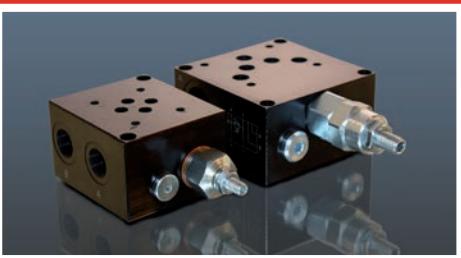
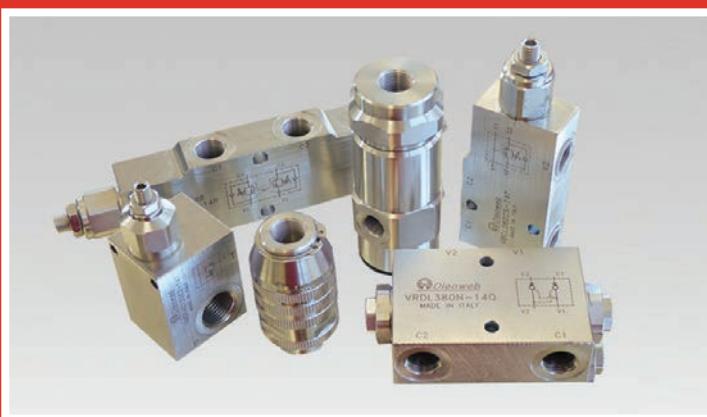


2016



Voleoweb

## HYDRAULIC VALVES AND COMPONENTS



*The Italian Quality In Hydraulic*



# MANUALE USO E MANUTENZIONE VALVOLE OLEODINAMICHE

Questo manuale è indirizzato a personale specializzato e competente che non può in ogni caso sostituire la professionalità e la competenza dell'installatore. La Casa Produttrice declina ogni responsabilità per danni alle persone ed agli oggetti dovuti ad una cattiva od impropria installazione delle valvole. La **OLEOWEB SRL** è orientata ad una continua ricerca e sviluppo dei propri prodotti e pertanto si riserva il diritto di modificare in qualunque momento e senza alcun preavviso tutte le caratteristiche tecniche ritenute necessarie. Il presente manuale potrà subire variazioni ed integrazioni, ma non potrà in alcun caso ritenersi superato. Il presente manuale e la documentazione tecnica della **OLEOWEB SRL** hanno lo scopo di fornire ulteriori informazioni tecniche ad utilizzatori competenti del settore (collaboratori competenti).



## PERSONA COMPETENTE

E' una persona che, per merito dell'addestramento tecnico e dell'esperienza, possiede una sufficiente conoscenza del settore. L'utilizzatore è responsabile della scelta del suo prodotto e dei suoi accessori. Risulta quindi importante che l'utilizzatore analizzi le problematiche della propria applicazione, eseguendo analisi e prove adeguate. E inoltre il responsabile dell'applicazione, delle sicurezze e delle avvertenze richieste dalle direttive in vigore.

## STAMPIGLIATURA

Le valvole **OLEOWEB** sono identificabili per mezzo della stampigliatura posta sulla valvola:

- Logo aziendale
- Schema idraulico
- Codice
- Mese e anno di fabbricazione (in estensione al codice)

## USO PREVISTO DELLE VALVOLE

Le valvole **OLEOWEB** sono destinate a costruttori di macchine ed attrezzature a comando oleodinamico.

Data la vastità applicativa delle valvole oleodinamiche e non essendo sempre nota la destinazione finale del prodotto, questo manuale è stato realizzato limitatamente in funzione delle generiche applicazioni conosciute.



## LIMITI DI IMPIEGO

La **OLEOWEB SRL** diffida ogni utilizzatore/cliente o costruttore nell'impiegare le valvole nelle seguenti applicazioni:

- ambienti dove esiste il pericolo di esplosione o incendio;
- veicoli ed impianti aeronautici e spaziali;
- sistemi ed impianti sterzanti su veicoli e su mezzi adibiti al trasporto di persone, cose ed animali;
- sistemi frenanti, di blocco e di stallo in genere;
- attrezzature ed impianti di applicazione in campo militare, nucleare, medicale ed ospedaliero

TUTTAVIA LA DIREZIONE TECNICA DELLA **OLEOWEB SRL** SI RISERVA, DIETRO RICHIESTA DELL'UTILIZZATORE, DI VALUTARE CASO PER CASO LE APPLICAZIONI SOPRA CITATE E DI DARNE QUALORA LO RITENGA OPPORTUNO L'AUTORIZZAZIONE.



## SPECIFICHE MECCANICHE

- Non manomettere alcun tipo di valvola, un semplice allentamento di una valvola potrebbe provocare la caduta libera di carichi o il cedimento di strutture.
- Tutte le operazioni d'installazione, montaggio, manutenzione e smontaggio delle valvole e dei componenti ad essa applicati devono essere eseguiti nel massimo rispetto delle norme di sicurezza. Durante queste operazioni, all'interno del circuito oleodinamico non deve mai essere presente pressione (pressione zero) e non deve esistere nessun tipo di carico sulla struttura dell'attrezzatura o della macchina a cui la valvola è applicata (carico zero).



## SPECIFICHE ELETTRICHE

- Tutti i collegamenti e scollegamenti elettrici devono essere eseguiti da personale specializzato e competente.
- Prima di procedere a qualsiasi tipo di operazione o di intervento sulla valvola, devono essere scolate dalla linea elettrica di alimentazione.



## SPECIFICHE DI SICUREZZA

- Usare protezioni antinfortunistiche;
- Lavorare in condizioni di massima pulizia;
- Lavorare in condizioni di massima sicurezza;
- Usare strumenti, attrezzi e banchi di servizio adatti e puliti;

- Durante le operazioni di avviamento, normale lavoro, manutenzione, regolazione, sfiato dell'impianto, intervento e azionamento di valvole e vari elementi di controllo POSSONO VERIFICARSI DEGLI SCHIZZI IMPROVVISI E DELLE FUORIUSCITE DI FLUIDO IDRUAULICO, IL QUALE PUÒ RAGGIUNGERE TEMPERATURE TALI DA CAUSARE USTIONI ALLA PELLE. Il fluido idraulico può essere pericoloso per la salute in quanto il contatto con la pelle e gli occhi può causare gravi danni. Attenersi scrupolosamente alle disposizioni di protezione e sicurezza imposte dal produttore del fluido idraulico riportate sulla scheda tecnica e tossicologica del prodotto. Il fluido idraulico può essere un prodotto inquinante. È perciò buona norma evitare perdite di fluido idraulico con prodotti oleoassorbenti. Rapide variazioni di temperatura possono pregiudicare sia le caratteristiche che la durata del prodotto, pertanto è indispensabile proteggerlo da queste situazioni.



## MONTAGGIO

Un montaggio ed una corretta installazione sono fattori essenziali per il buon funzionamento nel tempo di un impianto oleodinamico. La polvere e la sporcizia sono i peggiori nemici dell'oleodinamica.

Durante l'installazione preoccuparsi quindi della massima pulizia effettuando le principali operazioni di collegamento in un locale pulito e non polveroso. Le valvole devono essere montate in modo tale da permettere una facile accessibilità ai comandi, alle ispezioni, alla manutenzione ed alla riparazione, inoltre è altrettanto indispensabile che esse vengano montate in una zona protetta da urti accidentali e riparata da casuali contatti fisici, poiché la temperatura raggiunta durante il funzionamento può essere causa di ustioni.



## MOVIMENTAZIONE

Le valvole oleodinamiche sono dei prodotti da maneggiare con cura ed attenzione. Per loro caratteristica presentano protuberanze soggette a rottura.



## STOCCAGGIO

Le valvole oleodinamiche devono essere stoccate in un luogo protetto, possibilmente chiuso, al riparo da polvere, sporcizia, umidità ed intemperie, ad una temperatura non inferiore a -15° C e non superiore a +50° C. Inoltre, la protezione deve evitare la perdita di fluido idraulico rimasto nella valvola dopo il collaudo e non consentire l'accesso di corpi estranei, i quali si potrebbero dimostrare molto pericolosi per il buon funzionamento e per la durata della valvola.



## SMALTIMENTO VALVOLE

Le valvole oleodinamiche sono costruite principalmente in lega di alluminio, in lega di acciaio e in materiale plastico: possono essere smaltite come normali materiali inviati al riciclaggio con l'unica avvertenza di effettuare lo svuotamento dal fluido idraulico in tutte le sue parti.

## SMALTIMENTO FLUIDO IDRUAULICO

I fluidi idraulici sono soggetti a speciali prescrizioni di smaltimento: rispettare le indicazioni e le istruzioni dei produttori e attenersi alle disposizioni legislative vigenti nel Paese di utilizzazione.



## NON DISPERDERE NELL'AMBIENTE IL FLUIDO SOSTITUITO

## MANUTENZIONE

Un impianto oleodraulico ben installato e curato nella fase di montaggio e messa in esercizio assicura una lunga durata senza inconvenienti e non necessita di particolari cure manutentive. Il principio di base è la necessità di controllare spesso la qualità e lo stato del fluido che trasmette potenza e assicurarsi dell'assenza di impurità nel circuito cui è rapportata l'affidabilità di qualsiasi macchina oleodraulica. Infatti, fra le cause principali di fuori servizio o di guasto, si può segnalare il bloccaggio di apparecchiature a seguito di grippaggi o di rotture dovuti ad usura e ad invecchiamento del fluido che trasmette potenza, con conseguente perdita delle sue proprietà chimico-fisiche. È ormai accertato che la causa principale di tutti questi inconvenienti è dovuta alla presenza di particolari e microparticelle che circolano continuamente nel fluido e che costituiscono motivo di usura. Queste microparticelle, se lasciate circolare nel sistema, agiscono come una miscela abrasiva scaldfano le superfici con cui vengono a contatto e trascinano in ciclo ulteriore contaminante; i danni sono, ovviamente, tanto più gravi quanto più sono sofisticate le apparecchiature installate. Dalla messa in marcia dell'impianto, la manutenzione è fatta fondamentalmente di piccole operazioni che per essere veramente efficaci devono essere compiute con regolarità. È pertanto estremamente importante che tali operazioni di controllo e di verifica siano programmate e riportate su schede di macchine o di impianto.

## PULIZIA ESTERNA

Permette una facile localizzazione di eventuali perdite e dunque l'immediato intervento.

## CONTROLLO CONTINUO DELLA TEMPERATURA DELL'OLIO

L'alterazione del fluido a causa della temperatura è un motivo di inquinamento e di degradazione dell'impianto. La formazione dei prodotti di degradazione degli idrocarburi è particolarmente favorita dal calore: la velocità di ossidazione si può ritenere circa costante fino a 60°C, raddoppiando a partire da questo punto ad ogni incremento di 10°C. La presenza di mordettoni e di sedimenti nel fluido, causa di un aspetto torbido, segnala lo stato di degradazione dello stesso.

## CAMBIO FLUIDO

Assicurare nel tempo le migliori condizioni di lavoro, con frequente controllo del fluido e sua periodica sostituzione. Mediamente dopo le prime 100 ore di lavoro, poi ogni 2000 ore o comunque una volta all'anno. Ad ogni cambio sostituire i filtri ed eseguire la pulizia del serbatoio. Prima di eseguire il cambio del fluido idraulico svuotare completamente l'impianto dallo stesso.

## GARANZIA

### CONDIZIONI GENERALI DI GARANZIA

I prodotti di nostra fabbricazione sono garantiti da eventuali avarie imputabili a difetti di fabbricazione o a materiali impiegati. La durata della garanzia sarà di 12 mesi dalla spedizione dal nostro stabilimento. Eventuali interventi di revisione in garanzia, dovranno essere effettuati dai servizi di Assistenza Tecnica da noi autorizzati, oppure presso il nostro stabilimento dove i prodotti dovranno essere inviati in porto franco con un imballo adeguato. Sarà considerata decaduta la garanzia in caso di incauto utilizzo, di manomissione, di modifica e/o di riparazione eseguita da personale non da noi autorizzato.

### ASSISTENZA TECNICA FUORI GARANZIA

La **OLEOWEB SRL** è a disposizione per le riparazioni dei prodotti anche decorso il termine di garanzia.

La **OLEOWEB SRL** effettuerà la riparazione anche trascorsi diversi anni d'impiego (sempre che sia economicamente conveniente).

Il costo della riparazione dei nostri prodotti non più in garanzia viene normalmente calcolato a consuntivo. L'eventuale richiesta di un preventivo dovrà essere fatta espressamente al momento della consegna del prodotto da riparare. Nel caso che il preventivo non venga accettato, saranno comunque addebitate le spese da noi sostenute per la formulazione dello stesso.

**Ogni prodotto reso per la revisione deve essere accompagnato da:**

**1. Regolare bolla completa di dati, come da disposizione di legge.**

**2. Lettera di indicazione del difetto riscontrato e dati di riferimento di un Tecnico Responsabile per eventuali chiarimenti.**

# Indice • Index

Piccole valvole

*Small valves*

pag. 5 - 16



Valvole in linea

*In-line valves*

pag. 19 - 78



Valvole a cartuccia

*Cartridge Valves*

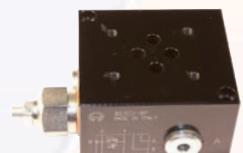
pag. 80 - 110



Basi e blocchi

*Hydraulic manifolds*

pag. 112 - 117



Pompe e deviatori

*Hand pumps and flow diverters*

pag. 121 - 149



Accessori

*Accessories*

pag. 152 - 159





## Caratteristiche tecniche

### Technical features

#### OLIO · OIL

Utilizzare esclusivamente olio idraulico a base minerale ISO 6743/4 (DIN 51524)

Use only ISO 6743/4 (DIN 51524) hydraulic mineral oil

#### VISCOSITÀ · VISCOSITY

Viscosità secondo i parametri ISO 3448 (DIN51519). Il grado di viscosità viene indicato con le lettere ISO VG seguito da un numero che indica la viscosità cinematica media a 40° C in mm<sup>2</sup>/s o centistokes (cSt)

Viscosità min. 15 mm <sup>2</sup> /s	Viscosità max. 100 mm <sup>2</sup> /s	Viscosità consigliata 46 mm <sup>2</sup> /s
--------------------------------------	---------------------------------------	---

The viscosity must be according to ISO 3448 (DIN51519) standards. The viscosity degree is stated by ISO VG letters followed by a number showing the average kinematic viscosity at 40° C in mm<sup>2</sup>/s or centistokes (cSt)

Minimum viscosity 15 mm <sup>2</sup> /s	Maximum viscosity 100 mm <sup>2</sup> /s	Advised viscosity 46 mm <sup>2</sup> /s
---	--	---

Gradi di viscosità ISO <i>ISO viscosity degrees</i>	Viscosità cinematica media <i>Average kinematic viscosity mm<sup>2</sup>/s at 40° C</i>	Limiti viscosità cinematica <i>Kinematic viscosity limits mm<sup>2</sup>/s at 40° C</i>	
		Min.	Max.
ISO VG 15	15	13,5	16,5
ISO VG 22	22	19,8	24,2
ISO VG 32	32	28,8	35,2
ISO VG 46	46	41,4	50,6
ISO VG 68	68	61,2	74,8
ISO VG 100	100	90,0	110

#### FILTRAZIONE CONTAMINAZIONE · FILTRATION CONTAMINATION

Tutti i costruttori di prodotti oleodinamici riconoscono che la eccessiva contaminazione del fluido è la principale causa del malfunzionamento negli impianti oleodinamici.

È indispensabile l'utilizzo di un filtro per proteggere la valvola.

Filtrazione consigliata 15 micron - Classe di contaminazione ISO 4406: 1999 classe 19/17/14

All manufacturers of hydraulic products recognize that excessive fluid contamination is the main cause of hydraulic installations bad working.  
It is necessary a filter use to protect the valve.

Advise filtration 15 micron - Contamination class ISO 4406: 1999 19/17/14

#### TEMPERATURA · TEMPERATURE

Temperatura ambiente	- 20°C + 50°C	Ambient temperature	- 20°C + 50°C
Temperatura olio	- 20°C + 80°C	Oil temperature	- 20°C + 80°C

#### CONDIZIONI DI PROVA · TESTING CONDITIONS

Tutte le curve di funzionamento riportate a catalogo sono state eseguite utilizzando olio minerale con grado di viscosità ISO VG46 alla temperatura di 40°C ed un grado di filtrazione assoluta di 15 micron.

All technical curves show in the present catalogue have been made using mineral oil with ISO VG46 viscosity degree at the temperature of 40°C and degree of absolute filtering of 15 micron.

I dati presenti nel catalogo possono essere soggetti a variazioni, pertanto OLEOWEB si riserva il diritto di apporre modifiche in qualunque momento e senza alcun preavviso.

OLEOWEB reserves the right to modify the products at any time and without notice: the technical data of the catalogue can consequently change.



*Piccole valvole*  

---

*Small valves*



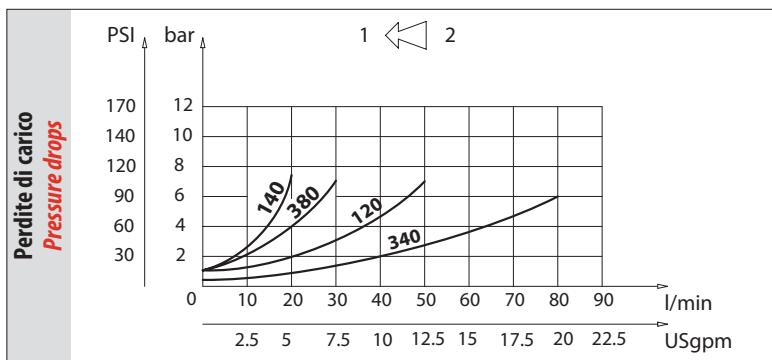
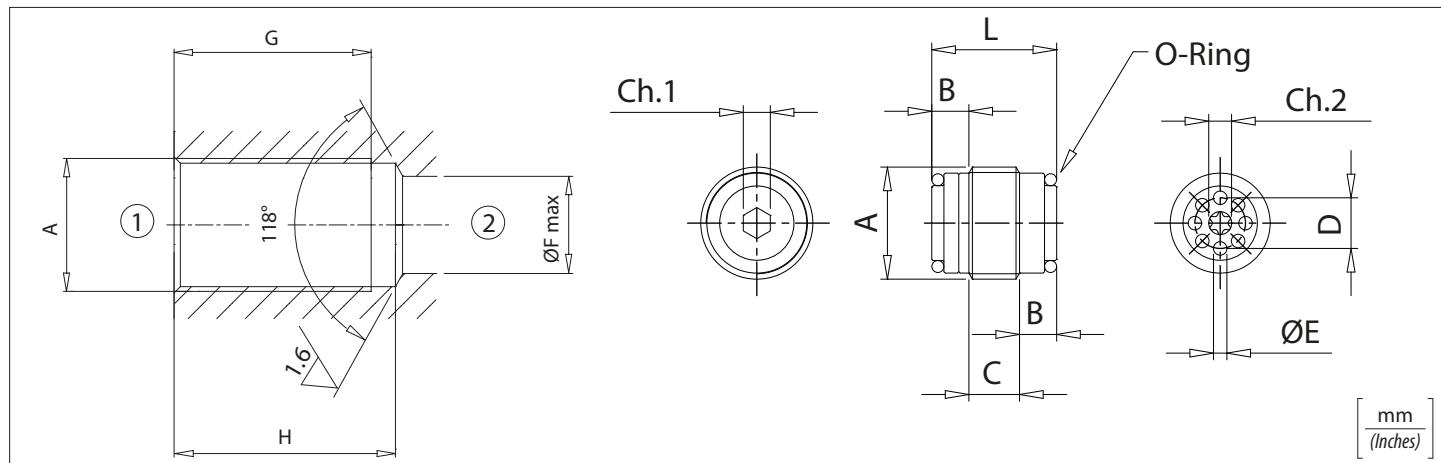
HYDRAULIC VALVES AND COMPONENTS





### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola It is necessary a filter use to protect the valve (advised filtration 15 micron)	
Trafilamento massimo Max internal leakage	5 gocce al min. 5 drops/min
Pressione d'apertura Cracking pressure	0,5 bar (7 PSI)



Codice ordinazione / Ordering code

**VUI - X**

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4

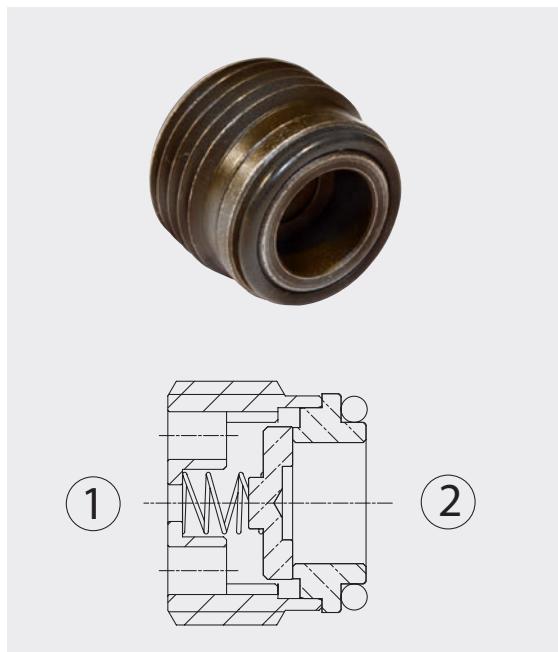
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Ch. 1	Ch. 2	Coppia di serraggio Tightening torque Nm / lbt in	O-Ring	Peso appross. Approx weight Kg / lb	
VUI 140	BSPP 1/4	20 (5)	350 (5000)	5,5 (0,28)	6 (0,24)	6 (0,24)	1,3 (0,05)	7 (0,28)	28 (1,10)	31 (1,22)	17 (0,67)	3 (0,11)	Torx T15	4 (35)	9 x 1	0,01 (0,022)	
VUI 380	BSPP 3/8	30 (8)			7,5 (0,30)	7,5 (0,30)	2 (0,08)	9 (0,35)	31 (1,22)	34 (1,34)	18,5 (0,73)	4 (0,15)	Torx T15	6 (53)	10,82 x 1,78	0,018 (0,040)	
VUI 120	BSPP 1/2	50 (13)			7 (0,22)	8,5 (0,34)	10 (0,39)	2,5 (0,10)	12 (0,47)	35 (1,38)	38 (1,50)	22,5 (0,88)	6 (0,23)	5 (0,19)	10 (88)	14 x 1,78	0,033 (0,073)
VUI 340	BSPP 3/4	80 (21)			7,5 (0,30)	12,5 (0,49)	14 (0,55)	3 (0,12)	16 (0,63)	41 (1,61)	45 (1,77)	28,5 (1,12)	8 (0,31)	20 (177)	18,72 x 2,62	0,07 (0,16)	



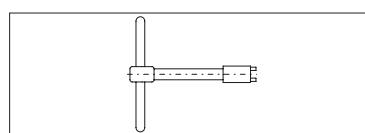
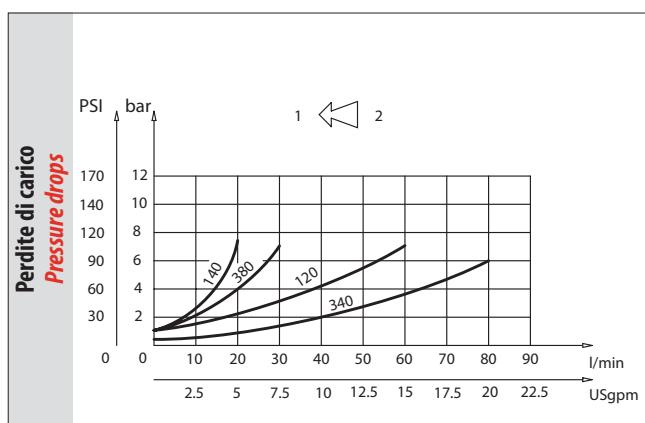
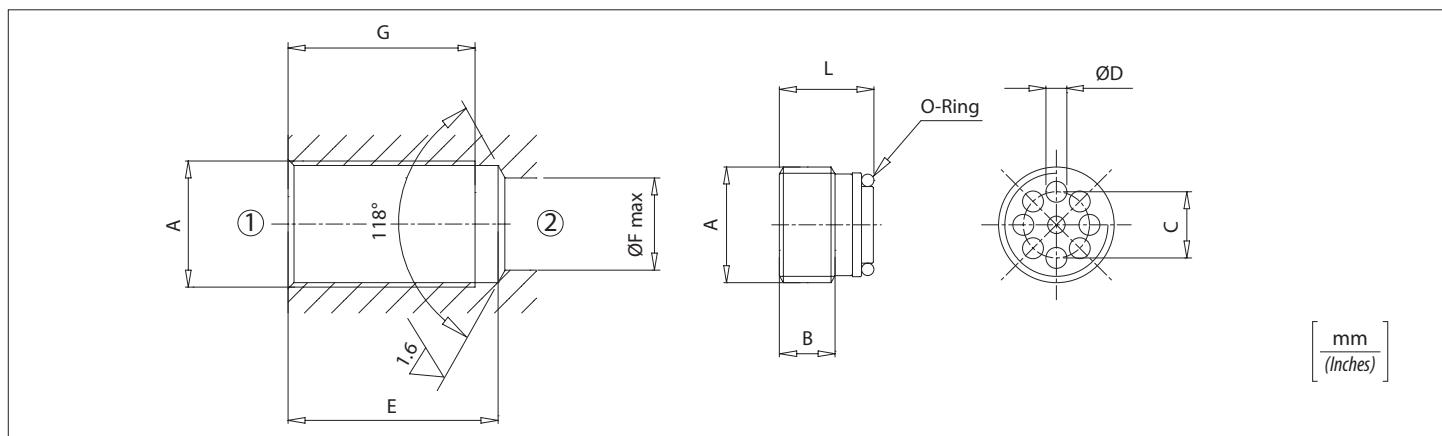
# VUP Valvole unidirezionali a disco

## Disk check valves



### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	
Trafilamento massimo Max internal leakage	5 gocce al min. 5 drops/min
Pressione d'apertura Cracking pressure	0,5 bar (7 PSI)



Codice ordinazione / Ordering code

**VUP - X**

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4

### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	L	Coppia di serraggio Tightening torque Nm / lb ft	O-Ring	Peso approssimativo Approx weight Kg / lb
VUP 140	BSPP 1/4	20 (5)	350 (5000)	6 (0.24)	7 (0.27)	2 (0.08)	24 (0.95)	7 (0.28)	22 (0.87)	10,2 (0.40)	6 (53)	9 x 1	0,01 (0.022)
VUP 380	BSPP 3/8	35 (9)		8 (0.31)	9,5 (0.37)	3 (0.12)	29 (1.14)	9 (0.35)	27 (1.06)	13,5 (0.53)	6 (53)	10,82 x 1,78	0,011 (0.025)
VUP 120	BSPP 1/2	60 (16)		10 (0.39)	12 (0.47)	4 (0.16)	32 (1.26)	12 (0.47)	29 (1.14)	16,1 (0.63)	10 (88)	14 x 1,78	0,02 (0.044)
VUP 340	BSPP 3/4	80 (21)		10,5 (0.41)	16 (0.63)	4,75 (0.19)	37 (1.46)	16 (0.63)	33 (1.30)	20,2 (0.80)	20 (177)	18,72 x 2,62	0,043 (1.12)

# VS

Valvole unidirezionali con traflamento  
Check valves with gap



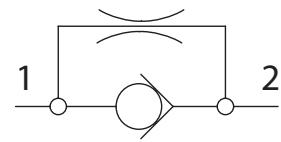
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Codice ordinazione / Ordering code

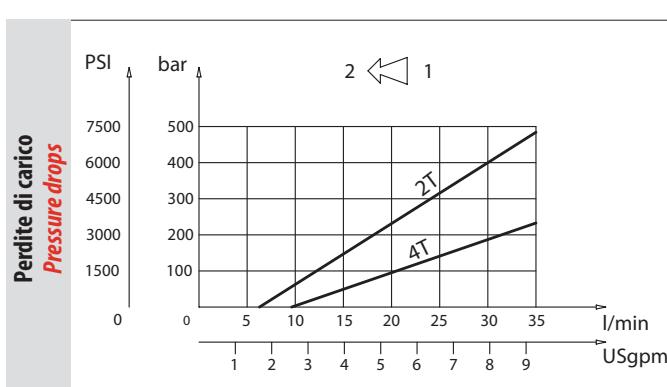
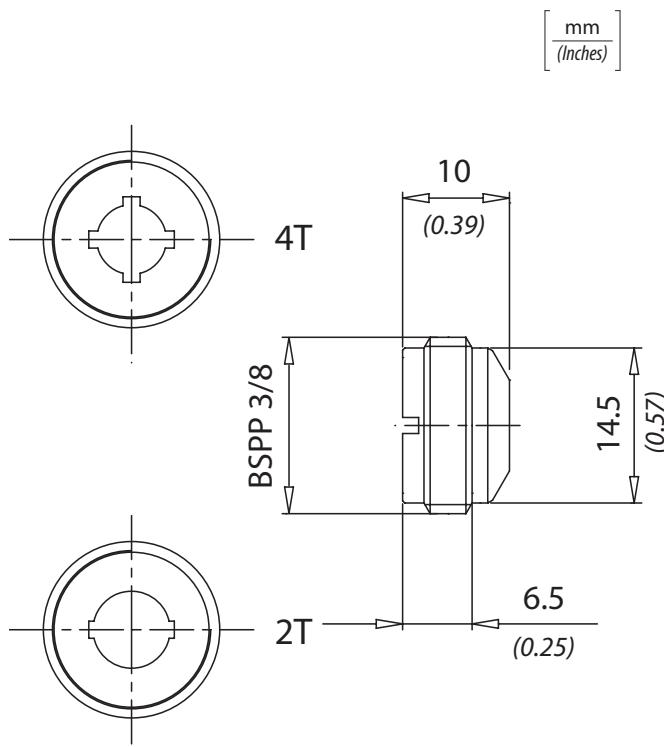
**VS - X - Y**

<b>X</b>	Dimensione / Size
380	BSPP 3/8

<b>Y</b>	Tagli / Gaps
2T	2 tagli / 2 gaps
4T	4 tagli / 4 gaps

## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Coppia di serraggio Tightening torque Nm/lbt in	Peso approssimativo Approx weightN/m Kg/lb
VS	35 (9)	500 (7000)	6 (4.5)	0,01 (0.022)





# VUBA

Valvole di sicurezza per tubazioni  
Hose burst valves

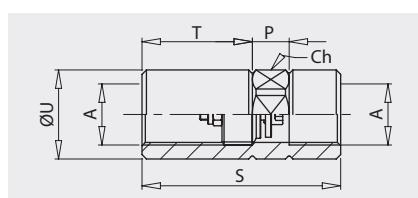
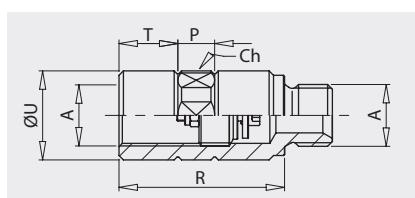
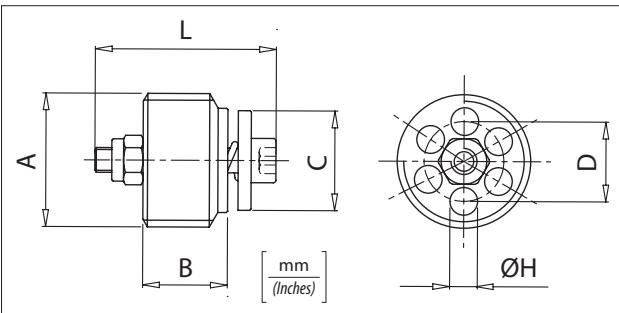
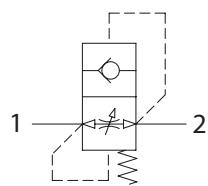


**Dimensione / Dimensions**

Codice Code	A	Peso / Kg Weight / lb
61700001	VUBA 140	0,12 (0.27)
61700002	VUBA 380	0,13 (0.29)
61700003	VUBA 120	0,15 (0.33)
61700004	VUBA 340	0,18 (0.40)

## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola It is necessary a filter use to protect the valve (advised filtration 15 micron)	
Trafillamento Leakage	0 - 0,25 cm <sup>3</sup> /min (0,015 in <sup>3</sup> )

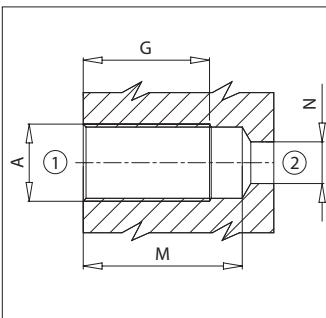
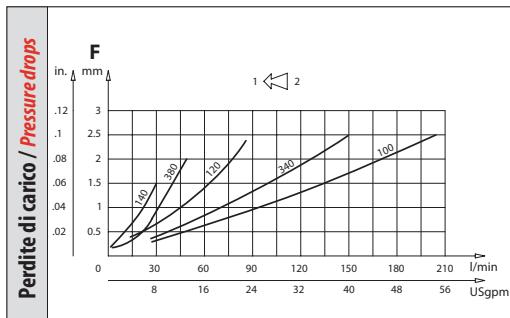


**Colonna / Housing M/F**

Codice Code	A	R	P	T	U	Ch.	Peso / Kg Weight / lb
61100087	BSPP 1/4	39 (1.53)	10 (0.39)	13 (0.51)	20.5 (0.80)	19 (0.75)	0.07 (0.16)
61100088	BSPP 3/8	45 (1.77)	10 (0.39)	16 (0.63)	24.5 (0.96)	22 (0.87)	0.09 (0.20)
61100089	BSPP 1/2	52 (2.05)	10 (0.39)	19 (0.75)	29.5 (1.16)	27 (1.06)	0.15 (0.33)
61100090	BSPP 3/4	61 (2.40)	12 (0.47)	23 (0.90)	35.5 (1.32)	32 (1.26)	0.23 (0.50)
61100091	BSPP 1	67 (2.63)	15 (0.59)	25.5 (1)	44.5 (1.75)	41 (1.61)	0.3 (0.65)

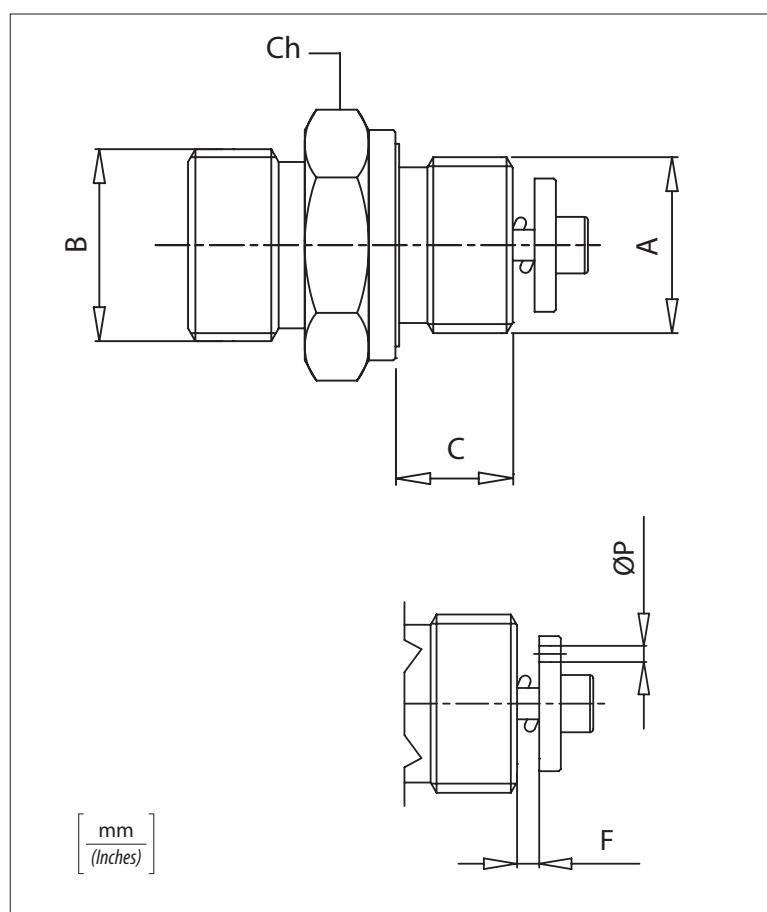
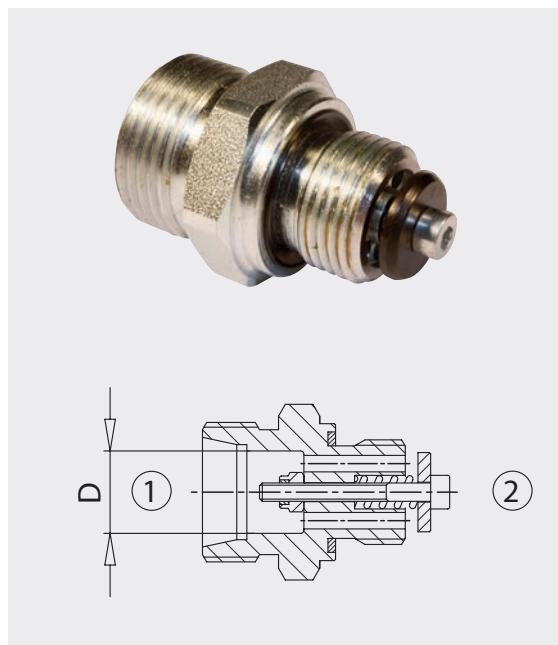
**Colonna / Housing F/F**

Codice Code	A	R	P	T	U	Ch.	Peso / Kg Weight / lb
61100092	BSPP 1/4	39 (1.53)	10 (0.39)	13 (0.51)	20.5 (0.80)	19 (0.75)	0.07 (0.16)
61100093	BSPP 3/8	54 (2.13)	10 (0.39)	30 (1.18)	24.5 (0.96)	22 (0.87)	0.09 (0.20)
61100094	BSPP 1/2	73 (2.87)	10 (0.39)	46.5 (1.83)	29.5 (1.16)	27 (1.06)	0.14 (0.30)
61100095	BSPP 3/4	74 (2.91)	12 (0.47)	44 (1.73)	35.5 (1.32)	32 (1.26)	0.22 (0.48)



**Caratteristiche tecniche / Technical performances**

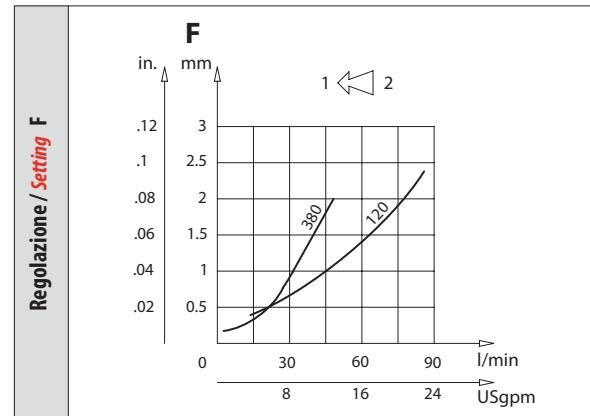
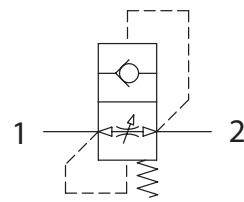
Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	G	H	L	M	N	Coppia di serraggio Tightening torque Nm / lbt in	Peso approssimativo Approx weight Kg / lb
VUBA 140	BSPP 1/4	25 (6.5)	350 (5000)	8,2 (0.32)	10,4 (0.41)	8 (0.31)	25 (0.98)	2,5 (0.10)	19 (0.75)	35 (1.38)	7 (0.28)	2 (1.5)	0,007 (0.016)
VUBA 380	BSPP 3/8	50 (13)		11 (0.43)	12,7 (0.50)	10 (0.39)	30 (1.18)	3,25 (0.13)	23 (0.90)	41 (1.61)	9,5 (0.37)	3 (2.5)	0,013 (0.029)
VUBA 120	BSPP 1/2	80 (21)		13 (0.51)	15 (0.59)	11,5 (0.45)	33 (1.30)	4 (0.16)	29 (1.14)	46 (1.81)	12 (0.47)	4 (3)	0,024 (0.053)
VUBA 340	BSPP 3/4	150 (40)		18 (0.71)	18 (0.71)	14,5 (0.57)	42 (1.65)	5,2 (0.20)	34 (1.34)	55 (2.17)	16 (0.63)	10 (7.5)	0,054 (0.12)
VUBA 100	BSPP 1	180 (47)		20 (0.79)	26 (1.02)	19 (0.75)	48 (1.89)	7 (0.28)	40 (1.57)	63 (2.48)	22 (0.87)	12 (9)	0,1 (0.22)



## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Codice ordinazione / Ordering code

**VUBA - X - Y - K - Z**

<b>X</b>	Dimensione Size	<b>K</b>	Regolazione Setting
380	BSPP 3/8		Esempio: regolazione 0,7 mm Example: setting 0,7 mm F 0,7
120	BSPP 1/2		Omettere se non richiesto Omit if not required
<b>Y</b>	Dimensione Size	<b>Z</b>	Foro sul piattello Hole on flat poppet
T10	Per tubo Ø 10 Solo For Ø 10 pipe VUBA380		Esempio: foro 1,5 mm Example: hole 1,5 mm P1,5
T12	Per tubo Ø 12 VUBA380 For Ø 12 pipe only		Omettere se non richiesto Omit if not required
T15	Per tubo Ø 15 For Ø 15 pipe		

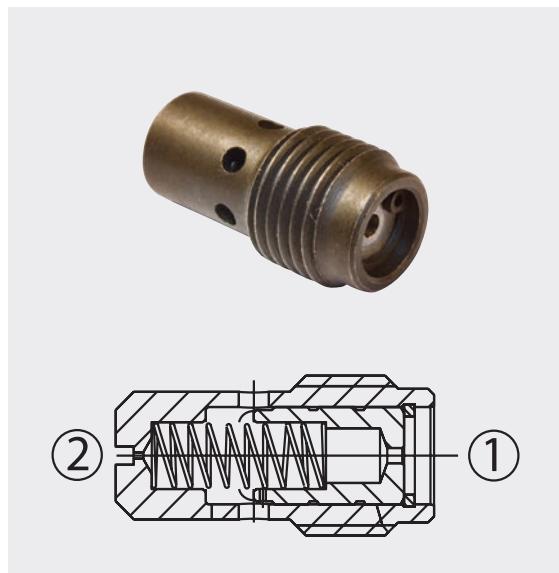
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	Ch	Coppia max di serraggio raccordo (Nm) Max fitting tightening torque (lbt in)	Coppia max di serraggio tubo (Nm) Max tightening torque for hose (lbt in)	Peso approssimativo Approx weight Kg / lb
VUBA380T10				M16 x 1,5		10 (0.39)	22 (0.87)		20 (15)	0,04 (0.088)
VUBA380T12	BSPP 3/8	50 (13)	315 (4500)	M18 x 1,5	11 (0.43)	12 (0.47)	22 (0.87)	70 (50)	40 (30)	0,045 (0.1)
VUBA380T15				M22 x 1,5	13 (0.51)	15 (0.59)	24 (0.94)		70 (50)	0,055 (0.12)
VUBA120T15	BSPP 1/2	80 (21)				27 (1.06)		85 (65)		0,077 (0.17)



# VCC140

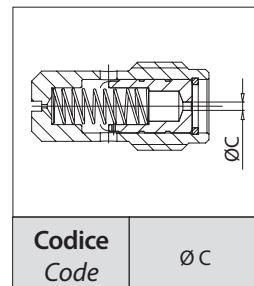
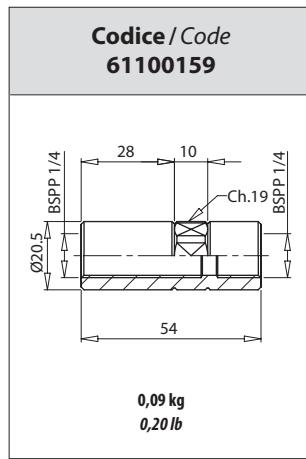
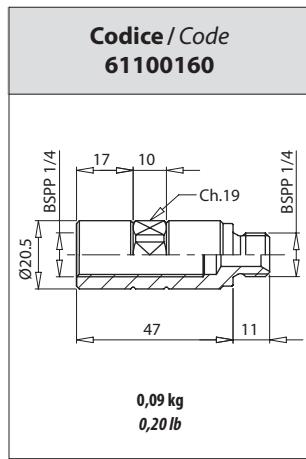
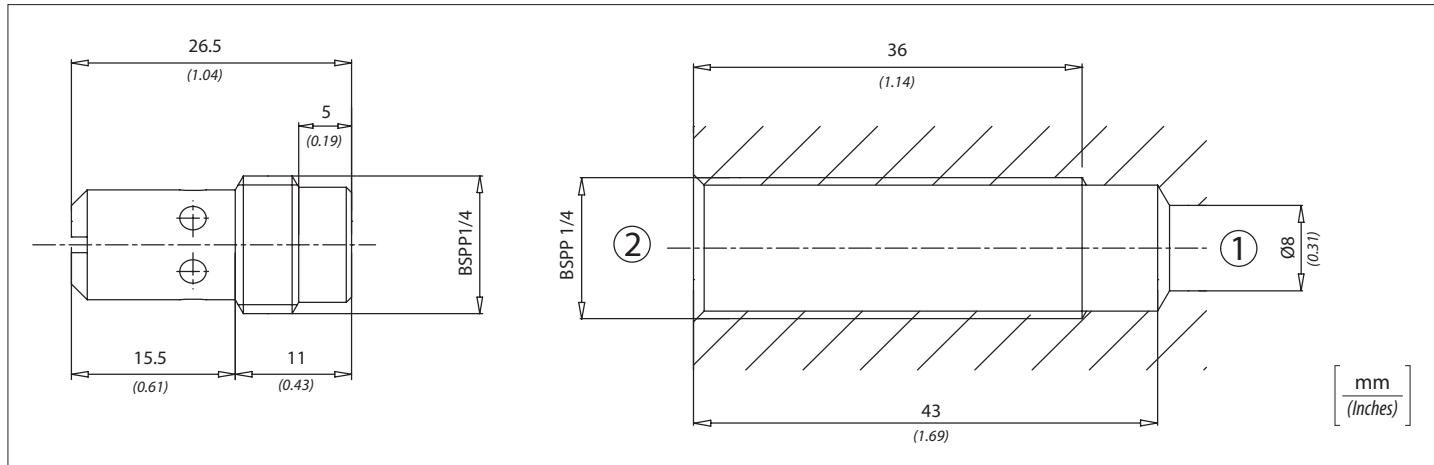
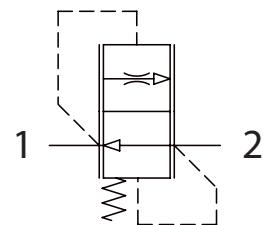
Valvole controllo discesa compensate fisse  
Fixed compensated load control valves



## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



**Codice / Code**  
**Ø C**

VCC1401	Ø 1 (Ø 0.039)
VCC1402	Ø 1,2 (Ø 0.047)
VCC1403	Ø 1,5 (Ø 0.059)
VCC1404	Ø 1,7 (Ø 0.067)
VCC1405	Ø 1,9 (Ø 0.075)
VCC1406	Ø 2,1 (Ø 0.083)
VCC1407	Ø 2,3 (Ø 0.090)
VCC1408	Ø 2,5 (Ø 0.098)
VCC1409	Ø 2,7 (Ø 0.106)
VCC1410	Ø 2,8 (Ø 0.110)
VCC1411	Ø 3,1 (Ø 0.122)
VCC1412	Ø 3,3 (Ø 0.13)

## Codice ordinazione / Ordering code

### VCC140 - Y

<b>Y</b>	<b>Portata controllata a 100 bar ± 10%</b> <b>Controlled flow at 100 bar ± 10%</b>
1	1 l/min (0.25 USgpm)
2	2 l/min (0.5 USgpm)
3	3 l/min (0.75 USgpm)
4	4 l/min (1 USgpm)
5	5 l/min (1.25 USgpm)
6	6 l/min (1.5 USgpm)
7	7 l/min (1.75 USgpm)
8	8 l/min (2 USgpm)
9	9 l/min (2.25 USgpm)
10	10 l/min (2.5 USgpm)
11	11 l/min (2.75 USgpm)
12	12 l/min (3 USgpm)

## Caratteristiche tecniche / Technical performances

Codice / Code	Portata max / Max Flow l/min - USgpm	Pressione Max / Max pressure bar / PSI	Coppia di serraggio / Tightening torque Nm / lbt in	Peso approssimativo valvola / Kg valve approx weight / lb
VCC140	12 (3)	250 (3600)	4(3)	0,014 (0.031)

# VCC380

Valvole controllo discesa compensate fisse

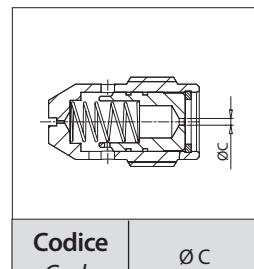
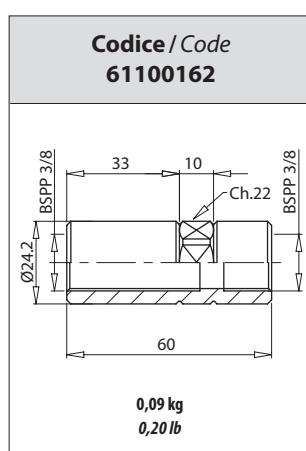
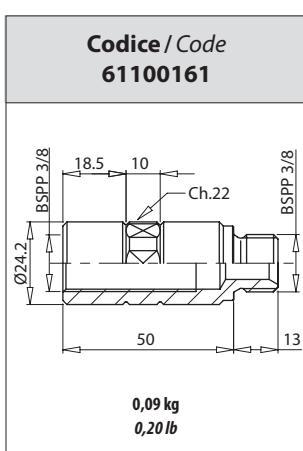
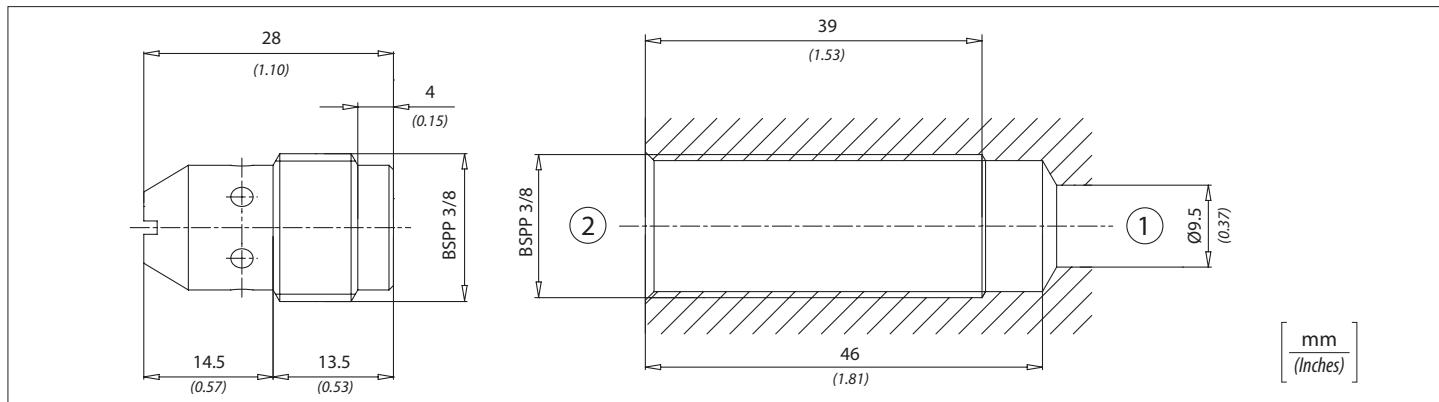
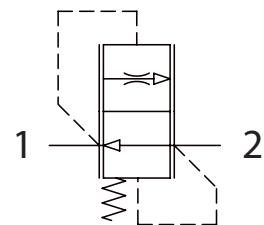
Fixed compensated load control valves



## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



**Codice ordinazione / Ordering code**

## VCC380 - Y

<b>Y</b>	<b>Portata controllata a 100 bar ± 10% Controlled flow at 100 bar ± 10%</b>
1	1 l/min (0.25 USgpm)
2	2 l/min (0.5 USgpm)
3	3 l/min (0.75 USgpm)
4	4 l/min (1 USgpm)
5	5 l/min (1.25 USgpm)
6	6 l/min (1.5 USgpm)
7	7 l/min (1.75 USgpm)
8	8 l/min (2 USgpm)
9	9 l/min (2.25 USgpm)
10	10 l/min (2.5 USgpm)
11	11 l/min (2.75 USgpm)
12	12 l/min (3 USgpm)
16	16 l/min (4.25 USgpm)
18	18 l/min (4.75 USgpm)

## Caratteristiche tecniche / Technical performances

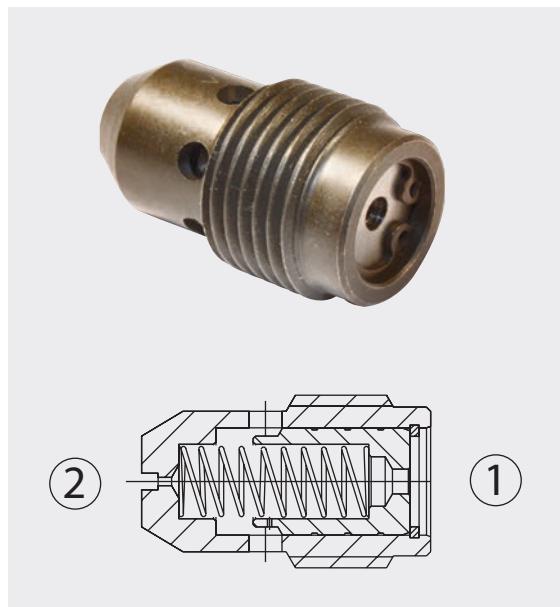
Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Coppia di serraggio Tightening torque Nm / lbt in	Peso approssimativo valvola / Kg valve approx weight / lb
VCC380	18 (5)	250 (3600)	6 (4.5)	0,024 (0.053)



# VSC120

Valvole controllo discesa compensate fisse

*Fixed compensated load control valves*

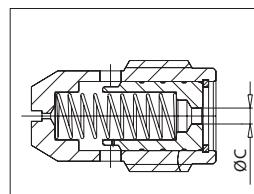
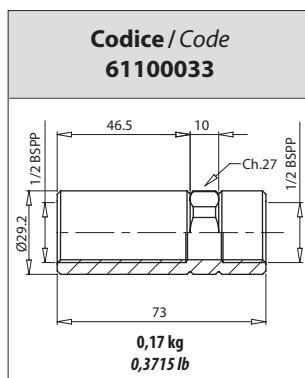
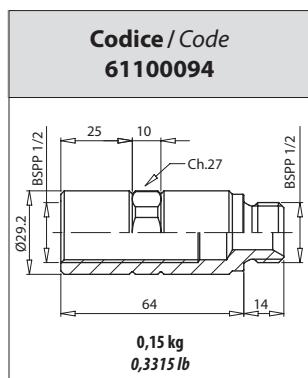
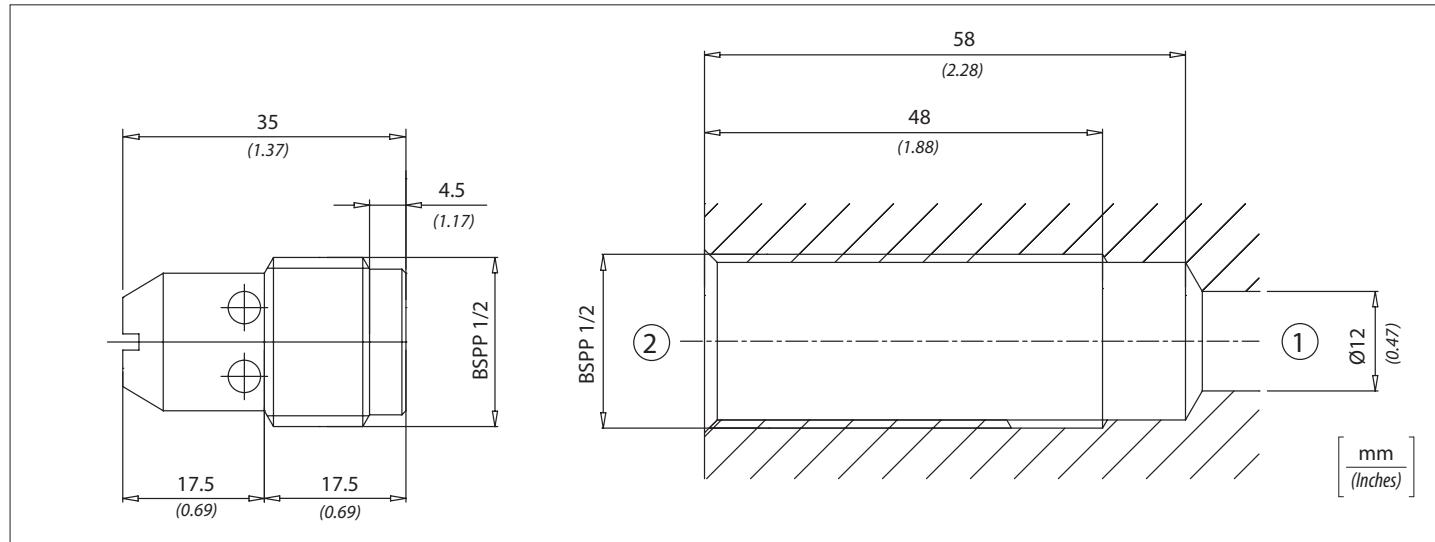
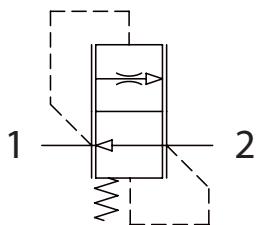


## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



**Codice ordinazione / Ordering code**

**VSC120 - Y**

<b>Y</b>	<b>Portata controllata a 100 bar ± 10%</b> <i>Controlled flow at 100 bar ± 10%</i>
9	9 l/min (2.2 USgpm)
12	12 l/min (3 USgpm)
17	17 l/min (4.5 USgpm)
21	21 l/min (5.5 USgpm)
27	27 l/min (7 USgpm)
32	32 l/min (8.5 USgpm)
40	40 l/min (10.5 USgpm)
47	47 l/min (12.5 USgpm)

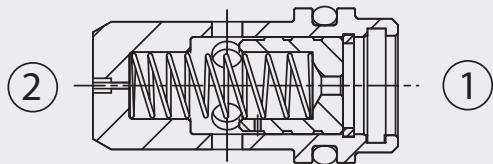
## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Coppia di serraggio Tightening torque Nm / lbt.in	Peso approssimativo valvola / Kg valve approx weight / lb
VSC120	47 (12)	250 (3600)	10 (7.5)	0,050 (0.11)

# VSCR6

Valvole controllo discesa compensate fisse

*Fixed compensated load control valves*



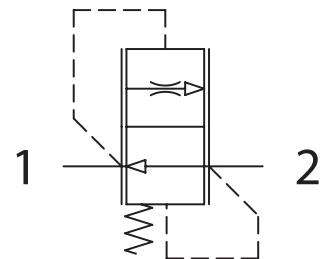
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

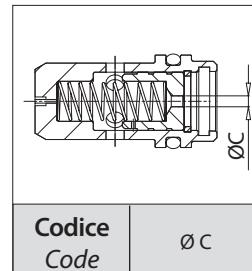
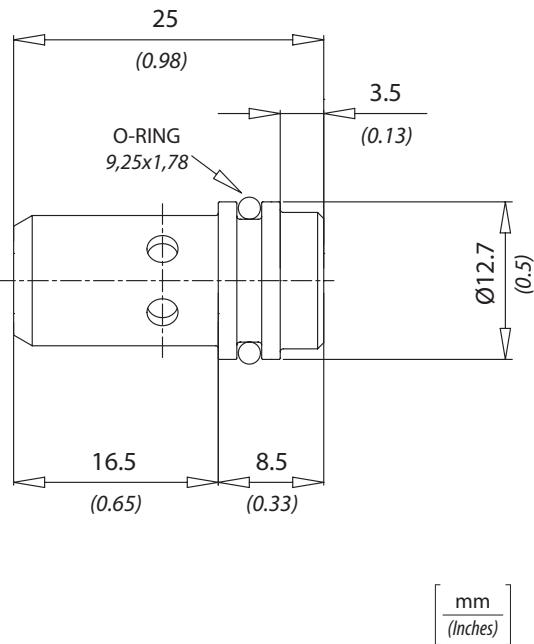
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo/ Kg Approx weight / lb
<b>VSCR6</b>	<b>12 (3)</b>	<b>250 (3600)</b>	<b>0,012 (0.026)</b>



## Codice ordinazione / Ordering code

### VSCR6 - Y

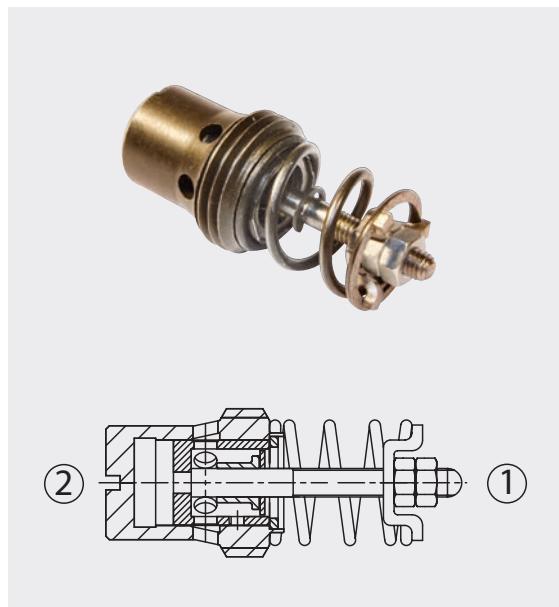
Portata controllata  
a 100 bar ± 10%  
*Controlled flow at 100 bar ± 10%*

Y	Portata controllata a 100 bar ± 10% <i>Controlled flow at 100 bar ± 10%</i>
1	1 l/min (0.25 USgpm)
2	2 l/min (0.5 USgpm)
3	3 l/min (0.75 USgpm)
4	4 l/min (1 USgpm)
5	5 l/min (1.25 USgpm)
6	6 l/min (1.5 USgpm)
7	7 l/min (1.75 USgpm)
8	8 l/min (2 USgpm)
9	9 l/min (2.25 USgpm)
10	10 l/min (2.5 USgpm)
11	11 l/min 2.75 USgpm
12	12 l/min (3 USgpm)



# VRD

## Valvole controllo discesa compensate regolabili Adjustable compensated flow control valves

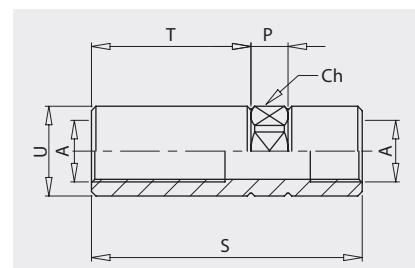
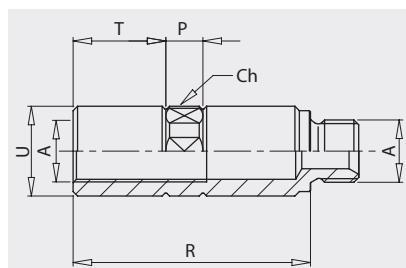
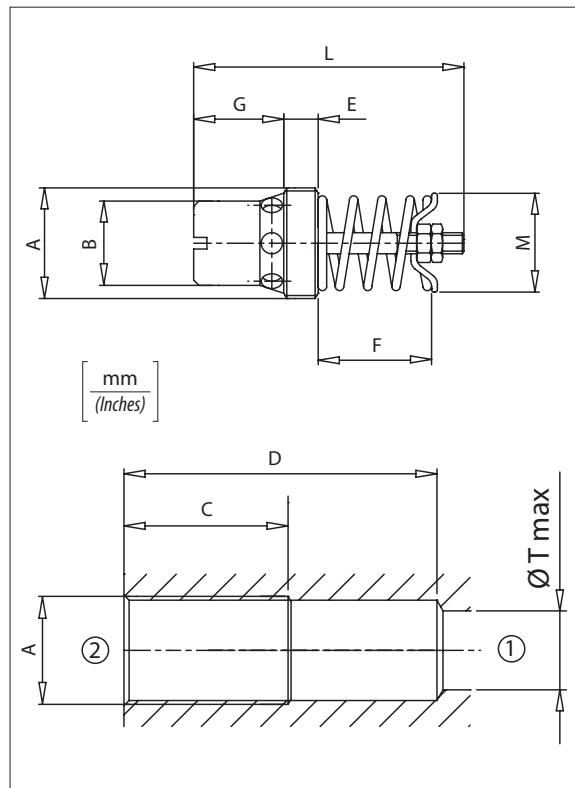
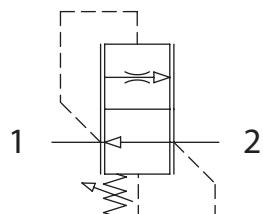


### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



Colonna Housings M/F

Codice Code	A	R	P	T	U	Ch.	Peso / Kg Weight/lb	Codice Code	A	R	P	T	U	Ch.	Peso / Kg Weight/lb
61100057	BSPP 1/4	57 (2.24)	10 (0.39)	22 (0.87)	20.5 (0.80)	19 (0.75)	0.11 (0.16)	61100051	BSPP 1/4	66 (2.60)	10 (0.39)	38 (1.49)	20.5 (0.80)	19 (0.75)	0.11 (0.16)
61100058	BSPP 3/8	64 (2.52)	10 (0.39)	25 (0.98)	24.5 (0.96)	22 (0.87)	0.14 (0.20)	61100052	BSPP 3/8	73 (2.87)	10 (0.39)	43 (1.69)	24.5 (0.96)	22 (0.87)	0.12 (0.20)
61100059	BSPP 1/2	69 (2.71)	10 (0.39)	28 (1.10)	29.5 (1.16)	27 (1.06)	0.24 (0.30)	61100053	BSPP 1/2	81 (3.19)	10 (0.39)	50.5 (1.99)	29.5 (1.16)	27 (1.06)	0.20 (0.33)
61100060	BSPP 3/4	87 (3.42)	12 (0.47)	36 (1.42)	35.5 (1.32)	32 (1.26)	0.34 (0.48)	61100054	BSPP 3/4	99 (3.89)	12 (0.47)	57 (2.24)	35.5 (1.32)	32 (1.26)	0.29 (0.50)

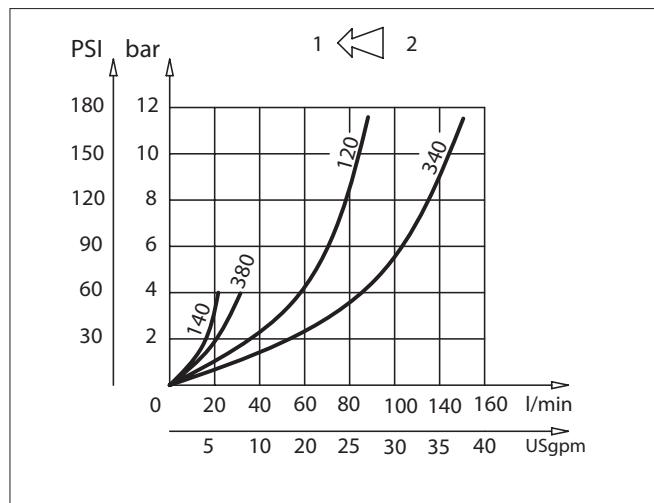
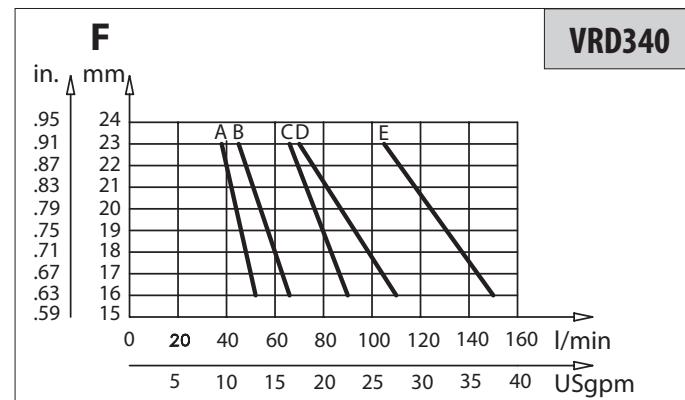
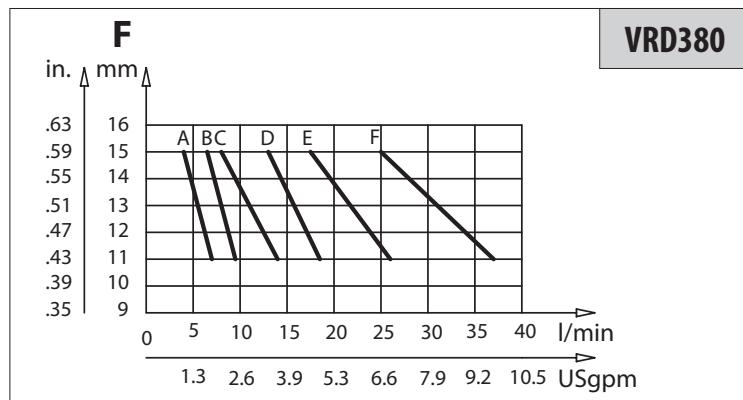
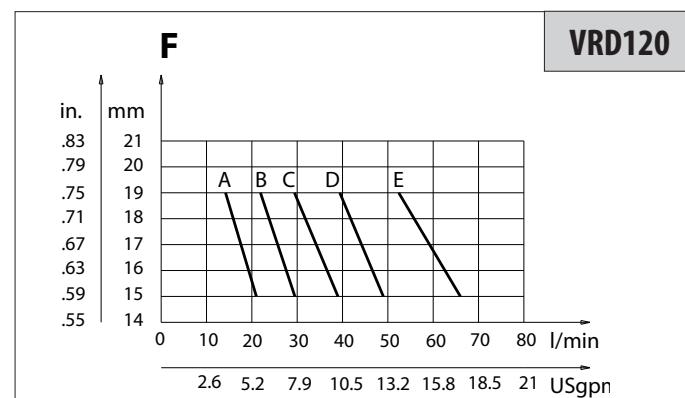
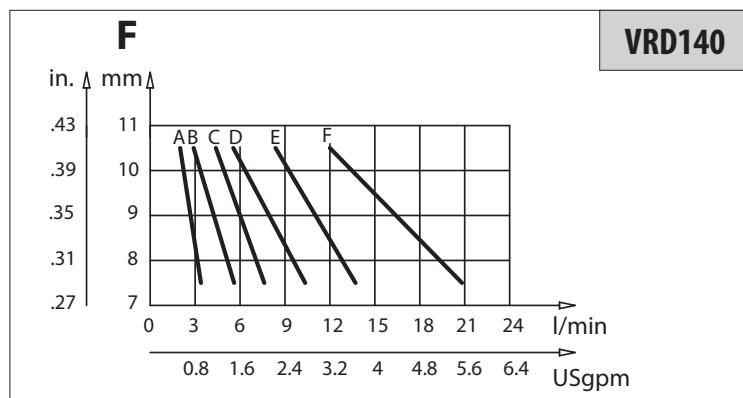
Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	T	G	L	M	R	S	Peso approssimativo Approx weight Kg/lb
VRD140	BSPP 1/4	20 (5.3)	300 (4350)	10 (0.39)	33 (1.30)	53 (2.09)	6 (0.24)	7 (0.28)	13,5 (0.53)	39 (1.54)	10 (0.39)	57 (2.24)	66 (2.60)	0,013 (0.029)
VRD380	BSPP 3/8	35 (9.2)		12,5 (0.49)	36 (1.42)	60 (2.63)	5 (0.20)	9.5 (0.37)	15,5 (0.61)	45 (1.77)	14 (0.55)	64 (2.52)	73 (2.87)	0,024 (0.053)
VRD120	BSPP 1/2	65 (17.1)		16 (0.63)	39 (1.54)	63 (2.48)	7 (0.28)	12 (0.47)	16 (0.63)	51 (2.01)	18 (0.71)	69 (2.72)	81 (3.19)	0,037 (0.082)
VRD340	BSPP 3/4	150 (40)		20 (0.79)	50 (1.97)	81 (3.19)	10 (0.39)	16 (0.63)	21 (0.83)	62 (2.44)	23 (0.91)	87 (3.43)	99 (3.90)	0,077 (0.17)

Codice / Code	Coppia di serraggio / Tightening Torque Nm / lbt in
VRD140	6 (4,5)
VRD380	8 (6)
VRD120	12 (9)
VRD340	15 (11,25)



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

**VRD - X - Y - K**

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4

Regolazione / Setting

Y	Flusso controllato a 50 bar Controlled flow at 50 bar	A	B	C	D	E	F
VRD140	0,8 / 7 (0.2 / 1.9)	1,5 / 9,5 (0.4 / 2.5)	2,3 / 14 (0.6 / 3.7)	4 / 18,5 (1 / 4.9)	6 / 26 (1.6 / 6.8)	8 / 37 (2.1 / 9.7)	
VRD380	4 / 7 (1 / 1.9)	6,5 / 9,5 (1.7 / 2.5)	8 / 14 (2.1 / 3.7)	13 / 18,5 (3.4 / 4.9)	17,5 / 26 (4.6 / 6.8)	25 / 37 (6.6 / 9.7)	
VRD120	12,5 / 21 (3.3 / 5.5)	20 / 29,5 (5.3 / 7.8)	27 / 39 (7.1 / 10.3)	37 / 49 (9.7 / 12.9)	49 / 66 (12.9 / 17.4)	-	
VRD340	38 / 52 (10 / 13.7)	45 / 66 (12 / 17.4)	66 / 90 (17.4 / 23.8)	70 / 110 (18.5 / 29)	115 / 150 (30 / 40)	-	

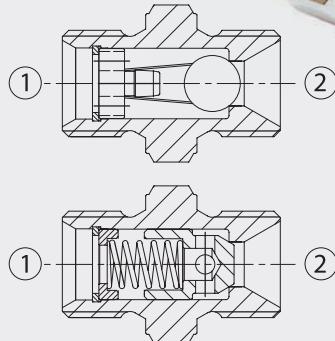
K	Regolazione / Setting
	Esempio: impostazione 15 mm Example: Setting 15 mm F 15
	Ommesso se non richiesto Omitted if not required



# VUN-BSP

Valvole unidirezionali  
Check valves

**NEW**

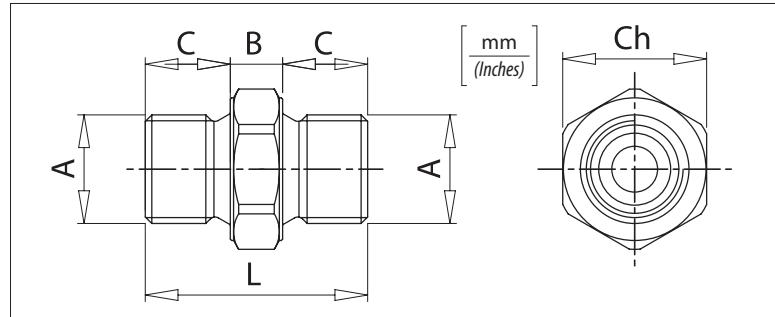
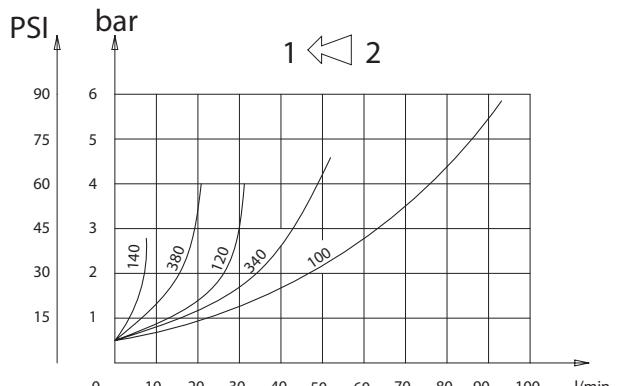


## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro	ISO 4406:1999 Max contamination index with filter
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	
Trafilamento Leakage	0 - 0,25 cm <sup>3</sup> /min (0-0,015 in <sup>3</sup> )



## Perdite di carico Pressure drops



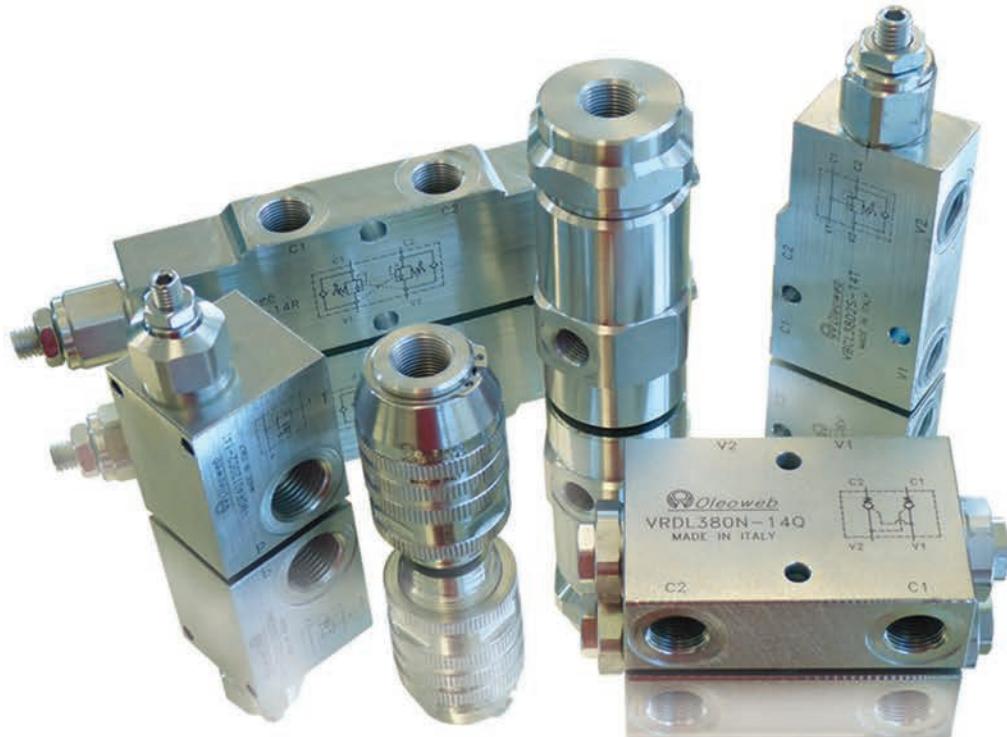
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	L	B	C	Ch.
<b>VUN 140</b>	BSPP1/4	5 (1.3)	500 (7200)	29 (1.14)	7 (1.27)	11 (0.43)	19 (0.75)
<b>VUN 380</b>	BSPP3/8	15 (4)		34 (1.34)	8 (0.31)	13 (0.51)	22 (0.86)
<b>VUN 120</b>	BSPP1/2	30 (8)		44 (1.73)	16 (0.63)	14 (0.55)	27 (1.06)
<b>VUN 340</b>	BSPP3/4	50 (13)		50 (1.97)	16 (0.63)	17 (0.67)	32 (1.26)
<b>VUN 100</b>	BSPP1	90 (23)		57 (2.24)	19 (0.75)	19 (0.75)	41 (1.61)

## Codice ordinazione / Ordering code

### VUN - X - Y - K

X	Dimensione / Size	Y	Tenuta / Sealing	K	Molla / Spring
140	BSPP 1/4	SF	Tenuta a sfera solo per VUN/140/380/120 <i>Ball sealing only for VUN/140/380/120</i>	1	1 bar Standard (14,5 PSI)
380	BSPP 3/8		<i>Ball sealing only for VUN/140/380/120</i>	3	3 bar (43,5 PSI)
120	BSPP 1/2	SP	Tenuta a cono <i>Poppet sealing</i>	4,5	4,5 bar (65 PSI)
340	BSPP 3/4			6	6 bar (87 PSI)
100	BSPP 1				



*Valvole in linea*  
*In-line valves*



Oleoweb

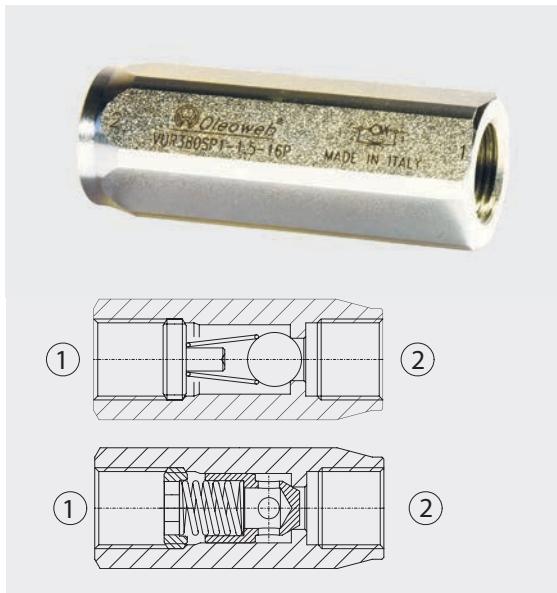
HYDRAULIC VALVES AND COMPONENTS



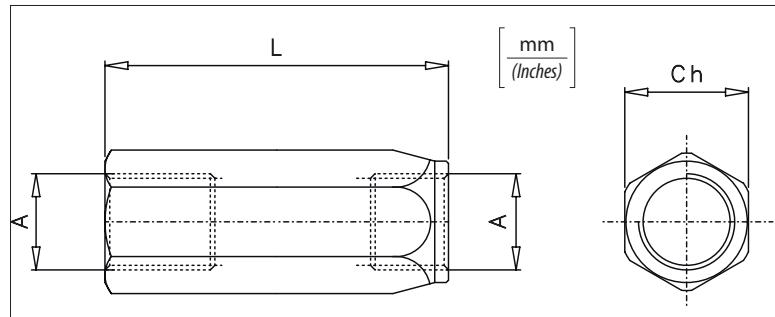
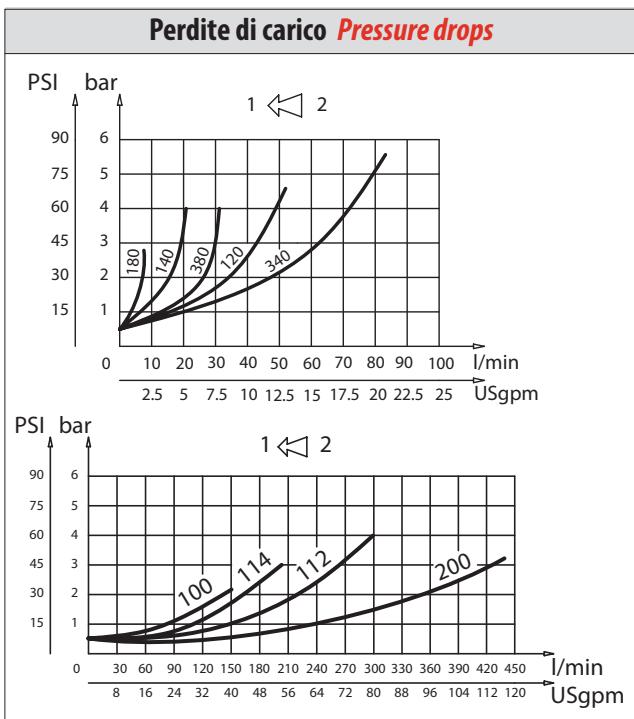
# VUR-BSP

Valvole unidirezionali

Check valves



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	
Trafilamento Leakage	0 - 0,25 cm <sup>3</sup> /min (0,015 in <sup>3</sup> )



Caratteristiche tecniche / Technical performances						
Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	L	Ch	Peso approssimativo / Kg Approx weight / lb
<b>VUR 180</b> BSPP 1/8	5 (1.3)	400 (5800)	47 (1.85) 55 (2.16) 65 (2.56) 75 (2.95) 86,5 (3.41)	47 (1.85)	14 (0.55)	0,05 (0.11)
	15 (4)			55 (2.16)	19 (0.75)	0,10 (0.22)
	30 (8)			65 (2.56)	24 (0.94)	0,18 (0.40)
	50 (13)			75 (2.95)	27 (1.06)	0,23 (0.50)
	90 (23)			110 (4.33)	35 (1.38)	0,45 (1)
<b>VUR 140</b> BSPP 1/4	150 (40)	350 (5000)	110 (4.33) 123 (4.84)	41 (1.61)	0,73 (1.6)	
	200 (50)			55 (2.16)	55 (2.16)	1,5 (3.3)
	300 (80)			138 (5.43)	60 (2.36)	2 (4.4)
	430 (110)			250 (3600)	160 (6.30)	2,7 (6)
<b>VUR 380</b> BSPP 3/8	50 (13)					
<b>VUR 120</b> BSPP 1/2	90 (23)					
<b>VUR 340</b> BSPP 3/4	150 (40)					
<b>VUR 100</b> BSPP 1	200 (50)					
<b>VUR 114</b> BSPP 1-1/4	300 (80)					
<b>VUR 112</b> BSPP 1-1/2	430 (110)					
<b>VUR 200</b> BSPP 2						

### Codice ordinazione / Ordering code

**VUR - X - Y - K**

X	Dimensione / Size
180	BSPP 1/8
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1
114	BSPP 1-1/4
112	BSPP 1-1/2
200	BSPP 2

Y	Tenuta / Sealing
SF	Tenuta a sfera solo per VUR 180/140/380/120 <i>Ball sealing only for VUR 180/140/380/120</i>
SP	Tenuta a cono <i>Poppet sealing</i>

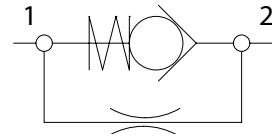
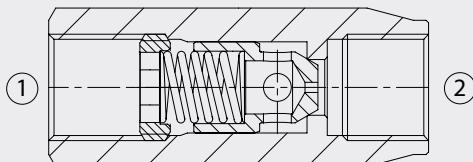
K	Molla / Spring
1	1 bar Standard (14,5 PSI)
3	3 bar (43,5 PSI)
4,5	4,5 bar (65 PSI)
6	6 bar (87 PSI)



# VUR-BSP

Valvole unidirezionali con foro di strozzamento  
Check valves, with restriction hole

**NEW**



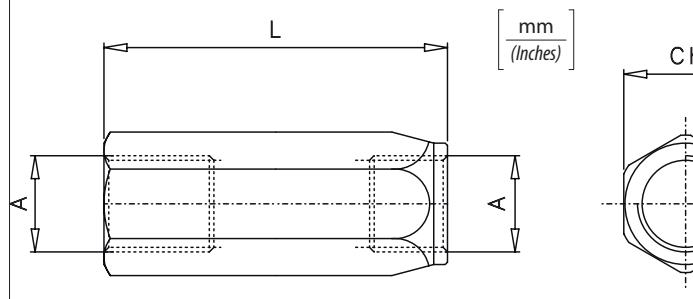
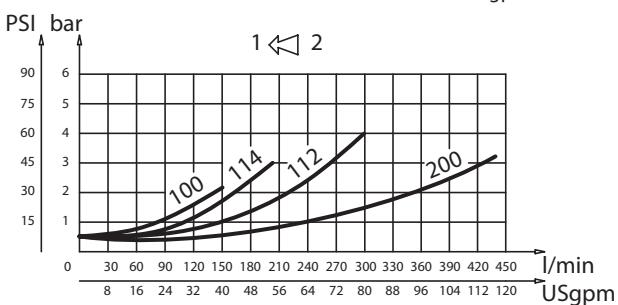
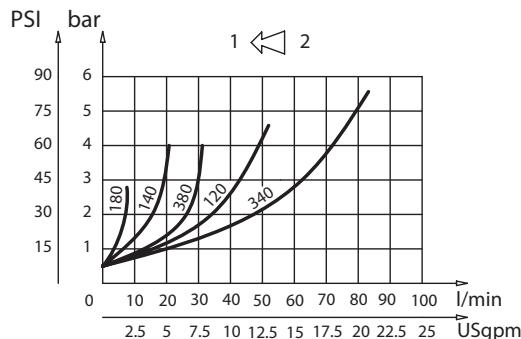
## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*

## Perdite di carico Pressure drops



## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	L	Ch	Peso approssimativo / Kg Approx weight / lb
<b>VUR 180</b>	BSPP 1/8	<b>5 (1.3)</b>	<b>400 (5800)</b>	<b>47 (1.85)</b>	<b>14 (0.55)</b>	<b>0,05 (0.11)</b>
<b>VUR 140</b>	BSPP 1/4	<b>15 (4)</b>		<b>55 (2.16)</b>	<b>19 (0.75)</b>	<b>0,10 (0.22)</b>
<b>VUR 380</b>	BSPP 3/8	<b>30 (8)</b>		<b>65 (2.56)</b>	<b>24 (0.94)</b>	<b>0,18 (0.40)</b>
<b>VUR 120</b>	BSPP 1/2	<b>50 (13)</b>		<b>75 (2.95)</b>	<b>27 (1.06)</b>	<b>0,23 (0.50)</b>
<b>VUR 340</b>	BSPP 3/4	<b>90 (23)</b>		<b>86,5 (3.41)</b>	<b>35 (1.38)</b>	<b>0,45 (1)</b>
<b>VUR 100</b>	BSPP 1	<b>150 (40)</b>	<b>350 (5000)</b>	<b>110 (4.33)</b>	<b>41 (1.61)</b>	<b>0,73 (1.6)</b>
<b>VUR 114</b>	BSPP 1-1/4	<b>200 (50)</b>		<b>123 (4.84)</b>	<b>55 (2.16)</b>	<b>1,5 (3.3)</b>
<b>VUR 112</b>	BSPP 1-1/2	<b>300 (80)</b>		<b>138 (5.43)</b>	<b>60 (2.36)</b>	<b>2 (4.4)</b>
<b>VUR 200</b>	BSPP 2	<b>430 (110)</b>		<b>250 (3600)</b>	<b>160 (6.30)</b>	<b>2,7 (6)</b>

## Codice ordinazione / Ordering code

**VUR - X - Y - K - Z**

X	Dimensione / Size
180	BSPP 1/8
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1
114	BSPP 1-1/4
112	BSPP 1-1/2
200	BSPP 2

K	Molla / Spring
1	1 bar Standard (14,5 PSI)
3	3 bar (43,5 PSI)

K	Molla / Spring
4,5	4,5 bar (65 PSI)
6	6 bar (87 PSI)

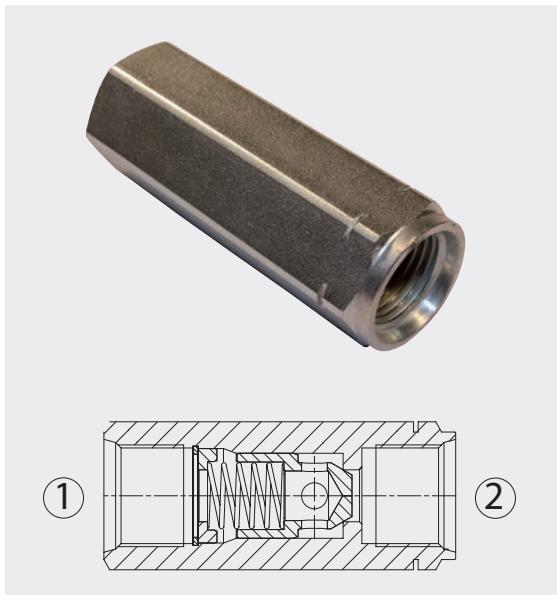
Y	Tenuta / Sealing
SP	Tenuta a cono Poppet sealing

Z Foro di strozzamento  
Restriction hole

Indicare il diametro del foro.  
Esempio: VUR380SP1 con foro Ø 1,5 mm  
Cod. VUR380SP1-1,5  
State the hole diameter  
Example: VUR380SP1-1,5 with Ø 1,5 in hole  
Cod. VUR380SP1-1,5

# VUR-SAE

Valvole unidirezionali  
Check valves

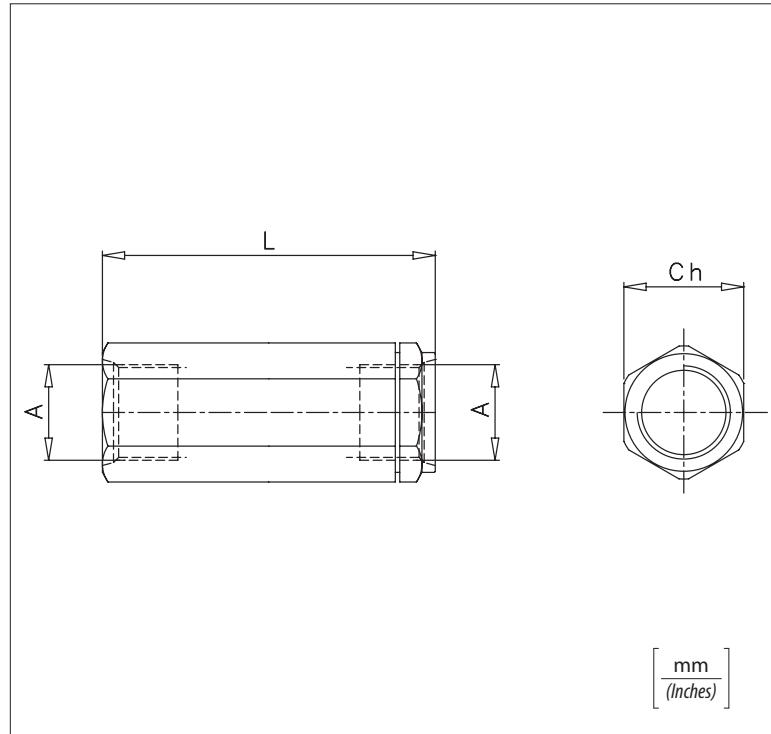
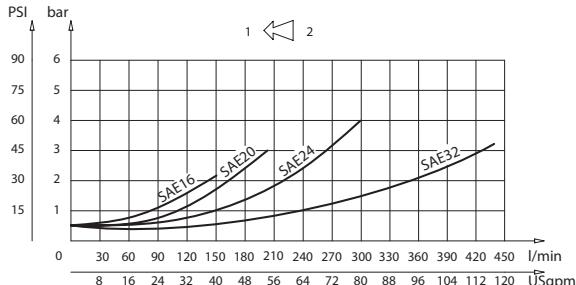
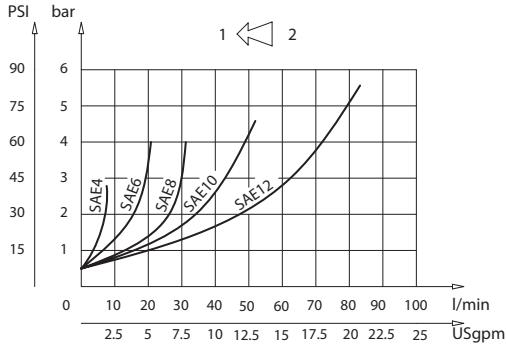


## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	
Trafilamento Leakage	0 - 0,25 cm <sup>3</sup> /min (0-0,015 in <sup>3</sup> )



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

**VUR - X - SAE - Y - K**

X	Dimensione / Size
4	7/16 - 20 UNF
6	9/16 - 18 UNF
8	3/4 - 16 UNF
12	1-1/16-12 UN
16	1-5/16-12 UN
20	1-5/8-12 UN
24	1-7/8-12 UN
32	2-1/2-12 UN

Y	Tenuta / Sealing
SP	Tenuta a cono <i>Poppet sealing</i>

K	Molla / Spring
1	1 bar Standard (14,5 PSI)
3	3 bar (43,5 PSI)
4,5	4,5 bar (65 PSI)
6	6 bar (87 PSI)

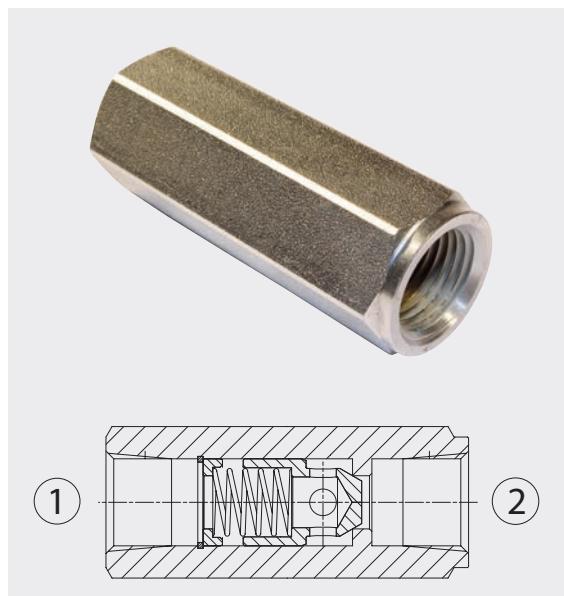
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	L	Ch	Peso approssimativo / Kg Approx weight / lb
VUR 4 SAE	7/16-20 UNF	5 (1.3)	400 (5800)	55 (2.16)	19 (0.75)	0,11 (0,24)
VUR 6 SAE	9/16-18 UNF	15 (4)		58 (2.28)	19 (0.75)	0,09 (0,20)
VUR 8 SAE	3/4-16 UNF	30 (8)		69 (2.71)	24 (0.94)	0,18 (0,40)
VUR 12 SAE	1-1/16-12 UN	90 (23)		88,5 (3.48)	35 (1.38)	0,45 (1)
VUR 16 SAE	1-5/16-12 UN	150 (40)	350 (5000)	110 (4.33)	41 (1.61)	0,73 (1,6)
VUR 20 SAE	1-5/8-12 UN	200 (50)		120 (4.72)	55 (2.16)	1,5 (3,43)
VUR 24 SAE	1-7/8-12 UN	300 (80)		138 (5.43)	60 (2.36)	2,5 (5,5)
VUR 32 SAE	2-1/2-12 UN	430 (110)		75 (2.97)	75 (2.97)	2,9 (6,4)

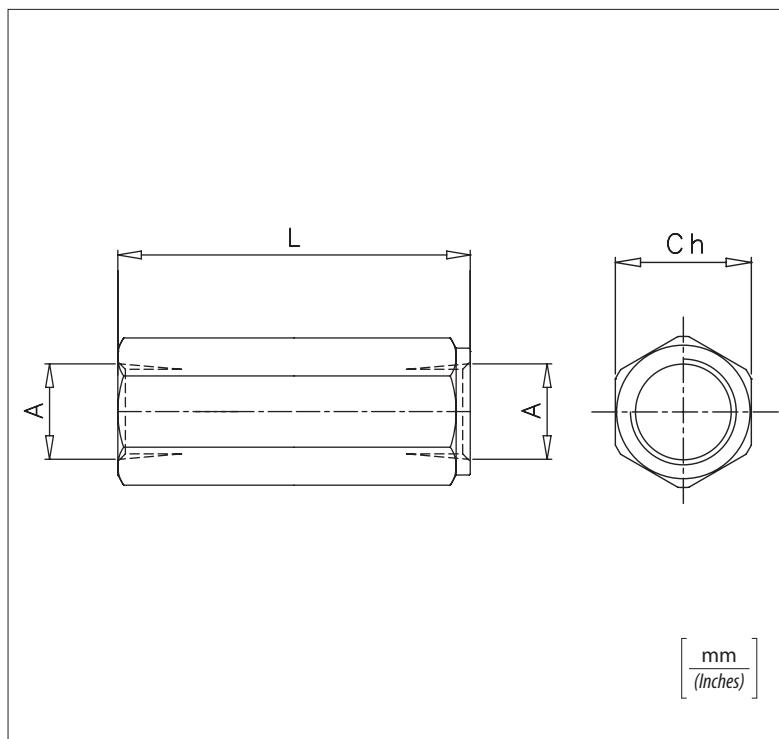
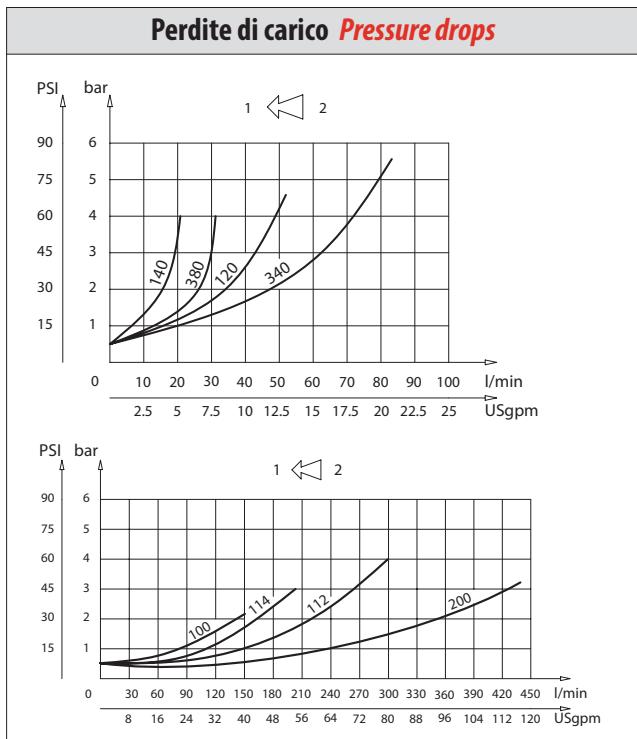


# VUR-NPTF

Valvole unidirezionali  
Check valves



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	
Trafilamento Leakage	0 - 0,25 cm <sup>3</sup> /min (0-0,015 in <sup>3</sup> )



## Codice ordinazione / Ordering code

**VUR - X - NPT - Y - K**

X	Dimensione / Size
140	1/4 NPTF
380	3/8 NPTF
120	1/2 NPTF
340	3/4 NPTF
100	1 NPTF
114	1 - 1/4 NPTF
112	1 - 1/2 NPTF
200	2 NPTF

Y	Tenuta / Sealing
SP	Tenuta a cono Poppet sealing

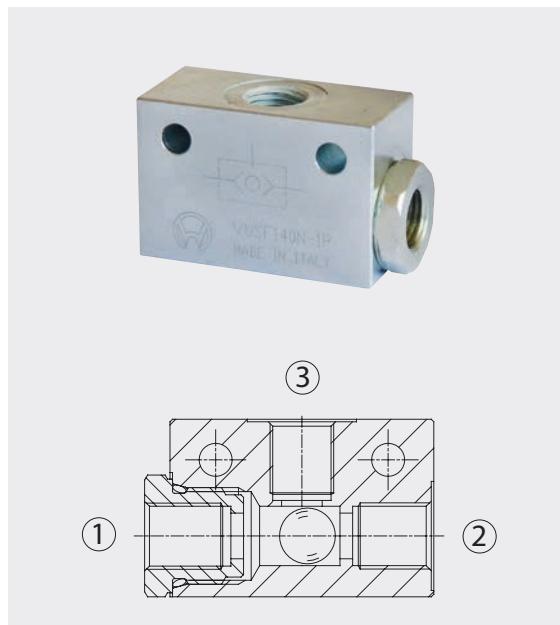
K	Molla / Spring
1	1 bar Standard (14,5 PSI)
3	3 bar (43,5 PSI)
4,5	4,5 bar (65 PSI)
6	6 bar (87 PSI)

## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	L	Ch	Peso approssimativo / Kg Approx weight / lb
VUR 140 NPT	1/4 NPTF	15 (4)	400 (5800)	58 (2.28)	19 (0.75)	0,10 (0.22)
VUR 380 NPT	3/8 NPTF	30 (8)		69 (2.72)	24 (0.94)	0,18 (0.40)
VUR 120 NPT	1/2 NPTF	50 (13)		75 (2.95)	27 (1.06)	0,23 (0.50)
VUR 340 NPT	3/4 NPTF	90 (23)		88,5 (3.48)	35 (1.38)	0,45 (1)
VUR 100 NPT	1 NPTF	150 (40)	350 (5000)	110 (4.33)	41 (1.61)	0,75 (1.7)
VUR 114 NPT	1-1/4 NPTF	200 (50)		120 (4.72)	55 (2.16)	1,5 (3.3)
VUR 112 NPT	1-1/2 NPTF	300 (80)		138 (5.43)	60 (2.36)	2,6 (5,7)
VUR 200 NPT	2 NPTF	430 (110)		75 (2.97)	75 (6.60)	3 (6.00)

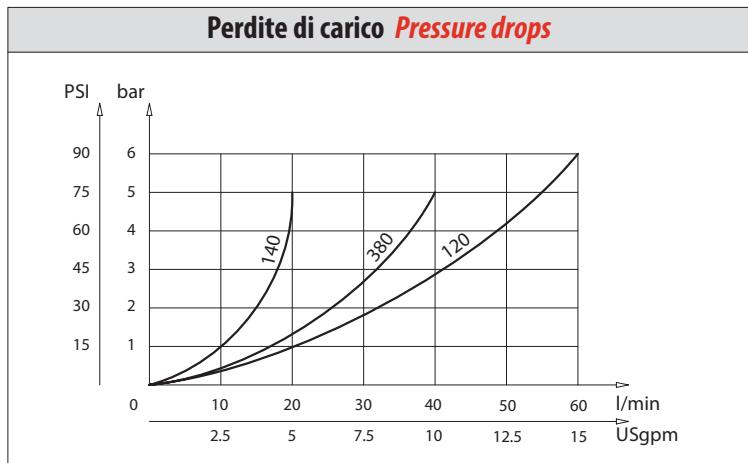
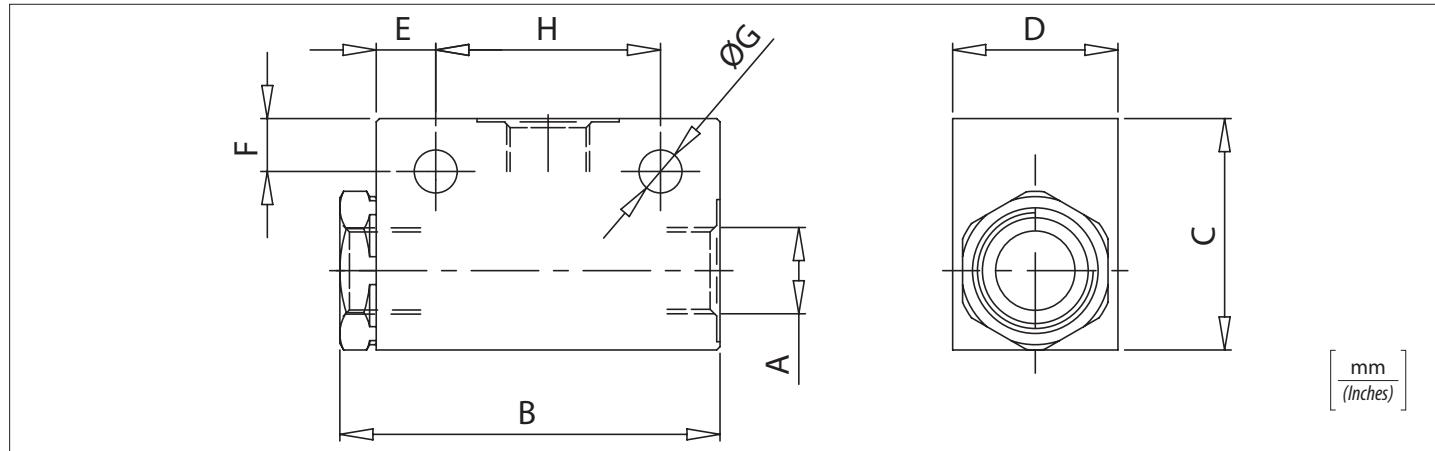
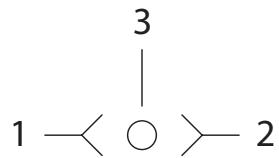
# VUSF

Valvole selettrici  
Load shuttle-ball valves



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



### Codice ordinazione / Ordering code

**VUSF - X**

X	Dimensione / Size
140N	BSPP 1/4
380N	BSPP 3/8
120N	BSPP 1/2

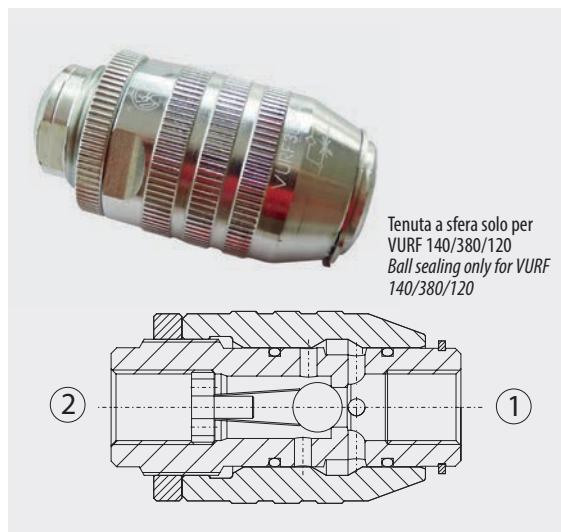
### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	Peso approssimativo Approx weight Kg / lb
<b>VUSF140N</b>	BSPP 1/4	<b>20 (5)</b>	<b>350 (5000)</b>	57 (2.24)	35 (1.38)	25 (0.98)	9 (0.35)	8 (0.31)	6,5 (0.26)	34 (1.34)	<b>0,29 (0.65)</b>
<b>VUSF380N</b>	BSPP 3/8	<b>40 (10)</b>		69 (2.71)	40 (1.57)		8 (0.31)			44 (1.73)	<b>0,35 (0.80)</b>
<b>VUSF120N</b>	BSPP 1/2	<b>60 (15)</b>		73,5 (2.89)	50 (1.97)	30 (1.18)	10 (0.39)	10 (1.38)	8,5 (0.33)	50 (1.97)	<b>0,65 (0.15)</b>



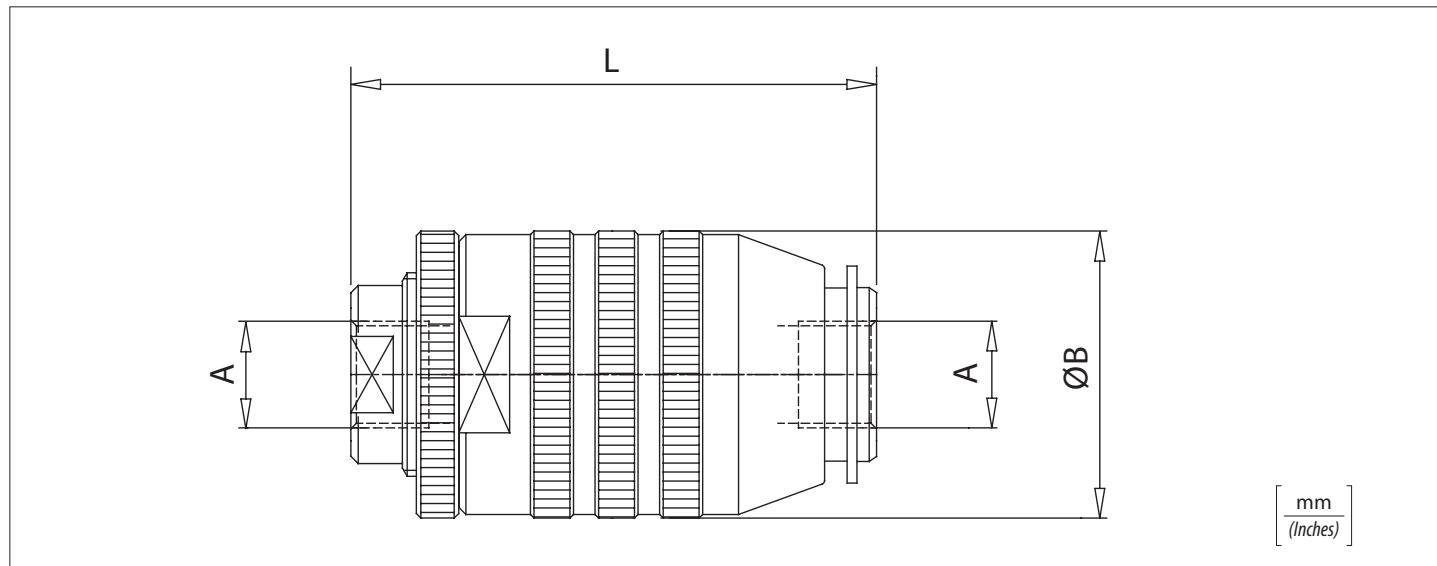
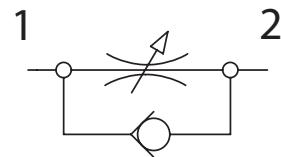
# VURF

Valvole di controllo flusso unidirezionale  
Unidirectional flow control valves

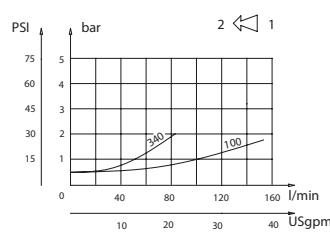
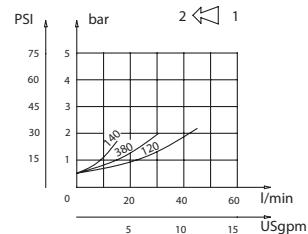
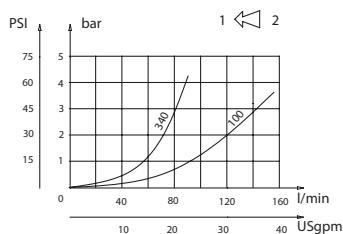
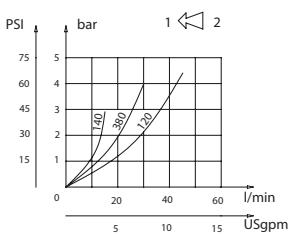


Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico Pressure drops



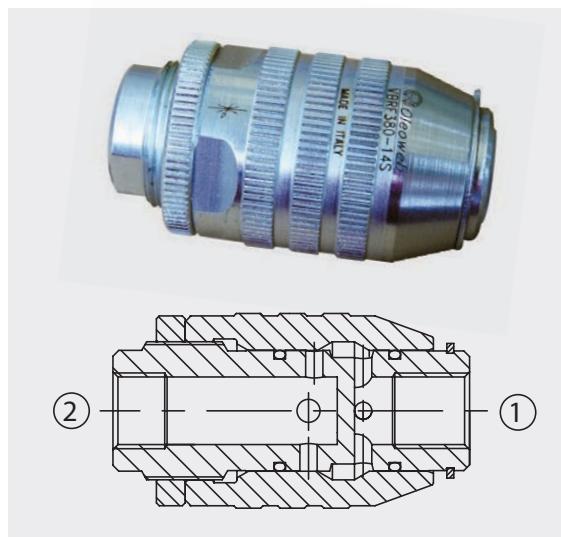
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Maxpressure bar/PSI	B	L	Peso approssimativo / Kg Approx weight / lb
VURF 140	BSPP 1/4	15 (4)	350 (5000)	34 (1.34)	62 (2.44)	0,28 (0.6)
VURF 380	BSPP 3/8	30 (8)		39 (1.54)	73 (2.87)	0,42 (0.93)
VURF 120	BSPP 1/2	45 (12)		44 (1.73)	83 (3.27)	0,66 (1.45)
VURF 340	BSPP 3/4	85 (22)	300 (4350)	54 (2.13)	102 (4.02)	1,12 (2.5)
VURF 100	BSPP 1	150 (40)	250 (3600)	65 (2.56)	124,5 (4.90)	1,9 (4.20)

## Codice ordinazione / Ordering code

**VURF - X**

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1



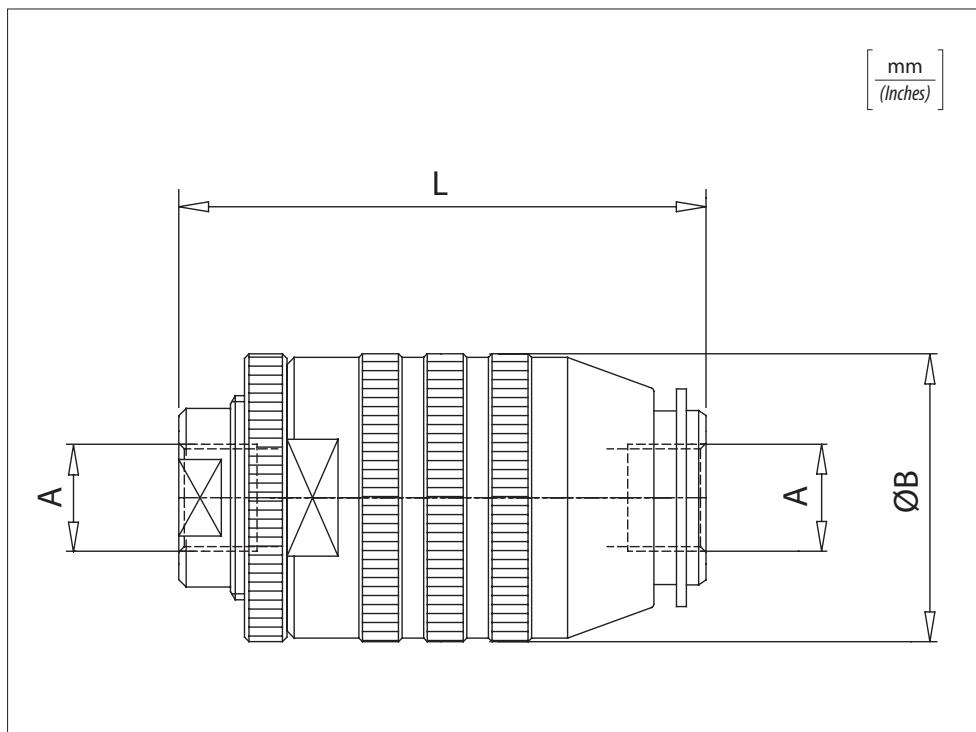
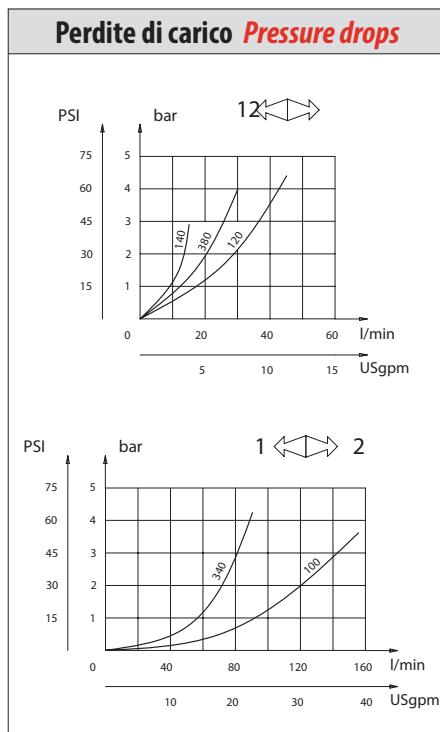
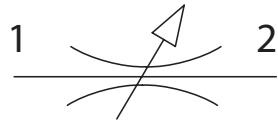
### Dati tecnici

#### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



#### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	L	Peso approssimativo / Kg Approx weight / lb
VBRF 140	BSPP 1/4	15 (4)	350 (5000)	34 (1.34)	62 (2.44)	0,28 (0.6)
VBRF 380	BSPP 3/8	30 (8)		39 (1.54)	73 (2.87)	0,45 (1)
VBRF 120	BSPP 1/2	45 (12)		44 (1.73)	83 (3.27)	0,63 (1.4)
VBRF 340	BSPP 3/4	85 (22)	300 (4350)	54 (2.13)	102 (4.02)	1,1 (2.5)
VBRF 100	BSPP 1	150 (40)	250 (3600)	65 (2.56)	124,5 (4.90)	1,8 (4)

#### Codice ordinazione / Ordering code

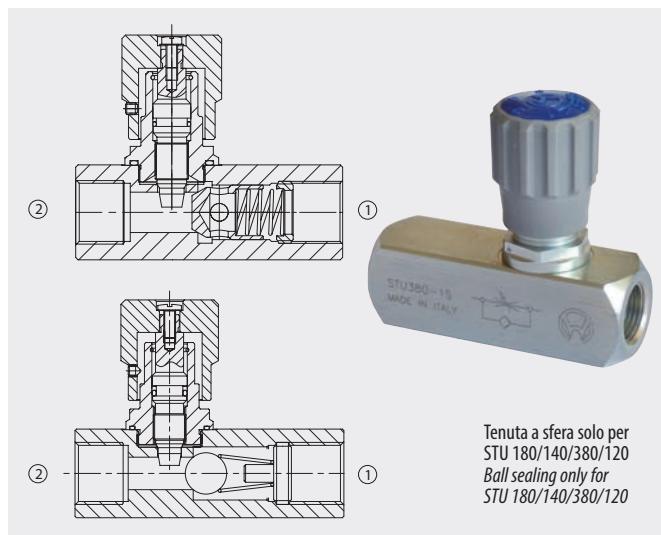
**VBRF - X**

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1



# STU-BSP

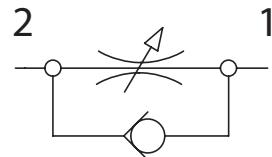
Valvole di controllo flusso unidirezionali  
Unidirectional flow control valves



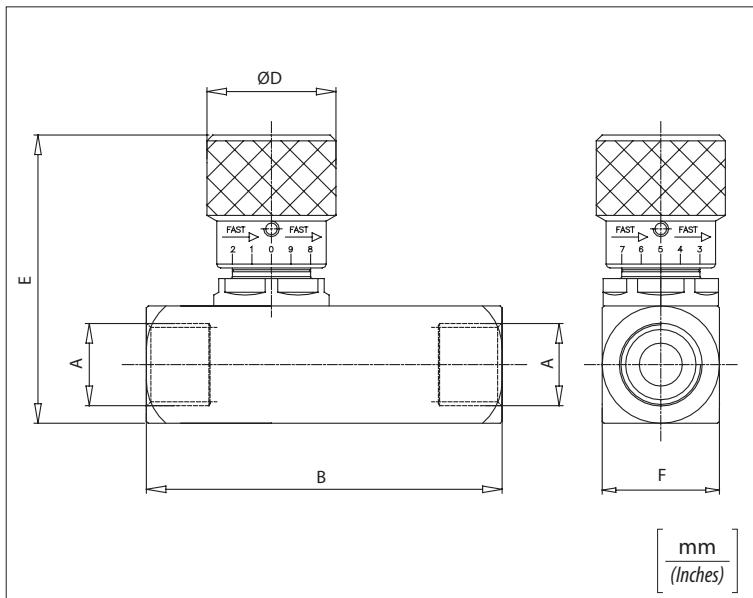
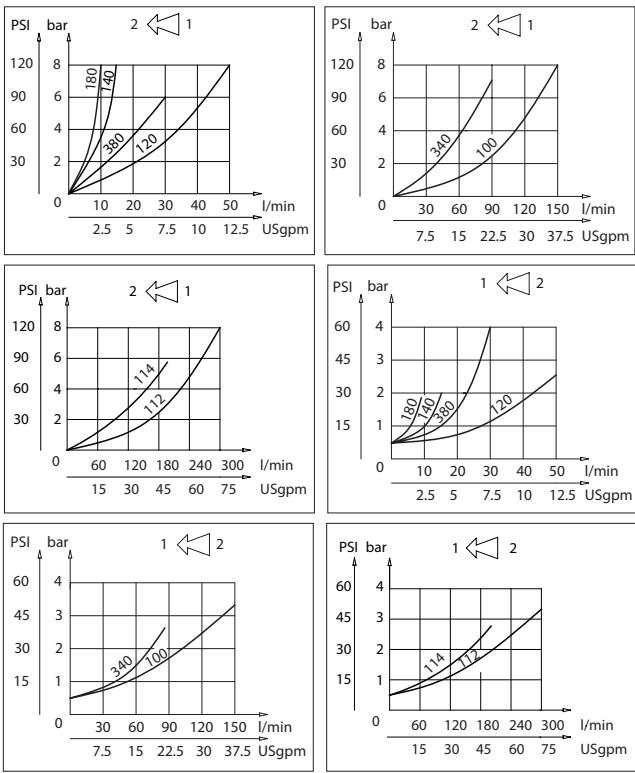
## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico Pressure drops



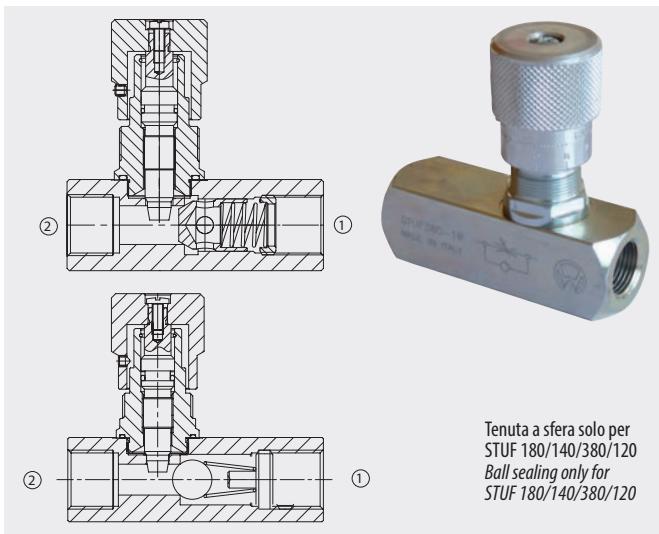
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	D	E	F	Peso approssimativo / Kg Approx weight / lb
STU 180	BSPP 1/8	10 (2.5)	400 (5800)	58 (2.28)	20 (0.79)	53 (2.08)	20 (0.79)	0,3 (0.7)
STU 140	BSPP 1/4	15 (4)		66 (2.60)	30 (1.18)	71,5 (2.81)	25 (0.98)	0,34 (0.75)
STU 380	BSPP 3/8	30 (8)		77 (3.03)				0,36 (0.80)
STU 120	BSPP 1/2	50 (13)		91 (3.58)	33 (1.30)	72 (2.83)	30 (1.18)	0,60 (1.3)
STU 340	BSPP 3/4	80 (20)		112,5 (4.43)	42 (1.65)	94 (3.70)	40 (1.57)	1,33 (3)
STU 100	BSPP 1	150 (40)		141 (5.55)		99 (3.90)	45 (1.77)	1,9 (4.2)
STU 114	BSPP 1-1/4	200 (50)	350 (5000)	155 (6.10)	53 (2.08)	121,5 (4.78)	55 (2.16)	3,1 (6.8)
STU 112	BSPP 1-1/4	300 (80)		168 (6.61)		131,5 (5.17)	65 (2.55)	4,5 (10)

## Codice ordinazione / Ordering code

**STU - X**

X	Dimensione / Size
180	BSPP 1/8
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1
114	BSPP 1-1/4
112	BSPP 1-1/2

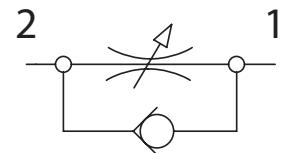


### Dati tecnici Technical data

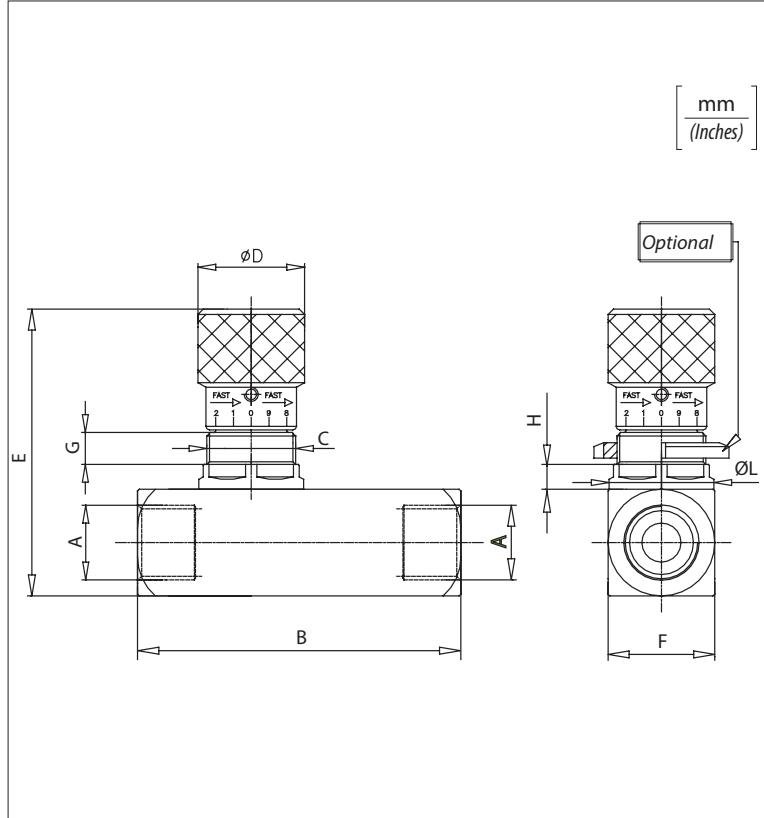
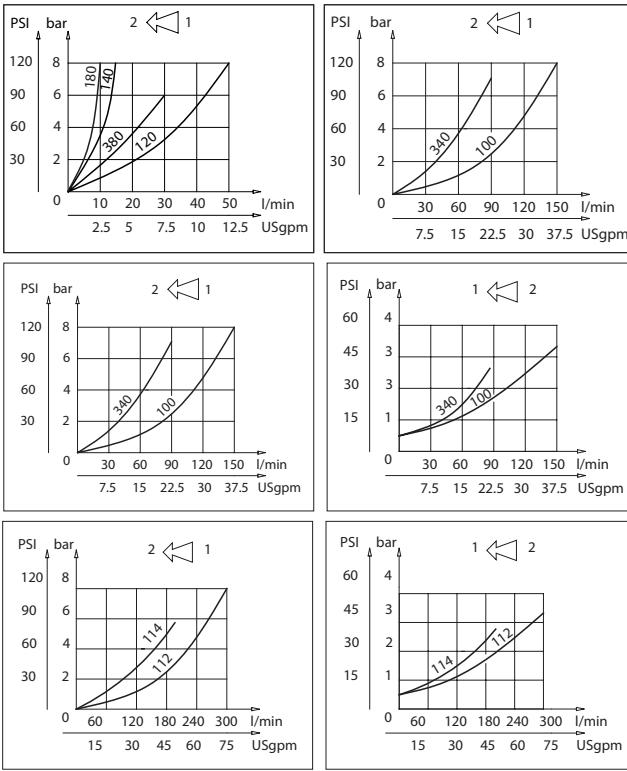
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro	ISO 4406:1999 Max contamination index with filter Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Perdite di carico Pressure drops



### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Optional Code	Peso approssimativo Approx weight Kg/lb
STUF180	BSPP 1/8	10 (2.5)	400 (5800)	58 (2.28)	M15x1	20 (0.79)	60,5 (2.38)	20 (0.79)	8 (0.31)	5,5 (0.21)	19,5 (0.76)	84100031	0,31 (0.7)
STUF140	BSPP 1/4	15 (4)		66 (2.60)	M20x1	30 (1.18)	75 (2.95)	25 (0.98)	7,5 (0.29)	6 (0.23)	24,5 (0.96)	84100022	0,38 (0.84)
STUF380	BSPP 3/8	30 (8)		77 (3.03)	M25x1,5	33 (1.30)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.27)	29,5 (1.16)	84100023	0,40 (0.88)
STUF120	BSPP 1/2	50 (13)		91 (3.58)	M35x1,5	42 (1.65)	110 (4.33)	40 (1.57)	15,5 (0.61)	8 (0.31)	39,5 (1.55)	84100024	0,63 (1.40)
STUF340	BSPP 3/4	80 (21)		112,5 (4.43)									1,45 (3.2)
STUF100	BSPP 1	150 (40)		141 (5.55)									2 (4.4)
STUF114	BSPP 1-1/4	200 (50)	350 (5000)	155 (6.10)	M45x1,5	53 (2.08)	137 (5.39)	55 (2.16)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	3,3 (7.25)
STUF112	BSPP 1-1/2	300 (80)		168 (6.61)					147 (5.78)	65 (2.55)			4,7 (10.3)

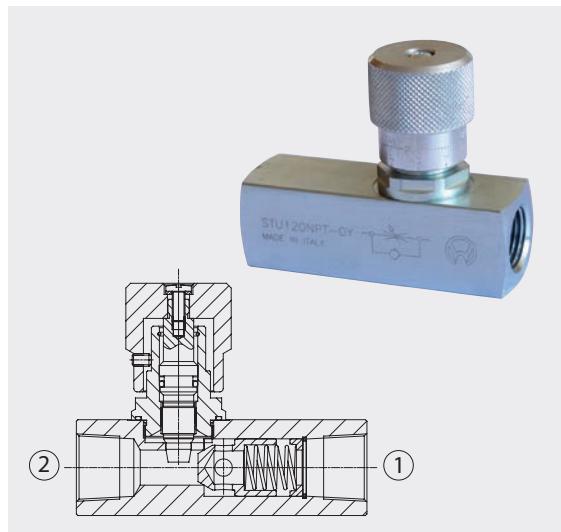
### Codice ordinazione Ordering code

**STUF - X**

X	Dimensione Size
180	BSPP 1/8
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1
114	BSPP 1-1/4
112	BSPP 1-1/2



# **STU-NPTF** Valvole di controllo flusso unidirezionali *Unidirectional flow control valves*

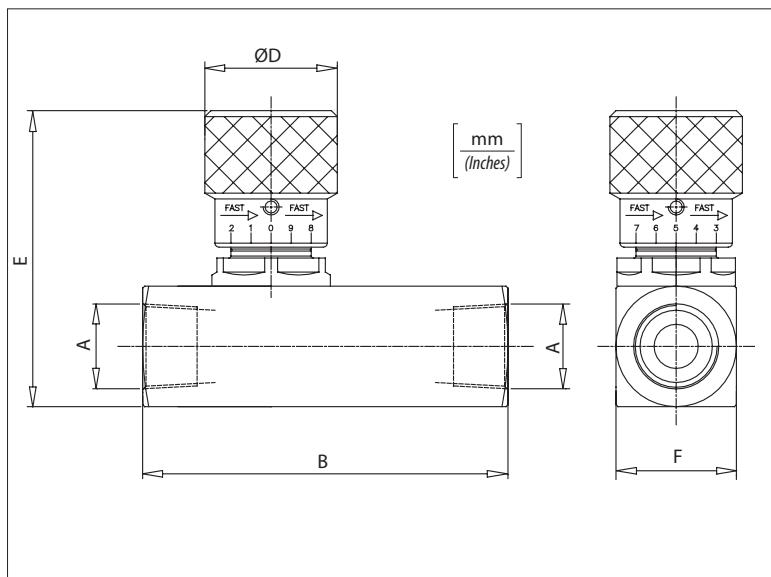
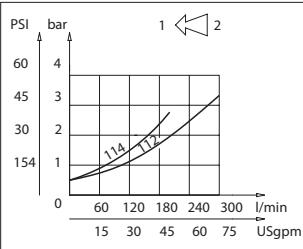
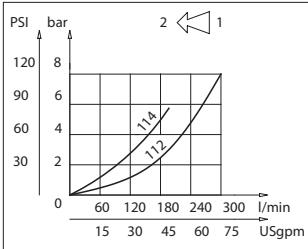
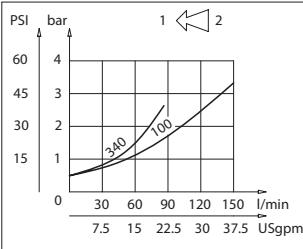
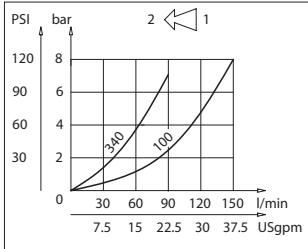
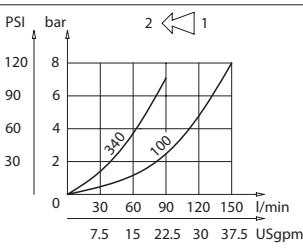
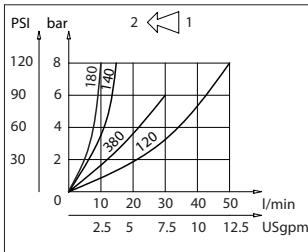


Dati tecnici <i>Technical data</i>		
Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524	
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)	
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14	
Temperatura del fluido <i>Fluid temperature</i>	-20°C -4°F	+80°C +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C -4°F	+50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*

## Perdite di carico *Pressure drops*



#### **Caratteristiche tecniche / *Technical performances***

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar /PSI	B	D	E	F	Peso approssimativo / Kg Approx weight /lb
<b>STU180NPT</b>	<b>NPTF 1/8</b>	<b>10 (2.5)</b>	<b>400 (5800)</b>	<b>58 (2.28)</b>	<b>20 (0.79)</b>	<b>53 (2.08)</b>	<b>20 (0.79)</b>	<b>0,3 (0.7)</b>
<b>STU140NPT</b>	<b>NPTF 1/4</b>	<b>15 (4)</b>		<b>66 (2.60)</b>	<b>30 (1.18)</b>	<b>68 (2.68)</b>	<b>25 (0.98)</b>	<b>0,37 (0.75)</b>
<b>STU380NPT</b>	<b>NPTF 3/8</b>	<b>30 (8)</b>		<b>77 (3.03)</b>				<b>0,40 (0.9)</b>
<b>STU120NPT</b>	<b>NPTF 1/2</b>	<b>50 (13)</b>		<b>91 (3.58)</b>	<b>33 (1.30)</b>	<b>72 (2.83)</b>	<b>30 (1.18)</b>	<b>0,60 (1.32)</b>
<b>STU340NPT</b>	<b>NPTF 3/4</b>	<b>80 (21)</b>		<b>112,5 (4.43)</b>	<b>42 (1.65)</b>	<b>94 (3.70)</b>	<b>40 (1.57)</b>	<b>1,40 (3.09)</b>
<b>STU100NPT</b>	<b>NPTF 1</b>	<b>150 (40)</b>		<b>141 (5.55)</b>		<b>99 (3.90)</b>	<b>45 (1.77)</b>	<b>1,9 (4.2)</b>
<b>STU114NPT</b>	<b>NPTF 1-1/4</b>	<b>200 (50)</b>	<b>350 (5000)</b>	<b>155 (6.10)</b>	<b>53 (2.08)</b>	<b>121,5 (4.78)</b>	<b>55 (2.16)</b>	<b>3,06 (6.73)</b>
<b>STU112NPT</b>	<b>NPTF 1-1/2</b>	<b>300 (80)</b>		<b>168 (6.61)</b>		<b>131,5 (5.17)</b>	<b>65 (2.55)</b>	<b>4,5 (10)</b>

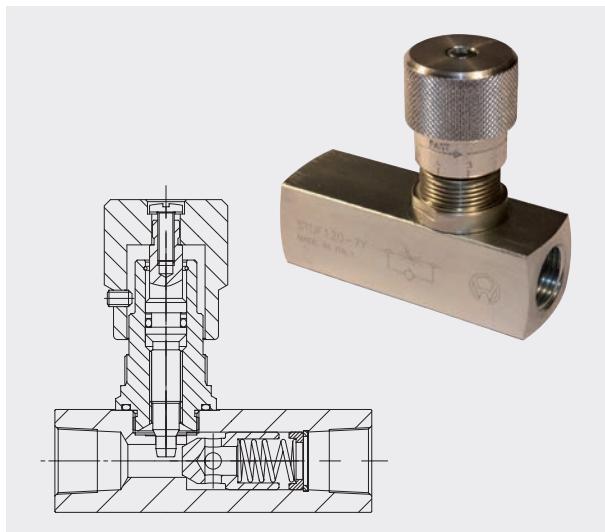
## Codice ordinazione / *Ordering code*

**STU - X - NPT**

X	Dimensione / Size
180	NPTF 1/8
140	NPTF 1/4
380	NPTF 3/8
120	NPTF 1/2
340	NPTF 3/4
100	NPTF 1
114	NPTF 1-1/4
112	NPTF 1-1/2

# STUF-NPTF

Valvole di controllo flusso unidirezionali  
Unidirectional flow control valves



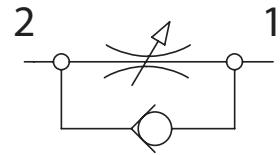
## Dati tecnici

### Technical data

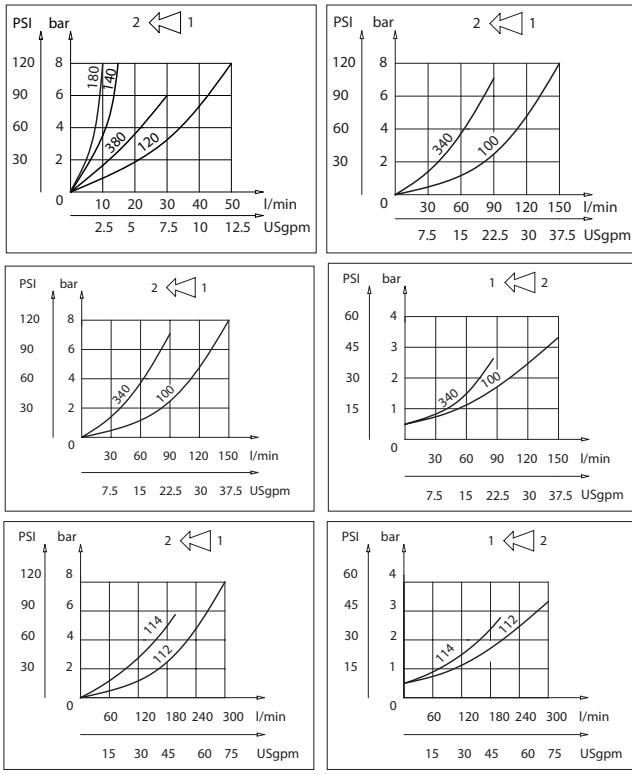
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

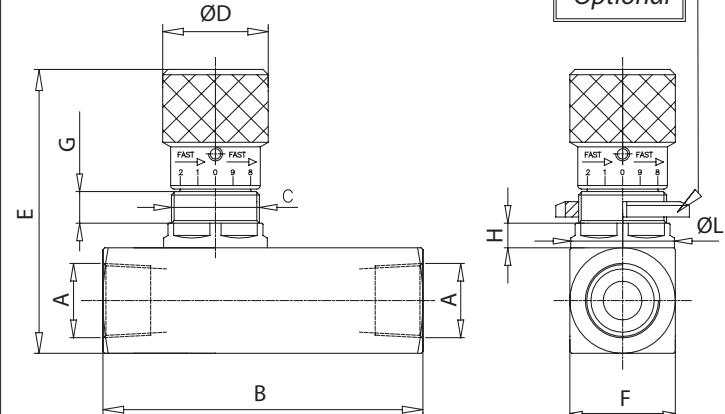
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico Pressure drops



[ mm  
(Inches) ]



Codice  
ordinazione  
Ordering  
code

**STUF - X**  
**NPT**

X	Dim / Size
180	NPTF 1/8
140	NPTF 1/4
380	NPTF 3/8
120	NPTF 1/2
340	NPTF 3/4
100	NPTF 1
114	NPTF 1-1/4
112	NPTF 1-1/2

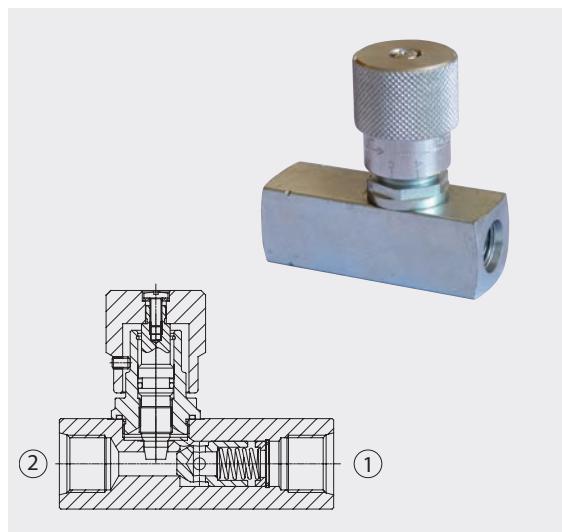
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Optional Code	Peso approssimativo Approx weight Kg / lb
STUF180NPT	NPTF 1/8	10 (2.5)	400 (5800)	58 (2.28)	M15x1	20 (0.79)	60,5 (2.38)	20 (0.79)	8 (0.31)	5,5 (0.21)	19,5 (0.76)	84100031	0,31 (0.7)
STUF140NPT	NPTF 1/4	15 (4)		66 (2.60)	M20x1	30 (1.18)	75 (2.95)	25 (0.98)	7,5 (0.29)	6 (0.23)	24,5 (0.96)	84100022	0,40 (0.88)
STUF380NPT	NPTF 3/8	30 (8)		77 (3.03)	M25x1,5	33 (1.30)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.27)	29,5 (1.16)	84100023	0,42 (0.92)
STUF120NPT	NPTF 1/2	50 (13)		91 (3.58)	M35x1,5	42 (1.65)	110 (4.33)	40 (1.57)	15,5	8 (0.31)	39,5 (1.55)	84100024	0,63 (1.40)
STUF340NPT	NPTF 3/4	80 (21)		112,5 (4.43)									1,5 (3.3)
STUF100NPT	NPTF 1	150 (40)		141 (5.55)			115 (4.53)	45 (1.77)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	2 (4.4)
STUF114NPT	NPTF 1-1/4	200 (50)	350 (5000)	155 (6.10)	M45x1,5	53 (2.08)	137 (5.39)	55 (2.16)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	3,2 (7)
STUF112NPT	NPTF 1-1/2	300 (80)		168 (6.61)			147 (5.78)	65 (2.55)	14,7 (0.53)				4,7 (10.3)



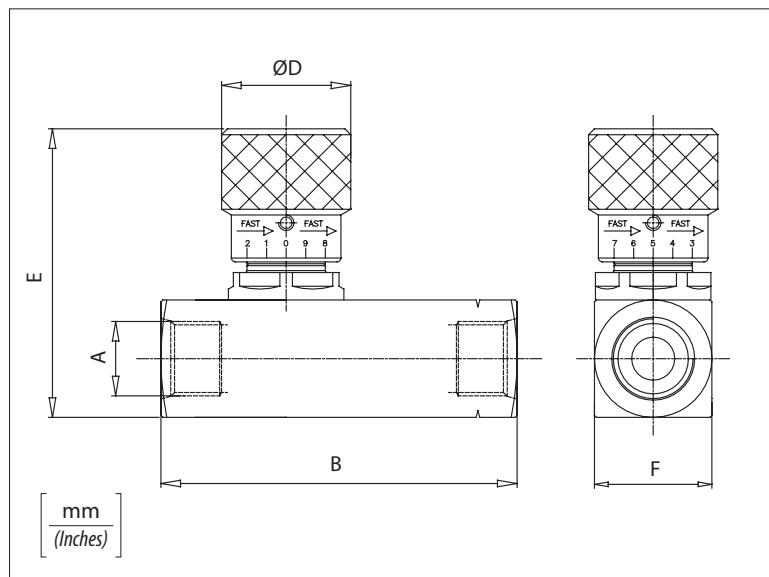
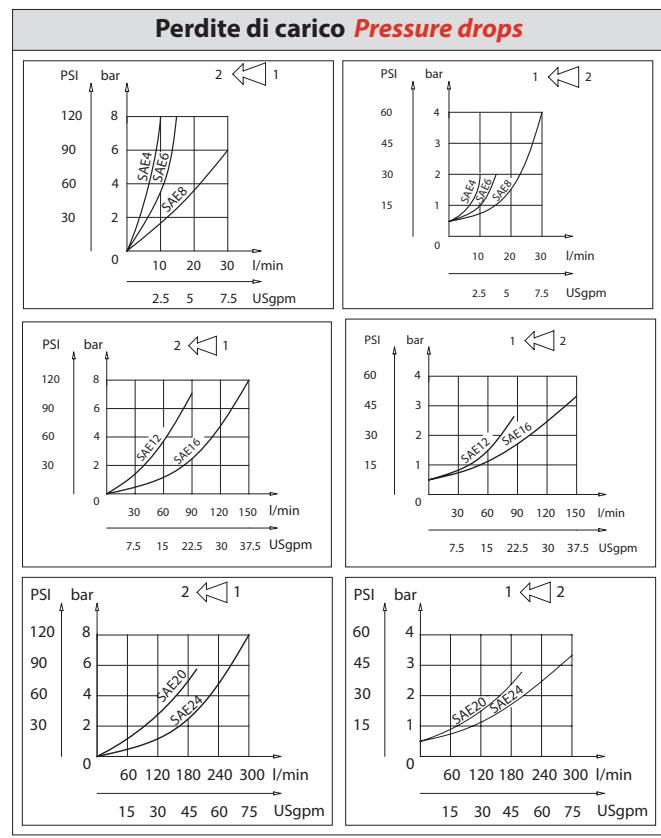
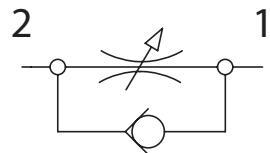
# STU-SAE

Valvole di controllo flusso unidirezionali  
Unidirectional flow control valves



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



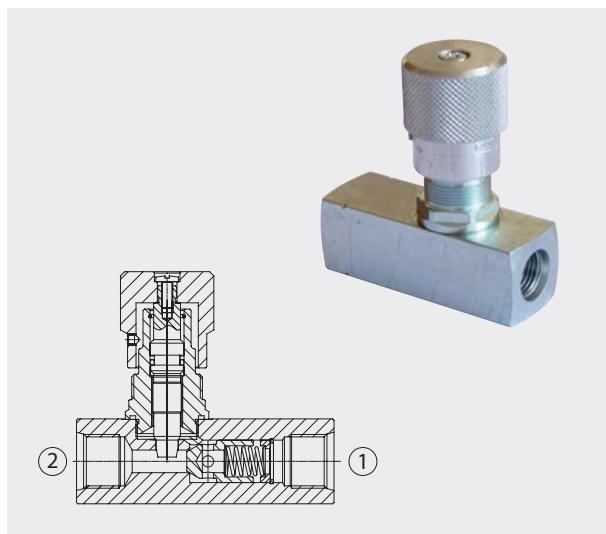
### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	D	E	F	Peso approssimativo / Kg Approx weight / lb
STU4SAE	7/16 - 20UNF	15 (4)	400 (5800)	66 (2.60)	30 (1.18)	68 (2.68)	25 (0.98)	0,39 (0.85)
STU6SAE	9/16 - 18UNF	30 (8)		70,5 (2.78)				0,40 (0.88)
STU8SAE	3/4 - 16UNF	50 (13)		91 (3.58)	33 (1.30)	72 (2.83)	30 (1.18)	0,60 (1.32)
STU12SAE	1 - 1/16 - 12UN	80 (21)		112,5 (4.43)	42 (1.65)	94 (3.70)	40 (1.57)	1,28 (2.80)
STU16SAE	1 - 5/16 - 12UN	150 (40)		141 (5.55)		99 (3.90)	45 (1.77)	1,87 (4.11)
STU20SAE	1 - 5/8 - 12UN	200 (50)		155 (6.10)	53 (2.08)	121,5 (4.78)	55 (2.16)	3,06 (6.73)
STU24SAE	1 - 7/8 - 12UN	300 (80)		168 (6.61)		131,5 (5.17)	65 (2.55)	4,5 (10)

### Codice ordinazione / Ordering code

**STU - X - SAE**

X	Dimensione / Size
4	7/16 - 20UNF
6	9/16 - 18UNF
8	3/4 - 16UNF
12	1 - 1/16 - 12UN
16	1 - 5/16 - 12UN
20	1 - 5/8 - 12UN
24	1 - 7/8 - 12UN

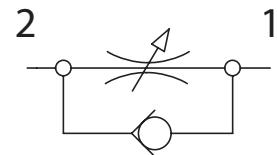


## Dati tecnici Technical data

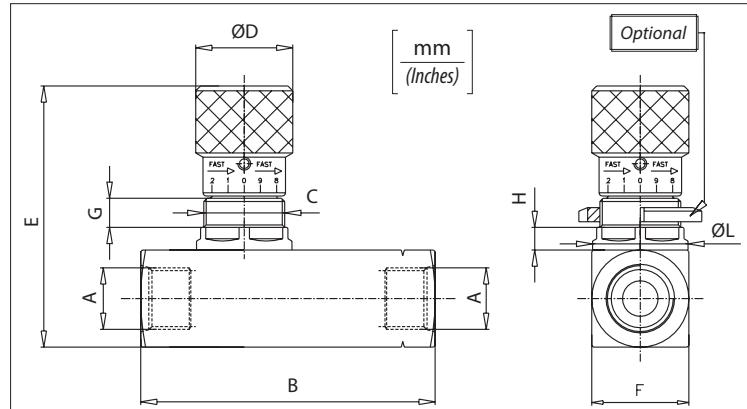
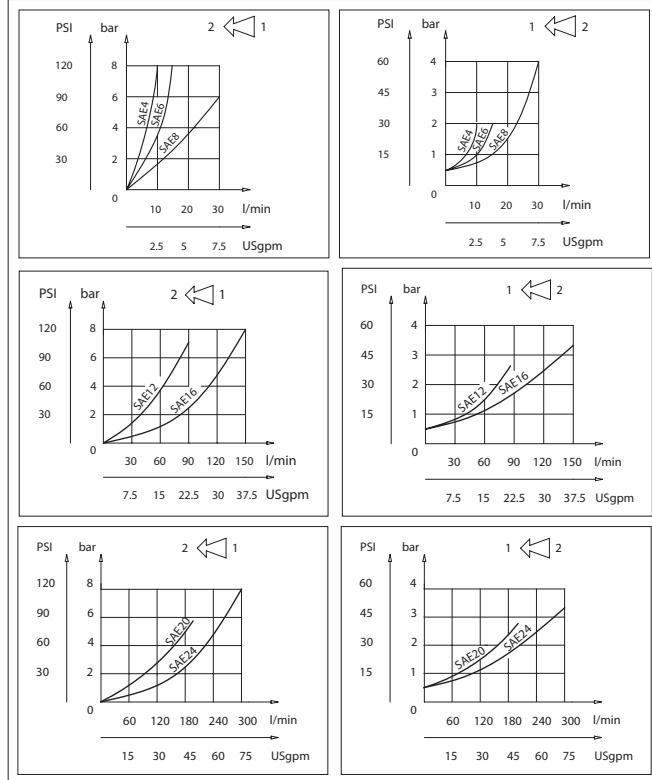
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F
Temperatura ambiente Ambient temperature	+80°C +176°F
	-20°C -4°F
	+50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

**STUF - X SAE**

X	4	6	8	12	16	20	24
Dim Size	7/16 20UNF	9/16 18UNF	3/4 16UNF	1-1/16 12UN	1-5/16 12UN	1-5/8 12UN	1-7/8 12UN

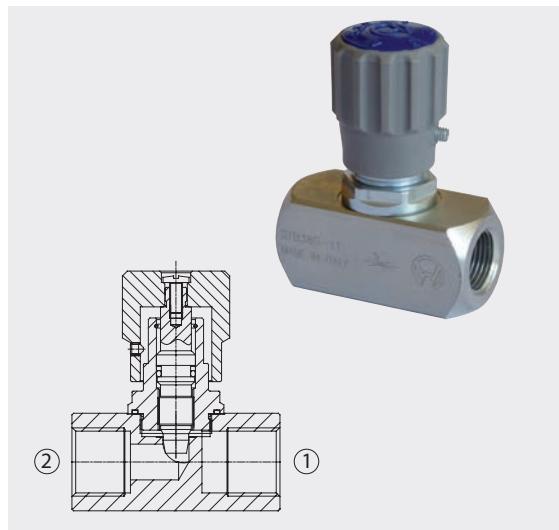
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Optional Code	Peso approssimativo Approx weight Kg / lb
STUF4SAE	7/16 - 20UNF	15 (4)	400 (5800)	66 (2.60)	M20x1	30 (1.18)	75 (2.95)	25 (0.98)	7,5 (0.29)	6 (0.23)	24,5 (0.96)	84100022	0,41 (0.90)
STUF6SAE	9/16 - 18UNF	30 (8)		70,5 (2.78)									0,42 (0.93)
STUF8SAE	3/4 - 16UNF	50 (13)		91 (3.58)	M25x1,5	33 (1.30)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.27)	29,5 (1.16)	84100023	0,63 (1.40)
STUF12SAE	1-1/16 - 12UN	80 (21)		112,5 (4.43)	M35x1,5	42 (1.65)	110 (4.33)	40 (1.57)	15,5 (0.61)	8 (0.31)	39,5 (1.55)	84100024	1,40 (3.10)
STUF16SAE	1-5/16 - 12UN	150 (40)		141 (5.55)			115 (4.53)	45 (1.77)					2 (4.4)
STUF20SAE	1-5/8 - 12UN	200 (50)	350 (5000)	155 (6.10)	M45x1,5	53 (2.08)	137 (5.39)	55 (2.16)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	3,3 (7.25)
STUF24SAE	1-7/8 - 12UN	300 (80)		168 (6.61)			147 (5.78)	65 (2.55)					4,7 (10.3)



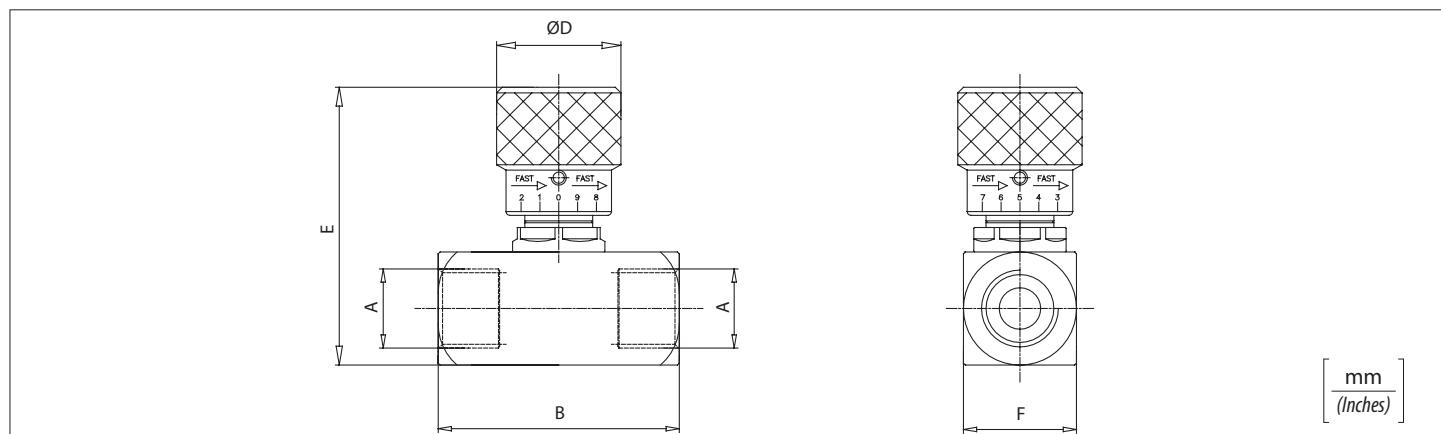
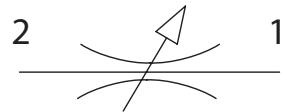
# STB-BSP

Valvole di controllo flusso bidirezionali  
Bidirectional flow control valves

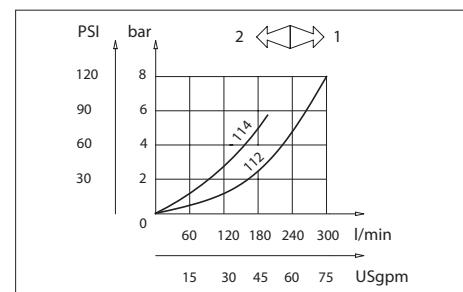
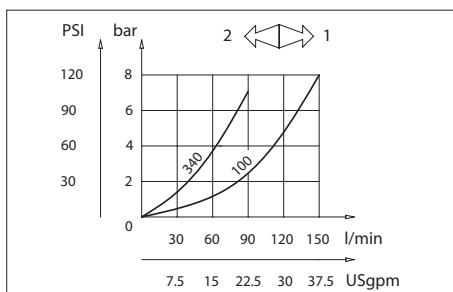
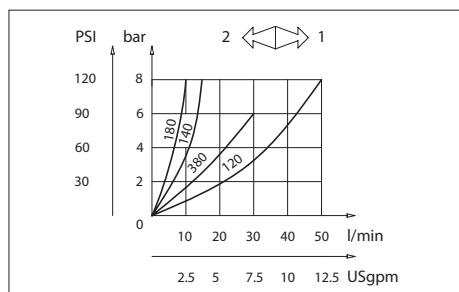


Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico Pressure drops



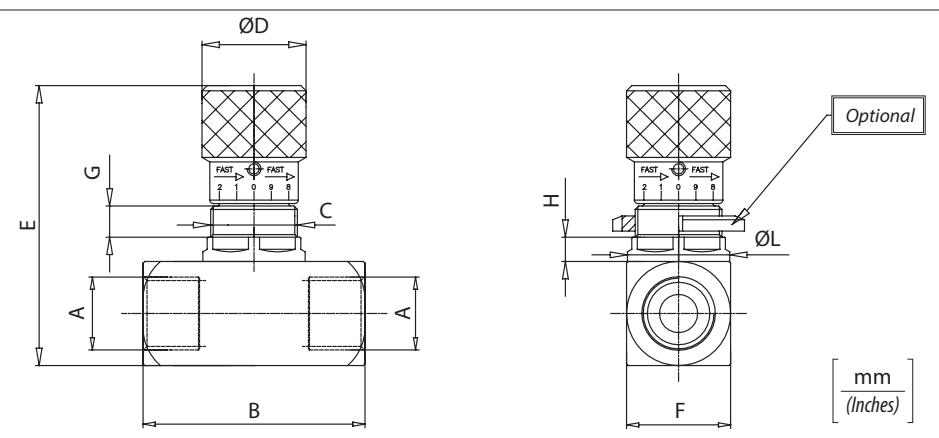
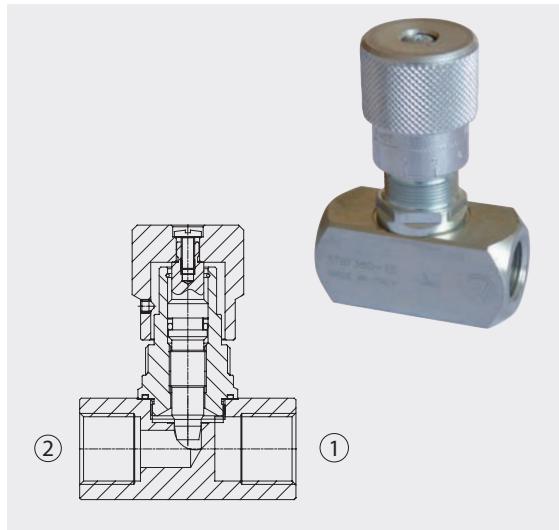
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	B	D	E	F	Peso approssimativo / Kg Approx weight / lb
STB180	BSPP 1/8	10 (2.5)	400 (5800)	44 (1.73)	20 (0.79)	53 (2.08)	20 (0.79)	0,16 (0.35)
STB140	BSPP 1/4	15 (4)		54 (2.13)	30 (1.18)	71,5 (2.81)	25 (0.98)	0,29 (0.70)
STB380	BSPP 3/8	30 (8)		64 (2.52)	33 (1.30)	72 (2.83)	30 (1.18)	0,26 (0.57)
STB120	BSPP 1/2	50 (13)		81 (3.19)	42 (1.65)	94 (3.70)	40 (1.57)	0,45 (1)
STB340	BSPP 3/4	80 (20)		99 (3.90)		45 (1.77)	1,02 (2.25)	
STB100	BSPP 1	150 (40)		102 (4.01)	53 (2.08)	121,5 (4.78)	55 (2.16)	1,38 (3.04)
STB114	BSPP 1-1/4	200 (50)				131,5 (5.17)	65 (2.55)	2,2 (4.8)
STB112	BSPP 1-1/2	300 (80)	350 (5000)					3 (6.6)

## Codice ordinazione / Ordering code

**STB - X**

X	Dimensione / Size
180	BSPP 1/8
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1
114	BSPP 1-1/4
112	BSPP 1-1/2

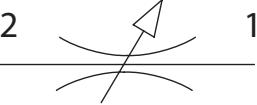


### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)

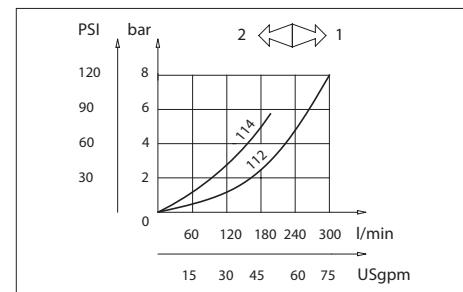
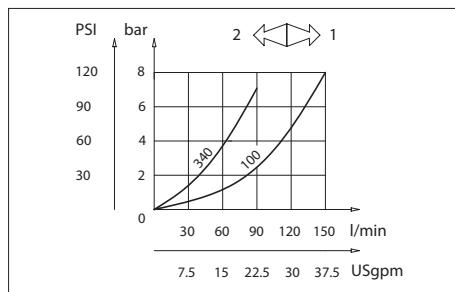
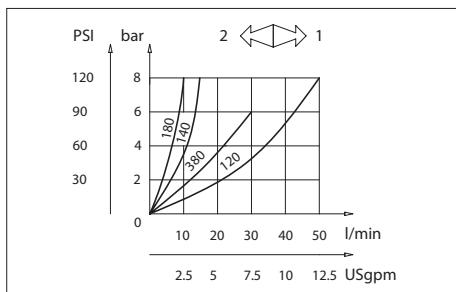


### Codice ordinazione / Ordering code

**STBF - X**

X	Dimensione / Size
180	BSPP 1/8
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1
114	BSPP 1-1/4
112	BSPP 1-1/2

### Perdite di carico Pressure drops



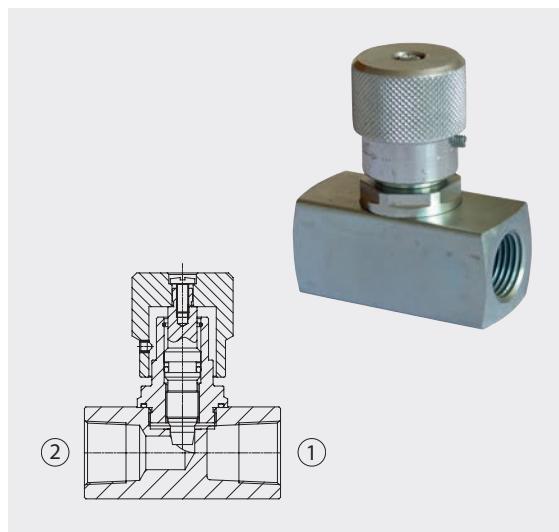
### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Optional Code	Peso approssimativo Approx weight Kg / lb
STBF180	BSPP 1/8	10 (2.5)	400 (5800)	44 (1.73)	M15x1	20 (0.79)	60,5 (2.38)	20 (0.79)	8 (0.31)	5,5 (0.21)	19,5 (0.76)	84100031	0,16 (0.36)
STBF140	BSPP 1/4	15 (4)		54 (2.13)	M20x1	30 (1.18)	75 (2.95)	25 (0.98)	7,5 (0.29)	6 (0.23)	24,5 (0.96)	84100022	0,31 (0.68)
STBF380	BSPP 3/8	30 (8)		64 (2.52)	M25x1,5	33 (1.30)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.27)	29,5 (1.16)	84100023	0,28 (0.62)
STBF120	BSPP 1/2	50 (13)		81 (3.19)	M35x1,5	42 (1.65)	110 (4.33)	40 (1.57)	15,5 (0.61)	8 (0.31)	39,5 (1.55)	84100024	0,48 (1.06)
STBF340	BSPP 3/4	80 (21)	350 (5000)			115 (4.53)	45 (1.77)						1,13 (2.50)
STBF100	BSPP 1	150 (40)		102 (4.01)	M45x1,5	53 (2.08)	137 (5.39)	55 (2.16)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	1,50 (3.3)
STBF114	BSPP 1-1/4	200 (50)				147 (5.78)	65 (2.55)						2,37 (5.21)
STBF112	BSPP 1-1/2	300 (80)											3,17 (7)



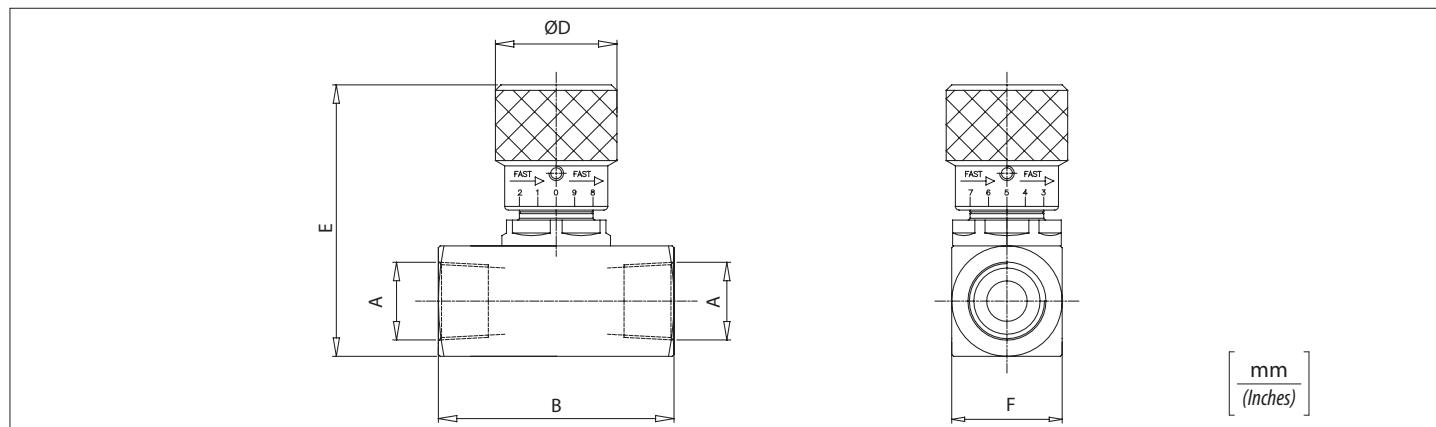
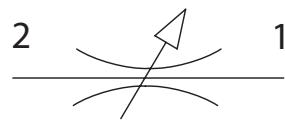
# STB-NPTF

Valvole di controllo flusso bidirezionali  
Bidirectional flow control valves

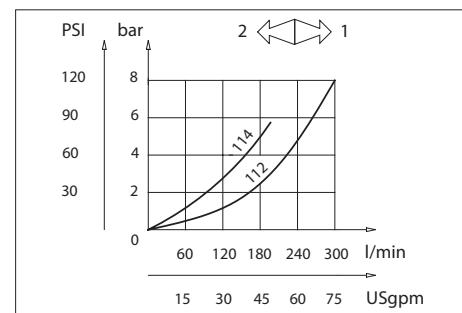
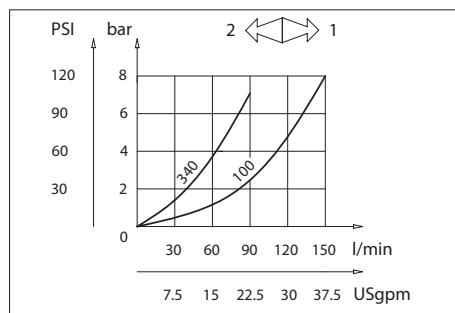
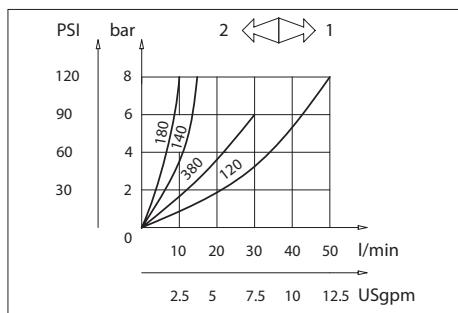


Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico Pressure drops



## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	D	E	F	Peso approssimativo / Kg Approx weight / lb
STB180NPT	NPTF 1/8	10 (2.5)	400 (5800)	44 (1.73)	20 (0.79)	53 (2.08)	20 (0.79)	0,16 (0.35)
STB140NPT	NPTF 1/4	15 (4)		54 (2.13)	30 (1.18)	68 (2.68)	25 (0.98)	0,32 (0.71)
STB380NPT	NPTF 3/8	30 (8)		64 (2.52)	33 (1.30)	72 (2.84)	30 (1.18)	0,30 (0.66)
STB120NPT	NPTF 1/2	50 (13)		81 (3.19)	42 (1.65)	94 (3.70)	40 (1.57)	0,47 (1.03)
STB340NPT	NPTF 3/4	80 (21)		99 (3.90)		45 (1.77)	1,05 (2.31)	
STB100NPT	NPTF 1	150 (40)		102 (4.02)	53 (2.08)	121,5 (4.78)	55 (2.16)	1,34 (2.95)
STB114NPT	NPTF 1-1/4	200 (50)				131,5 (5.17)	65 (2.55)	2,27 (5.21)
STB112NPT	NPTF 1-1/2	300 (80)	350 (5000)					3 (6.6)

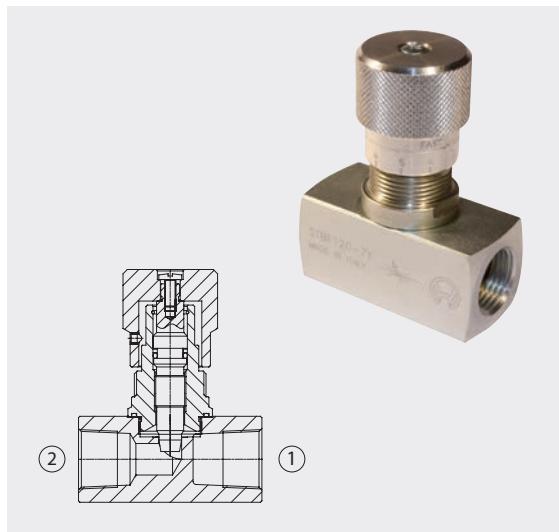
## Codice ordinazione / Ordering code

STB - X - NPT

X	Dimensione / Size
180	NPTF 1/8
140	NPTF 1/4
380	NPTF 3/8
120	NPTF 1/2
340	NPTF 3/4
100	NPTF 1
114	NPTF 1-1/4
112	NPTF 1-1/2

# STBF-NPTF

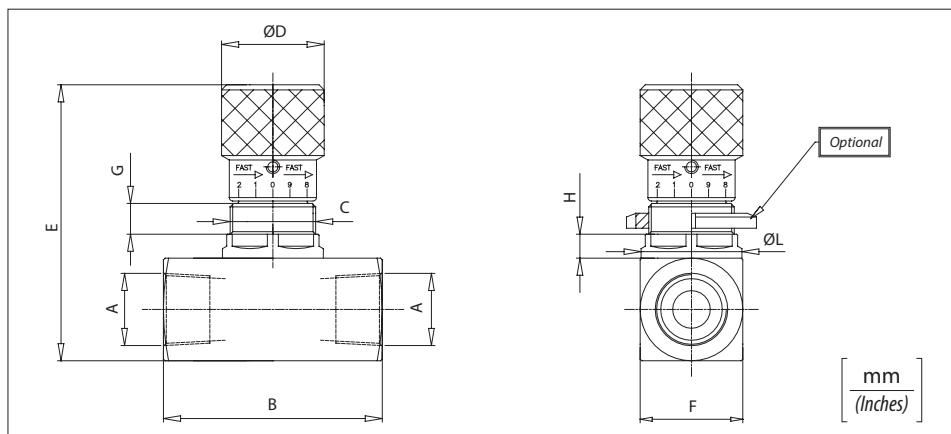
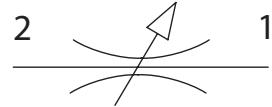
Valvole di controllo flusso bidirezionali  
Bidirectional flow control valves



## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)

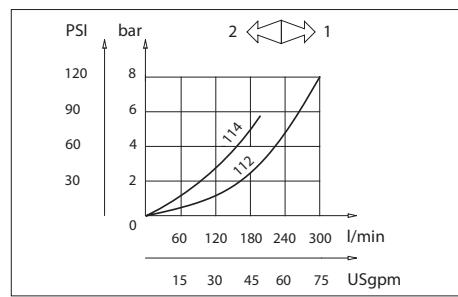
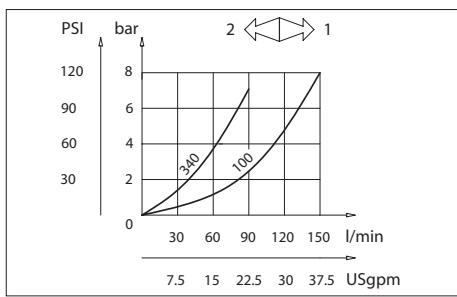
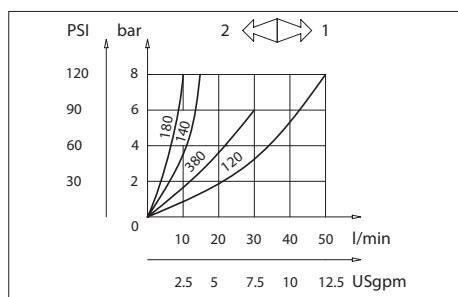


## Codice ordinazione / Ordering code

**STBF - X - NPT**

X	Dimensione / Size
180	NPTF 1/8
140	NPTF 1/4
380	NPTF 3/8
120	NPTF 1/2
340	NPTF 3/4
100	NPTF 1
114	NPTF 1-1/4
112	NPTF 1-1/2

## Perdite di carico Pressure drops



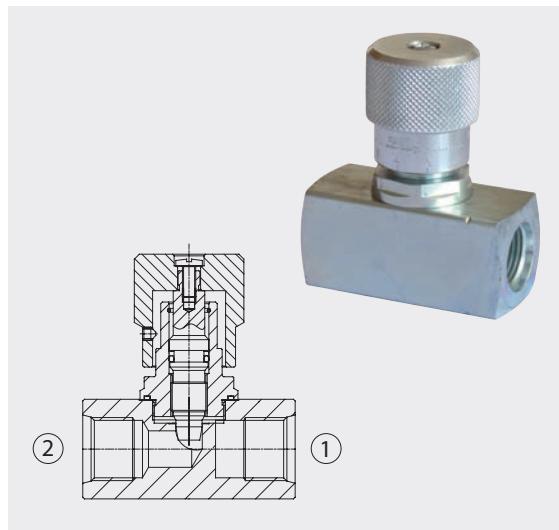
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Optional Code	Peso approssimativo Approx weight Kg/lb
STBF180NPT	NPTF 1/8	10 (2.5)	400 (5800)	44 (1.73)	M15x1	20 (0.79)	60,5 (2.38)	20 (0.79)	8 (0.31)	5,5 (0.21)	19,5 (0.76)	84100031	0,16 (0.36)
STBF140NPT	NPTF 1/4	15 (4)		54 (2.13)	M20x1	30 (1.18)	75 (2.95)	25 (0.98)	7,5 (0.29)	6 (0.23)	24,5 (0.96)	84100022	0,34 (0.75)
STBF380NPT	NPTF 3/8	30 (8)		64 (2.52)	M25x1,5	33 (1.30)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.27)	29,5 (1.16)	84100023	0,32 (0.71)
STBF120NPT	NPTF 1/2	50 (13)		81 (3.19)	M35x1,5	42 (1.65)	110 (4.33)	40 (1.57)	15,5 (0.61)	8 (0.31)	39,5 (1.55)	84100024	0,50 (1.1)
STBF340NPT	NPTF 3/4	80 (21)				115 (4.53)	45 (1.77)						1,15 (2.53)
STBF100NPT	NPTF 1	150 (40)	350 (5000)	102 (4.02)	M45x1,5	53 (2.08)	137 (5.39)	55 (2.16)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	3,05 (6.7)
STBF114NPT	NPTF 1-1/4	200 (50)				147 (5.78)	65 (2.55)						2,54 (5.6)
STBF112NPT	NPTF 1-1/2	300 (80)											3,17 (7)



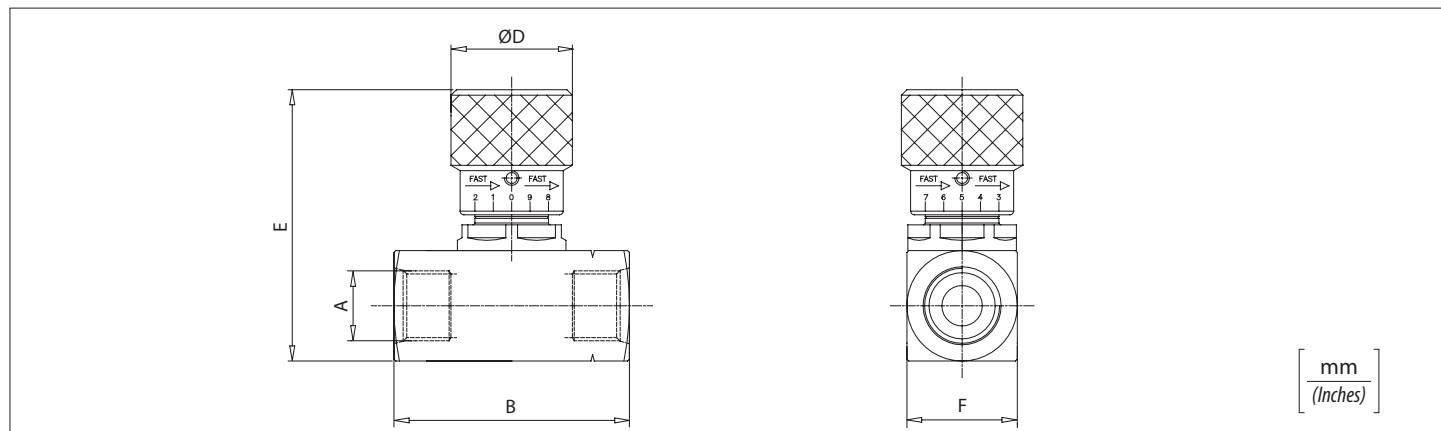
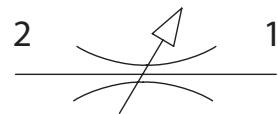
# STB-SAE

Valvole di controllo flusso bidirezionali  
Bidirectional flow control valves

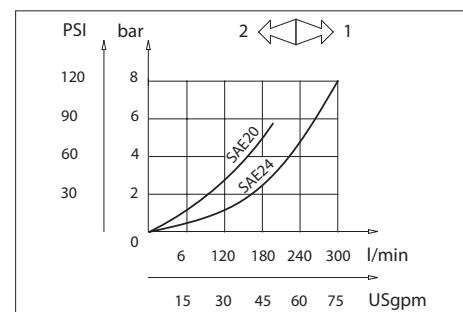
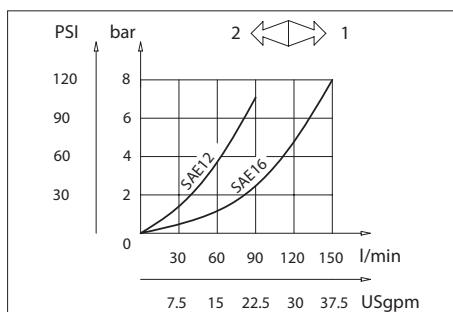
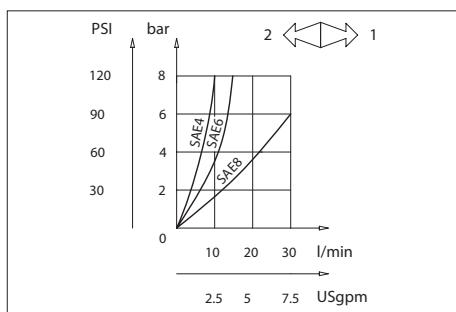


Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico Pressure drops



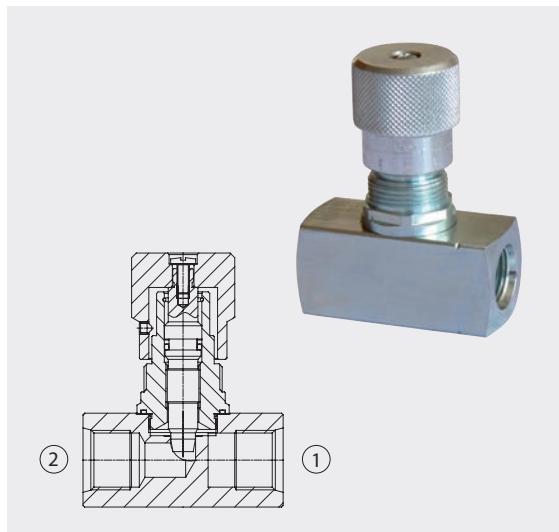
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	B	D	E	F	Peso approssimativo / Kg Approx weight / lb
STB4SAE	7/16 - 20UNF	15 (4)	400 (5800)	54 (2.13)	30 (1.18)	68 (2.68)	25 (0.98)	0,32 (0.71)
STB6SAE	9/16 - 18UNF	30 (28)		64 (2.52)	33 (1.30)	72 (2.83)	30 (1.18)	0,30 (0.66)
STB8SAE	3/4 - 16UNF	50 (13)		81 (3.19)	42 (1.65)	94 (3.70)	40 (1.57)	0,45 (0.99)
STB12SAE	1 - 1/16 - 12UN	80 (21)		99 (3.90)		45 (1.77)	1 (2.2)	1,35 (3)
STB16SAE	1 - 5/16 - 12UN	150 (40)		102 (4.02)	53 (2.08)	121,5 (4.78)	55 (2.16)	2,37 (5.21)
STB20SAE	1 - 5/8 - 12UN	200 (50)	350 (5000)	131,5 (5.17)	65 (2.55)		3 (6.6)	
STB24SAE	1 - 7/8 - 12UN	300 (80)						

## Codice ordinazione / Ordering code

**STB - X - SAE**

X	Dimensione / Size
4	7/16 - 20UNF
6	9/16 - 18UNF
8	3/4 - 16UNF
12	1 - 1/16 - 12UN
16	1 - 5/16 - 12UN
20	1 - 5/8 - 12UN
24	1 - 7/8 - 12UN



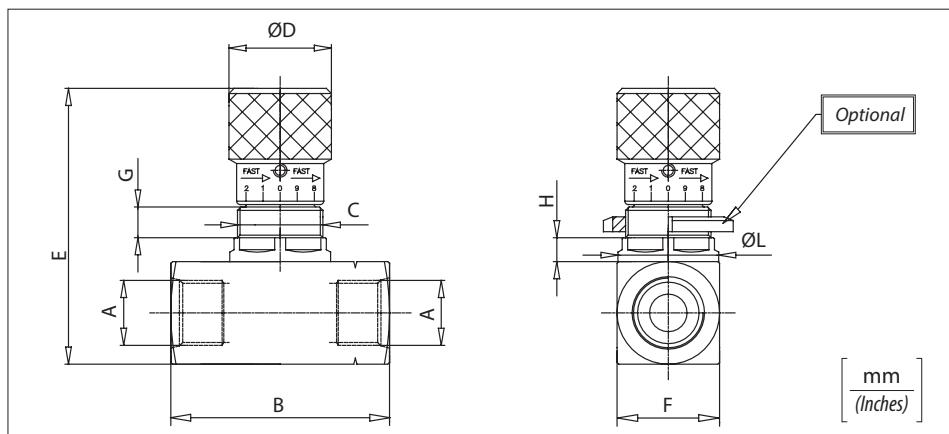
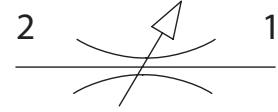
### Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)

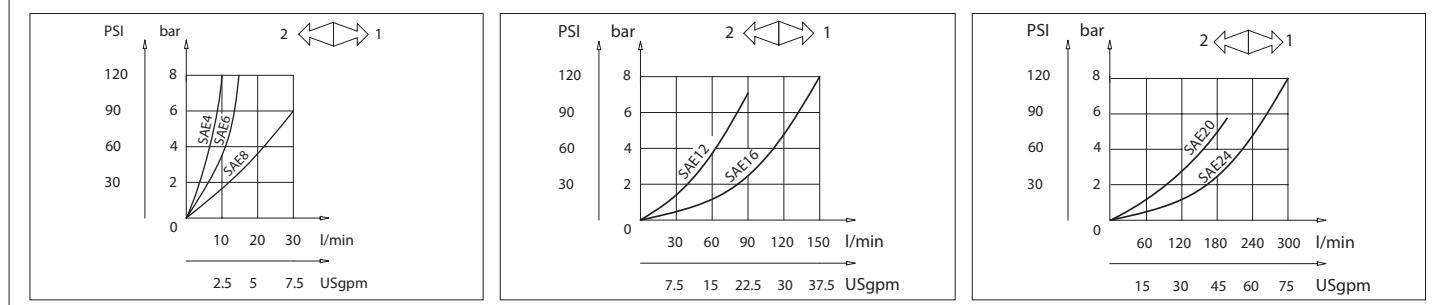


### Codice ordinazione / Ordering code

### STBF - X - SAE

X	Dimensione / Size
4	7/16 - 20UNF
6	9/16 - 18UNF
8	3/4 - 16UNF
12	1 - 1/16 - 12UN
16	1 - 5/16 - 12UN
20	1 - 5/8 - 12UN
24	1 - 7/8 - 12UN

### Perdite di carico Pressure drops



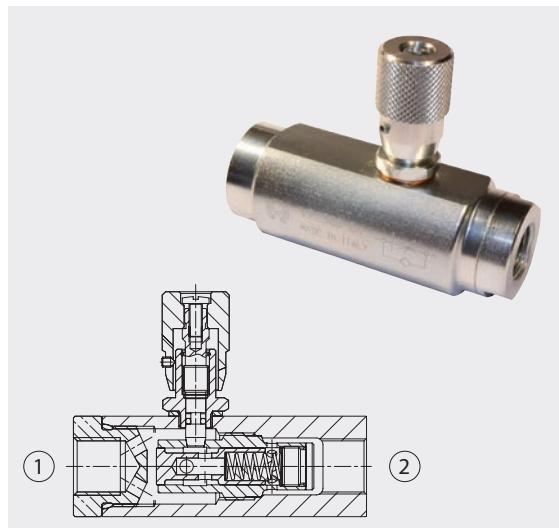
### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Optional Code	Peso approssimativo Approx weight Kg/lb
STBF4SAE	7/16 - 20UNF	15 (4)	400 (5800)	54 (2.13)	M20x1	30 (1.18)	75 (2.95)	25 (0.98)	7,5 (0.29)	6 (0.23)	24,5 (0.96)	84100022	0,34 (0.75)
STBF6SAE	9/16 - 18UNF	30 (8)											0,32 (0.71)
STBF8SAE	3/4 - 16UNF	50 (13)		64 (2.52)	M25x1,5	33 (1.30)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.27)	29,5 (1.16)	84100023	0,48 (1.05)
STBF12SAE	1 - 1/16 - 12UN	80 (21)		81 (3.19)	M35x1,5	42 (1.65)	110 (4.33)	40 (1.57)	15,5 (0.61)	8 (0.31)	39,5 (1.55)	84100024	1,1 (2.42)
STBF16SAE	1 - 5/16 - 12UN	150 (40)		115 (4.53)			45 (1.77)	1,45 (3.2)					
STBF20SAE	1 - 5/8 - 12UN	200 (50)	350 (5000)	102 (4.02)	M45x1,5	53 (2.08)	137 (5.39)	55 (2.16)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	2,45 (5.39)
STBF24SAE	1 - 7/8 - 12UN	300 (80)					147 (5.78)	65 (2.55)	3,17 (7)				



# VRC

Valvole per controllo flusso compensate  
Compensated flow control valves



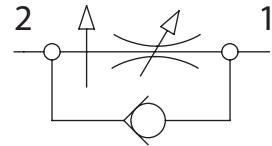
### Dati tecnici

#### Technical data

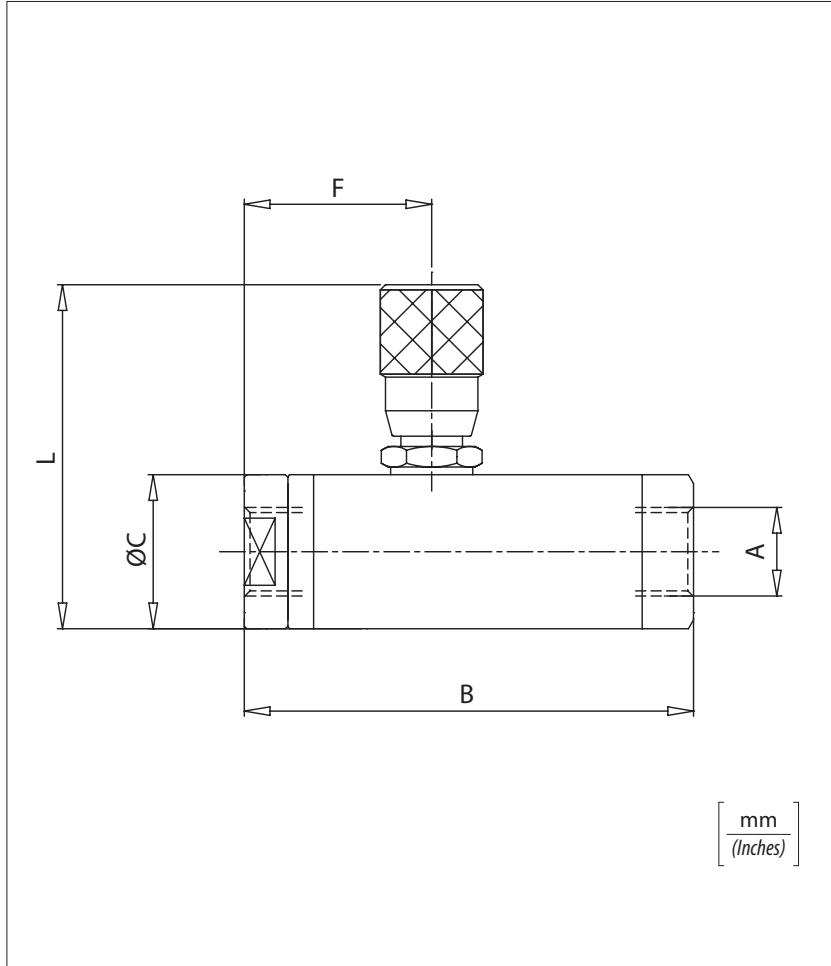
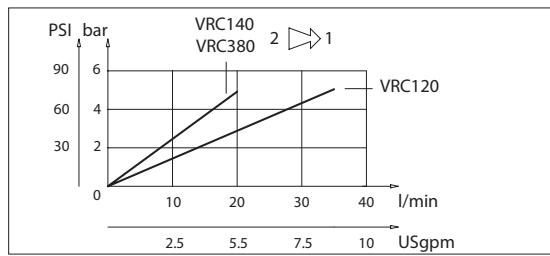
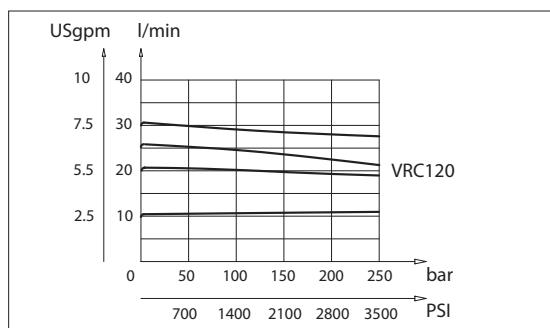
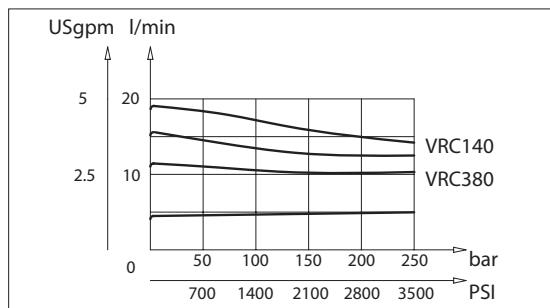
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Perdite di carico Pressure drops



### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	B	C	F	L	Peso approssimativo / Kg Approx weight / lb
VRC140	BSPP 1/4	10 (2.5)	250 (3600)	88 (3.46)	27 (1.06)	51 (2)	52 (2.05)	0,49 (1.08)
VRC380	BSPP 3/8	18 (4.7)						0,48 (1.05)
VRC120	BSPP 1/2	33 (8.7)		108 (4.25)	36 (1.42)	61 (2.40)	57 (2.25)	0,72 (1.58)

### Codice ordinazione / Ordering code

**VRC - X**

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2



**NEW**



### Portata massima l/min

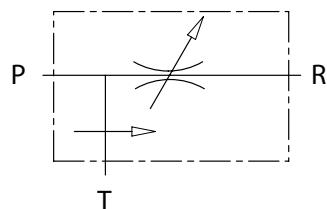
#### Max flow USgpm

380	50 l/min con 30 l/min in R ( 13,3 Usgpm with 8 USgpm in R)
120	80 l/min con 50 l/min in R ( 21,3 Usgpm with 13,3 USgpm in R)
340	150 l/min con 80 l/min in R ( 40 Usgpm with 21,3 USgpm in R)
100	240 l/min con 150 l/min in R ( 64 Usgpm with 40 USgpm in R)

### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



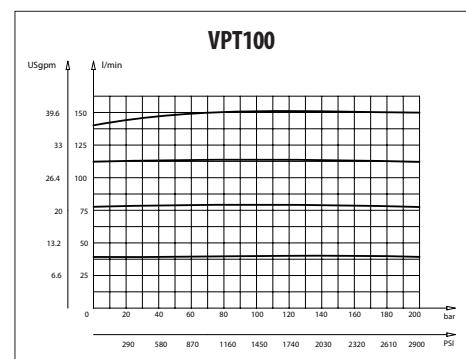
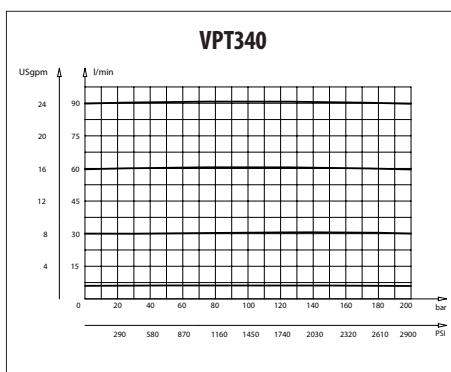
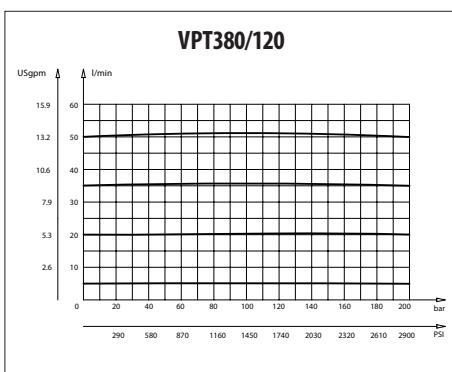
### Codice ordinazione / Ordering code

**VPT - X - Y**

<b>Y</b>	Regolazione / Setting
<b>V</b>	Volantino (Hand wheel)

<b>X</b>	Dimensione / Size
380	BSPP3/8
120	BSPP1/2
340	BSPP3/4
100	BSPP1

### Perdite di carico Pressure drops



### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	I	L	M	N	S	U	Peso approssimativo Approx weight Kg / lb
VPT380	BSPP 3/8	50 (13)	250 (3625)	90 (3.54)	90 (3.54)	40 (1.57)	43,5 (1.71)	31 (1.20)	42 (1.65)	64 (2.52)	54 (2.13)	6 (0.24)	78 (3.07)	36,5 (1.44)	6,5 (0.26)	50 (1.97)	1,15 (2.54)
VPT120	BSPP 1/2	90 (23,78)		110 (4.30)	110 (4.30)	50 (1.97)	45,5 (1.79)	35 (1.38)	50 (1.97)	88 (3.46)	63,5 (2.50)	8 (0.30)	94 (3.70)	34,7 (1.37)	8,5 (0.33)	66 (2.60)	2,10 (4.63)
VPT340	BSPP 3/4	150 (39,62)		140 (5.51)	130 (5.12)	70 (2.76)	49,5 (1.95)	47 (1.85?)	63 (2.48)	/	90 (3.54)	10 (0.39)	110 (4.30)	20 (0.78)	10,5 (0.41)	70 (2.76)	3,7 (8.12)
VPT100	BSPP 1	240 (63,40)															

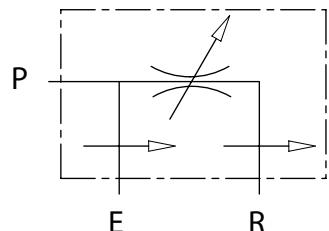


# VPP

Regolatori di Flusso 3 vie - Compensati, con eccedenza in pressione  
 3 ways flow control valves - Pressure compensated, exceeding flow to pressure

**NEW****Dati tecnici****Technical data**

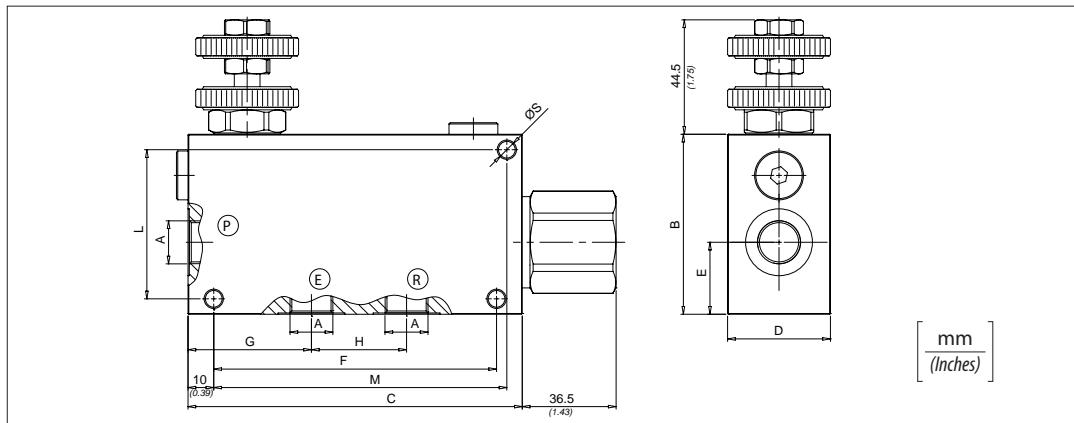
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> / s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

**Portata massima l/min****Max flow USgpm**

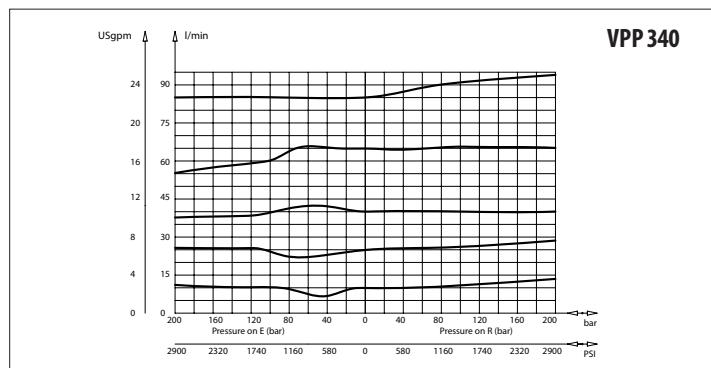
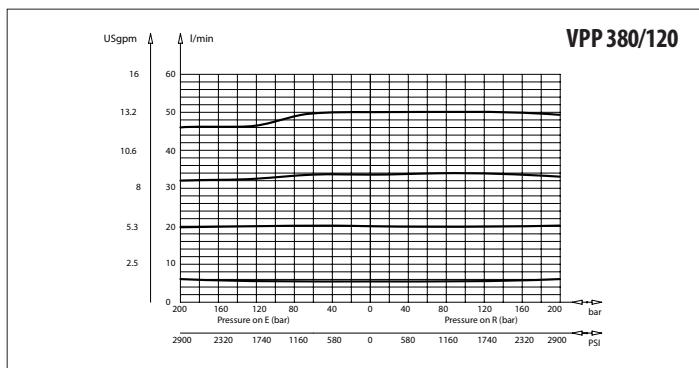
380	50 l/min con 30 l/min in R (13,3 Usgpm with 8 USgpm in R)
120	90 l/min con 50 l/min in R (24 Usgpm with 13,3 USgpm in R)
340	150 l/min con 80 l/min in R (40 Usgpm with 21,3 USgpm in R)

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*

**Codice ordinazione / Ordering code****VPP - X - Y**

<b>Y</b>	Regolazione / Setting
<b>V</b>	Volantino (Hand wheel)
<b>X</b>	Dimensione / Size
380	BSPP3/8
120	BSPP1/2
340	BSPP3/4

**Perdite di carico Pressure drops****Caratteristiche tecniche / Technical performances**

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	S	Peso approssimativo Approx weight Kg./lb
VPP380	BSPP 3/8	50 (13)	250 (3625)	70 (2.76)	130 (5.12)	40 (1.57)	28 (1.10)	110 (4.30)	48 (1.89)	37 (1.56)	58 (2.28)	114 (4.49)	6,5 (0,26)	1,30 (2,87)
VPP120	BSPP 1/2	90 (23,78)		90 (3.54)	150 (5.91)	50 (1.97)	35 (1.34)	/	57 (2.24)	44 (1.73)	74 (2.91)	135 (5.31)	8,5 (0,33)	2,30 (5,07)
VPP340	BSPP 3/4	150 (39,62)												



NEW



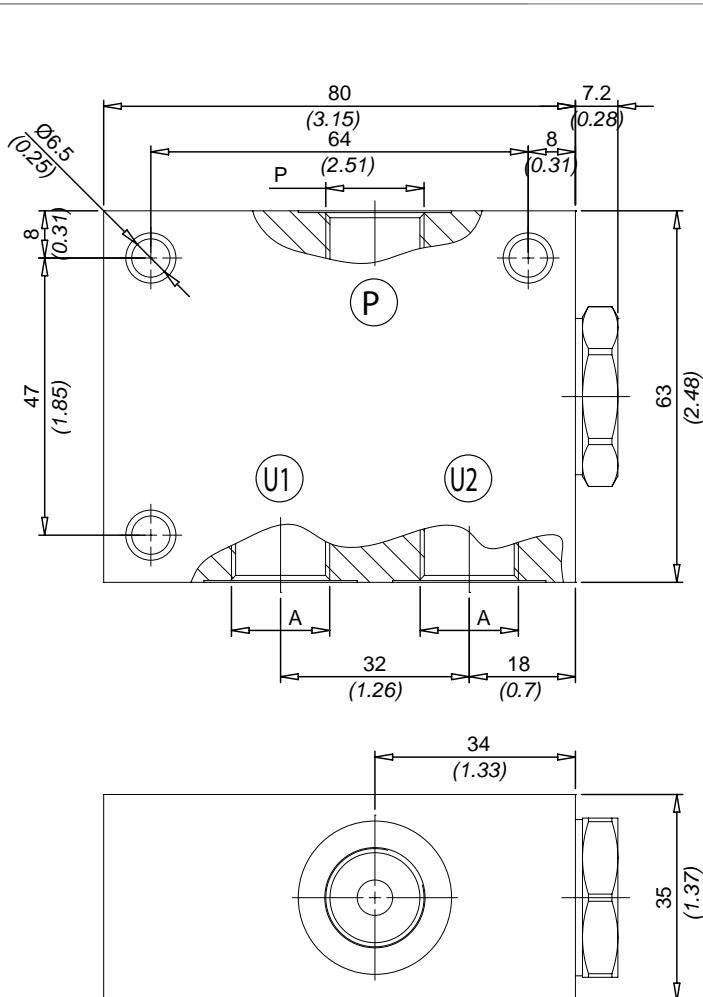
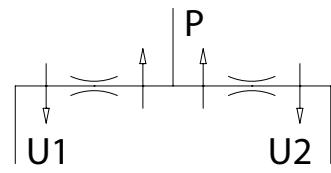
## Dati tecnici

## Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



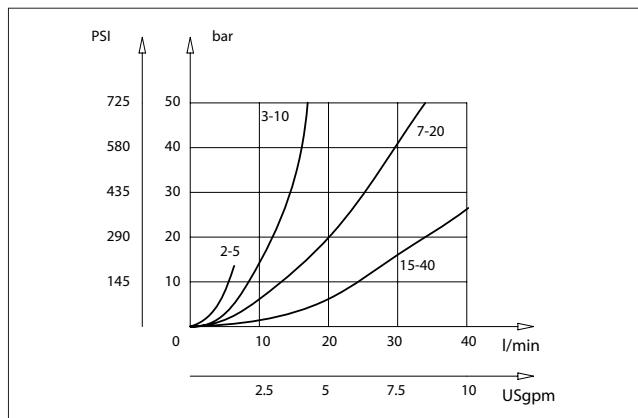
[ mm  
(Inches) ]

## Codice ordinazione / Ordering code

## DRF10 - X - Y - K

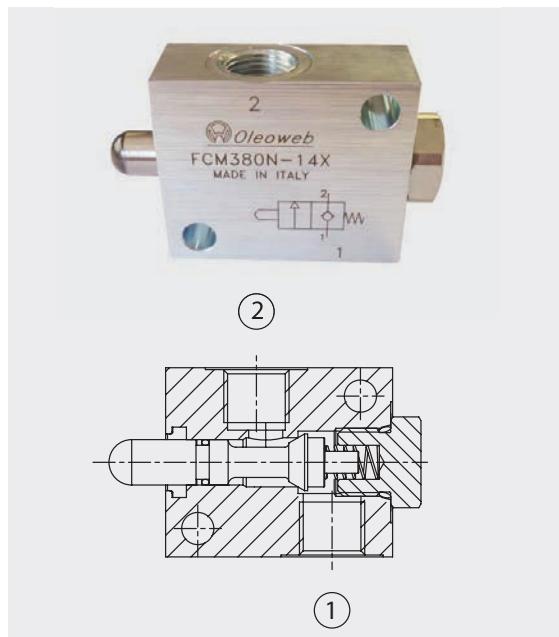
X	Campo di portata in ingresso Inlet flow range l/min - USgpm	K	Connessione U1/U2 Port U1/U2
1	2-5 (0,5-1,3)	380	1-2-3
2	3-10 (0,8-2,6)	120	4
3	7-20 (1,8-5,2)	380	1-2-3
4	15-40 (3,9-10,4)	120	4

## Perdite di carico Pressure drops



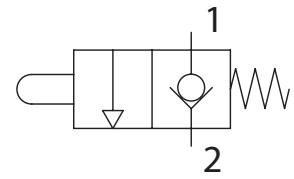
## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg / lb
DRF10	40 (10,57)	250 (3625)	0,55 (1,21)



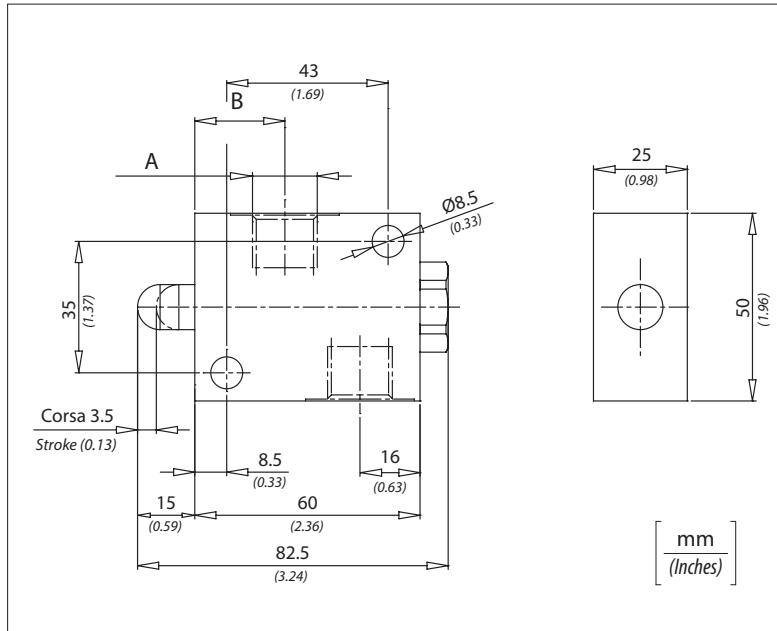
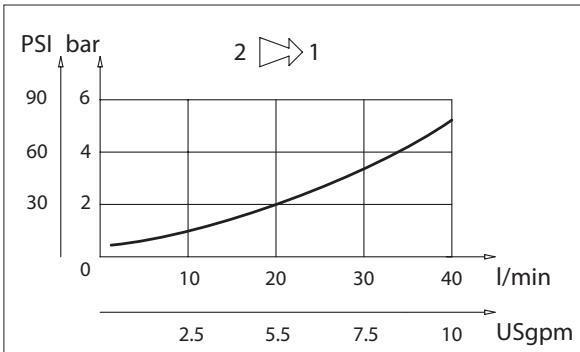
Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



Normalmente chiusa  
Normally closed

### Perdite di carico Pressure drops



### Caratteristiche tecniche / Technical performances

Codice Code	A	B	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight/lb
FCM140N	BSPP 1/4	26,5 (1.04)	40 (10.5)	350 (5000)	0,50 (1.10)
FCM380N	BSPP 3/8	24 (0.95)			

### Codice ordinazione / Ordering code

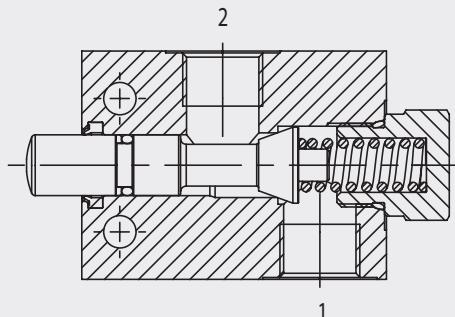
FCM - X

X	Dimensione / Size
140N	BSPP 1/4
380N	BSPP 3/8

# FCM120

Valvole di fine corsa

*End-stroke valves*



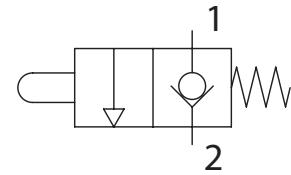
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

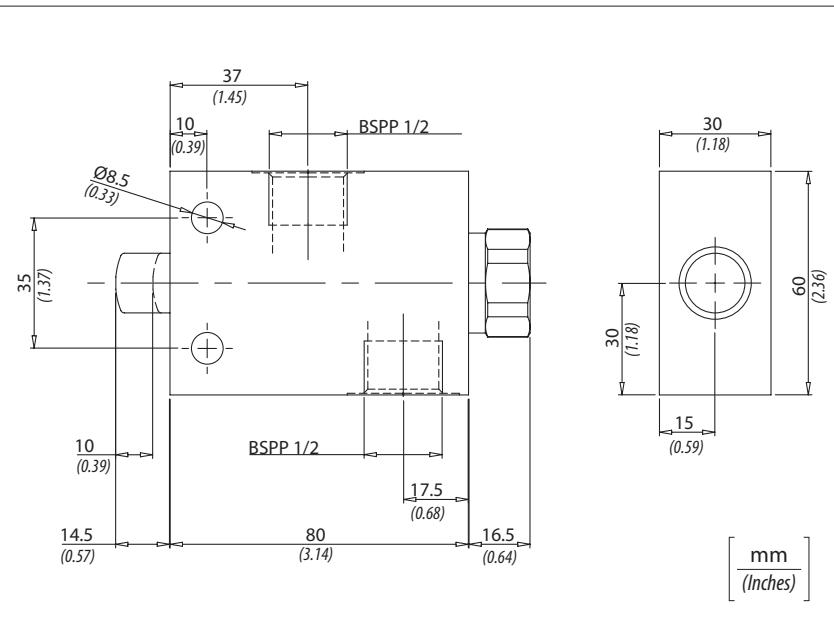
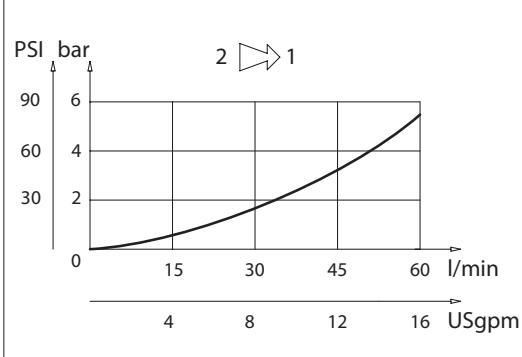
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



Normalmente chiusa  
Normally closed

## Perdite di carico Pressure drops



## Caratteristiche tecniche

### Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight / lb
FCM120N	60 (16)	300 (4350)	1,50 (3.3)

## Codice ordinazione

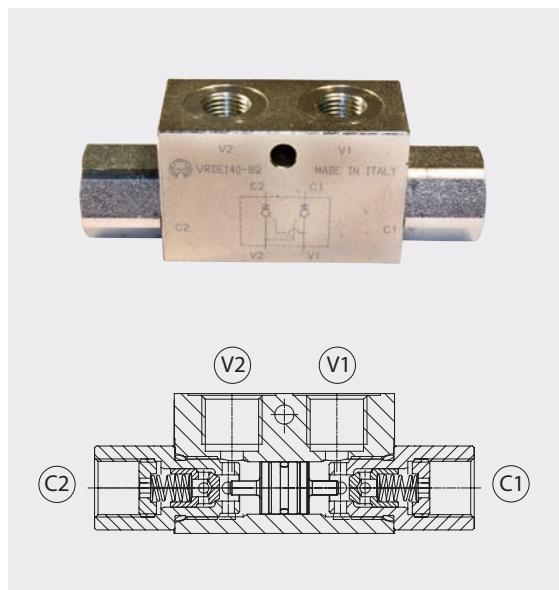
### Ordering code

**FCM120N**

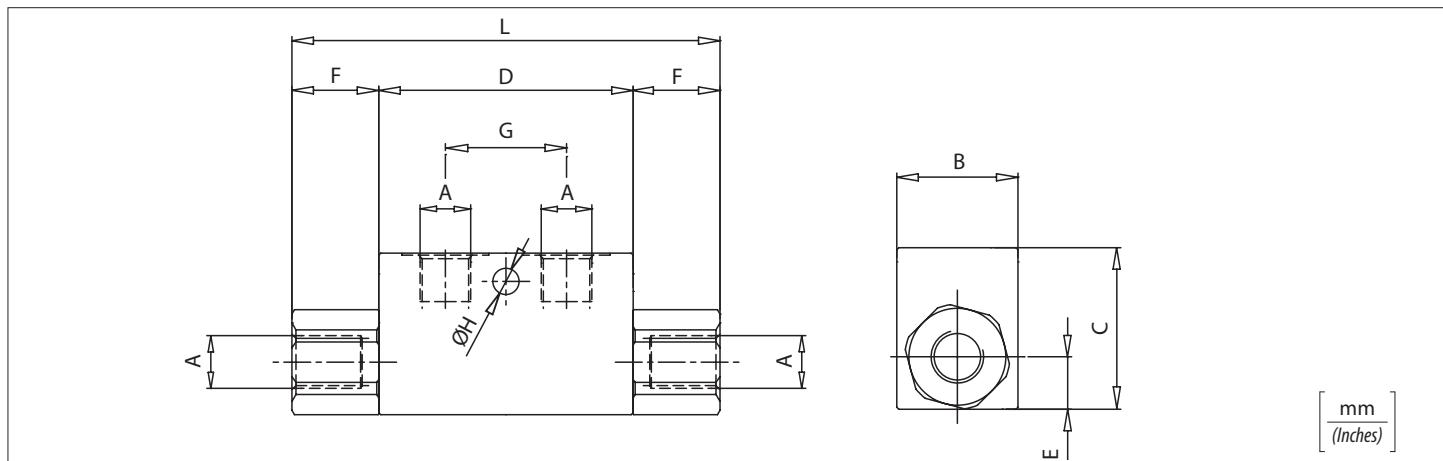
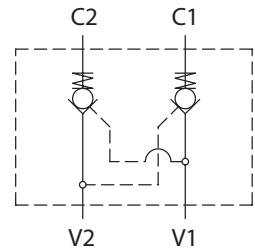


# VRDE

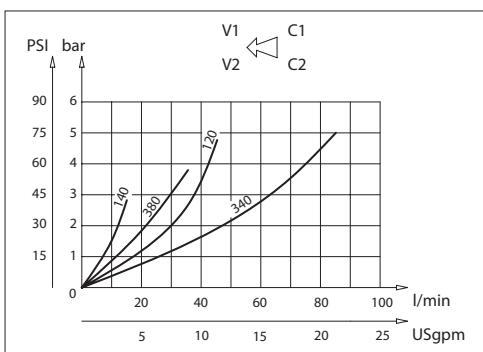
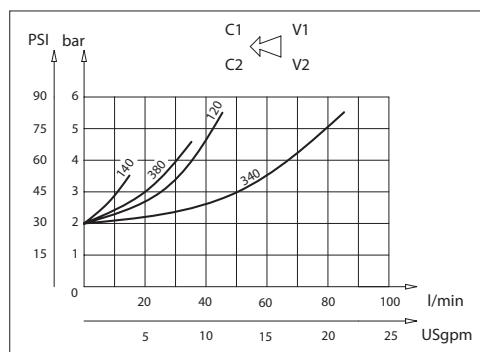
Valvole di blocco a doppio effetto  
Double acting pilot check valves



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	
Trafilamento Leakage	0 - 0,25 cm <sup>3</sup> /min (0-0,015 in <sup>3</sup> )



### Perdite di carico Pressure drops



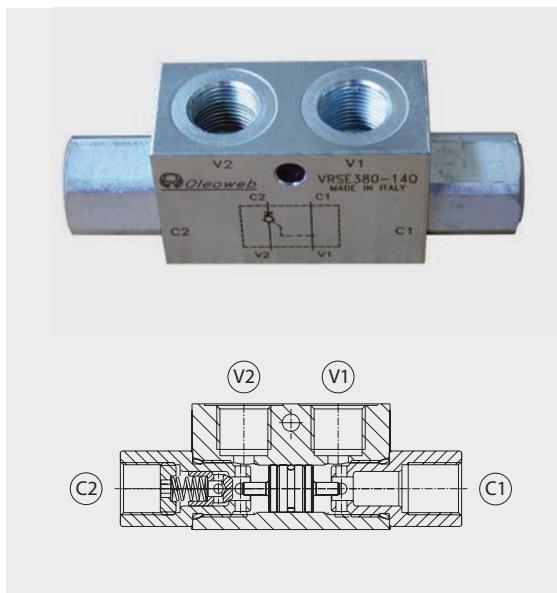
### Codice ordinazione / Ordering code

### VRDE - X

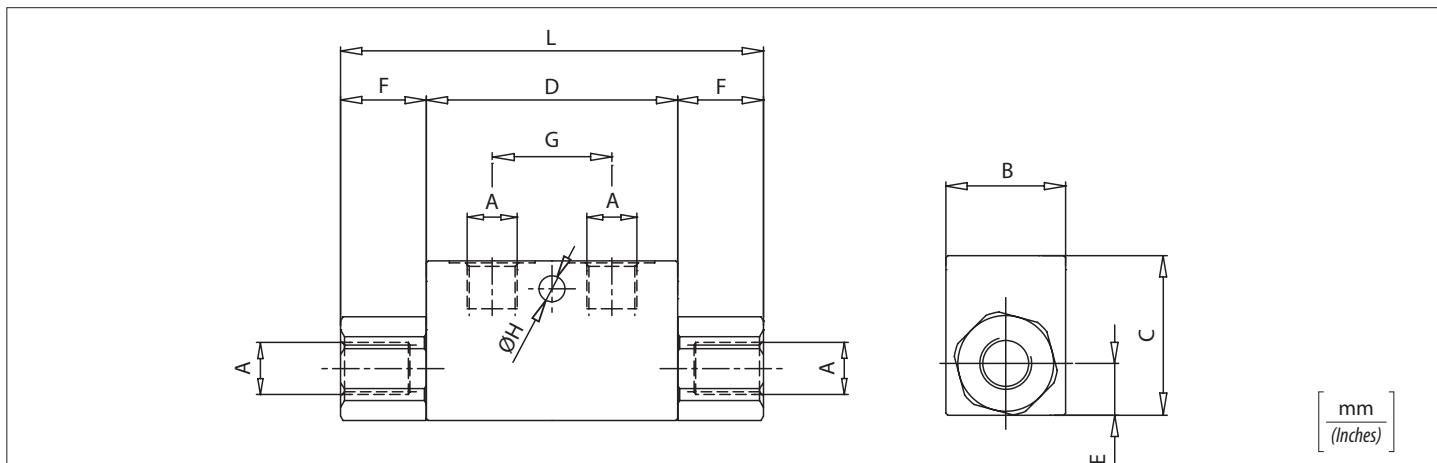
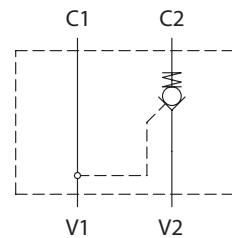
X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4

### Caratteristiche tecniche / Technical performances

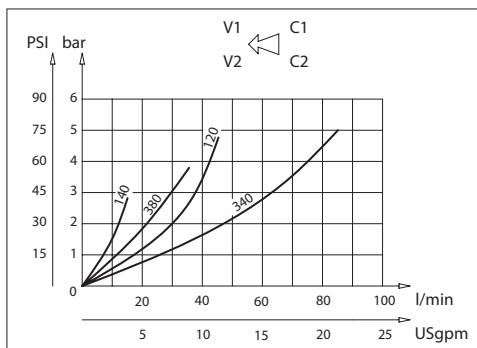
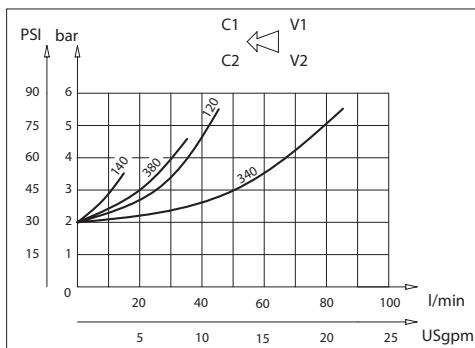
Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Peso approssimativo Approx weight Kg / lb	Rapporto di pilotaggio Pilot ratio
VRDE140	BSPP 1/4	15 (4)	320 (4500)	30 (1.18)	40 (1.57)	63 (2.48)	13 (0.51)	21,5 (0.85)	30 (1.18)	6,5 (0.26)	106 (4.17)	0,63 (1.4)	1:4
VRDE380	BSPP 3/8	35 (9.3)										0,60 (1.32)	
VRDE120	BSPP 1/2	45 (12)										145 (5.71)	1,10 (2.42)
VRDE340	BSPP 3/4	70 (18.5)	300 (4350)	40 (1.57)	60 (2.36)	100 (3.94)	22,5 (0.88)	46 (1.81)	50 (1.97)	8,5 (0.34)	192 (7.56)	2,10 (4.62)	12.9



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro	ISO 4406:1999 Max contamination index with filter
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola It is necessary a filter use to protect the valve (advised filtration 15 micron)	
Trafilamento Leakage	0 - 0,25 cm <sup>3</sup> /min (0-0,015 in <sup>3</sup> )



#### Perdite di carico Pressure drops



#### Codice ordinazione / Ordering code

### VRSE - X

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4

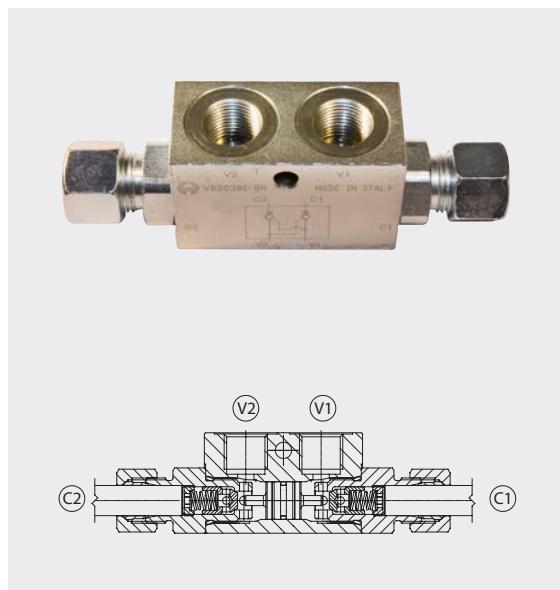
#### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Peso approssimativo Approx weight Kg / lb	Rapporto di pilotaggio Pilot ratio
VRSE140	BSPP 1/4	15 (4)	320 (4500)	30 (1.18)	40 (1.57)	63 (2.48)	13 (0.51)	21,5 (0.85)	30 (1.18)	6,5 (0.26)	106 (4.17)	0,61 (1.34)	1:4
VRSE380	BSPP 3/8	35 (9.3)		35 (1.38)	50 (1.97)	82 (3.23)	16,5 (0.65)	31,5 (1.24)	36 (1.42)			0,58 (1.27)	
VRSE120	BSPP 1/2	45 (12)		40 (1.57)	60 (2.36)	100 (3.94)	22,5 (0.88)	46 (1.81)	50 (1.97)		145 (5.71)	1,05 (2.31)	
VRSE340	BSPP 3/4	70 (18.5)	300 (4350)	40 (1.57)	60 (2.36)	100 (3.94)	22,5 (0.88)	46 (1.81)	50 (1.97)	8,5 (0.34)	192 (7.56)	1 (2.2)	1:2.9

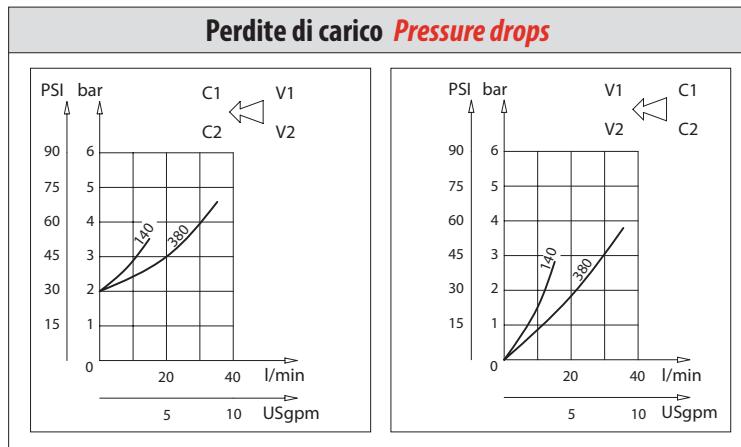
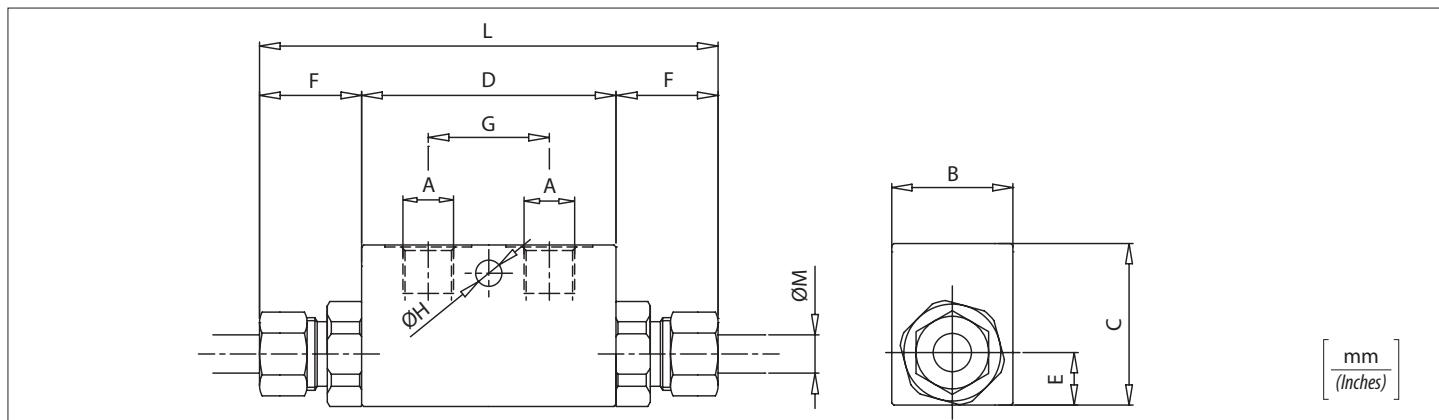
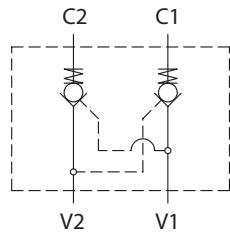


# VRDD

## Valvole di blocco a doppio effetto Double acting pilot check valves



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro	ISO 4406:1999 Max contamination index with filter
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola It is necessary a filter use to protect the valve (advised filtration 15 micron)	
Traffilamento Leakage	0 - 0,25 cm <sup>3</sup> /min (0-0,015 in <sup>3</sup> )

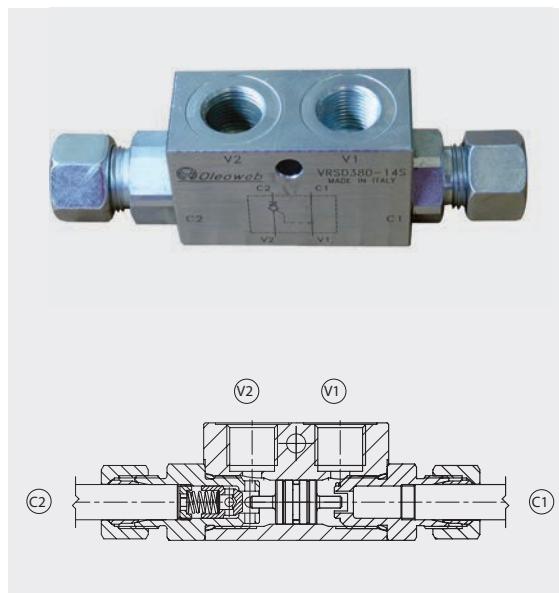


Codice ordinazione / Ordering code	
<b>VRDD - X - Y</b>	
<b>X</b>	Dimensione / Size
140	BSPP 1/4
140	BSPP 1/4
380	BSPP 3/8
<b>Y</b>	Dimensione / Size
T8	Per tubo Ø 8 For Ø 8 pipe
T12	Per tubo Ø 12 For Ø 12 pipe
T12	Per tubo Ø 12 For Ø 12 pipe

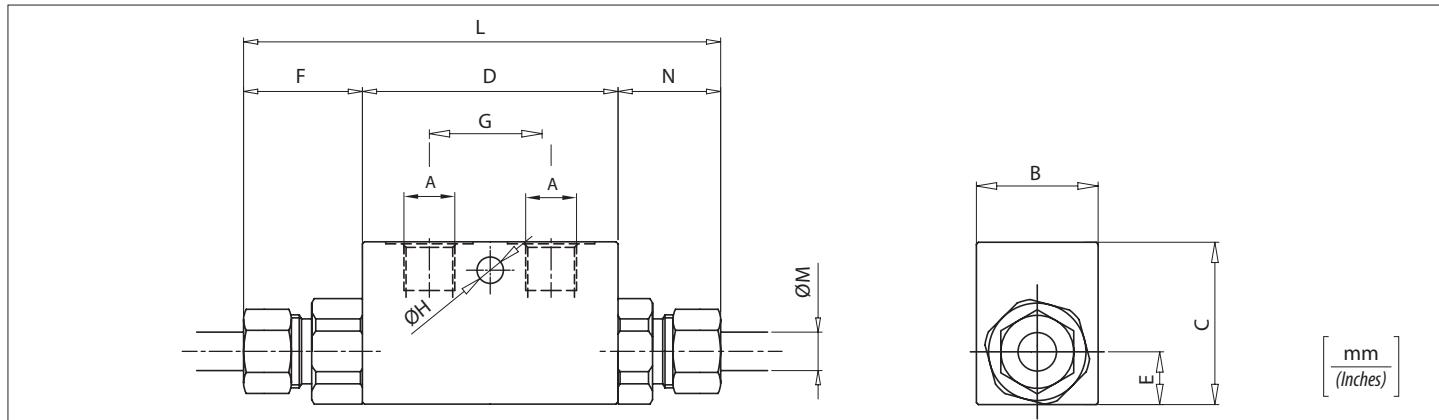
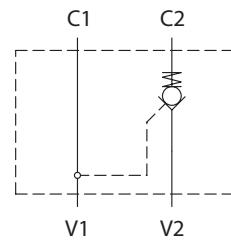
Caratteristiche tecniche / Technical performances														
Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	Peso approssimativo Approx weight Kg / lb	Rapporto di pilotaggio Pilot ratio
VRDD140T8	BSPP 1/4	10 (2.5)						25 (0.98)			113 (4.45)	8 (0.32)	0,60 (1.3)	1:9
VRDD140		15 (4)	320 (4500)	30 (1.18)	40 (1.57)	63 (2.48)	13 (0.51)		30 (1.18)	6,5 (0.26)			0,64 (1.4)	
VRDD380	BSPP 3/8	35 (9)						32 (1.26)			127 (5)	12 (0.47)	0,630 (1.38)	1:4

# VRSD

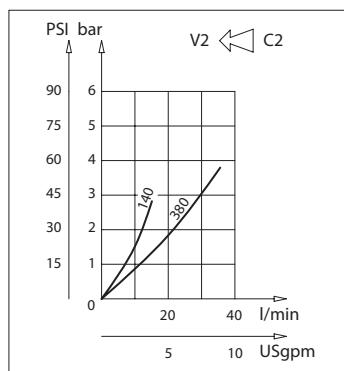
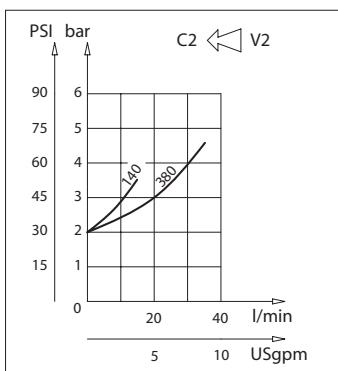
Valvole di blocco a semplice effetto DIN2353  
DIN2353 single acting pilot check valves



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	
Trafilamento Leakage	0 - 0,25 cm <sup>3</sup> /min



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

VRSD - X - Y

X	Dimensione / Size	Y	Dimensione / Size
140	BSPP 1/4	T8	Per tubo Ø 8 For Ø 8 pipe
140	BSPP 1/4	T12	Per tubo Ø 12 For Ø 12 pipe
380	BSPP 3/8	T12	Per tubo Ø 12 For Ø 12 pipe

## Caratteristiche tecniche / Technical performances

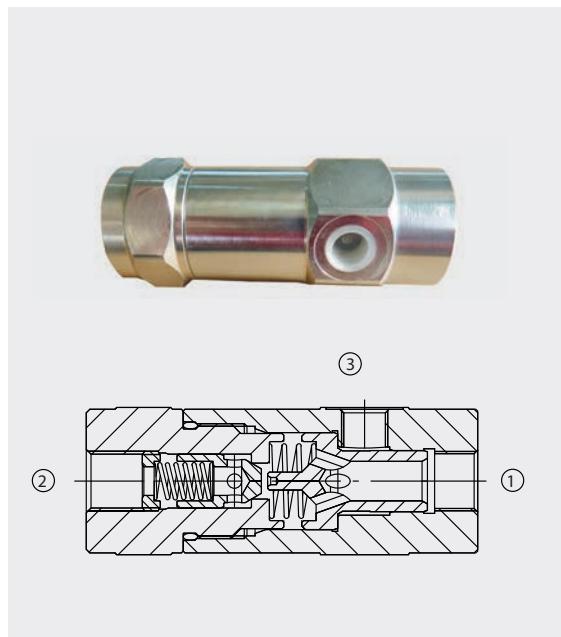
Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	N	Peso approssimativo Approx weight Kg / lb	Rapporto di pilotaggio Pilot ratio
VRSD140T8	BSPP 1/4	10 (2.5)	320 (4500)					25 (0.98)			113 (4.45)	8 (0.32)	25 (0.98)	0,59 (1.3)	1:9
VRSD140		15 (4)		30 (1.18)	40 (1.57)	63 (2.48)	13 (0.51)		30 (1.18)	6,5 (0.26)				0,63 (1.37)	
VRSD380	BSPP 3/8	35 (9)						32 (1.26)			127 (5)	12 (0.47)	28 (1.10)	0,62 (1.36)	1:4



# VRPE

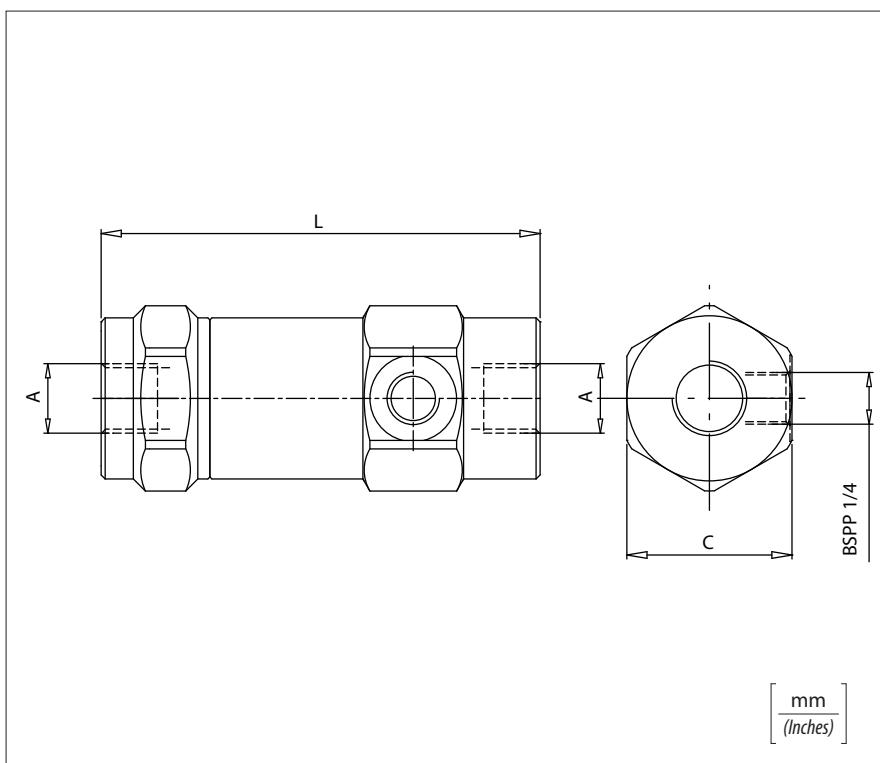
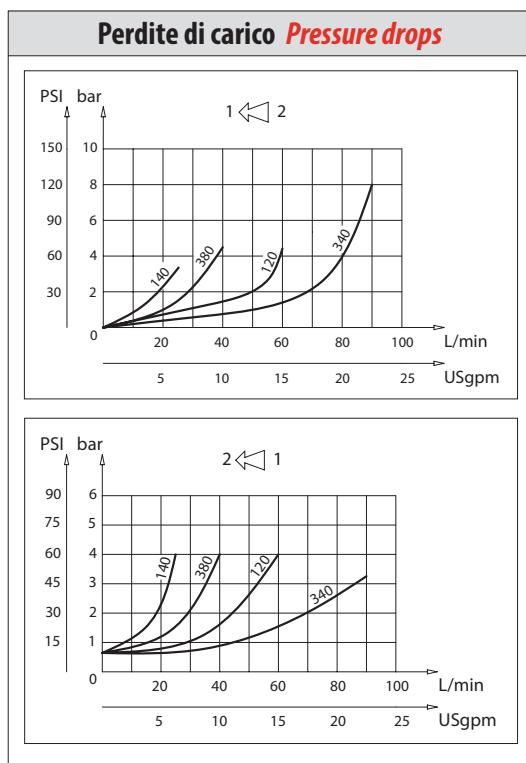
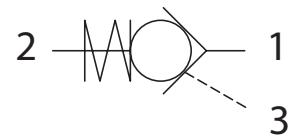
Valvole di blocco pilotate a semplice effetto

*Single acting pilot check valves*



## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	
Trafilamento Leakage	0 - 0,25 cm <sup>3</sup> /min (0-0,015 in <sup>3</sup> )



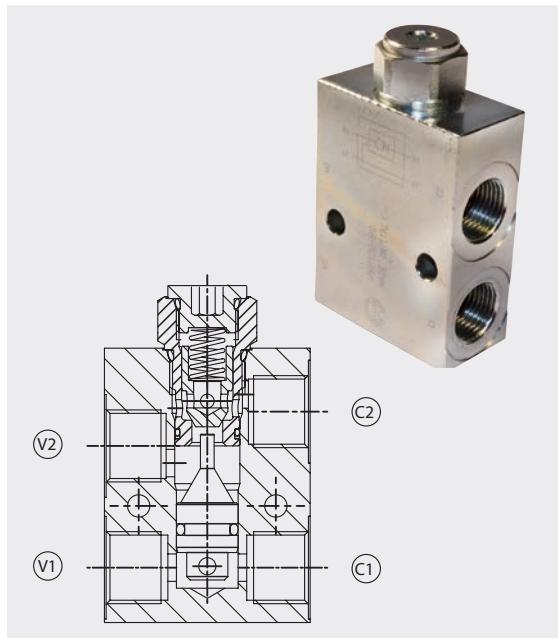
## Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	L	C	Peso approssimativo / Kg Approx weight/lb	Rapporto di pilotaggio Pilot ratio
VRPE140	BSPP 1/4	25 (6.5)	350 (5000)	100 (3.94)	40 (1.57)	0,71 (1.56)	1:5.3
VRPE380	BSPP 3/8	40 (10.5)		105 (4.13)	45 (1.77)	1 (2.2)	1:4.4
VRPE120	BSPP 1/2	60 (16)		125 (4.92)		1,1 (2.4)	1:4.2
VRPE340	BSPP 3/4	100 (26)		130 (5.12)	55 (2.16)	2,1 (4.62)	1:4
VRPE100	BSPP 1	150 (40)	300 (4350)	166 (6.54)	65 (2.56)	3,6 (7.92)	1:4.1

## Codice ordinazione / Ordering code

**VRPE - X**

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1



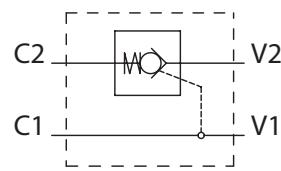
### Dati tecnici

### Technical data

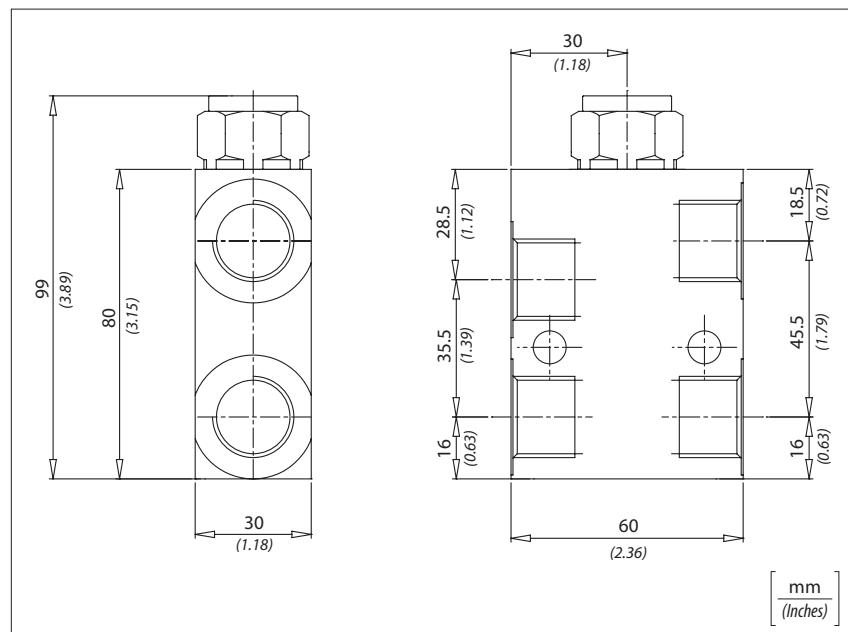
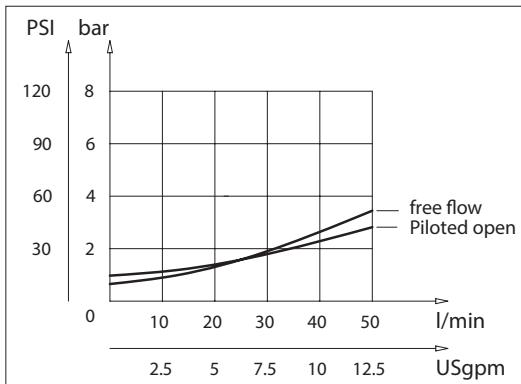
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



### Perdite di carico Pressure drops



### Caratteristiche tecniche

### Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight / lb	Rapporto di pilotaggio Pilot ratio
VRP120	50 (13)	350 (5000)	0,9 (2)	1:4

### Codice ordinazione / Ordering code

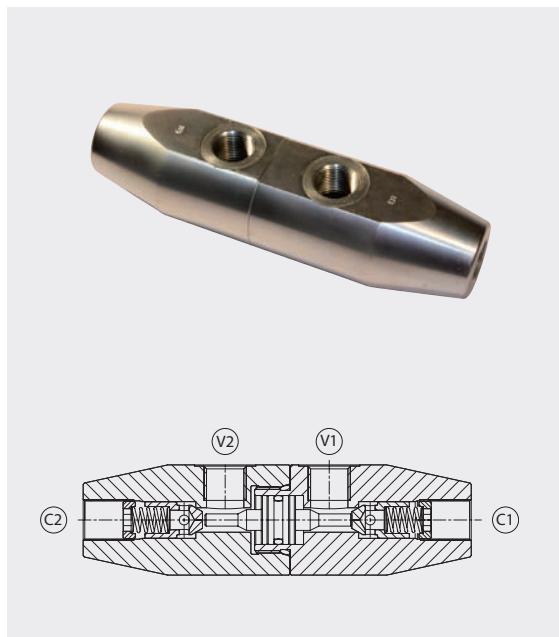
**VRP - X**

X	Dimensione / Size
120	BSPP 1/2



# VRDP

Valvole di blocco pilotate a doppio effetto  
Double acting pilot check valves

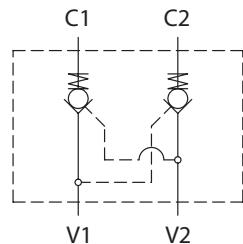


## Dati tecnici Technical data

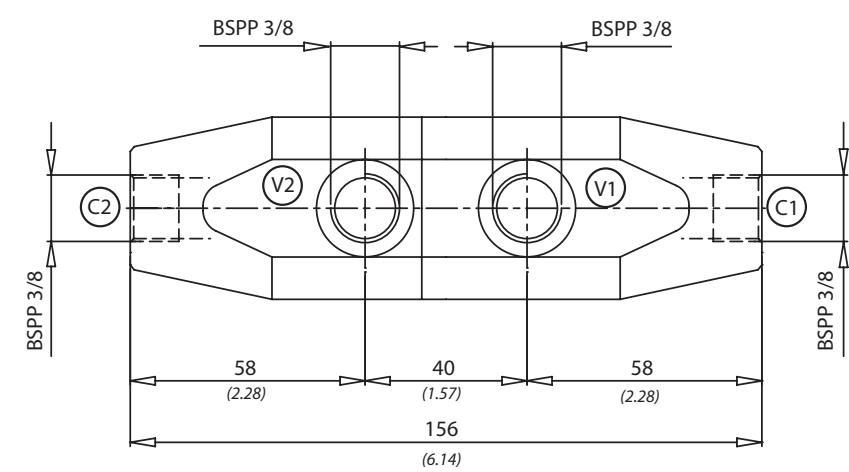
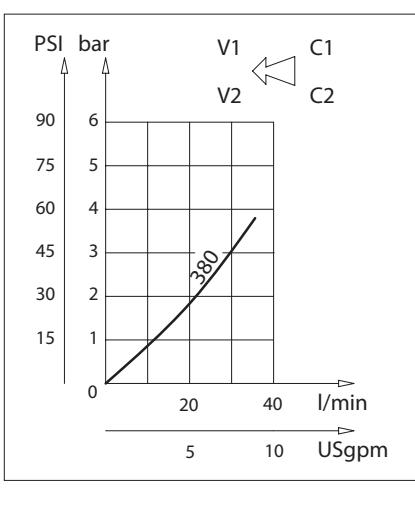
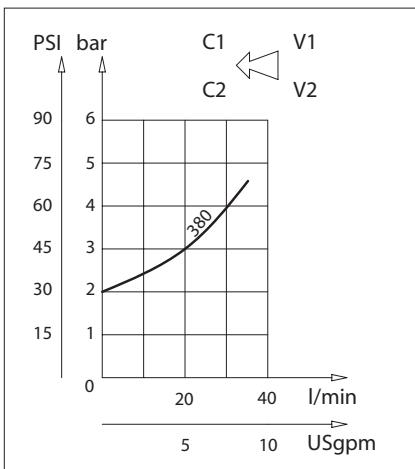
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico Pressure drops



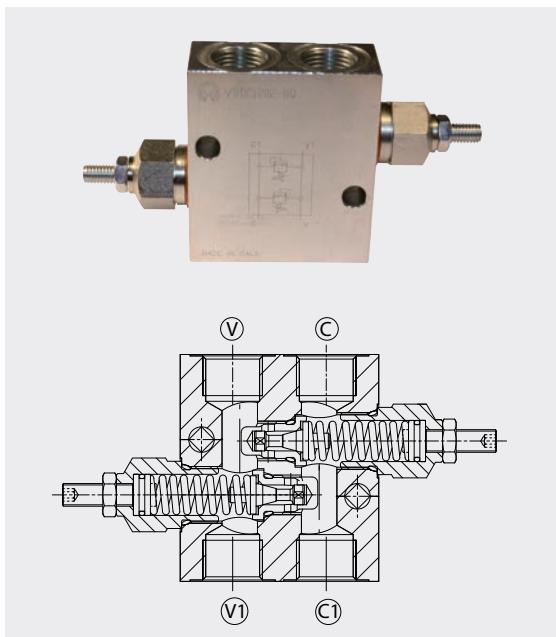
[ mm  
(Inches) ]

## Caratteristiche tecniche Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight / lb	Rapporto di pilotaggio Pilot ratio
VRDP 3801	35 (9)	320 (4500)	1,42 (3.15)	1:4

## Codice ordinazione Ordering code

**VRDP-3801**



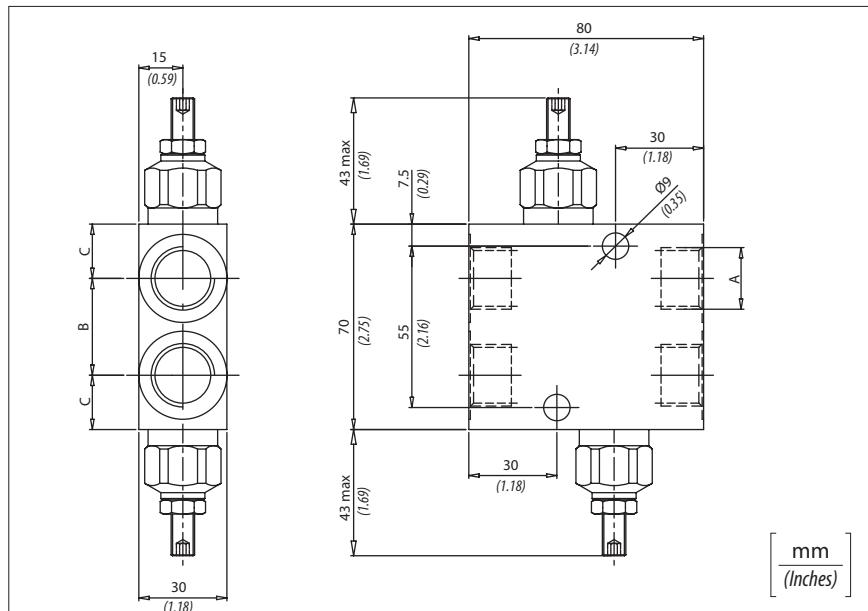
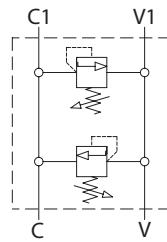
### Dati tecnici

#### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524	
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura del fluido Fluid temperature	-20°C -4°F	+80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F	+50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)

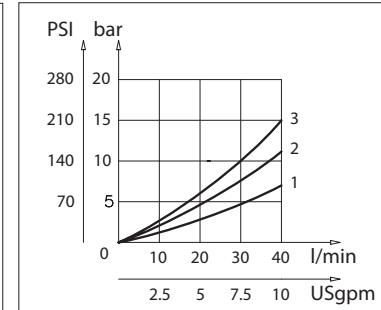
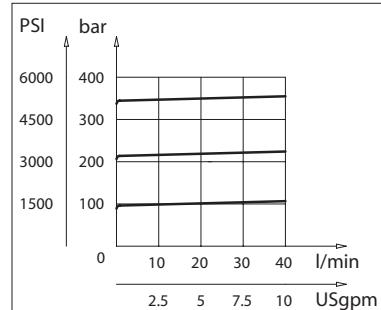


#### Codice ordinazione / Ordering code

**VBDC - X - Y**

<b>X</b>	Dimensione / Size
380	BSPP 3/8
120	BSPP 1/2

#### Perdite di carico Pressure drops



<b>Y</b>	Molla Spring	Incremento pressione al giro Press. increase
1	10/90 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)
2	20/210 bar (290/3000 PSI) max	30 bar/al giro (435 PSI/turn)
3	70/350 bar (1000/5000 PSI) max	65 bar/al giro (940 PSI/turn)

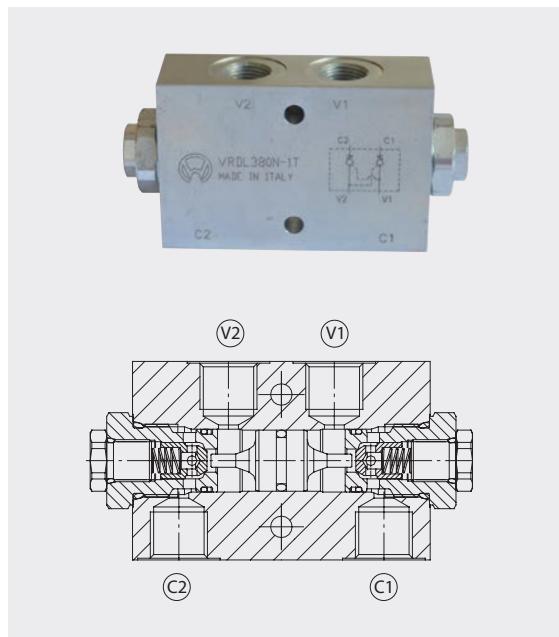
#### Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	B	C	Peso approssimativo / Kg Approx weight / lb	Valvola tipo Type of valve
VBDC380	BSPP 3/8	40 (10.5)	350 (5000)	28 (1.10)	21 (0.83)	1,2 (2.65)	VMD40
VBDC120	BSPP 1/2			33 (1.30)	18,5 (0.73)		



# VRDL

Valvole di blocco pilotate a doppio effetto  
Double acting pilot check valves

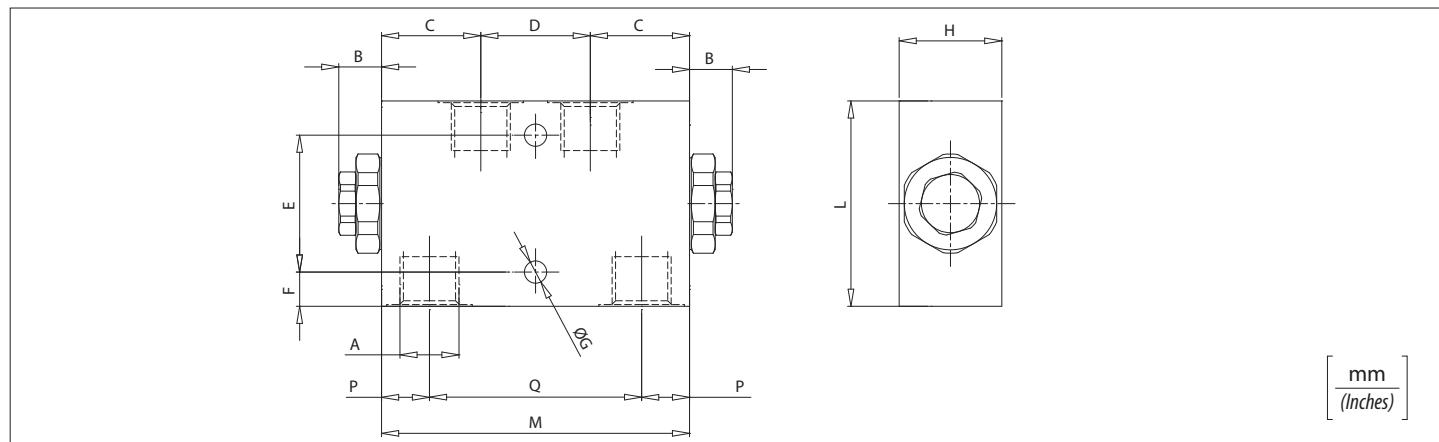
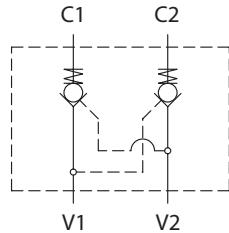


## Dati tecnici Technical data

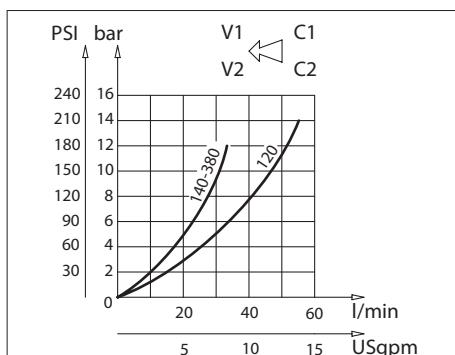
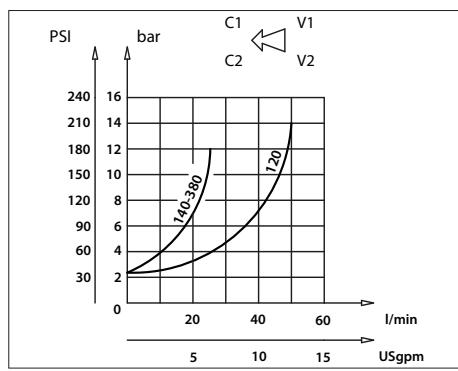
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

**VRDL - X**

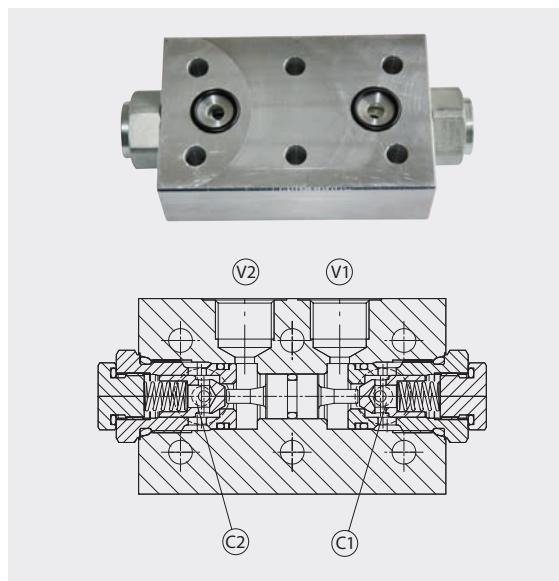
X	Dimensione / Size
140N	BSPP 1/4
380N	BSPP 3/8
120N	BSPP 1/2

## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	P	Q	Peso approssimativo Approx weight Kg / lb	Rapporto di pilotaggio Pilot ratio
VRDL140N	BSPP 1/4	35 (9)	12,5 (0,49)	29 (1,14)	32 (1,25)			10 (0,39)	6,5 (0,25)	30 (1,18)	60 (2,36)	90 (3,54)	14 (0,55)	62 (2,44)	1,2 (2,6)	
VRDL380N	BSPP 3/8		350 (5000)			40 (1,57)										1:7
VRDL120N	BSPP 1/2	50 (13)		14,5 (0,57)	38 (1,49)	34 (1,33)		15 (0,59)	8,5 (0,33)	35 (1,37)	70 (2,75)	110 (4,33)	20,5 (0,80)	69 (2,71)	1,9 (4,2)	

# VRDF

Valvole di blocco flangiata a doppio effetto  
Double acting pilot check valves-flanged version



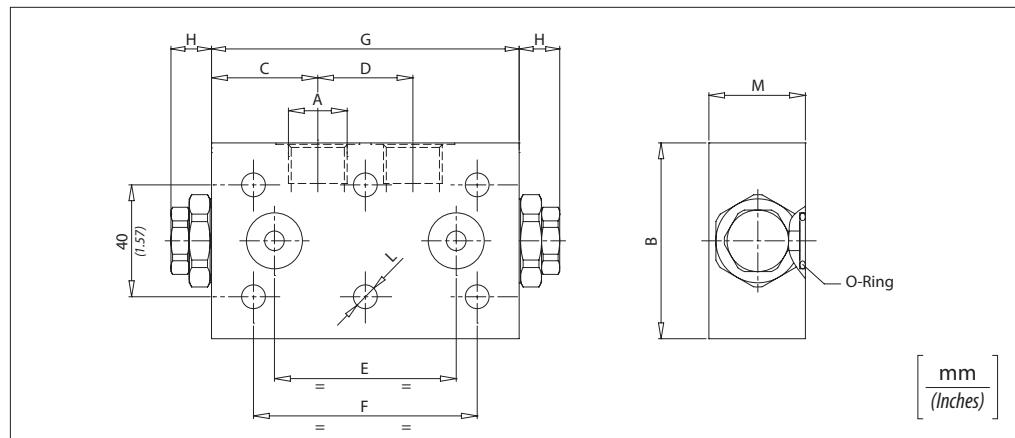
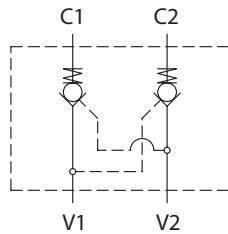
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Codice ordinazione / Ordering code

**VRDF -X-Y-K-I**

**X**

Dimensione / Size

380

BSPP 3/8

120

BSPP 1/2

**Y**

Dimensione / Size

1

1 bar

6

6 bar Standard

**K**

O-Ring sul pistone  
di pilotaggio  
O-ring on pilot piston

0

No o-ring

1

Con o-ring / With o-ring

## Solo per BSPP1/2 / For BSPP1/2 only

**K**

Rapporto di pilotaggio  
Pilot ratio

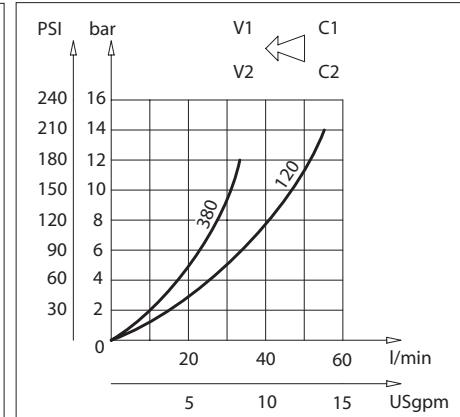
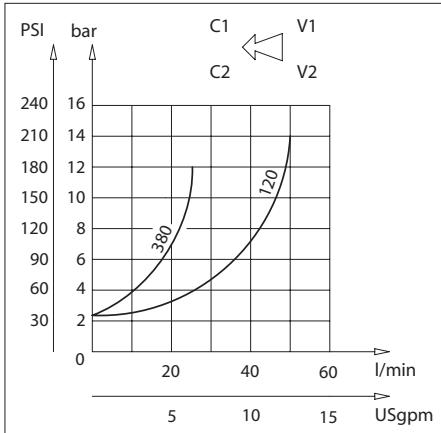
32

1:3,2

70

1:7

## Perdite di carico / Pressure drops



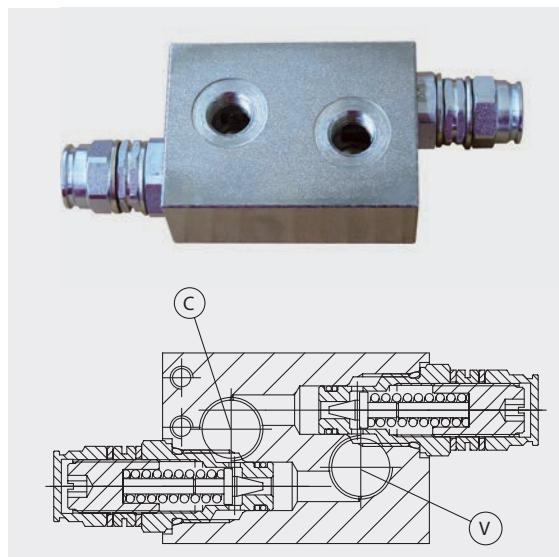
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	O-Ring	Peso approssimativo Approx weight Kg / lb	Rapporto di pilotaggio Pilot ratio
VRDF380	BSPP 3/8	35 (9)	350 (5000)	60 (2.36)	32 (1.26)	32 (1.26)	62 (2.44)	70 (2.76)	96 (3.78)	10 (0.39)	6.5 (0.26)	34 (1.34)	9.19 x 2.62	1,15 (2.53)	1:7
VRDF120	BSPP 1/2	50 (13)		70 (2.76)	38 (1.49)	34 (1.34)	65 (2.56)	80 (3.15)	110 (4.33)	14.5 (0.57)	8.5 (0.33)		15.54 x 2.62	1,85 (4)	1:3,2



# DCA

Valvole antiurto doppie incrociate  
Double cross line direct acting relief valves



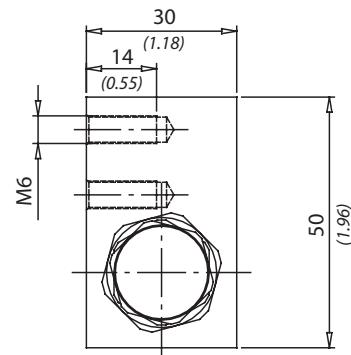
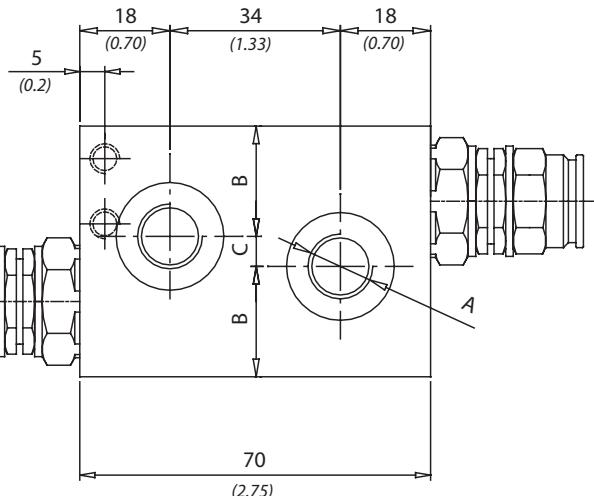
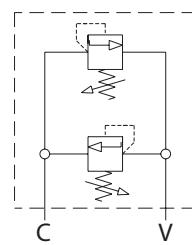
### Dati tecnici

#### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

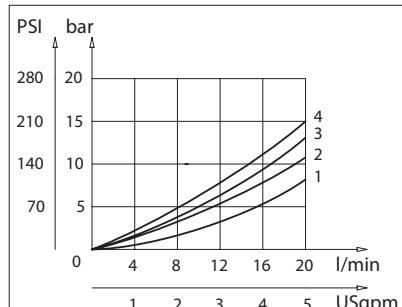
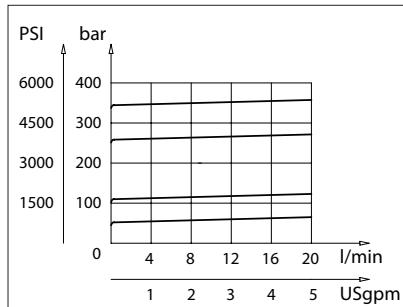
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



[ mm  
(Inches) ]

### Perdite di carico Pressure drops



### Codice ordinazione / Ordering code

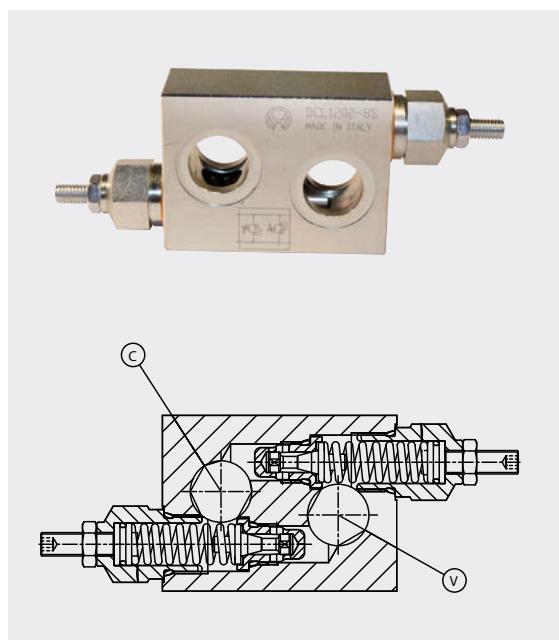
**DCA - X - Y**

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8

Y	Molla Spring	Incremento pressione al giro Press. increase
1	10/40 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)
2	20/110 bar (290/3000 PSI) max	35 bar/al giro (500 PSI/turn)
3	30/210 bar (435/3000 PSI) max	65 bar/al giro (940 PSI/turn)
4	40/350 bar (580/5000 PSI) max	120 bar/al giro (1740 PSI/turn)

### Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	Peso approssimativo / Kg Approx weight / lb	Valvola tipo Type of valve
DCA140	BSPP1/4	20 (5.3)	350 (5000)	22 (0.87)	6 (0.24)	0,8 (1.8)	VMD1
DCA380	BSPP 3/8			20 (0.79)	10 (0.39)		

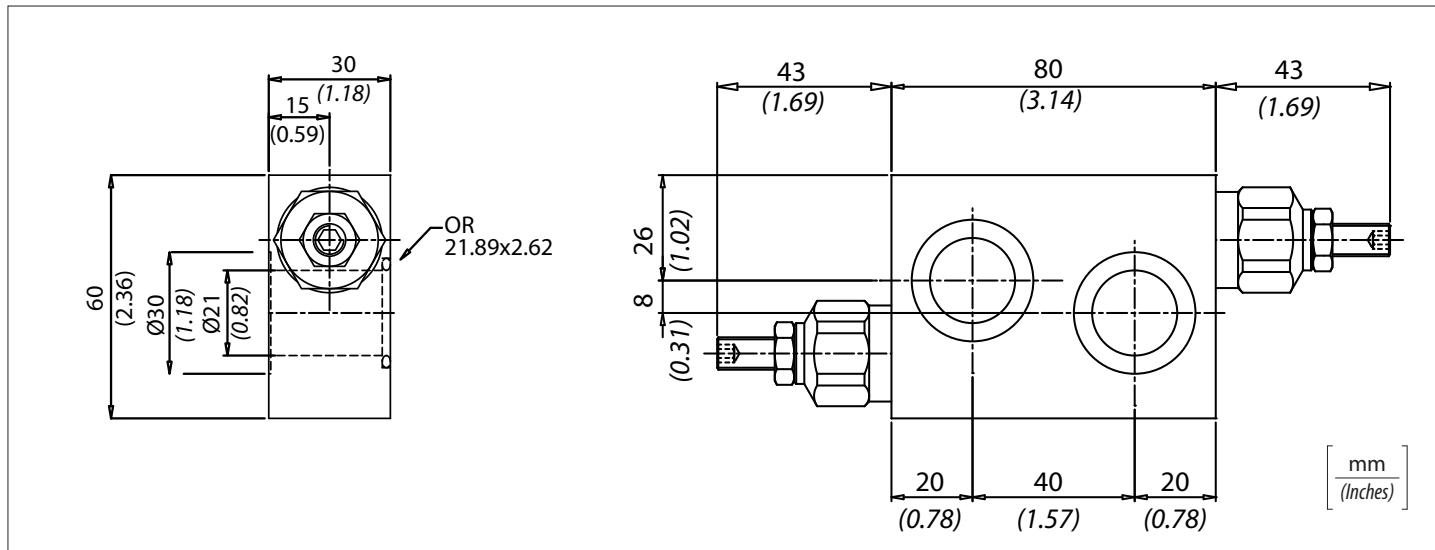
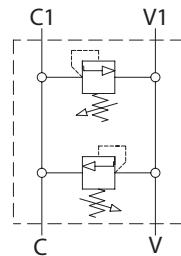


### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



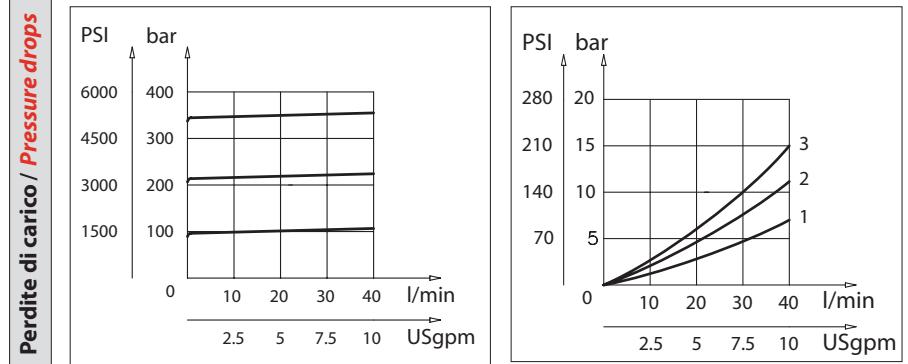
### Codice ordinazione / Ordering code

**DCL - X - Y**

X	Dimensione / Size
120	BSPP 1/2

Y	Molla Spring	Incremento pressione al giro Press. increase
1	10/90 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)
2	20/210 bar (290/3000 PSI) max	30 bar/al giro (435 PSI/turn)
3	70/350 bar (1000/5000 PSI) max	65 bar/al giro (940 PSI/turn)

### Perdite di carico / Pressure drops



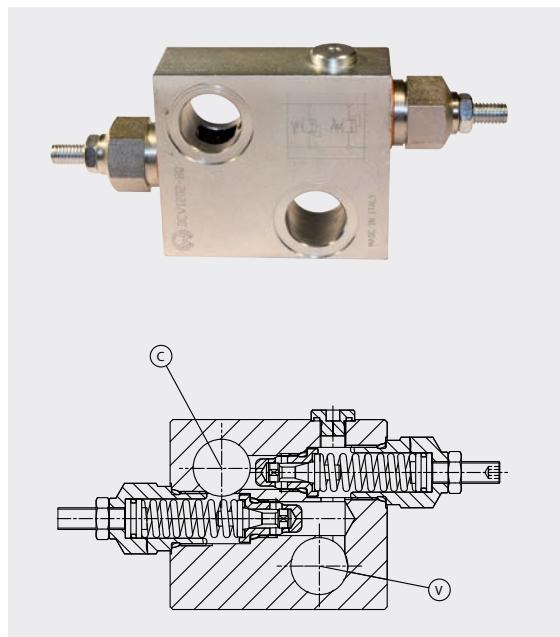
### Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar./PSI	Peso approssimativo / Kg Approx weight / lb	Valvola tipo Type of valve
DCL120	BSPP 1/2	40 (10.5)	350 (5000)	1,5 (3.3)	VMD40



# DCV

Valvole antiurto doppie incrociate  
Double cross line direct acting relief valves

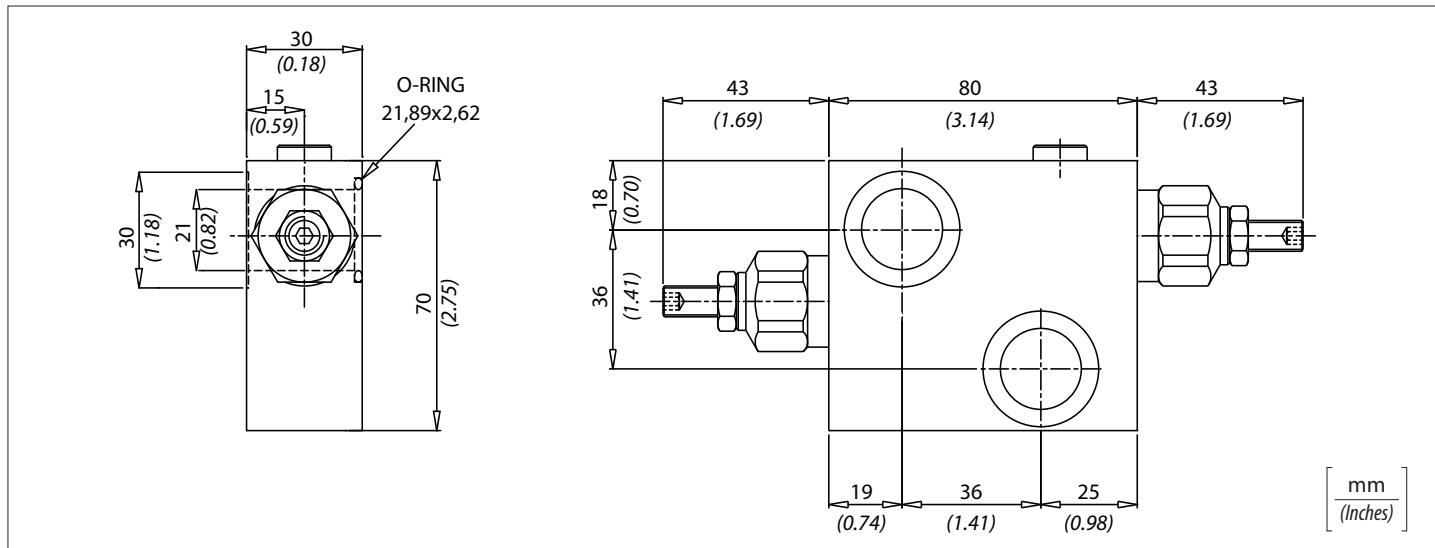
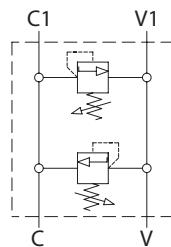


## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Codice ordinazione / Ordering code

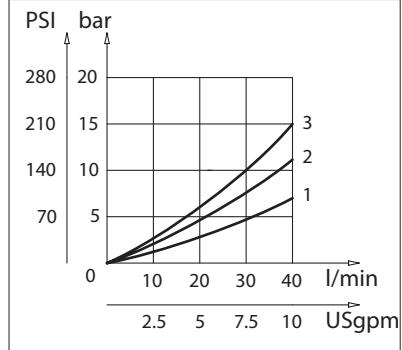
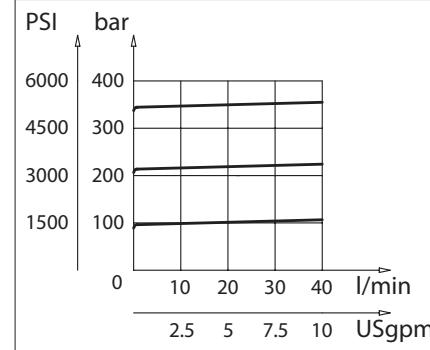
**DCV - X - Y**

<b>X</b>	Dimensione / Size
120	BSPP 1/2

<b>Y</b>	Molla Spring	Incremento pressione al giro Press. increase
1	10/90 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)

<b>Y</b>	Molla Spring	Incremento pressione al giro Press. increase
2	20/210 bar (290/3000 PSI) max	30 bar/al giro (435 PSI/turn)
3	70/350 bar (1000/5000 PSI) max	65 bar/al giro (940 PSI/turn)

## Perdite di carico / Pressure drops

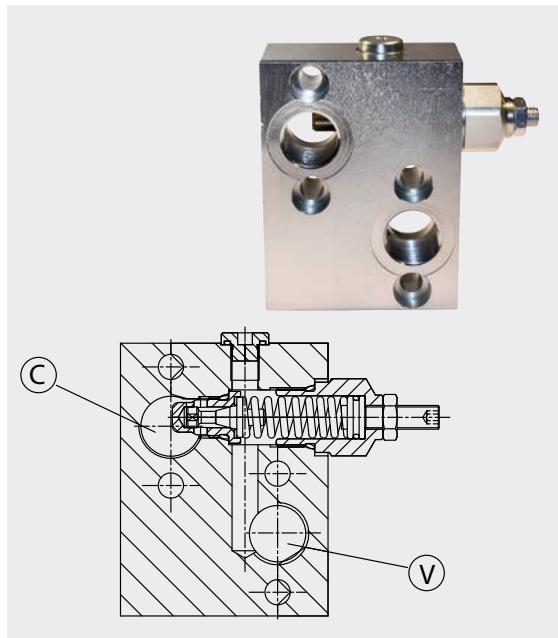


## Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight/lb	Valvola tipo Type of valve
DCV120	BSPP 1/2	40 (10.5)	350 (5000)	1,2 (2.7)	VMD40

# SCF

Valvole antiurto singola  
Single line direct acting relief valve

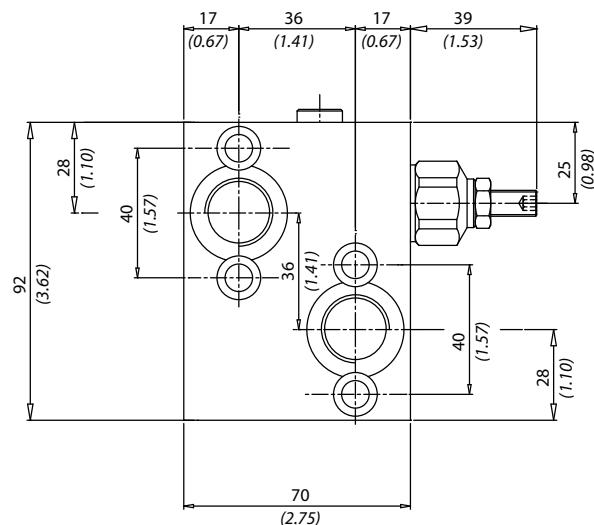
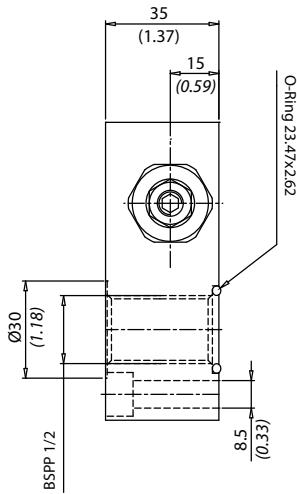
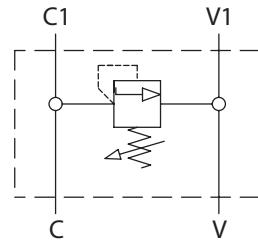


## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



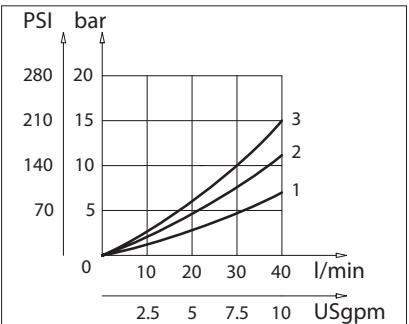
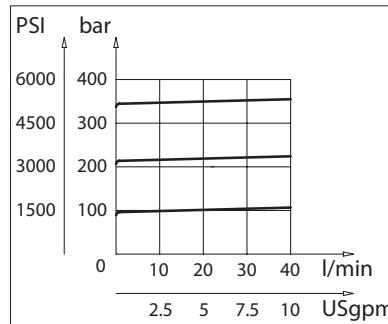
[mm  
(Inches)]

## Codice ordinazione / Ordering code

**SCF - X - Y**

<b>X</b>	Dimension / Size
120	BSPP 1/2
<b>Y</b>	Molla Spring Incremento pressione al giro Press. increase
1	10/90 bar (145/600 PSI) max 12 bar/al giro (175 PSI/turn)
2	20/210 bar (290/3000 PSI) max 30 bar/al giro (435 PSI/turn)
3	70/350 bar (1000/5000 PSI) max 65 bar/al giro (940 PSI/turn)

## Perdite di carico Pressure drops



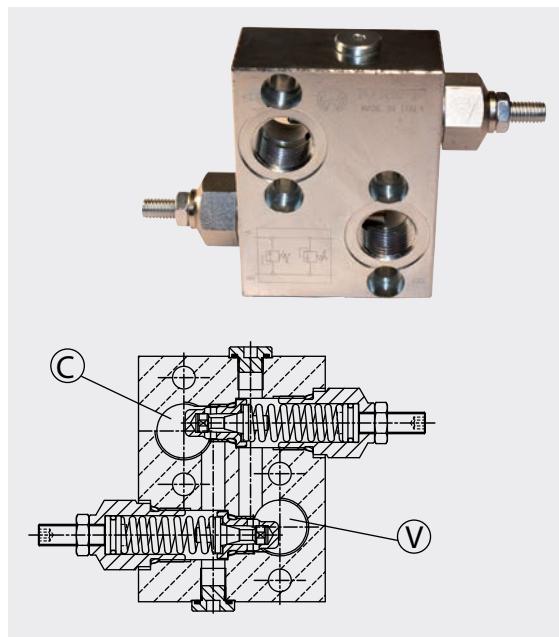
## Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight / lb	Valvola tipo Type of valve
SCF120	BSPP 1/2	40 (10.5)	350 (5000)	1,5 (3.3)	VMD40



# DCF

## Valvole antiurto doppie incrociate Double cross line direct acting relief valves

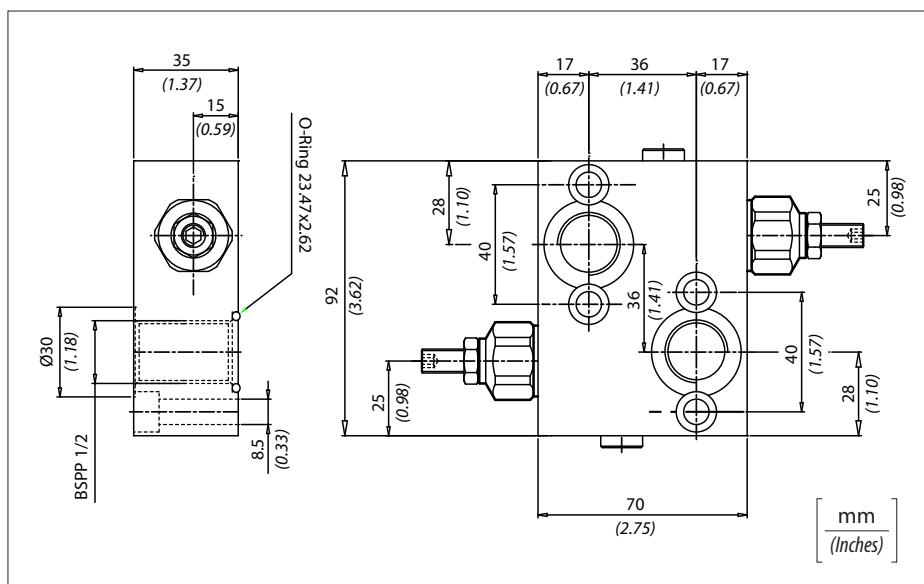
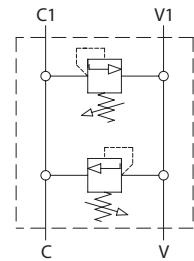


### Dati tecnici Technical data

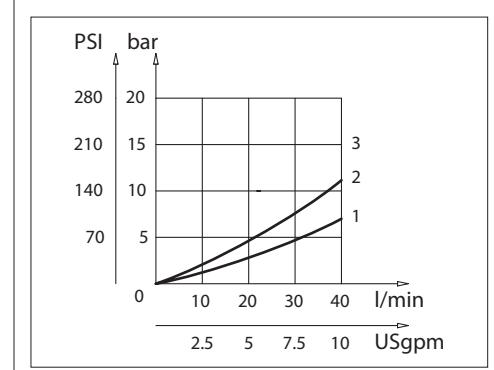
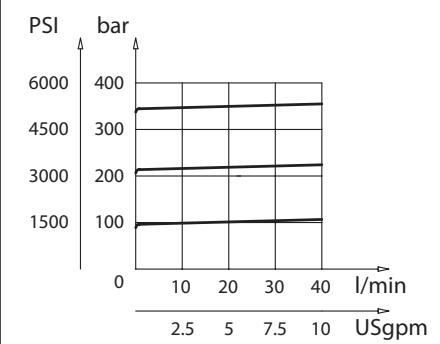
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524	
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura del fluido Fluid temperature	-20°C -4°F	+80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F	+50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Perdite di carico Pressure drops



### Codice ordinazione / Ordering code

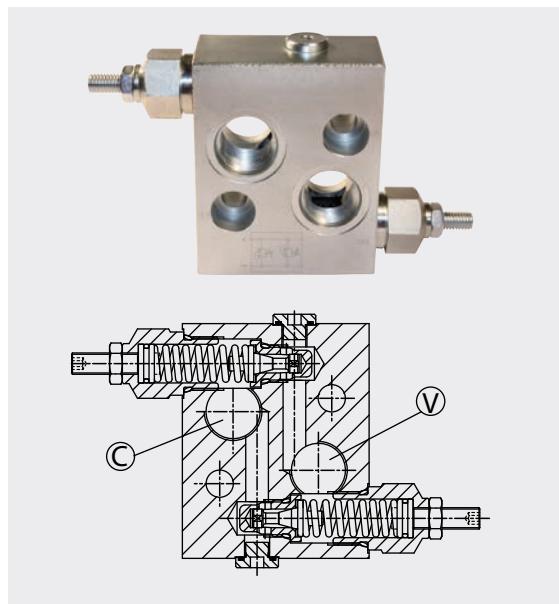
**DCF - X - Y**

X	Dimensione / Size
120	BSPP 1/2
7814	7/8 14UNF
2215	M22x1.5

Y	Molla Spring	Incremento pressione al giro Press. increase
1	10/40 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)
2	20/210 bar (290/3000 PSI) max	30 bar/al giro (435 PSI/turn)
3	70/350 bar (1000/5000 PSI) max	65 bar/al giro (940 PSI/turn)

### Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight/lb	Valvola tipo Type of valve
DCF120	BSPP 1/2	40 (10.5)	350 (5000)	1,5 (3.3)	VMD40
DCF7814	7/8 - 14 UNF				
DCF2215	M22 x 1,5				

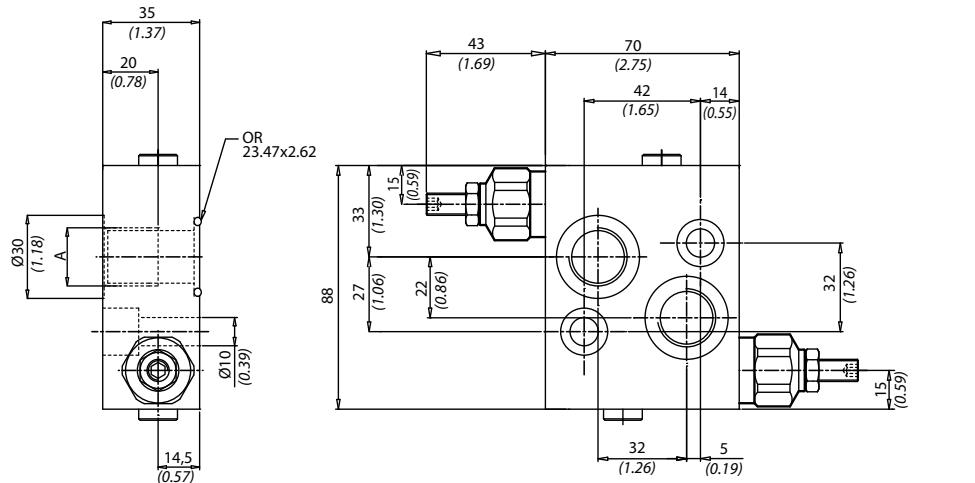
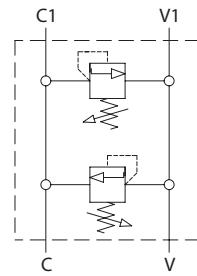


### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



[ mm  
Inches ]

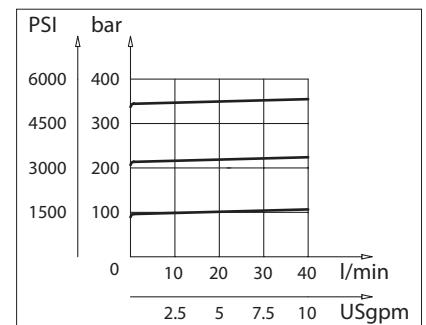
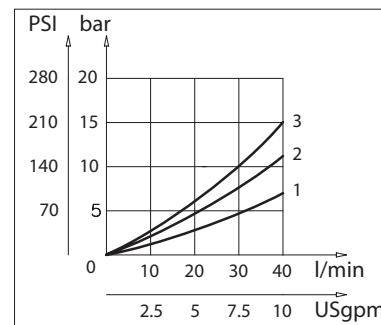
### Codice ordinazione / Ordering code

**DCM - X - Y**

X	Dimensione / Size
120	BSPP 1/2
7814	7/8 14UNF
2215	M22x1.5

Y	Molla Spring	Incremento pressione al giro Press. increase
1	10/40 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)
2	20/210 bar (290/3000 PSI) max	30 bar/al giro (435 PSI/turn)
3	70/350 bar (1000/5000 PSI) max	65 bar/al giro (940 PSI/turn)

### Perdite di carico Pressure drops



### Caratteristiche tecniche Technical performances

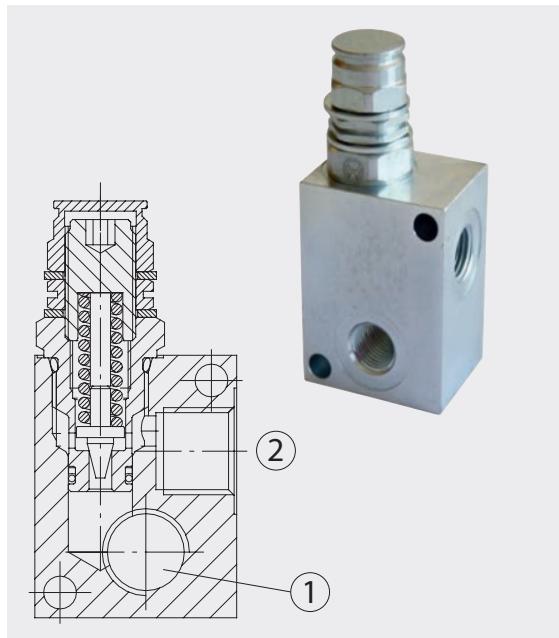
Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo / Kg Approx weight / lb	Valvola tipo Type of valve
DCM120	BSPP 1/2				
DCM7814	7/8 - 14 UNF	40 (10.5)	350 (5000)	1,5 (3.3)	VMD40
DCM2215	M22 x 1,5				



# VMDR1

Valvole di massima pressione in linea

*Direct acting relief valves*



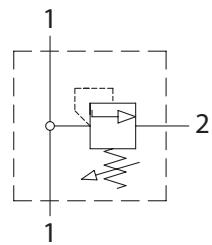
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



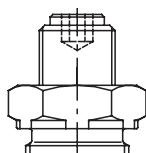
## Codice ordinazione / Ordering code

**VMDR1 -X-Y-K**

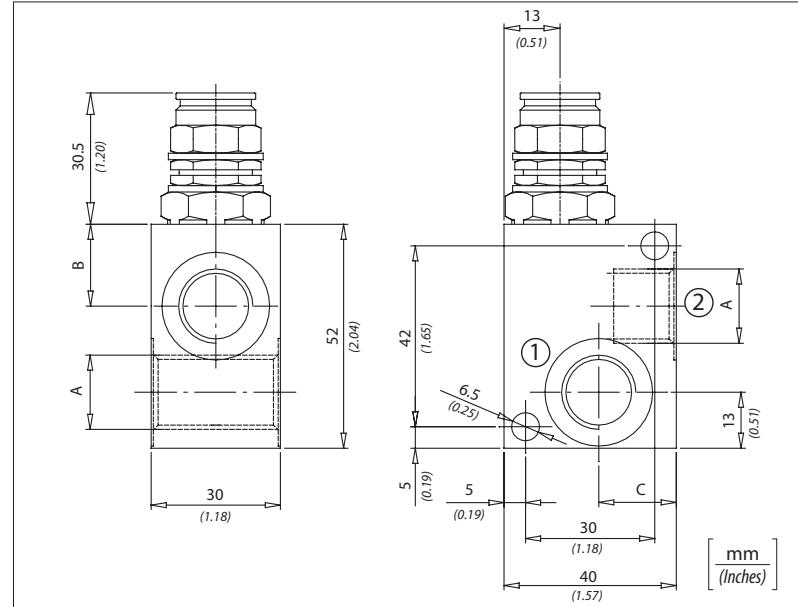
<b>X</b>	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8

<b>K</b>	Molla Spring	Incremento pressione al giro Press. increase
1	10/40 bar (145/600 PSI) max	20 bar/al giro (290 PSI/turn)
2	20/110 bar (290/1600 PSI) max	40 bar/al giro (580 PSI/turn)
3	30/210 bar (435/3000 PSI) max	70 bar/al giro (1000 PSI/turn)
4	40/350 bar (580/5000 PSI) max	130 bar/al giro (1900 PSI/turn)

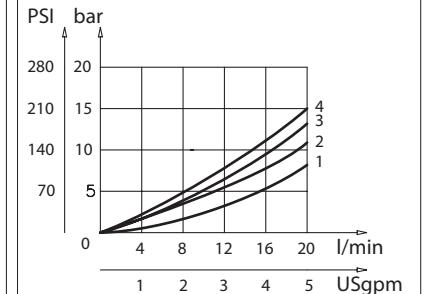
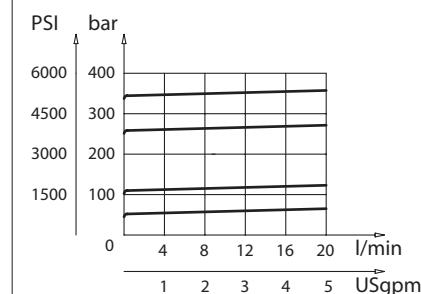
<b>Y</b>	Regolazione / Setting
----------	-----------------------



**C**



## Perdite di carico Pressure drops



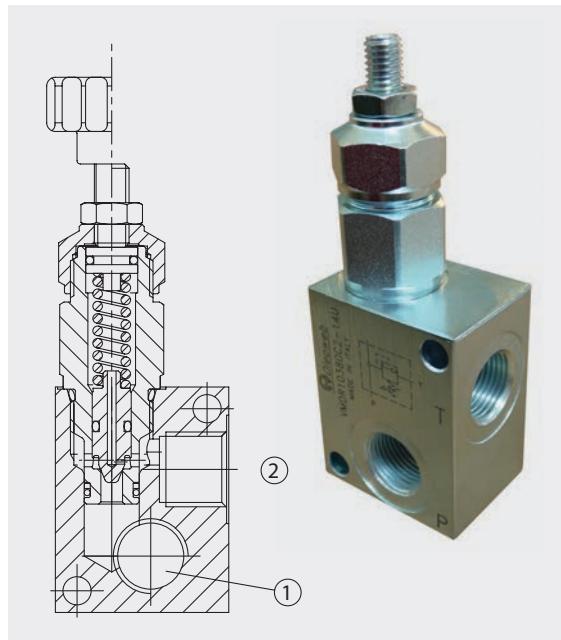
## Caratteristiche tecniche

### Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	Peso approssimativo / Kg Approx weight / lb
<b>VMDR1140</b>	<b>BSPP 1/4</b>	<b>20 (5)</b>	<b>350 (5000)</b>	<b>17 (0.67)</b>	<b>20 (0.78)</b>	<b>0,45 (0.99)</b>
<b>VMDR1380</b>	<b>BSPP 3/8</b>			<b>19 (0.75)</b>	<b>18 (0.71)</b>	

# VMDR10

Valvole di massima pressione in linea  
Direct acting relief valves

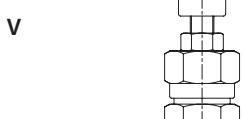


## Codice ordinazione / Ordering code

**VMDR10 -X-Y-K**

X	Dimensione / Size	
140	BSPP 1/4	
380	BSPP 3/8	
K	Molla Spring	Incremento pressione al giro Press. increase
1	10/40 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)
2	20/110 bar (290/1600 PSI) max	35 bar/al giro (500 PSI/turn)
3	30/210 bar (435/3000 PSI) max	62 bar/al giro (900 PSI/turn)
4	40/350 bar (580/5000 PSI) max	120 bar/al giro (1740 PSI/turn)

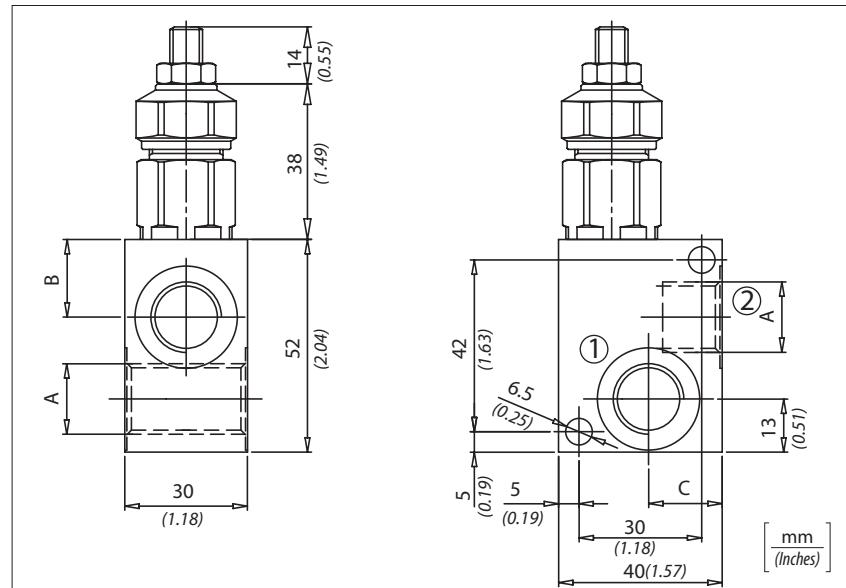
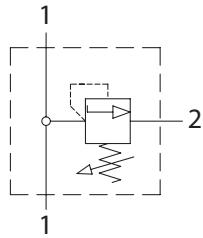
Y	Regolazione / Setting Codice/ Code 81300109
---	---



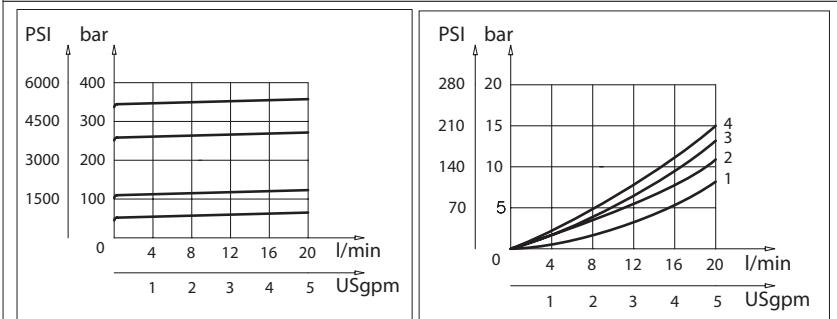
## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico Pressure drops



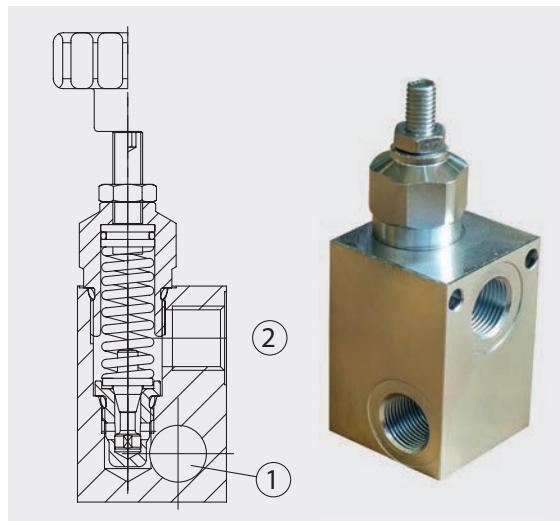
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	Peso approssimativo / Kg Approx weight / lb
VMDR10140	BSPP 1/4	20 (5)	350 (5000)	17 (0.67)	20 (0.78)	0,50 (1.1)
VMDR10380	BSPP 3/8			19 (0.75)	18 (0.71)	



# VM DR40

Valvole di massima pressione in linea  
Direct acting relief valves



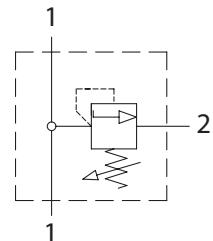
## Dati tecnici

### Technical data

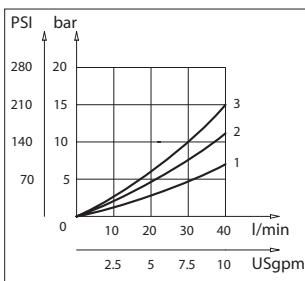
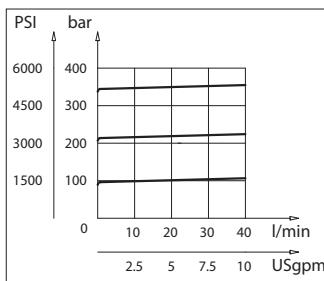
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico / Pressure drops



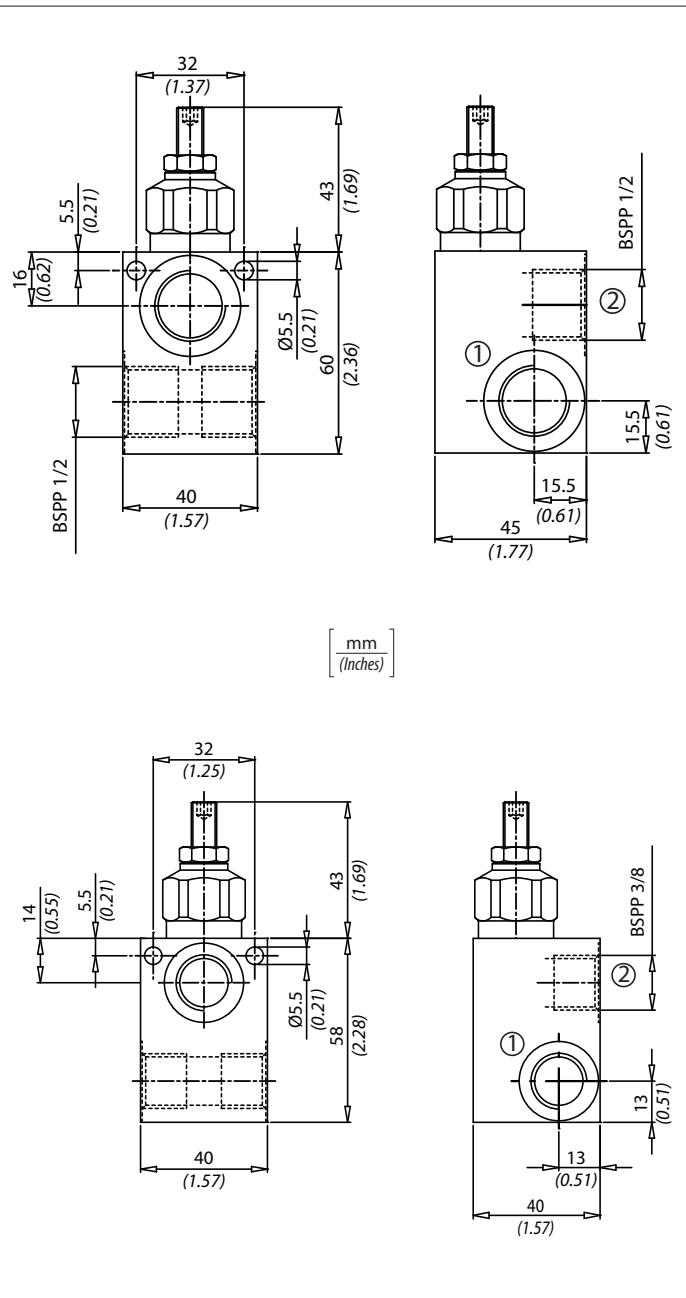
## Codice ordinazione / Ordering code

**VMDR40 - X - Y - K**

X	Dimensione / Size	
380	BSPP 3/8	
120	BSPP 1/2	
Y	Regolazione / Setting	Codice / Code 81300109
C		
K	Molla / Spring	Incremento pressione al giro Press. increase
1	10/90 bar / (145/600 PSI) max	12 bar/al giro / (175 PSI/turn)
2	20/210 bar / (290/3000 PSI) max	30 bar/al giro / (435 PSI/turn)
3	70/350 bar / (1000/5000 PSI) max	65 bar/al giro / (940 PSI/turn)

## Caratteristiche tecniche / Technical performances

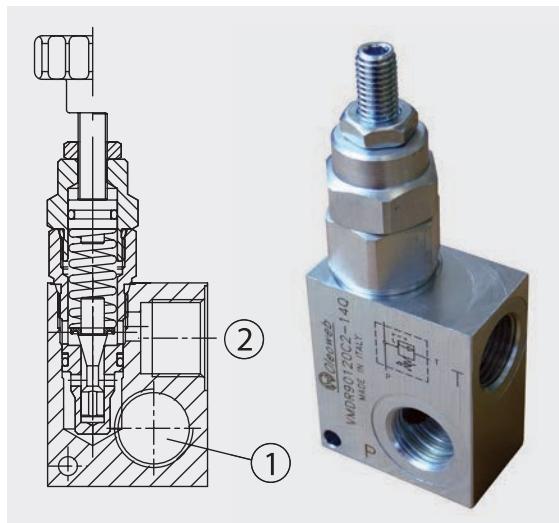
Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight / lb
VMDR40380	40 (10)	300 (4350)	0,65 (1.43)
VMDR40120			0,68 (1.50)



# VMDR90

Valvole di massima pressione in linea

*Direct acting relief valves*



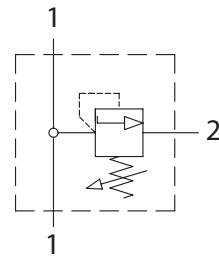
## Dati tecnici

### Technical data

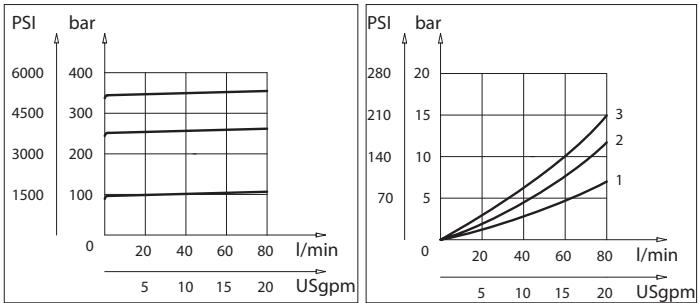
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico / Pressure drops



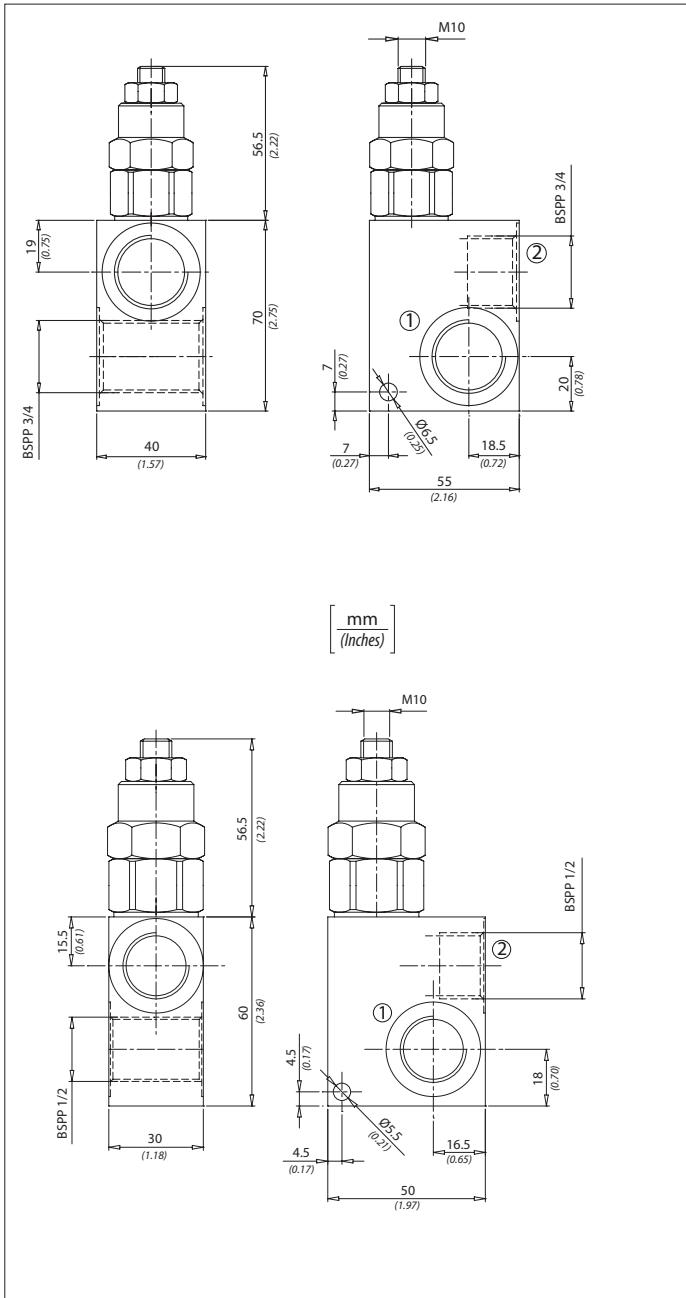
## Codice ordinazione / Ordering code

**VMDR90 - X - Y - K**

X	Dimensione / Size	
120	BSPP 1/2	
340	BSPP 3/4	
K	Molla / Spring	Incremento pressione al giro Press. increase
1	10/100 bar / (145/1450 PSI) max	23 bar/al giro / (333 PSI/turn)
2	20/250 bar / (290/3600 PSI) max	40 bar/al giro / (580 PSI/turn)
3	50/350 bar / (725/5000 PSI) max	90 bar/al giro / (1300 PSI/turn)
Y	Regolazione / Setting	Codice / Code 81300023
C		
V		

## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight / lb
VMDR90120	80 (20)	350 (5000)	0,67 (1.5)
VMDR90340			1 (2.2)

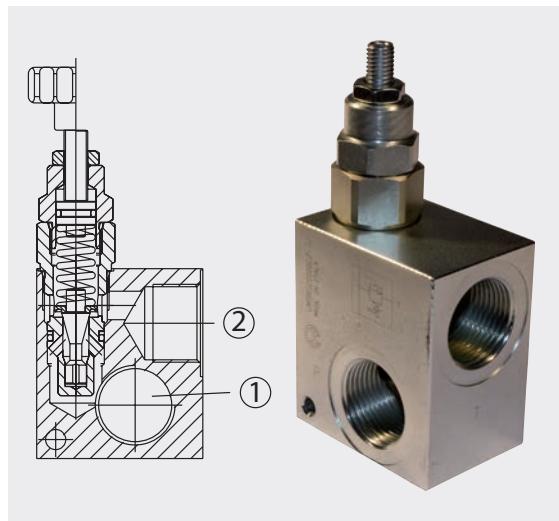




# VMDR120

Valvole di massima pressione in linea

*Direct acting relief valves*



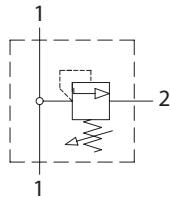
## Dati tecnici

### Technical data

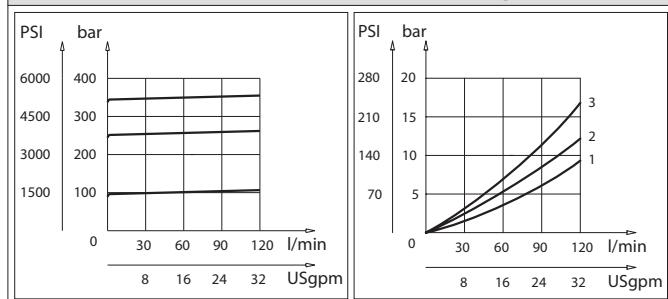
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico / Pressure drops



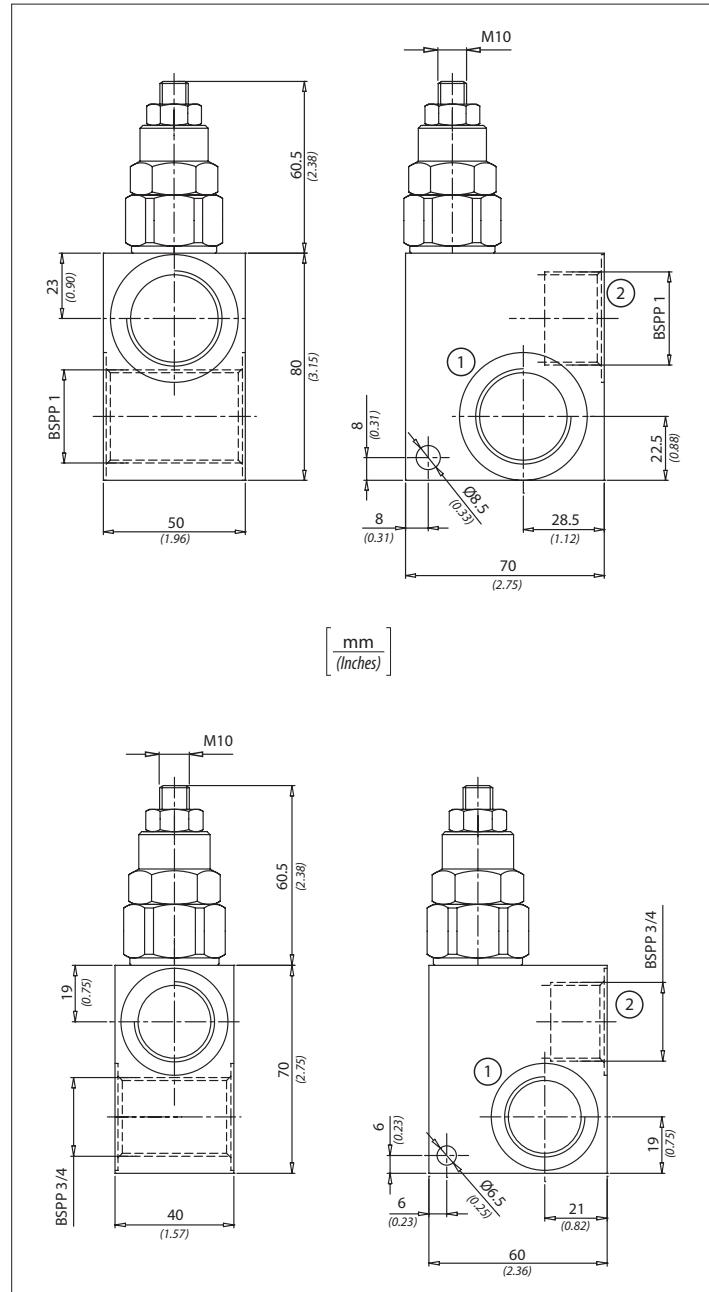
## Codice ordinazione / Ordering code

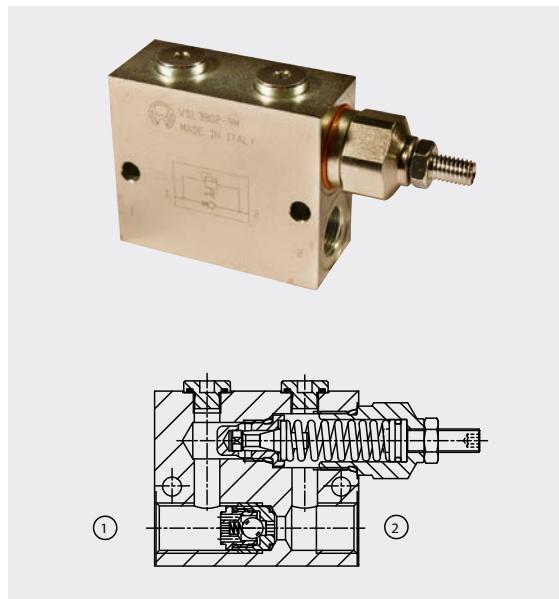
**VMDR120 - X - Y - K**

<b>X</b>	Dimensione / Size	
340	BSPP 3/4	
100	BSPP 1	
<b>K</b>	Molla / Spring	Incremento pressione al giro Press. increase
1	10/100 bar / (145/1450 PSI) max	20 bar/al giro / (290 PSI/turn)
2	20/250 bar / (290/3600 PSI) max	45 bar/al giro / (652 PSI/turn)
3	40/350 bar / (580/5000 PSI) max	50 bar/al giro / (725 PSI/turn)

<b>Y</b>	Regolazione / Setting	Codice / Code 81300023
C		

Caratteristiche tecniche / Technical performances	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight / lb
VMDR120340	120 (30)	350 (5000)	1,6 (3.52)
VMDR120100			1,72 (3.8)





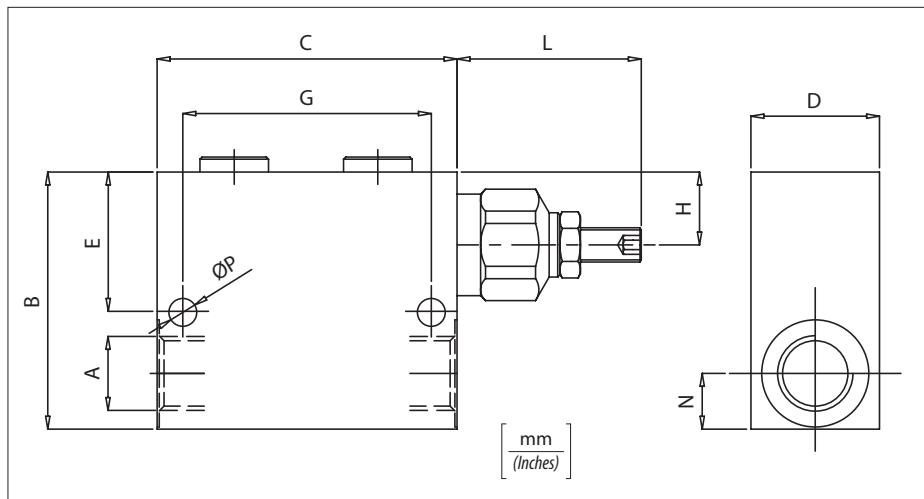
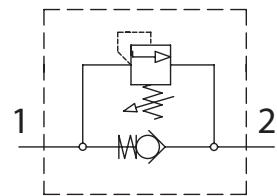
### Dati tecnici

#### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524	
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura del fluido Fluid temperature	-20°C -4°F	+80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F	+50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



### Codice ordinazione / Ordering code

**VSL - X - K**

#### Dimensione / Size

**X**

140 BSPP 1/4

380 BSPP 3/8

120 BSPP 1/2

**K**

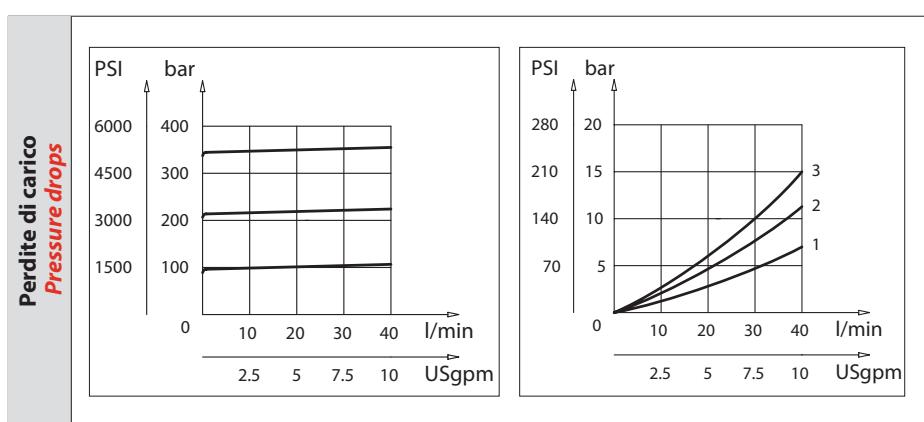
Molla / Spring

Incremento pressione al giro  
Press.increase

1 10/90 bar (145/600 PSI) max 12 bar/al giro (175 PSI/turn)

2 20/210 bar (290/3000 PSI) max 30 bar/al giro (435 PSI/turn)

3 70/350 bar (1000/5000 PSI) max 65 bar/al giro (940 PSI/turn)



### Caratteristiche tecniche / Technical performances

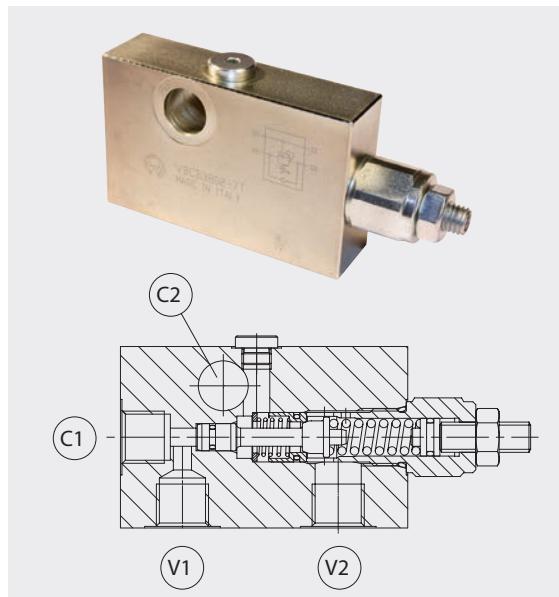
Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	G	L	N	H	P	Peso approssimativo Approx weight Kg/lb
<b>VSL140</b>	<b>BSPP 1/4</b>	<b>20 (5)</b>		<b>60 (2.36)</b>	<b>25 (1.18)</b>	<b>35.5 (1.39)</b>	<b>49 (1.93)</b>	<b>53 (2.08)</b>	<b>12 (0.47)</b>	<b>20 (0.78)</b>	<b>5.5 (0.22)</b>		<b>0,89 (2)</b>
<b>VSL380</b>	<b>BSPP 3/8</b>		<b>350 (5000)</b>	<b>70 (2.76)</b>	<b>30 (1.18)</b>	<b>32.5 (1.28)</b>		<b>58 (2.28)</b>	<b>43 (1.69)</b>	<b>13 (0.51)</b>	<b>17 (0.67)</b>	<b>6.5 (0.26)</b>	
<b>VSL120</b>	<b>BSPP 1/2</b>	<b>40 (10)</b>		<b>70 (2.76)</b>		<b>35 (1.38)</b>			<b>17 (0.67)</b>				<b>1,2 (2.70)</b>



# VBCB

Valvole overcenter singola a bullone per centro aperto

Bolt-fitting single counterbalance valves for open center



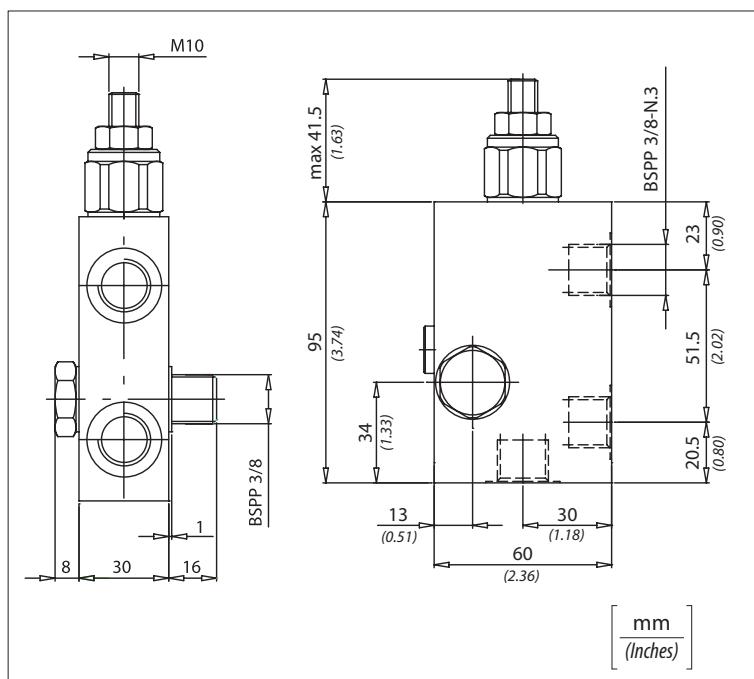
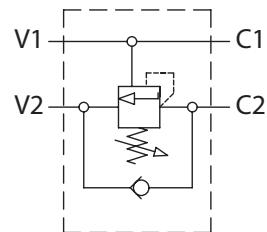
#### Dati tecnici

#### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)

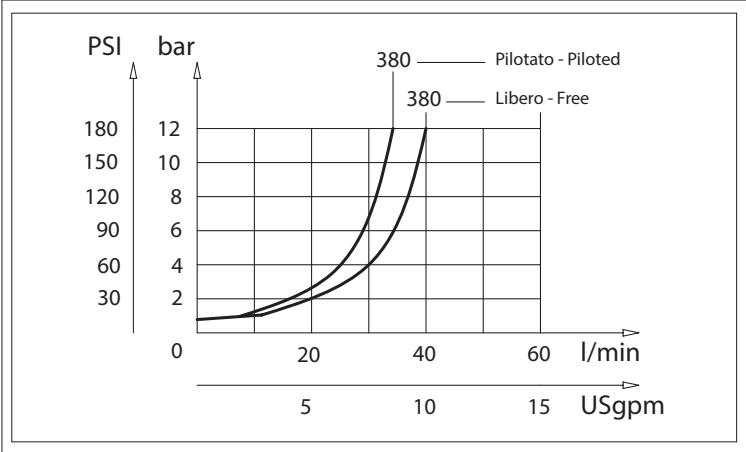


#### Codice ordinazione / Ordering code

**VBCB - X - Y - K - I**

X	Dimensione / Size		
380	BSPP 3/8		
Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)
1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)
2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)
K	Materiale / Material		
S	Corpo in acciaio (Steel body)		
I	Rapporto di pilotaggio / Pilot ratio		
/	1:4.25 Standard		
8	1:8		

#### Perdite di carico Pressure drops

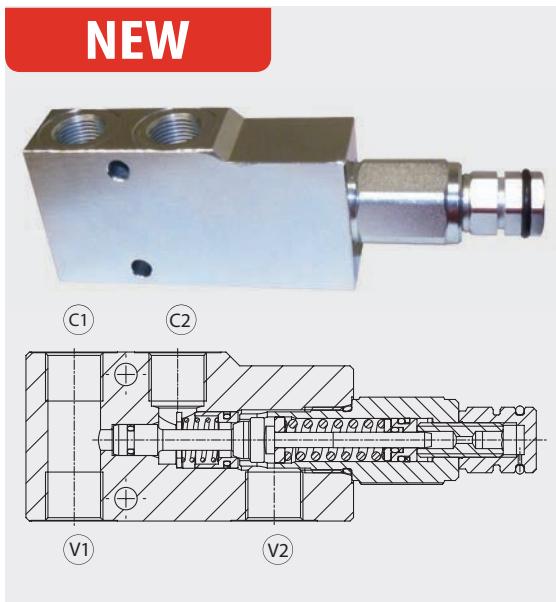


#### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Kg Approx weight/lb
VBCB380	BSPP 3/8	40 (10.5)	350 (5000)	1,1 (2.5)



**NEW**



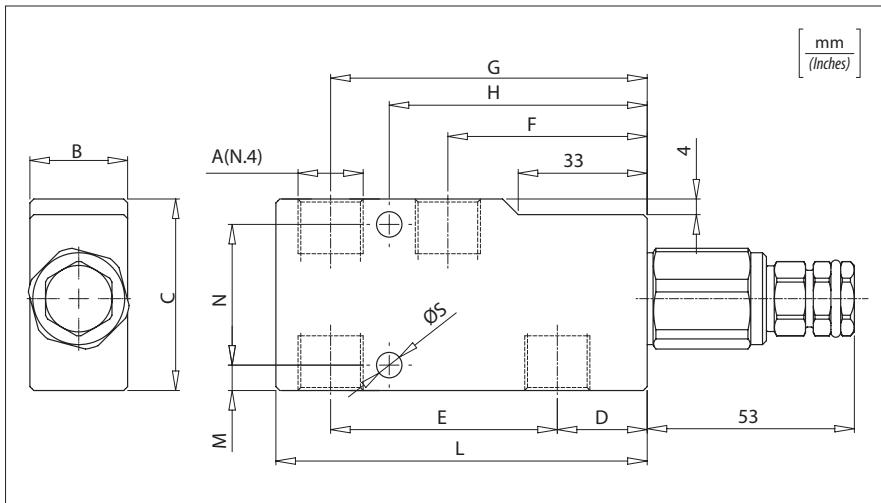
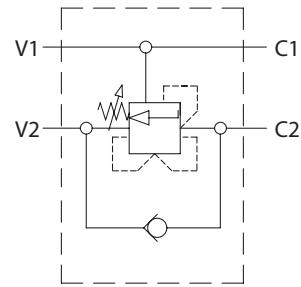
#### Dati tecnici

#### Technical data

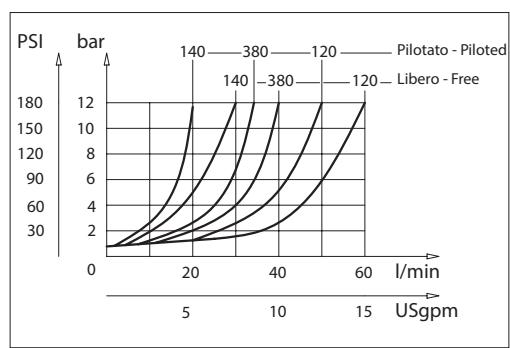
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



#### Perdite di carico Pressure drops



#### Codice ordinazione / Ordering code

**VCCL - X - Y - K - I**

X	Dimensione Size	Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)	K	Materiale Material	I	Rapporto di pilotaggio Pilot ratio
140	BSPP 1/4	1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)			/	1:4.25 Standard
380	BSPP 3/8					S	Corpo in acciaio (Steel body)		
120	BSPP 1/2	2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)			8	1:8

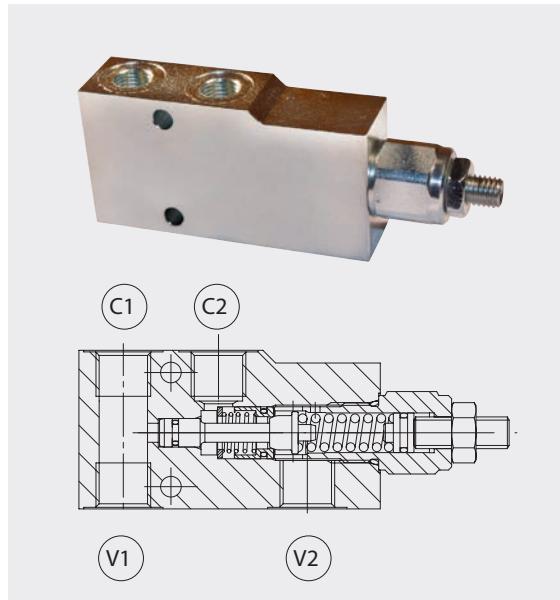
#### Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	N	S	Peso approssimativo Approx weight Kg / lb
VCCL140	BSPP 1/4	30 (8)			50 (1.97)	23 (0.90)	58 (2.28)	51 (2)	81 (3.19)	66 (2.60)	95 (3.74)	7 (0.27)	36 (1.41)		0,85 (1.90)
VCCL380	BSPP 3/8	40 (10.5)	350 (5000)	30 (1.18)										6,5 (0.26)	
VCCL120	BSPP 1/2	60 (16)			60 (2.36)	21 (0.83)	63 (2.48)		84 (3.30)	67,5 (2.66)	100 (3.94)	10 (0.39)	40 (1.57)		1,25 (2.75)



# VBCL

Valvole overcenter singole per centro aperto  
Single counterbalance valves for open center

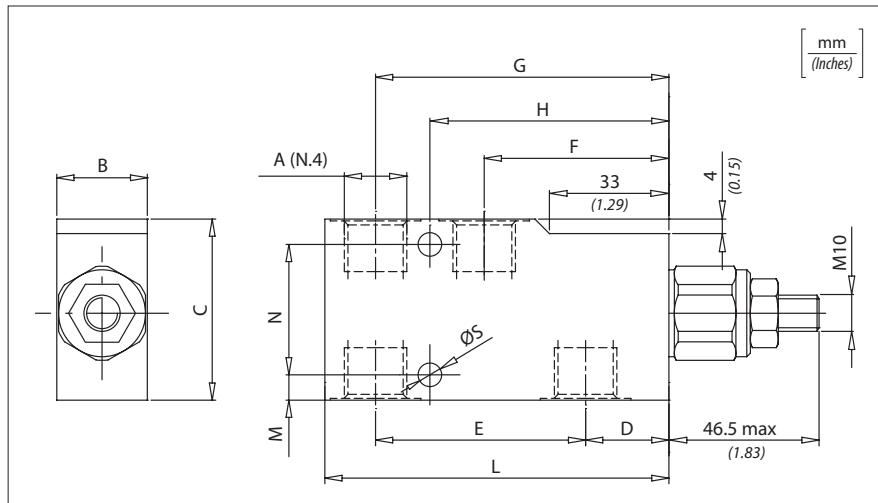
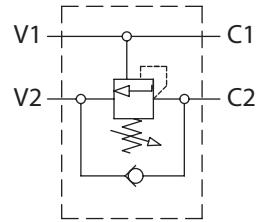


## Dati tecnici Technical data

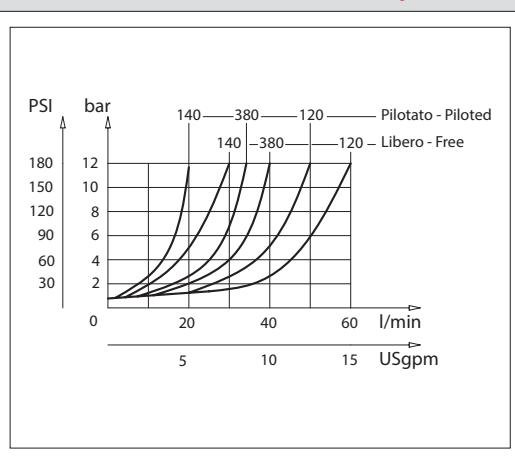
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

**VBCL - X - Y - K - I**

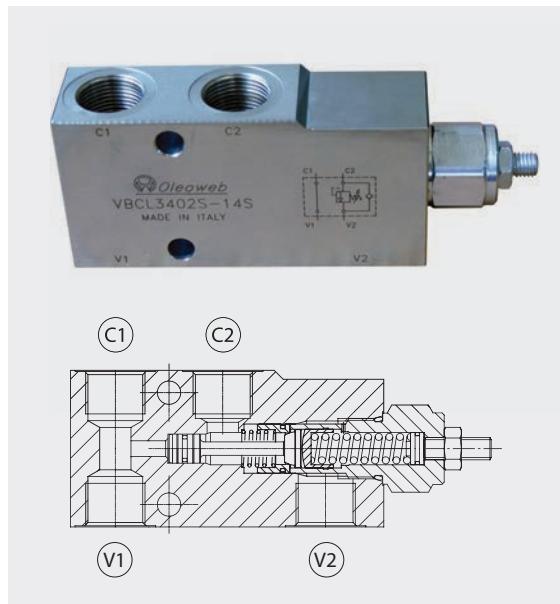
X	Dimensione Size	Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (0-5 l/min)	K	Materiale Material	I	Rapporto di pilotaggio Pilot ratio
140	BSPP 1/4	1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)			/	1:4.25 Standard
380	BSPP 3/8					S	Corpo in acciaio (Steel body)		
120	BSPP 1/2	2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)			8	1:8

## Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	N	S	Peso approssimativo Approx weight Kg / lb
VBCL140	BSPP 1/4	30 (8)			50 (1.97)	23 (0.90)	58 (2.28)	51 (2)	81 (3.19)	66 (2.60)	95 (3.74)	7 (0.27)	36 (1.41)		0,85 (1.90)
VBCL380	BSPP 3/8	40 (10.5)	350 (5000)	30 (1.18)										6,5 (0.26)	
VBCL120	BSPP 1/2	60 (16)			60 (2.36)	21 (0.83)	63 (2.48)		84 (3.30)	67,5 (2.66)	100 (3.94)	10 (0.39)	40 (1.57)		1,25 (2.75)

# VBC

Valvole overcenter singole per centro aperto  
Single counterbalance valves for open center

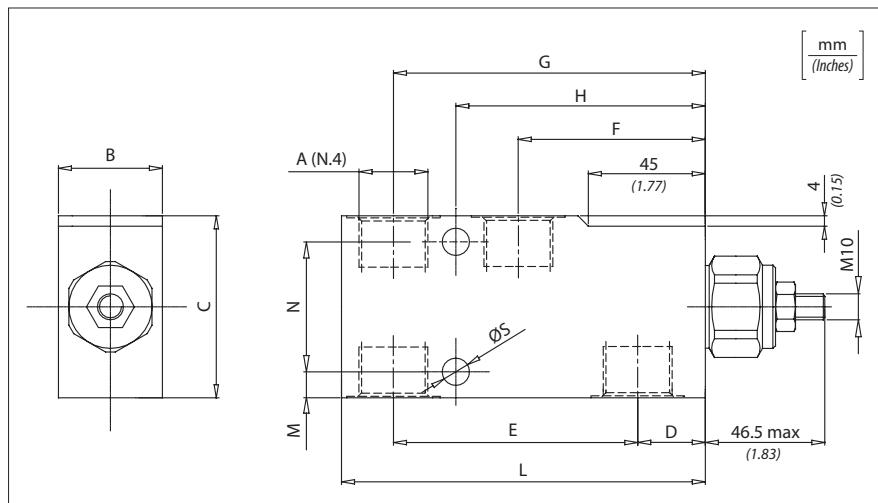
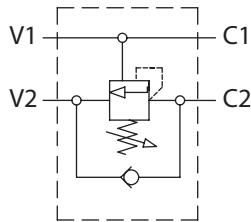


## Dati tecnici Technical data

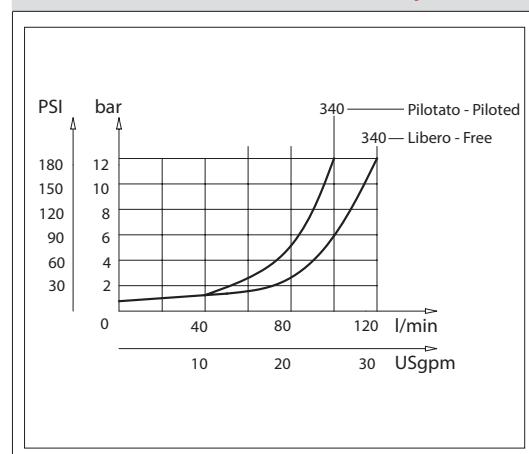
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

### VBC - X - Y - K - I

X	Dimensione Size	Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)	K	Materiale Material	Rapporto di pilotaggio Pilot ratio
340	BSPP 3/4	2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)	S	Corpo in acciaio (Steel body)	1:6.2

## Caratteristiche tecniche Technical performances

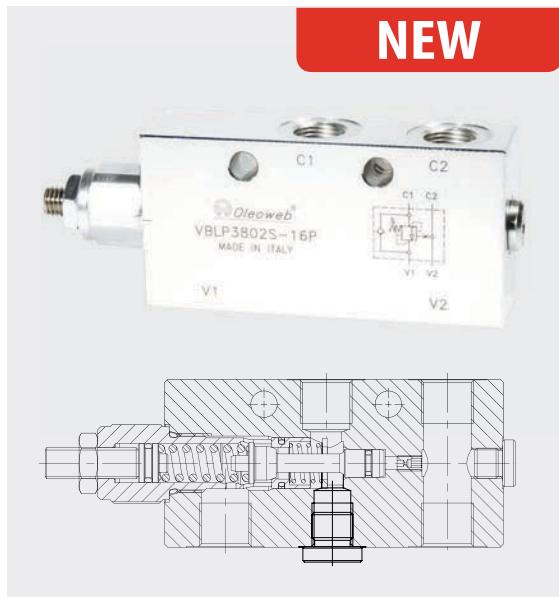
Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	N	S	Peso approssimativo Approx weight Kg / lb
VBC340	BSPP 3/4	120 (31)	350 (5000)	40 (1.57)	70 (2.75)	20 (0.78)	94 (3.7)	72 (2.83)	120 (4.72)	96 (3.78)	140 (5.51)	50 (1.96)	10 (0.39)	10,5 (0.41)	3 (6.6)



# VBLP

Valvole overcenter singole per centro aperto  
Single counterbalance valves for open center

**NEW**



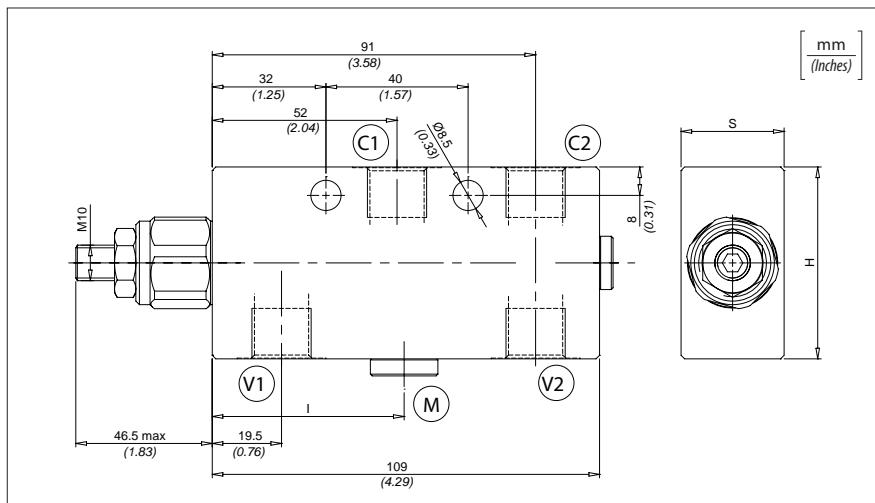
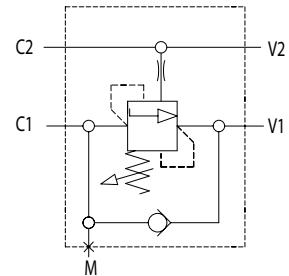
## Dati tecnici

### Technical data

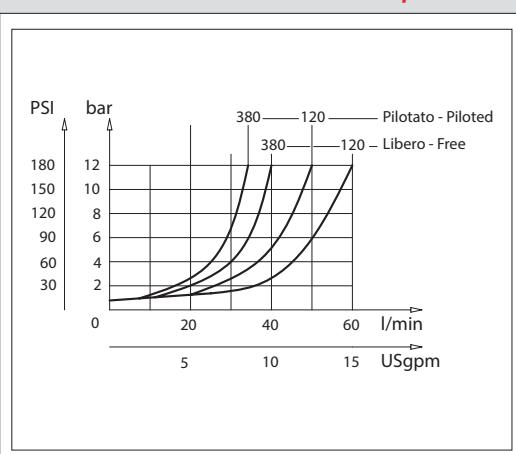
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

**VBLP - X - Y - K - I**

X	Dimensione Size	Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)	K	Materiale Material	I	Rapporto di pilotaggio Pilot ratio
380	BSPP 3/8	1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)	S	Corpo in acciaio (Steel body)	/	1:4.25 Standard
120	BSPP 1/2	2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)			8	1:8

## Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	H	I	M	S	Peso approssimativo Approx weight Kg / lb
VBLP380	BSPP 3/8	40 (10.5)	350 (5000)	54 (2.12)	/	/	29 (1.14)	1,21 (2.63)
VBLP120	BSPP 1/2	60 (16)		64 (2.52)	54 (2.12)	BSPP 1/4	34 (1.34)	1,59 (3.46)

# VBLF

Valvole overcenter singole per centro aperto - flangiate  
Single counterbalance valves for open center - flanged version



**NEW**



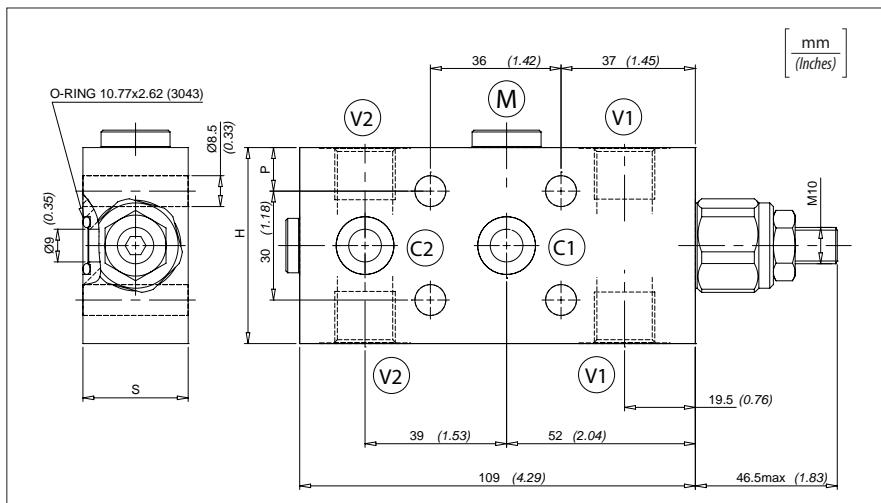
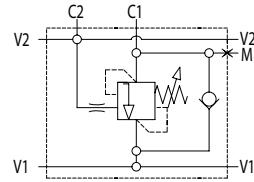
## Dati tecnici

### Technical data

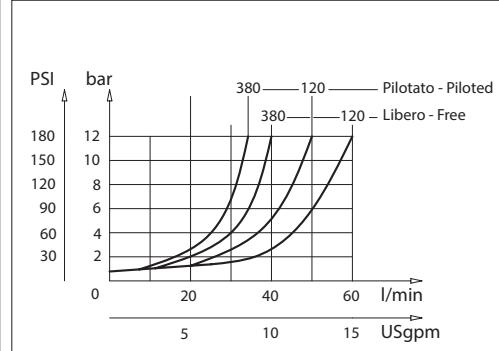
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

**VBLF - X - Y - K - I**

X	Dimensione Size	Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)	K	Materiale Material	I	Rapporto di pilotaggio Pilot ratio
380	BSPP 3/8	1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)	S	Corpo in acciaio (Steel body)	/	1:4.25 Standard
120	BSPP 1/2	2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)	8			1:8

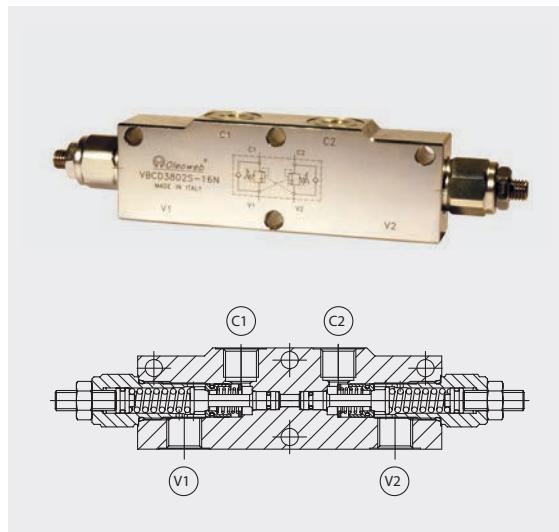
## Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	H	M	P	S	Peso approssimativo Approx weight Kg / lb
VBLF380	BSPP 3/8	40 (10.5)	350 (5000)	54 (2.12)	/	12 (0.47)	29 (1.14)	1,17 (2.55)
VBLF120	BSPP 1/2	60 (16)		64 (2.52)	BSPP1/4	17 (0.67)	34 (1.34)	1,55 (3.37)



# VBCD

Valvole overcenter doppie per centro aperto  
Dual counterbalance valves for open center

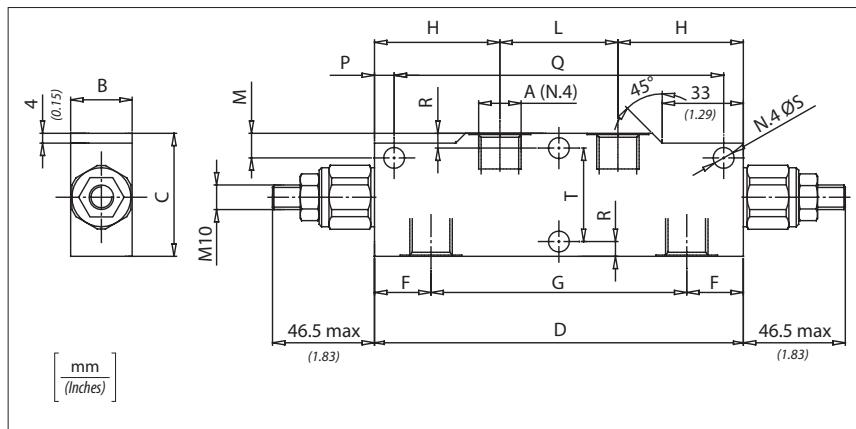
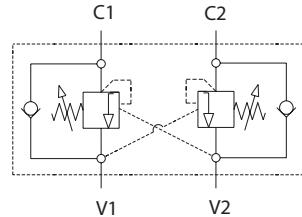


## Dati tecnici Technical data

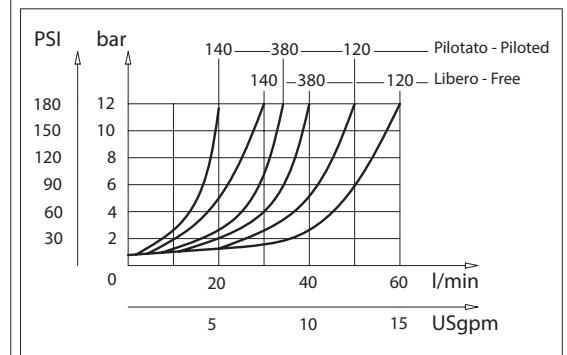
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Perdite di carico Pressure drops



## Codice ordinazione / Ordering code

### VBCD - X - Y - K - I

X	Dimensione Size	Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)	K	Materiali Material	I	Rapporto di pilotaggio Pilot ratio
140	BSPP 1/4	1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)			/	1:4.25 Standard
380	BSPP 3/8	2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)	S	Corpo in acciaio (Steel body)	8	1:8
120	BSPP 1/2								

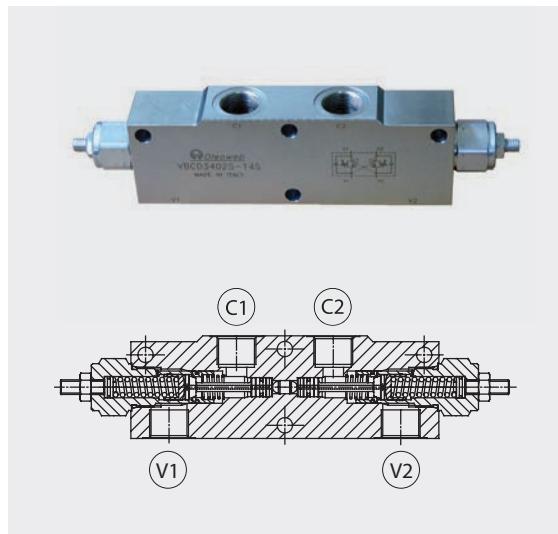
## Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	Peso approssimativo Approx weight Kg / lb
VBCD140	BSPP 1/4	30 (8)			50 (1.97)		23 (0.90)	104 (4.09)		10 (0.32)	8 (0.31)	134 (5.27)	6 (0.23)	8,5 (0.33)	38 (1.49)	1,38 (3)	
VBCD380	BSPP 3/8	40 (10.5)		350 (5000)	30 (1.18)	150 (5.90)	51 (2)	48 (1.89)		12 (0.47)						1,35 (3)	
VBCD120	BSPP 1/2	60 (16)				60 (2.36)	21 (0.83)	108 (4.25)							43 (1.69)	1,85 (4)	

# VBCD

Valvole overcenter doppie per centro aperto

Dual counterbalance valves for open center

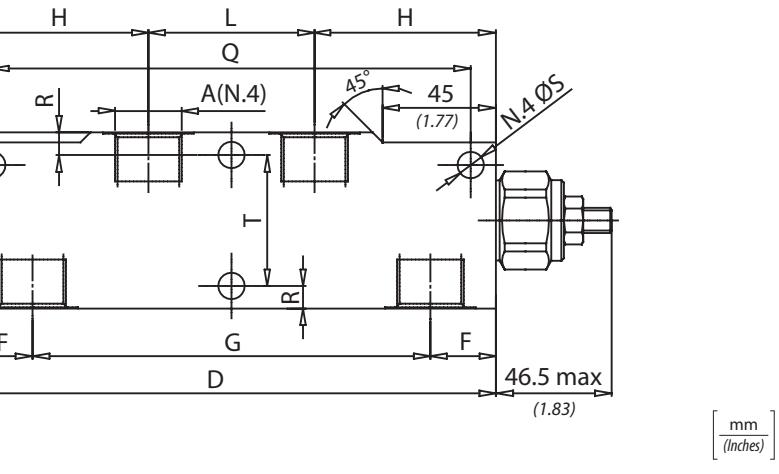
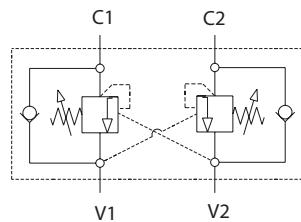


## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)

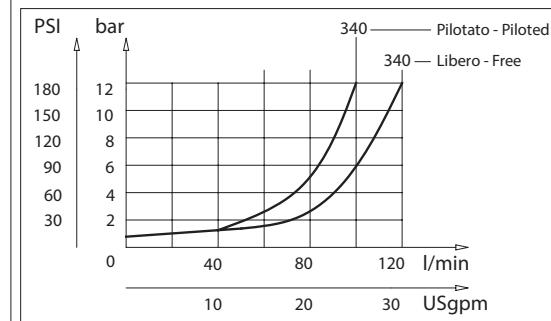


## Codice ordinazione Ordering code

**VBCD - X - Y - K**

X	Dimensione Size	Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)	K	Materiale Material
340	BSPP 3/4	2	60/350 bar (850/3500 PSI)	130 bar/al giro (1800 PSI/turn)	350 bar (5000 PSI)	S	Corpo in acciaio (Steel body)

## Perdite di carico Pressure drops



## Caratteristiche tecniche Technical performances

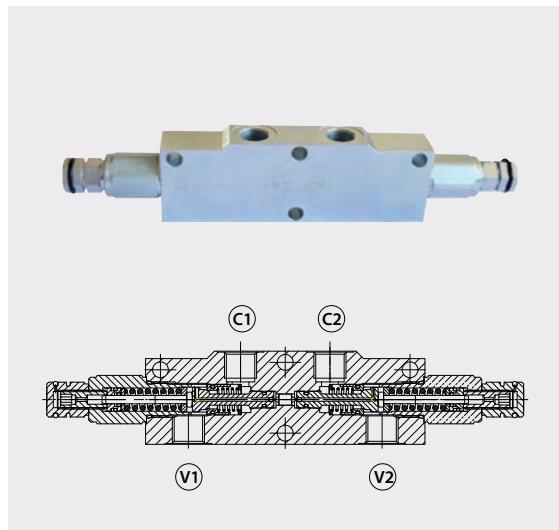
Codice Code	A	Portata max Max flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	Peso approssimativo Approx weight Kg / lb	Rapporto di pilotaggio Pilot ratio
VBCD340	BSPP 3/4	120 (31)	350 (5000)	40 (1.57)	70 (2.75)	210 (8.26)	26 (1.02)	158 (6.22)	72 (2.83)	66 (2.6)	13 (0.51)	10 (0.39)	190 (7.48)	9 (0.35)	10,5 (0.41)	52 (2.04)	4,5 (10)	1:6.2



# VBCC

Valvole overcenter doppie per centro chiuso

Dual counterbalance valves for closed center

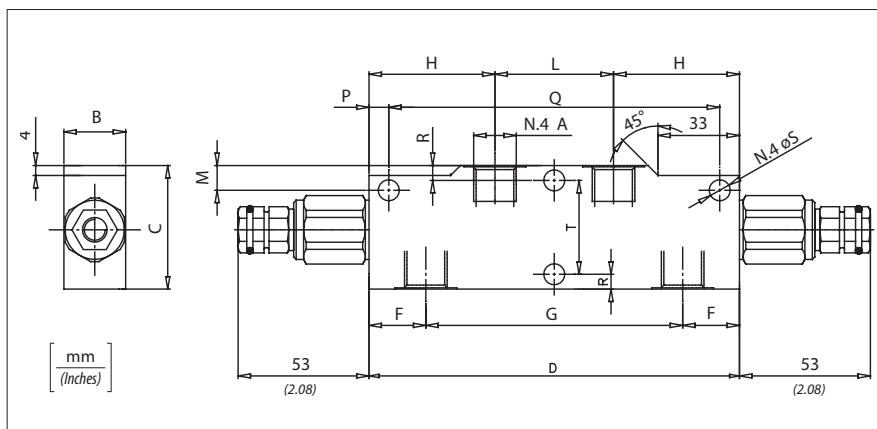
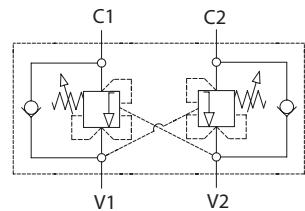


### Dati tecnici Technical data

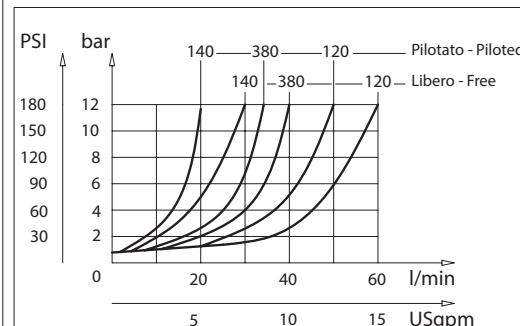
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524	
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura del fluido Fluid temperature	-20°C -4°F	+80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F	+50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Perdite di carico Pressure drops



### Codice ordinazione / Ordering code

**VBCC - X - Y - K - I**

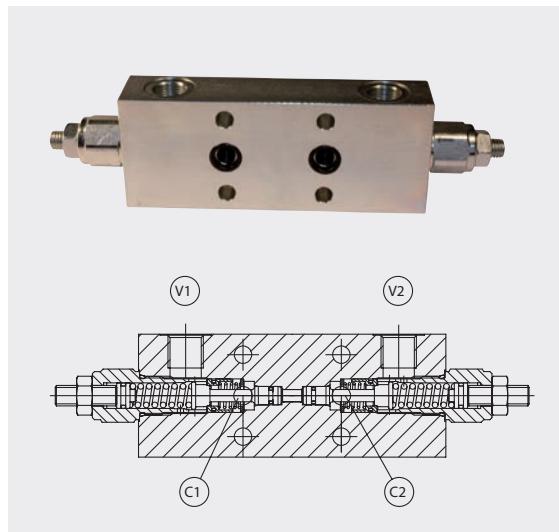
X	Dimensione Size	Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)	K	Materiali Material	I	Rapporto di pilotaggio Pilot ratio
140	BSPP 1/4	1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)			/	1:4.25 Standard
380	BSPP 3/8	2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)	S	Corpo in acciaio (Steel body)	8	1:8
120	BSPP 1/2								

### Caratteristiche tecniche Technical performances

Codice Code	A	Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	Peso approssimativo Approx weight Kg/lb
VBCC140	BSPP 1/4	30 (8)			50 (1.97)	150 (5.90)	23 (0.90)	104 (4.09)	51 (2)	48 (1.89)	10 (0.39)	8 (0.31)	134 (5.27)	6 (0.23)	8,5 (0.33)	38 (1.49)	1,5 (3,3)
VBCC380	BSPP 3/8	40 (10.5)		350 (5000)	30 (1.18)	60 (2.36)	21 (0.83)	108 (4.25)			12 (0.47)						
VBCC120	BSPP 1/2	60 (16)													43 (1.69)	2 (4,4)	

# VBCF

Valvole overcenter doppie per centro aperto  
Dual counterbalance valves for open center



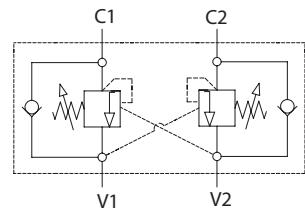
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



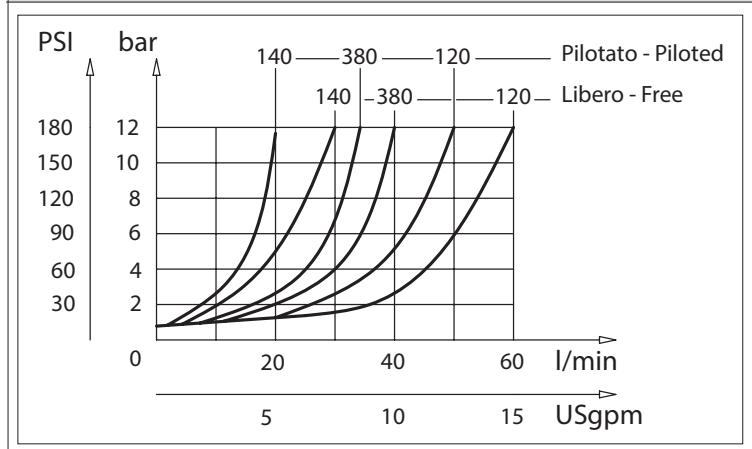
## Codice ordinazione / Ordering code

**VBCF - X - Y - K - I**

X	Dimensione / Size		
140	BSPP 1/4		
380	BSPP 3/8		
120	BSPP1/2		
Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)
1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)
2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)

K	Materiale / Material		
S	Corpo in acciaio (Steel body)		
I	Rapporto di pilotaggio / Pilot ratio		
/	1:4.25 Standard		
8	1:8		

## Perdite di carico Pressure drops



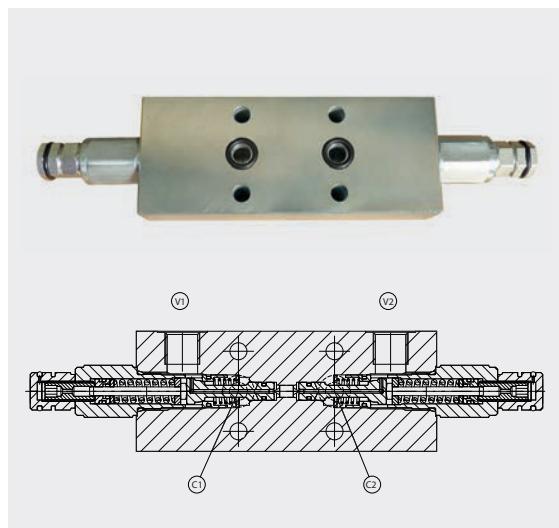
## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo / Kg Approx weight / lb
VBCF140	BSPP 1/4	40 (10.5)		
VBCF380	BSPP 3/8		350 (5000)	
VBCF120	BSPP 1/2	60 (16)		2 (4.4)



# VBCM

Valvole overcenter doppie per centro chiuso  
Dual counterbalance valves for closed center



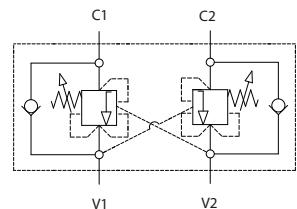
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524	
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura del fluido Fluid temperature	-20°C -4°F	+80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F	+50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Codice ordinazione / Ordering code

**VBCM - X - Y - K - I**

X	Dimensione / Size		
140	BSPP 1/4		
380	BSPP 3/8		
120	BSPP1/2		
Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)
1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)
2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)

## K

### Materiale / Material

S Corpo in acciaio (Steel body)

## I

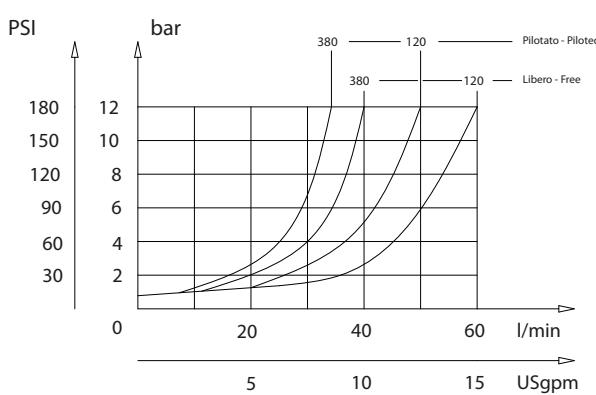
### Rapporto di pilotaggio / Pilot ratio

/ 1:4.25 Standard

8

1:8

## Perdite di carico Pressure drops

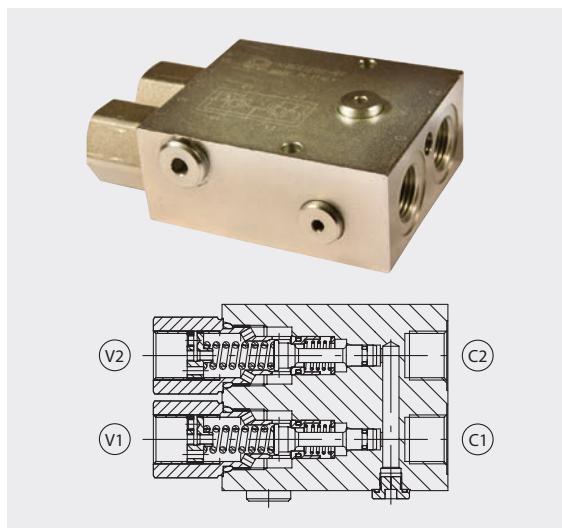


## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo / Kg Approx weight / lb
VBCM140	BSPP 1/4	40 (10.5)	350 (5000)	2 (4.4)
VBCM380	BSPP 3/8			
VBCM120	BSPP 1/2	60 (16)		

# VBCE

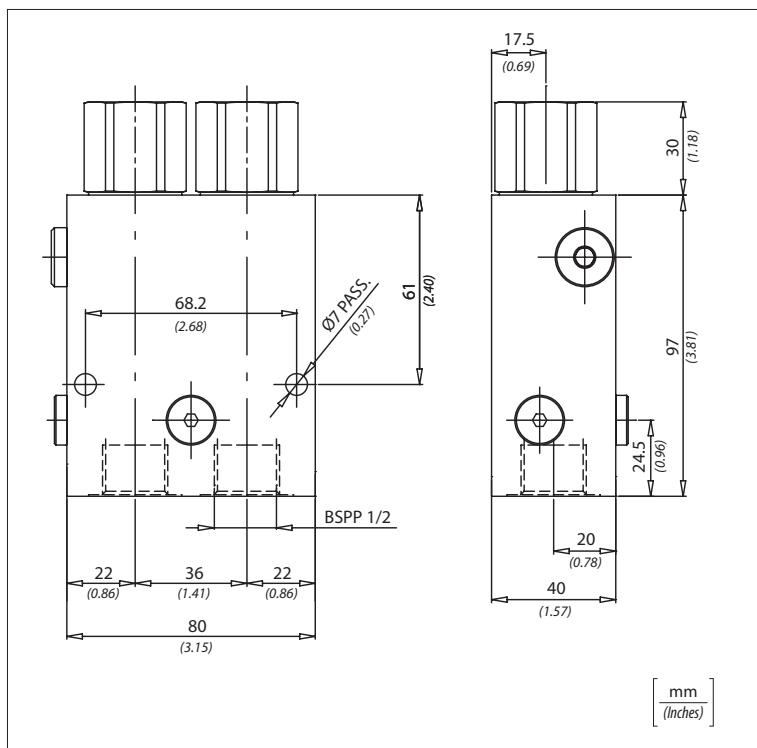
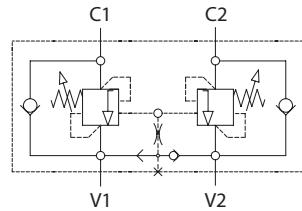
Valvole overcenter doppio effetto  
Dual counterbalance valves for open center



## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	



## Codice ordinazione / Ordering code

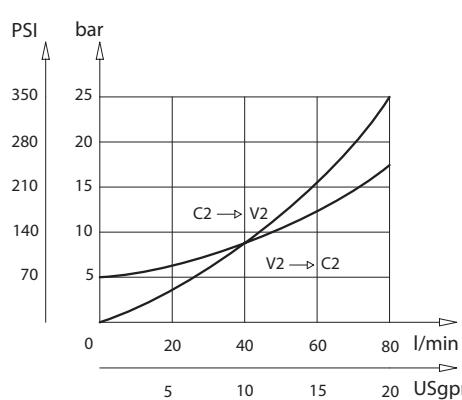
**VBCE - X - Y - K - I**

X	Dimensione / Size		
120	BSPP1/2		
Y	Molla Spring	Incremento pressione al giro Press. increase	Taratura standard Std. setting (Q=5 l/min)
1	30/210 bar (400/3000 PSI)	70 bar/al giro (1000 PSI/turn)	200 bar (2900 PSI)
2	60/350 bar (850/3500 PSI)	120 bar/al giro (1700 PSI/turn)	350 bar (5000 PSI)
K	Materiale / Material		
S	Corpo in acciaio (Steel body)		
I	Rapporto di pilotaggio / Pilot ratio		
/	1:4.25 Standard		

8

1:8

## Perdite di carico Pressure drops



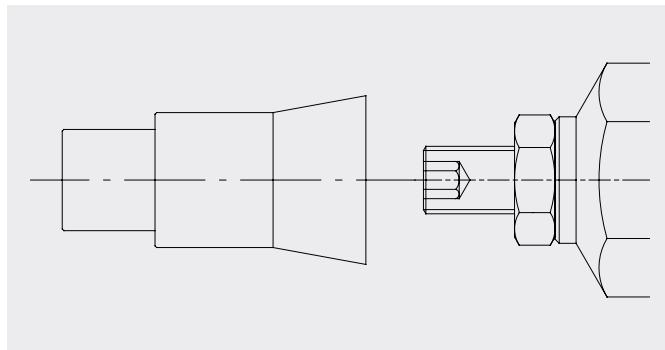
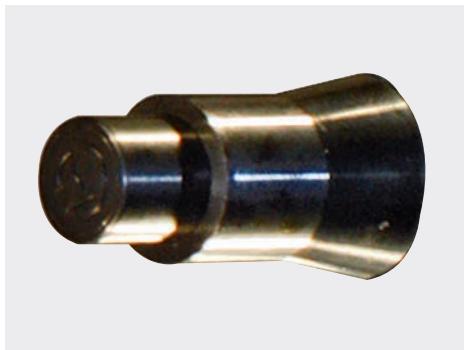
## Caratteristiche tecniche

### Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo / Kg Approx weight / lb
VBCE120	60 (15)	350 (5000)	2,3 (5)



# Tappo di sicurezza / Safety Cup



Codice ordinazione  
*Ordering code*

M6	81300119
M8	81300037
M10	81300095
M12	81300120
M16	81300121



*Valvole a cartuccia*  
*Cartridge valves*



**HYDRAULIC VALVES AND COMPONENTS**



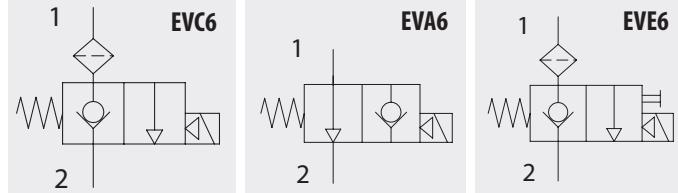
# EV6 Valvole a comando elettrico 2 vie/2 posizioni

## 2 ways/2 positions electric valves

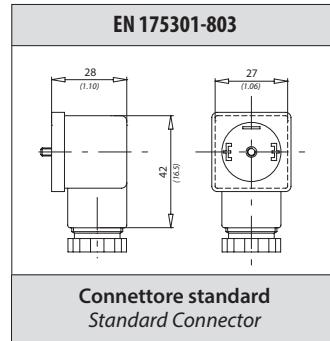


Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F
Trafilamento Leakage	0-0,25 cm <sup>3</sup> /min (5 gocce al min) 0-0,015 in <sup>3</sup> /min (5 drops/min)

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)

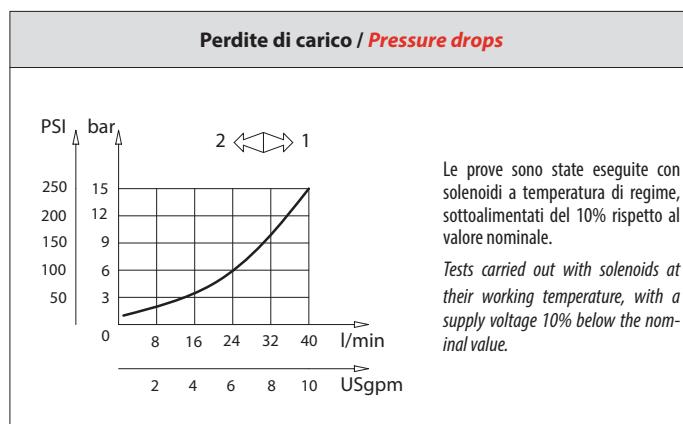


Connettore con raddrizzatore  
Connector with rectifier



Connettore standard  
Standard Connector

Portata nominale contatti Nominal current	<b>10 A</b>	Tensione nominale Nominal voltage	<b>AC - Max 250 V DC - Max 300 V</b>
Portata max contatti Max operating current	<b>16 A</b>	Portata nominale contatti Nominal current	<b>10 A</b>
Resistenza contatti Contact resistance	<b>≤ 4m Ohm</b>	Portata max contatti Max operating current	<b>16A</b>
Sezione max conduttori Max conductors cross-section	<b>1,5 mm<sup>2</sup></b>	Resistenza contatti Contact resistance	<b>≤ 4m Ohm</b>
Portacontatti, dado Contact holder	<b>PA</b>	Sezione max conduttori Max conductors cross-section	<b>1,5 mm<sup>2</sup></b>
Tipo di serracavo Gland size options	<b>Pg09</b>	Portacontatti, dado Contact holder	<b>PA (+G)</b>
Diametro cavo Cable diameter	<b>6-8 mm</b>	Tipo di serracavo Gland size options	<b>Pg11</b>
Grado di protezione Protection class	<b>IP 65 EN 60529</b>	Diametro cavo Cable diameter	<b>6-8 mm</b>
Classe di isolamento Insulation class	<b>VDE 0110-1/89</b>	Grado di protezione Protection class	<b>IP 65 EN 60529</b>
Guarnizione Sealing material	<b>NBR</b>	Classe di isolamento Insulation class	<b>VDE 0110-1/89</b>
Temperatura di esercizio Operating temperature	<b>-40°C +90°C</b>	Guarnizione Sealing material	<b>NBR</b>
		Temperatura di esercizio Operating temperature	<b>-40°C +90°C</b>



Le prove sono state eseguite con solenoidi a temperatura di regime, sottoalimentati del 10% rispetto al valore nominale.

Tests carried out with solenoids at their working temperature, with a supply voltage 10% below the nominal value.

X	Schema / Scheme	Y	Voltaggio Voltage
C6	Normalmente chiusa Normally closed	012DC	12 V (DC)
		024DC	24 V (DC)
E6	Normalmente chiusa + emerg. Normally closed + emerg.	11050	110 V (50 Hz.)
		22050	220 V (50 Hz.)
A6	Normalmente aperta Normally open	110RAC	110 V (RAC)
		220RAC	220 V (RAC)

### Caratteristiche tecniche / Technical performances

Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	Protezione Protection	Tolleranza di alimentazione Feeding tolerance	Inserimento Energizing time	Classe di isolamento Insulation class	Potenza assorbita in C.A. Absorbed power in A.C.	Potenza assorbita allo spunto Absorbed power at pickup	Potenza assorbita in C.C. Absorbed power in C.C.	Peso approssimativo Approx weight	Coppia di serraggio Tightening torque	Cavità Cavity
22 l/min 6 Usigpm	210 bar 3000 PSI	IP65	+ / - 10%	ED 100%	H	20 VA	28 VA	18 W	0,11 Kg 0.24 lb	25-30 Nm 19-22 lbft	SAE 8/2

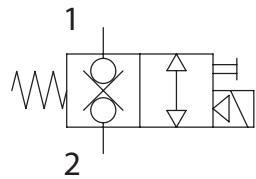
# EDT6

Valvole a comando elettrico 2 vie/2 posizioni  
2 ways/2 positions electric valves

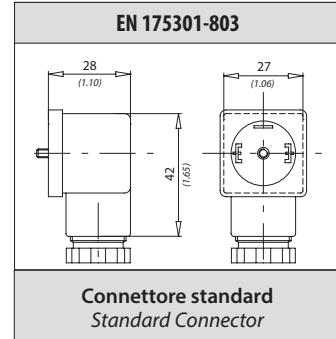


Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F
Trafilamento Leakage	0-0,25 cm <sup>3</sup> /min (5 gocce al min) 0-0,015 in <sup>3</sup> /min (5 drops/min)

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



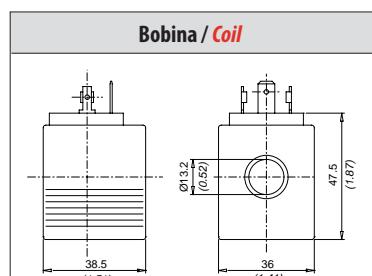
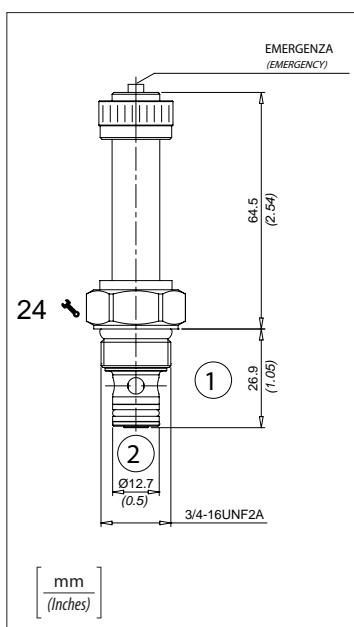
Connettore con raddrizzatore  
Connector with rectifier



Connettore standard  
Standard Connector

Portata nominale contatti Nominal current	<b>10 A</b>
Portata max contatti Max operating current	<b>16 A</b>
Resistenza contatti Contact resistance	<b>≤ 4m Ohm</b>
Sezione max conduttori Max conductors cross-section	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado Contact holder	<b>PA</b>
Tipo di serracavo Gland size options	<b>Pg09</b>
Diametro cavo Cable diameter	<b>6-8 mm</b>
Grado di protezione Protection class	<b>IP 65 EN 60529</b>
Classe di isolamento Insulation class	<b>VDE 0110-1/89</b>
Guarnizione Sealing material	<b>NBR</b>
Temperatura di esercizio Operating temperature	<b>-40°C +90°C</b>

Tensione nominale Nominal voltage	<b>AC - Max 250 V DC - Max 300 V</b>
Portata nominale contatti Nominal current	<b>10 A</b>
Portata max contatti Max operating current	<b>16A</b>
Resistenza contatti Contact resistance	<b>≤ 4m Ohm</b>
Sezione max conduttori Max conductors cross-section	<b>1,5 mm<sup>2</sup></b>
Protezione Housing	<b>PA (+G)</b>
Tipo di serracavo Gland size options	<b>Pg11</b>
Diametro cavo Cable diameter	<b>6-8 mm</b>
Grado di protezione Protection class	<b>IP 65 EN 60529</b>
Classe di isolamento Insulation class	<b>VDE 0110-1/89</b>
Guarnizione Sealing material	<b>NBR</b>
Temperatura di esercizio Operating temperature	<b>-40°C +90°C</b>



Peso approssimativo Approx weight	<b>0,22 Kg 0.4 lb</b>
--------------------------------------	---------------------------

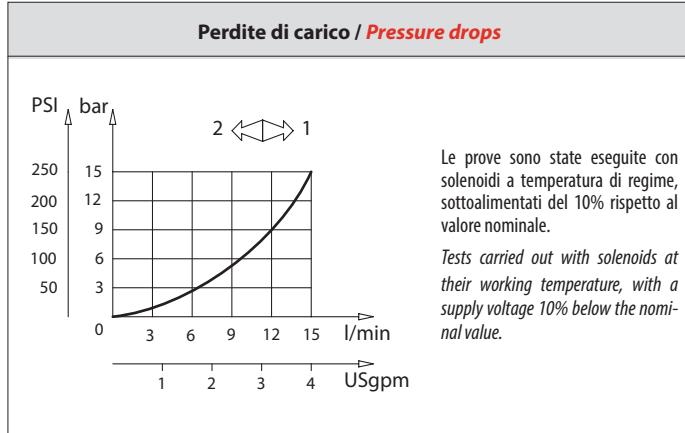
## Codice ordinazione / Ordering code

**EDT6 - Y - K - X - Z**

Y	Voltaggio Voltage	K	Dimensione Size	X	Schema Scheme
012DC	12V (DC)	12	Ø 12,7		
024DC	24V (DC)				
024RAC	24 V (RAC)	Z	Optional dado di chiusura	NC	Normalmente chiusa + emerg. Normally closed + emerg.
110RAC	110 V (RAC)				
220RAC	220 V (RAC)	D			

Le prove sono state eseguite con solenoidi a temperatura di regime, sottoalimentati del 10% rispetto al valore nominale.

Tests carried out with solenoids at their working temperature, with a supply voltage 10% below the nominal value.



## Caratteristiche tecniche / Technical performances

Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	Protezione Protection	Tolleranza di alimentazione Feeding tolerance	Inserimento Energizing time	Classe di isolamento Insulation class	Potenza assorbita in C.A. Absorbed power in A.C.	Potenza assorbita allo spunto Absorbed power at pickup	Potenza assorbita in D.C. Absorbed power in D.C.	Peso approssimativo Approx weight	Coppia di serraggio Tightening torque	Cavità Cavity
22 l/min 6 Usgpm	210 bar 3000 PSI	IP65	+ / - 10%	ED 100%	H	20 VA	28 VA	22 W	0,13 Kg 0.28 lb	25-30 Nm 19-22 lbf ft	SAE 8/2



EV7

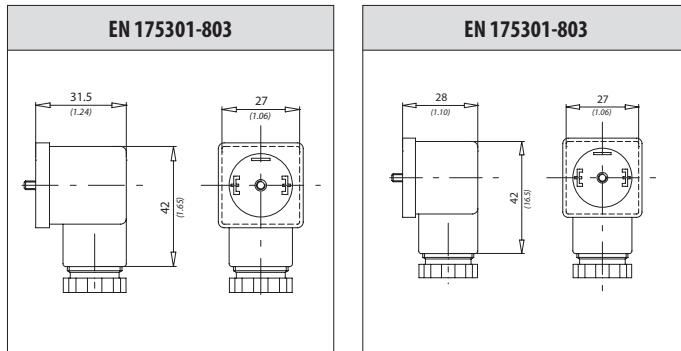
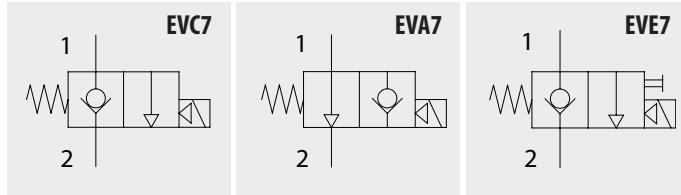
Valvole a comando elettrico 2 vie/2 posizioni  
2 ways/2 positions electric valves

NEW



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F +50°C +122°F
Trafilamento Leakage	0-0,25 cm <sup>3</sup> /min (5 gocce al min) 0-0,015 in <sup>3</sup> /min (5 drops/min)

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)

Connettore con raddrizzatore  
Connector with rectifier

Portata nominale contatti Nominal current	<b>10 A</b>
Portata max contatti Max operating current	<b>16 A</b>
Resistenza contatti Contact resistance	<b>≤ 4m Ohm</b>
Sezione max conduttori Max conductors cross-section	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado Contact holder	<b>PA</b>
Tipo di serracavo Gland size options	<b>Pg09</b>
Diametro cavo Cable diameter	<b>6-8 mm</b>
Grado di protezione Protection class	<b>IP 65 EN 60529</b>
Classe di isolamento Insulation class	<b>VDE 0110-1/89</b>
Guarnizione Sealing material	<b>NBR</b>
Temperatura di esercizio Operating temperature	<b>-40°C +90°C</b>

Connettore standard  
Standard Connector

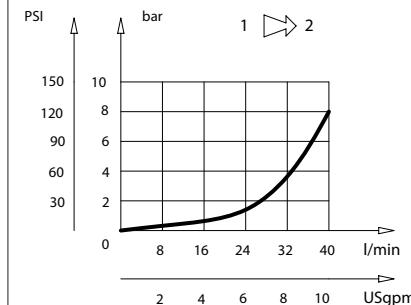
Tensione nominale Nominal voltage	<b>AC - Max 250 V DC - Max 300 V</b>
Portata nominale contatti Nominal current	<b>10 A</b>
Portata max contatti Max operating current	<b>16A</b>
Resistenza contatti Contact resistance	<b>≤ 4m Ohm</b>
Sezione max conduttori Max conductors cross-section	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado Contact holder	<b>PA (+G)</b>
Tipo di serracavo Gland size options	<b>Pg11</b>
Diametro cavo Cable diameter	<b>6-8 mm</b>
Grado di protezione Protection class	<b>IP 65 EN 60529</b>
Classe di isolamento Insulation class	<b>VDE 0110-1/89</b>
Guarnizione Sealing material	<b>NBR</b>
Temperatura di esercizio Operating temperature	<b>-40°C +90°C</b>

## Codice ordinazione / Ordering code

EV - X - Y

X	Schema / Scheme	Y	Voltaggio / Voltage
C7	Normalmente chiusa Normally closed	012DC	12V (DC)
024DC	24V (DC)	E7	Normalmente chiusa + emerg. Normally closed + emerg.
024RAC	24V (RAC)	A7	Normalmente aperta Normally open
110RAC	110V (RAC)	220RAC	220V (RAC)

## Perdite di carico / Pressure drops



Le prove sono state eseguite con solenoidi a temperatura di regime, sottoalimentati del 10% rispetto al valore nominale.

Tests carried out with solenoids at their working temperature, with a supply voltage 10% below the nominal value.

## Caratteristiche tecniche / Technical performances

Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	Protezione Protection	Tolleranza di alimentazione Feeding tolerance	Inserimento Energizing time	Classe di isolamento Insulation class	Potenza assorbita in C.A. Absorbed power in A.C.	Potenza assorbita allo spunto Absorbed power at pickup	Potenza assorbita in C.C. Absorbed power in D.C.	Peso approssimativo Approx weight	Coppia di serraggio Tightening torque	Cavità Cavity
40 l/min 11 Usgpm	350 bar 5000 PSI	IP65	+ / - 10%	ED 100%	H	20 VA	28 VA	22 W	0,15 Kg 0.32 lb	25-30 Nm 19-22 lbft	SAE 8/2

# EV8 Valvole a comando elettrico 2 vie/2 posizioni

2 ways/2 positions electric valves



**NEW**

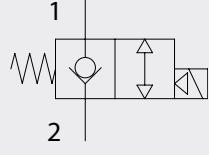


## Dati tecnici Technical data

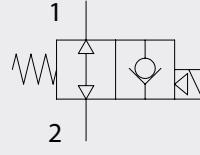
Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C +80°C -4°F +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C +50°C -4°F +122°F
Trafilamento <i>Leakage</i>	0-0,25 cm <sup>3</sup> /min (5 gocce al min) 0-0,015 in <sup>3</sup> /min (5 drops/min)

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)

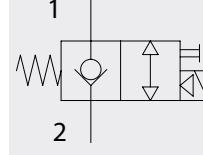
EVC8



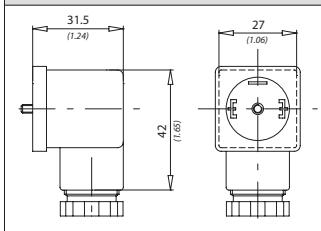
EVA8



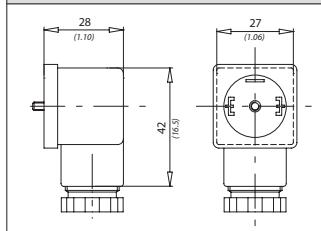
EVE8



EN 175301-803



EN 175301-803



## Connettore con raddrizzatore Connector with rectifier

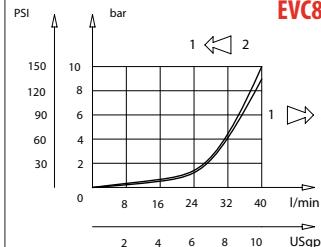
Portata nominale contatti <i>Nominal current</i>	<b>10 A</b>
Portata max contatti <i>Max operating current</i>	<b>16 A</b>
Resistenza contatti <i>Contact resistance</i>	<b>≤ 4m Ohm</b>
Sezione max conduttori <i>Max conductors cross-section</i>	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado <i>Contact holder</i>	<b>PA</b>
Tipo di serracavo <i>Gland size options</i>	<b>Pg09</b>
Diametro cavo <i>Cable diameter</i>	<b>6-8 mm</b>
Grado di protezione <i>Protection class</i>	<b>IP 65 EN 60529</b>
Classe di isolamento <i>Insulation class</i>	<b>VDE 0110-1/89</b>
Guarnizione <i>Sealing material</i>	<b>NBR</b>
Temperatura di esercizio <i>Operating temperature</i>	<b>-40°C +90°C</b>

## Connettore standard Standard Connector

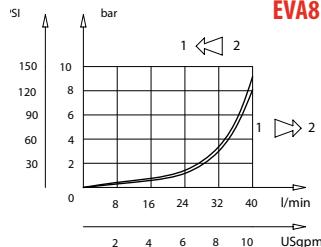
Tensione nominale <i>Nominal voltage</i>	<b>AC - Max 250 V DC - Max 300 V</b>
Portata nominale contatti <i>Nominal current</i>	<b>10 A</b>
Portata max contatti <i>Max operating current</i>	<b>16A</b>
Resistenza contatti <i>Contact resistance</i>	<b>≤ 4m Ohm</b>
Sezione max conduttori <i>Max conductors cross-section</i>	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado <i>Contact holder</i>	<b>PA (+G)</b>
Tipo di serracavo <i>Gland size options</i>	<b>Pg11</b>
Diametro cavo <i>Cable diameter</i>	<b>6-8 mm</b>
Grado di protezione <i>Protection class</i>	<b>IP 65 EN 60529</b>
Classe di isolamento <i>Insulation class</i>	<b>VDE 0110-1/89</b>
Guarnizione <i>Sealing material</i>	<b>NBR</b>
Temperatura di esercizio <i>Operating temperature</i>	<b>-40°C +90°C</b>

## Perdite di carico / Pressure drops

EVC8



EVA8



## Codice ordinazione / Ordering code

**EV - X - Y**

X	Schema / Scheme	Y	Voltaggio Voltage
C8	Normalmente chiusa <i>Normally closed</i>	012DC	12 V (DC)
		024DC	24 V (DC)
E8	Normalmente chiusa + emerg. <i>Normally closed + emerg.</i>	024RAC	24 V (RAC)
		110RAC	110 V (RAC)
A8	Normalmente aperta <i>Normally open</i>	220RAC	220 V (RAC)

Le prove sono state eseguite con solenoidi a temperatura di regime, sottoalimentati del 10% rispetto al valore nominale.

Tests carried out with solenoids at their working temperature, with a supply voltage 10% below the nominal value.

## Caratteristiche tecniche / Technical performances

Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	Protezione Protection	Tolleranza di alimentazione Feeding tolerance	Inserimento Energizing time	Classe di isolamento Insulation class	Potenza assorbita in C.A. Absorbed power in A.C.	Potenza assorbita allo spunto Absorbed power at pickup	Potenza assorbita in C.C. Absorbed power in D.C.	Peso approssimativo Approx weight	Coppia di serraggio Tightening torque	Cavità Cavity
40 l/min 11 Usgpm	350 bar 5000 PSI	IP65	+ / - 10%	ED 100%	H	20 VA	28 VA	22 W	0,22 Kg 0.48 lb	25-30 Nm 19-22 lbft	SAE 8/2



# ED9 Valvole a comando elettrico 2 vie/2 posizioni

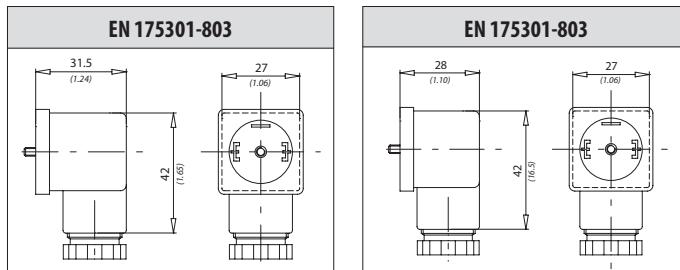
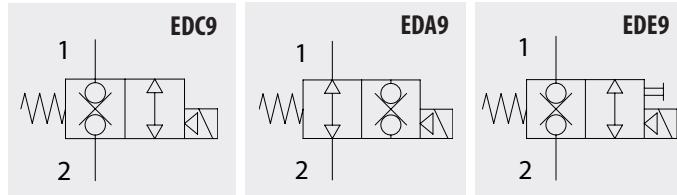
## 2 ways/2 positions electric valves

NEW



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F
Trafilamento Leakage	0-0,25 cm <sup>3</sup> /min (5 gocce al min) 0-0,015 in <sup>3</sup> /min (5 drops/min)

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)

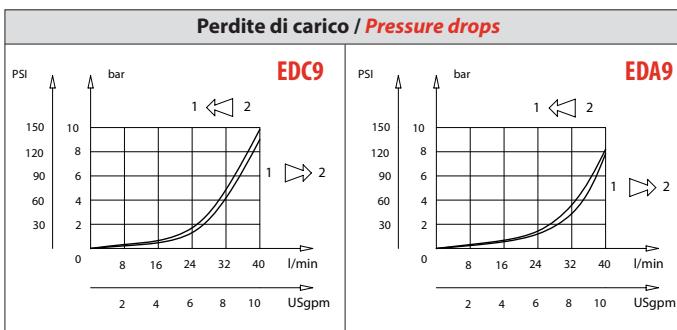


Connettore con raddrizzatore  
Connector with rectifier

Portata nominale contatti Nominal current	<b>10 A</b>
Portata max contatti Max operating current	<b>16 A</b>
Resistenza contatti Contact resistance	<b>≤ 4m Ohm</b>
Sezione max conduttori Max conductors cross-section	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado Contact holder	<b>PA</b>
Tipo di serracavo Gland size options	<b>Pg09</b>
Diametro cavo Cable diameter	<b>6-8 mm</b>
Grado di protezione Protection class	<b>IP 65 EN 60529</b>
Classe di isolamento Insulation class	<b>VDE 0110-1/89</b>
Guarnizione Sealing material	<b>NBR</b>
Temperatura di esercizio Operating temperature	<b>-40°C +90°C</b>

Connettore standard  
Standard Connector

Tensione nominale Nominal voltage	<b>AC - Max 250 V DC - Max 300 V</b>
Portata nominale contatti Nominal current	<b>10 A</b>
Portata max contatti Max operating current	<b>16A</b>
Resistenza contatti Contact resistance	<b>≤ 4m Ohm</b>
Sezione max conduttori Max conductors cross-section	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado Contact holder	<b>PA (+G)</b>
Tipo di serracavo Gland size options	<b>Pg11</b>
Diametro cavo Cable diameter	<b>6-8 mm</b>
Grado di protezione Protection class	<b>IP 65 EN 60529</b>
Classe di isolamento Insulation class	<b>VDE 0110-1/89</b>
Guarnizione Sealing material	<b>NBR</b>
Temperatura di esercizio Operating temperature	<b>-40°C +90°C</b>



Le prove sono state eseguite con solenoidi a temperatura di regime, sottoalimentati del 10% rispetto al valore nominale.  
Tests carried out with solenoids at their working temperature, with a supply voltage 10% below the nominal value.

### Caratteristiche tecniche / Technical performances

Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	Protezione Protection	Tolleranza di alimentazione Feeding tolerance	Inserimento Energizing time	Classe di isolamento Insulation class	Potenza assorbita in C.A. Absorbed power in A.C.	Potenza assorbita allo spunto Absorbed power at pickup	Potenza assorbita in C.C. Absorbed power in D.C.	Peso approssimativo Approx weight	Coppia di serraggio Tightening torque	Cavità Cavity
40 l/min 11 Usgpm	350 bar 5000 PSI	IP65	+ / - 10%	ED 100%	H	20 VA	28 VA	22 W	0,15 Kg 0.32 lb	25-30 Nm 19-22 lbft	SAE 8/2

# EV10

Valvole a comando elettrico 3 vie, 2 posizioni  
3 ways/2 positions electric valves



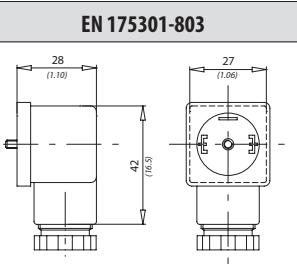
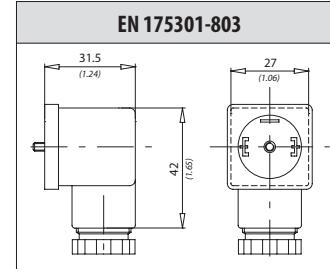
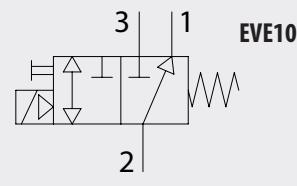
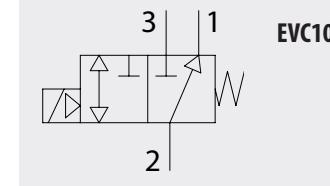
**NEW**



**Dati tecnici**  
**Technical data**

Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C -4°F +80°C +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C -4°F +50°C +122°F
Trafilamento <i>Leakage</i>	0-0,25 cm <sup>3</sup> /min (5 gocce al min) 0-0,015 in <sup>3</sup> /min (5 drops/min)

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



**Connettore con raddrizzatore**  
**Connector with rectifier**

Portata nominale contatti <i>Nominal current</i>	<b>10 A</b>
Portata max contatti <i>Max operating current</i>	<b>16 A</b>
Resistenza contatti <i>Contact resistance</i>	<b>≤ 4m Ohm</b>
Sezione max conduttori <i>Max conductors cross-section</i>	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado <i>Contact holder</i>	<b>PA</b>
Tipo di serracavo <i>Gland size options</i>	<b>Pg09</b>
Diametro cavo <i>Cable diameter</i>	<b>6-8 mm</b>
Grado di protezione <i>Protection class</i>	<b>IP 65 EN 60529</b>
Classe di isolamento <i>Insulation class</i>	<b>VDE 0110-1/89</b>
Guarnizione <i>Sealing material</i>	<b>NBR</b>
Temperatura di esercizio <i>Operating temperature</i>	<b>-40°C +90°C</b>

Tensione nominale <i>Nominal voltage</i>	<b>AC - Max 250 V DC - Max 300 V</b>
Portata nominale contatti <i>Nominal current</i>	<b>10 A</b>
Portata max contatti <i>Max operating current</i>	<b>16A</b>
Resistenza contatti <i>Contact resistance</i>	<b>≤ 4m Ohm</b>
Sezione max conduttori <i>Max conductors cross-section</i>	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado <i>Contact holder</i>	<b>PA (+G)</b>
Tipo di serracavo <i>Gland size options</i>	<b>Pg11</b>
Diametro cavo <i>Cable diameter</i>	<b>6-8 mm</b>
Grado di protezione <i>Protection class</i>	<b>IP 65 EN 60529</b>
Classe di isolamento <i>Insulation class</i>	<b>VDE 0110-1/89</b>
Guarnizione <i>Sealing material</i>	<b>NBR</b>
Temperatura di esercizio <i>Operating temperature</i>	<b>-40°C +90°C</b>

**Codice ordinazione / Ordering code**

**EV - X - Y**

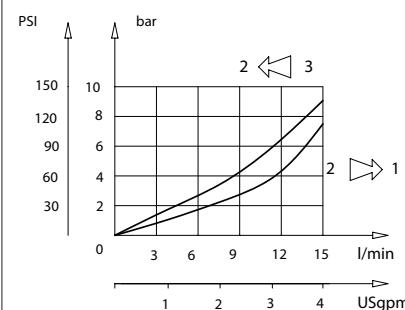
X	Schema / Scheme
C10	Vedi schema See diagram

Y	Voltaggio Voltage
012DC	12 V (DC)
024DC	24 V (DC)
024RAC	24 V (RAC)

E10	Vedi schema See diagram
	110RAC 110 V (RAC)

220RAC	220 V (RAC)
--------	-------------

**Perdite di carico / Pressure drops**



Le prove sono state eseguite con solenoidi a temperatura di regime, sottoalimentati del 10% rispetto al valore nominale.

Tests carried out with solenoids at their working temperature, with a supply voltage 10% below the nominal value.

**Caratteristiche tecniche / Technical performances**

Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	Protezione Protection	Tolleranza di alimentazione Feeding tolerance	Inserimento Energizing time	Classe di isolamento Insulation class	Potenza assorbita in C.A. Absorbed power in A.C.	Potenza assorbita allo spunto Absorbed power at pickup	Potenza assorbita in C.C. Absorbed power in D.C.	Peso approssimativo Approx weight	Coppia di serraggio Tightening torque	Cavità Cavity
12 l/min 3,2 Usgpm	350 bar 5000 PSI	IP65	+ / - 10%	ED 100%	H	20 VA	28 VA	22 W	0,14 Kg 0.31 lb	25-30 Nm 19-22 lbft	SAE 8/3



# EV11 Valvole a comando elettrico 3 vie, 2 posizioni

## 3 ways/2 positions electric valves

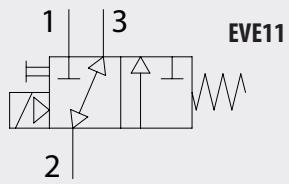
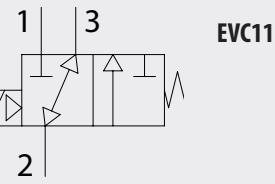
**NEW**



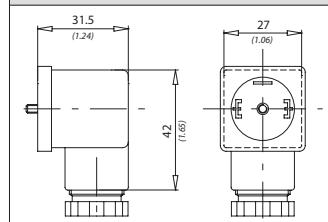
### Dati tecnici Technical data

Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C +80°C -4°F +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C +50°C -4°F +122°F
Trafilamento <i>Leakage</i>	0-0,25 cm <sup>3</sup> /min (5 gocce al min) 0-0,015 in <sup>3</sup> /min (5 drops/min)

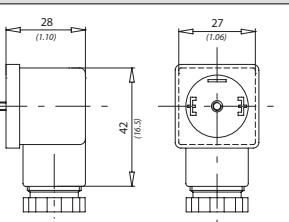
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



EN 175301-803



EN 175301-803



### Connettore con raddrizzatore Connector with rectifier

Portata nominale contatti <i>Nominal current</i>	<b>10 A</b>
Portata max contatti <i>Max operating current</i>	<b>16 A</b>
Resistenza contatti <i>Contact resistance</i>	<b>≤ 4m Ohm</b>
Sezione max conduttori <i>Max conductors cross-section</i>	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado <i>Contact holder</i>	<b>PA</b>
Tipo di serracavo <i>Gland size options</i>	<b>Pg09</b>
Diametro cavo <i>Cable diameter</i>	<b>6-8 mm</b>
Grado di protezione <i>Protection class</i>	<b>IP 65 EN 60529</b>
Classe di isolamento <i>Insulation class</i>	<b>VDE 0110-1/89</b>
Guarnizione <i>Sealing material</i>	<b>NBR</b>
Temperatura di esercizio <i>Operating temperature</i>	<b>-40°C +90°C</b>

### Connettore standard Standard Connector

Tensione nominale <i>Nominal voltage</i>	<b>AC - Max 250 V DC - Max 300 V</b>
Portata nominale contatti <i>Nominal current</i>	<b>10 A</b>
Portata max contatti <i>Max operating current</i>	<b>16A</b>
Resistenza contatti <i>Contact resistance</i>	<b>≤ 4m Ohm</b>
Sezione max conduttori <i>Max conductors cross-section</i>	<b>1,5 mm<sup>2</sup></b>
Portacontatti, dado <i>Contact holder</i>	<b>PA (+G)</b>
Tipo di serracavo <i>Gland size options</i>	<b>Pg11</b>
Diametro cavo <i>Cable diameter</i>	<b>6-8 mm</b>
Grado di protezione <i>Protection class</i>	<b>IP 65 EN 60529</b>
Classe di isolamento <i>Insulation class</i>	<b>VDE 0110-1/89</b>
Guarnizione <i>Sealing material</i>	<b>NBR</b>
Temperatura di esercizio <i>Operating temperature</i>	<b>-40°C +90°C</b>

### Codice ordinazione / Ordering code

**EV - X - Y**

X	Schema / Scheme
C11	Vedi schema See diagram

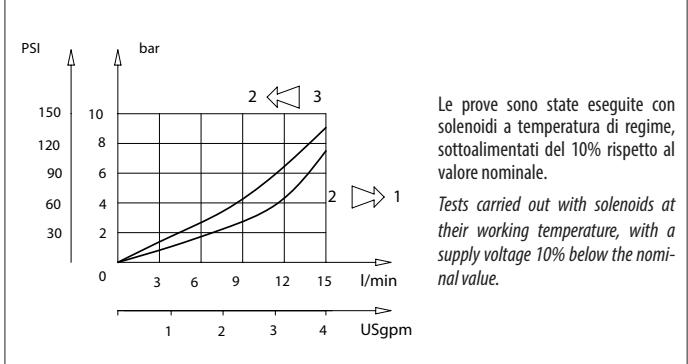
Y	Voltaggio Voltage
012DC	12 V (DC)
024DC	24 V (DC)
024RAC	24 V (RAC)

E11	Vedi schema See diagram
	110RAC 110 V (RAC)

110RAC	110 V (RAC)
220RAC	220 V (RAC)

### Caratteristiche tecniche / Technical performances

Portata max Max Flow l/min-USgpm	Pressione Max Max pressure bar/PSI	Protezione Protection	Tolleranza di alimentazione Feeding tolerance	Inserimento Energizing time	Classe di isolamento Insulation class	Potenza assorbita in C.A. Absorbed power in A.C.	Potenza assorbita allo spunto Absorbed power at pickup	Potenza assorbita in C.C. Absorbed power in D.C.	Peso approssimativo Approx weight	Coppia di serraggio Tightening torque	Cavità Cavity
12 l/min 3,2 Usgpm	350 bar 5000 PSI	IP65	+ / - 10%	ED 100%	H	20 VA	28 VA	22 W	0,14 Kg 0.31 lb	25-30 Nm 19-22 lbf ft	SAE 8/3

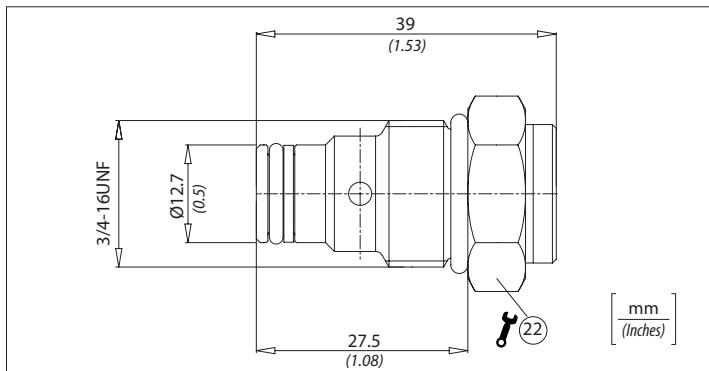
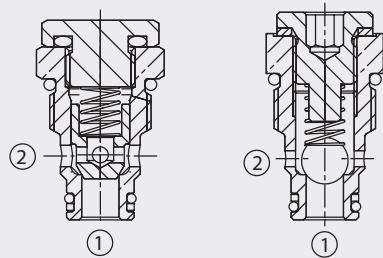


Le prove sono state eseguite con solenoidi a temperatura di regime, sottoalimenti del 10% rispetto al valore nominale.

Tests carried out with solenoids at their working temperature, with a supply voltage 10% below the nominal value.

# CUR6 Valvole unidirezionali

Check valves



**Caratteristiche tecniche / Technical performances**

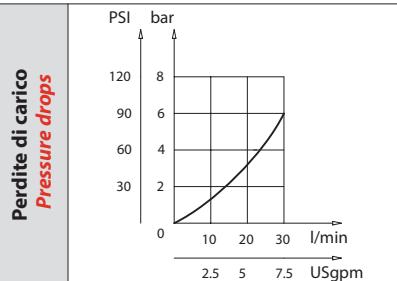
Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo Approx weight Kg / lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
CUR6	25 (6.5)	350 (5000)	0,07 (0.15)	25-30 (19-22)	SAE8/2

**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



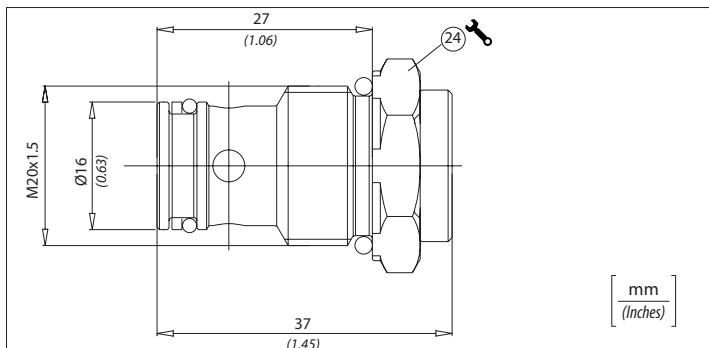
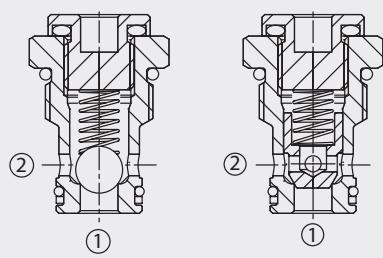
**Codice ordinazione**  
**Ordering code**

**CUR6 -X-Y**

<b>X</b>	Tenuta Sealing
<b>SF</b>	Tenuta a sfera Ball sealing
<b>SP</b>	Tenuta a otturatore Poppet sealing
<b>Y</b>	Molla Spring
<b>1</b>	1 bar (15 PSI)

# CUR2015 Valvole unidirezionali

Check valves



**Caratteristiche tecniche / Technical performances**

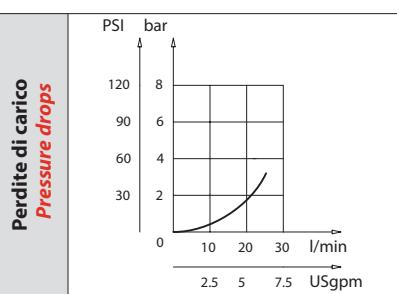
Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo Approx weight Kg / lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
CUR2015	25 (6.5)	350 (5000)	0,07 (0.15)	25-30 (19-22)	C2015/2

**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



**Codice ordinazione**  
**Ordering code**

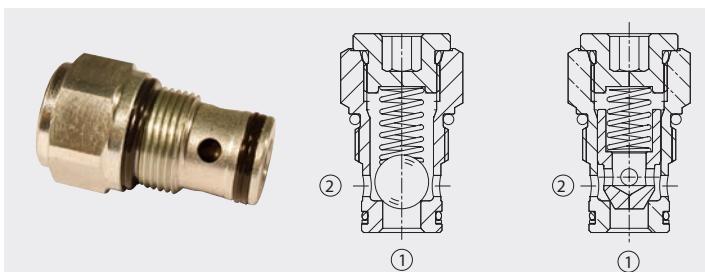
**CUR2015 -X-Y**

<b>X</b>	Tenuta Sealing
<b>SF</b>	Tenuta a sfera Ball sealing
<b>SP</b>	Tenuta a otturatore Poppet sealing
<b>Y</b>	Molla Spring
<b>1</b>	1 bar (15 PSI)



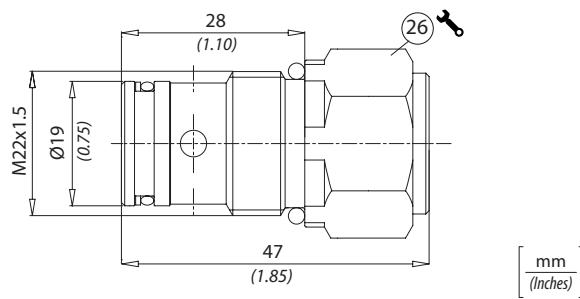
# CUR2215

Valvole unidirezionali  
Check valves



## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

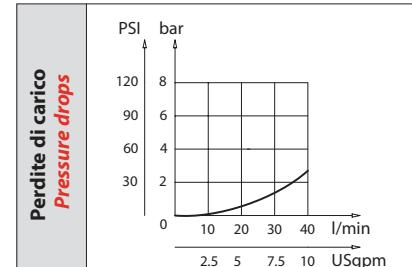


## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbfft	Cavità Cavity
CUR2215	40 (10)	350 (5000)	0,11 (0.25)	45-50 (33-37)	C2215/2

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



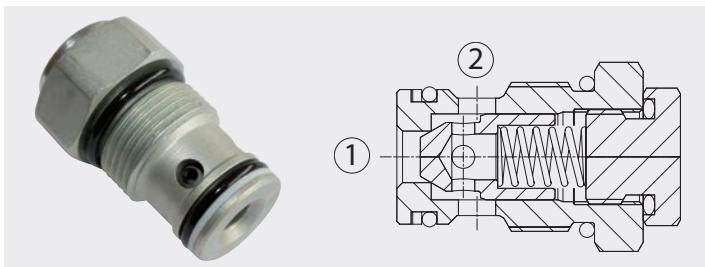
## Codice ordinazione Ordering code

**CUR2215 -X-Y**

<b>X</b>	Tenuta Sealing
<b>SF</b>	Tenuta a sfera Ball sealing
<b>SP</b>	Tenuta a otturatore Poppet sealing
<b>Y</b>	Molla Spring
<b>1</b>	1 bar (15 PSI)
<b>4,5</b>	4.5 bar (67.5 PSI)

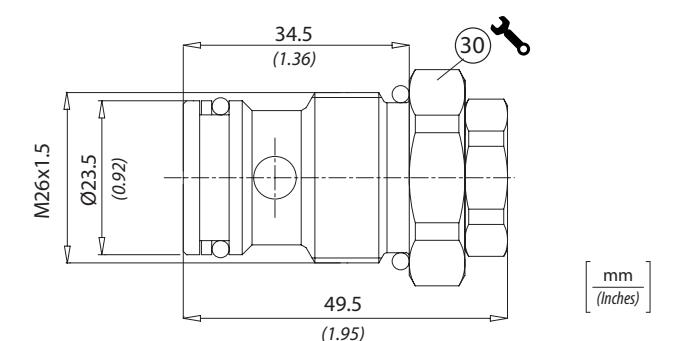
# CUR2615

Valvole unidirezionali  
Check valves



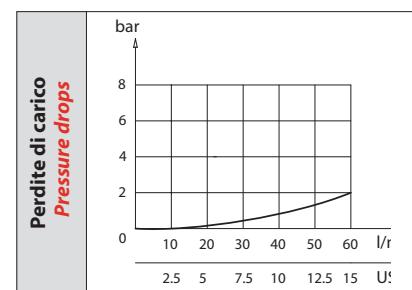
## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F



## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbfft	Cavità Cavity
CUR2615	60 (15)	350 (5000)	0,17 (0.38)	55-60 (41-45)	C2615/2



## Codice ordinazione Ordering code

**CUR2615 -X-Y**

<b>X</b>	Tenuta Sealing
<b>SP</b>	Tenuta a otturatore Poppet sealing
<b>Y</b>	Molla Spring
<b>1</b>	1 bar (15 PSI)
<b>4,5</b>	4.5 bar (67.5 PSI)

# CUR10

Valvole unidirezionali  
Check valves



**NEW**

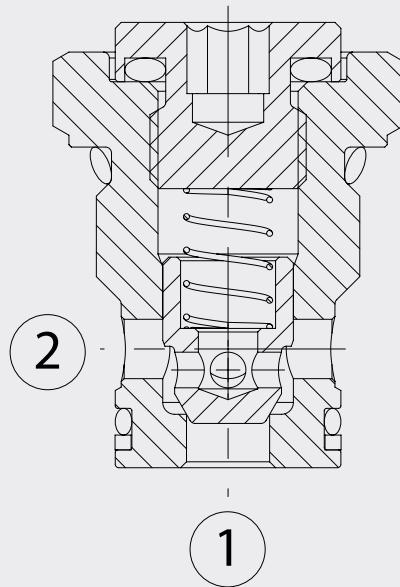


## Dati tecnici / Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*

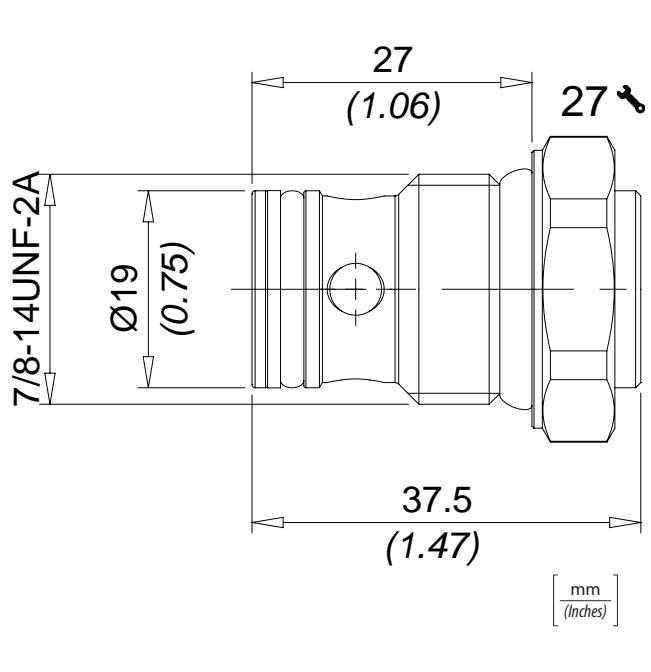
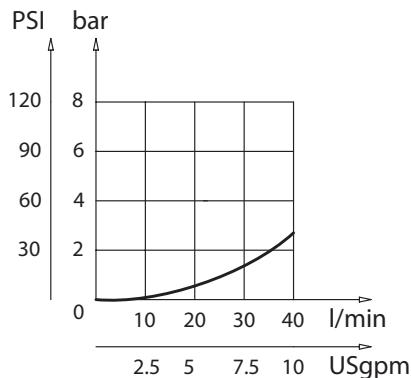


## Codice ordinazione Ordering code

**CUR10 -X-Y**

<b>X</b>	Tenuta Sealing
<b>SP</b>	Tenuta a otturatore Poppet sealing

<b>Y</b>	Molla Spring
1	1 bar (15 PSI)
4,5	4.5 bar (67.5 PSI)



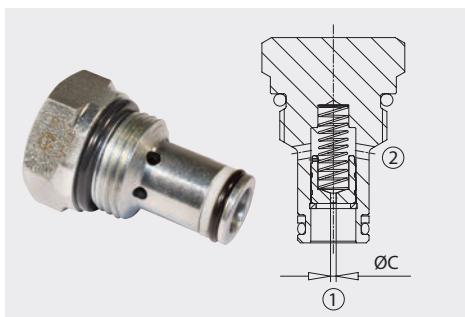
## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
CUR10	40 (10)	350 (5000)	0,11 (0.25)	45-50 (33-37)	SAET10/2



# VSC6

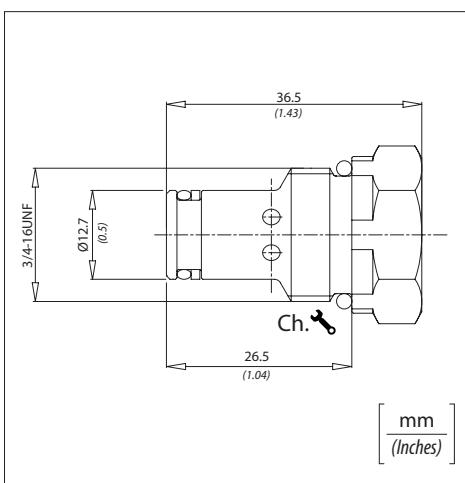
Valvole di controllo flusso compensate fissate  
Fixed compensated flow control valves



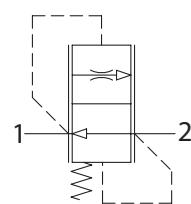
Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



Caratteristiche tecniche / Technical performances					
Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo Approx weight Kg / lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
VSC6	12 (3)	250 (3600)	0,06 (0.15)	25-30 (19-22)	SAE8/2



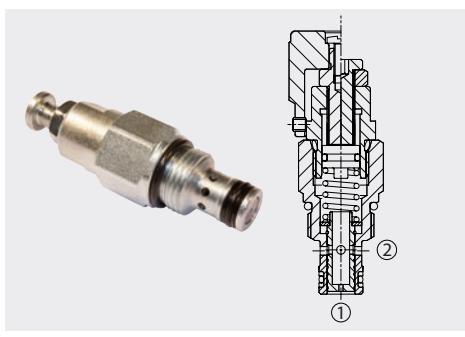
Codice ordinazione / Ordering code

## VSC6 - Y

<b>Y</b>	Portata controllata a 100 bar ± 10% <i>Controlled flow at 100 bar ± 10%</i>
<b>1</b>	1 l/min (0.25 USgpm)
<b>2</b>	2 l/min (0.5 USgpm)
<b>3</b>	3 l/min (0.75 USgpm)
<b>4</b>	4 l/min (1 USgpm)
<b>5</b>	5 l/min (1.25 USgpm)
<b>6</b>	6 l/min (1.5 USgpm)
<b>7</b>	7 l/min (1.75 USgpm)
<b>8</b>	8 l/min (2 USgpm)
<b>9</b>	9 l/min (2.25 USgpm)
<b>10</b>	10 l/min (2.5 USgpm)
<b>11</b>	11 l/min (2.75 USgpm)
<b>12</b>	12 l/min (3 USgpm)

# VCF6

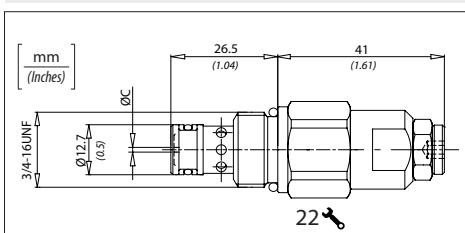
Valvole di controllo flusso compensate regolabili  
Adjustable compensated flow control valves



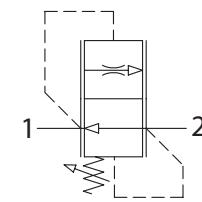
Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



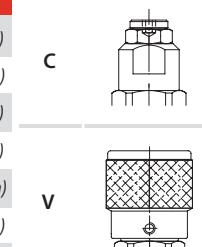
Codice / Code	Ø C
VCF61	Ø 0,9 (Ø 0.23)
VCF62	Ø 1 (Ø 0.26)
VCF63	Ø 1,3 (Ø 0.34)
VCF64	Ø 1,5 (Ø 0.39)
VCF65	Ø 1,7 (Ø 0.44)
VCF66	Ø 2,2 (Ø 0.57)
VCF67	Ø 2,8 (Ø 0.73)



Codice ordinazione / Ordering code

## VCF6 - X - Y

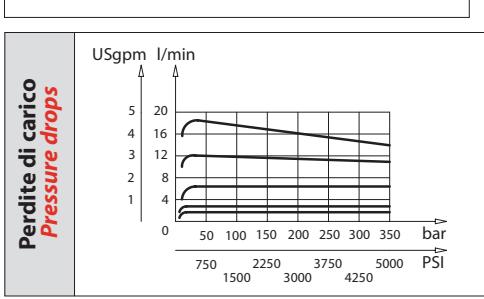
<b>X</b>	Portata controllata a 100 bar ± 10% <i>Controlled flow at 100 bar ± 10%</i>
<b>Y</b>	Regolazione Setting
<b>1</b>	0,6 - 2,2 l/min (0.15 - 0.57 USgpm)
<b>2</b>	0,8 - 3 l/min (0.21 - 0.78 USgpm)
<b>3</b>	1,3 - 5,1 l/min (0.34 - 1.32 USgpm)
<b>4</b>	1,9 - 6,8 l/min (0.49 - 1.77 USgpm)
<b>5</b>	2,6 - 9,1 l/min (0.67 - 2.36 USgpm)
<b>6</b>	4 - 14,4 l/min (1.04 - 3.74 USgpm)
<b>7</b>	7,2 - 18 l/min (1.87 - 4.68 USgpm)



Caratteristiche tecniche / Technical performances

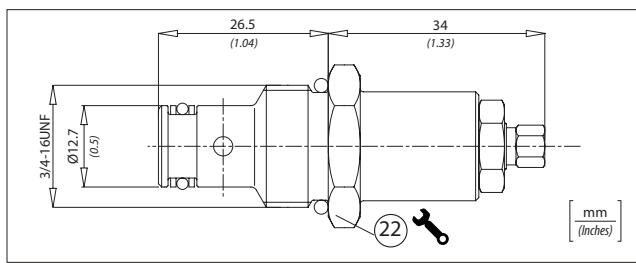
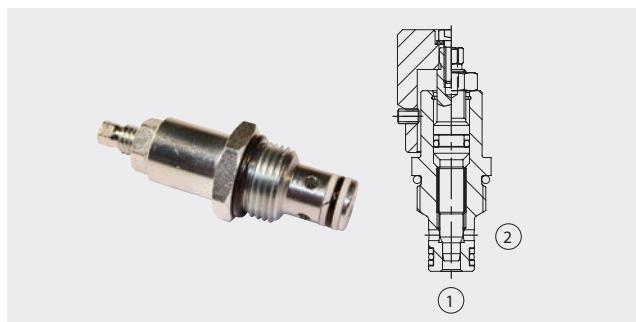
Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo Approx weight Kg / lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
VCF6	18 (5)	350 (5000)	0,21 (0.46)	25-30 (19-22)	SAE8/2

Perdite di carico  
Pressure drops



# VBF6

Valvole bidirezionali di controllo flusso  
Bidirectional flow control valves



## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

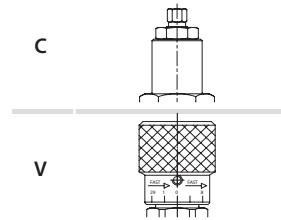
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Codice ordinazione Ordering code

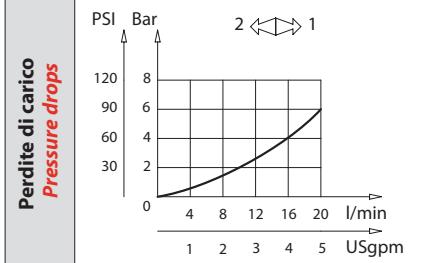
**VBF6 - X**

**X** | Regolazione / Setting



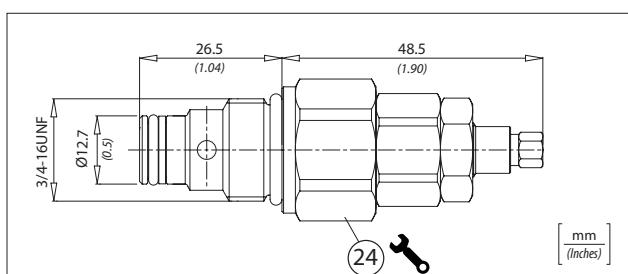
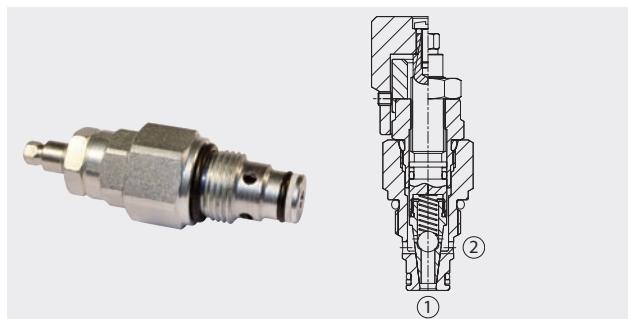
## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
<b>VBF6</b>	<b>30 (8)</b>	<b>300 (4500)</b>	<b>0,09 (0.20)</b>	<b>25-30 (19-22)</b>	<b>SAE8/2</b>



# VRF6

Valvole di controllo flusso unidirezionali  
Unidirectional flow control valves

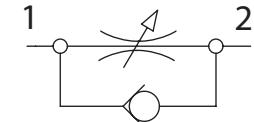


## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

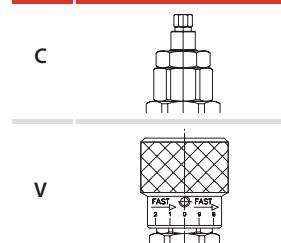
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Codice ordinazione Ordering code

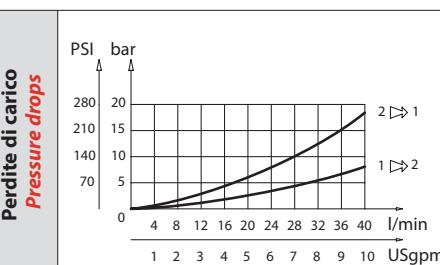
**VRF6 - X**

**X** | Regolazione / Setting



## Caratteristiche tecniche / Technical performances

Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar / PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
<b>VRF6</b>	<b>40 (10)</b>	<b>350 (5000)</b>	<b>0,13 (0.30)</b>	<b>25-30 (19-22)</b>	<b>SAE8/2</b>





# VDRF

Divisori/riunificatori di Flusso a Cartuccia  
Cartridge flow dividers/Combiners

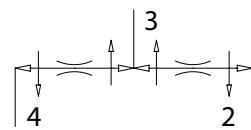
**NEW**



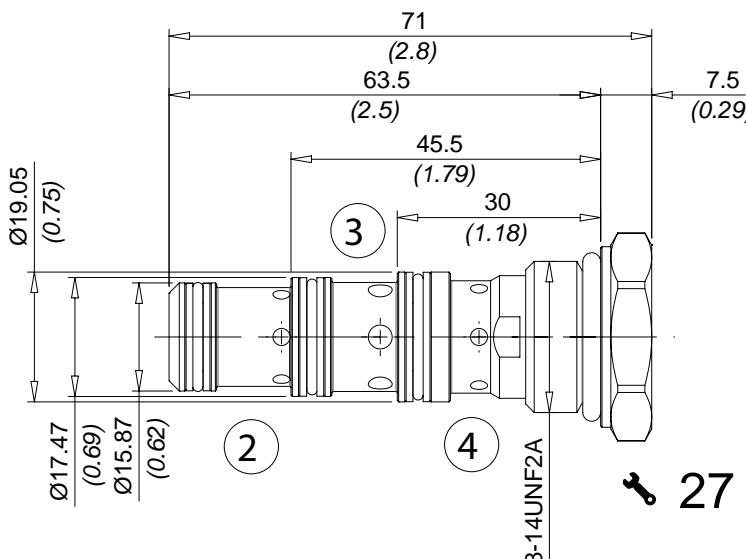
**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



[ mm  
(Inches) ]



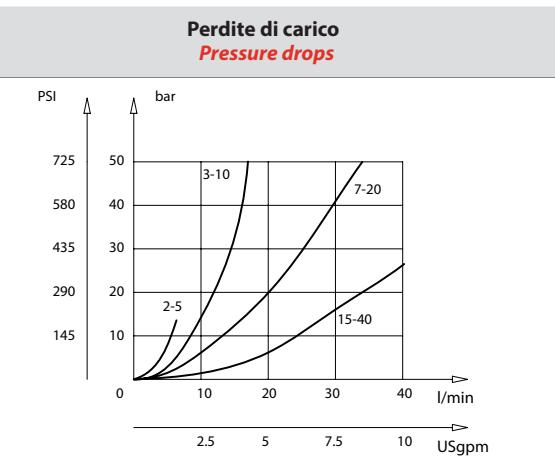
**Codice ordinazione / Ordering code**

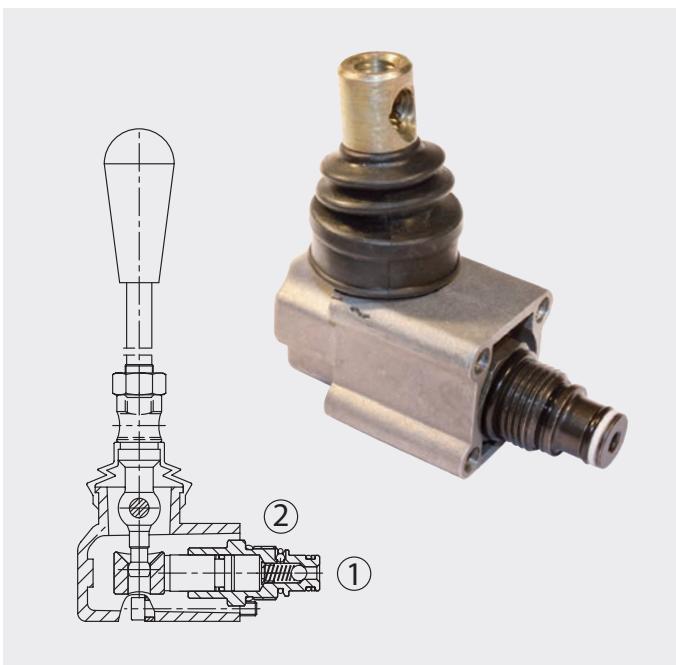
**VDRF10 - Y**

<b>Y</b>	Campo di portata in ingresso Inlet flow range l/min - USgpm
1	2-5 (0.5-1.3)
2	3-10 (0.8-2.6)
3	7-20 (1.8-5.2)
4	15-40 (3.9-10.4)

**Caratteristiche tecniche**  
**Technical performances**

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbfft	Cavità Cavity
<b>VDRF10</b>	<b>40 (10,4)</b>	<b>350 (5000)</b>	<b>0,12 (0.26)</b>	<b>30-35 (22-26)</b>	<b>SAE10/3</b>



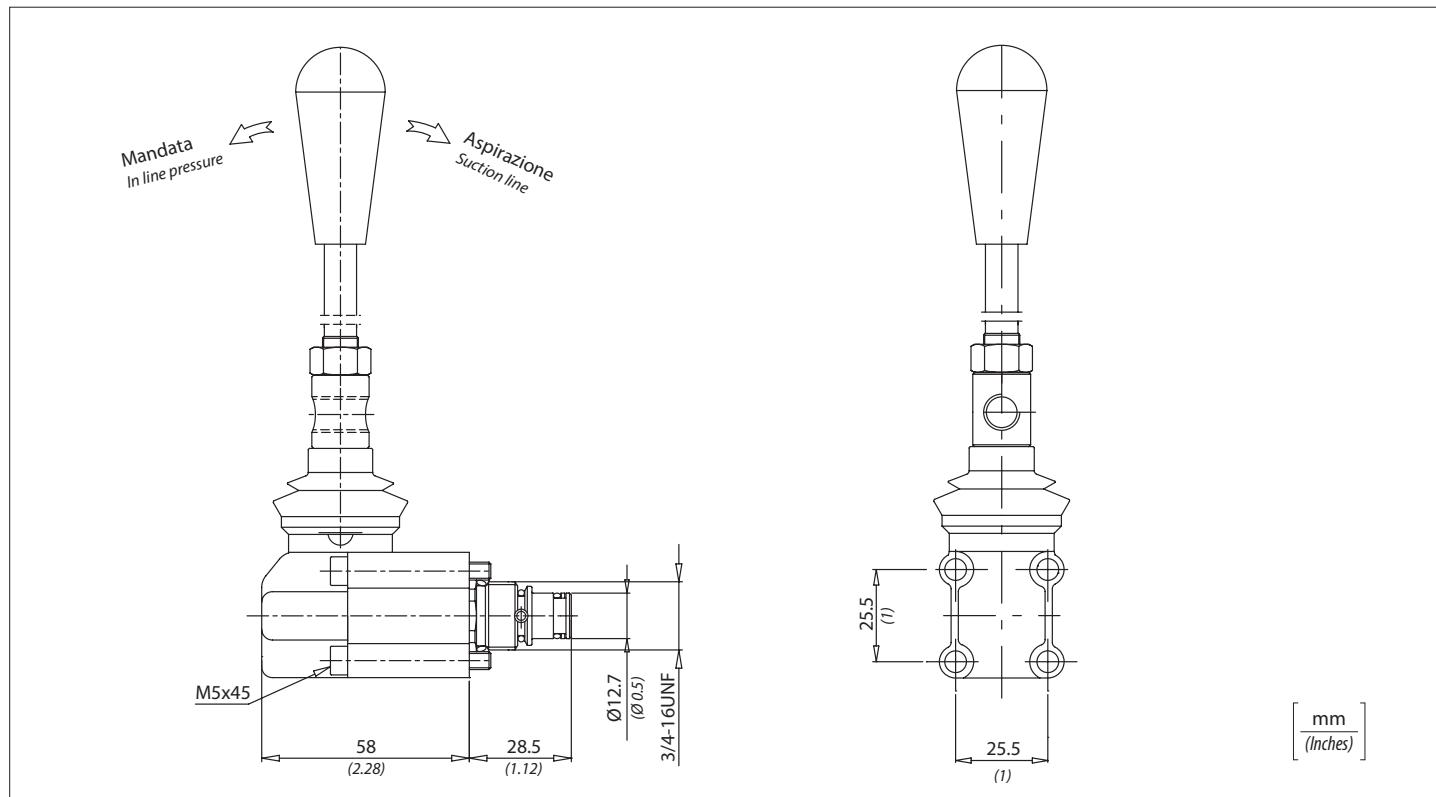
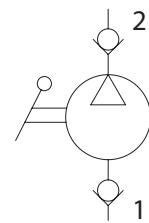


**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

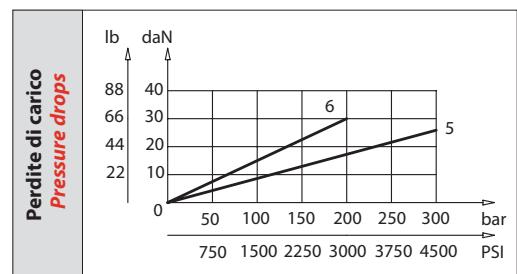
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



**Caratteristiche tecniche**  
**Technical performances**

Codice Code	Cilindrata Displacement cm <sup>3</sup> - in <sup>3</sup>	Pressione Max Max pressure bar / PSI	Peso approssimativo Approx weight Kg / lb	Coppia di serraggio Tightening torque Nm / lbfft	Cavità Cavity
<b>PME5L</b>	<b>1 (0.06)</b>	<b>300 (4000)</b>	<b>0,4 (0.88)</b>	<b>25-30 (19-22)</b>	<b>SAE8/2</b>
<b>PME6L</b>	<b>2 (0.12)</b>	<b>200 (3000)</b>			
<b>PME7L</b>	<b>3 (0.18)</b>	<b>120 (1700)</b>			

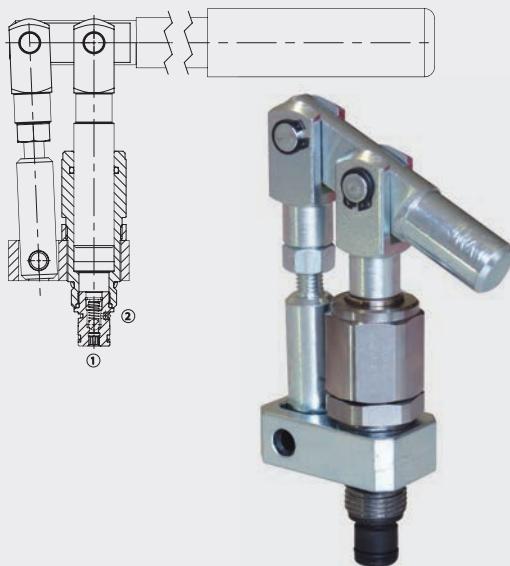




# PME10

Pompe a mano  
Cartridge hand pumps

**NEW**

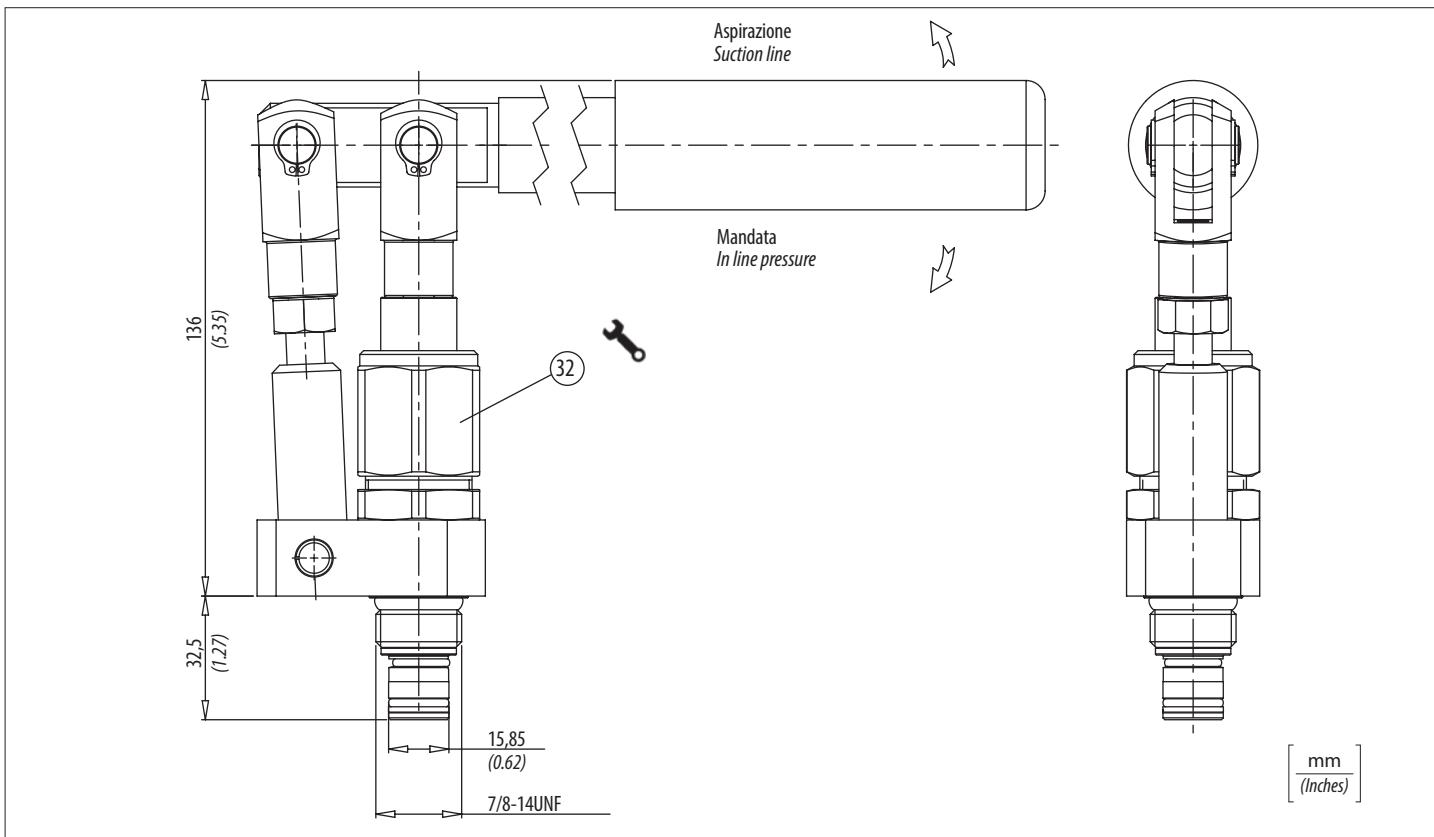
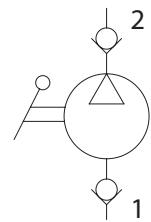


**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

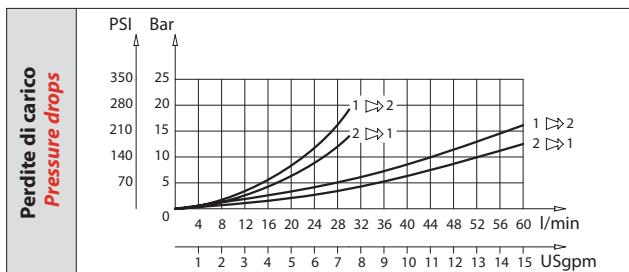
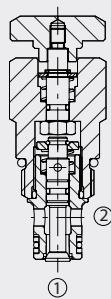
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



**Caratteristiche tecniche**  
**Technical performances**

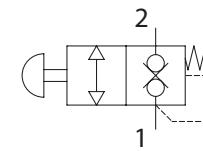
Codice Code	Cilindrata Displacement cm <sup>3</sup> - in <sup>3</sup>	Pressione Max Max pressure bar / PSI	Peso approssimativo Approx weight Kg / lb	Coppia di serraggio Tightening torque Nm / lbfft	Cavità Cavity
<b>PME10</b>	<b>10 (0.06)</b>	<b>200 (3000)</b>	<b>1,8 (3.97)</b>	<b>41-47 (30-35)</b>	<b>SAE10/2</b>



**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



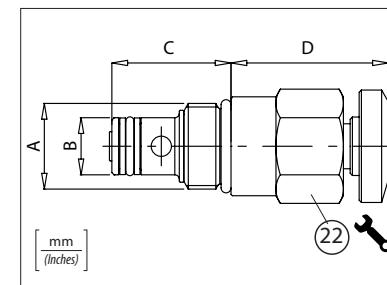
**Codice ordinazione**  
**Ordering code**

**VEM - X**

X	Dimensione Size
6	3/4 - 16UNF
10	7/8 - 14UNF

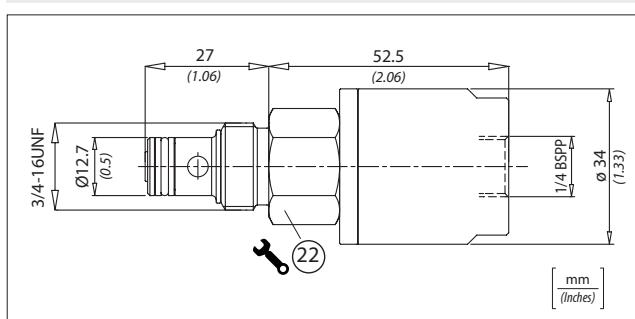
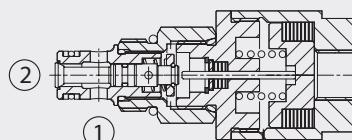
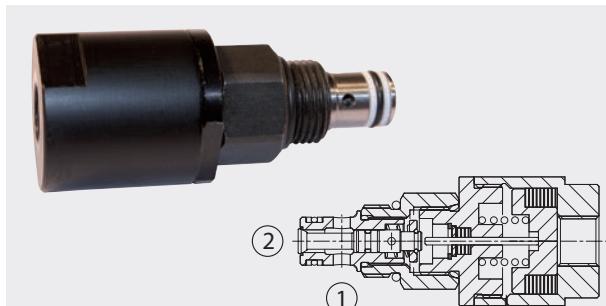
**Caratteristiche tecniche / Technical performances**

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	Peso approssimativo Approx weight Kg / lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
VEM6	3/4 - 16UNF	30 (8)	320 (4500)	12,7 (0,5)	26,5 (1,04)	35 (1,38)	0,12 (0,27)	25-30 (19-22)	SAE8/2
VEM10	7/8 - 14UNF	50 (13)		15,87 (0,62)	32,5 (1,28)	43,5 (1,71)	0,20 (0,44)	41-47 (30-35)	SAE10/2



# VPN6

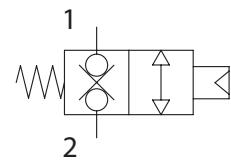
Valvole pneumatiche  
Pneumatic valves



**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

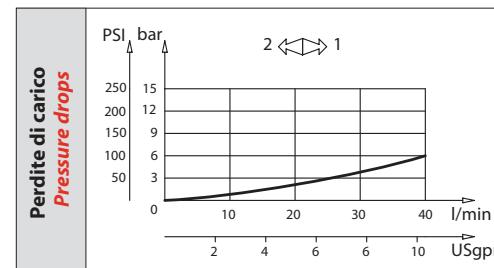
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



**Codice ordinazione**  
**Ordering code**

**VPN6**

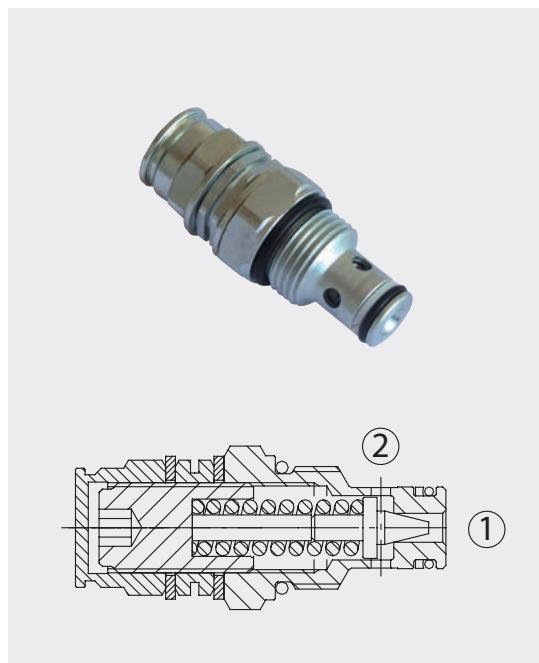
Codice Code	Portata max Max Flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm/lbft	Cavità Cavity	Pressione di pilotaggio Pilot pressure bar/PSI
CM6	40 (10)	350 (5000)	0,16 (0,35)	25-30 (19-22)	SAE8/2 (2)	4/15 (58/218)





# VMD1

## Valvole di massima pressione Relief valves

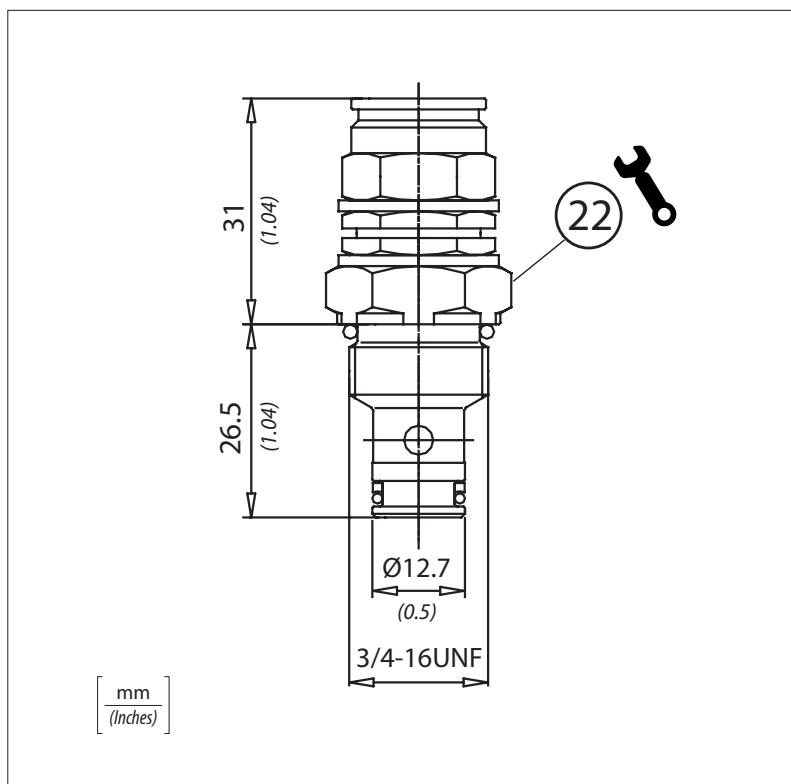
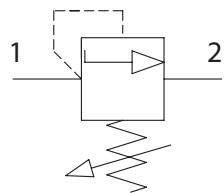


### Dati tecnici Technical data

Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C      +80°C -4°F      +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

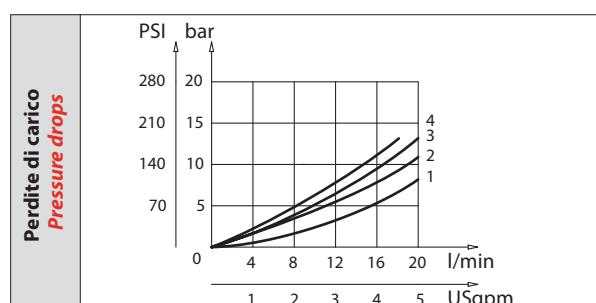
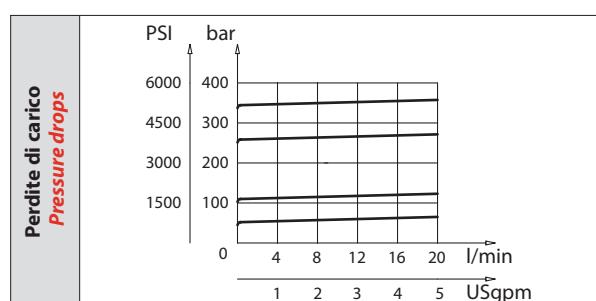
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



### Codice ordinazione / Ordering code

**VMD1 - X - Y - K**

X	Regolazione Setting	Y	Molla Spring	Incremento pressione al giro Press. increase
c		1		20 bar/al giro (290 PSI/turn)
		2		40 bar/al giro (580 PSI/turn)
		3		70 bar/al giro (1000 PSI/turn)
		4		130 bar/al giro (1800 PSI/turn)



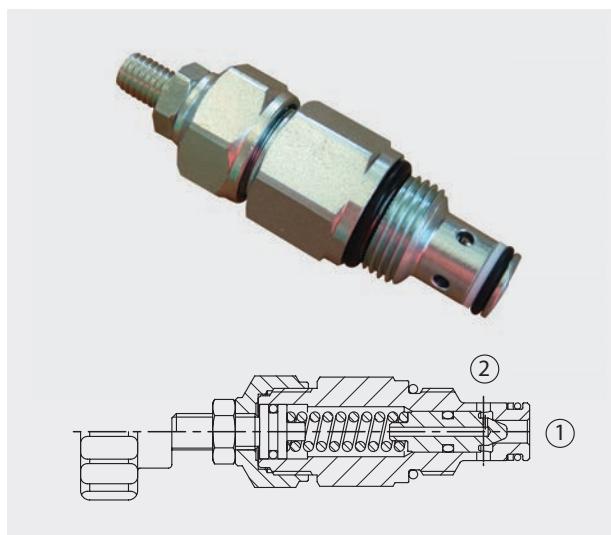
### Caratteristiche tecniche Technical performances

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
VMD1	20 (5)	350 (5000)	0,09 (0.20)	25-30 (19-22)	SAE8/2

# VMD10

Valvole di massima pressione

Relief valves



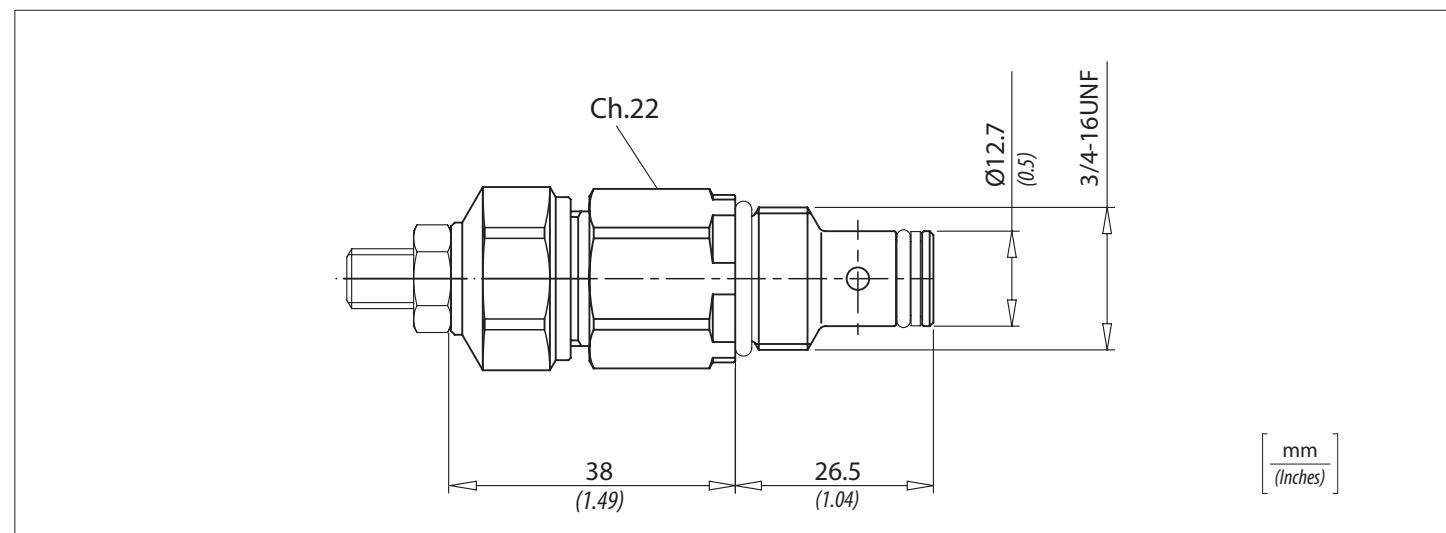
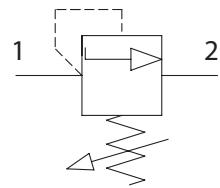
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Codice ordinazione / Ordering code

#### VMD10 - X - Y

X | Regolazione  
Setting



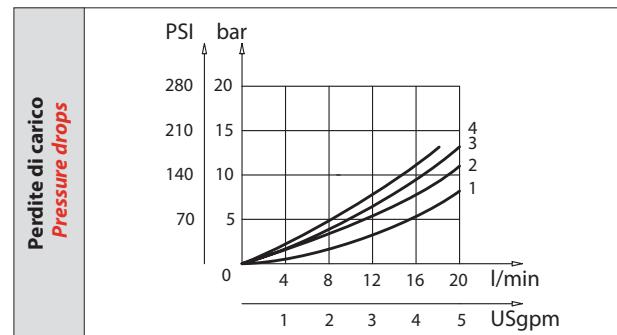
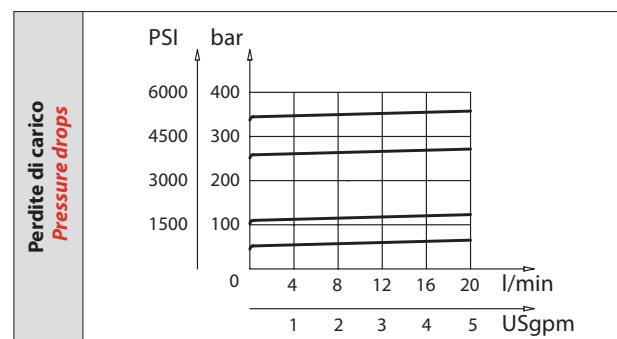
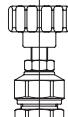
C

Codice volantino /  
Flyer Code

81300109

Y	Molla Spring	Incremento pressione al giro Press. increase
1	10/40 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)
2	20/110 bar (290/1600 PSI) max	35 bar/al giro (500 PSI/turn)
3	30/210 bar (435/3000 PSI) max	62 bar/al giro (900 PSI/turn)
4	40/350 bar (580/5000 PSI) max	120 bar/al giro (1740 PSI/turn)

V |



### Caratteristiche tecniche

#### Technical performances

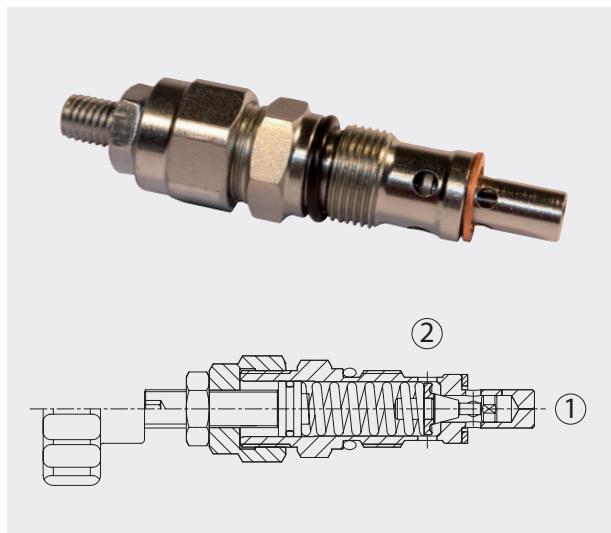
Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm/lbft	Cavità Cavity
VMD10	20 (5)	350 (5000)	0,14 (0.30)	25-30 (19-22)	SAE8/2



# VMD30

Valvole di massima pressione

*Relief valves*

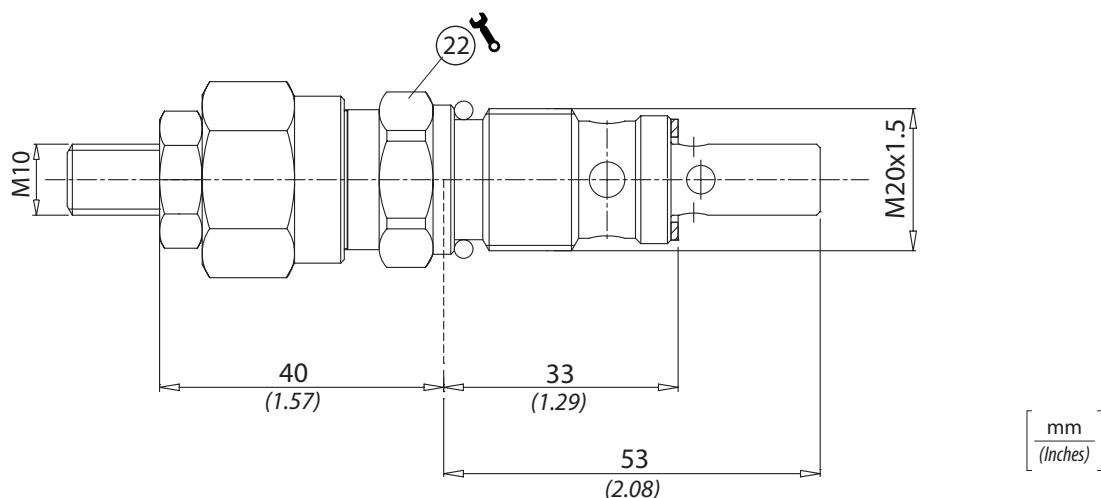
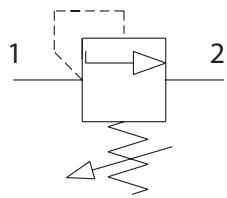


## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



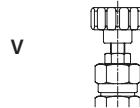
## Codice ordinazione / Ordering code

### VMD30 - X - Y

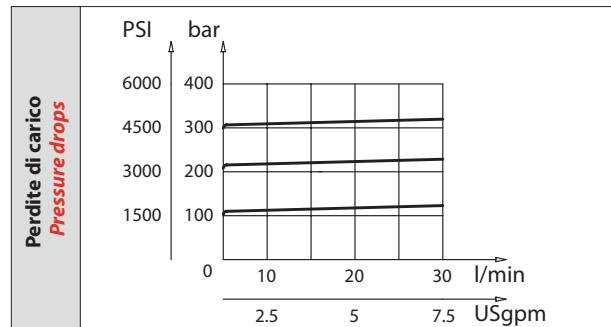
X Regolazione  
Setting



C Codice volantino /  
Flyer Code  
81300023

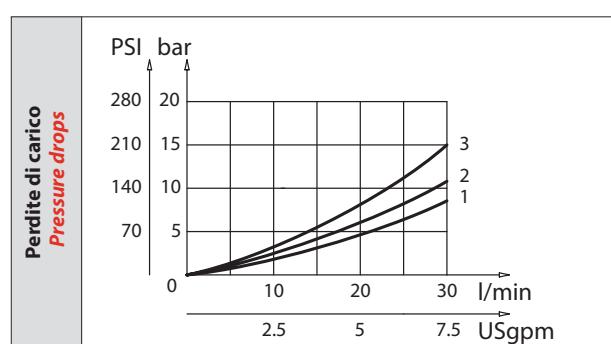


Y	Molla Spring	Incremento pressione al giro Press. increase
1	10/90 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)
2	20/210 bar (290/3000 PSI) max	30 bar/al giro (435 PSI/turn)
3	70/350 bar (1000/5000 PSI) max	65 bar/al giro (940 PSI/turn)



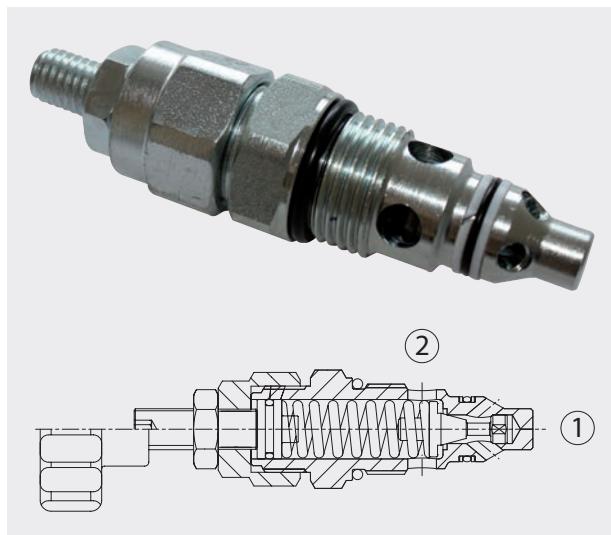
## Caratteristiche tecniche Technical performances

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
VMD30	30 (8)	320 (4500)	0,16 (0.35)	25-30 (19-22)	C2015/30



# VMD8

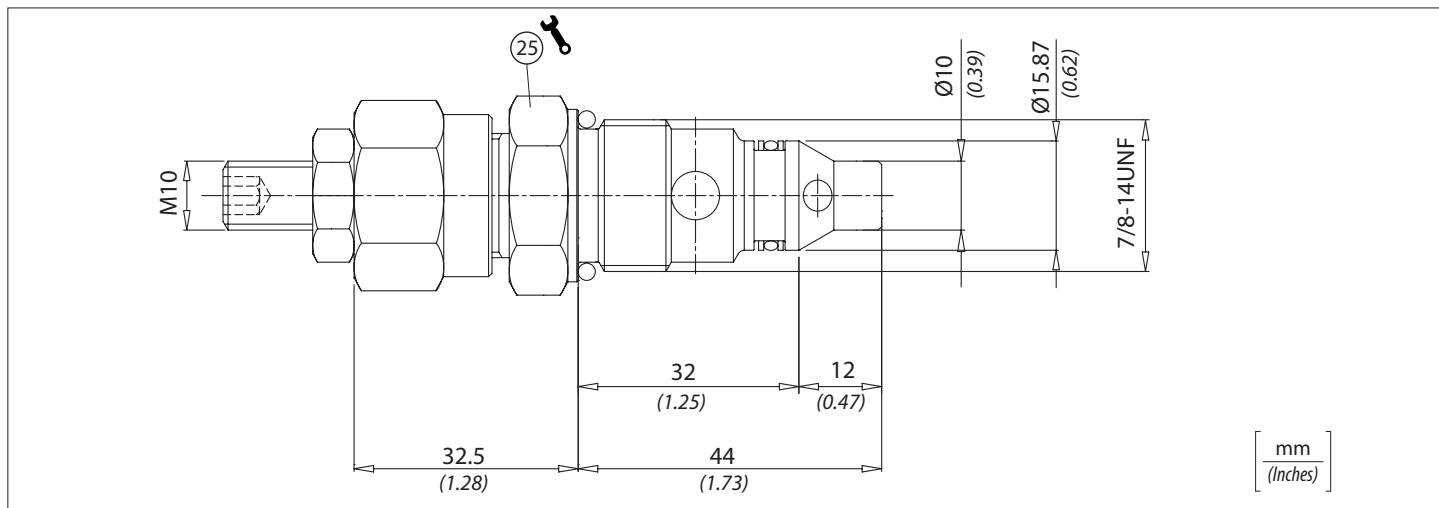
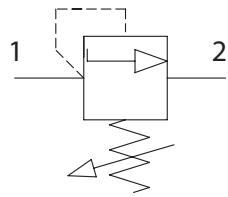
Valvole di massima pressione  
Relief valves



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Codice ordinazione / Ordering code

### VMD8 - X - Y

X Regolazione  
Setting



C Codice volantino /  
Flyer Code  
81300023

Y Molla  
Spring

10/90 bar  
(145/600 PSI) max

Incremento  
pressione al giro  
Press. increase

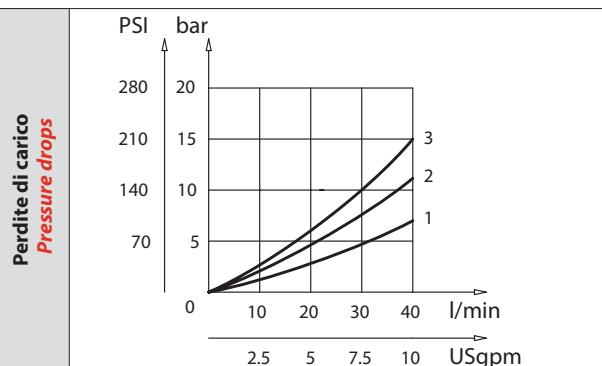
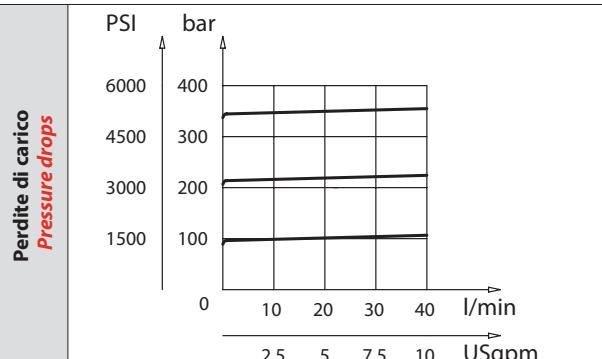
12 bar/al giro  
(175 PSI/turn)

2 20/210 bar  
(290/3000 PSI) max

30 bar/al giro  
(435 PSI/turn)

3 70/350 bar  
(1000/5000 PSI) max

65 bar/al giro  
(940 PSI/turn)



## Caratteristiche tecniche Technical performances

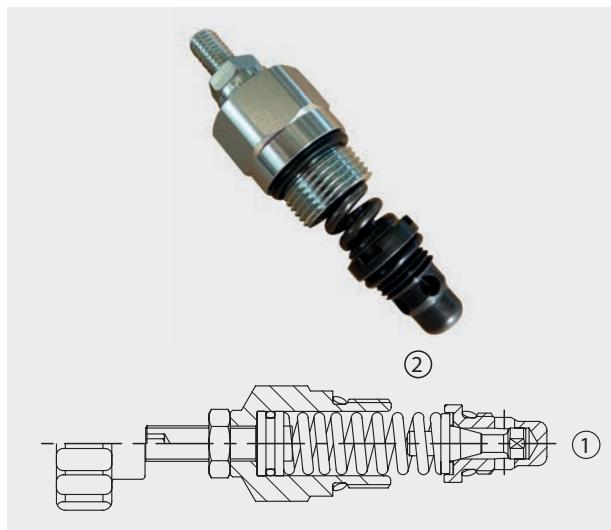
Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm/lbft	Cavità Cavity
VMD8	40 (10)	350 (5000)	0,17 (0.37)	41-47 (30-35)	SAE10/2



# VMD40S

Valvole di massima pressione

*Relief valves*



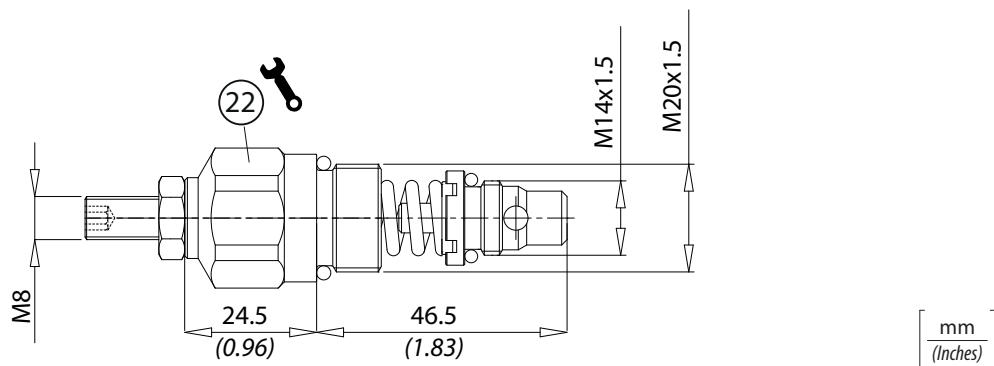
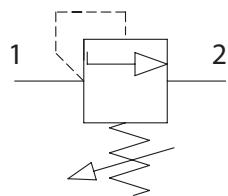
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



### Codice ordinazione / Ordering code

#### VMD40S - X - Y

X Regolazione  
Setting



c Codice volantino /  
Flyer Code

81300109

v Chiave /  
Tool



61700008

Y

Molla  
Spring

Incremento  
pressione al giro  
Press. increase

1

10/90 bar  
(145/600 PSI) max

12 bar/al giro  
(175 PSI/turn)

2

20/210 bar  
(290/3000 PSI) max

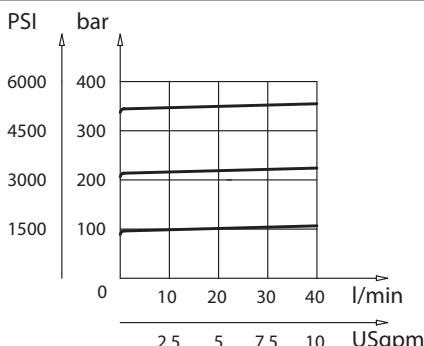
30 bar/al giro  
(435 PSI/turn)

3

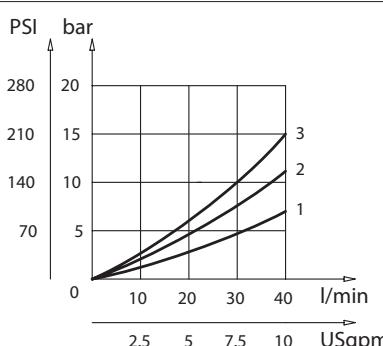
70/350 bar  
(1000/5000 PSI) max

65 bar/al giro  
(940 PSI/turn)

Perdite di carico  
Pressure drops



Perdite di carico  
Pressure drops



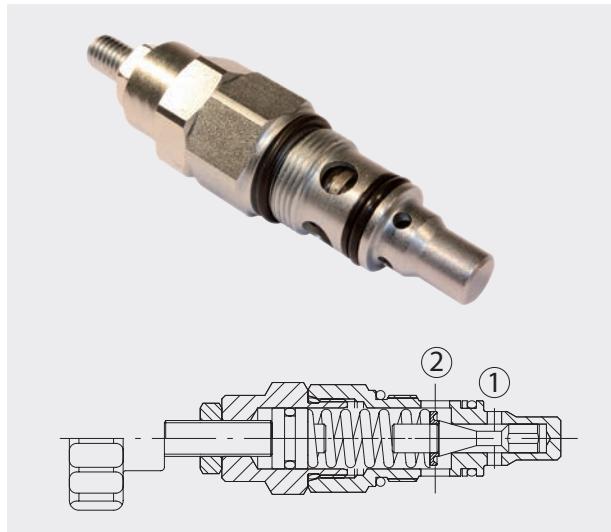
### Caratteristiche tecniche / Technical performances

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbf ft	Cavità Cavity
VMD40S	40 (10)	350 (5000)	0,12 (0.26)	M20 40/45 (30-34)	C2015/1415/2

# VMD90

Valvole di massima pressione

*Relief valves*



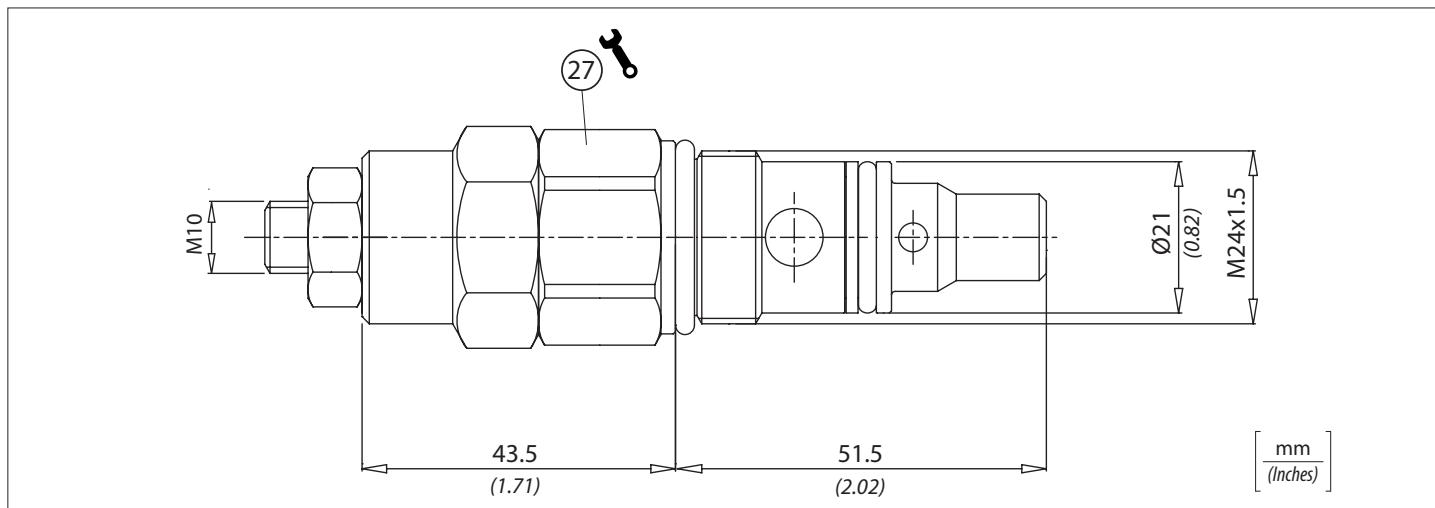
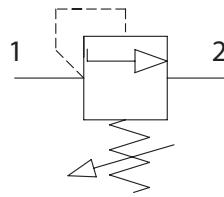
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



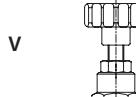
### Codice ordinazione / Ordering code

#### VMD90 - X - Y

X Regolazione  
Setting



C Codice volantino /  
Flyer Code  
81300023



V

Y

Molla  
Spring

Incremento  
pressione al giro  
Press. increase

1 10/90 bar  
(145/600 PSI) max

23 bar/al giro  
(333 PSI/turn)

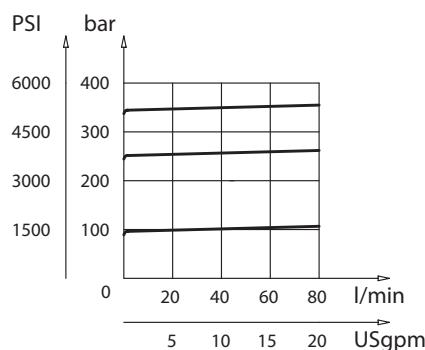
2 20/250 bar  
(290/3600 PSI) max

40 bar/al giro  
(580 PSI/turn)

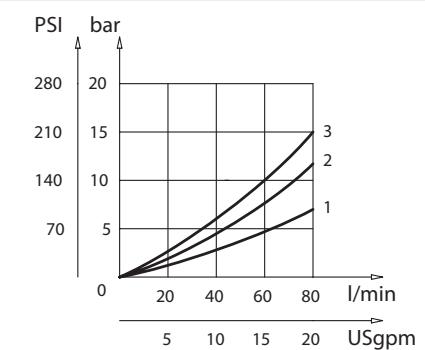
3 50/350 bar  
(725/5000 PSI) max

90 bar/al giro  
(1300 PSI/turn)

### Perdite di carico Pressure drops



### Perdite di carico Pressure drops



### Caratteristiche tecniche

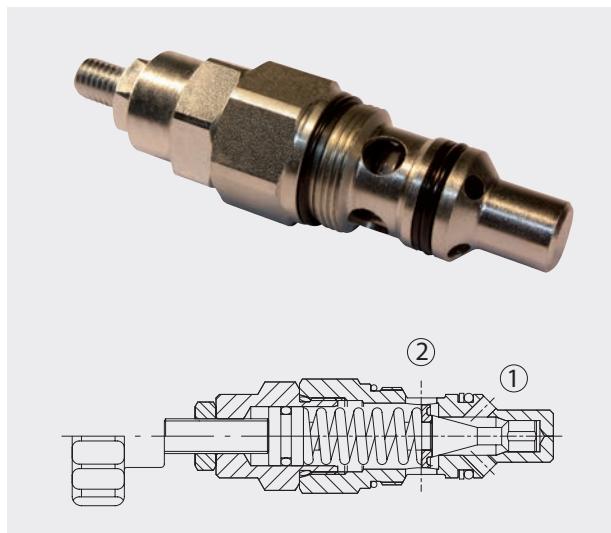
#### Technical performances

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity
<b>VMD90</b>	<b>80 (21)</b>	<b>350 (5000)</b>	<b>0,25 (0.55)</b>	<b>60-65 (45-49)</b>	<b>C2415/2</b>



# VMD120

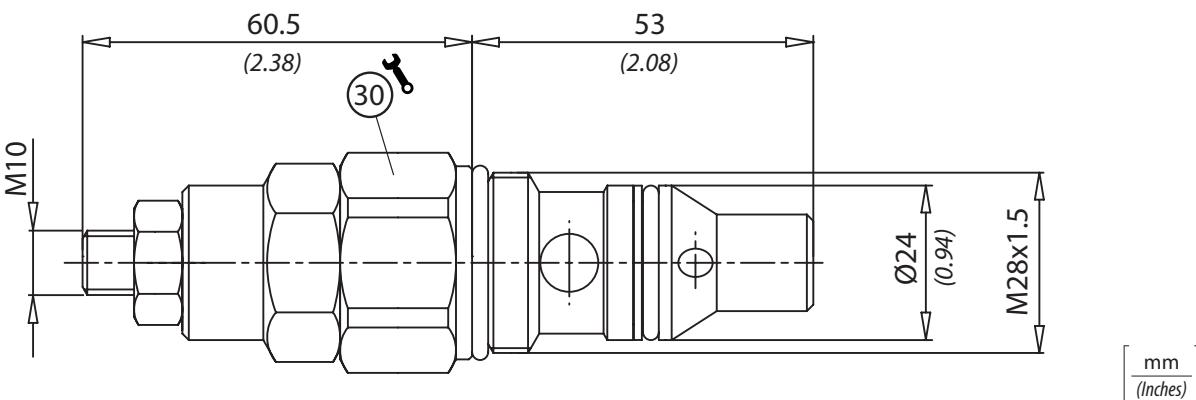
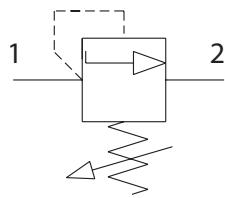
Valvole di massima pressione  
Relief valves



## Dati tecnici Technical data

Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C      +80°C -4°F      +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Codice ordinazione / Ordering code

### VMD120 - X - Y

X Regolazione  
*Setting*

Y

Molla  
*Spring*

Incremento  
pressione al giro  
*Press. increase*

C Codice volantino /  
*Flyer Code*

81300023

1 10/100 bar  
(145/1450 PSI) max

20 bar/al giro  
(290 PSI/turn)

V

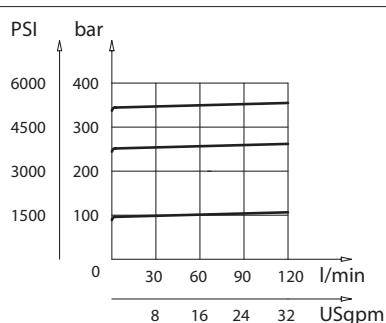
2 20/250 bar  
(290/3600 PSI) max

45 bar/al giro  
(652 PSI/turn)

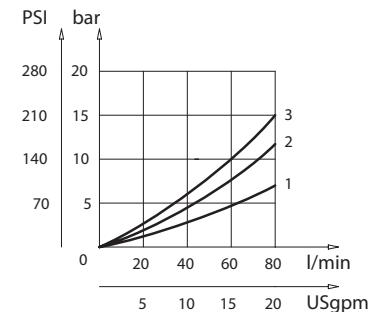
3 40/350 bar  
(580/5000 PSI) max

50 bar/al giro  
(725 PSI/turn)

## Perdite di carico *Pressure drops*



## Perdite di carico *Pressure drops*



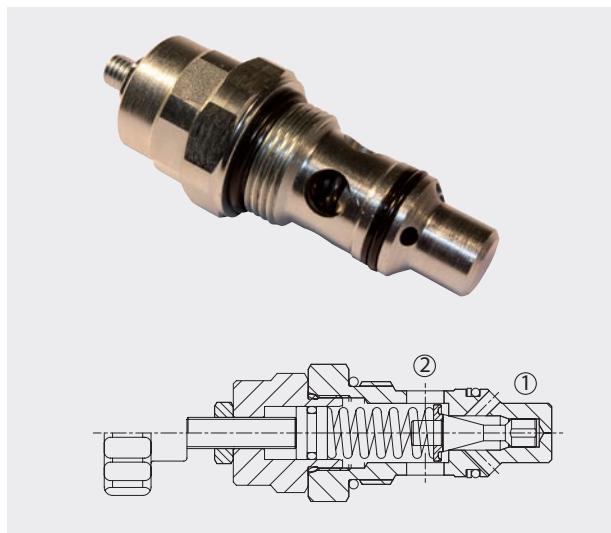
## Caratteristiche tecniche *Technical performances*

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm/lbft	Cavità Cavity
VMD120	120 (30)	350 (5000)	0,30 (0.65)	60-65 (45-49)	C2815/2

# VMD150

Valvole di massima pressione

*Relief valves*



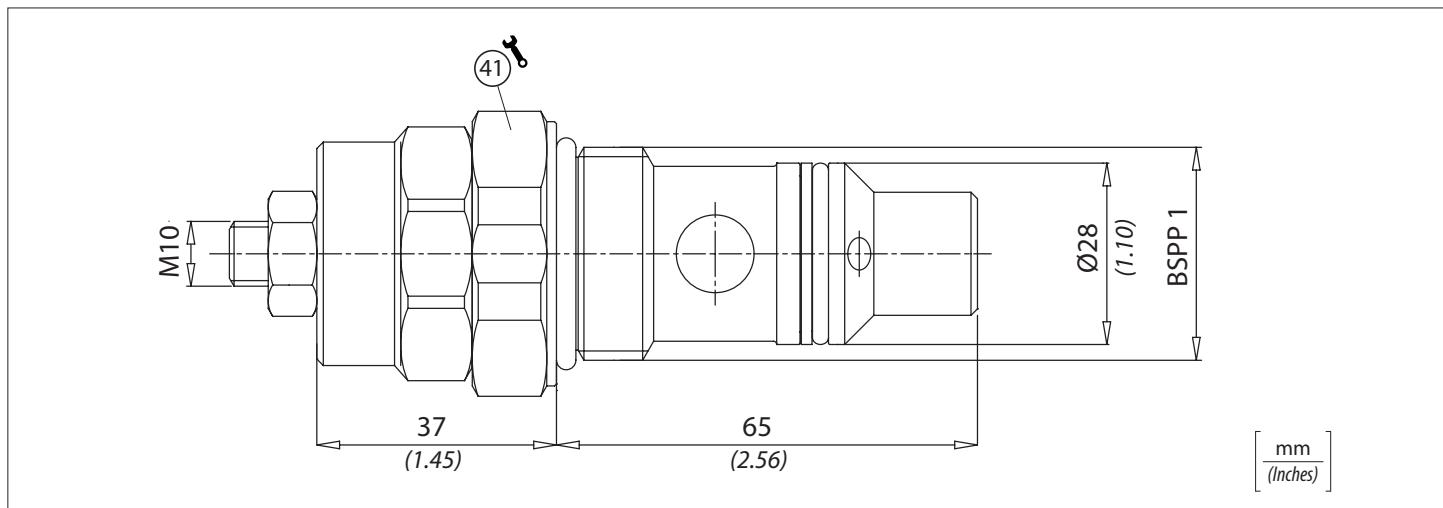
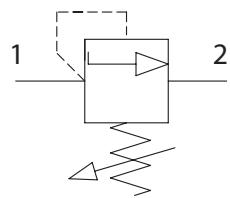
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



### Codice ordinazione / Ordering code

### VMD150 - X - Y

X Regolazione  
Setting



C Codice volantino /  
Flyer Code  
81300023



V Codice volantino /  
Flyer Code  
81300023

Y

Molla  
Spring

Incremento  
pressione al giro  
Press. increase

1 10/100 bar  
(145/1450 PSI) max

20 bar/al giro  
(290 PSI/turn)

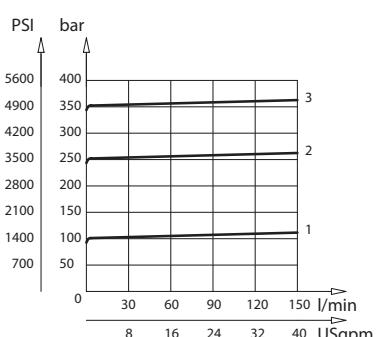
2 20/250 bar  
(290/3600 PSI) max

45 bar/al giro  
(652 PSI/turn)

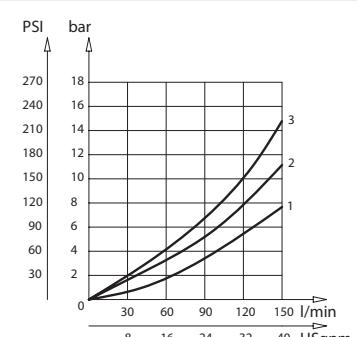
3 50/350 bar  
(725/5000 PSI) max

50 bar/al giro  
(725 PSI/turn)

### Perdite di carico Pressure drops



### Perdite di carico Pressure drops



### Caratteristiche tecniche Technical performances

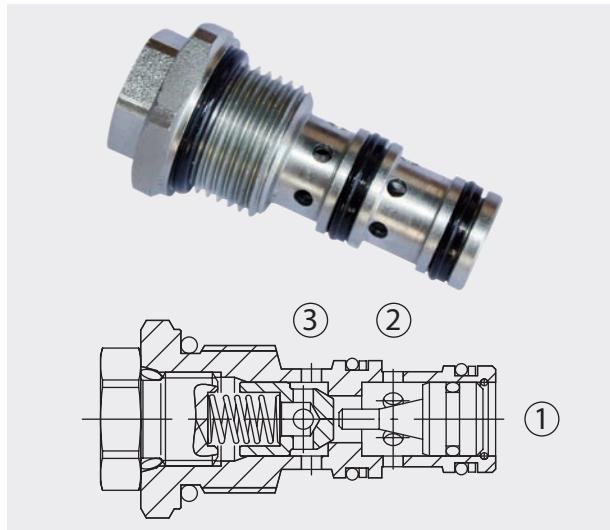
Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbfft	Cavità Cavity
<b>VMD150</b>	<b>150 (40)</b>	<b>350 (5000)</b>	<b>0,50 (1.1)</b>	<b>70-75 (52-56)</b>	<b>C100/2</b>



# VPR

## Valvole di blocco pilotate a semplice effetto

## *Single acting pilot check valves*

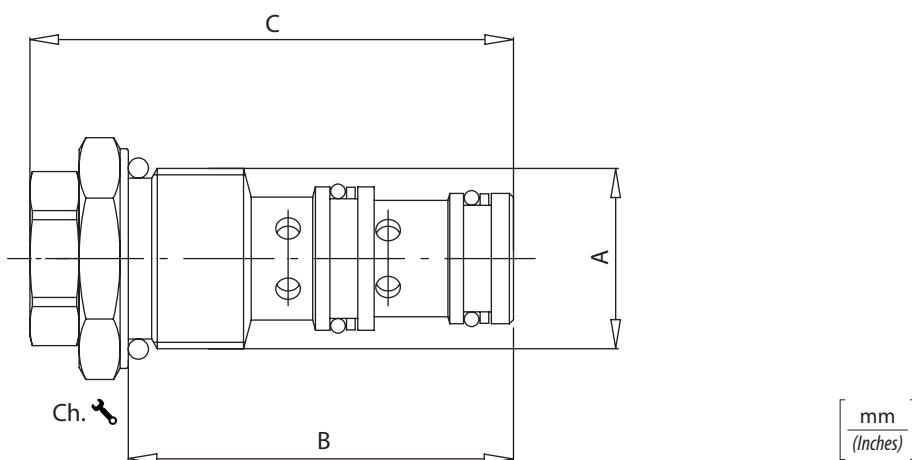


### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



### Codice ordinazione Ordering code

**VPR - X**

Dimensione / Dimension

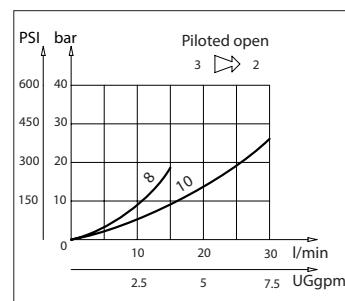
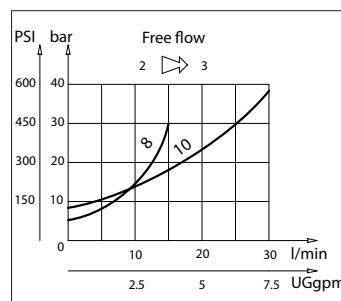
**X**

08      3/4 - 16UNF

10

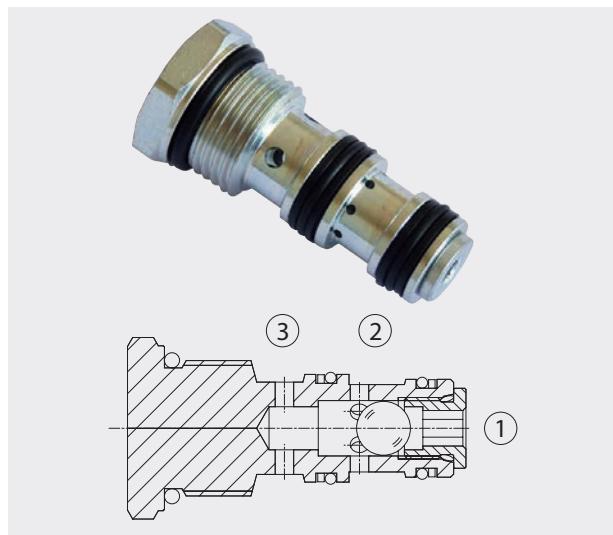
7/8 - 14UNF

### Perdite di carico / Pressure drops



### Caratteristiche tecniche / Technical performances

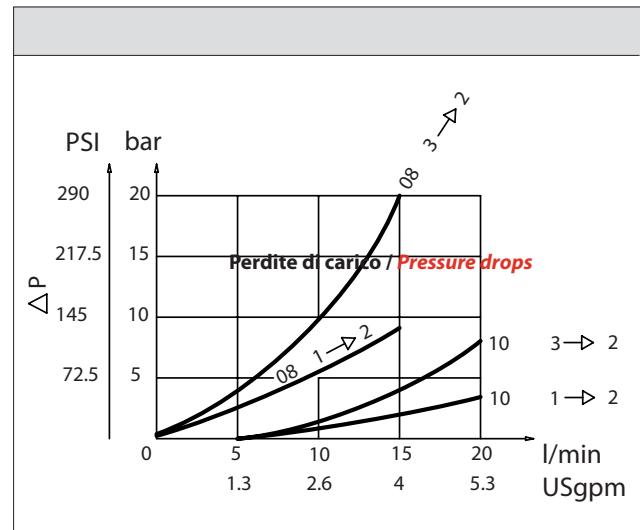
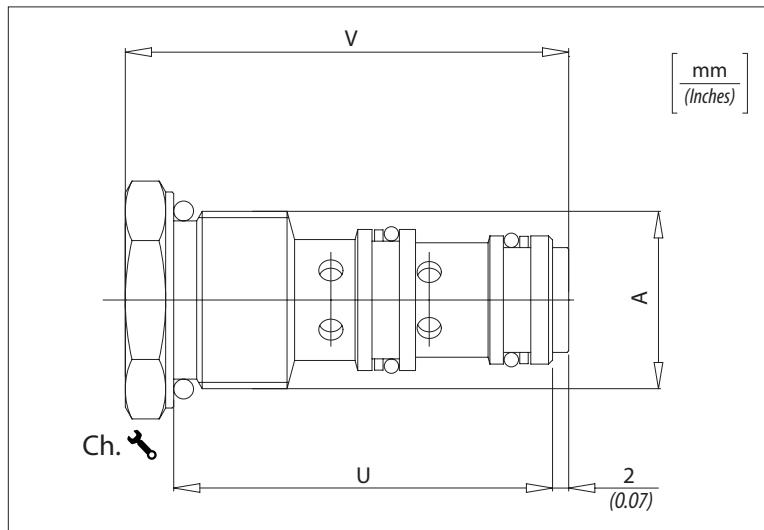
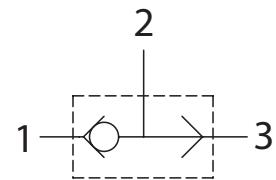
Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbf ft	Rapporto di pilotaggio Pilot ratio	Cavità Cavity	Ch. Key
<b>VPR08</b>	<b>3/4 - 16 UNF</b>	<b>15 (4)</b>	<b>350 (5000)</b>	<b>41 (1.61)</b>	<b>57 (2.24)</b>	<b>0,10 (0.22)</b>	<b>25-30 (19-22)</b>	<b>1:2.5</b>	<b>SAE8/3</b>	<b>22</b>
<b>VPR10</b>	<b>7/8 - 14 UNF</b>	<b>30 (8)</b>		<b>47 (1.85)</b>	<b>59 (2.32)</b>	<b>0,11 (0.25)</b>	<b>41-47 (30-35)</b>	<b>1:3</b>	<b>SAE10/3</b>	<b>27</b>


**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*


**Codice ordinazione**  
**Ordering code**

SV - X

X	Dimensione / Dimension
08	3/4 - 16UNF
10	7/8 - 14UNF

**Caratteristiche tecniche / Technical performances**

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	U	V	Peso approssimativo Approx weight Kg/lb	Coppia di serraggio Tightening torque Nm / lbft	Cavità Cavity	Ch. Key
SV08	3/4 - 16 UNF	15 (4)	350 (5000)	41 (1.61)	49 (1.93)	0,10 (0.22)	25-30 (19-22)	SAE8/3	22
SV10	7/8 - 14 UNF	30 (8)		47 (1.85)	55 (2.16)	0,11 (0.25)	41-47 (30-35)	SAE10/3	27



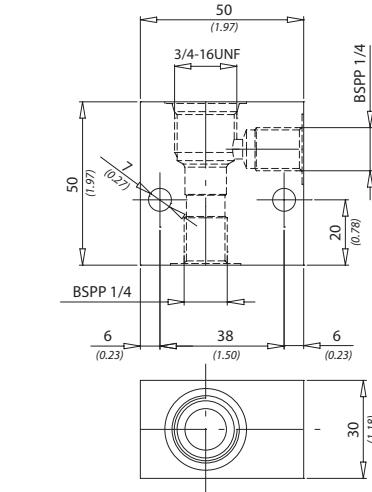
**Cod. 62200032**



**BSPP1/4**

Peso approssimativo  
Approx weight  
0,28 kg (0,62 lb)

Il blocco in alluminio può essere utilizzato per pressioni fino a 210 bar (3000PSI)  
Aluminium manifold can be used for pressures up to 210 bar ( 3000PSI)



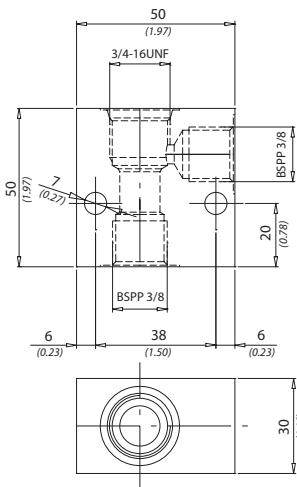
**Cod. 62200358**



**BSPP3/8**

Peso approssimativo  
Approx weight  
0,45 kg (1 lb)

Il blocco in alluminio può essere utilizzato per pressioni fino a 210 bar (3000PSI)  
Aluminium manifold can be used for pressures up to 210 bar ( 3000PSI)



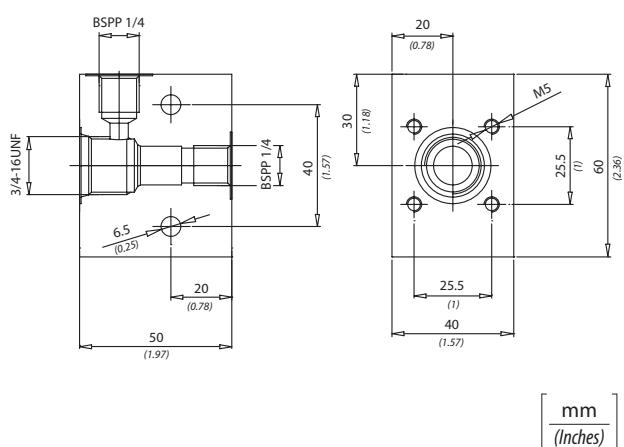
**Cod. 62200023**



**PME5/6/7**

Peso approssimativo  
Approx weight  
0,3 kg (0.66 lb)

Il blocco in alluminio può essere utilizzato per pressioni fino a 210 bar (3000PSI)  
Aluminium manifold can be used for pressures up to 210 bar ( 3000PSI)





**NEW**

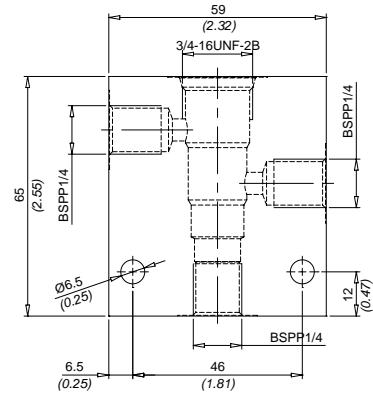
**Cod. 62200357**



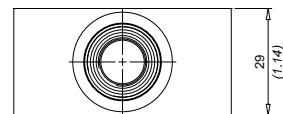
**BSPP1/4**

Peso approssimativo  
Approx weight  
0,28 kg (0,62 lb)

Il blocco in alluminio può essere utilizzato per pressioni fino a 210 bar (3000PSI)  
Aluminium manifold can be used for pressures up to 210 bar ( 3000PSI)



[ mm  
(Inches) ]



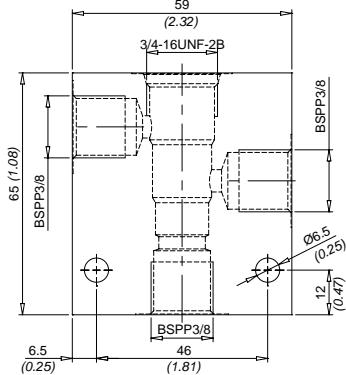
**Cod. 62200358**



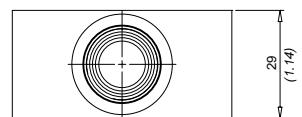
**BSPP3/8**

Peso approssimativo  
Approx weight  
0,27 kg (0,60 lb)

Il blocco in alluminio può essere utilizzato per pressioni fino a 210 bar (3000PSI)  
Aluminium manifold can be used for pressures up to 210 bar ( 3000PSI)



[ mm  
(Inches) ]



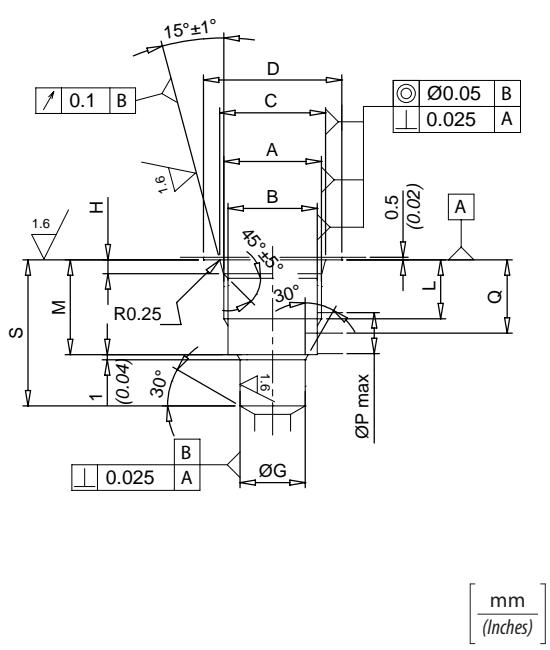


# CAVITÀ SAE

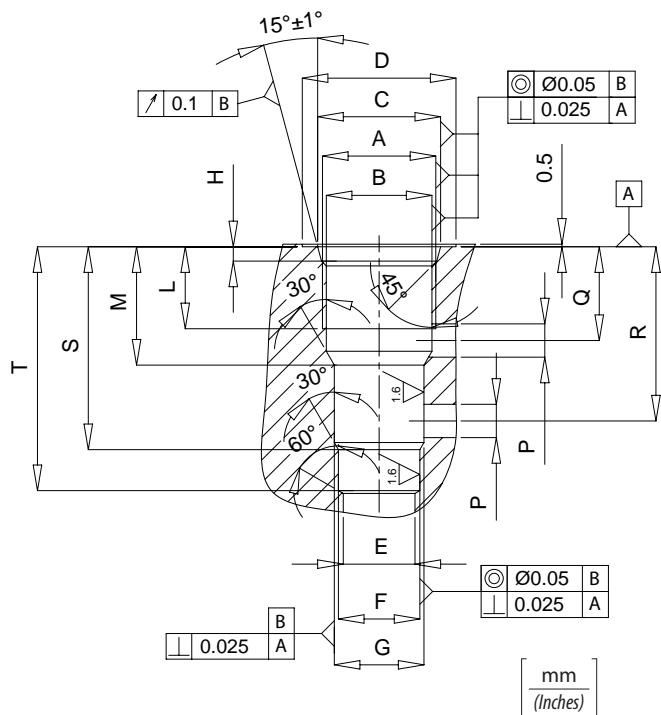
*SAE cavities*

**NEW**

**SAE\_/\_2**



**SAE\_/\_3**



**Dimensioni / Dimensions**

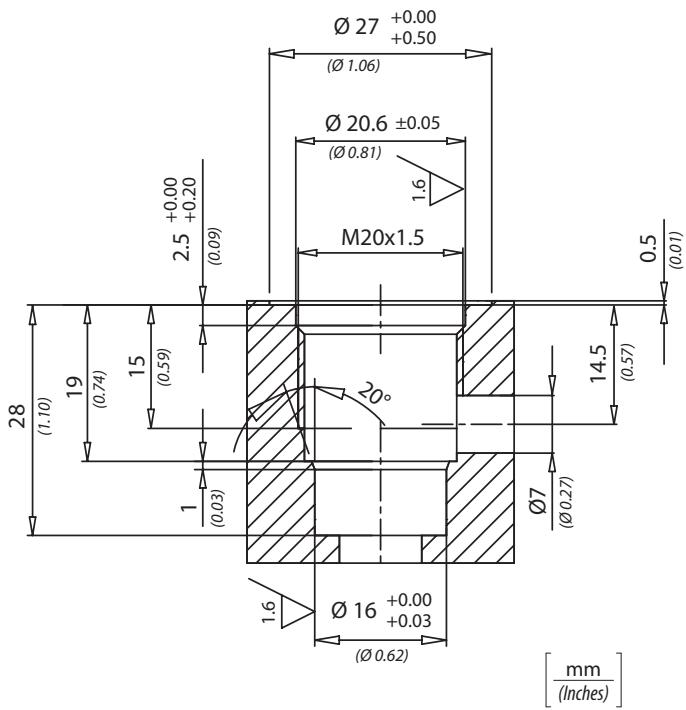
Codice Code	A	B $\pm 0,05$	C $\pm 0,05$	D	E $\varnothing$ max	F $\pm 0,02$	G $\pm 0,02$	H	L	M	P	Q	R	S	T	U
SAE08/2	3/4-16 UNF	17,42 (0.686)	20,66 (0.686)	27 (1.063)			12,72 (0.50)	2,7 (0.106)	11,50 (0.452)	18,50 (0.728)	8 (0.315)	14,30 (0.563)		28,50 (1.122)		
SAE08/3					12,5 (0.492)	14,30 (0.563)	15,90 (0.626)			19,10 (0.752)	5,5 (0.216)		28,6 (1.126)	33,30 (1.311)	41,30 (1.62)	5,5 (0.21)
SAE10/2	7/8-14 UNF	20,62 (0.812)	24 (0.812)	30 (1.181)				2,8 (0.110)	16 (0.630)	23,80 (0.937)	11 (0.433)	18,30 (0.720)				
SAE10/3					14 (0.551)	15,90 (0.626)	17,50 (0.689)			23,10 (0.909)	6,5 (0.256)		34 (1.338)	39,60 (1.560)	47,60 (1.87)	6,5 (0.25)
SAE12/2	1-1/16-12 UNF	24,73 (0.973)	29,23 (1.151)	38 (1.496)			22,25 (0.876)	3,56 (0.140)	19 (0.748)	34,10 (1.342)	19 (0.748)	24,50 (0.964)		46,80 (1.842)		
SAE12/3					19 (0.748)	22,25 (0.876)	23,82 (0.938)			36,60 (1.441)	16 (0.630)		53 (2.086)	63,50 (2.5)	75,40 (2.96)	16 (0.62)
SAE16/2	1-5/16-12 UNF	31,34 (1.233)	35,58 (1.4)	45 (1.771)			28,62 (1.126)	3,49 (0.137)	22 (0.866)	34,10 (1.342)	19 (0.748)			46,80 (1.842)		
SAE16/3					19 (0.748)	27,08 (1.063)				36,60 (1.441)	16 (0.630)		53 (2.086)	64,30 (2.53)	75,40 (2.96)	16 (0.62)

# CAVITÀ

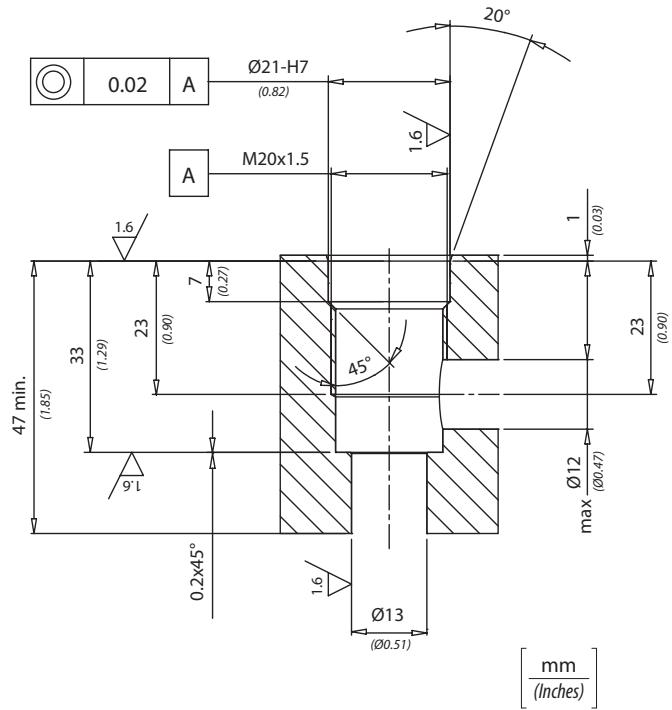
Cavities



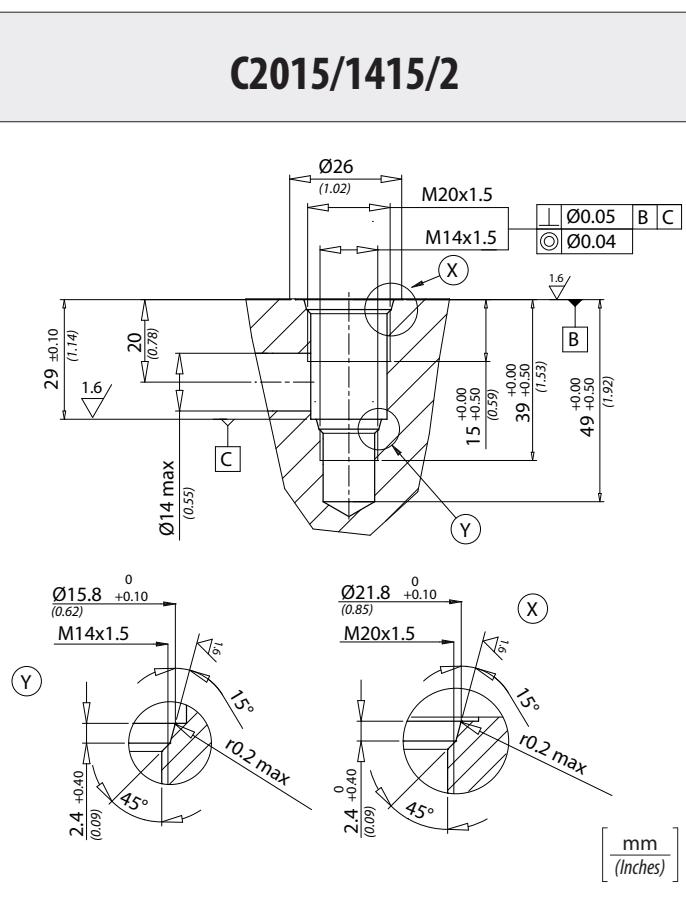
**C2015/2**



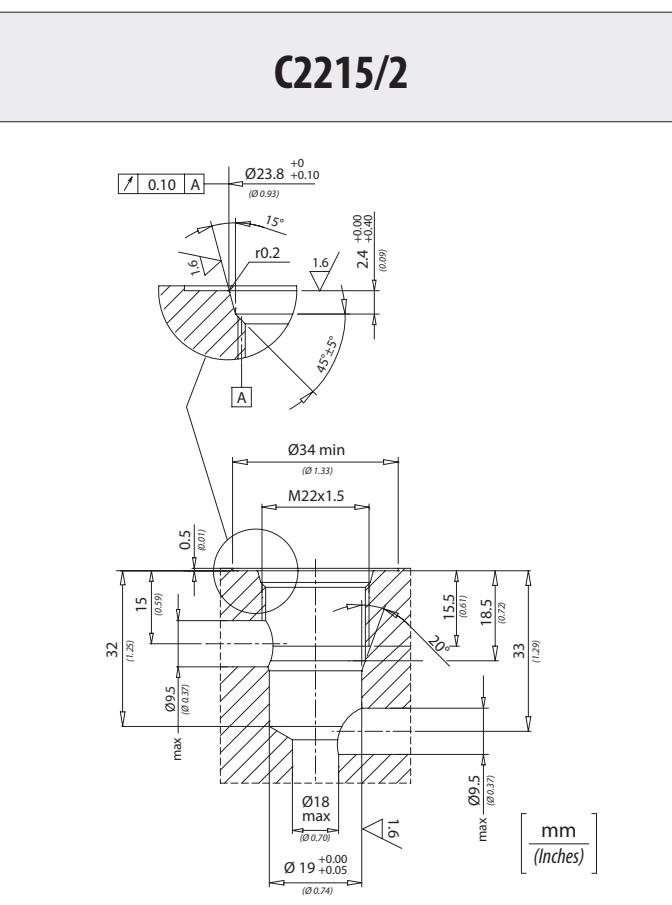
**C2015/30**



**C2015/1415/2**



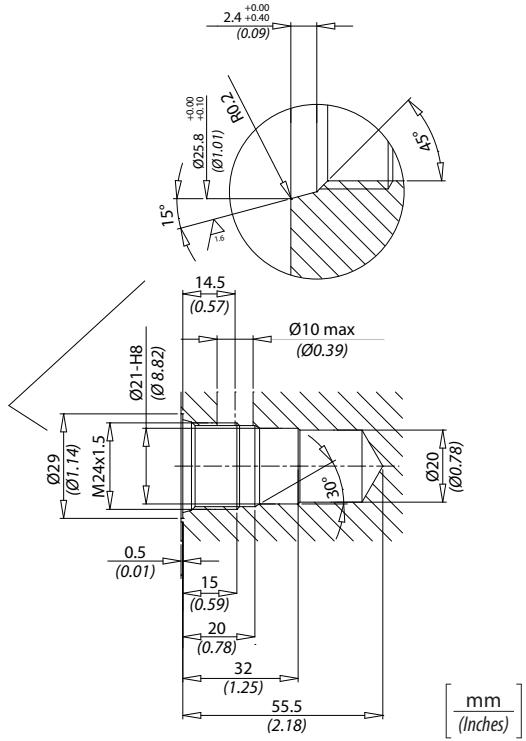
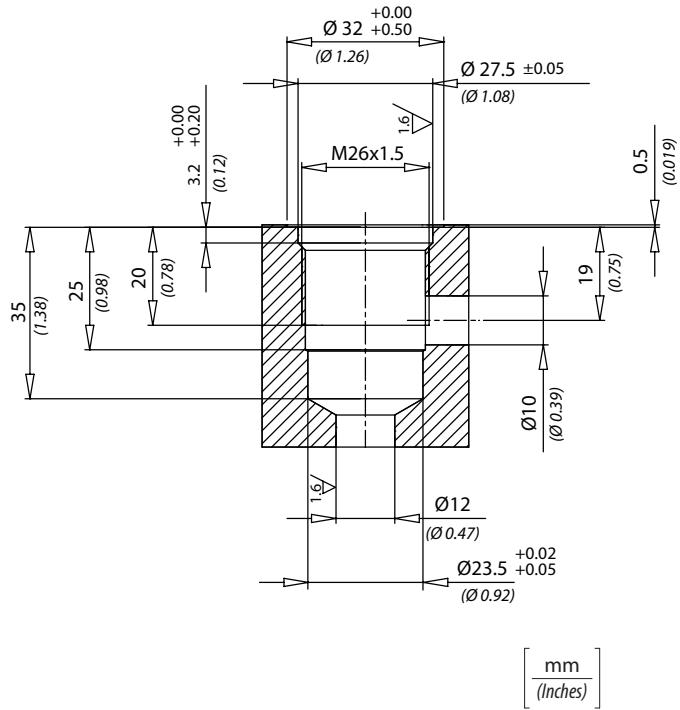
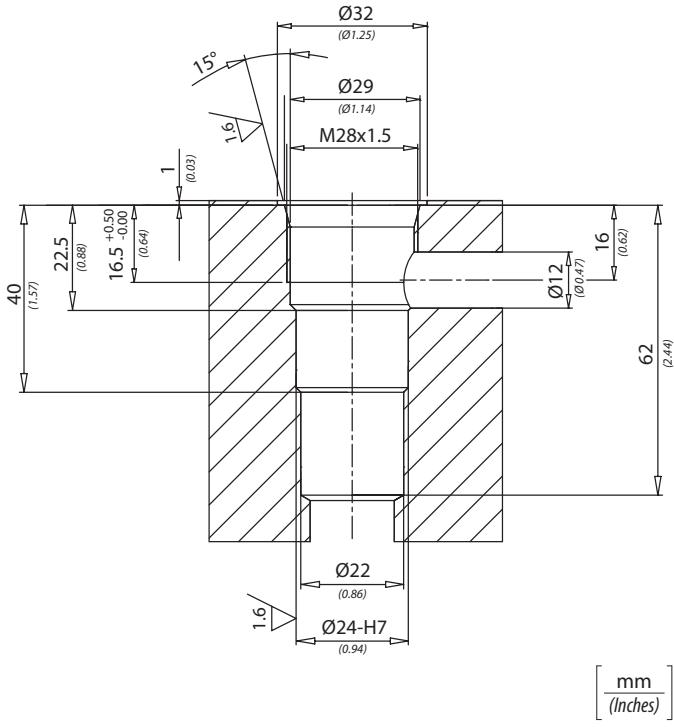
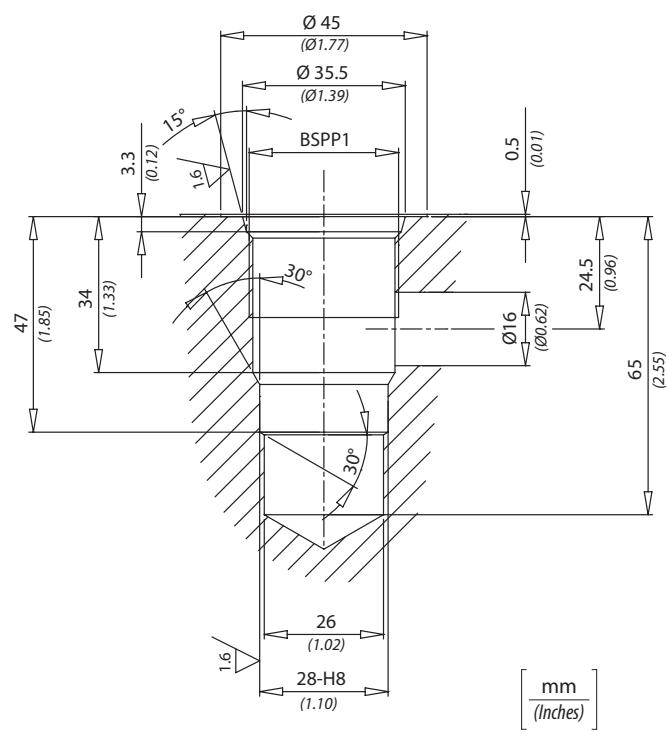
**C2215/2**

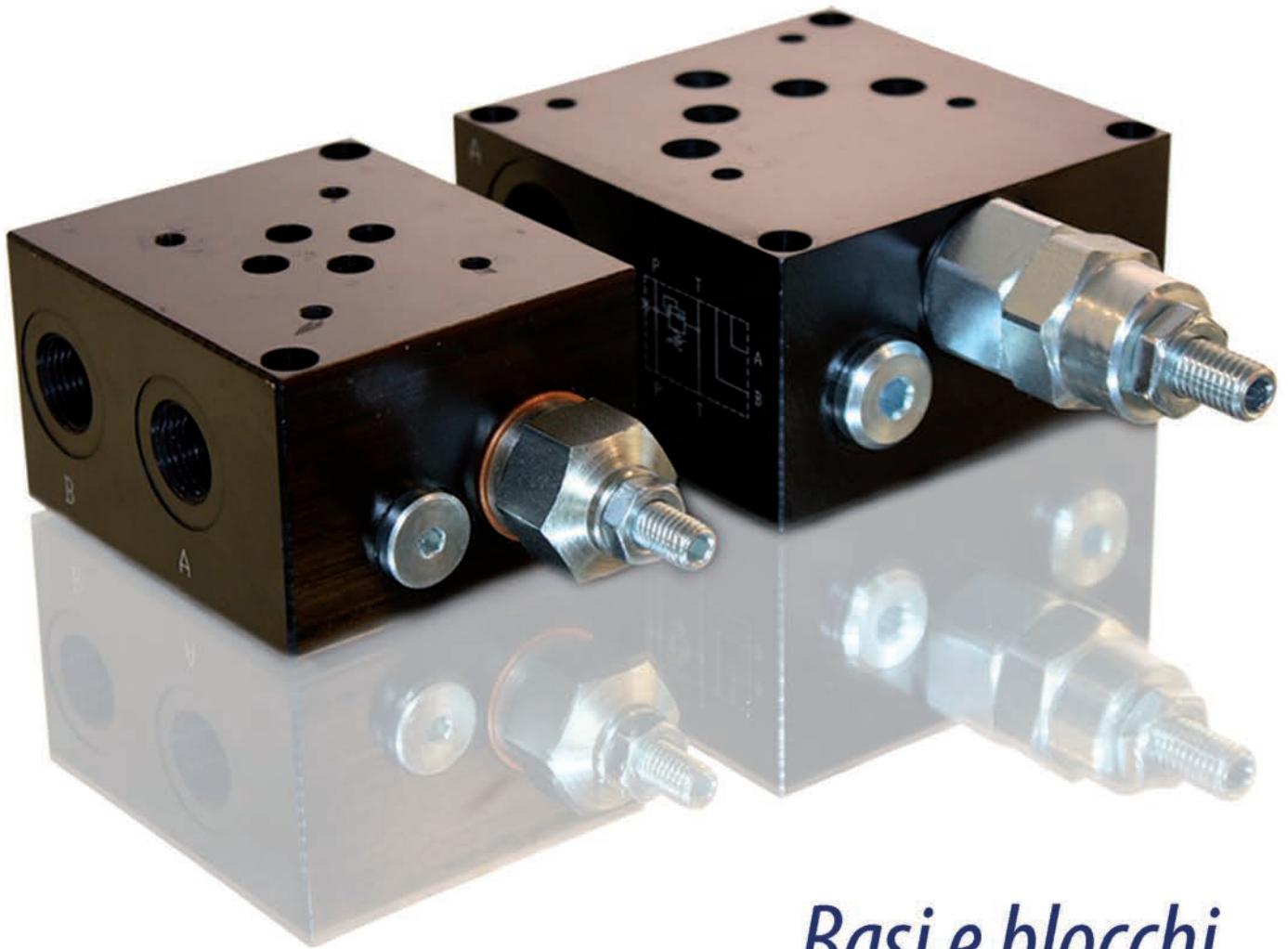




# CAVITÀ

## Cavities

**C2415/2****C2615/2****C2815/2****C100/2**



*Basi e blocchi*  

---

*Hydraulic manifolds*



**HYDRAULIC VALVES AND COMPONENTS**



# BS3

Basi singole cetop3 in alluminio  
Aluminium cetop3 single manifolds

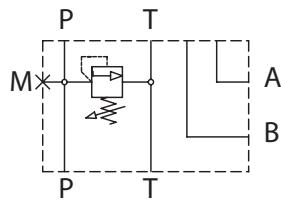


## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*

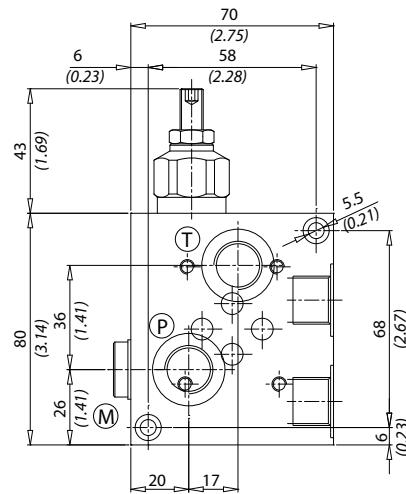
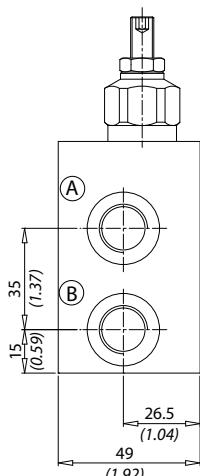


### Attacchi / Ports

P-T-A-B	BSPP 3/8
M	BSPP 1/4

Il blocco in alluminio può essere utilizzato per pressioni fino a 210bar (3000PSI)

Aluminum manifold can be used for pressures up to 210 bar (3000PSI)



[ mm  
(Inches) ]

### Codice ordinazione / Ordering code

#### BS3 - X - Y

X Regolazione  
Setting



Codice volantino /  
Flyer Code  
81300109

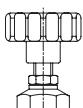
Y Molla  
Spring

10/90 bar  
(145/600 PSI) max

Incremento  
pressione al giro  
Press. increase

12 bar/al giro  
(175 PSI/turn)

V

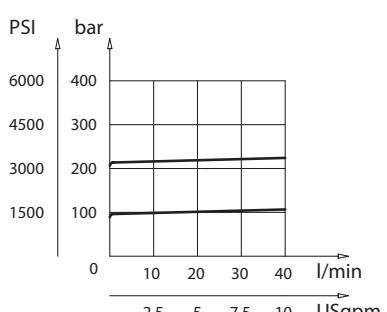


2

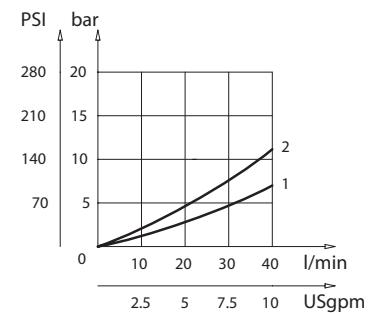
20/210 bar  
(290/3000 PSI) max

30 bar/al giro  
(435 PSI/turn)

### Perdite di carico Pressure drops



### Perdite di carico Pressure drops



### Caratteristiche tecniche Technical performances

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Tipo di valvola Type of valve
BS3	40 (10)	210 (3000)	0,8 (1.76)	VMD40



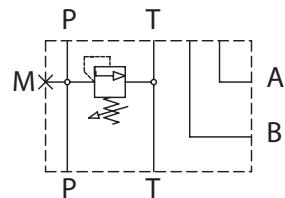
NEW


**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C + 176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C + 122°F

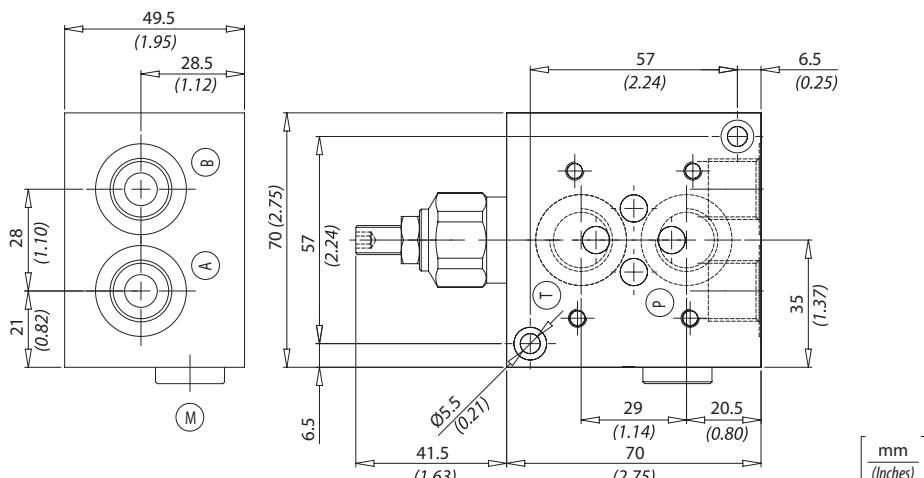
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*

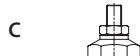
**Attacchi / Ports**

P-T-A-B	BSPP 3/8
M	BSPP 1/4

Il blocco in alluminio può essere utilizzato per pressioni fino a 210bar (3000PSI)  
Aluminium manifold can be used for pressures up to 210 bar (3000PSI)

**Codice ordinazione / Ordering code****BP3 - X - Y**

**X** Regolazione  
Setting



C Codice volantino /  
Flyer Code  
81300109

**Y**

Molla  
Spring

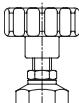
Incremento  
pressione al giro  
Press. increase

1

10/90 bar  
(145/600 PSI) max

12 bar/al giro  
(175 PSI/turn)

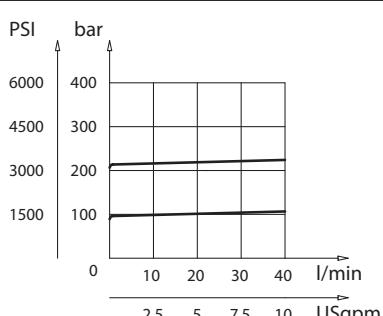
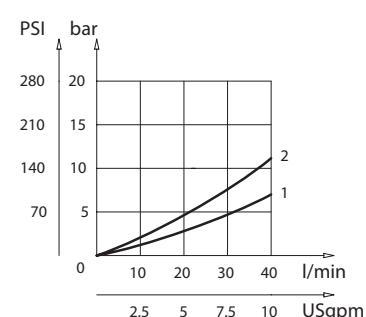
**V**



2

20/210 bar  
(290/3000 PSI) max

30 bar/al giro  
(435 PSI/turn)

**Perdite di carico**  
**Pressure drops**

**Perdite di carico**  
**Pressure drops**

**Caratteristiche tecniche**  
**Technical performances**

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Tipo di valvola Type of valve
BP3	40 (10)	210 (3000)	0,8 (1.76)	VMD40



# BS5

Basi singole cetop5 in alluminio  
Aluminium cetop5 single manifolds



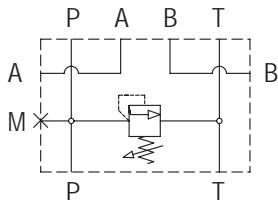
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*

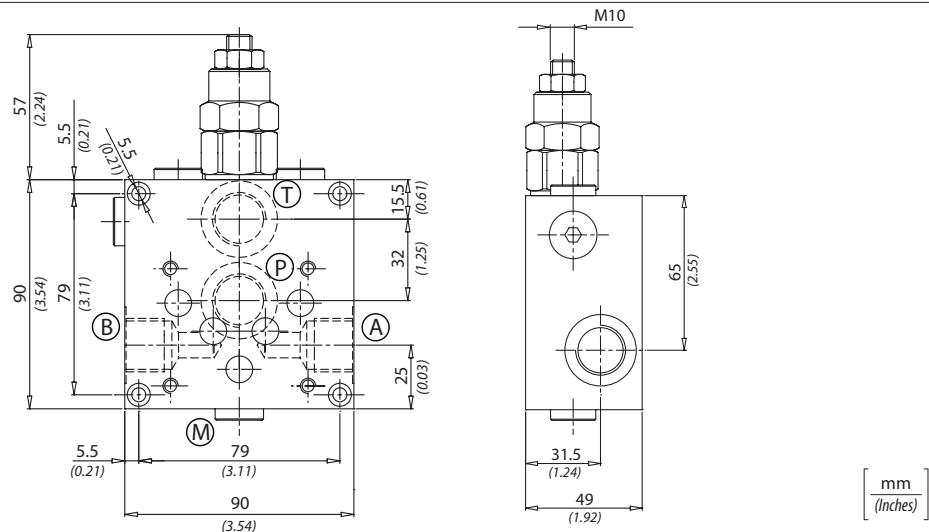


## Attacchi / Ports

P-T-A-B	BSPP 1/2
M	BSPP 1/4

Il blocco in alluminio può essere utilizzato per pressioni fino a 210bar (3000PSI)

Aluminium manifold can be used for pressures up to 210 bar (3000PSI)



## Codice ordinazione / Ordering code

### BS5 - X - Y

X Regolazione  
Setting



Y

Molla  
Spring

Incremento  
pressione al giro  
Press. increase

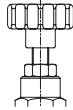
C Codice volantino /  
Flyer Code  
81300023

1

10/100 bar  
(145/1450 PSI) max

23 bar/al giro  
(333 PSI/turn)

V

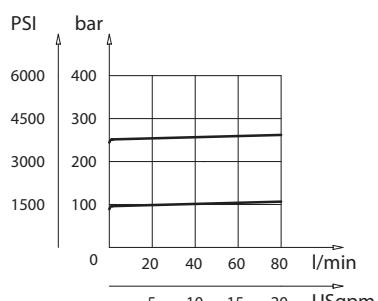


2

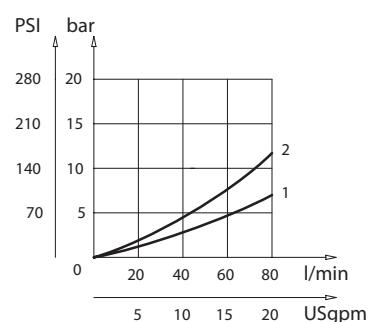
20/210 bar  
(290/3000 PSI) max

40 bar/al giro  
(580 PSI/turn)

## Perdite di carico Pressure drops



## Perdite di carico Pressure drops



## Caratteristiche tecniche Technical performances

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Tipo di valvola Type of valve
BS5	80 (20)	210 (3000)	1,25 (2.75)	VMD90

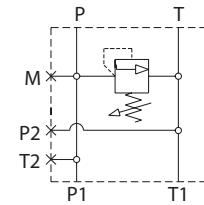


### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*

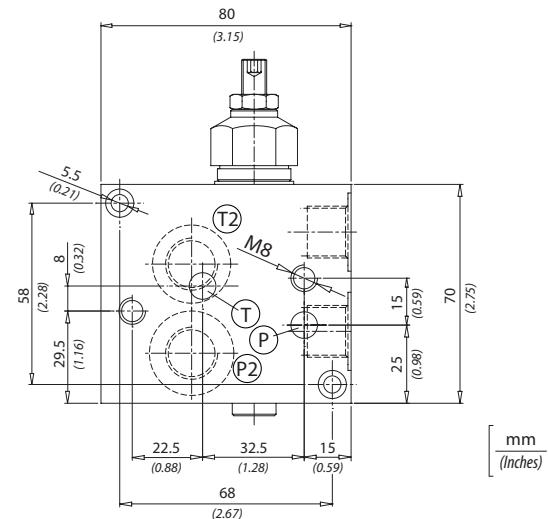
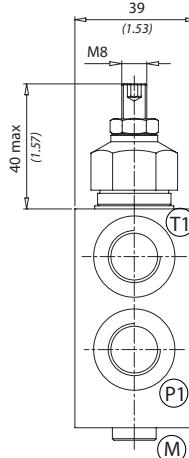


### Attacchi / Ports

P-T-A-B	BSPP 3/8
M	BSPP 1/4

Il blocco in alluminio può essere utilizzato per pressioni fino a 210bar (3000PSI)

Aluminium manifold can be used for pressures up to 210 bar (3000PSI)



### Codice ordinazione / Ordering code

#### BC3 - X - Y

X Regolazione  
Setting



C Codice volantino /  
Flyer Code  
81300109

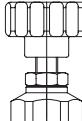
Y Molla  
Spring

10/90 bar  
(145/600 PSI) max

Incremento  
pressione al giro  
Press. increase

12 bar/al giro  
(175 PSI/turn)

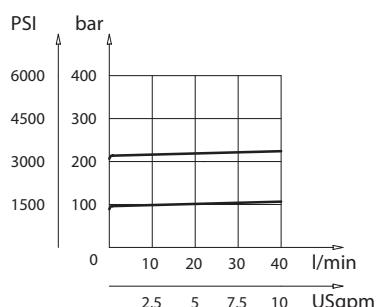
V



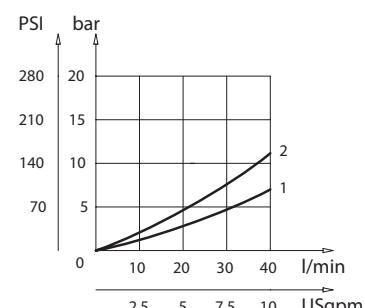
2 20/210 bar  
(290/3000 PSI) max

30 bar/al giro  
(435 PSI/turn)

### Perdite di carico Pressure drops



### Perdite di carico Pressure drops

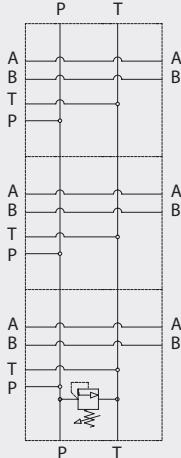


### Caratteristiche tecniche Technical performances

Codice Code	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Tipo di valvola Type of valve
BC3	40 (10)	210 (3000)	0,7 (1.54)	VMD40

**BM**

Basi multiple in parallelo in alluminio utilizzati laterali con valvola di massima pressione  
Aluminium parallel multiple manifolds - lateral ports with relief valve



### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

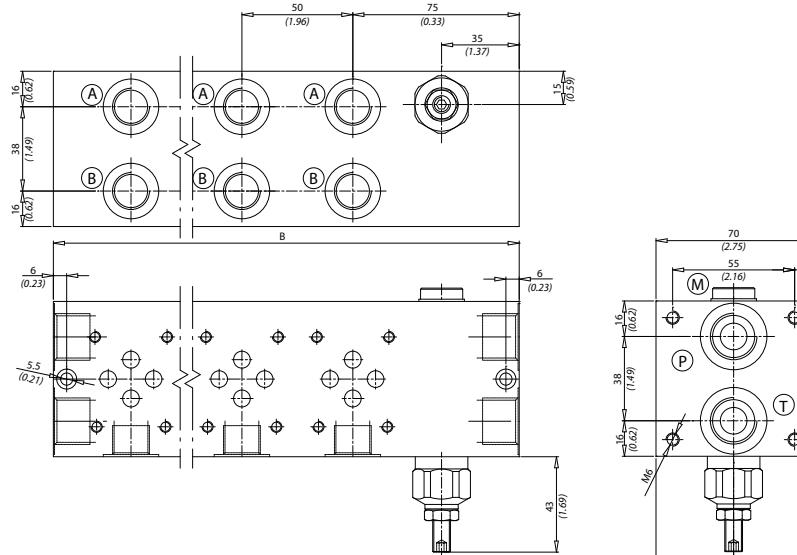
It is necessary a filter use to protect the valve (advised filtration 15 micron)

### Attacchi / Ports

P-T	BSPP 1/2
M	BSPP 1/4
A-B	BSPP 3/8

Il blocco in alluminio può essere utilizzato per pressioni fino a 210bar (3000PSI)

Aluminium manifold can be used for pressures up to 210 bar (3000PSI)



[ mm  
(Inches) ]

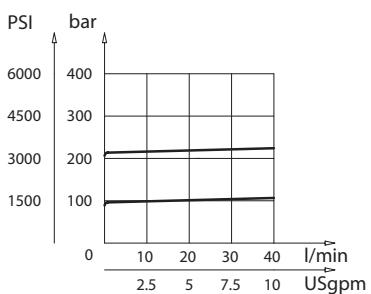
### Codice ordinazione / Ordering code

**BM - X - A - Y - K**

X	Stazione Stations	A	Y	Stazione Stations	K	Molla Spring	Incremento pressione al giro Press. increase
2					1	10/90 bar (145/600 PSI) max	12 bar/al giro (175 PSI/turn)
3	Numero di stazioni Number of stations	A:	C				
4	Alluminio Aluminium						
5					2	20/210 bar (290/3000 PSI) max	30 bar/al giro (435 PSI/turn)
6		V					

Codice / Code 81300109

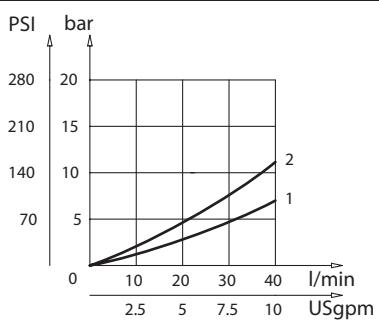
### Perdite di carico Pressure drops

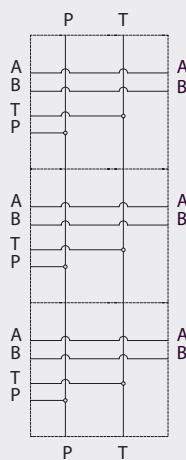


### Caratteristiche tecniche / Technical performances

Codice Code	N. di stazioni N. of stations	B	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Tipo di valvola Type of valve
BM2	2	160 (6.30)			2,1 (4.6)	
BM3	3	210 (8.27)			2,7 (6)	
BM4	4	260 (10.24)			3,3 (7.3)	
BM5	5	310 (12.20)			3,9 (8.6)	
BM6	6	360 (14.17)	40 (10)	210 (3000)	4,5 (10)	VMD40

### Perdite di carico Pressure drops





### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

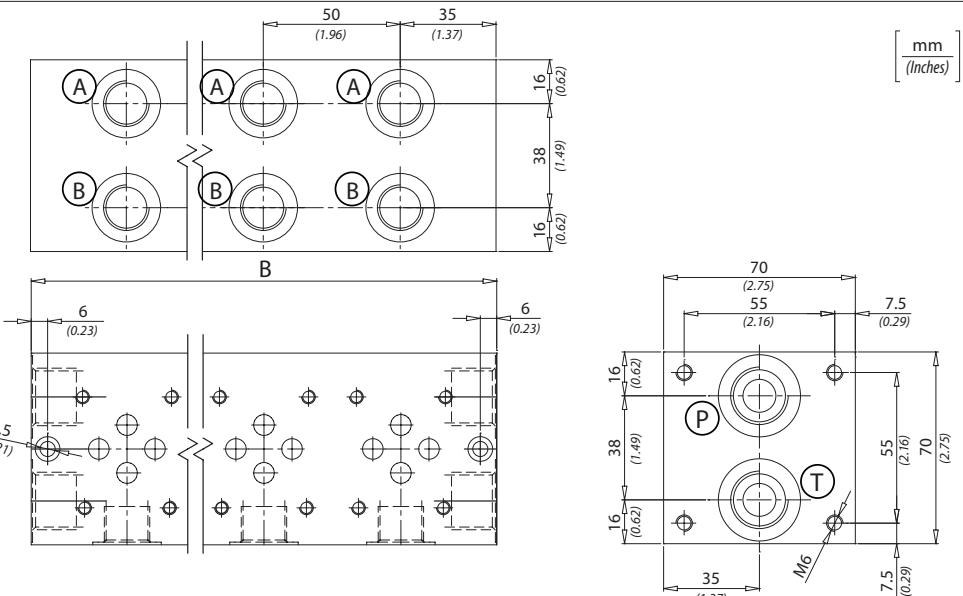
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*

### Attacchi / Ports

P-T	BSPP 1/2
M	BSPP 1/4
A-B	BSPP 3/8

Il blocco in alluminio può essere utilizzato per pressioni fino a 210bar (3000PSI)

*Aluminium manifold can be used for pressures up to 210 bar (3000PSI)*



### Codice ordinazione / Ordering code

**BM - X - A**

**X**

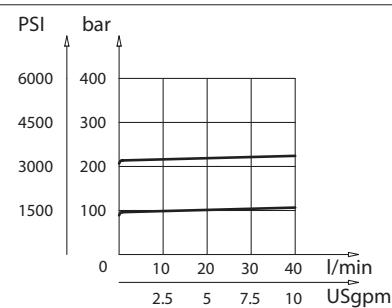
Stazioni  
Stations

**A**

- 2
- 3
- 4
- 5
- 6

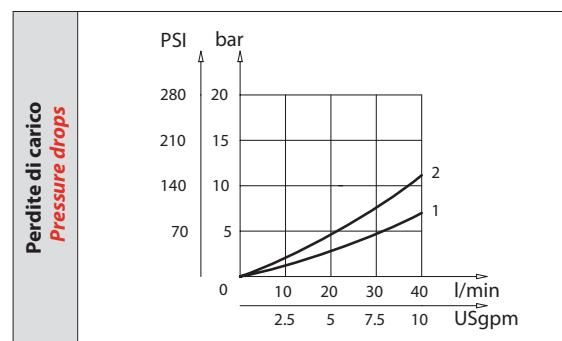
**Numero di stazioni**  
*Number of stations*

**A:** Alluminio /Aluminium

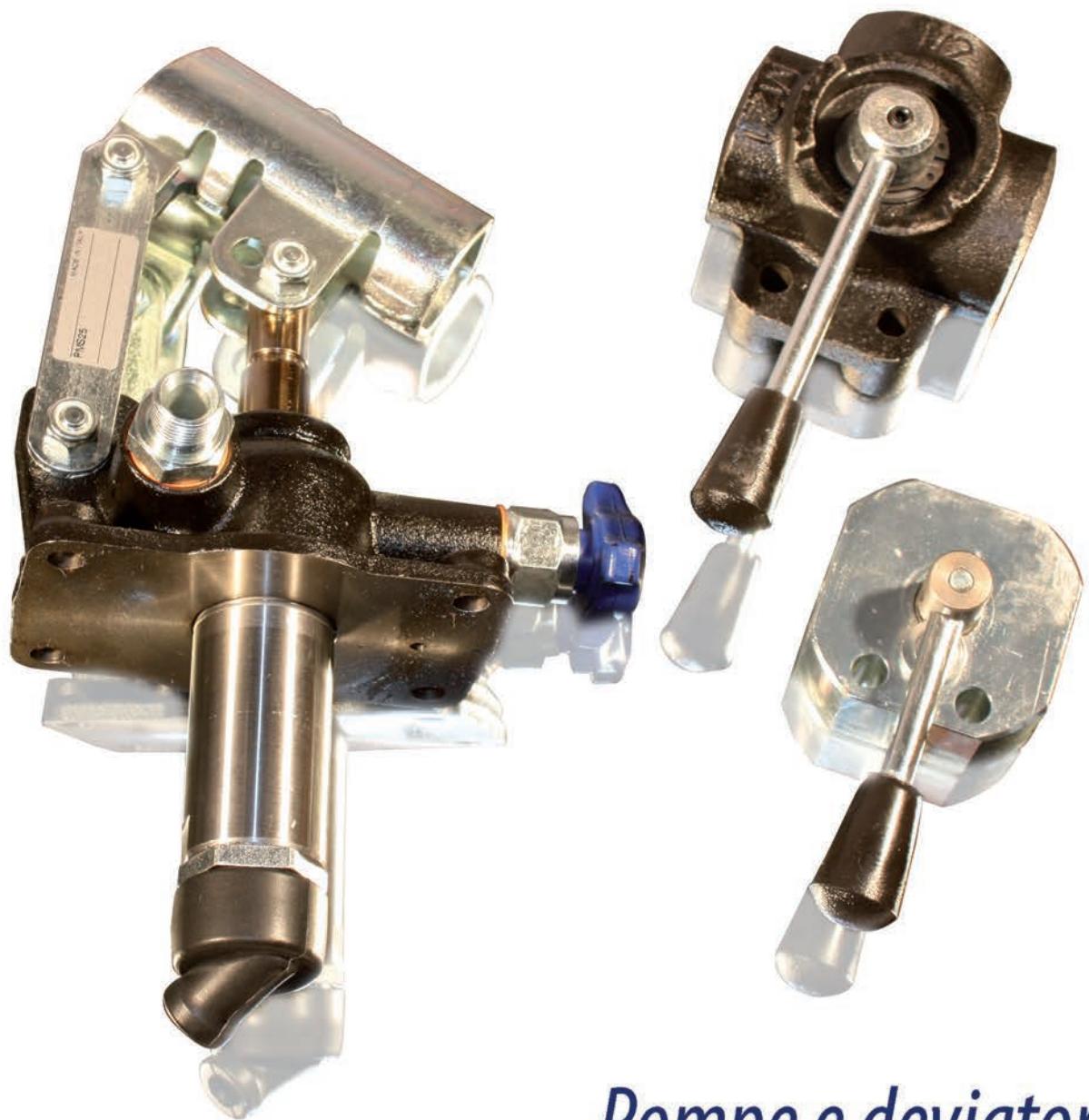


### Caratteristiche tecniche / Technical performances

Codice Code	N. di stazioni N. of stations	B	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb
BM2	2	120 (4.72)			1,5 (3.30)
BM3	3	170 (6.69)			2,1 (4.62)
BM4	4	220 (8.66)			2,7 (5.95)
BM5	5	270 (10.63)			3,3 (7.27)
BM6	6	320 (12.60)	40 (10)	210 (3000)	3,9 (8.59)







*Pompe e deviatori*  
*Hand pumps flow diverters*



**HYDRAULIC VALVES AND COMPONENTS**



# PM20

Pompa a mano semplice effetto  
Single acting hand pump

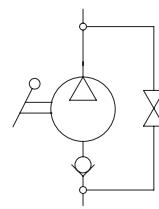


La pompa viene fornita con leva di azionamento L=600 mm  
The pump is supplied with acting lever 23 in long

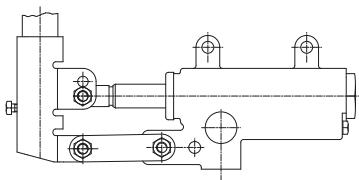
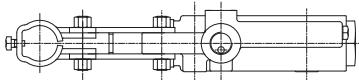
## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



W



## Codice ordinazione / Ordering code

**PM20 - X**

**X**      Optional

**P**      Soffietto / With rubber protection

**WRV**      Senza rubinetto di scarico  
Without unloading valve with relief valve

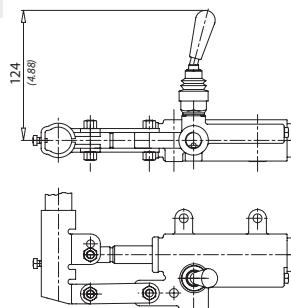
**W**      Senza rubinetto di scarico  
Without unloading valve

**J**      Con joystick / With joystick

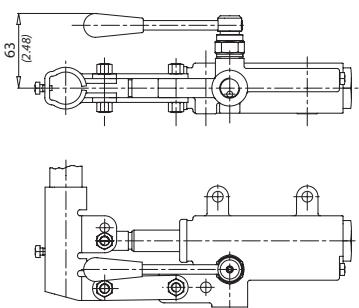
**L**      Con leva di scarico  
With unloading lever

**RRV**      Con rubinetto di scarico  
e valvola di massima  
With drain valve and relief valve

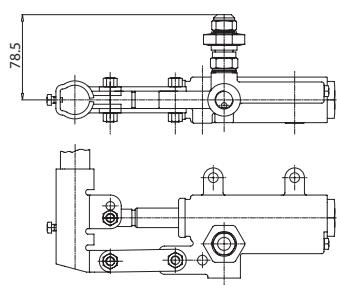
J



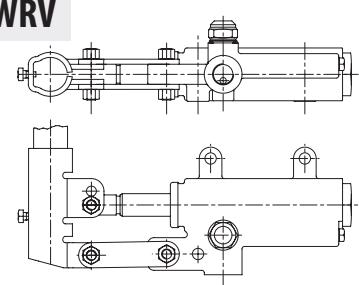
L



**RRV**



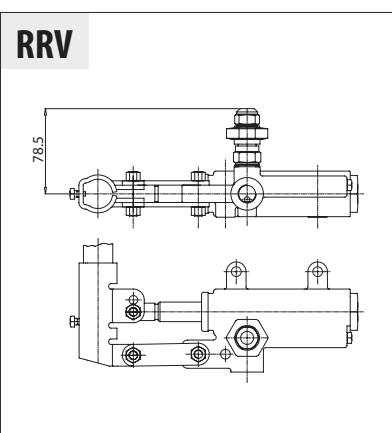
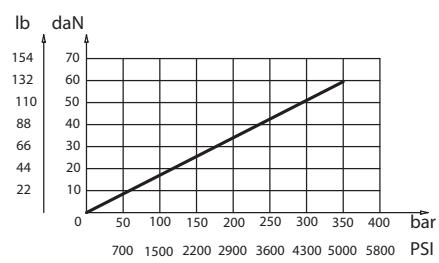
**WRV**



## Caratteristiche tecniche / Technical performances

Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg / lb	Cilindrata Displacement cm <sup>3</sup> / in <sup>3</sup>
<b>PM20</b>	<b>350 (5000)</b>	<b>3,4 (7.5)</b>	<b>20 (1.22)</b>

## Sforzo esercitato all'estremità della leva Effort operating on the end of the lever



Valvola di massima      Molla 40/350 bar  
(Relief valve)      Spring 580/5075 PSI  
Taratura Standard 100 bar  
(Standard Setting) 1500 psi



# PM50

Pompa a mano semplice effetto  
Single acting hand pump



La pompa viene fornita con leva di azionamento L=600 mm

The pump is supplied with acting lever 23 in long

## Caratteristiche tecniche / Technical performances

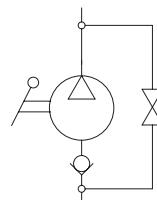
Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg / lb	Cilindrata Displacement cm <sup>3</sup> / in <sup>3</sup>
PM50	280 (4000)	3,6 (7.9)	50 (3.05)

## Dati tecnici Technical data

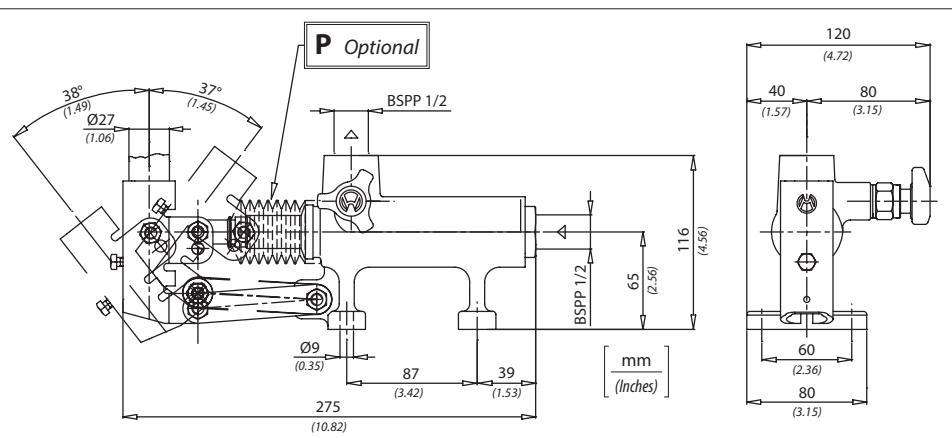
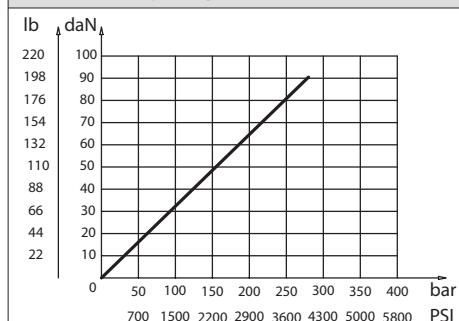
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Sforzo esercitato all'estremità della leva Effort operating on the end of the lever



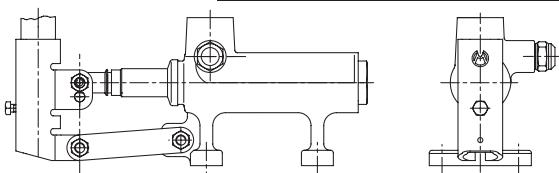
## Codice ordinazione / Ordering code

### PM50 - X

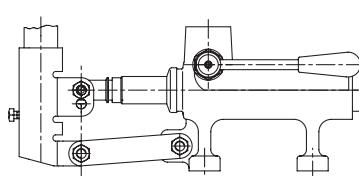
<b>X</b>	Optional
<b>P</b>	Soffietto / With rubber protection
<b>WRV</b>	Senza rubinetto di scarico con valvola di massima Without unloading valve with relief valve
<b>W</b>	Senza rubinetto di scarico / Without unloading valve
<b>J</b>	Con joystick / With joystick
<b>L</b>	Con leva di scarico / With unloading lever
<b>RRV</b>	Con rubinetto di scarico e valvola di massima / With drain valve and relief valve

### WRV

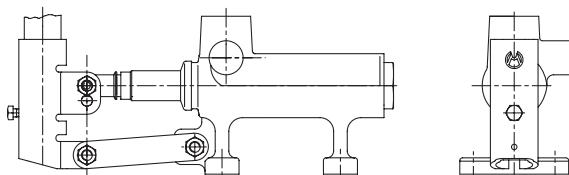
Valvola di massima    Molla 40/350 bar    Taratura Standard 100 bar  
(Relief valve)           Spring 580/5075 PSI           (Standard Setting) 1500 psi



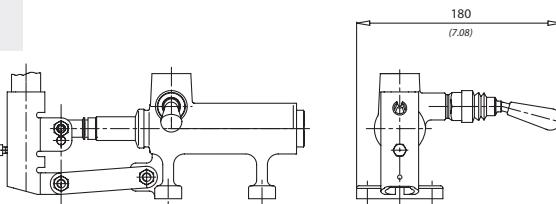
### L



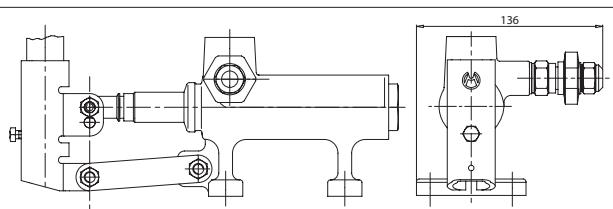
### W



### J



### RRV



# PM70

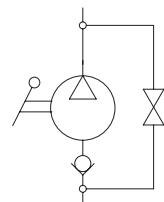
Pompa a mano semplice effetto  
Single acting hand pump



La pompa viene fornita con leva di azionamento L=600 mm  
The pump is supplied with acting lever 23 in. long

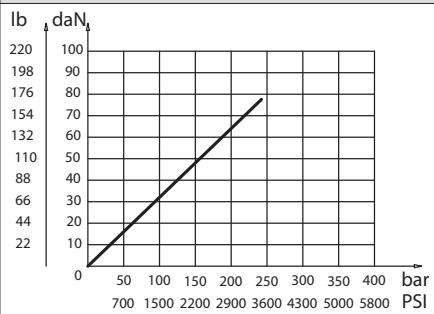
## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F



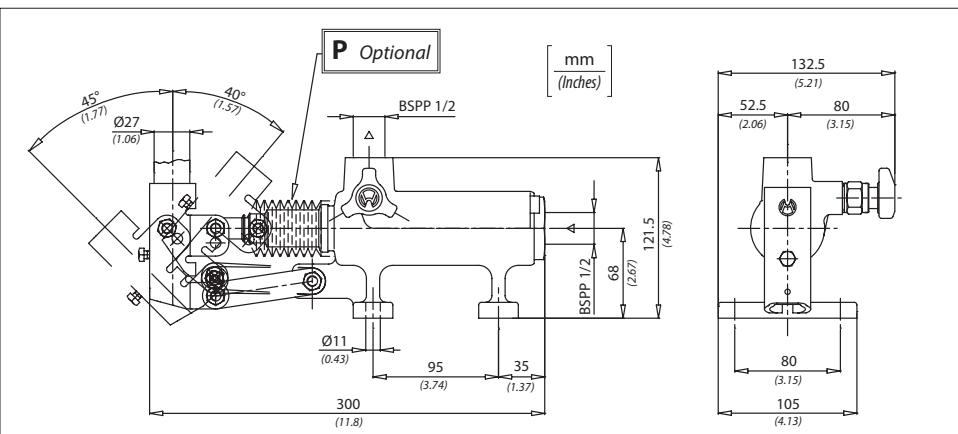
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)

## Sforzo esercitato all'estremità della leva Effort operating on the end of the lever



## Caratteristiche tecniche / Technical performances

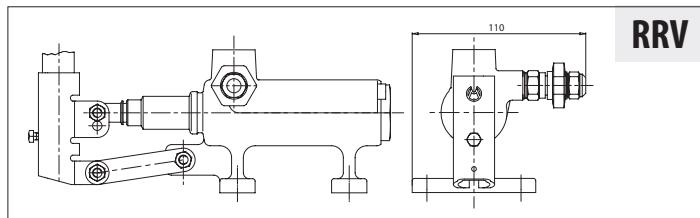
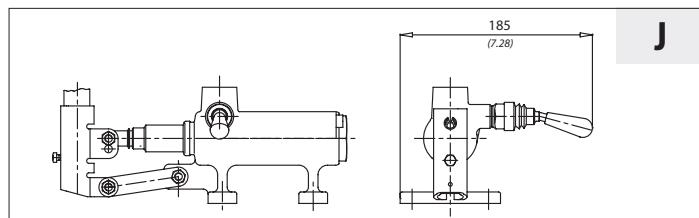
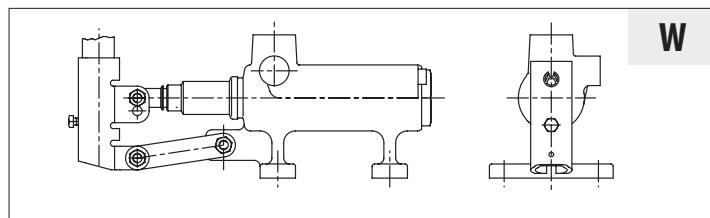
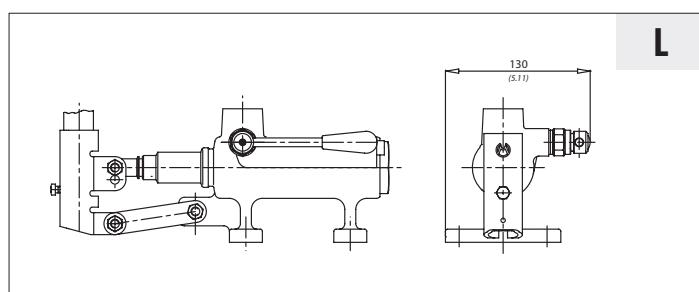
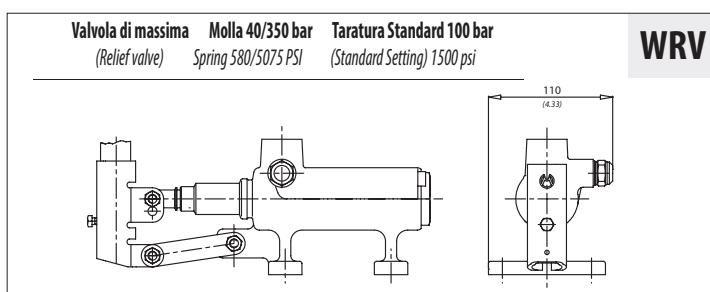
Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg / lb	Cilindrata Displacement cm <sup>3</sup> / in <sup>3</sup>
<b>PM70</b>	<b>230 (3300)</b>	<b>6 (13.2)</b>	<b>70 (4.27)</b>



## Codice ordinazione / Ordering code

### PM70 - X

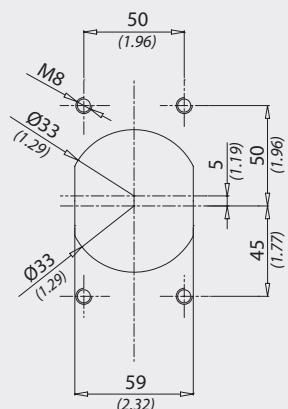
<b>X</b>	Optional
<b>P</b>	Soffietto / With rubber protection
<b>WRV</b>	Senza rubinetto di scarico con valvola di massima Without unloading valve with relief valve
<b>W</b>	Senza rubinetto di scarico / Without unloading valve
<b>J</b>	Con joystick / With joystick
<b>L</b>	Con leva di scarico / With unloading lever
<b>RRV</b>	Con rubinetto di scarico e valvola di massima / With drain valve and relief valve





# PMS

Pompa a mano semplice effetto  
Single acting hand pump



La pompa viene fornita con guarnizione sagomata + viti di fissaggio + leva di azionamento L=600 mm

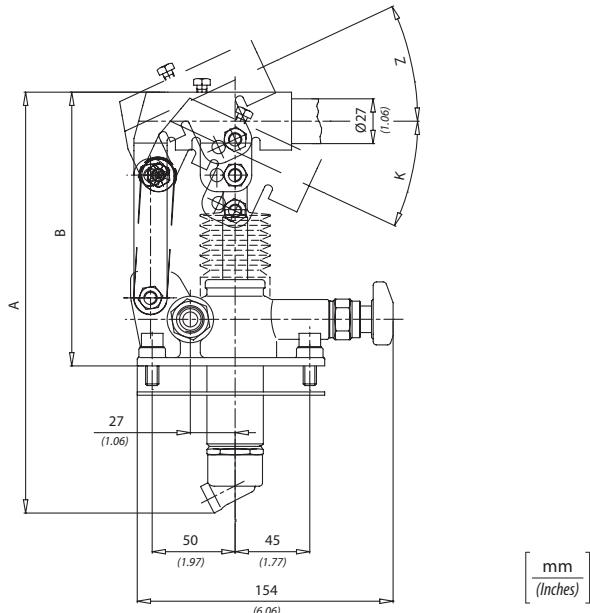
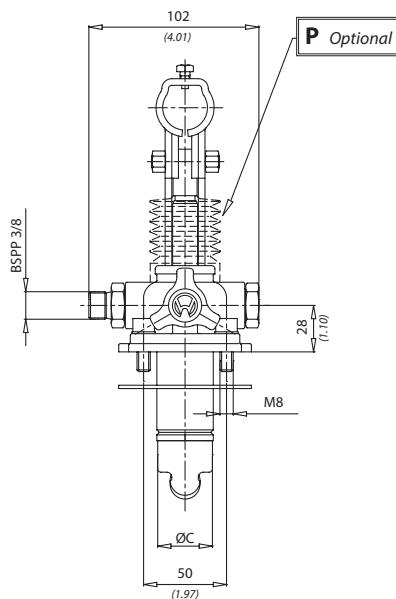
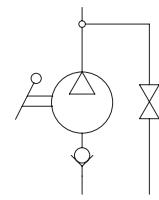
The pump is supplied with shaped seal, fixing screws and acting lever 23 in. long

## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-5000 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Codice ordinazione / Ordering code

**PMS - X - Y**

Optional

**X**

P Soffietto / With rubber protection

WRV Senza rubinetto di scarico con valvola di massima / Without unloading valve with relief valve

W Senza rubinetto di scarico / Without unloading valve

J Con joystick / With joystick

L Con leva di scarico / With unloading lever

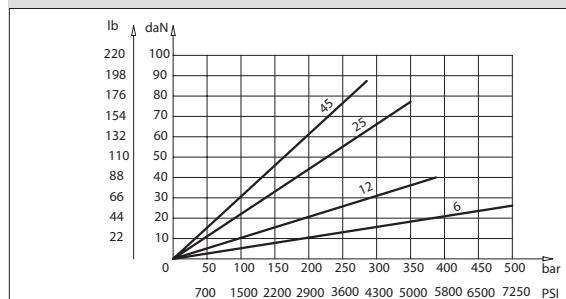
RV Con valvola di massima pressione / With relief valve

JRV Con joystick e valvola di massima pressione / With joystick and relief valve

LRV Con leva di scarico e valvola di massima pressione / With unloading lever and relief valve

<b>Y</b>	Cilindrata / Displacement	K	Z	A	B	C
6	6 cm <sup>3</sup> (0.36 in <sup>3</sup> )	31°	26°	253 (9.96)	166 (6.53)	34 (1.33)
12	12 cm <sup>3</sup> (0.73 in <sup>3</sup> )	31°	35°	253 (9.96)	166 (6.53)	34 (1.33)
25	25 cm <sup>3</sup> (1.52 in <sup>3</sup> )	30°	25°	273 (10.74)	172 (6.77)	34 (1.33)
45	45 cm <sup>3</sup> (2.75 in <sup>3</sup> )	33°	35°	283 (11.14)	172 (6.77)	40 (1.57)

## Sforzo esercitato all'estremità della leva / Effort operating on the end of the lever



## Caratteristiche tecniche / Technical performances

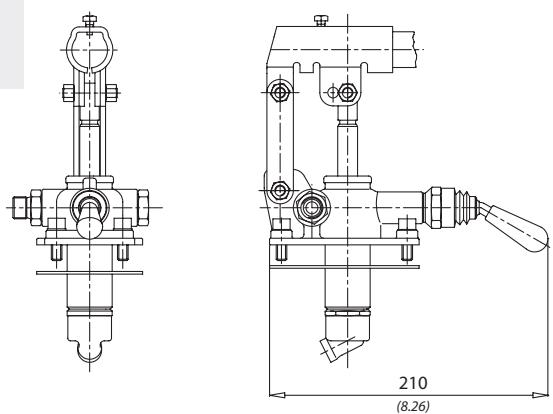
Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb
PMS6	500 (7250)	3,9 (8,6)
PMS12	380 (5500)	
PMS25	350 (5000)	
PMS45	280 (4000)	

# PMS

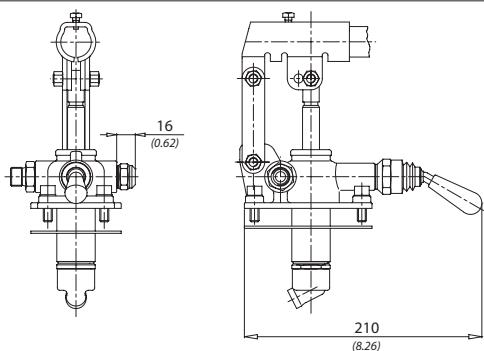
Pompa a mano semplice effetto  
Single acting hand pump



**J**

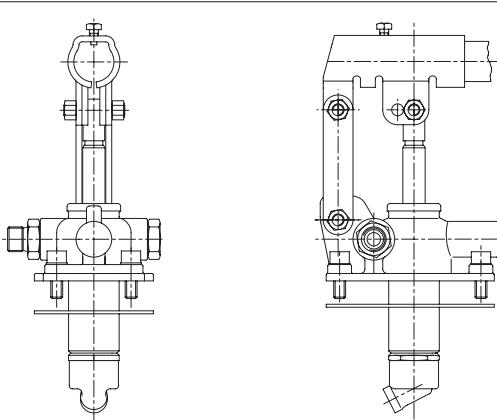


**JRV**

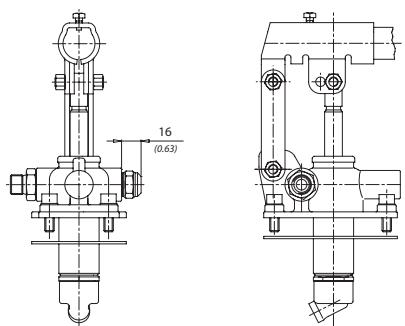


Valvola di massima Molla 40/350 bar Taratura Standard 100 bar  
(Relief valve) Spring 580/5075 PSI (Standard Setting) 1500 psi

**W**

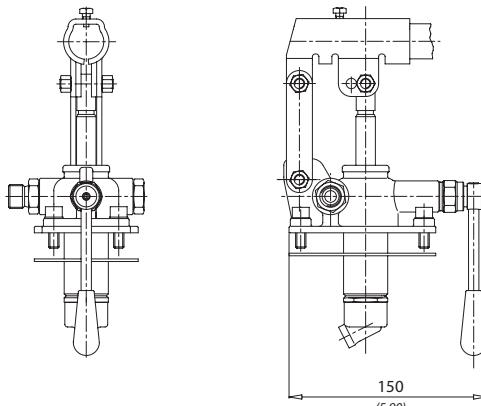


**WRV**

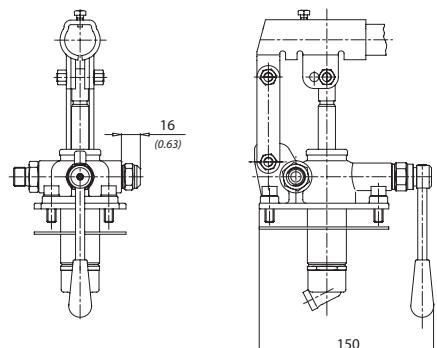


Valvola di massima Molla 40/350 bar Taratura Standard 100 bar  
(Relief valve) Spring 580/5075 PSI (Standard Setting) 1500 psi

**L**

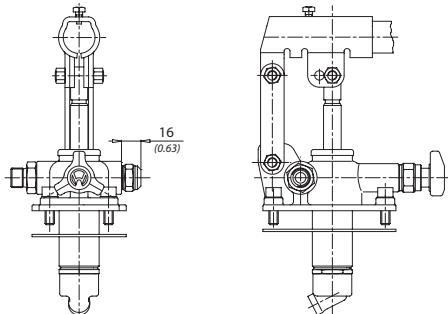


**LRV**



Valvola di massima Molla 40/350 bar Taratura Standard 100 bar  
(Relief valve) Spring 580/5075 PSI (Standard Setting) 1500 psi

**RV**



Valvola di massima Molla 40/350 bar Taratura Standard 100 bar  
(Relief valve) Spring 580/5075 PSI (Standard Setting) 1500 psi



# PMI

Pompa a mano doppio effetto centro chiuso  
Double acting hand pump closed center

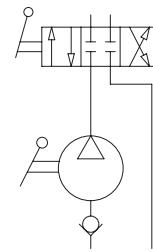


La pompa viene fornita con guarnizione sagomata + viti di fissaggio + leva di azionamento L=600 mm  
The pump is supplied with shaped seal, fixing screws and acting lever 23 in. long

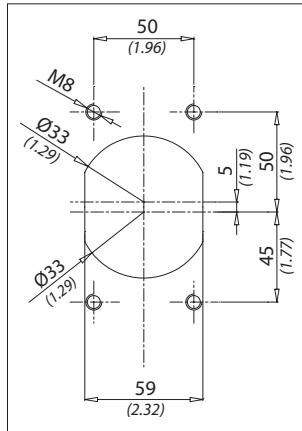
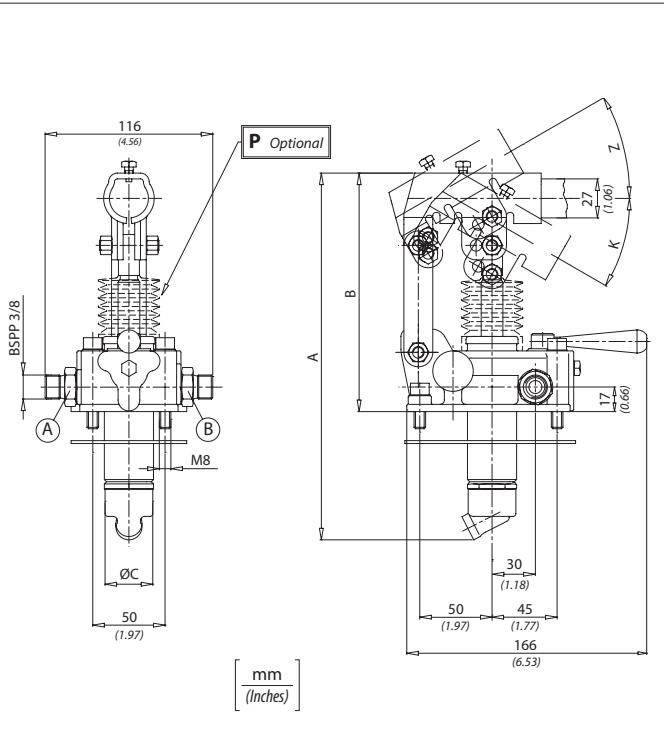
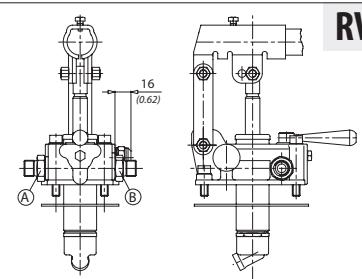
### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

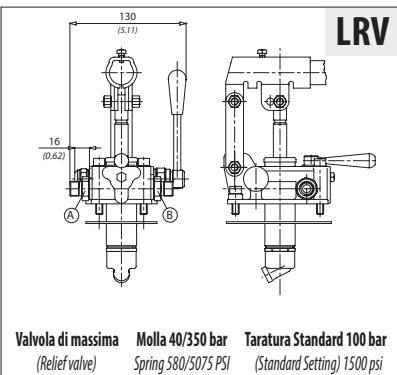
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



RV



LRV



### Caratteristiche tecniche Technical performances

Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb
PMI6	500 (7250)	4,4 (9.7)
PMI12	380 (5500)	
PMI25	350 (5000)	
PMI45	280 (4000)	

Codice ordinazione / Ordering code

PMI - X - Y

Optional

X

P Soffietto / With rubber protection

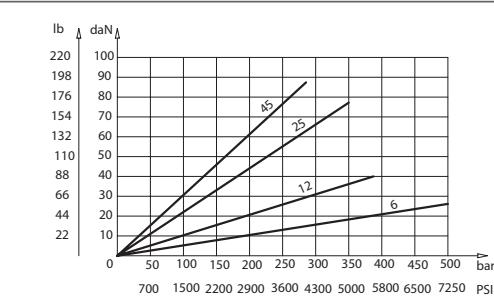
L Con leva di scarico / With unloading lever

RV Con valvola di massima pressione / With relief valve

LRV Con leva di scarico e valvola di massima pressione / With unloading lever and relief valve

Y	Cilindrata / Displacement	K	Z	A	B	C
6	6 cm <sup>3</sup> (0.36 in <sup>3</sup> )	31°	26°	253 (9.96)	166 (6.53)	34 (1.33)
12	12 cm <sup>3</sup> (0.73 in <sup>3</sup> )	31°	35°	253 (9.96)	166 (6.53)	34 (1.33)
25	25 cm <sup>3</sup> (1.52 in <sup>3</sup> )	30°	25°	273 (10.74)	172 (6.77)	34 (1.33)
45	45 cm <sup>3</sup> (2.75 in <sup>3</sup> )	33°	35°	283 (11.14)	172 (6.77)	40 (1.57)

### Sforzo esercitato all'estremità della leva Effort operating on the end of the lever



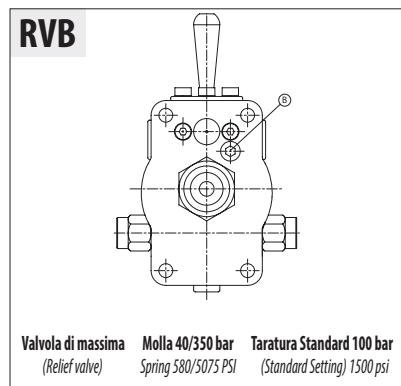
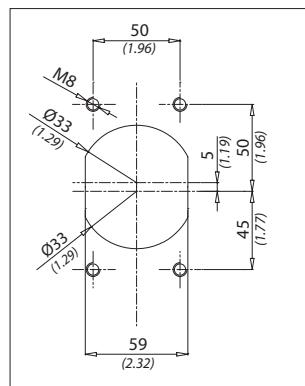
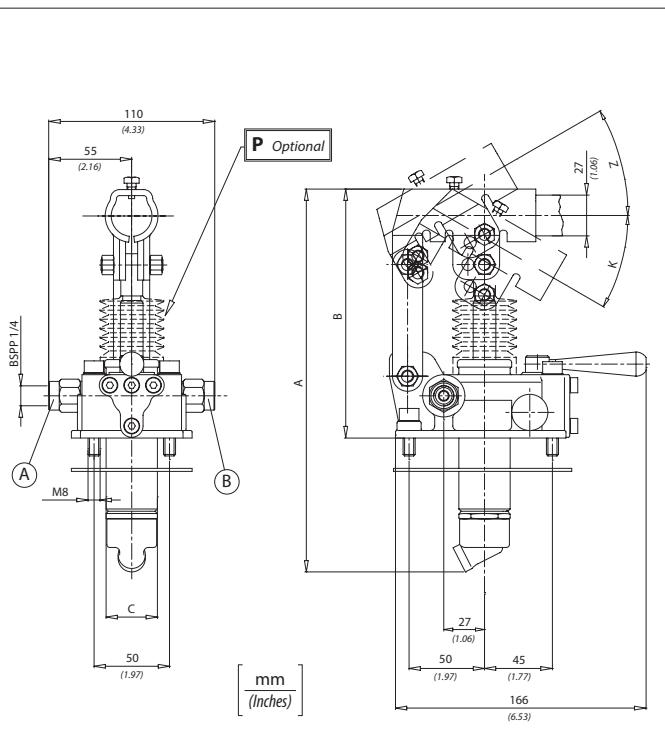
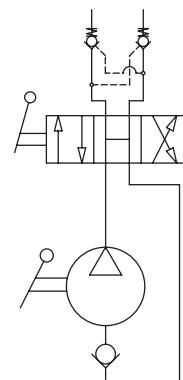


La pompa viene fornita con guarnizione sagomata + viti di fissaggio + leva di azionamento L=600 mm  
The pump is supplied with shaped seal, fixing screws and acting lever 23 in. long

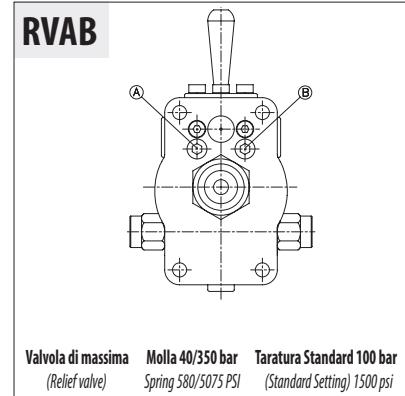
### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-5000 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



Caratteristiche tecniche Technical performances		
Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb
PMT6	500 (7250)	4,4 (9.7)
PMT12	380 (5500)	
PMT25	350 (5000)	
PMT45	280 (4000)	



### Codice ordinazione / Ordering code

PMT - X - Y

X

Optional

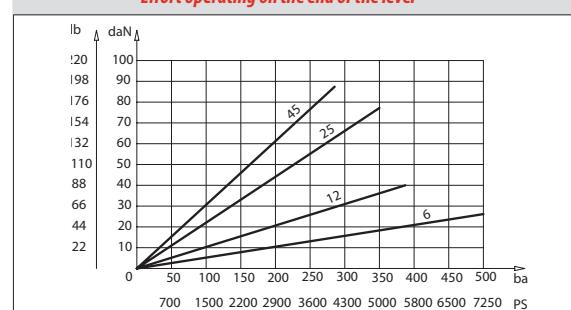
P Soffietto / With rubber protection

RVAB Con valvola di massima pressione su A e B / With relief valve on A and B

RVB Con valvola di massima pressione su B / With relief valve on B

Y	Cilindrata / Displacement	K	Z	A	B	C
6	6 cm <sup>3</sup> (0.36 in <sup>3</sup> )	31°	26°	253 (9.96)	166 (6.53)	34 (1.33)
12	12 cm <sup>3</sup> (0.73 in <sup>3</sup> )	31°	35°	253 (9.96)	166 (6.53)	34 (1.33)
25	25 cm <sup>3</sup> (1.52 in <sup>3</sup> )	30°	25°	273 (10.74)	172 (6.77)	34 (1.33)
45	45 cm <sup>3</sup> (2.75 in <sup>3</sup> )	33°	35°	283 (11.14)	172 (6.77)	40 (1.57)

### Sforzo esercitato all'estremità della leva Effort operating on the end of the lever





# PMA

Pompa a mano doppio effetto centro aperto  
Double acting hand pump open center



La pompa viene fornita con guarnizione sagomata + viti di fissaggio + leva di azionamento L=600 mm

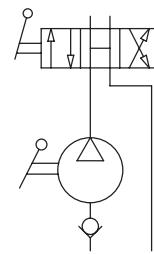
The pump is supplied with shaped seal, fixing screws and acting lever 23 in. long

## Dati tecnici Technical data

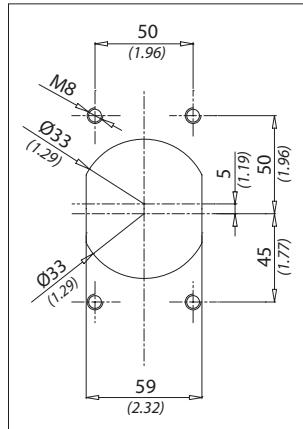
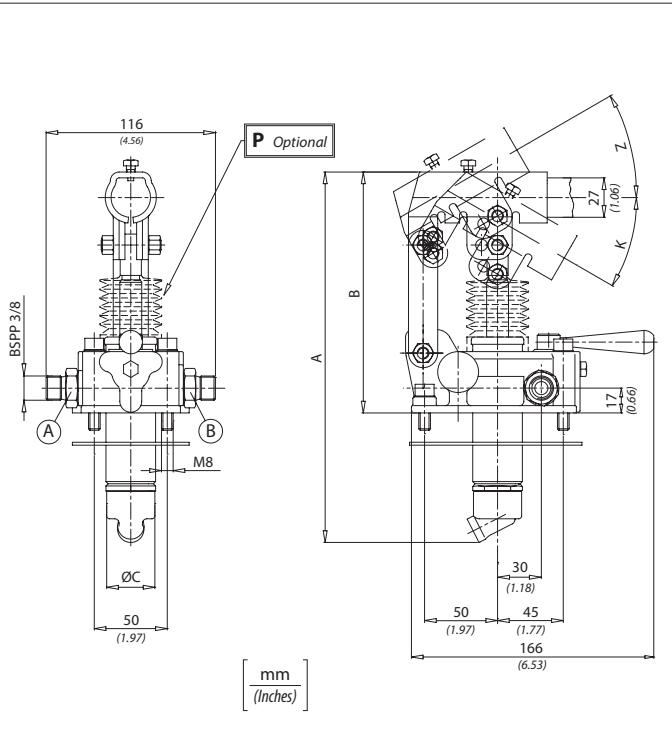
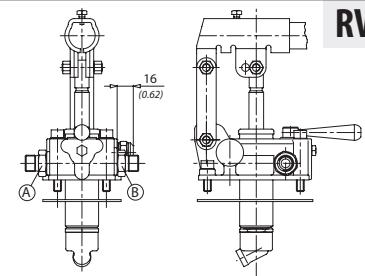
Olio idraulico <i>Mineral oil</i>	ISO 6743/4 <i>DIN 51524</i>
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C -4°F      +80°C +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

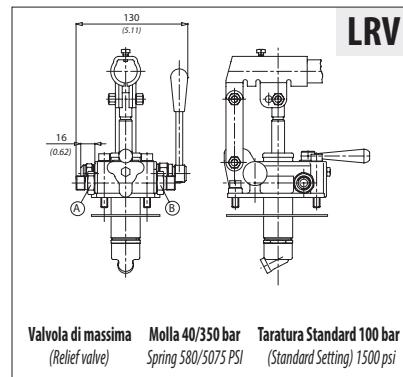
It is necessary a filter use to protect the valve (advised filtration 15 micron)



**RV**



**LRV**



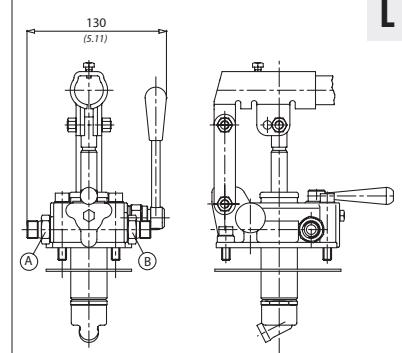
Valvola di massima      Molla 40/350 bar      Taratura Standard 100 bar  
(Relief valve)      Spring 580/5075 PSI      (Standard Setting) 1500 psi

## Caratteristiche tecniche Technical performances

Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb
<b>PMA6</b>	<b>500 (7250)</b>	
<b>PMA12</b>	<b>380 (5500)</b>	
<b>PMA25</b>	<b>350 (5000)</b>	
<b>PMA45</b>	<b>280 (4000)</b>	<b>4,4 (9.7)</b>

Valvola di massima      Molla 40/350 bar      Taratura Standard 100 bar  
(Relief valve)      Spring 580/5075 PSI      (Standard Setting) 1500 psi

**L**



## Codice ordinazione / Ordering code

**PMA - X - Y**

**X**

Optional

**P** Soffietto / With rubber protection

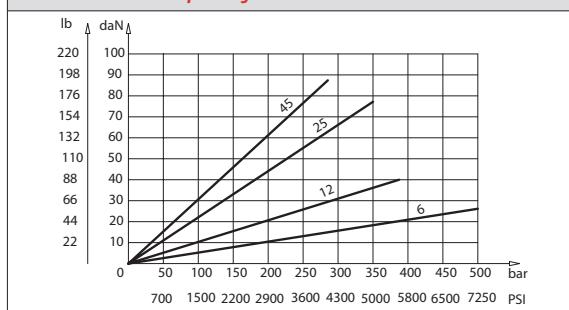
**L** Con leva di scarico / With unloading lever

**RV** Con valvola di massima pressione su A e B / With relief valve on A and B

**LRV** Con leva di scarico e valvola di massima pressione / With unloading lever and relief valve

<b>Y</b>	Cilindrata / Displacement	K	Z	A	B	C
<b>6</b>	<b>6 cm<sup>3</sup> (0.36 in<sup>3</sup>)</b>	<b>31°</b>	<b>26°</b>	<b>253 (9.96)</b>	<b>166 (6.53)</b>	<b>34 (1.33)</b>
<b>12</b>	<b>12 cm<sup>3</sup> (0.73 in<sup>3</sup>)</b>	<b>31°</b>	<b>35°</b>	<b>253 (9.96)</b>	<b>166 (6.53)</b>	<b>34 (1.33)</b>
<b>25</b>	<b>25 cm<sup>3</sup> (1.52 in<sup>3</sup>)</b>	<b>30°</b>	<b>25°</b>	<b>273 (10.74)</b>	<b>172 (6.77)</b>	<b>34 (1.33)</b>
<b>45</b>	<b>45 cm<sup>3</sup> (2.75 in<sup>3</sup>)</b>	<b>33°</b>	<b>35°</b>	<b>283 (11.14)</b>	<b>172 (6.77)</b>	<b>40 (1.57)</b>

## Sforzo esercitato all'estremità della leva Effort operating on the end of the lever



# PME1

Pompa a mano semplice effetto  
Single acting hand pump



La pompa viene fornita con guarnizione sagomata + viti di fissaggio + leva di azionamento L=500 mm  
La mandata la si ottiene solamente azionando la leva verso il basso

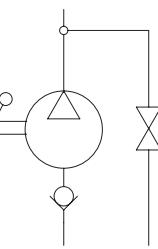
The pump is supplied with shaped seal, fixing screws and action lever 19 in. long  
Oil flow lever action downwards only

## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524	
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura del fluido Fluid temperature	-20°C -4°F	+80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F	+50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Caratteristiche tecniche

### Technical performances

Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb
PME18	380 (5500)	
PME115	350 (5000)	4,1 (9)

## Codice ordinazione / Ordering code

**PME1 - X - Y**

Optional

**X**

**P** Soffietto / With rubber protection

**WRV** Senza rubinetto di scarico con valvola di massima / Without unloading valve with relief valve

**W** Senza rubinetto di scarico / Without unloading valve

**RV** Con valvola di massima pressione / With relief valve

**Y**

Cilindrata / Displacement

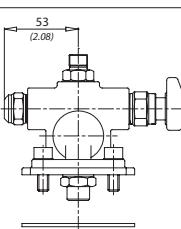
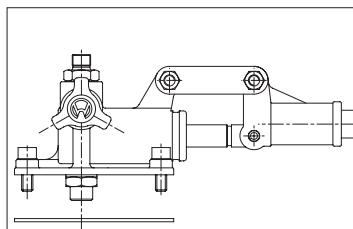
**8**

8 cm<sup>3</sup> (0.50 in<sup>3</sup>)

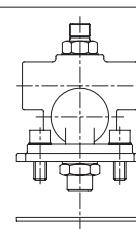
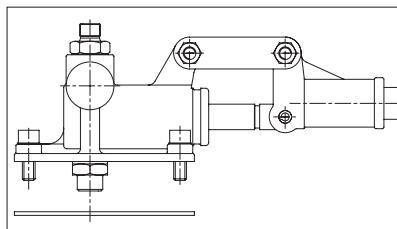
**15**

15 cm<sup>3</sup> (0.90 in<sup>3</sup>)

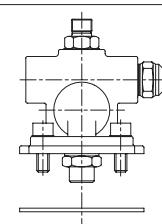
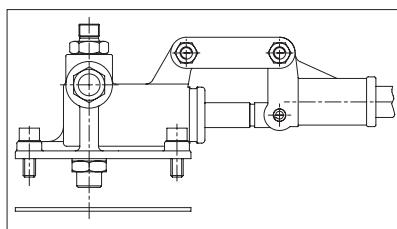
**RV**



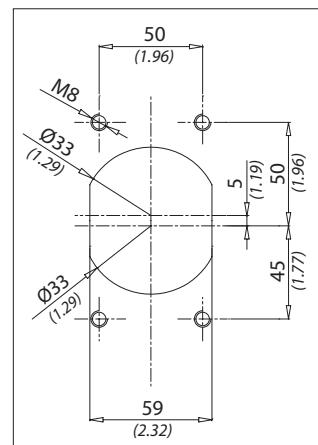
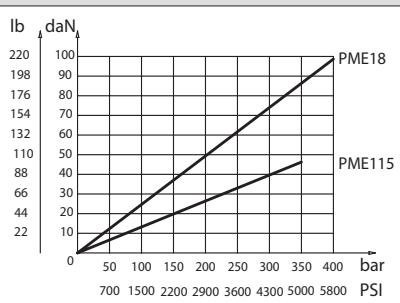
**W**



**WRV**



## Sforzo esercitato all'estremità della leva Effort operating on the end of the lever



Valvola di massima / Molla 40/350 bar / Taratura Standard 100 bar  
(Reliefvalve) / Spring 580/5075 PSI / (Standard Setting) 1500 psi



# PME2

Pompa a mano semplice effetto  
Single acting hand pump



La pompa viene fornita con guarnizione sagomata + viti di fissaggio + leva di azionamento L=500 mm  
La manda la si ottiene solamente azionando la leva verso il basso

The pump is supplied with shaped seal, fixing screws and acting lever 19 in. long  
Oil flow lever action downwards only

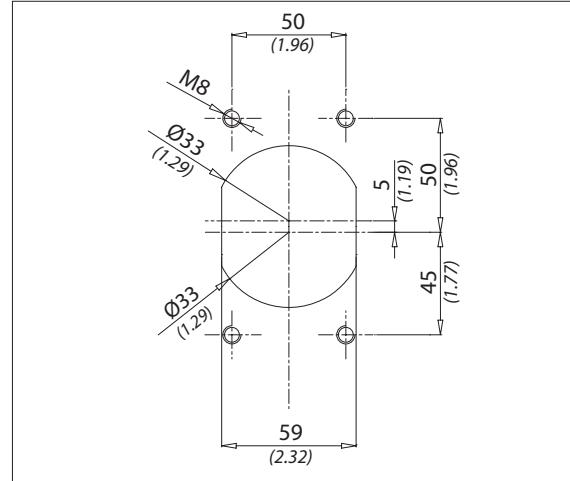
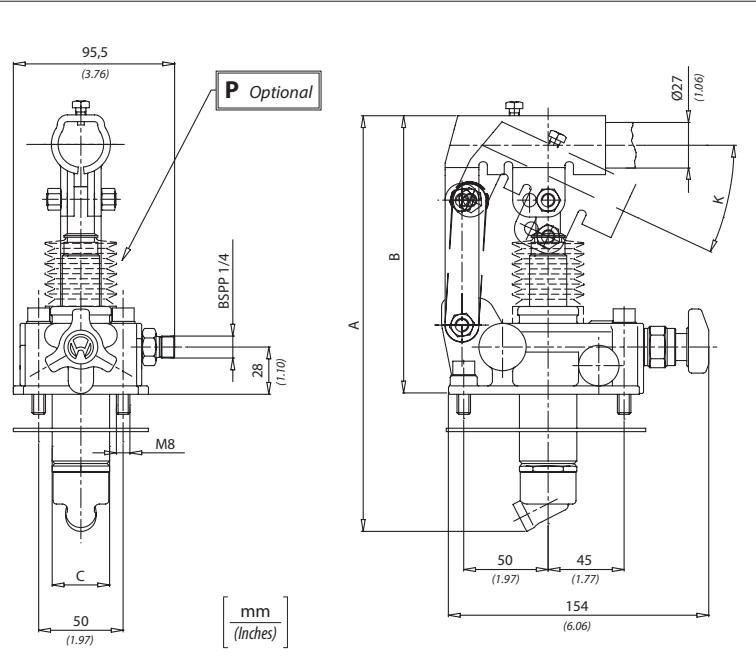
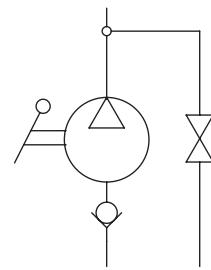
## Dati tecnici

### Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Codice ordinazione / Ordering code

**PME2 - X - Y**

**X**

Optional

**P** Soffietto / With rubber protection

**WRV** Senza rubinetto di scarico con valvola di massima / Without unloading valve with relief valve

**W** Senza rubinetto di scarico / Without unloading valve

**L** Con leva di scarico / With unloading lever

**RV** Con valvola di massima pressione / With relief valve

**LRV** Con leva di scarico e valvola di massima pressione / With unloading lever and relief valve

<b>Y</b>	Cilindrata / Displacement	K	A	B	C
20	20 cm <sup>3</sup> (1.22 in <sup>3</sup> )	29°	249 (9.80)	167 (6.57)	34 (1.33)
30	30 cm <sup>3</sup> (1.83 in <sup>3</sup> )	26°	252 (9.92)	167 (6.57)	34 (1.33)
40	40 cm <sup>3</sup> (2.44 in <sup>3</sup> )	26°	252 (9.92)	167 (6.57)	40 (1.57)

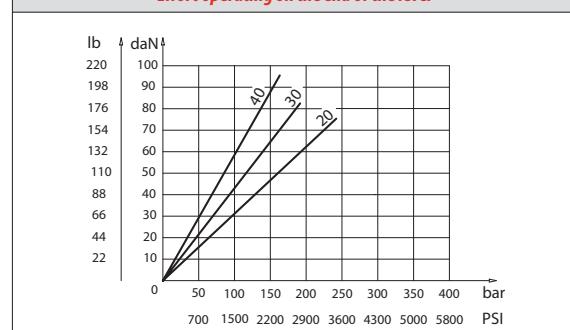
### Caratteristiche tecniche

#### Technical performances

Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Peso approssimativo Approx weight Kg/lb
PME220	380 (5500)		20 (1.22)
PME230	350 (5000)	4,2 (9.2)	30 (1.83)
PME240	280 (4000)		40 (2.44)

### Sforzo esercitato all'estremità della leva

#### Effort operating on the end of the lever

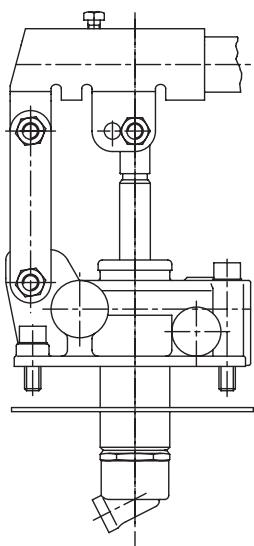
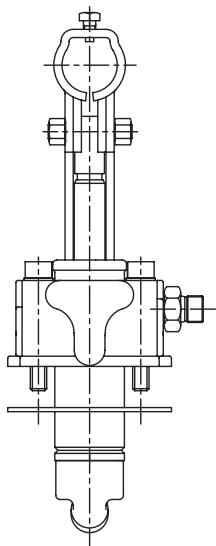


# PME2

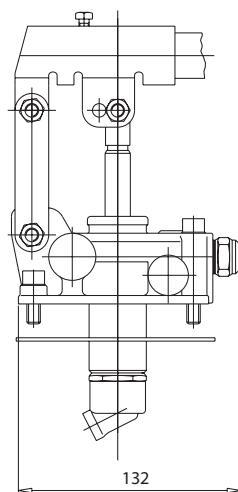
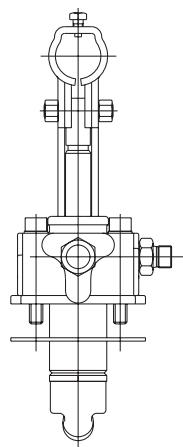
Pompa a mano semplice effetto  
Single acting hand pump



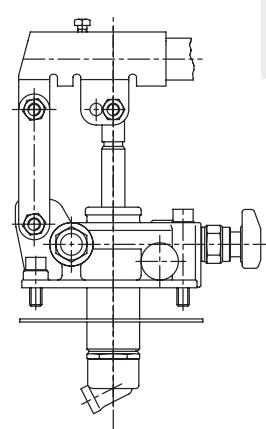
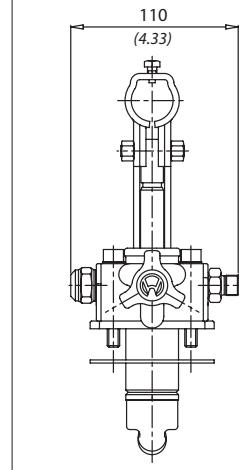
**W**



**WRV**

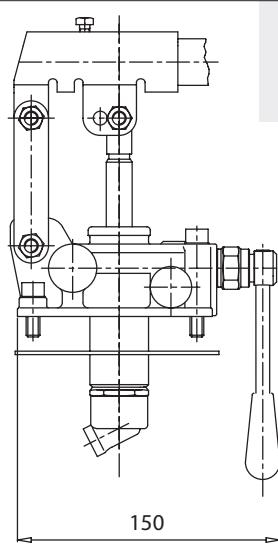
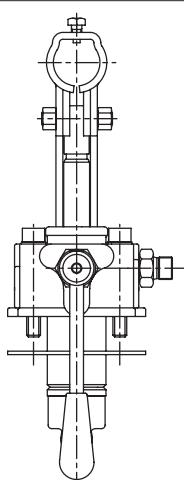


Valvola di massima    Molla 40/350 bar    Taratura Standard 100 bar  
(Relief valve)    Spring 580/5075 PSI    (Standard Setting) 1500 psi

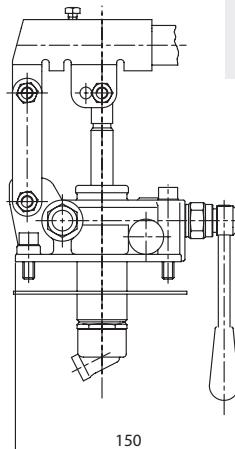
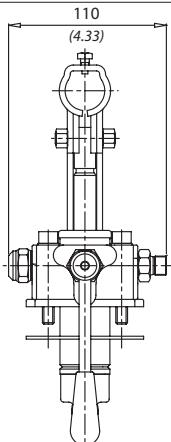


Valvola di massima    Molla 40/350 bar    Taratura Standard 100 bar  
(Relief valve)    Spring 580/5075 PSI    (Standard Setting) 1500 psi

**RV**



**L**



Valvola di massima    Molla 40/350 bar    Taratura Standard 100 bar  
(Relief valve)    Spring 580/5075 PSI    (Standard Setting) 1500 psi

**LRV**



# PMD

Pompa a mano semplice effetto doppio pompante  
Single acting hand pump with double cylinder



La pompa viene fornita con guarnizione sagomata + viti di fissaggio + leva di azionamento L=500 mm

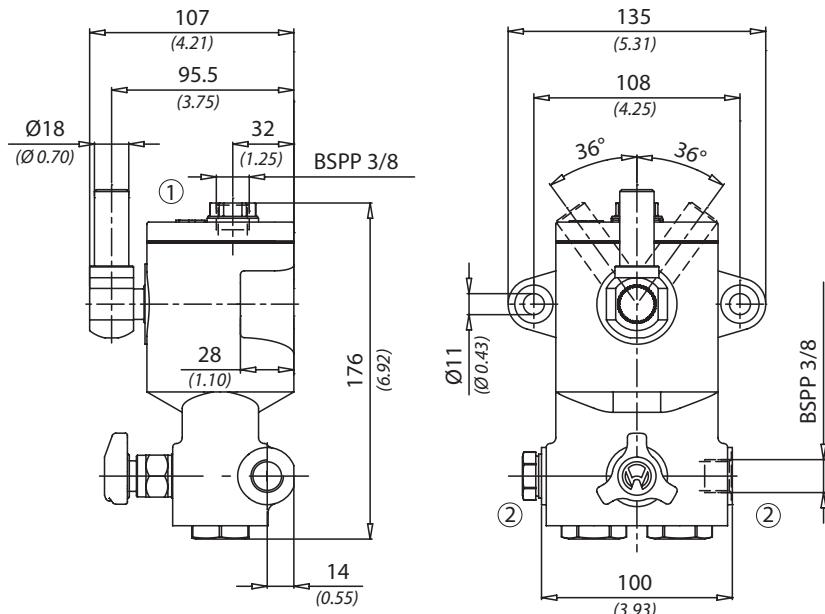
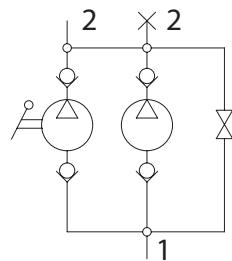
The pump is supplied with shaped seal, fixing screws and acting lever 19 in. long

## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente Ambient temperature	-20°C +50°C -4°F +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Caratteristiche tecniche / Technical performances

Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Cilindrata Displacement cm <sup>3</sup> / in <sup>3</sup>
PMD5	500 (7250)		5 (0.30)
PMD10	250 (3600)		10 (0.61)
PMD17	150 (2100)		17 (1.03)

## Codice ordinazione / Ordering code

**PMD - Y - X**

**X**

Optional

**Y**

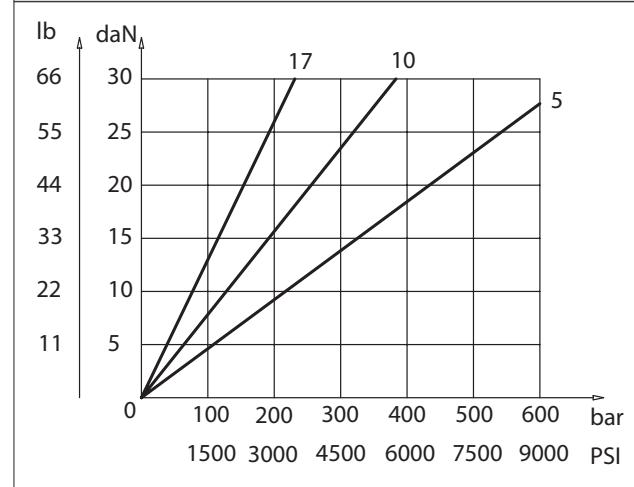
Cilindrata / Displacement

5      5 cm<sup>3</sup> (0.30 in<sup>3</sup>)

10     10 cm<sup>3</sup> (0.61 in<sup>3</sup>)

17     17 cm<sup>3</sup> (1.03 in<sup>3</sup>)

## Sforzo esercitato all'estremità della leva Effort operating on the end of the lever



# PME3

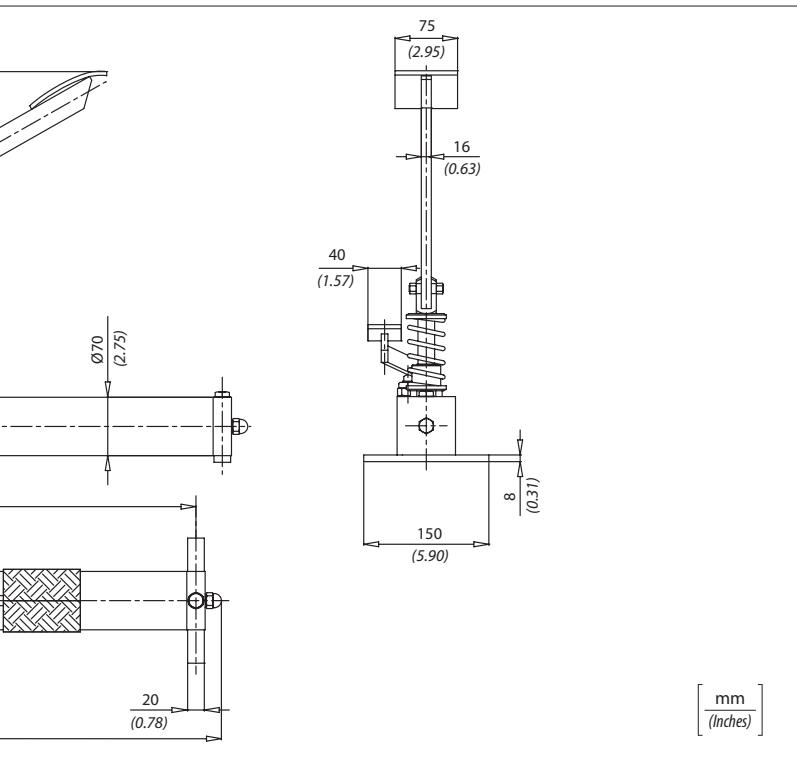
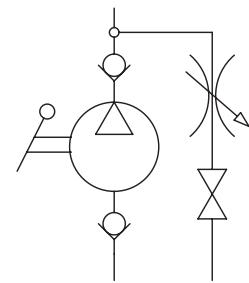
Pompa a pedale  
Foot pump



## Dati tecnici Technical data

Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C      +80°C -4°F      +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



Serbatoio lt. 1,5  
*Reservoir lt. 1,5*

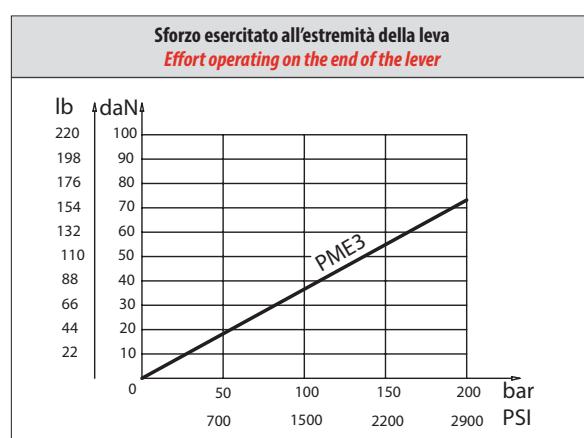
## Codice ordinazione Ordering code

**PME3**

## Caratteristiche tecniche Technical performances

Codice Code	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb	Cilindrata Displacement cm <sup>3</sup> / in <sup>3</sup>
PME3	200 (2900)	10 (22)	14 (0.85)

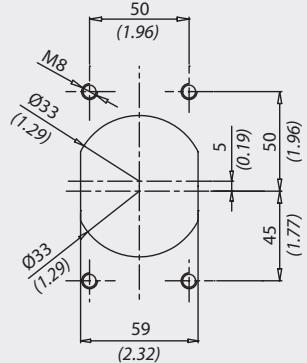
## Sforzo esercitato all'estremità della leva Effort operating on the end of the lever





# PME580

Pompa a mano 2 velocità per cilindro a semplice effetto  
Two speed hand pump with single acting cylinder



La pompa viene fornita con guarnizione sagomata + viti di fissaggio + leva di azionamento L=600 mm

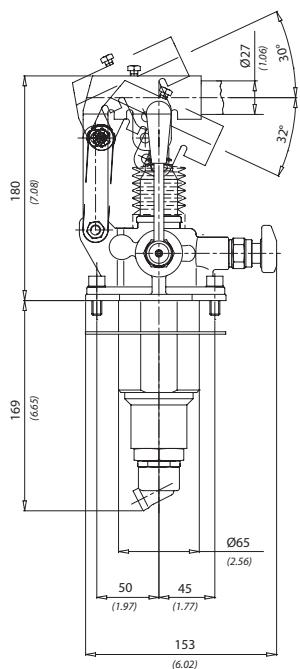
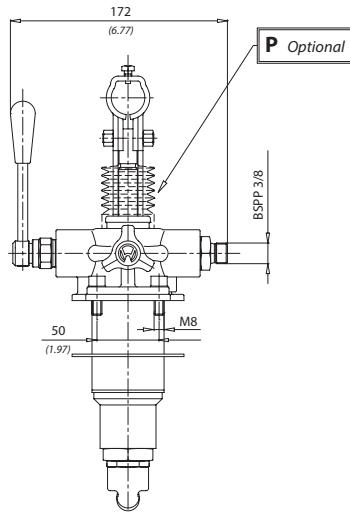
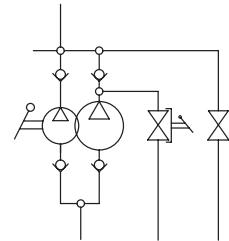
The pump is supplied with shaped seal, fixing screws and acting lever 23 in. long

## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

It is necessary a filter use to protect the valve (advised filtration 15 micron)



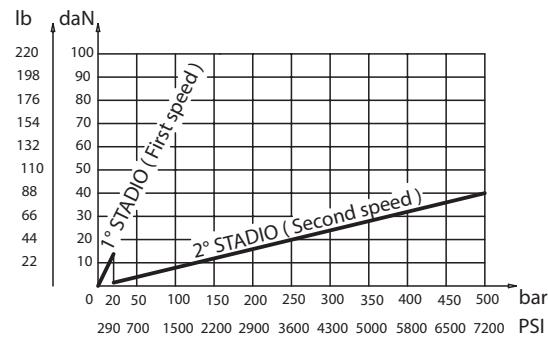
[ mm  
(Inches) ]

## Codice ordinazione / Ordering code

### PME580 - X

X	Optional
P	Soffietto / With rubber protection
18	Con predisposizione manometro / With arrangement for gauge
X18	Con valvola di massima e predisposizione manometro With relief valve and arrangement for gauge
CA	Con comando automatico / With automatic device
CA18	Con comando automatico e predisposizione manometro With automatic device and arrangement for gauge
CARV	Con comando automatico e valvola di massima With automatic device and relief valve
CARV18	Con comando automatico, valvola di massima e predisposizione manometro With automatic device, relief valve and arrangement for gauge

## Sforzo esercitato all'estremità della leva / Effort operating on the end of the lever



## Caratteristiche tecniche / Technical performances

Codice Code	Pressione Max 1 stadio Max pressure 1 stage bar/PSI	Pressione Max 2 stadio Max pressure 1 stage bar/PSI	Cilindrata 1 stadio Displacement 1 stage cm <sup>3</sup> / in <sup>3</sup>	Cilindrata 2 stadio Displacement 2 stage cm <sup>3</sup> / in <sup>3</sup>	Peso approssimativo Approx weight Kg / lb
PME580	20 (290)	500 (7250)	80 (4.9)	5 (0.30)	7,1 (15.6)

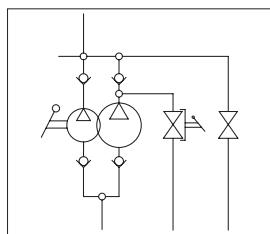
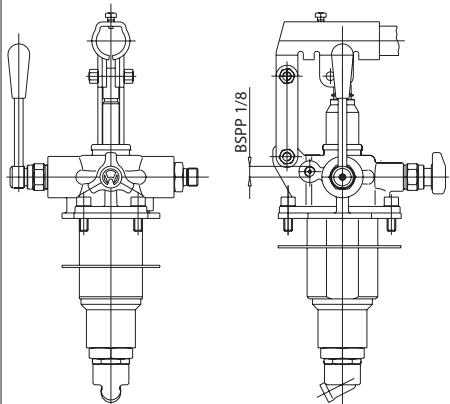
# PME580

Pompa a mano 2 velocità per cilindro a semplice effetto

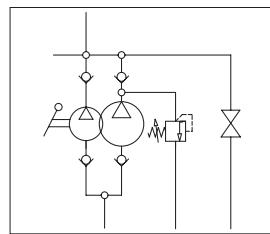
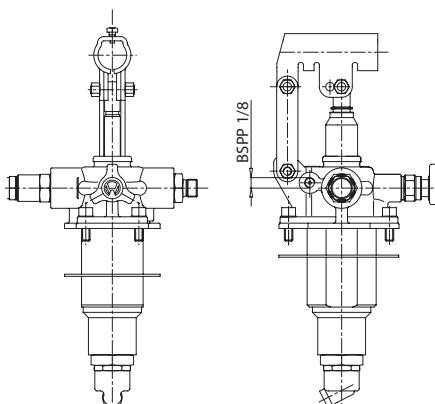
*Two speed hand pump with single acting cylinder*



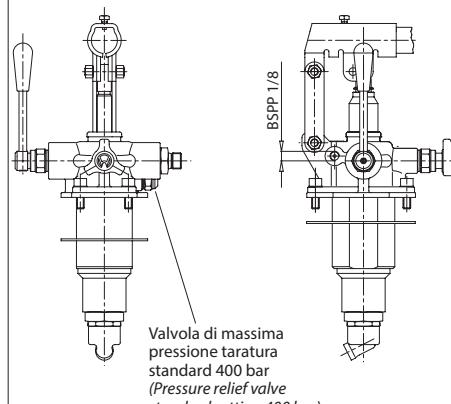
18



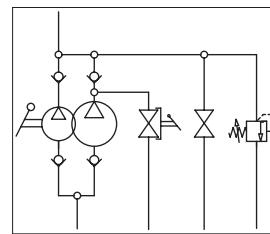
CA18



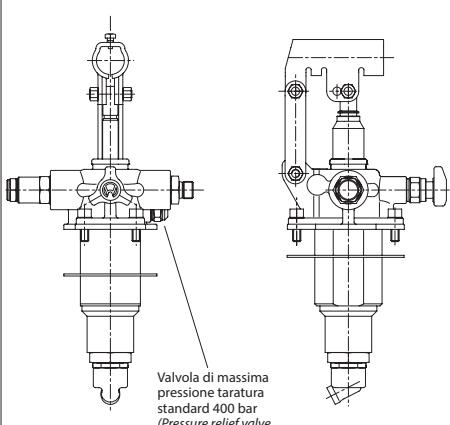
X18



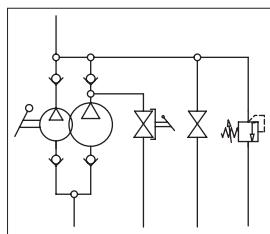
Valvola di massima  
pressione taratura  
standard 400 bar  
(Pressure relief valve  
standard setting 400 bar)



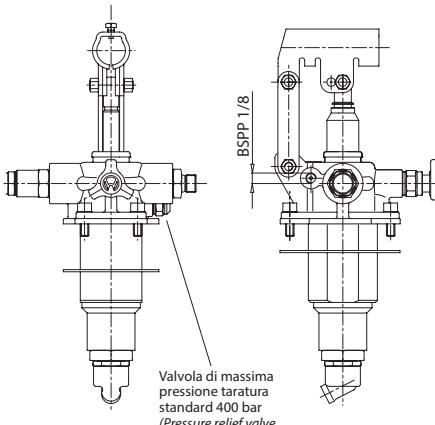
CARV



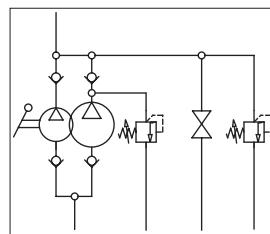
Valvola di massima  
pressione taratura  
standard 400 bar  
(Pressure relief valve  
standard setting 400 bar)



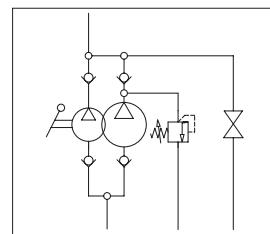
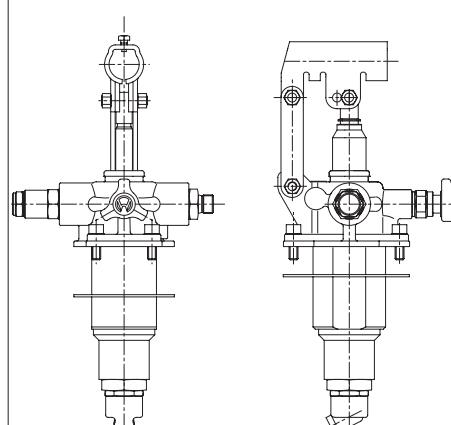
CARV18

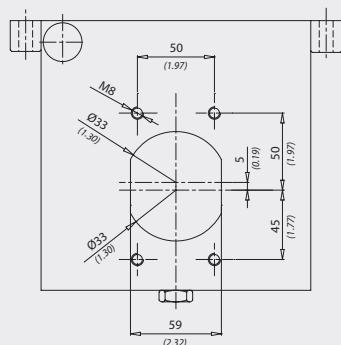


Valvola di massima  
pressione taratura  
standard 400 bar  
(Pressure relief valve  
standard setting 400 bar)



CA





Serbatoio in acciaio, Verniciatura RAL9005 antolio-nero,  
Il serbatoio è comprensivo di tappo sfiato e tappo scarico

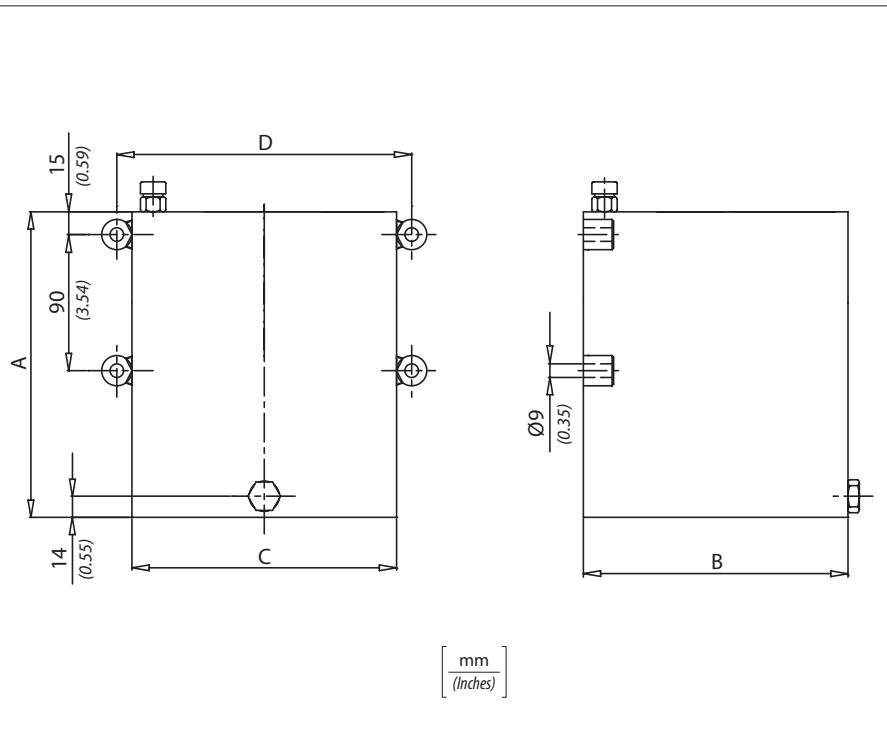
Steel reservoir, RAL9005 black oil proof painting,  
The reservoir is including the breather plug

### Dati tecnici Technical data

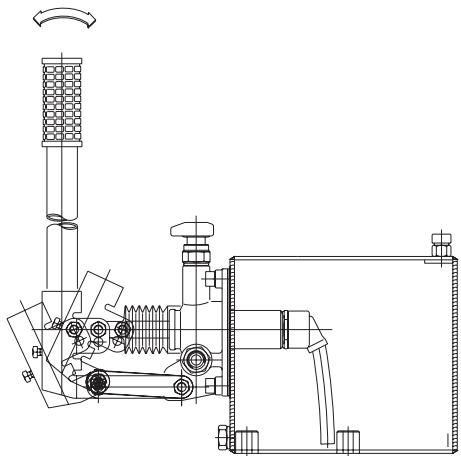
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro	ISO 4406:1999 Max contamination index with filter
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

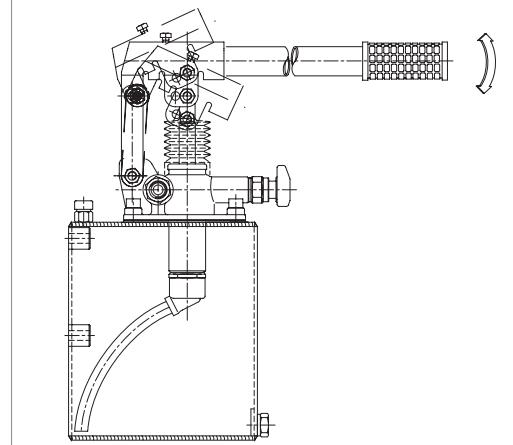
It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Montaggio orizzontale Horizontal mounting



### Montaggio verticale Vertical mounting



#### Codice ordinazione / Ordering code

#### Caratteristiche tecniche / Technical performances

Codice Code	Capacità Capacity	A	B	C	D	Peso approssimativo Approx weight Kg / lb
17900001	1 Lt. - 61 in. <sup>3</sup>	120 (4.72)				2,2 (5)
17900002	2 Lt. - 122 in. <sup>3</sup>	185 (7.28)	150 (5.90)	100 (4.72)	120 (4.72)	2,7 (6)
17900003	3 Lt. - 183 in. <sup>3</sup>	255 (10.03)				3,7 (8)
17900006	5 Lt. - 305 in. <sup>3</sup>	200 (7.87)				5,3 (11.5)
17900004	7 Lt. - 427 in. <sup>3</sup>	275 (10.82)				6,6 (14.5)
17900005	10 Lt. - 610 in. <sup>3</sup>	380 (14.96)				8,3 (18)
17900014	13 Lt. - 793 in. <sup>3</sup>	485 (19.09)				10,75 (23.7)
17900015	15 Lt. - 915 in. <sup>3</sup>	600 (23.62)				12,10 (26.67)
17900016	20 Lt. - 1220 in. <sup>3</sup>	780 (30.70)	175 (6.88)		195 (7.67)	16 (35.26)



#### Caratteristiche tecniche / Technical performances

Codice Code	Capacità Capacity	Peso approssimativo Approx weight Kg / lb
TNA1	1	1,5 (3.3)
TNA1,5	1,5	1,8 (4)

#### Codice ordinazione / Ordering code

**TNA - X**

X	Capacità / Capacity	A	H
1	1 Lt. - 61 in. <sup>3</sup>	40 (1.57)	
1,5	1,5 Lt. - 90 in. <sup>3</sup>	160 (6.30)	
2	2 Lt. - 122 in. <sup>3</sup>		25 (0.98)
3	3 Lt. - 183 in. <sup>3</sup>		70 (2.75)
5	5 Lt. - 305 in. <sup>3</sup>		180 (7.08)

Il serbatoio è comprensivo di guarnizione, tappo sfiato e tappo scarico  
The reservoir is including the gasket and breather plug



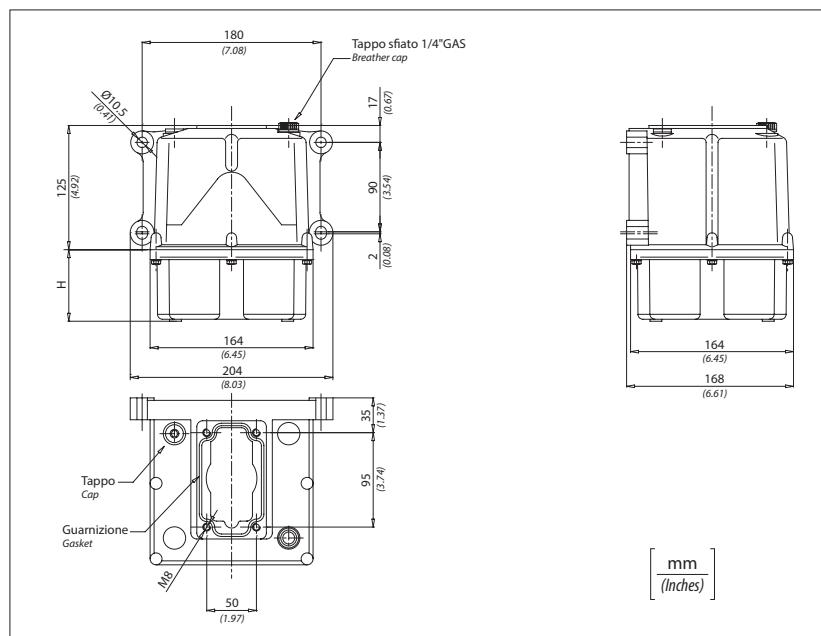
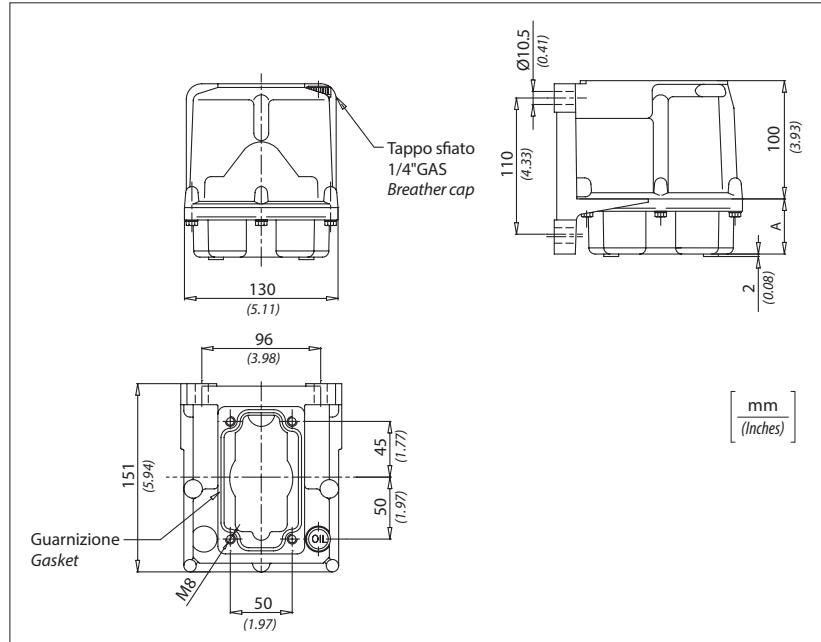
#### Caratteristiche tecniche / Technical performances

Codice Code	Capacità Capacity	Peso approssimativo Approx weight Kg / lb
TNA2	2	1,5 (3.3)
TNA3	3	1,6 (3.5)
TNA5	5	1,8 (4)

#### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)

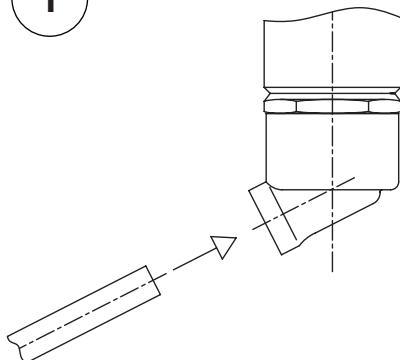




# Manuale d'uso e manutenzione Pompe a Mano

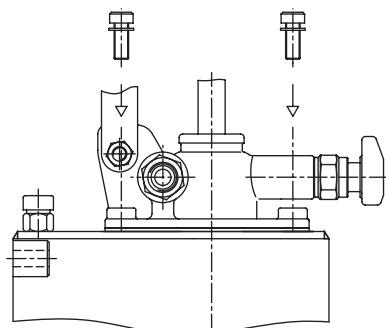
## MONTAGGIO DEL TUBO ASPIRAZIONE

1



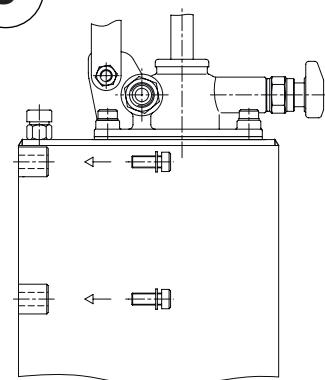
Introdurre il tubo di aspirazione nell'apposito raccordo.

2



Appoggiare la guarnizione in gomma sul serbatoio, posizionare la pompa, assemblare la pompa sul serbatoio mediante kit viti di fissaggio.

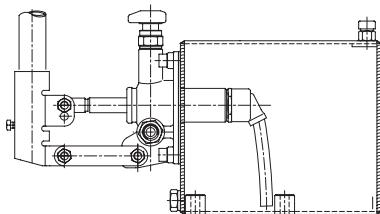
3



Collocare pompa e serbatoio nella posizione desiderata fissando con 4 viti.  
Avvitare per minimo 20 mm.

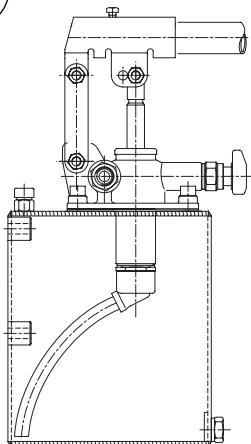
Collegare la mandata della pompa al circuito a semplice o doppio effetto.

4



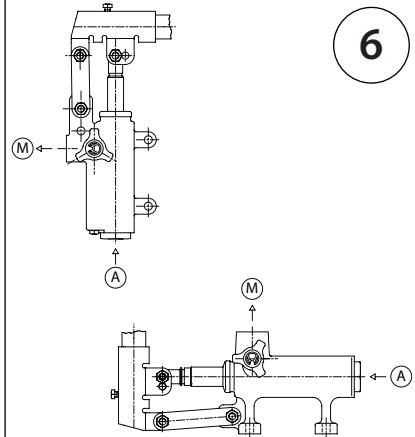
Montaggio orizzontale

5



Montaggio verticale

6



Posizionare la pompa in orizzontale o verticale fissandola con apposite viti.  
Collegare aspirazione (A) e mandata (M) della pompa al circuito.

## USO

Per un corretto funzionamento, dopo aver montato la pompa nel o sul serbatoio in modo appropriato, utilizzare esclusivamente olio idraulico a base minerale ISO6743/4 (DIN 51524), viscosità secondo i parametri ISO 3448 (DIN51519).

**Viscosità consigliata:** 46 mm<sup>2</sup>/s (cSt)

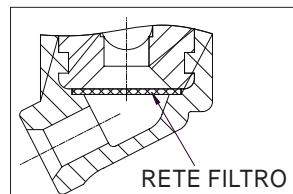
**Filtrazione consigliata:** 15 micron

**Classe di contaminazione:** 18/14 ISO4406  
(9 NAS 1638)

## MANUTENZIONE

Per un corretto funzionamento, si consiglia di seguire le seguenti procedure periodiche:

- Pulizia della RETE FILTRO
- Sostituzione olio

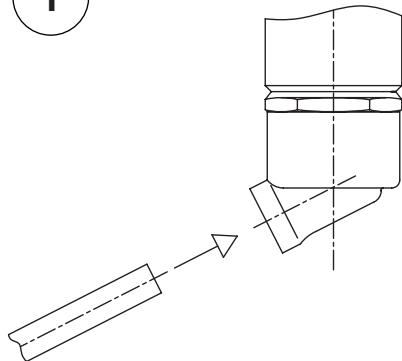


# Hand Pumps use and maintenance booklet



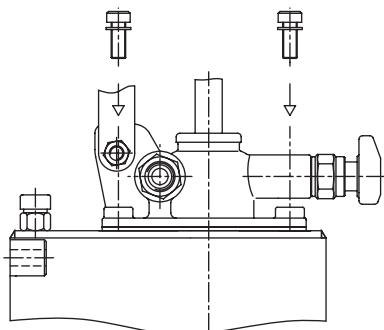
## MOUNTING THE SUCTION HOSE

1



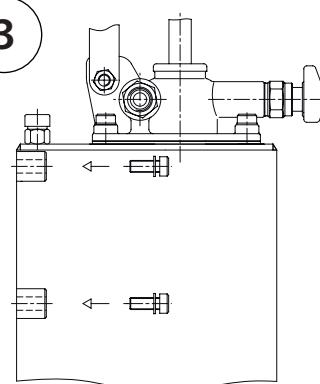
Insert the suction hose in the proper fitting.

2



Put the rubber seal on the tank, position the pump, assemble the pump to the tank by means of the fixing screws kit.

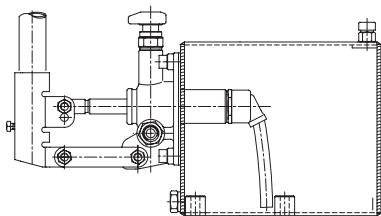
3



Place pump and tank in the position you need and fix them with nr.4 screws. You have to screw for at least 20 mm.

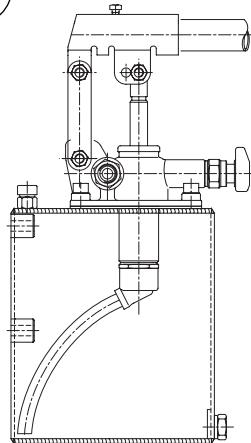
Connect pump delivery to the single or double acting circuit.

4



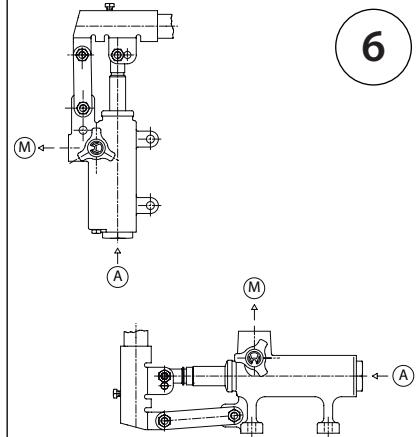
Horizontal mounting

5



Vertical mounting

6



Place pump horizontally or vertically and fix with proper screws.

Connect pump suction (A) and delivery (M) to the circuit.

## USE

For a good service of the pump, after having assembled the pump inside or on the tank in the proper way, please use only ISO6743/4 (DIN 51524), hydraulic mineral oil, viscosity according to ISO 3448 (DIN51519) standards.

**Advised viscosity:** 46 mm<sup>2</sup>/s (cSt)

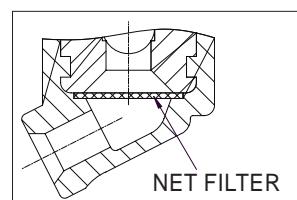
**Advised filtration:** 15 micron

**Contamination class:** 18/14 ISO4406  
(9 NAS 1638)

## MAINTENANCE

For a good service, we advise following periodical operations:

- NET FILTER cleaning
- Oil replacement





# DDFA3

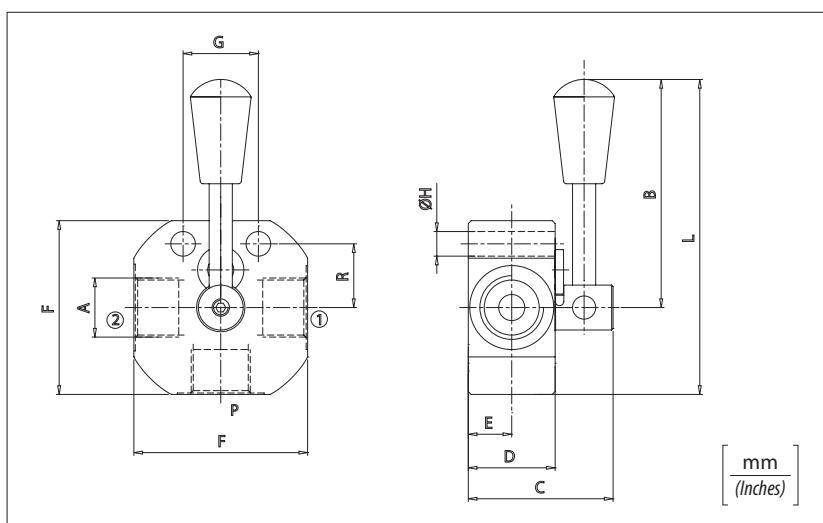
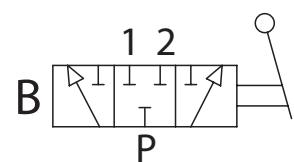
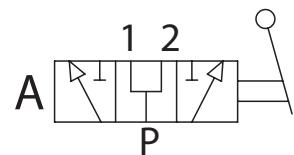
Deviatori di flusso a 3 vie alta pressione

High pressure 3 ways flow diverters



Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
Trafilamento massimo Max internal leakage	7 gocce al min drops/min 7      200 bar

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)

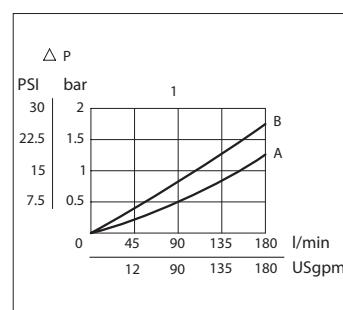
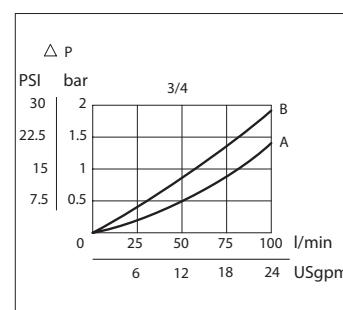
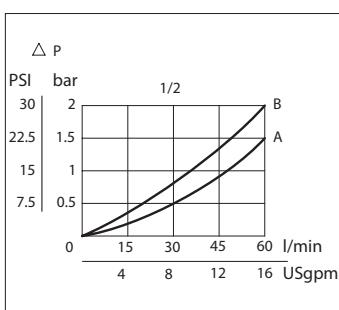
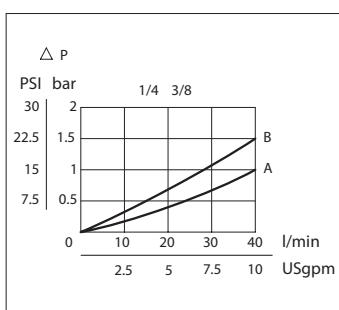


Codice ordinazione / Ordering code

**DDFA3 - X - Y - S**

X	Dimensione / Size	Y	Schema / Circuit
140	BSPP 1/4	A	Centro aperto Open centre
380	BSPP 3/8	B	Centro chiuso Closed centre
120	BSPP 1/2		
340	BSPP 3/4		
100	BSPP 1		

Perdite di carico / Pressure drops



Caratteristiche tecniche / Technical performances

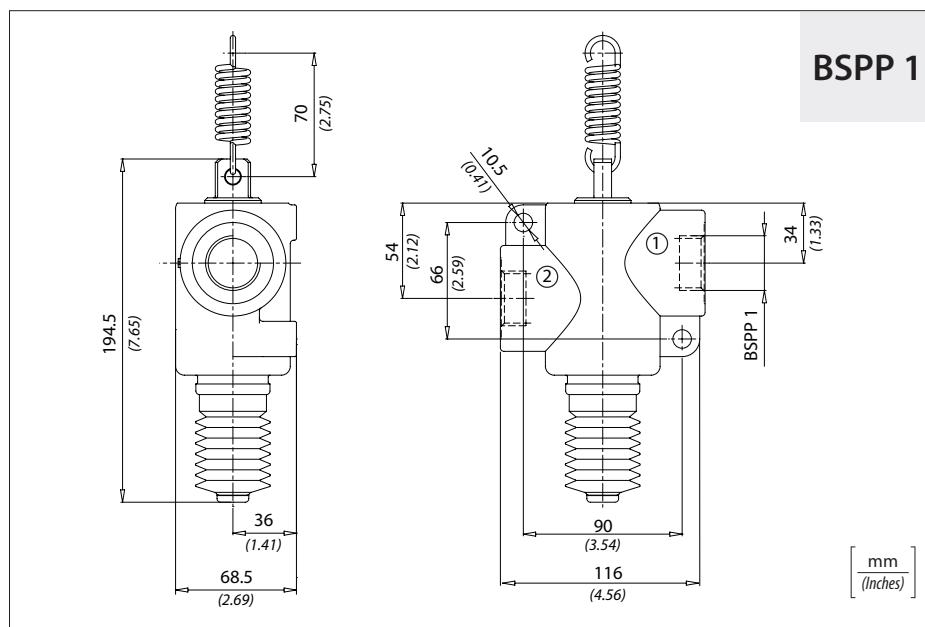
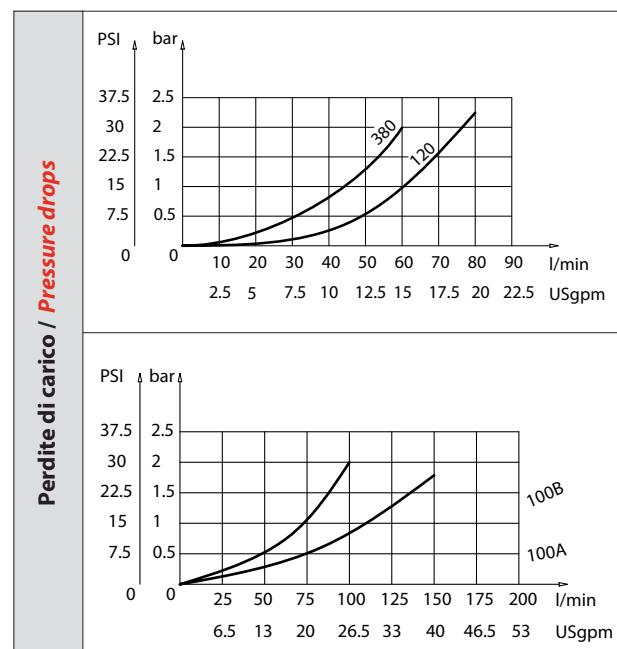
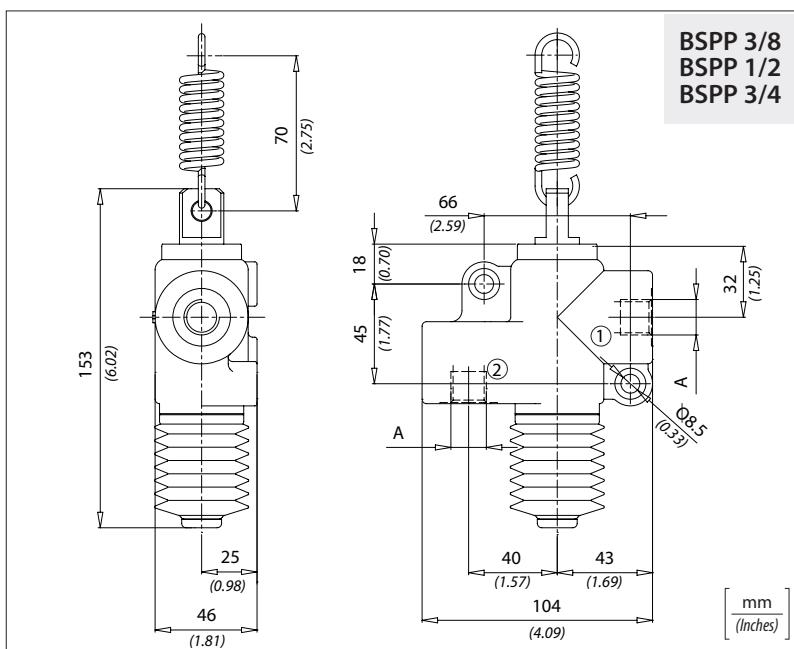
Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	R	Peso approssimativo Approx weight Kg/lb
DDFA3140	BSPP 1/4	500 (7250)	40 (10)	80 (3.15)	50 (1.97)	30 (1.18)	15 (0.59)	60 (2.36)	26 (1.02)	8,5 (0.33)	110 (4.33)	22 (0.87)	0,75 (1.65)
DDFA3380	BSPP 3/8												
DDFA3120	BSPP 1/2		60 (15)	102 (4.01)	67 (2.64)	45 (1.77)	22,5 (0.88)	80 (3.15)	32 (1.26)	11 (0.43)	142 (4.60)	26 (1.02)	1,8 (4)
DDFA3340	BSPP 3/4		100 (25)										
DDFA3100	BSPP 1		180 (47)										



Dati tecnici <i>Technical data</i>	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola <i>It is necessary a filter use to protect the valve (advised filtration 15 micron)</i>	



Caratteristiche tecniche / <i>Technical performances</i>				
Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Peso approssimativo Approx weight Kg/lb
FCT380	BSPP 3/8	60 (16)		1,7 (3,7)
FCT120	BSPP 1/2	80 (21)	250 (3600)	1,8 (4)
FCT340	BSPP 3/4	100 (26)		1,9 (4,1)
FCT100	BSPP 1	140 (37)	200 (2900)	2,5 (5,5)



Codice ordinazione / <i>Ordering code</i>	
X	Dimensione / <i>Size</i>
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1

Y	Schema / <i>Circuit</i>
A	Centro chiuso <i>Closed centre</i>
B	Centro aperto <i>Open centre</i>



# DDF3 Deviatori di flusso a 3 vie

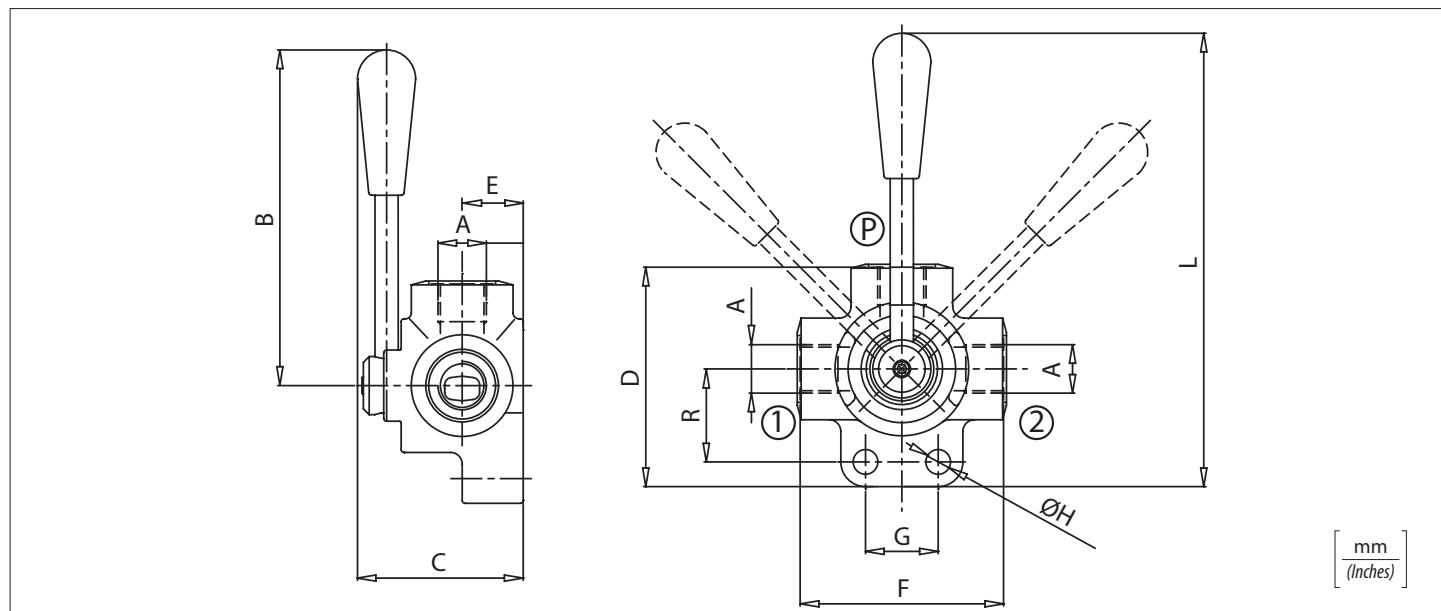
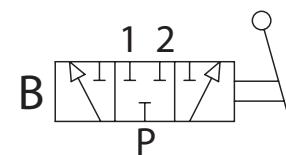
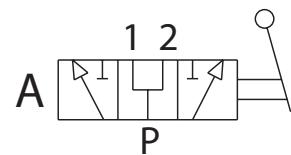
## 3 ways flow diverters



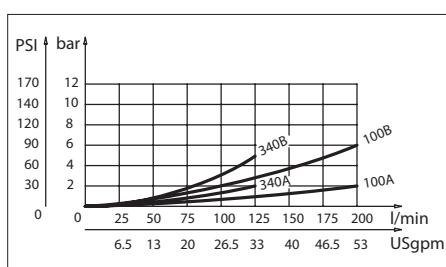
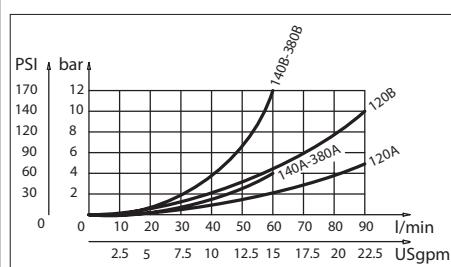
### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
Trafilamento massimo Max internal leakage	7 gocce al min drops/min 7      200 bar

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Perdite di carico / Pressure drops



### Codice ordinazione / Ordering code

#### DDF3 - X - Y

X	Dimensione / Size	Y	Schema / Circuit
140	BSPP 1/4	A	Centro aperto Open centre
380	BSPP 3/8		
120	BSPP 1/2	B	Centro chiuso Closed centre
340	BSPP 3/4		
100	BSPP 1		

### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	R	Peso approssimativo Approx weight Kg/lb
DDF3140	BSPP 1/4	60 (16)			57 (2.25)	75,5 (2.97)	21 (0.83)	70 (2.76)	25 (0.98)				0,8 (1.8)
DDF3380	BSPP 3/8			350 (5000)	115 (4.53)					8,5 (0.33)	155,5 (6.12)	32 (1.26)	
DDF3120	BSPP 1/2	90 (23)			63 (2.48)	86 (3.38)	24 (0.95)	80 (3.15)			161 (6.34)	36 (1.42)	1,2 (2.7)
DDF3340	BSPP 3/4	120 (30)			67 (2.64)	98,5 (3.88)	26 (1.02)	90 (3.54)		32 (0.13)	168,5 (6.63)	42 (1.65)	1,8 (4)
DDF3100	BSPP 1	200 (50)		300 (4000)		77 (3.03)	110 (4.33)	31 (1.22)	98 (3.86)	10,5 (0.41)	176,5 (6.95)	150 (1.97)	2,7 (6)

# DDF6 Deviatori di flusso a 6 vie

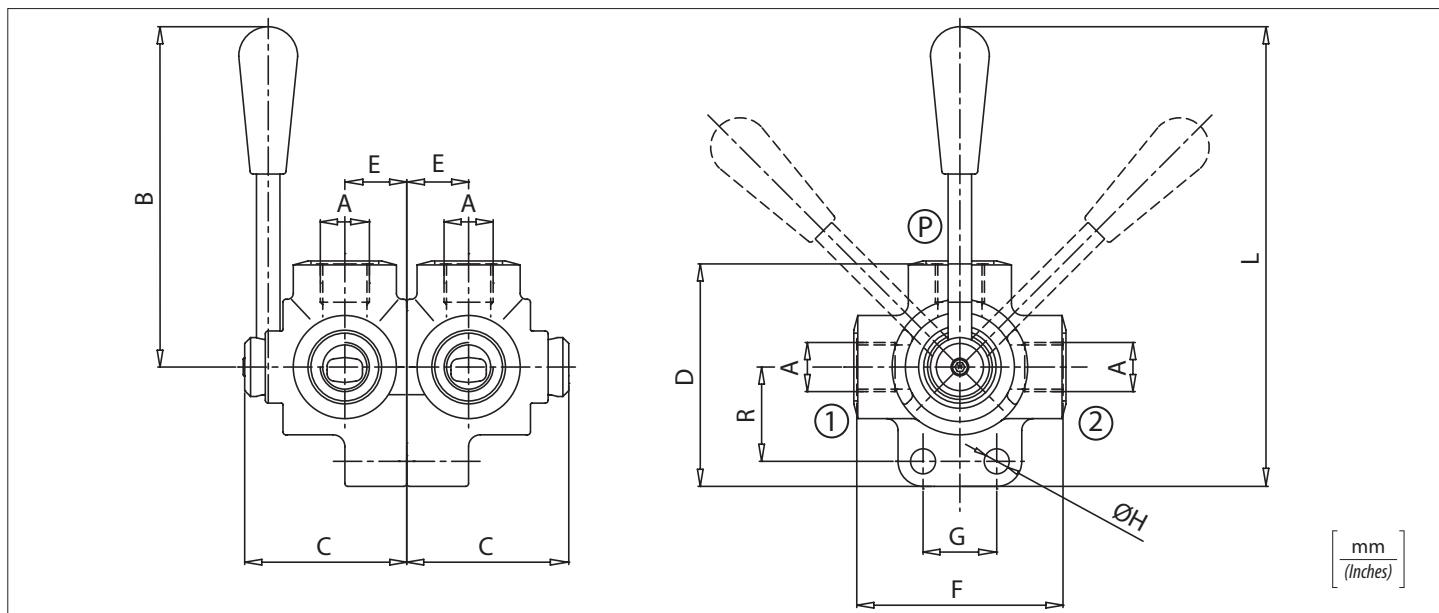
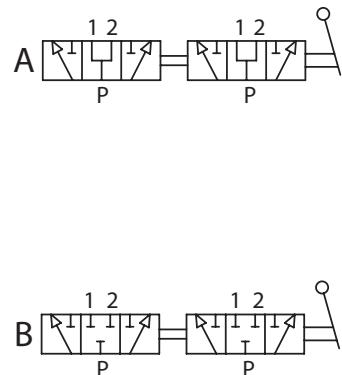
## 6 ways flow diverters



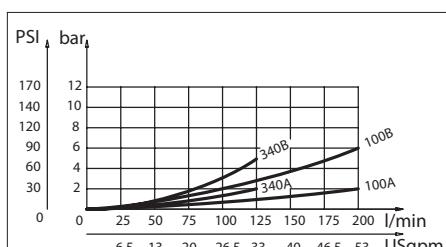
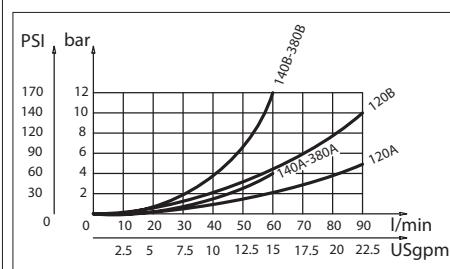
### Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524	
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura del fluido Fluid temperature	-20°C -4°F	+80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F	+50°C +122°F
Trafilamento massimo Max internal leakage	7 gocce al min drops/min 7	200 bar

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Perdite di carico / Pressure drops



### Codice ordinazione / Ordering code

**DDF6 - X - Y**

X	Dimensione / Size	Y	Schema / Circuit
140	BSPP 1/4	A	Centro aperto Open centre
380	BSPP 3/8		
120	BSPP 1/2	B	Centro chiuso Closed centre
340	BSPP 3/4		
100	BSPP 1		

### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	R	Peso approssimativo Approx weight Kg/lb
DDF6140	BSPP 1/4	60+60 (16+16)			57 (2.25)	75,5 (2.97)	21 (0.83)	70 (2.76)	25 (0.98)		155,5 (6.12)	32 (1.26)	1,5 (3.3)
DDF6380	BSPP 3/8			350 (5000)	115 (4.53)	63 (2.48)	86 (3.38)	24 (0.95)	80 (3.15)		8,5 (0.33)		161 (6.34)
DDF6120	BSPP 1/2	90+90 (23+23)			67 (2.64)	98,5 (3.88)	26 (1.02)	90 (3.54)			32 (0.13)	36 (1.42)	2,3 (5)
DDF6340	BSPP 3/4	120+120 (30+30)			77 (3.03)	110 (4.33)	31 (1.22)	98 (3.86)		10,5 (0.41)		168,5 (6.63)	42 (1.65)
DDF6100	BSPP 1	200+200 (50+50)	300 (4000)								176,5 (6.95)	150 (1.97)	5,3 (12)



# IDF4

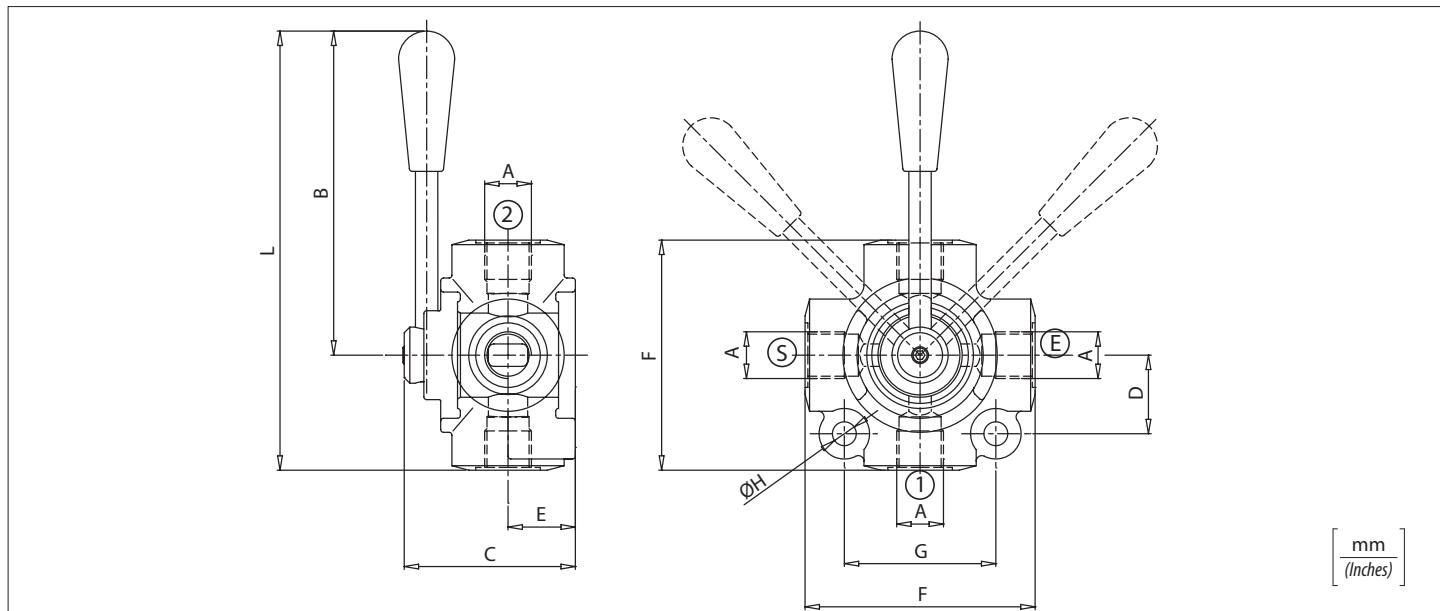
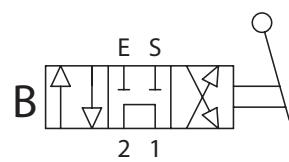
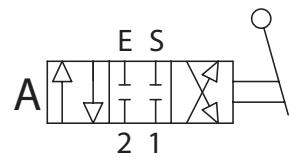
Deviatori di flusso a 4 vie  
4 ways flow diverters



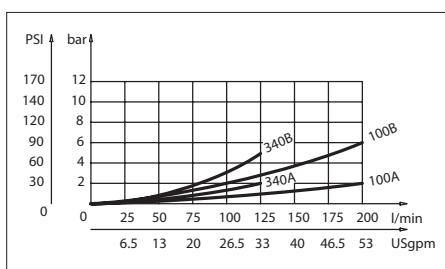
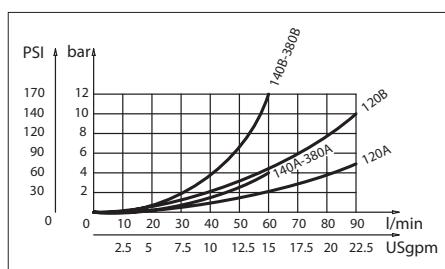
## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
Trafilamento massimo Max internal leakage	7 gocce al min drops/min 7      200 bar

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico / Pressure drops



## Codice ordinazione / Ordering code

**IDF4 - X - Y**

X	Dimensione / Size	Y	Schema / Circuit
140	BSPP 1/4	A	Centro chiuso Closed centre
380	BSPP 3/8		
120	BSPP 1/2	B	Centro aperto Open centre
340	BSPP 3/4		
100	BSPP 1		

## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Peso approssimativo Approx weight Kg/lb
IDF4140	BSPP 1/4	60 (16)	350 (5000)	115 (4.53)	63 (2.48)	28 (1.10)	24 (0.95)	80 (3.15)	54 (2.12)	8,5 (0.33)	155 (6.10)	1,2 (2.6)
IDF4380	BSPP 3/8				77 (3.03)	38 (1.50)	31 (1.22)	94 (3.70)	74 (2.91)	10,5 (0.41)	162 (6.38)	2,2 (4.8)
IDF4120	BSPP 1/2	90 (23)										2 (4.4)
IDF4340	BSPP 3/4	120 (30)										
IDF4100	BSPP 1	200 (50)	300 (4000)									

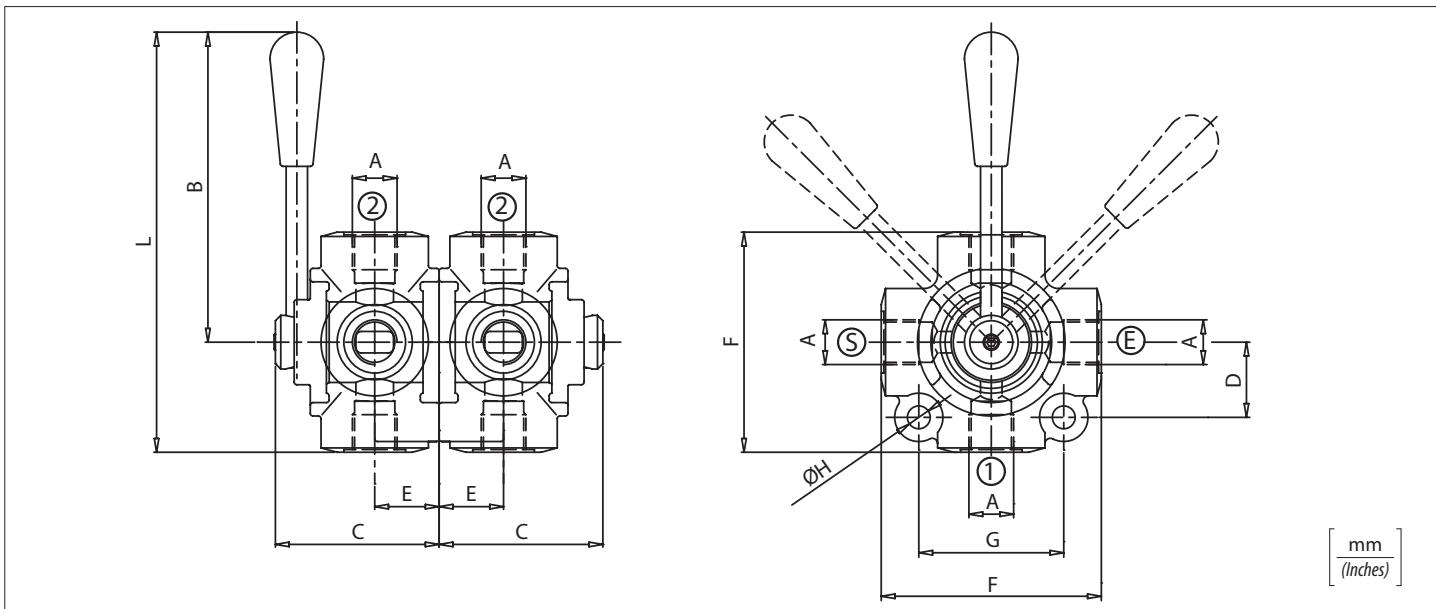
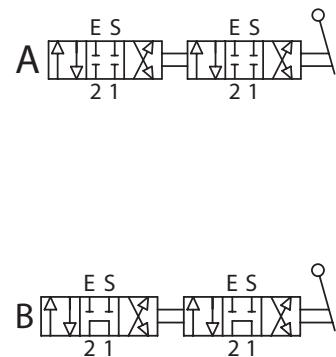
# IDF8

Deviatori di flusso a 8 vie  
8 ways flow diverters

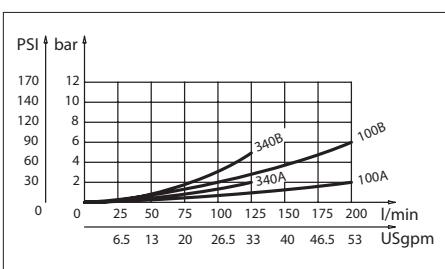
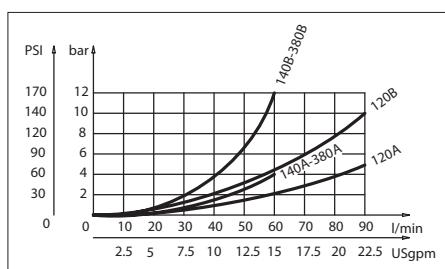


Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
Trafilamento massimo Max internal leakage	7 gocce al min drops/min 7      200 bar

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico / Pressure drops



## Codice ordinazione / Ordering code

**IDF8 - X - Y**

X	Dimensione / Size	Y	Schema / Circuit
140	BSPP 1/4	A	Centro chiuso Closed centre
380	BSPP 3/8		
120	BSPP 1/2	B	Centro aperto Open centre
340	BSPP 3/4		
100	BSPP 1		

## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Peso approssimativo Approx weight Kg/lb
IDF8140	BSPP 1/4	60 (16)	350 (5000)	115 (4.53)	63 (2.48)	28 (1.10)	24 (0.95)	80 (3.15)	54 (2.12)	8,5 (0.33)	155 (6.10)	2,3 (5)
IDF8380	BSPP 3/8											2,1 (4.6)
IDF8120	BSPP 1/2	90 (23)										4,3 (9.5)
IDF8340	BSPP 3/4	120 (30)										4 (8.8)
IDF8100	BSPP 1	200 (50)	300 (4000)		77 (3.03)	38 (1.50)	31 (1.22)	94 (3.70)	74 (2.91)	10,5 (0.41)	162 (6.38)	



# DDF3-SAE

Deviatori di flusso a 3 vie  
3 ways flow diverters

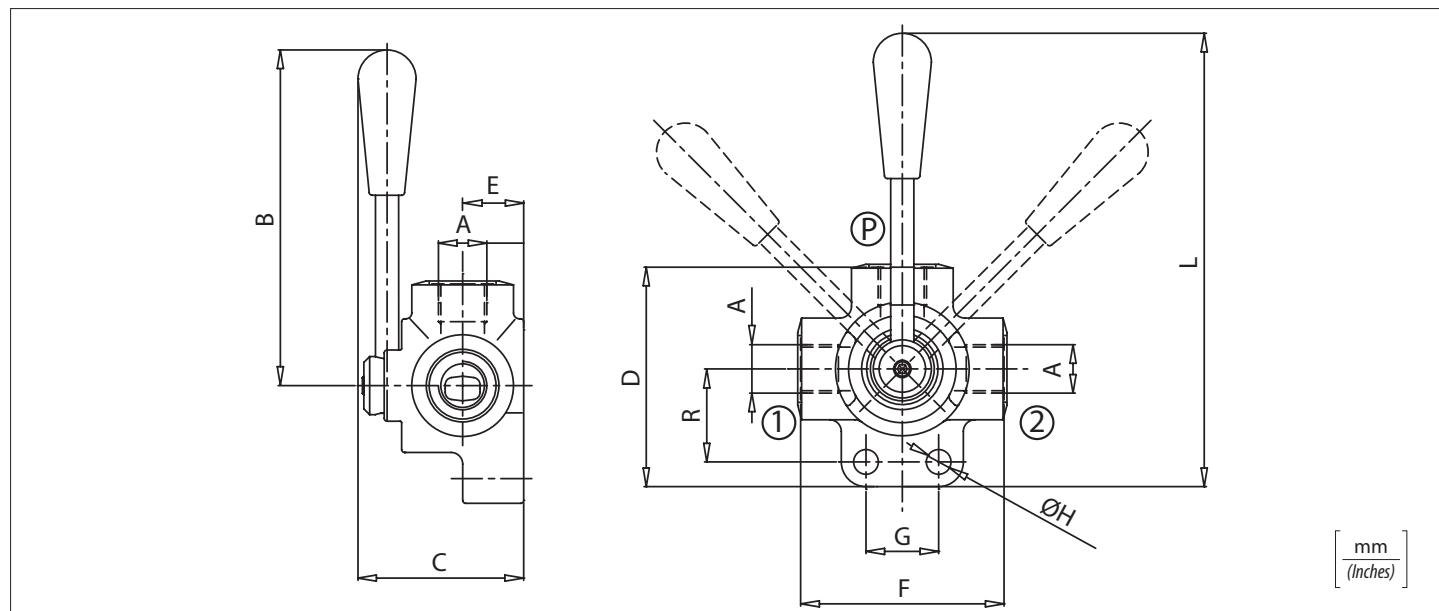
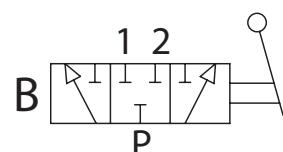
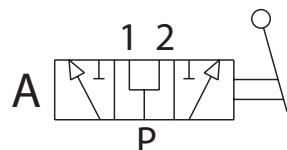
**NEW**



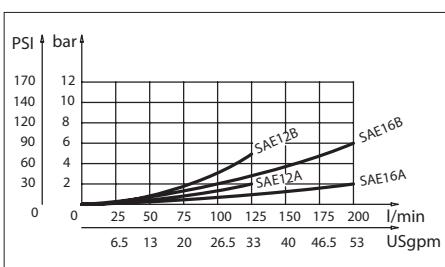
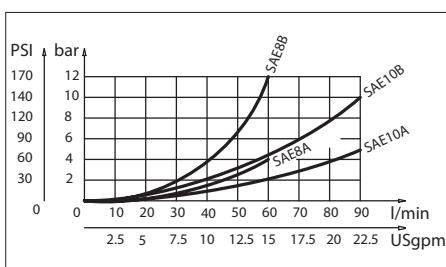
**Dati tecnici**  
**Technical data**

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F
Trafilamento massimo Max internal leakage	7 gocce al min drops/min 7      200 bar

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



**Perdite di carico / Pressure drops**



**Codice ordinazione / Ordering code**

**DDF3SAE - X - Y**

X	Dimensione / Size	Y	Schema / Circuit
8	3/4-16UNF	A	Centro aperto Open centre
10	7/8-14UNF		
12	1-1/16-12UN	B	Centro chiuso Closed centre
16	1-5/16-12UN		

**Caratteristiche tecniche / Technical performances**

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	R	Peso approssimativo Approx weight Kg/lb
DDF3SAE8	3/4-16UNF	60 (16)	350 (5000)	115 (4.53)	57 (2.25)	75,5 (2.97)	21 (0.83)	70 (2.76)	25 (0.98)	8,5 (0.33)	155,5 (6.12)	32 (1.26)	0,8 (1.8)
DDF3SAE10	7/8-14UNF	90 (23)			63 (2.48)	86 (3.38)	24 (0.95)	80 (3.15)			161 (6.34)	36 (1.42)	1,2 (2.7)
DDF3SAE12	1-1/16-12UN	120 (30)			67 (2.64)	98,5 (3.88)	26 (1.02)	90 (3.54)	32 (0.13)	10,5 (0.41)	168,5 (6.63)	42 (1.65)	1,8 (4)
DDF3SAE16	1-5/16-12UN	200 (50)	300 (4000)		77 (3.03)	110 (4.33)	31 (1.22)	98 (3.86)		10,5 (0.41)	176,5 (6.95)	150 (1.97)	2,7 (6)

# DDF6-SAE

Deviatori di flusso a 6 vie

6 ways flow diverters



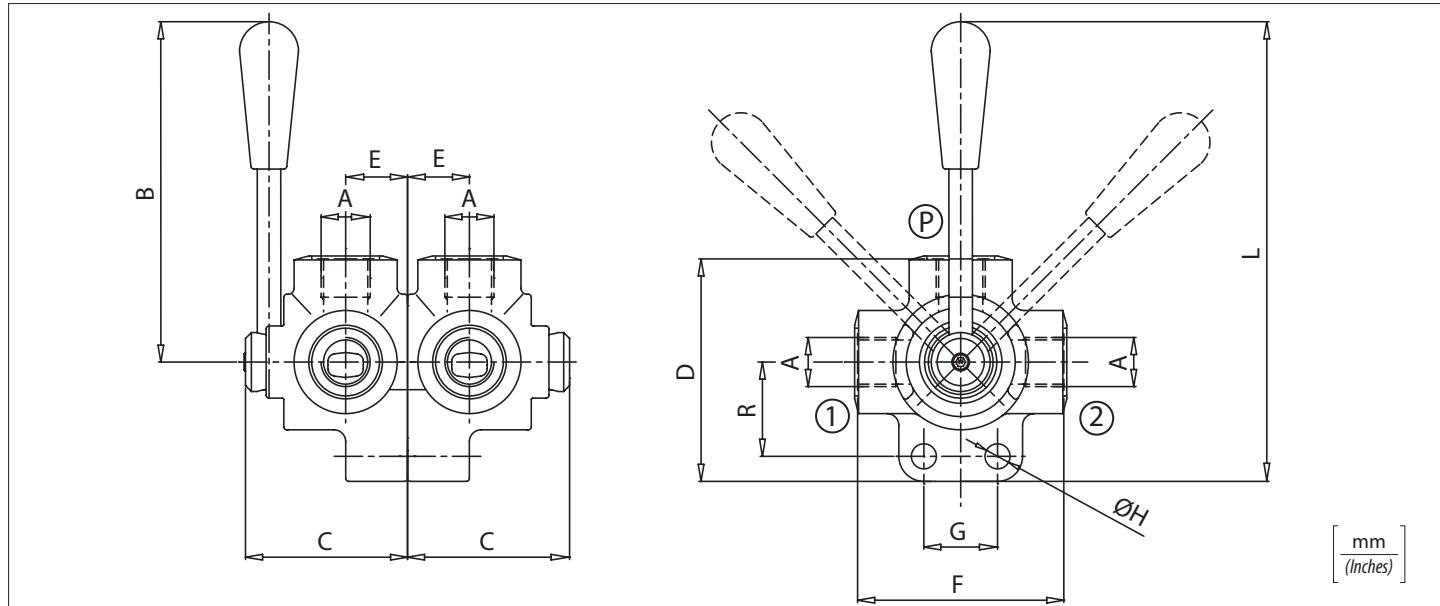
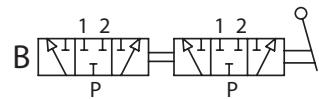
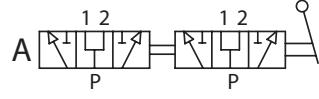
**NEW**



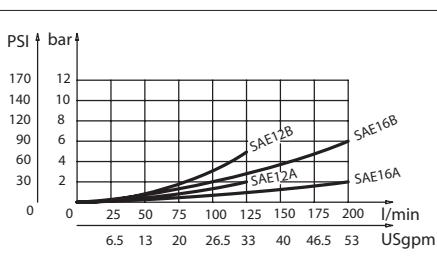
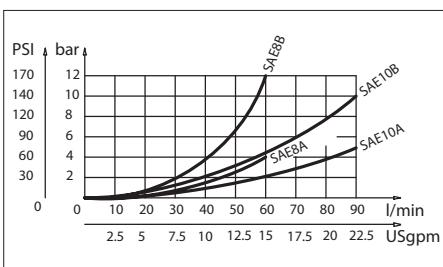
## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524	
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura del fluido Fluid temperature	-20°C -4°F	+80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F	+50°C +122°F
Trafilamento massimo Max internal leakage	7 gocce al min drops/min 7	200 bar

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



## Perdite di carico / Pressure drops



## Codice ordinazione / Ordering code

**DDF6SAE - X - Y**

X	Dimensione / Size	Y	Schema / Circuit
8	3/4-16UNF	A	Centro aperto Open centre
10	7/8-14UNF		
12	1-1/16-12UN	B	Centro chiuso Closed centre
16	1-5/16-12UN		

## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	R	Peso approssimativo Approx weight Kg/lb
DDF6SAE8	3/4-16UNF	60+60 (16+16)	350 (5000)	115 (4.53)	57 (2.25)	75,5 (2.97)	21 (0.83)	70 (2.76)	25 (0.98)	8,5 (0.33)	155,5 (6.12)	32 (1.26)	1,5 (3.3)
DDF6SAE10	7/8-14UNF	90+90 (23+23)			63 (2.48)	86 (3.38)	24 (0.95)	80 (3.15)			161 (6.34)	36 (1.42)	2,3 (5)
DDF6SAE12	1-1/16-12UN	120+120 (30+30)			67 (2.64)	98,5 (3.88)	26 (1.02)	90 (3.54)	32 (0.13)	10,5 (0.41)	168,5 (6.63)	42 (1.65)	3,5 (8)
DDF6SAE16	1-5/16-12UN	200+200 (50+50)	300 (4000)		77 (3.03)	110 (4.33)	31 (1.22)	98 (3.86)		176,5 (6.95)	150 (1.97)	5,3 (12)	



# IDF4-SAE

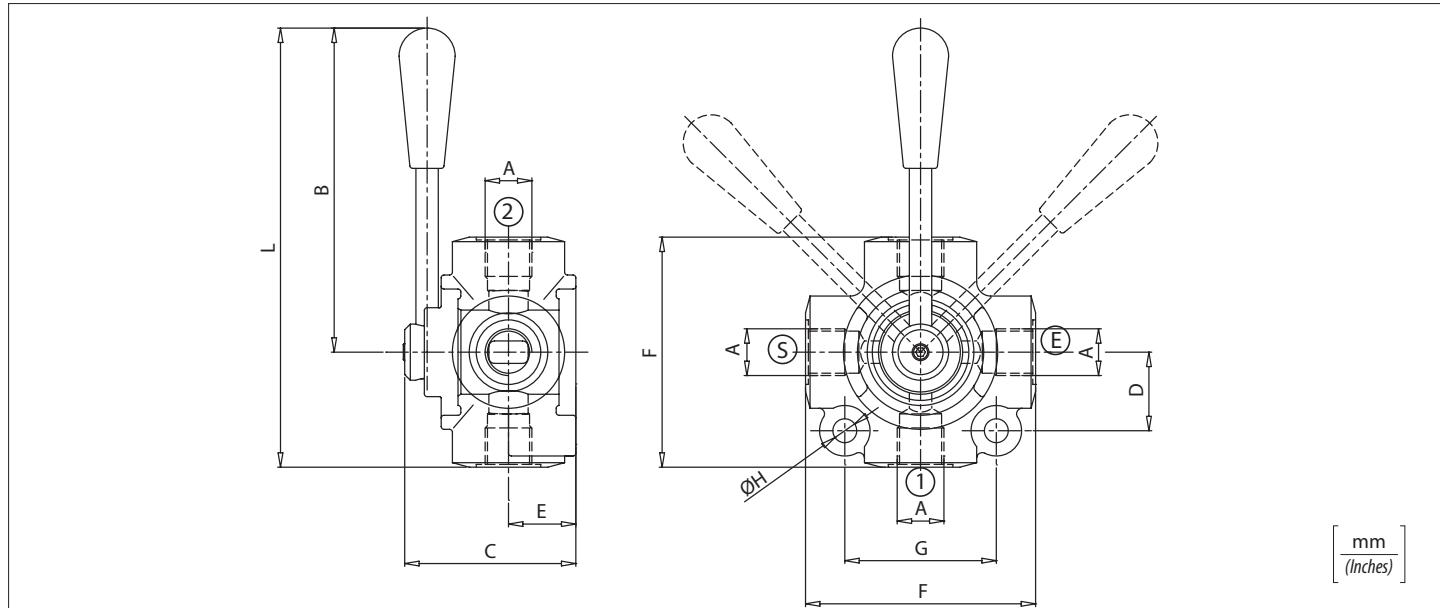
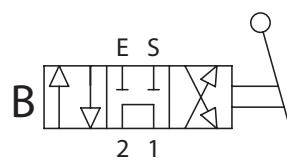
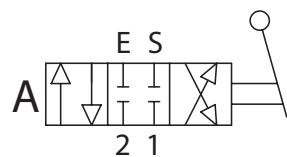
Deviatori di flusso a 4 vie  
4 ways flow diverters

**NEW**

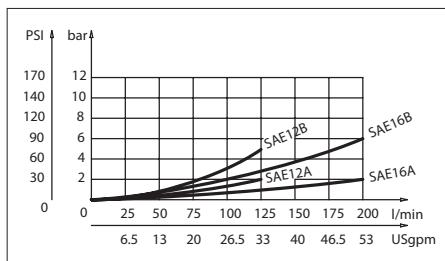
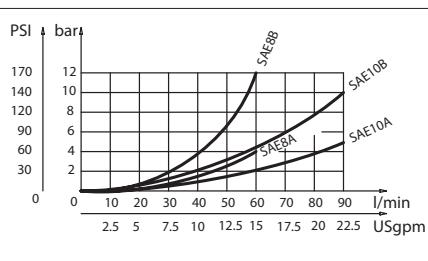


Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F
Trafilamento massimo Max internal leakage	7 gocce al min drops/min 7      200 bar

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



Perdite di carico / Pressure drops



Codice ordinazione / Ordering code

**IDF4SAE - X - Y**

X	Dimensione / Size	Y	Schema / Circuit
8	3/4-16UNF	A	Centro chiuso Closed centre
10	7/8-14UNF		
12	1-1/16-12UN	B	Centro aperto Open centre
16	1-5/16-12UN		

Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Peso approssimativo Approx weight Kg/lb
IDF4SAE8	3/4-16UNF	60 (16)	350 (5000)	115 (4.53)	63 (2.48)	28 (1.10)	24 (0.95)	80 (3.15)	54 (2.12)	8,5 (0.33)	155 (6.10)	1,2 (2.6)
IDF4SAE10	7/8-14UNF	90 (23)			77 (3.03)	38 (1.50)	31 (1.22)	94 (3.70)	74 (2.91)	10,5 (0.41)	162 (6.38)	2,2 (4.8)
IDF4SAE12	1-1/16-12UN	120 (30)	300 (4000)									2 (4.4)
IDF4SAE16	1-5/16-12UN	200 (50)										

# IDF8-SAE

Deviatori di flusso a 8 vie  
8 ways flow diverters

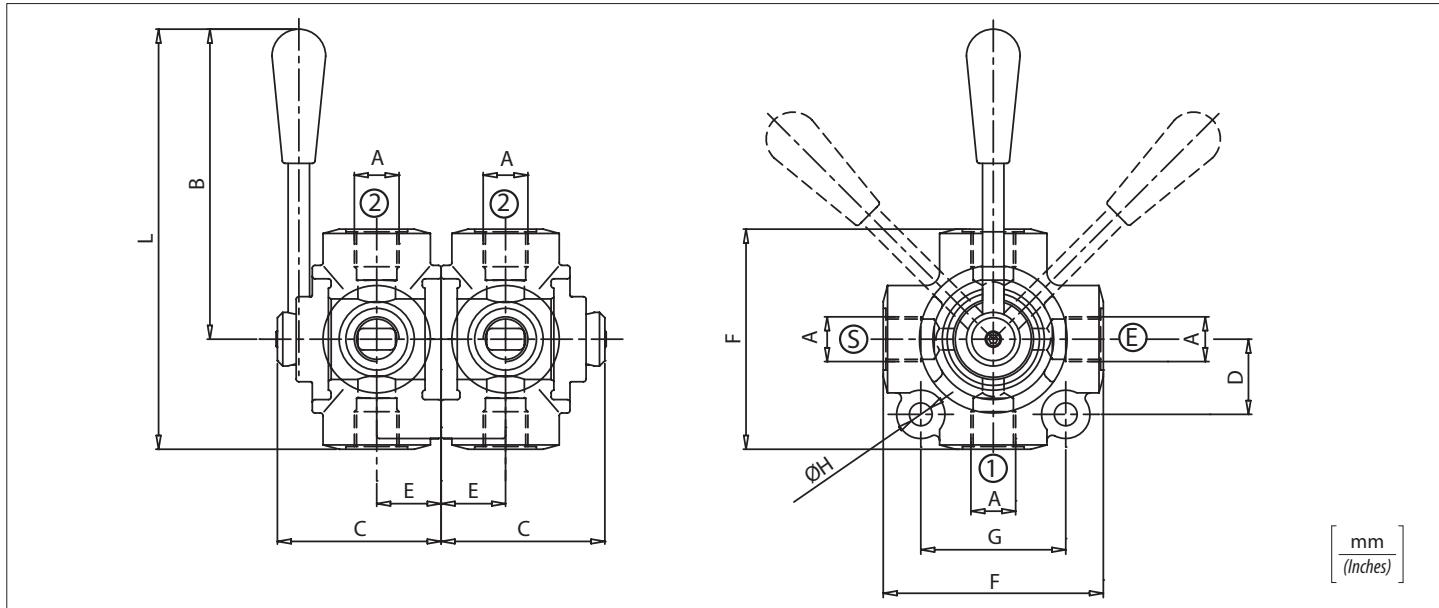
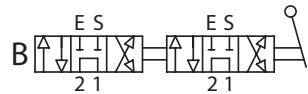
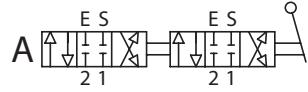


**NEW**

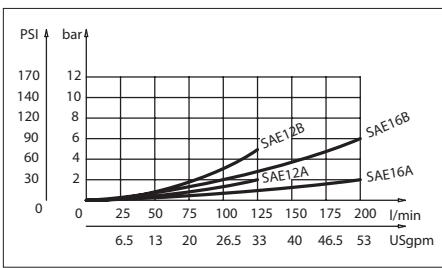
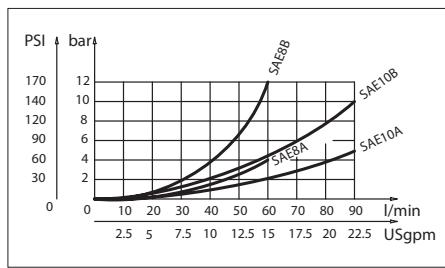


Dati tecnici Technical data	
Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C -4°F      +80°C +176°F
Temperatura ambiente Ambient temperature	-20°C -4°F      +50°C +122°F
Trafilamento massimo Max internal leakage	7 gocce al min drops/min 7      200 bar

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



### Perdite di carico / Pressure drops



### Codice ordinazione / Ordering code

**IDF8SAE - X - Y**

X	Dimensione / Size	Y	Schema / Circuit
140	BSPP 1/4	A	Centro chiuso Closed centre
380	BSPP 3/8		
120	BSPP 1/2	B	Centro aperto Open centre
340	BSPP 3/4		
100	BSPP 1		

### Caratteristiche tecniche / Technical performances

		Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	D	E	F	G	H	L	Peso approssimativo Approx weight Kg/lb
IDF8SAE8	3/4-16UNF	60 (16)	350 (5000)	115 (4.53)	63 (2.48)	28 (1.10)	24 (0.95)	80 (3.15)	54 (2.12)	8,5 (0.33)	155 (6.10)	2,3 (5)
IDF8SAE10	7/8-14UNF	90 (23)										2,1 (4.6)
IDF8SAE12	1-1/16-12UN	120 (30)										4,3 (9.5)
IDF8SAE16	1-5/16-12UN	200 (50)	300 (4000)		77 (3.03)	38 (1.50)	31 (1.22)	94 (3.70)	74 (2.91)	10,5 (0.41)	162 (6.38)	4 (8.8)





*Accessori*  
*Accessories*

Oleoweb

HYDRAULIC VALVES AND COMPONENTS



# RAS2

## Valvole a sfera a 2 vie 2 ways ball valves

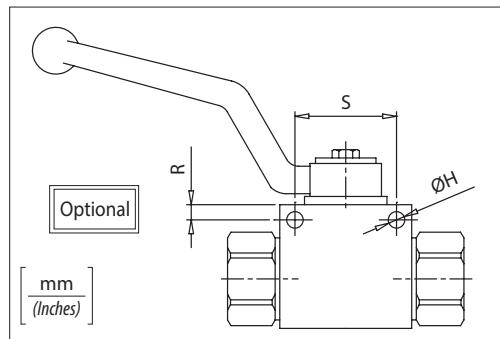
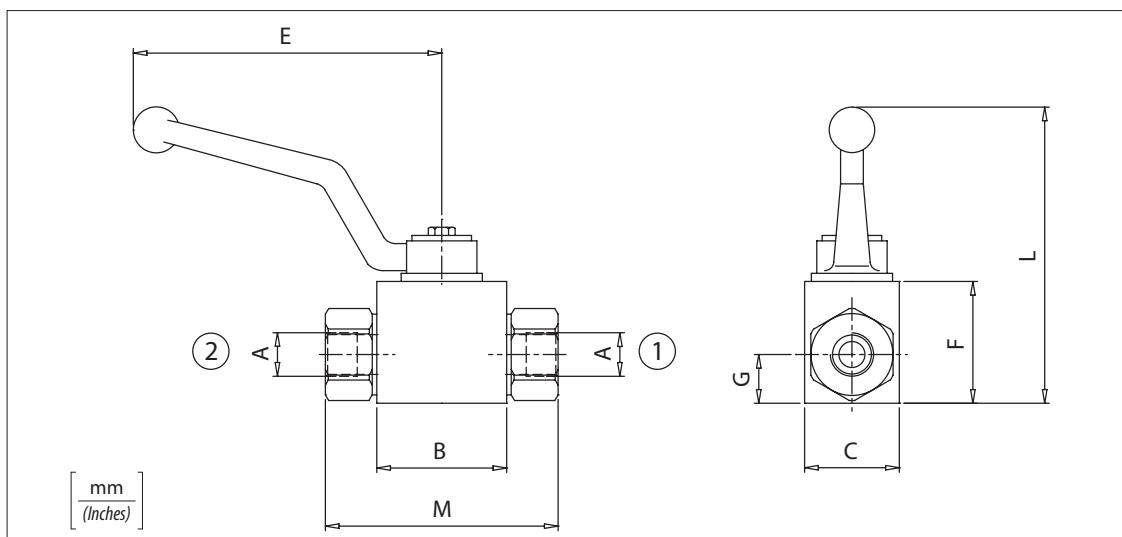
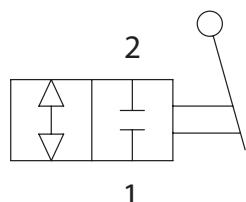


### Dati tecnici Technical data

Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C      +80°C -4°F      +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



### Codice ordinazione Ordering code

**RAS2 - X - Y**

X	Dimensione / Size
180	BSPP 1/8
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1
114	BSPP 1-1/4
112	BSPP 1-1/2

Y	Optional
P	Fori di fissaggio Fixing ports

### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	E	F	G	H	L	M	R	S	Peso approssimativo Approx weight Kg/lb
RAS2180	BSPP 1/8	15 (4)	500 (7250)	42 (1.65)	30 (1.18)	110 (4.33)	35 (1.38)	14,5 (0.57)	5,2 (0.20)	91,5 (3.60)	71 (2.80)	4,5 (0.18)	34 (1.34)	0,5 (1.1)
RAS2140	BSPP 1/4	25 (6.5)		44 (1.73)	35 (1.38)		40 (1.57)	17,5 (0.69)		96,5 (3.80)	73 (2.87)	5 (0.20)		0,7 (1.5)
RAS2380	BSPP 3/8	35 (9)		48 (1.89)	37 (1.46)		43 (1.69)	18 (0.71)		99,5 (3.91)	83 (3.27)			0,8 (1.8)
RAS2120	BSPP 1/2	60 (15)												1,5 (3.3)
RAS2340	BSPP 3/4	100 (25)	400 (5800)	62,5 (2.46)	45 (1.77)	180 (7.08)	55 (2.16)	23,5 (0.93)	6,2 (0.24)	106,5 (4.19)	95 (3.74)	6 (0.24)	50 (1.97)	2,3 (5)
RAS2100	BSPP 1										2,5 (5.5)			
RAS2114	BSPP 1-1/4													
RAS2112	BSPP 1-1/2													

# RAS3

Valvole a sfera a 3 vie  
3 ways ball valves

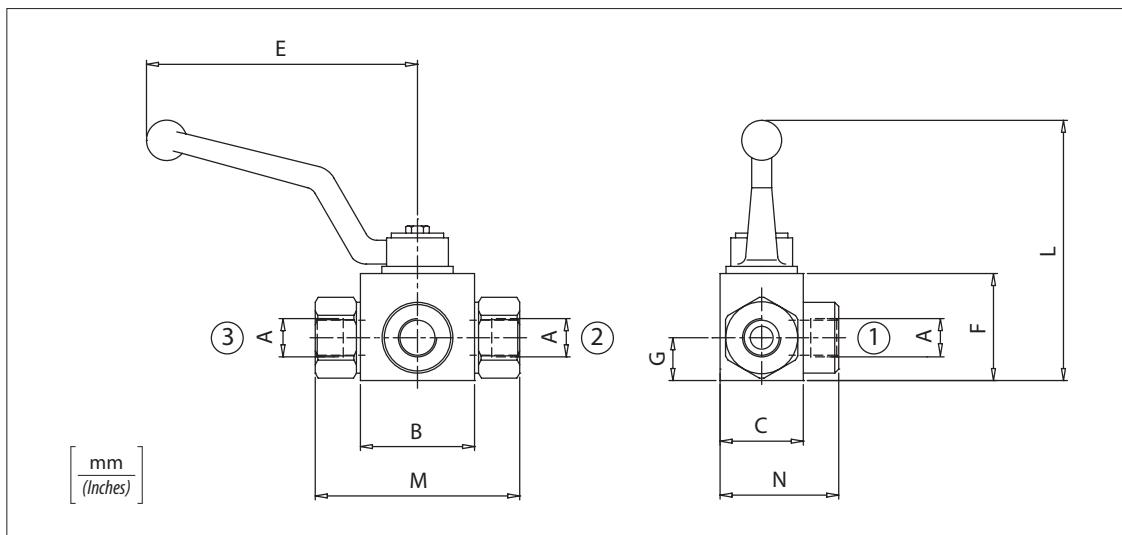
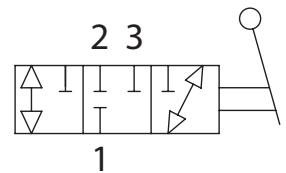


## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



## Codice ordinazione Ordering code

**RAS3 - X - Y**

X	Dimensione / Size
180	BSPP 1/8
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1
114	BSPP 1-1/4
112	BSPP 1-1/2

Y	Optional
P	Fori di fissaggio Fixing ports

## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	B	C	E	F	G	H	L	M	N	R	S	Peso approssimativo Approx weight Kg/lb			
RAS3180	BSPP 1/8	15 (4)	400 (5800)	42 (1.65)	30 (1.18)	110 (4.33)	35 (1.38)	14,5 (0.57)	5,2 (0.20)	91,5 (3.60)	71 (2.80)	48,5 (1.90)	4,5 (0.18)	34 (1.34)	0,6 (1.3)			
RAS3140	BSPP 1/4	25 (6.5)		44 (1.73)	35 (1.38)		40 (1.57)	17,5 (0.69)		96,5 (3.80)	73 (2.87)	54,5 (2.14)	5 (0.20)	36 (1.42)	0,7 (1.5)			
RAS3380	BSPP 3/8	35 (9)		48 (1.89)	37 (1.46)		43 (1.69)	18 (0.71)		99,5 (3.91)	83 (3.27)	58,5 (2.30)	6 (0.24)	50 (1.97)	0,8 (1.8)			
RAS3120	BSPP 1/2	60 (15)		62,5 (2.46)	45 (1.77)		55 (2.16)	23,5 (0.93)		106,5 (4.19)	95 (3.74)	75 (2.95)			1,6 (3.5)			
RAS3340	BSPP 3/4	100 (25)	350 (5000)	66,5 (2.62)	55 (2.16)	180 (7.08)	65 (2.56)	29,5 (1.16)	6,2 (0.24)	116,5 (4.59)	112 (4.41)	87,5 (3.15)			2,4 (5.3)			
RAS3100	BSPP 1	150 (40)		75 (2.95)	65 (2.56)		70 (2.76)	30,5 (1.18)		124 (4.88)	120 (4.72)				2,6 (5.7)			
RAS3114	BSPP 1-1/4			85 (3.35)	75 (2.95)		75 (3.00)	35,5 (1.33)		134 (5.24)	125 (5.00)				2,8 (6)			
RAS3112	BSPP 1-1/2			95 (3.74)	85 (3.35)		85 (3.35)	40,5 (1.51)		144 (5.66)	135 (5.30)							



# GGIL

## Giunti girevoli in linea In line rotating coupling

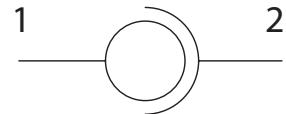


### Dati tecnici Technical data

Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C      +80°C -4°F      +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C      +50°C -4°F      +122°F

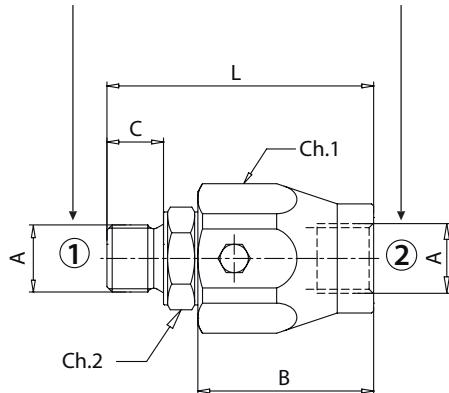
È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola

*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



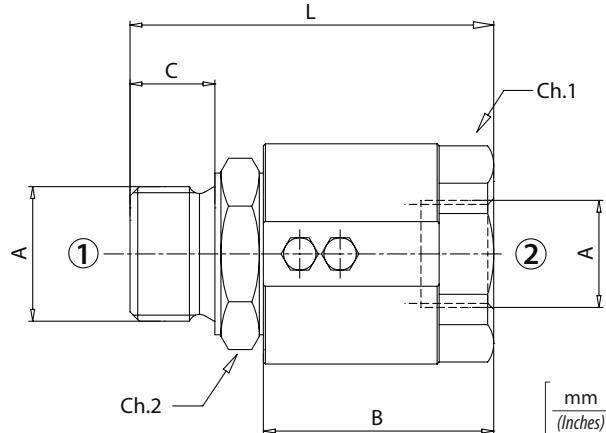
Coppie di serraggio  
femmina girevole 60°  
*60° female swivel ends torque values*

①	Nm
BSPP 1/4	20
BSPP 3/8	35
BSPP 1/2	60
BSPP 3/4	115
BSPP 1	140



Coppie di serraggio raccordo  
*Tightening torques for stud*

②	Nm
BSPP 1/4	40
BSPP 3/8	90
BSPP 1/2	120
BSPP 3/4	210
BSPP 1	370



Codice ordinazione  
*Ordering code*

**GGIL - X**

X	Dimensione / Size
140	BSPP 1/4
380	BSPP 3/8
120	BSPP 1/2
340	BSPP 3/4
100	BSPP 1

### Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Pressione max in rotazione Max rotation pressure bar/PSI	Velocità max di rotazione Max rotation speed rev/min	B	C	Ch.1	Ch.2	L	Peso approssimativo Approx weight Kg/lb
GGIL140	BSPP 1/4	25 (6.5)	400 (5800)	200 (2900)	212	42 (1.65)	11 (0.43)	30 (1.18)	19 (0.75)	61 (2.40)	0,21 (0.46)
GGIL380	BSPP 3/8	35 (9)			173	44 (1.73)	14 (0.55)	34 (1.34)	24 (0.95)	66 (2.60)	0,27 (0.60)
GGIL120	BSPP 1/2	60 (15)	300 (4000)	150 (2200)	160	47 (1.85)	15 (0.59)	36 (1.42)	27 (1.06)	71 (2.79)	0,34 (0.75)
GGIL340	BSPP 3/4	100 (26)			120	50 (1.97)	19 (0.75)	45 (1.77)	34 (1.34)	80 (3.15)	0,55 (1.2)
GGIL100	BSPP 1	180 (47)		100 (1450)	100	57 (2.24)	21 (0.82)	50 (1.97)	41 (1.61)	90 (3.54)	0,91 (2)

# GG90

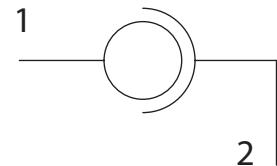
Giunti girevoli a 90°  
90° rotating coupling



## Dati tecnici Technical data

Olio idraulico Mineral oil	ISO 6743/4 DIN 51524
Viscosità fluido Fluid viscosity	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido Fluid temperature	-20°C      +80°C -4°F      +176°F
Temperatura ambiente Ambient temperature	-20°C      +50°C -4°F      +122°F

È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
It is necessary a filter use to protect the valve (advised filtration 15 micron)



Coppie di serraggio femmina girevole 60° 60° female swivel ends torque values		Coppie di serraggio raccordo Tightening torques for stud		Codice ordinazione Ordering code	
①	Nm	②	Nm	X	Dimensione / Size
BSPP 1/4	20	BSPP 1/4	40	140	BSPP 1/4
BSPP 3/8	35	BSPP 3/8	90	380	BSPP 3/8
BSPP 1/2	60	BSPP 1/2	120	120	BSPP 1/2
BSPP 3/4	115	BSPP 3/4	210	340	BSPP 3/4
BSPP 1	140	BSPP 1	370	100	BSPP 1
				<b>GG90 - X</b>	

## Caratteristiche tecniche / Technical performances

Codice Code	A	Portata Max Max flow l/min - USgpm	Pressione Max Max pressure bar/PSI	Pressione max in rotazione Max rotation pressure bar/PSI	Velocità max di rotazione Max rotation speed rev/min	B	C	D	E	L	Ch.1	Peso approssimativo Approx weight Kg/lb
GG90140	BSPP 1/4	25 (6.5)	400 (5800)	200 (2900)	212	50 (1.97)	11 (0.43)	33,5 (1.32)	11 (0.43)	69 (2.71)	19 (0.75)	0,31 (0.68)
GG90380	BSPP 3/8	35 (9)			173	54 (2.13)	14 (0.55)	37,5 (1.48)	13 (0.51)	76 (2.99)	24 (0.95)	0,41 (0.90)
GG90120	BSPP 1/2	60 (15)	300 (4000)	150 (2200)	160	63 (2.48)	15 (0.59)	39,5 (1.55)	14 (0.55)	87 (3.42)	27 (1.06)	0,52 (1.15)
GG90340	BSPP 3/4	100 (26)			120	70 (2.76)	19 (0.75)	54,5 (2.15)	18 (0.71)	100 (3.93)	34 (1.34)	0,90 (2)
GG90100	BSPP 1	180 (47)		100 (1450)	100	80 (3.15)	21 (0.82)	59 (2.32)	25 (0.98)	113 (4.45)	41 (1.61)	1,12 (2.5)



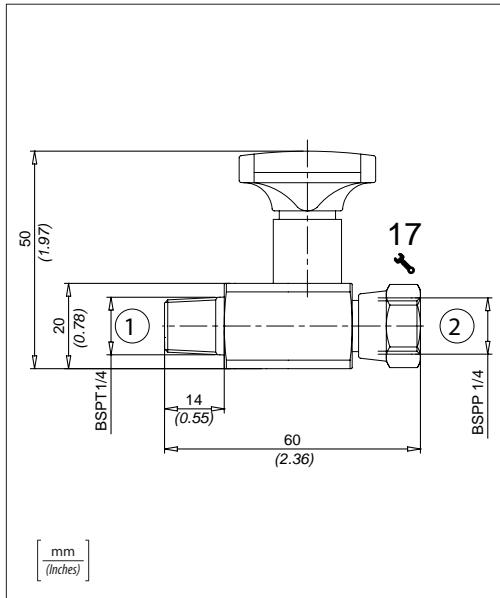
# SOV

Rubinetti esclusore in linea protezione manometro  
Pressure gauge in-line shut-off valves



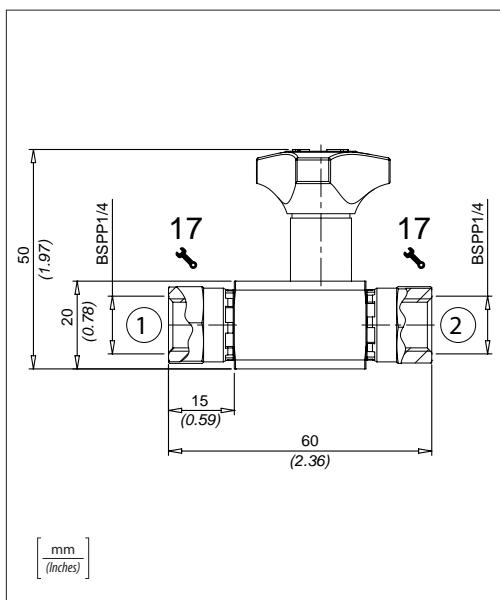
Codice ordinazione  
*Ordering code*

**SOV1400**



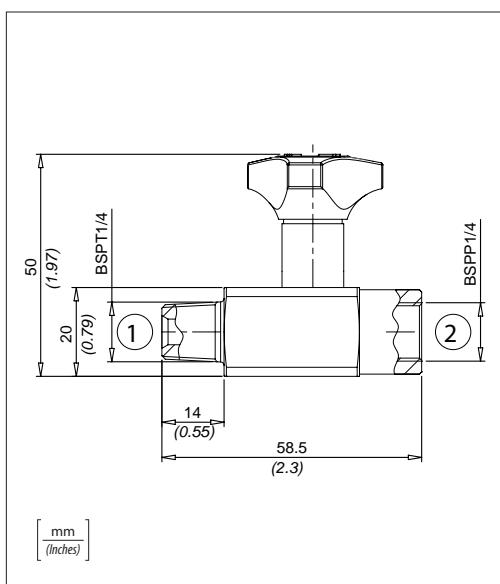
Codice ordinazione  
*Ordering code*

**SOV1400FF**



Codice ordinazione  
*Ordering code*

**SOV1400MF**



**Dati tecnici**  
**Technical data**

Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C -4°F      +80°C +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C -4°F      +50°C +122°F
Pressione Max <i>Max pressure</i> bar/PSI	400 (5800)
Peso approssimativo <i>Approx weight</i> Kg / lb	0,15 (0.33)



**NEW**

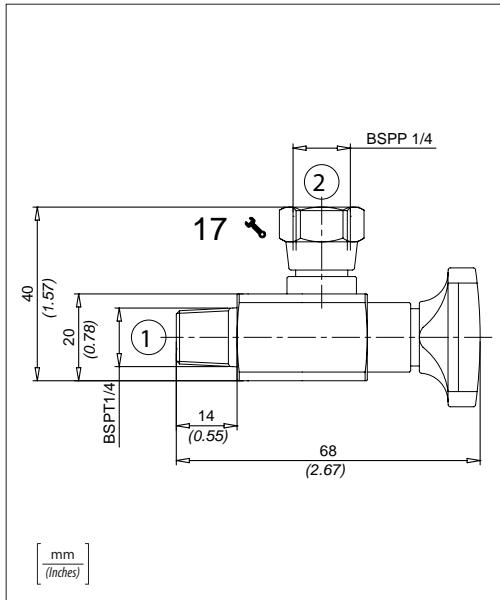
# SOV

Rubinetti esclusore 90° protezione manometro  
Pressure gauge 90° shut-off valves



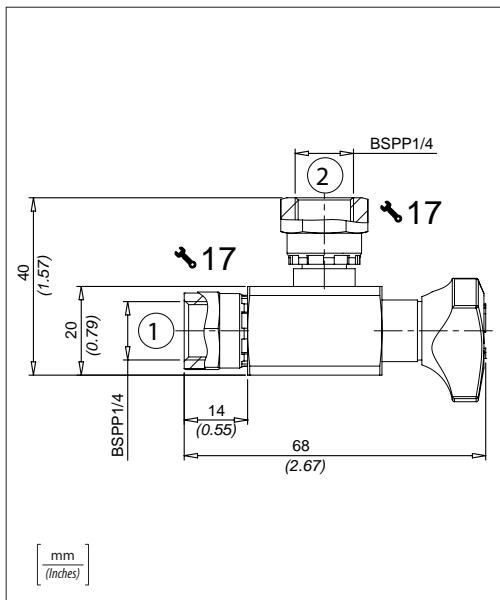
Codice ordinazione  
*Ordering code*

**SOV1490**



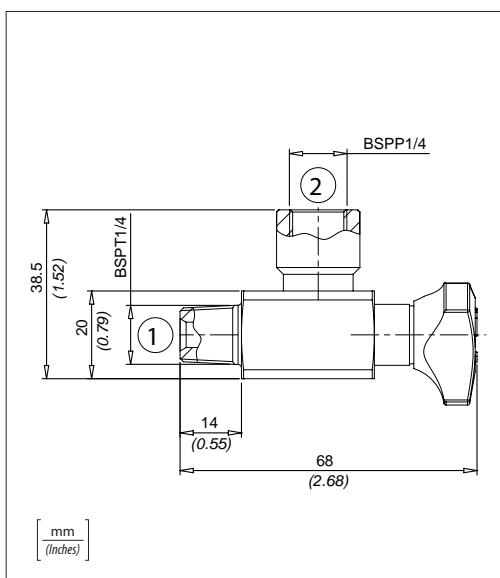
Codice ordinazione  
*Ordering code*

**SOV1490FF**



Codice ordinazione  
*Ordering code*

**SOV1490MF**



Dati tecnici  
*Technical data*

Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C -4°F      +80°C +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C -4°F      +50°C +122°F
Pressione Max <i>Max pressure</i> bar/PSI	400 (5800)
Peso approssimativo <i>Approx weight</i> Kg / lb	0,15 (0.33)



**NEW**



# MNP

Miniprese prova pressione  
Test couplings for pressure checking

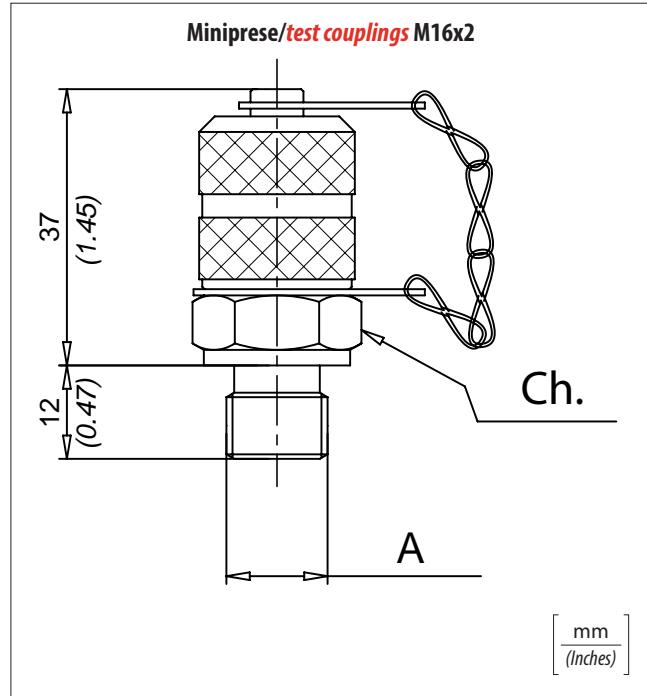
**NEW**



Dati tecnici <i>Technical data</i>	
Olio idraulico <i>Mineral oil</i>	ISO 6743/4 DIN 51524
Viscosità fluido <i>Fluid viscosity</i>	10-500 mm <sup>2</sup> /s 45 to 2000 ssu (6 to 420 cSt)
Classe di contaminazione max con filtro <i>Max contamination index with filter</i>	ISO 4406:1999 Classe 19/17/14
Temperatura del fluido <i>Fluid temperature</i>	-20°C      +80°C -4°F      +176°F
Temperatura ambiente <i>Ambient temperature</i>	-20°C      +50°C -4°F      +122°F



È indispensabile l'utilizzo di un filtro (filtrazione consigliata 15 micron) per proteggere la valvola  
*It is necessary a filter use to protect the valve (advised filtration 15 micron)*



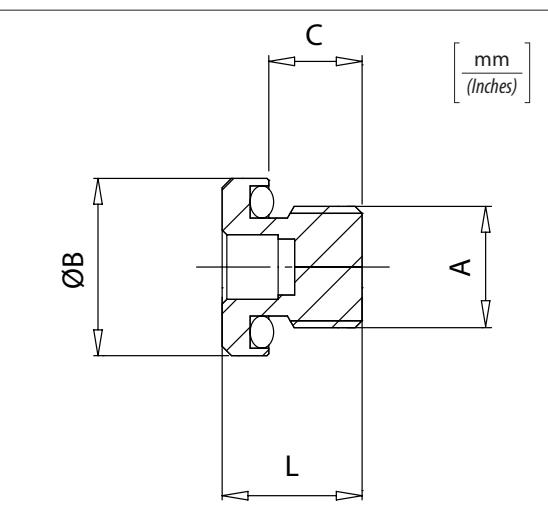
## Caratteristiche tecniche / *Technical performances*

Codice <i>Code</i>	A	Pressione Max <i>Max pressure</i> bar/PSI	Ch. mm	Coppia di serraggio <i>Tightening torque</i> Nm/lbfft	Peso approssimativo <i>Approx weight</i> Kg / lb
MNP180	BSPP 1/8	630 (9000)	17	20 (14,6)	0,07 (0.16)
MNP140	BSPP 1/4		19	30 (22)	0,08 (0.18)
MNP380	BSPP 3/8		22	60 (44)	0,10 (0.22)
MNP120	BSPP 1/2		27	80 (58,6)	0,13 (0.29)

## Tappi Plugs

### Caratteristiche tecniche / *Technical performances*

Codice <i>Code</i>	A	B	C	L
83500001	BSPP 1/8	15 (0.59)	9 (0.35)	13 (0.51)
83500002	BSPP 1/4	19 (0.75)	11 (0.43)	16 (0.63)
83500003	BSPP 3/8	22 (0.87)	11 (0.43)	17 (0.67)
83500004	BSPP 1/2	27 (1.06)		
83500005	BSPP 3/4	32 (1.26)	14 (0.55)	20 (0.79)



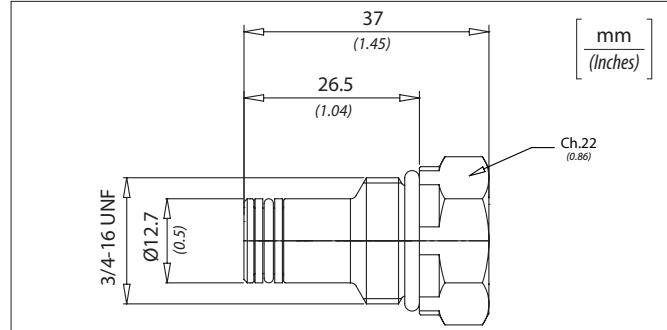
# Tappi Plugs



**TAPPO A / PLUG A**



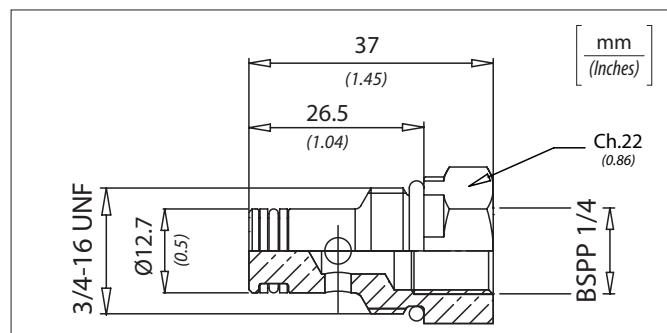
Cod. 11200001



**TAPPO B / PLUG B**



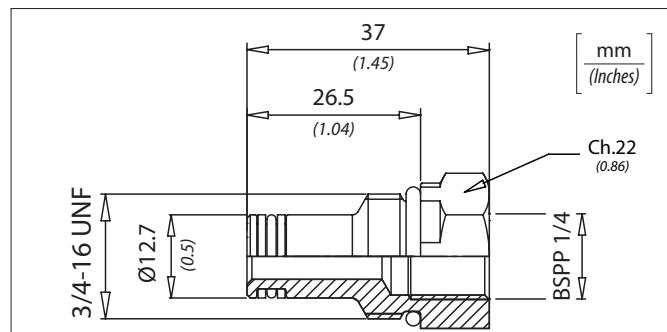
Cod. 12000162



**TAPPO C / PLUG C**



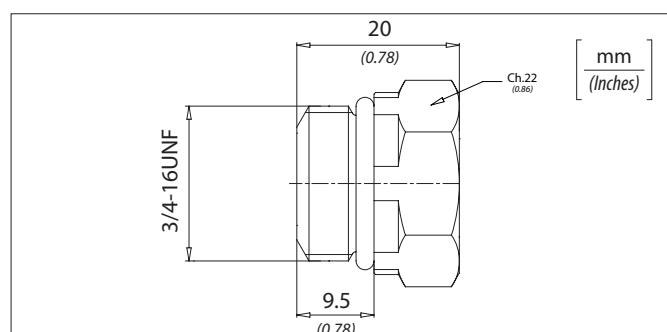
Cod. 12000182



**TAPPO D / PLUG D**



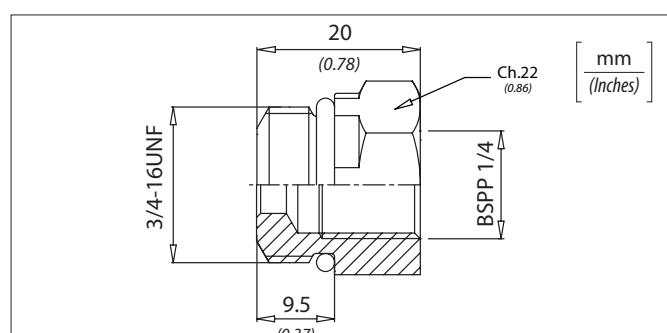
Cod. 12000184



**TAPPO E / PLUG E**



Cod. 12000183





# Typical Applications

LIFTING TABLES



STAKERS



BANDSAW MACHINES



SECTIONAL IND.DOORS



PRESSES



TYRE CHANGER



DUMP TRUCKS



LONG SPLITTER



CAR LIFTERS



HYDRAULIC GANGWAYS



PARKING SYSTEMS



LIGHT TOWERS



HYDRAULIC CRANES



AUTOMARKETS



AUTOMARKETS



BENDING MACHINES



TAIL-LIFTS



DOCK LEVELLERS





# HYDRAULIC VALVES MAINTENANCE BOOKLET

This handbook is directed to specialized and competent staff that may not replace in any case the knowledge and competence of the installer. The Producer disclaims any responsibility for damage to persons and objects due to a bad or improper installation of the valves. **OLEOWEB SRL** is geared to a continuous research and development of its products and therefore reserves the right to change at any time and without notice all the technical characteristics deemed necessary. This manual will undergo changes and additions, but shall in no circumstances be regarded as outdated. This manual and the technical documentation of **OLEOWEB SRL** are intended to provide additional technical information to competent users of the department and/or employees.



## COMPETENT PERSON

It's a person that has sufficient knowledge of the field due to technical worth of training and experience. The User, however, is the only responsible for the choice of the product and its accessories. It is therefore important that the user analyses the problems of its application, running adequate tests. The same user is also responsible for the implementation of security and warnings required by existing laws.

## ENGRAVING

Oleoweb's valves can be simply identified through the stamp placed on the valve:

- Corporate Logo
- Hydraulic circuit
- Article code
- Month and year of manufacture (extension code)

## USE OF THE VALVES

**OLEOWEB** valves are destined from **OLEOWEB** to manufacturers of hydraulic power equipment.

Given the wide application of hydraulic valves and given the fact that it's not always possible to know the final destination of the product, this manual has been produced only on the basis of known generic application.



## LIMITATIONS OF USE

**OLEOWEB SRL** warns each user/customer or manufacturer not to employ valves in the following applications:

- environments where there is danger of explosion and fire;
- vehicles and aeronautical or space equipment;
- steering systems and equipment for vehicles due to carry persons, things and animals;
- brake systems, blocking and deadlock in general;
- Equipment and installation of application in the military, nuclear, medical and hospital department

**HOWEVER, THE TECHNICAL DEPARTMENT IN OLEOWEB SRL, AFTER REQUEST OF THE USER, MAY EVALUATE CASE-BY-CASE APPLICATIONS AND GIVE ITS AUTHORIZATION.**



## MECHANICAL SPECIFICATIONS

- Do not tamper with any type of valve: a simple loosening of valve could cause the free fall of loads or failure of structures.
- All operations of installation, assembly, maintenance and removal of valves and components applied to it must be executed with the utmost respect of safety standards. During these operations, within the hydraulic circuit there must never be pressure (pressure zero) and there should not be any type of cargo on the structures of the equipment or the machinery to which the valve is applied (load zero).



## ELECTRICAL SPECIFICATION

- All electrical connections and disconnections must be carried out by skilled and competent staff.
- Before making any action or intervention on the valve, this must be disconnected from its power source.



## SECURITY SPECIFICATION

- Use safety protection;
- Work under very clean conditions;
- Work under maximum security conditions;
- Use tools and service desks always in suitable and clean conditions;
- During the start-up operations, normal work, maintenance, adjustment, leaking, intervention and drive of valves and various elements of control, SUDDEN SPILLS AND LEAKS OF HYDRAULIC FLUID MAY OCCUR, WHICH CAN REACH TEMPERATURES SUCH AS TO CAUSE BURNS TO THE SKIN.

Hydraulic fluid may be dangerous to health as in contact with skin and eyes and can cause serious damage. Follow scrupulously the protection and security provisions imposed by the manufacturer of the hydraulic fluid listed on the technical and toxicological schedule of the product. Hydraulic fluid may be a pollutant product. It's good practice therefore to avoid loss of hydraulic fluid using tanks to collect and protect against accidental spills and leakage of hydraulic fluid using also oil-absorbing products. Quick changes in temperature may affect both the characteristics and the duration of the product, so it is essential to protect it from these situations.



## MOUNTING

A fitting and proper installation are essential factors for the smooth functioning of an hydraulic plant. Dust and dirt are the worst enemies of hydraulic.

During installation you have to concentrate on the utmost clean by conducting the main operations in a clean and non-dusty room. Valves must be mounted in such a way as to allow easy access to controls, inspections, maintenance and repair, it is also equally essential that they are mounted in an accidental bumps protected area and repaired by random physical contact, as the temperature reached during the operation can cause burns.



## HANDLING

Hydraulic valves are products to handle with care and attention. Characteristic of those valve is to have protuberances subject to breakage.



## STORAGE

Hydraulic valves must be stored in a protected place, possibly closed, away from dust, dirt, humidity and bad weather conditions, with a minimum temperature of -15°C and not exceeding +50°C. In addition, valves are provided with protective plastic caps into their holes routes to avoid the loss of hydraulic fluid left in the valve after testing and not allow access to foreign bodies, which could be very dangerous for the smooth functioning and for the duration of the valve. It is therefore essential not remove these caps if not before mounting the valve.



## DISPOSAL OF THE VALVES

Hydraulic valves are constructed primarily of aluminum alloy, steel alloy and plastic; therefore they can be disposed of as normal materials sending them for recycling with the only advice to make a complete emptying of the hydraulic fluid they may contain.



## DISPOSAL OF THE HYDRAULIC FLUID

Hydraulic fluids are subject to special disposal requirements: therefore comply with the directions and instructions of producers and abide by the laws in force in the country of use.

**DO NOT THROW THE REPLACED FLUID IN THE ENVIRONMENT**

## MAINTENANCE

The good installation and care during installation and putting into operation ensures a long duration of the oilhydraulic plant without drawbacks or need of special care maintenance. The principle basic is the need to frequently monitor the quality and status of the fluid that transmits power and ensure that there are no impurities in the circuit: the good condition of the fluid is reported the reliability of any oilhydraulic machine. Indeed, among the leading causes of out of service or fault, you can report the equipment block as a result of seizing or braking due to wear and aging of the fluid that transmits power, with consequent loss of its chemical and physical properties. It's now certain that the main cause of all these drawbacks is due to the presence of hosts and microparticles circulating continuously in the fluid and which constitute grounds for wear. A large quantity of these microparticles, if left circulating in the system, acts as an abrasive mixture scraping the surfaces with which it comes into contact and dragging in cycle further contaminant particles; damage are, of course, the more severe the more sophisticated the installed equipment is. From the putting in motion of the installation, maintenance is basically made of small operations that, to be truly effective, must be carried out with regularity. It is therefore extremely important that these operations of control and verification are planned and reported on sheets of machinery or plant.

## EXTERIOR CLEANING

It allows easy location of any losses and therefore immediate intervention.

## CONTINUOUS MONITORING OF THE TEMPERATURE

Alteration of the fluid because of the temperature is a cause of pollution and degradation of the plant. The creation of particles inside the oil is particularly favoured by the heat: the rate of oxidation can be considered almost constant up to 60°C, doubling starting from this point to each increment of 10°C. The presence of sludge and sediment in the oil, because of a roiled appearance, reports its degradation.

## REPLACEMENT OF THE FLUID

Ensure over time better working conditions, with frequent monitoring of the fluid and its periodic replacement. On average, after the first 100 hours of work, then every 2000 hours or once a year. For each exchange replace also the filters and clean the tank. Before running the exchange of hydraulic fluid, completely clear the plant from it.

## GUARANTEE

### GUARANTEE TERMS

The products we manufacture are guaranteed against possible failures due to manufacturing defects or materials used. The duration of the guarantee will be 12 months after the shipment from our premises. Any intervention of revision within the guarantee period must be carried out by Technical Assistance authorized by us, or at our establishment where products must be sent in free port with appropriate packaging. It will be considered lapsed in case of improper use, tampering, amendment and/or repair carried out by non-authorized staff.

### TECHNICAL ASSISTANCE AFTER GUARANTEE PERIOD

**OLEOWEB SRL** is available for repairs of their products even when the period of guarantee has already run out.

**OLEOWEB SRL** will carry out the repair also after several years of use (provided it is still cost convenient). The availability of spare parts made on **OLEOWEB** drawing is guaranteed up to 5 years by ceased production. The cost of repair of no longer under warranty products is normally calculated on the actual cost.

Any price request must be made expressly on delivery of the goods that have to be repaired. If the estimate will not be accepted, we will be anyway charging the costs we incurred for its formulation.

**Every product sent back for the revision must be accompanied by:**

1. Law Regular and complete transport document.
2. Defect identifying letter and reference of a Technical Manager for any clarifications.



**Oleoweb S.r.l.** • Via L. Ariosto, 1 • 42023 CADELBOSCO DI SOPRA (Reggio Emilia) • Italy  
Ph. +39 (0) 522 • 917679 • Fax +39 (0) 522 • 491715 • sales@oleoweb.com • www.oleoweb.com