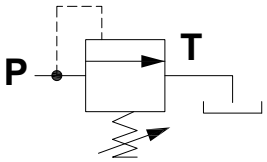
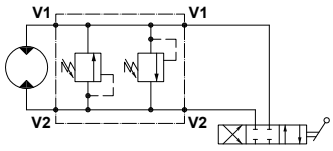
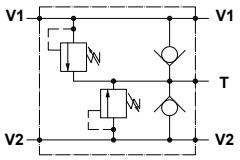
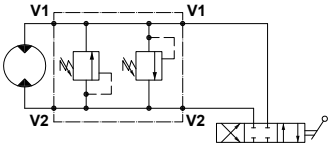
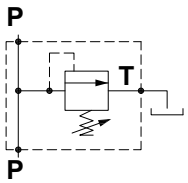
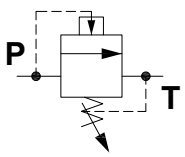
Meta HYDRAULIC

Cartridge Valves

Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
A	Valvole di massima ad azione diretta *Direct acting relief valve*		VPM-D-5-C(B)	010
			VPM-D-15-C(B)	015
			VPM-D-40-C(B)	030
			VPM-D-70-C(B)	045
			VPM-D-S10-C	048
			VPM-D-15F-C(B)	115
			VPM-D-40F-C(B)	130
			VPM-D-70F-C(B)	145
			VPM-D-80F-C(B)	150
			VPMHP-D-30-C(B)	185
			VPM-I-D-3	205
	Valvole di massima doppie incrociate ad azione diretta *Dual cross direct acting relief valve*		VPM-D-40-IL-3/8	280
			VPM-D-40-IL-3/8-S-SP-08N	282
			VPM-D-40-IL-1/2-SP-09D	284
			VPM-D-40-IL-AC-1/2	290
			VPM-D-70-IL-1/2	305
	Valvole di massima ad azione diretta, area differenziale *Direct acting, differential piston, relief valve*		VPM-A-100-CB	360
	Valvole di massima pilotata *Pilot operating relief valve*		VPM-P-S10-C	445
			VPM-P-150-C(B)	480

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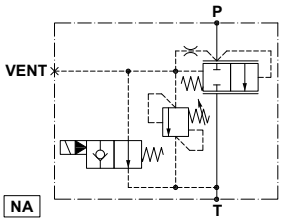
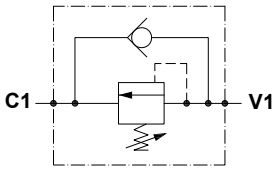
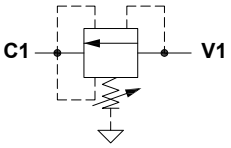
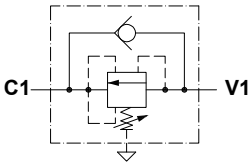
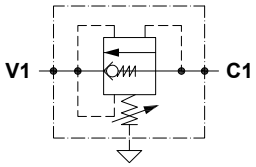
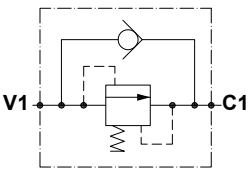
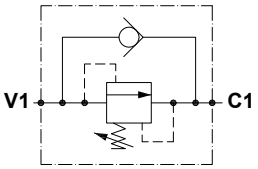
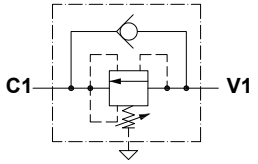
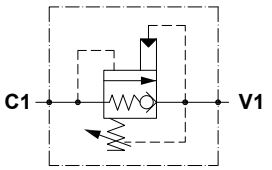
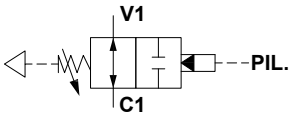
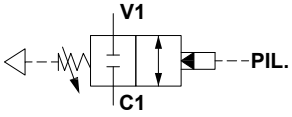
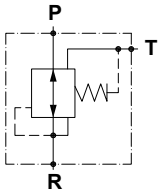
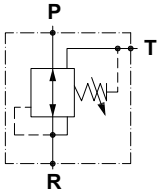
Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
A	Valvole di massima elettropilotata *Electric pilot operated relief valve*		VPM-PEV-200 (NA/NC)	490
B	Valvole di sequenza ad azione diretta *Direct acting sequence valve*		VPSQ-D-15-CB	015
			VPSQ-D-30-CB	025
			VPSQ-D-70-CB	045
	Valvole di sequenza bilanciata ad azione diretta *Direct acting, fully balanced, sequence valve*		VPSQB-D-30-C	090
			VPSQB-D-30-CB	091
			VPSQB-D-150-CB	140
	Valvole di sequenza ad azione diretta, taratura fissa, montaggio in linea *Direct acting sequence valve, fixed setting, line mounting*		VPSQL-D-3/8	170

Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
B	Valvole di sequenza ad azione diretta, taratura regolabile, montaggio in linea *Direct acting sequence valve, adjustable setting, line mounted*		VPSQR-L-D-3/8	175
			VPSQR-L-D-1/2	180
	Valvole di sequenza bilanciata ad azione diretta, taratura regolabile, montaggio in linea *Direct acting fully balanced, sequence valve, adjustable setting, line mounted*		VPSQRB-L-D-3/8	225
	Valvole di sequenza ad area differenziale con ritorno libero *Differential piston sequence valve, free reverse flow*		VPSQ-A-25-C	265
	Valvole di sequenza bilanciata ad azione diretta normalmente aperta *Direct acting fully balanced sequence valve, normally open*		VPSQB-D-30-C-NA	330
	Valvole di sequenza bilanciata ad azione diretta normalmente chiusa *Direct acting fully balanced sequence valve, normally closed*		VPSQB-D-30-C-NC	331
C	Valvole di riduzione pressione, azione diretta, taratura fissa *Pressure reducing valve, direct acting, fixed setting*		VPRPF-D-2-C	005
	Valvole di riduzione pressione, azione diretta, con relief *Pressure reducing valve, direct acting, with reverse relief*		VPRP-D-30-C(B)	025
			VPRPN-D-30-C(B)	026

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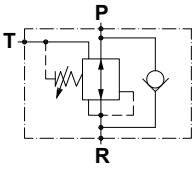
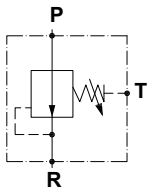
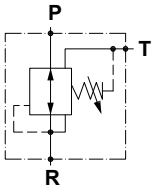
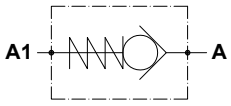
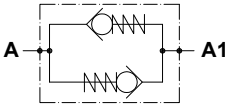
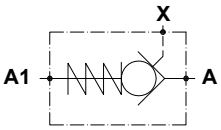
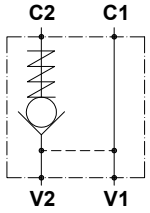
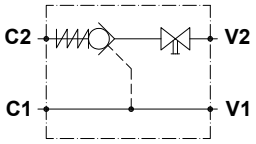
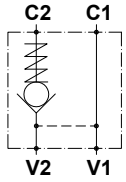
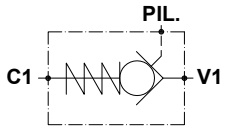
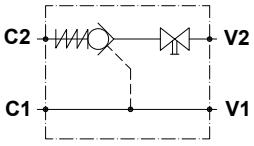
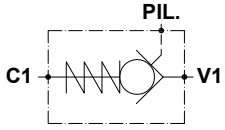
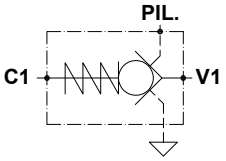
Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
C	Valvole di riduzione pressione, azione diretta, con relief e ritorno libero *Pressure reducing valve, direct acting, with reverse relief and free reverse flow*		VPRPU-D-30-CB-3/8	075
	Valvola di riduzione pressione pilotata *Pressure reducing valve, pilot operated*		VPRP-P-SR-60-C	270
	Valvola di riduzione pressione pilotata, con relief *Pressure reducing valve, pilot operated, with reverse relief*		VPRP-P-60-C	272
D	Valvola di ritegno unidirezionale *Check valve*		VPR	025
			VPR-MF	050
			VPRI	075
			VPRI-S	100
			VPR C	125
			VPR C SAE	130
			VPR C-S08-S	135
			VPR CR-SAE	140
	Valvola a ritegni contrapposti *Bi-directional check valve*		VPRD	200
E	Valvola di blocco pilotata semplice, montaggio in linea *Single pilot operated check valve, line mounting*		VPS	010

Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
E	Valvola di blocco pilotata semplice, montaggio in linea *Single pilot operated check valve, line mounting*		VPSLE-1/4-S	019
			VPSL	020
	Valvole di blocco pilotata semplice, in linea, a rubinetto *Single pilot operated check valve, line mounted with manual shut-off*		VPS-LR1	025
			VPS-LR2	026
	Valvole di blocco pilotata semplice, montaggio in flangia *Single pilot operated check valve, gasket mounted*		VPS F	040
	Valvole di blocco pilotata semplice, montaggio con vite *Single pilot operated check valve,drilled screw version*		VPS C-40-B-3/8-SP-5FA	050
	Valvole di blocco pilotata semplice, montaggio con vite, a rubinetto *Single pilot operated check valve,drilled screw version with manual shut-off*		VPS C-40-*-*-B-PR1-3/8-*	055
			VPS C-40-*-*-B-PR2-3/8-*	056
	Valvole di blocco pilotata semplice, a cartuccia *Single pilot operated check valve,cartridge version*		VPS C-20	110
			VPS C-40	120
			VPS C-SAE	140
			VPS C-CR	160
	Valvole di blocco pilotata semplice bilanciata *Single pilot operated fully balanced check valve*		VPSFB-L-3/8	320
			VPSFB-L-1/2	321

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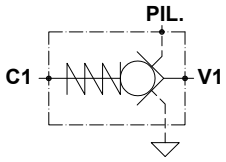
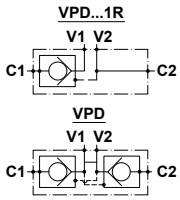
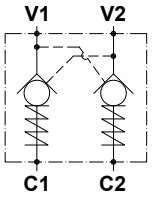
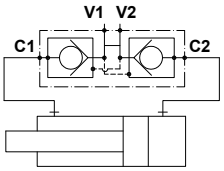
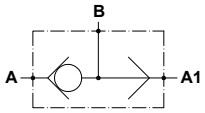
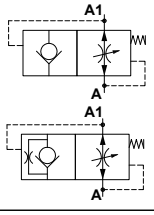
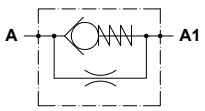
Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
E	Valvole di blocco pilotata semplice bilanciata *Single pilot operated fully balanced check valve*		VPSFB-CR-70	410
F	Valvole di blocco pilotata doppia in linea *Duoble pilot operated check valve, line mounted*		VPD / VPD-1R	010
	Valvola di blocco pilotata doppia, in linea *Double pilot operated check, line mounted*		VPDLE-1/4-S	019
			VPD L	020
			VPD F	040
	Valvola di blocco pilotata doppia, predisposta per raccordi ad occhio *Double pilot operated check, prepared for union*		VPD-1RO-SR	080
			VPD-2RO-SR	085
G	Valvola di commutazione *Shuttle valve*		VPT	050
			VPTI	080
H	Valvola di blocco per tubazioni *Hose break valve*		VPP	050
I	Valvola di strozzamento unidirezionale fissa *Fixed setting throttle check valve*		VPRU	010
			VPRU-MF	012

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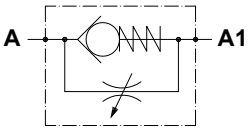
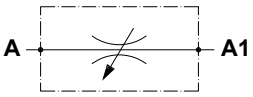
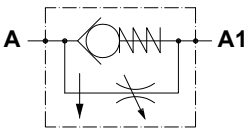
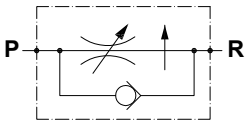
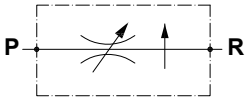
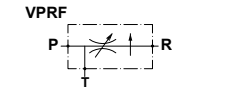
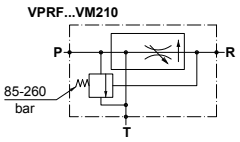
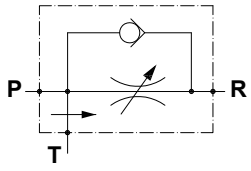
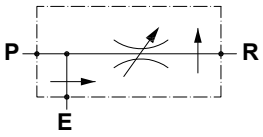
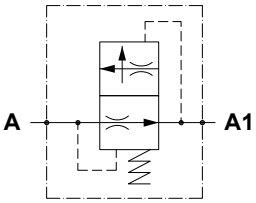
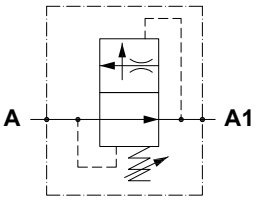
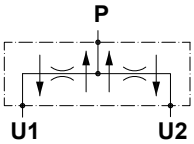
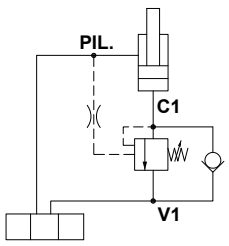
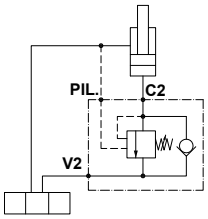
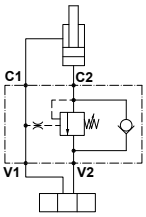
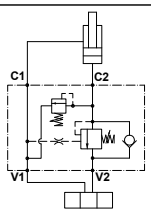
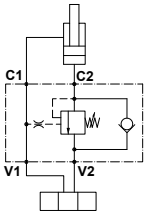
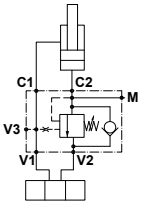
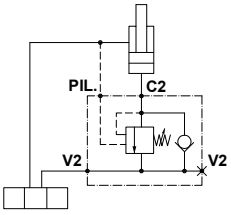
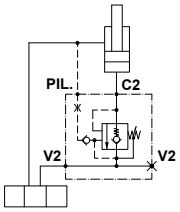
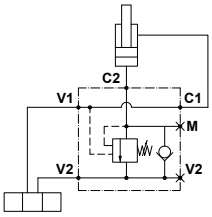
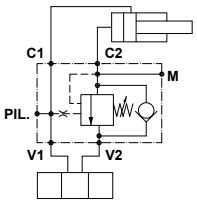
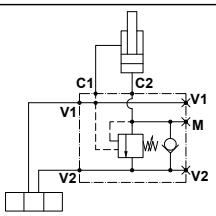
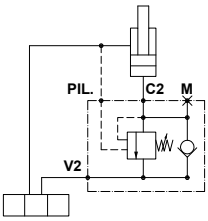
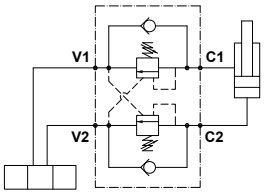
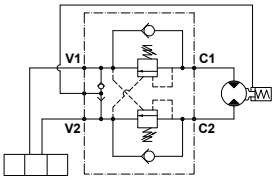
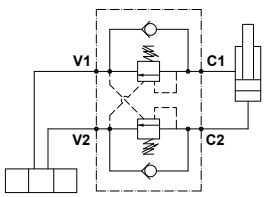
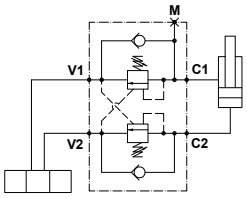
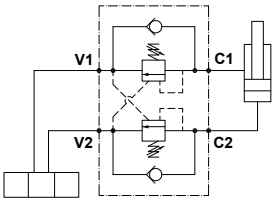
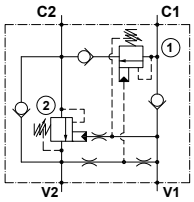
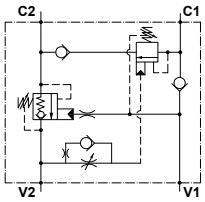
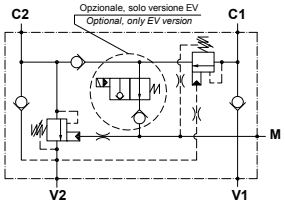
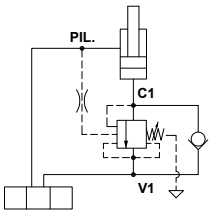
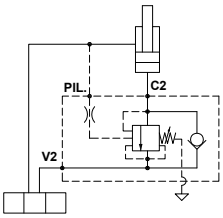
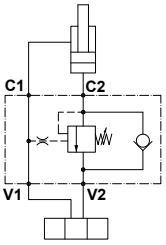
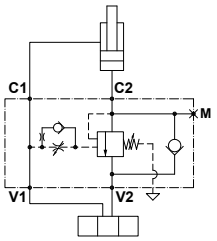
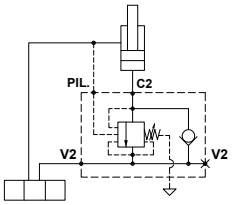
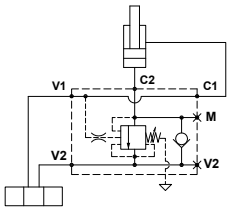
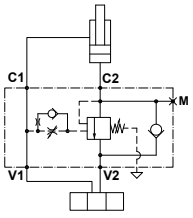
Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
I	Valvola regolatrice di flusso unidirezionale *Restrictor valve*		VPU	050
			VPSU	060
			VPMU	070
			VPU C	100
L	Valvola regolatrice di flusso bidirezionale *Needle valve*		VPB	050
			VPSB	060
			VPMB	070
			VPB C	100
M	Valvole regolatrice di flusso unidirezionale compensata *Compensated flow control valve*		VPCU	010
	Valvole regolatrice di flusso compensata, con ritorno libero *Compensated flow control valve, with reverse flow*		VPRUC	050
	Valvole regolatrice di flusso compensata, a due vie *Two way compensated flow control valve*		VPRBC	100
	Valvole regolatrice di flusso compensata, a 3 vie con eccedenza a scarico *Three way compensated flow control valve, with exceeding flow to tank*	 	VPRF-H	209
			VPRF	210

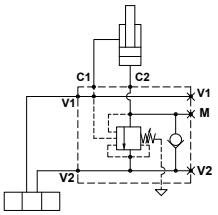
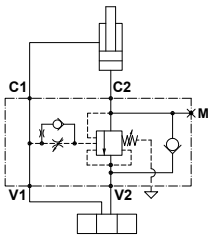
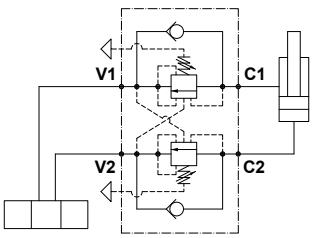
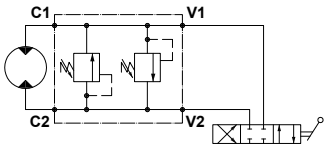
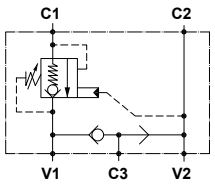
Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
M	Valvole regolatrice di flusso compensata, a 3 vie con ritorno libero, eccedenza a scarico *Three way compensated flow control valve, with exceeding flow to tank and free reverse flow*		VPRFU	215
	Valvole regolatrice di flusso compensata, a 3 vie con eccedenza in pressione *Three way compensated flow control valve, with exceeding flow in pressure*		VPVP-50-C-R	260
			VPVP-90-C-R	280
			VPVP-H	309
			VPVP	310
			VPVPF-60-C	440
	Valvola di controllo discesa compensata *Pressure compensated flow restrictor valve*		VSC	480
			VSC G	485
	Valvola di controllo discesa compensata regolabile *Adjustable pressure compensated flow restrictor valve*		VSCR	490
N	Divisore/riunificatore di flusso *Flow divider/combiner*		VPFD	050
O	Valvola overcenter a cartuccia *Overcenter valve, cartridge version*		VPO-15-CM	010
			VPO-25-C	017
			VPO-25-CM	018
			VPO-50-C	031
			VPO-60-C	036
			VPO-90-C	051
			VPO-100-C	058
			VPO-150-C	072
			VPO-300-C	088

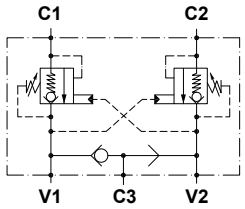
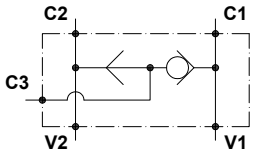
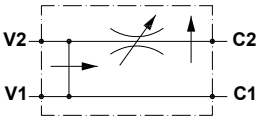
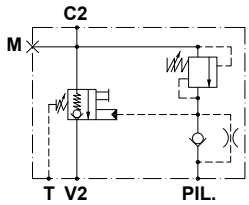
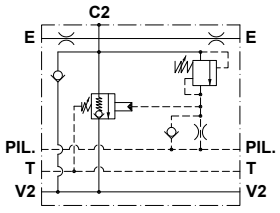
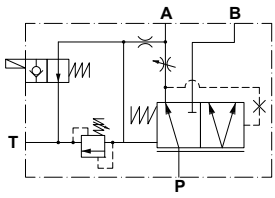
Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
O	Valvola overcenter singola, in linea *Single overcenter valve, line mounted*		VPO-35-SS-1/4-L	110
			VPO-35-S-1/4-L	111
			VPO-50-S-*-L	120
			VPO-50-SX-*-L	121
	Valvola overcenter singola, in linea, pilotaggio interno *Single overcenter valve, line mounted, internal pilot*		VPO-35-S-1/4-L-P	155
			VPO-50-S-*-L-P	160
			VPO-50-SX-*-L-P	161
	Valvola overcenter singola, in linea, pilotaggio interno, valvola di max. su V2-C2 *Single overcenter valve, line mounted, internal pilot, relief valve on V2-C2 line*		VPO-50-S-*-L-P-VM	162
	Valvola overcenter singola, in linea, pilotaggio interno *Single overcenter valve, line mounted, internal pilot*		VPOE-70-S-1/2-L-P-A	170
			VPO-90-S-3/4-L-P	180
			VPOE-120-S-3/4-L-P-A	190
	Valvola overcenter singola, montaggio a flangia *Single overcenter valve, gasket mounted*		VPO-35-S-1/4-1F-P-M	205
			VPO-50-S-*-1F	210
			VPO-50-S-1/2-1F-SAE	211
	Valvola overcenter singola, montaggio a flangia, pilot. a trafilamento *Single overcenter valve, gasket mounted, bleeding pilot*		VPO-50-S-3/8-1F-BP	212

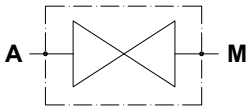
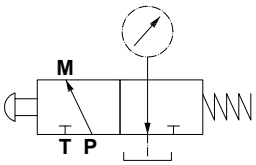
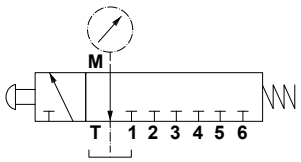
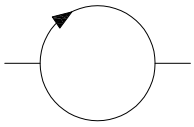
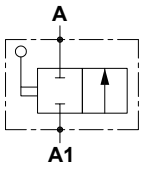
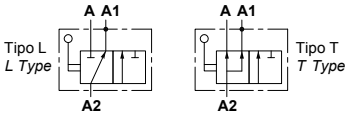
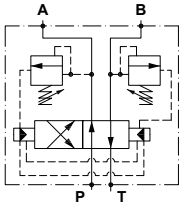
Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
O	Valvola overcenter singola, montaggio a flangia, pilot. Interno, attacco manometro *Single overcenter valve, gasket mounted, internal pilot, pressure gauge port*		VPO-50-S-*-1F-P-M	213
	Valvola overcenter singola, con C1/C2 flangiate, attacco manometro *Single overcenter valve, C1/C2 gasket mounted, pressure gauge port*		VPO-35-S-1/4-2F-P-M	255
	Valvola overcenter singola, con C1/C2 flangiate, attacco manometro *Single overcenter valve, C1/C2 gasket mounted, pressure gauge port*		VPO-50-S-*-2F-P-M	260
	Valvola overcenter singola, montaggio a vite forata, attacco manometro *Single overcenter valve, drilled screw version, pressure gauge port*		VPO-50-S-3/8-V-L-M	293
	Valvola overcenter doppia *Dual overcenter valve*		VPO-35-D-1/4-L	310
			VPO-35-DD-1/4-L	311
			VPO-50-D-*-L	320
			VPO-50-DX-*-L	321
	Valvola overcenter doppia con sblocco freno *Dual overcenter valve, with brake release port*		VPO-50-D-*-L-U	322
	Valvola overcenter doppia *Dual overcenter valve*		VPOE-70-D-1/2-L-A	328
			VPO-90-D-3/4-L	331
			VPOE-120-D-3/4-L-A	335
			VPO-150-D-3/4-L	340

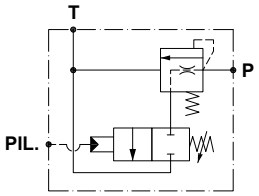
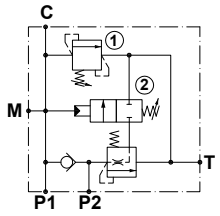
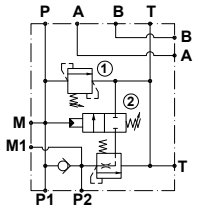
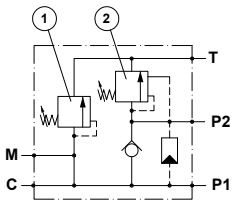
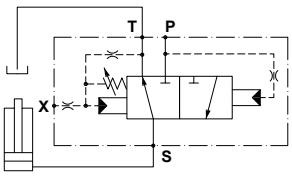
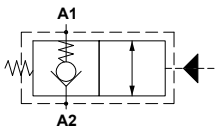
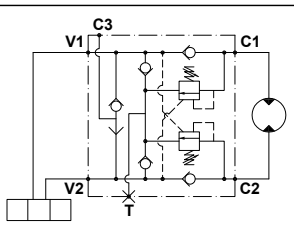
Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
O	Valvola overcenter doppia con attacco manometro *Dual overcenter valve, with pressure gauge port*		VPO-50-D-3/8-1F-M	410
	Valvola overcenter doppia, montaggio a flangia *Dual overcenter valve, gasket mounted*		VPO-35-D-1/4-2F	457
			VPOE-40-D-3/8-2F-A	462
			VPO-50-D-*-2F	470
			VPO-50-DX-*-2F	471
	Valvola overcenter doppia, montaggio in linea, per circuito rigenerativo *Dual overcenter valve, line mounted, for regenarive circuits*		VPOR-35-D-3/8-L	710
			VPOR-60-D-1/2-L	725
	Valvola overcenter doppia, mont. in linea, per circuito rigenerativo con valvola elettrica opzionale *Dual overcenter valve, line mounted, for regenarive circuits, with optional electric valve*		VPOR-150-D-3/4-L-M	750
P	Valvola overcenter bilanciata, versione a cartuccia *Fully balanced overcenter valve, cartridge version*		VPOFB-25-C	017
			VPOFB-25-CM	018
			VPOFB-60-C	036
			VPOFB-100-C	058
			VPOFB-150-C	072
			VPOFB-300-C	088

Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
P	Valvola overcenter singola bilanciata, montaggio in linea *Balanced single overcenter valve, line mounted*		VPOFB-35-S-1/4-L	111
			VPOB-50-S-*-L	120
	Valvola overcenter singola bilanciata, montaggio in linea, pilotaggio interno *Balanced overcenter valve, line mounted, internal pilot*		VPOFB-35-S-1/4-L-P	155
			VPOB-50-S-*-L-P	160
			VPOFB-50-S-*-L-P	161
			VPOEB-70-S-1/2-L-P-A	170
			VPOB-90-S-3/4-L-P	180
			VPOEB-120-S-3/4-L-P-A	190
	Valvola overcenter singola bilanciata, montaggio in linea, attacco manometro pilotaggio regolabile *Fully balanced overcenter valve, line mounted, adjustable pilot, pressure gauge port*		VPOFB-150-S-*-L-P-M	194
	Valvola overcenter singola bilanciata, montaggio a flangia *Balanced overcenter valve, gasket mounted*		VPOB-50-S-*-1F	210
			VPOB-50-S-1/2-1F-SAE	211
	Valvola overcenter singola bilanciata, montaggio a flangia, pilotaggio interno, attacco manometro *Balanced overcenter valve, gasket mounted, internal pilot, gauge port*		VPOB-50-S-*-1F-P-M	213
	Valvola overcenter singola bilanciata, montaggio a flangia, pilotaggio interno e regolabile, attacco manometro *Balanced overcenter valve, gasket mounted, adjustable internal pilot, gauge port*		VPOFB-150-S-*-1F-P-M	225

Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
P	Valvola overcenter singola bilanciata, montaggio a flangia, pilotaggio interno *Balanced overcenter valve, gasket mounted, internal pilot*		VPOB-50-S-*-2F-P-M	260
	Valvola overcenter singola bilanciata, montaggio a flangia, pilotaggio interno e regolabile *Balanced overcenter valve, gasket mounted,adjustable internal pilot*		VPOFB-150-S-1/2-2F-P	275
	Valvola overcenter bilanciata doppia, montaggio in linea *Balanced dual overcenter valve, line mounted*		VPOFB-35-D-1/4-L-*-*	310
			VPOFB-35-DD-1/4-L-*-*	311
			VPOB-50-D-*-L	320
			VPOEB-70-D-1/2-L-A	328
			VPOB-90-D-*-L	331
			VPOEB-120-D-3/4-L	335
			VPOFB-150-DD-3/4-L-35-*	340
	Valvola overcenter bilanciata doppia, montaggio a flangia *Balanced dual overcenter valve, gasket mounted*		VPOB-50-D-*-2F	470
			VPOFB-150-D-3/4-2F	480
Q	Valvole di massima per motori idraulici *Dual cross main pressure relief valve for hydraulic motors*		VPM-D-15-DV-D1	065
			VPM-D-40-DV-D2	070
			VPM-D-40-DV-S1	072
			VPM-D-40-DF-D2	116
	Valvole overcenter singola per motori idraulici *Single overcenter valve for hydraulic motors*		VPO-60-SV-D2(D3)	165
			VPO-60-SV-O1	167
			VPO-50-SF-D2	215
			VPO-150-SF-R1	235

Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
Q	Valvole overcenter doppia per motori idraulici *Dual overcenter valve for hydraulic motors*		VPO-50-DV-D2(D3)	260
			VPO-50-DV-O1	261
			VPO-50-DV-S1	262
			VPO-60-DV-D2(D3)	264
			VPO-60-DV-O1	265
			VPO-60-DV-S1	266
			VPO-50-DF-D2	315
	Valvole selettrici per motori idraulici *Shuttle valve for hydraulic motors*		VPT-DV-S1	380
			VPT-DF-D2	392
			VPT-DF-D3	393
	Regolatore di flusso compensato a 3 vie per motori idraulici *3 way pressure compensated regulator for hydraulic motors*		VPRF-50-DV-E6	472
			VPRF-90-DV-D2	480
			VPRF-90-DV-D3	481
			VPRF-90-DV-E6	484
			VPRF-90-DF-D4	530
R	Valvola per escavatori *Excavator valves*		VPEXC-35-S-3/8-L-DX	010
			VPEXC-35-S-3/8-L-SX	011
			VPEXC-90-S-1/2-L-DX	022
			VPEXC-90-S-1/2-L-SX	023
			VPEXC-150-S-3/4-L-DX	030
			VPEXC-150-S-3/4-L-SX	031
			VPEXC-250-S-3/4-1F-SAE3000	130
			VPEXC-250-S-3/4-1F-SAE6000	130
			VPEXC-400-S-1-1F-SAE6000	145
			VPEXC-500-S-1 1/4-1F-SAE6000	150
			VPEXCH-EV*-3/4-S	250

Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
V	Valvola per esclusione manometro *Snubbing pressure gauge valve*		VPE/VPEA	010
			VPEP	015
	Valvola per esclusione manometro *Snubbing pressure gauge valve*		VPESM6P	020
			VPCG	025
	Rubinetti a sfera *Ball valves*		VP-GE2	050
			VP-GE3	051
	Invertitore automatico *Automatic inverter*		VPIA-L6-VM	100
			VPIA-L10-VM	105

Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
V	Valvola di messa a scarico, idropilotata *Pilot operated unloading valve*		VPMS-P	150
	Valvola di esclusione pompa doppia *Pump unloading valve*		VPMS-PD-P	155
	Valvola di esclusione pompa doppia, flangia *CETOP 5 Pump unloading valve, flanged CETOP 5*		VPMS-PDL10-P	160
	Valvola di esclusione altabassa pressione *Two-pump unloading valve*		VPMSE-PD	165
	Sensore compensato di pressione limite *Three way sequence*		VPLM-CB-P	200
	Valvola di fine corsa *End run valve*		VPFC	225
	Valvola controllo rotazione con sblocco freno, montaggio in linea *Motion control valve, with brake release port, line mounted*		VPVCR-120-D-3/4-35	300

Sezione *Section*	Gruppo - *Group*	Schema idraulico *Hydraulic scheme*	Tipo - *Type*	Pagina *Page*
W	Raccordi orientabili e kit di fissaggio VPD…RO *Banjo union and fixing kit for VPD…RO*		VPD…RO	010
	Corpi MF/FF per valvole VPP/VSC/VSCR *MF/FF body for valves VPP/VSC/VSCR*		VPP/VSC/VSCR	100
	Corpi standard per cartuccie in cavità SAE *Standard body for SAE cavity cartridges*		23**1-G*-*-1/33**2-G*-*-1	150
			33**1-G*-*-1/43**2-G*-*-1	150
X	Cavità Vanguard *Vanguard cavities*		23**1 – 33**2	010
			33**1 – 43**1	011
			23102 – 33071	020
			33103 - 33123	030
			33141	040
			22201 - 22261	050
			22221 - 22222	060
			22331 - 22205	070
			22182 - 22161	080
			32181 - 32221	090
			32331 - 32205	100
			32421	110
			26241	120

INTRODUZIONE E NORME GENERALI

INTRODUZIONE

Quella che segue é una descrizione generale delle caratteristiche tecnico-costruttive e funzionali, nonché delle regole operativo-commerciali che Meta Hydraulic segue nella realizzazione e nella distribuzione dei propri prodotti oleodinamici, parte dei quali illustrati nel presente catalogo, con il quale, nel rispetto delle applicazioni, delle funzioni e delle prescrizioni in esso indicate e raccomandate, ne garantisce l'affidabilità, proponendoli al mercato oledinamico.

PRODOTTI A CATALOGO

1° - VALVOLE A CARTUCCIA
Le valvole a cartuccia possono essere inserite direttamente sugli attuatori o in blocchi integrati, realizzando le apposite cavità su di essi (vedere sezione X).

2° - VALVOLE con BLOCCHETTO DI COLLEGAMENTO
Queste valvole possono essere generalmente montate in 3 diverse soluzioni: in linea, flangiate direttamente sull'attuatore e con fissaggio mediante vite forata.
BLOCCHETTO DI COLLEGAMENTO: I blocchetti di collegamento possono essere realizzati con 2 tipi di materiale:
- acciaio quando le pressioni di esercizio sono superiori a 250 bar o su specifica richiesta del Cliente;
- alluminio ad alta resistenza, solo quando le pressioni di esercizio sono inferiori a 250 bar.
Il corpo in acciaio é solitamente protetto mediante zincatura.

3° - GUARNIZIONI
Gli o-ring sono generalmente realizzati in Acrilo-Nitrile Butadiene NBR (BUNA-N), e sono idonei per temperature comprese tra i -20 e i +90°C. Per temperature più elevate si raccomandano o-ring in Fluorocarbonio FPM (VITON). Gli anelli antiestrusione sono realizzati in NBR (BUNA-N), oppure in Lubrifon (PTFE).

4° - PIOMBATURA O ANTIMANOMISSIONE
A richiesta, molte valvole possono essere fornite predisposte con i fori per la piombatura a filo. Per alcuni modelli sono disponibili cappellotti antimanomissione in plastica.

INTRODUCTION & GENERAL CONDITION

INTRODUCTION

What follows is a general description of the technical-constructive and functional features, and moreover of the operating and trading rules, that Meta Hydraulic follows in the realization and distribution of its own hydraulic products (some of them) illustrated in this catalogue; with which, in respect of the applications, of the functions and the prescription in it indicated and recommended, of it guarantee the reliability, proposing them to the market.

CATALOGUE PRODUCT

1° - CARTRIDGE VALVES
The cartridge valves can be inserted directly on the actuators or in integrated blocks, realizing the appropriate cavities on them (see section X).

2° - VALVES with CONNECTION HOUSING
These valves can be generally mounted in 3 different solutions: on line, flanged directly on the actuator and with drilled screw.
CONNECTION HOUSING: They can be realized with 2 types of material:
- steel when the working pressure are higher than 250 bar or on specific request of Customer;
- high resistance aluminum alloy, only when the working pressure is up to 250 bar.
The steel body is usually protected through zing plating.

3° - SEALS
The o-ring are generally realized in Acrylonitrile Butadiene NBR (BUNA-N), and are suitable for temperatures between the -20 and the +90°C. For higher temperature, are recommended o-ring in Fluorocarbon FPM (VITON). The anti-extrusion rings are realized in NBR (BUNA-N), or in Lubrifon (PTFE).

4° - COPPED ADJUSTEMENT OR TAMPERPROOF CAP
On request, many valves can be supplied with the copped adjustement. For some models are available plastic tamperproof caps.

PRODOTTI EXTRA-CATALOGO

BLOCCHI INTEGRATI
Questo prodotto, raggruppa in se più funzioni allo scopo di ottimizzare ogni impianto, perciò, pur mantenendo le presenti condizioni giuridico-commerciali, non è tecnicamente proponibile come prodotto di serie su questo catalogo, ma viene progettato e realizzato a stretto contatto con il Cliente, tenendo presente ogni sua esigenza.

EXTRA-CATALOGUE PRODUCT

INTEGRATED MANIFOLD
This product, grouping in itself multiple functions in order to optimize every plant, whereby, though maintaining the same legal-commercial conditions, it cannot be proposed technically as standard product, but it is planned and realized in tightened contact with the Customer, considering every its requirement.

RACCOMANDAZIONI DI UTILIZZO

1° - OLI IDRAULICI
Raccomandiamo l'utilizzo di OLI a BASE MINERALE con proprietà fisico-chimiche adatte per l'utilizzo in apparecchiature oleodinamiche, come ad esempio:
- OLI A BASE MINERALE tipo HL (DIN 51524-parte 1)
- OLI A BASE MINERALE tipo HLP (DIN 51524-parte 2).
Grado di viscosità: compreso nello standard ISO 3448 - DIN 51519.

2° - CONTROLLO DELLA CONTAMINAZIONE
Una delle maggiori cause di guasti e disfunzioni negli impianti oleodinamici è l'elevata contaminazione dell'olio. Per un corretto e più duraturo funzionamento delle valvole consigliamo di contenere il livello di contaminazione dell'olio nei valori indicati in tabella, utilizzando i metodi di filtrazione più consoni.
La classe di contaminazione è indicata attraverso due scale:
ISO 4406: è espressa mediante 3 numeri, che rappresentano la quantità di particelle, rispettivamente: ≥ 4 µ, ≥ 6 µ e ≥ 14 µ contenute in 1 ml di fluido;
NAS 1638: è espressa mediante 1 numero, che rappresenta la quantità di particelle, di diverse dimensioni, contenute in 100 ml di fluido.

RACCOMANDATIONS OF USE

1° - HYDRAULIC OIL
It's recommended the use of MINERAL OIL with features suitable for use in hydraulic equipment, like as an example:
- MINERAL OIL type HL (DIN 51524-part 1)
- MINERAL OIL type HLP (DIN 51524-part 2)
Degree of viscosity: comprised in standard ISO 3448 - DIN 51519.

2° - CONTAMINATION CONTROL
One of the greater disfunction and failure causes in the hydraulic system is the elevated contamination of oil. For a correct and more long-lasting operation of the valves we advise to contain the level of contamination of oil between the values indicated in data sheet below, using the filtration methods you think better.
The contamination class is indicated through two scales:
ISO 4406: it's expressed by means of 3 numbers, that represent the particle amount, respective:≥ 4 µ, ≥ 6 µ *e* ≥ 14 µ *, contained in 1 mililiter of fluid;*
NAS 1638: it is expressed by means of 1 number, that represents the particle amount, of various dimensions, contained in 100 milimeter of fluid.

Componente idraulico - *Hydraulic component*	***ISO 4406***	**NAS 1638**
Valvole funzionanti ad alta pressione (> 250 bar) o impieghi molto sensibili alla contaminazione. *Valve working at high pressure (> 250 bar) or employes very sensible to contamination.*	19/17/14	8
Valvole funzionanti a media pressione e/o moderatamente sensibili alla contaminazione. *Valve working at average pressure and/or moderately sensible to contamination.*	20/18/15	9
Valvole funzionanti a bassa pressione e meno sensibili alla contaminazione. *Tolerant working valves to low pressure and less sensible to contamination.*	21/19/16	10

3° - TEMPERATURE DI ESERCIZIO
I prodotti di Meta Hydraulic sono progettati per funzionare normalmente con olio idraulico a temperature comprese tra -20°C e +90°C.

3° - WORKING TEMPERATURE
The products of Meta Hydraulic are realized normally in order to work with hydraulic oil at temperatures comprised between -20°C and +90°C.

4° - TARATURE
Generalmente le valvole sono tarate al valore di pressione standard specificato nel catalogo. In caso sia necessario modificare la taratura, agire senza mai oltrepassare il campo di taratura indicato.

5° - INSTALLAZIONE DELLE CARTUCCIE
Per l'installazione delle cartuccie nelle loro cavità si raccomanda di rispettare la seguente procedura:
I - verificare le superfici sia della cartuccia che quelle interne delle cavità siano perfettamente pulite e prive di rigature o ammaccature;
II - accertarsi che gli o-ring e gli anelli antiestrusione siano integri e correttamente installati;
III - lubrificare la cartuccia esternamente con olio pulito;
IV - inserire la cartuccia a mano e avvitare fino a quando si percepisce la resistenza degli anelli di tenuta, poi con chiave dinamometrica, serrare la cartuccia fino al raggiungimento della coppia di serraggio indicata nel catalogo. Dopo circa 1 giorno d'attività, verificare e ripristinare se necessario, sia la coppia di serraggio che la taratura.

6° - IMMAGAZZINAMENTO
Tutti i nostri prodotti devono essere conservati ad una temperatura ambiente compresa tra -10°C e +50°C, e mantenuti protetti nel loro involucro o sistema antipolvere originale, al riparo dai raggi solari e da sorgenti di calore o di ozono, in particolare da motori elettrici in funzione.

4° - PRESSURE SETTING
Generally the valves are setted at the standard values specified in the catalogue. In case it's necessary to modify the setting, to act without never exceed the pressure range indicated.

5° - CARTRIDGE INSTALLATION
For the installation of cartridges in their cavities is recommended to respect the following procedure:
I - verify that the surface of cartridge and cavity are perfectly clean and without visible defects;
II - verify that o-ring and antiextrusion rings are integral and correctly installed;
III - lubricate the cartridge with clean oil externally;
IV - insert the cartridge by hand and screw it until is perceived the resistance of seals, then with dynamometric key, locking the cartridge until the attainment of the installation torque indicated in the catalogue. After 1 day approximately of activity, verify and restore if necessary, the installation torque and the setting.

6° - STORAGE
All our products have to be kept at an ambient temperature between -10°C and +50°C, and be maintained protected in their original wrap or antipowder system, protected from the solar beams and from sources of heat or ozone, in particular from electric motors in function.

INFORMAZIONI TECNICHE

1° - TRAFILAMENTO INTERNO
Eccetto alcuni casi, le nostre valvole sono caratterizzate da una tenuta al ritegno con trafilamento praticamente nullo o trascurabile. Nei casi limite non superiore 30 gocce/min, alla massima pressione di esercizio e con olio a viscosità 24 cSt. Mediamente tali trafilamenti tendono a ridursi sensibilmente o ad esaurirsi totalmente a breve tempo dalla chiusura.

2° - DIAGRAMMI E SPECIFICHE
Le curve caratteristiche, i valori e le specifiche indicate nel presente catalogo sono il risultato di prove effettuate con olio a base minerale, avente viscosità cinematica ed a temperatura descritte nelle singole pagine tecniche, con grado di pulizia conforme a ISO 4406 19/17/14.

TECHNICAL INFORMATION

1° - INNER LEAKAGE
Generally, our check valves are characterized from zero or negligible leakage. In some cases, up to 30 drops/min, at the maximum working pressure and with oil viscosity of 46 cSt. Such leakages tend to reduce themselves considerably or vanish totally after a short time from the closing.

2° - DIAGRAMS AND FEATURES
The characteristic curves, the values and the features indicated in the present catalogue are the result of tests realized with mineral oil, with viscosity and to a temperature specified in the technical pages, with cleansing degree of 19/17/14 in compliance with ISO 4406.

PRESCRIZIONI D'USO

1°) I componenti illustrati nel presente catalgo, sono concepiti per gestire la movimentazione del flusso di olio idraulico a base minerale, all'interno di appositi circuiti. La Meta Hydraulic non risponde per alcun danno ne a persone nè a cose, imputabile ai propri prodotti per utilizzi e prestazioni diversi da quelli indicati e raccomandati sul proprio catalogo; utilizzi diversi devono essere espressamente autorizzati in forma scritta da Meta Hydraulic.
2°) I prodotti Meta Hydraulic sono sottoposti a collaudi funzionali conformi alle specifiche indicate nella relativa documentazione tecnica. Ma le effettive e a volte imprevedibili condizioni di funzionamento delle apparecchiature dell'acquirente, possono non essere integralmente riproducibili nei nostri laboratori di prova: ciò comporta che tutti i prodotti Meta Hydraulic devono essere preventivamente ricollaudati dal costruttore dell'impianto alle condizioni limite di funzionamento prima dell'utilizzo operativo dell'impianto stesso.

3°) Le valvole descritte nel presente catalogo e i blocchi integrati in esso segnalati (e descritti da propria documentazione tecnica), sono destinati ad essere installati in macchine a cui si applica la Direttiva 2006/42/CE (Direttiva Macchine) e successivi emendamenti. E' assolutamente vietato mettere in funzione le valvole o i blocchi integrati prima che la macchina su cui sono installati sia dichiarata conforme alle disposizioni della Direttiva citata.

ORDINI

1°) Gli ordini devono pervenire a Vangurd srl sempre in forma scritta e devono riportare l'esatta ragione sociale, l'indirizzo dell'ordinante, numero d'ordine, data di emissione, riferimento ad eventuale offerta Meta Hydraulic, denominazione scrupolosa degli articoli ordinati facendo riferimento agli esempi di ordinazione illustrati sul presente catalogo, quantità, data di consegna richiesta, descrizione del materiale e vettore.

2°) Meta Hydraulic si riserva la facoltà di adeguare eventualmente o di respingere l'ordinazione in forma scritta entro sette giorni dal ricevimento.

3°) Non sono da ritenersi impegnativi eventuali accordi verbali o scritti di qualsiasi genere presi da nostri dipendenti o da agenti con il committente, se non seguiti da conferma scritta della Meta Hydraulic.

USE PRESCRIPTION

1°) The components illustrated in this catalogue area designed to handle the flow of mineral-based hydraulic oil within special circuits. Meta Hydraulic accepts no liability for damages to people or objects as a result its products being put to uses or working conditions inconsistent with those indicated and recommended in its catalogue. Different uses are subject to the advance written authorisation of Meta Hydraulic.

2°) The products of Meta Hydraulic are subjected to working tests according to the specifications indicated in the relative technical documentation. But the effective and sometimes unpredictable conditions of operation of the equipment of the purchaser that can be only partially reproduced in our test benches, involve that all the products Meta Hydraulic have to be preventively retested from the constructor of the system to the most onerous working conditions before of operating use of the same system.

3°) The valves described in the present catalogue and the integrated blocks indicated in it (and described with own technical documentation), are assigned to being installed in machines at which is applied the regulation 2006/42/EC and subsequent corrigenda. It's absolutely prohibited to put in function the valves or the integrated blocks before that the machine on which they are installed is declared in compliance with the dispositions of the cited regulation.

ORDERS

1°) Orders should always be placed on written form and contain: full name and address of the customer, order number, date of issue, reference number of any Meta Hydraulic quotation received, exact name of the item/items ordered (please refer to the order examples illustrated in this catalogue), delivery date requested, quantity, destination of material and carrier.

2°) Meta Hydraulic l reserves the right to alter if necessary or decline an order, subject to supplying written notice within 7 days of receipt of same.

3°) Any form of written or verbal agreement entered into with the customer by our employees or agents shell not be considered binding unless followed by written confirmation of same from Meta Hydraulic.

GARANZIA

1°) La Meta Hydraulic garantisce che i propri prodotti, se utilizzati integralmente e nel rispetto delle funzioni e delle prestazioni per cui sono stati progettati e vengono commercializzati, sono esenti da difetti di materiale o di costruzione, per un periodo di 12 mesi a decorrere dal giorno di spedizione dalla propria sede (fa testo la data riportata sul prodotto). La garanzia consiste nella riparazione o sostituzione, previo esame presso la sede della Meta Hydraulic dei prodotti o parti di essi inutilizzabili, per accertato difetto del materiale o di costruzione. Gli eventuali reclami dovranno pervenire in forma scritta presso la nostra sede. Meta Hydraulic si riserva il diritto di autorizzare la restituzione del materiale contestato; difetti di fabbrica visibili alla consegna dovranno essere segnalati in forma scritta entro 48 ore dal ricevimento della merce. Il prodotto si intende franco destino ad accertamento delle cause di necessaria riparazione o sostituzione.

2°) Sono esclusi dalla garanzia i componenti del prodotto soggetti a più facile usura come ad esempio: molle, o-rings, guarnizioni in genere, ecc.

3°) La garanzia non ha validità per i prodotti utilizzati ed installati in modo improprio, negligente, per qualunque manomissione o per danni causati agli stessi dalle attrezzature utilizzatrici, o da sostanze contaminanti, in particolar modo la Meta Hydraulic è esonerata da ogni obbligo per qualsiasi danno a persone o cose che possono verificarsi per, o durante, l'uso dei propri prodotti per causa o dipendenza a quanto sopra.

4°) La Meta Hydraulic non risponde per eventuali danni causati al proprio prodotto avvenuti durante il trasposrto o la consegna, salvo eventuali accordi.

5°) Questa garanzia elimina e sostituisce totalmente ogni altra garanzia di qualsiasi genere, esplicita od implicita.

WARRANTY

1°) Meta Hydraulic guarantees that its products, if used integrally and in respect of the functions and the performances for which they have been planned and commercialized, are free from material or manufacturing defects for a period of 12 months with effect from date of shipment from its premises as confirmed by the date indicated on the product itself. The warranty covers repair and/or replacement of products or parts of product that have proved to be unserviceable due to material or manufaturing defects following inspection at the premises of Meta Hydraulic.
All claims should be forwarded in writing to our premises. Meta Hydraulic reserves the right to authorise the return of the material that is the subject of complaint. Manufaturing defects apparent at time of delivery should be reported in writing within 48 hours of receipt. The product is intended as being delivered free to consignee for investigation into the reasons as to the required repair or replacement.

2°) Those components of the product subject to normal wear and tear are not covered by the terms of the warranty; for example springs, o-rings, gaskets, etc.

3°) The warranty does not cover products assembled in an improper or negligent manner, any kind of manumission or damage caused to same by other user equipment, or from contaminating substances. In particolar, Meta Hydraulic is relieved of all liability for damages to people or objects caused during or as a result of the improper use of its products as outlined above.

4°) Unless otherwise agreed in advance, Meta Hydraulic will accept no liability for damages to the product arising during shipment or delivery.

5°) This warranty eliminates and replaces totally every other guarantee of whichever kind, explicit or implicit.

PRESCRIZIONI LEGALI

1°) Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

2°) Il presente catalogo annulla e sostituisce i precedenti.

3°) E' fatto espresso divieto di qualunque riproduzione parziale o totale del presente catalogo.

4°) Tutti i diritti sono riservati.

GIURISDIZIONE

In caso di contestazione in cui sia covenuta la Meta Hydraulic, è competente esclusivamente il Foro di Reggio Emilia.

LEGAL REGULATION

1°) Meta Hydraulic reserves the right to stop the production or to modify the technical and dimensional features of all own products in every moment without warning and obligation.

2°) The present catalogue cancels and replaces the previous ones.

3°) It's made expressed prohibition of partial or total reproduction of the present catalogue.

4°) All the rights are reserved.

JURISDICTION

Sole jurisdiction for the settlement of any disputes involving Meta Hydraulic lies with the Law Court of Reggio Emilia, Italy.

SEZIONE A
Valvole di regolazione pressione

SECTION A
Relief Valves

VALVOLE DI REG. PRESSIONE AD AZIONE DIRETTA
Queste valvole trovano il miglior impiego in condizioni di funzionamento continuo. Limitano la pressione preservando circuito e relativi componenti da picchi di pressione. Sono disponibili 3 soluzioni di montaggio: a cartuccia, a pannello, in linea.
Le valvole di regolazione pressione doppie incrociate trovano impiego sia come valvole antishock sia in condizioni di funzionamento continuo. Limitano la pressione in entrambi i rami dell'attuatore. In caso di attuatore con cilindrata non simmetrica tra i due rami, è necessario installare una valvola anti-cavitazione per consentire lo scarico della portata in eccedenza.
Per tutti i modelli, possibilità di taratura su un vasto campo di pressione.

DIRECT ACTING RELIEF VALVE
These valves are ideal for continuous duty application. They work as protection against overload or surge conditions for all type of actuators. 3 solutions of assembly are available: cartridge, panel mounting and in line.
Dual cross relief valves are ideal for continuous duty application and as antishock valves. They work as protection against overload or surge conditions in both the lines of actuator. In case of actuator with not coaxial piston displacement between the lines, it's necessary to install an anti-cavitation valve, to guarantee the discharge of exceeding flow.
For all the models, It's possible to adjust the setting in a wide array of pressure.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
A 010	VPM-D-5-C(B)	A 150	VPM-D-80F-C(B)
A 015	VPM-D-15-C(B)	A 185	VPMHP-D-30-C(B)
A 030	VPM-D-40-C(B)	A 205	VPM-D-I-3
A 045	VPM-D-70-C(B)	A 280	VPM-D-40-IL-38
A 048	VPM-D-S10-C	A 282	VPM-D-40-IL-3/8-S-SP-08N
A 115	VPM-D-15F-C(B)	A 284	VPM-D-40-IL-1/2-SP-09D
A 130	VPM-D-40F-C(B)	A 290	VPM-D-40-IL-AC-1/2
A 145	VPM-D-70F-C(B)	A 305	VPM-D-70-IL-1/2

VALVOLE DI REG. PRESSIONE AD AREA DIFFERENZIALE E PILOTATE
Queste valvole sono indicate per condizioni d'uso più gravose grazie alle ridotte perdite di carico all'aumentare della portata, vengono impiegate principalmente come valvole anti-shock in applicazioni con frequenti intermittenze.

PILOT OPERATED AND DIRECT ACTING DIFFERENTIAL PISTON RELIEF VALVE
These valves are suitable for heavy duty conditions thanks to low pressure drop with increasing flow, are mainly used as anti-shock valves in applications with frequent intermittence.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
A 360	VPM-A-100-CB	A 480	VPM-P-150-C(B)
A 445	VPM-P-S10-C	A 490	VPM-PEV-200 (NA/NC)

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

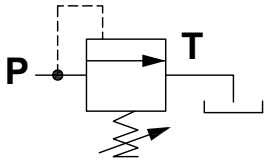
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

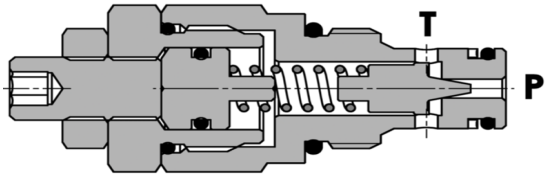
VPM-D-5-C(B)-*-*-*-*-*

A - 010/1

Valvola di regolazione pressione con cono guidato ad azione diretta
Direct acting, guided poppet style relief valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio (o acciaio, su richiesta).
Portata max.: 5 l/min
Taratura max.: 400 bar
Regolazione pressione: mediante vite o volantino (P/R)
Coppia di serraggio in cavità: 45-50 Nm
Cavità: 23081 (vedere sezione X)
Peso cartuccia: 0,140 Kg
Peso cartuccia con blocco: 0,300 Kg (std) - 0,600 Kg (S)

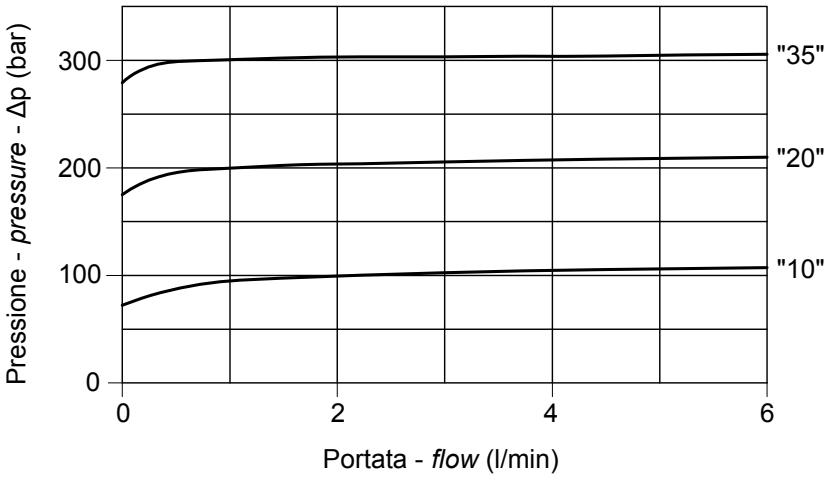
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (only CB version) is in high strenght alluminium alloy (steel body on request).*
Rated flow: *5 l/min*
Max. setting: *400 bar*
Adjustement means*: leakproof screw or handknob (P/R)*
Installation torque: *45-50 Nm*
Cavity: *23081 (see section X)*
Cartridge weight: *0,140 Kg*
Cartridge with body weight: *0,300 Kg (std) - 0,600 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



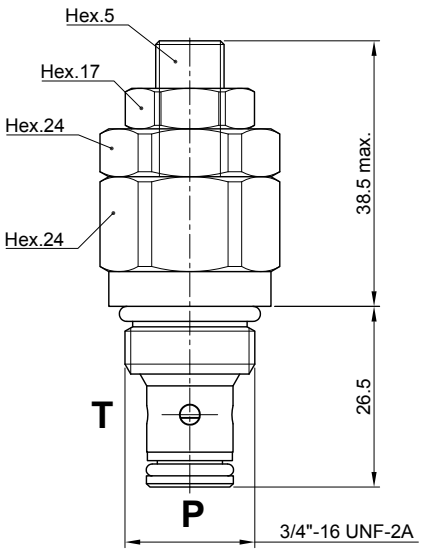
VPM-D-5-C(B)-*-*-*-*-*

A - 010/2

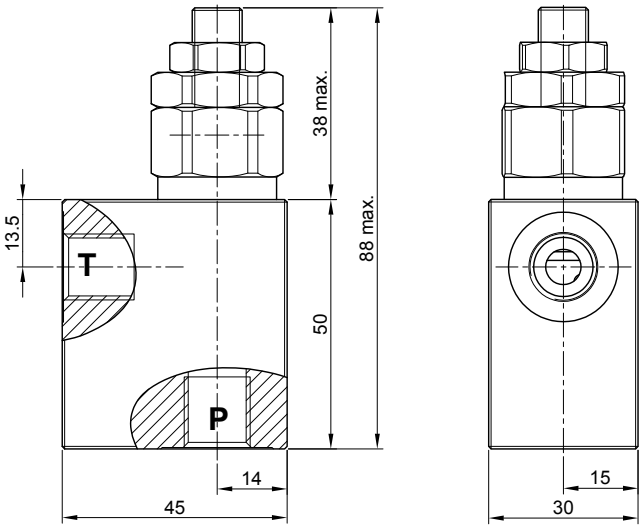
Valvola di regolazione pressione con cono guidato ad azione diretta
Direct acting, guided poppet style relief valve

Rev. 01-2010/02

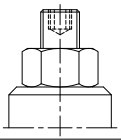
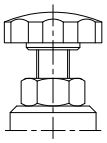
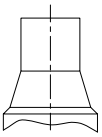
VPM D 5 C



VPM D 5 CB



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	20 - 140	26	20	Bianco *White*
20	40 - 280	55	40	Giallo *Yellow*
35	60 - 400	120	60	Verde *Green*

REGOLAZIONI – *ADJUSTEMENTS*	*	
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M | **D** | **5** | **C B** | **P** | **1 / 4** | **S** | **2 0** | *

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R/Z:
Regolazioni - *Adjustements*

* 1/4 = 1/4” BSPP
3/8 = 3/8” BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

Guarnizioni - *Seals*: V=Viton *
Omettere se BUNA-N -
Omit if BUNA-N

“10” / “20” / “35”: *
Campi di taratura pressione -
Adjustable pressure range

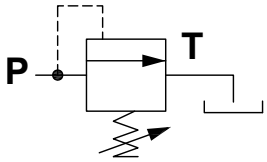
Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

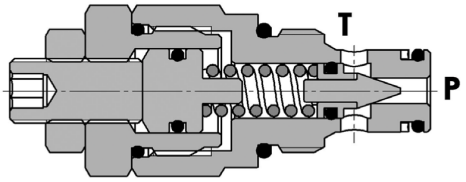
VPM-D-15-C(B)-*-*-*-*-*

A - 015/1

Valvola di regolazione pressione con cono guidato ad azione diretta
Direct acting, guided poppet style relief valve

Rev. 02-2010/04





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio (o acciaio, su richiesta).
Portata max.: 15 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite o volantino (P/R)
Coppia di serraggio in cavità: 45-50 Nm
Cavità: 23081 (vedere sezione X)
Peso cartuccia: 0,125 Kg
Peso cartuccia con blocco: 0,380 Kg (std) - 0.600 Kg (ver.S)

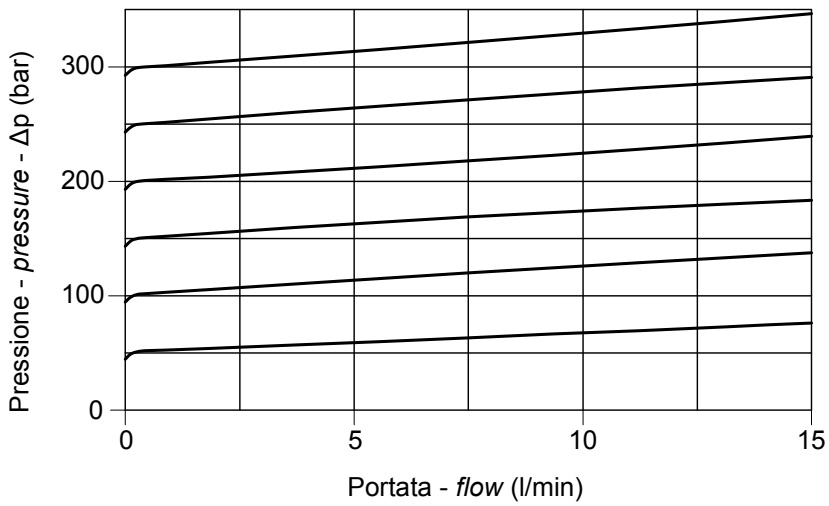
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (only CB version) is in high strenght alluminium alloy (steel body on request).*
Rated flow: *15 l/min*
Max. setting: *350 bar*
Adjustement means*: leakproof screw or handknob (P/R)*
Installation torque: *45-50 Nm*
Cavity: *23081 (see section X)*
Cartridge weight: *0,125 Kg*
Cartridge with body weight: *0,380 Kg (std) - 0.600 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



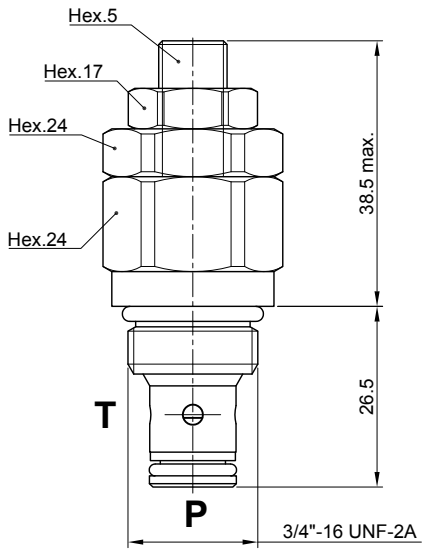
VPM-D-15-C(B)-*-*-*-*-*

A - 015/2

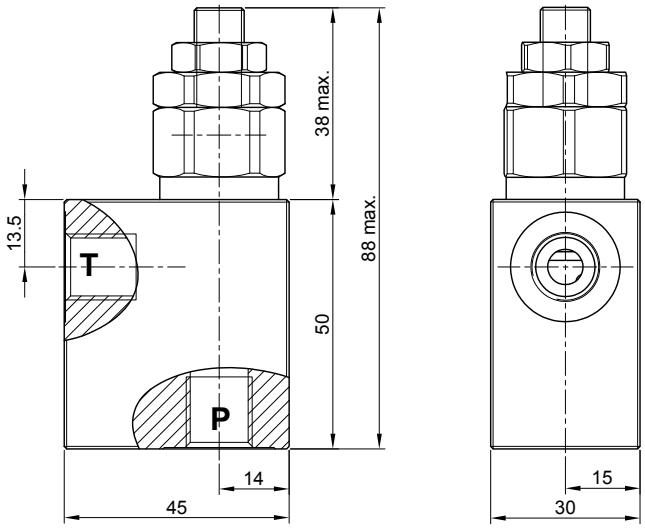
Valvola di regolazione pressione con cono guidato ad azione diretta
Direct acting, guided poppet style relief valve

Rev. 02-2010/04

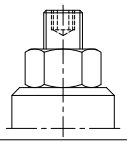
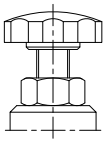
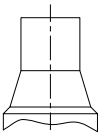
VPM D 15 C



VPM D 15 CB



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 60	15	5	Bianco *White*
10	20 - 130	30	20	Giallo *Yellow*
20	40 - 240	65	40	Verde *Green*
35	50 - 350	100	50	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM D 15 CB P 1/4 S 20 *

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R/Z:
Regolazioni - *Adjustements*

* 1/4 = 1/4" BSPP
3/8 = 3/8" BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

"05" / "10" / "20" / "35": *
Campi di taratura pressione -
Adjustable pressure range

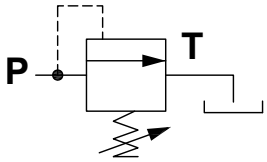
Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

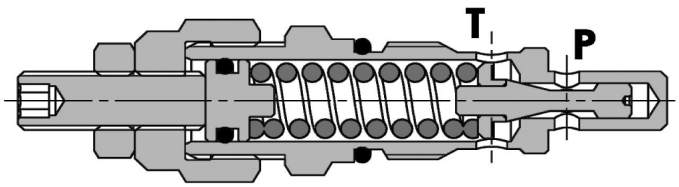
VPM-D-40-C(B)-*-*-*-*-*

A - 030/1

Valvola di regolazione pressione con cono guidato ad azione diretta
Direct acting, guided poppet style relief valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

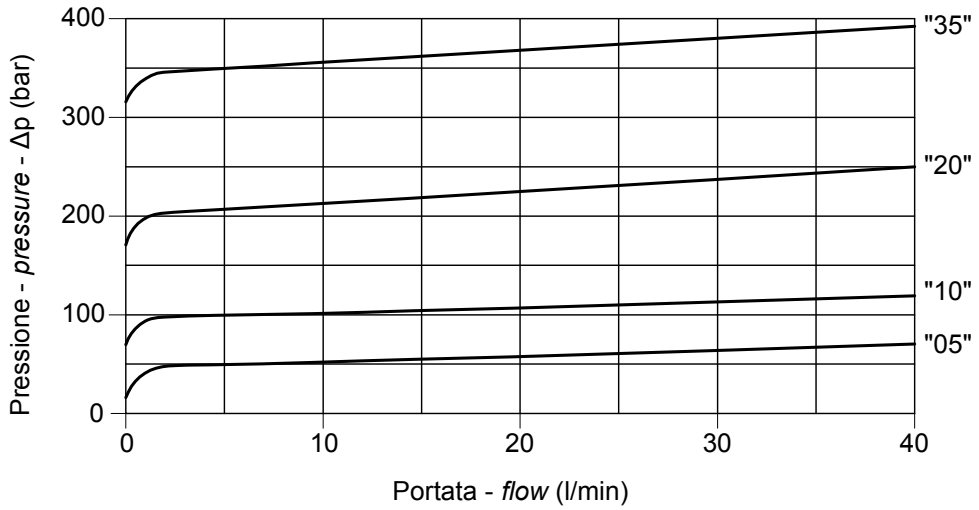
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio (o acciaio, su richiesta).
Portata max.: 40 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite o volantino (P/R)
Coppia di serraggio in cavità: 45-50 Nm
Cavità: 22201 (vedere sezione X)
Peso cartuccia: 0,165 Kg
Peso cartuccia con blocco: 0,410 Kg (std) - 0,800 Kg (ver.S)

TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (only CB version) is in high strenght alluminium alloy (steel body on request).*
Rated flow: *40 l/min*
Max. setting: *350 bar*
Adjustement means*: leakproof screw or handknob (P/R)*
Installation torque: *45-50 Nm*
Cavity: *22201 (see section X)*
Cartridge weight: *0,165 Kg*
Cartridge with body weight: *0,410 Kg (std) - 0,800 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E) — *Oil viscosity 24 mm²/sec. (3.5 °E)*
Temperatura 50 °C — *Temperature 50 °C*



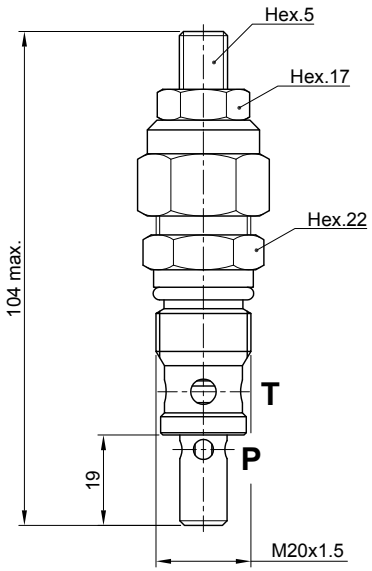
VPM-D-40-C(B)-*-*-*-*-*

A - 030/2

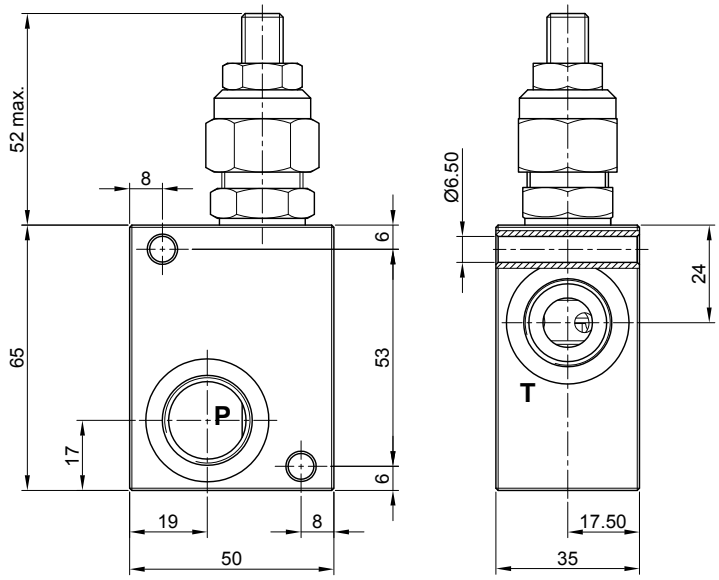
Valvola di regolazione pressione con cono guidato ad azione diretta
Direct acting, guided poppet style relief valve

Rev. 01-2010/02

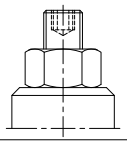
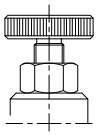
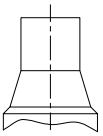
VPM D 40 C



VPM D 40 CB



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM | **D** | **40** | **CB** | **P** | **1/2** | **S** | **20** | *

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R/Z:
Regolazioni - *Adjustements*

* 3/8 = 3/8" BSPP
1/2 = 1/2" BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

"05" / "10" / "20" / "35": *
Campi di taratura pressione -
Adjustable pressure range

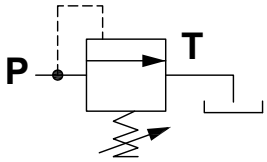
Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

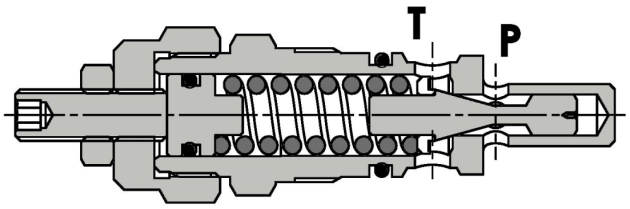
VPM-D-70-C(B)-*-*-*-*-*

A - 045/1

Valvola di regolazione pressione con cono guidato ad azione diretta
Direct acting, guided poppet style relief valve

Rev. 02-2010/07





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio (o acciaio, su richiesta).
Portata: 80 l/min
Taratura max.: 280 bar
Regolazione pressione: mediante vite o volantino (P/R)
Coppia di serraggio in cavità: 70-80 Nm
Cavità: 22261 (vedere sezione X)
Peso cartuccia: 0,285 Kg
Peso cartuccia con blocco: 0,730 Kg (std) - 1,450 Kg (ver.S)

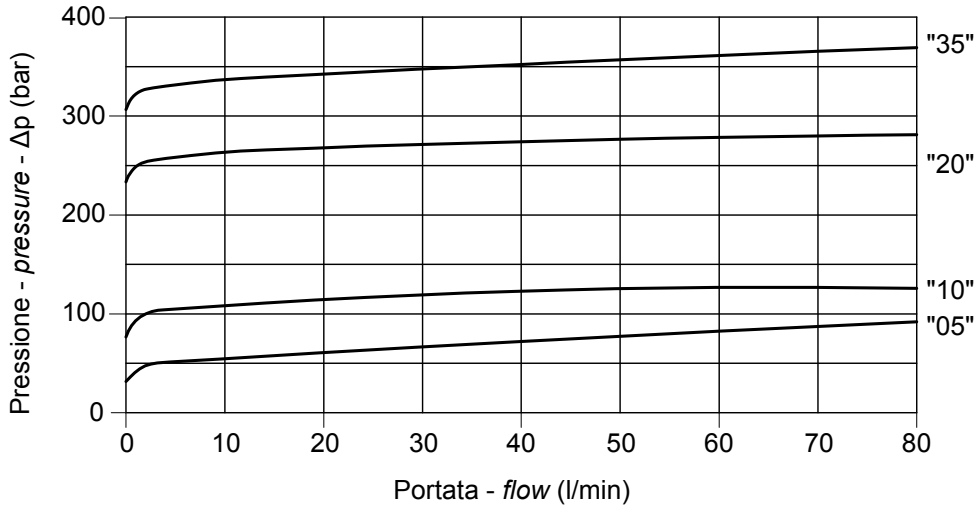
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (only CB version) is in high strenght alluminium alloy (steel body on request).*
Rated flow: *80 l/min*
Max. setting: *280 bar*
Adjustement means*: leakproof screw or handknob (P/R)*
Installation torque: *70-80 Nm*
Cavity: *22261 (see section X)*
Cartridge weight: *0,285 Kg*
Cartridge with body weight: *0,730 Kg (std) - 1,450 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



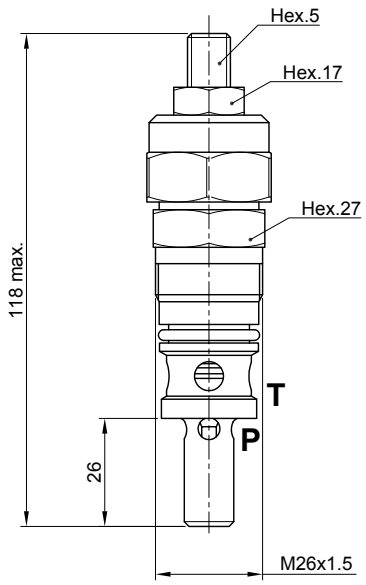
VPM-D-40-C(B)-*-*-*-*-*

A - 045/2

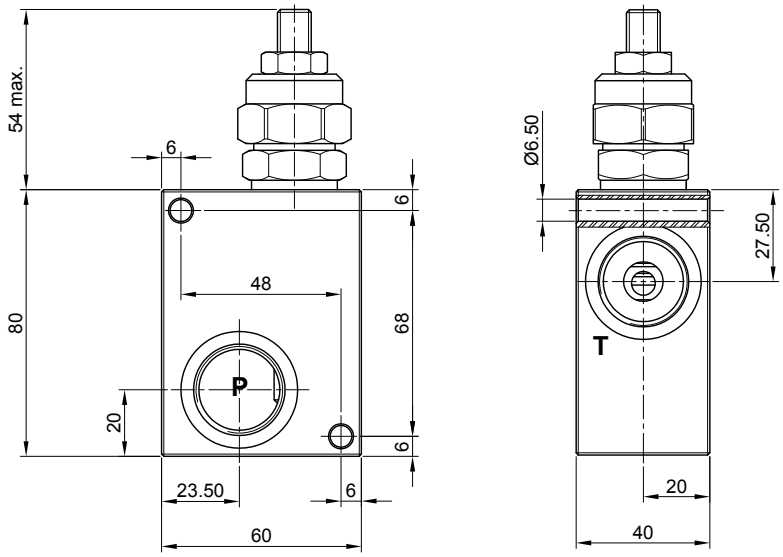
Valvola di regolazione pressione con cono guidato ad azione diretta
Direct acting, guided poppet style relief valve

Rev. 02-2010/07

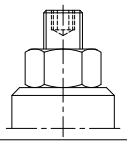
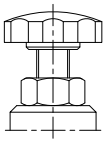
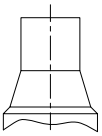
VPM D 70 C



VPM D 70 CB



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	80 - 280	40	80	Verde *Green*
35	120 - 320	50	120	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM | **D** | **70** | **CB** | **P** | **3/4** | **S** | **20** | *

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R/Z:
Regolazioni - *Adjustements*

* 1/2 = 1/2” BSPP
3/4 = 3/4” BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

“05” / “10” / “20” / “35”: *
Campi di taratura pressione -
Adjustable pressure range

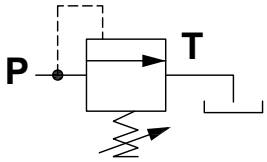
Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

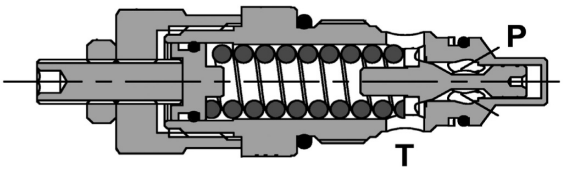
VPM-D-S10-C-P-35

A - 048/1

Valvola di regolazione pressione con cono guidato ad azione diretta, cavità SAE
Direct acting, guided poppet style relief valve, SAE cavity

Rev. 02-2010/08





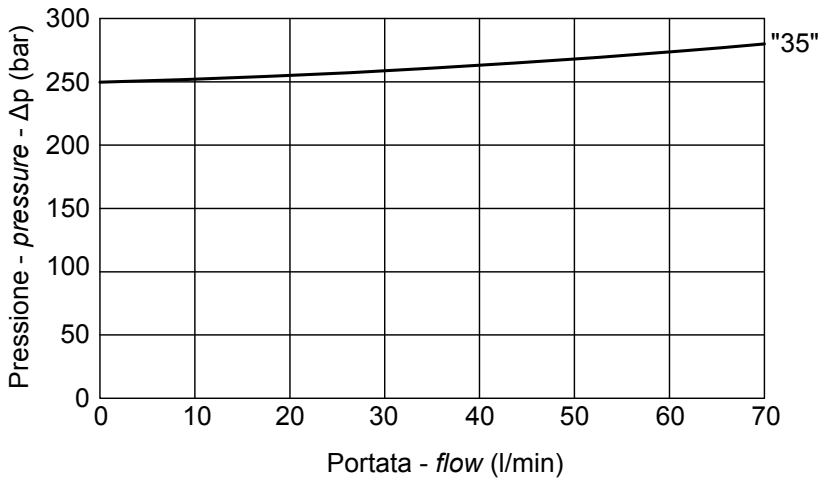
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 70 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *70 l/min*
Max. setting: *350 bar*
Adjustement means*: leakproof screw*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPM-D-S10-C-P-35

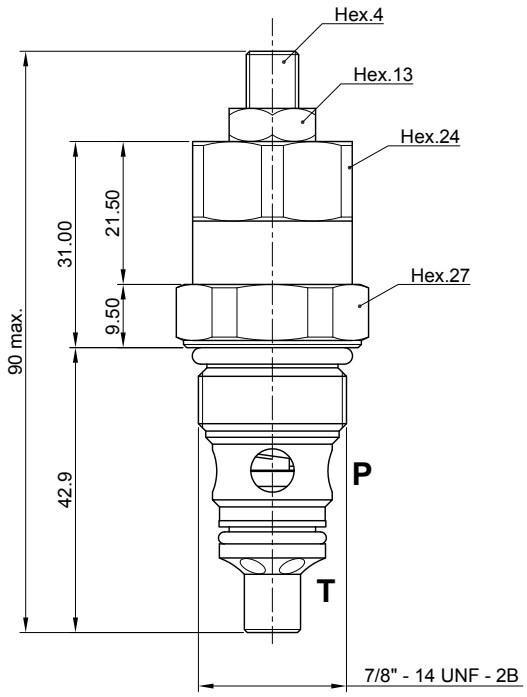
A - 048/2

Valvola di regolazione pressione con cono guidato ad azione diretta, cavità SAE

Direct acting, guided poppet style relief valve, SAE cavity

Rev. 02-2010/08

MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
35	100 - 350	/	100	/



TIPO *TYPE*	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
		Nm	Kg
VPM D S10 C	23102	35-38	0.170

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M	D	S 1 0	C	P	3 5

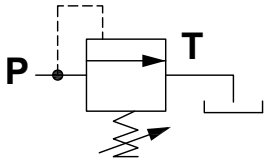
VPM-D-15F-C(B)-*-*-*-*-*

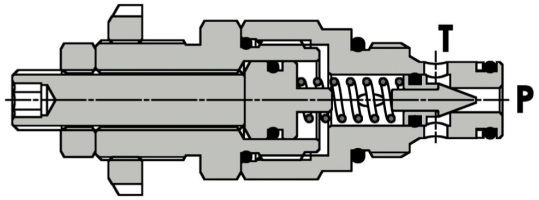
A - 115/1

Valvola di regolaz. pressione con cono guidato ad azione diretta - versione per montaggio a pannello

Direct acting, guided poppet style relief valve - panel mounted version

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio (o acciaio, su richiesta).
Portata: 15 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite o volantino (P/R)
Coppia di serraggio in cavità: 45-50 Nm
Cavità: 22081 (vedere sezione X)
Peso cartuccia: 0,180 Kg
Peso cartuccia con blocco: 0,430 Kg (std) - 0,660 Kg (ver.S)

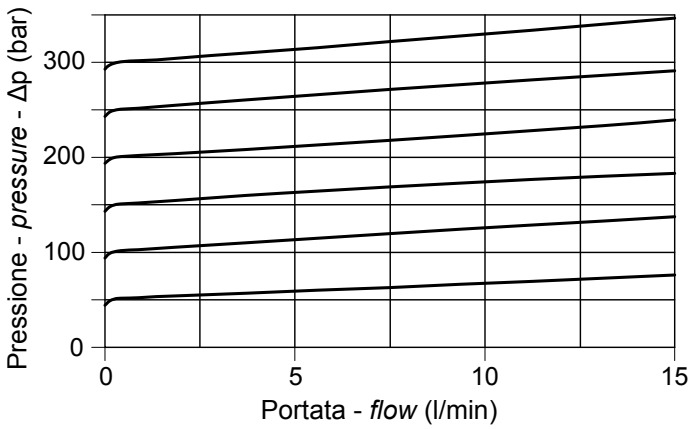
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (only CB version) is in high strenght alluminium alloy (steel body on request).*
Rated flow: *15 l/min*
Max. setting: *350 bar*
Adjustement means*: leakproof screw or handknob (P/R)*
Installation torque: *45-50 Nm*
Cavity: *22081 (see section X)*
Cartridge weight: *0,180 Kg*
Cartridge with body weight: *0,430 Kg (std) - 0,660 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPM-D-15F-C(B)-*-*-*-*-*

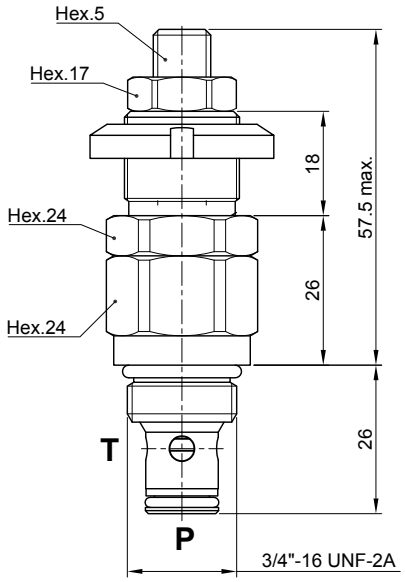
A - 115/2

Valvola di regolaz. pressione con cono guidato ad azione diretta - versione per montaggio a pannello

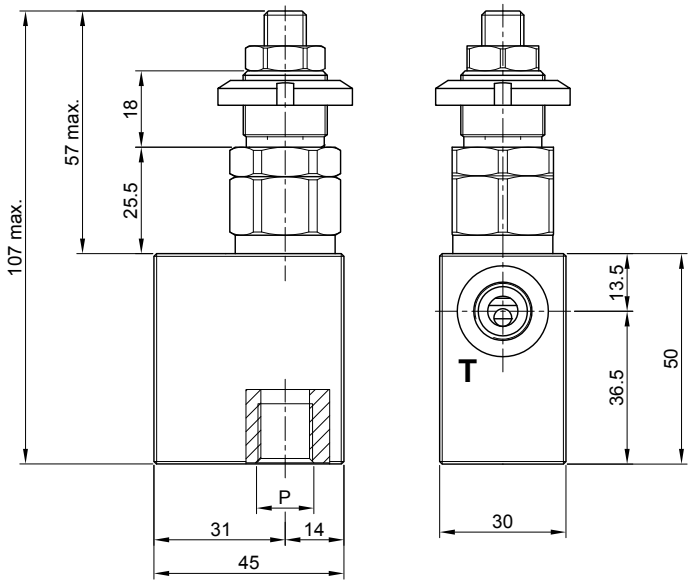
Direct acting, guided poppet style relief valve - panel mounted version

Rev. 01-2010/02

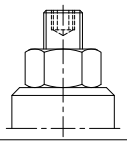
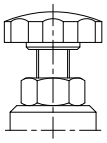
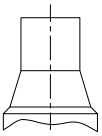
VPM D 15F C



VPM D 15F CB



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 60	15	5	Bianco *White*
10	20 - 130	30	20	Giallo *Yellow*
20	40 - 240	65	40	Verde *Green*
35	50 - 350	100	50	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM D 15F CB P 1/4 S 20 *

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R/Z:
Regolazioni - *Adjustements*

* 1/4 = 1/4" BSPP
3/8 = 3/8" BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

"05" / "10" / "20" / "35": *
Campi di taratura pressione - *Adjustable pressure range*

Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

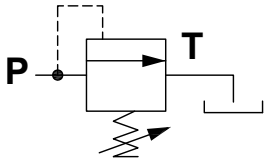
VPM-D-40F-C(B)-*-*-*-*-*

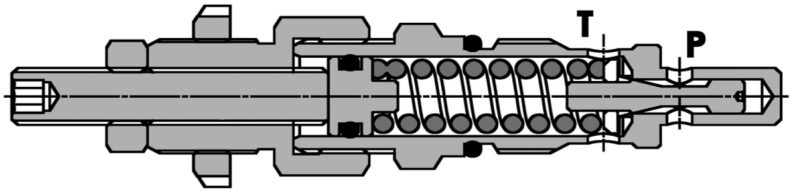
A - 130/1

Valvola di regolaz. pressione con cono guidato ad azione diretta - versione per montaggio a pannello

Direct acting, guided poppet style relief valve - panel mounted version

Rev. 01-2010/02





SPECIFICHE TECNICHE

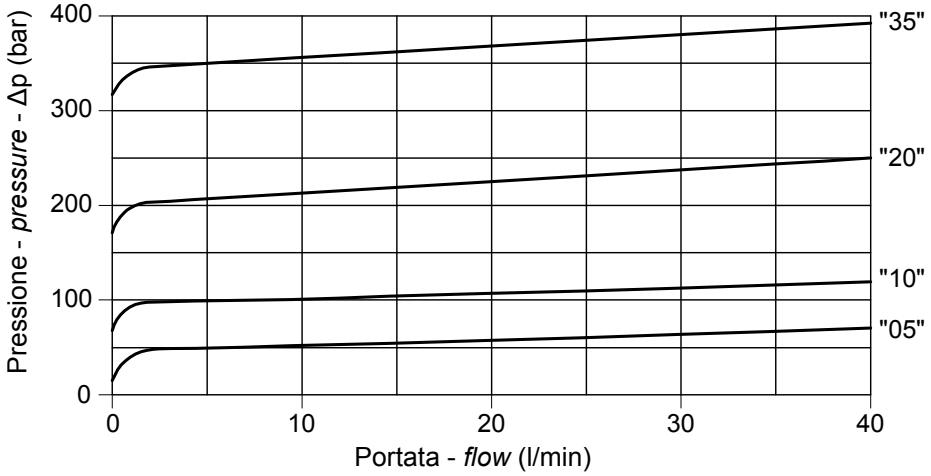
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio (o acciaio, su richiesta).
Portata: 40 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite o volantino (P/R)
Coppia di serraggio in cavità: 45-50 Nm
Cavità: 22201 (vedere sezione X)
Peso cartuccia: 0,210 Kg
Peso cartuccia con blocco: 0,450 Kg (std) - 0,850 Kg (ver.S)

TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (only CB version) is in high strenght alluminium alloy (steel body on request).*
Rated flow: *40 l/min*
Max. setting: *350 bar*
Adjustement means*: leakproof screw or handknob (P/R)*
Installation torque: *45-50 Nm*
Cavity: *22201 (see section X)*
Cartridge weight: *0,210 Kg*
Cartridge with body weight: *0,450 Kg (std) - 0,850 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E) — *Oil viscosity 24 mm²/sec. (3.5 °E)*
Temperatura 50 °C — *Temperature 50 °C*



VPM-D-40F-C(B)-*-*-*-*-*

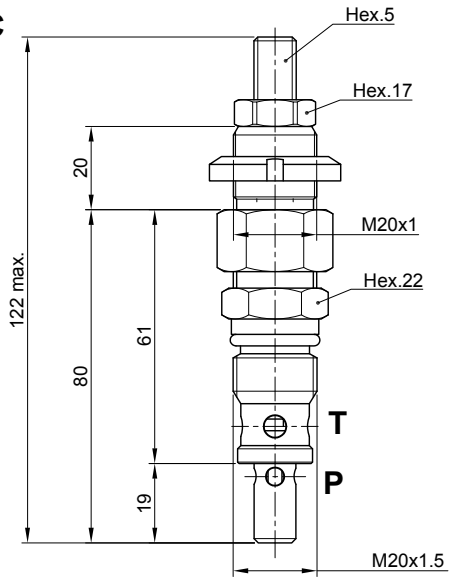
Valvola di regolaz. pressione con cono guidato ad azione diretta - versione per montaggio a pannello

Direct acting, guided poppet style relief valve - panel mounted version

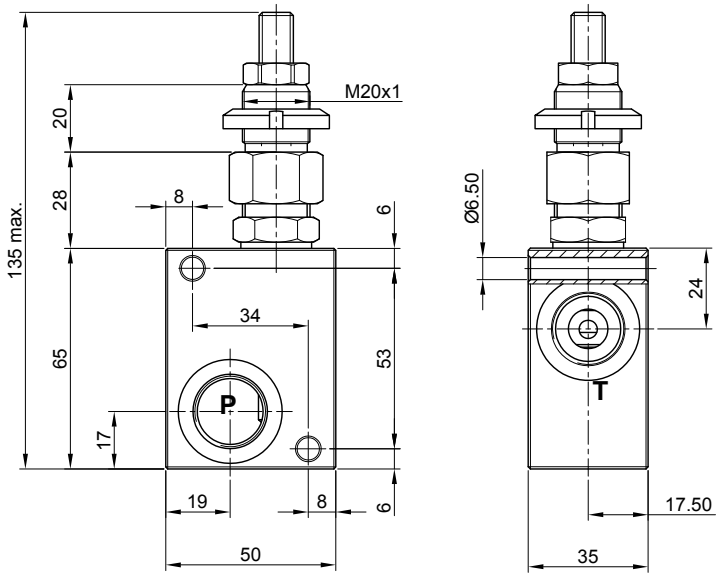
A - 130/2

Rev. 01-2010/02

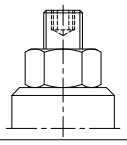
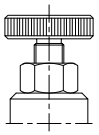
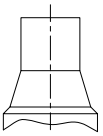
VPM D 40F C



VPM D 40F CB



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM | **D** | **40F** | **CB** | **P** | **3/8** | **S** | **20** | *

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R/Z:
Regolazioni - *Adjustements*

* 3/8 = 3/8" BSPP
1/2 = 1/2" BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

"05" / "10" / "20" / "35": *
Campi di taratura pressione - *Adjustable pressure range*

Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

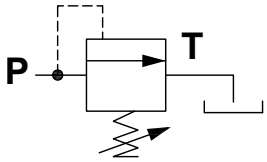
VPM-D-70F-C(B)-*-*-*-*-*

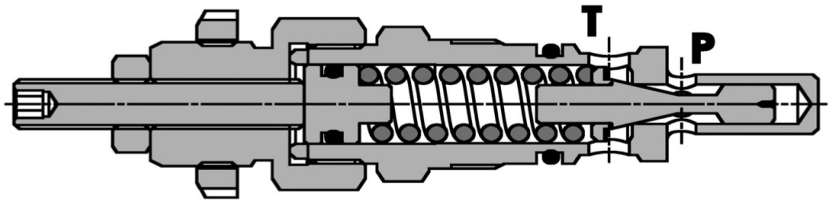
A - 145/1

Valvola di regolaz. pressione con cono guidato ad azione diretta - versione per montaggio a pannello

Direct acting, guided poppet style relief valve - panel mounted version

Rev. 01-2010/02





SPECIFICHE TECNICHE

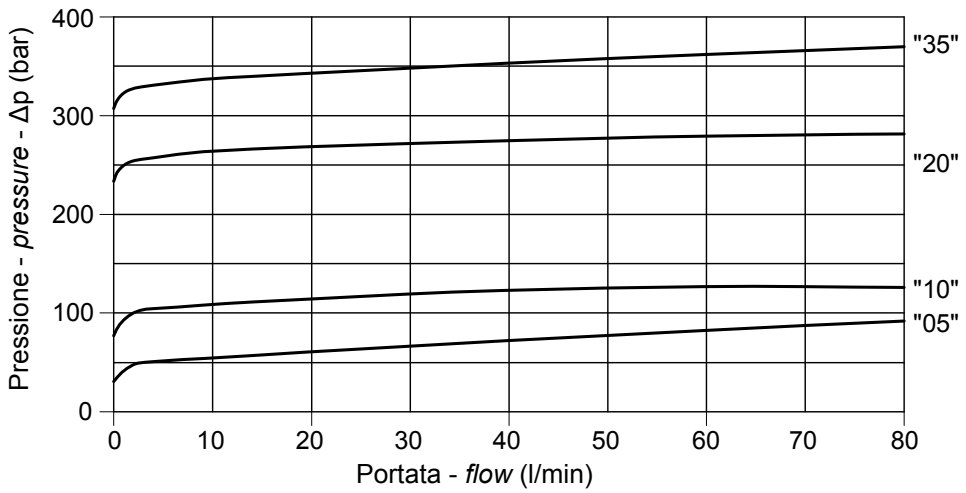
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio (o acciaio, su richiesta).
Portata: 80 l/min
Taratura max.: 280 bar
Regolazione pressione: mediante vite o volantino (P/R)
Coppia di serraggio in cavità: 70-80 Nm
Cavità: 22261 (vedere sezione X)
Peso cartuccia: 0,335 Kg
Peso cartuccia con blocco: 0,780 Kg (std) - 1,500 Kg (ver.S)

TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (only CB version) is in high strenght alluminium alloy (steel body on request).*
Rated flow: *80 l/min*
Max. setting: *280 bar*
Adjustement means*: leakproof screw or handknob (P/R)*
Installation torque: *70-80 Nm*
Cavity: *22261 (see section X)*
Cartridge weight: *0,335 Kg*
Cartridge with body weight: *0,780 Kg (std) - 1,500 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E) — *Oil viscosity 24 mm²/sec. (3.5 °E)*
Temperatura 50 °C — *Temperature 50 °C*



VPM-D-70F-C(B)-*-*-*-*-*

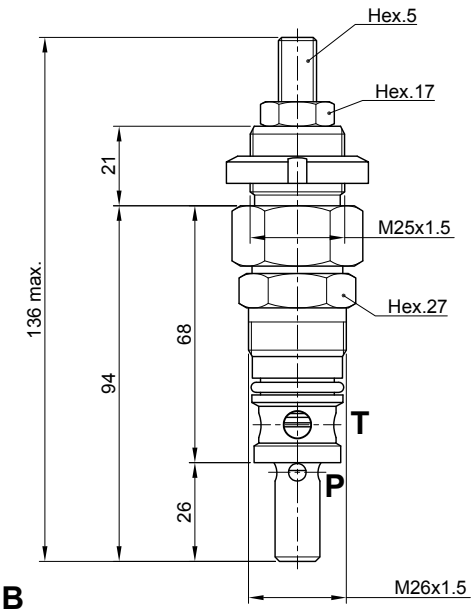
A - 145/2

Valvola di regolaz. pressione con cono guidato ad azione diretta - versione per montaggio a pannello

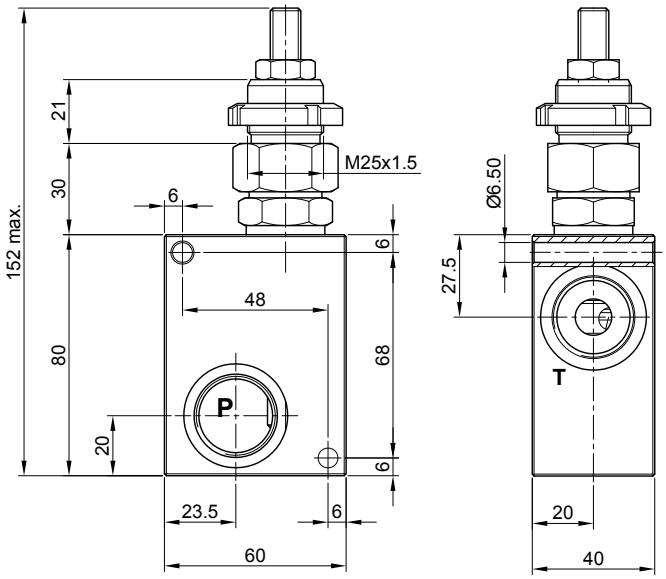
Direct acting, guided poppet style relief valve - panel mounted version

Rev. 01-2010/02

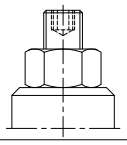
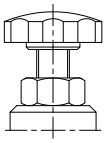
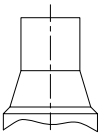
VPM D 70F C



VPM D 70F CB



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	80 - 280	40	80	Verde *Green*
35	120 - 320	50	120	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM D 70F CB P 3/4 S 20 *

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R/Z:
Regolazioni - *Adjustements*

* 1/2 = 1/2" BSPP
3/4 = 3/4" BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

"05" / "10" / "20" / "35": *
Campi di taratura pressione -
Adjustable pressure range

Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

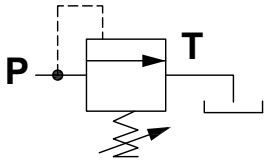
VPM-D-80F-C(B)-*-*-*-*-*

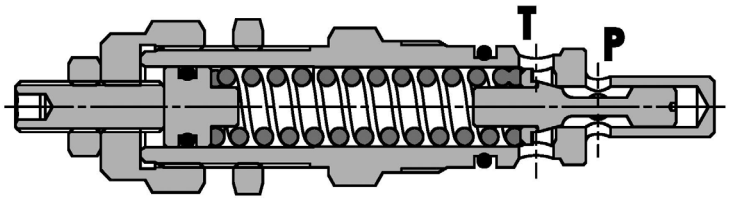
A - 150/1

Valvola di regolazione pressione con cono guidato ad azione diretta - Possibilità di montaggio a pannello

Direct acting, guided poppet style relief valve - panel mounted version

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio (o acciaio, su richiesta).
Portata: 80 l/min
Taratura max.: 280 bar
Regolazione pressione: mediante vite o volantino (P/R)
Coppia di serraggio in cavità: 70-80 Nm
Cavità: 22261 (vedere sezione X)
Peso cartuccia: 0,355 Kg
Peso cartuccia con blocco: 0,800 Kg (std) - 1,550 Kg (ver.S)

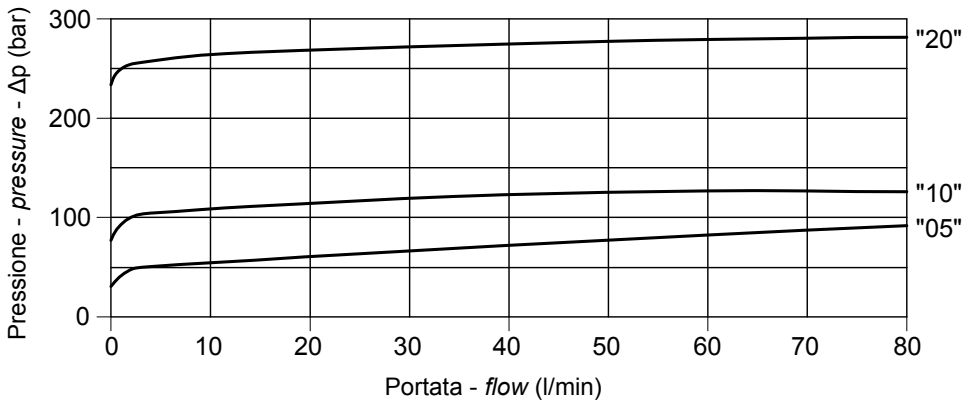
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (only CB version) is in high strenght alluminium alloy (steel body on request).*
Rated flow: *80 l/min*
Max. setting: *280 bar*
Adjustement means*: leakproof screw or handknob (P/R)*
Installation torque: *70-80 Nm*
Cavity: *22261 (see section X)*
Cartridge weight: *0,355 Kg*
Cartridge with body weight: *0,800 Kg (std) - 1,550 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPM-D-80F-C(B)-*-*-*-*-*

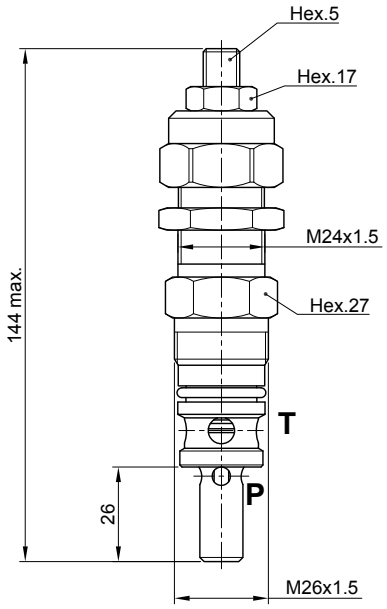
A - 150/2

Valvola di regolazione pressione con cono guidato ad azione diretta - Possibilità di montaggio a pannello

Direct acting, guided poppet style relief valve - panel mounted version

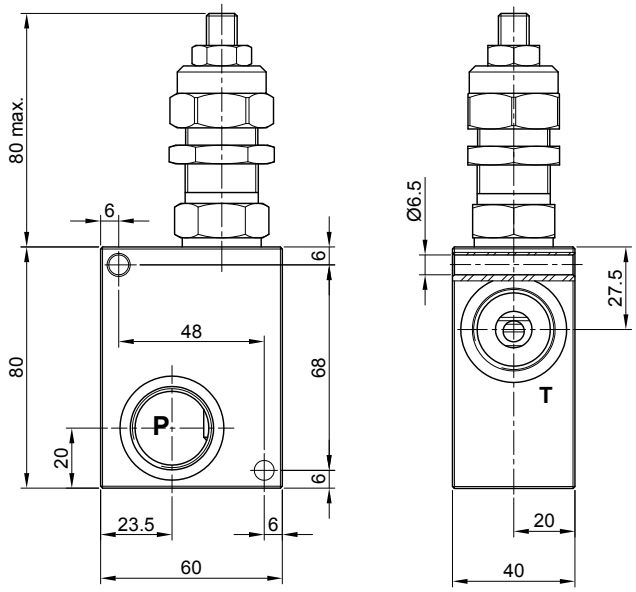
Rev. 01-2010/02

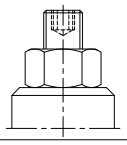
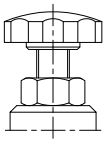
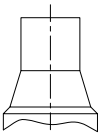
VPM D 80F C



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	80 - 280	40	80	Verde *Green*

VPM D 80F CB



REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM D 80F CB P 3/4 S 20 *

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R/Z:
Regolazioni - *Adjustements*

* 1/2 = 1/2" BSPP
3/4 = 3/4" BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

"05" / "10" / "20" : *
Campi di taratura pressione -
Adjustable pressure range

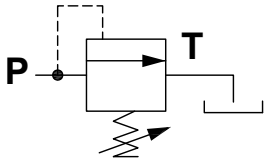
Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

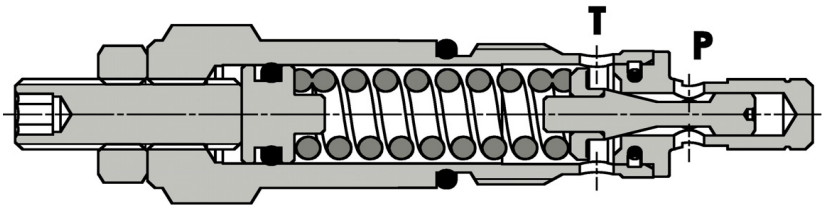
VPMHP-D-30-C(B)-P-*-*-*-*

Valvola di regolazione pressione con cono guidato ad azione diretta, pressioni elevate
Direct acting, guided poppet style relief valve, high pressure

A - 185/1

Rev. 02-2010/08





SPECIFICHE TECNICHE

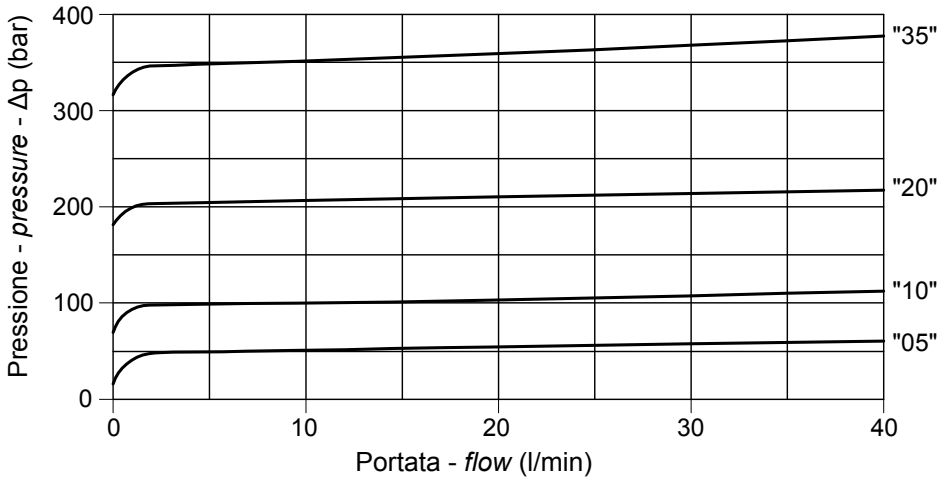
Materiali: cartuccia in acciaio zincato, sede speciale in acciaio trattato termicamente per maggiore resistenza in applicazioni a pressioni elevate. Corpo (solo versione CB) in lega di alluminio (o acciaio, su richiesta).
Portata max: 30 l/min
Taratura max.: 420 bar
Regolazione pressione: mediante vite
Coppia di serraggio in cavità: 45-50 Nm
Cavità: 22201 (vedere sezione X)
Peso cartuccia: 0,170 Kg
Peso cartuccia con blocco: 0,415 Kg (std) - 0,805 Kg (ver.S)

TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, special seat in hardened steel provides enhanced durability in high pressure applications. Body (only CB version) is in high strenght alluminium alloy (steel body on request).*
Rated flow: *30 l/min*
Max. setting: *420 bar*
Adjustement means*: leakproof screw*
Installation torque: *45-50 Nm*
Cavity: *22201 (see section X)*
Cartridge weight: *0,170 Kg*
Cartridge with body weight: *0,415 Kg (std) - 0,805 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E) — *Oil viscosity 24 mm²/sec. (3.5 °E)*
Temperatura 50 °C — *Temperature 50 °C*



VPMHP-D-30-C(B)-P-*-*-*-*

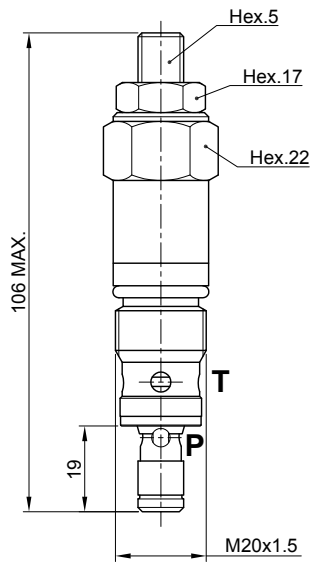
Valvola di regolazione pressione con cono guidato ad azione diretta, pressioni elevate

Direct acting, guided poppet style relief valve, high pressure

A - 185/2

Rev. 02-2010/08

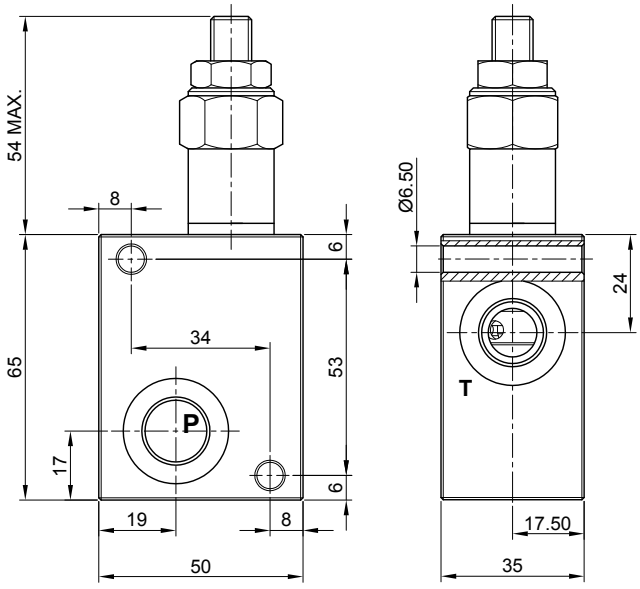
VPMHP D 30 C



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5(1)	Bianco *White*
10	30 - 100	20	30(1)	Giallo *Yellow*
20	50 - 220	40	50(1)	Verde *Green*
35	80 - 420	80	80(1)	Rosso *Red*

(1) solo per la versione CB, la versione C viene fornita senza taratura - *only CB version, the C version is supplied without standard setting*

VPMHP D 30 CB



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M H P | **D** | **3 0** | **C B** | **P** | **1 / 2** | **S** | **2 0** | *

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* 3/8 = 3/8" BSPP
1/2 = 1/2" BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

"05" / "10" / "20" / "35" : *
Campi di taratura pressione -
Adjustable pressure range

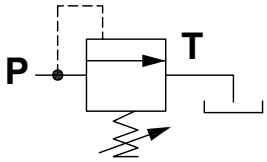
Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

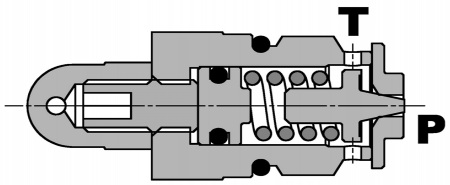
VPM-I-D-3-P-*(ex VM 260)

A - 205/1

Valvola di regolazione pressione con cono guidato ad azione diretta
Direct acting, guided poppet style relief valve

Rev. 03-2010/08





SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata max: 3 l/min
Taratura max.: 260 bar
Regolazione pressione: mediante vite
Coppia di serraggio in cavità: 35-45 Nm
Cavità: 22161
Peso: 0,040 Kg

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *3 l/min*
Max. setting: *260 bar*
Adjustement means*: leakproof screw*
Installation torque: *35-45 Nm*
Cavity: *22161*
Weight: *0,040 Kg*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

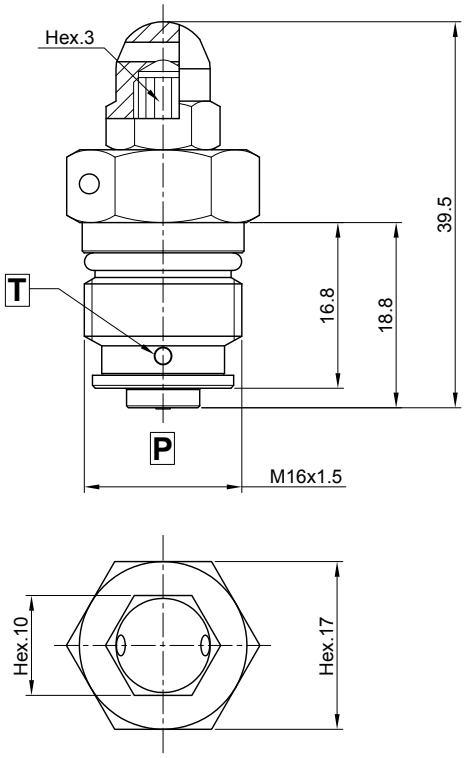
VPM-I-D-3-P-* (ex VM 260)

A - 205/2

Valvola di regolazione pressione con cono guidato ad azione diretta

Direct acting, guided poppet style relief valve

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	20 - 100	70	/	Neutro *Neutral*
20	85 - 260	150	/	Neutro *Neutral*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M | **I** | **D** | **3** | **P** | **2 0**

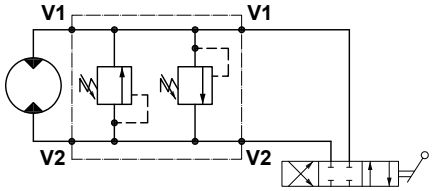
* “10” / “20”:
Campi di taratura pressione - *Adjustable pressure range*

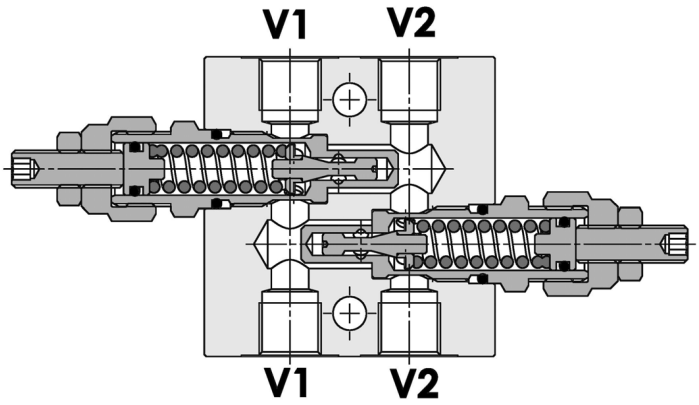
VPM-D-40-IL-*-3/8-*-*-*

A - 280/1

Valvole di regolazione pressione doppie incrociate ad azione diretta
Dual cross direct acting relief valves line mounted version

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio (o acciaio, su richiesta).
Portata: 40 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar (std) - 350 bar (ver. S)
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 0,800 Kg (std) - 2,150 Kg (ver.S)

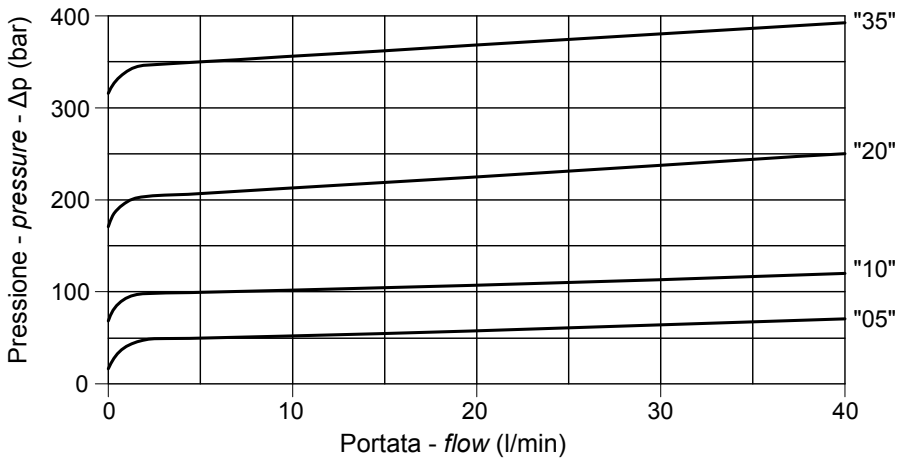
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy (steel body on request).*
Rated flow: *40 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar (std) - 350 bar (ver. S)*
Adjustement means*: leakproof screw or handknob (P/R)*
Weight: *0,800 Kg (std) - 2,150 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

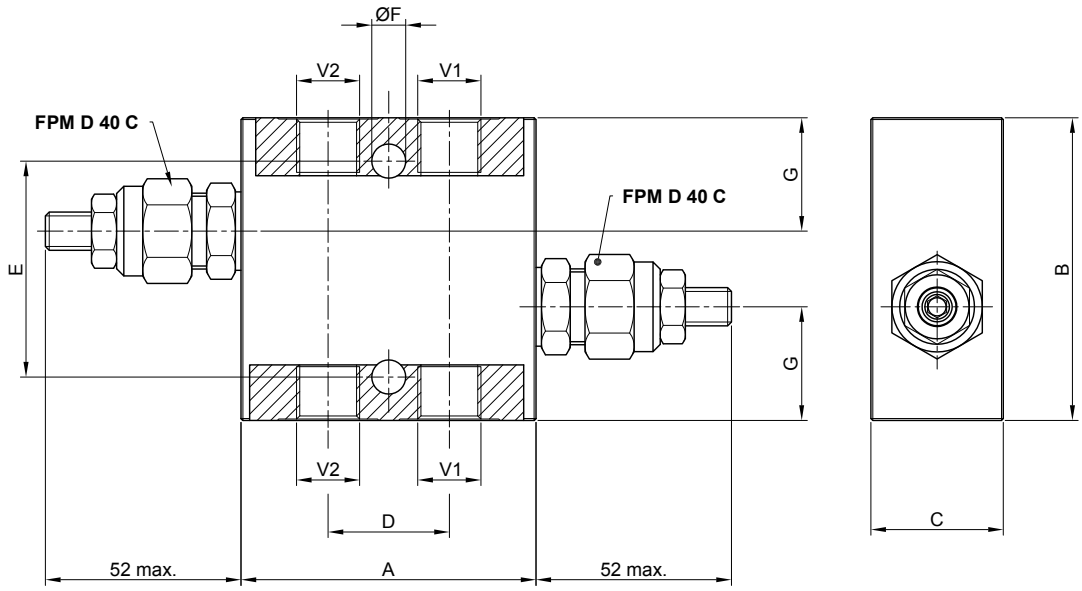
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPM-D-40-IL-*-3/8-*-*-* A - 280/2

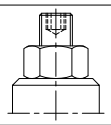
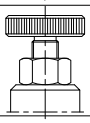
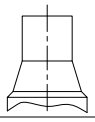
Valvole di regolazione pressione doppie incrociate ad azione diretta
Dual cross direct acting relief valves line mounted version

Rev. 01-2010/02



TIPO / *TYPE*	PORTATA MAX. *MAX FLOW*	V1-V2	A	B	C	D	E	F	G
	L/MIN	BSPP	mm	mm	mm	mm	mm	mm	mm
VPM-D-40-IL 3/8	40	3/8"	78	80	35	32	57	9	30

MOLLE - *SPRINGS* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS* *		
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM D 40 IL P 3/8 S 20 *

* P/R/Z: Regolazioni - *Adjustements*

* Materiale blocco: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S= steel

* “05” / “10” / “20” / “35”: Campi di taratura pressione - *Adjustable pressure range*

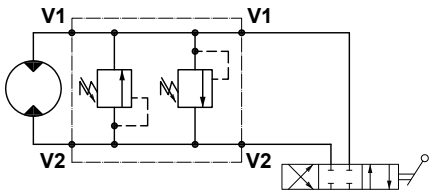
* Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N*

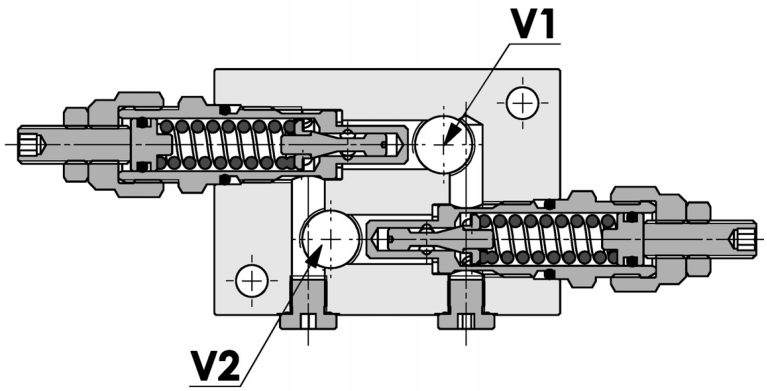
VPM-D-40-IL-*-3/8-S-*-SP-08N

A - 282/1

Valvole di regolazione pressione doppie incrociate ad azione diretta
Dual cross direct acting relief valves line mounted version

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in acciaio.
Portata: 40 l/min
Taratura max.: 350 bar
Pressione max.: 350 bar
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 1,450 Kg

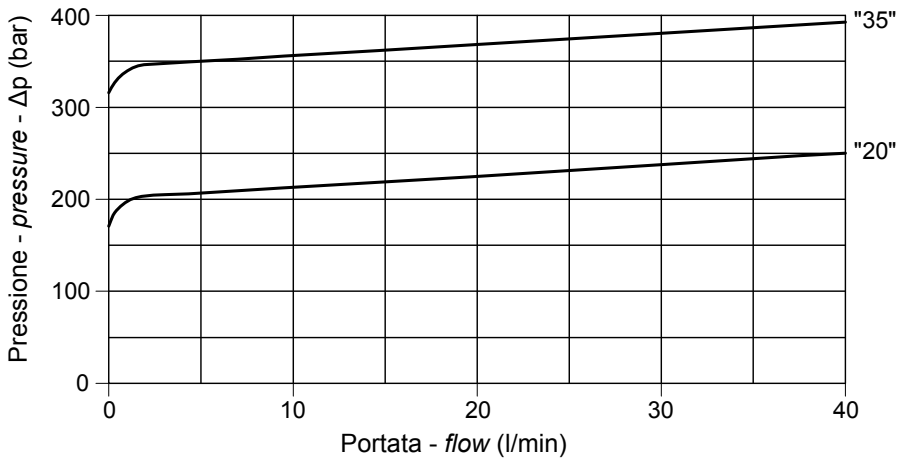
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Steel body, zinc plated.*
Rated flow: *40 l/min*
Max. setting: *350 bar*
Max. pressure: *350 bar*
Adjustement means*: leakproof screw or handknob (P/R)*
Weight: *1,450 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



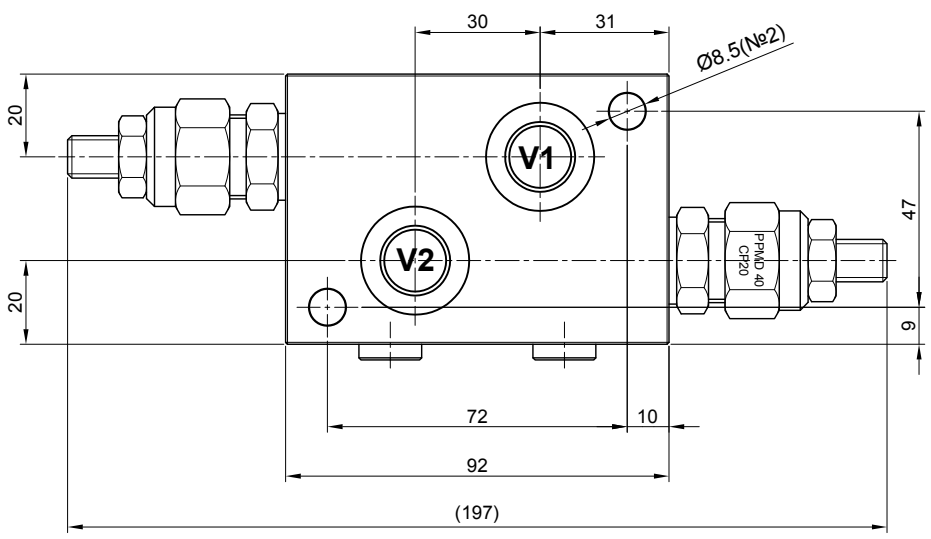
VPM-D-40-IL-*-3/8-S-*-SP-08N

A - 282/2

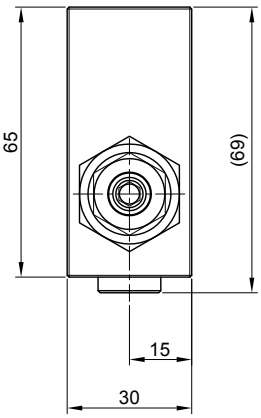
Valvole di regolazione pressione doppie incrociate ad azione diretta

Dual cross direct acting relief valves line mounted version

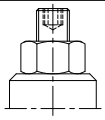
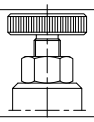
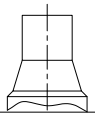
Rev. 01-2010/02



V1/V2=3/8"BSPP



MOLLE - *SPRINGS* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS* *		
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM	D	40	IL	P	3/8	S	20	SP-08N

* P/R/Z: Regolazioni - *Adjustements*

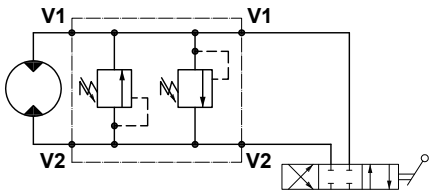
"20" / "35": * Campi di taratura pressione - *Adjustable pressure range*

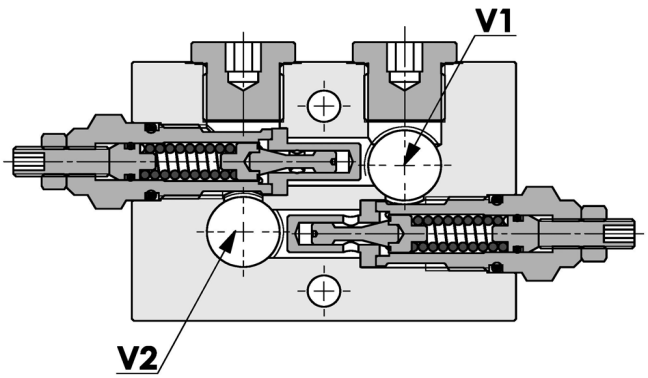
VPM-D-40-IL-P-1/2-20-SP-09D

A - 284/1

Valvole di regolazione pressione doppie incrociate ad azione diretta
Dual cross direct acting relief valves line mounted version

Rev. 02-2010/08





SPECIFICHE TECNICHE

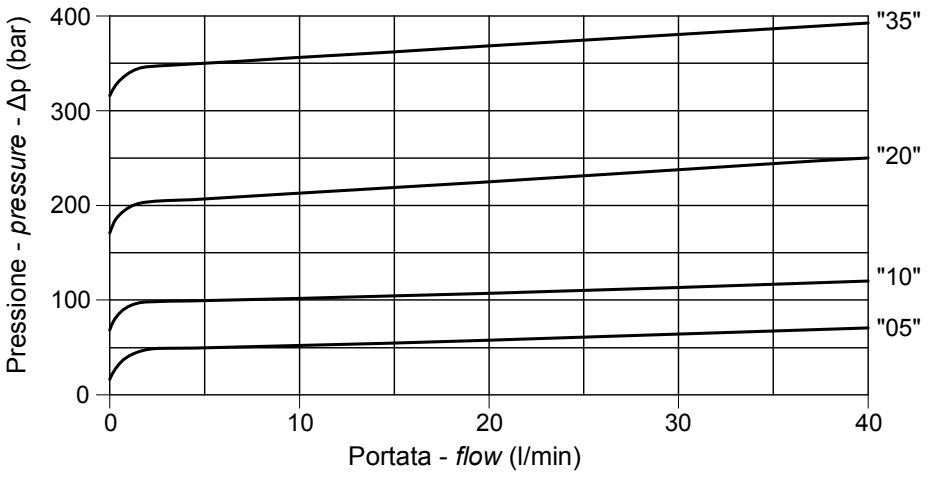
Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata: 40 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar
Regolazione pressione: mediante vite (P)
Peso: 1,840 Kg

TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *40 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Adjustement means*: leakproof screw (P)*
Weight: *1,840 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E) — *Oil viscosity 24 mm²/sec. (3.5 °E)*
Temperatura 50 °C — *Temperature 50 °C*



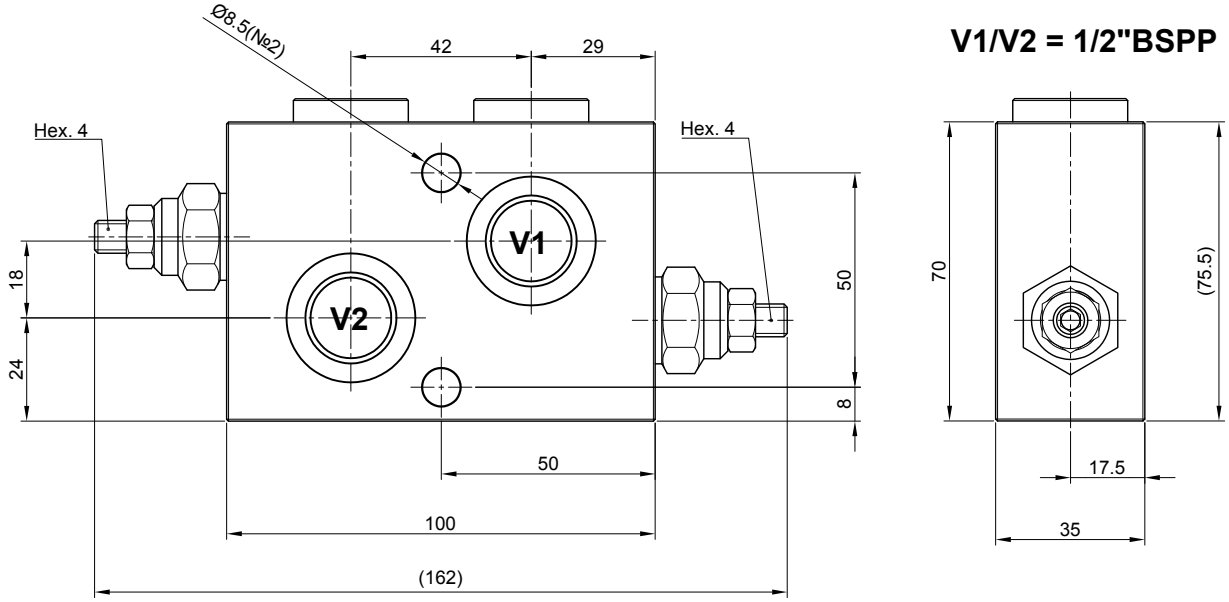
VPM-D-40-IL-P-1/2-20-SP-09D

A - 284/2

Valvole di regolazione pressione doppie incrociate ad azione diretta

Dual cross direct acting relief valves line mounted version

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
20	30 - 250	50	30	Verde *Green*

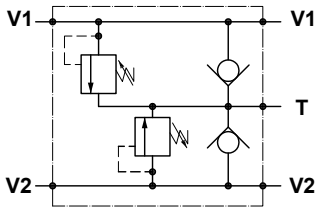
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

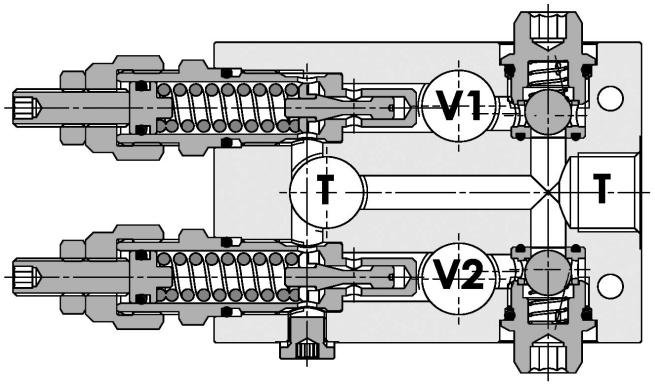
V P M	D	4 0	I L	P	1 / 2	2 0	S P - 0 9 N

VPM D 40 IL-AC-P-1/2-A-* A - 290/1

Valvole di regolazione pressione doppie incrociate ad azione diretta, anticavitazione
Dual cross direct acting relief valves line mounted version, anti-cavitation

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata: 40 l/min
Pressione max.: 250 bar
Regolazione pressione: mediante vite
Peso: 1,050 Kg

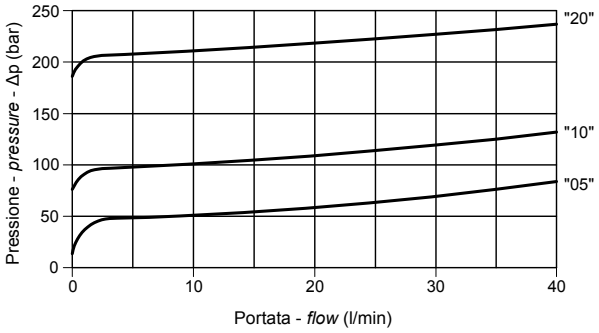
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *40 l/min*
Max. pressure: *250 bar*
Adjustement means*: leakproof screw*
Weight: *1,050 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E) *Oil viscosity 24 mm²/sec. (3.5 °E)*
Temperatura 50 °C *Temperature 50 °C*

V2 → T

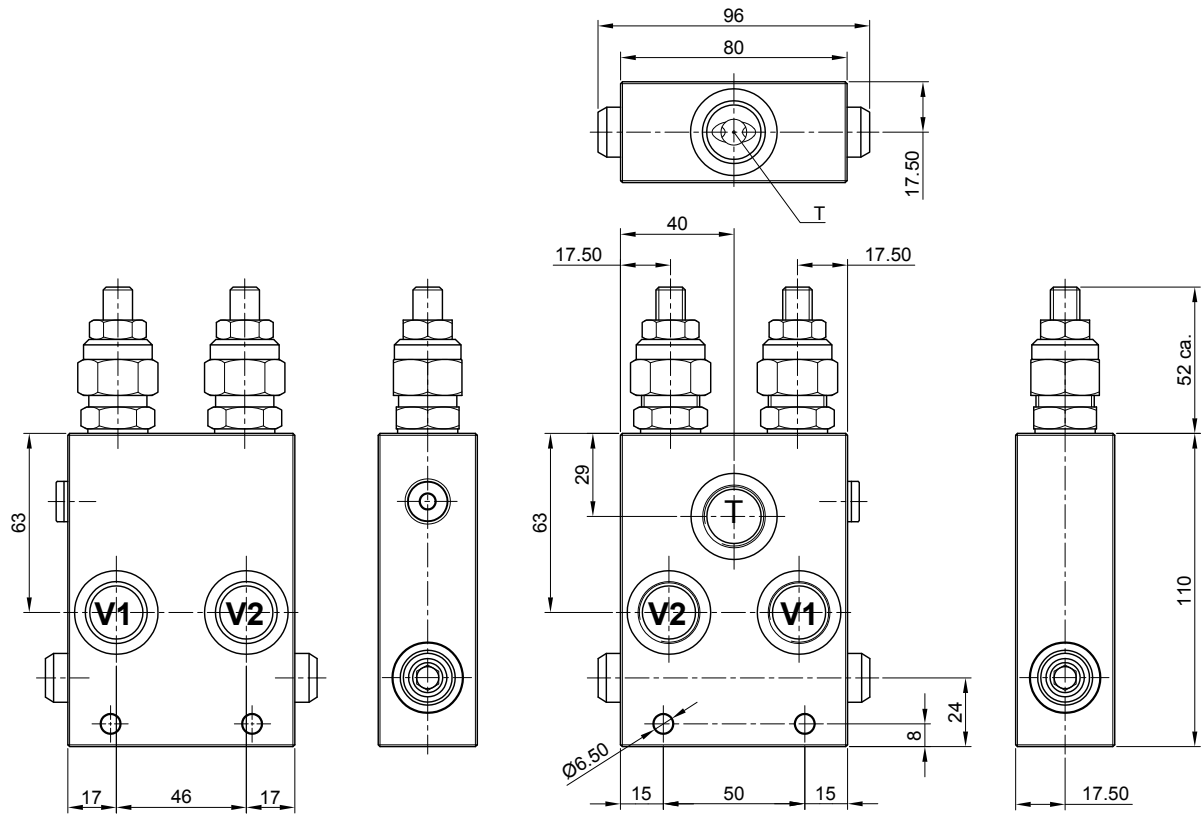


T → V2

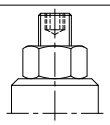
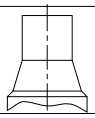
VPM D 40 IL-AC-P-1/2-A-* A - 290/2

Valvole di regolazione pressione doppie incrociate ad azione diretta, anticavitazione
Dual cross direct acting relief valves line mounted version, anti-cavitation

Rev. 01-2010/02



MOLLE - *SPRINGS* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*

REGOLAZIONI – *ADJUSTEMENTS* *		
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M	D	4 0	I L	A C	P	1 / 2	A	2 0

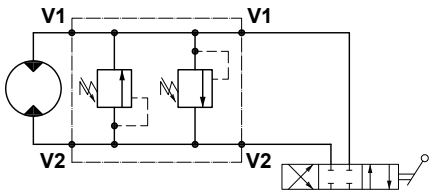
* P/Z:
Regolazioni - *Adjustements*

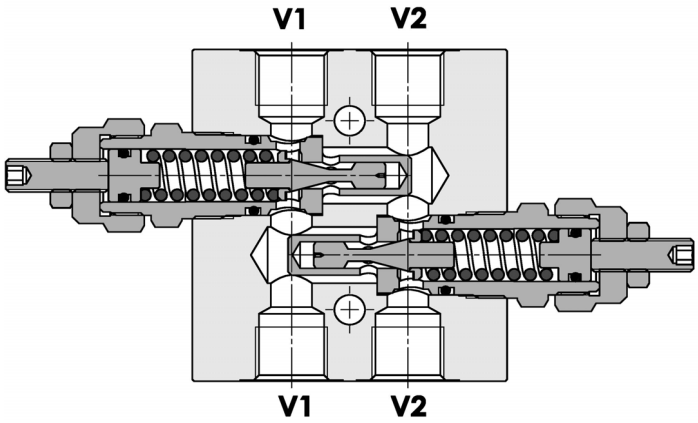
* “05” / “10” / "20":
Campi di taratura pressione - *Adjustable pressure range*

VPM-D-70-IL-*-1/2-*-*-* A - 305/1

Valvole di regolazione pressione doppie incrociate ad azione diretta
Dual cross direct acting relief valves line mounted version

Rev. 01-2010/02





SPECIFICHE TECNICHE

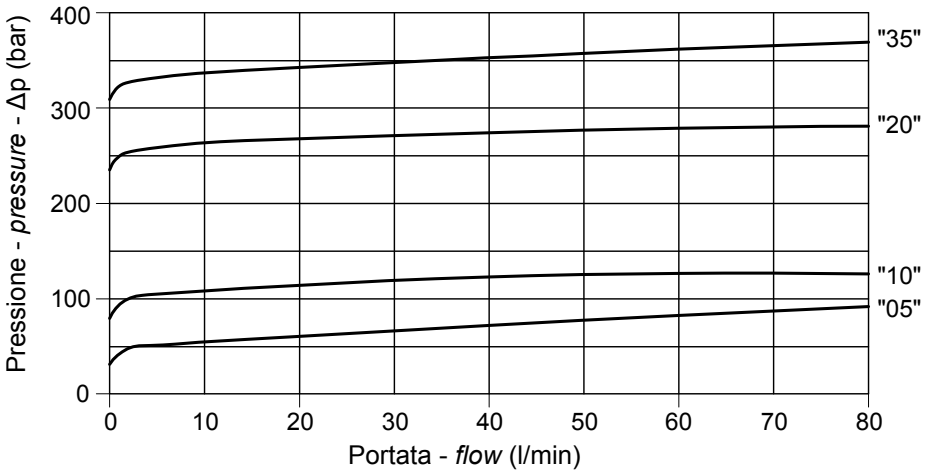
Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio (o acciaio, su richiesta).
Portata: 80 l/min
Taratura max.: 320 bar
Pressione max.: 250 bar (std) - 350 bar (ver. S)
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 1,325 Kg (std) - 2,750 Kg (ver.S)

TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy (steel body on request).*
Rated flow: *80 l/min*
Max. setting: *320 bar*
Max. pressure: *250 bar (std) - 350 bar (ver. S)*
Adjustement means*: leakproof screw or handknob (P/R)*
Weight: *1,325 Kg (std) - 2,750 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

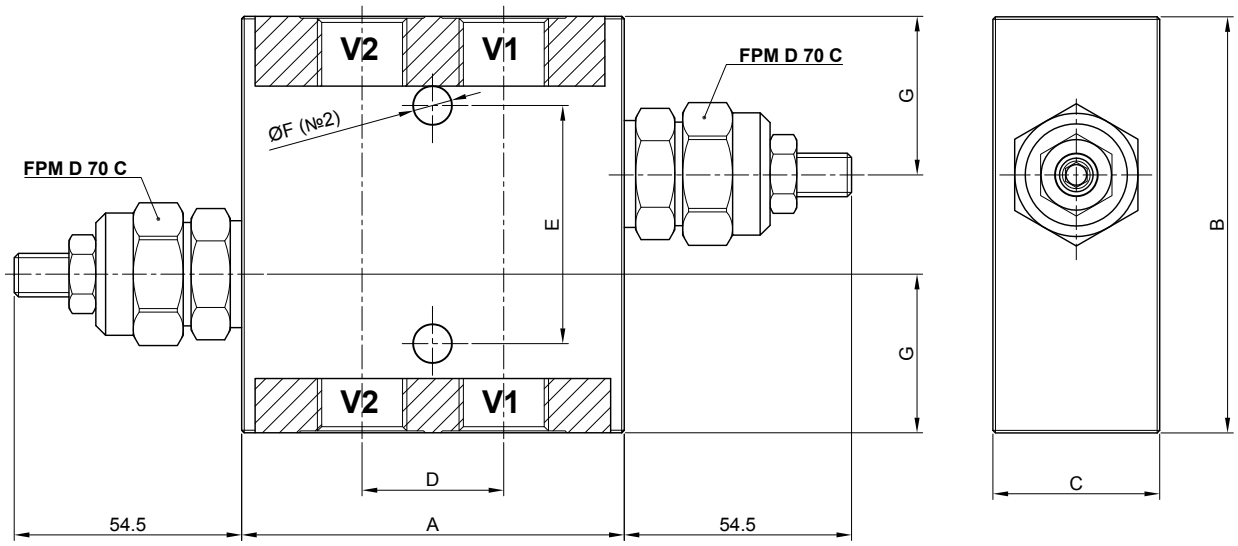
Viscosità olio 24 mm²/sec. (3.5 °E) — *Oil viscosity 24 mm²/sec. (3.5 °E)*
Temperatura 50 °C — *Temperature 50 °C*



VPM-D-70-IL-*-1/2-*-*-* A - 305/2

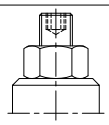
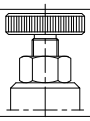
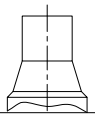
Valvole di regolazione pressione doppie incrociate ad azione diretta
Dual cross direct acting relief valves line mounted version

Rev. 01-2010/02



TIPO / *TYPE*	PORTATA MAX. *MAX FLOW*	V1-V2	A	B	C	D	E	F	G
	L/MIN	BSPP	mm	mm	mm	mm	mm	mm	mm
VPM-D-70-IL 1/2	80	1/2"	92	100	40	34	57	9	38

MOLLE - *SPRINGS* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	80 - 280	40	80	Verde *Green*
35	120 - 320	50	120	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS* *		
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M | **D** | **7 0** | **I L** | **P** | **1 / 2** | **S** | **2 0** | *

* P/R/Z: Regolazioni - *Adjustements*

* Materiale blocco: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S= steel

* “05” / “10” / “20” / “35”: Campi di taratura pressione - *Adjustable pressure range*

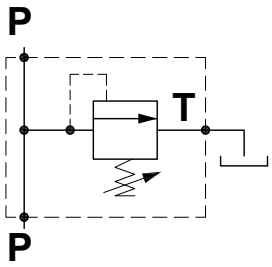
* Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N*

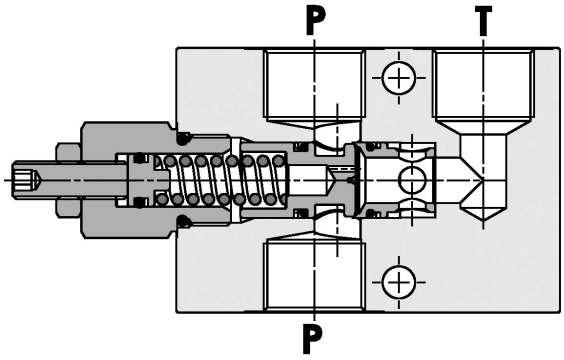
VPM A 100 CB-*-*-*

A - 360/1

Valvola di regolazione pressione, azione diretta, ad area differenziale
Direct acting, differential piston, relief valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata: 100 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar
Regolazione pressione: mediante vite
Peso: 1,000 Kg

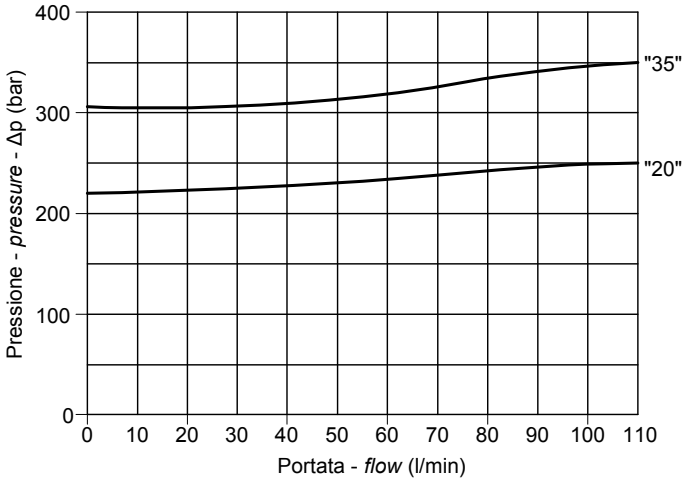
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *100 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Adjustement means*: leakproof screw*
Weight: *1,000 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

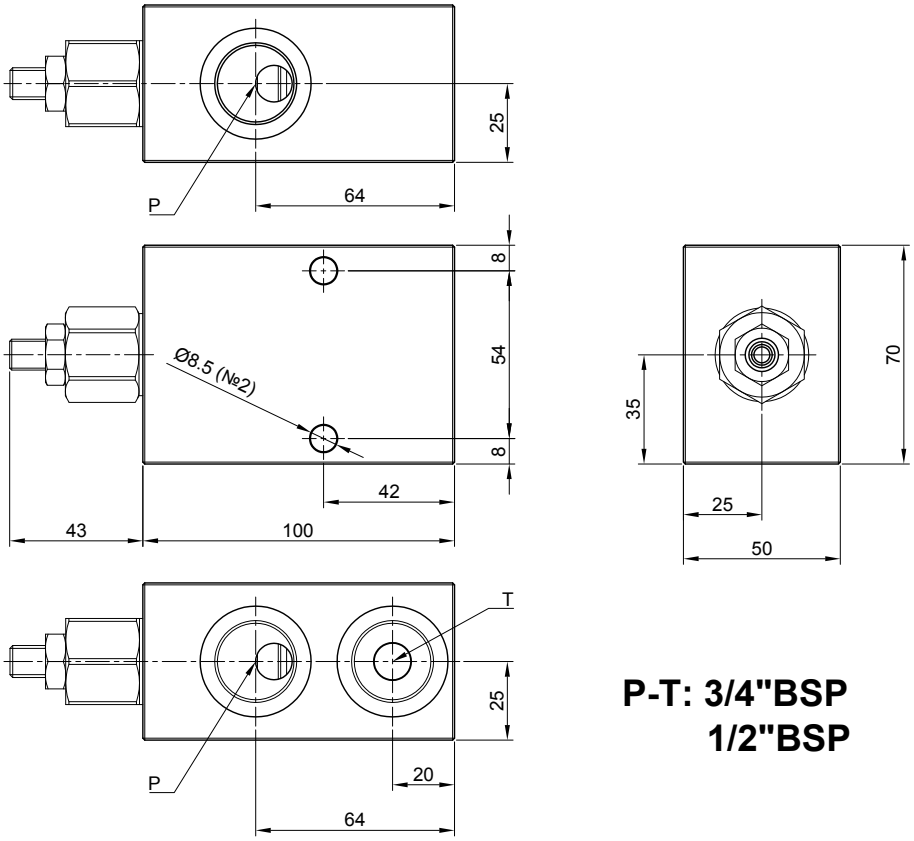


VPM A 100 CB-*-*-*

A - 360/2

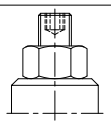
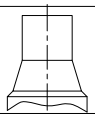
Valvola di regolazione pressione, azione diretta, ad area differenziale
Direct acting, differential piston, relief valve

Rev. 01-2010/02



P-T: 3/4"BSP
1/2"BSP

MOLLE - *SPRINGS* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
20	60 - 210	70	170	Verde *Green*
35	80 - 350	120	280	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS* *		
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M | **A** | **1 0 0** | **C B** | **P** | **3 / 4** | **2 0**

* P/Z:
Regolazioni - *Adjustements*

* 1/2 = 1/2" BSPP
3/4 = 3/4" BSPP
Connessioni P/T - *P/T port sizes*

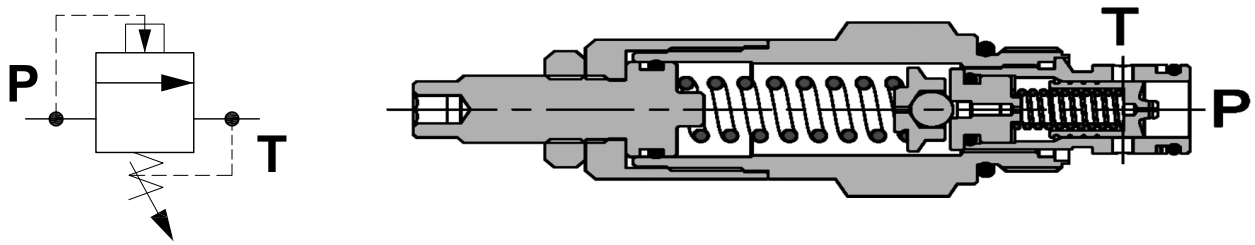
"20" / "35": *
Campi di taratura pressione -
Adjustable pressure range

VPM-P-S10-C-P-*

A - 445/1

Valvola di regolazione pressione pilotata a cursore, cavità SAE
Pilot operating sliding spool type relief valve, SAE cavity

Rev. 01-2010/02



SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 110 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite

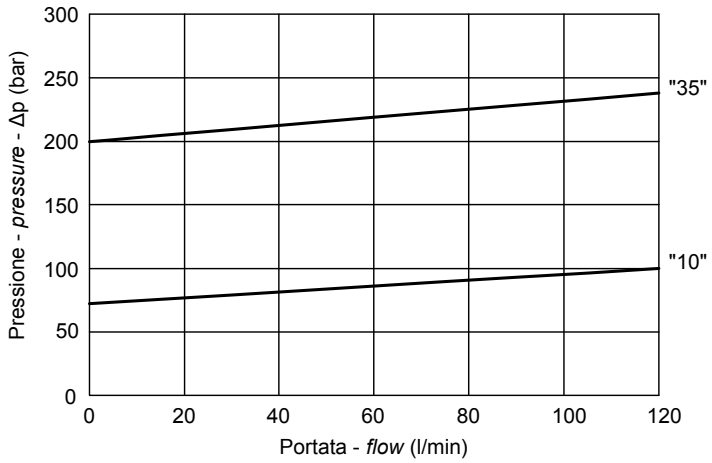
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *110 l/min*
Max. setting: *350 bar*
Adjustement means*: leakproof screw*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



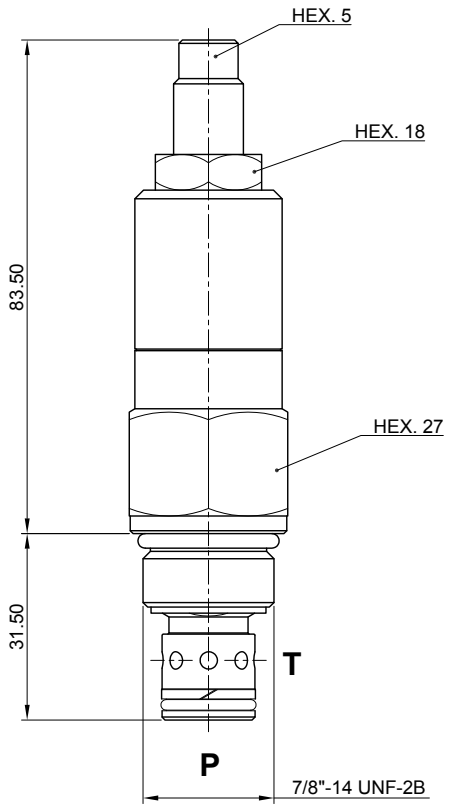
VPM-P-S10-C-P-*

A - 445/2

Valvola di regolazione pressione pilotata a cursore, cavità SAE
Pilot operating sliding spool type relief valve, SAE cavity

Rev. 01-2010/02

MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	10 - 140	/	10	/
35	25 - 350	/	25	/



TIPO *TYPE*	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
		Nm	Kg
VPM P S10 C	23101	35 - 38	0.270

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M	P	S 1 0	C	P	3 5

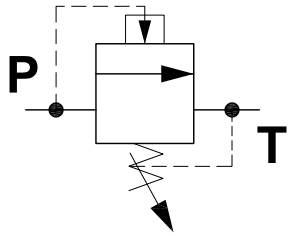
* "10" / "35":
Campi di taratura pressione - *Adjustable pressure range*

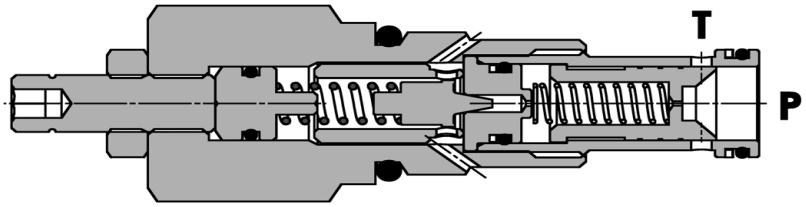
VPM-P-150-C(B)-P-*-*

A - 480/1

Valvola di regolazione pressione pilotata, a cursore
Pilot operating, sliding spool type, relief valve

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio.
Portata: 150 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Coppia di serraggio in cavità: 60 Nm
Cavità: 26241 (vedere sezione X)
Peso cartuccia: 0,140 Kg
Peso cartuccia con blocco 3/4": 0,650 Kg
Peso cartuccia con blocco 1": 0,910 Kg

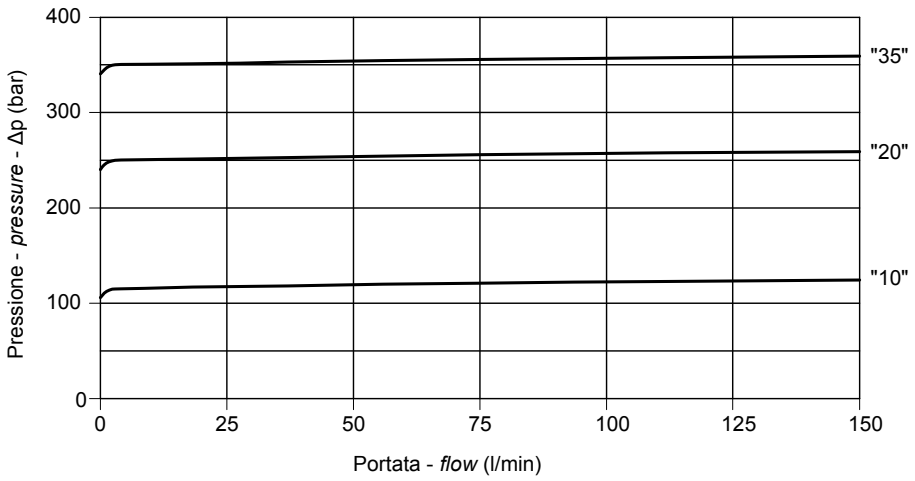
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (CB version) is in high strenght alluminium alloy.*
Rated flow: *150 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw*
Installation torque: *60 Nm*
Cavity: *26241 (see section X)*
Cartridge weight: *0,140 Kg*
Cartridge with body (3/4"ports) weight: *0,650 Kg*
Cartridge with body (1"ports) weight: *0,910 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



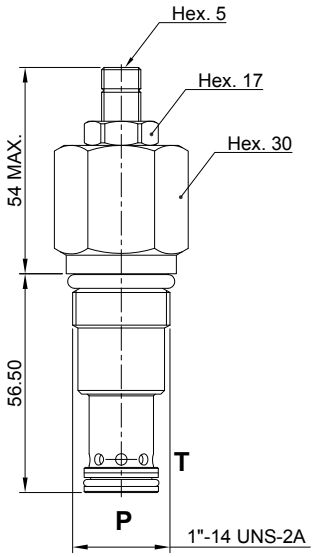
VPM-P-150-C(B)-P-*-*

A - 480/2

Valvola di regolazione pressione pilotata, a cursore
Pilot operating, sliding spool type, relief valve

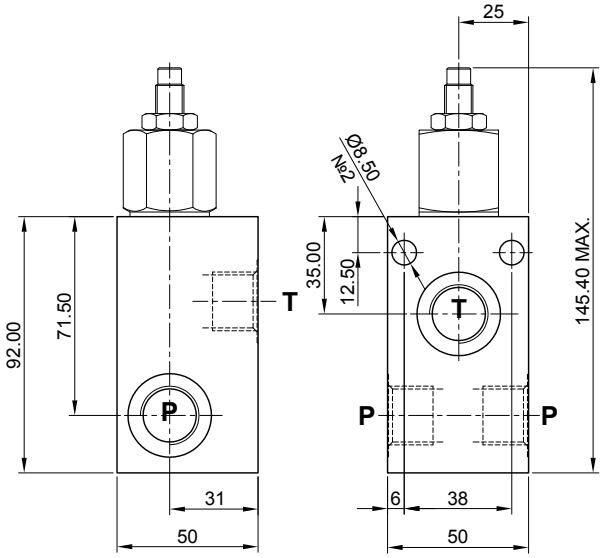
Rev. 03-2010/08

VPM P 150 C

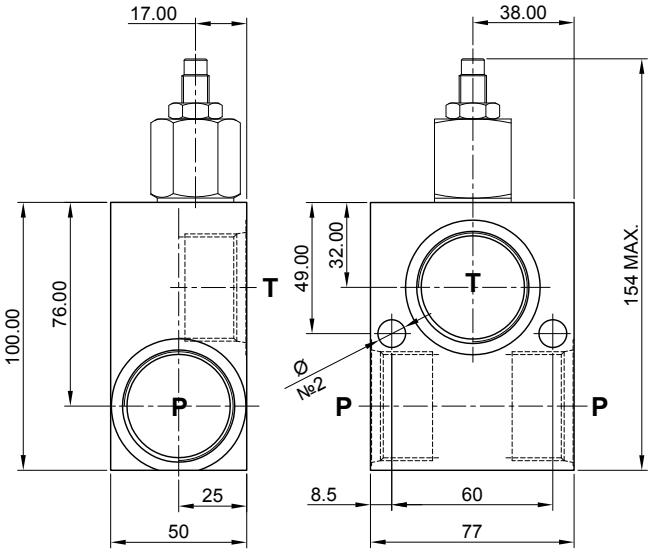


MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	10 - 120	26	10	Bianco *White*
20	15 - 250	55	15	Giallo *Yellow*
35	20 - 350	120	20	Verde *Green*

VPM P 150 CB 3/4



VPM P 150 CB 1



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM	P	150	CB	P	3/4	20

* C: solo cartuccia – *only cartridge*
CB: cartuccia con corpo – *cartridge and body*

* 3/4 = 3/4”
1 = 1” BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

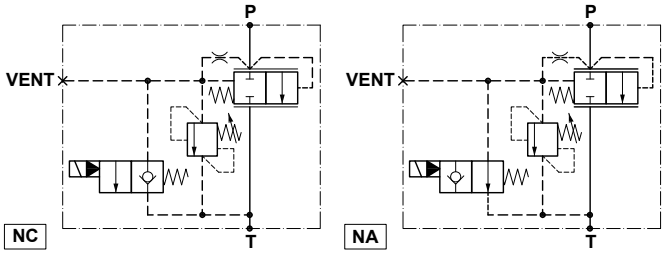
"10" / “20” / “35”: *
Campi di taratura pressione -
Adjustable pressure range

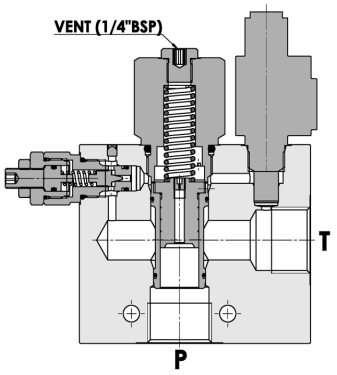
VPM-PEV-*-*-200-P-*-*

A - 490/1

Valvola di regolazione pressione elettropilotata
Electric pilot operated relief valve

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: Corpo in lega di alluminio, altri componenti esterni sono in acciaio zincato. Parti interne in acciaio trattato termicamente.
Portata max.: 200 l/min
Taratura max.: 400 bar
Regolazione pressione: mediante vite
Voltaggio bobina: 12/24 VDC
Peso 3/4": 2,200 Kg
Peso 1": 2,100 Kg

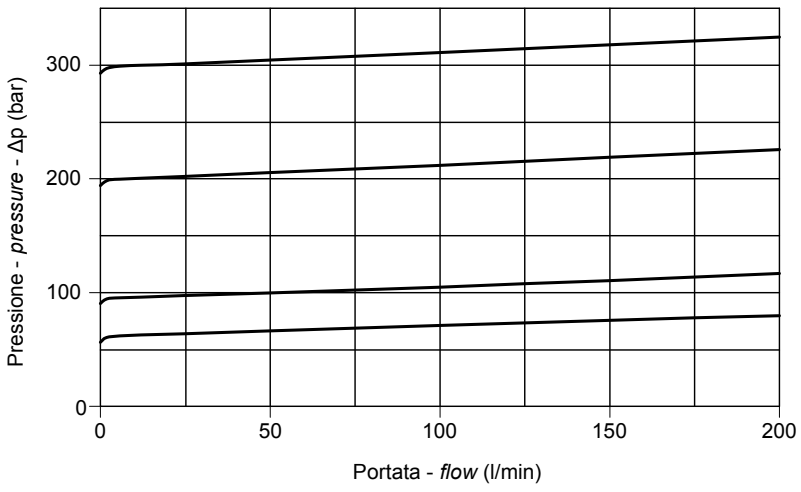
TECHNICAL SPECIFICATIONS

Materials: *Body is in high strenght alluminium alloy, other external components are zinc plated steel. Internal parts in hardened steel.*
Rated flow: *200 l/min*
Max. setting: *400 bar*
Adjustement means: *leakproof screw*
Coil voltage: *12/24 VDC*
Weight (3/4"ports): *2,200 Kg*
Weight (1"ports): *2,100 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

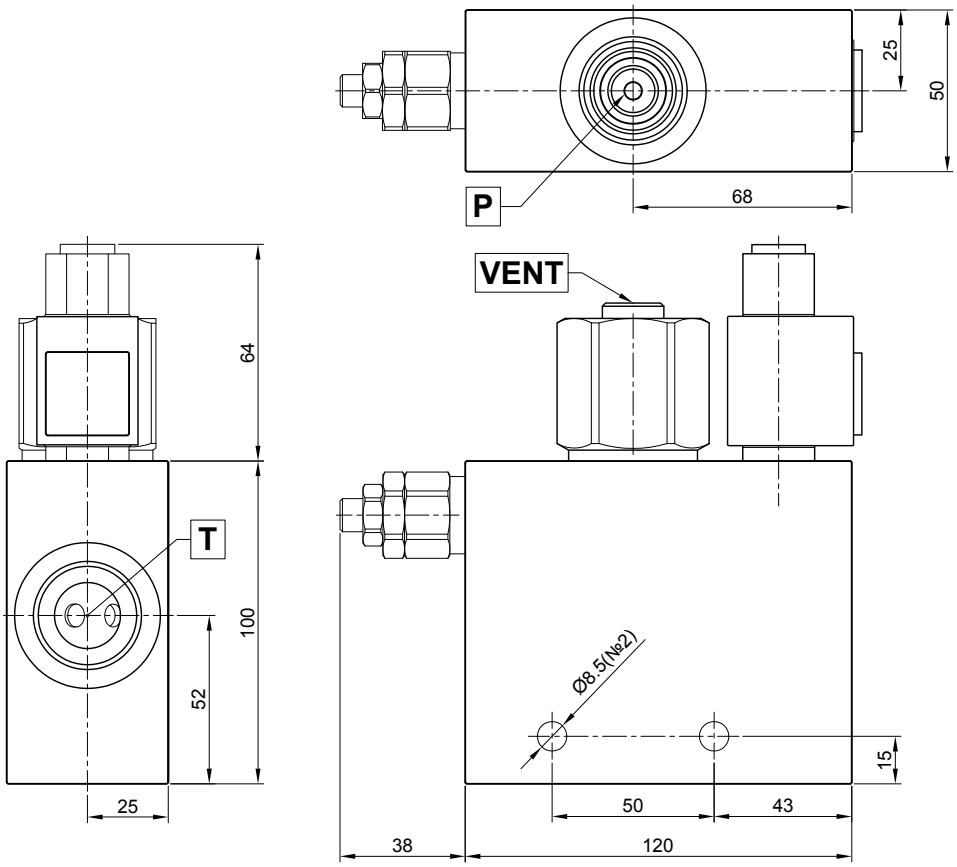


VPM-PEV-*-*-200-P-*-*

A - 490/2

Valvola di regolazione pressione elettropilotata
Electric pilot operated relief valve

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	20 - 140	26	20	Bianco *White*
20	40 - 280	55	40	Giallo *Yellow*
35	60 - 400	120	60	Verde *Green*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPM **PEV** **12** **NA** **200** **P** **3/4** **35**

* 12: voltaggio bobina 12 VDC – *coil voltage 12 VDC*
24: voltaggio bobina 24 VDC – *coil voltage 24 VDC*

* NA: normalmente aperto – *normally open*
NC: normlamente chiuso – *normally closed*

"10" / "20" / "35": *
Campi di taratura pressione -
Adjustable pressure range

3/4 = 3/4" BSPP:
1 = 1" BSPP: *
Connessioni P/T – *P/T port sizes*

SEZIONE B
Valvole di sequenza

SECTION B
Sequence Valves

VALVOLE DI SEQUENZA AD AZIONE DIRETTA

Queste valvole sono impiegate quando il funzionamento di un attuatore deve avvenire in modo automatico e sequenziale rispetto alla posizione di fine corsa dell'attuatore prioritario. Le versioni bilanciate possono essere utilizzate come valvole di massima pressione in sistemi in cui eccessive perdite di carico sul ritorno possono generare elevati valori di contropressione. Per un corretto funzionamento delle versioni bilanciate (VPSQB), la pressione nel circuito non deve mai scendere sotto i 20 bar.
Sono disponibili 2 soluzioni di montaggio: a cartuccia e in linea. Le versioni in linea, sono disponibili a taratura fissa e regolabile.

DIRECT ACTING SEQUENCE VALVE

These valves are employed when an actuator has to work in automatic and sequential way compared to the final position of the priority actuator. The balanced version can also be used as relief valve in systems in which excessive pressure drops on the return line can generate high values of counterpressure.
In order to ensure correct working of the balanced version of valve (VPSQB), the pressure in the secondary circuit hasn't to drop under 20 bar.
2 solutions of assembly are available: cartridge and in line. In line version are available with fixed or adjustable setting.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
B 015	VPSQ-D-15-CB	B 175	VPSQR-L-D-3/8
B 025	VPSQ-D-30-CB	B 180	VPSQR-L-D-1/2
B 045	VPSQ-D-70-CB	B 225	VPSQRB-L-D-3/8
B 090	VPSQB-D-30-C	B 265	VPSQ-A-25-C
B 091	VPSQB-D-30-CB	B 330	VPSQB-D-30-C-NA
B 140	VPSQB-D-150-CB	B 331	VPSQB-D-30-C-NC
B 170	VPSQL-D-3/8		

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

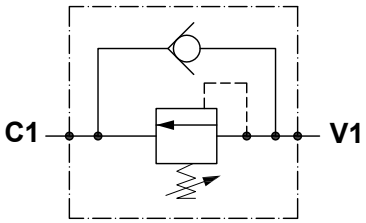
***Meta Hydraulic** reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

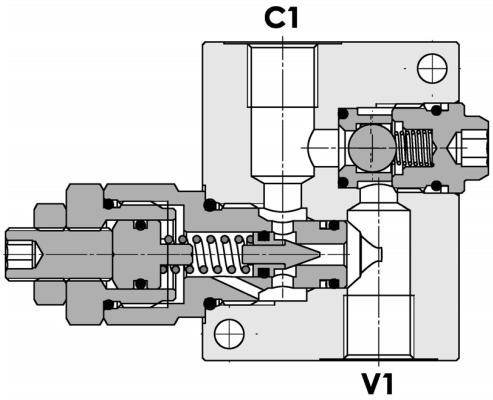
VPSQ-D-15-CB-*-1/4-*-*-*

B - 015/1

Valvola di sequenza ad azione diretta, montaggio in linea
Direct acting sequence valve, line mounted

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Blocchetto in lega di alluminio o acciaio (su richiesta).
Portata: 15 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar (std) - 350 bar (ver.S)
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 0,360 Kg (std) - 0,540 Kg (ver. S)

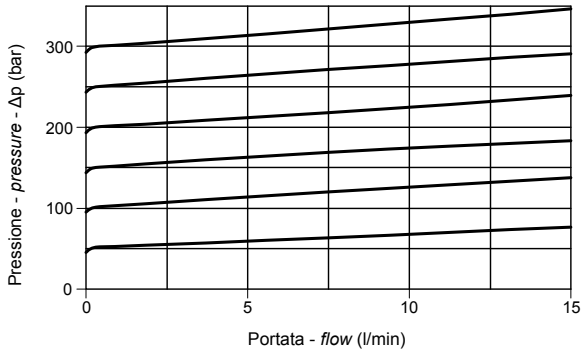
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy or steel (on request).*
Rated flow: *15 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar (std) - 350 bar (ver.S)*
Adjustement means: *leakproof screw or handknob (P/R)*
Weight: *0,360 Kg (std) - 0,540 Kg (ver. S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E) — *Oil viscosity 24 mm²/sec. (3.5 °E)*
Temperatura 50 °C — *Temperature 50 °C*

C1 ➡ V1



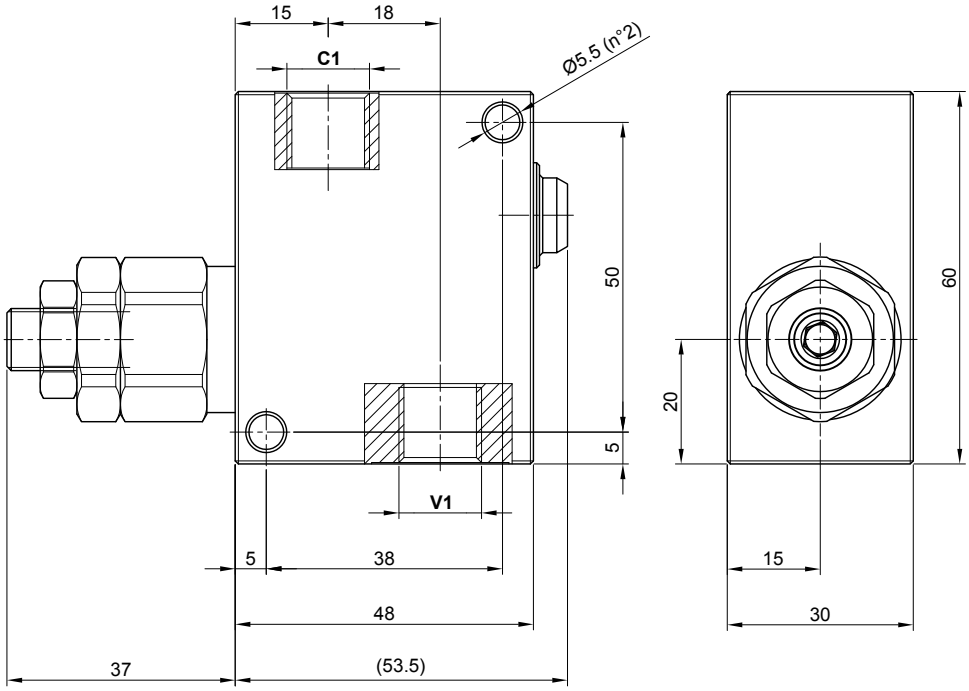
V1 ➡ C1

VPSQ-D-15-CB-*-1/4-*-*-*

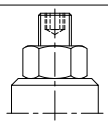
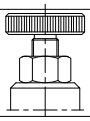
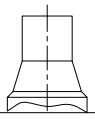
B - 015/2

Valvola di sequenza ad azione diretta, montaggio in linea
Direct acting sequence valve, line mounted

Rev. 02-2010/08



MOLLE - *SPRINGS* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 60	15	5	Bianco *White*
10	20 - 130	30	20	Giallo *Yellow*
20	40 - 240	65	40	Verde *Green*
35	50 - 350	100	50	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS* *		
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSQ | **D** | **15** | **CB** | **P** | **1/4** | **S** | **35** | *

* P/R/Z:
Regolazioni - *Adjustements*

* Materiale blocco: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S= steel

* “10” / “20” / “35”:
Campi di taratura
Adjustable pressure range

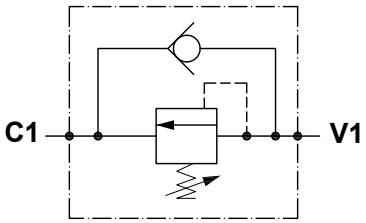
* Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N –
Omit if BUNA-N

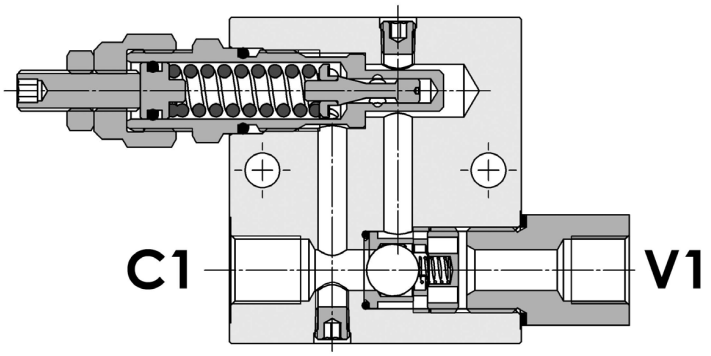
VPSQ-D-30-CB-*-*-*-*-*

B - 025/1

Valvola di sequenza ad azione diretta, montaggio in linea
Direct acting sequence valve, line mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Blocchetto in lega di alluminio.
Portata: 40 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar (std) - 350 bar (ver.S)
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 0,735 Kg (std) - 1,560 Kg (ver. S)

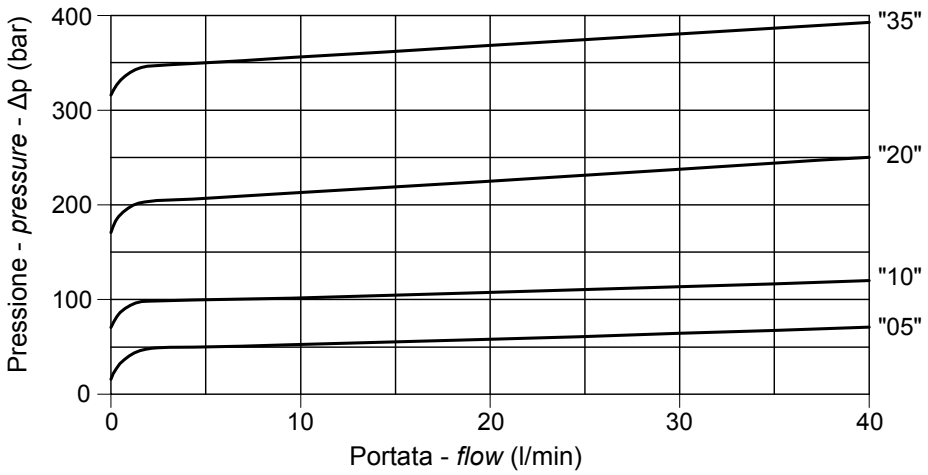
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *40 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar (std) - 350 bar (ver.S)*
Adjustement means: *leakproof screw or handknob (P/R)*
Weight: *0,735 Kg (std) - 1,560 Kg (ver. S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

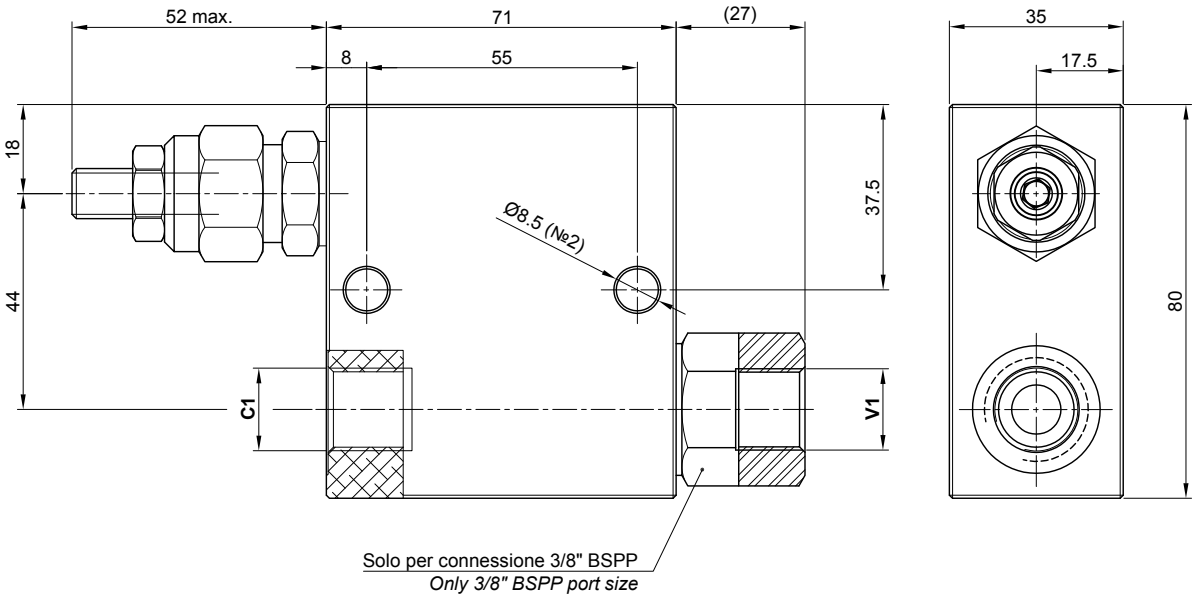


VPSQ-D-30-CB-*-*-*-*-*

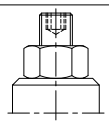
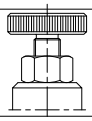
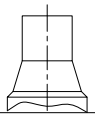
B - 025/2

Valvola di sequenza ad azione diretta, montaggio in linea
Direct acting sequence valve, line mounted

Rev. 01-2010/02



MOLLE - *SPRINGS* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS* *		
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S Q | **D** | **3 0** | **C B** | **P** | **1 / 2** | **S** | **2 0** | *

* P/R/Z: Regolazioni - *Adjustements*

* 3/8 = 3/8" BSPP; 1/2 = 1/2" BSPP — Connessioni C1/V1 - *C1/V1 port sizes*

* Materiale blocco: omettere se alluminio, S=acciaio — *Body material: omit if aluminium, S= steel*

"05" / "10" / "20" / "35": Campi di taratura pressione * — *Adjustable pressure range*

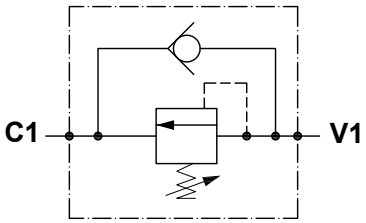
Guarnizioni – *Seals*: V=Viton * — Omettere se BUNA-N – *Omit if BUNA-N*

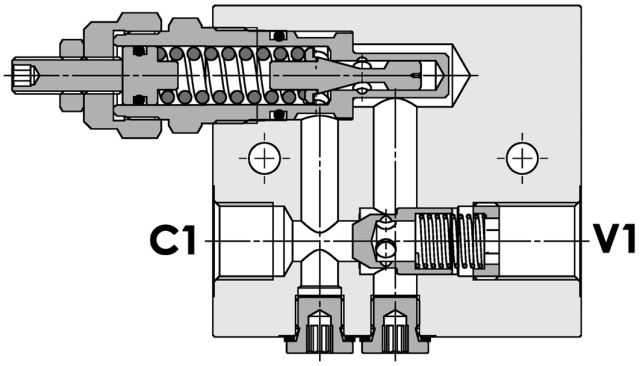
VPSQ-D-70-CB-*-*-S-*-*

B - 045/1

Valvola di sequenza ad azione diretta, montaggio in linea
Direct acting sequence valve, line mounted

Rev. 01-2010/02





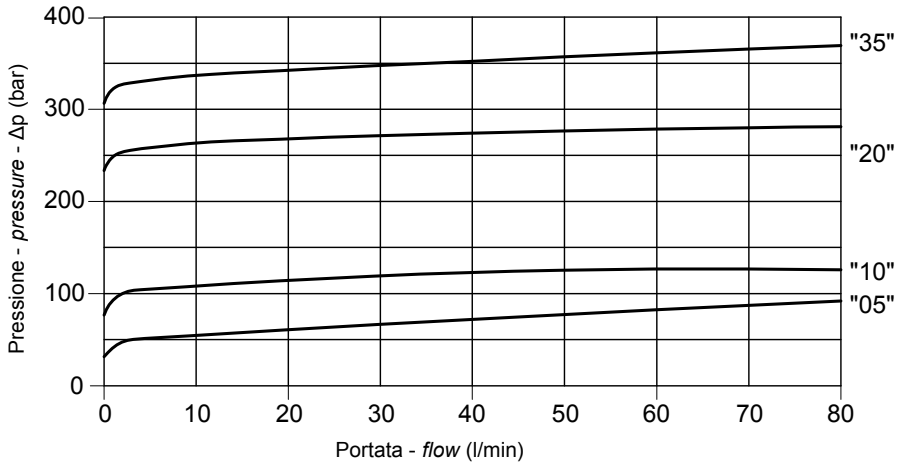
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Blocchetto in acciaio.
Portata: 80 l/min
Taratura max.: 320 bar
Pressione max.: 350 bar
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 2,600 Kg

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Body is in steel.
Rated flow: *80 l/min*
Max. setting: *320 bar*
Max. pressure: *350 bar*
Adjustement means: *leakproof screw or handknob (P/R)*
Weight: *2,600 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

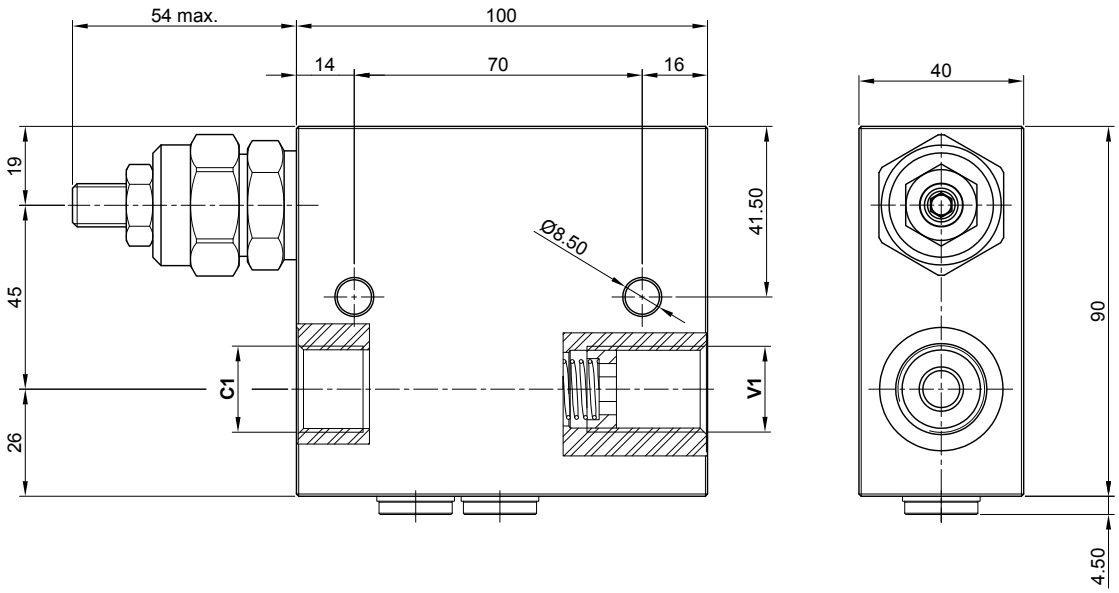


VPSQ-D-70-CB-*-*-S-*-*

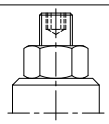
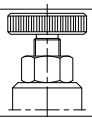
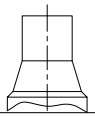
B - 045/2

Valvola di sequenza ad azione diretta - montaggio in linea
Direct acting sequence valve, line mounted

Rev. 01-2010/02



MOLLE - *SPRINGS* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	80 - 280	40	80	Verde *Green*
35	120 - 320	50	120	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS* *		
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSQ | **D** | **70** | **CB** | **P** | **1/2** | **S** | **20** | *

* P/R/Z:
Regolazioni - *Adjustements*

* 1/2 = 1/2" BSPP
3/4 = 3/4" BSPP
Connessioni V1/C1 - *V1/C1 port sizes*

Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

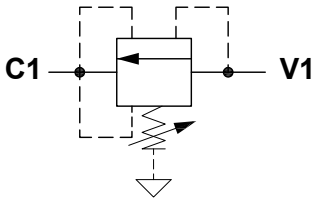
"05" / "10" / "20" / "35":
Campi di taratura pressione *
Adjustable pressure range

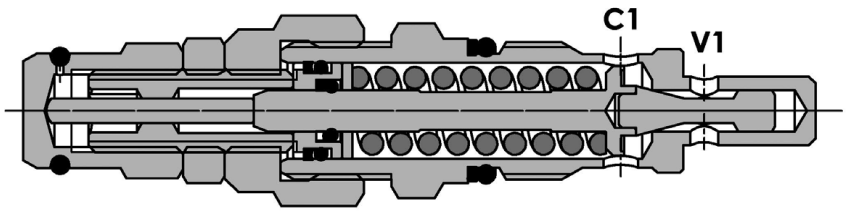
VPSQB-D-30-C-*-*

B - 090/1

Valvola di sequenza bilanciata ad azione diretta, versione a cartuccia
Direct acting, fully balanced sequence valve, cartridge version

Rev. 01-2010/02





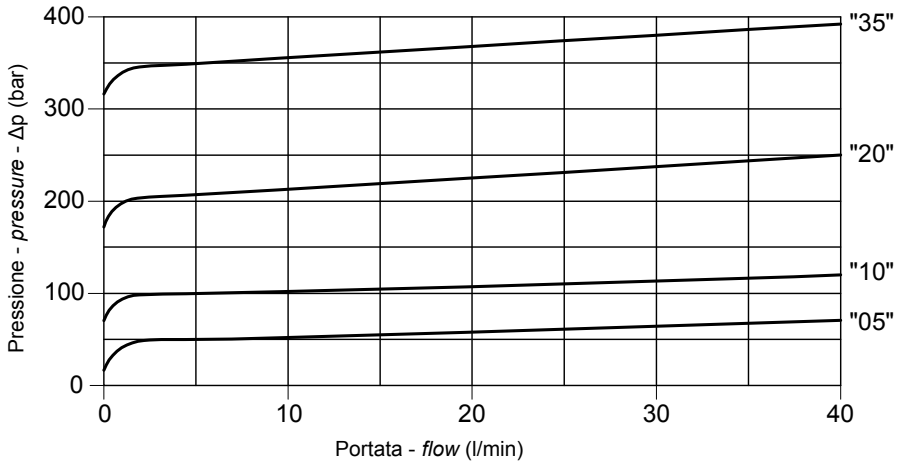
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata max.: 40 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite o volantino (P/R)
Coppia di serraggio in cavità: 45-50 Nm
Cavità: 22201 (vedere sezione X)
Peso cartuccia: 0,180 Kg

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *40 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw or handknob (P/R)*
Installation torque: *45-50 Nm*
Cavity: *22201 (see section X)*
Cartridge weight: *0,180 Kg*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

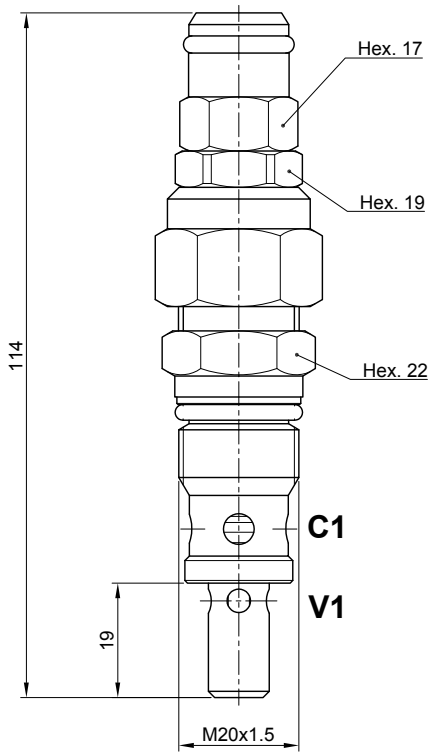


VPSQB-D-30-C-*-*

B - 090/2

Valvola di sequenza bilanciata ad azione diretta, versione a cartuccia
Direct acting, fully balanced sequence valve, cartridge version

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSQB | **D** | **30** | **C** | **35** | ***** |

"05" / "10" / "20" / "35":
* Campi di taratura pressione
Adjustable pressure range

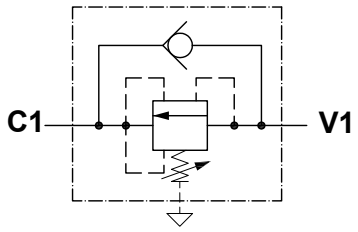
Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

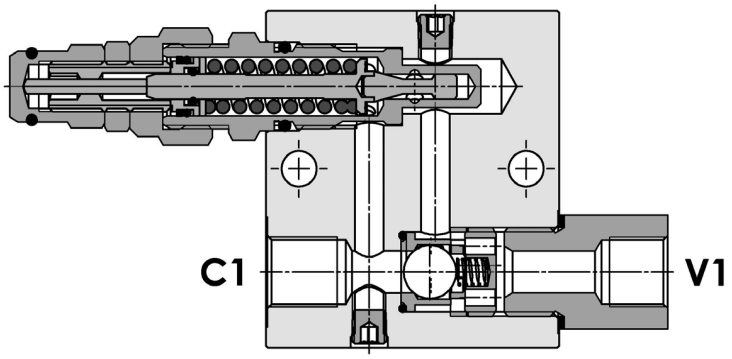
VPSQB-D-30-CB-*-*-*

B - 091/1

Valvola di sequenza bilanciata ad azione diretta, montaggio in linea
Direct acting, fully balanced sequence valve, line mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Blocchetto in lega di alluminio.
Portata: 40 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 0,800 Kg

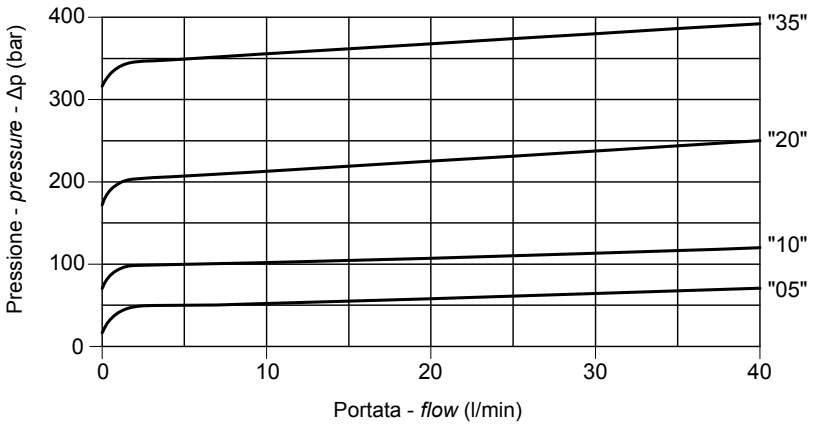
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel yellow zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *40 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Adjustement means: *leakproof screw or handknob (P/R)*
Weight: *0,800 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

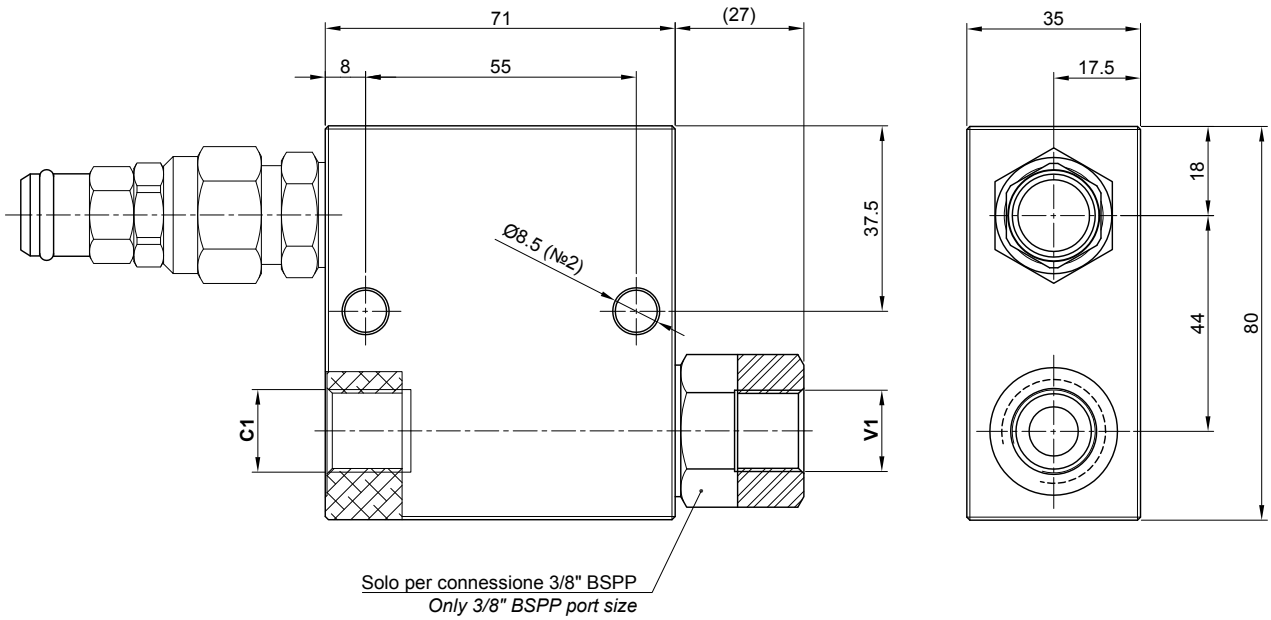


VPSQB-D-30-CB-*-*-*

B - 091/2

Valvola di sequenza bilanciata ad azione diretta, montaggio in linea
Direct acting, fully balanced sequence valve, line mounted

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S Q B | **D** | **3 0** | **C B** | **3 / 8** | **3 5** | ***** |

3/8 = 3/8" BSPP
* 1/2 = 1/2" BSPP
Connessioni C1/V1 - *C1/V1 port*

"05" / "10" / "20" / "35":
* Campi di taratura pressione
Adjustable pressure range

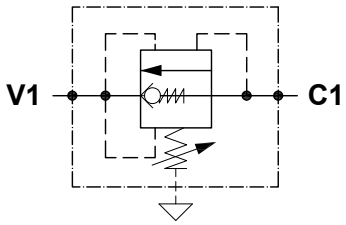
Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *
Omit if BUNA-N

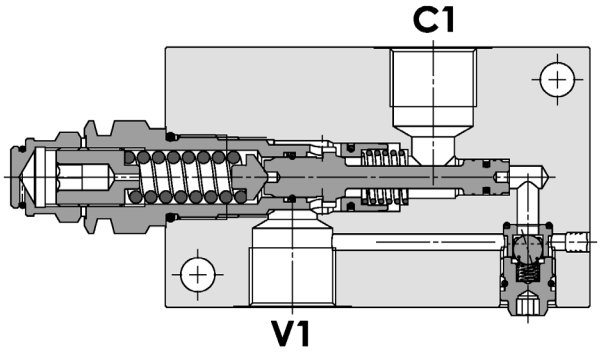
VPSQB-D-150-CB-*-3/4-*-*

B - 140/1

Valvola di sequenza bilanciata ad azione diretta, montaggio in linea
Direct acting, fully balanced sequence valve, line mounted

Rev. 01-2010/02





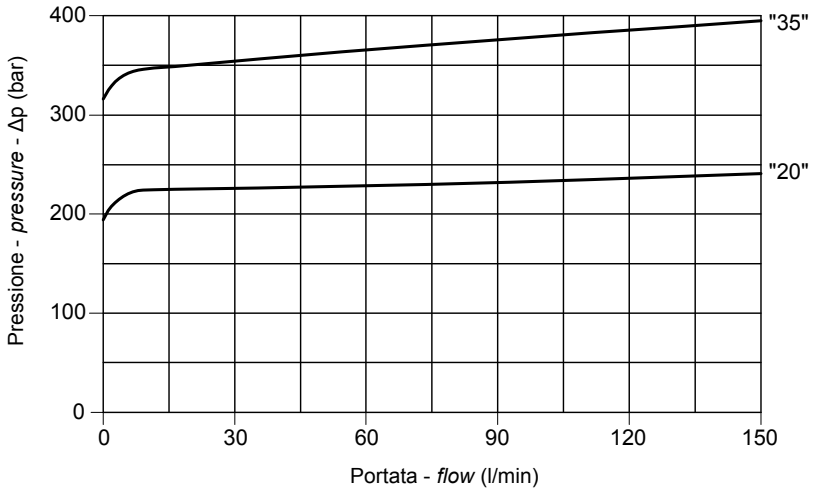
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio (a richiesta in acciaio zincato).
Portata: 150 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar (std) - 350 bar (ver.S)
Regolazione pressione: mediante vite.
Peso: 1,000 Kg (std) - 3,000 Kg (ver.S)

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body in aluminium alloy (zinc plated steel on request).*
Rated flow: *150 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar (std) - 350 bar (ver.S)*
Adjustement means: *leakproof screw.*
Weight: *1,000 Kg (std) - 3,000 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

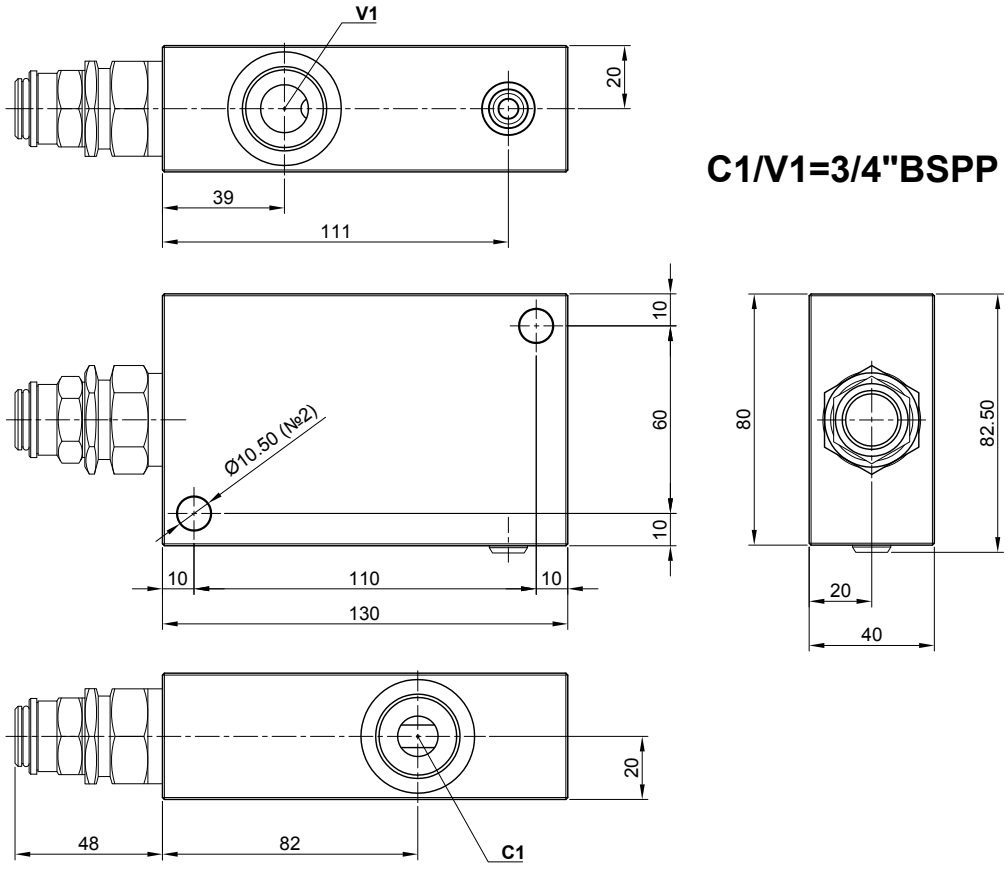


VPSQB-D-150-CB-*-3/4-*-*

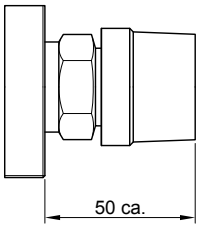
B - 140/2

Valvola di sequenza bilanciata ad azione diretta, montaggio in linea
Direct acting, fully balanced sequence valve, line mounted

Rev. 01-2010/02



C1/V1=3/4"BSPP



Cappellotto antimanomissione disponibile su richiesta (Z)

Tamperproof cap available on request (Z)

MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
20	60 - 220	50	60	Rosso *Red*
35	100 - 350	110	100	Rosso *Red*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSQB	D	150	CB	Z	3/4	S	20

* Z = tappo antimanomissione - *tamperproof cap*
Omettere se non richiesto - *omit if not requested*

* Materiale blocco: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S= steel

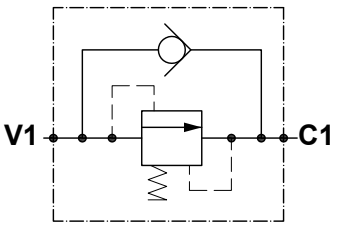
"20" / "35": *
Campi di taratura pressione -
Adjustable pressure range

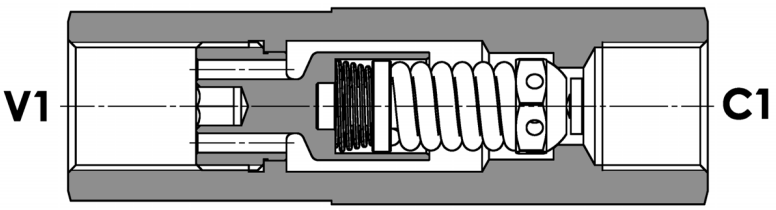
VPSQL-D-3/8-*

B - 170/1

Valvola di sequenza ad azione diretta, taratura fissa, montaggio in linea
Direct acting, sequence valve, fixed setting, line mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 30 l/min
Taratura max.: 80 bar
Pressione max.: 350 bar
Peso: 0,200 Kg

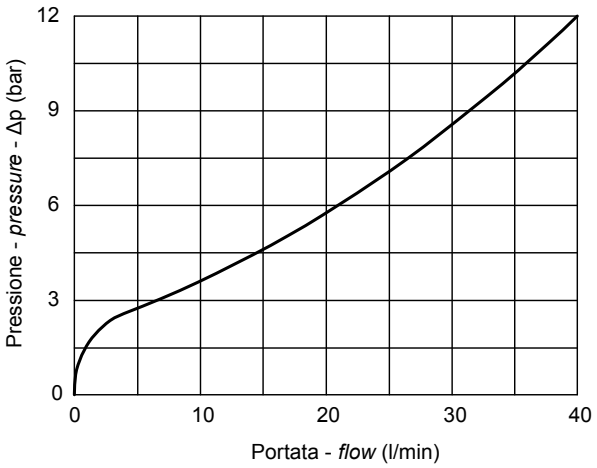
TECHNICAL SPECIFICATIONS
Materials: *body in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *30 l/min*
Max. setting: *80 bar*
Max. pressure: *350 bar*
Weight: *0,200 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

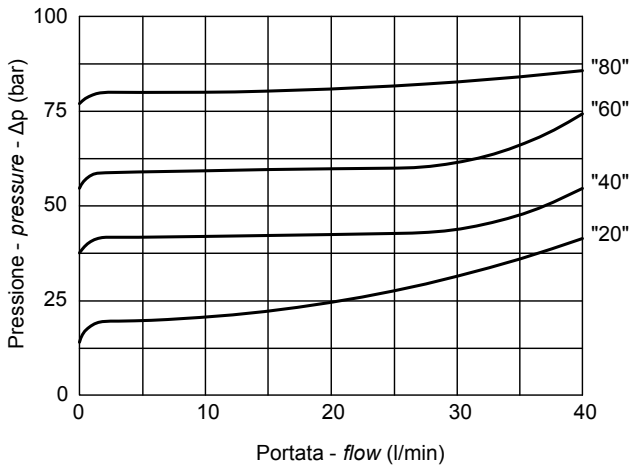
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

C1 ➡ V1



C1 ➡ V1

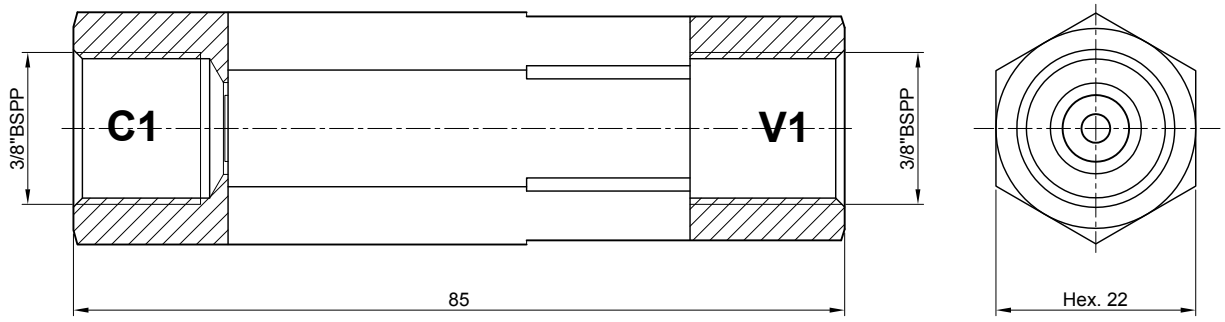


VPSQL-D-3/8-*

B - 170/2

Valvola di sequenza ad azione diretta, taratura fissa, montaggio in linea
Direct acting, sequence valve, fixed setting, line mounted

Rev. 01-2010/02



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSQL	D	3/8	20

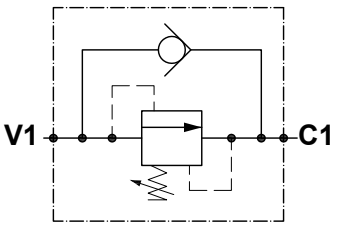
20 = 20 BAR
40 = 40 BAR
60 = 60 BAR *
80 = 80 BAR
Taratura fissa valvola
Valve fixed setting

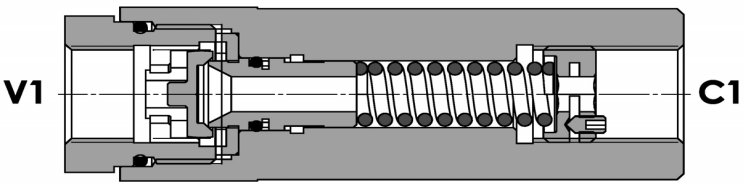
VPSQR-L-D-3/8-*

B - 175/1

Valvola di sequenza ad azione diretta, taratura regolabile, montaggio in linea
Direct acting, sequence valve, adjustable setting, line mounted

Rev. 02-2010/08





SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 40 l/min
Taratura max.: 300 bar
Pressione max.: 350 bar
Peso: 0,420 Kg

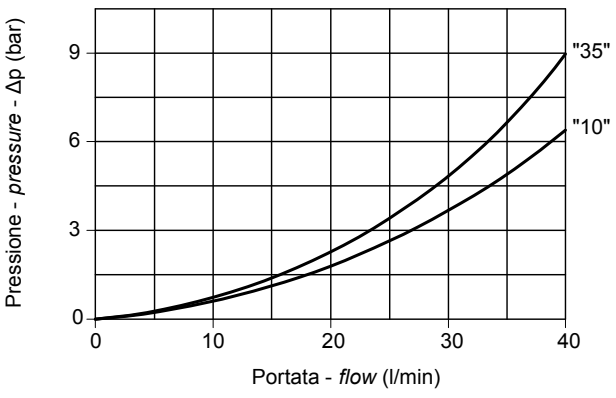
TECHNICAL SPECIFICATIONS
Materials: *body in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *40 l/min*
Max. setting: *300 bar*
Max. pressure: *350 bar*
Weight: *0,420 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

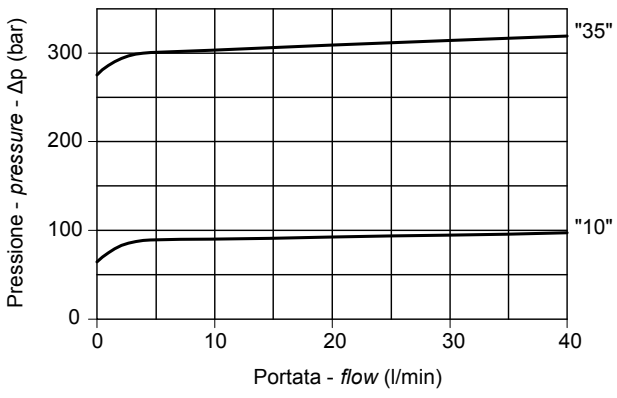
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

C1 → V1



V1 → C1

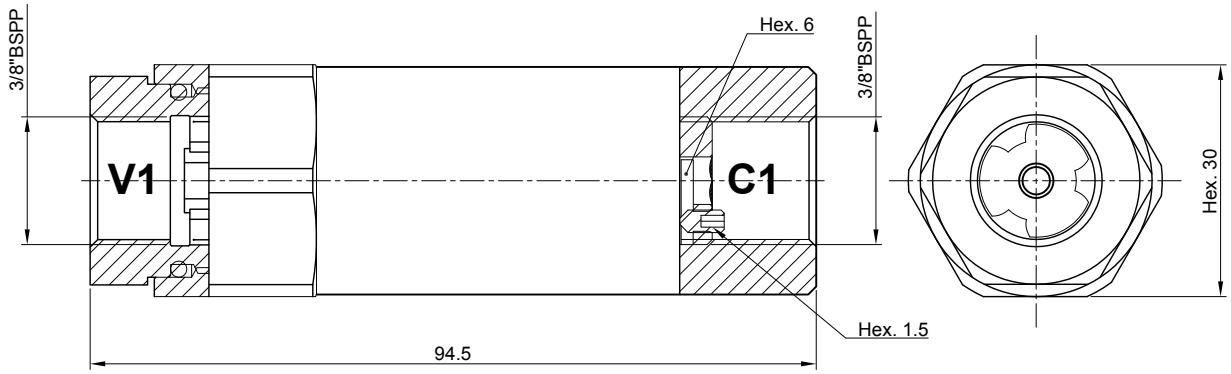


VPSQR-L-D-3/8-*

B - 175/2

Valvola di sequenza ad azione diretta, taratura regolabile, montaggio in linea
Direct acting, sequence valve, adjustable setting, line mounted

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	18 - 85	24	18	Verde *Green*
35	90 - 300	85	90	Neutro *Neutral*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSQR	L	D	3/8	10

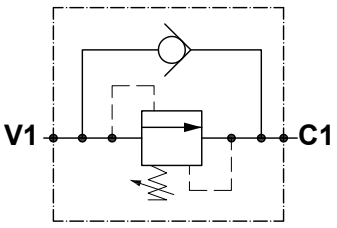
"10" / "35":
Campi di taratura pressione *
Adjustable pressure range

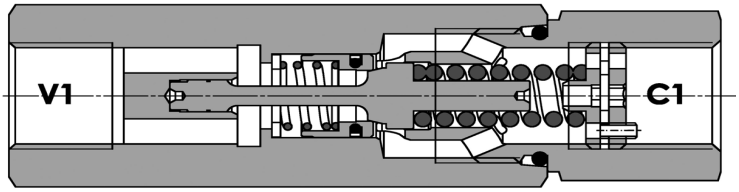
VPSQR-L-D-1/2-*

B - 180/1

Valvola di sequenza ad azione diretta, taratura regolabile, montaggio in linea
Direct acting, sequence valve, adjustable setting, line mounted

Rev. 03-2010/08





SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 80 l/min
Taratura max.: 120 bar
Pressione max.: 350 bar
Peso: 0,420 Kg

TECHNICAL SPECIFICATIONS
Materials: *body in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *80 l/min*
Max. setting: *120 bar*
Max. pressure: *350 bar*
Weight: *0,420 Kg*

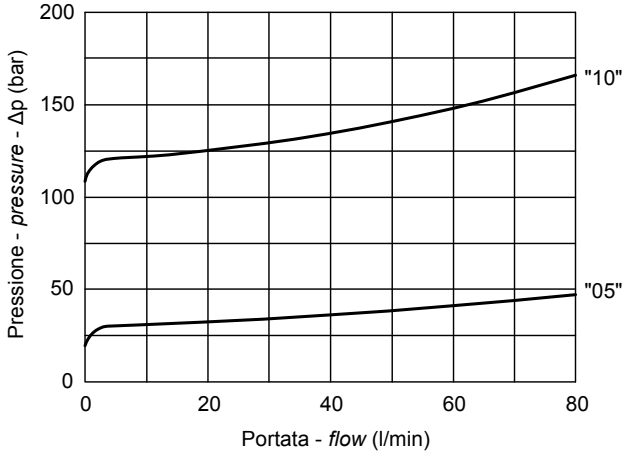
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

C1 → V1

V1 → C1

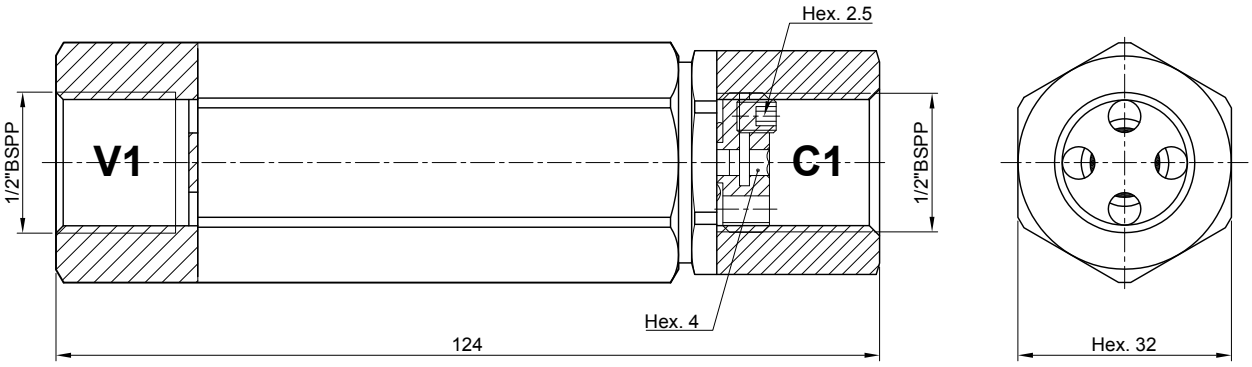


VPSQR-L-D-1/2-*

B - 180/2

Valvola di sequenza ad azione diretta, taratura regolabile, montaggio in linea
Direct acting, sequence valve, adjustable setting, line mounted

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	05 - 30	15	05	Verde *Green*
10	30 - 120	60	30	Rosso *Red*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSQR	L	D	1/2	05

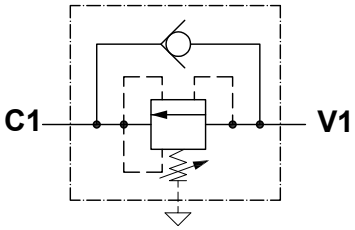
"05" / "10":
Campi di taratura pressione *
Adjustable pressure range

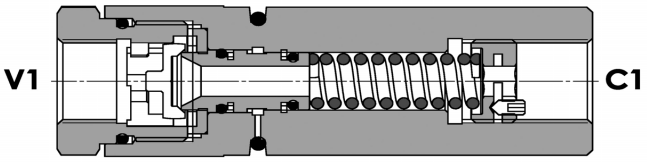
VPSQRB-L-D-3/8-*

B - 225/1

Valvola di sequenza bilanciata ad azione diretta, taratura regolabile, montaggio in linea
Direct acting, fully balanced sequence valve, adjustable setting, line mounted

Rev. 02-2010/08





SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 40 l/min
Taratura max.: 300 bar
Pressione max.: 350 bar
Peso: 0,420 Kg

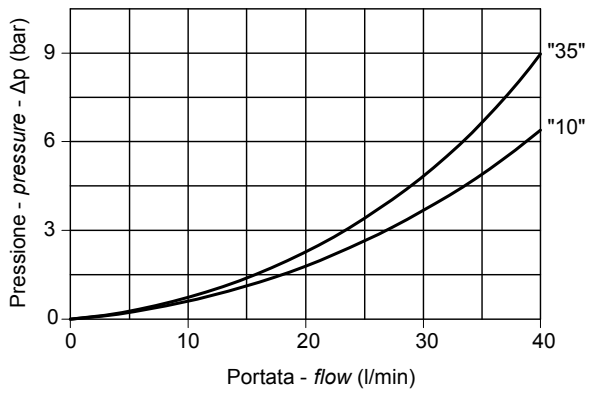
TECHNICAL SPECIFICATIONS
Materials: *body in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *40 l/min*
Max. setting: *300 bar*
Max. pressure: *350 bar*
Weight: *0,420 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

C1 → V1



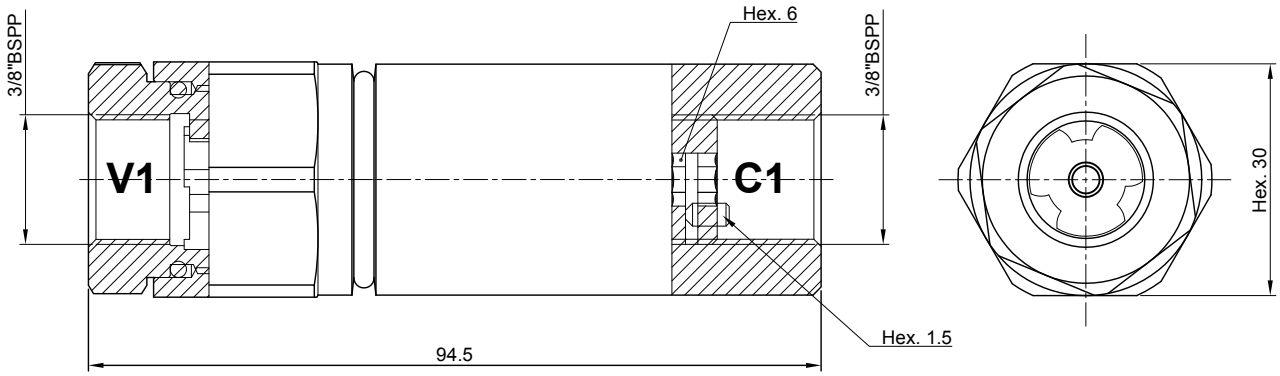
V1 → C1

VPSQRB-L-D-3/8-*

B - 225/2

Valvola di sequenza bilanciata ad azione diretta, taratura regolabile, montaggio in linea
Direct acting, fully balanced sequence valve, adjustable setting, line mounted

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	18 - 85	24	18	Verde *Green*
35	90 - 300	85	90	Neutro *Neutral*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S Q R B	L	D	3 / 8	1 0

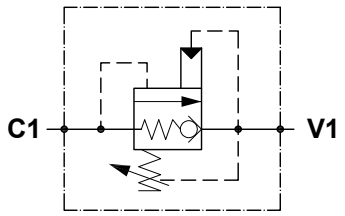
"10" / "35":
Campi di taratura pressione *
Adjustable pressure range

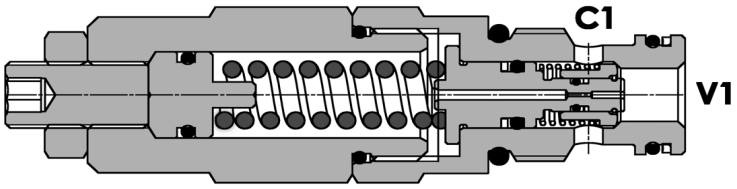
VPSQ-A-25-C-P-35

B - 265/1

Valvola di sequenza ad area differenziale con ritorno libero, a cartuccia
Differential piston sequence valve, free reverse flow, cartridge version

Rev. 02-2010/08





SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 25 l/min
Taratura max.: 350 bar
Pressione max.: 350 bar
Regolazione pressione: mediante vite
Cavità: 22205 (vedere sez. X)
Peso: 0,250 Kg

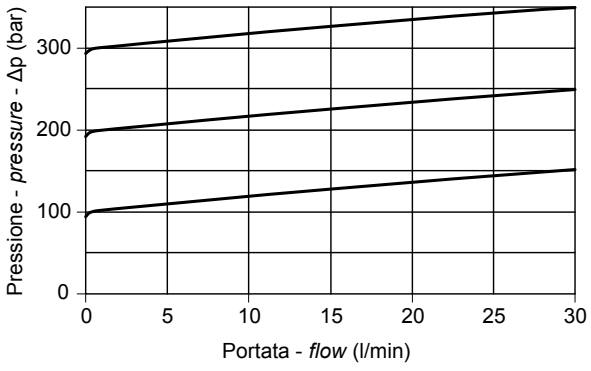
TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *25 l/min*
Max. setting: *350 bar*
Max. pressure: *350 bar*
Adjustement means: *leakproof screw*
Cavity: *22205 (see section X)*
Weight: *0,250 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

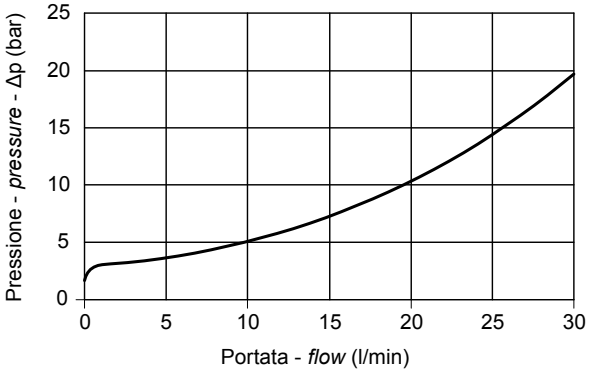
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

C1 → V1



V1 → C1

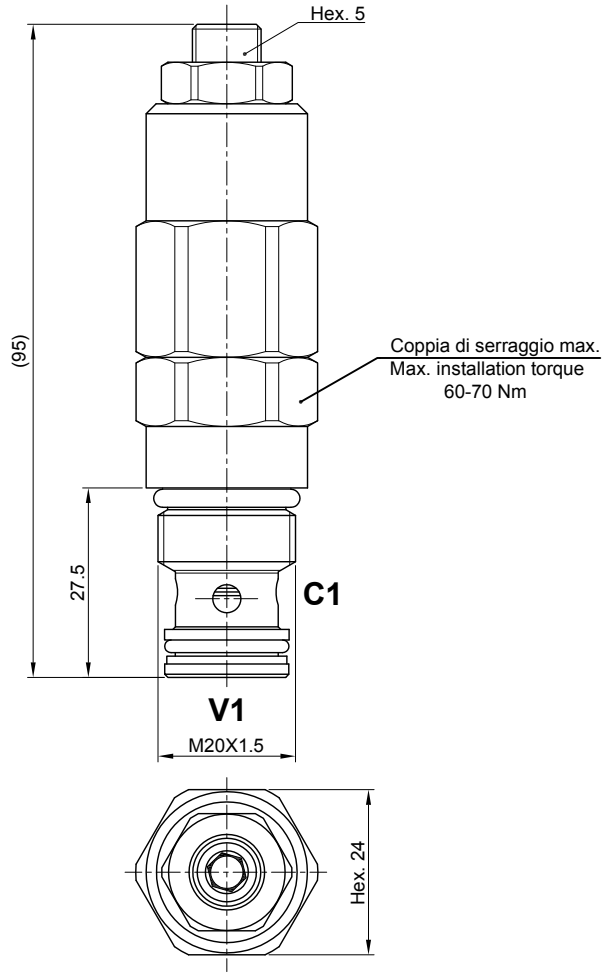


VPSQ-A-25-C-P-35

B - 265/2

Valvola di sequenza ad area differenziale con ritorno libero, a cartuccia
Differential piston sequence valve, free reverse flow, cartridge version

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
35	100 - 350	110	100	Rosso *Red*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

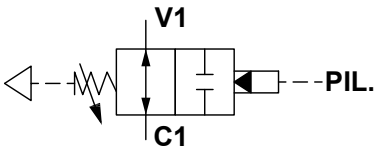
V P S Q	A	2 5	C	P	3 5

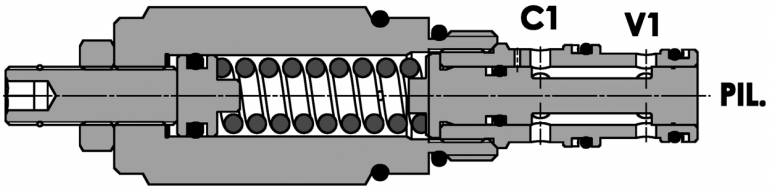
VPSQB-D-30-C-NA-*

B - 330/1

Valvola di sequenza bilanciata, ad azione diretta, a cartuccia, normalmente aperta
Direct acting, fully balanced sequence valve, cartridge version, normally open

Rev. 02-2010/08





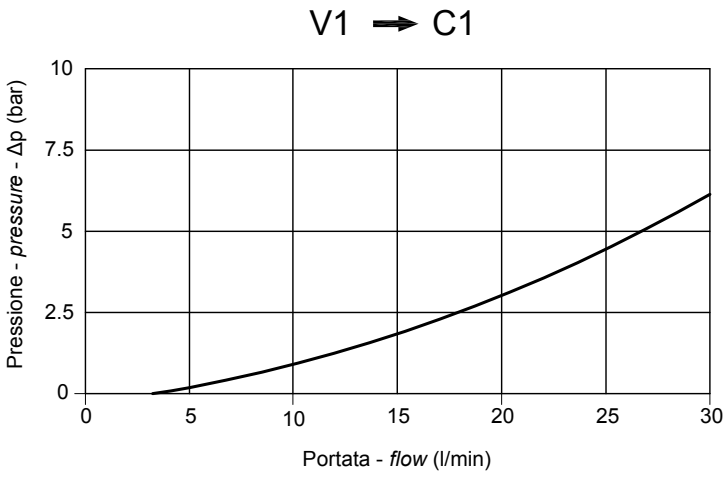
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 30 l/min
Taratura max.: 120 bar
Pressione max.: 350 bar
Regolazione pressione: mediante vite

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *30 l/min*
Max. setting: *120 bar*
Max. pressure: *350 bar*
Adjustement means: *leakproof screw*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

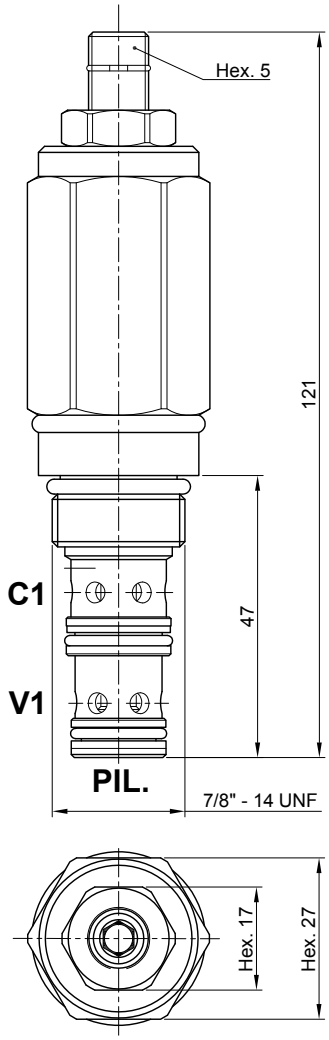


VPSQB-D-30-C-NA-*

B - 330/2

Valvola di sequenza bilanciata, ad azione diretta, a cartuccia, normalmente aperta
Direct acting, fully balanced sequence valve, cartridge version, normally open

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
02	2 - 25	/	2	/
08	20 - 80	/	20	/
12	40 - 120	/	40	/

TIPO ***TYPE***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
		Nm	Kg
VPSQB D 30 C NA	33101	50	0.330

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S Q B	D	3 0	C	N A	0 2

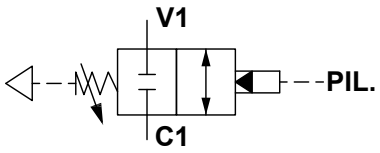
* "02" / "08" / "12":
Campi di taratura pressione - *Adjustable pressure range*

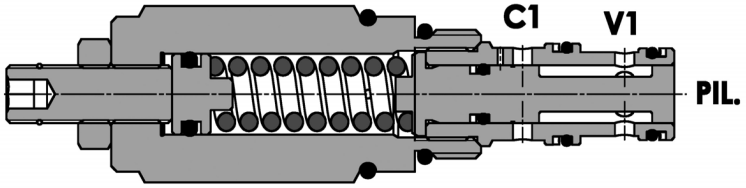
VPSQB-D-30-C-NC-*

B - 331/1

Valvola di sequenza bilanciata, ad azione diretta, a cartuccia, normalmente chiusa
Direct acting, fully balanced sequence valve, cartridge version, normally closed

Rev. 02-2010/08





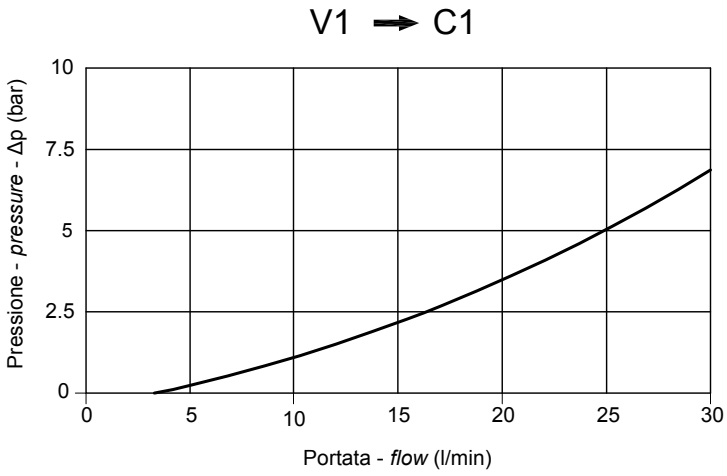
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 30 l/min
Taratura max.: 120 bar
Pressione max.: 350 bar
Regolazione pressione: mediante vite

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *30 l/min*
Max. setting: *120 bar*
Max. pressure: *350 bar*
Adjustement means: *leakproof screw*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

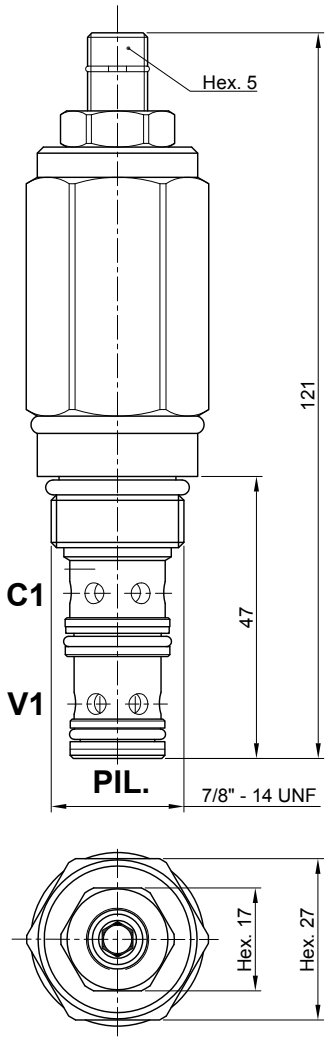


VPSQB-D-30-C-NC-*

B - 331/2

Valvola di sequenza bilanciata, ad azione diretta, a cartuccia, normalmente chiusa
Direct acting, fully balanced sequence valve, cartridge version, normally closed

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
02	2 - 25	/	2	/
08	20 - 80	/	20	/
12	40 - 120	/	40	/

TIPO ***TYPE***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
		Nm	Kg
VPSQB D 30 C NC	33101	50	0.330

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S Q B	D	3 0	C	N C	0 2

* "02" / "08" / "12":
Campi di taratura pressione - *Adjustable pressure range*

SEZIONE C
Valvole riduttrici di pressione

SECTION C
Pressure reducing Valves

VALVOLE RIDUTTRICI AD AZIONE DIRETTA

Queste valvole sono impiegate quando, in un circuito nel quale opera una sola alimentazione, è necessario lavorare a molteplici pressioni.
In particolare, le valvole riduttrici ad azione diretta sono indicate per piccole portate e ridotte pressioni di taratura (max 140 bar).
Sono disponibili 2 soluzioni di montaggio: a cartuccia e in linea. Tutte le versioni sono con relief incorporata.

DIRECT ACTING REDUCING VALVE

These valves are used when in a circuit in which operates only one supply, it's necessary to work at multiple pressures.
In particular, direct acting reducing valves are indicated for small flow and low setting pressure (max.140 bar).
2 solutions of assembly are available: cartridge and in line.
All versions have reverse relief.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
C 005	VPRPF-D-2-C	C 026	VPRPN-D-30-C(B)
C 025	VPRP-D-30-C(B)	C 075	VPRPU-D-30-CB-3/8

VALVOLE RIDUTTRICI PILOTATE

Queste valvole sono indicate per portate e tarature più elevate.
Sono disponibili in versione a cartuccia, con e senza relief.

PILOT OPERATED REDUCING VALVE

These valves are used for higher settings and flow.
They area available on cartridge version only, with and without reverse relief.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
C 270	VPRP-P-SR-60-C	C 272	VPRP-P-60-C

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hudraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

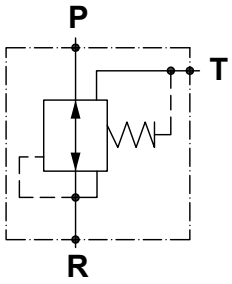
***Meta Hydraulic** reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

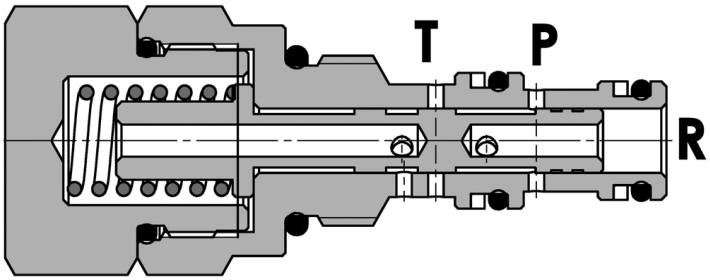
VPRPF-D-2-C

C - 005/1

Valvola di riduzione pressione diretta, a taratura fissa
Pressure reducing valve, direct acting, fixed setting

Rev. 01-2010/05





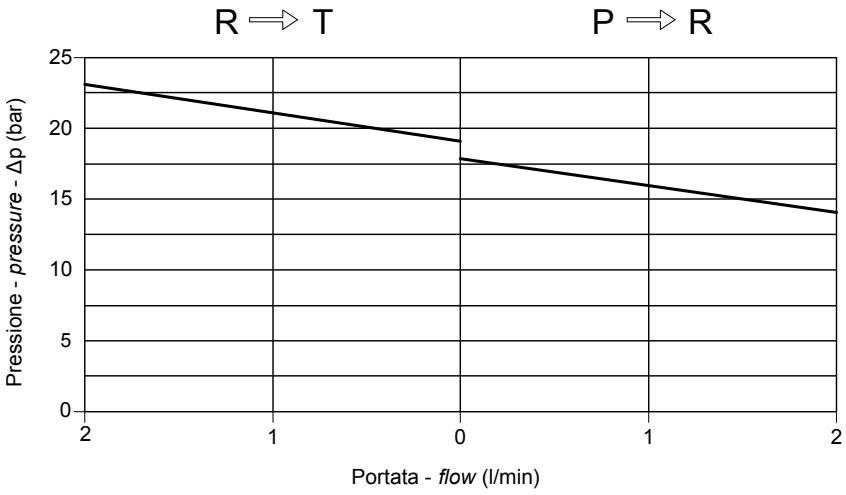
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 2 l/min
Taratura standard fissa: 18 bar
Pressione max. in P: 350 bar
Pressione max. in R: 18 bar
Pressione max. in T: 1 bar

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *2 l/min*
Standard fixed setting: *18 bar*
Max. pressure on P: *350 bar*
Max. pressure on R: *18 bar*
Max. pressure on T: *1 bar*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



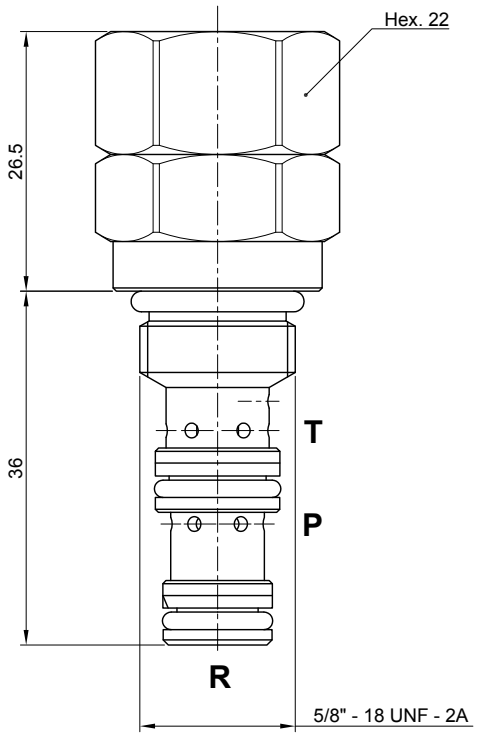
VPRPF-D-2-C

C - 005/2

Valvola di riduzione pressione diretta, a taratura fissa

Pressure reducing valve, direct acting, fixed setting

Rev. 01-2010/05



TIPO *TYPE*	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
		Nm	Kg
VPRPF-D-2-C	33071	15	0.100

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

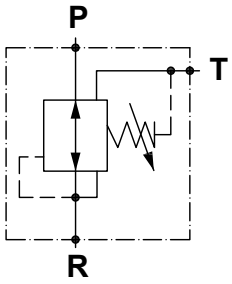
V P R P F	D	2	C

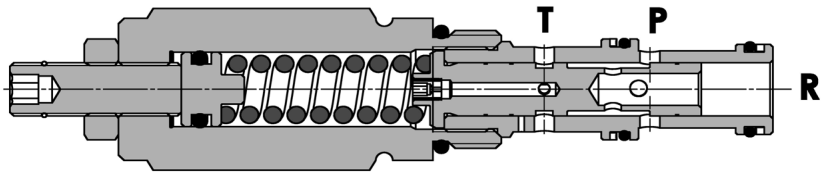
VPRP-D-30-C(B)-*-3/8-*-*

C - 025/1

Valvola di riduzione pressione, azione diretta con relief incorporata
Pressure reducing valve, direct acting with reverse relief

Rev. 03-2010/09





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (versione CB) in lega di alluminio (o acciaio su richiesta).
Portata: 30 l/min
Taratura max.: 180 bar
Pressione max.: 350 bar (250 bar versione CB std)
Pressione differenziale max. tra R e P: 210 bar
Regolazione pressione: mediante vite o volantino
Coppia di serraggio in cavità: 60 Nm
Cavità: 33103 (vedere sezione X)
Peso cartuccia: 0,240 Kg
Peso cartuccia con blocco: 0,650 Kg (std) - 1,200 Kg (ver.S)

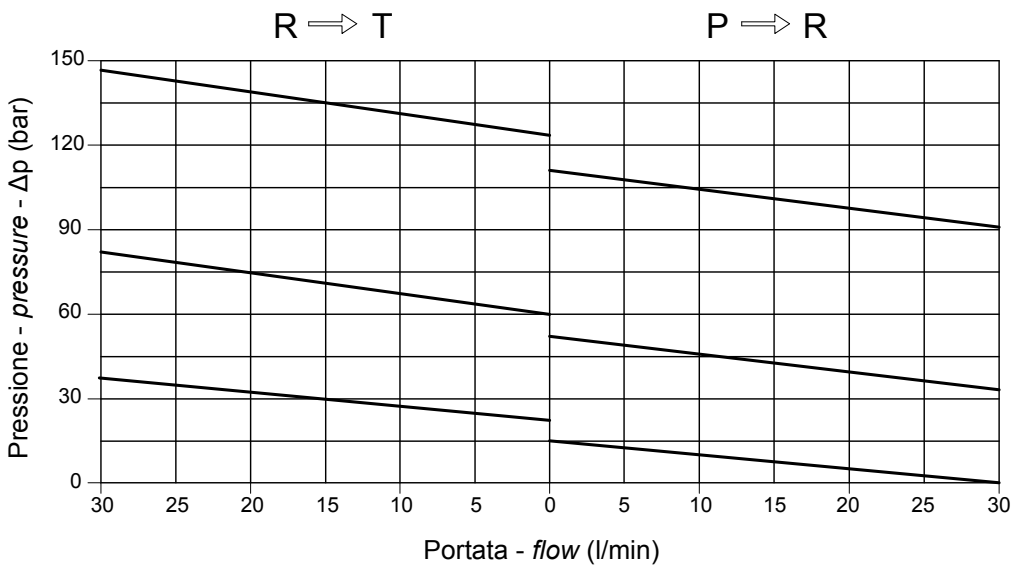
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (CB version) is in high strenght alluminium alloy (or zinc plated steel on request).*
Rated flow: *30 l/min*
Max. setting: *180 bar*
Max. inlet pressure: *350 bar (250 bar, std CB version)*
Max. differential pressure between R and P: *210 bar*
Adjustement means: *leakproof screw or handknob*
Installation torque: *60 Nm*
Cavity: *33103 (see section X)*
Cartridge weight: *0,240 Kg*
Cartridge with body weight: *0,650 Kg (std) - 1,200 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



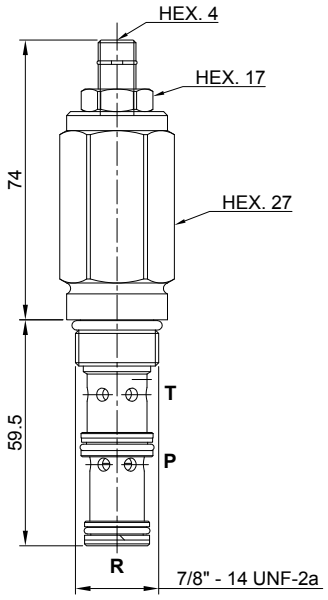
VPRP-D-30-C(B)-*-3/8-*-*

C - 025/2

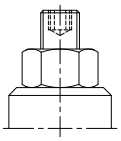
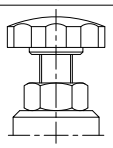
Valvola di riduzione pressione, azione diretta con relief incorporata
Pressure reducing valve, direct acting with reverse relief

Rev. 03-2010/09

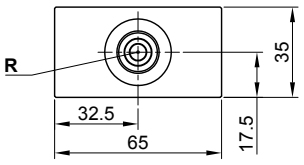
VPRP D 30 C P



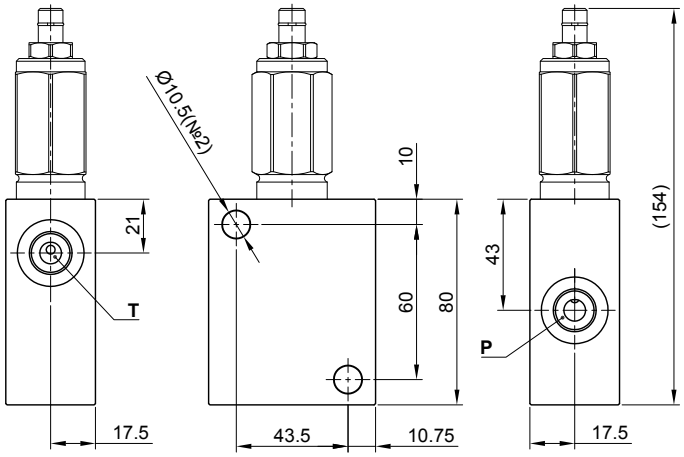
MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 35	3	5	Bianco *White*
10	10 - 60	5.5	10	Giallo *Yellow*
20	15 - 100	10	15	Verde *Green*
35	35 - 180	20	35	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	

VPRP D 30 CB P 3/8



T/P/R=3/8" BSPP



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRP	D	30	CB	P	3/8	S	05

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R:
Regolazioni - *Adjustements*

"05" / "10" / "20" / "35": *
Campi di taratura pressione -
Adjustable pressure range

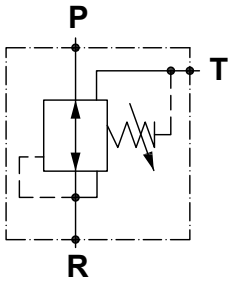
Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

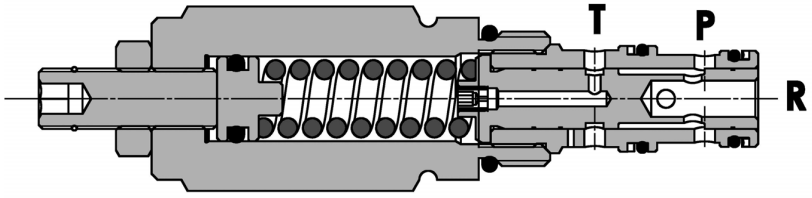
VPRPN-D-30-C(B)-*-3/8-*-*

C - 026/1

Valvola di riduzione pressione, azione diretta con relief incorporata
Pressure reducing valve, direct acting with reverse relief

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo (versione CB) in lega di alluminio (o acciaio su richiesta).
Portata: 30 l/min
Taratura max.: 180 bar
Pressione max.: 350 bar (250 bar versione CB std)
Pressione differenziale max. tra R e P: 210 bar
Regolazione pressione: mediante vite o volantino
Coppia di serraggio in cavità: 60 Nm
Cavità: 33101 (vedere sezione X)
Peso cartuccia: 0,330 Kg
Peso cartuccia con blocco: 0,630 Kg (std) - 1,200 Kg (ver.S)

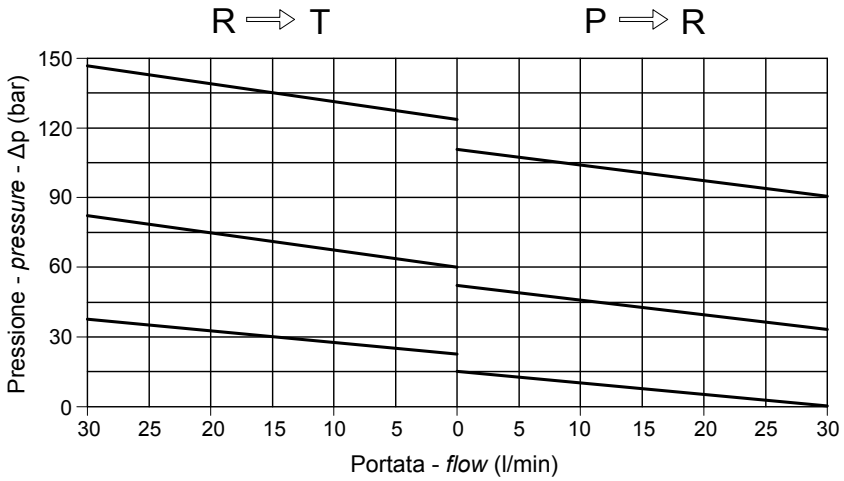
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body (CB version) is in high strenght alluminium alloy (or zinc plated steel on request).*
Rated flow: *30 l/min*
Max. setting: *180 bar*
Max. inlet pressure: *350 bar (250 bar, std CB version)*
Max. differential pressure between R and P: *210 bar*
Adjustement means: *leakproof screw or handknob*
Installation torque: *60 Nm*
Cavity: *33101 (see section X)*
Cartridge weight: *0,330 Kg*
Cartridge with body weight: *0,630 Kg (std) - 1,200 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



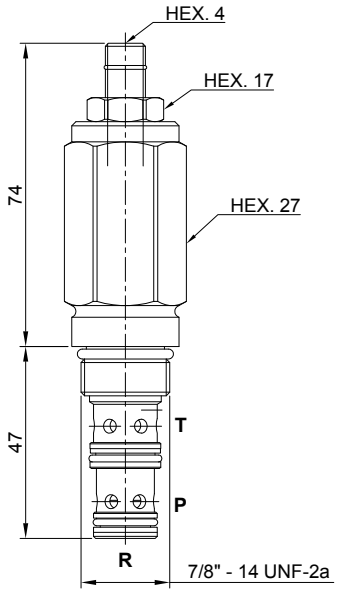
VPRPN-D-30-C(B)-*-3/8-*-*

C - 026/2

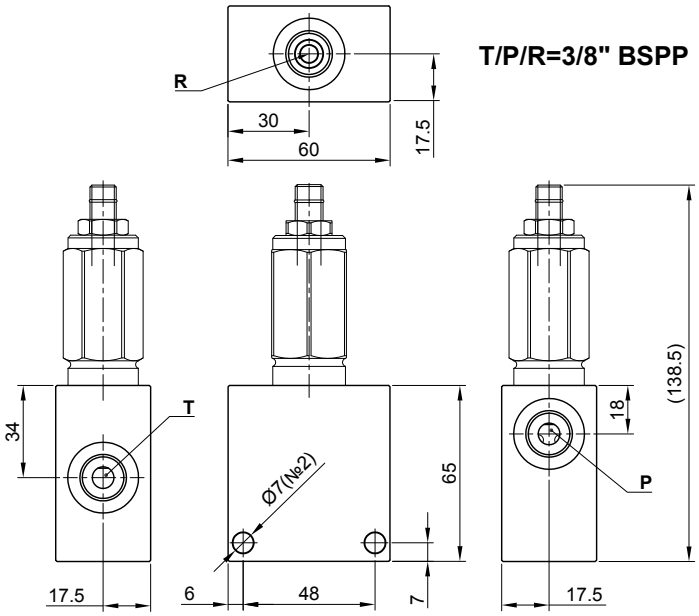
Valvola di riduzione pressione, azione diretta con relief incorporata
Pressure reducing valve, direct acting with reverse relief

Rev. 02-2010/08

VPRPN D 30 C P

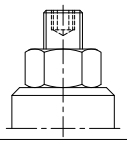
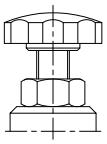


VPRPN D 30 CB P 3/8



T/P/R=3/8" BSPP

MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 35	3	5	Bianco *White*
10	10 - 60	5.5	10	Giallo *Yellow*
20	15 - 100	10	15	Verde *Green*
35	35 - 180	20	35	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRPN | **D** | **30** | **CB** | **P** | **3/8** | **S** | **05**

* C: solo cartuccia - *only cartridge*
CB: cartuccia con corpo - *cartridge and body*

* P/R:
Regolazioni - *Adjustements*

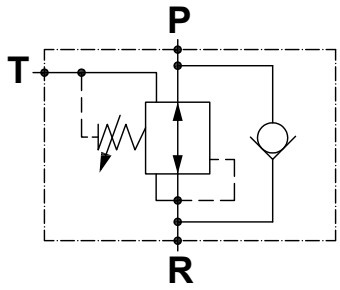
"05" / "10" / "20" / "35": *
Campi di taratura pressione -
Adjustable pressure range

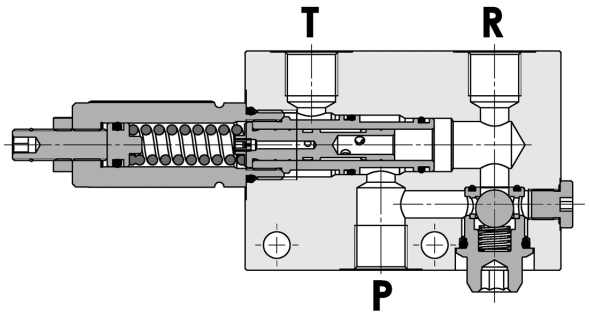
Materiale blocco: omettere se alluminio, S=acciaio *
Body material: omit if aluminium, S= steel

VPRPU-D-30-CB-*-3/8-*-* C - 075/1

Valvola di riduzione pressione, azione diretta con relief incorporata e ritorno libero
Pressure reducing valve, direct acting with reverse relief and free reverse flow

Rev. 03-2010/10





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio (a richiesta in acciaio).
Portata: 30 l/min
Taratura max.: 180 bar
Pressione max.: 210 bar (std) - 350 bar (ver."S")
Pressione di apertura ritegno: 0.5 bar
Regolazione pressione: mediante vite o volantino
Peso: 0,900 Kg (std), 2,900 (ver.S)

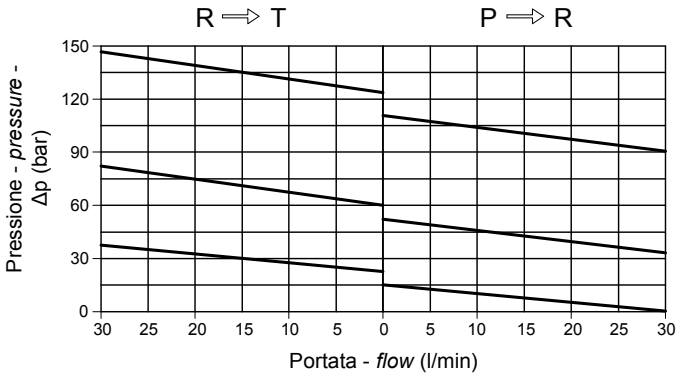
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy (steel body on request).*
Rated flow: *30 l/min*
Max. setting: *180 bar*
Max. inlet pressure: *210 bar (std) - 350 bar (ver.S)*
Cracking pressure: *0.5 bar*
Adjustement means: *leakproof screw or handknob*
Weight: *0,900 Kg (std), 2,900 Kg (ver.S)*

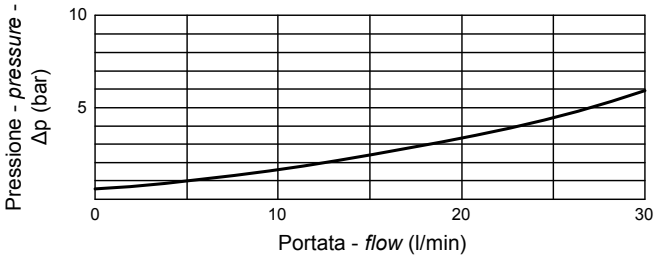
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



Ritorno libero - *Free reverse flow*

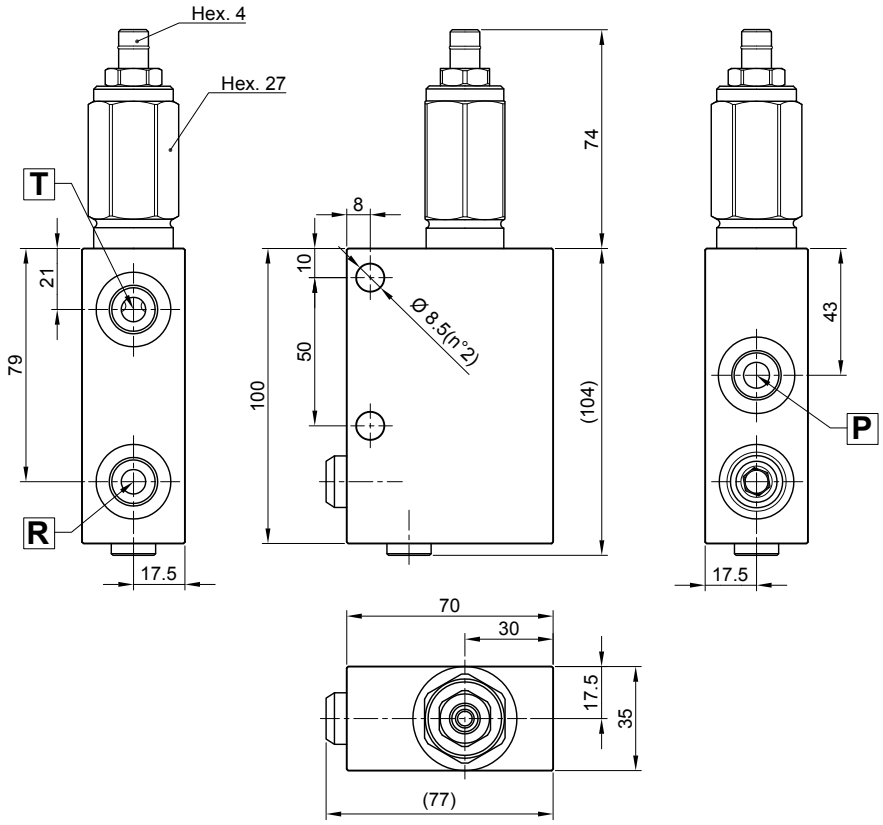


VPRPU-D-30-CB-*-3/8-*-* C - 075/2

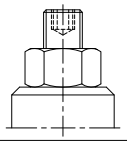
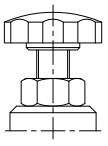
Valvola di riduzione pressione, azione diretta con relief incorporata e ritorno libero

Pressure reducing valve, direct acting with reverse relief and free reverse flow

Rev. 03-2010/10



MOLLE - *SPRINGS* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 35	3	5	Bianco *White*
10	10 - 60	5.5	10	Giallo *Yellow*
20	15 - 100	10	15	Verde *Green*
35	35 - 180	20	35	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS* *		
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRPU | **D** | **30** | **CB** | **P** | **3/8** | **S** | **05**

* P/R:
Regolazioni - *Adjustements*

* "05" / "10" / "20" / "35":
Campi di taratura pressione -
Adjustable pressure range

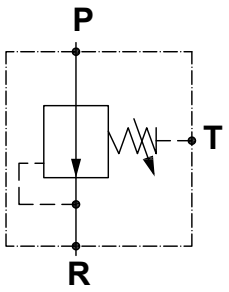
* Materiale blocco: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S= steel

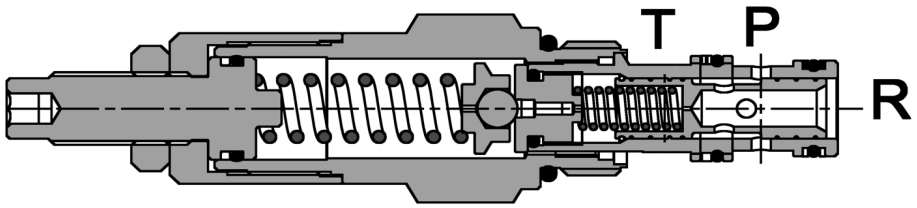
VPRP-P-SR-60-C-P-*

C - 270/1

Valvola di riduzione pressione pilotata
Pressure reducing valve, pilot operated

Rev. 01-2010/02





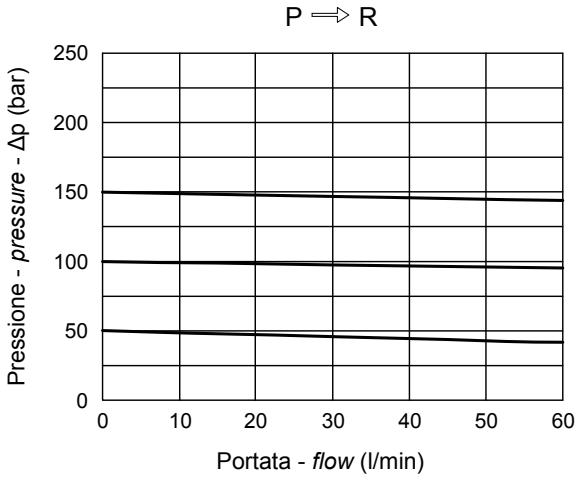
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 50 l/min
Taratura max.: 250 bar
Pressione max.: 350 bar
Pressione differenziale max. tra R e P: 200 bar
Regolazione pressione: mediante vite

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *50 l/min*
Max. setting: *250 bar*
Max. inlet pressure: *350 bar*
Max. differential pressure between R and P: *200 bar*
Adjustement means: *leakproof screw*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

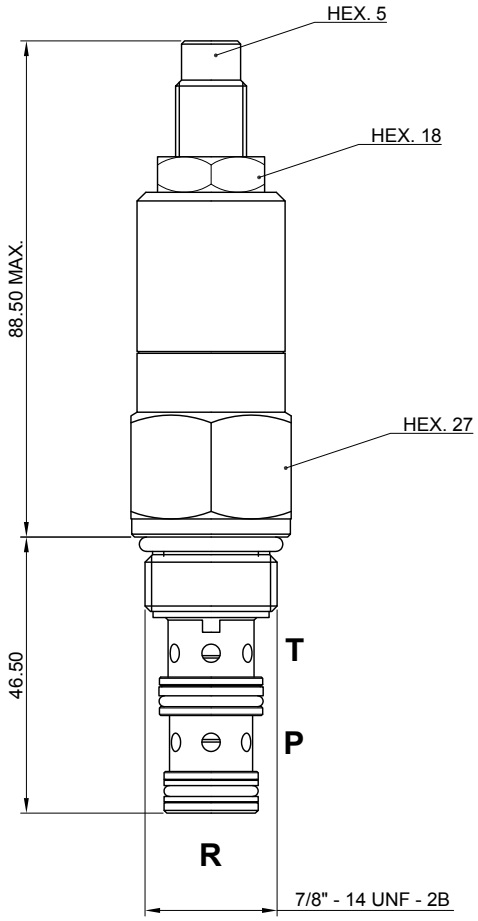


VPRP-P-SR-60-C-P-*

C - 270/2

Valvola di riduzione pressione pilotata
Pressure reducing valve, pilot operated

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	14 - 140	/	14	/
20	15 - 250	/	15	/

TIPO ***TYPE***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
		Nm	Kg
VPRP P SR 60 C	33101	27-30	0.260

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P R P | **P** | **S R** | **6 0** | **C** | **P** | **2 0**

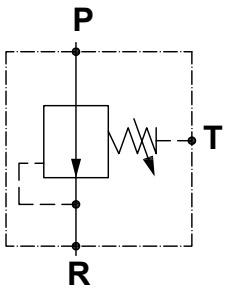
"10" / "20": *
Campi di taratura pressione -
Adjustable pressure range

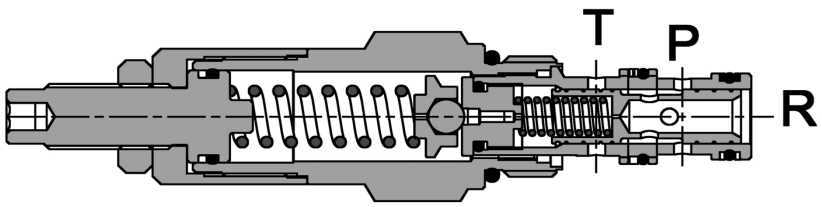
VPRP-P-60-C-P-*

C - 272/1

Valvola di riduzione pressione pilotata, con relief incorporata
Pressure reducing valve, pilot operated, with reverse relief

Rev. 01-2010/02





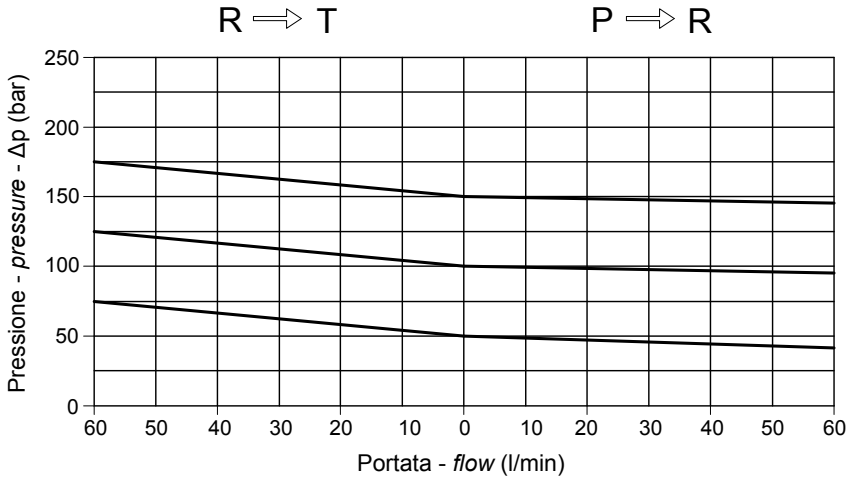
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata: 60 l/min
Taratura max.: 250 bar
Pressione max.: 350 bar
Pressione differenziale max. tra R e P: 210 bar
Regolazione pressione: mediante vite

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow: *60 l/min*
Max. setting: *250 bar*
Max. inlet pressure: *350 bar*
Max. differential pressure between R and P: *210 bar*
Adjustement means: *leakproof screw*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

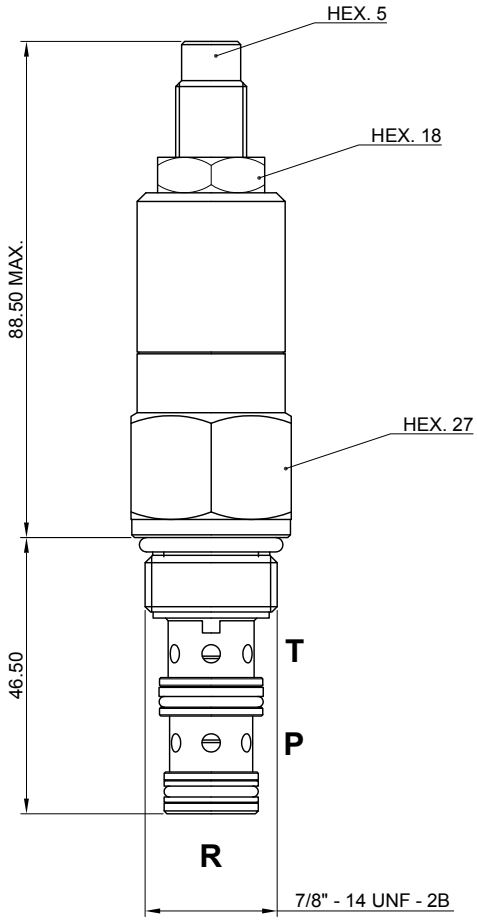


VPRP-P-60-C-P-*

C - 272/2

Valvola di riduzione pressione pilotata, con relief incorporata
Pressure reducing valve, pilot operated, with reverse

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	14 - 140	/	14	/
20	15 - 250	/	15	/

TIPO ***TYPE***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
		Nm	Kg
VPRP P 60 C	33101	35 - 35	0.290

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V	P	R	P		P		6	0		C		P		2	0

"10" / "20": *
Campi di taratura pressione -
Adjustable pressure range

SEZIONE D
Valvole di ritegno unidirezionale

SECTION D
Check Valves

VALVOLE DI RITEGNO UNIDIREZIONALI

Queste valvole consentono il flusso libero in una direzione e lo impediscono nella direzione opposta.
Sono disponibili 3 soluzioni di montaggio: a cartuccia, in linea e ad inserto.

CHECK VALVE

These valves allow free flow in one direction and prevent flow in the reverse direction.
3 solutions of assembly are available: in line, cartridge and insert version.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
D 025	VPR	D 125	VPR C
D 050	VPR-MF	D 130	VPR C SAE
D 075	VPRI	D 135	VPR C-S08-S
D 100	VPRI-S	D 140	VPR CR-SAE

VALVOLE A RITEGNI CONTRAPPOSTI

Queste valvole consentono il flusso in entrambe le direzioni, ma con pressioni di apertura ritegno differenti.

BI-DIRECTIONAL CHECK VALVE

These valves allow the flow in both direction, but with different cracking pressure.

PAGINA / *PAGE*	CODICE / *CODE*
D 200	VPRD

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

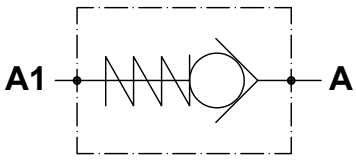
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

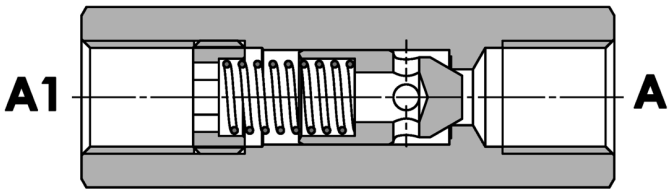
VPR-*-*

D - 025/1

Valvola di ritegno unidirezionale
Check valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: fino a 310 l/min
Pressione max.: 350 bar, vedasi tabella a parte
Pressione di apertura: standard 0.5 bar, a richiesta 2.5-5-10 bar

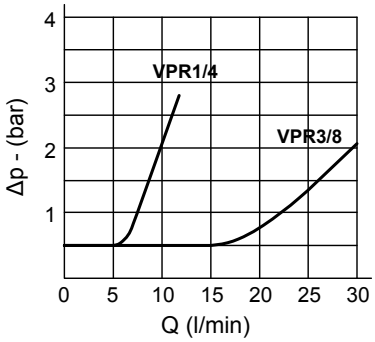
TECHNICAL SPECIFICATIONS

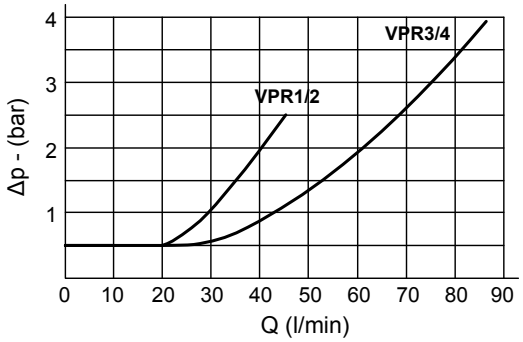
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 310 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *0.5 bar standard, on request: 2.5-5-10 bar*

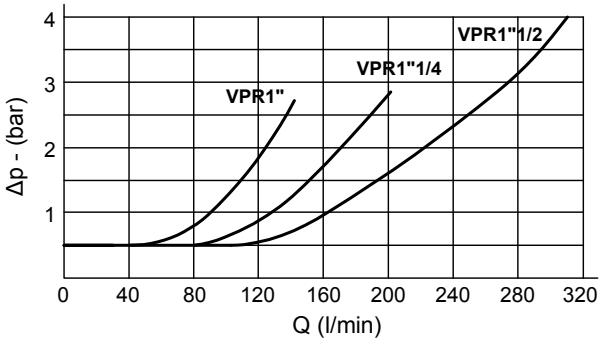
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C





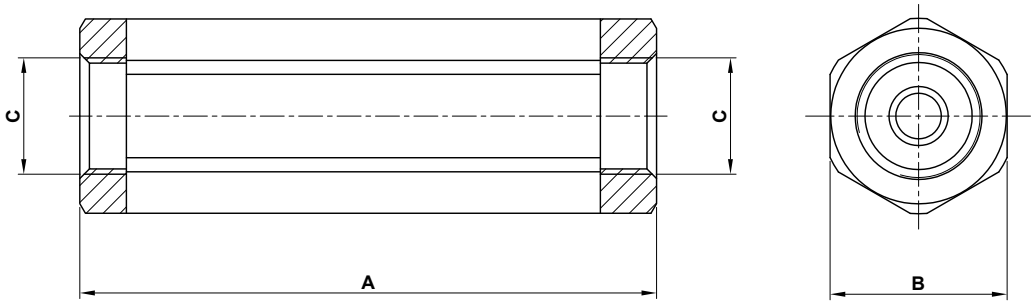


VPR-*-*

D - 025/2

Valvola di ritegno unidirezionale
Check valve

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	Kg
VPR 1/4"	12	350	62	19	1/4"	0.10
VPR 3/8"	30	350	68	24	3/8"	0.17
VPR 1/2"	45	320	78	27	1/2"	0.22
VPR 3/4"	85	300	88	36	3/4"	0.45
VPR 1"	140	250	112	46	1"	0.97
VPR 1 1/4"	200	250	145	55	1 1/4"	1.68
VPR 1 1/2"	310	210	155	60	1 1/2"	2.10

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPR **1/4** **2.5**

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
1 - 1" BSPP
1 1/4 – 1 1/4" BSPP
1 1/2 – 1 1/2" BSPP
Connessioni - *Port sizes*

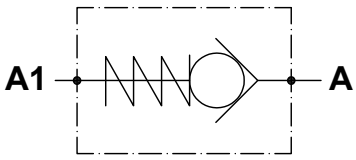
0.5 bar (std)
2.5 bar
5 bar
10 bar *
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

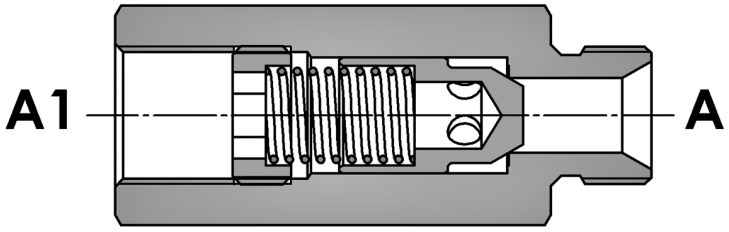
VPR-*-MF-*

D - 050/1

Valvola di ritegno unidirezionale, versione maschio-femmina
Check valve, male-female version

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: fino a 310 l/min
Pressione max.: 350 bar, vedasi tabella a parte
Pressione di apertura: standard 0.5 bar, a richiesta 2.5-5-10 bar

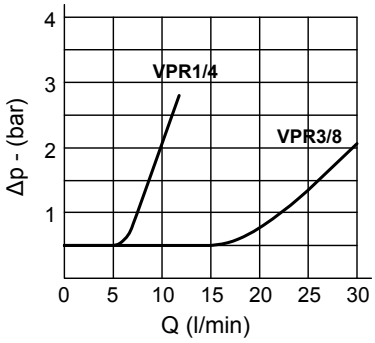
TECHNICAL SPECIFICATIONS

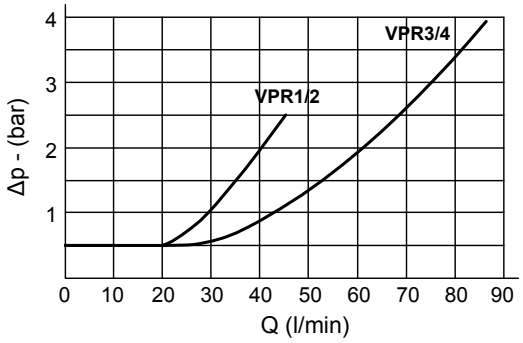
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 310 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *0.5 bar standard, on request: 2.5-5-10 bar*

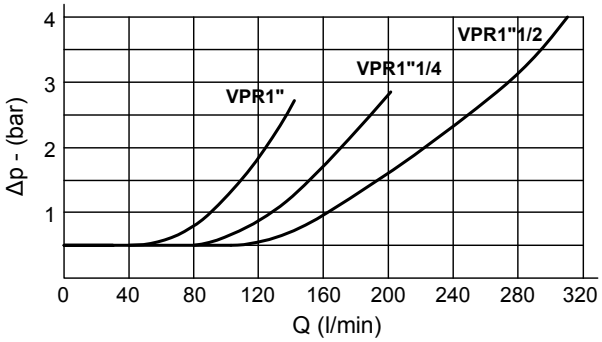
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C





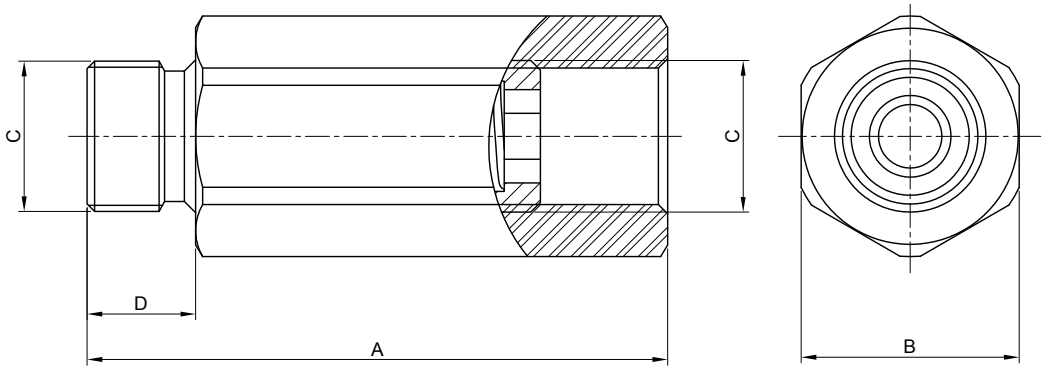


VPR-*-MF-*

D - 050/2

Valvola di ritegno unidirezionale, versione maschio-femmina
Check valve, male-female version

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	C	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	mm	Kg
VPR 1/4" MF	12	350	62	19	1/4"	12	0.10
VPR 3/8" MF	30	350	68	24	3/8"	12	0.17
VPR 1/2" MF	45	320	78	27	1/2"	14	0.22
VPR 3/4" MF	85	300	88	36	3/4"	16	0.45
VPR 1" MF	140	250	112	46	1"	18	0.97
VPR 1 1/4" MF	200	250	145	55	1 1/4"	20	1.68
VPR 1 1/2" MF	310	210	155	60	1 1/2"	22	2.10

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPR **1/4** **MF** **2.5**

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
1 - 1" BSPP
1 1/4 – 1 1/4" BSPP
1 1/2 – 1 1/2" BSPP
Connessioni - *Port sizes*

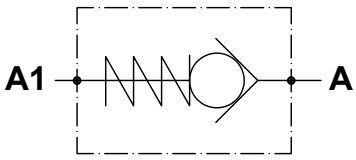
0.5 bar (std)
2.5 bar
5 bar
10 bar *
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

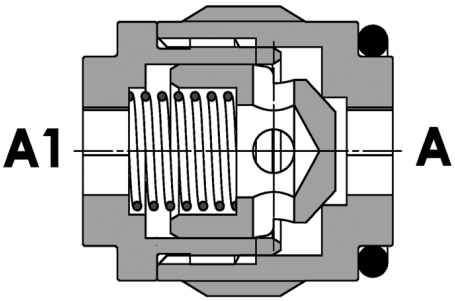
VPRI-*-*

D - 075/1

Valvola di ritegno unidirezionale, versione inserto
Check valve, insert version

Rev. 01-2010/02





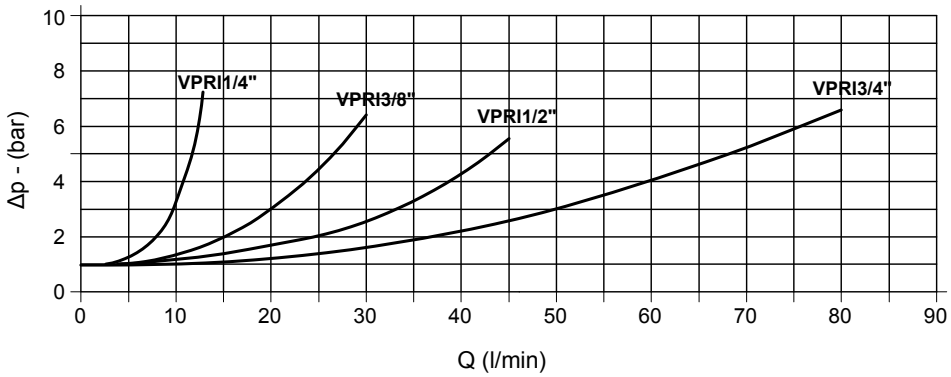
SPECIFICHE TECNICHE
Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente.
Portata: fino a 80 l/min
Pressione max.: 350 bar
Pressione di apertura: 1 bar

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Guided poppet is in hardened steel.*
Rated flow: *up to 80 l/min*
Max. pressure: *350 bar*
Cracking pressure: *1 bar*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

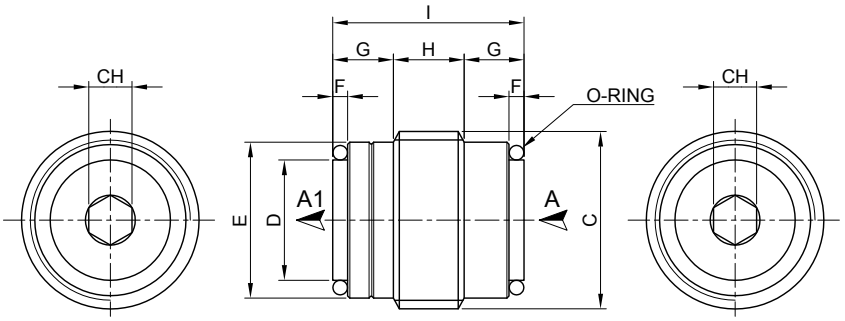


VPRI-*-*

D - 075/2

Valvola di ritegno unidirezionale, versione inserto
Check valve, insert version

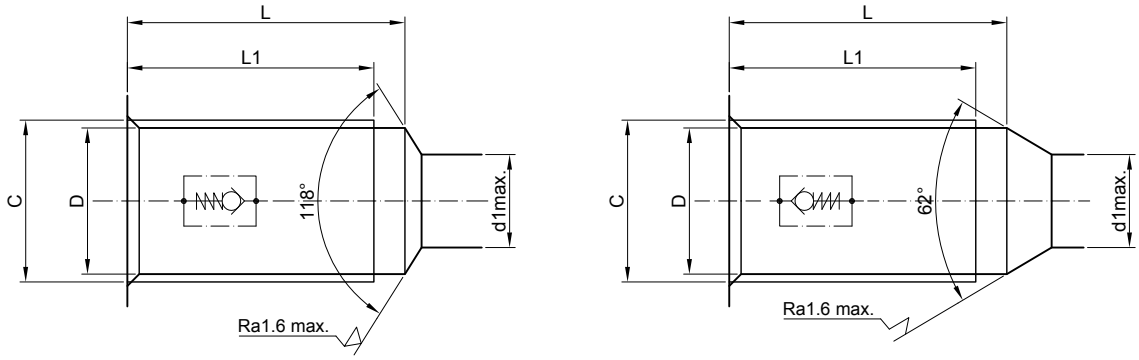
Rev. 01-2010/02



Attenzione: in fase di montaggio o smontaggio si raccomanda di inserire la chiave esagonale fino a sfiorare il ritegno su un lato e la molla nell'altro e non oltre, per non compromettere la sede di tenuta nel primo caso, e non danneggiare la molla nel secondo.

Warning: *during the mounting or dismounting it's recommended to insert the exagonal key up to brush the check in one side and the spring in the other side and not over, to not compromise the seat in the first case and not damage the spring in the second.*

TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	C	D	E	F	G	H	I	CH	0-RING	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	Kg
VPRI 1/4"	15	350	1/4"	9.2	11.3	1	5.5	6	17.5	4	9x1	0.015
VPRI 3/8"	30	350	3/8"	11	14.8	1.8	5.3	7.5	18.8	5	10.8x1.78	0.025
VPRI 1/2"	45	350	1/2"	14.2	18.5	1.8	7	8.5	23	7	14x1.78	0.040
VPRI 3/4"	80	300	3/4"	19	24.1	2.7	7	13.5	28	10	17.86x2.62	0.070



TIPO *TYPE*	C	D	d1	L	L1	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*
	BSPP	mm	mm	mm	mm	Nm
VPRI 1/4"	1/4"	11.8	8	29	26	6 Nm
VPRI 3/8"	3/8"	15.2	9	30	27	10 Nm
VPRI 1/2"	1/2"	19	12	36	32	20 Nm
VPRI 3/4"	3/4"	24.5	16	43	39.5	30 Nm

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRI **1/4** *****

1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
* Connessioni - *Port sizes*

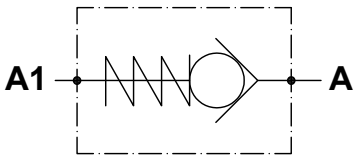
Guarnizioni - *Seals:*
V=Viton
Omettere se BUNA-N - *Omit if BUNA-N*
*

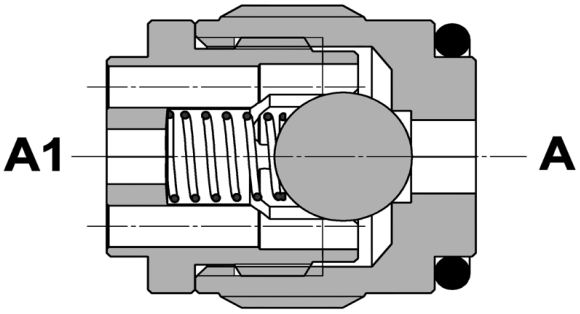
VPRI-*-S-*

D - 100/1

Valvola di ritegno unidirezionale, versione inserto, tenuta a sfera
Check valve, insert ball version

Rev. 01-2010/02





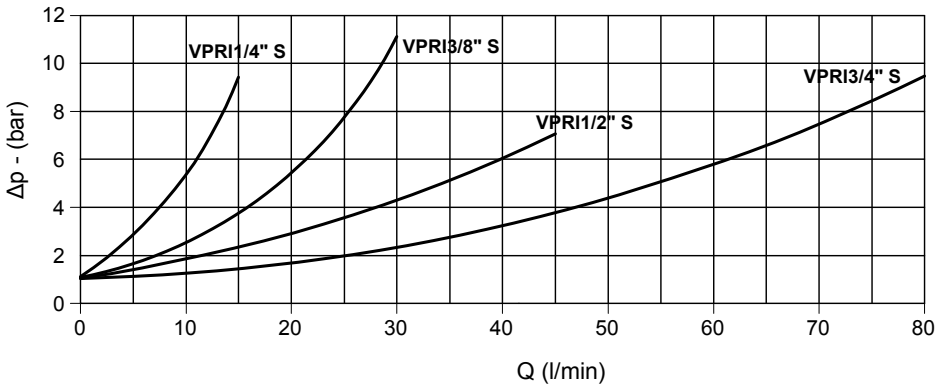
SPECIFICHE TECNICHE
Materiali: corpo in acciaio. La sfera è in acciaio trattato termicamente.
Portata: fino a 80 l/min
Pressione max.: 350 bar
Pressione di apertura: 1 bar

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Ball is in hardened steel.*
Rated flow: *up to 80 l/min*
Max. pressure: *350 bar*
Cracking pressure: *1 bar*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

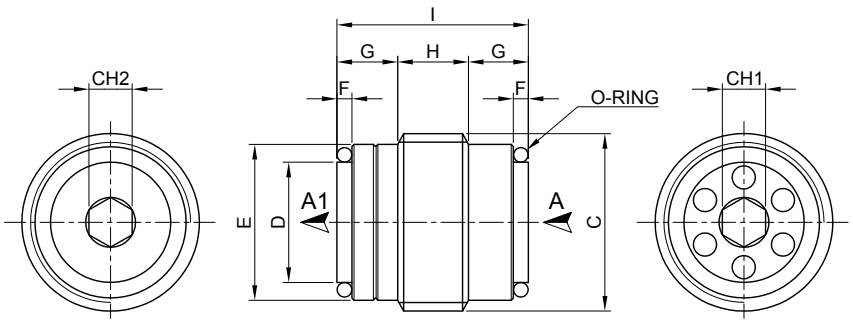


VPRI-*-S-*

D - 100/2

Valvola di ritegno unidirezionale, versione inserto, tenuta a sfera
Check valve, insert ball version

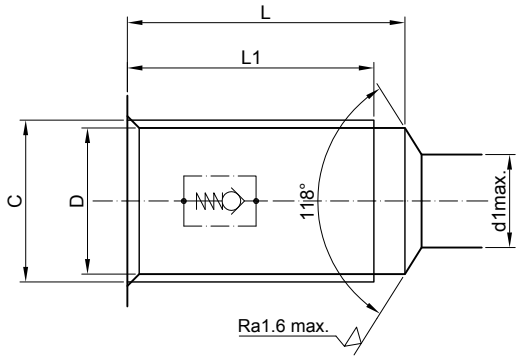
Rev. 01-2010/02

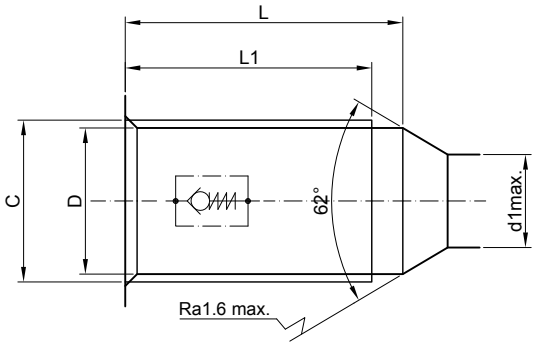


Attenzione: in fase di montaggio o smontaggio si raccomanda di inserire la chiave esagonale fino a sfiorare il ritegno su un lato e la molla nell'altro e non oltre, per non compromettere la sede di tenuta nel primo caso, e non danneggiare la molla nel secondo.

Warning: *during the mounting or dismounting it's recommended to insert the exagonal key up to brush the check in one side and the spring in the other side and not over, to not compromise the seat in the first case and not damage the spring in the second.*

TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	C	D	E	F	G	H	I	CH1	CH2	0-RING	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
VPRI 1/4" S	15	350	1/4"	9.2	11.4	1.1	5.5	6.5	17.5	3	3	9x1	0.015
VPRI 3/8" S	30	350	3/8"	10.9	14.9	2.1	5.6	7.5	18.7	3	4	10.8x1.78	0.025
VPRI 1/2" S	45	350	1/2"	14.2	18.5	2.1	7.2	8.6	23	5	6	14x1.78	0.040
VPRI 3/4" S	80	300	3/4"	18.1	24.1	3	7	14.5	28.5	6	8	17.86x2.62	0.070





TIPO *TYPE*	C	D	d1	L	L1	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*
	BSPP	mm	mm	mm	mm	Nm
VPRI 1/4" S	1/4"	11.8	8	29	26	6 Nm
VPRI 3/8" S	3/8"	15.2	9	30	27	10 Nm
VPRI 1/2" S	1/2"	19	12	36	32	20 Nm
VPRI 3/4" S	3/4"	24.5	16	43	39.5	30 Nm

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRI **1/4** **S** *

1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
* Connessioni - *Port sizes*

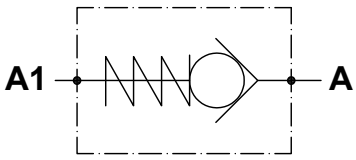
Guarnizioni - *Seals:*
V=Viton
Omettere se BUNA-N - *Omit if BUNA-N*
*

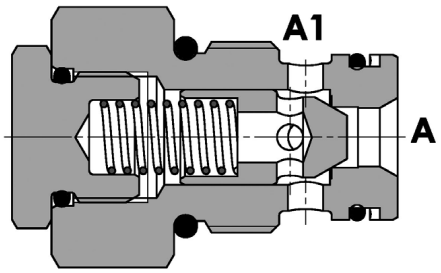
VPR C-*-*-*

D - 125/1

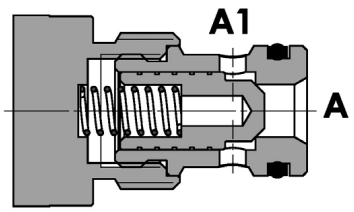
Valvola di ritegno unidirezionale, versione cartuccia
Check valve, cartridge version

Rev. 02-2010/04





VPRC 40/80/150



VPRC 20

SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: fino a 70 l/min
Pressione max.: 350 bar
Pressione di apertura: standard 0,5 bar, a richiesta 2,5-5-10 bar (VPR C 20 solo 2,5 bar)

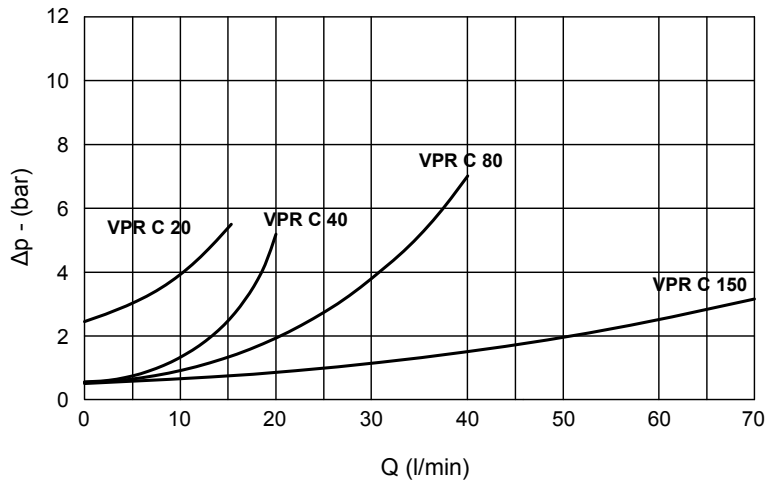
TECHNICAL SPECIFICATIONS

Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 70 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *0.5 bar standard, 2,5-5-10 bar on request (VPR C 20 only 2,5 bar)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

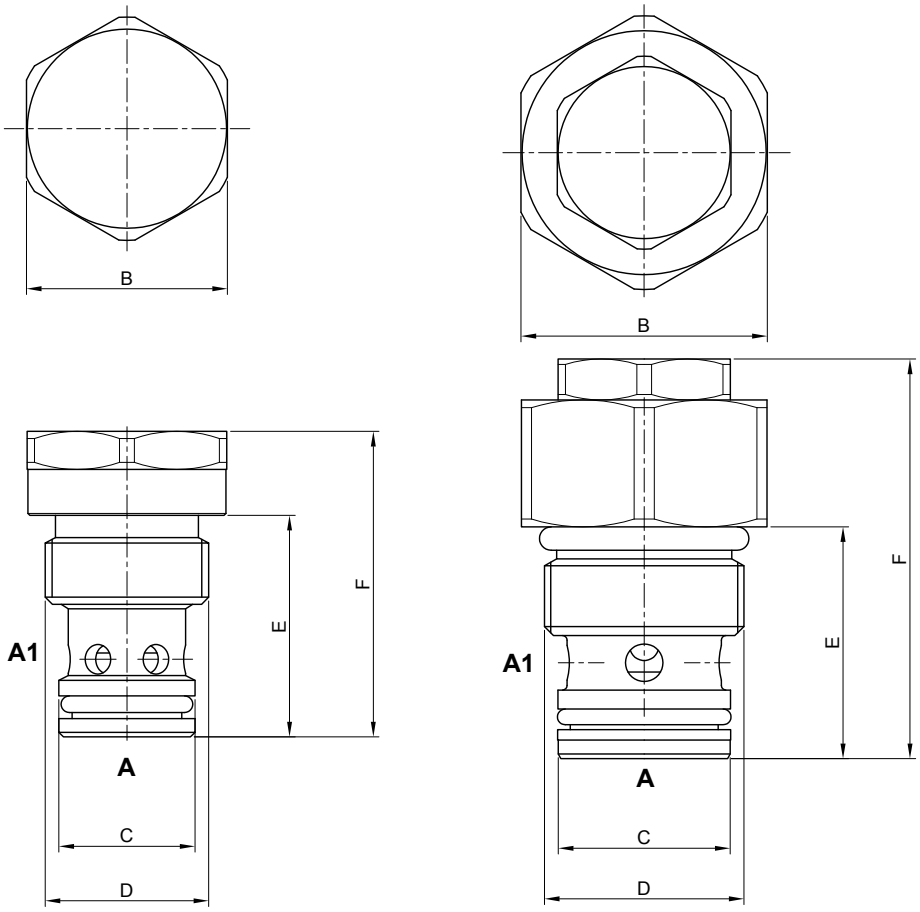


VPR C-*-*-*

D - 125/2

Valvola di ritegno unidirezionale, versione cartuccia
Check valve, cartridge version

Rev. 02-2010/04



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	B	C	D	E	F	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	mm	mm	mm	mm	mm	Kg
VPR C 20	15	350	22	15	M18x1.5	24.5	33.5	22182	30-40	0.050
VPR C 40	20	350	27	19	M22x1.5	25.5	44	22221	50-60	0.090
VPR C 80	40	350	27	19	M22x1.5	35.5	50	22222	50-60	0.095
VPR C 150	70	300	38	28	M33x2	43	60	22331	110-120	0.230

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRC **80** **2.5** *****

* 20 – M18X1.5
40 – M22X1.5
80 – M22X1.5
150 – M33X2
Dimensione - *Dimension*

0.5 bar (std) - 2.5 bar - 5 bar - 10 bar
Pressione apertura ritegno, omettere se std *
Cracking pressure, omit if std
VPR C 20: solo molla 2.5 bar - *only 2.5 bar*

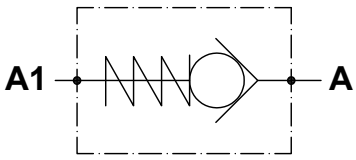
Guarnizioni - *Seals:*
V=Viton *
Omettere se BUNA-N - *Omit if BUNA-N*

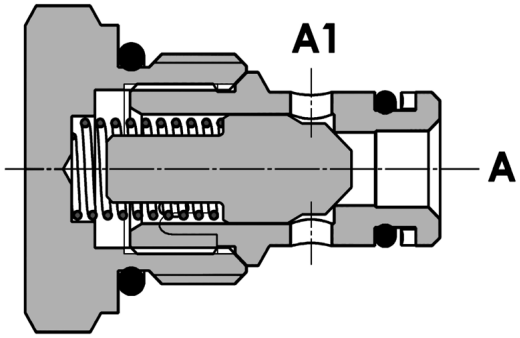
VPR-C-S**-*-*

D - 130/1

Valvola di ritegno unidirezionale, versione cartuccia, cavità SAE
Check valve, cartridge version, SAE cavity

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: fino a 120 l/min
Pressione max.: 350 bar
Pressione di apertura: standard 1 bar, a richiesta 2,5-5 bar

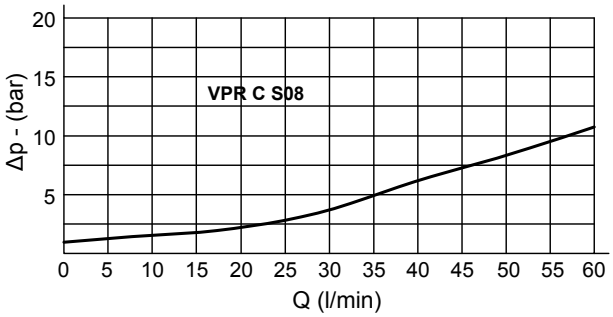
TECHNICAL SPECIFICATIONS

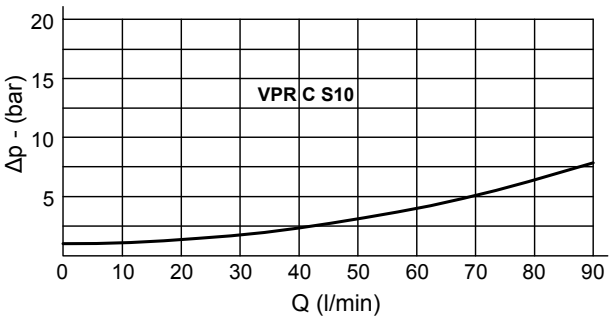
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 120 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *1 bar standard, 2,5-5 bar on request*

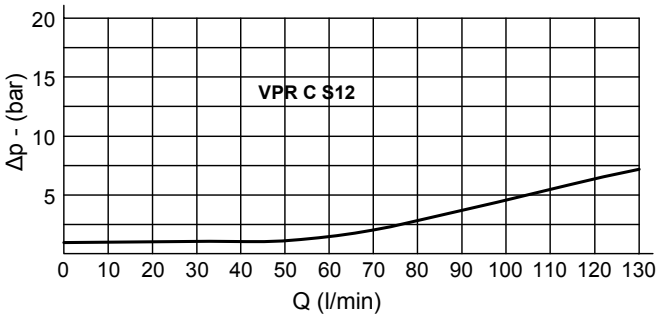
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C





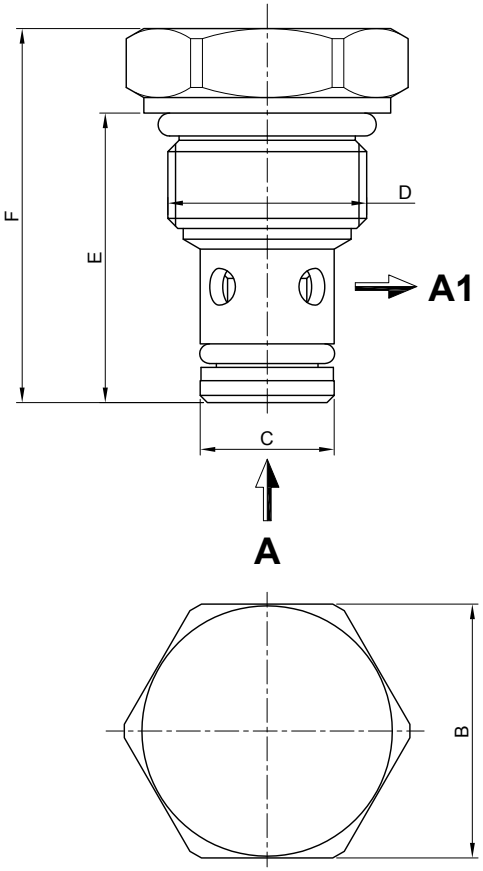


VPR-C-S**-*-*

D - 130/2

Valvola di ritegno unidirezionale, versione cartuccia, cavità SAE
Check valve, cartridge version, SAE cavity

Rev. 02-2010/08



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	B	C	D	E	F	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	UNF-2a	mm	mm	mm	Nm	Kg
VPR C S08	50	350	24	12.7	3/4"-16	27.6	35.6	23081	40-45	0.057
VPR C S10	80	350	27	15.87	7/8"-14	31.8	41.3	23101	60-70	0.083
VPR C S12	120	350	32	22.22	1 1/16"-12	46	57	23121	90-100	0.180

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRC S08 2.5 *

* S08 – 3/4"-16 UNF
S10 – 7/8"-14 UNF
S12 – 1 1/16"-12 UNF
Dimensione - *Dimension*

Guarnizioni - *Seals:*
V=Viton *
Omettere se BUNA-N - *Omit if BUNA-N*

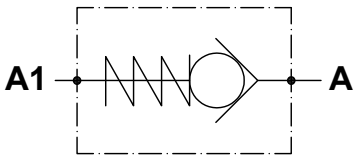
1 bar (std) - 2.5 bar - 5 bar
Pressione apertura ritegno, omettere se std *
Cracking pressure, omit if std

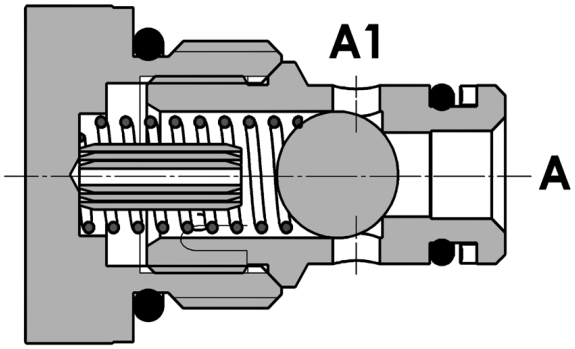
VPR-C-S08-S-*-*

D - 135/1

Valvola di ritegno unidirezionale, tenuta a sfera, versione cartuccia, cavità SAE
Check valve, cartridge ball version, SAE cavity

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. La sfera è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: 50 l/min
Pressione max.: 350 bar
Pressione di apertura: standard 1 bar, a richiesta 2,5 bar

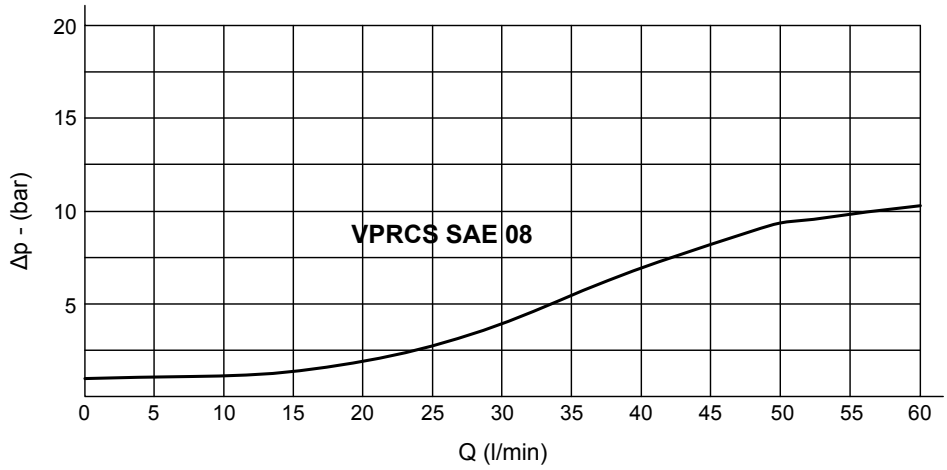
TECHNICAL SPECIFICATIONS

Materials: *body is steel made. Ball is in hardened steel.*
External surface is zinc plated.
Rated flow: *50 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *1 bar standard, 2,5 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

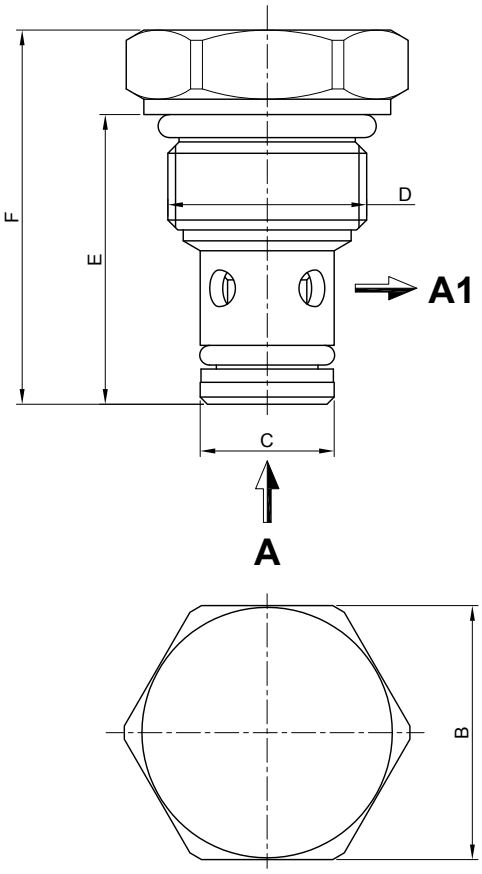


VPR-C-S08-S-*-*

D - 135/2

Valvola di ritegno unidirezionale, tenuta a sfera, versione cartuccia, cavità SAE
Check valve, cartridge ball version, SAE cavity

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	B	C	D	E	F	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	UNF-2a	mm	mm	mm	Nm	Kg
VPR C S08 S	50	350	24	12.7	3/4"-16	27.6	35.6	23081	40-45	0.055

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRC **S08** **S** **2.5** *****

1 bar (std) – 2.5 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if std

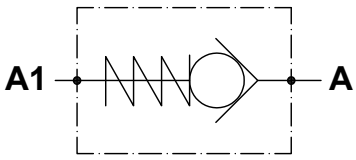
Guarnizioni - *Seals:*
V=Viton *
Omettere se BUNA-N - *Omit if BUNA-N*

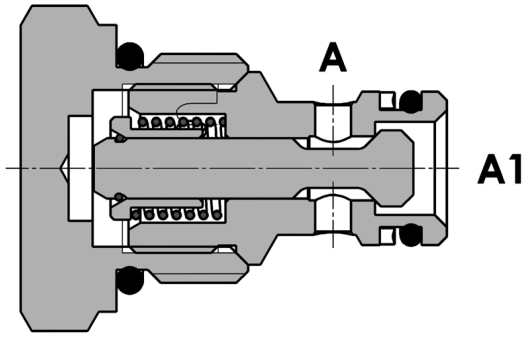
VPR-CR-*-2.5-*

D - 140/1

Valvola di ritegno unidirezionale, versione cartuccia, cavità SAE
Check valve, cartridge version, SAE cavity

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: fino a 100 l/min
Pressione max.: 350 bar
Pressione di apertura: standard 2.5 bar

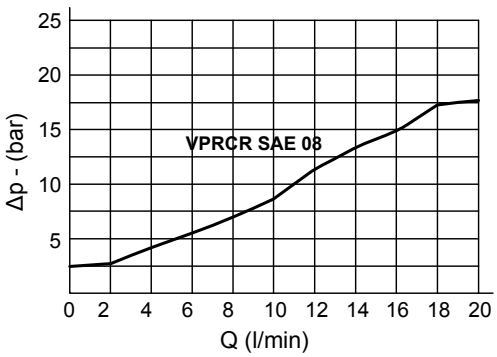
TECHNICAL SPECIFICATIONS

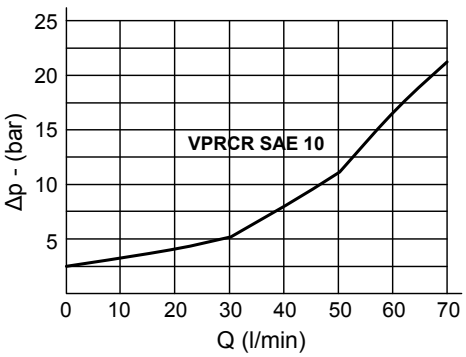
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 100 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *2.5 bar standard*

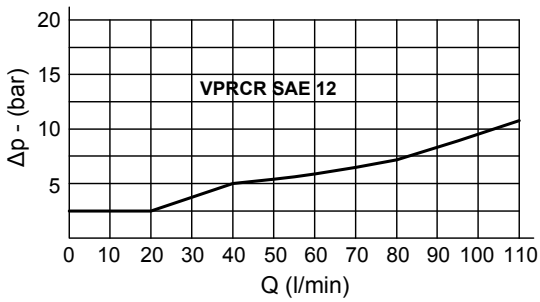
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C







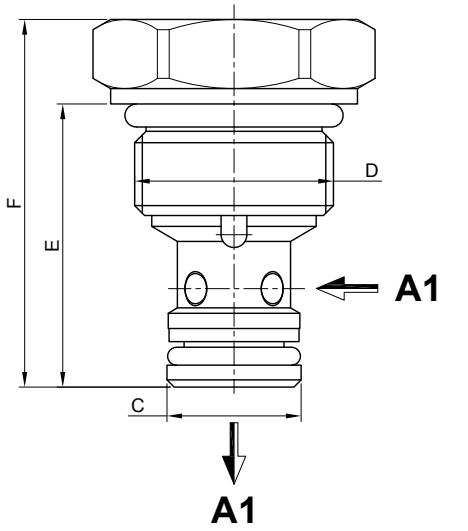
VPR-CR-*-2.5-*

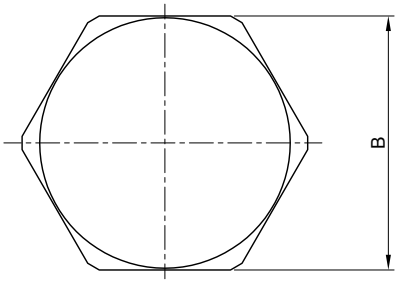
D - 140/2

Valvola di ritegno unidirezionale, versione cartuccia, cavità SAE

Check valve, cartridge version, SAE cavity

Rev. 01-2010/02





TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	B	C	D	E	F	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	UNF-2a	mm	mm	mm	Nm	Kg
VPR CR S08	20	350	24	12.7	3/4"-16	27.6	35.6	23081	40-45	0.056
VPR CR S10	60	350	27	15.87	7/8"-14	32.8	41.3	23101	60-70	0.084
VPR CR S12	100	350	32	22.22	1 1/16"-12	46	57	23121	90-100	0.173

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRCR **S08** **2.5** *

S08 – 3/4"-16 UNF
S10 – 7/8"-14 UNF
* S12 – 1 1/16"-12 UNF
Dimensione - *Dimension*

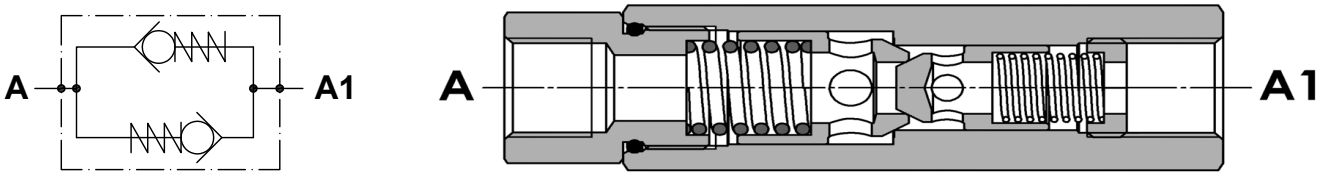
Guarnizioni - *Seals:*
V=Viton *
Omettere se BUNA-N - *Omit if BUNA-N*

VPRD-*-*-*-*

D - 200/1

Valvola a ritegni contrapposti, montaggio in linea
Bi-directional in line poppet check valve

Rev. 01-2010/02



SPECIFICHE TECNICHE

Materiali: corpo in acciaio. I ritegni sono in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: fino a 85 l/min
Pressione max.: 350 bar
Pressione di apertura: standard A-A1: 0.5 bar, A1-A: 8 bar

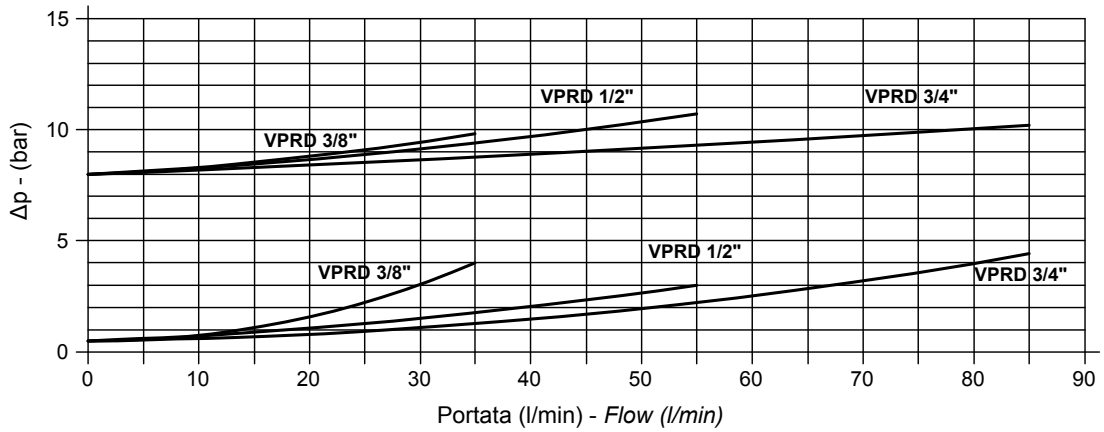
TECHNICAL SPECIFICATIONS

Materials: *body is steel made. Guided poppets are in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 85 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *A-A1: 0.5 bar, A1-A: 8 bar standard*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

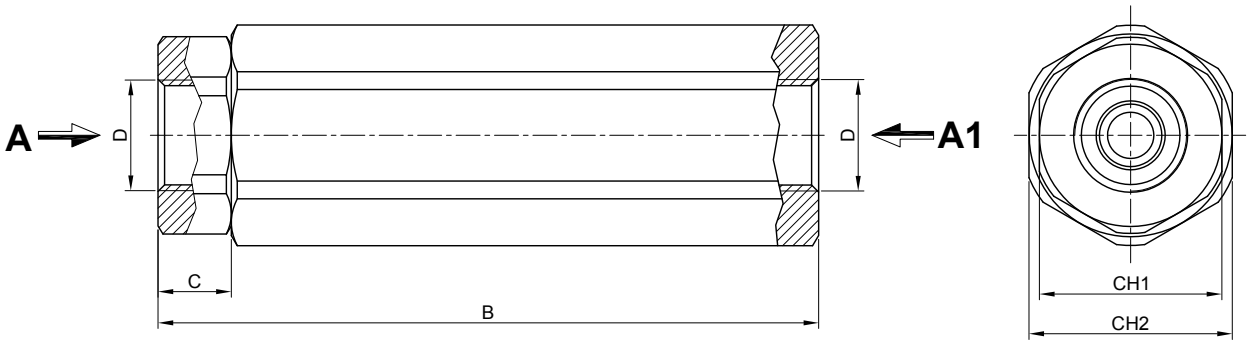


VPRD-*-*-*-*

D - 200/2

Valvola a ritegni contrapposti, montaggio in linea
Bi-directional in line poppet check valve

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	B	C	D	CH1	CH2	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	DSPP	mm	mm	Kg
VPRD 3/8	35	350	99	11	3/8	27	30	0.455
VPRD 1/2	55	350	127	21	1/2	30	32	0.592
VPRD 3/4	85	350	135.5	14	3/4	42	46	1.426

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRD **3/8** * * *

3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
* 3/4 – 3/4" BSPP
Connessioni – *Port sizes*

Taratura – *Setting A1→A*
* Omettere se 8 bar – *Omit if 8 bar*
Altre tarature disponibili a richiesta
Other settings available on request

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

Taratura – *Setting A→A1*
Omettere se 0.5 bar – *Omit if 0.5 bar* *
Altre tarature disponibili a richiesta
Other settings available on request

SEZIONE E
Valvole di blocco pilotate semplici

SECTION E
Single pilot operated check valves

Queste valvole vengono utilizzate per bloccare un cilindro od un attuatore, impedendo il flusso in senso contrario fino a quando non si applica la pressione di pilotaggio. Quando la linea di pilotaggio è senza pressione, sono normali valvole di ritegno unidirezionale.
Le versioni bilanciate sono insensibili alle contropressioni. Sono disponibili 4 soluzioni di montaggio: a cartuccia, in linea, flangiate e mediante vite forata.

These valves are used to block a cylinder or an actuator, preventing the flow in the opposite direction until pilot pressure is applied.
When the pilot line is without pressure, they are normal check valves.
Balanced versions are insensitive to counterpressure.
Available 4 assembly solution: cartridge, in line, gasket mounted and drilled screw mounted.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
E 010	VPS	E 056	VPS C-40-*-*-B-PR2-3/8-*
E 019	VPSLE-1/4-S	E 110	VPS C-20
E 020	VPSL	E 120	VPS C-40
E 025	VPS-LR1	E 140	VPS C-SAE
E 026	VPS-LR2	E 160	VPS CR-SAE
E 040	VPS F	E 320	VPSFB-L-3/8
E 050	VPS C-40-B-3/8-SP-5FA	E 321	VPSFB-L-1/2
E 055	VPS C-40-*-*-B-PR1-3/8-*	E 410	VPFSB-CR-70

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

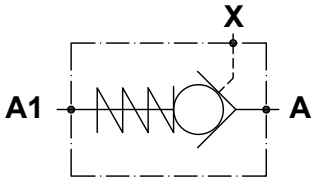
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

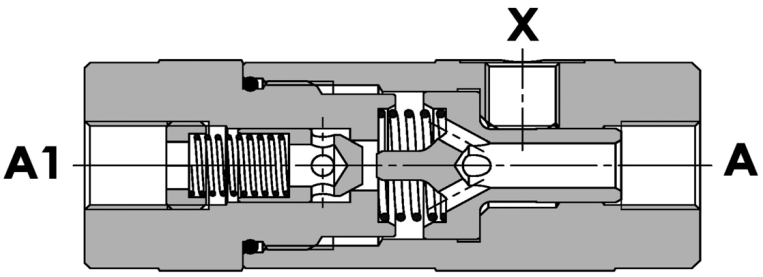
VPS-*-*-*

E - 010/1

Valvola di blocco pilotata semplice, montaggio in linea
Single pilot operated check valve, line mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: fino a 85 l/min
Pressione max.: 350 bar
Pressione di apertura: standard 0,5 bar, a richiesta 2,5-5-10 bar

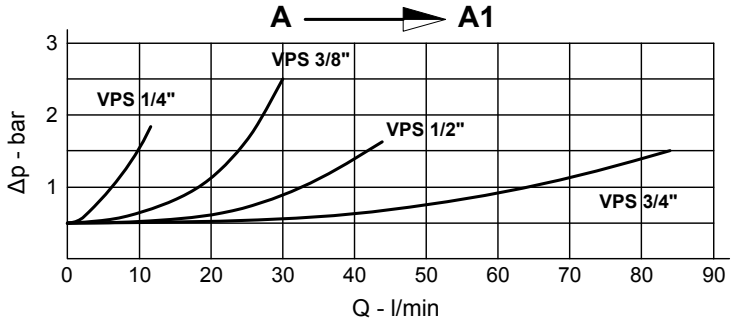
TECHNICAL SPECIFICATIONS

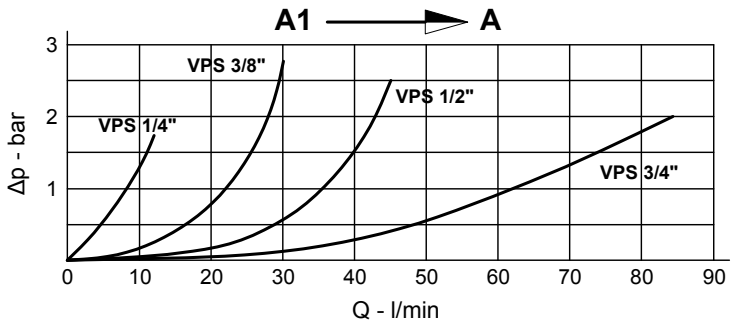
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 85 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *0,5 bar standard, 2,5-5-10 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



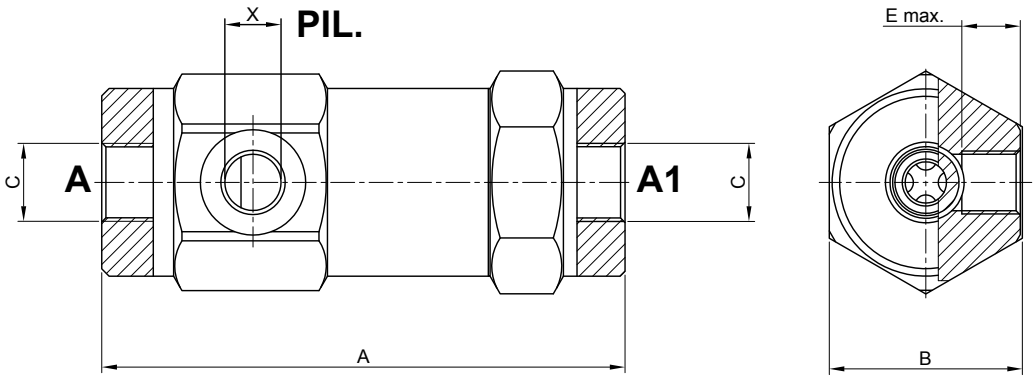


VPS-*-*-*

E - 010/2

Valvola di blocco pilotata semplice, montaggio in linea
Single pilot operated check valve, line mounted

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	X	E	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	BSPP	mm		Kg
VPS 1/4"	12	350	103	36	1/4"	1/4"	11	1 : 9	0.650
VPS 3/8"	30	310	109	40	3/8"	1/4"	11.5	1 : 6	0.820
VPS 1/2"	45	310	120	42	1/2"	1/4"	11	1 : 4.5	0.960
VPS 3/4"	85	300	131	55	3/4"	1/4"	14	1 : 3.7	1.950

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S **1 / 4** **2 . 5** *****

1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

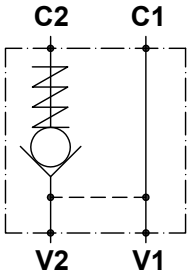
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

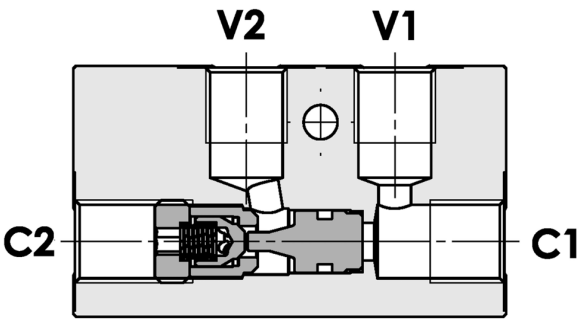
0.5 bar (std) – 2.5 bar – 5 bar -10 bar
Pressione apertura ritegno, omettere se std *
Cracking pressure, omit if std

VPS LE-1/4-*-S-* E - 019/1

Valvola di blocco pilotata semplice, montaggio in linea
Single pilot operated check valve, line mounted

Rev. 04-2010/08





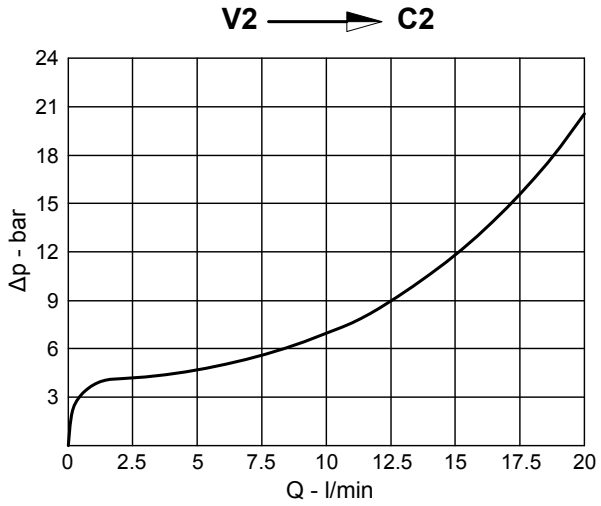
SPECIFICHE TECNICHE
Materiali: corpo acciaio zincato. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: 20 l/min
Pressione max.: 350 bar
Pressione di apertura: 3 bar
Rapp. di pilotaggio: 1 : 4
Peso: 0.360 Kg

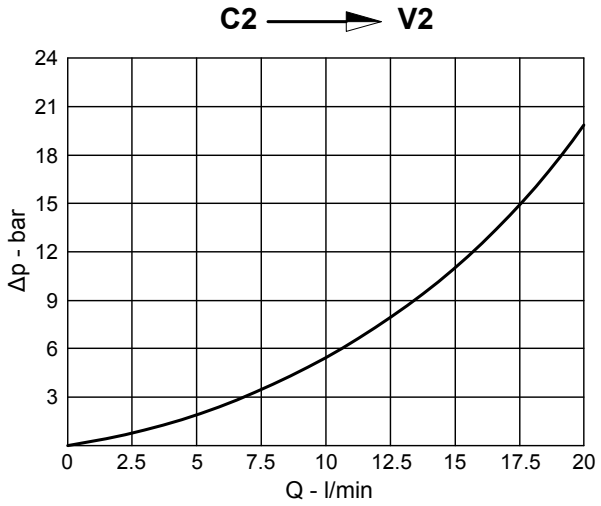
TECHNICAL SPECIFICATIONS
Materials: *body in zinc plated steel.*
Internal parts are in hardened and ground steel.
Rated flow: *20 l/min*
Max. pressure: *350 bar;*
Cracking pressure: *3 bar*
Pilot ratio: *1 : 4*
Weight: *0.360 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



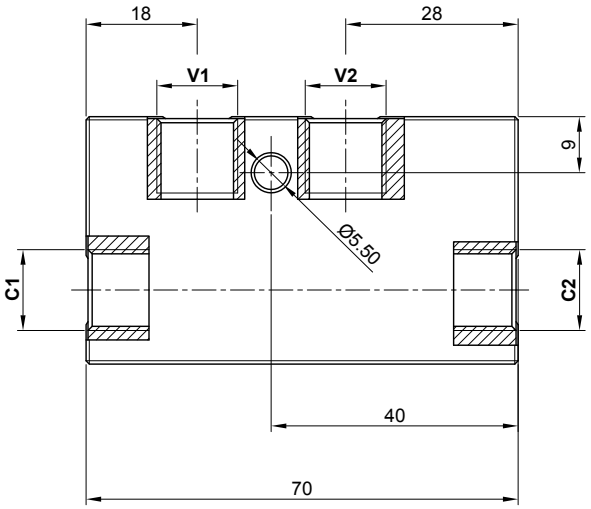


VPS LE-1/4-*-S-*

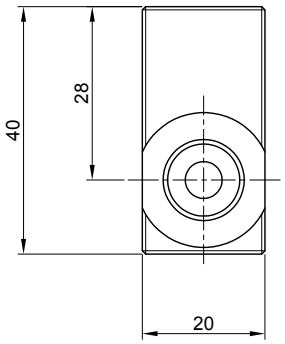
E - 019/2

Valvola di blocco pilotata semplice, montaggio in linea
Single pilot operated check valve, line mounted

Rev. 04-2010/08



V1/V2/C1/C2=1/4"BSPP



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S L E	1 / 4	G	S	*

* Guarnizione sul pilota, omettere se non richiesta
With o-ring on pilot valve, omit if not requested

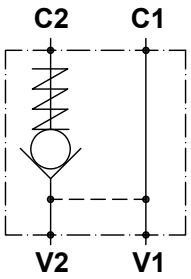
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

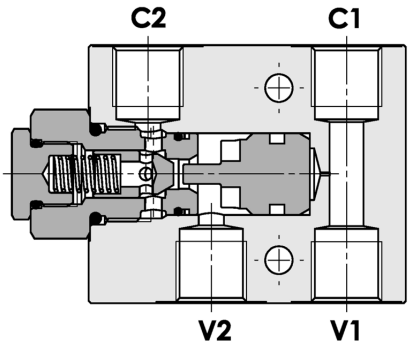
VPS L-*-*-*-*-*

E - 020/1

Valvola di blocco pilotata semplice, montaggio in linea
Single pilot operated check valve, line mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in alluminio (a richiesta in acciaio). I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 85 l/min
Pressione max.: vedi tabela pag.2
Pressione di apertura: standard 2,5 bar, a richiesta 5-10 bar

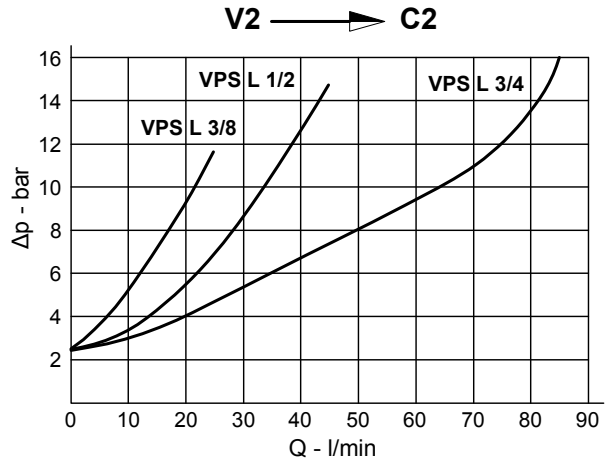
TECHNICAL SPECIFICATIONS

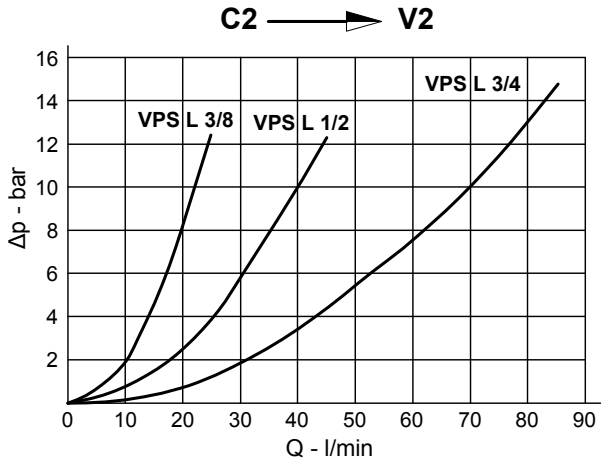
Materials: *body in aluminum (steel on request). Internal components in hardened steel.*
Rated flow: *up to 85 l/min*
Max. pressure: *see data sheet page 2*
Cracking pressure: *2,5 bar standard, 5-10 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



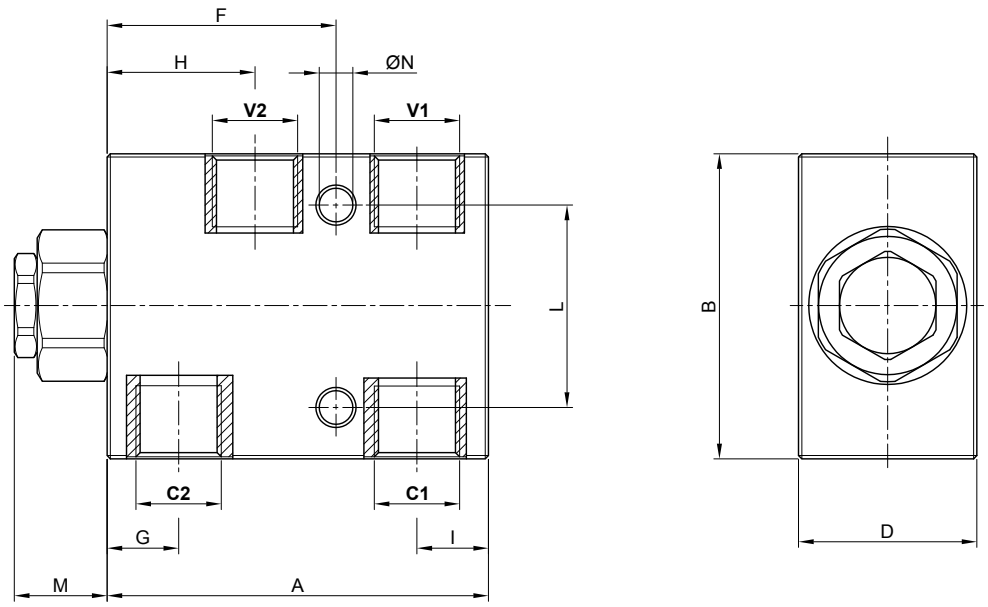


VPS L-*-*-*-*-*

E - 020/2

Valvola di blocco pilotata semplice, montaggio in linea
Single pilot operated check valve, line mounted

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	V1-C1 V2-C2	A	B	D	F	G	H	I	L	M	N	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		Kg
VPS L 3/8"	30	250 - 350(S)	3/8"	75	60	35	45	14	29	14	40	18.5	6.5	1 : 7	0.480-1.110(S)
VPS L 1/2"	45	250 - 350(S)	1/2"	95	70	35	55	21	38	19	40	15	8.5	1 : 3.5	0.620-1.530(S)
VPS L 3/4"	85	250 - 350(S)	3/4"	135	90	50	80	30	57.5	22	50	14	10.5	1 : 4	1.650-4.050(S)

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSL 3/8 2.5 G * *

3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

2.5 bar (std) – 5 bar – 10 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if std

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

Materiale corpo: omettere se aluminio, S=acciaio *
Body material: omit if aluminum, S=steel

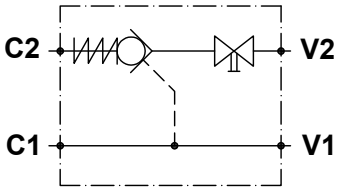
Guarnizione sul pilota, omettere se non richiesta *
With o-ring on pilot valve, omit if not requested

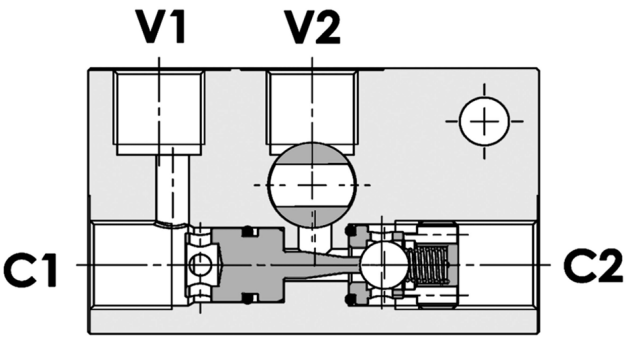
VPS LR1-*-A

E - 025/1

Valvola di blocco pilotata semplice, montaggio in linea, rubinetto, versione sinistra
Single pilot operated check valve, line mounted with manual shut-off, left version

Rev. 01-2010/02





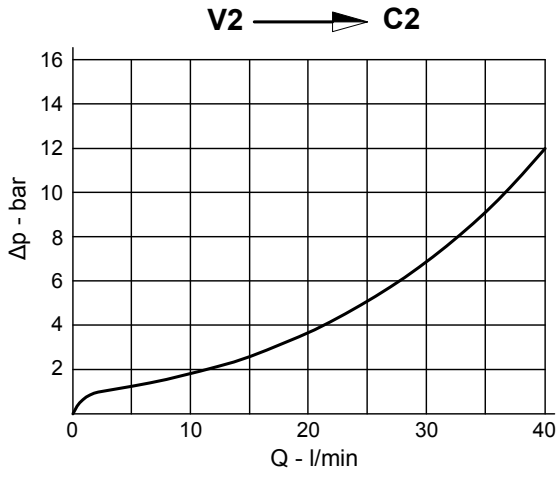
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: 30 l/min
Pressione max.: vedere tabella pag. 02
Pressione di apertura: standard 1 bar ca.

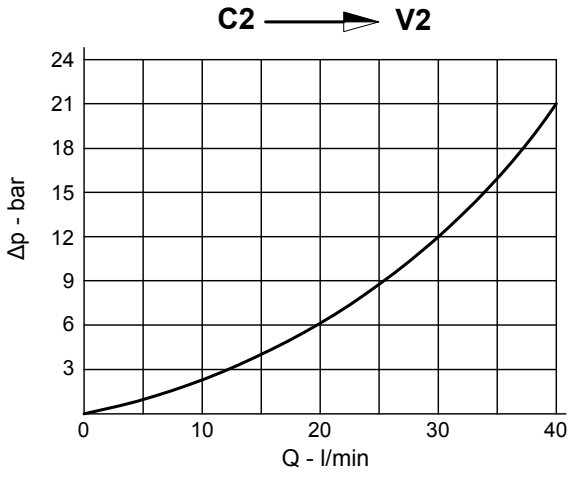
TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium. Internal parts are in hardened and ground steel.*
Rated flow: *30 l/min*
Max. pressure: *see data sheet page 02*
Cracking pressure: *about 1 bar*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C





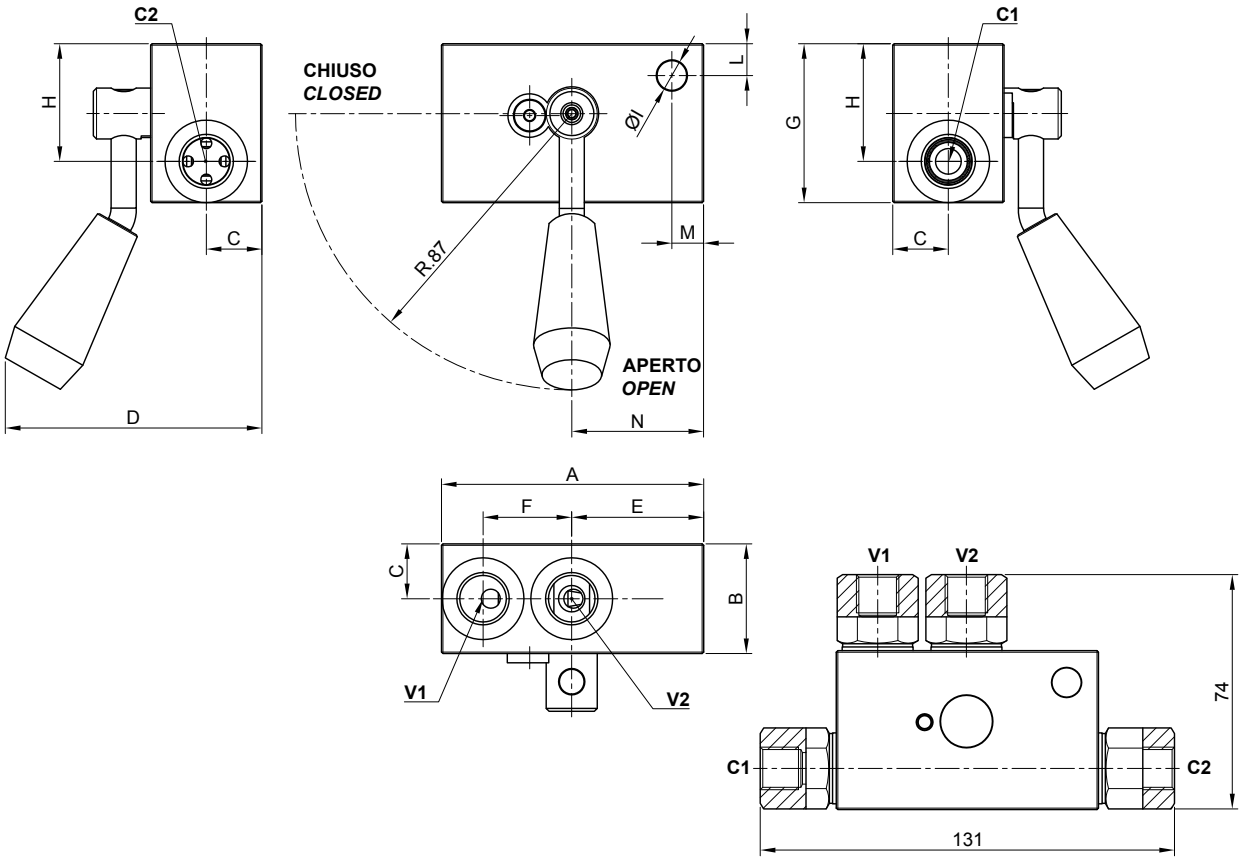
VPS LR1-*-A

E - 025/2

Valvola di blocco pilotata semplice, montaggio in linea, rubinetto, versione sinistra

Single pilot operated check valve, line mounted with manual shut-off, left version

Rev. 01-2010/02



VPS LR1 1/4 A

TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	V1-C1 V2-C2	A	B	C	D	E	F	G	H	I	L	M	N	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		Kg
VPS LR1 1/4	30	250	1/4"	82.5	35	17.5	82	41	28	50	37	9	10	10	41.5	1 : 3.5	0.770
VPS LR1 3/8	30	250	3/8"	82.5	35	17.5	82	41	28	50	37	9	10	10	41.5	1 : 3.5	0.500

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPS **LR1** **3/8** **A**

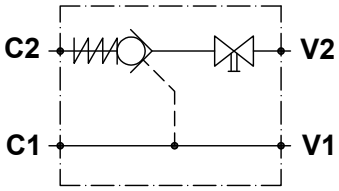
1/4 – 1/4" BSPP
* 3/8 – 3/8" BSPP
Connessioni - *Port sizes*

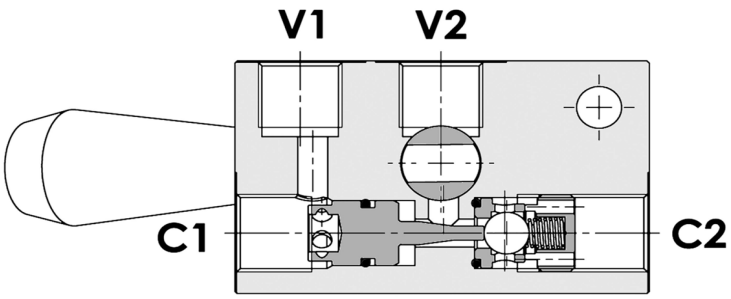
VPS LR2-*-A

E - 026/1

Valvola di blocco pilotata semplice, montaggio in linea, rubinetto, versione destra
Single pilot operated check valve, line mounted with manual shut-off, rigft version

Rev. 01-2010/02





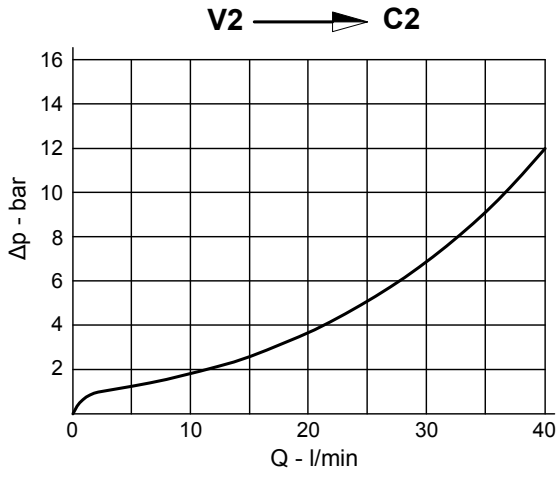
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: 30 l/min
Pressione max.: vedere tabella pag. 02
Pressione di apertura: standard 1 bar ca.

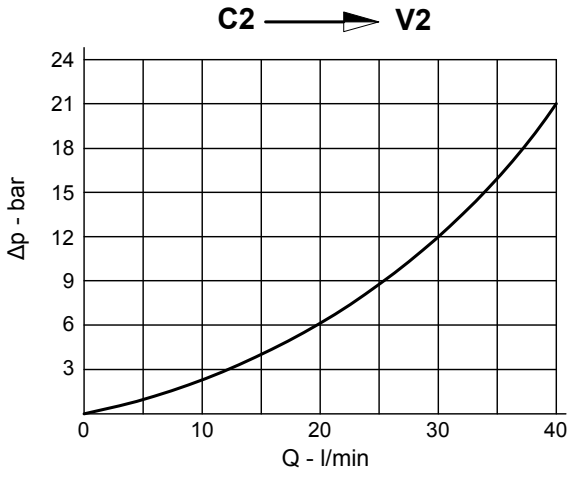
TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium. Internal parts are in hardened and ground steel.*
Rated flow: *30 l/min*
Max. pressure: *see data sheet page 02*
Cracking pressure: *about 1 bar*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C





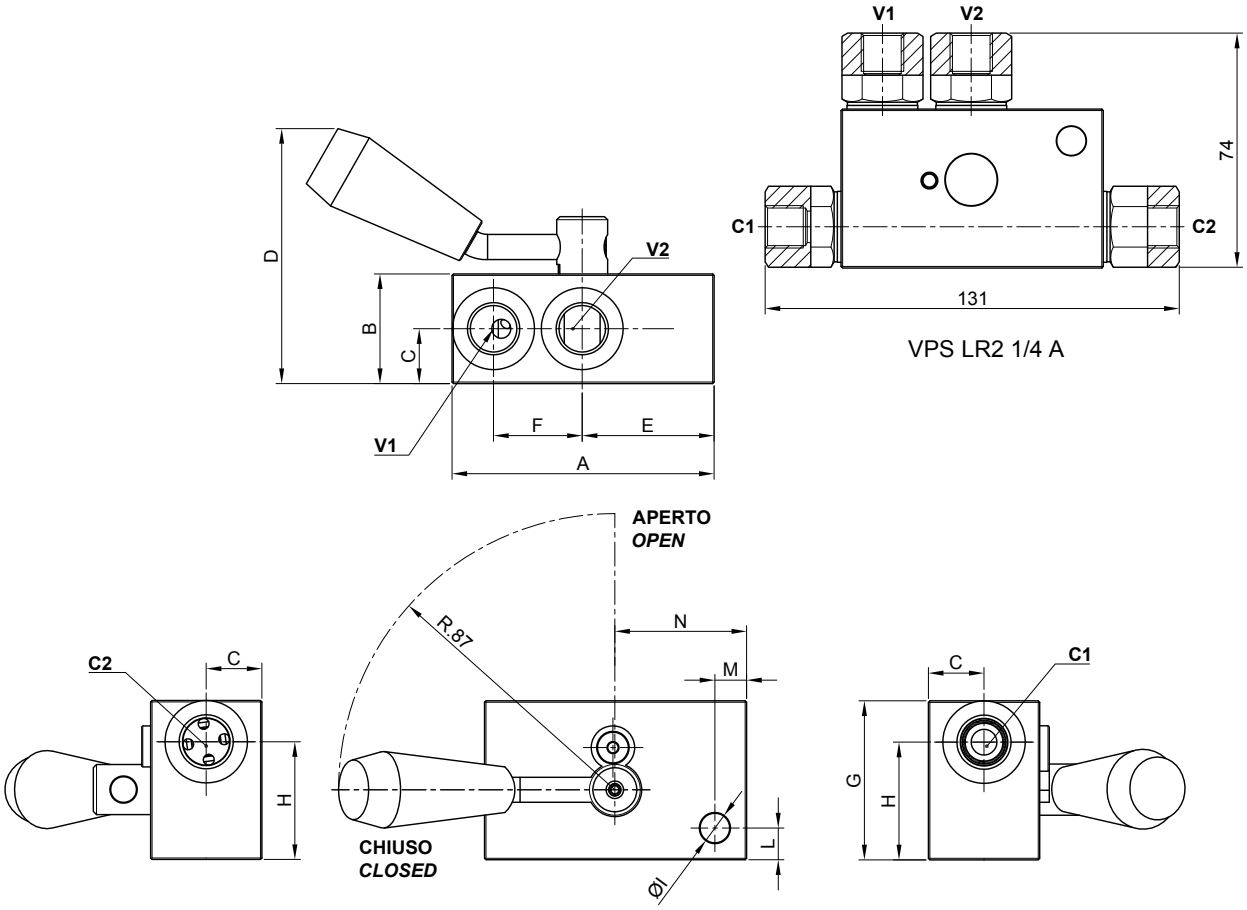
VPS LR2-*-A

E - 026/2

Valvola di blocco pilotata semplice, montaggio in linea, rubinetto, versione destra

Single pilot operated check valve, line mounted with manual shut-off, rigft version

Rev. 01-2010/02



VPS LR2 1/4 A

TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	V1-C1 V2-C2	A	B	C	D	E	F	G	H	I	L	M	N	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		Kg
VPS LR2 1/4	30	250	1/4"	82.5	35	17.5	82	41	28	50	37	9	10	10	41.5	1 : 3.5	0.770
VPS LR2 3/8	30	250	3/8"	82.5	35	17.5	82	41	28	50	37	9	10	10	41.5	1 : 3.5	0.500

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPS **LR2** **3/8** **A**

1/4 – 1/4" BSPP
* 3/8 – 3/8" BSPP

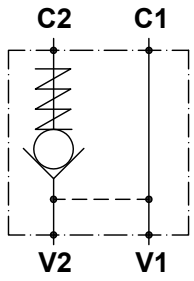
Connessioni - *Port sizes*

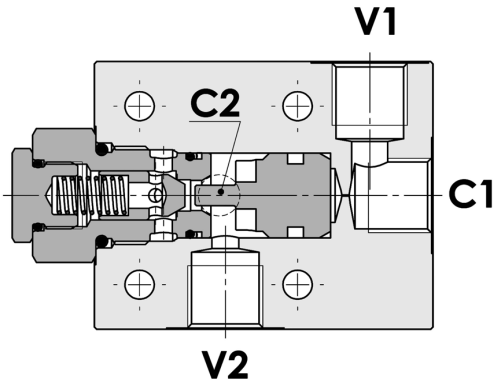
VPS F-*-*-*-*-*

E - 040/1

Valvola di blocco pilotata semplice, montaggio a flangia
Single pilot operated check valve, gasket mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in alluminio (a richiesta in acciaio). I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 85 l/min
Pressione max.: vedi tabela pag.2
Pressione di apertura: standard 2,5 bar, a richiesta 5-10 bar

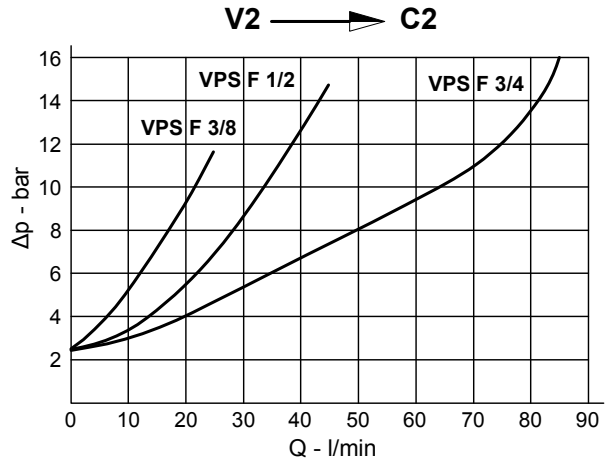
TECHNICAL SPECIFICATIONS

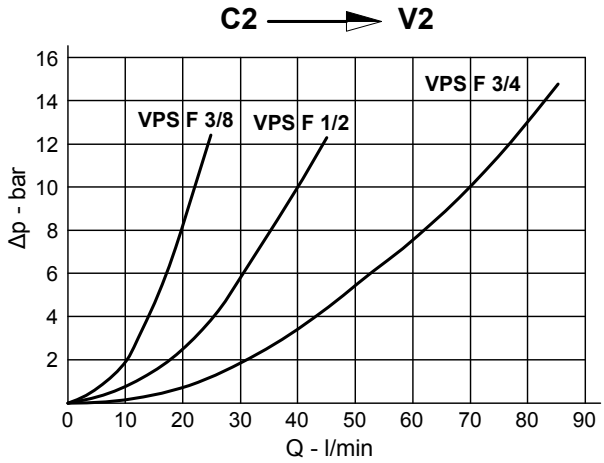
Materials: *body in aluminum (steel on request). Internal components in hardened steel.*
Rated flow: *up to 85 l/min*
Max. pressure: *see data sheet page 2*
Cracking pressure: *2,5 bar standard, 5-10 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



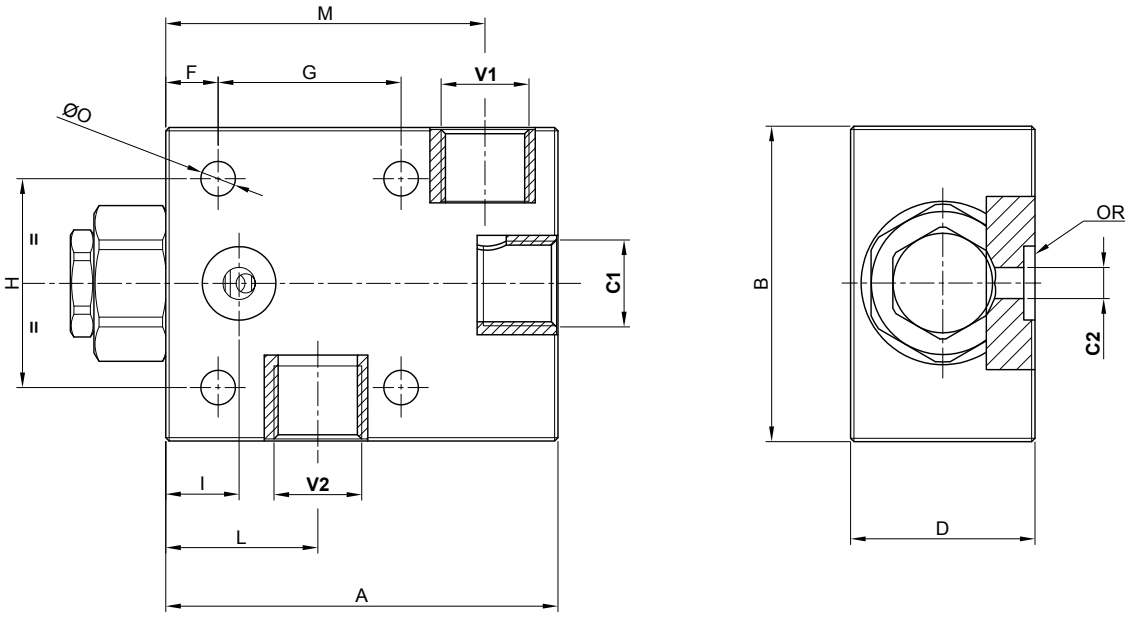


VPS F-*-*-*-*-*

E - 040/2

Valvola di blocco pilotata semplice, montaggio a flangia
Single pilot operated check valve, gasket mounted

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	V1-C1 V2	C2	A	B	D	F	G	H	I	L	M	N	O	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		Kg
VPS F 3/8"	30	250 - 350(S)	3/8"	6	75	60	35	10	35	40	14	29	61	18.5	6.5	1 : 7	0.470-1.150(S)
VPS F 1/2"	45	250 - 350(S)	1/2"	8	95	70	34	15	40	40	22.5	38	76	15	8.5	1 : 3.5	0.600-1.600(S)
VPS F 3/4"	85	250 - 350(S)	3/4"	14	135	90	49	15	65	50	30	57.5	113	14	10.5	1 : 4	1.700-4.100(S)

Queste valvole, data la loro configurazione, non consentono una elevata contropressione allo scarico
These valves, owing to their configuration, can't allow for an high discharge pressure

	VPS F 3/8"	VPS F 1/2"	VPS F 3/4"
Guarnizione OR – *OR seal*	9.19x2.62	15.54x2.62	18.64x3.53

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSF **3/8** **2.5** **G** * *

3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

2.5 bar (std) – 5 bar – 10 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if std

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

Materiale corpo: omettere se aluminio, S=acciaio *
Body material: omit if aluminum, S=steel

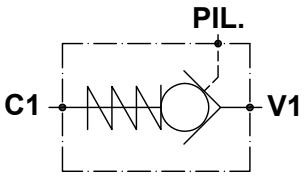
Guarnizione sul pilota, omettere se non richiesta *
With o-ring on pilot valve, omit if not requested

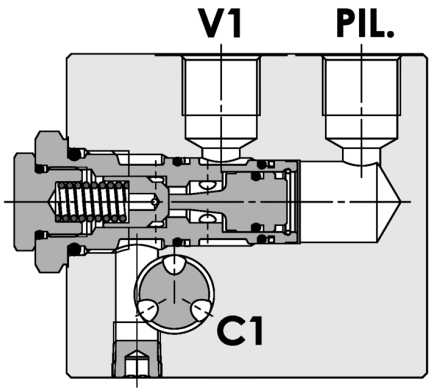
VPS C 40-*-*-B-3/8-*-SP-5FA

E - 050/1

Valvola di blocco pilotata semplice, montaggio con vite forata
Single pilot operated check valve, drilled screw version

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in alluminio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna della cartuccia è protetta mediante zincatura.
Portata max.: 40 l/min
Pressione max.: 250 bar
Pressione di apertura: standard 0,5 bar, a richiesta 2,5-5-10-20 bar

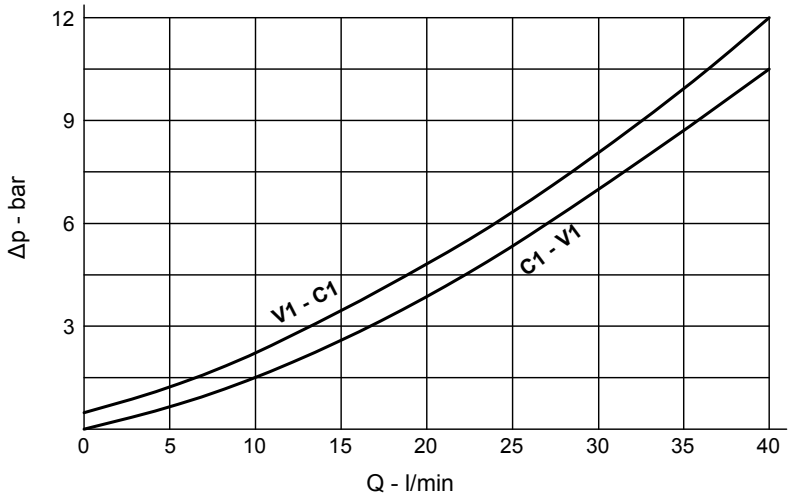
TECHNICAL SPECIFICATIONS

Materials: *body is aluminium made. Guided poppet is in hardened steel. External surface of cartridge is zinc plated.*
Rated flow: *40 l/min*
Max. pressure: *250 bar*
Cracking pressure: *0,5 bar (std), 2,5-5-10-20 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



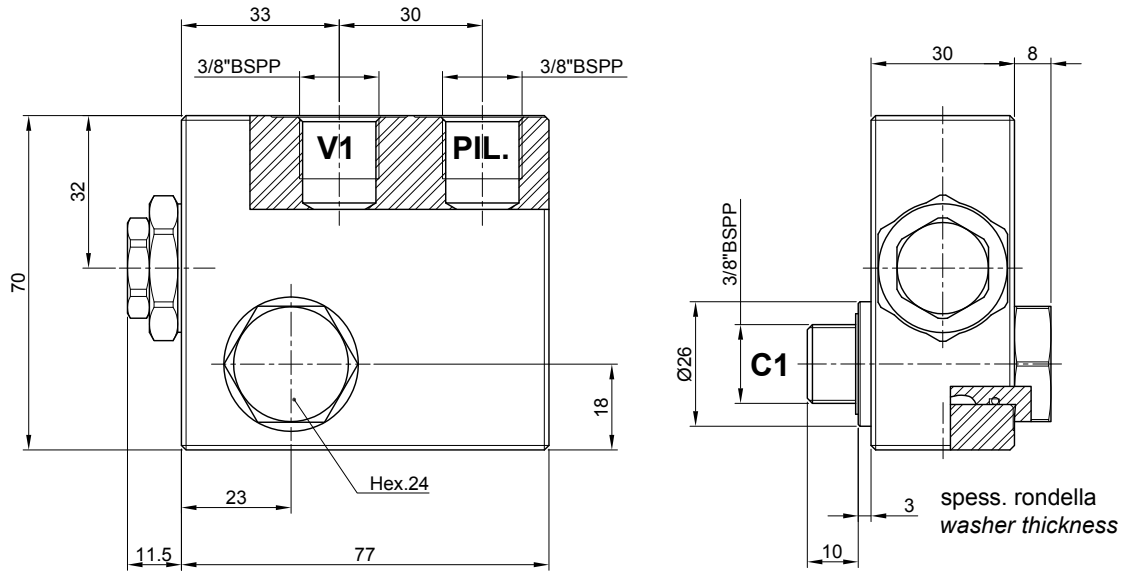
VPS C 40-*-*-B-3/8-*-SP-5FA

E - 050/2

Valvola di blocco pilotata semplice, montaggio con vite forata

Single pilot operated check valve, drilled screw version

Rev. 01-2010/02



TIPO *TYPE*	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
		Kg
VPS C 40 B 3/8 SP-5FA	1 : 4	0.600

Con la guarnizione sul pistone di pilotaggio si consiglia di montare una molla sul ritegno di almeno 2.5 bar

With the seal on the pilot piston, we recommend to assebly a at least a 2.5 bar spring on the check valve

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSC	40	*	G	B	3/8	*	SP-5FA

* 0.5 bar (std)
2.5 - 5 - 10 - 20 bar
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

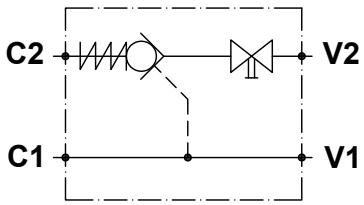
* Guarnizione sul pilota, omettere se non richiesta
With o-ring on pilot valve, omit if not requested

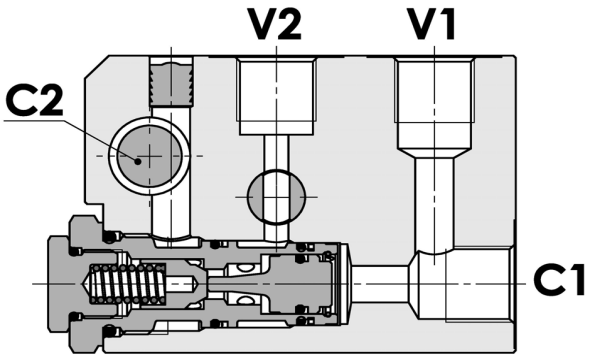
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

VPS C-40-*-*-B-PR1-3/8-* E - 055/1

Valvola di blocco pilotata semplice, montaggio con vite forata, rubinetto, versione destra
Single pilot operated check valve, drilled screw version with manual shut-off, right version

Rev. 01-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in alluminio, anodizzato. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna della cartuccia è protetta mediante zincatura.
Portata max.: 30 l/min
Pressione max.: 250 bar
Pressione di apertura: standard 0,5 bar, a richiesta 2,5-5-10-20 bar

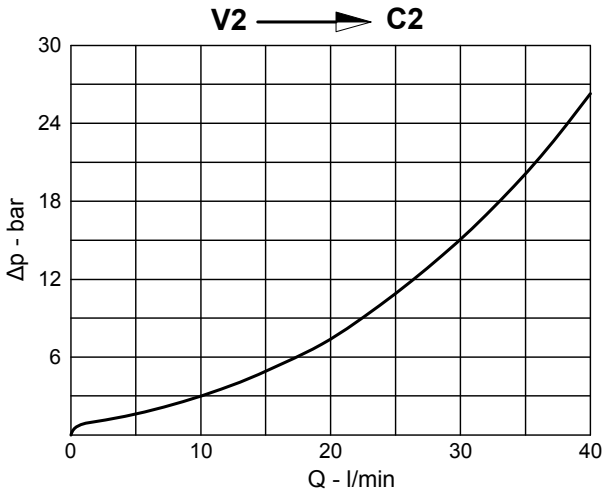
TECHNICAL SPECIFICATIONS

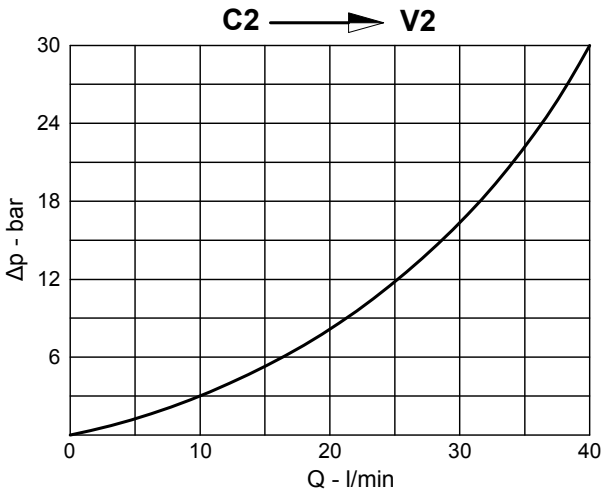
Materials: *body is aluminium made, anodized. Guided poppet is in hardened steel. External surface of cartridge is zinc plated.*
Rated flow: *30 l/min*
Max. pressure: *250 bar*
Cracking pressure: *0,5 bar (std), 2,5-5-10-20 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



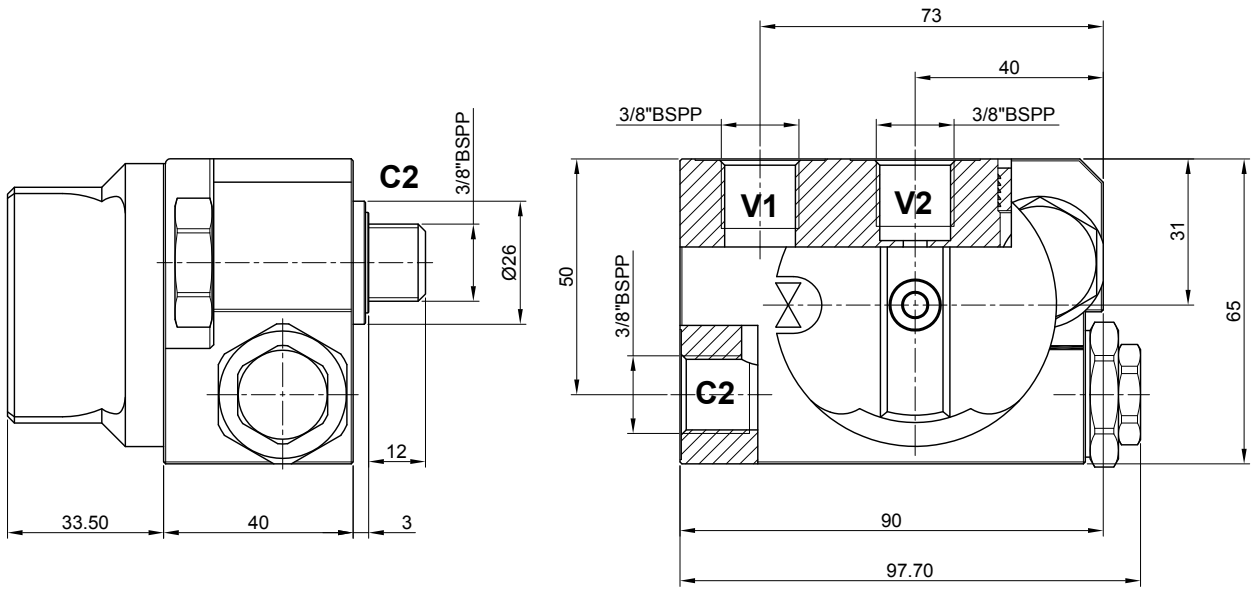


VPS C-40-*-*-B-PR1-3/8-*

E - 055/2

Valvola di blocco pilotata semplice, montaggio con vite forata, rubinetto, versione destra
Single pilot operated check valve, drilled screw version with manual shut-off, right version

Rev. 01-2010/05



TIPO *TYPE*	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
		Kg
VPS-C-40-B-PR1-3/8	1 : 4	0.875

Con la guarnizione sul pistone di pilotaggio si consiglia di montare una molla sul ritegno di almeno 2.5 bar
With the seal on the pilot piston, we recommend to assebly a at least a 2.5 bar spring on the check valve

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSC	40	*	G	B	PR1	3/8	*

* 0.5 bar (std)
2.5 - 5 - 10 - 20 bar
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

* Guarnizione sul pilota, omettere se non richiesta
With o-ring on pilot valve, omit if not requested

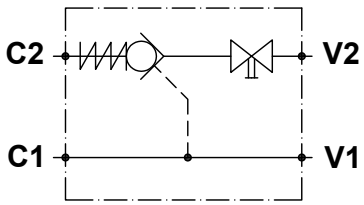
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

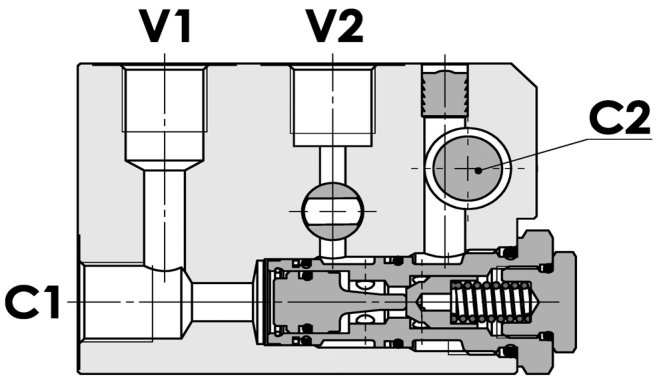
VPS C-40-*-*-B-PR2-3/8-*

E - 056/1

Valvola di blocco pilotata semplice, montaggio con vite forata, rubinetto, versione sinistra
Single pilot operated check valve, drilled screw version with manual shut-off, left version

Rev. 01-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in alluminio, anodizzato. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna della cartuccia è protetta mediante zincatura.
Portata max.: 30 l/min
Pressione max.: 250 bar
Pressione di apertura: standard 0,5 bar, a richiesta 2,5-5-10-20 bar

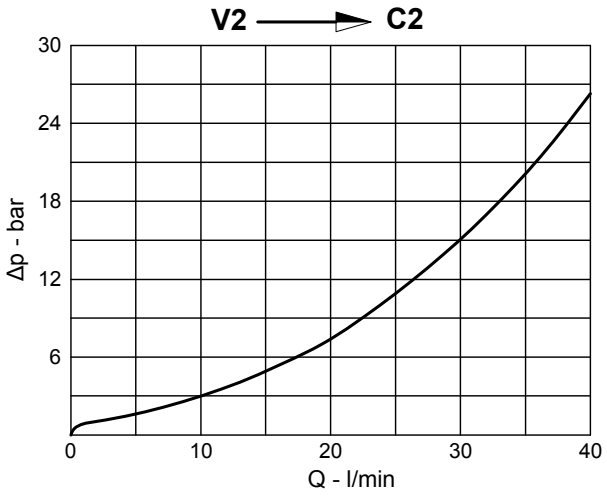
TECHNICAL SPECIFICATIONS

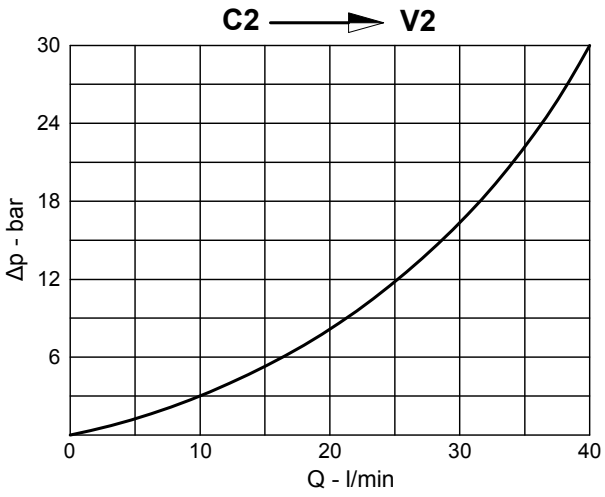
Materials: *body is aluminium made, anodized. Guided poppet is in hardened steel. External surface of cartridge is zinc plated.*
Rated flow: *30 l/min*
Max. pressure: *250 bar*
Cracking pressure: *0,5 bar (std), 2,5-5-10-20 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



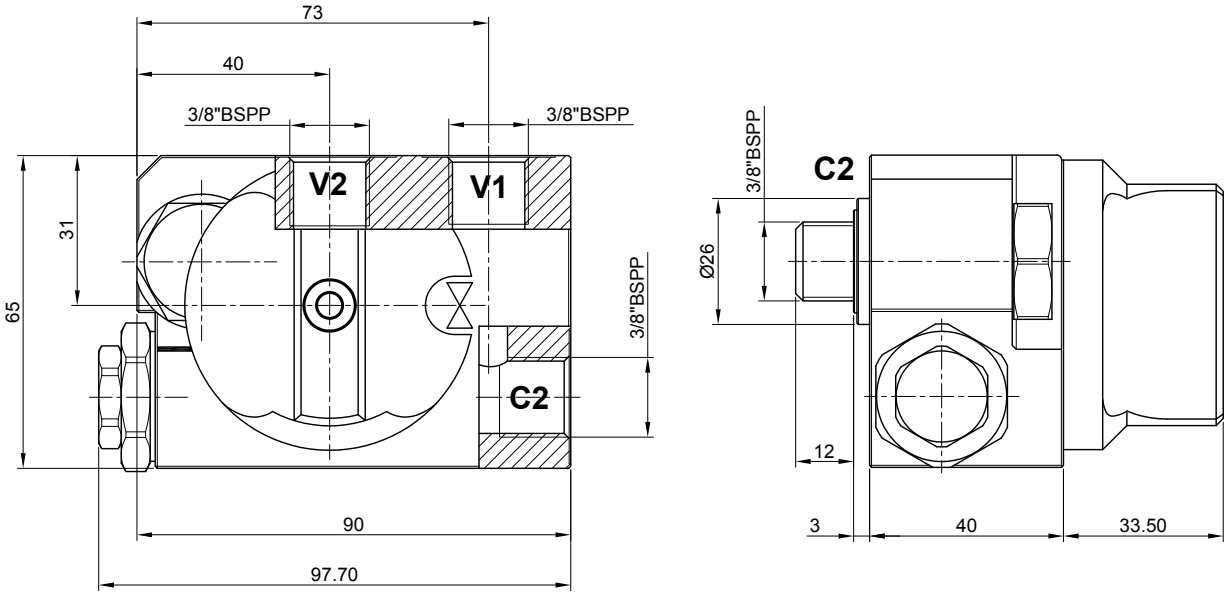


VPS C-40-*-*-B-PR2-3/8-*

E - 056/2

Valvola di blocco pilotata semplice, montaggio con vite forata, rubinetto, versione sinistra
Single pilot operated check valve, drilled screw version with manual shut-off, left version

Rev. 01-2010/05



TIPO *TYPE*	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
		Kg
VPS-C-40-B-PR2-3/8	1 : 4	0.875

Con la guarnizione sul pistone di pilotaggio si consiglia di montare una molla sul ritegno di almeno 2.5 bar
With the seal on the pilot piston, we recommend to assebly a at least a 2.5 bar spring on the check valve

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSC	40	*	G	B	PR2	3/8	*

* 0.5 bar (std)
2.5 - 5 - 10 - 20 bar
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

* Guarnizione sul pilota, omettere se non richiesta
With o-ring on pilot valve, omit if not requested

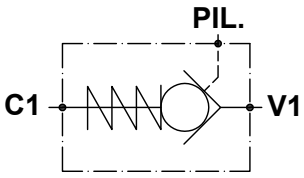
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

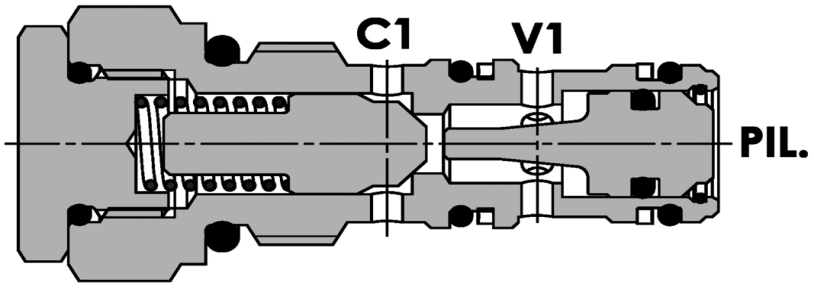
VPS C-20-*-*-*

E - 110/1

Valvola di blocco pilotata semplice, versione cartuccia
Single pilot operated check valve, cartridge version

Rev. 02-2010/08





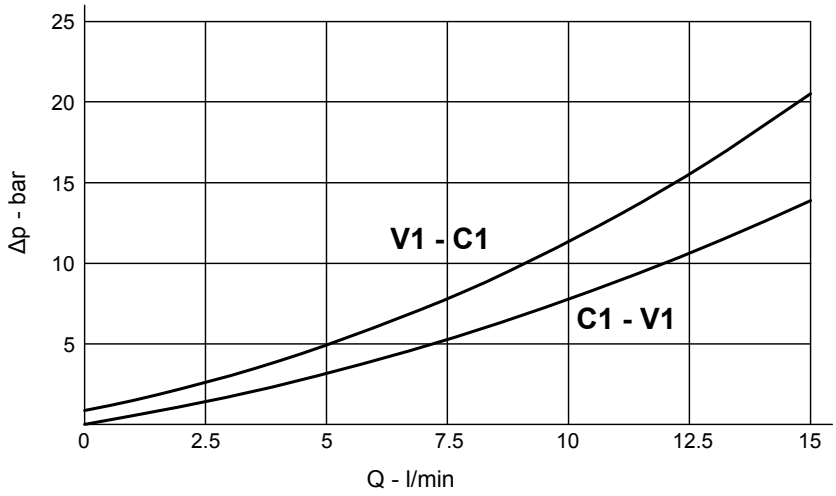
SPECIFICHE TECNICHE
Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: 15 l/min
Pressione max.: 350 bar
Pressione di apertura: standard 1 bar, a richiesta 2,5-5 bar

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *15 l/min*
Max. pressure: *350 bar*
Cracking pressure: *1 bar standard, 2,5-5 bar on request*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

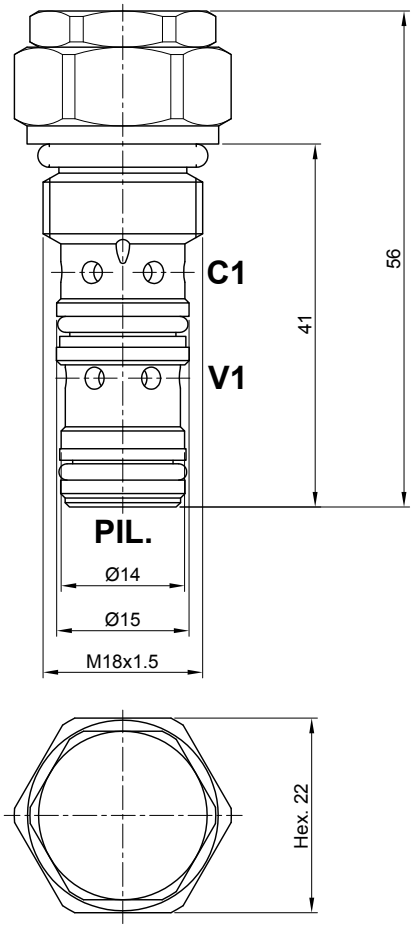


VPS C-20-*-*-*

E - 110/2

Valvola di blocco pilotata semplice, versione cartuccia
Single pilot operated check valve, cartridge version

Rev. 02-2010/08



TIPO *TYPE*	RAPP. DI PILOTAGGIO *PILOT RATIO*	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
			Nm	Kg
VPS C 20	1 : 3.2	32181	35 - 40	0.080

Con la guarnizione sul pistone di pilotaggio si consiglia di montare una molla sul ritegno di almeno 2.5 bar
With the seal on the pilot piston, we recommend to assebly a at least a 2.5 bar spring on the check valve

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSC | **20** | **5** | **G** | ***|**

* 01 bar (std)
2.5 - 5 bar
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

* Guarnizione sul pilota, omettere se non richiesta
With o-ring on pilot valve, omit if not requested

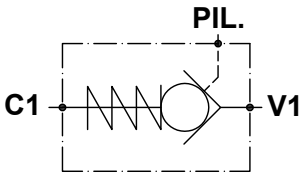
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

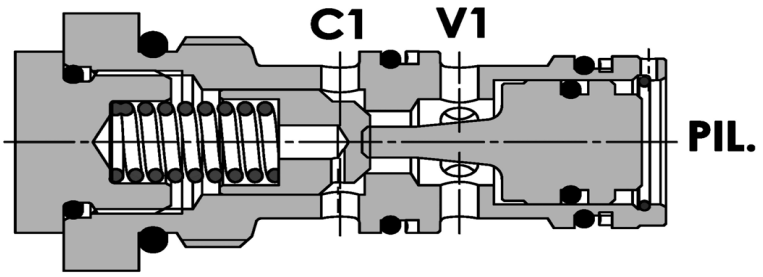
VPS C-40-*-*-*

E - 120/1

Valvola di blocco pilotata semplice, versione cartuccia
Single pilot operated check valve, cartridge version

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: 40 l/min
Pressione max.: 350 bar
Pressione di apertura: standard 0,5 bar, a richiesta 2,5-5-10-20 bar

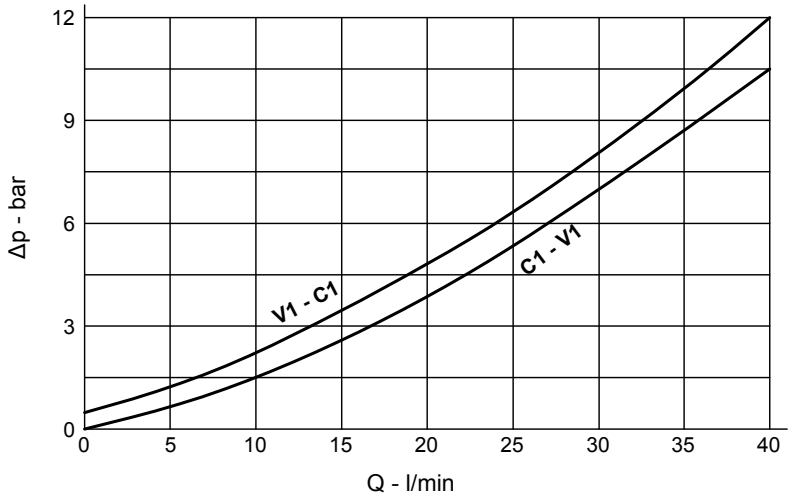
TECHNICAL SPECIFICATIONS

Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *40 l/min*
Max. pressure: *350 bar*
Cracking pressure: *0,5 bar standard, 2,5-5-10-20 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

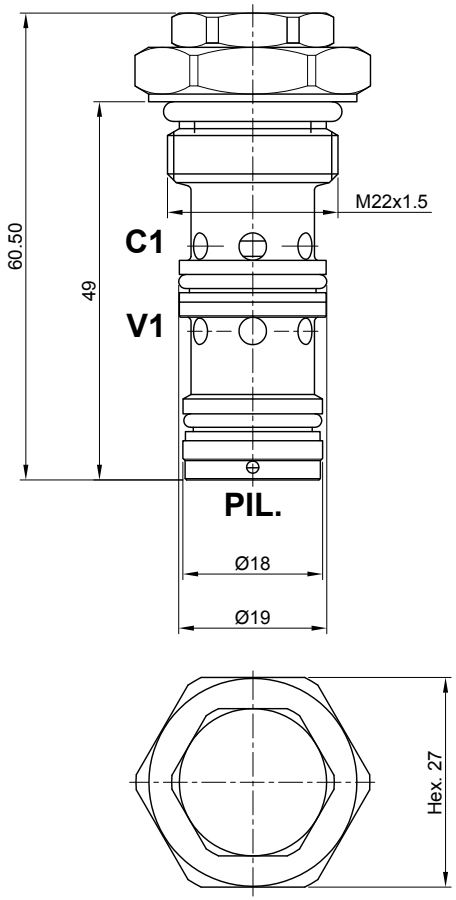


VPS C-40-*-*-*

E - 120/2

Valvola di blocco pilotata semplice, versione cartuccia
Single pilot operated check valve, cartridge version

Rev. 02-2010/08



TIPO *TYPE*	RAPP. DI PILOTAGGIO *PILOT RATIO*	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
			Nm	Kg
VPS C 40	1 : 4	32221	60 - 70	0.115

Con la guarnizione sul pistone di pilotaggio si consiglia di montare una molla sul ritegno di almeno 2.5 bar
With the seal on the pilot piston, we recommend to assebly a at least a 2.5 bar spring on the check valve

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSC | **40** | **5** | **G** | ***|**

* 0.5 bar (std)
2.5 - 5 - 10 - 20 bar
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

* Guarnizione sul pilota, omettere se non richiesta
With o-ring on pilot valve, omit if not requested

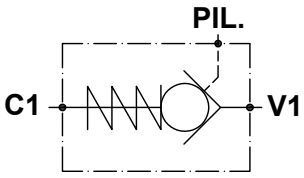
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

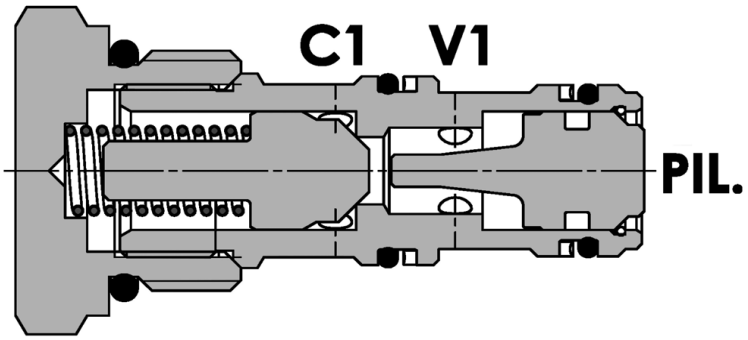
VPS C-S**-*-*-*

E - 140/1

Valvola di blocco pilotata semplice, versione cartuccia, cavità SAE
Single pilot operated check valve, cartridge version, SAE cavity

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata max: fino a 90 l/min
Pressione max.: 350 bar
Pressione di apertura: 2.5 bar standard, 5 bar su richiesta

TECHNICAL SPECIFICATIONS

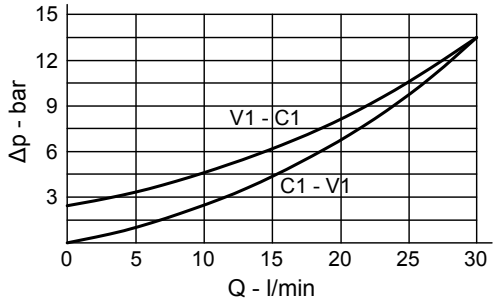
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 90 l/min*
Max. pressure: *350 bar*
Cracking pressure: *2.5 bar standard, 5 bar on request.*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

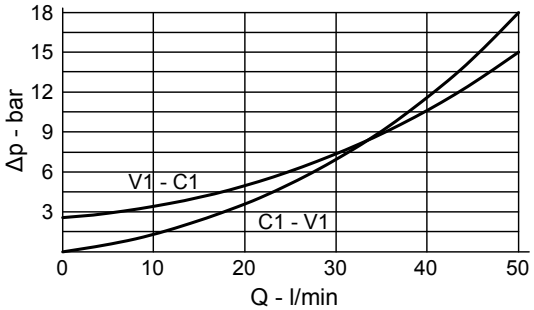
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

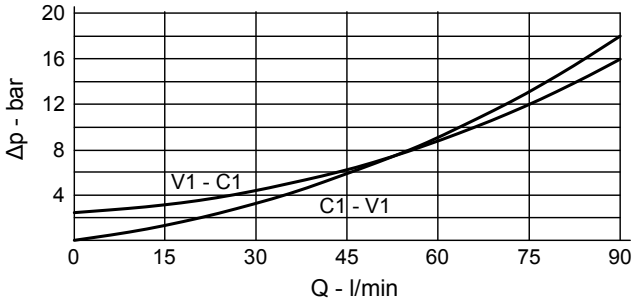
VPS C S08



VPS C S10



VPS C S12

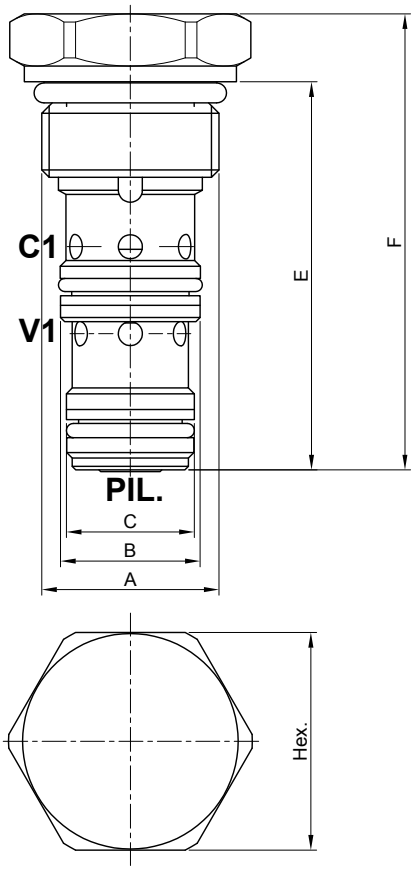


VPS C-S**-*-*-*

E - 140/2

Valvola di blocco pilotata semplice, versione cartuccia, cavità SAE
Single pilot operated check valve, cartridge version, SAE cavity

Rev. 02-2010/08



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	E	F	HEX	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	UNF-2B	mm	mm	mm	mm	mm		Nm		Kg
VPS C S08	30	300	3/4"-16	15.87	14.27	43	51	24	33081	40-45	1 : 3.2	0.080
VPS C S10	50	300	7/8"-14	17.47	45.87	48.5	57	27	33101	60-70	1 : 3.1	0.110
VPS C S12	90	300	1 1/16"-12	23.80	22.22	72.5	83.5	32	33121	90-100	1 : 3	0.250

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSC **S10** **2.5** **G** *****

* S08 – 3/4"-16 UNF-2B
S10 – 7/8"-14 UNF-2B
S12 – 1 1/16"-12 UNF-2B
Cracking pressure, omit if standard

* 2.5 bar (std)
5 bar
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

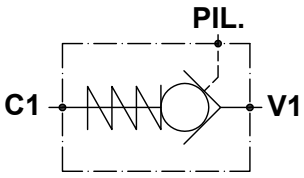
Guarnizione sul pilota, omettere se non richiesta *
With o-ring on pilot valve, omit if not requested

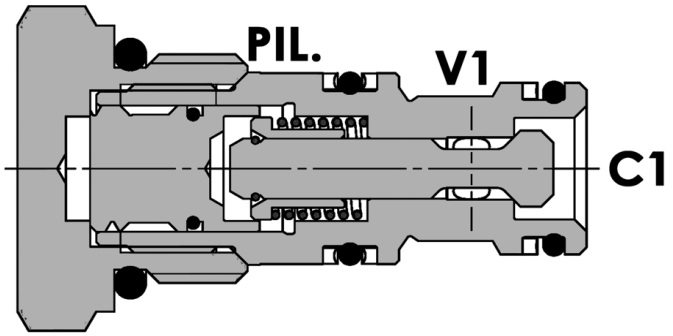
VPS CR-*-*-*-*

E - 160/1

Valvola di blocco pilotata semplice, versione cartuccia, cavità SAE
Single pilot operated check valve, cartridge version, SAE cavity

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: fino a 70 l/min
Pressione max.: 350 bar
Pressione di apertura: standard 2.5 bar, 5 bar su richiesta

TECHNICAL SPECIFICATIONS

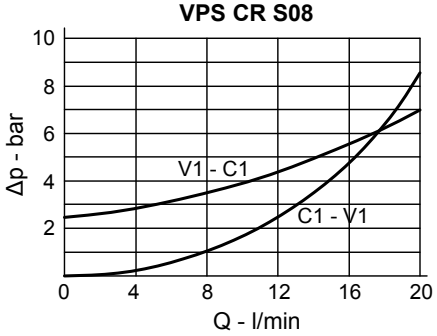
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 70 l/min*
Max. pressure: *350 bar*
Cracking pressure: *2.5 bar standard, 5 bar on request.*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

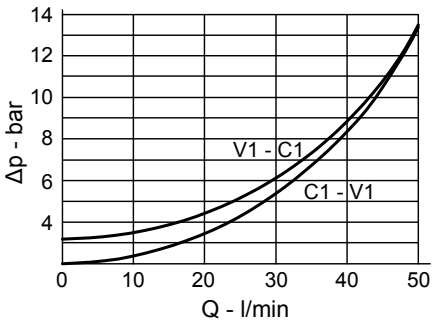
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

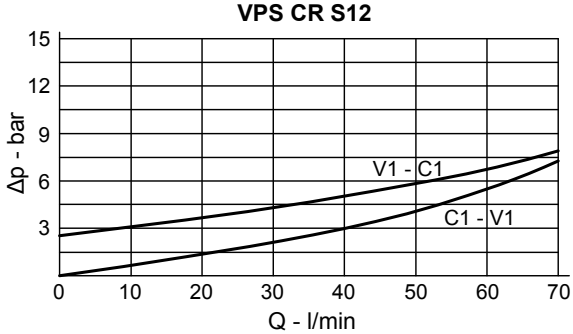
VPS CR S08



VPS CR S10



VPS CR S12

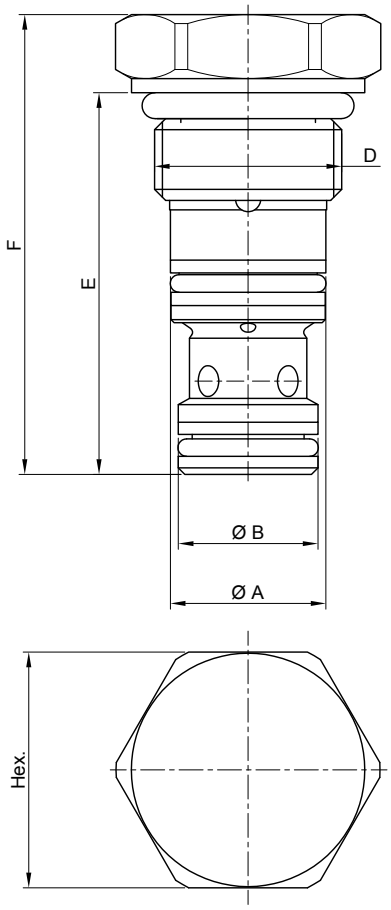


VPS CR-*-*-*-*

E - 160/2

Valvola di blocco pilotata semplice, versione cartuccia, cavità SAE
Single pilot operated check valve, cartridge version, SAE cavity

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	D	E	F	HEX	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	UNF-2B	mm	UNF-2B	mm	mm	mm		Nm		Kg
VPS CR S08	20	350	15.87	14.27	3/4"-16	39	47	24	33082	40-45	1 : 4	0.074
VPS CR S10	50	350	19.05	17.47	7/8"-14	47.5	56	27	33102	60-70	1 : 3.4	0.115
VPS CR S12	70	350	23.80	22.22	1 1/16"-12	58.5	69.5	32	33122	90-100	1 : 3	0.222

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPSCR S10 2.5 G *

* S08 – 3/4”-16 UNF-2B
S10 – 7/8”-14 UNF-2B
S12 – 1 1/16”-12 UNF-2B
Cracking pressure, omit if standard

* 2.5 bar (std)
5 bar
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

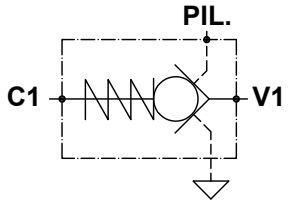
Guarnizione sul pilota, omettere se non richiesta *
With o-ring on pilot valve, omit if not requested

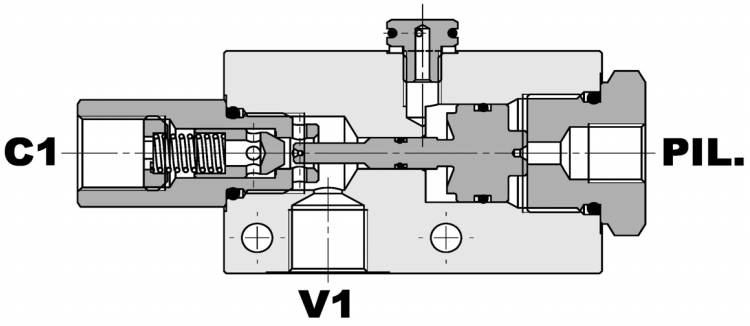
VPSFB-L-3/8-*

E - 320/1

Valvola di blocco pilotata semplice bilanciata, montaggio in linea
Single pilot operated check valve, fully balanced, line mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: 30 l/min
Pressione max.: 250 bar
Rapporto di pilotaggio: 10 : 1
Pressione di apertura: 10 bar
Peso: 0,550 Kg

TECHNICAL SPECIFICATIONS

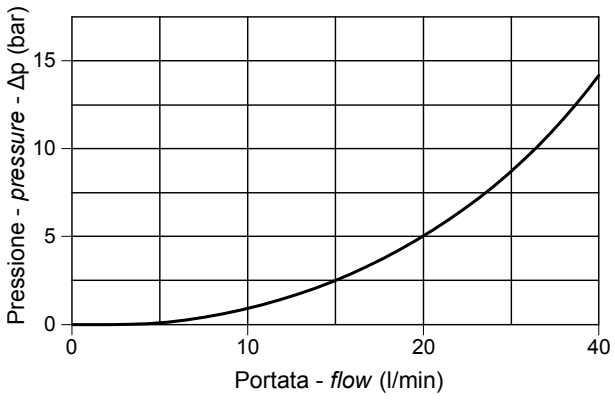
Materials: *body is in aluminium. Internal parts are in hardened and ground steel.*
Rated flow: *30 l/min*
Max. pressure: *250 bar*
Pilot ratio: *10 : 1*
Cracking pressure: *10 bar*
Weight: *0,550 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

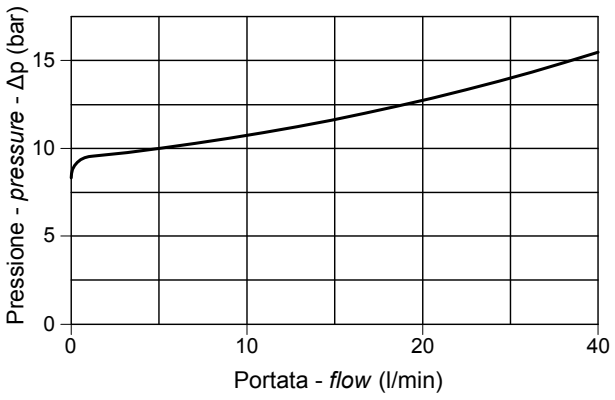
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

C1 ► V1



V1 ► C1



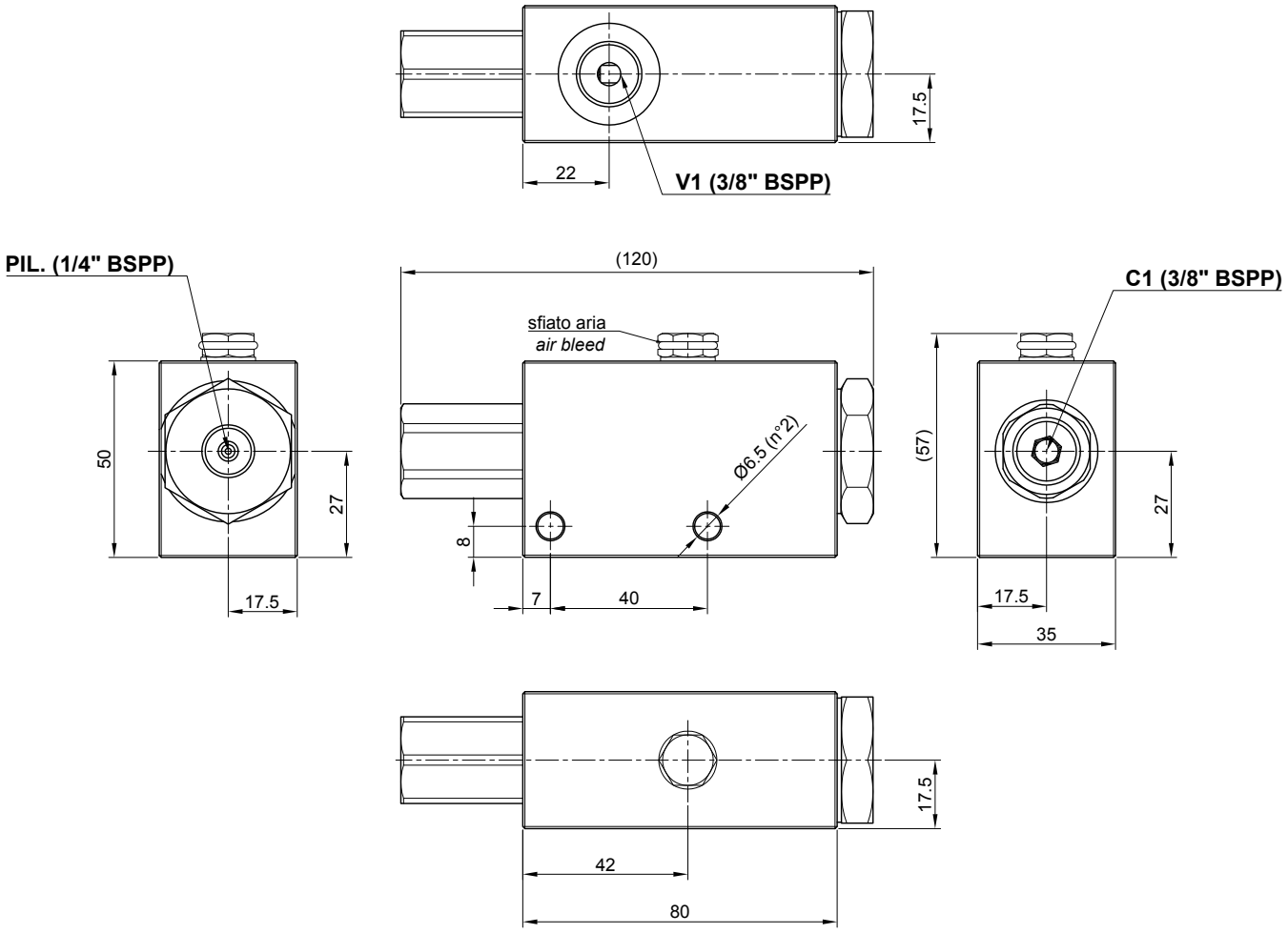
VPSFB-L-3/8-*

E - 320/2

Valvola di blocco pilotata semplice bilanciata, montaggio in linea

Single pilot operated check valve, fully balanced, line mounted

Rev. 01-2010/02



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S F B	L	3 / 8	*

Guarnizioni – *Seals:*

V=Viton *

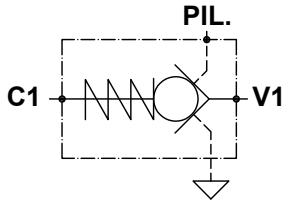
Omettere se BUNA-N – *Omit if BUNA-N*

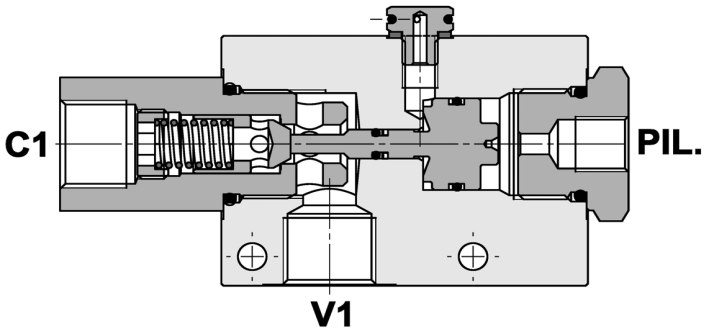
VPSFB-L-1/2-*

E - 321/1

Valvola di blocco pilotata semplice bilanciata, montaggio in linea
Single pilot operated check valve, fully balanced, line mounted

Rev. 01-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: 60 l/min
Pressione max.: 250 bar
Rapporto di pilotaggio: 5.4 : 1
Pressione di apertura: 10 bar
Peso: 0,850 Kg

TECHNICAL SPECIFICATIONS

Materials: *body is in aluminium. Internal parts are in hardened and ground steel.*
Rated flow: *60 l/min*
Max. pressure: *250 bar*
Pilot ratio: *5.4 : 1*
Cracking pressure: *10 bar*
Weight: *0,850 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

C1 ► V1

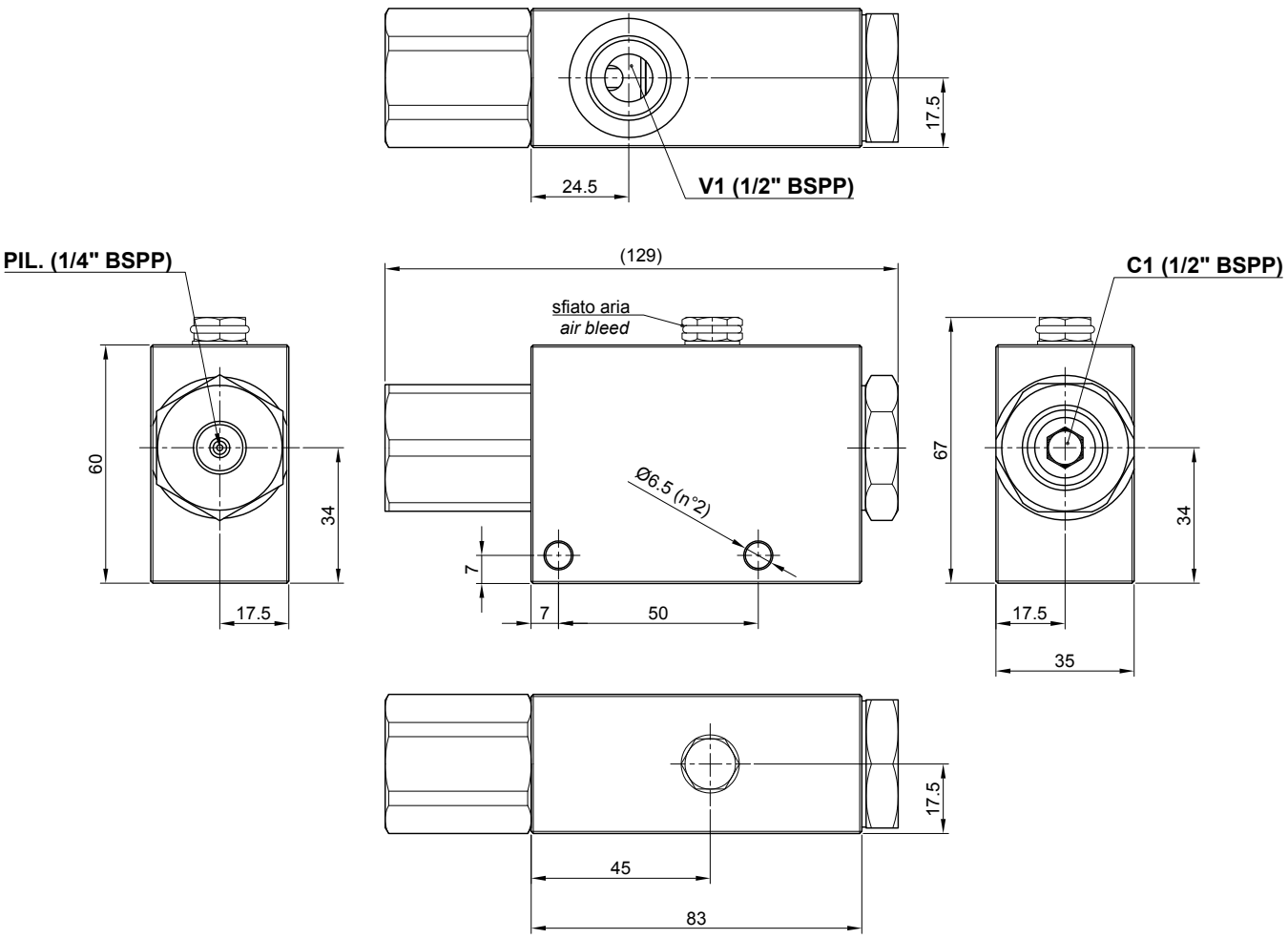
V1 ► C1

VPSFB-L-1/2-*

E - 321/2

Valvola di blocco pilotata semplice bilanciata, montaggio in linea
Single pilot operated check valve, fully balanced, line mounted

Rev. 01-2010/08



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S F B	L	1 / 2	*

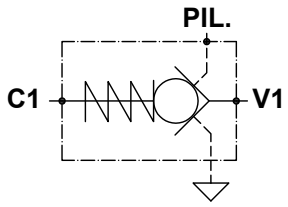
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

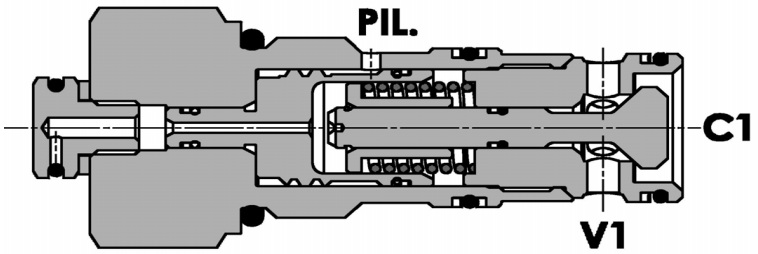
VPSFB CR 70-10-*

E - 410/1

Valvola di blocco pilotata semplice bilanciata, a cartuccia
Single pilot operated check valve, fully balanced, cartridge version

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: 70 l/min
Pressione max.: 350 bar
Rapporto di pilotaggio: 3 : 1
Pressione di apertura: 10 bar
Cavità: 33122
Peso: 0,300 Kg

TECHNICAL SPECIFICATIONS

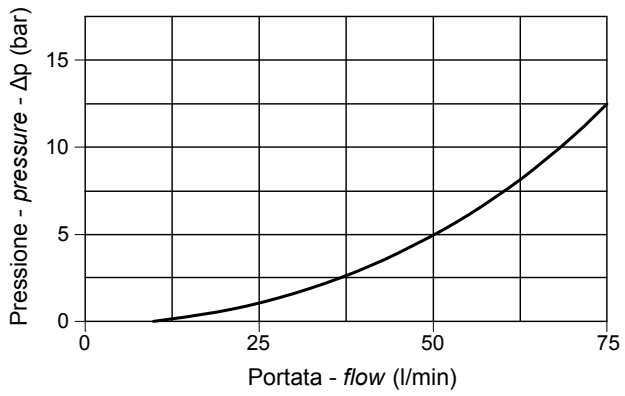
Materials: *body steel made. Internal parts are in hardened and ground steel.*
Rated flow: *70 l/min*
Max. pressure: *350 bar*
Pilot ratio: *3 : 1*
Cracking pressure: *10 bar*
Cavity: *33122*
Weight: *0,300 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

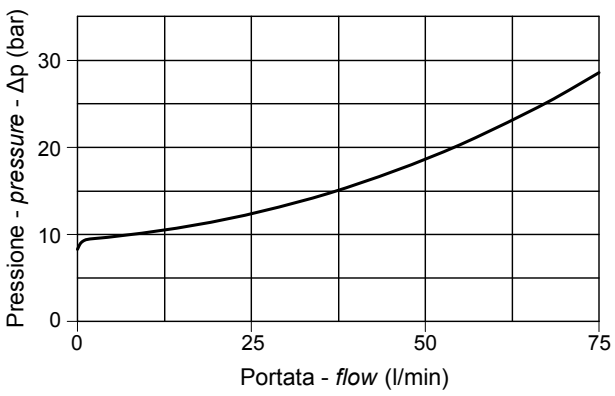
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

C1 ► V1



V1 ► C1



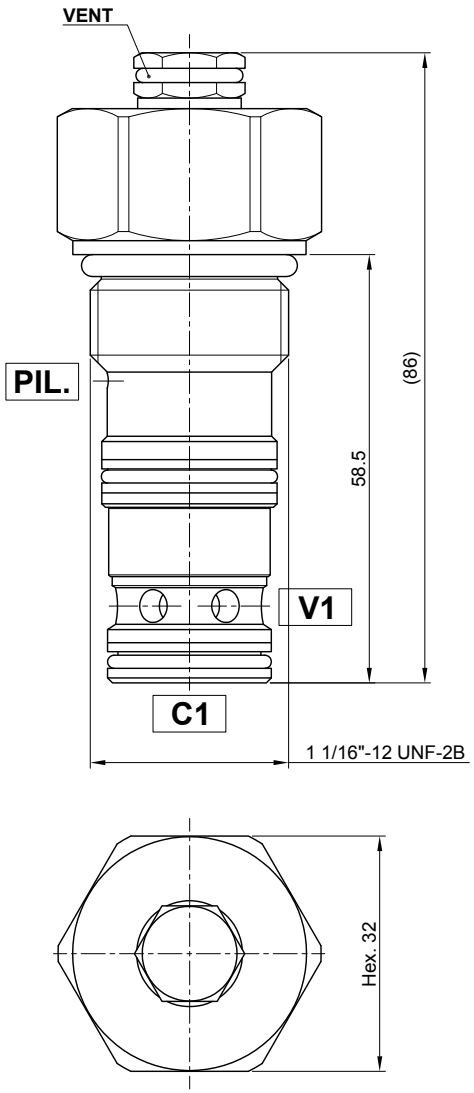
VPSFB CR 70-10-*

E - 410/2

Valvola di blocco pilotata semplice bilanciata, a cartuccia

Single pilot operated check valve, fully balanced, cartridge version

Rev. 02-2010/08



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S F B	C R	7 0	1 0	*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

SEZIONE F
Valvole di blocco pilotate doppie

SECTION F
Dual pilot operated check Valves

Queste valvole vengono utilizzate per bloccare un cilindro od un attuatore in entrambi i sensi, fin quando non si manda pressione in una delle 2 linee di mandata, azionando cosi il pilotaggio interno che va a sbloccare l'altra linea permettendo il movimento. Invertendo la mandata si ottiene il movimento inverso.
Sono disponibili 3 soluzioni di montaggio: in linea, flangiata e mediante vite forata su raccordi ad occhio.

These valves are used to block a cylinder or an actuator in both directions, until pressure is sent in one of the lines, activating the internal pilot that unlocks the opposite line, allowing movement.
Inverting the flow you get the opposite movement.
There are 3 assembly solution: in line, flanged, with drilled screw on banjo bolt.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
F 010	VPD / VPD-1R	F 040	VPD F
F 019	VPDLE-1/4-S	F 080	VPD-1RO-SR
F 020	VPD L	F 085	VPD-2RO-SR

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

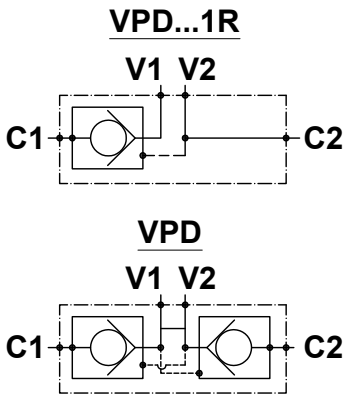
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

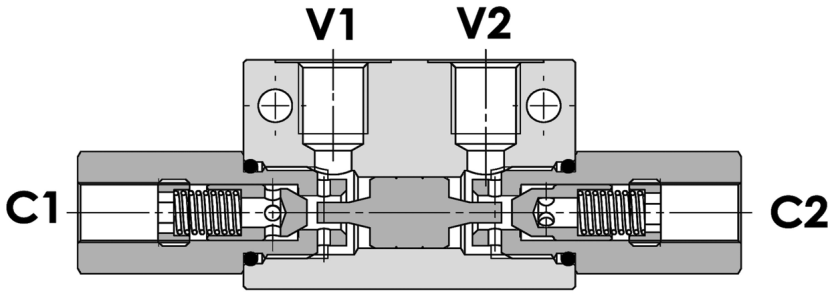
VPD-*-*-*-*/VPD-*-*-1R-*-*

F - 010/1

Valvola di blocco pilotata doppia, montaggio in linea
Double pilot operated check valve, line mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: fino a 85 l/min
Pressione max.: 350 bar, vedasi tabella a parte
Pressione di apertura: standard 2 bar, a richiesta 5 -10 bar

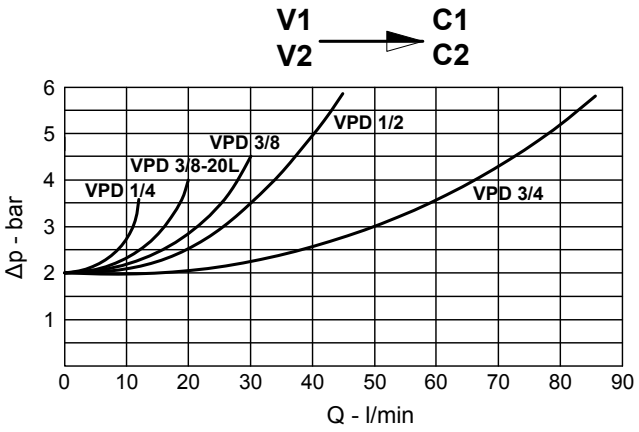
TECHNICAL SPECIFICATIONS

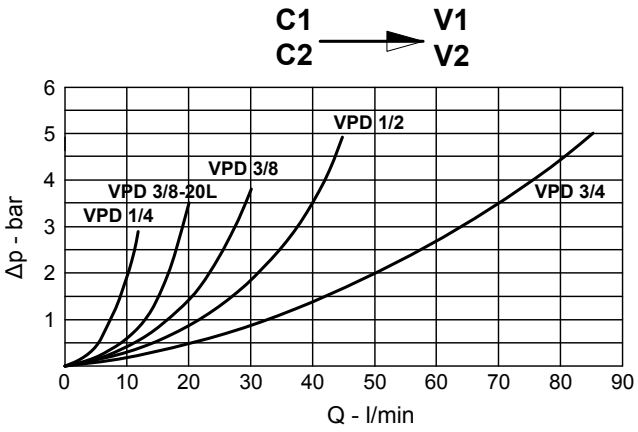
Materials: *steel body, zinc plated. Internal parts are in hardened and ground steel.*
Rated flow: *up to 85 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *2 bar standard, 5 -10 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



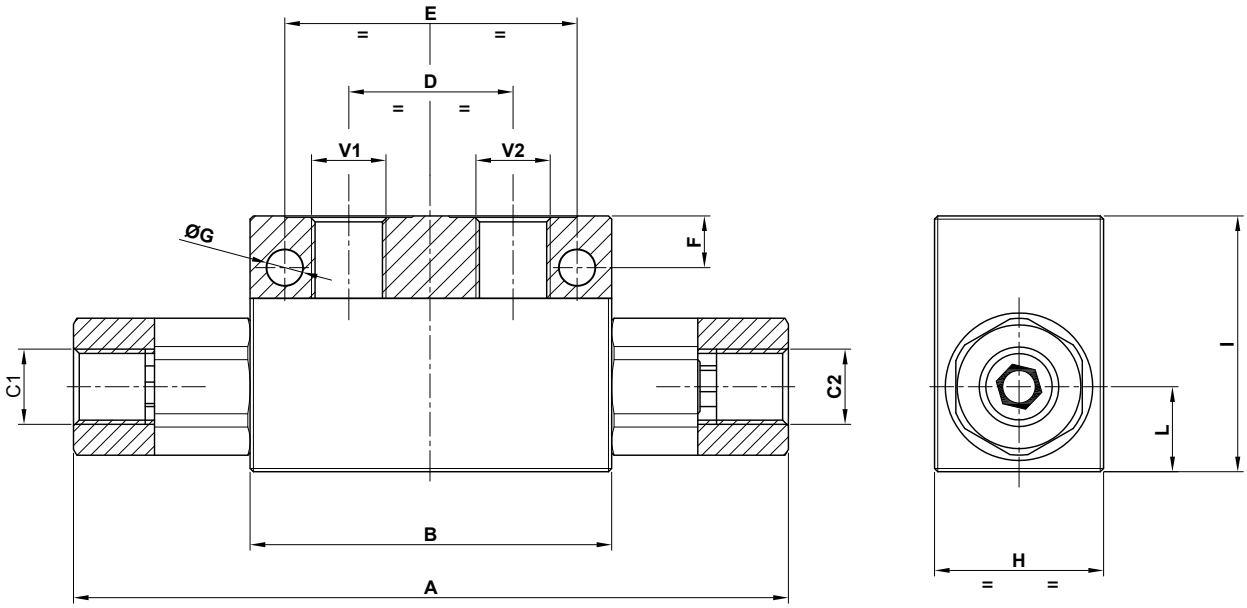


VPD-*-*-*-*/VPD-*-*-1R-*-*

F - 010/2

Valvola di blocco pilotata doppia, montaggio in linea
Double pilot operated check valve, line mounted

Rev. 01-2010/02



Per ottenere una perfetta tenuta della valvola si consiglia di collegare a scarico le bocche del distributore per evitare contropressioni che non permetterebbero una perfetta tenuta dell'otturatore
In order to obtain zero leakage we recommend that directional control valve ports be connected to tank in order to avoid back-pressure that would make it impossible for the poppet to provide a perfect seal.

TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	V1-C1 V2-C2	A	B	D	E	F	G	H	I	L	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm		Kg
VPD 1/4	12	350	1/4"	126	63.6	29	51.6	9	6.5	30	45	15	1 : 4	0.650
*VPD 3/8-20L	20	300	3/8"	126	63.6	29	-	-	-	30	45	15	1 : 4	0.620
VPD 3/8	30	300	3/8"	158	90	40	75	17	8	40	60	20	1 : 6	1.750
VPD 1/2	45	300	1/2"	174	90	40	75	17	8	40	60	20	1 : 4	1.780
VPD 3/4	85	280	3/4"	212	120	60	104	16	9	50	70	25	1 : 3.6	3.250

* La valvola VPD 3/8"-20L viene fornita senza fori di fissaggio – *valve VPD 3/8"-20L is supplied without fixing holes*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPD **3/8** **5** **1R** **G** ***

* 1/4 – 1/4" BSPP
3/8-20L – 3/8" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

* 2 bar (std) – 5 bar – 10 bar
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if std

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

Guarnizione sul pilota, omettere se non richiesta *
With o-ring on pilot valve, omit if not requested

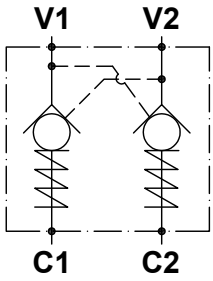
1R – valvole con un solo ritegno, omettere se std *
1R – single check valve, omit if not requested

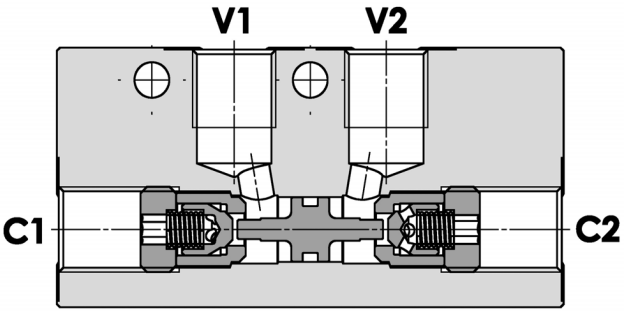
VPD LE-1/4-*-S-*

F - 019/1

Valvola di blocco pilotata doppia, montaggio in linea
Double pilot operated check valve, line mounted

Rev. 04-2010/08





SPECIFICHE TECNICHE

Materiali: corpo acciaio zincato. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: 20 l/min
Pressione max.: 350 bar
Pressione di apertura: 3 bar
Rapp. di pilotaggio: 1 : 4
Peso: 0.450 Kg

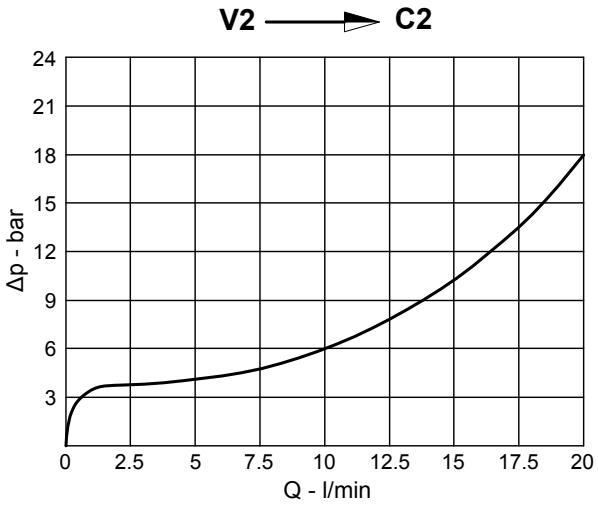
TECHNICAL SPECIFICATIONS

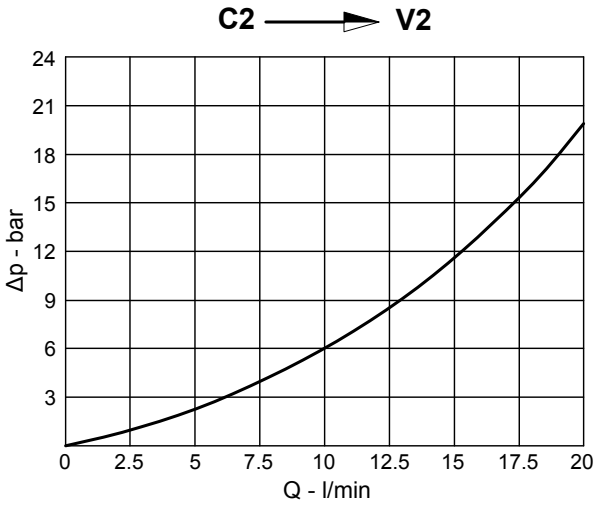
Materials: *body in zinc plated steel.*
Internal parts are in hardened and ground steel.
Rated flow: *20 l/min*
Max. pressure: *350 bar;*
Cracking pressure: *3 bar*
Pilot ratio: *1 : 4*
Weight: *0.450 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



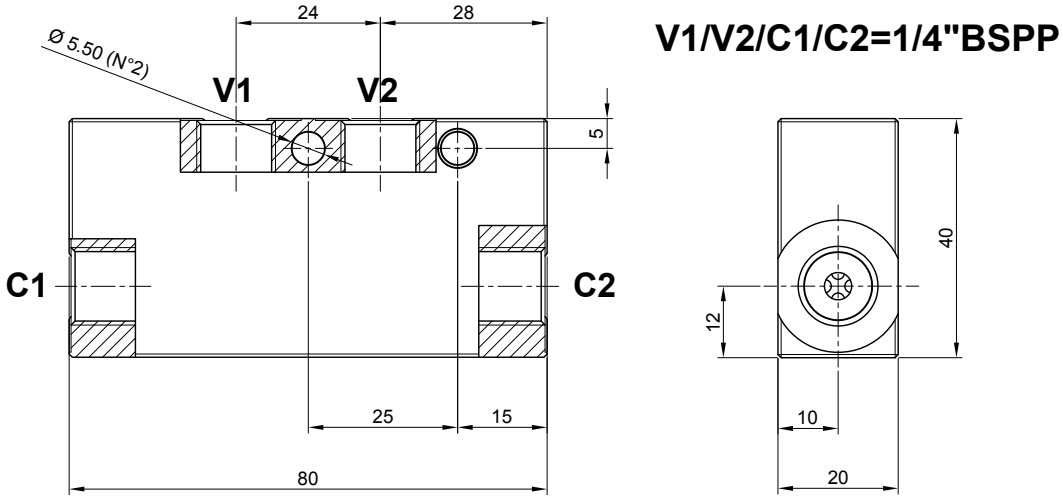


VPD LE-1/4-*-S-*

F - 019/2

Valvola di blocco pilotata doppia, montaggio in linea
Double pilot operated check valve, line mounted

Rev. 04-2010/08



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P D L E	1 / 4	G	S	*

* Guarnizione sul pilota, omettere se non richiesta
With o-ring on pilot valve, omit if not requested

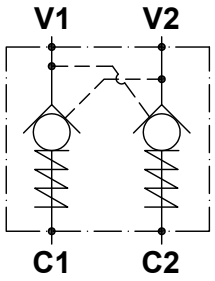
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

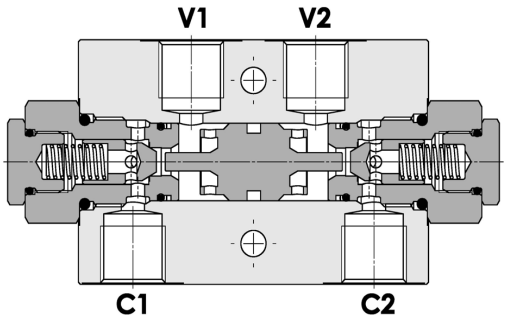
VPD L-*-*-*-*-*-*

F - 020/1

Valvola di blocco pilotata doppia, montaggio in linea
Double pilot operated check valve, line mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in alluminio, a richiesta in acciaio. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: fino a 85 l/min
Pressione max.: vedere tabella pag. 02
Pressione di apertura: standard 2.5 bar, a richiesta 5-10 bar

TECHNICAL SPECIFICATIONS

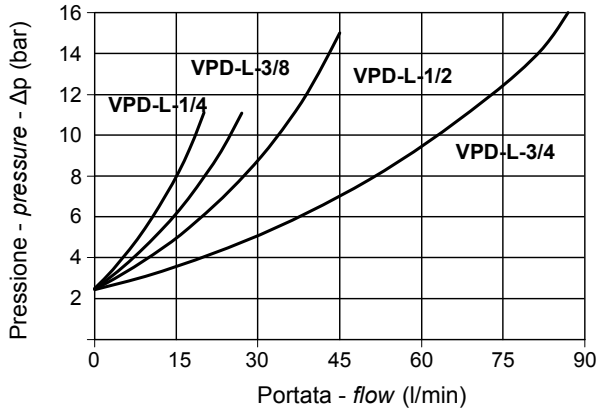
Materials: *std body is in aluminium, steel body on request. Internal parts are in hardened and ground steel.*
Rated flow: *up to 85 l/min*
Max. pressure: *see data sheet page 02*
Cracking pressure: *2.5 bar standard, 5-10 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

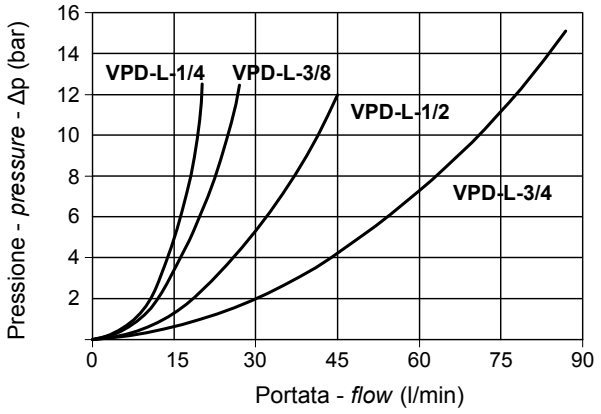
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

C1 C2 ► V1 V2



V1 V2 ► C1 C2

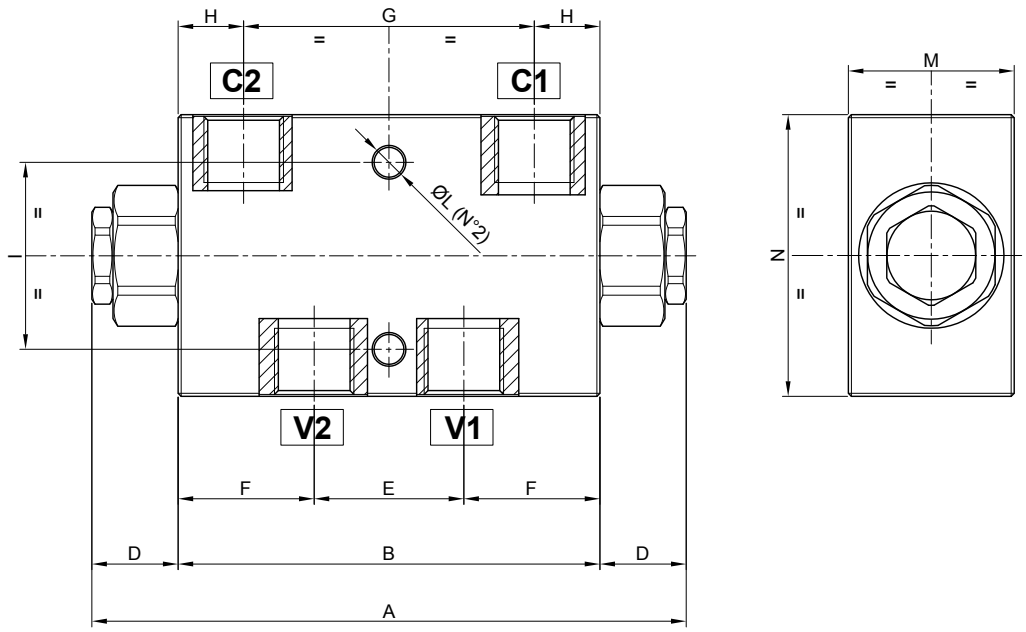


VPD L-*-*-*-*-*-*

F - 020/2

Valvola di blocco pilotata doppia, montaggio in linea
Double pilot operated check valve, line mounted

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	V1-C1 V2-C2	A	B	D	E	F	G	H	I	L	M	N	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		Kg
VPD L 1/4	20	250 - 350(S)	1/4"	126	90	18	34	25.5	60	12.5	40	8.5	30	60	1 : 4	0.625- 1.300(S)
VPD L 3/8	25	250 - 350(S)	3/8"	127	90	18.5	32	29	62	14	40	6.5	35	60	1 : 7 1 : 4(B)	0.650- 1.400(S)
VPD L 1/2	45	250 - 350(S)	1/2"	138	110	14.5	34	38	68	21	40	8.5	35	70	1 : 3.5	0.750- 1.800(S)
VPD L 3/4	85	250 - 350(S)	3/4"	193	165	14	50	57.5	107	29	60	8.5	50	90	1 : 4	2.300- 5.200(S)

Queste valvole, data la loro configurazione, non consentono una elevata contropressione allo scarico
These valves, owing to their configuration, can't allow for a high discharge counterpressure

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPDL 1/2 2.5 G B * *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

2.5 bar (std) – 5 bar – 10 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if std

* Guarnizione sul pilota, omettere se non richiesta
With o-ring on pilot valve, omit if not requested

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

Materiale corpo: omettere se aluminio, S=acciaio *
Body material: omit if aluminum, S=steel

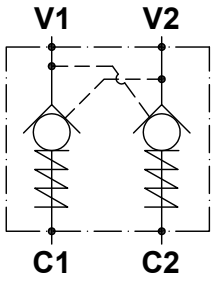
B - solo per VPD L 3/8 R.PIL: 1:4
B – only for VPD L 3/8 R.PIL: 1:4 *
Omettere se std - *omit if std*

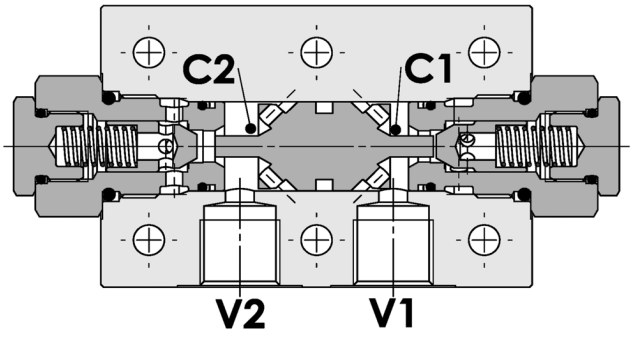
VPD F-*-*-*-*-*-*

F - 040/1

Valvola di blocco pilotata doppia, montaggio a flangia
Double pilot operated check valve, gasket mounted

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in alluminio, a richiesta in acciaio. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: fino a 85 l/min
Pressione max.: vedere tabella pag. 02
Pressione di apertura: standard 2.5 bar, a richiesta 5-10 bar

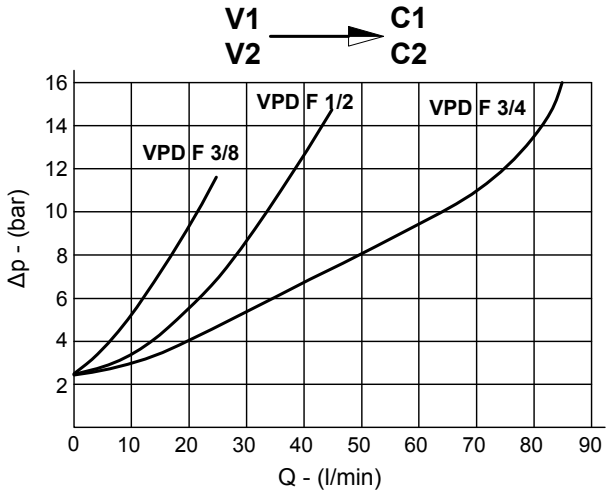
TECHNICAL SPECIFICATIONS

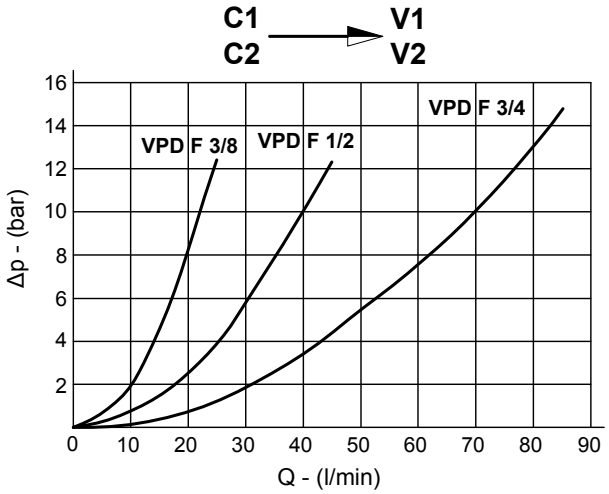
Materials: *std body is in aluminium, steel body on request. Internal parts are in hardened and ground steel.*
Rated flow: *up to 85 l/min*
Max. pressure: *see data sheet page 02*
Cracking pressure: *2.5 bar standard, 5-10 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



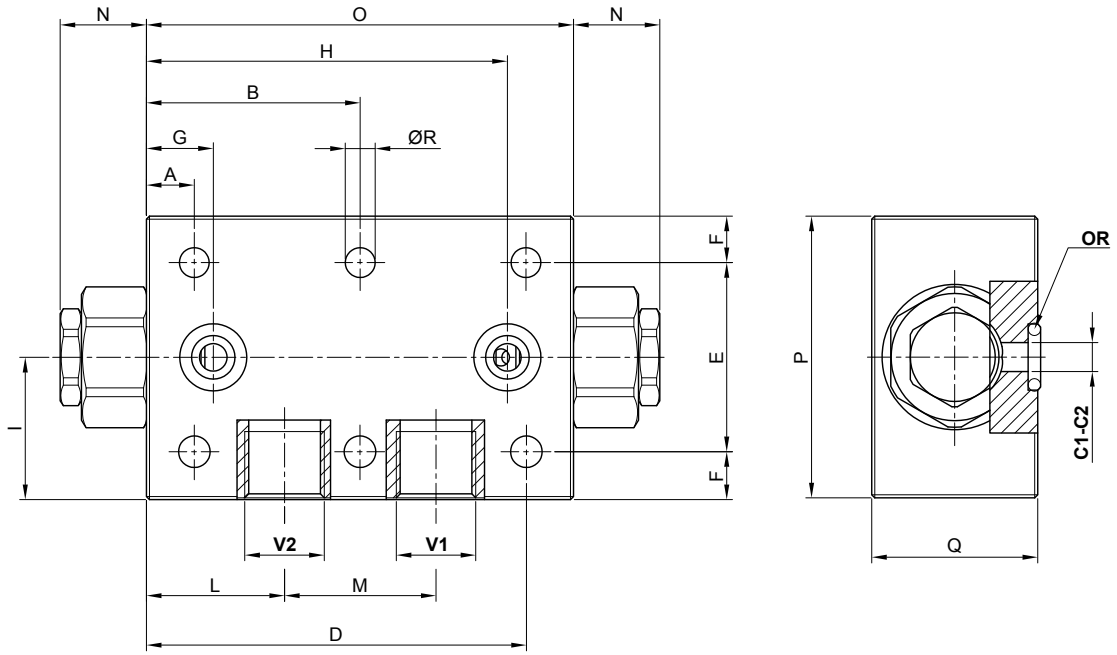


VPD F-*-*-*-*-*-*

F - 040/2

Valvola di blocco pilotata doppia, montaggio a flangia
Double pilot operated check valve, gasket mounted

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	V1 V2	C1 C2	A	B	D	E	F	G	H	I	L	M	N	O	P	Q	R	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		Kg
VPD F 3/8	30	250 - 350(S)	3/8"	6	10	45	80	40	10	14	76	30	29	32	18.5	90	60	34.5	6.5	1 : 7 1 : 4(B)	0.650-1.400(S)
VPD F 1/2	45	250 - 350(S)	1/2"	8	15	55	95	40	15	22.5	87.5	35	38	34	14.5	110	70	34.5	8.5	1 : 3.5	0.750-1.800(S)
VPD F 3/4	85	250 - 350(S)	3/4"	14	15	82.5	150	50	20	30	135	45	57.5	50	14	165	90	49.5	10.5	1 : 4	2.300-5.200(S)

Queste valvole, data la loro configurazione, non consentono una elevata contropressione allo scarico
These valves, owing to their configuration, can't allow for an high discharge pressure

	VPD F 3/8"	VPD F 1/2"	VPD F 3/4"
Guarnizione OR – *OR seal*	9.19x2.62	15.54x2.62	18.64x3.53

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPDF **1/2** **2.5** **G** **B** * *

* 3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

* 2.5 bar (std) – 5 bar – 10 bar
Pressione apertura ritegno, omettere se std
Cracking pressure, omit if std

* Guarnizione sul pilota, omettere se non richiesta
With o-ring on pilot valve, omit if not requested

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

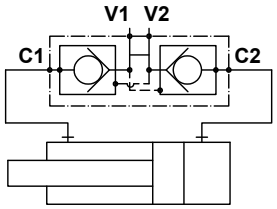
Materiale corpo: omettere se aluminio, S=acciaio *
Body material: omit if aluminum, S=steel

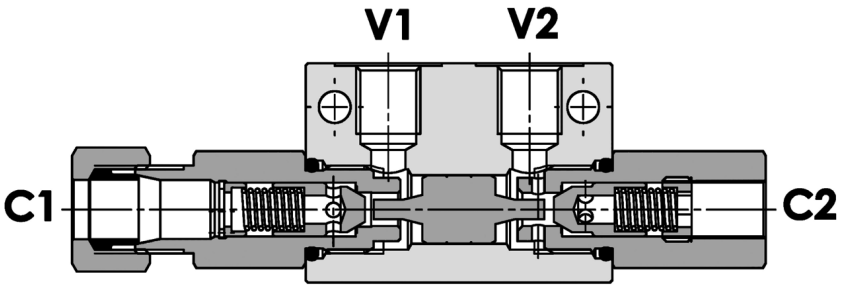
B - solo per VPD F 3/8 R.PIL: 1:4
B – only for VPD F 3/8 R.PIL: 1:4 *
Omettere se std - *omit if std*

VPD-*-1RO-SR-*-*-* F - 080/1

Valvola di blocco pilotata doppia, predisposta per 1 raccordo
Double pilot operated check valve, prepared for 1 union

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: fino a 20 l/min
Pressione max.: vedere tabella pag. 02
Pressione di apertura: standard 2 bar, a richiesta 5-10 bar

Connessione C1 predisposta per raccordo ad occhio con tubo diam.12 mm

TECHNICAL SPECIFICATIONS

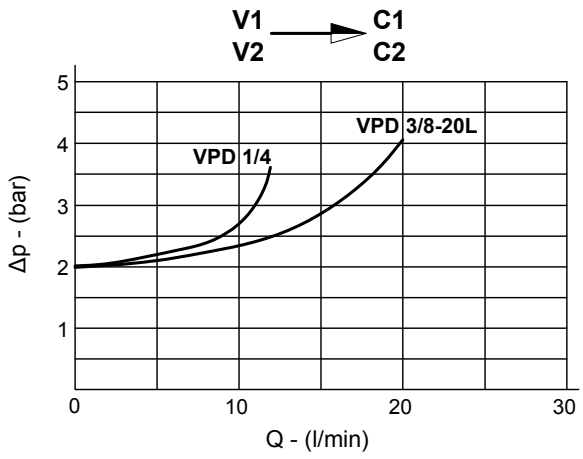
Materials: *zinc plated steel body. Internal parts are in hardened and ground steel.*
Rated flow: *up to 20 l/min*
Max. pressure: *see data sheet page 02*
Cracking pressure: *2 bar standard, 5-10 bar on request*

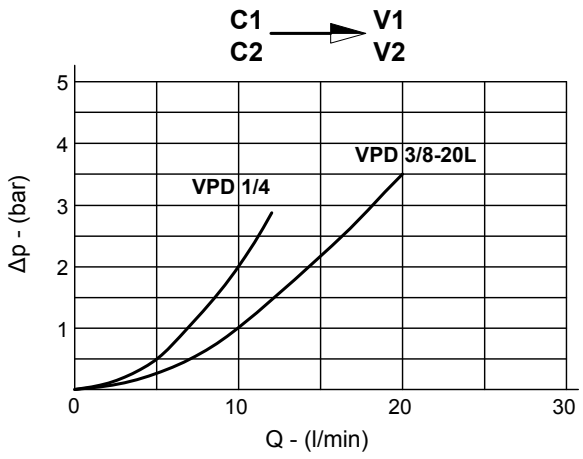
Port C1 predisposed for banjo with union diameter 12 mm

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

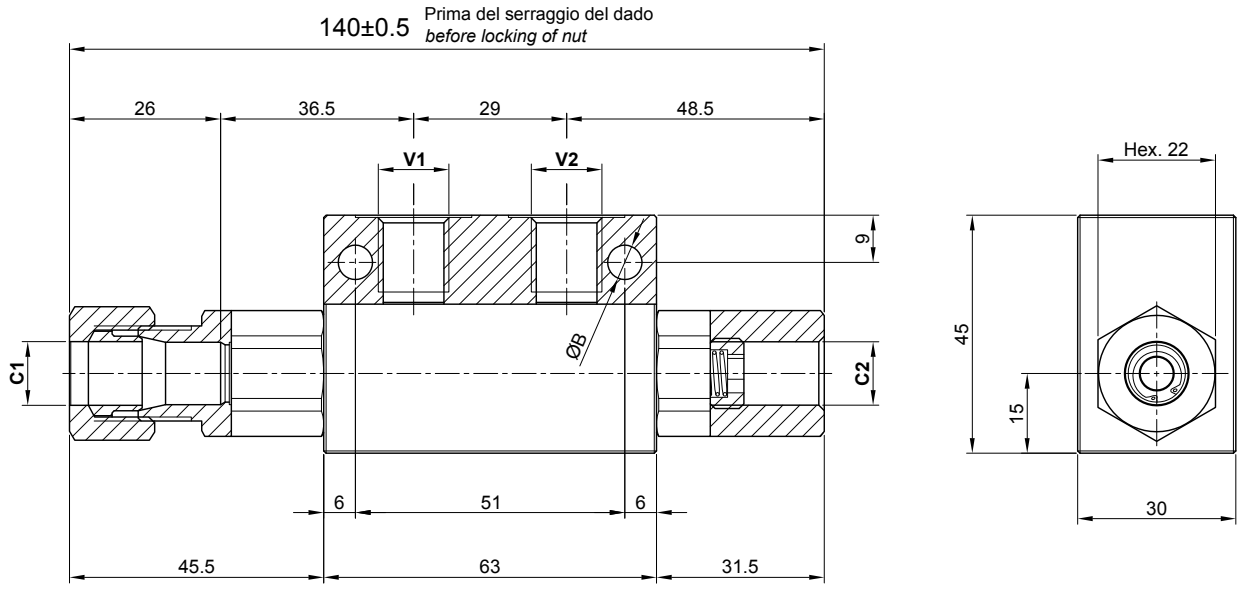




VPD-*-1RO-SR-*-*-* F - 080/2

Valvola di blocco pilotata doppia, predisposta per 1 raccordo
Double pilot operated check valve, prepared for 1 union

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	V1-V2-C2	C1	B	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm		Kg
VPD 1/4 1RO SR	12	250	1/4"	12	6.5	1 : 4	0.760
*VPD 3/8-20L 1RO SR	20	250	3/8"	12	-	1 : 4	0.750

* La valvola VPD 3/8"-20L 1RO SR viene fornita senza fori di fissaggio – *valve VPD 3/8"-20L 1RO SR is supplied without fixing holes*

Per l'acquisto di raccordi ad occhio di dimensioni standard, vedere sezione W
For purchase standard banjo unions, see section W

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPD 3/8-20L 1RO SR 5 G *

1/4 - 1/4" BSPP
* 3/8-20L - 3/8" BSPP
Connessioni - *Port sizes*

2 bar (std) – 5 bar – 10 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if std

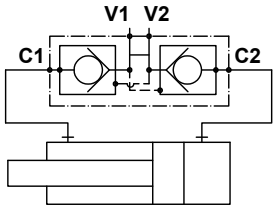
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

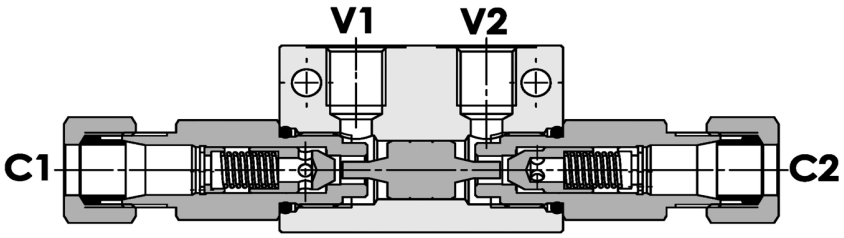
Guarnizione sul pilota, omettere se non richiesta *
With o-ring on pilot valve, omit if not requested

VPD-*-2RO-SR-*-*-* F - 085/1

Valvola di blocco pilotata doppia, predisposta per 2 raccordo
Double pilot operated check valve, prepared for 2 union

Rev. 02-2010/09





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente e rettificati.
Portata max.: fino a 20 l/min
Pressione max.: vedere tabella pag. 02
Pressione di apertura: standard 2 bar, a richiesta 5-10 bar

Connessione C1/C2 predisposta per raccordo ad occhio con tubo diam.12 mm

TECHNICAL SPECIFICATIONS

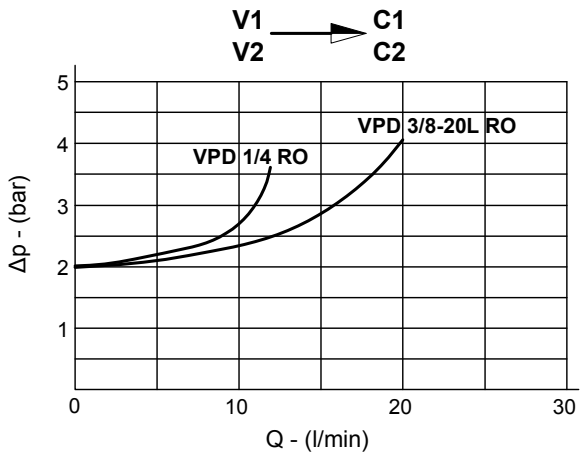
Materials: *zinc plated steel body. Internal parts are in hardened and ground steel.*
Rated flow: *up to 20 l/min*
Max. pressure: *see data sheet page 02*
Cracking pressure: *2 bar standard, 5-10 bar on request*

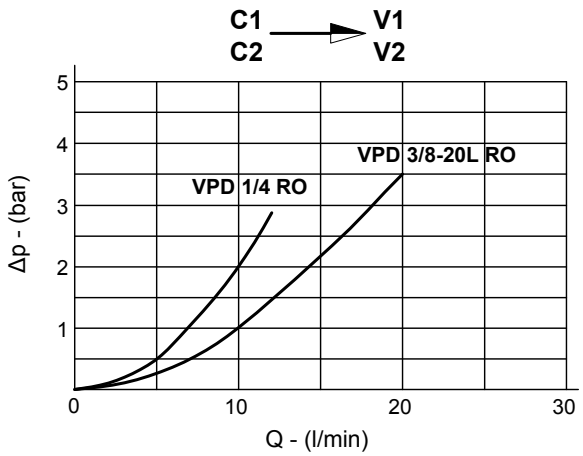
Port C1/C2 predisposed for banjo with union diameter 12 mm

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

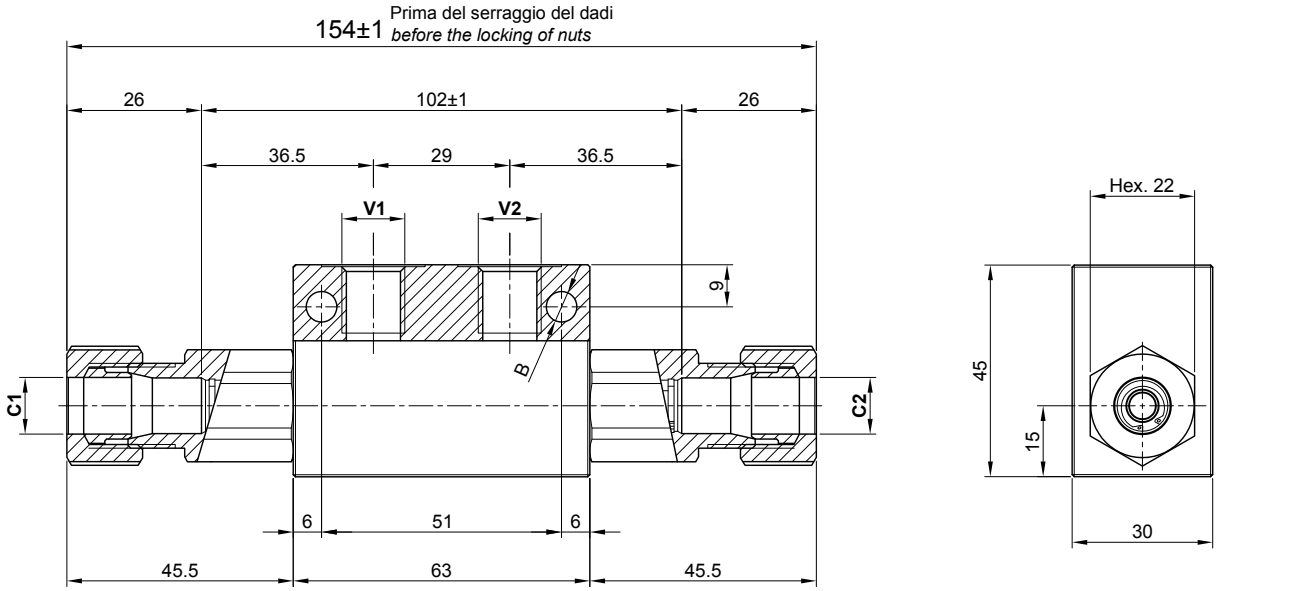




VPD-*-2RO-SR-*-*-* F - 085/2

Valvola di blocco pilotata doppia, predisposta per 2 raccordo
Double pilot operated check valve, prepared for 2 union

Rev. 02-2010/09



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	V1-V2	C1-C2	B	RAPP. DI PILOTAGGIO *PILOT RATIO*	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm		Kg
VPD 1/4 2RO SR	12	250	1/4"	12	6.5	1 : 4	0.760
*VPD 3/8-20L 2RO SR	20	250	3/8"	12	-	1 : 4	0.750

* La valvola VPD 3/8"-20L 2RO SR viene fornita senza fori di fissaggio – *valve VPD 3/8"-20L 2RO SR is supplied without fixing holes*

Per l'acquisto di raccordi ad occhio di dimensioni standard, vedere sezione W
For purchase standard banjo unions, see section W

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPD 3/8-20L 2RO SR 5 G *

1/4 - 1/4" BSPP
* 3/8-20L - 3/8" BSPP
Connessioni - *Port sizes*

2 bar (std) – 5 bar – 10 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if std

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

Guarnizione sul pilota, omettere se non richiesta *
With o-ring on pilot valve, omit if not requested

SEZIONE G
Valvole selettrici

SECTION G
Shuttle Valves

Le valvole selettrici trovano impiego quando, in un circuito idraulico, si ha la necessità di convogliare il flusso da una tra 2 linee principali (quella con pressione più elevata) in una terza secondaria. Le 2 linee principali restano separate.
Le versioni più piccole vengono utilizzate prevalentemente nei circuiti per freni e nei circuiti logici di pilotaggio.
Sono disponibili 2 soluzioni di montaggio: in linea e ad inserto.

Shuttle valves are used when, in a hydraulic circuit, it's necessary to convey the flow from one of 2 prioritary lines (the one with higher pressure) in a third secondary one.
The 2 prioritary lines remain separated.
The smaller versions are ideal for brake circuits and logic pilot circuits.
There are 2 mounting solutions: online and insert.
2 solution of assembly are available: in line and insert.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
G 050	VPT	G 080	VPT I

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

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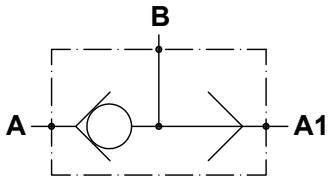
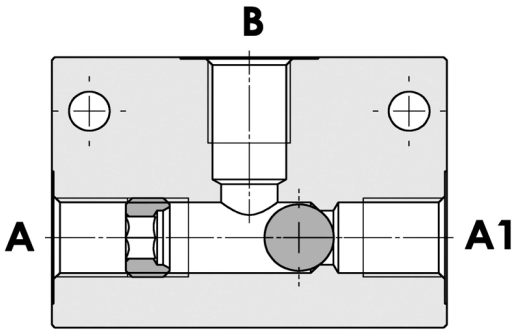
VPT-*

G - 050/1

Valvola di commutazione, montaggio in linea
Shuttle valve, line mounted

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. La sfera è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata max.: fino a 110 l/min
Pressione max.: 350 bar

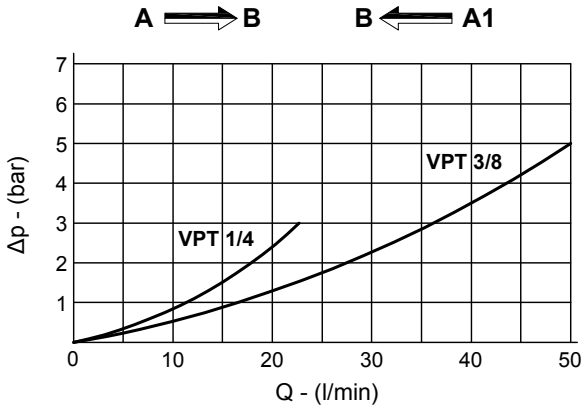
TECHNICAL SPECIFICATIONS

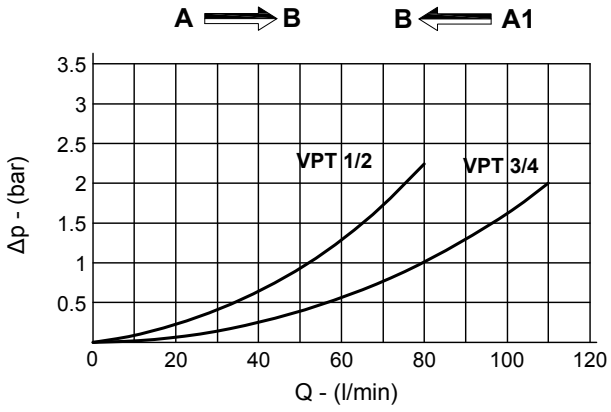
Materials: *body is steel made. Ball is in hardened steel. External surface is zinc plated.*
Rated flow: *up to 110 l/min*
Max. pressure: *350 bar*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



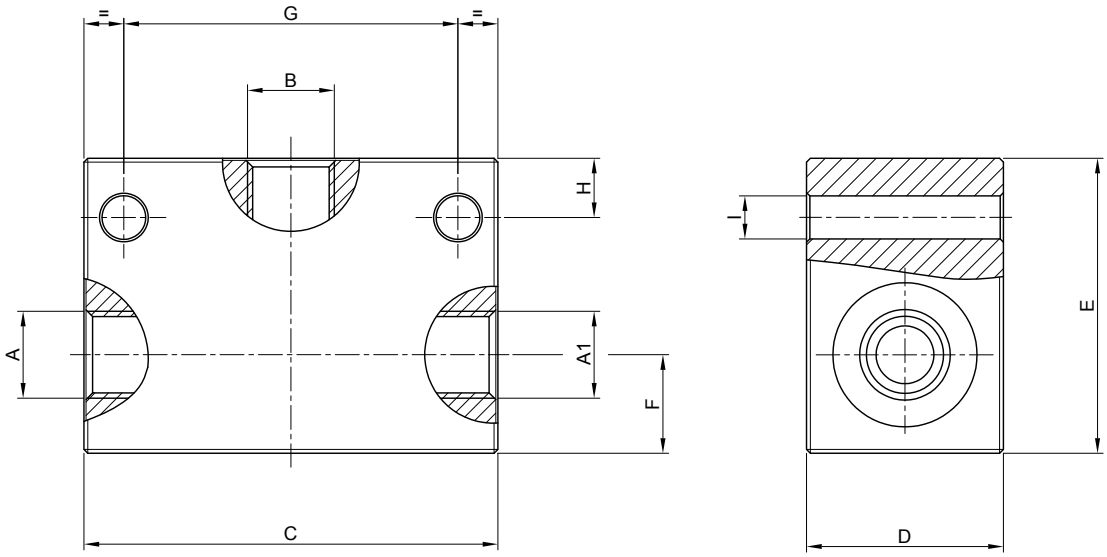


VPT-*

G - 050/2

Valvola di commutazione, montaggio in linea
Shuttle valve, line mounted

Rev. 02-2010/08



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	A-A1 B	C	D	E	F	G	H	I	PESO *WEIGHT*
	L/MIN	BSPP	mm	mm	mm	mm	mm	mm	mm	Kg
VPT 1/4	25	1/4"	63	30	45	15	51	9	6.5	0.570
VPT 3/8	50	3/8"	63	30	45	15	51	9	6.5	0.530
VPT 1/2	80	1/2"	90	40	60	20	75	7.5	8.5	1.450
VPT 3/4	110	3/4"	90	40	60	20	75	7.5	8.5	1.350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P T **3 / 8**

1/4 - 1/4" BSPP
3/8 - 3/8" BSPP
* 1/2 - 1/2" BSPP
3/4 - 3/4" BSPP

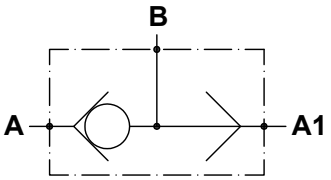
Connessioni - *Port sizes*

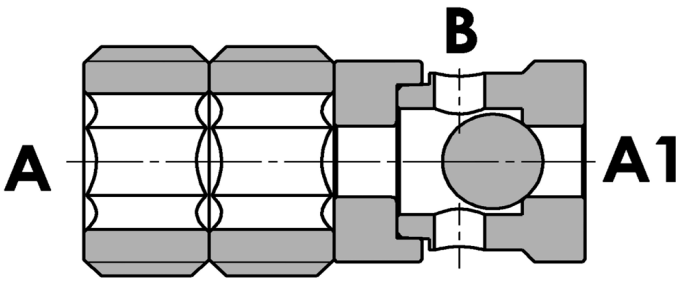
VPT I-*

G - 080/1

Valvola di commutazione, cartuccia ad inserto
Shuttle valve, ball version

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. La sfera è in acciaio trattato termicamente.
Portata max.: vedere diagramma perdite di carico
Pressione max.: 350 bar

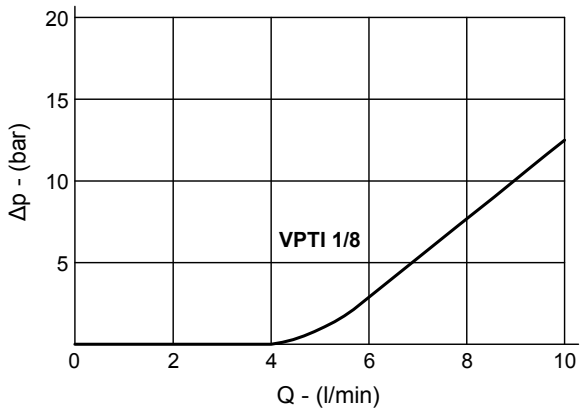
TECHNICAL SPECIFICATIONS

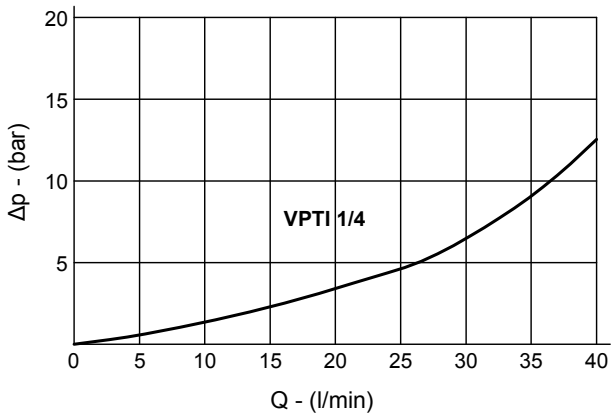
Materials: *body is steel made. Ball is in hardened steel.*
Rated flow: *see pressure drop curves*
Max. pressure: *350 bar*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



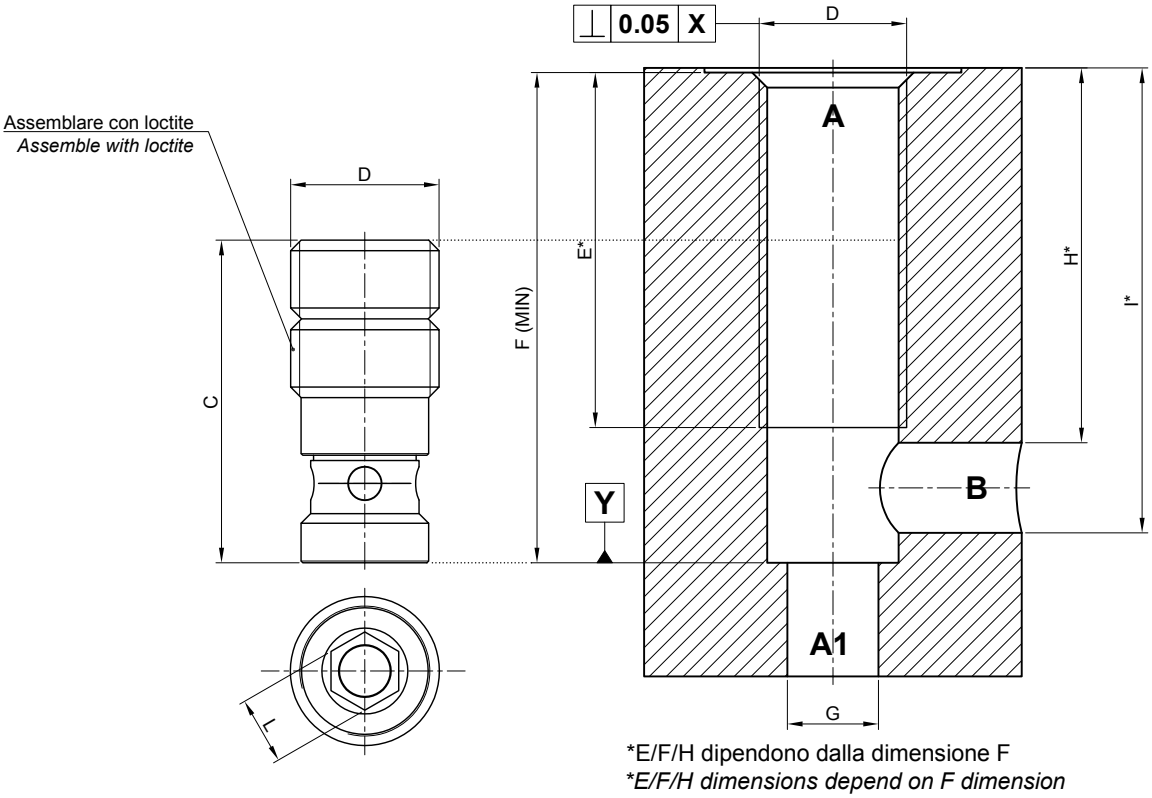


VPT I-*

G - 080/2

Valvola di commutazione, cartuccia ad inserto
Shuttle valve, ball version

Rev. 02-2010/08



*E/F/H dipendono dalla dimensione F
**E/F/H dimensions depend on F dimension*

TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	C	D	E	F	G	H	I	L	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
	L/MIN	mm	BSPP	mm	mm	mm	mm	mm	mm	Nm	Kg
VPT I 1/8	Vedere diagramma perdite di carico *See pressure drop curves*	20	1/8"	24.5	32.5	6	24.5	30.5	5	15	0.008
VPT I 1/4		41.5	1/4"	30	43	8	31.5	39.5	6	20	0.017

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPTI **1/4**

1/8 - 1/8" BSPP
* 1/4 - 1/4" BSPP
Connessioni - *Port sizes*

SEZIONE H
Valvole di blocco per tubazioni

SECTION H
Hose break Valves

Queste valvole sono impiegate per interrompere il flusso dell'olio in una tubazione al superamento del valore di taratura.
In condizioni normali il deflusso avviene regolarmente, viene bloccato quando la portata supera il flusso di reazione preimpostato sulla valvola (determinato dallo spessore "T")
Sono disponibili 2 soluzioni di montaggio: ad inserto, oppure in linea, mediante corpi maschio-femmina e femmina-femmina (vedere sezione W100 - il montaggio all'interno dei corpi deve essere effettuato dall'utilizzatore)

These valves are employed to interrupt the flow in an hose when the setting value is exceeded.
Under normal condition, the return flow is freely dumped to tank, but it's blocked when it exceeds the valve presetting (depending from thickness "T").
2 solution of assembly are available: insert or in line, through male-female and female-female housings (see section W100 - the valves have to be inserted in the housings by the user)

PAGINA / *PAGE*	**CODICE / *CODE***
H 050	VPP

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

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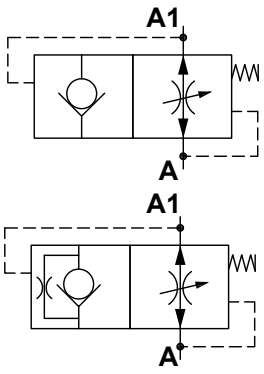
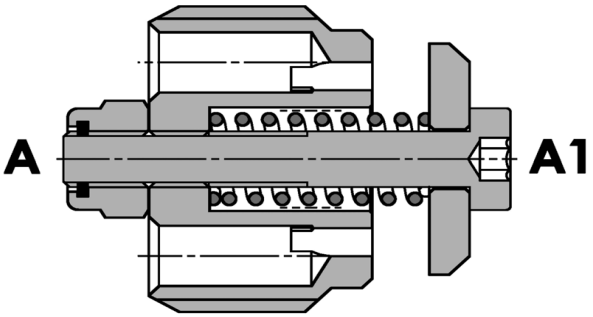
VPP-*-T*-(F*)

H - 050/1

Valvola di blocco per tubazioni
Hose break valve

Rev. 02-2010/04



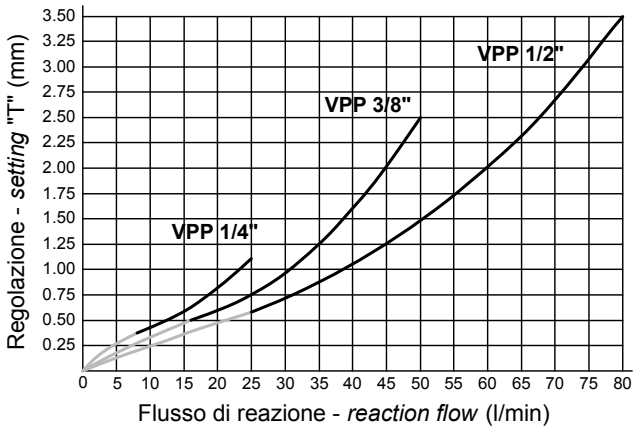


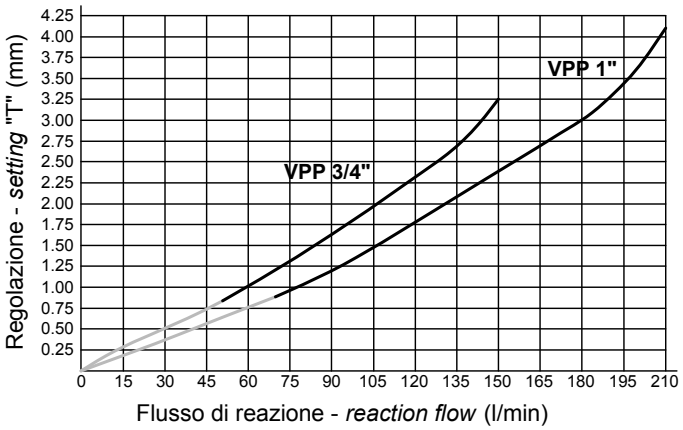
SPECIFICHE TECNICHE

Materiali: tutti i componenti sono in acciaio
Portata: fino a 200 l/min
Pressione max.: 350 bar, vedasi tabella a parte

TECHNICAL SPECIFICATIONS

Materials: *all components are steel made*
Portata: *up to 200 l/min*
Max pressure: *350 bar, see data sheet*





Flusso di reazione raccomandato (min.-max.)
recommended flow reaction (min.-max.)

Per attuatori movimentati tramite valvole direzionali manuali, e' consigliato un flusso di reazione 1,5 volte la portata dell'impianto; di 2 volte per attuatori movimentati tramite valvole direzionali a solenoide. Se non richiesta, la regolazione "T" viene fornita al massimo valore possibile.
For actuator moved by directional control valve, the reaction flow has to be calculated multiply the nominal flow by 1.5 and by 2 for actuator moved by solenoid operated directional control valve. It is normal to set the reaction flow 1,5 times the rate flow of the system. If not required, the setting of "T" will be supplied at the maximum value.

Attenzione: i valori di regolazione indicati nei diagrammi sono da ritenersi indicativi: per ogni valore fisso di T il flusso di reazione può variare del ±10 % ed oltre a seconda delle caratteristiche dell'apparecchiatura in cui vengono installate.

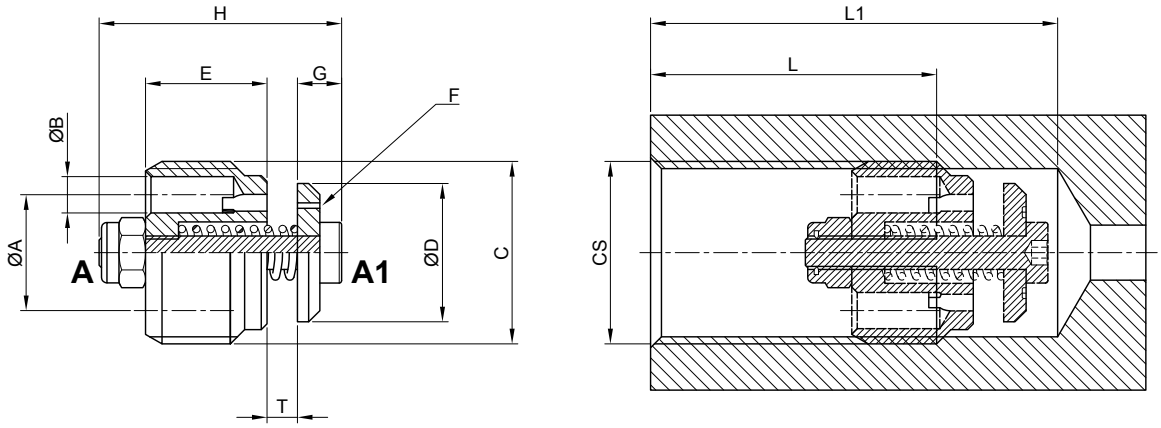
Warning: *the setting values indicated in this diagram are indicative, for any setting value of "T", the reaction flow can change by ±10 % and beyond based on the features of the equipment in which they are installed.*

VPP-*-T*-(F*)

H - 050/2

Valvola di blocco per tubazioni
Hose break valve

Rev. 02-2010/04



TIPO *TYPE*	PORTATA - *FLOW* (MIN-MAX)	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	D	E	G	H	T	PESO *WEIGHT*	CAVITA' - *CAVITY* CS	L	L1
	L/MIN	BAR	mm	mm	BSPP	mm	mm	mm	mm	mm	Kg	BSPP	mm	mm
VPP 1/4	8-25	350	8.5	2.4	1/4"	9.5	8	5	23	Vedere diagramma *See diagram*	0.007	1/4"	24	35
VPP 3/8	16-50	350	11	3.5	3/8"	12.5	11	5	23		0.012	3/8"	26	37
VPP 1/2	25-80	350	13	4.5	1/2"	15	13	6	29		0.023	1/2"	30	45
VPP 3/4	50-150	350	16	6	3/4"	18.5	18	6	34		0.045	3/4"	38	54
VPP 1	70-200	300	20	7	1"	23	21	7.5	40		0.094	1"	46	66

Disponibili a richiesta corpi maschio-femmina e femmina-femmina, vedere sezione W100 –
Available on request male-female and female-female housing, see section W100

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPP **3/8** **T0.5** **F0.5**

* 1/4 - 1/4" BSPP
3/8 - 3/8" BSPP
1/2 - 1/2" BSPP
3/4 - 3/4" BSPP
1 - 1" BSPP
Connessioni - *Port sizes*

* Regolazione T
T setting

F – Foro di strozzamento – *throttling hole* *
Omettere se non richiesto – *omit if not requested*

TIPO - *TYPE*	Ø MIN (mm)	Ø MAX (mm)
VPP 1/4	0.5	1.00
VPP 3/8	0.5	1.25
VPP 1/2	0.5	1.50
VPP 3/4	0.5	2.50
VPP 1	0.5	3.00

SEZIONE I
Valvole reg. di flusso unidirezionali

SECTION I
Restrictor Valves

VALVOLE DI STROZZAMENTO UNIDIREZIONALI FISSE

Sono valvole regolatrici di flusso a strozzamento fisso. Permettono il flusso libero in un senso mediante una valvola di non ritorno e lo controllano nel senso opposto.
Il diametro del foro di strozzamento viene eseguito in base alle esigenze del cliente, entro un campo prestabilito di dimensioni. La portata può variare in funzione della pressione e della viscosità del fluido.
Il montaggio è in linea, con versione maschio-femmina e femmina-femmina.

FIXED SETTING THROTTLE CHECK VALVES

They are line mounted fixed restrictor, that allow free flow in one direction (through a check valve) and fixed flow in the other.
The diameter of throttling hole is executed on the basis of customers' requirements, inside a determined range of dimensions. Rated flow may change depending on the pressure and fluid viscosity.
In line mounting, with 2 version: male-female and female-female.

PAGINA / *PAGE*	**CODICE / *CODE***	**PAGINA / *PAGE***	**CODICE / *CODE***
I 010	VPRU	I 012	VPRU-MF

VALVOLE REGOLATRICI DI FLUSSO UNIDIREZIONALI

Sono valvole regolatrici di flusso regolabili. Permettono il flusso libero in un senso mediante una valvola di non ritorno e lo controllano nel senso opposto.
La regolazione del flusso si effettua mediante rotazione del pomolo o tramite vite con esagono incassato. La portata può variare in funzione della pressione e della viscosità del fluido.
Sono disponibili 3 soluzioni di montaggio: in linea, a cartuccia e a pannello.

RESTRICTOR VALVES

These valves are unidirectional flow restrictor, that allow free flow in one direction (through a check valve) and adjustable flow in the other.
Flow regulation is obtained by turning a knob or through a socket screw.
Rated flow may change depending on the pressure and fluid viscosity.
3 solutions of assembly are available: in line, catridge and panel.

PAGINA / *PAGE*	**CODICE / *CODE***	**PAGINA / *PAGE***	**CODICE / *CODE***
I 050	VPU	I 060	VPSU
I 070	VPMU	I 100	VPU C

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

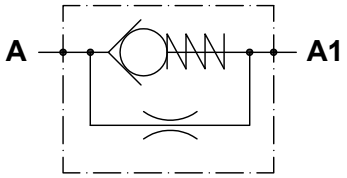
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

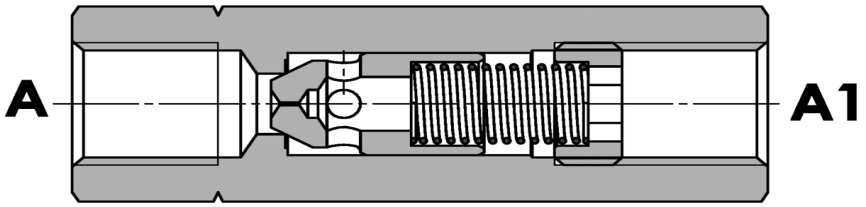
VPRU-*-*-F*

I - 010/1

Valvola di strozzamento unidirezionale fissa
Fixed setting throttle check valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata: fino a 310 l/min
Pressione max.: 350 bar, vedasi tabella a parte
Pressione di apertura: standard 0.5 bar, a richiesta 2.5-5-10 bar

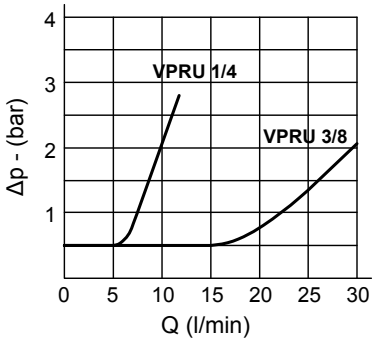
TECHNICAL SPECIFICATIONS

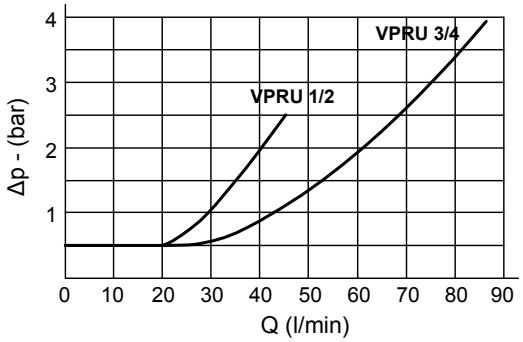
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 310 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *0.5 bar standard, on request: 2.5-5-10 bar*

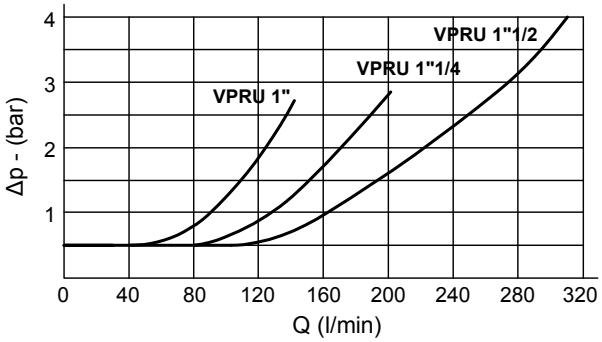
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C





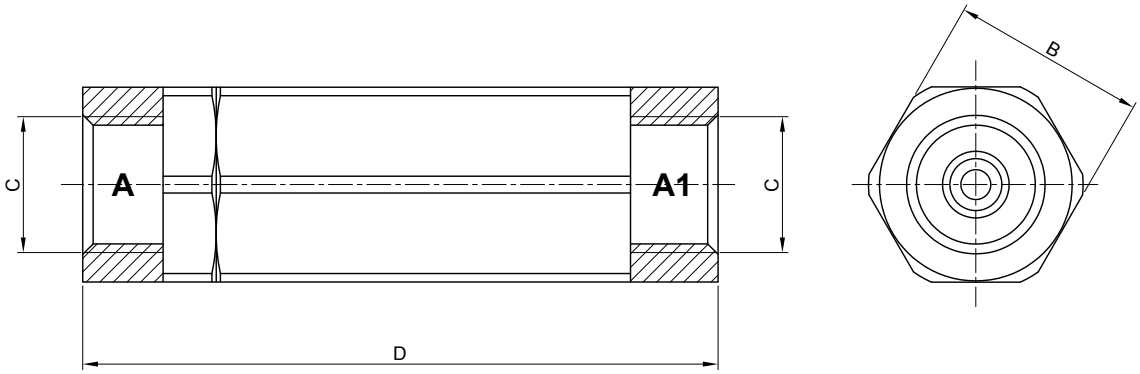


VPRU-*-*-F*

I - 010/2

Valvola di strozzamento unidirezionale fissa
Fixed setting throttle check valve

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	D	B	C	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	Kg
VPRU 1/4"	12	350	62	19	1/4"	0.10
VPRU 3/8"	30	350	68	24	3/8"	0.17
VPRU 1/2"	45	320	78	27	1/2"	0.22
VPRU 3/4"	85	300	88	36	3/4"	0.45
VPRU 1"	140	250	112	46	1"	0.97
VPRU 1 1/4"	200	250	145	55	1 1/4"	1.68
VPRU 1 1/2"	310	210	155	60	1 1/2"	2.10

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRU **3/8** **2.5** **F0.6**

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
1 - 1" BSPP
1 1/4 – 1 1/4" BSPP
1 1/2 – 1 1/2" BSPP
Connessioni - *Port sizes*

0.5 bar (std) – 2.5 bar – 5 bar – 10 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

F – Foro di strozzamento – *throttling hole* *
Omettere se non richiesto – *omit if not requested*

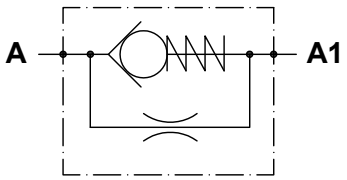
TIPO - *TYPE*	Ø MIN (mm)	Ø MAX (mm)
VPRU 1/4	0.6	2.0
VPRU 3/8	0.6	3.5
VPRU 1/2	0.6	4.0
VPRU 3/4	0.6	4.0
VPRU 1	Su richiesta – *on request*	
VPRU 1 1/4		
VPRU 1 1/2		

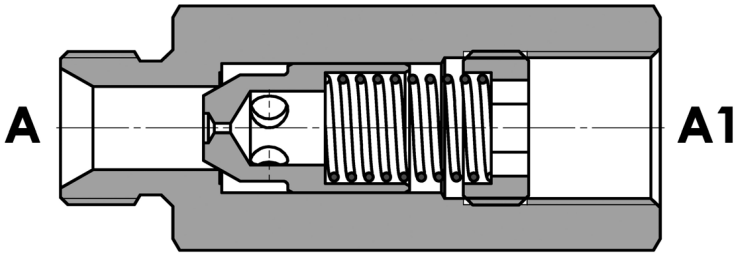
VPRU-*-MF-*-F*

I - 012/1

Valvola di strozzamento unidirezionale fissa, versione maschio-femmina
Fixed setting throttle check valve, male-female version

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata max.: fino a 310 l/min
Pressione max.: 350 bar, vedasi tabella a parte
Pressione di apertura: standard 0.5 bar, a richiesta 2.5-5-10 bar

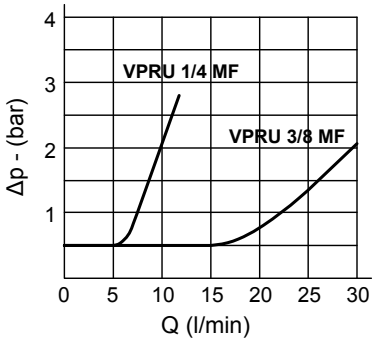
TECHNICAL SPECIFICATIONS

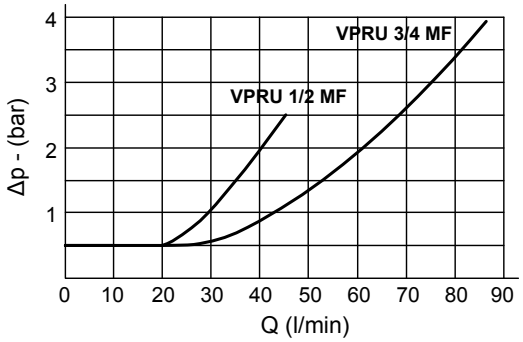
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is zinc plated.
Rated flow: *up to 310 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *0.5 bar standard, on request: 2.5-5-10 bar*

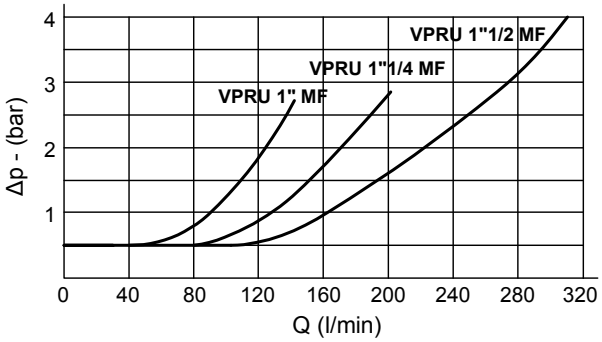
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C







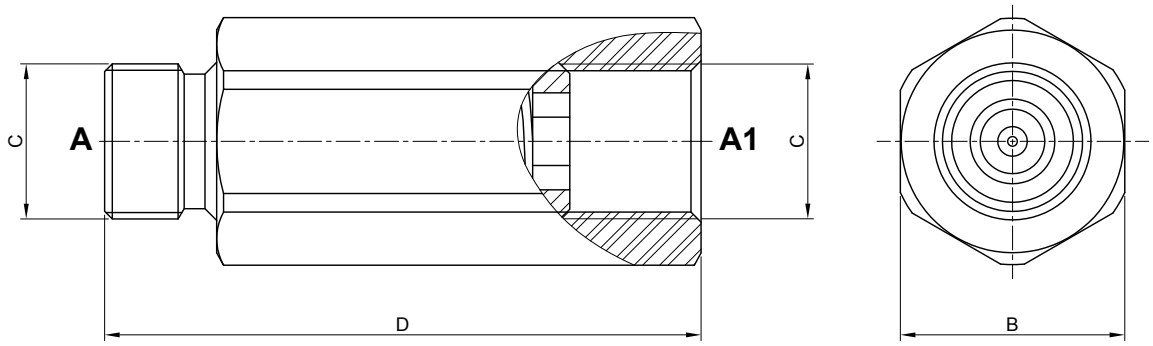
VPRU-*-MF-*-F*

I - 012/2

Valvola di strozzamento unidirezionale fissa, versione maschio-femmina

Fixed setting throttle check valve, male-female version

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	D	B	C	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	Kg
VPRU 1/4" MF	12	350	58	19	1/4"	0.10
VPRU 3/8" MF	30	350	64	24	3/8"	0.17
VPRU 1/2" MF	45	320	72	27	1/2"	0.22
VPRU 3/4" MF	85	300	84	36	3/4"	0.45
VPRU 1" MF	140	250	105	46	1"	0.97
VPRU 1 1/4" MF	200	250	125	55	1 1/4"	1.68
VPRU 1 1/2" MF	310	210	138	60	1 1/2"	2.10

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRU **3/8** **MF** **2.5** **F0.6**

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
1 - 1" BSPP
1 1/4 – 1 1/4" BSPP
1 1/2 – 1 1/2" BSPP
Connessioni - *Port sizes*

0.5 bar (std) – 2.5 bar – 5 bar – 10 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

F – Foro di strozzamento – *throttling hole* *
Omettere se non richiesto – *omit if not requested*

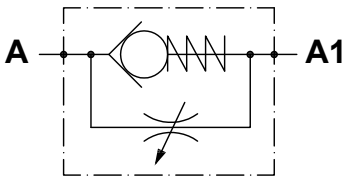
TIPO - *TYPE*	Ø MIN (mm)	Ø MAX (mm)
VPRU 1/4	0.6	2.0
VPRU 3/8	0.6	3.5
VPRU 1/2	0.6	4.0
VPRU 3/4	0.6	4.0
VPRU 1	Su richiesta – *on request*	
VPRU 1 1/4		
VPRU 1 1/2		

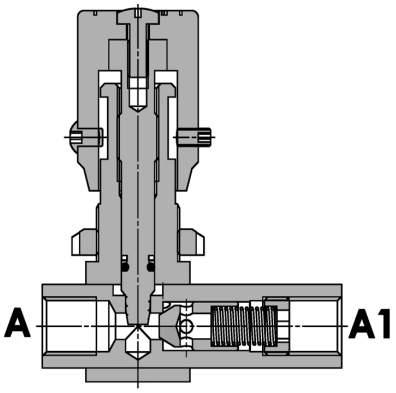
VPU-*-*-*-*

I - 050/1

Valvola regolatrice di flusso unidirezionale
Restrictor valve

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: corpo e parti interne in acciaio. La superficie esterna è protetta mediante zincatura.
Portata max.: fino a 85 l/min
Pressione max.: 300 bar, vedasi tabella a parte
Pressione di apertura: standard 0,5 bar, a richiesta 2.5-5-10 bar

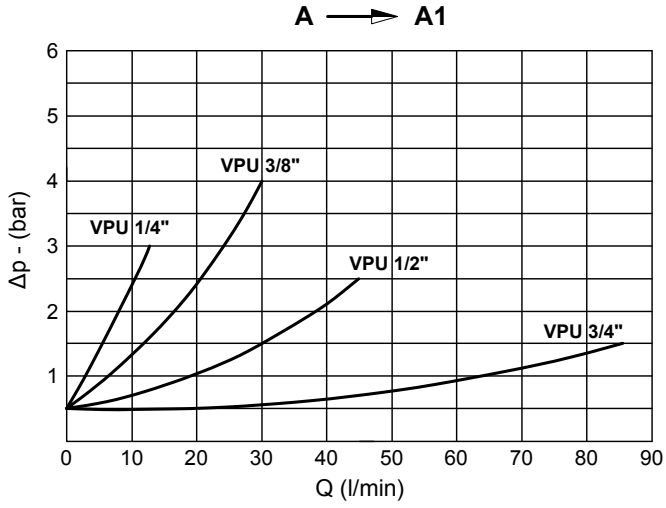
TECHNICAL SPECIFICATIONS

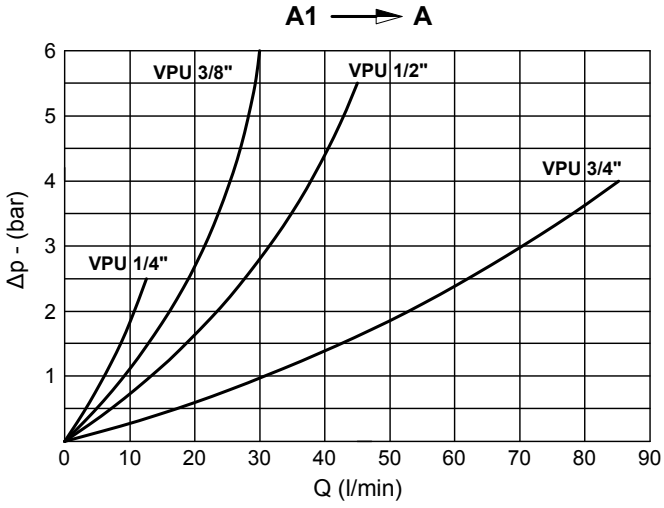
Materials: *body and internal parts are steel made. External surface zinc plated.*
Rated flow: *up to 85 l/min*
Max. pressure: *300 bar, see data sheet*
Cracking pressure: *0.5 bar standard, 2.5-5-10 bar on request*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



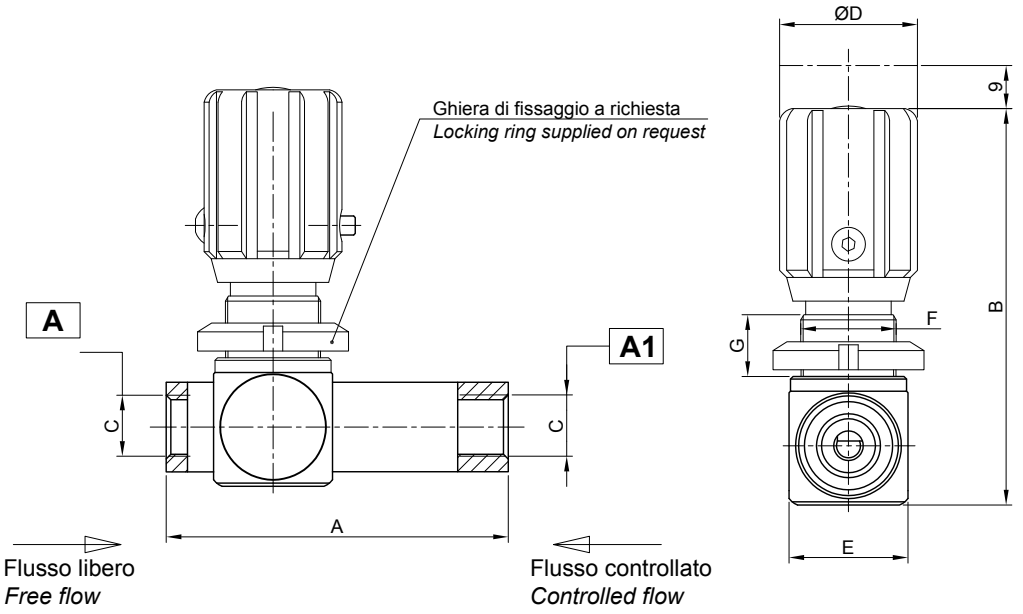


VPU-*-*-*-*

I - 050/2

Valvola regolatrice di flusso unidirezionale
Restrictor valve

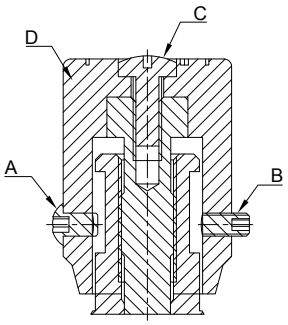
Rev. 02-2010/08



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	D	E	F	G	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	mm	mm	mm	mm	Kg
VPU 1/4"	12	300	72	80	1/4"	28	25	M21X1	13	0.250
VPU 3/8"	30	300	78	85	3/8"	28	30	M25X1.5	13	0.420
VPU 1/2"	45	280	92	92	1/2"	38	35	M30X1.5	13	0.600
VPU 3/4"	85	250	106	105	3/4"	38	45	M35X1.5	12.5	1.100

ISTRUZIONI PER IL MONTAGGIO A PANNELLO

INSTRUCTIONS FOR PANEL MOUNTING



Togliere le viti "A" di fine corsa, "B" di bloccaggio regolazione e "C" di fissaggio pomolo; sfilare il pomolo "D" ed installare la valvola a pannello fissandola con relativa ghiera.
Rimontare nell'ordine inverso i particolari precedentemente smontati.

Remove the screw "A" of limit stop, "B" for blocking and regulation, "C" of handwheel fixing; withdraw the handwheel "D" and install the panel-valve by fixing it with the relative metal ring.
Re-assemble in reversed order the parts previously disassembled.

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPU 1/2 2.5 F *

1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

0.5 bar (std) – 2.5 bar – 5 bar – 10 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

F – ghiera di fissaggio – *locking ring* *
Omettere se non richiesta – *omit if not requested*

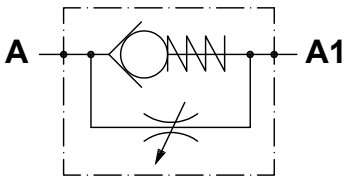
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

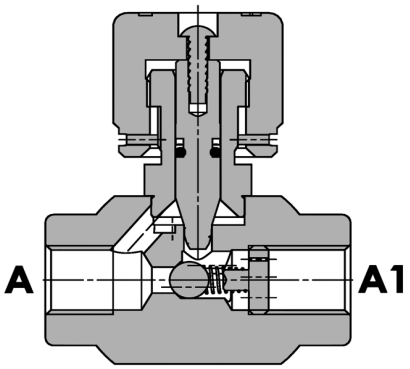
VPSU-*-*

I - 060/1

Valvola regolatrice di flusso unidirezionale
Restrictor valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo e parti interne in acciaio. La superficie esterna è protetta mediante zincatura.
Portata max.: 40 l/min
Pressione max.: 300 bar, vedasi tabella a parte
Pressione di apertura: standard 0,5 bar.

TECHNICAL SPECIFICATIONS

Materials: *body and internal parts are steel made. External surface zinc plated.*
Rated flow: *40 l/min*
Max. pressure: *300 bar, see data sheet*
Cracking pressure: *0.5 bar standard.*

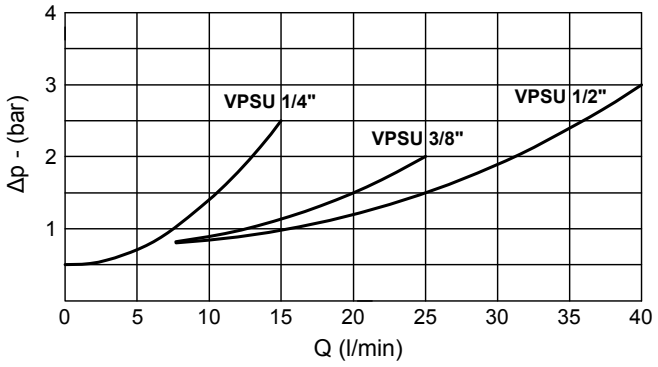
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

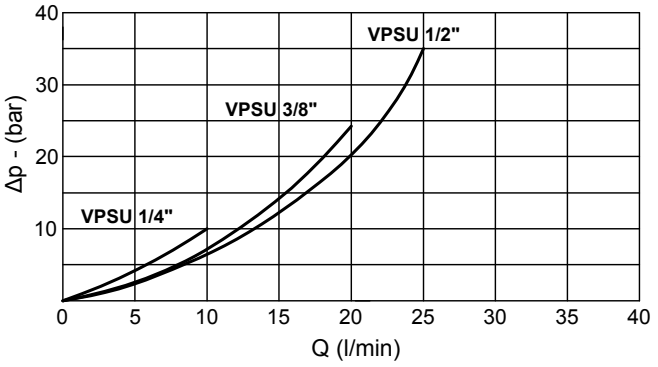
STROZZATORE TUTTO APERTO - *FULLY OPEN THROTTLE*

A → A1



STROZZATORE TUTTO APERTO - *FULLY OPEN THROTTLE*

A1 → A

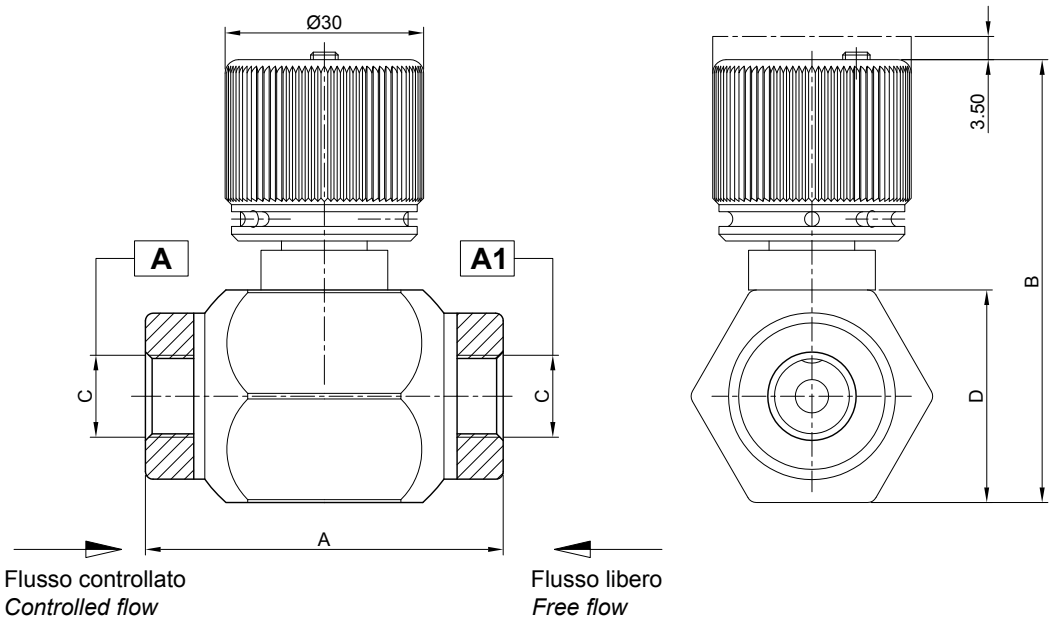


VPSU-*-*

I - 060/2

Valvola regolatrice di flusso unidirezionale
Restrictor valve

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	D	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	mm	Kg
VPSU 1/4"	12	300	54	64	1/4"	32	0.310
VPSU 3/8"	25	300	62	64	3/8"	32	0.325
VPSU 1/2"	40	280	62	64	1/2"	32	0.320

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S U **1 / 2** *****

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

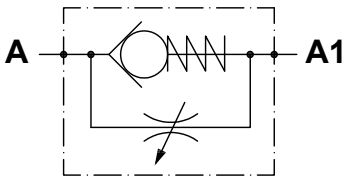
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

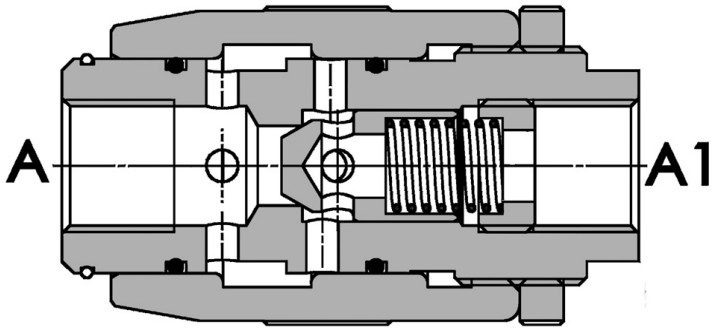
VPMU-*-*-*

I - 070/1

Valvola regolatrice di flusso unidirezionale, tipo a manicotto
Restrictor valve, barrel type

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo e parti interne in acciaio. La superficie esterna è protetta mediante zincatura.
Portata max.: 150 l/min
Pressione max.: 350 bar, vedasi tabella a parte
Pressione di apertura: standard 0,5 bar, a richiesta 2.5-5-10 bar.

TECHNICAL SPECIFICATIONS

Materials: *body and internal parts are steel made. External surface zinc plated.*
Rated flow: *150 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *0.5 bar standard, 2.5-5-10 bar on request.*

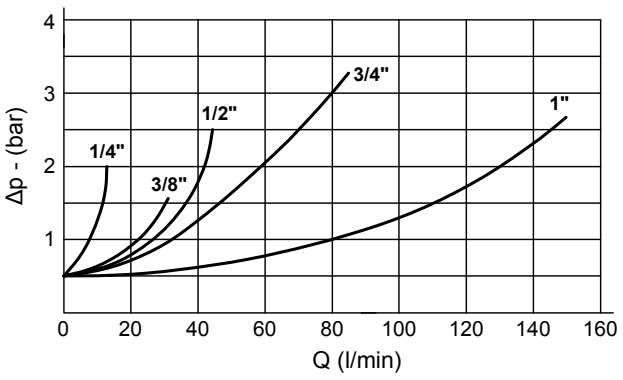
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

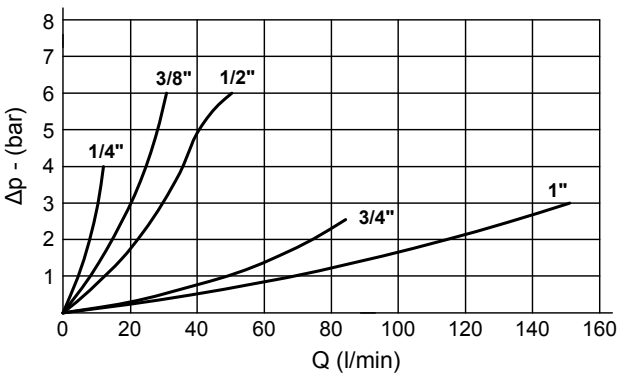
STROZZATORE TUTTO APERTO - *FULLY OPEN THROTTLE*

A ⟶ A1



STROZZATORE TUTTO APERTO - *FULLY OPEN THROTTLE*

A1 ⟶ A

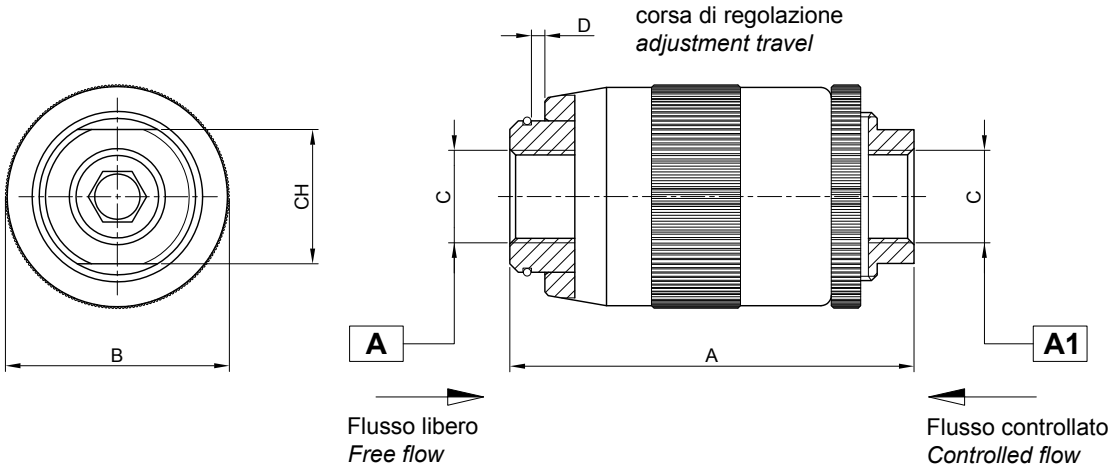


VPMU-*-*-*

I - 070/2

Valvola regolatrice di flusso unidirezionale, tipo a manicotto
Restrictor valve, barrel type

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	D	CH	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	mm	mm	Kg
VPMU 1/4	12	350	62	34	1/4"	4.5	19	0.275
VPMU 3/8	30	350	72	40	3/8"	5.5	24	0.430
VPMU 1/2	45	310	80	46	1/2"	7	30	0.630
VPMU 3/4	85	280	100	54	3/4"	10	36	1.050
VPMU 1	150	250	125	65	1"	12	41	1.960

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPMU **1/2** **2.5** *

1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

0.5 bar (std) – 2.5 bar – 5 bar – 10 bar
* Pressione apertura ritegno, omettere se std
Cracking pressure, omit if standard

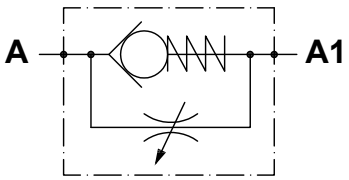
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

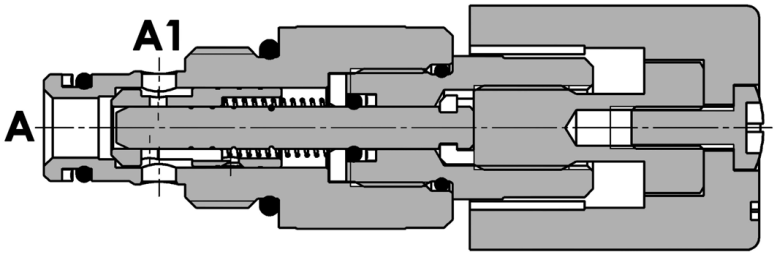
VPU C-*-*

I - 100/1

Valvola regolatrice di flusso unidirezionale, versione a cartuccia, cavità SAE
Restrictor valve, cartridge version, SAE cavity

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata max.: fino a 140 l/min
Pressione max.: 350 bar, vedasi tabella a parte
Pressione di apertura: 1 bar

TECHNICAL SPECIFICATIONS

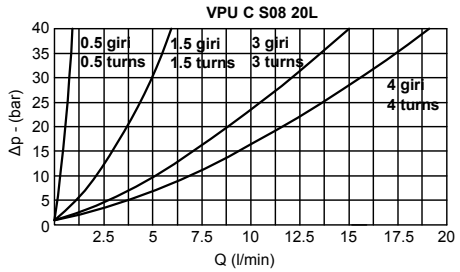
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is yellow zinc plated.
Rated flow: *up to 140 l/min*
Max. pressure: *350 bar, see data sheet*
Cracking pressure: *1 bar*

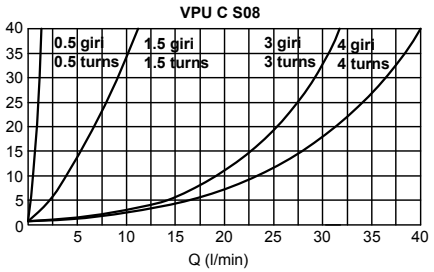
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

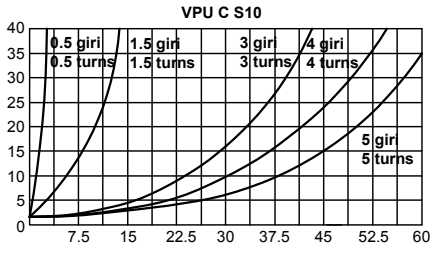
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

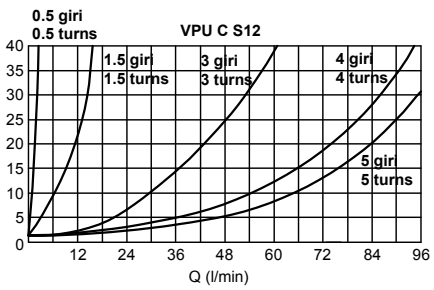
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

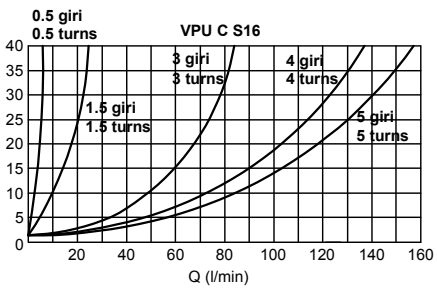
A1 → A



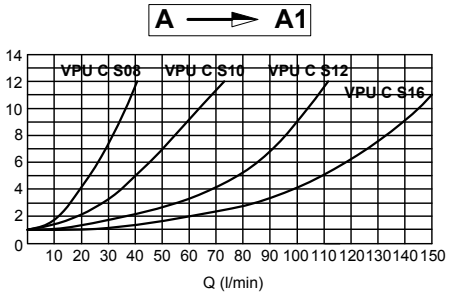








A → A1



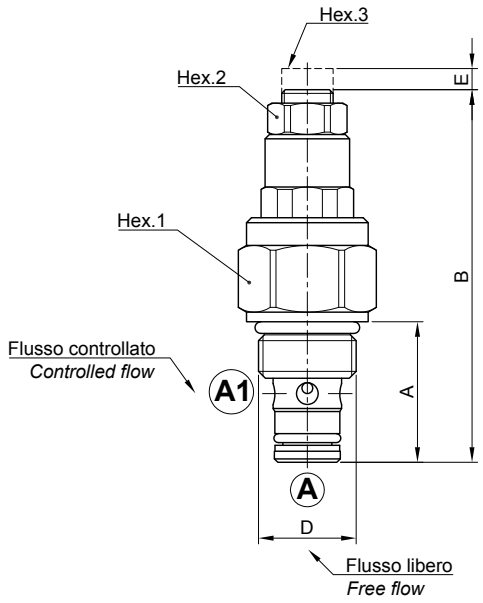
VPU C-*-*

I - 100/2

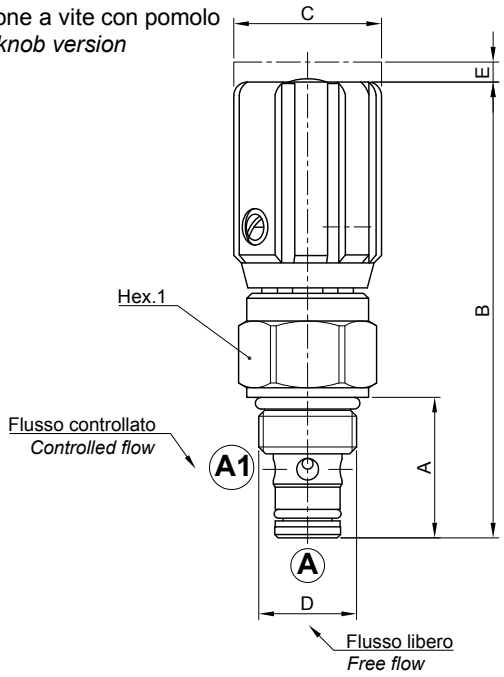
Valvola regolatrice di flusso unidirezionale, versione a cartuccia, cavità SAE
Restrictor valve, cartridge version, SAE cavity

Rev. 01-2010/02

VPU C...P
Versione a vite con esagon incassato
Socket screw version



VPU C...R
Versione a vite con pomolo
Handknob version



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	D	E	HEX.1	HEX.2	HEX.3	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	mm	UNF-2A	mm	mm	mm	mm	mm	mm	Kg
VPU C S08 20L P	20	350	27.6	72.1	-	3/4"-16	5	24	17	5	23081	40 - 45	0.136
VPU C S08 P	40	350	27.6	72.1	-	3/4"-16	5	24	17	5	23081	40 - 45	0.136
VPU C S10 P	60	350	32.8	76.5	-	7/8"-14	6	27	17	5	23101	60 - 70	0.174
VPU C S12 P	80	350	46	86.5	-	1 1/16"-12	7	32	17	6	23121	90 - 100	0.252
VPU C S16 P	140	350	46.5	88.5	-	1 5/16"-12	6.6	40	17	6	23161	110 - 120	0.382
VPU C S08 20L R	20	350	27.6	84.6	28	3/4"-16	5	24	-	-	23081	40 - 45	0.160
VPU C S08 R	40	350	27.6	84.6	28	3/4"-16	5	24	-	-	23081	40 - 45	0.160
VPU C S10 R	60	350	32.8	89	28	7/8"-14	6	27	-	-	23101	60 - 70	0.198
VPU C S12 R	80	350	46	95	38	1 1/16"-12	7	32	-	-	23121	90 - 100	0.286
VPU C S16 R	140	350	46.5	97	38	1 5/16"-12	6.6	40	-	-	23161	110 - 120	0.418

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPUC **S08** **P** *****

S08 20L – 3/4"-16 UNF-2B
S08 – 3/4"-16 UNF-2B
* S10 – 7/8"-14 UNF-2B
S12 – 1 1/16"-12 UNF-2B
S16 – 1 5/16"-12 UNF-2B
Connessioni - *Port sizes*

* P/R
Regolazioni-*Adjustements*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

SEZIONE L
Valvole reg. di flusso bidirezionali

SECTION L
Needle Valves

Queste valvole controllano il flusso in entrambe le direzioni. La regolazione del flusso si effettua mediante rotazione del pomolo o tramite vite con esagono incassato.
La portata può variare in funzione della pressione e della viscosità del fluido.
Sono disponibili 3 soluzioni di montaggio: in linea, a cartuccia e a pannello.

These needle valves restrict in both directions.
Flow regulation is obtained by turning a knob or through a socket screw.
Rated flow may change depending on the pressure and fluid viscosity.
3 solutions of assembly are available: in line, catridge and panel.

PAGINA / *PAGE*	**CODICE / *CODE***	**PAGINA / *PAGE***	**CODICE / *CODE***
L 050	VPB	L 070	VPMB
L 060	VPSB	L 100	VPB C

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

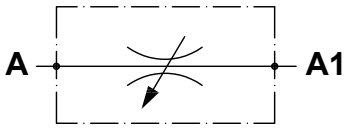
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

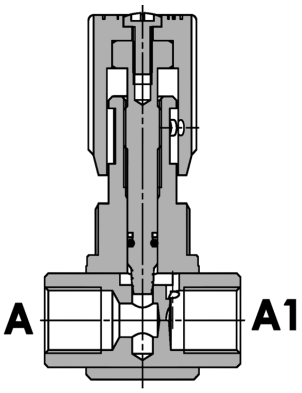
VPB-*-*-*

L - 050/1

Valvola regolatrice di flusso bidirezionale
Needle valve

Rev. 01-2010/02





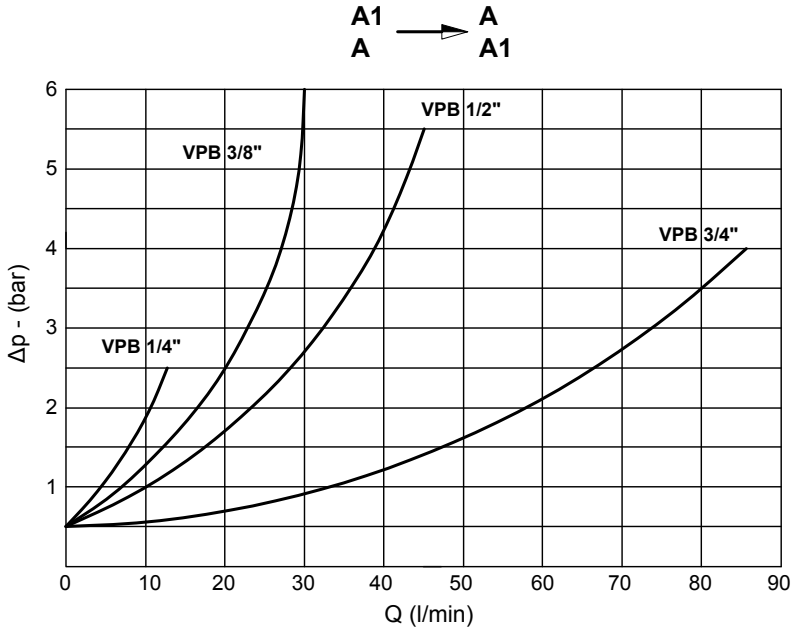
SPECIFICHE TECNICHE
Materiali: corpo e parti interne in acciaio. La superficie esterna è protetta mediante zincatura.
Portata max.: 85 l/min
Pressione max.: 300 bar, vedasi tabella a parte

TECHNICAL SPECIFICATIONS
Materials: *body and internal parts are steel made. External surface zinc plated.*
Rated flow: *85 l/min*
Max. pressure: *300 bar, see data sheet*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

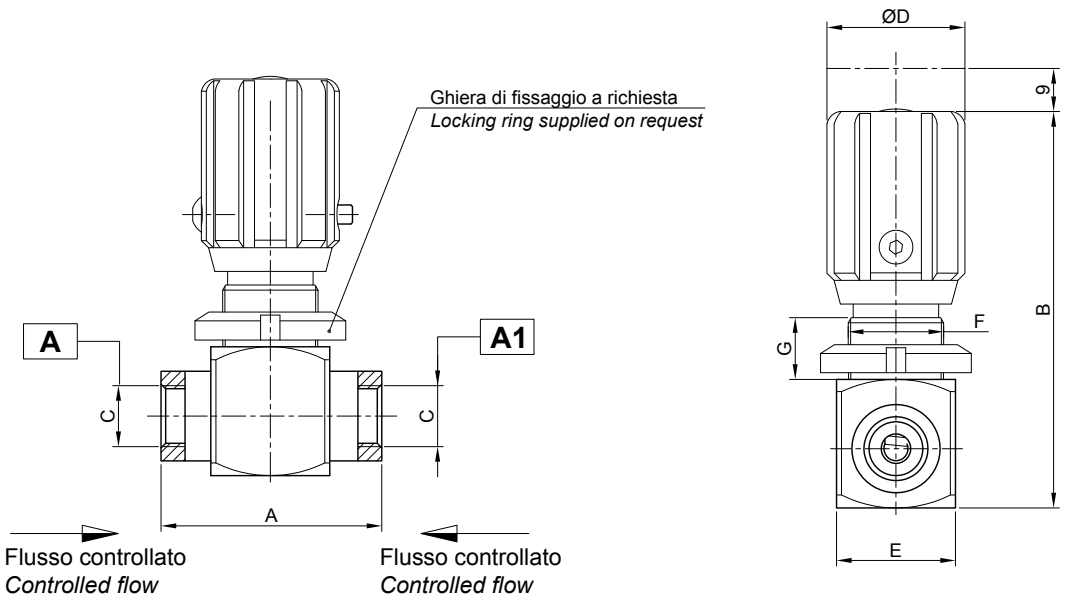


VPB-*-*-*

L - 050/2

Valvola regolatrice di flusso bidirezionale
Needle valve

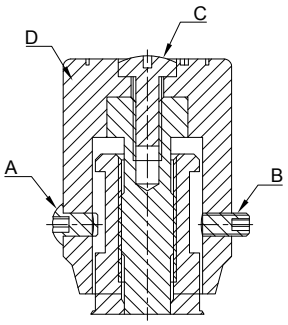
Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	D	E	F	G	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	mm	mm	mm	mm	Kg
VPB 1/4"	12	300	45	80	1/4"	28	25	M21X1	13	0.210
VPB 3/8"	30	300	52	85	3/8"	28	30	M25X1.5	13	0.350
VPB 1/2"	45	280	60	92	1/2"	38	35	M30X1.5	13	0.500
VPB 3/4"	85	250	68	105	3/4"	38	45	M35X1.5	14	0.870

ISTRUZIONI PER IL MONTAGGIO A PANNELLO

NSTRUCTIONS FOR PANEL MOUNTING



Togliere le viti "A" di fine corsa, "B" di bloccaggio regolazione e "C" di fissaggio pomolo; sfilare il pomolo "D" ed installare la valvola a pannello fissandola con relativa ghiera.
Rimontare nell'ordine inverso i particolari precedentemente smontati.

Remove the screw "A" of limit stop, "B" for blocking and regulation, "C" of handwheel fixing; withdraw the handwheel "D" and install the panel-valve by fixing it with the relative metal ring.
Re-assemble in reversed order the parts previously disassembled.

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P B **1 / 2** **F** *****

1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

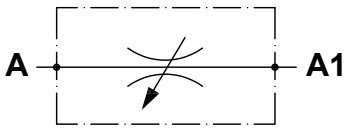
F – ghiera di fissaggio – *locking ring* *
Omettere se non richiesta – *omit if not requested*

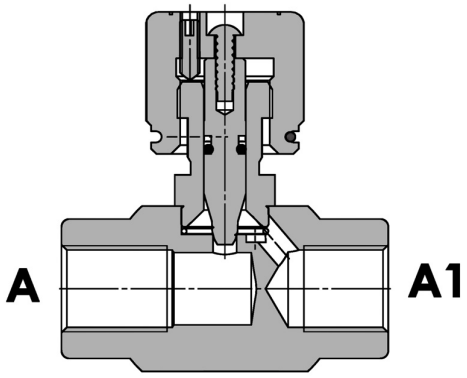
VPSB-*-*

L - 060/1

Valvola regolatrice di flusso bidirezionale
Needle valve

Rev. 01-2010/02





SPECIFICHE TECNICHE
Materiali: corpo e parti interne in acciaio. La superficie esterna è protetta mediante zincatura.
Portata max.: fino a 25 l/min
Pressione max.: 300 bar, vedasi tabella a parte

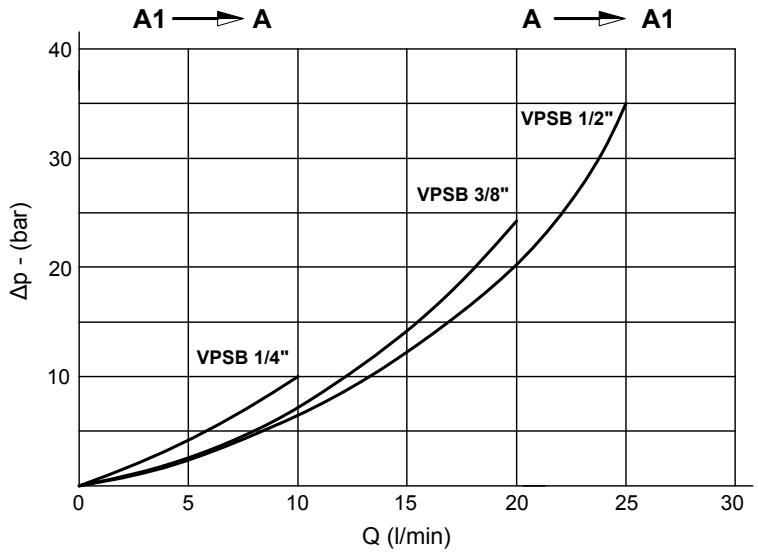
TECHNICAL SPECIFICATIONS
Materials: *body and internal parts are steel made. External surface zinc plated.*
Rated flow: *up to 25 l/min*
Max. pressure: *300 bar, see data sheet*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

STROZZATORE TUTTO APERTO - *FULLY OPEN THROTTLE*

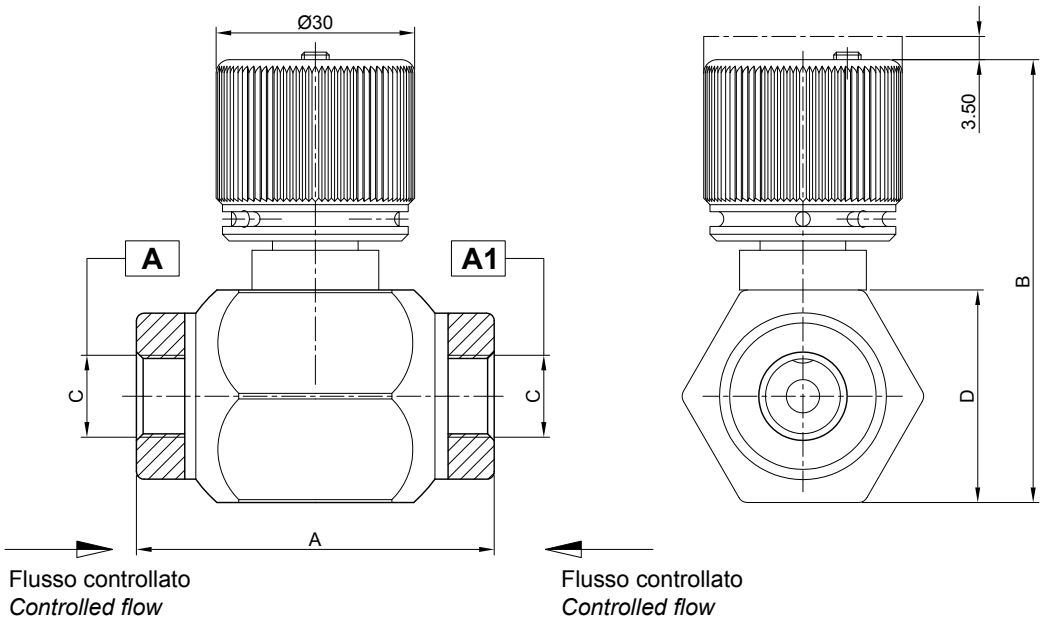


VPSB-*-*

L - 060/2

Valvola regolatrice di flusso bidirezionale
Needle valve

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	D	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	mm	Kg
VPSB 1/4"	12	300	54	64	1/4"	32	0.300
VPSB 3/8"	20	300	62	64	3/8"	32	0.310
VPSB 1/2"	25	280	62	64	1/2"	32	0.310

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P S B **1 / 2** *****

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

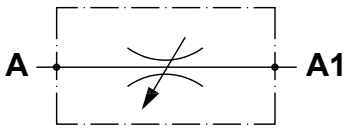
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

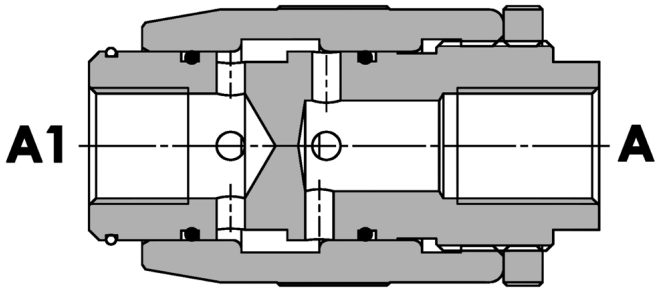
VPMB-*-*

L - 070/1

Valvola regolatrice di flusso bidirezionale, tipo a manicotto
Needle valve, barrel type

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo e parti interne in acciaio. La superficie esterna è protetta mediante zincatura.
Portata max.: fino a 150 l/min
Pressione max.: 350 bar, vedasi tabella a parte

TECHNICAL SPECIFICATIONS

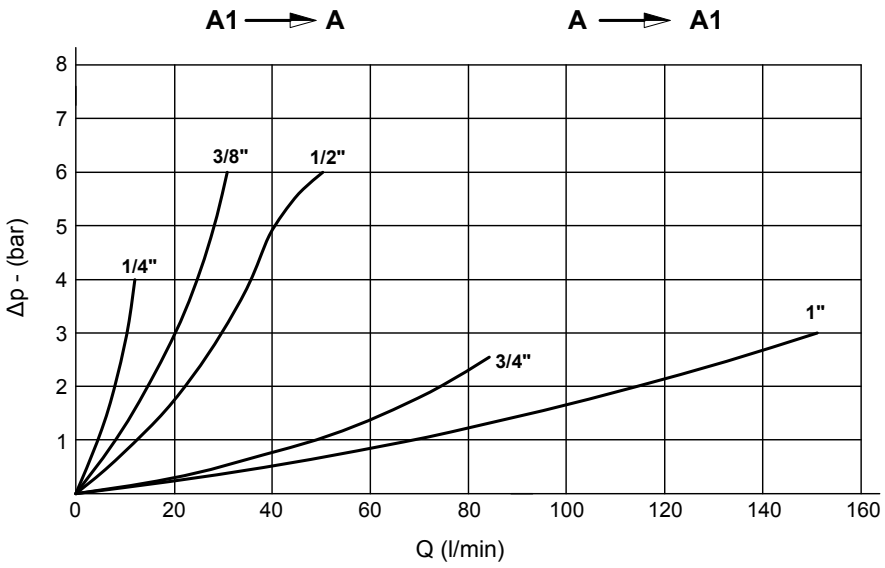
Materials: *body and internal parts are steel made. External surface zinc plated.*
Rated flow: *up to 150 l/min*
Max. pressure: *350 bar, see data sheet*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

STROZZATORE TUTTO APERTO - *FULLY OPEN THROTTLE*

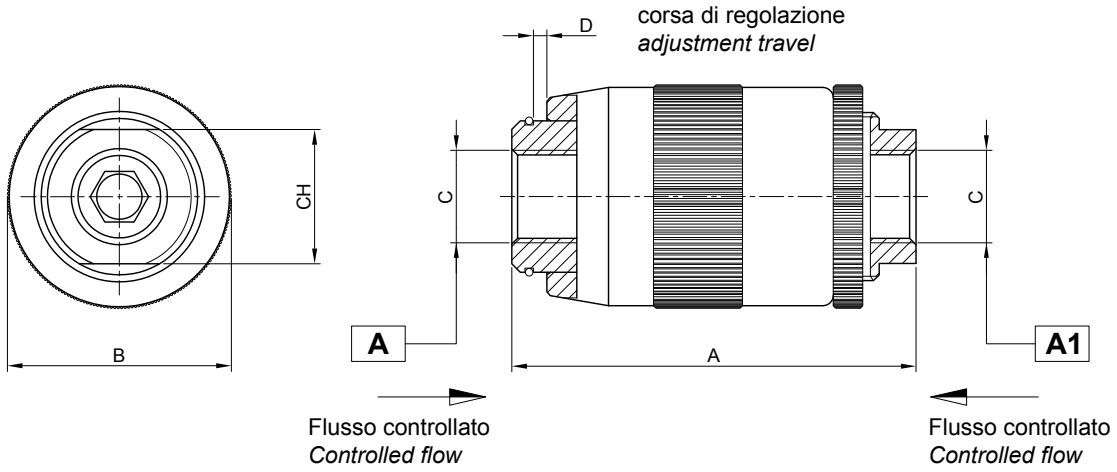


VPMB-*-*

L - 070/2

Valvola regolatrice di flusso bidirezionale, tipo a manicotto
Needle valve, barrel type

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	D	CH	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	BSPP	mm	mm	Kg
VPMB 1/4	12	350	62	34	1/4"	4.5	19	0.275
VPMB 3/8	30	350	72	40	3/8"	5.5	24	0.430
VPMB 1/2	45	310	80	46	1/2"	7	30	0.630
VPMB 3/4	85	280	100	54	3/4"	10	36	1.050
VPMB 1	150	250	125	65	1"	12	41	1.960

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M B **1 / 2** *****

1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

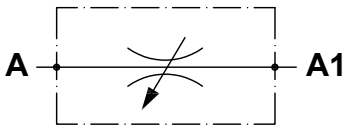
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

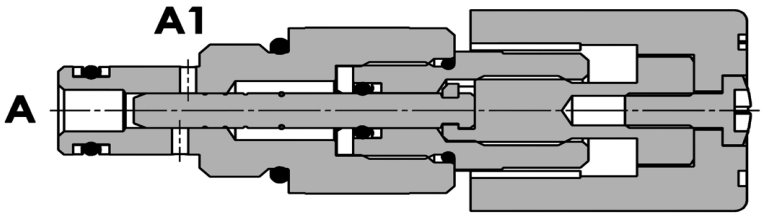
VPB C-*-*-*

L - 100/1

Valvola regolatrice di flusso bidirezionale, versione a cartuccia, cavità SAE
Needle valve, cartridge version, SAE cavity

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. L'otturatore conico guidato è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata max.: fino a 140 l/min
Pressione max.: 350 bar, vedasi tabella a parte

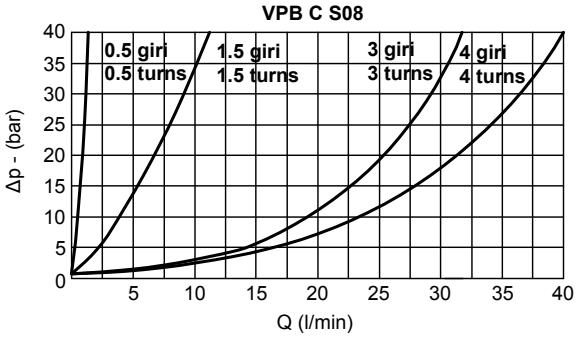
TECHNICAL SPECIFICATIONS

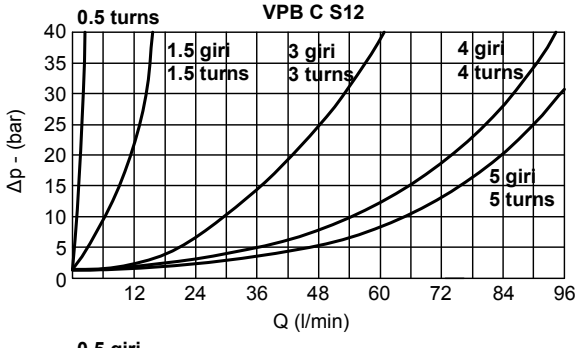
Materials: *body is steel made. Guided poppet is in hardened steel.*
External surface is yellow zinc plated.
Rated flow: *up to 140 l/min*
Max. pressure: *350 bar, see data sheet*

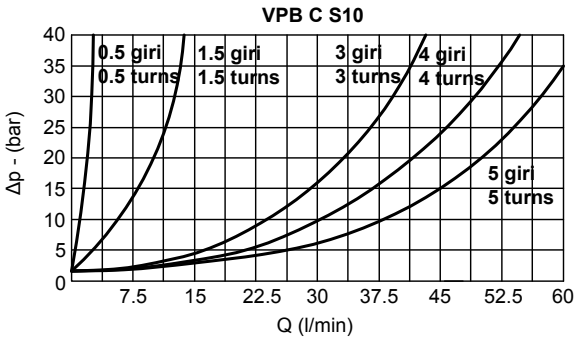
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

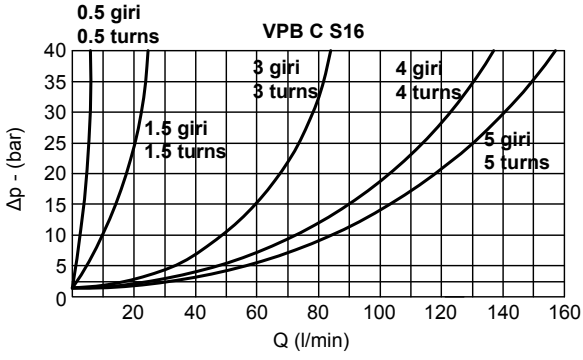
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C









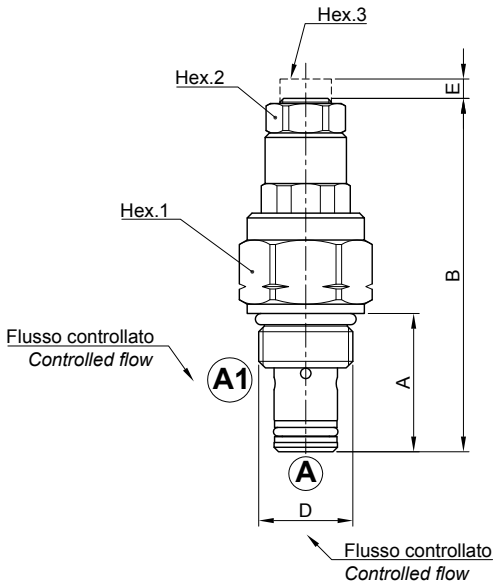
VPB C-*-*-*

L - 100/2

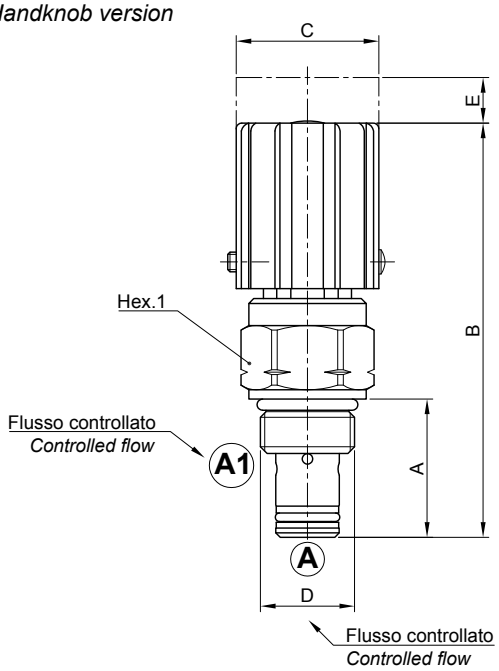
Valvola regolatrice di flusso bidirezionale, versione a cartuccia, cavità SAE
Needle valve, cartridge version, SAE cavity

Rev. 01-2010/02

VPB C...P
Versione a vite con esagon incassato
Socket screw version



VPB C...R
Versione a vite con pomolo
Handknob version



TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	A	B	C	D	E	HEX.1	HEX.2	HEX.3	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
	L/MIN	BAR	mm	mm	mm	UNF-2A	mm	mm	mm	mm	mm	mm	Kg
VPB C S08 P	40	350	27.6	72.1	-	3/4"-16	5	24	17	5	23081	40 - 45	0.136
VPB C S10 P	60	350	32.8	76.5	-	7/8"-14	6	27	17	5	23101	60 - 70	0.174
VPB C S12 P	80	350	46	86.5	-	1 1/16"-12	7	32	17	6	23121	90 - 100	0.252
VPB C S16 P	140	350	46.5	88.5	-	1 5/16"-12	6.6	40	17	6	23161	110 - 120	0.382
VPB C S08 R	40	350	27.6	84.6	28	3/4"-16	5	24	-	-	23081	40 - 45	0.160
VPB C S10 R	60	350	32.8	89	28	7/8"-14	6	27	-	-	23101	60 - 70	0.198
VPB C S12 R	80	350	46	95	38	1 1/16"-12	7	32	-	-	23121	90 - 100	0.286
VPB C S16 R	140	350	46.5	97	38	1 5/16"-12	6.6	40	-	-	23161	110 - 120	0.418

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPBC **S08** **P** *****

* S08 – 3/4"-16 UNF-2B
* S10 – 7/8"-14 UNF-2B
S12 – 1 1/16"-12 UNF-2B
S16 – 1 5/16"-12 UNF-2B
Connessioni - *Port sizes*

* P/R
Regolazioni-*Adjustements*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

SEZIONE M
Valvole reg. di flusso compensate

SECTION M
Compensated flow control Valves

Queste valvole permettono la regolazione del flusso mantenendolo costante al variare della pressione all'utenza e della portata in ingresso.
Possono essere a taratura fissa o regolabile, a due o tre vie, in quest'ultimo caso, con eccedenza a scarico o in pressione.
Sono disponibili 3 soluzioni di montaggio: in linea, a cartuccia e inserto. Per le valvole ad inserto VSC / VSCR sono disponibili corpi maschio-femmina e femmina-femmina (vedere sezione W100).

These valves allow the flow regulation maintaining its value costant to the varaition of pressure and the incoming flow.
They can have fixed or adjustable regulation, two or three way, and in this case, with exceeding flow to tank or in pressure.
3 solutions of assembly are available: in line, catridge and insert. For the insert valves VSC / VSCR are available male-female and female-female housings (see section W100).

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
M 010	VPCU	M 280	VPVP-90-C-R
M 050	VPRUC	M 309	VPVP-H
M 100	VPRBC	M 310	VPVP
M 209	VPRF-H	M 440	VPVPF-60-C
M 210	VPRF	M 480	VSC
M 215	VPRFU	M 485	VSC G
M 260	VPVP-50-C-R	M 490	VSCR

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

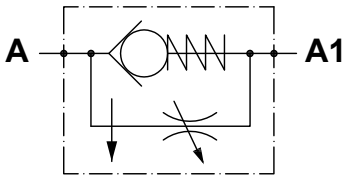
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

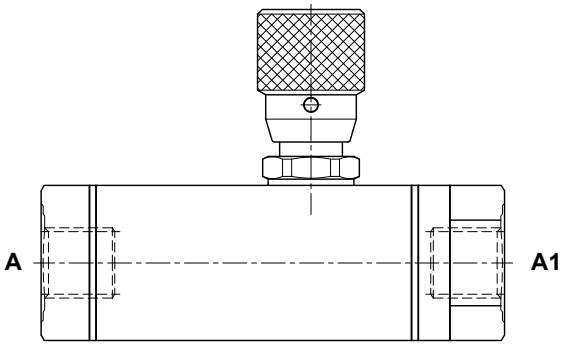
VPCU-*

M - 010/1

Valvola regolatrice di flusso unidirezionale compensata
Compensated flow control valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo e parti interne in acciaio. La superficie esterna è protetta mediante zincatura.
Portata max.: 18 l/min
Pressione max.: 250 bar, vedasi tabella a parte

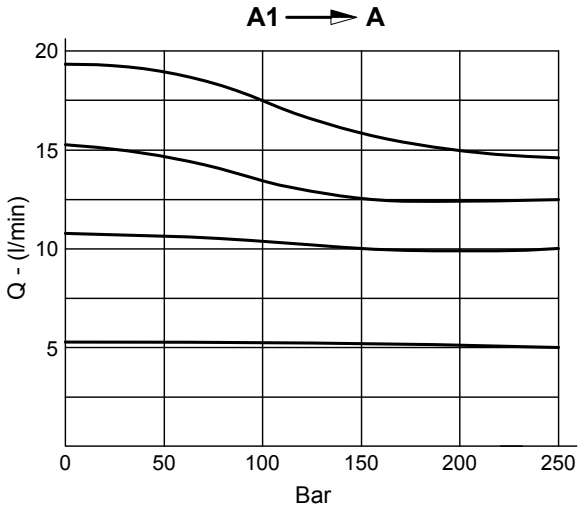
TECHNICAL SPECIFICATIONS

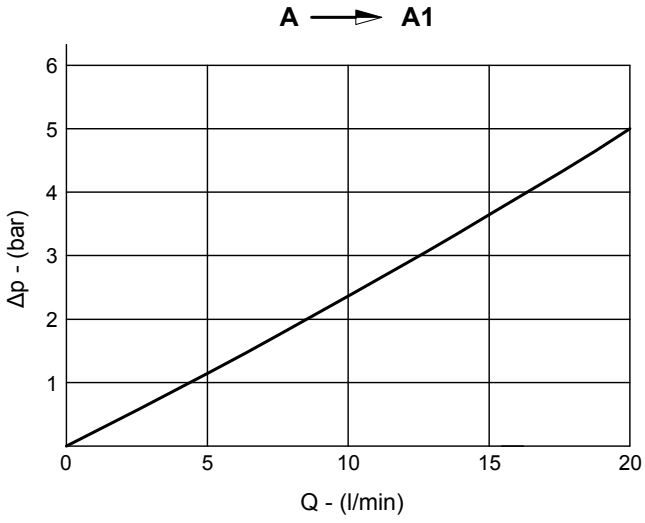
Materials: *body and internal parts are steel made. External surface zinc plated.*
Rated flow: *18 l/min*
Max. pressure: *250 bar, see data sheet*

DIAGRAMMA PERDITE DI CARICO E COMPENSAZIONE - *PRESSURE DROP AND COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



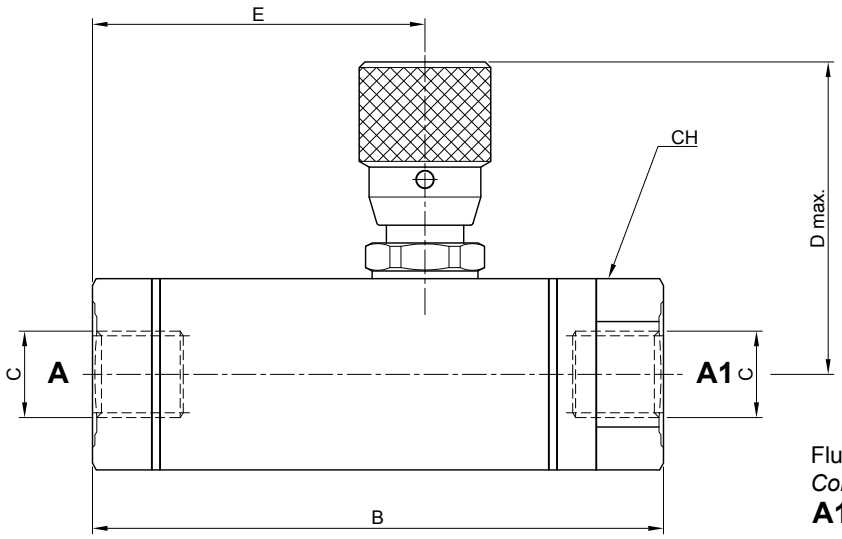


VPCU-*

M - 010/2

Valvola regolatrice di flusso unidirezionale compensata
Compensated flow control valve

Rev. 01-2010/02



Flusso libero
Free flow
A-A1

Flusso controllato
Controlled flow
A1-A

TIPO *TYPE*	PORTATA MAX. *MAX FLOW*	PRESSIONE MAX. *MAX PRESSURE*	B	C	D	E	CH	PESO *WEIGHT*
	L/MIN	BAR	mm	BSPP	mm	mm	mm	Kg
VPCU 1/4	10	250	88	1/4"	56	51	27	0.340
VPCU 3/8	18	250	88	3/8"	56	51	27	0.320

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P C U **3 / 8**

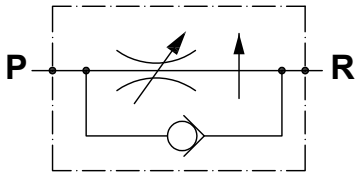
1/4 – 1/4" BSPP
* 3/8 – 3/8" BSPP
Connessioni - *Port sizes*

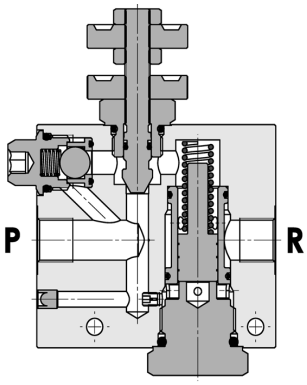
VPRUC-*-*-*-*

M - 050/1

Regolatore di flusso compensato, con ritorno libero
In line pressure compensated flow regulator, with free reverse flow

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in alluminio (standard), a richiesta in acciaio. Componenti interni in acciaio trattato termicamente.

Portata max.: - 30 l/min per 3/8";
- 50 l/min per 1/2";
- 90 l/min per 3/4"

Pressione max.: 250 bar (std), 350 bar (S)

TECHNICAL SPECIFICATIONS

Materials: *aluminium body (std), steel body on request.*
Internal parts are in hardened steel.

Rated flow: *- 30 l/min for 3/8";*
- 50 l/min for 1/2";
- 90 l/min for 3/4"

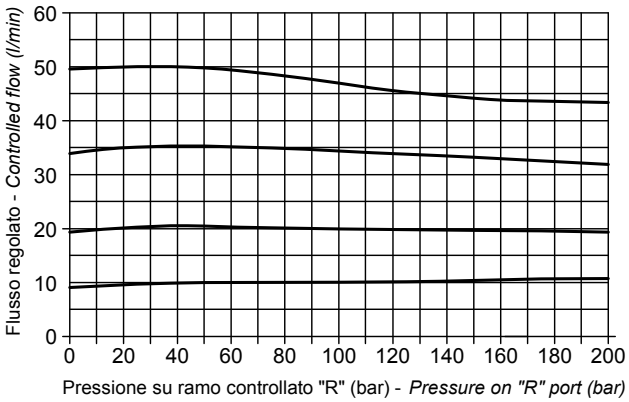
Max. pressure: *250 bar (std), 350 bar (S)*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

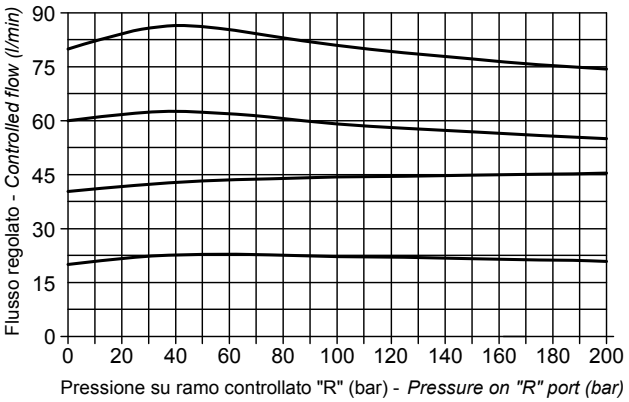
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

VPRUC 3/8" - 1/2"



VPRUC 3/4"



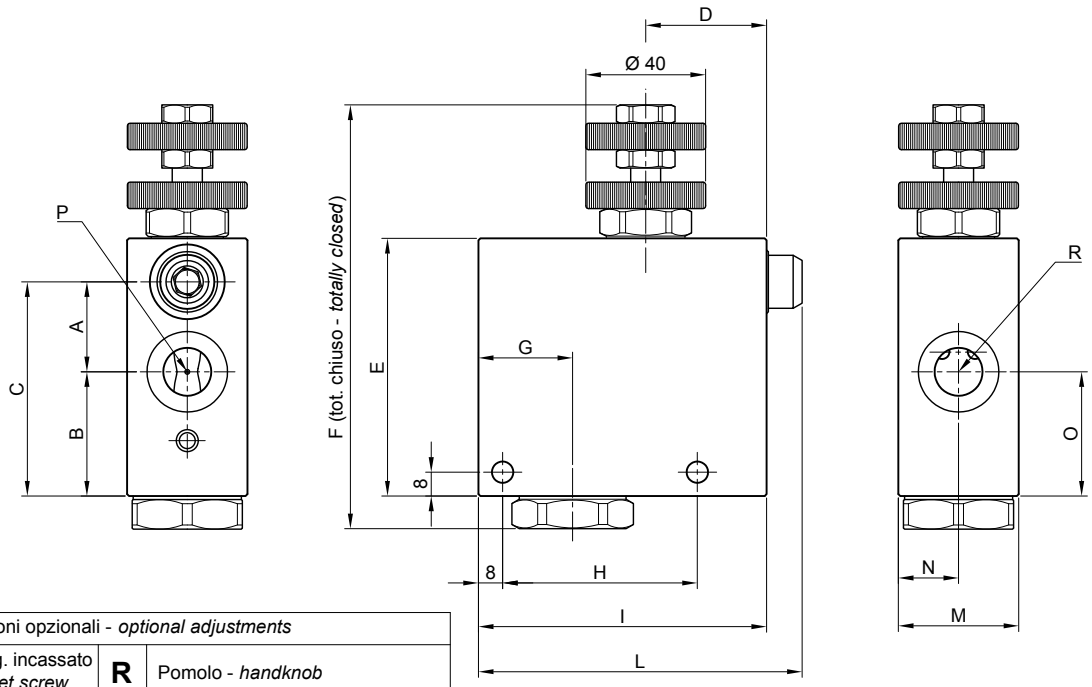
VPRUC-*-*-*-*

M - 050/2

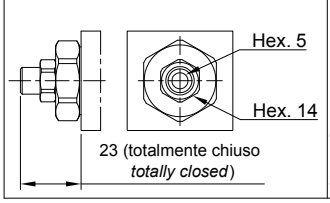
Regolatore di flusso compensato, con ritorno libero

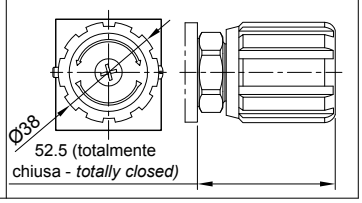
In line pressure compensated flow regulator, with free reverse flow

Rev. 02-2010/05



Regolazioni opzionali - *optional adjustments*			
P	Vite esterna ed esag. incassato *Leakproof hex. socket screw*	**R**	Pomolo - *handknob*





TIPO *TYPE*	PORTATA MAX. *MAX FLOW* L/MIN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M mm	N mm	O mm	P BSPP	R BSPP	U mm	PESO *WEIGHT* Kg
VPRUC-3/8	Vedere specifiche *See specifications*	29.5	42	71.5	40	85	139.5	31	64	95	106.5	40	20	41	3/8"	3/8"	6.5	1.085-2.450(S)
VPRUC-1/2		29.5	42	71.5	40	85	139.5	31	64	95	106.5	40	20	41	1/2"	1/2"	6.5	1.085-2.450(S)
VPRUC-3/4		38	42	80	52	100	154.5	35	82	120	131.5	50	25	44	3/4"	3/4"	8.5	1.085-4.320(S)

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRUC **3/8** **S** **G** ***

* 3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

* Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

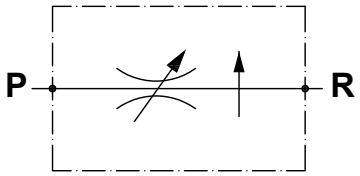
G: ghiera – *ring*
P: vite con esag. incassato - *leakproof hex. socket screw*
R: pomolo – *handknob* *
Regolazioni – *Adjustements*

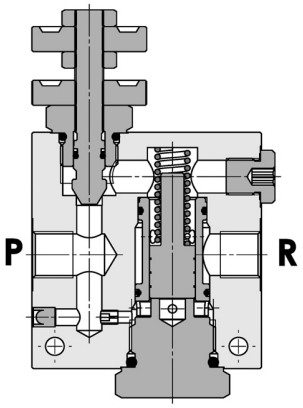
VPRBC-*-*-*-*

M - 100/1

Regolatore di flusso a 2 vie compensato, in linea
In line pressure compensated two-way flow regulator

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in alluminio (standard), a richiesta in acciaio. Componenti interni in acciaio trattato termicamente.

Portata max.: - 30 l/min per 3/8";
- 50 l/min per 1/2";
- 90 l/min per 3/4"

Pressione max.: 250 bar (std), 350 bar (S)

TECHNICAL SPECIFICATIONS

Materials: *aluminium body (std), steel body on request.*
Internal parts are in hardened steel.

Rated flow: *- 30 l/min for 3/8";*
- 50 l/min for 1/2";
- 90 l/min for 3/4"

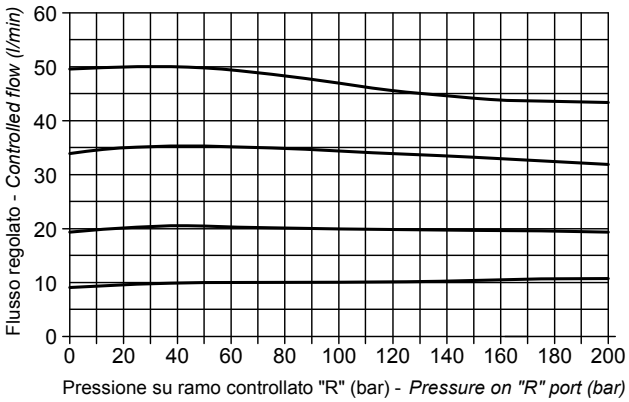
Max. pressure: *250 bar (std), 350 bar (S)*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

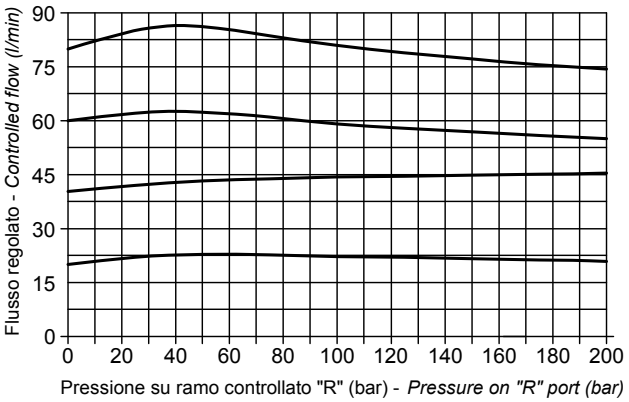
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

VPRBC 3/8" - 1/2"



VPRBC 3/4"

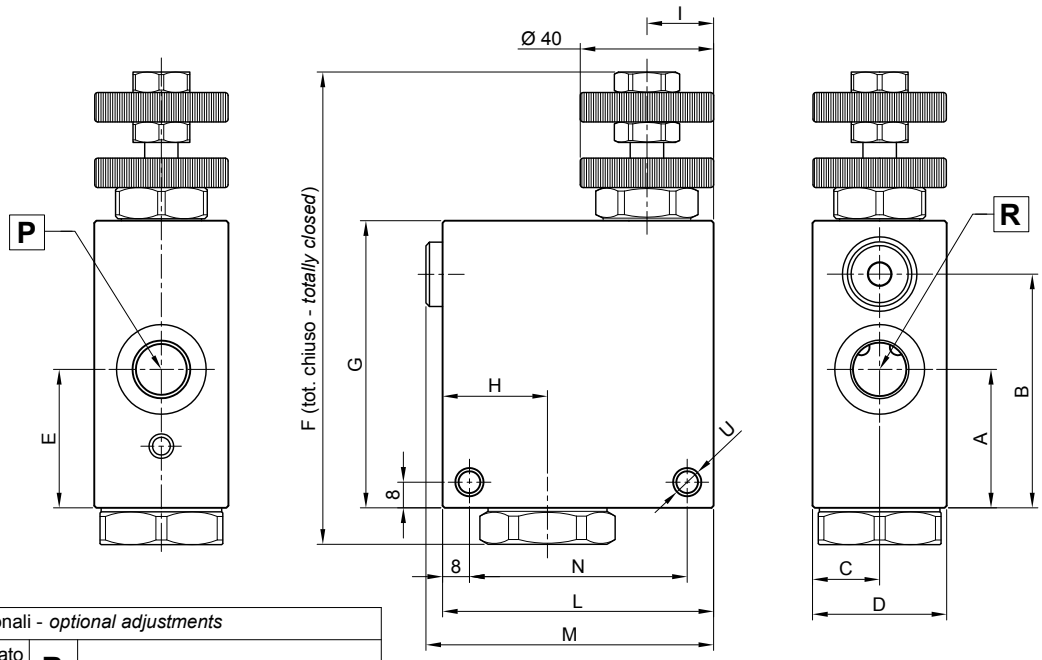


VPRBC-*-*-*-*

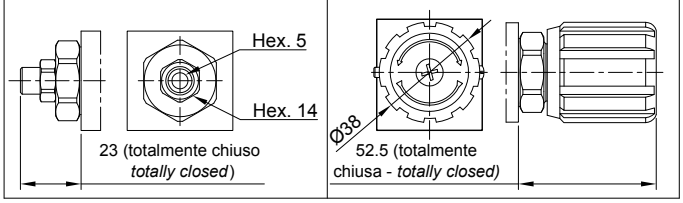
M - 100/2

Regolatore di flusso a 2 vie compensato, in linea
In line pressure compensated two-way flow regulator

Rev. 02-2010/05



Regolazioni opzionali - *optional adjustments*			
P	Vite esterna ed esag. incassato *Leakproof hex. socket screw*	**R**	Pomolo - *handknob*



TIPO *TYPE*	PORTATA MAX. *MAX FLOW* L/MIN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M mm	N mm	P BSPP	R BSPP	U mm	PESO *WEIGHT* Kg
VPRBC-3/8	Vedere specifiche *See specifications*	41	69	20	40	41	139.5	85	31	20	80	85	64	3/8"	3/8"	6.5	0.900-1.950(S)
VPRBC-1/2		41	69	20	40	41	139.5	85	31	20	80	85	64	1/2"	1/2"	6.5	0.900-1.950(S)
VPRBC-3/4		44	80	25	50	44	154.5	100	35	30	100	105	82	3/4"	3/4"	8.5	1.580-3.550(S)

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRBC **3/8** **S** **G** *

* 3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

* Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

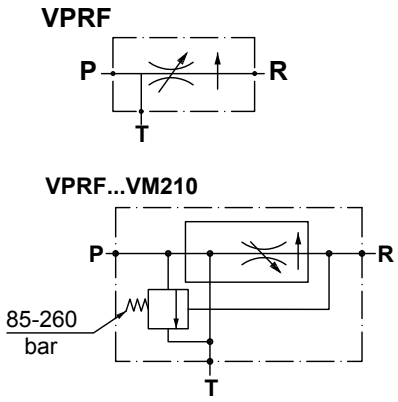
G: ghiera – *ring*
P: vite con esag. incassato - *leakproof hex. socket screw*
R: pomolo – *handknob* *
Regolazioni – *Adjustements*

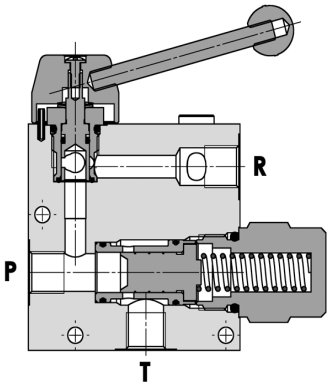
VPRF-*-*-H-*-*

M - 209/1

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, montaggio in linea
In line three way pressure compensated flow regulator, with exceeding flow to tank

Rev. 02-2010/04





SPECIFICHE TECNICHE

Materiali: corpo in alluminio (standard), a richiesta in acciaio. Componenti interni in acciaio trattato termicamente.

Portata max.:

- 50 l/min con 30 l/min su ramo regolato “R” per 3/8"
- 90 l/min con 50 l/min su ramo regolato “R” per 1/2"

Pressione max.: 250 bar (std), 350 bar (ver.S)

Pressione di standby: 5 bar

Peso: 1.120 Kg (std), 3.020 Kg (ver.S)

TECHNICAL SPECIFICATIONS

Materials: *aluminium body (std), steel body on request.*
Internal parts are in hardened steel.

Rated flow:

- 50 l/min with 30 l/min in “R” port for 3/8”
- 90 l/min with 50 l/min in “R” port for 1/2”

Max. pressure: *250 bar (std), 350 bar (ver.S)*

Standby pressure: *5 bar*

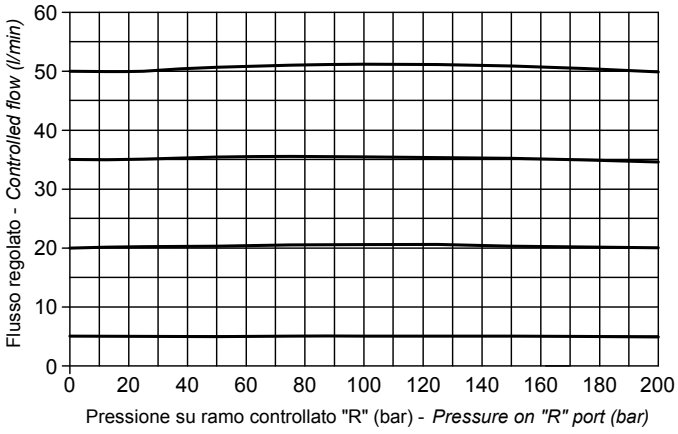
Weight: *1.120 Kg (std), 3.020 Kg (ver.S)*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

VPRF 3/8" - 1/2" H



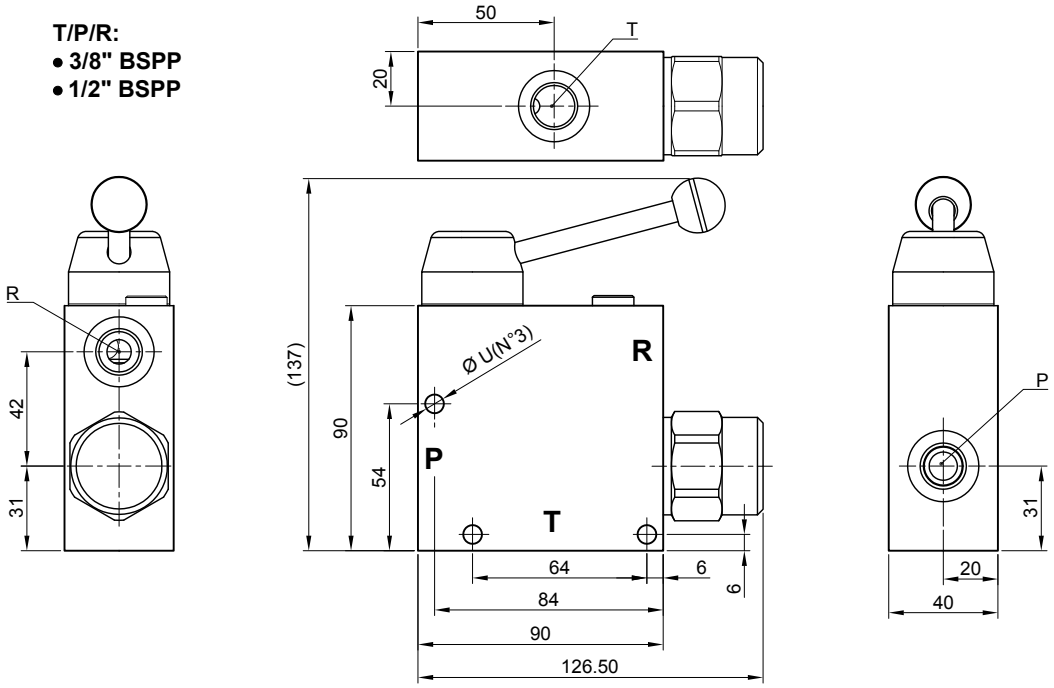
VPRF-*-*-H-*-*

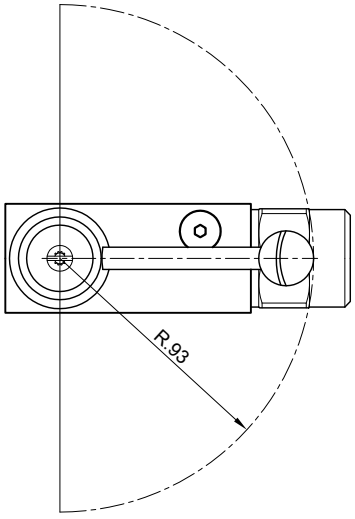
M - 209/2

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, montaggio in linea
In line three way pressure compensated flow regulator, with exceeding flow to tank

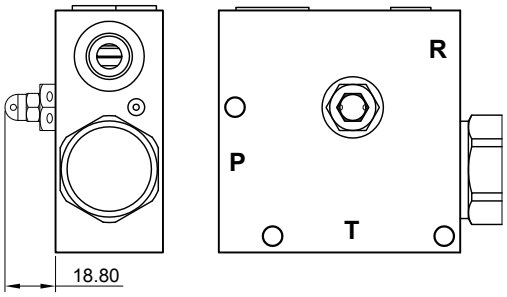
Rev. 02-2010/04

T/P/R:
- **3/8" BSPP**
- **1/2" BSPP**





Versione VM 210 (opzionale)
Version VM 210 (optional)



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P R F | **3 / 8** | **S** | **H** | **V M 2 1 0** | ***

* 3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

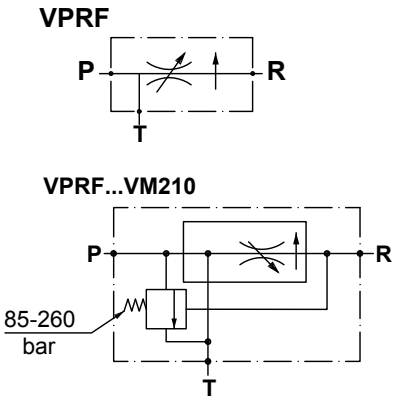
VM210 - Valvola di massima pressione
Omettere se non richiesta
VM210 – main relief valve *
Omit if not requested

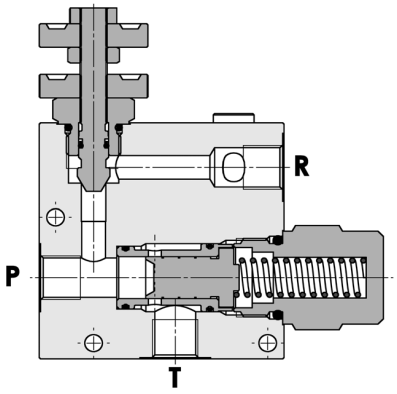
VPRF-*-*-*-*-*

M - 210/1

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, montaggio in linea
In line three way pressure compensated flow regulator, with exceeding flow to tank

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in alluminio (standard), a richiesta in acciaio. Componenti interni in acciaio trattato termicamente.

Portata max.:

- 50 l/min con 30 l/min su ramo regolato “R” per 3/8"
- 90 l/min con 50 l/min su ramo regolato “R” per 1/2"
- 150 l/min con 90 l/min su ramo regolato “R” per 3/4"
- 240 l/min con 150 l/min su ramo regolato “R” per 1"

Pressione max.: 250 bar (std), 350 bar (ver.S)

Pressione di standby: 5 bar

TECHNICAL SPECIFICATIONS

Materials: *aluminium body (std), steel body on request.*

Internal parts are in hardened steel.

Rated flow:

- *50 l/min with 30 l/min in “R” port for 3/8”*
- *90 l/min with 50 l/min in “R” port for 1/2”*
- *150 l/min with 90 l/min in “R” port for 3/4”*
- *240 l/min with 150 l/min in “R” port for 1”*

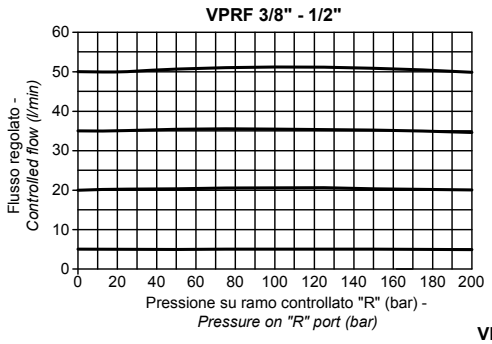
Max. pressure: *250 bar (std), 350 bar (ver.S)*

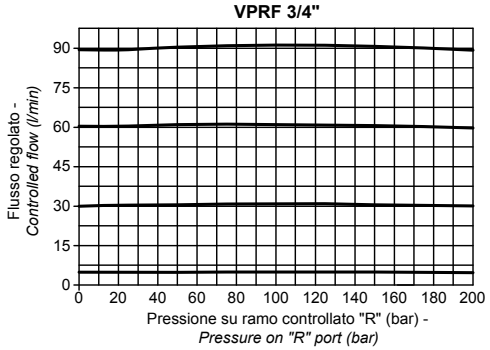
Standby pressure: *5 bar*

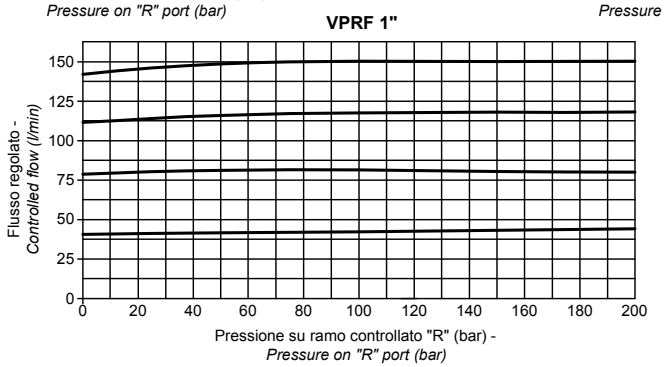
DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C







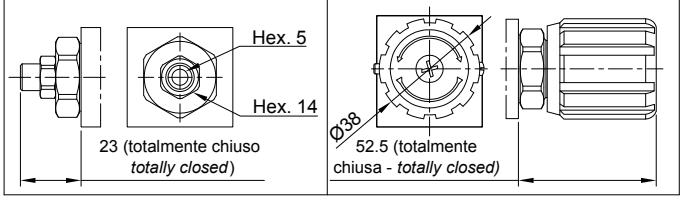
VPRF-*-*-*-*-*

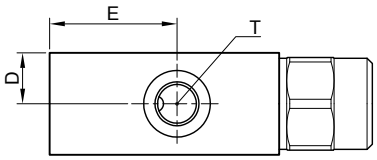
M - 210/2

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, montaggio in linea
In line three way pressure compensated flow regulator, with exceeding flow to tank

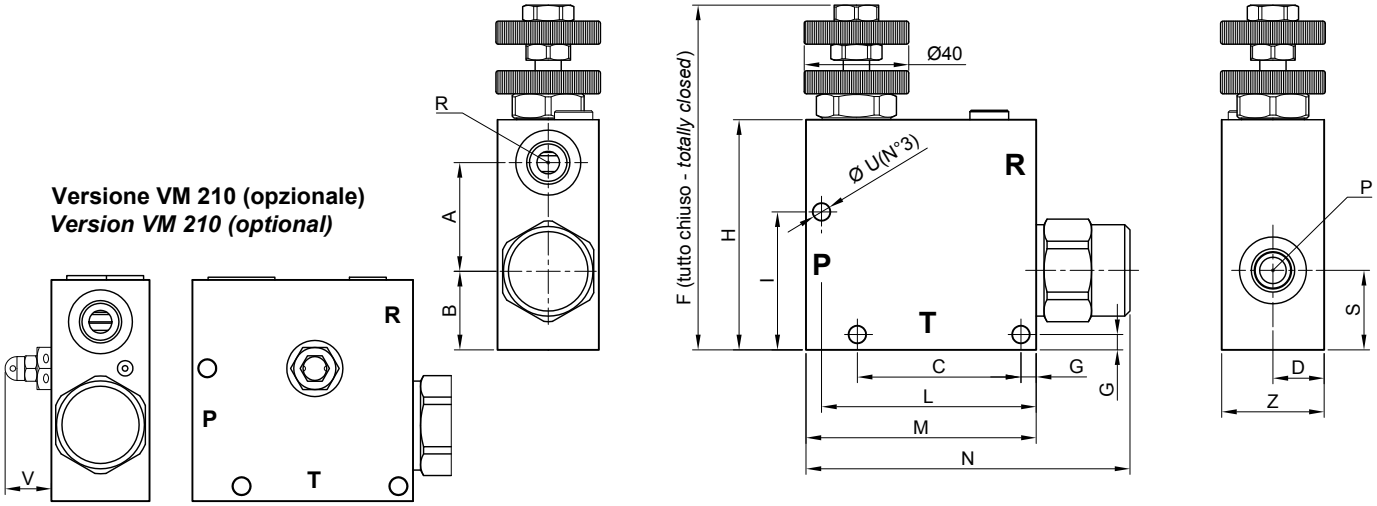
Rev. 02-2010/05

Regolazioni opzionali - *optional adjustments*			
P	Vite esterna ed esag. incassato *Leakproof hex. socket screw*	**R**	Pomolo - *handknob*





Versione VM 210 (opzionale)
Version VM 210 (optional)



TIPO *TYPE*	PORTATA MAX. *MAX FLOW* L/MIN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M mm	N mm	P BSPP	R BSPP	S mm	T BSPP	U mm	V mm	Z mm	PESO *WEIGHT* Kg
VPRF-3/8	Vedere specifiche *See specifications*	42	31	64	20	50	133.5	6	90	54	78	90	126.5	3/8"	3/8"	31	3/8"	6.5	18.8	40	1.155-3.050(S)
VPRF-1/2		42	31	64	20	50	133.5	6	90	54	78	90	126.5	1/2"	1/2"	31	1/2"	6.5	18.8	40	1.130-2.600(S)
VPRF-3/4		50	35	88	25	66	155.5	8	110	63.5	94	110	144.7	3/4"	3/4"	35	3/4"	8.5	16.8	50	2.000-4.730(S)
VPRF-1		63	47	-	35	70	189.5	10	140	90	110	130	150	1"	1"	47	1"	10.5	9	70	3.620-9.000(S)

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRF **3/8** **S** **G** **VM210** *

3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
* 3/4 – 3/4" BSPP
1 – 1" BSPP
Connessioni - *Port sizes*

* Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel

G: ghiera – *ring*
* P: vite con esag. incassato - *leakproof hex. socket screw*
R: pomolo – *handknob*
Regolazioni – *Adjustements*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

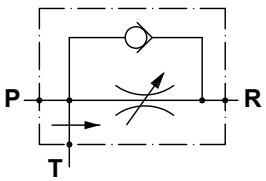
VM210 - Valvola di massima pressione
Omettere se non richiesta *
VM210 – main relief valve
Omit if not requested

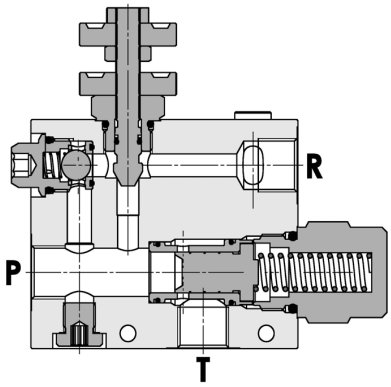
VPRFU-*-*-*-*

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico e ritorno libero, montaggio in linea
In line three way pressure compensated flow regulator, free reverse flow, with exceeding flow to tank

M - 215/1

Rev. 02-2010/04





SPECIFICHE TECNICHE

Materiali: corpo in alluminio (standard), a richiesta in acciaio. Componenti interni in acciaio trattato termicamente.

Portata max.:

- 50 l/min con 30 l/min su ramo regolato “R” per 3/8"
- 90 l/min con 50 l/min su ramo regolato “R” per 1/2"
- 150 l/min con 90 l/min su ramo regolato “R” per 3/4"

Pressione max.: 250 bar (std) - 350 bar (S)

Pressione di standby: 5 bar

TECHNICAL SPECIFICATIONS

Materials: *aluminium body (std), steel body on request.*

Internal parts are in hardened steel.

Rated flow:

- *50 l/min with 30 l/min in “R” port for 3/8”*
- *90 l/min with 50 l/min in “R” port for 1/2”*
- *150 l/min with 90 l/min in “R” port for 3/4”*

Max. pressure: *250 bar (std) - 350 bar (S)*

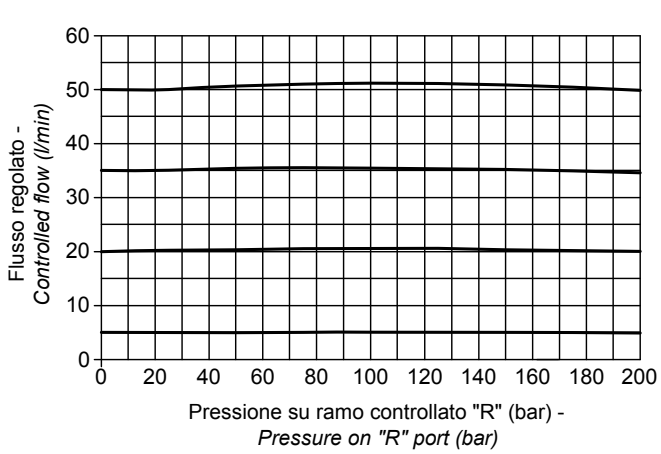
Standby pressure: *5 bar*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

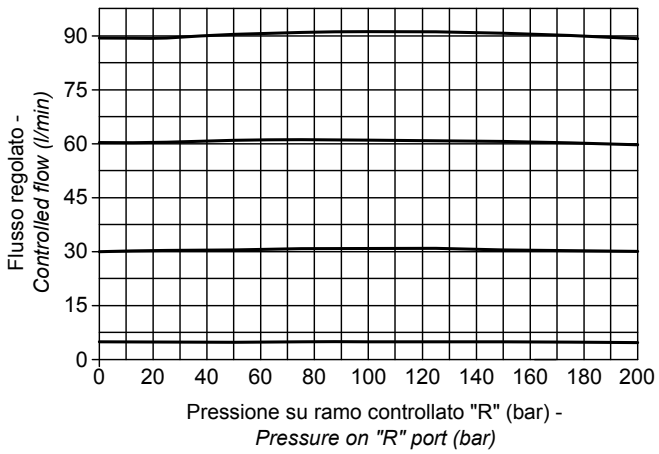
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

VPRFU 3/8" - 1/2"



VPRFU 3/4"



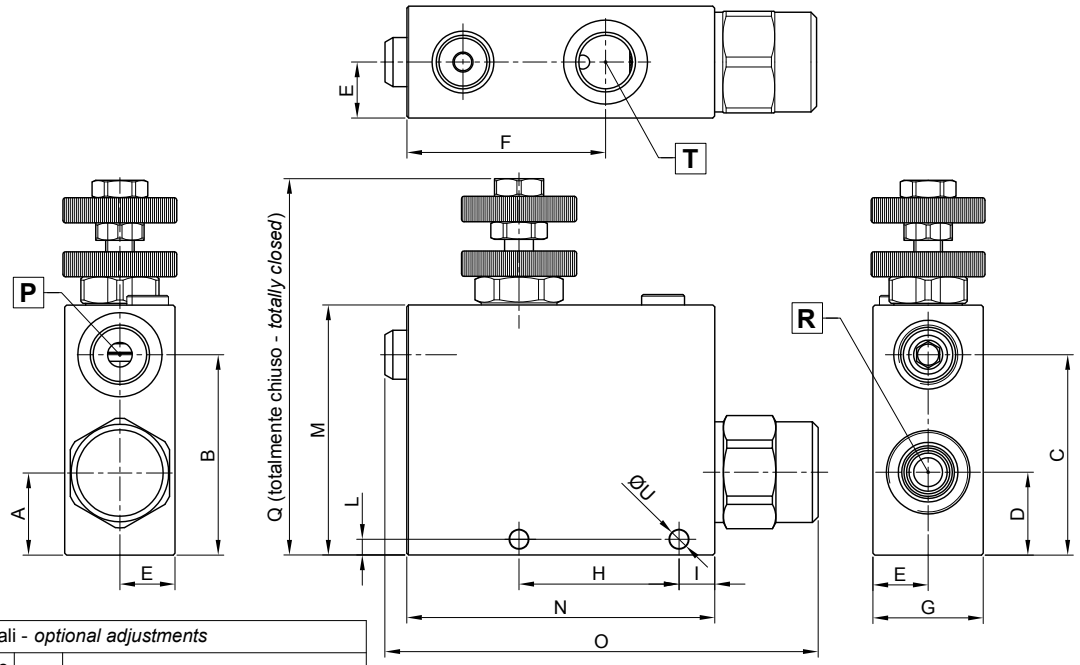
VPRFU-*-*-*-*

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico e ritorno libero, montaggio in linea

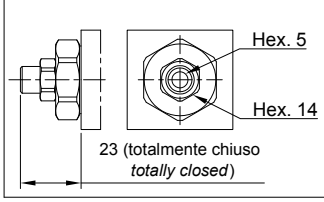
In line three way pressure compensated flow regulator, free reverse flow, with exceeding flow to tank

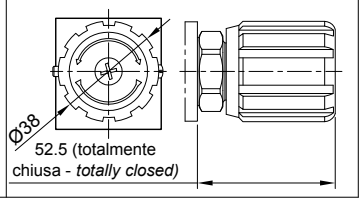
M - 215/2

Rev. 02-2010/04



Regolazioni opzionali - *optional adjustments*			
P	Vite esterna ed esag. incassato *Leakproof hex. socket screw*	**R**	Pomolo - *handknob*





TIPO *TYPE*	PORTATA MAX. *MAX FLOW* L/MIN	P - T S BSPP	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M mm	N mm	O mm	Q mm	PESO *WEIGHT* Kg
VPRFU-3/8	Vedere specifiche *See specifications*	3/8"	30	72	72	30	20	71	40	57	13	6	90	110	155	134	1.400-3.250(S)
VPRFU-1/2		1/2"	30	72	72	30	20	71	40	57	13	6	90	110	155	134	1.350-2.900(S)
VPRFU-3/4		3/4"	35	87	87	35	25	86	50	70	10	7	110	130	175.5	156	2.200-5.100(S)

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRFU **3/8** **S** **G** ***

* 3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

* Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

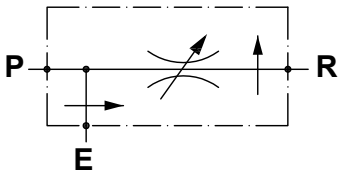
G: ghiera – *ring*
P: vite con esag. incassato - *leakproof hex. socket screw*
R: pomolo – *handknob* *
Regolazioni – *Adjustements*

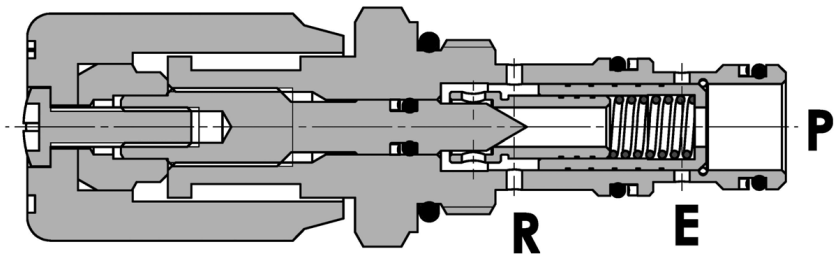
VPVP 50 C-R

Regolatore di flusso a 3 vie compensato, con eccedenza in pressione, versione a cartuccia
Three way, pressure compensated flow regulator, with exceeding flow in pressure, cartridge version

M - 260/1

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata max.:
- 50 l/min con 30 l/min su ramo regolato “R”

Pressione max.: 350 bar
Pressione di standby: 12 bar

TECHNICAL SPECIFICATIONS

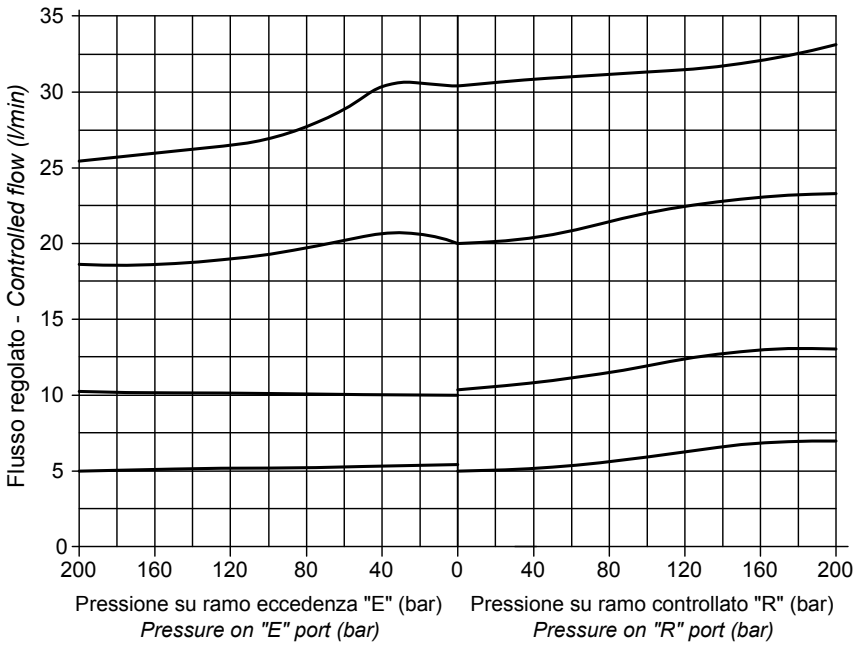
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow:
- *50 l/min with 30 l/min in “R” port*

Max. pressure: *350 bar*
Standby pressure: *12 bar*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

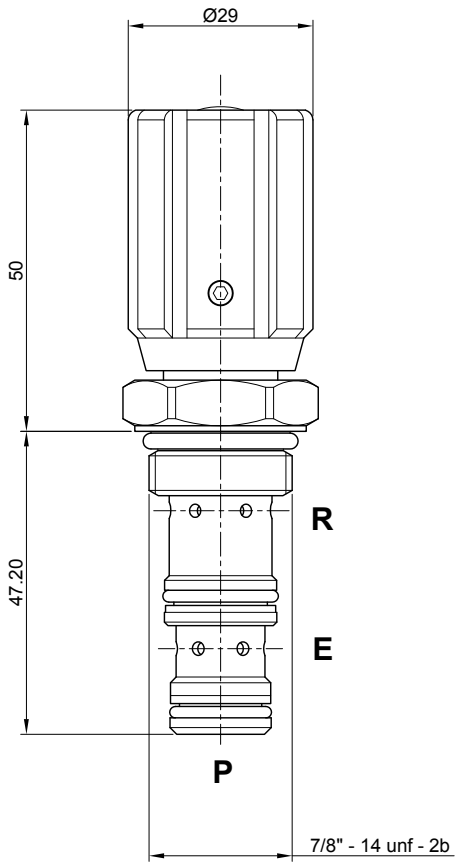


VPVP 50 C-R

Regolatore di flusso a 3 vie compensato, con eccedenza in pressione, versione a cartuccia
Three way, pressure compensated flow regulator, with exceeding flow in pressure, cartridge version

M - 260/2

Rev. 01-2010/02



TIPO *TYPE*	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
		Nm	Kg
VPVP 50 C R	33101	60 - 70	0.285

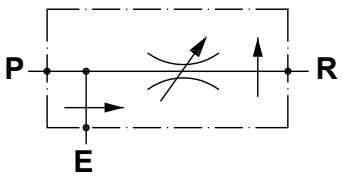
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

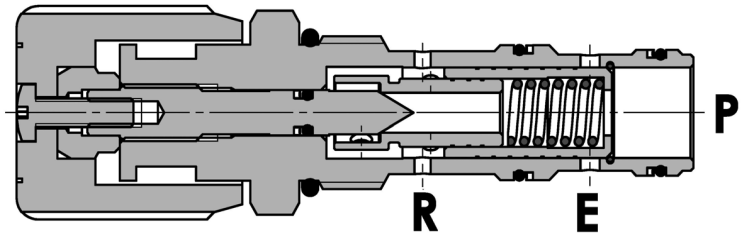
V P V P	5 0	C	R

Regolatore di flusso a 3 vie compensato, con eccedenza in pressione, versione a cartuccia
Three way, pressure compensated flow regulator, with exceeding flow in pressure, cartridge version

M - 280/1

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente.
Portata max.:
- 90 l/min con 60 l/min su ramo regolato “R”

Pressione max.: 350 bar
Pressione di standby: 10 bar

TECHNICAL SPECIFICATIONS

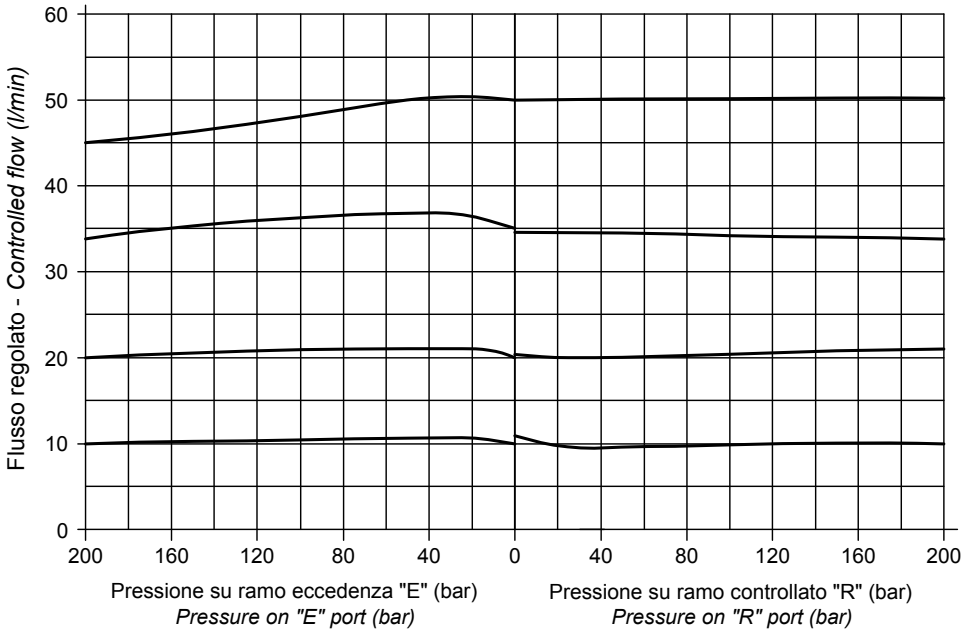
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel.*
Rated flow:
- *90 l/min with 60 l/min in “R” port*

Max. pressure: *350 bar*
Standby pressure: *10 bar*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

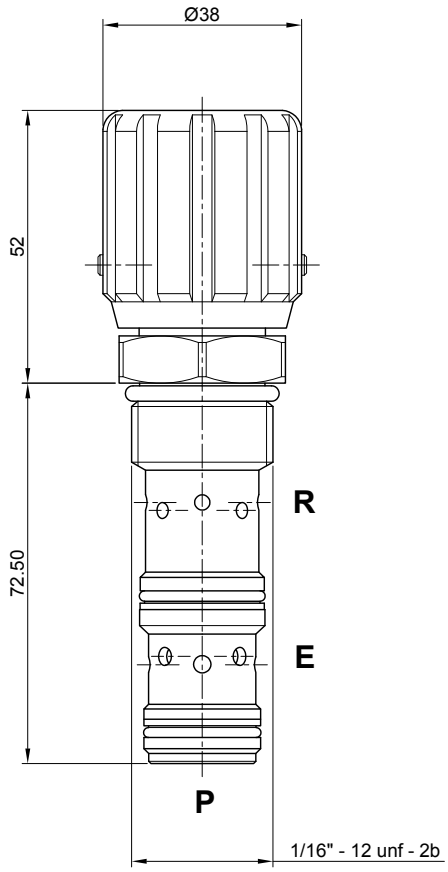


VPVP 90 C-R

Regolatore di flusso a 3 vie compensato, con eccedenza in pressione, versione a cartuccia
Three way, pressure compensated flow regulator, with exceeding flow in pressure, cartridge version

M - 280/2

Rev. 01-2010/02



TIPO *TYPE*	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
		Nm	Kg
VPVP 90 C R	33121	90 - 100	0.341

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

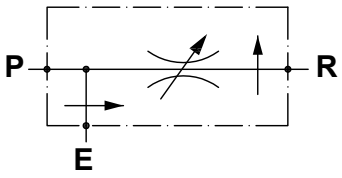
V P V P	9 0	C	R

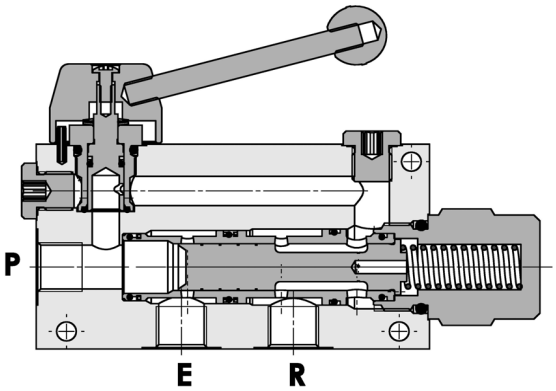
VPVP-*-*-H-*

M - 309/1

Regolatore di flusso a 3 vie compensato, con eccedenza in pressione, montaggio in linea
In line three way pressure compensated flow regulator, with exceeding flow in pressure

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in alluminio (standard), a richiesta in acciaio. Componenti interni in acciaio trattato termicamente.

Portata max.:

- 50 l/min con 30 l/min su ramo regolato “R” per 3/8"
- 90 l/min con 50 l/min su ramo regolato “R” per 1/2"

Pressione max.: 250 bar (std), 350 bar (S)

Pressione di standby: 5 bar

Peso: 1.300 Kg (std), 2.850 Kg (S)

TECHNICAL SPECIFICATIONS

Materials: *aluminium body (std), steel body on request.*
Internal parts are in hardened steel.

Rated flow:

- *50 l/min with 30 l/min in “R” port for 3/8”*
- *90 l/min with 50 l/min in “R” port for 1/2”*

Max. pressure: *250 bar (std), 350 bar (S)*

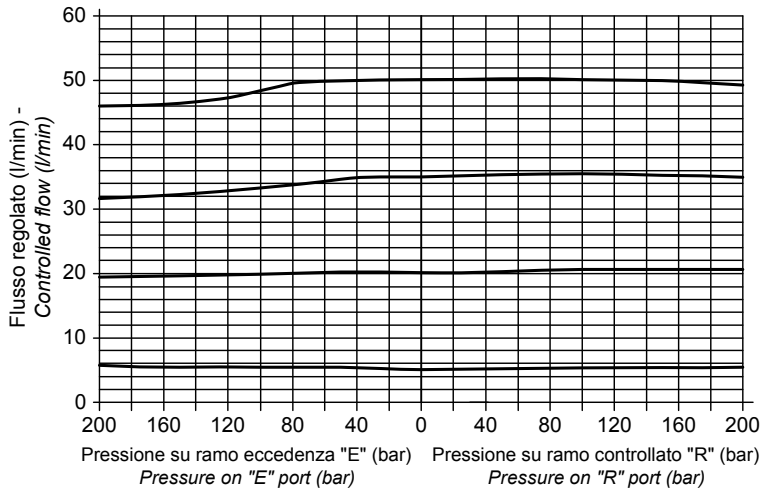
Standby pressure: *about 5 bar*

Weight: *1.300 Kg (std), 2.850 Kg (S)*

DIAGRAMMA COMPENSAZIONE - ***COMPENSATION CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



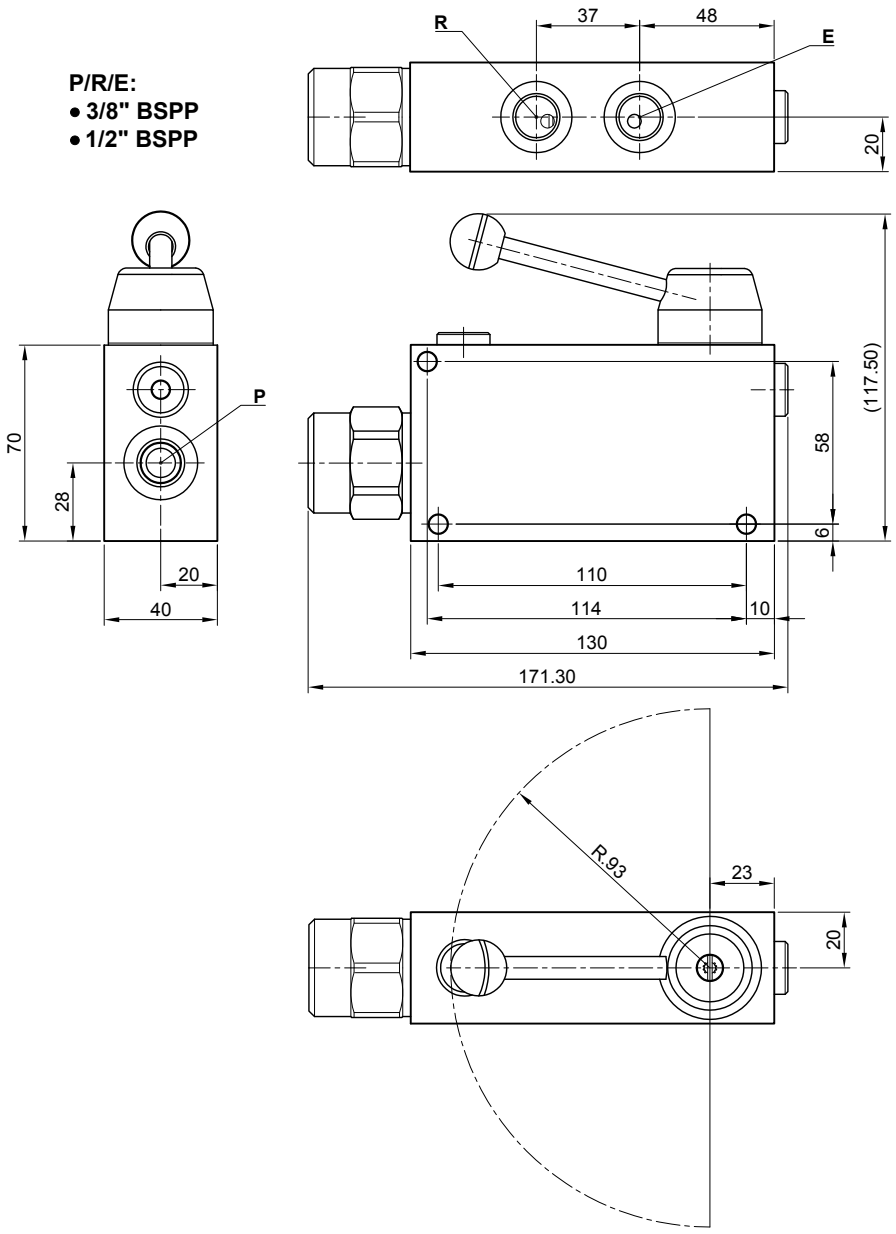
VPVP-*-*-H-*

M - 309/2

Regolatore di flusso a 3 vie compensato, con eccedenza in pressione, montaggio in linea
In line three way pressure compensated flow regulator, with exceeding flow in pressure

Rev. 02-2010/05

P/R/E:
- **3/8" BSPP**
- **1/2" BSPP**



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P V P | **3 / 8** | **S** | **H** | ***** |

3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel

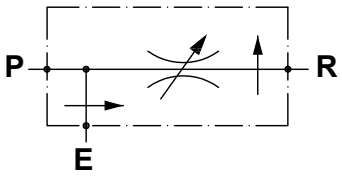
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

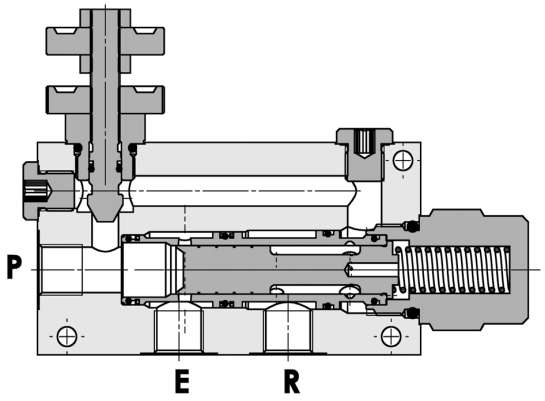
VPVP-*-*-*-*

M - 310/1

Regolatore di flusso a 3 vie compensato, con eccedenza in pressione, montaggio in linea
In line three way pressure compensated flow regulator, with exceeding flow in pressure

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in alluminio (standard), a richiesta in acciaio. Componenti interni in acciaio trattato termicamente.
Portata max.:
- 50 l/min con 30 l/min su ramo regolato “R” per 3/8"
- 90 l/min con 50 l/min su ramo regolato “R” per 1/2"
- 150 l/min con 90 l/min su ramo regolato “R” per 3/4"

Pressione max.: 250 bar (std), 350 bar (S)
Pressione di standby: 5 bar

TECHNICAL SPECIFICATIONS

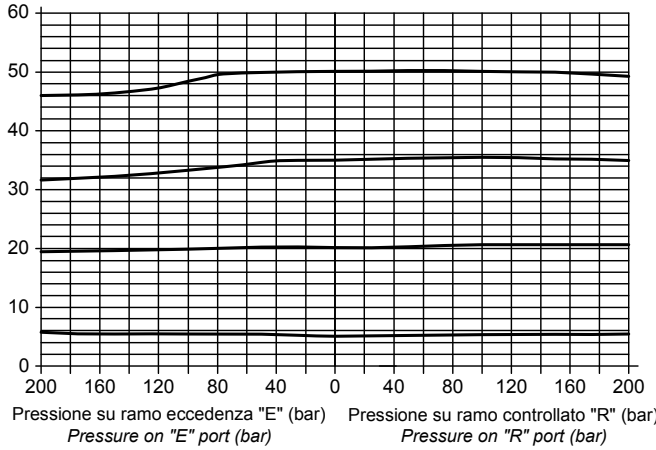
Materials: *aluminium body (std), steel body on request.*
Internal parts are in hardened steel.
Rated flow:
- 50 l/min with 30 l/min in “R” port for 3/8”
- 90 l/min with 50 l/min in “R” port for 1/2”
- 150 l/min with 90 l/min in “R” port for 3/4”
Max. pressure: *250 bar (std), 350 bar (S)*
Standby pressure: *about 5 bar*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

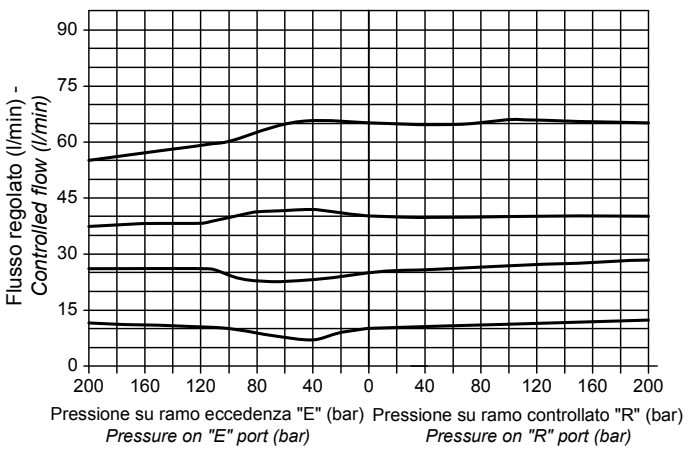
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

VPVP 3/8" - 1/2"



VPVP 3/4"

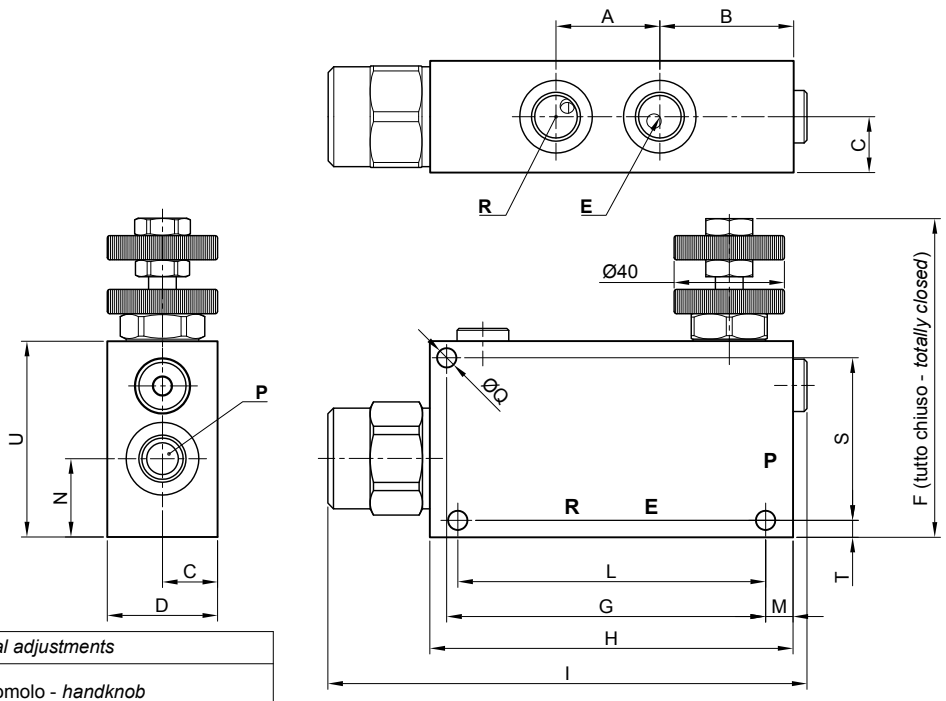


VPVP-*-*-*-*

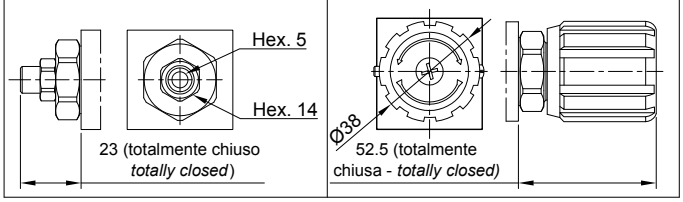
M - 310/2

Regolatore di flusso a 3 vie compensato, con eccedenza in pressione, montaggio in linea
In line three way pressure compensated flow regulator, with exceeding flow in pressure

Rev. 02-2010/05



Regolazioni opzionali - *optional adjustments*			
P	Vite esterna ed esag. incassato *Leakproof hex. socket screw*	**R**	Pomolo - *handknob*



TIPO *TYPE*	PORTATA MAX. *MAX FLOW* L/MIN	A mm	B mm	C mm	D mm	E - P R BSPP	F mm	G mm	H mm	I mm	L mm	M mm	N mm	O mm	Q mm	S mm	T mm	U mm	PESO *WEIGHT* Kg
VPVP-3/8	Vedere specifiche *See specifications*	37	48	20	40	3/8"	113.7	114	130	171.3	110	10	28	23	6.5	58	6	70	1.250-2.800(S)
VPVP-1/2		37	48	20	40	1/2"	113.7	114	130	171.3	110	10	28	23	6.5	58	6	70	1.250-2.750(S)
VPVP-3/4		44	57	25	50	3/4"	139.5	135	155	194.8	-	10	35	25	8.5	74	8	90	2.205-4.705(S)

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPVP **3/8** **S** **G** *****

* 3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

* Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel

G: ghiera – *ring*
P: vite con esag. incassato - *leakproof hex. socket screw*
R: pomolo – *handknob* *
Regolazioni – *Adjustements*

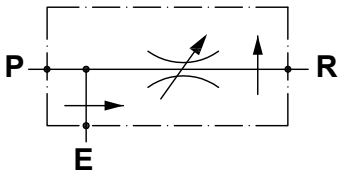
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

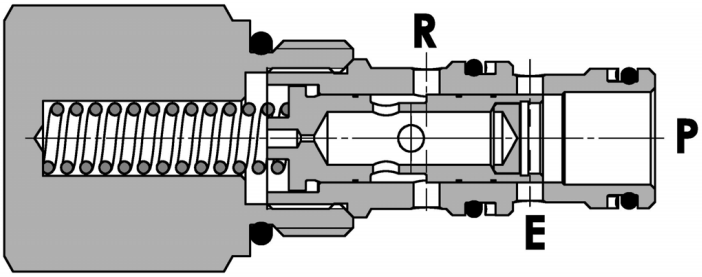
VPVPF-60-C-*

Regolatore di flusso a 3 vie compensato fisso, con eccedenza in pressione, a cartuccia
Three way pressure compensated, fixed flow regulator, with exceeding flow in pressure, cartridge version

M - 440/1

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, componenti interni in acciaio trattato termicamente.

Portata max in P.:

- 60 l/min con 30 l/min su ramo regolato “R”

Pressione max.: 350 bar

Pressione di standby: 5 bar

TECHNICAL SPECIFICATIONS

Materials: *cartridge in zinc plated steel, internal parts are in hardened steel.*

Rated flow on P:

- 60 l/min with 30 l/min in “R”

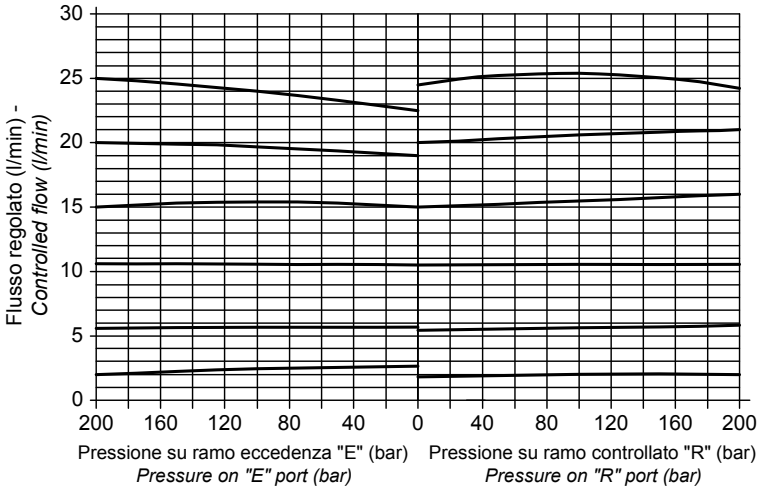
Max. pressure: *350 bar*

Standby pressure: *about 5 bar*

DIAGRAMMA COMPENSAZIONE - ***COMPENSATION CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

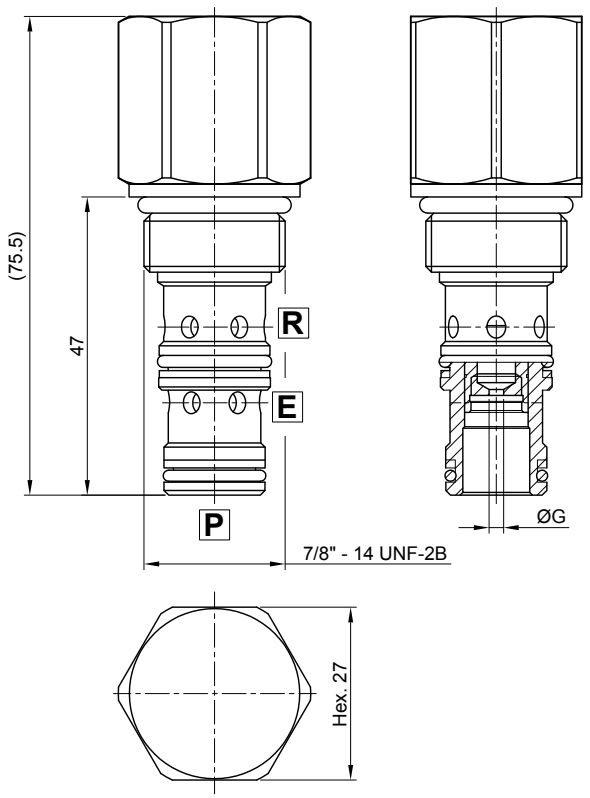


VPVPF-60-C-*

Regolatore di flusso a 3 vie compensato fisso, con eccedenza in pressione, a cartuccia
Three way pressure compensated, fixed flow regulator, with exceeding flow in pressure, cartridge version

M - 440/2

Rev. 01-2010/02



TIPO *TYPE*	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
		Nm	Kg
VPVPF 60 C	33101	60 - 70	0.200

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P V P F **6 0** **C** *****

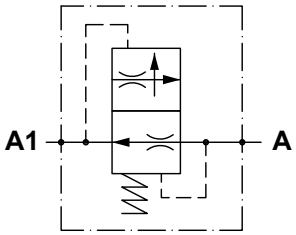
Tabella valori di portata controllata – *Controlled flow setting list*													
Q (L/min)	1	2	3	4	5.5	7.5	10.5	12	15	21	26	30	*
ØG (mm)	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	

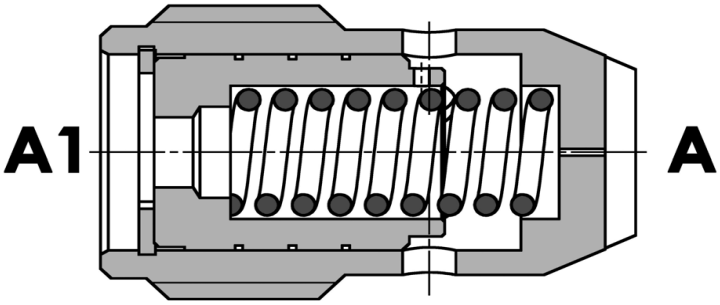
VSC-*-*

M - 480/1

Valvola controllo discesa compensata
Pressure compensated flow restricting valve

Rev. 03-2010/08





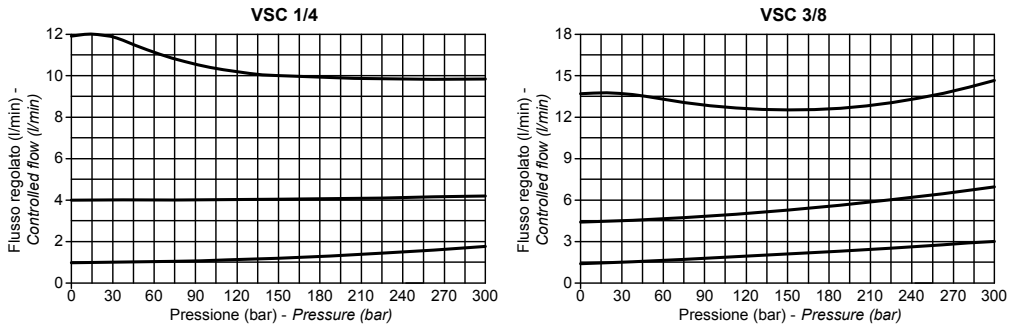
SPECIFICHE TECNICHE
Materiali: tutti i componenti sono in acciaio
Portata max.: vedere “tabella valori portata controllata”
Pressione max.: 300 bar

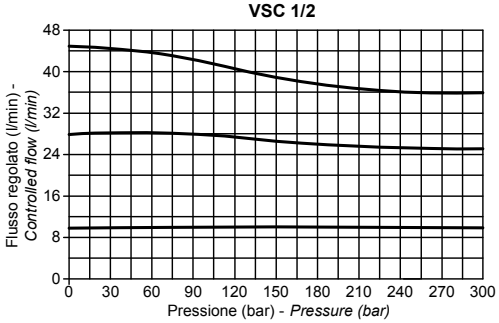
TECHNICAL SPECIFICATIONS
Materials: *all the components are steel made*
Rated flow: *see “controlled flow setting list”*
Max. pressure: *300 bar*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



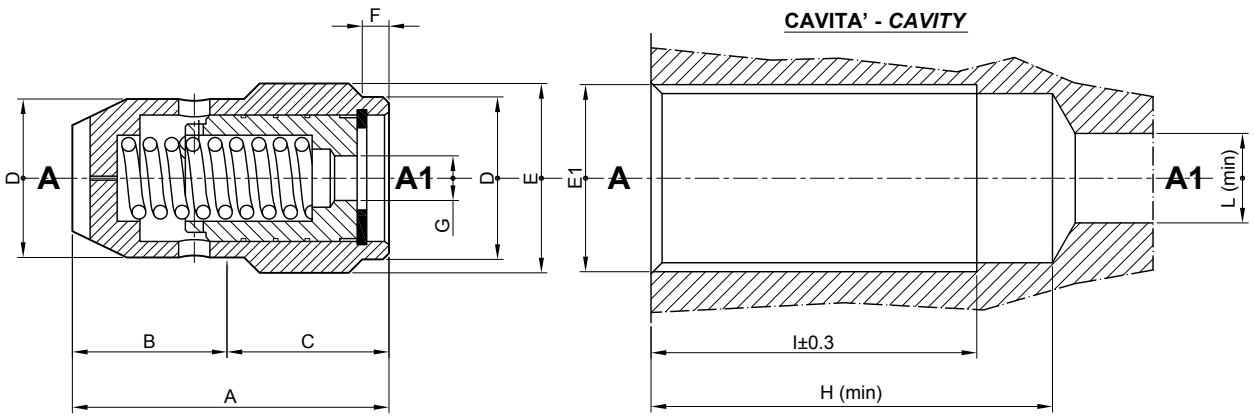


VSC-*-*

M - 480/2

Valvola controllo discesa compensata
Pressure compensated flow restricting valve

Rev. 03-2010/08



TIPO	A	B	C	D	E	F	G	PESO *WEIGHT*	CAVITA' - *CAVITY* E1	H	I	L	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*
TYPE	mm	mm	mm	mm	BSPP	mm	mm	Kg	BSPP	mm	mm	mm	Nm
VSC-1/4"	27	15	12	11	1/4"	3	FORO DOSATORE	0.012	1/4"	40	36	8	2
VSC-3/8"	28	14	14	14	3/8"	4	(VEDI TABELLA) –	0.025	3/8"	44	39	11	3
VSC-1/2"	35	19	16	18	1/2"	3	*ORIFICE (SEE LIST)*	0.050	1/2"	51	47	14	4

Disponibili a richiesta corpi maschio-femmina e femmina-femmina, vedere sezione W100 –
Available on request male-female and female-female housing, see section W100

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V S C **3 / 8** **1 1**

1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

Tabella valori di portata controllata – *Controlled flow setting list*											
VSC-1/4	Q (L/min)	1.5	2	3	4	5	6	7	8	9	10
	ØG (mm)	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
VSC-3/8	Q (L/min)	1	2	3	4	5	6	8	10	11	12
	ØG (mm)	0.75	1.25	1.75	2.00	2.25	2.50	3.00	3.50	4.00	4.25
VSC-1/2	Q (L/min)	8	11	14	17	22	27	32	40	47	-
	ØG (mm)	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	-

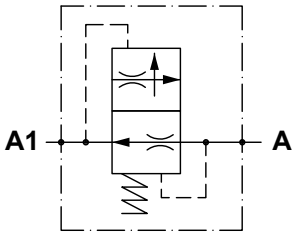
*

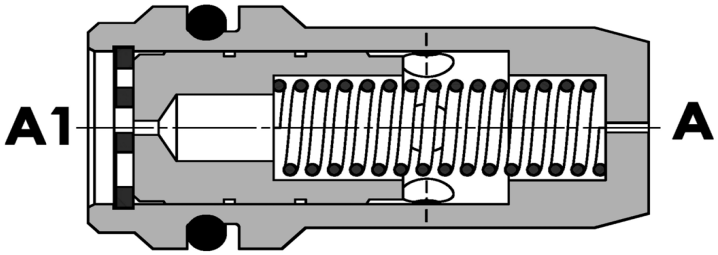
VSC G-*-*

M - 485/1

Valvola controllo discesa compensata
Pressure compensated flow restricting valve

Rev. 02-2010/05





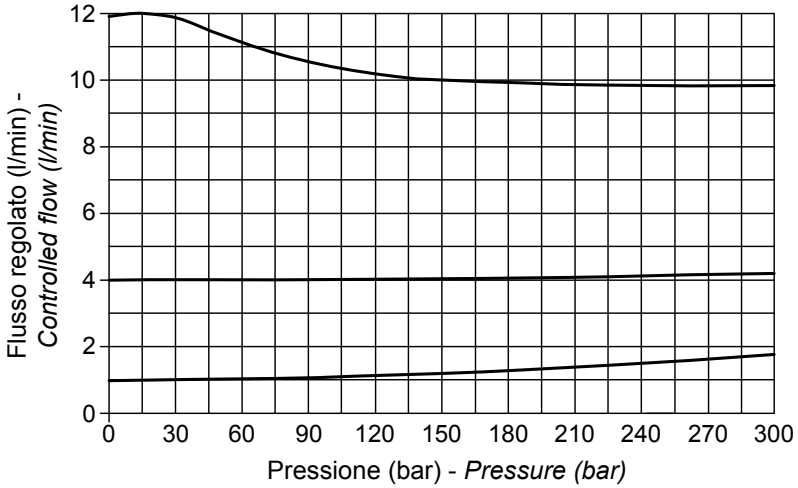
SPECIFICHE TECNICHE
Materiali: tutti i componenti sono in acciaio
Portata: vedere “tabella valori portata controllata”
Pressione max.: 300 bar

TECHNICAL SPECIFICATIONS
Materials: *all the components are steel made*
Rated flow: *see “controlled flow setting list”*
Max. pressure: *300 bar*

DIAGRAMMA COMPENSAZIONE - ***COMPENSATION CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



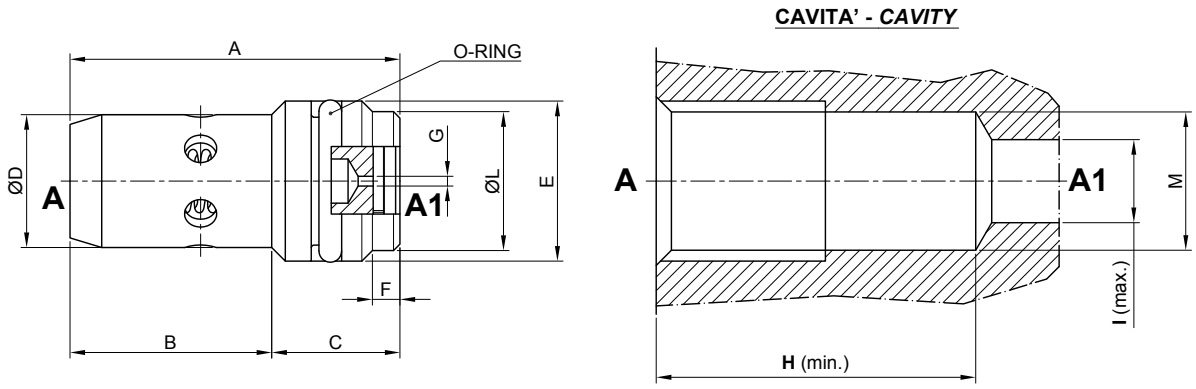
VSC G-*-*

M - 485/2

Valvola controllo discesa compensata

Pressure compensated flow restricting valve

Rev. 02-2010/05



TIPO *TYPE*	A	B	C	D	E	F	O-RING	G	L	PESO *WEIGHT*	CAVITA' - *CAVITY* H	I	M
	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg	mm	mm	mm
VSC G 1/4"	26	15.9	10.1	10.5	12.7	2.15	1.78X9.25	FORO DOSATORE (VEDI TABELLA) – *ORIFICE (SEE LIST)*	11	0.013	38	9	12.7

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V S C G **1 / 4** **1 0**

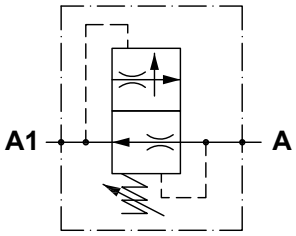
Tabella valori di portata controllata – *Controlled flow setting list*											
Q (L/min)	1.5	2	3	4	5	6	7	8	9	10	*
ØG (mm)	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	

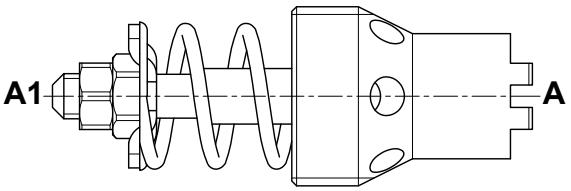
VSCR-*-*

M - 490/1

Valvola controllo discesa compensata regolabile
Adjustable pressure compensated flow restricting valve

Rev. 02-2010/05





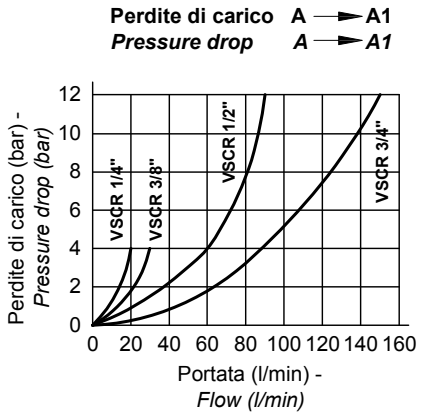
SPECIFICHE TECNICHE
Materiali: tutti i componenti sono in acciaio
Portata: vedere “tabella valori portata controllata”
Pressione max.: 300 bar

TECHNICAL SPECIFICATIONS
Materials: *all the components are steel made*
Rated flow: *see “controlled flow setting list”*
Max. pressure: *300 bar*

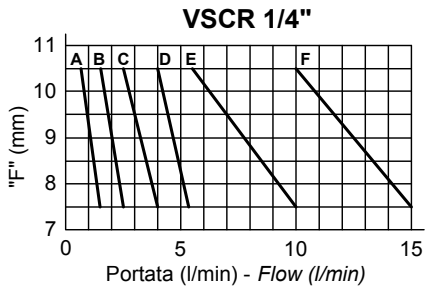
DIAGRAMMI PERDITE DI CARICO E REGOLAZIONE - *REGULATION AND DROP CURVES*

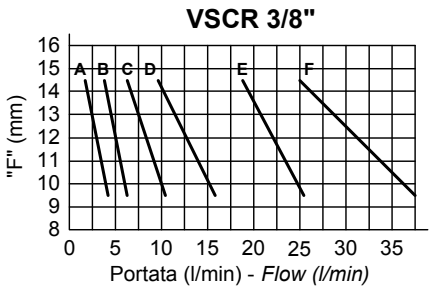
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

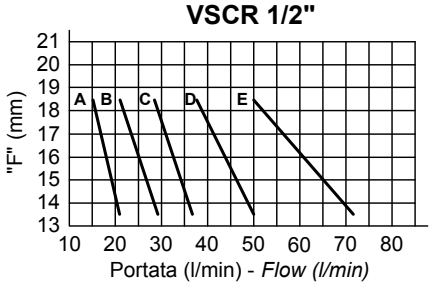
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

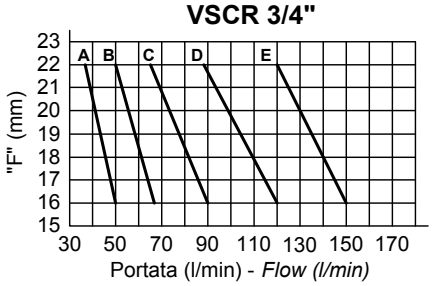


Regolazione "F" - *"F" setting*







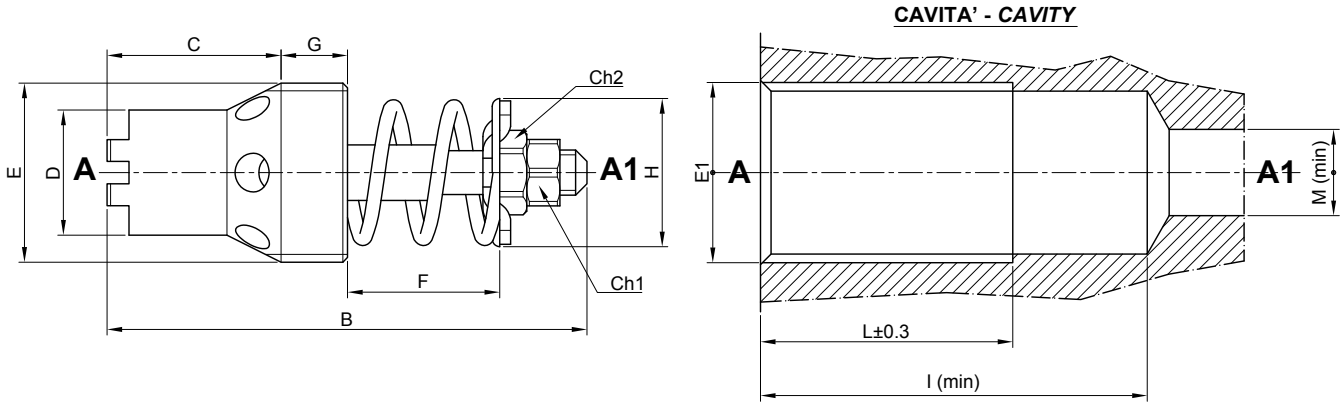


VSCR-*-*

M - 490/2

Valvola controllo discesa compensata regolabile
Adjustable pressure compensated flow restricting valve

Rev. 02-2010/05



TIPO *TYPE*	B	C	D	E	F	G	H	CH1	CH2	PESO *WEIGHT*	CAVITA' - *CAVITY*				
											E1	I	L	M	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*
	mm	mm	mm	BSPP	mm	mm	mm	mm	mm	Kg	BSPP	mm	mm	mm	Nm
VSCR-1/4	39	13.5	10	1/4"	Vedi grafici *See graphics*	6	10	5.5	5.5	0.013	1/4"	53	32	8	6
VSCR-3/8	45	15.5	12.5	3/8"		5	14	6	7	0.024	3/8"	61	35	11	8
VSCR-1/2	51	16	16	1/2"		7	18	6	7	0.037	1/2"	69	40	14	12
VSCR-3/4	62	21	20	3/4"		10	23	6	7	0.070	3/4"	84	51	18	15

Disponibili a richiesta corpi maschio-femmina e femmina-femmina, vedere sezione W100 –
Available on request male-female and female-female housing, see section W100

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V S C R **3 / 8** ***** *****

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

Regolazione "F" (mm)
"F" regolation (mm) *
Esempio – *example: F10*

		Tabella valori di portata controllata – *Controlled flow setting list*					
		A	B	C	D	E	F
VSCR-1/4	Q (L/min)	1 - 1.6	1.5 - 2.5	2.4 - 4	3.9 - 6.3	6.2 - 10	9.5 - 15
VSCR-3/8	Q (L/min)	2.5 - 4	3.8 - 6.3	6.1 - 10	9.8 - 16	15.8 - 25	24.5 - 35
VSCR-1/2	Q (L/min)	16 - 21	20.5 - 28	27.5 - 37	36.5 - 50	48 - 65	-
VSCR-3/4	Q (L/min)	37 - 50	48 - 65	63 - 90	88 - 120	115 - 150	-

*

SEZIONE N
Divisori/riunificatori di flusso

SECTION N
Flow divider/combiner

Queste valvole consentono di dividere in parti uguali il flusso in ingresso e di riunificarlo, nel senso inverso, indipendentemente dalla pressione degli attuatori e dalla portata di alimentazione
Sono disponibili 2 soluzioni di montaggio: a cartuccia e in linea.

These valves allow to divide the inlet flow in equal parts an to unify it, in the reverse direction, regardless of pressure of actuators and flow.
2 solutions of assembly are available: cartridge and in line.

PAGINA / *PAGE*	**CODICE / *CODE***
N 050	VPFD

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

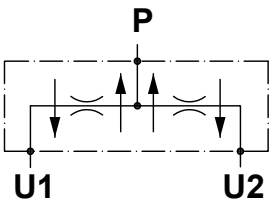
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

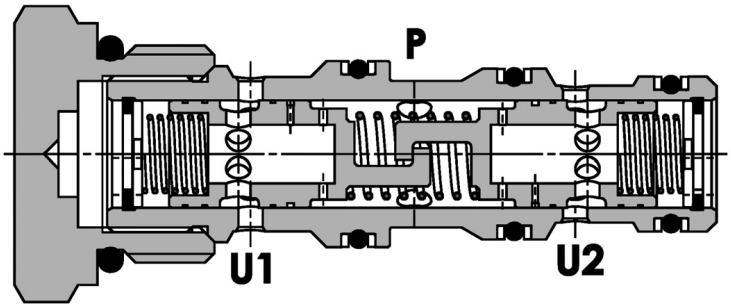
VPFD-*-C(B)-*-*-*-*

N - 050/1

Divisore/riunificatore flusso
Flow divider/combiner

Rev. 03-2010/10





SPECIFICHE TECNICHE

Materiali: Cartuccia in acciaio zincato, componenti interni in acciaio trattato termicamente. Corpo (solo versione CB) in lega di alluminio (o acciaio su richiesta).
Portata max.: fino a 150 l/min
Pressione max.: 250 bar (std), 350 bar (S)
Percentuale di divisione: standard 50/50, speciali a richiesta (tolleranza 10% tra le bocche U1-U2 con 120 bar di pressione differenziale).

TECHNICAL SPECIFICATIONS

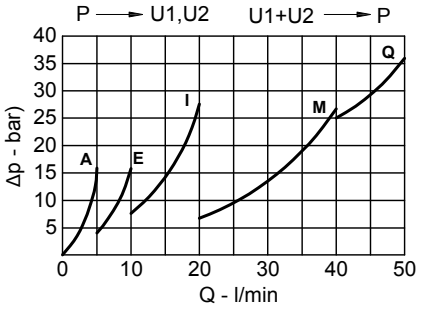
Materials: *Cartridge is steel made zinc plated. Internal parts are in hardened steel. Body (only CB version) in high strenght aluminium alloy (steel body on request).*
Rated flow: *up to 150 l/min*
Max. pressure: *250 bar (std), 350 bar (S)*
Division percentage: *50/50 standard, special on request (accuracy 10% between ports U1-U2 with 120 bar differential pressure).*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

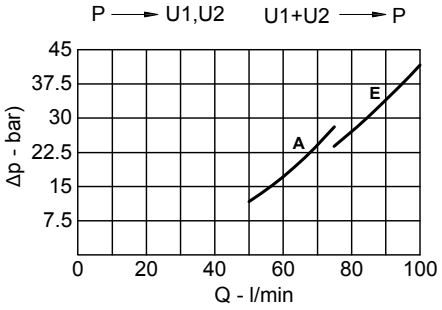
Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

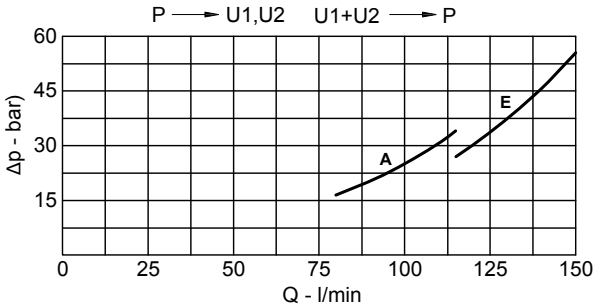
VPFD S10



VPFD S12



VPFD S16



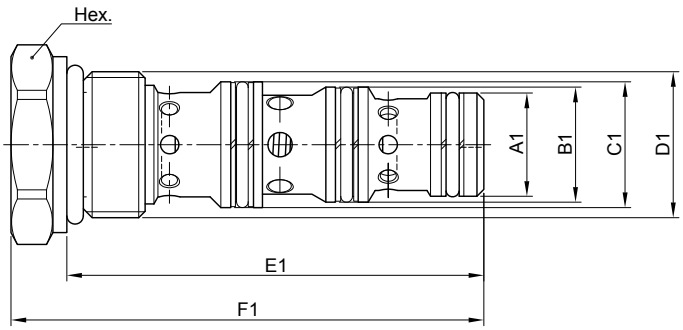
VPFD-*-C(B)-*-*-*-*

N - 050/2

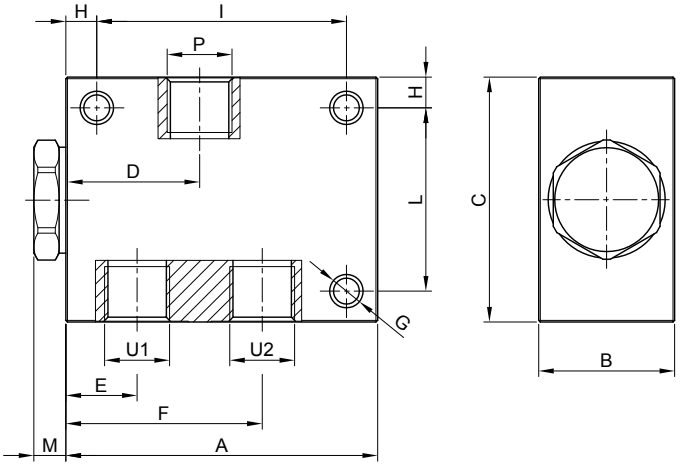
Divisore/riunificatore flusso
Flow divider/combiner

Rev. 03-2010/10

VPFD-*-C



VPFD-*-CB



TIPO *TYPE*	A1	B1	C1	D1	E1	F1	HEX	CAMPO PORTATA IN INGRESSO *INLET FLOW RANGE*	CAVITA' *CAVITY*	COPPIA DI SERRAGGIO *INSTALLATION TORQUE*	PESO *WEIGHT*
	mm	mm	mm	UNF-2B	mm	mm	mm	L/min		Nm	Kg
VPFD S10 C	15.87	17.47	19.05	7/8"-14	63.5	72	27	A(1-5)-E(5-10)-I(10-20) M(20-40)-Q(40-50)	43101	35	0.115
VPFD S12 C	20.62	22.22	23.80	1 1/16"-12	98	109	32	A(50-75)-E(75-100)	43121	45	0.265
VPFD S16 C	25.42	27.00	28.60	1 5/16"-12	103	116	40	A(80-115)-E(115-150)	43161	60	0.430

TIPO *TYPE*	P	U-U2	A	B	C	D	E	F	G	H	I	L	M	PESO WEIGHT
	BSPP	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
VPFD S10 CB	3/8"(A-E-1) 1/2"(M-Q)	3/8"	80	35	63	34	18	50	6.5	8	64	47	8	0.500
VPFD S10 CB S	3/8"(A-E-1) 1/2"(M-Q)	3/8"	80	35	63	34	18	50	6.5	8	64	47	8	1.200
VPFD S12 CB	1/2"(A) 3/4"(E)	1/2"	115	40	80	53.3	27.3	78.3	6.5	8	99	64	10.7	1.100
VPFD S12 CB S	1/2"(A) 3/4"(E)	1/2"	115	40	80	53.3	27.3	78.3	6.5	8	99	64	10.7	2.500
VPFD S16 CB	3/4"(A) 1"(E)	3/4"	125	50	100	54.3	25.8	82.8	8.5	10	105	80	12.7	1.800
VPFD S16 CB S	3/4"(A) 1"(E)	3/4"	125	50	100	54.3	25.8	82.8	8.5	10	105	80	12.7	4.300

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P F D | **S 1 0** | **C B** | **3 / 8** | **3 / 8** | **S** | ***** | *****

* S10 – 7/8"-14 UNF-2B
* S12 – 1 1/16"-12 UNF-2B
S16 – 1 5/16"-12 UNF-2B
Dimensioni - *Dimension*

* C: solo cartuccia – *only cartridge*
CB: cartuccia con corpo – *cartridge and body*

* Connessione P – *P port*
Vedere tabella sopra – *see data sheet above*

* Connessione U/U1 – *U/U1 port*
Vedere tabella sopra – *see data sheet above*

Materiale corpo: omettere se aluminio, S=acciaio
Body material: omit if aluminum, S=steel *

Campo portata in ingresso
Inlet flow range *
S10: A – E – I – M – Q
S12: A – E
S16: A – E

Guarnizioni – *Seals:*
V=Viton *
Omett. se BUNA-N – *Omit if BUNA-N*

SEZIONE O
Valvole overcenter

SECTION O
Overcenter Valves

VALVOLE OVERCENTER

Queste valvole, con codice base “VPO”, sono valvole di controllo movimento: nelle versioni a semplice effetto controllano l’azionamento e il blocco degli attuatori idraulici, siano essi cilindri o motori, in un solo senso; oppure in entrambi i sensi nelle versioni a doppio effetto.

Funzioni principali:

1) arresto del flusso e conseguente blocco dell’attuatore con distributore in posizione neutra o con pompa non in funzione;
2) discesa controllata del carico, il quale non può sfuggire a causa del proprio peso, in quanto la valvola, essendo aperta, non attiva alcuna cavitazione dell’attuatore, permettendo cosi la discesa del carico (solo se c’è adeguata pressione sul pilota) che assicura il reflusso al cilindro;
3) limitazione della pressione massima o sovrapressioni (indotte dalla movimentazione del carico, dal carico eccessivo o da manovre scorrette); purché le valvole siano utilizzate con distributore a centro aperto;
4) flusso libero sulla linea di sollevamento.

Per un corretto funzionamento in fase di tenuta, si consiglia di tarare la valvola ad un valore di pressione pari ad almeno 1.3 volte il valore indotto dal carico massimo.
Sono disponibili 4 soluzioni di montaggio: a cartuccia, in linea, a flangia e a vite forata. A seconda del modello, sono disponibili con corpo in alluminio o in acciaio.

OVERCENTER VALVES

These valves, with basic code "VPO" are motion control valves: in the single effect version control the driving and the block of hydraulic actuators (motors or cylinders), in one direction; or in both directions in the double effect versions.

Main features:

1) Arrest of flow and consequent block of the actuator with distributor in neutral position or pump not in function;
2) Controlled descent of load, that cannot escape, because of its own weight, since the valve, being opened, doesn’t activate any cavitation of the actuator, allowing the descent of load (only if there is proper pressure on the pilot) that ensures the reflux to the cylinder;
3) Limitation of the maximum pressure or over pressures (induced from the load movement, the excessive load or wrong maneuvers); provided that the valves are used with open centre distributor;
4) Free flow on the lifting line.

To guarantee a correct operation, is advised to set the pressure at least 1.3 times higher than the maximum load induced pressure.
4 solutions of assembly are available: cartridge, in line, flanged and drilled screw.
Depending on the model, are available with aluminum or steel body.

$$Pp = \frac{Ps - Pl}{Pr}$$

Pp = pressione di pilotaggio / *pilot pressure*
Ps = pressione di taratura / *pressure setting*
Pl = pressione carico / *load pressure*
Pr = rapporto di pilotaggio / *pilot ratio*

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
O 010	VPO-15-CM	O 162	VPO-50-S-*-L-P-VM
O 017	VPO-25-C	O 170	VPOE-70-S-1/2-L-P-A
O 018	VPO-25-CM	O 180	VPO-90-S-3/4-L-P
O 031	VPO-50-C	O 190	VPOE-120-S-3/4-L-P-A
O 036	VPO-60-C	O 205	VPO-35-S-1/4-1F-P-M
O 051	VPO-90-C	O 210	VPO-50-S-*-1F
O 058	VPO-100-C	O 211	VPO-50-S-1/2-1F-SAE
O 072	VPO-150-C	O 212	VPO-50-S-3/8-1F-BP
O 088	VPO-300-C	O 213	VPO-50-S-*-1F-P-M
O 110	VPO-35-SS-1/4-L	O 255	VPO-35-S-1/4-2F-P-M
O 111	VPO-35-S-1/4-L	O 260	VPO-50-S-*-2F-P-M
O 120	VPO-50-S-*-L	O 293	VPO-50-S-3/8-V-L-M
O 121	VPO-50-SX-*-L	O 310	VPO-35-D-1/4-L
O 155	VPO-35-S-1/4-L-P	O 311	VPO-35-DD-1/4-L
O 160	VPO-50-S-*-L-P	O 314	VPOE-40-D-3/8-L-A
O 161	VPO-50-SX-*-L-P	O 320	VPO-50-D-*-L

SEZIONE O
Valvole overcenter

SECTION O
Overcenter Valves

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
O 321	VPO-50-DX-*-L	O 410	VPO-50-D-3/8-1F-M
O 322	VPO-50-D-*-L-U	O 457	VPO-35-D-1/4-2F
O 328	VPOE-70-D-1/2-L-A	O 462	VPOE-40-D-3/8-2F-A
O 331	VPO-90-D-3/4-L	O 470	VPO-50-D-*-2F
O 335	VPOE-120-D-3/4-L-A	O 471	VPO-50-DX-*-2F
O 340	VPO-150-D-3/4-L		

VALVOLE OVERCENTER PER CIRCUITO RIGENERATIVO

Queste valvole combinano le funzioni di bilanciamento a doppio effetto (tenuta della pressione e controllo bidirezionale del movimento del cilindro) con la funzione rigenerativa che rende più veloce lo sfilo del cilindro.
Sono disponibili nella versione in linea.

OVERCENTER VALVE FOR REGENERATIVE CIRCUIT

These valves combine the dual acting overcenter function (pressure sealing and bidirectional control of cylinder movement) with regenerative function that increase the maximum extension speed of cylinder.
They are available in line version.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
O 710	VPOR-35-D-3/8-L	O 750	VPOR-150-D-3/4-L-M
O 725	VPOR-60-D-1/2-L		

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

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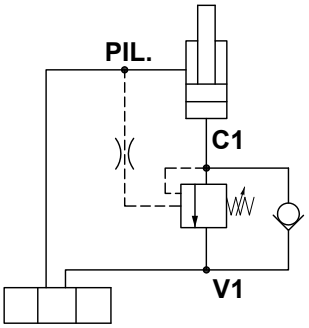
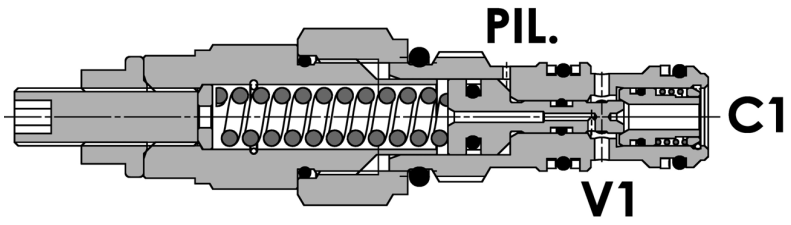
VPO-15-CM-35

O - 010/1

Valvola overcenter, versione a cartuccia, cavità metrica
Overcenter valve, cartridge version, metric cavity

Rev. 01-2010/02





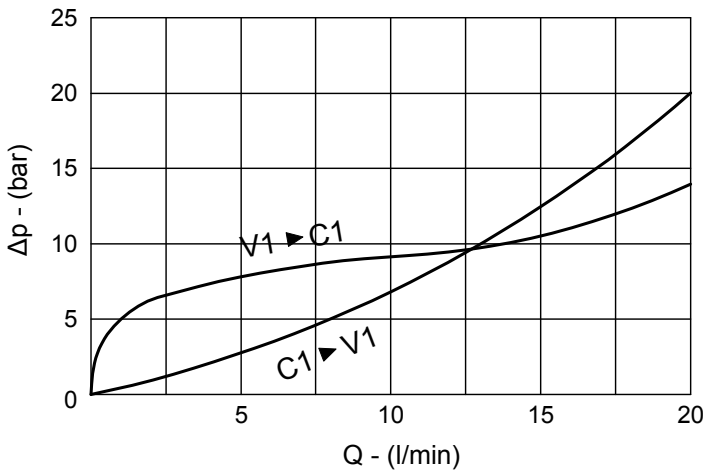
SPECIFICHE TECNICHE
Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 15 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 15 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

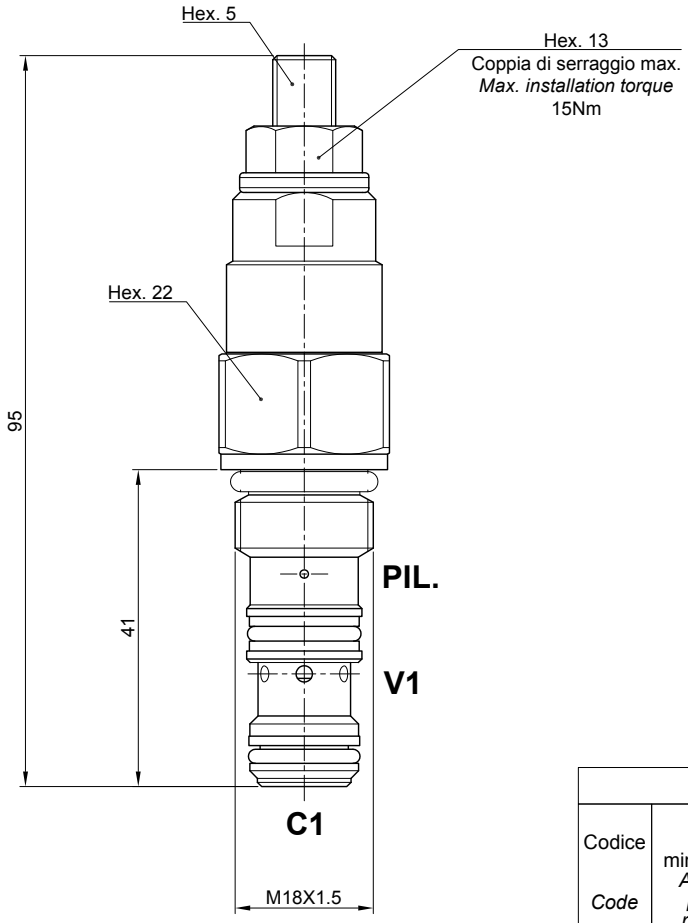


VPO-15-CM-35

O - 010/2

Valvola overcenter, versione a cartuccia, cavità metrica
Overcenter valve, cartridge version, metric cavity

Rev. 01-2010/02



MOLLE - *SPRINGS*			*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	80 - 350	80	280

TIPO ***TYPE***	**RAPP. DI PILOTAGGIO** ***PILOT RATIO***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
			Nm	Kg
VPO 15 CM	1 : 4.5	32181	40	0.137

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

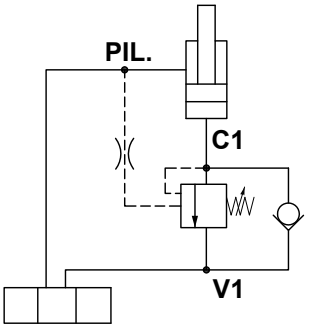
V P O **1 5** **C M** **3 5**

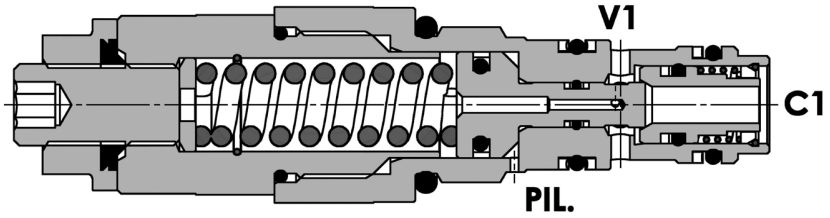
VPO-25-C-*-*-*

O - 017/1

Valvola overcenter, versione a cartuccia, cavità SAE 08
Overcenter valve, cartridge version, SAE 08 cavity

Rev. 01-2010/02





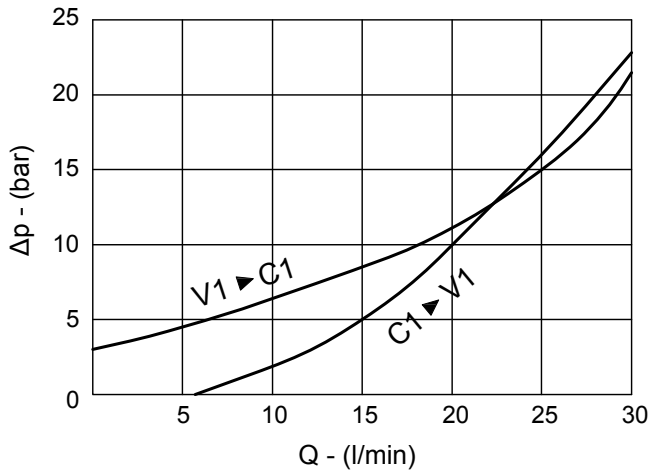
SPECIFICHE TECNICHE
Materiali: corpo in acciaio protetto da zincatura. Componenti interni in acciaio trattato termicamente.
Portata max.: fino a 25 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 25 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see pag.02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

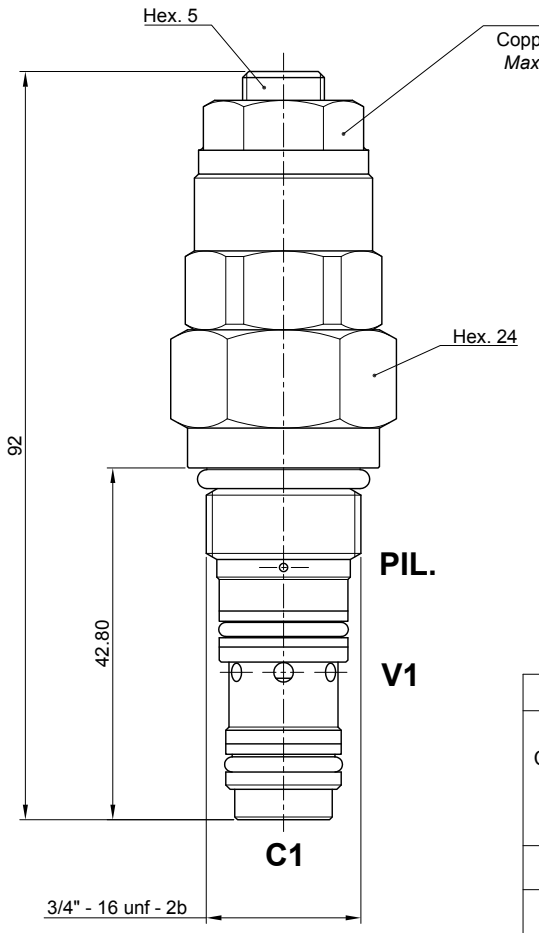


VPO-25-C-*-*-*

O - 017/2

Valvola overcenter, versione a cartuccia, cavità SAE 08
Overcenter valve, cartridge version, SAE 08 cavity

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** *PILOT RATIO*	**CAVITA'** *CAVITY*	**COPPIA DI SERRAGGIO** *INSTALLATION TORQUE*	**PESO** *WEIGHT*
			Nm	Kg
VPO 25 C	1 : 4 (standard) - 1:8	33082	50 - 55	0.168

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **25** **C** **35** **B** *****

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

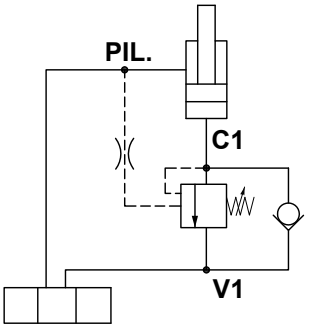
Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

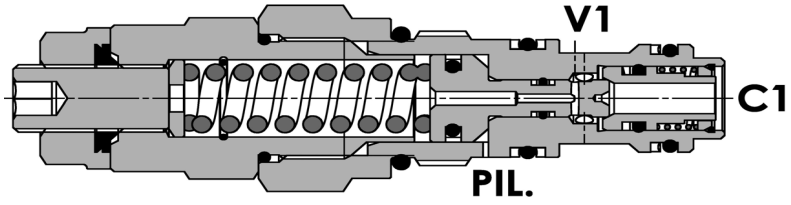
Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N* *

VPO-25-CM-*-*-* O - 018/1

Valvola overcenter, versione a cartuccia, cavità metrica
Overcenter valve, cartridge version, metric cavity

Rev. 02-2010/08





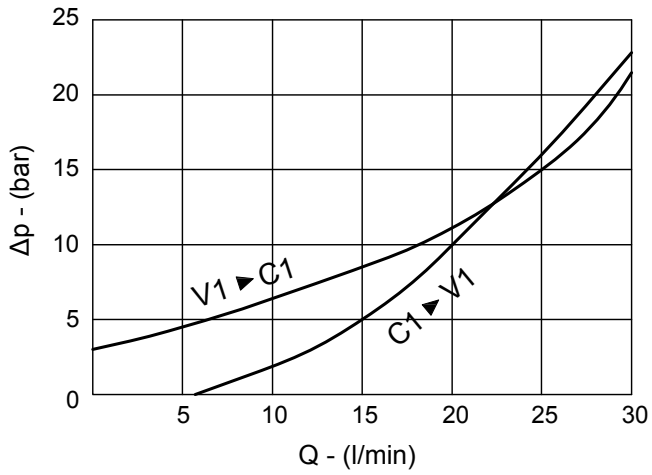
SPECIFICHE TECNICHE
Materiali: corpo in acciaio protetto da zincatura. Componenti interni in acciaio trattato termicamente.
Portata max.: fino a 25 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 25 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see pag.02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

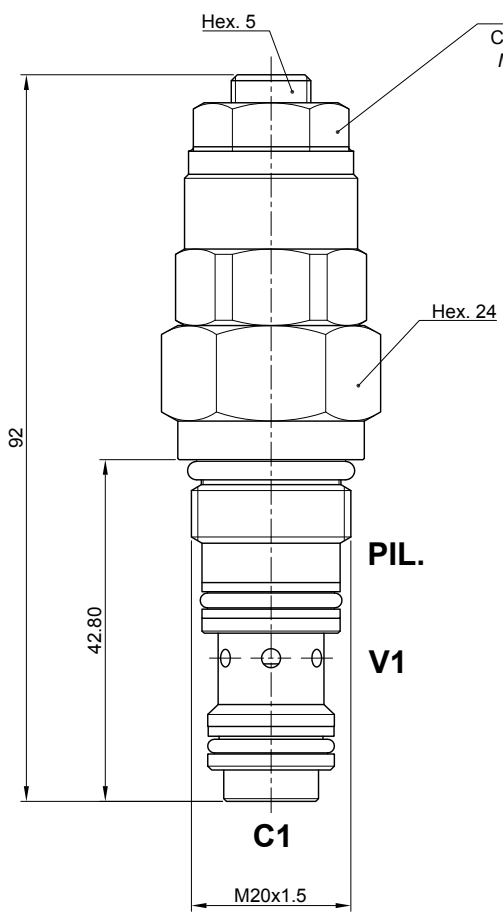


VPO-25-CM-*-*-*

O - 018/2

Valvola overcenter, versione a cartuccia, cavità metrica
Overcenter valve, cartridge version, metric cavity

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** ***PILOT RATIO***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
			Nm	Kg
VPO 25 CM	1 : 4 (standard) - 1:8	32205	50 - 55	0.168

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O **2 5** **C M** **3 5** **B** *

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

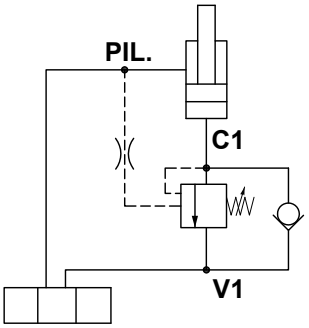
Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

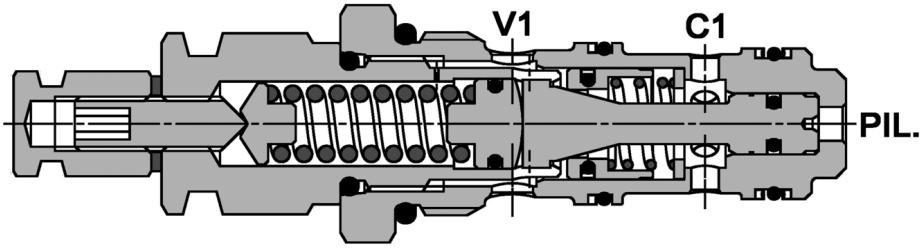
Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

VPO-50-C-*-*-* O - 031/1

Valvola overcenter, versione a cartuccia, cavità SAE 12
Overcenter valve, cartridge version, SAE 12 cavity

Rev. 03-2010/08





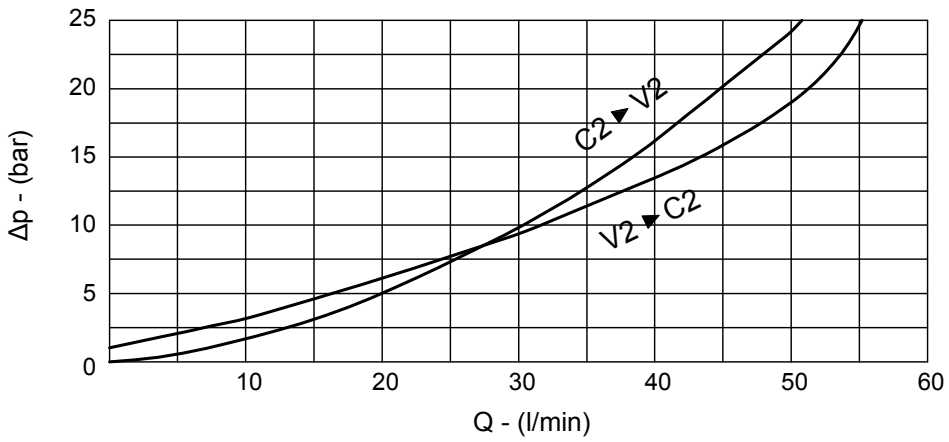
SPECIFICHE TECNICHE
Materiali: corpo in acciaio. Componenti interni in acciaio trattato termicamente. Superficie esterna protetta mediante zincatura.
Portata max.: fino a 50 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see pag.02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

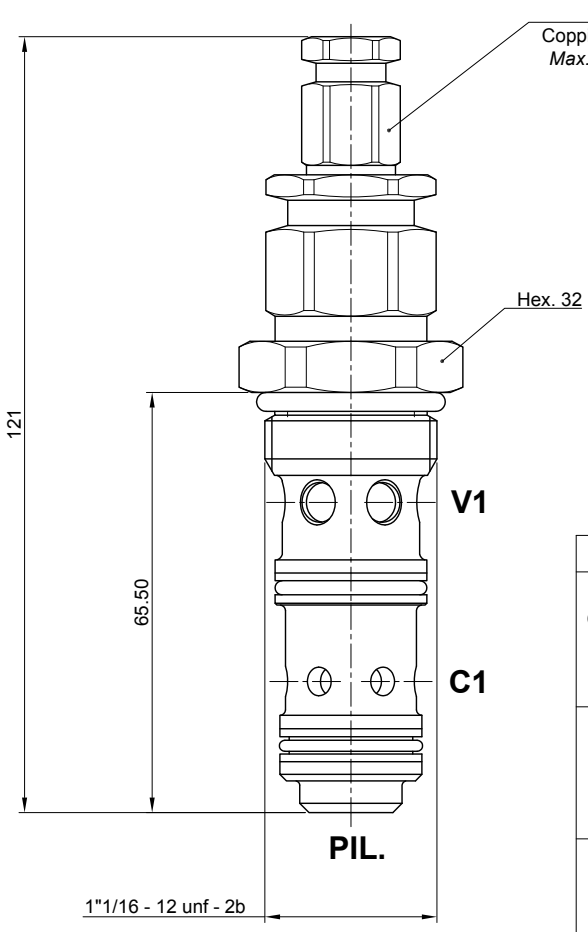


VPO-50-C-*-*-*

O - 031/2

Valvola overcenter, versione a cartuccia, cavità SAE 12
Overcenter valve, cartridge version, SAE 12 cavity

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** *PILOT RATIO*	**CAVITA'** *CAVITY*	**COPPIA DI SERRAGGIO** *INSTALLATION TORQUE*	**PESO** *WEIGHT*
			Nm	Kg
VPO 50 C	1 : 4.25 (std) - 1:8 - 1:11	32123	90 - 100	0.290

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O **5 0** **C** **3 5** **B** *****

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8 / C = 1:11

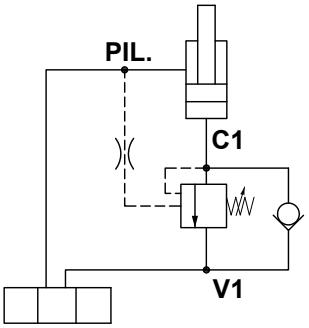
Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

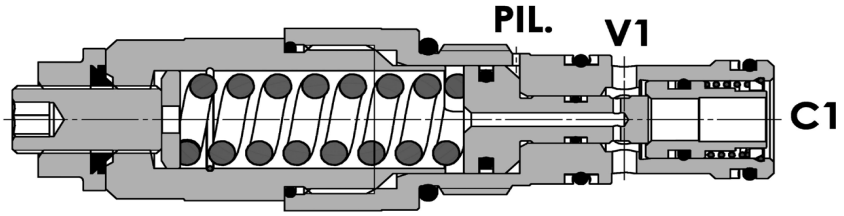
VPO-60-C-*-*-*

O - 036/1

Valvola overcenter, versione a cartuccia, cavità SAE 10
Overcenter valve, cartridge version, SAE 10 cavity

Rev. 01-2010/02





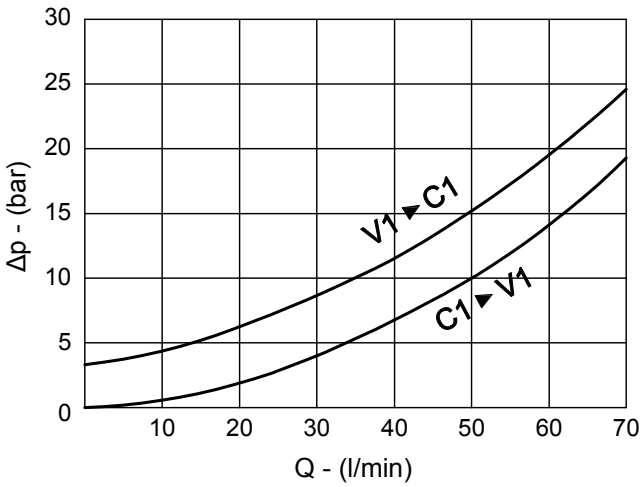
SPECIFICHE TECNICHE
Materiali: corpo in acciaio protetto da zincatura. Componenti interni in acciaio trattato termicamente.
Portata max.: fino a 60 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 60 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

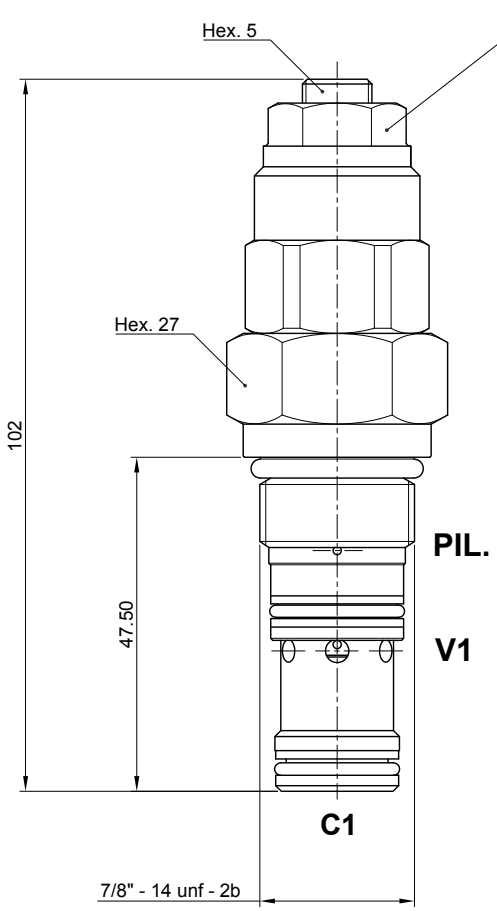


VPO-60-C-*-*-*

O - 036/2

Valvola overcenter, versione a cartuccia, cavità SAE 10
Overcenter valve, cartridge version, SAE 10 cavity

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** ***PILOT RATIO***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
			Nm	Kg
VPO 60 C	1 : 4 (standard) - 1:8	33102	60 - 70	0.210

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **60** **C** **35** **B** *****

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

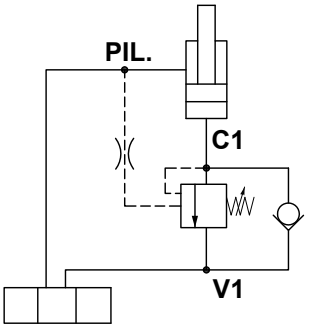
Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N* *

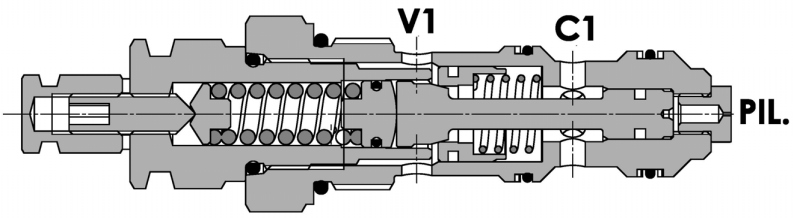
VPO-90-C-35

O - 051/1

Valvola overcenter, versione a cartuccia, cavità 1 3/16" - 12 unf
Overcenter valve, cartridge version, cavity 1 3/16" - 12 unf

Rev. 03-2010/09





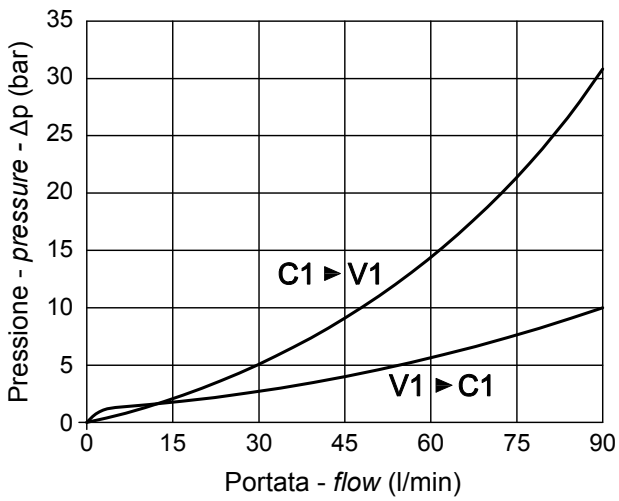
SPECIFICHE TECNICHE
Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata: 90 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 90 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

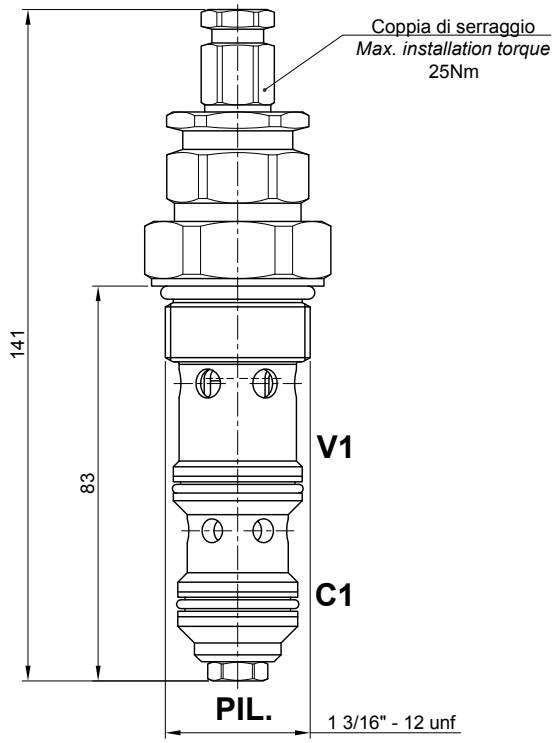


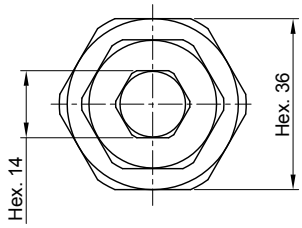
VPO-90-C-35

O - 051/2

Valvola overcenter, versione a cartuccia, cavità 1 3/16" - 12 unf
Overcenter valve, cartridge version, cavity 1 3/16" - 12 unf

Rev. 03-2010/09





MOLLE - *SPRINGS*			*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	100 - 350	109	280

TIPO ***TYPE***	**RAPP. DI PILOTAGGIO** ***PILOT RATIO***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
			Nm	Kg
VPO 90 C	1 : 4.2	33141	90 - 100	0.500

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

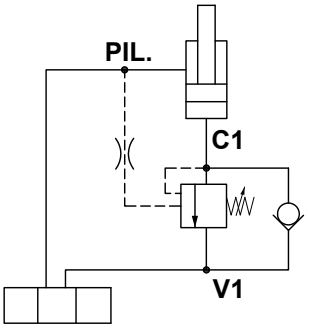
V P O **9 0** **C** **3 5**

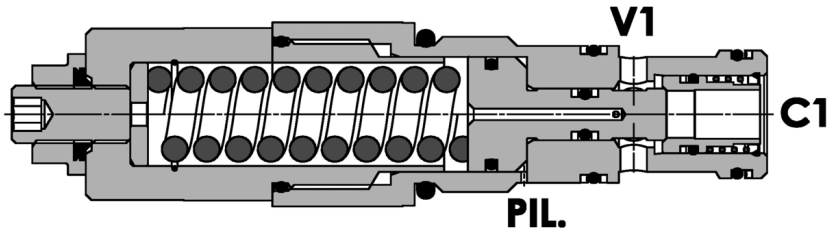
VPO-100-C-*-*

O - 058/1

Valvola overcenter, versione a cartuccia, cavità SAE 12
Overcenter valve, cartridge version, SAE 12 cavity

Rev. 02-2010/09





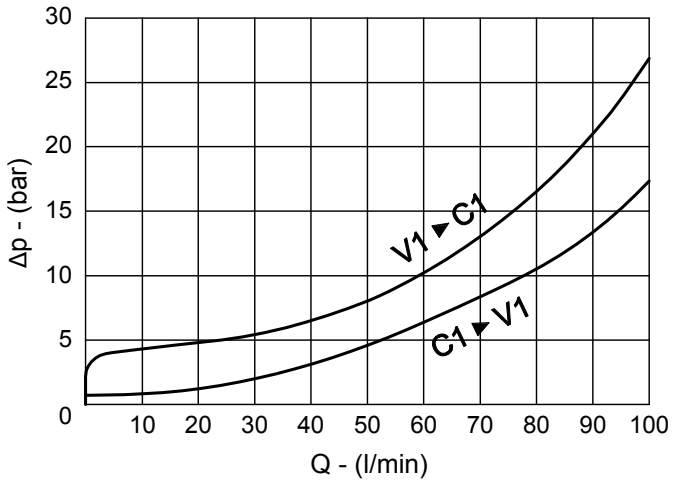
SPECIFICHE TECNICHE
Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata: 100 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *100 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

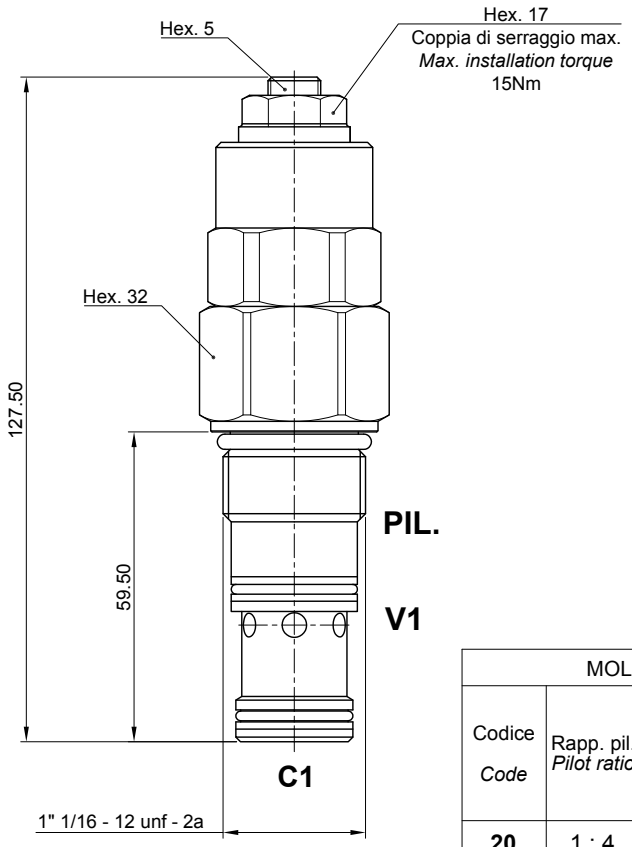


VPO-100-C-*-*

O - 058/2

Valvola overcenter, versione a cartuccia, cavità SAE 12
Overcenter valve, cartridge version, SAE 12 cavity

Rev. 02-2010/09



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	23	170
20	1 : 8	60 - 220	23	170
35	1 : 4	100 - 350	41	280
35	1 : 8	100 - 350	41	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** ***PILOT RATIO***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
			Nm	Kg
VPO-100-C	1 : 4 (standard) - 1:8	33122	90 - 100	0.455

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O **1 0 0** **C** * *

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

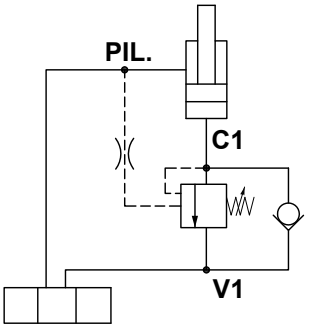
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8

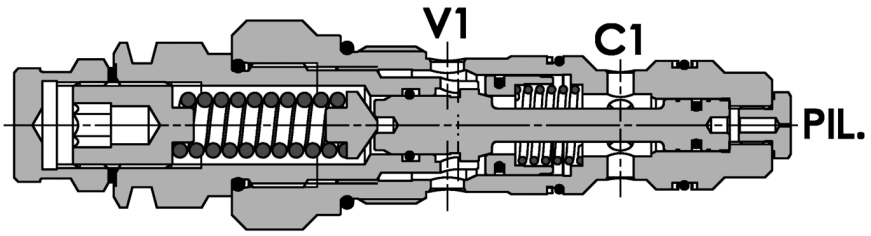
VPO-150-C-*-35-*-*

O - 072/1

Valvola overcenter, versione a cartuccia, cavità metrica
Overcenter valve, cartridge version, metric cavity

Rev. 02-2010/09





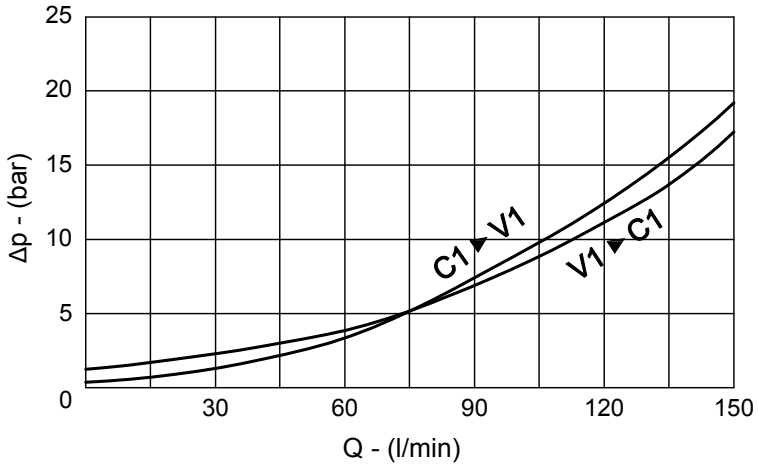
SPECIFICHE TECNICHE
Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 150 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

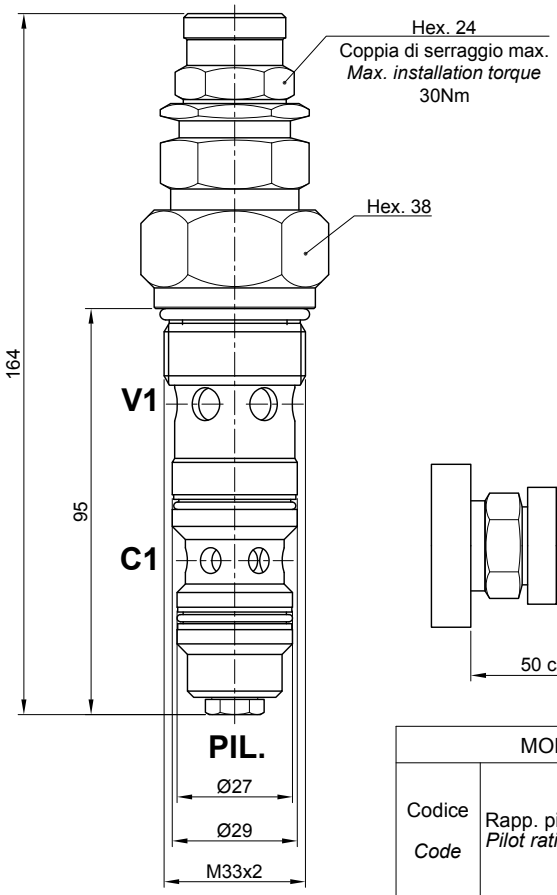


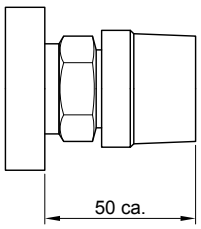
VPO-150-C-*-35-*-*

O - 072/2

Valvola overcenter, versione a cartuccia, cavità metrica
Overcenter valve, cartridge version, metric cavity

Rev. 02-2010/09





Cappellotto antimanomissione disponibile su richiesta (Z)

Tamperproof cap available request (Z)

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** *PILOT RATIO*	**CAVITA'** *CAVITY*	**COPPIA DI SERRAGGIO** *INSTALLATION TORQUE*	**PESO** *WEIGHT*
			Nm	Kg
VPO 150 C	1 : 4 (standard) - 1:8	32331	110 - 120	0.700

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O **1 5 0** **C** **Z** **3 5** **B** *****

* Z: tappo antimanomissione, omettere se non richiesto
Z: tamperproof cap, omit if not requested

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

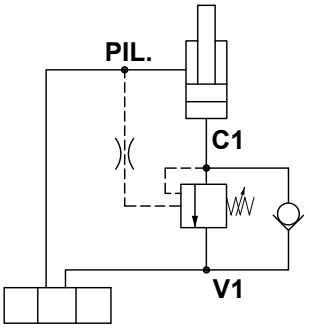
Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

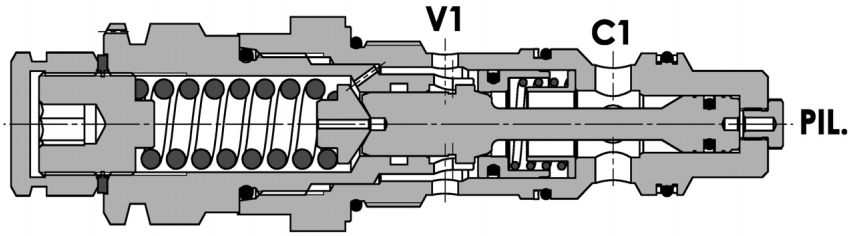
VPO-300-C-35

O - 088/1

Valvola overcenter, versione a cartuccia, cavità metrica
Overcenter valve, cartridge version, metric cavity

Rev. 03-2010/09





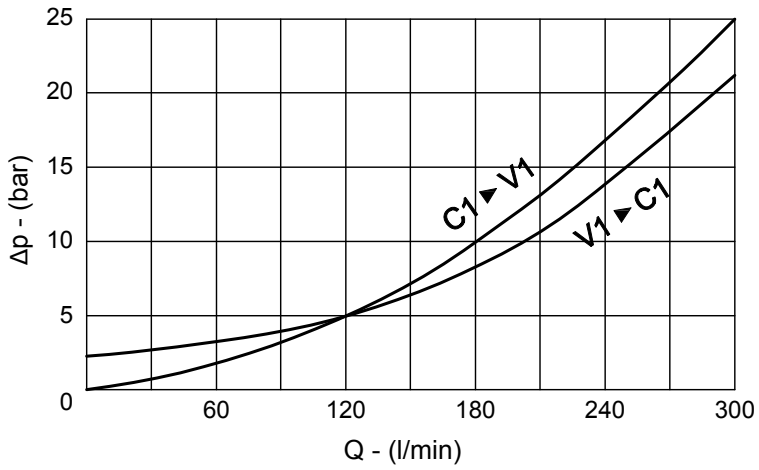
SPECIFICHE TECNICHE
Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata max: 300 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *300 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

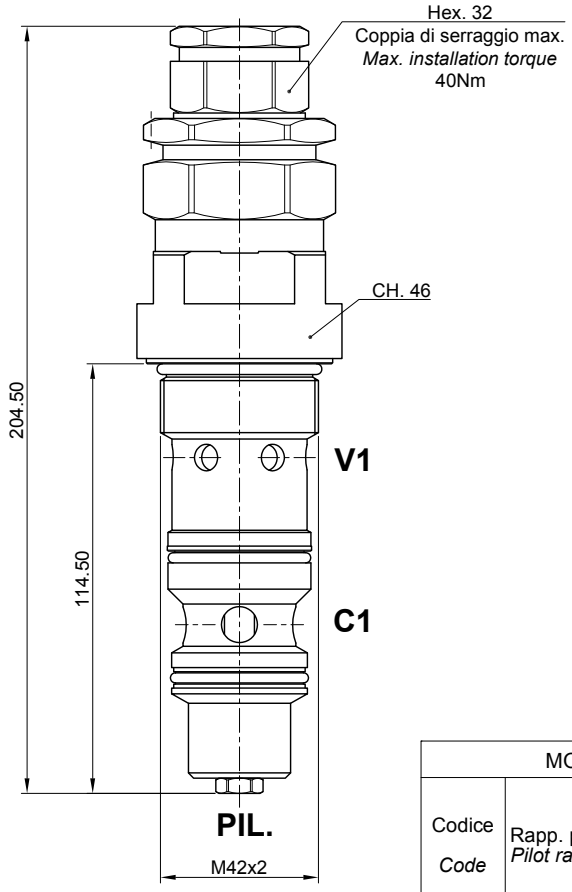


VPO-300-C-35

O - 088/2

Valvola overcenter, versione a cartuccia, cavità metrica
Overcenter valve, cartridge version, metric cavity

Rev. 03-2010/09



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	45	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** ***PILOT RATIO***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
			Nm	Kg
VPO 300 C	1 : 4	32421	246 - 272	1.650

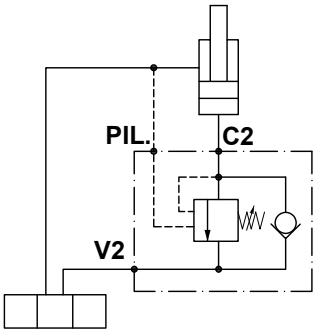
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

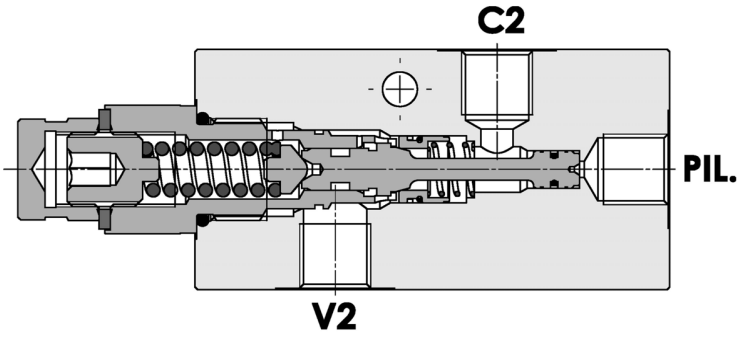
V P O **3 0 0** **C** **3 5**

VPO-35-SS-1/4-L-*-* O - 110/1

Valvola overcenter singola, montaggio in linea
Single overcenter valve, line mounted

Rev. 02-2010/05





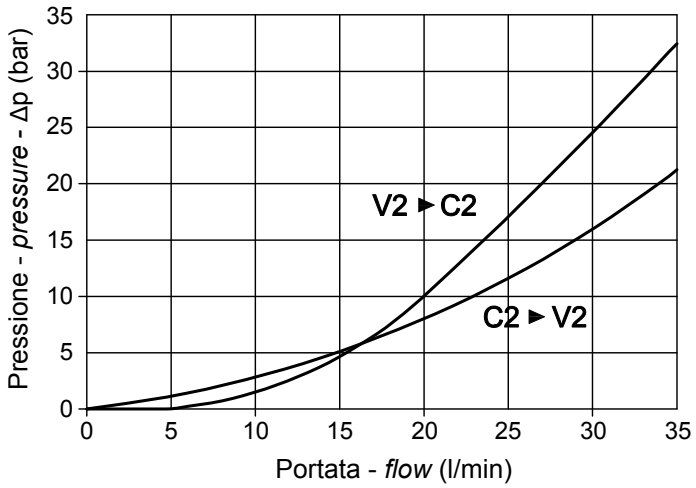
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 0,950 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *0,950 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

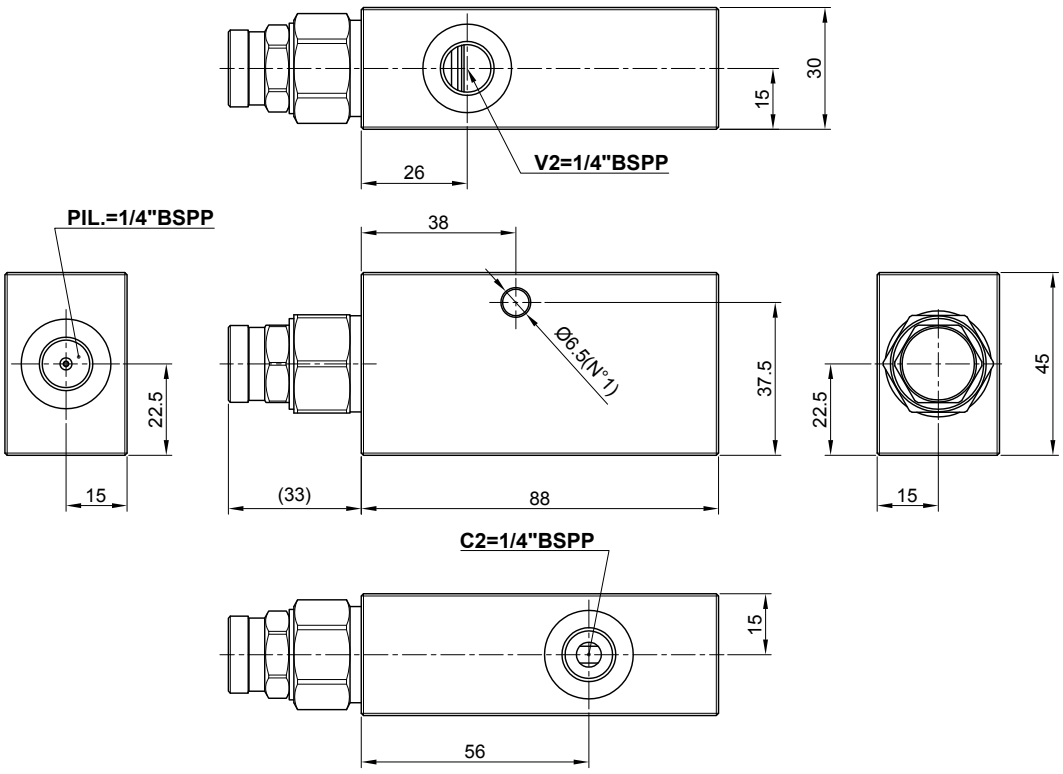


VPO-35-SS-1/4-L-*-*

O - 110/2

Valvola overcenter singola, montaggio in linea
Single overcenter valve, line mounted

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O	3 5	S S	1 / 4	L	3 5	B

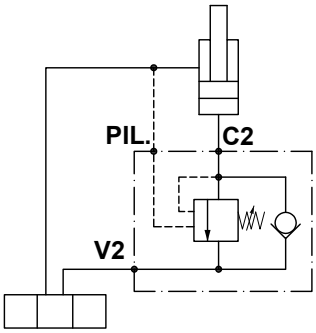
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

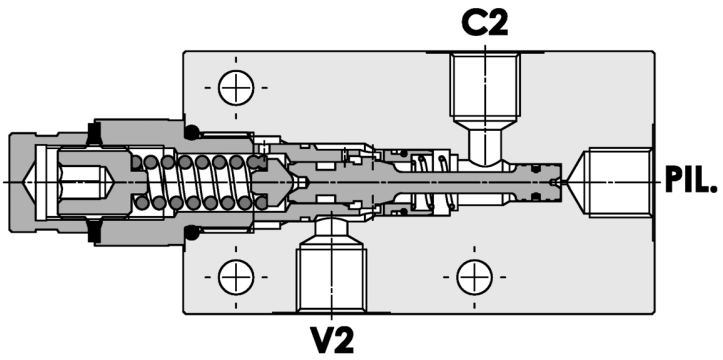
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-35-S-1/4-L-*-* O - 111/1

Valvola overcenter singola, montaggio in linea
Single overcenter valve, line mounted

Rev. 02-2010/05





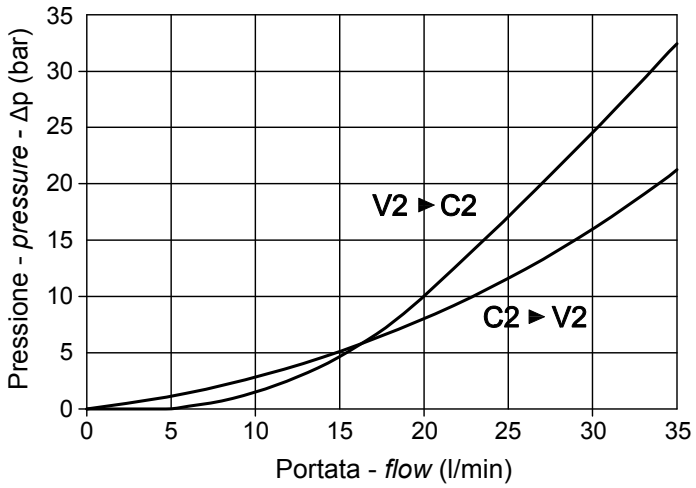
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1,050 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,050 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

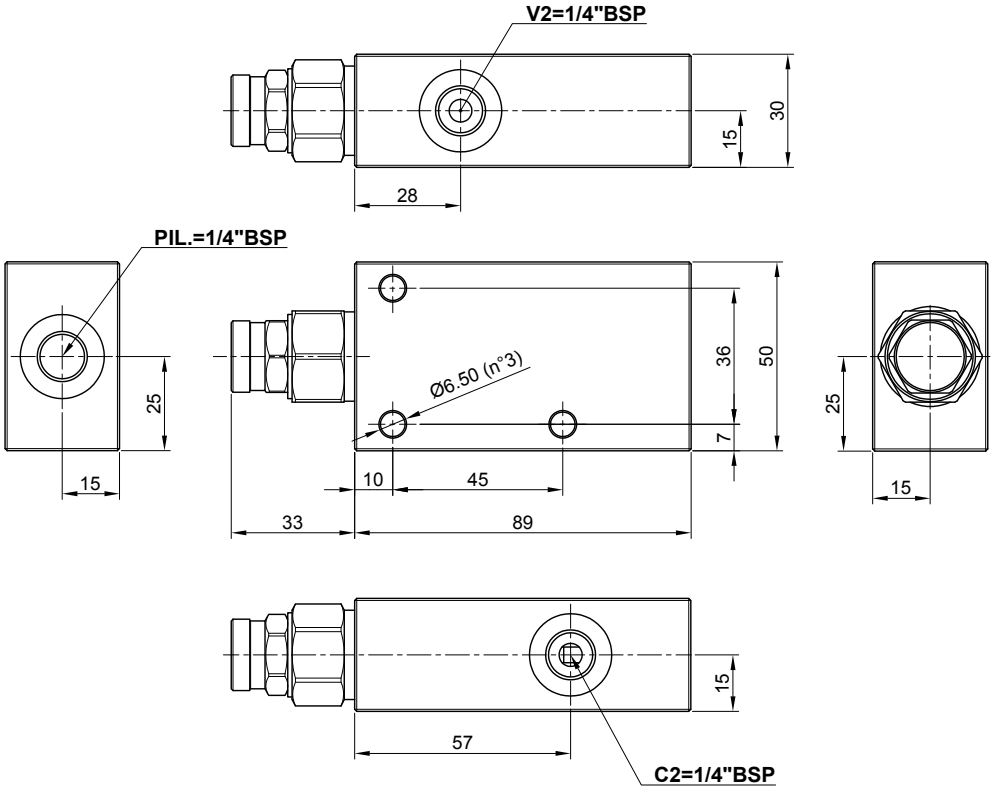


VPO-35-S-1/4-L-*-*

O - 111/2

Valvola overcenter singola, montaggio in linea
Single overcenter valve, line mounted

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O	3 5	S	1 / 4	L	3 5	B

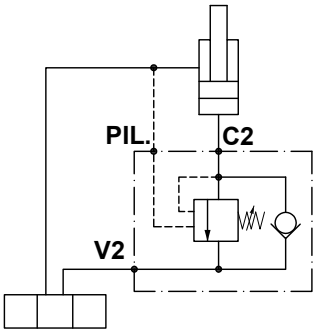
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

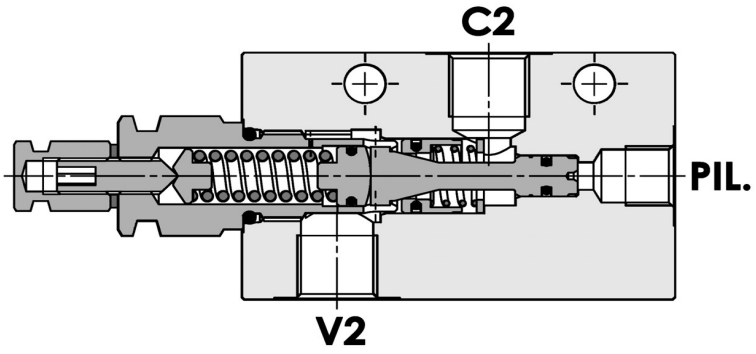
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-50-S-*-L-*-*-* O - 120/1

Valvola overcenter singola, montaggio in linea
Single overcenter valve, line mounted

Rev. 03-2010/08





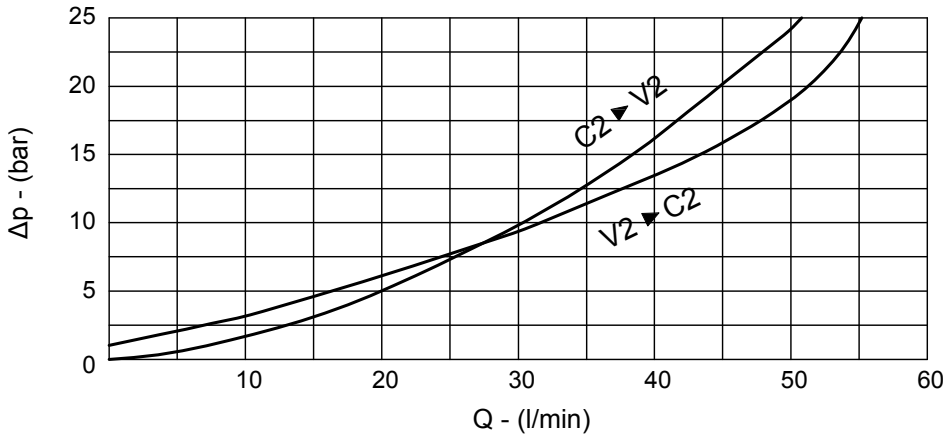
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

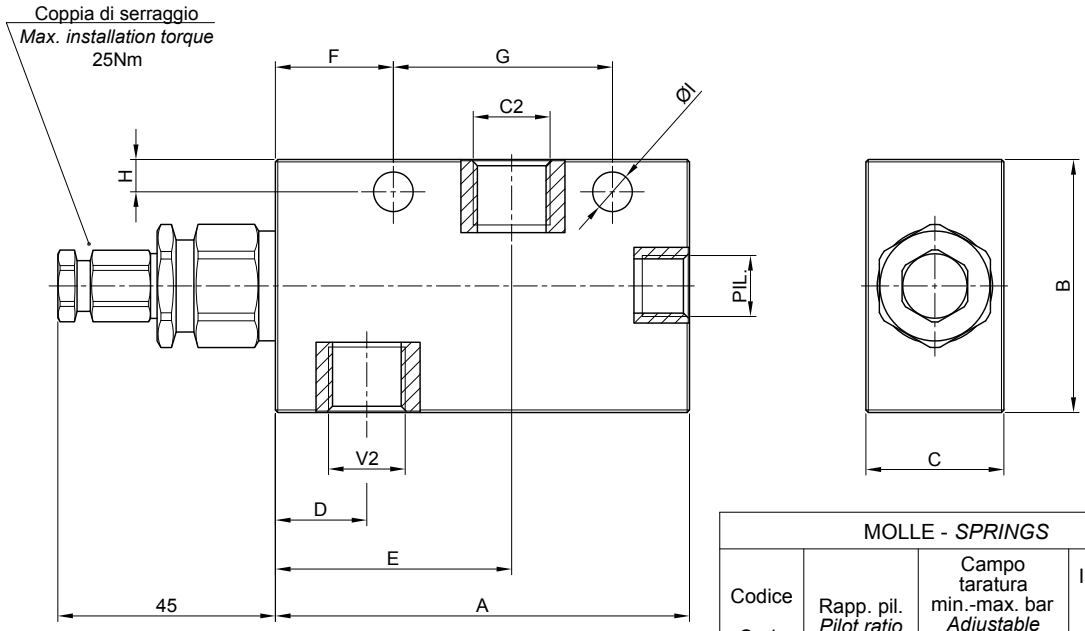
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-50-S-*-L-*-*-* O - 120/2

Valvola overcenter singola, montaggio in linea
Single overcenter valve, line mounted

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V2-C2**	**PIL.**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO** ***WEIGHT***
	BSPP	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 S-1/4"-L	1/4"	1/4"	90	55	30	19.5	51	25.6	47.6	11	8.5	1.020
VPO 50 S-3/8"-L	3/8"	1/4"	90	55	30	19.5	51	25.6	47.6	11	8.5	1.020
VPO 50 S-1/2"-L	1/2"	1/4"	90	65	35	19.5	51	25.6	47.6	11	8.5	1.450

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **50** **S** **1/4** **L** **20** **B** *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

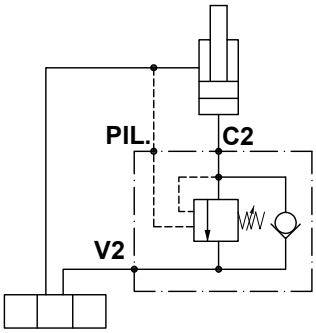
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

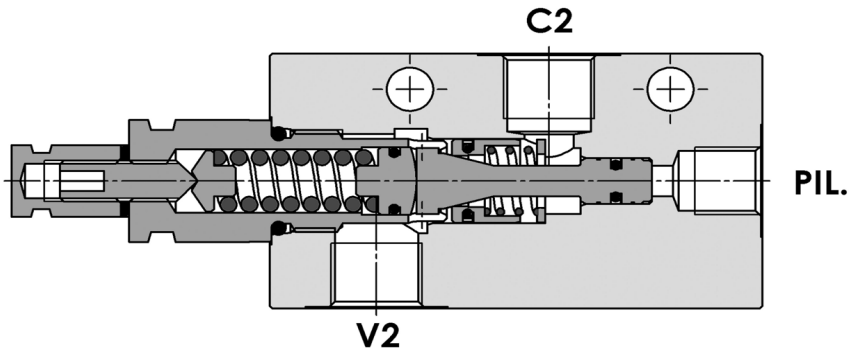
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-50-SX-*-L-20-*-* O - 121/1

Valvola overcenter singola, montaggio in linea, corpo in alluminio
Single overcenter valve, line mounted, aluminium body

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 250 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

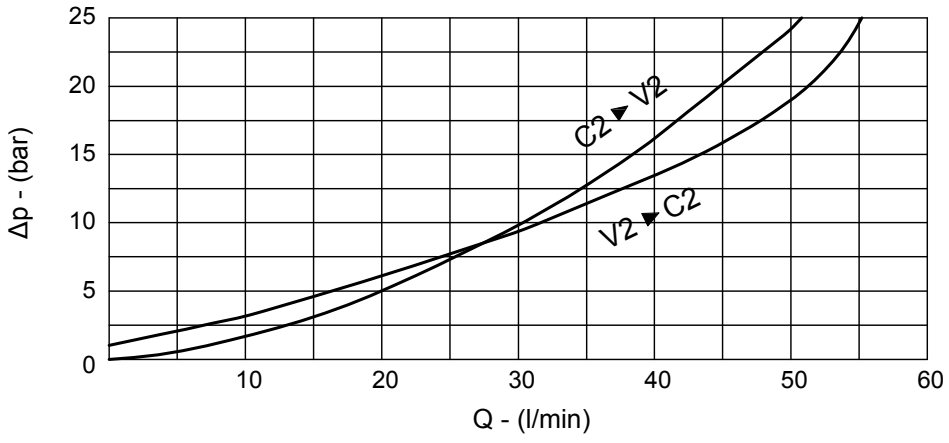
TECHNICAL SPECIFICATIONS

Materials: *body is in aluminium. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *250 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

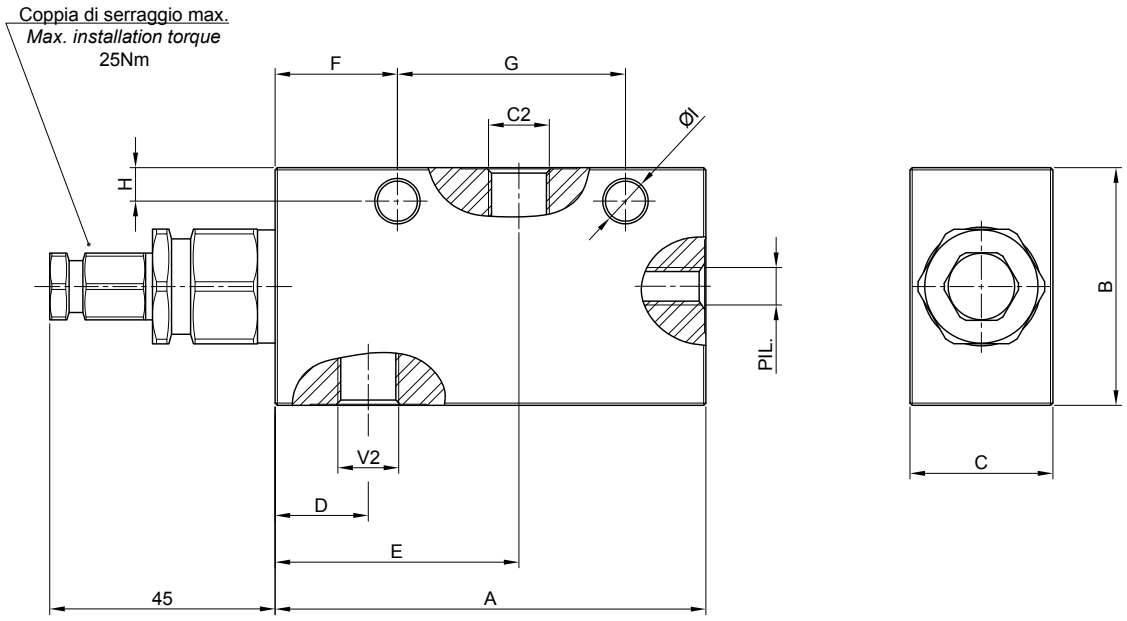
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-50-SX-*-L-20-*-* O - 121/2

Valvola overcenter singola, montaggio in linea, corpo in alluminio
Single overcenter valve, line mounted, aluminium body

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	

TIPO *TYPE*	**V2-C2**	**PIL.**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO** ***WEIGHT***
	BSPP	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 SX-1/4"-L	1/4"	1/4"	90	50	30	19.5	51	25.6	47.6	7	8.5	0.510
VPO 50 SX-3/8"-L	3/8"	1/4"	90	50	30	19.5	51	25.6	47.6	7	8.5	0.500

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO 50 SX 1/4 L 20 B *

1/4 – 1/4" BSPP
* 3/8 – 3/8" BSPP
Connessioni - *Port sizes*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

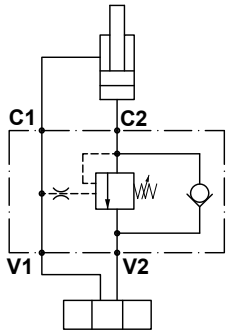
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

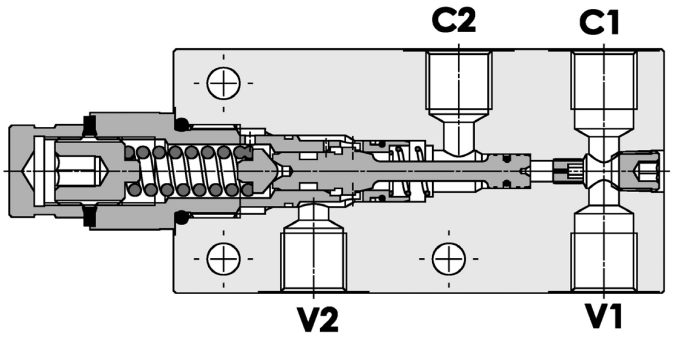
VPO-35-S-1/4-L-P-*-*

O - 155/1

Valvola overcenter singola, montaggio in linea, pilotaggio interno
Single overcenter valve, line mounted, internal pilot

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1,300 Kg

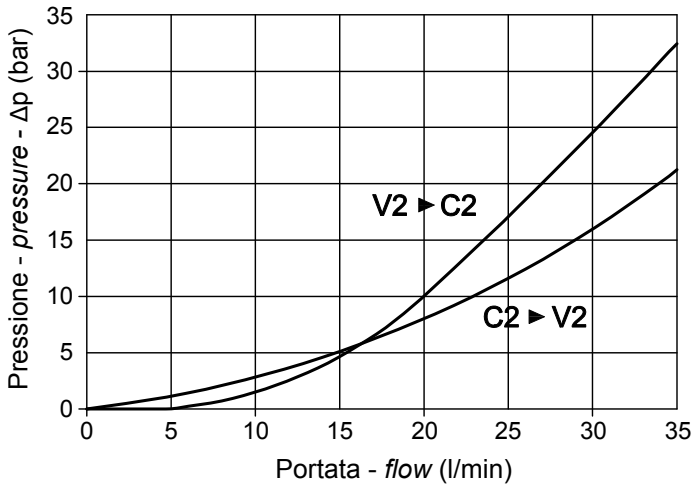
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,300 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



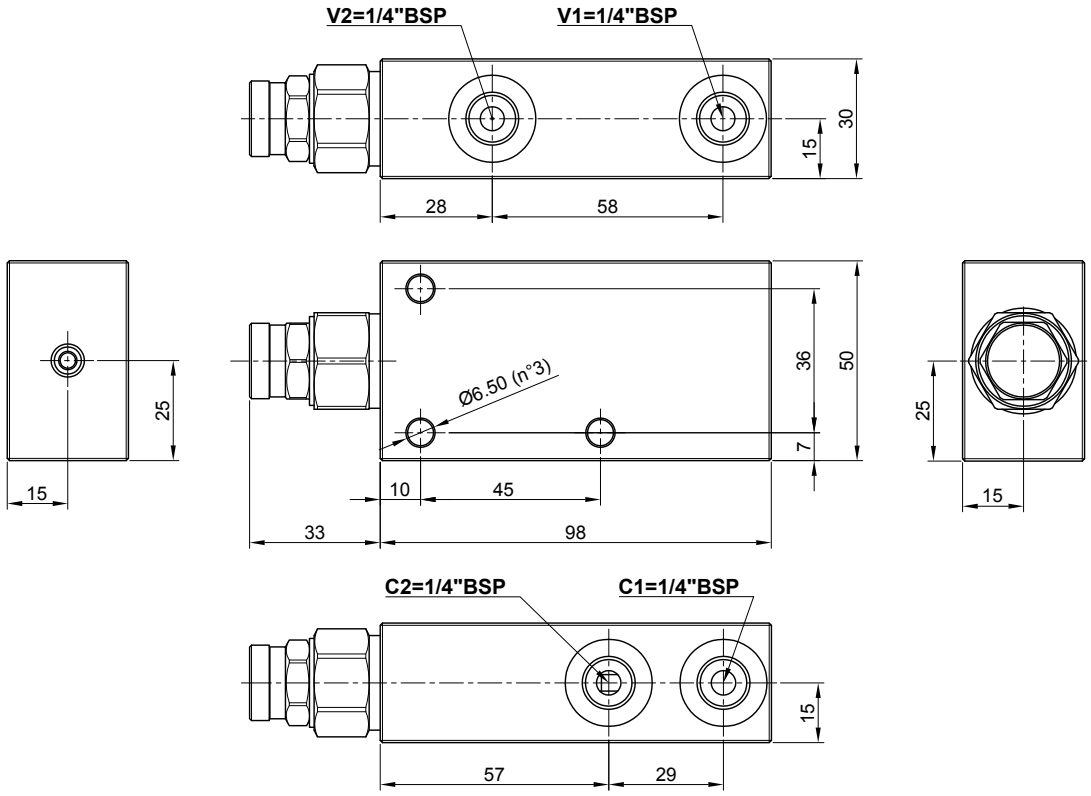
VPO-35-S-1/4-L-P-*-*

O - 155/2

Valvola overcenter singola, montaggio in linea, pilotaggio interno

Single overcenter valve, line mounted, internal pilot

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O	3 5	S	1 / 4	L	P	3 5	B

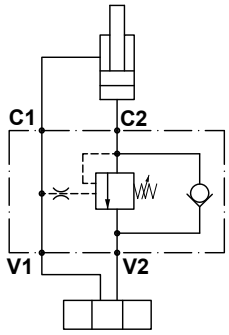
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

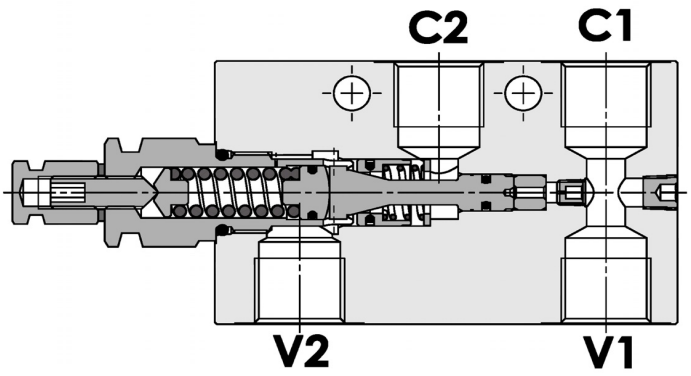
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-50-S-*-L-P-*-*-* O - 160/1

Valvola overcenter singola, montaggio in linea, pilotaggio interno
Single overcenter valve, line mounted, internal pilot

Rev. 03-2010/08





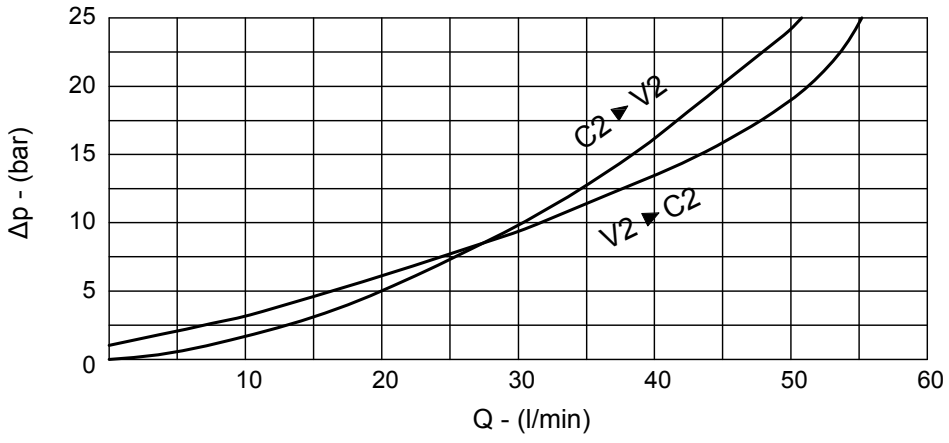
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

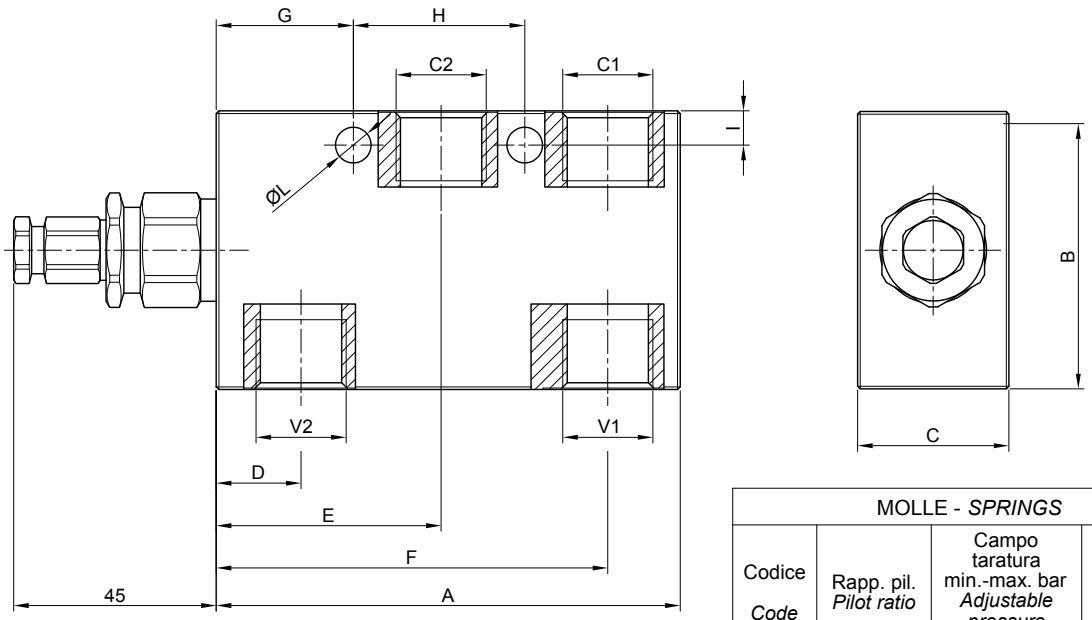


VPO-50-S-*-L-P-*-*-*

O - 160/2

Valvola overcenter singola, montaggio in linea, pilotaggio interno
Single overcenter valve, line mounted, internal pilot

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-C1 V2-C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**L**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 S-1/4"-L-P	1/4"	108	55	30	19.5	52	91	32	40	8	8.5	1.230
VPO 50 S-3/8"-L-P	3/8"	108	55	30	19.5	52	91	32	40	8	8.5	1.230
VPO 50 S-1/2"-L-P	1/2"	108	65	35	19.5	52	91	32	40	8	8.5	1.860

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **50** **S** **1/4** **L** **P** **20** **B** *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

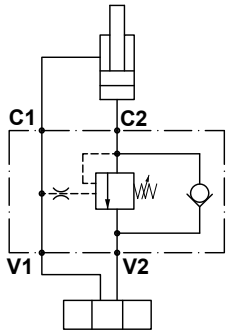
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

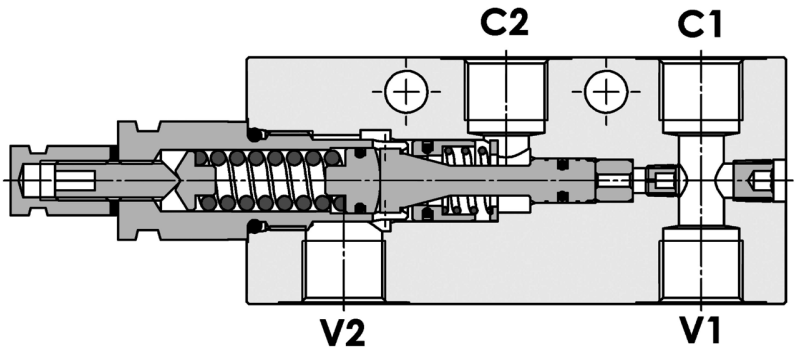
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-50-SX-*-L-P-20-*-* O - 161/1

Valvola overcenter singola, montaggio in linea, pilotaggio interno, corpo in alluminio
Single overcenter valve, internal pilot, line mounted, aluminium body

Rev. 03-2010/08





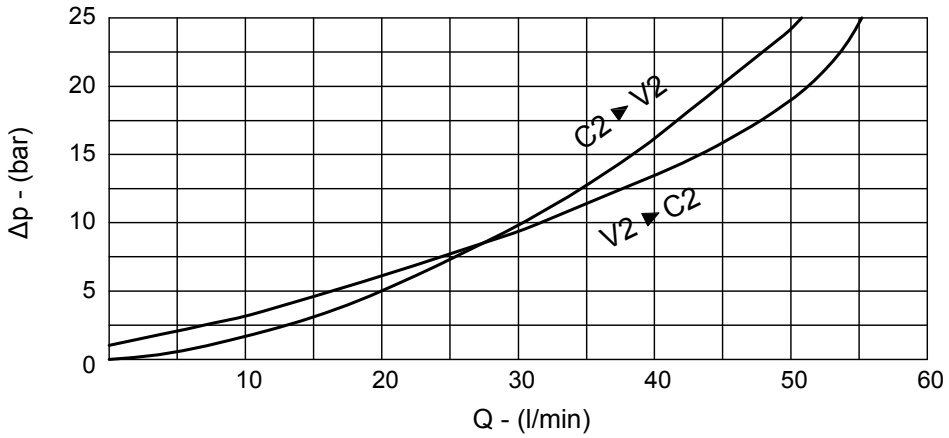
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 50 l/min
Taratura max.: 250 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *250 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

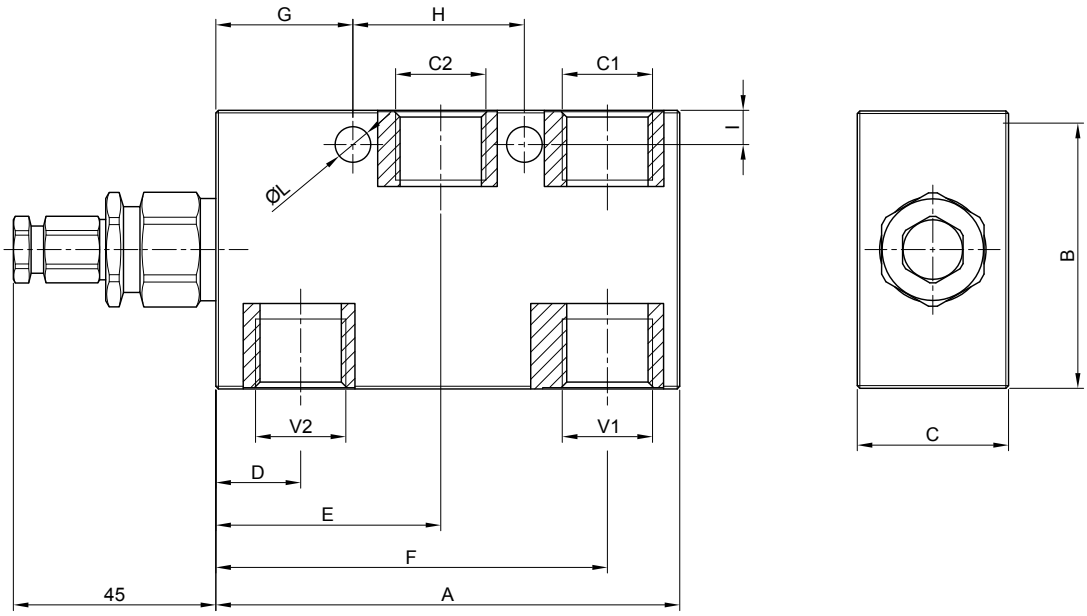


VPO-50-SX-*-L-P-20-*-*

O - 161/2

Valvola overcenter singola, montaggio in linea, pilotaggio interno, corpo in alluminio
Single overcenter valve, internal pilot, line mounted, aluminium body

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	

TIPO *TYPE*	**V1-C1 V2-C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**L**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 SX-1/4"-L-P	1/4"	108	50	30	19.5	52	91	32	40	7	8.5	0.610
VPO 50 SX-3/8"-L-P	3/8"	108	50	30	19.5	52	91	32	40	7	8.5	0.600

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O | **5 0** | **S X** | **1 / 4** | **L** | **P** | **2 0** | **B** | *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
Connessioni - *Port sizes*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

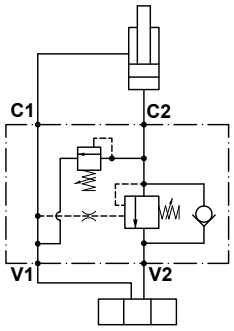
VPO-50-S-*-L-P-*-VM-*-*-*

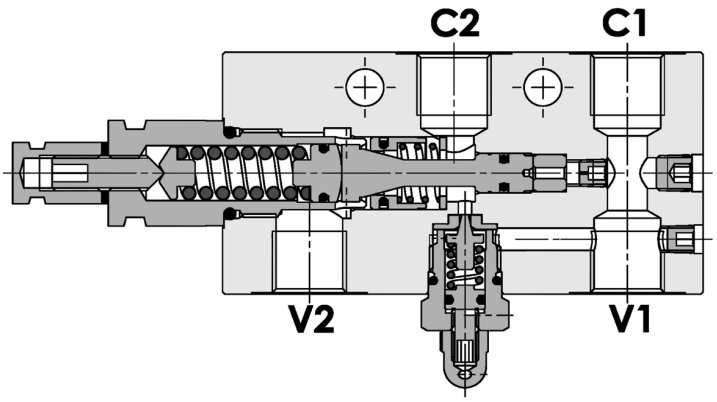
O - 162/1

Valvola overcenter singola con valvola di regolazione pressione sulla linea V2-C2, montaggio in linea, pilotaggio interno

Single overcenter valve, line mounted, internal pilot, with auxiliary relief valve on V2-C2 line

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

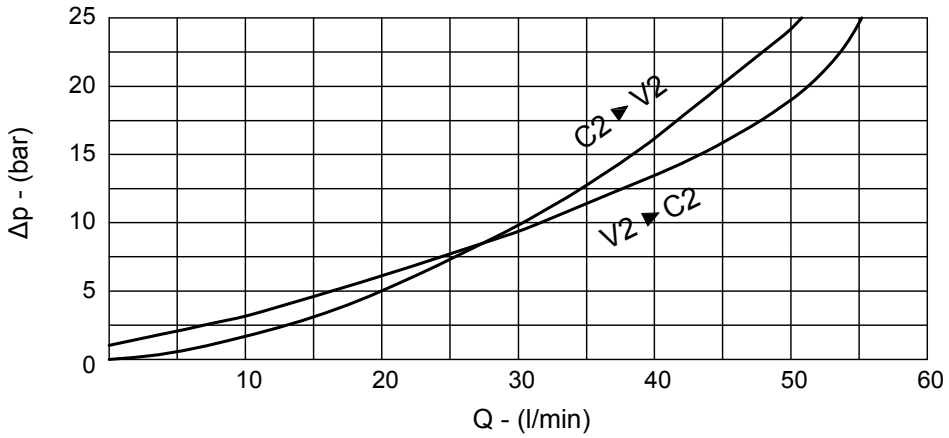
TECHNICAL SPECIFICATIONS

Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



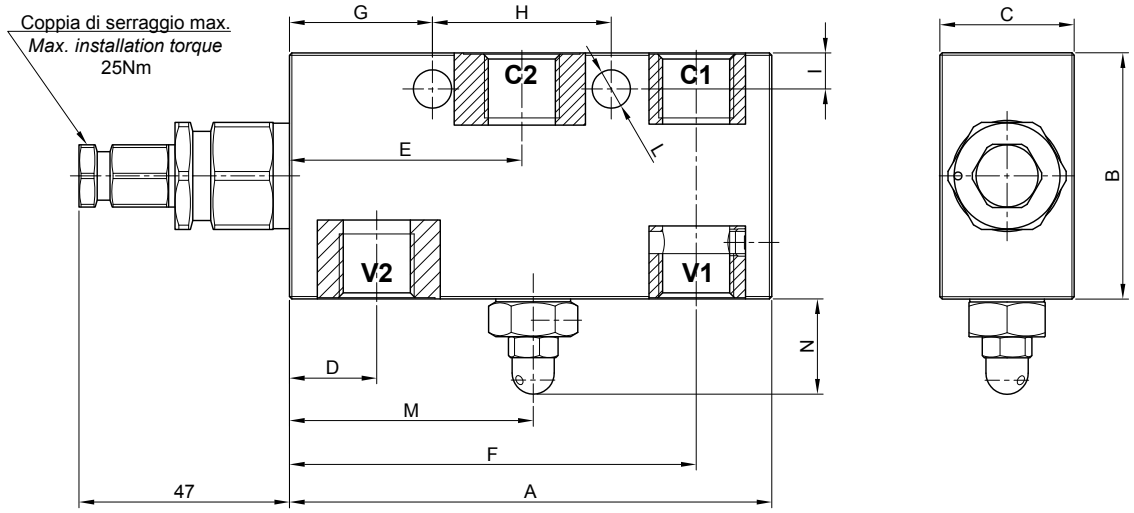
VPO-50-S-*-L-P-*-VM-*-*-*

O - 162/2

Valvola overcenter singola con valvola di regolazione pressione sulla linea V2-C2, montaggio in linea, pilotaggio interno

Single overcenter valve, line mounted, internal pilot, with auxiliary relief valve on V2-C2 line

Rev. 03-2010/08



MOLLA "VM" – "VM" SPRING			
Codice molla overcenter *Code overcenter spring*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar (molla VM) *Standard setting bar (VM spring)*
20	150 - 350	/	150
35			250

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-C1 V2-C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**L**	**M**	**N**	**PESO *WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 S-1/4-L-P-VM	1/4"	108	55	30	19.5	52	91	32	40	8	8.5	54.5	21	1.250
VPO 50 S-3/8-L-P-VM	3/8"	108	55	30	19.5	52	91	32	40	8	8.5	54.5	21	1.250

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO 50 S 3/8 L P 35 VM * B *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

* Taratura valvola di massima – *relief valve setting*
Omettere se standard (vedere MOLLA VM) – *Omit if standard (see VM SPRING)*

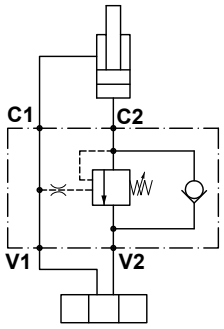
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

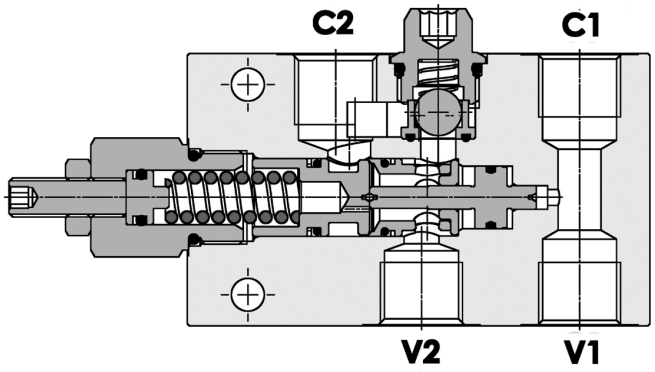
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPOE-70-S-1/2-L-P-A-*-* O - 170/1

Valvola overcenter singola, montaggio in linea, pilotaggio interno, serie E
Single overcenter valve, line mounted, internal pilot, E series

Rev. 01-2010/02





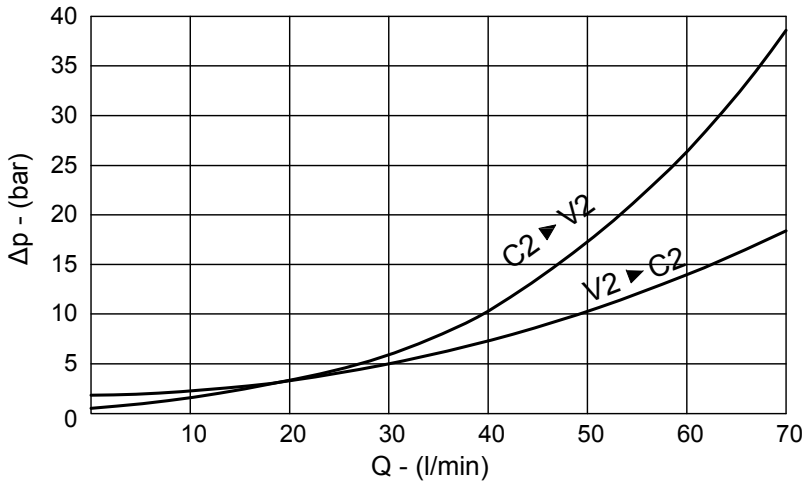
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 70 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 3.2 : 1 (a richiesta 8.2 : 1)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 0,700 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 70 l/min*
Max. setting: *350 bar*
Pilot ratio: *3.2 : 1 (standard), 8.2 : 1 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *0,700 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

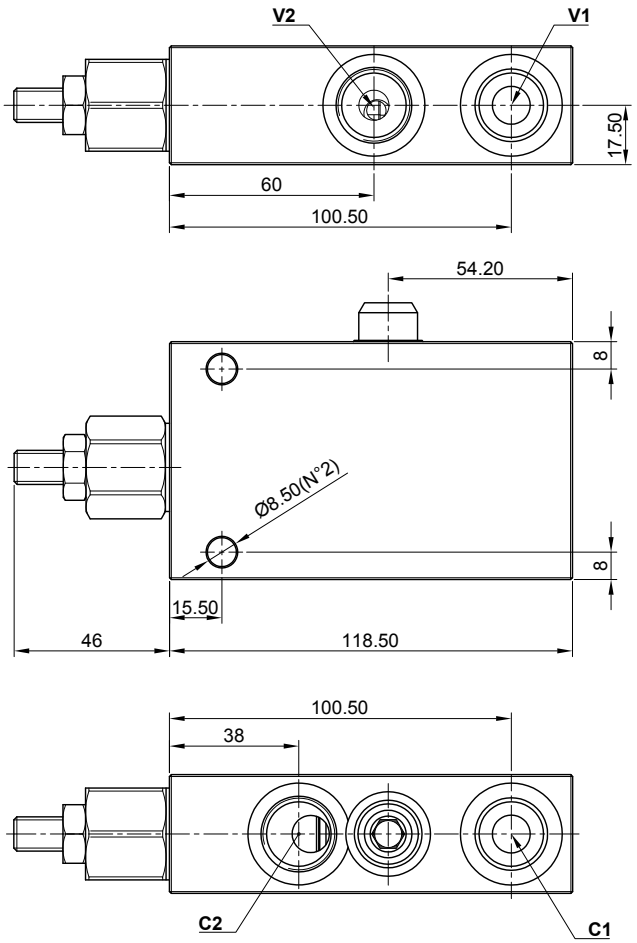


VPOE-70-S-1/2-L-P-A-*-*

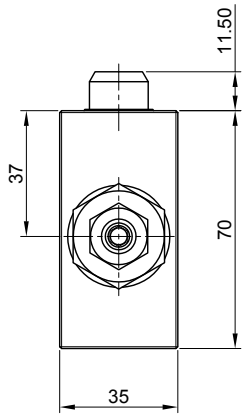
O - 170/2

Valvola overcenter singola, montaggio in linea, pilotaggio interno, serie E
Single overcenter valve, line mounted, internal pilot, E series

Rev. 01-2010/02



C1 - C2 - V1 - V2: 1/2"BSP



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 3.2	60 - 210	56	200
20	1 : 8.2	60 - 210	56	200
35	1 : 3.2	120 - 350	90	350
35	1 : 8.2	120 - 350	90	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOE	70	S	1/2	L	P	A	20	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

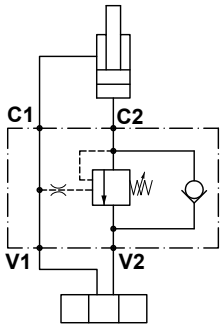
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8.2

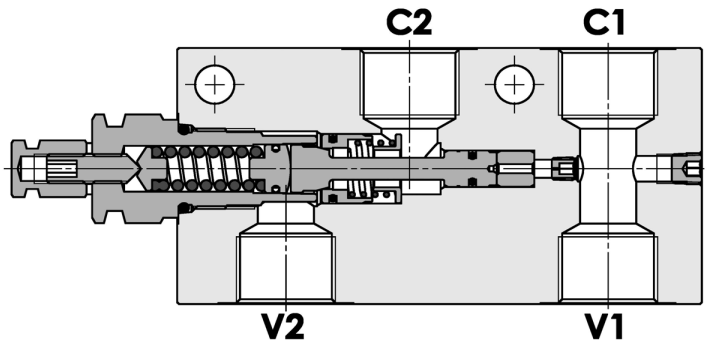
VPO-90-S-3/4-L-P-35

O - 180/1

Valvola overcenter singola, montaggio in linea, pilotaggio interno
Single overcenter valve, line mounted, internal pilot

Rev. 02-2010/08





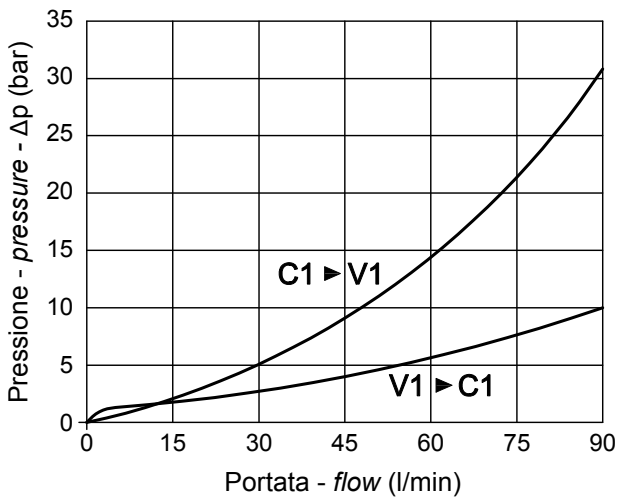
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 90 L/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.2
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 2.700 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 90 L/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.2*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *2.700 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

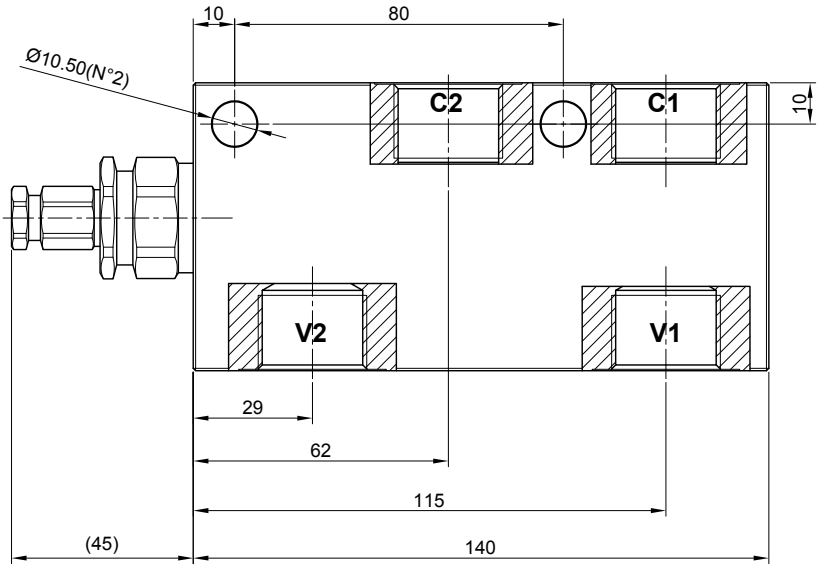


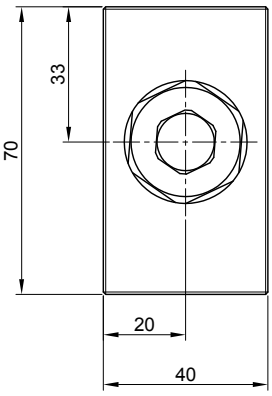
VPO-90-S-3/4-L-P-35

O - 180/2

Valvola overcenter singola, montaggio in linea, pilotaggio interno
Single overcenter valve, line mounted, internal pilot

Rev. 02-2010/08





C1/C2/V1/V2:
3/4"BSPP

MOLLE - *SPRINGS*			*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	100 - 350	109	280

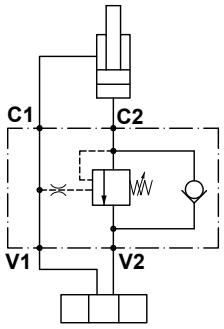
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

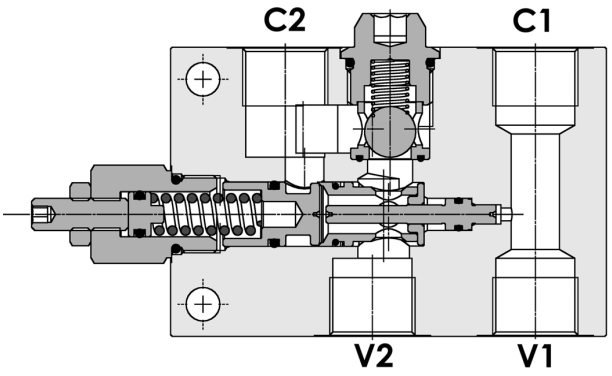
V P O	9 0	S	3 / 4	L	P	3 5

VPOE-120-S-3/4-L-P-A-*-* O - 190/1

Valvola overcenter singola, montaggio in linea, pilotaggio interno, serie E
Single overcenter valve, line mounted, internal pilot, E series

Rev. 01-2010/02





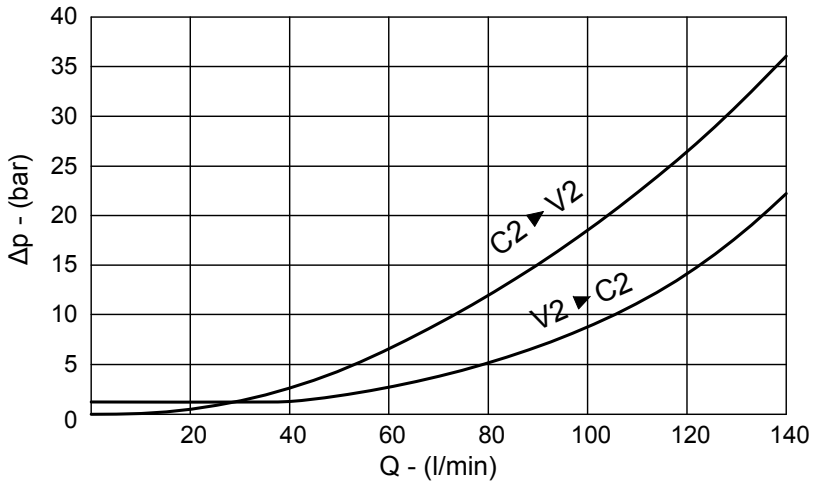
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 120 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 3.2 : 1 (a richiesta 8.2 : 1)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1.300 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 120 l/min*
Max. setting: *350 bar*
Pilot ratio: *3.2 : 1 (standard), 8.2 : 1 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1.300 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

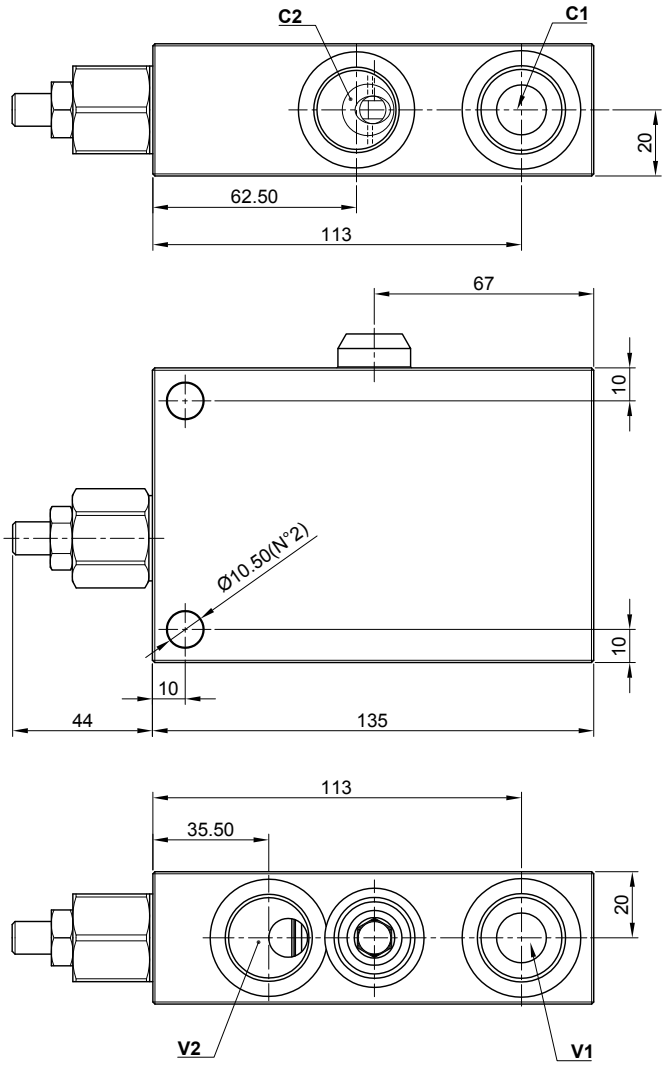
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

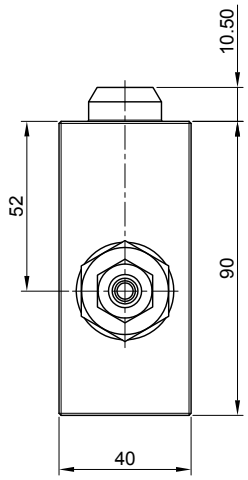


VPOE-120-S-3/4-L-P-A-*-* O - 190/2

Valvola overcenter singola, montaggio in linea, pilotaggio interno, serie E
Single overcenter valve, line mounted, internal pilot, E series

Rev. 01-2010/02





C1 - C2 - V1 - V2: 3/4"BSP

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 3.2	60 - 210	56	200
	1 : 8.2	60 - 210	56	200
35	1 : 3.2	120 - 350	90	350
	1 : 8.2	120 - 350	90	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O E	1 2 0	S	3 / 4	L	P	A	2 0	B

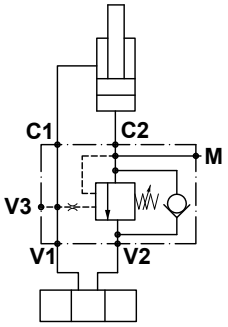
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

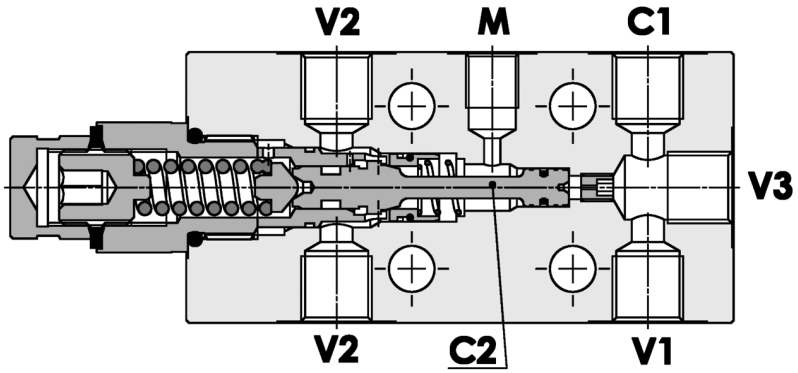
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8.2

VPO-35-S-1/4-1F-P-M-*-* O - 205/1

Valvola overcenter singola, montaggio a flangia
Single overcenter valve, gasket mounted

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1,100 Kg

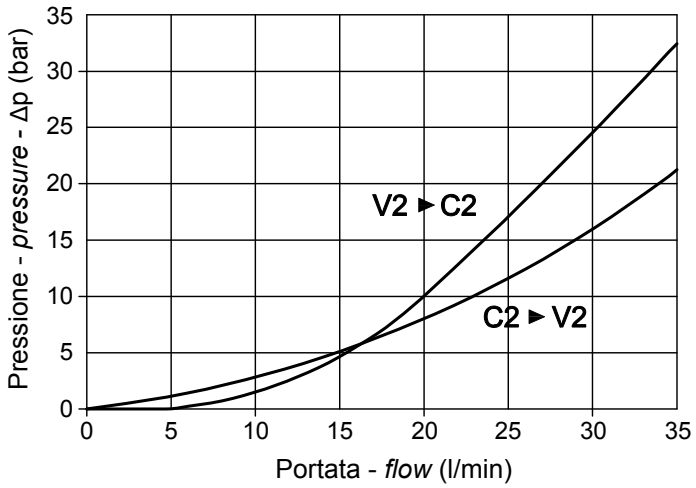
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,100 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

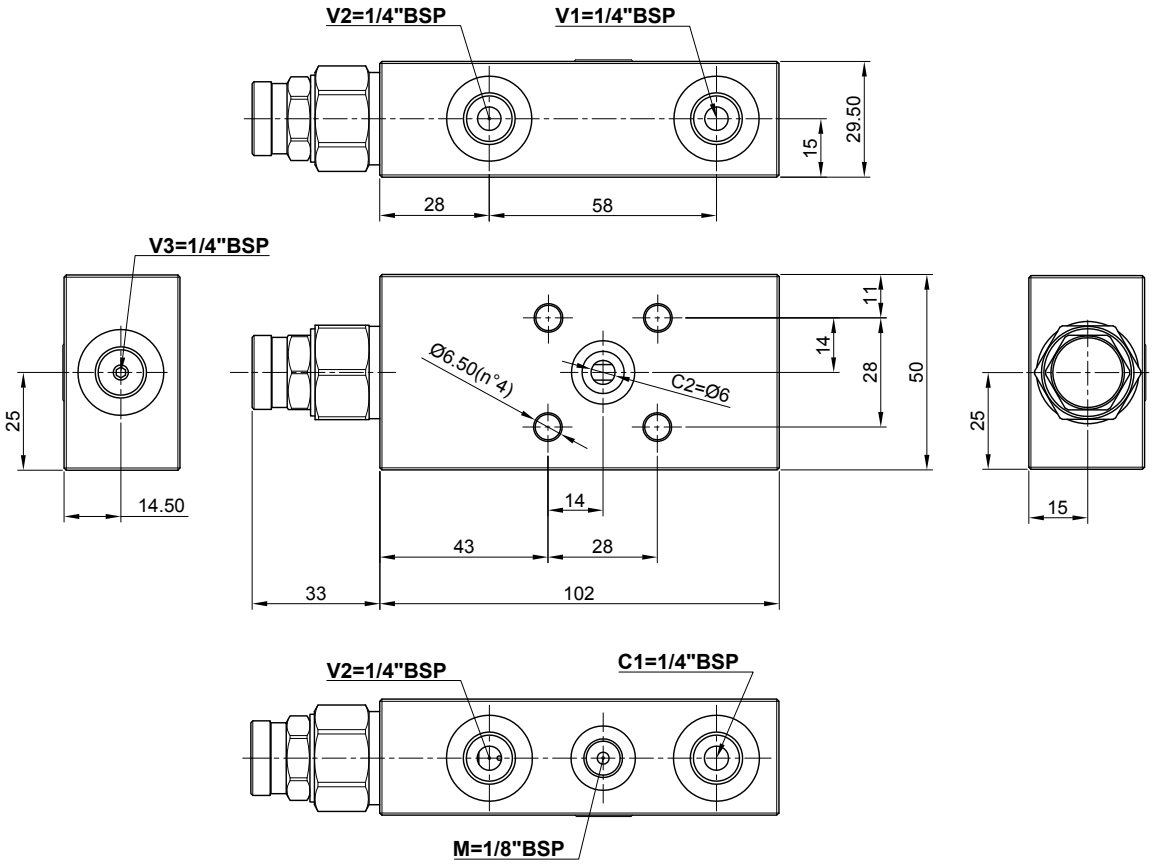


VPO-35-S-1/4-1F-P-M-*-*

O - 205/2

Valvola overcenter singola, montaggio a flangia
Single overcenter valve, gasket mounted

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O	3 5	S	1 / 4	1 F	P	M	3 5	B

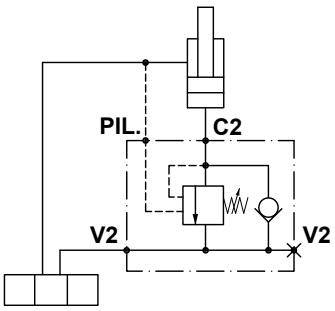
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

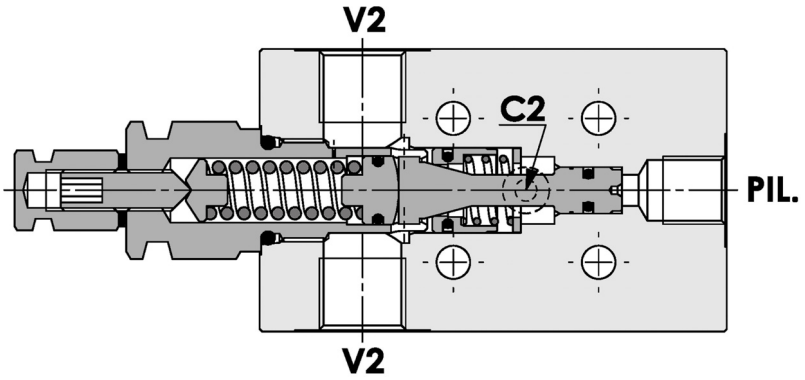
Rapporto di pilotaggio – *Pilot ratio*
Omettere se std – *Omit if std* *
B = 1 : 8, C = 1 : 11

VPO-50-S-*-1F-*-*-* O - 210/1

Valvola overcenter singola, montaggio a flangia
Single overcenter valve, gasket mounted

Rev. 03-2010/08





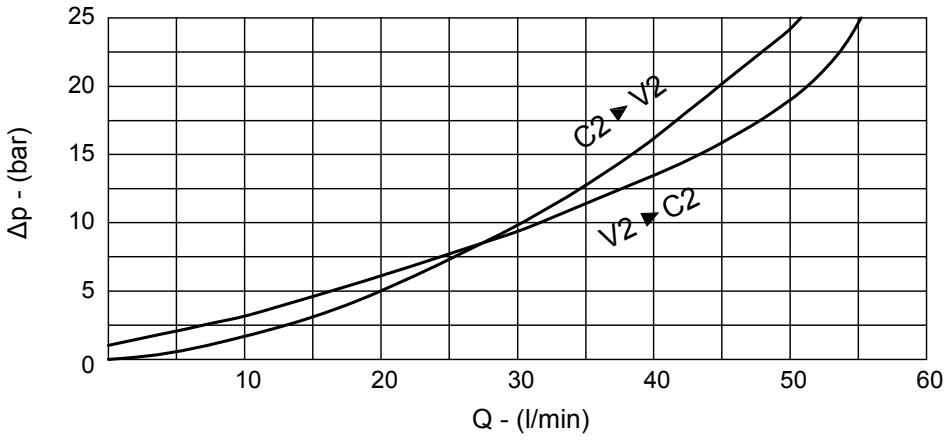
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

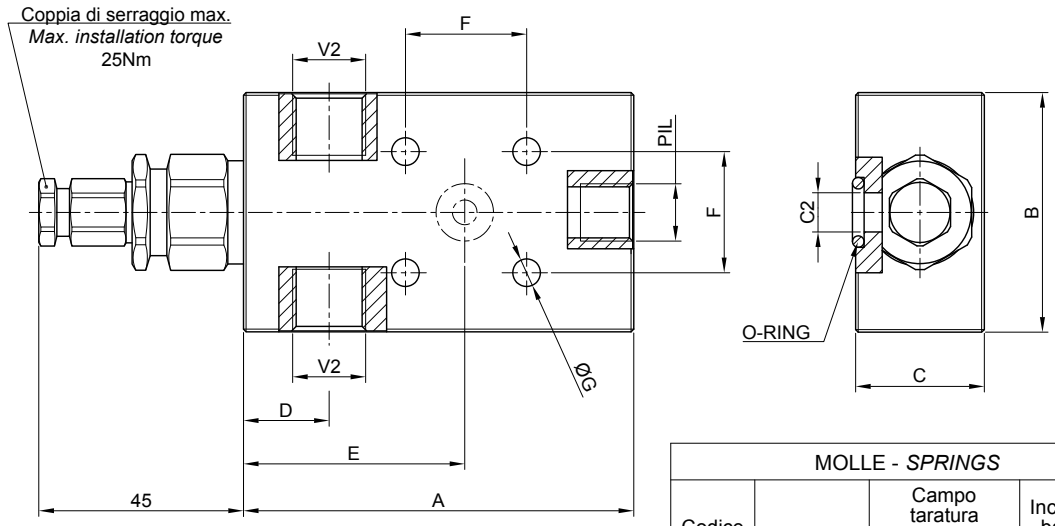


VPO-50-S-*-1F-*-*-*

O - 210/2

Valvola overcenter singola, montaggio a flangia
Single overcenter valve, gasket mounted

Rev. 03-2010/03



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V2**	**C2**	**PIL.**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**O-RING**	**PESO** ***WEIGHT***
	BSPP	**mm**	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 S-1/4"-1F	1/4"	9	1/4"	90	55	30	19	51	28	6.5	10.77x2.62	1.000
VPO 50 S-3/8"-1F	3/8"	9	1/4"	90	55	30	19	51	28	6.5	10.77x2.62	1.000
VPO 50 S-1/2"-1F	1/2"	9	1/4"	90	65	35	19	51	28	6.5	10.77x2.62	1.400

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO | **50** | **S** | **1/4** | **1F** | **20** | **B** | *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

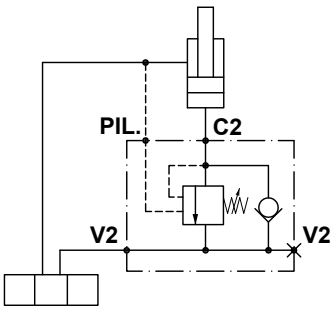
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

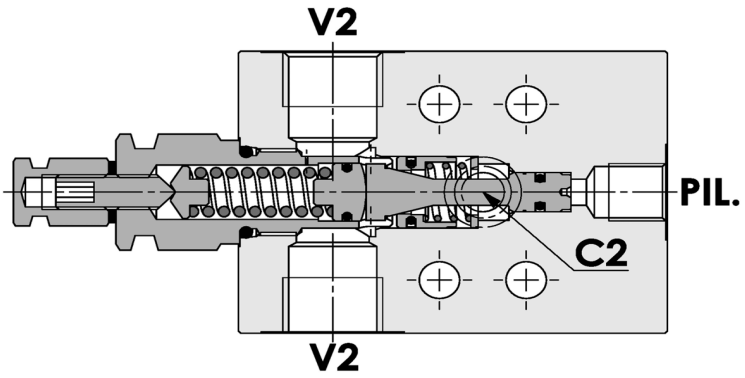
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-50-S-1/2-1F-SAE-*-*-* O - 211/1

Valvola overcenter singola, montaggio a flangia, SAE 6000
Single overcenter valve, gasket mounted, SAE 6000

Rev. 03-2010/08





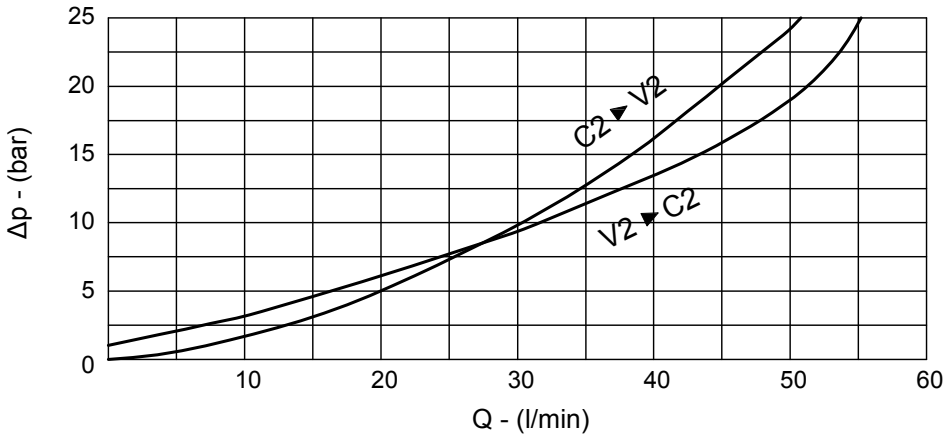
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (1 : 8, 1 : 11 su richiesta)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8, 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

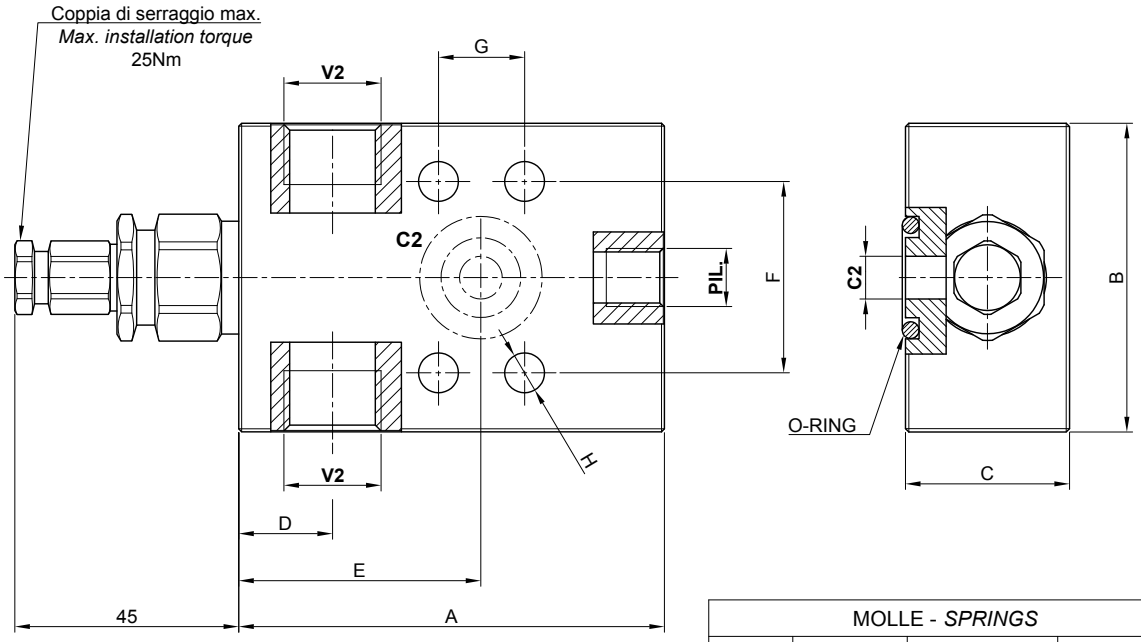
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-50-S-1/2-1F-SAE-*-*-* O - 211/2

Valvola overcenter singola, montaggio a flangia, SAE 6000
Single overcenter valve, gasket mounted, SAE 6000

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V2**	**C2**	**O-RING**	**PIL.**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 S-1/2"-1F-SAE	1/2"	1/2" SAE 6000	18.64x3.53	1/4"	90	65	34.5	19	51	40.5	18.2	8.5	1.000

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	50	S	1/2	1F	SAE	20	B	*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8, C = 1 : 11

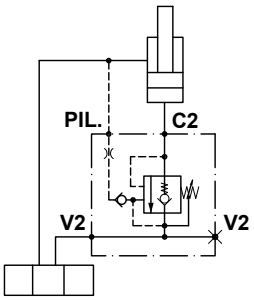
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

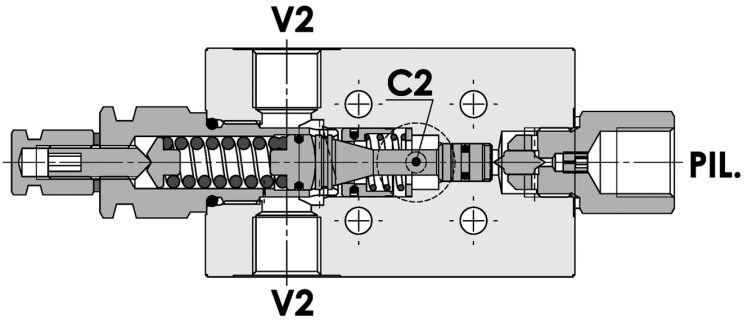
VPO-50-S-3/8-1F-*-BP-*

O - 212/1

Valvola overcenter singola, montaggio a flangia, pilotaggio a trafilamento
Single overcenter valve, gasket mounted, bleeding pilot

Rev. 01-2010/02





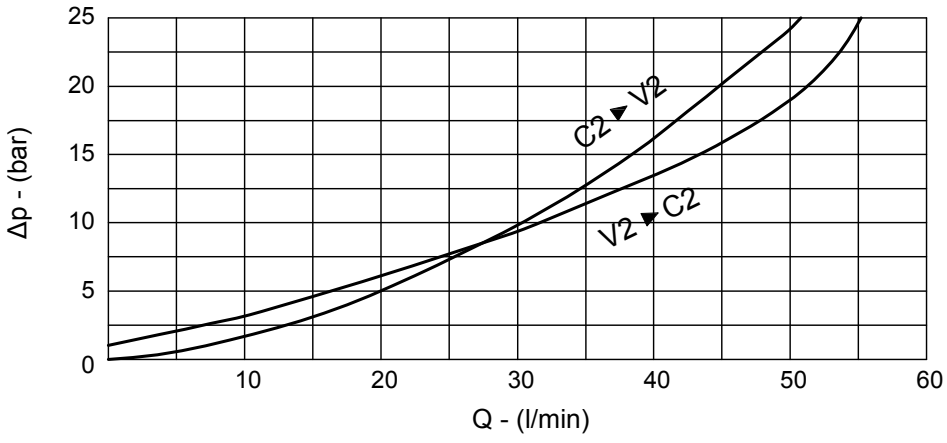
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 2
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 2*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



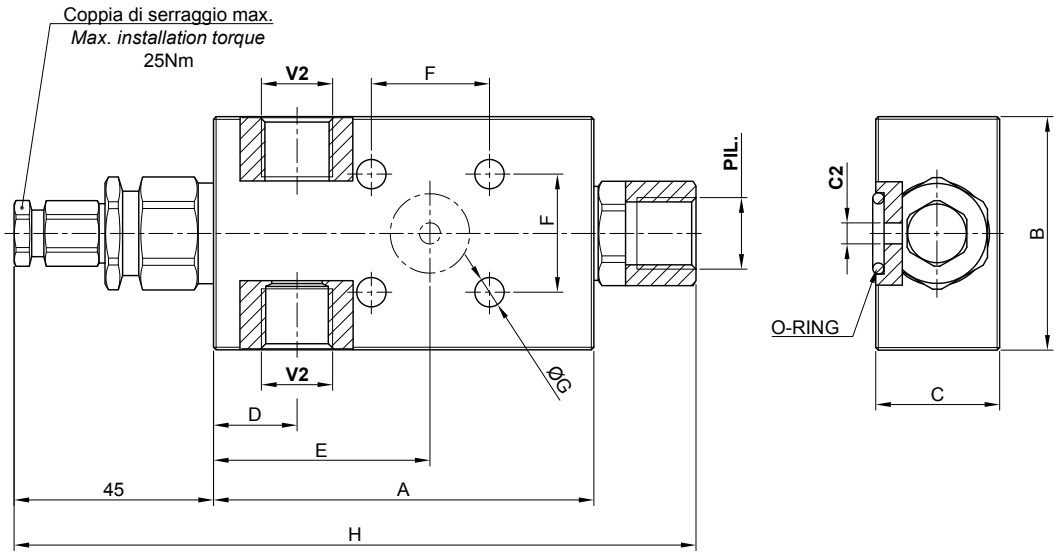
VPO-50-S-3/8-1F-*-BP-*

O - 212/2

Valvola overcenter singola, montaggio a flangia, pilotaggio a trafilamento

Single overcenter valve, gasket mounted, bleeding pilot

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 2	60 - 210	70	170
35	1 : 2	80 - 350	120	280

TIPO *TYPE*	**V2**	**C2**	**PIL.**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**O-RING**	**PESO** ***WEIGHT***
	BSPP	**mm**	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 S-3/8"-1F-BP	3/8"	6	3/8"	90	55	29.5	19.5	51	28	6.5	161.5	13.95x2.62	1.140

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O **5 0** **S** **3 / 8** **1 F** **2 0** **B P** *****

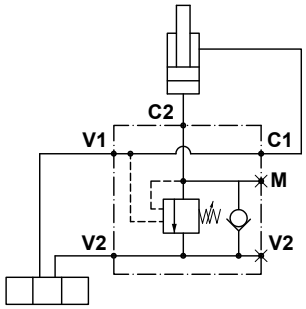
* “20” / “35”:
Campi di taratura pressione - *Adjustable pressure*

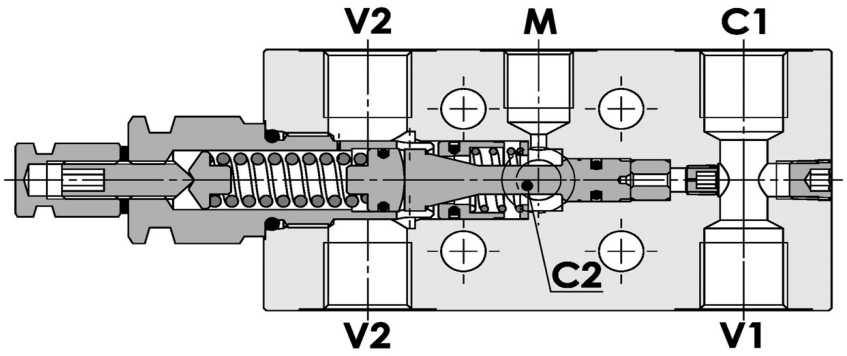
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

VPO-50-S-*-1F-P-M-*-*-* O - 213/1

Valvola overcenter singola, montaggio con C2 flagiata,V1-C1 contrapposte, attacco manometro
Single overcenter valve, gasket mounted: C2 flanged, V1-C1 through ported, pressure gauge port

Rev. 04-2010/10





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

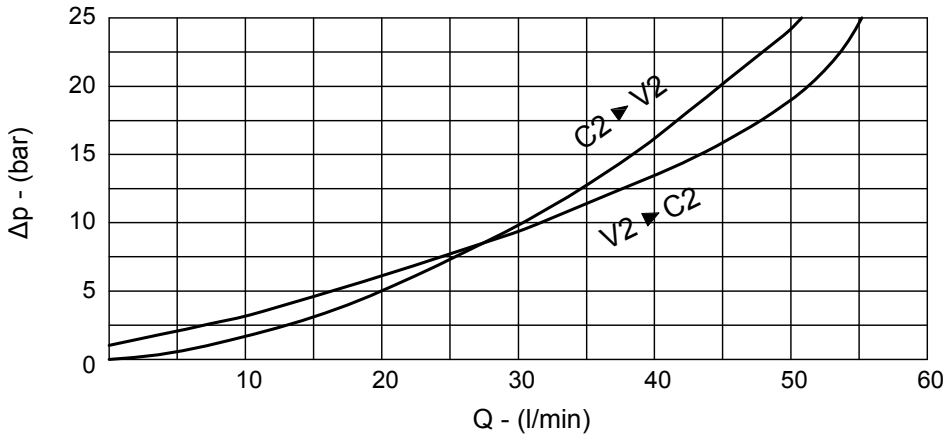
TECHNICAL SPECIFICATIONS

Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

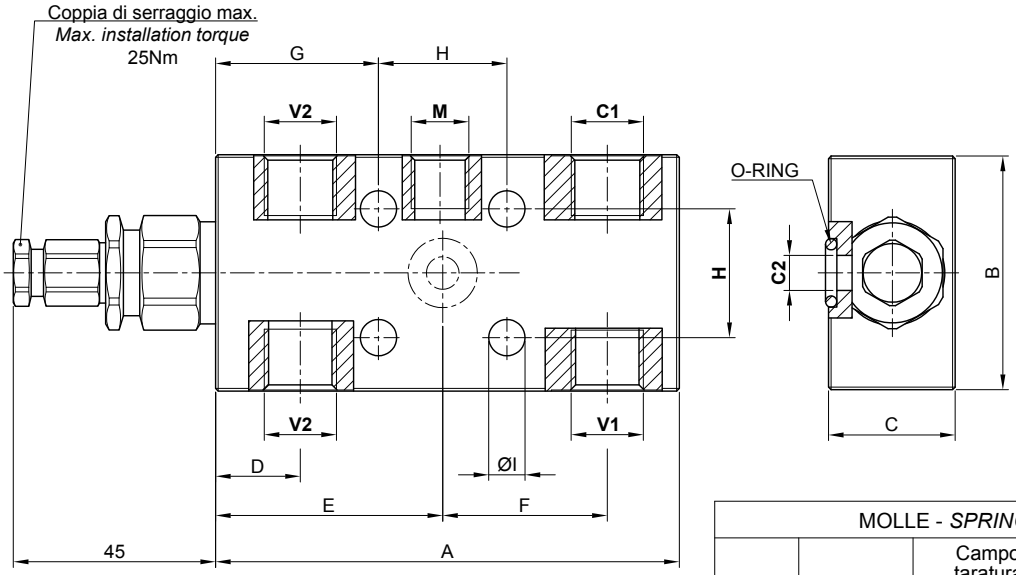


VPO-50-S-*-1F-P-M-*-*-* O - 213/2

Valvola overcenter singola, montaggio con C2 flagiata,V1-C1 contrapposte, attacco manometro

Single overcenter valve, gasket mounted: C2 flanged, V1-C1 through ported, pressure gauge port

Rev. 04-2010/10



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-C1 V2**	**C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**O-RING**	**PESO *WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 S-1/4"-1F-P-M	1/4"	9	108	55	30	19.5	52	39	38	30	8.5	10.77x2.62	1.200
VPO 50 S-3/8"-1F-P-M	3/8"	9	108	55	30	19.5	52	39	37	30	8.5	10.77x2.62	1.200
VPO 50 S-1/2"-1F-P-M	1/2"	9	108	65	35	19.5	52	39	37	30	8.5	10.77x2.62	1.800

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **50** **S** **1/2** **1F** **P** **M** **20** **B** *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

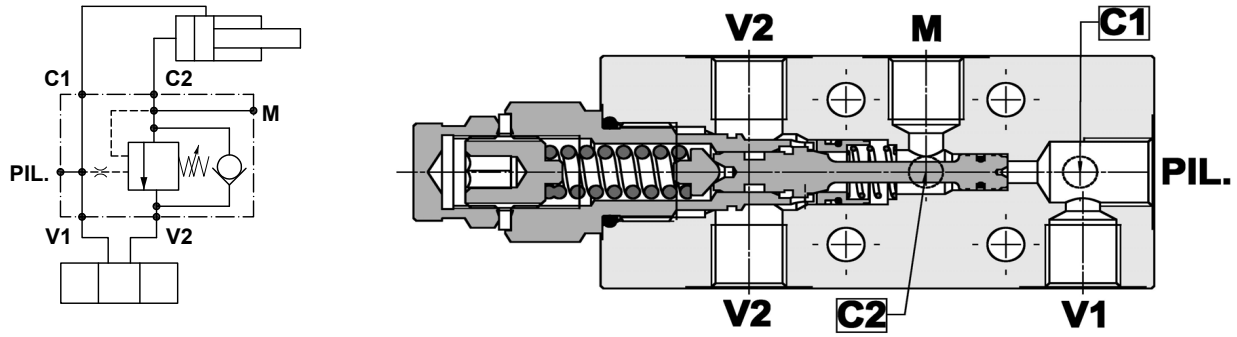
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-35-S-1/4-2F-P-M-*-* O - 255/1

Valvola overcenter singola, montaggio a flangia su C1/C2, attacco manometro
Single overcenter valve, gasket mounted on C1/C2, gauge port

Rev. 03-2010/08



SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1,000 Kg

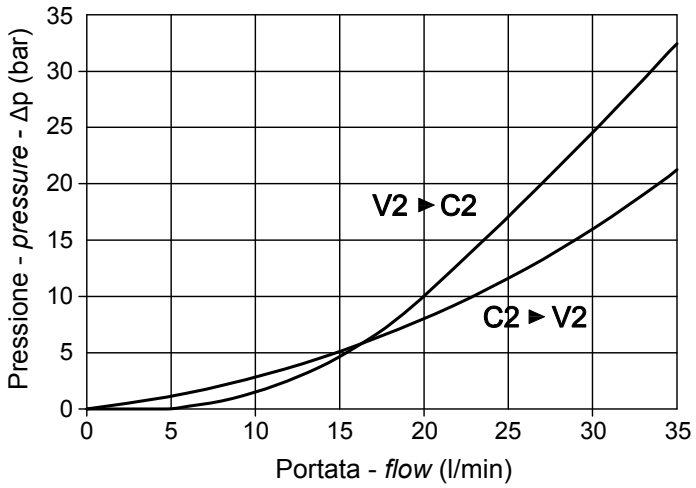
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,000 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

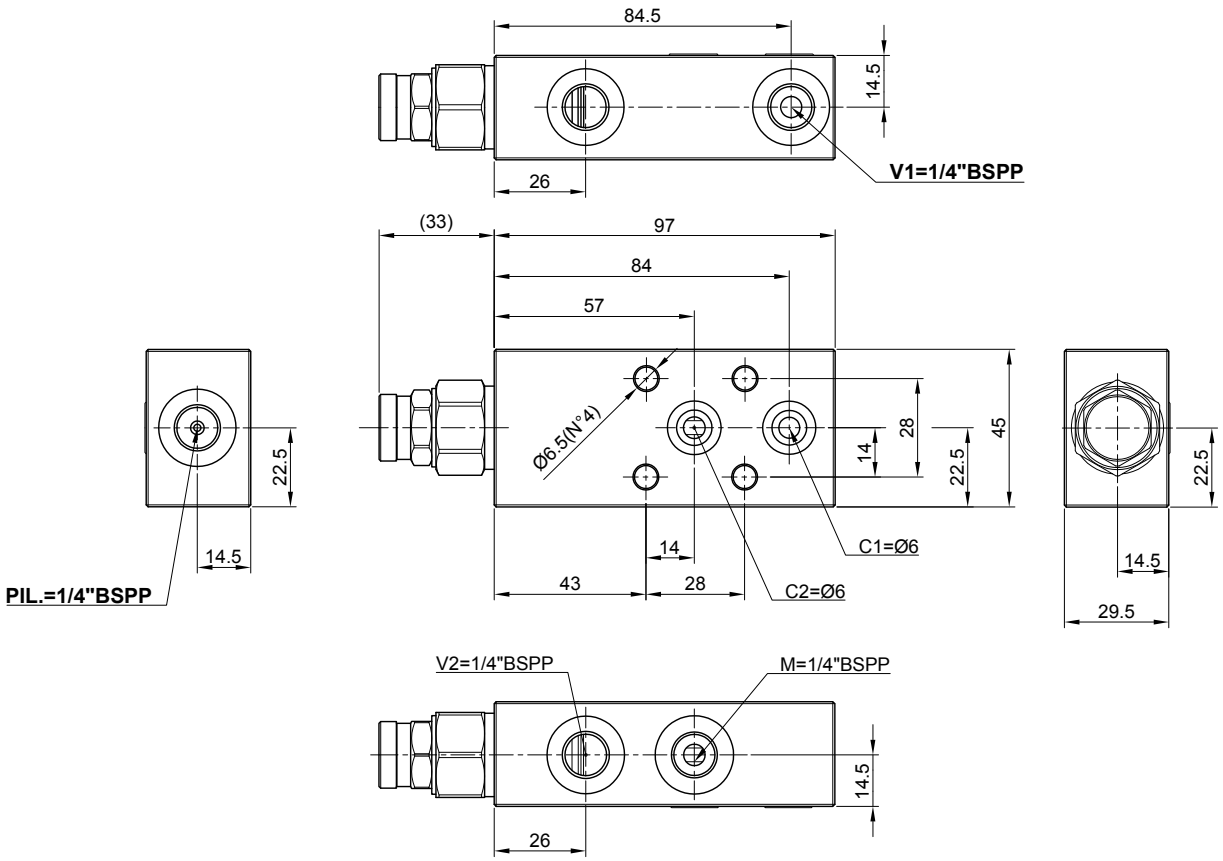
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-35-S-1/4-2F-P-M-*-* O - 255/2

Valvola overcenter singola, montaggio a flangia su C1/C2, attacco manometro
Single overcenter valve, gasket mounted on C1/C2, gauge port

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O	3 5	S	1 / 4	2 F	P	M	3 5	B

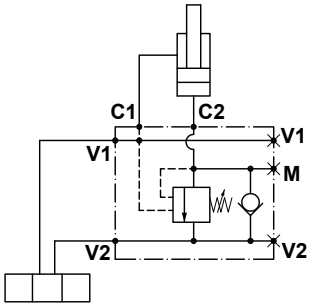
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

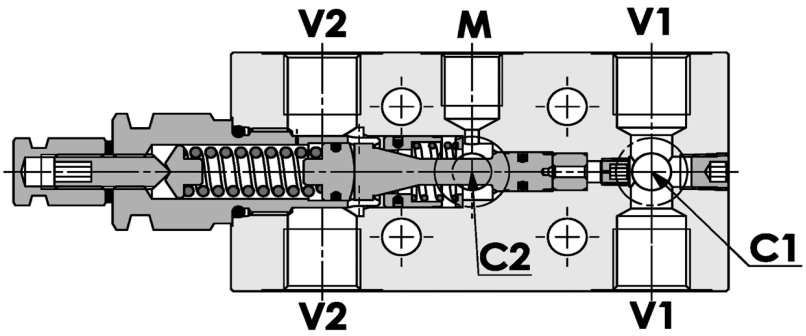
Rapporto di pilotaggio – *Pilot ratio*
Omettere se std – *Omit if std* *
B = 1 : 8, C = 1 : 11

VPO-50-S-*-2F-P-M-*-*-* O - 260/1

Valvola overcenter singola, montaggio con C1-C2 flangiate, attacco manometro
Single overcenter valve, gasket mounted: C1-C2 flanged, pressure gauge port

Rev. 03-2010/08





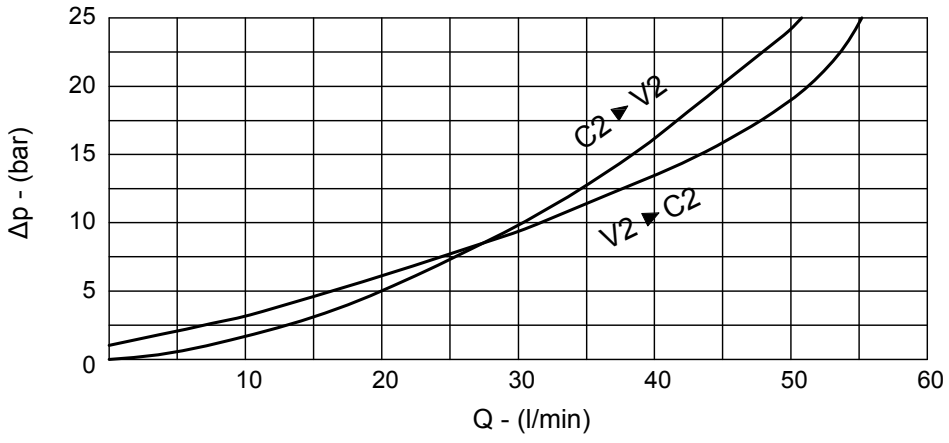
SPECIFICHE TECNICHE
Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made, zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

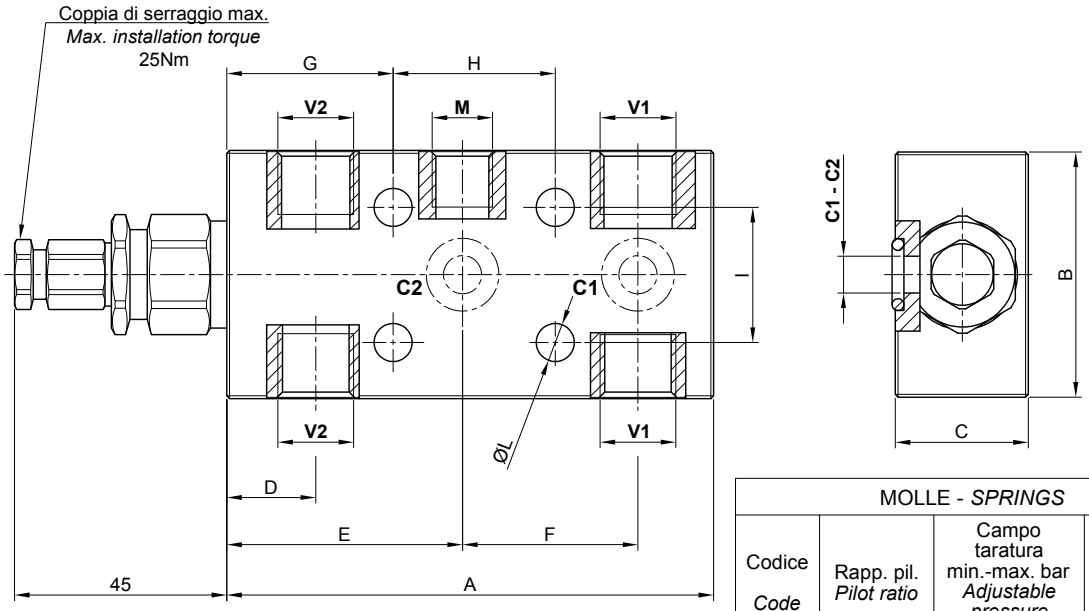
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-50-S-*-2F-P-M-*-*-* O - 260/2

Valvola overcenter singola, montaggio con C1-C2 flangiate, attacco manometro
Single overcenter valve, gasket mounted: C1-C2 flanged, pressure gauge port

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-V2**	**C1-C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**L**	**O-RING**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 S-1/4"-2F-P-M	1/4"	9	108	55	30	19.5	52	39	37	36	30	8.5	10.77x2.62	1.180
VPO 50 S-3/8"-2F-P-M	3/8"	9	108	55	30	19.5	52	39	37	36	30	8.5	10.77x2.62	1.180
VPO 50 S-1/2"-2F-P-M	1/2"	9	108	65	35	19.5	52	39	37	36	30	8.5	10.77x2.62	1.750

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **50** **S** **1/2** **2F** **P** **M** **20** **B** *

* 1/4 – 1/4" BSPP
* 3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

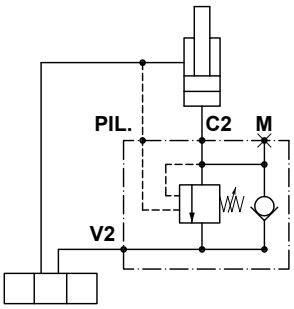
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

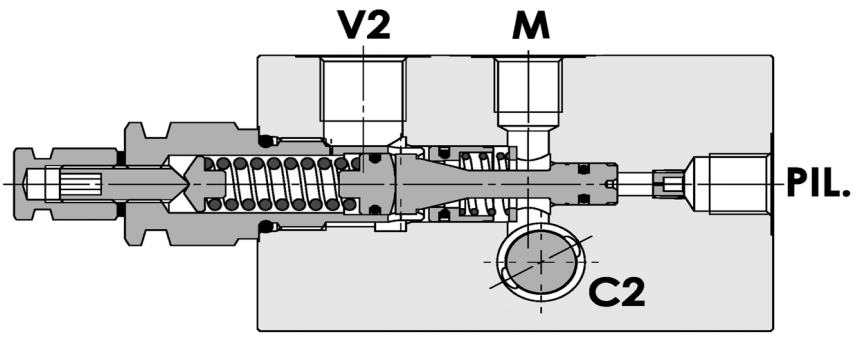
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-50-S-3/8-V-L-M-*-*-* O - 293/1

Valvola overcenter singola, montaggio con vite forata, attacco manometro
Single overcenter valve, drilled screw version, pressure gauge port

Rev. 03-2010/08





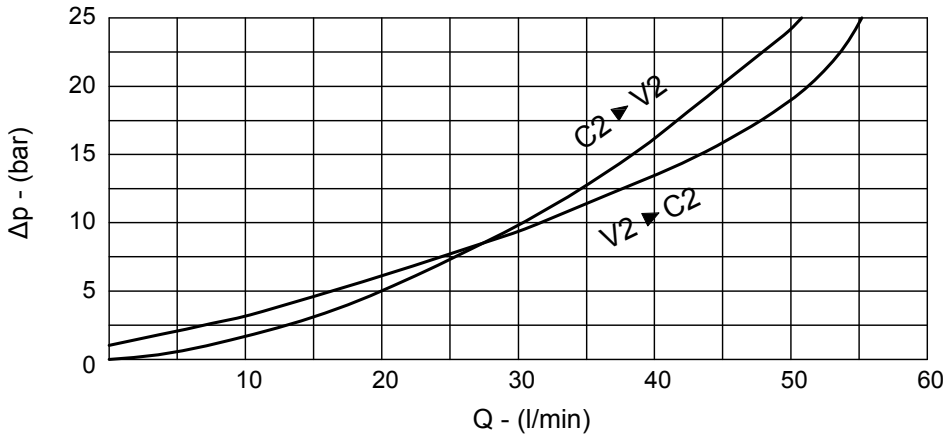
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: fino a 30 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 30 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

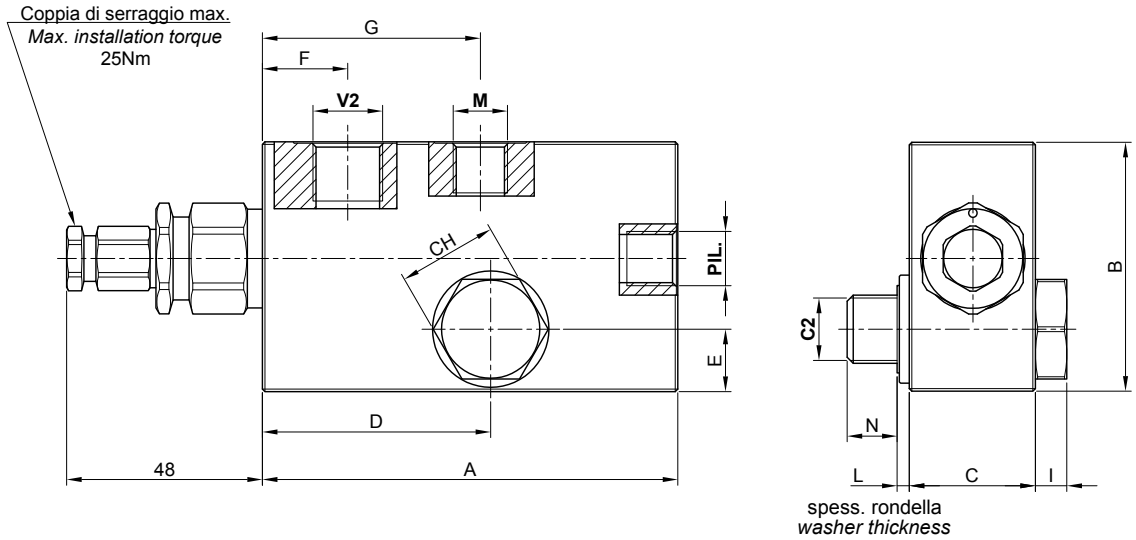
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-50-S-3/8-V-L-M-*-*-* O - 293/2

Valvola overcenter singola, montaggio con vite forata, attacco manometro
Single overcenter valve, drilled screw version, pressure gauge port

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V2-C2**	**PIL.**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**I**	**L**	**M**	**N**	**CH**	**PESO** ***WEIGHT***
	BSPP	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**BSPP**	**mm**	**mm**	**Kg**
VPO 50 S-3/8"-V-L-M	3/8"	1/4"	100	60	30	55	15	20.5	52.5	8	3	1/4	12	24	1.450

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **50** **S** **3/8** **V** **L** **M** **20** **B** *****

* “20” / “35”:
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8, C = 1 : 11

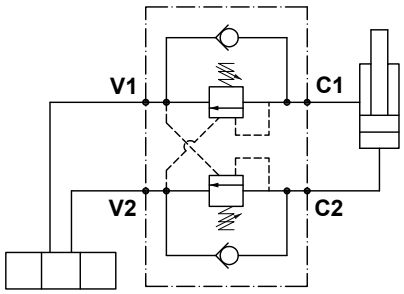
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

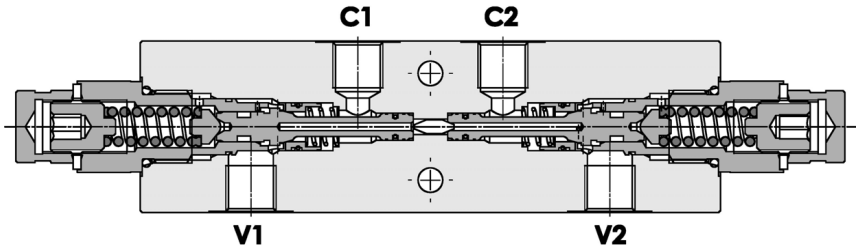
VPO-35-D-1/4-L-*-*

O - 310/1

Valvola overcenter doppia, montaggio in linea
Dual overcenter valve, line mounted

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 2,000 Kg

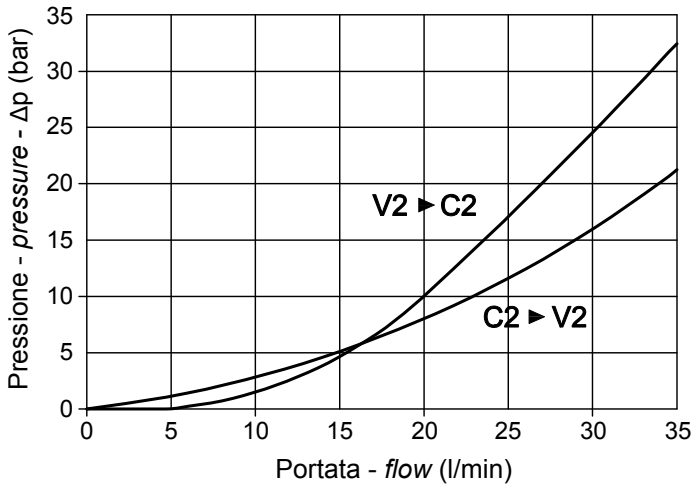
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw.*
Adjustable pressure range: *see page 02*
Weight: *2,000 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

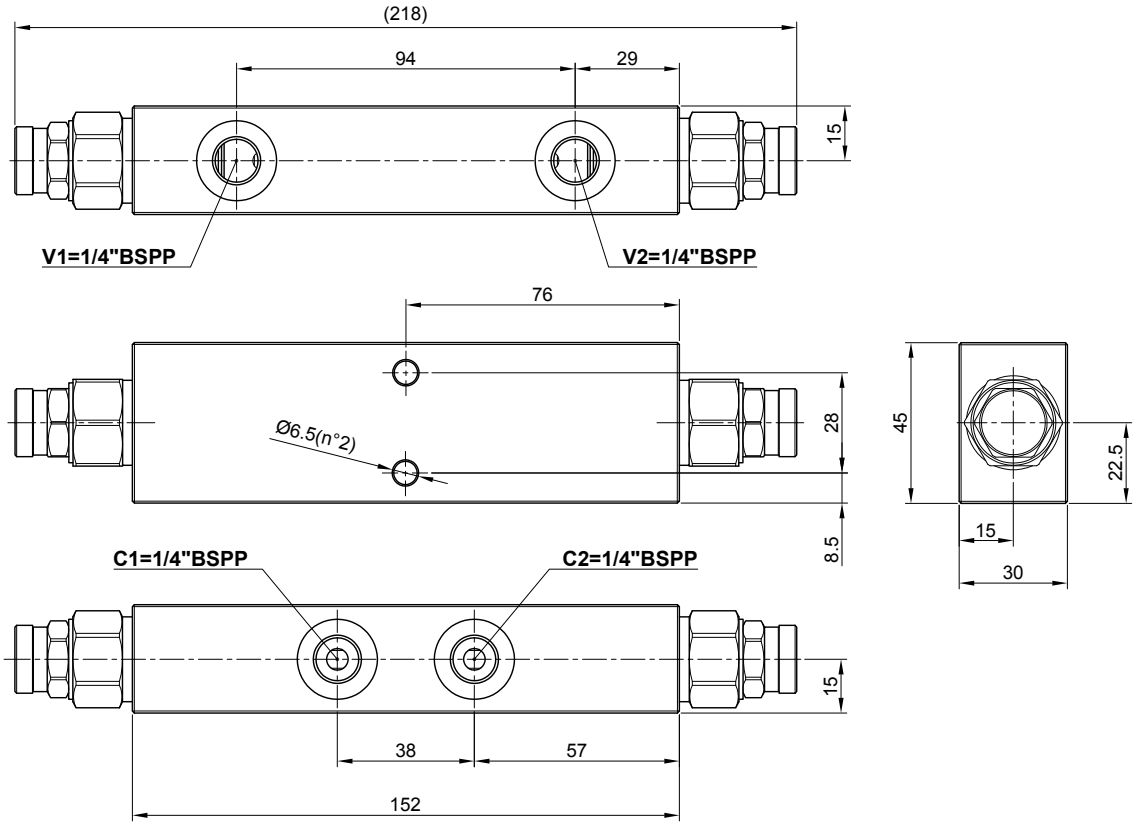


VPO-35-D-1/4-L-*-*

O - 310/2

Valvola overcenter doppia, montaggio in linea
Dual overcenter valve, line mounted

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O	3 5	D	1 / 4	L	3 5	B

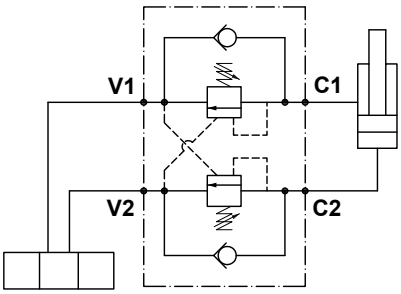
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

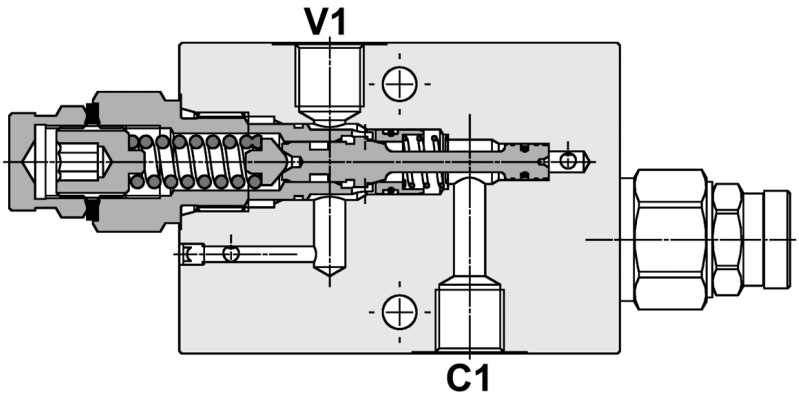
Rapporto di pilotaggio – *Pilot ratio*
Omettere se std – *Omit if std* *
B = 1 : 8, C = 1 : 11

VPO-35-DD-1/4-L-*-* O - 311/1

Valvola overcenter doppia, montaggio in linea
Dual overcenter valve, line mounted

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 2,000 Kg

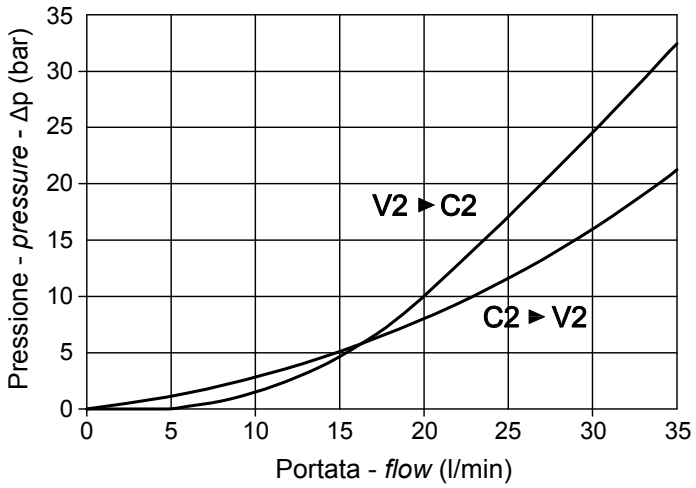
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw.*
Adjustable pressure range: *see page 02*
Weight: *2,000 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

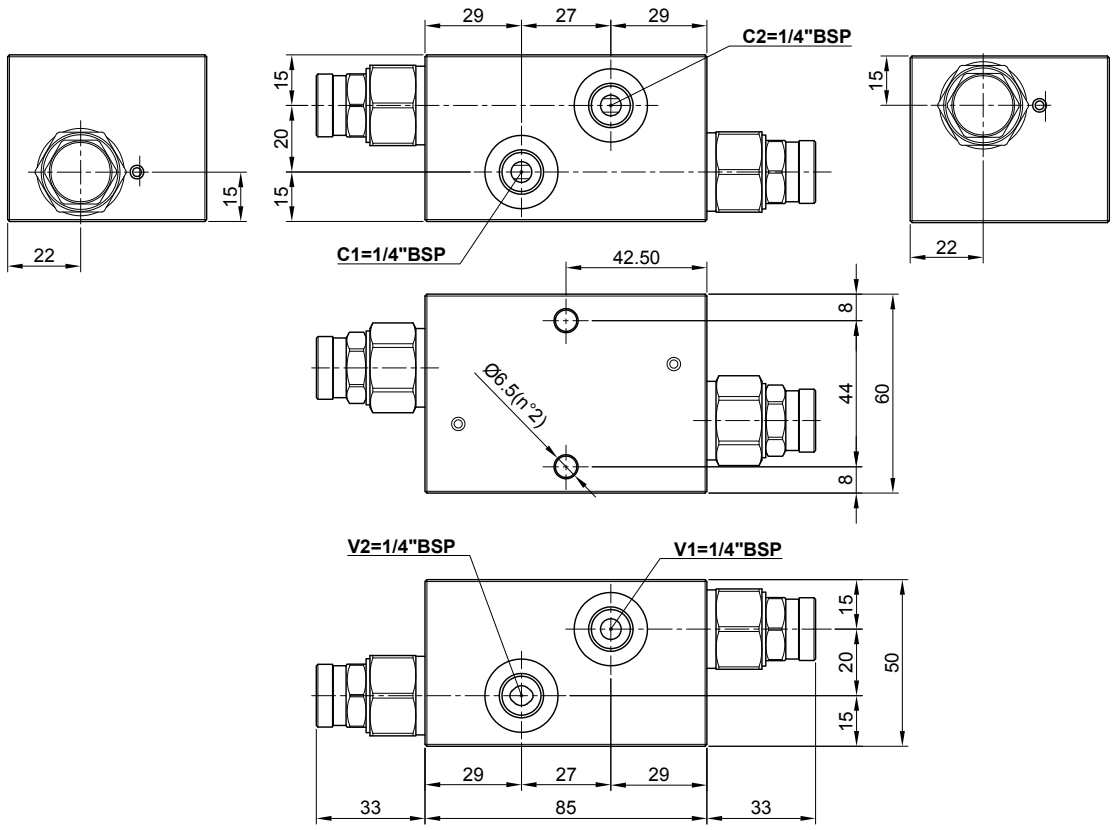
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-35-DD-1/4-L-*-* O - 311/2

Valvola overcenter doppia, montaggio in linea
Dual overcenter valve, line mounted

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	35	DD	1/4	L	35	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

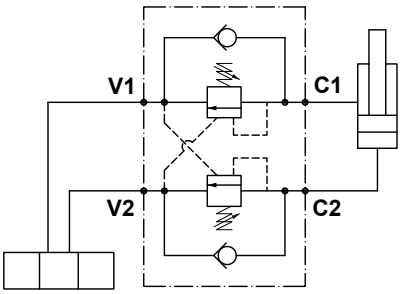
Rapporto di pilotaggio – *Pilot ratio*
Omettere se std – *Omit if std* *
B = 1 : 8, C = 1 : 11

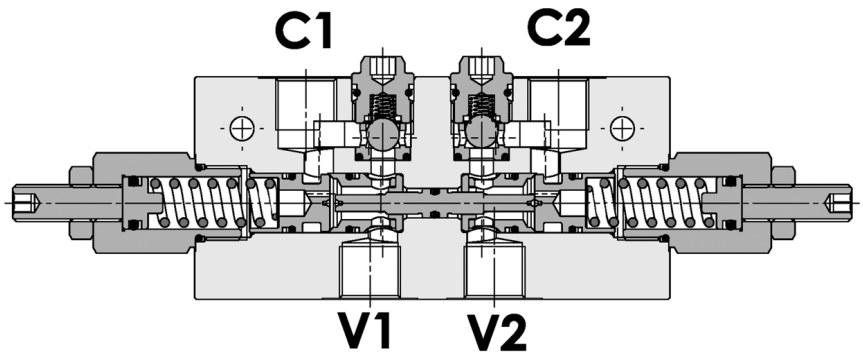
VPOE-40-D-3/8-L-A-*-*

O - 314/1

Valvola overcenter doppia, montaggio in linea, serie E
Dual overcenter valve, line mounted, E series

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 40 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 2.9 (a richiesta 1 : 6.6)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 0,900 Kg

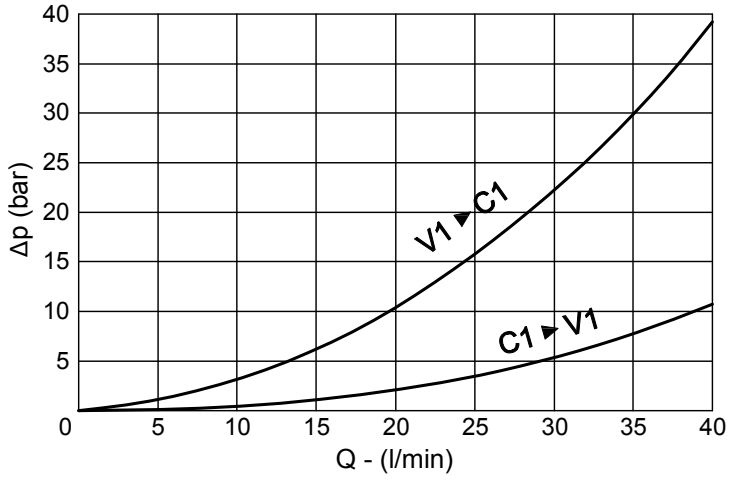
TECHNICAL SPECIFICATIONS

Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 40 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 2.9 (1 : 6.6 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *0,900 Kg*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

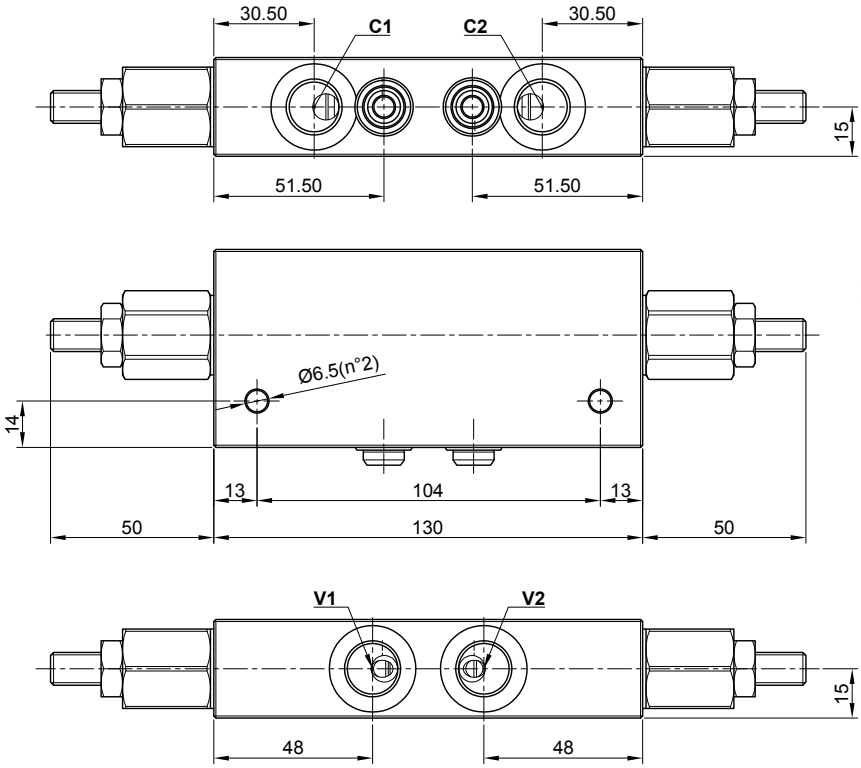


VPOE-40-D-3/8-L-A-*-*

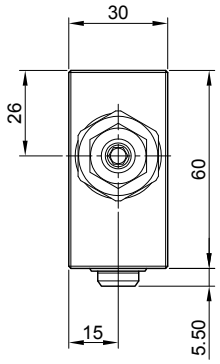
O - 314/2

Valvola overcenter doppia, montaggio in linea, serie E
Dual overcenter valve, line mounted, E series

Rev. 01-2010/02



C1-C2-V1-V2:
3/8" BSP



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 2.9	60 - 210	51	200
20	1 : 6.6	60 - 210	51	200
35	1 : 2.9	120 - 350	88	350
35	1 : 6.6	120 - 350	88	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O E	4 0	D	3 / 8	L	A	2 0	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

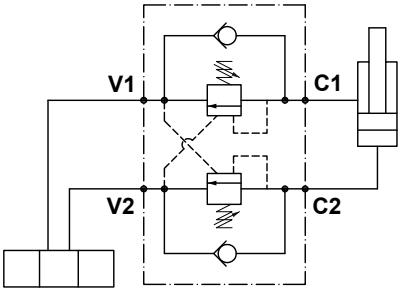
Rapporto di pilotaggio – *Pilot ratio*
Omettere se std – *Omit if std* *
B = 1 : 6.6

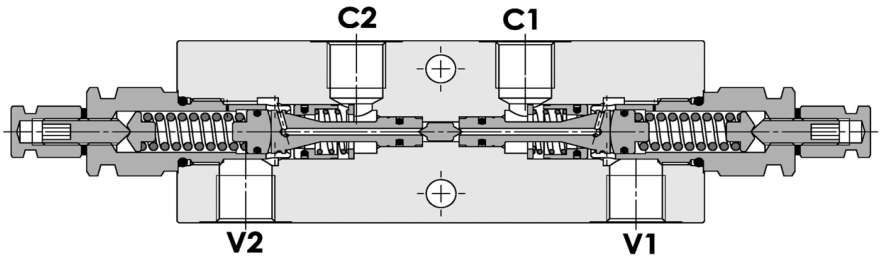
VPO-50-D-*-L-*-*-*

O - 320/1

Valvola overcenter doppia, montaggio in linea
Dual overcenter valve, line mounted

Rev. 03-2010/08





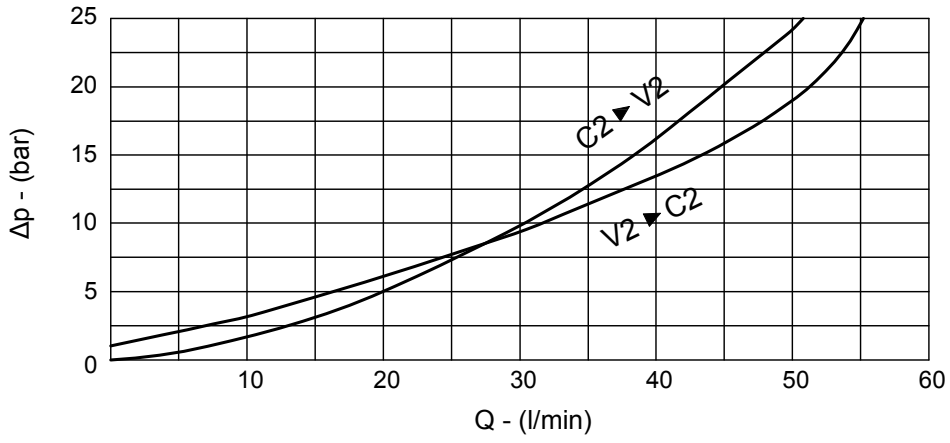
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

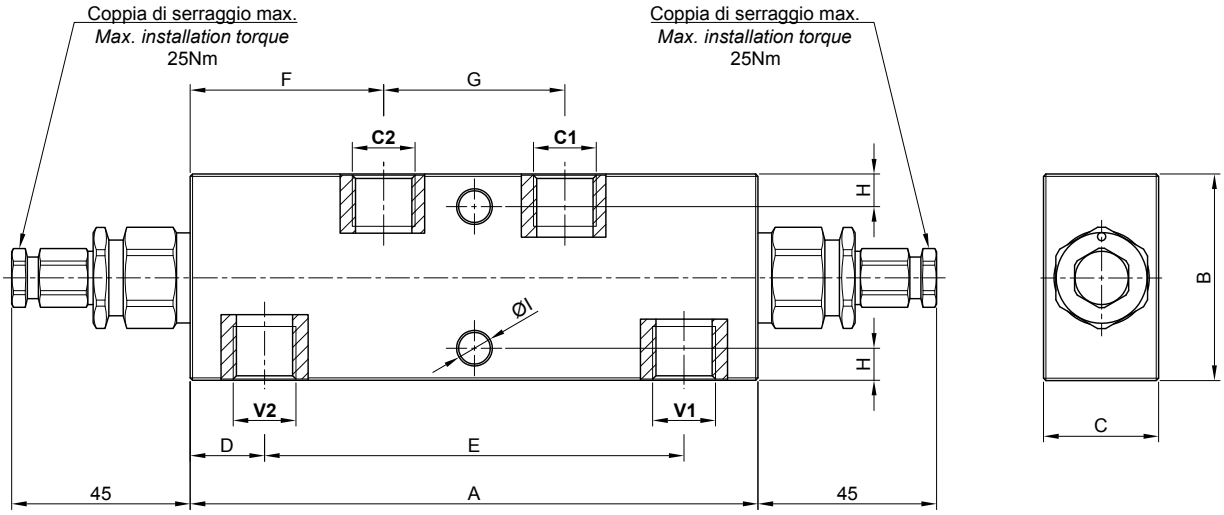
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-50-D-*-L-*-*-* O - 320/2

Valvola overcenter doppia, montaggio in linea
Dual overcenter valve, line mounted

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-C1 V2-C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO *WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 D-3/8"-L	3/8"	150	55	30	19	112	51	48	8.5	8.5	1.850
VPO 50 D-1/2"-L	1/2"	150	65	35	19	112	51	48	11	8.5	2.300

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O | **5 0** | **D** | **3 / 8** | **L** | **2 0** | **B** | *

3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

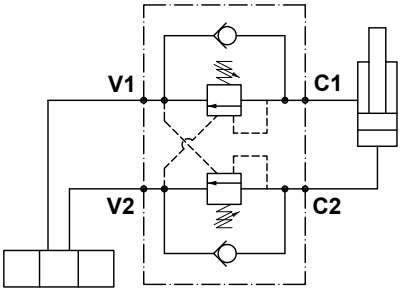
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

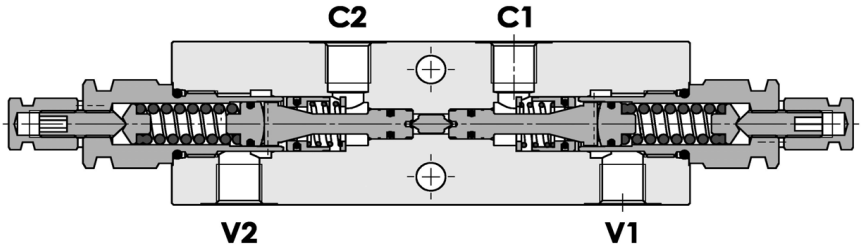
VPO-50-DX-*-L-20-*-*

O - 321/1

Valvola overcenter doppia, montaggio in linea, corpo in alluminio
Dual overcenter valve, line mounted, aluminium body

Rev. 02-2010/05





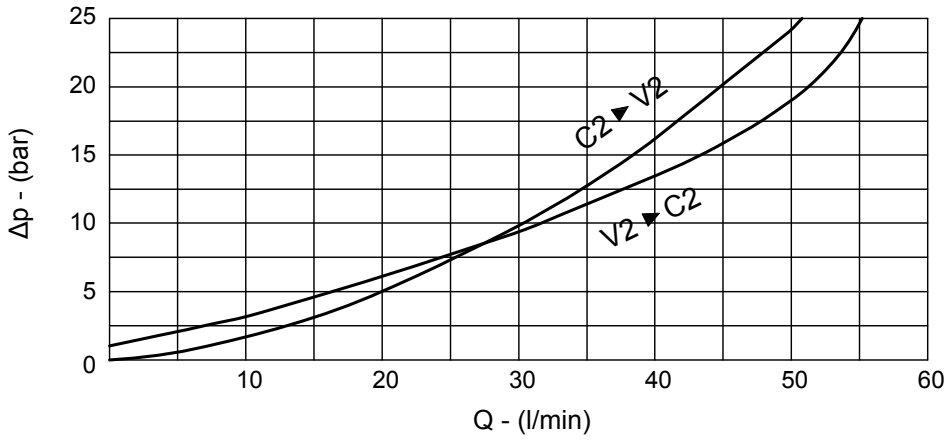
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 250 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *250 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

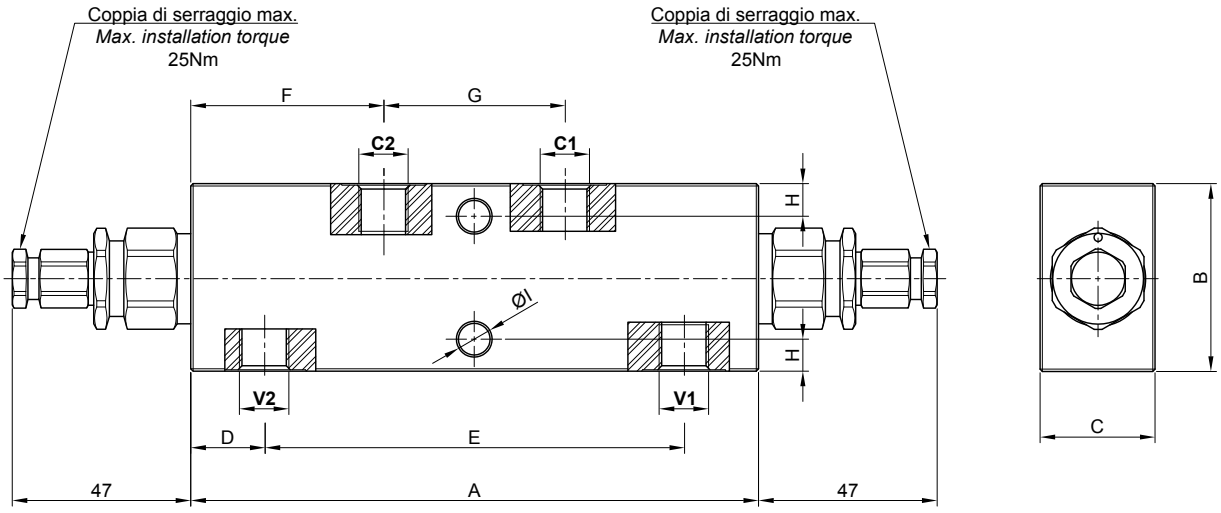


VPO-50-DX-*-L-20-*-*

O - 321/2

Valvola overcenter doppia, montaggio in linea, corpo in alluminio
Dual overcenter valve, line mounted, aluminium body

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	

TIPO *TYPE*	**V1-C1 V2-C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 DX-1/4"-L-20	1/4"	150	50	30	19.5	111	51	48	8.5	8.5	0.850
VPO 50 DX-3/8"-L-20	3/8"	150	50	30	19.5	111	51	48	8.5	8.5	0.840

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **50** **DX** **3/8** **L** **20** **B** *

1/4 – 1/4" BSPP
* 3/8 – 3/8" BSPP
Connessioni - *Port sizes*

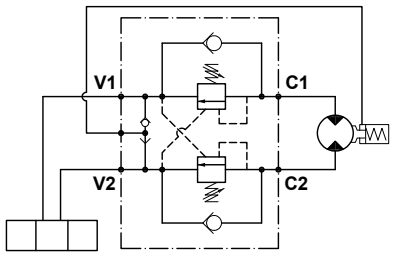
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

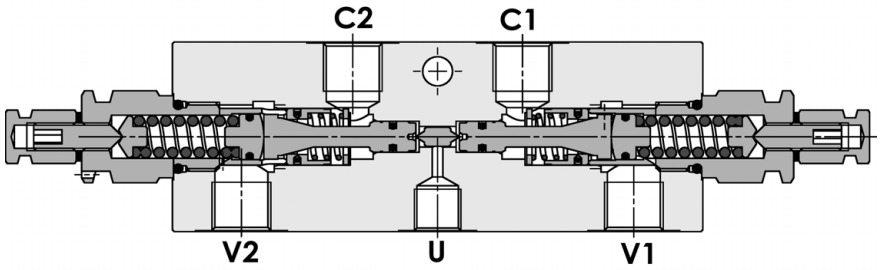
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-50-D-*-L-U-*-*-* O - 322/1

Valvola overcenter doppia, montaggio in linea, con sblocco freno
Dual overcenter valve, line mounted, with brake release port

Rev. 03-2010/08





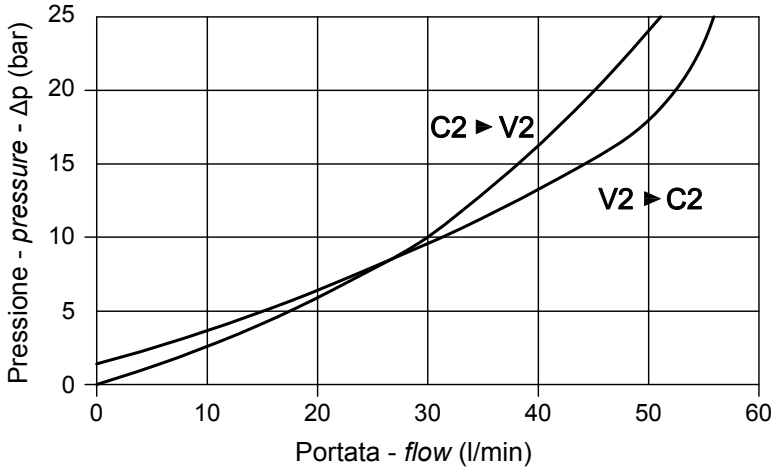
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

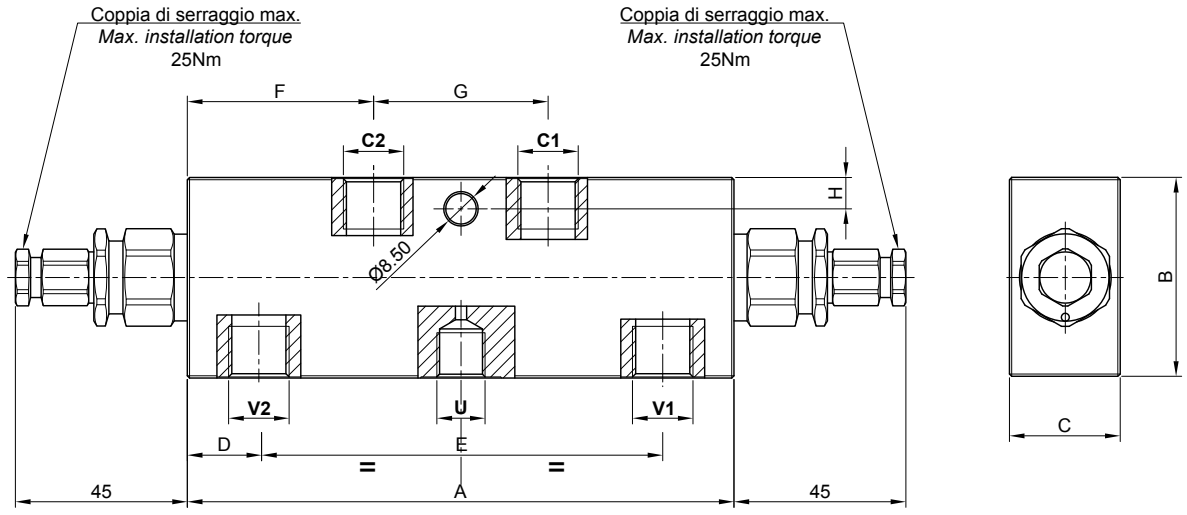


VPO-50-D-*-L-U-*-*-*

O - 322/2

Valvola overcenter doppia, montaggio in linea, con sblocco freno
Dual overcenter valve, line mounted, with brake release port

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-C1 V2-C2**	**U**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO** ***WEIGHT***
	BSPP	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 D-3/8"-L-U	3/8"	1/4"	150	55	30	19	112	51	48	8.5	8.5	1.850
VPO 50 D-1/2"-L-U	1/2"	1/4"	150	65	35	19	112	51	48	11	8.5	2.300

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO 50 D 1/2 L U 20 B *

3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Guarnizioni – *Seals:*
V=Viton
Omettere se BUNA-N – * *Omit if BUNA-N*

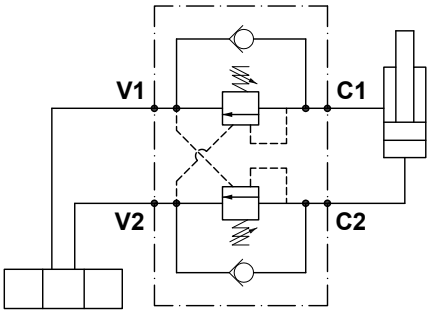
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

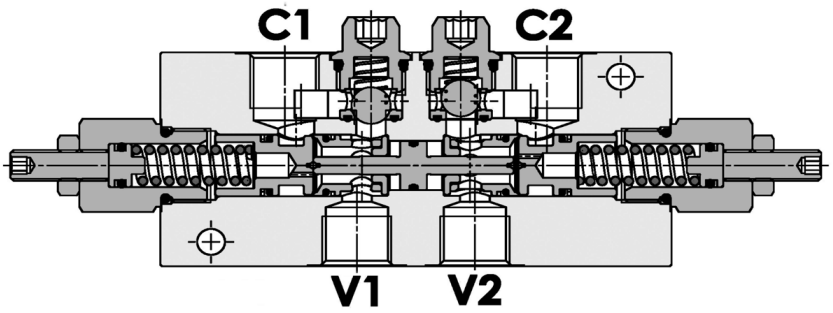
VPOE-70-D-1/2-L-A-*-*

O - 328/1

Valvola overcenter doppia, montaggio in linea, serie E
Dual overcenter valve, line mounted, E series

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 70 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 3.2 (a richiesta 1 : 8.2)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1.300 Kg

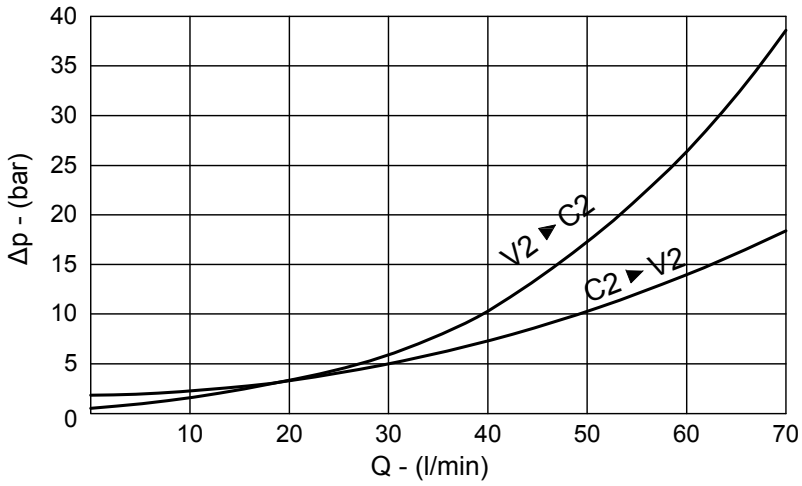
TECHNICAL SPECIFICATIONS

Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 70 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 3.2 (1 : 8.2 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1.300 Kg*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

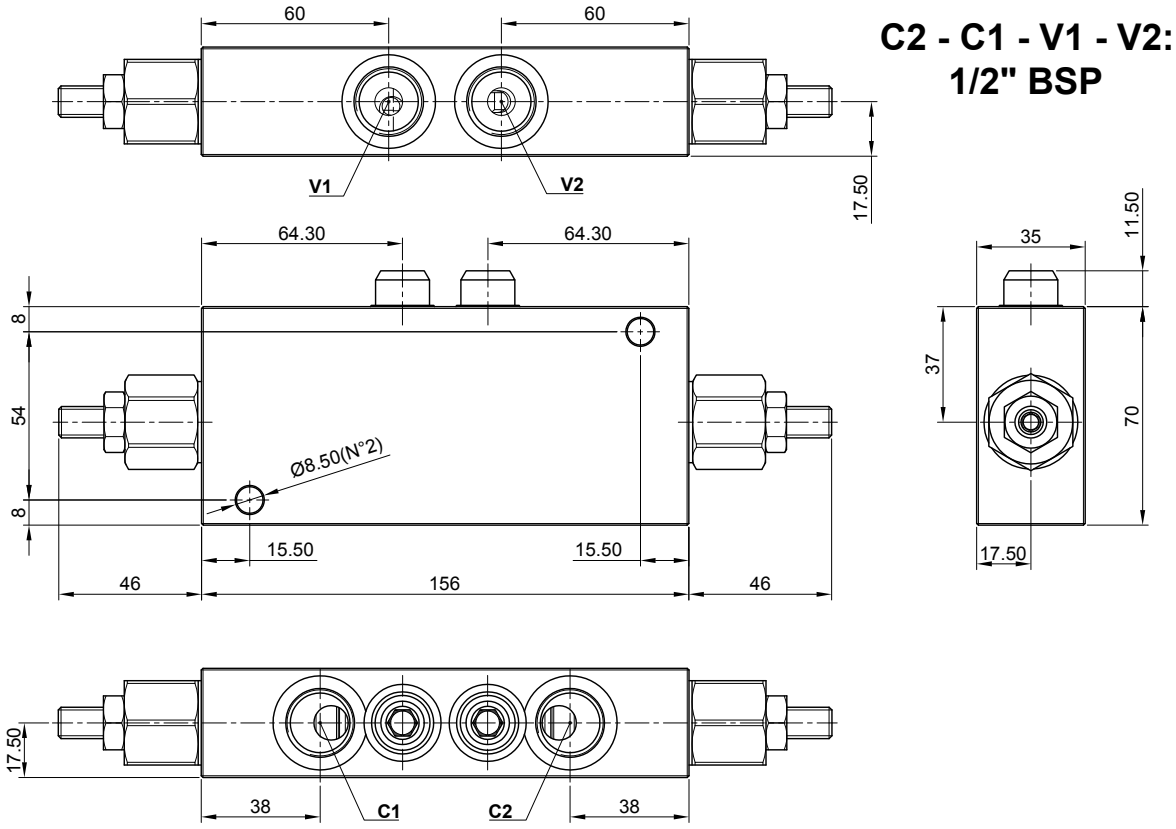


VPOE-70-D-1/2-L-A-*-*

O - 328/2

Valvola overcenter doppia, montaggio in linea, serie E
Dual overcenter valve, line mounted, E series

Rev. 01-2010/02



C2 - C1 - V1 - V2:
1/2" BSP

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 3.2	60 - 210	56	200
20	1 : 8.2	60 - 210	56	200
35	1 : 3.2	120 - 350	90	350
35	1 : 8.2	120 - 350	90	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O E	7 0	D	1 / 2	L	A	2 0	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

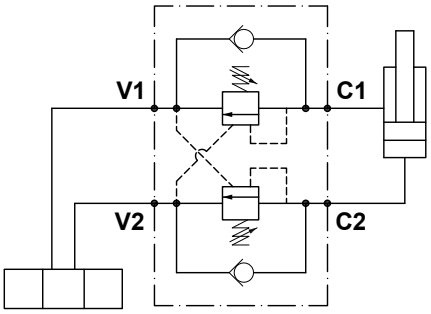
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8.2

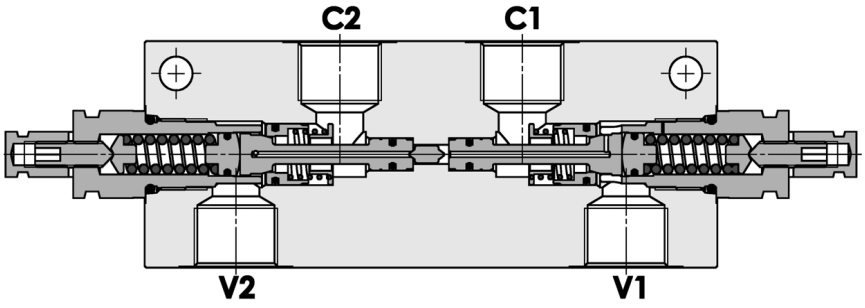
VPO-90-D-3/4-L-35

O - 331/1

Valvola overcenter singola, montaggio in linea, pilotaggio interno
Single overcenter valve, line mounted, internal pilot

Rev. 02-2010/08





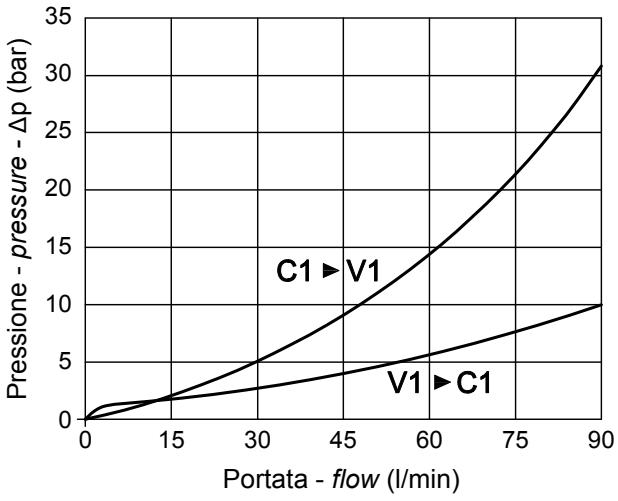
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 90 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.2
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 3.700 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 90 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.2*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *3.700 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



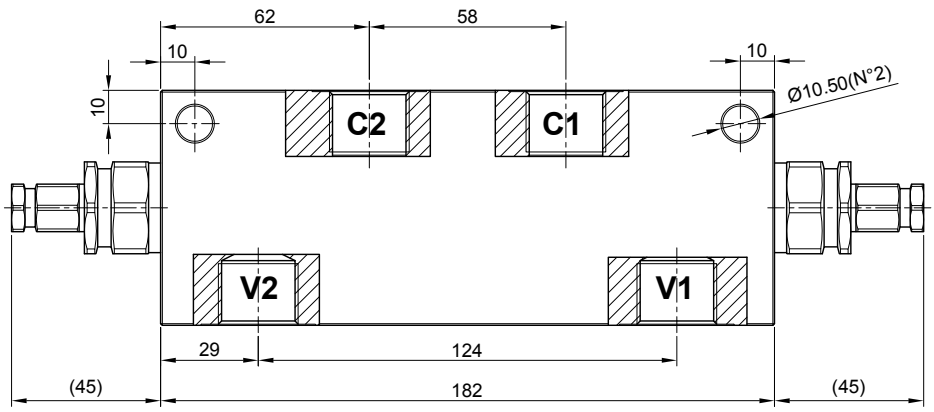
VPO-90-D-3/4-L-35

O - 331/2

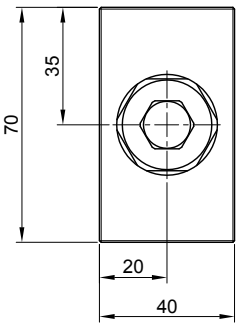
Valvola overcenter singola, montaggio in linea, pilotaggio interno

Single overcenter valve, line mounted, internal pilot

Rev. 02-2010/08



C1/C2/V1/V2:
3/4" BSPP



MOLLE - *SPRINGS*			*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	100 - 350	109	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

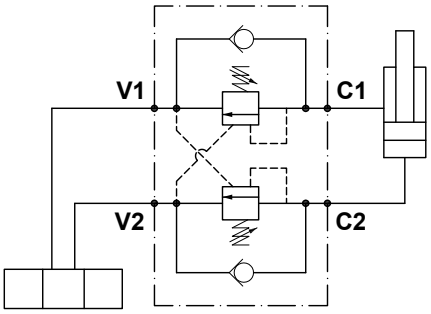
V P O	9 0	D	3 / 4	L	3 5

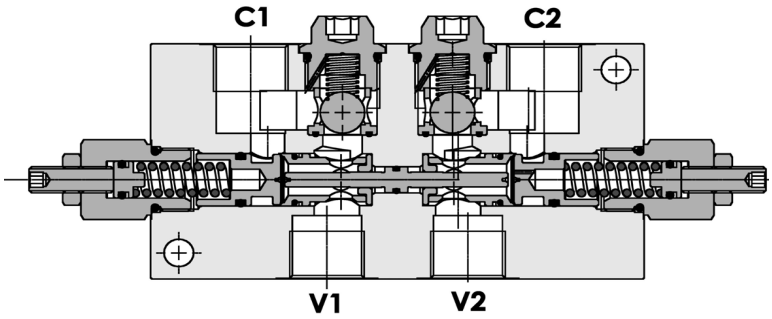
VPOE-120-D-3/4-L-A-*-*

O - 335/1

Valvola overcenter doppia, montaggio in linea, serie E
Dual overcenter valve, line mounted, E series

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 120 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 3.2 (a richiesta 1 : 8.2)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1,770 Kg

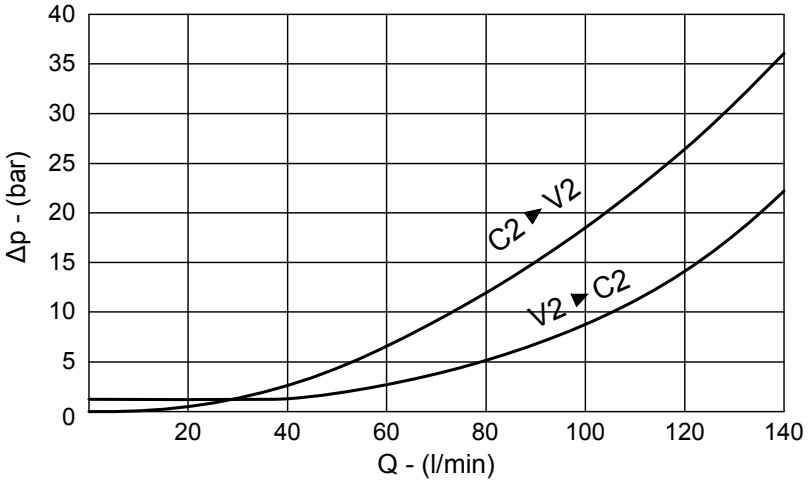
TECHNICAL SPECIFICATIONS

Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 120 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 3.2 (standard), 1 : 8.2 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,770 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

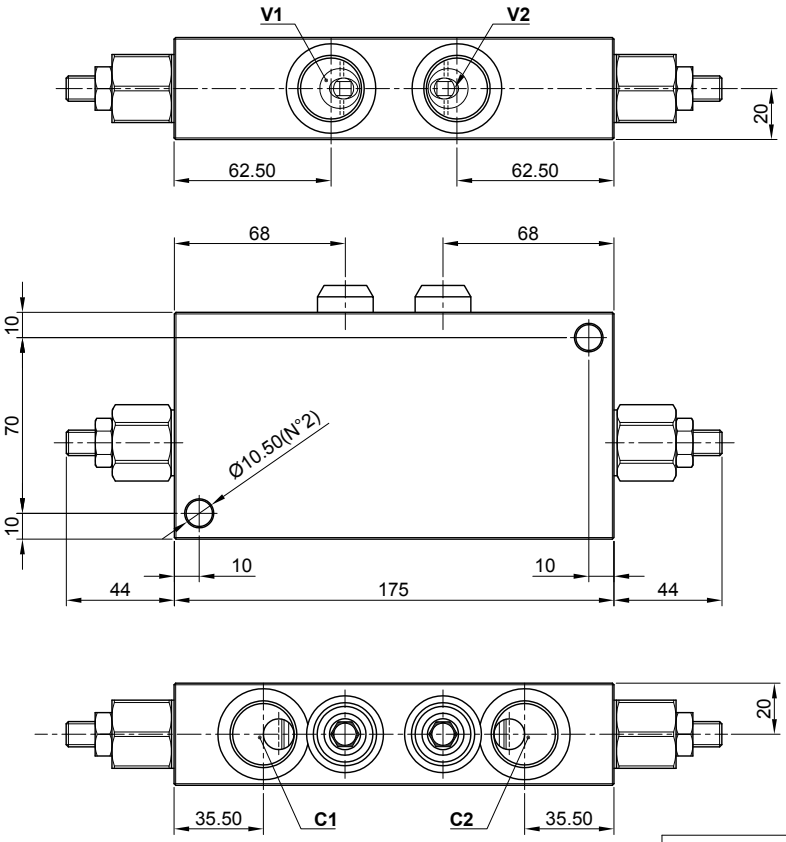


VPOE-120-D-3/4-L-A-*-*

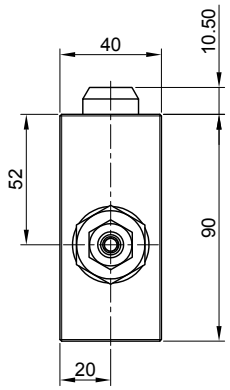
O - 335/2

Valvola overcenter doppia, montaggio in linea, serie E
Dual overcenter valve, line mounted, E series

Rev. 01-2010/02



C1 - C2 - V1 - V2:
3/4" BSP



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 3.2	60 - 210	56	200
20	1 : 8.2	60 - 210	56	200
35	1 : 3.2	120 - 350	90	350
35	1 : 8.2	120 - 350	90	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O E	1 2 0	D	3 / 4	L	A	2 0	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

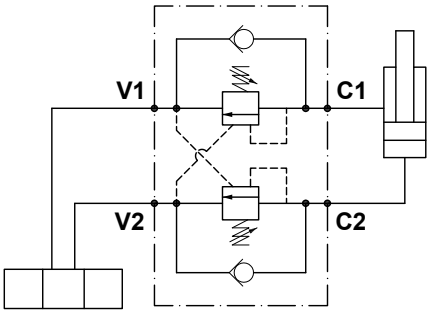
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8.2

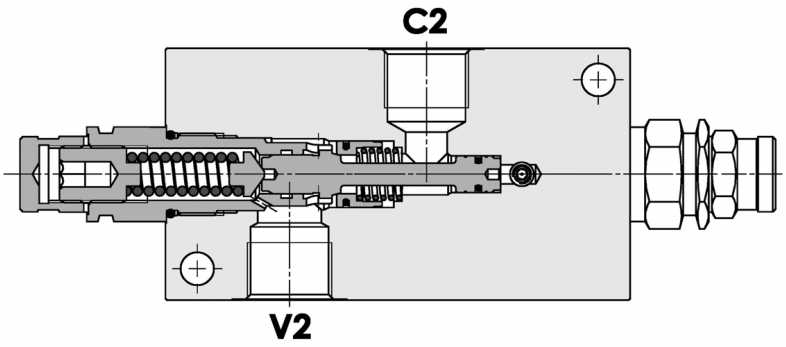
VPO-150-DD-3/4-L-35-*

O - 340/1

Valvola overcenter doppia, montaggio in linea
Dual overcenter valve, line mounted

Rev. 02-2010/07





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 150 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 6,400 Kg

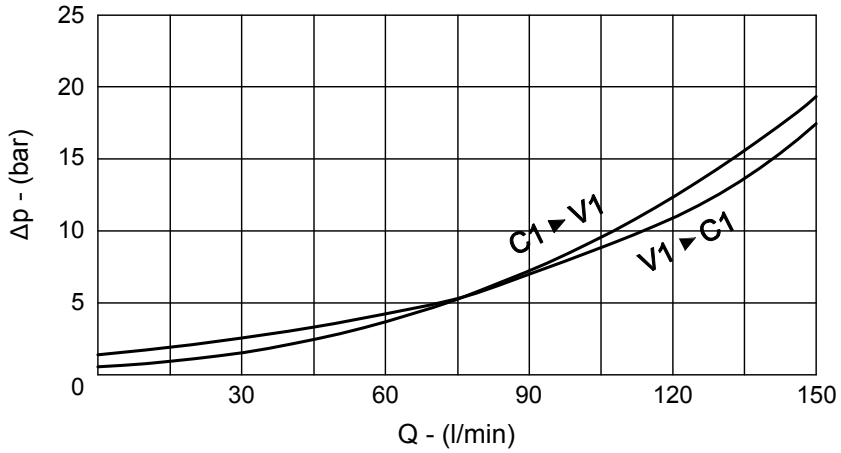
TECHNICAL SPECIFICATIONS

Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (standard), 1 to 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *6,400 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

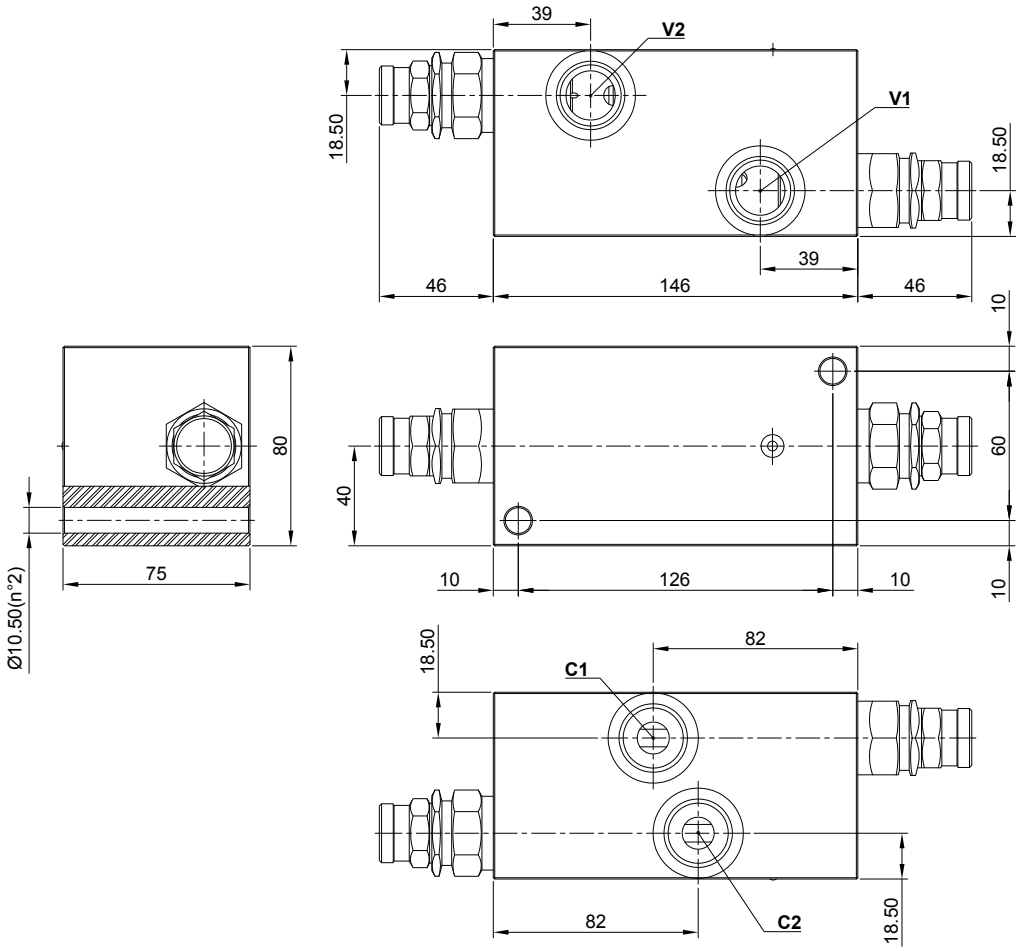


VPO-150-DD-3/4-L-35-*

O - 340/2

Valvola overcenter doppia, montaggio in linea
Dual overcenter valve, line mounted

Rev. 02-2010/07



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

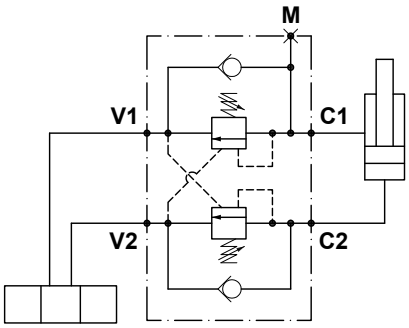
VPO	150	DD	3/4	L	35	*

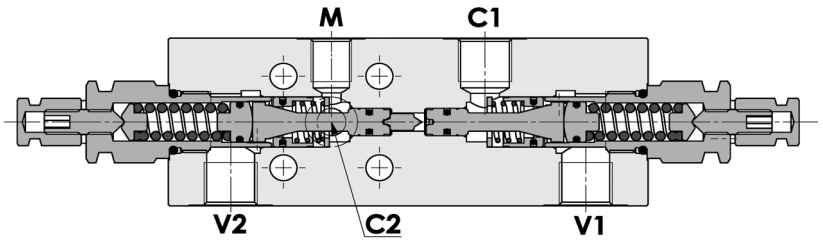
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8.2

VPO-50-D-3/8-1F-M-*-*-* O - 410/1

Valvola overcenter doppia, montaggio a flangia singolo, attacco manometro
Dual overcenter valve, single gasket mounted, pressure gauge port

Rev. 03-2010/08





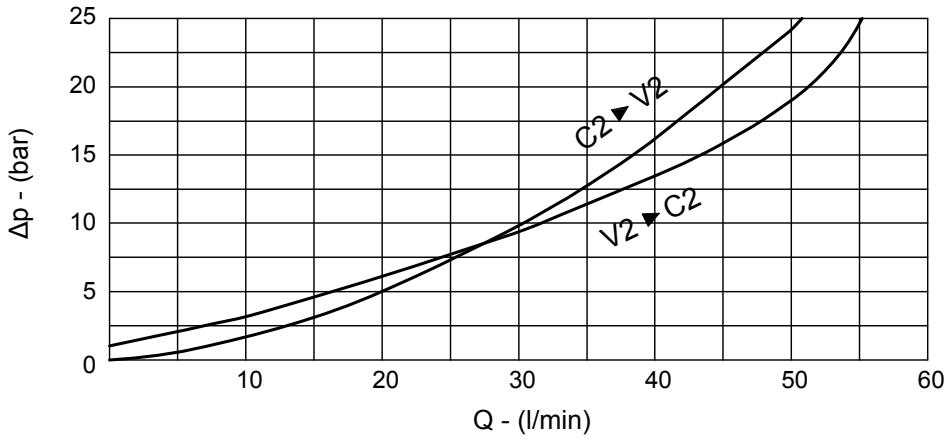
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 1,850 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is steel made, zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,850 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



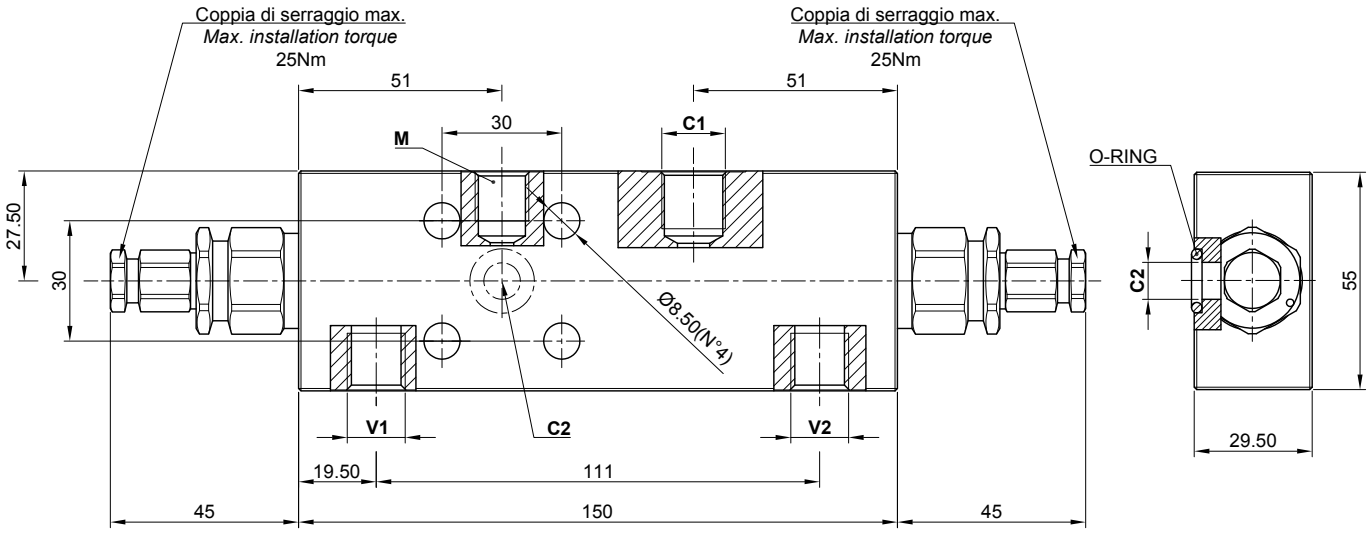
VPO-50-D-3/8-1F-M-*-*-*

O - 410/2

Valvola overcenter doppia, montaggio a flangia singolo, attacco manometro

Dual overcenter valve, single gasket mounted, pressure gauge port

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **50** **D** **3/8** **1F** **M** **20** **B** *****

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8, C = 1 : 11

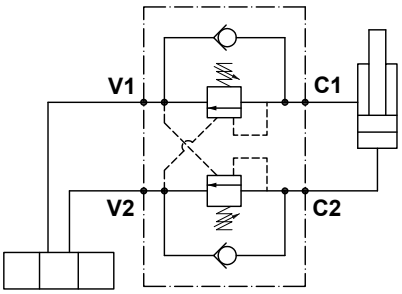
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

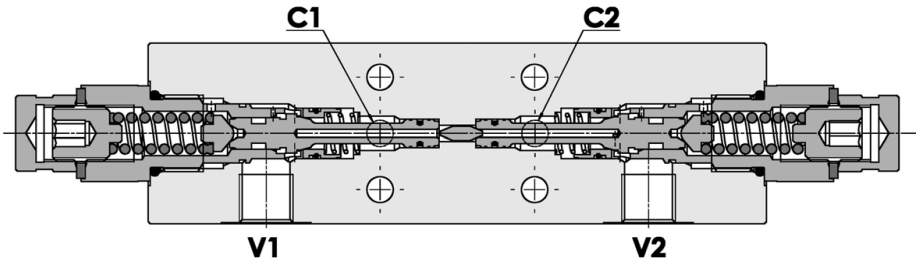
VPO-35-D-1/4-2F-*-*

O - 457/1

Valvola overcenter doppia, montaggio a flangia
Dual overcenter valve, gasket mounted

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 2,000 Kg

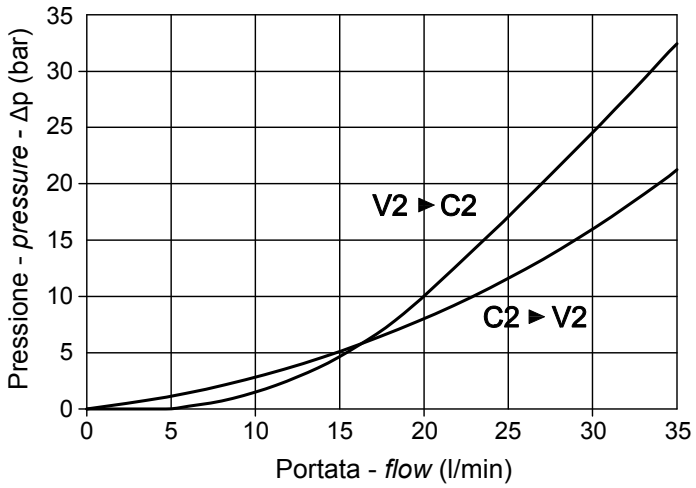
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw.*
Adjustable pressure range: *see page 02*
Weight: *2,000 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

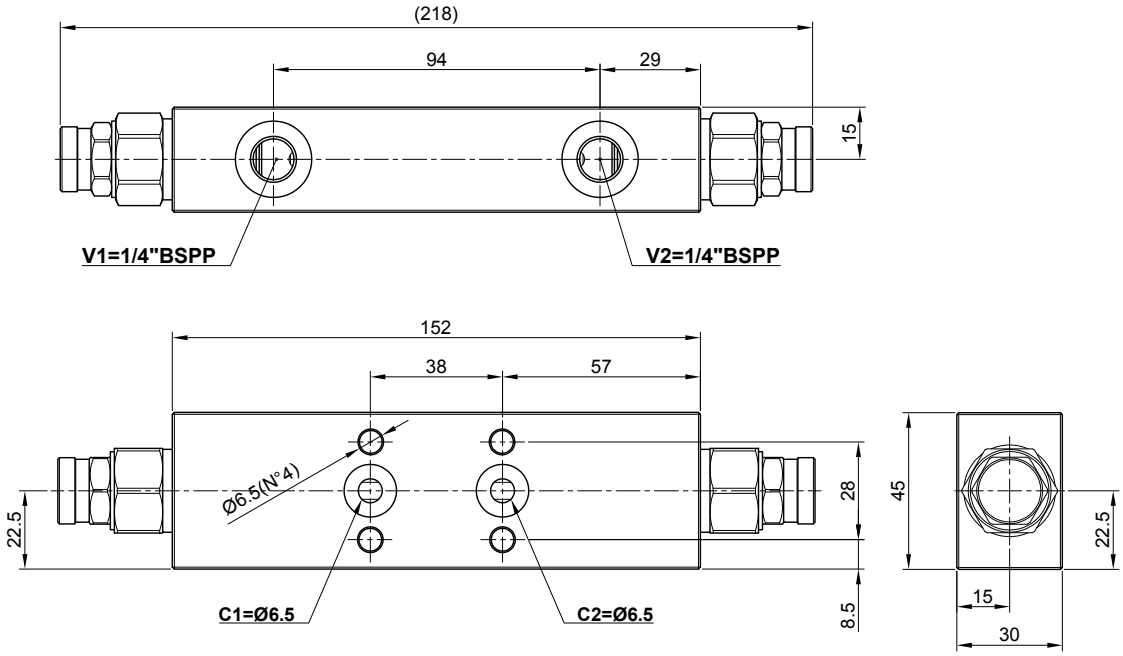


VPO-35-D-1/4-2F-*-*

O - 457/2

Valvola overcenter doppia, montaggio a flangia
Dual overcenter valve, gasket mounted

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O	3 5	D	1 / 4	2 F	3 5	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

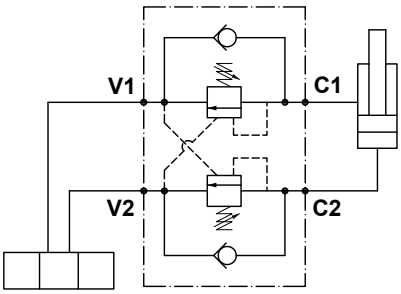
Rapporto di pilotaggio – *Pilot ratio*
Omettere se std – *Omit if std* *
B = 1 : 8, C = 1 : 11

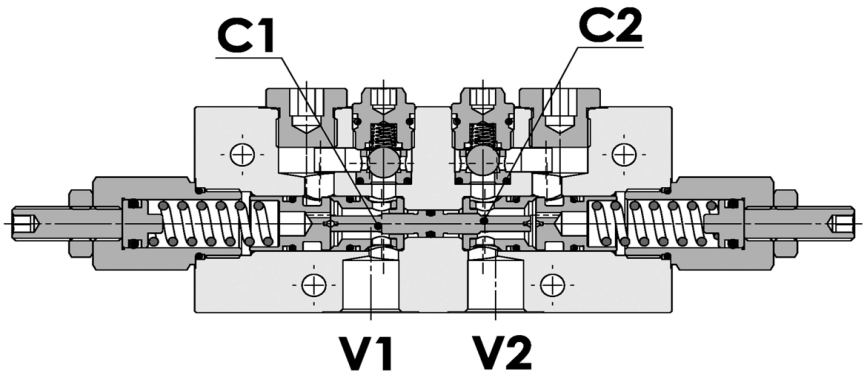
VPOE-40-D-3/8-2F-A-*-*

O - 462/1

Valvola overcenter doppia, montaggio a flangia, serie E
Dual overcenter valve, gasket mounted, E series

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 40 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 2.9 (a richiesta 1 : 6.6)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 0,900 Kg

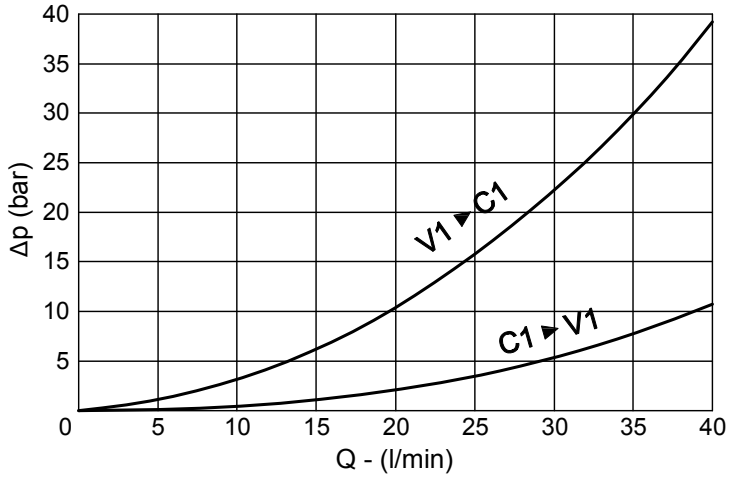
TECHNICAL SPECIFICATIONS

Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 40 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 2.9 (standard), 1 : 6.6 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *0,900 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

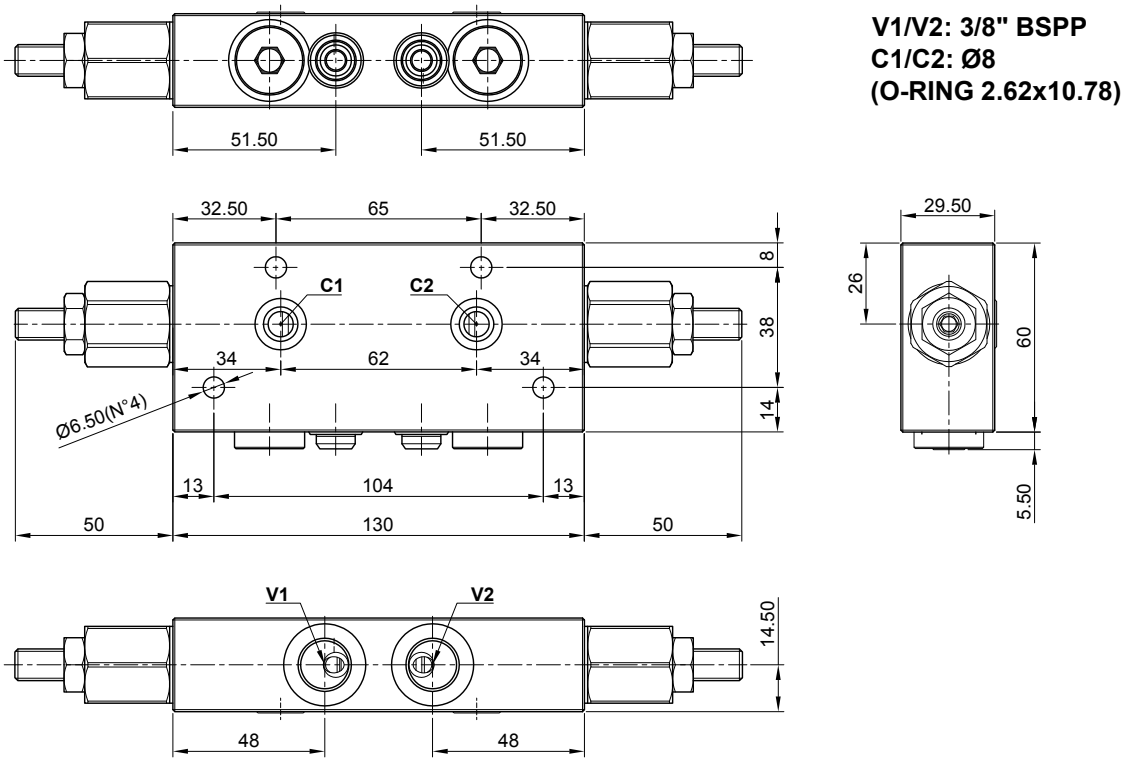


VPOE-40-D-3/8-2F-A-*-*

O - 462/2

Valvola overcenter doppia, montaggio a flangia, serie E
Dual overcenter valve, gasket mounted, E series

Rev. 02-2010/05



V1/V2: 3/8" BSPP
C1/C2: Ø8
(O-RING 2.62x10.78)

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 2.9	60 - 210	51	200
20	1 : 6.6	60 - 210	51	200
35	1 : 2.9	120 - 350	88	350
35	1 : 6.6	120 - 350	88	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOE	40	D	3/8	2F	A	20	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

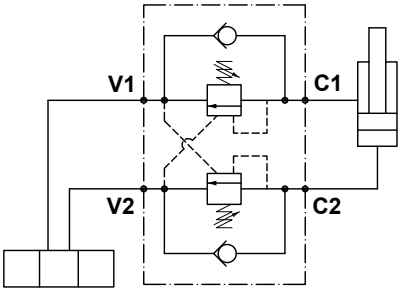
Rapporto di pilotaggio – *Pilot ratio*
Omettere se std – *Omit if std* *
B = 1 : 6.6

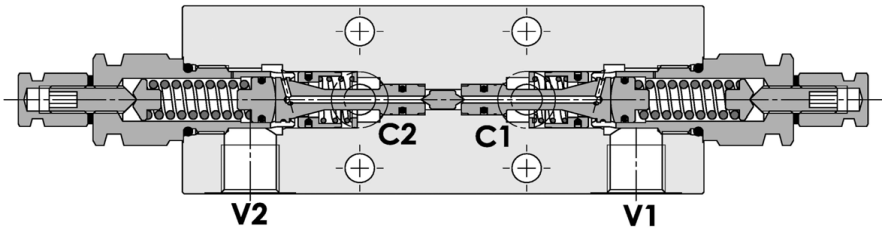
VPO-50-D-*-2F-*-*-*

O - 470/1

Valvola overcenter doppia, montaggio a flangia
Dual overcenter valve, gasket mounted

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

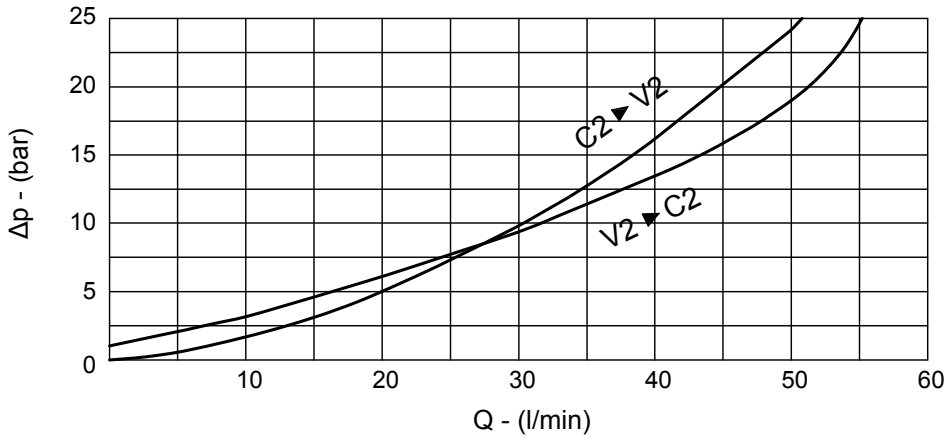
TECHNICAL SPECIFICATIONS

Materials: *body is steel made, zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

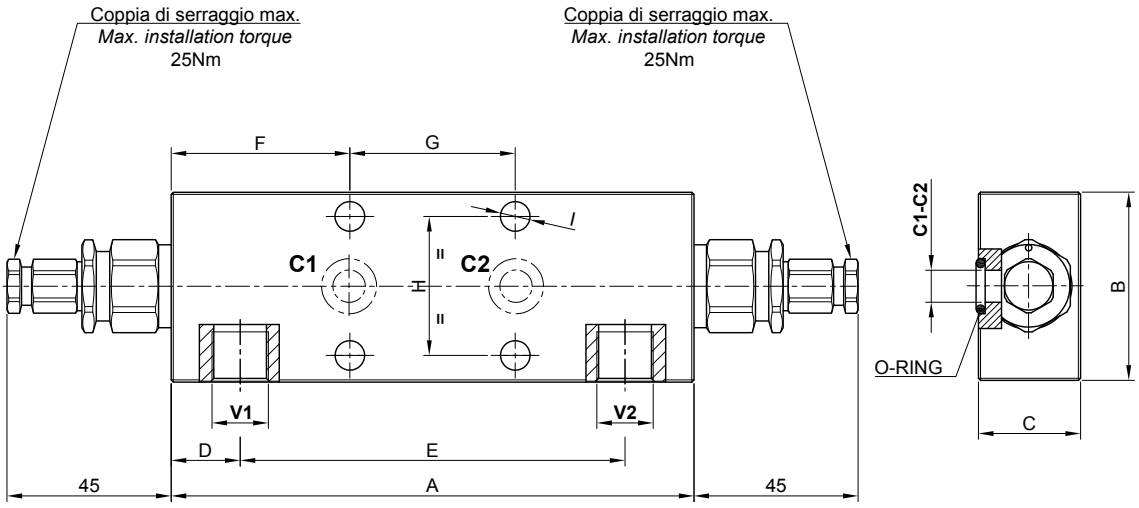


VPO-50-D-*-2F-*-*-*

O - 470/2

Valvola overcenter doppia, montaggio a flangia
Dual overcenter valve, gasket mounted

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-V2**	**C1-C2**	**O-RING**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 D-3/8"-2F	3/8"	9	10.77x2.62	150	55	29.5	19	112	51	48	40	8.5	1.820
VPO 50 D-1/2"-2F	1/2"	9	10.77x2.62	150	65	34.5	19	112	51	48	40	8.5	2.400

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **50** **D** **3/8** **2F** **20** **B** *

* 3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

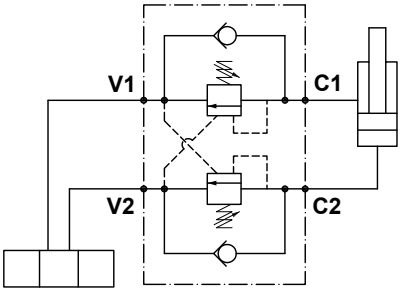
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

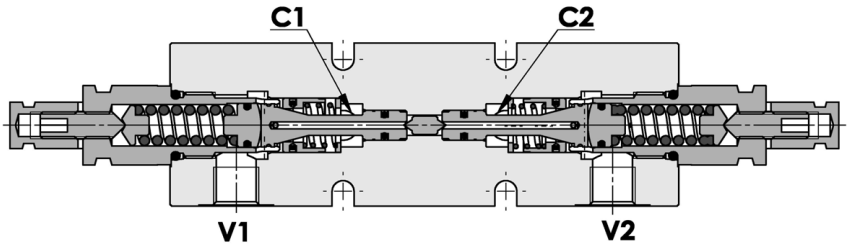
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-50-DX-*-2F-20-*-* O - 471/1

Valvola overcenter doppia, montaggio a flangia, corpo in alluminio
Dual overcenter valve, gasket mounted, aluminium body

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 250 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

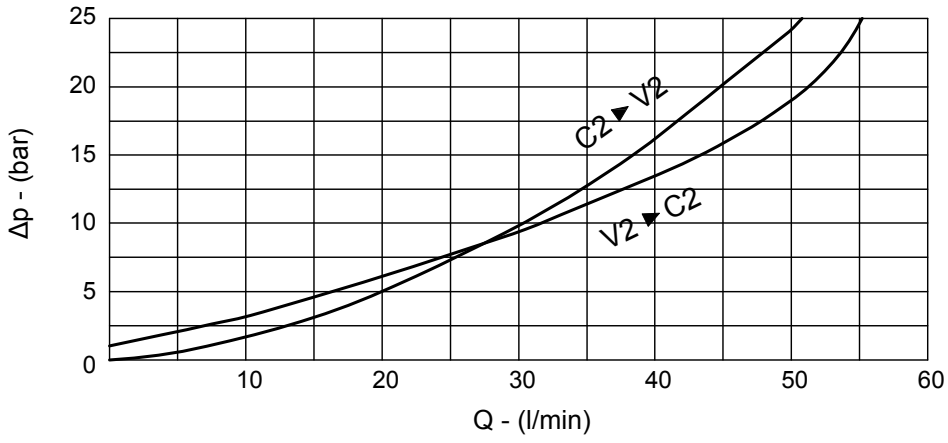
TECHNICAL SPECIFICATIONS

Materials: *body is in aluminium. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *250 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

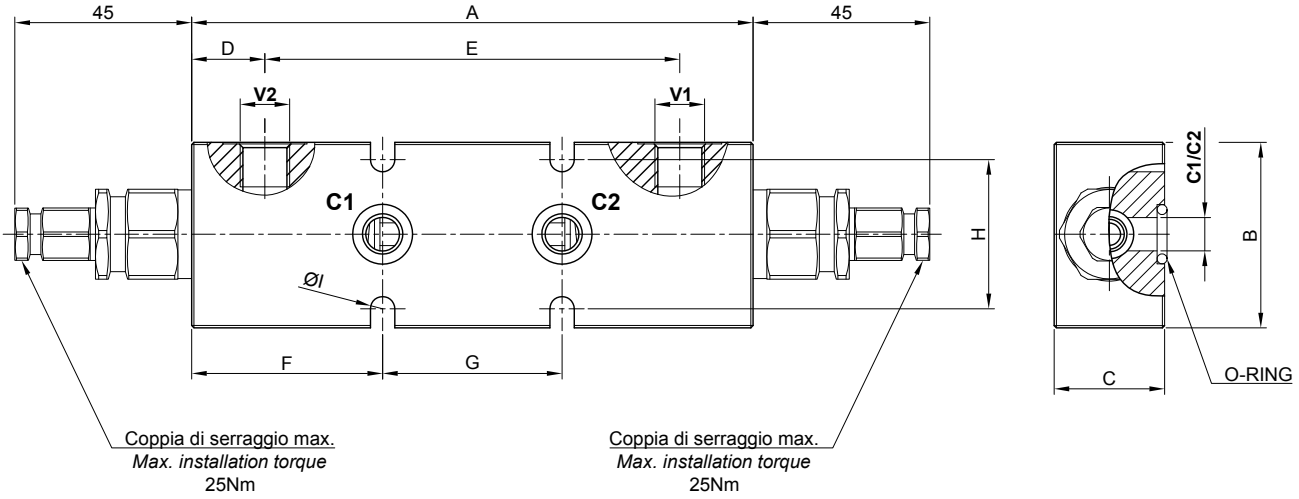


VPO-50-DX-*-2F-20-*-*

O - 471/2

Valvola overcenter doppia, montaggio a flangia, corpo in alluminio
Dual overcenter valve, gasket mounted, aluminium body

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	

TIPO *TYPE*	**V1-V2**	**C1-C2**	**O-RING**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPO 50 DX-1/4"-2F-20	1/4"	9	10.77x2.62	150	50	29.5	19.5	111	51	48	40	6.5	0.850
VPO 50 DX-3/8"-2F-20	3/8"	9	10.77x2.62	150	50	29.5	19.5	111	51	48	40	6.5	0.840

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O | **5 0** | **D X** | **3 / 8** | **2 F** | **2 0** | **B** | ***

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
Connessioni - *Port sizes*

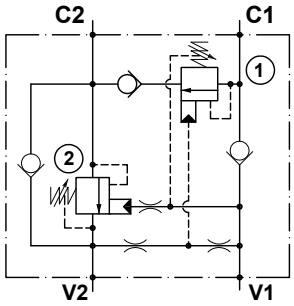
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

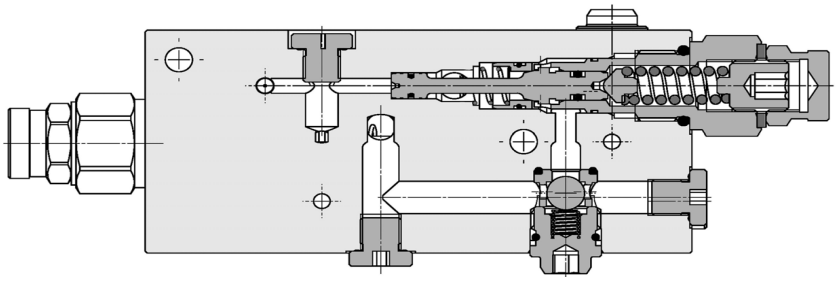
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPOR-35-D-*-3/8-L-*-* O - 710/1

Valvola overcenter doppia, montaggio in linea, per circuito rigenerativo
Dual overcenter valve, line mounted, for regenerative circuits

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in lega di alluminio, anodizzato nero. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 40 l/min
Taratura max.: 350 bar
Pressione max. di lavoro: 250 bar
Rapporto di pilotaggio: 1 : 4
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 1.260 Kg

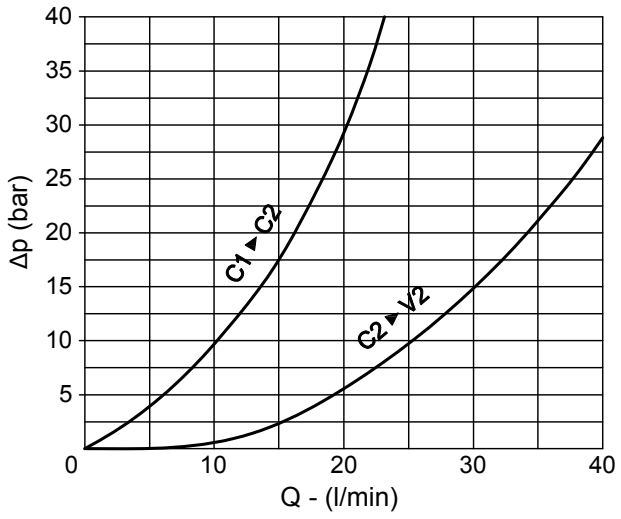
TECHNICAL SPECIFICATIONS

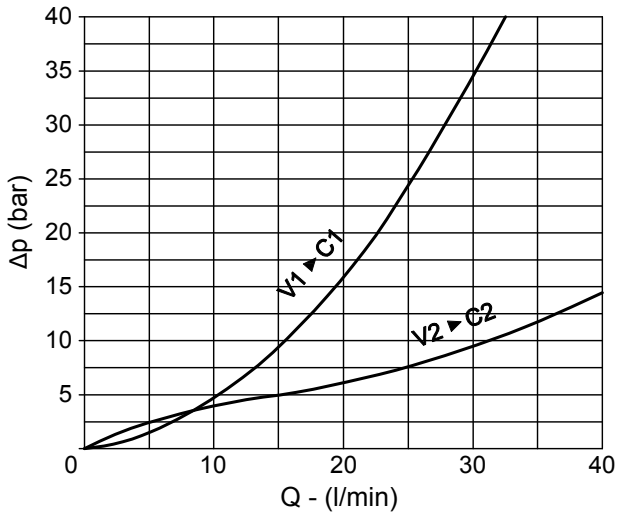
Materials: *body is in aluminium alloy, black anodized. Internal parts are in hardened steel.*
Rated flow: *up to 40 l/min*
Max. setting: *350 bar*
Max. working pressure: *250 bar*
Pilot ratio: *1 : 4*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1.260 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

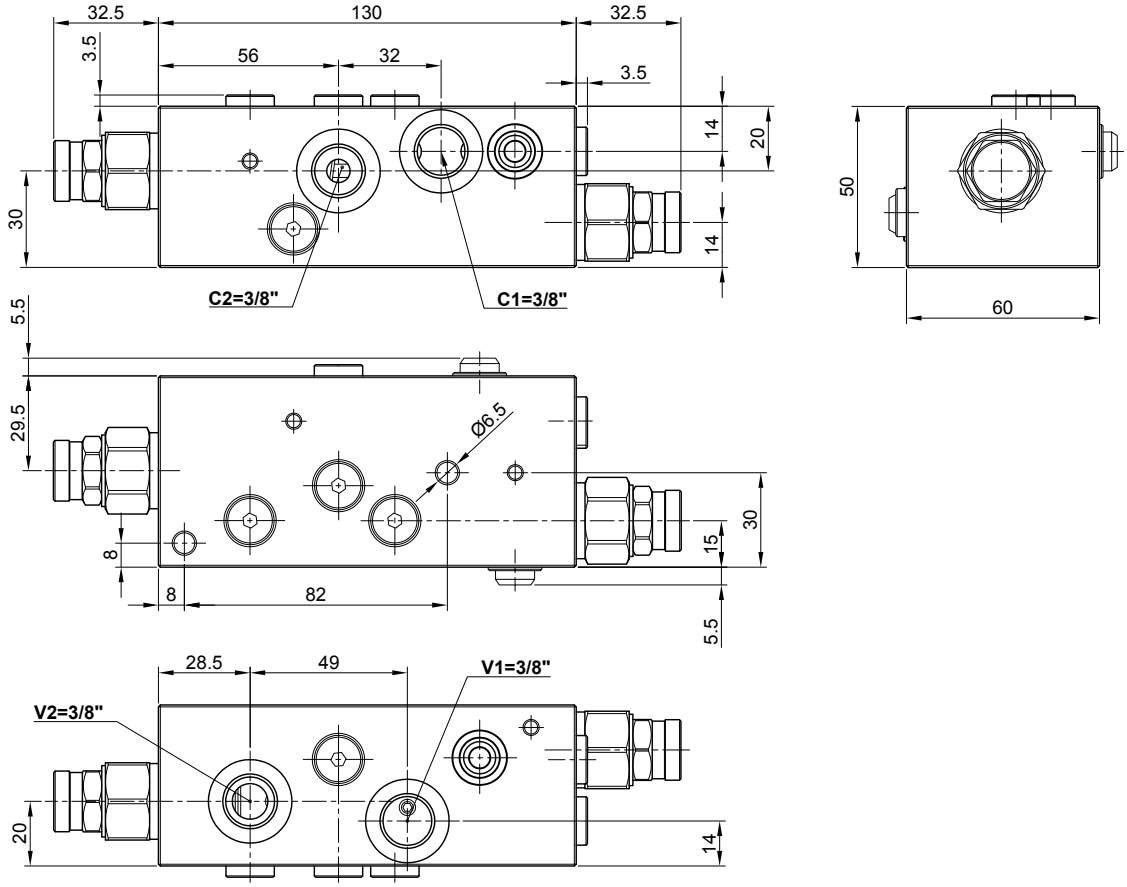


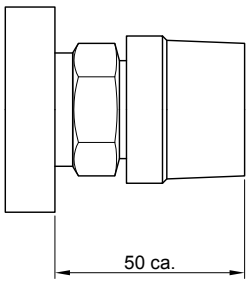


VPOR-35-D-*-3/8-L-*-* O - 710/2

Valvola overcenter doppia, montaggio in linea, per circuito rigenerativo
Dual overcenter valve, line mounted, for regenerative circuits

Rev. 01-2010/02





Cappellotto antimanomissione disponibile su richiesta (Z)

Tamperproof cap available request (Z)

MOLLE - *SPRINGS*				*
Codice *Code*	Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
(1)*	**35**	100 - 350	110	130
(2)*	**35**	100 - 350	110	160

* vedere schema idraulico pag.1 – *see hydraulic scheme page 1*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O R	3 5	D	Z	3 / 8	L	3 5	*

* Z = tappo antimanomissione – *tamperproof cap*
Omettere se non richiesto – *Omit if not requested*

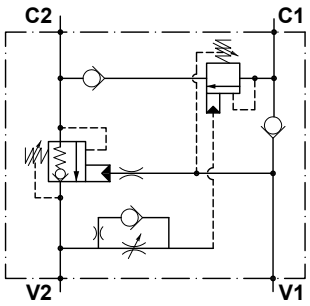
Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *
Omit if BUNA-N

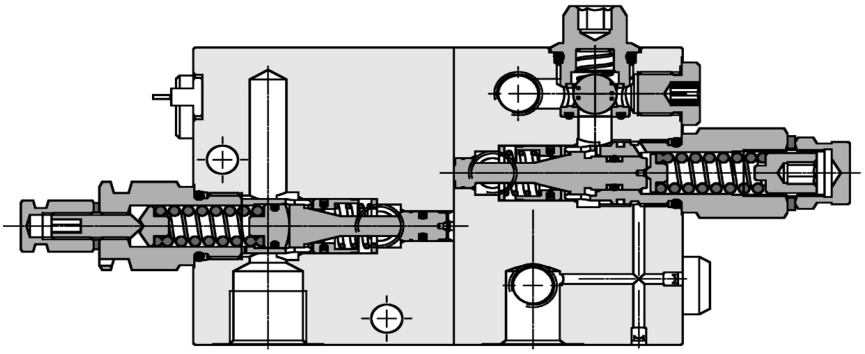
VPOR-60-D-1/2-L-35-*

O - 725/1

Valvola overcenter doppia, montaggio in linea, per circuito rigenerativo
Dual overcenter valve, line mounted, for regenerative circuits

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 60 l/min
Taratura max.: 430 bar
Pressione max. di lavoro: 350 bar
Rapporto di pilotaggio: 1 : 4.2
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 5,300 Kg

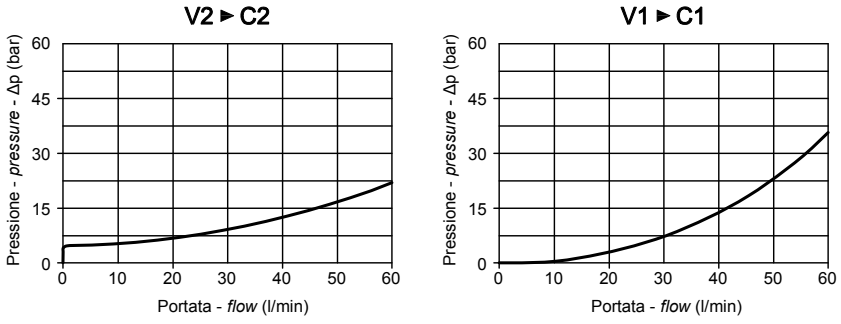
TECHNICAL SPECIFICATIONS

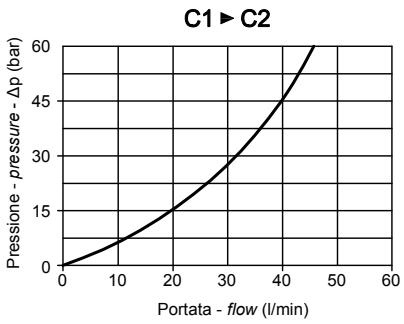
Materials: *body in zinc plated steel. Internal parts are in hardened steel.*
Rated flow: *up to 60 l/min*
Max. setting: *430 bar*
Max. working pressure: *350 bar*
Pilot ratio: *1 : 4.2*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *5,300 Kg*

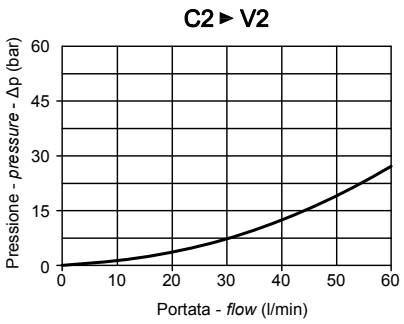
DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C







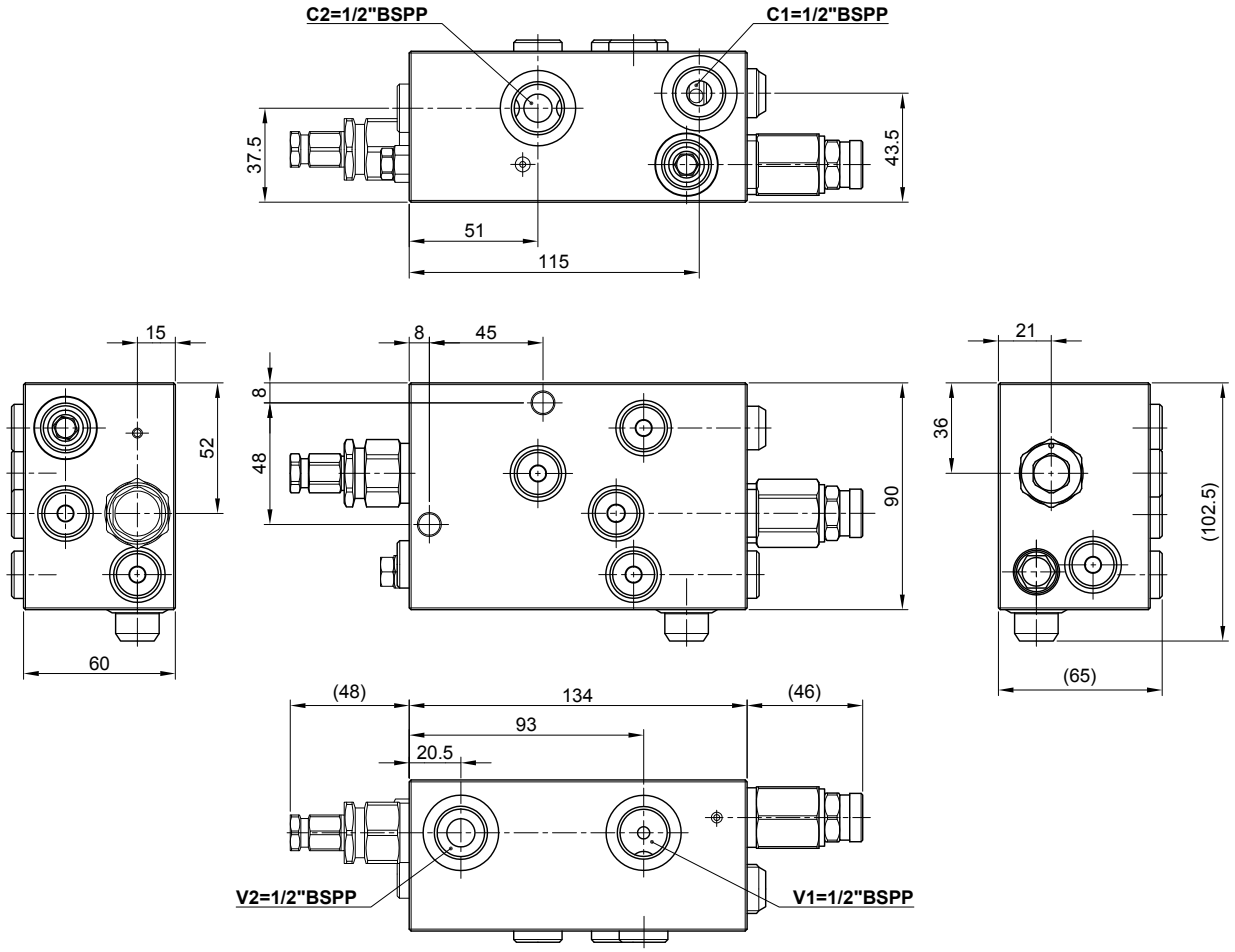
VPOR-60-D-1/2-L-35-*

O - 725/2

Valvola overcenter doppia, montaggio in linea, per circuito rigenerativo

Dual overcenter valve, line mounted, for regenerative circuits

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4.2	80 - 350	120	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O R	6 0	D	1 / 2	L	3 5	*

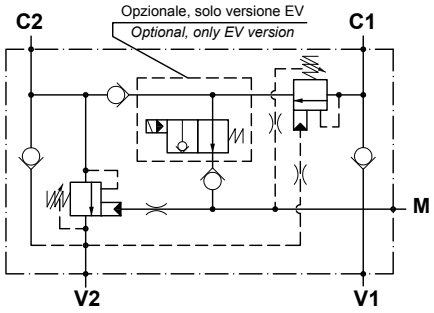
Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N* *

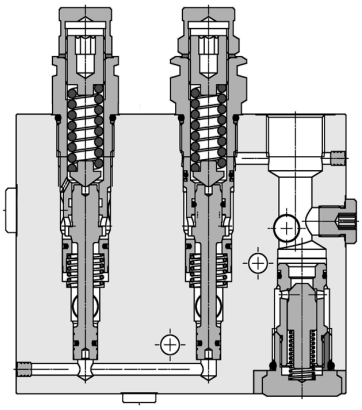
VPOR-150-D-*-3/4-L-M-*-*-* O - 750/1

Valvola overcenter doppia, montaggio in linea, per circuito rigenerativo con valvola elettrica opzionale

Dual overcenter valve, line mounted, for regenerative circuits, with optional electric valve

Rev. 02-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in lega di alluminio, anodizzato nero. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 150 l/min
Taratura max.: 350 bar
Pressione max. di lavoro: 250 bar
Rapporto di pilotaggio: 1 : 4 standard, a richiesta 1:8
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 4.850 Kg

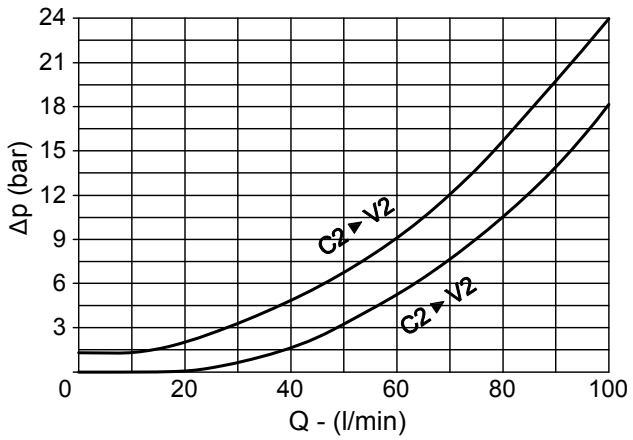
TECHNICAL SPECIFICATIONS

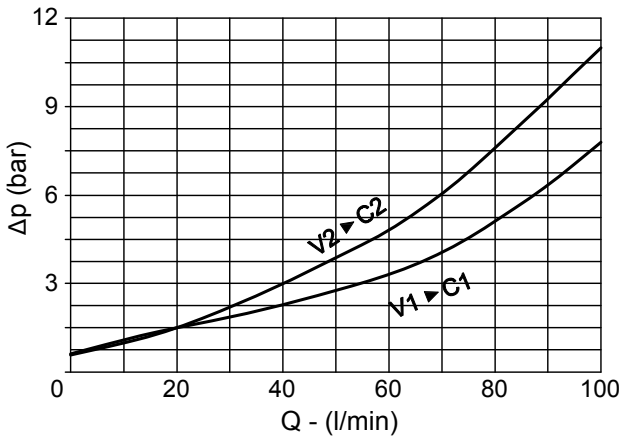
Materials: *body is in aluminium alloy, black anodized. Internal parts are in hardened steel.*
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Max. working pressure: *250 bar*
Pilot ratio: *1 : 4 standard, 1 : 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *4.850 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



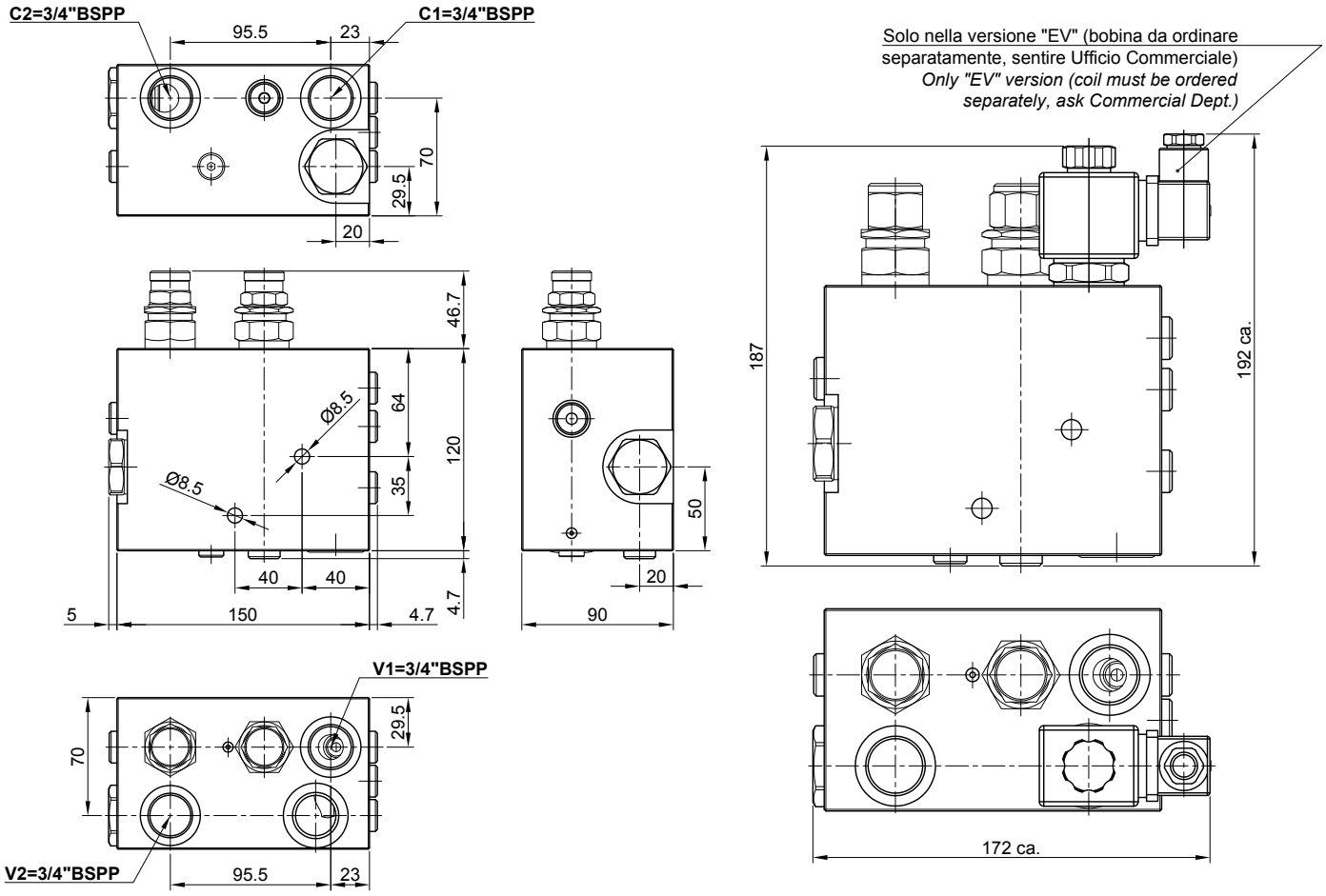


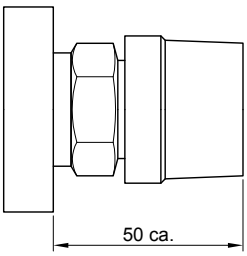
VPOR-150-D-*-3/4-L-M-*-*-* O - 750/2

Valvola overcenter doppia, montaggio in linea, per circuito rigenerativo con valvola elettrica opzionale

Dual overcenter valve, line mounted, for regenerative circuits, with optional electric valve

Rev. 02-2010/08





Cappellotto antimanomissione disponibile su richiesta (Z)

Tamperproof cap available on request (Z)

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOR **150** **D** **Z** **3/4** **L** **35** **B** **EV** *****

* Z = tappo antimanomissione – *tamperproof cap*
Omettere se non richiesto – *Omit if not requested*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *
Omit if BUNA-N

EV = valvola elettrica
EV = electric valve
Omettere se non richiesto *
Omit if not requested

SEZIONE P
Valvole overcenter bilanciate

Queste valvole, oltre ad assolvere le stesse funzioni delle valvole overcenter alla sezione O, sono dotate di una configurazione specifica con compensazione della contropressione sullo scarico.
Sono disponibili due versioni:
1) parzialmente bilanciate (codice base: VPOB, VPOEB), sono insensibili alle contropressioni sulla valvola di massima, in esse il pilotaggio resta soggetto ad eventuali pressioni additive;
2) totalmente bilanciate (codice base VPOFB), sono insensibili alle contropressioni sia sulla valvola di massima che sul pilotaggio.
Vengono generalmente installate in circuiti con distributore a centro chiuso, dotato di valvole ausiliarie anti-shock sulle connessioni di mandata.
Sono disponibili in 4 soluzioni di montaggio: a cartuccia, in linea, a flangia e a vite forata.

SECTION P
Compensated overcenter Valves

These valves, as well as carry out the same functions as the overcenter valves on section O, have a specific configuration with compensation of pressure in the return line.
There are 2 available versions:
1) partially balanced (base code: VPOB, VPOEB), they are insensitive to back pressure on the relief valve, in this version the piloted opening remains subject to additive pressure;
2) totally balanced (base code: VPOFB), they are insensitive to back pressure on both the relief valve and the piloted opening.
They are usually installed in circuits with closed centres directional spools, equipped with auxiliary valve anti-shock valves on the delivery ports.
Available in 4 assembly solutions: cartridge, in line, flanged and drilled screw.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
P 017	VPOFB-25-C	P 210	VPOB-50-S-*-1F
P 018	VPOFB-25-CM	P 211	VPOB-50-S-1/2-1F-SAE
P 036	VPOFB-60-C	P 213	VPOB-50-S-*-1F-P-M
P 058	VPOFB-100-C	P 225	VPOFB-150-S-*-1F-P-M
P 072	VPOFB-150-C	P 260	VPOB-50-S-*-2F-P-M
P 088	VPOFB-300-C	P 275	VPOFB-150-S-1/2-2F-P
P 111	VPOFB-35-S-1/4-L	P 310	VPOFB-35-D-1/4-L-*-*
P 120	VPOB-50-S-*-L	P 311	VPOFB-35-DD-1/4-L-*-*
P 155	VPOFB-35-S-1/4-L-P	P 320	VPOB-50-D-*-L
P 160	VPOB-50-S-*-L-P	P 328	VPOEB-70-D-1/2-L-A
P 161	VPOFB-50-S-*-L-P	P 331	VPOB-90-D-*-L
P 170	VPOEB-70-S-1/2-L-P-A	P 335	VPOEB-120-D-3/4-L
P 180	VPOB-90-S-3/4-L-P	P 340	VPOFB-150-DD-3/4-L-35-*
P 190	VPOEB-120-S-3/4-L-P-A	P 470	VPOB-50-D-*-2F
P 194	VPOFB-150-S-*-L-P-M	P 480	VPOFB-150-D-3/4-2F

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

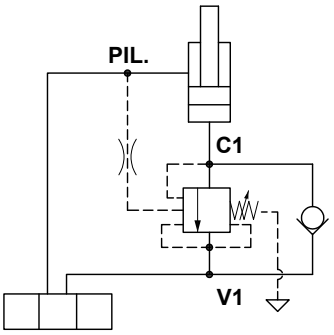
Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

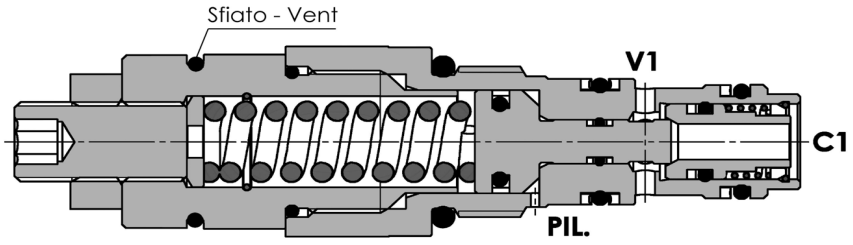
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

VPOFB-25-C-*-*-* P - 017/1

Valvola overcenter bilanciata, versione a cartuccia, cavità SAE 08
Fully balanced overcenter valve, cartridge version, SAE 08 cavity

Rev. 02-2010/08





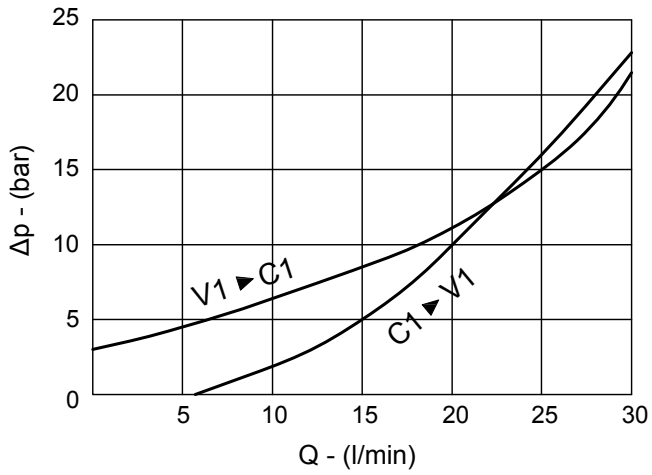
SPECIFICHE TECNICHE
Materiali: corpo in acciaio protetto da zincatura. Componenti interni in acciaio trattato termicamente.
Portata max.: 25 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *25 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see pag.02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

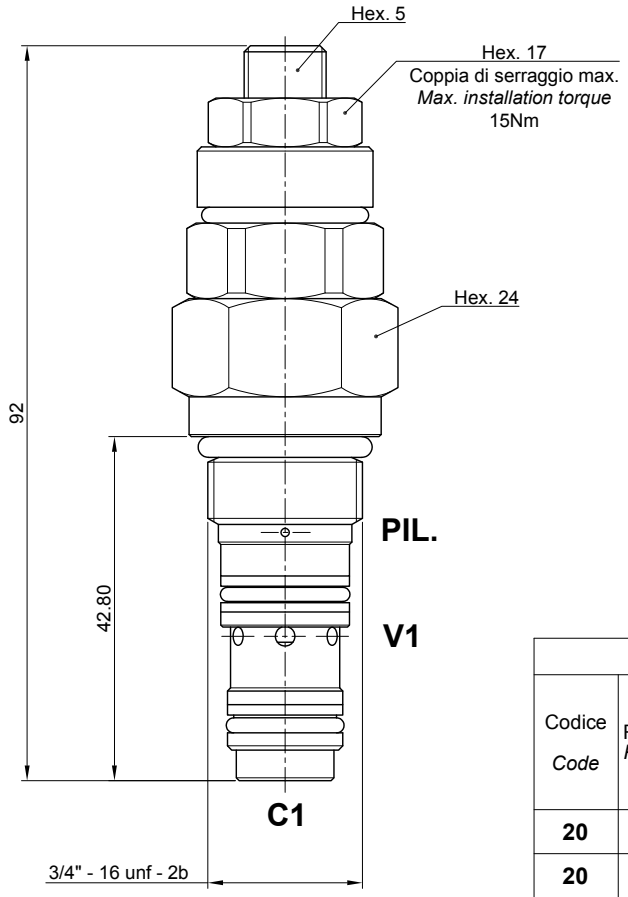


VPOFB-25-C-*-*-*

P - 017/2

Valvola overcenter bilanciata, versione a cartuccia, cavità SAE 08
Fully balanced overcenter valve, cartridge version, SAE 08 cavity

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** *PILOT RATIO*	**CAVITA'** *CAVITY*	**COPPIA DI SERRAGGIO** *INSTALLATION TORQUE*	**PESO** *WEIGHT*
			Nm	Kg
VPOFB 25 C	1 : 4 (standard) - 1:8	33082	50 - 55	0.168

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B | **2 5** | **C** | **3 5** | **B** | ***** |

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

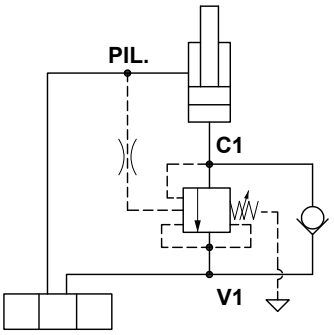
Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

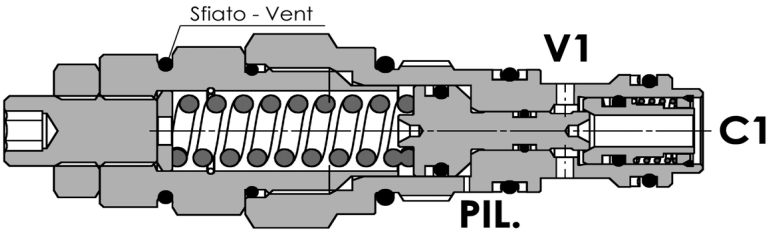
Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N* *

VPOFB-25-CM-*-*-* P - 018/1

Valvola overcenter bilanciata, versione a cartuccia, cavità metrica
Fully balanced overcenter valve, cartridge version, metric cavity

Rev. 02-2010/08





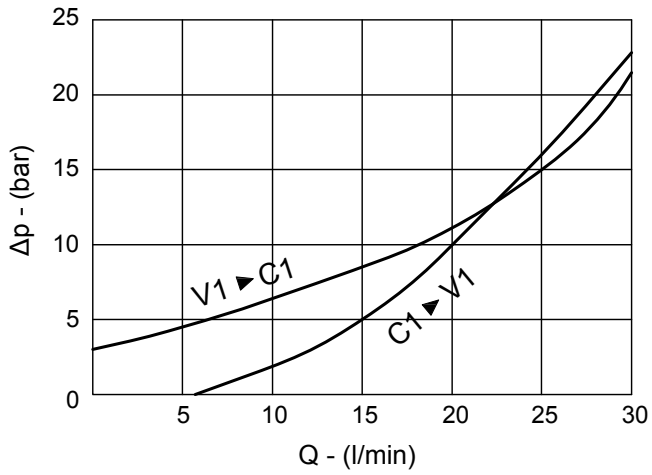
SPECIFICHE TECNICHE
Materiali: corpo in acciaio protetto da zincatura. Componenti interni in acciaio trattato termicamente.
Portata max.: fino a 25 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 25 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see pag.02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

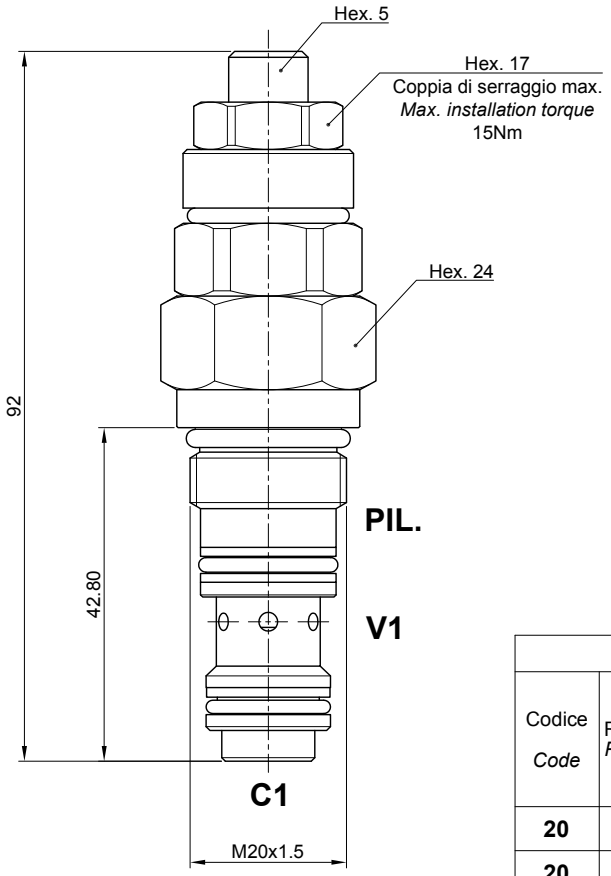


VPOFB-25-CM-*-*-*

P - 018/2

Valvola overcenter bilanciata, versione a cartuccia, cavità metrica
Fully balanced overcenter valve, cartridge version, metric cavity

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** *PILOT RATIO*	**CAVITA'** *CAVITY*	**COPPIA DI SERRAGGIO** *INSTALLATION TORQUE*	**PESO** *WEIGHT*
			Nm	Kg
VPOFB 25 CM	1 : 4 (standard) - 1:8	32205	50 - 55	0.168

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B **2 5** **C M** **3 5** **B** *****

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

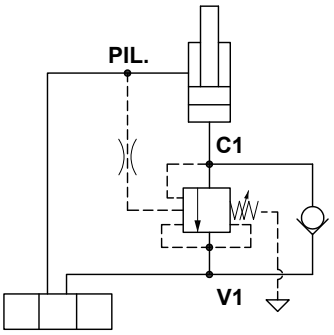
Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N* *

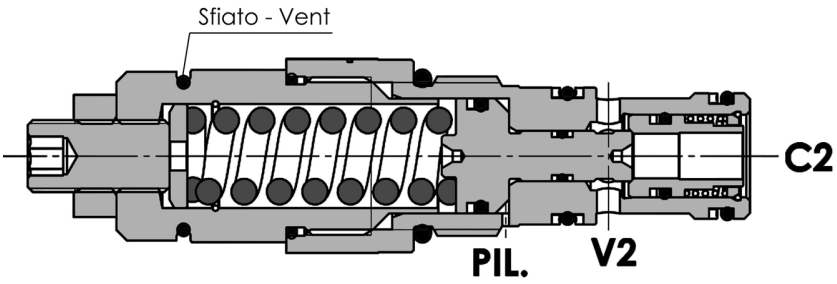
VPOFB-60-C-*-*-*

P - 036/1

Valvola overcenter bilanciata, versione a cartuccia, cavità SAE 10
Fully balanced overcenter valve, cartridge version, SAE 10 cavity

Rev. 02-2010/08





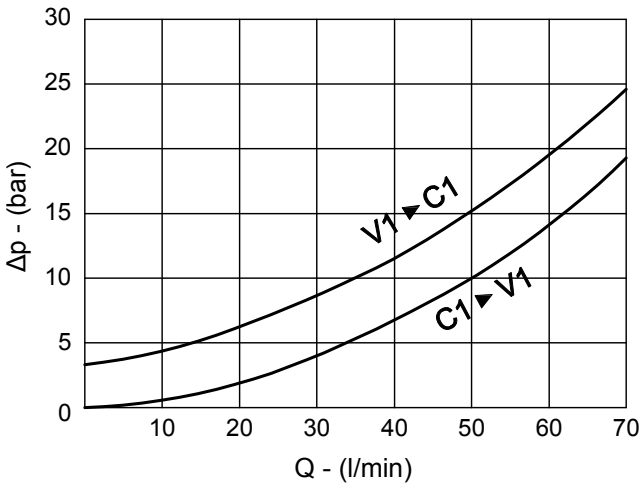
SPECIFICHE TECNICHE
Materiali: corpo in acciaio protetto da zincatura. Componenti interni in acciaio trattato termicamente.
Portata max.: fino a 60 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 60 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

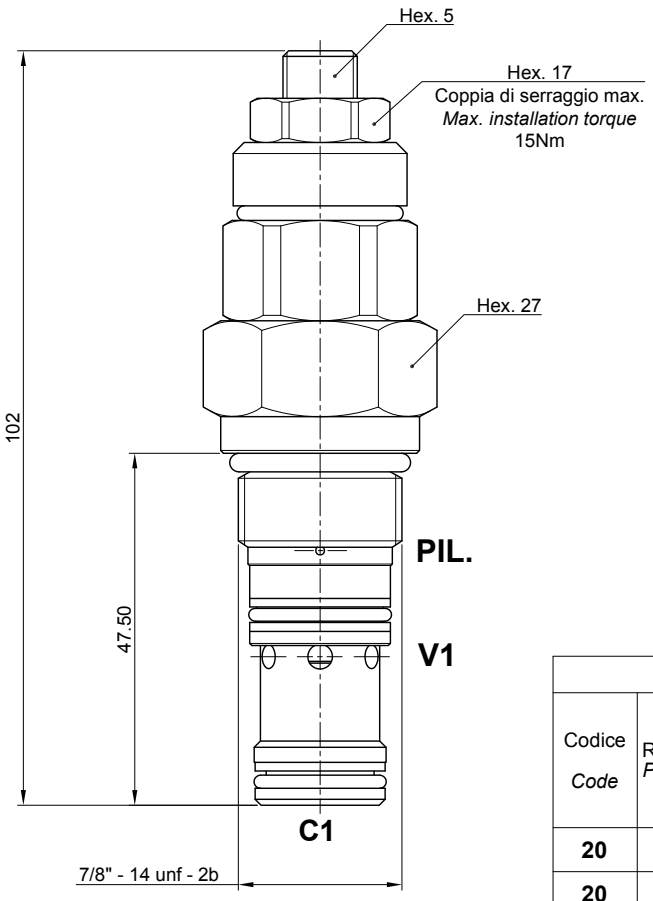


VPOFB-60-C-*-*-*

P - 036/2

Valvola overcenter bilanciata, versione a cartuccia, cavità SAE 10
Fully balanced overcenter valve, cartridge version, SAE 10 cavity

Rev. 02-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** *PILOT RATIO*	**CAVITA'** *CAVITY*	**COPPIA DI SERRAGGIO** *INSTALLATION TORQUE*	**PESO** *WEIGHT*
			Nm	Kg
VPOFB-60-C	1 : 4 (standard) - 1:8	33102	60 - 70	0.210

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOFB **60** **C** **35** **B** *****

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

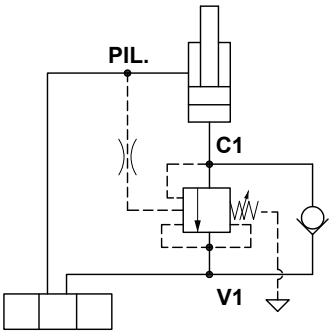
Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N* *

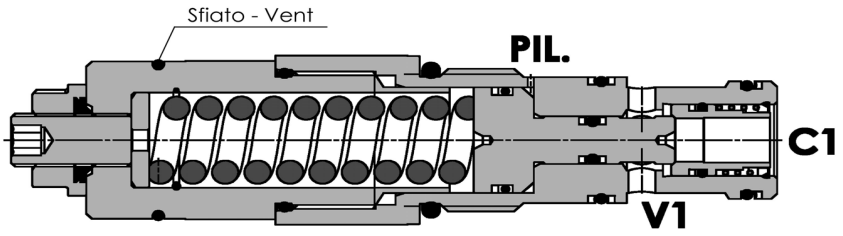
VPOFB-100-C-*-*

P - 058/1

Valvola overcenter bilanciata, versione a cartuccia, cavità SAE 12
Fully balanced overcenter valve, cartridge version, SAE 12 cavity

Rev. 04-2010/09





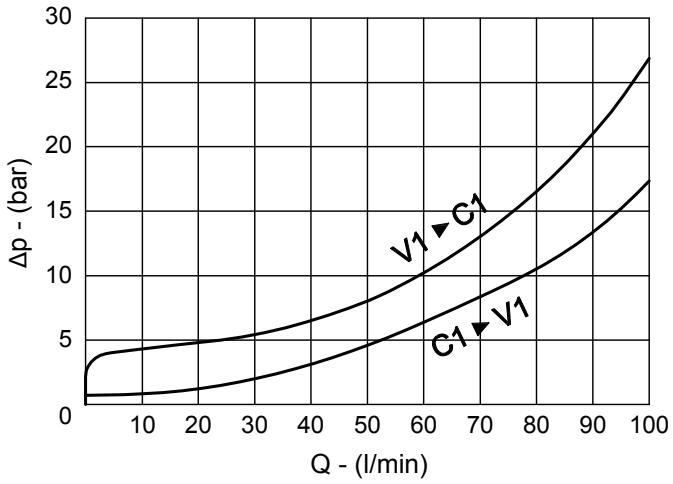
SPECIFICHE TECNICHE
Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 100 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: veder pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 100 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

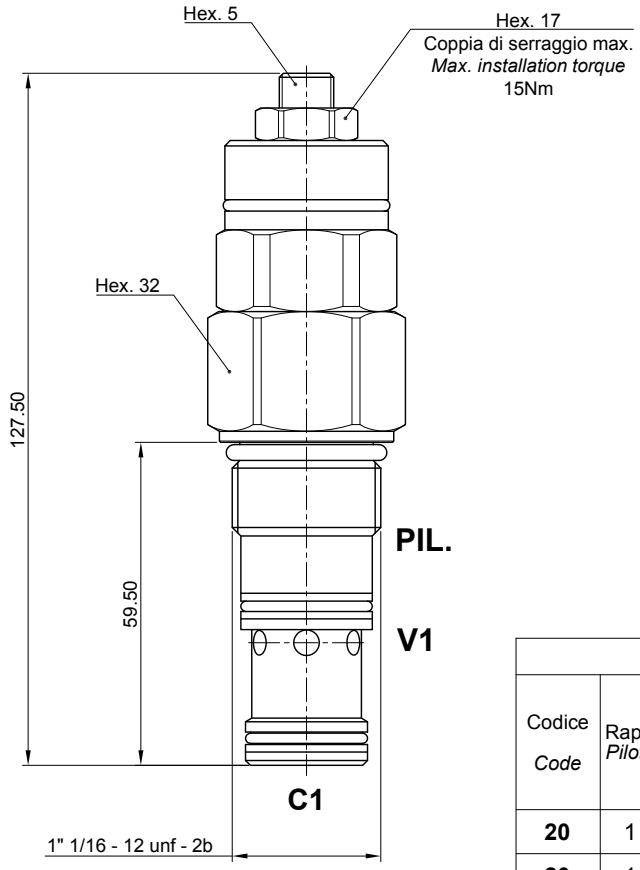


VPOFB-100-C-*-*

P - 058/2

Valvola overcenter bilanciata, versione a cartuccia, cavità SAE 12
Fully balanced overcenter valve, cartridge version, SAE 12 cavity

Rev. 04-2010/09



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	23	170
20	1 : 8	60 - 220	23	170
35	1 : 4	100 - 350	41	280
35	1 : 8	100 - 350	44	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** *PILOT RATIO*	**CAVITA'** *CAVITY*	**COPPIA DI SERRAGGIO** *INSTALLATION TORQUE*	**PESO** *WEIGHT*
			Nm	Kg
VPOFB-100-C	1 : 4 (standard) - 1:8	33122	90 - 100	0.455

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B | **1 0 0** | **C** | * | *

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

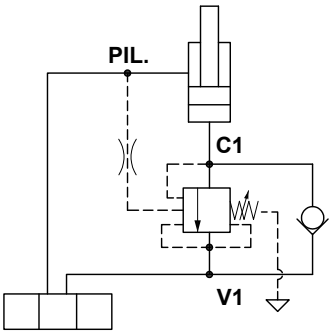
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8

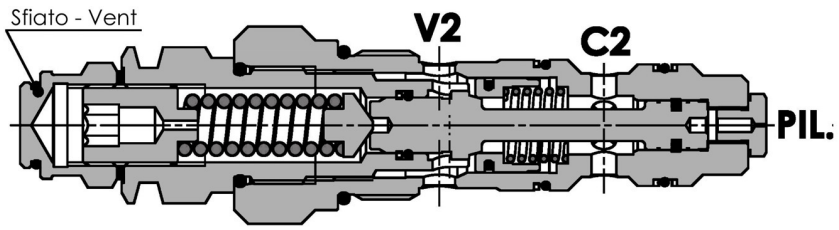
VPOFB-150-C-*-35-*-*

P - 072/1

Valvola overcenter bilanciata, versione a cartuccia, cavità metrica
Fully balanced overcenter valve, cartridge version, metric cavity

Rev. 02-2010/09





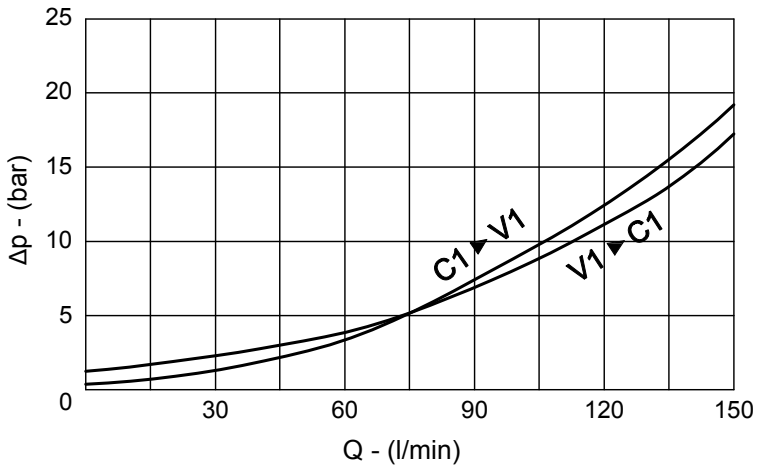
SPECIFICHE TECNICHE
Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 150 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite

TECHNICAL SPECIFICATIONS
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

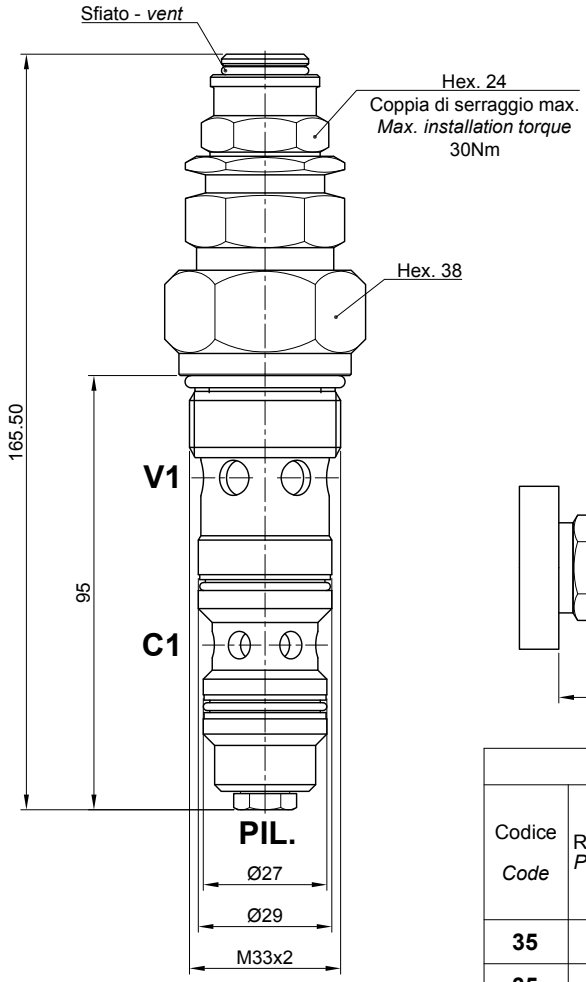


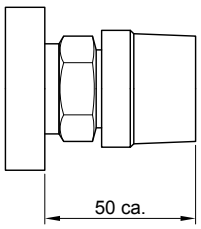
VPOFB-150-C-*-35-*-*

P - 072/2

Valvola overcenter bilanciata, versione a cartuccia, cavità metrica
Fully balanced overcenter valve, cartridge version, metric cavity

Rev. 02-2010/09





Cappellotto antimanomissione disponibile su richiesta (Z)

Tamperproof cap available on request (Z)

50 ca.

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** ***PILOT RATIO***	**CAVITA'** ***CAVITY***	**COPPIA DI SERRAGGIO** ***INSTALLATION TORQUE***	**PESO** ***WEIGHT***
			Nm	Kg
VPOFB-150-C	1 : 4 (standard) - 1:8	32331	110 - 120	0.700

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B **1 5 0** **C** **Z** **3 5** **B** *

* Z: tappo antimanomissione, omettere se non richiesto
Z: tamperproof cap, omit if not requested

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

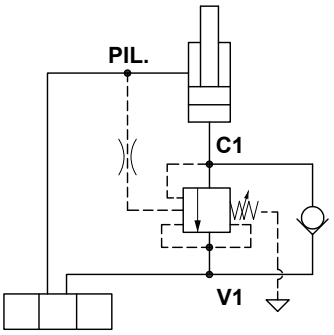
Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

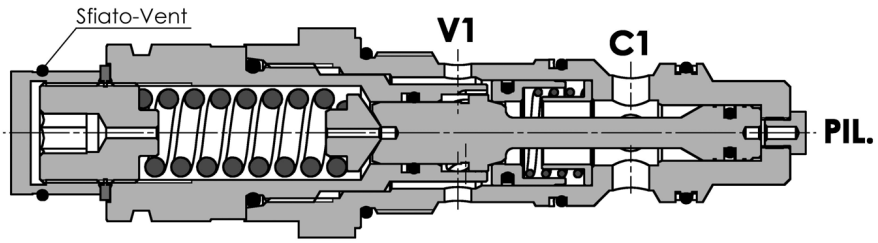
VPOFB-300-C-35

P - 088/1

Valvola overcenter bilanciata, versione a cartuccia, cavità metrica
Fully overcenter valve, cartridge version, metric cavity

Rev. 04-2010/09





SPECIFICHE TECNICHE

Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata max: 300 l/min
Taratura max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

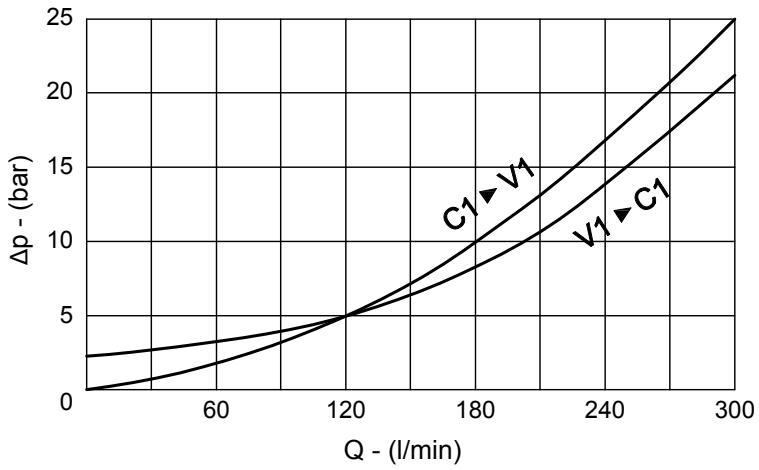
TECHNICAL SPECIFICATIONS

Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *300 l/min*
Max. setting: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



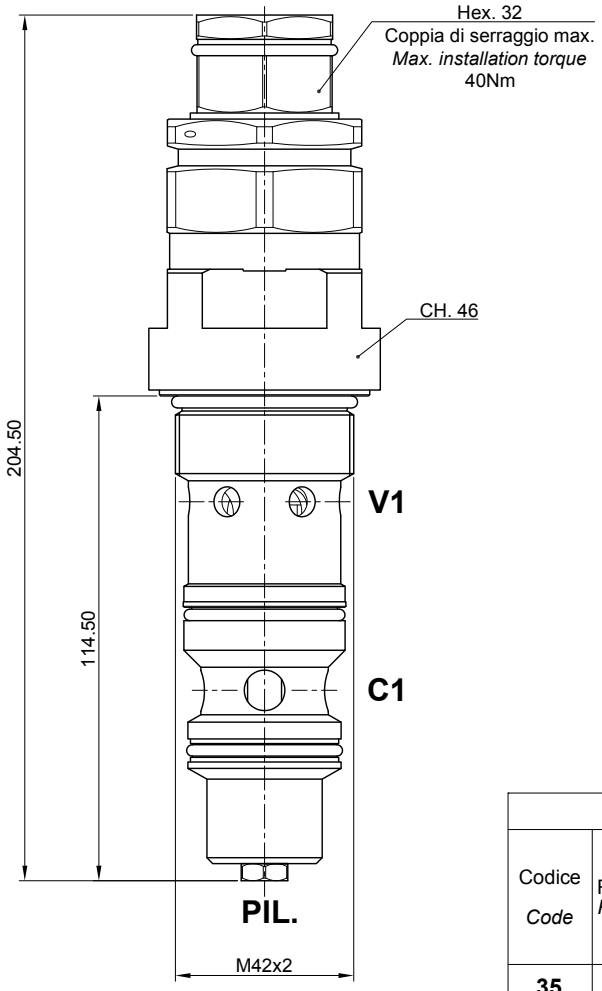
VPOFB-300-C-35

P - 088/2

Valvola overcenter bilanciata, versione a cartuccia, cavità metrica

Fully overcenter valve, cartridge version, metric cavity

Rev. 04-2010/09



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	45	280

TIPO *TYPE*	**RAPP. DI PILOTAGGIO** *PILOT RATIO*	**CAVITA'** *CAVITY*	**COPPIA DI SERRAGGIO** *INSTALLATION TORQUE*	**PESO** *WEIGHT*
			Nm	Kg
VPOFB-300-C	1 : 4	32421	246 - 272	1.650

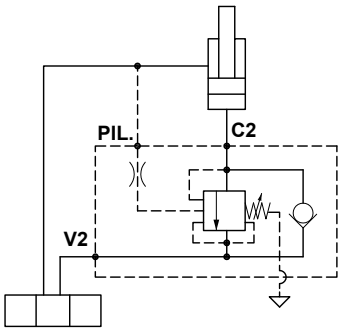
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

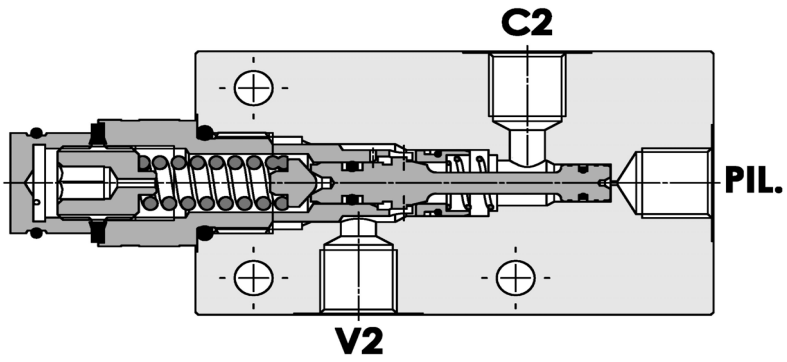
V P O F B	3 0 0	C	3 5

VPOFB-35-S-1/4-L-*-*

Valvola overcenter singola bilanciata, montaggio in linea
Fully balanced single overcenter valve, line mounted

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1,050 Kg

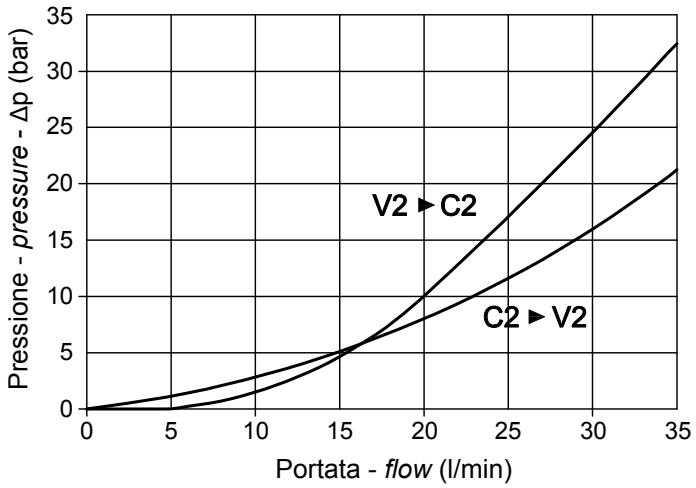
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,050 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



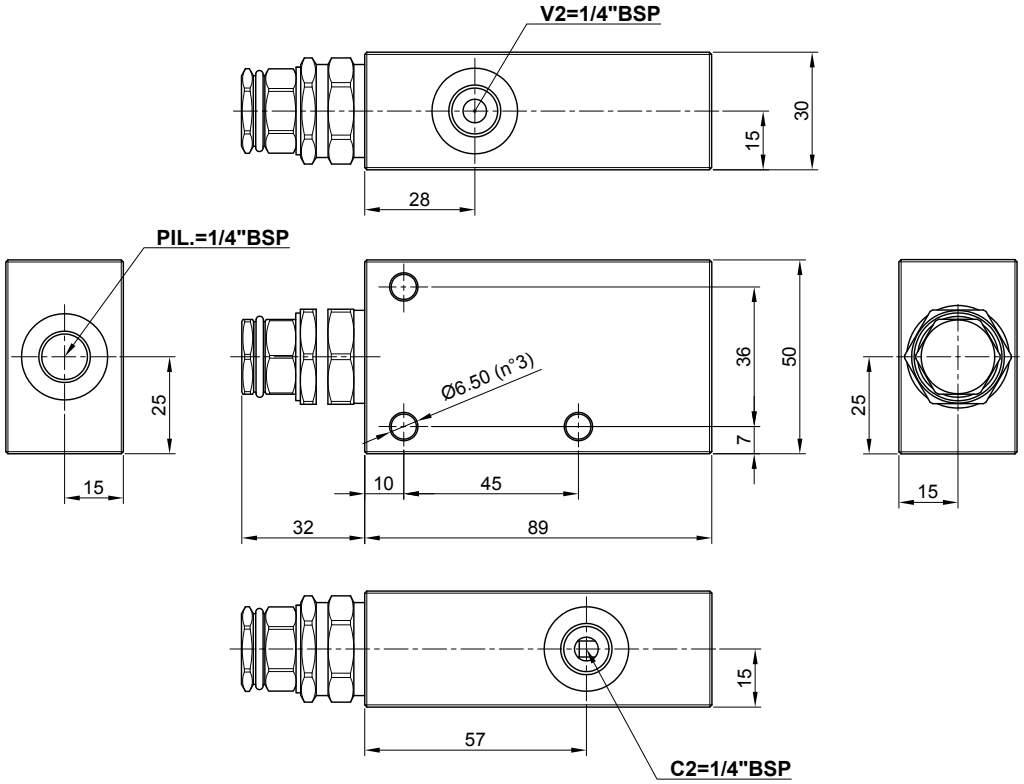
VPOFB-35-S-1/4-L-*-*

P - 111/2

Valvola overcenter singola bilanciata, montaggio in linea

Fully balanced single overcenter valve, line mounted

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B	3 5	S	1 / 4	L	3 5	B

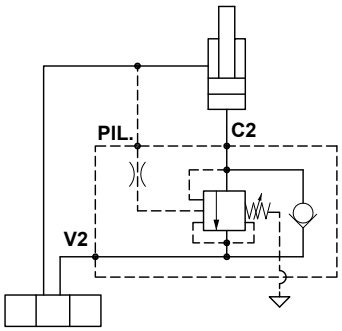
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

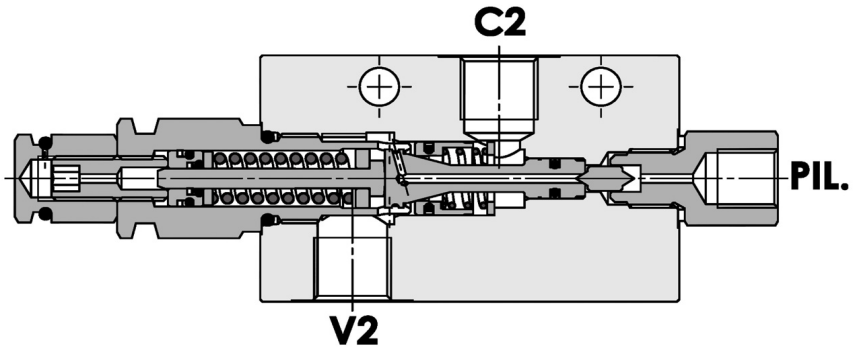
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPOB-50-S-*-L-*-*-* P - 120/1

Valvola overcenter singola parzialmente bilanciata, montaggio in linea
Partially balanced single overcenter valve, line mounted

Rev. 03-2010/08





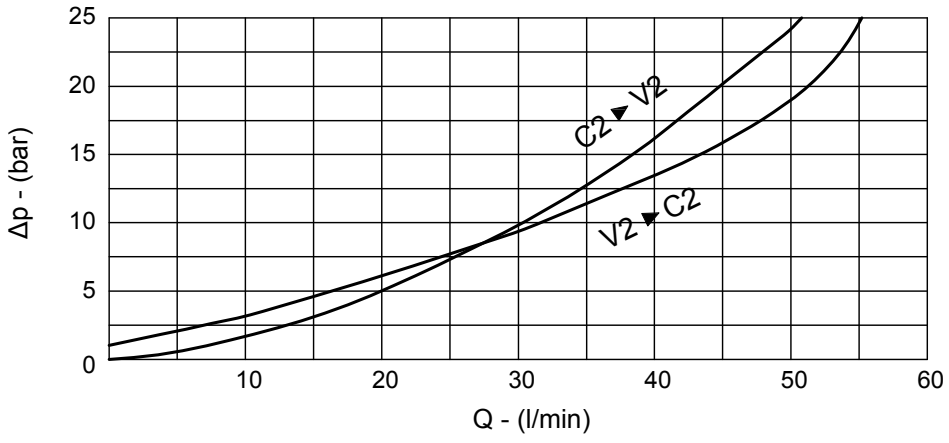
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

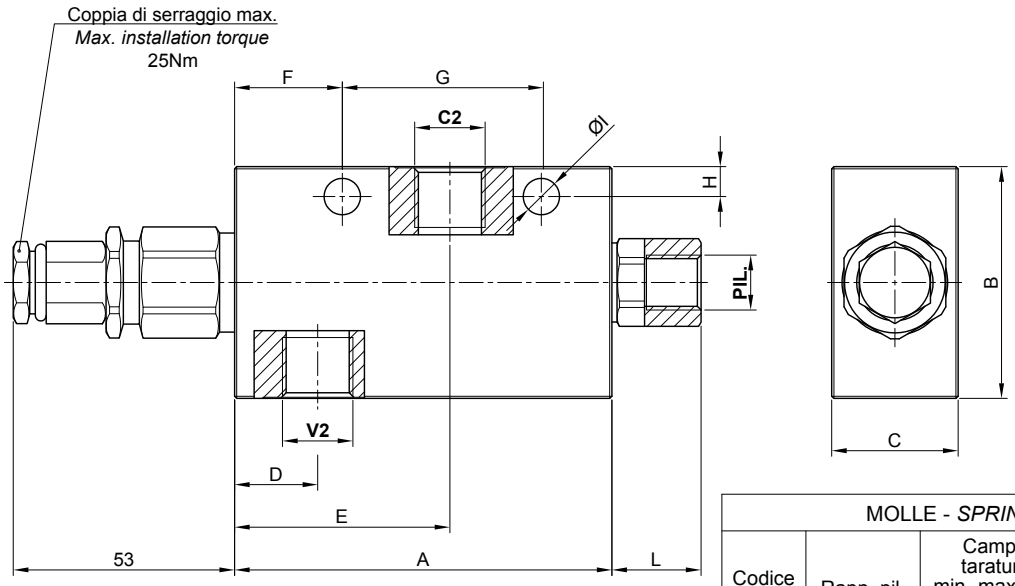
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPOB-50-S-*-L-*-*-* P - 120/2

Valvola overcenter singola parzialmente bilanciata, montaggio in linea
Partially balanced single overcenter valve, line mounted

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V2-C2**	**PIL.**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO** *WEIGHT*
	BSPP	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOB-50-S-1/4"-L	1/4"	1/4"	90	55	30	19.5	51	25.6	47.6	11	8.5	1.020
VPOB-50-S-3/8"-L	3/8"	1/4"	90	55	30	19.5	51	25.6	47.6	11	8.5	1.020
VPOB-50-S-1/2"-L	1/2"	1/4"	90	65	35	19.5	51	25.6	47.6	11	8.5	1.450

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOB **50** **S** **1/4** **L** **20** **B** *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

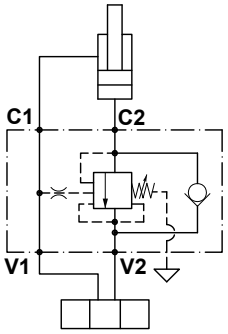
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

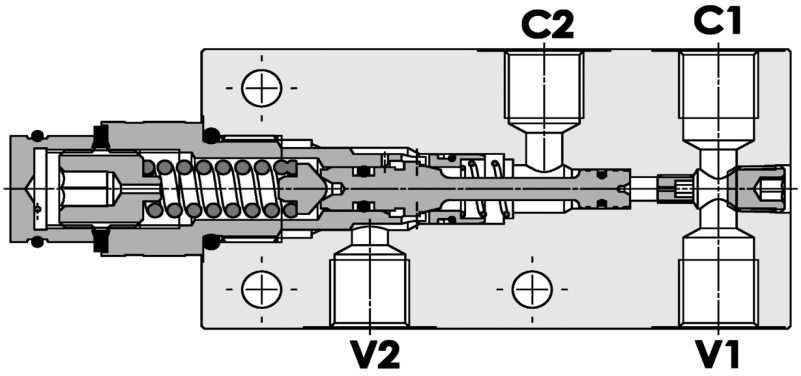
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPOFB-35-S-1/4-L-P-*-*

Valvola overcenter singola bilanciata, montaggio in linea, pilotaggio interno
Fully balanced single overcenter valve, line mounted, internal pilot

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1,300 Kg

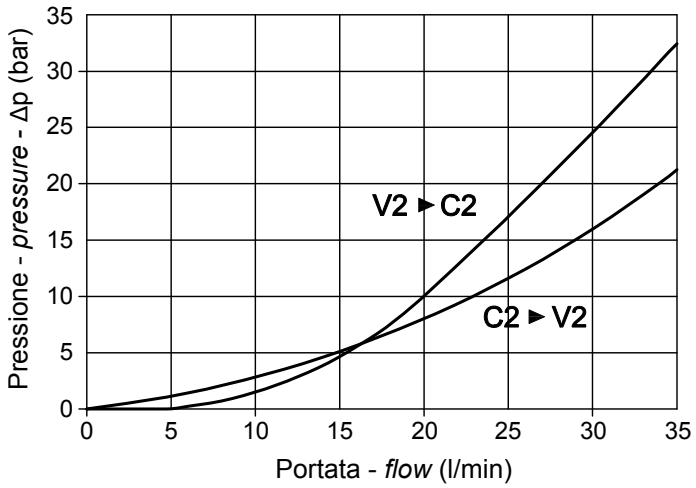
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,300 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



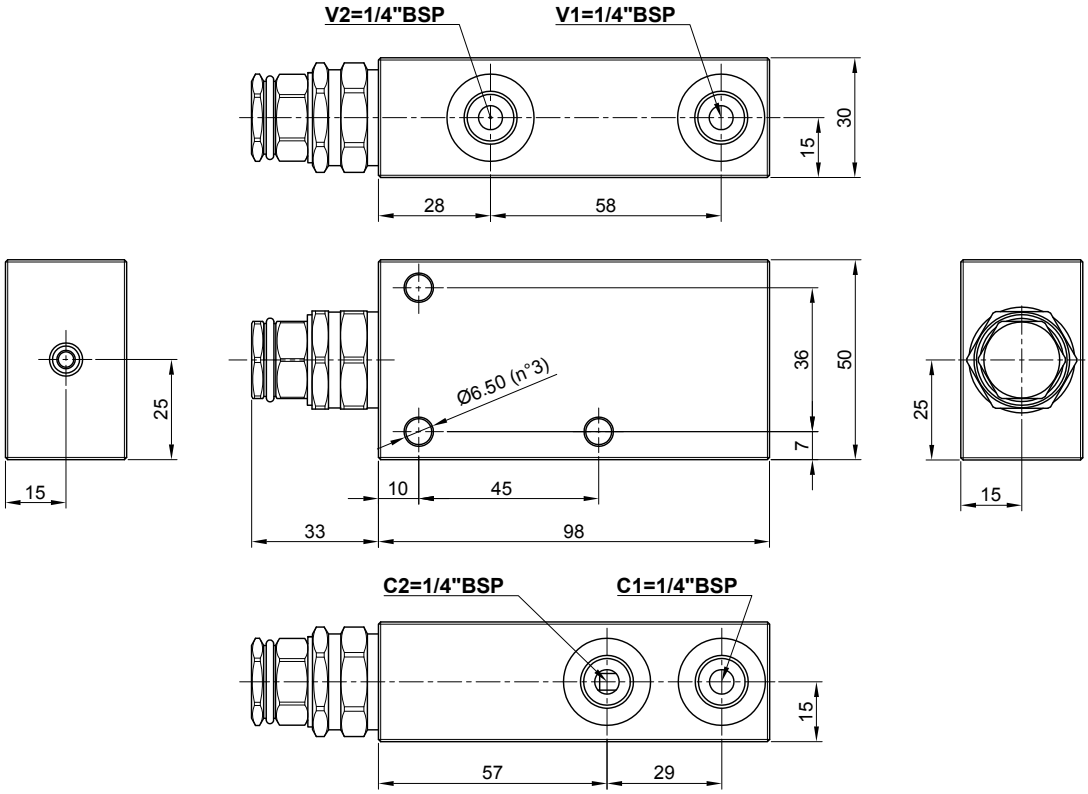
VPOFB-35-S-1/4-L-P-*-*

P - 155/2

Valvola overcenter singola bilanciata, montaggio in linea, pilotaggio interno

Fully balanced single overcenter valve, line mounted, internal pilot

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B	3 5	S	1 / 4	L	P	3 5	B

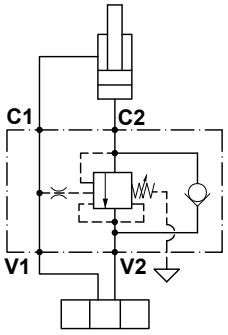
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

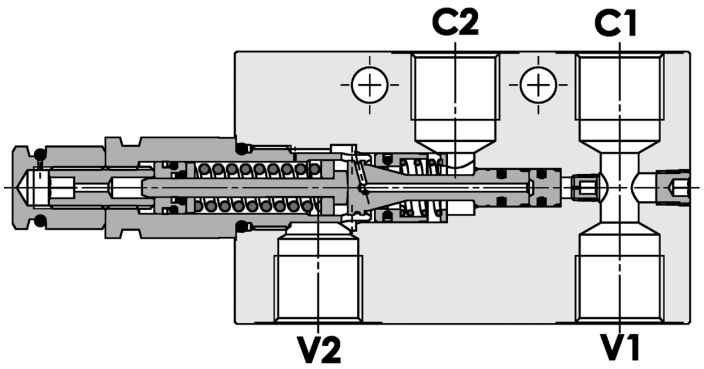
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPOB-50-S-*-L-P-*-*-*

Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno
Partially balanced single overcenter valve, line mounted, internal pilot

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

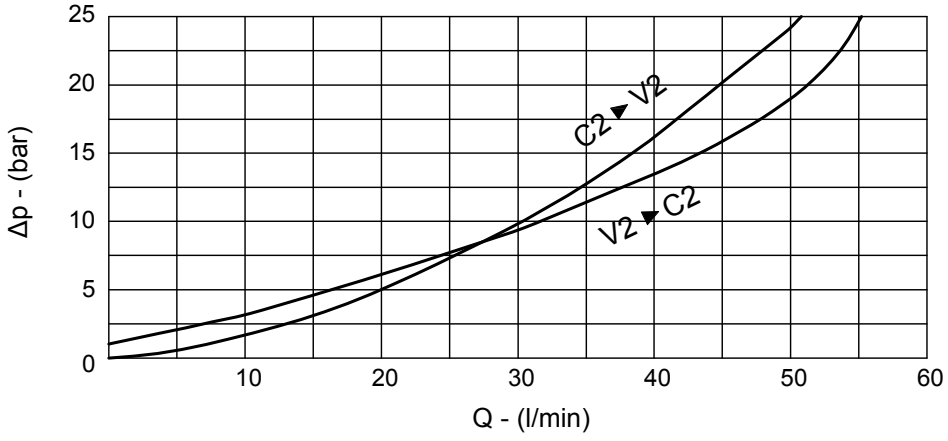
TECHNICAL SPECIFICATIONS

Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



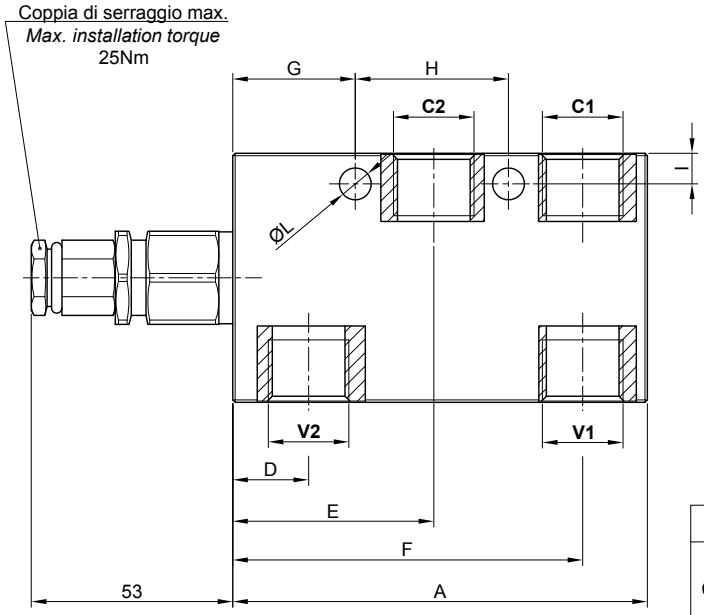
VPOB-50-S-*-L-P-*-*-*

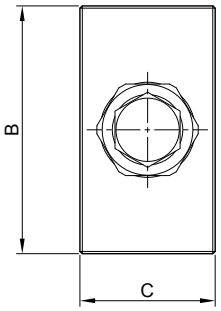
P - 160/2

Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno

Partially balanced single overcenter valve, line mounted, internal pilot

Rev. 03-2010/08





MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-C1 V2-C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**L**	**PESO *WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOB-50-S-1/4"-L-P	1/4"	108	55	30	19.5	52	91	32	40	8	8.5	1.200
VPOB-50-S-3/8"-L-P	3/8"	108	55	30	19.5	52	91	32	40	8	8.5	1.200
VPOB-50-S-1/2"-L-P	1/2"	108	65	35	19.5	52	91	32	40	8	8.5	1.820

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOB | **50** | **S** | **1/4** | **L** | **P** | **20** | **B** | *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

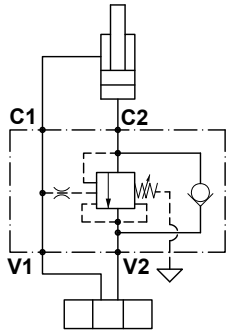
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

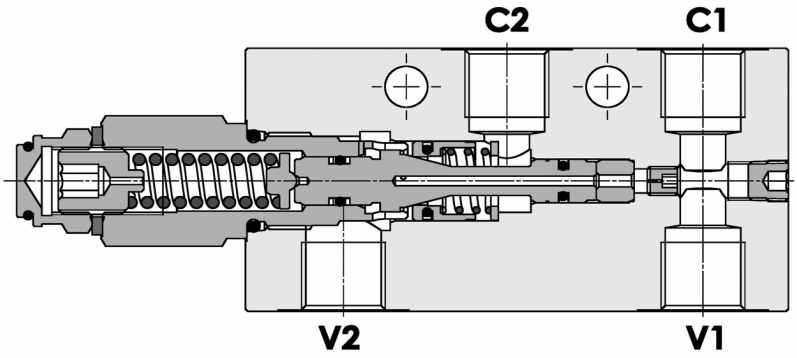
VPOFB-50-S-*-L-P-*-*-*

P - 161/1

Valvola overcenter singola bilanciata, montaggio in linea
Fully balanced single overcenter valve, line mounted

Rev. 03-2010/08





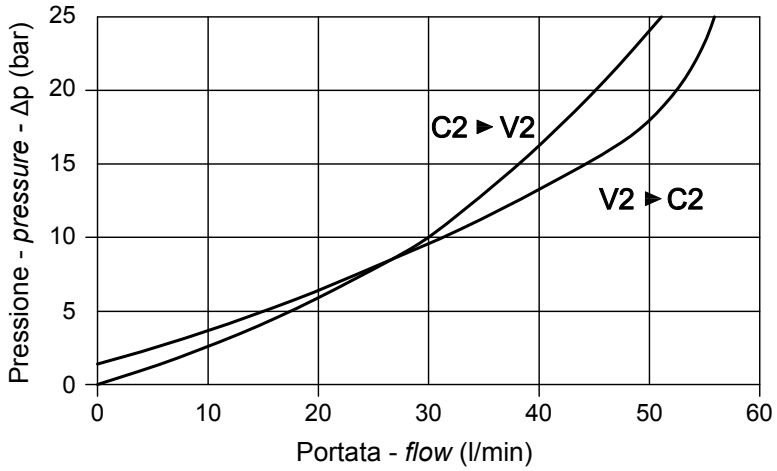
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 4,25 : 1 (a richiesta 8 : 1)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *4,25 : 1 (standard), 8 : 1 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

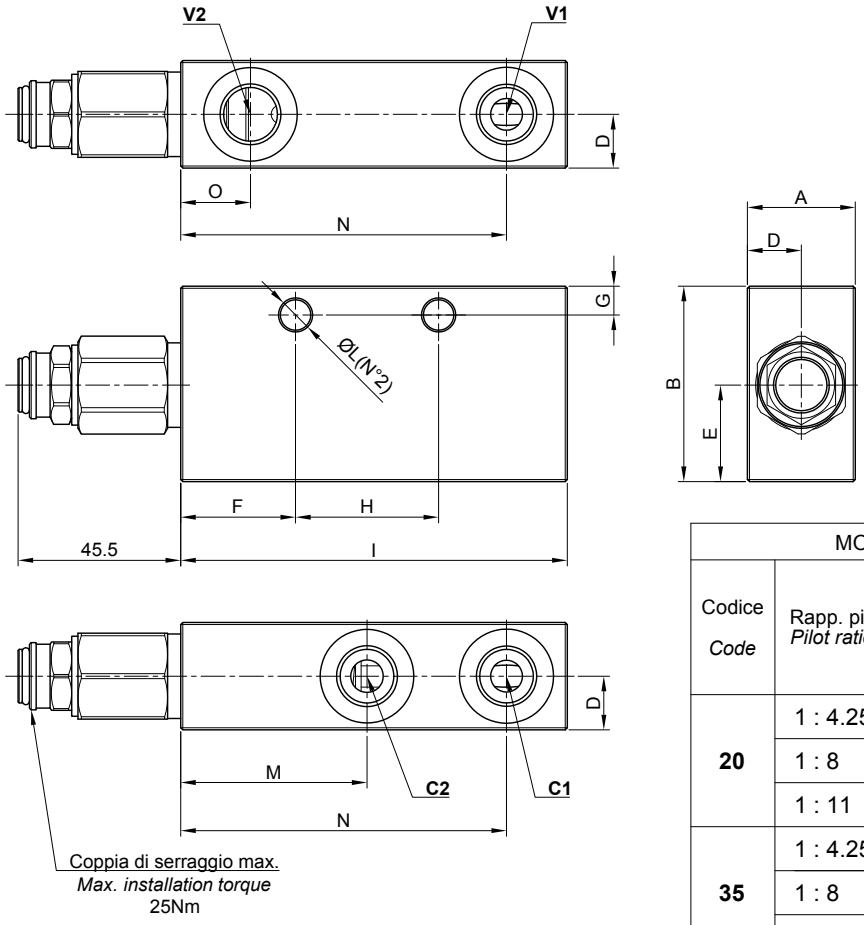


VPOFB-50-S-*-L-P-*-*-*

P - 161/2

Valvola overcenter singola bilanciata, montaggio in linea
Fully balanced single overcenter valve, line mounted

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**PORTATA MAX** *MAX. FLOW*	**V1-C1 V2-C2**	**A**	**B**	**D**	**E**	**F**	**G**	**H**	**I**	**L**	**M**	**N**	**O**	**PESO** *WEIGHT*
	L/MIN	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOFB-50-S-1/4"-L-P	Vedere Specifiche *See specifications*	1/4"	30	54.5	15	27	32	8	40	108	8.5	52	91	19.5	1.225
VPOFB-50-S-3/8"-L-P		3/8"	30	54.5	15	27	32	8	40	108	8.5	52	91	19.5	1.225
VPOFB-50-S-1/2"-L-P		1/2"	35	65	17.5	32.5	32	8	40	108	8.5	52	91	19.5	1.800

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOFB **50** **S** **1/4** **L** **P** **20** **B** *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

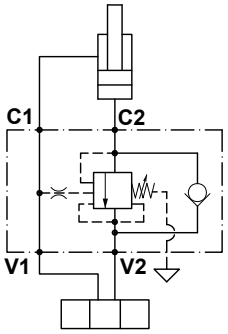
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

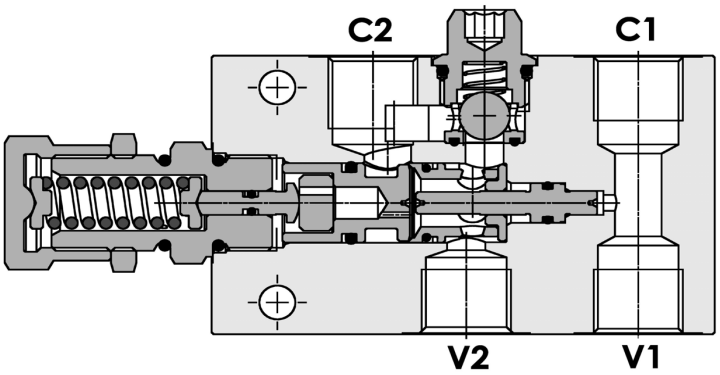
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

VPOEB-70-S-1/2-L-P-A-*-* P - 170/1

Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno, serie E
Partially balanced single overcenter valve, line mounted, internal pilot, E series

Rev. 01-2010/02





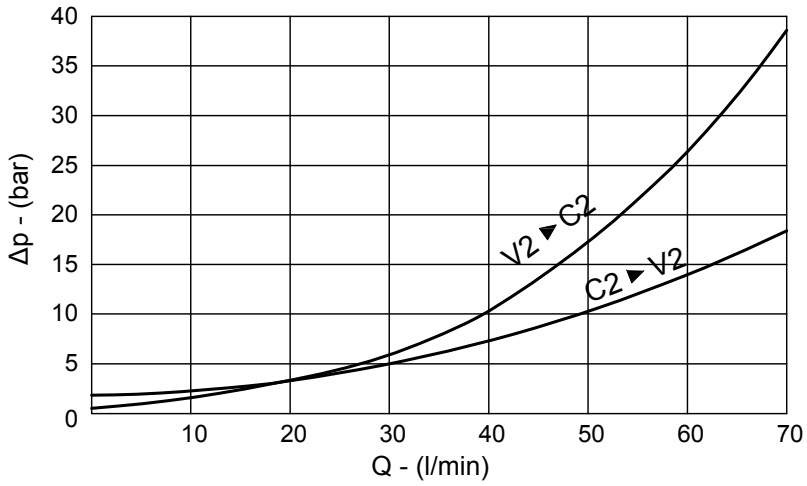
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 70 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 3.2 (a richiesta 1 : 8.2)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 0,700 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 70 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 3.2 (standard), 1 : 8.2 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *0,700 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

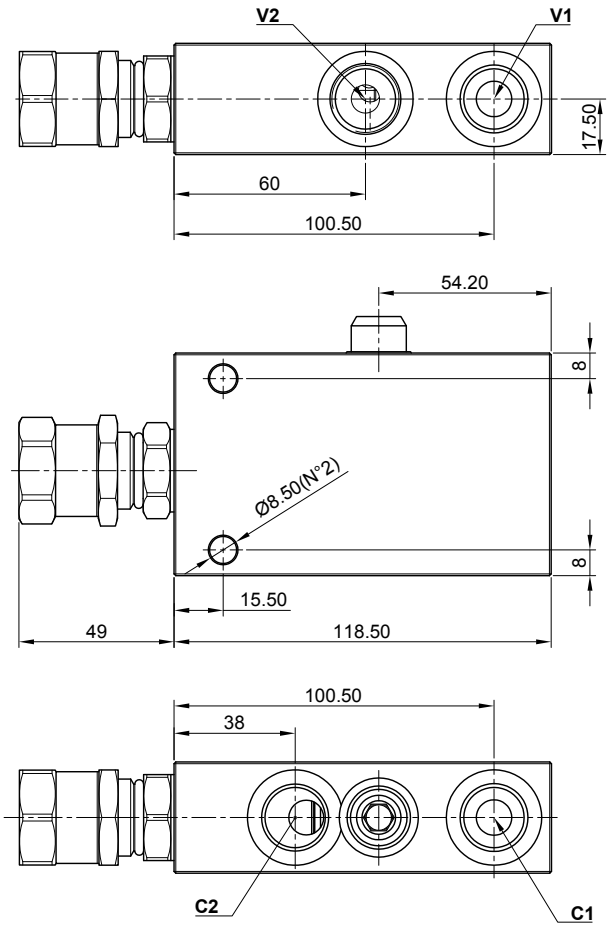
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

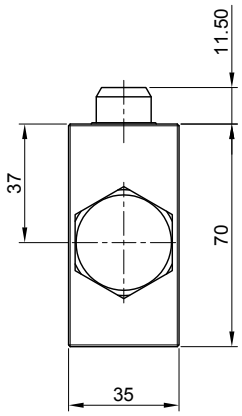


VPOEB-70-S-1/2-L-P-A-*-* P - 170/2

Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno, serie E
Partially balanced single overcenter valve, line mounted, internal pilot, E series

Rev. 01-2010/02





C1 - C2 - V1 - V2: 1/2"BSP

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 3.2	60 - 210	56	200
20	1 : 8.2	60 - 210	56	200
35	1 : 3.2	120 - 350	90	350
35	1 : 8.2	120 - 350	90	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V	P	O	E	B	7 0	S	1 / 2	L	P	A	2 0	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

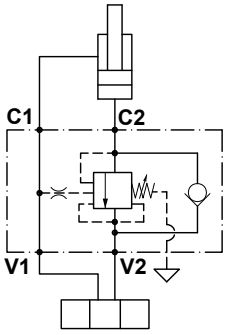
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8.2

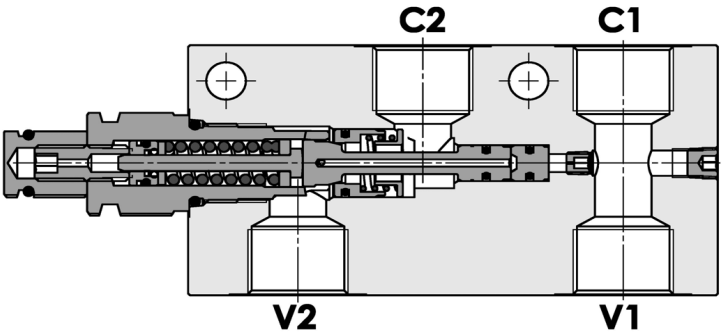
VPOB-90-S-3/4-L-P-35

P - 180/1

Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno
Partially balanced single overcenter valve, line mounted, internal pilot

Rev. 02-2010/08





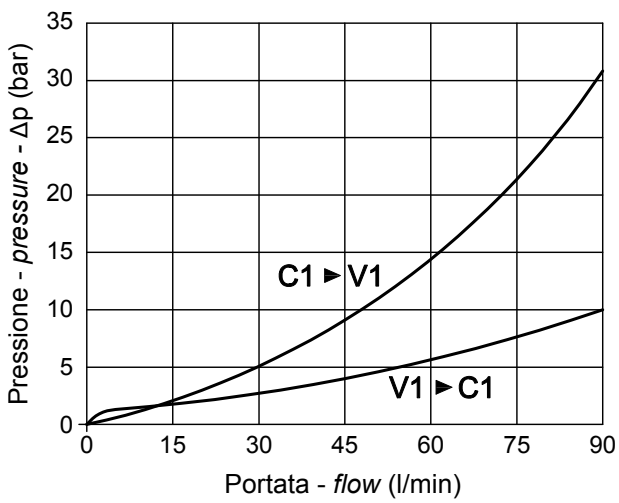
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 90 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.2
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 2.750 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 90 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.2*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *2.750 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



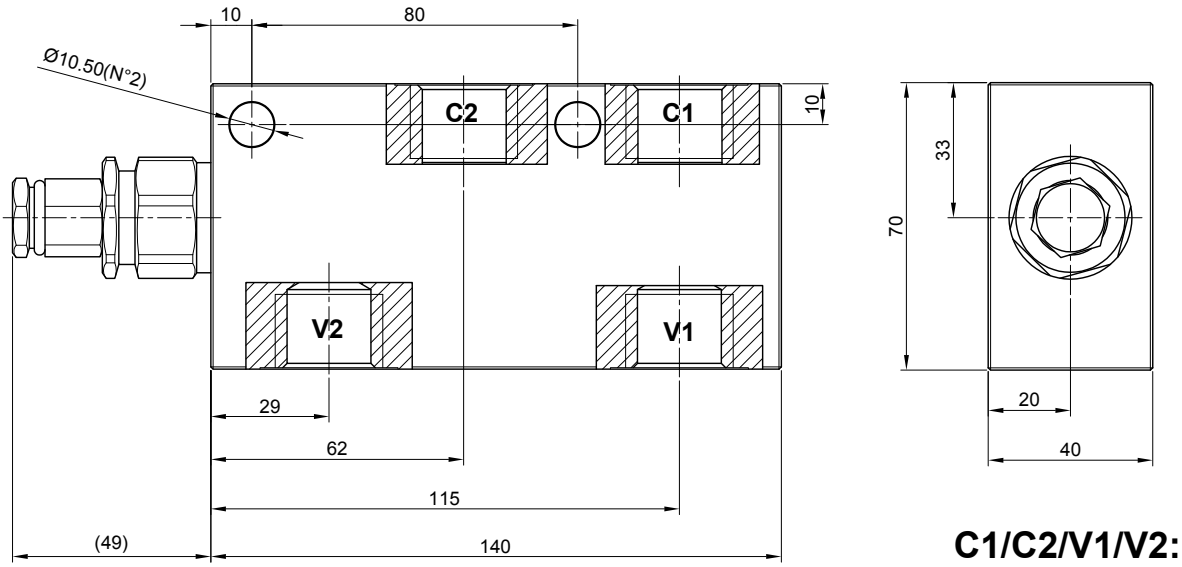
VPOB-90-S-3/4-L-P-35

P - 180/2

Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno

Partially balanced single overcenter valve, line mounted, internal pilot

Rev. 02-2010/08



C1/C2/V1/V2:
3/4"BSPP

MOLLE - *SPRINGS*			*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	100 - 350	109	280

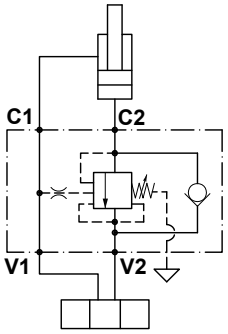
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

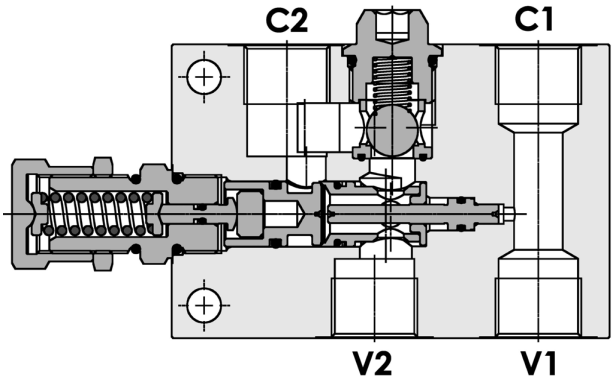
V P O B	9 0	S	3 / 4	L	P	3 5

VPOEB-120-S-3/4-L-P-A-*-* P - 190/1

Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno, serie E
Partially balanced single overcenter valve, line mounted, internal pilot, E series

Rev. 02-2010/05





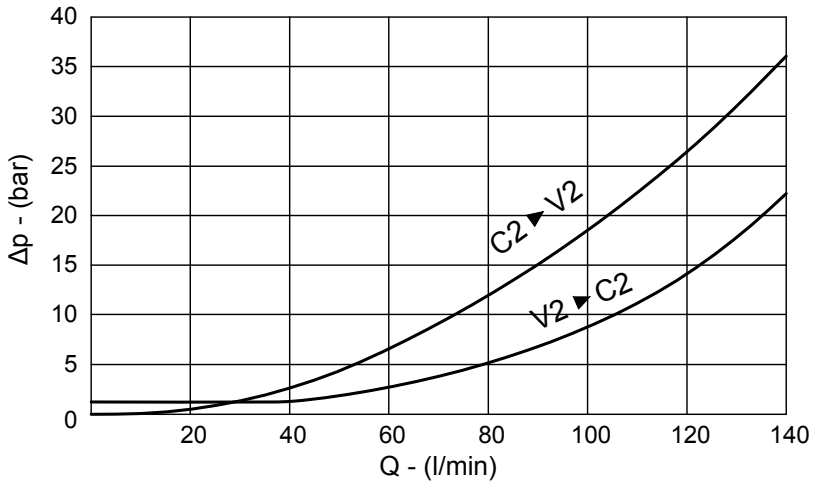
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 120 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 3.2 (a richiesta 1 : 8.2)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1.300 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 120 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 3.2 (standard), 1 : 8.2 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1.300 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

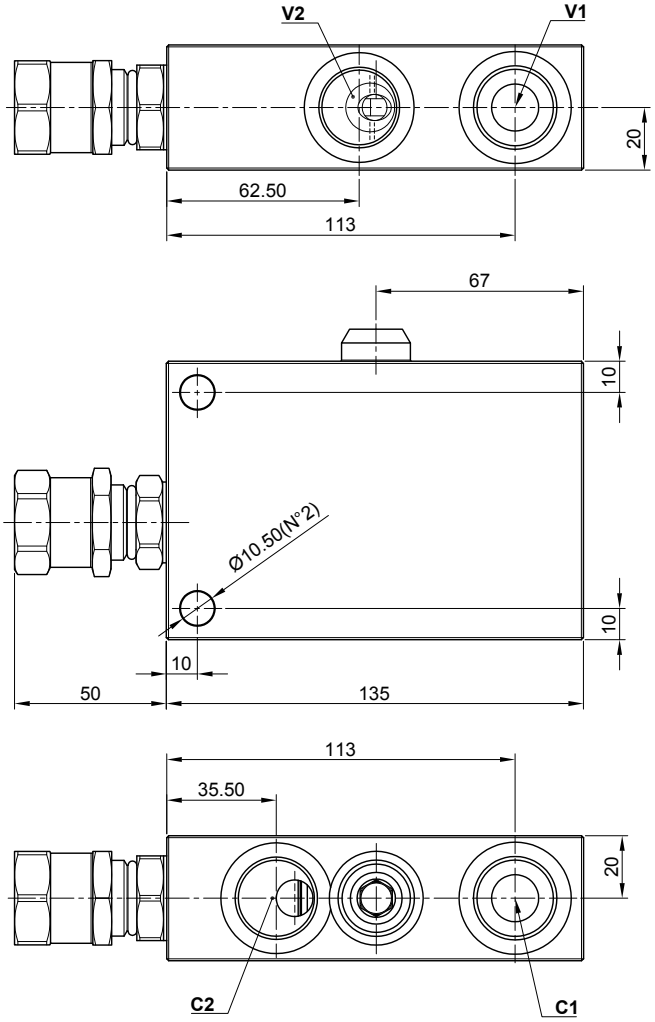


VPOEB-120-S-3/4-L-P-A-*-* P - 190/2

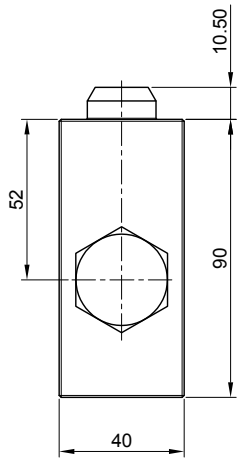
Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno, serie E

Partially balanced single overcenter valve, line mounted, internal pilot, E series

Rev. 02-2010/05



C1 - C2 - V1 - V2: 3/4"BSP



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 3.2	60 - 210	56	200
	1 : 8.2	60 - 210	56	200
35	1 : 3.2	120 - 350	90	350
	1 : 8.2	120 - 350	90	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O E B | 1 2 0 | S | 3 / 4 | L | P | A | 2 0 | B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

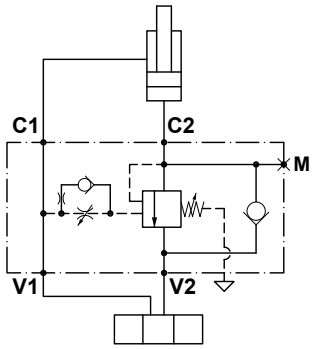
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8.2

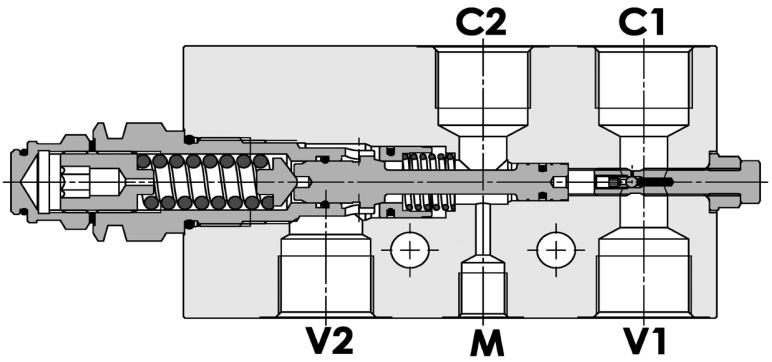
VPOFB-150-S-*-L-P-M-35-AP-*-* P - 194/1

Valvola overcenter singola bilanciata, montaggio in linea e pilotaggio interno, attacco manometro e pilotaggio regolabile

Fully balanced single overcenter valve, line mounted, internal and adjustable pilot, pressure gauge port

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 150 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8)
Regolazione pressione: mediante vite
Campo di regolazione pressione: veder pag. 02

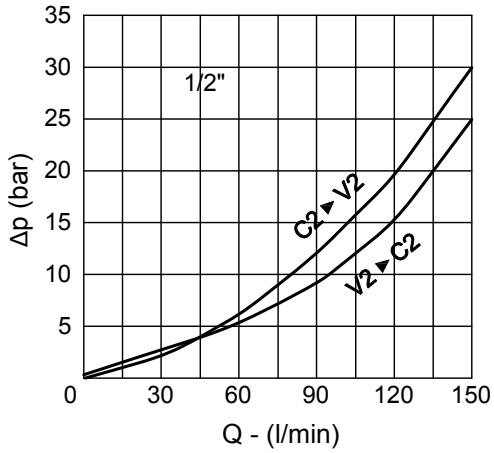
TECHNICAL SPECIFICATIONS

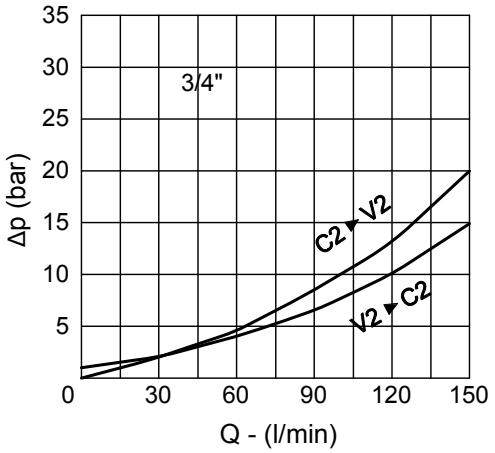
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (standard), 1 : 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C





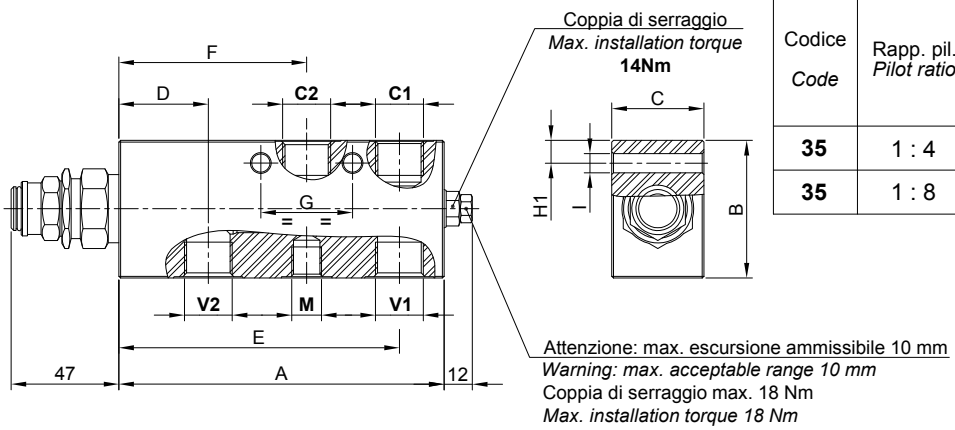
VPOFB-150-S-*-L-P-M-35-AP-*-* P - 194/2

Valvola overcenter singola bilanciata, montaggio in linea e pilotaggio interno, attacco manometro e pilotaggio regolabile

Fully balanced single overcenter valve, line mounted, internal and adjustable pilot, pressure gauge port

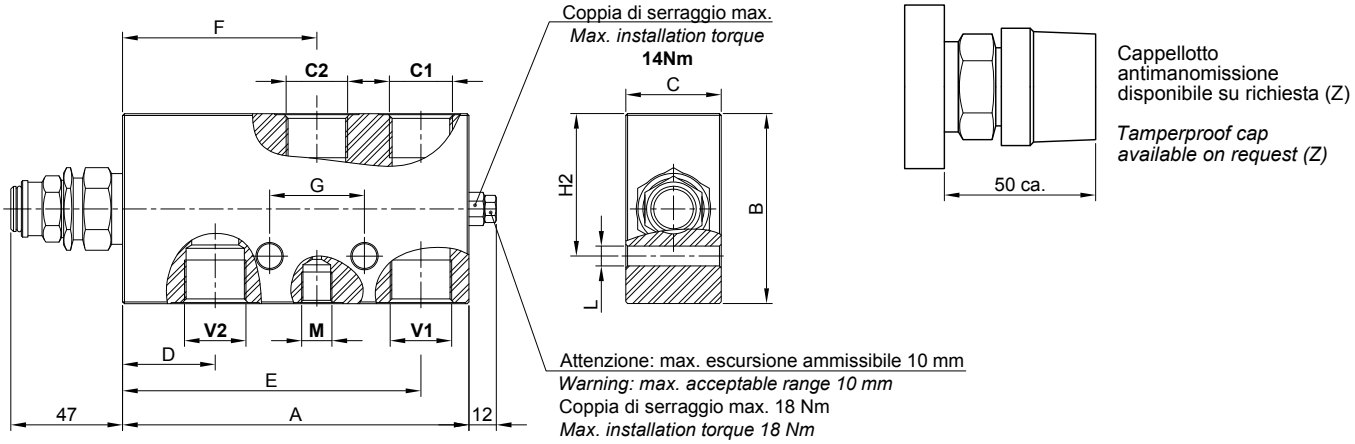
Rev. 01-2010/02

VPOB-150-S-1/2-L-P-M-35-AP



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

VPOB-150-S-3/4-L-P-M-35-AP



TIPO *TYPE*	V1-C1 V2-C2	M	A	B	C	D	E	F	G	H1	H2	I	L	PESO *WEIGHT*
	BSPP	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
VPOFB-150-S-1/2"-L-P-M-35-AP	1/2"	1/4"	142	60	40	39	122.5	82	40	10	/	8.5	/	2.450
VPOFB-150-S-3/4"-L-P-M-35-AP	3/4"	1/4"	146	80	40	39	126	82	40	/	60	/	10.5	3.170

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B	1 5 0	S	Z	1 / 2	L	P	M	3 5	A P	B	*

* Z: tappo antimanomissione, omettere se non richiesto
Z: tamperproof cap, omit if not requested

* 1/2 – 1/2" BSPP
3/4 – 3/4" BSPP
Connessioni - *Port sizes*

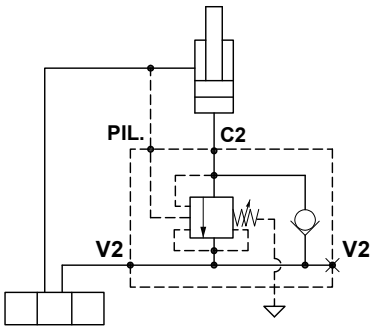
* Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard*
B = 1 : 8

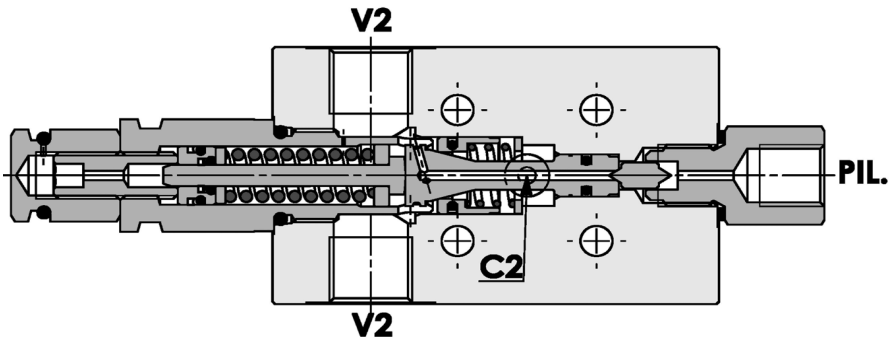
* Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N*

VPOB-50-S-*-1F-*-*-* P - 210/1

Valvola overcenter singola parzialmente bilanciata, montaggio a flangia
Partially balanced single overcenter valve, gasket mounted

Rev. 03-2010/08





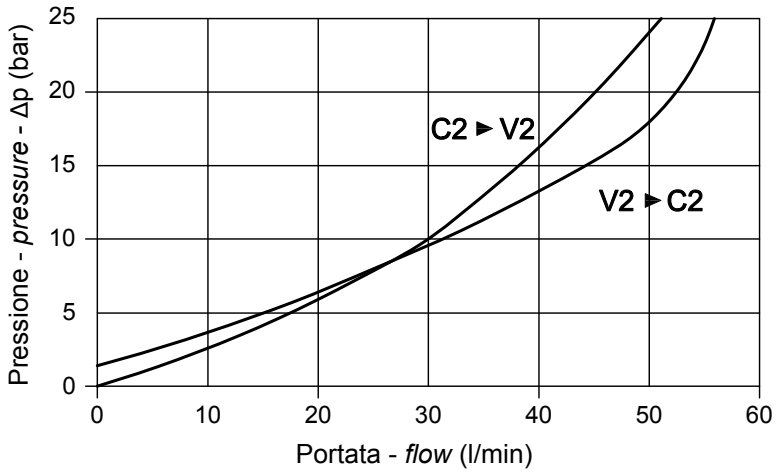
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (standard), 1 : 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

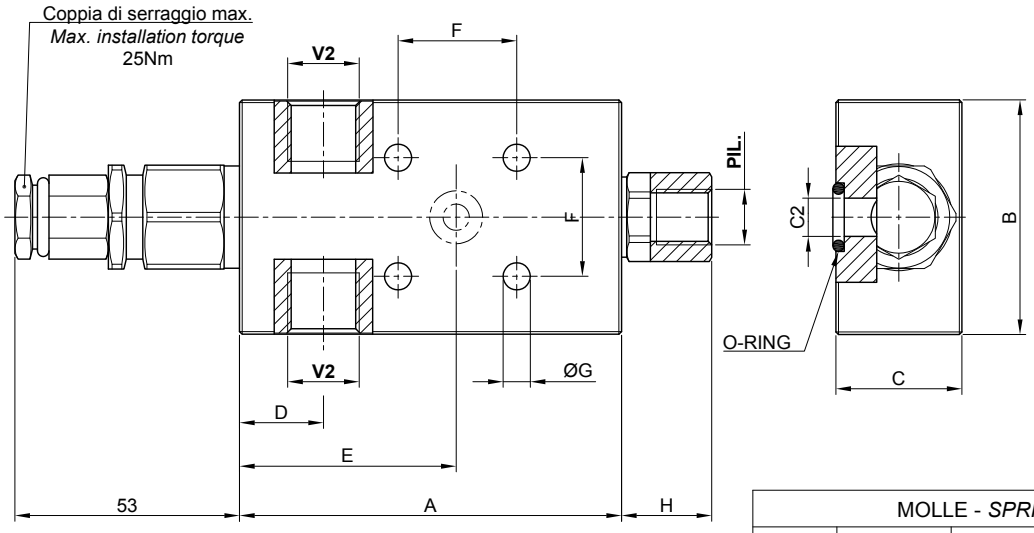
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPOB-50-S-*-1F-*-*-* P - 210/2

Valvola overcenter singola parzialmente bilanciata, montaggio a flangia
Partially balanced single overcenter valve, gasket mounted

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	V2	C2	PIL.	A	B	C	D	E	F	G	H	O-RING	PESO *WEIGHT*
	BSPP	mm	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
VPOB-50-S-1/4"-1F	1/4"	9	1/4"	90	55	30	19	51	28	6.5	21	10.77x2.62	1.000
VPOB-50-S-3/8"-1F	3/8"	9	1/4"	90	55	30	19	51	28	6.5	21	10.77x2.62	1.000
VPOB-50-S-1/2"-1F	1/2"	9	1/4"	90	65	35	19	51	28	6.5	21	10.77x2.62	1.500

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOB **50** **S** **1/4** **1F** **20** **B** *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

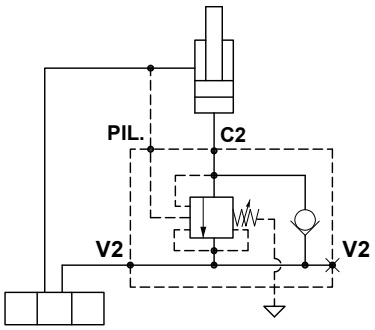
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

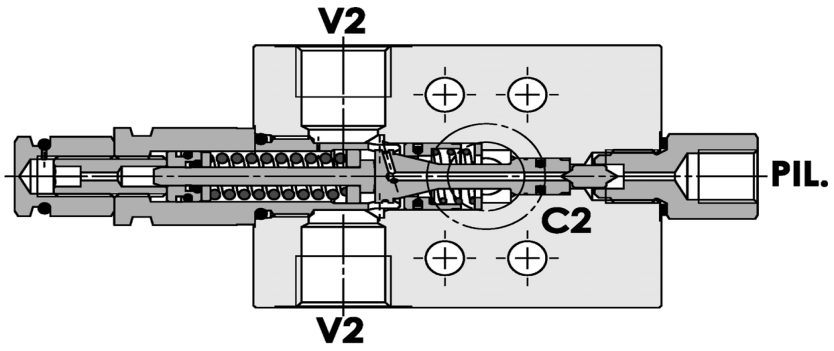
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPOB-50-S-1/2-1F-SAE-*-*-* P - 211/1

Valvola overcenter singola parzialmente bilanciata, montaggio a flangia, SAE 6000
Partially balanced single overcenter valve, gasket mounted, SAE 6000

Rev. 03-2010/08





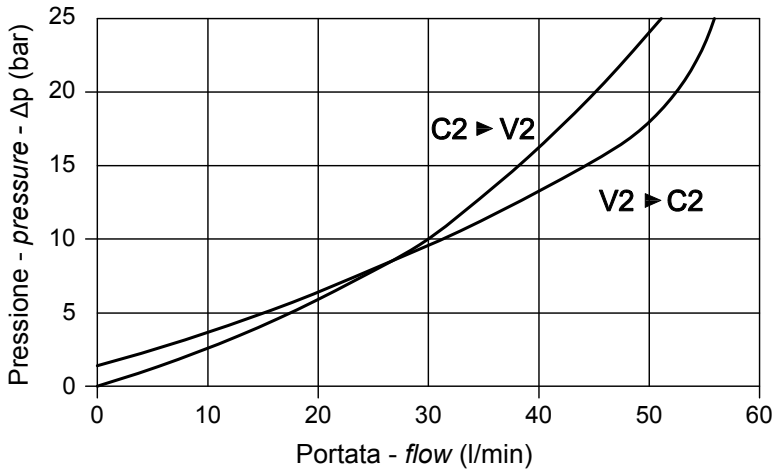
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

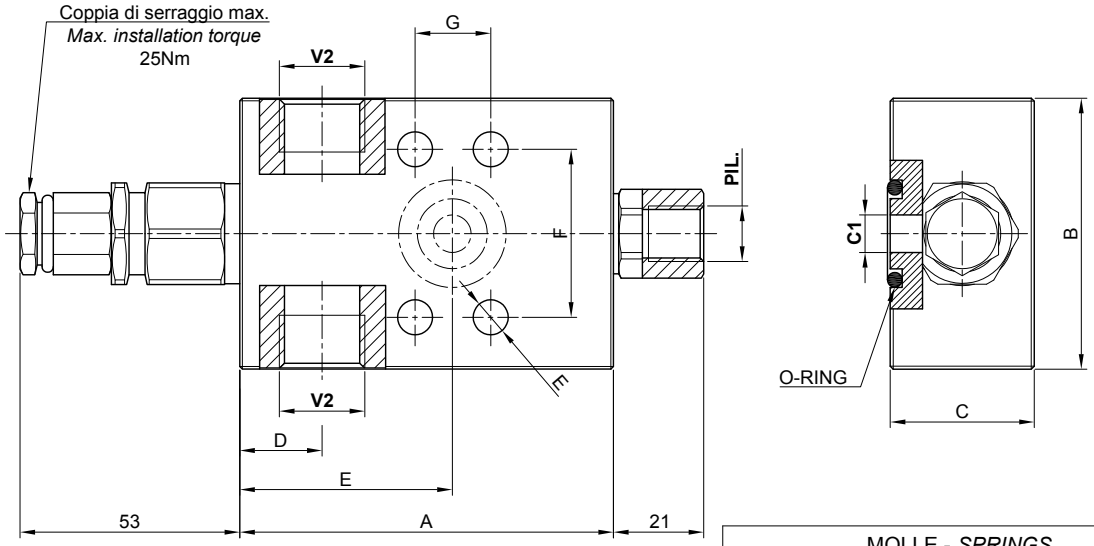
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPOB-50-S-1/2-1F-SAE-*-*-* P - 211/2

Valvola overcenter singola parzialmente bilanciata, montaggio a flangia, SAE 6000
Partially balanced single overcenter valve, gasket mounted, SAE 6000

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V2**	**C2**	**O-RING**	**PIL.**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOB-50-S-1/2"-1F-SAE	1/2"	1/2" SAE 6000	18.64x3.53	1/4"	90	65	34.5	19	51	40.5	18.2	8.5	1.150

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOB **50** **S** **1/2** **1F** **SAE** **20** **B** *****

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8, C = 1 : 11

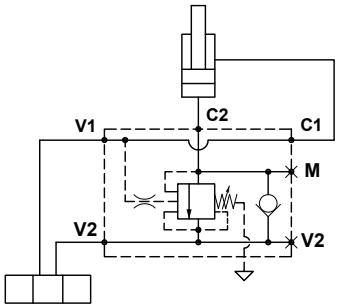
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

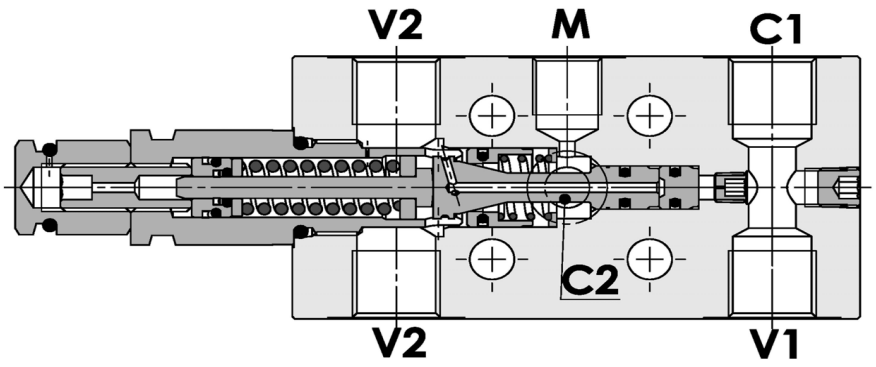
VPOB-50-S-*-1F-P-M-*-*-*

Valvola overcenter singola parzialmente bilanciata, montaggio con C2 flangiata, V1-C1 contrapposte e attacco manometro

Partially balanced single overcenter valve, gasket mounted, C2 flanged, V1-C1 through ported, gauge port

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

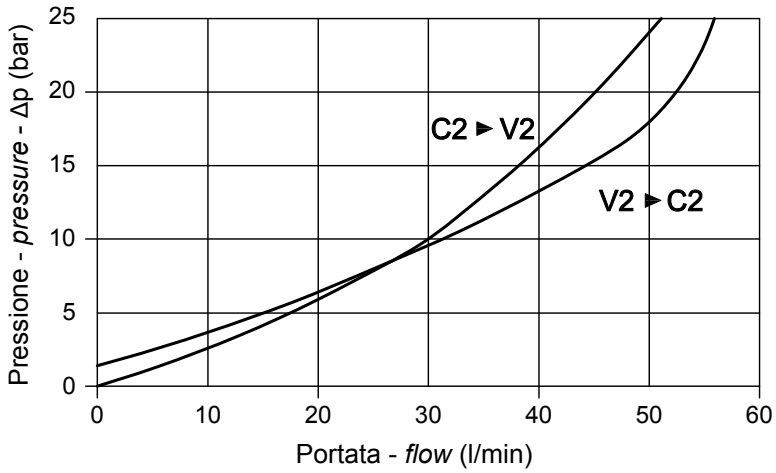
TECHNICAL SPECIFICATIONS

Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (standard), 1 : 8 and 1 : 11 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

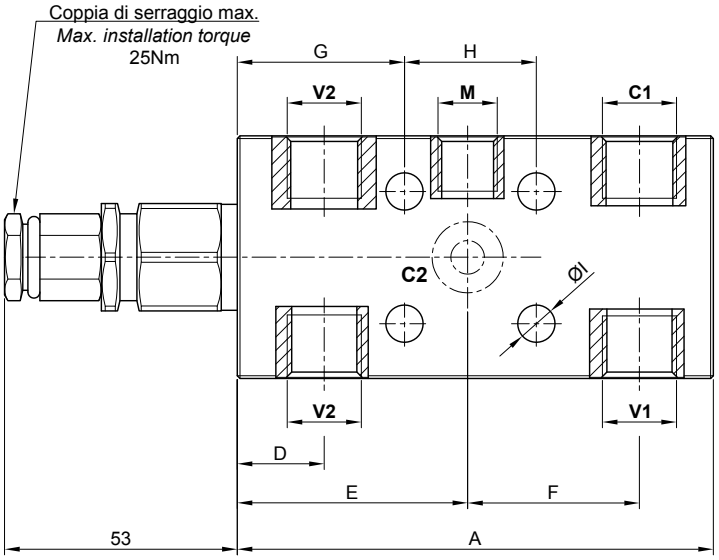


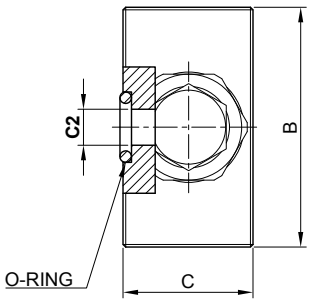
VPOB-50-S-*-1F-P-M-*-*-*

Valvola overcenter singola parzialmente bilanciata, montaggio con C2 flangiata, V1-C1 contrapposte e attacco manometro

Partially balanced single overcenter valve, gasket mounted, C2 flanged, V1-C1 through ported, gauge port

Rev. 03-2010/08





MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-C1 V2**	**C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**O-RING**	**PESO *WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOB 50 S-1/4"-1F-P-M	1/4"	9	108	55	30	19.5	52	39	38	30	8.5	10.77x2.62	1.200
VPOB 50 S-3/8"-1F-P-M	3/8"	9	108	55	30	19.5	52	39	38	30	8.5	10.77x2.62	1.200
VPOB 50 S-1/2"-1F-P-M	1/2"	9	108	65	35	19.5	52	39	37	30	8.5	10.77x2.62	1.800

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O B | **5 0** | **S** | **1 / 2** | **1 F** | **P** | **M** | **2 0** | **B** | *

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

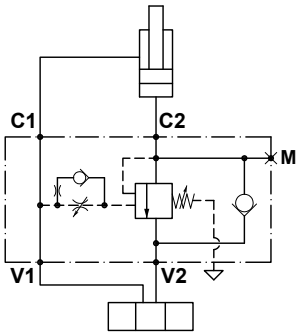
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

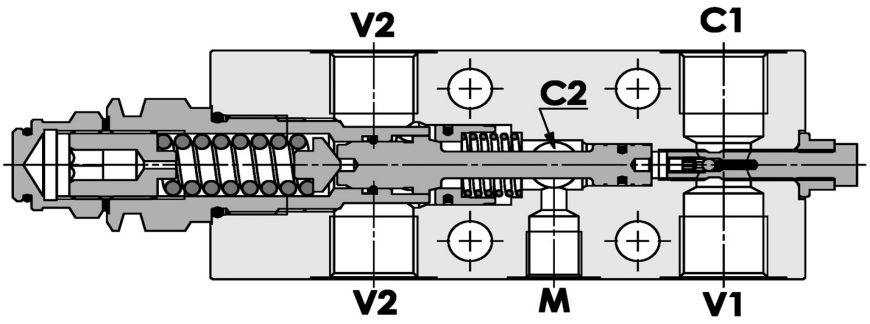
VPOFB-150-S-*-*-1F-P-M-35-AP-*-* P - 225/1

Valvola overcenter singola bilanciata, montaggio a flangia e pilotaggio interno, attacco manometro e pilotaggio regolabile

Fully balanced single overcenter valve, flanged mounting, internal and adjustable pilot, pressure gauge port

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 150 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8)
Regolazione pressione: mediante vite
Campo di regolazione pressione: veder pag. 02

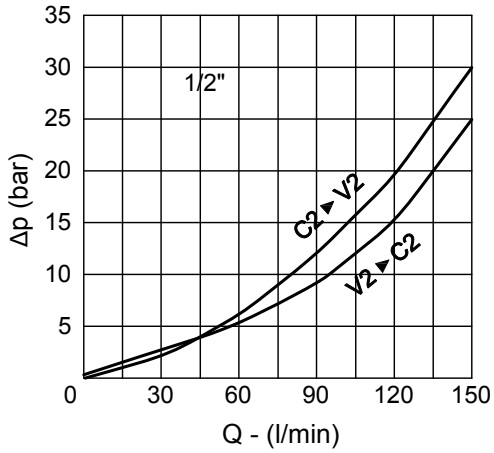
TECHNICAL SPECIFICATIONS

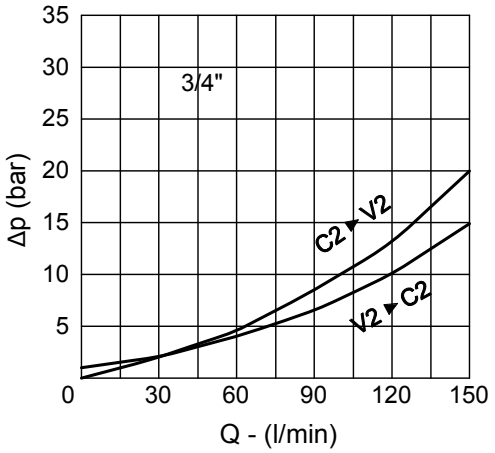
Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (standard), 1 to 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



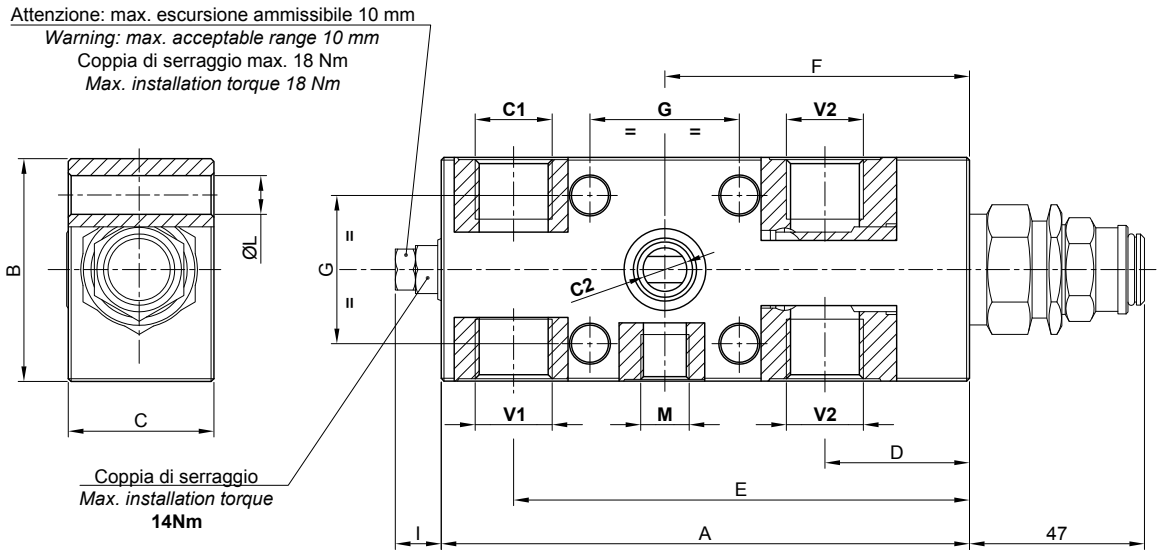


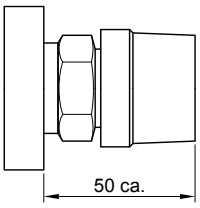
VPOFB-150-S-*-*-1F-P-M-35-AP-*-* P -225/2

Valvola overcenter singola bilanciata, montaggio a flangia e pilotaggio interno, attacco manometro e pilotaggio regolabile

Fully balanced single overcenter valve, flanged mounting, internal and adjustable pilot, pressure gauge port

Rev. 02-2010/05





Cappellotto antimanomissione disponibile su richiesta (Z)

Tamperproof cap available on request (Z)

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

TIPO *TYPE*	**V1-C1 V2**	**C2**	**M**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**I**	**L**	**PESO** ***WEIGHT***
	BSPP	**mm**	**BSPP**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOFB-150-S-1/2"-1F-P-M-35-AP	1/2"	12	1/4"	142	60	39	39	122.5	82	40	12	8.5	2.500
VPOFB-150-S-3/4"-1F-P-M-35-AP	3/4"	12	1/4"	147	80	39	39	126	83	40	6	10.5	3.100

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOFB	150	S	Z	1/2	1F	P	M	35	AP	B	*

* Z: tappo antimanomissione, omettere se non richiesto
Z: tamperproof cap, omit if not requested

1/2 – 1/2" BSPP
* 3/4 – 3/4" BSPP
Connessioni - *Port sizes*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

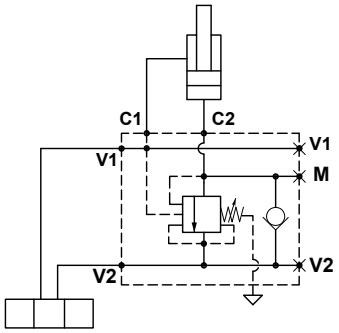
* Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N*

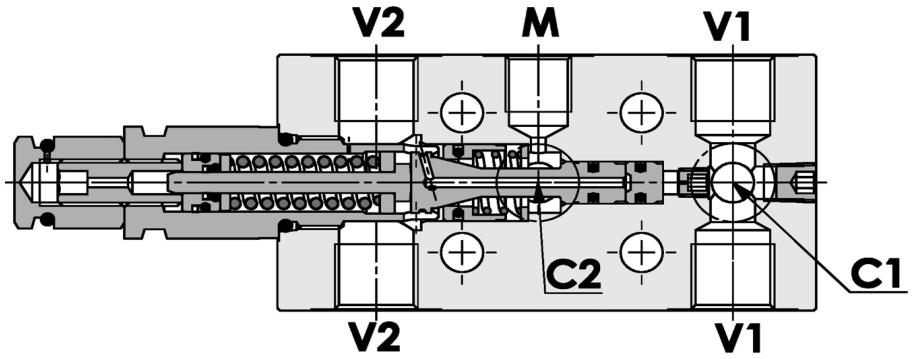
VPOB-50-S-*-2F-P-M-*-*-* P - 260/1

Valvola overcenter singola parzialmente bilanciata, montaggio con C1-C2 flangiate, attacco manometro

Partially balanced single overcenter valve, gasket mounted: C1-C2 flanged, pressure gauge port

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02

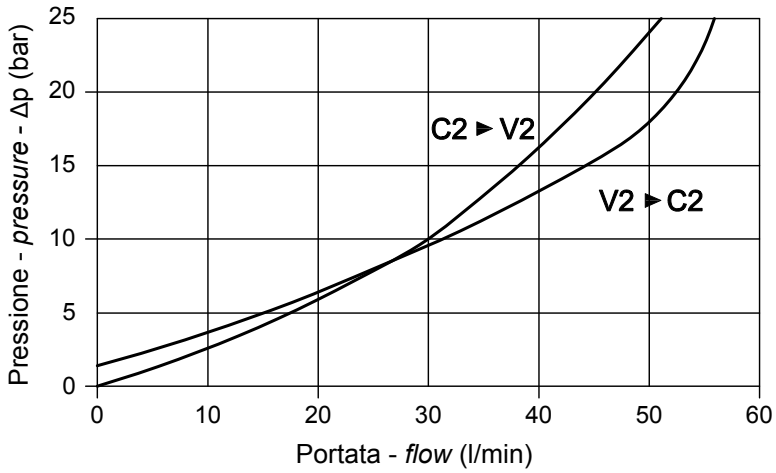
TECHNICAL SPECIFICATIONS

Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

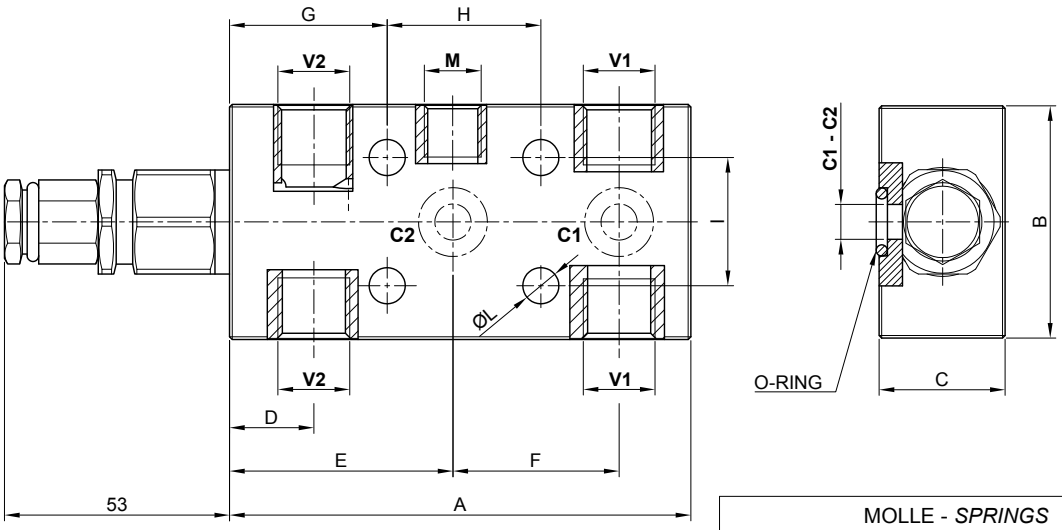


VPOB-50-S-*-2F-P-M-*-*-* P - 260/2

Valvola overcenter singola parzialmente bilanciata, montaggio con C1-C2 flangiate, attacco manometro

Partially balanced single overcenter valve, gasket mounted: C1-C2 flanged, pressure gauge port

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-V2**	**C1-C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**L**	**O-RING**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOB-50-S-1/4"-2F-P-M	1/4"	9	108	55	30	19.5	52	39	37	36	30	8.5	10.77x2.62	1.210
VPOB-50-S-3/8"-2F-P-M	3/8"	9	108	55	30	19.5	52	39	37	36	30	8.5	10.77x2.62	1.210
VPOB-50-S-1/2"-2F-P-M	1/2"	9	108	65	35	19.5	52	39	37	36	30	8.5	10.77x2.62	1.790

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O B	5 0	S	1 / 2	2 F	P	M	2 0	B	*

* 1/4 – 1/4" BSPP
3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

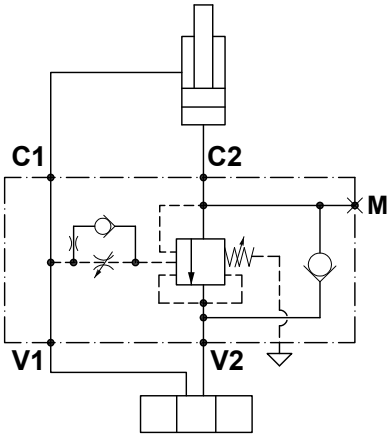
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

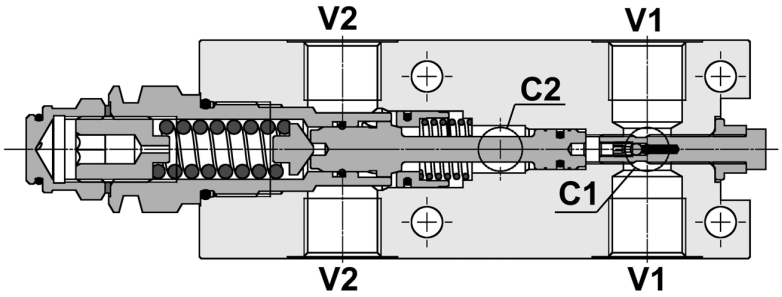
VPOFB-150-S-*-1/2-2F-P-35-AP-*-* P - 275/1

Valvola overcenter singola bilanciata, montaggio con C1, C2 flangiate e pilotaggio interno e regolabile

Fully balanced single overcenter valve, gasket mounted: C1-C2 flanged, internal and adjustable pilot

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio, protetto mediante zincatura. I componenti interni sono in acciaio trattato termicamente.
Portata: fino a 150 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8)
Regolazione pressione: mediante vite
Campo di regolazione pressione: veder pag. 02

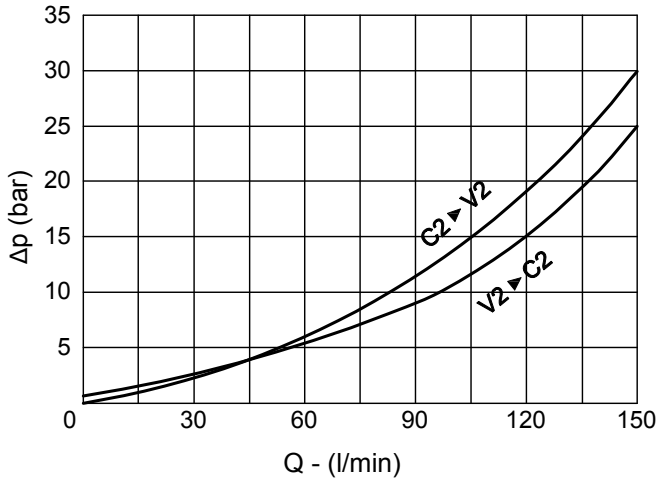
TECHNICAL SPECIFICATIONS

Materials: *body is steel made. Internal parts are in hardened steel.*
External surface: zinc plated.
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (standard), 1 to 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

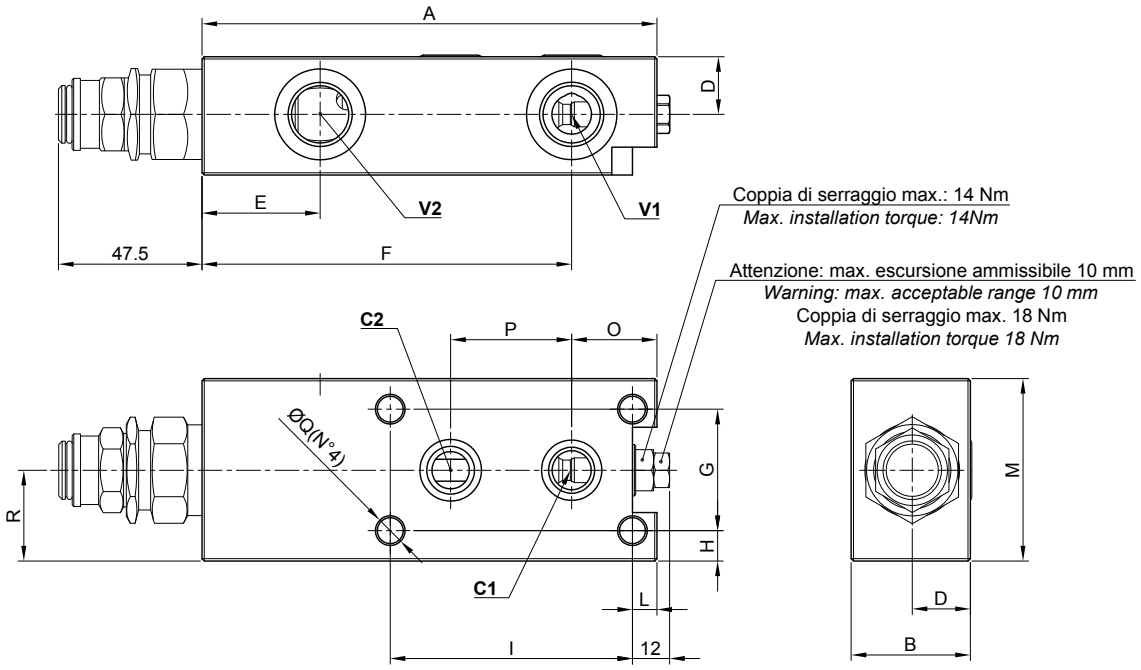


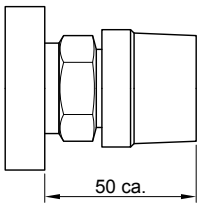
VPOFB-150-S-*-1/2-2F-P-35-AP-*-* P -275/2

Valvola overcenter singola bilanciata, montaggio con C1, C2 flangiate e pilotaggio interno e regolabile

Fully balanced single overcenter valve, gasket mounted: C1-C2 flanged, internal and adjustable pilot

Rev. 03-2010/08





Cappellotto antimanomissione disponibile su richiesta (Z)

Tamperproof cap available on request (Z)

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

TIPO *TYPE*	**V1 V2**	**C1 C2**	**A**	**B**	**D**	**E**	**F**	**G**	**H**	**I**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOFB 150 S-1/2"-2F-P...	1/2"	12	150	39	30	39	122	40	10	80	8	60	65	28	40	8.5	30	2,500

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B **1 5 0** **S** **Z** **1 / 2** **2 F** **P** **3 5** **A P** **B** *

Z: tappo antimanomissione,
* omettere se non richiesto
Z: tamperproof cap, omit if not requested

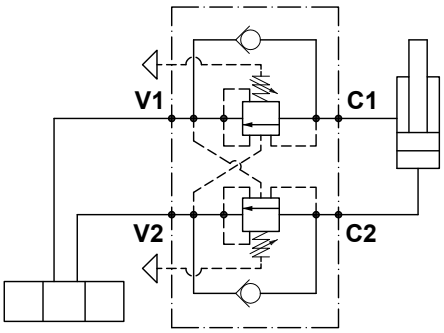
Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 8 : 1

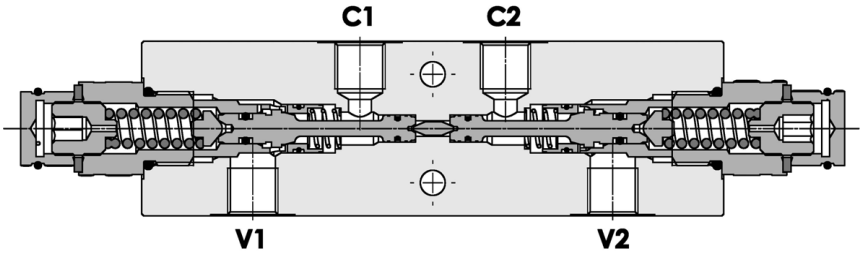
Guarnizioni – *Seals*:
V=Viton
Omettere se BUNA-N – *
Omit if BUNA-N

VPOFB-35-D-1/4-L-*-* P - 310/1

Valvola overcenter doppia bilanciata, montaggio in linea
Fully balanced dual overcenter valve, line mounted

Rev. 01-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1.650 Kg

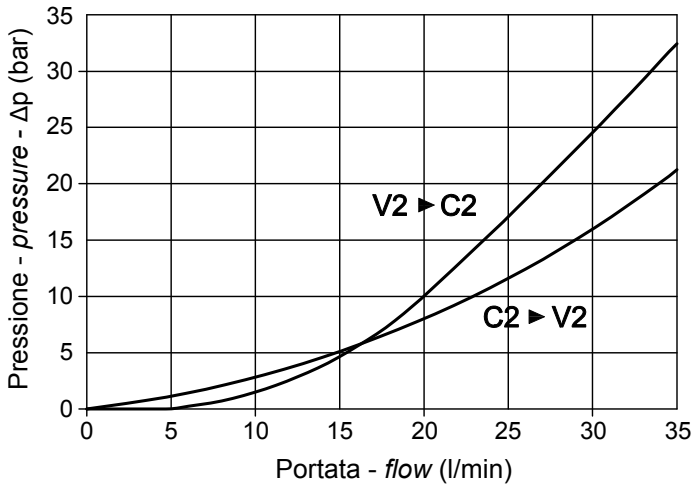
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw.*
Adjustable pressure range: *see page 02*
Weight: *1.650 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



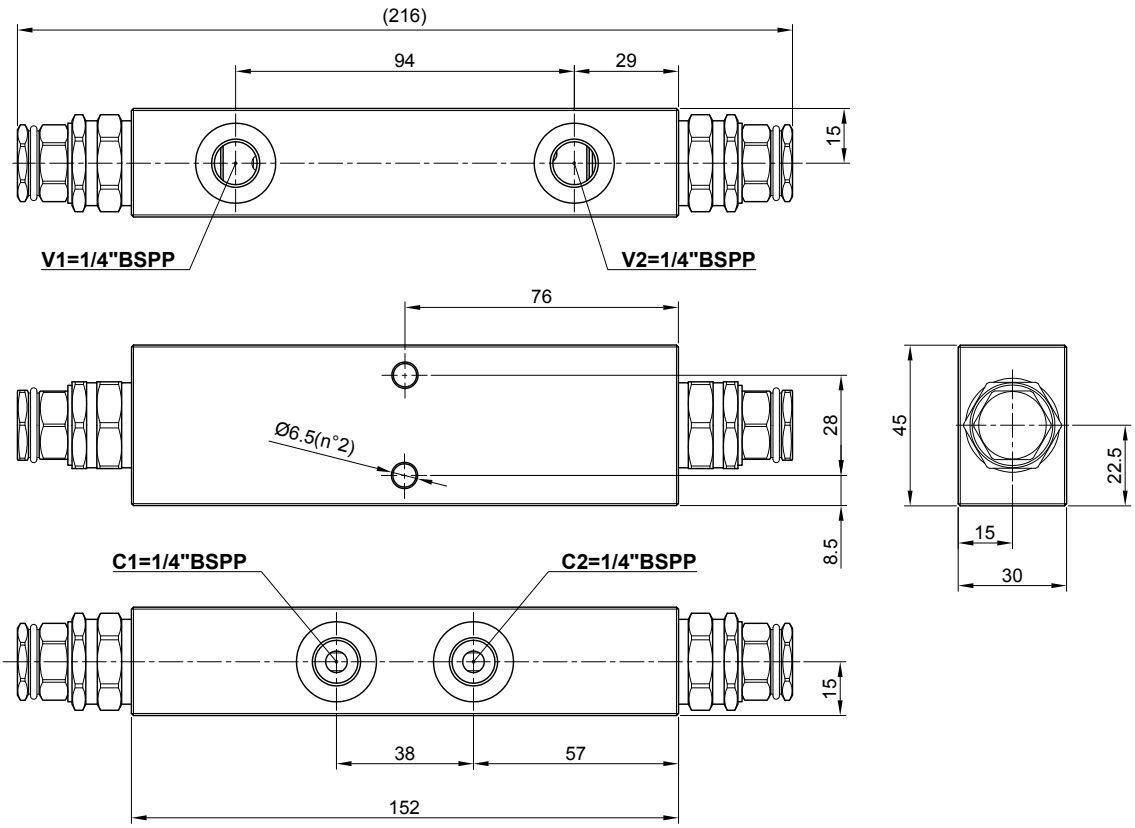
VPOFB-35-D-1/4-L-*-*

P - 310/2

Valvola overcenter doppia bilanciata, montaggio in linea

Fully balanced dual overcenter valve, line mounted

Rev. 01-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B	3 5	D	1 / 4	L	3 5	B

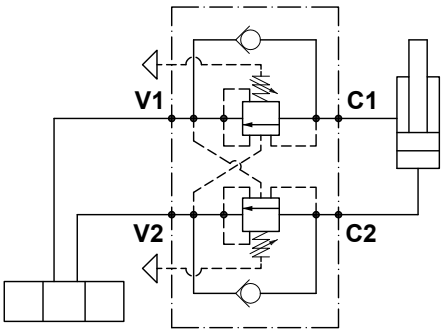
* “20” / “35”:
Campi di taratura pressione - *Adjustable pressure range*

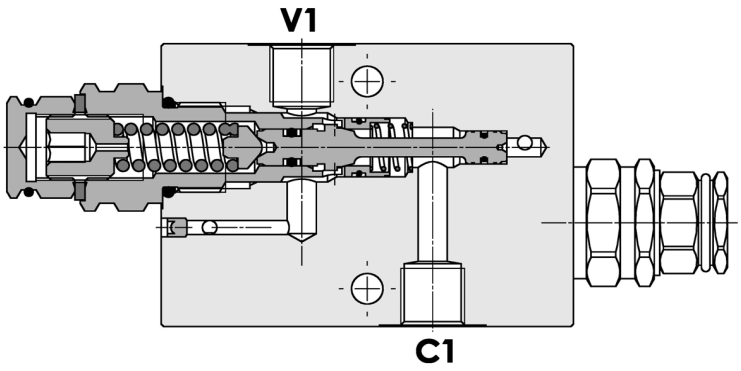
Rapporto di pilotaggio – *Pilot ratio*
Omettere se std – *Omit if std* *
B = 1 : 8, C = 1 : 11

VPOFB-35-DD-1/4-L-*-* P - 311/1

Valvola overcenter doppia bilanciata, montaggio in linea
Fully balanced dual overcenter valve, line mounted

Rev. 01-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 2,050 Kg

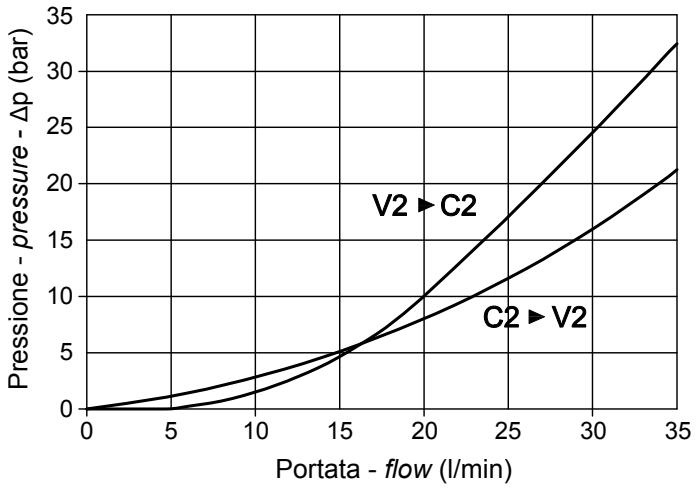
TECHNICAL SPECIFICATIONS

Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw.*
Adjustable pressure range: *see page 02*
Weight: *2,050 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



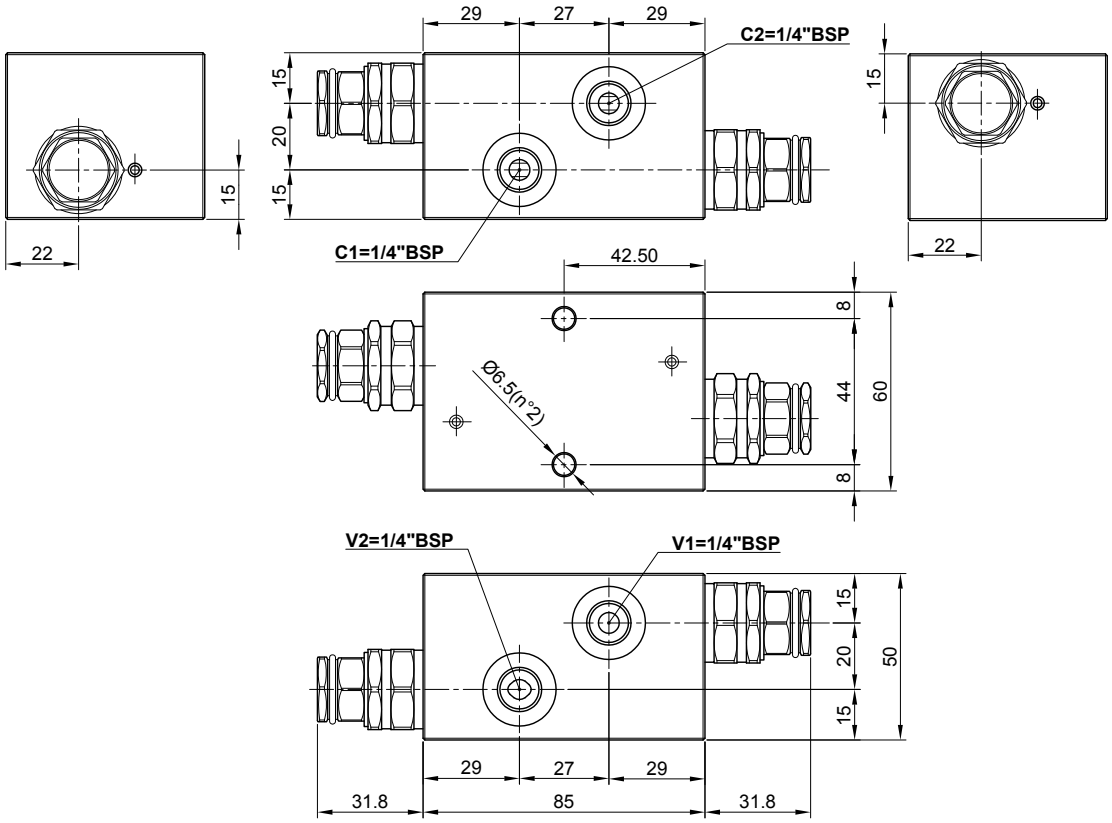
VPOFB-35-DD-1/4-L-*-*

P - 311/2

Valvola overcenter doppia bilanciata, montaggio in linea

Fully balanced dual overcenter valve, line mounted

Rev. 01-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 250	65	170
35	1 : 4	100 - 350	110	280
	1 : 8	80 - 350	140	
	1 : 11	80 - 350	160	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B	3 5	D D	1 / 4	L	3 5	B

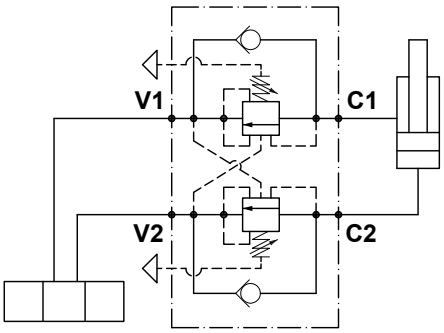
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

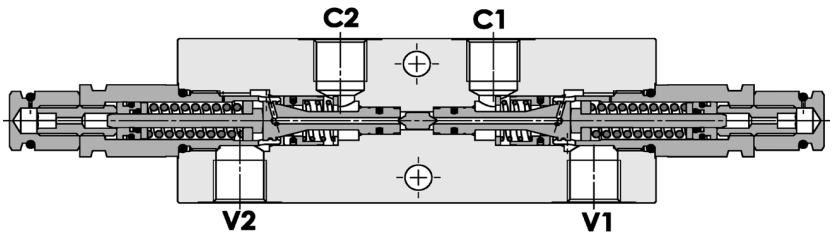
Rapporto di pilotaggio – *Pilot ratio*
Omettere se std – *Omit if std* *
B = 1 : 8, C = 1 : 11

VPOB-50-D-*-L-*-*-*

Valvola overcenter doppia parzialmente bilanciata, montaggio in linea
Partially balanced dual overcenter valve, line mounted

Rev. 04-2010/09





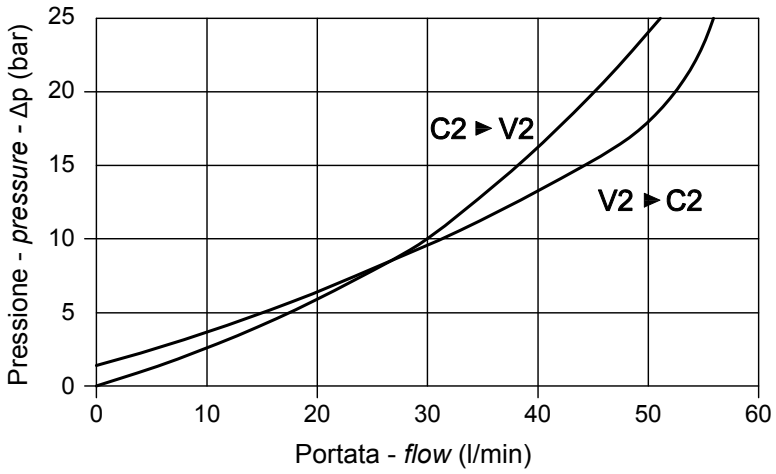
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



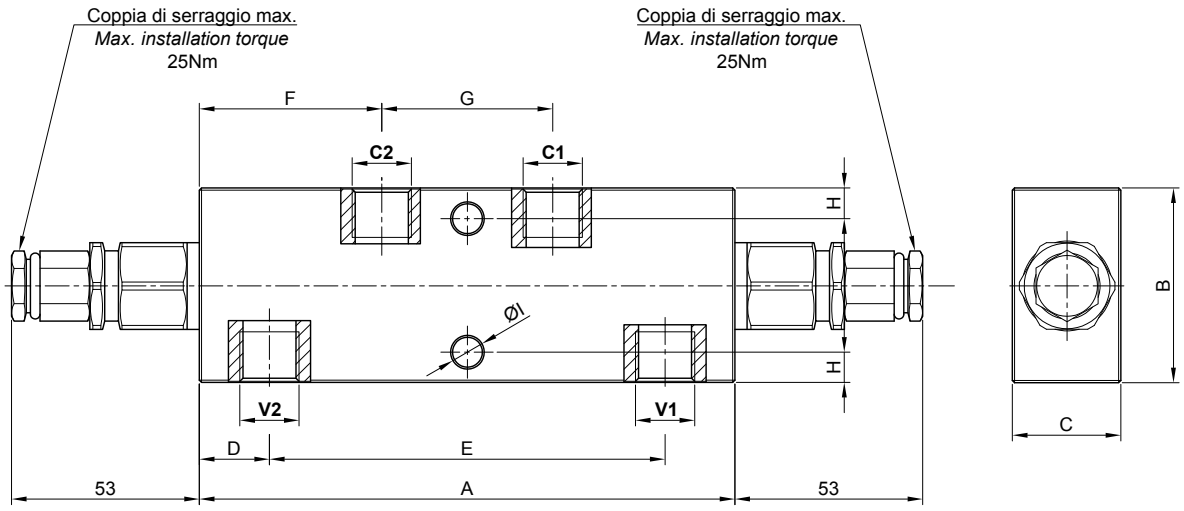
VPOB-50-D-*-L-*-*-*

P - 320/2

Valvola overcenter doppia parzialmente bilanciata, montaggio in linea

Partially balanced dual overcenter valve, line mounted

Rev. 04-2010/09



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-C1 V2-C2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO *WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOB-50-D-3/8"-L	3/8"	150	55	30	19	112	51	48	8.5	8.5	1.850
VPOB-50-D-1/2"-L	1/2"	150	65	35	19	112	51	48	11	8.5	2.300

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O B | **5 0** | **D** | **1 / 2** | **L** | **2 0** | **B** | *

* 3/8 – 3/8" BSPP
* 1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

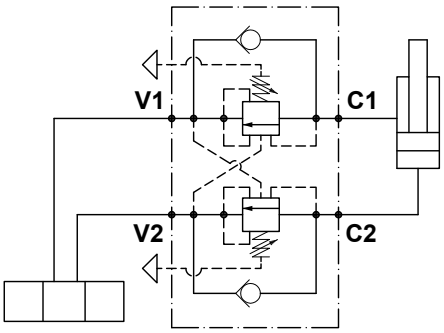
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

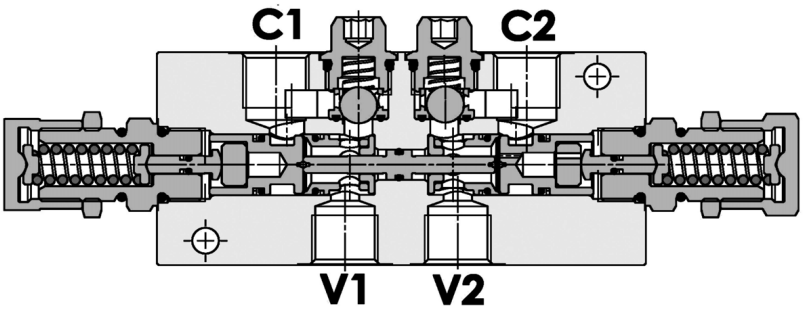
VPOEB-70-D-1/2-L-A-*-*

P - 328/1

Valvola overcenter doppia parzialmente bilanciata, montaggio in linea, serie E
Partially balanced dual overcenter valve, line mounted, E series

Rev. 01-2010/02





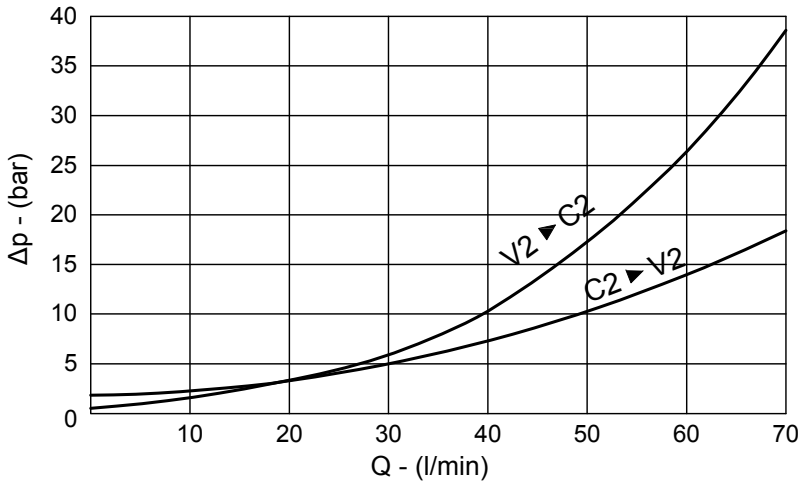
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 70 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 3.2 (a richiesta 1 : 8.2)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1.400 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 70 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 3.2 (standard), 1 : 8.2 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,400 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



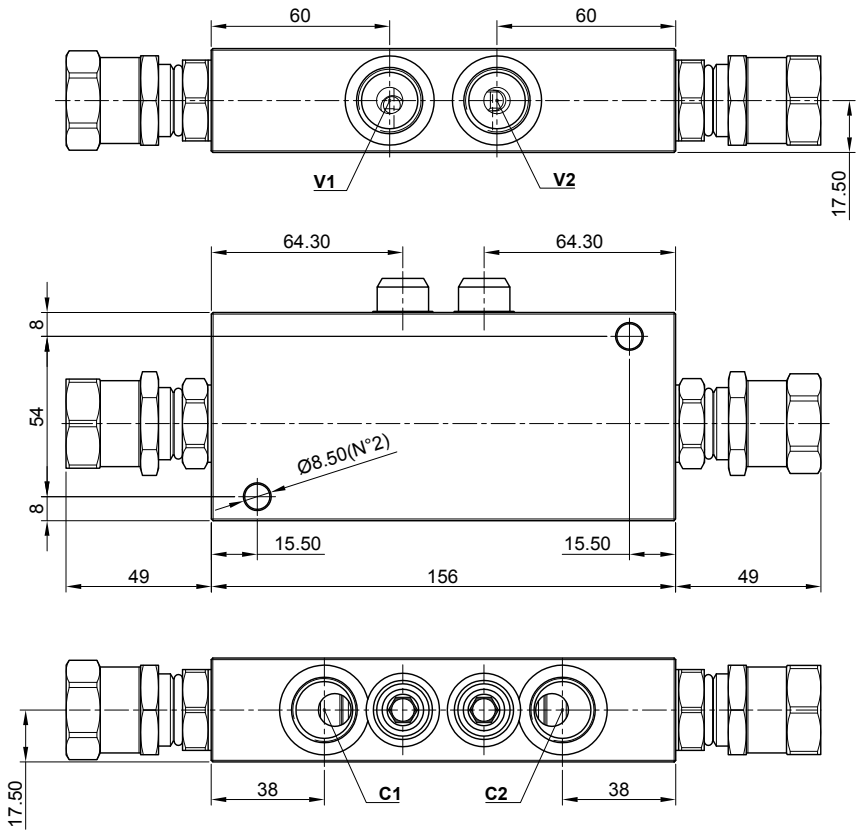
VPOEB-70-D-1/2-L-A-*-*

P - 328/2

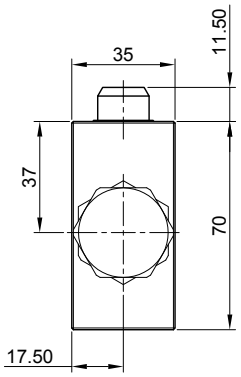
Valvola overcenter doppia parzialmente bilanciata, montaggio in linea, serie E

Partially balanced dual overcenter valve, line mounted, E series

Rev. 01-2010/02



C1 - C2 - V1 - V2:
1/2" BSP



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 3.2	60 - 210	56	200
20	1 : 8.2	60 - 210	56	200
35	1 : 3.2	120 - 350	90	350
35	1 : 8.2	120 - 350	90	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O E B	7 0	D	1 / 2	L	A	2 0	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

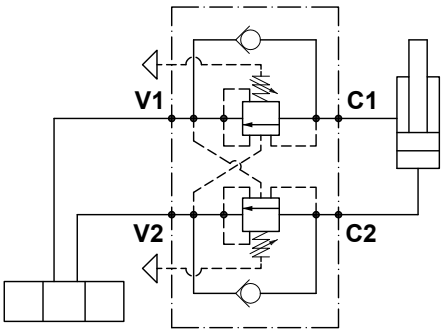
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8.2

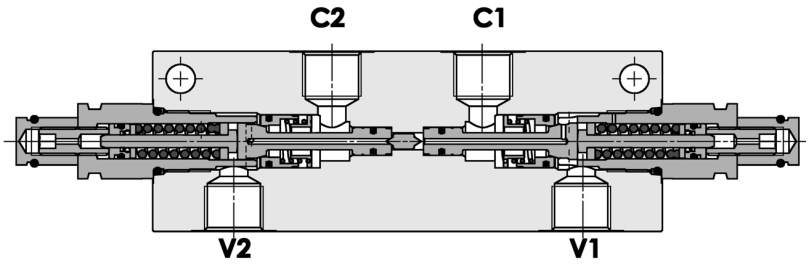
VPOB-90-D-3/4-L-35

P - 331/1

Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno
Partially balanced single overcenter valve, line mounted, internal pilot

Rev. 02-2010/08





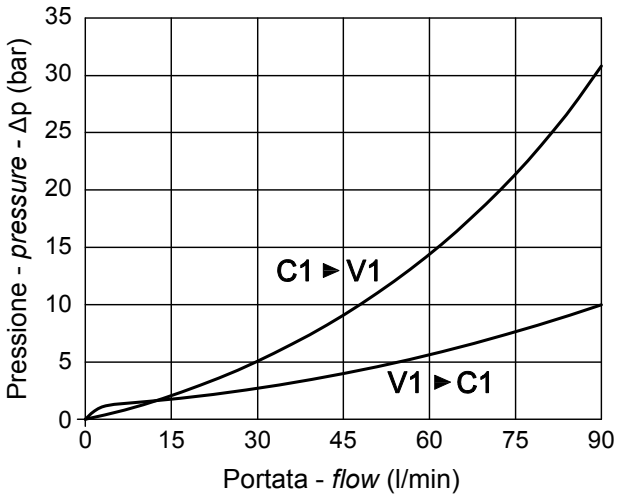
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 90 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.2
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 3.200 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 90 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.2*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *3.200 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPOB-90-D-3/4-L-35

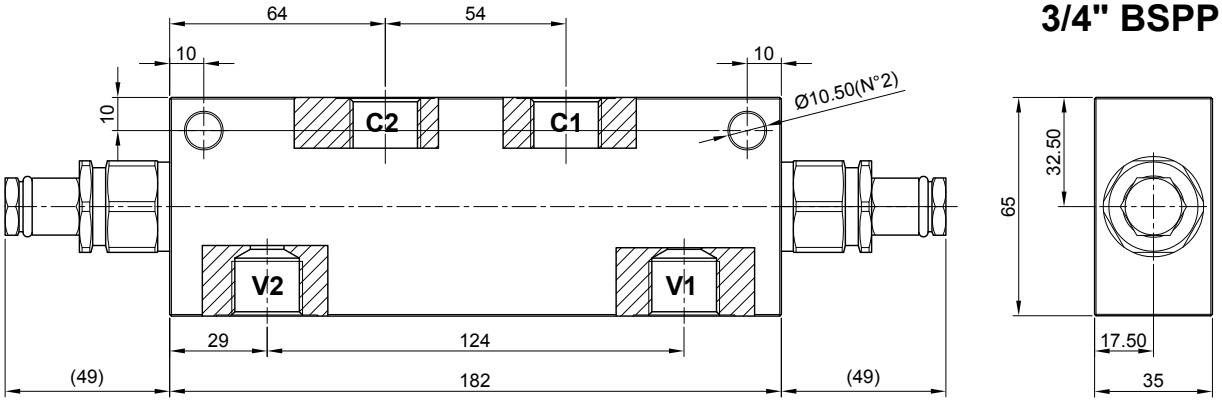
P - 331/2

Valvola overcenter singola parzialmente bilanciata, montaggio in linea, pilotaggio interno

Partially balanced single overcenter valve, line mounted, internal pilot

Rev. 02-2010/08

C1/C2/V1/V2:
3/4" BSPP



MOLLE - *SPRINGS*			*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	100 - 350	109	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

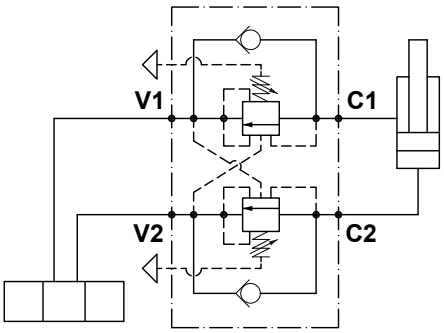
V P O B	9 0	D	3 / 4	L	3 5

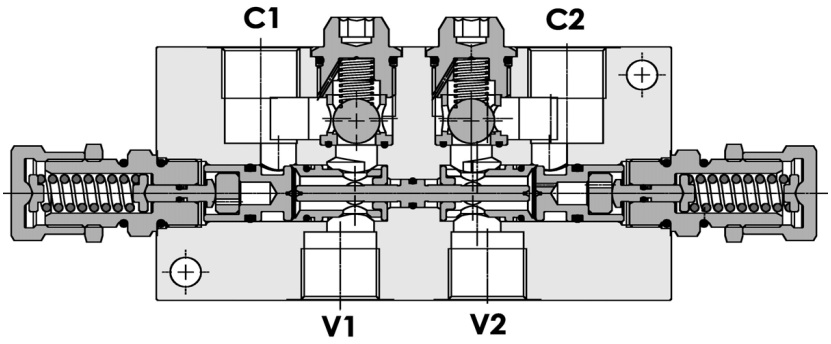
VPOEB-120-D-3/4-L-A-*-*

P - 335/1

Valvola overcenter doppia parzialmente bilanciata, montaggio in linea, serie E
Partially balanced dual overcenter valve, line mounted, E series

Rev. 01-2010/02





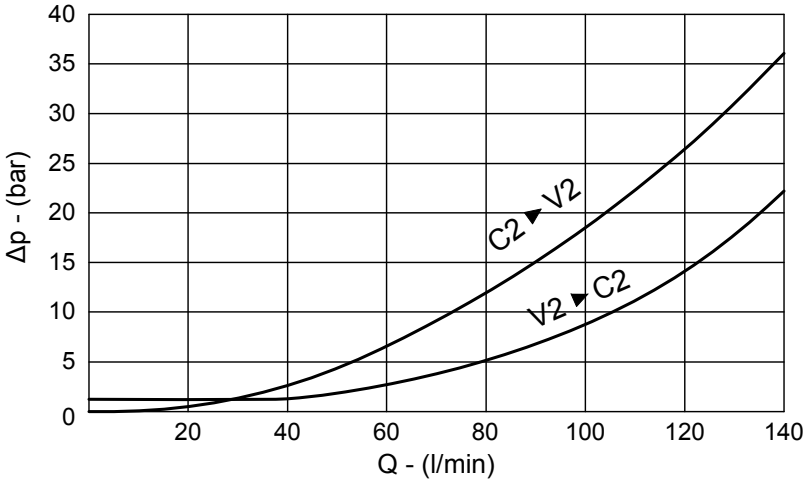
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 120 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 3.2 (a richiesta 1 : 8.2)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1,770 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in aluminium alloy. Internal parts are in hardened steel.*
Rated flow: *up to 120 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 3.2 (standard), 1 : 8.2 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,770 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



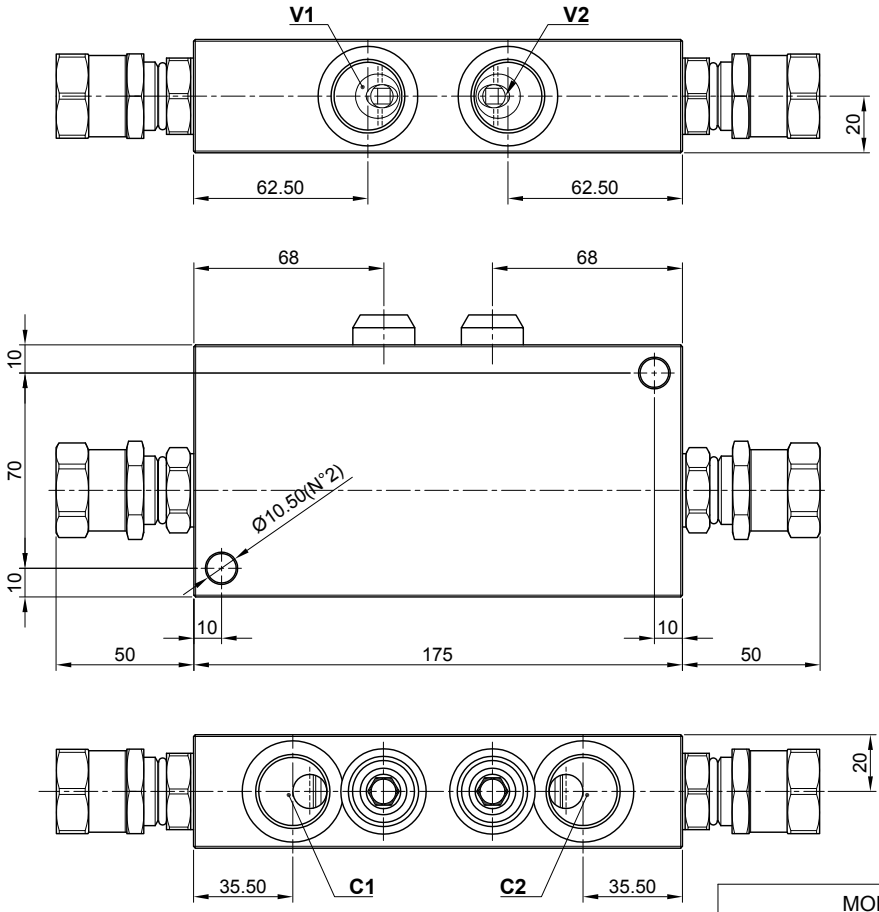
VPOEB-120-D-3/4-L-A-*-*

P - 335/2

Valvola overcenter doppia parzialmente bilanciata, montaggio in linea, serie E

Partially balanced dual overcenter valve, line mounted, E series

Rev. 01-2010/02



C1 - C2 - V1 - V2:
3/4" BSP

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 3.2	60 - 210	56	200
20	1 : 8.2	60 - 210	56	200
35	1 : 3.2	120 - 350	90	350
35	1 : 8.2	120 - 350	90	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOEB	120	D	3/4	L	A	20	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

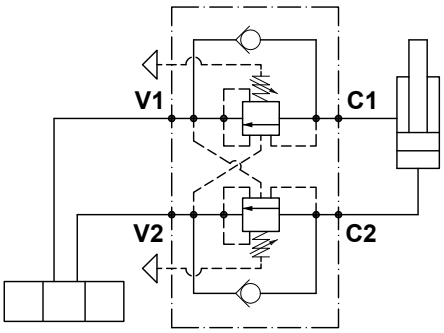
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8.2

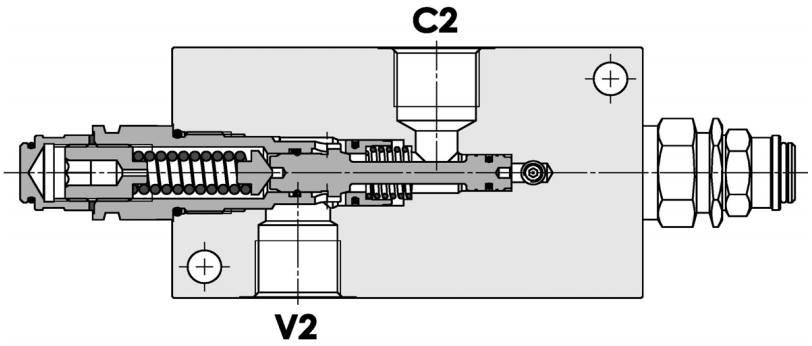
VPOFB-150-DD-3/4-L-35-*

P - 340/1

Valvola overcenter doppia bilanciata, montaggio in linea
Fully balanced dual overcenter valve, line mounted

Rev. 01-2010/08





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 150 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 6.500 Kg

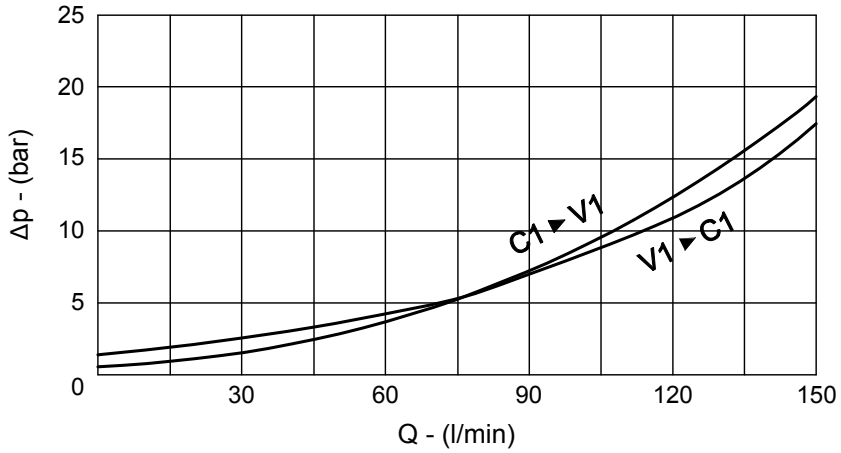
TECHNICAL SPECIFICATIONS

Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (standard), 1 to 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *6.500 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



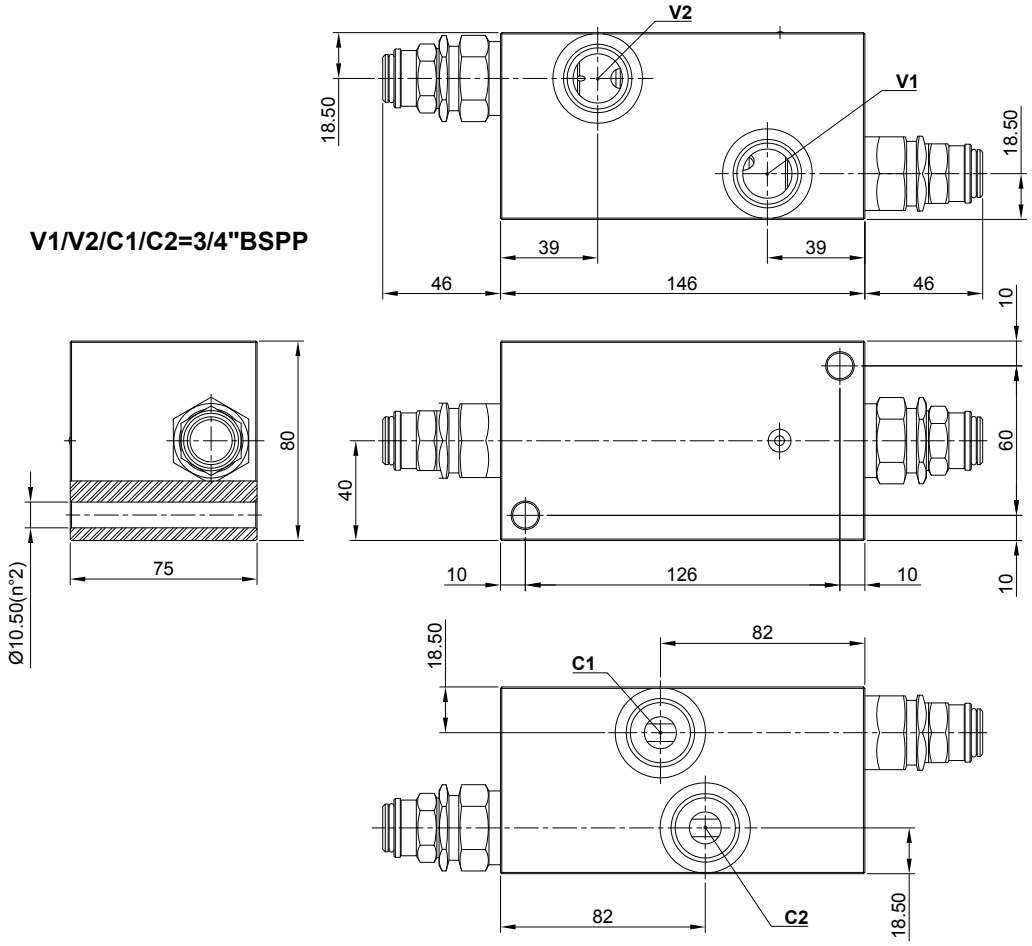
VPOFB-150-DD-3/4-L-35-*

P - 340/2

Valvola overcenter doppia bilanciata, montaggio in linea

Fully balanced dual overcenter valve, line mounted

Rev. 01-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B	1 5 0	D D	3 / 4	L	3 5	*

Rapporto di pilotaggio – *Pilot ratio*

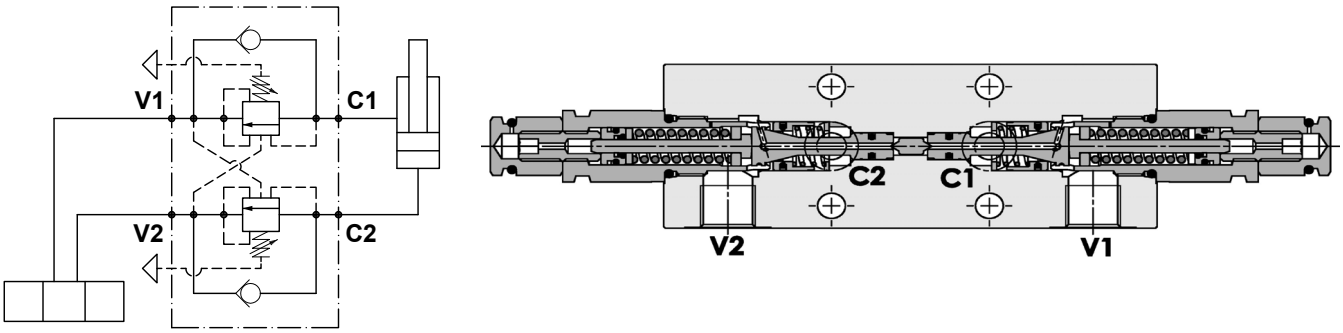
Omettere se standard – *Omit if standard* *

B = 1 : 8.2

VPOB-50-D-*-2F-*-*-* P - 470/1

Valvola overcenter doppia parzialmente bilanciata, montaggio a flangia
Partially balanced dual overcenter valve, gasket mounted

Rev. 03-2010/08



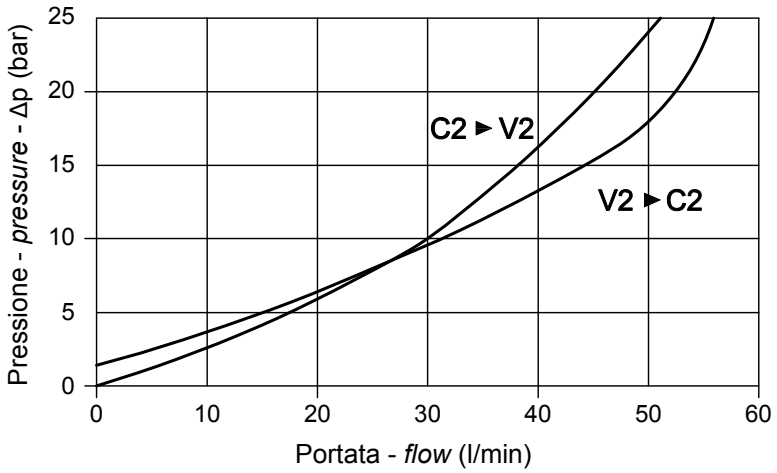
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 50 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4.25 (a richiesta 1 : 8, 1 : 11)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02

TECHNICAL SPECIFICATIONS
Materials: *body is steel made, zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4.25 (1 : 8 and 1 : 11 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



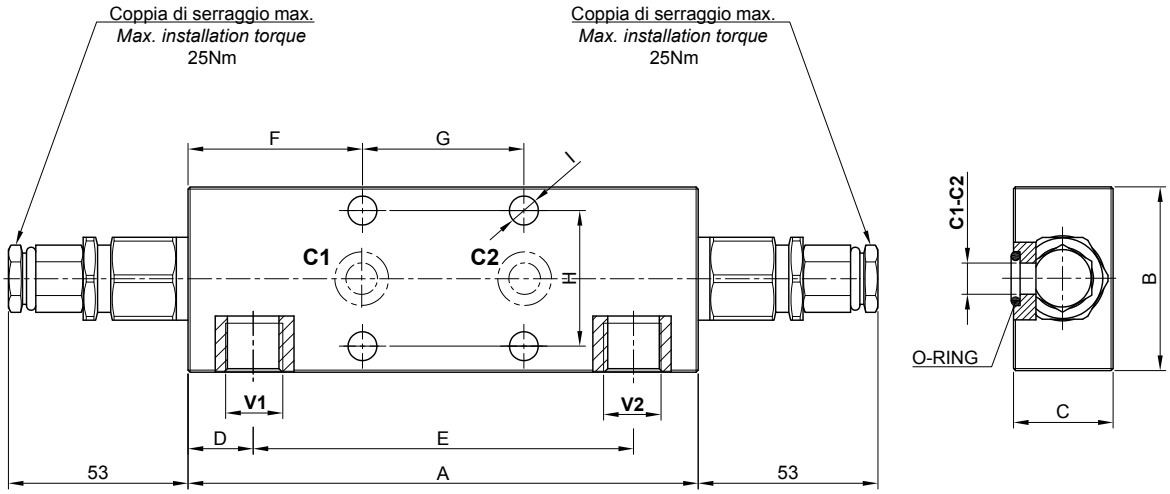
VPOB-50-D-*-2F-*-*-*

P - 470/2

Valvola overcenter doppia parzialmente bilanciata, montaggio a flangia

Partially balanced dual overcenter valve, gasket mounted

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

TIPO *TYPE*	**V1-V2**	**C1-C2**	**O-RING**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**PESO** ***WEIGHT***
	BSPP	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**	**Kg**
VPOB-50-D-3/8"-2F	3/8"	9	10.77x2.62	150	55	29.5	19	112	51	48	40	8.5	2.600
VPOB-50-D-1/2"-2F	1/2"	9	10.77x2.62	150	65	34.5	19	112	51	48	40	8.5	3.100

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPOB **50** **D** **3/8** **2F** **20** **B** ***

* 3/8 – 3/8" BSPP
1/2 – 1/2" BSPP
Connessioni - *Port sizes*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

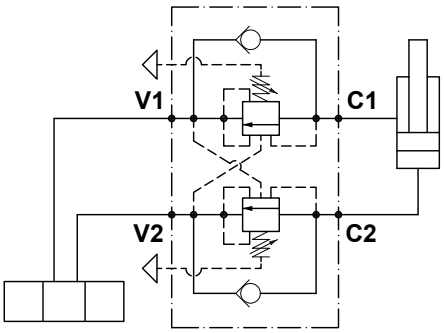
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

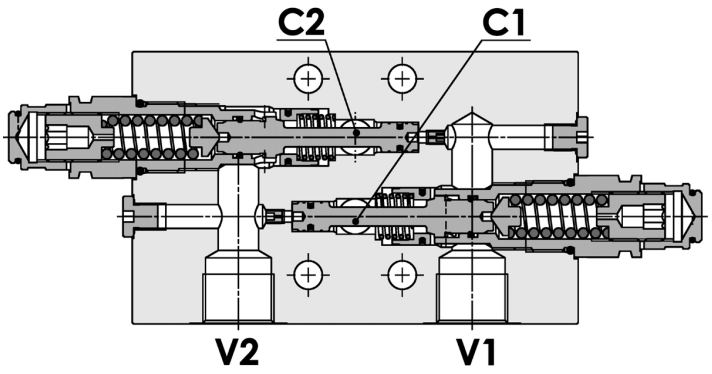
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPOFB-150-DD-3/4-2F-35-* P - 480/1

Valvola overcenter doppia bilanciata, montaggio a flangia
Fully balanced dual overcenter valve, gasket mounted

Rev. 02-2010/08





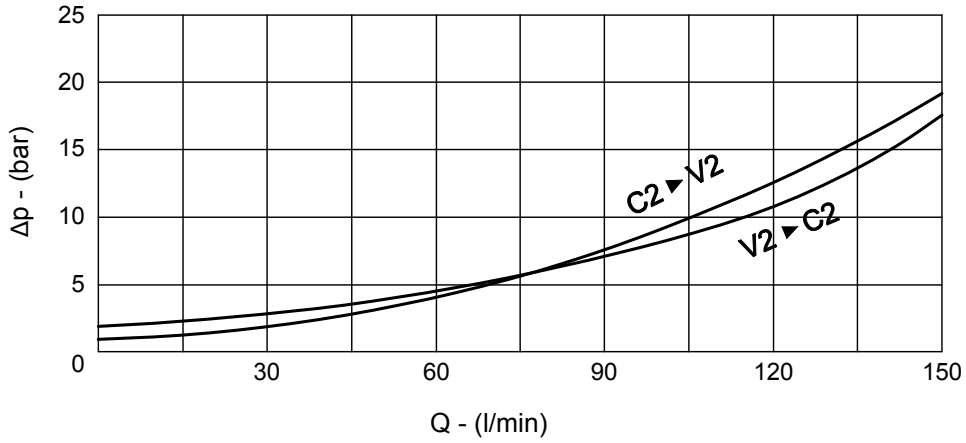
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 150 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 4 (a richiesta 1 : 8)
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 2,800 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is steel made zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 4 (1 : 8 on request)*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *2,800 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

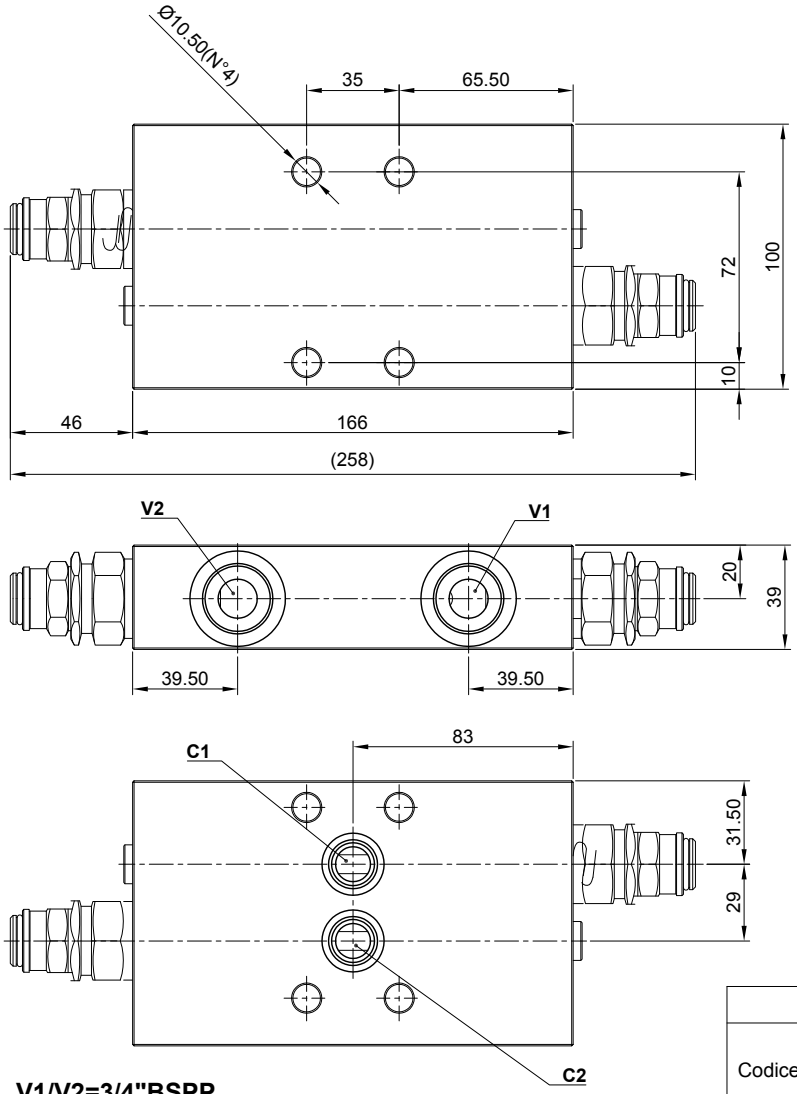


VPOFB-150-DD-3/4-2F-35-*

P - 480/2

Valvola overcenter doppia bilanciata, montaggio a flangia
Fully balanced dual overcenter valve, gasket mounted

Rev. 02-2010/08



V1/V2=3/4"BSPP
C1/C2=Ø13

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P O F B	1 5 0	D D	3 / 4	2 F	3 5	*

Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 8 : 1

SEZIONE Q
Valvole per motori idraulici

Queste valvole, disponibili per molteplici funzioni (controllo pressione, controllo velocità, controllo frenatura e arresto...) hanno in comune un corpo studiato per il fissaggio diretto sui più diffusi motori idraulici.
Sono disponibili 2 soluzioni di montaggio: a flangia (versioni SF/DF) e a vite forata (versioni SV/DV).

SECTION Q
Valves flangeable on hydraulic motors

These valves, available for several functions (pressure control, speed control, braking and arrest control...) have in common a body projected for direct fixing on the most diffused hydraulic motors.
2 solutions of assembly are available: gasket mounted (SF/DF version) and drilled screw mounted (SV/DV version)

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
Q 065	VPM-D-15-DV-D1	Q 265	VPO-60-DV-01
Q 070	VPM-D-40-DV-D2	Q 266	VPO-60-DV-S1
Q 072	VPM-D-40-DV-S1	Q 315	VPO-50-DF-D2
Q 116	VPM-D-40-DF-D2	Q 380	VPT-DV-S1
Q 165	VPO-60-SV-D2(D3)	Q 392	VPT-DF-D2
Q 167	VPO-60-SV-O1	Q 393	VPT-DF-D3
Q 215	VPO-50-SF-D2	Q 472	VPRF-50-DV-E6
Q 235	VPO-150-SF-R1	Q 480	VPRF-90-DV-D2
Q 260	VPO-50-DV-D2(D3)	Q 481	VPRF-90-DV-D3
Q 261	VPO-50-DV-01	Q 484	VPRF-90-DV-E6
Q 262	VPO-50-DV-S1	Q 530	VPRF-90-DF-D4
Q 264	VPO-60-DV-D2(D3)		

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

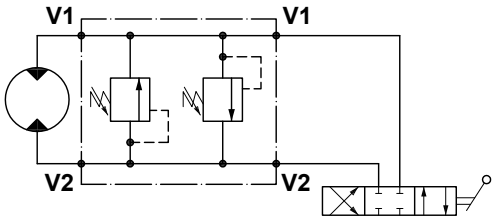
Meta Hydraulic*reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

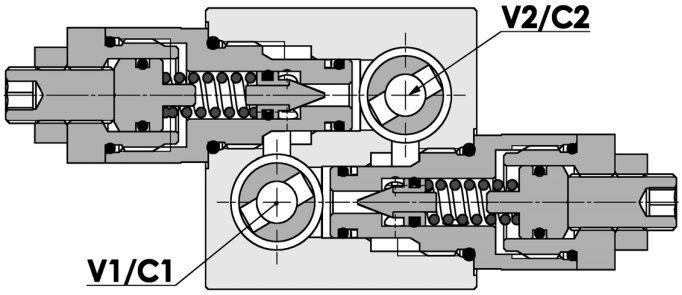
VPM-D-15-DV-D1-*-3/8"-*-*

Q - 065/1

Valvola di massima doppia incrociata, flangiabile su motori Danfoss serie "OMM"
Dual cross main pressure relief valve, flangeable on Danfoss motors "OMM" series

Rev. 03-2010/10





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio, viti forate in acciaio zincato.
Portata: 15 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar
Regolazione pressione: mediante vite o volantino (P/R)

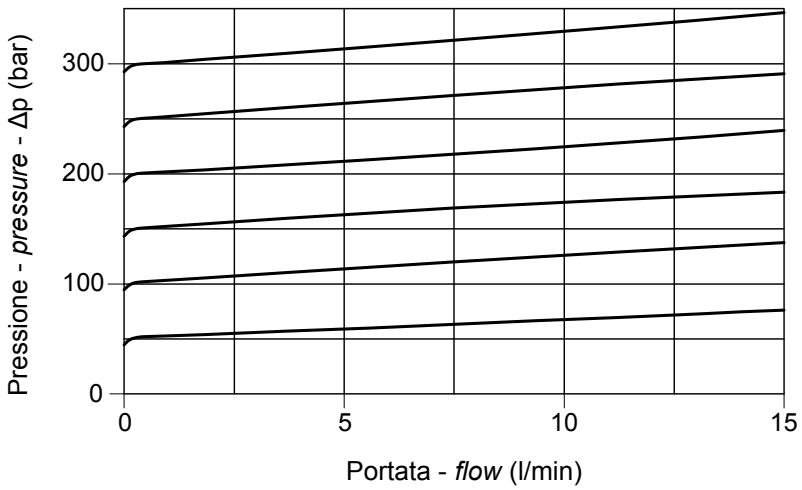
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy, drilled screw in steel zinc plated.*
Rated flow: *15 l/min*
Max. setting: *350 bar*
Max. pressure: *350 bar*
Adjustement means: *leakproof screw or handknob (P/R)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

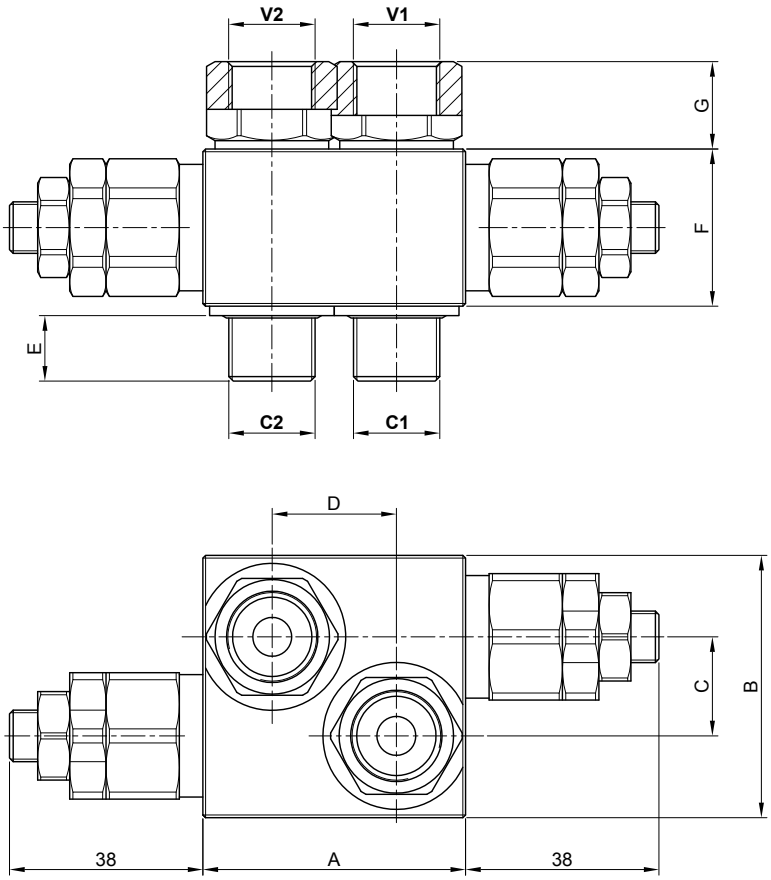


VPM-D-15-DV-D1-*-3/8"-*-*

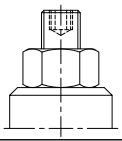
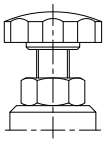
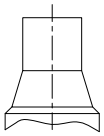
Q - 065/2

Valvola di massima doppia incrociata, flangiabile su motori Danfoss serie "OMM"
Dual cross main pressure relief valve, flangeable on Danfoss motors "OMM" series

Rev. 03-2010/10



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 60	15	5	Bianco *White*
10	20 - 130	30	20	Giallo *Yellow*
20	40 - 240	65	40	Verde *Green*
35	50 - 350	100	50	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

TIPO *TYPE*	**PORTATA MAX.** ***MAX. FLOW***	**V1 V2**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**PESO** ***WEIGHT***
	L/MIN	BSPP	mm	mm	mm	mm	mm	mm	mm	Kg
VPM D 15 DV D1 P 3/8	15	3/8"	50	50	19	23.7	13	30	17	0.550

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M | **D** | **1 5** | **D V** | **D 1** | **P** | **3 / 8** | **2 0** | *

* P/R/Z: Regolazioni - *Adjustements*

Guarnizioni – *Seals*: V=Viton * Omettere se BUNA-N – *Omit if BUNA-N*

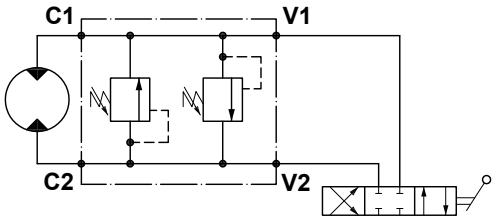
"05" / "10" / "20" / "35": * Campi di taratura pressione - *Adjustable pressure*

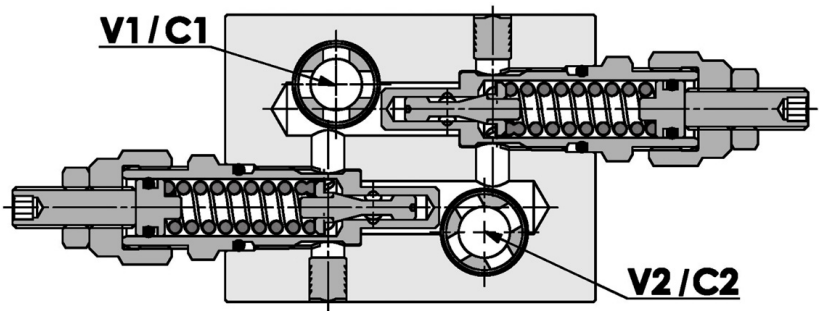
VPM-D-40-DV-D2-*-1/2-*-*

Q - 070/1

Valvola di massima doppia incrociata, flangiabile su motori Danfoss serie "OMP/OMR"
Dual cross main pressure relief valve, flangeable on Danfoss motors "OMP/OMR" series

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato giallo, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: 50 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 1,050 Kg

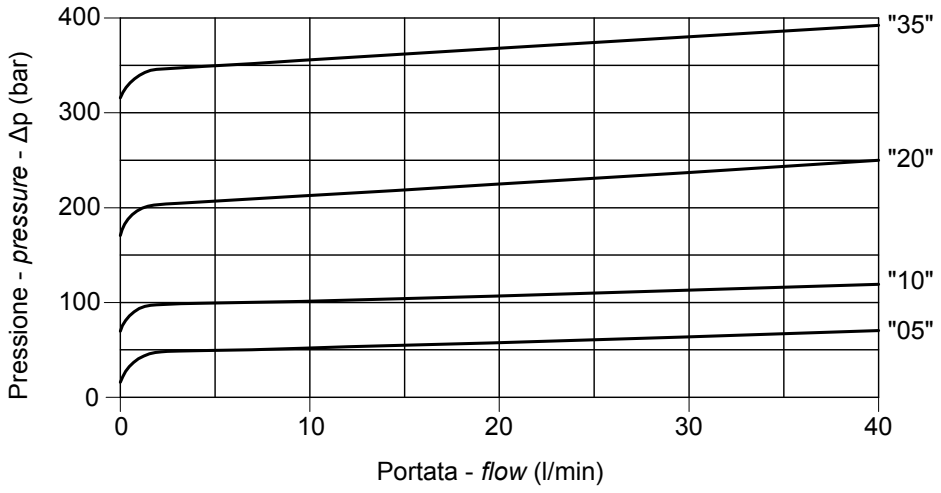
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *50 l/min*
Max. setting: *350 bar*
Max.pressure: *250 bar*
Adjustement means: *leakproof screw or handknob (P/R)*
Weight: *1,050 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



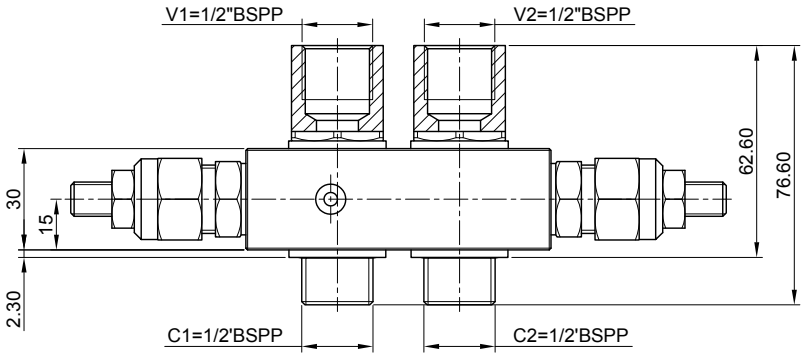
VPM-D-40-DV-D2-*-1/2-*-*

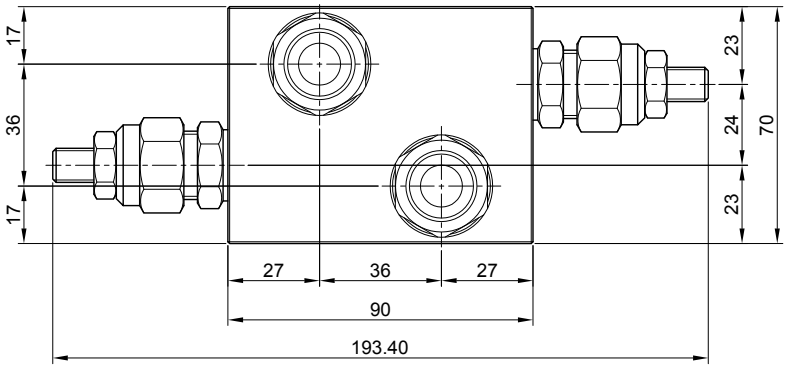
Q - 070/2

Valvola di massima doppia incrociata, flangiabile su motori Danfoss serie "OMP/OMR"

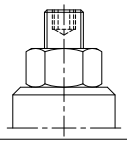
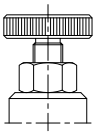
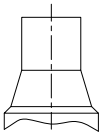
Dual cross main pressure relief valve, flangeable on Danfoss motors "OMP/OMR" series

Rev. 02-2010/05





MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M | **D** | **4 0** | **D V** | **D 2** | **P** | **1 / 2** | **2 0** | *

* P/R/Z: Regolazioni - *Adjustements*

Guarnizioni – *Seals*: V=Viton * Omettere se BUNA-N – *Omit if BUNA-N*

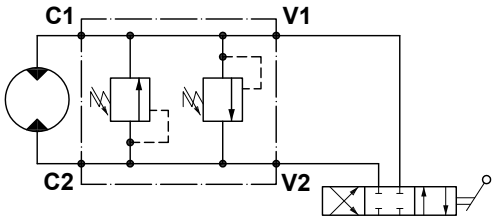
"05" / "10" / "20" / "35": Campi di taratura pressione - * *Adjustable pressure range*

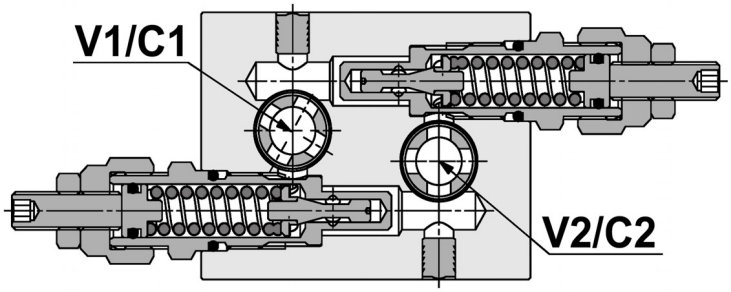
VPM-D-40-DV-S1-*-1/2-*-* Q - 072/1

Valvola di massima doppia incrociata, flangiabile su motori Samhydraulik serie "AG/BG/AR/BR/ARSR/MB"

Dual cross main pressure relief valve, flangeable on Samhydraulik motors "AG/BG/AR/BR/ARSR/MB" series

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato giallo, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: 50 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 1,050 Kg

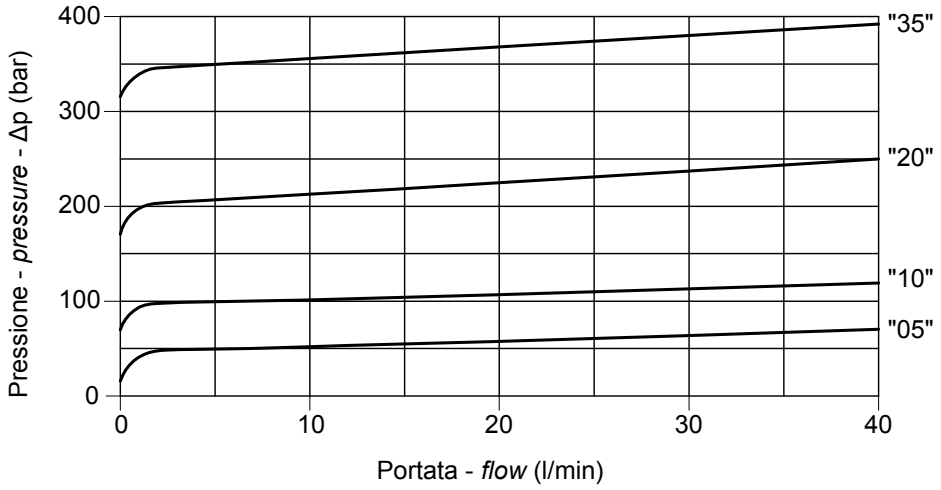
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *50 l/min*
Max. setting: *350 bar*
Max.pressure: *250 bar*
Adjustement means: *leakproof screw or handknob (P/R)*
Weight: *1,050 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



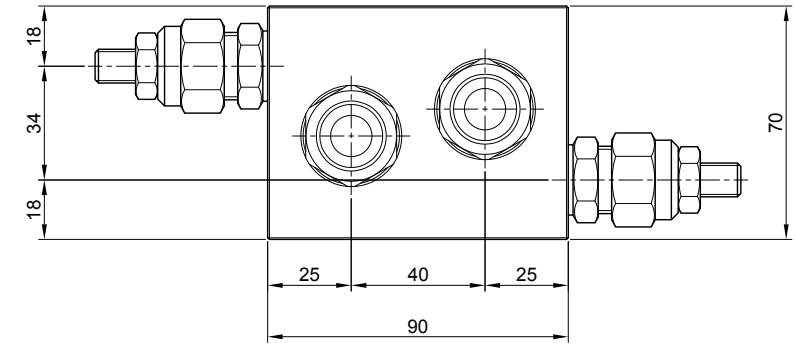
VPM-D-40-DV-S1-*-1/2-*-*

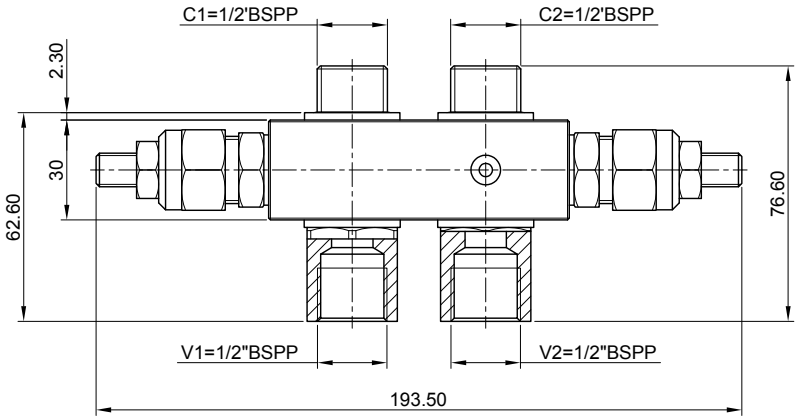
Q - 072/2

Valvola di massima doppia incrociata, flangiabile su motori Samhydraulik serie "AG/BG/AR/BR/ARSR/MB"

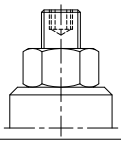
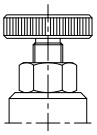
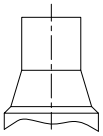
Dual cross main pressure relief valve, flangeable on Samhydraulik motors "AG/BG/AR/BR/ARSR/MB" series

Rev. 02-2010/05





MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M | **D** | **4 0** | **D V** | **S 1** | **P** | **1 / 2** | **2 0** | *

* P/R/Z: Regolazioni - *Adjustements*

* Guarnizioni – *Seals*: V=Viton. Omettere se BUNA-N – *Omit if BUNA-N*

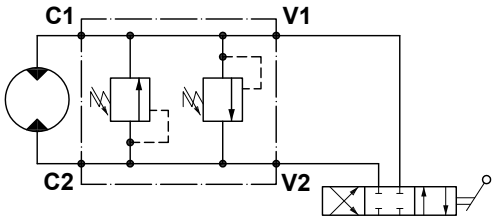
* "05" / "10" / "20" / "35": Campi di taratura pressione - *Adjustable pressure range*

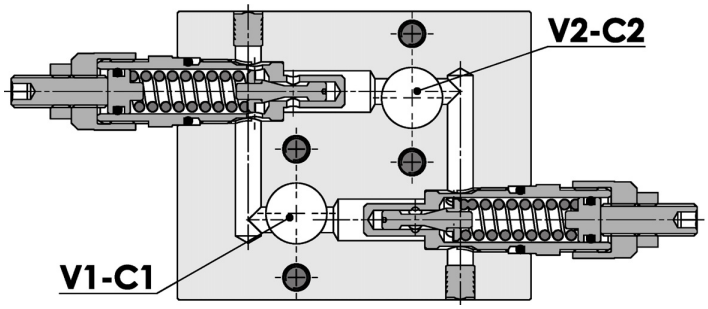
VPM-D-40-DF-D2-*-1/2"-*-*

Q - 116/1

Valvola di massima doppia incrociata, flangiabile su motori Danfoss serie "OMP/R/H"
Dual cross main pressure relief valve, flangeable on Danfoss motors "OMP/R/H" series

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato giallo, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: 40 l/min
Taratura max.: 350 bar
Pressione max.: 250 bar
Regolazione pressione: mediante vite o volantino (P/R)
Peso: 1.250 Kg

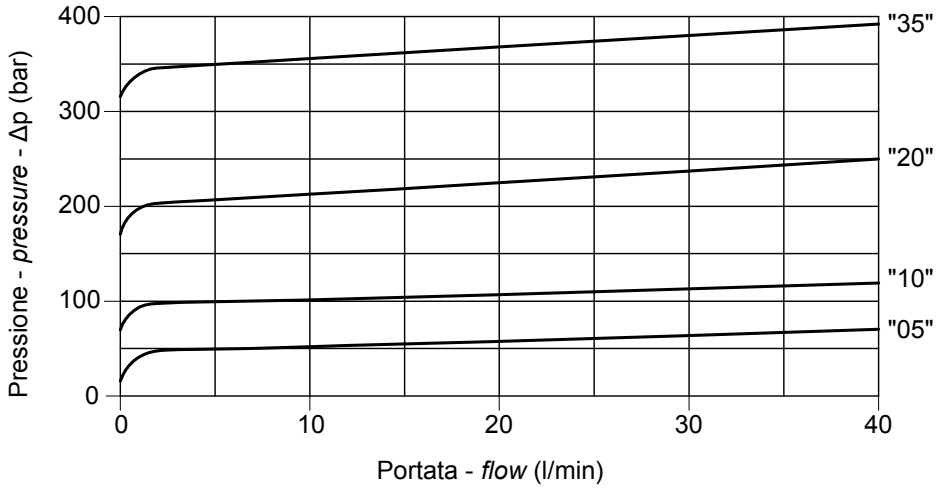
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *40 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Adjustement means: *leakproof screw or handknob (P/R)*
Weight: *1.250 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



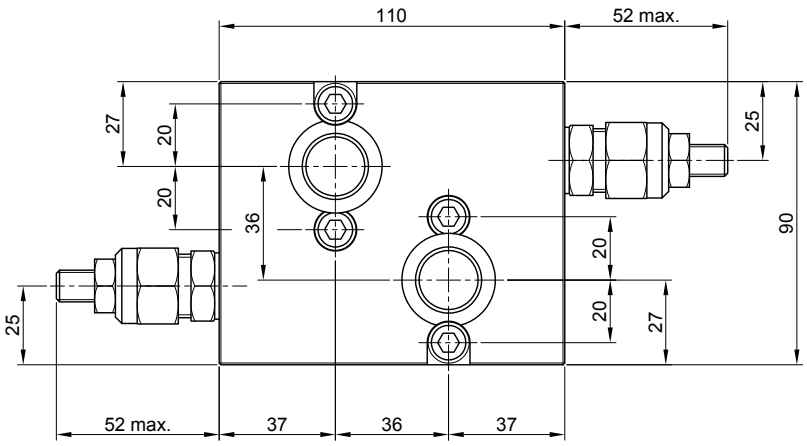
VPM-D-40-DF-D2-*-1/2"-*-*

Q - 116/2

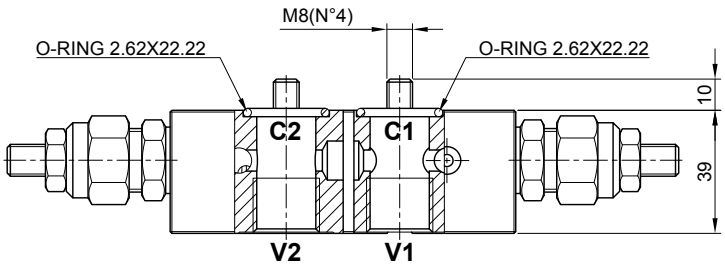
Valvola di massima doppia incrociata, flangiabile su motori Danfoss serie "OMP/R/H"

Dual cross main pressure relief valve, flangeable on Danfoss motors "OMP/R/H" series

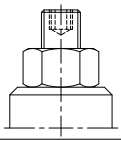
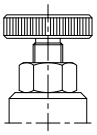
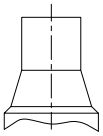
Rev. 03-2010/08



V2/V1=1/2"BSPP
C2/C1=Ø19



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
05	5 - 50	10	5	Bianco *White*
10	30 - 100	20	30	Giallo *Yellow*
20	50 - 220	40	50	Verde *Green*
35	80 - 350	80	80	Rosso *Red*

REGOLAZIONI – *ADJUSTEMENTS*		*
Codice *Code*	Tipo - *Type*	
P	Vite esterna con esagono incassato *Leakproof hex. socket screw*	
R	Volantino e dado *Handknob and locknut*	
Z	Cappellotto antimanomissione *Tamperproof cap*	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M	D	4 0	D F	D 2	P	1 / 2	2 0	*

* P/R/Z: Regolazioni - *Adjustements*

"05" / "10" / "20" / "35": Campi di taratura pressione - *Adjustable pressure* *

Guarnizioni – *Seals*: V=Viton Omettere se BUNA-N – *Omit if BUNA-N* *

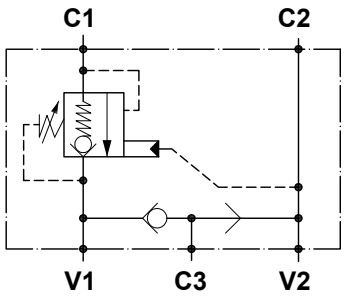
VPO-60-SV-D2(D3)-1/2-U-*-*-*

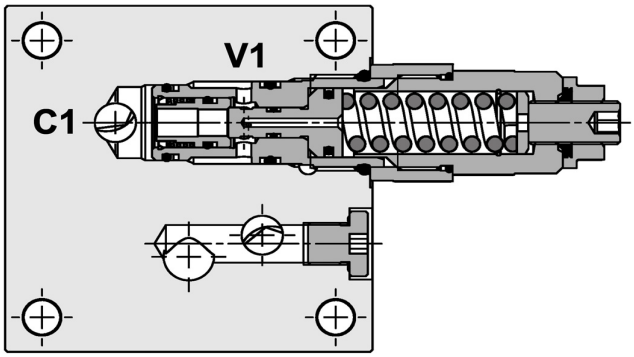
Q - 165/1

Valvola overcenter singola, flangiabile su motori Danfoss serie "OMP/R/H-OMS", con sblocco freno

Single overcenter valve, flangeable on Danfoss motors "OMP/R/H-OMS" series, brake release port

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: fino a 60 l/min
Taratura max.: 350 bar
Pressione max: 250 bar
Rapporto di pilotaggio: 1 : 4 standard, a richiesta 1 : 8
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 1,650 Kg

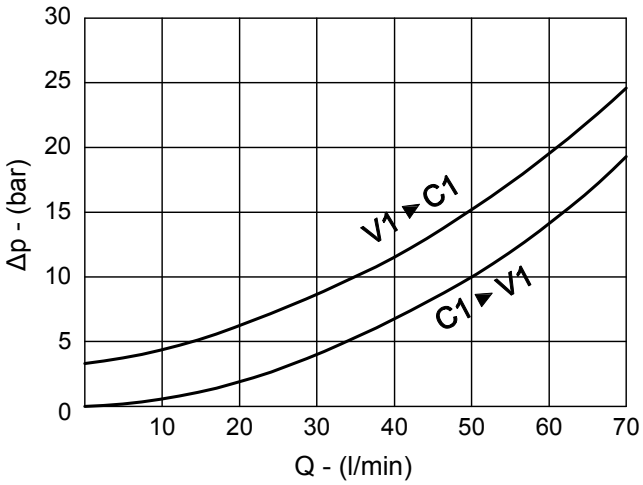
TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *up to 60 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Pilot ratio: *1 : 4 std, 1 : 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,650 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



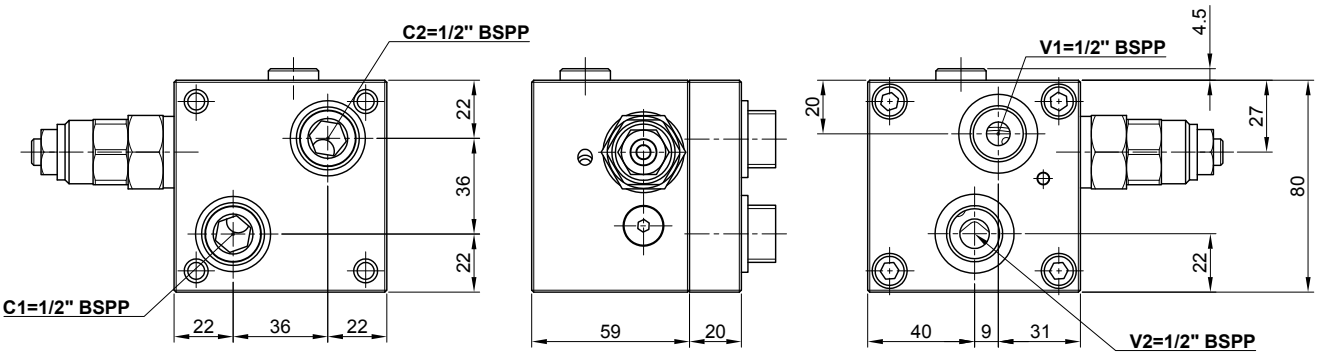
VPO-60-SV-D2(D3)-1/2-U-*-*-*

Q - 165/2

Valvola overcenter singola, flangiabile su motori Danfoss serie "OMP/R/H-OMS", con sblocco freno

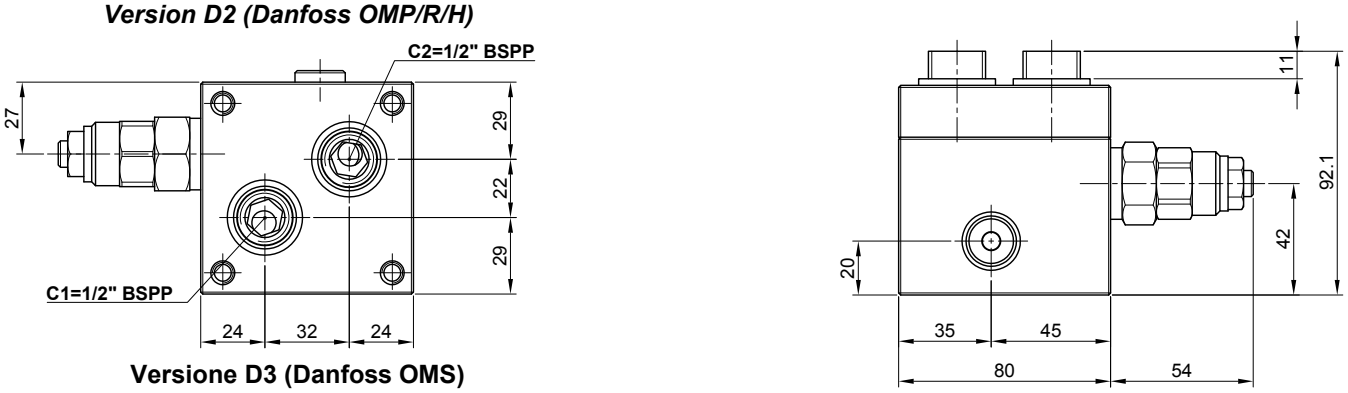
Single overcenter valve, flangeable on Danfoss motors "OMP/R/H-OMS" series, brake release port

Rev. 01-2010/02



Versione D2 (Danfoss OMP/R/H)

Version D2 (Danfoss OMP/R/H)



Versione D3 (Danfoss OMS)

Version D3 (Danfoss OMS)

MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO **60** **SV** **D2** **1/2** **U** **20** **B** ***

* D2 = per motori Danfoss OMP/R/H
D2 = for OMP/R/H Danfoss motors
D3 = per motori Danfoss OMS
D3 = for OMS Danfoss motors

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

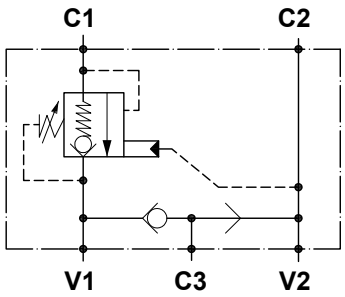
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

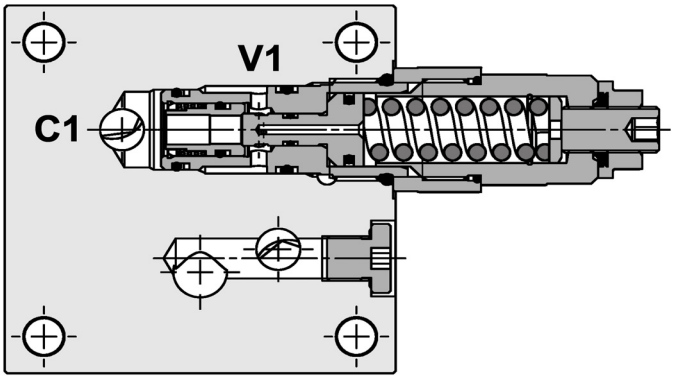
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8

VPO-60-SV-O1-1/2-U-*-*-* Q - 167/1

Valvola overcenter singola, flangiabile su motori Oil-drive serie "MGL/MGT", con sblocco freno
Single overcenter valve, flangeable on Oil-drive motors "MGL/MGT" series, brake release port

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: *cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.*
Portata max.: *fino a 60 l/min*
Taratura max.: *350 bar*
Pressione max: *250 bar*
Rapporto di pilotaggio: *1 : 4 standard, a richiesta 1 : 8*
Regolazione pressione: *mediante vite*
Campo di regolazione pressione: *vedere pag. 02*
Peso: *1,650 Kg*

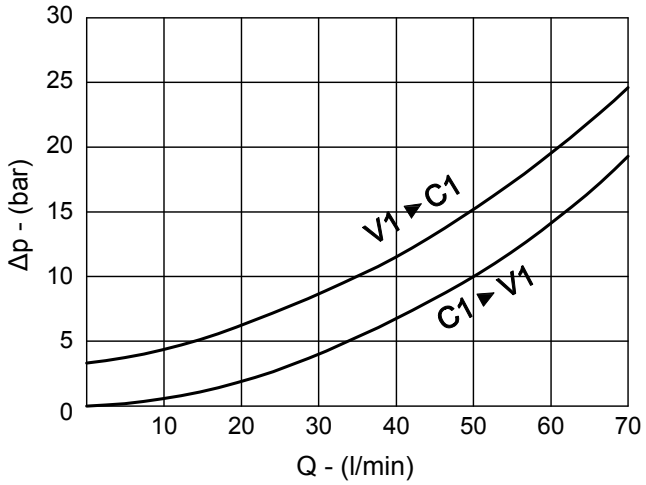
TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *up to 60 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Pilot ratio: *1 : 4 std, 1 : 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,650 Kg*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

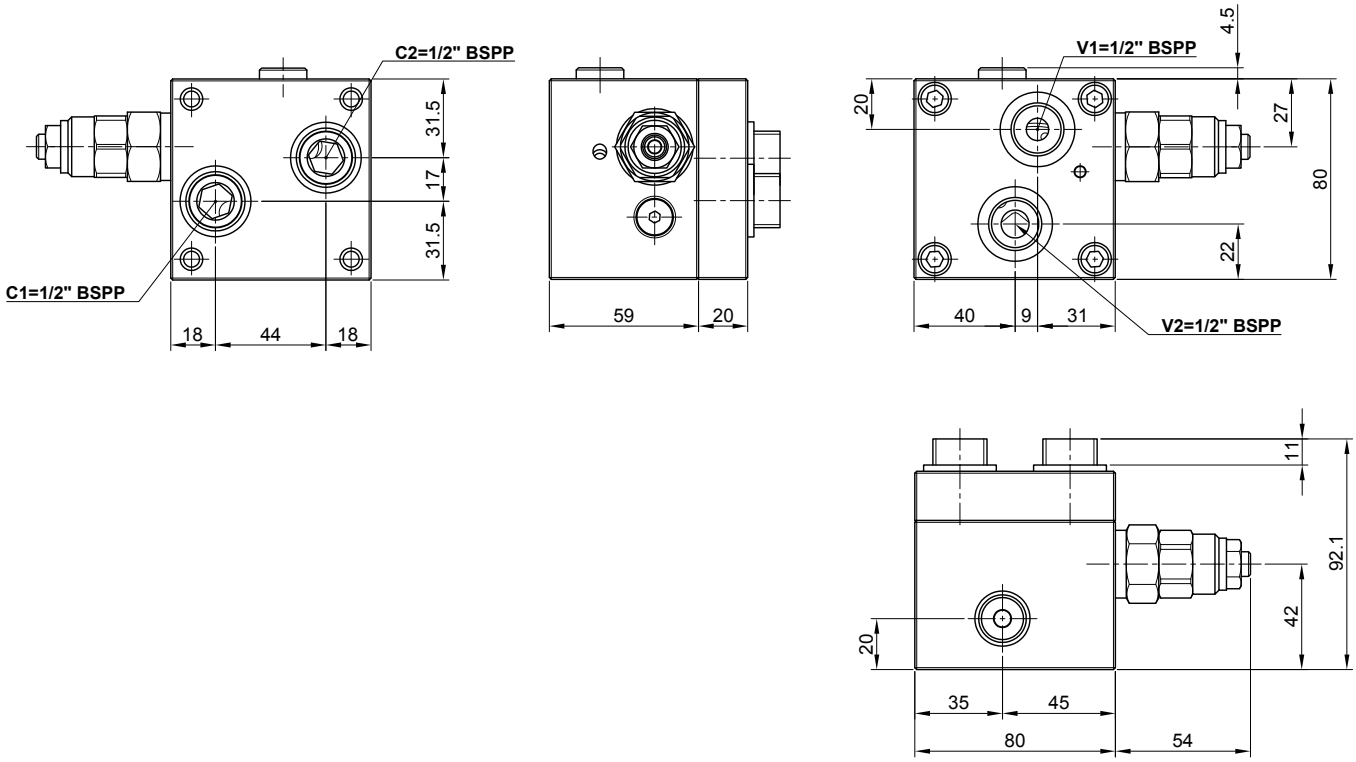


VPO-60-SV-O1-1/2-U-*-*-* Q - 167/2

Valvola overcenter singola, flangiabile su motori Oil-drive serie “MGL/MGT”, con sblocco freno

Single overcenter valve, flangeable on Oil-drive motors “MGL/MGT” series, brake release port

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO 60 SV 01 1/2 U 20 B *

* “20” / “35”:
Campi di taratura pressione - *Adjustable pressure*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

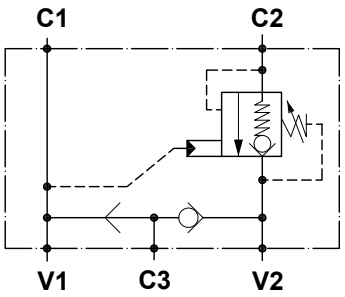
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8

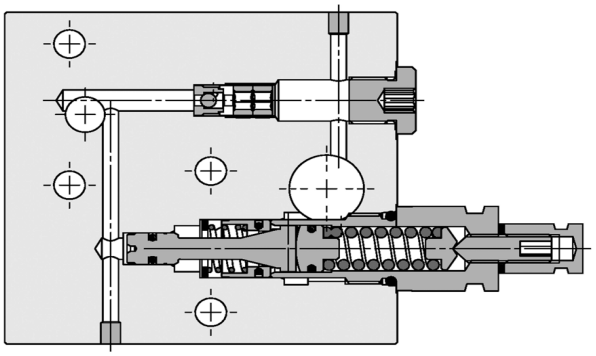
VPO-50-SF-D2-1/2-U-*-*

Q - 215/1

Valvola overcenter singola, flangiabile su motori Danfoss serie "OMP/R/H", con sblocco freno
Single overcenter valve, flangeable on Danfoss motors "OMP/R/H" series, brake release port

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: fino a 50 l/min
Taratura max.: 350 bar
Pressione max: 250 bar
Rapporto di pilotaggio: 1 : 4.25 standard, a richiesta 1 : 8, 1 : 11
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 0,950 Kg

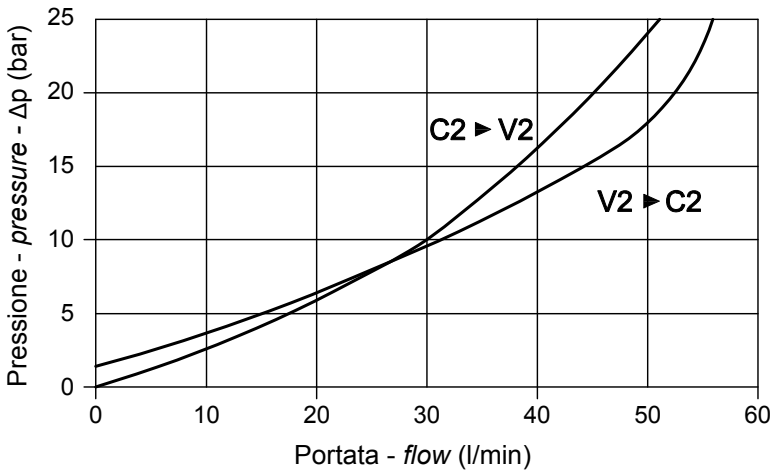
TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Pilot ratio: *1 : 4.25 std, 1 : 8 and 1 : 11 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *0,950 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



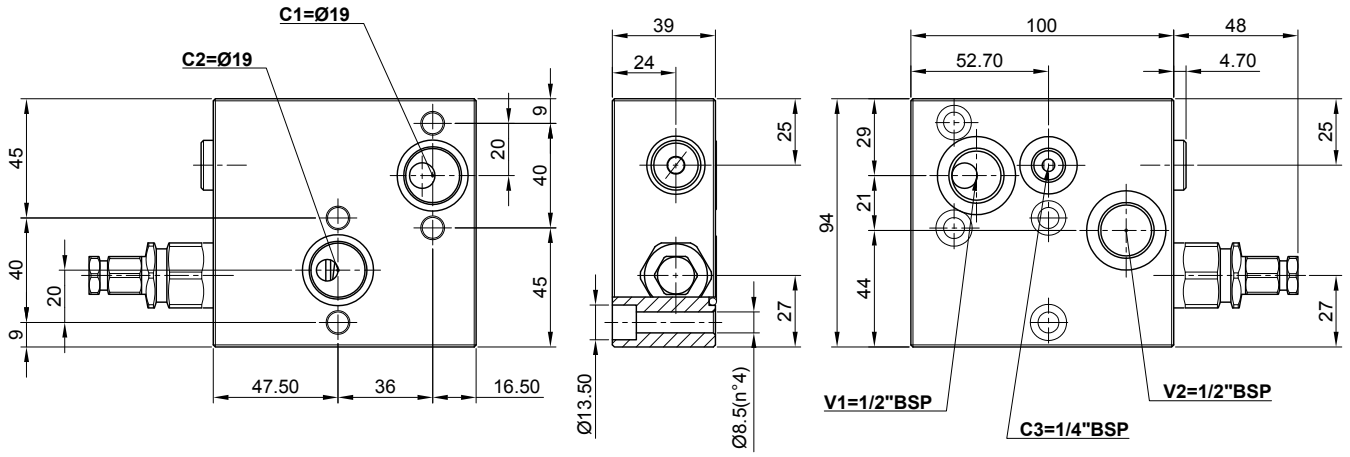
VPO-50-SF-D2-1/2-U-*-*

Q - 215/2

Valvola overcenter singola, flangiabile su motori Danfoss serie "OMP/R/H", con sblocco freno

Single overcenter valve, flangeable on Danfoss motors "OMP/R/H" series, brake release port

Rev. 02-2010/05



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	50	SF	D2	1/2	U	20	B

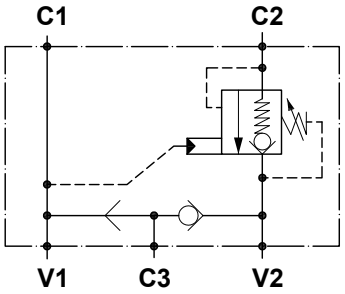
* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

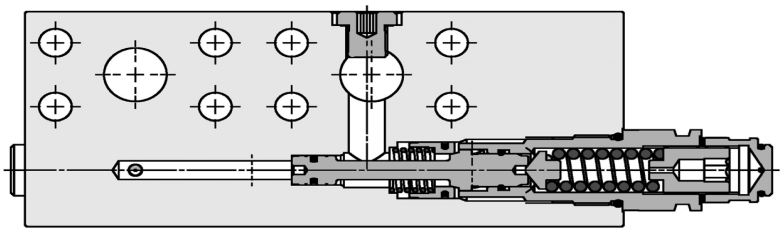
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

VPO-150-SF-R1-3/4-U-S-*-*-* Q - 235/1

Valvola overcenter singola, flangiabile su motori Rexroth serie "A2FE 45-56-63", con sblocco freno
Single overcenter valve, flangeable on Rexroth motors "A2FE 45-56-63" series, brake release port

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in acciaio zincato.
Portata max.: fino a 150 l/min
Taratura max.: 350 bar
Pressione max: 350 bar
Rapporto di pilotaggio: 1 : 4 standard, 1 : 8 su richiesta
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 8,000 Kg

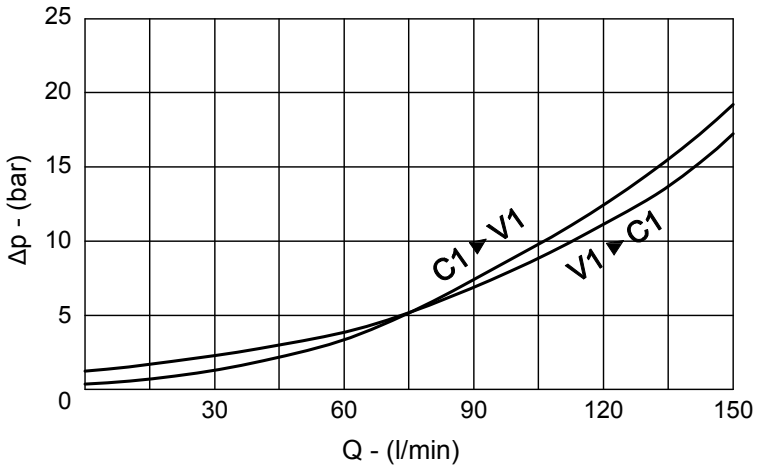
TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is zinc plated steel.*
Rated flow: *up to 150 l/min*
Max. setting: *350 bar*
Max. pressure: *350 bar*
Pilot ratio: *1 : 4 std, 1 : 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *8,000 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

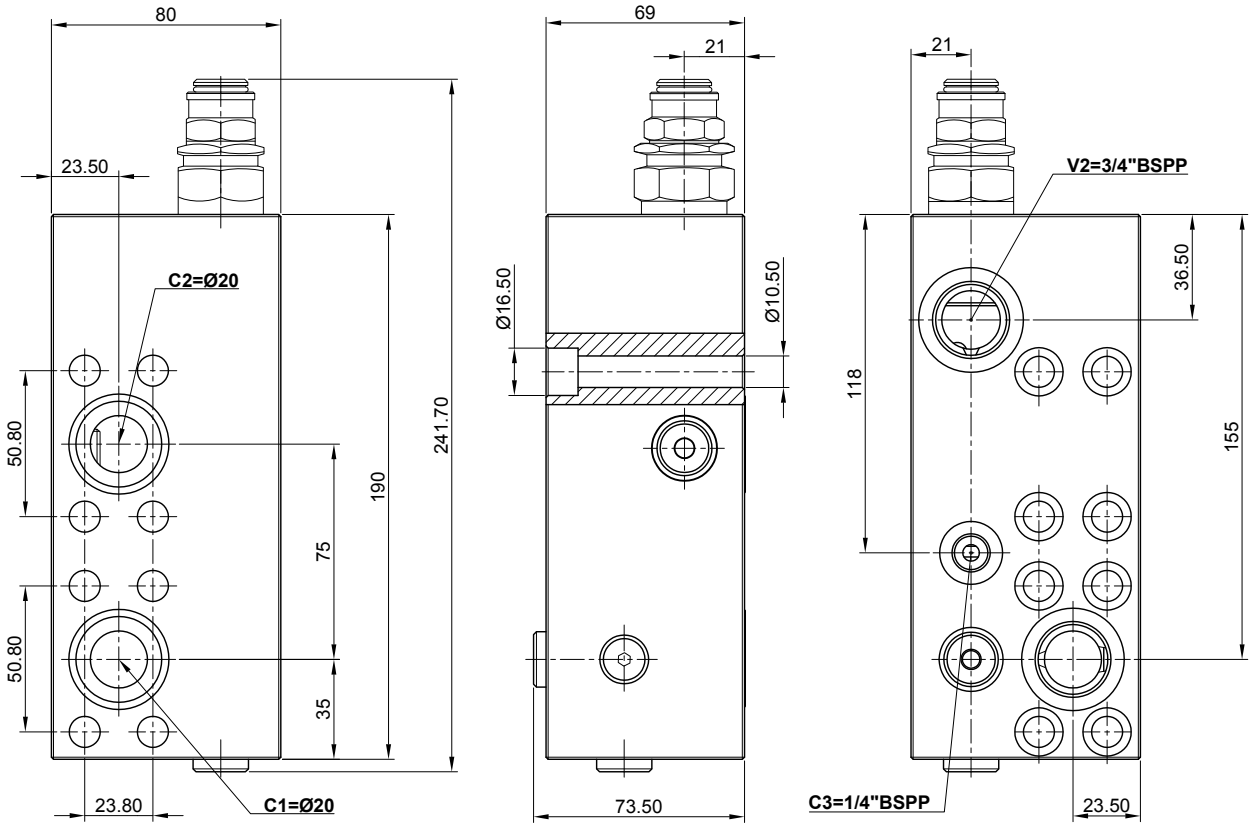
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-150-SF-R1-3/4-U-S-*-*-* Q - 235/2

Valvola overcenter singola, flangiabile su motori Rexroth serie "A2FE 45-56-63", con sblocco freno
Single overcenter valve, flangeable on Rexroth motors "A2FE 45-56-63" series, brake release port

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 4	100 - 350	110	280
35	1 : 8	150 - 350	92	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	150	SF	R1	3/4	U	S	35	B	*

Rapporto di pilotaggio – *Pilot ratio*
* Omettere se standard – *Omit if standard*
B = 1 : 8

Guarnizioni – *Seals*: V=Viton
Omettere se BUNA-N – *Omit if BUNA-N* *

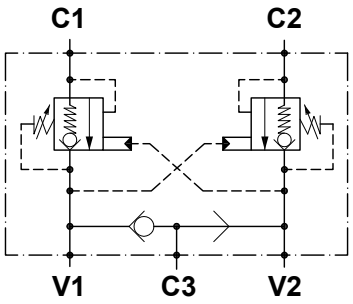
VPO-50-DV-D2(D3)-1/2-U-*-*-*-*

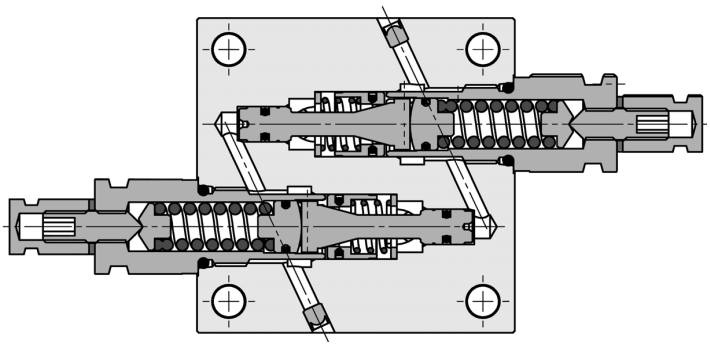
Q - 260/1

Valvola overcenter doppia incrociata, flangiabile su motori Danfoss serie "OMP/R/H-OMS", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Danfoss motors "OMP/R/H-OMS" series, brake release port, optional anti-shock valve

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio (o acciaio su richiesta).
Portata max.: 50 l/min
Taratura max.: 350 bar
Pressione max: 250 bar (std) 350 bar (ver.S)
Rapporto di pilotaggio: 1 : 4.25 standard, a richiesta 1 : 8, 1 : 11
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 1,650 Kg (std) - 3.400 Kg (ver.S)
Peso con valvola antiurto: 2,300 Kg (std) - 4.850 Kg (ver.S)

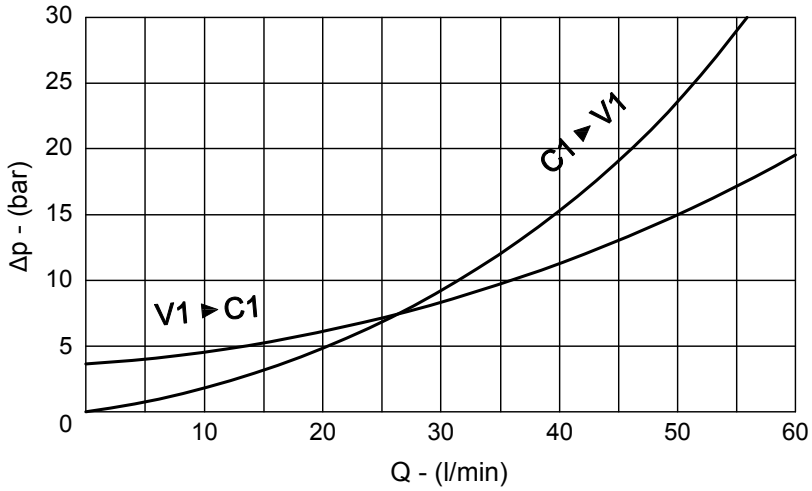
TECHNICAL SPECIFICATIONS

Materials: cartridges in steel zinc plated, internal parts in hardened steel.
Body is in high strenght alluminium alloy (or steel on request).
***Rated flow:** up to 50 l/min*
***Max. setting:** 350 bar*
***Max. pressure:** 250 bar (std) - 350 bar (ver.S)*
***Pilot ratio:** 1 : 4.25 std, 1 : 8 and 1 : 11 on request*
***Adjustement means:** leakproof screw adjustement*
***Adjustable pressure range:** see page 02*
***Weight:** 1,650 Kg (std) - 3.400 Kg (ver.S)*
***Weight with anti-shock valve:** 2,650 Kg (std) - 4.850 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPO-50-DV-D2(D3)-1/2-U-*-*-*-*

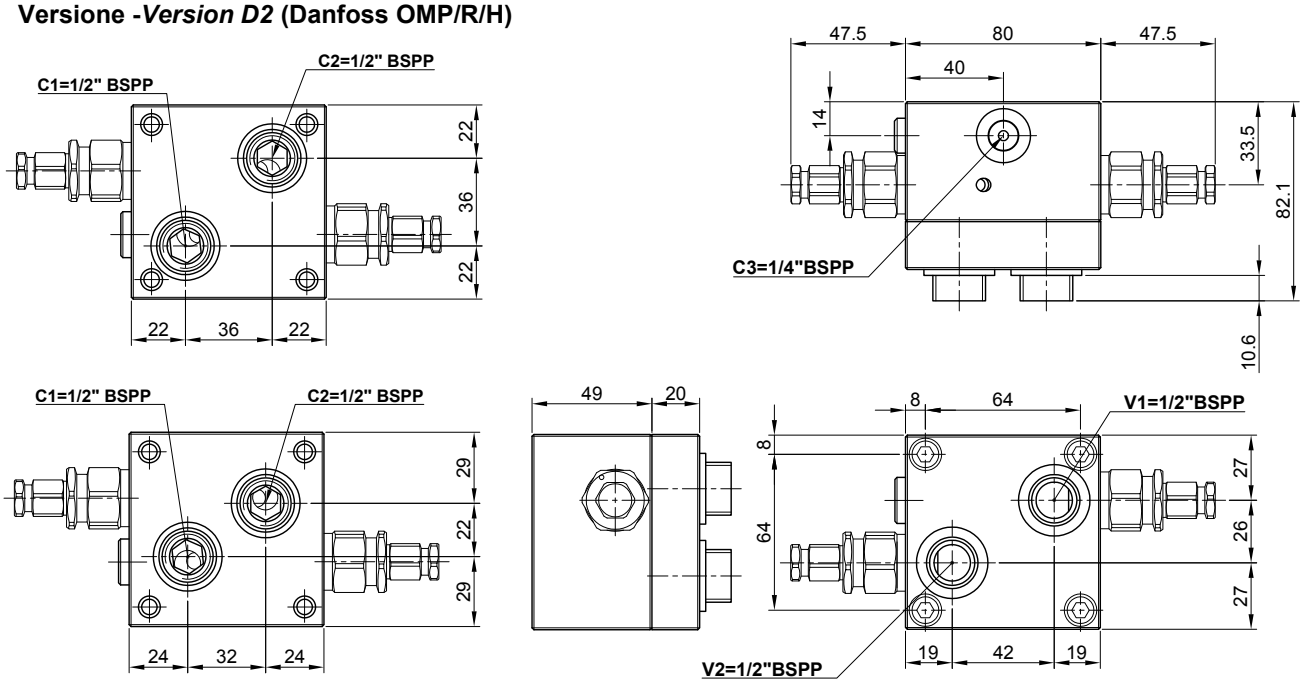
Q - 260/2

Valvola overcenter doppia incrociata, flangiabile su motori Danfoss serie "OMP/R/H-OMS", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Danfoss motors "OMP/R/H-OMS" series, brake release port, optional anti-shock valve

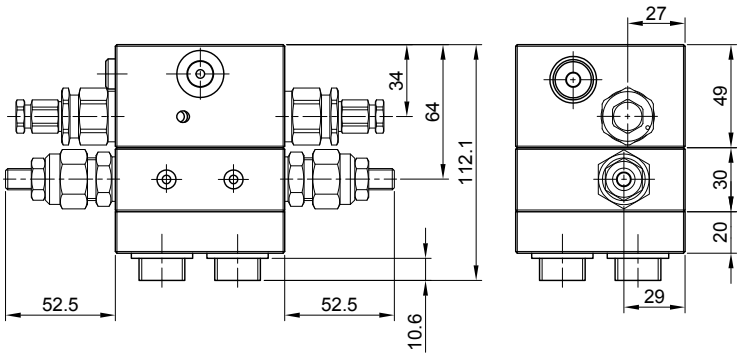
Rev. 03-2010/08

Versione -*Version D2* (Danfoss OMP/R/H)



Versione -*Version D3* (Danfoss OMS)

Versione con valvole antiurto -*Version with anti-shock valves*



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	50	DV	D2	1/2	U	S	20	B	VM05	*

D2 = per motori Danfoss OMP/R/H
D2 = for OMP/R/H Danfoss motors
D3 = per motori Danfoss OMS
D3 = for OMS Danfoss motors
*

Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel
*

"20" / "35":
Campi di taratura pressione - *Adjustable pressure range*
*

Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard*
B = 1 : 8, C = 1 : 11
*

Guarnizioni – *Seals:*
V=Viton
Omettere se BUNA-N
Omit if BUNA-N
*

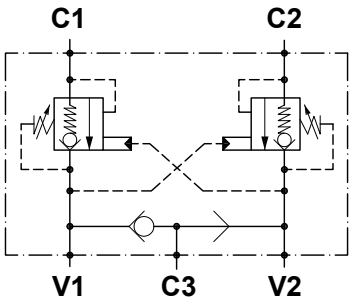
Valvola di max, omettere se non richiesta
Relief valve, Omit if not requested
Campi di taratura pressione disponibili
Available pressure range
"05"= 5-50 bar – "10"= 30-100 bar
"20"= 50-220 bar – "35"= 80-350 bar
*

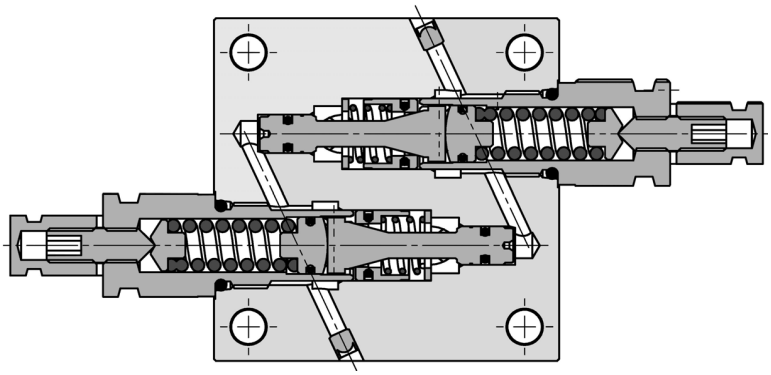
VPO-50-DV-O1-1/2-U-*-*-*-* Q - 261/1

Valvola overcenter doppia incrociata, flangiabile su motori Oil-drive serie "MGL/MGT", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Oil-drive motors "MGL/MGT" series, brake release port, optional anti-shock valve

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio (o acciaio su richiesta).
Portata max.: 50 l/min
Taratura max.: 350 bar
Pressione max: 250 bar (std) 350 bar (ver.S)
Rapporto di pilotaggio: 1 : 4.25 standard, a richiesta 1 : 8, 1 : 11
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 1,650 Kg (std) - 3.400 Kg (ver.S)
Peso con valvola antiurto: 2,300 Kg (std) - 4.850 Kg (ver.S)

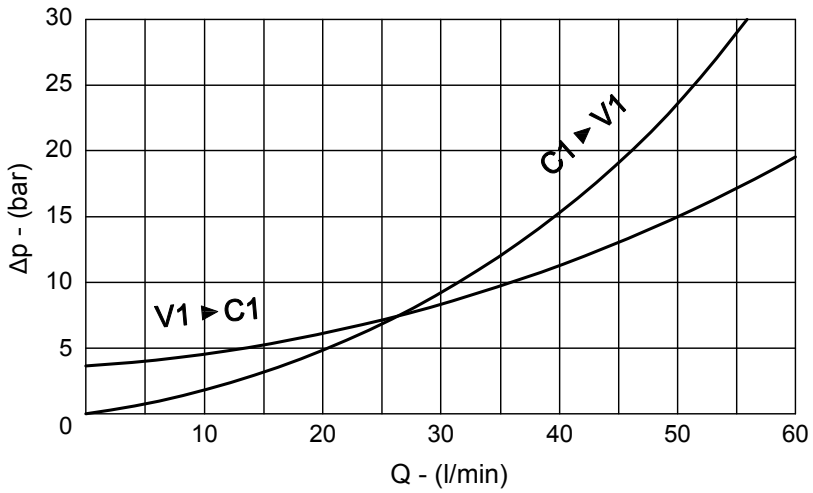
TECHNICAL SPECIFICATIONS

Materials: cartridges in steel zinc plated, internal parts in hardened steel.
Body is in high strenght alluminium alloy (or steel on request).
***Rated flow:** up to 50 l/min*
***Max. setting:** 350 bar*
***Max. pressure:** 250 bar (std) - 350 bar (ver.S)*
***Pilot ratio:** 1 : 4.25 std, 1 : 8 and 1 : 11 on request*
***Adjustement means:** leakproof screw adjustement*
***Adjustable pressure range:** see page 02*
***Weight:** 1,650 Kg (std) - 3.400 Kg (ver.S)*
***Weight with anti-shock valve:** 2,650 Kg (std) - 4.850 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

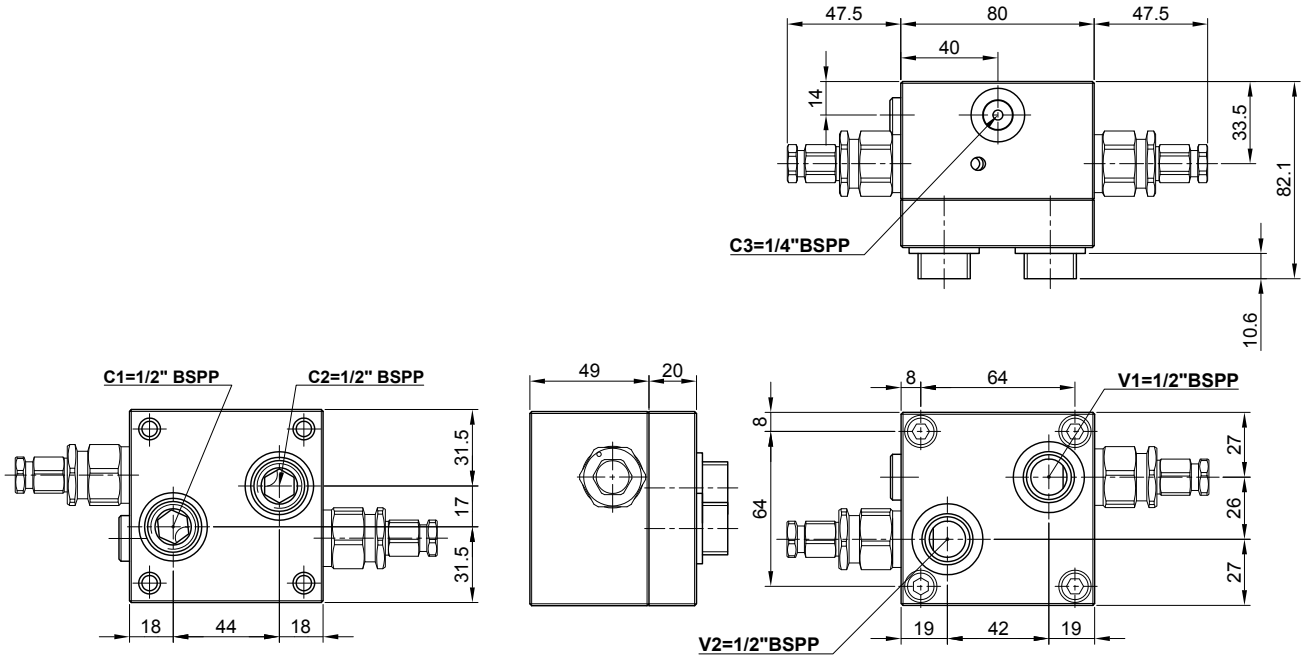


VPO-50-DV-O1-1/2-U-*-*-*-* Q - 261/2

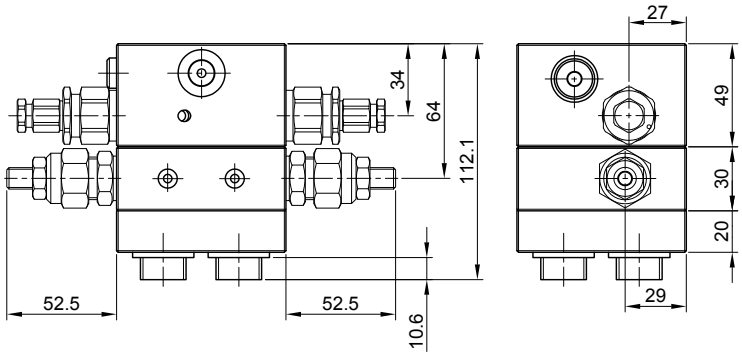
Valvola overcenter doppia incrociata, flangiabile su motori Oil-drive serie "MGL/MGT", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Oil-drive motors "MGL/MGT" series, brake release port, optional anti-shock valve

Rev. 03-2010/08



Versione con valvole antiurto -*Version with anti-shock valves*



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	50	DV	O1	1/2	U	S	20	B	VM05	*

* Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

* Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard*
B = 1 : 8, C = 1 : 11

Guarnizioni – *Seals:*
V=Viton
Omettere se BUNA-N *
Omit if BUNA-N

Valvola di max, omettere se non richiesta
Relief valve, Omit if not requested
Campi di taratura pressione disponibili *
Available pressure range
"05"= 5-50 bar – "10"= 30-100 bar
"20"= 50-220 bar – "35"= 80-350 bar

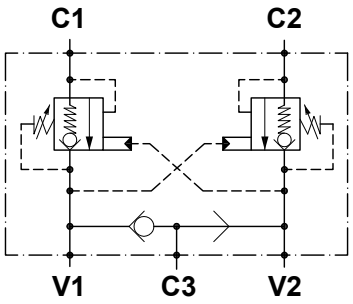
VPO-50-DV-S1-1/2-U-*-*-*-*

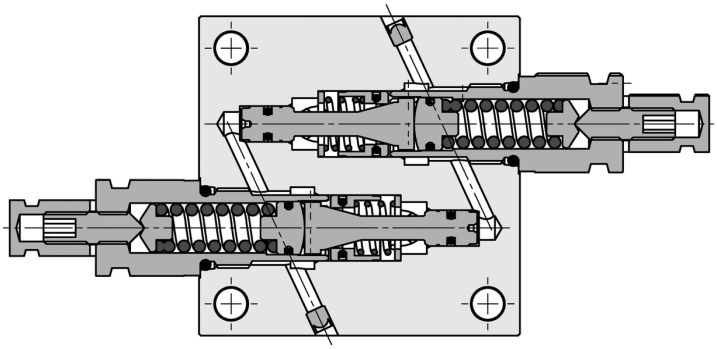
Q - 262/1

Valvola overcenter doppia incrociata, flangiabile su motori Samhydraulik serie "AG/BG/AR/BR/ARSR/MB", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Samhydraulik motors "AG/BG/AR/BR/ARSR/MB" series, brake release port, optional anti-shock valve

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio (o acciaio su richiesta).
Portata max.: 50 l/min
Taratura max.: 350 bar
Pressione max: 250 bar (std) 350 bar (ver.S)
Rapporto di pilotaggio: 1 : 4.25 standard, a richiesta 1 : 8, 1 : 11
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 1.800 Kg (std) - 3.750 Kg (ver.S)
Peso con valvola antiurto: 2.450 Kg (std) - 5.150 Kg (ver.S)

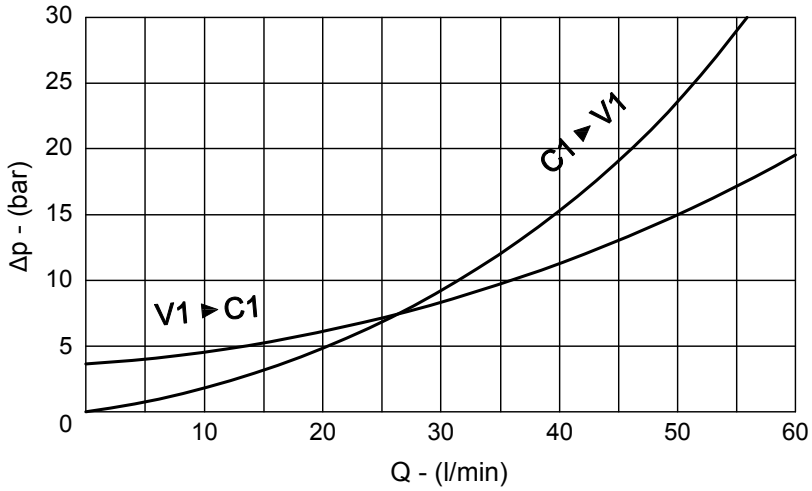
TECHNICAL SPECIFICATIONS

Materials: cartridges in steel zinc plated, internal parts in hardened steel.
Body is in high strenght alluminium alloy.
***Rated flow:** up to 50 l/min*
***Max. setting:** 350 bar*
***Max. pressure:** 250 bar (std) - 350 bar (ver.S)*
***Pilot ratio:** 1 : 4.25 std, 1 : 8 and 1 : 11 on request*
***Adjustement means:** leakproof screw adjustement*
***Adjustable pressure range:** see page 02*
***Weight:** 1.800 Kg (std) - 3.750 Kg (ver.S)*
***Weight with anti-shock valve:** 2.450 Kg (std) - 5.150 Kg (ver.S)*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



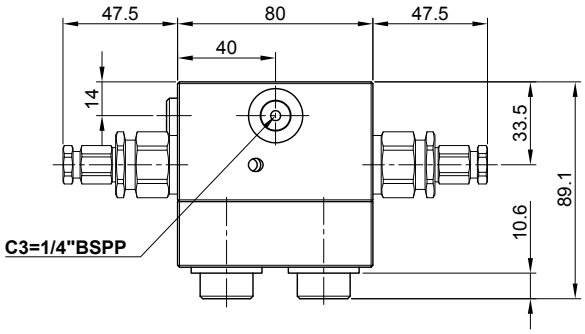
VPO-50-DV-S1-1/2-U-*-*-*-*

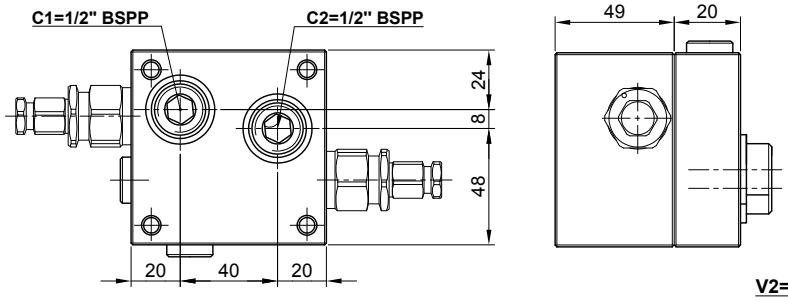
Q - 262/2

Valvola overcenter doppia incrociata, flangiabile su motori Samhydraulik serie "AG/BG/AR/BR/ARSR/MB", con sblocco freno e valvola antiurto opzionale

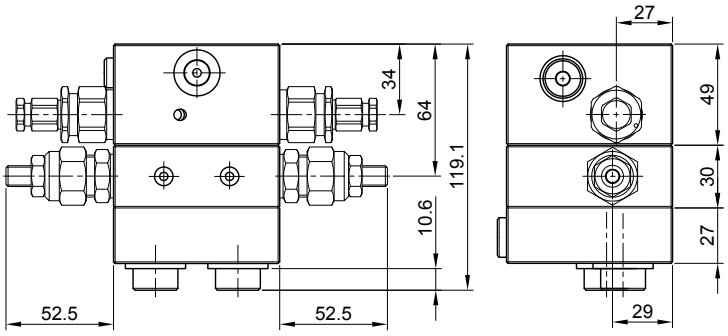
Dual overcenter valve, flangeable on Samhydraulik motors "AG/BG/AR/BR/ARSR/MB" series, brake release port, optional anti-shock valve

Rev. 03-2010/08





Versione con valvole antiurto -*Version with anti-shock valves*



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	50	DV	S1	1/2	U	S	20	B	VM05	*

* Mat. corpo: omettere se alluminio, S=acciaio
Body material: omit if aluminium, S=steel

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure range*

* Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard*
B = 1 : 8, C = 1 : 11

Valvola di max, omettere se non richiesta
Relief valve, Omit if not requested
Campi di taratura pressione disponibili
Available pressure range *
"05"= 5-50 bar – "10"= 30-100 bar
"20"= 50-220 bar – "35"= 80-350 bar

Guarnizioni – *Seals:*
V=Viton
Omettere se BUNA-N *
Omit if BUNA-N

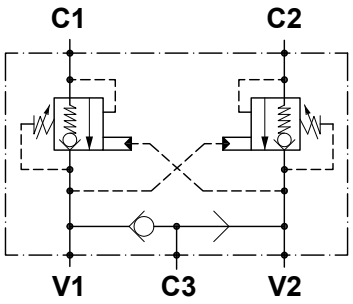
VPO-60-DV-D2(D3)-1/2-U-*-*-*-*

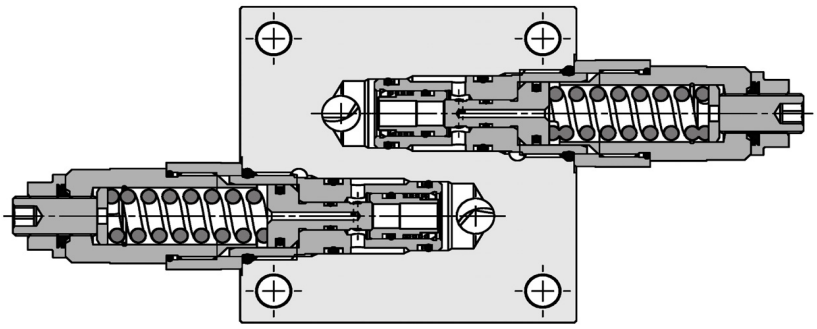
Q - 264/1

Valvola overcenter doppia incrociata, flangiabile su motori Danfoss serie "OMP/R/H-OMS", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Danfoss motors "OMP/R/H-OMS" series, brake release port, optional anti-shock valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: 60 l/min
Taratura max.: 350 bar
Pressione max: 250 bar
Rapporto di pilotaggio: 1 : 4 standard, a richiesta 1 : 8
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso senza valvola antiurto: 1,900 Kg
Peso con valvola: 2,650 Kg

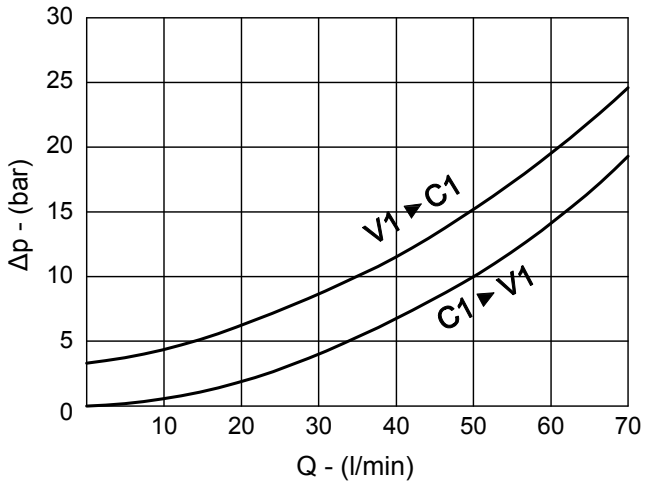
TECHNICAL SPECIFICATIONS

Materials: cartridges in steel zinc plated, internal parts in hardened steel.
Body is in high strenght alluminium alloy.
Rated flow: *up to 60 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Pilot ratio: *1 : 4 std, 1 : 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight without anti-shock valve: *1,900 Kg*
Weight with anti-shock valve: *2,650 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



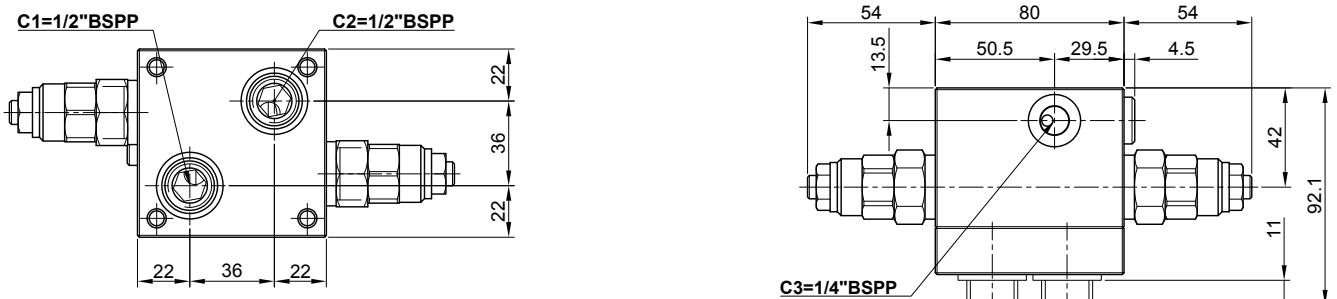
VPO-60-DV-D2(D3)-1/2-U-*-*-*-*

Q - 264/2

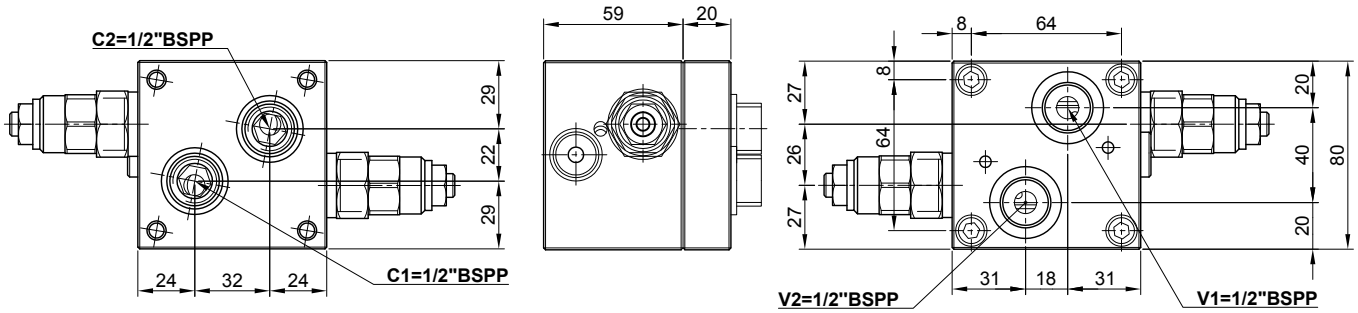
Valvola overcenter doppia incrociata, flangiabile su motori Danfoss serie "OMP/R/H-OMS", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Danfoss motors "OMP/R/H-OMS" series, brake release port, optional anti-shock valve

Rev. 01-2010/02

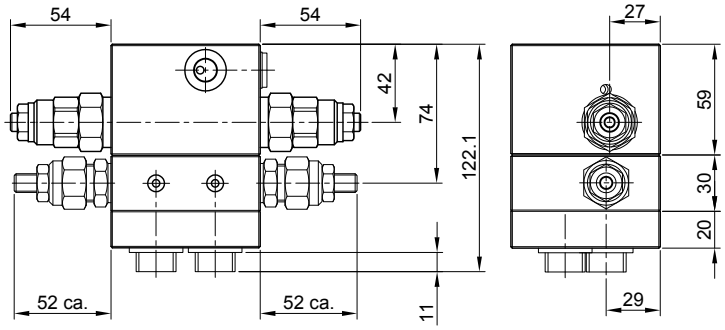


Versione D2 (Danfoss OMP/R/H)
Version D2 (Danfoss OMP/R/H)



Versione D3 (Danfoss OMS)
Version D3 (Danfoss OMS)

Versione con valvole anti-urto -*Version with anti-shock valves*



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	60	DV	D2	1/2	U	20	B	VM05	*

* D2 = per motori Danfoss OMP/R/H
D2 = for OMP/R/H Danfoss motors
D3 = per motori Danfoss OMS
D3 = for OMS Danfoss motors

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

* Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard*
B = 1 : 8

Valvola di max, omettere se non richiesta
Relief valve, Omit if not requested
Campi di taratura pressione disponibili
Available pressure range *
"05"= 5-50 bar – "10"= 30-100 bar
"20"= 50-220 bar – "35"= 80-350 bar

Guarnizioni – *Seals:*
V=Viton
Omettere se BUNA-N *
Omit if BUNA-N

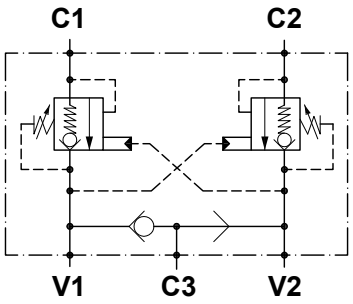
VPO-60-DV-O1-1/2-U-*-*-*-*

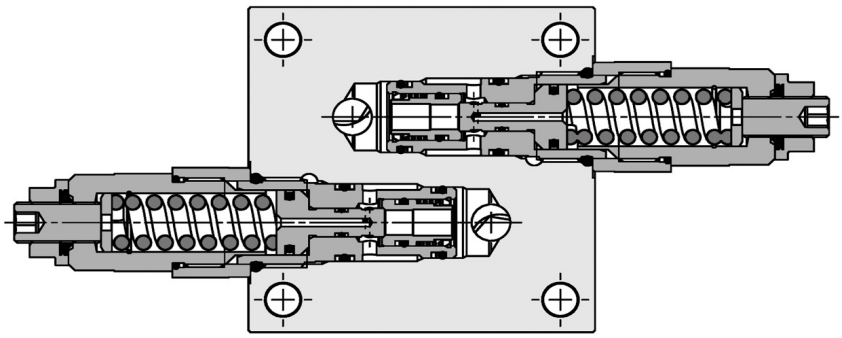
Q - 265/1

Valvola overcenter doppia incrociata, flangiabile su motori Oil-drive serie "MGL/MGT", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Oil-drive motors "MGL/MGT" series, brake release port, optional anti-shock valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: 60 l/min
Taratura max.: 350 bar
Pressione max: 250 bar
Rapporto di pilotaggio: 1 : 4 standard, a richiesta 1 : 8
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso senza valvola antiurto: 1,900 Kg
Peso con valvola: 2,650 Kg

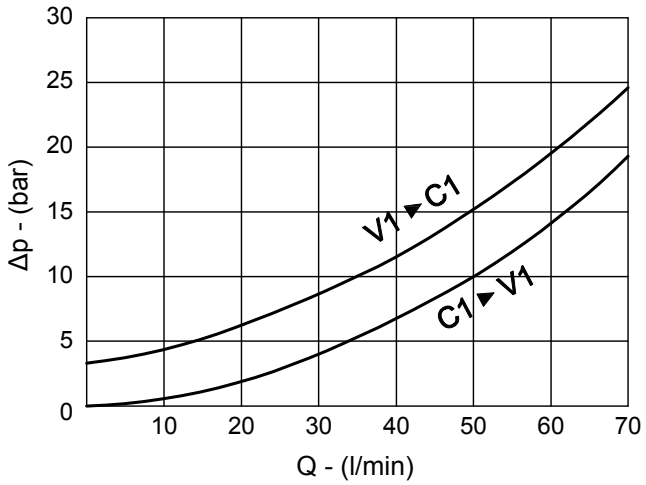
TECHNICAL SPECIFICATIONS

Materials: cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.
Rated flow: *up to 60 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Pilot ratio: *1 : 4 std, 1 : 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight without anti-shock valve: *1,900 Kg*
Weight with anti-shock valve: *2,650 Kg*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



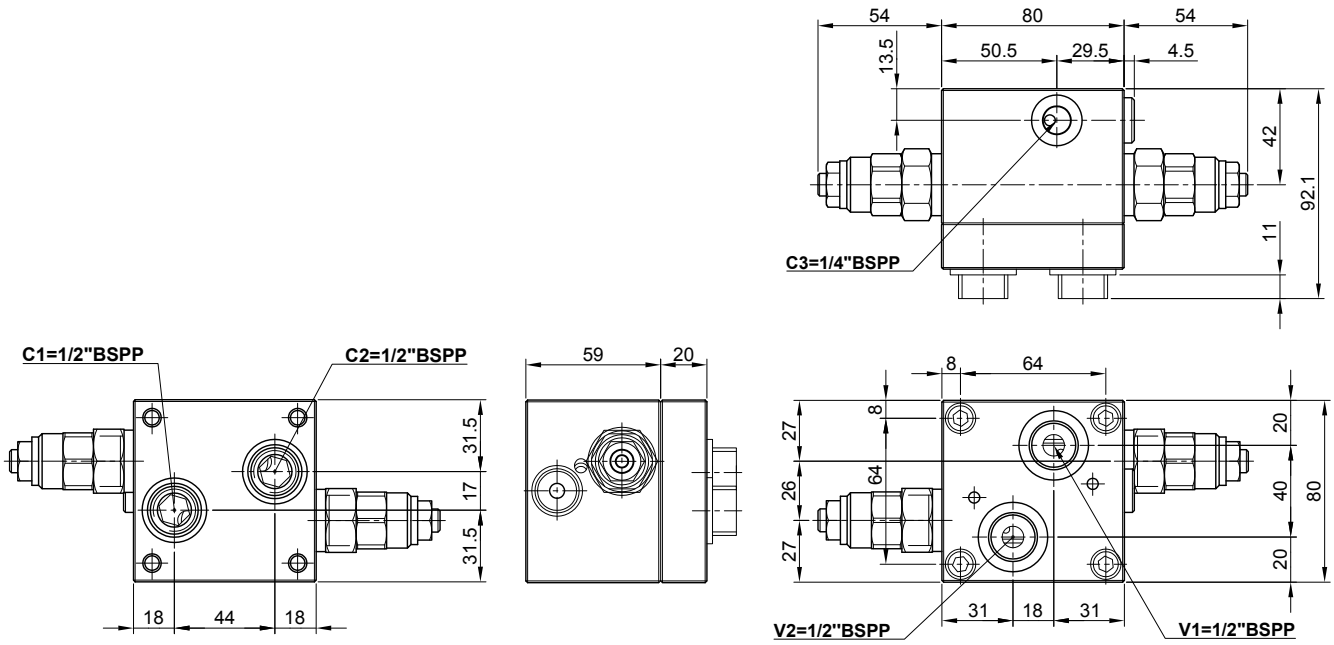
VPO-60-DV-O1-1/2-U-*-*-*-*

Q - 265/2

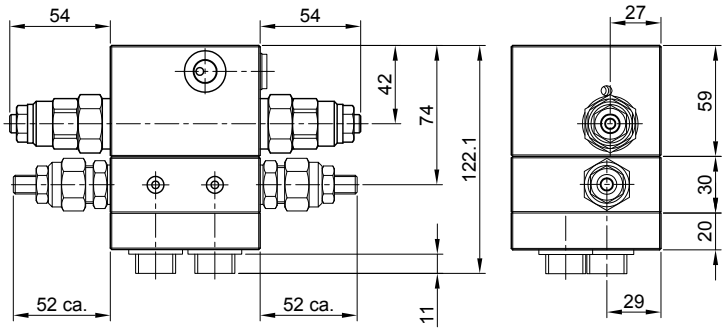
Valvola overcenter doppia incrociata, flangiabile su motori Oil-drive serie "MGL/MGT", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Oil-drive motors "MGL/MGT" series, brake release port, optional anti-shock valve

Rev. 01-2010/02



Versione con valvole anti-urto -*Version with anti-shock valves*



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	60	DV	O1	1/2	U	20	B	VM05	*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

* Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard*
B = 1 : 8

Valvola di max, omettere se non richiesta
Relief valve, Omit if not requested
Campi di taratura pressione disponibili
Available pressure range *
"05"= 5-50 bar – "10"= 30-100 bar
"20"= 50-220 bar – "35"= 80-350 bar

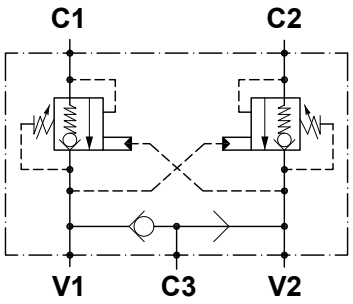
Guarnizioni – *Seals:*
V=Viton
Omettere se BUNA-N *
Omit if BUNA-N

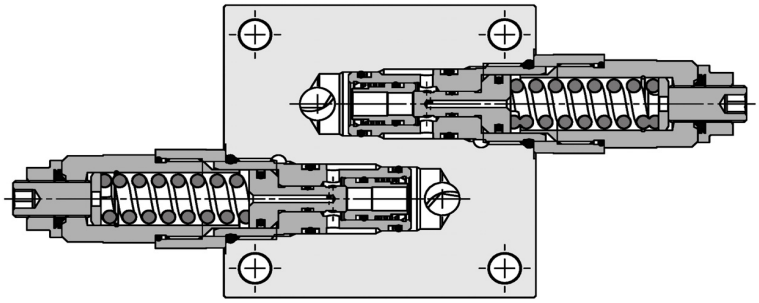
VPO-60-DV-S1-1/2-U-*-*-*-* Q - 266/1

Valvola overcenter doppia incrociata, flangiabile su motori Samhydraulik serie "AG/BG/AR/BR/ARSR/MB", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Samhydraulik motors "AG/BG/AR/BR/ARSR/MB" series, brake release port, optional anti-shock valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: 60 l/min
Taratura max.: 350 bar
Pressione max: 250 bar
Rapporto di pilotaggio: 1 : 4 standard, a richiesta 1 : 8
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso senza valvola antiurto: 1,900 Kg
Peso con valvola: 2,650 Kg

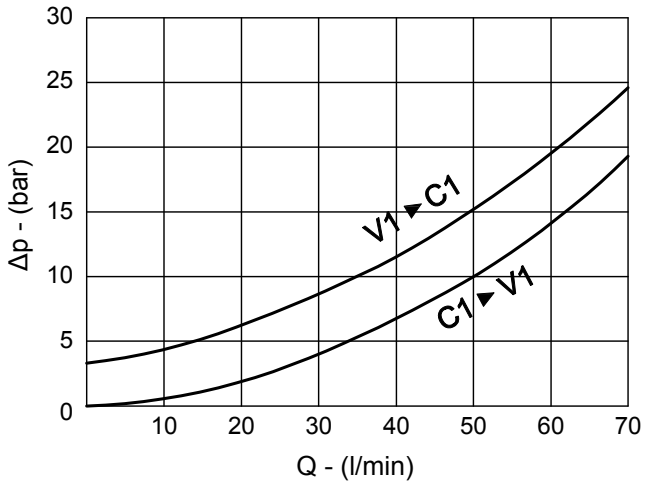
TECHNICAL SPECIFICATIONS

Materials: cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.
Rated flow: *up to 60 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Pilot ratio: *1 : 4 std, 1 : 8 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight without anti-shock valve: *1,900 Kg*
Weight with anti-shock valve: *2,650 Kg*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



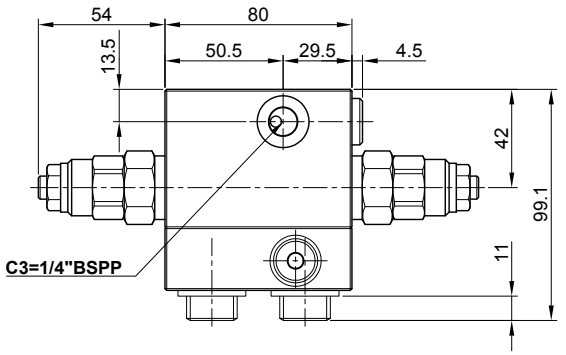
VPO-60-DV-S1-1/2-U-*-*-*-*

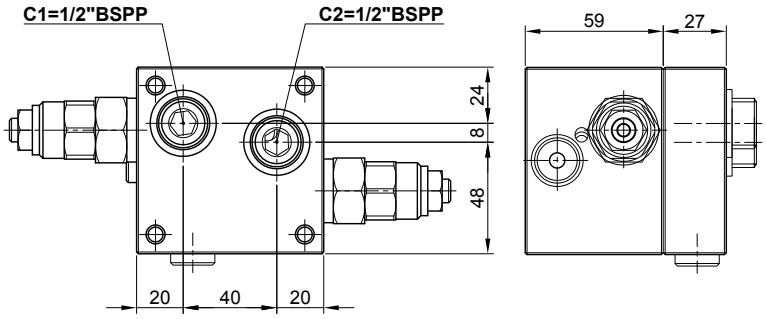
Q - 266/2

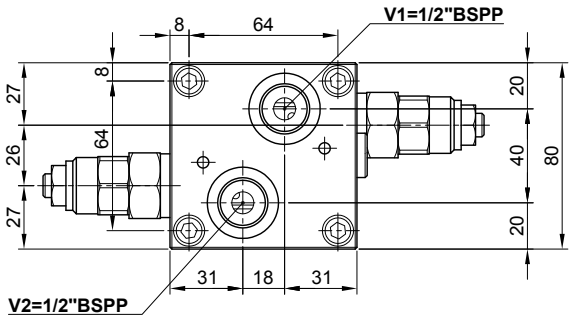
Valvola overcenter doppia incrociata, flangiabile su motori Samhydraulik serie "AG/BG/AR/BR/ARSR/MB", con sblocco freno e valvola antiurto opzionale

Dual overcenter valve, flangeable on Samhydraulik motors "AG/BG/AR/BR/ARSR/MB" series, brake release port, optional anti-shock valve

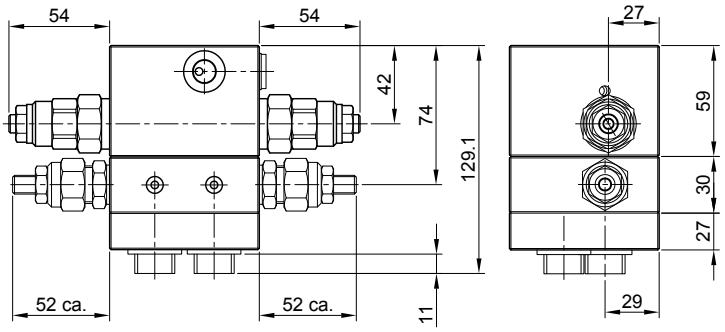
Rev. 01-2010/02







Versione con valvole anti-urto -*Version with anti-shock valves*



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4	60 - 220	50	170
20	1 : 8	60 - 220	50	170
35	1 : 4	100 - 350	110	280
35	1 : 8	100 - 350	110	280

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	60	DV	S1	1/2	U	20	B	VM05	*

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

* Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard*
B = 1 : 8

Valvola di max, omettere se non richiesta
Relief valve, Omit if not requested
Campi di taratura pressione disponibili
Available pressure range *
"05"= 5-50 bar – "10"= 30-100 bar
"20"= 50-220 bar – "35"= 80-350 bar

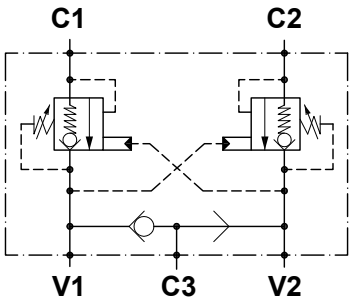
Guarnizioni – *Seals:*
V=Viton
Omettere se BUNA-N *
Omit if BUNA-N

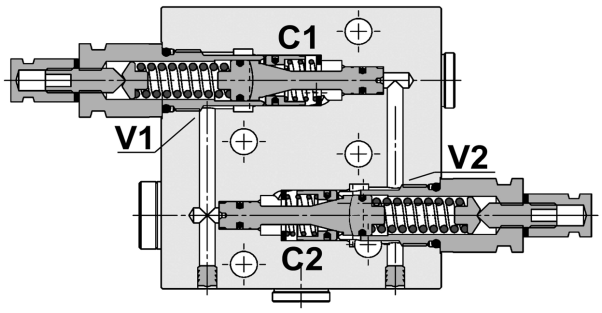
VPO-50-DF-D2-1/2-U-*-*

Q - 315/1

Valvola overcenter doppia, flangiabile su motori Danfoss serie "OMP/R/H", con sblocco freno
Dual overcenter valve, flangeable on Danfoss motors "OMP/R/H" series, brake release port

Rev. 03-2010/08





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: fino a 50 l/min
Taratura max.: 350 bar
Pressione max: 250 bar
Rapporto di pilotaggio: 1 : 4.25 standard, a richiesta 1 : 8, 1 : 11
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 1,500 Kg

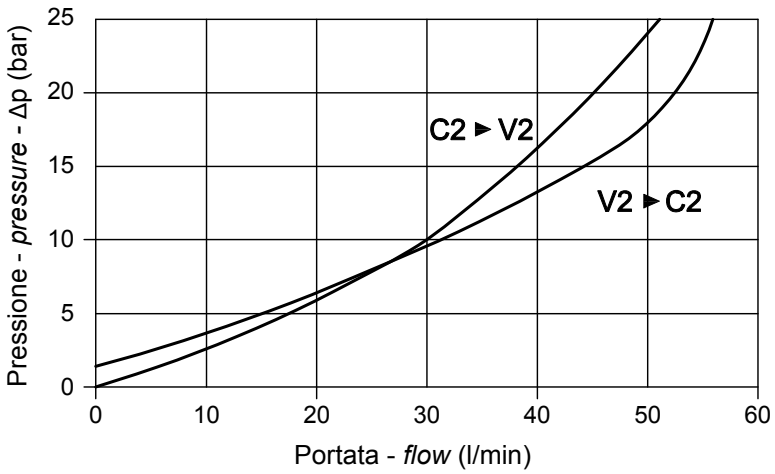
TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *up to 50 l/min*
Max. setting: *350 bar*
Max. pressure: *250 bar*
Pilot ratio: *1 : 4.25 std, 1 : 8 and 1 : 11 on request*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,500 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



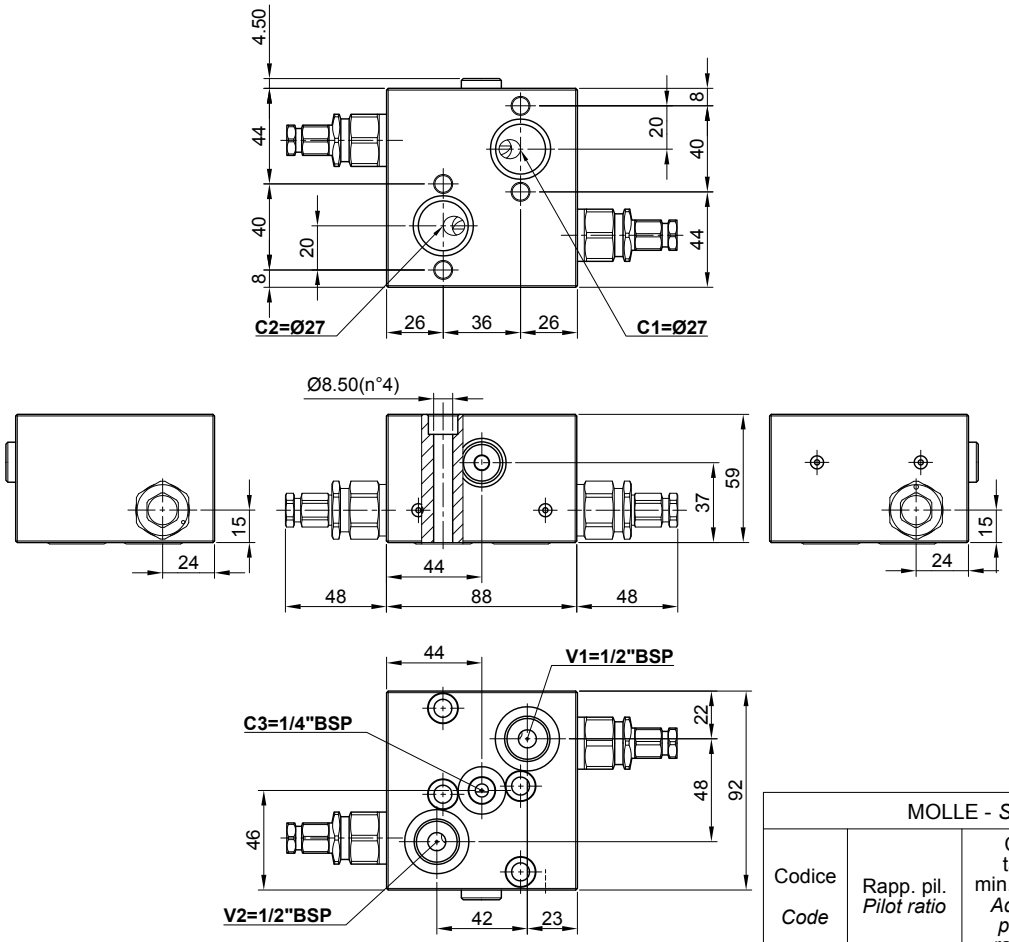
VPO-50-DF-D2-1/2-U-*-*

Q - 315/2

Valvola overcenter doppia, flangiabile su motori Danfoss serie "OMP/R/H", con sblocco freno

Dual overcenter valve, flangeable on Danfoss motors "OMP/R/H" series, brake release port

Rev. 03-2010/08



MOLLE - *SPRINGS*				*
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	1 : 4.25	60 - 210	70	170
	1 : 8	60 - 220	50	
	1 : 11	60 - 250	90	
35	1 : 4.25	80 - 350	120	280
	1 : 8	100 - 350	85	
	1 : 11	80 - 350	150	

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPO	50	DF	D2	1/2	U	20	B

* "20" / "35":
Campi di taratura pressione - *Adjustable pressure*

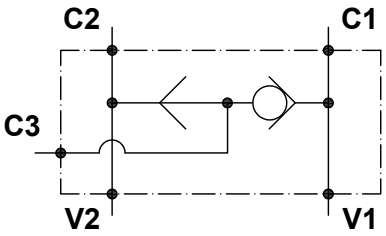
Rapporto di pilotaggio – *Pilot ratio*
Omettere se standard – *Omit if standard* *
B = 1 : 8, C = 1 : 11

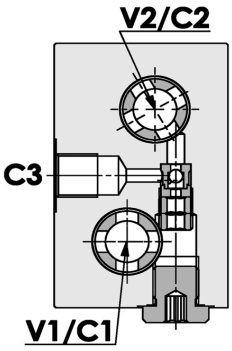
VPT-DV-S1-1/2-*

Q - 380/1

Valvola selettrice, flangiabile su motori Samhydraulik serie "AG/BG/AR/BR/ARSR/MB"
Shuttle valve, flangeable on Samhydraulik motors "AG/BG/AR/BR/ARSR/MB" series

Rev. 02-2010/05





SPECIFICHE TECNICHE

Materiali: Corpo in lega di alluminio, parti interne in acciaio trattato termicamente.
Portata max.: 60 l/min
Pressione max.: 250 bar
Peso: 0,478 Kg

TECHNICAL SPECIFICATIONS

Materials: *body is in high strenght alluminium alloy, internal parts in hardened steel.*
Rated flow: *60 l/min*
Max. pressure: *250 bar*
Weight: *0,478 Kg*

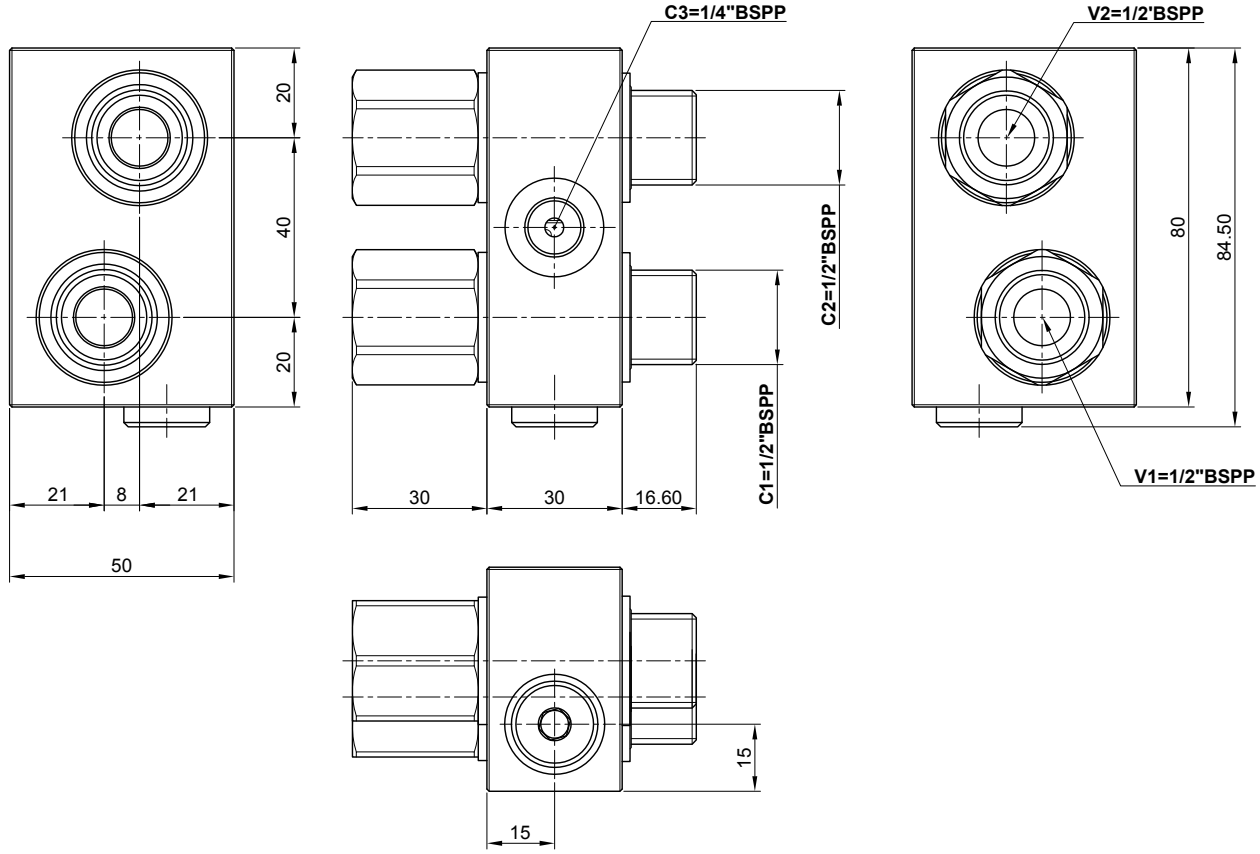
VPT-DV-S1-1/2-*

Q - 380/2

Valvola selettrice, flangiabile su motori Samhydraulik serie "AG/BG/AR/BR/ARSR/MB"

Shuttle valve, flangeable on Samhydraulik motors "AG/BG/AR/BR/ARSR/MB" series

Rev. 02-2010/05



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P T	D V	S 1	1 / 2	*

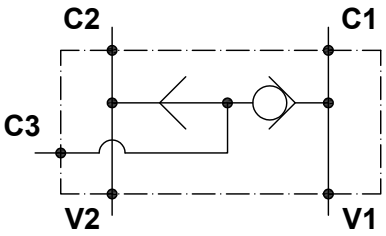
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N *Omit if BUNA-N*

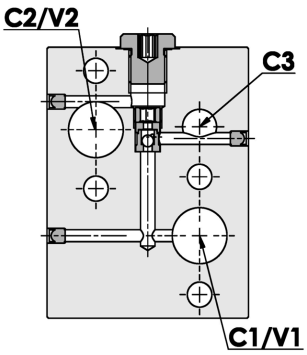
VPT-DF-D2-1/2-*

Q - 392/1

Valvola selettrice, flangiabile su motori Danfoss serie "OMP/OMR/OMH"
Shuttle valve, flangeable on Danfoss motors "OMP/OMR/OMH" series

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: Corpo in lega di alluminio, parti interne in acciaio trattato termicamente.
Portata max.: 60 l/min
Taratura max.: 250 bar
Peso: 0,514 Kg

TECHNICAL SPECIFICATIONS

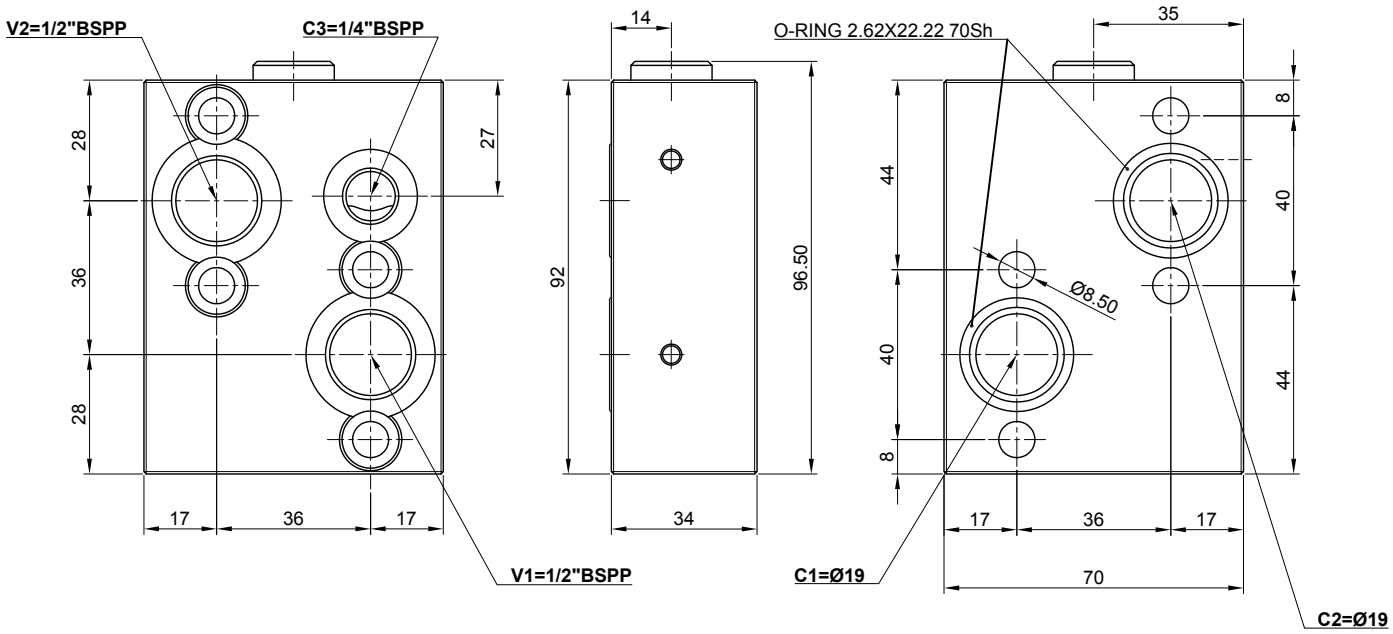
Materials: *body is in high strenght alluminium alloy, internal parts in hardened steel.*
Rated flow: *60 l/min*
Max. setting: *250 bar*
Weight: *0,514 Kg*

VPT-DF-D2-1/2-*

Q - 392/2

Valvola selettrice, flangiabile su motori Danfoss serie "OMP/OMR/OMH"
Shuttle valve, flangeable on Danfoss motors "OMP/OMR/OMH" series

Rev. 01-2010/02



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P T	D F	D 2	1 / 2	*

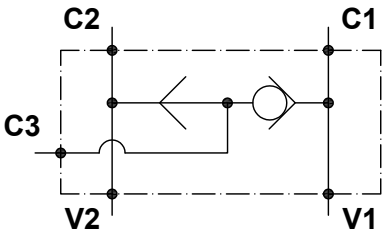
Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N *Omit if BUNA-N*

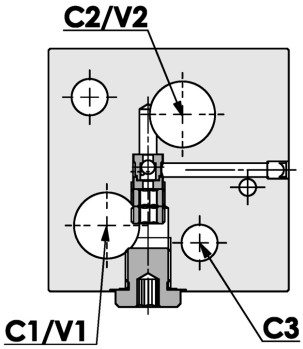
VPT-DF-D3-1/2-*

Q - 393/1

Valvola selettrice, flangiabile su motori Danfoss serie "OMS"
Shuttle valve, flangeable on Danfoss motors "OMS" series

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: Corpo in lega di alluminio, parti interne in acciaio trattato termicamente.
Portata max.: 60 l/min
Taratura max.: 250 bar
Peso: 0,370 Kg

TECHNICAL SPECIFICATIONS

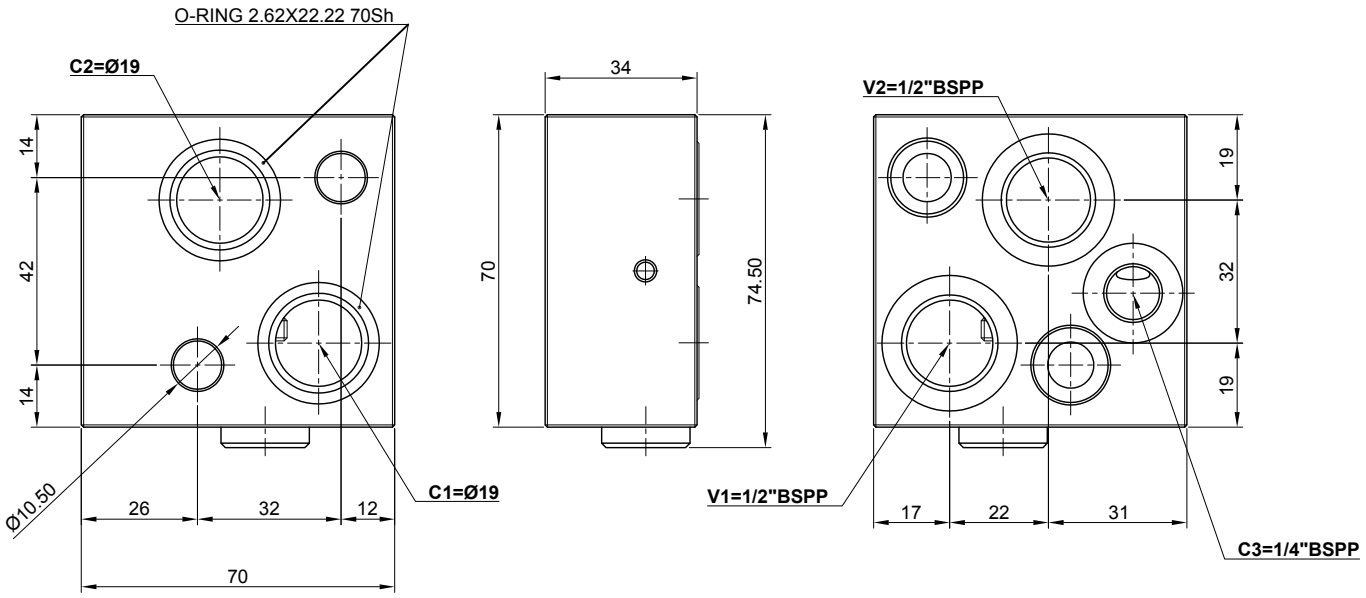
Materials: *body is in high strenght alluminium alloy, internal parts in hardened steel.*
Rated flow: *60 l/min*
Max. setting: *250 bar*
Weight: *0,370 Kg*

VPT-DF-D3-1/2-*

Q - 393/2

Valvola selettrice, flangiabile su motori Danfoss serie "OMS"
Shuttle valve, flangeable on Danfoss motors "OMS" series

Rev. 01-2010/02



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P T	D F	D 3	1 / 2	*

Guarnizioni – *Seals:*
V=Viton *
Omettere se BUNA-N *Omit if BUNA-N*

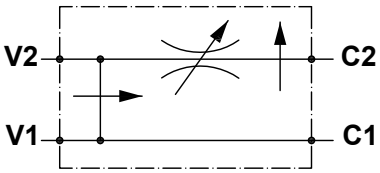
VPRF-50-DV-E6-R-1/2-*

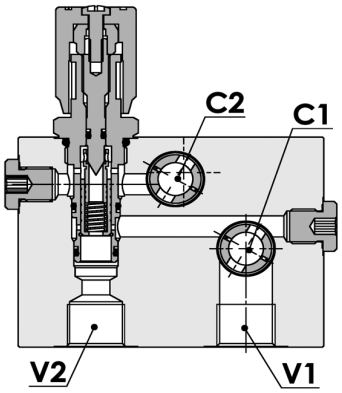
Q - 472/1

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Char-Lynn 2000

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Char-Lynn 2000 motors

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.

Portata max.:

- 50 l/min con 30 l/min su ramo regolato “C2”

Pressione max: 250 bar (corpo in alluminio)

Pressione di standby: 12 bar

Peso: 1,250 Kg

TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*

Rated flow:

- 50 l/min with 30 l/min in “C2” port

Max. pressure: *250 bar (aluminium body)*

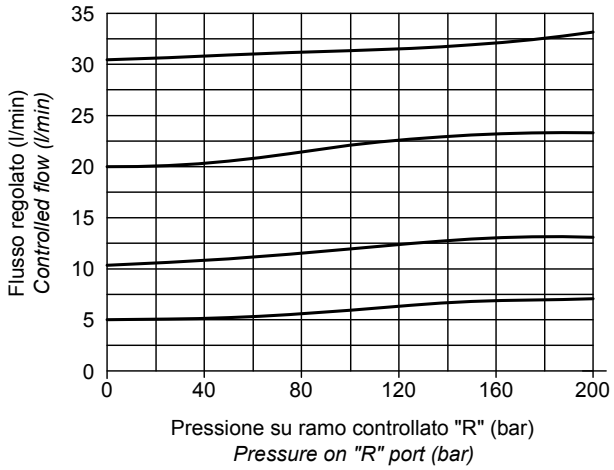
Standby pressure: *12 bar*

Weight: *1,250 Kg*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



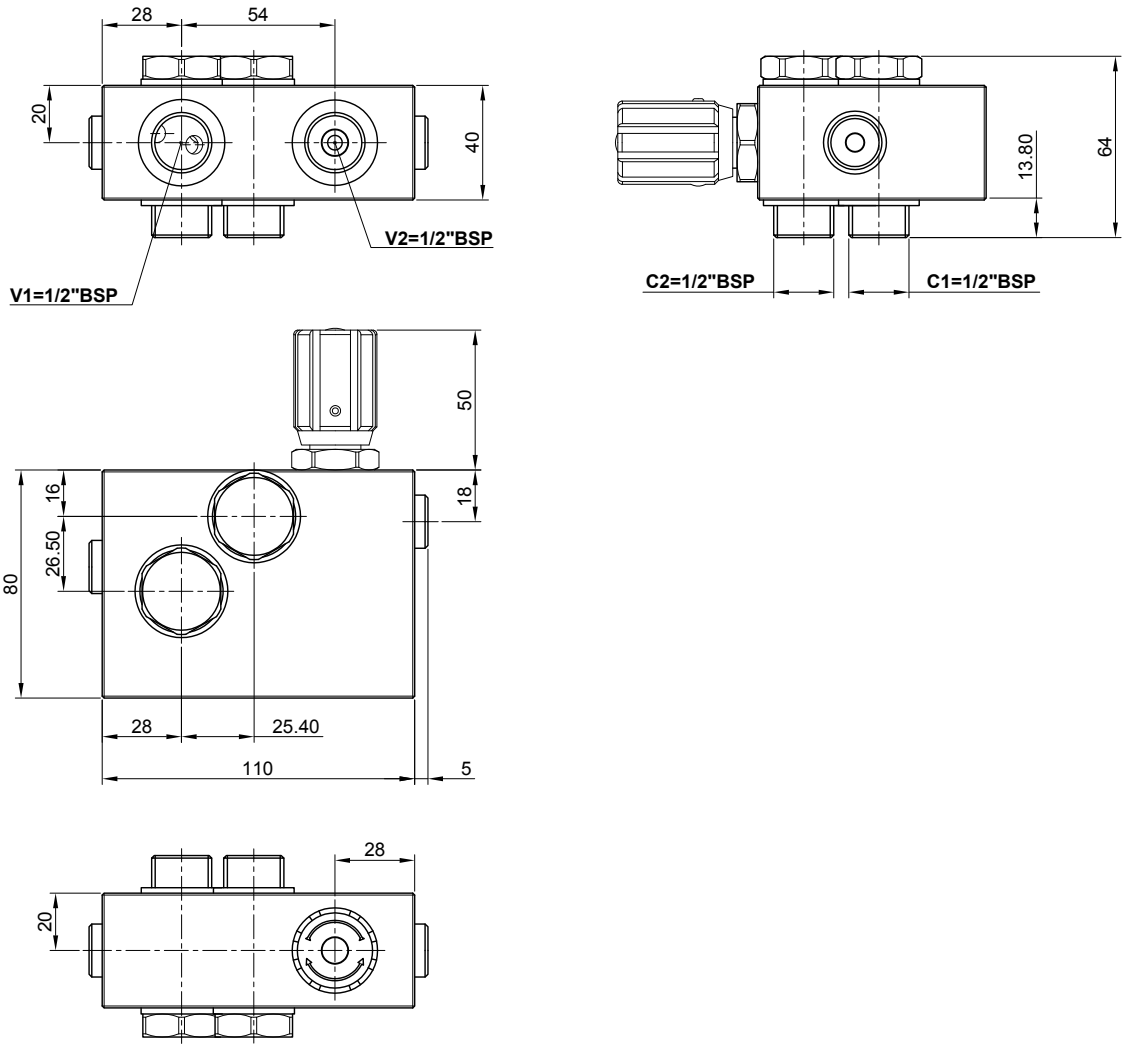
VPRF-50-DV-E6-R-1/2-*

Q - 472/2

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Char-Lynn 2000

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Char-Lynn 2000 motors

Rev. 01-2010/02



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P R F	5 0	D V	E 6	R	1 / 2	S

Materiale corpo – *body material*

Omettere se alluminio – *Omit if aluminum* *

S = acciaio - *steel*

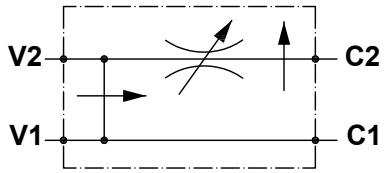
VPRF-90-DV-D2-R-1/2-*

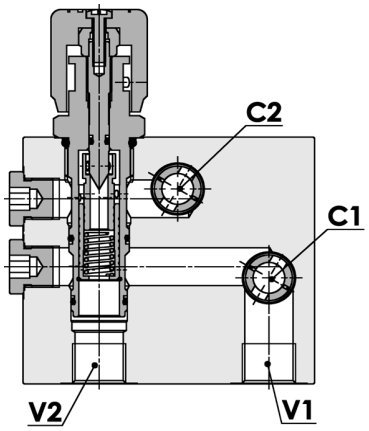
Q - 480/1

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Danfoss serie "OMP/R/H"

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Danfoss motors "OMP/R/H" series

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.

Portata max.:

- 90 l/min con 60 l/min su ramo regolato "C2"

Pressione max: 250 bar (corpo in alluminio)

Pressione di standby: 10 bar

Peso: 1,600 Kg

TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*

Rated flow:

- 90 l/min with 60 l/min in "C2" port

Max. pressure: *250 bar (aluminium body)*

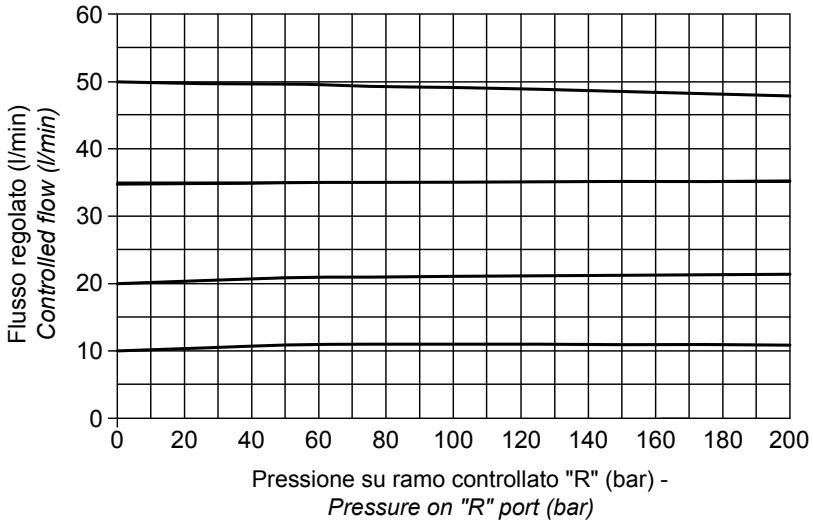
Standby pressure: *10 bar*

Weight: *1,600 Kg*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



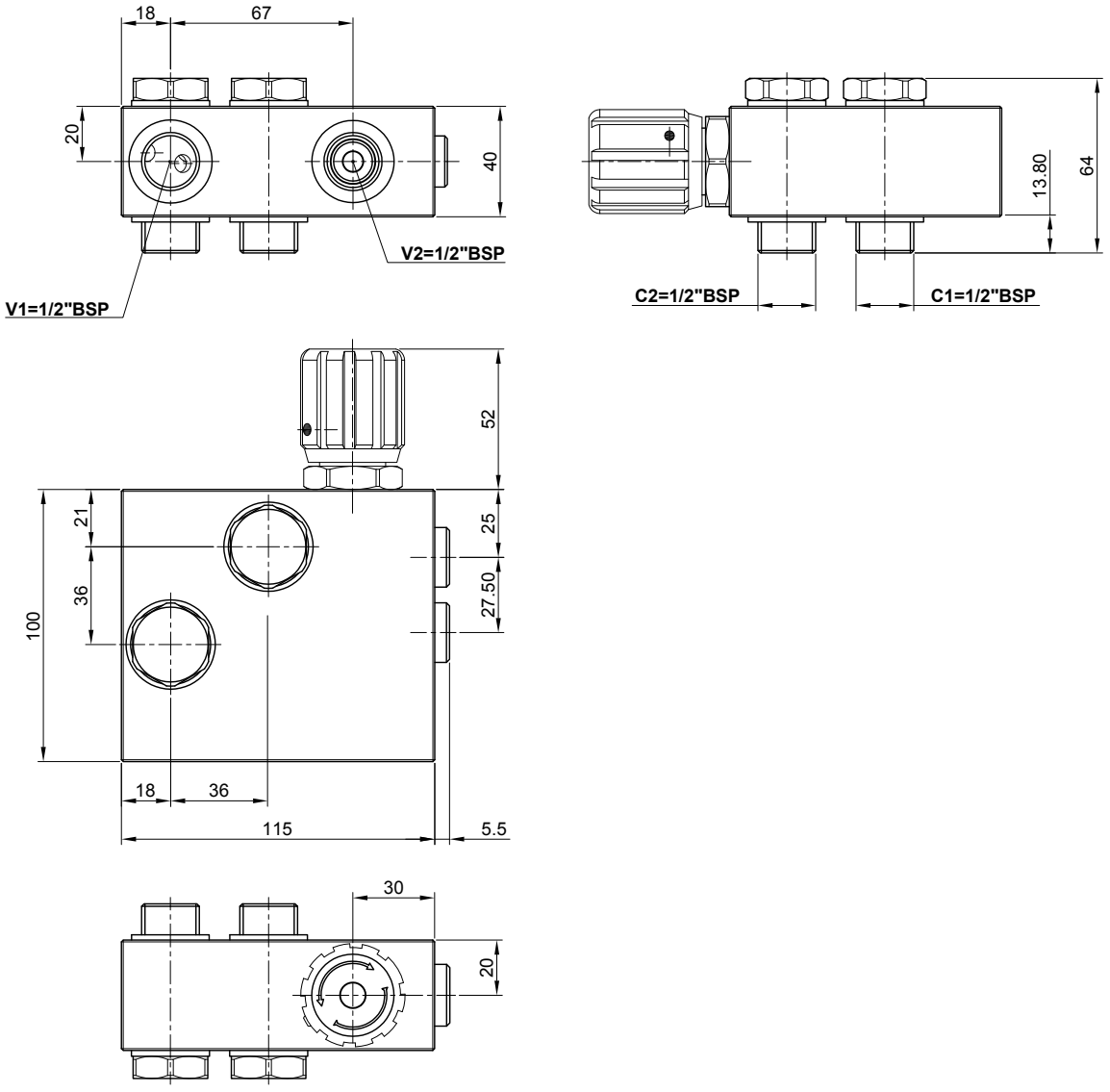
VPRF-90-DV-D2-R-1/2-*

Q - 480/2

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Danfoss serie "OMP/R/H"

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Danfoss motors "OMP/R/H" series

Rev. 01-2010/02



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P R F	9 0	D V	D 2	R	1 / 2	S

Materiale corpo – *body material*

Omettere se alluminio – *Omit if aluminum* *

S = acciaio - *steel*

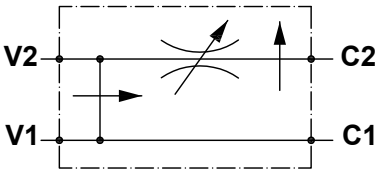
VPRF-90-DV-D3-R-1/2-*

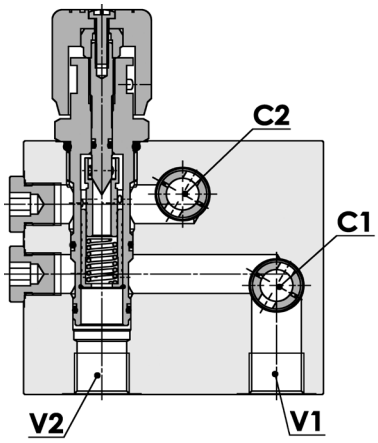
Q - 481/1

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Danfoss serie “OMS”

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Danfoss motors “OMS” series

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.

Portata max.:

- 90 l/min con 60 l/min su ramo regolato “C2”

Pressione max: 250 bar (corpo in alluminio)

Pressione di standby: 10 bar

Peso: 1,500 Kg

TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*

Rated flow:

- 90 l/min with 60 l/min in “C2” port

Max. pressure: *250 bar (aluminium body)*

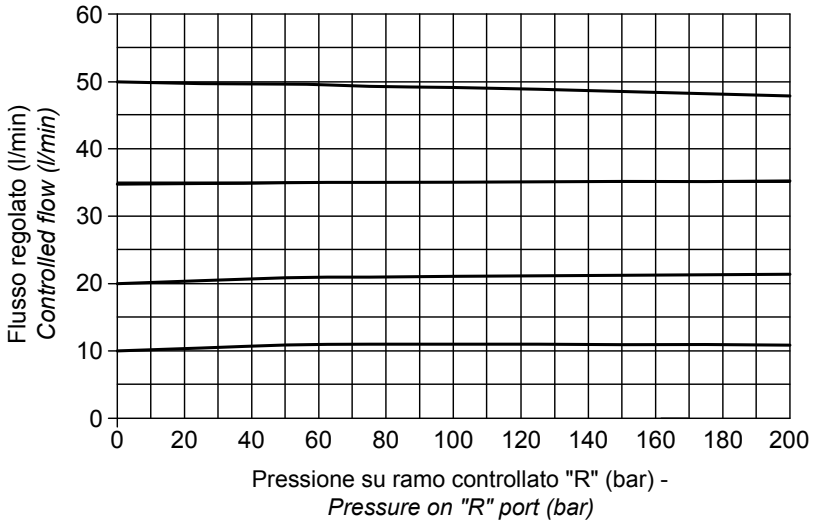
Standby pressure: *10 bar*

Weight: *1,500 Kg*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



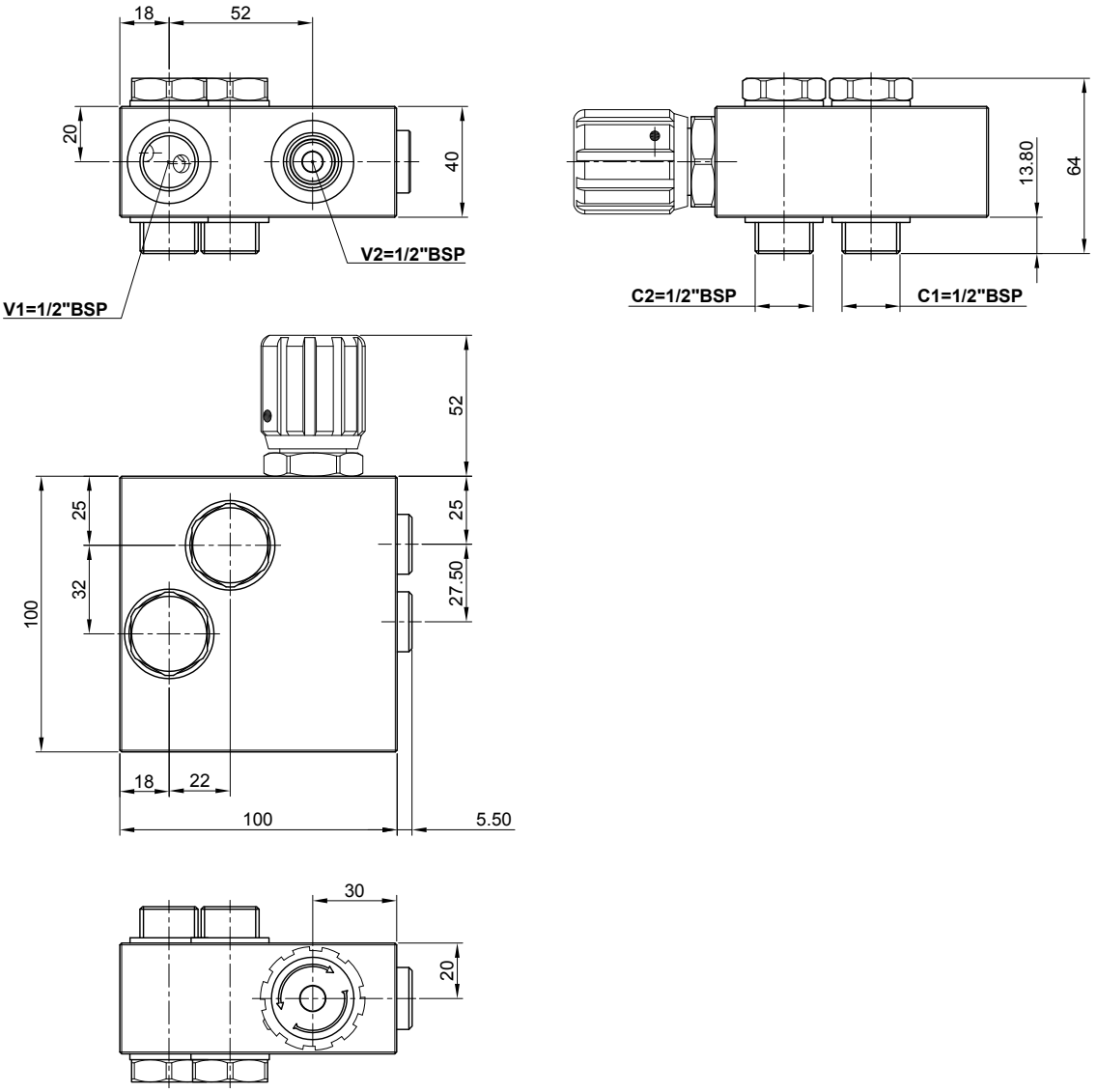
VPRF-90-DV-D3-R-1/2-*

Q - 481/2

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Danfoss serie "OMS"

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Danfoss motors "OMS" series

Rev. 01-2010/02



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPRF	90	DV	D3	R	1/2	S

Materiale corpo – *body material*

Omettere se alluminio – *Omit if aluminum* *

S = acciaio - *steel*

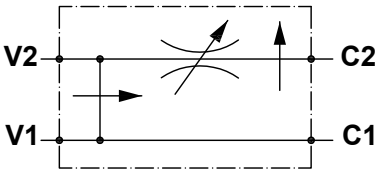
VPRF-90-DV-E6-R-1/2-*

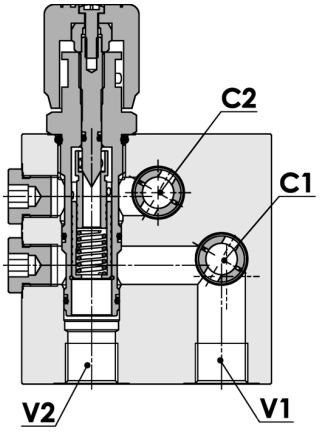
Q - 484/1

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Char-Lynn 2000

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Char-Lynn 2000 motors

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.

Portata max.:

- 90 l/min con 60 l/min su ramo regolato “C2”

Pressione max: 250 bar (corpo in alluminio)

Pressione di standby: 10 bar

Peso: 1,500 Kg

TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*

Rated flow:

- 90 l/min with 60 l/min in “C2” port

Max. pressure: *250 bar (aluminium body)*

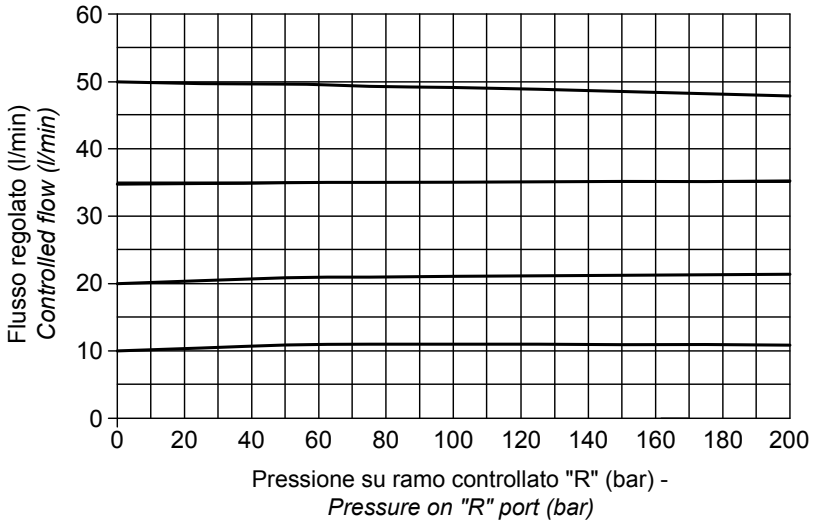
Standby pressure: *10 bar*

Weight: *1,500 Kg*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



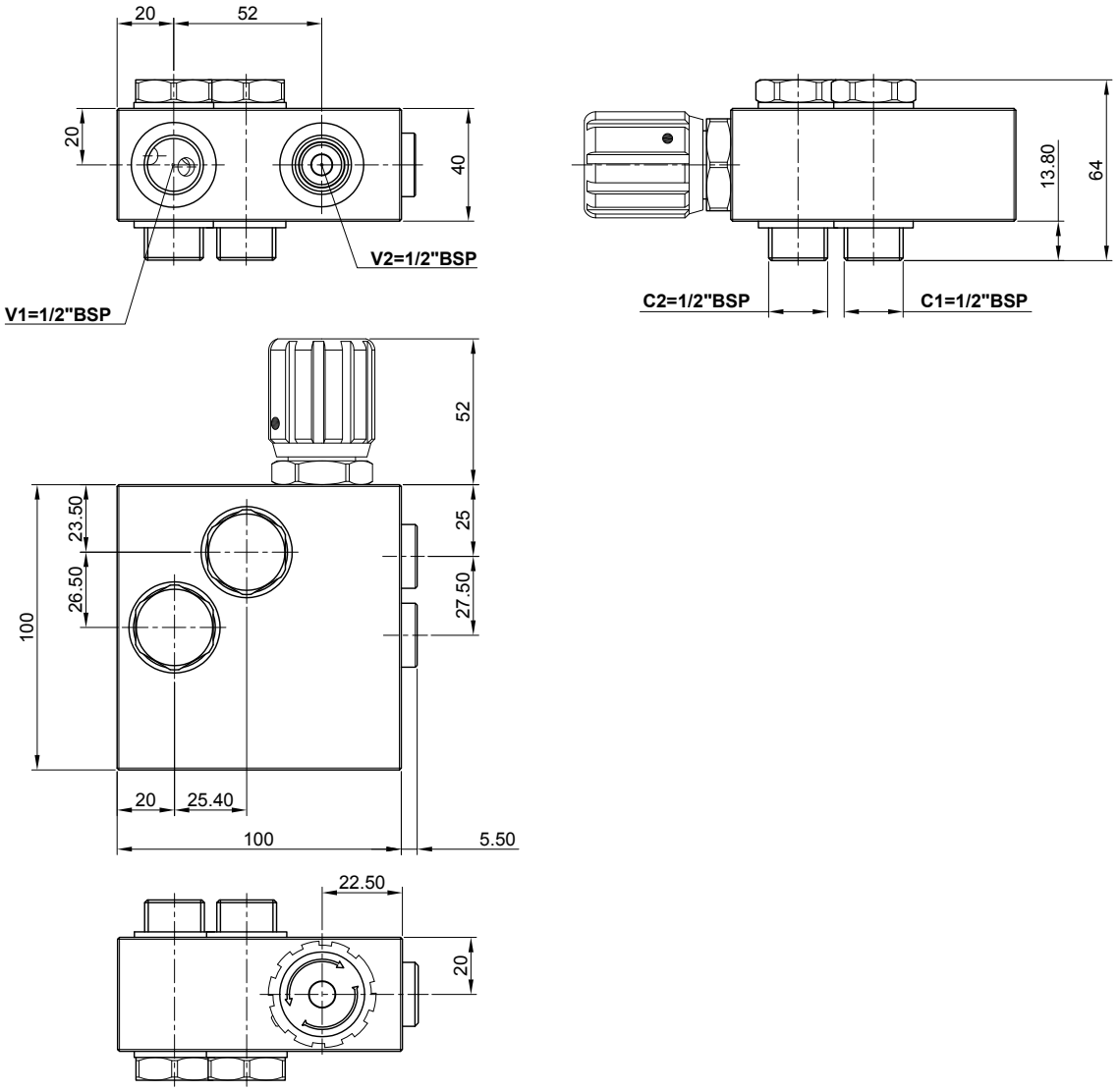
VPRF-90-DV-E6-R-1/2-*

Q - 484/2

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Char-Lynn 2000

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Char-Lynn 2000 motors

Rev. 01-2010/02



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P R F	9 0	D V	E 6	R	1 / 2	S

Materiale corpo – *body material*

Omettere se alluminio – *Omit if aluminum* *

S = acciaio - *steel*

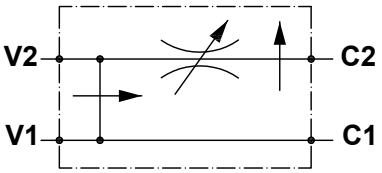
VPRF-90-DF-D4-R-3/4-*

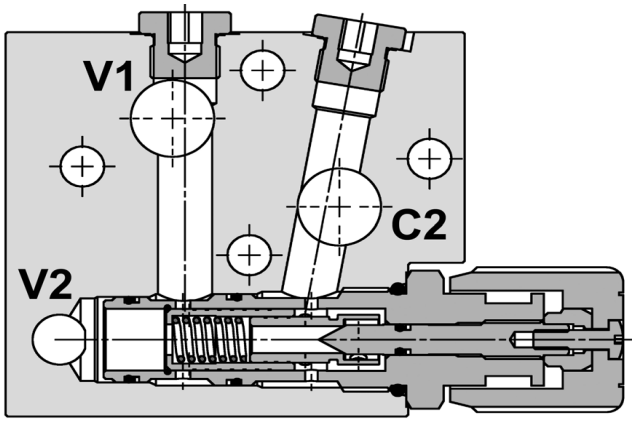
Q - 530/1

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Danfoss OMT

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Danfoss OMT motors

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccie in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.

Portata max.:

- 90 l/min con 60 l/min su ramo regolato “C2”

Pressione max: 250 bar (corpo in alluminio)

Pressione di standby: 10 bar

Peso: 1,500 Kg

TECHNICAL SPECIFICATIONS

Materials: *cartridges in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*

Rated flow:

- 90 l/min with 60 l/min in “C2” port

Max. pressure: *250 bar (aluminium body)*

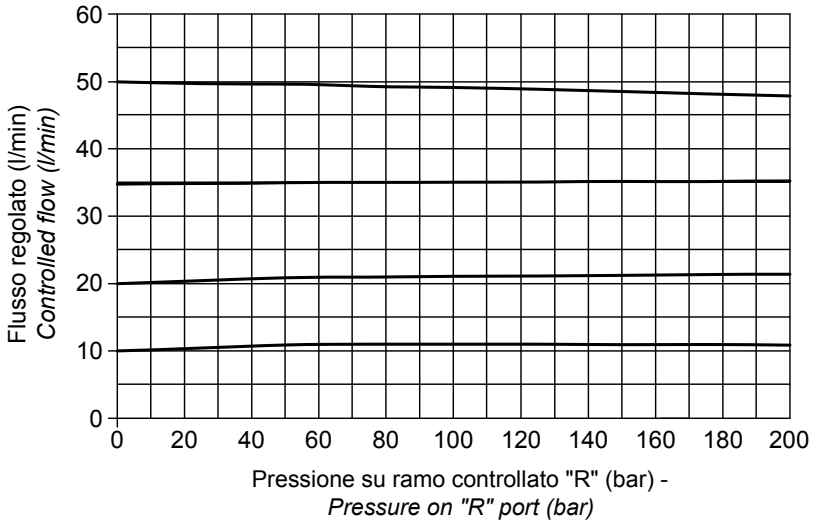
Standby pressure: *10 bar*

Weight: *1,500 Kg*

DIAGRAMMA COMPENSAZIONE - *COMPENSATION CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPRF-90-DF-D4-R-3/4-*

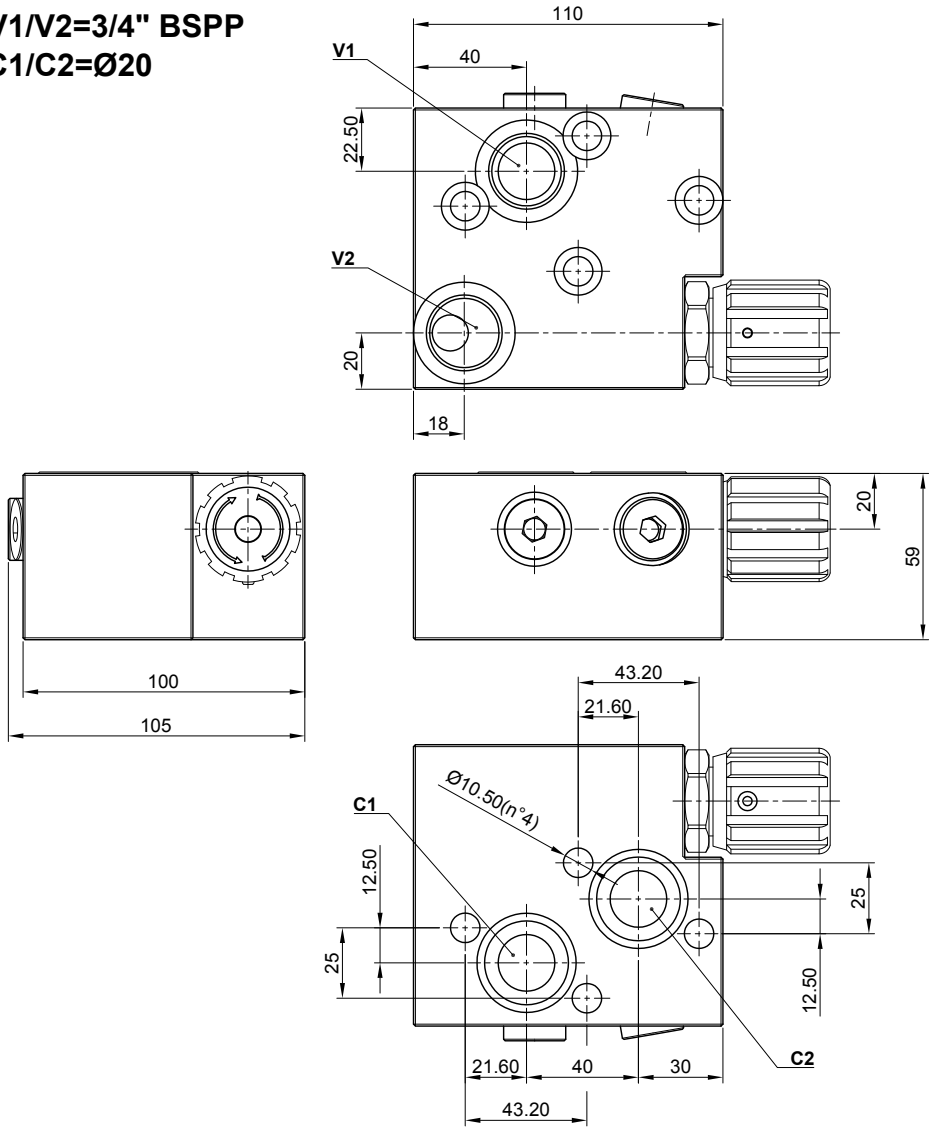
Q - 530/2

Regolatore di flusso a 3 vie compensato, con eccedenza a scarico, flangiabile su motori Danfoss OMT

Three way, pressure compensated flow regulator, with exceeding flow to tank, flangeable on Danfoss OMT motors

Rev. 01-2010/02

V1/V2=3/4" BSPP
C1/C2=Ø20



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P R F	9 0	D F	D 4	R	3 / 4	S

Materiale corpo – *body material*
Omettere se alluminio – *Omit if aluminum* *
S = acciaio - *steel*

SEZIONE R
Valvole per escavatori idraulici

SECTION R
Hydraulic excavator Valves

VALVOLE OVERCENTER PER ESCAVATORI
Sono valvole overcenter specifiche per il controllo della discesa e sospensione dei bracci degli escavatori.
Sono disponibili in 2 soluzioni di montaggio: in linea e a flangia.

BOOM LOWERING VALVES FOR EXCAVATOR
These valves are overcenter specific for the control of holding and lowering of excavator booms.
2 solutions of assembly are available: in line and gasket mounted.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
R 010	VPEXC-35-S-3/8-L-DX	R 031	VPEXC-150-S-3/4-L-SX
R 011	VPEXC-35-S-3/8-L-SX	R 130	VPEXC-250-S-3/4-1F-SAE3000
R 022	VPEXC-90-S-1/2-L-DX	R 130	VPEXC-250-S-3/4-1F-SAE6000
R 023	VPEXC-90-S-1/2-L-SX	R 145	VPEXC-400-S-1-1F-SAE6000
R 030	VPEXC-150-S-3/4-L-DX	R 150	VPEXC-500-S-1 1/4-1F-SAE6000

REGOLATORI DI PORTATA PER ESCAVATORI
Sono valvole progettate per permettere l'installazione di martelli idraulici ed altri attrezzi a comando idraulico su escavatori.
Disponibili nella versione in linea.

FLOW REGULATOR FOR EXCAVATOR
These valves are designed to allow the installation of hydraulic hammer or other hydraulic control tools on exacavators.
In line version is available.

PAGINA / *PAGE*	CODICE / *CODE*
R 250	VPEXCH-EV*-3/4-S

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

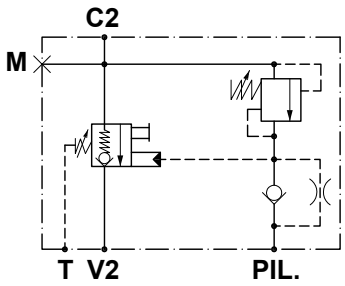
Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

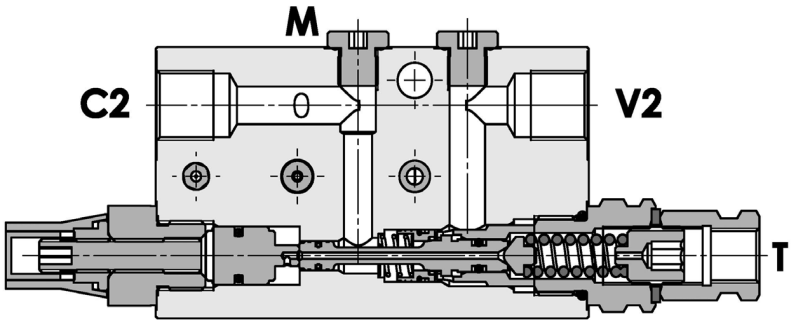
Meta Hydraulic *reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

VPEXC-35-S-3/8"-L-DX-05-50 R - 010/1

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione destra
Flow check and metering valve for booms, line mounted, right version

Rev. 03-2010/08





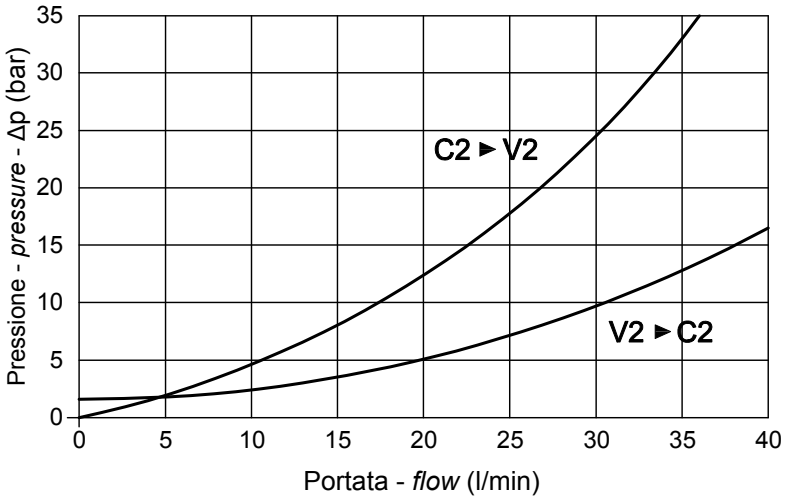
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Pressione max.: 420 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1.950 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *420 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *1.950 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



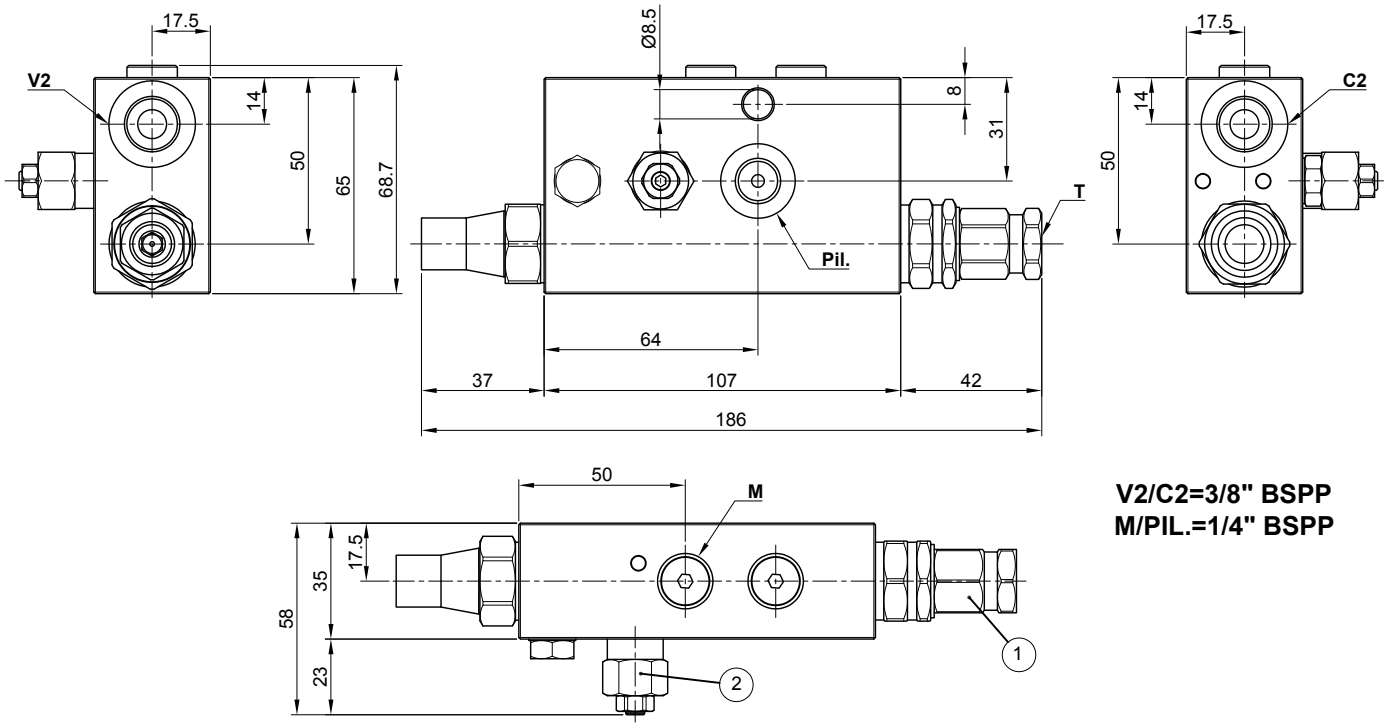
VPEXC-35-S-3/8"-L-DX-05-50

R - 010/2

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione destra

Flow check and metering valve for booms, line mounted, right version

Rev. 03-2010/08



V2/C2=3/8" BSPP
M/PIL.=1/4" BSPP

MOLLA VALVOLA (1) - *SPRING VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
05	4 - 15.5	4	7.5

MOLLA VALVOLA (2) - *SPRING VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
50	250 - 500	198	350

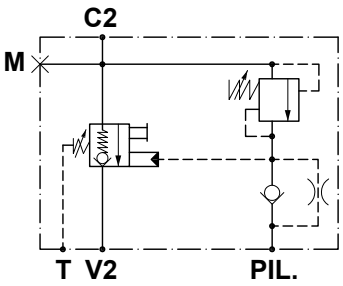
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

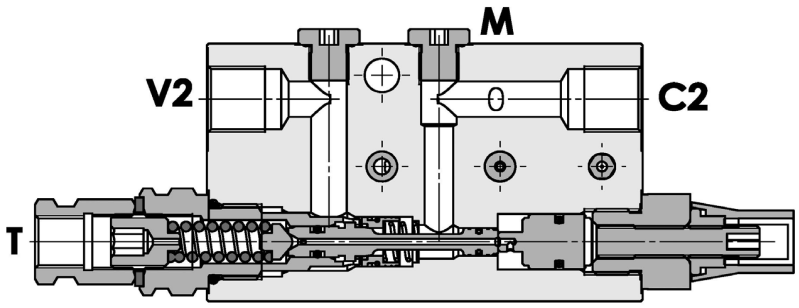
V P E X C	3 5	S	3 / 8	L	D X	0 5	5 0

VPEXC-35-S-3/8"-L-SX-05-50 R - 011/1

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione sinistra
Flow check and metering valve for booms, line mounted, left version

Rev. 03-2010/08





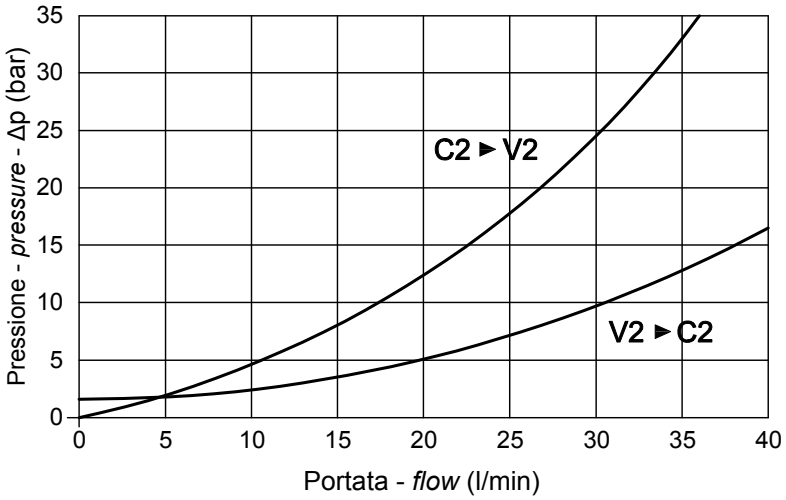
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 35 l/min
Pressione max.: 420 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 1.950 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 35 l/min*
Max. setting: *420 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *1.950 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



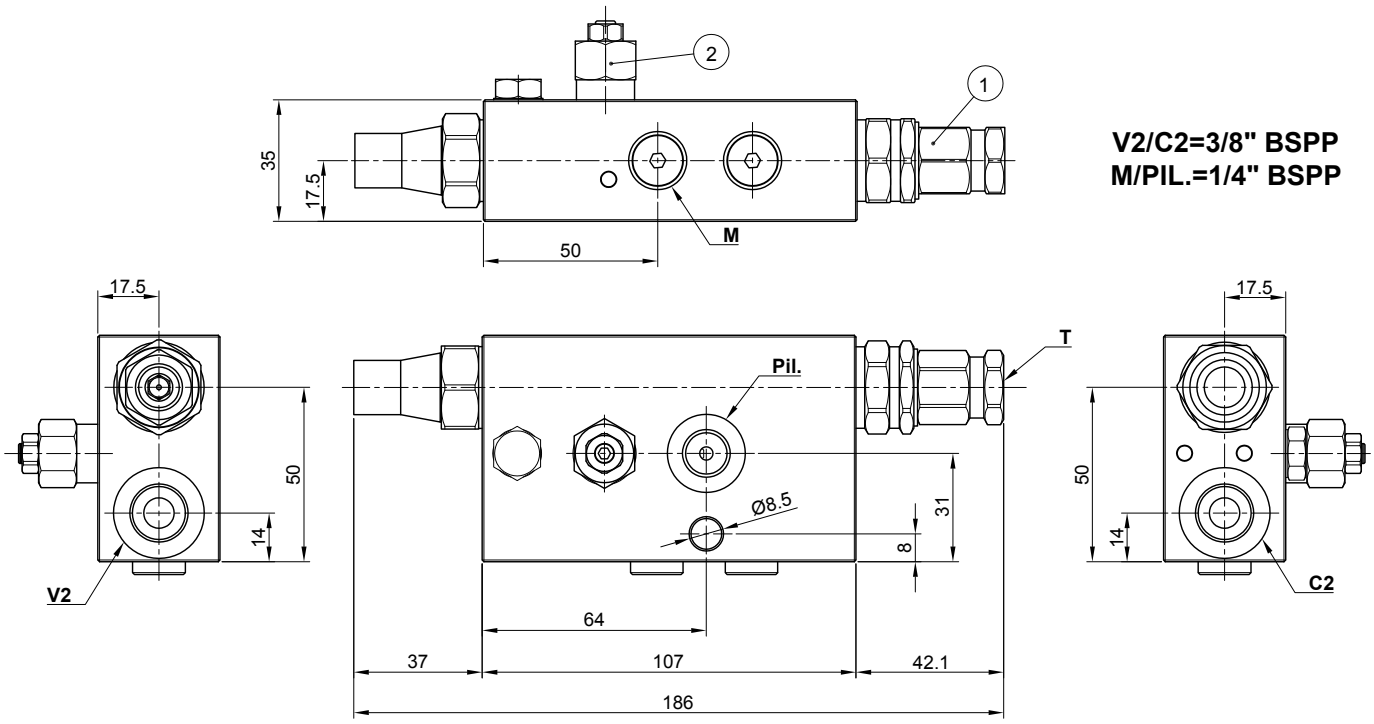
VPEXC-35-S-3/8"-L-SX-05-50

R - 011/2

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione sinistra

Flow check and metering valve for booms, line mounted, left version

Rev. 03-2010/08



MOLLA VALVOLA (1) - *SPRING VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
05	4 - 15.5	4	7.5

MOLLA VALVOLA (2) - *SPRING VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
50	250 - 500	198	350

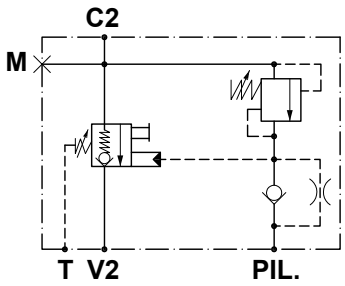
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

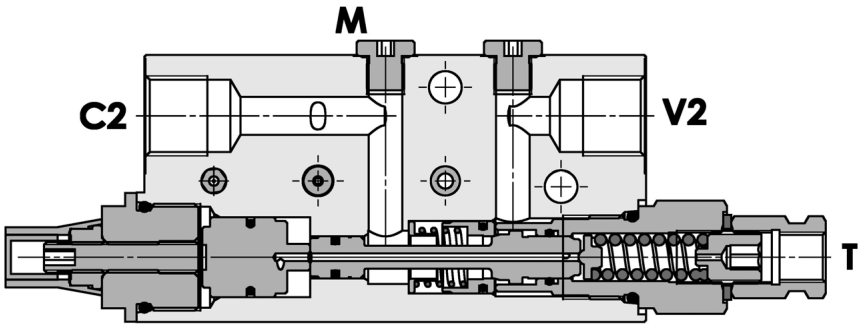
V P E X C	3 5	S	3 / 8	L	S X	0 5	5 0

VPEXC-90-S-1/2"-L-DX-05-50 R - 022/1

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione destra
Flow check and metering valve for booms, line mounted, right version

Rev. 02-2010/09





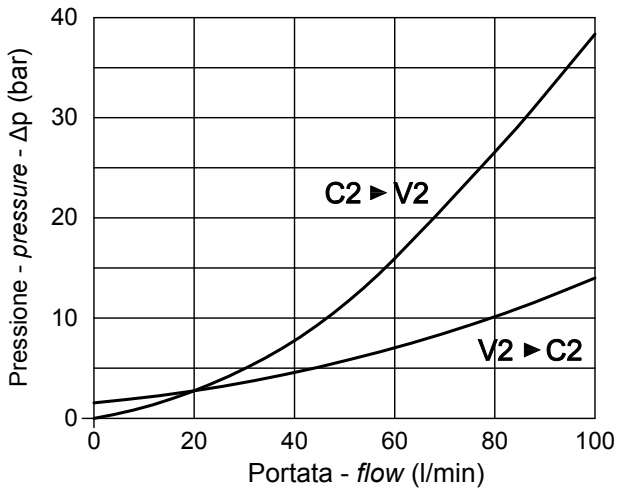
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 100 l/min
Pressione max.: 420 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 2.500 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 100 l/min*
Max. setting: *420 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *2.500 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



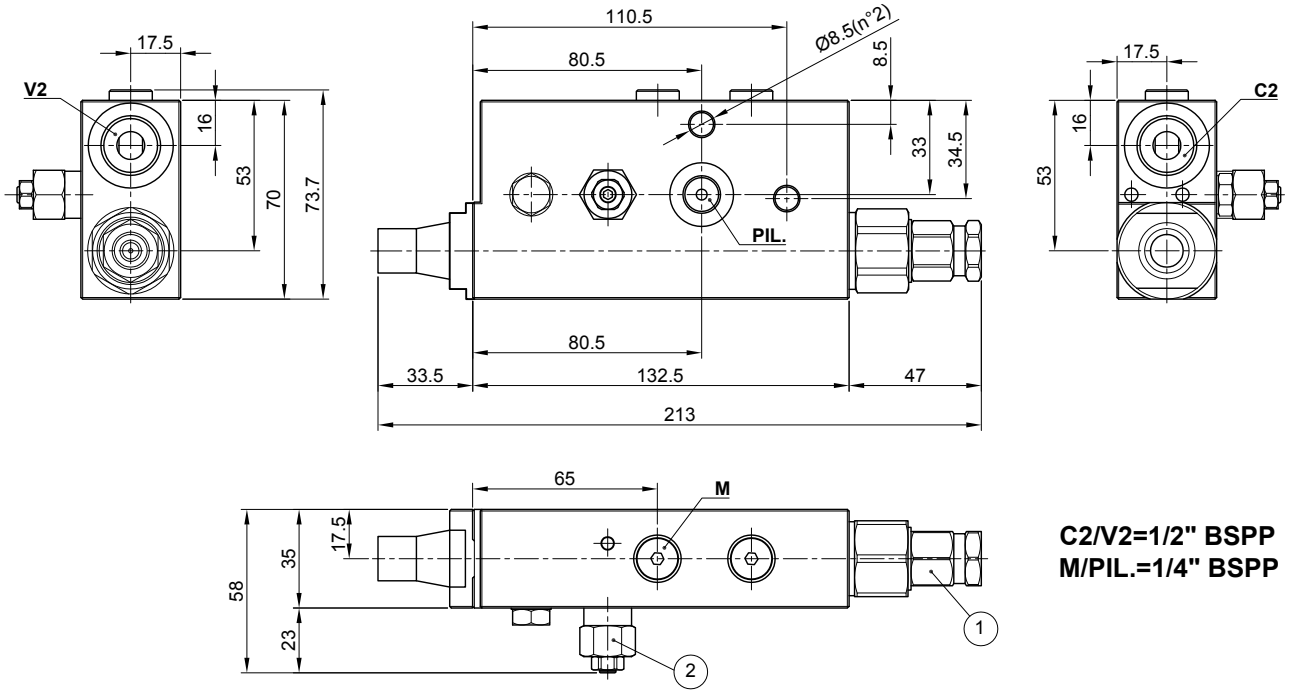
VPEXC-90-S-1/2"-L-DX-05-50

R - 022/2

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione destra

Flow check and metering valve for booms, line mounted, right version

Rev. 02-2010/09



C2/V2=1/2" BSPP
M/PIL.=1/4" BSPP

MOLLA VALVOLA (1) - *SPRING VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
05	3 - 14	2.5	7.5

MOLLA VALVOLA (2) - *SPRING VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
50	250 - 500	198	350

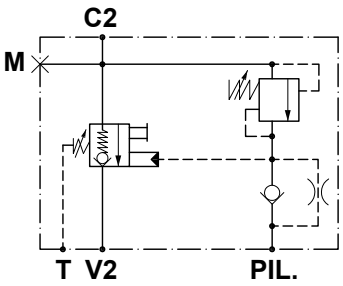
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

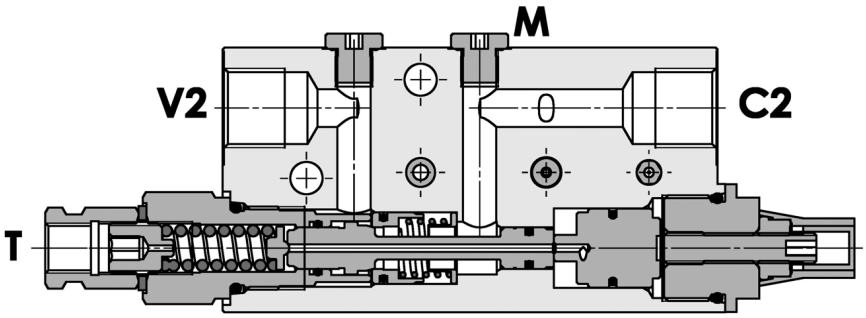
V P E X C	9 0	S	1 / 2	L	D X	0 5	5 0

VPEXC-90-S-1/2"-L-SX-05-50 R - 023/1

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione sinistra
Flow check and metering valve for booms, line mounted, left version

Rev. 02-2010/09





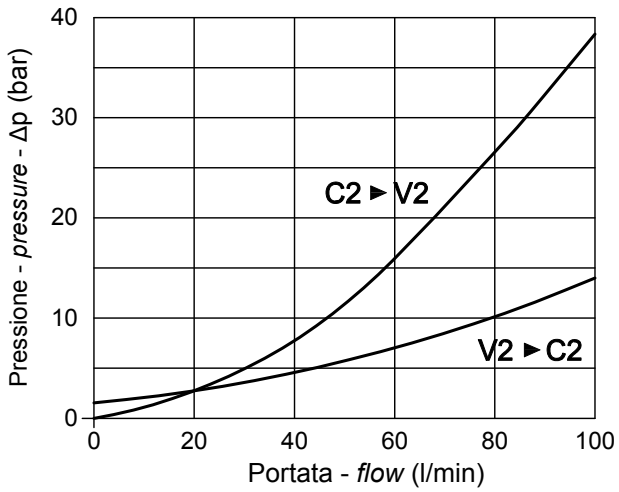
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 100 l/min
Pressione max.: 420 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 2.500 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 100 l/min*
Max. setting: *420 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *2.500 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

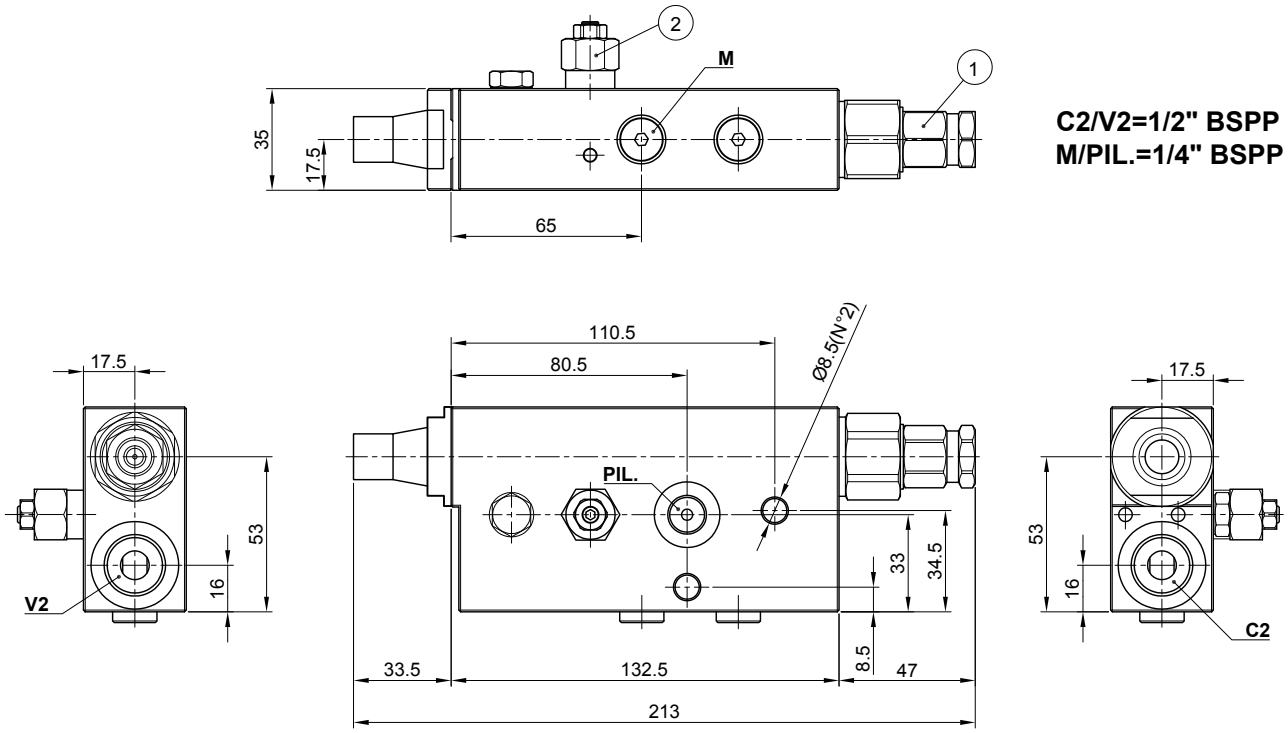
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPEXC-90-S-1/2"-L-SX-05-50 R - 023/2

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione sinistra
Flow check and metering valve for booms, line mounted, left version

Rev. 02-2010/09



MOLLA VALVOLA (1) - *SPRING VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
05	3 - 14	2.5	7.5

MOLLA VALVOLA (2) - *SPRING VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
50	250 - 500	198	350

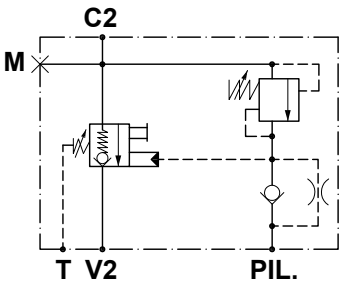
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

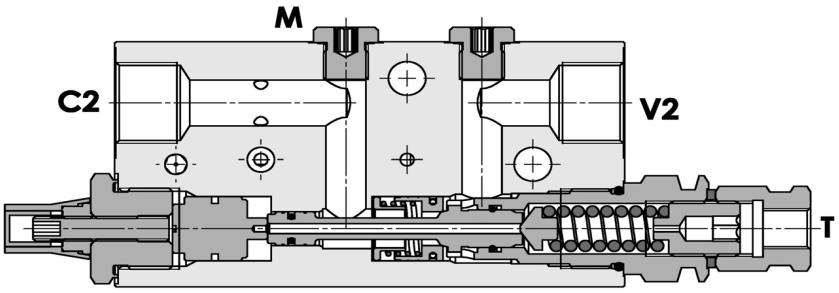
V P E X C	9 0	S	1 / 2	L	S X	0 5	5 0

VPEXC-150-S-3/4-L-DX-05-50 R - 030/1

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione destra
Flow check and metering valve for booms, line mounted, right version

Rev. 03-2010/08





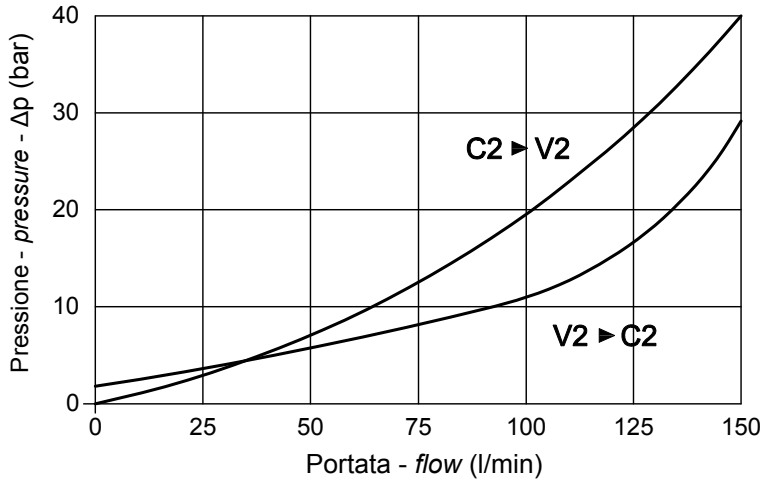
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 150 l/min
Pressione max.: 420 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 3.600 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 150 l/min*
Max. setting: *420 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *3.600 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



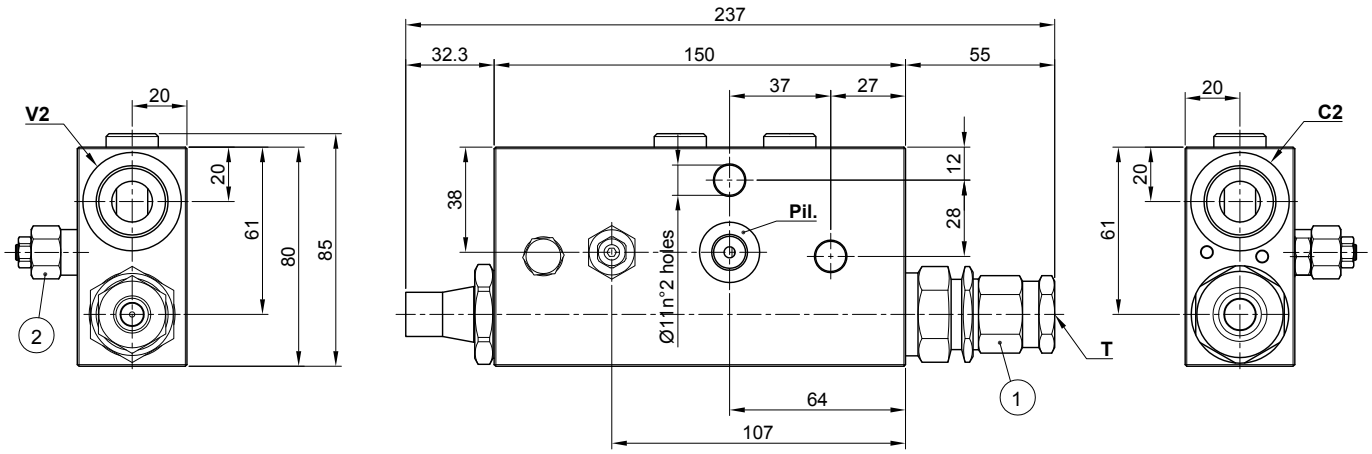
VPEXC-150-S-3/4-L-DX-05-50

R - 030/2

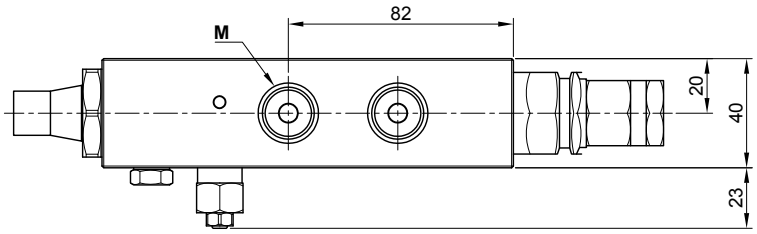
Valvola di blocco e controllo portata per bracci, montaggio in linea, versione destra

Flow check and metering valve for booms, line mounted, right version

Rev. 03-2010/08



V2/C2=3/4" BSPP
PIL./M/T=1/4" BSPP



MOLLE VALVOLA (1) - *SPRINGS VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
05	3.5 - 19.5	3.5	7.5

MOLLE VALVOLA (2) - *SPRINGS VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
50	250 - 500	198	350

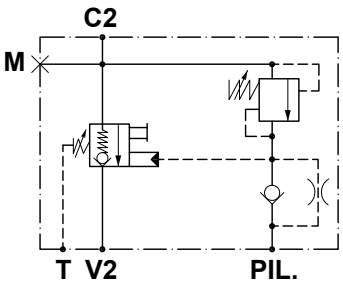
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

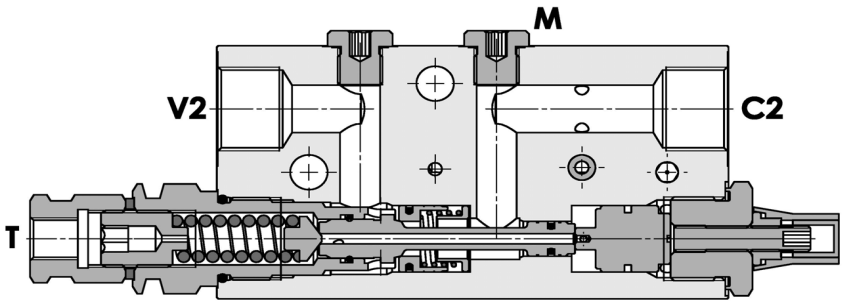
V P E X C	1 5 0	S	3 / 4	L	D X	0 5	5 0

VPEXC-150-S-3/4-L-SX-05-50 R - 031/1

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione sinistra
Flow check and metering valve for booms, line mounted, left version

Rev. 03-2010/08





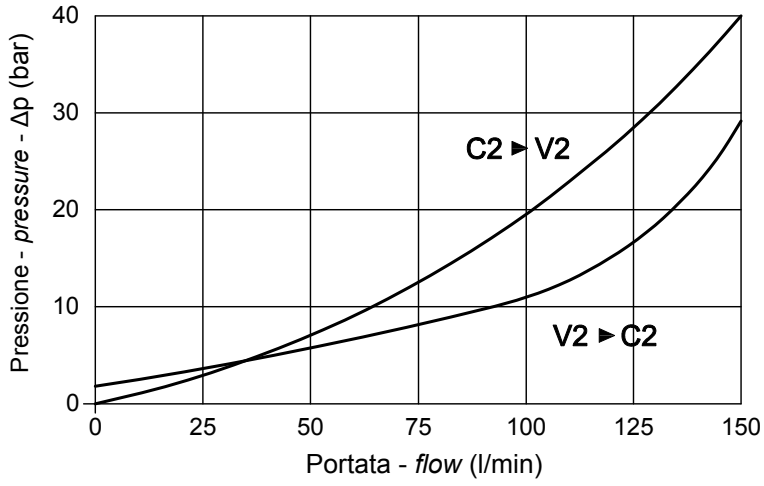
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 150 l/min
Pressione max.: 420 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 3.600 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 150 l/min*
Max. setting: *420 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight:: *3.600 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

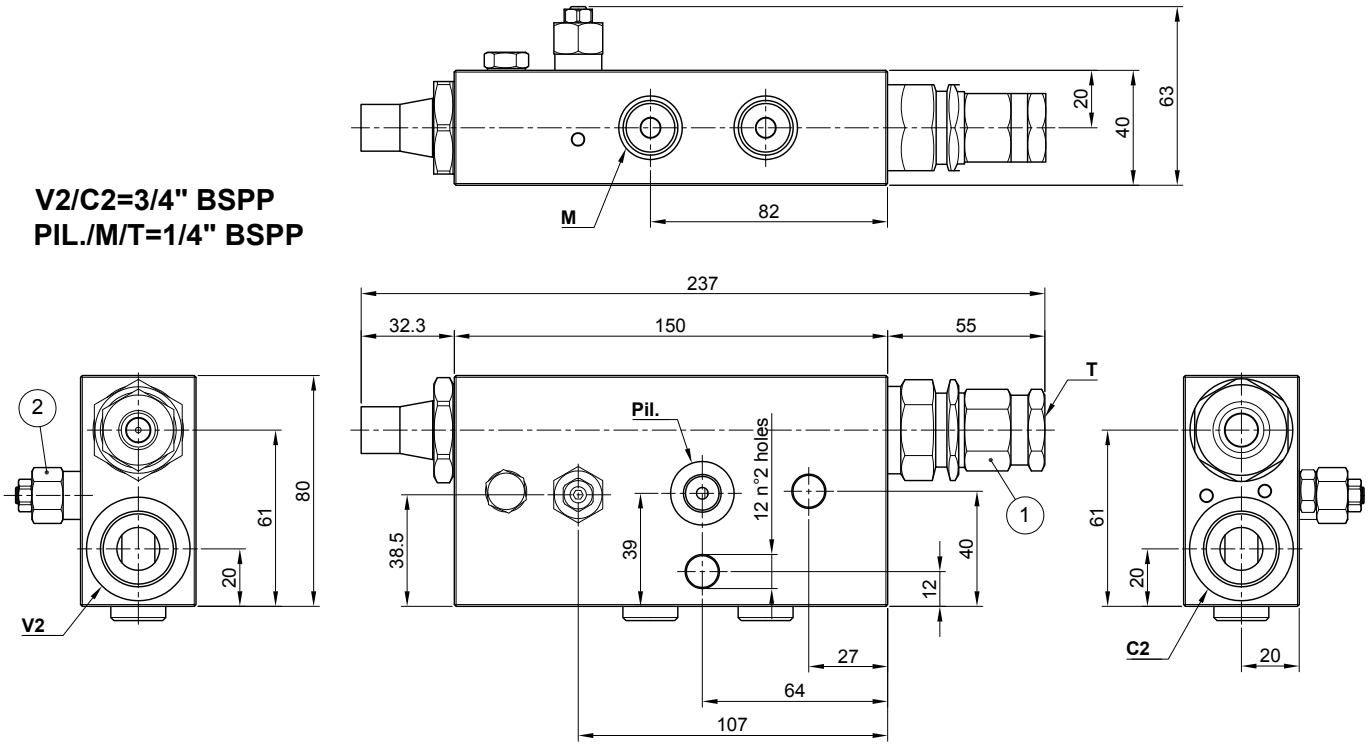


VPEXC-150-S-3/4-L-SX-05-50 R - 031/2

Valvola di blocco e controllo portata per bracci, montaggio in linea, versione sinistra
Flow check and metering valve for booms, line mounted, left version

Rev. 03-2010/08

V2/C2=3/4" BSPP
PIL./M/T=1/4" BSPP



MOLLE VALVOLA (1) - *SPRINGS VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
05	3.5 - 19.5	3.5	7.5

MOLLE VALVOLA (2) - *SPRINGS VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
50	250 - 500	198	350

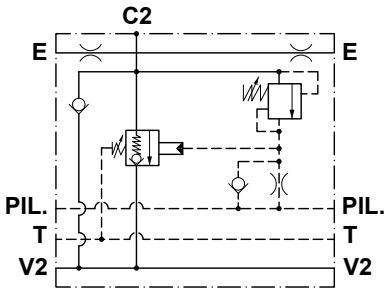
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

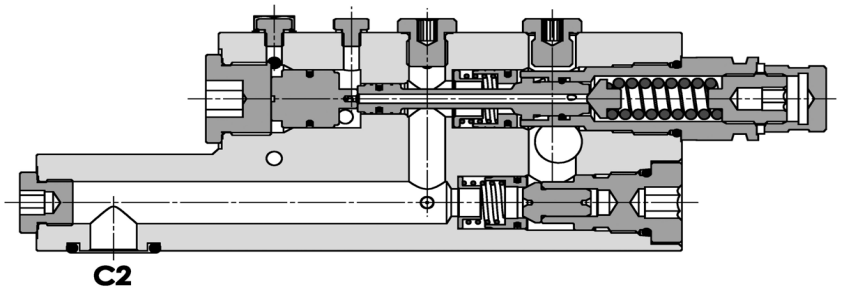
V P E X C	1 5 0	S	3 / 4	L	S X	0 5	5 0

VPEXC-250-S-3/4-1F-SAE*-05-50 R - 130/1

Valvola di blocco e controllo portata per bracci, montaggio a flangia
Flow check and metering valve for booms, gasket mounted

Rev. 03-2010/09





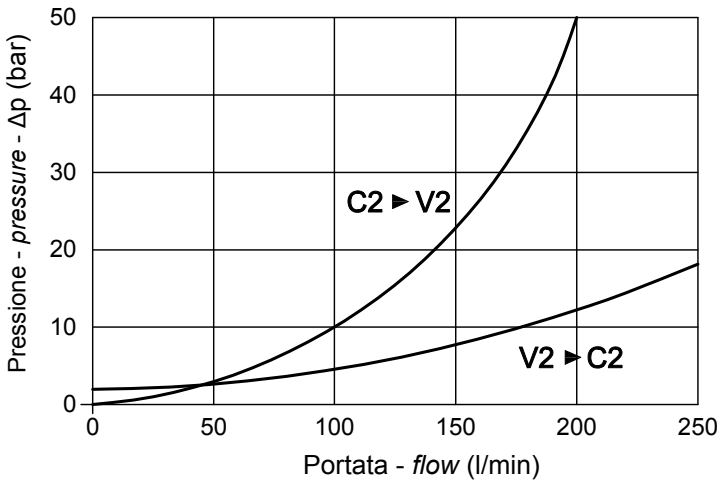
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 250 l/min
Pressione max.: 420 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 8.100 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 250 l/min*
Max. pressure: *420 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *8.100 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

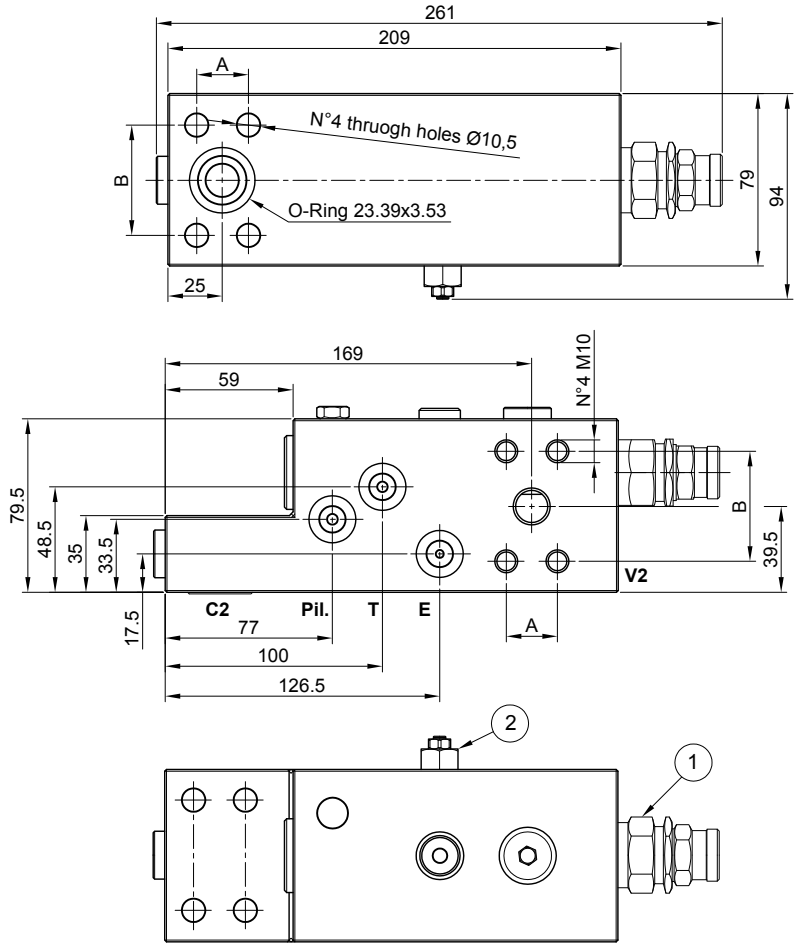
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPEXC-250-S-3/4-1F-SAE*-05-50 R - 130/2

Valvola di blocco e controllo portata per bracci, montaggio a flangia
Flow check and metering valve for booms, gasket mounted

Rev. 03-2010/09



MOLLE VALVOLA (1) - *SPRINGS VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
05	3.5 - 19.5	3.5	7.5

MOLLE VALVOLA (2) - *SPRINGS VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
50	250 - 500	198	350

TIPO ***TYPE***	**A**	**B**	**C2 - V2**	**E - PIL - T**	**PESO** ***WEIGHT***
	mm	mm	SAE	BSPP	**Kg**
VPEXC-250-S-3/4...SAE3000	22.2	47.6	3/4" SAE3000	1/4"	8.000
VPEXC-250-S-3/4...SAE6000	23.8	50.8	3/4" SAE6000	1/4"	8.000

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

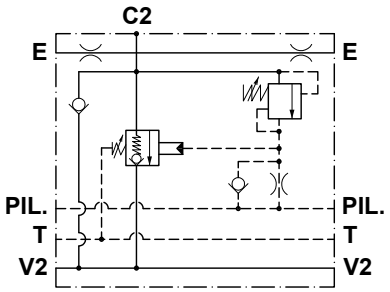
VPEXC	250	S	3/4	1F	SAE6000	05	50

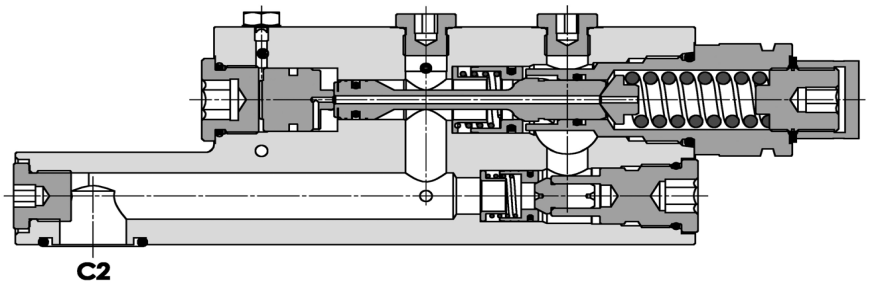
SAE 6000
SAE 3000
* Dimensione flangia – *flange dimension*

VPEXC-400-S-1-1F-SAE6000-05-50 R - 145/1

Valvola di blocco e controllo portata per bracci, montaggio a flangia
Flow check and metering valve for booms, gasket mounted

Rev. 02-2010/08





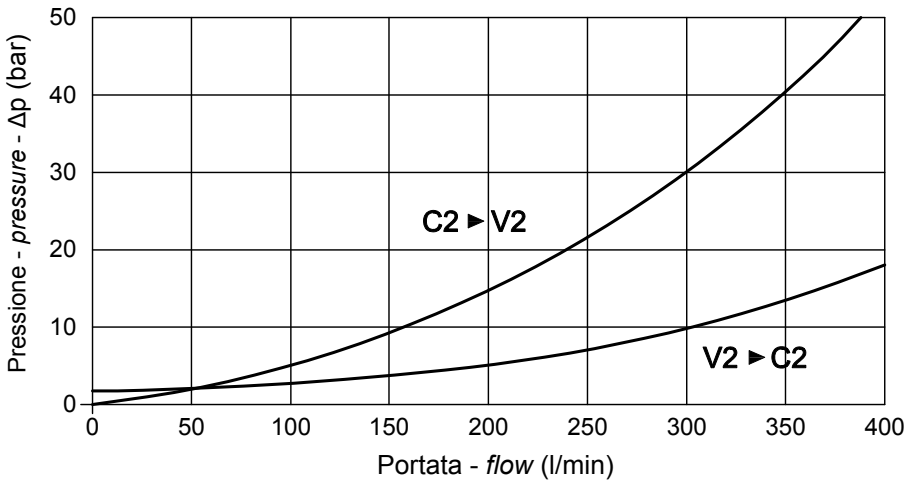
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 400 l/min
Pressione max.: 420 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 12,150 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 400 l/min*
Max. pressure: *420 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *12,150 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



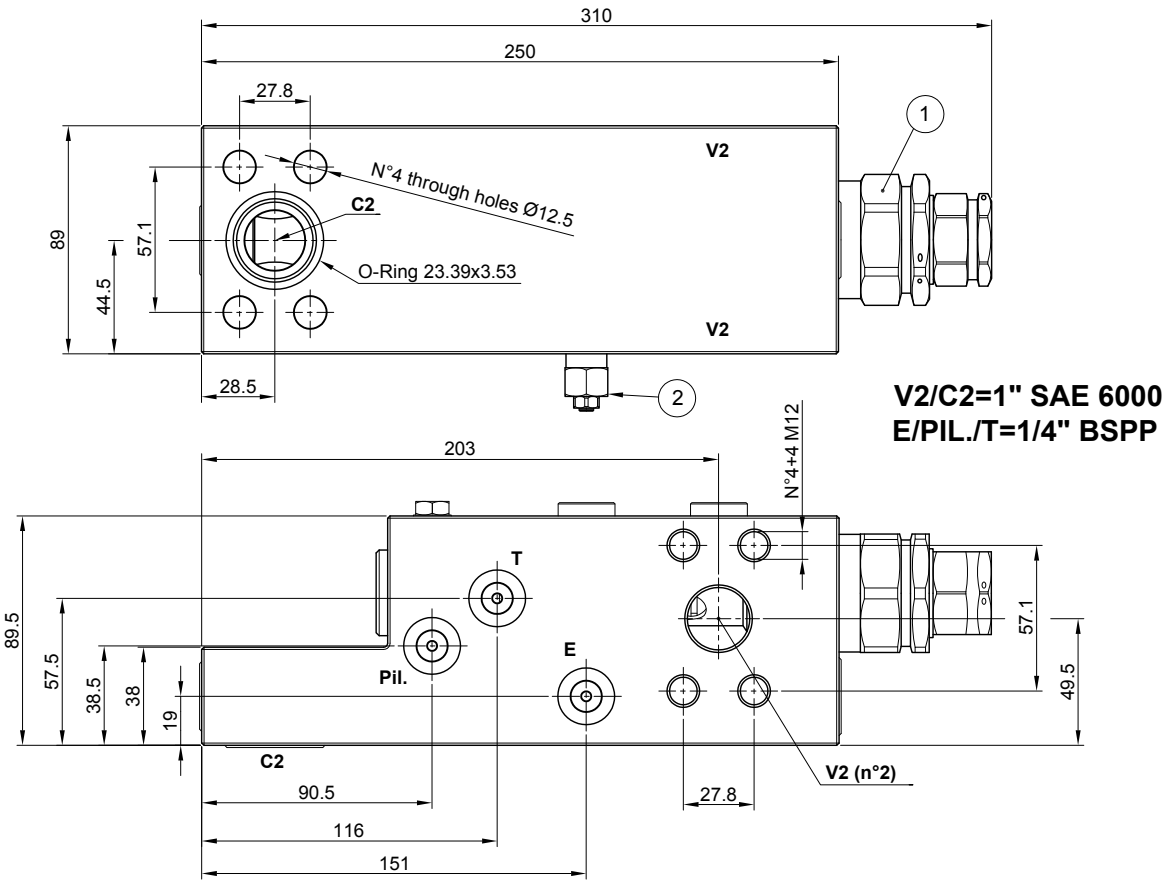
VPEXC-400-S-1-1F-SAE6000-05-50

R - 145/2

Valvola di blocco e controllo portata per bracci, montaggio a flangia

Flow check and metering valve for booms, gasket mounted

Rev. 02-2010/08



MOLLA VALVOLA (1) - *SPRING VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
05	3.5 - 24	5	7.5

MOLLA VALVOLA (2) - *SPRING VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
50	250 - 500	198	350

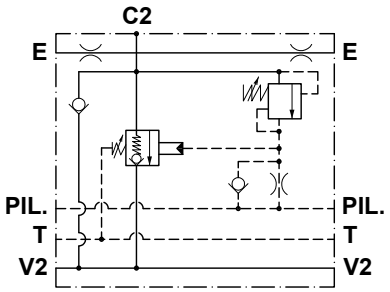
ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

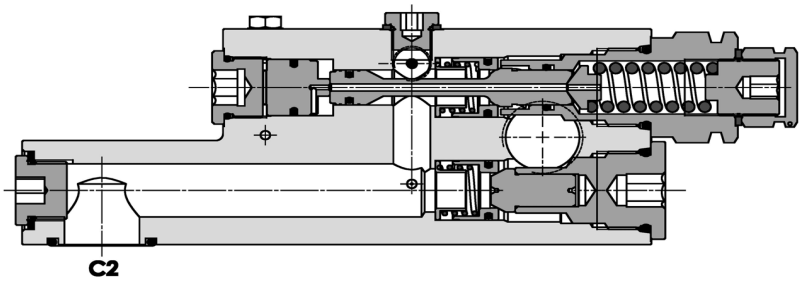
VPEXC	400	S	1	1F	SAE6000	05	50

VPEXC-500-S-1 1/4-1F-SAE6000-05-50 R - 150/1

Valvola di blocco e controllo portata per bracci, montaggio a flangia
Flow check and metering valve for booms, gasket mounted

Rev. 01-2010/08





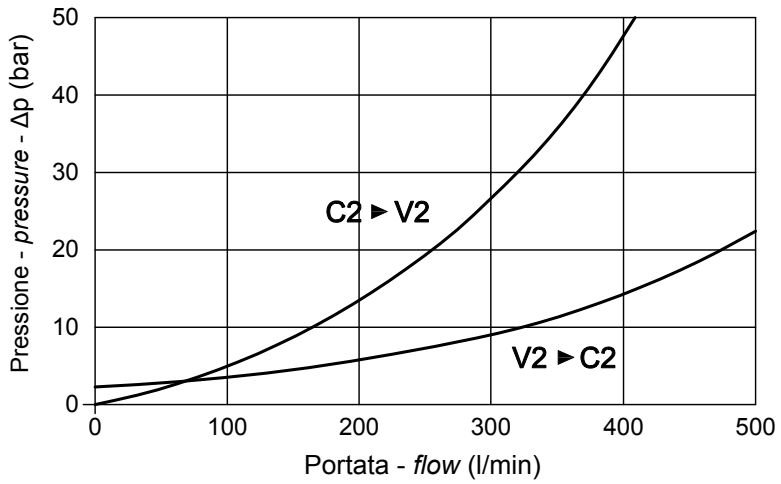
SPECIFICHE TECNICHE
Materiali: corpo in acciaio zincato. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 500 l/min
Pressione max.: 420 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag.02
Peso: 15,300 Kg

TECHNICAL SPECIFICATIONS
Materials: *body is in steel zinc plated. Internal parts are in hardened steel.*
Rated flow: *up to 500 l/min*
Max. pressure: *420 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *15,300 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

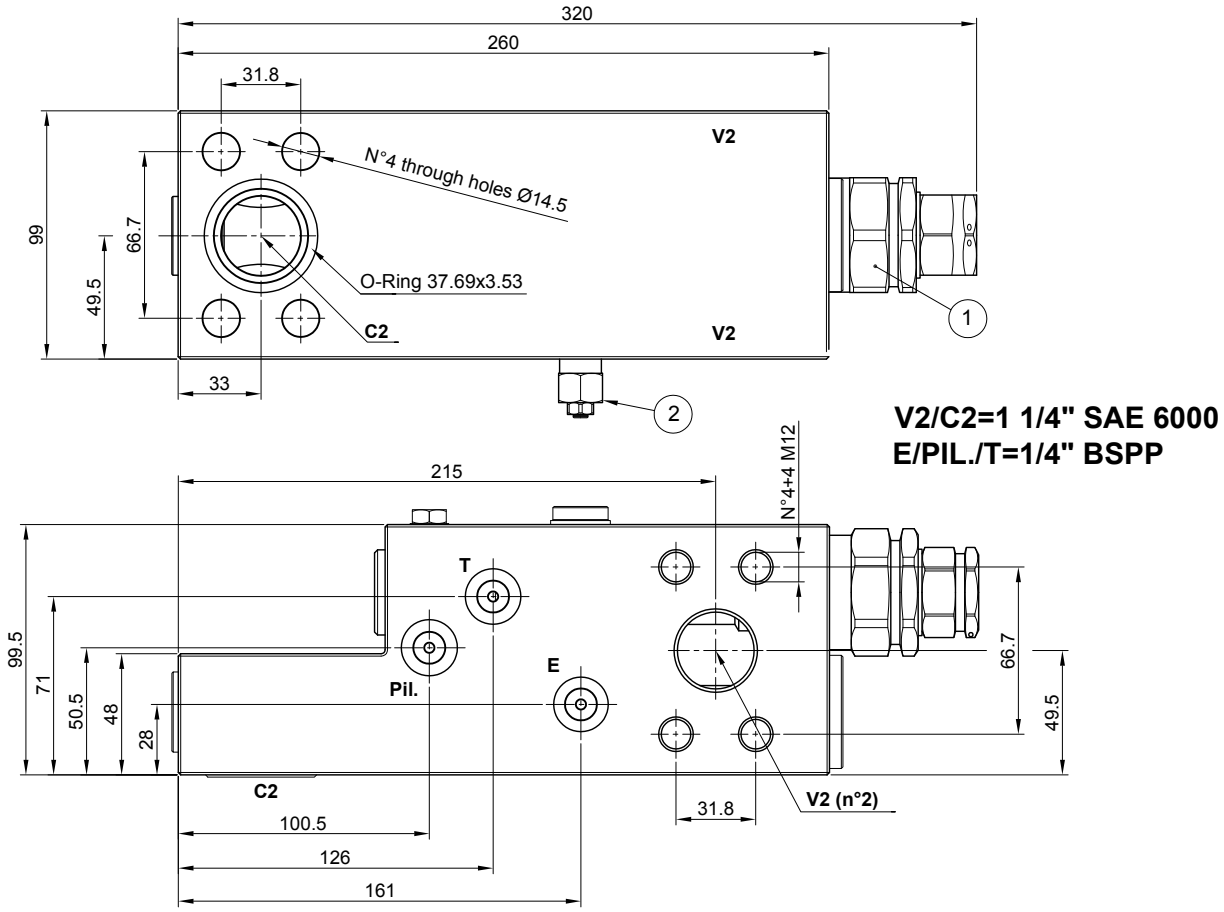


VPEXC-500-S-1 1/4-1F-SAE6000-05-50 R - 150/2

Valvola di blocco e controllo portata per bracci, montaggio a flangia

Flow check and metering valve for booms, gasket mounted

Rev. 01-2010/08



MOLLA VALVOLA (1) - *SPRING VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
05	3.5 - 24	5	7.5

MOLLA VALVOLA (2) - *SPRING VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
50	250 - 500	198	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

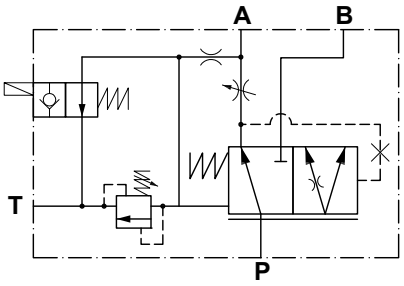
VPEXC	500	S	1 1/4	1F	SAE6000	05	50

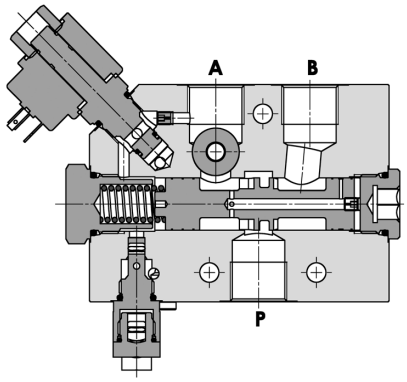
VPEXCH-EV*-3/4-S-*

R - 250/1

Valvola per azionamento martelli demolitori
Hammer control valves

Rev. 02-2010/10





SPECIFICHE TECNICHE

Materiali: corpo in acciaio zincato. Componenti interni in acciaio trattato termicamente.
Portata max.:
- 200 l/min con 140 l/min su ramo regolato “A”
Pressione max.: 350 bar
Pressione max. linea prioritaria: regolata dalla valvola di max., molle 20/35 (pag.2)
Trafilamento max.: 3 L/min
Contropressione max in T: 1.5 bar

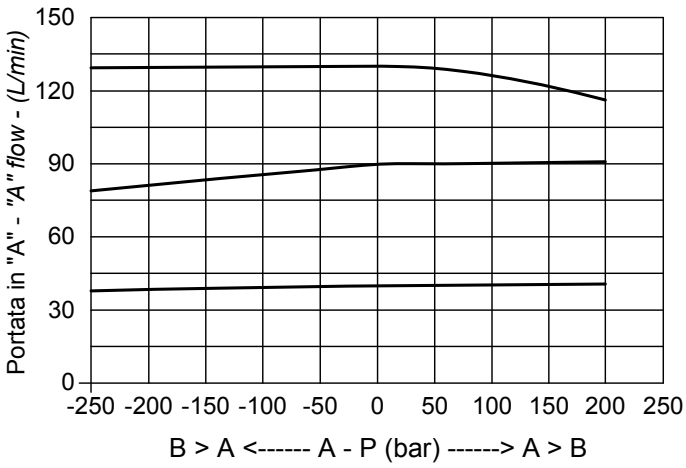
TECHNICAL SPECIFICATIONS

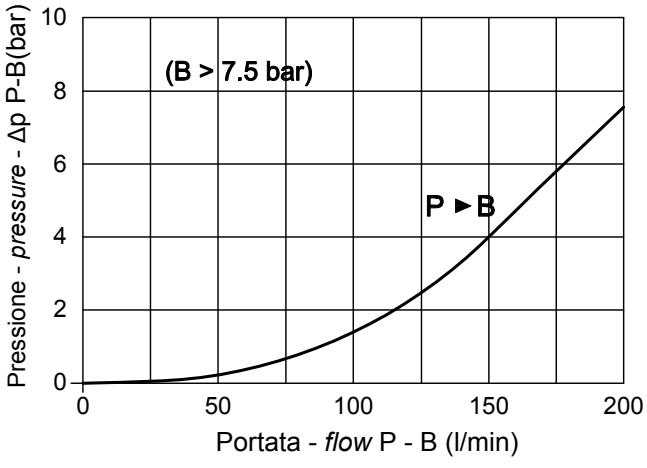
Materials: *zinc plated steel body. Internal parts in hardened steel.*
Rated flow:
- 200 l/min with 140 l/min in “A”
Max. pressure: *350 bar*
Max pressure on priority line: *limited by relief valve, springs 20/35 (see page 2)*
Max leakage: *3 L/min*
Max backpressure on T: *1.5 bar*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C





VPEXCH-EV*-3/4-S-*

R - 250/2

Valvola per azionamento martelli demolitori
Hammer control valves

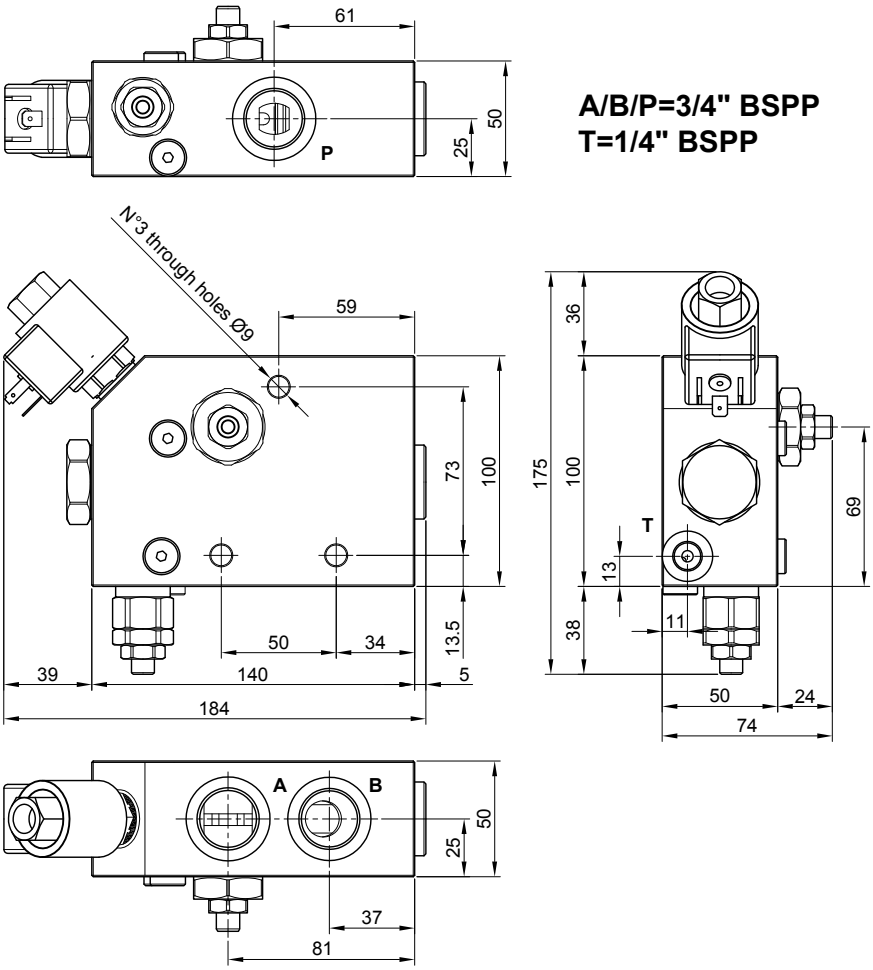
Rev. 02-2010/10

Per assicurare il corretto funzionamento dell'idrostato quando la valvola elettrica è aperta, è importante che la pressione sulla linea regolata P sia almeno 7.5 bar. In caso contrario, è necessario installare una valvola unidirezionale che garantisca la contropressione richiesta.

To ensure correct working of hydrostat when the electric valve is open, it's important a backpressure of at least 7.5 bar on the regulated line (P). Otherwise, it's necessary to install a check valve to guarantee the requested backpressure.

Nel posizionamento e fissaggio delle valvole, per evitare qualsiasi incurvatura del corpo che potrebbe impedire il corretto funzionamento del cursore interno, si raccomanda di utilizzare 3 distanziali (rondelle di metallo) di uguale spessore su ognuno dei 3 fori di fissaggio, da inserirsi tra il corpo valvola e la struttura alla quale essa viene fissata.

When positioning and tightening the valve, to avoid any deflection of the body which could prevent the internal spool from working correctly, it is recommended to insert 3 equal spacers (metal washers), one on each fixing hole, between the valve body and the supporting structure.



A/B/P=3/4" BSPP
T=1/4" BSPP

MOLLE - *SPRINGS*			*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	50 - 210	48	200
35	100 - 350	95	350

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P E X C H | **E V 1 2** | **3 / 4** | **S** | **2 0**

* EV12: voltaggio bobina 12 VDC – *coil voltage 12 VDC*
EV24: voltaggio bobina 24 VDC – *coil voltage 24 VDC*

"20" / "35":
Campi di taratura pressione *
Adjustable pressure

SEZIONE V
Valvole varie

SECTION V
Various Valves

ESCLUSORI MANOMETRO

Gli esclusori manometro vengono impiegati negli impianti idraulici per isolare il manometro dalla linea di pressione, proteggendola da eventuali colpi di pressione e rendendo possibile la lettura solo quando lo si desidera.
Sono disponibili 2 soluzioni di montaggio: a pannello e in linea.

SHUT-OFF PRESSURE GAUGE

Shut-off pressure gauge valves are used in hydraulic systems to cut-off gauge from the pressure line and to allow pressure readings only when required.
2 solutions of assembly are available: panel mounting and in line.

PAGINA / *PAGE*	**CODICE / *CODE***	**PAGINA / *PAGE***	**CODICE / *CODE***
V 010	VPE/VPEA	V 020	VPESM6P
V 015	VPEP		

CONNETTORI MANOMETRO

I connettori manometro sono usati per collegare direttamente il manometro alla linea di pressione, il dado girevole consente il posizionamento del manometro su di un angolo di 360° per facilitarne la lettura.

PRESSURE GAUGE CONNECTORS

The connector are used in directly connect the pressure gauge to the pressure line, the swiveling nut allow the fixing of pressure gauge through a full 360° to facilitate the pressure readings.

PAGINA / *PAGE*	**CODICE / *CODE***
V 025	VPCG

RUBINETTI A SFERA

Sono valvole a sfera a 2 o 3 vie, disponibili per montaggio in linea in numerose dimensioni.

BALL VALVES

They are 2/3 way ball valves, available for line mounting in various dimensions.

PAGINA / *PAGE*	**CODICE / *CODE***	**PAGINA / *PAGE***	**CODICE / *CODE***
V 050	VP-GE2	V 051	VP-GE3

INVERTITORE AUTOMATICO

Queste valvole sono usate per effettuare l'inversione automatica del movimento di un attuatore idraulico. Sono disponibili per il montaggio su flangia CETOP 3 e 5.

AUTOMATIC INVERTER

These valves are used to accomplish the automatic inversion of movement of an hydraulic actuator. They are available for gasket mounting on CETOP 3 and 5.

PAGINA / *PAGE*	**CODICE / *CODE***	**PAGINA / *PAGE***	**CODICE / *CODE***
V 100	VPIA-L6-VM	V 105	VPIA-L10-VM

VALVOLA DI MESSA A SCARICO IDROPILOTATA

Queste valvole scaricano il serbatoio il flusso della pompa quando la pressione sul pilota raggiunge il valore di taratura impostato. Sono disponibili per il montaggio in linea.

PILOT OPERATED UNLOADING VALVE

These valves unload to tank when a pilot pressure reaches the setting. The valve also gives relief protection. They are available for line mounting.

PAGINA / *PAGE*	**CODICE / *CODE***
V 150	VPMS-P

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

***Meta Hydraulic** reserves the right to stop the production or to modify the technical and dimensional of all own products in every moment without notice and without obligation.*

SEZIONE V
Valvole varie

SECTION V
Various valves

VALVOLA DI ESCLUSIONE POMPA DOPPIA
Queste valvole vengono impiegate quando il circuito è alimentato da una pompa doppia e consentono di scaricare la portata di una di esse al raggiungimento del valore di pressione impostato. Una valvola di non ritorno consente alla restante pompa di continuare ad alimentare il circuito.
Sono disponibili nella versione in linea e come base per CETOP 5.

PUMP UNLOADING VALVE
These unloading valves can divert to tank one oil supply pump once the preset pressure is reached in the system. The check valve allows the system to continue to operate through the remaining pump.
They are available for line mounting and for gasket mounting on CETOP 5.

PAGINA / *PAGE*	**CODICE / *CODE***	**PAGINA / *PAGE***	**CODICE / *CODE***
V 155	VPMS-PD-P	V 165	VPMSE-PD
V 160	VPMS-PDL10-P		

SENSORE COMPENSATO DI PRESSIONE LIMITE
E' una valvola di sequenza che, al raggiugimento del valore di taratura, limita la pressione impedendo l'utilizzo delle utenze ad esso collegate.
Disponibile nella versione in linea.

THREE WAY SEQUENCE
It 's a sequence valve that, when the setting is reached, limit the pressure preventing the utilization of users linked to it.
Available in line version.

PAGINA / *PAGE*	**CODICE / *CODE***
V 200	VPLM-CB-P

VALVOLA DI FINE CORSA
Queste valvole agiscono normalmente come ritegni unidirezionali, e permettono il flusso in entrambe le direzioni una volta azionato meccanicamente il cursore.
Disponibile nella versione in linea.

END RUN VALVE
These valves act normally as check valves, and allow the free flow in both directions once the slider is set into action.
Available in line version.

PAGINA / *PAGE*	**CODICE / *CODE***
V 225	VPFC

VALVOLA CONTROLLO ROTAZIONE
Sono valvole per il controllo della rotazione con sblocco freno.
Disponibili nella versione in linea.

MOTION CONTROL VALVE
These are motion control valves with brake release port.
Available in line version.

PAGINA / *PAGE*	**CODICE / *CODE***
V300	VPVCR-120-D-3/4-35

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

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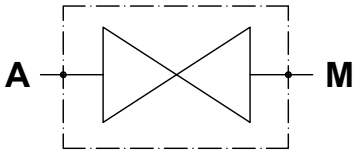
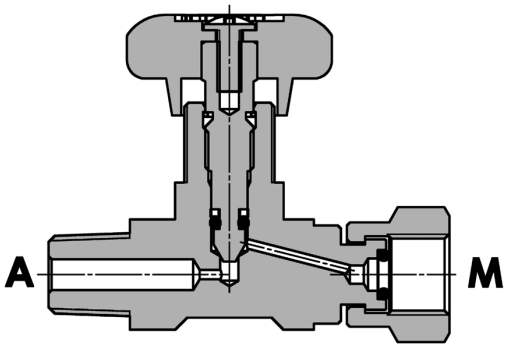
VPE/A-1/4-*-B-*

V - 010/1

Esclusore per manometro
Shut off pressure gauge valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo stampato in lega di ottone, nichelato. Le parti interne sono in acciaio.
Pressione max.: 400 bar
Connessioni: 1/4”
Peso: VPE 1/4 1G B = 0,162 Kg
VPE 1/4 2G B = 0,173 Kg
VPEA 1/4 1G B = 0,161 Kg
VPEA 1/4 2G B = 0,174 Kg

TECHNICAL SPECIFICATIONS

Materials: *brass alloy forged body; nickel plated. Internal parts in steel.*
Max. pressure: *400 bar*
Ports: *1/4”*
Weight: *VPE 1/4 1G B = 0,162 Kg*
VPE 1/4 2G B = 0,173 Kg
VPEA 1/4 1G B = 0,161 Kg
VPEA 1/4 2G B = 0,174 Kg

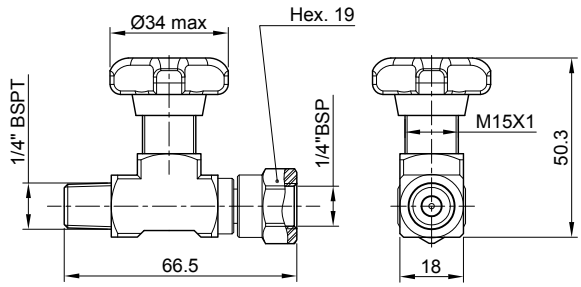
VPE/A-1/4-*-B-*

V - 010/2

Esclusore per manometro
Shut off pressure gauge valve

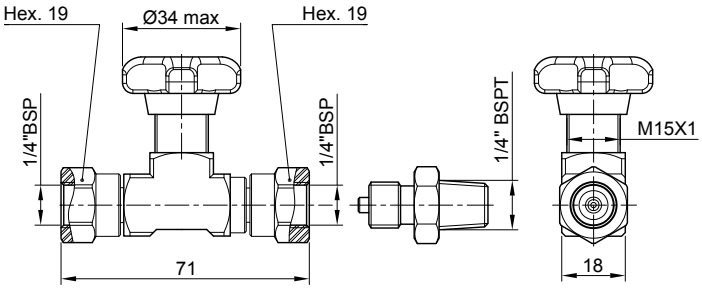
Rev. 01-2010/02

VPE 1/4 1G B



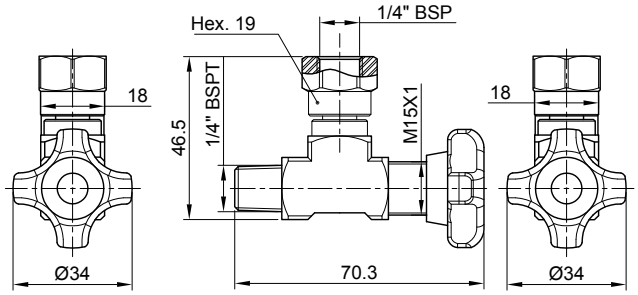
Esclusore per attacco manometro in linia: Il dado girevole permette il fissaggio del manometro nella posizione desiderata
Shut off pressure gauge for in-line connection: *the swiveling nut allows to fix the gauge in any needed position*

VPE 1/4 2G B



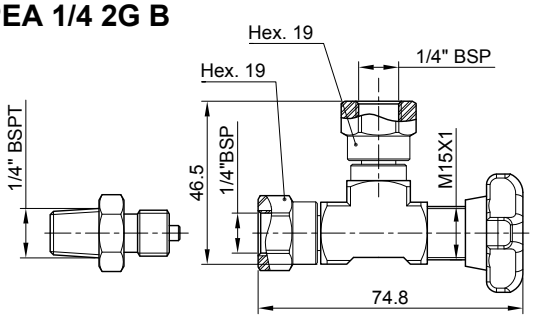
Esclusore per attacco manometro in linea: I dadi girevoli permettono il fissaggio del manometro e dell'esclusore nella posizione desiderata. Il connettore è opzionale, viene fornito su richiesta.
Shut off pressure gauge for in-line connection: *the swiveling nuts allow to fix the gauge and shut off valve in any needed position. The connector is supplied as optional, on request*

VPEA 1/4 1G B



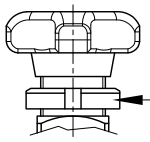
Esclusore per attacco manometro a 90°
Shut off pressure gauge 90° connection

VPEA 1/4 2G B



Esclusore per attacco manometro a 90°: I dadi girevoli permettono il fissaggio del manometro su di un angolo di 360°. Il connettore è opzionale, viene fornito su richiesta.
Shut off pressure gauge for 90° connection: *the swiveling nuts allow to fix the gauge and shut off valve through a full 360°. The connector is supplied as optional, on request.*

Coppia di serraggio del manometro sul girello: 15 Nm
Max. installation torque of pressure gauge on swiveling nut: 15 Nm



Ghiera di fissaggio a richiesta
Locking ring supplied on request

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P E A | **1 / 4** | **1 G** | **B** | **F**

VPE: esclusore in linea
VPE: Shut off pressure gauge valve in line
* VPEA: esclusore a 90°
VPEA: shut off pressure gauge valve at 90°

1G: 1 girello – 1 swiveling nut
* *2G: 2 girelli – 2 swiveling nuts*

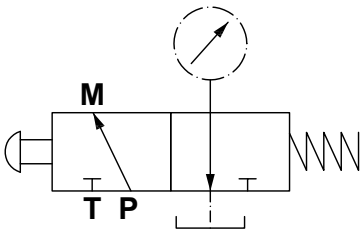
F: ghiera di fissaggio – *locking ring*
Omettere se non richiesta *
Omit if not requested

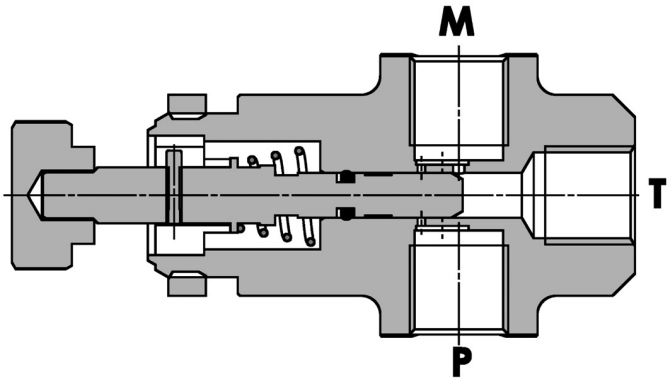
VPEP-1/4

V - 015/1

Esclusore per manometro, montaggio a pannello
Shut off pressure gauge valve, panel mounting

Rev. 01-2010/02





SPECIFICHE TECNICHE
Materiali: corpo e parti interne sono in acciaio. La superficie esterna è protetta mediante zincatura.
Pressione max.: 350 bar
Connessioni P-M-T: 1/4”
Peso: 0,340 Kg

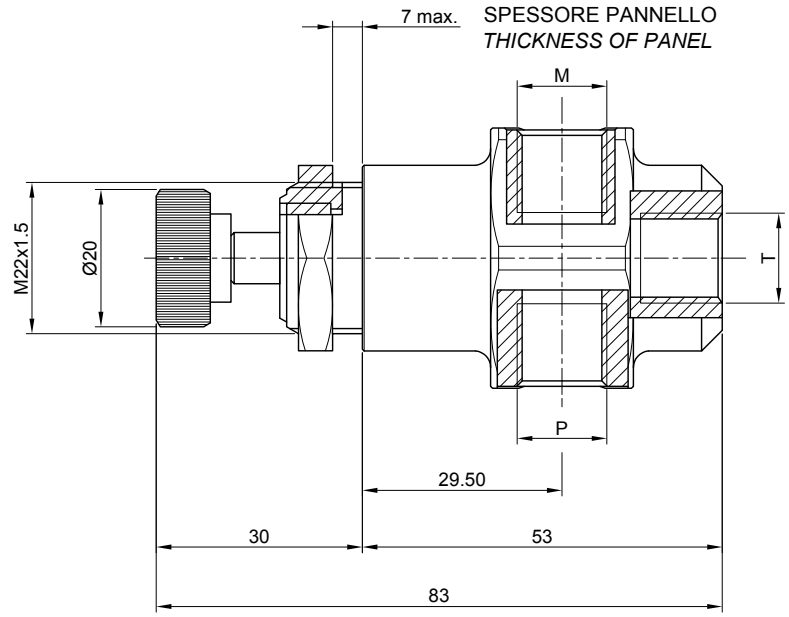
TECHNICAL SPECIFICATIONS
Materials: *body and internal parts are steel made, external surface is zinc plated.*
Max. pressure: *350 bar*
P-M-T ports: *1/4”*
Weight: *0,340 Kg*

VPEP-1/4

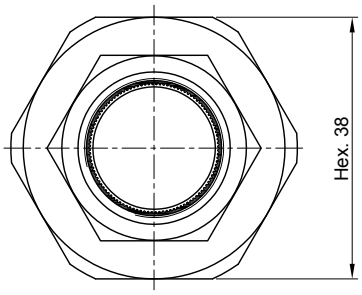
V - 015/2

Esclusore per manometro, montaggio a pannello
Shut off pressure gauge valve, panel mounting

Rev. 01-2010/02



M/P/T=1/4" BSPP



ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

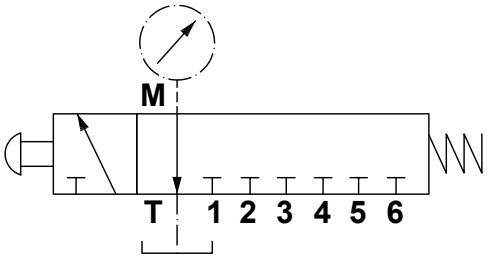
V P E P	1 / 4

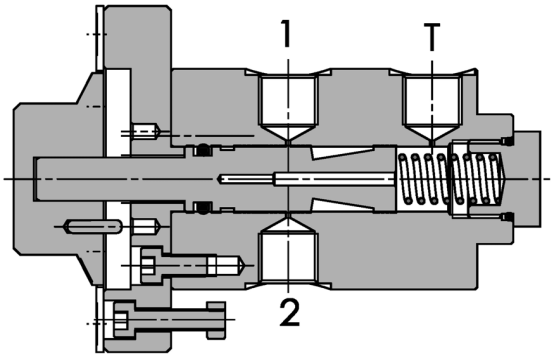
VPESM-6P-*-*

V - 020/1

Selettore per manometro a 6 vie
6 way pressure-gauge selector

Rev. 01-2010/02





SPECIFICHE TECNICHE
Materiali: corpo e parti interne sono in acciaio. La superficie esterna è protetta mediante zincatura.
Pressione max.: 315 bar
Connessioni: 1/8” - 1/4”
Peso: 1,280 Kg

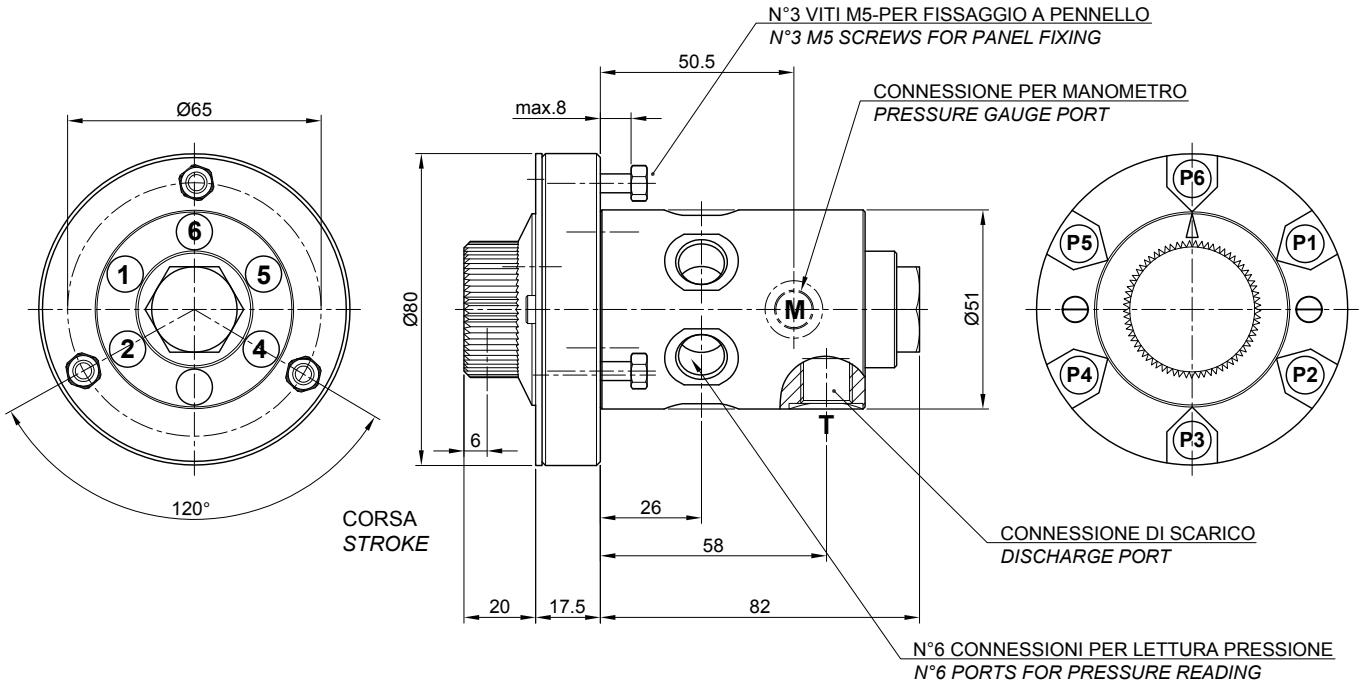
TECHNICAL SPECIFICATIONS
Materials: *body and internal parts are steel made, external surface is zinc plated.*
Max. pressure: *350 bar*
Ports: *1/8” - 1/4”*
Weight: *1,280 Kg*

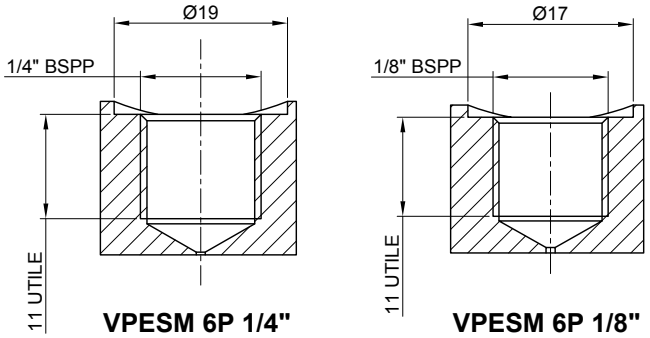
VPESM-6P-*-*

V - 020/2

Selettore per manometro a 6 vie
6 way pressure-gauge selector

Rev. 01-2010/02





VPESM 6P 1/4" **VPESM 6P 1/8"**

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P E S M 6 P **1 / 4** *****

* 1/8 – 1/8" BSPP
1/4 – 1/4" BSPP
Connessioni - *Port sizes*

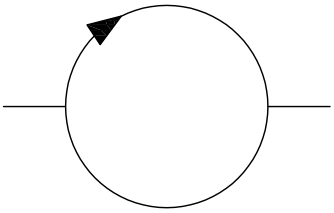
Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

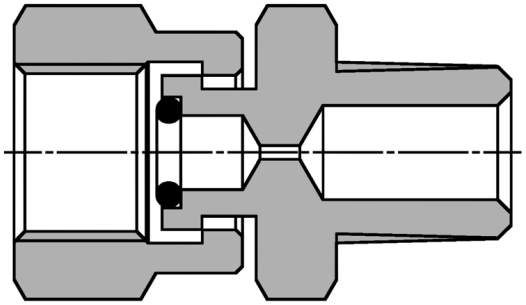
VPCG-1/4-*-*-*

V - 025/1

Connettori per manometro
Pressure gauge connectors

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: acciaio. La superficie esterna è protetta mediante zincatura.

Connessioni:

filettatura femmina (A): 1/4” BSPP
filettatura maschio (B): 1/4”BSPP e 1/4”-3/8”-1/2”BSPT

Pressione max.: 350 bar

TECHNICAL SPECIFICATIONS

Materials: *steel. External surface zinc plated.*

Ports:

female thread (A): 1/4” BSPP
male thread (B): 1/4”BSPP e 1/4”-3/8”-1/2”BSPT

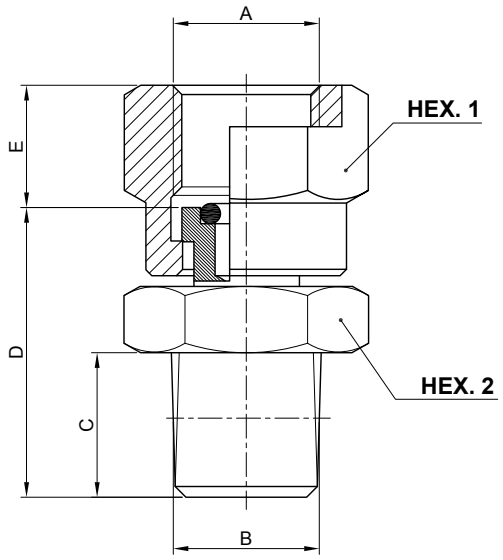
Max. pressure: *350 bar*

VPCG-1/4-*-*-*

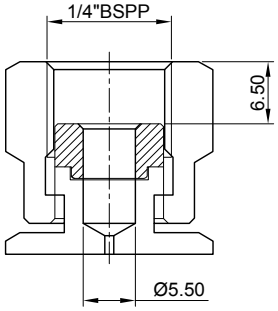
V - 025/2

Connettori per manometro
Pressure gauge connectors

Rev. 01-2010/02



TIPO *TYPE*	A	B	B	C	D	E	HEX.1	HEX.2	PESO *WEIGHT*
	BSPP	BSPP	BSPT	mm	mm	mm	mm	mm	Kg
VPCG 1/4 - 1/4 BSPP	1/4"	1/4	-	10	23	10	19	19	0.050
VPCG 1/4 - 1/4 BSPT	1/4"	-	1/4"	13	26	11	19	19	0.050
VPCG 1/4 - 3/8 BSPT	1/4"	-	3/8"	14	28	11	19	19	0.060
VPCG 1/4 - 1/2 BSPT	1/4"	-	1/2"	16	31	11	19	22	0.075



Qualora si voglia assemblare un manometro avente filettatura conica, è necessario montare un'apposita rondella in rame in sostituzione della guarnizione O-ring

To assemble a pressure gauge having a tapered thread, it's necessary to set up an appropriate copper washer in place of the O-ring seal

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P C G | **1 / 4** | **1 / 4 B S P P** | **R** | ***** |

* 1/4" BSPP
1/4" BSPT
3/8" BSPT
1/2" BSPT
Filettatura maschio (B)
Male thread (B)

Guarnizioni – *Seals*: V=Viton *
Omettere se BUNA-N –
Omit if BUNA-N

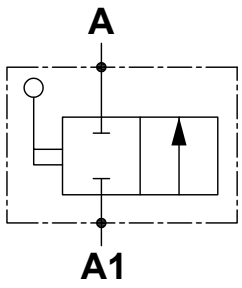
R: rondella in rame – *copper washer* *
Omettere se non richiesta – *omit if not requested*

VP-GE2-*-*

V - 050/1

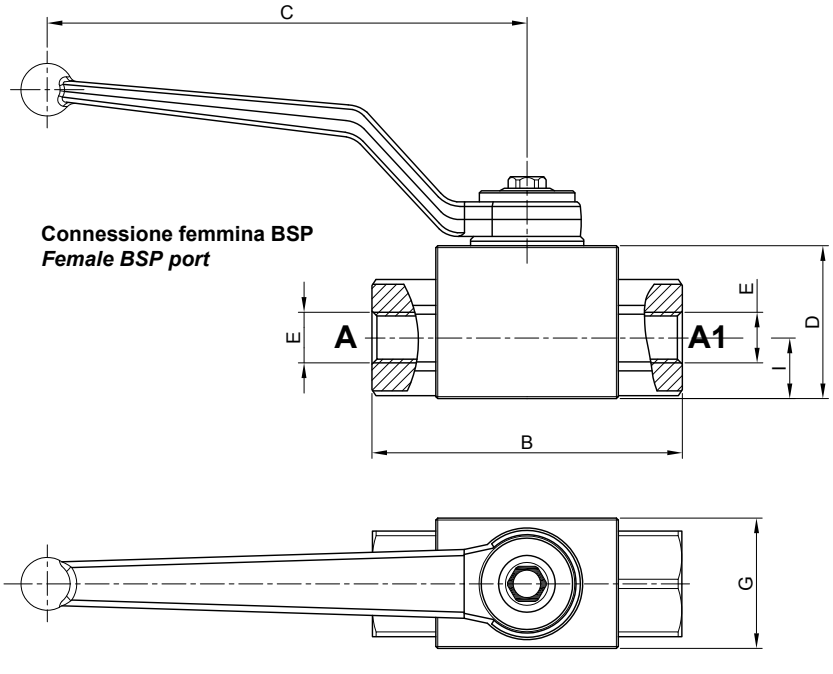
Valvola a sfera a 2 vie
Two way ball valve

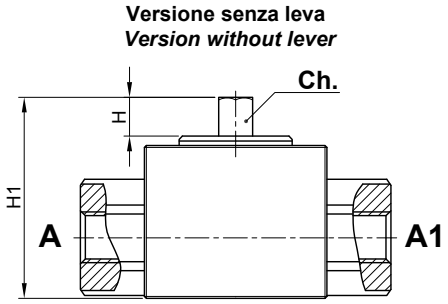
Rev. 01-2010/02

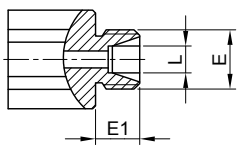


SPECIFICHE TECNICHE
Materiali: corpo in acciaio, particolari interni in acciaio trattato termicamente.
Pressione max.: vedi tabella

TECHNICAL SPECIFICATIONS
Materials: *body is in steel. Internal parts are in hardened steel.*
Max. pressure: *see data sheet*







VP-GE2-*-*

V - 050/2

Valvola a sfera a 2 vie
Two way ball valve

Rev. 01-2010/02

Connessione femmina BSP DIN/ISO 228 – *DIN/ISO 228 BSP female connection*

TIPO *TYPE*	PRESSIONE MAX. MAX. PRESSURE	DN	B	C	D	E	F	G	H	H1	I	Ch.	PESO *WEIGHT*
	bar	mm	mm	mm	mm	BSPP	mm	mm	mm	mm	mm	mm	Kg
VP - GE2 - G1/8"	500	4	71	110	35	G1/8"	42	30	11	49	14	9	0,500
VP - GE2 - G1/4"	500	6	71	110	35	G1/4"	42	30	11	49	14	9	0,500
VP - GE2 - G3/8"	500	10	73	110	40	G3/8"	44	35	11	54	17	9	0,650
VP - GE2 - G1/2"	500	13	83	110	43	G1/2"	48	37	11	57	18	9	0,750
VP - GE2 - G3/4"	400	20	95	180	55	G3/4"	62	45	13	73	23	14	1,400
VP - GE2 - G1"	350	25	113	180	65	G1"	66	55	13	83	29	14	2,150
VP - GE2 - G1"1/4	350	25	121	180	65	G1"1/4	66	55	13	83	29	14	2,150
VP - GE2 - G1"1/2	350	25	124	180	65	G1"1/2	66	55	13	83	29	14	2,150

Connessione serie leggera DIN 2353 – *DIN 2353 light series connection*

TIPO *TYPE*	PRESSIONE MAX. MAX. PRESSURE	DN	B	C	D	E	E1	F	G	H	H1	I	L	Ch.	PESO *WEIGHT*
	bar	mm	mm	mm	mm	M	mm	mm	mm	mm	mm	mm	mm	mm	Kg
VP - GE2 - 6L	500	6	76	110	35	12X1.5	10	42	30	11	49	14	6	9	0,500
VP - GE2 - 8L	500	6	76	110	35	14X1.5	10	42	30	11	49	14	8	9	0,500
VP - GE2 - 10L	500	6	76	110	35	16X1.5	11	42	30	11	49	14	10	9	0,500
VP - GE2 - 10L	500	10	76	110	40	16X1.5	11	44	35	11	54	17	10	9	0,650
VP - GE2 - 12L	500	10	77	110	40	18X1.5	11	44	35	11	54	17	12	9	0,650
VP - GE2 - 15L	500	13	86	110	43	22X1.5	12	48	37	11	57	18	15	9	0,750
VP - GE2 - 18L	500	13	86	110	43	26X1.5	12	48	37	11	57	18	18	9	0,750
VP - GE2 - 22L	400	20	108	180	55	30X2	14	62	45	13	73	23	22	14	1,400
VP - GE2 - 28L	350	25	115	180	65	36X2	14	66	55	13	83	29	28	14	2,150
VP - GE2 - 35L	350	25	115	180	65	45X2	16	66	55	13	83	29	35	14	2,150
VP - GE2 - 42L	350	25	115	180	65	52X2	16	66	55	13	83	29	35	14	2,150

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P G E 2 **G 3 / 8** *****

* Connessioni – *port sizes*
Vedi tabelle – *see data sheet*

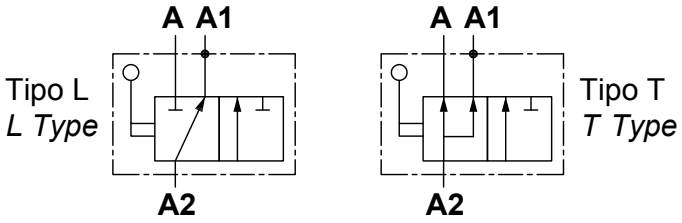
Guarnizioni – *Seals*:
Omettere se BUNA-N – *omit if BUNA-N*
Per guarnizioni speciali, consultare il servizio clienti *
For special seals, please contact Customer service

VP-GE3-*-*-*-*

V - 051/1

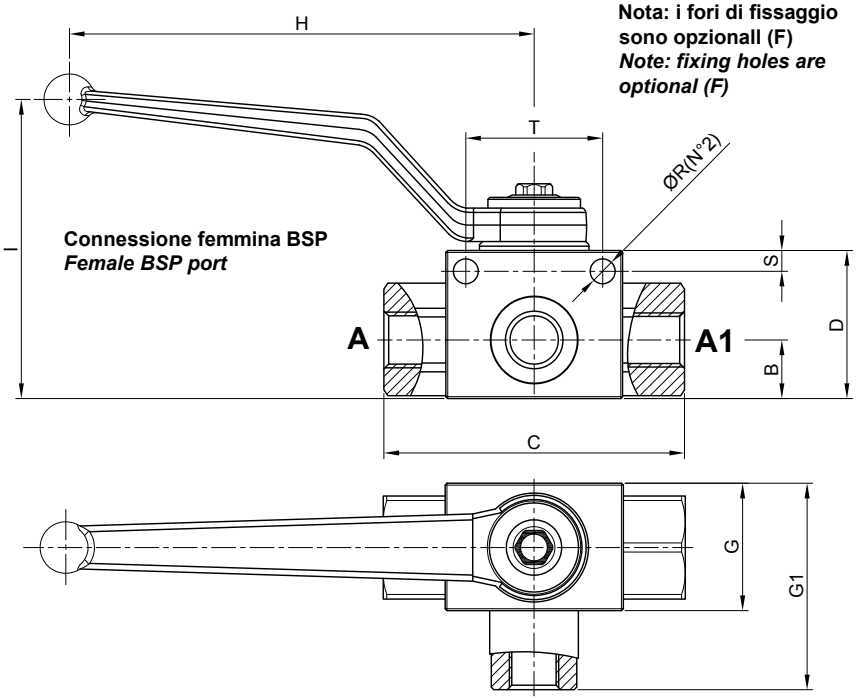
Valvola a sfera a 3 vie
Two way ball valve

Rev. 02-2010/05



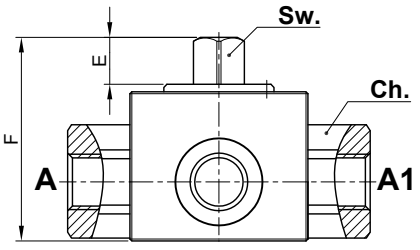
SPECIFICHE TECNICHE
Materiali: corpo in acciaio, particolari interni in acciaio trattato termicamente.
Pressione max.: vedi tabella

TECHNICAL SPECIFICATIONS
Materials: *body is in steel. Internal parts are in hardened steel.*
Max. pressure: *see data sheet*

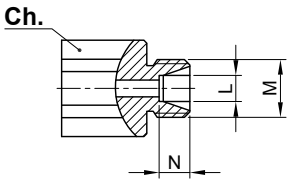


Nota: i fori di fissaggio sono opzionall (F)
Note: fixing holes are optional (F)

Versione senza leva
Version without lever



Connessione serie leggera
Light series port



VP-GE3-*-*-*-*

V - 051/2

Valvola a sfera a 3 vie
Two way ball valve

Rev. 01-2010/02

Connessione femmina BSP DIN/ISO 228 - *DIN/ISO 228 BSP female connection*

TIPO *TYPE*	PRESS. MAX. MAX. PRES	DN	A/A1	B	C	D	E	F	G	G1	H	I	SW	CH	R	S	T	PESO *WEIGHT*
	bar	mm	BSP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
VP - GE3 - G1/8"	400	4	G1/8"	14.5	71	35	11	49	30	48.5	110	91.5	9	24	5.25	4.5	34	0.560
VP - GE3 - G1/4"	400	6	G1/4"	14.5	71	35	11	49	30	48.5	110	91.5	9	24	5.25	4.5	34	0.540
VP - GE3 - G3/8"	400	10	G3/8"	17.4	73	40	11	54.25	35	54.5	110	96.5	9	30	5.25	4.5	34	0.700
VP - GE3 - G1/2"	350	13	G1/2"	18	83	43	11	57	37	58.5	110	99.5	9	32	5.25	5	36	0.825
VP - GE3 - G3/4"	350	20	G3/4"	23.4	95	55	14	43.5	45	75	180	106.5	14	41	6.25	6	50	1.600
VP - GE3 - G1"	350	25	G1"	29.5	112	65	14	83.5	55	87.5	180	116.5	14	50	6.25	6	50	2.425
VP - GE3 - G1"1/4	350	25	G1"1/4	29.5	120	65	14	83.5	55	87.5	180	116.5	14	55	6.25	6	50	2.600
VP - GE3 - G1"1/2	350	25	G1"1/2	29.5	124	65	14	83.5	55	87.5	180	116.5	14	60	6.25	6	50	2.750

Connessione serie leggera DIN 2353 - *DIN 2353 light series connection*

TIPO *TYPE*	PRESS. MAX. *MAX. PRES.*	DN	B	C	D	E	F	G	G1	H	I	L	M	N	SW	CH	R	S	T	PESO *WEIGHT*
	bar	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
VP - GE3 - 6L	400	6	14.5	76	35	11	49	30	48.5	110	91.5	6	12x1.5	7	9	24	5.25	4.5	34	0.530
VP - GE3 - 8L	400	6	14.5	76	35	11	49	30	48.5	110	91.5	8	14x1.5	7	9	24	5.25	4.5	34	0.530
VP - GE3 - 10L	400	6	14.5	76	35	11	49	30	48.5	110	91.5	10	16x1.5	7	9	24	5.25	4.5	34	0.540
VP - GE3 - 12L	400	10	17.4	79.5	40	11	54.25	35	54.5	110	96.5	12	18x1.5	7	9	30	5.25	4.5	34	0.670
VP - GE3 - 15L	350	13	18	87	43	11	57	37	59	110	99.5	15	22x1.5	7	9	32	5.25	5	50	0.725
VP - GE3 - 18L	350	13	18	87	43	11	57	37	59	110	99.5	18	26x1.5	7.5	9	32	5.25	5	50	0.860
VP - GE3 - 22L	350	20	23.4	110	55	14	73.5	45	75	180	106.5	22	30x2	7.5	14	41	6.25	6	50	1.640
VP - GE3 - 28L	350	25	29.5	117	65	14	83.5	55	87.5	180	116.5	28	36x2	7.5	14	50	6.25	6	50	2.360
VP - GE3 - 35L	350	25	29.5	119	65	14	83.5	55	87.5	180	116.5	35	45x2	10.5	14	50	6.25	6	50	2.360

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P G E 3 | T | G 3 / 8 | F | *

* Modello L/T – *model L/T*
Omettere se L – *omit if L*

* Connessioni – *port sizes*
Vedi tabelle – *see data sheet*

Guarnizioni – *Seals*:
Omettere se BUNA-N – *omit if BUNA-N* *
Per guarnizioni speciali, consultare il servizio clienti
For special seals, please contact Customer service

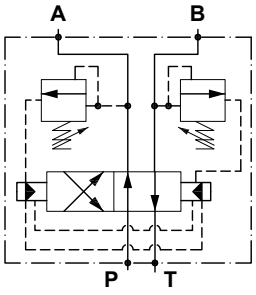
Fori di fissaggio – *Fixing holes:*
Omettere se non richiesti – *omit if not requested* *

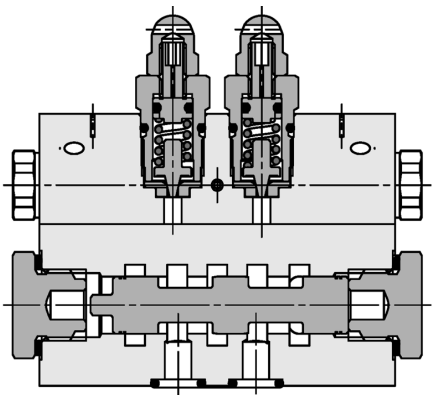
VPIA-L6-VM-*-*

V - 100/1

Invertitore automatico ad aumento di pressione, flangiato CETOP 3
Automatic reversing valves, pressure increase control, flanged CETOP 3

Rev. 03-2010/09





SPECIFICHE TECNICHE

Materiali: corpo in ghisa zincata. I componenti interni sono in acciaio trattato termicamente. La superficie esterna delle cartuccie è protetta mediante zincatura.
Portata min.: 3 l/min
Portata max.: 35 l/min
Pressione max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 1,210 Kg

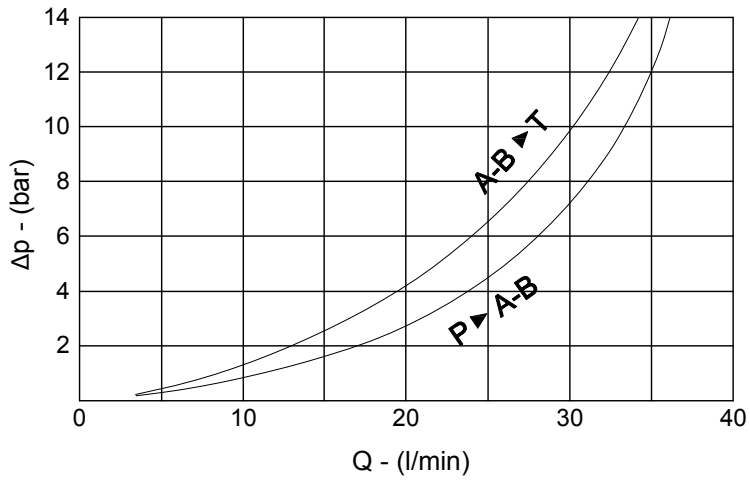
TECHNICAL SPECIFICATIONS

Materials: *body is in zinc plated cast iron. Internal parts are in hardened steel. Cartridges external surface: zinc plated.*
Min. flow: *3 l/min*
Max. flow: *up to 35 l/min*
Max. pressure: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *1,210 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



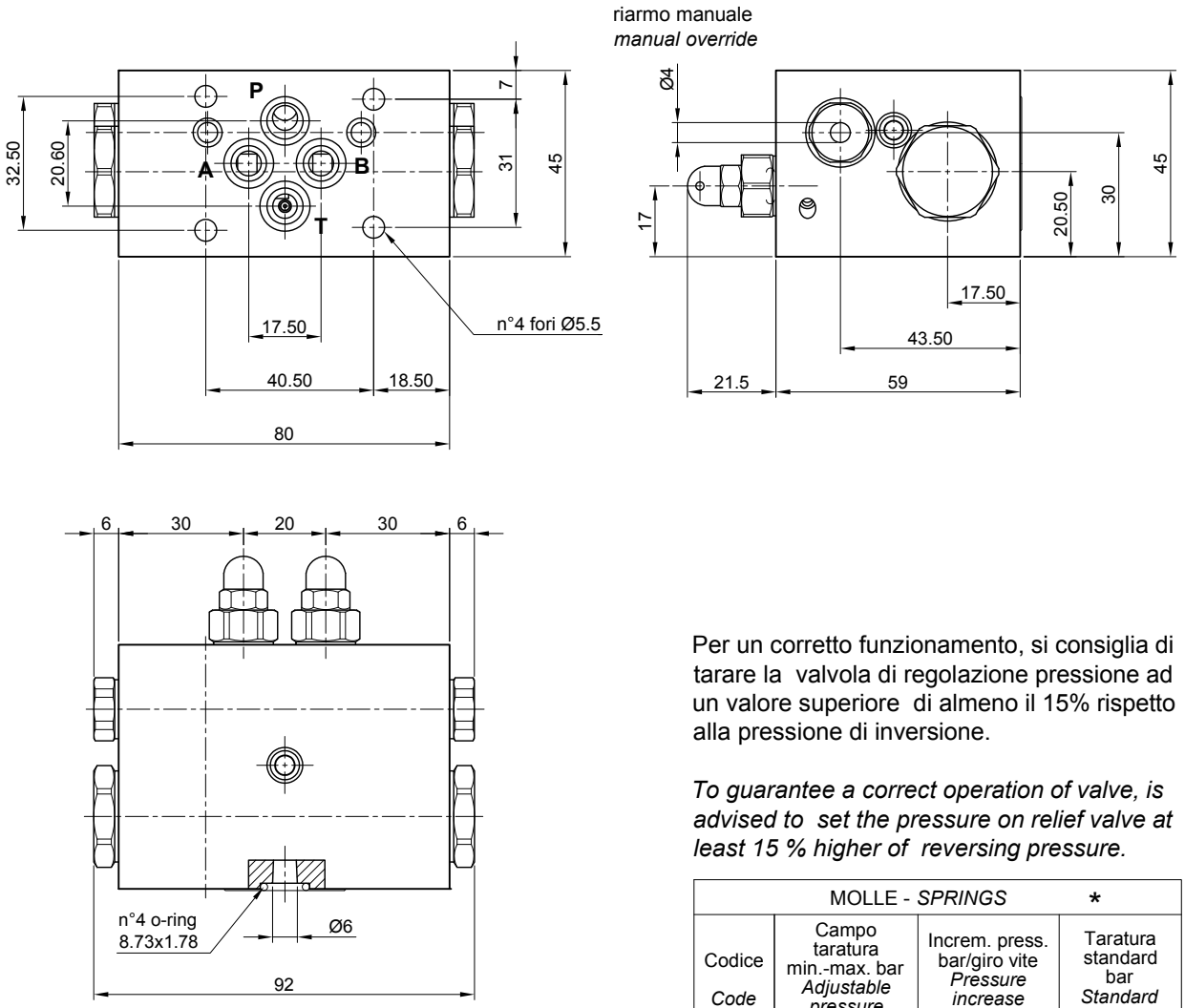
VPIA-L6-VM-*-*

V - 100/2

Invertitore automatico ad aumento di pressione, flangiato CETOP 3

Automatic reversing valves, pressure increase control, flanged CETOP 3

Rev. 03-2010/09



Per un corretto funzionamento, si consiglia di tarare la valvola di regolazione pressione ad un valore superiore di almeno il 15% rispetto alla pressione di inversione.

To guarantee a correct operation of valve, is advised to set the pressure on relief valve at least 15 % higher of reversing pressure.

MOLLE - *SPRINGS*			*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
10	20 - 100	70	40
20	85 - 260	150	150

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPIA **L6** **VM** **20** *

* "10" / "20":
Campi di taratura pressione - *Adjustable pressure range*

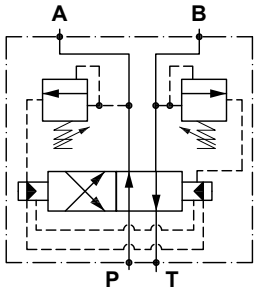
Guarnizioni – *Seals*:
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

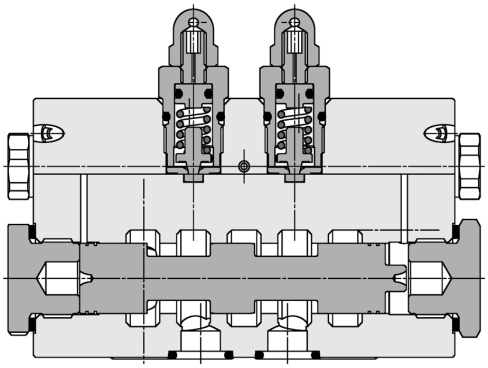
VPIA-L10-VM-*-*

V - 105/1

Invertitore automatico ad aumento di pressione, flangiato CETOP 5
Automatic reversing valves, pressure increase control, flanged CETOP 5

Rev. 03-2010/09





SPECIFICHE TECNICHE

Materiali: corpo in ghisa zincata. I componenti interni sono in acciaio trattato termicamente. La superficie esterna delle cartuccie è protetta mediante zincatura.
Portata min.: 3 l/min
Portata max.: 80 l/min
Pressione max.: 350 bar
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 2.500 Kg

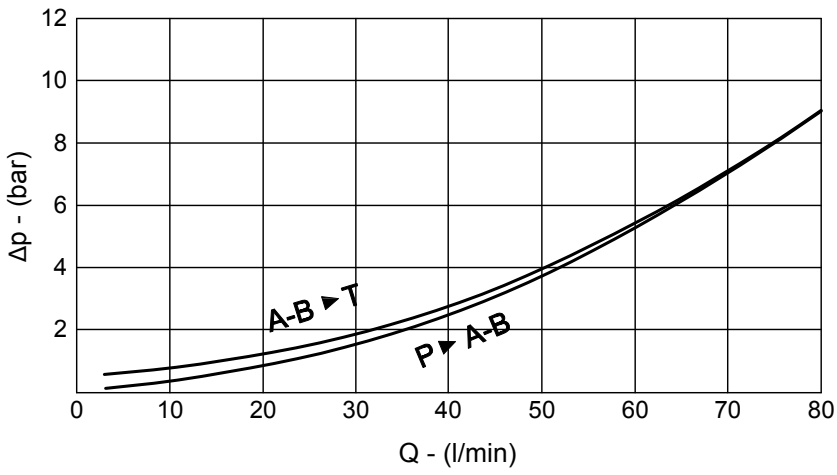
TECHNICAL SPECIFICATIONS

Materials: *body is zinc plated cast iron. Internal parts are in hardened steel. Cartridges external surface: zinc plated.*
Min. flow: *3 l/min*
Max. flow: *up to 80 l/min*
Max. pressure: *350 bar*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *2.500 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



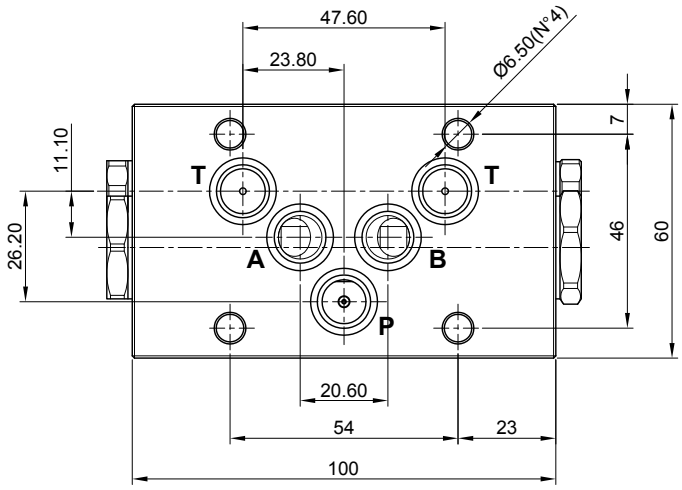
VPIA-L10-VM-*-*

V - 105/2

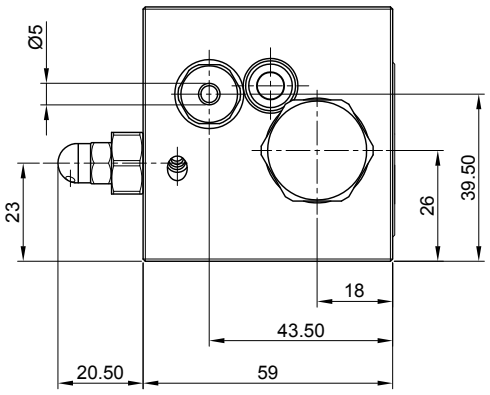
Invertitore automatico ad aumento di pressione, flangiato CETOP 5

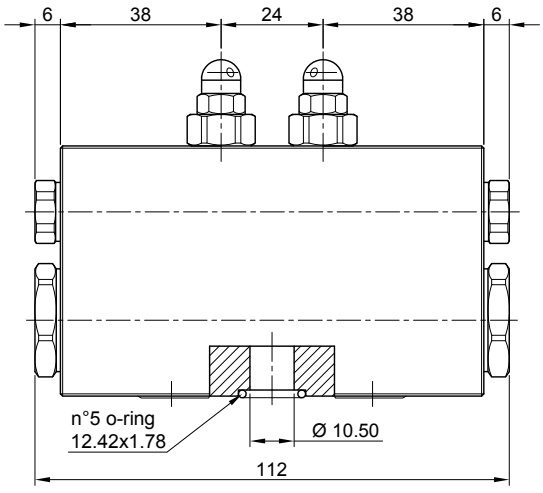
Automatic reversing valves, pressure increase control, flanged CETOP 5

Rev. 03-2010/09



riarmo manuale
manual override





Per un corretto funzionamento, si consiglia di tarare la valvola di regolazione pressione ad un valore superiore di almeno il 15% rispetto alla pressione di inversione.

To guarantee a correct operation of valve, is advised to set the pressure on relief valve at least 15 % higher of reversing pressure.

MOLLE - *SPRINGS*			*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
10	20 - 100	70	40
20	85 - 260	150	150

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPIA **L10** **VM** **20** *

* "10" / "20":
Campi di taratura pressione - *Adjustable pressure range*

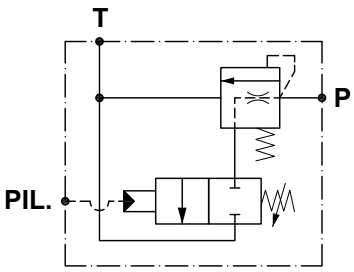
Guarnizioni – *Seals*:
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

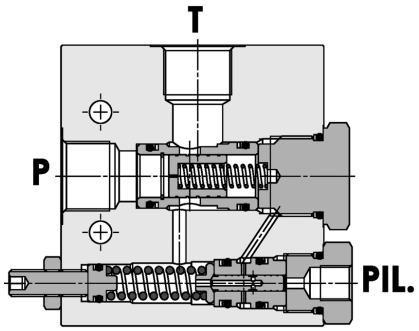
VPMS-P-*-*-*

V - 150/1

Valvola di messa a scarico, idropilotata
Pilot operated unloading valve

Rev. 01-2010/02





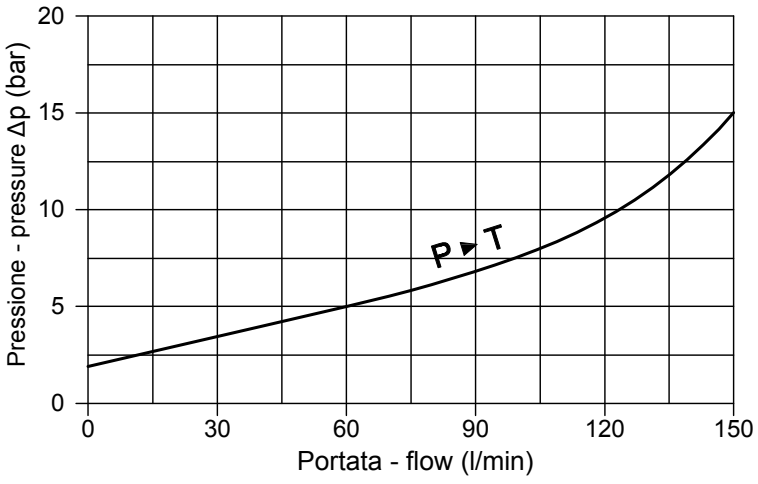
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato giallo, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: 150 l/min
Taratura max.: 250 bar
Pressione max.: 300 bar
Regolazione pressione: mediante vite
Peso: 1,350 Kg

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *150 l/min*
Max. setting: *250 bar*
Max.pressure: *300 bar*
Adjustement means: *leakproof screw*
Weight: *1,350 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

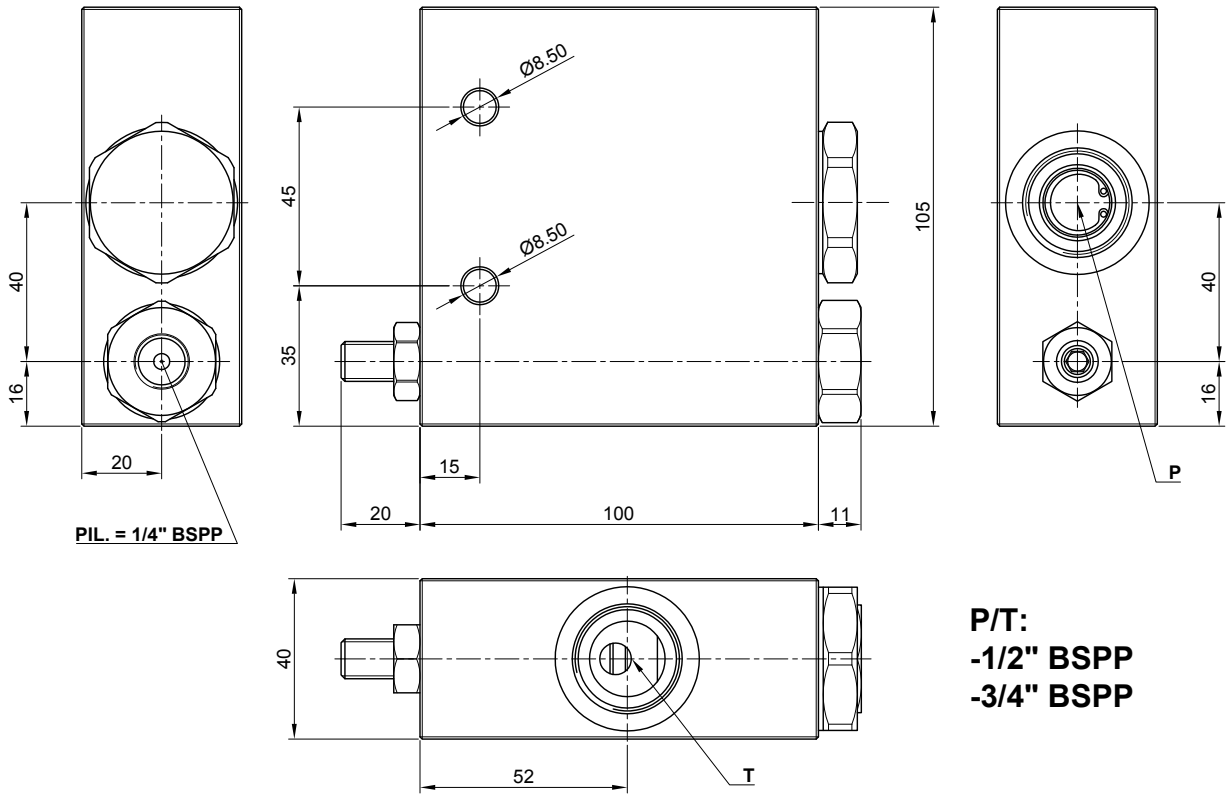


VPMS-P-*-*-*

V - 150/2

Valvola di messa a scarico, idropilotata
Pilot operated unloading valve

Rev. 01-2010/02



P/T:
-1/2" BSPP
-3/4" BSPP

MOLLE - *SPRINGS* *			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
10	20 - 100	18	50
20	50 - 220	50	200

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPMS | **P** | **1/2** | **20** | *

* 1/2 = 1/2" BSPP
3/4 = 3/4" BSPP
Connessioni P/T (versione CB) - *P/T port sizes (CB version)*

* "10" / "20":
Campi di taratura pressione - *Adjustable pressure range*

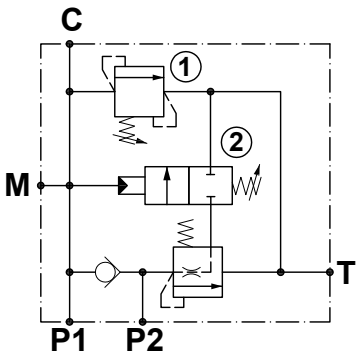
Guarnizioni – *Seals*:
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

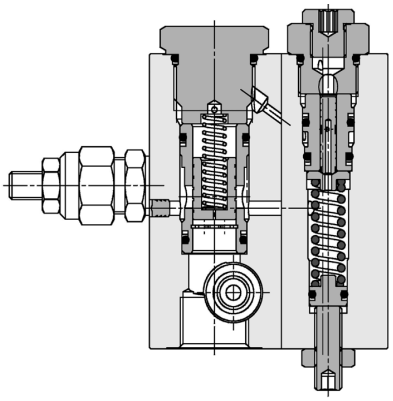
VPMS-PD-P-3/4-*-*-*

V - 155/1

Valvola di esclusione pompa doppia
Pump unloading valve

Rev. 01-2010/02





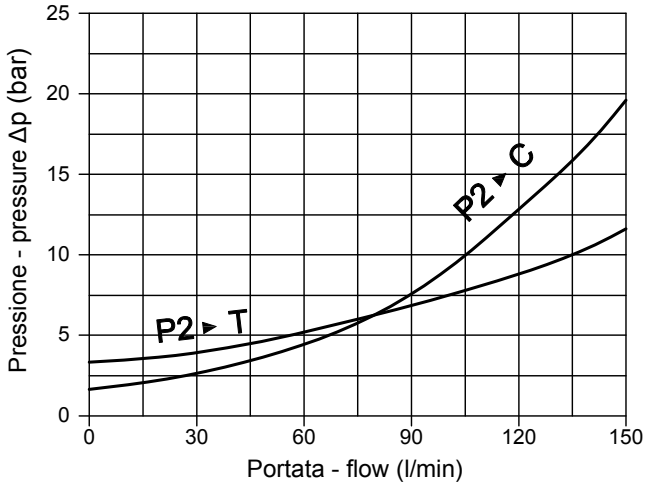
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato giallo, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: 150 l/min
Portata valvola (1): 40 l/min
Taratura max.: 350 bar (1), 220 bar (2)
Pressione max. di lavoro: 250 bar su P2, 300 bar su P1
Regolazione pressione: mediante vite
Peso: 2,400 Kg

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *150 l/min*
Rated flow relief valve (1): *40 l/min*
Max. setting: *350 bar (1), 220 bar (2)*
Max. working pressure: *250 bar on P2, 300 bar on P1*
Adjustement means: *leakproof screw*
Weight: *2,400 Kg*

DIAGRAMMA PERDITE DI CARICO - ***PRESSURE DROP CURVES***

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



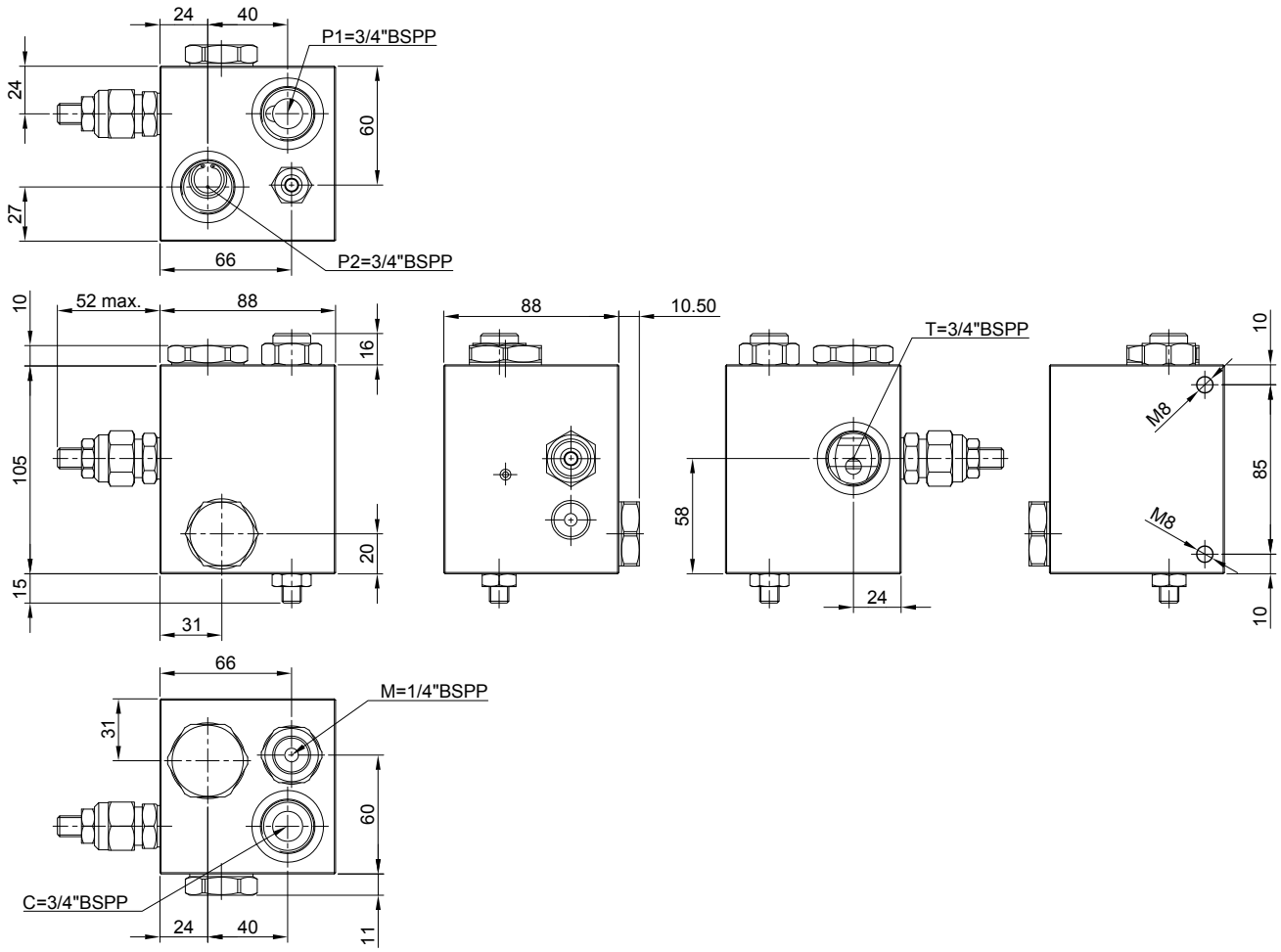
VPMS-PD-P-3/4-*-*-*

V - 155/2

Valvola di esclusione pompa doppia

Pump unloading valve

Rev. 01-2010/02



MOLLE VALVOLA DI MAX. (1) * *SPRINGS RELIEF VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	50 - 220	40	150
35	80 - 350	80	280

MOLLE VALVOLA DI MAX. (2) * *SPRINGS RELIEF VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
10	20 - 100	18	50
20	50 - 220	50	200

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

VPMSPD	P	3/4	20	20	*

* "20" / "35":
Campi di taratura pressione valvola max. (1) -
Adjustable pressure range relief valve (1)

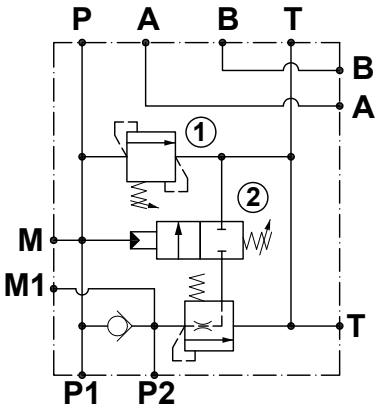
* "10" / "20":
Campi di taratura pressione valvola max. (2) -
Adjustable pressure range relief valve (2)

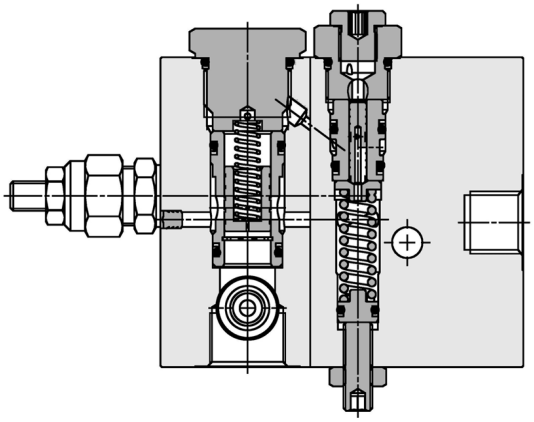
Guarnizioni – *Seals*:
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

VPMS-PDL10-P-3/4-*-*-* V - 160/1

Valvola di esclusione pompa doppia, con flangia CETOP 5
Pump unloading valve, with flange CETOP 5

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato giallo, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata max.: 150 l/min
Portata valvola (1): 40 l/min
Taratura max.: 350 bar (1), 220 bar (2)
Pressione max. di lavoro: 250 bar su P2, 300 bar su P1
Regolazione pressione: mediante vite
Peso: 3,810 Kg

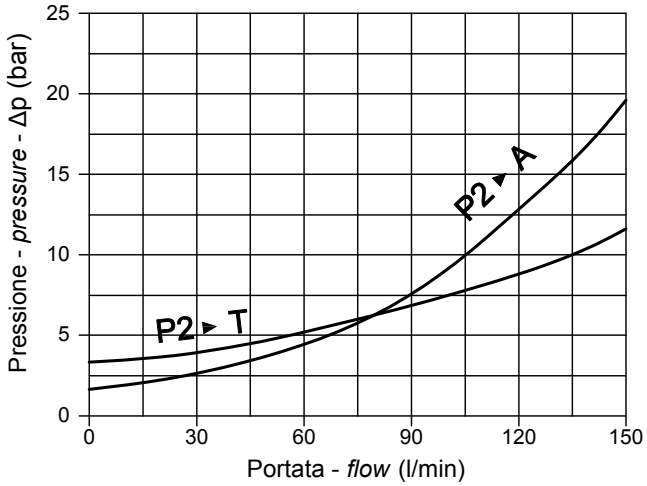
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *150 l/min*
Rated flow relief valve (1): *40 l/min*
Max. setting: *350 bar (1), 220 bar (2)*
Max. working pressure: *250 bar on P2, 300 bar on P1*
Adjustement means: *leakproof screw*
Weight: *3,810 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

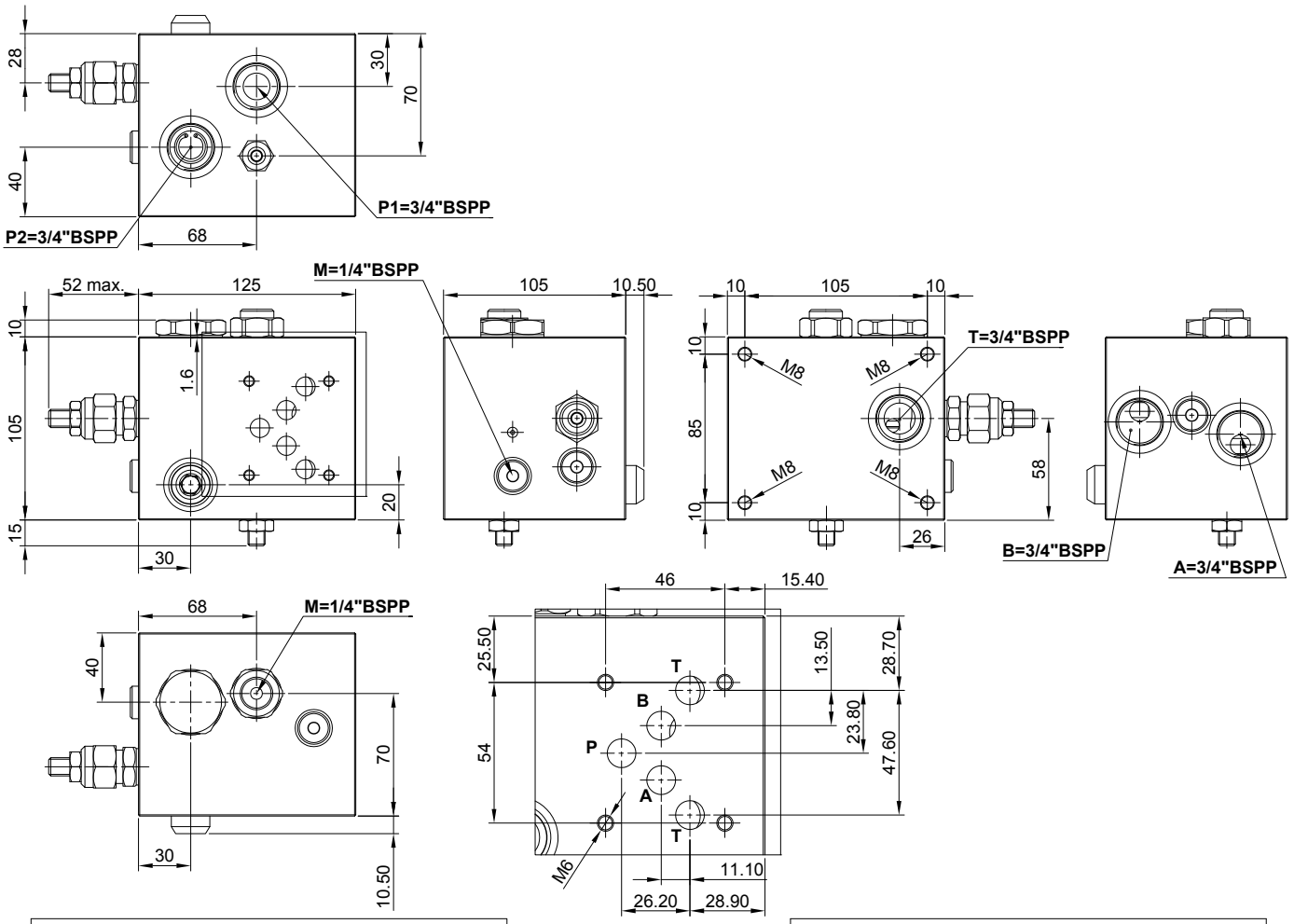
Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



VPMS-PDL10-P-3/4-*-*-* V - 160/2

Valvola di esclusione pompa doppia, con flangia CETOP 5
Pump unloading valve, with flange CETOP 5

Rev. 01-2010/02



MOLLE VALVOLA DI MAX. (1) * *SPRINGS RELIEF VALVE (1)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
20	50 - 220	40	150
35	80 - 350	80	280

MOLLE VALVOLA DI MAX. (2) * *SPRINGS RELIEF VALVE (2)*			
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
10	20 - 100	18	50
20	50 - 220	50	200

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M S P D L 1 0 | **P** | **3 / 4** | **2 0** | **2 0** | *

* "20" / "35":
Campi di taratura pressione valvola max. (1) -
Adjustable pressure range relief valve (1)

* "10" / "20":
Campi di taratura pressione valvola max. (2) -
Adjustable pressure range relief valve (2)

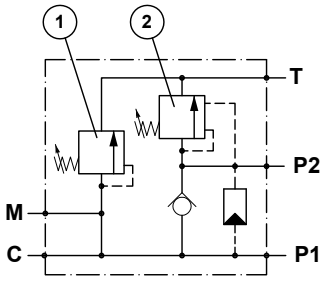
Guarnizioni – *Seals*:
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

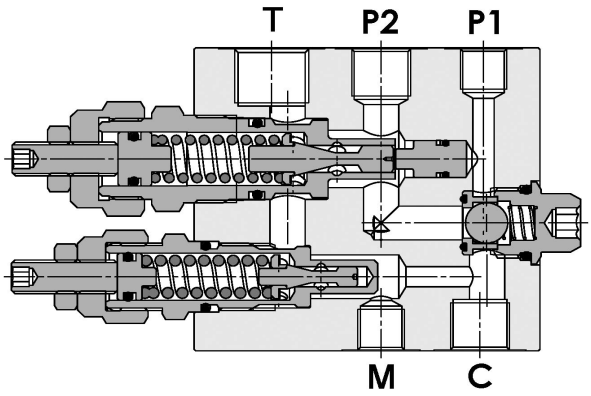
VPMSE PD-P-3/8-*-*

V - 165/1

Valvola di esclusione alta-bassa pressione
Two-pump unloading valve

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: cartuccia in acciaio zincato giallo, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio.
Portata: P1=10 l/min, P2=25 l/min, C=30 l/min
Taratura max.: 350 bar (1), 220 bar (2)
Pressione max. di lavoro: 200 bar su P2, 300 bar su P1
Regolazione pressione: mediante vite
Peso: 1,30 Kg

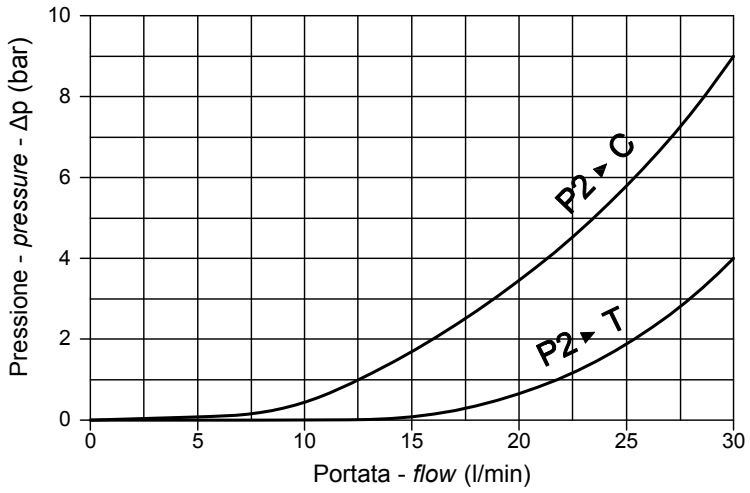
TECHNICAL SPECIFICATIONS

Materials: *cartridge in steel zinc plated, internal parts in hardened steel. Body is in high strenght alluminium alloy.*
Rated flow: *P1=10 l/min, P2=25 l/min, C=30 l/min*
Max. setting: *350 bar (1), 220 bar (2)*
Max. working pressure: *200 bar on P2, 300 bar on P1*
Adjustement means: *leakproof screw*
Weight: *1,30 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

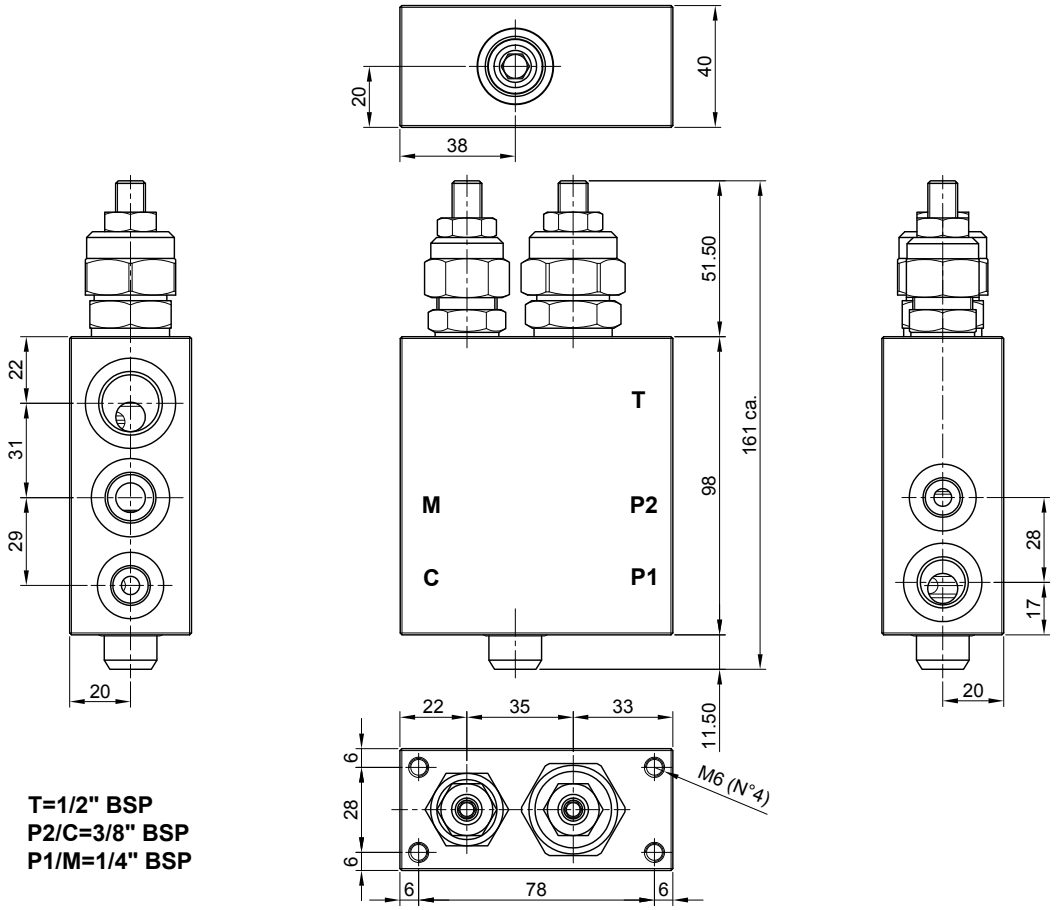


VPMSE PD-P-3/8-*-*

V - 165/2

Valvola di esclusione alta-bassa pressione
Two-pump unloading valve

Rev. 01-2010/02



T=1/2" BSP
P2/C=3/8" BSP
P1/M=1/4" BSP

MOLLE VALVOLA DI MAX. (1) *SPRINGS RELIEF VALVE (1)* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
20	50 - 220	40	150	/
35	80 - 350	80	280	/

MOLLE VALVOLA DI MAX. (2) *SPRINGS RELIEF VALVE (2)* *				
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
10	20 - 100	18	50	/
20	50 - 220	50	200	/

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P M S E P D | **P** | **3 / 8** | **2 0** | **2 0** | *

"20" / "35":
* Campi di taratura pressione valvola max. (1) -
Adjustable pressure range relief valve (1)

"10" / "20":
* Campi di taratura pressione valvola max. (2) -
Adjustable pressure range relief valve (2)

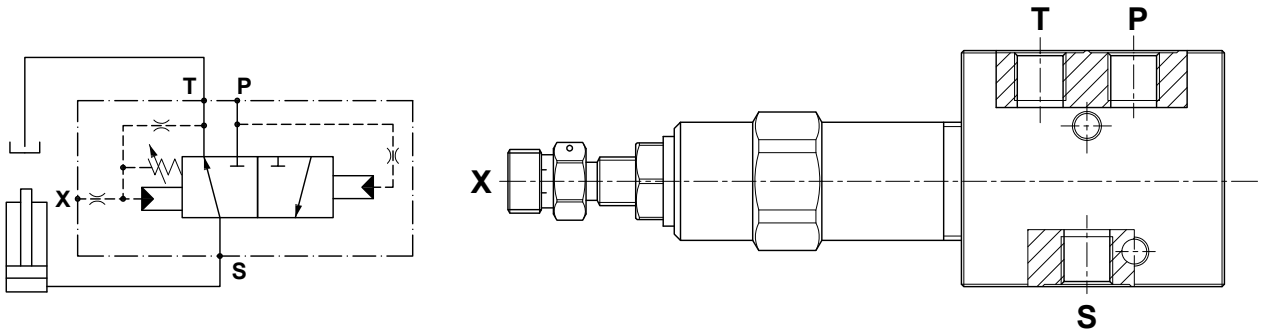
Guarnizioni – *Seals*:
V=Viton *
Omettere se BUNA-N – *Omit if BUNA-N*

VPLM-CB-P-1/4-35

V - 200/1

Sensore compensato di pressione limite
Three way sequence

Rev. 01-2010/02



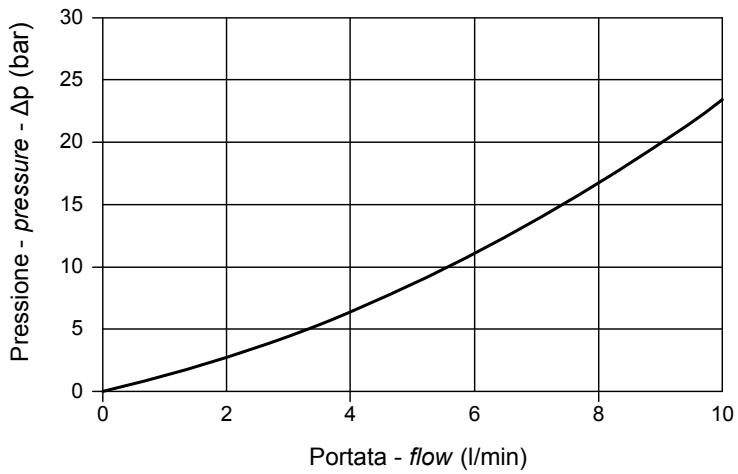
SPECIFICHE TECNICHE
Materiali: cartuccia in acciaio zincato, parti interne in acciaio trattato termicamente. Corpo in lega di alluminio anodizzato.
Portata max.: 8 l/min
Pressione di lavoro max.: 350 bar
Regolazione pressione: mediante vite
Peso: 0,780 Kg

TECHNICAL SPECIFICATIONS
Materials: *cartridge in steel zinc plated, internal parts are in hardened steel. Body is in high strenght alluminium alloy, anodized.*
Rated flow: *8 l/min*
Max. working pressure: *350 bar*
Adjustement means: *leakproof screw*
Weight: *0,780 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C



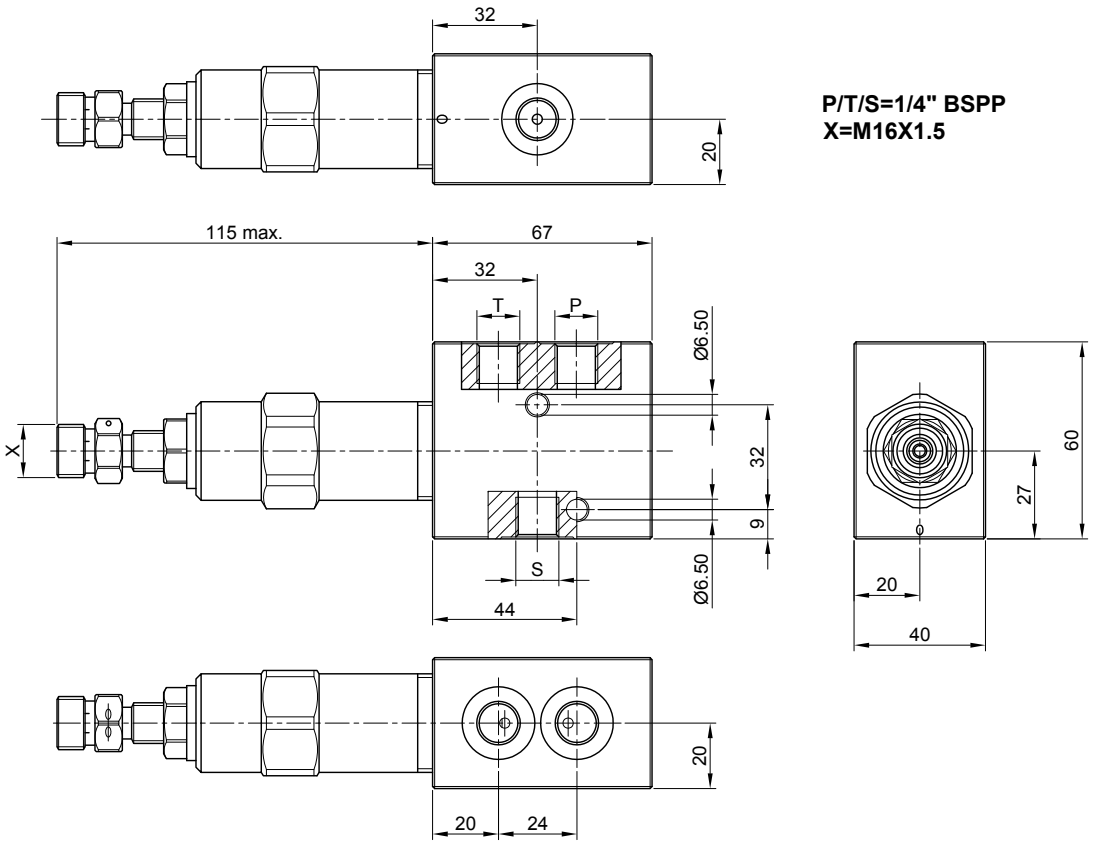
VPLM-CB-P-1/4-35

V - 200/2

Sensore compensato di pressione limite

Three way sequence

Rev. 01-2010/02



MOLLE - *SPRINGS*				*
Codice *Code*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*	Colore *Color*
35	80 - 350	22	300	Rosso *Red*

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

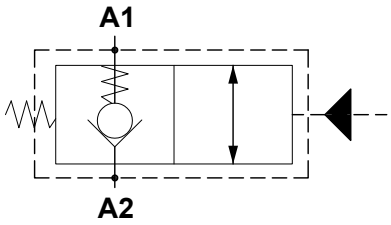
V P L M	C B	P	1 / 4	3 5

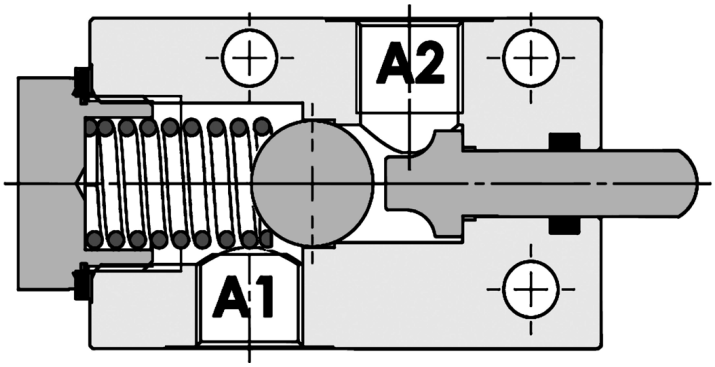
VPFC-*

V - 225/1

Valvole di fine corsa
End run valves

Rev. 01-2010/02





SPECIFICHE TECNICHE

Materiali: corpo in acciaio. La sfera è in acciaio trattato termicamente. La superficie esterna è protetta mediante zincatura.
Portata max.: 45 l/min
Pressione max.: 250 bar, vedasi tabella a parte
Connessioni: 1/4" - 3/8" BSP

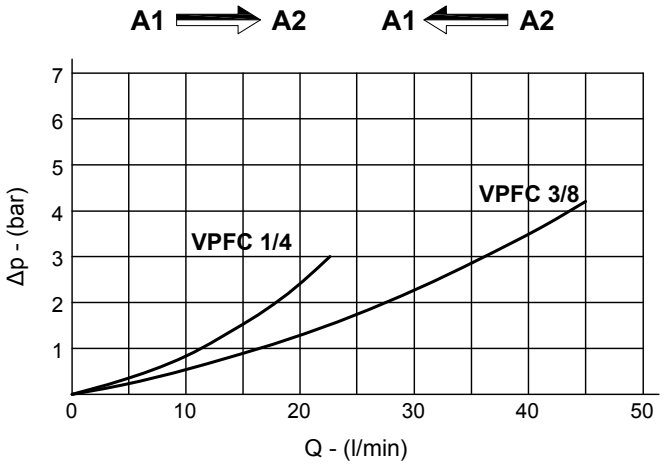
TECHNICAL SPECIFICATIONS

Materials: *body is steel made. Ball is in hardened steel. External surface is zinc plated.*
Rated flow: *45 l/min*
Max. pressure: *250 bar, see data sheet*
Ports: *1/4" - 3/8" BSP*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

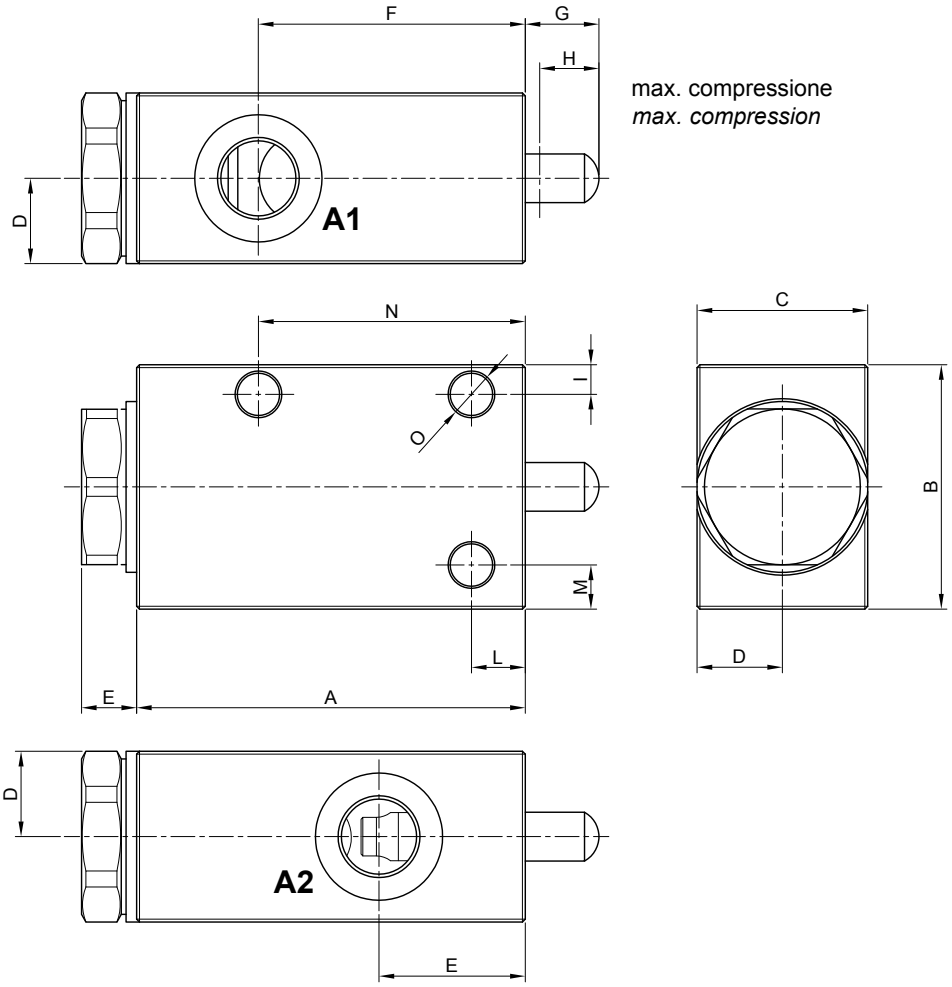


VPFC-*

V - 225/2

Valvole di fine corsa
End run valves

Rev. 01-2010/02



TIPO *TYPE*	PORTATA MAX. *MAX. FLOW*	PRESSIONE MAX. *MAX. PRESSURE*	A1-A2	A	B	C	D	E	F	G	H	I	L	M	N	O	PESO *WEIGHT*
	L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
VPFC-1/4"	25	250	1/4"	80	50	35	17.5	30	55	15	13	6	11	9	55	8.5	1,000
VPFC-3/8"	45	250	3/8"	80	50	35	17.5	30	55	15	13	6	11	9	55	8.5	1,000

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P F C **3 / 8**

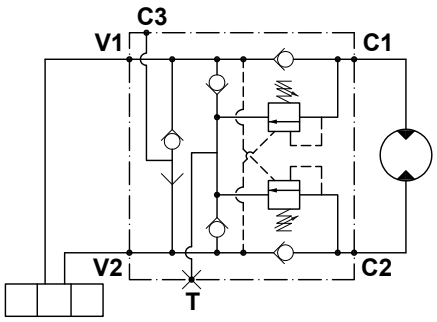
1/4 = 1/4” BSPP
* 3/8 = 3/8” BSPP
Connessioni - *Port sizes*

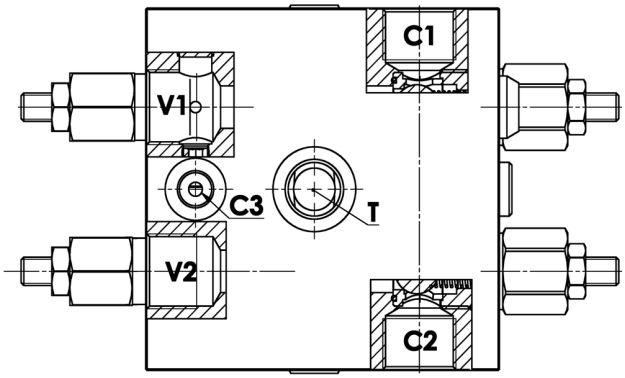
VPVCR-120-D-3/4-35

V - 300/1

Valvola controllo rotazione con sblocco freno, montaggio in linea
Motion control valve, with brake release port, line mounted

Rev. 03-2010/10





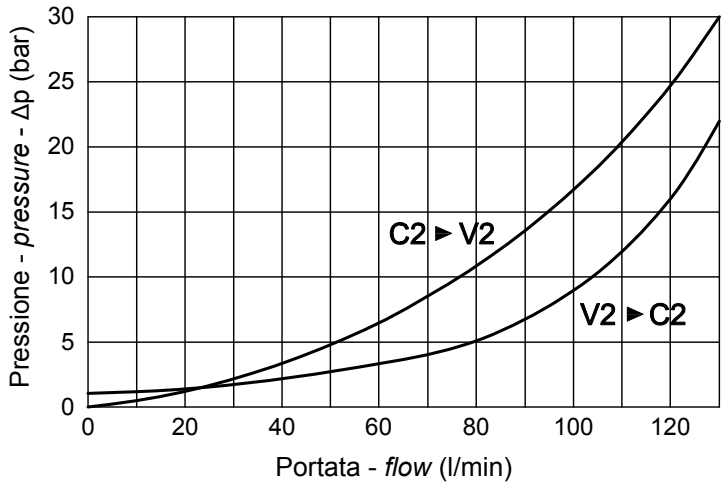
SPECIFICHE TECNICHE
Materiali: corpo in alluminio. I componenti interni sono in acciaio trattato termicamente.
Portata max.: 120 l/min
Taratura max.: 350 bar
Rapporto di pilotaggio: 1 : 7
Regolazione pressione: mediante vite
Campo di regolazione pressione: vedere pag. 02
Peso: 4,800 Kg

TECHNICAL SPECIFICATIONS
Materials: *aluminium body. Internal parts are in hardened steel.*
Rated flow: *up to 120 l/min*
Max. setting: *350 bar*
Pilot ratio: *1 : 7*
Adjustement means: *leakproof screw adjustement*
Adjustable pressure range: *see page 02*
Weight: *4,800 Kg*

DIAGRAMMA PERDITE DI CARICO - *PRESSURE DROP CURVES*

Viscosità olio 24 mm²/sec. (3.5 °E)
Temperatura 50 °C

Oil viscosity 24 mm²/sec. (3.5 °E)
Temperature 50 °C

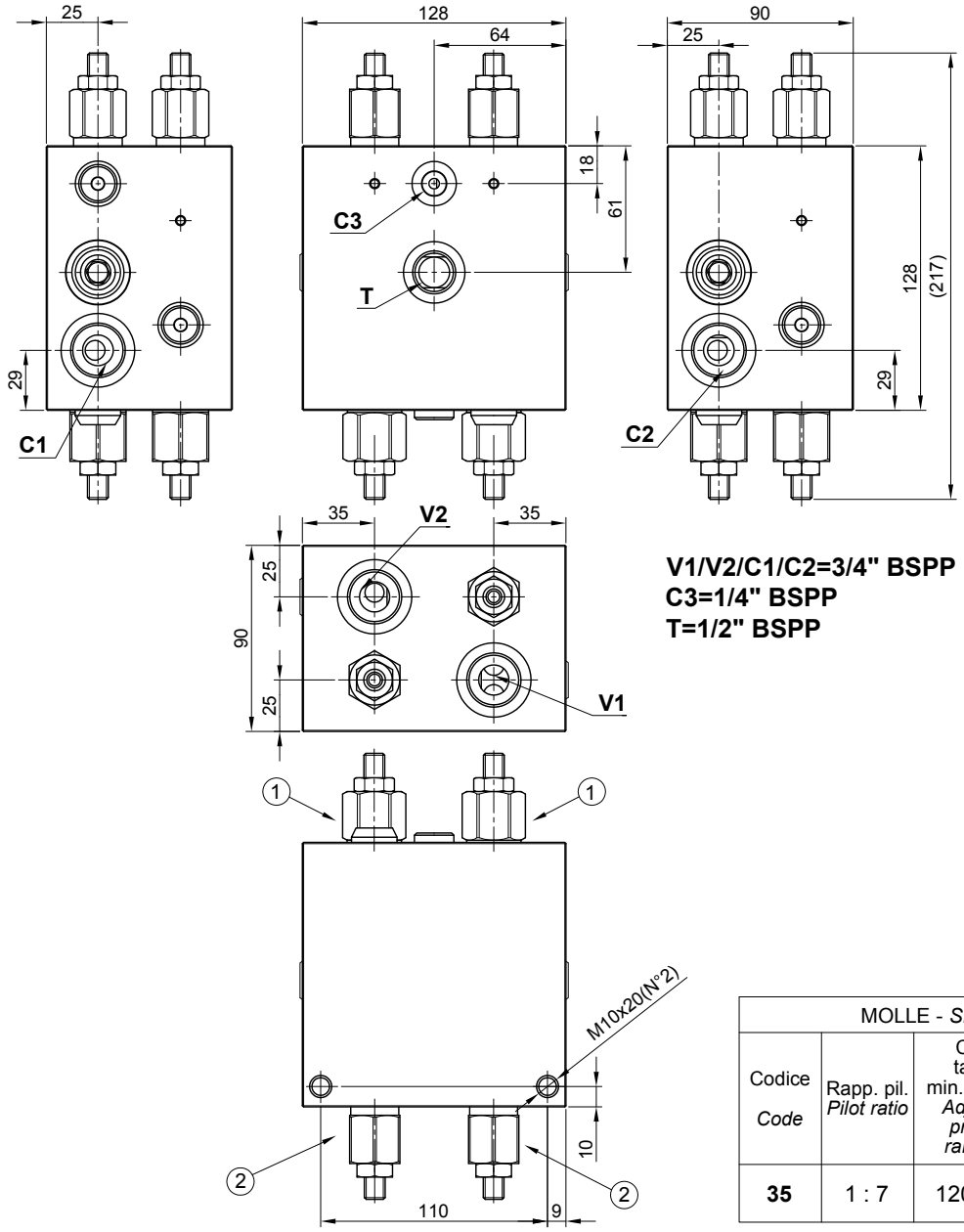


VPVCR-120-D-3/4-35

V - 300/2

Valvola controllo rotazione con sblocco freno, montaggio in linea
Motion control valve, with brake release port, line mounted

Rev. 03-2010/10



V1/V2/C1/C2=3/4" BSPP
C3=1/4" BSPP
T=1/2" BSPP

MOLLE - *SPRINGS*				
Codice *Code*	Rapp. pil. *Pilot ratio*	Campo taratura min.-max. bar *Adjustable pressure range bar*	Increm. press. bar/giro vite *Pressure increase bar/turn*	Taratura standard bar *Standard setting bar*
35	1 : 7	120 - 350	90	300(1) 120(2)

ESEMPIO DI ORDINAZIONE - *ORDERING CODE EXAMPLE*

V P V C R	1 2 0	D	3 / 4	3 5

SEZIONE W
Complementi valvole e corpi standard

SECTION W
Valve complements, standard body

RACCORDI ORIENTABILI E KIT DI FISSAGGIO PER VPD...RO

Sono raccordi ad occhio con tubi diam.12 mm per valvole VPD...RO, orientabili a 360° per il montaggio diretto sui cilindri. Sono disponibili in molteplici dimensioni standard e su richiesta può essere fornito anche il kit di fissaggio con viti forate.

BANJO UNIONS AND FIXING KIT FOR VPD...RO

These are banjo unions with 12 mm diameter pipes for valves VPD...RO, and they are turnable on a full 360° degrees for the direct mounting on cylinders. Many standard dimensions are available, and on request can be supplied the fixing kit with drilled screws.

PAGINA / *PAGE*	**CODICE / *CODE***
W 010	VPD...RO

CORPI MF/FF PER VALVOLE FPP/VSC/VSCR

Sono corpi maschio-femmina e femmina-femmina per valvole ad inserto VPP / VSC / VSCR

MF AND FF BODY FOR VALVES VPP/VSC/VSCR

These are male-female and female-female bodies for VPP / VSC / VSCR insert mounting valves.

PAGINA / *PAGE*	**CODICE / *CODE***
W 100	VPP / VSC / VSCR

CORPI STANDARD PER VALVOLE A CARTUCCIA IN CAVITÀ SAE

Sono corpi maschio-femmina e femmina-femmina per valvole ad inserto VPP / VSC / VSCR

STANDARD BODY FOR CARTRIDGE VALVES, SAE CAVITY

These are male-female and female-female bodies for VPP / VSC / VSCR insert mounting valves.

PAGINA / *PAGE*	**CODICE / *CODE***	**PAGINA / *PAGE***	**CODICE / *CODE***
W 150	23**1-G*-*-1 / 33**2-G-*-*-1	W 150	33**1-G*-*-1 / 43**2-G-*-*-1

Filtraggio consigliato: 25 micron o inferiore
Per specifiche tecniche più dettagliate, consultare le rispettive pagine.

Advised filtration: 25 micron or lower
For more detailed technical specification, consult the respective pages.

Meta Hydraulic si riserva il diritto di cessare la produzione o di variare le caratteristiche tecniche e dimensionali di tutti i propri prodotti in ogni momento senza nessun preavviso e senza alcun obbligo.

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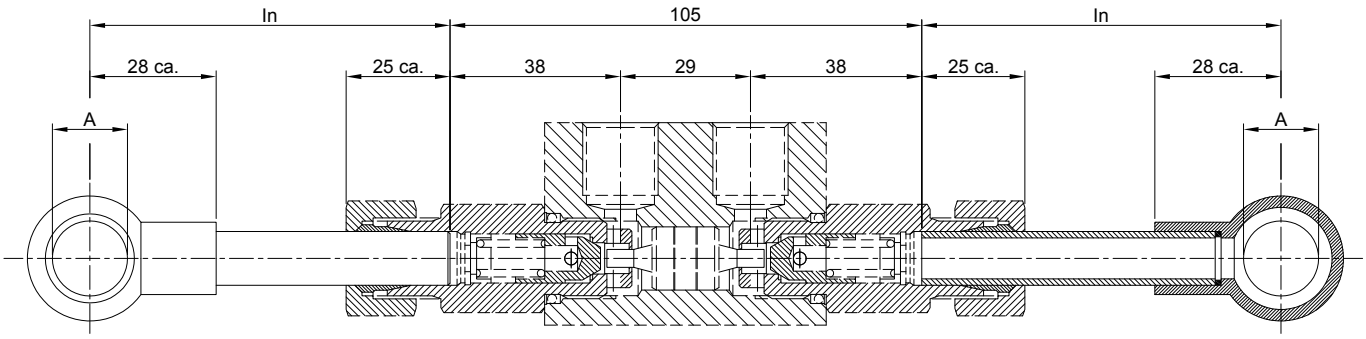
VPD...1RO/2RO

W - 010/1

Raccordi ad occhio e kit di fissaggio per valvole VPD...1RO/2RO

Banjo unions and fixing kit for VPD...1RO/2RO valve

Rev. 01-2010/02



VPD 3/8"-20L...1RO/2RO

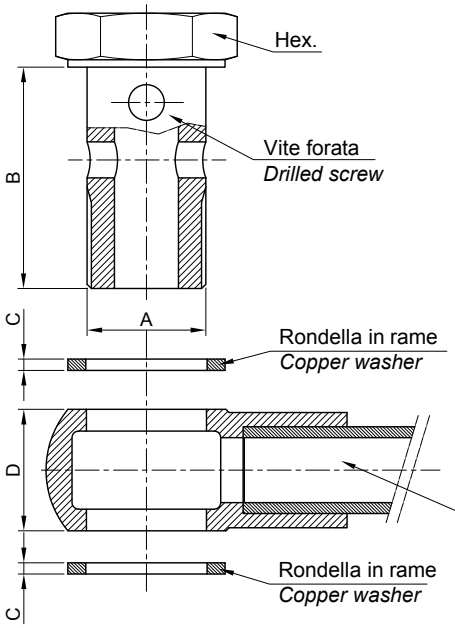
CODICE D'ORDINE *ORDERING CODE*	In	A	PRESSIONE MAX. *MAX.PRESSURE*
	mm	mm	BAR
1004000060	38	16.75	250
1004000070	52	16.75	250
1004000080	56	16.75	250
1004000090	75	16.75	250
1004000100	100	16.75	250
1004000110	150	16.75	250
1004000120	200	16.75	250
1004000130	300	16.75	250
1004000140	400	16.75	250
1004000150	500	16.75	250

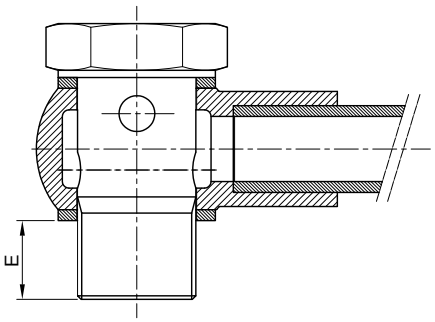
VPD 1/4"...1RO/2RO

CODICE D'ORDINE *ORDERING CODE*	In	A	PRESSIONE MAX. *MAX.PRESSURE*
	mm	mm	BAR
1004000160	38	13.2	250
1004000170	52	13.2	250
1004000180	56	13.2	250
1004000190	75	13.2	250
1004000200	100	13.2	250
1004000210	150	13.2	250
1004000220	200	13.2	250
1004000230	300	13.2	250
1004000240	400	13.2	250
1004000250	500	13.2	250

Per dimensioni speciali dei raccordi ad occhio, richiedere informazioni all'Ufficio Commerciale.

For special dimension of banjo unions, ask information to the Commercial Dept.





Il kit si compone di n°1 vite forata + n°2 rondelle in rame

The kit is composed of n°1 drilled screw + n°2 copper washer

TIPO *TYPE*	CODICE D'ORDINE *ORDERING CODE*	A	B	C	D	E	Hex.
		BSPP	mm	mm	mm	mm	mm
VPD 1/4...1RO/2RO	10F2650001	1/4"	28	1.5	15	10	19
VPD 3/8-20L...1RO/2RO	40F2650002	3/8"	31	1.5	17	11	22

VPP/VSC/VSCR MF/FF

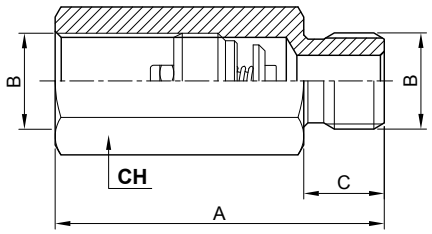
W - 100/1

Corpi maschio-femmina e femmina-femmina per valvole VPP/VSC/VSCR
Male-female and female-female body for VPP/VSC/VSCR valve

Rev. 02-2010/05

VALVOLE VPP - *VPP VALVES*

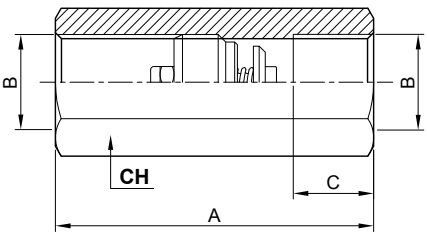
CORPO "MF" - *BODY "MF"*



Le valvole VPP devono essere inserite nei corpi FF e MF dall'installatore

The valves VPP have to be inserted in the housings by the user.

CORPO "FF" - *BODY "FF"*

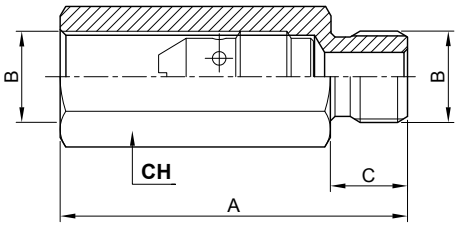


TIPO *TYPE*	CODICE D'ORDINE *ORDERING CODE*	A	B	C	CH	PESO *WEIGHT*
		mm	BSPP	mm	mm	Kg
CORPO VPP 1/4 MF	1003501120	50	1/4"	12	19	0.075
CORPO VPP 3/8 MF	1003501130	58	3/8"	12	22	0.105
CORPO VPP 1/2 MF	1003501140	70	1/2"	14	27	0.185
CORPO VPP 3/4 MF	1003501150	78	3/4"	16	36	0.365
CORPO VPP 1 MF	1003501320	92	1"	18	46	0.765

TIPO *TYPE*	CODICE D'ORDINE *ORDERING CODE*	A	B	C	CH	PESO *WEIGHT*
		mm	BSPP	mm	mm	Kg
CORPO VPP 1/4 FF	1003501160	48	1/4"	12	19	0.075
CORPO VPP 3/8 FF	1003501170	52	3/8"	12	22	0.097
CORPO VPP 1/2 FF	1003501180	62	1/2"	14	27	0.160
CORPO VPP 3/4 FF	1003501190	72	3/4"	16	36	0.350
CORPO VPP 1 FF	1003501330	86	1"	20	46	0.785

VALVOLE VSC - *VSC VALVES*

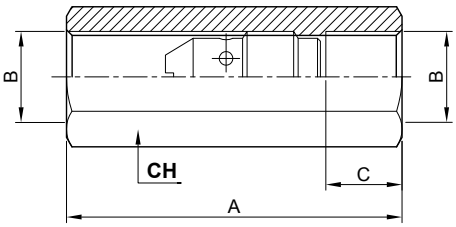
CORPO "MF" - *BODY "MF"*



Le valvole VSC devono essere inserite nei corpi FF e MF dall'installatore.

The valves VSC have to be inserted in the housings by the user.

CORPO "FF" - *BODY "FF"*

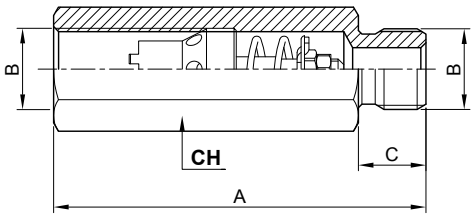


TIPO *TYPE*	CODICE D'ORDINE *ORDERING CODE*	A	B	C	CH	PESO *WEIGHT*
		mm	BSPP	mm	mm	Kg
CORPO VSC 1/4 MF	1003502720	60	1/4"	12	19	0.078
CORPO VSC 3/8 MF	1003502700	62	3/8"	12	22	0.098
CORPO VSC 1/2 MF	1003502680	74	1/2"	14	27	0.172

TIPO *TYPE*	CODICE D'ORDINE *ORDERING CODE*	A	B	C	CH	PESO *WEIGHT*
		mm	BSPP	mm	mm	Kg
CORPO VSC 1/4 FF	1003502710	56	1/4"	12	19	0.080
CORPO VSC 3/8 FF	1003502690	60	3/8"	14	22	0.100
CORPO VSC 1/2 FF	1003502670	72	1/2"	16	27	0.172

VALVOLE VSCR - *VSCR VALVES*

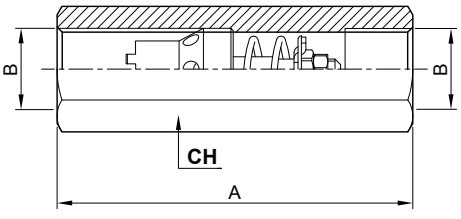
CORPO "MF" - *BODY "MF"*



Le valvole VSCR devono essere inserite nei corpi FF e MF dall'installatore.

The valves VSCR have to be inserted in the housings by the user.

CORPO "FF" - *BODY "FF"*



TIPO *TYPE*	CODICE D'ORDINE *ORDERING CODE*	A	B	C	CH	PESO *WEIGHT*
		mm	BSPP	mm	mm	Kg
CORPO VSCR 1/4 MF	9006600010	68	1/4"	11	19	0.110
CORPO VSCR 3/8 MF	9006600020	82	3/8"	13	22	0.140
CORPO VSCR 1/2 MF	9006600030	96	1/2"	14	27	0.240
CORPO VSCR 3/4 MF	9006600040	104	3/4"	17	36	0.340

TIPO *TYPE*	CODICE D'ORDINE *ORDERING CODE*	A	B	C	CH	PESO *WEIGHT*
		mm	BSPP	mm	mm	Kg
CORPO VSCR 1/4 FF	9007000020	66	1/4"	11	19	0.110
CORPO VSCR 3/8 FF	9007000030	73	3/8"	13	22	0.120
CORPO VSCR 1/2 FF	9007000010	81	1/2"	14	27	0.200
CORPO VSCR 3/4 FF	9007000040	99	3/4"	17	36	0.290

23**1-G-*-*-1/33**2-G*-*-1

W - 150/1

Corpi standardizzati, cavità SAE
Standard body, SAE cavity

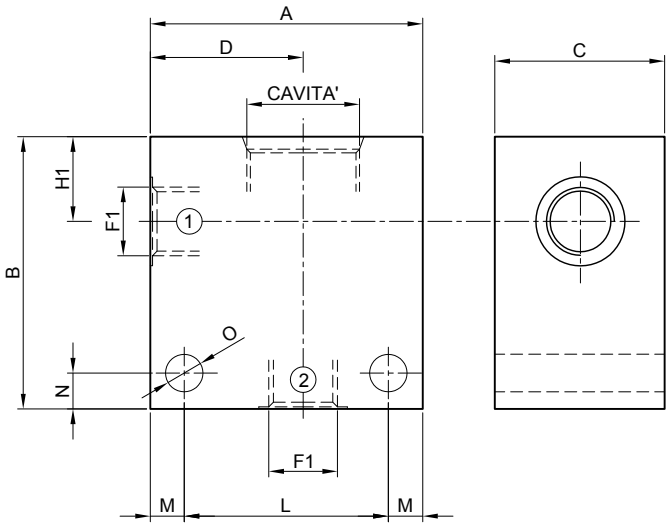
Rev. 02-2010/08

Corpi con cavità SAE 2 VIE - *Body with 2 WAY SAE cavity*

Caratteristiche - *features:*

Materiale standard: alluminio UNI 9007/1
(su richiesta: acciaio UNI CF 9 SMnPb 36)
Standard material: aluminium UNI 9007/1
(on request: steel UNI CF 9 SMnPb 36)

Pressione max: 250 bar per alluminio,
350 bar per acciaio
Max. pressure: 250 bar for aluminium;
350 bar for steel



CAVITA' *CAVITY*	CODICE CAVITA' *CAVITY CODE*	A	B	C	D	F1	H1	L	M	N	O	CODICE ORDINAZIONE *BLOCCO BODY ORDER CODE*
SAE 08	23081	50	50	30	29.5	1/4" bsp	14.5	38	6	7	7	23081-G1/4-*-1
SAE 10	23101	60	56	35	35	3/8" bsp	18	48	6	7	7	23101-G3/8-*-1
SAE 12	23121	70	70	40	40	1/2" bsp	25.5	54	8	8	9	23121-G1/2-*-1
SAE 16	23161	80	80	50	45	3/4" bsp	25	60	10	10.5	7	23161-G3/4-*-1

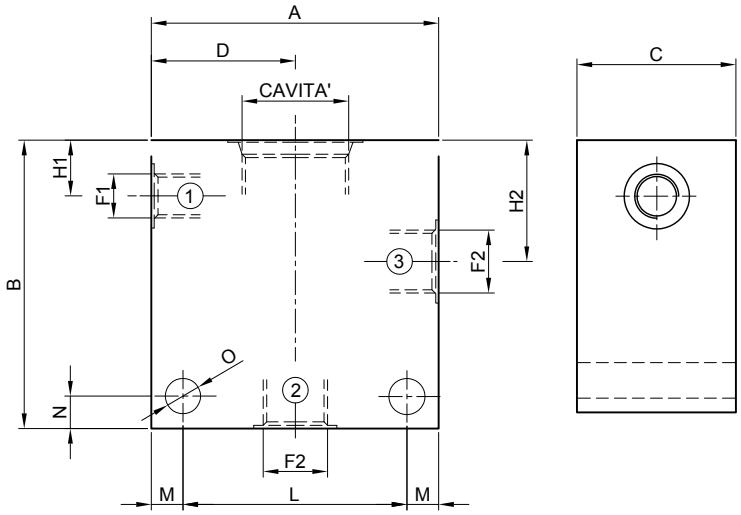
* Alluminio - *aluminium* = A
Acciaio - *steel* = S

Corpi con cavità SAE 3 VIE CORTA - *Body with 3 WAY SAE cavity (short)*

Caratteristiche - *features:*

Materiale standard: alluminio UNI 9007/1
(su richiesta: acciaio UNI CF 9 SMnPb 36)
Standard material: aluminium UNI 9007/1
(on request: steel UNI CF 9 SMnPb 36)

Pressione max: 250 bar per alluminio,
350 bar per acciaio
Max. pressure: 250 bar for aluminium;
350 bar for steel



CAVITA' *CAVITY*	CODICE CAVITA' *CAVITY CODE*	A	B	C	D	F1	F2	H1	H2	L	M	N	O	CODICE ORDINAZIONE *BLOCCO BODY ORDER CODE*
SAE 08	33082	60	60	30	30	1/4" bsp	1/4" bsp	12.5	27	46	7	12	7	33082-G1/4-*-1
SAE 10	33102	60	65	35	30	1/4" bsp	3/8" bsp	14	32	48	6	7	7	33102-G3/8-*-1
SAE 12	33122	80	90	40	40	1/4" bsp	1/2" bsp	22.5	41	64	8	8	9	33122-G1/2-*-1
SAE 16	33162	90	85	50	45	1/4" bsp	3/4" bsp	17.5	38.5	70	10	10	11	33162-G3/4-*-1

* Alluminio - *aluminium* = A
Acciaio - *steel* = S

33**1-G-*-*-1/43**1-G*-*-1

W - 150/2

Corpi standardizzati, cavità SAE
Standard body, SAE cavity

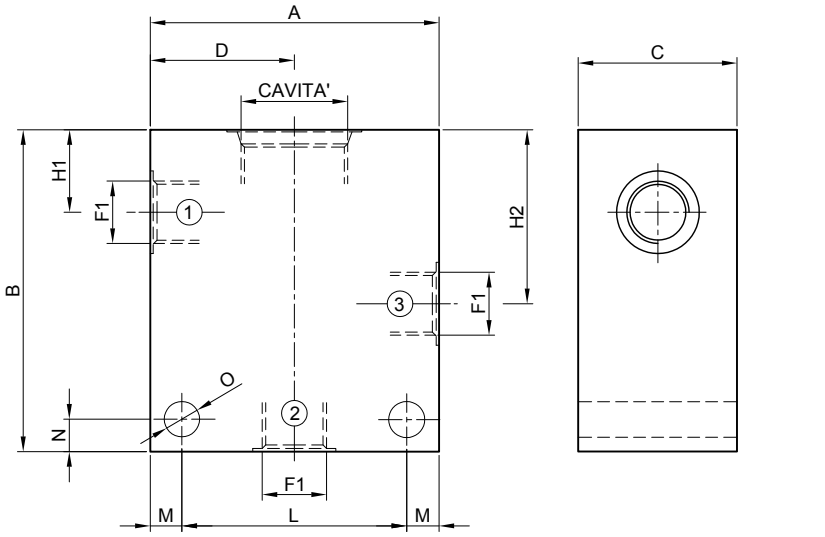
Rev. 02-2010/08

Corpi con cavità SAE 3 VIE - *Body with 3 WAY SAE cavity*

Caratteristiche - *features:*

Materiale standard: alluminio UNI 9007/1
(su richiesta: acciaio UNI CF 9 SMnPb 36)
Standard material: aluminium UNI 9007/1
(on request: steel UNI CF 9 SMnPb 36)

Pressione max: 250 bar per alluminio,
350 bar per acciaio
Max. pressure: 250 bar for aluminium;
350 bar for steel



CAVITA' *CAVITY*	CODICE CAVITA' *CAVITY CODE*	A	B	C	D	F1	H1	H2	L	M	N	O	CODICE ORDINAZIONE *BLOCCO BODY ORDER CODE*
SAE 08	33081	60	60	30	30	1/4" bsp	15	29	46	7	12	7	33081-G1/4-1
SAE 10	33101	60	65	35	30	3/8" bsp	18	34	48	6	7	7	33101-G3/8-1
SAE 12	33121	80	100	40	40	1/2" bsp	27	53	64	8	8	9	33121-G1/2-1
SAE 16	33161	90	100	50	45	3/4" bsp	25.5	54	70	10	10	11	33161-G3/4-1

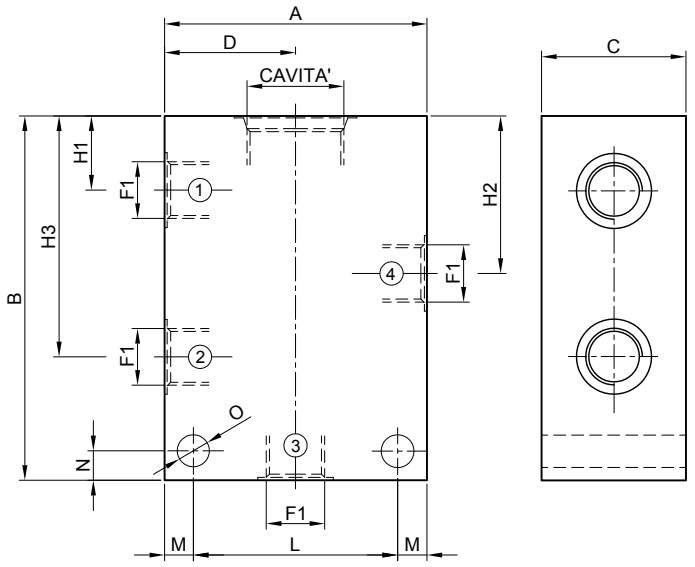
Alluminio - *aluminium* = A
*
Acciaio - *steel* = S

Corpi con cavità SAE 4 VIE - *Body with 4 WAY SAE cavity*

Caratteristiche - *features:*

Materiale standard: alluminio UNI 9007/1
(su richiesta: acciaio UNI CF 9 SMnPb 36)
Standard material: aluminium UNI 9007/1
(on request: steel UNI CF 9 SMnPb 36)

Pressione max: 250 bar per alluminio,
350 bar per acciaio
Max. pressure: 250 bar for aluminium;
350 bar for steel



CAVITA' *CAVITY*	CODICE CAVITA' *CAVITY CODE*	A	B	C	D	F1	H1	H2	H3	L	M	N	O	CODICE ORDINAZIONE *BLOCCO BODY ORDER CODE*
SAE 08	43081	60	75	30	30	1/4" bsp	15	29	43	46	7	12	7	43081-G1/4-1
SAE 10	43101	60	85	35	30	3/8" bsp	18	34	50	48	6	8	7	43101-G3/8-1
SAE 12	43121	80	120	40	40	1/2" bsp	27	53	78	64	8	8	9	43121-G1/2-1
SAE 16	43161	90	125	50	45	3/4" bsp	25.5	54	82.5	70	10	10	11	43161-G3/4-1

Alluminio - *aluminium* = A
*
Acciaio - *steel* = S

SEZIONE X
Cavità standard

In questa sezione sono riportate le cavità di tutte le valvole a cartuccia presenti nel catalogo tecnico

SECTION X
Standard cavity

In this section are specified all the cavities of cartridge valves in this technical catalogue.

PAGINA / *PAGE*	CODICE / *CODE*	PAGINA / *PAGE*	CODICE / *CODE*
X 010	23**1 - 33**2	X 070	22331 - 22205
X 011	33**1 - 43**1	X 080	22182 - 22161
X 020	23102 - 33071	X 090	32181 - 32221
X 030	33103 - 33123	X 100	32331 - 32205
X 040	33141	X 110	32421
X 050	22201 - 22261	X 120	26241
X 060	22221 - 22222		

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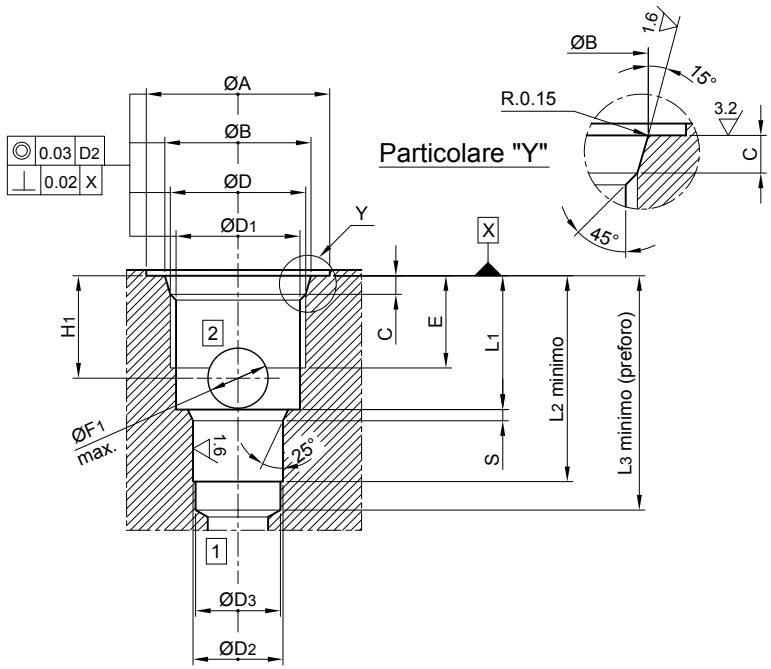
23**1 - 33**2

X - 010

Cavita' standard SAE
SAE standard cavity

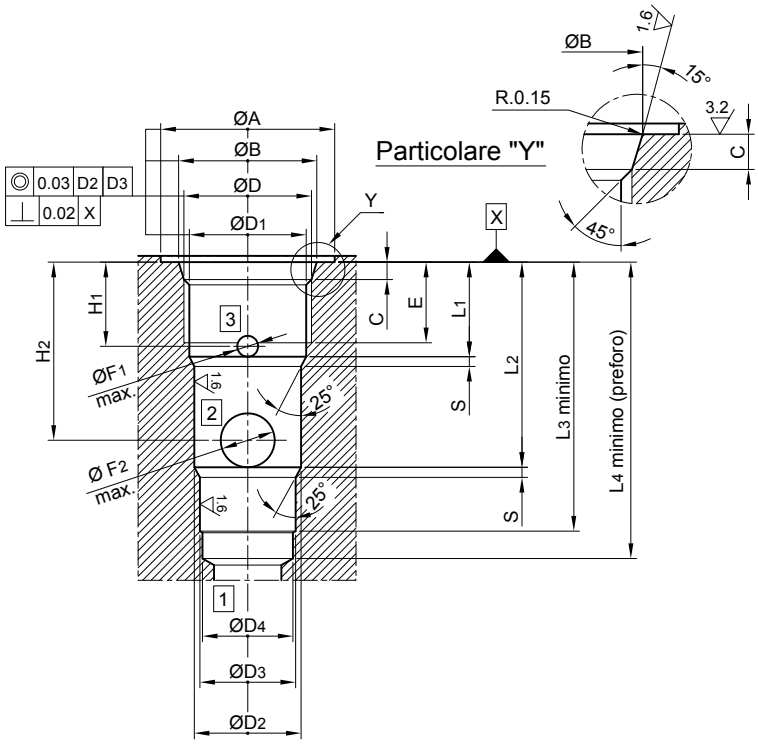
Rev. 01-2010/02

23 * * 1 2 VIE - *2 WAY*



CAVITA' *CAVITY*	SAE 08 - 2	SAE 10 - 2	SAE 12 - 2	SAE 16 - 2
CODICE *CODE*	23081	23101	23121	23161
A	26	30	35	42
B	20.6 $^{+0.1}_{0}$	23.9 $^{+0.1}_{0}$	29.2 $^{+0.1}_{0}$	35.5 $^{+0.1}_{0}$
C	2.6 $^{+0.3}_{0}$	2.6 $^{+0.3}_{0}$	3.3 $^{+0.3}_{0}$	3.3 $^{+0.3}_{0}$
D	3/4"-16 UNF-2B	7/8"-14 UNF-2B	1"1/16-12 UN-2B	1"5/16-12 UN-2B
D1	17.5 $^{+0.1}_{0}$	20.5 $^{+0.1}_{0}$	25 $^{+0.15}_{0}$	31.25 $^{+0.15}_{0}$
D2	12.70 $^{+0.05}_{0}$	15.87 $^{+0.05}_{0}$	22.22 $^{+0.05}_{0}$	28.60 $^{+0.05}_{0}$
D3	12 $^{+0.4}_{0}$	15 $^{+0.4}_{0}$	21.5 $^{+0.4}_{0}$	27.5 $^{+0.4}_{0}$
E	13	15	18	20
F1	8.5	11.5	18	18.5
H1	14.5	18	25.5	25
L1	19 $^{0}_{-0.15}$	24 $^{0}_{-0.15}$	35 $^{0}_{-0.15}$	34.5 $^{0}_{-0.15}$
L2	29	34.5	48	49
L3	33	38.5	52	54
S	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$

33 * * 2 3 VIE CORTA - *3 WAY SHORT*



CAVITA' *CAVITY*	SAE 08 - 3C	SAE 10 - 3C	SAE 12 - 3C	SAE 16 - 3C
CODICE *CODE*	33082	33102	33122	33162
A	26	30	35	42
B	20.6 $^{+0.1}_{0}$	23.9 $^{+0.1}_{0}$	29.2 $^{+0.1}_{0}$	35.5 $^{+0.1}_{0}$
C	2.6 $^{+0.3}_{0}$	2.6 $^{+0.3}_{0}$	3.3 $^{+0.3}_{0}$	3.3 $^{+0.3}_{0}$
D	3/4"-16 UNF-2B	7/8"-14 UNF-2B	1"1/16-12 UN-2B	1"5/16-12 UN-2B
D1	17.5 $^{+0.1}_{0}$	20.5 $^{+0.1}_{0}$	25 $^{+0.15}_{0}$	31.25 $^{+0.15}_{0}$
D2	15.87 $^{+0.05}_{0}$	19.05 $^{+0.05}_{0}$	23.8 $^{+0.05}_{0}$	28.60 $^{+0.05}_{0}$
D3	14.27 $^{+0.05}_{0}$	17.47 $^{+0.05}_{0}$	22.22 $^{+0.05}_{0}$	25.42 $^{+0.05}_{0}$
D4	13.5 $^{+0.4}_{0}$	16.5 $^{+0.5}_{0}$	21 $^{+0.4}_{0}$	24.5 $^{+0.5}_{0}$
E	12	13	20	17
F1	3	4	5	5
F2	7	12	13	15
H1	12.5	14	22.5	17.5
H2	27	32	41	38.5
L1	14 $^{0}_{-0.15}$	16.5 $^{0}_{-0.15}$	25 $^{0}_{-0.15}$	20.5 $^{0}_{-0.15}$
L2	30.5 $^{0}_{-0.15}$	38.5 $^{0}_{-0.15}$	48 $^{0}_{-0.15}$	46 $^{0}_{-0.15}$
L3	40	49	60	58
L4	44	53	64	63
S	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$

33**1 - 43**1

X - 011

Cavita' standard SAE
SAE standard cavity

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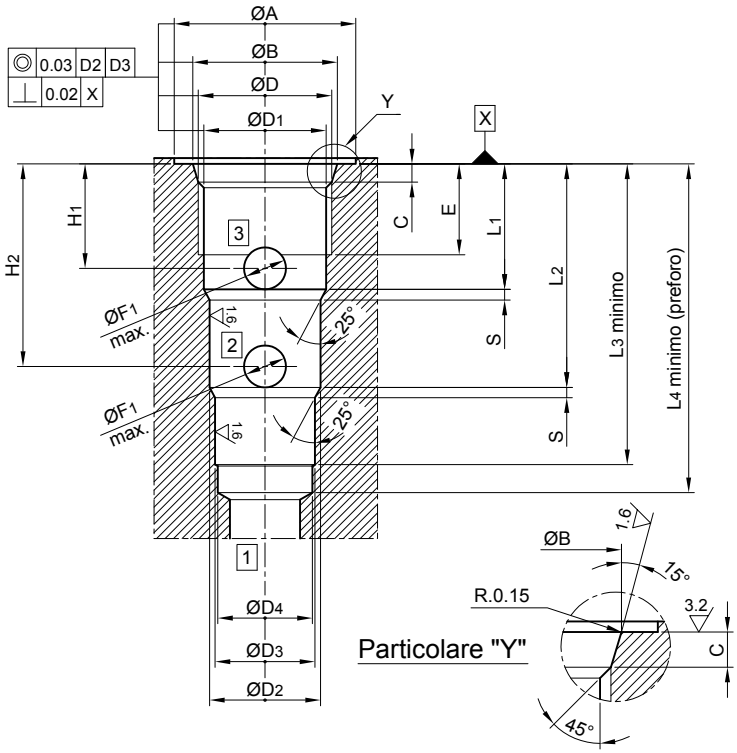
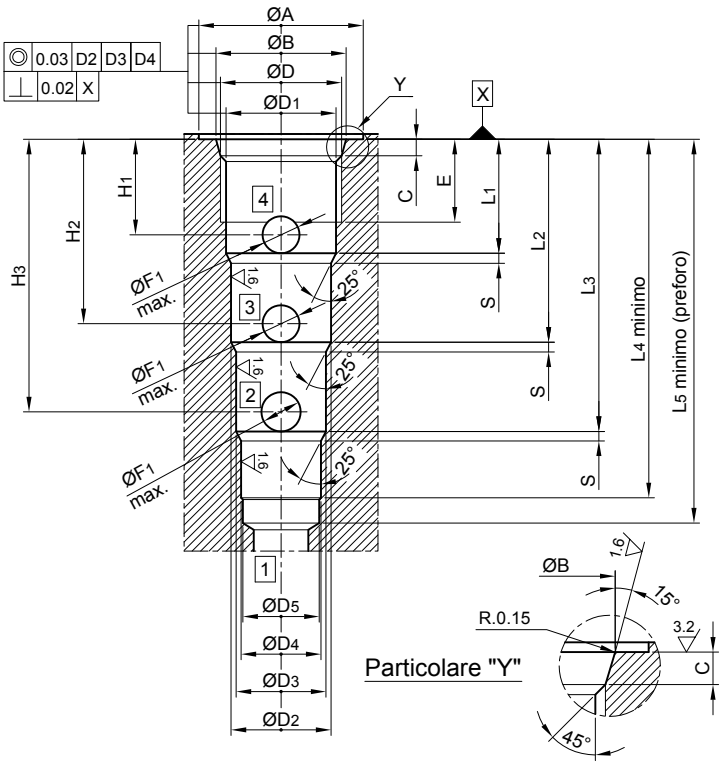
33 * * 1 3 VIE - *3 WAY*



CAVITA' *CAVITY*	SAE 08 - 3	SAE 10 - 3	SAE 12 - 3	SAE 16 - 3
CODICE *CODE*	33081	33101	33121	33161
A	26	30	35	42
B	20.6 $^{+0.1}_{0}$	23.9 $^{+0.1}_{0}$	29.2 $^{+0.1}_{0}$	35.5 $^{+0.1}_{0}$
C	2.6 $^{+0.3}_{0}$	2.6 $^{+0.3}_{0}$	3.3 $^{+0.3}_{0}$	3.3 $^{+0.3}_{0}$
D	3/4"-16 UNF-2B	7/8"-14 UNF-2B	1"1/16-12 UN-2B	1"5/16-12 UN-2B
D1	17.5 $^{+0.1}_{0}$	20.5 $^{+0.1}_{0}$	25 $^{+0.15}_{0}$	31.25 $^{+0.15}_{0}$
D2	15.87 $^{+0.05}_{0}$	17.47 $^{+0.05}_{0}$	23.8 $^{+0.05}_{0}$	28.60 $^{+0.05}_{0}$
D3	14.27 $^{+0.05}_{0}$	15.87 $^{+0.05}_{0}$	22.22 $^{+0.05}_{0}$	27.00 $^{+0.05}_{0}$
D4	13.5 $^{+0.4}_{0}$	15 $^{+0.4}_{0}$	21.5 $^{+0.4}_{0}$	26 $^{+0.5}_{0}$
E	13	15	18	20
F1	6	8	14	17
H1	15	18	27	25.5
H2	29	34	53	54
L1	18 $^{0}_{-0.15}$	22 $^{0}_{-0.15}$	34.5 $^{0}_{-0.15}$	34 $^{0}_{-0.15}$
L2	32 $^{0}_{-0.15}$	38 $^{0}_{-0.15}$	60 $^{0}_{-0.15}$	62.5 $^{0}_{-0.15}$
L3	43	48.5	74	76
L4	47	52.5	78	81
S	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$

43 * * 1 4 VIE - *4 WAY*



CAVITA' *CAVITY*	SAE 08 - 4	SAE 10 - 4	SAE 12 - 4	SAE 16 - 4
CODICE *CODE*	43081	43101	43121	43161
A	26	30	35	42
B	20.6 $^{+0.1}_{0}$	23.9 $^{+0.1}_{0}$	29.2 $^{+0.1}_{0}$	35.5 $^{+0.1}_{0}$
C	2.6 $^{+0.3}_{0}$	2.6 $^{+0.3}_{0}$	3.3 $^{+0.3}_{0}$	3.3 $^{+0.3}_{0}$
D	3/4"-16 UNF-2B	7/8"-14 UNF-2B	1"1/16-12 UN-2B	1"5/16-12 UN-2B
D1	17.5 $^{+0.1}_{0}$	20.5 $^{+0.1}_{0}$	25 $^{+0.15}_{0}$	31.25 $^{+0.15}_{0}$
D2	15.87 $^{+0.05}_{0}$	19.05 $^{+0.05}_{0}$	23.8 $^{+0.05}_{0}$	28.60 $^{+0.05}_{0}$
D3	14.27 $^{+0.05}_{0}$	17.47 $^{+0.05}_{0}$	22.22 $^{+0.05}_{0}$	27.00 $^{+0.05}_{0}$
D4	12.70 $^{+0.05}_{0}$	15.87 $^{+0.05}_{0}$	20.62 $^{+0.05}_{0}$	25.42 $^{+0.05}_{0}$
D5	12 $^{+0.4}_{0}$	15 $^{+0.4}_{0}$	19.5 $^{+0.5}_{0}$	24.5 $^{+0.4}_{0}$
E	13	15	18	20
F1	6	8	14	17
H1	15	18	27	25.5
H2	29	34	53	54
H3	43	50	78	82.5
L1	18 $^{0}_{-0.15}$	22 $^{0}_{-0.15}$	34.5 $^{0}_{-0.15}$	34 $^{0}_{-0.15}$
L2	32 $^{0}_{-0.15}$	38 $^{0}_{-0.15}$	60 $^{0}_{-0.15}$	62.5 $^{0}_{-0.15}$
L3	46 $^{0}_{-0.15}$	54 $^{0}_{-0.15}$	86 $^{0}_{-0.15}$	91 $^{0}_{-0.15}$
L4	56.5	64.5	99	104
L5	60.5	68.5	103	109
S	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$	1.5 $^{0}_{-0.15}$

23102 - 33071

X - 020

Cavita' SAE speciali
Special SAE cavity

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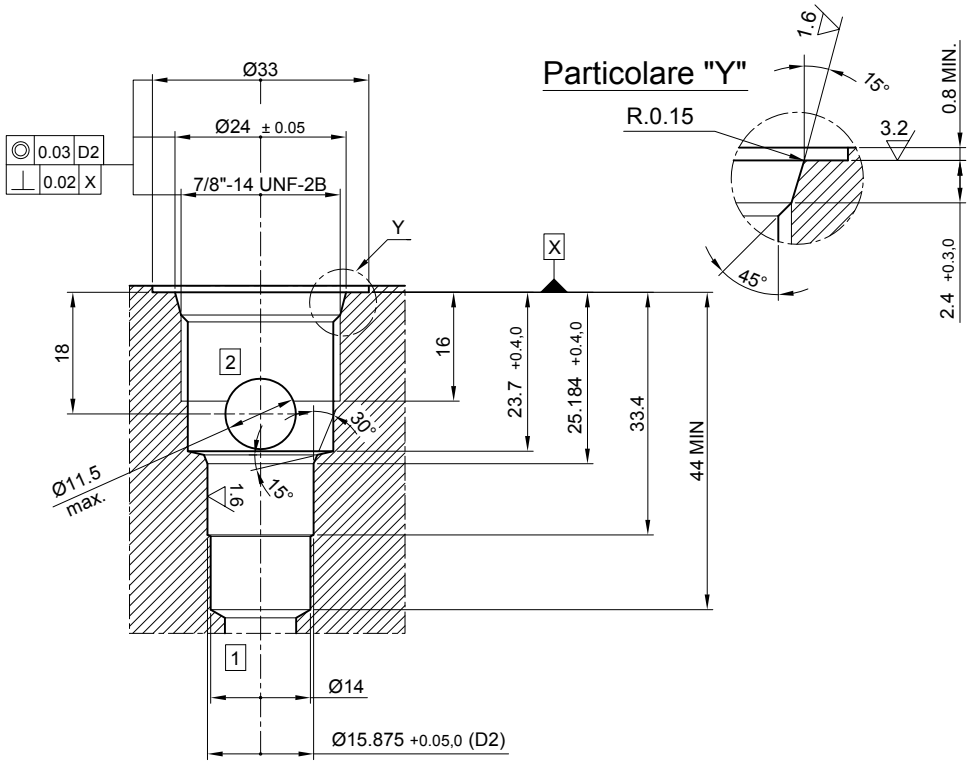
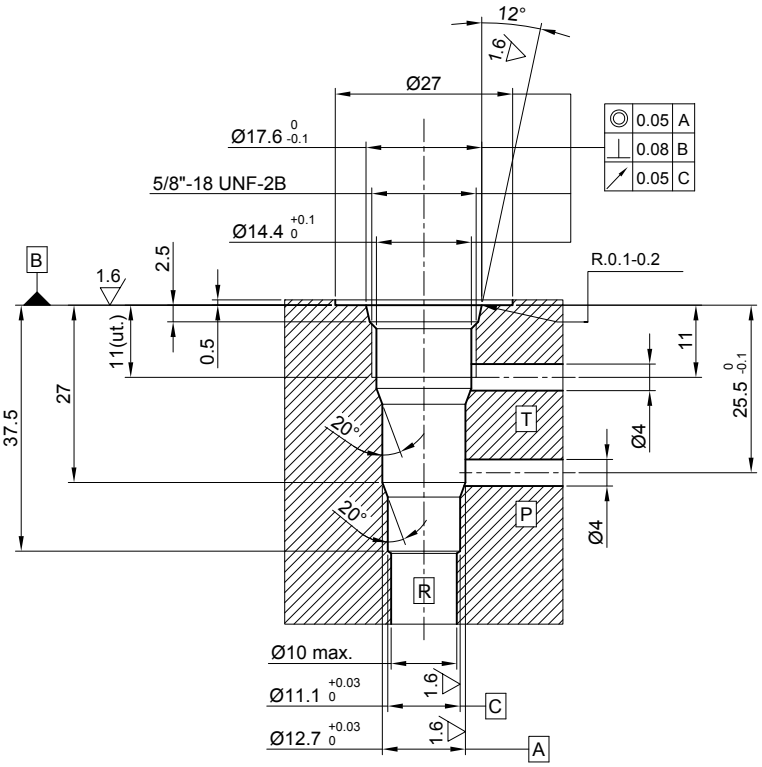
23102 2 VIE - *2 WAY*



33071 3 VIE - *3 WAY*



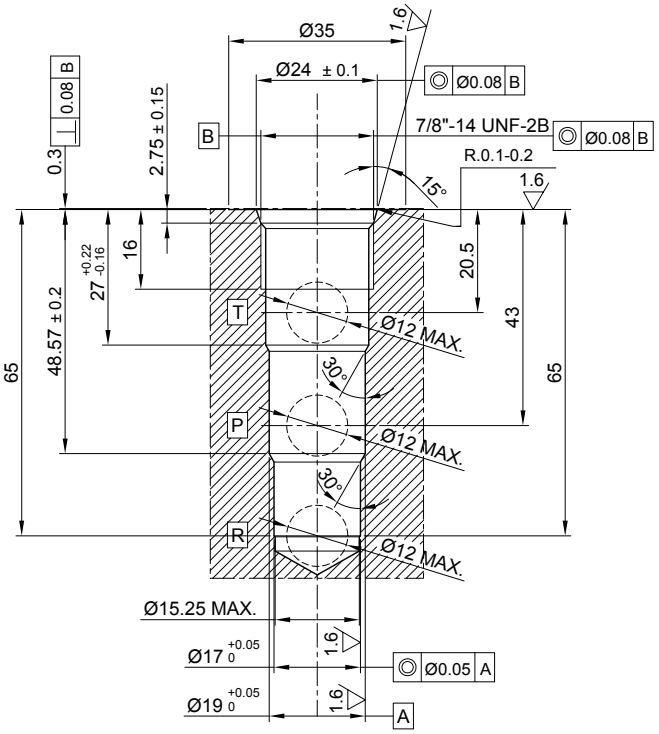
33103 - 33123

X - 030

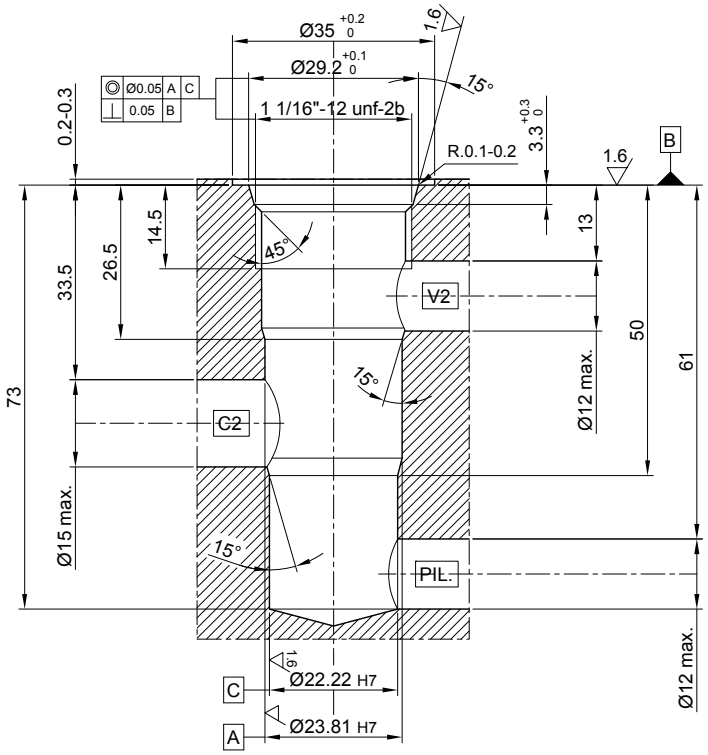
Cavita' SAE speciali
Special SAE cavity

Rev. 02-2010/05

33103 3 VIE - *3 WAY*



33123 3 VIE - *3 WAY*



33141

X - 040

Cavita' SAE speciali
Special SAE cavity

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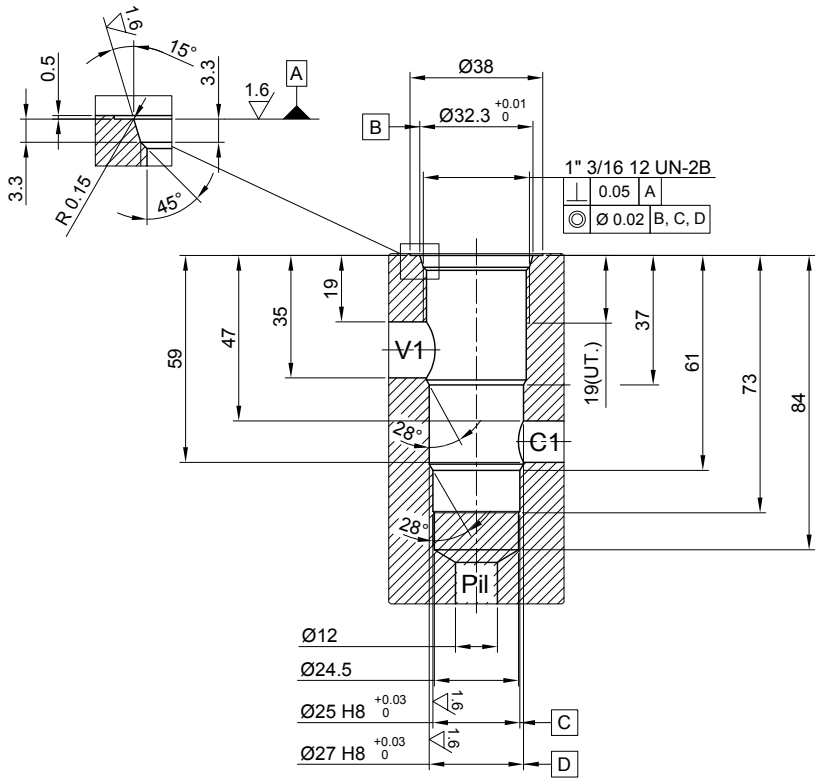
33141 3 VIE - *3 WAY*



22201 - 22261

X - 050

Cavita' metriche
Metric cavity

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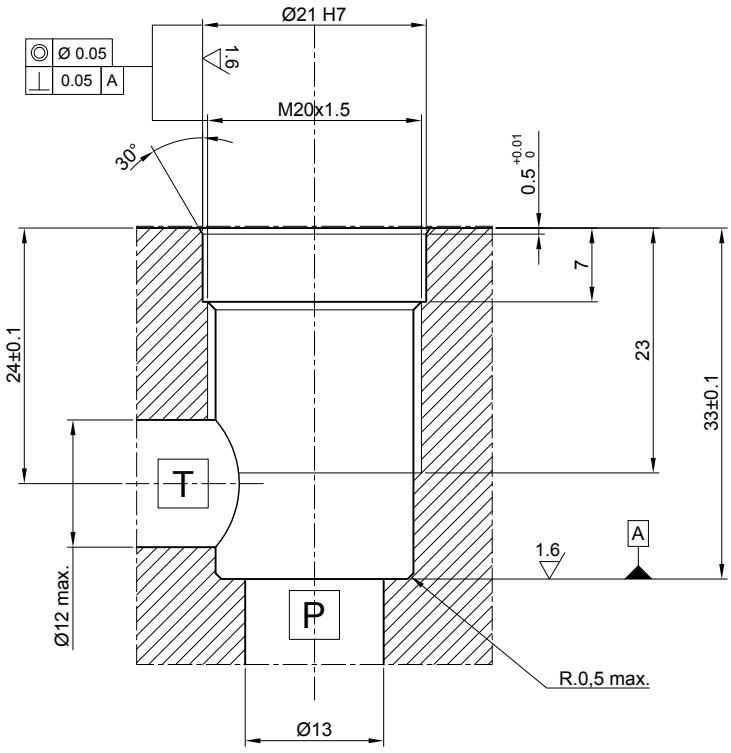
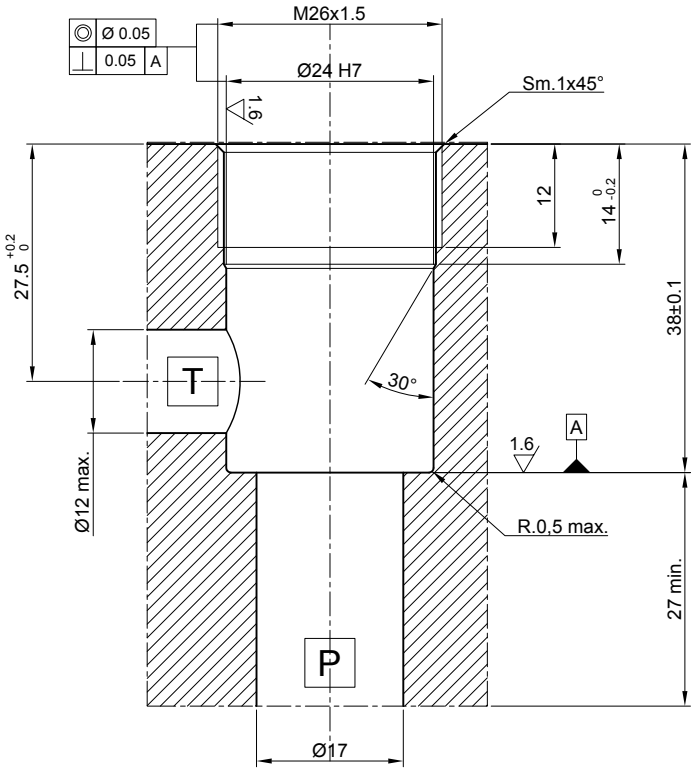
22201 2 VIE - *2 WAY*



22261 2 VIE - *2 WAY*



22221 - 22222

X - 060

Cavita' metriche

Metric cavity

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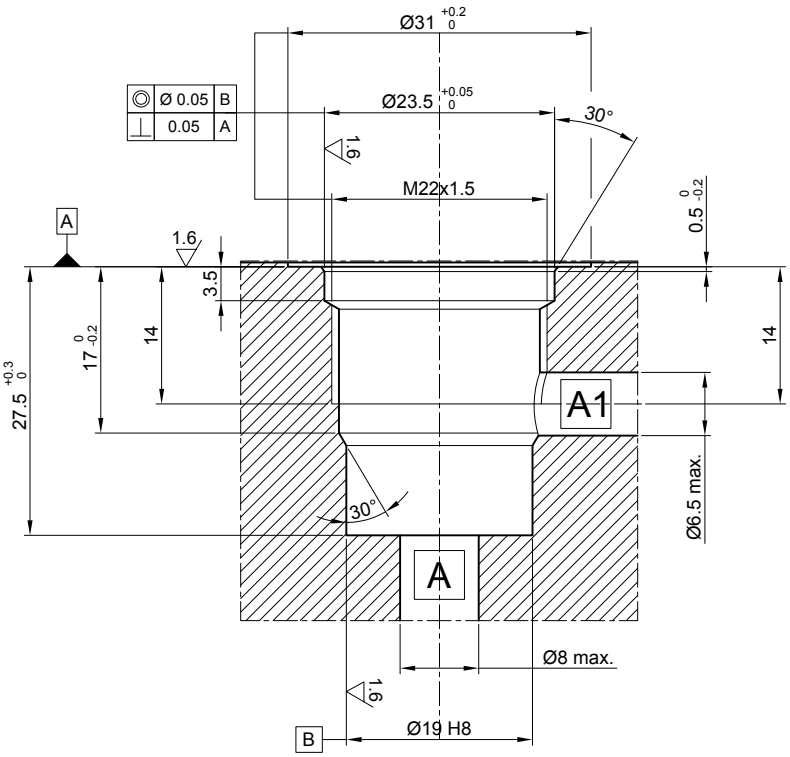
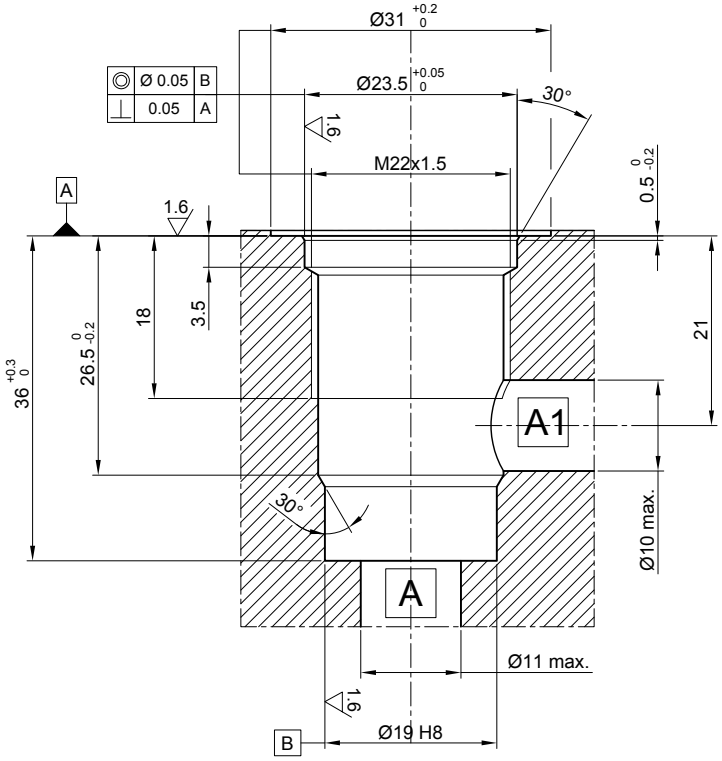
22221 2 VIE - *2 WAY*



22222 2 VIE - *2 WAY*



22331 - 22205

X - 070

Cavita' metriche
Metric cavity

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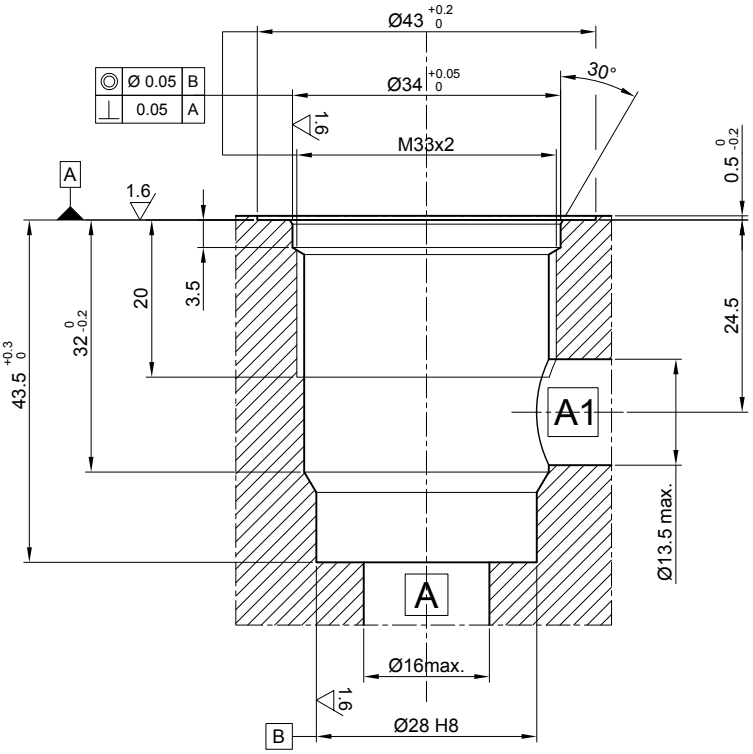
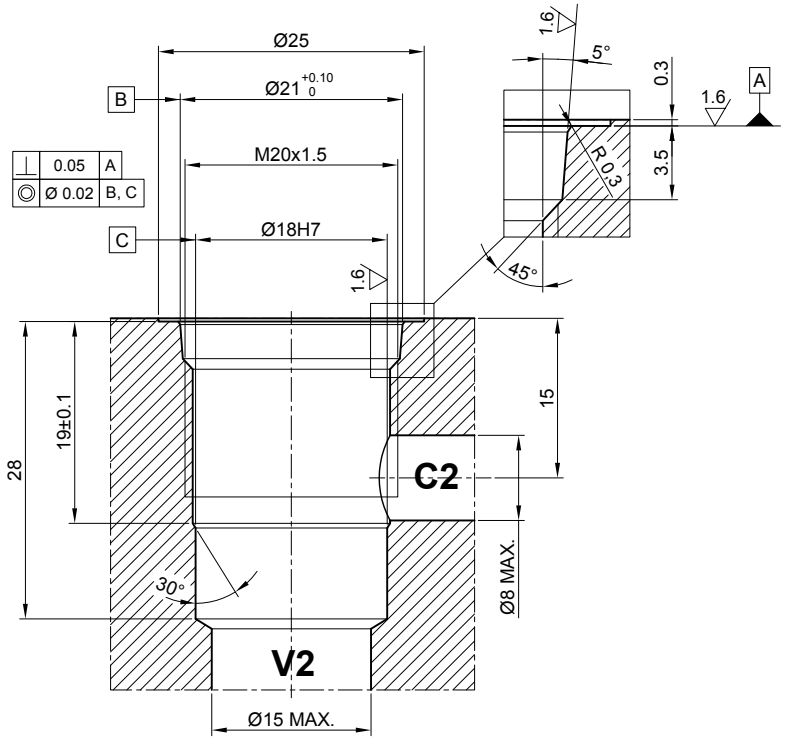
22331 2 VIE - *2 WAY*



22205 2 VIE - *2 WAY*



22182 - 22161

X - 080

Cavita' metriche

Metric cavity

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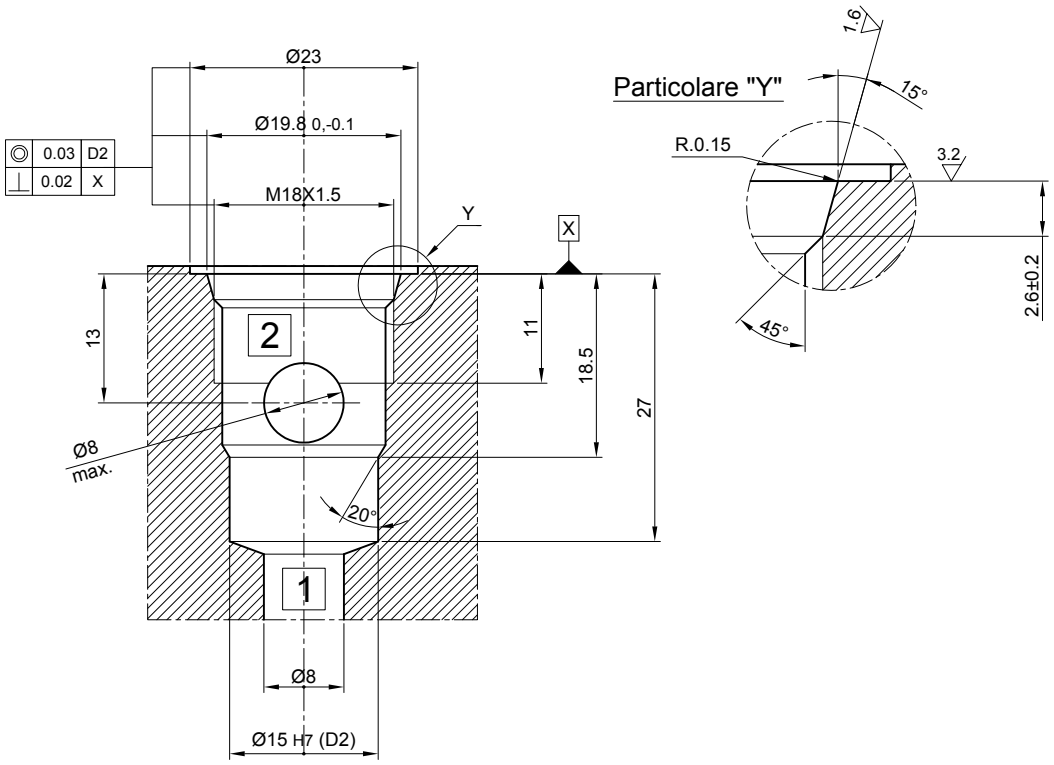
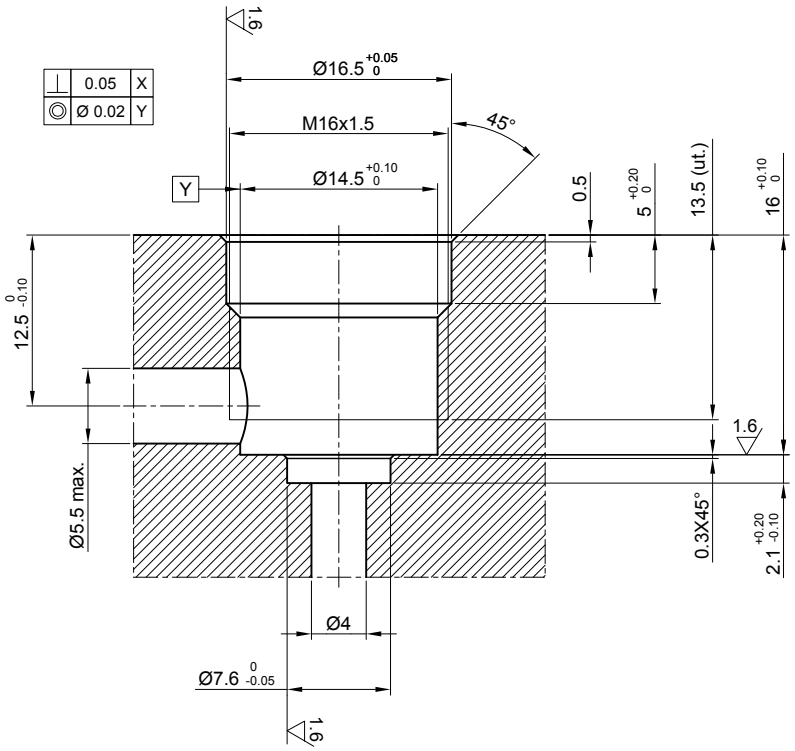
22182 2 VIE - *2 WAY*



22161 2 VIE - *2 WAY*



32181 - 32221

X - 090

Cavita' metriche
Metric cavity

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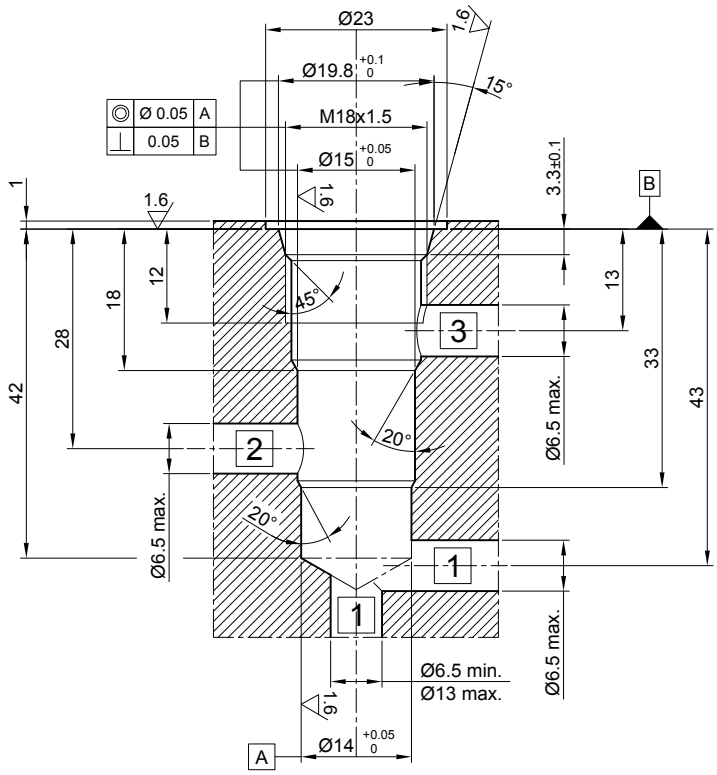
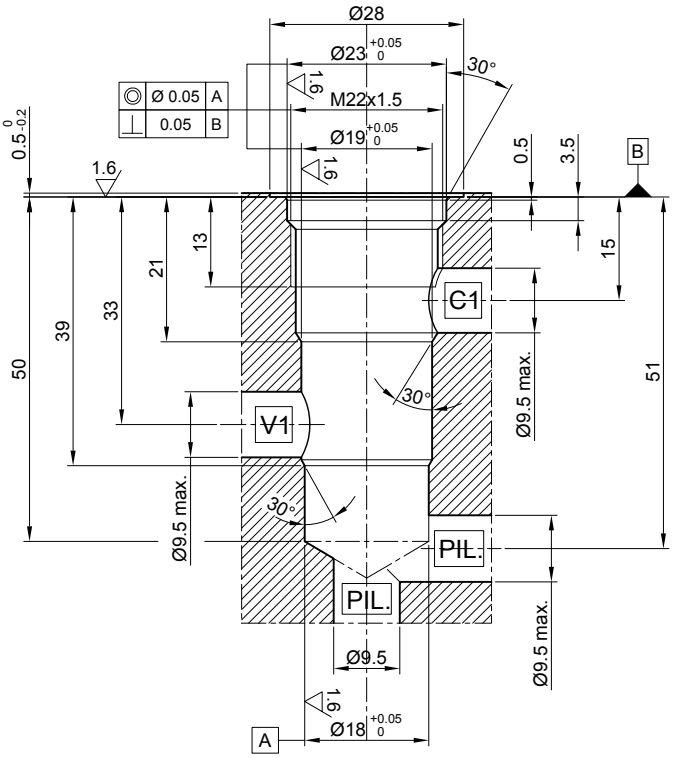
32181 3 VIE - *3 WAY*



32221 3 VIE - *3 WAY*



32331 - 32205

X - 100

Cavita' metriche
Metric cavity

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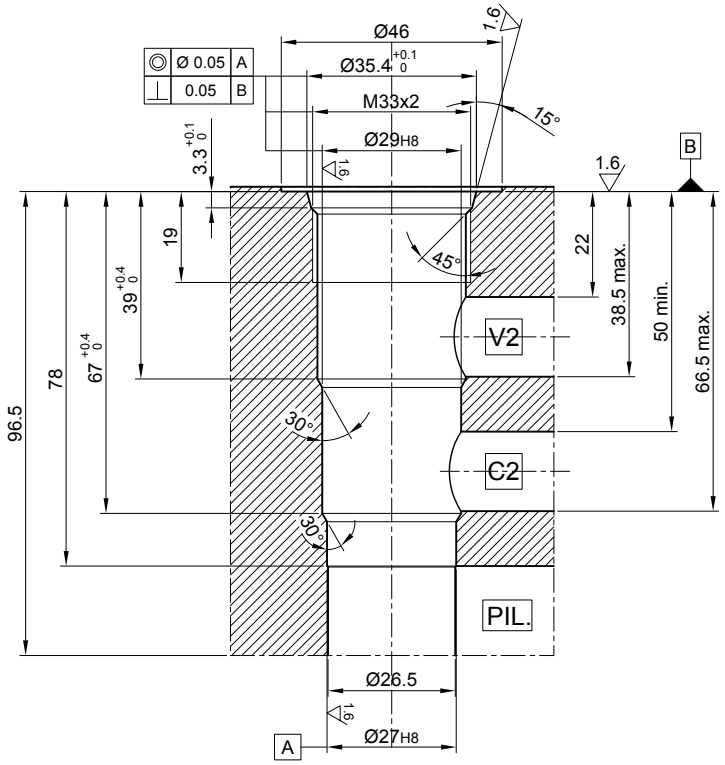
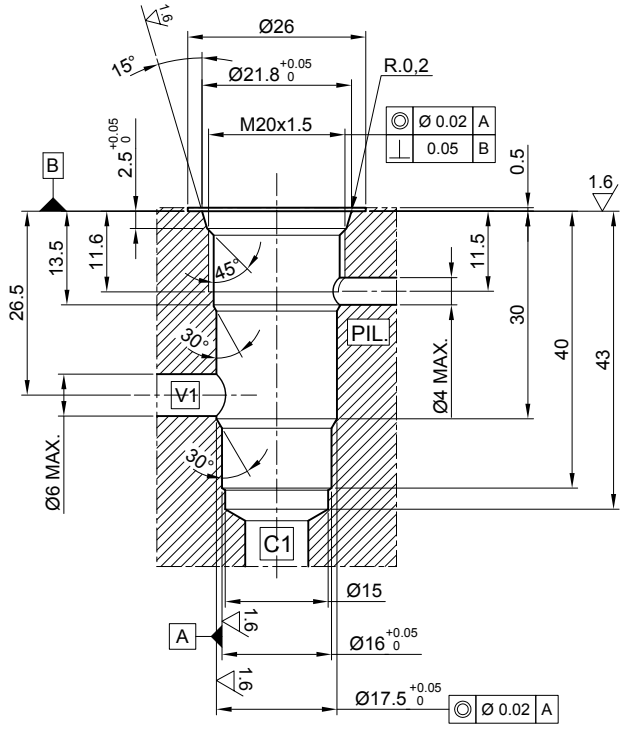
32331 3 VIE - *3 WAY*



32205 3 VIE - *3 WAY*



32421

Cavita' metriche
Metric cavity

X - 110

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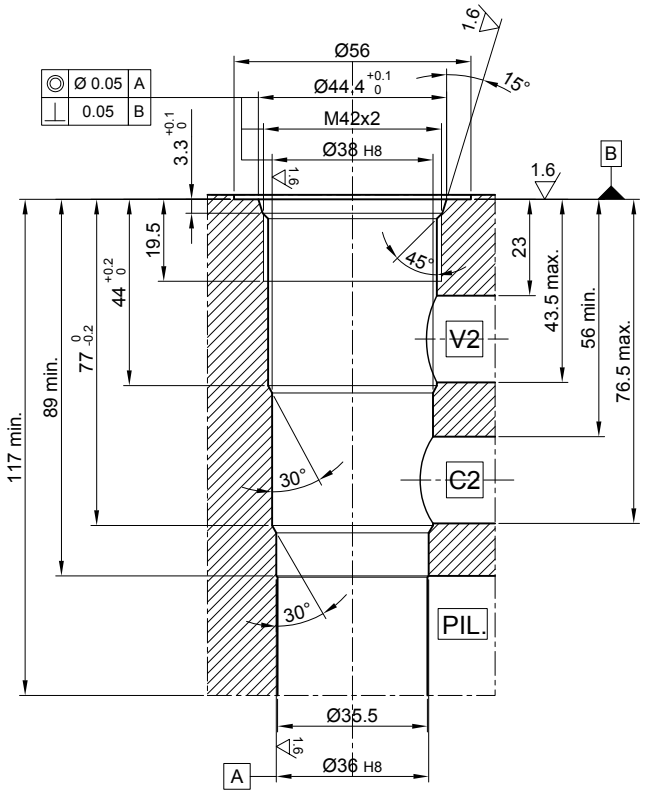
32421 3 VIE - *3 WAY*



26241

X - 120

CAVITA' UNS

UNIFIED NATIONAL SPECIAL CAVITY

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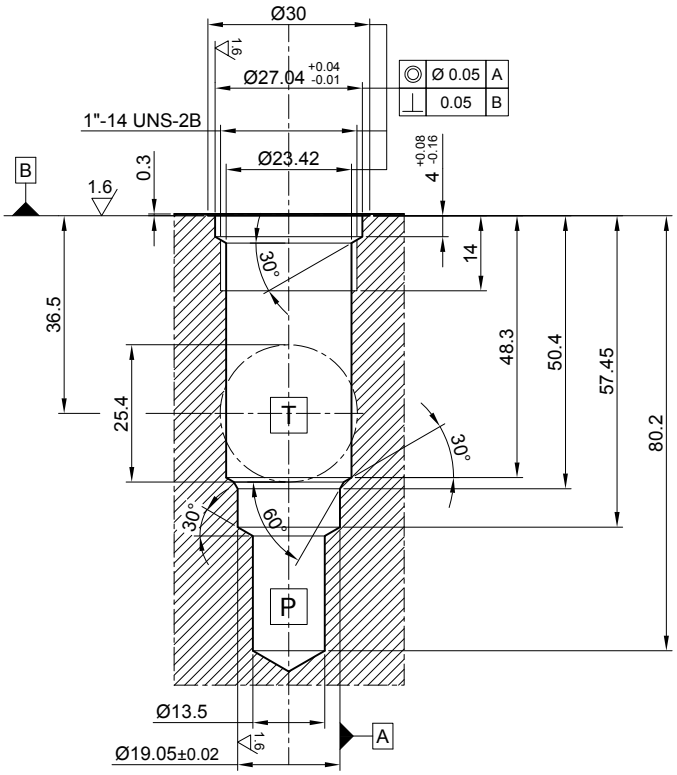
26241 2 VIE - 2 *WAY*