

# VALVES & SOLUTIONS



# 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

È 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, è 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/clienti o costruttori nell'impiegare le valvole nelle seguenti applicazioni:

- Ambienti dove esista 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 scollegate 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 IDRAULICO, 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 IDRAULICO

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 oleidraulico 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 oleidraulica. 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 scalfando le superfici con cui vengono a contatto e trascinando 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 morchie 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.

MESE DI FABBRICAZIONE	ANNO DI FABBRICAZIONE										
	2020	2021	2022	2023	2024	2025	2026	2028	2029	2030	2031
GENNAIO	20M	21M	22M	23M	24M	25M	26M	28M	29M	30M	31M
FEBBRAIO	20N	21N	22N	23N	24N	25N	26N	28N	29N	30N	31N
MARZO	20P	21P	22P	23P	24P	25P	26P	28P	29P	30P	31P
APRILE	20Q	21Q	22Q	23Q	24Q	25Q	26Q	28Q	29Q	30Q	31Q
MAGGIO	20R	21R	22R	23R	24R	25R	26R	28R	29R	30R	31R
GIUGNO	20S	21S	22S	23S	24S	25S	26S	28S	29S	30S	31S
LUGLIO	20T	21T	22T	23T	24T	25T	26T	28T	29T	30T	31T
AGOSTO	20U	21U	22U	23U	24U	25U	26U	28U	29U	30U	31U
SETTEMBRE	20V	21V	22V	23V	24V	25V	26V	28V	29V	30V	31V
OTTOBRE	20Z	21Z	22Z	23Z	24Z	25Z	26Z	28Z	29Z	30Z	31Z
NOVEMBRE	20X	21X	22X	23X	24X	25X	26X	28X	29X	30X	31X
DICEMBRE	20Y	21Y	22Y	23Y	24Y	25Y	26Y	28Y	29Y	30Y	31Y

## 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

La Viscosità deve essere 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).

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).

GRADI DI VISCOSITÀ ISO ISO VISCOSITY DEGREES	VISCOSITÀ CINEMATICA MEDIA AVERAGE KINEMATIC VISCOSITY mm <sup>2</sup> /s at 40° C	LIMITI VISCOSITÀ CINEMATICA KINEMATIC VISCOSITY LIMITS mm <sup>2</sup> /s at 40° C	
		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
<b>ISO VG 46</b>	<b>46</b>	<b>41,4</b>	<b>50,6</b>
ISO VG 68	68	61,2	74,8
ISO VG 100	100	90,0	110

## TEMPERATURA · TEMPERATURE

Temperatura ambiente da -20°C a 50°C / Temperatura Olio da -20°C a 80°C.

Environment temperature from -20°C to 50°C / Oil Temperature from -20°C to 80°C.

## FILTRAZIONE CONTAMINAZIONE · FILTRATION CONTAMINATION

Tutti i costruttori di prodotti oleodinamici riconoscono che l'eccessiva contaminazione dell'olio è la principale causa del malfunzionamento negli impianti oleodinamici. È indispensabile l'utilizzo di un filtro per proteggere la valvola. Oleoweb consiglia Filtrazione 15 µm - 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. Oleoweb advise filtration 15 µm - Contamination class ISO 4406: 1999 19/17/14.

## MATERIALI · MATERIALS

Tutte le valvole sono prodotte in acciaio di alta qualità. I blocchi sono realizzati in acciaio o alluminio in relazione alla pressione di lavoro. Corpi e componenti in acciaio sono protetti superficialmente mediante zincatura trivalente CRIII. Su richiesta è disponibile il trattamento di zinco-nickel.

All products are made out high quality steel. The manifolds are produced in steel or aluminium in relation to the working pressure. Bodies and components are protected from corrosion with CRIII zinc plating. Under request zinc-nickel treatment is available.

## GUARNIZIONI · SEALING

Le valvole Oleoweb montano guarnizioni in NBR. Per applicazioni con particolari temperature di lavoro sono disponibili su richiesta guarnizioni in viton o poliuretano.

Oleoweb Valves mount NBR seals as standard. For application exposed to particular temperatures, viton or polyurethane seals are available.

## 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 µm.

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 µm.

**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.**

## VALVOLE AD INSERTO - Insert valves

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	FILETTO Thread	PAGINA Page
	VUI	20	350	BSPP 1/4	2
		30		BSPP 3/8	
		50		BSPP 1/2	
		80		BSPP 3/4	
	VUC	20	350	BSPP 1/4	3
		30		BSPP 3/8	
	VUP	60	350	BSPP 1/2	4
		80		BSPP 3/4	
	VS	35	500	BSPP 3/8	14

## VALVOLE A CARTUCCIA - Cartridge valves

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGINA Page
	CUR6	25	350	SAE8/2	134
	CUR2015	25		C2015/2	137
	CUR10N	40		/	136
	CUR2215	40		C2215/2	138
	CUR2615	60		C2615/2	139
	CUR6M	25	350	SAE8/2	135

## VALVOLE IN LINEA - In-line valves

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	DIMENSIONE Size	PAGINA Page
	VUR-BSPP	5	400	BSPP 1/8"	18
		15		BSPP 1/4"	
		30		BSPP 3/8"	
		50		BSPP 1/2"	
		90	BSPP 3/4"	350	
		150	BSPP 1"		
		200	BSPP 1-1/4"		
		300	BSPP 1-1/2"		
	VMF	430	250	BSPP 2"	22
		15	400	BSPP 1/4"	
		30		BSPP 3/8"	
		50		BSPP 1/2"	
		90		BSPP 3/4"	
	VUN	150	350	BSPP 1"	24
		5	500	BSPP 1/4"	
		15		BSPP 3/8"	
		30		BSPP 1/2"	
		50		BSPP 3/4"	
	VUR-SAE	90	400	BSPP 1"	20
		15		7/16-20 UNF	
		30		9/16-18 UNF	
		50		3/4-16 UNF	
		150	350	1-1/16-12 UN	
		200		1-5/16-12 UN	
300		1-5/8-12 UN			
430		1-7/8-12 UN			
			2-1/2-12 UN		



**VALVOLE UNIDIREZIONALI - Check valves**

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	DIMENSIONE Size	PAGINA Page
	VUR-NPTF	5	400	1/8 NPTF	21
		15		1/4 NPTF	
		30		3/8 NPTF	
		50		1/2 NPTF	
		90		3/4 NPTF	
		150	350	1 NPTF	
		200		1-1/4 NPTF	
		300		1-1/2 NPTF	
		430		2 NPTF	
	VUR-H	5	400	BSPP 1/8"	19
		15		BSPP 1/4"	
		30		BSPP 3/8"	
		50		BSPP 1/2"	
		90	BSPP 3/4"		
		150	350	BSPP 1"	
		200		BSPP 1-1/4"	
		300		BSPP 1-1/2"	
	430	250	BSPP 2"		
	VMF-H	15	400	BSPP 1/4"	23
		30		BSPP 3/8"	
		50		BSPP 1/2"	
		90		BSPP 3/4"	
		150		350	
	VUN-H	5	500	BSPP 1/4"	25
15		BSPP 3/8"			
30		BSPP 1/2"			
50		BSPP 3/4"			
90		BSPP 1"			

**VALVOLE DI FINE CORSA  
End stroke valves**
**VALVOLE IN LINEA - In-line valves**

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	FCM	40	350	BSPP 1/4"	54
				BSPP 3/8"	
		60	300	BSPP 1/2"	
	FCT	60	250	BSPP 3/8"	206
		80		BSPP 1/2"	
		100		BSPP 3/4"	
		140	200	BSPP 1"	

VALVOLE AD INSERTO - Insert valves					
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGINA Page
	VUBA	25	350	BSPP 1/4"	6-7
		50		BSPP 3/8"	
		80		BSPP 1/2"	
		150		BSPP 3/4"	
		180		BSPP 1"	
	VUBA-DIN	50	315	BSPP 3/8" - M16x1,5	5
				BSPP 3/8" - M18x1,5	
				BSPP 3/8" - M22x1,5	
				BSPP 1/2" - M22x1,5	

VALVOLE A CARTUCCIA - Cartridges valves					
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGE Pagina
	VPR	15	350	SAE8/3	160
		30		SAE10/3	
	VPR22	50		C2215/3	161

VALVOLE IN LINEA - In-line valves					
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	VRP	35	350	BSPP 3/8"	60
		50		BSPP 1/2"	
	VRSE	15	320	BSPP 1/4"	55
		35		BSPP 3/8"	
		45	300	BSPP 1/2"	
	VRSD	70	320	BSPP 3/4"	57
		10		BSPP 1/4" - pipe Ø8	
		15		BSPP 1/4" - pipe Ø12	
		35		BSPP 3/8" - pipe Ø12	
		VRPE	45	300	BSPP 1/2" - pipe Ø15
25			BSPP 1/4"		
40			BSPP 3/8"		
60			BSPP 1/2"		
100			BSPP 3/4"		
	VRDE	15	320	BSPP 1/4"	56
		35		BSPP 3/8"	
		45	300	BSPP 1/2"	
		70		BSPP 3/4"	
	VRDD	10	320	BSPP 1/4" - pipe Ø8	58
		15		BSPP 1/4" - pipe Ø12	
		35		BSPP 3/8" - pipe Ø12	
		45		BSPP 1/2" - pipe Ø15	
	VRDL	35	350	BSPP 1/4"	61
		50		BSPP 3/8"	
	VRDF	35	350	BSPP 1/2"	62
		50		BSPP 3/8" - Ø6	
					BSPP 1/2" - Ø7

**VALVOLE DI CONTROLLO PORTATA**  
 Flow control valves

VALVOLE AD INSERTO - Insert Valves					
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	FILETTO Thread	PAGE Pagina
	VCC	12	250	BSPP 1/4"	<b>8</b>
		18		BSPP 3/8"	<b>9</b>
	VSC	47	250	BSPP 1/2"	<b>10</b>
		VSCR6		12	Ø12,7
	VRD	20	300	BSPP 1/4"	<b>12</b>
		35		BSPP 3/8"	
		65		BSPP 1/2"	
		150		BSPP 3/4"	

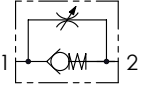
**VALVOLE DI CONTROLLO PORTATA**  
 Flow control valves

VALVOLE A CARTUCCIA - Cartridges Valves					
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGINA Page
	VSC6	12	250	SAE8/2	<b>140</b>
	VCF6	18	350	SAE8/2	<b>141</b>
	VRF6	40	350	SAE8/2	<b>143</b>
	VBF6	30	350	SAE8/2	<b>142</b>

**VALVOLE DI CONTROLLO PORTATA**  
 Flow control valves


CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGINA Page
	SV	15	350	SAE8/3	<b>162</b>
		30		SAE10/3	
	VDRF10	40	350	SAE10/4	<b>144</b>
	CP10	50	350	SAE10/3	<b>145</b>

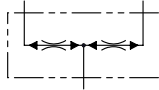

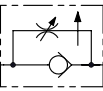
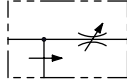
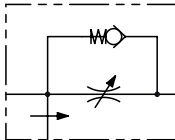
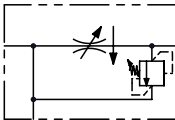
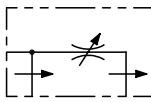
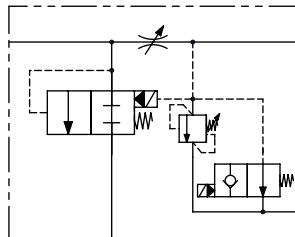
**VALVOLE IN LINEA - In-line valves**

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page		
	VURF	5	350	BSPP 1/8"	26		
		15		BSPP 1/4"			
		30		BSPP 3/8"			
		45	300	BSPP 1/2"			
		85		BSPP 3/4"			
		150		BSPP 1"			
	STU-BSPP	200	250	BSPP 1-1/4"	28		
		10		BSPP 1/8"			
		15	400	BSPP 1/4"			
		30		BSPP 3/8"			
		50		BSPP 1/2"			
		80	350	BSPP 3/4"			
		150		BSPP 1"			
		200		BSPP 1-1/4"			
	STUF-BSPP	300	350	BSPP 1-1/2"	29		
		10		BSPP 1/8"			
		15	400	BSPP 1/4"			
		30		BSPP 3/8"			
		50		BSPP 1/2"			
		80	350	BSPP 3/4"			
	150	BSPP 1"					
	200	BSPP 1-1/4"					
	SVU-BSPP	300	350	BSPP 1-1/2"	40		
		10		BSPP 1/8"			
		15	400	BSPP 1/4"			
		30		BSPP 3/8"			
	STU-NPTF	50	400	BSPP 1/2"	30		
		80		BSPP 3/4"			
		150		BSPP 1"			
		200	350	1 NPTF			
		300		1-1/4 NPTF			
		STUF-NPTF	10	400		1-1/2 NPTF	31
			15			1/8 NPTF	
			30			1/4 NPTF	
	50		350	3/8 NPTF			
	80			1/2 NPTF			
	150			3/4 NPTF			
	SVU-NPTF		150	350	1 NPTF	41	
			200		1-1/4 NPTF		
		300	400	1-1/2 NPTF			
		10		1/8 NPTF			
	STU-SAE	15	400	1/4 NPTF	32		
30		3/8 NPTF					
50		1/2 NPTF					
80		350	3/4 NPTF				
150			1 NPTF				
200			1-1/4 NPTF				
STUF-SAE		300	350	1-1/2 NPTF		33	
	15	1/8 NPTF					
	30	400	1/4 NPTF				
	50		3/8 NPTF				
	80		1/2 NPTF				
	SVU-SAE	150	350	3/4 NPTF	42		
200		1 NPTF					
300		400	1-1/4 NPTF				
15			1-1/6-12 UN				
30			1-5/16-12 UN				
STU-SAE		50	400	1-5/8-12 UN		32	
	80	1-7/8-12 UN					
	150	7/16-20 UNF					
	STUF-SAE	200	350	9/16-18 UNF	33		
		300		3/4-16 UNF			
		15	400	1-1/16-12 UN			
30		1-5/16-12 UN					
50		1-5/8-12 UN					
SVU-SAE		80	350	1-7/8-12 UN		42	
	150	7/16-20 UNF					
	200	400	9/16-18 UNF				
	300		3/4-16 UNF				
	15		1-1/16-12 UN				
	STU-SAE	30	400	1-5/16-12 UN	32		
50		1-5/8-12 UN					
80		1-7/8-12 UN					
STUF-SAE		150	350	7/16-20 UNF		33	
		200		9/16-18 UNF			
		300	400	3/4-16 UNF			
	15	1-1/16-12 UN					
	30	1-5/16-12 UN					
	SVU-SAE	50	350	1-5/8-12 UN	42		
80		1-7/8-12 UN					
150		400	7/16-20 UNF				
200			9/16-18 UNF				
300			3/4-16 UNF				

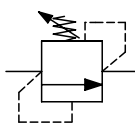


**VALVOLE DI CONTROLLO PORTATA - Flow control valves**

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	VBRF	5	350	BSPP 1/8"	27
		15		BSPP 1/4"	
		30		BSPP 3/8"	
		45	300	BSPP 1/2"	
		85		BSPP 3/4"	
		150	250	BSPP 1"	
	200	BSPP 1-1/4"			
	STB-BSPP	10	400	BSPP 1/8"	34
		15		BSPP 1/4"	
		30		BSPP 3/8"	
		50		BSPP 1/2"	
		80	BSPP 3/4"		
		150	BSPP 1"		
		200	350	BSPP 1-1/4"	
	300	BSPP 1-1/2"			
	10	400		BSPP 1/8"	35
	15		BSPP 1/4"		
	30		BSPP 3/8"		
	50		BSPP 1/2"		
	80		BSPP 3/4"		
	150		BSPP 1"		
	200	350	BSPP 1-1/4"		
	300		BSPP 1-1/2"		
	SVB-BSPP	10	400	BSPP 1/8"	43
		15		BSPP 1/4"	
		30		BSPP 3/8"	
		50		BSPP 1/2"	
	STB-NPTF	10	400	1/8 NPTF	36
		15		1/4 NPTF	
		30		3/8 NPTF	
		50		1/2 NPTF	
		80	3/4 NPTF		
		150	1 NPTF		
		200	350	1-1/4 NPTF	
		300		1-1/2 NPTF	
	STBF-NPTF	10	400	1/8 NPTF	37
		15		1/4 NPTF	
		30		3/8 NPTF	
		50		1/2 NPTF	
		80	3/4 NPTF		
		150	1 NPTF		
		200	350	1-1/4 NPTF	
	300	1-1/2 NPTF			
	SVB-NPTF	10	400	1/8 NPTF	44
		15		1/4 NPTF	
30		3/8 NPTF			
50		1/2 NPTF			
STB-SAE	15	400	7/16-20 UNF	38	
	30		9/16-18 UNF		
	50		3/4-16 UNF		
	80	350	1-1/16-12 UN		
	150		1-5/16-12 UN		
	200		1-5/8-12 UN		
300	1-7/8-12 UN				
STBF-SAE	15	400	7/16-20 UNF	39	
	30		9/16-18 UNF		
	50		3/4-16 UNF		
	80	350	1-1/16-12 UN		
	150		1-5/16-12 UN		
	200		1-5/8-12 UN		
300	1-7/8-12 UN				
SVB-SAE	15	400	7/16-20 UNF	45	
	30		9/16-18 UNF		
	50		3/4-16 UNF		
	80	350	1-1/16-12 UN		
	150		1-5/16-12 UN		
	200		1-5/8-12 UN		
300	1-7/8-12 UN				

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	DRF10	40	250	BSPP 3/8" - BSPP 3/8"	<b>48</b>
				BSPP 3/8" - BSPP 1/2"	
				BSPP 1/2" - BSPP 3/8"	
				BSPP 1/2" - BSPP 1/2"	
	VUSF	20	350	BSPP 1/4"	<b>47</b>
		40		BSPP 3/8"	
		60		BSPP 1/2"	
	VRC	10	250	BSPP 1/4"	<b>46</b>
		18		BSPP 3/8"	
		33		BSPP 1/2"	
	VPT	50	250	BSPP 3/8"	<b>49</b>
		90		BSPP 1/2"	
		150		BSPP 3/4"	
		240		BSPP 1"	
	VPT-AR	50	250	BSPP 3/8"	<b>50</b>
		90		BSPP 1/2"	
	VPT-RV	50	250	BSPP 3/8"	<b>51</b>
		90		BSPP 1/2"	
		150		BSPP 3/4"	
	VPP	50	250	BSPP 3/8"	<b>52</b>
		90		BSPP 1/2"	
		150		BSPP 3/4"	
	VPP-RV	50	250	BSPP 3/8"	<b>53</b>
		90		BSPP 1/2"	

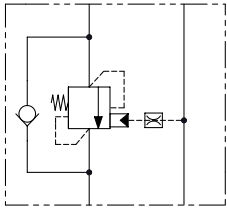
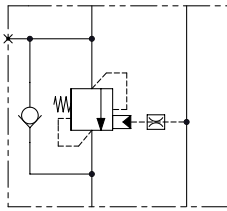
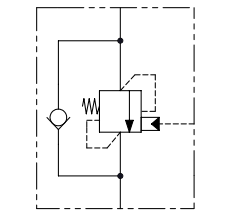
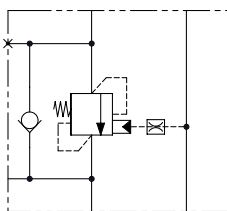
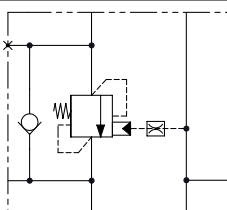
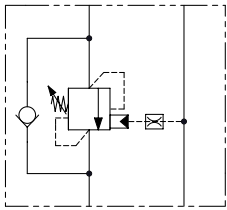
**VALVOLE A CARTUCCIA - Cartridges valves**

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGINA Page
	VMD1N	20	350	SAE8/2	<b>153</b>
	VMD10	20	350	SAE8/2	<b>154</b>
	VMD8	40	350	SAE10/2	<b>155</b>
	VMD30	30	320	C2015/30	<b>156</b>
	VMD40S	40	350	C2015/1415/2	<b>157</b>
	VMD90	80	350	C2415/2	<b>158</b>
	VMD120	120	350	C2815/2	<b>159</b>

VALVOLE IN LINEA - In-line valves					
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	VMDR1	20	350	BSPP 1/4" BSPP 3/8"	<b>70</b>
	VMDR10	20	350	BSPP 1/4" BSPP 3/8"	<b>71</b>
	VMDR40	40	350	BSPP 3/8" BSPP 1/2"	<b>72</b>
	VMDR90	80	350	BSPP 1/2" BSPP 3/4"	<b>73</b>
	VMDR120	120	350	BSPP 3/4" BSPP 1"	<b>74</b>
	SCF	40	350	BSPP 1/2" - Ø19	<b>67</b>
	DCA	20	350	BSPP 1/4"	<b>63</b>
				BSPP 3/8"	
	VBDC	40	350	BSPP 3/8" BSPP 1/2"	<b>64</b>
	DCL	40	350	BSPP 1/2" - Ø21	<b>65</b>
	DCV	40	350	BSPP 1/2" - Ø21	<b>66</b>
	DCF	40	350	BSPP 1/2" - Ø19	<b>68</b>
	DCM	40	350	BSPP 1/2" - Ø19	<b>69</b>

VALVOLE DI SEQUENZA - Sequence valves					
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	VSL	20	350	BSPP 1/4"	<b>75</b>
		40		BSPP 3/8"	
				BSPP 1/2"	

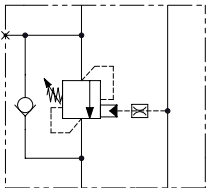
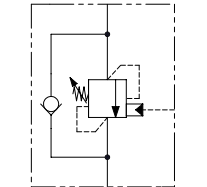
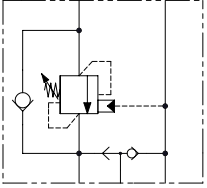
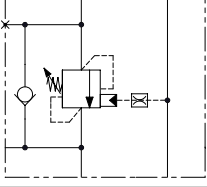
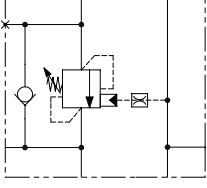
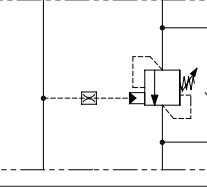
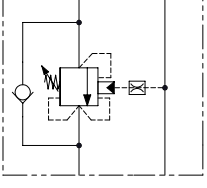
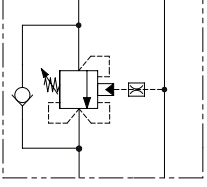
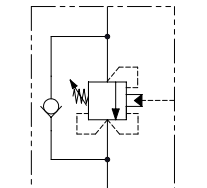
**VALVOLE DI BILANCIAMENTO - Counterbalance valves**

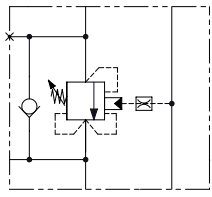
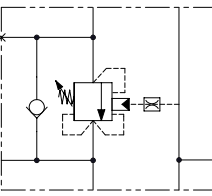
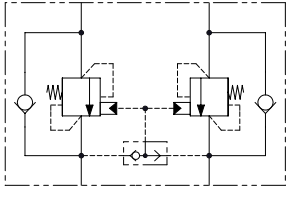
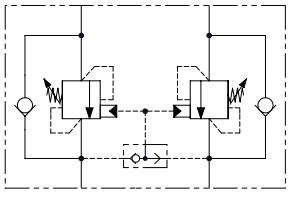
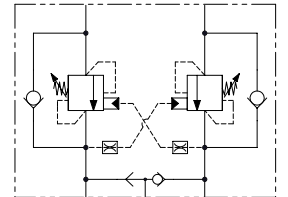
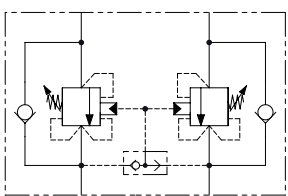
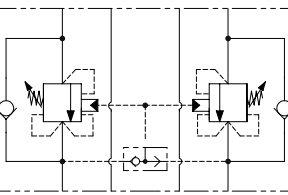
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	VBZB	40	350	BSPP 3/8" + BANJO BOLT	<b>82</b>
	VBZL	30	350	BSPP 1/4"	<b>85</b>
		40		BSPP 3/8"	
		60		BSPP 1/2"	
	VBZP	30	350	BSPP 1/4"	<b>89</b>
		40		BSPP 3/8"	
		60		BSPP 1/2"	
	VBZR	30	350	BSPP 1/4"	<b>93</b>
		40		BSPP 3/8"	
		60		BSPP 1/2"	
	VBZH	40	350	BSPP 3/8" - Ø9	<b>96</b>
		60		BSPP 1/2" - Ø9	
	VBZF	40	350	BSPP 3/8" - Ø9	<b>99</b>
		60		BSPP 1/2" - Ø9	
	VBCB	40	350	BSPP 3/8" + BANJO BOLT	<b>80</b>
	VBCL	30	350	BSPP 1/4"	<b>83</b>
		40		BSPP 3/8"	
		60		BSPP 1/2"	
		120		BSPP 3/4"	
	VBCL-SAE	30	350	7/16-20UNF	<b>84</b>
		40		9/16-18UNF	
		60		3/4-16UNF	

**VALVOLE DI BILANCIAMENTO SINGOLE**  
Single counterbalance valves

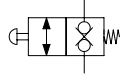
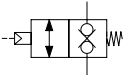
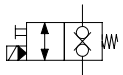


**VALVOLE DI BILANCIAMENTO SINGOLE - Single counterbalance valves**

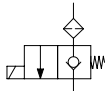
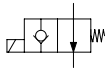
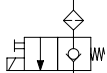
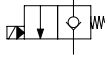
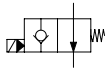
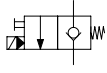
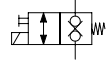
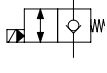
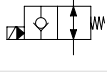
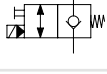
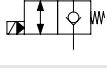
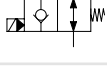
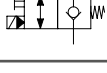
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	VBLP	40	350	BSPP 3/8"	88
		60		BSPP 1/2"	
	VBCR	30	350	BSPP 1/4"	91
		40		BSPP 3/8"	
		60		BSPP 1/2"	
	VBFP	40	350	BSPP 3/8"	94
	VBLH	40	350	BSPP 3/8" - Ø9	95
	VBLF	40	350	BSPP 3/8" - Ø9	98
		60		BSPP 1/2" - Ø9	
	SCVB	60	350	OMP - OMR	112
	VCCB	40	350	BSPP 3/8"	81
	VCCL	30	350	BSPP 1/4"	86
		40		BSPP 3/8"	
		60		BSPP 1/2"	
	VCCL-SAE	30	350	7/16-20UNF	87
		40		9/16-18UNF	
60		3/4-16UNF			
	VCLP	40	350	BSPP 3/8"	90
		60		BSPP 1/2"	
	VCCR	30	350	BSPP 1/4"	92
		40		BSPP 3/8"	
		60		BSPP 1/2"	

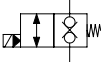
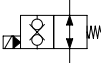
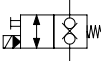
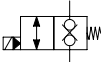
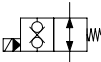
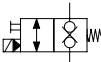
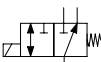
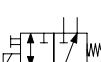


CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page	
	VCLH	40	350	BSPP 3/8" - Ø9	97	
		60		BSPP 1/2" - Ø9		
	VCLF	40	350	BSPP 3/8" - Ø9	100	
		60		BSPP 1/2" - Ø9		
	VBZD	30	350	BSPP 1/4"	104	
		40		BSPP 3/8"		
		60		BSPP 1/2"		
	VBZG	30	350	BSPP 1/4" - Ø9	108	
		40		BSPP 3/8" - Ø9		
		60		BSPP 1/2" - Ø9		
	VBCA	40	350	BSPP 3/8" + BANJO BOLT	101	
	VBCD	30		350	BSPP 1/4"	102
		40	BSPP 3/8"			
		60	BSPP 1/2"			
	VBCD-SAE	120	350	BSPP 3/4"	103	
		30		7/16-20UNF		
		40		9/16-18UNF		
	VBCF	60	350	3/4-16UNF	107	
		30		BSPP 1/4" - Ø9		
		40		BSPP 3/8" - Ø9		
			60		BSPP 1/2" - Ø9	
		VBCS	40	350	CETOP 3	110
	DCVB	60	350	OMP - OMR	113	
	VBCC	30	350	BSPP 1/4"	105	
		40		BSPP 3/8"		
		60		BSPP 1/2"		
VBCC-SAE	30	350	7/16-20UNF	106		
	40		9/16-18UNF			
	60		3/4-16UNF			
VBCM	30	350	BSPP 1/4" - Ø9	109		
	40		BSPP 3/8" - Ø9			
	60		BSPP 1/2" - Ø9			
	VBCT	40	350	CETOP 3	111	

VALVOLE A COMANDO MANUALE o PNEUMATICO  
Manual or pneumatic operated release valves

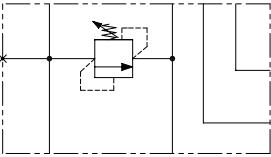
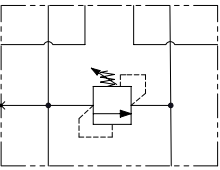
VALVOLE A CARTUCCIA - Cartridges valves					
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGINA Page
	VEM6	30	320	SAE8/2	151
	VEM10	50		SAE10/2	
	VPN6	40	350	SAE8/2	152
	CM60	25	320	SAE8/2	146
	CM6M				

VALVOLE A COMANDO ELETTRICO - Electrical valves

VALVOLE A CARTUCCIA - Cartridges valves					
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGINA Page
	EVC6	22	210	SAE8/2	120
	EVA6				
	EVE6				
	EVC7	40	350	SAE8/2	122
	EVA7				
	EVE7				
	EDE6	22	210	SAE8/2	121
	EVC8	40	350	SAE8/2	123
	EVA8				
	EVE8				
	EVC30	70	350	SAE10/2	127
	EVA30				
	EVE30				

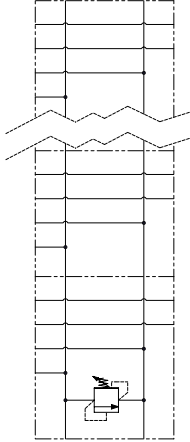
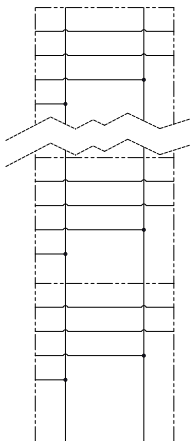
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGINA Page
	EDC9	40	350	SAE8/2	124
	EDA9				
	EDE9				
	EVC34	70	350	SAE10/2	128
	EVA34				
	EVE34				
	EVC10	12	210	SAE8/3	125
	EVE10				
	EVC11	12	210	SAE8/3	126
	EVE11				

**BASI MULTIPLE - Cetop manifolds**

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CETOP	ATTACCHI CETOP CETOP ports		PAGINA Page
					P-T	A-B	
	BS3	40	21	CETOP 3	BSPP 3/8"	BSPP 3/8"	166
	BP3	40	210	CETOP 3	BSPP 3/8"	BSPP 3/8"	167
	BS5	80	210	CETOP 5	BSPP 1/2"	BSPP 1/2"	168

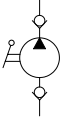
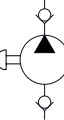


### BASI MULTIPLE - Cetop manifolds

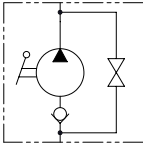
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CETOP	ATTACCHI CETOP CETOP ports		PAGINA Page
					P-T	A-B	
	BM-RV	40	210	CETOP 3	BSPP 1/2"	BSPP 3/8"	169
	BM	40	210	CETOP 3	BSPP 1/2"	BSPP 3/8"	170

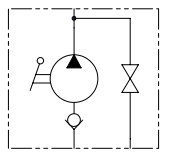
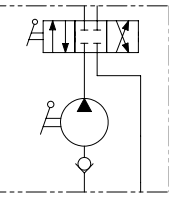
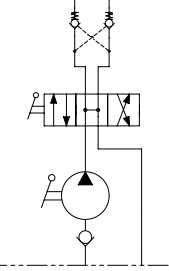
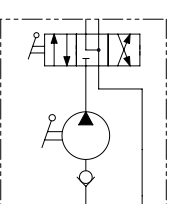
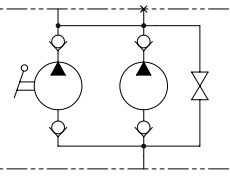
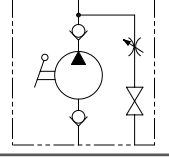
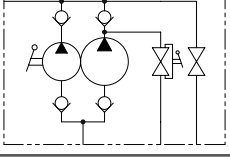
### POMPE - Pumps

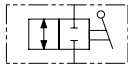
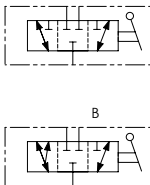
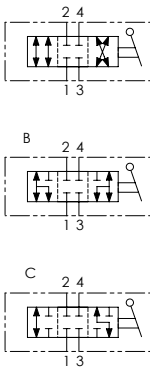
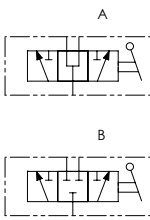
#### POMPE A CARTUCCIA - Cartridge pumps

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	CAVITÀ Cavity	PAGINA Page
	PME	1	300	SAE8/2	147
		2	200		
		3	120		
	PME10	10	200	SAE10/2	148
	PME5P	1	50	SAE8/2	150

#### POMPE A MANO - Hand pumps

	PM	20	350	BSPP 1/2" - BSPP 3/8"	180-181
		50	280	BSPP 1/2" - BSPP 1/2"	182-183
		70	200	BSPP 1/2" - BSPP 1/2"	184-185
	PMS	6	500	Pipe - BSPP 3/8"	186-187
		12	380	Pipe - BSPP 3/8"	
		25	350	Pipe - BSPP 3/8"	
		45	280	Pipe - BSPP 3/8"	

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	CILINDRATA Displacement (cm <sup>3</sup> )	PRESSIONE Pressure (bar)	ATTACCHI CETOP CETOP Ports	PAGINA Page
				IN - OUT	
	PME2	20	240	Pipe - BSPP 1/4"	<b>196-197</b>
		30	185	Pipe - BSPP 1/4"	
		40	160	Pipe - BSPP 1/4"	
	PME1	8	380	Pipe - BSPP 1/4"	<b>194-195</b>
		15	350	Pipe - BSPP 1/4"	
	PMI	6	500	Pipe - BSPP 3/8"	<b>188-189</b>
		12	380	Pipe - BSPP 3/8"	
		25	350	Pipe - BSPP 3/8"	
		45	280	Pipe - BSPP 3/8"	
	PMT	6	500	Pipe - BSPP 1/4"	<b>190-191</b>
		12	380	Pipe - BSPP 1/4"	
		25	350	Pipe - BSPP 1/4"	
		45	280	Pipe - BSPP 1/4"	
	PMA	6	500	Pipe - BSPP 3/8"	<b>192-193</b>
		12	380	Pipe - BSPP 3/8"	
		25	350	Pipe - BSPP 3/8"	
		45	280	Pipe - BSPP 3/8"	
	PMD	5	500	BSPP 3/8" - BSPP 3/8"	<b>198</b>
		10	250	BSPP 3/8" - BSPP 3/8"	
		17	150	BSPP 3/8" - BSPP 3/8"	
	PME3	14	200	- - BSPP 1/4"	<b>199</b>
	PME580	5 - 80	20 - 500	Pipe - BSPP 3/8"	<b>200-201</b>

VALVOLE IN LINEA - In-line valves						
CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page	
	RAS2-BSPP	15	500	BSPP 1/8"	218	
		25		BSPP 1/4"		
		35		BSPP 3/8"		
		60		BSPP 1/2"		
		100		BSPP 3/4"		
	RAS2-NPTF	150	350	BSPP 1"		
		15	500	BSPP 1-1/4"		
		25		BSPP 1-1/2"		
		35		1/8 NPTF		
		60		1/4 NPTF		
100	3/8 NPTF					
	RAS3-BSPP	15	400	BSPP 1/8"	219	
		25		BSPP 1/4"		
		35		BSPP 3/8"		
		60		BSPP 1/2"		
		100		BSPP 3/4"		
	RAS3-NPTF	150	350	BSPP 1"		
		15	400	BSPP 1-1/4"		
		25		BSPP 1-1/2"		
		35		BSPP 1/8"		
		60		BSPP 1/4"		
100	BSPP 3/8"					
	RAS4-BSPP	25	500	BSPP 1/4"	220	
		35	400	BSPP 3/8"		
		60	350	BSPP 1/2"		
		100		BSPP 3/4"		
		150		BSPP 1"		
	RAS4-NPTF	25		500		BSPP 1-1/4"
		35		400		BSPP 1-1/2"
		60	350	1/4 NPTF		
		100		3/8 NPTF		
		150		1/2 NPTF		
DDFA3-N	25	500		3/4 NPTF		
	60			1 NPTF		
	100		1-1/4 NPTF			
	180		1-1/2 NPTF			
	DDF3-BSPP		60	350	BSPP 1/4"	208
90		BSPP 3/8"				
120		BSPP 1/2"				
200		BSPP 3/4"				
DDF3-SAE		60	350		BSPP 1"	
	90	3/4-16UNF				
	120	7/8-14UNF				
	200	1-1/16-12UN				
	DDF3-SAE	200	300	1-5/16-12UN	209	

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	DDF6-BSPP	60	350	BSPP 1/4"	210
		90		BSPP 3/8"	
		120	BSPP 1/2"		
		200	BSPP 3/4"		
	DDF6-SAE	60	350	BSPP 1"	211
		90		3/4-16UNF	
		120	7/8-14UNF		
		200	1-1/16-12UN		
	IDF4-BSPP	60	350	1-5/16-12UN	212
		90		BSPP 1/4"	
		120	BSPP 3/8"		
		200	BSPP 1/2"		
	IDF4-SAE	60	350	BSPP 3/4"	213
		90		BSPP 1"	
		120	3/4-16UNF		
		200	7/8-14UNF		
	IDF8-BSPP	60	350	1-1/16-12UN	214
		90		BSPP 1/4"	
		120	BSPP 3/8"		
		200	BSPP 1/2"		
	IDF8-SAE	60	350	BSPP 3/4"	215
		90		BSPP 1"	
		120	3/4-16UNF		
		200	7/8-14UNF		

**COMPONENTI VARI - Hydraulic components**

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	FILETTO Thread	PAGINA Page		
	GGIL	25	400	BSPP 1/4"	224		
		35		BSPP 3/8"			
		60	BSPP 1/2"				
		100	BSPP 3/4"				
	GG90	180	300	BSPP 1"	225		
		25		BSPP 1/4"			
		35	BSPP 3/8"				
		60	BSPP 1/2"				
	SOV	-	400	BSPP 3/4"	226-227		
				100		BSPP 1"	
				25		BSPT 1/4" - BSPP 1/4"	
				35		BSPP 1/4" - BSPP 1/4"	
				60		BSPT 1/4" - BSPP 1/4"	
				100		BSPP 1/4" - BSPP 1/4"	
	MNP-BSPP	-	630	BSPT 1/4" - BSPP 1/4"	228		
				180		BSPP 1/8"	
				25		BSPP 1/4"	
				35		BSPP 3/8"	
	MNP-NPTF	-	630	630	BSPP 1/2"	229	
					100		1/8 NPTF
					150		1/4 NPTF
					200		3/8 NPTF
				1/2 NPTF			

**SERBATOI - Reservoirs**

CIRCUITO IDRAULICO Hydraulic circuit	CAPACITÀ (l) Capacity (l)	PAGINA Page
TNK	1	202
	2	
	3	
	5	
	7	
	10	
	13	
TNA	15	203
	20	
	1	
	2	
	3	
	5	

**BLOCCHI - Manifolds**

CODICE Model code	CAVITÀ Cavity	ATTACCHI Ports	PAGINA Page
62200032	SAE8/2	BSPP 1/4"	171
62200051		BSPP 3/8"	
62200357		BSPP 1/4"	
62200358	SAE8/3	BSPP 3/8"	172
62200451		BSPP 3/8"	
62200452	SAE10/2	BSPP 1/2"	172
62200373		BSPP 3/8"	
62200374	SAE10/3	BSPP 1/2"	172
62200023		SAE8/2 (PME 5/6/7)	

CAVITÀ - Cavities		
CODICE Model code	CAVITÀ Cavity	PAGINA Page
SAE /2	3/4-16UNF	173
	7/8-14UNF	
	1-1/16-12UNF	
	1-5/16-12UNF	
SAE /3	3/4-16UNF	174
	7/8-14UNF	
	1-1/16-12UNF	
	1-5/16-12UNF	
SAE /4	3/4-16UNF	175
	7/8-14UNF	
	1-1/16-12UNF	
	1-5/16-12UNF	
C2015/2	M20x1,5	176
C2015/30	M20x1,5	
C2015/1415/2	M20x1,5 - M14x1,5	
C2215/2	M22x1,5	
C2215/3	M22x1,5	177
C2415/2	M24x1,5	
C2615/2	M26x1,5	
C2815/2	M28x1,5	

TAPPI - Plug			
CODICE Model code	CAVITÀ Cavity	ATTACCHI Ports	PAGINA Page
PLUG BSPP	BSPP 1/4"	-	230
	BSPP 3/8"	-	
	BSPP 1/2"	-	
	BSPP 3/4"	-	
	BSPP 1"	-	
PLUG 3/4-16UNF	SAE8/2	-	231
	SAE8/2	BSPP 1/4"	
	SAE8/2	BSPP 1/4"	
	3/4-16UNF	BSPP 1/4"	
	3/4-16UNF	-	

**BOBINE E CONNETTORI**  
**Coils and Connectors**


BOBINE - Coil				
CODICE Model code	POTENZA Power (W)	TENSIONE Voltage (V)	Ø CANOTTO Bore size (mm)	PAGINA Page
EC	18	12 - VDC	Ø13	129
	18	24 - VDC		
	18	220 - 50/60Hz	Ø13	
	18	220 RAC		
EC36	22	12 - VDC	Ø13	
	22	24 - VDC	Ø13	
	22	220 - 50/60Hz 220 RAC	Ø13	

CONNETTORI - Connectors		
CODICE Model code	TIPO - Type	PAGINA Page
88100002	STANDARD - With rectifier	130
88100003		

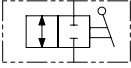
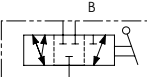
# ACCIAIO INOSSIDABILE

## - Stainless Steel -

### VALVOLE UNIDIREZIONALI IN INOX - Stainless steel check valves

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	XVUR-BSPP	15	400	BSPP 1/4"	<b>237</b>
		30		BSPP 3/8"	
		50		BSPP 1/2"	
		90	350	BSPP 3/4"	
		150		BSPP 1"	
		200		BSPP 1-1/4"	
	XVUR-SAE	300	400	BSPP 1-1/2"	<b>238</b>
		30		9/16-18 UNF	
	XVUR-NPTF	50	400	3/4-16 UNF	<b>239</b>
		15		1/4 NPTF	
		30		3/8 NPTF	
		50		1/2 NPTF	
		90	350	3/4 NPTF	
		150		1 NPTF	
		200		1-1/4 NPTF	
		300		1-1/2 NPTF	
	YVUR-BSPP	430	400	2 NPTF	<b>240</b>
		15		BSPP 1/4"	
		30		BSPP 3/8"	
		50	350	BSPP 1/2"	
		90		BSPP 3/4"	
		150		BSPP 1"	
	YVUR-SAE	200	400	BSPP 1-1/4"	<b>241</b>
		300		BSPP 1-1/2"	
YVUR-NPTF	30	400	9/16-18 UNF	<b>242</b>	
	50		3/4-16 UNF		
	15		1/4 NPTF		
	30		3/8 NPTF		
	50	350	1/2 NPTF		
	90		3/4 NPTF		
	150		1 NPTF		
	200		1-1/4 NPTF		
	300		1-1/2 NPTF		
	430		2 NPTF		

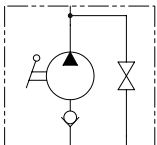
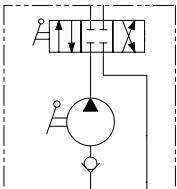
### DEVIATORI E VALVOLE A SFERA IN INOX - Stainless steel flow diverters and ball valves

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	XRAS2-BSPP	25	500	BSPP 1/4"	<b>243</b>
		35		BSPP 3/8"	
		60		BSPP 1/2"	
		100	400	BSPP 3/4"	
		150		350	
	XRAS3-BSPP	25	400	BSPP 1/4"	<b>244</b>
		35		BSPP 3/8"	
		60	350	BSPP 1/2"	
		100		BSPP 3/4"	
		150		BSPP 1"	

### COMPONENTI VARI IN INOX - Stainless steel hydraulic components

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	PORTATA Flow (l/min)	PRESSIONE Pressure (bar)	ATTACCHI Ports	PAGINA Page
	XSOV	-	400	BSPT 1/4" - BSPP 1/4"	245
				BSPT 1/4" - BSPP 1/4"	
	XMNP-BSPP	-	630	BSPP 1/8"	246
				BSPP 1/4"	
				BSPP 3/8"	
	XMNP-NPTF	-	630	1/8 NPTF	247
				1/4 NPTF	
				3/8 NPTF	
				1/2 NPTF	

### POMPE A MANO IN INOX - Stainless steel hand pumps

CIRCUITO IDRAULICO Hydraulic circuit	CODICE Model code	CILINDRATA Displacement (cm <sup>3</sup> )	PRESSIONE Pressure (bar)	ATTACCHI CETOP CETOP Ports	PAGINA Page
				IN - OUT	
	XPMS	12	380	Pipe -BSPP 3/8"	248
		25	350	Pipe -BSPP 3/8"	
	XPMI	12	380	Pipe -BSPP 3/8"	249
		25	350	Pipe -BSPP 3/8"	

### SERBATOI IN INOX - Stainless steel reservoirs

CODICE Model code	CAPACITÀ - Capacity (l)	PAGINA Page
XTNK	1	250
	3	
	5	





# VALVOLE A INSERTO

## INSERT VALVES

Valvole a inserto per il controllo della portata, di sicurezza anti rottura tubo e di regolazione della velocità di discesa degli attuatori.

Flow control valves, Hose burst valves, Descent Speed control valves pressure compensated.





**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>VUI</b>	

<b>01</b>	VALVOLE UNIDIREZIONALI A SFERA (CHECK VALVES - BALL TYPE)	<b>VUI</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4
		BSPP 3/8
		BSPP 1/2
		BSPP 3/4

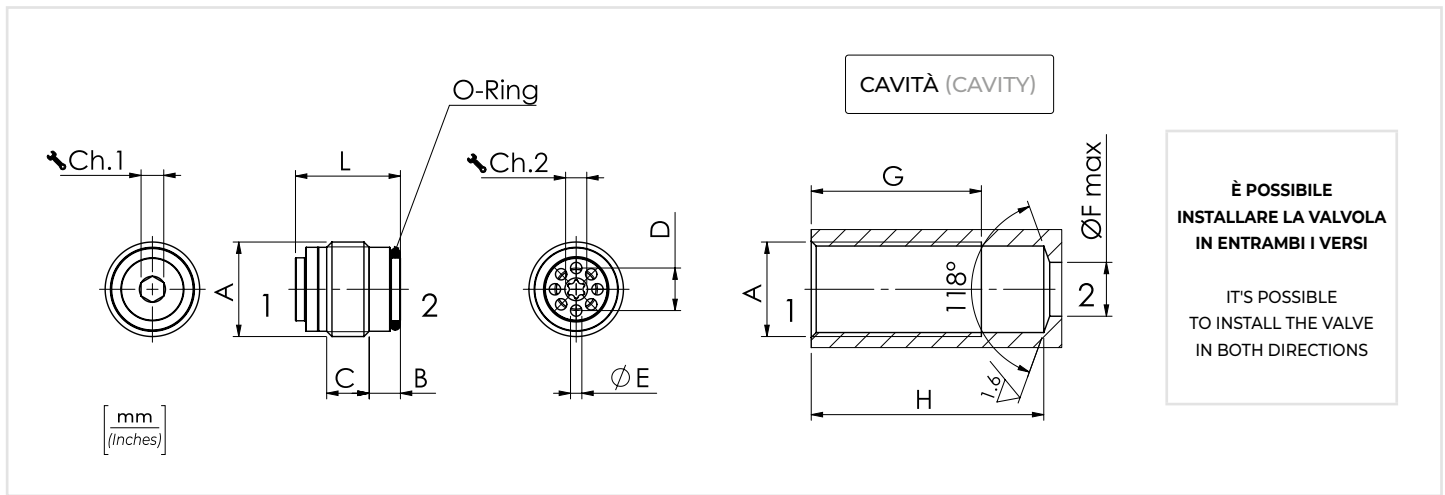
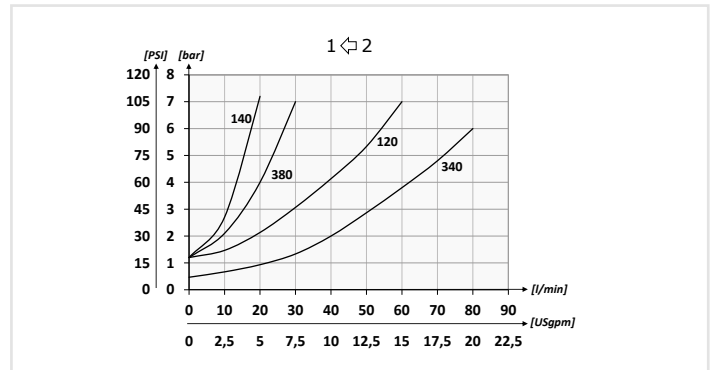
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Ambient temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min
<b>Pressione d'apertura</b> - Cracking pressure	<b>0,5 bar - 7.25 PSI</b>

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	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 ft	O-RING	PESO APPROX APPROX WEIGHT kg-lbt
VUI140	BSPP 1/4	20 (5.3)	350 (5075)	5,5 (0.22)	6 (0.24)	6 (0.24)	1,3 (0.05)	7 (0.28)	28 (1.10)	31 (1.22)	17 (0.67)	3	Torx T15	4 (35)	9 x 1	0,01 (0.022)
VUI380	BSPP 3/8	30 (7.9)			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	Torx T15	6 (53)	10,82 x 1,78	0,018 (0.040)
VUI120	BSPP 1/2	50 (13.2)		7 (0.28)	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	5	10 (88)	14 x 1,78	0,033 (0.073)
VUI340	BSPP 3/4	80 (21.1)		8 (0.31)	12,5 (0.49)	14 (0.55)	3 (0.12)	16 (0.63)	41 (1.61)	45 (1.77)	28,5 (1.12)	8	8	20 (177)	18,72 x 2,62	0,07 (0.16)



**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>VUC</b>	

<b>01</b>	VALVOLE UNIDIREZIONALI AD OTTURATORE (CHECK VALVES - POPPET TYPE)	<b>VUC</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4
		BSPP 3/8
		<b>140</b>
		<b>380</b>

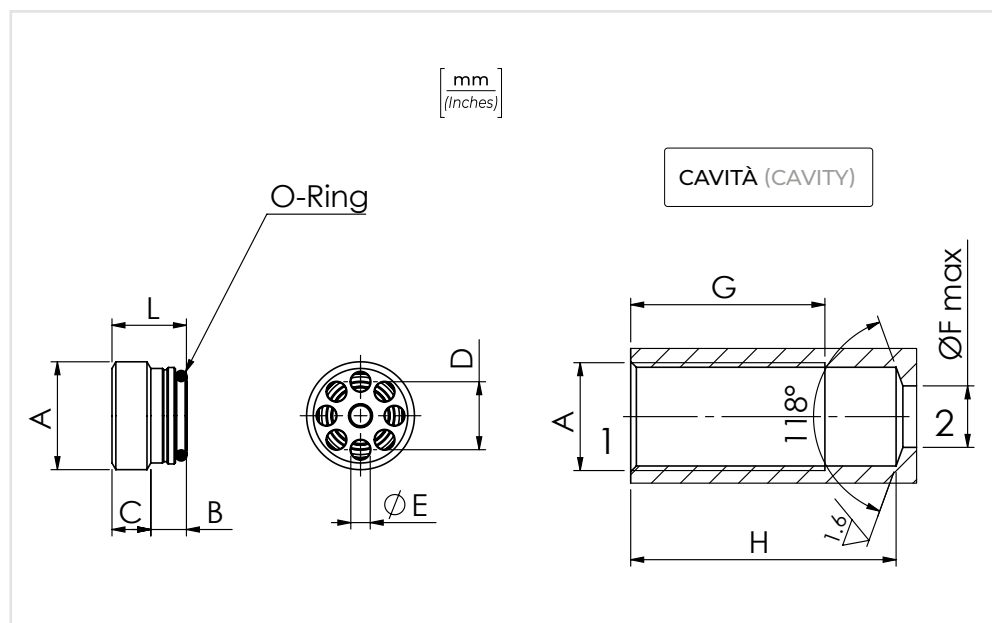
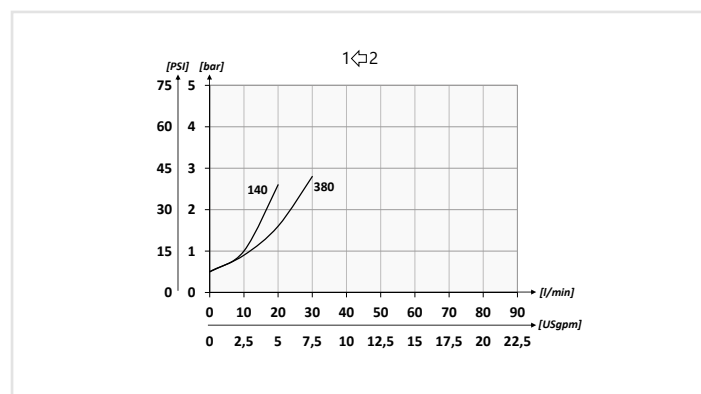
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> <b>-4°F +176°F</b>
<b>Temperatura ambiente</b> - Ambient temperature	<b>-20°C +50°C</b> <b>-4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> <b>0,015 in<sup>3</sup>/min - 5 drops/min</b>
<b>Pressione d'apertura</b> - Cracking pressure	<b>0,5 bar - 7.25 PSI</b>

**PERFORMANCES**



<b>CHIAVE</b> TOOL		
<b>DIMENSIONE</b> (DIMENSIONS)		
<b>TIPO CHIAVE</b> TOOL'S TYPE	<b>TIPO</b> TYPE	<b>PESO (kg)</b> WEIGHT (lb)
<b>61700005</b>	<b>VUC140</b>	<b>0,12 (0.27)</b>
<b>61700031</b>	<b>VUC380</b>	<b>0,13 (0.29)</b>

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	O-Ring	PESO APPROX APPROX WEIGHT kg-lbt
<b>VUC140</b>	<b>BSPP 1/4</b>	<b>20 (5.3)</b>	<b>350</b> (5075)	<b>4</b> (0.16)	<b>5</b> (0.20)	<b>7</b> (0.28)	<b>2,2</b> (0.94)	<b>7</b> (0.28)	<b>22</b> (0.87)	<b>24</b> (0.94)	<b>9</b> (0.35)	<b>6</b> (53)	<b>9 x 1</b>	<b>0,01</b> (0.022)
<b>VUC380</b>	<b>BSPP 3/8</b>	<b>30 (7.9)</b>		<b>5,5</b> (0.22)	<b>6</b> (0.24)	<b>10,5</b> (0.41)	<b>3</b> (0.12)	<b>9</b> (0.35)	<b>27</b> (1.06)	<b>29</b> (1.14)	<b>11,5</b> (0.45)	<b>6</b> (53)	<b>10,82 x 1,78</b>	



**CODICE ORDINAZIONE**  
ORDERING CODE

01	<b>VUP</b>
02	

<b>01</b>	VALVOLE UNIDIREZIONALI A DISCO (CHECK VALVES - DISK TYPE)		<b>VUP</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>

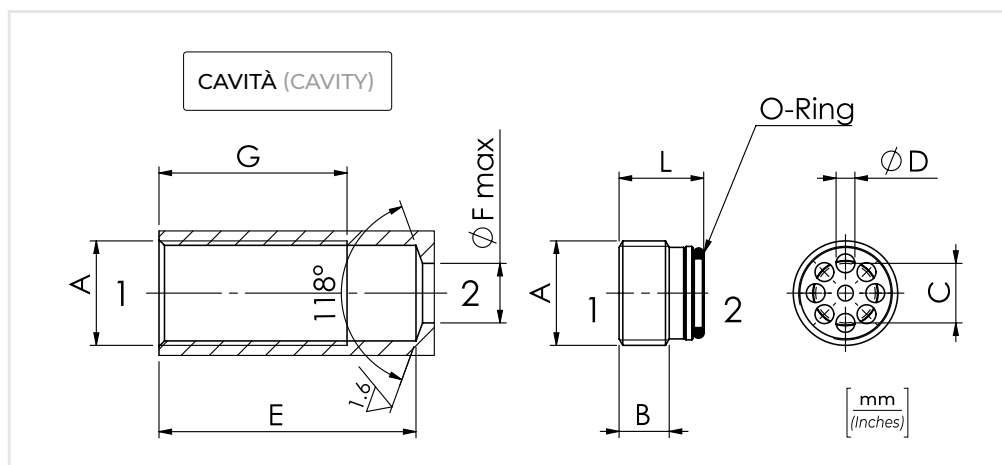
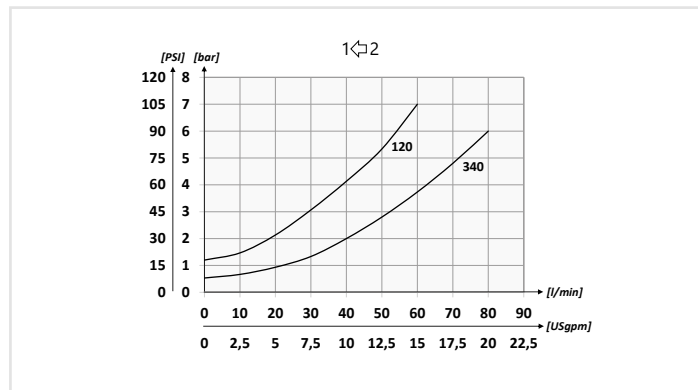
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Ambient temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min
<b>Pressione d'apertura</b> - Cracking pressure	<b>0,5 bar - 7.25 PSI</b>

**PERFORMANCES**



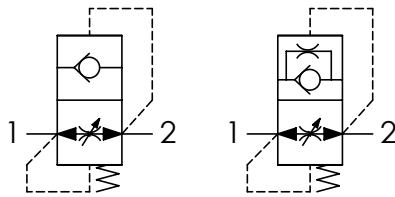
<p><b>CHIAVE</b> TOOL</p>		
<b>DIMENSIONE</b> (DIMENSIONS)		
<b>TIPO CHIAVE</b> TOOL'S TYPE	<b>TIPO</b> TYPE	<b>PESO (kg)</b> WEIGHT (lb)
<b>61700003</b>	<b>VUP120</b>	<b>0,15 (0.33)</b>
<b>61700030</b>	<b>VUP340</b>	<b>0,18 (0.40)</b>

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	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-lbt ft	O-Ring	PESO APPROX APPROX WEIGHT kg-lbt
VUP120	BSPP 1/2	60 (15.9)	350 (5075)	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)
VUP340	BSPP 3/4	80 (21.1)		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)

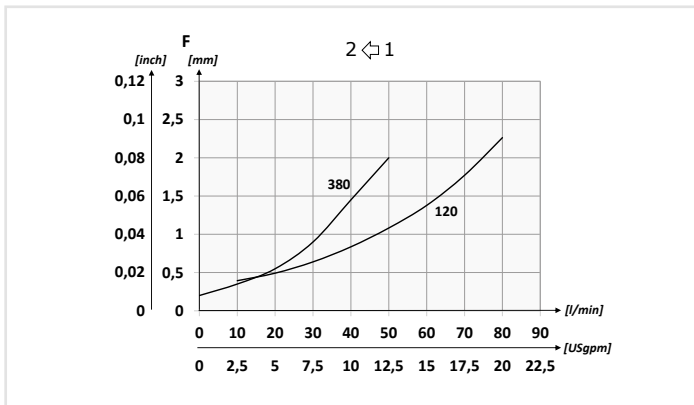


### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



CON FORO  
(WITH ORIFICE)

### REGOLAZIONE "F" / SETTING "F"



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	ISO 6743/4 (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> - Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
<b>Temperatura dell'olio</b> - Oil temperature	-20°C +80°C    -4°F +176°F
<b>Temperatura ambiente</b> - Ambient temperature	-20°C +50°C    -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> - Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	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 APPROX APPROX WEIGHT kg-lbt
VUBA380T10	BSPP 3/8	50 (13.2)	315 (4568)	M16 x 1,5	10 (0.39)	10	22	45 (33.2)	20 (15)	0,044 (0.097)
VUBA380T12				M18 x 1,5	11 (0.43)	12 (0.47)	22		40 (30)	
VUBA380T15				M22 x 1,5	15 (0.59)	24	70 (50)		0,060 (0.13)	
VUBA120T15	BSPP 1/2	80 (21.1)			13 (0.51)	15	27	60 (44.3)	70 (50)	0,077 (0.17)

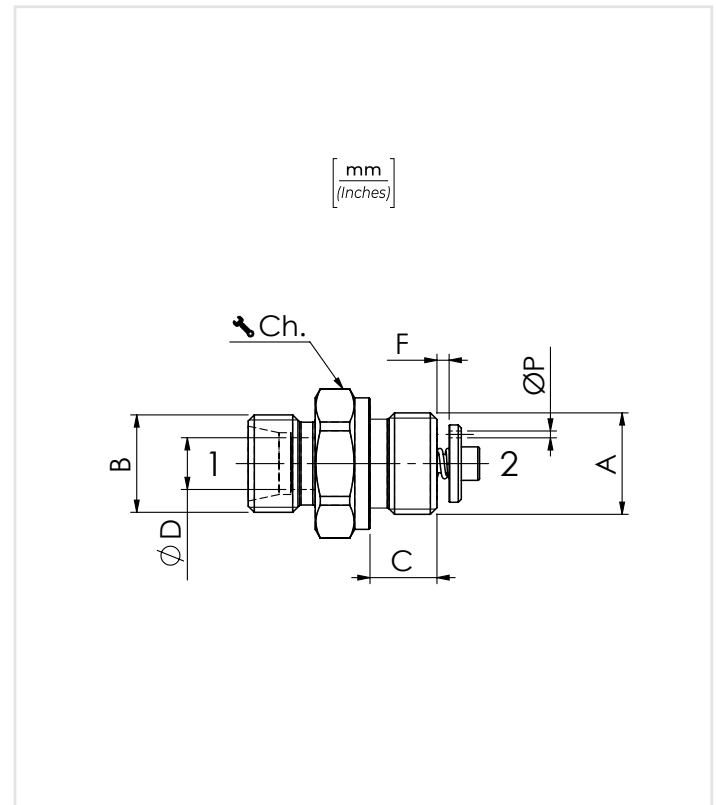
### CODICE ORDINAZIONE ORDERING CODE

01	02	03	04	05
<b>VUBA</b>				

<b>01</b>	VALVOLE DI SICUREZZA PER TUBAZIONI DIN (DIN HOSE BURST VALVES)		<b>VUBA</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
<b>03</b>	DIMENSIONE (SIZE)	Tubo Ø 10 (For Ø 10 pipe)	<b>T10</b>
		Tubo Ø 12 (For Ø 12 pipe)	<b>T12</b>
		Tubo Ø 15 (For Ø 15 pipe, only for VUBA120)	<b>T15</b>
<b>04</b>	REGOLAZIONE (SETTING)	Esempio: regolazione 0,7 mm (Example: setting 0.7 mm) <b>F 0,7</b>	<b>F__</b>
		*Omettere se non richiesto (Omit if not required)	
<b>05</b>	FORO SUL PIATTELLO (ORIFICE ON FLAT POPPET)	Esempio: foro 1,5 mm (Example: hole 1,5 mm) <b>P 1,5</b>	<b>P__</b>
		Omettere se non richiesto (Omit if not required)	

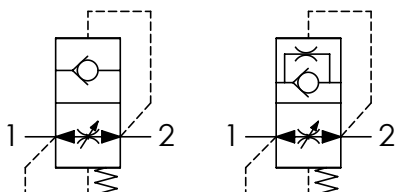
\*Se ommesso questo valore, le valvole vengono fornite senza alcuna taratura di fabbrica e i dadi non sono serrati. Per garantire il loro corretto funzionamento è necessario che venga eseguito il settaggio da parte dell'installatore finale.

If omitted this value, the valves are supplied without factory setting and nuts are not tightened. For the correct operating it is needed a calibration of the valve made by final installer.





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



CON FORO  
(WITH ORIFICE)

### CODICE ORDINAZIONE ORDERING CODE

01	02	03	04
<b>VUBA</b>			

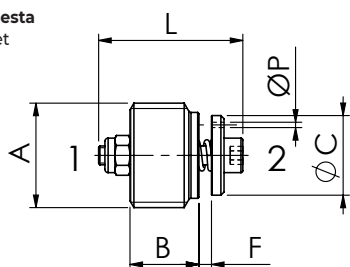
01	VALVOLE DI SICUREZZA PER TUBAZIONI (HOSE BURST VALVES)	VUBA
02	DIMENSIONE (SIZE)	BSPP 1/4
		BSPP 3/8
		BSPP 1/2
		BSPP 3/4
		BSPP 1
03	REGOLAZIONE (SETTING)	Esempio: regolazione 0,7 mm (Example: setting 0.7 mm) <b>F 0,7</b>
		Omettere se non richiesto (Omit if not required)
04	FORO SUL PIATTELLO (ORIFICE ON FLAT POPPET)	Esempio: foro 1,5 mm (Example: hole 1.5 mm) <b>P 1,5</b>
		*Omettere se non richiesto (Omit if not required)

\*Se ommesso questo valore, le valvole vengono fornite senza alcuna taratura di fabbrica e i dadi non sono serrati. Per garantire il loro corretto funzionamento è necessario che venga eseguito il settaggio da parte dell'installatore finale.

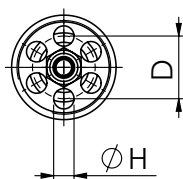
If omitted this value, the valves are supplied without factory setting and nuts are not tightened. For the correct operating it is needed a calibration of the valve made by final installer.

Regolazione F a richiesta  
F setting on request

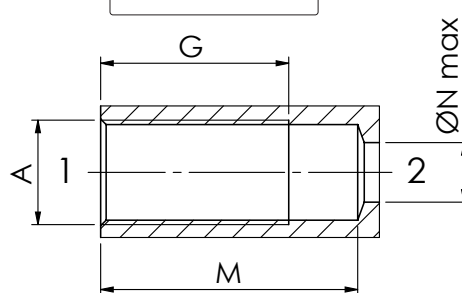
Foro su piattello a richiesta  
Orifice on flat poppet on request



mm  
(Inches)

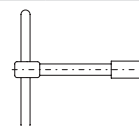


CAVITÀ (CAVITY)



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil 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 per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min



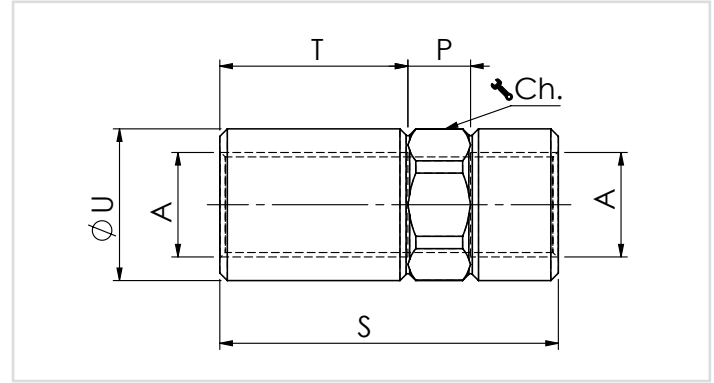
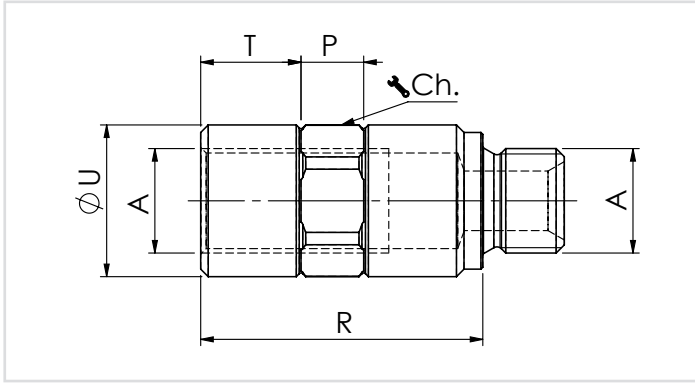
CHIAVE  
TOOL

### Dimensione/Dimensions

Tipo chiave Tool's Type	Tipo Type	Peso/Weight kg-lbt
61700001	VUBA140	0,12 (0.27)
61700002	VUBA380	0,13 (0.29)
61700003	VUBA120	0,15 (0.33)
61700004	VUBA340	0,18 (0.40)

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	G	H	L	M	N	COPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	PESO APPROX APPROX WEIGHT kg-lbt
VUBA140	BSPP 1/4	25 (6.6)	350 (5075)	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)	0,008 (0.017)
VUBA380	BSPP 3/8	50 (13.2)		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)	0,014 (0.030)
VUBA120	BSPP 1/2	80 (21.1)		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)	0,025 (0.055)
VUBA340	BSPP 3/4	150 (39.6)		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)
VUBA100	BSPP 1	180 (47.5)		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)



**COLONNETTE - HOUSINGS M/F**

TIPO TYPE	A	R	P	T	U	Ch.	PESO APPROX APPROX WEIGHT kg-lbt
61100087	BSPP 1/4	39 (1.53)	10 (0.39)	13 (0.51)	20.5 (0.80)	19	0.07 (0.16)
61100088	BSPP 3/8	45 (1.77)	10 (0.39)	16 (0.63)	24.5 (0.96)	22	0.10 (0.22)
61100089	BSPP 1/2	52 (2.05)	10 (0.39)	19 (0.75)	29.5 (1.16)	27	0.17 (0.37)
61100090	BSPP 3/4	61 (2.40)	12 (0.47)	23 (0.90)	35.5 (1.32)	32	0.26 (0.57)
61100091	BSPP 1	67 (2.63)	15 (0.59)	25.5 (1)	44.5 (1.75)	41	0.4 (0.88)

**COLONNETTE - HOUSINGS F/F**

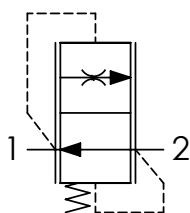
TIPO TYPE	A	S	P	T	U	Ch.	PESO APPROX APPROX WEIGHT kg-lbt
61100092	BSPP 1/4	48 (1.89)	10 (0.39)	13 (0.51)	20.5 (0.80)	19	0.09 (0.20)
61100093	BSPP 3/8	54 (2.13)	10 (0.39)	30 (1.18)	24.2 (0.95)	22	0.11 (0.24)
61100094	BSPP 1/2	73 (2.87)	10 (0.39)	46.5 (1.83)	29.2 (1.14)	27	0.20 (0.44)
61100095	BSPP 3/4	74 (2.91)	12 (0.47)	44 (1.73)	35.5 (1.32)	32	0.27 (0.59)

TARATURA SETTING mm	Portata (l/min) - Flow rate (Usgpm) Tolleranza ± 10% - Tolerance ± 10%				
	VUBA140	VUBA380	VUBA120	VUBA340	VUBA100
0	0	0	0	0	0
0,1	3,0 (0,8)	3,0 (0,8)	4,0 (1,1)	9,0 (2,4)	3,5 (0,9)
0,2	6,0 (1,6)	6,0 (1,6)	8,0 (2,1)	18,0 (4,8)	7,0 (1,8)
0,3	9,3 (2,5)	10,0 (2,6)	12,7 (3,3)	25,3 (6,7)	12,0 (3,2)
0,4	12,7 (3,3)	14,0 (3,7)	17,3 (4,6)	32,7 (8,6)	17,0 (4,5)
0,5	16,0 (4,2)	18,0 (4,8)	22,0 (5,8)	40,0 (10,6)	22,0 (5,8)
0,6	17,0 (4,5)	20,5 (5,4)	26,5 (7,0)	48,5 (12,8)	27,5 (7,3)
0,7	18,0 (4,8)	23,0 (6,1)	31,0 (8,2)	57,0 (15,0)	33,0 (8,7)
0,8	19,2 (5,1)	25,0 (6,6)	34,0 (9,0)	61,7 (16,3)	39,0 (10,3)
0,9	20,3 (5,4)	27,0 (7,1)	37,0 (9,8)	66,3 (17,5)	45,0 (11,9)
1	21,5 (5,7)	29,0 (7,7)	40,0 (10,6)	71,0 (18,7)	51,0 (13,5)
1,1	22,3 (5,9)	30,0 (7,9)	42,5 (11,2)	77,0 (20,3)	53,5 (14,1)
1,2	23,0 (6,1)	31,0 (8,2)	45,0 (11,9)	83,0 (21,9)	56,0 (14,8)
1,3	23,7 (6,2)	32,3 (8,5)	47,7 (12,6)	88,7 (23,4)	60,7 (16,0)
1,4	24,3 (6,4)	33,7 (8,9)	50,3 (13,3)	94,3 (24,9)	65,3 (17,2)
1,5	25,0 (6,6)	35,0 (9,2)	53,0 (14,0)	100,0 (26,4)	70,0 (18,5)
1,6	25,4 (6,7)	36,4 (9,6)	55,8 (14,7)	106,0 (28,0)	72,4 (19,1)
1,7	26,0 (6,9)	37,0 (9,8)	58,6 (15,5)	111,0 (29,3)	74,8 (19,7)
1,8	26,3 (7,0)	38,7 (10,2)	61,4 (16,2)	116,0 (30,6)	77,2 (20,4)
1,9	26,7 (7,0)	40,3 (10,6)	64,2 (16,9)	120,0 (31,7)	79,6 (21,0)
2	27,0 (7,1)	42,0 (11,1)	67,0 (17,7)	124,0 (32,7)	82,0 (21,6)





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	PESO APPROX APPROX WEIGHT kg-lbt
VCC140	15 (3.96)	250 (3625)	4 (3)	0,014 (0.031)

### DATI TECNICI / TECHNICAL DATA

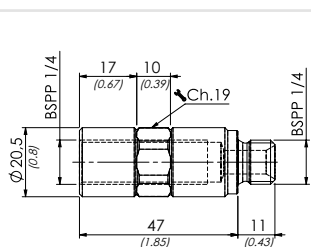
Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Ambient temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### CODICE ORDINAZIONE ORDERING CODE

01	02	03
<b>VCC140</b>		

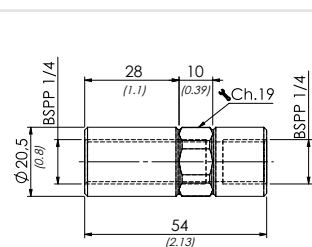
01	VALVOLE CONTROLLO DISCESA FISSE COMPENSATE (FIXED FLOW CONTROL VALVES - PRESSURE COMPENSATED)		VCC140
02	VERSIONE (VERSION)	L = 26,5 (1.02)	C
		L = 23 (0.90)	
03	PORTATA CONTROLLATA A 100 BAR ± 10% (CONTROLLED FLOW AT 100 BAR ± 10 %)	1 l/min (0.26 USgpm)	1
		2 l/min (0.53 USgpm)	2
		3 l/min (0.79 USgpm)	3
		4 l/min (1.06 USgpm)	4
		5 l/min (1.32 USgpm)	5
		6 l/min (1.58 USgpm)	6
		7 l/min (1.85 USgpm)	7
		8 l/min (2.11 USgpm)	8
		9 l/min (2.38 USgpm)	9
		10 l/min (2.64 USgpm)	10
		11 l/min (2.90 USgpm)	11
		12 l/min (3.17 USgpm)	12
		15 l/min (3.96 USgpm)	15

### TIPO / TYPE 61100160

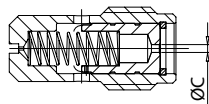


Peso Approx (Approx weight)  
0,09 kg (0.20 lb)

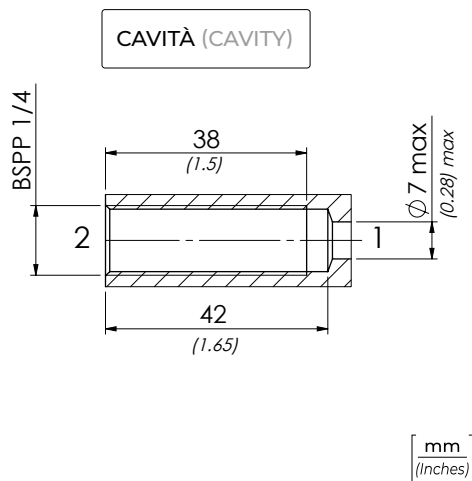
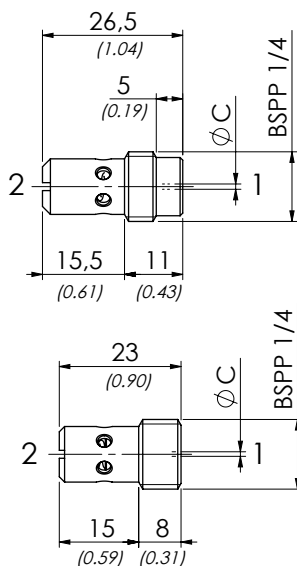
### TIPO / TYPE 61100159



Peso Approx (Approx weight)  
0,09 kg (0.20 lb)



TIPO (TYPE)	Ø C
VCC1401	1 (0.04)
VCC1402	1,2 (0.05)
VCC1403	1,5 (0.06)
VCC1404	1,7 (0.07)
VCC1405	1,9 (0.07)
VCC1406	2,1 (0.08)
VCC1407	2,3 (0.09)
VCC1408	2,4 (0.09)
VCC1409	2,7 (0.11)
VCC14010	2,8 (0.11)
VCC14011	3,1 (0.12)
VCC14012	3,3 (0.13)
VCC14015	5 (0.20)



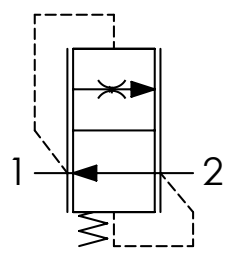
[ mm ]  
[ inches ]



**CODICE ORDINAZIONE** 01 02  
**ORDERING CODE** **VCC380**



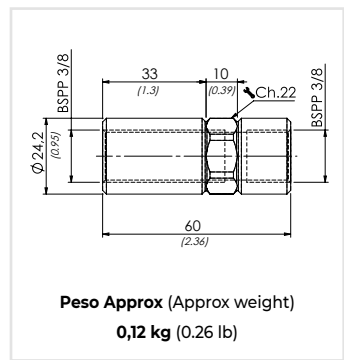
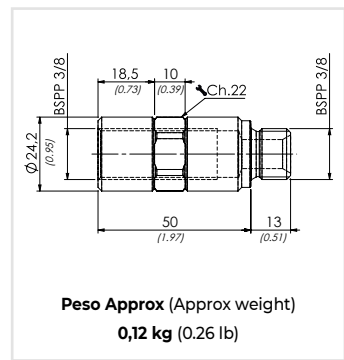
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



01	VALVOLE CONTROLLO DISCESA FISSE COMPENSATE (FIXED FLOW CONTROL VALVES - PRESSURE COMPENSATED)	VCC380
02	PORTATA CONTROLLATA A 100 BAR ± 10% (CONTROLLED FLOW AT 100 BAR ± 10%)	1 l/min (0.26 USgpm) <b>1</b>
		2 l/min (0.53 USgpm) <b>2</b>
		3 l/min (0.79 USgpm) <b>3</b>
		4 l/min (1.06 USgpm) <b>4</b>
		5 l/min (1.32 USgpm) <b>5</b>
		6 l/min (1.58 USgpm) <b>6</b>
		7 l/min (1.89 USgpm) <b>7</b>
		8 l/min (2.11 USgpm) <b>8</b>
		9 l/min (2.38 USgpm) <b>9</b>
		10 l/min (2.64 USgpm) <b>10</b>
		11 l/min (2.90 USgpm) <b>11</b>
		12 l/min (3.17 USgpm) <b>12</b>
		16 l/min (4.22 USgpm) <b>16</b>
		18 l/min (4.75 USgpm) <b>18</b>

**TIPO / TYPE**  
**61100162**

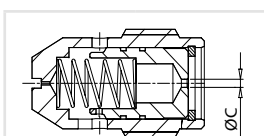
**TIPO / TYPE**  
**61100161**



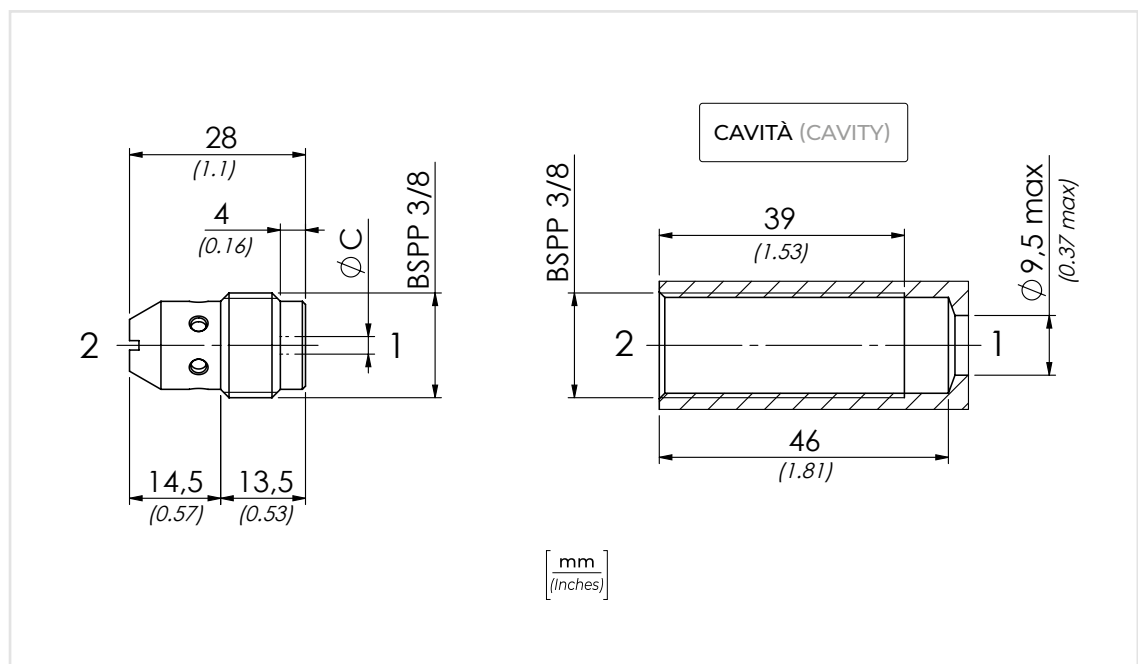
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Ambient temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	PESO APPROX APPROX WEIGHT kg-lbt
VCC380	<b>18</b> (4.8)	<b>250</b> (3625)	<b>6</b> (4.5)	<b>0,024</b> (0.053)

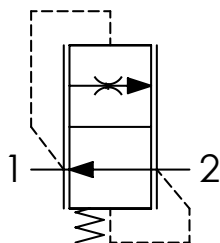


TIPO (TYPE)	Ø C
VCC3801	0,6 (0.02)
VCC3802	1,4 (0.06)
VCC3803	1,7 (0.07)
VCC3804	2 (0.08)
VCC3805	2,3 (0.09)
VCC3806	2,6 (0.10)
VCC3807	2,8 (0.11)
VCC3808	3,1 (0.12)
VCC3809	3,3 (0.13)
VCC38010	3,5 (0.14)
VCC38011	3,7 (0.15)
VCC38012	4 (0.16)
VCC38016	5 (0.12)
VCC38018	5,5 (0.22)





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



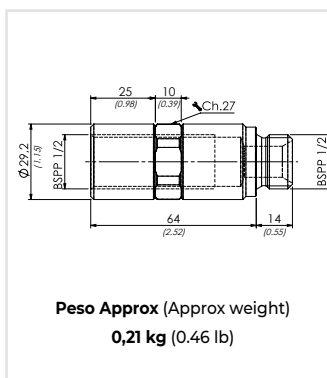
### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil 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 per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

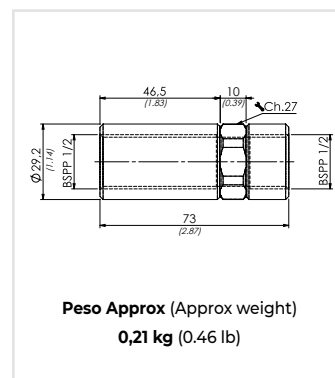
CODICE ORDINAZIONE ORDERING CODE	01	02
	<b>VSC120</b>	

01	VALVOLE CONTROLLO DISCESA FISSE COMPENSATE (FIXED FLOW CONTROL VALVES - PRESSURE COMPENSATED)		VSC120
02	PORTATA CONTROLLATA A 100 BAR ± 10%  (CONTROLLED FLOW AT 100 BAR ± 10%)	9 l/min (2.38 USgpm)	9
		12 l/min (3.17 USgpm)	12
		15 l/min (3.96 USgpm)	15
		17 l/min (4.49 USgpm)	17
		21 l/min (5.54 USgpm)	21
		25 l/min (6.60 USgpm)	25
		27 l/min (7.1 USgpm)	27
		32 l/min (8.45 USgpm)	32
		35 l/min (9.24 USgpm)	35
		40 l/min (10.56 USgpm)	40
47 l/min (12.4 USgpm)	47		

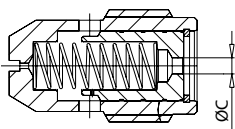
### TIPO / TYPE 61100033



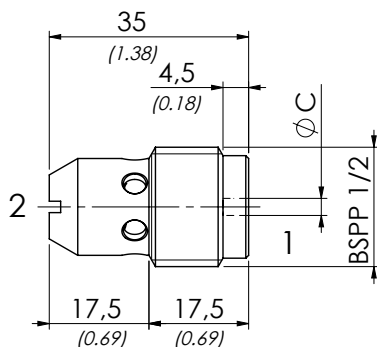
### TIPO / TYPE 61100094



TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	PESO APPROX APPROX WEIGHT kg-lbt
VCC120	47 (12.4)	250 (3625)	10 (7.5)	0,050 (0.11)

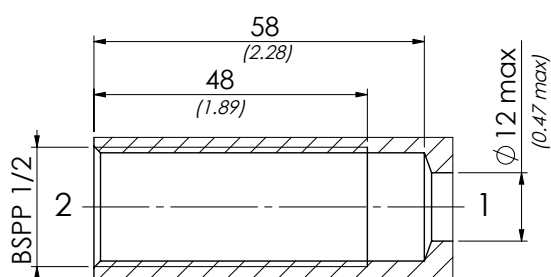


TIPO (TYPE)	Ø C
VSC1209	2 (0.08)
VSC12012	2,5 (0.10)
VSC12015	3 (0.12)
VSC12017	3,2 (0.13)
VSC12021	3,5 (0.14)
VSC12025	4 (0.16)
VSC12027	4,2 (0.17)
VSC12032	4,5 (0.18)
VSC12035	5 (0.20)
VSC12040	5,5 (0.22)
VSC12047	6 (0.24)



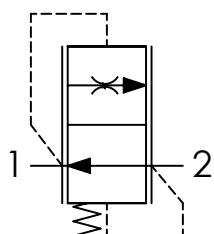
[ mm  
(Inches) ]

### CAVITÀ (CAVITY)



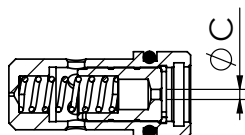


### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

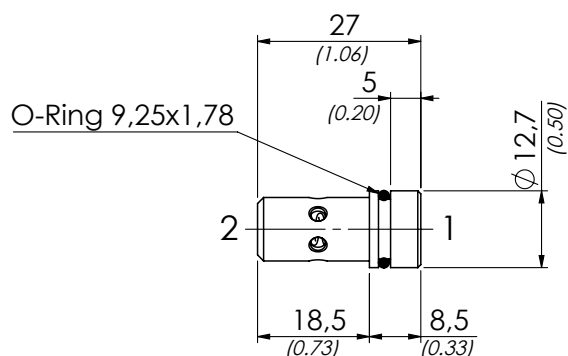
<b>Olio idraulico</b> - Mineral oil	ISO 6743/4 (DIN 51524)	
<b>Viscosità olio</b> - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)	
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
<b>Temperatura dell'olio</b> - Oil temperature	-20°C +80°C	-4°F +176°F
<b>Temperatura ambiente</b> - Ambient temperature	-20°C +50°C	-4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)		



TIPO (TYPE)	Ø C
VSCR61	1 ( 0.04)
VSCR62	1,2 ( 0.05)
VSCR63	1,5 ( 0.06)
VSCR64	1,7 ( 0.07)
VSCR65	1,9 ( 0.07)
VSCR66	2,1 ( 0.08)
VSCR67	2,3 ( 0.09)
VSCR68	2,4 ( 0.09)
VSCR69	2,7 ( 0.11)
VSCR610	2,8 ( 0.11)
VSCR611	3,1 ( 0.12)
VSCR612	3,3 ( 0.13)

<b>CODICE ORDINAZIONE</b> ORDERING CODE	01 <b>VSCR6</b>	02
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01	VALVOLE CONTROLLO DISCESA FISSE COMPENSATE (FIXED FLOW CONTROL VALVES - PRESSURE COMPENSATED)	VSCR6
02	PORTATA CONTROLLATA A 100 BAR ± 10% (CONTROLLED FLOW AT 100 BAR ± 10 %)	1 l/min (0.26 USgpm) <b>1</b>
		2 l/min (0.53 USgpm) <b>2</b>
		3 l/min (0.79 USgpm) <b>3</b>
		4 l/min (1.06 USgpm) <b>4</b>
		5 l/min (1.32 USgpm) <b>5</b>
		6 l/min (1.58 USgpm) <b>6</b>
		7 l/min (1.85 USgpm) <b>7</b>
		8 l/min (2.11 USgpm) <b>8</b>
		9 l/min (2.38 USgpm) <b>9</b>
		10 l/min (2.64 USgpm) <b>10</b>
		11 l/min (2.90 USgpm) <b>11</b>
		12 l/min (3.17 USgpm) <b>12</b>

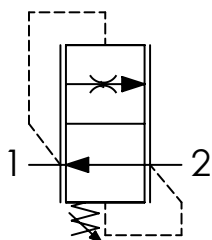


[ mm ]  
[ inches ]

TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
VSCR6	12 (3.20)	250 (3625)	0,012 (0.026)

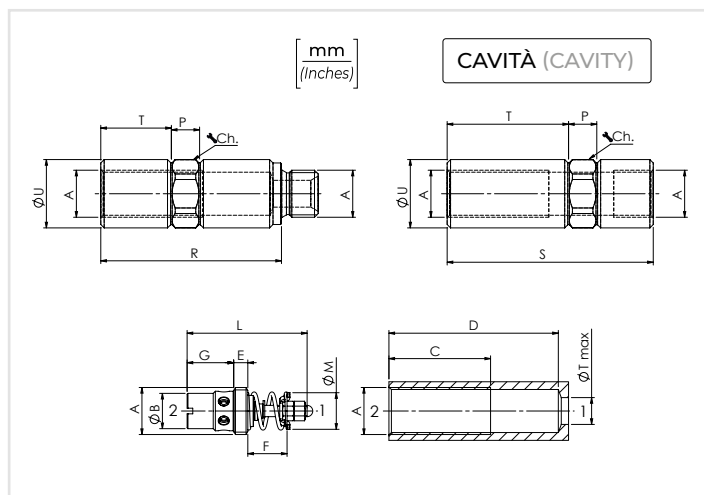


### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil 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 per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	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 APPROX APPROX WEIGHT kg-lbt	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft
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)	6 (4.5)
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)	8 (6)
VRD120	BSPP 1/2	65 (17.2)		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)	12 (9)
VRD340	BSPP 3/4	150 (39.6)		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)	0,079 (0.18)	15 (11.25)

### CODICE ORDINAZIONE ORDERING CODE

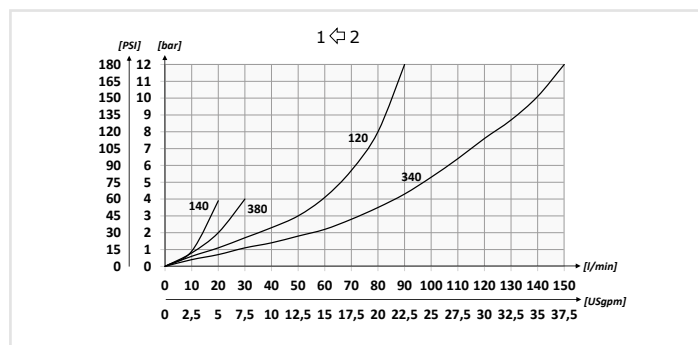
01	02	03	04
<b>VRD</b>			

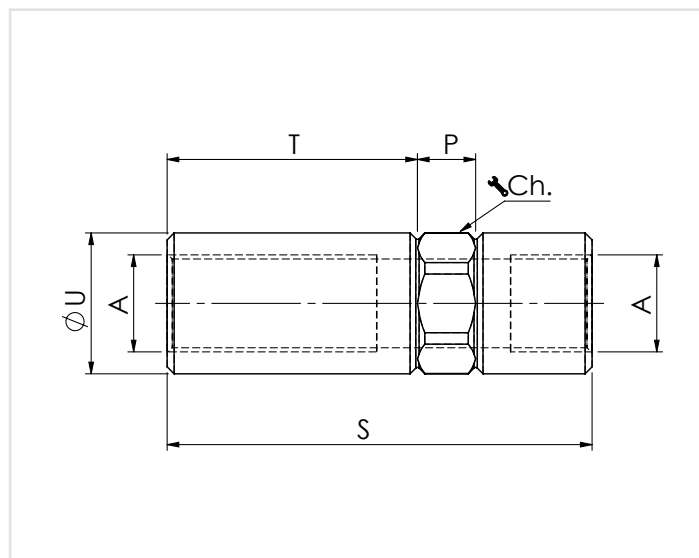
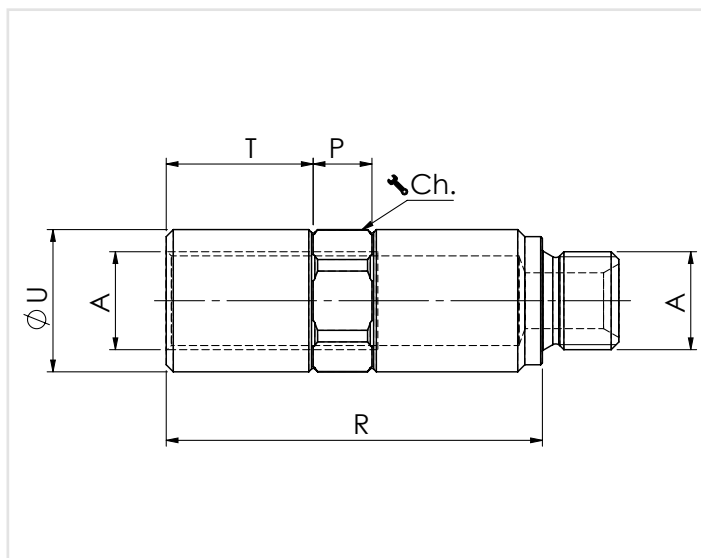
<b>01</b>	VALVOLE CONTROLLO DISCESA REGOLABILI COMPENSATE (ADJUSTABLE FLOW CONTROL VALVES - PRESSURE COMPENSATED)						<b>VRD</b>		
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4					<b>140</b>		
		BSPP 3/8					<b>380</b>		
		BSPP 1/2					<b>120</b>		
		BSPP 3/4					<b>340</b>		
<b>03</b>	FLUSSO CONTROLLATO A 50 BAR (CONTROLLED FLOW AT 50 BAR)	A	B	C	D	E	F	<b>VRD140</b>	
		l/min-USgpm							
		1,4/4,2 (0,37/1,11)	2,4/7,8 (0,63/2,06)	3,8/9 (1/2,38)	6/13,4 (1,58/3,54)	8,6/17,5 (2,27/4,62)	12,2/24 (3,22/6,34)		
		1,7/3,7 (0,45/0,98)	3/5,5 (0,79/1,45)	5/10,5 (1,32/2,77)	10/18 (2,64/4,75)	16,5/25,4 (4,36/6,71)	19,5/33 (5,15/8,71)		<b>VRD380</b>
							<b>VRD120</b>		
							<b>VRD340</b>		
<b>04</b>	REGOLAZIONE (SETTING)	ESEMPIO: REGOLAZIONE 15 MM (EXAMPLE: SETTING 15 MM) F 15						<b>F_</b>	
		(TOLLERANZA IN PORTATA ± 10%) (TOLERANCE OF SETTING FLOW RATE ± 10%)							
*OMESSO SE NON RICHIESTO (OMITTED IF NOT REQUIRED)									

\*Se ommesso questo valore, le valvole vengono fornite senza alcuna taratura di fabbrica e i dadi non sono serrati. Per garantire il loro corretto funzionamento è necessario che venga eseguito il settaggio da parte dell'installatore finale.

If omitted this value, the valves are supplied without factory setting and nuts are not tightened. For the correct operating it is needed a calibration of the valve made by final installer.

### PERFORMANCES





### COLONNETTE - HOUSING M/F

TIPO TYPE	A	R	P	T	U	Ch.	PESO APPROX APPROX WEIGHT kg-lbt
61100057	BSPP 1/4	57 (2.24)	10 (0.39)	22 (0.87)	20.5 (0.81)	19	0.11 (0.16)
61100058	BSPP 3/8	64 (2.52)	10 (0.39)	25 (0.98)	24.5 (0.96)	22	0.14 (0.20)
61100059	BSPP 1/2	69 (2.71)	10 (0.39)	28 (1.10)	29.5 (1.16)	27	0.24 (0.30)
61100060	BSPP 3/4	87 (3.42)	12 (0.47)	36 (1.42)	35.5 (1.40)	32	0.34 (0.48)

### COLONNETTE - HOUSING F/F

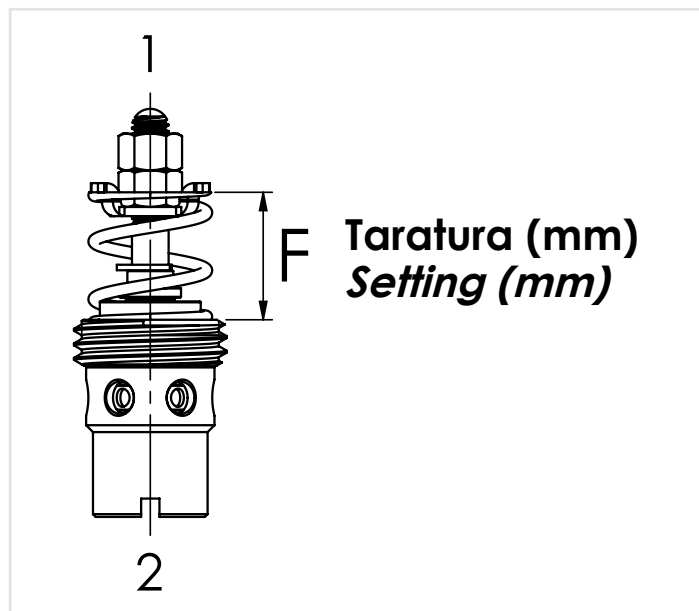
TIPO TYPE	A	S	P	T	U	Ch.	PESO APPROX APPROX WEIGHT kg-lbt
61100051	BSPP 1/4	66 (2.60)	10 (0.39)	38 (1.50)	20.5 (0.81)	19	0.11 (0.16)
61100052	BSPP 3/8	73 (2.87)	10 (0.39)	43 (1.69)	24.5 (0.96)	22	0.12 (0.20)
61100053	BSPP 1/2	81 (3.19)	10 (0.39)	50.5 (1.99)	29.5 (1.16)	27	0.20 (0.33)
61100054	BSPP 3/4	99 (3.90)	12 (0.47)	57 (2.24)	35.5 (1.40)	32	0.29 (0.50)

TARATURA SETTING mm	F <sub>-</sub>	VRD140 Portata (l/min) - Flow rate (Usgpm)					
		A	B	C	D	E	F
10		1,4 (0,37)	2,4 (0,63)	3,8 (1,00)	6 (1,58)	8,6 (2,27)	12,2 (3,22)
9		1,9 (0,50)	3,1 (0,82)	4,7 (1,24)	7,6 (2,01)	10,3 (2,72)	15,4 (4,07)
8		2,1 (0,55)	3,8 (1,00)	5,6 (1,48)	8,9 (2,35)	12 (3,17)	18,6 (4,91)
7		3,3 (0,87)	5,9 (1,56)	7,2 (1,90)	10,6 (2,80)	13,1 (3,46)	18,8 (4,96)
6		4,2 (1,11)	7,8 (2,06)	9 (2,38)	13,4 (3,54)	17,5 (4,62)	24 (6,34)

TARATURA SETTING mm	F <sub>-</sub>	VRD340 Portata (l/min) - Flow rate (Usgpm)				
		A	B	C	D	E
23		39,8 (10,51)	45,2 (11,93)	63,2 (16,68)	67 (17,69)	105 (27,72)
22		42,1 (11,11)	48 (12,67)	65,7 (17,34)	69,7 (18,40)	112,5 (29,70)
21		45,1 (11,91)	51,8 (13,68)	68 (17,95)	76,6 (20,22)	119 (31,42)
20		47 (12,41)	54,9 (14,49)	70,7 (18,66)	81,9 (21,62)	126,2 (33,32)
19		50,2 (13,25)	58,1 (15,34)	73,4 (19,38)	90,1 (23,79)	133,7 (35,30)
18		51,8 (13,68)	62,3 (16,45)	77,1 (20,35)	95 (25,08)	140,2 (37,01)
17		54,5 (14,39)	64,8 (17,11)	80,2 (21,17)	101 (26,66)	145,4 (38,39)
16		57,1 (15,07)	68,2 (18,00)	83,3 (21,99)	107 (28,25)	151 (39,86)

TARATURA SETTING mm	F <sub>-</sub>	VRD380 Portata (l/min) - Flow rate (Usgpm)					
		A	B	C	D	E	F
15		1,7 (0,45)	3 (0,79)	5 (1,32)	10 (2,64)	16,5 (4,36)	19,5 (5,15)
14		2,3 (0,61)	3,8 (1,00)	6,2 (1,64)	13 (3,43)	20 (5,28)	23,4 (6,18)
13		2,6 (0,69)	4,7 (1,24)	8,2 (2,16)	15,6 (4,12)	22 (5,81)	26,9 (7,10)
12		3 (0,79)	5,2 (1,37)	9,4 (2,48)	16,6 (4,38)	23,5 (6,20)	29,8 (7,87)
11		3,7 (0,98)	5,5 (1,45)	10,5 (2,77)	18 (4,75)	25,4 (6,71)	33 (8,71)

TARATURA SETTING mm	F <sub>-</sub>	VRD120 Portata (l/min) - Flow rate (Usgpm)				
		A	B	C	D	E
20		15,5 (4,09)	19,7 (5,20)	22,8 (6,02)	32 (8,45)	40,5 (10,69)
19		17 (4,49)	21,7 (5,73)	25,8 (6,81)	35,4 (9,35)	44,3 (11,70)
18		18 (4,75)	24,3 (6,42)	28 (7,39)	38,7 (10,22)	49,3 (13,02)
17		19,4 (5,12)	26,2 (6,92)	31,2 (8,24)	41,8 (11,04)	54,8 (14,47)
16		20,4 (5,39)	28,1 (7,42)	33,5 (8,84)	44 (11,62)	59,2 (15,63)
15		21,6 (5,70)	29,2 (7,71)	34,2 (9,03)	46,2 (12,20)	62,9 (16,61)
14		22,6 (5,97)	31 (8,18)	36,1 (9,53)	49,2 (12,99)	67,7 (17,87)
13		23,8 (6,28)	32,5 (8,58)	38,4 (10,14)	51,4 (13,57)	71,6 (18,90)



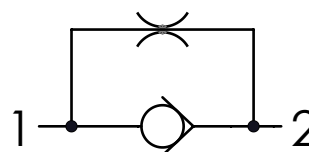


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>VS</b>	<b>380</b>	

<b>01</b>	VALVOLE UNIDIREZIONALI CON TRAFILAMENTO (CHECK VALVES WITH LEAKAGE)		<b>VS</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8	<b>380</b>
<b>03</b>	TAGLI (GAPS)	2 tagli (2 gaps)	<b>2T</b>
		4 tagli (4 gaps)	<b>4T</b>

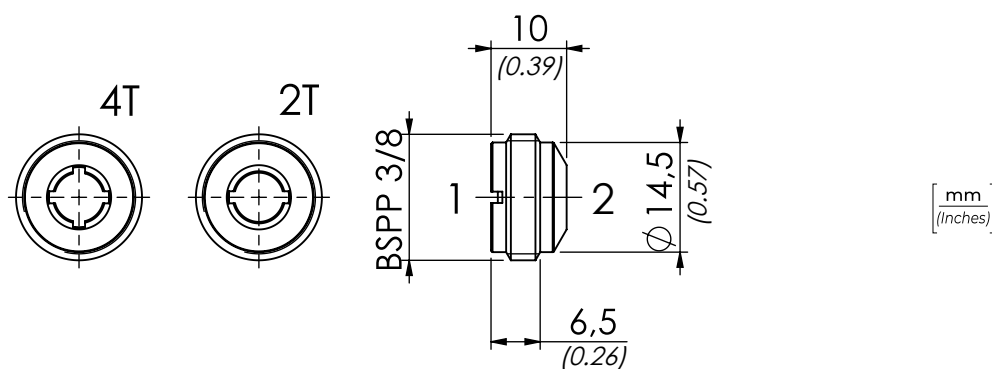
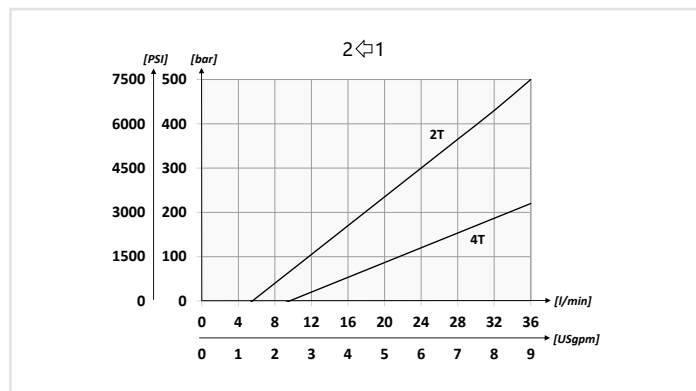
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	PESO APPROX APPROX WEIGHT kg-lbt
<b>VS380</b>	<b>35 (9.2)</b>	<b>500 (7250)</b>	<b>6 (4.5)</b>	<b>0,01 (0.022)</b>





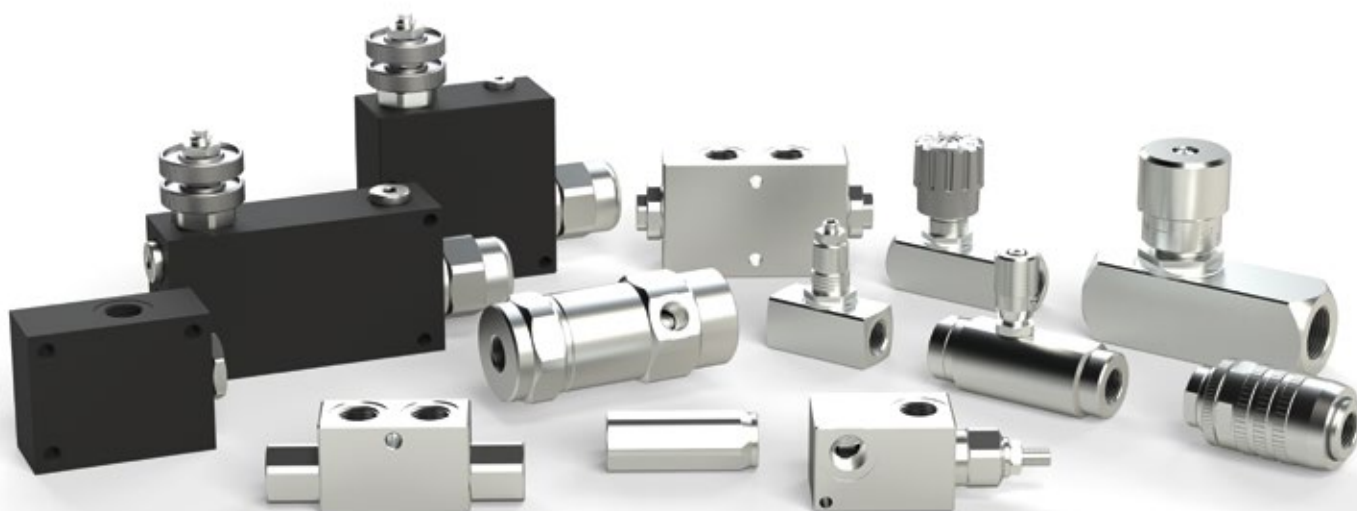


# VALVOLE IN LINEA

## IN-LINE VALVES

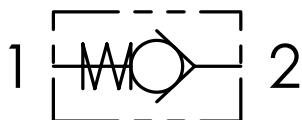
Le famiglia delle valvole in linea comprende: valvole di regolazione della portata unidirezionali, bidirezionali, valvole per il controllo di portata compensate, valvole divisori/riunificatori di flusso, valvole finecorsa, valvole di blocco singole e doppie, valvole antiurto doppie, valvole limitatrici di pressione per montaggio in linea e valvole di sequenza.

Unidirectional flow control valves, bidirectional flow control valves, flow control valves pressure compensated, flow dividers, end-stroke valves, single or double acting pilot check valves, double cross direct acting relief valves, direct acting relief valves and sequence valves.



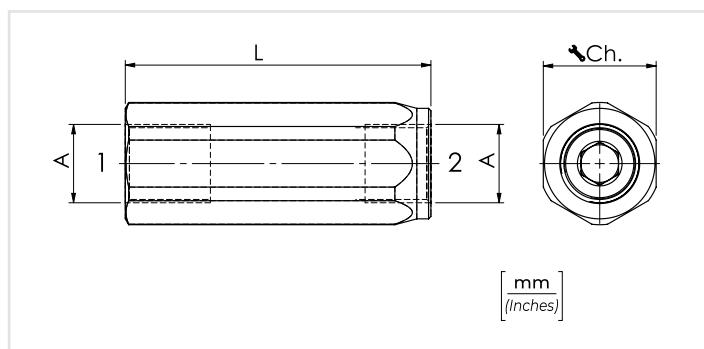


### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

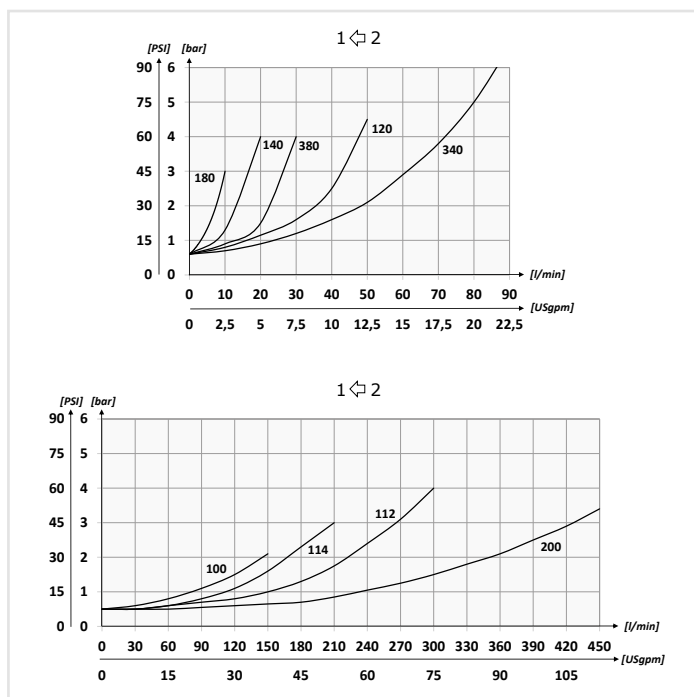


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04
<b>VUR</b>			

01	VALVOLE UNIDIREZIONALI A COLONNETTA F/F (F/F CHECK HOUSING VALVES)	VUR	
02	DIMENSIONE (SIZE)	BSPP 1/8	180
		BSPP 1/4	140
		BSPP 3/8	380
		BSPP 1/2	120
		BSPP 3/4	340
		BSPP 1	100
		BSPP 1-1/4	114
		BSPP 1-1/2	112
03	TENUTA (SEALING)	Tenuta a sfera solo per VUR180/140/380/120 e molla 1 bar (Ball sealing only for VUR180/140/380/120 and spring 1 bar)	SF
		Tenuta a cono (Poppet sealing)	SP
04	MOLLA (SPRING)	1 bar Standard (14.5 PSI)	1
		3 bar (43.5 PSI)	3
		4,5 bar (65.25 PSI)	4,5
		6 bar (87 PSI)	6
		10 bar (145 PSI)	Solo versione 120 (Only 120 version)

### PERFORMANCES

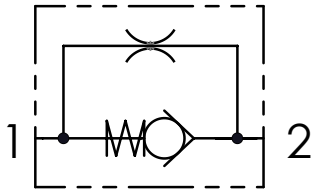


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	Ch.	PESO APPROX (kg) APPROX WEIGHT (lb)
VUR180	BSPP 1/8	5 (1.3)	400 (5800)	47 (1.85)	14	0,05 (0.11)
VUR140	BSPP 1/4	15 (4.0)		55 (2.17)	19	0,10 (0.22)
VUR380	BSPP 3/8	30 (7.9)		65 (2.56)	24	0,18 (0.40)
VUR120	BSPP 1/2	50 (13.2)		75 (2.95)	27	0,23 (0.50)
VUR340	BSPP 3/4	90 (23.8)		86,5 (3.41)	35	0,45 (1)
VUR100	BSPP 1	150 (39.6)	350 (5075)	110 (4.33)	41	0,73 (1.6)
VUR114	BSPP 1-1/4	200 (52.8)		123 (4.84)	54	1,5 (3.3)
VUR112	BSPP 1-1/2	300 (79.2)		138 (5.43)	59	1,85 (4.07)
VUR200	BSPP 2	430 (113.5)		145 (5.71)	69	2,7 (6)

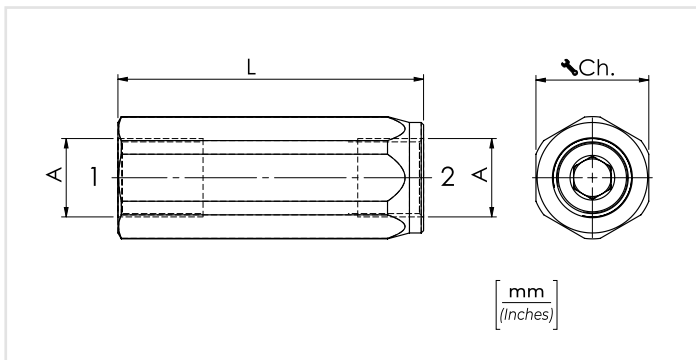


### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> <b>-4°F + 176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> <b>-4°F + 122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

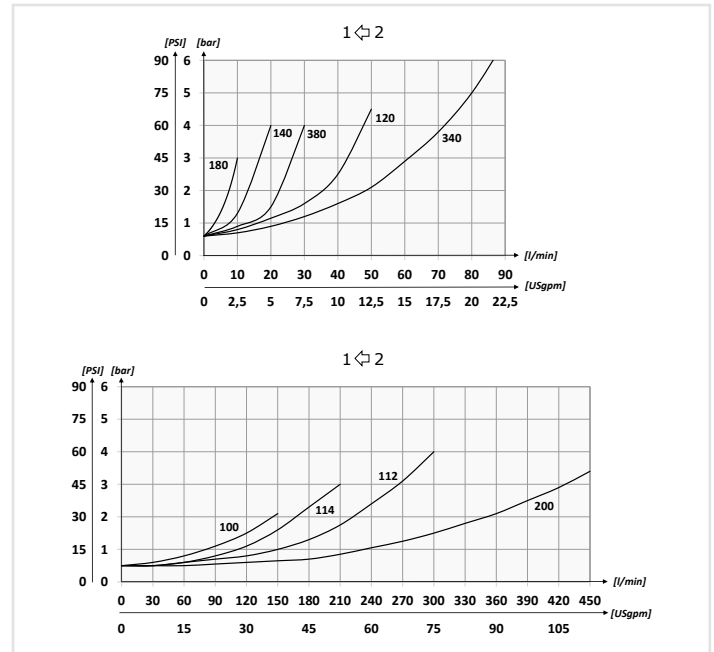


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VUR</b>		<b>SP</b>		

<b>01</b>	VALVOLE UNIDIREZIONALI F/F A COLONNETTA CON FORO DI STROZZATURA (F/F CHECK HOUSING VALVES WITH RESTRICTION HOLE)	<b>VUR</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/8	<b>180</b>
		BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
		BSPP 1-1/4	<b>114</b>
		BSPP 1-1/2	<b>112</b>
<b>03</b>	TENUTA (SEALING)	Tenuta a cono (Poppet sealing)	<b>SP</b>
<b>04</b>	MOLLA (SPRING)	1 bar Standard (14.5 PSI)	<b>1</b>
		3 bar (43.5 PSI)	<b>3</b>
		4,5 bar (65.25 PSI)	<b>4,5</b>
		6 bar (87 PSI)	<b>6</b>
		10 bar (145 PSI)	<b>10</b>
<b>05</b>	FORO DI STROZZATURA (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 0,06 in hole Cod. VUR380SP1-1,5	

### PERFORMANCES

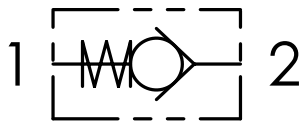


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
VUR180-H	BSPP 1/8	5 (1.3)	400 (5800)	47 (1.85)	14	0,05 (0.11)
VUR140-H	BSPP 1/4	15 (4.0)		55 (2.17)	19	0,10 (0.22)
VUR380-H	BSPP 3/8	30 (7.9)		65 (2.56)	24	0,18 (0.40)
VUR120-H	BSPP 1/2	50 (13.2)		75 (2.95)	27	0,23 (0.50)
VUR340-H	BSPP 3/4	90 (23.8)		86,5 (3.41)	35	0,45 (1)
VUR100-H	BSPP 1	150 (39.6)	350 (5075)	110 (4.33)	41	0,73 (1.6)
VUR114-H	BSPP 1-1/4	200 (52.8)		123 (4.84)	55	1,5 (3.3)
VUR112-H	BSPP 1-1/2	300 (79.2)		138 (5.43)	60	1,85 (4.07)
VUR200-H	BSPP 2	430 (113.5)	250 (3625)	145 (5.71)	70	2,7 (6)



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



**CODICE ORDINAZIONE**  
ORDERING CODE

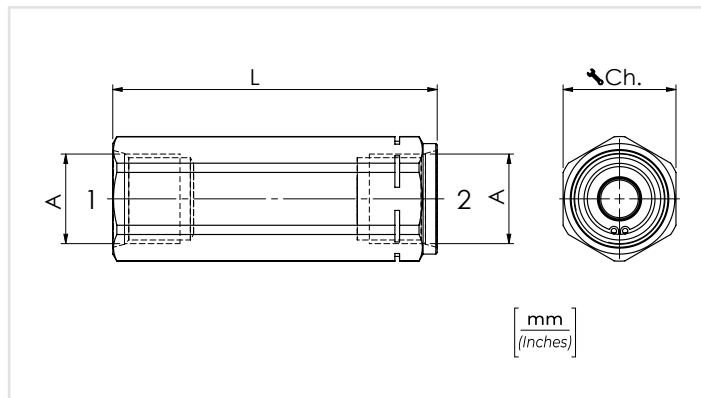
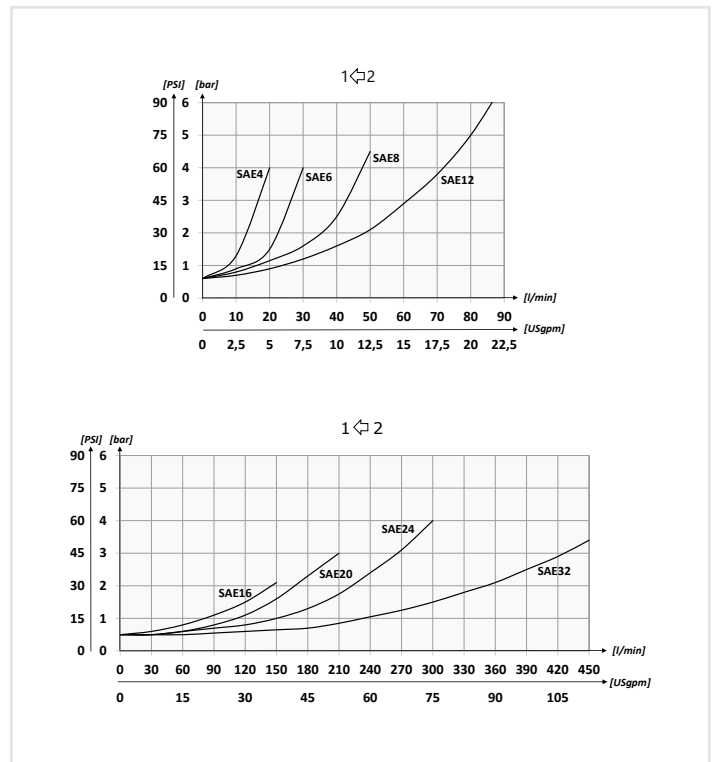
01	02	03	04
<b>VUR</b>		<b>SP</b>	

01	VALVOLE UNIDIREZIONALI A COLONNETTA F/F (F/F CHECK HOUSING VALVES)	VUR
02	DIMENSIONE (SIZE)	7/16-20UNF <b>4</b>
		9/16-18UNF <b>6</b>
		3/4-16UNF <b>8</b>
		1-1/16-12UN <b>12</b>
		1-5/16-12UN <b>16</b>
		1-5/8-12UN <b>20</b>
		1-7/8-12UN <b>24</b>
		2-1/2-12UN <b>32</b>
03	TENUTA (SEALING)	Tenuta a cono (Poppet sealing) <b>SP</b>
04	MOLLA (SPRING)	<b>0,5 bar Standard (7.25 PSI)</b> <b>0,5</b>
		<b>3 bar (43.5 PSI)</b> <b>3</b>
		<b>4,5 bar (65.25 PSI)</b> <b>4,5</b>
		<b>6 bar (87 PSI)</b> <b>6</b>

**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

**PERFORMANCES**

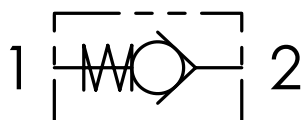


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)	
VUR4	7/16-20UNF	15 (4)	400 (5800)	55 (2.17)	19	0,11 (0.24)	
VUR6	9/16-18UNF	30 (7.9)		58 (2.28)	19	0,09 (0.20)	
VUR8	3/4-16UNF	50 (13.2)		69 (2.71)	24	0,18 (0.40)	
VUR12	1-1/16-12UN	90 (23.8)		88,5 (3.48)	35	0,45 (1)	
VUR16	1-5/16-12UN	150 (39.6)	350 (5075)	110 (4.33)	41	0,73 (1.6)	
VUR20	1-5/8-12UN	200 (52.8)		120 (4.72)	54	1,5 (3.43)	
VUR24	1-7/8-12UN	300 (79.2)		138 (5.43)	59	2,5 (5.5)	
VUR32	2-1/2-12UN	430 (113.5)				69	2,9 (6.4)

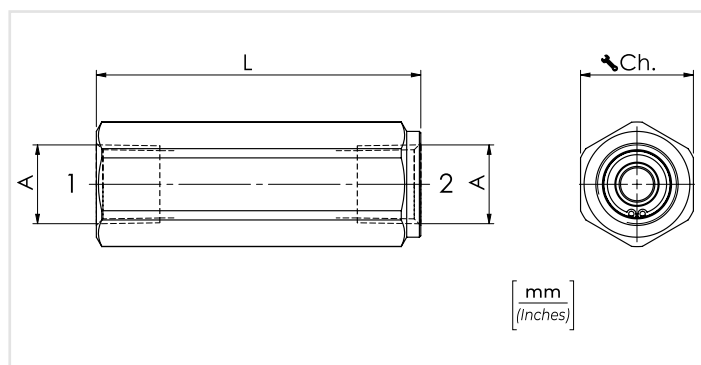


### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

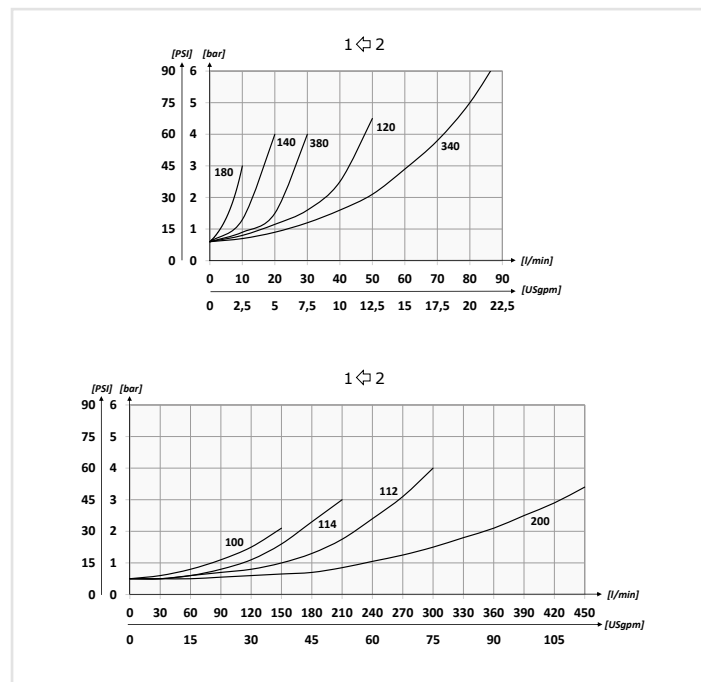
<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min



<b>CODICE ORDINAZIONE</b> ORDERING CODE	01 <b>VUR</b>	02	03 <b>SP</b>	04
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<b>01</b>	VALVOLE UNIDIREZIONALI A COLONNETTA F/F (F/F CHECK HOUSING VALVES)	<b>VUR</b>	
<b>02</b>	DIMENSIONE (SIZE)	1/8 NPTF	<b>180N</b>
		1/4 NPTF	<b>140N</b>
		3/8 NPTF	<b>380N</b>
		1/2 NPTF	<b>120N</b>
		3/4 NPTF	<b>340N</b>
		1 NPTF	<b>100N</b>
		1-1/4 NPTF	<b>114N</b>
		1-1/2 NPTF	<b>112N</b>
		2 NPTF	<b>200N</b>
<b>03</b>	TENUTA (SEALING)	Tenuta a cono (Poppet sealing)	<b>SP</b>
<b>04</b>	MOLLA (SPRING)	0,5 bar Standard (7.25 PSI)	<b>0,5</b>
		3 bar (43.5 PSI)	<b>3</b>
		4,5 bar (65.25 PSI)	<b>4,5</b>
		6 bar (87 PSI)	<b>6</b>
		10 bar (145 PSI)	<b>10</b>
		Solo versione 120N (Only 120N version)	<b>10</b>

### PERFORMANCES



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	Ch.	PESO APPROX (kg) APPROX WEIGHT (lb)
VUR180N	1/8 NPTF	5 (1,3)	400 (5800)	47 (1.85)	14	0,05 (0.11)
VUR140N	1/4 NPTF	15 (4)		58 (2.28)	19	0,10 (0.22)
VUR380N	3/8 NPTF	30 (7.9)		69 (2.72)	24	0,18 (0.40)
VUR120N	1/2 NPTF	50 (13.2)		75 (2.95)	27	0,23 (0.50)
VUR340N	3/4 NPTF	90 (23.8)		88,5 (3.48)	35	0,45 (1)
VUR100N	1 NPTF	150 (39.6)	350 (5075)	110 (4.33)	41	0,75 (1.7)
VUR114N	1-1/4 NPTF	200 (52.8)		120 (4.72)	54	1,5 (3.3)
VUR112N	1-1/2 NPTF	300 (79.2)		138 (5.43)	59	2,6 (5.7)
VUR200N	2 NPTF	430 (113.5)			69	3 (6.60)

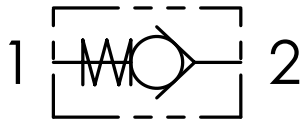
01 02 03 04

**CODICE ORDINAZIONE**  
ORDERING CODE

<b>VMF</b>			
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**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

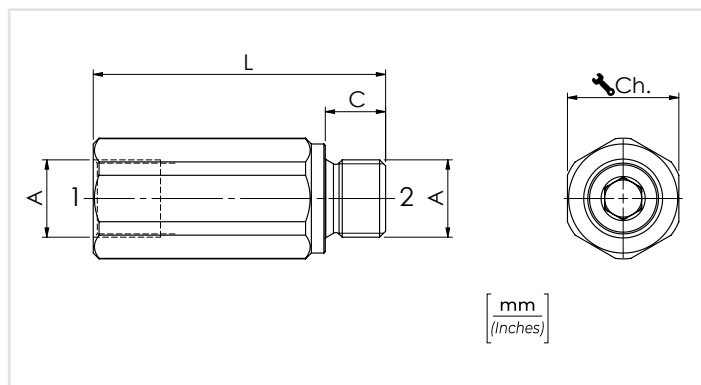
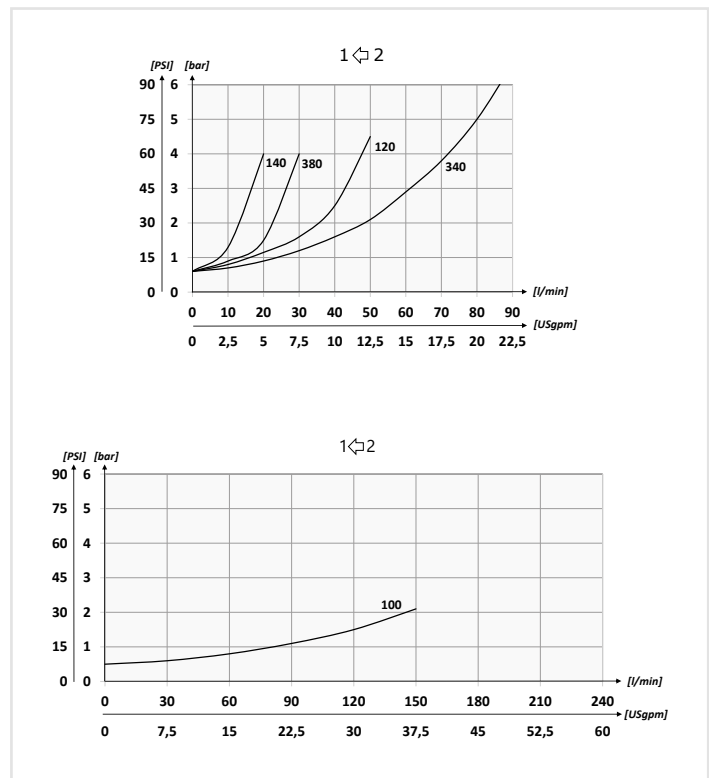


<b>01</b>	VALVOLE UNIDIREZIONALI A COLONNETTA M/F (M/F CHECK HOUSING VALVES)		<b>VMF</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
<b>03</b>	TENUTA (SEALING)	Tenuta a sfera solo per VMF140/380/120 e molla 1 bar (Ball sealing only for VMF140/380/120 and spring 1 bar)	<b>SF</b>
		Tenuta a cono (Poppet sealing)	<b>SP</b>
<b>04</b>	MOLLA (SPRING)	1 bar Standard (14.5 PSI)	<b>1</b>
		3 bar (43.5 PSI)	<b>3</b>
		4,5 bar (65 PSI)	<b>4,5</b>
		6 bar (87 PSI)	<b>6</b>
		10 bar (145 PSI)	<b>10</b>
		Solo versione 120 (Only 120 version)	

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min

**PERFORMANCES**

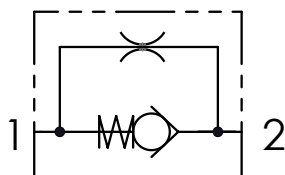


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	C	Ch.	PESO APPROX APPROX WEIGHT kg-lbt
VMF140	BSPP 1/4	15 (4)	400 (5800)	50 (1.96)	11 (0.43)	19 (0.75)	0,08 (0.18)
VMF380	BSPP 3/8	30 (8)		63 (2.48)	13 (0.51)	24 (0.94)	0,16 (0.35)
VMF120	BSPP 1/2	50 (13)		70 (2.75)	14 (0.55)	27 (1.06)	0,20 (0.44)
VMF340	BSPP 3/4	90 (23)		82 (3.23)	17 (0.67)	35 (1.38)	0,39 (0.86)
VMF100	BSPP 1	150 (40)	350 (5075)	100,5 (3.95)	19 (0.75)	41 (1.61)	0,63 (1.38)

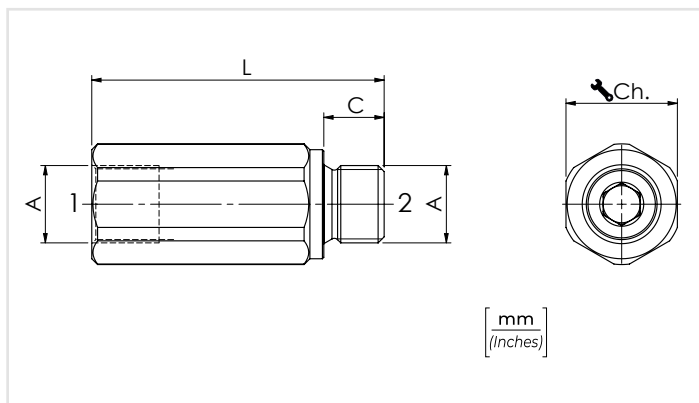


### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

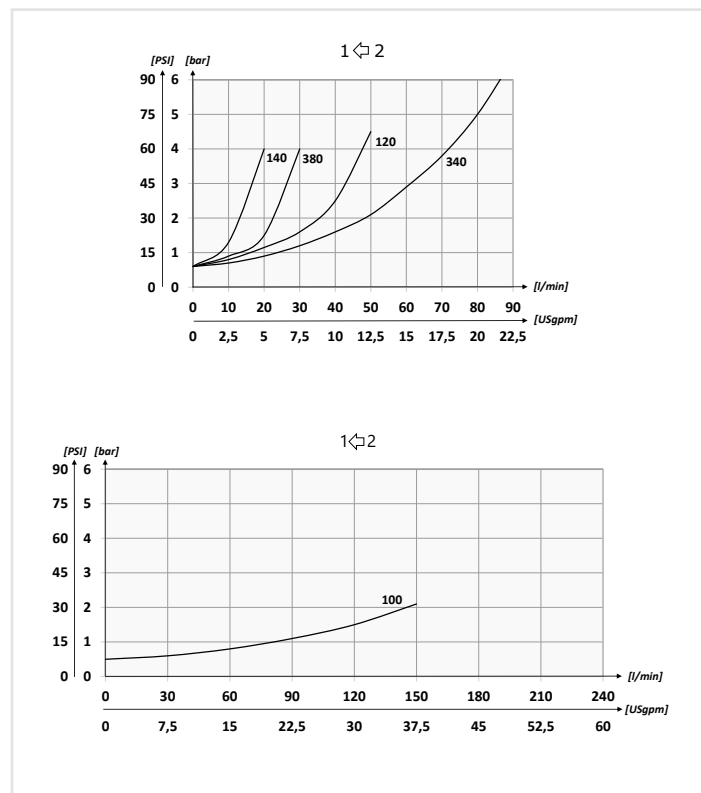


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VMF</b>		<b>SP</b>		

<b>01</b>	VALVOLE UNIDIREZIONALI A COLONNETTA M/F (M/F CHECK HOUSING VALVES)		<b>VMF</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
<b>03</b>	TENUTA (SEALING)	Tenuta a cono (Poppet sealing)	<b>SP</b>
<b>04</b>	MOLLA (SPRING)	1 bar Standard (14.5 PSI)	<b>1</b>
		3 bar (43.5 PSI)	<b>3</b>
		4,5 bar (65 PSI)	<b>4,5</b>
		6 bar (87 PSI)	<b>6</b>
		10 bar (145 PSI)	<b>10</b>
		Solo versione 120 (Only 120 version)	
<b>05</b>	FORO DISTROZZATURA (RESTRICTION HOLE)	Indicare il diametro del foro. Esempio: VMF380SP1 con foro Ø 1,5 mm Cod. VMF380SP1-1,5 State the hole diameter Example: VMF380SP1-1,5 with Ø 0,06 in hole Cod. VMF380SP1-1,5	

### PERFORMANCES



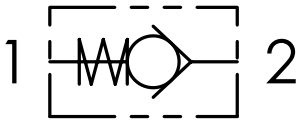
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	C	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
VMF140-H	BSPP 1/4	15 (4)	400 (5800)	50 (1.96)	11 (0.43)	19 (0.75)	0,08 (0.18)
VMF380-H	BSPP 3/8	30 (8)		63 (2.48)	13 (0.51)	24 (0.94)	0,16 (0.35)
VMF120-H	BSPP 1/2	50 (13)		70 (2.75)	14 (0.55)	27 (1.06)	0,20 (0.44)
VMF340-H	BSPP 3/4	90 (23)		82 (3.23)	17 (0.67)	35 (1.38)	0,39 (0.86)
VMF100-H	BSPP 1	150 (40)	350 (5075)	100,5 (3.95)	19 (0.75)	41 (1.61)	0,63 (1.38)





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

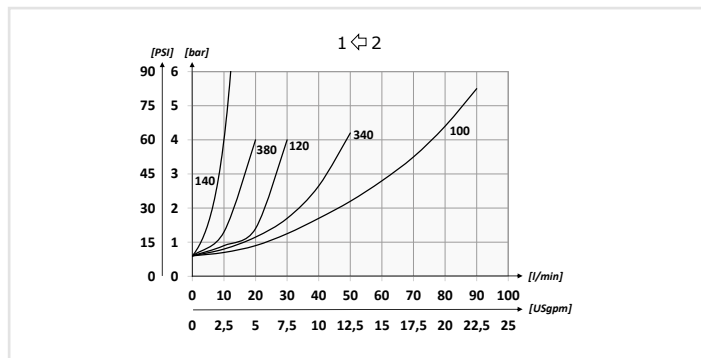


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04
<b>VUN</b>			

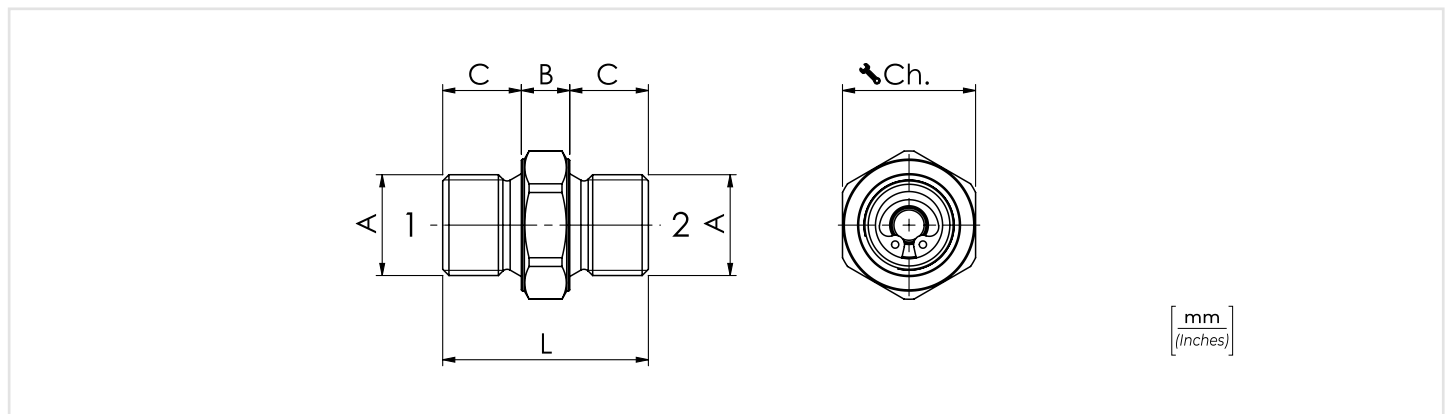
<b>01</b>	VALVOLE UNIDIREZIONALI M/M (M/M CHECK VALVES)		<b>VUN</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
<b>03</b>	TENUTA (SEALING)	Tenuta a sfera solo per VUN140/380/120 e molla 1 bar (Ball sealing only for VUN140/380/120 and spring 1 bar)	<b>SF</b>
		Tenuta a cono (Poppet sealing)	<b>SP</b>
<b>04</b>	MOLLA (SPRING)	1 bar Standard (14.5 PSI)	<b>1</b>
		3 bar (43.5 PSI)	<b>3</b>
		4,5 bar (65.25 PSI)	<b>4,5</b>
		6 bar (87 PSI)	<b>6</b>

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm²/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> / Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> / Max leakage	<b>0,25 cm³/min - 5 gocce/min</b> 0,015 in³/min - 5 drops/min



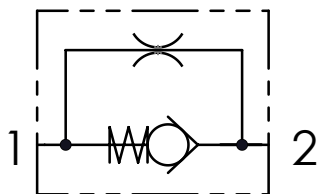
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

CODICE CODE	A	PORTATA MAX MAX FLOW /min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	L	B	C	Ch.	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	COPPIA MAX DI SERRAGGIO TUBO MAX TIGHTENING TORQUE FOR HOSE (lbt in)	PESO APPROX APPROX WEIGHT kg - (lbt)
VUN140	BSPP 1/4	5 (1.3)	500 (7250)	29 (0.28)	7 (1.27)	11 (0.43)	19	30 (22.2)	20 (14.75)	0,03 (0.066)
VUN380	BSPP 3/8	15 (4)		34 (1.34)	8 (0.31)	13 (0.51)	22	45 (33.2)	35 (25.8)	0,05 (0.01)
VUN120	BSPP 1/2	30 (7.9)		44 (1.73)	16 (0.63)	14 (0.55)	27	60 (44.3)	50 (36.8)	0,11 (0.24)
VUN340	BSPP 3/4	50 (13.2)		50 (1.97)	16 (0.63)	17 (0.67)	32	100 (73.75)	90 (66.3)	0,18 (0.40)
VUN100	BSPP 1	90 (23.8)		57 (2.24)	19 (0.75)	19 (0.75)	41	140 (103.3)	120 (88.5)	0,32 (0.71)





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

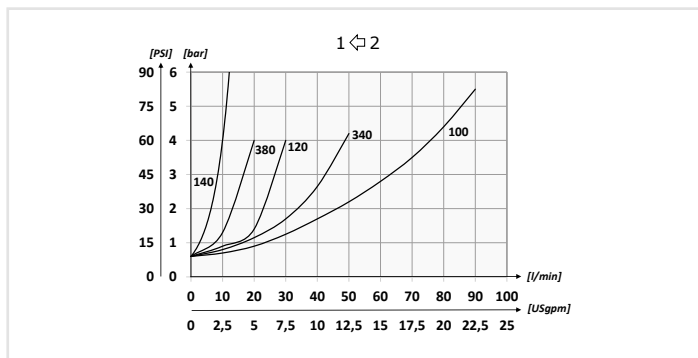


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VUN</b>		<b>SP</b>		

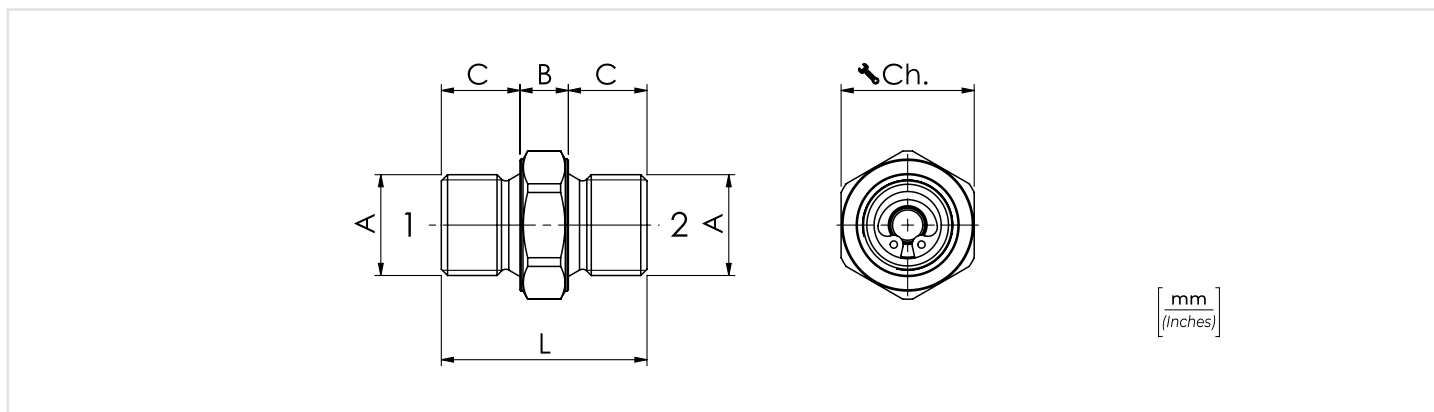
<b>01</b>	VALVOLE UNIDIREZIONALI M/M CON FORO DI STROZZATURA (M/M CHECK VALVES WITH RESTRICTION HOLE)	<b>VUN</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4 <b>140</b>
		BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>
		BSPP 3/4 <b>340</b>
		BSPP 1 <b>100</b>
<b>03</b>	TENUTA (SEALING)	Tenuta a cono (Poppet sealing) <b>SP</b>
<b>04</b>	MOLLA (SPRING)	1 bar Standard (14.5 PSI) <b>1</b>
		3 bar (43.5 PSI) <b>3</b>
		4,5 bar (65.25 PSI) <b>4,5</b>
		6 bar (87 PSI) <b>6</b>
<b>05</b>	FORO DI STROZZATURA (RESTRICTION HOLE)	Indicare il diametro del foro. Esempio: VUN380SP1 con foro Ø 1,5 mm Cod. VUN380SP1-1,5 State the hole diameter Example: VUN380SP1-1,5 with Ø 0,06 in hole Cod. VUN380SP1-1,5

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> <b>0,015 in<sup>3</sup>/min - 5 drops/min</b>



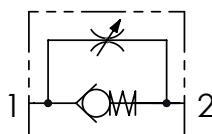
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

CODICE CODE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	L	B	C	Ch.	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	COPPIA MAX DI SERRAGGIO TUBO (Nm) MAX TIGHTENING TORQUE FOR HOSE (lbt in)	PESO APPROX (kg) APPROX WEIGHT (lbt)
VUN140-H	BSPP 1/4	5 (1.3)	500 (7250)	29 (0.28)	7 (1.27)	11 (0.43)	19	30 (22.2)	20 (14.75)	0,03 (0.066)
VUN380-H	BSPP 3/8	15 (4)		34 (1.34)	8 (0.31)	13 (0.51)	22	45 (33.2)	35 (25.8)	0,05 (0.01)
VUN120-H	BSPP 1/2	30 (7.9)		44 (1.73)	16 (0.63)	14 (0.55)	27	60 (44.3)	50 (36.8)	0,11 (0.24)
VUN340-H	BSPP 3/4	50 (13.2)		50 (1.97)	16 (0.63)	17 (0.67)	32	100 (73.75)	90 (66.3)	0,18 (0.40)
VUN100-H	BSPP 1	90 (23.8)		57 (2.24)	19 (0.75)	19 (0.75)	41	140 (103.3)	120 (88.5)	0,32 (0.71)



**TENUTA A SFERA SOLO PER VURF 140/380/120**  
**BALL SEALING ONLY FOR VURF 140/380/120**

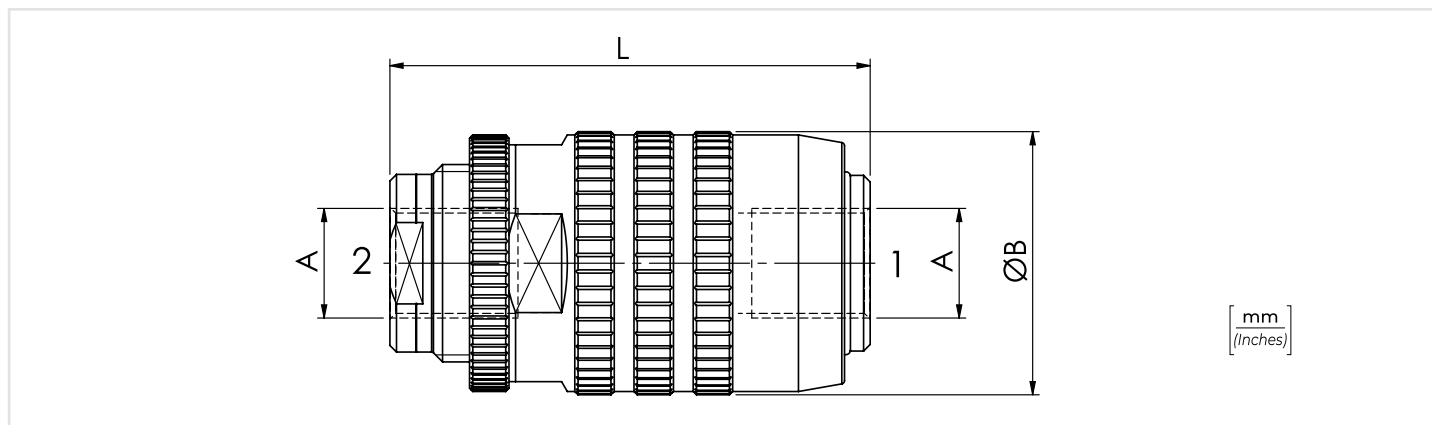
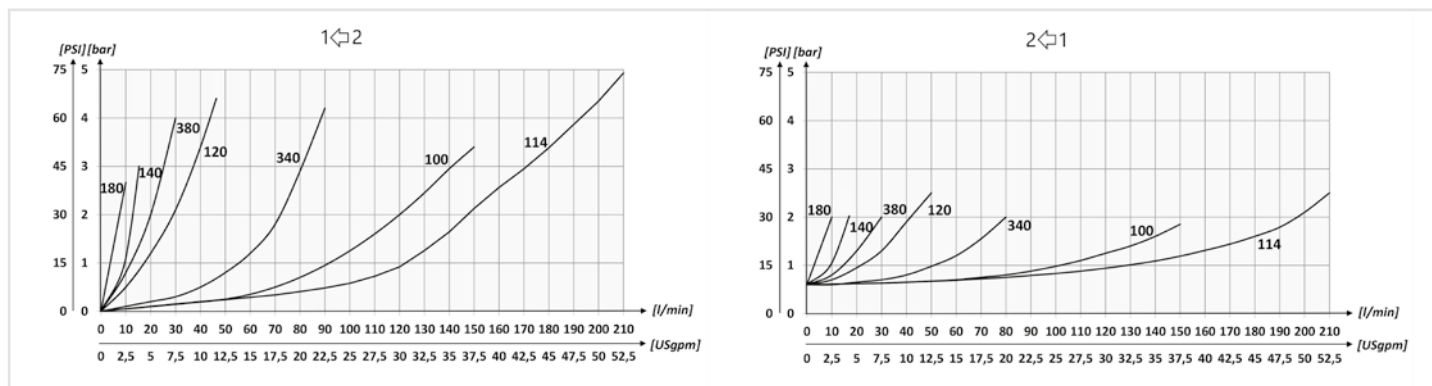
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**



**CODICE ORDINAZIONE**  
**ORDERING CODE**

01	02
<b>VURF</b>	

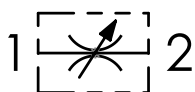
<b>01</b>	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI (UNIDIRECTIONAL FLOW CONTROL VALVES)	<b>VURF</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/8	<b>180</b>
		BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
		BSPP 1-1/4	<b>114</b>

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	L	PESO APPROX APPROX WEIGHT kg-lbt
VURF180	BSPP 1/8	5 (1,3)	350 (5075)	25 (0.98)	48 (1.89)	0,12 (0.26)
VURF140	BSPP 1/4	15 (4)		34 (1.34)	62 (2.44)	0,28 (0.6)
VURF380	BSPP 3/8	30 (7.9)		39 (1.54)	73 (2.87)	0,46 (1.01)
VURF120	BSPP 1/2	45 (11.9)	300 (4350)	44 (1.73)	83 (3.27)	0,66 (1.45)
VURF340	BSPP 3/4	85 (22.4)		54 (2.13)	102 (4.02)	1,10 (2.42)
VURF100	BSPP 1	150 (39.6)	250 (3625)	65 (2.56)	124,5 (4.90)	1,9 (4.20)
VURF114	BSPP 1-1/4	200 (52.8)		75 (2.95)	144 (5.67)	2,95 (6.32)



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



**CODICE ORDINAZIONE**  
ORDERING CODE

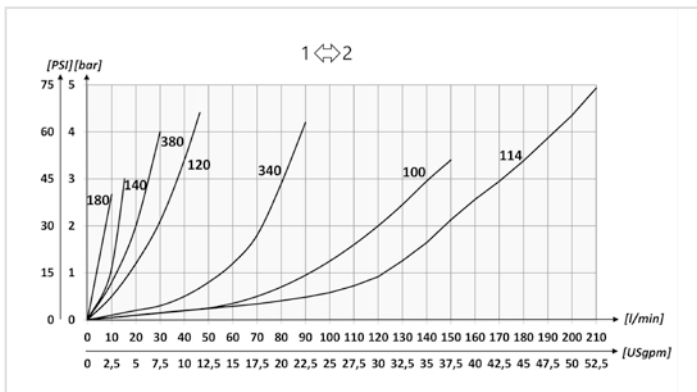
01	02
<b>VBRF</b>	

<b>01</b>	VALVOLE DI CONTROLLO FLUSSO BIDIREZIONALI (BIDIRECTIONAL FLOW CONTROL VALVES)	<b>VBRF</b>
<b>02</b>	DIMENSIONE (SIZE)	
	BSPP 1/8	<b>180</b>
	BSPP 1/4	<b>140</b>
	BSPP 3/8	<b>380</b>
	BSPP 1/2	<b>120</b>
	BSPP 3/4	<b>340</b>
	BSPP 1	<b>100</b>
	BSPP 1-1/4	<b>114</b>

**DATI TECNICI / TECHNICAL DATA**

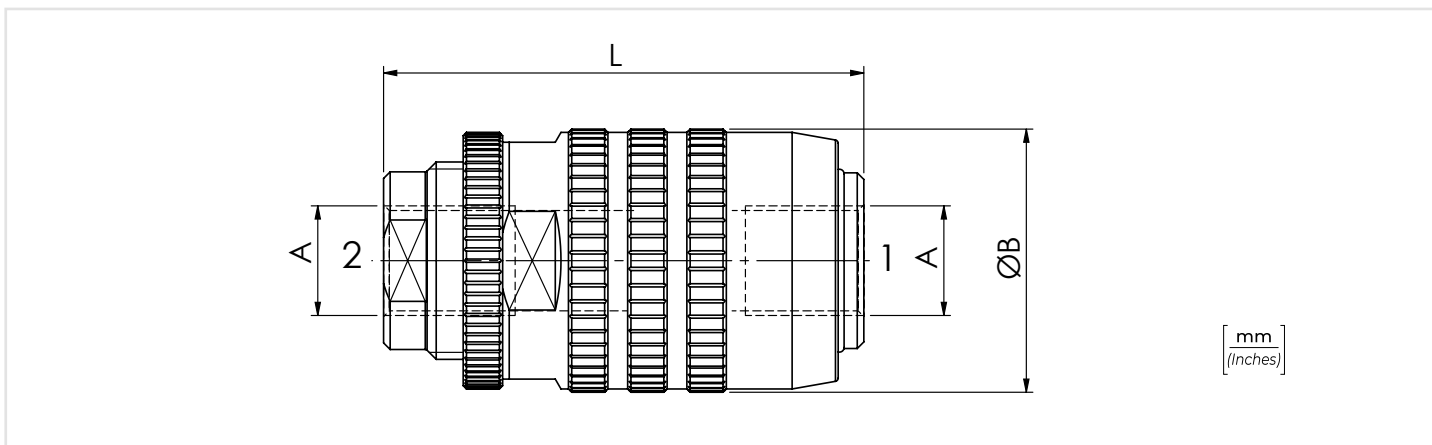
<b>Olio idraulico</b> - Mineral oil	ISO 6743/4 (DIN 51524)		
<b>Viscosità olio</b> - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
<b>Temperatura dell'olio</b> - Oil temperature	-20°C +80°C	-4°F	+176°F
<b>Temperatura ambiente</b> - Environment temperature	-20°C +50°C	-4°F	+122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)			

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	L	PESO APPROX APPROX WEIGHT kg-lbt
VBRF180	BSPP 1/8	5 (1,3)	350 (5075)	25 (0.98)	48 (1.89)	0,12 (0,26)
VBRF140	BSPP 1/4	15 (4)		34 (1.34)	62 (2.44)	0,28 (0,6)
VBRF380	BSPP 3/8	30 (7.9)		39 (1.54)	73 (2.87)	0,45 (1)
VBRF120	BSPP 1/2	45 (11.9)		44 (1.73)	83 (3.27)	0,63 (1.4)
VBRF340	BSPP 3/4	85 (22.4)	300 (4350)	54 (2.13)	102 (4.02)	1,06 (2.33)
VBRF100	BSPP 1	150 (39.6)	250 (3625)	65 (2.56)	124,5 (4.90)	1,8 (4)
VBRF114	BSPP 1-1/4	200 (52.8)		75 (2.95)	144 (5.67)	2,78 (5.96)





POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



BSPP STU140 - STU380 - STU120

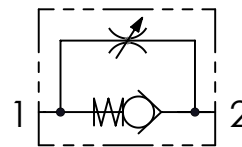


BSPP STU180 - STU340 - STU100 - STU114 - STU112

<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02
	<b>STU</b>	

01	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI (UNIDIRECTIONAL FLOW CONTROL VALVES)	STU	
02	DIMENSIONE (SIZE)  Tenuta a sfera solo per STU180/140/380/120  Ball sealing only for STU180/140/380/120	BSPP 1/8	<b>180</b>
		BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
		BSPP 1-1/4	<b>114</b>
		BSPP 1-1/2	<b>112</b>

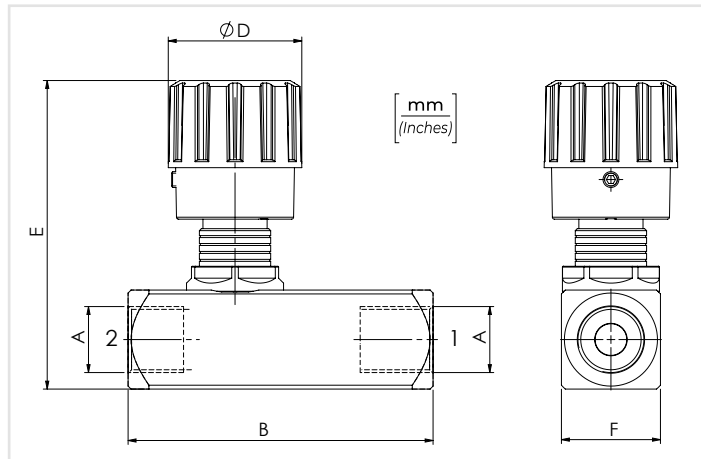
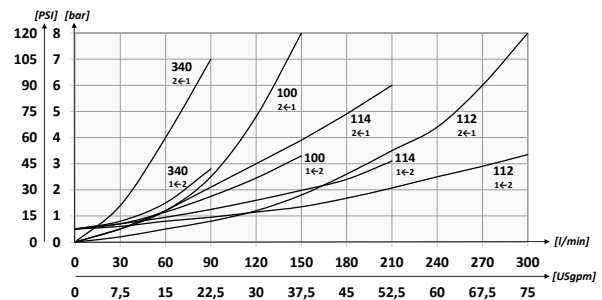
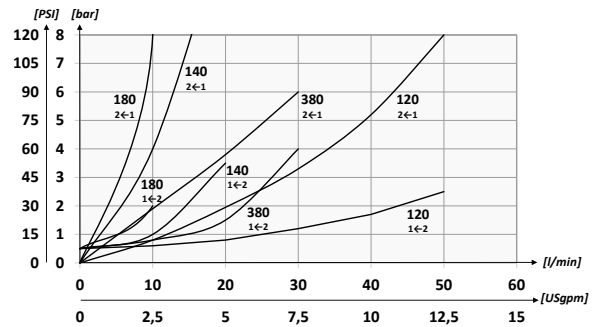
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### PERFORMANCES



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	D	E	F	PESO APPROX APPROX WEIGHT kg-lbt
STU180	BSPP 1/8	10 (2.6)	400 (5800)	58 (2.28)	20 (0.79)	53 (2.09)	20 (0.79)	0,19 (0.42)
STU140	BSPP 1/4	15 (4)		66 (2.60)	30 (1.18)	71,5 (2.81)	25 (0.98)	0,34 (0.75)
STU380	BSPP 3/8	30 (7.9)		77 (3.03)				0,36 (0.80)
STU120	BSPP 1/2	50 (13.2)		91 (3.58)	33 (1.30)	72 (2.83)	30 (1.18)	0,60 (1.3)
STU340	BSPP 3/4	80 (21.1)		112,5 (4.43)	42 (1.65)	94 (3.70)	40 (1.57)	1,33 (3)
STU100	BSPP 1	150 (39.6)		141 (5.55)				99 (3.90)
STU114	BSPP 1-1/4	200 (52.8)	350 (5075)	155 (6.10)	53 (2.09)	121,5 (4.78)	55 (2.17)	3,1 (6.8)
STU112	BSPP 1-1/2	300 (79.2)		168 (6.61)				131,5 (5.18)



POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



BSPP STUF140 - STUF380 - STUF120

BSPP STUF180 - STUF340 - STUF100 - STUF114 - STUF112

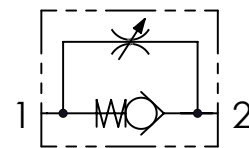
**CODICE ORDINAZIONE**  
ORDERING CODE

01  
**STUF**

02

01	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI (UNIDIRECTIONAL FLOW CONTROL VALVES)	STUF
02	Tenuta a sfera solo per STU180/140/380/120  Ball sealing only for STU180/140/380/120	BSPP 1/8 <b>180</b>
		BSPP 1/4 <b>140</b>
		BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>
		BSPP 3/4 <b>340</b>
		BSPP 1 <b>100</b>
		BSPP 1-1/4 <b>114</b>
	BSPP 1-1/2 <b>112</b>	

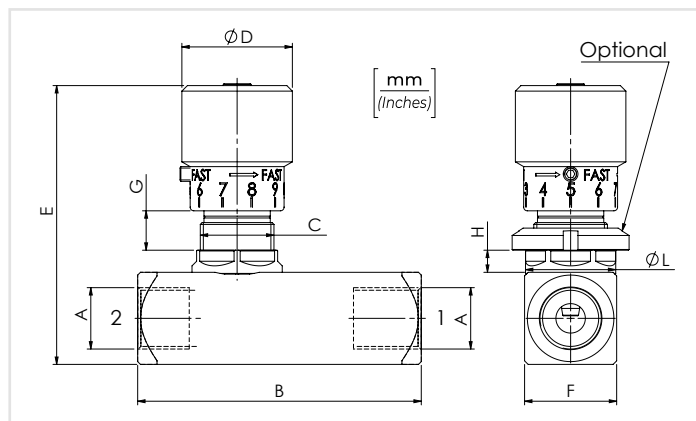
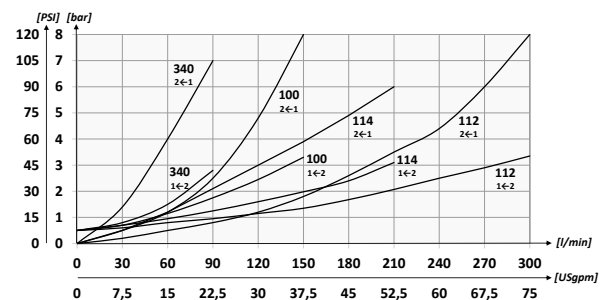
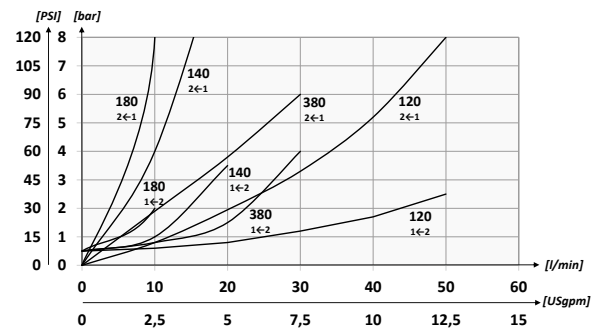
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

**Olio idraulico** - Mineral oil **ISO 6743/4 (DIN 51524)**  
**Viscosità olio** - Oil viscosity **15-250 mm<sup>2</sup>/s (15 to 250 cSt)**  
**Classe di contaminazione max con filtro** **ISO 4406:1999 Classe 19/17/14**  
 Max contamination index with filter  
**Temperatura dell'olio** - Oil temperature **-20°C +80°C -4°F +176°F**  
**Temperatura ambiente** - Environment temperature **-20°C +50°C -4°F +122°F**  
**È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)**  
 It is necessary a filter use to protect the valve (advised filtration 15 µm)

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	OPTIONAL TYPE	PESO APPROX APPROX WEIGHT kg-lbt
STUF180	BSPP 1/8	10 (2.6)	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	0,20 (0.44)
STUF140	BSPP 1/4	15 (4)		66 (2.60)	M20x1	33 (1.30)	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 (7.9)		77 (3.03)									0,40 (0.88)
STUF120	BSPP 1/2	50 (13.2)		91 (3.58)	M25x1,5	42 (1.65)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.27)	29,5 (1.16)	84100023	0,63 (1.40)
STUF340	BSPP 3/4	80 (21.1)	112,5 (4.43)	M35x1,5	45 (1.77)								110 (4.33)
STUF100	BSPP 1	150 (39.6)	141 (5.55)	M45x1,5		53 (2.09)	137 (5.39)	55 (2.17)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	
STUF114	BSPP 1-1/4	200 (52.8)	155 (6.10)		168 (6.61)								147 (5.79)
STUF112	BSPP 1-1/2	300 (79.2)											4,7 (10.3)



**POMELLO IN ALLUMINIO PRESSOFUSO**  
DIE CAST ALUMINIUM HANDKNOB

**POMELLO IN ALLUMINIO TORNITO**  
TURNED ALUMINIUM HANDKNOB



NPTF **STU140N - STU380N - STU120N**



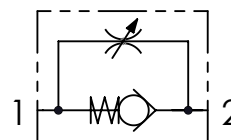
NPTF **STU180N - STU340N - STU100N - STU114N - STU12N**

**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>STU</b>	

01	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI (UNIDIRECTIONAL FLOW CONTROL VALVES)	STU
02	DIMENSIONE (SIZE)	NPTF 1/8 <b>180N</b>
		NPTF 1/4 <b>140N</b>
		NPTF 3/8 <b>380N</b>
		NPTF 1/2 <b>120N</b>
		NPTF 3/4 <b>340N</b>
		NPTF 1 <b>100N</b>
		NPTF 1-1/4 <b>114N</b>
		NPTF 1-1/2 <b>112N</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

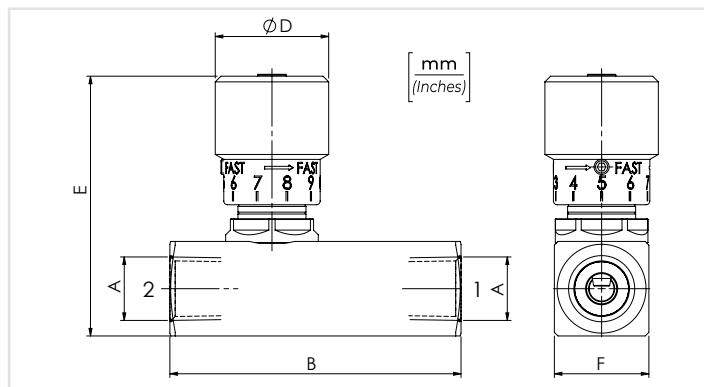
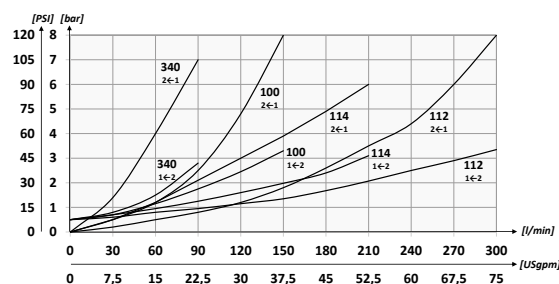
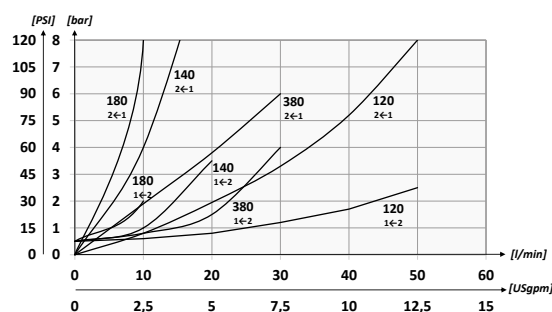


**DATI TECNICI / TECHNICAL DATA**

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F

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

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	D	E	F	PESO APPROX (kg) APPROX WEIGHT (lbt)
STU180N	NPTF 1/8	10 (2.6)	400 (5800)	58 (2.28)	20 (0.79)	53 (2.08)	20 (0.79)	0,19 (0.42)
STU140N	NPTF 1/4	15 (4)		66 (2.60)				
STU380N	NPTF 3/8	30 (7.9)		77 (3.03)	33 (1.30)	68 (2.68)	25 (0.98)	0,40 (0.9)
STU120N	NPTF 1/2	50 (13.2)		91 (3.58)				
STU340N	NPTF 3/4	80 (21.1)		112,5 (4.43)	42 (1.65)	94 (3.70)	40 (1.57)	1,40 (3.09)
STU100N	NPTF 1	150 (39.6)	141 (5.55)	99 (3.90)				
STU114N	NPTF 1-1/4	200 (52.8)	350 (5075)	155 (6.10)	53 (2.09)	121,5 (4.78)	55 (2.17)	3,06 (6.73)
STU112N	NPTF 1-1/2	300 (79.2)		168 (6.61)				





POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



NPTF STUF140N - STUF380N - STUF120N

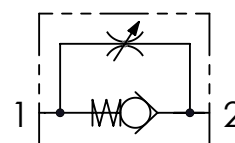
NPTF STUF180N - STUF340N - STUF100N - STUF114N - STUF112N

**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>STUF</b>	

<b>01</b>	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI (UNIDIRECTIONAL FLOW CONTROL VALVES)	<b>STUF</b>
<b>02</b>	DIMENSIONE (SIZE)	NPTF 1/8 <b>180N</b>
		NPTF 1/4 <b>140N</b>
		NPTF 3/8 <b>380N</b>
		NPTF 1/2 <b>120N</b>
		NPTF 3/4 <b>340N</b>
		NPTF 1 <b>100N</b>
		NPTF 1-1/4 <b>114N</b>
NPTF 1-1/2 <b>112N</b>		

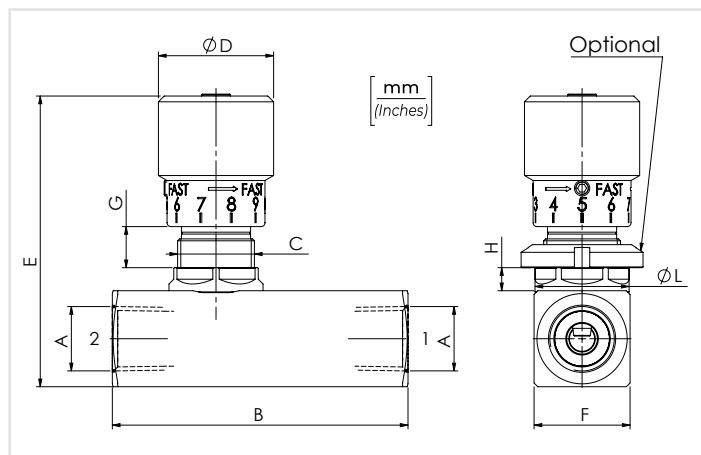
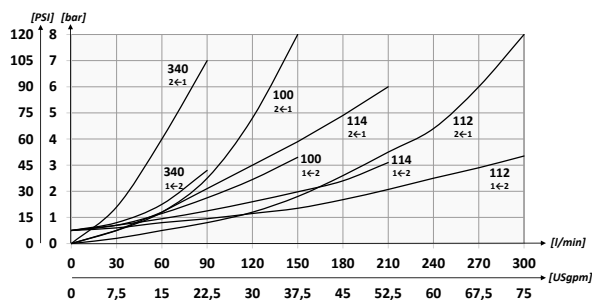
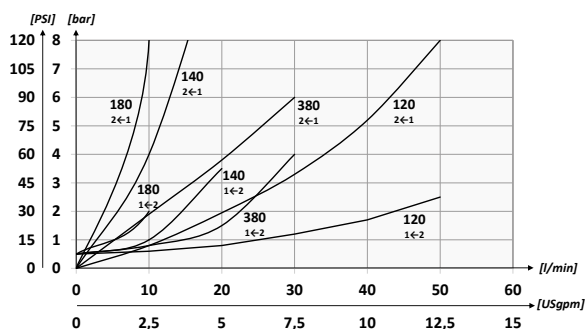
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	ISO 6743/4 (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
<b>Temperatura dell'olio</b> - Oil temperature	-20°C +80°C -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	OPTIONAL TYPE	PESO APPROX APPROX WEIGHT kg-lbt
STUF180N	NPTF 1/8	10 (2.6)	400 (5800)	58 (2.28)	M15x1	20 (0.79)	60,5 (2.38)	20 (0.79)	8 (0.31)	5,5 (0.22)	19,5 (0.77)	84100031	0,20 (0.44)
STUF140N	NPTF 1/4	15 (4)		66 (2.60)	M20x1	33 (1.30)	75 (2.95)	25 (0.98)	7,5 (0.30)	6 (0.24)	24,5 (0.96)	84100022	0,40 (0.88)
STUF380N	NPTF 3/8	30 (7.9)		77 (3.03)									0,42 (0.92)
STUF120N	NPTF 1/2	50 (13.2)		91 (3.58)	M25x1,5	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.28)	29,5 (1.16)	84100023	0,63 (1.40)	
STUF340N	NPTF 3/4	80 (21.1)		112,5 (4.43)	M35x1,5	42 (1.65)	110 (4.33)	40 (1.57)	15,5 (0.61)	8 (0.31)	39,5 (1.56)	84100024	1,5 (3.3)
STUF100N	NPTF 1	150 (39.6)	141 (5.55)	115 (4.53)									45 (1.77)
STUF114N	NPTF 1-1/4	200 (52.8)	350 (5075)	155 (6.10)	M45x1,5	53 (2.09)	137 (5.39)	55 (2.17)	13,5 (0.53)	10 (0.39)	50 (1.97)	84100030	3,2 (7.05)
STUF112N	NPTF 1-1/2	300 (79.2)		168 (6.61)									147 (5.79)



POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



SAE **STUF4 - STUF6 - STUF8**

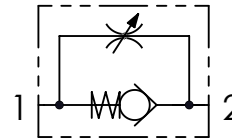
SAE **STU4S - STUF12  
STUF16 - STUF20 - STUF24**

**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>STU</b>	

<b>01</b>	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI (UNIDIRECTIONAL FLOW CONTROL VALVES)	<b>STU</b>
<b>02</b>	DIMENSIONE (SIZE)	7/16-20UNF Small <b>4S</b>
		7/16-20UNF <b>4</b>
		9/16-18UNF <b>6</b>
		3/4-16UNF <b>8</b>
		1-1/16-12UN <b>12</b>
		1-5/16-12UN <b>16</b>
		1-5/8-12UN <b>20</b>
1-7/8-12UN <b>24</b>		

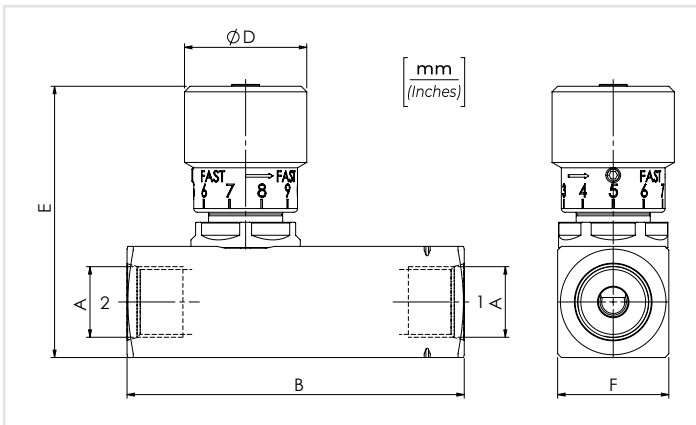
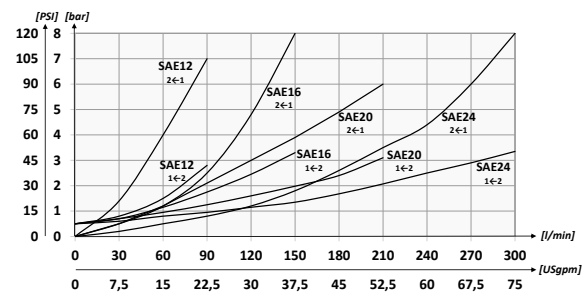
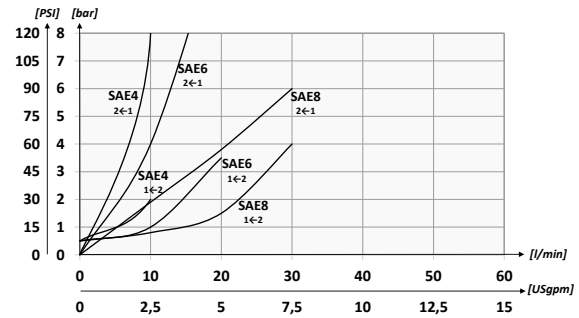
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	D	E	F	PESO APPROX (kg) APPROX WEIGHT (lbt)	
STU4S	7/16-20UNF	10 (2.6)	400 (5800)	66 (2.60)	33 (1.30)	68 (2.68)	20 (0.79)	0,21 (0.46)	
STU4							25 (0.98)	0,39 (0.85)	
STU6							30 (1.18)	0,40 (0.9)	
STU8	3/4-16UNF	30 (7.9)		112,5 (4.43)	91 (3.58)	42 (1.65)	94 (3.70)	40 (1.57)	1,28 (2.80)
STU12	1-1/16-12UN	80 (21.1)						45 (1.77)	1,87 (4.11)
STU16	1-5/16-12UN	150 (39.6)						55 (2.17)	3,06 (6.73)
STU20	1-5/8-12UN	200 (52.8)	350 (5075)	155 (6.10)	53 (2.09)	121,5 (4.78)	55 (2.17)	3,06 (6.73)	
STU24	1-7/8-12UN	300 (79.2)					168 (6.61)	131,5 (5.18)	65 (2.56)





POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



SAE STUF4 - STUF6 - STUF8

SAE STUF4S - STUF12  
STUF16 - STUF20 - STUF24

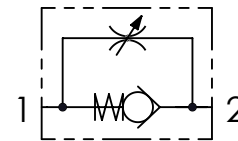
**CODICE ORDINAZIONE**  
ORDERING CODE

01  
**STUF**

02

01	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI (UNIDIRECTIONAL FLOW CONTROL VALVES)	STUF	
02	DIMENSIONE (SIZE)	7/16-20UNF Small	<b>4S</b>
		7/16-20UNF	<b>4</b>
		9/16-18UNF	<b>6</b>
		3/4-16UNF	<b>8</b>
		1-1/16-12UN	<b>12</b>
		1-5/16-12UN	<b>16</b>
		1-5/8-12UN	<b>20</b>
1-7/8-12UN	<b>24</b>		

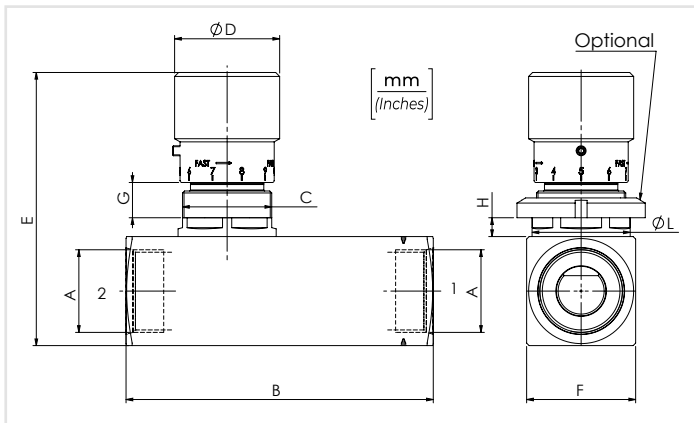
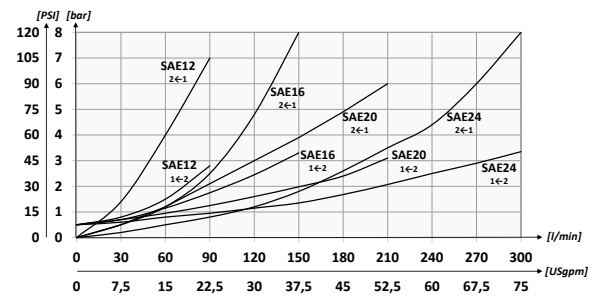
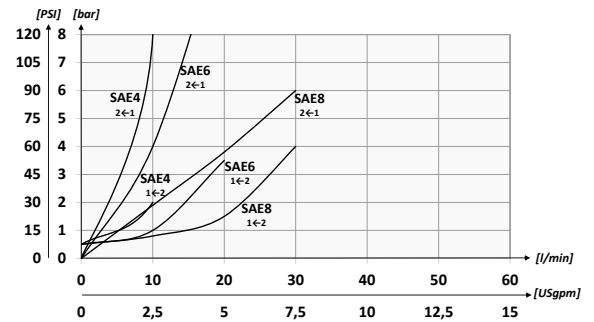
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	OPTIONAL TYPE	PESO APPROX APPROX WEIGHT kg-lbt	
STUF4S	7/16-20UNF	10 (2.6)	400 (5800)	66 (2.60)	M20x1	33 (1.30)	75 (2.95)	20 (0.79)	7,5 (0.30)	6 (0.24)	24,5 (0.96)	84100022	0,22 (0.48)	
STUF4								25 (0.98)					0,41 (0.90)	
STUF6				70,5 (2.78)				0,42 (0.92)						
STUF8	9/16-18UNF	15 (4)		350 (5075)	91 (3.58)	M25x1,5	42 (1.65)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.28)	29,5 (1.16)	84100023	0,63 (1.40)
STUF12	112,5 (4.43)	1,40 (3.10)												
STUF16	141 (5.55)	2 (4.4)												
STUF20	1-1/16-12UN	80 (21.1)	M35x1,5		42 (1.65)	110 (4.33)	115 (4.53)	40 (1.57)	15,5 (0.61)	8 (0.31)	39,5 (1.56)	84100024	1,40 (3.10)	
STUF16	1-5/16-12UN	150 (39.6)											2 (4.4)	
STUF24	1-5/8-12UN	200 (52.8)							3,3 (7.25)					
STUF24	1-7/8-12UN	300 (79.2)	4,7 (10.3)	M45x1,5	53 (2.09)	137 (5.39)	147 (5.79)	55 (2.17)	13,5 (0.53)	10 (0.39)	50 (1.97)	84100030	3,3 (7.25)	
STUF24	1-7/8-12UN	300 (79.2)	4,7 (10.3)											



POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



BSPP **STB140 - STB380 - STB120**

BSPP **STB180 - STB340 - STB100 - STB114 - STB112**

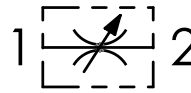
**CODICE ORDINAZIONE**  
ORDERING CODE

01  
**STB**

02

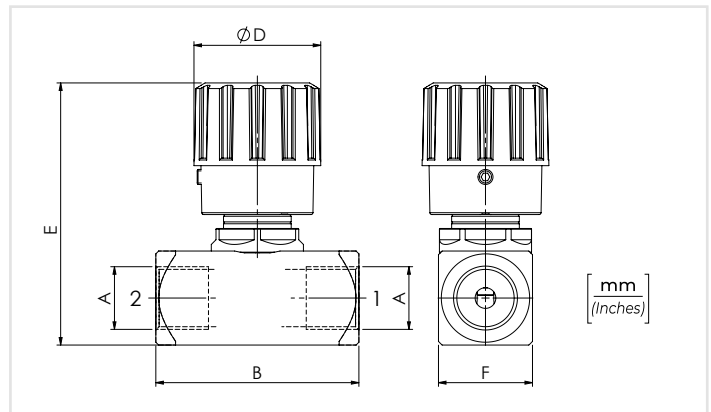
01	VALVOLE DI CONTROLLO FLUSSO BIDIREZIONALI (BIDIRECTIONAL FLOW CONTROL VALVES)	STB	
02	DIMENSIONE (SIZE)	BSPP 1/8	<b>180</b>
		BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
		BSPP 1-1/4	<b>114</b>
	BSPP 1-1/2	<b>112</b>	

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

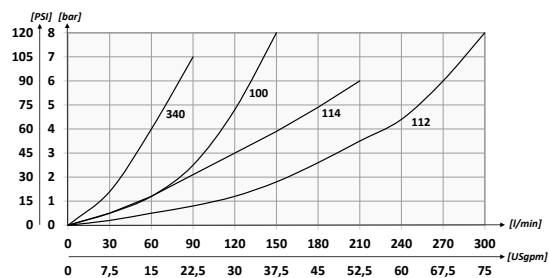
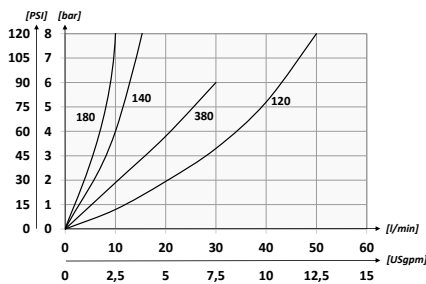


**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	



**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	D	E	F	PESO APPROX (kg) APPROX WEIGHT (lbt)
STB180	BSPP 1/8	10 (2.6)	400 (5800)	44 (1.73)	20 (0.79)	53 (2.09)	20 (0.79)	0,15 (0.33)
STB140	BSPP 1/4	15 (4)		54 (2.13)	33 (1.30)	71,5 (2.81)	25 (0.98)	0,29 (0.70)
STB380	BSPP 3/8	30 (7.9)		64 (2.52)		72 (2.83)	30 (1.18)	0,45 (1)
STB120	BSPP 1/2	50 (13.2)		81 (3.19)	42 (1.65)	94 (3.70)	40 (1.57)	1,02 (2.25)
STB340	BSPP 3/4	80 (21.1)		102 (4.01)		99 (3.90)	45 (1.77)	1,38 (3.04)
STB100	BSPP 1	150 (39.6)	350 (5075)	102 (4.01)	53 (2.09)	121,5 (4.78)	55 (2.17)	2,2 (4.8)
STB114	BSPP 1-1/4	200 (52.8)				131,5 (5.18)	65 (2.56)	3 (6.6)
STB112	BSPP 1-1/2	300 (79.2)						

# STBF-BSPP VALVOLE DI CONTROLLO FLUSSO BIDIREZIONALI

## BIDIRECTIONAL FLOW CONTROL VALVES



POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



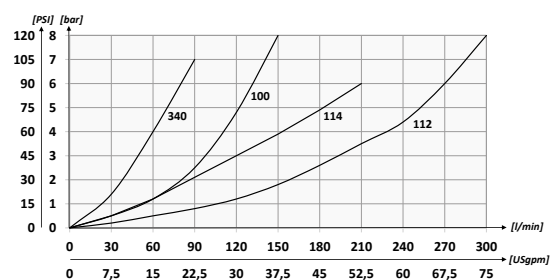
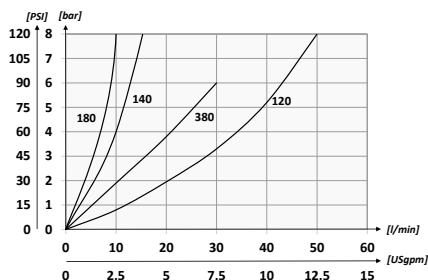
BSPP STBF140 - STBF380 - STBF120

BSPP STBF180 - STBF340 -  
STBF100 - STBF114 - STBF112

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### PERFORMANCES



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

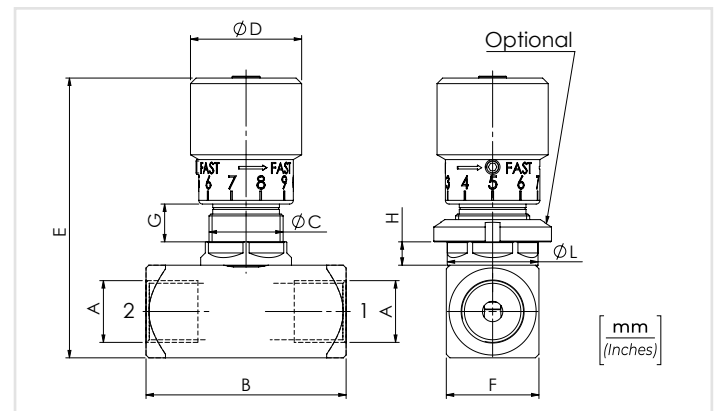
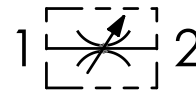
TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	D	E	F	G	H	L	OPTIONAL TYPE	PESO APPROX (kg) APPROX WEIGHT (lbt)	
STBF180	BSPP 1/8	10 (2.6)	400 (5800)	44 (1.73)	M15x1	20 (0.79)	60,5 (2.38)	20 (0.79)	8 (0.31)	5,5 (0.22)	19,5 (0.77)	84100031	0,16 (0.36)	
STBF140	BSPP 1/4	15 (4)		54 (2.13)	M20x1	33 (1.30)	75 (2.95)	25 (0.98)	7,5 (0.30)	6 (0.24)	24,5 (0.96)	84100022	0,31 (0.68)	
STBF380	BSPP 3/8	30 (7.9)		64 (2.52)	M25x1,5	81 (3.19)	30 (1.18)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.28)	29,5 (1.16)	84100023	0,48 (1.06)
STBF120	BSPP 1/2	50 (13.2)		81 (3.19)	M35x1,5	42 (1.65)	110 (4.33)	40 (1.57)	15,5 (0.61)	8 (0.31)	39,5 (1.56)	84100024	1,13 (2.50)	
STBF340	BSPP 3/4	80 (21.1)		102 (4.01)	M45x1,5	53 (2.09)	115 (4.53)	45 (1.77)	13,5 (0.53)	10 (0.39)	50 (1.97)	84100030	2,37 (5.21)	
STBF100	BSPP 1	150 (39.6)		350 (5075)			137 (5.39)	55 (2.17)	147 (5.79)	65 (2.56)				3,17 (7)
STBF114	BSPP 1-1/4	200 (52.8)												
STBF112	BSPP 1-1/2	300 (79.2)												

### CODICE ORDINAZIONE ORDERING CODE

01	02
<b>STBF</b>	

01	VALVOLE DI CONTROLLO FLUSSO BIDIREZIONALI (BIDIRECTIONAL FLOW CONTROL VALVES)	STBF	
02	DIMENSIONE (SIZE)	BSPP 1/8	<b>180</b>
		BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
		BSPP 1-1/4	<b>114</b>
		BSPP 1-1/2	<b>112</b>

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



[mm  
(Inches)]



POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



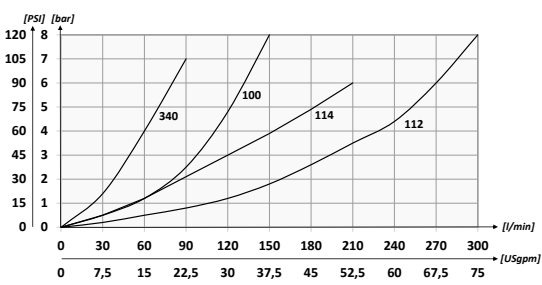
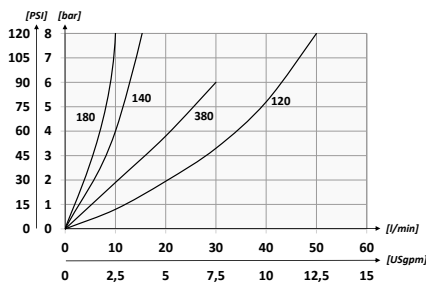
NPTF STB140N - STB380N - STB120N

NPTF STB180N - STB340N -  
STB100N - STB114N - STB112N

### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### PERFORMANCES



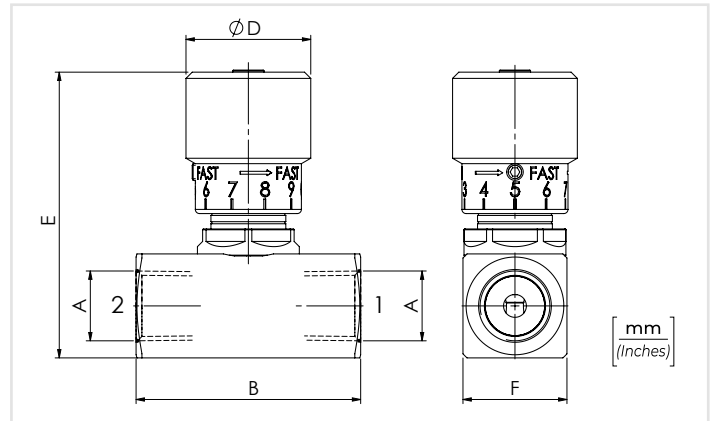
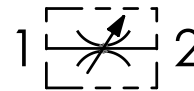
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	D	E	F	PESO APPROX (kg) APPROX WEIGHT (lbt)
STB180N	NPTF 1/8	10 (2.6)	400 (5800)	44 (1.73)	20 (0.79)	53 (2.09)	20 (0.79)	0,15 (0.33)
STB140N	NPTF 1/4	15 (4)		54 (2.13)	33 (1.30)	68 (2.68)	25 (0.98)	0,32 (0.71)
STB380N	NPTF 3/8	30 (7.9)		64 (2.52)		72 (2.83)	30 (1.18)	0,30 (0.66)
STB120N	NPTF 1/2	50 (13.2)		81 (3.19)	42 (1.65)	94 (3.70)	40 (1.57)	1,05 (2.31)
STB340N	NPTF 3/4	80 (21.1)	350 (5075)	102 (4.02)	42 (1.65)	99 (3.90)	45 (1.77)	1,49 (3.95)
STB100N	NPTF 1	150 (39.6)				121,5 (4.78)	55 (2.16)	2,27 (5.21)
STB114N	NPTF 1-1/4	200 (52.8)		53 (2.09)	131,5 (5.18)	65 (2.56)	3 (6.6)	
STB112N	NPTF 1-1/2	300 (79.2)						

<b>CODICE ORDINAZIONE</b> ORDERING CODE	01 <b>STB</b>	02
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01	VALVOLE DI CONTROLLO FLUSSO BIDIREZIONALI (BIDIRECTIONAL FLOW CONTROL VALVES)	STB	
02	DIMENSIONE (SIZE)	NPTF 1/8	180N
		NPTF 1/4	140N
		NPTF 3/8	380N
		NPTF 1/2	120N
		NPTF 3/4	340N
		NPTF 1	100N
		NPTF 1-1/4	114N
		NPTF 1-1/2	112N

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT





POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



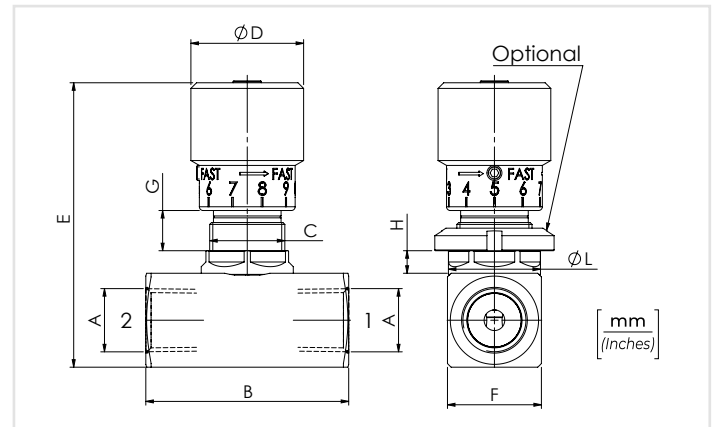
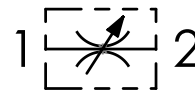
NPTF STBF140N - STBF380N - STBF120N

NPTF STBF180N - STBF340N - STBF100N -  
STBF114N - STBF112N

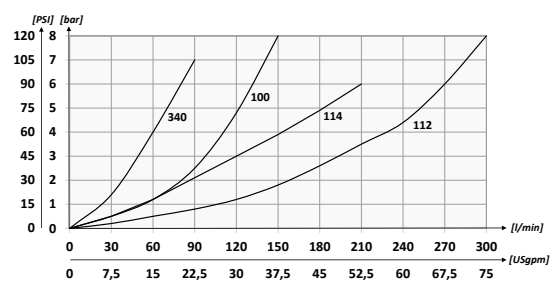
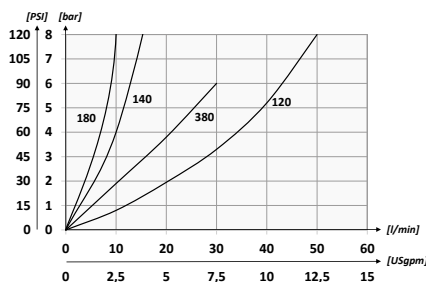
## DATI TECNICI / TECHNICAL DATA

olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

## SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



## PERFORMANCES



## CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	D	E	F	G	H	L	OPTIONAL TYPE	PESO APPROX (kg) APPROX WEIGHT (lb)		
STBF180N	NPTF 1/8	10 (2.6)	400 5800	44 (1.73)	M15x1	20 (0.79)	60,5 (2.38)	20 (0.79)	8 (0.31)	5,5 (0.22)	19,5 (0.77)	84100031	0,16 (0.36)		
STBF140N	NPTF 1/4	15 (4)		54 (2.13)	M20x1	33 (1.30)	75 (2.95)	25 (0.98)	7,5 (0.30)	6 (0.24)	24,5 (0.96)	84100022	0,34 (0.75)		
STBF380N	NPTF 3/8	30 (7.9)		64 (2.52)	M25x1,5		81 (3.19)	30 (1.18)	9 (0.35)	7 (0.28)	29,5 (1.16)	84100023	0,50 (1.1)		
STBF120N	NPTF 1/2	50 (13.2)		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	1,15 (2.53)		
STBF340N	NPTF 3/4	80 (21.1)		115 (4.53)			45 (1.77)	137 (5.39)	55 (2.17)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	1,49 (3.30)	
STBF100N	NPTF 1	150 (39.6)		350 (5075)	102 (4.01)	M45x1,5	53 (2.09)	147 (5.78)	65 (2.56)					2,54 (5.6)	
STBF114N	NPTF 1-1/4	200 (52.8)													3,17 (7)
STBF112N	NPTF 1-1/2	300 (79.2)													



**POMELLO IN ALLUMINIO PRESSOFUSO**  
DIE CAST ALUMINIUM HANDKNOB

**POMELLO IN ALLUMINIO TORNITO**  
TURNED ALUMINIUM HANDKNOB



SAE **STB4 - STB6 - STB8**

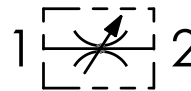
SAE **STB4S - STB12 - STB16**  
**STB20 - STB24**

**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>STB</b>	

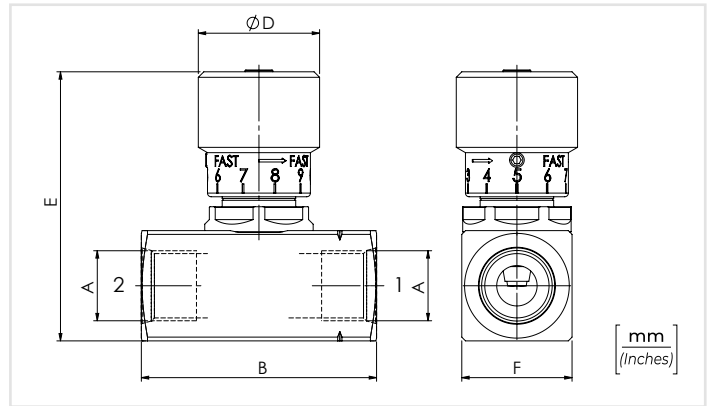
<b>01</b>	VALVOLE DI CONTROLLO FLUSSO BIDIREZIONALI (BIDIRECTIONAL FLOW CONTROL VALVES)	<b>STB</b>
<b>02</b>	DIMENSIONE (SIZE)	7/16-20UNF Small <b>4S</b>
		7/16-20UNF <b>4</b>
		9/16-18UNF <b>6</b>
		3/4-16UNF <b>8</b>
		1-1/16-12UN <b>12</b>
		1-5/16-12UN <b>16</b>
		1-5/8-12UN <b>20</b>
1-7/8-12UN <b>24</b>		

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

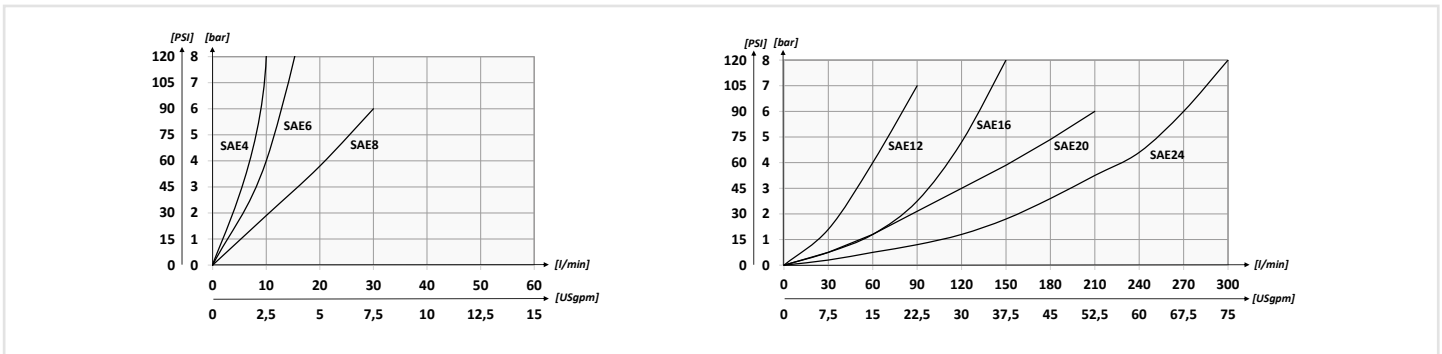


**DATI TECNICI / TECHNICAL DATA**

Olío idraulico - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
Viscosità olío - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
Temperatura dell'olío - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
Temperatura ambiente - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	



**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	D	E	F	PESO APPROX (kg) APPROX WEIGHT (lb)	
STB4S	7/16-20UNF	10 (2.6)	400 (5800)	54 (2.13)	33 (1.30)	68 (2.68)	20 (0.79)	0,21 (0.46)	
STB4							25 (0.98)	0,32 (0.71)	
STB6	9/16-18UNF	15 (4)		64 (2.52)	72 (2.83)	30 (1.18)	30 (1.18)	0,30 (0.66)	
STB8	3/4-16UNF	30 (7.9)		81 (3.19)			40 (1.57)	1 (2.2)	
STB12	1-1/16-12UN	80 (21.1)		350 (5075)	102 (4.02)	42 (1.65)	99 (3.90)	45 (1.77)	1,35 (3)
STB16	1-5/16-12UN	150 (39.6)						55 (2.17)	2,37 (5.21)
STB20	1-5/8-12UN	200 (52.8)	65 (2.56)					3 (6.6)	
STB24	1-7/8-12UN	300 (79.2)							





POMELLO IN ALLUMINIO PRESSOFUSO  
DIE CAST ALUMINIUM HANDKNOB

POMELLO IN ALLUMINIO TORNITO  
TURNED ALUMINIUM HANDKNOB



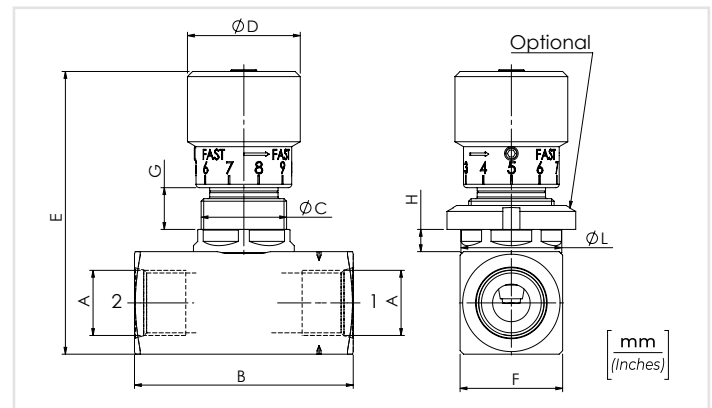
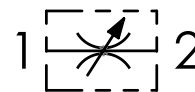
SAE STBF4 - STBF6 - STBF8

SAE STBF4S STBF12 - STBF16  
STBF20 - STBF24

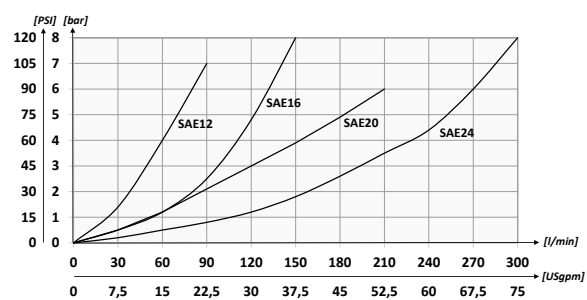
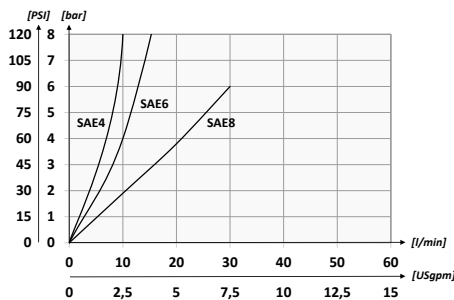
### DATI TECNICI / TECHNICAL DATA

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES

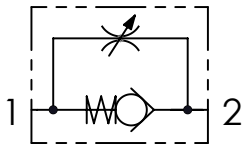


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PRESSIONE MAX MAX PRESSURE bar-PSI	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	OPTIONAL TYPE	PESO APPROX (kg) APPROX WEIGHT (lb)
STBF4S	7/16-20UNF	10 (2.6)	400 (5800)	54 (2.13)	M20x1	33 (1.30)	75 (2.95)	20 (0.79)	7,5 (0.29)	6 (0.24)	24,5 (0.96)	84100022	0,22 (0.48)
STBF4								25 (0.98)					0,34 (0.75)
STBF6								9/16-18UNF					15 (4)
STBF8	3/4-16UNF	30 (7.9)	350 (5075)	64 (2.52)	M25x1,5	42 (1.65)	81 (3.19)	30 (1.18)	9 (0.35)	7 (0.28)	29,5 (1.16)	84100023	0,48 (1.05)
STBF12	1-1/16-12UN	80 (21.1)		81 (3.19)	M35x1,5		110 (4.33)	40 (1.57)	15,5 (0.61)	8 (0.31)	39,5 (1.55)	84100024	1,1 (2.42)
STBF16	1-5/16-12UN	150 (39.6)		115 (4.53)				45 (1.77)	8 (0.31)	39,5 (1.55)	1,45 (3.2)		
STBF20	1-5/8-12UN	200 (52.8)	102 (4.02)	M45x1,5	53 (2.09)	137 (5.39)	55 (2.17)	13,5 (0.53)	10 (0.39)	50 (1.96)	84100030	2,45 (5.39)	
STBF24	1-7/8-12UN	300 (79.2)				147 (5.78)	65 (2.56)	10 (0.39)	50 (1.96)	3,17 (7)			



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

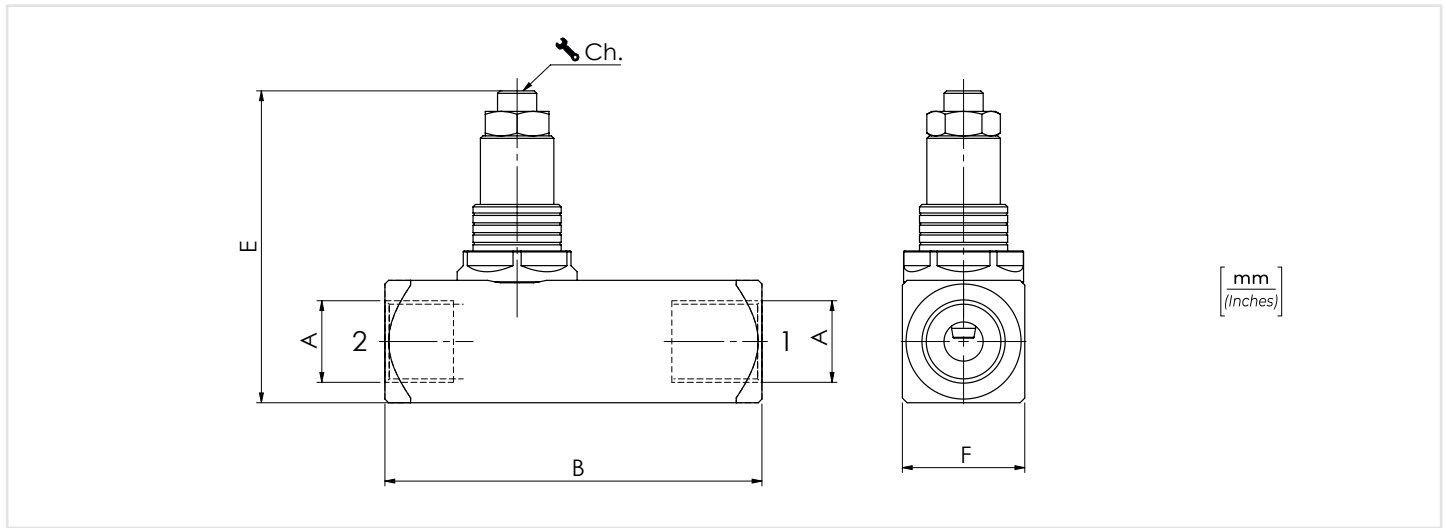
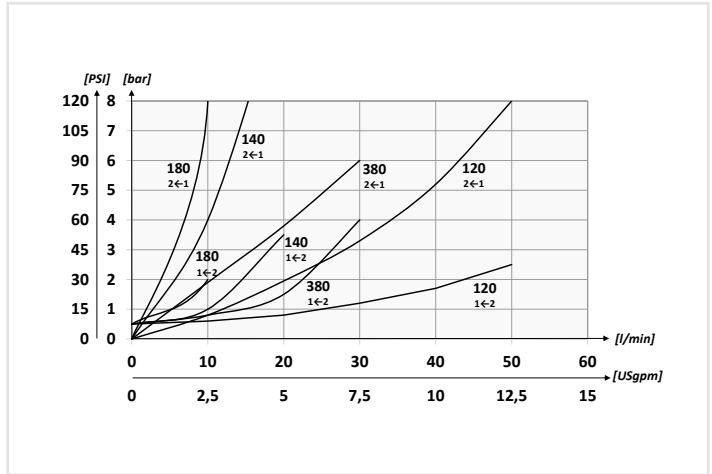


DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

<b>CODICE ORDINAZIONE</b> ORDERING CODE		01	02
		<b>SVU</b>	
01	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI CON REGOLAZIONE ESAGONO AD INCASSATO (UNIDIRECTIONAL FLOW CONTROL VALVES WITH HEXAGON SOCKET SCREW ADJUSTMENT)		SVU
02	DIMENSION (SIZE)	BSPP 1/8	180
		BSPP 1/4	140
		BSPP 3/8	380
		BSPP 1/2	120

PERFORMANCES



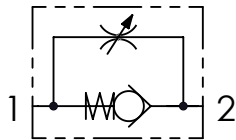
CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	E	F	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
SVU180	BSPP 1/8	10 (2.6)	400 (5800)	58 (2.28)	53 (2.09)	20 (0.79)	3	0,19 (0.42)
SVU140	BSPP 1/4	15 (4)		66 (2.60)	71,5 (2.81)	25 (0.98)	4	0,34 (0.75)
SVU380	BSPP 3/8	30 (7.9)		77 (3.03)				0,36 (0.80)
SVU120	BSPP 1/2	50 (13.2)		91 (3.58)	72 (2.83)	30 (1.18)	5	0,60 (1.3)





SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



DATI TECNICI / TECHNICAL DATA

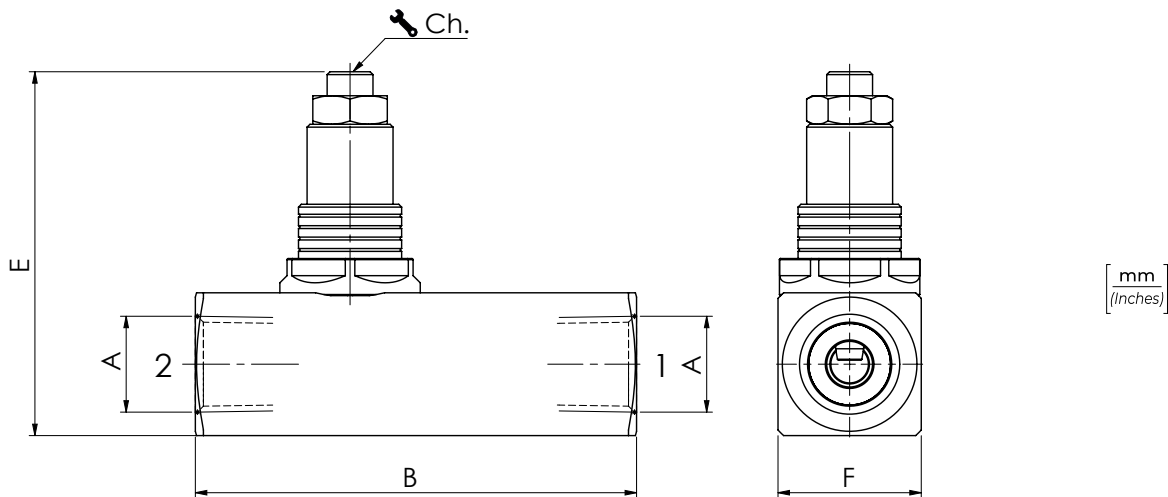
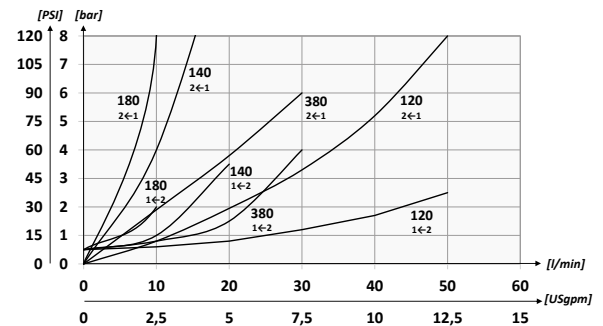
olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F

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

CODICE ORDINAZIONE ORDERING CODE	01	02
	<b>SVU</b>	

01	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI CON REGOLAZIONE ESAGONO AD INCASSATO (UNIDIRECTIONAL FLOW CONTROL VALVES WITH HEXAGON SOCKET SCREW ADJUSTMENT)		SVU
02	DIMENSIONE (SIZE)	NPTF 1/8	180N
		NPTF 1/4	140N
		NPTF 3/8	380N
		NPTF 1/2	120N

PERFORMANCES

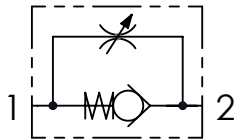


CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	E	F	Ch.	PESO APPROX (kg) APPROX WEIGHT (lb)
SVU180N	NPTF 1/8	10 (2.6)	400 (5800)	58 (2.28)	53 (2.08)	20 (0.79)	3	0,19 (0.42)
SVU140N	NPTF 1/4	15 (4)		66 (2.60)	68 (2.68)	25 (0.98)	4	0,37 (0.75)
SVU380N	NPTF 3/8	30 (7.9)		77 (3.03)				0,40 (0.9)
SVU120N	NPTF 1/2	50 (13.2)		91 (3.58)	72 (2.83)	30 (1.18)	5	0,60 (1.3)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

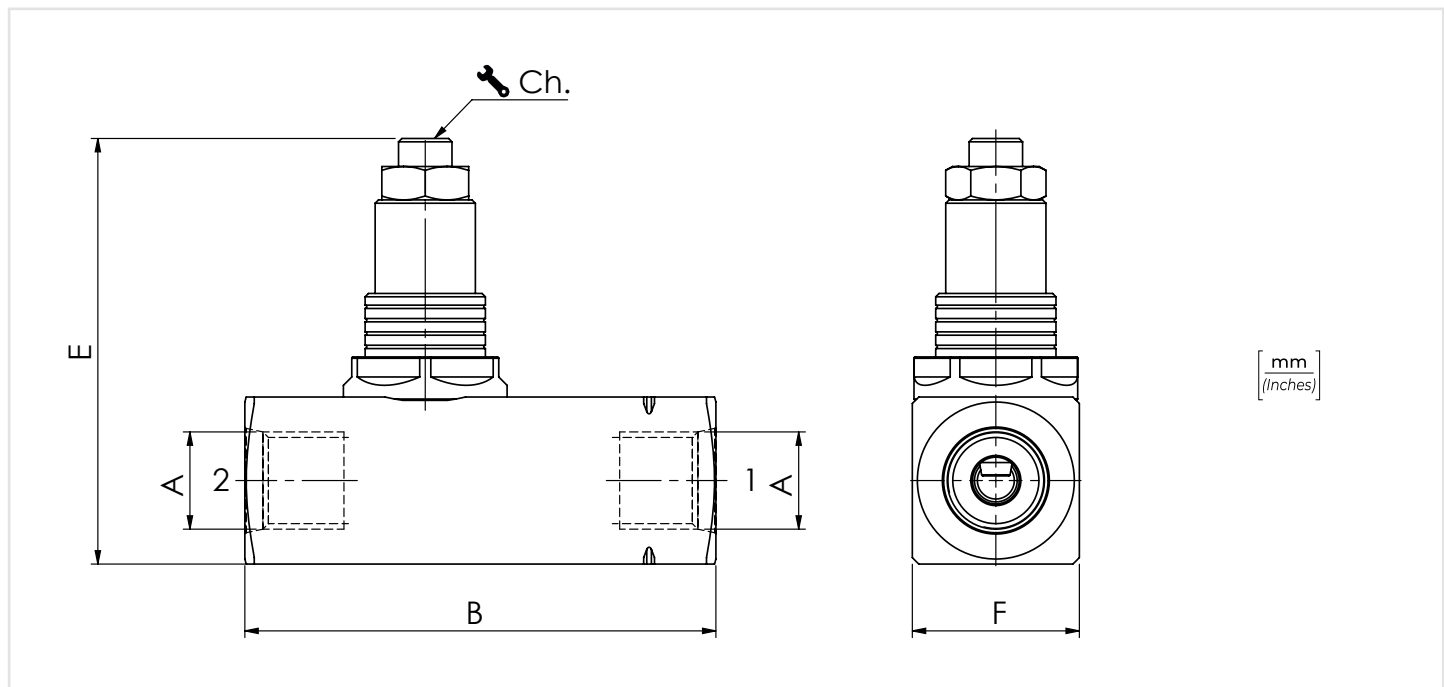
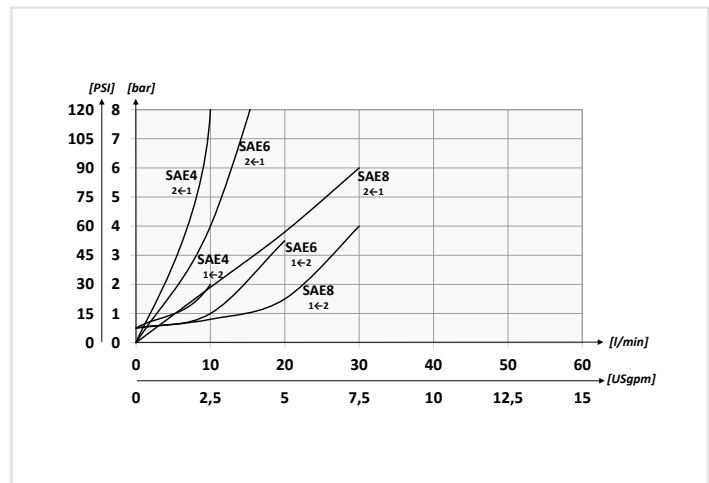


**DATI TECNICI / TECHNICAL DATA**

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

<b>CODICE ORDINAZIONE / ORDERING CODE</b>		01	02
<b>SVU</b>			
<b>01</b>	VALVOLE DI CONTROLLO FLUSSO UNIDIREZIONALI CON REGOLAZIONE AD ESAGONO INCASSATO (UNIDIRECTIONAL FLOW CONTROL VALVES WITH HEXAGON SOCKET SCREW ADJUSTMENT)		<b>SVU</b>
<b>02</b>	DIMENSIONE (SIZE)	7/16-20UNF	<b>4</b>
		9/16-18UNF	<b>6</b>
		3/4-16UNF	<b>8</b>

**PERFORMANCES**

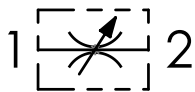


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	E	F	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
SVU4	7/16-20UNF	10 (2.6)	400 (5800)	66 (2.60)	68 (2.68)	25 (0.98)	4	0,39 (0.85)
SVU6	9/16-18UNF	15 (4)		70,5 (2.78)				0,40 (0.9)
SVU8	3/4-16UNF	30 (7.9)		91 (3.58)				72 (2.83)



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

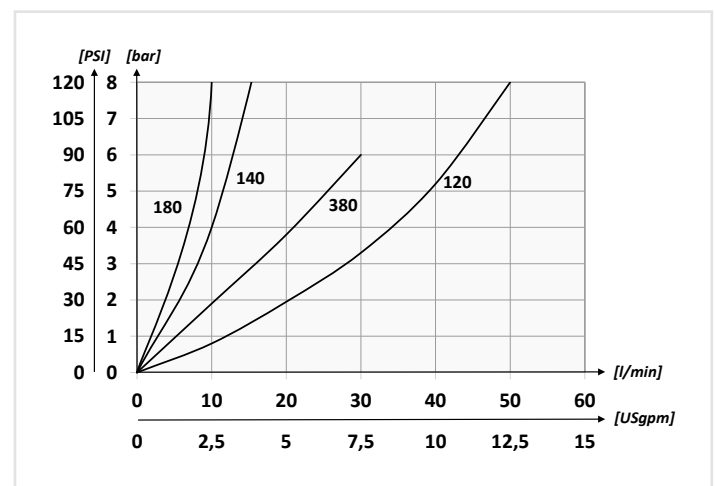


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>SVB</b>	

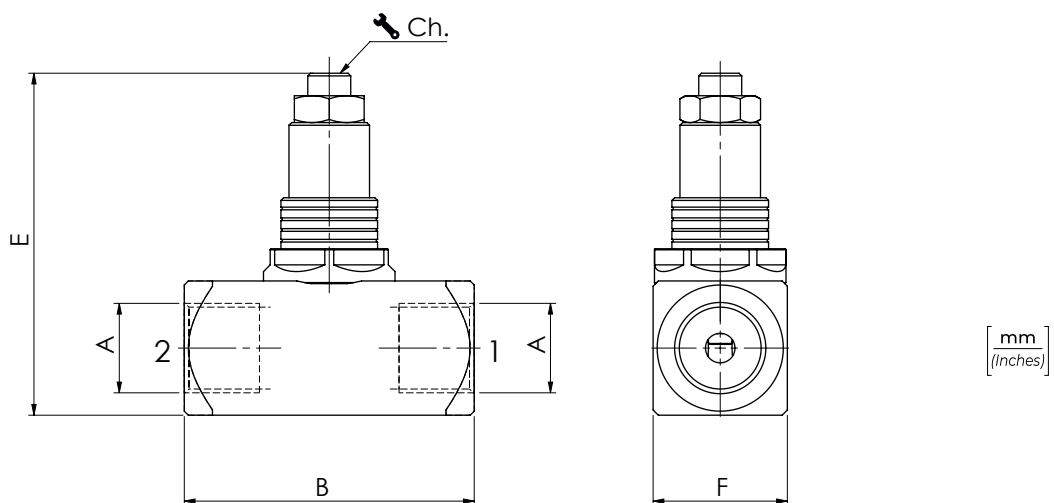
<b>01</b>	VALVOLE DI CONTROLLO FLUSSO BIDIREZIONALI CON REGOLAZIONE AD ESAGONO INCASSATO (BIDIRECTIONAL FLOW CONTROL VALVES WITH HEXAGON SOCKET SCREW ADJUSTMENT)	<b>SVB</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/8	<b>180</b>
		BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

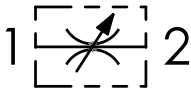
TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	E	F	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
SVB180	BSPP 1/8	10 (2.6)	400 (5800)	44 (1.73)	53 (2.09)	20 (0.79)	3	0,15 (0.33)
SVB140	BSPP 1/4	15 (4)		54 (2.13)	71,5 (2.81)	25 (0.98)	4	0,29 (0.70)
SVB380	BSPP 3/8	30 (7.9)		64 (2.52)	72 (2.83)	30 (1.18)	5	0,26 (0.57)
SVB120	BSPP 1/2	50 (13.2)						0,45 (1)



<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02
	<b>SVB</b>	

<b>01</b>	VALVOLE DI CONTROLLO FLUSSO BIDIREZIONALI CON REGOLAZIONE ESAGONO AD INCASSATO (BIRECTIONAL FLOW CONTROL VALVES WITH HEXAGON SOCKET SCREW ADJUSTMENT)	<b>SVB</b>
<b>02</b>	DIMENSIONE (SIZE)	NPTF 1/8 <b>180N</b>
		NPTF 1/4 <b>140N</b>
		NPTF 3/8 <b>380N</b>
		NPTF 1/2 <b>120N</b>

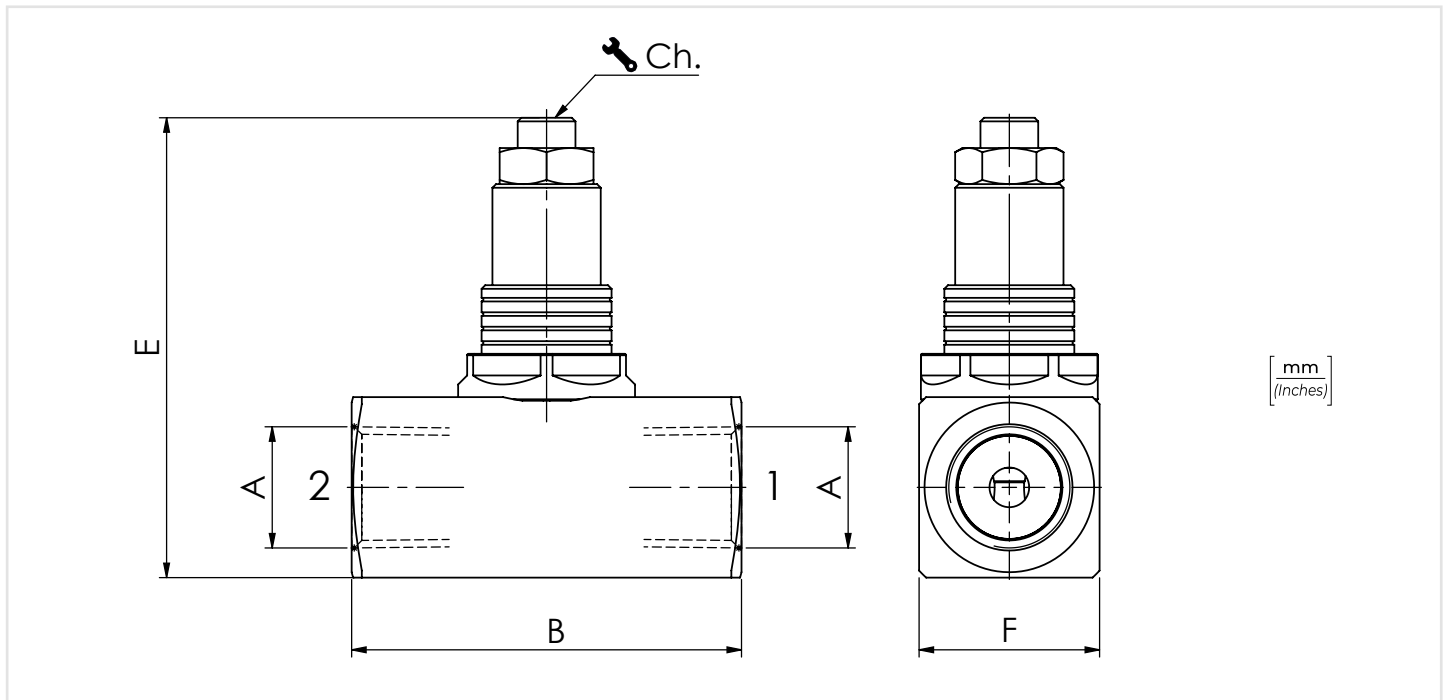
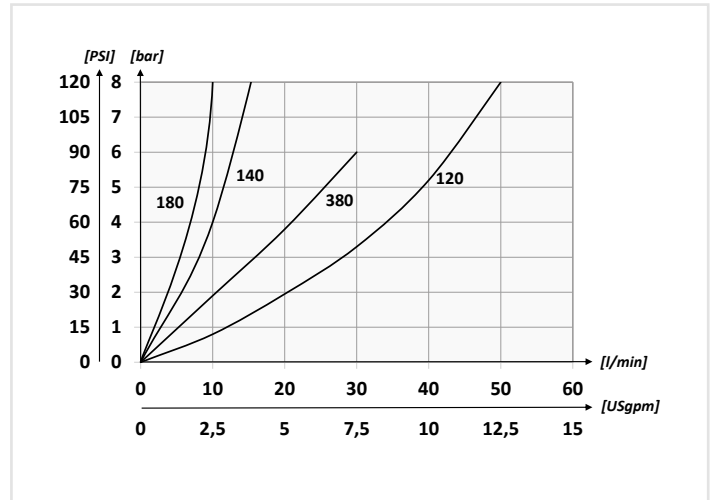
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**

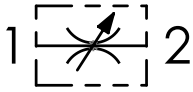


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	E	F	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
SVB180N	NPTF 1/8	10 (2.6)	400 (5800)	44 (1.73)	53 (2.09)	20 (0.79)	3	0,15 (0.33)
SVB140N	NPTF 1/4	15 (4)		54 (2.13)	68 (2.68)	25 (0.98)	4	0,32 (0.71)
SVB380N	NPTF 3/8	30 (7.9)		64 (2.52)	72 (2.83)	30 (1.18)	5	0,30 (0.66)
SVB120N	NPTF 1/2	50 (13.2)						0,47 (1.03)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



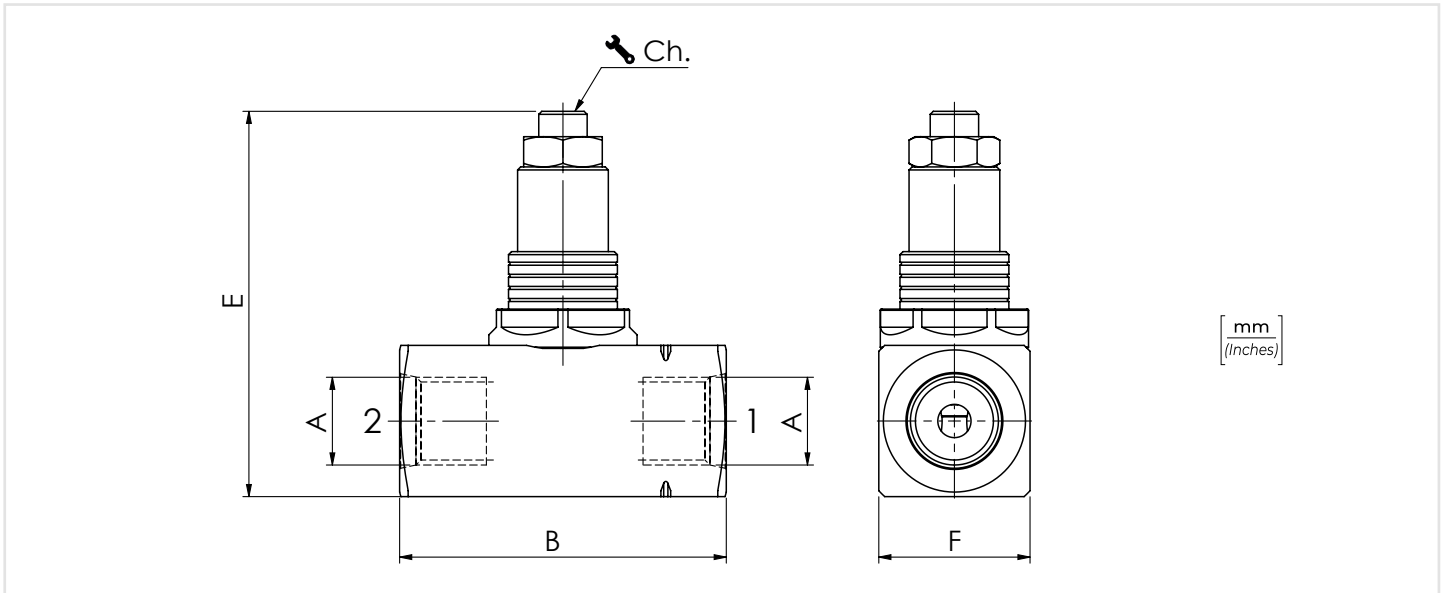
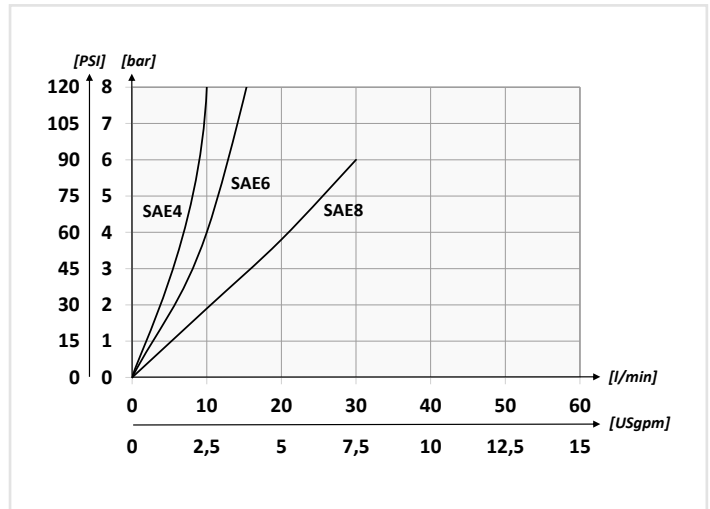
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> <b>-4°F +176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> <b>-4°F +122°F</b>
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

<b>CODICE ORDINAZIONE</b> ORDERING CODE	01 <b>SVB</b>	02
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<b>01</b>	VALVOLE DI CONTROLLO FLUSSO BIDIREZIONALI CON REGOLAZIONE AD ESAGONO INCASSATO (BIDIRECTIONAL FLOW CONTROL VALVES WITH HEXAGON SOCKET SCREW ADJUSTMENT)		<b>SVB</b>
<b>02</b>	DIMENSIONE (SIZE)	7/16-20UNF	<b>4</b>
		9/16-18UNF	<b>6</b>
		3/4-16UNF	<b>8</b>

**PERFORMANCES**

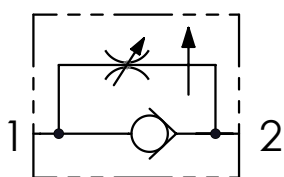


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	E	F	Ch.	PESO APPROX (kg) APPROX WEIGHT (lb)
SVB4	7/16-20UNF	10 (2.6)	400 (5800)	54 (2.13)	68 (2.68)	25 (0.98)	4	0,32 (0.71)
SVB6	9/16-18UNF	15 (4)						0,30 (0.66)
SVB8	3/4-16UNF	30 (7.9)		64 (2.52)	72 (2.83)	30 (1.18)	5	0,45 (0.99)



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



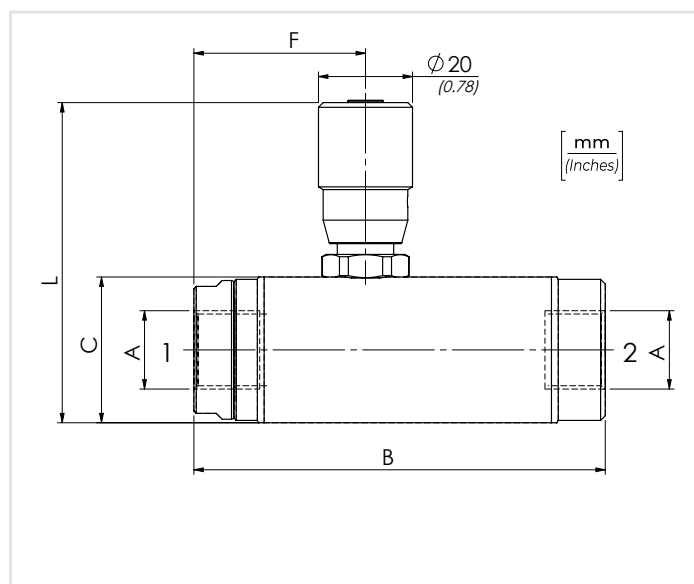
### CODICE ORDINAZIONE / ORDERING CODE

01	02
<b>VRC</b>	

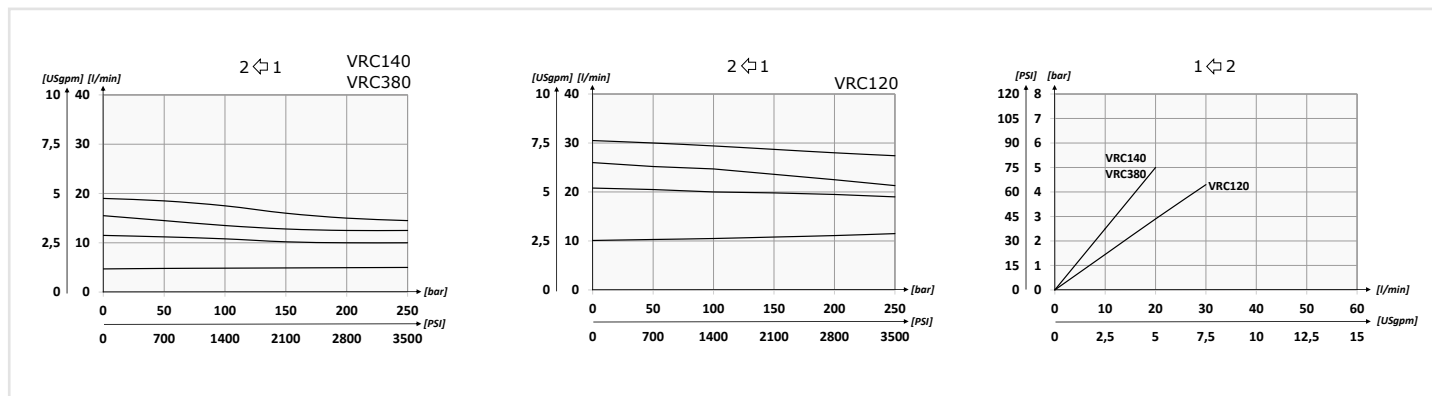
<b>01</b>	VALVOLE DI CONTROLLO FLUSSO 2 VIE COMPENSATE (2 WAYS FLOW CONTROL VALVES - PRESSURE COMPENSATED)	<b>VRC</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4 <b>140</b>
		BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



### PERFORMANCES



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

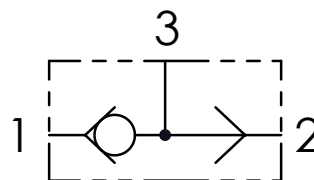
TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	B	C	F	L	PESO APPROX (kg) / APPROX WEIGHT (lb)
VRC140	BSPP 1/4	10 (2.6)	250 (3625)	87,5 (3.44)	31 (1.22)	36,5 (1,44)	68 (2.68)	0,51 (1.12)
VRC380	BSPP 3/8	18 (4.8)						0,50 (1.10)
VRC120	BSPP 1/2	33 (8.7)		107,5 (4.31)	36 (1.42)	46 (1.81)	73 (2.87)	0,76 (1.67)



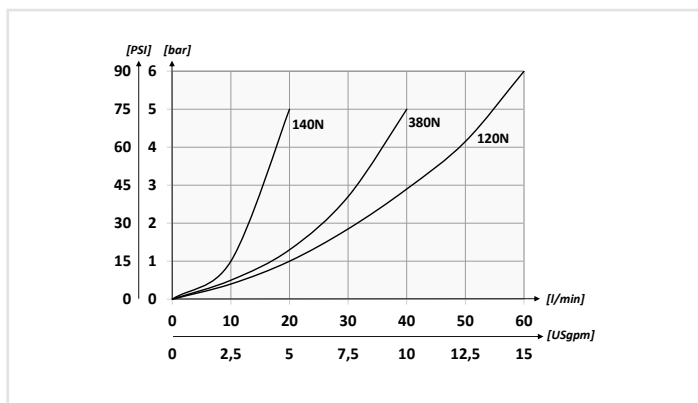
	01	02
<b>CODICE ORDINAZIONE</b> ORDERING CODE	<b>VUSF</b>	

<b>01</b>	VALVOLE SELETTRICI (LOAD SHUTTLE VALVES)		<b>VUSF</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140N</b>
		BSPP 3/8	<b>380N</b>
		BSPP 1/2	<b>120N</b>

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

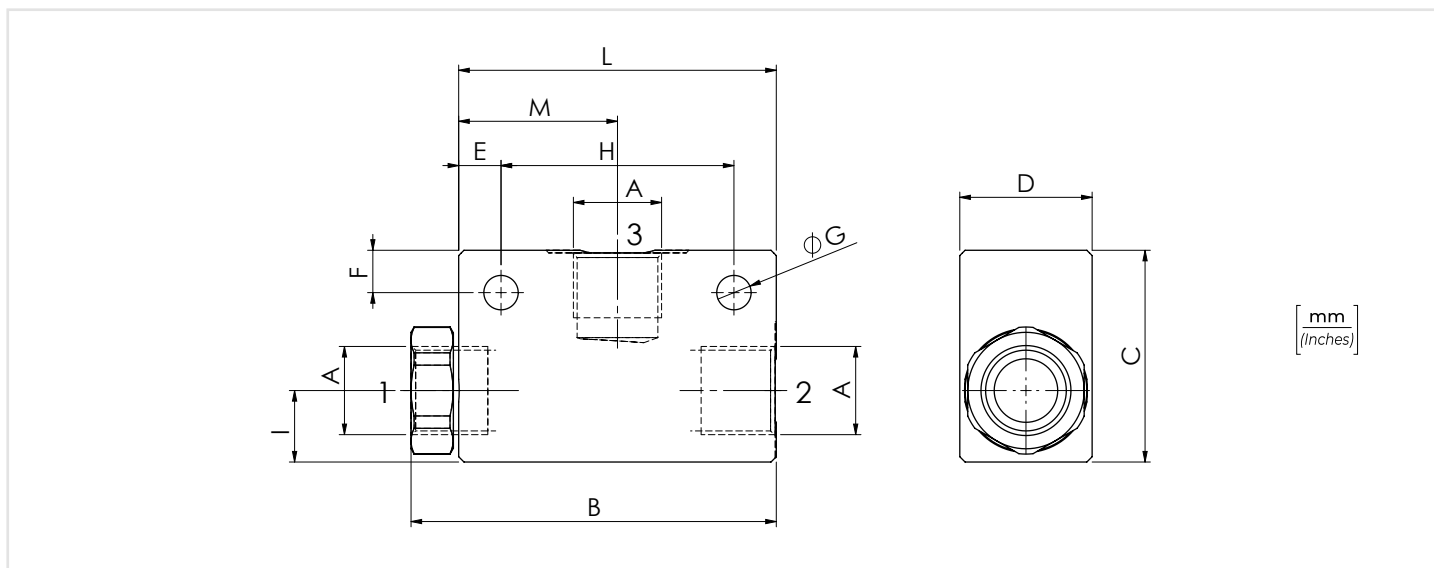


### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

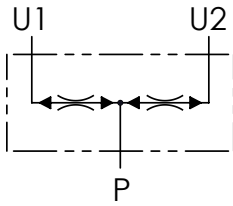


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	I	L	M	PESO APPROX APPROX WEIGHT kg-lbt
VUSF140N	BSPP 1/4	20 (5.3)	350 (5075)	57,3 (2.26)	35 (1.38)	25 (0.98)	9 (0.35)	8 (0.31)	6,5 (0.26)	34 (1.34)	12 (0.47)	52 (2.05)	24,5 (0.96)	0,29 (0.65)
VUSF380N	BSPP 3/8	40 (10.6)		69 (2.72)	40 (1.57)		8 (0.31)			44 (1.73)	13,5 (0.53)	60 (2.36)	30 (1.18)	0,37 (0.81)
VUSF120N	BSPP 1/2	60 (15.8)		73,8 (2.90)	50 (1.97)	35 (1.38)	10 (0.39)	10 (0.39)	8,5 (0.33)	45 (1.79)	18 (0.71)	65 (2.56)		0,71 (1.56)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04
<b>DRF10</b>			

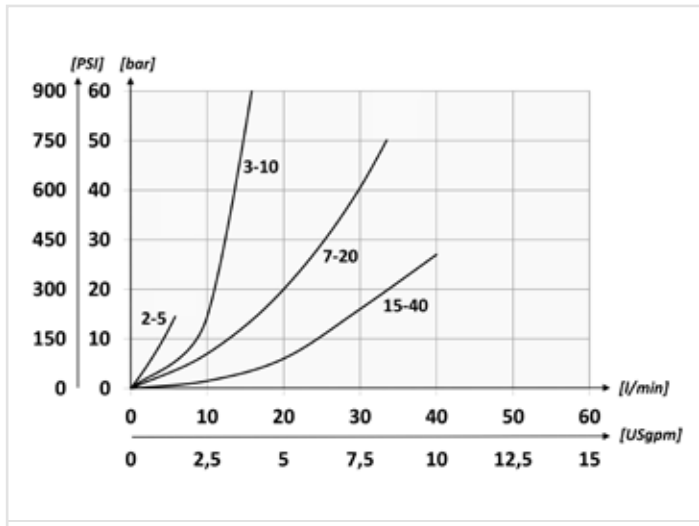
01	VALVOLA DIVISORE/RIUNIFICATORE DI FLUSSO (FLOW DIVIDER/COMBINER VALVES)	DRF10
02	CAMPO DI PORTATA IN INGRESSO (L/MIN) INLET FLOW RANGE (USGPM)	2-5 (0.5-1.3) <b>1</b>
		3-10 (0.8-2.6) <b>2</b>
		7-20 (1.8-5.2) <b>3</b>
		15-40 (3.9-10.4) <b>4</b>
03	CONNESSIONE P (PORT P)	BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>
04	CONNESSIONE U1/U2 (PORT U1/U2)	BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>

**DATI TECNICI / TECHNICAL DATA**

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F

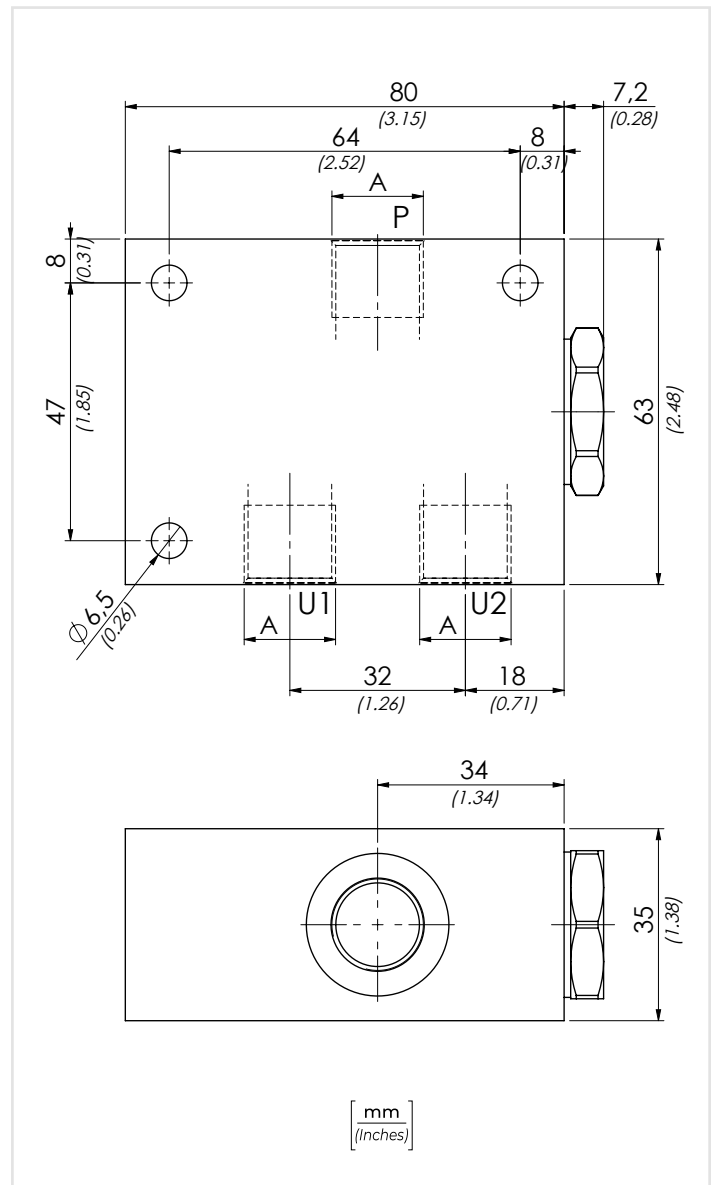
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)  
It is necessary a filter use to protect the valve (advised filtration 15 µm)

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
DRF10	40 (10.6)	250 (3625)	0,52 (1.14)





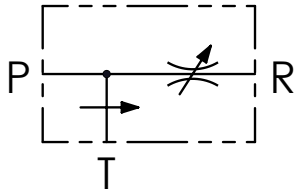


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>VPT</b>		<b>V</b>

<b>01</b>	REGOLATORI DI FLUSSO 3 VIE - COMPENSATI, CON ECCEDEZZA IN SCARICO (3 WAYS FLOW CONTROL VALVES - PRESSURE COMPENSATED, EXCEEDING FLOW TO TANK)	<b>VPT</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>
		BSPP 3/4 <b>340</b>
		BSPP 1 <b>100</b>
<b>03</b>	REGOLAZIONE (SETTING)	Volantino (Hand wheel) <b>V</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

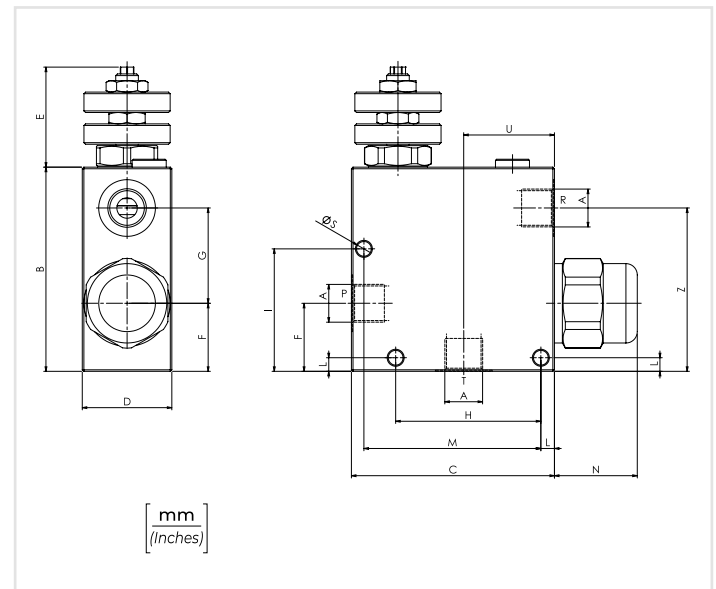


**DATI TECNICI / TECHNICAL DATA**

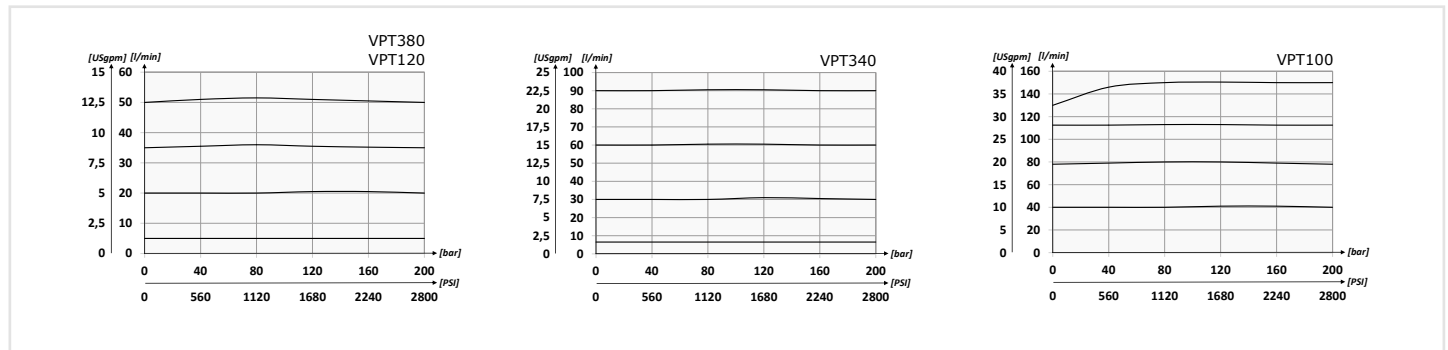
<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PORTATA MASSIMA L/MIN - MAX FLOW USGPM**

50 L/MIN CON 30 L/MIN IN R (13,3 USGPM WITH 8 USGPM IN R)	<b>380</b>
80 L/MIN CON 50 L/MIN IN R (21,3 USGPM WITH 13,3 USGPM IN R)	<b>120</b>
150 L/MIN CON 80 L/MIN IN R (40 USGPM WITH 21,3 USGPM IN R)	<b>340</b>
240 L/MIN CON 150 L/MIN IN R (64 USGPM WITH 40 USGPM IN R)	<b>100</b>



**PERFORMANCES**

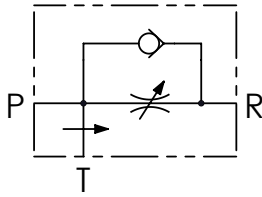


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	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	Z	PESO APPROX (kg) APPROX WEIGHT (lb)
VPT380	BSPP 3/8	50 (13.2)	250 (3625)	90 (3.54)	89,5 (35.24)	39,5 (15.55)	47,5 (1.87)	30 (1.18)	42 (1.65)	64 (2.52)	54 (2.13)	6 (0.24)	78 (3.07)	36,5 (1.44)	6,5 (0.26)	40 (1.57)	/	1,39 (3.06)
VPT120	BSPP 1/2	90 (23.8)		110 (4.33)	110 (4.33)	50 (1.97)	49,5 (1.95)	35 (1.38)	50 (1.97)	88 (3.46)	63,5 (2.50)	8,5 (0.33)	100 (3.70)	34,7 (1.37)	8,5 (0.33)	44 (1.73)	/	1,37 (3.02)
VPT340	BSPP 3/4	150 (39.6)		110 (4.33)	110 (4.33)	50 (1.97)	49,5 (1.95)	35 (1.38)	50 (1.97)	88 (3.46)	63,5 (2.50)	8,5 (0.33)	100 (3.70)	34,7 (1.37)	8,5 (0.33)	44 (1.73)	/	1,94 (4.28)
VPT100	BSPP 1	240 (63.4)		110 (4.33)	110 (4.33)	50 (1.97)	52,5 (2.07)	47 (1.85)	/	/	/	/	10 (0.39)	/	36,5 (1.44)	44 (1.73)	87 (3.45)	2,05 (4.52)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

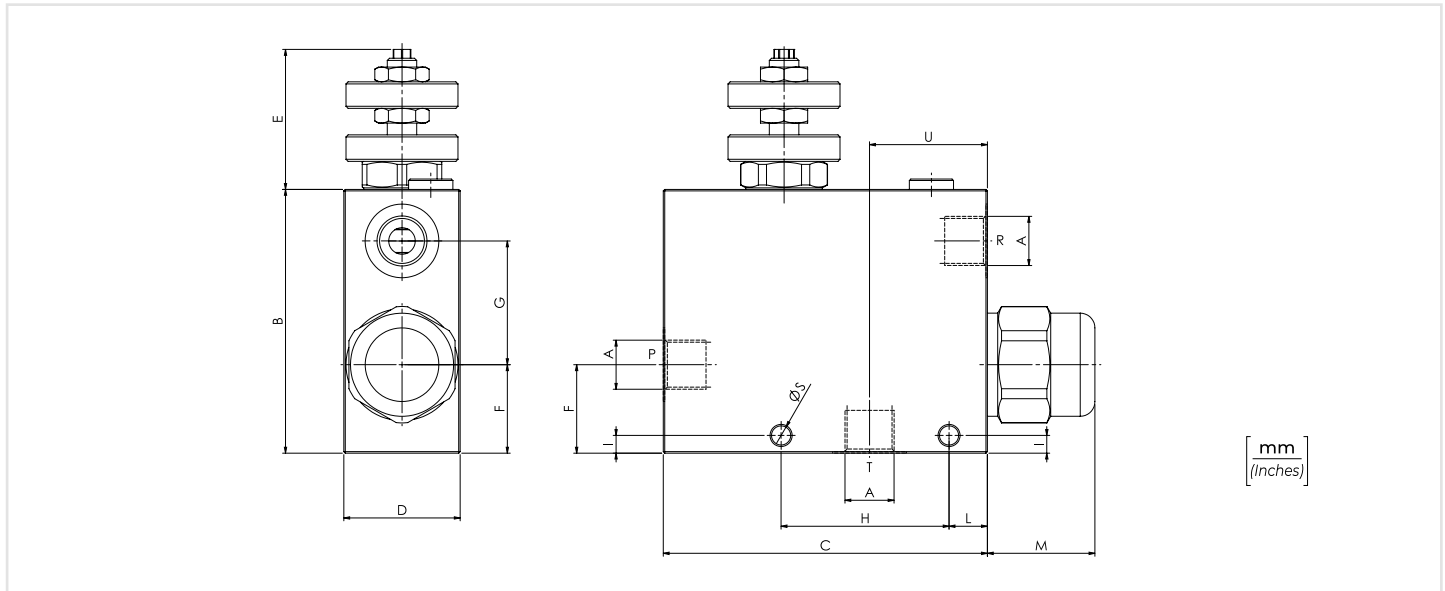
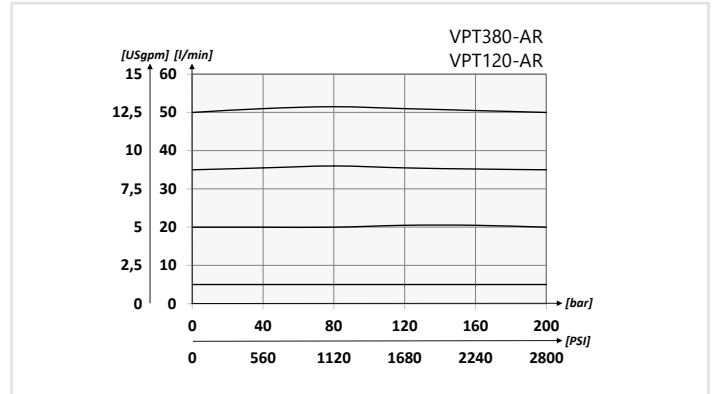
<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03	04
	<b>VPT</b>		<b>V</b>	<b>AR</b>

<b>01</b>	REGOLATORI DI FLUSSO 3 VIE - COMPENSATI, CON ECCEDEZZA IN SCARICO E VALVOLA DI RITEGNO PER FLUSSO INVERSO 3 WAYS FLOW CONTROL VALVES - PRESSURE COMPENSATED, EXCEEDING FLOW TO TANK AND CHECK VALVE FOR FREE REVERSE FLOW	<b>VPT</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
<b>03</b>	REGOLAZIONE (SETTING)	Volantino (Hand wheel)	<b>V</b>
<b>04</b>	Con valvola di ritegno per flusso inverso (check valve for free reverse flow)		<b>AR</b>

**PORTATA MASSIMA L/MIN - MAX FLOW USGPM**

50 L/MIN CON 30 L/MIN IN R (13,3 USGPM WITH 8 USGPM IN R)	<b>380</b>
80 L/MIN CON 50 L/MIN IN R (21,3 USGPM WITH 13,3 USGPM IN R)	<b>120</b>

**PERFORMANCES**

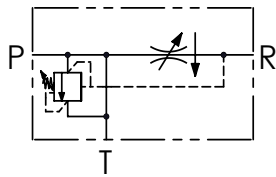


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

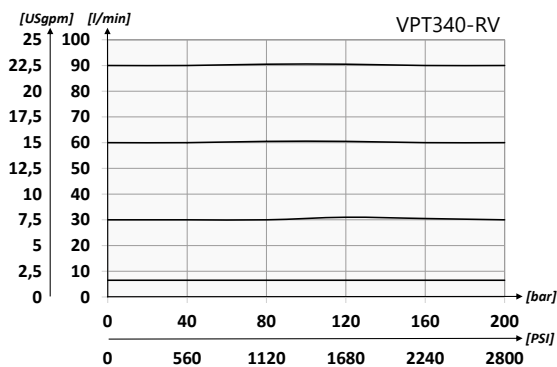
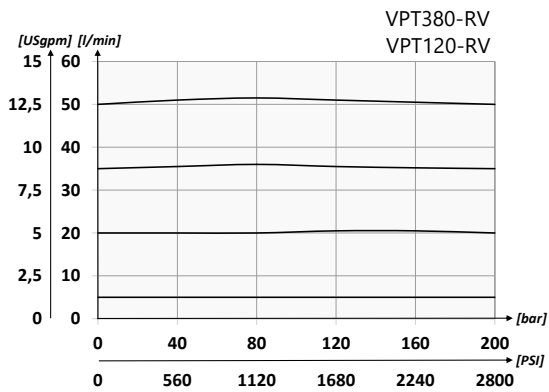
CODICE CODE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	I	L	M	S	U	PESO APPROX APPROX WEIGHT kg-lbt
VPT380-AR	BSPP 3/8	50 (13.2)	250 (3625)	89,5 (3.52)	110 (4.33)	39,5 (15.55)	47,5 (1.87)	30 (1.18)	42 (1.65)	57 (2.24)	6 (0.24)	13 (0.50)	36,5 (1.44)	6,5 (0.26)	40 (1.57)	1,60 (3.52)
VPT120-AR	BSPP 1/2	90 (23.8)														1,61 (3.54)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**PERFORMANCES**



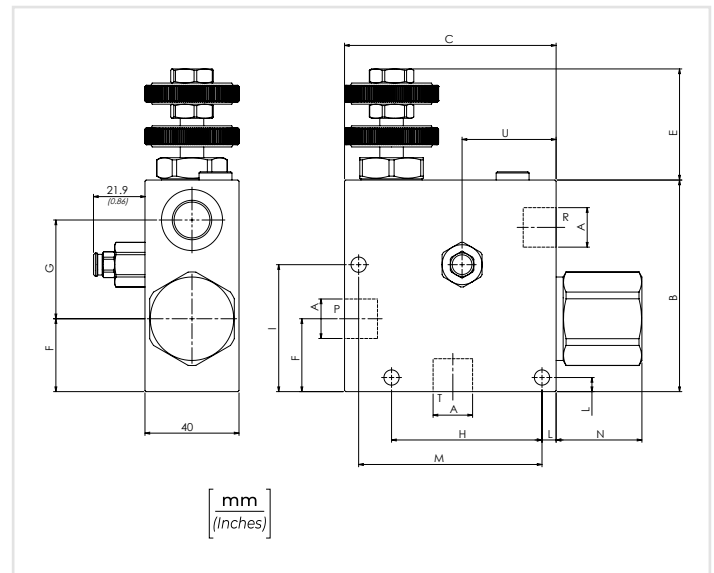
**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04
<b>VPT</b>		<b>V</b>	<b>RV</b>

<b>01</b>	REGOLATORI DI FLUSSO 3 VIE - COMPENSATI, CON ECCEDEZZA IN SCARICO (3 WAYS FLOW CONTROL VALVES - PRESSURE COMPENSATED, EXCEEDING FLOW TO TANK AND RELIEF VALVE)	<b>VPT</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>
		BSPP 3/4 <b>340</b>
<b>03</b>	REGOLAZIONE (SETTING)	Volantino (Hand wheel) <b>V</b>
<b>04</b>	Valvola di massima - Relief valve (10/250 bar - 145/3625 PSI)	<b>RV</b>

**PORTATA MASSIMA L/MIN - MAX FLOW USGPM**

50 L/MIN CON 30 L/MIN IN R (13,3 USGPM WITH 8 USGPM IN R)	<b>380</b>
80 L/MIN CON 50 L/MIN IN R (21,3 USGPM WITH 13,3 USGPM IN R)	<b>120</b>
150 L/MIN CON 80 L/MIN IN R (40 USGPM WITH 21,3 USGPM IN R)	<b>340</b>



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	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 APPROX (kg) APPROX WEIGHT (lb)
VPT380-RV	BSPP 3/8	50 (13.2)	250 (3625)	90 (3.54)	90 (3.54)	40 (1.57)	47,5 (1.87)	31 (1.22)	42 (1.65)	64 (2.52)	54 (2.13)	6 (0.24)	78 (3.07)	36,5 (1.44)	6,5 (0.26)	40 (1.57)	1,15 (2.54)
VPT120-RV	BSPP 1/2	90 (23.8)		110 (4.33)	110 (4.33)	50 (1.97)	49,5 (1.95)	35 (1.38)	50 (1.97)	88 (3.46)	63,5 (2.50)	8 (0.31)	94 (3.70)	34,7 (1.37)	8,5 (0.33)	44 (1.73)	1,94 (4.28)
VPT340-RV	BSPP 3/4	150 (39.6)															

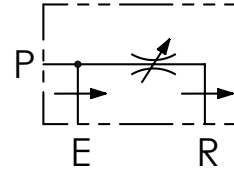


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>VPP</b>		<b>V</b>

<b>01</b>	REGOLATORI DI FLUSSO 3 VIE - COMPENSATI, CON ECCEDEZZA IN PRESSIONE (3 WAYS FLOW CONTROL VALVES - PRESSURE COMPENSATED, EXCEEDING FLOW TO PRESSURE)	<b>VPP</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>
		BSPP 3/4 <b>340</b>
<b>03</b>	REGOLAZIONE (SETTING)	Volantino (Hand wheel) <b>V</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

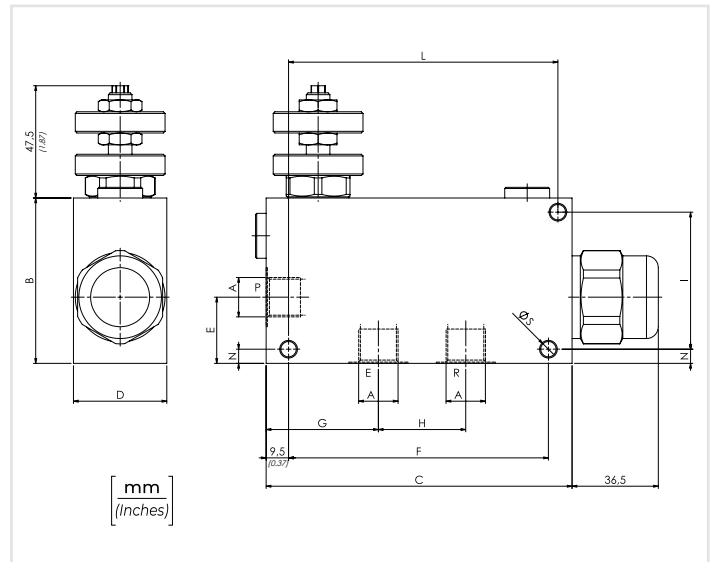


**DATI TECNICI / TECHNICAL DATA**

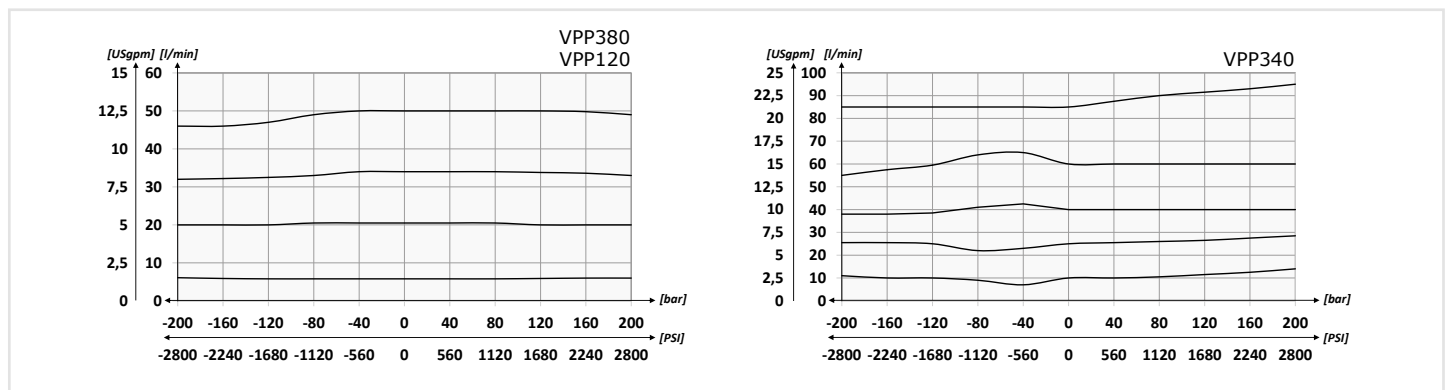
<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PORTATA MASSIMA L/MIN - MAX FLOW USGPM**

50 L/MIN CON 30 L/MIN IN R (13,3 USGPM WITH 8 USGPM IN R)	<b>380</b>
90 L/MIN CON 50 L/MIN IN R (24 USGPM WITH 13,3 USGPM IN R)	<b>120</b>
150 L/MIN CON 80 L/MIN IN R (40 USGPM WITH 21,3 USGPM IN R)	<b>340</b>



**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

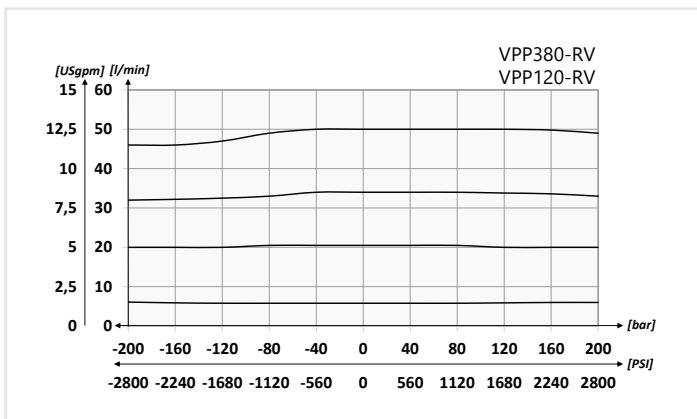
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	I	L	N	S	PESO APPROX (kg) APPROX WEIGHT (lb)
VPP380	BSPP 3/8	50 (13.2)	250 (3625)	70 (2.76)	129,5 (50.98)	39,5 (15.55)	28 (1.10)	110 (4.33)	47 (18.70)	37 (1.46)	58 (2.28)	114 (4.49)	6 (0.24)	6,5 (0.26)	1,54 (3.39)
VPP120	BSPP 1/2	90 (23.8)		90 (3.54)	155 (6.10)	50 (1.97)	35 (1.38)	/	57 (2.24)	44 (1.73)	74 (2.91)	135 (5.31)	8 (0.31)	8,5 (0.33)	1,52 (3.35)
VPP340	BSPP 3/4	150 (39.6)													2,48 (5.46)



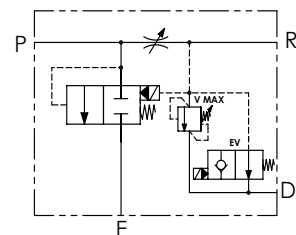
## DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

## PERFORMANCES

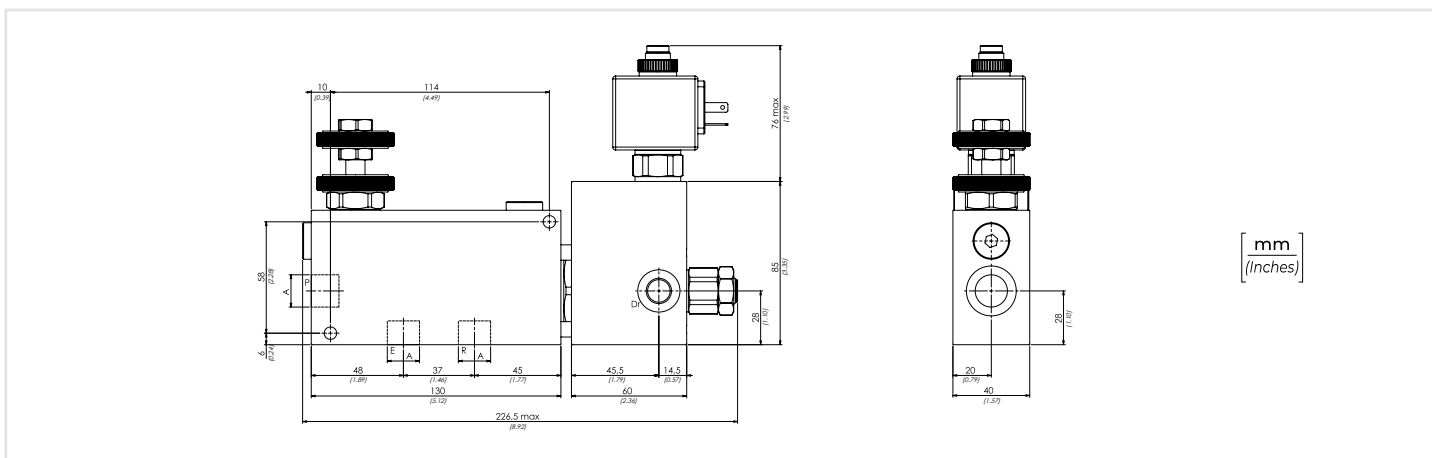


## SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



## PORTATA MASSIMA L/MIN - MAX FLOW USGPM

50 L/MIN CON 30 L/MIN IN R (13,3 USGPM WITH 8 USGPM IN R)	<b>380</b>
90 L/MIN CON 50 L/MIN IN R (24 USGPM WITH 13,3 USGPM IN R)	<b>120</b>



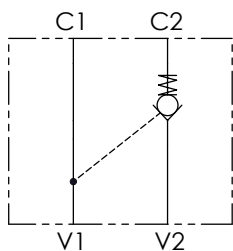
## CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX SENZA VALVOLE (kg) APPROX WEIGHT WITHOUT VALVES (lb)
<b>VPP380-RV</b>	<b>BSPP 3/8</b>	<b>50</b> (13.2)	<b>250</b> (3625)	<b>2,25</b> (4.97)
<b>VPP120-RV</b>	<b>BSPP 1/2</b>	<b>90</b> (23.8)		





**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

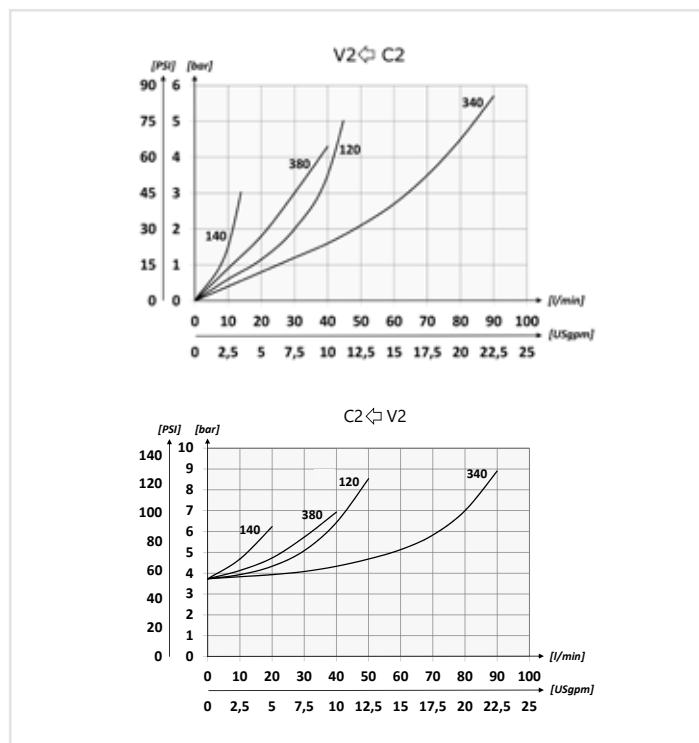


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>VRSE</b>	

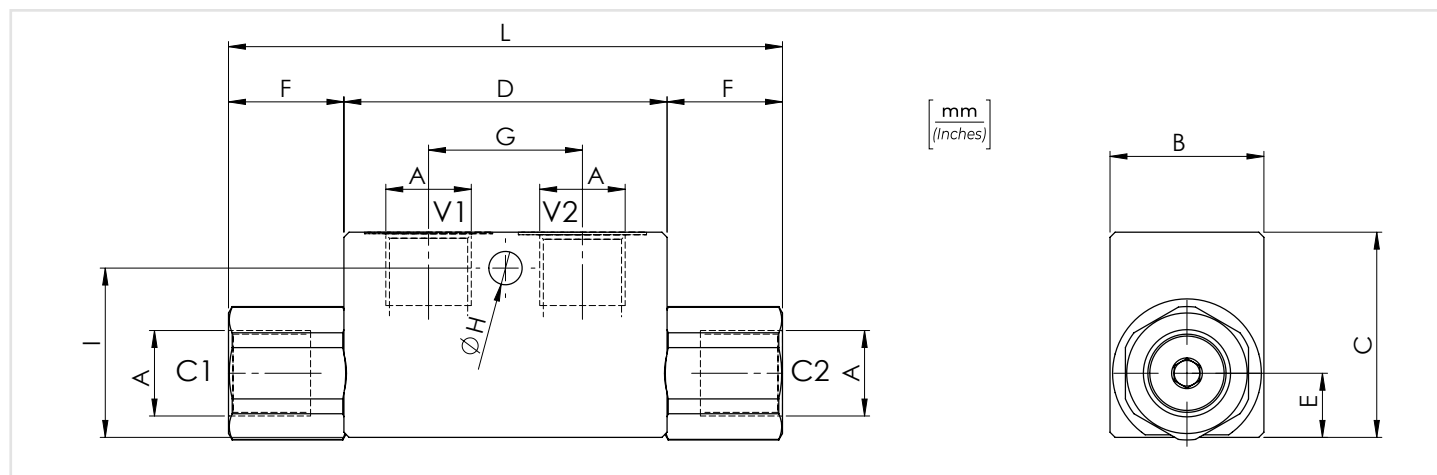
01	VALVOLE DI BLOCCO A SEMPLICE EFFETTO (SINGLE ACTING PILOT CHECK VALVES)	VRSE
02	DIMENSIONE (SIZE)	BSP 1/4
		BSP 3/8
		BSP 1/2
		BSP 3/4

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	I	L	PESO APPROX APPROX WEIGHT kg-lbt	RAPPORTO DI PILOTAGGIO PILOT RATIO
VRSE140	BSP 1/4	15 (4)	350 (5075)	30 (1.18)	40 (1.57)	63 (2.48)	12,5 (0.49)	22,5 (0.89)	30 (1.18)	6,5 (0.26)	33 (1.30)	108 (4.25)	0,64 (1.41)	1:4
VRSE380	BSP 3/8	35 (9.2)												
VRSE120	BSP 1/2	45 (11.9)		35 (1.38)	50 (1.97)	82 (3.23)	16,5 (0.65)	31,5 (1.24)	36 (1.42)	35 (1.38)	145 (5.71)	1,08 (2.38)		
VRSE340	BSP 3/4	70 (18.5)		40 (1.57)	60 (2.36)	100 (3.94)	22,5 (0.89)	46 (1.81)	50 (1.97)	8,5 (0.33)	50 (1.97)	192 (7.56)	2 (4.41)	



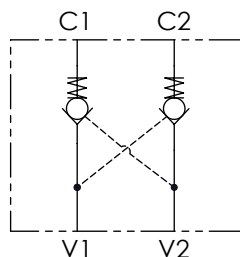


### CODICE ORDINAZIONE / ORDERING CODE

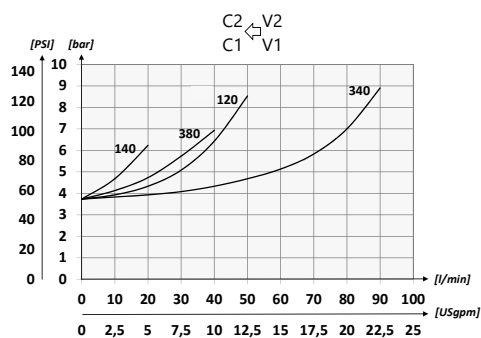
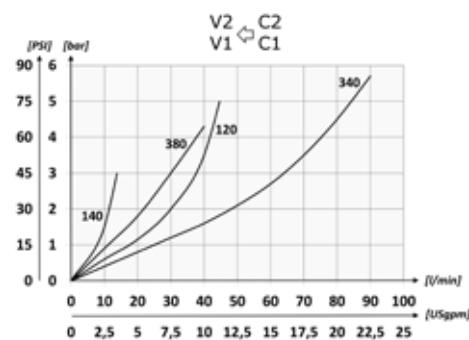
01	02
<b>VRDE</b>	

<b>01</b>	VALVOLE DI BLOCCO A DOPPIO EFFETTO (DOUBLE ACTING PILOT CHECK VALVES)	<b>VRDE</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4
		BSPP 3/8
		BSPP 1/2
		BSPP 3/4

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

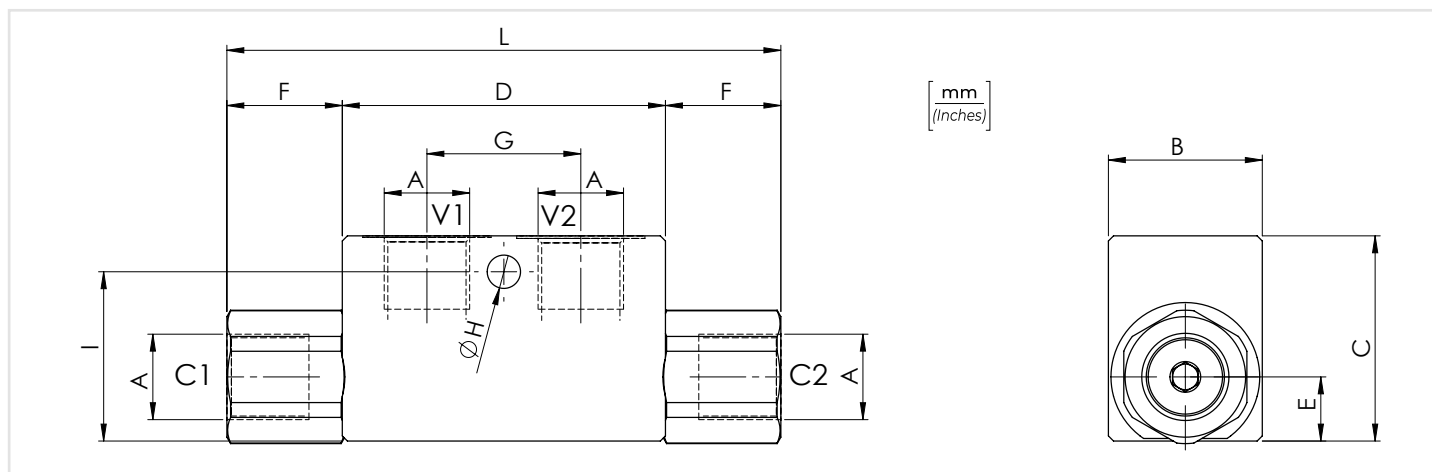


### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

Olío idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	I	L	PESO APPROX APPROX WEIGHT kg-lbt	RAPPORTO DI PILOTAGGIO PILOT RATIO
VRDE140	BSPP 1/4	15 (4)	350 (5075)	30 (1.18)	40 (1.57)	63 (2.48)	12,5 (0.49)	22,5 (0.89)	30 (1.18)	6,5 (0.26)	33 (1.30)	108 (4.25)	0,64 (1.41)	1:4
VRDE380	BSPP 3/8	35 (9.2)		35 (1.38)	50 (1.97)	82 (3.23)	16,5 (0.65)	31,5 (1.24)	36 (1.42)		35 (1.38)	145 (5.71)	0,60 (1.32)	
VRDE120	BSPP 1/2	45 (11.9)		40 (1.57)	60 (2.36)	100 (3.94)	46 (1.81)	50 (1.97)	8,5 (0.33)		50 (1.97)	192 (7.56)	1,10 (2.42)	
VRDE340	BSPP 3/4	70 (18.5)		40 (1.57)	60 (2.36)	100 (3.94)	46 (1.81)	50 (1.97)	8,5 (0.33)		50 (1.97)	192 (7.56)	2 (4.40)	



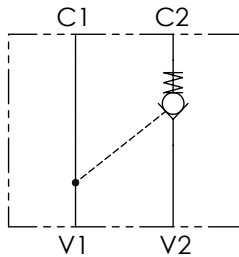


### CODICE ORDINAZIONE ORDERING CODE

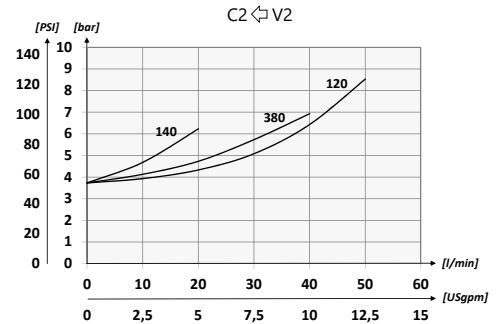
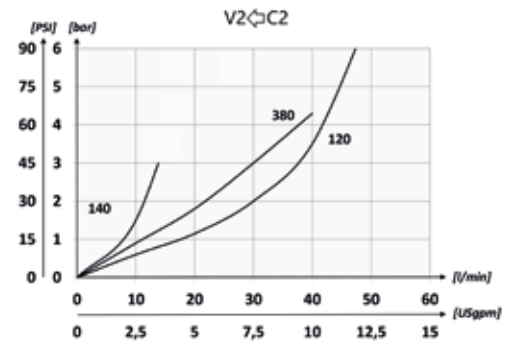
01	02	03
<b>VRSD</b>		

<b>01</b>	VALVOLE DI BLOCCO A SEMPLICE EFFETTO DIN2353 (DIN2353 SINGLE ACTING PILOT CHECK VALVES)		<b>VRSD</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
<b>03</b>	DIMENSIONE TUBO (SIZE PIPE)	Per tubo Ø 8 - For Ø 8 pipe only for BSPP 1/4	<b>T8</b>
		Per tubo Ø 12 - For Ø 12 pipe standard only for BSPP 1/4 and 3/8	
		Per tubo Ø 15 - For Ø 15 pipe standard only for BSPP 1/2	

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

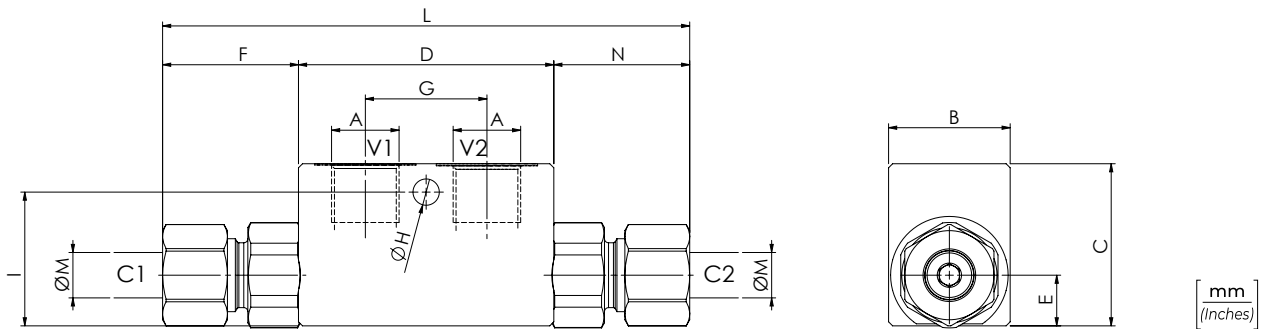


### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm²/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm³/min - 5 gocce/min</b> 0,015 in³/min - 5 drops/min

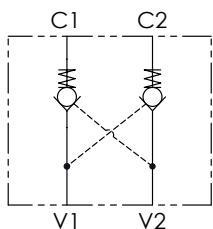


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	I	L	M	PESO APPROX APPROX WEIGHT kg-lbt	RAPPORTO DI PILOTAGGIO PILOT RATIO
VRSD140T8	BSPP 1/4	10 (2.6)	350 (5075)	30 (1.18)	40 (1.57)	63 (2.48)	12,5 (0.49)	28 (1.10)	30 (1.18)	6,5 (0.26)	33 (1.30)	119 (4.69)	8 (0.31)	0,62 (1.36)	1:9
VRSD140		15 (4)						32 (1.26)				127 (5)	12 (0.47)	0,63 (1.37)	
VRSD380	BSPP 3/8	35 (9.2)		35 (1.38)	50 (1.97)	82 (3.23)	16,5 (0.65)	33,5 (1.32)	36 (1.42)		35 (1.38)	149 (5.87)	15 (0.59)	1,10 (2.42)	1:4
VRSD120	BSPP 1/2	45 (11.9)													



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

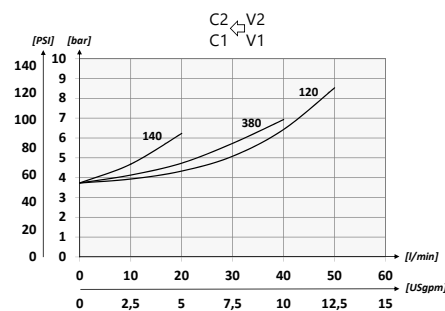
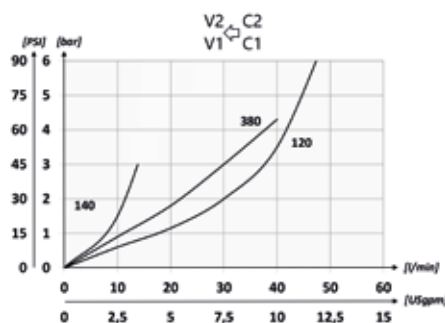


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03
<b>VRDD</b>		

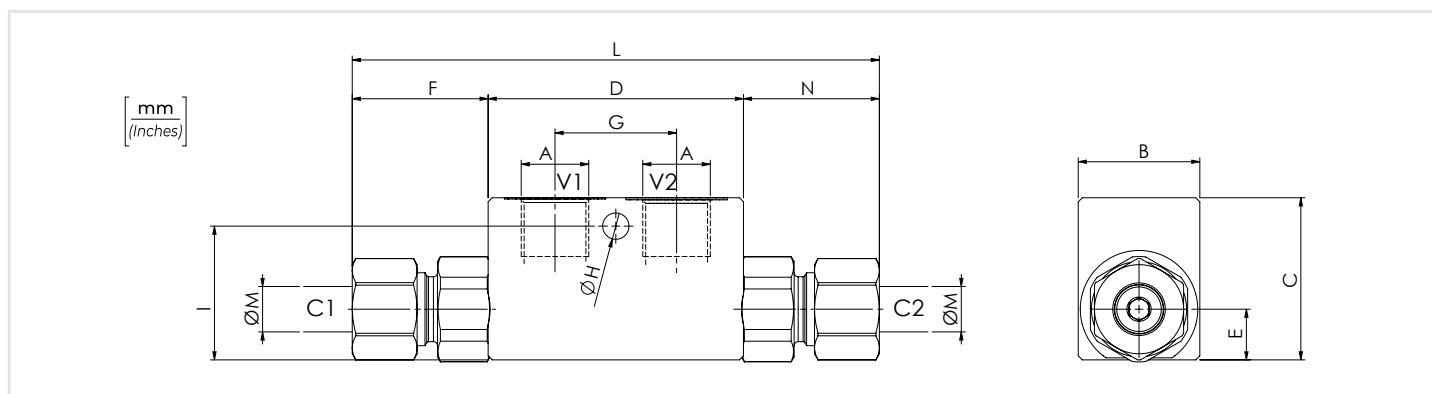
<b>01</b>	VALVOLE DI BLOCCO A DOPPIO EFFETTO DIN2353 (DIN2353 DOUBLE ACTING PILOT CHECK VALVES)	<b>VRDD</b>
<b>02</b>	DIMENSIONE (SIZE)	BSP 1/4 <b>140</b>
		BSP 3/8 <b>380</b>
		BSP 1/2 <b>120</b>
<b>03</b>	DIMENSIONE TUBO (SIZE PIPE)	Per tubo Ø 8 - For Ø 8 pipe only for <b>BSP 1/4</b> <b>T8</b>
		Per tubo Ø 12 - For Ø 12 pipe standard only for <b>BSP 1/4 and 3/8</b>
		Per tubo Ø 15 - For Ø 15 pipe standard only for <b>BSP 1/2</b>

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

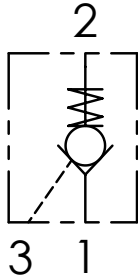


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO / TYPE	A	PORTATA MAX / MAX FLOW l/min-USgpm	PRESSIONE MAX / MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	I	L	M	PESO APPROX / APPROX WEIGHT kg-lbt	RAPPORTO DI PILOTAGGIO / PILOT RATIO
VRDD140T8	BSP 1/4	10 (2.6)	350 (5075)	30 (1.18)	40 (1.57)	63 (2.48)	12,5 (0.49)	28 (1.10)	30 (1.18)	6,5 (0.26)	35 (1.38)	113 (4.45)	8 (0.31)	0,60 (1.32)	1:9
VRDD140		15 (4)						32 (1.26)				127 (5)	12 (0.47)	0,64 (1.40)	
VRDD380	BSP 3/8	35 (9.2)						35 (1.38)				149 (5.87)	15 (0.59)	0,63 (1.38)	1:4
VRDD120	BSP 1/2	45 (11.9)						36 (1.42)				149 (5.87)	15 (0.59)	1,17 (2.57)	



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



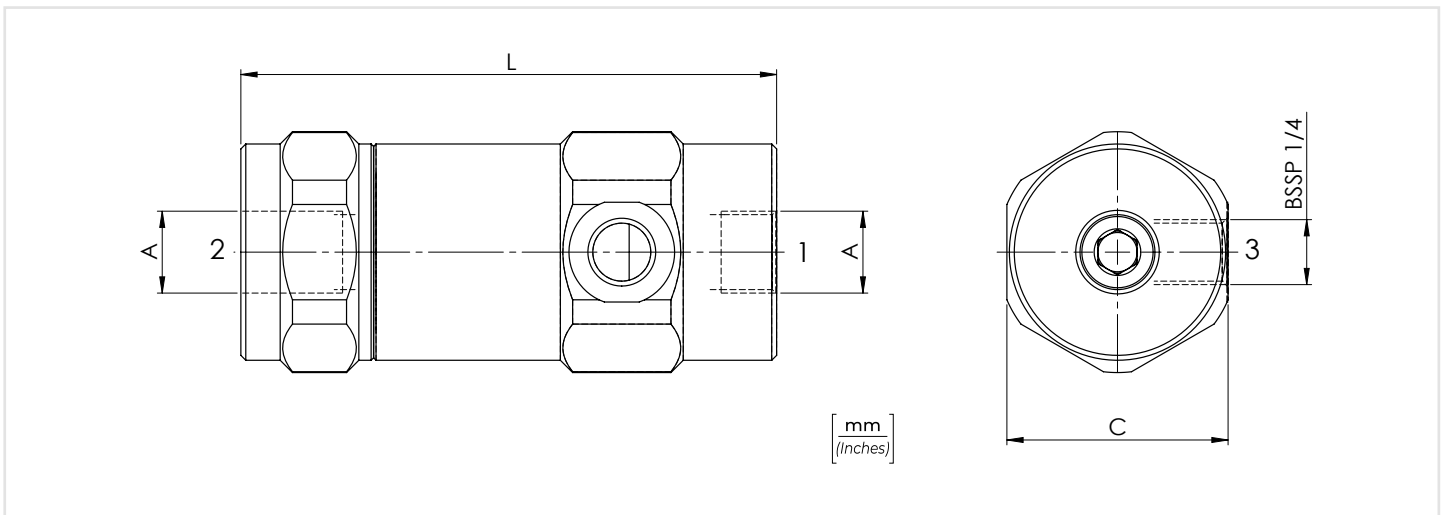
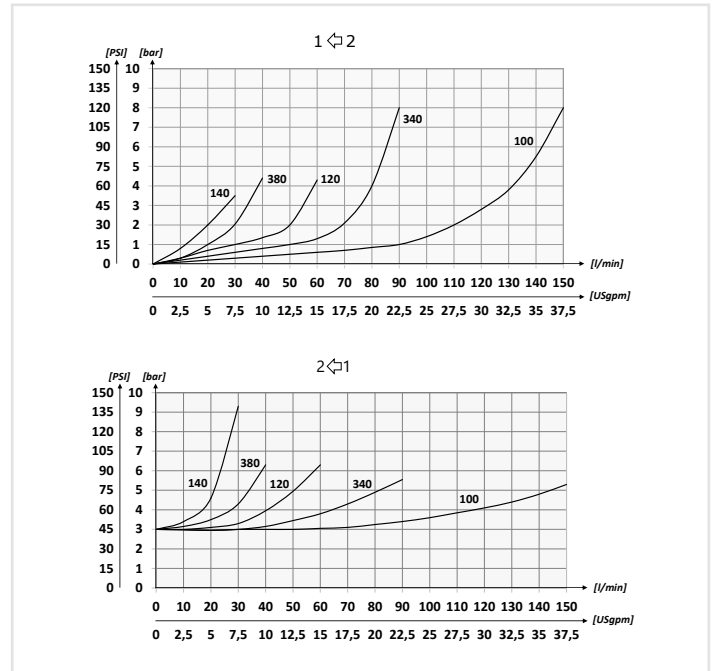
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min

01	02
<b>CODICE ORDINAZIONE</b> ORDERING CODE	
<b>VRPE</b>	

<b>01</b>	<b>VALVOLE DI BLOCCO PILOTATE A SEMPLICE EFFETTO</b> (SINGLE ACTING PILOT CHECK VALVES)	<b>VRPE</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPB 1/4 <b>140</b>
		BSPB 3/8 <b>380</b>
		BSPB 1/2 <b>120</b>
		BSPB 3/4 <b>340</b>
		BSPB 1 <b>100</b>

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

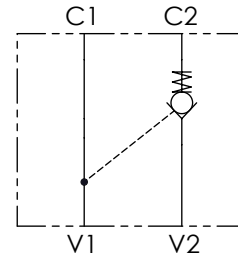
TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	C	PESO APPROX (kg) APPROX WEIGHT (lbt)	RAPPORTO DI PILOTAGGIO PILOT RATIO
VRPE140	BSPB 1/4	25 (6.6)	350 (5075)	96 (3.78)	40 (1.57)	0,84 (1.85)	1:5.3
VRPE380	BSPB 3/8	40 (10.6)		109 (4.29)	45 (1.77)	1,14 (2.51)	1:4.4
VRPE120	BSPB 1/2	60 (15.9)		122 (4.80)		1,24 (2.73)	1:4.2
VRPE340	BSPB 3/4	100 (26.4)	300 (4350)	132 (5.20)	55 (2.17)	1,87 (4.12)	1:4
VRPE100	BSPB 1	150 (39.6)		166 (6.54)	65 (2.56)	3,22 (7.10)	1:4.1



	01	02
<b>CODICE ORDINAZIONE</b> ORDERING CODE	<b>VRP</b>	

<b>01</b>	VALVOLE DI BLOCCO PILOTATE A SEMPLICE EFFETTO (SINGLE ACTING PILOT CHECK VALVES)	<b>VRP</b>
<b>02</b>	DIMENSIONE (SIZE)	<b>380</b>
		<b>120</b>

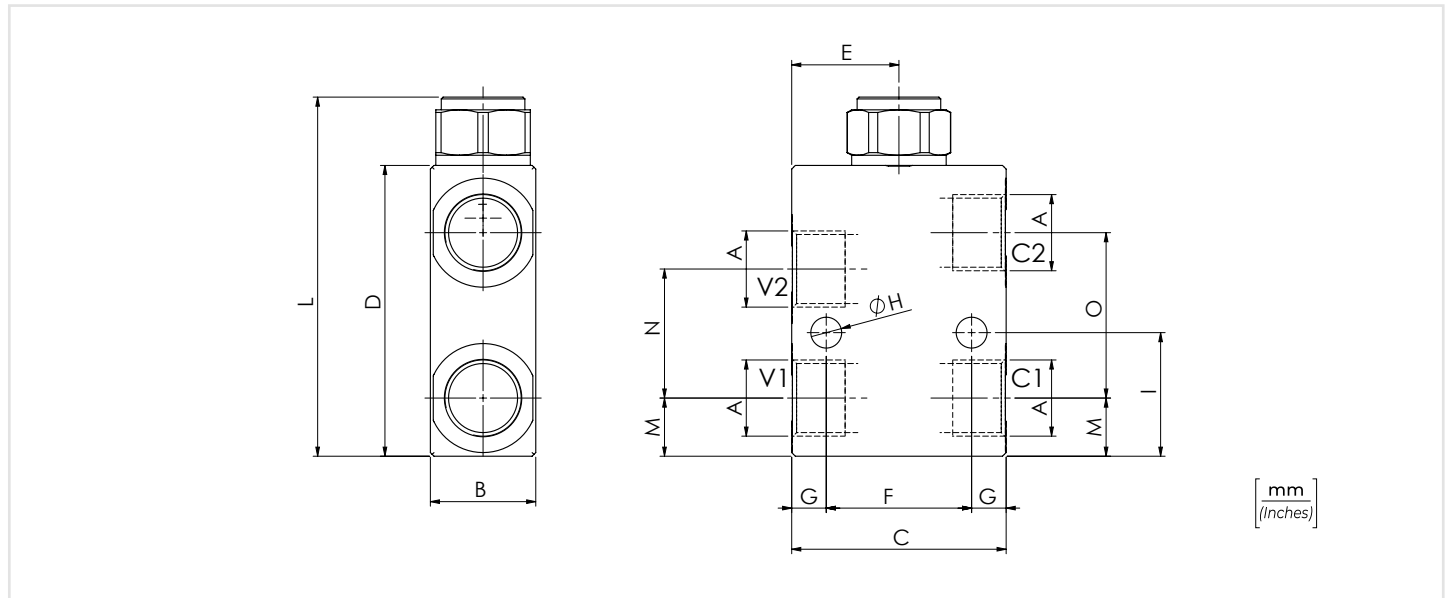
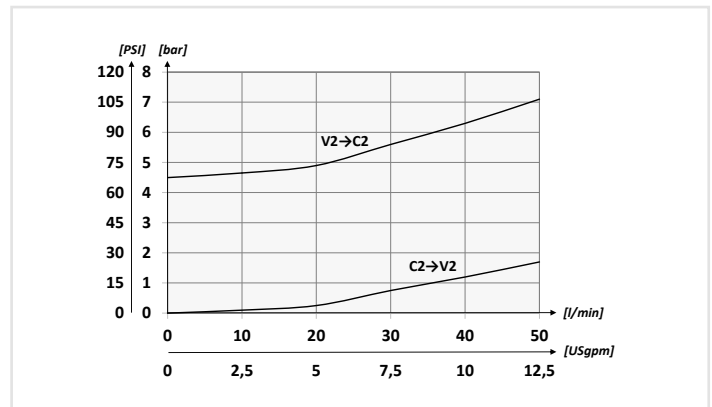
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

### PERFORMANCES



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	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	O	PESO APPROX APPROX WEIGHT kg-lbt	RAPPORTO DI PILOTAGGIO PILOT RATIO
VRP380	BSPP 3/8	35 (9.2)	350 (5075)	29 (1.14)	59 (2.32)	80 (3.5)	29,5 (1.16)	40 (1.57)	9,5 (0.37)	8,5 (0.33)	31,75 (1.25)	99	15 (0.59)	33,50 (1.32)	50 (1.97)	0,9 (2)	1:4
VRP120	BSPP 1/2	50 (13.2)		34 (1.34)	16 (0.63)	35,50 (1.40)	45,5 (1.79)										

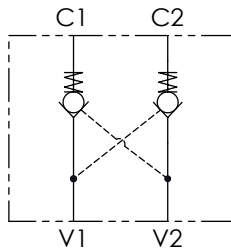


**CODICE ORDINAZIONE**  
ORDERING CODE

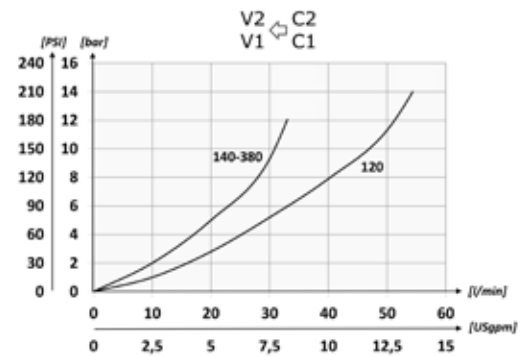
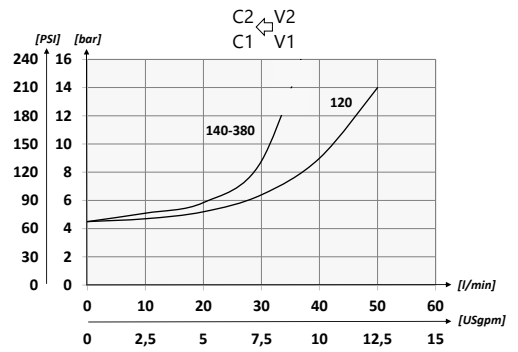
01	<b>VRDL</b>
02	

<b>01</b>	VALVOLE DI BLOCCO PILOTATE A DOPPIO EFFETTO (DOUBLE ACTING PILOT CHECK VALVES)	<b>VRDL</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4
		BSPP 3/8
		BSPP 1/2

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

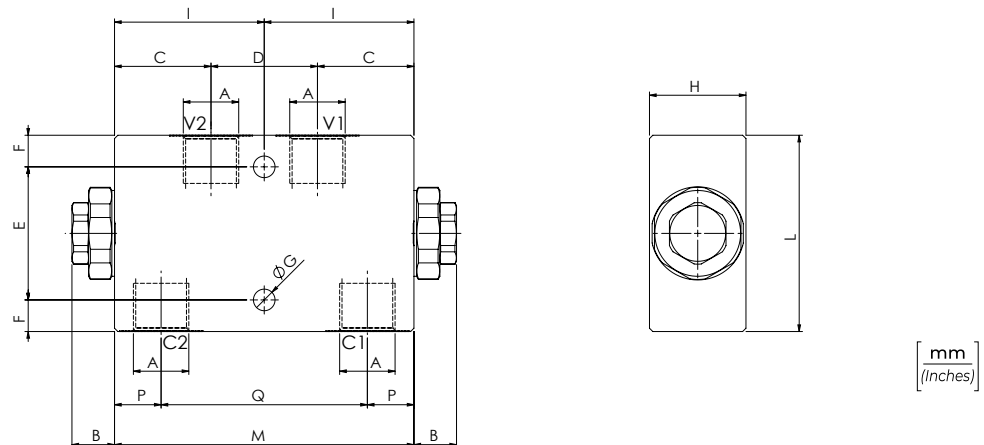


**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min

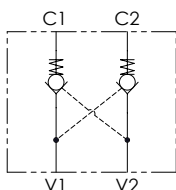


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	I	L	M	P	Q	PESO APPROX APPROX WEIGHT kg-lbt	RAPPORTO DI PILOTAGGIO PILOT RATIO
VRDL140N	BSPP 1/4	35 (9.2)	350 (5075)	13 (0.51)	29 (1.14)	32 (1.26)	40 (1.57)	9,5 (0.37)	6,5 (0.26)	29 (1.14)	45 (1.77)	59 (2.32)	90 (3.54)	14 (0.55)	62 (2.44)	1,18 (2.60)	1:7
VRDL380N	BSPP 3/8			14,8 (0.58)	38 (1.50)	34 (1.34)		14,5 (0.57)	8,5 (0.33)	34 (1.34)	55 (2.17)	69 (2.72)	110 (4.33)	20,5 (0.81)	69 (2.72)		
VRDL120N	BSPP 1/2	50 (13.2)		14,8 (0.58)	38 (1.50)	34 (1.34)	14,5 (0.57)	8,5 (0.33)	34 (1.34)	55 (2.17)	69 (2.72)	110 (4.33)	20,5 (0.81)	69 (2.72)	1,77 (3.90)		



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

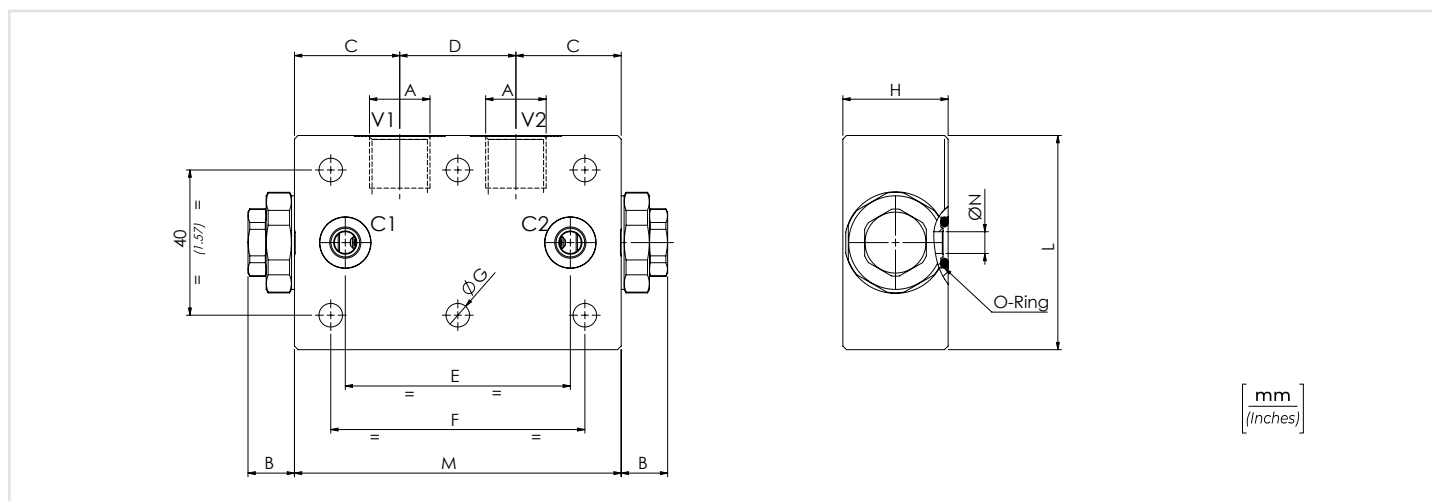
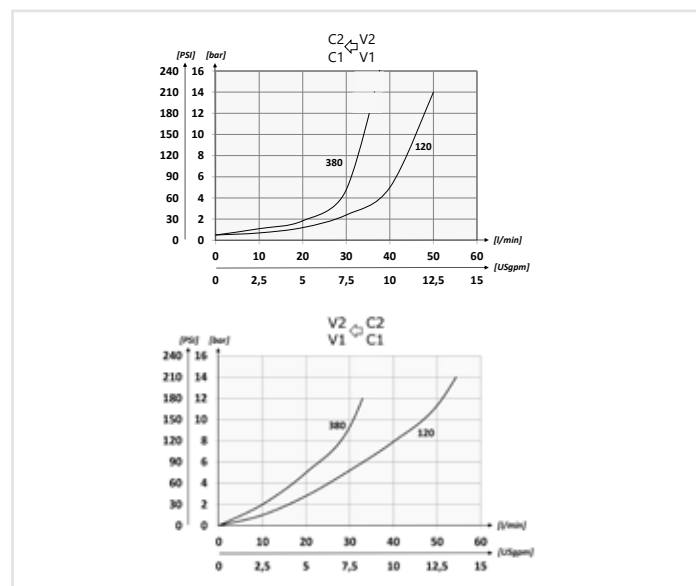
Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VRDF</b>				

<b>01</b>	VALVOLE DI BLOCCO FLANGIATA A DOPPIO EFFETTO (DOUBLE ACTING PILOT CHECK VALVES - FLANGED VERSION)	<b>VRDF</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPB 3/8 <b>380</b>
		BSPB 1/2 <b>120</b>
<b>03</b>	MOLLA (SPRING)	<b>1 bar</b> (14.5 PSI) <b>1</b>
		<b>6 bar</b> (87 PSI) Standard <b>6</b>
<b>04</b>	O-RING SUL PISTONE DI PILOTAGGIO (O-RING ON PILOT PISTON)	Senza o-ring (without o-ring) <b>0</b>
		con o-ring (with o-ring) <b>1</b>
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:3,2 solo per dimensione 120 (only for size 120) <b>32</b>
		1:7 <b>70</b>

### PERFORMANCES

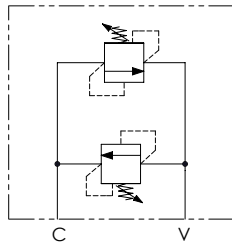


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	M	N	O-RING	PESO APPROX APPROX WEIGHT kg-lbt	RAPPORTO DI PILOTAGGIO PILOT RATIO
VRDF380	BSPB 3/8	35 (9.2)	350 (5075)	12,8 (0.50)	29 (1.94)	32 (1.26)	62 (2.44)	70 (2.76)	6.5 (0.26)	34 (1.34)	59 (2.32)	90 (3.54)	Ø 6 (0,24)	9,19x2,62	1,11 (2.44)	1:7
VRDF120	BSPB 1/2	50 (13.2)		14.8 (0.58)	38 (1.50)	34 (1.34)	65 (2.56)	80 (3.15)	8.5 (0.33)		69 (2.72)	110 (4.33)	Ø 7 (0,28)	15,08x2,62	1,85 (4)	1:3,2
																1:7



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	PESO APPROX APPROX WEIGHT kg-lbt	VALVOLA TIPO TYPE OF VALVE
DCA140	BSPP 1/4	20 (5.3)	350 (5075)	22 (0.87)	6 (0.24)	0,8 (1.8)	VMDIN
DCA380				20 (0.79)	10 (0.39)		

### CODICE ORDINAZIONE ORDERING CODE

01	02	03
<b>DCA</b>		

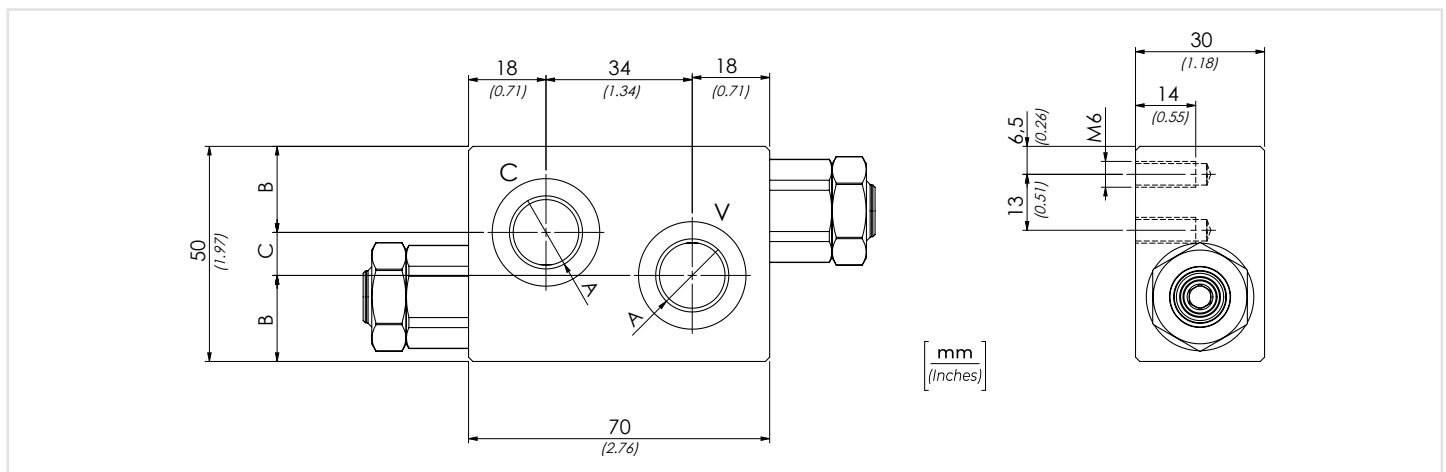
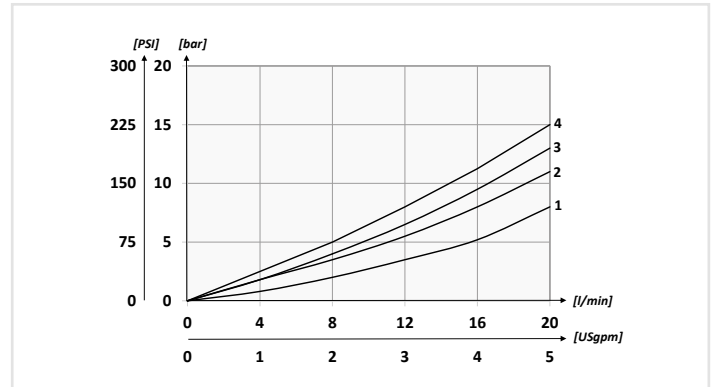
01	VALVOLE ANTIURTO DOPPIE INCROCIATE (DOUBLE CROSS LINE DIRECT ACTING RELIEF VALVES)		DCA
02	DIMENSIONE (SIZE)	BSPP 1/4	140
		BSPP 3/8	380
03	MOLLA (SPRING) 10/40 bar (145/580PSI)	20 bar/al giro (290 PSI/turn)	1
	Molla (SPRING) 20/110 bar (290/1595 PSI)	40 bar/al giro (580 PSI/turn)	2
	MOLLA (SPRING) 30/210 bar (435/3045 PSI)	70 bar/al giro (1015 PSI/turn)	3
	Molla (SPRING) 40/350 bar (580/5075 PSI)	130 bar/al giro (1885 PSI/turn)	4

### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F

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

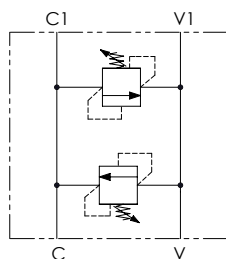
### PERFORMANCES



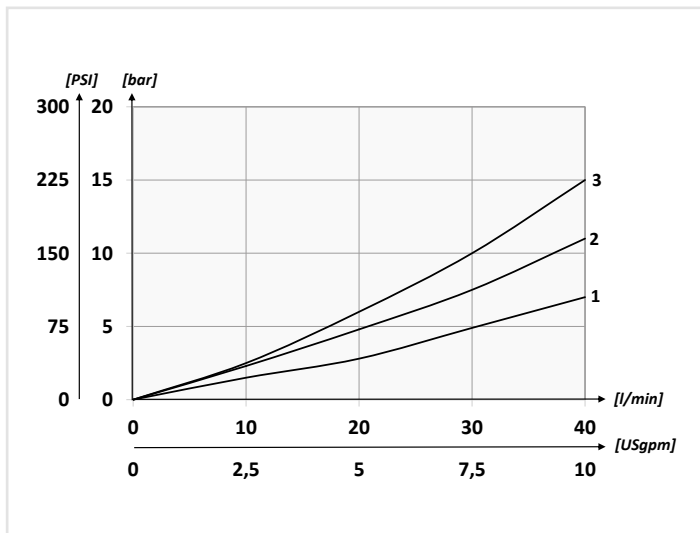




### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



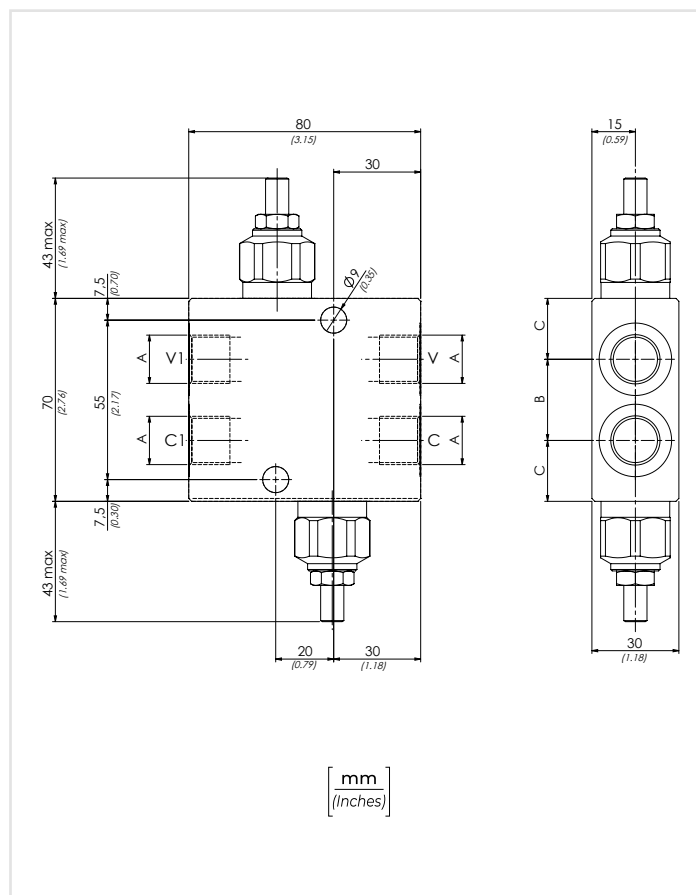
### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### CODICE ORDINAZIONE / ORDERING CODE

01	02	03
<b>VBDC</b>		

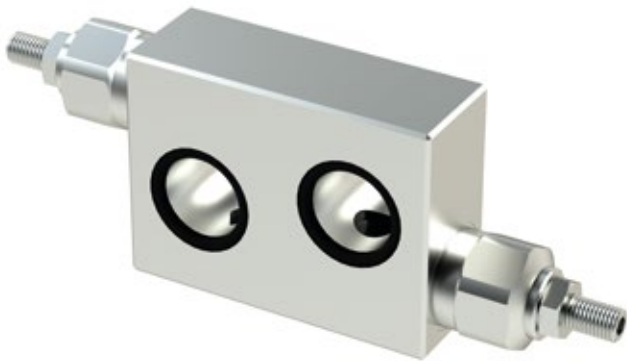
01	VALVOLE ANTIURTO DOPPIE INCROCIATE (DOUBLE CROSS LINE DIRECT ACTING RELIEF VALVES)	VBDC
02	DIMENSIONE (SIZE)	BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>
03	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	<b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>2</b>
	MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI)	<b>3</b>



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	PESO APPROX APPROX WEIGHT kg-lbt	VALVOLA TIPO TYPE OF VALVE
VBDC380	BSPP 3/8	40 (10.6)	350 (5075)	28 (1.10)	21 (0.83)	1,18 (2.60)	VMD40S
VBDC120	BSPP 1/2			33 (1.30)	18,5 (0.73)	1,12 (2.47)	

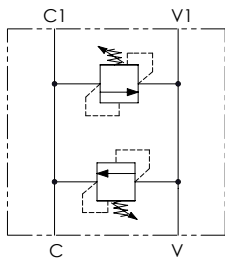




<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03
	<b>DCL</b>	<b>120</b>	

<b>01</b>	VALVOLE ANTIURTO DOPPIE INCROCIATE (DOUBLE CROSS LINE DIRECT ACTING RELIEF VALVES)	<b>DCL</b>
<b>02</b>	DIMENSIONE (SIZE)	Ø 21 (BSPP 1/2)
<b>03</b>	MOLLA (SPRING) 10/90 bar (145/1305 PSI)	12 bar/al giro (174 PSI/turn)
	MOLLA (SPRING) 20/210 bar (290/3045 PSI)	33 bar/al giro (479 PSI/turn)
	MOLLA (SPRING) 70/350 bar (1015/5075 PSI)	70 bar/al giro (1015 PSI/turn)

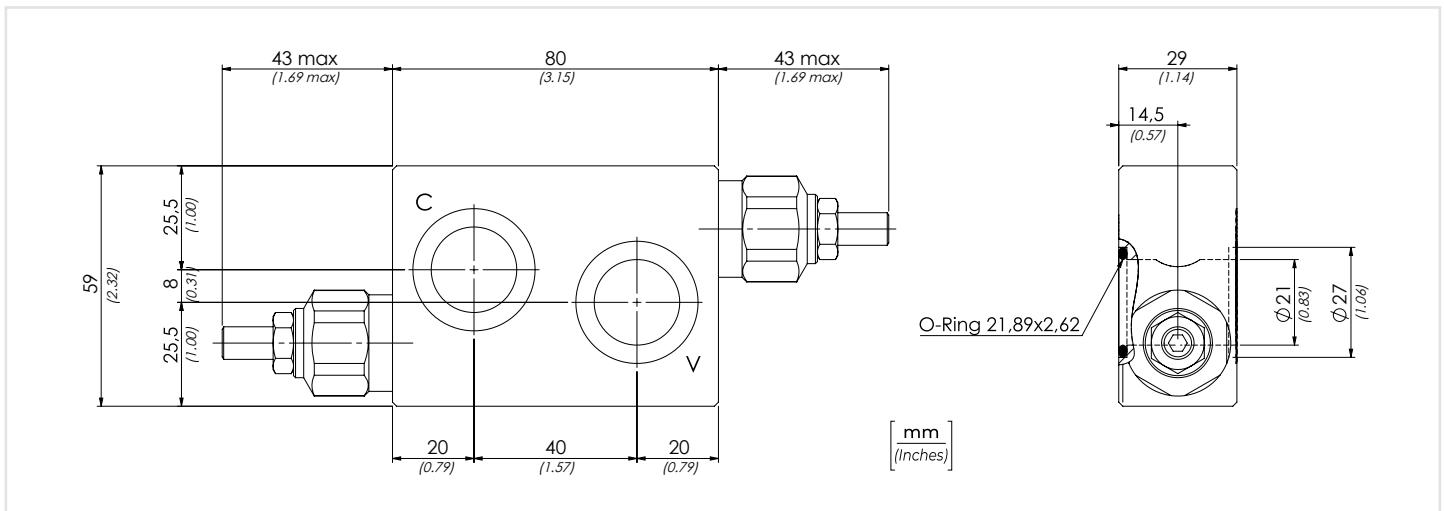
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F

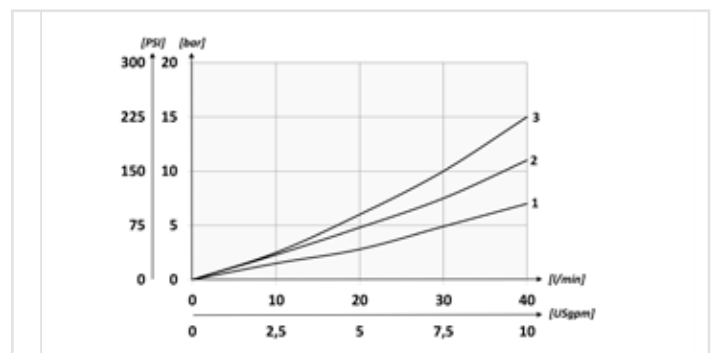
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)  
It is necessary a filter use to protect the valve (advised filtration 15 µm)

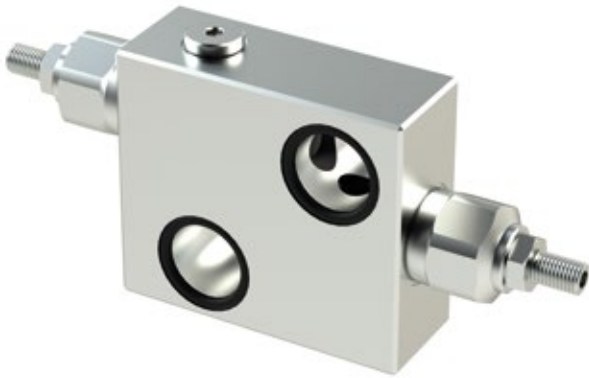


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

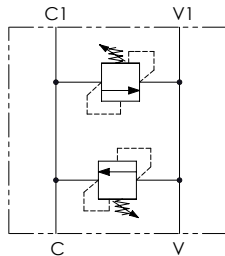
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	VALVOLA TIPO TYPE OF VALVE
<b>DCL120</b>	<b>Ø 21 (BSPP 1/2)</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>0,96 (2.11)</b>	<b>VMD40S</b>

### PERFORMANCES





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### CODICE ORDINAZIONE / ORDERING CODE

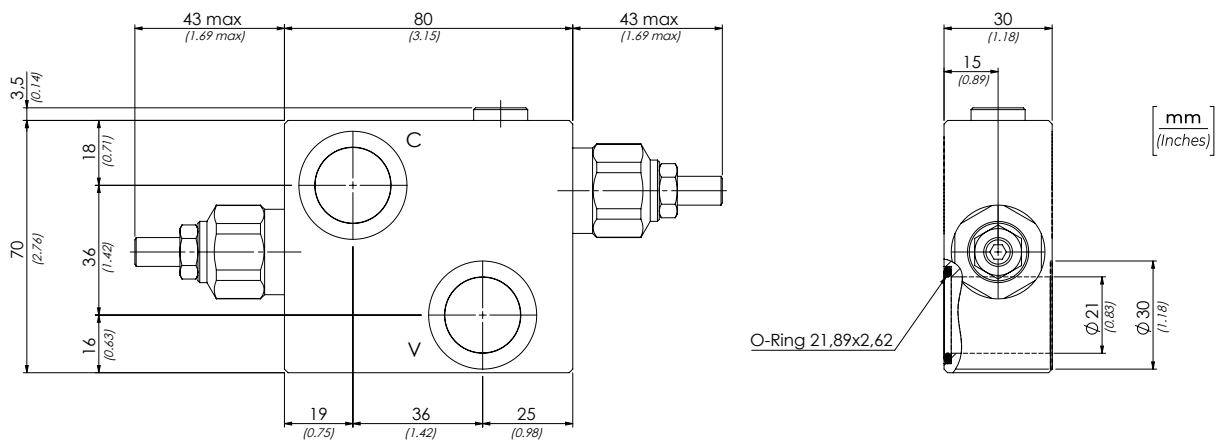
01	02	03
<b>DCV</b>	<b>120</b>	

<b>01</b>	VALVOLE ANTIURTO DOPPIE INCROCIATE (DOUBLE CROSS LINE DIRECT ACTING RELIEF VALVES)	<b>DCV</b>
<b>02</b>	DIMENSIONE (SIZE)	<b>120</b>
<b>03</b>	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	<b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>2</b>
	MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI)	<b>3</b>

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F

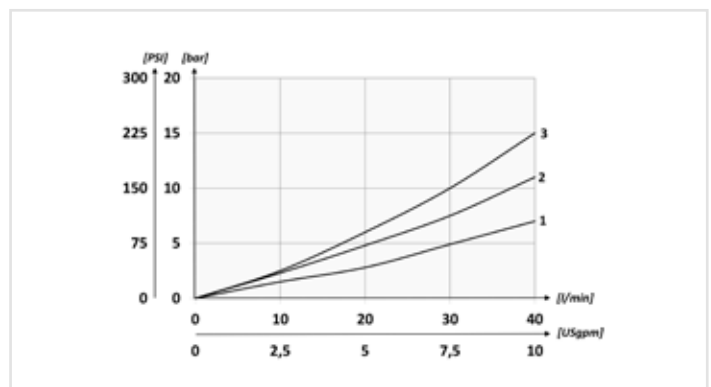
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)  
It is necessary a filter use to protect the valve (advised filtration 15 µm)



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PORTATA MAX MAX FLOW l/min-USgpm	PESO APPROX APPROX WEIGHT kg-lbt	VALVOLA TIPO TYPE OF VALVE
DCV120	Ø 21 (BSPP 1/2)	40 (10.6)	350 (5075)	1,2 (2.7)	VMD40S

### PERFORMANCES

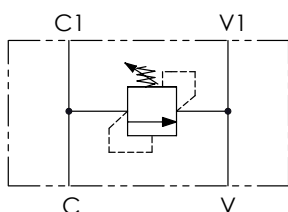




<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03
	<b>SCF</b>	<b>120</b>	

<b>01</b>	VALVOLE ANTIURTO SINGOLA (SINGLE LINE DIRECT ACTING RELIEF VALVES)	<b>SCF</b>
<b>02</b>	DIMENSIONE (SIZE)	<b>120</b>
<b>03</b>	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	<b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>2</b>
	MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI)	<b>3</b>

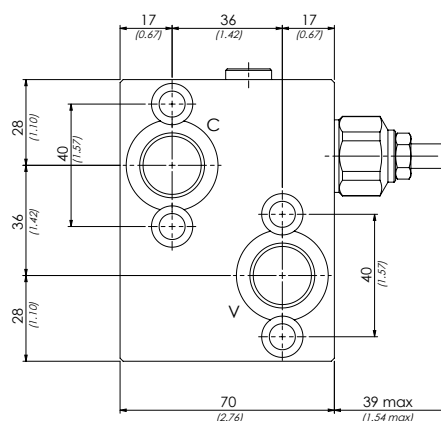
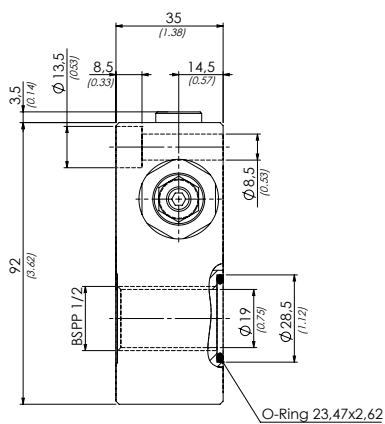
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm²/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F

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

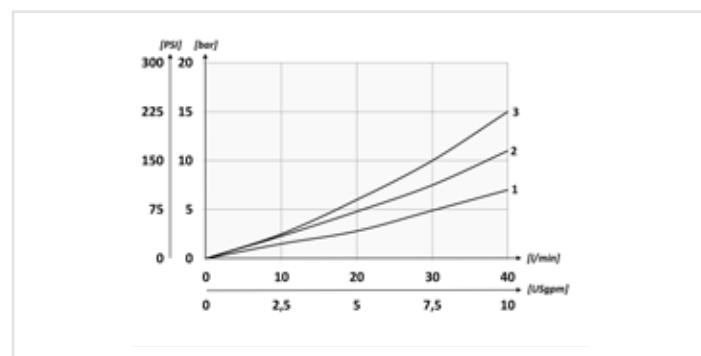


[ mm ]  
[ Inches ]

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	VALVOLA TIPO TYPE OF VALVE
<b>SCF120</b>	<b>BSPP 1/2</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>1,65</b> (3.63)	<b>VMD40S</b>

### PERFORMANCES



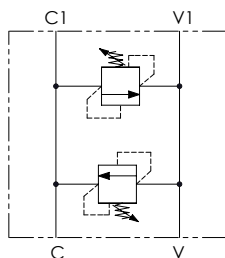


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03
<b>DCF</b>		

<b>01</b>	VALVOLE ANTIURTO DOPPIE INCROCIATE (DOUBLE CROSS LINE DIRECT ACTING RELIEF VALVES)	<b>DCF</b>
<b>02</b>	DIMENSIONE (SIZE)	<b>120</b>
<b>03</b>	MOLLA (SPRING) <b>10/40 bar</b> (145/580 PSI)	<b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>2</b>
	MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI)	<b>3</b>

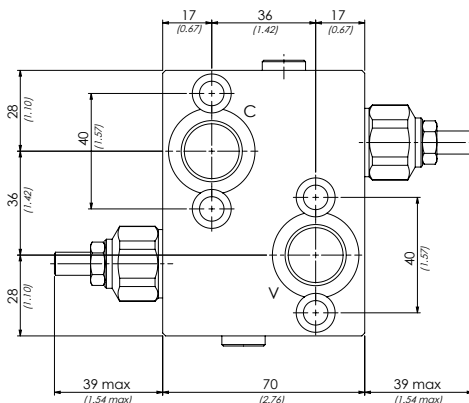
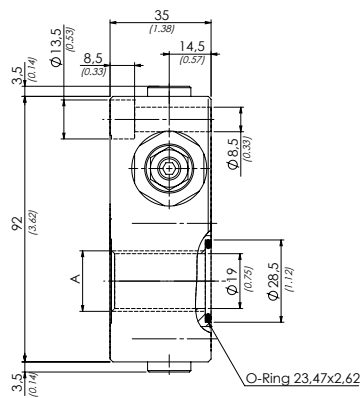
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm²/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro Max contamination index with filter</b>	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>

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

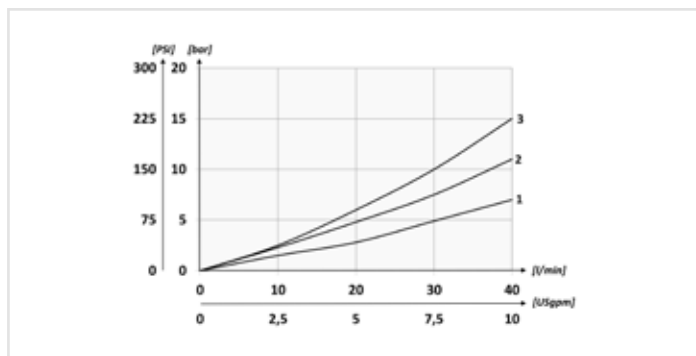


mm  
(inches)

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	VALVOLA TIPO TYPE OF VALVE
DCF120	BSPP 1/2	40 (10.6)	350 (5075)	1,5 (3.3)	VMD40S

### PERFORMANCES

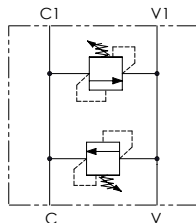




	01	02	03
<b>CODICE ORDINAZIONE</b> ORDERING CODE	<b>DCM</b>		

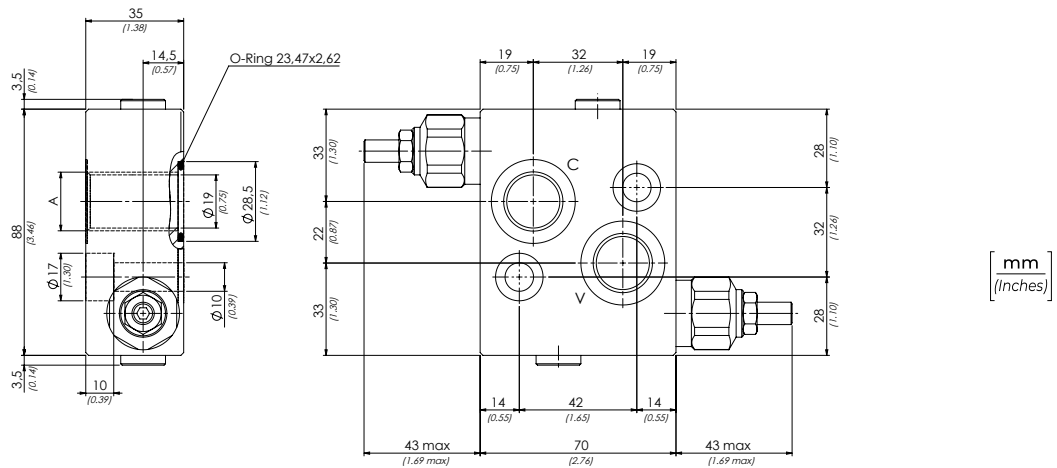
<b>01</b>	VALVOLE ANTIURTO DOPPIE INCROCIATE (DOUBLE CROSS LINE DIRECT ACTING RELIEF VALVES)	<b>DCM</b>
<b>02</b>	DIMENSIONE (SIZE)	BSP 1/2
<b>03</b>	MOLLA (SPRING) <b>10/40 bar</b> (145/580 PSI)	<b>12 bar/al giro</b> (174 PSI/turn)
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>33 bar/al giro</b> (479 PSI/turn)
	MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI)	<b>70 bar/al giro</b> (1015 PSI/turn)

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

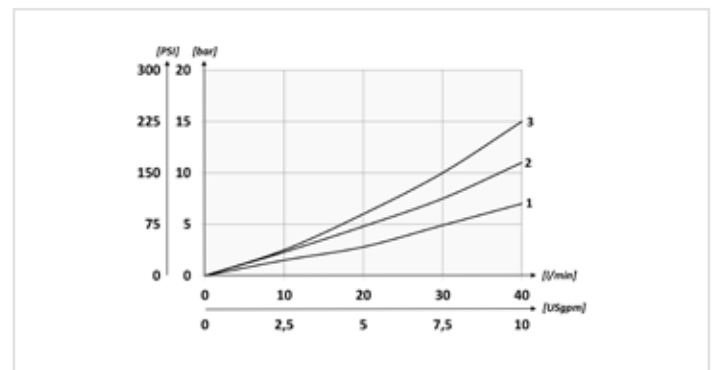
<b>olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

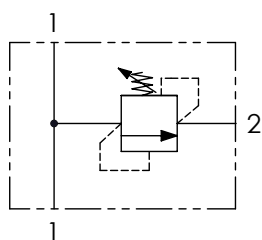
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-U- Sgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	VALVOLA TIPO TYPE OF VALVE
<b>DCM120</b>	<b>BSP 1/2</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>1,45</b> (3.20)	<b>VMD40S</b>

### PERFORMANCES





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

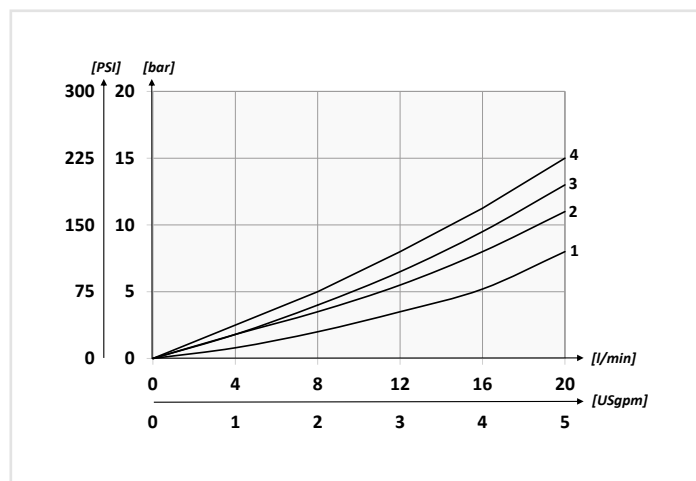


### CODICE ORDINAZIONE ORDERING CODE

01	02	03	04
<b>VMDR1</b>		<b>C</b>	

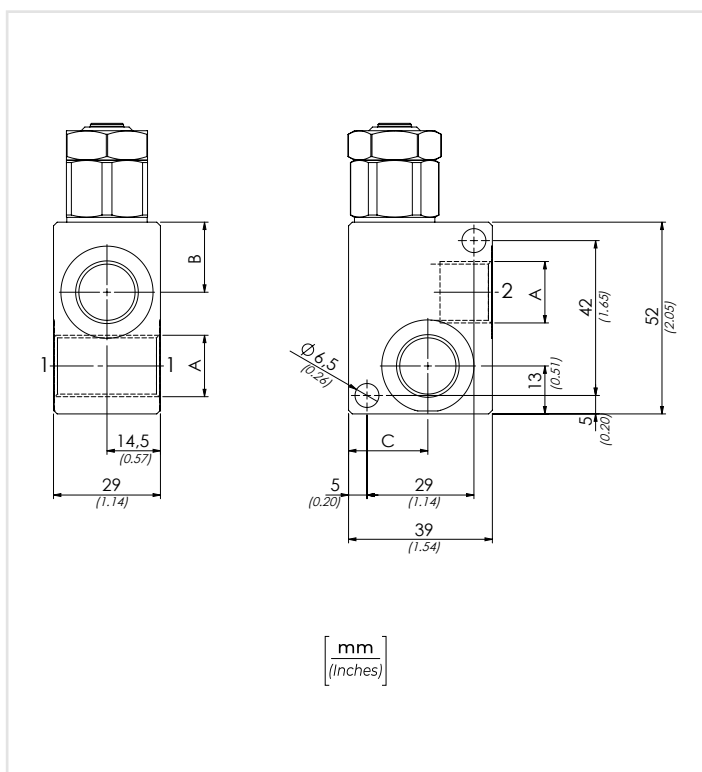
<b>01</b>	VALVOLE DI MASSIMA PRESSIONE DIRETTA IN LINEA (DIRECT ACTING PRESSURE RELIEF VALVES)	<b>VMDR1</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4 <b>140</b>
		BSPP 3/8 <b>380</b>
<b>03</b>	REGOLAZIONE (SETTING)	Chiave (Screw) <b>C</b>
<b>04</b>	MOLLA (SPRING) <b>10/40 bar</b> (145/580PSI)	<b>20 bar/al giro</b> (290 PSI/turn) <b>1</b>
	MOLLA (SPRING) <b>20/110 bar</b> (290/1595 PSI)	<b>40 bar/al giro</b> (580 PSI/turn) <b>2</b>
	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	<b>70 bar/al giro</b> (1015 PSI/turn) <b>3</b>
	MOLLA (SPRING) <b>40/350 bar</b> (580/5075 PSI)	<b>130 bar/al giro</b> (1885 PSI/turn) <b>4</b>

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

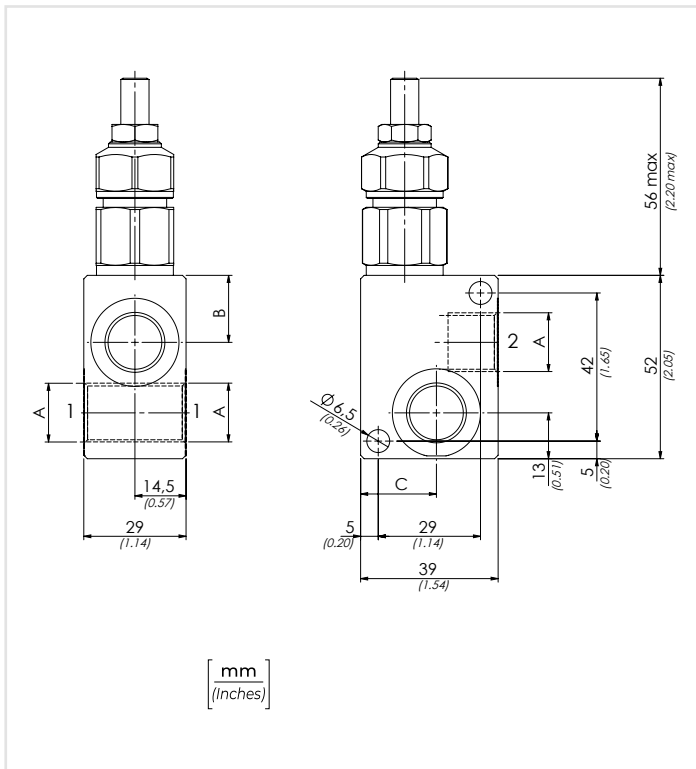
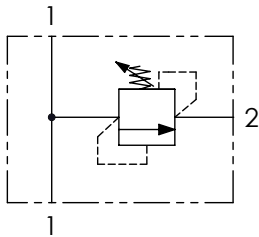


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	PESO APPROX (kg) APPROX WEIGHT (lb)
VMDR1140	BSPP 1/4	20 (5.3)	350 (5075)	17 (0.67)	20 (0.79)	0,47 (1.03)
VMDR1380	BSPP 3/8			19 (0.75)	18 (0.71)	0,43 (0.95)



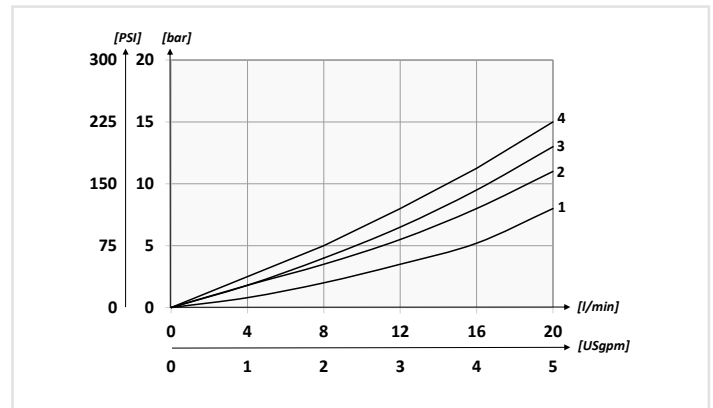
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03	04
	<b>VMDR10</b>			

<b>01</b>	VALVOLE DI MASSIMA PRESSIONE DIRETTA IN LINEA (DIRECT ACTING PRESSURE RELIEF VALVES)	<b>VMDR10</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4 <b>140</b>
		BSPP 3/8 <b>380</b>
<b>03</b>	REGOLAZIONE (SETTING)	Chiave (Screw) <b>C</b>
		Volantino (Handknob) Tipo (Type) <b>81300109</b> <b>V</b>
<b>04</b>	MOLLA (SPRING) <b>10/40 bar</b> (145/580 PSI)	<b>12 bar/al giro</b> (174 PSI/turn) <b>1</b>
	MOLLA (SPRING) <b>20/110 bar</b> (290/1595 PSI)	<b>37 bar/al giro</b> (537 PSI/turn) <b>2</b>
	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	<b>67 bar/al giro</b> (972 PSI/turn) <b>3</b>
	MOLLA (SPRING) <b>40/350 bar</b> (580/5075 PSI)	<b>131 bar/al giro</b> (1900 PSI/turn) <b>4</b>

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F

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

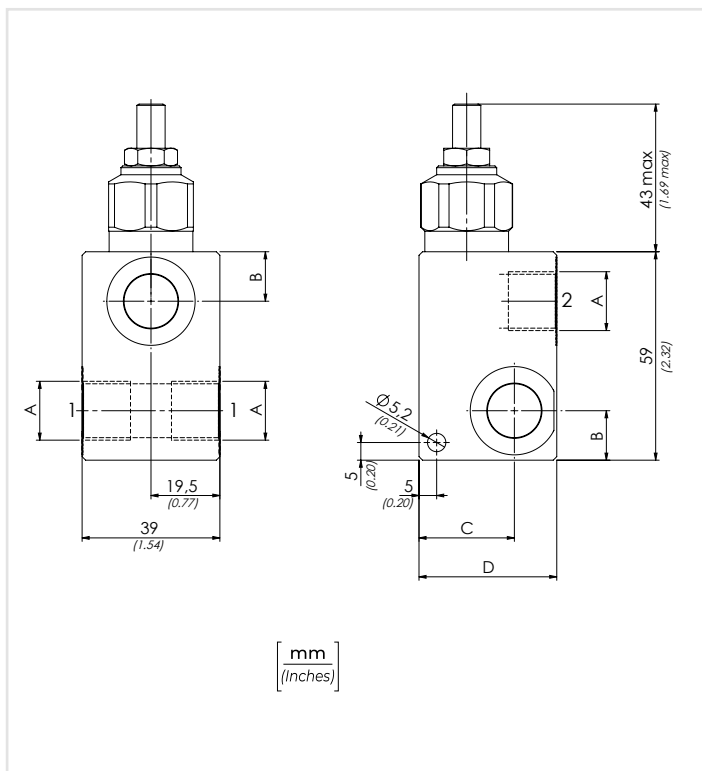
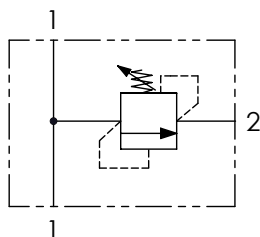
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	PESO APPROX (kg) APPROX WEIGHT (lbt)
<b>VMDR10140</b>	<b>BSPP 1/4</b>	<b>20</b> (5.3)	<b>350</b> (5075)	<b>17</b> (0.67)	<b>20</b> (0.79)	<b>0,51</b> (1.12)
<b>VMDR10380</b>	<b>BSPP 3/8</b>			<b>19</b> (0.75)	<b>18</b> (0.71)	<b>0,47</b> (1.03)





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

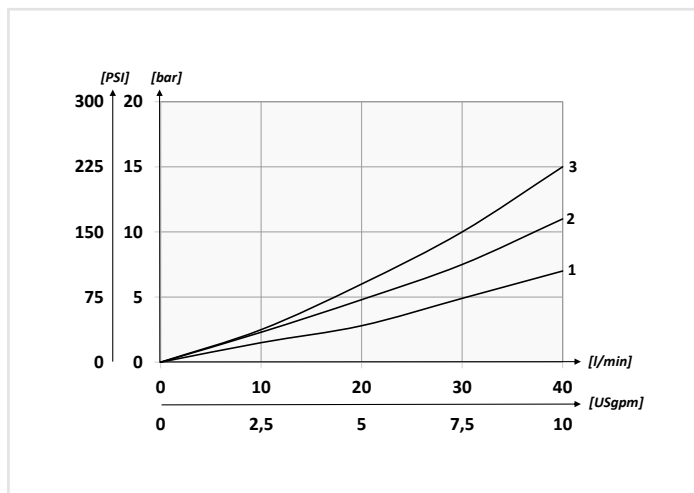


### CODICE ORDINAZIONE ORDERING CODE

01	02	03	04
<b>VMDR40</b>			

<b>01</b>	VALVOLE DI MASSIMA PRESSIONE DIRETTA IN LINEA (DIRECT ACTING PRESSURE RELIEF VALVES)	<b>VMDR40</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>
<b>03</b>	REGOLAZIONE (SETTING)	Chiave (Screw) <b>C</b>
		Volantino (Handknob) Tipo (Type) <b>81300109</b> <b>V</b>
<b>04</b>	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	<b>12 bar/al giro</b> (174 PSI/turn) <b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>33 bar/al giro</b> (479 PSI/turn) <b>2</b>
	MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI)	<b>70 bar/al giro</b> (1015 PSI/turn) <b>3</b>

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F

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

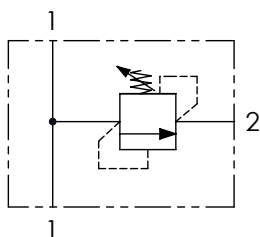
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	D	PESO APPROX (kg) APPROX WEIGHT (lbt)
VMDR40380	BSPP 3/8	40 (10.6)	350 (5075)	14 (0.55)	27 (1.06)	39 (1.54)	0,64 (1.39)
VMDR40120	BSPP 1/2			15 (0.59)	29,5 (1.16)	45 (1.77)	0,69 (1.50)

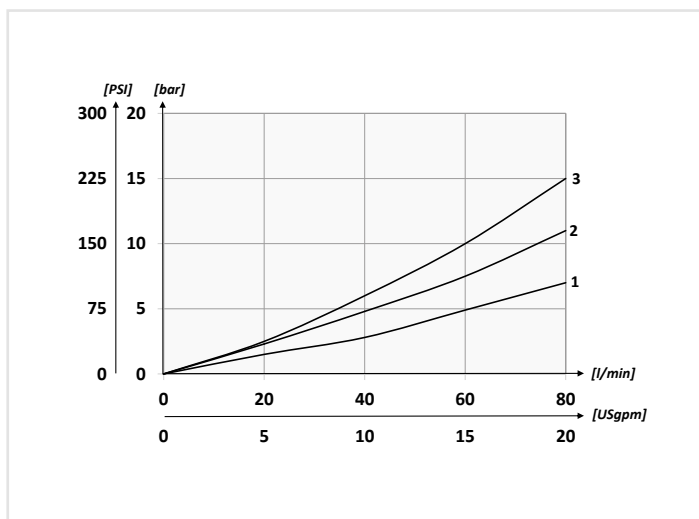




### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> <b>-4°F + 176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> <b>-4°F + 122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

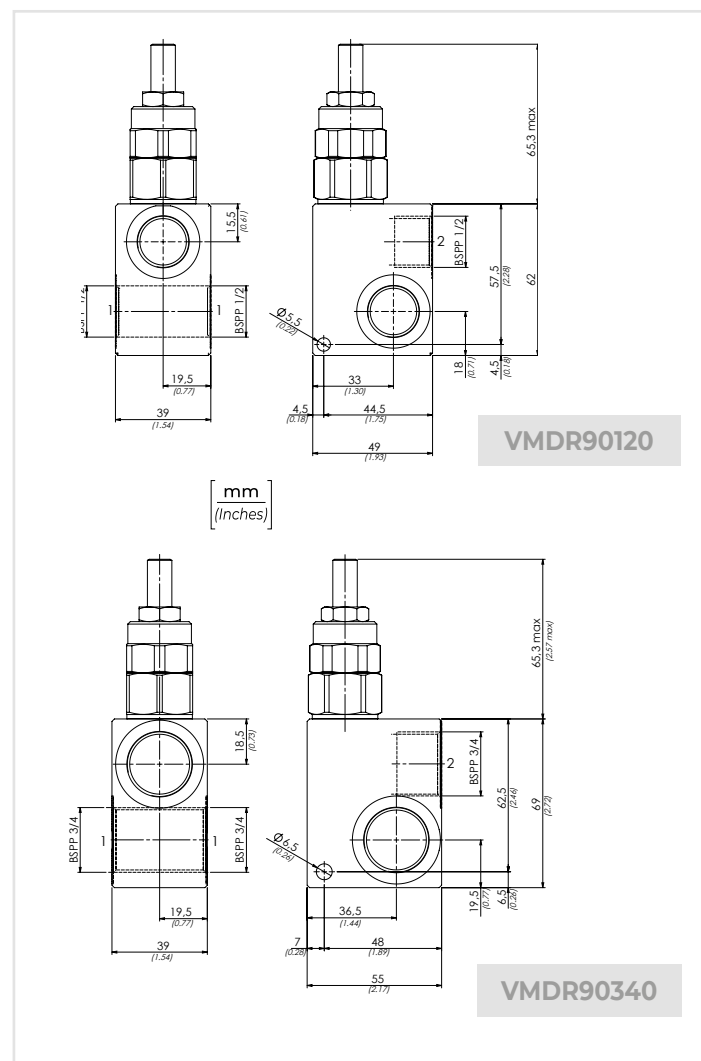
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lb)
VMDR90120	80 (21.1)	350 (5075)	0,65 (1.43)
VMDR90340			1 (2.2)

### CODICE ORDINAZIONE ORDERING CODE

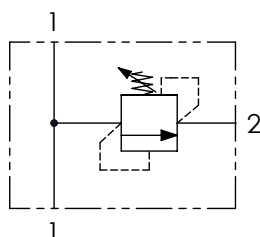
01	02	03	04
<b>VMDR90</b>			

<b>01</b>	VALVOLE DI MASSIMA PRESSIONE DIRETTA IN LINEA (DIRECT ACTING PRESSURE RELIEF VALVES)	<b>VMDR90</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/2 <b>120</b>
		BSPP 3/4 <b>340</b>
<b>03</b>	REGOLAZIONE (SETTING)	Chiave (Screw) <b>C</b>
		Volantino (Handknob) Tipo (Type) <b>81300023</b> <b>V</b>
<b>04</b>	MOLLA (SPRING) <b>10/100 bar</b> (145/1450 PSI)	<b>26 bar/al giro</b> (377 PSI/turn) <b>1</b>
	MOLLA (SPRING) <b>20/250 bar</b> (290/3625 PSI)	<b>41 bar/al giro</b> (595 PSI/turn) <b>2</b>
	MOLLA (SPRING) <b>50/350 bar</b> (725/5075 PSI)	<b>91 bar/al giro</b> (1320 PSI/turn) <b>3</b>





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

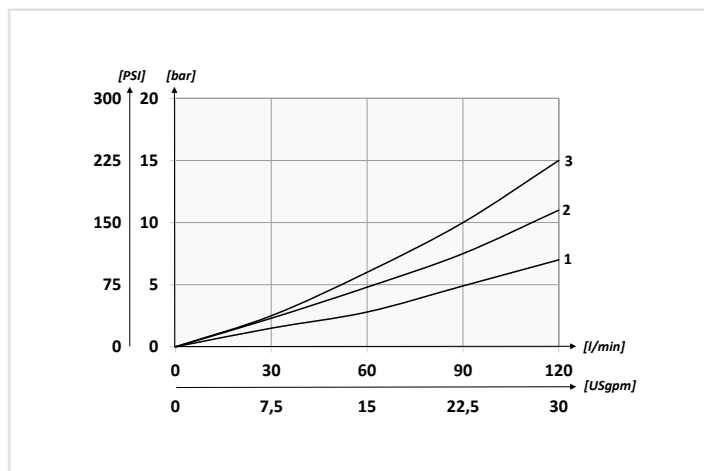


### CODICE ORDINAZIONE ORDERING CODE

01	02	03	04
<b>VMDR120</b>			

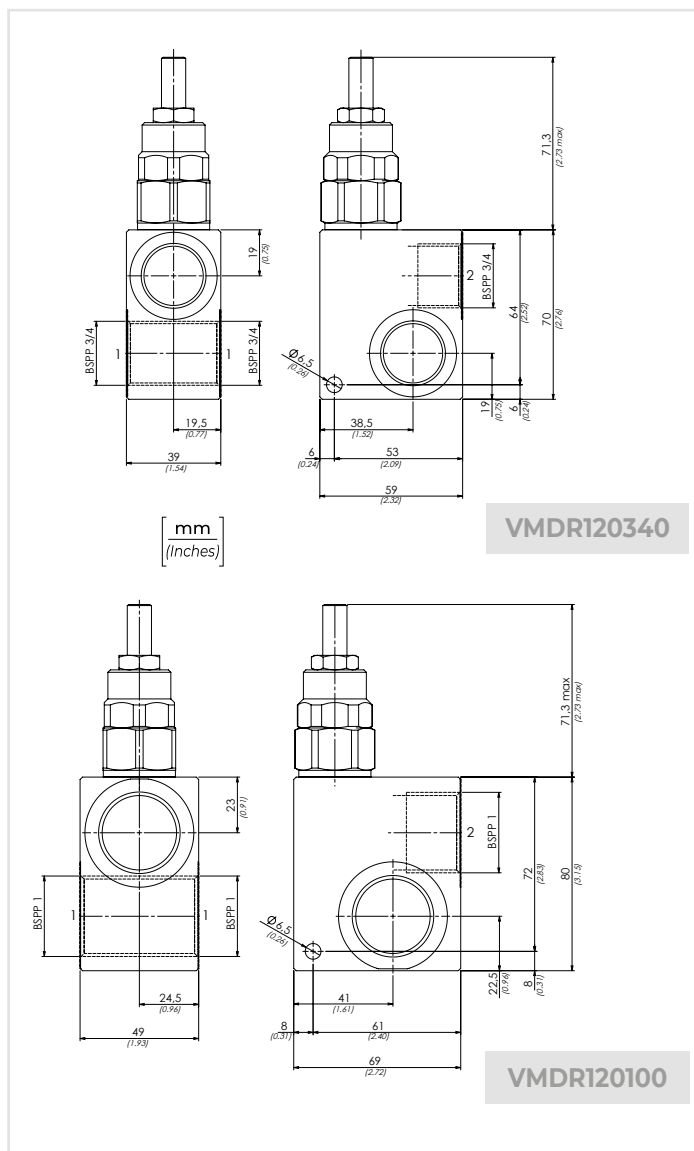
<b>01</b>	VALVOLE DI MASSIMA PRESSIONE DIRETTA IN LINEA (DIRECT ACTING PRESSURE RELIEF VALVES)	<b>VMDR120</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/4 <b>340</b>
		BSPP 1 <b>100</b>
<b>03</b>	REGOLAZIONE (SETTING)	Chiave (Screw) <b>C</b>
		Volantino (Handknob) Tipo (Type) <b>81300023</b> <b>V</b>
<b>04</b>	MOLLA (SPRING) <b>10/100 bar</b> (145/1450 PSI)	<b>21 bar/al giro</b> (305 PSI/turn) <b>1</b>
	MOLLA (SPRING) <b>20/250 bar</b> (290/3625 PSI)	<b>48 bar/al giro</b> (696 PSI/turn) <b>2</b>
	MOLLA (SPRING) <b>40/350 bar</b> (580/5075 PSI)	<b>55 bar/al giro</b> (798 PSI/turn) <b>3</b>

### PERFORMANCES



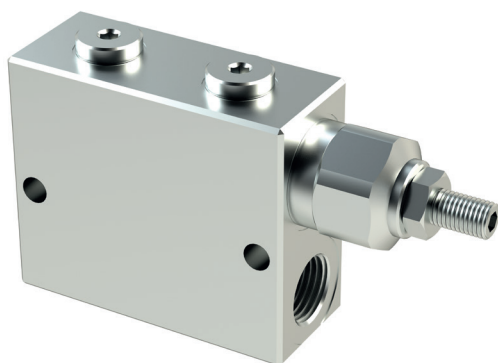
### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

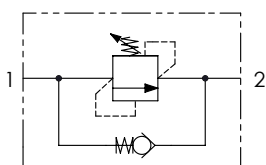


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)
VMDR120340	120 (31.7)	350 (5075)	1,1 (2.42)
VMDR120100			1,7 (3.74)



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

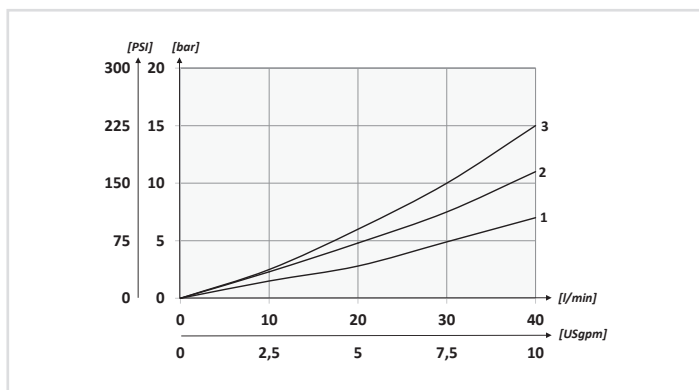


### CODICE ORDINAZIONE ORDERING CODE

01	02	03
<b>VSL</b>		

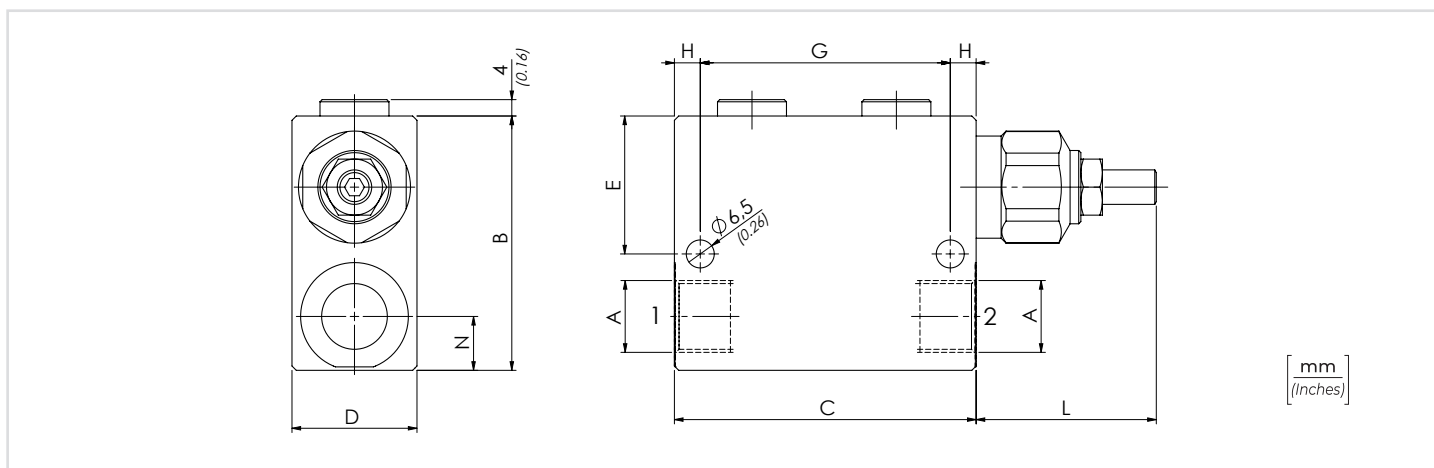
01	VALVOLE DI SEQUENZA DIRETTE (IN-LINE DIRECT SEQUENCE VALVES)		VSL
02	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
03	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI) max	<b>12 bar/al giro</b> (174 PSI/turn)	BSPP 1/4 BSPP 3/8 BSPP 1/2 <b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI) max	<b>30 bar/al giro</b> (435 PSI/turn)	BSPP 1/4 BSPP 3/8 BSPP 1/2 <b>2</b>
	MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI) max	<b>65 bar/al giro</b> (943 PSI/turn)	BSPP 1/4 BSPP 3/8 BSPP 1/2 <b>3</b>

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	G	L	N	H	P	PESO APPROX APPROX WEIGHT kg-lbt
VSL140	BSPP 1/4	20 (5.3)	350 (5075)	60 (2.36)	60 (0.98)	25 (0.98)	35.5 (1.40)	49 (1.93)	53 (2.09)	12 (0.47)	20 (0.79)	5.5 (0.22)	0,72 (1.58)
VSL380	BSPP 3/8	40 (10.6)			70 (2.76)	30 (1.18)	32.5 (1.28)	58 (2.28)	43 (1.69)	13 (0.51)	17 (0.67)	6.5 (0.26)	0,89 (1.96)
VSL120	BSPP 1/2			70 (2.76)	35 (1.38)	35 (1.38)	17 (0.67)	1 (2.21)					







# VALVOLE DI BILANCIAMENTO

## COUNTERBALANCE VALVES

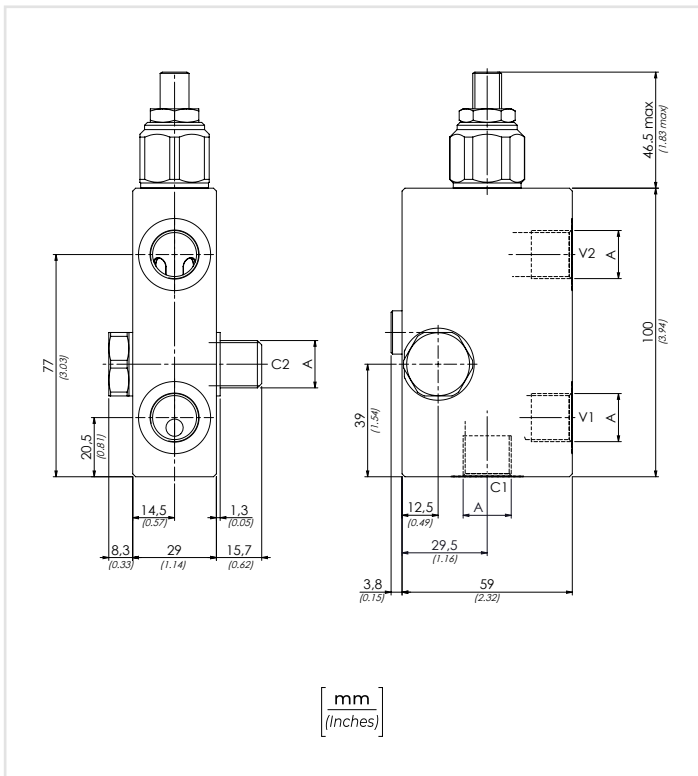
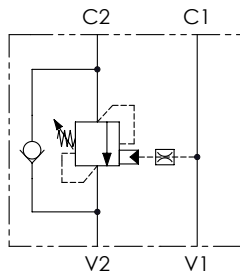
La gamma di valvole di bilanciamento OLEOWEB comprende soluzioni per installazioni in linea o flangiata o con bullone banjo su cilindro a motore, con bocche filettate BSPP-GAS o SAE UNF, e per installazioni su sistemi a centro aperto (non compensate) e a centro chiuso (semi-compensate).

The range of Oleoweb's Overcenter valves includes solutions for in-line installations, flanged or with banjo bolt, with BSPP-GAS or UNF-SAE threaded parts, and for installation on open center (not compensated) or closed center (semi-compensated) systems.





SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



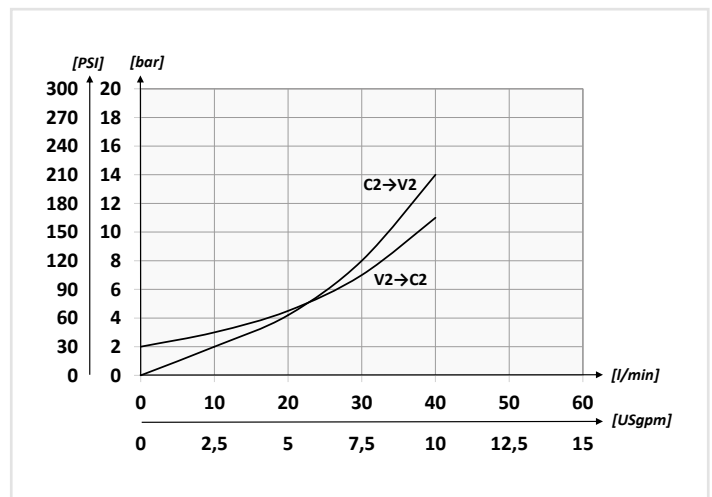
DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03	04	05
<b>VBCB 380</b>					

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE A BULLONE PER CENTRO APERTO (BOLT-FITTING SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER)				<b>VBCB</b>
<b>02</b>	DIMENSIONE (SIZE)	BSSP 3/8			<b>380</b>
<b>03</b>	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	MOLLA (SPRING) <b>60/350 bar</b> (870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)			<b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel)			<b>K</b>
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard			<b>/</b>
		1:8.75			<b>8</b>

PERFORMANCES



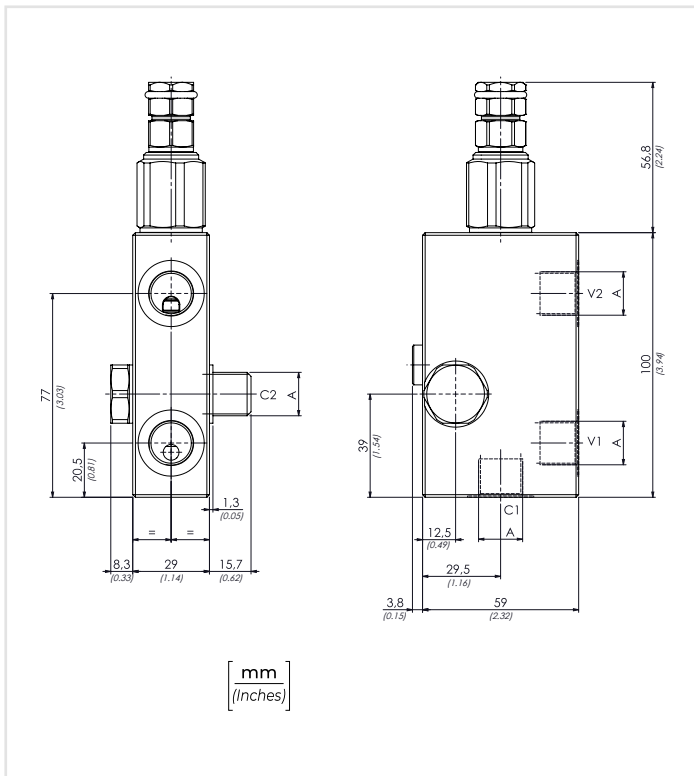
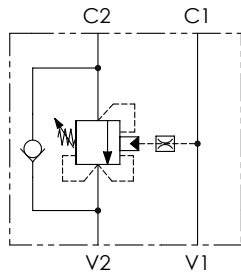
CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
<b>VBCB380</b>	<b>BSSP 3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>1,24 (2.73)</b>





**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



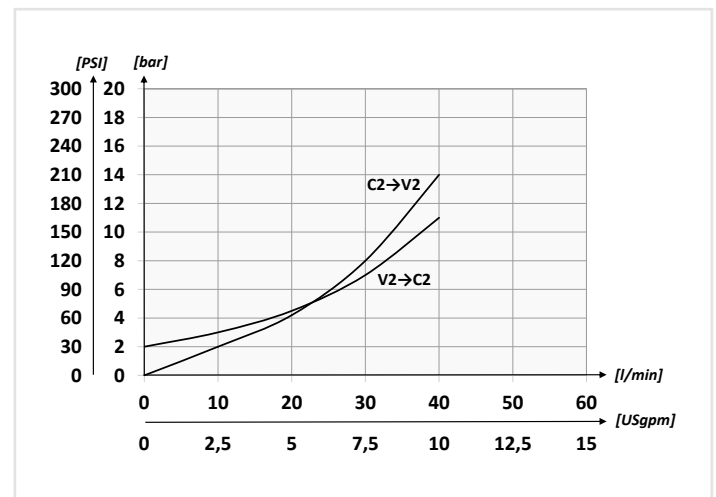
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03	04	05
<b>VCCB 380</b>				<b>S</b>	

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE A BULLONE PER CENTRO CHIUSO (BOLT-FITTING SINGLE COUNTERBALANCE VALVES FOR CLOSED CENTER)				<b>VBCB</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8			<b>380</b>
	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	MOLLA (SPRING) <b>60/350 bar</b> (870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)			<b>S</b>
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard			<b>/</b>
		1:8.75			<b>8</b>

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

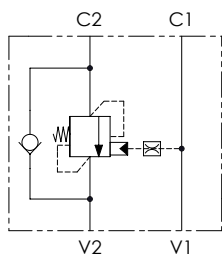
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
<b>VCCB380</b>	<b>BSPP 3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>1,24 (2.73)</b>



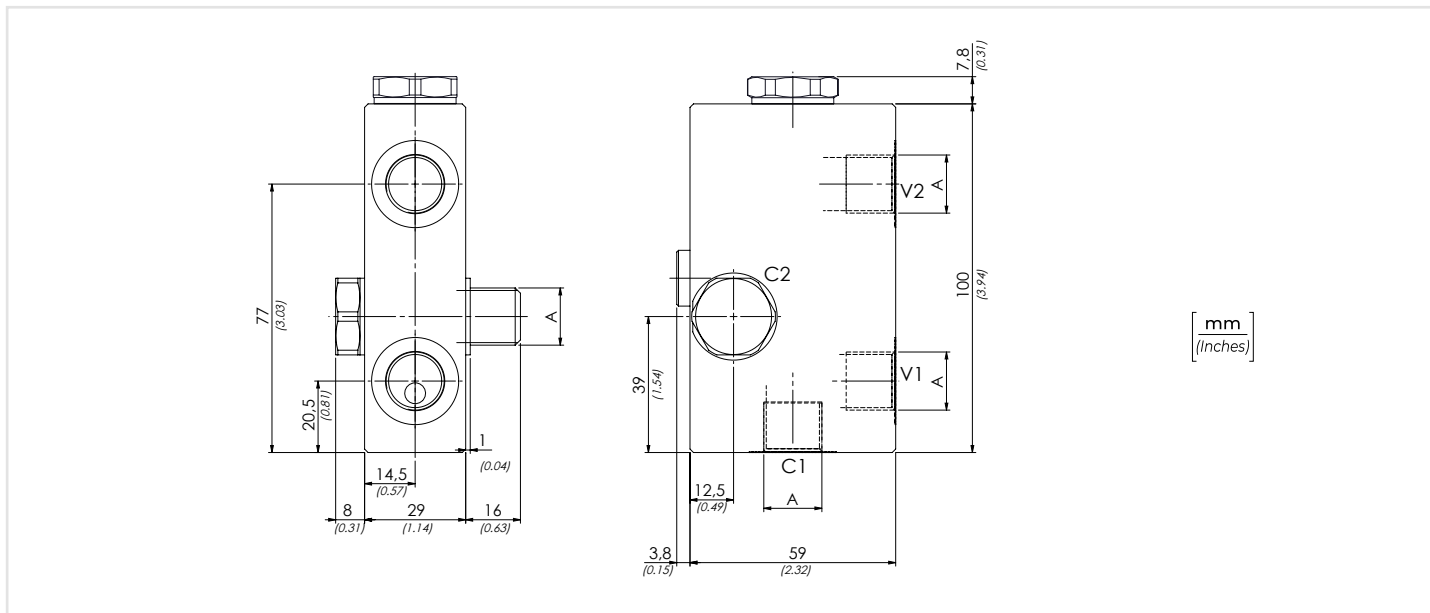
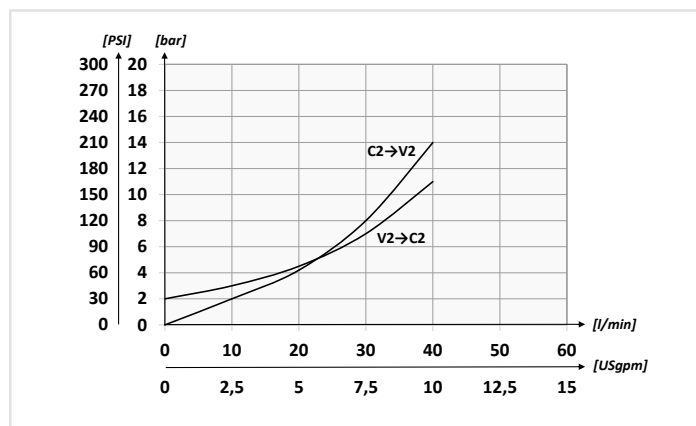
<b>CODICE ORDINAZIONE</b> ORDERING CODE	01 <b>VBZB</b>	02 <b>380</b>	03 <b>2</b>	04
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<b>01</b>	VALVOLE DI BILANCIAMENTO A BULLONE SINGOLE PER CENTRO APERTO A TARATURA FISSA (BOLT-FITTING SINGLE COUNTERBALANCE VALVES FIXED SETTING FOR OPEN CENTER)			<b>VBZB</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8		<b>380</b>
<b>03</b>	TARATURA (SETTING)	Q=5 l/min 350 bar (5075 PSI)		<b>2</b>
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel)		<b>K</b>
RAPPORTO DI PILOTAGGIO (PILOT RATIO) 1:4.25				

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

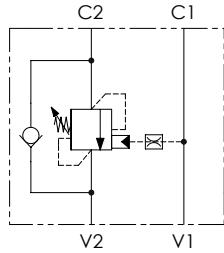
Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
<b>VBZB380</b>	<b>BSPP 3/8</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>1,24</b> (2,73)



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

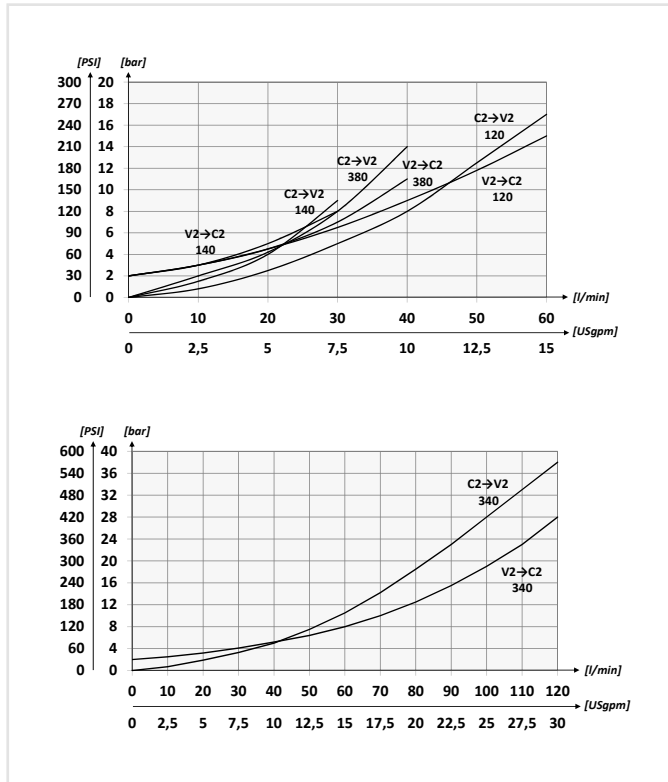


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04	05
<b>VBCL</b>				

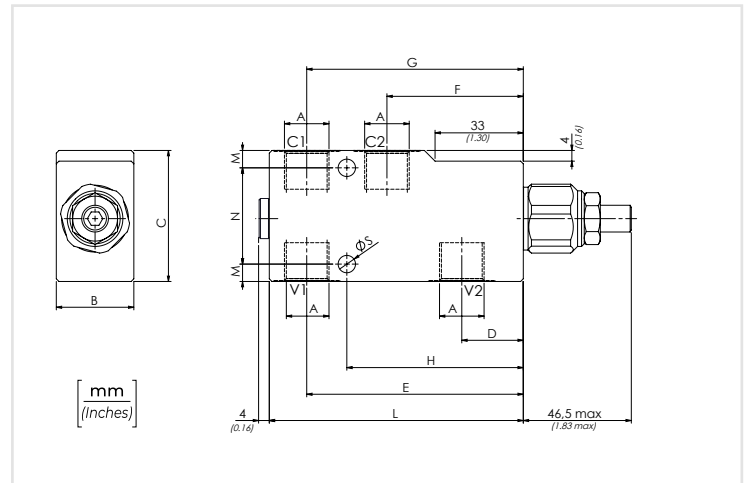
01	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO (SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER)				VBCL		
02	DIMENSIONE (SIZE)			BSPB 1/4	<b>140</b>		
				BSPB 3/8	<b>380</b>		
				BSPB 1/2	<b>120</b>		
				BSPB 3/4	<b>340</b>		
03	MOLLA (SPRING)	Rp 1:4.25	140	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting)	<b>1</b>	
			380	<b>160 bar/al giro</b> (2320 PSI/turn)			
	Rp 1:8.75	120	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting)			
		120	<b>160 bar/al giro</b> (2320 PSI/turn)				
	MOLLA (SPRING)	Rp 1:6.2	340	140	<b>143 bar/al giro</b> (2074 PSI/turn)		Taratura standard (Std. setting)
				120	<b>242 bar/al giro</b> (3509 PSI/turn)		
Rp 1:10.6					<b>2</b>		
04	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel body + zinc-plating)			<b>S</b>		
		Acciaio + zinco-nichel (Steel body + zinc-nickel)			<b>K</b>		
05	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	140	1:4.25 Standard		<b>/</b>		
		380	1:8.75		<b>8</b>		
		120	1:6.2		<b>/</b>		
		340	1:10,6		<b>11</b>		

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

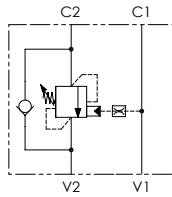


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

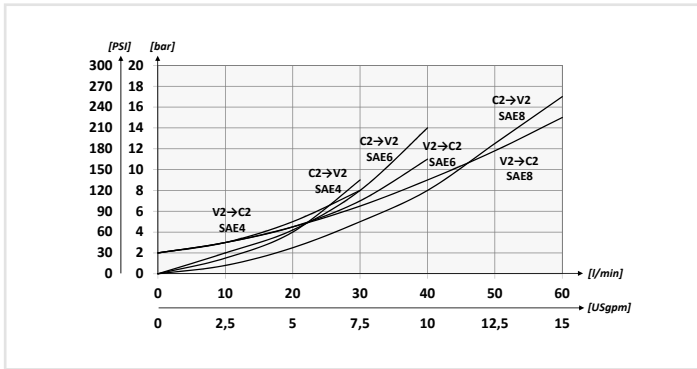
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	M	N	S	PESO APPROX (kg) APPROX WEIGHT (lb)
VBCL140	BSPB 1/4	30 (7.9)	350 (5075)	29 (1.14)	49 (1.93)	23 (0.91)	81 (3.19)	51 (2.01)	81 (3.19)	66 (2.60)	95 (3.74)	6,5 (0.26)	36 (1.42)	6,5 (0.26)	0,98 (2.16)
VBCL380	BSPB 3/8	40 (10.6)			59 (2.32)	21 (0.83)	84 (3.30)		84 (3.31)	67,5 (2.66)	100 (3.94)	9,5 (0.37)	40 (1.57)		0,92 (2.02)
VBCL120	BSPB 1/2	60 (15.9)			39 (1.54)	69 (2.72)	20 (0.79)		120 (4.72)	72 (2.83)	120 (4.72)	96 (3.78)	140 (5.51)		1,09 (2.40)
VBCL340	BSPB 3/4	120 (31.7)			39 (1.54)	69 (2.72)	20 (0.79)		120 (4.72)	72 (2.83)	120 (4.72)	96 (3.78)	140 (5.51)		2,54 (5.59)



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



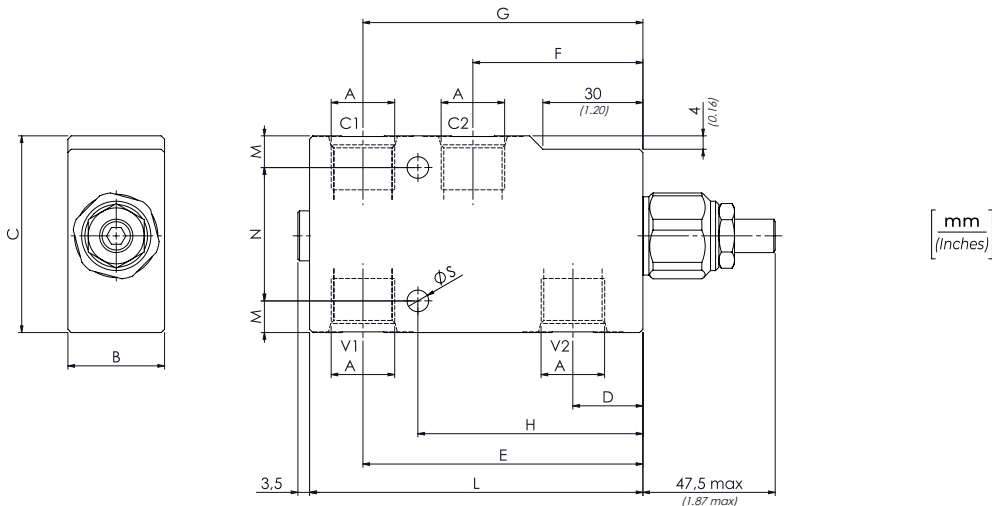
### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VBCL</b>				

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER			<b>VBCL</b>		
<b>02</b>	DIMENSIONE (SIZE)	7/16-20UNF		<b>4</b>		
		9/16-18UNF		<b>6</b>		
		3/4-16UNF		<b>8</b>		
<b>03</b>	MOLLA (SPRING)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>	
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)			
	MOLLA (SPRING)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)		<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)			
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)			<b>S</b>	
		Acciaio + zinco-nichel (Steel + zinc-nickel)			<b>K</b>	
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard			<b>/</b>	
		1:8.75			<b>8</b>	

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	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 APPROX APPROXWEIGHT kg-lbt
VBCL4	7/16-20UNF	30 (7.9)	350 (5075)	29 (1.14)	49 (1.93)	23 (0.91)	81 (3.19)	51 (2.01)	81 (3.19)	66 (2.60)	95 (3.74)	6,5 (0.26)	36 (1.42)	6,5 (0.26)	1 (2.20)
VBCL6	9/16-18UNF	40 (10.6)			59 (2.32)	21 (0.83)	84 (3.31)		84 (3.31)	67,5 (2.66)	100 (3.94)	9,5 (0.37)	40 (1.57)		0,97 (2.14)
VBCL8	3/4-16UNF	60 (15.9)			84 (3.31)	84 (3.31)	100 (3.94)		9,5 (0.37)	40 (1.57)	1,16 (2.56)				

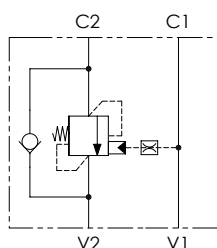


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04
<b>VBZL</b>		<b>2</b>	

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO A TARATURA FISSA (SINGLE COUNTERBALANCE VALVES FIXED SETTING FOR OPEN CENTER)			<b>VBZL</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4		<b>140</b>
		BSPP 3/8		<b>380</b>
		BSPP 1/2		<b>120</b>
<b>05</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>			<b>2</b>
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel)		<b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25				

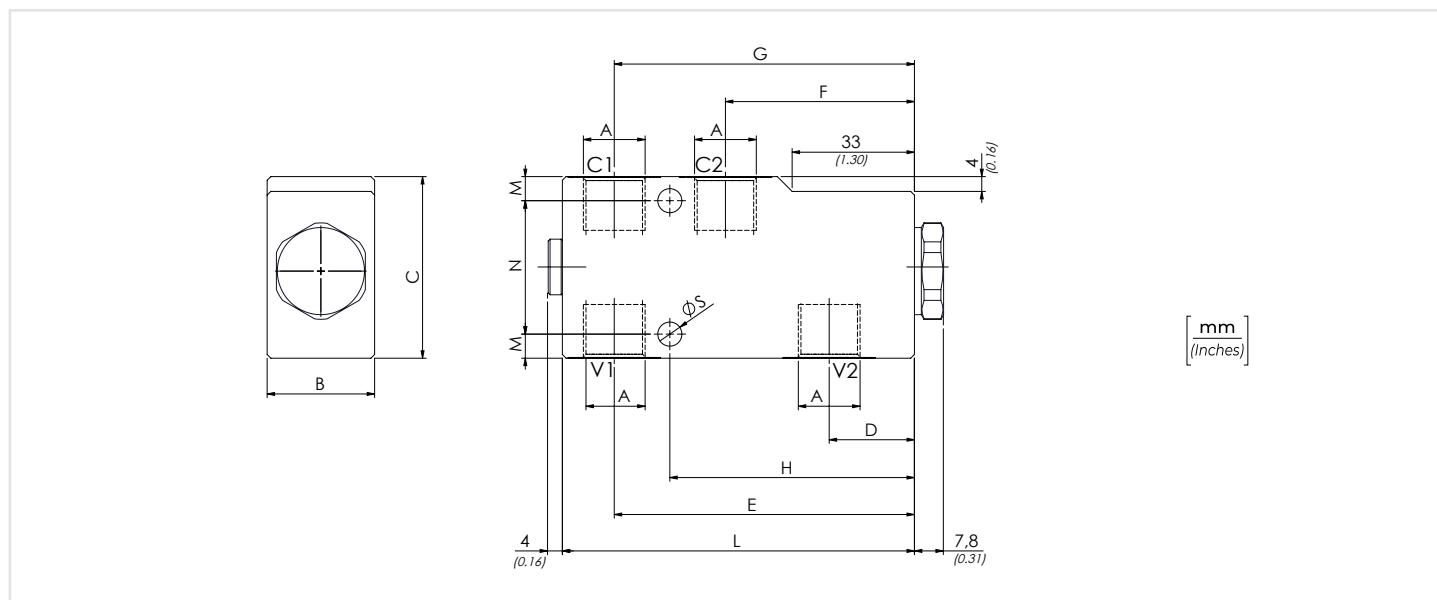
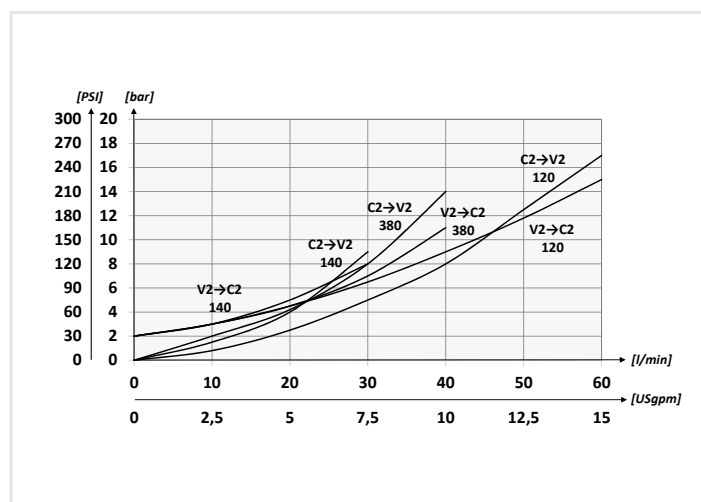
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	ISO 6743/4 (DIN 51524)		
<b>Viscosità olio</b> - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
<b>Temperatura dell'olio</b> - Oil temperature	-20°C +80°C	-4°F +176°F	
<b>Temperatura ambiente</b> - Environment temperature	-20°C +50°C	-4°F +122°F	
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)			

**PERFORMANCES**

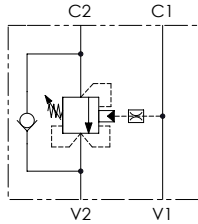


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

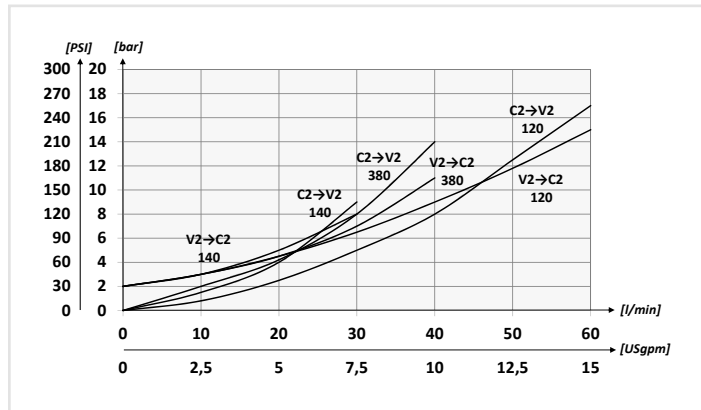
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	M	N	S	PESO APPROX (kg) APPROX WEIGHT (lbt)
VBZL140	BSPP 1/4	30 (7.9)	350 (5075)	29 (1.14)	49 (1.93)	23 (0.91)	81 (3.19)	51 (2.01)	81 (3.19)	66 (2.60)	95 (3.74)	6,5 (0.26)	36 (1.42)	6,5 (0.26)	0,91 (2.00)
VBZL380	BSPP 3/8	40 (10.6)			59 (2.32)	21 (0.83)	84 (3.30)		84 (3.31)	67,5 (2.66)	100 (3.94)	9,5 (0.37)	40 (1.57)		0,85 (1.87)
VBZL120	BSPP 1/2	60 (15.9)			59 (2.32)	21 (0.83)	84 (3.30)		84 (3.31)	67,5 (2.66)	100 (3.94)	9,5 (0.37)	40 (1.57)		1,02 (2.24)



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



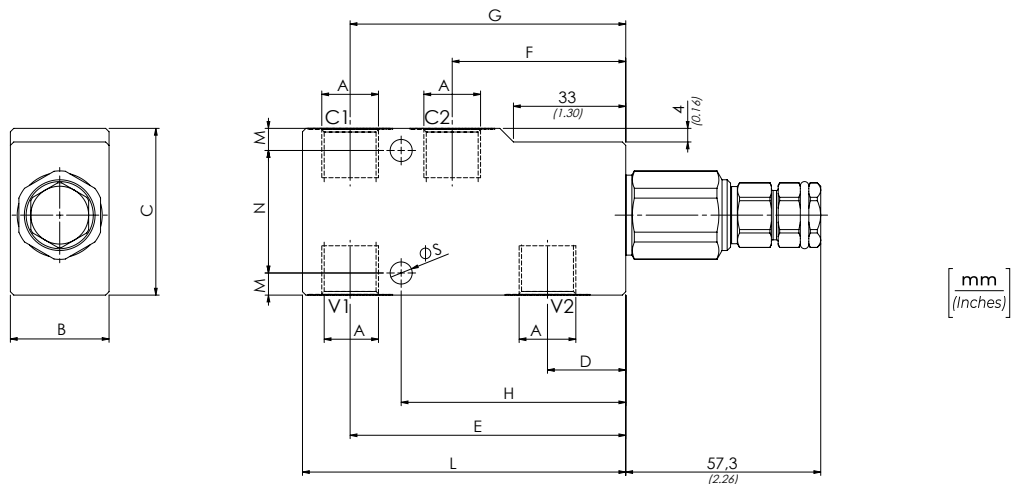
### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VCCL</b>			<b>S</b>	

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO CHIUSO (SINGLE COUNTERBALANCE VALVES FOR CLOSED CENTER)			<b>VCCL</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4		<b>140</b>	
		BSPP 3/8		<b>380</b>	
		BSPP 1/2		<b>120</b>	
<b>03</b>	MOLLA (SPRING) 30/210 bar (435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	MOLLA (SPRING) 60/350 bar (870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>	
<b>05</b>	RAPPORTO DI PILOTTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm²/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

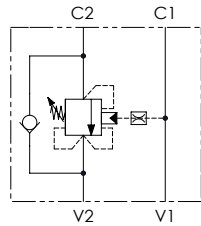


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

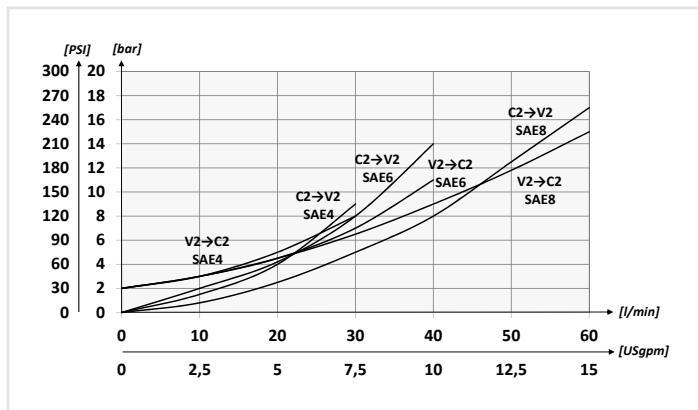
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	M	N	S	PESO APPROX APPROX WEIGHT kg-lbt
VCCL140	BSPP 1/4	30 (7.9)	350 (5075)	29 (1.14)	49 (1.93)	23 (0.91)	81 (3.19)	51 (2.01)	81 (3.19)	66 (2.60)	95 (3.74)	6,5 (0.26)	36 (1.42)	6,5 (0.26)	1,02 (2.24)
VCCL380	BSPP 3/8	40 (10.6)			59 (2.32)	21 (0.83)	84 (3.30)		84 (3.31)	67,5 (2.66)	100 (3.94)	9,5 (0.37)	40 (1.57)		0,98 (2.16)
VCCL120	BSPP 1/2	60 (15.9)			59 (2.32)	21 (0.83)	84 (3.30)		84 (3.31)	67,5 (2.66)	100 (3.94)	9,5 (0.37)	40 (1.57)		1,15 (2.53)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



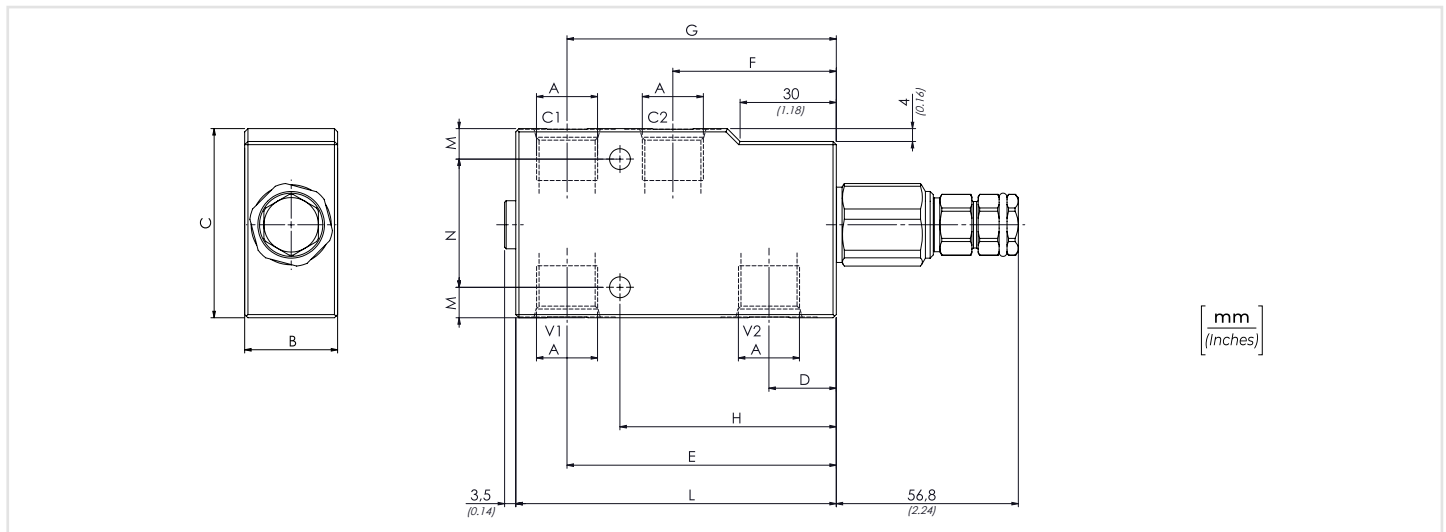
**PERFORMANCES**



CODICE ORDINAZIONE / ORDERING CODE		01	02	03	04	05
<b>VCCL</b>					<b>S</b>	
<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO CHIUSO (SINGLE COUNTERBALANCE VALVES FOR CLOSED CENTER)					<b>VCCL</b>
<b>02</b>	DIMENSIONE (SIZE)	7/16-20UNF				<b>4</b>
		9/16-18UNF				<b>6</b>
		3/4-16UNF				<b>8</b>
<b>03</b>	MOLLA (SPRING) 30/210 bar (435/3045 PSI)	Rp 1:4.25	78 bar/al giro (1131 PSI/turn)		Taratura standard (Std. setting) Q=5 l/min 200 bar (2900 PSI)	<b>1</b>
		Rp 1:8.75	160 bar/al giro (2320 PSI/turn)			
<b>03</b>	MOLLA (SPRING) 60/350 bar (870/5075 PSI)	Rp 1:4.25	135 bar/al giro (1958 PSI/turn)		Taratura standard (Std. setting) Q=5 l/min 350 bar (5075 PSI)	<b>2</b>
		Rp 1:8.75	160 bar/al giro (2320 PSI/turn)			
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)				<b>S</b>
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard				<b>/</b>
		1:8.75				<b>8</b>

**DATI TECNICI / TECHNICAL DATA**

Olío idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	



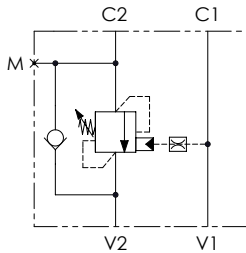
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	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 APPROX APPROX WEIGHT kg-lbt
VCCL4	7/16-20UNF	30 (7.9)	350 (5075)	29 (1.14)	49 (1.93)	23 (0.91)	81 (3.19)	51 (2.01)	81 (3.19)	66 (2.60)	95 (3.74)	6,5 (0.26)	36 (1.42)	6,5 (0.26)	1,02 (2.24)
VCCL6	9/16-18UNF	40 (10.6)			59 (2.32)	21 (0.83)	84 (3.30)		84 (3.31)	67,5 (2.66)	100 (3.94)	9,5 (0.37)	40 (1.57)		0,98 (2.16)
VCCL8	3/4-16UNF	60 (15.9)			59 (2.32)	21 (0.83)	84 (3.30)		84 (3.31)	67,5 (2.66)	100 (3.94)	9,5 (0.37)	40 (1.57)		1,15 (2.53)

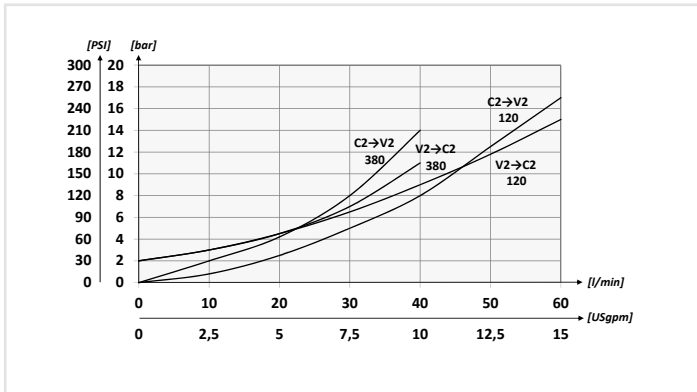




### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



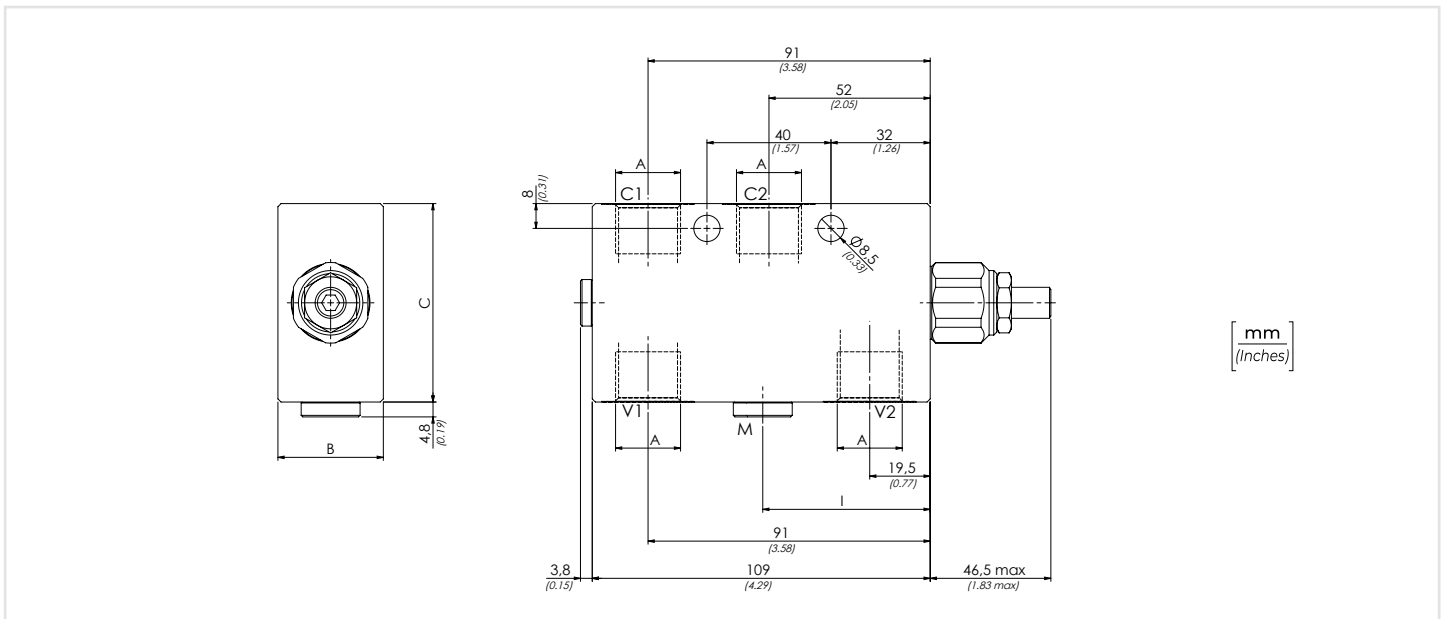
### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VBLP</b>				

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO (SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER)			<b>VBLP</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8		<b>380</b>	
		BSPP 1/2		<b>120</b>	
<b>03</b>	MOLLA <b>30/210 BAR</b> (SPRING 435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	MOLLA <b>60/350 BAR</b> (SPRING 870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>	
		Acciaio + zinco-nichel (Steel + zinc-nickel)		<b>K</b>	
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	I	M	PESO APPROX (kg) APPROX WEIGHT (lb)
<b>VBLP380</b>	<b>BSPP 3/8</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>29</b> (1.14)	<b>54</b> (2.13)	<b>/</b>	<b>/</b>	<b>1,21</b> (2.63)
<b>VBLP120</b>	<b>BSPP 1/2</b>	<b>60</b> (15.9)		<b>34</b> (1.34)	<b>64</b> (2.52)	<b>54</b> (2.13)	<b>BSPP 1/4</b>	<b>1,59</b> (3.46)



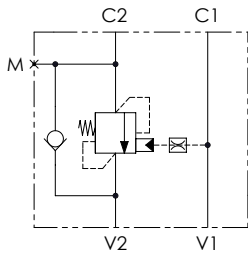


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04
<b>VBZP</b>		<b>2</b>	

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO A TARATURA FISSA (SINGLE COUNTERBALANCE VALVES FIXED SETTING FOR OPEN CENTER)		<b>VBZP</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
<b>03</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>		<b>2</b>
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)	<b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel)	<b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25			

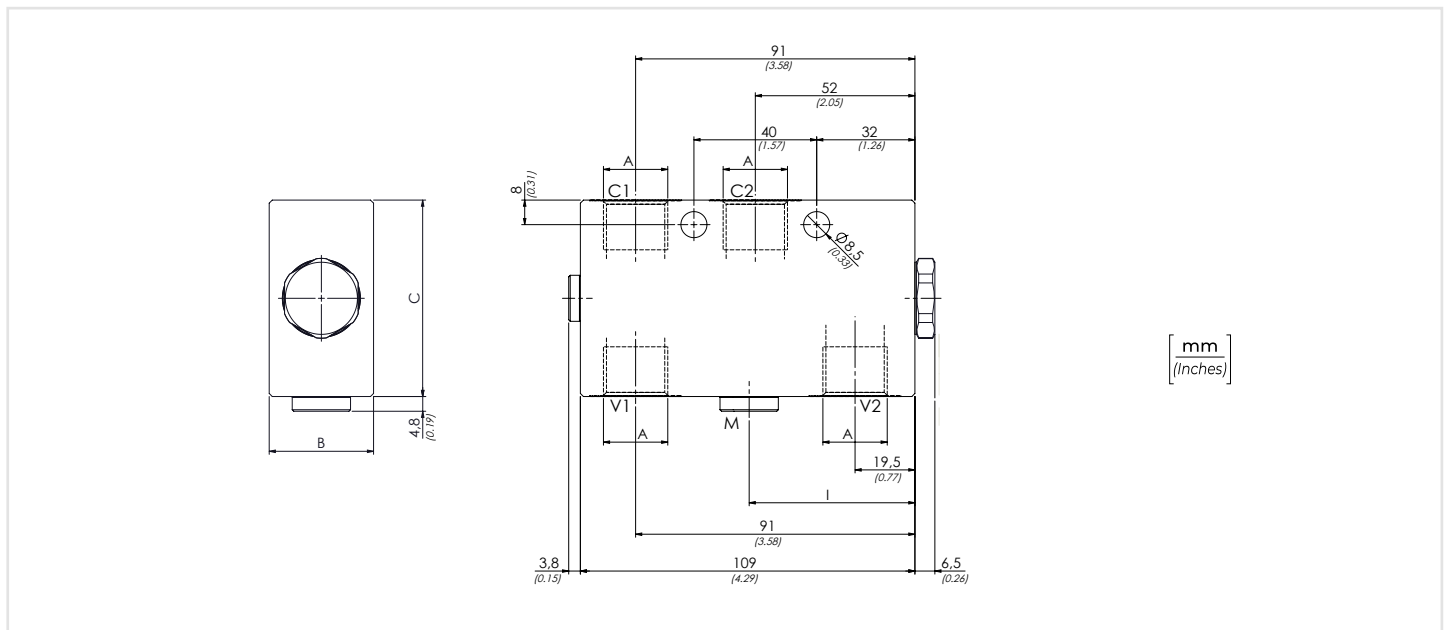
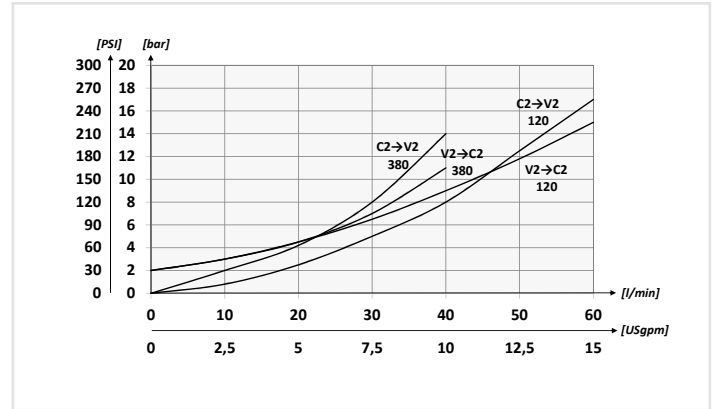
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olio - Oil temperature	-20°C +80°C	-4°F +176°F	
Temperatura ambiente - Environment temperature	-20°C +50°C	-4°F +122°F	
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)			

**PERFORMANCES**

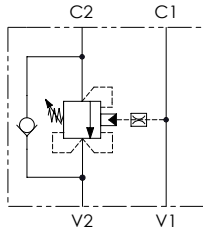


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

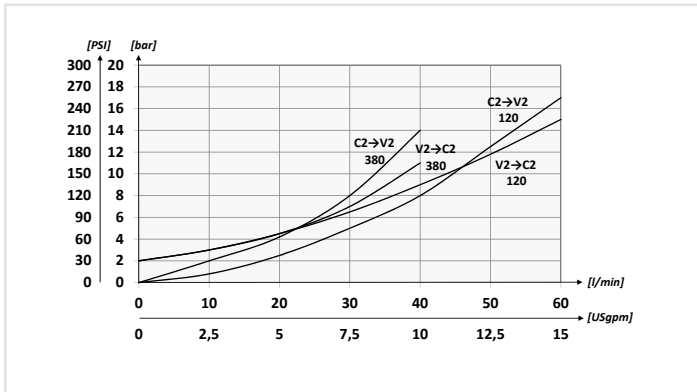
TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	I	M	PESO APPROX (kg) APPROX WEIGHT (lbt)
<b>VBZP380</b>	<b>BSPP 3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>29 (1.14)</b>	<b>54 (2.13)</b>	/	/	<b>1,14 (2.50)</b>
<b>VBZP120</b>	<b>BSPP 1/2</b>	<b>60 (15.9)</b>		<b>34 (1.34)</b>	<b>64 (2.52)</b>	<b>54 (2.13)</b>	<b>BSPP 1/4</b>	<b>1,52 (3.34)</b>



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



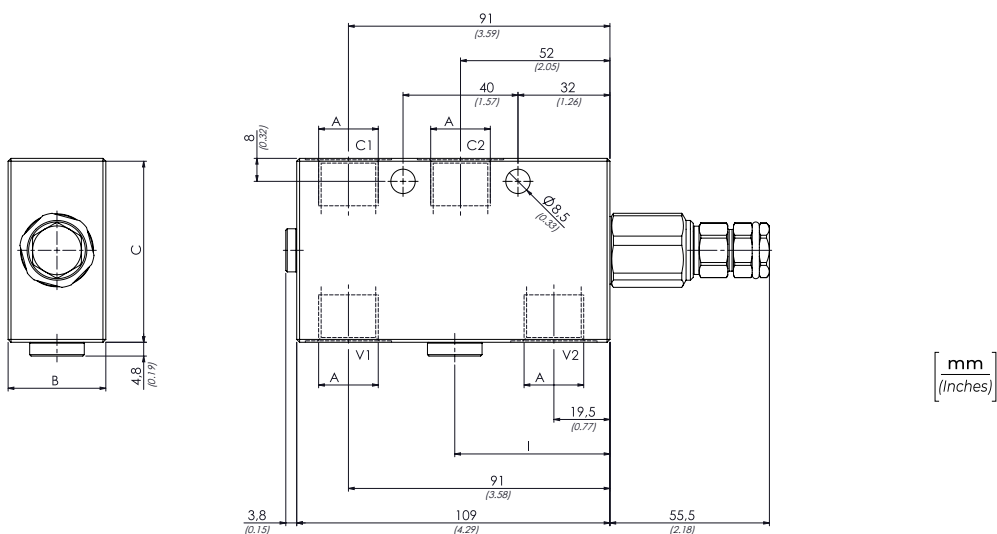
### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VCLP</b>			<b>S</b>	

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO CHIUSO (SINGLE COUNTERBALANCE VALVES FOR CLSOED CENTER)			<b>VCLP</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8		<b>380</b>	
		BSPP 1/2		<b>120</b>	
<b>03</b>	MOLLA 30/210 BAR (SPRING 435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
	MOLLA 60/350 BAR (SPRING 870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>	
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> / Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

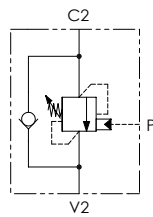


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

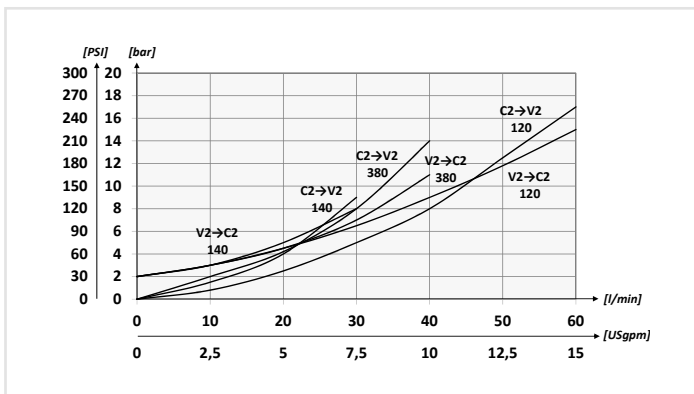
TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	B	C	I	M	PESO APPROX (kg) / APPROX WEIGHT (lb)
<b>VCLP380</b>	<b>BSPP 3/8</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>29</b> (1.14)	<b>54</b> (2.13)	<b>/</b>	<b>/</b>	<b>1,21</b> (2.63)
<b>VCLP120</b>	<b>BSPP 1/2</b>	<b>60</b> (15.9)		<b>34</b> (1.34)	<b>64</b> (2.52)	<b>54</b> (2.13)	<b>BSPP 1/4</b>	<b>1,59</b> (3.46)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**PERFORMANCES**



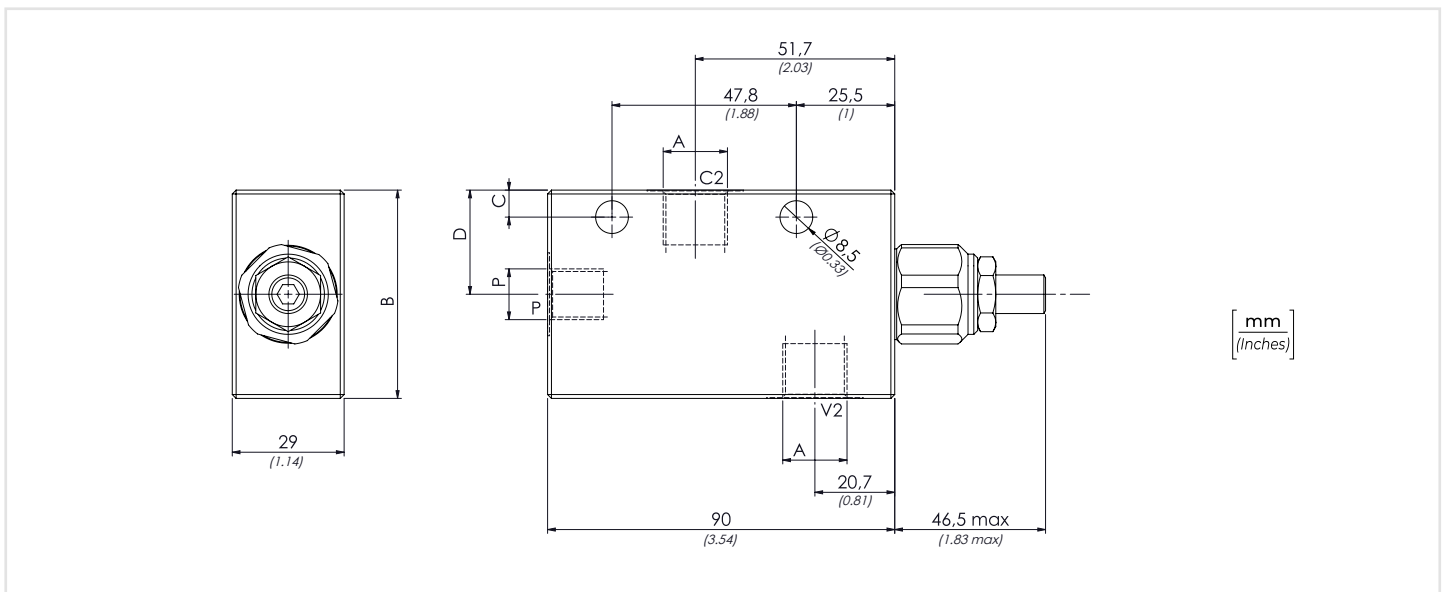
**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04	05
<b>VBCR</b>				

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO - PILOTAGGIO ESTERNO SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER - EXTERNAL PILOT			<b>VBCR</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4		<b>140</b>	
		BSPP 3/8		<b>380</b>	
		BSPP 1/2		<b>120</b>	
<b>03</b>	MOLLA 30/210 BAR (SPRING 435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	MOLLA 60/350 BAR (SPRING 870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel body + zinc-plating)		<b>S</b>	
		Acciaio + zinco-nichel (Steel body + zinc-nickel)		<b>K</b>	
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	<b>ISO 6743/4 (DIN 51524)</b>
Viscosità olio - Oil viscosity	<b>15-250 mm²/s (15 to 250 cSt)</b>
Classe di contaminazione max con filtro Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
Temperatura dell'olio - Oil temperature	<b>-20°C +80°C -4°F +176°F</b>
Temperatura ambiente - Environment temperature	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

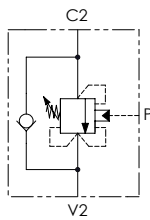


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

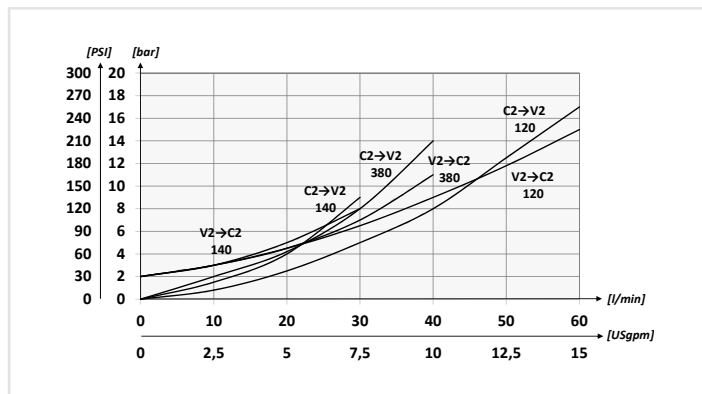
TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	D	A	P	PESO APPROX (kg) APPROX WEIGHT (lb)
VBCR140	BSPP 1/4	30 (7.9)	350 (5075)	54 (2.13)	7 (0.28)	27 (1.06)	BSPP 1/4	BSPP 1/4	1,06 (2.33)
VBCR380	BSPP 3/8	40 (10.6)		64 (2.52)	11 (0.43)	32 (1.26)	BSPP 3/8		1,21 (2.63)
VBCR120	BSPP 1/2	60 (15.9)		64 (2.52)	11 (0.43)	32 (1.26)	BSPP 1/2		1,59 (3.46)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**PERFORMANCES**



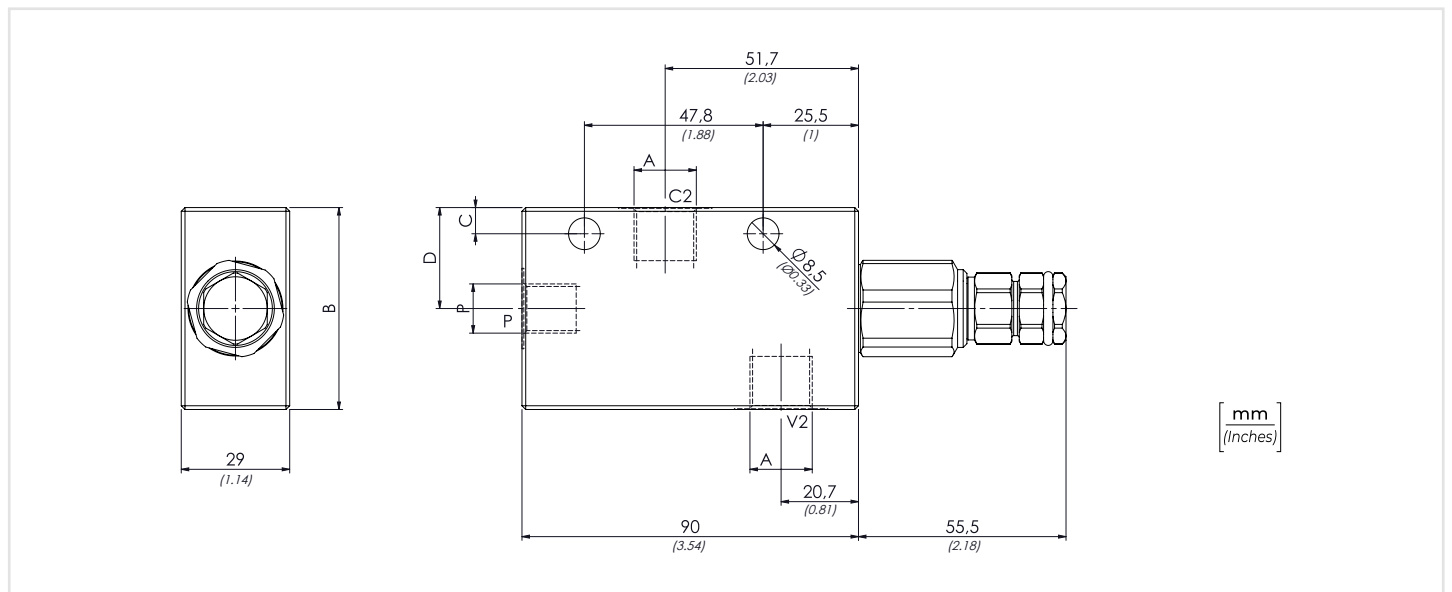
**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04	05
<b>VCCR</b>			<b>S</b>	

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO CHIUSO - PILOTAGGIO ESTERNO SINGLE COUNTERBALANCE VALVES FOR CLOSED CENTER - EXTERNAL PILOT			<b>VCCR</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4		<b>140</b>	
		BSPP 3/8		<b>380</b>	
		BSPP 1/2		<b>120</b>	
<b>03</b>	MOLLA 30/210 BAR (SPRING 435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	MOLLA 60/350 BAR (SPRING 870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel body + zinc-plating)		<b>S</b>	
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

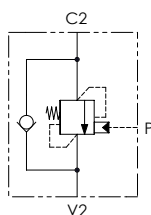


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	D	A	P	PESO APPROX (kg) APPROX WEIGHT (lbt)
VCCR140	BSPP 1/4	30 (7.9)	350 (5075)	54 (2.13)	7 (0.28)	27 (1.06)	BSPP 1/4	BSPP 1/4	1,06 (2.33)
VCCR380	BSPP 3/8	40 (10.6)		64 (2.52)	11 (0.43)	32 (1.26)	BSPP 3/8		1,21 (2.63)
VCCR120	BSPP 1/2	60 (15.9)					BSPP 1/2		1,59 (3.46)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

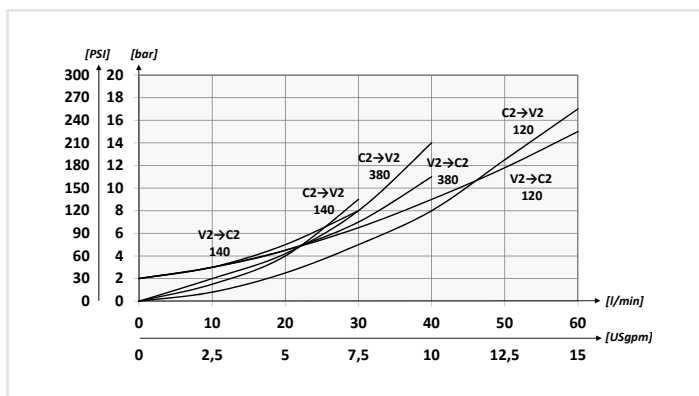


**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04
<b>VBZR</b>		<b>2</b>	

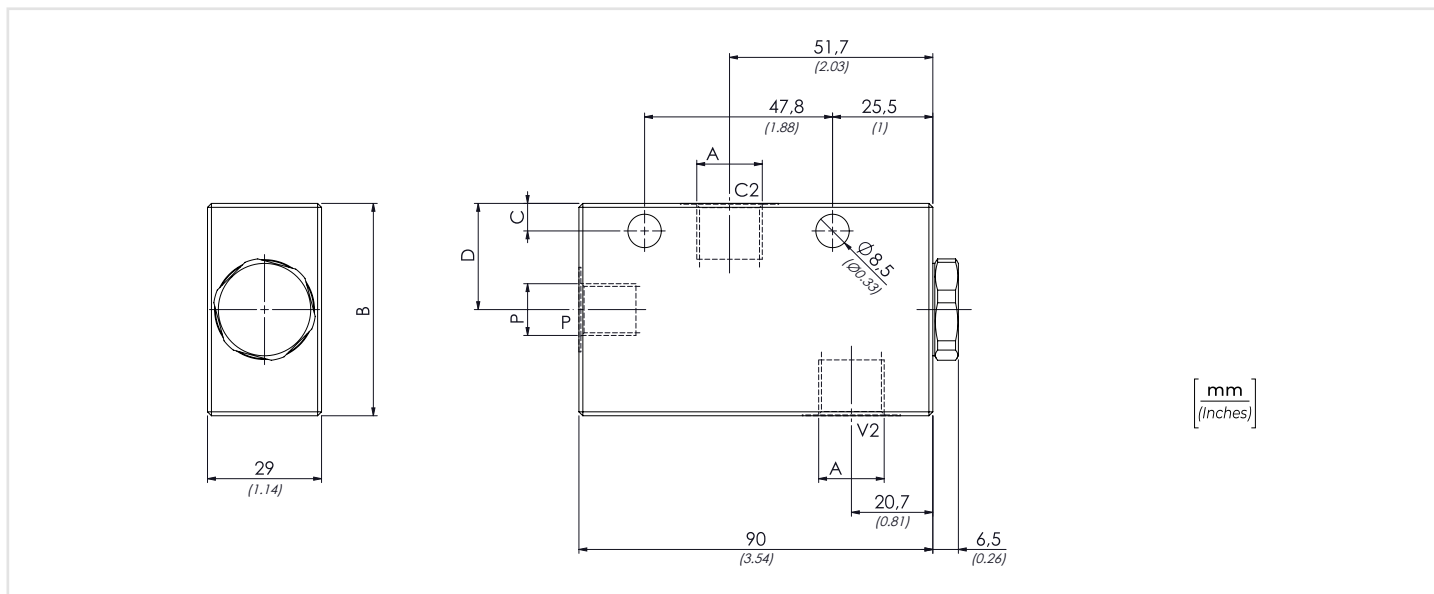
<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO - PILOTAGGIO ESTERNO A TARTURA FISSA SINGLE COUNTERBALANCE VALVES FIXED SETTING FOR OPEN CENTER - EXTERNAL PILOT	<b>VBZR</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4 <b>140</b>
		BSPP 3/8 <b>380</b>
		BSPP 1/2 <b>120</b>
<b>03</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>	<b>2</b>
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel body + zinc-plating) <b>S</b>
		Acciaio + zinco-nichel (Steel body + zinc-nickel) <b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25		

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm²/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

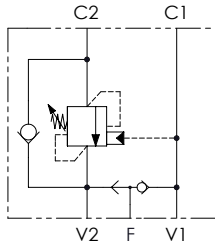


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

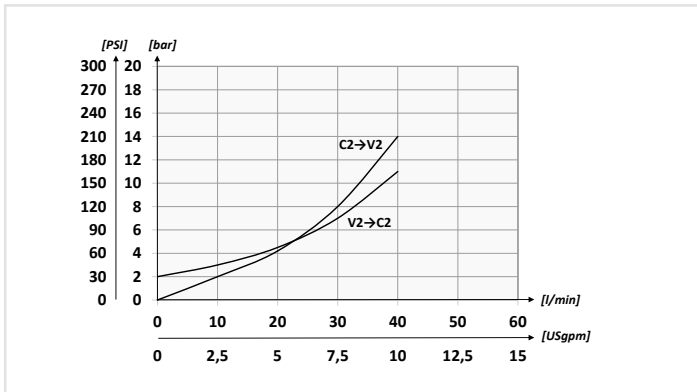
TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	D	A	P	PESO APPROX (kg) APPROX WEIGHT (lb)
<b>VBZR140</b>	<b>BSPP 1/4</b>	<b>30 (7.9)</b>	<b>350 (5075)</b>	<b>54 (2.13)</b>	<b>7 (0.28)</b>	<b>27 (1.06)</b>	<b>BSPP 1/4</b>	<b>BSPP 1/4</b>	<b>1,06 (2.33)</b>
<b>VBZR380</b>	<b>BSPP 3/8</b>	<b>40 (10.6)</b>					<b>BSPP 3/8</b>		<b>1,21 (2.63)</b>
<b>VBZR120</b>	<b>BSPP 1/2</b>	<b>60 (15.9)</b>					<b>BSPP 1/2</b>		<b>1,59 (3.46)</b>



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



PERFORMANCES



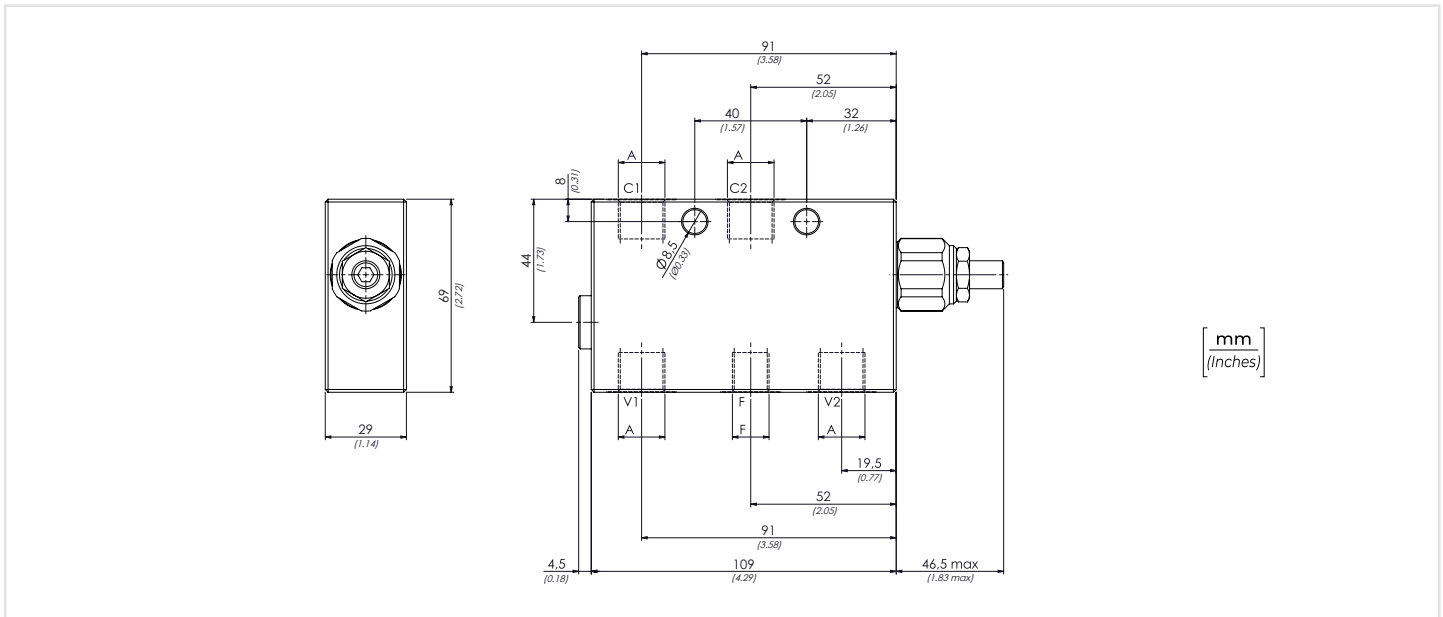
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04	05
<b>VBFP</b>	<b>380</b>			

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO CON SBLOCCA FRENO (SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER WITH BRAKE UN-LOCKING)			<b>VBFP</b>	
<b>02</b>	DIMENSIONE (SIZE)		BSPP 3/8	<b>380</b>	
<b>03</b>	<b>MOLLA 30/210 BAR</b> (SPRING 435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	<b>MOLLA 60/350 BAR</b> (SPRING 870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)		Acciaio + zincatura (Steel + zinc-plating)	<b>S</b>	
			Acciaio + zinco-nichel (Steel + zinc-nickel)	<b>K</b>	
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)		1:4.25 Standard	<b>/</b>	

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro - Max contamination index with filter</b>	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)</b>	

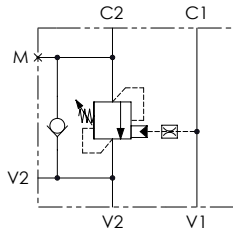


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

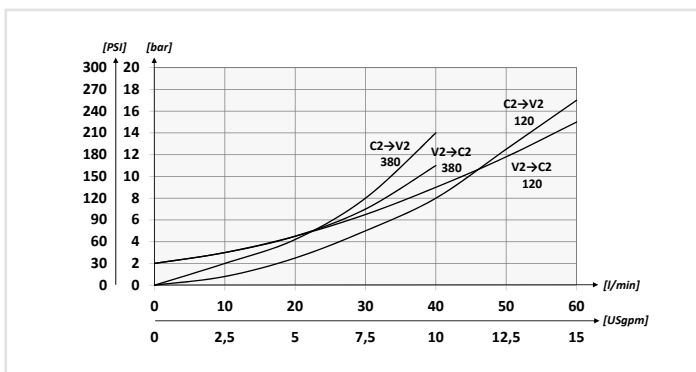
TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	A	F	PESO APPROX (kg) APPROX WEIGHT (lb)
<b>VBFP380</b>	<b>BSPP 3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>BSPP 3/8</b>	<b>BSPP 1/4</b>	<b>1,51 (3.33)</b>



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**PERFORMANCES**



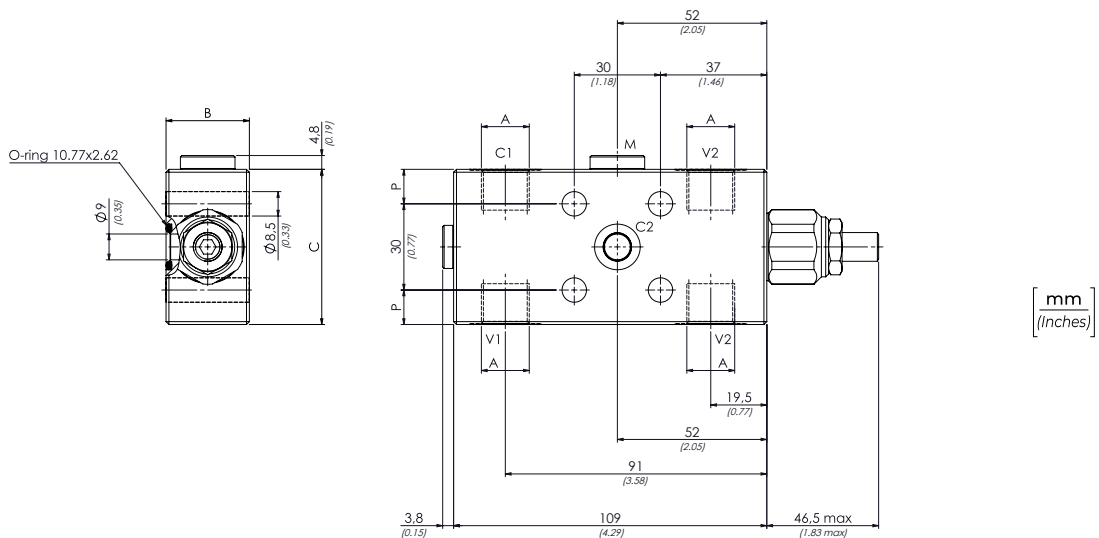
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04	05
<b>VBLH</b>				

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO - FLANGIATE SINGOLE (SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER - SINGLE FLANGED VERSION)			<b>VBLH</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8		<b>380</b>	
		BSPP 1/2		<b>120</b>	
<b>03</b>	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	MOLLA (SPRING) <b>60/350 bar</b> (870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)			<b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel)			<b>K</b>
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm²/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



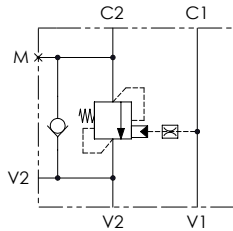
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	M	P	PESO APPROX (kg) APPROX WEIGHT (lb)
<b>VBLH380</b>	<b>BSPP 3/8</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>29</b> (1.14)	<b>54</b> (2.13)	<b>BSPP 1/4</b>	<b>12</b> (0.47)	<b>1,18</b> (2.60)
<b>VBLH120</b>	<b>BSPP 1/2</b>	<b>60</b> (15.9)		<b>34</b> (1.34)	<b>64</b> (2.52)		<b>17</b> (0.67)	<b>1,57</b> (3.49)





**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

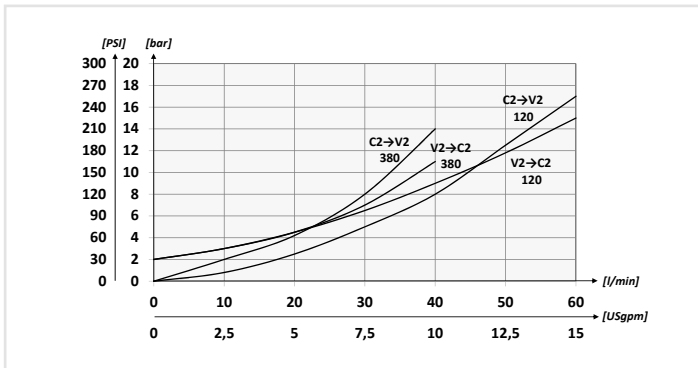


**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04
<b>VBZH</b>		<b>2</b>	

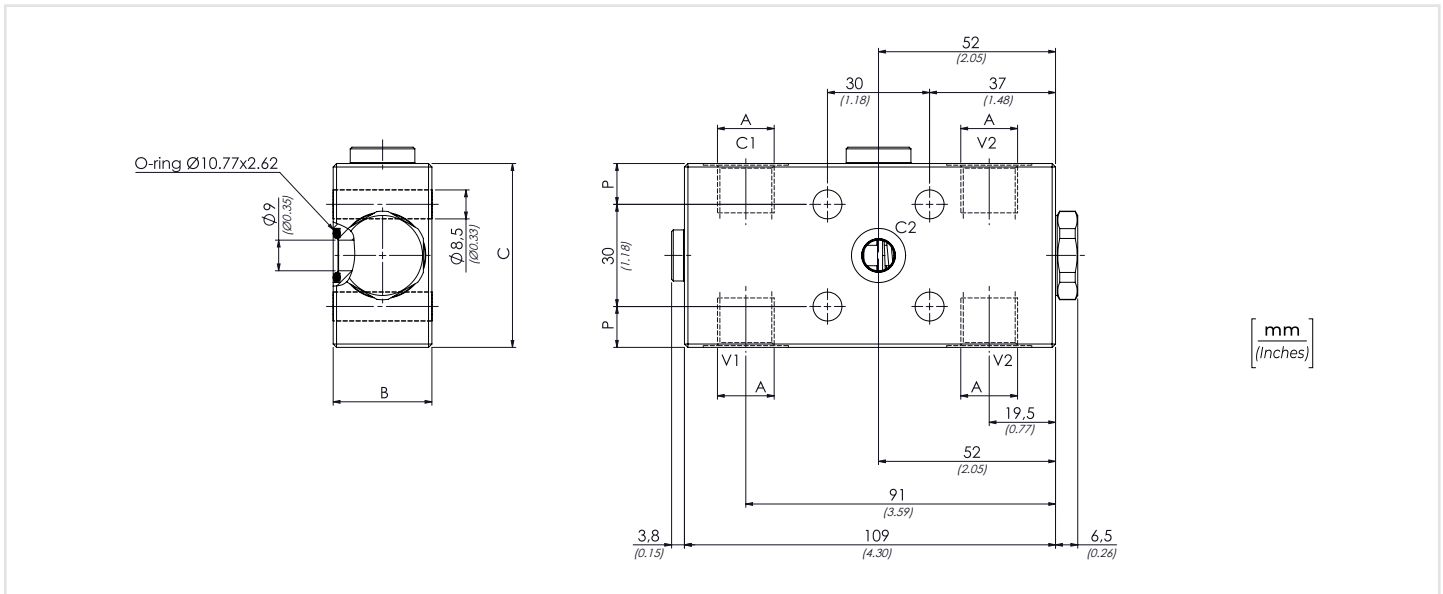
<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO - FLANGIATE SINGOLE A TARATURA FISSA (SINGLE COUNTERBALANCE VALVES FIXED SETTING FOR OPEN CENTER - SINGLE FLANGED VERSION)	<b>VBZH</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8
		BSPP 1/2
<b>03</b>	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)
		Acciaio + zinco-nichel (Steel + zinc-nickel)
Rapporto di pilotaggio (Pilot ratio) 1:4.25		

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm²/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro / Max contamination index with filter</b>	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) / It is necessary a filter use to protect the valve (advised filtration 15 µm)</b>	



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	B	C	M	P	PESO APPROX (kg) / APPROX WEIGHT (lbt)
<b>VBZH380</b>	<b>BSPP 3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>29 (1.14)</b>	<b>54 (2.13)</b>	<b>BSPP 1/4</b>	<b>12 (0.47)</b>	<b>1,11 (2.49)</b>
<b>VBZH120</b>	<b>BSPP 1/2</b>	<b>60 (15.9)</b>		<b>34 (1.34)</b>	<b>64 (2.52)</b>		<b>17 (0.67)</b>	<b>1,55 (3.41)</b>

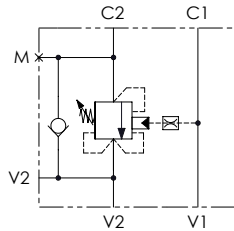




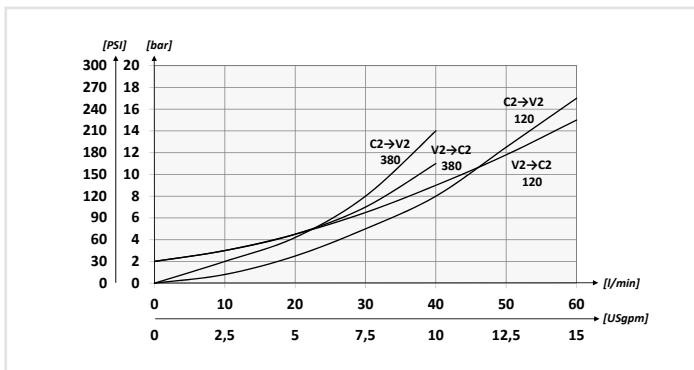
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04	05
<b>VCLH</b>			<b>S</b>	

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



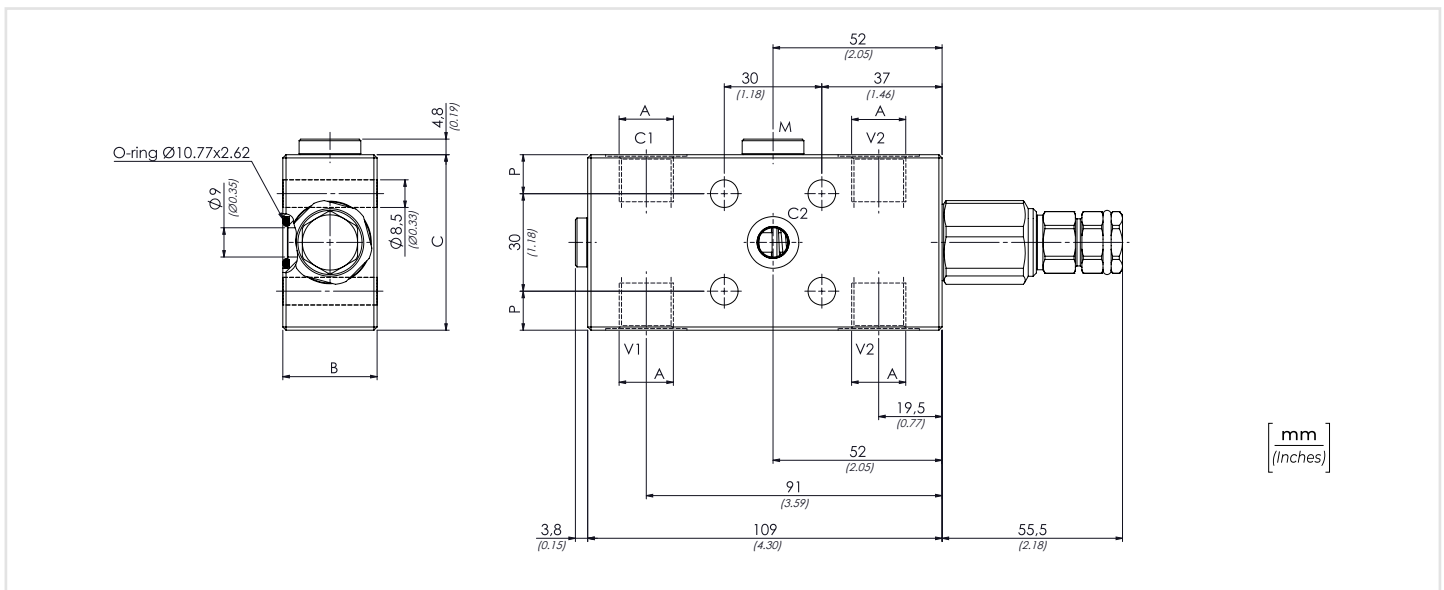
**PERFORMANCES**



<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO CHIUSO - FLANGIATE SINGOLE (SINGLE COUNTERBALANCE VALVES FOR CLOSED CENTER - SINGLE FLANGED VERSION)			<b>VCLH</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8		<b>380</b>	
		BSPP 1/2		<b>120</b>	
<b>03</b>	MOLLA (SPRING)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
	MOLLA (SPRING)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>	
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

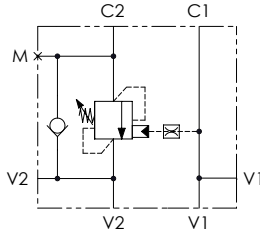


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

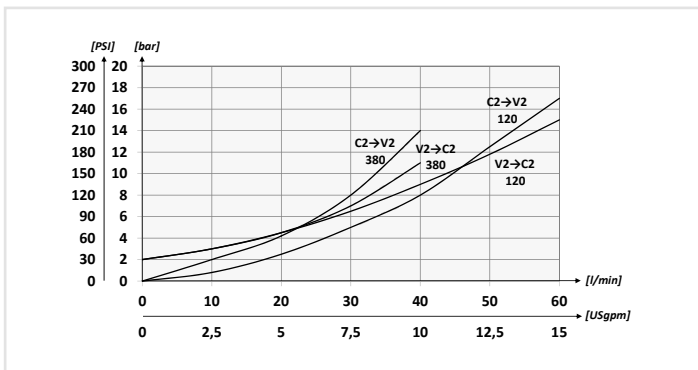
TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	B	C	M	P	PESO APPROX (kg) APPROX WEIGHT (lbt)
VCLH380	BSPP 3/8	40 (10.6)	350 (5075)	29 (1.14)	54 (2.13)	BSPP 1/4	12 (0.47)	1,23 (2.85)
VCLH120	BSPP 1/2	60 (15.9)		34 (1.34)	64 (2.52)		17 (0.67)	1,62 (3.61)



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



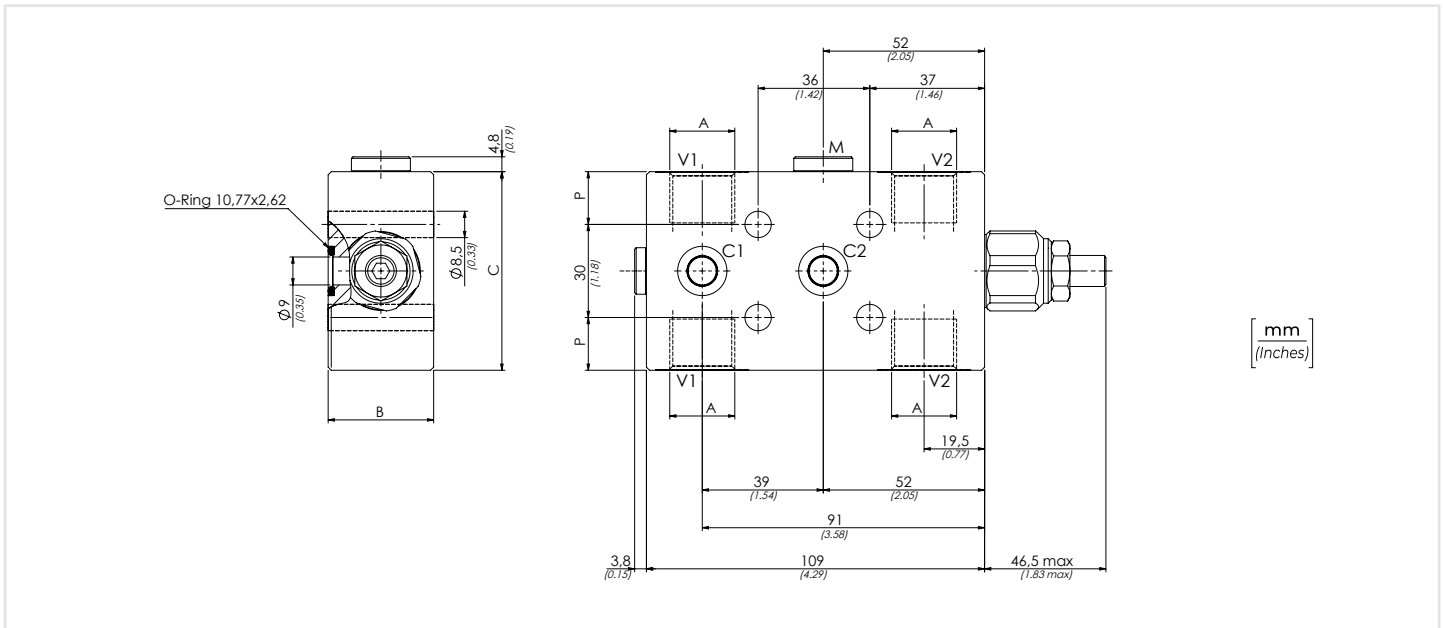
### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VBLF</b>				

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO - FLANGIATA DOPPIA (SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER - DOUBLE FLANGED VERSION)			<b>VBLF</b>		
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8		<b>380</b>		
		BSPP 1/2		<b>120</b>		
<b>03</b>	MOLLA (SPRING)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>	
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)			
	MOLLA (SPRING)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)		<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)			
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>		
		Acciaio + zinco-nichel (Steel + zinc-nickel)		<b>K</b>		
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>		
		1:8.75		<b>8</b>		

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm²/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

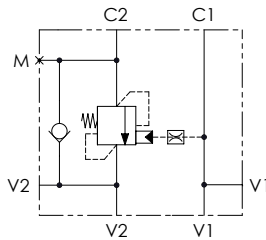


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	B	C	M	P	PESO APPROX (kg) / APPROX WEIGHT (lb)
VBLF380	BSPP 3/8	40 (10.6)	350 (5075)	29 (1.14)	54 (2.13)	BSPP 1/4	12 (0.47)	1,17 (2.55)
VBLF120	BSPP 1/2	60 (15.9)		34 (1.34)	64 (2.52)		17 (0.67)	1,55 (3.37)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

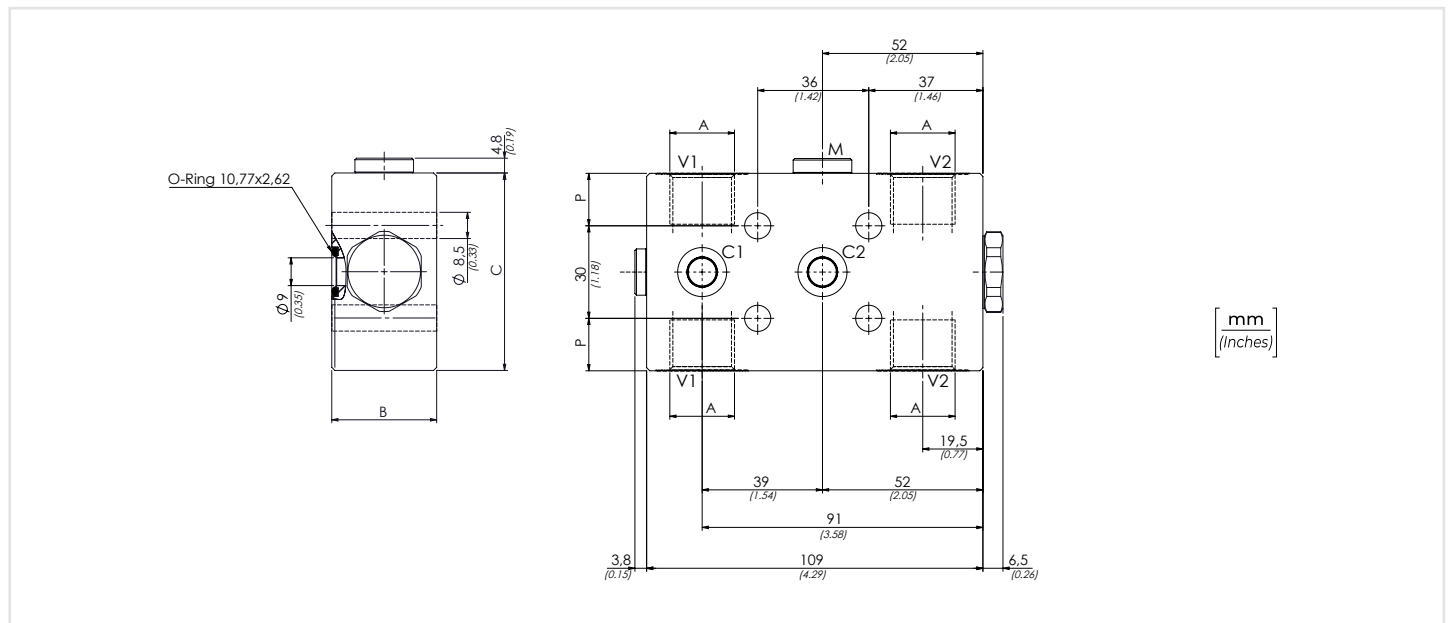
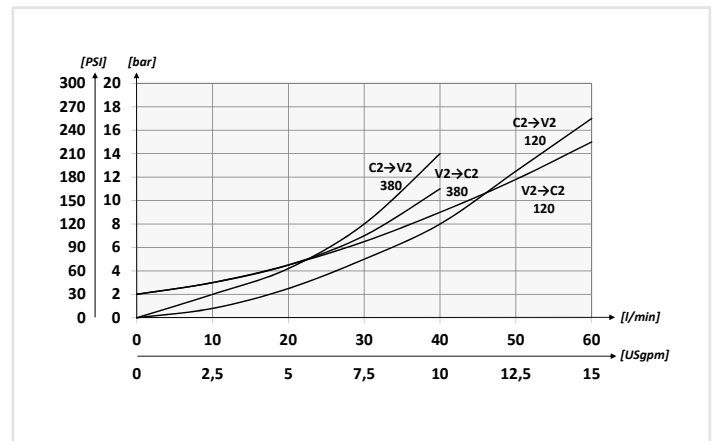
<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04
<b>VBZF</b>		<b>2</b>	

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO - FLANGIATE A TARATURA FISSA (SINGLE COUNTERBALANCE VALVES FIXED SETTING FOR OPEN CENTER - FLANGED VERSION)		<b>VBZF</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
<b>03</b>	Taratura (Setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)		<b>2</b>
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)	<b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel)	<b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25			

**PERFORMANCES**

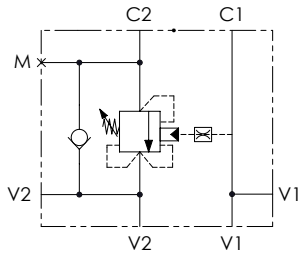


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

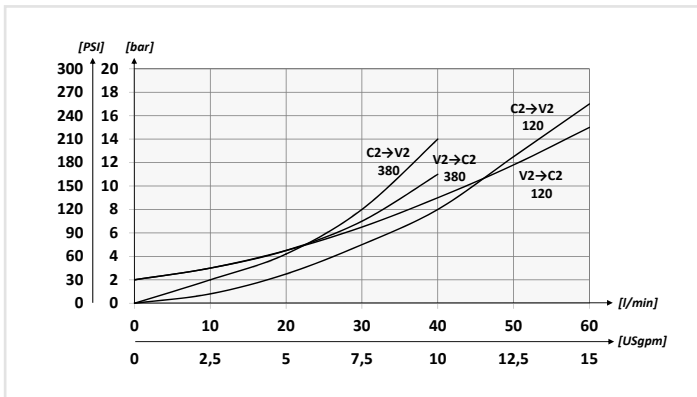
TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	B	C	M	P	PESO APPROX (kg) / APPROX WEIGHT (lb)
<b>VBZF380</b>	<b>BSPP 3/8</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>29</b> (1.14)	<b>54</b> (2.13)	<b>BSPP 1/4</b>	<b>12</b> (0.47)	<b>1,10</b> (2.42)
<b>VBZF120</b>	<b>BSPP 1/2</b>	<b>60</b> (15.9)		<b>34</b> (1.34)	<b>64</b> (2.52)		<b>17</b> (0.67)	<b>1,48</b> (3.25)



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



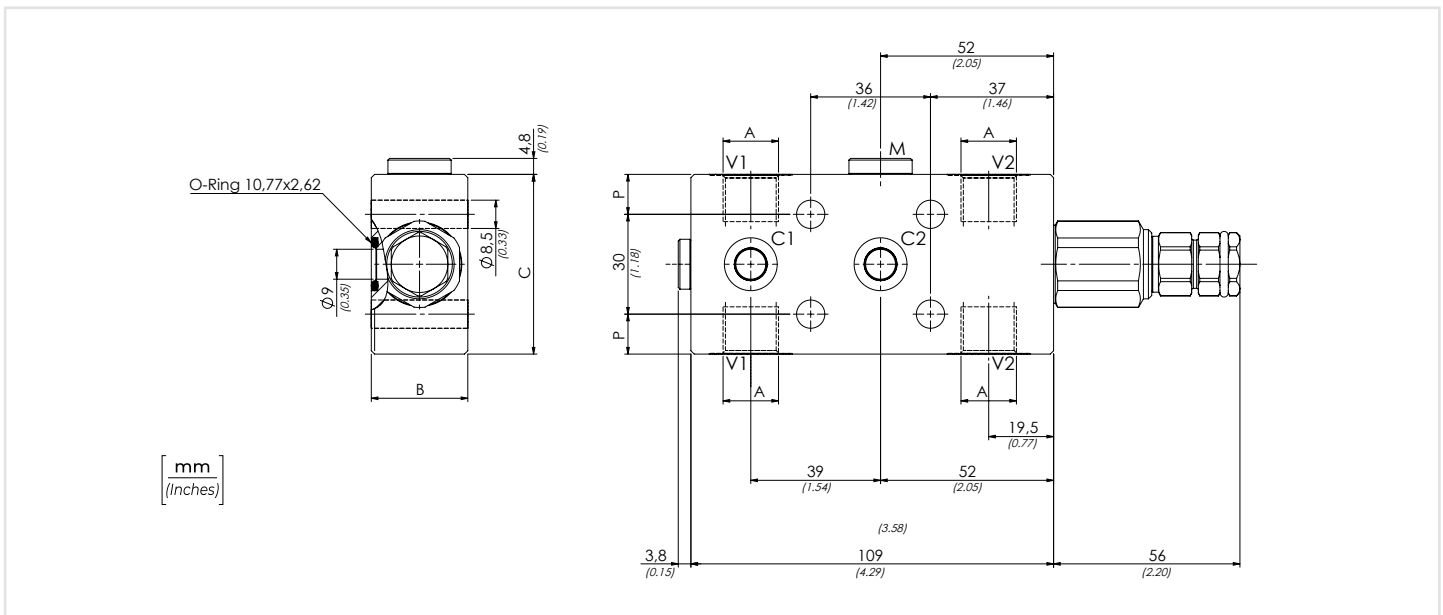
### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VCLF</b>			<b>S</b>	

<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO CHIUSO - FLANGIATE (SINGLE COUNTERBALANCE VALVES FOR CLOSED CENTER - FLANGED VERSION)			<b>VCLF</b>		
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8		<b>380</b>		
		BSPP 1/2		<b>120</b>		
<b>03</b>	MOLLA (SPRING)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>	
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)			
	MOLLA (SPRING)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)		<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)			
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>		
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>		
		1:8.75		<b>8</b>		

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico - Mineral oil</b>	ISO 6743/4 (DIN 51524)
<b>Viscosità olio - Oil viscosity</b>	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
<b>Temperatura dell'olio - Oil temperature</b>	-20°C +80°C -4°F +176°F
<b>Temperatura ambiente - Environment temperature</b>	-20°C +50°C -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

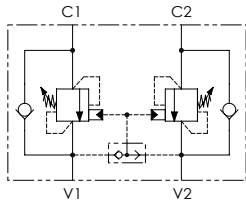


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

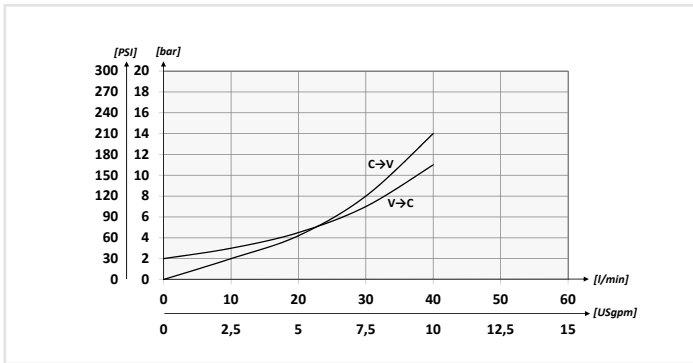
TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	B	C	M	P	PESO APPROX (kg) / APPROX WEIGHT (lb)
VCLF380	BSPP 3/8	40 (10.6)	350 (5075)	29 (1.14)	54 (2.13)	BSPP 1/4	12 (0.47)	1,22 (2.69)
VCLF120	BSPP 1/2	60 (15.9)		34 (1.34)	64 (2.52)		17 (0.67)	1,60 (3.52)



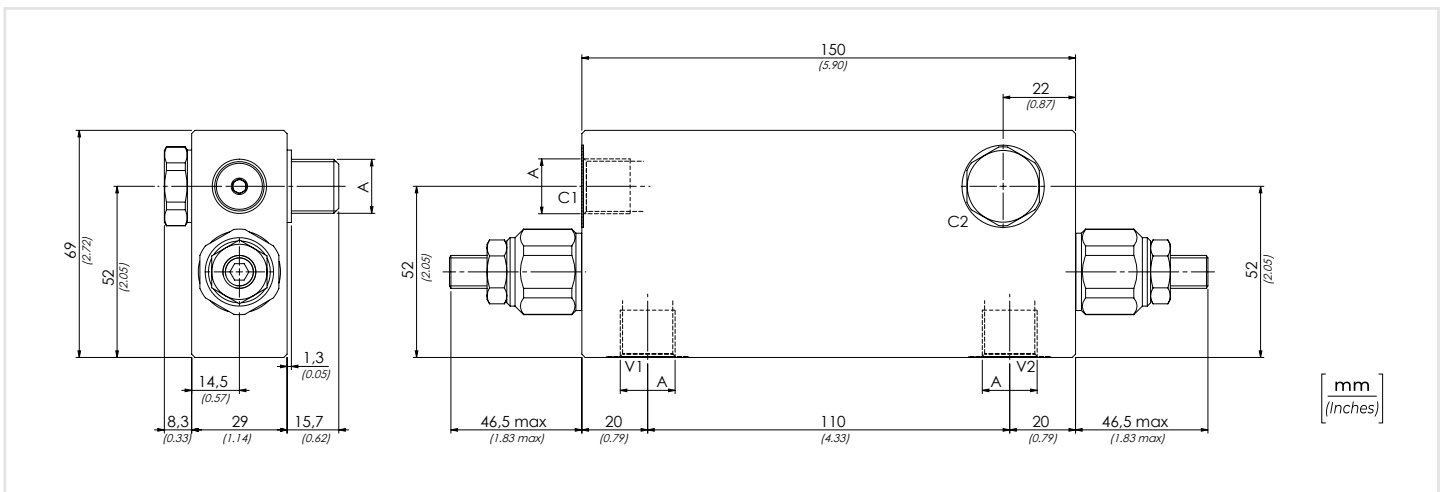
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



CODICE ORDINAZIONE / ORDERING CODE		01	02	03	04	05
<b>VBCA 380</b>						
<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLA A BULLONE PER CENTRO APERTO (BOLT-FITTING SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER)					<b>VBCA</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8				<b>380</b>
<b>03</b>	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting)		<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)	<b>Q=5 l/min 200 bar</b> (2900 PSI)		
<b>03</b>	MOLLA (SPRING) <b>60/350 bar</b> (870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting)		<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)	<b>Q=5 l/min 350 bar</b> (5075 PSI)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)				<b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel)				<b>K</b>
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard				<b>/</b>
		1:8.75				<b>8</b>



### DATI TECNICI / TECHNICAL DATA

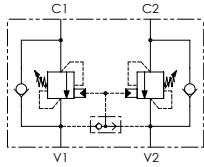
Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

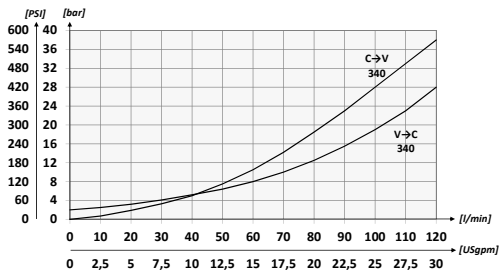
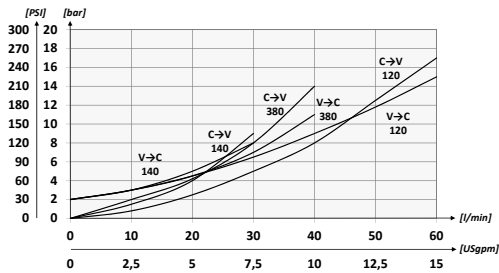
CODICE CODE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX (kg) APPROX WEIGHT (lb)
<b>VBCA380</b>	<b>BSPP 3/8</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>2,32</b> (5.11)



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



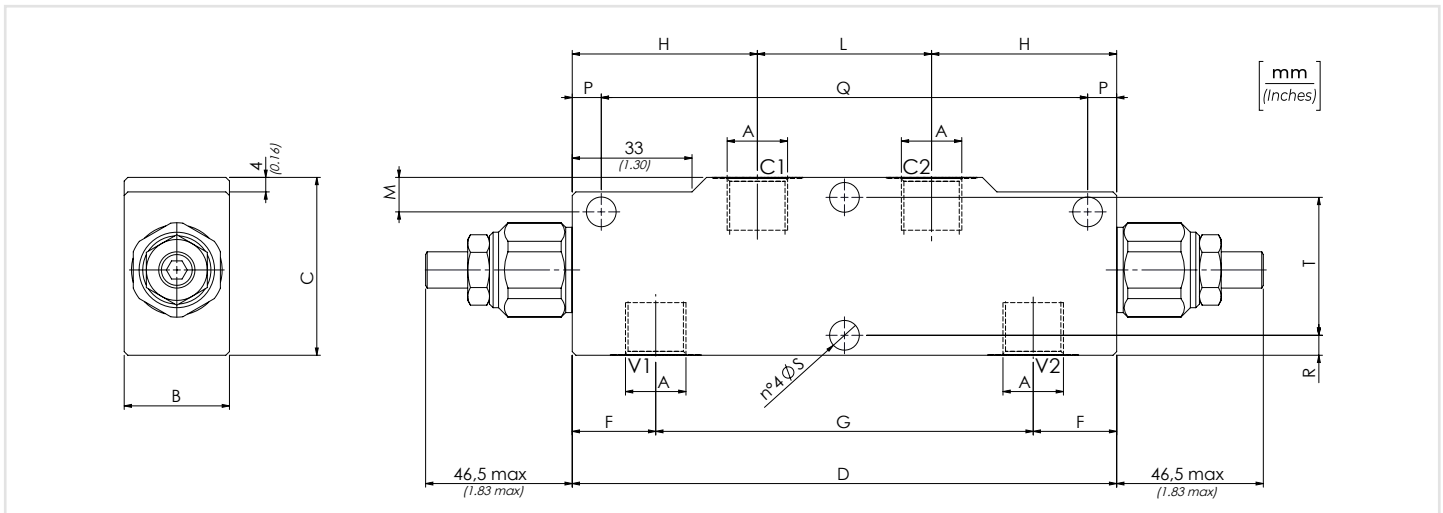
### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VBCD</b>				

<b>01</b>	VALVOLE DI BILANCIAMENTO DOPPIE PER CENTRO APERTO (DOUBLE COUNTERBALANCE VALVES FOR OPEN CENTER)				<b>VBCD</b>		
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4		<b>140</b>			
		BSPP 3/8		<b>380</b>			
		BSPP 1/2		<b>120</b>			
		BSPP 3/4		<b>340</b>			
<b>03</b>	MOLLA (SPRING)	Rp 1:4.25	140	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting)	<b>1</b>	
			380	<b>160 bar/al giro</b> (2320 PSI/turn)			Q=5 l/min 200 bar (2900 PSI)
	Rp 1:8.75	120					
		MOLLA (SPRING)	Rp 1:4.25	140	<b>135 bar/al giro</b> (1958 PSI/turn)		Taratura standard (Std. setting)
	380			<b>160 bar/al giro</b> (2320 PSI/turn)	Q=5 l/min 350 bar (5075 PSI)		
	Rp 1:8.75	120					
MOLLA (SPRING)		Rp 1:6.2	340	<b>143 bar/al giro</b> (2074 PSI/turn)	Taratura standard (Std. setting)	<b>2</b>	
	<b>242 bar/al giro</b> (3509 PSI/turn)			Q=5 l/min 350 bar (5075 PSI)			
Rp 1:10.6							
	<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>		
Acciaio + zincatura (Steel + zinc-plating)			<b>K</b>				
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	140	1:4.25 Standard		<b>/</b>		
		380	1:8.75		<b>8</b>		
		120	1:6.2		<b>/</b>		
		340	1:10.6		<b>11</b>		

### DATI TECNICI / TECHNICAL DATA

**Olio idraulico** - Mineral oil **ISO 6743/4** (DIN 51524)  
**Viscosità olio** - Oil viscosity **15-250 mm<sup>2</sup>/s** (15 to 250 cSt)  
**Classe di contaminazione max con filtro** **ISO 4406:1999 Classe 19/17/14**  
 Max contamination index with filter  
**Temperatura dell'olio** - Oil temperature **-20°C +80°C** **-4°F +176°F**  
**Temperatura ambiente** - Environment temperature **-20°C +50°C** **-4°F +122°F**  
**È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)**  
 It is necessary a filter use to protect the valve (advised filtration 15 µm)

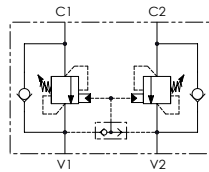


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

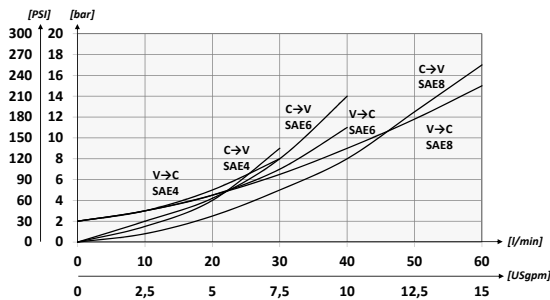
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	Peso Approx Approx weight kg-lbt
VBCD140	BSPP 1/4	30 (7.9)	350 (5075)	29 (1.14)	49 (1.93)	150 (5.91)	23 (0.91)	104 (4.09)	51 (2.01)	48 (1.89)	10 (0.39)	8 (0.31)	134 (5.28)	5,5 (0.22)	8,2 (0.32)	38 (1.50)	1,57 (3,46)
VBCD380	BSPP 3/8	40 (10.6)					21 (0.83)	108 (4.25)									
VBCD120	BSPP 1/2	60 (15.9)		59 (2.32)	21 (0.83)	108 (4.25)						12 (0.47)			7,5 (0.29)	43 (1.69)	1,78 (3,92)
VBCD340	BSPP 3/4	120 (31.7)		39 (1.54)	69 (2.72)	210 (8.27)	26 (1.02)	158 (6.22)	72 (2.83)	66 (2.6)	13 (0.51)	10 (0.39)	190 (7.48)	8,5 (0.33)	10,5 (0.41)	52 (2.05)	4,5 (8,81)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**PERFORMANCES**



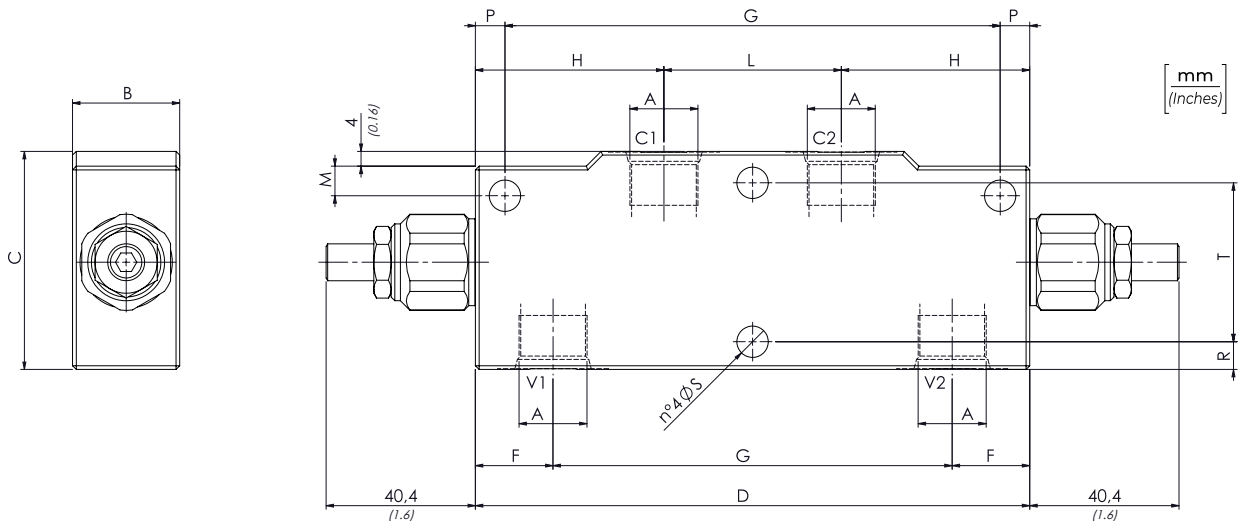
**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04	05
<b>VBCD</b>				

<b>01</b>	VALVOLE DI BILANCIAMENTO DOPPIE PER CENTRO APERTO DOUBLE COUNTERBALANCE VALVES FOR OPEN CENTER	<b>VBCD</b>
<b>02</b>	DIMENSIONE (SIZE)	7/16-20UNF <b>4</b>
		9/16-18UNF <b>6</b>
		3/4-16UNF <b>8</b>
<b>03</b>	MOLLA (SPRING) Rp 1:4.25 <b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)
	30/210 bar (435/3045 PSI) Rp 1:8.75 <b>160 bar/al giro</b> (2320 PSI/turn)	<b>1</b>
<b>03</b>	MOLLA (SPRING) Rp 1:4.25 <b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)
	60/350 bar (870/5075 PSI) Rp 1:8.75 <b>160 bar/al giro</b> (2320 PSI/turn)	<b>2</b>
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating) <b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel) <b>K</b>
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard <b>/</b>
		1:8.75 <b>8</b>

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm²/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



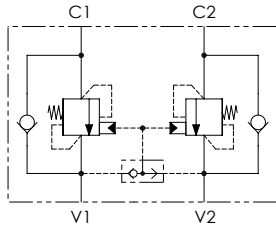
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	F	G	H	L	M	P	R	S	T	PESO APPROX APPROXWEIGHT kg-lbt
VBCD4	7/16-20UNF	30 (7.9)	350 (5075)	29 (1.14)	49 (1.93)	150 (5.91)	23 (0.91)	104 (4.09)	51 (2.01)	48 (1.89)	5,5 (0.22)	8 (0.31)	5,5 (0.22)	8,2 (0.32)	38 (1.50)	1,59 (3,50)
VBCD6	9/16-18UNF	40 (10.6)			59 (2.32)		21 (0.83)	134 (5.27)			8 (0.31)		7,5 (0.29)		43 (1.69)	1,56 (3,44)
VBCD8	3/4-16UNF	60 (15.9)														





**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

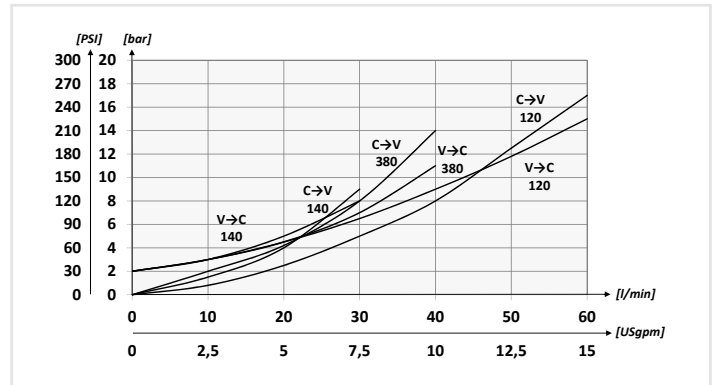


**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04
<b>VBZD</b>		<b>2</b>	

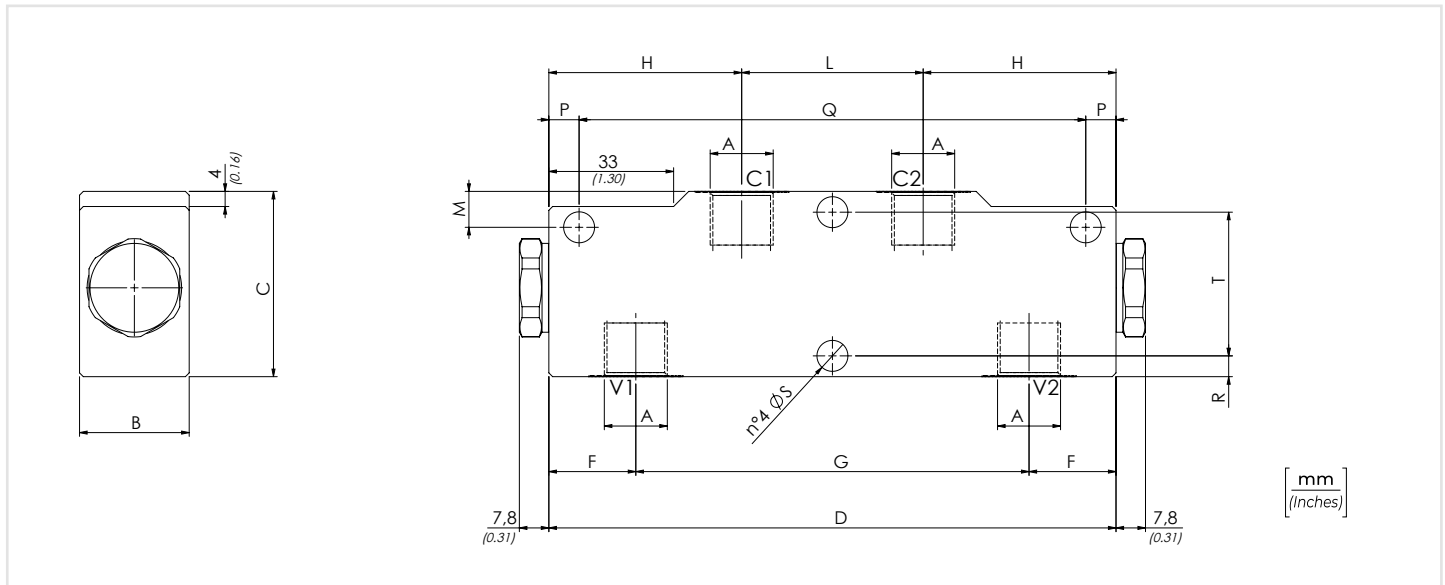
<b>01</b>	VALVOLE DI BILANCIAMENTO DOPPIE PER CENTRO APERTO A TARATURA FISSA (DOUBLE COUNTERBALANCE VALVES FIXED SETTING FOR OPEN CENTER)		<b>VBZD</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
<b>03</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>		<b>2</b>
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)	<b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel)	<b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25			

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro Max contamination index with filter</b>	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)</b>	



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	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 APPROX APPROX WEIGHT kg-lbt		
VBZD140	BSPP 1/4	30 (7.9)	350 (5075)	29 (1.14)	49 (1.93)	150 (5.91)	23 (0.91)	104 (4.09)	51 (2.01)	48 (1.89)	10 (0.39)	8 (0.31)	134 (5.28)	5,5 (0.22)	8,2 (0.32)	38 (1.50)	1,50 (3,30)		
VBZD380	BSPP 3/8	40 (10.6)			59 (2.32)		21 (0.83)	108 (4.25)						12 (0.47)		7,5 (0.29)		43 (1.69)	1,48 (3,25)
VBZD120	BSPP 1/2	60 (15.9)																	

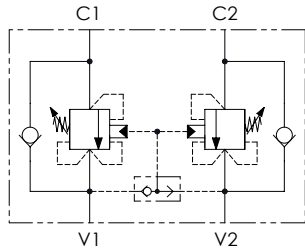




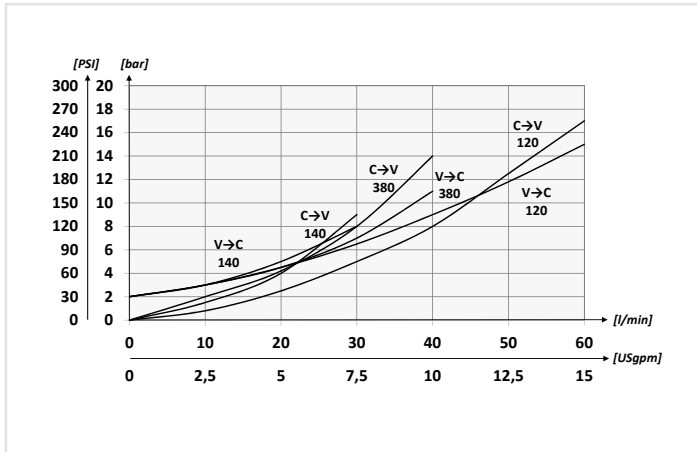
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04	05
<b>VBCC</b>			<b>S</b>	

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



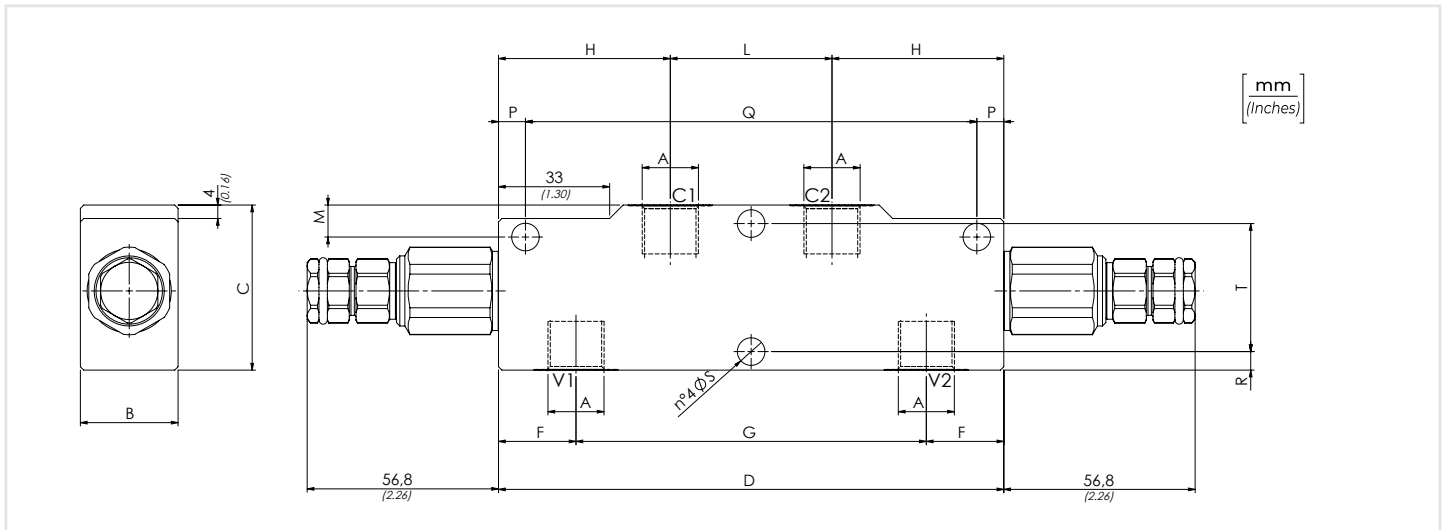
**PERFORMANCES**



<b>01</b>	VALVOLE DI BILANCIAMENTO DOPPIE PER CENTRO CHIUSO (DOUBLE COUNTERBALANCE VALVES FOR CLOSED CENTER)			<b>VBCC</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4		<b>140</b>	
		BSPP 3/8		<b>380</b>	
		BSPP 1/2		<b>120</b>	
<b>03</b>	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	MOLLA (SPRING) <b>60/350 bar</b> (870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>	
<b>05</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

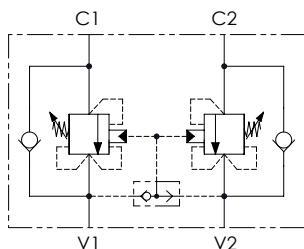


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

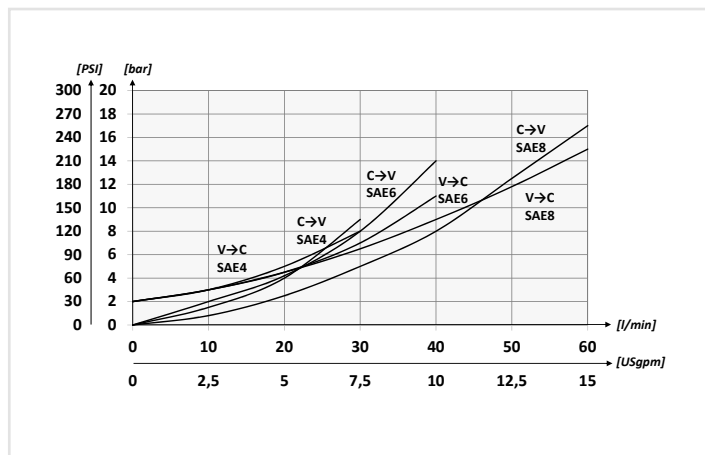
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	PESO APPROX APPROX WEIGHT kg-lbt
<b>VBCC140</b>	<b>BSPP 1/4</b>	<b>30</b> (8)	<b>350</b> (5075)	<b>29</b> (1.14)	<b>49</b> (1.93)	<b>150</b> (5.91)	<b>23</b> (0.91)	<b>104</b> (4.09)	<b>51</b> (2.01)	<b>48</b> (1.89)	<b>10</b> (0.39)	<b>8</b> (0.31)	<b>134</b> (5.28)	<b>5,5</b> (0.22)	<b>8,2</b> (0.32)	<b>38</b> (1.50)	<b>1,68</b> (3.70)
<b>VBCC380</b>	<b>BSPP 3/8</b>	<b>40</b> (10.5)			<b>59</b> (2.32)		<b>21</b> (0.83)	<b>108</b> (4.25)			<b>12</b> (0.47)			<b>7,5</b> (0.29)		<b>43</b> (1.69)	<b>1,66</b> (3.66)
<b>VBCC120</b>	<b>BSPP 1/2</b>	<b>60</b> (16)															



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



### CODICE ORDINAZIONE / ORDERING CODE

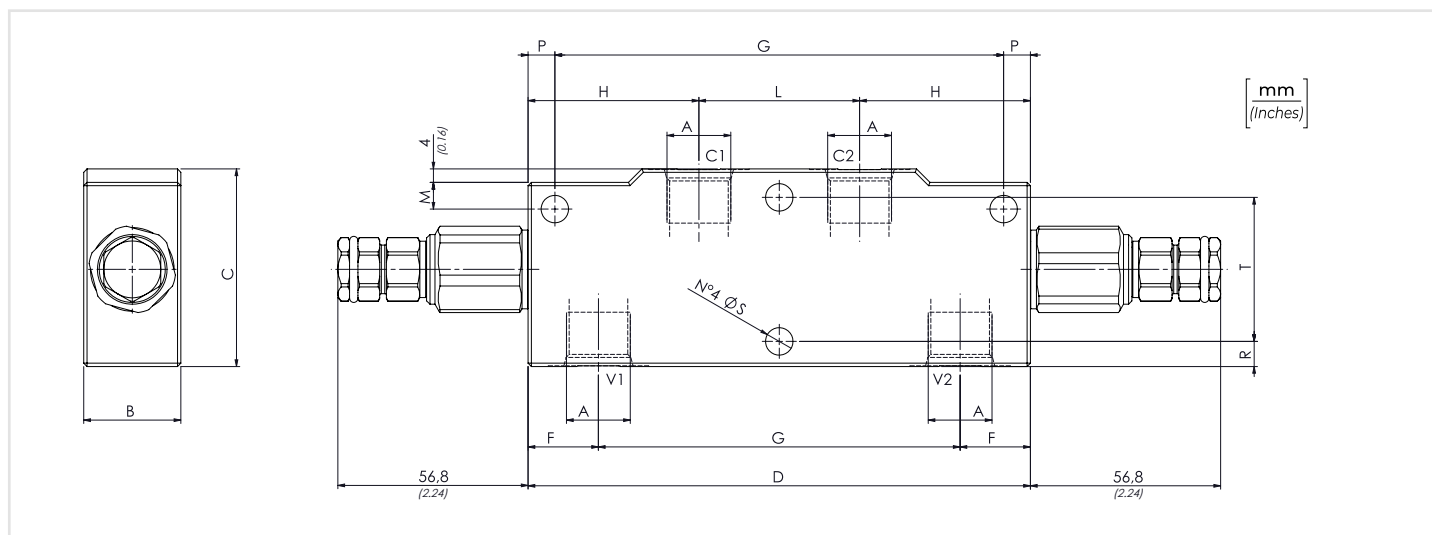
01	02	03	04	05
<b>VBCC</b>			<b>S</b>	

01	VALVOLE DI BILANCIAMENTO DOPPIE PER CENTRO CHIUSO (DOUBLE COUNTERBALANCE VALVES FOR CLOSED CENTER)			<b>VBCC</b>	
02	DIMENSIONE (SIZE)	7/16-20UNF		<b>4</b>	
		9/16-18UNF		<b>6</b>	
		3/4-16UNF		<b>8</b>	
03	MOLLA (SPRING)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
	MOLLA (SPRING)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
04	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>	
05	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F

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

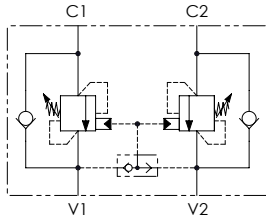


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

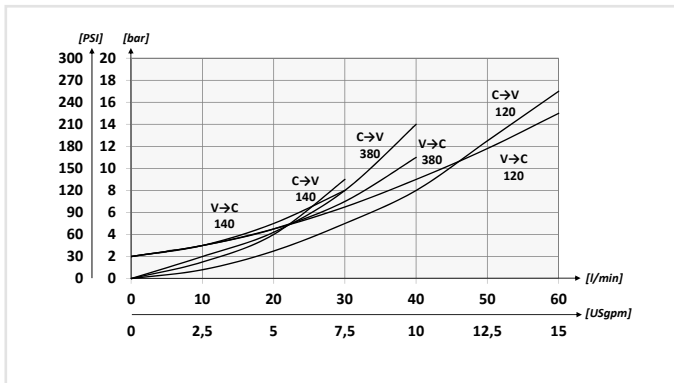
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	PESO APPROX APPROX WEIGHT kg-lbt	
VBCC140	7/16-20UNF	30 (8)	350 (5075)	29 (1.14)	49 (1.93)	150 (5.91)	23 (0.91)	104 (4.09)	51 (2.01)	48 (1.89)	10 (0.39)	8 (0.31)	134 (5.28)	5,5 (0.22)	8,2 (0.32)	38 (1.50)	1,68 (3.70)	
VBCC380	9/16-18UNF	40 (10.5)			59 (2.32)		21 (0.83)	108 (4.25)						12 (0.47)		7,5 (0.29)	43 (1.69)	1,66 (3.66)
VBCC120	3/4-16UNF	60 (16)																



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### PERFORMANCES



### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04	05
<b>VBCF</b>				

01	VALVOLE DI BILANCIAMENTO DOPPIE PER CENTRO APERTO - FLANGIATE (DOUBLE COUNTERBALANCE VALVES FOR OPEN CENTER - FLANGED VERSION)				VBCF
02	DIMENSIONE (SIZE)	BSPP 1/4		140	1
		BSPP 3/8		380	
		BSPP 1/2		120	
03	MOLLA (SPRING)	Rp 1:4.25	78 bar/al giro (1131 PSI/turn)	Taratura standard (Std. setting)	2
			30/210 bar (435/3045 PSI)		
	Rp 1:8.75	135 bar/al giro (1958 PSI/turn)	Taratura standard (Std. setting)		
		60/350 bar (870/5075 PSI)		160 bar/al giro (2320 PSI/turn)	
04	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)			S
		Acciaio + zinco-nichel (Steel + zinc-nickel)			K
05	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard			/
		1:8.75			8

### DATI TECNICI / TECHNICAL DATA

**Olio idraulico - Mineral oil** ISO 6743/4 (DIN 51524)

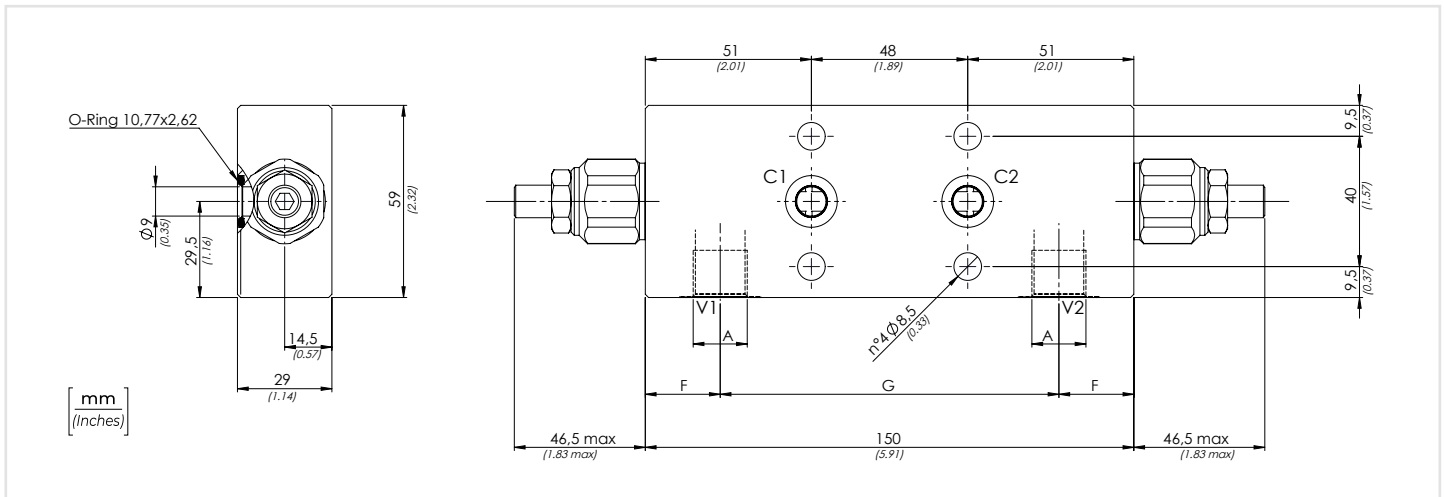
**Viscosità olio - Oil viscosity** 15-250 mm<sup>2</sup>/s (15 to 250 cSt)

**Classe di contaminazione max con filtro** ISO 4406:1999 Classe 19/17/14  
Max contamination index with filter

**Temperatura dell'olio - Oil temperature** -20°C +80°C -4°F +176°F

**Temperatura ambiente - Environment temperature** -20°C +50°C -4°F +122°F

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

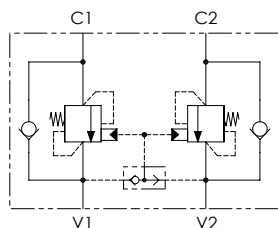


### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	G	F	PESO APPROX (kg) / APPROX WEIGHT (lbt)
VBCF140	BSPP 1/4	40 (10.6)	350 (5075)	104 (4.09)	23 (0.91)	2,02 (4.45)
VBCF380	BSPP 3/8					1,95 (4.30)
VBCF120	BSPP 1/2	60 (15.9)		108 (4.25)	21 (0.83)	1,92 (4.23)



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

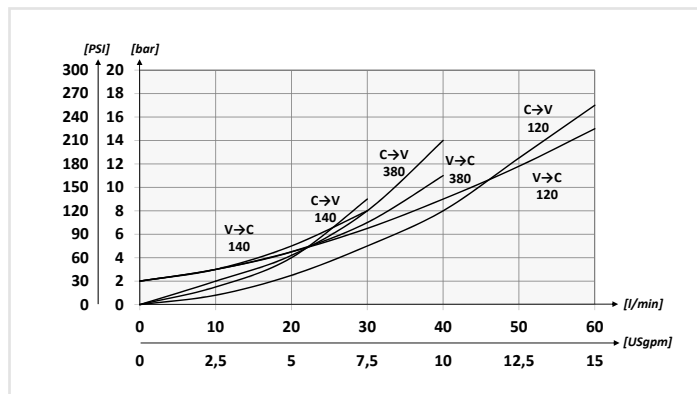


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03	04
<b>VBZG</b>		<b>2</b>	

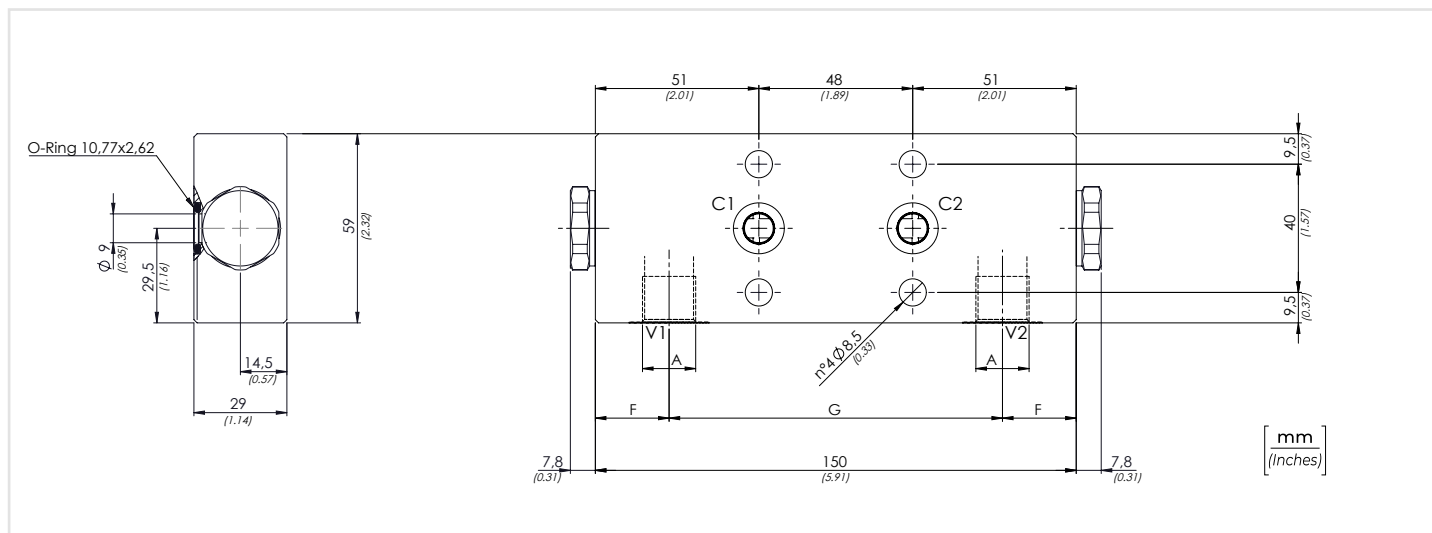
<b>01</b>	VALVOLE DI BILANCIAMENTO DOPPIE PER CENTRO APERTO - FLANGIATE A TARATURA FISSA (DOUBLE COUNTERBALANCE VALVES FIXED SETTING FOR OPEN CENTER - FLANGED VERSION)		<b>VBZG</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPB 1/4	<b>140</b>
		BSPB 3/8	<b>380</b>
		BSPB 1/2	<b>120</b>
<b>03</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>		<b>2</b>
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)	<b>S</b>
		Acciaio + zinco-nichel (Steel + zinc-nickel)	<b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25			

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	



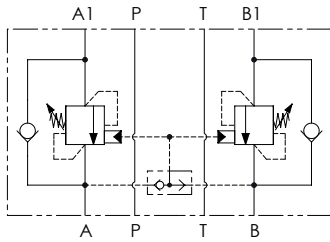
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	G	F	PESO APPROX (kg) / APPROX WEIGHT (lb)
VBZG140	BSPB 1/4	40 (10.6)	350 (5075)	104 (4.09)	23 (0.91)	1,98 (4.24)
VBZG380	BSPB 3/8					1,90 (4.07)
VBZG120	BSPB 1/2	60 (15.9)		108 (4.25)	21 (0.83)	1,88 (4.03)





**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**CODICE ORDINAZIONE**  
ORDERING CODE

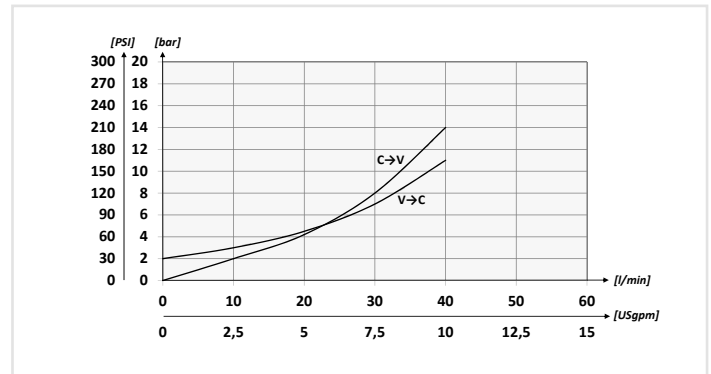
01	02	03	04	05
<b>VBCS06</b>		<b>S</b>		

<b>01</b>	VALVOLE DI BILANCIAMENTO MODULARI CETOP3 DOPPIE PER CENTRO APERTO (DOUBLE CETOP3 MODULAR COUNTERBALANCE VALVES FOR OPEN CENTER)			<b>VBCS06</b>	
<b>02</b>	MOLLA (SPRING) 30/210 bar (435/3045 PSI)	Rp 1:4.25 Rp 1:8.75	78 bar/al giro (1131 PSI/turn) 160 bar/al giro (2320 PSI/turn)	Taratura standard (Std. setting) Q=5 l/min 200 bar (2900 PSI)	<b>1</b>
	MOLLA (SPRING) 60/350 bar (870/5075 PSI)	Rp 1:4.25 Rp 1:8.75	135 bar/al giro (1958 PSI/turn) 160 bar/al giro (2320 PSI/turn)	Taratura standard (Std. setting) Q=5 l/min 350 bar (5075 PSI)	
<b>03</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>	
<b>04</b>	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		<b>/</b>	
		1:8.75		<b>8</b>	

**DATI TECNICI / TECHNICAL DATA**

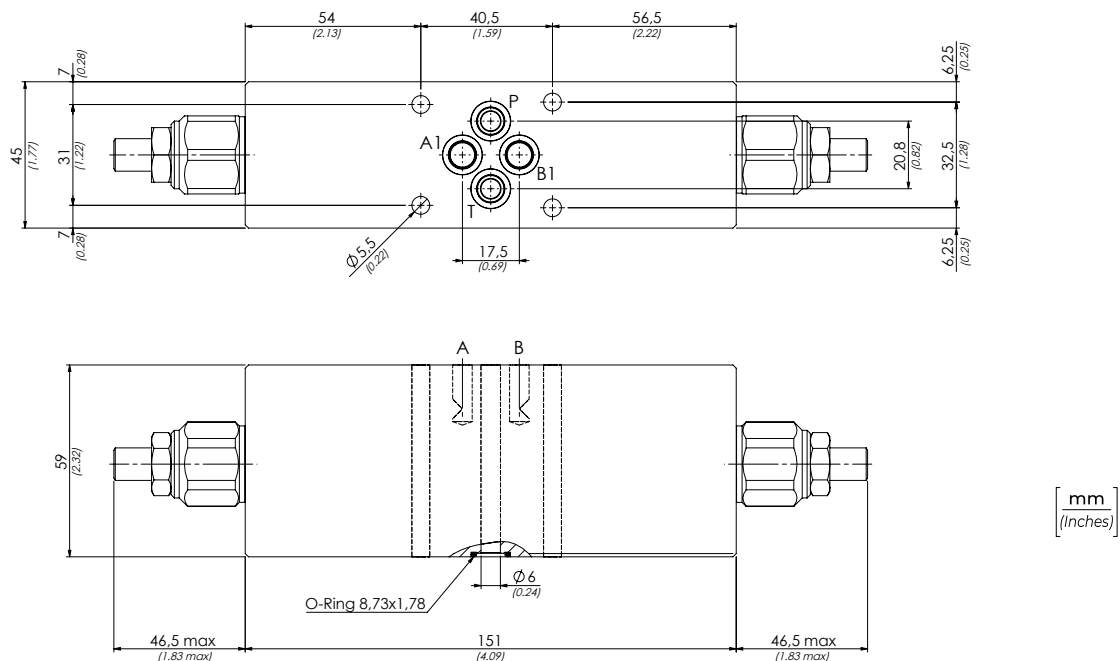
Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**



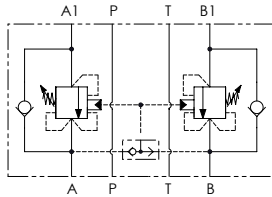
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
VBCS06	40 (10.6)	350 (5075)	3,10 (6.80)





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

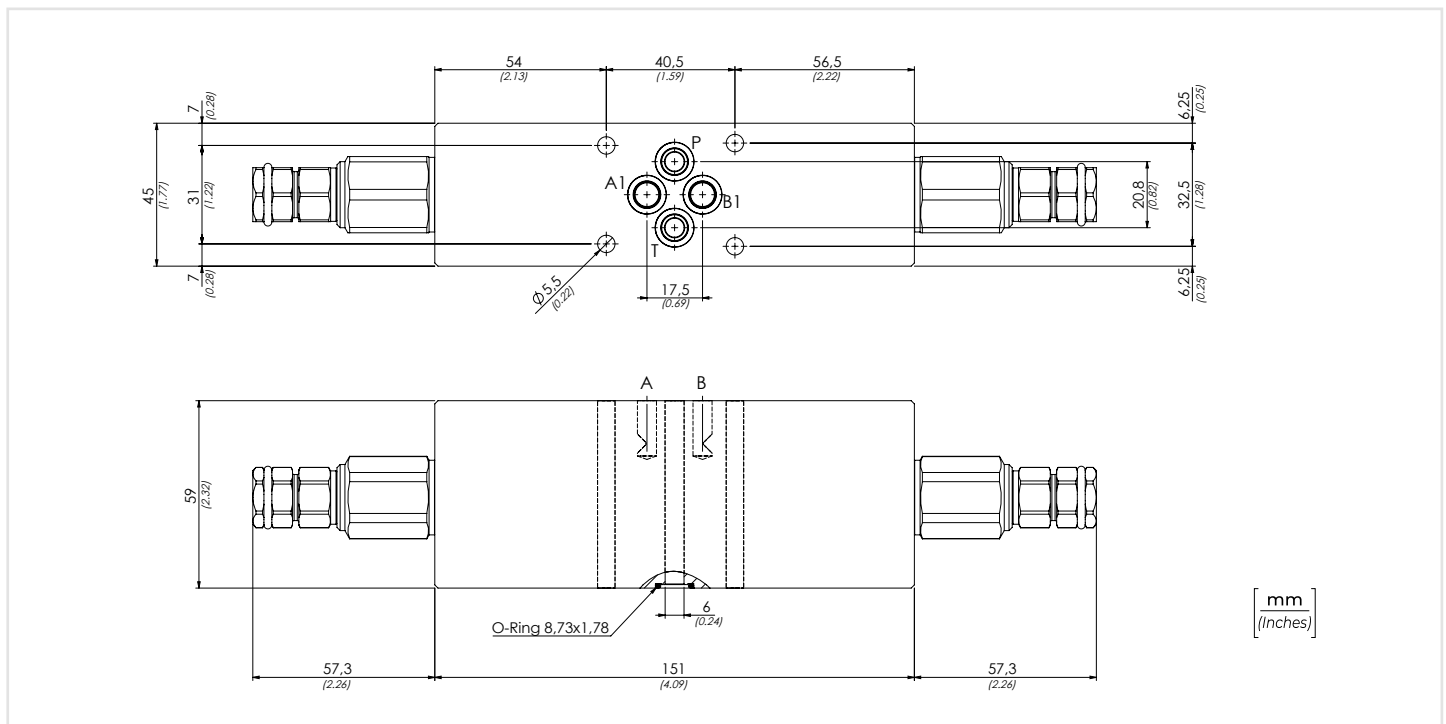
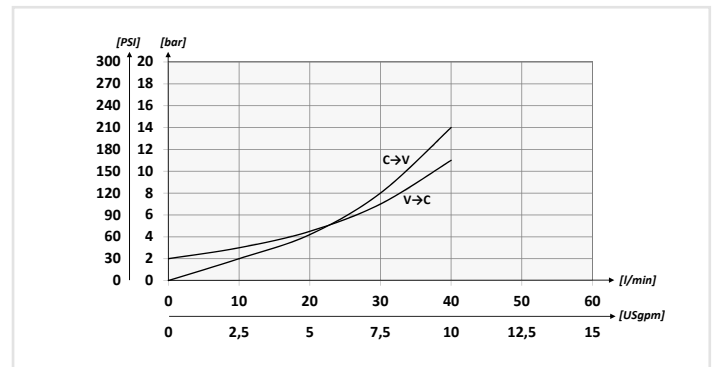
TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
VBCT06	40 (10.6)	350 (5075)	3,10 (6.9)

### CODICE ORDINAZIONE ORDERING CODE

01	02	03	04	05
<b>VBCT06</b>		<b>S</b>		

01	VALVOLE DI BILANCIAMENTO MODULARI CETOP3 DOPPIE PER CENTRO CHIUSO (DOUBLE CETOP3 MODULAR COUNTERBALANCE VALVES FOR CLOSED CENTER)			VBCT06
MOLLA (SPRING) 30/210 bar (435/3045 PSI)	Rp 1:4.25 Rp 1:8.75	78 bar/al giro (1131 PSI/turn) 160 bar/al giro (2320 PSI/turn)	Taratura standard (Std. setting) Q=5 l/min 200 bar (2900 PSI)	1
MOLLA (SPRING) 60/350 bar (870/5075 PSI)	Rp 1:4.25 Rp 1:8.75	135 bar/al giro (1958 PSI/turn) 160 bar/al giro (2320 PSI/turn)	Taratura standard (Std. setting) Q=5 l/min 350 bar (5075 PSI)	2
03	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		S
04	RAPPORTO DI PILOTAGGIO (PILOT RATIO)	1:4.25 Standard		/
		1:8.75		8

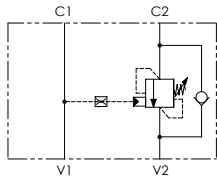
### PERFORMANCES







**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

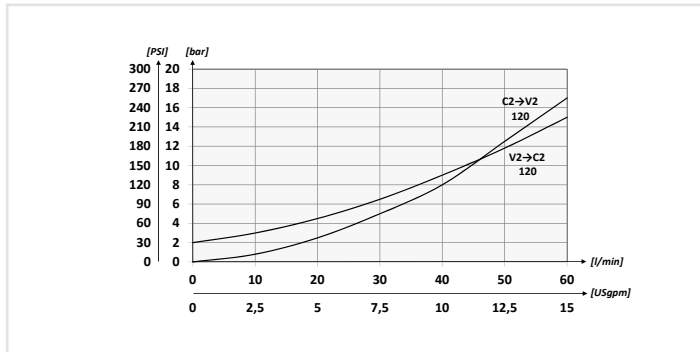


**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04
<b>SCVB</b>			<b>S</b>

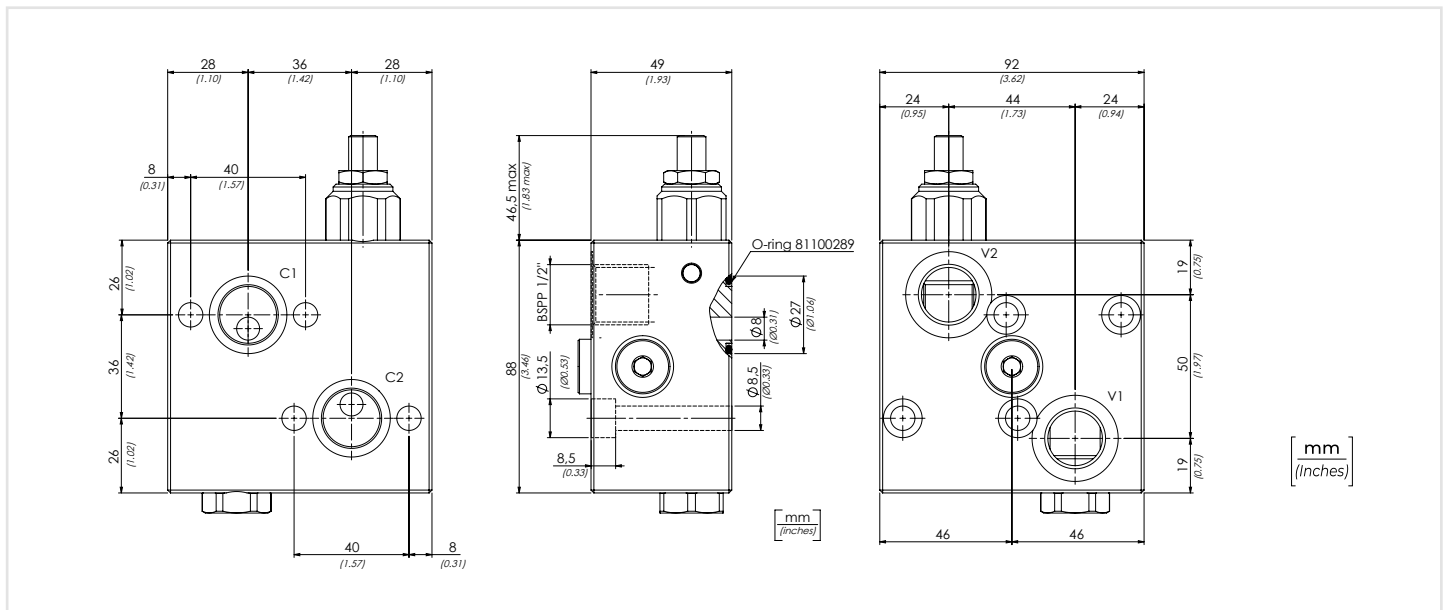
<b>01</b>	VALVOLE DI BILANCIAMENTO SINGOLE PER CENTRO APERTO (SINGLE COUNTERBALANCE VALVES FOR OPEN CENTER)			<b>SCVB</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/2		<b>120</b>	
<b>03</b>	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>03</b>	MOLLA (SPRING) <b>60/350 bar</b> (870/5075 PSI)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
		Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)		
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)			<b>S</b>

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm²/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro Max contamination index with filter</b>	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)</b>	



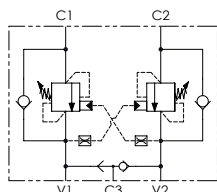
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX (kg) APPROX WEIGHT (lbt)
<b>SCVB120</b>	<b>BSPP 1/2</b>	<b>60 (15.9)</b>	<b>350 (5075)</b>	<b>2,81 (6.19)</b>

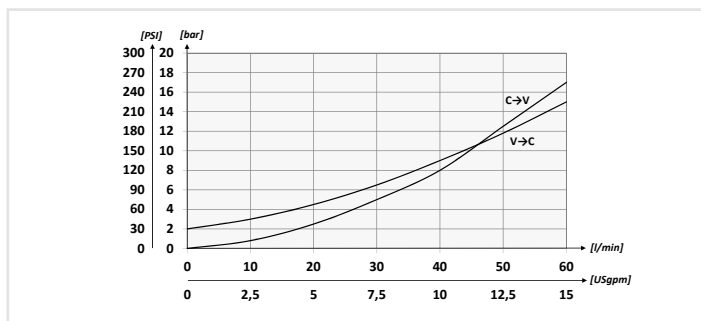




**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**PERFORMANCES**



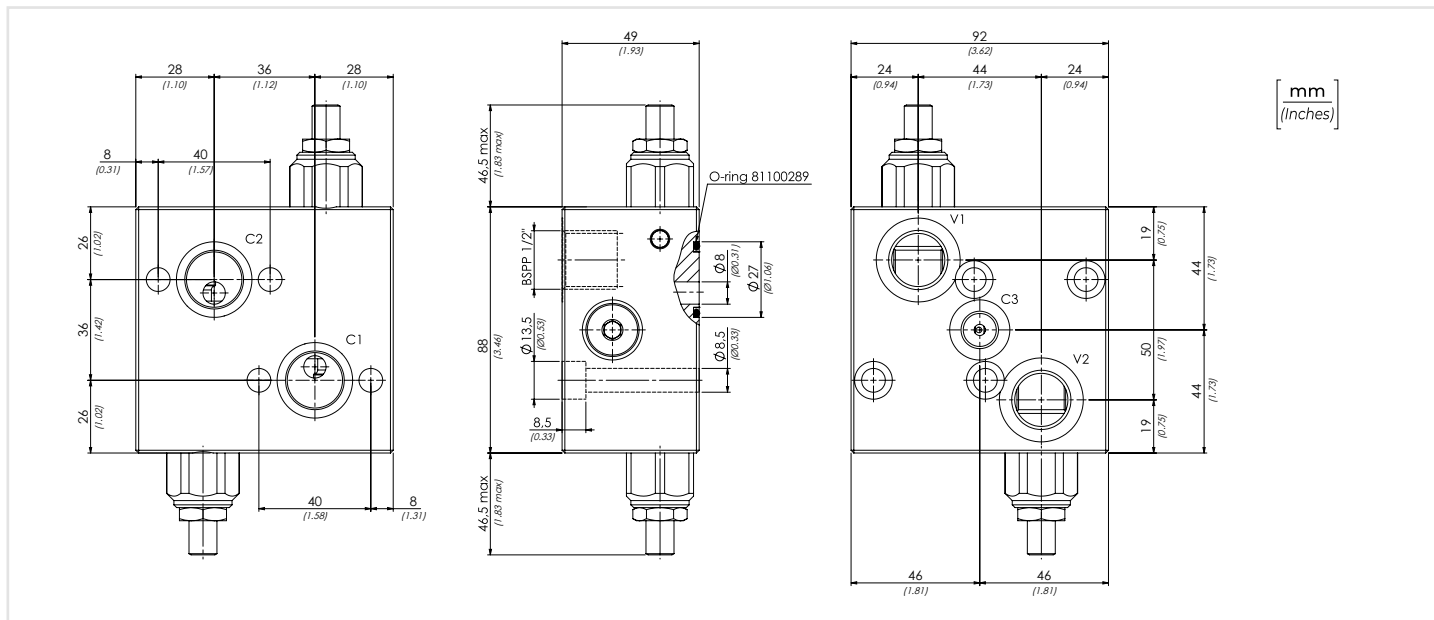
**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04
<b>DCVB</b>			<b>S</b>

<b>01</b>	VALVOLE DI BILANCIAMENTO DOPPIE PER CENTRO APERTO OMP-OMR (DOUBLE COUNTERBALANCE VALVES FOR OPEN CENTER OMP-OMR)			<b>DCVB</b>
<b>02</b>	MOLLA (SPRING)	BSPF 1/2		<b>120</b>
<b>03</b>	MOLLA (SPRING)	Rp 1:4.25	<b>78 bar/al giro</b> (1131 PSI/turn)	<b>1</b>
	<b>30/210 bar</b> (435/3045 PSI)	Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)	
<b>03</b>	MOLLA (SPRING)	Rp 1:4.25	<b>135 bar/al giro</b> (1958 PSI/turn)	<b>2</b>
	<b>60/350 bar</b> (870/5075 PSI)	Rp 1:8.75	<b>160 bar/al giro</b> (2320 PSI/turn)	
<b>04</b>	MATERIALE (MATERIAL)	Acciaio + zincatura (Steel + zinc-plating)		<b>S</b>

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO / TYPE	A	PORTATA MAX / MAX FLOW / l/min-USgpm	PRESSIONE MAX / MAX PRESSURE / bar-PSI	Peso Approx / Approx weight / kg-lbt
<b>DCVB120</b>	<b>BSPF 1/2</b>	<b>60 (15.9)</b>	<b>350 (5075)</b>	<b>2,8 (6.17)</b>



01

**CODICE ORDINAZIONE**  
ORDERING CODE

01	<b>81300119</b>	<b>M6</b>
	<b>81300037</b>	<b>M8</b>
	<b>81300095</b>	<b>M10</b>
	<b>81300120</b>	<b>M12</b>
	<b>81300121</b>	<b>M16</b>









# VALVOLE ELETTRICHE

## ELECTRICAL VALVES

Valvole elettriche in cavità SAE a tenuta singola e doppia e a cursore. Bobine e connettori.

Solenoid valves in SAE cavities single or double sealing or spool type. Coils and connectors.





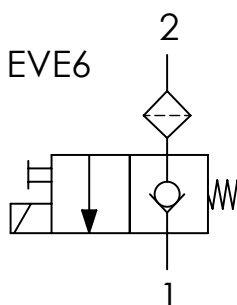
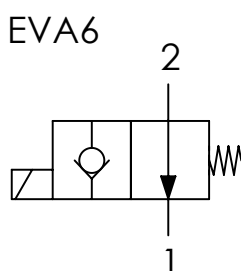
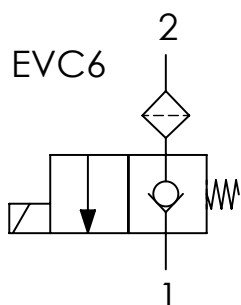


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>EV</b>	

<b>01</b>	VALVOLE A COMANDO ELETTRICO SAE8 2 VIE/2 POSIZIONI DIRETTE (2 WAYS/2 POSITIONS SAE8 ELECTRIC VALVES - DIRECT ACTING)	<b>EV</b>	
<b>02</b>	SCHEMA (CIRCUIT)	<b>Normalmente chiusa</b> (Normally closed)	<b>C6</b>
		<b>Normalmente chiusa + emergenza</b> (Normally closed + emergency)	<b>E6</b>
		<b>Normalmente aperta</b> (Normally open)	<b>A6</b>

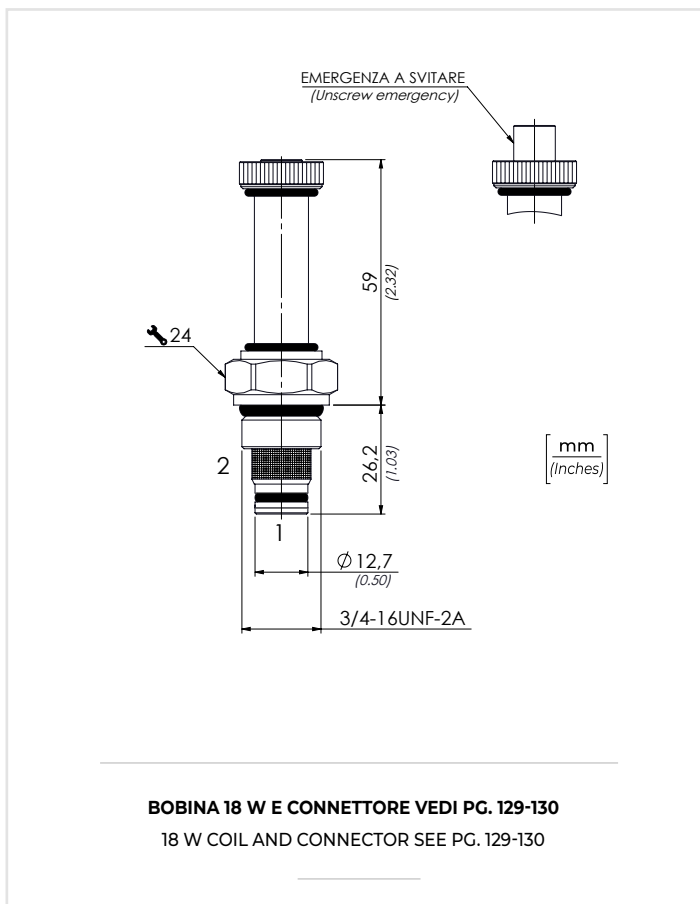
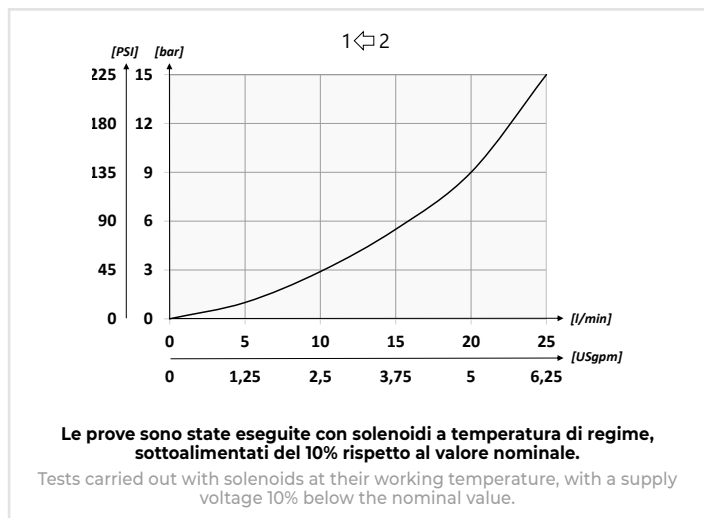
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 18/16/13</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>EV6</b>	<b>3/4-16UNF-2A</b>	<b>22</b> (5.8)	<b>210</b> (3045)	<b>0,12</b> (0.26)	<b>30</b> (22)	<b>SAE 8/2</b>

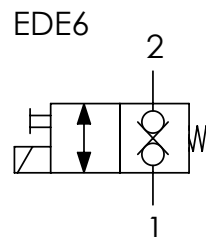


**CODICE ORDINAZIONE**  
ORDERING CODE

01	<b>ED</b>	02	<b>E6</b>
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<b>01</b>	VALVOLE A COMANDO ELETTRICO SAE8 DOPPIA TENUTA 2 VIE/2 POSIZIONI DIRETTE (2 WAYS/2 POSITIONS SAE8 DOUBLE SEALING ELECTRIC VALVES - DIRECT ACTING)		<b>ED</b>
<b>02</b>	SCHEMA (CIRCUIT)	<b>Normalmente chiusa + emergenza</b> (Normally closed + emergency)	<b>E6</b>

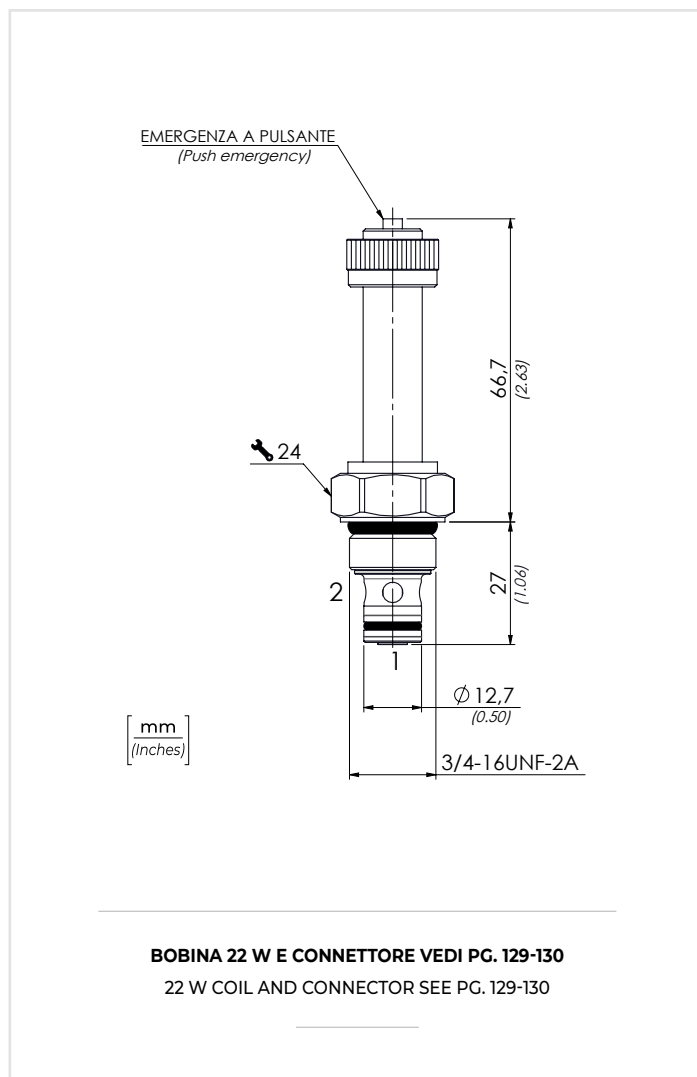
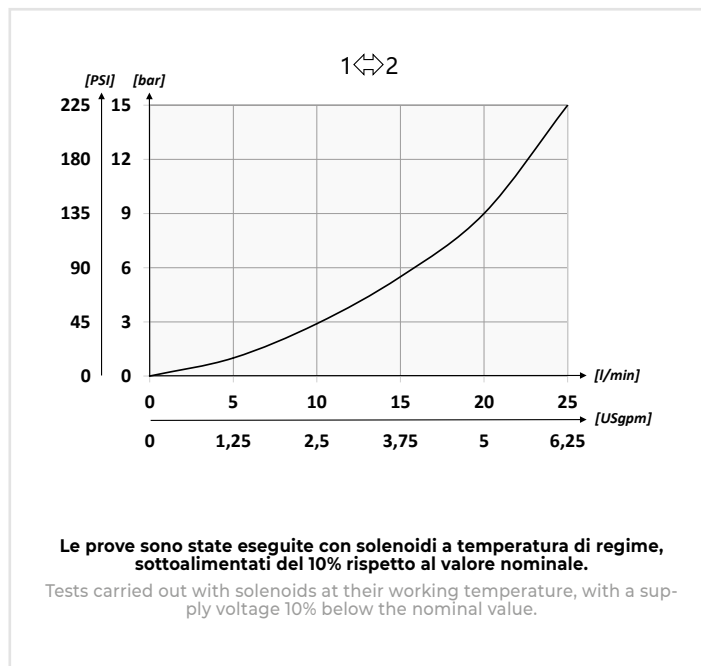
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)		
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)		
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 18/16/13</b>		
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b>	<b>-4°F +176°F</b>	
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b>	<b>-4°F +122°F</b>	
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)			
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> <b>0,015 in<sup>3</sup>/min - 5 drops/min</b>		

**PERFORMANCES**



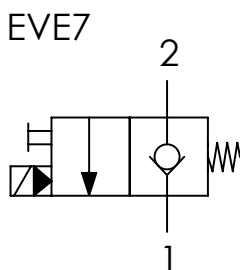
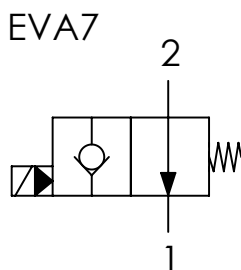
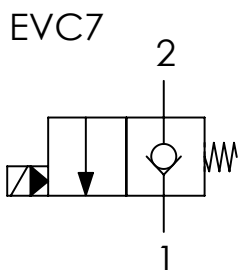
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	Pressione max Max pressure bar/PSI	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
EDE6	3/4-16UNF-2A	22 (5.8)	210 (3045)	0,13 (0.28)	30 (22)	SAE 8/2



		01	02
<b>CODICE ORDINAZIONE</b> ORDERING CODE		<b>EV</b>	
<b>01</b>	VALVOLE A COMANDO ELETTRICO SAE8 2 VIE/2 POSIZIONI PILOTATE (2 WAYS/2 POSITIONS SAE8 ELECTRIC VALVES - PILOT OPERATED)		<b>EV</b>
<b>02</b>	SCHEMA (CIRCUIT)	<b>Normalmente chiusa</b> (Normally closed)	<b>C7</b>
		<b>Normalmente chiusa + emergenza</b> (Normally closed + emergency)	<b>E7</b>
		<b>Normalmente aperta</b> (Normally open)	<b>A7</b>

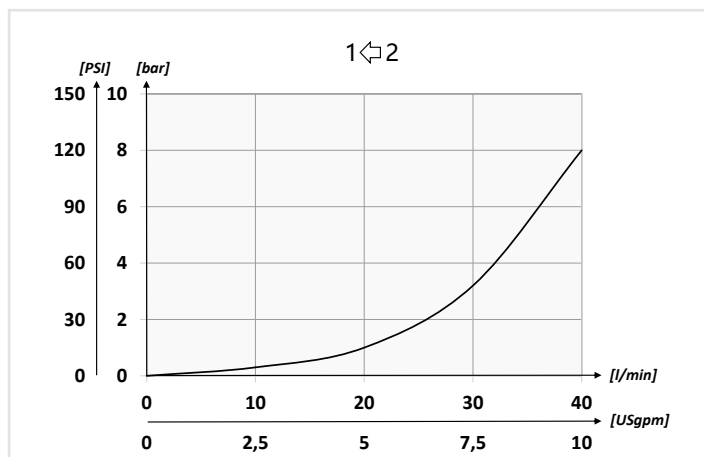
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 18/16/13
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

### PERFORMANCES



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.

Technical drawing of the EV7 valve showing dimensions and labels. The drawing includes a side view and a top view of the emergency screw. Dimensions are given in mm (inches). The emergency screw is labeled "EMERGENZA A SVITARE (Unscrew emergency)". Dimensions include 71,2 (2,80) mm for the total height, 27,6 (1,09) mm for the lower section, and a diameter of 12,7 (0,50) mm. The thread is specified as 3/4-16UNF-2A. A note at the bottom states: "BOBINA 22 W E CONNETTORE VEDI PG. 129-130" and "22 W COIL AND CONNECTOR SEE PG. 129-130".

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
EV7	3/4-16UNF-2A	40 (10.8)	350 (5075)	0,16 (0.35)	30 (22)	SAE 8/2

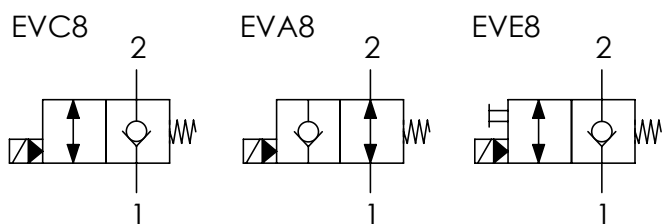


### CODICE ORDINAZIONE / ORDERING CODE

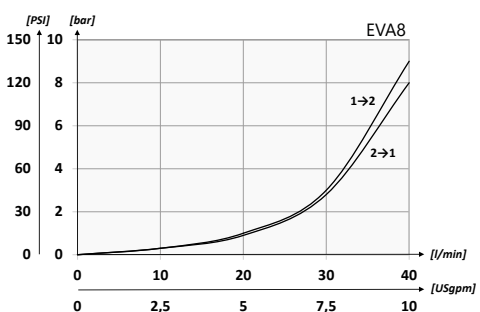
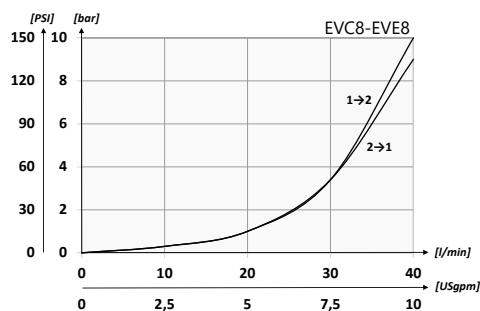
01	02
<b>EV</b>	

<b>01</b>	VALVOLE A COMANDO ELETTRICO SAE8 2 VIE/2 POSIZIONI PILOTATE (2 WAYS/2 POSITIONS SAE8 ELECTRIC VALVES - PILOT OPERATED)	<b>EV</b>	
<b>02</b>	SCHEMA (CIRCUIT)	<b>Normalmente chiusa</b> (Normally closed)	<b>C8</b>
		<b>Normalmente chiusa + emergenza</b> (Normally closed + emergency)	<b>E8</b>
		<b>Normalmente aperta</b> (Normally open)	<b>A8</b>

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

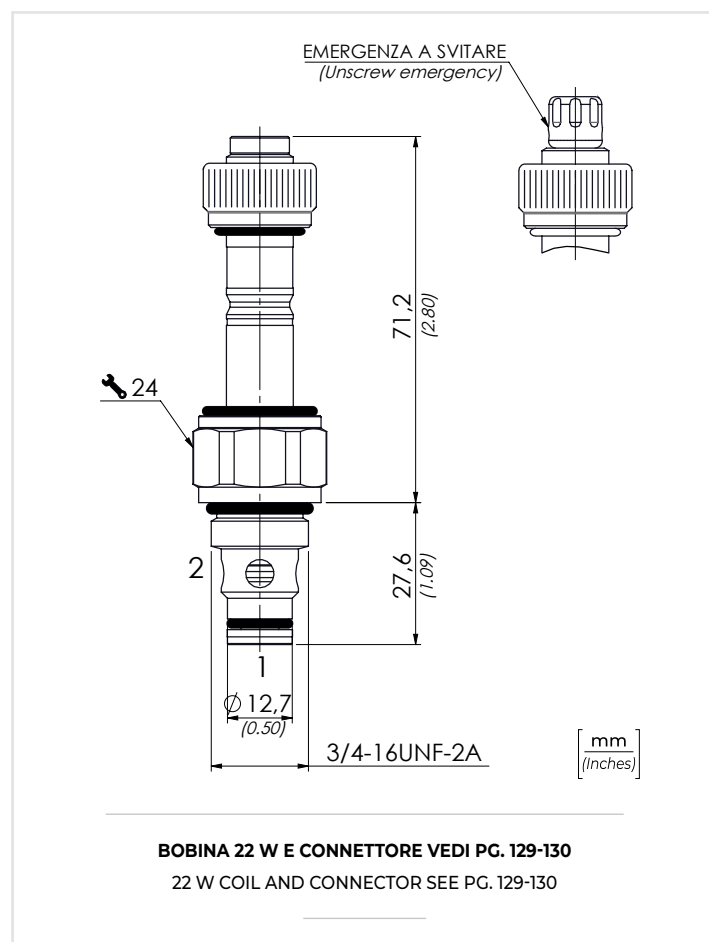


### PERFORMANCES



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.



### DATI TECNICI / TECHNICAL DATA

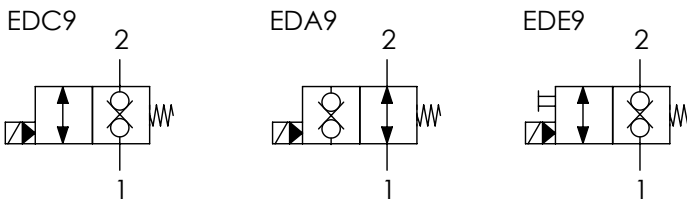
<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 18/16/13</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

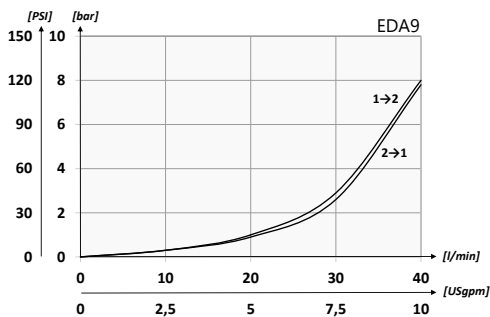
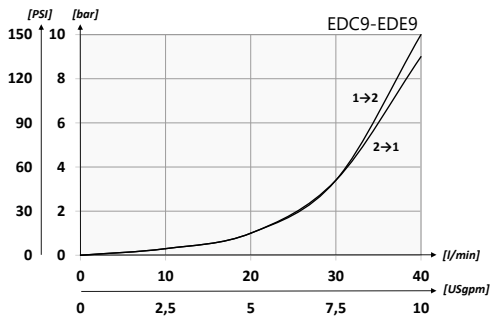
TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	PESO APPROX (kg) / APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO / TIGHTENING TORQUE (Nm-lbt ft)	CAVITÀ / CAVITY
<b>EV8</b>	<b>3/4-16UNF-2A</b>	<b>40 (10.8)</b>	<b>350 (5075)</b>	<b>0,16 (0.35)</b>	<b>30 (22)</b>	<b>SAE 8/2</b>



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**PERFORMANCES**



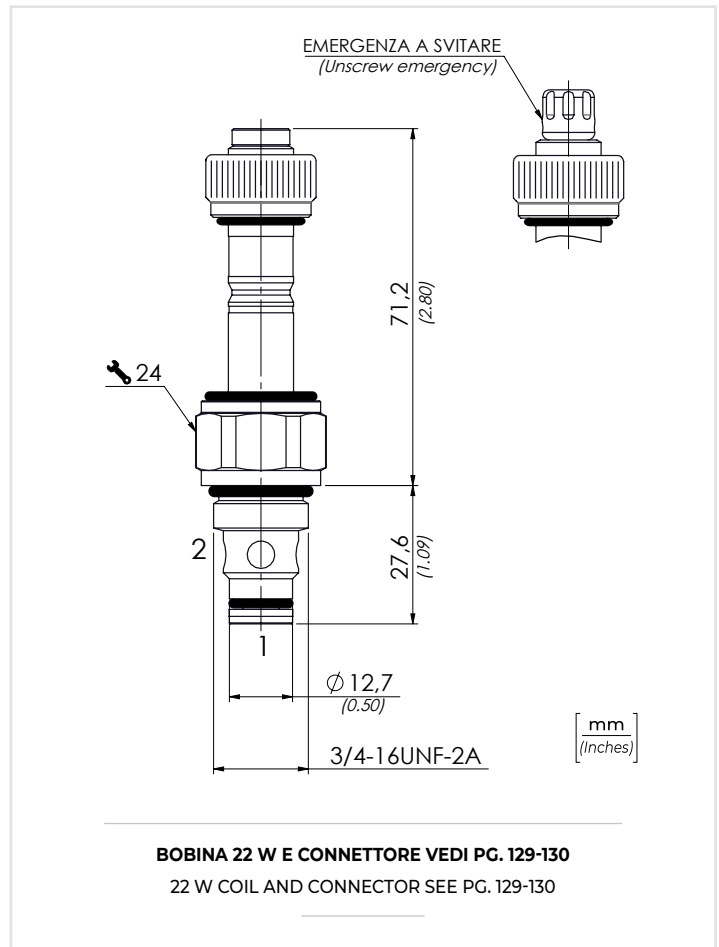
Le prove sono state eseguite con solenoidi a temperatura di regime, sottoalimentati del 10% rispetto al valore nominale.

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

**CODICE ORDINAZIONE / ORDERING CODE**

01	02
<b>ED</b>	

<b>01</b>	VALVOLE A COMANDO ELETTRICO SAE8 DOPPIA TENUTA 2 VIE/2 POSIZIONI PILOTATE (2 WAYS/2 POSITIONS SAE8 DOUBLE SEALING ELECTRIC VALVES - PILOT OPERATED)	<b>ED</b>	
<b>02</b>	SCHEMA (CIRCUIT)	<b>Normalmente chiusa</b> (Normally closed)	<b>C9</b>
		<b>Normalmente chiusa + emergenza</b> (Normally closed + emergency)	<b>E9</b>
		<b>Normalmente aperta</b> (Normally open)	<b>A9</b>



**DATI TECNICI / TECHNICAL DATA**

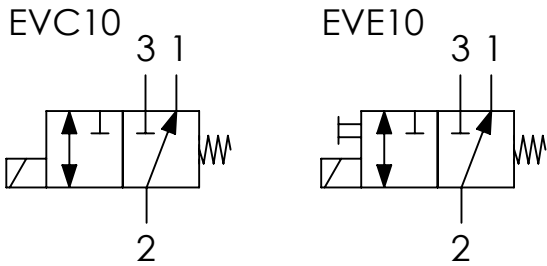
<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 18/16/13</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,50 cm<sup>3</sup>/min - 10 gocce/min</b> <b>0,30 in<sup>3</sup>/min - 10 drops/min</b>

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	PESO APPROX (kg) / APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO (Nm) / TIGHTENING TORQUE (lbt ft)	CAVITÀ / CAVITY
<b>ED9</b>	<b>3/4-16UNF-2A</b>	<b>40 (10.8)</b>	<b>350 (5075)</b>	<b>0,16 (0.35)</b>	<b>30 (22)</b>	<b>SAE 8/2</b>



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**CODICE ORDINAZIONE**  
ORDERING CODE

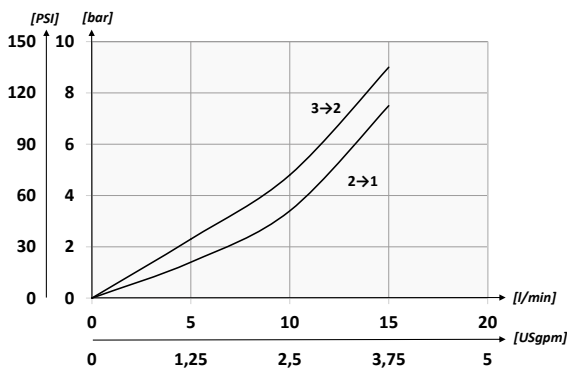
01	02
<b>EV</b>	

<b>01</b>	VALVOLE A COMANDO ELETTRICO A CURSORE SAE8 3 VIE/2 POSIZIONI DIRETTE (3 WAYS/2 POSITIONS SAE8 ELECTRIC SPOOL VALVES - DIRECT ACTING)	<b>EV</b>
<b>02</b>	SCHEMA (CIRCUIT)	Vedi schema (See diagram) <b>C10</b>
		Vedi schema (See diagram) <b>E10</b>

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 18/16/13</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>60 cm<sup>3</sup>/min</b> 36 in <sup>3</sup> /min

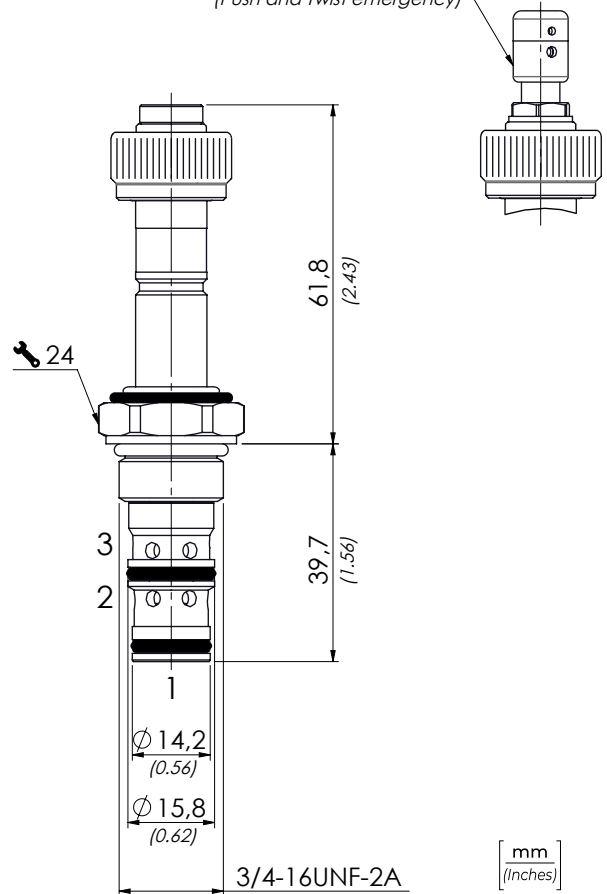
**PERFORMANCES**



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.

**EMERGENZA SPINGI E GIRA**  
(Push and Twist emergency)



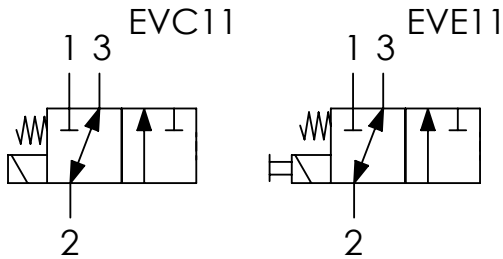
**BOBINA 22 W E CONNETTORE VEDI PG. 129-130**  
22 W COIL AND CONNECTOR SEE PG. 129-130

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO (Nm) TIGHTENING TORQUE (lbt ft)	CAVITÀ CAVITY
<b>EV10</b>	<b>3/4-16UNF-2A</b>	<b>12 (3.2)</b>	<b>210 (3045)</b>	<b>0,15 (0.33)</b>	<b>30 (22)</b>	<b>SAE 8/3</b>



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**CODICE ORDINAZIONE**  
ORDERING CODE

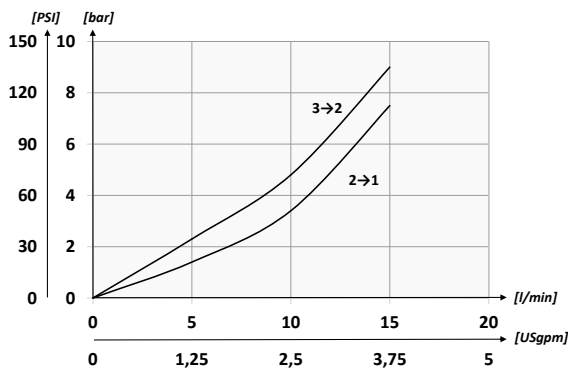
01	02
<b>EV</b>	

<b>01</b>	VALVOLE A COMANDO ELETTRICO A CORSO SAE8 3 VIE/2 POSIZIONI DIRETTA (3 WAYS/2 POSITIONS SAE8 ELECTRIC SPOOL VALVES - DIRECT ACTING)	<b>EV</b>	
<b>02</b>	SCHEMA (CIRCUIT)	Vedi schema (See diagram)	<b>CTI</b>
		Vedi schema (See diagram)	<b>ETI</b>

**DATI TECNICI / TECHNICAL DATA**

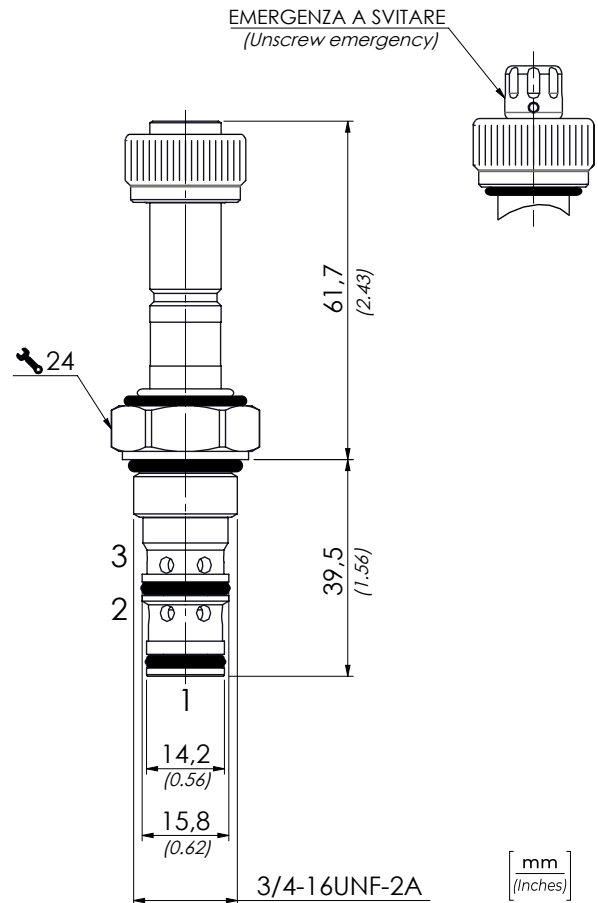
<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 18/16/13</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>60 cm<sup>3</sup>/min</b> 36 in <sup>3</sup> /min

**PERFORMANCES**



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.



**BOBINA 22 W E CONNETTORE VEDI PG. 129-130**  
22 W COIL AND CONNECTOR SEE PG. 129-130

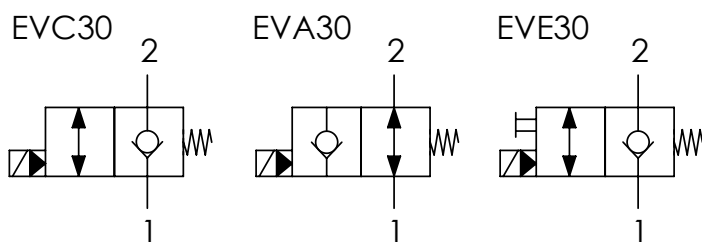
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
EV11	3/4-16UNF-2A	12 (3.2)	210 (3045)	0,15 (0.33)	30 (22)	SAE 8/3





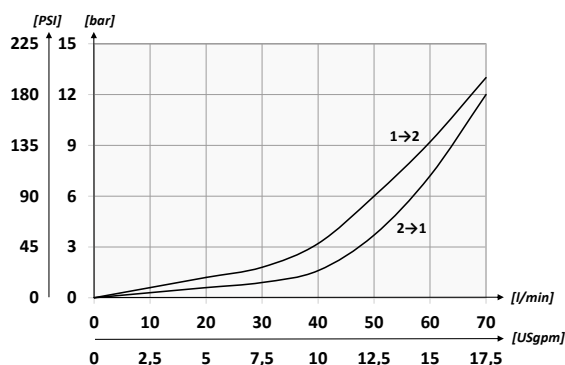
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 18/16/13
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

### PERFORMANCES



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.

CODICE ORDINAZIONE / ORDERING CODE		01	02
		<b>EV</b>	
01	VALVOLE A COMANDO ELETTRICO SAE10 2 VIE/2 POSIZIONI PILOTATE (2 WAYS/2 POSITIONS SAE10 ELECTRIC VALVES - PILOT OPERATED)		<b>EV</b>
02	SCHEMA (CIRCUIT)	Normalmente chiusa (Normally closed)	<b>C30</b>
		Normalmente chiusa + emergenza (Normally closed + emergency)	<b>E30</b>
		Normalmente aperta (Normally open)	<b>A30</b>

EMERGENZA A SVITARE (Unscrew emergency)

68,8 (2.71)

32 (1.26)

27

2

1

Ø 15,8 (0.62)

7/8-14UNF-2A

[ mm (Inches) ]

**BOBINA 22 W E CONNETTORE VEDI PG. 129-130**  
22 W COIL AND CONNECTOR SEE PG. 129-130

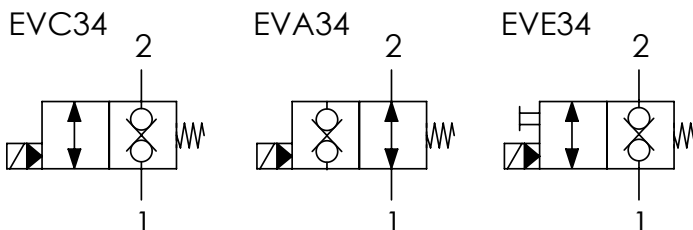
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO / TYPE	A	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	PESO APPROX (kg) / APPROX WEIGHT (lb)	COPPIA DI SERRAGGIO / TIGHTENING TORQUE (Nm-lb ft)	CAVITÀ / CAVITY
EV30	7/8-14UNF-2A	70 (18.5)	350 (5075)	0,19 (0.40)	40 (30)	SAE 10/2





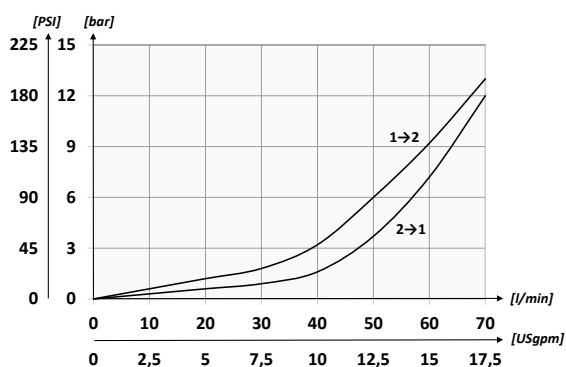
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 18/16/13
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

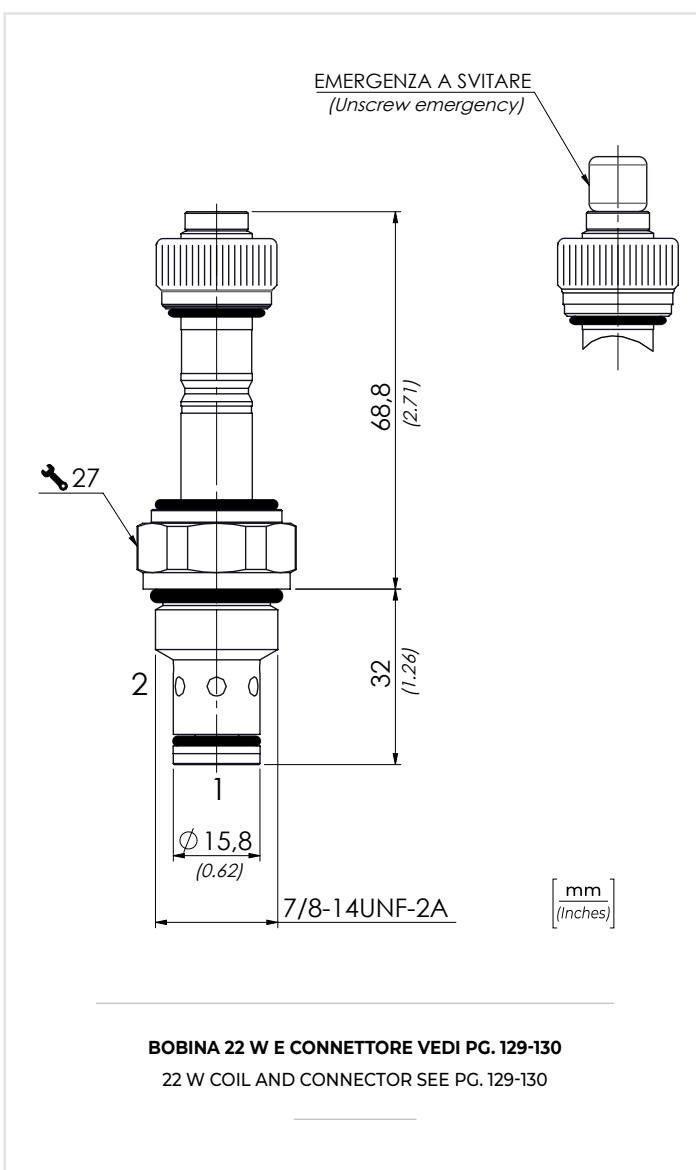
**PERFORMANCES**



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.

	01	02
<b>CODICE ORDINAZIONE</b> ORDERING CODE	<b>EV</b>	
<b>01</b>	VALVOLE A COMANDO ELETTRICO SAE10 DOPPIA TENUTA 2 VIE/2 POSIZIONI PILOTATE (2 WAYS/2 POSITIONS SAE10 DOUBLE SEALING ELECTRIC VALVES - PILOT OPERATED)	<b>EV</b>
<b>02</b>	SCHEMA (CIRCUIT)	
	Normalmente chiusa (Normally closed)	<b>C34</b>
	Normalmente chiusa + emergenza (Normally closed + emergency)	<b>E34</b>
	Normalmente aperta (Normally open)	<b>A34</b>

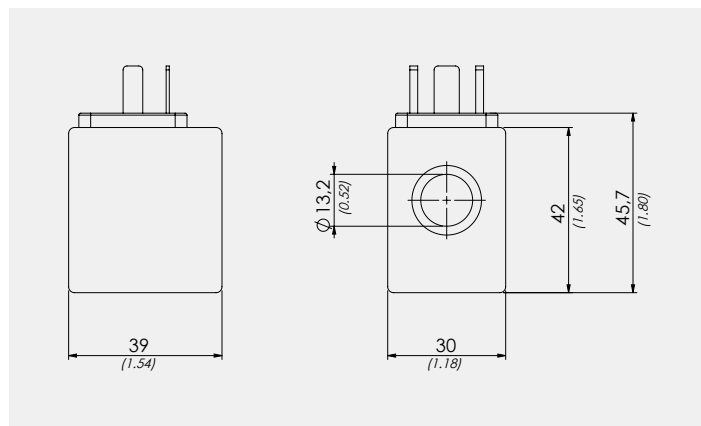


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

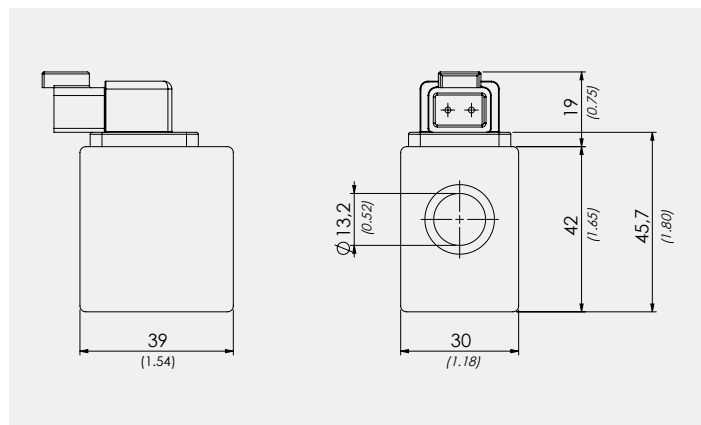
CODICE CODE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
EV34	7/8-14UNF-2A	70 (18.5)	350 (5075)	0,19 (0.40)	40 (30)	SAE 10/2

## EC - 18W

DATI TECNICI - TECHNICAL DATA	
<b>POTENZA A 20°C</b> COIL POWER AT 20°C	<b>18 W</b>
<b>CLASSE ISOLAMENTO DEL FILO</b> WIRE INSULATION CLASS	<b>H+ (202°C)</b>
<b>ED</b>	<b>100%</b>
<b>POTENZA ASSORBITA IN CA</b> ABSORBED POWER IN AC	<b>28 VA</b>
<b>CAMPO DI TEMPERATURA AMBIENTE</b> RANGE AMBIENT TEMPERATURE	<b>-30°C / +50°C</b>
<b>PESO</b> WEIGHT	<b>0,19 Kg / 0,30 lb</b>

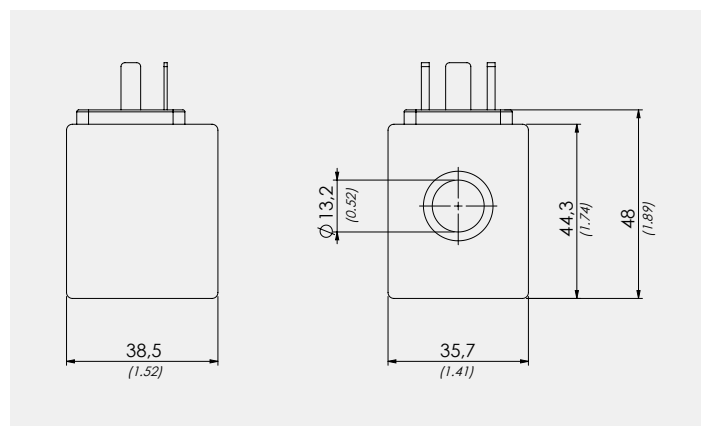


TIPO TYPE	CONNETTORE CONNECTOR	CLASSE DI PROTEZIONE PROTECTION CLASS	TENSIONE VOLTAGE
<b>EC012DC</b>	DIN 43650 (+88100002)	IP65	<b>12 V dc</b>
<b>EC024DC</b>	DIN 43650 (+88100002)	IP65	<b>24 V dc</b>
<b>EC22050</b>	DIN 43650 (+88100003)	IP65	<b>220 V 50 Hz</b>
<b>EC220RAC</b>	DIN 43650 (+88100003)	IP65	<b>220 V 50-60 Hz</b>
<b>EC012DEU</b>	Deutsch	IP69K	<b>12 V dc</b>
<b>EC024DEU</b>	Deutsch	IP69K	<b>24 V dc</b>

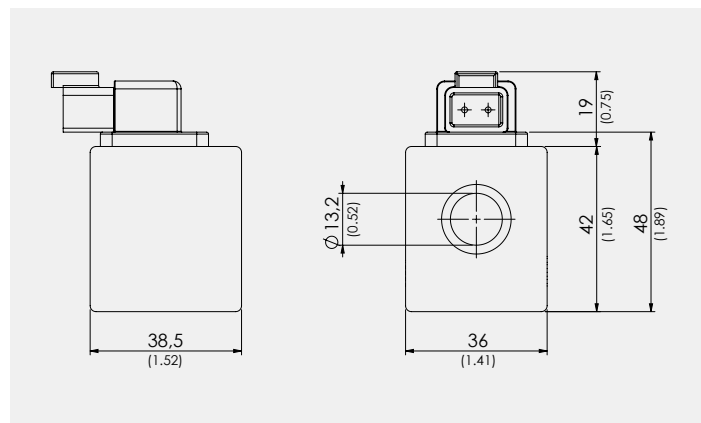


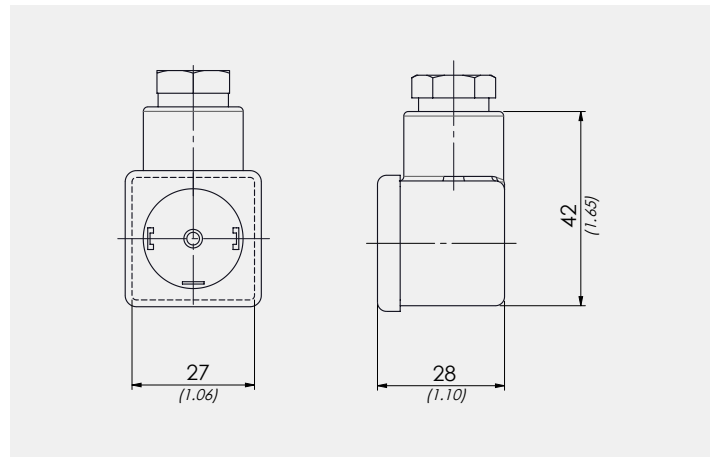
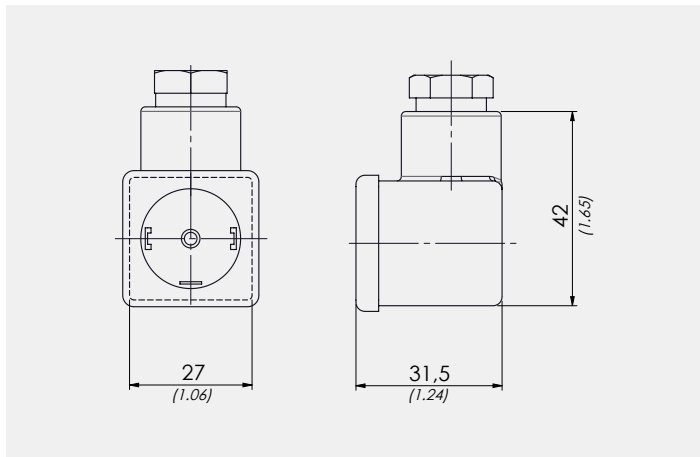
## EC36 - 22W

DATI TECNICI - TECHNICAL DATA	
<b>POTENZA A 20°C</b> COIL POWER AT 20°C	<b>22 W</b>
<b>CLASSE ISOLAMENTO DEL FILO</b> WIRE INSULATION CLASS	<b>H+ (202°C)</b>
<b>ED</b>	<b>100%</b>
<b>POTENZA ASSORBITA IN CA</b> ABSORBED POWER IN AC	<b>28 VA</b>
<b>CAMPO DI TEMPERATURA AMBIENTE</b> RANGE AMBIENT TEMPERATURE	<b>-30°C / +50°C</b>
<b>PESO</b> WEIGHT	<b>0,21 Kg / 0,46 lb</b>



TIPO TYPE	CONNETTORE CONNECTOR	CLASSE DI PROTEZIONE PROTECTION CLASS	TENSIONE VOLTAGE
<b>EC36012DC</b>	DIN 43650 (+88100002)	IP65	<b>12 V dc</b>
<b>EC36024DC</b>	DIN 43650 (+88100002)	IP65	<b>24 V dc</b>
<b>EC36220RAC</b>	DIN 43650 (+88100003)	IP65	<b>220 V 50-60 Hz</b>
<b>EC36012DEU</b>	Deutsch	IP69K	<b>12 V dc</b>
<b>EC36024DEU</b>	Deutsch	IP69K	<b>24 V dc</b>





### CONNETTORE CON RADDRIZZATORE (CONNECTOR WITH RECTIFIER)

TIPO - TYPE: <b>88100003</b>	EN 175301-803
<b>CORRENTE NOMINALE CONTATTI</b> NOMINAL CURRENT	<b>10 A</b>
<b>CORRENTE MAX CONTATTI</b> MAX OPERATING CURRENT	<b>16 A</b>
<b>RESISTENZA CONTATTI</b> CONTACT RESISTANCE	<b>≤ 4m Ohm</b>
<b>SEZIONE MAX CONDUTTORI</b> MAX CONDUCTORS CROSS-SECTION	<b>1,5 mm<sup>2</sup></b>
<b>PORTACONTATTI, DADO</b> CONTACT HOLDER	<b>PA</b>
<b>TIPO DI SERRACAPO</b> GLAND SIZE OPTIONS	<b>Pg09</b>
<b>DIAMETRO CAVO</b> CABLE DIAMETER	<b>6-8 mm</b>
<b>GRADO DI PROTEZIONE</b> PROTECTION CLASS	<b>IP 65 EN 60529</b>
<b>CLASSE DI ISOLAMENTO</b> INSULATION CLASS	<b>VDE 0110-1/89</b>
<b>GUARNIZIONE</b> SEALING MATERIAL	<b>NBR</b>
<b>TEMPERATURA DI ESERCIZIO</b> OPERATING TEMPERATURE	<b>-40C +90C</b>
<b>PESO APPROX</b> APPROX WEIGHT	<b>0,025 kg</b> 0.055 lb

### CONNETTORE STANDARD (STANDARD CONNECTOR)

TIPO - TYPE: <b>88100002</b>	EN 175301-803
<b>TENSIONE NOMINALE</b> NOMINAL VOLTAGE	<b>AC - Max 250 V</b> <b>DC - Max 300 V</b>
<b>CORRENTE NOMINALE CONTATTI</b> NOMINAL CURRENT	<b>10 A</b>
<b>CORRENTE MAX CONTATTI</b> MAX OPERATING CURRENT	<b>16 A</b>
<b>RESISTENZA CONTATTI</b> CONTACT RESISTANCE	<b>≤ 4m Ohm</b>
<b>SEZIONE MAX CONDUTTORI</b> MAX CONDUCTORS CROSS-SECTION	<b>1,5 mm<sup>2</sup></b>
<b>PROTEZIONE</b> HOUSING	<b>PA (+G)</b>
<b>TIPO DI SERRACAPO</b> GLAND SIZE OPTIONS	<b>Pg11</b>
<b>DIAMETRO CAVO</b> CABLE DIAMETER	<b>6-8 mm</b>
<b>GRADO DI PROTEZIONE</b> PROTECTION CLASS	<b>IP 65 EN 60529</b>
<b>CLASSE DI ISOLAMENTO</b> INSULATION CLASS	<b>VDE 0110-1/89</b>
<b>GUARNIZIONE</b> SEALING MATERIAL	<b>NBR</b>
<b>TEMPERATURA DI ESERCIZIO</b> OPERATING TEMPERATURE	<b>-40C +90C</b>
<b>PESO APPROX</b> APPROX WEIGHT	<b>0,020 kg</b> 0.044 lb





# VALVOLE A CARTUCCIA

## CARTRIDGE VALVES

La famiglia delle valvole a cartuccia comprende: valvole unidirezionali a ritegno, valvole controllo di flusso compensate, valvole controllo di flusso unidirezionali e bidirezionali, pompe a mano, valvole di emergenza manuali e con pilotaggio pneumatico, divisori/riunificatori di flusso, valvole di ritegno pilotate, valvole selettive e valvole di massima.

Cartridge valves family includes: check valves, control pressure compensated valves, unidirectional and bidirectional flow control valves, hand pumps emergency valves, flow dividers combiners, single acting check valves, load shuttle valves and relief valves.



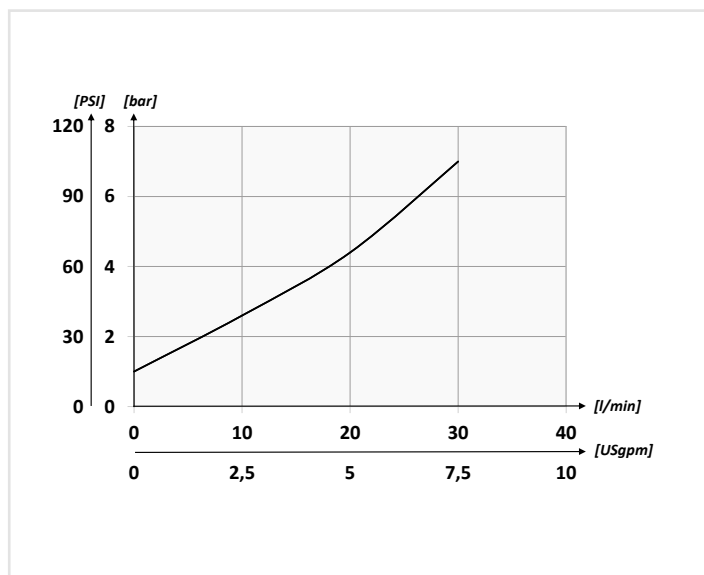


### CODICE ORDINAZIONE / ORDERING CODE

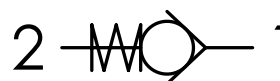
01	02	03
<b>CUR6</b>		

<b>01</b>	VALVOLE UNIDIREZIONALI SAE8 (SAE8 CHECK VALVES)		<b>CUR6</b>
<b>02</b>	TENUTA (SEALING)	Tenuta a sfera - solo molla <b>1 bar</b> (Ball sealing - only spring 14,5 PSI)	<b>SF</b>
		Tenuta ad otturatore (Poppet sealing)	<b>SP</b>
<b>03</b>	MOLLA (SPRING)	<b>1 bar</b> (14,5 PSI)	<b>1</b>
		<b>3 bar</b> (43,5 PSI)	<b>3</b>
		<b>4,5 bar</b> (65,3 PSI)	<b>4,5</b>

### PERFORMANCES

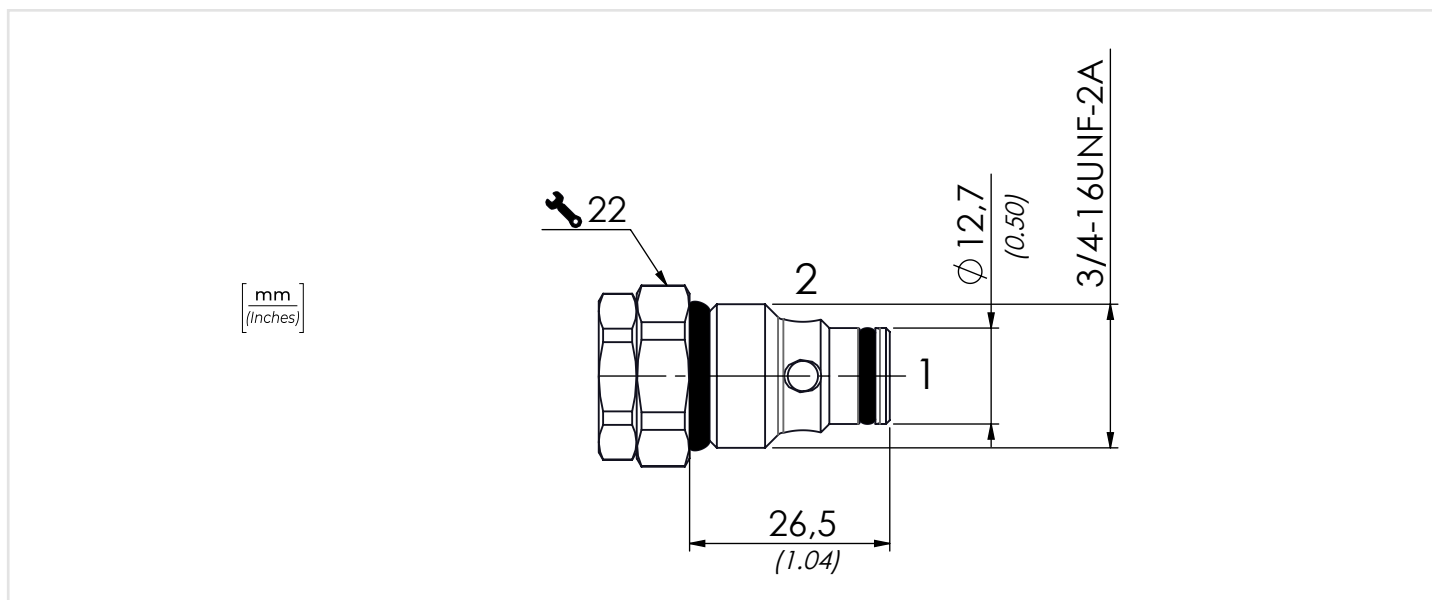


### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> <b>0,015 in<sup>3</sup>/min - 5 drops/min</b>



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

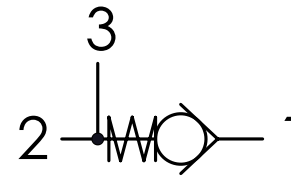
TIPO / TYPE	PORTATA MAX (l/min) / MAX FLOW (USgpm)	PRESSIONE MAX (bar) / MAX PRESSURE (PSI)	PESO APPROX (kg) / APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO / TIGHTENING TORQUE (Nm-lbt ft)	CAVITÀ / CAVITY
<b>CUR6</b>	<b>25 (6.6)</b>	<b>350 (5075)</b>	<b>0,06 (0.13)</b>	<b>25-30 (19-22)</b>	<b>SAE8/2</b>



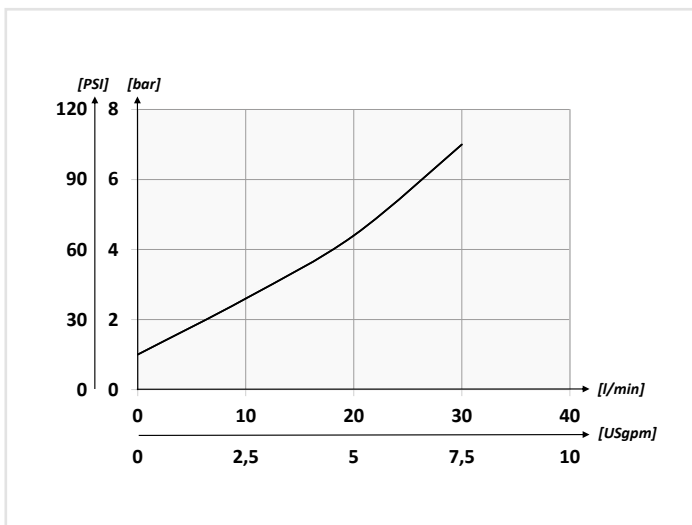
<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03	04
	<b>CUR6</b>		<b>1</b>	<b>M</b>

<b>01</b>	VALVOLE UNIDIREZIONALI SAE8 CON ATTACCO MANOMETRO (SAE8 CHECK VALVES WITH PRESSURE CONNECTION)	<b>CUR6</b>	
<b>02</b>	TENUTA (SEALING)	Tenuta a sfera (Ball sealing)	<b>SF</b>
		Tenuta a otturatore (Poppet sealing)	<b>SP</b>
<b>03</b>	MOLLA (SPRING)	<b>1 bar (14.5 PSI)</b>	<b>1</b>
<b>04</b>	Con attacco manometro (With pressure connection)		<b>M</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

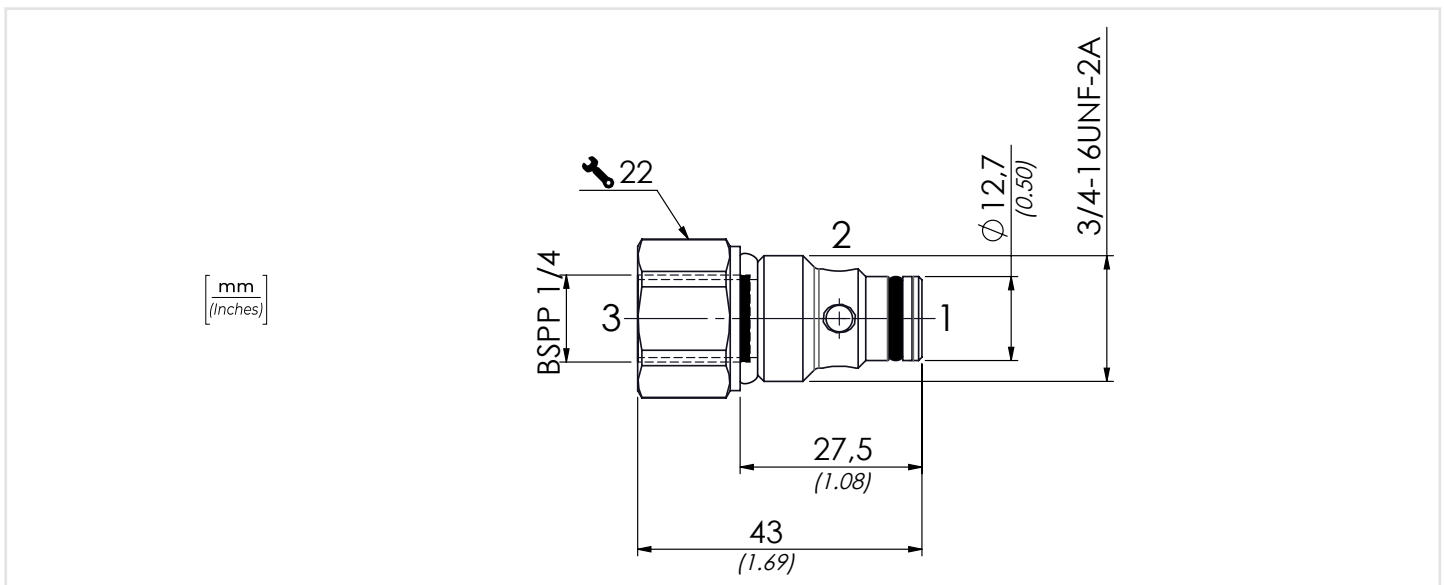


**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> <b>0,015 in<sup>3</sup>/min - 5 drops/min</b>



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

CODICE CODE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>CUR6M</b>	<b>25 (6.6)</b>	<b>350 (5075)</b>	<b>0,07 (0.15)</b>	<b>25-30 (19-22)</b>	<b>SAE8/2</b>



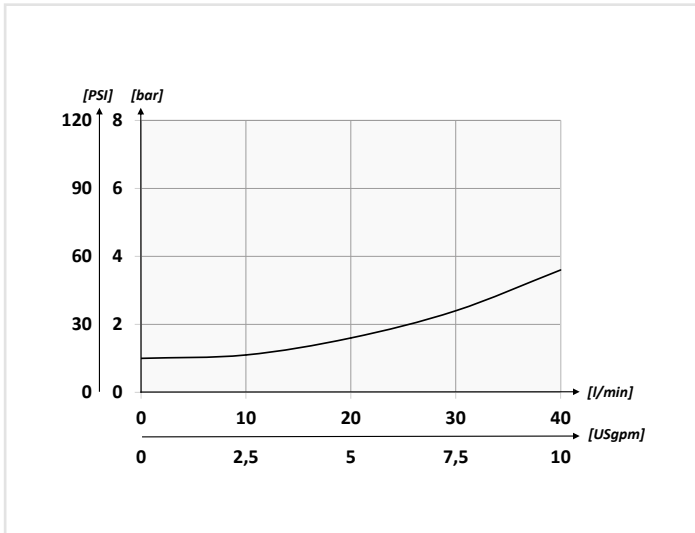


		01	02	03
<b>CODICE ORDINAZIONE</b> ORDERING CODE		<b>CURION</b>	<b>SP</b>	
<b>01</b>	VALVOLE UNIDIREZIONALI SAE10/2 (SAE10/2 CHECK VALVES)			<b>CURION</b>
<b>02</b>	TENUTA (SEALING)	Tenuta ad otturatore (Poppet sealing)	<b>SP</b>	
<b>03</b>	MOLLA (SPRING)	1 bar (14.5 PSI)	<b>1</b>	

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

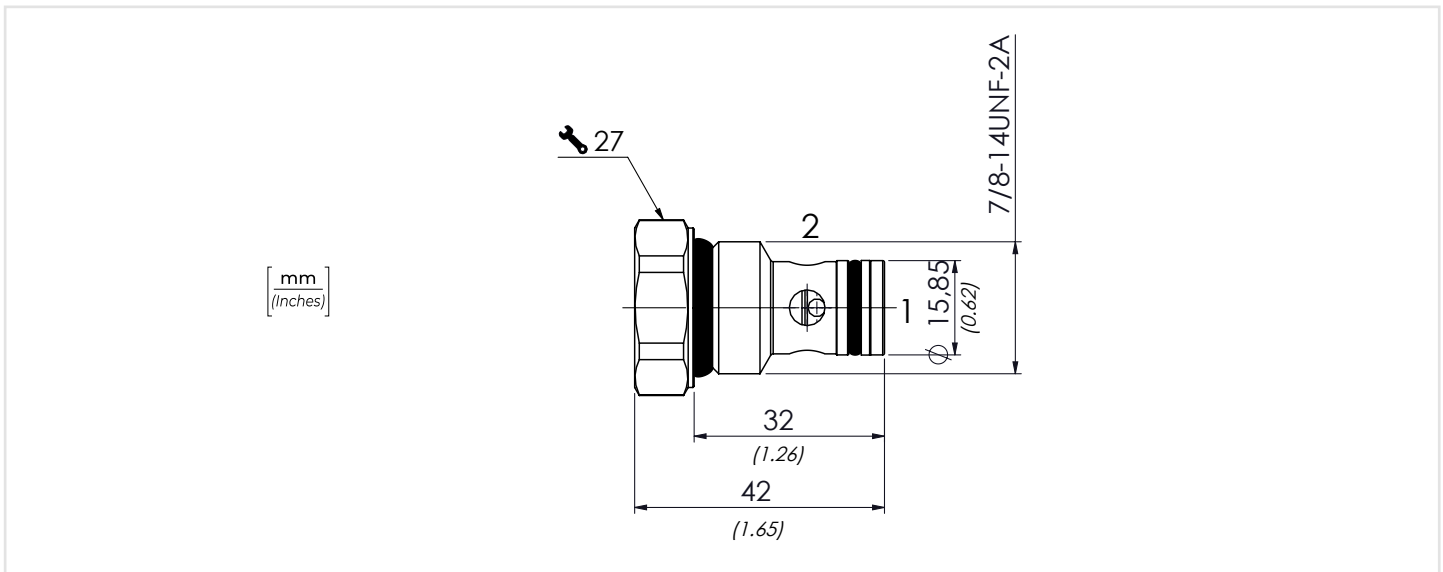


**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	CAVITÀ CAVITY	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft
<b>CURION</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>0,09</b> (0.22)	<b>SAE10/2</b>	<b>45-50</b> (33-37)

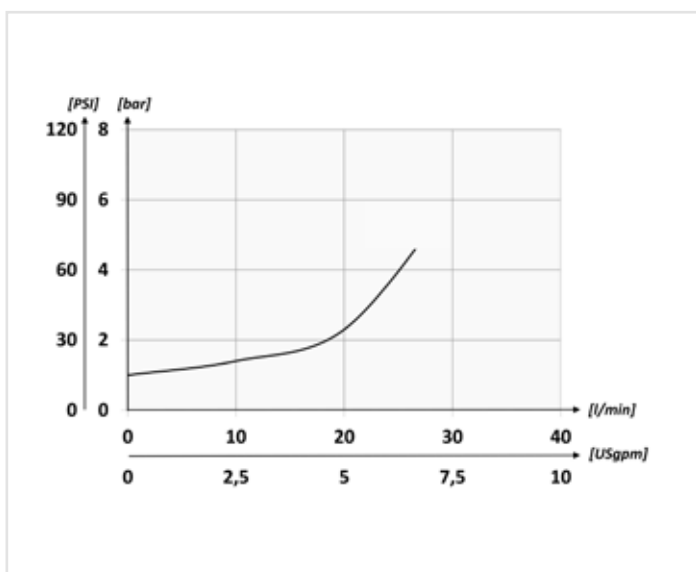


<b>CODICE ORDINAZIONE</b> ORDERING CODE		01	02	03
		<b>CUR2015</b>		<b>1</b>
<b>01</b>	VALVOLE UNIDIREZIONALI M20X1,5 (M20X1,5 CHECK VALVES)			<b>CUR2015</b>
<b>02</b>	TENUTA (SEALING)	Tenuta a sfera (Ball sealing)		<b>SF</b>
		Tenuta ad otturatore (Poppet sealing)		<b>SP</b>
<b>03</b>	MOLLA (SPRING)	1 bar (14.5 PSI)		<b>1</b>

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

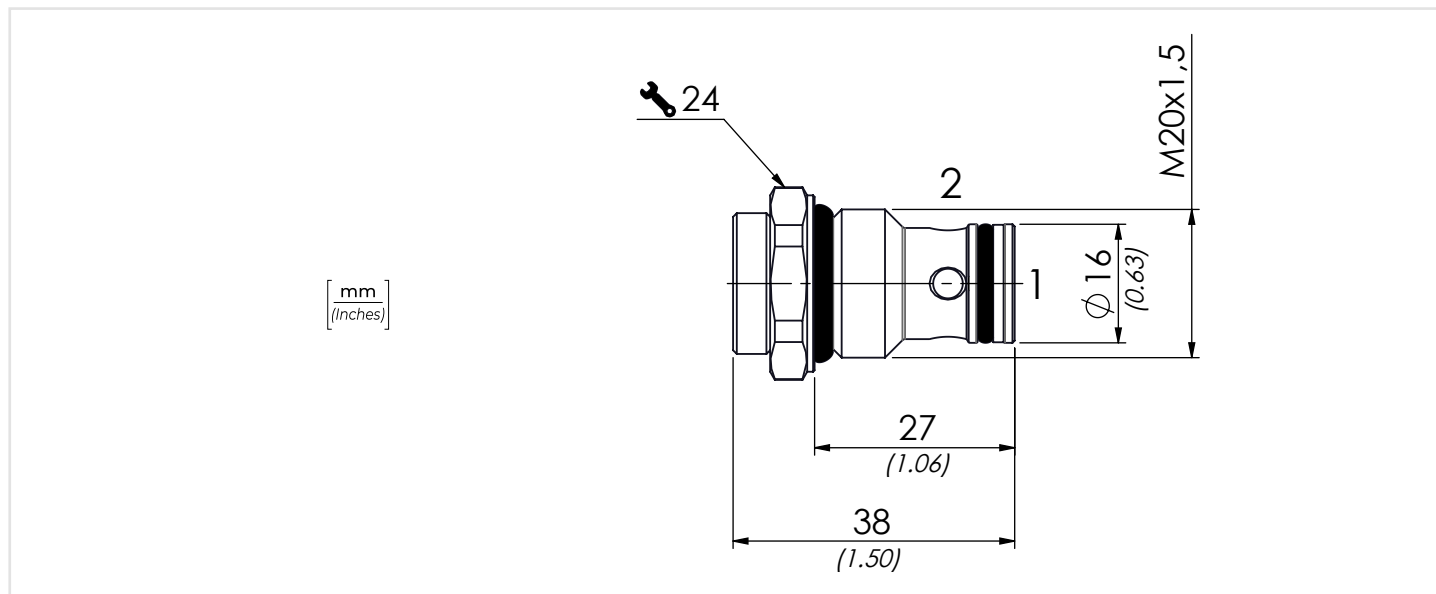


### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>CUR2015</b>	<b>25</b> (6.6)	<b>350</b> (5075)	<b>0,07</b> (0.15)	<b>25-30</b> (19-22)	<b>C2015/2</b>

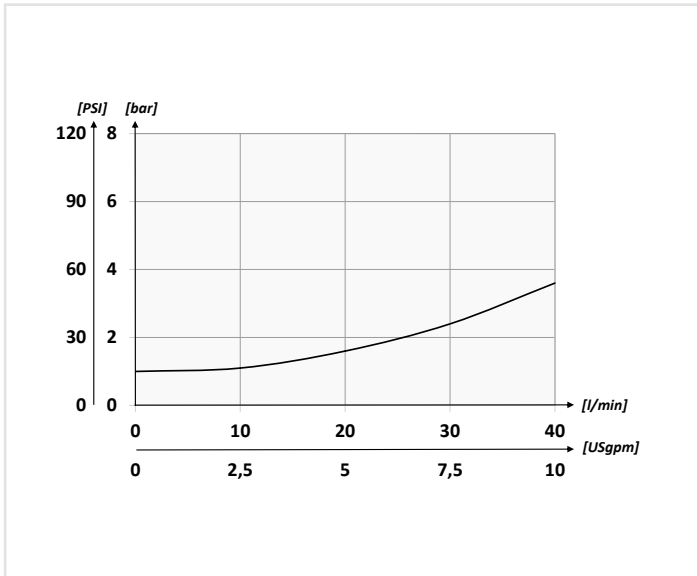


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>CUR2215</b>		

<b>01</b>	VALVOLE UNIDIREZIONALI M22X1,5 (M22X1,5 CHECK VALVES)		<b>CUR2215</b>
<b>02</b>	TENUTA (SEALING)	Tenuta a sfera (Ball sealing)	<b>SF</b>
		Tenuta ad otturatore (Poppet sealing)	<b>SP</b>
<b>03</b>	MOLLA (SPRING)	<b>1 bar</b> (14,5 PSI)	<b>1</b>
		<b>4,5 bar</b> - solo otturatore (65,3 PSI - only poppet)	<b>4,5</b>

**PERFORMANCES**

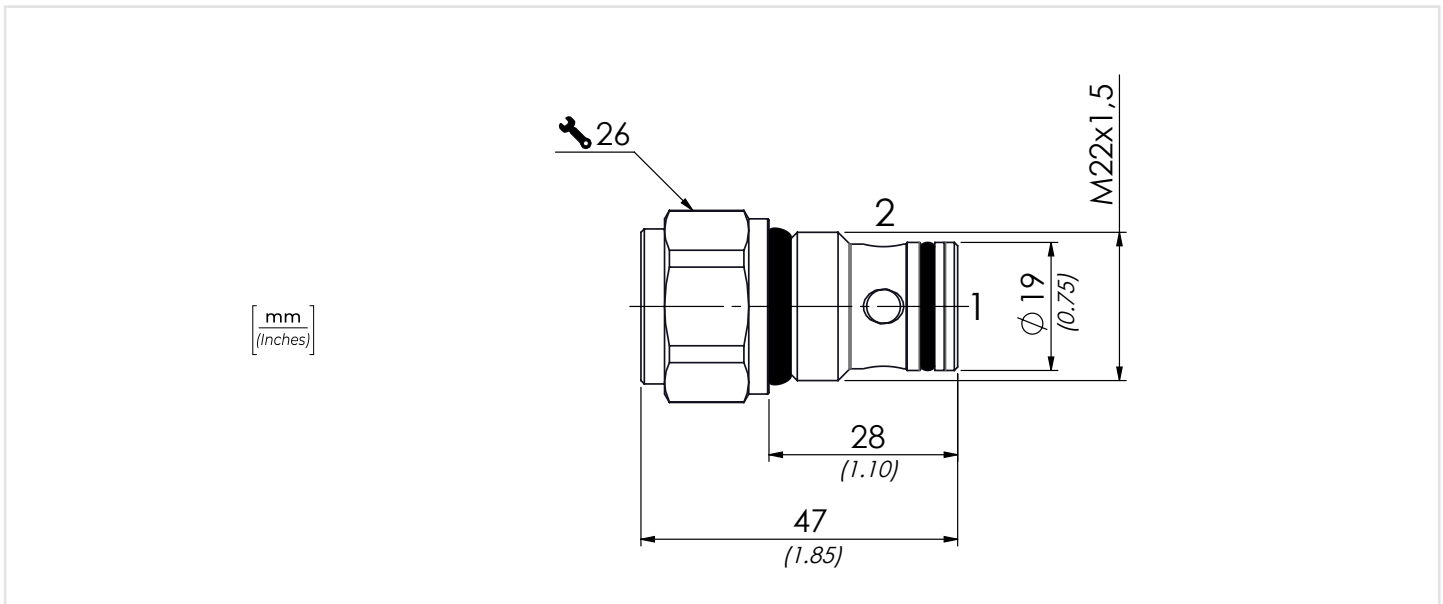


**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>CUR2215</b>	<b>40</b> (10,6)	<b>350</b> (5075)	<b>0,11</b> (0,25)	<b>45-50</b> (33-37)	<b>C2215/2</b>

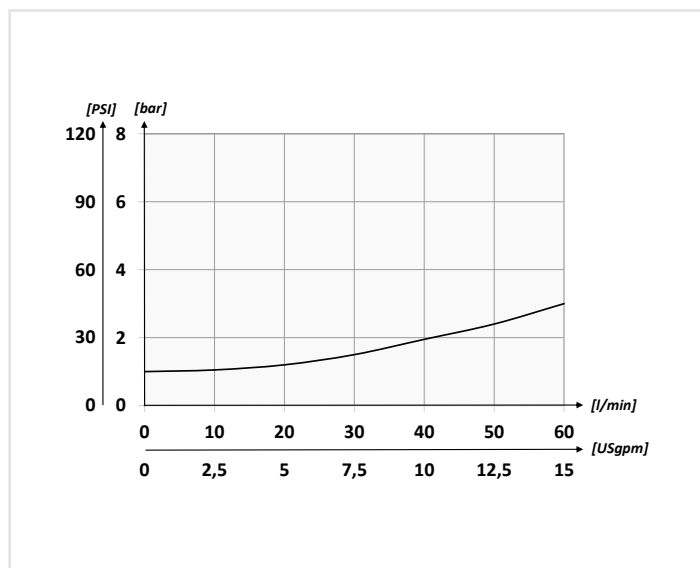


**CODICE ORDINAZIONE**  
ORDERING CODE

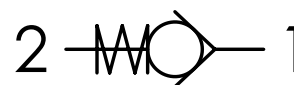
01	02	03
<b>CUR2615</b>	<b>SP</b>	

<b>01</b>	VALVOLE UNIDIREZIONALI M26X1,5 (M26X1,5 CHECK VALVES)		<b>CUR2615</b>
<b>02</b>	TENUTA (SEALING)	Tenuta ad otturatore (Poppet sealing)	<b>SP</b>
<b>03</b>	MOLLA (SPRING)	<b>1 bar</b> (14.5 PSI)	<b>1</b>
		<b>4,5 bar</b> (65.3 PSI)	<b>4,5</b>

**PERFORMANCES**

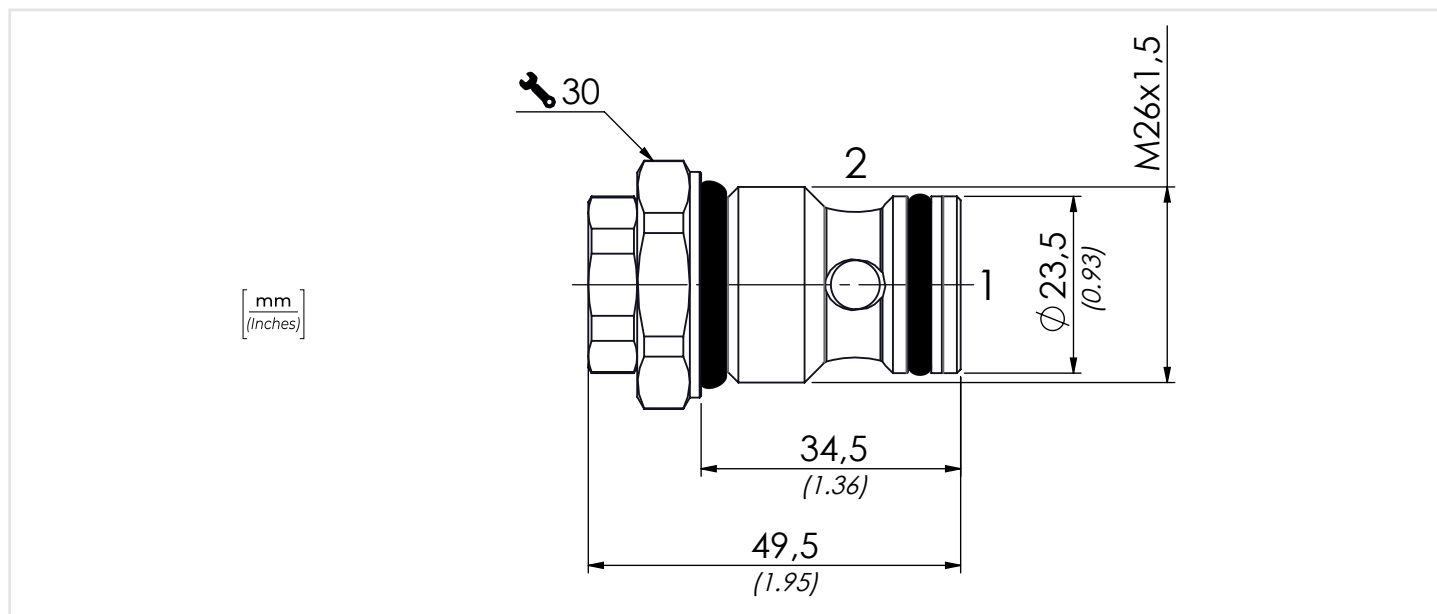


**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min

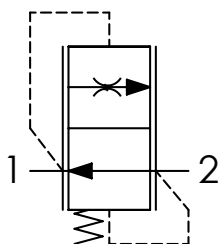


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>CUR2615</b>	<b>60</b> (15.8)	<b>350</b> (5075)	<b>0,15</b> (0.33)	<b>55-60</b> (41-45)	<b>C2615/2</b>



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**CODICE ORDINAZIONE**  
ORDERING CODE

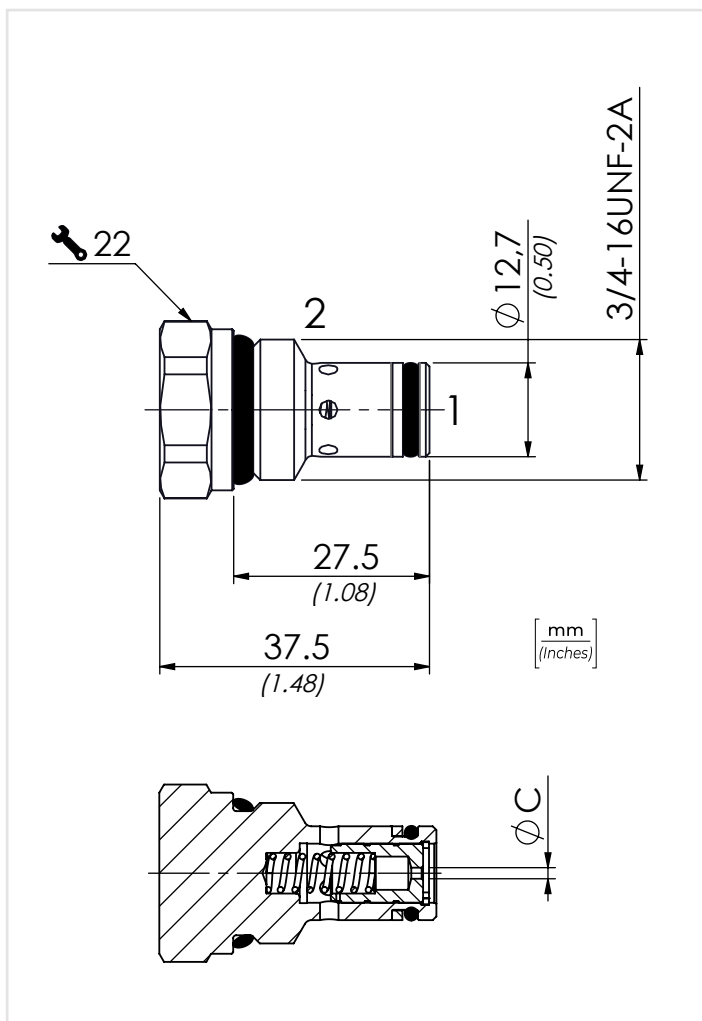
01	02
<b>VSC6</b>	

01	VALVOLE CONTROLLO FLUSSO FISSE COMPENSATE SAE 8 (SAE 8 FIXED FLOW CONTROL VALVES - PRESSURE COMPENSATED)	VSC6
02	PORTATA CONTROLLATA A 100 BAR ± 10% (CONTROLLED FLOW AT 100 BAR ± 10 %)	1 l/min (0.26 USgpm) <b>1</b>
		2 l/min (0.53 USgpm) <b>2</b>
		3 l/min (0.79 USgpm) <b>3</b>
		4 l/min (1.06 USgpm) <b>4</b>
		5 l/min (1.32 USgpm) <b>5</b>
		6 l/min (1.58 USgpm) <b>6</b>
		7 l/min (1.85 USgpm) <b>7</b>
		8 l/min (2.11 USgpm) <b>8</b>
		9 l/min (2.38 USgpm) <b>9</b>
		10 l/min (1.64 USgpm) <b>10</b>
		11 l/min (2.90 USgpm) <b>11</b>
		12 l/min (3.17 USgpm) <b>12</b>

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

TIPO (TYPE)	Ø C
VSC61	1 ( 0.04)
VSC62	1,2 ( 0.05)
VSC63	1,5 ( 0.06)
VSC64	1,7 ( 0.07)
VSC65	1,9 ( 0.07)
VSC66	2,1 ( 0.08)
VSC67	2,3 ( 0.09)
VSC68	2,4 ( 0.09)
VSC69	2,7 ( 0.11)
VSC610	2,8 ( 0.11)
VSC611	3,1 ( 0.12)
VSC612	3,3 ( 0.13)

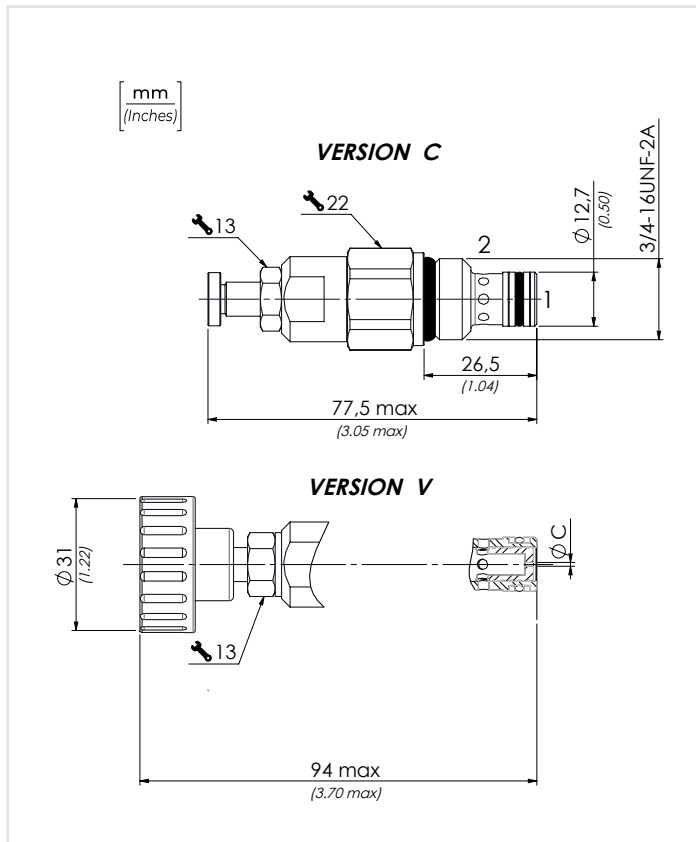
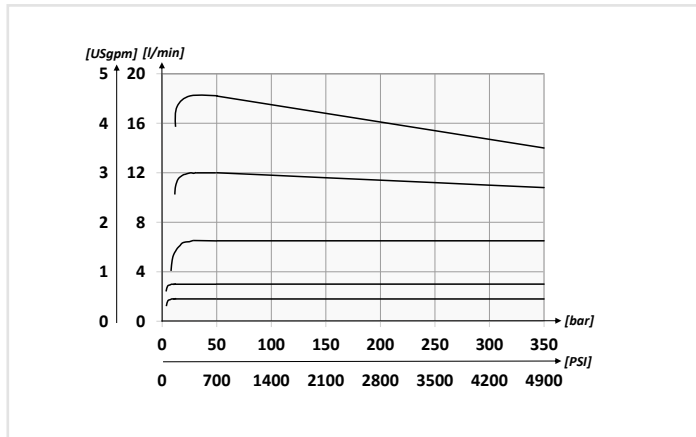


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
VSC6	12 (3.11)	250 (3625)	0,06 (0.15)	25-30 (19-22)	SAE8/2



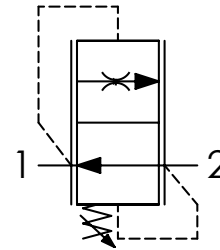
## PERFORMANCES



<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03
<b>VCF6</b>			

<b>01</b>	VALVOLE CONTROLLO FLUSSO REGOLABILE COMPENSATE SAE 8 (SAE 8 ADJUSTABLE FLOW CONTROL VALVES - PRESSURE COMPENSATED)	<b>VCF6</b>	
<b>02</b>	PORTATA CONTROLLATA A 100 BAR ± 10% (CONTROLLED FLOW AT 100 BAR ± 10 %)	0,6-2,2 l/min (0.16-0.58 USgpm)	<b>1</b>
		0,8-3 l/min (0.21-0.79 USgpm)	<b>2</b>
		1,3-5,1 l/min (0.34-1.35 USgpm)	<b>3</b>
		1,9-6,8 l/min (0.50-1.80 USgpm)	<b>4</b>
		2,6-9,1 l/min (0.69-2.40 USgpm)	<b>5</b>
		4-14,4 l/min (1.06-3.08 USgpm)	<b>6</b>
		7,2-18 l/min (1.90-4.75 USgpm)	<b>7</b>
<b>03</b>	REGOLAZIONE (SETTING)	Chiave (Screw)	<b>C</b>
		Volantino (Handknob) Tipo (Type) 12000354	<b>V</b>

## SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



## DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

TIPO (TYPE)	Ø C
VCF61	0,9 (0.04)
VCF62	1 (0.04)
VCF63	1,3 (0.05)
VCF64	1,5 (0.06)
VCF65	1,7 (0.07)
VCF66	2,2 (0.09)
VCF67	2,8 (0.11)

## CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

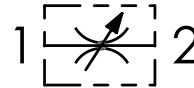
TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
VCF6	18 (4.8)	350 (5075)	0,12 (0.26)	25-30 (19-22)	SAE8/2



<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02
	<b>VBF6</b>	

<b>01</b>	VALVOLE CONTROLLO FLUSSO BIDIREZIONALI SAE 8 (SAE 8 BIDIRECTIONAL FLOW CONTROL VALVES)	<b>VBF6</b>
<b>02</b>	Chiave (Screw)	<b>C</b>
	Volantino (Handknob)	<b>V</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

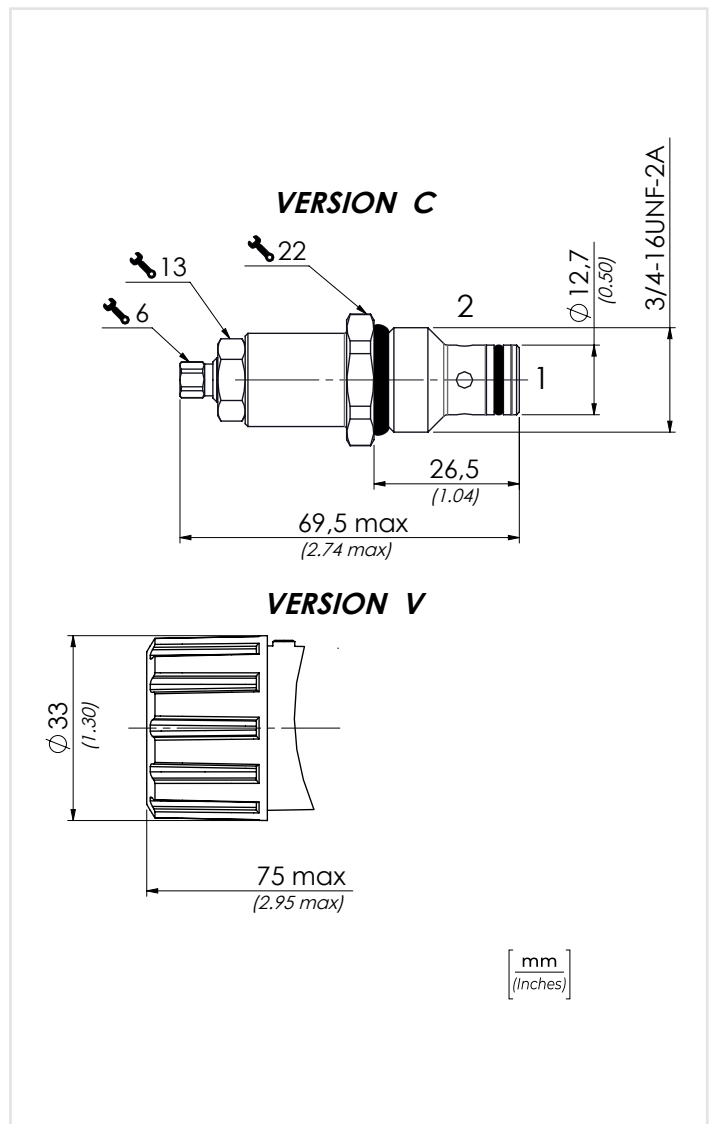
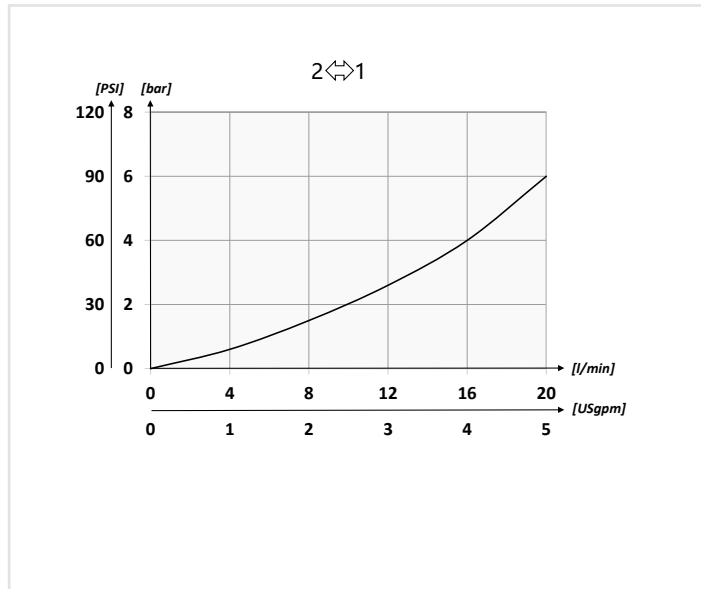


**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F

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

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

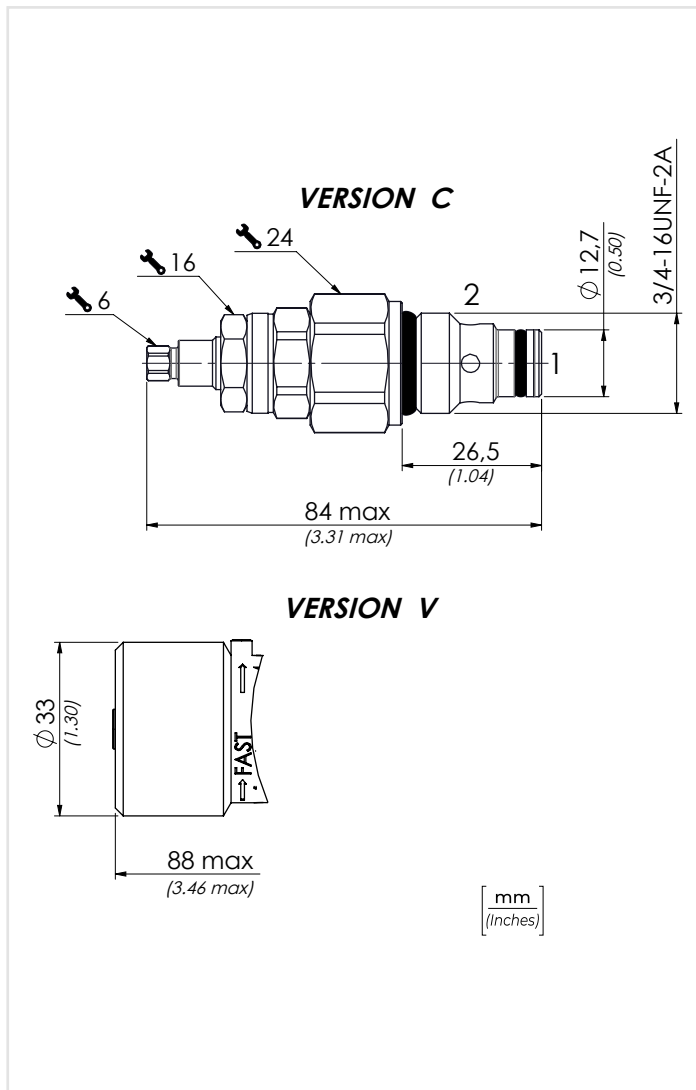
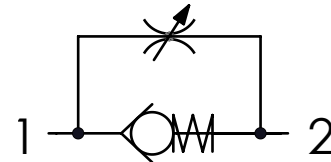
TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>VBF6</b>	<b>30</b> (7.9)	<b>350</b> (5075)	<b>0,09</b> (0.20)	<b>25-30</b> (19-22)	<b>SAE8/2</b>



<b>CODICE ORDINAZIONE</b> ORDERING CODE	01 <b>VRF6</b>	02
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<b>01</b>	VALVOLE CONTROLLO FLUSSO UNIDIREZIONALI SAE 8 (SAE 8 UNIDIRECTIONAL FLOW CONTROL VALVES)	<b>VRF6</b>
<b>02</b>	CHIAVE (SCREW)	<b>C</b>
	Volantino (Handknob) Tipo (Type) <b>I2000275</b>	<b>V</b>

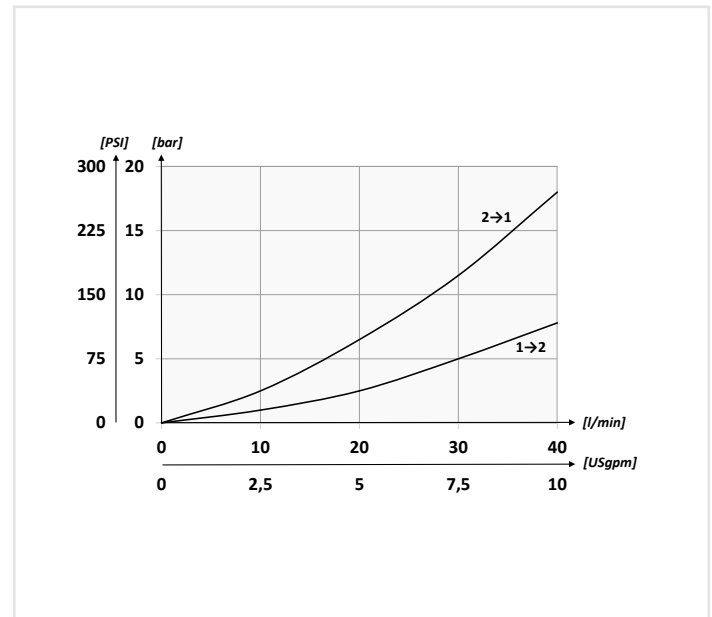
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**



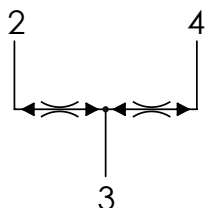
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lb)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbf ft	CAVITÀ CAVITY
<b>VRF6</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>0,13</b> (0.30)	<b>25-30</b> (19-22)	<b>SAE8/2</b>





**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**CODICE ORDINAZIONE / ORDERING CODE**

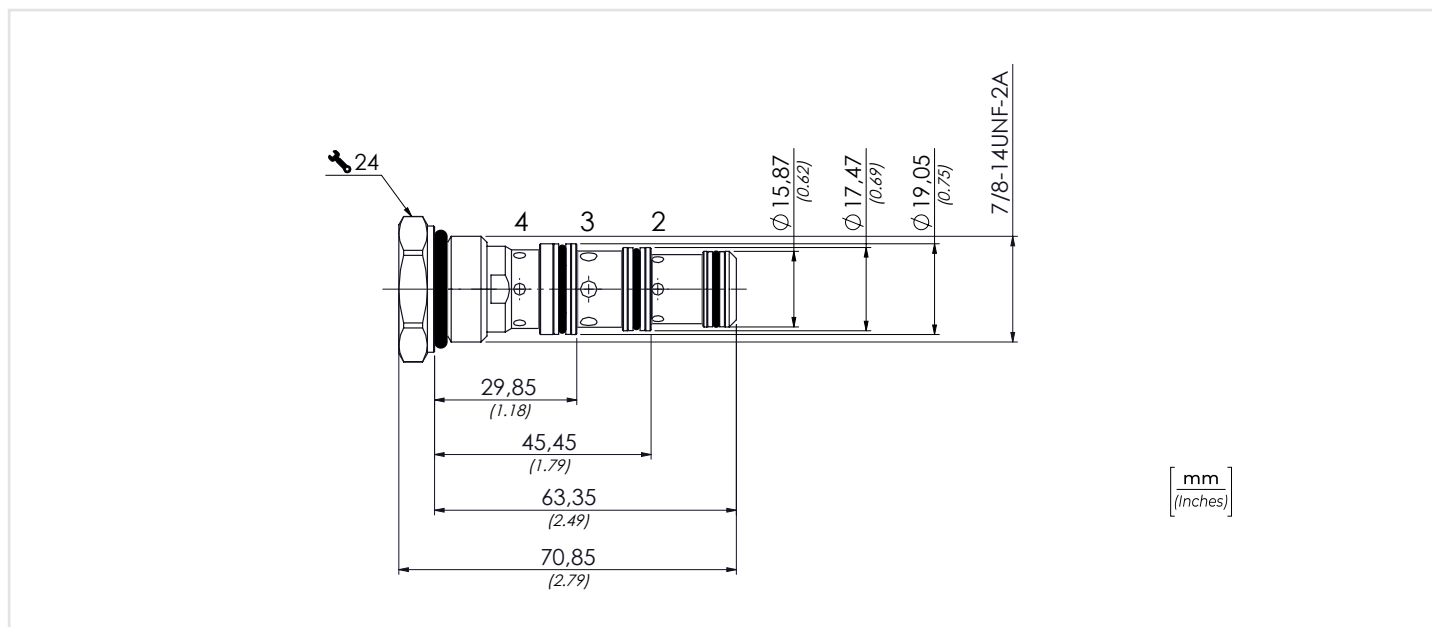
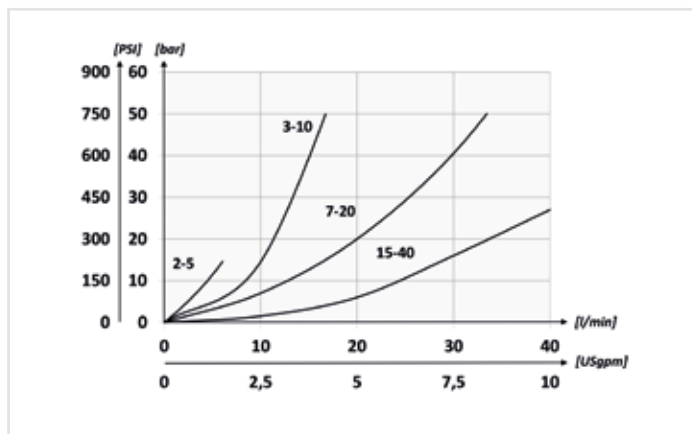
01	02
<b>VDRF10</b>	

<b>01</b>	DIVISORE/RIUNIFICATORE DI FLUSSO A CARTUCCIA SAE 10 (SAE 10 CARTRIDGE FLOW DIVIDERS/COMBINERS)	<b>VDRF10</b>
<b>02</b>	Campo di portata in ingresso (l/min) Inlet flow range (USgpm)	2-5 (0.5-1.3) <b>1</b>
		3-10 (0.8-2.6) <b>2</b>
		7-20 (1.8-5.3) <b>3</b>
		15-40 (4.0-10.6) <b>4</b>

**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
VDRF10	40 (10.6)	350 (5075)	0,12 (0.26)	30-35 (22-26)	SAE10/4

01

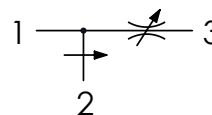
**CODICE ORDINAZIONE**  
ORDERING CODE

**CP10**

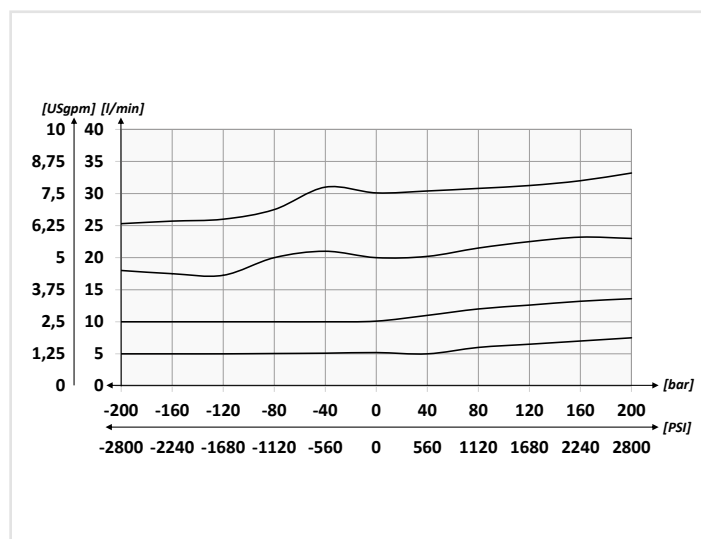


<b>01</b>	VALVOLE REGOLATRICI DI FLUSSO 3 VIE SAE 10 - COMPENSATE SAE 10 FLOW REGULATOR 3 WAYS - PRESSURE COMPENSATED	<b>CP10</b>
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**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**PERFORMANCES**

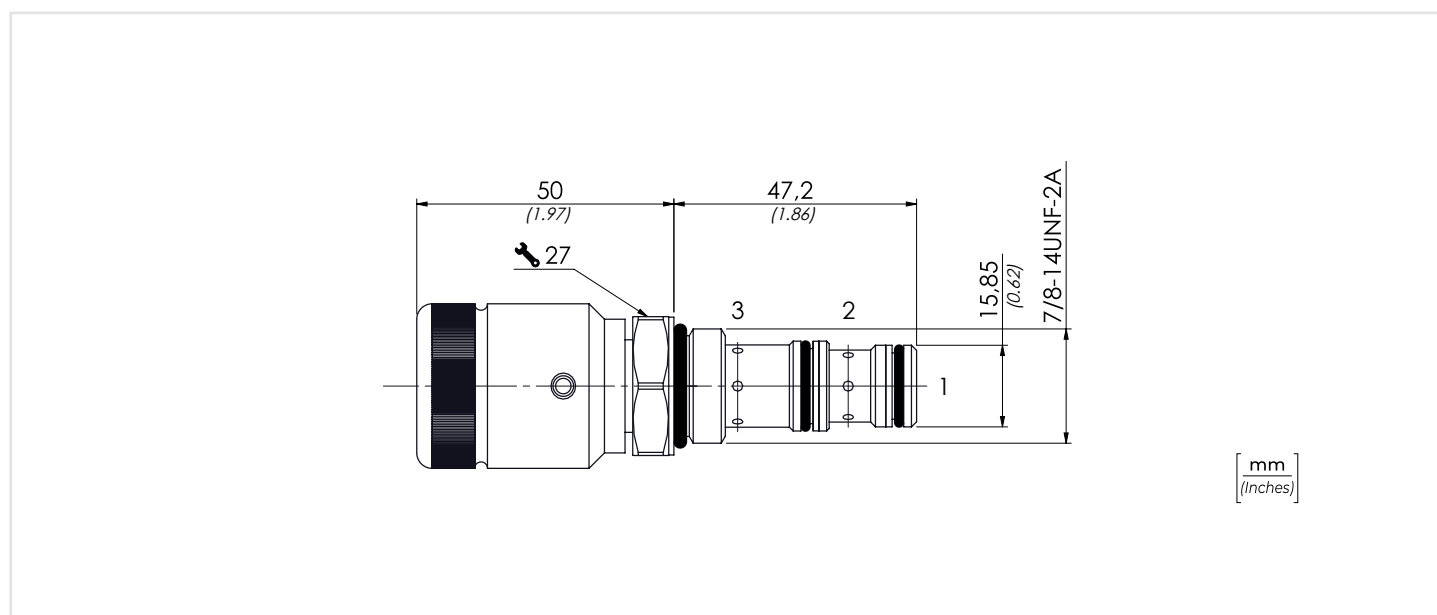


**PORTATA MASSIMA (L/MIN) - MAX FLOW (USGPM)**

50 l/min con 30 l/min in 3 (13,3 USgpm with 8 USgpm in 3)

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>CP10</b>	<b>50</b> (13.26)	<b>350</b> (5075)	<b>0,20</b> (0.44)	<b>60-70</b> (45-52)	<b>SAE10/3</b>



01 02

**CODICE ORDINAZIONE**  
ORDERING CODE

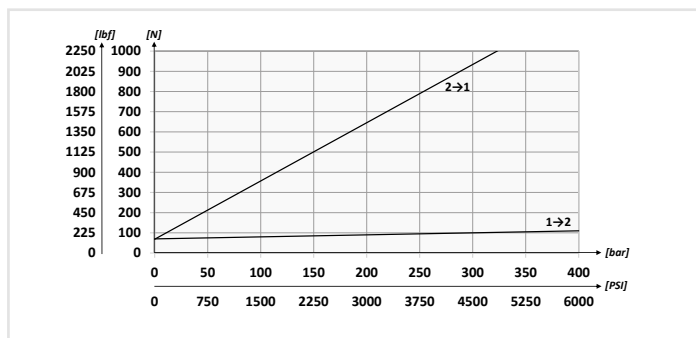
**CM6**

<b>01</b>	<b>VALVOLE A COMANDO MANUALE</b> (MANUAL OPERATED RELEASE VALVES)	<b>CM6</b>
<b>02</b>	Senza microinterruttore (Without micro-switch)	<b>0</b>
	Con micro microinterruttore (With micro-switch)	<b>M</b>

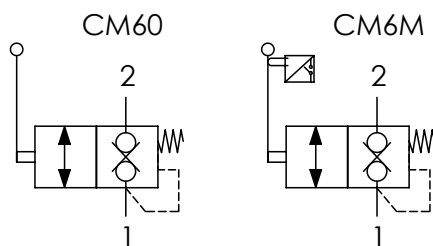
**LA VALVOLE A COMANDO MANUALE VIENE FORNITA  
CON LEVA DI AZIONAMENTO L=190 mm**

**THE MANUAL OPERATED RELEASE VALVE  
IS SUPPLIED WITH ACTING LEVER 7,4 inch LENGHT**

**PERFORMANCES**

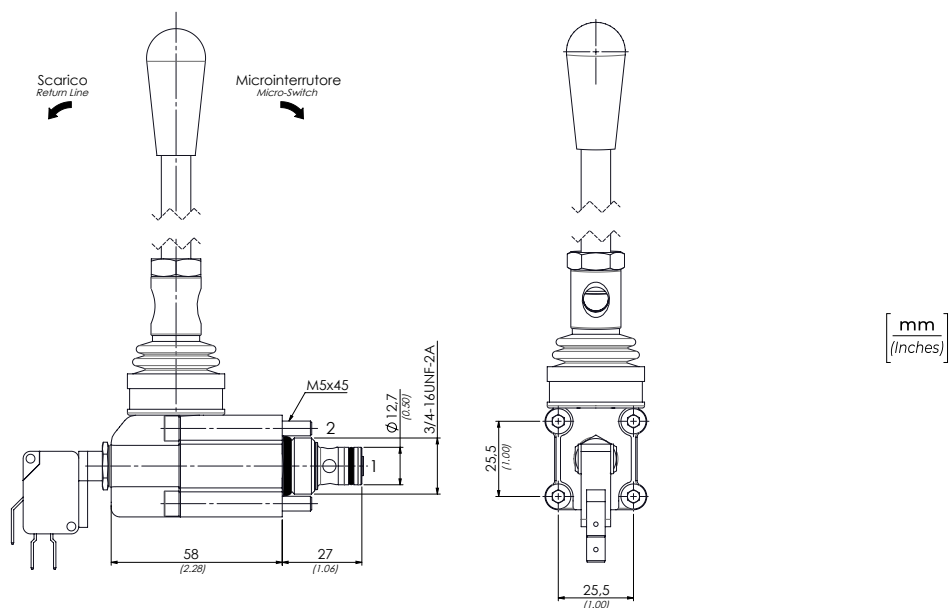


**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>CM6</b>	<b>25 (6.6)</b>	<b>320 (4640)</b>	<b>0,41 (0,90)</b>	<b>25-30 (19-22)</b>	<b>SAE8/2</b>



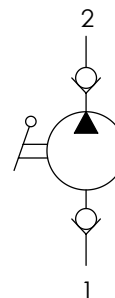
**LA POMPA VIENE FORNITA CON LEVA DI AZIONAMENTO L=270 mm**  
**THE PUMP IS SUPPLIED WITH ACTING LEVER 10,5 inch LENGHT**

**CODICE ORDINAZIONE**  
**ORDERING CODE**

01	02	03
<b>PME</b>		<b>L</b>

<b>01</b>	POMPE A MANO (CARTRIDGE HAND PUMPS)	<b>PME</b>
<b>02</b>	Modello (Type)	<b>05</b>
		<b>06</b>
		<b>07</b>
<b>03</b>	Leva (Hand lever)	<b>L</b>

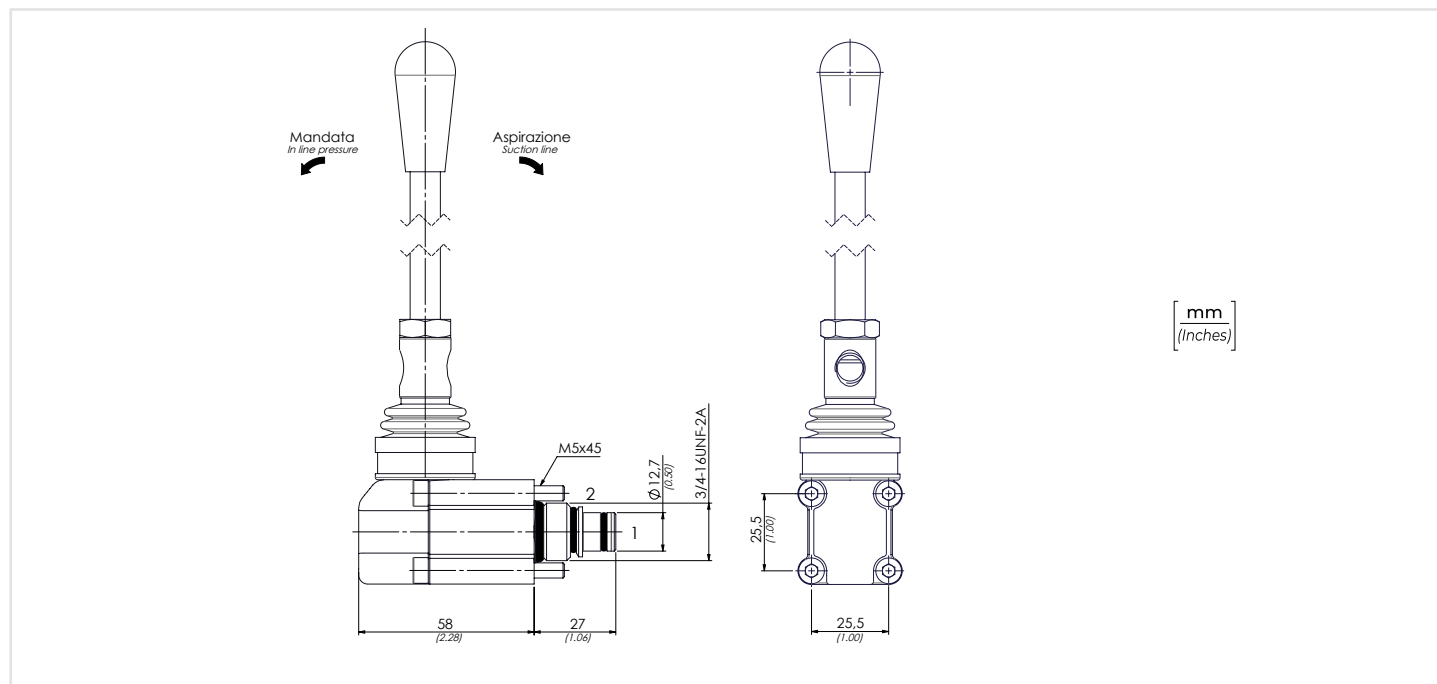
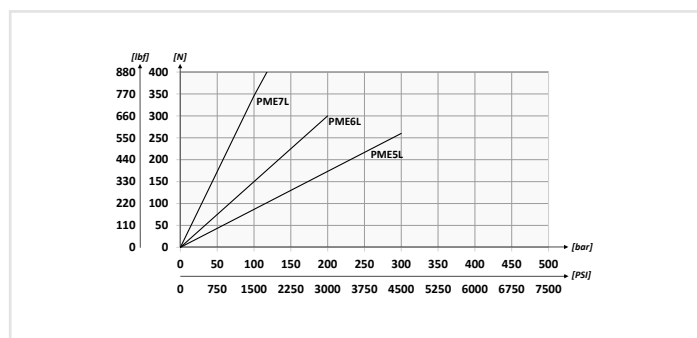
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	CILINDRATA (cm <sup>3</sup> ) DISPLACEMENT (in <sup>3</sup> )	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lb)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
PME5L	1 (0.06)	300 (4350)	0,46 (1.01)	25-30 (19-22)	SAE8/2
PME6L	2 (0.12)	200 (2900)			
PME7L	3 (0.18)	120 (1740)			

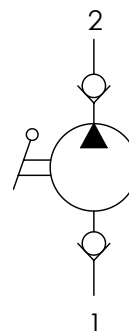


**CODICE ORDINAZIONE**  
ORDERING CODE

01  
**PME10**

<b>01</b>	POMPE A MANO (CARTRIDGE HAND PUMPS)	<b>PME10</b>
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**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



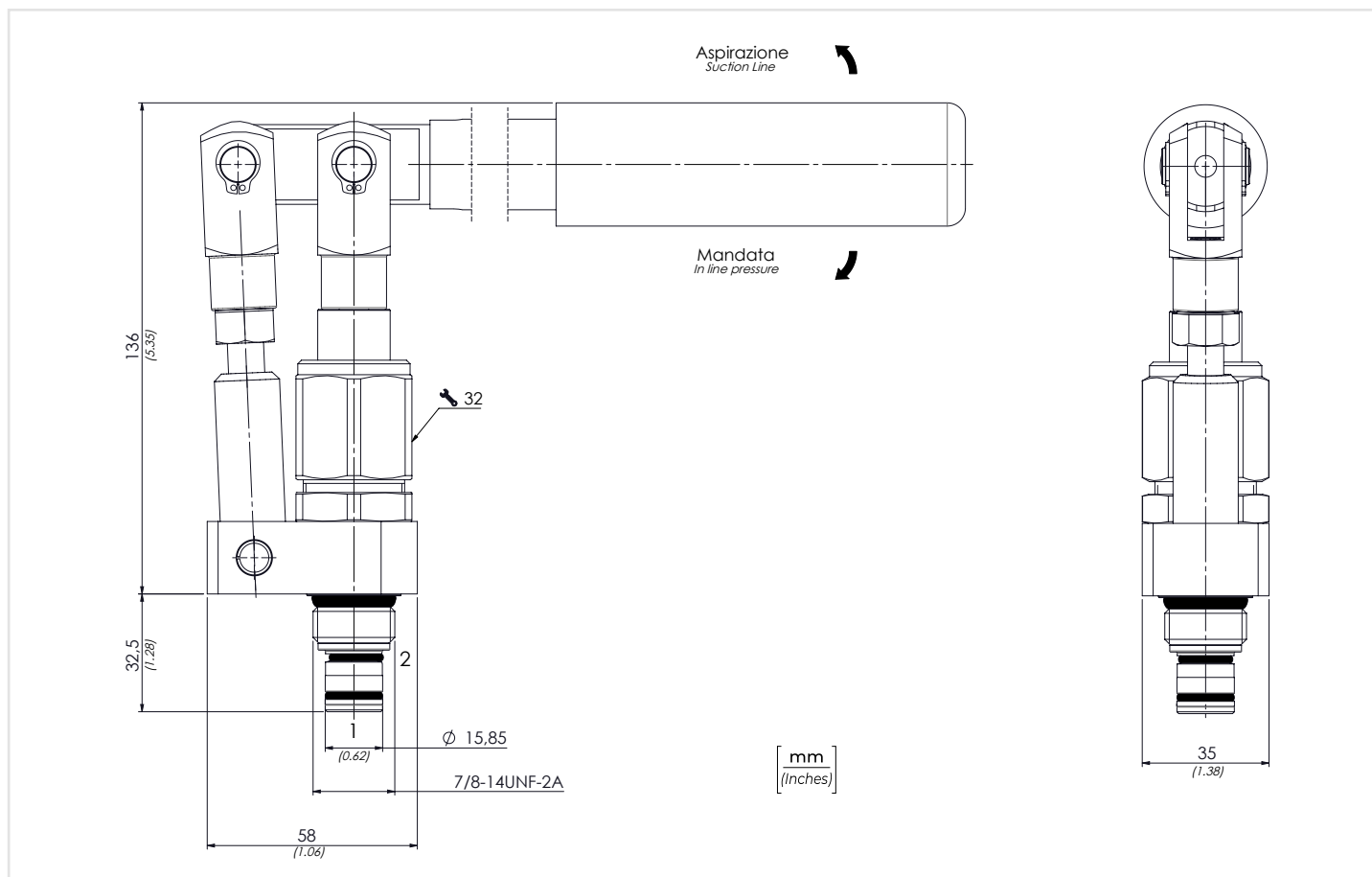
**LA POMPA VIENE FORNITA CON LEVA DI AZIONAMENTO L=500 mm**  
**THE PUMP IS SUPPLIED WITH ACTING LEVER 19,6 inch LENGHT**

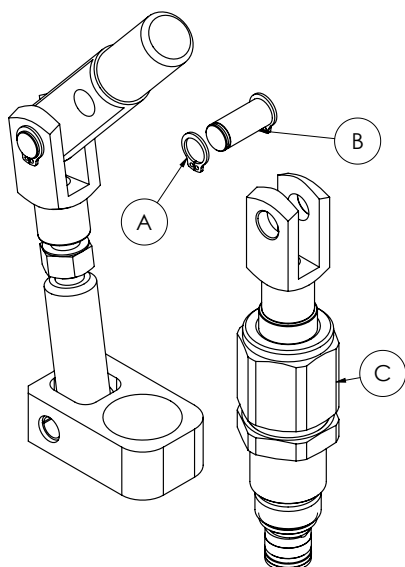
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	CILINDRATA (cm <sup>3</sup> ) DISPLACEMENT (in <sup>3</sup> )	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>PME10</b>	<b>10 (0.6)</b>	<b>200 (2900)</b>	<b>1,9 (4.20)</b>	<b>41-47 (30-35)</b>	<b>SAE10/2</b>

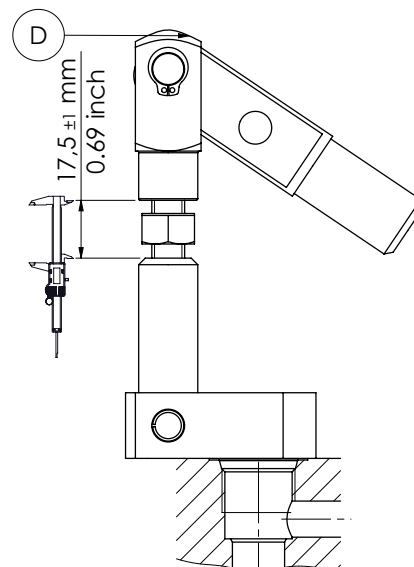




**1**

Smontare l'anello di arresto (A), sfilare la spina (B), togliere la valvola (C).

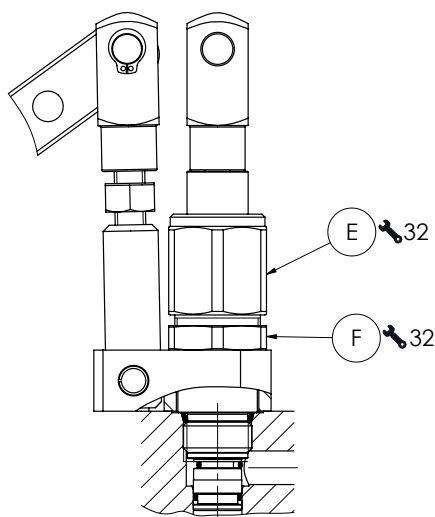
Disassemble the snap ring (A), get out the pin (B), remove the valve (C).



**2**

Posizionare la forcella (D) alla misura indicata; avvicinare il leverismo alla cavità della valvola.

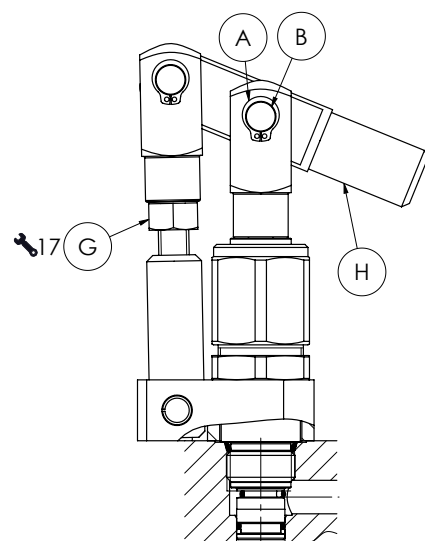
Position the fork (D) at shown dimension; put the levering kit close to the valve cavity.



**3**

Avvitare la cartuccia (E) nella cavità (41-47 Nm); stringere la ghiera (F)(41-47 Nm).

Screw the cartridge (E) in the cavity (30-35 lbft); tighten the lock nut (F)(30-35 lbft).



**4**

Posizionare la leva (H) verso il basso; montare la spina (B) e l'anello di arresto (A); serrare il dado (G) (33-53 Nm).

Place the lever (H) downward; assemble the pin (B) and the snap ring (A); tighten the nut (G) (45-72 lbft).



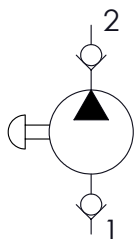
01

**CODICE ORDINAZIONE**  
ORDERING CODE

**PME5P**

<b>01</b>	POMPE A MANO (CARTRIDGE HAND PUMPS)	<b>PME5P</b>
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**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

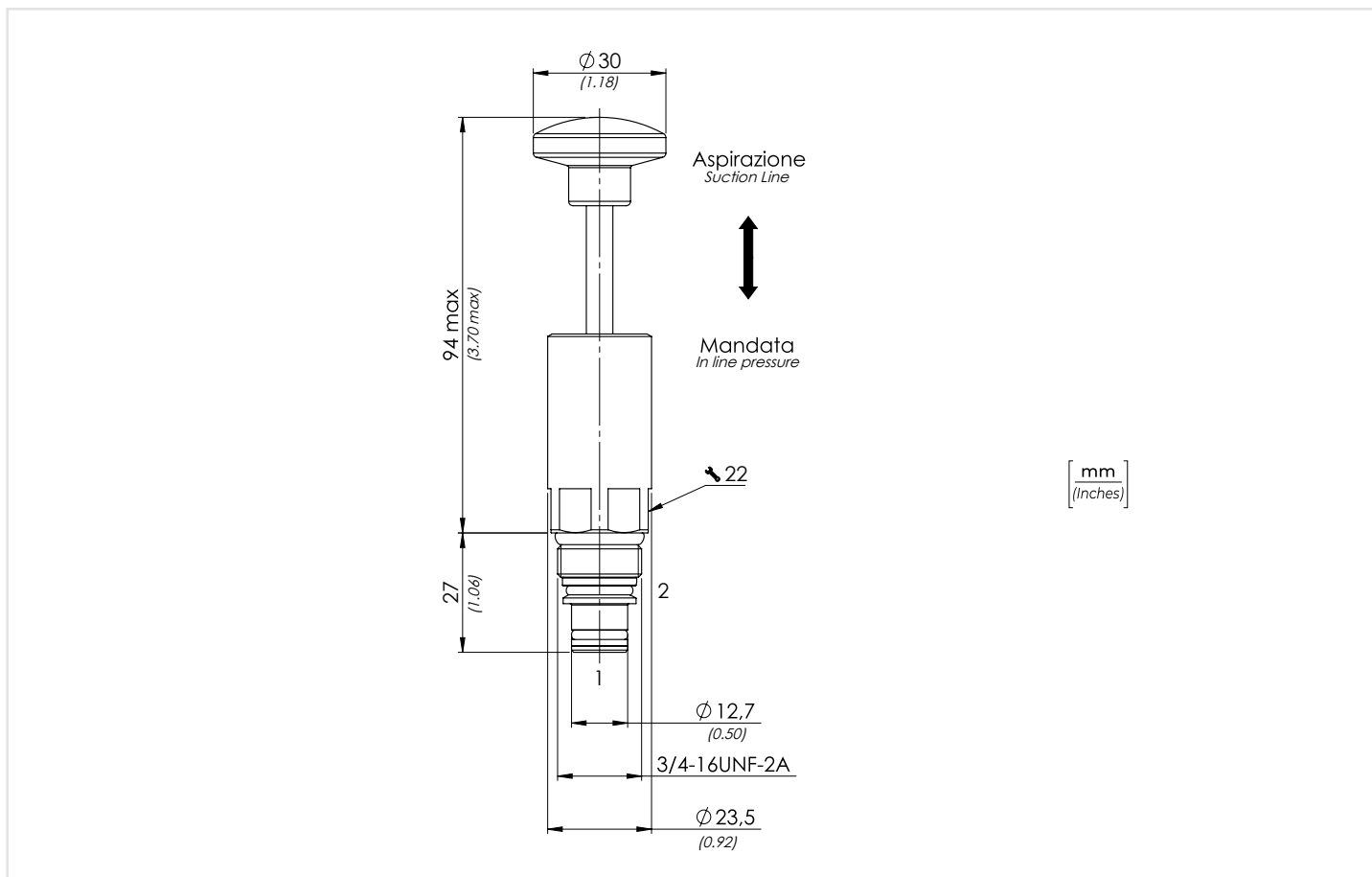


**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	CILINDRATA (cm <sup>3</sup> ) DISPLACEMENT (in <sup>3</sup> )	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>PME5P</b>	<b>1</b> (0.06)	<b>50</b> (725)	<b>0,2</b> (0.44)	<b>34-41</b> (25-30)	<b>SAE8/2</b>

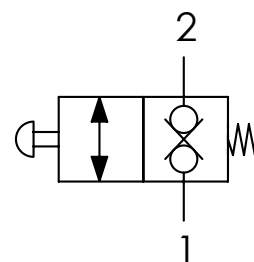




	01	02
<b>CODICE ORDINAZIONE</b> ORDERING CODE	<b>VEM</b>	

<b>01</b>	VALVOLE DI EMERGENZA MANUALE (MANUAL EMERGENCY VALVES)	<b>VEM</b>
<b>02</b>	DIMENSIONE (SIZE)	3/4-16UNF
		7/8-14UNF

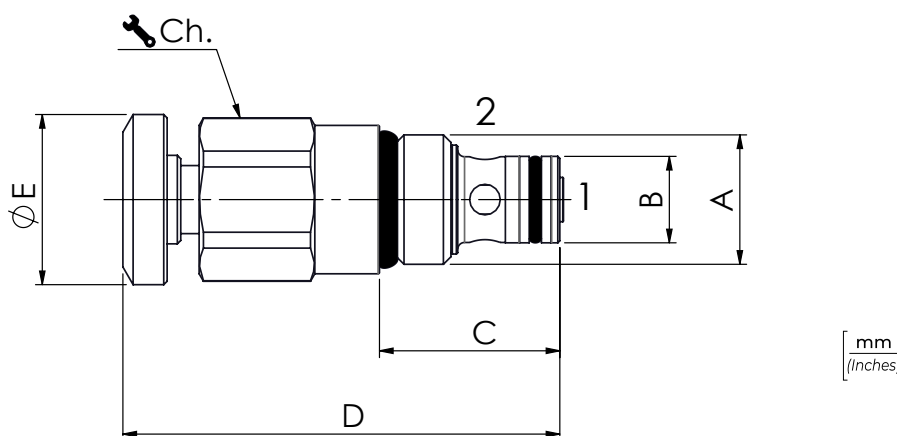
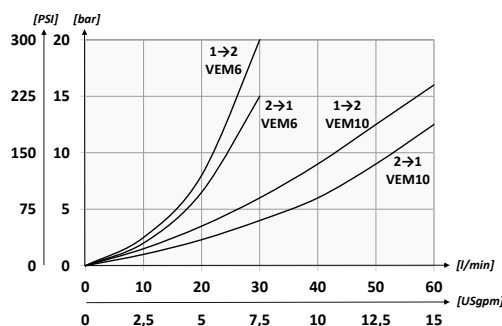
### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C    -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C    -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	0,25 cm <sup>3</sup> /min - 5 gocce/min 0,015 in <sup>3</sup> /min - 5 drops/min

### PERFORMANCES



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

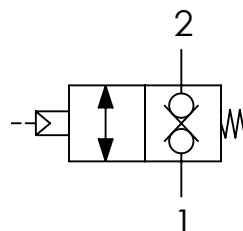
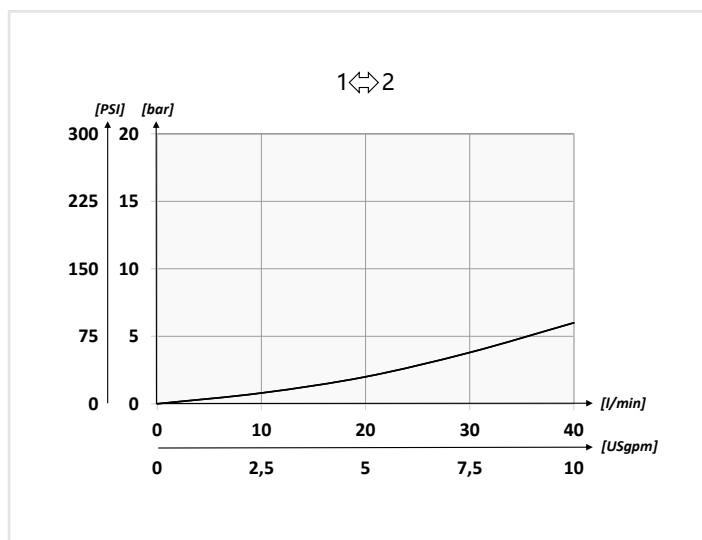
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	Ch.	PESO APPROX (kg) APPROX WEIGHT (lb)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	Cavità Cavity
VEM6	3/4-16UNF-2A	30 (7.9)	320 (4640)	12,7 (0.5)	26,5 (1.04)	35 (1.38)	25 (0.98)	22	0,12 (0.27)	25-30 (19-22)	SAE8/2
VEM10	7/8-14UNF-2A	50 (13.2)		15,80 (0.62)	32,5 (1.28)	43,5 (1.71)	29 (1.14)	27			



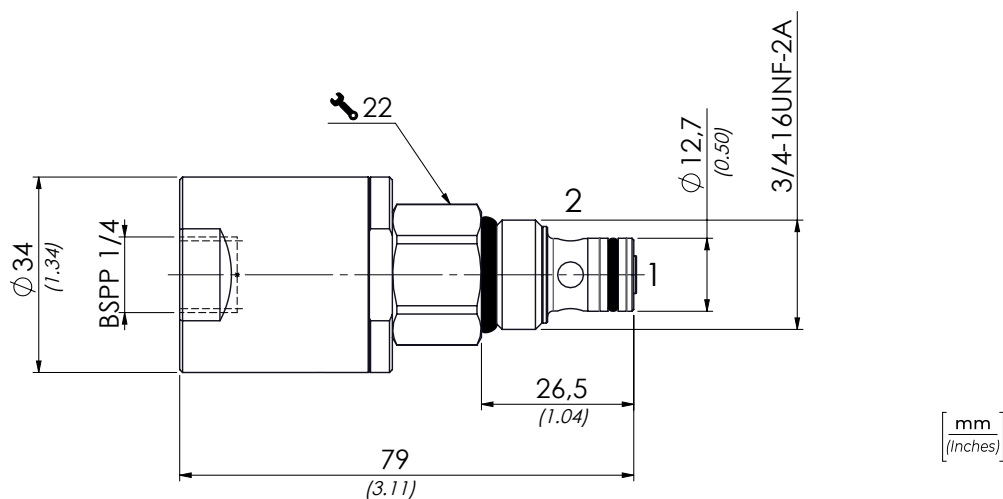
01

**CODICE ORDINAZIONE**  
**ORDERING CODE**
**VPN6**


<b>01</b>	VALVOLE PNEUMATICHE SAE 8 (SAE 8 PNEUMATIC VALVES)	<b>VPN6</b>
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**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

**PERFORMANCES**

**DATI TECNICI / TECHNICAL DATA**

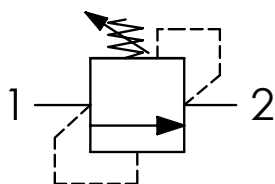
<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>0,25 cm<sup>3</sup>/min - 5 gocce/min</b> 0,015 in <sup>3</sup> /min - 5 drops/min


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

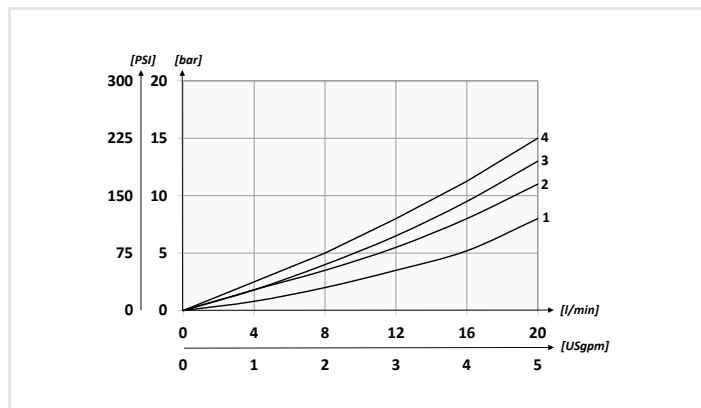
TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY	PRESSIONE DI PILOTAGGIO PILOT PRESSURE bar-PSI
<b>VPN6</b>	<b>30</b> (7.9)	<b>350</b> (5075)	<b>0,16</b> (0.35)	<b>25-30</b> (19-22)	<b>SAE8/2</b>	<b>4/15</b> (58/218)



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**PERFORMANCES**

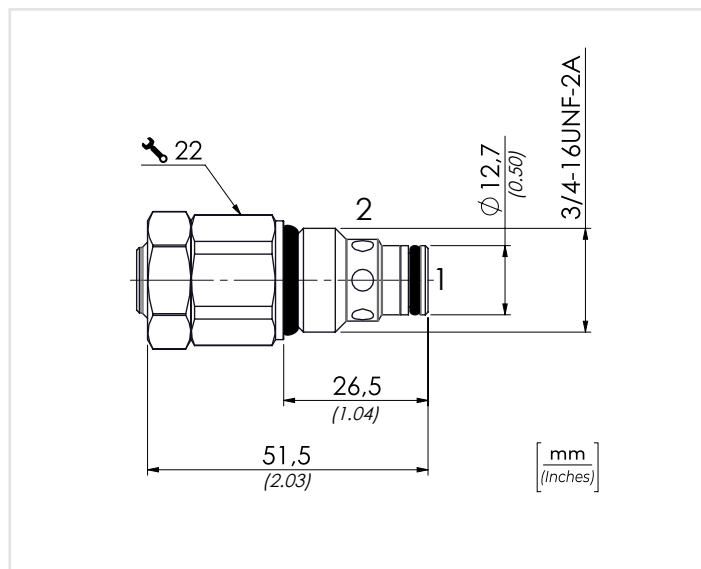


<b>CODICE ORDINAZIONE</b> ORDERING CODE	01 <b>VMD1</b>	02 <b>C</b>	03	04 <b>N</b>
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<b>01</b>	VALVOLE LIMITATRICI DI PRESSIONE DIRETTE SAE 8 (SAE8 DIRECT ACTING PRESSURE RELIEF VALVES)	<b>VMD1</b>
<b>02</b>	REGOLAZIONE (SETTING)	Chiave (Key) <b>C</b>
<b>03</b>	MOLLA (SPRING) <b>10/40 bar</b> (145/580PSI)	<b>20 bar/al giro</b> (290 PSI/turn) <b>1</b>
	MOLLA (SPRING) <b>20/110 bar</b> (290/1595 PSI)	<b>40 bar/al giro</b> (580 PSI/turn) <b>2</b>
	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	<b>70 bar/al giro</b> (1015 PSI/turn) <b>3</b>
	MOLLA (SPRING) <b>40/350 bar</b> (580/5075 PSI)	<b>130 bar/al giro</b> (1885 PSI/turn) <b>4</b>
<b>04</b>	Versione (Version)	<b>N</b>

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



**OPTION**  
SAFETY CAP  
**Cod. 12000380**

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>VMD1N</b>	<b>20</b> (5.3)	<b>350</b> (5075)	<b>0,11</b> (0.24)	<b>25-30</b> (19-22)	<b>SAE8/2</b>

01

02

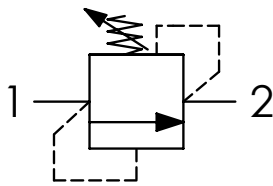
03

**CODICE ORDINAZIONE**  
ORDERING CODE

**VMD10**



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



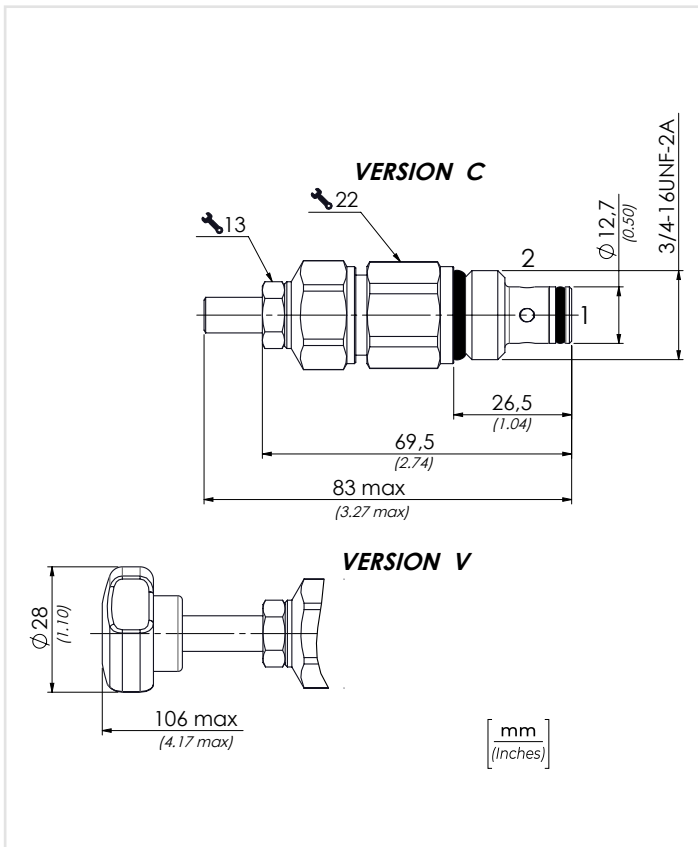
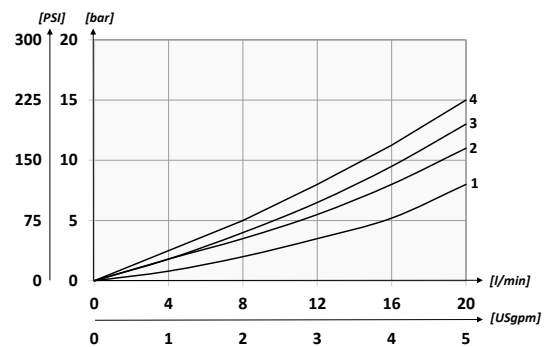
<b>01</b>	VALVOLE LIMITATRICI DI PRESSIONE DIRETTE SAE 8 (SAE8 DIRECT ACTING PRESSURE RELIEF VALVES)		<b>VMD10</b>
<b>02</b>	REGOLAZIONE (SETTING)	Chiave (Hex socket screw)	Opzione: Tappo piombatura (Optional: Tamper proof cap) <b>81300037</b>
		Volantino (Handknob) Tipo (Type) <b>81300109</b>	<b>C</b>  <b>V</b>
<b>03</b>	MOLLA (SPRING) <b>10/40 bar</b> (145/580 PSI)	<b>12 bar/al giro</b> (174 PSI/turn)	<b>1</b>
	MOLLA (SPRING) <b>20/110 bar</b> (290/1595 PSI)	<b>37 bar/al giro</b> (537 PSI/turn)	<b>2</b>
	MOLLA (SPRING) <b>30/210 bar</b> (435/3045 PSI)	<b>67 bar/al giro</b> (972 PSI/turn)	<b>3</b>
	MOLLA (SPRING) <b>40/350 bar</b> (580/5075 PSI)	<b>131 bar/al giro</b> (1900 PSI/turn)	<b>4</b>

**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
Viscosità olio - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
Temperatura dell'olio - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
Temperatura ambiente - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F

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

**PERFORMANCES**

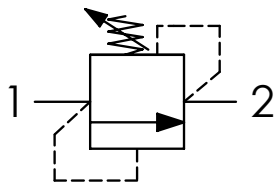


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>VMD10</b>	<b>20</b> (5.3)	<b>350</b> (5075)	<b>0,14</b> (0.30)	<b>25-30</b> (19-22)	<b>SAE8/2</b>



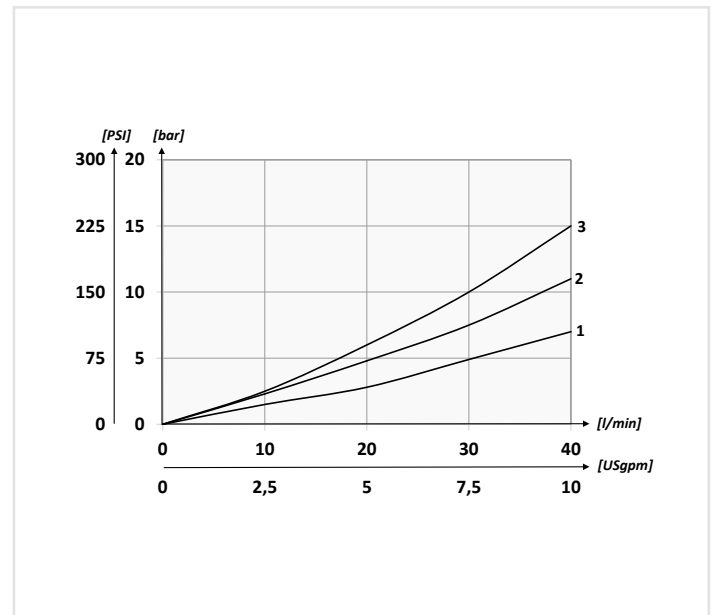
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03
<b>VMD8</b>			

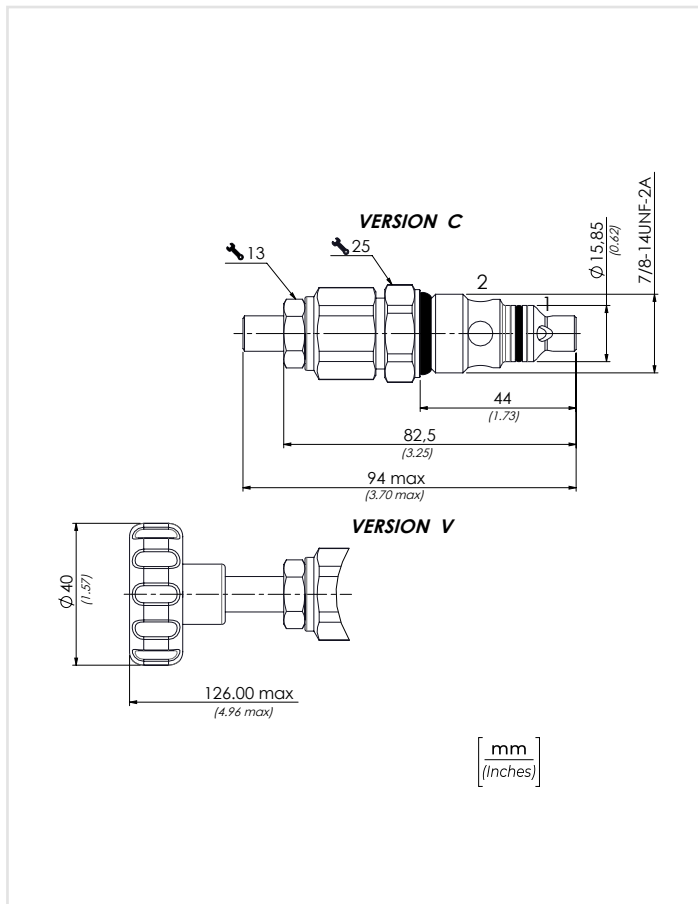
01	VALVOLE LIMITATRICI DI PRESSIONE DIRETTE SAE 10 (SAE10 DIRECT ACTING PRESSURE RELIEF VALVES)	VMD8	
02	REGOLAZIONE (SETTING)	Chiave (Hex socket screw)  Opzione: Tappo piombatura (Optional: Tamper proof cap) <b>81300095</b>	<b>C</b>
		Volantino (Handknob) Tipo (Type) <b>81300023</b>	<b>V</b>
03	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	<b>20 bar/al giro</b> (290 PSI/turn)	<b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>48 bar/al giro</b> (696 PSI/turn)	<b>2</b>
	MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI)	<b>85 bar/al giro</b> (1233 PSI/turn)	<b>3</b>

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

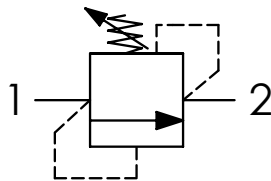


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>VMD8</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>0,17</b> (0.37)	<b>41-47</b> (30-35)	<b>SAE10/2</b>



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

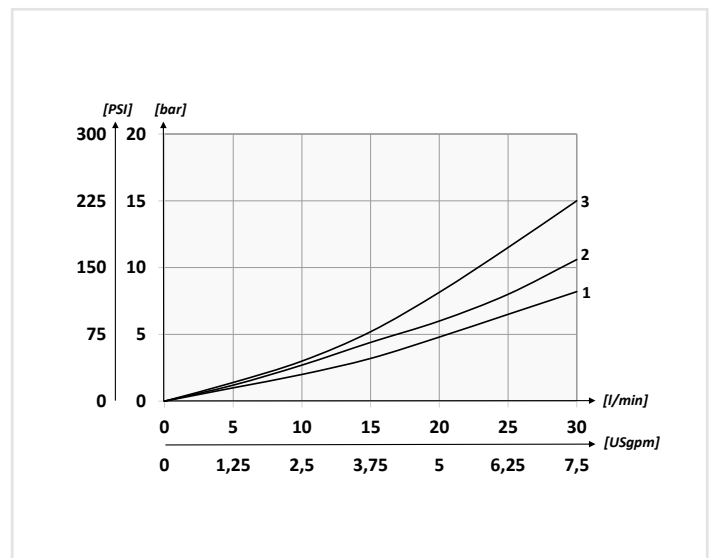


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>VMD30</b>		

<b>01</b>	VALVOLE LIMITATRICI DI PRESSIONE DIRETTE M20X1,5 (M20X1,5 DIRECT ACTING PRESSURE RELIEF VALVES)	<b>VMD30</b>
<b>02</b>	REGOLAZIONE (SETTING)	<b>C</b>
	Chiave (Hex socket screw)	Opzione: Tappo piombatura (Optional: Tamper proof cap) <b>81300095</b>
<b>03</b>	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	<b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>2</b>
	MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI)	<b>3</b>

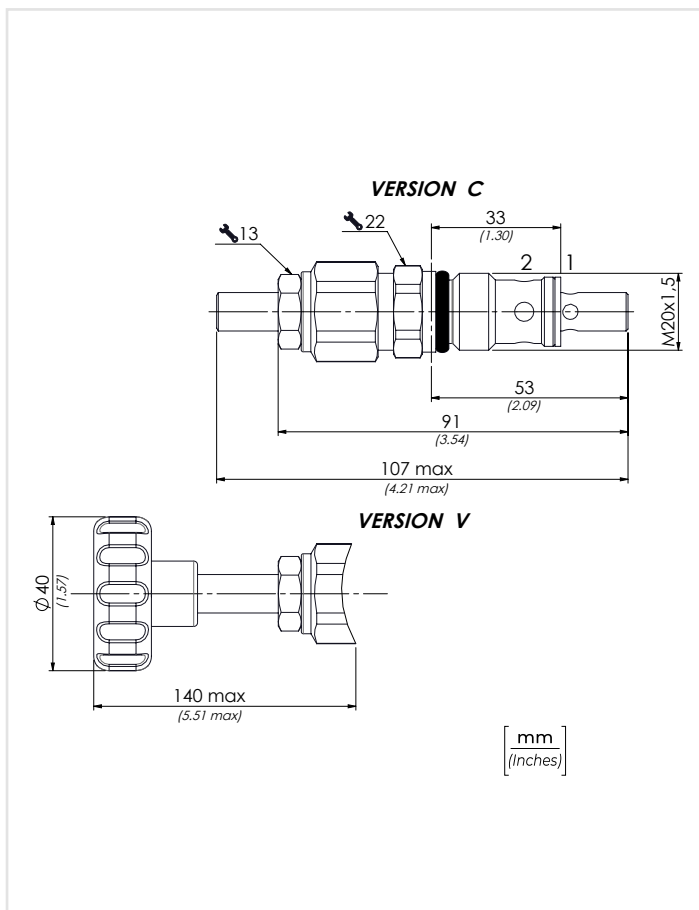
**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm²/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F

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

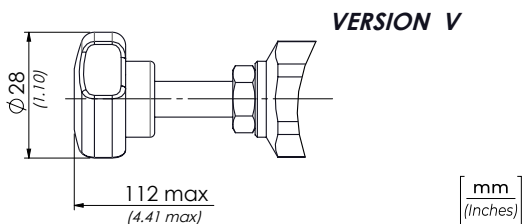
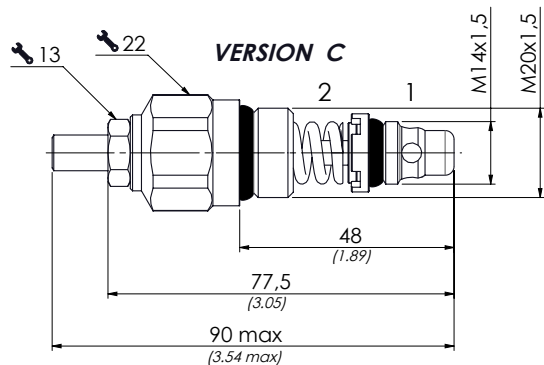
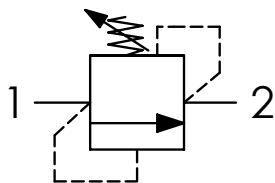


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>VMD30</b>	<b>30</b> (7.9)	<b>320</b> (4640)	<b>0,16</b> (0.35)	<b>25-30</b> (19-22)	<b>C2015/30</b>



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

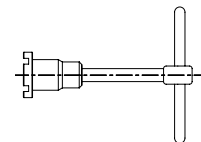


**CODICE ORDINAZIONE**  
ORDERING CODE

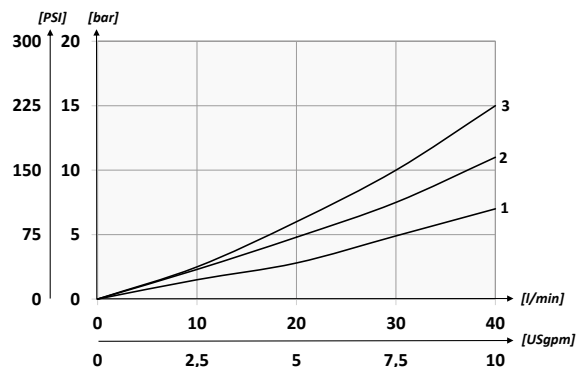
01	02	03
<b>VMD40S</b>		

<b>01</b>	VALVOLE LIMITATRICI DI PRESSIONE DIRETTE M20X1,5 (M20X1,5 DIRECT ACTING PRESSURE RELIEF VALVES)		<b>VMD40S</b>
<b>02</b>	REGOLAZIONE (SETTING)	Chiave (Hex socket screw)	<b>C</b>
		Opzione: Tappo piombatura (Optional: Tamper proof cap) <b>81300037</b>	
<b>03</b>	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	Volantino (Handknob) Tipo (Type) <b>81300109</b>	<b>V</b>
		MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>1</b>
		MOLLA (SPRING) <b>70/350 bar</b> (1015/5075 PSI)	<b>2</b>

CHIAVE (TOOL)  
**61700008**



**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F

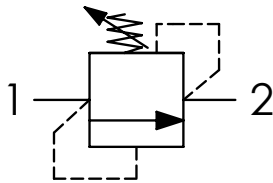
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)  
It is necessary a filter use to protect the valve (advised filtration 15 µm)

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lb)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY
<b>VMD40S</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>0,13</b> (0.29)	<b>M20 40/45</b> (30-34)	<b>C2015/1415/2</b>
				<b>M14 10/15</b> (7-11)	



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

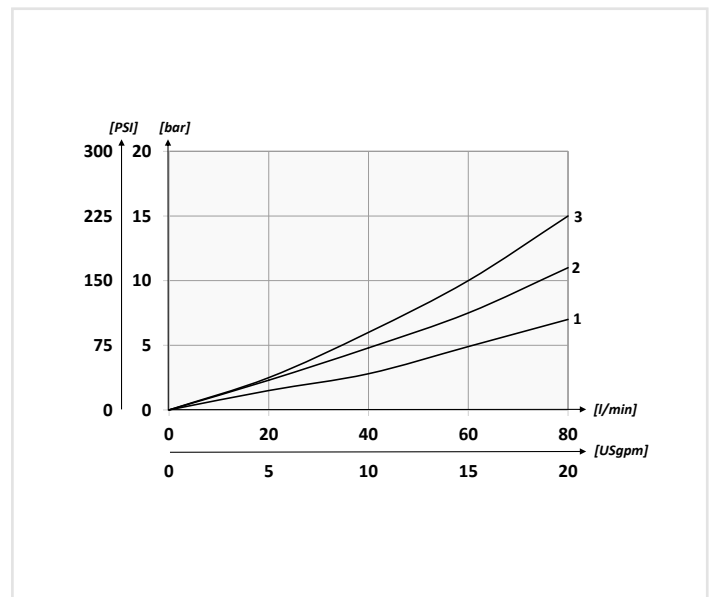


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>VMD90</b>		

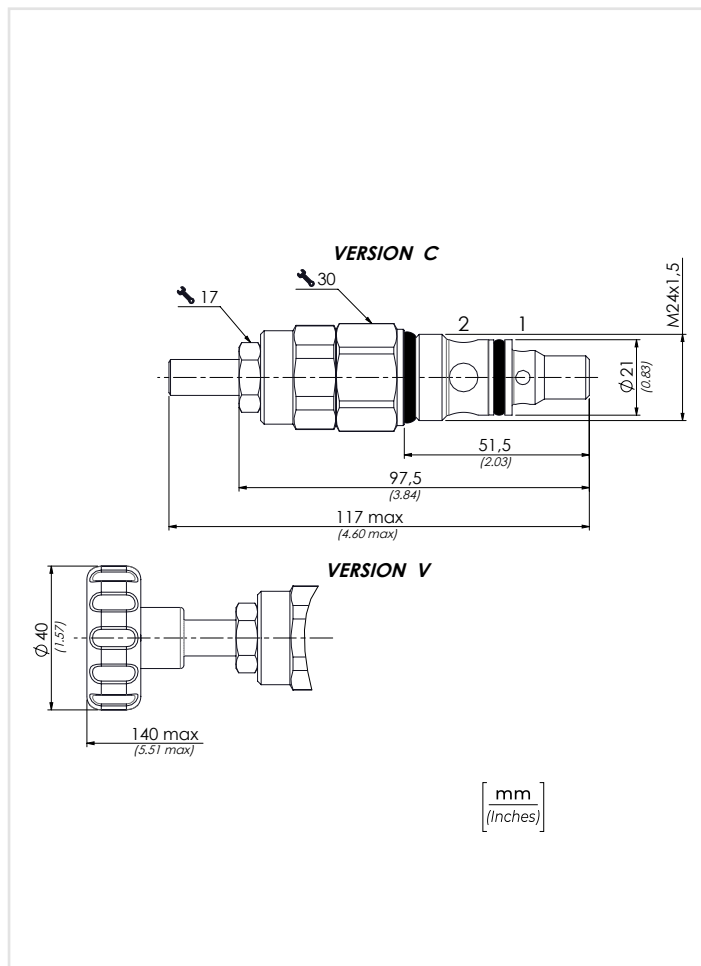
<b>01</b>	VALVOLE LIMITATRICI DI PRESSIONE DIRETTE M24X1,5 (M24X1,5 DIRECT ACTING PRESSURE RELIEF VALVE)		<b>VMD90</b>
<b>02</b>	REGOLAZIONE (SETTING)	Chiave (Hex socket screw) Opzione: Tappo piombatura (Optional: Tamper proof cap) <b>81300095</b>	<b>C</b>
		Volantino (Handknob) Tipo (Type) <b>81300023</b>	<b>V</b>
<b>03</b>	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	<b>26 bar/al giro</b> (377 PSI/turn)	<b>1</b>
	MOLLA (SPRING) <b>20/250 bar</b> (290/3625 PSI)	<b>41 bar/al giro</b> (595 PSI/turn)	<b>2</b>
	MOLLA (SPRING) <b>50/350 bar</b> (725/5075 PSI)	<b>91 bar/al giro</b> (1320 PSI/turn)	<b>3</b>

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
Viscosità olio - Oil viscosity	<b>15-250 mm²/s</b> (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
Temperatura dell'olio - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
Temperatura ambiente - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

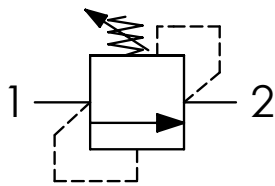


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	CILINDRATA (cm³) DISPLACEMENT (in³)	CAVITÀ CAVITY
<b>VMD90</b>	<b>80</b> (21.1)	<b>350</b> (5075)	<b>0,25</b> (0.55)	<b>60-65</b> (45-49)	<b>C2415/2</b>

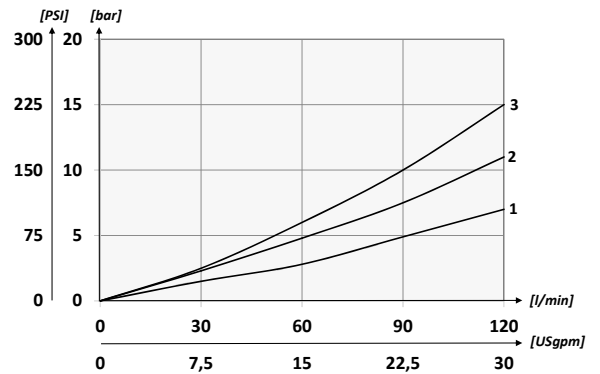


**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



CODICE ORDINAZIONE / ORDERING CODE		01	02	03
<b>VMD120</b>				
<b>01</b>	VALVOLE LIMITATRICI DI PRESSIONE DIRETTE M28X1,5 (M28X1,5 DIRECT ACTING PRESSURE RELIEF VALVE)	<b>VMD120</b>		
<b>02</b>	REGOLAZIONE (SETTING)	Chiave (Hex socket screw)	Opzione: Tappo piombatura (Optional: Tamper proof cap) <b>81300095</b>	<b>C</b>
		Volantino (Handknob) Tipo (Type) <b>81300023</b>		<b>V</b>
<b>03</b>	MOLLA (SPRING) <b>10/100 bar</b> (145/1450 PSI)	<b>21 bar/al giro</b> (305 PSI/turn)		<b>1</b>
	MOLLA (SPRING) <b>20/250 bar</b> (290/3625 PSI)	<b>48 bar/al giro</b> (696 PSI/turn)		<b>2</b>
	Molla (SPRING) <b>40/350 bar</b> (580/5075 PSI)	<b>55 bar/al giro</b> (798 PSI/turn)		<b>3</b>

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lb)	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	Cavità Cavity
<b>VMD120</b>	<b>120</b> (31.7)	<b>350</b> (5075)	<b>0,32</b> (0.70)	<b>60-65</b> (45-49)	<b>C2815/2</b>



01

02

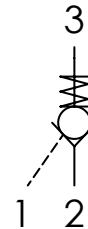
**CODICE ORDINAZIONE**  
ORDERING CODE

**VPR**



<b>01</b>	VALVOLE DI BLOCCO PILOTATE A SEMPLICE EFFETTO (SINGLE ACTING PILOT CHECK VALVES)	<b>VPR</b>
<b>02</b>	DIMENSIONE (SIZE)	<b>08</b>
		<b>10</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

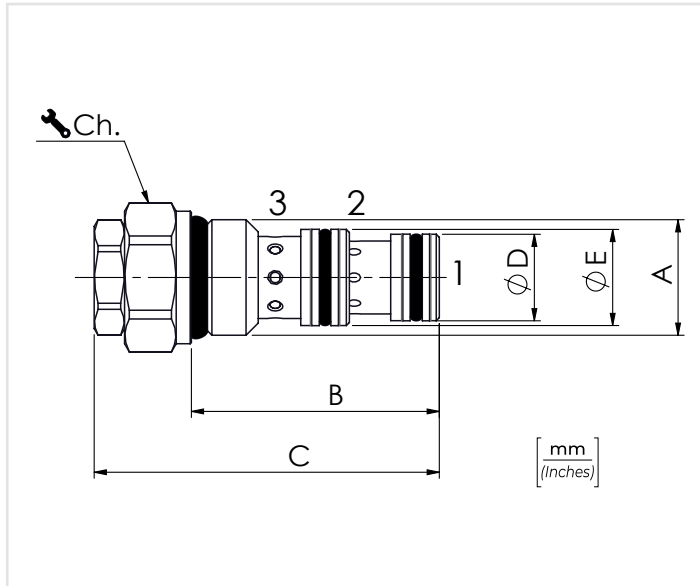
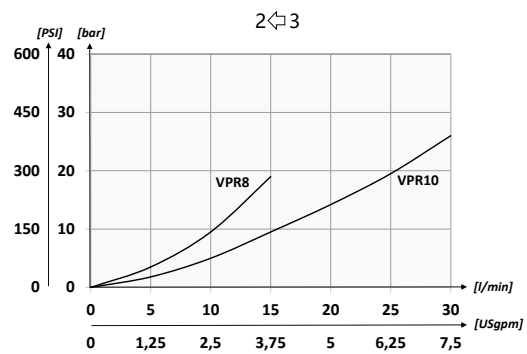
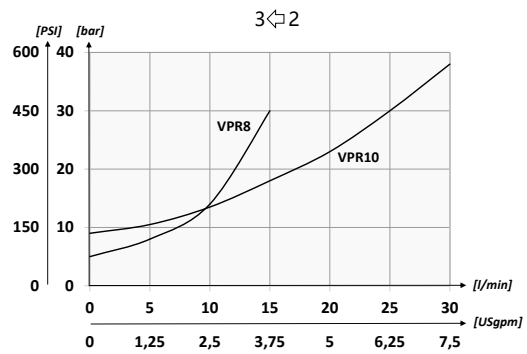


**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>

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

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

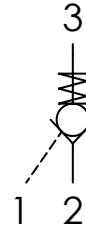
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	PESO APPROX APPROX WEIGHT kg-lbt	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	RAPPORTO DI PILOTAGGIO PILOT RATIO	CAVITÀ CAVITY	Ch. Key
VPR08	3/4-16UNF	15 (4)	350 (5075)	41 (1.61)	57 (2.24)	14,2 (0.56)	15,8 (0.62)	0,09 (0.19)	25-30 (19-22)	1:2.5	SAE8/3	22
VPR10	7/8 - 14UNF	30 (7.9)		47 (1.85)	59 (2.32)	15,8 (0.62)	17,4 (0.69)	0,11 (0.25)	41-47 (30-35)	1:3	SAE10/3	27

<b>CODICE ORDINAZIONE</b> ORDERING CODE	01 <b>VPR</b>	02 <b>22</b>	03 <b>SP</b>	04
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<b>01</b>	VALVOLE DI BLOCCO PILOTATE M22X1,5 A SEMPLICE EFFETTO (M22X1,5 SINGLE ACTING PILOT CHECK VALVES)	<b>VPR</b>
<b>02</b>	DIMENSIONE (SIZE)	M22x1,5
<b>03</b>	TENUTA (SEALING)	Tenuta ad otturatore (Poppet sealing)
<b>04</b>	MOLLA (SPRING)	5 bar (72,5 PSI)
		8 bar (116 PSI)

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

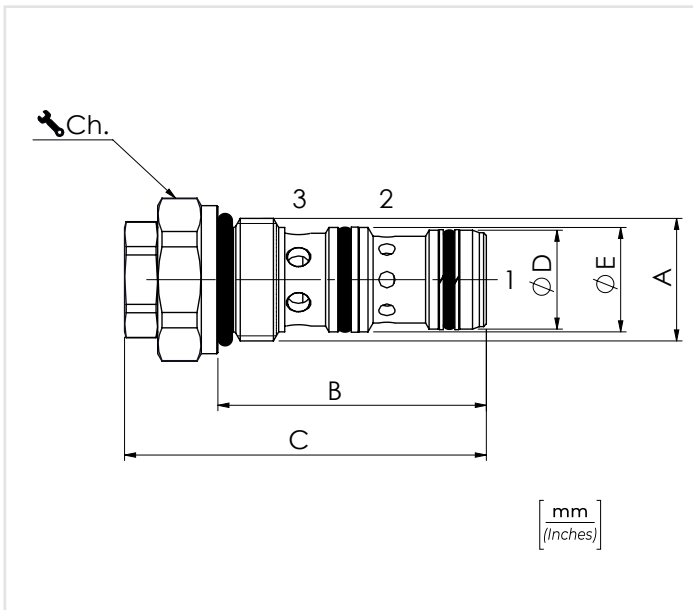
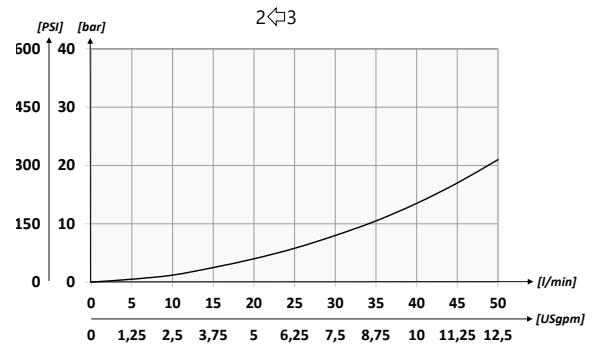
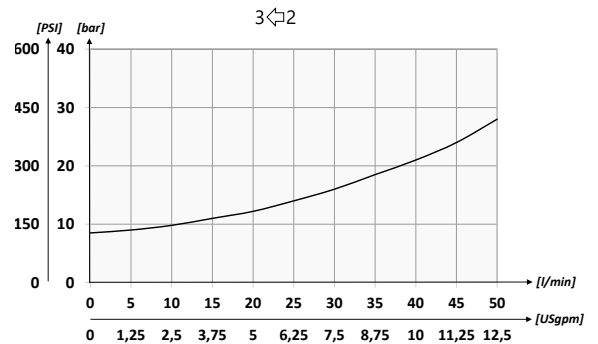


### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> <b>-4°F +176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> <b>-4°F +122°F</b>

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

### PERFORMANCES



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

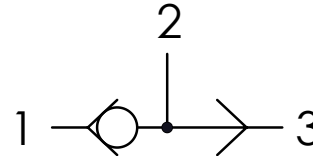
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	PESO APPROX APPROX WEIGHT kg-lbt	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	RAPPORTO DI PILOTAGGIO PILOT RATIO	CAVITÀ CAVITY	Ch. Key
VPR22	M22x1,5	50 (13,3)	350 (5075)	48,6 (1.91)	65,5 (2.58)	17,9 (0.70)	18,9 (0.74)	0,14 (0.30)	44-50 (32-37)	1:2,5	C2215/3	27



		01	02
<b>CODICE ORDINAZIONE</b> ORDERING CODE		<b>SV</b>	

<b>01</b>	VALVOLE SELETTRICI (LOAD SHUTTLE - BALL VALVES)	<b>SV</b>
<b>02</b>	DIMENSIONE (SIZE)	<b>08</b>
		<b>10</b>

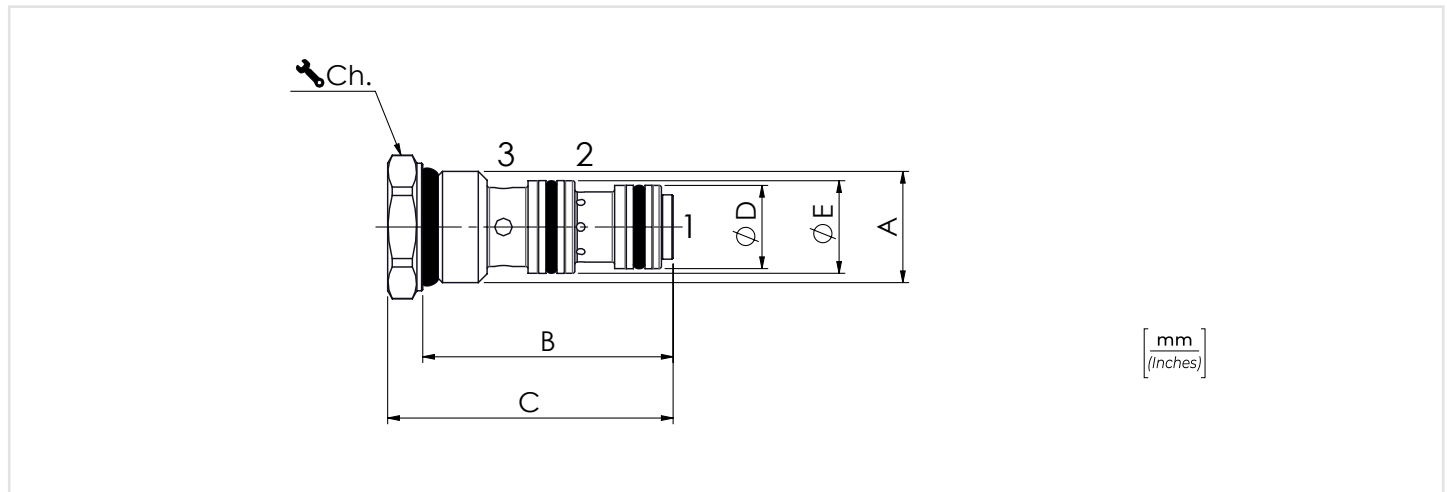
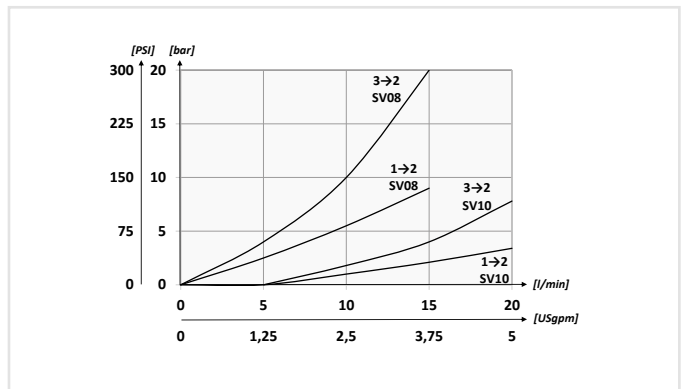
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	U	V	D	E	PESO APPROX APPROXWEIGHT kg-lbt	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	CAVITÀ CAVITY	Ch. Key
SV08	3/4-16UNF	15 (4)	350 (5075)	41 (1.61)	49 (1.93)	14,2 (0.56)	15,8 (0.62)	0,07 (0.15)	25-30 (19-22)	SAE8/3	22
SV10	7/8 - 14UNF	30 (7.9)		47 (1.85)	55 (2.17)	15,8 (0.62)	17,4 (0.69)	0,10 (0.22)	41-47 (30-35)	SAE10/3	27





# BASI E BLOCCHI

## HYDRAULIC MANIFOLDS

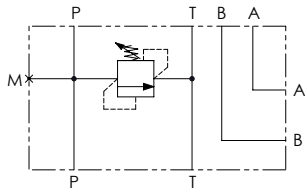
Basi CETOP in alluminio; singole CETOP 3 con porte laterali o posteriori; singole CETOP 5 o multiple con circuito in parallelo; con o senza valvola limitatrice di pressione.

Aluminium Cetop bases; single Cetop 3 with lateral or rear parts; single Cetop 5 on multiple stages with parallel circuit; with or without pressure relief valve.





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

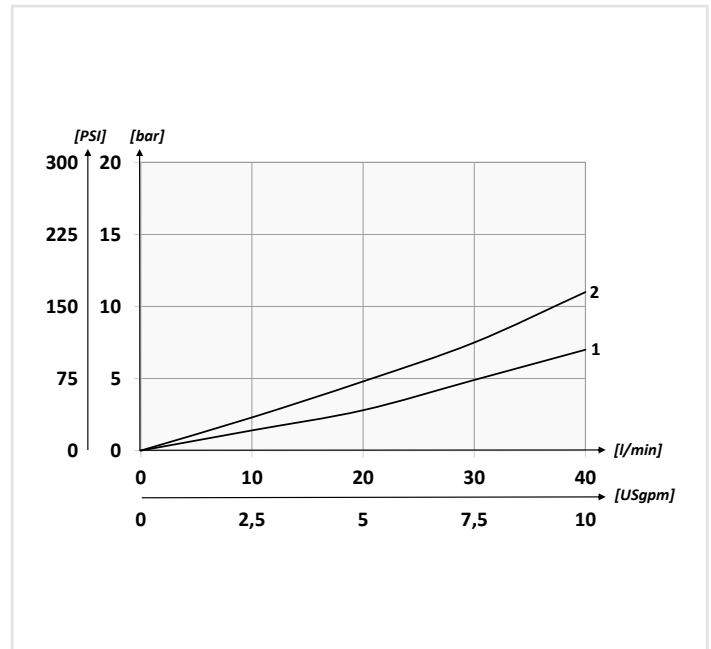


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03
<b>BS3</b>		

<b>01</b>	BASI SINGOLE CETOP3 IN ALLUMINIO - ATTACCHI LATERALI (ALUMINIUM CETOP3 SINGLE MANIFOLDS - LATERAL PORTS)	<b>BS3</b>
<b>02</b>	REGOLAZIONE (SETTING)	Chiave (Hex socket screw)
		Volantino (Handknob) Tipo (Type) <b>81300109</b>
<b>03</b>	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	<b>12 bar/al giro</b> (174 PSI/turn)
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>30 bar/al giro</b> (435 PSI/turn)

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	TIPO DI VALVOLA TYPE OF VALVE
<b>BS3</b>	<b>40</b> (10.6)	<b>210</b> (3045)	<b>0,8</b> (1.76)	<b>VMD40S</b>

#### ATTACCHI / PRESSURE DROPS

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

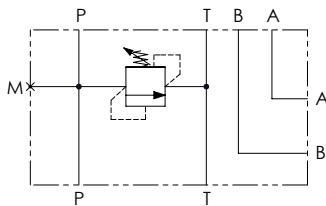
Il blocco in alluminio anodizzato nero può essere utilizzato per pressioni fino a 210 bar (3045 PSI)

Aluminium manifold black anodized can be suitable for pressures up to 210 bar (3045 PSI)

mm  
(inches)



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> <b>-4°F + 176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> <b>-4°F + 122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

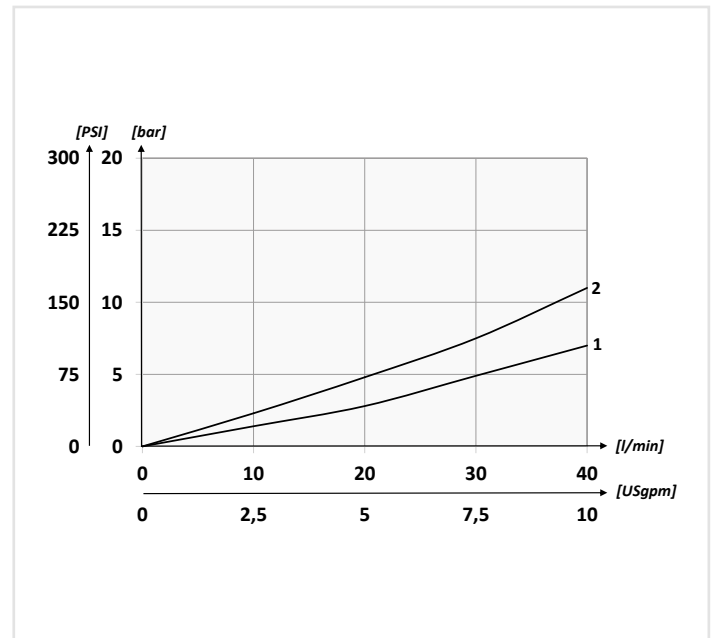
TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	TIPO DI VALVOLA TYPE OF VALVE
<b>BP3</b>	<b>40</b> (10.6)	<b>210</b> (3045)	<b>0,72</b> (1.58)	<b>VMD40S</b>

### CODICE ORDINAZIONE ORDERING CODE

01	02	03
<b>BP3</b>		

<b>01</b>	BASI SINGOLE CETOP3 IN ALLUMINIO ATTACCHI POSTERIORI (ALUMINIUM CETOP3 SINGLE MANIFOLDS - REAR PORTS)	<b>BP3</b>
<b>02</b>	REGOLAZIONE (SETTING)	Chiave (Screw)
		Volantino (Handknob) Tipo (Type) <b>81300109</b>
<b>03</b>	MOLLA (SPRING) <b>10/90 bar</b> (145/1305 PSI)	<b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>2</b>

### PERFORMANCES



**ATTACCHI - PRESSURE DROPS**

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

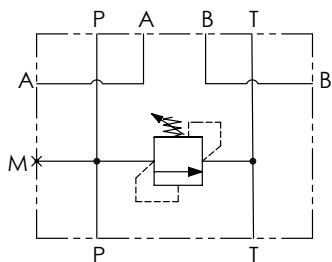
**Il blocco in alluminio anodizzato nero può essere utilizzato per pressioni fino a 210 bar (3045 PSI)**

Aluminium manifold black anodized can be suitable for pressures up to 210 bar (3045 PSI)





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### CODICE ORDINAZIONE ORDERING CODE

01	02	03
<b>BS5</b>		

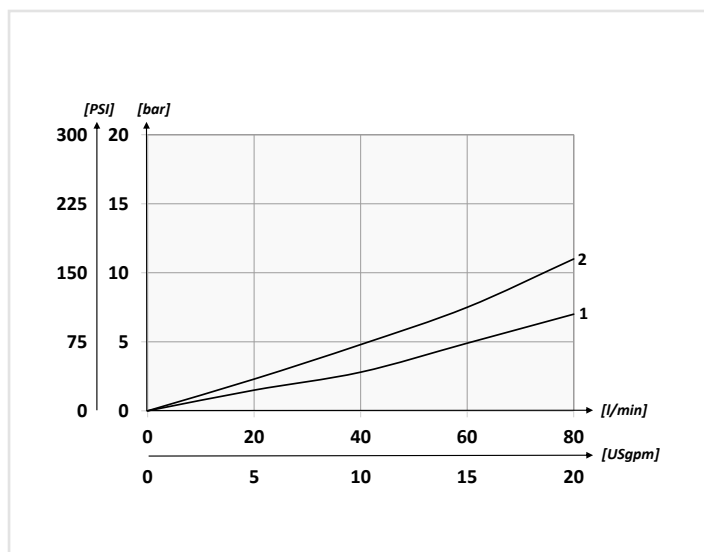
<b>01</b>	BASI SINGOLE CETOP5 IN ALLUMINIO (ALUMINIUM CETOP5 SINGLE MANIFOLDS)	<b>BS5</b>
<b>02</b>	REGOLAZIONE (SETTING)	Chiave (Screw) <b>C</b>
		Volantino (Handknob) Tipo (Type) <b>V</b> <b>81300023</b>
<b>03</b>	MOLLA (SPRING) <b>10/100 bar</b> (145/1450 PSI)	<b>1</b>
	MOLLA (SPRING) <b>20/210 bar</b> (290/3045 PSI)	<b>2</b>

### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
Viscosità olio - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
Temperatura dell'olio - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
Temperatura ambiente - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F

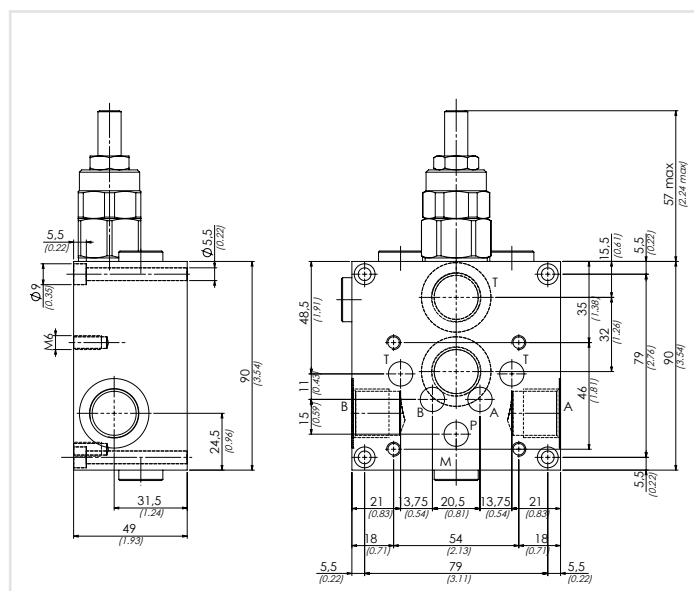
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)  
It is necessary a filter use to protect the valve (advised filtration 15 µm)

### PERFORMANCES



### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	TIPO DI VALVOLA TYPE OF VALVE
<b>BS5</b>	<b>80</b> (21.1)	<b>210</b> (3045)	<b>1,20</b> (2.64)	<b>VMD90</b>



[ mm ]  
[ Inches ]

### ATTACCHI / PRESSURE DROPS

<b>P-T-A-B</b>	<b>BSPP 1/2</b>
<b>M</b>	<b>BSPP 1/4</b>

**Il blocco in alluminio anodizzato nero può essere utilizzato per pressioni fino a 210 bar (3045 PSI)**

Aluminium manifold black anodized can be suitable for pressures up to 210 bar (3045 PSI)



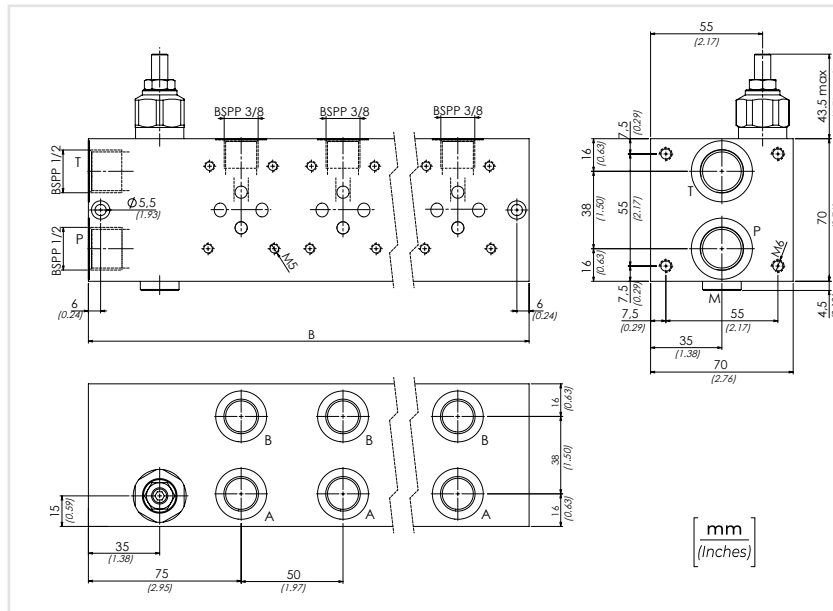
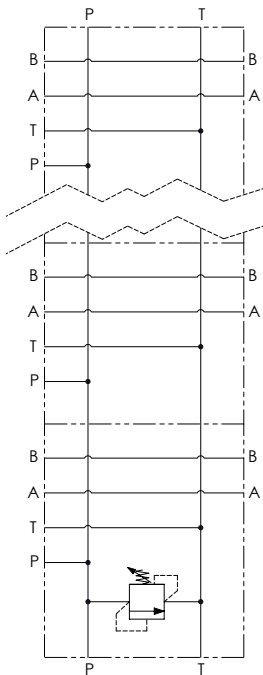
01 02 03 04 05

**CODICE ORDINAZIONE**  
ORDERING CODE

<b>BM</b>		<b>A</b>		
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<b>01</b>	BASI SI IN PARALLELO IN ALLUMINIO UTILIZZI LATERALI CON VALVOLA DI MASSIMA (ALUMINIUM PARALLEL MULTIPLE MANIFOLDS - LATERAL PORTS WITH RELIEF VALVES)	<b>BM</b>
<b>02</b>	NUMERO DI STAZIONI (NUMBER OF STATIONS)	<b>2</b> <b>3</b> <b>4</b> <b>5</b> <b>6</b> <b>7</b> <b>8</b>
<b>03</b>	ALLUMINIO (ALUMINIUM)	<b>A</b>
<b>04</b>	REGOLAZIONE (SETTING)	Chiave (Screw) Volantino (Handknob) Tipo (Type) <b>81300109</b> <b>V</b>
<b>05</b>	MOLLA (SPRING) <b>10/90 bar (145/1305 PSI)</b>	<b>1</b>
	MOLLA (SPRING) <b>20/210 bar (290/3045 PSI)</b>	<b>2</b>

**SCHEMA IDRAULICO**  
HYDRAULIC CIRCUIT



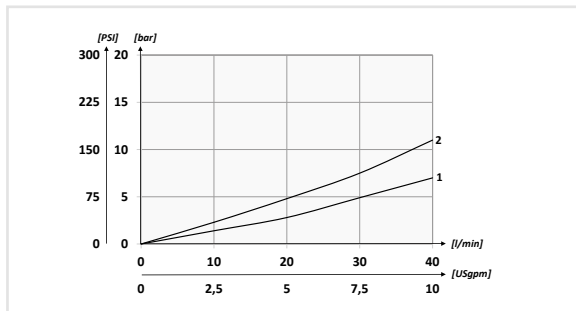
**ATTACCHI**  
PRESSURE DROPS

<b>P-T</b>	<b>BSP 1/2</b>
<b>M</b>	<b>BSP 1/4</b>
<b>A-B</b>	<b>BSP 3/8</b>

**Il blocco in alluminio anodizzato nero può essere utilizzato per pressioni fino a 210 bar (3045 PSI)**

Aluminium manifold black anodized can be suitable for pressures up to 210 bar (3045 PSI)

**PERFORMANCES**



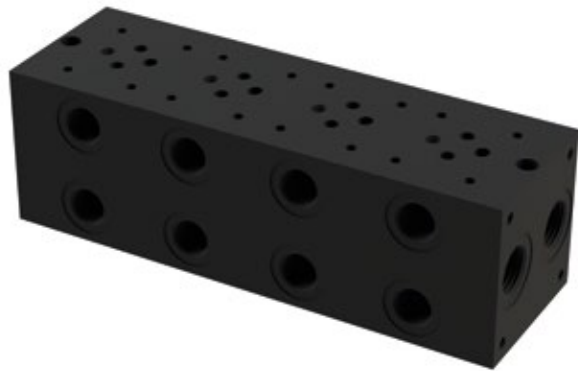
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro Max contamination index with filter</b>	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>

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

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	N. DI STAZIONI N. OF STATIONS	B	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)	TIPO DI VALVOLA TYPE OF VALVE
<b>BM2-RV</b>	<b>2</b>	<b>160 (6.30)</b>	<b>40 (10.6)</b>	<b>210 (3045)</b>	<b>2,1 (4.6)</b>	<b>VMD40S</b>
<b>BM3-RV</b>	<b>3</b>	<b>210 (8.27)</b>			<b>2,7 (6)</b>	
<b>BM4-RV</b>	<b>4</b>	<b>260 (10.24)</b>			<b>3,3 (7.3)</b>	
<b>BM5-RV</b>	<b>5</b>	<b>310 (12.20)</b>			<b>3,9 (8.6)</b>	
<b>BM6-RV</b>	<b>6</b>	<b>360 (14.17)</b>			<b>4,5 (10)</b>	
<b>BM7-RV</b>	<b>7</b>	<b>410 (16.14)</b>			<b>5,3 (11,7)</b>	
<b>BM8-RV</b>	<b>8</b>	<b>460 (18.11)</b>			<b>5,9 (13)</b>	

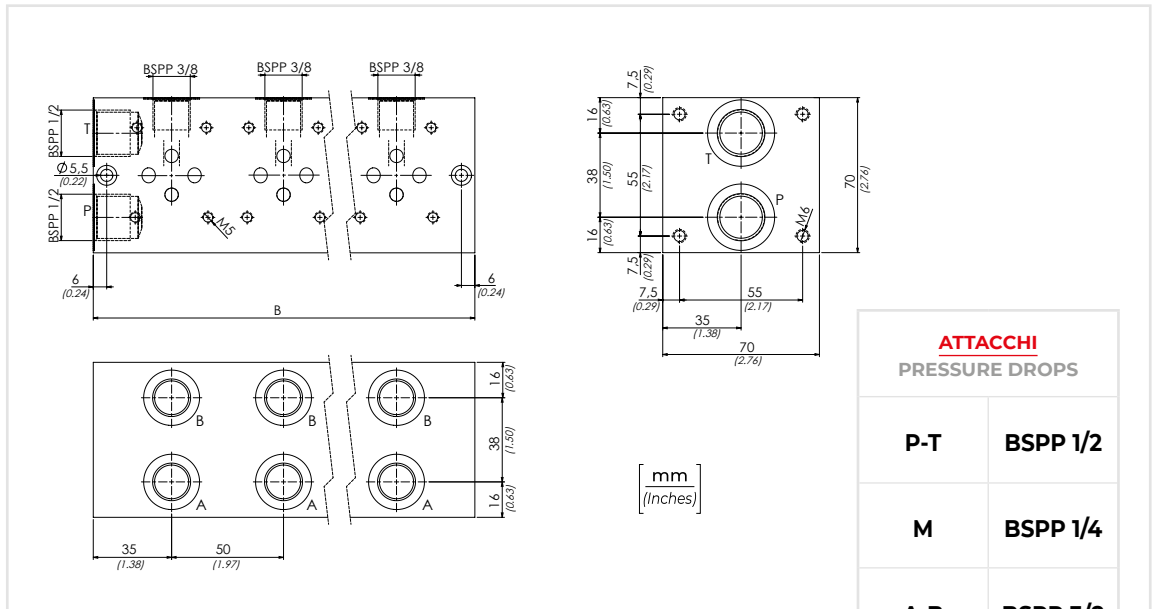
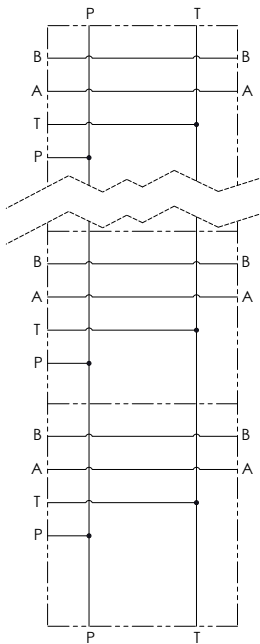


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>BM</b>		<b>A</b>

<b>01</b>	BASI MULTIPLE IN PARALLELO IN ALLUMINIO UTILIZZI LATERALI SENZA VALVOLA DI MASSIMA (ALUMINIUM PARALLEL MULTIPLE MANIFOLDS - LATERAL PORTS WITHOUT RELIEF VALVES)	<b>BM</b>
<b>02</b>	NUMERO DI STAZIONI (NUMBER OF STATIONS)	<b>2</b> <b>3</b> <b>4</b> <b>5</b> <b>6</b> <b>7</b> <b>8</b>
<b>03</b>	ALLUMINIO (ALUMINIUM)	<b>A</b>

**SCHEMA IDRAULICO**  
HYDRAULIC CIRCUIT



**ATTACCHI**  
PRESSURE DROPS

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

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

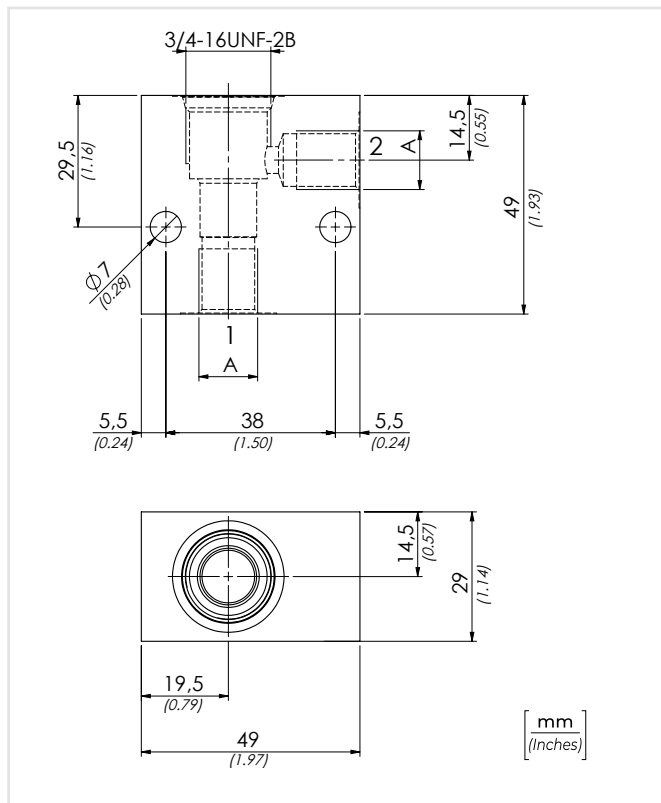
**Il blocco in alluminio anodizzato nero può essere utilizzato per pressioni fino a 210 bar (3045 PSI)**

Aluminium manifold black anodized can be suitable for pressures up to 210 bar (3045 PSI)

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

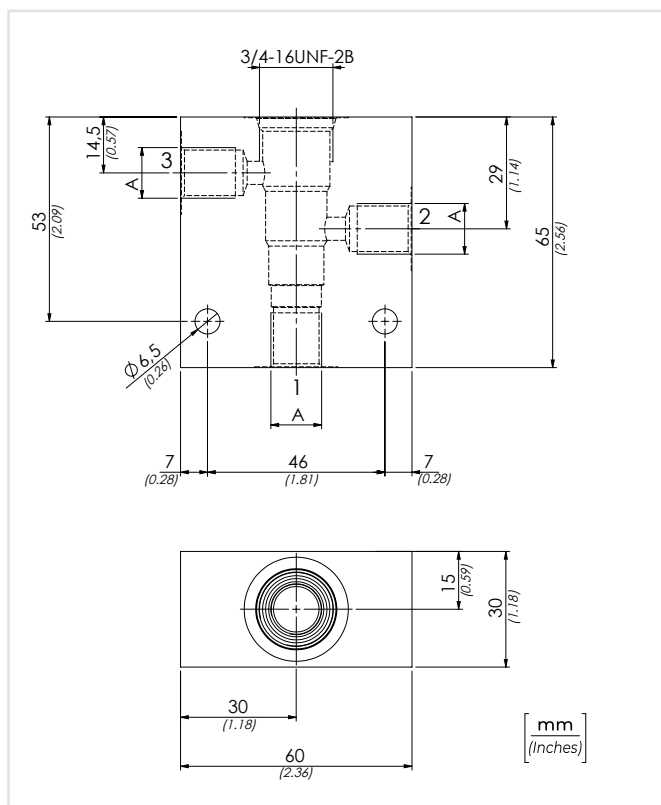
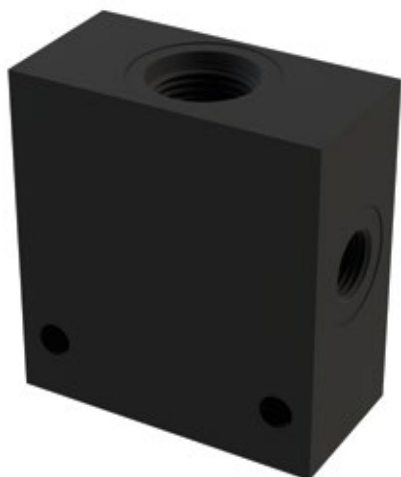
TIPO TYPE	N. DI STAZIONI N. OF STATIONS	B	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)
<b>BM2</b>	<b>2</b>	<b>120</b> (4.72)	<b>40</b> (10.6)	<b>210</b> (3045)	<b>1,5</b> (3.30)
<b>BM3</b>	<b>3</b>	<b>170</b> (6.69)			<b>2,1</b> (4.62)
<b>BM4</b>	<b>4</b>	<b>220</b> (8.66)			<b>2,7</b> (5.95)
<b>BM5</b>	<b>5</b>	<b>270</b> (10.63)			<b>3,3</b> (7.27)
<b>BM6</b>	<b>6</b>	<b>320</b> (12.60)			<b>3,9</b> (8.59)
<b>BM7</b>	<b>7</b>	<b>370</b> (14.57)			<b>4,6</b> (10.12)
<b>BM8</b>	<b>8</b>	<b>320</b> (18.53)			<b>5,2</b> (11.44)

## SAE8/2



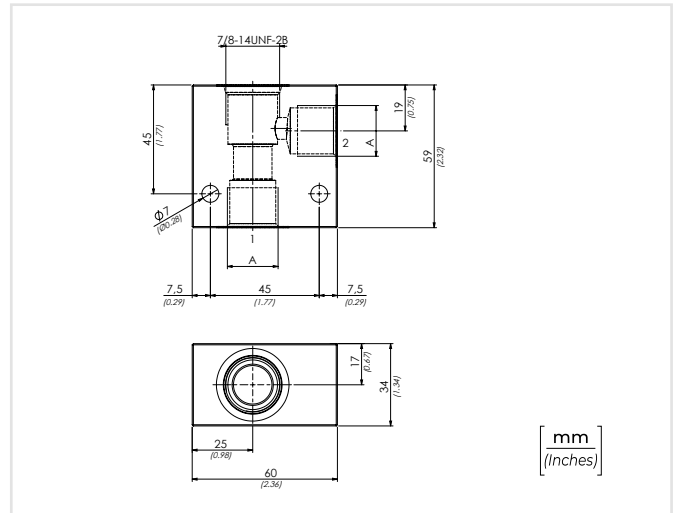
CODICE CODE	MATERIALE MATERIAL	TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	A	PRESSIONE MAX MAX PRESSURE bar - PSI	PESO APPROX APPROX WEIGHT kg-lbt
62200032	Acciaio Steel	Zincatura Zinc-plating	BSPP 1/4	350 (5075)	0,44 (0.97)
62200051			BSPP 3/8		0,43 (0.95)

## SAE8/3



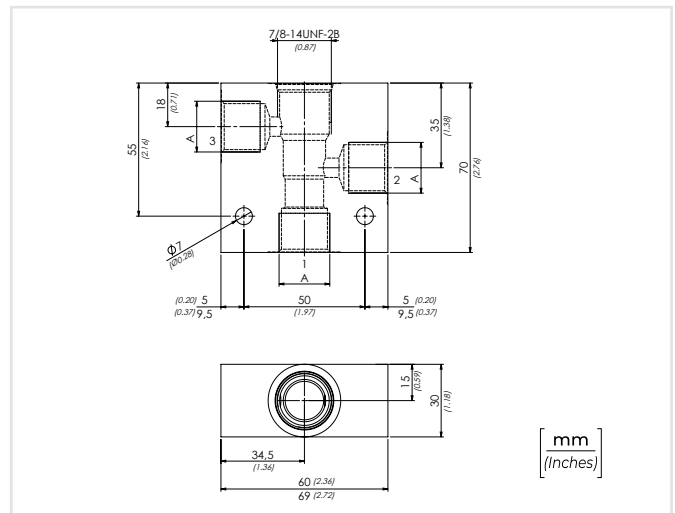
CODICE CODE	MATERIALE MATERIAL	TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	A	PRESSIONE MAX MAX PRESSURE bar - PSI	PESO APPROX APPROX WEIGHT kg-lbt
62200357	Alluminio Aluminium	Anodizzazione nera Black anodizing	BSPP 1/4	210 (3045)	0,28 (0.62)
62200358			BSPP 3/8		0,27 (0.60)

## SAE10/2



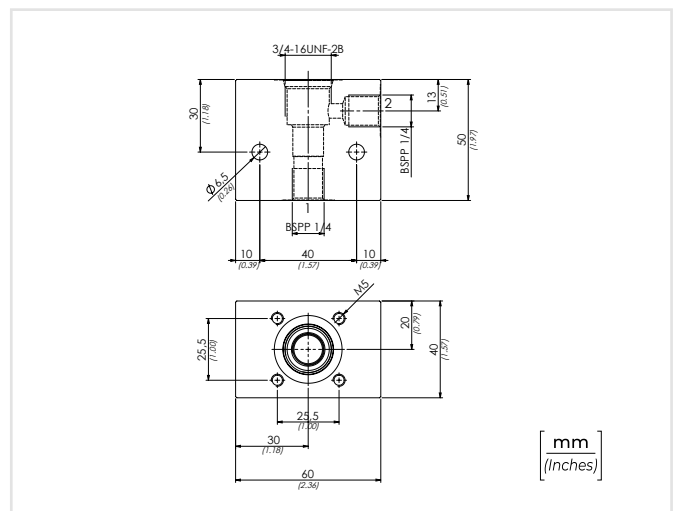
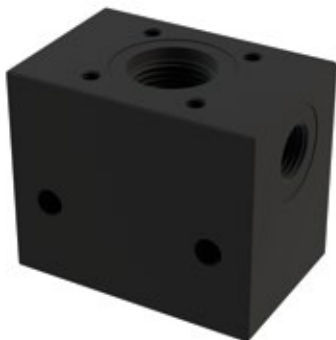
CODICE CODE	MATERIALE MATERIAL	TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	A	PRESSIONE MAX MAX PRESSURE bar - PSI	PESO APPROX APPROX WEIGHT kg-lbt
62200451	Acciaio Steel	Zincatura Zinc-plating	BSPP 3/8	350 (5075)	0,77 (170)
62200452	Steel	Zinc-plating	BSPP 1/2		0,73 (1.61)

## SAE10/3

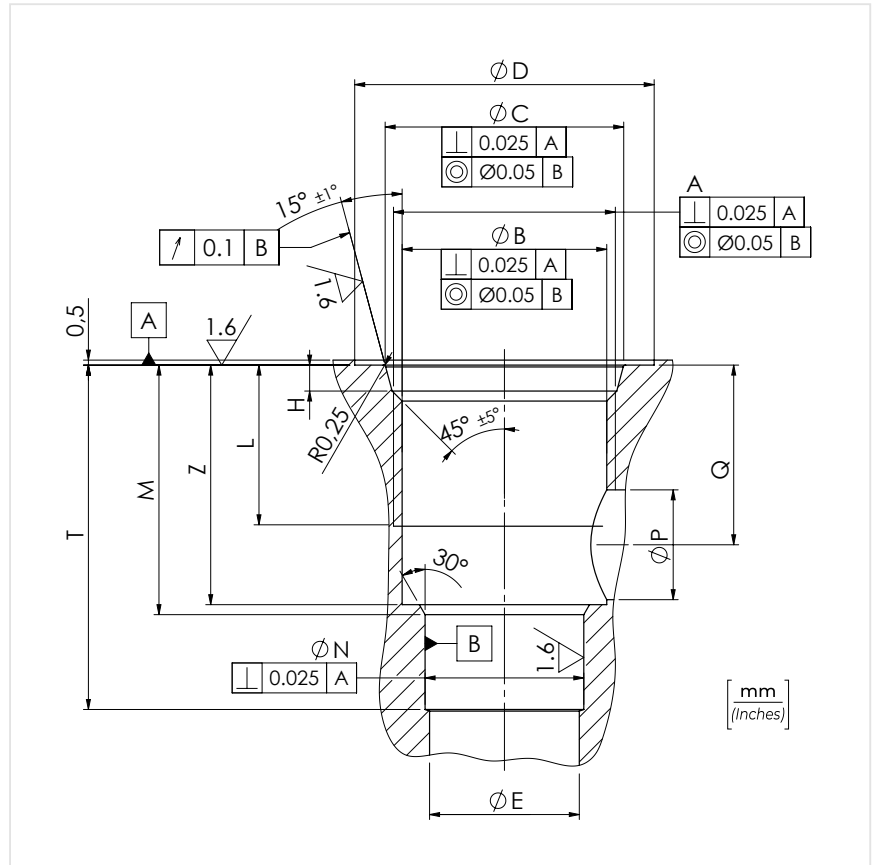


CODICE CODE	MATERIALE MATERIAL	TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	A	PRESSIONE MAX MAX PRESSURE bar - PSI	PESO APPROX APPROX WEIGHT kg-lbt
62200373	Alluminio Aluminium	Anodizzazione nera Black anodizing	BSPP 3/8	210 (3045)	0,26 (0.57)
62200374	Aluminium	Black anodizing	BSPP 1/2		0,31 (0.68?)

## PME5/6/7

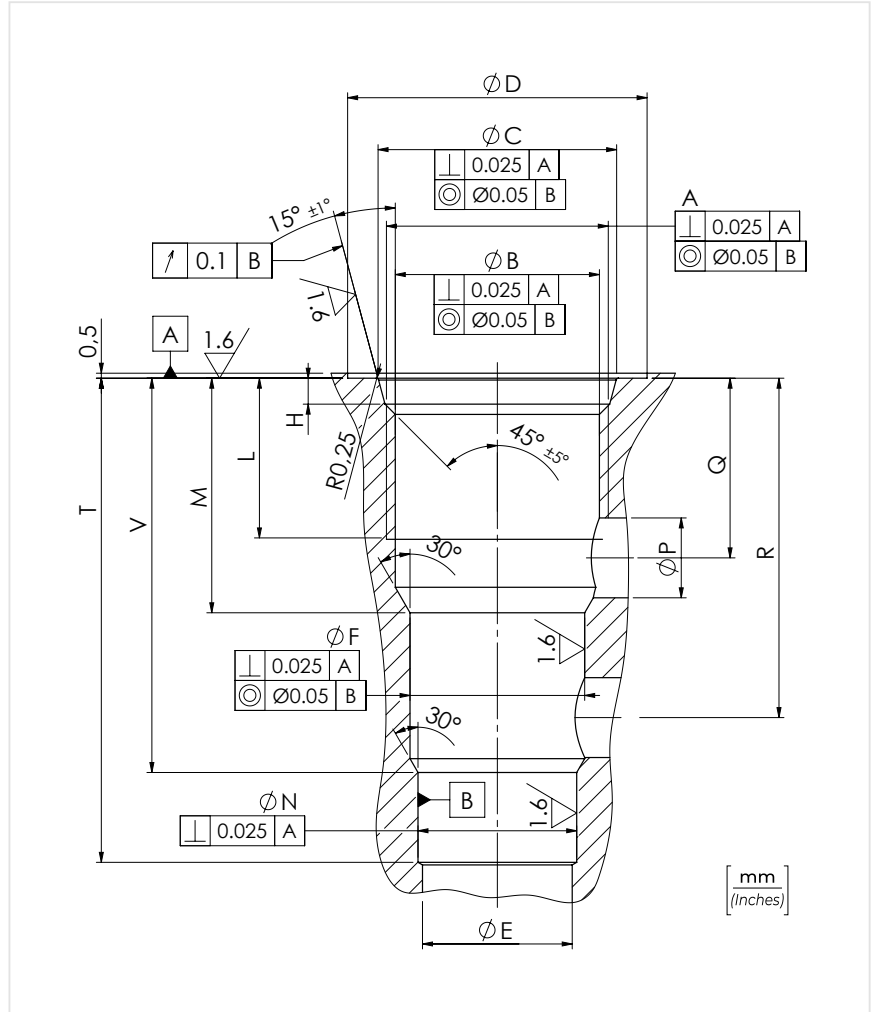
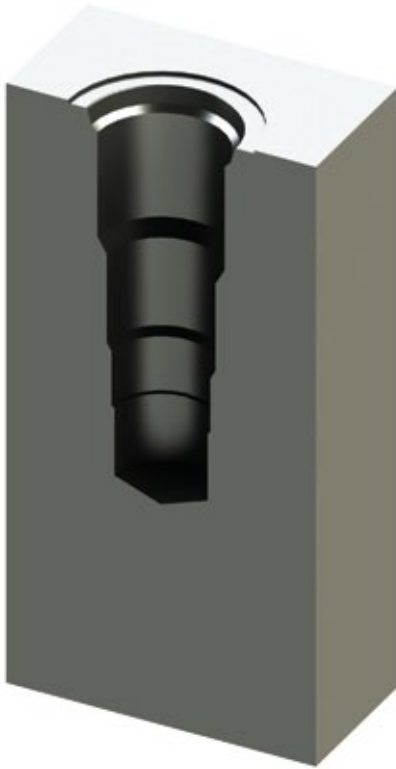


CODICE CODE	MATERIALE MATERIAL	TRATTAMENTO SUPERFICIALE SURFACE TREATMENT	PRESSIONE MAX MAX PRESSURE bar - PSI	PESO APPROX APPROX WEIGHT kg-lbt
62200023	Alluminio Aluminium	Anodizzazione nera Black anodizing	210 (3045)	0,3 (0.66)



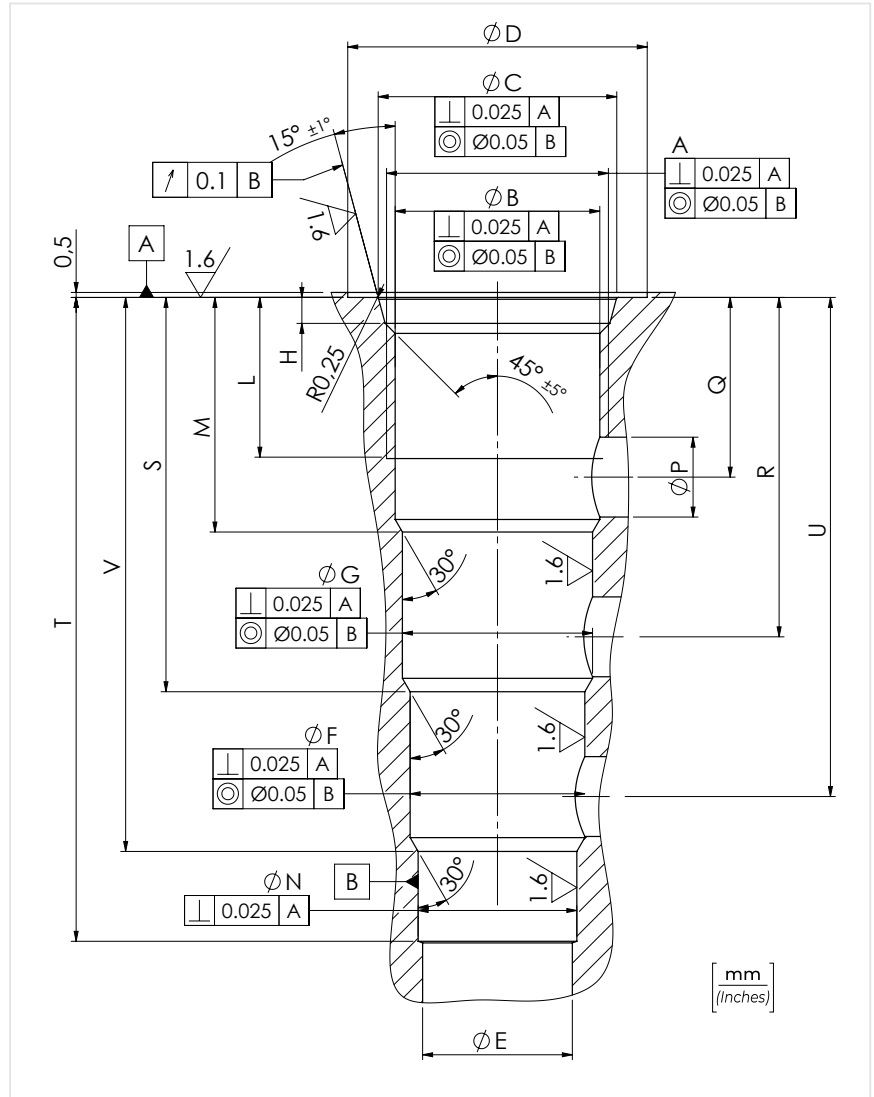
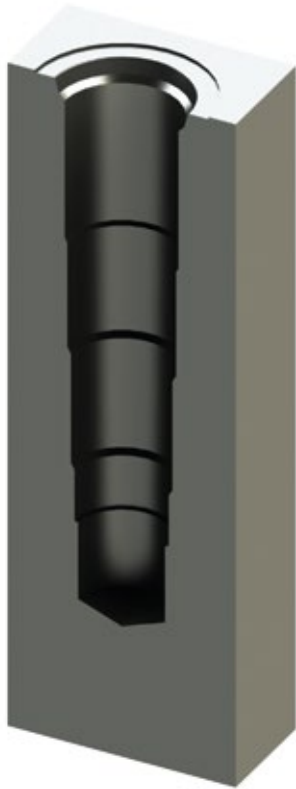
## DIMENSIONI / DIMENSIONS

TIPO TYPE	A	B 0 + 0,1	C 0 + 0,1	D 0 + 0,5	E Ø max	H 0 + 0,3	L	M 0 - 0,2	N 0 + 0,05	P	Q	T 0 + 0,5	Z 0 + 0,1
SAE08/2	3/4-16UNF-2B	17,4 0.69	20,6 0.81	27 1.06	12 0.47	2,6 0.10	13 0.51	20,50 0.81	12,7 0.5	9 0.35	14 0.55	19,5 0.77	18,5 0.73
SAE10/2	7/8-14UNF-2B	20,5 0.81	23,9 0.94	30 1.18	15 0.59	2,6 0.10	16 0.63	25,5 1.00	15,9 0.63	11 0.43	18 0.71	34,5 1.36	24 0.94
SAE12/2	1-1/16-12UNF-2B	24,9 0.98	29,2 1.15	38 1.50	19 0.75	3,3 0.13	20 0.79	36,5 1.44	22,2 0.87	14 0.55	26 1.02	48 1.89	35,5 1.40
SAE16/2	1-5/16-12UNF-2B	31,3 1.25	35,5 1.40	45 1.77	24 0.94	3,3 0.13	20 0.79	36 1.42	28,6 1.13	14 0.55	25 0.98	49 1.93	35 1.38



## DIMENSIONI / DIMENSIONS

TIPO TYPE	A	B 0 + 0,1	C 0 + 0,1	D 0 + 0,5	E Ø max	F 0 + 0,05	H 0 + 0,3	L	M 0 - 0,2	N 0 + 0,05	P	Q	R	T 0 + 0,5	V ± 0,1
SAE08/3	3/4-16UNF-2B	17,4 0.69	20,6 0.81	27 1.06	12 0.47	15,9 0.63	2,6 0.10	13 0.51	19,5 0.77	14,3 0.56	6 0.24	15 0.59	29 1.14	43 1.69	33,5 1.32
SAE10/3	7/8-14UNF-2B	20,5 0.81	23,9 0.94	30 1.18	15 0.59	17,5 0.69	2,6 0.10	16 0.63	23,5 0.93	15,9 0.63	8 0.31	18 0.71	34 1.34	48,5 1.91	39,5 1.56
SAE12/3	1-1/16-12UNF-2B	24,9 0.98	29,2 1.15	38 1.50	19 0.75	23,8 0.94	3,3 0.13	20 0.79	36,5 1.44	22,2 0.87	14 0.55	28 1.10	53 2.09	73 2.87	61,5 2.42
SAE16/3	1-5/16-12UNF-2B	31,3 1.23	35,5 1.40	45 1.77	24 0.94	28,6 1.13	3,3 0.13	20 0.79	35,5 1.40	27 1.06	14 0.55	25,5 1,00	54 2.13	75 2.95	64 2.52



## DIMENSIONI / DIMENSIONS

TIPO TYPE	A	B 0 + 0,1	C 0 + 0,1	D 0 + 0,5	E	F 0 + 0,05	G 0 + 0,05	H 0 + 0,3	L	M 0 - 0,2	N 0 + 0,05	P	Q	R	S ± 0,1	T 0 + 0,5	U	V ± 0,1
SAE08/4	3/4-16UNF-2B	17,4 0.69	20,6 0.81	27 1.06	12 0.47	14,3 0.56	15,9 0.63	2,6 0.10	13 0.51	19,5 0.77	12,7 0.50	6 0.24	15 0.59	29 1.14	33,5 1.32	56 2.20	43 1.69	47,5 1.87
SAE10/4	7/8-14UNF-2B	20,5 0.81	23,9 0.94	30 1.18	15 0.59	17,5 0.69	19,05 0.75	2,6 0.10	16 0.63	23,5 0.93	15,9 0.63	8 0.31	18 0.71	34 1.34	39,5 1.56	64,5 2.54	50 1.97	55,5 2.19
SAE12/4	1-1/16-12UNF-2B	24,9 0.98	29,2 1.15	38 1.50	19 0.75	22,2 0.87	23,8 0.94	3,3 0.13	20 0.79	36,5 1.44	20,6 0.81	14 0.55	28 1.1	53 2.09	61,5 2.42	99 3.90	78 3.07	87,5 3.44
SAE16/4	1-5/16-12UNF-2B	31,3 1.23	35,5 1.40	45 1.77	24 0.94	27 1.06	28,6 1.13	3,3 0.13	20 0.79	35,5 1.40	25,4 1.00	16 0.63	25 0.98	53,5 2.11	64 2.52	92,5 3.64	82 3.23	92,5 3.64









# POMPE E DEVIATORI

## HAND PUMPS AND FLOW DIVERTERS

Pompe oleodinamiche a mano in diversi layout e cilindrata, serbatoi in acciaio e alluminio, deviatori di flusso a 3 vie, a 4 vie, a 6 vie e a 8 vie.

Hand pump with many layout and displacement, aluminium or steel tanks, flow diverters 3, 4, 6 and 8 ways.





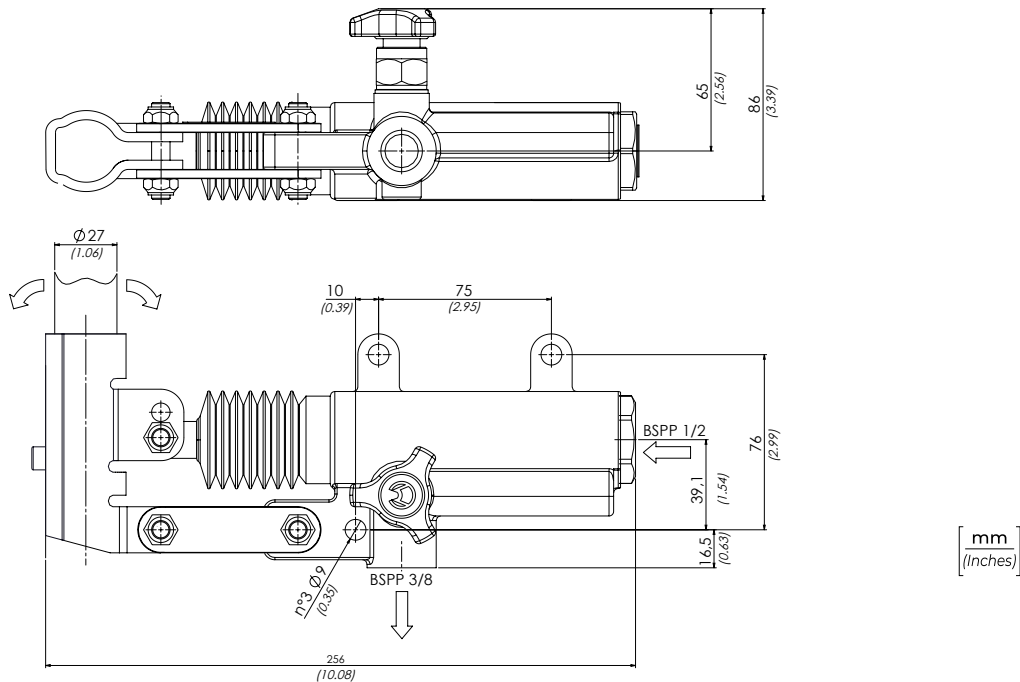
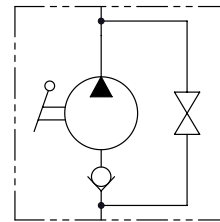
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>PM20</b>	

<b>01</b>	POMPA A MANO SEMPLICE EFFETTO (DOUBLE PUMPING HAND PUMP FOR SINGLE ACTING CYLINDER)	<b>PM20</b>
<b>02</b>	OPTIONAL	
	Con soffietto (With rubber protection)	<b>P</b>
	Senza rubinetto di scarico con valvola di massima (Without unloading valve With relief valves)	<b>WRV</b>
	Senza rubinetto di scarico (Without unloading valve)	<b>W</b>
	Con joystick (With joystick)	<b>J</b>
	Con leva di scarico Ø 27 mm (With unloading lever Ø 1.06 inch)	<b>L</b>
	Con rubinetto di scarico e valvola di massima (With drain valve and relief valve)	<b>RRV</b>

LA POMPA VIENE FORNITA CON LEVA DI AZIONAMENTO L=600 mm  
THE PUMP IS SUPPLIED WITH ACTING LEVER 23,6 inch LONG

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



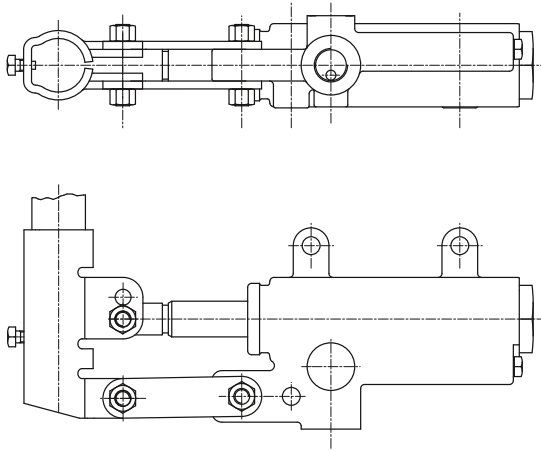
**DATI TECNICI / TECHNICAL DATA**

olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

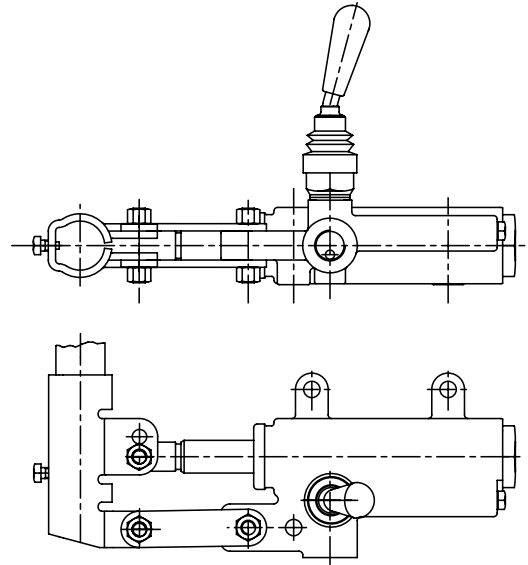
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	CILINDRATA (cm <sup>3</sup> ) DISPLACEMENT (in <sup>3</sup> )	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
PM20	20 (1.22)	150 (2175)	350 (5075)	3,4 (7.5)

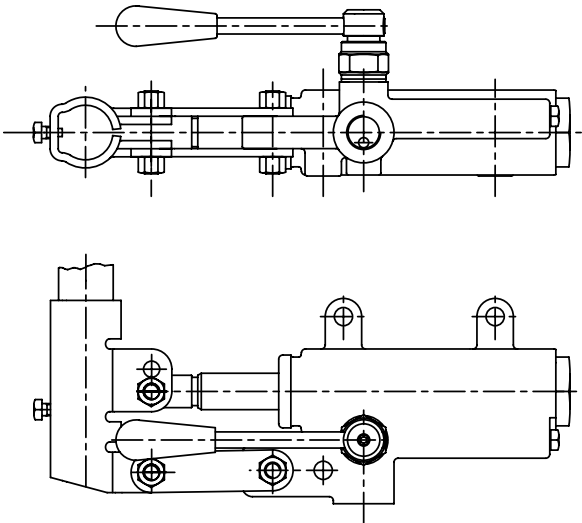
**W**



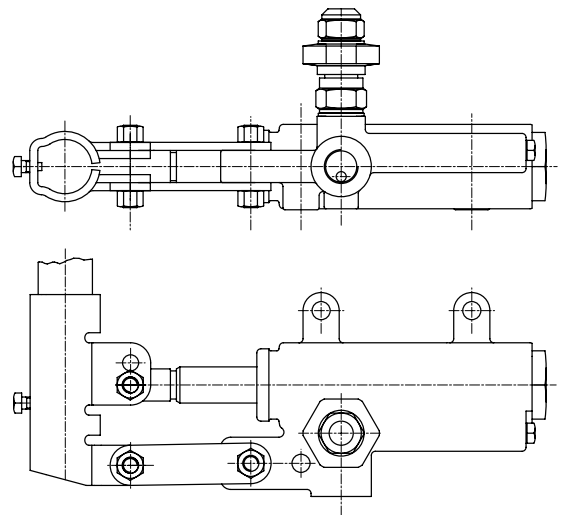
**J**



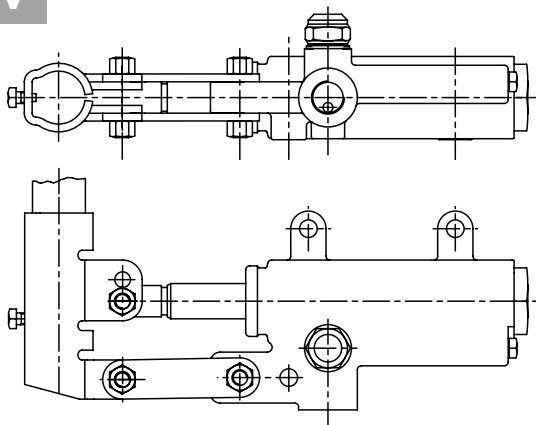
**L**



**RRV**

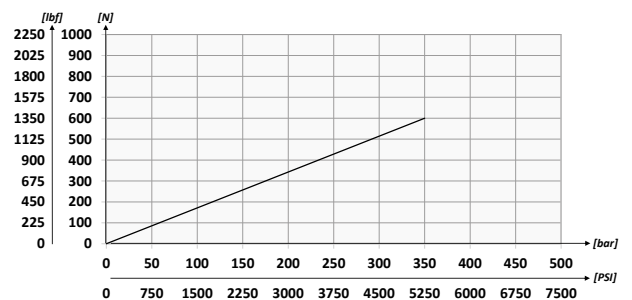


**WRV**



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

**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER





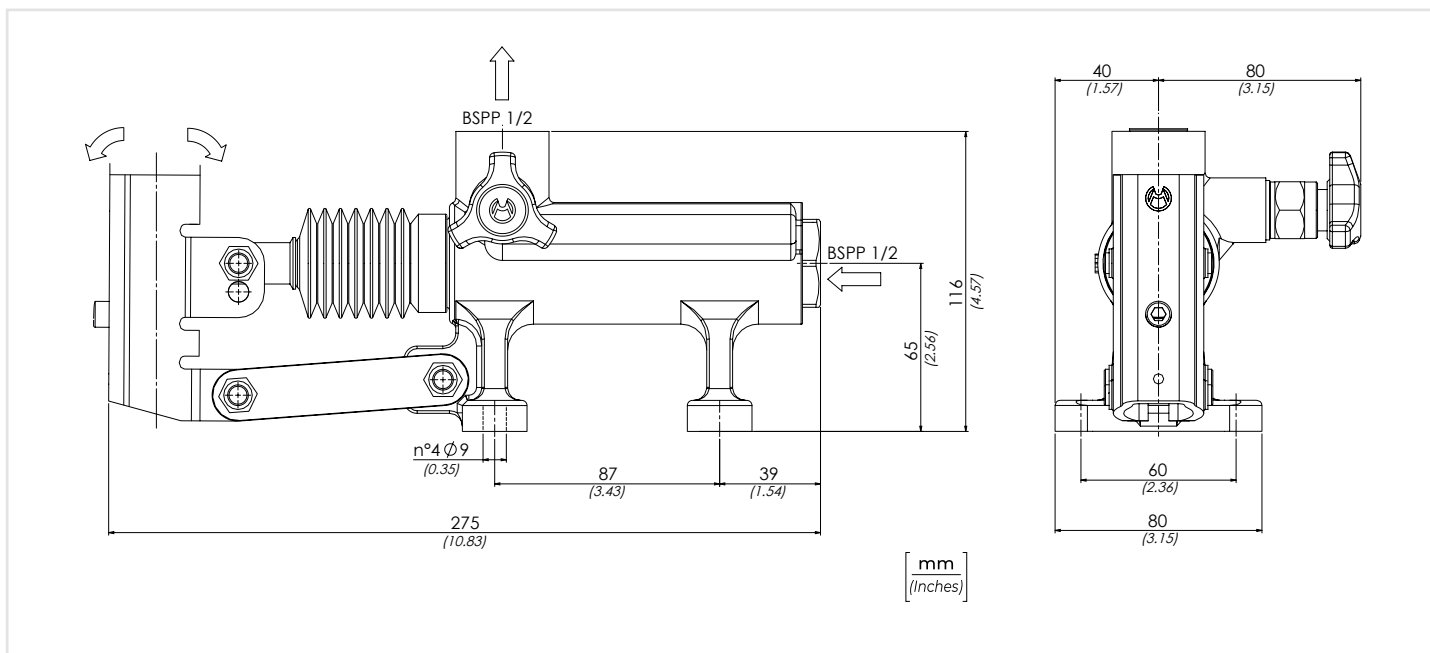
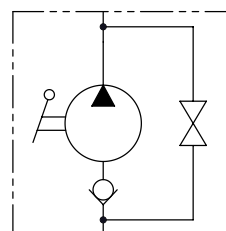
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>PM50</b>	

<b>01</b>	POMPA A MANO DOPPIO POMPAGGIO PER CILINDRO A SEMPLICE EFFETTO (DOUBLE PUMPING FOR SINGLE ACTING CYLINDER)	<b>PM50</b>	
<b>02</b>	OPTIONAL	Con soffiutto (With rubber protection)	<b>P</b>
		Senza rubinetto di scarico con valvola di massima (Without unloading valve With relief valves)	<b>WRV</b>
		Senza rubinetto di scarico (Without unloading valve)	<b>W</b>
		Con joystick (With joystick)	<b>J</b>
		Con leva di scarico Ø 27 mm (With unloading lever Ø 1.06 inch)	<b>L</b>
		Con rubinetto di scarico e valvola di massima (With unloading and relief valves)	<b>RRV</b>

LA POMPA VIENE FORNITA CON LEVA DI AZIONAMENTO L=600 mm  
THE PUMP IS SUPPLIED WITH ACTING LEVER 23,6 inch LONG

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



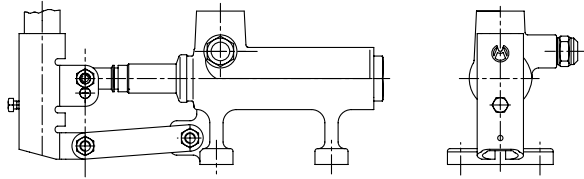
**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

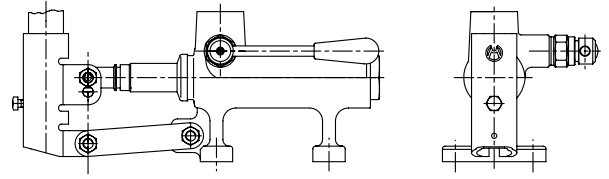
TIPO TYPE	CILINDRATA (cm <sup>3</sup> ) DISPLACEMENT (in <sup>3</sup> )	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
PM50	50 (3.05)	80 (1160)	280 (4060)	4,2 (9.25)

**WRV**

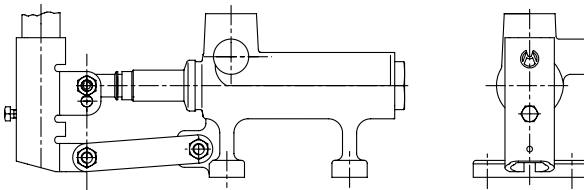


**Valvola di massima**    **Molla 40/350 bar**    **Taratura Standard 100 bar**  
Relief valve            Spring 580/5075 PSI    Standard Setting 1450 PSI

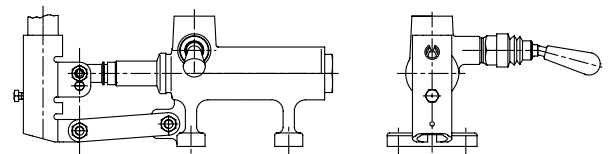
**L**



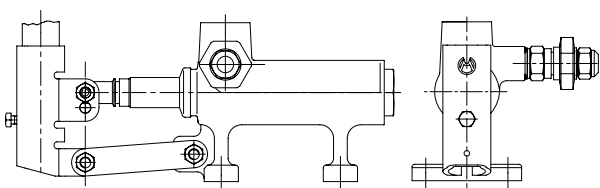
**W**



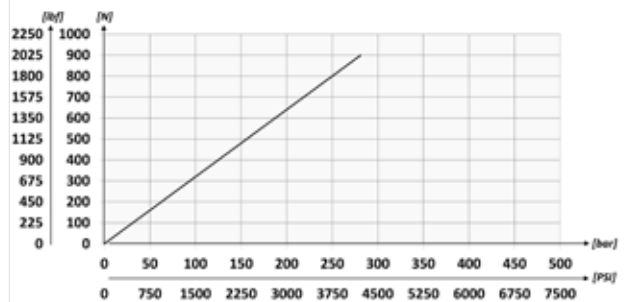
**J**



**RRV**



**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
**EFFORT OPERATING AT THE END OF THE LEVER**





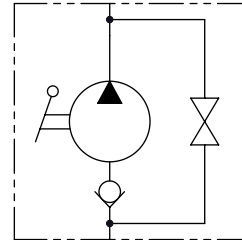


**CODICE ORDINAZIONE**  
ORDERING CODE

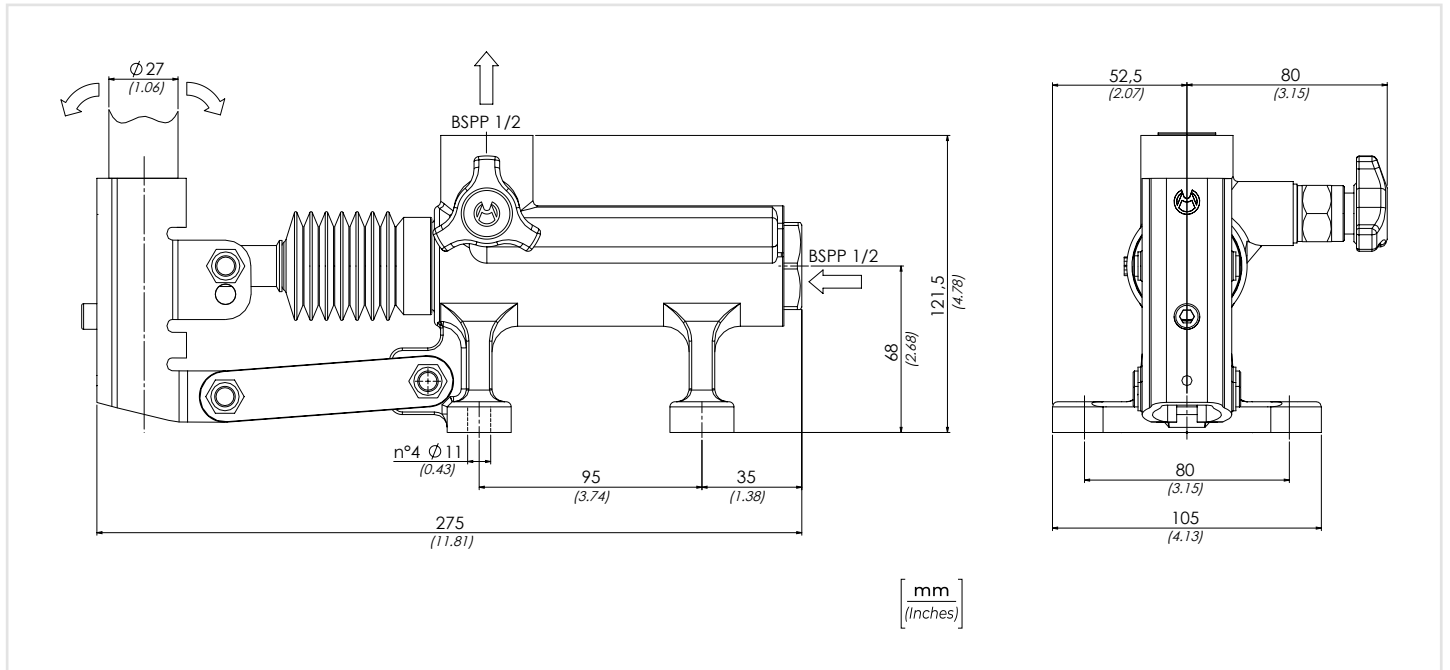
01	02
<b>PM70</b>	

<b>01</b>	POMPA A MANO DOPPIO POMPAGGIO PER CILINDRO A SEMPLICE EFFETTO (DOUBLE PUMPING HAND PUMPFOR SINGLE ACTING CYLINDER)	<b>PM70</b>	
<b>02</b>	OPTIONAL	Con soffietto (With rubber protection)	<b>P</b>
		Senza rubinetto di scarico con valvola di massima (Without unloading valve With relief valves)	<b>WRV</b>
		Senza rubinetto di scarico (Without unloading valve)	<b>W</b>
		Con joystick (With joystick)	<b>J</b>
		Con leva di scarico Ø 27 mm (With unloading lever Ø 1.06 inch)	<b>L</b>
		Con rubinetto di scarico e valvola di massima (With unloading and relief valves)	<b>RRV</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



LA POMPA VIENE FORNITA CON LEVA DI AZIONAMENTO L=600 mm  
THE PUMP IS SUPPLIED WITH ACTING LEVER 23,6 inch LONG



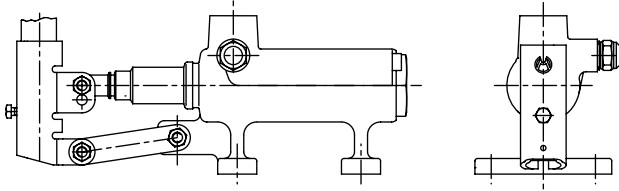
**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

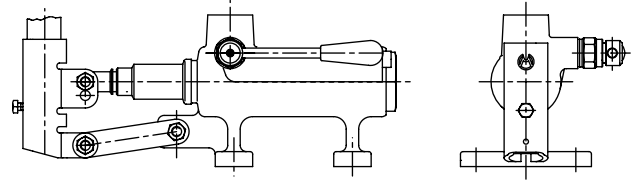
TIPO TYPE	CILINDRATA (cm <sup>3</sup> ) DISPLACEMENT (in <sup>3</sup> )	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
<b>PM70</b>	<b>70</b> (4.27)	<b>50</b> (725)	<b>200</b> (2900)	<b>5,6</b> (12.34)

**WRV**

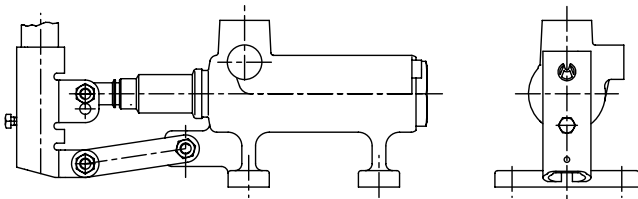


**Valvola di massima**    **Molla 40/350 bar**    **Taratura Standard 100 bar**  
Relief valve            Spring 580/5075 PSI    Standard Setting 1450 PSI

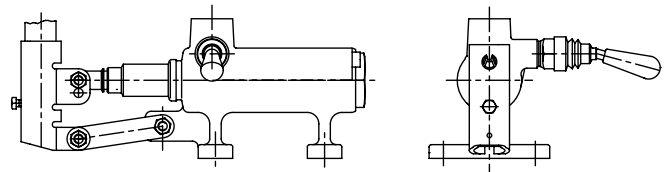
**L**



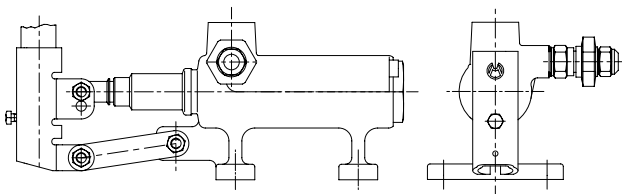
**W**



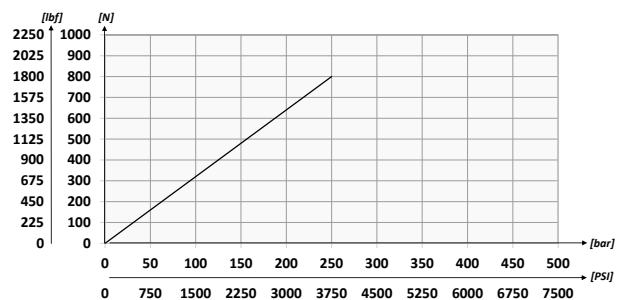
**J**



**RRV**



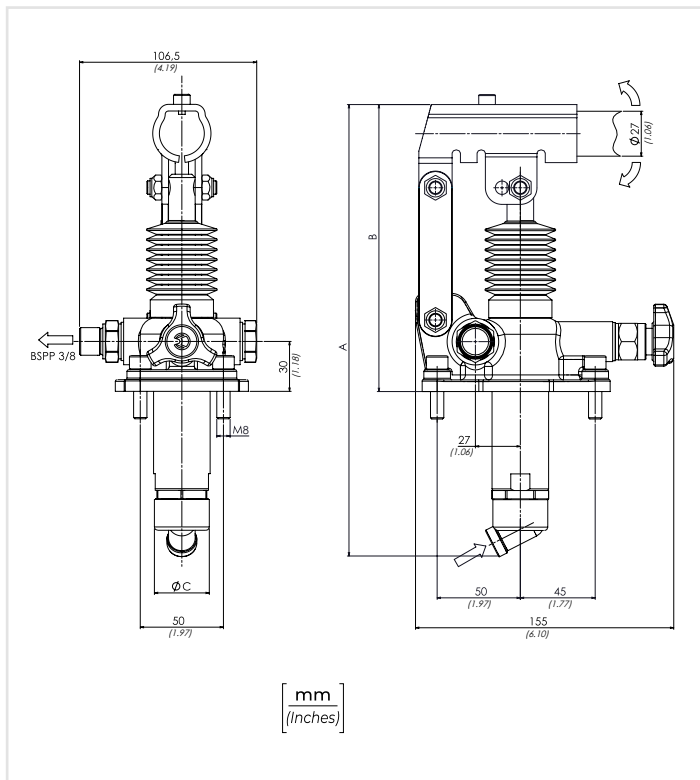
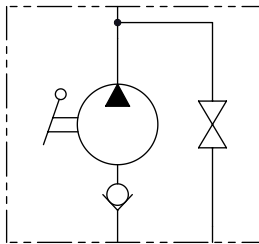
**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
**EFFORT OPERATING AT THE END OF THE LEVER**





**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 23.6 inch LONG**

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



CODICE ORDINAZIONE / ORDERING CODE		01	02	03	
<b>PMS</b>					
<b>01</b>	POMPA A MANO DOPPIO POMPAGGIO PER CILINDRO A SEMPLICE EFFETTO (DOUBLE PUMPING HAND PUMP FOR SINGLE ACTING CYLINDER)				<b>PMS</b>
	CILINDRATA (DISPLACEMENT)	A	B	C	
	<b>6 cm<sup>3</sup></b> (0.37 in <sup>3</sup> )	<b>253</b> (9.96)	<b>166</b> (6.54)	<b>34</b> (1.34)	<b>6</b>
<b>02</b>	<b>12 cm<sup>3</sup></b> (0.73 in <sup>3</sup> )	<b>253</b> (9.96)	<b>166</b> (6.54)	<b>34</b> (1.34)	<b>12</b>
	<b>25 cm<sup>3</sup></b> (1.53 in <sup>3</sup> )	<b>273</b> (10.75)	<b>172</b> (6.77)	<b>34</b> (1.34)	<b>25</b>
	<b>45 cm<sup>3</sup></b> (2.75 in <sup>3</sup> )	<b>283</b> (11.14)	<b>172</b> (6.77)	<b>40</b> (1.57)	<b>45</b>
	Con soffiETTO (With rubber protection)				<b>P</b>
	Senza rubinetto di scarico con valvola di massima (Without unloading valve With relief valves)				<b>WRV</b>
	Senza rubinetto di scarico (Without unloading valve)				<b>W</b>
	Con joystick (With joystick)				<b>J</b>
<b>03</b>	OPTIONAL				
	Con leva di scarico Ø 27 mm (With unloading lever Ø 1.06 inch)				<b>L</b>
	Con valvola di massima pressione (With relief valves)				<b>RV</b>
	Con joystick e valvola di massima pressione (With joystick and relief valve)				<b>JRV</b>
	Con leva di scarico e valvola di massima pressione (With unloading lever and relief valves)				<b>LRV</b>

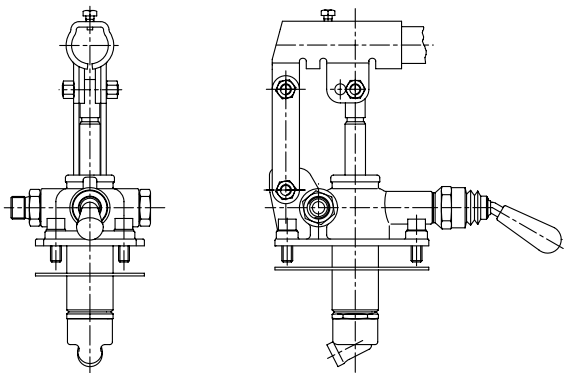
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO / TYPE	PRESSIONE OTTIMALE / OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX / MAX PRESSURE bar-PSI	PESO APPROX / APPROX WEIGHT kg-lbt
<b>PMS6</b>	<b>420</b> (6090)	<b>500</b> (7250)	<b>3,7</b> (8.15)
<b>PMS12</b>	<b>220</b> (3190)	<b>380</b> (5510)	
<b>PMS25</b>	<b>120</b> (1740)	<b>350</b> (5075)	
<b>PMS45</b>	<b>80</b> (1160)	<b>280</b> (4060)	

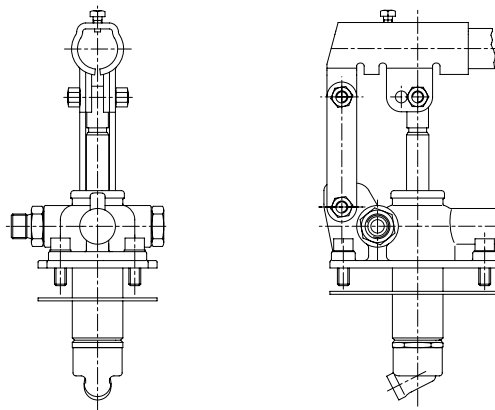
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

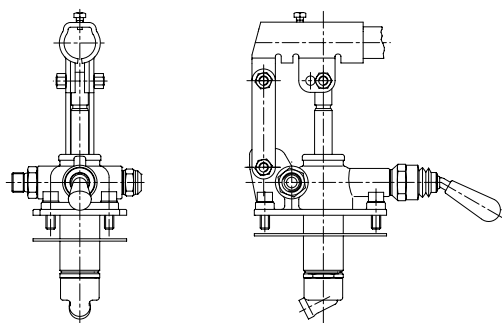
**J**



**W**

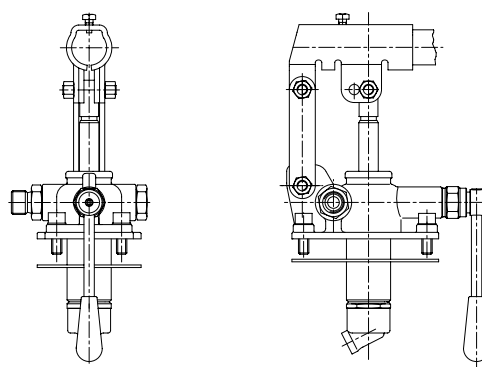


**JRV**

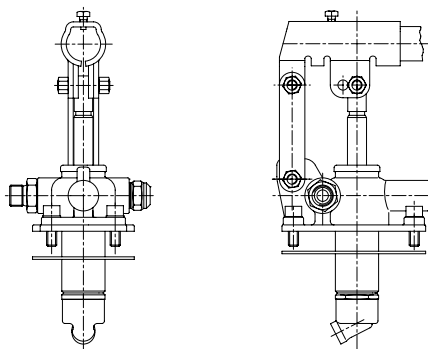


**Valvola di massima**    **Molla 40/350 bar**    **Taratura Standard 100 bar**  
Relief valve                      Spring 580/5075 PSI                      Standard Setting 1450 PSI

**L**

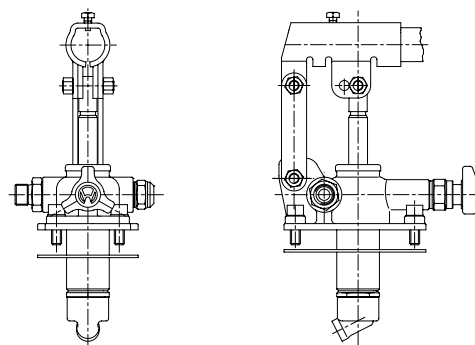


**WRV**



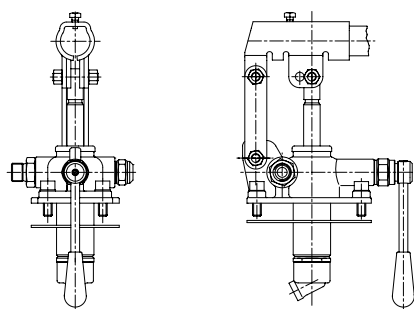
**Valvola di massima**    **Molla 40/350 bar**    **Taratura Standard 100 bar**  
Relief valve                      Spring 580/5075 PSI                      Standard Setting 1450 PSI

**RV**



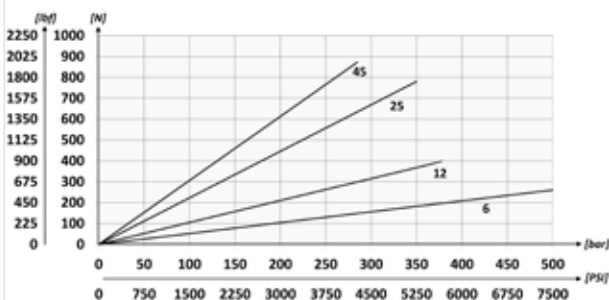
**Valvola di massima**    **Molla 40/350 bar**    **Taratura Standard 100 bar**  
Relief valve                      Spring 580/5075 PSI                      Standard Setting 1450 PSI

**LRV**



**Valvola di massima**    **Molla 40/350 bar**    **Taratura Standard 100 bar**  
Relief valve                      Spring 580/5075 PSI                      Standard Setting 1450 PSI

**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER





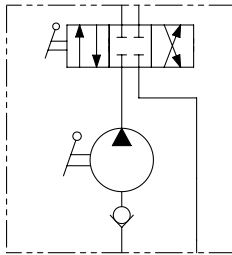
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>PMI</b>		

<b>01</b>	POMPA A MANO DOPPIO POMPAGGIO PER CILINDRO A DOPPIO EFFETTO - CENTRO CHIUSO (DOUBLE PUMPING HAND PUMP FOR DOUBLE ACTING CYLINDER - CLOSED CENTER)			<b>PMI</b>	
	CILINDRATA (DISPLACEMENT)	A	B	C	
	6 cm <sup>3</sup> (0.37 in <sup>3</sup> )	253 (9.96)	166 (6.54)	34 (1.34)	<b>6</b>
<b>02</b>	12 cm <sup>3</sup> (0.73 in <sup>3</sup> )	253 (9.96)	166 (6.54)	34 (1.34)	<b>12</b>
	25 cm <sup>3</sup> (1.53 in <sup>3</sup> )	273 (10.75)	172 (6.77)	34 (1.34)	<b>25</b>
	45 cm <sup>3</sup> (2.75 in <sup>3</sup> )	283 (11.14)	172 (6.77)	40 (1.57)	<b>45</b>
<b>03</b>	OPTIONAL	Con soffietto (With rubber protection)		<b>P</b>	
		Con leva di scarico Ø 27 mm (With unloading lever Ø 1.06 inch)		<b>L</b>	
		Con valvola di massima pressione (With relief valves)		<b>RV</b>	
		Con leva di scarico e valvola di massima pressione (With unloading lever and relief valves)		<b>LRV</b>	

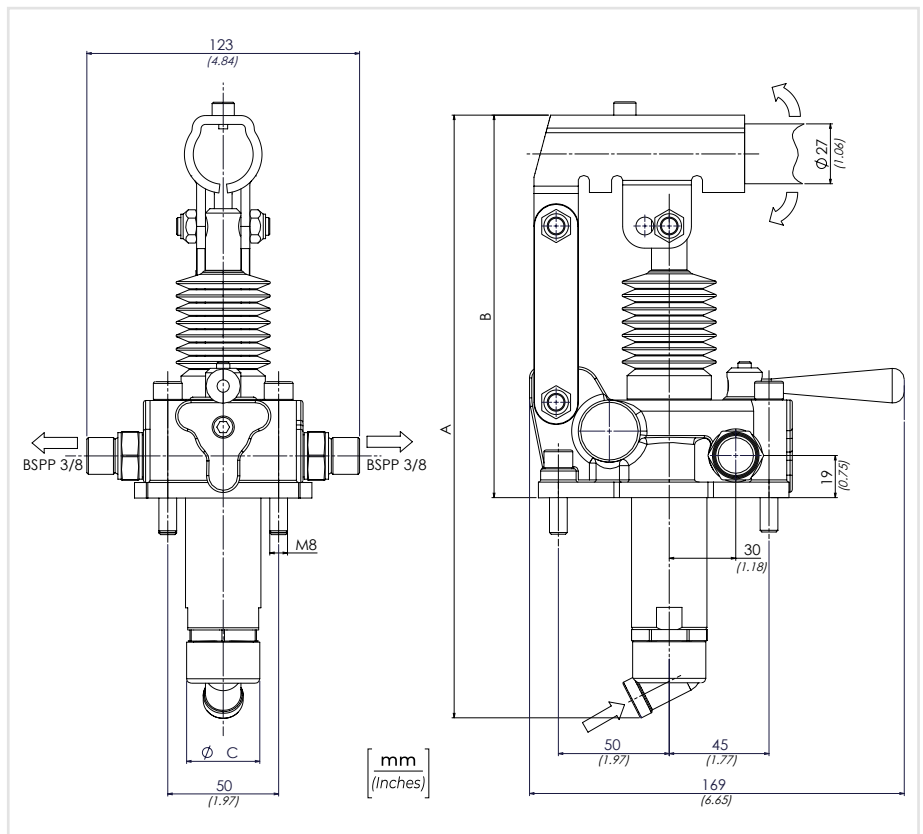
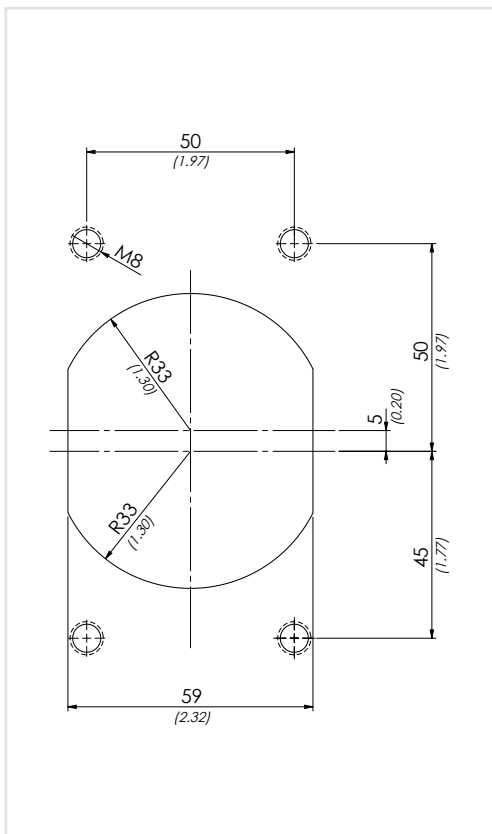
**LA POMPA VIENE FORNITA CON GUARNIZIONE SAGOMATA + VITI DI FISSAGGIO + LEVA DI AZIONAMENTO L=600 mm**  
**THE PUMP IS SUPPLIED WITH SHAPED SEAL, FIXING SCREWS AND ACTING LEVER 23.6 inch LONG**

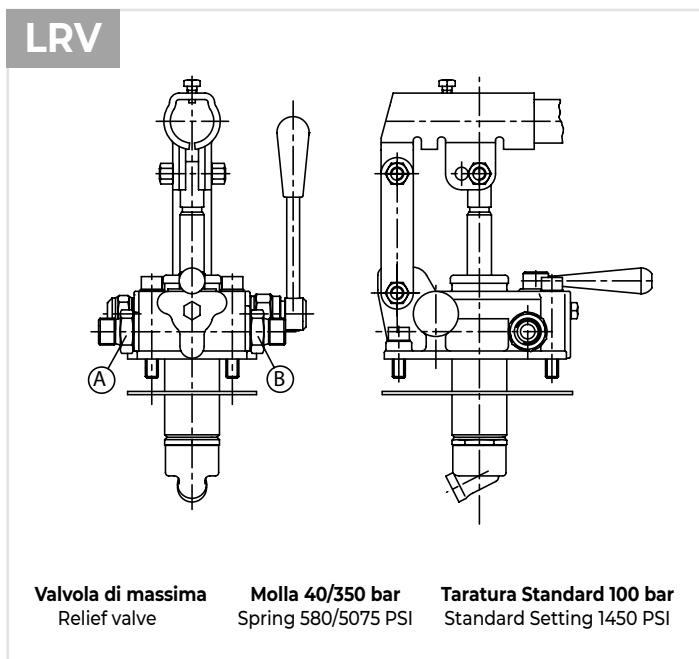
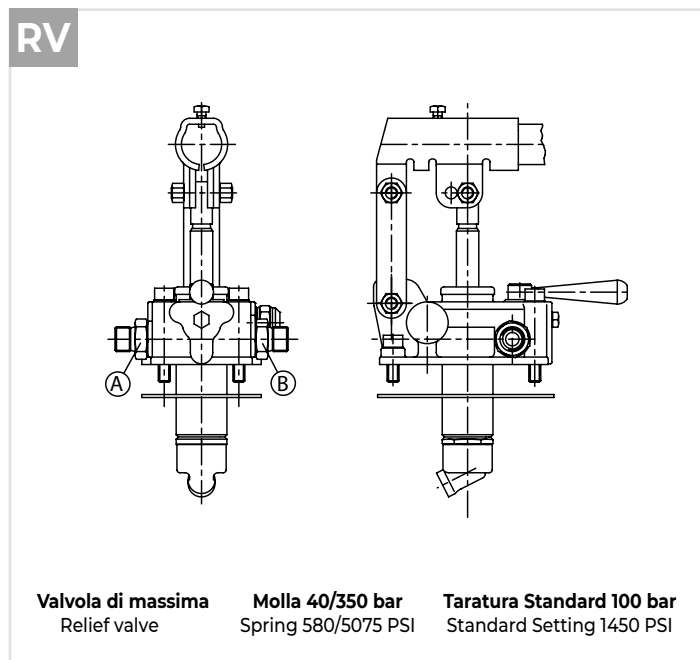
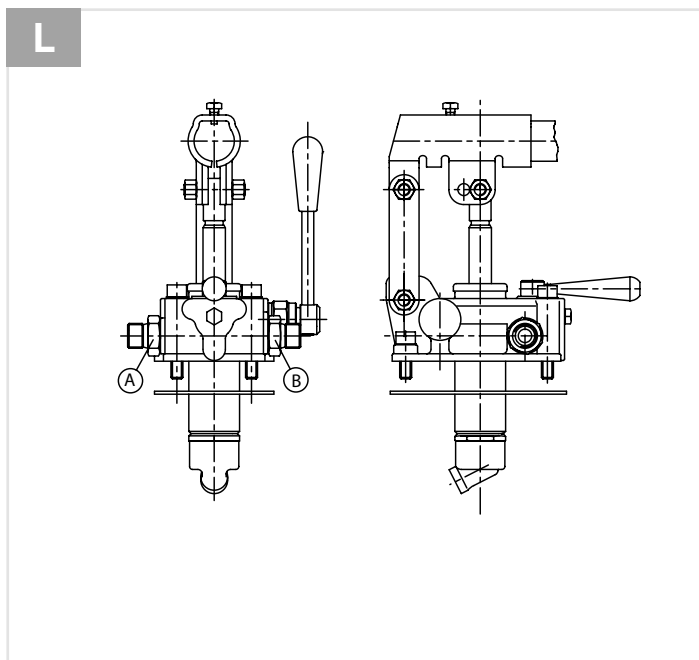
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



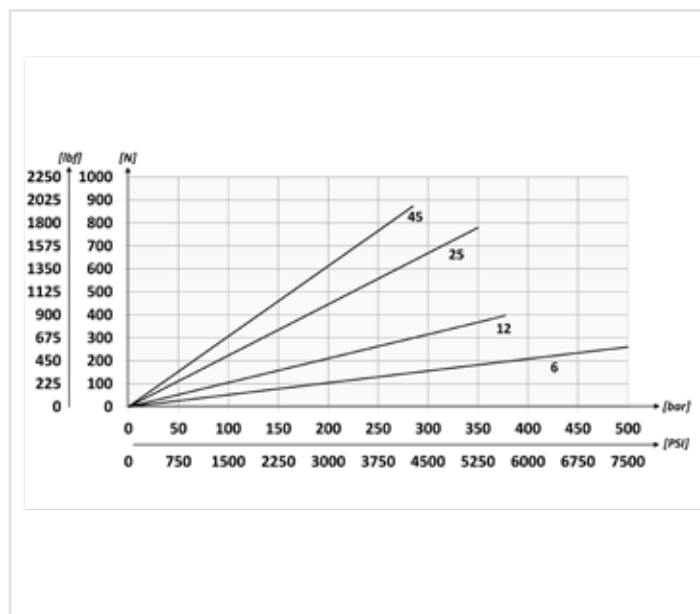
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	





**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
**EFFORT OPERATING AT THE END OF THE LEVER**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX APPROX WEIGHT kg-lbt
PMI6	420 (6090)	500 (7250)	4,20 (9.25)
PMI12	220 (3190)	380 (5510)	
PMI25	120 (1740)	350 (5075)	
PMI45	80 (1160)	280 (4060)	



**LA POMPA VIENE FORNITA CON GUARNIZIONE SAGOMATA  
+ VITI DI FISSAGGIO + LEVA DI AZIONAMENTO Ø 27 MM L=600 mm**

**THE PUMP IS SUPPLIED WITH SHAPED SEAL, FIXING SCREWS  
AND ACTING LEVER Ø 1,06 INCH 23 inch LONG**

**CODICE ORDINAZIONE**  
ORDERING CODE

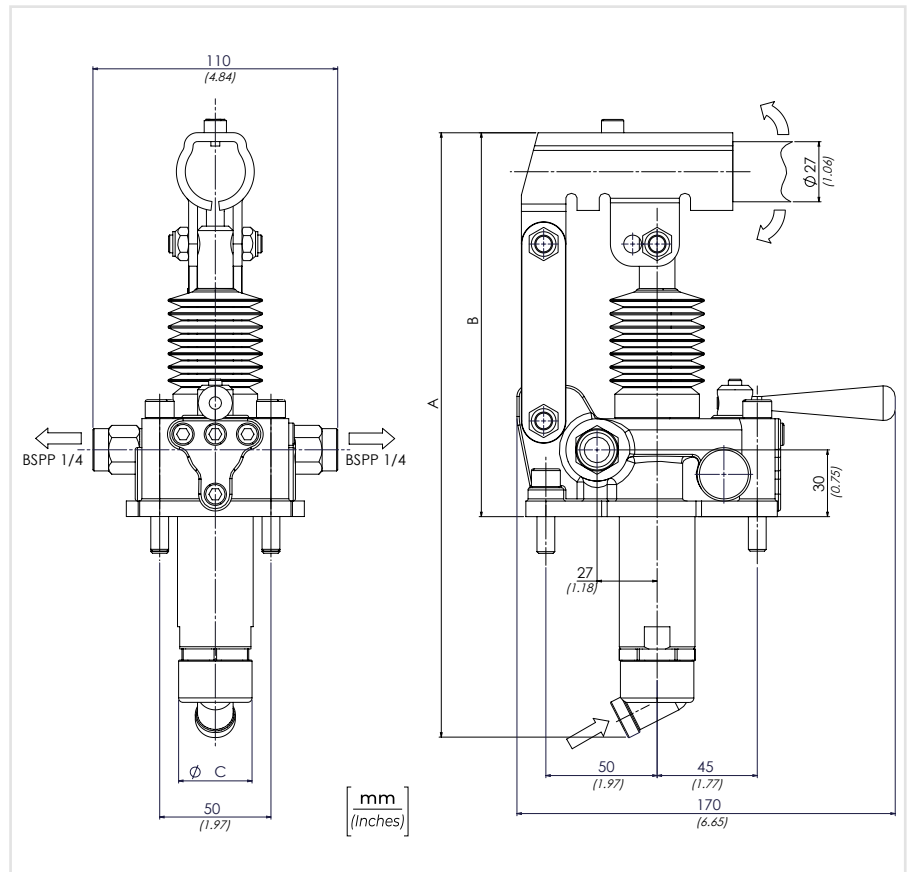
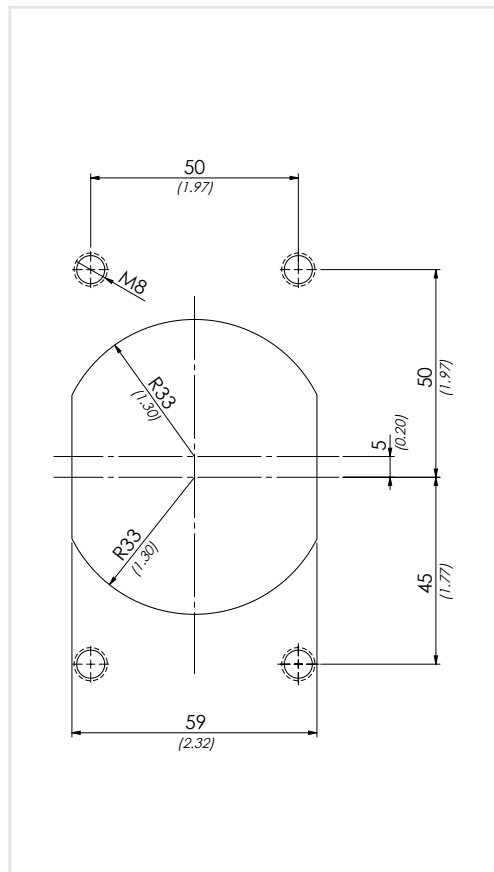
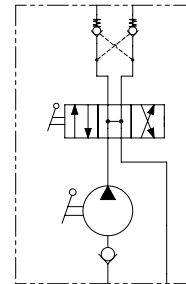
01	02	03
<b>PMT</b>		

<b>01</b>	POMPA A MANO DOPPIO POMPAGGIO PER CILINDRO A DOPPIO EFFETTO CON VALVOLE DI BLOCCO (DOUBLE PUMPING HAND PUMP WITH CHECK VALVES FOR DOUBLE ACTING CYLINDER)			<b>PMT</b>	
<b>02</b>	CILINDRATA (DISPLACEMENT)	A	B	C	
	6 cm <sup>3</sup> (0.37 in <sup>3</sup> )	253 (9.96)	166 (6.54)	34 (1.34)	<b>6</b>
	12 cm <sup>3</sup> (0.73 in <sup>3</sup> )	253 (9.96)	166 (6.54)	34 (1.34)	<b>12</b>
	25 cm <sup>3</sup> (1.53 in <sup>3</sup> )	273 (10.75)	172 (6.77)	34 (1.34)	<b>25</b>
	45 cm <sup>3</sup> (2.75 in <sup>3</sup> )	283 (11.14)	172 (6.77)	40 (1.57)	<b>45</b>
<b>03</b>	OPTIONAL	Con soffiutto (With rubber protection)		<b>P</b>	
		Con valvola di massima pressione su A e B (With relief valves on A and B)		<b>RVAB</b>	
		Con valvola di massima pressione su B (With relief valves on B)		<b>RVB</b>	

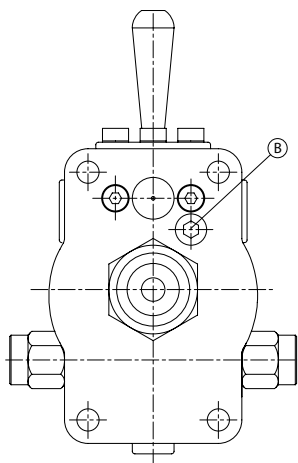
**DATI TECNICI / TECHNICAL DATA**

Olío idraulico - Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olío - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olío - Oil temperature	-20°C +80°C	-4°F	+176°F
Temperatura ambiente - Environment temperature	-20°C +50°C	-4°F	+122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)			

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

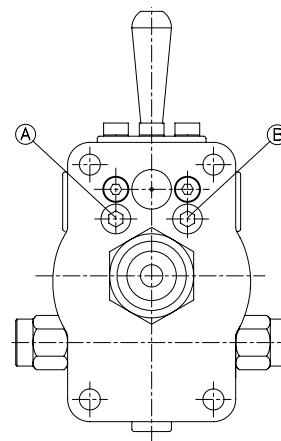


## RVB



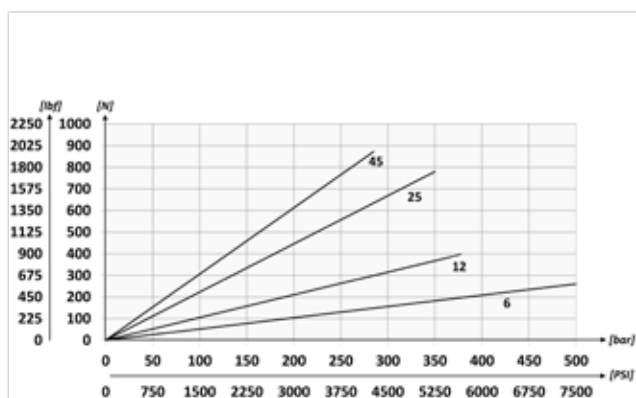
**Valvola di massima**      **Molla 40/350 bar**      **Taratura Standard 100 bar**  
Relief valve              Spring 580/5075 PSI      Standard Setting 1450 PSI

## RVAB



**Valvola di massima**      **Molla 40/350 bar**      **Taratura Standard 100 bar**  
Relief valve              Spring 580/5075 PSI      Standard Setting 1450 PSI

**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
PMT6	420 (6090)	500 (7250)	4,20 (9.25)
PMT12	220 (3190)	380 (5510)	
PMT25	120 (1740)	350 (5075)	
PMT45	80 (1160)	280 (4060)	





**CODICE ORDINAZIONE**  
ORDERING CODE

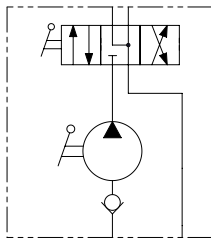
01	02	03
<b>PMA</b>		

<b>01</b>	POMPA A MANO DOPPIO POMPAGGIO PER CILINDRO A DOPPIO EFFETTO - CENTRO APERTO (DOUBLE PUMPING HAND PUMP FOR DOUBLE ACTING CYLINDER - OPEN CENTER)			<b>PMA</b>	
	CILINDRATA (DISPLACEMENT)	A	B	C	
	6 cm <sup>3</sup> (0.37 in <sup>3</sup> )	253 (9.96)	166 (6.54)	34 (1.34)	<b>6</b>
<b>02</b>	12 cm <sup>3</sup> (0.73 in <sup>3</sup> )	253 (9.96)	166 (6.54)	34 (1.34)	<b>12</b>
	25 cm <sup>3</sup> (1.53 in <sup>3</sup> )	273 (10.75)	172 (6.77)	34 (1.34)	<b>25</b>
	45 cm <sup>3</sup> (2.75 in <sup>3</sup> )	283 (11.14)	172 (6.77)	40 (1.57)	<b>45</b>
<b>03</b>	OPTIONAL	Con soffiutto (With rubber protection)			<b>P</b>
		Con leva di scarico Ø 27 mm (With unloading lever Ø 1.06 inch)			<b>L</b>
		Con valvola di massima pressione su A e B (With relief valves on A and B)			<b>RV</b>
		Con leva di scarico e valvola di massima pressione (With unloading lever and relief valves)			<b>LRV</b>

LA POMPA VIENE FORNITA CON GUARNIZIONE SAGOMATA  
+ VITI DI FISSAGGIO + LEVA DI AZIONAMENTO L=600 mm

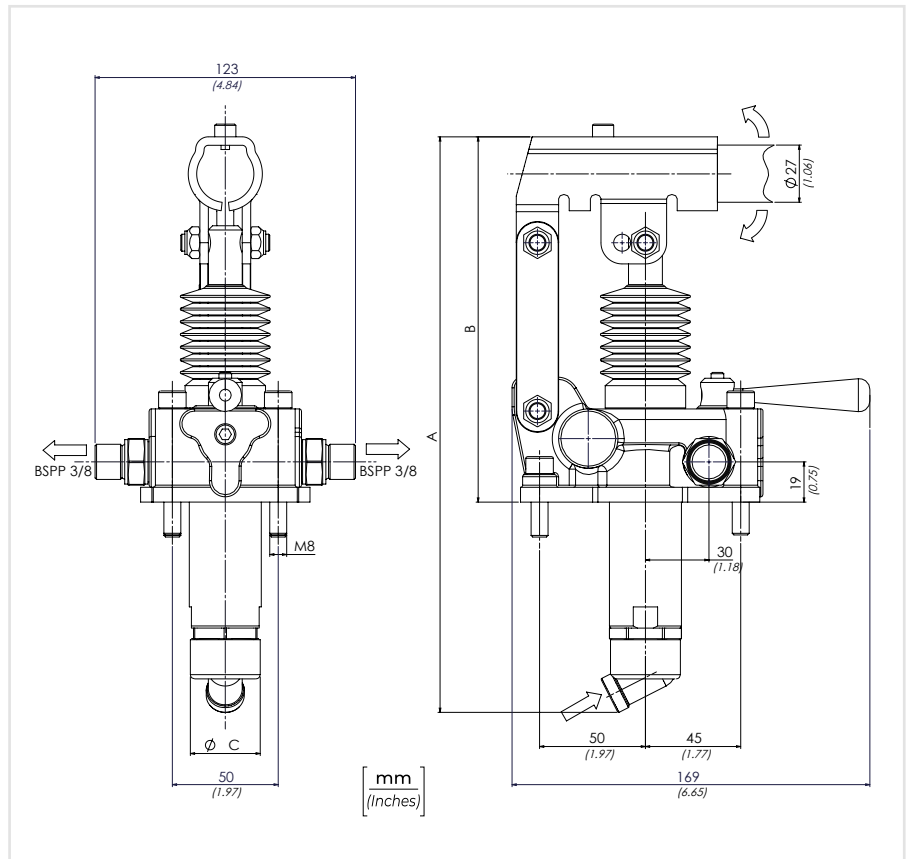
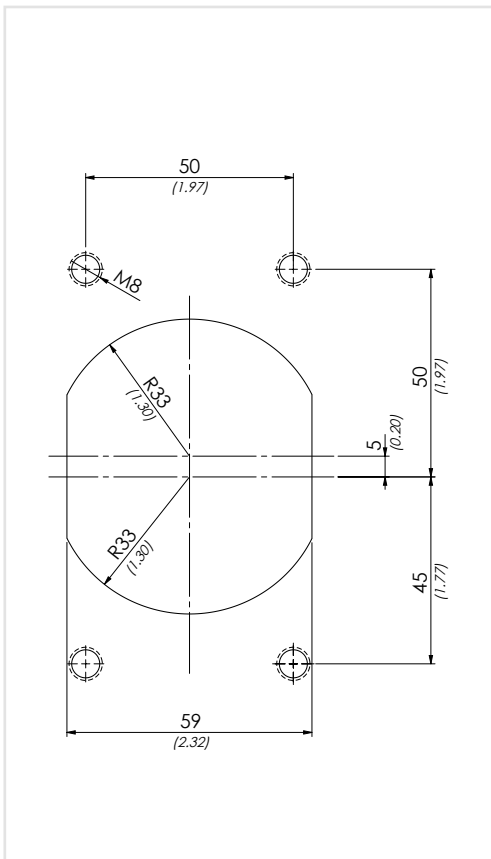
THE PUMP IS SUPPLIED WITH SHAPED SEAL, FIXING SCREWS  
AND ACTING LEVER 23.6 inch LONG

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

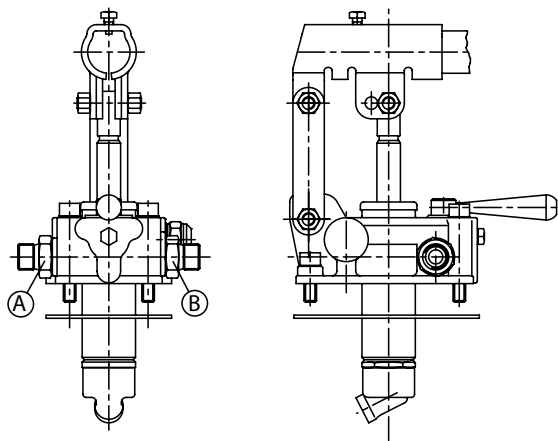


**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

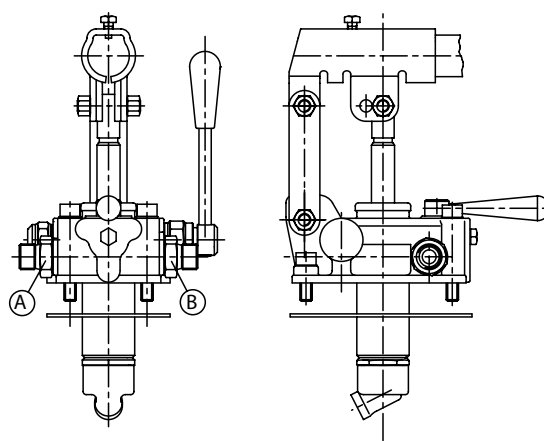


**RV**



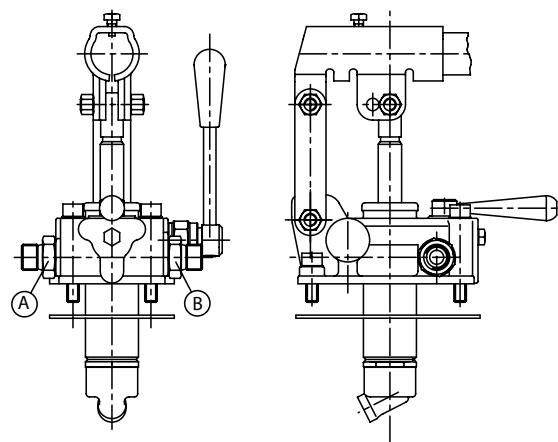
**Valvola di massima**    **Molla 40/350 bar**    **Taratura Standard 100 bar**  
 Relief valve    Spring 580/5075 PSI    Standard Setting 1450 PSI

**LRV**

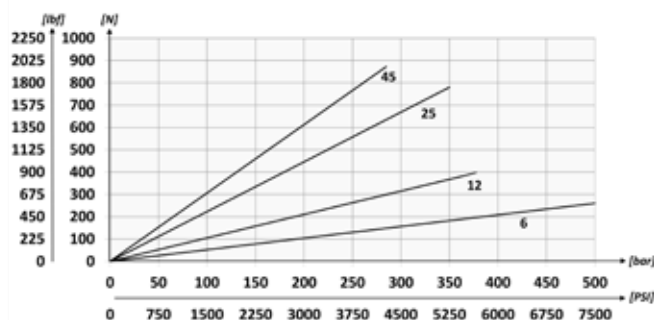


**Valvola di massima**    **Molla 40/350 bar**    **Taratura Standard 100 bar**  
 Relief valve    Spring 580/5075 PSI    Standard Setting 1450 PSI

**L**



**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
 EFFORT OPERATING AT THE END OF THE LEVER



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)
PMA6	420 (6090)	500 (7250)	4,20 (9.25)
PMA12	220 (3190)	380 (5510)	
PMA25	120 (1740)	350 (5075)	
PMA45	80 (1160)	280 (4060)	



<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03
	<b>PME1</b>		

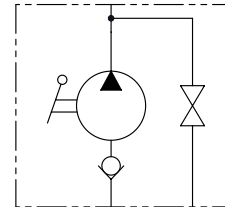
<b>01</b>	POMPA A MANO SINGOLO POMPAGGIO VERSO IL BASSO PER CILINDRO A SEMPLICE EFFETTO (SINGLE DOWNWARD PUMPING HAND PUMP FOR SINGLE ACTING CYLINDER)		<b>PME1</b>
<b>02</b>	CILINDRATA (DISPLACEMENT)	8 cm <sup>3</sup> (0.49 in <sup>3</sup> )	<b>8</b>
		15 cm <sup>3</sup> (0.92 in <sup>3</sup> )	<b>15</b>
<b>03</b>	OPTIONAL	Con soffietto (With rubber protection)	<b>P</b>
		Senza rubinetto di scarico con valvola di massima (Without unloading valve With relief valves)	<b>WRV</b>
		Senza rubinetto di scarico (Without unloading valve)	<b>W</b>
		Con valvola di massima pressione (With relief valves)	<b>RV</b>

LA POMPA VIENE FORNITA CON GUARNIZIONE SAGOMATA  
+ VITI DI FISSAGGIO  
+ LEVA DI AZIONAMENTO Ø 20 MM 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 ACTING LEVER Ø 0.79 17,7 inch LONG.  
OIL FLOW LEVER ACTION DOWNWARDS ONLY

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



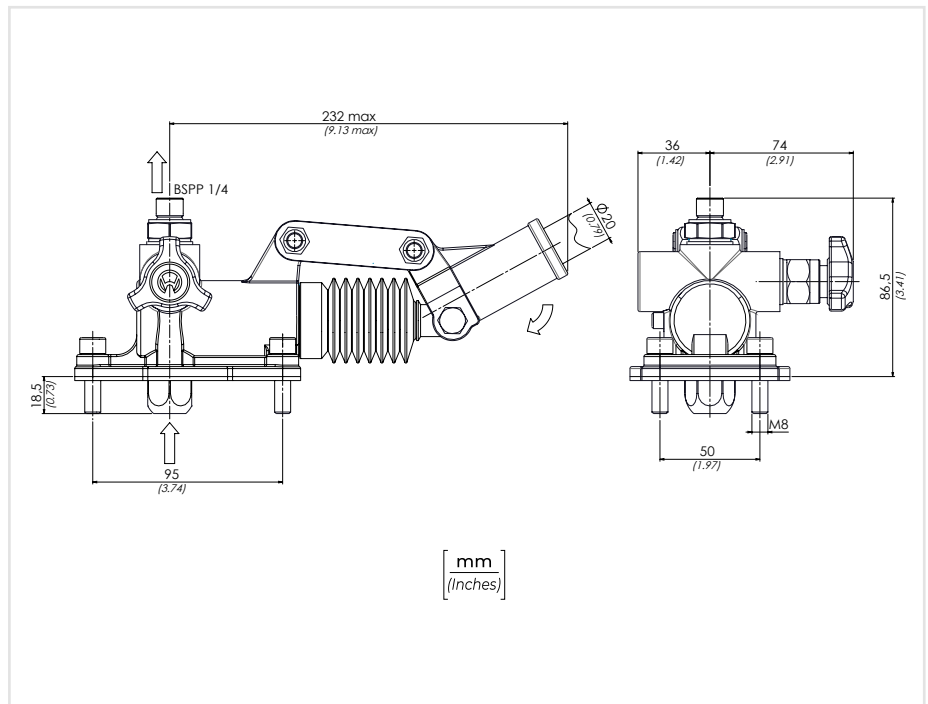
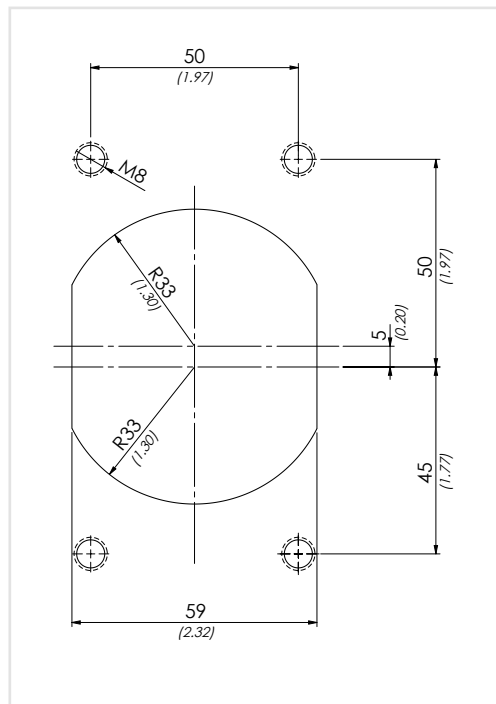
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
PME18	180 (2610)	380 (5510)	2,9 (6.39)
PME15	110 (1595)	350 (5075)	

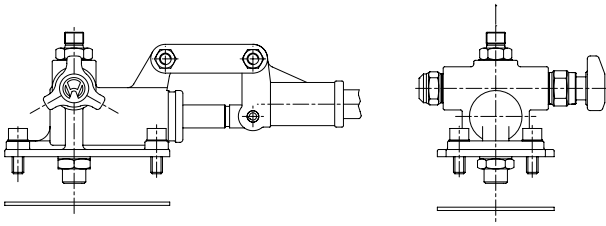
**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F

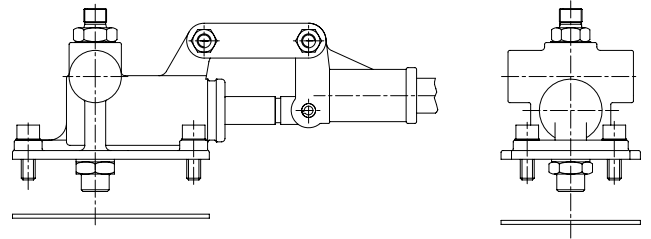
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)  
It is necessary a filter use to protect the valve (advised filtration 15 µm)



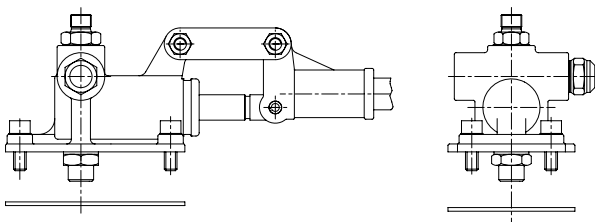
**RW**



**W**

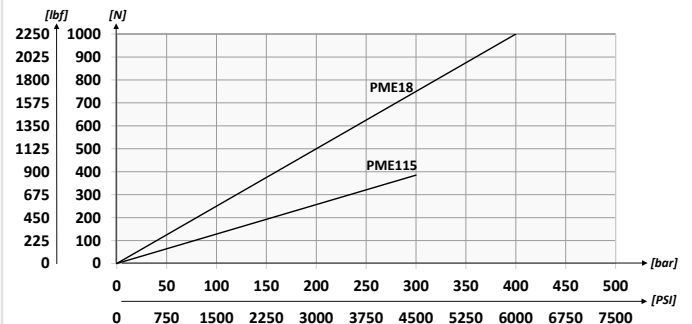


**WRV**



**Valvola di massima**      **Molla 40/350 bar**      **Taratura Standard 100 bar**  
Relief valve              Spring 580/5075 PSI      Standard Setting 1450 PSI

**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER

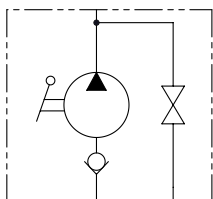




**LA POMPA VIENE FORNITA CON GUARNIZIONE SAGOMATA  
+ VITI DI FISSAGGIO + LEVA DI AZIONAMENTO L=600 mm  
LA MANDATA LA SI OTTIENE SOLAMENTE AZIONANDO LA LEVA VERSO IL BASSO**

**THE PUMP IS SUPPLIED WITH SHAPED SEAL,  
FIXING SCREWS AND ACTING LEVER 23,6 inch LONG.  
OIL FLOW LEVER ACTION DOWNWARDS ONLY**

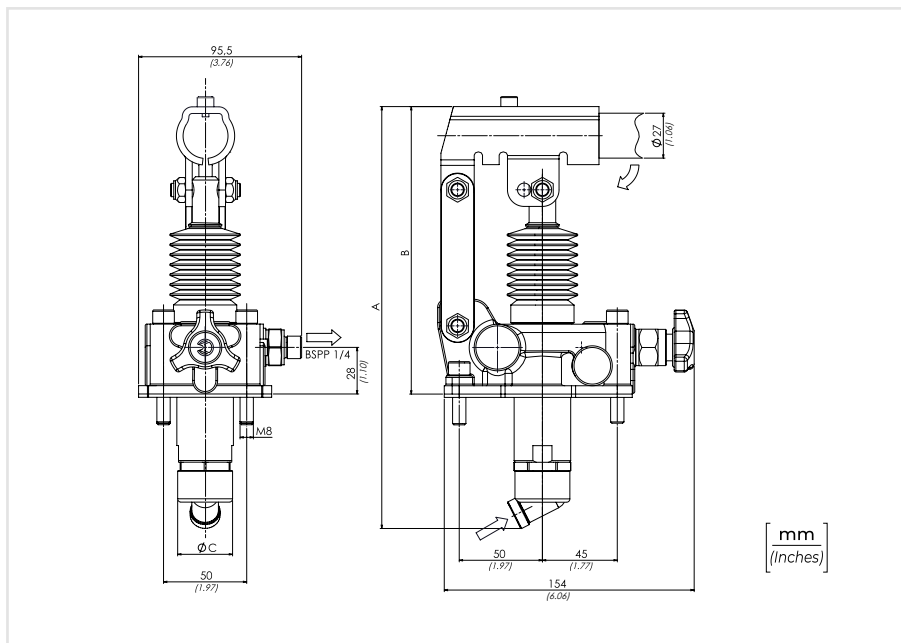
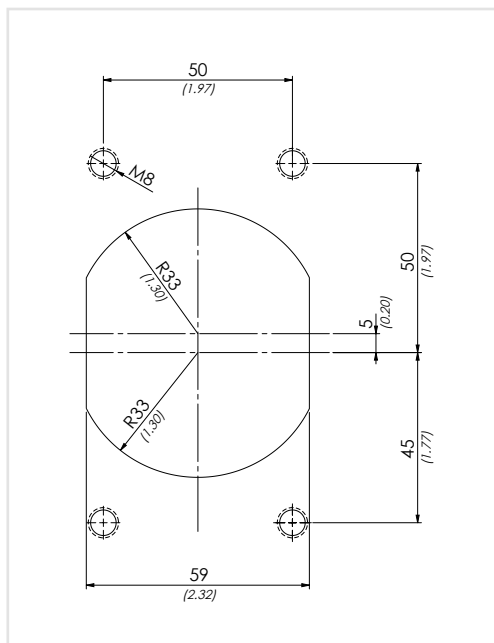
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**CODICE ORDINAZIONE  
ORDERING CODE**

01	02	03
<b>PME2</b>		

<b>01</b>	POMPA A MANO SINGOLO POMPAGGIO VERSO IL BASSO PER CILINDRO A SEMPLICE EFFETTO (SINGLE DOWNWARD PUMPING HAND PUMP FOR SINGLE ACTING CYLINDER)			<b>PME2</b>	
<b>02</b>	CILINDRATA (DISPLACEMENT)	A	B	C	
	20 cm <sup>3</sup> (1.22 in <sup>3</sup> )	249 (9.80)	167 (6.57)	34 (1.33)	20
	30 cm <sup>3</sup> (1.83 in <sup>3</sup> )	252 (9.92)	167 (6.57)	34 (1.33)	30
	40 cm <sup>3</sup> (2.44 in <sup>3</sup> )	252 (9.92)	167 (6.57)	40 (1.57)	40
<b>03</b>	OPTIONAL	Con soffietto (With rubber protection)			<b>P</b>
		Senza rubinetto di scarico con valvola di massima (Without unloading valve With relief valves)			<b>WRV</b>
		Senza rubinetto di scarico (Without unloading valve)			<b>W</b>
		Con leva di scarico (With unloading lever)			<b>L</b>
		Con valvola di massima pressione (With relief valves)			<b>RV</b>
		Con leva di scarico e valvola di massima pressione (With unloading lever and relief valves)			<b>LRV</b>



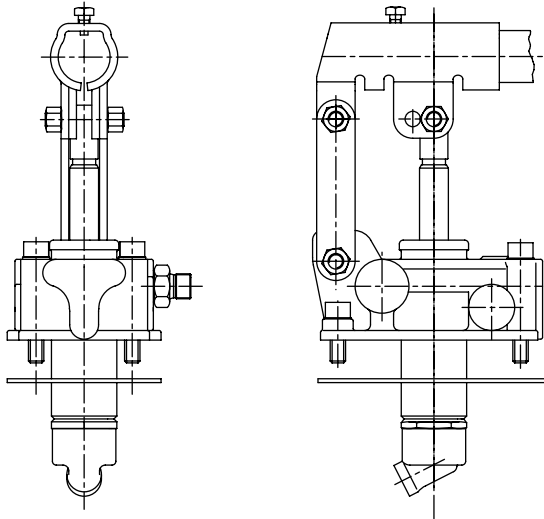
**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

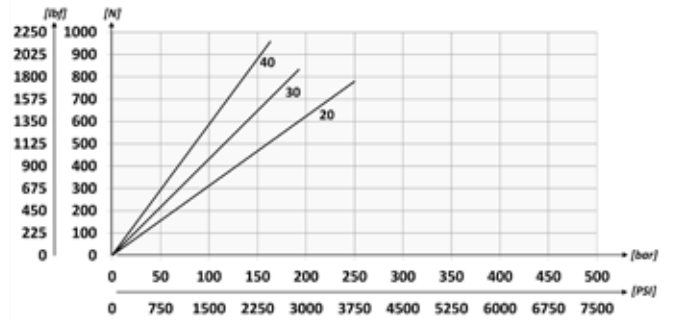
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
PME220	80 (1160)	240 (3480)	4,2 (9.2)
PME230	60 (870)	185 (2683)	
PME240	40 (580)	160 (2320)	

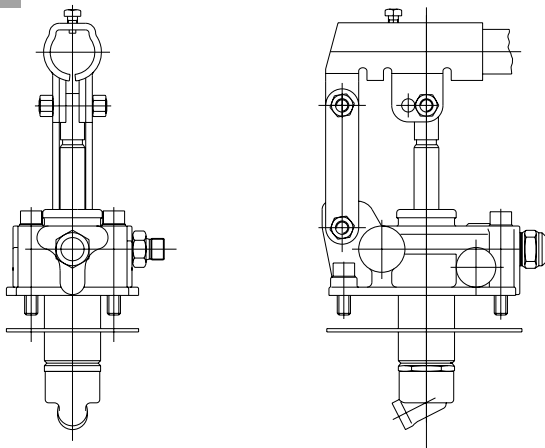
**W**



**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER

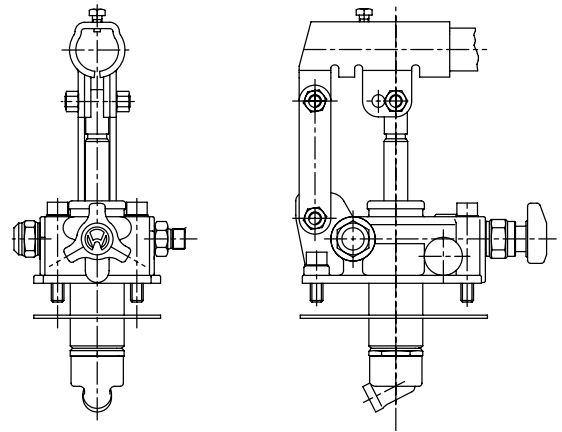


**WRV**



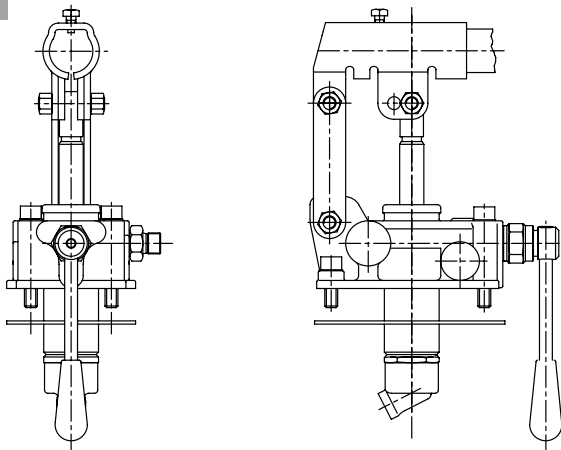
**Valvola di massima** Relief valve  
**Molla 40/350 bar** Spring 580/5075 PSI  
**Taratura Standard 100 bar** Standard Setting 1450 PSI

**RV**

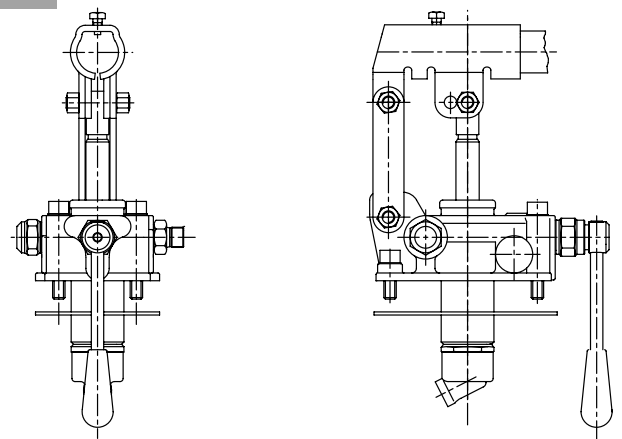


**Valvola di massima** Relief valve  
**Molla 40/350 bar** Spring 580/5075 PSI  
**Taratura Standard 100 bar** Standard Setting 1450 PSI

**L**



**LRV**



**Valvola di massima** Relief valve  
**Molla 40/350 bar** Spring 580/5075 PSI  
**Taratura Standard 100 bar** Standard Setting 1450 PSI



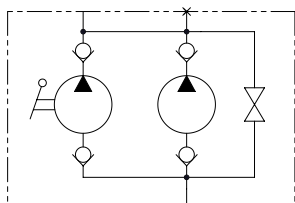
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>PMD</b>		

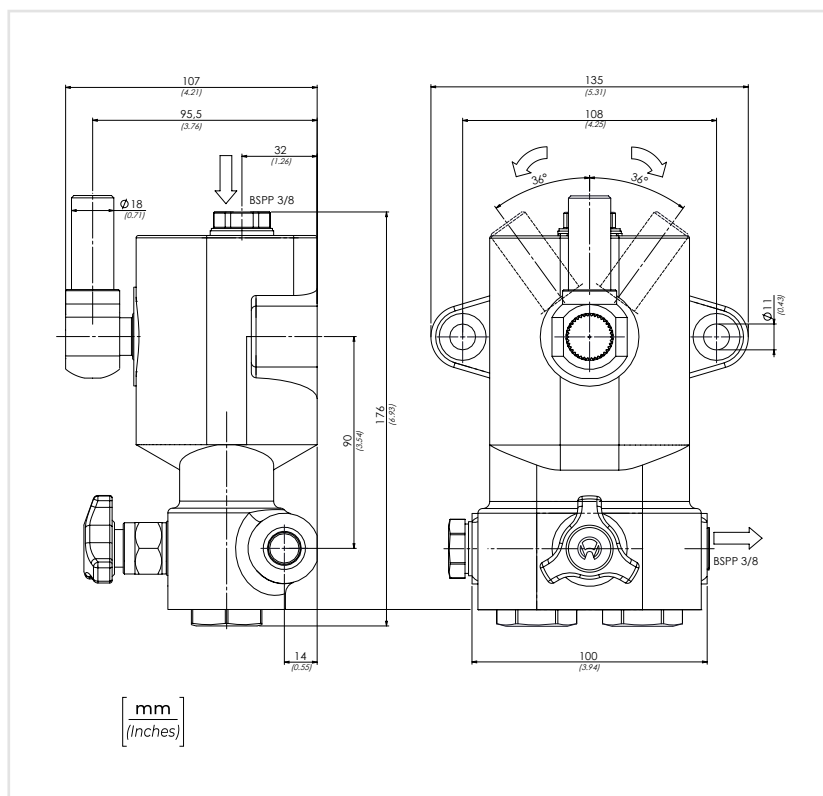
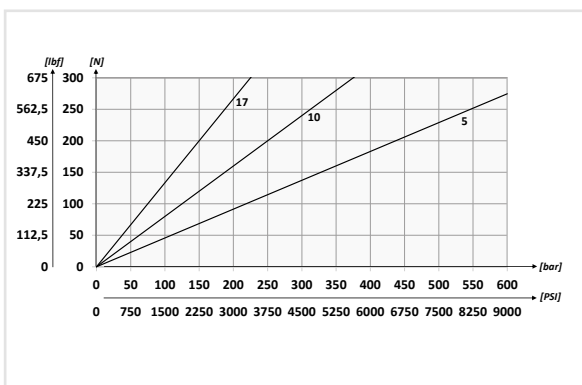
LA POMPA VIENE FORNITA CON GUARNIZIONE SAGOMATA  
+ VITI DI FISSAGGIO + LEVA DI AZIONAMENTO L=500 mm  
THE PUMP IS SUPPLIED WITH SHAPED SEAL, FIXING SCREWS  
AND ACTING LEVER 19.7 inch LONG

<b>01</b>	POMPA A MANO SEMPLICE EFFETTO DOPPIO POMPANTE (SINGLE ACTING HAND PUMP WITH DOUBLE CYLINDER)	<b>PMD</b>
<b>02</b>	CILINDRATA (DISPLACEMENT)	5 cm <sup>3</sup> (0.31 in <sup>3</sup> ) <b>5</b>
		10 cm <sup>3</sup> (0.61 in <sup>3</sup> ) <b>10</b>
		17 cm <sup>3</sup> (1.04 in <sup>3</sup> ) <b>17</b>
<b>03</b>	OPTIONAL	Senza rubinetto di scarico (Without unloading valve) <b>W</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER



**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	CILINDRATA (cm <sup>3</sup> ) DISPLACEMENT (in <sup>3</sup> )
PMD5	500 (7250)	500 (7250)	5,7 (12.56)	5 (0.31)
PMD10	250 (3625)	250 (3625)		10 (0.61)
PMD17	150 (2175)	150 (2175)		17 (1.04)

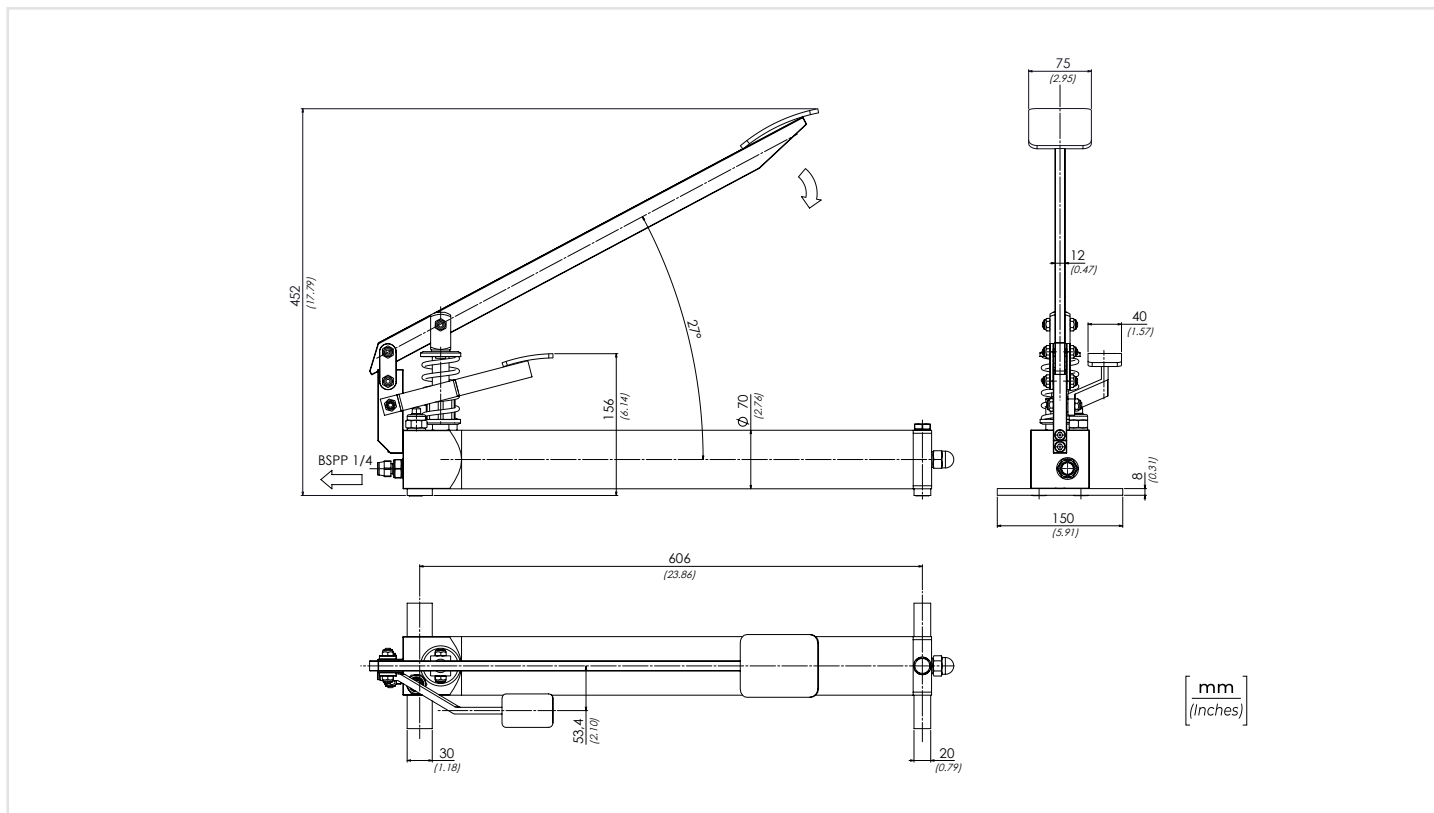
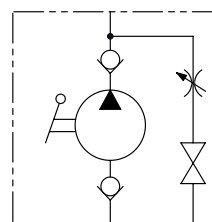
**CODICE ORDINAZIONE**  
ORDERING CODE

01  
**PME3**

<b>01</b>	POMPA A PEDALE (FOOT PUMP)	<b>PME3</b>
Serbatoio lt. 1,5 (Reservoir lt. 1.5)		



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



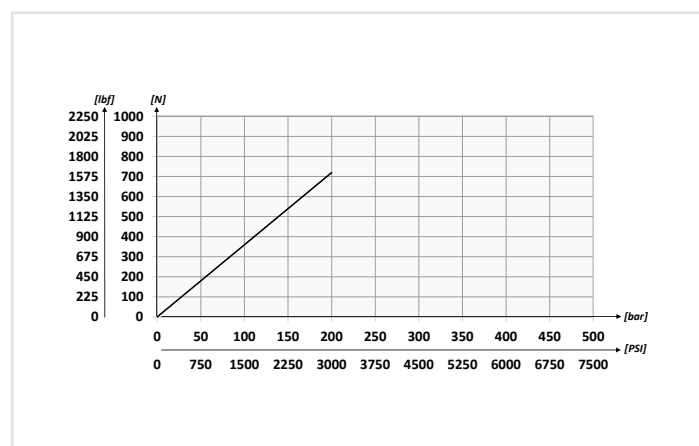
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt	CILINDRATA (cm <sup>3</sup> ) DISPLACEMENT (in <sup>3</sup> )
<b>PME3</b>	<b>220</b> (3190)	<b>10,40</b> (22.92)	<b>14</b> (0.85)

**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER



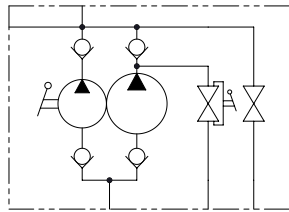




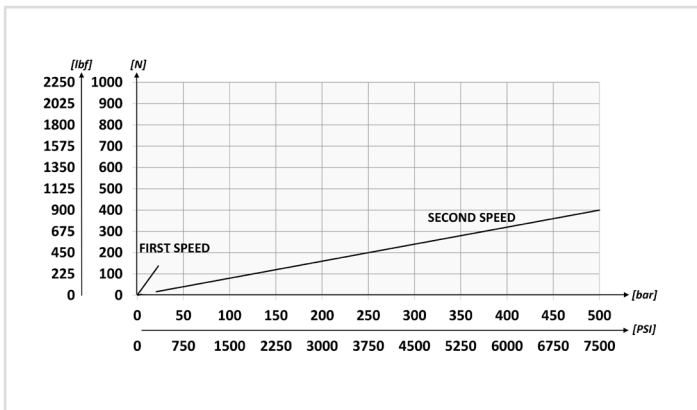
LA POMPA VIENE FORNITA CON GUARNIZIONE SAGOMATA + VITI DI FISSAGGIO + LEVA DI AZIONAMENTO L=600 mm

THE PUMP IS SUPPLIED WITH SHAPED SEAL, FIXING SCREWS AND ACTING LEVER 23.6 inch LONG

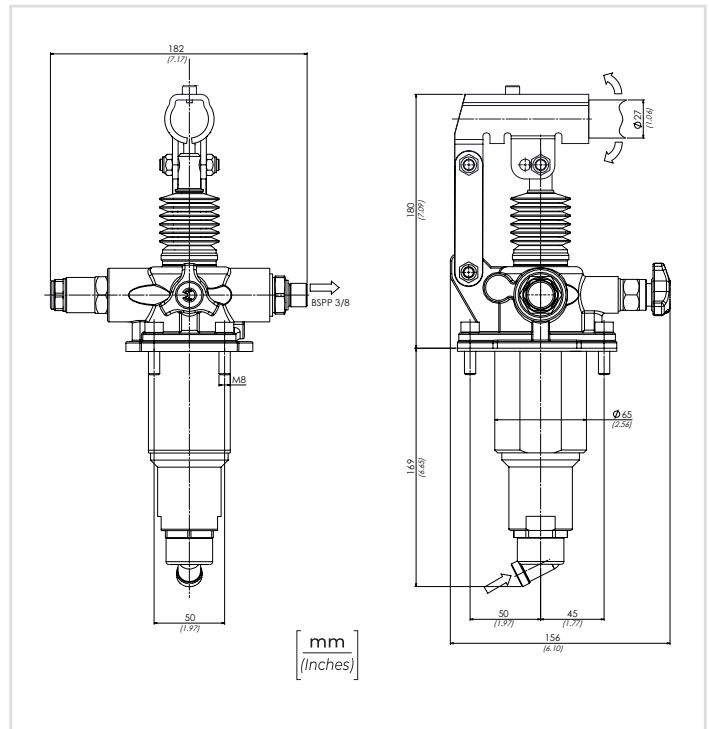
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER



CODICE ORDINAZIONE / ORDERING CODE		01	02
		<b>PME580</b>	
<b>01</b>	POMPA A MANO 2 VELOCITÀ DOPPIO POMPAGGIO PER CILINDRO A SEMPLICE EFFETTO (2 SPEEDS DOUBLE PUMPING HAND PUMP FOR SINGLE ACTING CYLINDER)		<b>PME580</b>
<b>02</b>	OPTIONAL	Con soffietto (With rubber protection)	<b>P</b>
	Con attacco manometro G 1/8" (With pressure gauge port G 1/8")	<b>18</b>	
	Con valvola di massima e attacco manometro G 1/8" (With relief valve and pressure gauge port G 1/8")	<b>X18</b>	
	Con valvola di esclusione alta-bassa pressione automatica (With automatic Hi-Low unloading device)	<b>CA</b>	
	Con valvola di esclusione alta-bassa pressione automatica e attacco manometro G 1/8" (With automatic Hi-Low unloading device and pressure gauge port G 1/8")	<b>CA18</b>	
	Con valvola di esclusione alta-bassa pressione automatica e valvola di massima (With automatic Hi-Low unloading device and relief valve)	<b>CARV</b>	
Con valvola di esclusione alta-bassa pressione automatica, valvola di massima e attacco manometro G 1/8" (With automatic Hi-Low unloading device, relief valve and pressure gauge port G 1/8")	<b>CARV18</b>		



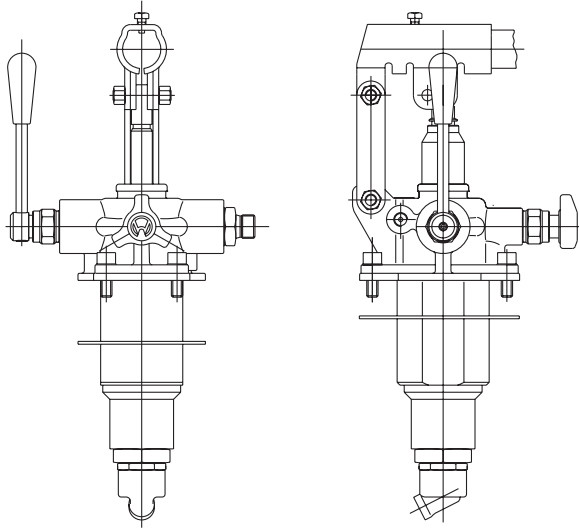
**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

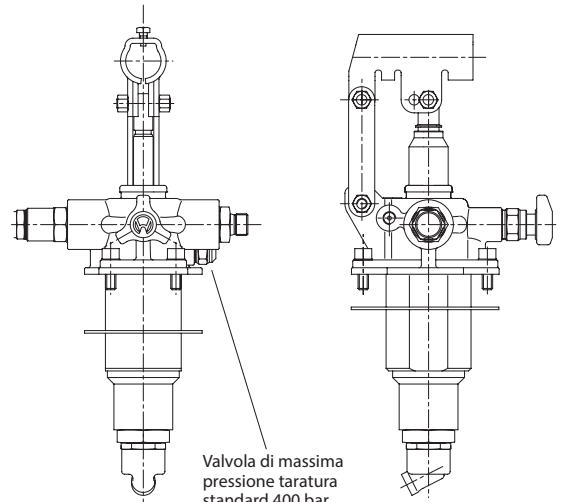
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE MAX 1 STADIO MAX PRESSURE 1 STAGE bar-PSI	PRESSIONE MAX 2 STADIO MAX PRESSURE 2 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 APPROX WEIGHT kg-lbt
<b>PME580</b>	<b>20 (290)</b>	<b>500 (7250)</b>	<b>80 (4.9)</b>	<b>5 (0.31)</b>	<b>6,6 (14.55)</b>

18

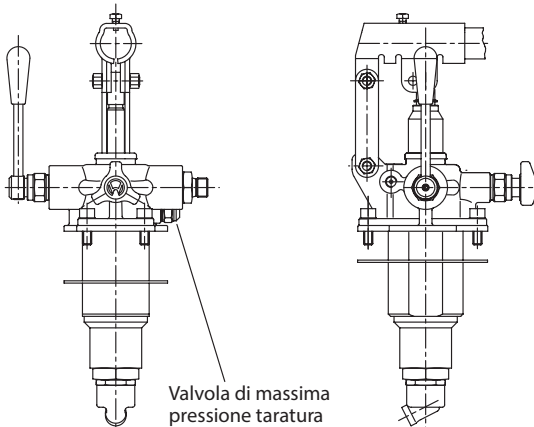


CA18



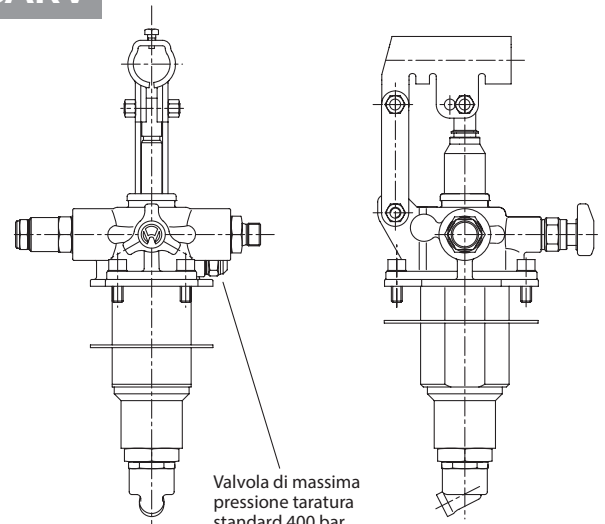
Valvola di massima  
pressione taratura  
standard 400 bar  
(Pressure relief valve  
standard setting 5800 PSI)

X18



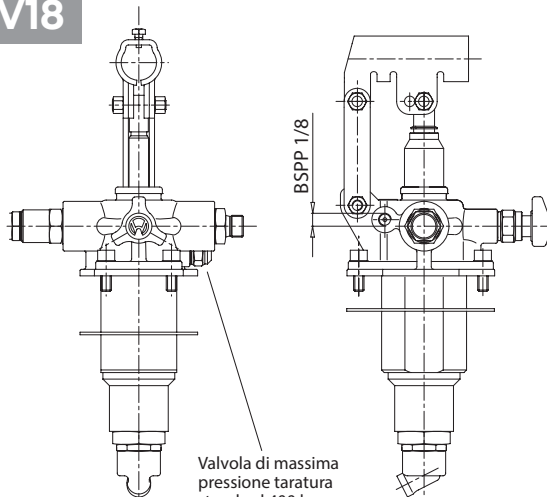
Valvola di massima  
pressione taratura  
standard 400 bar  
(Pressure relief valve  
standard setting 5800 PSI)

CARV



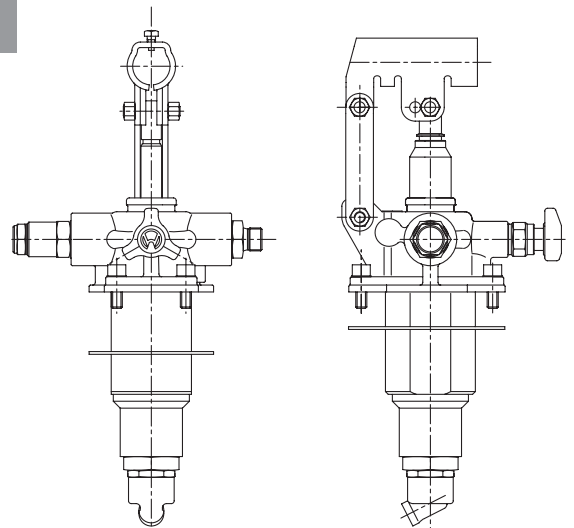
Valvola di massima  
pressione taratura  
standard 400 bar  
(Pressure relief valve  
standard setting 5800 PSI)

CARV18



Valvola di massima  
pressione taratura  
standard 400 bar  
(Pressure relief valve  
standard setting 400 bar)

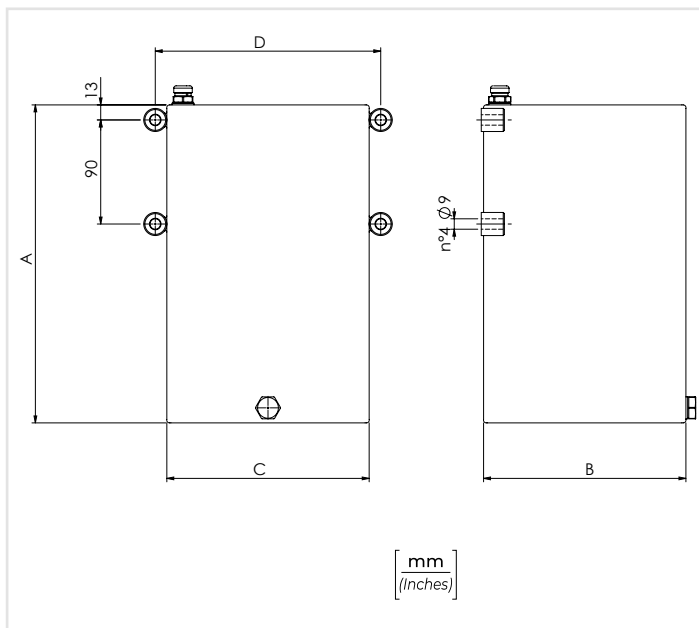
CA





**SERBATOIO IN ACCIAIO, VERNICIATURA RAL9005 ANTIOLIO-NERO, IL SERBATOIO È COMPRESIVO DI TAPPO SFIATO, TAPPO SCARICO E TUBO PESCAGGIO**

**STEEL RESERVOIR, RAL9005 BLACK OIL PROOF PAINTING, THE RESERVOIR IS INCLUDING THE BREATHER PLUGS AND DRAFT TUBE**



01

**CODICE ORDINAZIONE**  
ORDERING CODE

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

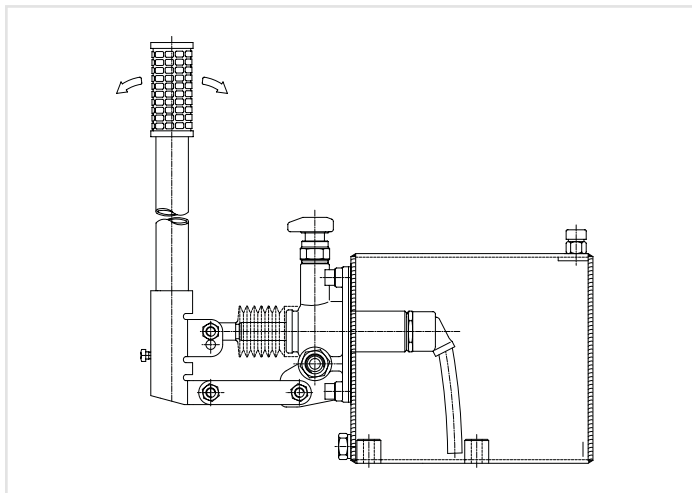
	TIPO TYPE	CAPACITÀ CAPACITY	A	B	C	D	PESO APPROX (kg) APPROX WEIGHT (lbt)
01	17900001	1 Lt. - 6l in. <sup>3</sup>	120 (4.72)	150 (5.91)	100 (3.94)	120 (4.72)	2,2 (5)
	17900002	2 Lt. - 122 in. <sup>3</sup>	185 (7.28)				2,7 (6)
	17900003	3 Lt. - 183 in. <sup>3</sup>	255 (10.04)				3,5 (7,71)
	17900006	5 Lt. - 305 in. <sup>3</sup>	200 (7.87)	175 (6.89)	195 (7.68)	5 (10.9)	
	17900004	7 Lt. - 427 in. <sup>3</sup>	275 (10.83)			5,5 (12.1)	
	17900005	10 Lt. - 610 in. <sup>3</sup>	380 (14.96)			7,1 (15.39)	
	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 (30.71)			16 (35.26)	

**DATI TECNICI / TECHNICAL DATA**

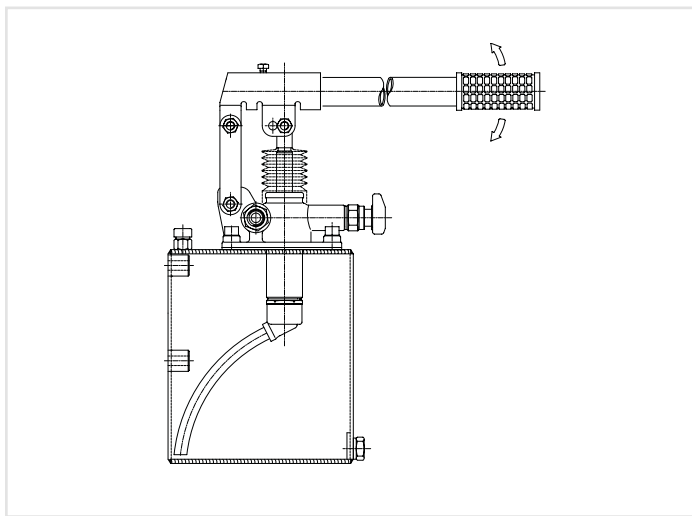
Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F

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

**MONTAGGIO ORIZZONTALE / HORIZONTAL MOUNTING**



**MONTAGGIO VERTICALE / VERTICAL MOUNTING**





**TNA 1**



**TNA 2 - TNA 3 - TNA 5**

**SERBATOIO IN ALLUMINIO, IL SERBATOIO È COMPRENSIVO DI TAPPO SFIATO, TAPPO SCARICO E TUBO PESCIAGGIO**

**ALUMINIUM RESERVOIR, THE RESERVOIR INCLUDES THE AIR BLEEDING PLUGS AND SUCTION TUBE**

	01	02
<b>CODICE ORDINAZIONE</b> ORDERING CODE	<b>TNA</b>	

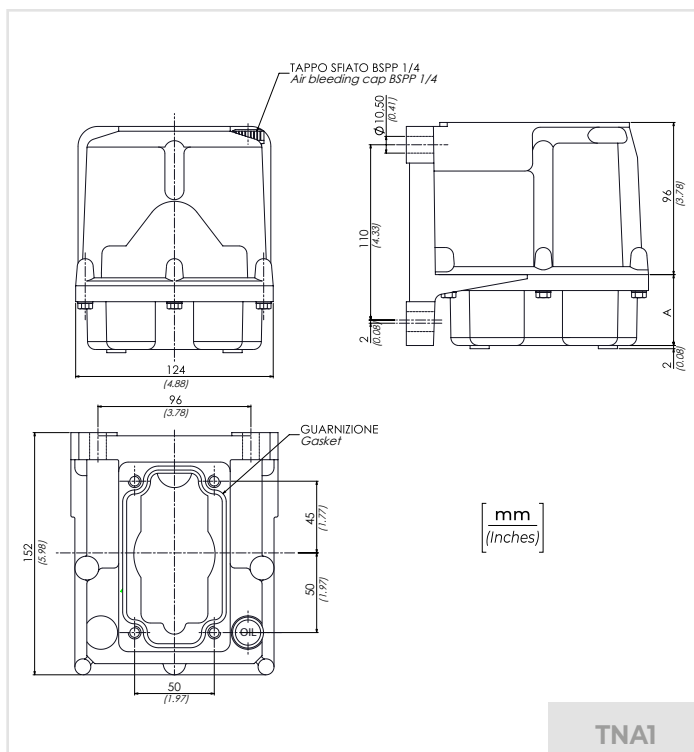
<b>01</b>	SERBATOI IN ALLUMINIO (ALUMINIUM RESERVOIRS)	<b>TNA</b>	
<b>02</b>	CAPACITÀ (CAPACITY)	<b>1 Lt. - 61 in.<sup>3</sup></b>	<b>1</b>
		<b>2 Lt. - 122 in.<sup>3</sup></b>	<b>2</b>
		<b>3 Lt. - 183 in.<sup>3</sup></b>	<b>3</b>
		<b>5 Lt. - 305 in.<sup>3</sup></b>	<b>5</b>

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

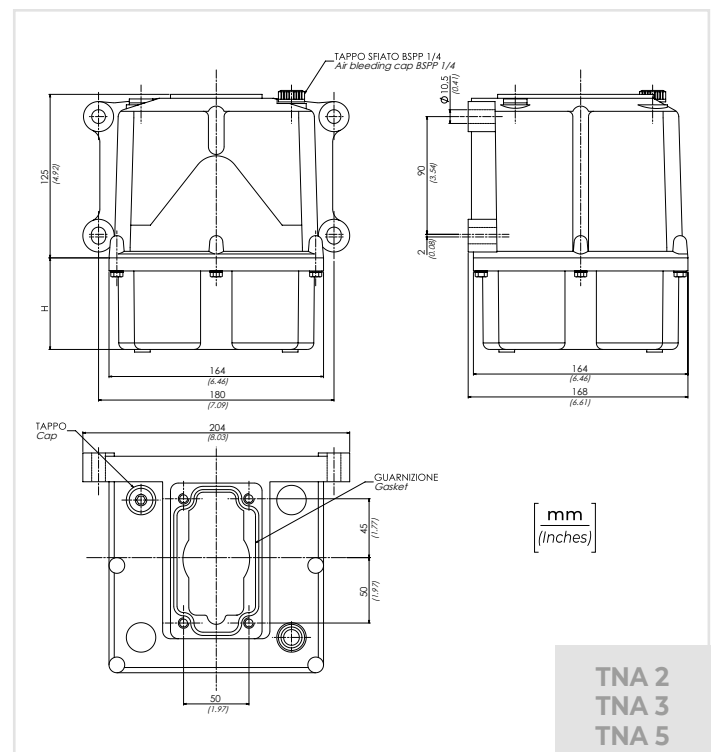
Tipo Type	Capacità Capacity Lt./in	A	H	Peso Approx (kg) Approx weight (lb)
<b>TNA 1</b>	<b>1 Lt. - 61 in.<sup>3</sup></b>	<b>40 (1.57)</b>	/	<b>1,1 (2.4)</b>
<b>TNA 2</b>	<b>2 Lt. - 122 in.<sup>3</sup></b>	/	<b>25 (0.98)</b>	<b>1,5 (3.3)</b>
<b>TNA 3</b>	<b>3 Lt. - 183 in.<sup>3</sup></b>	/	<b>70 (2.76)</b>	<b>1,6 (3.5)</b>
<b>TNA 5</b>	<b>5 Lt. - 305 in.<sup>3</sup></b>	/	<b>180 (7.09)</b>	<b>1,8 (4)</b>

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro Max contamination index with filter</b>	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)</b>	



**TNA1**



**TNA 2  
TNA 3  
TNA 5**

## MONTAGGIO POMPA NEL SERBATOIO

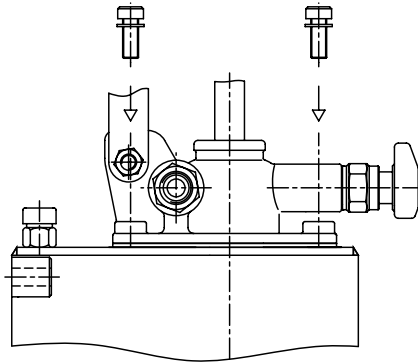
**1**

### Montaggio del tubo aspirazione



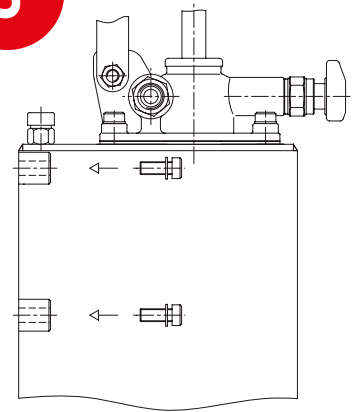
Introdurre il tubo di aspirazione nell'apposito raccordo.

**2**



Appoggiare la guarnizione in gomma sul serbatoio, posizionare la pompa, assemblare la pompa sul serbatoio mediante kit viti di fissaggio.

**3**

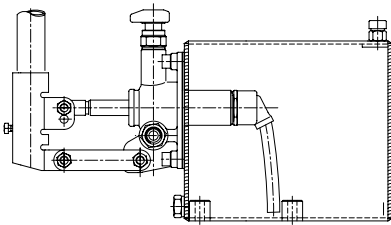


Collocare pompa e serbatoio nella posizione desiderata fissando con 4 viti.

Avvitare per minimo 20 mm.

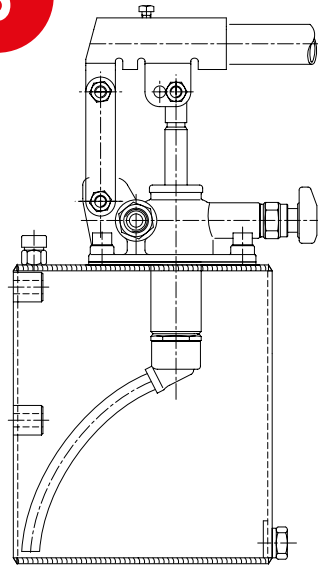
Collegare la mandata della pompa al circuito a semplice o doppio effetto.

**4**



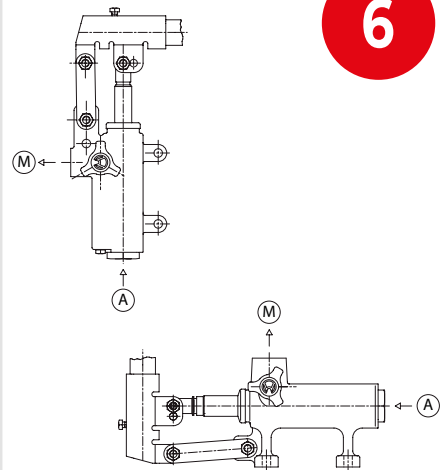
Montaggio orizzontale.

**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)

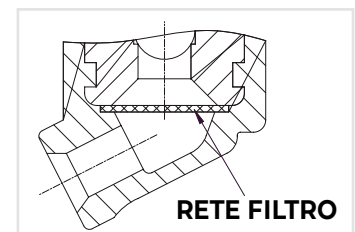
**Filtrazione consigliata:** 15 µm

**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

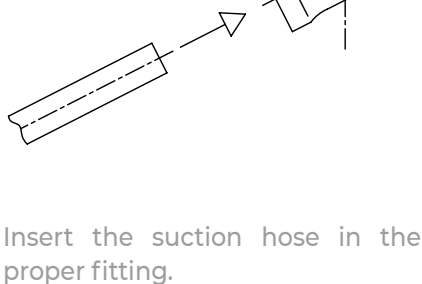


**RETE FILTRO**

## MOUNTING OF PUMP INSIDE THE TANK

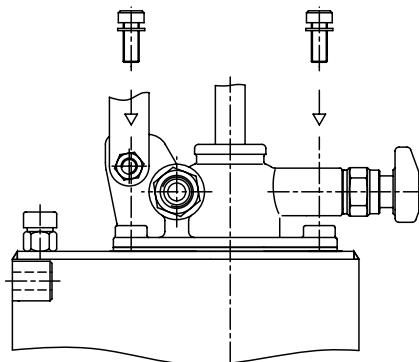
1

### Mounting the suction hose



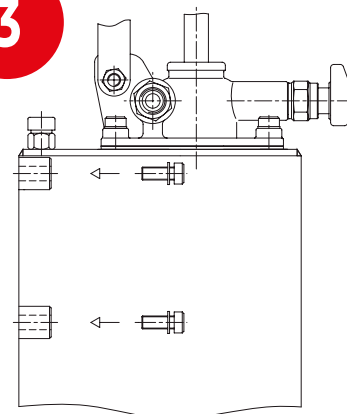
Insert the suction hose in the proper fitting.

2



Put the rubber seal on the tank, position the pump, assemble the pump to the tank by means of the fixing screws kit.

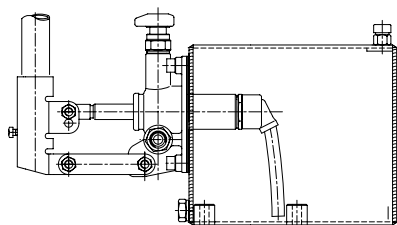
3



Place pump and tank in the position you need and fix them with nr.4 screws. You have to screw for at least 0.79 inch.

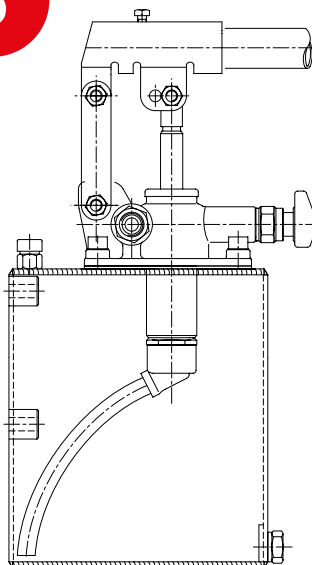
Connect pump delivery to the single or double acting circuit.

4



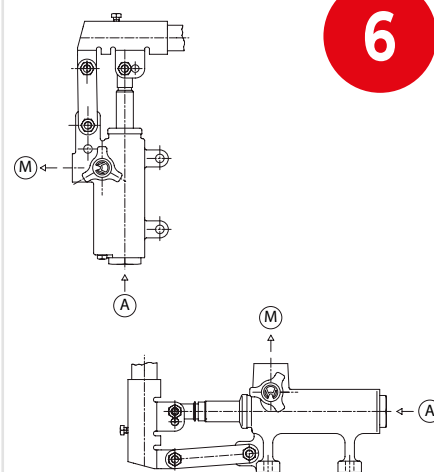
Horizontal mounting.

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)

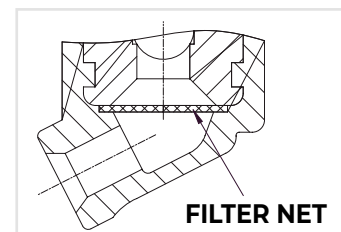
**Advised filtration:** 15 μm

**Contamination class:** 18/14 ISO4406  
(9 NAS 1638)

## MAINTENANCE

For a good service, we advise following periodical operations:

- FILTER NET CLEANING
- OIL REPLACEMENT



**FILTER NET**

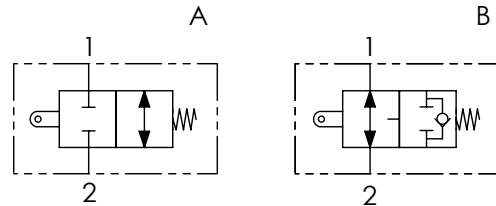


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>FCT</b>		

<b>01</b>	VALVOLE DI FINE CORSA A TRAZIONE (TUG END - STROKE VALVES)	<b>vpr</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 3/8
		BSPP 1/2
		BSPP 3/4
		BSPP 1
<b>03</b>	SCHEMA (CIRCUIT)	Centro chiuso (Closed centre)
		Centro aperto (Open centre)

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



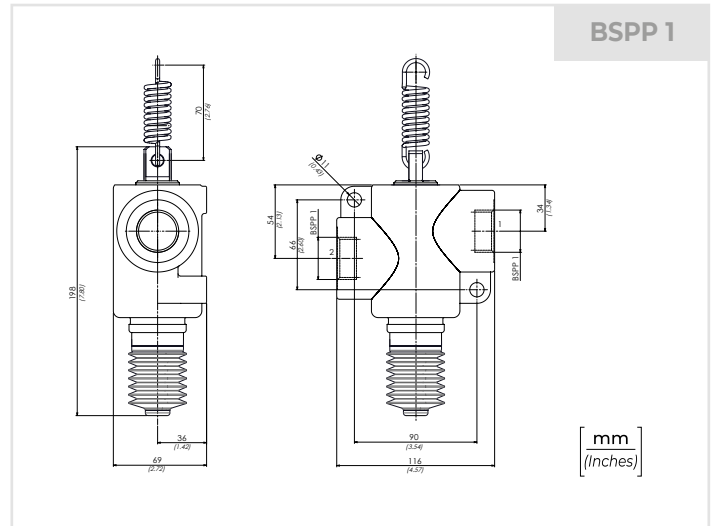
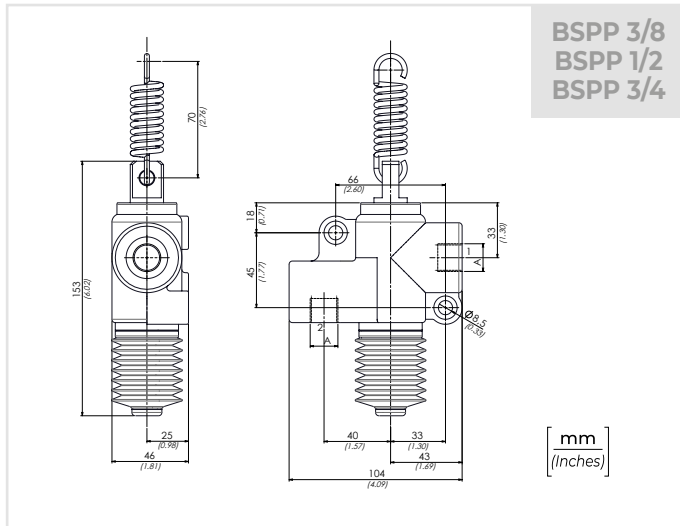
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
380	BSPP 3/8	60 (15.8)	250 (3625)	1,7 (3.7)
120	BSPP 1/2	80 (21.1)		1,8 (4)
340	BSPP 3/4	100 (26.4)		1,9 (4.1)
100	BSPP 1	140 (37)	200 (2900)	2,5 (5.5)

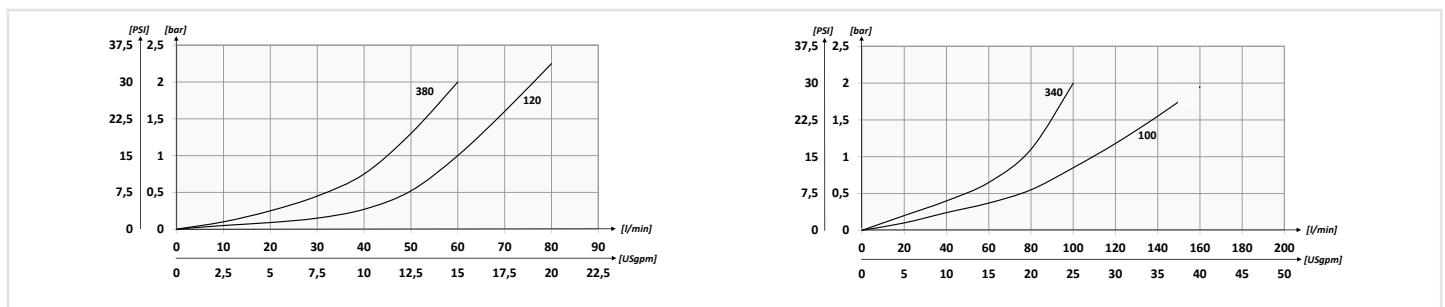
**DATI TECNICI / TECHNICAL DATA**

**Olio idraulico - Mineral oil** ISO 6743/4 (DIN 51524)  
**Viscosità olio - Oil viscosity** 15-250 mm<sup>2</sup>/s (15 to 250 cSt)  
**Classe di contaminazione max con filtro** ISO 4406:1999 Classe 19/17/14  
 Max contamination index with filter  
**Temperatura dell'olio - Oil temperature** -20°C +80°C -4°F +176°F  
**Temperatura ambiente - Environment temperature** -20°C +50°C -4°F +122°F

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



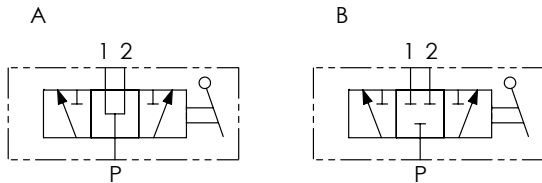
**PERFORMANCES**







### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

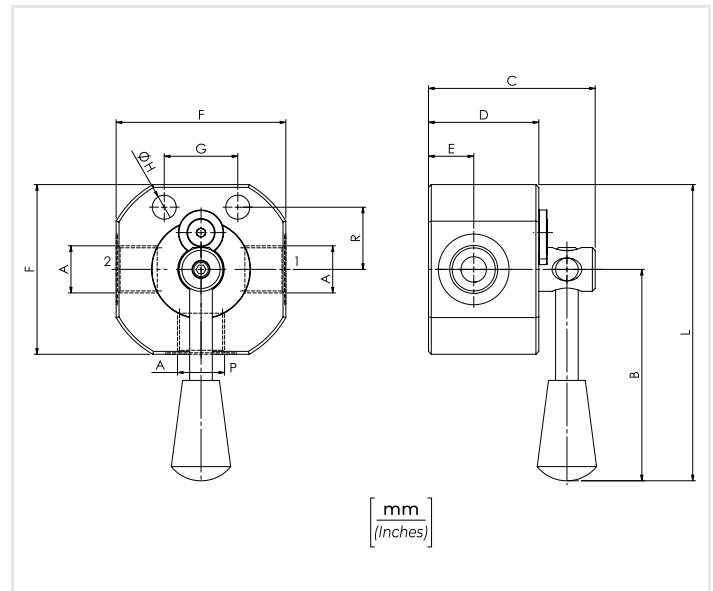


<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03	04	05
	<b>DDFA3</b>		<b>N</b>		<b>S</b>

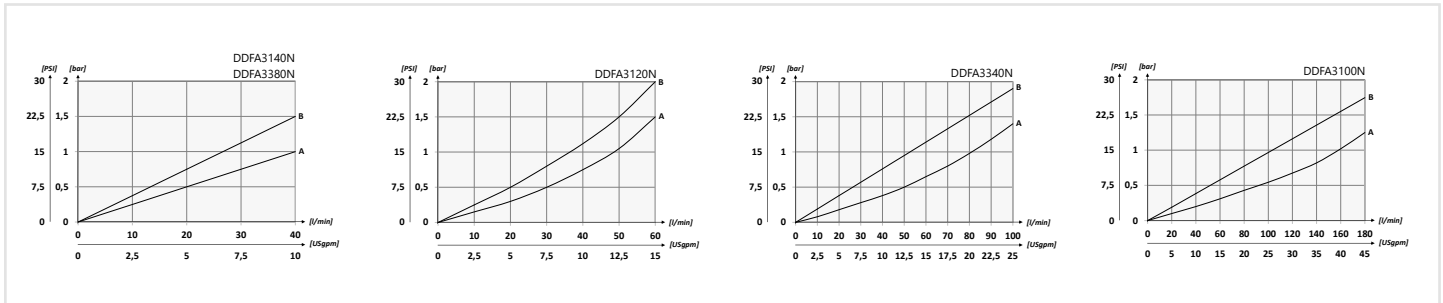
<b>01</b>	DEVIATORI DI FLUSSO A 3 VIE ALTA PRESSIONE (HIGH PRESSURE 3 WAYS FLOW DIVERTERS)			<b>DDFA3</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>	
		BSPP 3/8	<b>380</b>	
		BSPP 1/2	<b>120</b>	
		BSPP 3/4	<b>340</b>	
		BSPP 1	<b>100</b>	
<b>03</b>	NUOVA VERSIONE (NEW VERSION)			<b>N</b>
<b>04</b>	SCHEMA (CIRCUIT)	Centro aperto (Open centre)	<b>A</b>	
		Centro chiuso (Closed centre)	<b>B</b>	
<b>05</b>	MATERIALE (MATERIAL)	Acciaio (Steel)		<b>S</b>

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4 (DIN 51524)</b>	
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>	
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>	
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b>	<b>-4°F + 176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b>	<b>-4°F + 122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)		
<b>Trafilamento massimo</b> Max leakage	<b>7 gocce al min.</b> 0,015 in <sup>3</sup> /min	<b>200 bar</b> drops/min



### PERFORMANCES



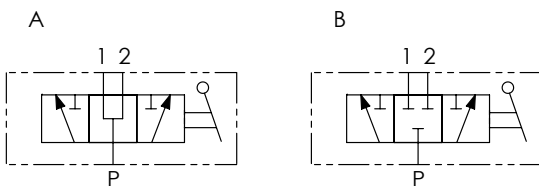
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	R	PESO APPROX APPROX WEIGHT kg-lbt
DDFA3140-N	BSPP 1/4	40 (10.6)	500 (7250)	80 (3.15)	59 (2.32)	39 (1.54)	16 (0.63)	60 (2.36)	26 (1.02)	8,5 (0.33)	110 (4.33)	22 (0.87)	0.97 (2.13)
DDFA3380-N	BSPP 3/8												0.94 (2.07)
DDFA3120-N	BSPP 1/2	60 (15.8)		0.90 (1.98)									
DDFA3340-N	BSPP 3/4	100 (26.4)		102 (4.02)	75,7 (2.98)	54 (2.13)	23,5 (0.93)	80 (3.15)	85 (3.35)	32 (1.26)	11 (0.43)	142 (5.59)	26 (1.02)
DDFA3100-N	BSPP 1	180 (47.5)									145 (5.71)	31,5 (1.24)	2.33 (5.14)





### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

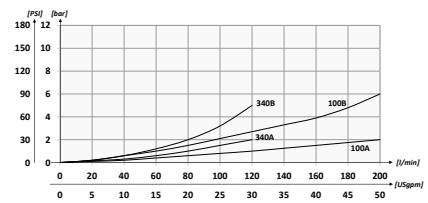
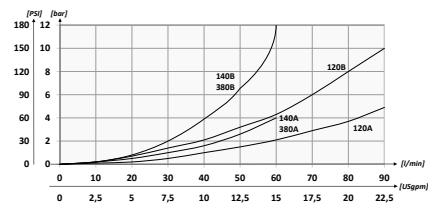


### CODICE ORDINAZIONE / ORDERING CODE

01	02	03
<b>DDF3</b>		

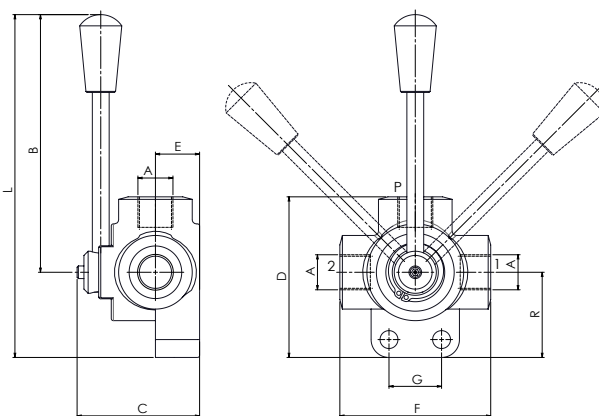
01	DEVIATORI DI FLUSSO A 3 VIE (3 WAYS FLOW DIVERTERS)	DDF3	
02	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
03	SCHEMA (CIRCUIT)	Centro aperto (Open centre)	<b>A</b>
		Centro chiuso (Closed centre)	<b>B</b>

### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	7 gocce al min. 200 bar 7 drops-min 2900 PSI



[ mm ]  
[ Inches ]

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	R	PESO APPROX APPROX WEIGHT kg-lbt
DDF3140	BSPP 1/4	60 (15.8)	350 (5075)	115 (4.53)	57 (2.24)	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)
DDF3380	BSPP 3/8				63 (2.48)	86 (3.39)	24 (0.94)	80 (3.15)	32 (1.26)		161 (6.34)	36 (1.42)	1,3 (2.8)
DDF3120	BSPP 1/2	67 (2.64)			98,5 (3.88)	26 (1.02)	90 (3.54)	168,5 (6.63)			42 (1.65)	1,7 (3.7)	
DDF3340	BSPP 3/4	77 (3.03)			110 (4.33)	31 (1.22)	98 (3.86)	176,5 (6.95)			50 (1.97)	2,5 (5.5)	
DDF3100	BSPP 1	200 (52.8)	300 (4350)							10,5 (0.41)			

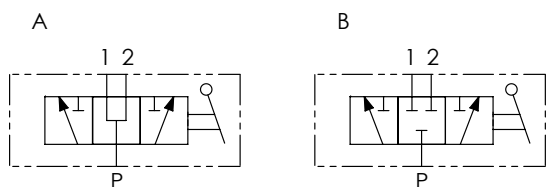


**CODICE ORDINAZIONE**  
ORDERING CODE

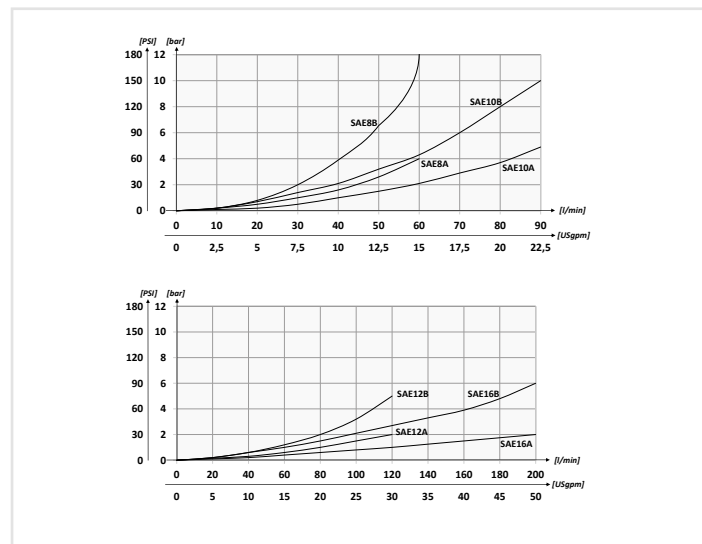
01	02	03
<b>DDF3SAE</b>		

<b>01</b>	DEVIATORI DI FLUSSO A 3 VIE (3 WAYS FLOW DIVERTERS)		<b>DDF3SAE</b>
<b>02</b>	DIMENSIONE (SIZE)	3/4-16UNF	<b>8</b>
		7/8-14UNF	<b>10</b>
		1-1/16-12UN	<b>12</b>
		1-5/16-12UN	<b>16</b>
<b>03</b>	SCHEMA (CIRCUIT)	<b>Centro aperto</b> (Open centre)	<b>A</b>
		<b>Centro chiuso</b> (Closed centre)	<b>B</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

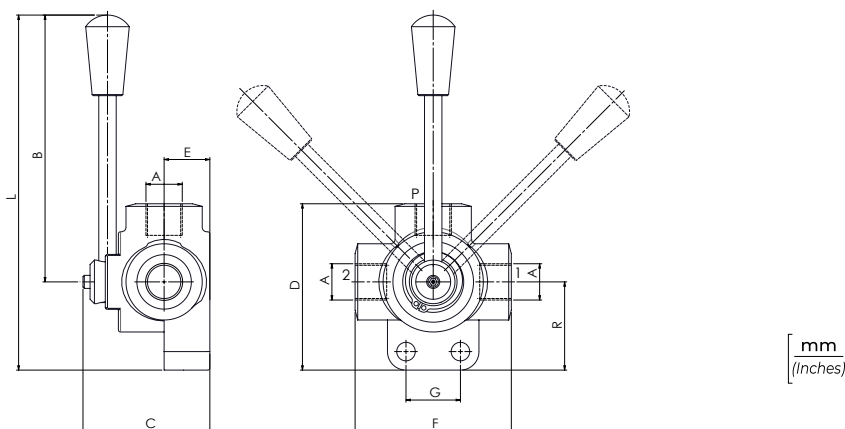


**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>7 gocce al min.</b> <b>200 bar</b> 7 drops-min    2900 PSI



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	R	PESO APPROX APPROX WEIGHT kg-lbt
DDF3SAE8	3/4-16UNF	60 (15.8)	350 (5075)	115 (4.53)	57 (2.24)	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 (23.8)			63 (2.48)	86 (3.39)	24 (0.94)	80 (3.15)	32 (1.26)		161 (6.34)	36 (1.42)	1,3 (2.8)
DDF3SAE12	1-1/16-12UN	120 (31.7)	67 (2.64)		98,5 (3.88)	26 (1.02)	90 (3.54)	10,5 (0.41)		168,5 (6.63)	42 (1.65)	1,7 (3.7)	
DDF3SAE16	1-5/16-12UN	200 (52.8)	300 (4350)		77 (3.03)	110 (4.33)	31 (1.22)		98 (3.86)	176,5 (6.95)	50 (1.97)	2,2 (5.5)	

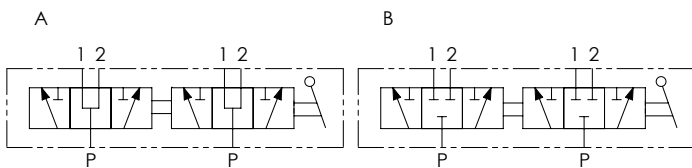


**CODICE ORDINAZIONE**  
ORDERING CODE

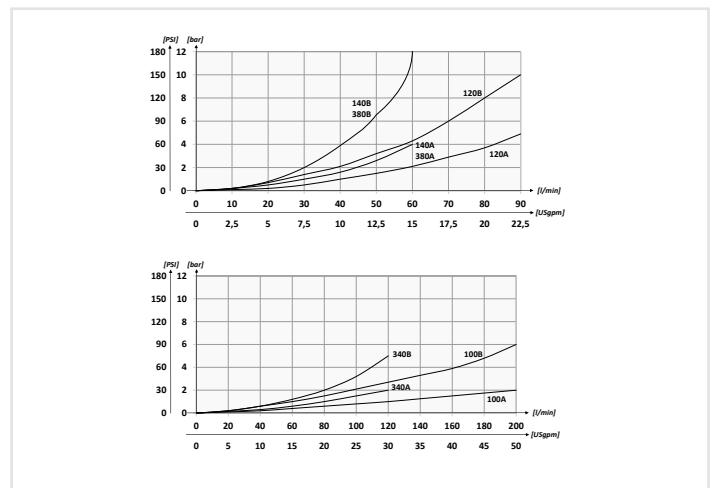
01	02	03
<b>DDF6</b>		

<b>01</b>	DEVIATORI DI FLUSSO A 6 VIE (6 WAYS FLOW DIVERTERS)	<b>DDF6</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
<b>03</b>	SCHEMA (CIRCUIT)	Centro aperto (Open centre)	<b>A</b>
		Centro chiuso (Closed centre)	<b>B</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

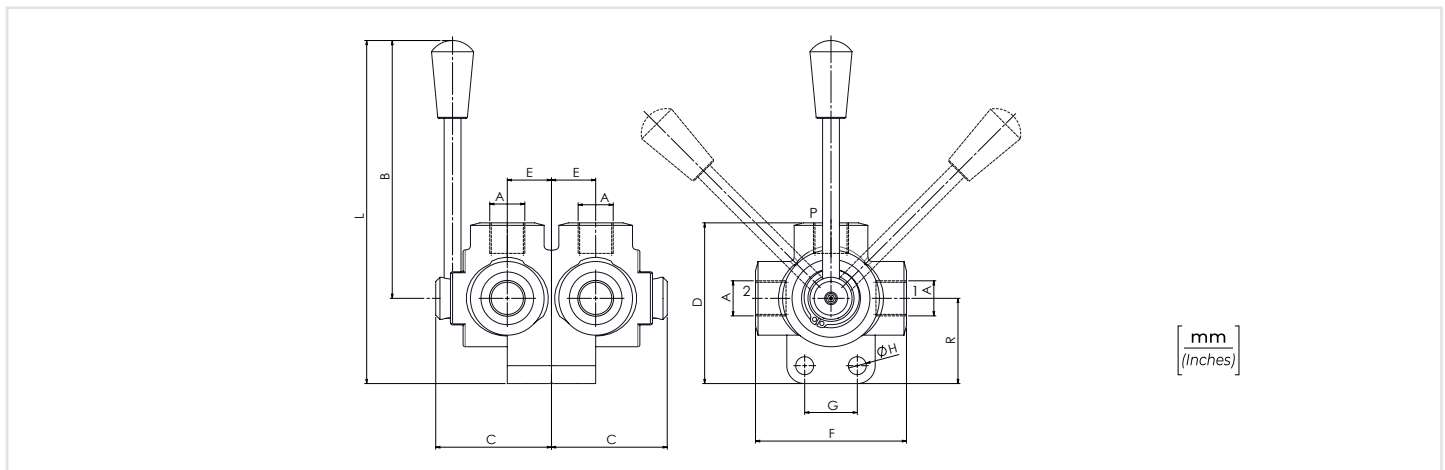


**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	<b>7 gocce al min. 200 bar</b> 7 drops-min 2900 PSI



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	R	PESO APPROX APPROX WEIGHT kg-lbt
DDF6140	BSPP 1/4	60+60 (15.8+15.8)	350 (5075)	115 (4.53)	57 (2.24)	75,5 (2.97)	21 (0.83)	70 (2.76)	25 (0.98)	8,5 (0.33)	155,5 (6.12)	32 (1.26)	1,6 (3.52)
DDF6380	BSPP 3/8				63 (2.48)	86 (3.39)	24 (0.94)	80 (3.15)			161 (6.34)	36 (1.42)	2,6 (5.7)
DDF6120	BSPP 1/2	90+90 (23.8+23.8)			67 (2.64)	98,5 (3.88)	26 (1.02)	90 (3.54)	32 (1.26)	10,5 (0.41)	168,5 (6.63)	42 (1.65)	3,4 (7.5)
DDF6340	BSPP 3/4	120+120 (31.7+31.7)			77 (3.03)	110 (4.33)	31 (1.22)	98 (3.86)			176,5 (6.95)	50 (1.97)	5,3 (12)
DDF6100	BSPP 1	200+200 (52.8+52.8)	300 (4000)										

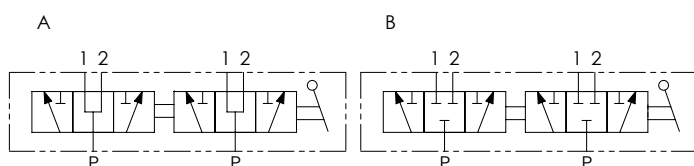
# DDF6-SAE DEVIATORI DI FLUSSO A 6 VIE 6 WAYS FLOW DIVERTERS



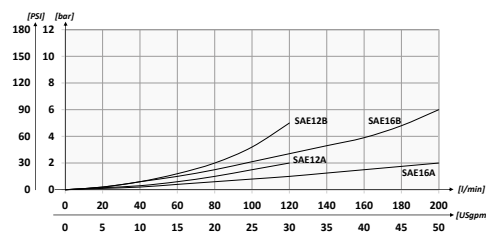
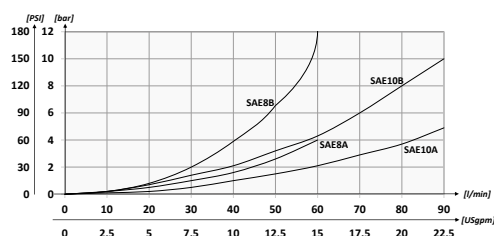
	01	02	03
<b>CODICE ORDINAZIONE</b> ORDERING CODE	<b>DDF6SAE</b>		

<b>01</b>	DEVIATORI DI FLUSSO A 6 VIE (6 WAYS FLOW DIVERTERS)		<b>DDF6SAE</b>
<b>02</b>	DIMENSIONE (SIZE)	3/4-16UNF	<b>8</b>
		7/8-14UNF	<b>10</b>
		1-1/16-12UN	<b>12</b>
		1-5/16-12UN	<b>16</b>
<b>03</b>	SCHEMA (CIRCUIT)	<b>Centro aperto</b> (Open centre)	<b>A</b>
		<b>Centro chiuso</b> (Closed centre)	<b>B</b>

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT

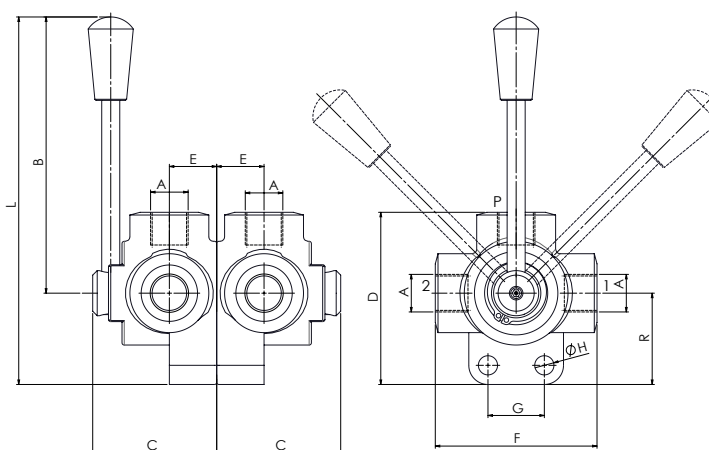


### PERFORMANCES



### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)	
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)	
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>	
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b>	<b>-4°F +176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b>	<b>-4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)		
<b>Trafilamento massimo</b> Max leakage	<b>7 gocce al min.</b> 7 drops-min	<b>200 bar</b> 2900 PSI



[ mm ]  
[ Inches ]

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	R	PESO APPROX APPROX WEIGHT kg-lbt
DDF6SAE8	3/4-16UNF	60+60 (15.8+15.8)	350 (5075)	115 (4.53)	57 (2.24)	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 (23.8+23.8)			63 (2.48)	86 (3.38)	24 (0.95)	80 (3.15)	32 (1.26)		10,5 (0.41)	161 (6.34)	36 (1.42)
DDF6SAE12	1-1/16-12UN	120+120 (31.7+31.7)	67 (2.64)		98,5 (3.88)	26 (1.02)	90 (3.54)	32 (1.26)		10,5 (0.41)		168,5 (6.63)	42 (1.65)
DDF6SAE16	1-5/16-12UN	200+200 (52.8+52.8)	300 (4000)		77 (3.03)	110 (4.33)	31 (1.22)		98 (3.86)		176,5 (6.95)	50 (1.97)	5,3 (12)

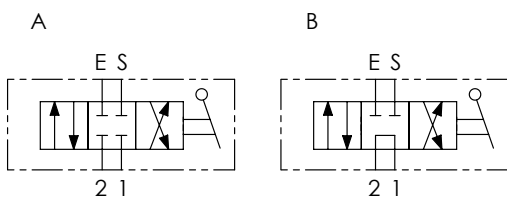


**CODICE ORDINAZIONE**  
ORDERING CODE

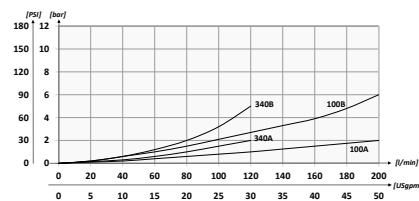
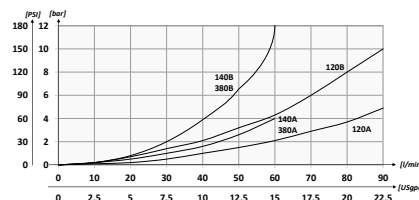
01	02	03
<b>IDF4</b>		

<b>01</b>	DEVIATORI DI FLUSSO A 4 VIE (4 WAYS FLOW DIVERTERS)	<b>IDF4</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
<b>03</b>	SCHEMA (CIRCUIT)	Centro chiuso (Closed centre)	<b>A</b>
		Centro aperto (Open centre)	<b>B</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

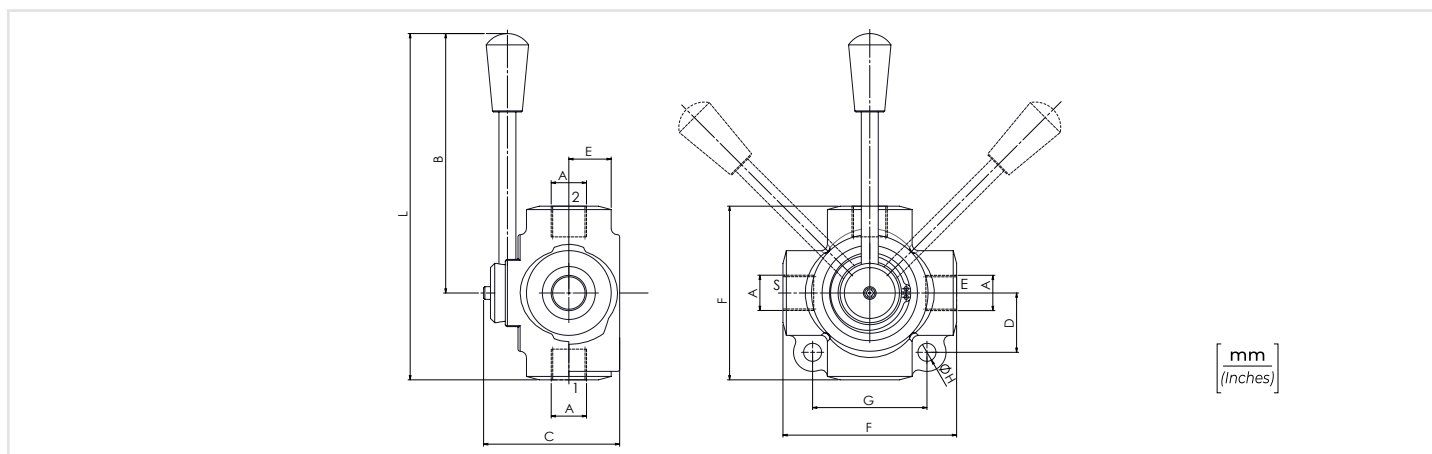


**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	
Trafilamento massimo Max leakage	<b>7 gocce al min. 200 bar</b> 7 drops-min 2900 PSI



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	PESO APPROX (kg) APPROX WEIGHT (lb)
IDF4140	BSPP 1/4	60 (15.8)	350 (5075)	115 (4.53)	63 (2.48)	28 (1.10)	24 (0.94)	80 (3.15)	54 (2.13)	8,5 (0.33)	155 (6.10)	1,3 (2.8)
IDF4380	BSPP 3/8											1,87 (4.06)
IDF4120	BSPP 1/2	90 (23.8)	300 (4350)	77 (3.03)	38 (1.50)	31 (1.22)	94 (3.70)	74 (2.91)	10,5 (0.41)	162 (6.38)	2,8 (6.1)	
IDF4340	BSPP 3/4	120 (31.7)									2,5 (5.51)	
IDF4100	BSPP 1	200 (52.8)										

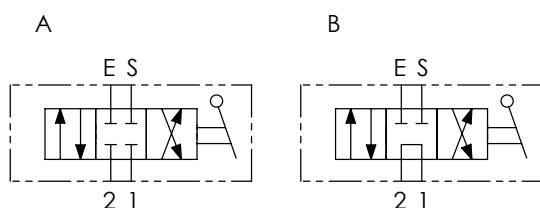


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>IDF4SAE</b>		

<b>01</b>	DEVIATORI DI FLUSSO A 4 VIE (4 WAYS FLOW DIVERTERS)	<b>IDF4SAE</b>
<b>02</b>	DIMENSIONE (SIZE)	3/4-16UNF
		7/8-14UNF
		1-1/16-12UN
		1-5/16-12UN
<b>03</b>	SCHEMA (CIRCUIT)	<b>Centro chiuso</b> (Closed centre)
		<b>Centro aperto</b> (Open centre)

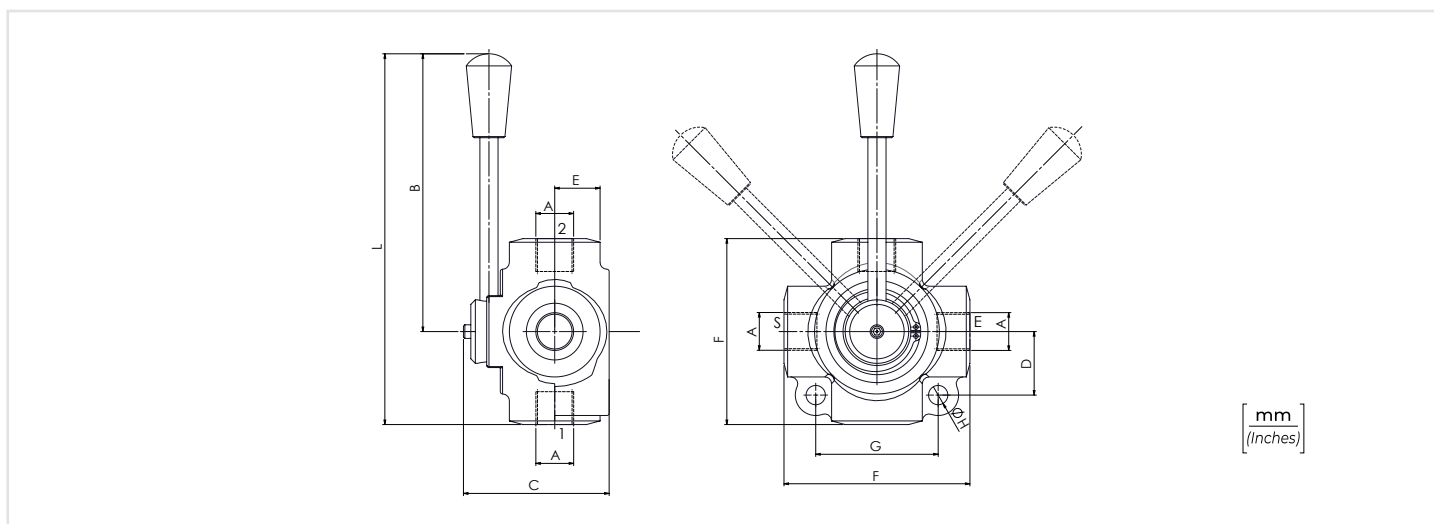
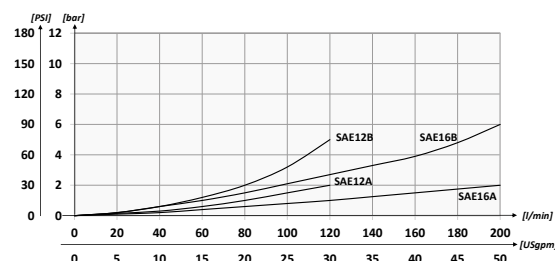
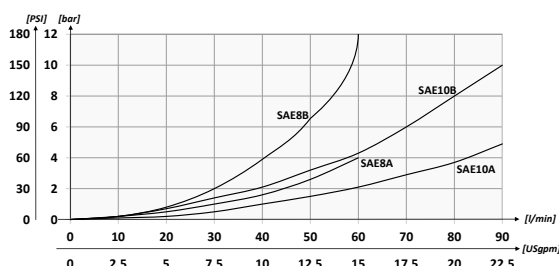
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>7 gocce al min.</b> <b>200 bar</b> 7 drops-min    2900 PSI

**PERFORMANCES**

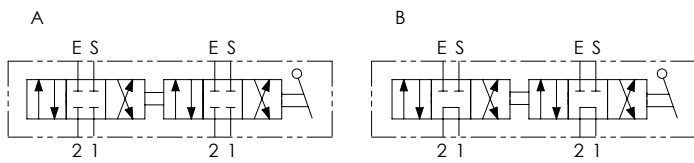


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	PESO APPROX APPROX WEIGHT kg-lbt
IDF4SAE8	3/4-16UNF	60 (15.8)	350 (5075)	115 (4.53)	63 (2.48)	28 (1.10)	24 (0.94)	80 (3.15)	54 (2.13)	8,5 (0.33)	155 (6.10)	1,3 (2.8)
IDF4SAE10	7/8-14UNF	90 (23.8)										
IDF4SAE12	1-1/16-12UN	120 (31.7)	300 (4350)	77 (3.03)	38 (1.50)	31 (1.22)	94 (3.70)	74 (2.91)	10,5 (0.41)	162 (6.38)	2 (4.4)	
IDF4SAE16	1-5/16-12UN	200 (52.8)										



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

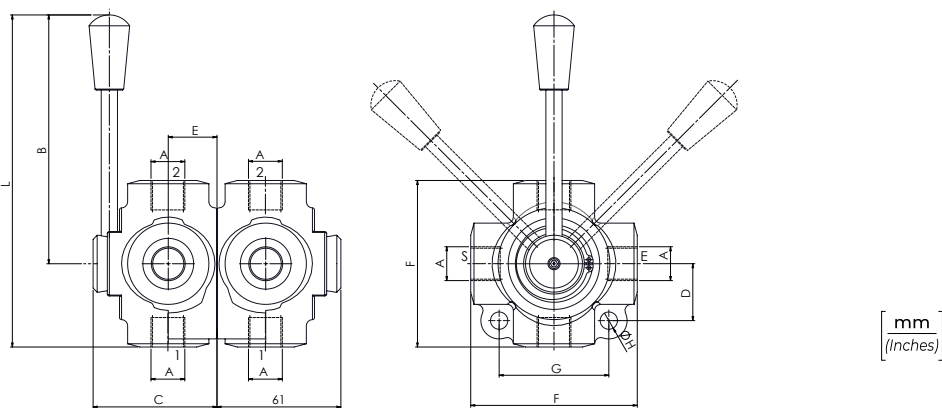
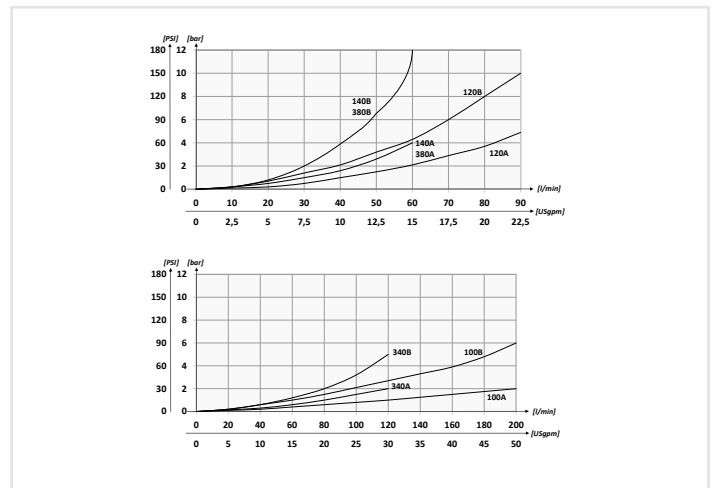
olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)	
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura dell'olio - Oil temperature	-20°C +80°C	-4°F + 176°F
Temperatura ambiente - Environment temperature	-20°C +50°C	-4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)		
Trafilamento massimo Max leakage	7 gocce al min. 7 drops-min	200 bar 2900 PSI

**CODICE ORDINAZIONE  
ORDERING CODE**

01	02	03
<b>IDF8</b>		

<b>01</b>	DEVIATORI DI FLUSSO A 8 VIE (8 WAYS FLOW DIVERTERS)	<b>IDF8</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
<b>03</b>	SCHEMA (CIRCUIT)	Centro chiuso (Closed centre)	<b>A</b>
		Centro aperto (Open centre)	<b>B</b>

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

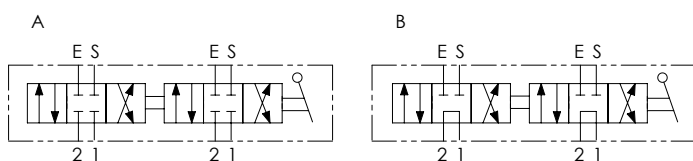
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	PESO APPROX (kg) APPROX WEIGHT (lbt)
IDF8140	BSPP 1/4	60+60 (15.8+15.8)	350 (5075)	115 (4.53)	63 (2.48)	28 (1.10)	24 (0.94)	80 (3.15)	54 (2.13)	8,5 (0.33)	155 (6.10)	2,70 (5.86)
IDF8380	BSPP 3/8											2,52 (5.47)
IDF8120	BSPP 1/2	90+90 (23.8+23.8)	300 (4000)	77 (3.03)	38 (1.50)	31 (1.22)	94 (3.70)	74 (2.91)	10,5 (0.41)	162 (6.38)	5,10 (11.07)	
IDF8340	BSPP 3/4	120+120 (31.7+31.7)									4 (8.8)	
IDF8100	BSPP 1	200+200 (52.8+52.8)										



# IDF8-SAE DEVIATORI DI FLUSSO A 8 VIE 8 WAYS FLOW DIVERTERS



## SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



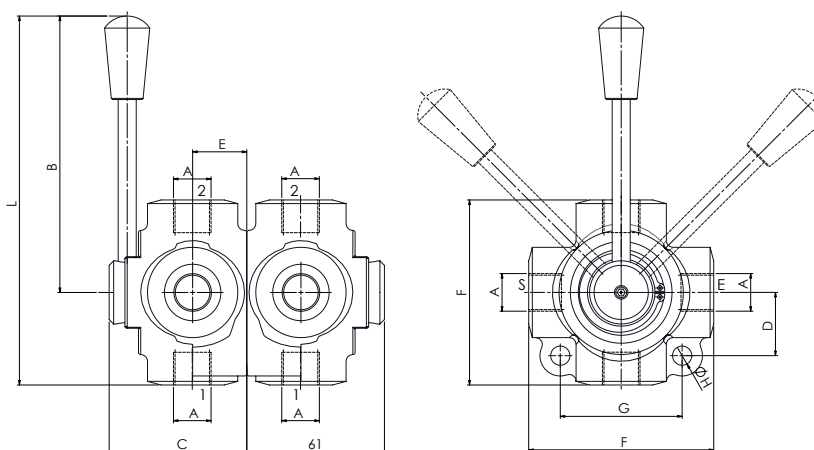
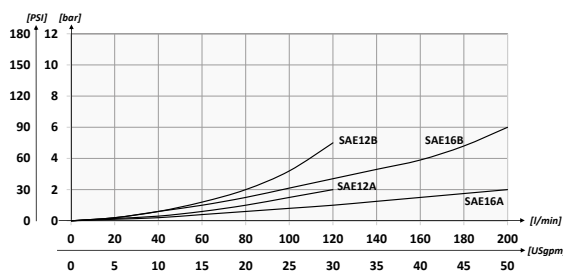
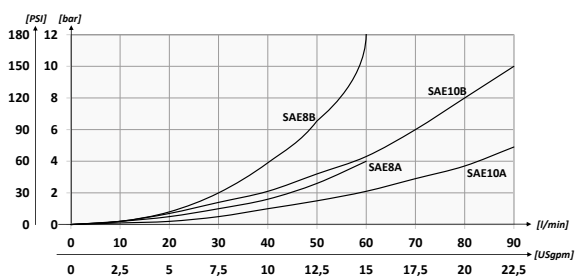
	01	02	03
<b>CODICE ORDINAZIONE</b> ORDERING CODE	<b>IDF8SAE</b>		

<b>01</b>	DEVIATORI DI FLUSSO A 8 VIE (8 WAYS FLOW DIVERTERS)	<b>IDF8SAE</b>	
<b>02</b>	DIMENSIONE (SIZE)	3/4-16UNF	<b>8</b>
		7/8-14UNF	<b>10</b>
		1-1/16-12UN	<b>12</b>
		1-5/16-12UN	<b>16</b>
<b>03</b>	SCHEMA (CIRCUIT)	Centro chiuso (Closed centre)	<b>A</b>
		Centro aperto (Open centre)	<b>B</b>

## DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F +176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F +122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	
<b>Trafilamento massimo</b> Max leakage	<b>7 gocce al min.</b> <b>200 bar</b> 7 drops-min    2900 PSI

## PERFORMANCES



## CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	D	E	F	G	H	L	PESO APPROX APPROX WEIGHT kg-lbt
IDF8SAE8	3/4-16UNF	60+60 (15.8+15.8)	350 (5075)	115 (4.53)	63 (2.48)	28 (1.10)	24 (0.94)	80 (3.15)	54 (2.13)	8,5 (0.33)	155 (6.10)	2,3 (5)
IDF8SAE10	7/8-14UNF	90+90 (23.8+23.8)										2,1 (4.6)
IDF8SAE12	1-1/16-12UN	120+120 (31.7+31.7)	300 (4350)	77 (3.03)	38 (1.50)	31 (1.22)	94 (3.70)	74 (2.91)	10,5 (0.41)	162 (6.38)	4,3 (9.5)	
IDF8SAE16	1-5/16-12UN	200+200 (52.8+52.8)									4 (8.8)	



# notes

A series of horizontal dotted lines for taking notes.

# COMPONENTI E ACCESSORI

## HYDRAULIC COMPONENTS

Valvole a sfera a 2, 3 e 4 vie, giunti girevoli, mini-prese di pressione ed esclusori manometro.

Ball valves 2, 3 or 4 ways, rotating couplings, pressure gauge shut-off valves and test couplings for pressure checking.

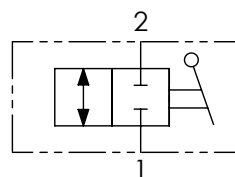




<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02	03
<b>RAS2</b>			

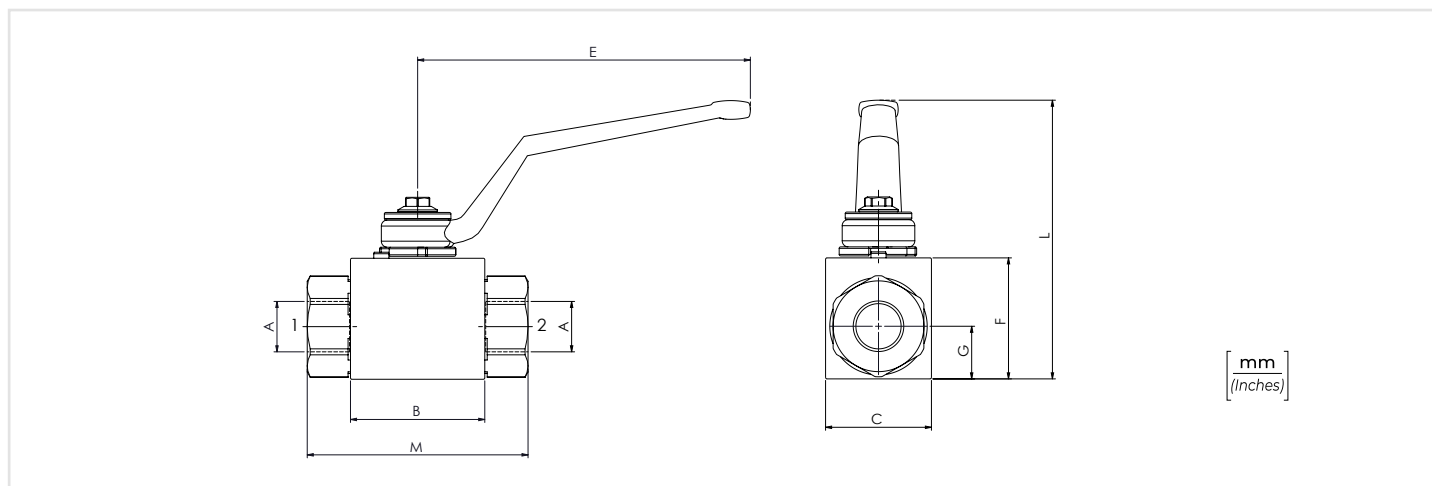
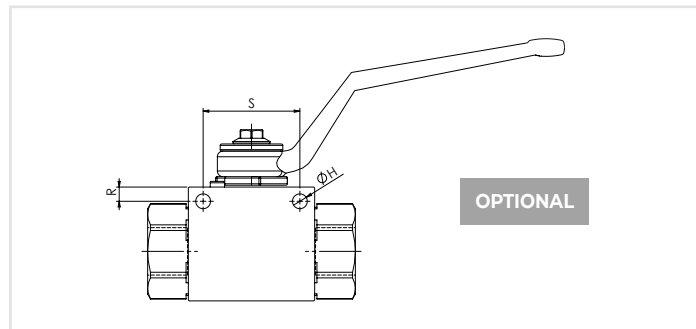
<b>01</b>	VALVOLE A SFERA A 2 VIE (2 WAYS BALL VALVES)	<b>RAS2</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/8
		BSPP 1/4
		BSPP 3/8
		BSPP 1/2
		BSPP 3/4
		BSPP 1
		BSPP 1-1/4
<b>03</b>	OPTIONAL	Fori di fissaggio (Fixing ports)
		<b>P</b>

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



### DATI TECNICI / TECHNICAL DATA

Olivo idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	



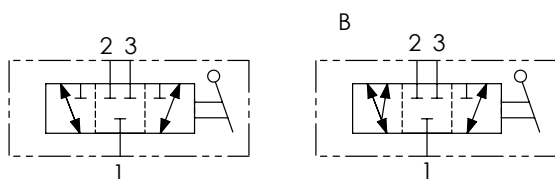
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	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 APPROX APPROX WEIGHT kg-lbt
RAS2180	BSPP 1/8	15 (4)	500 (7250)	42,4 (1.67)	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 (6.6)												
RAS2380	BSPP 3/8	35 (9.2)												
RAS2120	BSPP 1/2	60 (15.8)	400 (5800)	48,4 (1.91)	37 (1.46)	180 (7.09)	43 (1.69)	18 (0.71)	6,2 (0.24)	99,5 (3.92)	83 (3.27)	5 (0.20)	36 (1.42)	0,8 (1.8)
RAS2340	BSPP 3/4	100 (26.4)												
RAS2100	BSPP 1	150 (39.6)	350 (5075)	66,5 (2.62)	55 (2.17)	180 (7.09)	65 (2.56)	29,5 (1.16)	6,2 (0.24)	106,5 (4.19)	95 (3.74)	6 (0.24)	50 (1.97)	2,3 (5)
RAS2114	BSPP 1-1/4													
RAS2112	BSPP 1-1/2													

# RAS3-BSPP VALVOLE A SFERA A 3 VIE 3 WAYS BALL VALVES



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



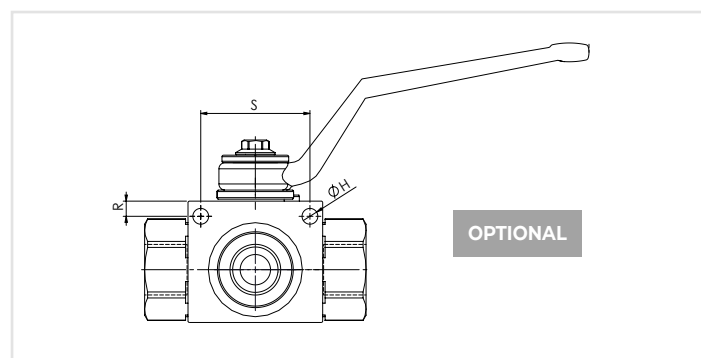
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04
<b>RAS3</b>			

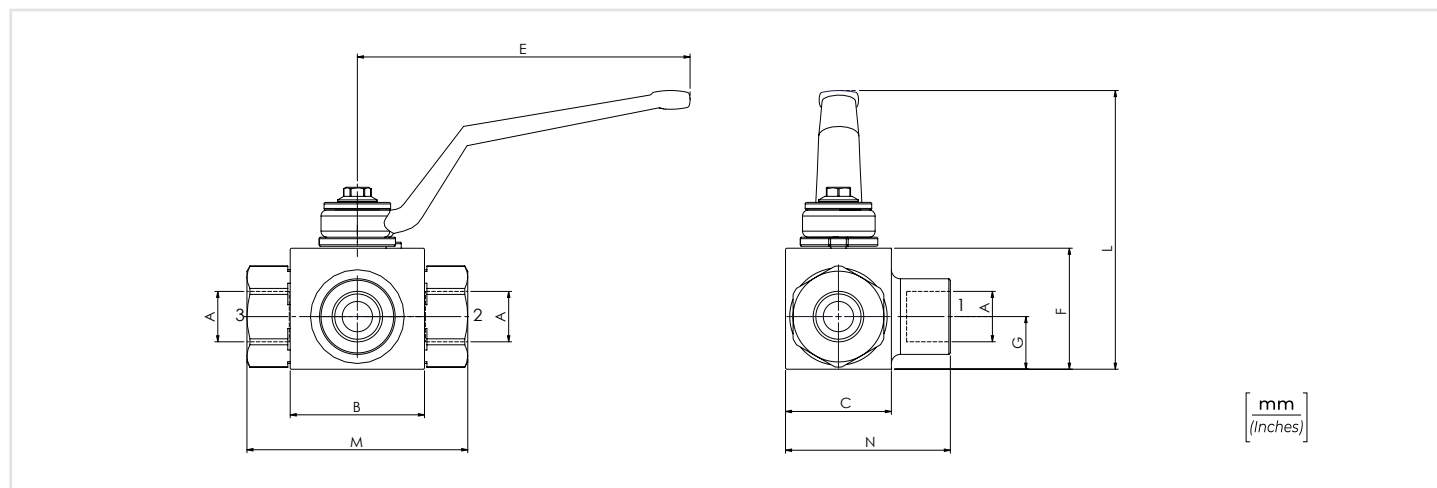
<b>01</b>	VALVOLE A SFERA A 3 VIE (3 WAYS BALL VALVES)	<b>RAS3</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/8	<b>180</b>
		BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
		BSPP 1-1/4	<b>114</b>
		BSPP 1-1/2	<b>112</b>
<b>03</b>	SCHEMA (CIRCUIT)	STANDARD	<b>/</b>
		SCHEMA B	<b>B</b>
<b>04</b>	OPTIONAL	Fori di fissaggio (Fixing ports)	<b>P</b>

**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico - Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio - Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio - Oil temperature</b>	<b>-20°C +80°C -4°F +176°F</b>
<b>Temperatura ambiente - Environment temperature</b>	<b>-20°C +50°C -4°F +122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	



**OPTIONAL**



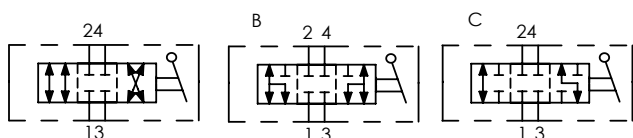
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	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 APPROX APPROX WEIGHT kg-lbt
RAS3180	BSPP 1/8	15 (4)	400 (5800)	42,4 (1.67)	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 (1.91)	4,5 (0.18)	34 (1.34)	0,6 (1.3)
RAS3140	BSPP 1/4	25 (6.6)		40 (1.57)	17,5 (0.69)		96,5 (3.80)	73 (2.87)		54,5 (2.15)	5 (0.20)	36 (1.42)	0,7 (1.5)		
RAS3380	BSPP 3/8	35 (9.2)	44,4 (1.75)	35 (1.38)	40 (1.57)	17,5 (0.69)	99,5 (3.92)	83 (3.27)	58,5 (2.30)	6 (0.24)				50 (1.97)	1,6 (3.5)
RAS3120	BSPP 1/2	60 (15.8)	48,4 (1.91)	37 (1.46)	43 (1.69)	18 (0.71)	106,5 (4.19)	95 (3.74)	75 (2.95)		6 (0.24)	50 (1.97)	2,4 (5.3)		
RAS3340	BSPP 3/4	100 (26.4)	62,5 (2.46)	45 (1.77)	55 (2.16)	23,5 (0.93)	116,5 (4.59)	120 (4.72)	87,5 (3.44)	6 (0.24)				50 (1.97)	2,6 (5.7)
RAS3100	BSPP 1	150 (89.6)	350 (5075)	66,5 (2.62)	55 (2.17)	180 (7.09)	65 (2.56)	29,5 (1.16)	6,2 (0.24)		112 (4.41)	124 (4.88)	2,8 (6)		
RAS3114	BSPP 1-1/4									120 (4.72)	87,5 (3.44)			2,6 (5.7)	
RAS3112	BSPP 1-1/2									124 (4.88)		87,5 (3.44)	2,8 (6)		

# RAS4-BSPP VALVOLE A SFERA A 4 VIE 4 WAYS BALL VALVES



### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



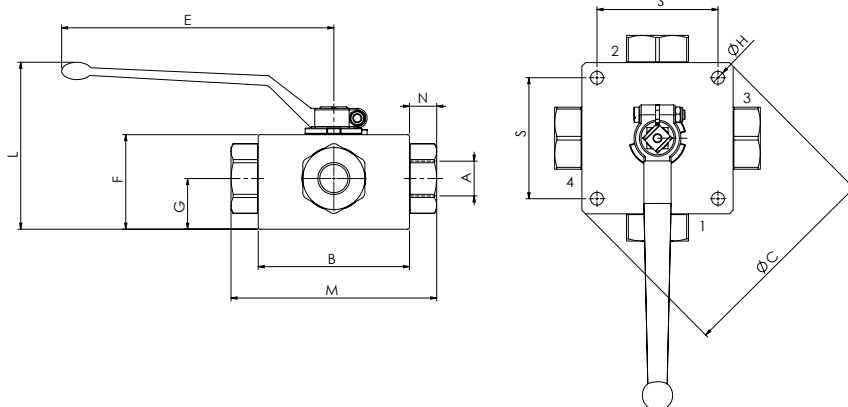
### DATI TECNICI / TECHNICAL DATA

olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### CODICE ORDINAZIONE ORDERING CODE

01	02	03	04
<b>RAS4</b>			<b>P</b>

<b>01</b>	VALVOLE A SFERA A 4 VIE (4 WAYS BALL VALVES)		<b>RAS4</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
		BSPP 1-1/4	<b>114</b>
		BSPP 1-1/2	<b>112</b>
<b>03</b>	SCHEMA (CIRCUIT)	STANDARD	<b>/</b>
		SCHEMA B	<b>B</b>
		SCHEMA C	<b>C</b>
<b>04</b>	STANDARD	Fori di fissaggio (Fixing ports)	<b>P</b>



[ mm ]  
[ Inches ]

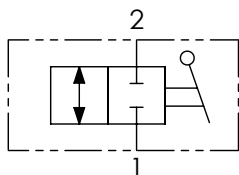
### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	E	F	G	H	L	M	N	S	PESO APPROX APPROX WEIGHT kg-lbt
RAS4140	BSPP 1/4	25 (6.6)	500 (7250)	70 (2.76)	/	110 (4.33)	42 (1.65)	21,5 (0.85)	6,5 (0.26)	97,5 (3.84)	100 (3.94)	15,5 (0.61)	55 (2.17)	1,80 (3.96)
RAS4380	BSPP 3/8	35 (9.2)	400 (5800)	80 (3.15)		180 (7.09)	53 (2.09)	28,5 (1.12)		101 (3.98)	115 (4.53)		65 (2.56)	3 (6.60)
RAS4120	BSPP 1/2	60 (15.8)	350 (5075)	100 (3.94)		62 (2.44)	33 (1.30)	110 (4.33)	136 (5.35)	17 (0.67)	80 (3.15)	5,2 (11.44)		
RAS4340	BSPP 3/4	100 (26.4)		113 (4.45)		68 (2.68)	36 (1.42)	116,5 (4.59)	156 (6.14)	21 (0.83)	6,9 (15.18)			
RAS4100	BSPP 1	150 (89.6)		118 (4.65)	138 (5.43)	300 (11.81)	82 (3.23)	47,5 (1.87)	130,5 (5.14)	181 (7.13)	24 (0.94)	85 (3.35)	9 (19.80)	
RAS4114	BSPP 1-1/4		9,2 (20.24)											
RAS4112	BSPP 1-1/2													

# RAS2-NPT VALVOLE A SFERA A 2 VIE 2 WAYS BALL VALVES



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



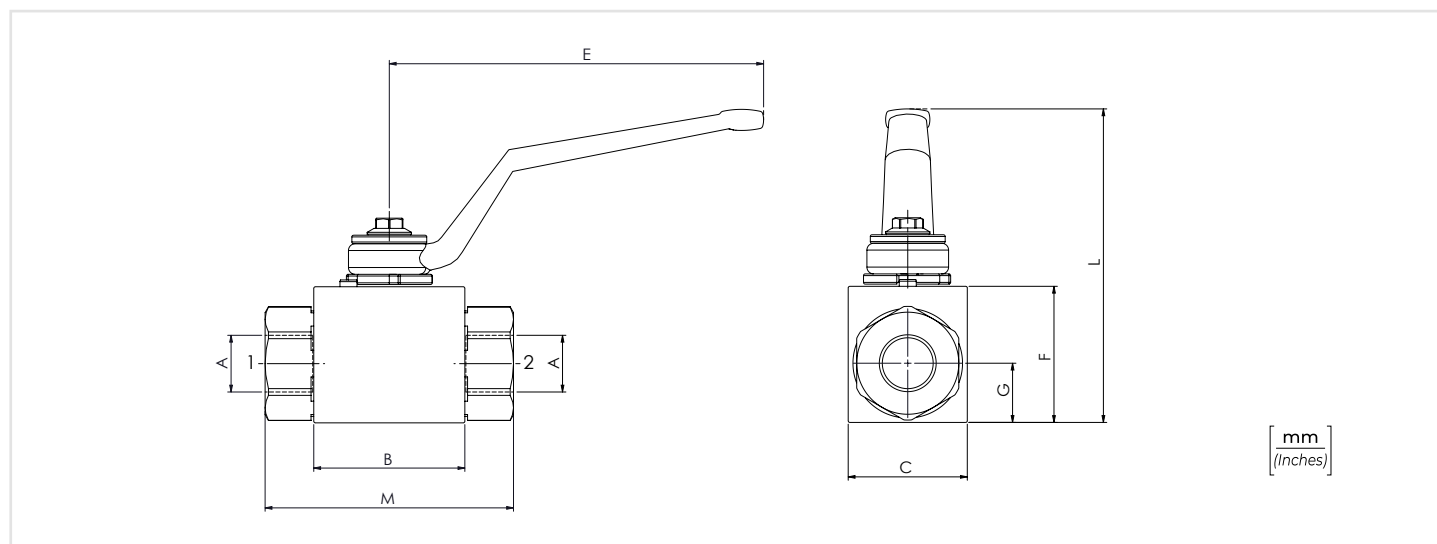
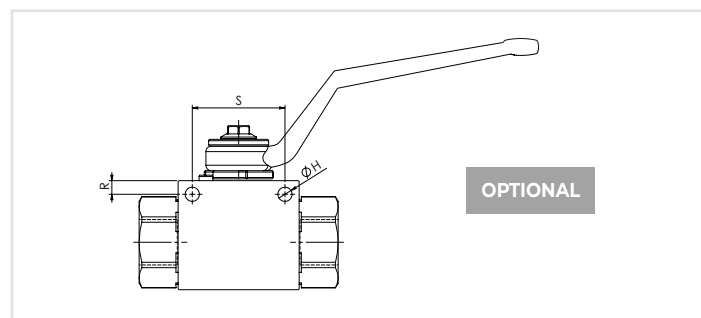
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04
<b>RAS2</b>		<b>NPT</b>	

<b>01</b>	VALVOLE A SFERA A 2 VIE (2 WAYS BALL VALVES)	<b>RAS2</b>
<b>02</b>	DIMENSIONE (SIZE)	NPT 1/8 <b>180</b>
		NPT 1/4 <b>140</b>
		NPT 3/8 <b>380</b>
		NPT 1/2 <b>120</b>
		NPT 3/4 <b>340</b>
		NPT 1 <b>100</b>
		NPT 1-1/4 <b>114</b>
		NPT 1-1/2 <b>112</b>
<b>03</b>	FILETTATURA (THREAD)	<b>NPT</b>
<b>04</b>	OPTIONAL	Fori di fissaggio (Fixing ports) <b>P</b>

**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

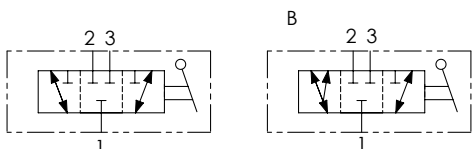


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	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 APPROX APPROX WEIGHT kg-lbt
RAS2180NPT	NPT 1/8	15 (4)	500 (7250)	42,4 (1.67)	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)
RAS2140NPT	NPT 1/4	25 (6.6)		44,4 (1.75)	35 (1.38)		40 (1.57)	17,5 (0.69)		96,5 (3.80)	73 (2.87)		0,7 (1.5)	
RAS2380NPT	NPT 3/8	35 (9.2)		48,4 (1.91)	37 (1.46)		43 (1.69)	18 (0.71)		99,5 (3.92)	83 (3.27)		0,8 (1.8)	
RAS2120NPT	NPT 1/2	60 (15.8)		62,5 (2.46)	45 (1.77)		55 (2.17)	23,5 (0.93)		106,5 (4.19)	95 (3.74)		1,5 (3.3)	
RAS2340NPT	NPT 3/4	100 (26.4)	350 (5075)	66,5 (2.62)	55 (2.17)	180 (7.09)	65 (2.56)	29,5 (1.16)	6,2 (0.24)	116,5 (4.59)	112 (4.41)	6 (0.24)	50 (1.97)	2,3 (5)
RAS2100NPT	NPT 1	150 (39.6)									120 (4.72)			2,5 (5.5)
RAS2114NPT	NPT 1-1/4										124 (4.88)			
RAS2112NPT	NPT 1-1/2													



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



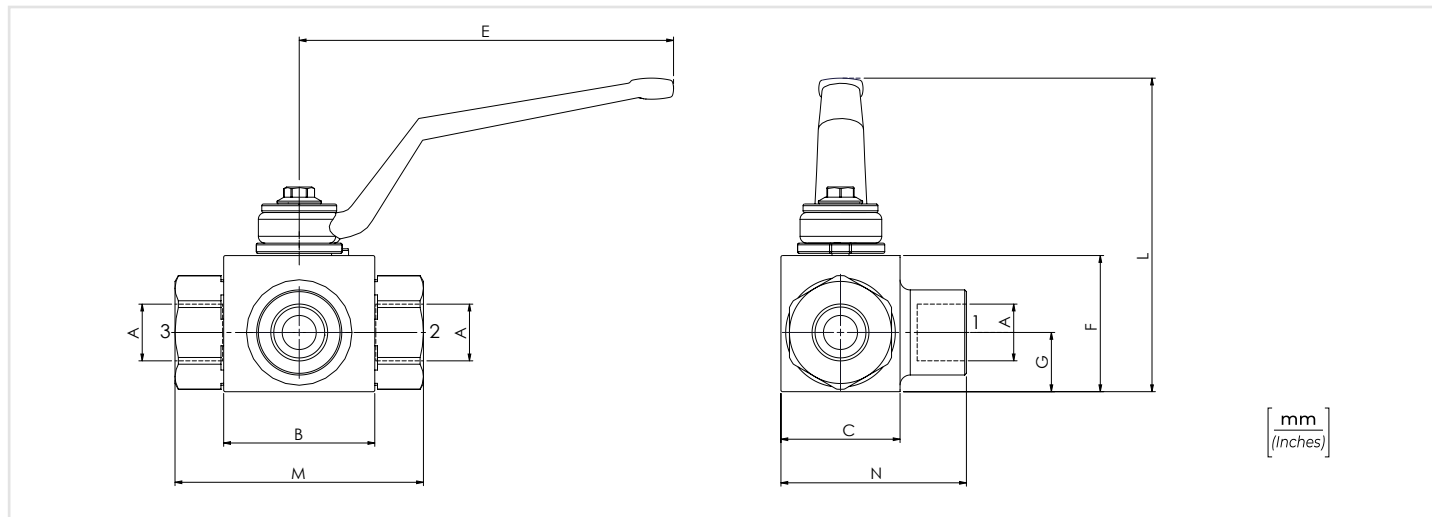
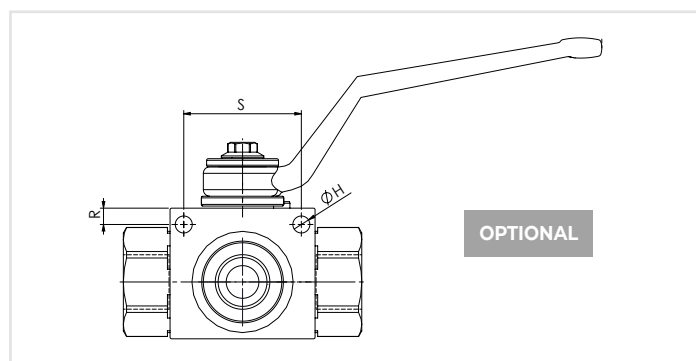
**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04	05
<b>RAS3</b>	<b>NPT</b>			

<b>01</b>	VALVOLE A SFERA A 3 VIE (3 WAYS BALL VALVES)	<b>RAS3</b>
<b>02</b>	DIMENSIONE (SIZE)	NPT 1/8 <b>180</b>
		NPT 1/4 <b>140</b>
		NPT 3/8 <b>380</b>
		NPT 1/2 <b>120</b>
		NPT 3/4 <b>340</b>
		NPT 1 <b>100</b>
		NPT 1-1/4 <b>114</b>
<b>03</b>	FILETTATURA (THREAD)	NPT <b>NPT</b>
		Standard <b>/</b>
<b>04</b>	SCHEMA (CIRCUIT)	Schema B <b>B</b>
		Fori di fissaggio (Fixing ports) <b>P</b>
<b>05</b>	OPTIONAL	

**DATI TECNICI / TECHNICAL DATA**

Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C -4°F +176°F
Temperatura ambiente - Environment temperature	-20°C +50°C -4°F +122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	



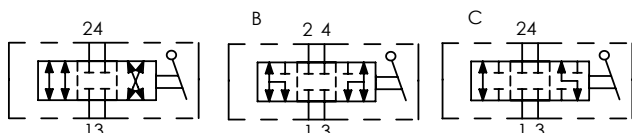
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	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 APPROX APPROX WEIGHT kg-lbt
RAS3180NPT	NPT 1/8	15 (4)	400 (5800)	42,4 (1.67)	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 (1.91)	4,5 (0.18)	34 (1.34)	0,6 (1.3)
RAS3140NPT	NPT 1/4	25 (6.6)		44,4 (1.75)	35 (1.38)		40 (1.57)	17,5 (0.69)		96,5 (3.80)	73 (2.87)	54,5 (2.15)	5 (0.20)	36 (1.42)	0,7 (1.5)
RAS3380NPT	NPT 3/8	35 (9.2)		48,4 (1.91)	37 (1.46)		43 (1.69)	18 (0.71)			99,5 (3.92)	83 (3.27)	58,5 (2.30)	6 (0.24)	50 (1.97)
RAS3120NPT	NPT 1/2	60 (15.8)	350 (5075)	62,5 (2.46)	45 (1.77)	55 (2.16)	23,5 (0.93)	6,2 (0.24)	106,5 (4.19)	95 (3.74)	75 (2.95)	87,5 (3.44)	50 (1.97)		1,6 (3.5)
RAS3340NPT	NPT 3/4	100 (26.4)		66,5 (2.62)	55 (2.17)	65 (2.56)	29,5 (1.16)		116,5 (4.59)	112 (4.41)	120 (4.72)			124 (4.88)	2,4 (5.3)
RAS3100NPT	NPT 1	150 (89.6)	350 (5075)	66,5 (2.62)	55 (2.17)	180 (7.09)	65 (2.56)	29,5 (1.16)	6,2 (0.24)	116,5 (4.59)	120 (4.72)	87,5 (3.44)	6 (0.24)	50 (1.97)	2,6 (5.7)
RAS3114NPT	NPT 1-1/4														2,8 (6)
RAS3112NPT	NPT 1-1/2														2,8 (6)

# RAS4-NPT VALVOLE A SFERA A 4 VIE 4 WAYS BALL VALVES



## SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



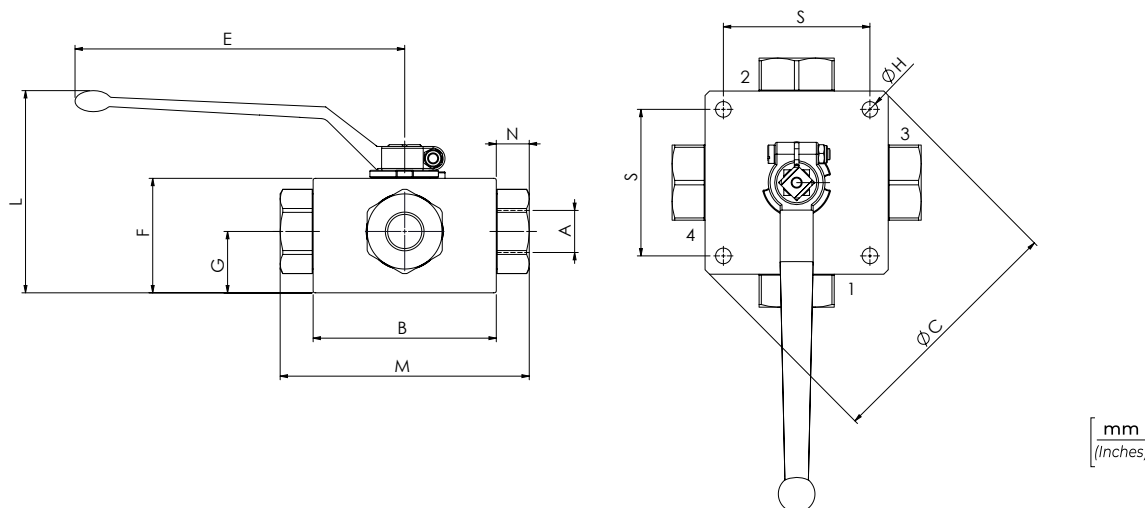
## DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> <b>-4°F + 176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> <b>-4°F + 122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

## CODICE ORDINAZIONE ORDERING CODE

01	02	03	04	05
<b>RAS4</b>		<b>NPT</b>		<b>P</b>

<b>01</b>	VALVOLE A SFERA A 4 VIE (4 WAYS BALL VALVES)	<b>RAS4</b>
<b>02</b>	DIMENSIONE (SIZE)	NPT 1/4 <b>140</b>
		NPT 3/8 <b>380</b>
		NPT 1/2 <b>120</b>
		NPT 3/4 <b>340</b>
		NPT 1 <b>100</b>
		NPT 1-1/4 <b>114</b>
		NPT 1-1/2 <b>112</b>
<b>03</b>	FILETTATURA (THREAD)	<b>NPT</b>
<b>04</b>	SCHEMA (CIRCUIT)	Standard <b>/</b>
		Schema B <b>B</b>
	Schema C <b>C</b>	
<b>05</b>	STANDARD	Fori di fissaggio (Fixing ports) <b>P</b>



## CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	E	F	G	H	L	M	N	S	PESO APPROX APPROX WEIGHT kg-lbt
RAS4140NPT	NPT 1/4	25 (6.6)	500 (7250)	70 (2.76)	/	110 (4.33)	42 (1.65)	21,5 (0.85)	6,5 (0.26)	97,5 (3.84)	100 (3.94)	15,5 (0.61)	55 (2.17)	1,80 (3.96)
RAS4380NPT	NPT 3/8	35 (9.2)	400 (5800)	80 (3.15)		180 (7.09)	53 (2.09)	28,5 (1.12)		101 (3.98)	115 (4.53)		65 (2.56)	3 (6.60)
RAS4120NPT	NPT 1/2	60 (15.8)	350 (5075)	100 (3.94)		110 (4.33)	62 (2.44)	33 (1.30)	110 (4.33)	136 (5.35)	17 (0.67)	80 (3.15)	5,2 (11.44)	
RAS4340NPT	NPT 3/4	100 (26.4)		113 (4.45)		68 (2.68)	36 (1.42)	116,5 (4.59)	156 (6.14)	21 (0.83)	6,9 (15.18)			
RAS4100NPT	NPT 1	150 (89.6)	350 (5075)	118 (4.65)	138 (5.43)	300 (11.81)	82 (3.23)	47,5 (1.87)	8,5 (0.33)	130,5 (5.14)	181 (7.13)	24 (0.94)	85 (3.35)	9 (19.80)
RAS4114NPT	NPT 1-1/4									130,5 (5.14)	181 (7.13)	24 (0.94)	9,2 (20.24)	
RAS4112NPT	NPT 1-1/2									130,5 (5.14)	181 (7.13)	24 (0.94)	9,2 (20.24)	





<b>CODICE ORDINAZIONE</b> ORDERING CODE	01	02
	<b>GGIL</b>	

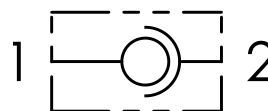
01	GIUNTI GIREVOLI IN LINEA (IN-LINE ROTATING COUPLINGS)	GGIL	
02	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> -4°F + 176°F
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> -4°F + 122°F

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

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



#### 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

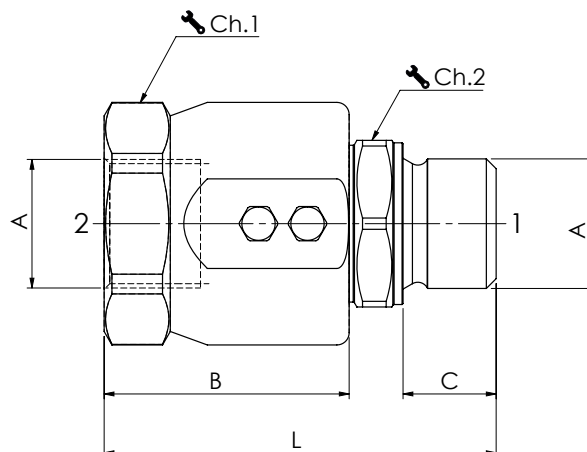
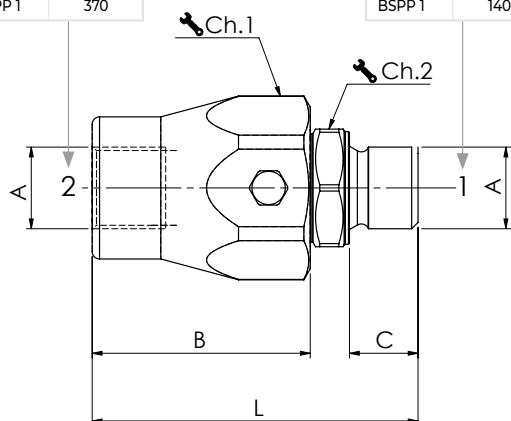
#### COPPIE DI SERRAGGIO FEMMINA GIREVOLE 60°

#### 60° FEMALE SWIVEL ENDS TIGHTENING TORQUE VALUES

①	Nm
BSPP 1/4	20
BSPP 3/8	35
BSPP 1/2	60
BSPP 3/4	115
BSPP 1	140

**GGIL140  
GGIL380  
GGIL120**

**GGIL340  
GGIL100**



[ mm  
(Inches) ]

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	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 APPROX APPROX WEIGHT kg-lbt
GGIL140	BSPP 1/4	25 (6.6)	400 (5800)	200 (2900)	212	42 (1.65)	11 (0.43)	30	19	61 (2.40)	0,21 (0.46)
GGIL380	BSPP 3/8	35 (9.2)			173	44 (1.73)	14 (0.55)	34	24	66 (2.60)	0,27 (0.60)
GGIL120	BSPP 1/2	60 (15.8)	300 (4350)	150 (2175)	160	47 (1.85)	15 (0.59)	36	27	71 (2.80)	0,34 (0.75)
GGIL340	BSPP 3/4	100 (26.4)			120	50 (1.97)	19 (0.75)	45	34	80 (3.15)	0,66 (1.45)
GGIL100	BSPP 1	180 (47.5)			100	57 (2.24)	21 (0.83)	50	41	90 (3.54)	0,90 (1.98)



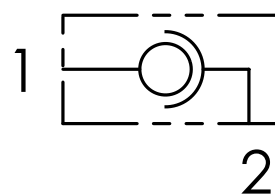
01	02
<b>CODICE ORDINAZIONE</b> ORDERING CODE	<b>GG90</b>

<b>01</b>	GIUNTI GIREVOLI A 90° (90° ROTATING COUPLINGS)	<b>GG90</b>
<b>02</b>	DIMENSIONE (SIZE)	
	BSPP 1/4	<b>140</b>
	BSPP 3/8	<b>380</b>
	BSPP 1/2	<b>120</b>
	BSPP 3/4	<b>340</b>
	BSPP 1	<b>100</b>

### DATI TECNICI / TECHNICAL DATA

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> <b>-4°F + 176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> <b>-4°F + 122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



**COPIE DI SERRAGGIO RACCORDO**  
**TIGHTENING TORQUES FOR STUD**

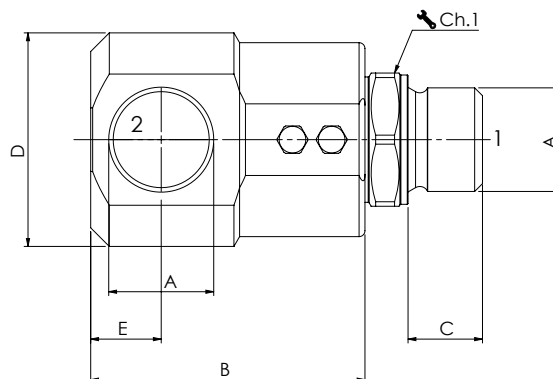
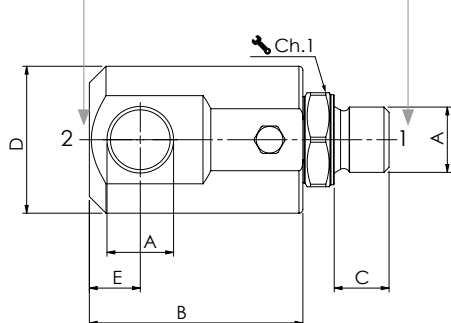
②	Nm
BSPP 1/4	40
BSPP 3/8	90
BSPP 1/2	120
BSPP 3/4	210
BSPP 1	370

**GG90140**  
**GG90380**  
**GG90120**

**COPIE DI SERRAGGIO FEMMINA GIREVOLE 60°**  
**60° FEMALE SWIVEL ENDS TIGHTENING TORQUE VALUES**

①	Nm
BSPP 1/4	20
BSPP 3/8	35
BSPP 1/2	60
BSPP 3/4	115
BSPP 1	140

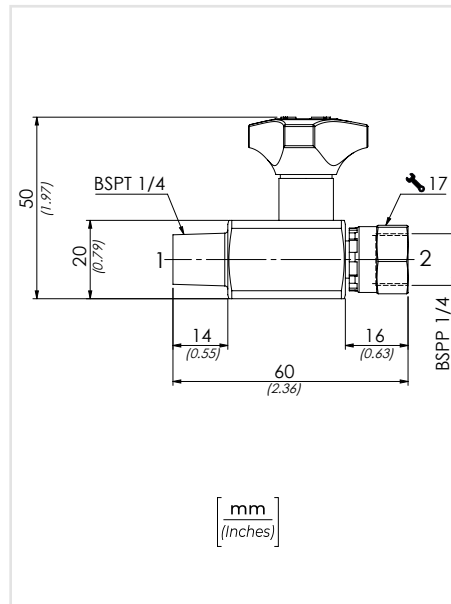
**GG90340**  
**GG90100**



[ mm ]  
[ Inches ]

### CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	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 Approx Approx weight kg-lbt
GG90140	BSPP 1/4	25 (6.6)	400 (5800)	200 (2900)	212	50 (1.97)	11 (0.43)	33,5 (1.32)	11 (0.43)	69 (2.71)	19	0,31 (0.68)
GG90380	BSPP 3/8	35 (9.2)				54 (2.13)	14 (0.55)	37,5 (1.48)	13 (0.51)	76 (2.99)	24	0,41 (0.90)
GG90120	BSPP 1/2	60 (15.8)	300 (4350)	150 (2175)	160	63 (2.48)	15 (0.59)	39,5 (1.56)	14 (0.55)	87 (3.43)	27	0,52 (1.15)
GG90340	BSPP 3/4	100 (26.4)				70 (2.76)	19 (0.75)	54,5 (2.15)	18 (0.71)	100 (3.94)	34	0,96 (2.11)
GG90100	BSPP 1	180 (47.5)				80 (3.15)	21 (0.83)	59 (2.32)	25 (0.98)	113 (4.45)	41	1,25 (2.75)



**CODICE ORDINAZIONE**  
ORDERING CODE

**SOV1400**

**DATI TECNICI / TECHNICAL DATA**

**Olio idraulico** **ISO 6743/4**  
Mineral oil **DIN 51524**

**Viscosità olio** **15-250 mm<sup>2</sup>/s**  
Oil viscosity **45 to 2000 ssu (15 to 250 cSt)**

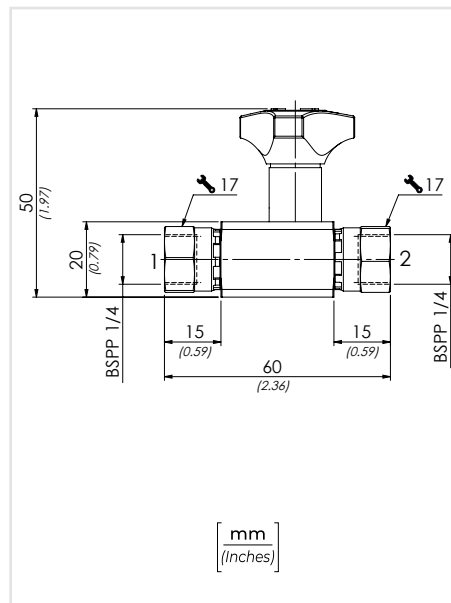
**Classe di contaminazione max con filtro**  
Max contamination index with filter  
**ISO 4406:1999 - Classe 19/17/14**

**Temperatura dell'olio** **-20°C +80°C**  
Oil temperature **-4°F + 176°F**

**Temperatura ambiente** **-20°C +50°C**  
Environment temperature **-4°F + 122°F**

**Pressione max (bar)** **400**  
Max pressure (PSI) **(5800)**

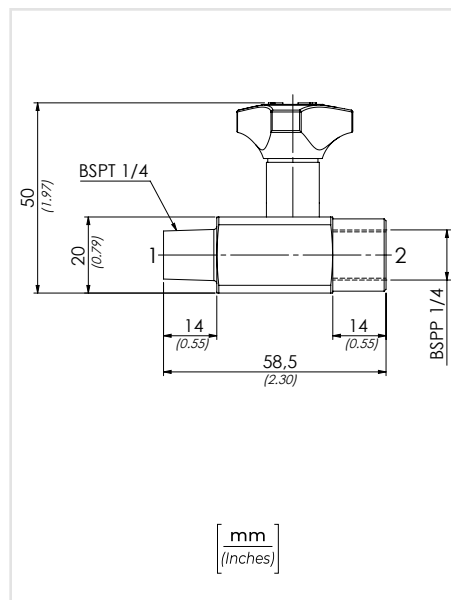
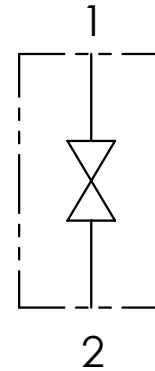
**Peso Approx (kg)** **0,15**  
Approx weight (lb) **(0.33)**



**CODICE ORDINAZIONE**  
ORDERING CODE

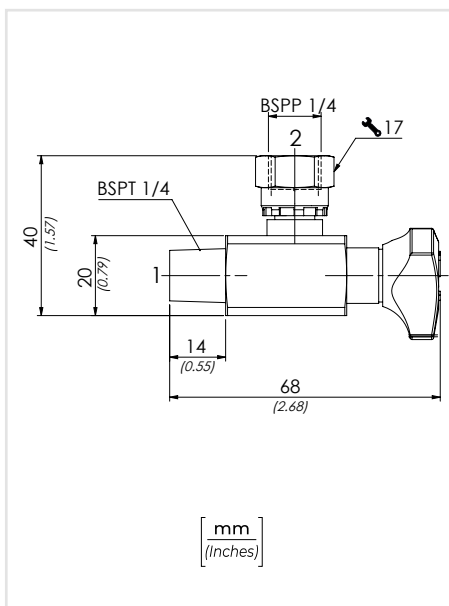
**SOV1400FF**

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**CODICE ORDINAZIONE**  
ORDERING CODE

**SOV1400MF**



**CODICE ORDINAZIONE**  
ORDERING CODE

**SOV1490**

**DATI TECNICI / TECHNICAL DATA**

**Olio idraulico** **ISO 6743/4**  
Mineral oil **DIN 51524**

**Viscosità olio** **15-250 mm<sup>2</sup>/s**  
Oil viscosity **45 to 2000 ssu (15 to 250 cSt)**

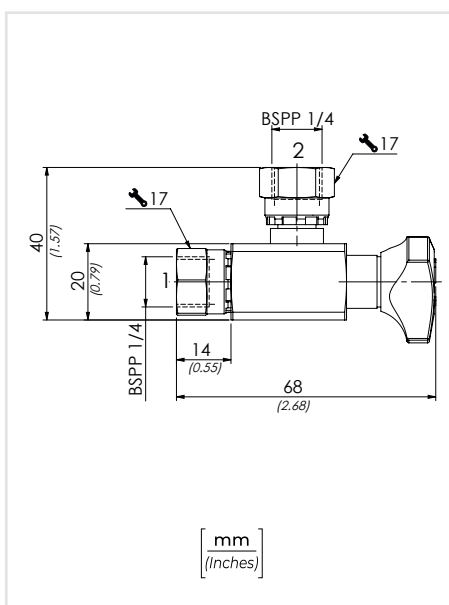
**Classe di contaminazione max con filtro**  
Max contamination index with filter  
**ISO 4406:1999 - Classe 19/17/14**

**Temperatura dell'olio** **-20°C +80°C**  
Oil temperature **-4°F +176°F**

**Temperatura ambiente** **-20°C +50°C**  
Environment temperature **-4°F +122°F**

**Pressione max (bar)** **400**  
Max pressure (PSI) **(5800)**

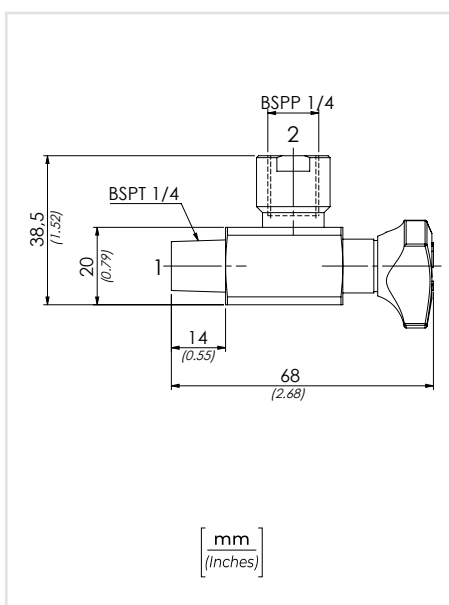
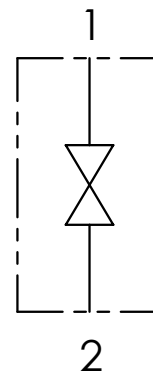
**Peso Approx (kg)** **0,15**  
Approx weight (lb) **(0.33)**



**CODICE ORDINAZIONE**  
ORDERING CODE

**SOV1490FF**

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**CODICE ORDINAZIONE**  
ORDERING CODE

**SOV1490MF**



**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>MNP</b>	

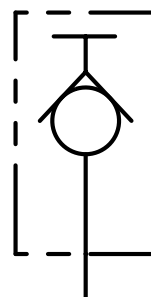
<b>01</b>	MINIPRESE PROVA PRESSIONE (TEST COUPLINGS FOR PRESSURE CHECKING)	<b>MNP</b>
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/8
		BSPP 1/4
		BSPP 3/8
		BSPP 1/2

**DATI TECNICI / TECHNICAL DATA**

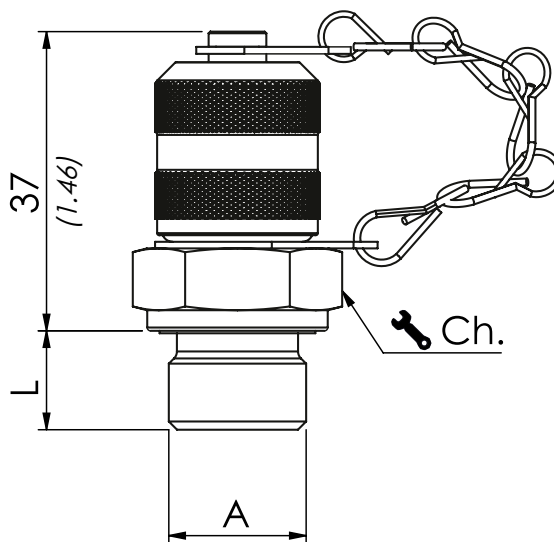
Olio idraulico - Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio - Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio - Oil temperature	-20°C +80°C    -4°F + 176°F
Temperatura ambiente - Environment temperature	-20°C +50°C    -4°F + 122°F

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

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**MINIPRESE**  
TEST COUPLINGS  
**M16X2**



$\left[ \frac{\text{mm}}{\text{(Inches)}} \right]$

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PRESSIONE MAX MAX PRESSURE bar-PSI	Ch. mm	L	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	PESO APPROX (kg) APPROX WEIGHT (lbt)
MNP180	BSPP 1/8	630 (9135)	17	8 (0.31)	20 (14.6)	0,07 (0.16)
MNP140	BSPP 1/4		19	12 (0.47)	30 (22)	0,08 (0.18)
MNP380	BSPP 3/8		22	12 (0.47)	60 (44)	0,10 (0.22)
MNP120	BSPP 1/2		27	14 (0.55)	80 (58.6)	0,13 (0.29)



**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>MNP</b>	

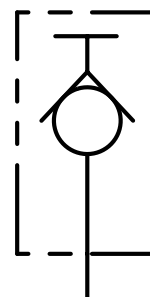
<b>01</b>	MINIPRESE PROVA PRESSIONE (TEST COUPLINGS FOR PRESSURE CHECKING)	<b>MNP</b>
<b>02</b>	DIMENSIONE (SIZE)	NPTF 1/8 <b>180N</b>
		NPTF 1/4 <b>140N</b>
		NPTF 3/8 <b>380N</b>
		NPTF 1/2 <b>120N</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

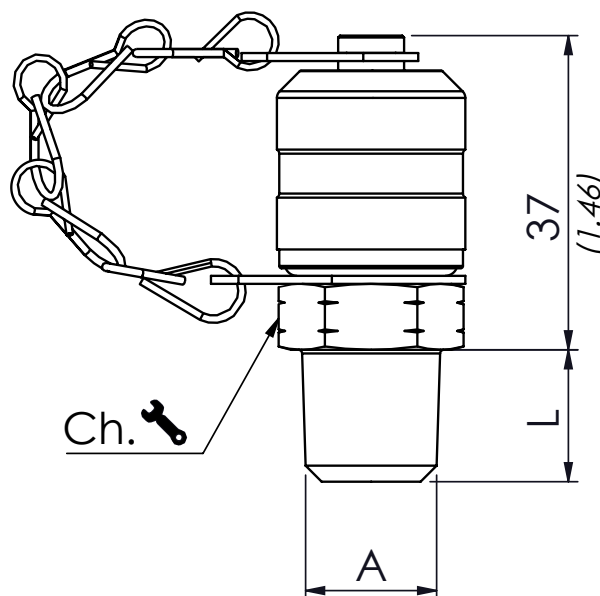
**DATI TECNICI / TECHNICAL DATA**

<b>Olio idraulico</b> - Mineral oil	<b>ISO 6743/4</b> (DIN 51524)
<b>Viscosità olio</b> - Oil viscosity	<b>15-250 mm<sup>2</sup>/s</b> (15 to 250 cSt)
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio</b> - Oil temperature	<b>-20°C +80°C</b> <b>-4°F +176°F</b>
<b>Temperatura ambiente</b> - Environment temperature	<b>-20°C +50°C</b> <b>-4°F +122°F</b>

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



**MINIPRESE**  
TEST COUPLINGS  
**M16X2**



[ mm  
(Inches)

**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

CODICE CODE	A	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	Ch. mm	L	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	PESO APPROX (kg) APPROX WEIGHT (lbt)
<b>MNP180N</b>	<b>NPTF 1/8</b>	<b>630</b> (9135)	<b>17</b>	<b>10</b> (0.39)	<b>20</b> (14.6)	<b>0,07</b> (0.16)
<b>MNP140N</b>	<b>NPTF 1/4</b>		<b>19</b>	<b>12</b> (0.47)	<b>30</b> (22)	<b>0,08</b> (0.18)
<b>MNP380N</b>	<b>NPTF 3/8</b>		<b>22</b>	<b>14</b> (0.55)	<b>60</b> (44)	<b>0,10</b> (0.22)
<b>MNP120N</b>	<b>NPTF 1/2</b>		<b>27</b>		<b>80</b> (58.6)	<b>0,13</b> (0.29)

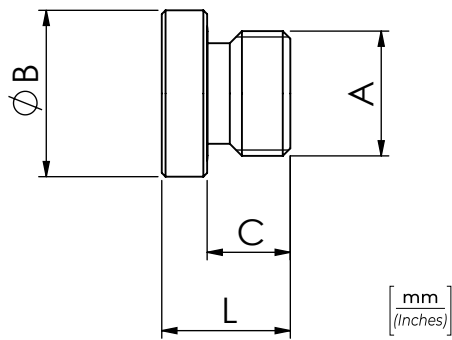
# TAPPI DIN 3852 DIN 3852 PLUGS



**CODICE ORDINAZIONE**  
ORDERING CODE

01	02
<b>MNP</b>	

<b>01</b>	TAPPI (PLUGS)	<b>83500001</b>	<b>BSPP 1/8</b>
		<b>83500002</b>	<b>BSPP 1/4</b>
		<b>83500003</b>	<b>BSPP 3/8</b>
		<b>83500004</b>	<b>BSPP 1/2</b>
		<b>83500005</b>	<b>BSPP 3/4</b>



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

A	B	C	L	PESO APPROX (kg) APPROX WEIGHT (lbt)
<b>BSPP 1/8</b>	<b>15</b> (0.59)	<b>9</b> (0.35)	<b>13</b> (0.51)	<b>0,01</b> (0.022)
<b>BSPP 1/4</b>	<b>19</b> (0.75)	<b>11</b> (0.43)	<b>16</b> (0.63)	<b>0,015</b> (0.033)
<b>BSPP 3/8</b>	<b>22</b> (0.87)	<b>11</b> (0.43)	<b>17</b> (0.67)	<b>0,03</b> (0.066)
<b>BSPP 1/2</b>	<b>27</b> (1.06)	<b>14</b> (0.55)	<b>20</b> (0.79)	<b>0,05</b> (0.11)
<b>BSPP 3/4</b>	<b>32</b> (1.26)			<b>0,07</b> (0.15)

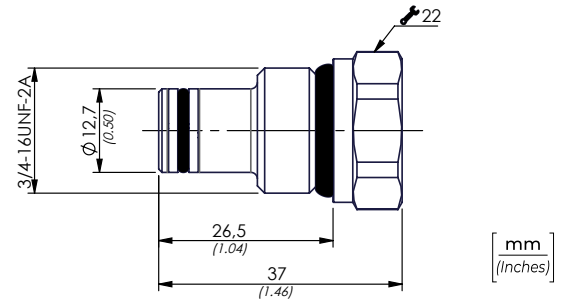
# TAPPI 3/4-16UNF 3/4-16UNF PLUGS

## TAPPO A - A PLUG



Peso approssimativo  
(Approx weight)  
**0,07 kg (0.15 lb)**

**CODICE ORDINAZIONE - ORDERING CODE** **11200001**

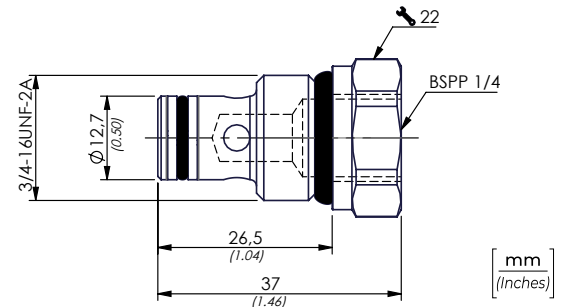


## TAPPO B - A PLUG



Peso approssimativo  
(Approx weight)  
**0,05 kg (0.11 lb)**

**CODICE ORDINAZIONE - ORDERING CODE** **12000162**

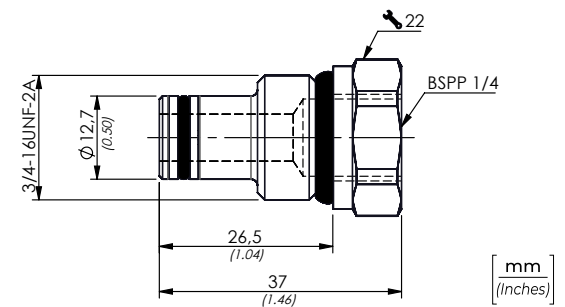


## TAPPO C - A PLUG



Peso approssimativo  
(Approx weight)  
**0,05 kg (0.11 lb)**

**CODICE ORDINAZIONE - ORDERING CODE** **12000182**

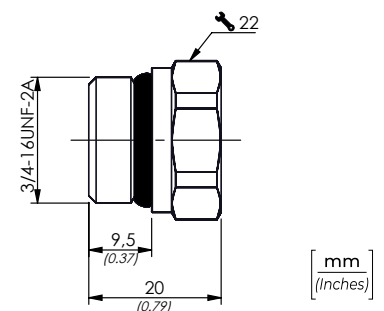


## TAPPO D - A PLUG



Peso approssimativo  
(Approx weight)  
**0,05 kg (0.11 lb)**

**CODICE ORDINAZIONE - ORDERING CODE** **12000184**

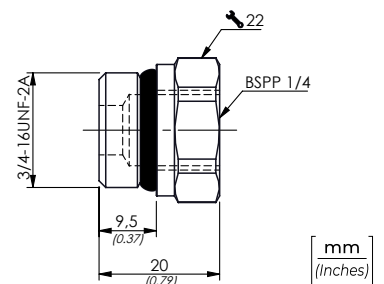


## TAPPO E - A PLUG



Peso approssimativo  
(Approx weight)  
**0,04 kg (0.088 lb)**

**CODICE ORDINAZIONE - ORDERING CODE** **12000183**







### MACCHINARI AGRICOLI AGRICULTURE AND SERVICE



**ARATRI**  
PLOUGHS



**FRESATRICI**  
ROTARY TILLERS



**AUTOMEZZI  
RACCOLTA RIFIUTI**  
WASTE MACHINES



**ERPICI ROTANTI**  
POWER HARROWS



**MACCHINARI  
FORESTALI**  
FOREST MACHINES



**TRINCIATRICI**  
MULCHERS



**ROTOPRESSE**  
ROUND BALERS



**MACCHINARI  
DA SEMINA**  
SEEDING MACHINES



**BRACCI  
DECESPUGLIATORI**  
BOOM MOWERS



**MACCHINARI  
SPARGISALE**  
SALT SPREADERS



**ATOMIZZATORI**  
SPRAYERS

**MACCHINARI INDUSTRIALI**  
INDUSTRIAL AND SERVICE MACHINERIES



**SMONTAGOMME**  
TIRE CHANGERS



**PRESSE**  
PRESSES



**INSTALLAZIONI INDUSTRIALI**  
INDUSTRIAL INSTALLATIONS



**NASTRI INDUSTRIALI**  
INDUSTRIAL TAPES



**INSTALLAZIONI SOLARI ED EOLICHE**  
SOLAR AND WIND INSTALLATIONS

**MACCHINARI MOVIMENTAZIONE TERRA E COSTRUZIONI**  
EARTH MOVING AND CONSTRUCTION MACHINERIES



**GRU MOBILI**  
MOBILE CRANES



**MINI PALE**  
SKID LOADERS



**RUSPE**  
DOZERS



**TRASPORTI INERTI**  
MINI DUMPERS



**ESCAVATORI  
E MINI-ESCAVATORI**  
EXCAVATORS  
AND MINI-EXCAVATORS



**MACCHINARI  
PER ASFALTI**  
ASPHALT MACHINES



**CARICATORI  
CINGOLATI**  
CRAWLER CARRIES



**ACCESSORI**  
ATTACHMENTS





### MACCHINARI PER TRASPORTO E SOLLEVAMENTO

#### LIFTING AND TRANSPORT MACHINERIES



**MINI GRU**  
MINI CRANES



**CARRELLI ELEVATORI**  
FORKLIFTS



**MINI ELVEVATORI**  
MINI PICKERS



**SCARRABILI MULTIBENNA**  
SKIP LOADERS



**SOLLEVATORI POSTERIORI**  
TAIL LIFTS



**SOLLEVATORI PER AUTO**  
CAR LIFTERS



**GRU PER CAMION**  
TRUCK CRANES



**SCARRABILI A GANCIO**  
HOOK LOADERS



**PIATTAFORME AEREE**  
AERIAL PLATFORMS



**UTENSILI**  
TOOLS

### COMPONENTI IDRAULICI

#### HYDRAULIC COMPONENTS



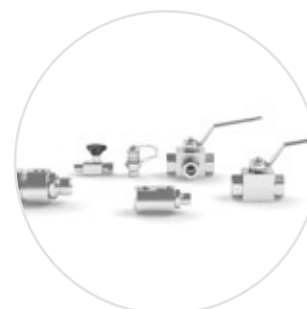
**MINI CENTRALINE**  
MINI-POWER PACKS



**DISTRIBUTORI IDRAULICI**  
DCVS



**IMPIANTI IDRAULICI**  
HYDRAULIC SYSTEMS



**RICAMBI**  
SPARE PARTS

- CATALOGO / CATALOGUE -

# ACCIAIO INOSSIDABILE

## STAINLESS STEEL

Valvole unidirezionali in linea, rubinetti a 2 e 3 vie, esclusori manometro, mini prese di pressione, pompe a mano e serbatoi.

Unidirectional flow control valves, ball valves 2 and 3 ways, pressure gauge shut-off valves, test coupling for pressure checking, hand pump and tank.



Fluidi	Fluids	
Acetone	Acetone	R
Acetiene	Acetylene	R
Birra	Beer	R
Benzene	Benzene	R
Benzina	Benzine	R
Bitume	Bitumen	R
Cloroformio	Chloroform	R
Caffe	Coffee	LR
Olio Diesel	Diesel oil	R
Dimetilchetone	Dimethyl Ketone	R
Cloruro di Ferro	Ferric Chloride	R
Succo di frutta	Fruit Juices	R
Gasolio	Gasoline	R
Gelatina	Gelatine	R
Glucosio	Glucose	R
Glicerina	Glycerine	R
Glicole	Glycol	R
Grasso	Grease	R
Inchiostro	Ink	R
Cherosene	Kerosene	R
Cloruro di magnesio	Magnesium Chloride	LR
Margarina	Margarine	R
Mercurio	Mercury	R
Latte	Milk	R
Nafta	Naphta	R
Naptalina	Naphtalene	LR
Olio di oliva	Olive oil	R
Olio di paraffina	Paraffin oil	R
Fenolo liquido	Phenol aqueous	R
Solfato di potassio	Potassium sulphate	LR
Acqua di mare	Sea water	R
Olio di silicone	Silicone oil	R
Cloruro di sodio 10%	Sodium chloride 10%	LR
Nitrato di sodio 10%	Sodium nitrate 10%	R
Solvente	Solvent	R
Urea liquido	Urea aqueous	LR
Vaselina	Vaseline	R
Olio vegetale	Vegetable oil	R
Acqua fredda	Water cold	R
Acqua distillata	Water distilled	R
Acqua calda	Water hot	R
Cloruro di zinco	Zinc Chloride 10 %	LR

Legenda/Legend		
Resistente	Resistant	<b>R</b>
Resistenza limitata	Limited Resistance	<b>LR</b>
Non Resistente	Not resistant	-

ACCIAIO INOSSIDABILE  
STAINLESS STEEL

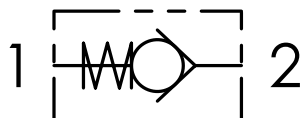
01 02 03 04

**CODICE ORDINAZIONE**  
ORDERING CODE

**XVUR**



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



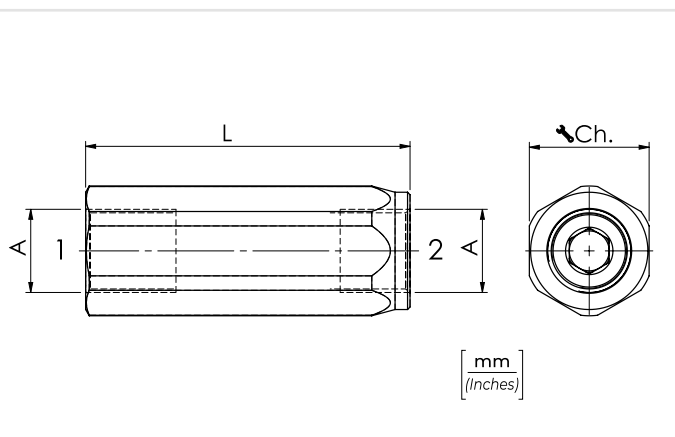
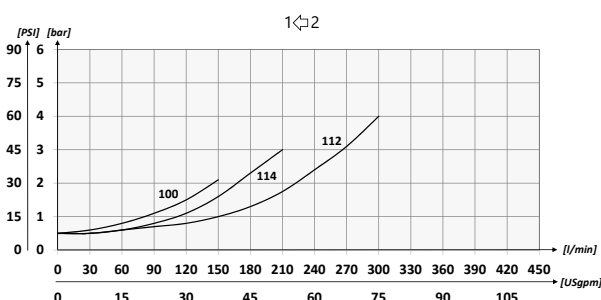
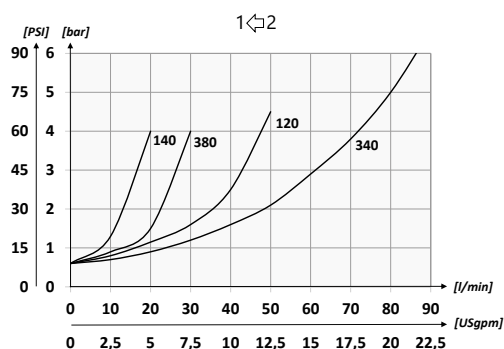
01	VALVOLE UNIDIREZIONALI A COLONNETTA F/F (F/F CHECK HOUSING VALVES)	XVUR	
02	DIMENSIONE (SIZE)	BSPP 1/4	140
		BSPP 3/8	380
		BSPP 1/2	120
		BSPP 3/4	340
		BSPP 1	100
		BSPP 1-1/4	114
		BSPP 1-1/2	112
03	TENUTA (SEALING)	Tenuta a cono (Poppet sealing)	SP
04	MOLLA (SPRING)	1 bar Standard (14.5 PSI)	1

DATI TECNICI / TECHNICAL DATA

**PARTICOLARE / COMPONENT**      **MATERIALE / MATERIAL**

Corpo / Manifold	1.4404 (AISI 316L)
Molla / Spring	1.4404 (AISI 316L)
Otturatore / Poppet	1.4404 (AISI 316L)
Spingimolla / Spring Spacer	1.4404 (AISI 316L)

PERFORMANCES



CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
XVUR140	BSPP 1/4	15 (4.0)	400 (5800)	55 (2.17)	19	0,10 (0.22)
XVUR380	BSPP 3/8	30 (7.9)		65 (2.56)	24	0,18 (0.40)
XVUR120	BSPP 1/2	50 (13.2)		75 (2.95)	27	0,23 (0.50)
XVUR340	BSPP 3/4	90 (23.8)		86,5 (3.41)	35	0,45 (1)
XVUR100	BSPP 1	150 (39.6)	50 (5075)	110 (4.33)	54	0,73 (1.6)
XVUR114	BSPP 1-1/4	200 (52.8)		123 (4.84)	59	1,5 (3.3)
XVUR112	BSPP 1-1/2	300 (79.2)		138 (5.43)	69	1,85 (4.07)

# XVUR-SAE VALVOLE UNIDIREZIONALI A COLONNETTA F/F F/F CHECK HOUSING VALVES

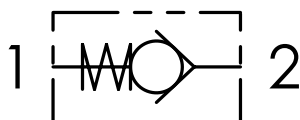
ACCIAIO INOSSIDABILE  
STAINLESS STEEL

**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04
<b>XVUR</b>		<b>SP</b>	

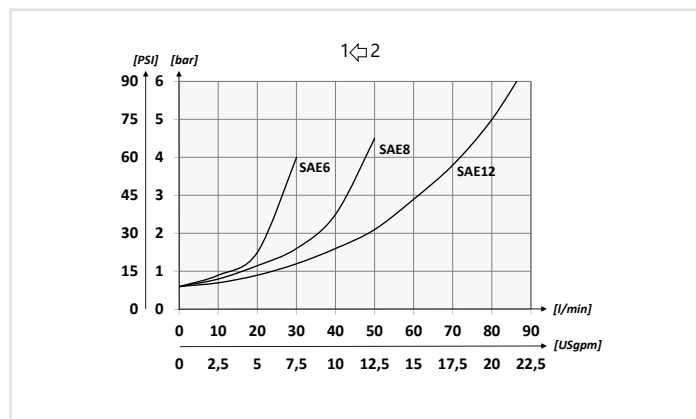


**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



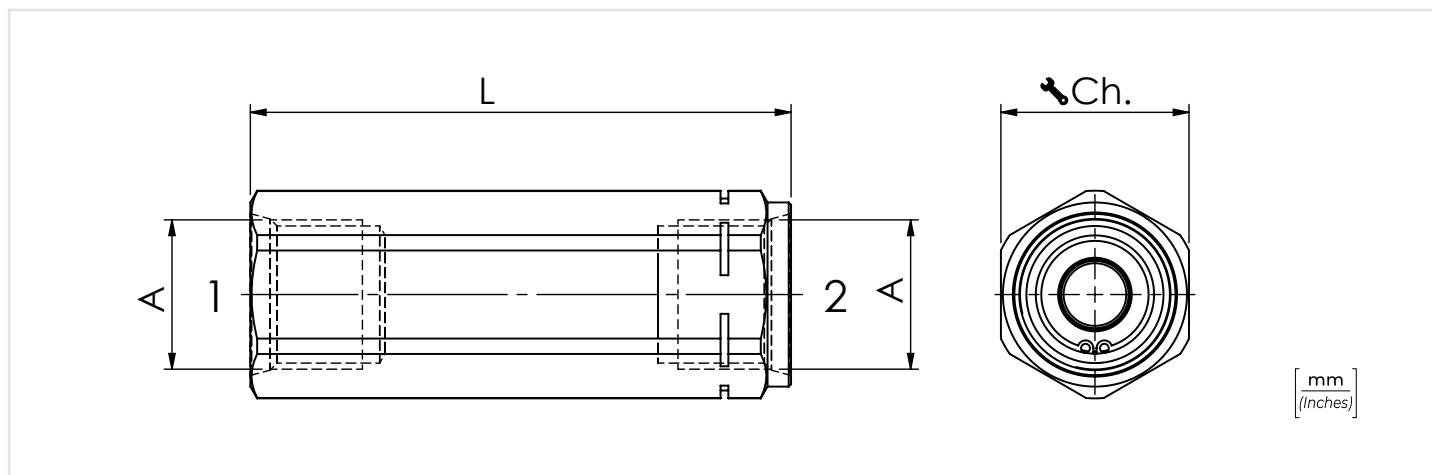
<b>01</b>	VALVOLE UNIDIREZIONALI A COLONNETTA F/F (F/F CHECK HOUSING VALVES)	<b>XVUR</b>
<b>02</b>	DIMENSIONE (SIZE)	9/16-18UNF <b>6</b>
		3/4-16UNF <b>8</b>
		1-1/16-12UNF <b>12</b>
<b>03</b>	TENUTA (SEALING)	Tenuta a cono (Poppet sealing) <b>SP</b>
<b>04</b>	MOLLA (SPRING)	<b>0,5 bar Standard (7.25 PSI)</b> <b>0,5</b>

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

PARTICOLARE / COMPONENT	MATERIALE / MATERIAL
Corpo / Manifold	1.4404 (AISI 316L)
Molla / Spring	1.4404 (AISI 316L)
Otturatore / Poppet	1.4404 (AISI 316L)
Spingimolla / Spring Spacer	1.4404 (AISI 316L)



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

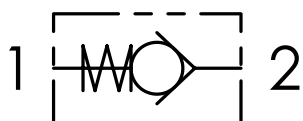
TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
XVUR6	9/16-18UNF	30 (7.9)	400 (5800)	58 (2.28)	19	0,09 (0.20)
XVUR8	3/4-16UNF	50 (13.2)		69 (2.71)	24	0,18 (0.40)
XVUR12	1-1/16-12UNF	90 (23.8)		88,5 (3.48)	35	0,45 (1)

# XVUR-NPTF VALVOLE UNIDIREZIONALI A COLONNETTA F/F F/F CHECK HOUSING VALVES

ACCIAIO INOSSIDABILE  
STAINLESS STEEL



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04
<b>XVUR</b>		<b>SP</b>	

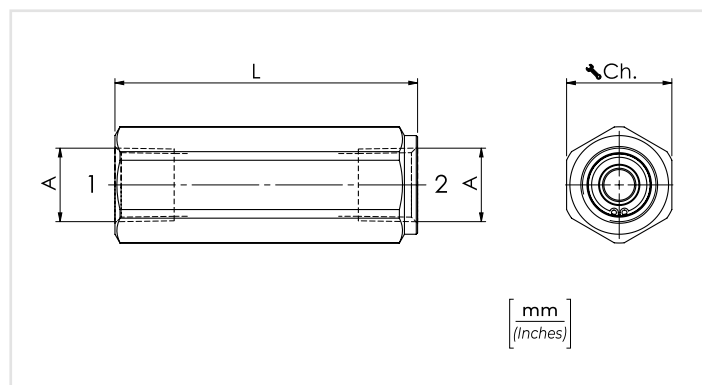
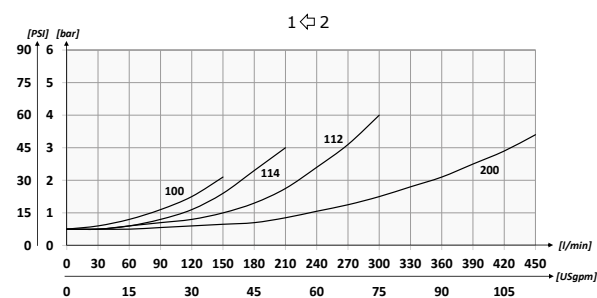
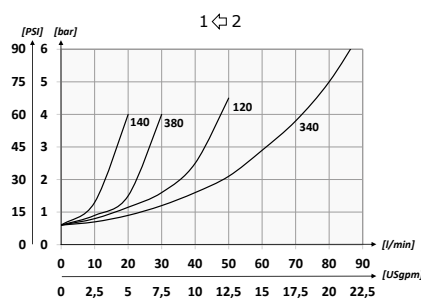
<b>01</b>	VALVOLE UNIDIREZIONALI A COLONNETTA F/F (F/F CHECK HOUSING STAINLESS)	<b>XVUR</b>
<b>02</b>	DIMENSIONE (SIZE)	1/4 NPTF <b>140N</b>
		3/8 NPTF <b>380N</b>
		1/2 NPTF <b>120N</b>
		3/4 NPTF <b>340N</b>
		1 NPTF <b>100N</b>
		1-1/4 NPTF <b>114N</b>
		1-1/2 NPTF <b>112N</b>
<b>03</b>	TENUTA (SEALING)	Tenuta a cono (Poppet sealing) <b>SP</b>
<b>04</b>	MOLLA (SPRING)	<b>0,5 bar Standard (7.25 PSI)</b> <b>0,5</b>

**DATI TECNICI / TECHNICAL DATA**

**PARTICOLARE / COMPONENT**      **MATERIALE / MATERIAL**

<b>Corpo / Manifold</b>	1.4404 (AISI 316L)
<b>Molla / Spring</b>	1.4404 (AISI 316L)
<b>Otturatore / Poppet</b>	1.4404 (AISI 316L)
<b>Spingimolla / Spring Spacer</b>	1.4404 (AISI 316L)

**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	CH.	PESO APPROX (kg) APPROX WEIGHT (lb)
XVUR140N	1/4 NPTF	15 (4)	400 (5800)	58 (2.28)	19	0,10 (0.22)
XVUR380N	3/8 NPTF	30 (7.9)		69 (2.72)	24	0,18 (0.40)
XVUR120N	1/2 NPTF	50 (13.2)		75 (2.95)	27	0,23 (0.50)
XVUR340N	3/4 NPTF	90 (23.8)		88,5 (3.48)	35	0,45 (1)
XVUR100N	1 NPTF	150 (39.6)	350 (5075)	110 (4.33)	41	0,75 (1.7)
XVUR114N	1-1/4 NPTF	200 (52.8)		120 (4.72)	54	1,5 (3.3)
XVUR112N	1-1/2 NPTF	300 (79.2)		138 (5.43)	59	2,6 (5.7)
XVUR200N	2 NPTF	430 (113.5)			69	3 (6.60)



CORPO IN ACCIAIO INOSSIDABILE  
STAINLESS STEEL BODY

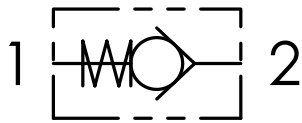
01 02 03 04

**CODICE ORDINAZIONE**  
ORDERING CODE

**YVUR**



SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



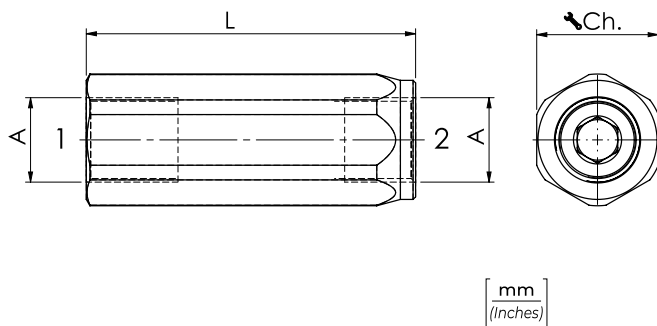
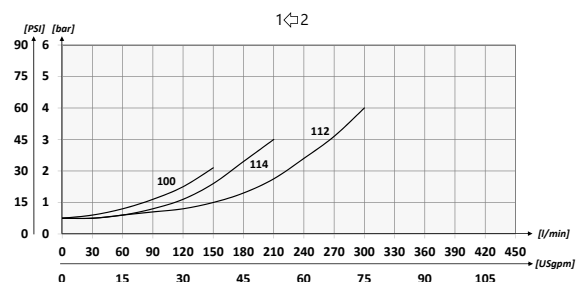
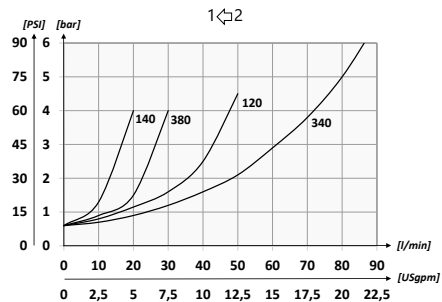
01	VALVOLE UNIDIREZIONALI A COLONNETTA F/F, SOLO CORPO IN ACCIAIO INOX (F/F CHECK HOUSING VALVES, ONLY STAINLESS STEEL BODY)		YVUR
02	DIMENSIONE (SIZE)	BSPP 1/4	140
		BSPP 3/8	380
		BSPP 1/2	120
		BSPP 3/4	340
		BSPP 1	100
		BSPP 1-1/4	114
		BSPP 1-1/2	112
03	TENUTA (SEALING)	Tenuta a cono (Poppet sealing)	SP
04	MOLLA (SPRING)	1 bar Standard (14.5 PSI)	1
		3 bar Standard (43.5 PSI)	3
		4,5 bar Standard (65.25 PSI)	4,5
		6 bar Standard (87 PSI)	6

DATI TECNICI / TECHNICAL DATA

**PARTICOLARE / COMPONENT**      **MATERIALE / MATERIAL**

Corpo / Manifold	1.4404 (AISI 316L)
Molla / Spring	1.0116 (OTEVA 70)
Otturatore / Poppet	1.5715 (Ng2)
Spingimolla / Spring Spacer	1.0737 (AVPb)

PERFORMANCES



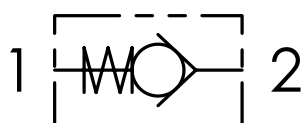
CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
YVUR140	BSPP 1/4	15 (4.0)	400 (5800)	55 (2.17)	19	0,10 (0.22)
YVUR380	BSPP 3/8	30 (7.9)		65 (2.56)	24	0,18 (0.40)
YVUR120	BSPP 1/2	50 (13.2)		75 (2.95)	27	0,23 (0.50)
YVUR340	BSPP 3/4	90 (23.8)		86,5 (3.41)	35	0,45 (1)
YVUR100	BSPP 1	150 (39.6)	50 (5075)	110 (4.33)	41	0,73 (1.6)
YVUR114	BSPP 1-1/4	200 (52.8)		123 (4.84)	55	1,5 (3.3)
YVUR112	BSPP 1-1/2	300 (79.2)		138 (5.43)	60	1,85 (4.07)

CORPO IN ACCIAIO INOSSIDABILE  
STAINLESS STEEL BODY



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**

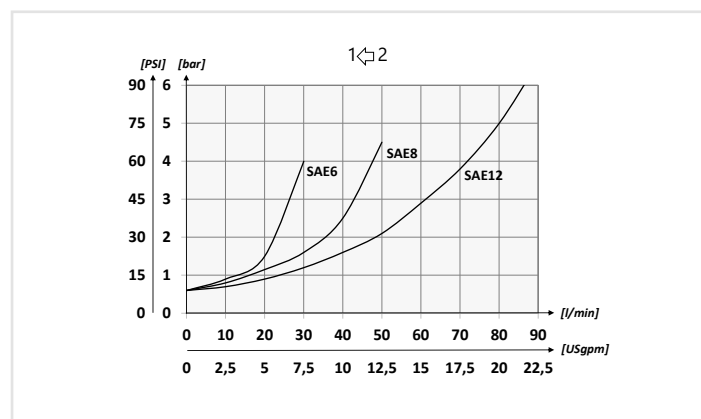


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03	04
<b>YVUR</b>		<b>SP</b>	

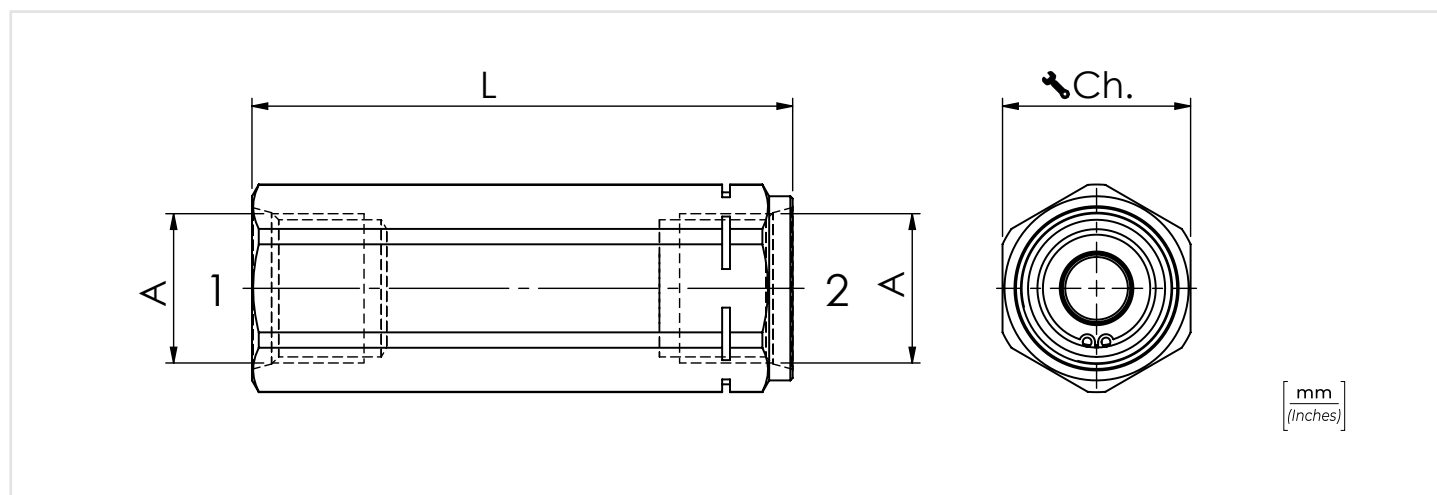
01	VALVOLE UNIDIREZIONALI A COLONNETTA F/F, SOLO CORPO IN ACCIAIO INOX (F/F CHECK HOUSING VALVES, ONLY STAINLESS STEEL BODY)		YVUR
02	DIMENSIONE (SIZE)	9/16-18UNF	6
		3/4-16UNF	8
		1-1/16-12UNF	12
03	TENUTA (SEALING)	Tenuta a cono (Poppet sealing)	SP
04	MOLLA (SPRING)	0,5 bar Standard (7.25 PSI)	0,5
		3 bar Standard (43.5 PSI)	3
		4,5 bar Standard (65.25 PSI)	4,5
		6 bar Standard (87 PSI)	6

**PERFORMANCES**



**DATI TECNICI / TECHNICAL DATA**

PARTICOLARE / COMPONENT	MATERIALE / MATERIAL
Corpo / Manifold	1.4404 (AISI 316L)
Molla / Spring	1.0116 (OTEVA 70)
Otturatore / Poppet	1.5715 (Ng2)
Spingimolla / Spring Spacer	1.0737 (AVPb)



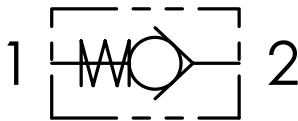
**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX MAX PRESSURE bar-PSI	L	Ch.	PESO APPROX (kg) APPROX WEIGHT (lb)
YVUR6	9/16-18UNF	15 (4)	400 (5800)	58 (2.28)	19	0,09 (0.20)
YVUR8	3/4-16UNF	30 (7.9)		69 (2.71)	24	0,18 (0.40)
YVUR12	1-1/16-12UNF	90 (23.8)		88,5 (3.48)	35	0,45 (1)

CORPO IN ACCIAIO INOSSIDABILE  
STAINLESS STEEL BODY



**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



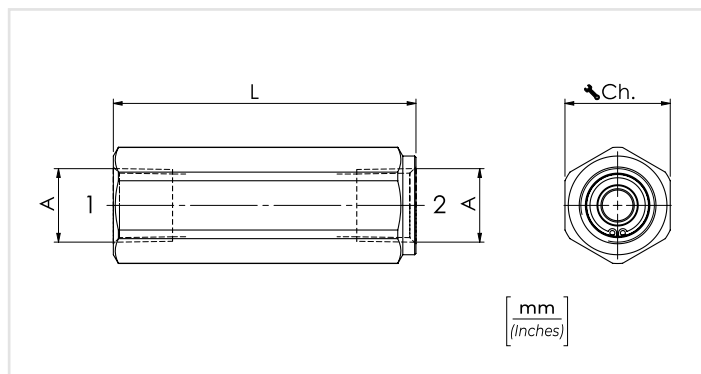
**CODICE ORDINAZIONE / ORDERING CODE**

01	02	03	04
<b>YVUR</b>		<b>SP</b>	

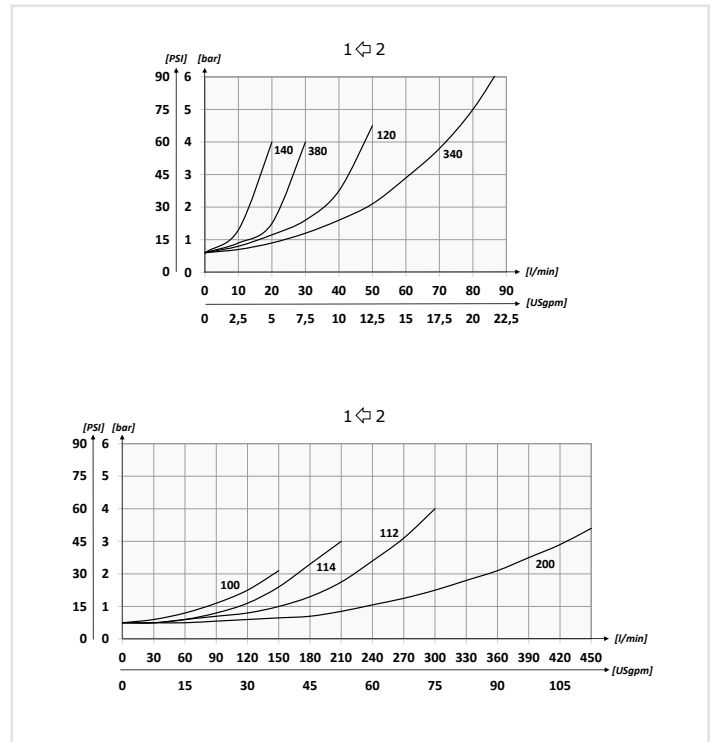
<b>01</b>	VALVOLE UNIDIREZIONALI A COLONNETTA F/F, SOLO CORPO IN ACCIAIO INOX (F/F CHECK HOUSING VALVES, ONLY STAINLESS STEEL BODY)	<b>YVUR</b>
<b>02</b>	DIMENSIONE (SIZE)	1/4 NPTF <b>140N</b>
		3/8 NPTF <b>380N</b>
		1/2 NPTF <b>120N</b>
		3/4 NPTF <b>340N</b>
		1 NPTF <b>100N</b>
		1-1/4 NPTF <b>114N</b>
		1-1/2 NPTF <b>112N</b>
<b>03</b>	TENUTA (SEALING)	Tenuta a cono (Poppet sealing) <b>SP</b>
	<b>04</b>	MOLLA (SPRING)
3 bar (43.5 PSI) <b>3</b>		
4,5 bar (65.25 PSI) <b>4,5</b>		
6 bar (87 PSI) <b>6</b>		

**DATI TECNICI / TECHNICAL DATA**

PARTICOLARE / COMPONENT	MATERIALE / MATERIAL
Corpo / Manifold	1.4404 (AISI 316L)
Molla / Spring	1.0116 (OTEVA 70)
Otturatore / Poppet	1.5715 (Ng2)
Spingimolla / Spring Spacer	1.0737 (AVPb)



**PERFORMANCES**



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PORTATA MAX (l/min) MAX FLOW (USgpm)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	L	Ch.	PESO APPROX (kg) APPROX WEIGHT (lbt)
YVUR140N	1/4 NPTF	5 (1.3)	400 (5800)	58 (2.28)	19	0,10 (0.22)
YVUR380N	3/8 NPTF	15 (4)		69 (2.72)	24	0,18 (0.40)
YVUR120N	1/2 NPTF	30 (7.9)		75 (2.95)	27	0,23 (0.50)
YVUR340N	3/4 NPTF	90 (23.8)		88,5 (3.48)	35	0,45 (1)
YVUR100N	1 NPTF	150 (39.6)	350 (5075)	110 (4.33)	41	0,75 (1.7)
YVUR114N	1-1/4 NPTF	200 (52.8)		120 (4.72)	55	1,5 (3.3)
YVUR112N	1-1/2 NPTF	300 (79.2)		138 (5.43)	60	2,6 (5.7)
YVUR200N	2 NPTF	430 (113.5)			75	3 (6.60)

# XRAS2-BSPP VALVOLE A SFERA A 2 VIE 2 WAYS BALL VALVES

ACCIAIO INOSSIDABILE  
STAINLESS STEEL

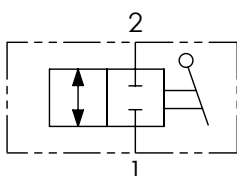


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>XRAS2</b>		

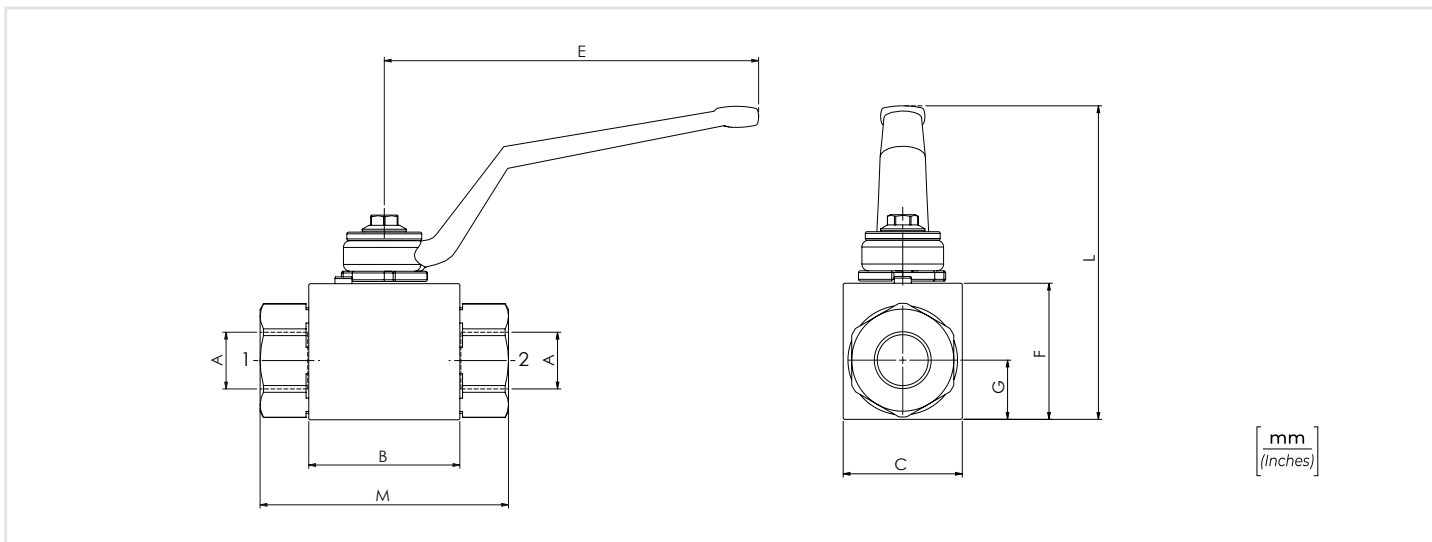
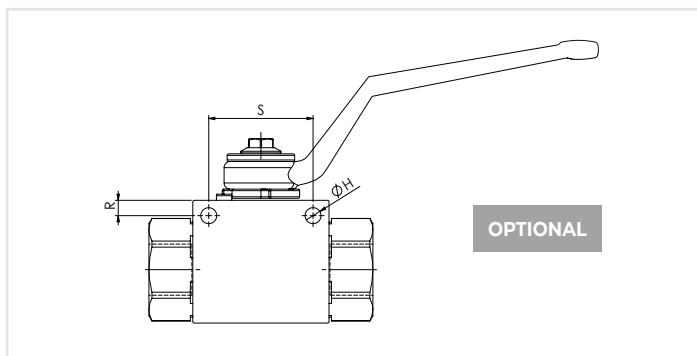
01	VALVOLE A SFERA A 2 VIE (2 WAYS BALL VALVES)	XRAS2	
02	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
03	OPTIONAL	Fori di fissaggio (Fixing ports)	<b>P</b>

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**DATI TECNICI / TECHNICAL DATA**

PARTICOLARE / COMPONENT	MATERIALE / MATERIAL
Corpo / Manifold	1.4404 (AISI 316L)
Adattatori / Adapter	1.4404 (AISI 316L)
Sfera / Ball	1.4404 (AISI 316L)
Vite regolatrice / Stern	1.4404 (AISI 316L)
Battuta sfera / Ball seat	POM
Leva / Handle	1.4301 (AISI 304)
Fermo inferiore / Lower washer	1.4301 (AISI 304)
Fermo Superiore / Upper washer	1.4301 (AISI 304)
Anello vite / Stern ring	POM
Spina / Spine	1.4301 (AISI 304)
Anello seeger / Component	1.4301 (AISI 304)
O-ring adattatori / Adapter o-ring	NBR
O-ring vite / Stern o-ring	NBR
Vite / Screw	DIN 6921 A2



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

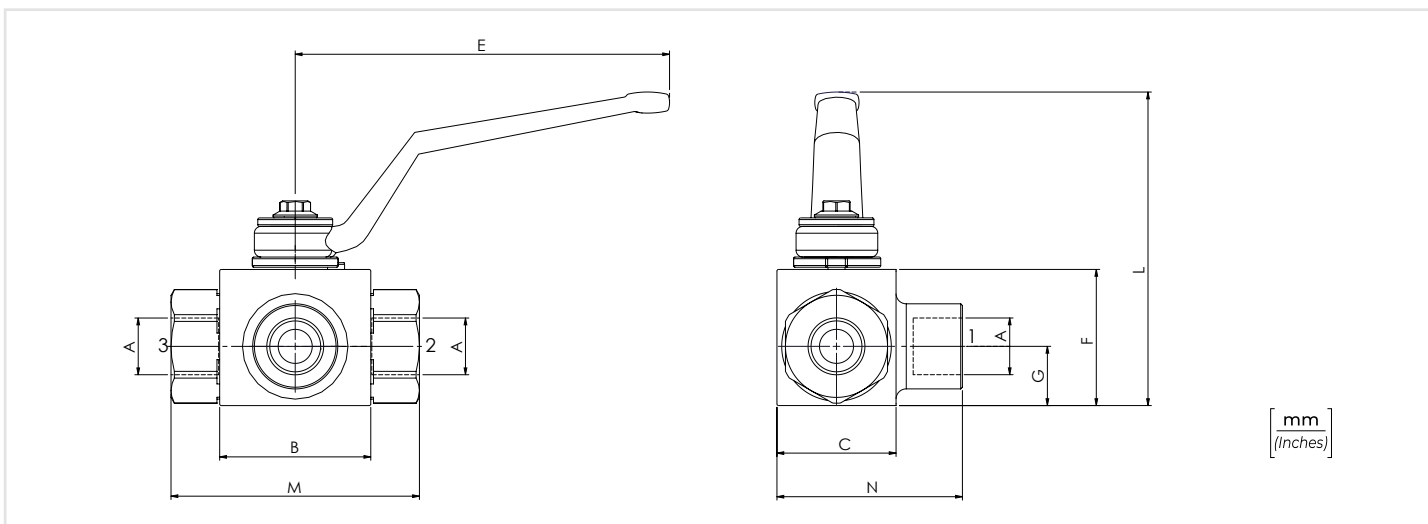
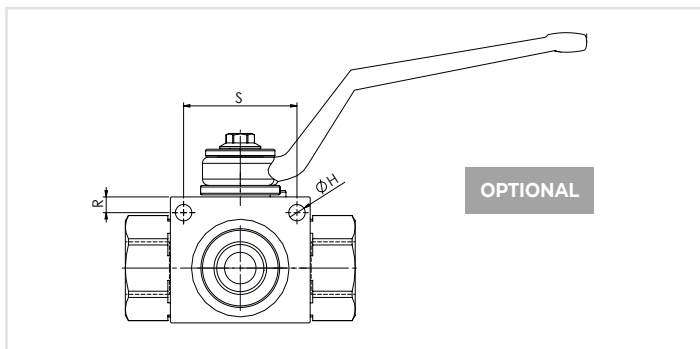
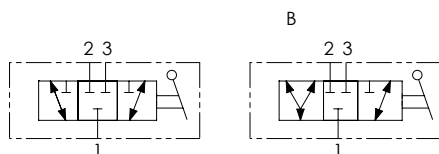
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	E	F	G	H	L	M	R	S	PESO APPROX APPROX WEIGHT kg-lbt
XRAS2140	BSPP 1/4	25 (6.6)	500 (7250)	42,4 (1.67)	30 (1.18)	110 (4.33)	35 (1.38)	14,5 (0.57)	5,2 (0.20)	91,5 (3.60)	71 (2.80)	4,5 (0.18)	34 (1.34)	0,5 (1.1)
XRAS2380	BSPP 3/8	35 (9.2)		44,4 (1.75)	35 (1.38)		40 (1.57)	17,5 (0.69)		96,5 (3.80)	73 (2.87)		0,7 (1.5)	
XRAS2120	BSPP 1/2	60 (15.8)	400 (5800)	48,4 (1.91)	37 (1.46)	180 (7.09)	43 (1.69)	18 (0.71)	6,2 (0.24)	99,5 (3.92)	83 (3.27)	5 (0.20)	36 (1.42)	0,8 (1.8)
XRAS2340	BSPP 3/4	100 (26.4)		62,5 (2.46)	45 (1.77)		55 (2.17)	23,5 (0.93)		106,5 (4.19)	95 (3.74)		1,5 (3.3)	
XRAS2100	BSPP 1	150 (39.6)	350 (5075)	66,5 (2.62)	55 (2.17)	65 (2.56)	29,5 (1.16)	116,5 (4.59)	112 (4.41)	6 (0.24)	50 (1.97)	2,3 (5)		

# XRAS3-BSPP VALVOLE A SFERA A 3 VIE 3 WAYS BALL VALVES

ACCIAIO INOSSIDABILE  
STAINLESS STEEL



## SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



[ mm  
(Inches) ]

## CODICE ORDINAZIONE ORDERING CODE

01	02	03
<b>XRAS3</b>		

<b>01</b>	VALVOLE A SFERA A 3 VIE (3 WAYS BALL VALVES)	<b>XRAS3</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>
		BSPP 3/4	<b>340</b>
		BSPP 1	<b>100</b>
<b>03</b>	OPTIONAL	Fori di fissaggio (Fixing ports)	<b>P</b>

## DATI TECNICI / TECHNICAL DATA

### PARTICOLARE / COMPONENT

### MATERIALE / MATERIAL

<b>Corpo / Manifold</b>	1.4404 (AISI 316L)
<b>Adattatori / Adapter</b>	1.4404 (AISI 316L)
<b>Sfera / Ball</b>	1.4404 (AISI 316L)
<b>Vite regolatrice / Stern</b>	1.4404 (AISI 316L)
<b>Battuta sfera / Ball seat</b>	POM
<b>Leva / Handle</b>	1.4301 (AISI 304)
<b>Fermo inferiore / Lower washer</b>	1.4301 (AISI 304)
<b>Fermo Superiore / Upper washer</b>	1.4301 (AISI 304)
<b>Anello vite / Stern ring</b>	POM
<b>Spina / Spine</b>	1.4301 (AISI 304)
<b>Anello seeger / Component</b>	1.4301 (AISI 304)
<b>O-ring adattatori / Adapter o-ring</b>	NBR
<b>O-ring vite / Stern o-ring</b>	NBR
<b>Vite / Screw</b>	DIN 6921 A2

## CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

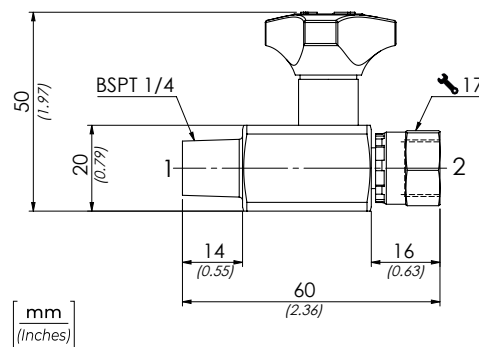
TIPO TYPE	A	PORTATA MAX MAX FLOW l/min-USgpm	PRESSIONE MAX MAX PRESSURE bar-PSI	B	C	E	F	G	H	L	M	N	R	S	PESO APPROX APPROX WEIGHT kg-lbt
XRAS3140	BSPP 1/4	25 (6.6)	400 (5800)	42,4 (1.67)	30 (1.18)	110 (4.33)	35 (1.38)	14,5 (0.57)	5,2 (0.20)	91,5 (3.60)	71 (2.80)	48,5 (1.91)	4,5 (0.18)	34 (1.34)	0,6 (1.3)
XRAS3380	BSPP 3/8	35 (9.2)		44,4 (1.75)	35 (1.38)			40 (1.57)		17,5 (0.69)	96,5 (3.80)	73 (2.87)	54,5 (2.15)	5 (0.20)	36 (1.42)
XRAS3120	BSPP 1/2	60 (15.8)	350 (5075)	48,4 (1.91)	37 (1.46)	180 (7.09)	55 (2.16)	18 (0.71)	6,2 (0.24)	99,5 (3.92)	83 (3.27)	58,5 (2.30)	6 (0.24)	50 (1.97)	0,8 (1.8)
XRAS3340	BSPP 3/4	100 (26.4)		62,5 (2.46)	45 (1.77)			23,5 (0.93)		106,5 (4.19)	95 (3.74)	75 (2.95)			1,6 (3.5)
XRAS3100	BSPP 1	150 (89.6)		66,5 (2.62)	55 (2.17)			65 (2.56)		29,5 (1.16)	116,5 (4.59)	112 (4.41)			87,5 (3.44)

## RUBINETTI ESCLUSIONE MANOMETRO IN LINEA IN-LINE PRESSURE GAUGE SHUT-OFF VALVES



**CODICE ORDINAZIONE**  
ORDERING CODE

**XSOV1400**

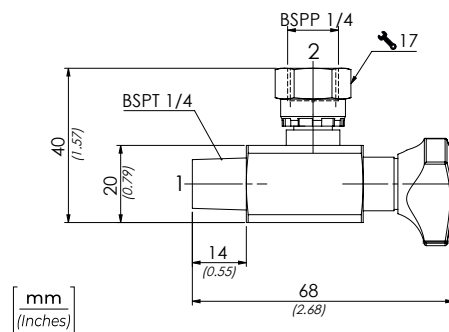


## RUBINETTI ESCLUSIONE MANOMETRO A 90° 90° PRESSURE GAUGE SHUT-OFF VALVES



**CODICE ORDINAZIONE**  
ORDERING CODE

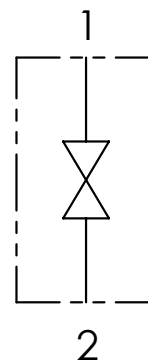
**XSOV1490**



### DATI TECNICI / TECHNICAL DATA

<b>PARTICOLARE / COMPONENT</b>	<b>MATERIALE / MATERIAL</b>
<b>Corpo / Manifold</b>	1.4404 (AISI 316L)
<b>Adattatori / Adapter</b>	1.4404 (AISI 316L)
<b>Vite regolatrice / Stern</b>	1.4404 (AISI 316L)
<b>Volantino / Handknob</b>	Plastica / Plastic
<b>Guarnizioni / O-rings</b>	Viton (FKM)

### SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



# XMNP-BSPP MINIPRESE PROVA PRESSIONE TEST COUPLINGS FOR PRESSURE CHECKING

ACCIAIO INOSSIDABILE  
STAINLESS STEEL



**CODICE ORDINAZIONE**  
ORDERING CODE

01	<b>XMNP</b>
02	

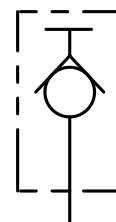
<b>01</b>	MINIPRESE PROVA PRESSIONE (TEST COUPLINGS FOR PRESSURE CHECKING)	<b>XMNP</b>	
<b>02</b>	DIMENSIONE (SIZE)	BSPP 1/8	<b>180</b>
		BSPP 1/4	<b>140</b>
		BSPP 3/8	<b>380</b>
		BSPP 1/2	<b>120</b>

## DATI TECNICI / TECHNICAL DATA

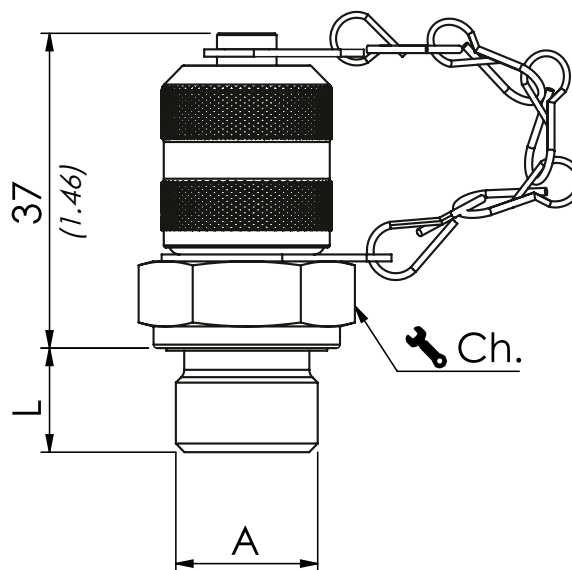
### PARTICOLARE / COMPONENT MATERIALIE / MATERIAL

<b>Corpo / Manifold</b>	1.4404 (AISI 316L)
<b>Cappuccio di protezione / Safety cap</b>	1.4404 (AISI 316L)
<b>Guarnizioni / O-rings</b>	Viton (FKM)

## SCHEMA IDRAULICO / HYDRAULIC CIRCUIT



## MINIPRESE TEST COUPLINGS M16X2



[ mm ]  
[ Inches ]

## CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

TIPO TYPE	A	PRESSIONE MAX MAX PRESSURE bar-PSI	Ch. mm	L	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	PESO APPROX APPROX WEIGHT kg-lbt
XMNP180	BSPP 1/8	630 (9135)	17	8 (0.31)	20 (14.6)	0,07 (0.16)
XMNP140	BSPP 1/4		19	12 (0.47)	30 (22)	0,08 (0.18)
XMNP380	BSPP 3/8		22	12 (0.47)	60 (44)	0,10 (0.22)
XMNP120	BSPP 1/2		27	14 (0.55)	80 (58.6)	0,13 (0.29)

# XMNP-NPTF MINIPRESE PROVA PRESSIONE TEST COUPLINGS FOR PRESSURE CHECKING

ACCIAIO INOSSIDABILE  
STAINLESS STEEL



**CODICE ORDINAZIONE**  
ORDERING CODE

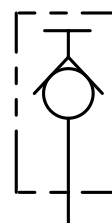
01	<b>XMNP</b>	02
----	-------------	----

<b>01</b>	MINIPRESE PROVA PRESSIONE (TEST COUPLINGS FOR PRESSURE CHECKING)		<b>XMNP</b>
<b>02</b>	DIMENSIONE (SIZE)	NPTF 1/8	<b>180N</b>
		NPTF 1/4	<b>140N</b>
		NPTF 3/8	<b>380N</b>
		NPTF 1/2	<b>120N</b>

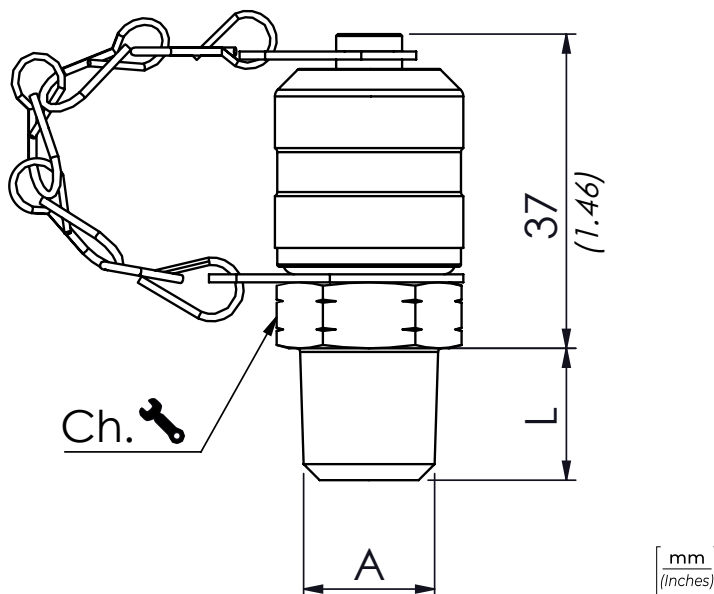
**DATI TECNICI / TECHNICAL DATA**

PARTICOLARE / COMPONENT	MATERIALE / MATERIAL
Corpo / Manifold	1.4404 (AISI 316L)
Cappuccio di protezione / Safety cap	1.4404 (AISI 316L)
Guarnizioni / O-rings	Viton (FKM)

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



**MINIPRESE  
TEST COUPLINGS  
M16X2**

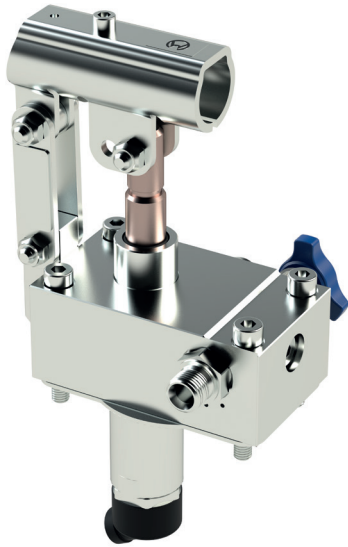


**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	A	PRESSIONE MAX MAX PRESSURE bar-PSI	Ch. mm	L	COPPIA DI SERRAGGIO TIGHTENING TORQUE Nm-lbt ft	PESO APPROX (kg) APPROX WEIGHT (lbt)
XMNP180N	NPTF 1/8	630 (9135)	17	10 (0.39)	20 (14.6)	0,07 (0.16)
XMNP140N	NPTF 1/4		19	12 (0.47)	30 (22)	0,08 (0.18)
XMNP380N	NPTF 3/8		22	14 (0.55)	60 (44)	0,10 (0.22)
XMNP120N	NPTF 1/2		27	14 (0.55)	80 (58.6)	0,13 (0.29)



ACCIAIO INOSSIDABILE  
STAINLESS STEEL

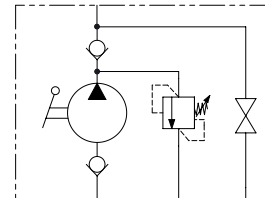


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>XPMS</b>		<b>RV</b>

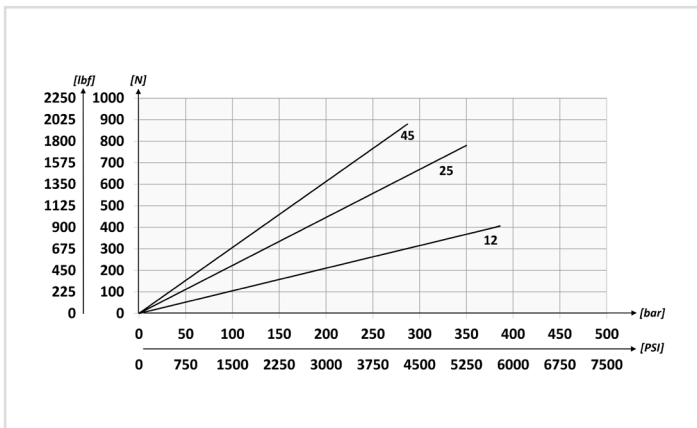
<b>01</b>	POMPA A MANO DOPPIO POMPAGGIO PER CILINDRO A SEMPLICE EFFETTO (DOUBLE PUMPING HAND PUMP FOR SINGLE ACTING CYLINDER)			<b>XPMS</b>	
<b>02</b>	CILINDRATA (DISPLACEMENT)	A	B	C	
	12 cm <sup>3</sup> (0.73 in <sup>3</sup> )	253 (9.96)	166 (6.54)	34 (1.34)	12
	25 cm <sup>3</sup> (1.53 in <sup>3</sup> )	273 (10.75)	172 (6.77)	34 (1.34)	25
	45 cm <sup>3</sup> (2.75 in <sup>3</sup> )	283 (11.14)	172 (6.77)	40 (1.57)	45
<b>03</b>	Con rubinetto di scarico e valvola di massima pressione (With unloading valve and relief valves)			<b>RV</b>	

**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



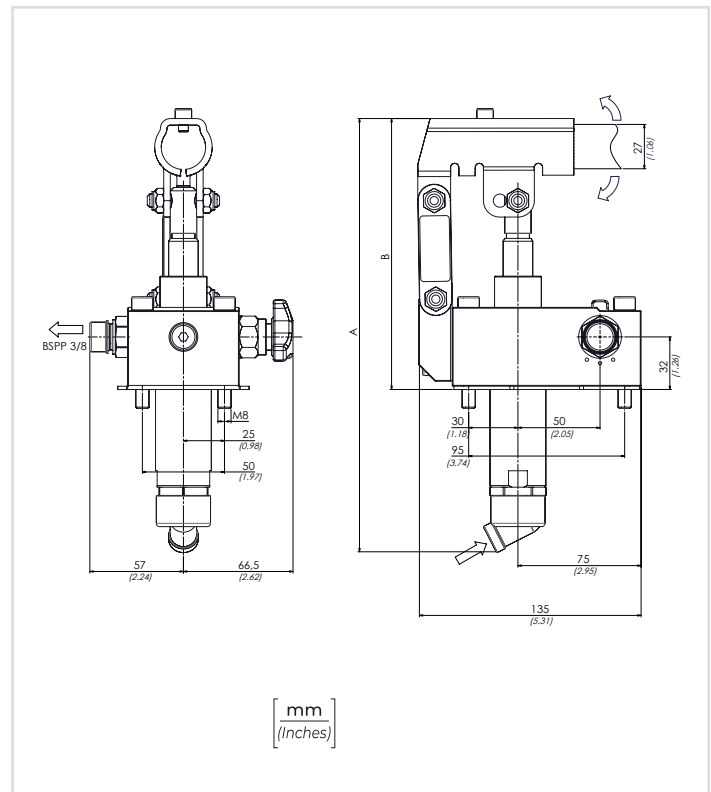
LA POMPA VIENE FORNITA CON LEVA DI AZIONAMENTO L=600 mm  
THE PUMP IS SUPPLIED WITH ACTING LEVER 23.6 IN LONG

**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER



**DATI TECNICI / TECHNICAL DATA**

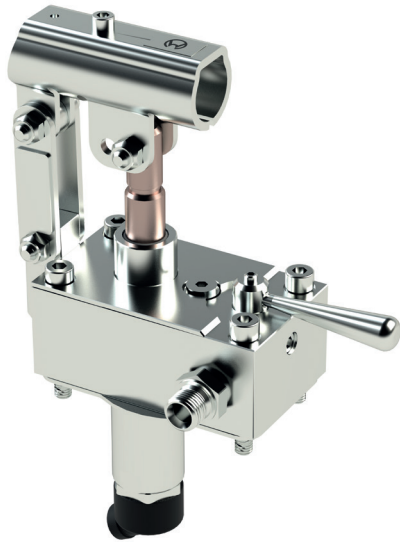
PARTICOLARE / COMPONENT	MATERIALE / MATERIAL
Corpo / Manifold	1.4404 (AISI 316L)
Stelo / Rod	1.4542 (AISI 630) + Niploy
Altri particolari Other components	1.4404 (AISI 316L)
Guarnizioni / O-rings	SILICONE



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE OTTIMALE OPTIMAL PRESSURE bar-PSI	PRESSIONE MAX MAX PRESSURE bar-PSI	PESO APPROX APPROX WEIGHT kg-lbt
XPMS12	220 (3190)	380 (5510)	3,7 (8.15)
XPMS25	120 (1740)	350 (5075)	
XPMS45	80 (1160)	280 (4060)	

ACCIAIO INOSSIDABILE  
STAINLESS STEEL

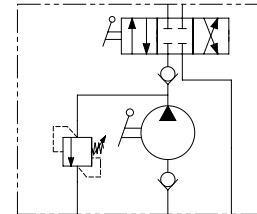


**CODICE ORDINAZIONE**  
ORDERING CODE

01	02	03
<b>XPMI</b>		<b>RV</b>

<b>01</b>	POMPA A MANO DOPPIO POMPAGGIO PER CILINDRO A DOPPIO EFFETTO - CENTRO CHIUSO (DOUBLE PUMPING HAND PUMP FOR DOUBLE ACTING CYLINDER - CLOSED CENTER)			<b>XPMI</b>	
<b>02</b>	CILINDRATA (DISPLACEMENT)	A	B	C	
	12 cm <sup>3</sup> (0.73 in <sup>3</sup> )	253 (9.96)	166 (6.54)	34 (1.34)	12
	25 cm <sup>3</sup> (1.53 in <sup>3</sup> )	273 (10.75)	172 (6.77)	34 (1.34)	25
	45 cm <sup>3</sup> (2.75 in <sup>3</sup> )	283 (11.14)	172 (6.77)	40 (1.57)	45
<b>03</b>	Con valvola di massima pressione (With relief valves)			<b>RV</b>	

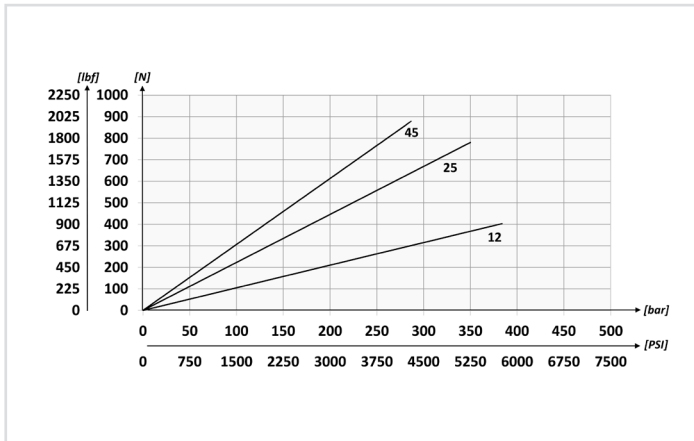
**SCHEMA IDRAULICO / HYDRAULIC CIRCUIT**



LA POMPA VIENE FORNITA CON GUARNIZIONE SAGOMATA  
+ VITI DI FISSAGGIO + LEVA DI AZIONAMENTO L=600 mm

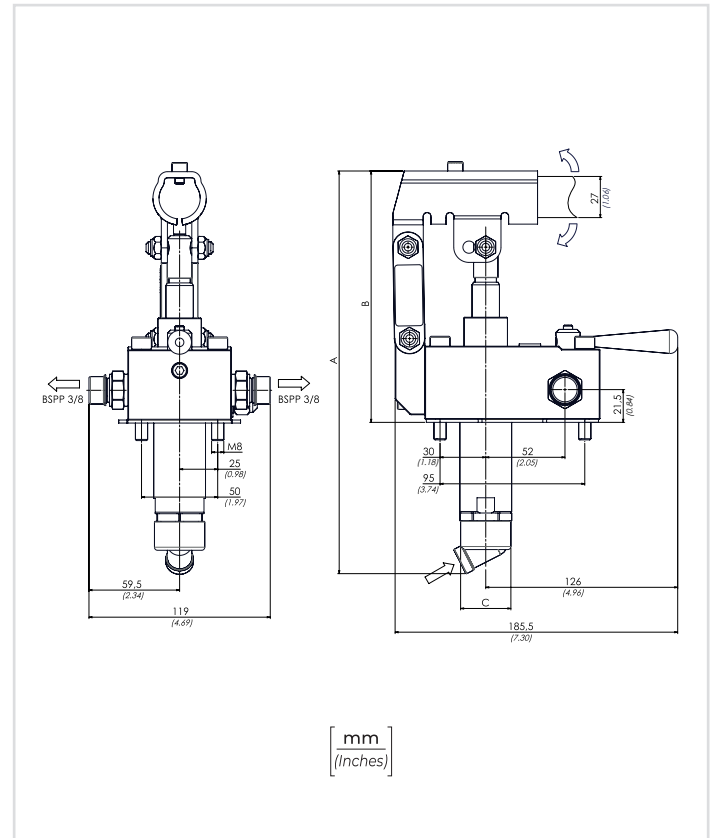
THE PUMP IS SUPPLIED WITH SHAPED SEAL, FIXING SCREWS  
AND ACTING LEVER 23.6 inch LONG

**SFORZO ESERCITATO ALL'ESTREMITÀ DELLA LEVA**  
EFFORT OPERATING AT THE END OF THE LEVER



**DATI TECNICI / TECHNICAL DATA**

PARTICOLARE / COMPONENT	MATERIALE / MATERIAL
Corpo / Manifold	1.4404 (AISI 316L)
Stelo / Rod	1.4542 (AISI 630) + Niploy
Altri particolari Other components	1.4404 (AISI 316L)
Guarnizioni / O-rings	SILICONE



**CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS**

TIPO TYPE	PRESSIONE OTTIMALE (bar) OPTIMAL PRESSURE (PSI)	PRESSIONE MAX (bar) MAX PRESSURE (PSI)	PESO APPROX (kg) APPROX WEIGHT (lbt)
XPMI12	220 (3190)	380 (5510)	4,20 (9.25)
XPMI25	120 (1740)	350 (5075)	
XPMI45	80 (1160)	280 (4060)	

ACCIAIO INOSSIDABILE  
STAINLESS STEEL



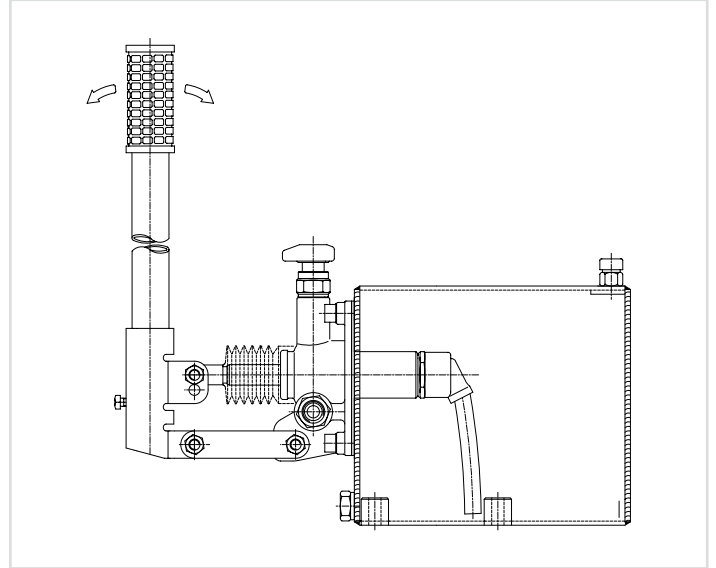
SERBATOIO IN ACCIAIO INOX 316, IL SERBATOIO È  
COMPRESIVO DI TAPPO SFIATO E TAPPO SCARICO

STEEL RESERVOIR INOX 316, THE RESERVOIR  
IS INCLUDING THE AIR BLEEDING PLUG

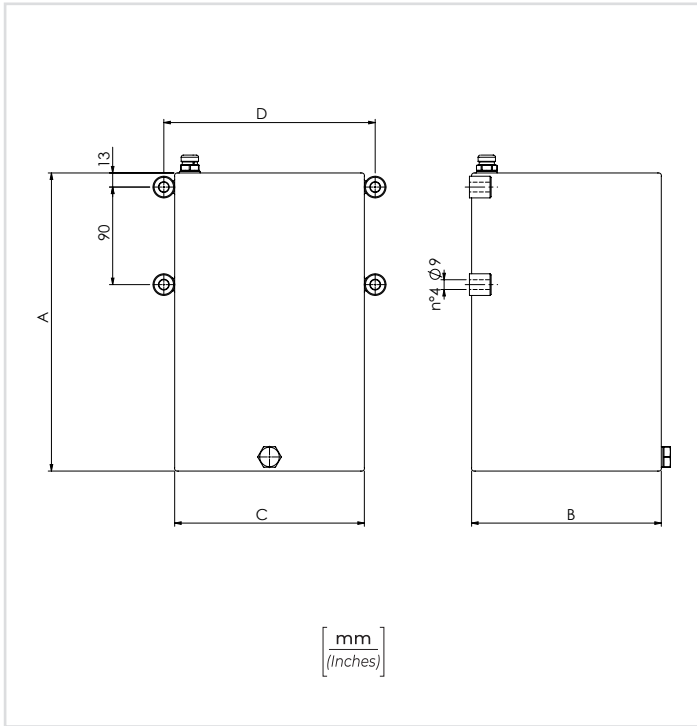
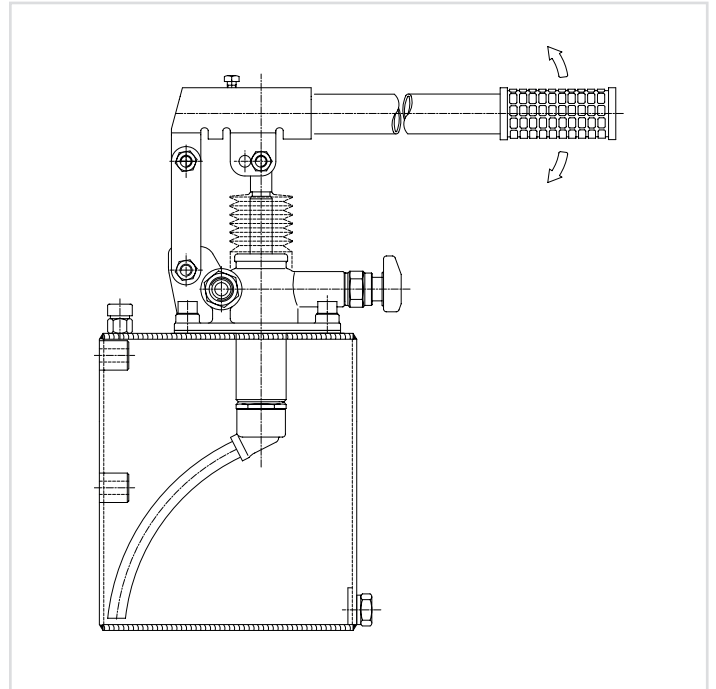
## DATI TECNICI / TECHNICAL DATA

PARTICOLARE / COMPONENT	MATERIALE / MATERIAL
Corpo / Manifold	1.4404 (AISI 316L)

## MONTAGGIO ORIZZONTALE / HORIZONTAL MOUNTING



## MONTAGGIO VERTICALE / VERTICAL MOUNTING



01

**CODICE ORDINAZIONE**  
ORDERING CODE

## CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS

	TIPO TYPE	CAPACITÀ CAPACITY	A	B	C	D	PESO APPROX (kg) APPROX WEIGHT (lbt)
01	XTNK1	1 Lt. - 61 in. <sup>3</sup>	120 (4.72)	150 (5.91)	100 (3.94)	120 (4.72)	2,1 (4.6)
	XTNK2	2 Lt. - 122 in. <sup>3</sup>	185 (7.28)				2,8 (6.1)
	XTNK3	3 Lt. - 183 in. <sup>3</sup>	255 (10.04)				3,4 (7.4)
	XTNK5	5 Lt. - 305 in. <sup>3</sup>	200 (7.87)	175 (6.89)	195 (7.68)	4,6 (10.1)	
	XTNK7	7 Lt. - 427 in. <sup>3</sup>	275 (10.83)			5,5 (12.1)	
	XTNK10	10 Lt. - 610 in. <sup>3</sup>	380 (14.96)			7,0 (15.4)	



# 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 know 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 person, 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 IT'S 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 it's 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 our 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:**

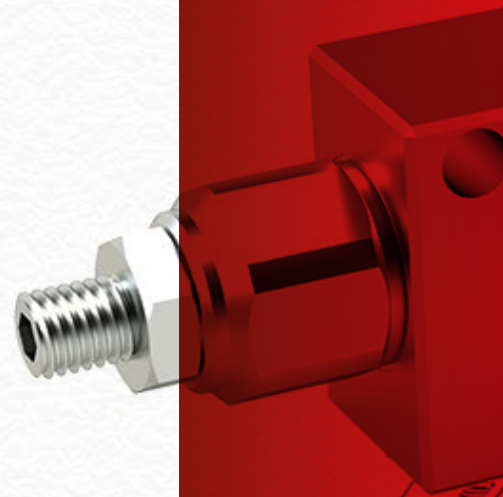
1. Law Regular and complete transport document.
2. Defect identifying letter and reference of a Technical Manager for any clarifications.

MANUFACTURE MONTH	MANUFACTURE YEAR										
	2020	2021	2022	2023	2024	2025	2026	2028	2029	2030	2031
JANUARY	20M	21M	22M	23M	24M	25M	26M	28M	29M	30M	31M
FEBRUARY	20N	21N	22N	23N	24N	25N	26N	28N	29N	30N	31N
MARCH	20P	21P	22P	23P	24P	25P	26P	28P	29P	30P	31P
APRIL	20Q	21Q	22Q	23Q	24Q	25Q	26Q	28Q	29Q	30Q	31Q
MAY	20R	21R	22R	23R	24R	25R	26R	28R	29R	30R	31R
JUNE	20S	21S	22S	23S	24S	25S	26S	28S	29S	30S	31S
JULY	20T	21T	22T	23T	24T	25T	26T	28T	29T	30T	31T
AUGUST	20U	21U	22U	23U	24U	25U	26U	28U	29U	30U	31U
SEPTEMBER	20V	21V	22V	23V	24V	25V	26V	28V	29V	30V	31V
OCTOBER	20Z	21Z	22Z	23Z	24Z	25Z	26Z	28Z	29Z	30Z	31Z
NOVEMBER	20X	21X	22X	23X	24X	25X	26X	28X	29X	30X	31X
DECEMBER	20Y	21Y	22Y	23Y	24Y	25Y	26Y	28Y	29Y	30Y	31Y



2020 - 20V

# THE ITALIAN QUALITY IN HYDRAULIC



 **Oleoweb**  
**HYDRAULIC VALVES AND COMPONENTS**

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ORGANIZATION WITH A  
ISO 9001-2015  
MANAGEMENT SYSTEM

