



# *Fluid World*

*Hydraulics Evolution*

**TECHNICAL CATALOGUE 2023**

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**Fluid World** is a team of professionals, technicians, designers who are experts in the design and implementation of:

- *cartridge valves*
- *parts-in body valves*
- *hydraulic integrated circuits*
- *bankable*

History:

We are a recent established company. Since we started in 2015, our goal has been to offer high quality products and services aimed at customer needs in a professional, effective and personalized way.

## **Our job is hydraulics.**

We operate in the agricultural and industrial sectors, on earthmoving machineries, on lifting systems, on waste disposal machineries.

We are a young company but with over twenty years of know-how developed in large similar companies.

How we work:

From the beginning we have focused on the goal of supporting our customers' business and increasing the growth of their business. Thanks to the growth of our customers, our reality grows at the same time.

## **We listen to learn.**

Flexibility, availability, careful listening to the needs of our customers and a great passion for hydraulics are our strengths.

We have a **vast stock** which allows fast delivery times. Our standard products are interchangeable with the main brands of the sector.

## **We design and manufacture customized components.**

The 50% of our turnover is made up of customized products.

During the years we have been receiving the trust of hundreds of customers who entrust us with increasingly elaborate projects in the technical field.

Equally important are the continuous development of the staff, the ability to listen to customer needs and, above all, the ability to interpret, understand and implement them.

We are constantly evolving and always looking for new projects that allow us to develop new products and refine our technical skills.

Quality and assistance:

our products are **100% made in Italy**.

Every single step, from the storage of the raw material, to the testing, up to the delivery to the customer is monitored according to certified standards.

We guarantee the **total traceability** of the products thanks to the matrix system, and we test every single component.

We designed and built our **test benches** to best test all the technical and performance characteristics of our products.

The world of hydraulics is full of companies that are measured by price. We chose a different path.

We are a **smart factory**: we invest a lot of resources in technology. We like it compete in **precision, reliability, punctuality, service, customization**.



**Fluid World** è un team di professionisti, tecnici, progettisti esperti nell'ideazione e nella realizzazione di:

- *valvole oleodinamiche in cartuccia*
- *valvole parts-in body*
- *blocchi speciali*
- *bancabili*

La storia:

Siamo un'azienda di recente costituzione. Da quando abbiamo iniziato, nel 2015, il nostro obiettivo è quello di offrire prodotti di alta qualità e servizi finalizzati alle esigenze dei clienti in modo professionale, efficace e personalizzato.

## Il nostro lavoro è l'oleodinamica.

Operiamo nel settore agricolo, industriale, su macchine movimento terra, su sistemi di sollevamento, su macchinari per la nettezza urbana.

Siamo un'azienda giovane ma con un know-how di oltre vent'anni sviluppato in grandi aziende omologhe.

Come lavoriamo:

Sin dall'inizio ci siamo focalizzati sull'obiettivo di supportare il business dei nostri clienti ed aumentare la crescita della loro attività. Grazie alla crescita dei nostri clienti, cresce al contempo la nostra realtà.

## Ascoltiamo per imparare.

Flessibilità, disponibilità, un attento ascolto alle esigenze dei nostri clienti e una grande passione per l'oleodinamica sono i nostri punti di forza.

Disponiamo di un **vasto stock** che ci consente tempi di consegna rapidi. I nostri prodotti standard sono intercambiabili con i principali brands del settore.

## Progettiamo e realizziamo componenti personalizzati.

Il 50% del nostro turnover è costituito da prodotti customizzati.

In questi anni abbiamo ricevuto la fiducia di centinaia di clienti che ci affidano progetti sempre più elaborati in ambito tecnico.

Altrettanto importanti sono lo sviluppo continuo dello staff, la capacità di ascolto delle esigenze del cliente e soprattutto la capacità di interpretarle, comprenderle e realizzarle.

Siamo in continua evoluzione e sempre alla ricerca di nuovi progetti che ci permettano di sviluppare nuovi prodotti ed affinare le nostre competenze tecniche.

Qualità ed assistenza:

i nostri prodotti sono **100% made in Italy**.

Ogni singolo passaggio, dallo stoccaggio della materia prima, ai collaudi, fino alla consegna al cliente è monitorato secondo standard certificati.

Garantiamo la totale **tracciabilità** dei prodotti grazie al sistema matrix. Collaudiamo ogni singolo componente.

Abbiamo progettato e costruito i nostri **banchi prova** per testare al meglio tutte le caratteristiche tecniche e performanti dei prodotti forniti.

Il mondo dell'oleodinamica è pieno di aziende che si misurano sul prezzo. Noi abbiamo scelto una strada diversa.

Siamo una **smart factory**: investiamo molte risorse in tecnologia. Ci piace competere in **precisione, affidabilità, puntualità, servizio, personalizzazione**.



**GENERAL**

These general conditions are applicable to all the supplies which Fluid World will carry out, on the base of purchasing orders forwarded from the Customer.

**ORDERS REGULATIONS**

Order to be considered valid and binding must always be confirmed by Fluid World in writing. Orders must be received by Fluid World in a complete and written form. It after 4 working days, in the absence of any communication or customer notification from dispatch of the order confirmation will consider the order valid.

**PAYMENT CONDITIONS**

The parties agree upon the payment conditions at the beginning of the supply. In case of delay of payment, Fluid World will have the right to request of moratory with an annual interest rate of minimum 4%. In case of delay of payment, Fluid World will have the right to not execute the eventual purchasing orders in progress, even if confirmed.

**DELIVERY AND SHIPMENT**

Unless agreed in writing between the parties, transport and shipping costs of the products sold are considered to be always a customer duty (EX WORKS). The possible risks of damage of the goods will pass to the customer, at latest, when the goods are delivered to the first carrier.

**PRODUCT CHARACTERISTICS**

Fluid world engages itself to supply good quality products, conform to the technical schedules or in catalogue. It reserves the exclusive right make some change to the products, which, without altering their essential features, to be considered for improvement and appropriate.

**COMPLAINTS**

The possible claims related to the packaging or the shipment should be reported in writing to Fluid World within 48 hours of receipt of goods. In the event of malfunctions or problems with the operation of our products, please note that complaints or dispute must be submitted in writing with in 12 months from the day of delivery. It should be noted that even in the event of complaints or claims the customer has not in any case the right to suspend or delay payment previously agreed.

**WARRANTY**

Fluid World guarantees that its products, if used integrally and in respect of the functions and the performances for which they have been planned and commercialized, are free from material or manufacturing defects for a period of 12 month with effect from date of shipment from its premises as confirmed by the date indicated on the product itself. The warranty covers repair and/or replacement of products or parts of product that have proved to be unserviceable due to material or manufacturing defects following inspection at the premises of Fluid World. All claims should be forwarded in writing to our premises. Manufacturing defects apparent at time of delivery should be reported in writing within 48 hours of receipt. It should be noted that even in the event of complaints or claims the customer has not in any case the right to suspend or delay payment previously agreed. Fluid World recognizes and acts to defects only to his costumers, who is responsible to test the product when integrated with other functions prior to delivery to the end user, taking a load even any disputes. The components that are easier to usury as o-ring, springs, plastic components, etc. are excluded from the warranty. The warranty does not apply to improperly installed products and Fluid World will be not liable for any damage to third parties or other equipment.

**FORMS OF LAW**

All deliveries made and agreed upon by Fluid World are governed by these Terms and conditions and to the extent not described in detailed ways the by Italian law. This catalogue cancels and replaces all previous documentation and all rights are reserved according to the law.

### GENERALE

Le presenti condizioni generali si applicano a tutte le forniture che Fluid World effettuerà, sulla base degli ordini di acquisto inoltrati dal Cliente.

### REGOLAMENTO ORDINI

Un ordine per essere considerato valido e vincolato deve sempre essere confermato da Fluid World per iscritto. Gli ordini devono pervenire in forma completa e scritta. Dopo 4 giorni lavorativi, in assenza di qualsiasi comunicazione o notifica del cliente dall'invio della conferma d'ordine verrà considerato l'ordine valido.

### CONDIZIONI DI PAGAMENTO

Le parti concorderanno le condizioni di pagamento all'inizio della fornitura. In caso di ritardo di pagamento, Fluid World avrà il diritto di chiedere una moratoria con un tasso di interesse annuo del 4% minimo. In caso di ritardo di pagamento, Fluid World avrà il diritto di non eseguire l' eventuale ordine di acquisto in corso, anche se confermato.

### SPEDIZIONE E CONSEGNA

A meno che non concordato per iscritto tra le parti, i costi di trasporto e spedizione dei prodotti venduti sono considerati sempre un dovere del cliente (Ex Works). I possibili rischi di danneggiamento delle merci passeranno al cliente, dopo che la merce viene consegnata al primo corriere.

### CARATTERISTICHE DI PRODOTTO

Fluid World si impegna a fornire prodotti di buona qualità, conformi alle schede tecniche o al catalogo. Si riserva il diritto esclusivo di apportare alcuni cambiamenti ai prodotti che, senza alterarne le caratteristiche essenziali, vengano considerate migliorative ed opportune.

### RECLAMI

Gli eventuali reclami relativi alla confezione e alla spedizione devono essere comunicati per iscritto a Fluid World entro 48 ore dal ricevimento merce. In caso di malfunzionamenti o problemi con il funzionamento dei nostri prodotti, si prega di notare che le denunce o le controversie devono essere presentate per iscritto entro 12 mesi a partire dal giorno di consegna. Va notato che, anche in caso di denunce o reclami il cliente non ha in ogni caso il diritto di sospendere o ritardare il pagamento precedentemente concordato.

### GARANZIA

Fluid World garantisce che i suoi prodotti, se utilizzati integralmente e nel rispetto delle funzioni e delle prestazioni per le quali sono stati previsti e commercializzati, sono esenti da difetti di materiale o costruzione, per un periodo di 12 mesi a decorrere dalla data di spedizione dalla propria sede come confermato dalla data indicata sul prodotto stesso.

La garanzia prevede la riparazione e/o sostituzione di prodotti o parti di prodotto che hanno dimostrato di essere inutilizzabili a causa di difetti di materiale o costruttivi, a seguito di ispezioni presso i locali Fluid World.

Tutte le richieste dovranno essere inoltrate per iscritto alla nostra sede.

Difetti di consegna apparenti al momento della consegna devono essere segnalati per iscritto entro 48 ore dal ricevimento. Va notato che, anche in caso di denunce o reclami il cliente non ha in ogni caso il diritto di sospendere o ritardare il pagamento precedentemente concordato.

Fluid World riconosce ed interviene per eventuali difetti solo fino al proprio cliente, il quale si assume la responsabilità di testare il prodotto se integrato ad altre funzioni prima di far la fornitura all' utilizzatore finale, prendendosi a carico anche eventuali contestazioni. Sono esclusi dalla garanzia i componenti di più facile usura tipo: guarnizioni, molle, componenti in plastica, ecc. La garanzia non ha valore per prodotti installati in maniera impropria inoltre Fluid World non sarà responsabile di eventuali danni a terzi o ad altre apparecchiature.

### FORMA DI LEGGE

Tutte le consegne fatte e concordate da Fluid World sono disciplinate dalle presenti condizioni e termini e per quanto non descritto in modo dettagliato dalla legge italiana. Il presente catalogo annulla e sostituisce ogni documentazione precedente e tutti i diritti sono riservati secondo termini di legge.

### HYDRAULIC OIL

We recommend the use of mineral-based oil with characteristics and physical chemical properties suitable for the use on mobile equipment and hydraulic systems. Examples of the types can be used:

MINERAL BASE OIL type HL (DIN 51524 part 1)

MINERAL BASE OIL type HLP (DIN 51524 part 2)

**Viscosity Class:** It's described in accordance with ISO DIN standard, the values expressed in ISO-VG indicate that the medium viscosity of the fluid at 40°.

Fluid World for proper operation is recommending for all components a viscosity that can go from 15 cSt to 250 cSt.

### CONTAMINATION CLASSES

One of the greater disfunction and failure causes in the hydraulic system is the elevated contamination of oil.

The contamination class is indicated through two scales:

- ISO 4406: The norm is expressed by means of 3 numbers, that will determine the quantity of solid particles in 1 ml of fluid larger than 4/6/14 microns.

- NAS 1638: The norm is expressed by means of 1 number, that represents the particle amount, of various dimensions, contained in 100 ml of fluid.

WORKING PRESSURE	NOMINAL FILTRATION	CONTAMINATION CLASSES
Suggested for valves working with a system pressure equal or higher than 250 bar (3625 psi)	10 µm	ISO 4406: 19/17/14 NAS 1638: 8
Suggested for valves working with a system pressure from 100 bar (1450psi) to 250 bar (3625 psi)	15 µm	ISO 4406: 20/18/15 NAS 1638: 9
Suggested for valves working with a system pressure lower than 100 bar (1450 psi)	25 µm	ISO 4406: 21/19/16 NAS 1638: 10

### WORKING TEMPERATURE

Our products are designed to operate at a fluid temperatures between - 20° C to + 80° C while the ambient temperature range can go from - 30° C to + 60° C.

### PRESSURE SETTING

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

### STORAGE

Our products have to be maintained protected in their original wrap or antipowder system, protected from the solar beams and from sources of heat. Make sure that an ideal storage temperature between of -10° C and +50° C is available.

### INTERNAL LEAKAGE

Generally, our products thanks to their design ensure a mechanical seal with low leakage. For the range of products offered, the leakage in extreme cases is not more than 20 drops/min referred to the maximum working pressure and with oil at a viscosity of 46 cSt with a temperature of 40° C.

### DIAGRAMS AND FEATURES

All diagrams in this catalogue report performance curves obtained by use of mineral oil at ISO viscosity VG32 and at 40° C with a degree of cleanliness of the system conforms to ISO 4406 19/17/14.

### SEALS

O-Ring: made out of butadiene/acrylonitril (BUNA-N) and are suitable for temperature between the -20° and the +90° C. The anti-extrusion rings are made lubricifon (PTFE ) or NBR (BUNA-N).

### ASSEMBLY CARTRIDGE VALVES

Each cartridge valve must be mounted in the recess indicated in the catalog and must be mounted following the installation torques. In addition it is recommended to lubricate the seals to prevent corruption in the assembly .

### OLIO IDRAULICO

Si consiglia l'uso di olio a base minerale con caratteristiche e proprietà chimico fisiche adatte per l'utilizzo su apparecchiature mobili e sistemi idraulici. Esempi dei tipi che possono essere utilizzati :

OLIO BASE MINERALE HL (DIN 51524 parte 1)

OLIO BASE MINERALE HLP (DIN 51524 parte 2)

Classe Viscosità: E' descritto in conformità nella norma ISO DIN , i valori espressi in ISO - VG indicano la media di viscosità del fluido a 40° C.

Raccomandiamo, per il corretto funzionamento di tutti i componenti, una viscosità che può andare da 15 cSt a 250 cSt.

### CLASSE DI CONTAMINAZIONE

Una delle maggiori cause di guasti e disfunzioni nei sistemi idraulici è la elevata contaminazione dell' olio.

La classe di contaminazione è indicata attraverso due scale:

- ISO 4406: La norma è espressa mediante 3 numeri, che determinerà la quantità di particelle solide contenuto in 1 ml di liquido superiori a 4/6/14 micron.

- NAS 1638: La norma è espressa mediante 1 numero, che rappresenta la quantità di particelle, di varie dimensioni, contenute in 100 ml di liquido.

PRESSIONE DI ESERCIZIO	FILTRAZIONE NOMINALE	CLASSE DI CONTAMINAZIONE
Consigliato per valvole che lavorano con una pressione uguale o superiore a 250 bar (3625 psi)	10 µm	ISO 4406: 19/17/14 NAS 1638: 8
Consigliato per valvole che lavorano con una pressione da 100 bar (1450psi) a 250 bar (3625 psi)	15 µm	ISO 4406: 20/18/15 NAS 1638: 9
Consigliato per valvole che lavorano con una pressione inferiore a 100 bar (1450 psi)	25 µm	ISO 4406: 21/19/16 NAS 1638: 10

### TEMPERATURA D'ESERCIZIO

I nostri prodotti sono progettati per funzionare con una temperatura del fluido che va tra - 20° C a + 80° C mentre la temperatura ambiente può andare da - 30° C a + 60° C.

### TARATURE

Tutte le valvole sono tarate nei valori standard specificate nel catalogo. In caso sia necessario modificare l'impostazione, si consiglia di agire senza mai superare il campo di pressione indicato.

### MAGAZZINO

I nostri prodotti devono essere mantenuti protetti in loro involucro originale o nel sistema antipolvere, protetto dai raggi solari e da fonti di calore. Assicurarsi che la temperatura di conservazione ideale sia tra -10° C e + 50° C.

### TRAFILAMENTO INTERNO

In generale, i nostri prodotti grazie alla loro progettazione garantiscono una tenuta meccanica a bassa perdita. Per la gamma di prodotti offerti, la perdita nei casi limite non è superiore a 20 gocce/min riferita alla massima pressione di esercizio e con olio a viscosità 46 cSt con temperatura di 40° C.

### DIAGRAMMI E SPECIFICHE

Tutte le curve di prestazione riportate in questo catalogo sono ottenute con l'uso di olio minerale a viscosità VG32 ISO a 40° C, con un grado di pulizia del sistema conforme alla norma ISO 4406 19/17/14.

### GUARNIZIONI

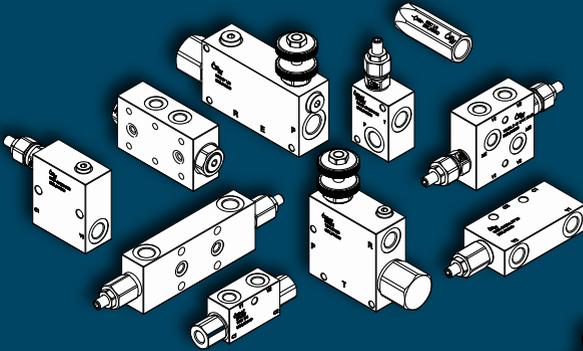
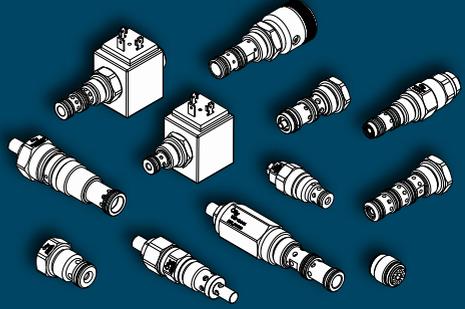
O -Ring: fatto di butadiene / acrilonitrile (BUNA-N) e sono adatti a temperature tra -20° e + 90° C.

Gli anelli antiestrusione sono realizzati in lubrifon (PTFE) oppure in NBR (BUNA-N).

### MONTAGGIO VALVOLE A CARTUCCIA

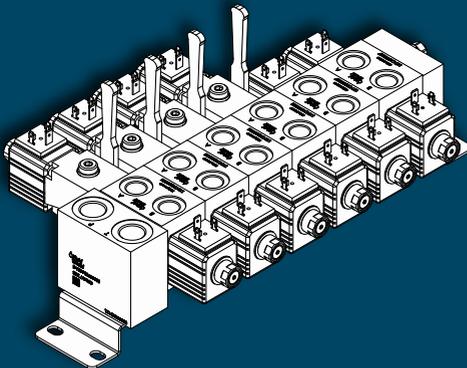
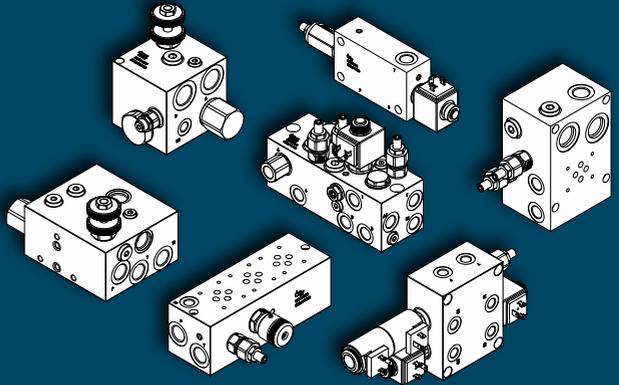
Ogni valvola a cartuccia dovrà essere montata nell'apposita cavità indicata a catalogo e dovrà essere montata seguendo le coppie di serraggio indicate. Inoltre si consiglia di lubrificare le guarnizioni per evitare il danneggiamento nel montaggio.

**CARTRIDGE  
VALVES**



**PARTS-IN-BODY  
VALVES**

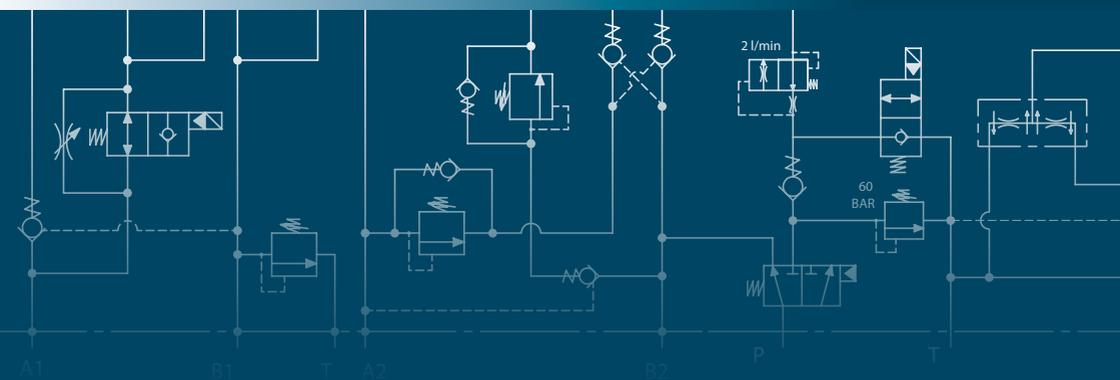
**HYDRAULIC  
INTEGRATED  
CIRCUITS**



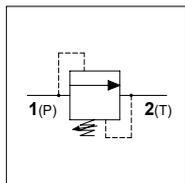
**DIRECTIONAL  
ELECTRO-HYDRAULIC  
SYSTEMS**

# PRODUCT SELECTION GUIDE

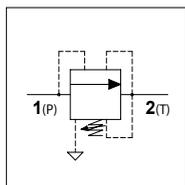
## GUIDA ALLA SELEZIONE DEL PRODOTTO



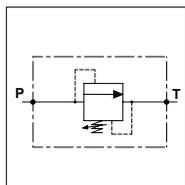
**PRESSURE RELIEF VALVES**  
VALVOLE DI MASSIMA PRESSIONE



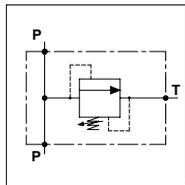
CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WMD 5	2	450	M16 x 1,5	42
WMD 25	20	350	SAE 08	43
WMD 25 H	25	350	SAE 08	45
WMD 40	40	350	M20 x 1,5	48
WMD 50	50	350	SAE 10	51
WMD 80	80	350	M26 x 1,5	52



WMD 40 CC	40	350	M20 x 1,5	55

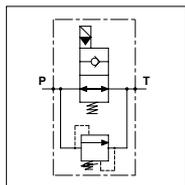


WMD 25	20	250 (A) - 350 (S)	1/4; 3/8	44
WMD 25 H	25	250 (A) - 350 (S)	1/4; 3/8	46

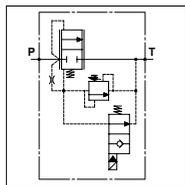


WMD 25 H - SPW	25	250 (A) - 350 (S)	1/4; 3/8	47
WMD 40	40	250 (A) - 350 (S)	3/8; 1/2	49
WMD 40 - SPW	40	250 (A) - 350 (S)	3/8; 1/2	50
WMD 80	80	250 (A) - 350 (S)	1/2; 3/4	53
WMD 80 - SPW	80	250 (A) - 350 (S)	3/4	54

**PRESSURE RELIEF VALVES**  
**VALVOLE DI MASSIMA PRESSIONE**

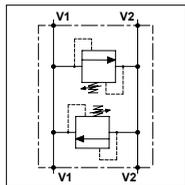


CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WMD 25 - VE	25	250 (A)	1/4; 3/8	56

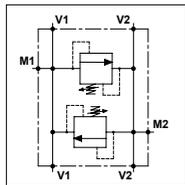


WMD 100 - VE	100	250 (A)	3/8; 1/2	57
WMD 200 - VE	200	250 (A)	3/4; 1	58

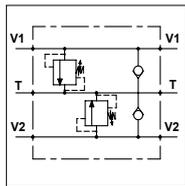
**DUAL CROSS RELIEF VALVES**  
**VALVOLE REGOLATRICI DI PRESSIONE INCROCIATE**



CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WMDL D 40	40	250 (A) - 350 (S)	3/8; 1/2	62
WMDL D 80	80	250 (A) - 350 (S)	1/2; 3/4	63

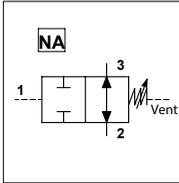
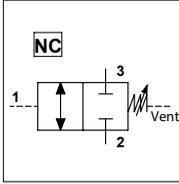
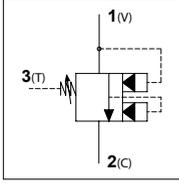
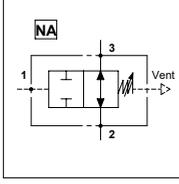
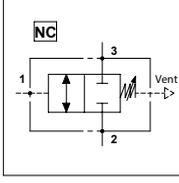
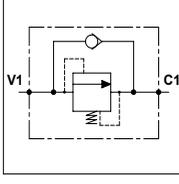


WMD D 40	40	250 (A) - 350 (S)	3/8; 1/2	64
WMD D 80	80	250 (A) - 350 (S)	1/2; 3/4	65

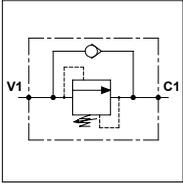


WMDL D 40 AC	40	250 (A)	3/8; 1/2	66

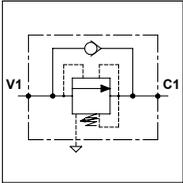
**SEQUENCE VALVES**  
VALVOLE DI SEQUENZA

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WSD C 30 S10 NA	30	350	SAE 10	70
	WSD C 40 M22 NA	40	350	M22 x 1,5	72
	WSD C 30 S10 NC	30	350	SAE 10	70
	WSD C 150 KD	150	350	1-14UNS	73
	WSD C 30 S10 NA	30	250 (A) - 350 (S)	3/8; 1/2	71
	WSD C 30 S10 NC	30	250 (A) - 350 (S)	3/8; 1/2	71
	WSD LF 30	30	350 (S)	3/8	74

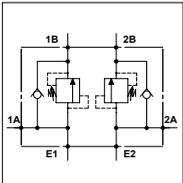
**SEQUENCE VALVES**  
 VALVOLE DI SEQUENZA



CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WSD 25	25	250 (A) - 350 (S)	1/4	75
WSD 40	40	250 (A) - 350 (S)	3/8; 1/2	76
WSD 80	80	250 (A) - 350 (S)	1/2; 3/4	77

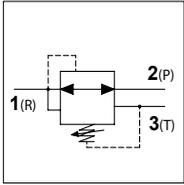


WSD 40 CC	40	250 (A) - 350 (S)	3/8; 1/2	78

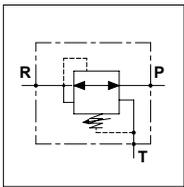


WSD D 40	40	250 (A)	1/2	79

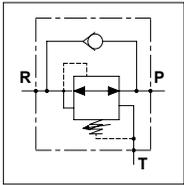
**PRESSURE REDUCING VALVES**  
 VALVOLE RIDUTTRICI DI PRESSIONE



CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WRP 30 S10	30	350	SAE 10	82
WRP 30	30	350	7/8 - 14 UNF	84

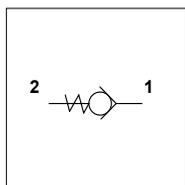


WRP 30 S10	30	250 (A) - 350 (S)	3/8; 1/2	83
WRP 30	30	250 (A) - 350 (S)	3/8	85
WRP 30 S10 - SPW	30	250 (A) - 350 (S)	3/8	86

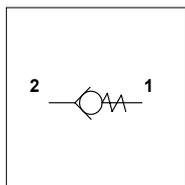


WRP 30 VU	30	250 (A) - 350 (S)	3/8	87

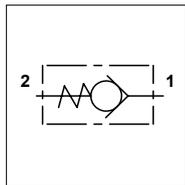
**CHECK VALVES**  
VALVOLE DI RITEGNO UNIDIREZIONALI



CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WUC C 30	30	350	SAE 10	90
WUC C 40 M22	40	420	M22 x 1,5	91
WUC C 80	80	420	SAE 10	92
WUC C 120	120	420	SAE 12	93
WUC I	Max 80	350	1/8; 1/4; 3/8; 1/2; 3/4	94
WUC IS	Max 120	350	1/8; 1/4; 3/8; 1/2; 3/4	95
WRS	Max 90	350	1/2; 3/4	103

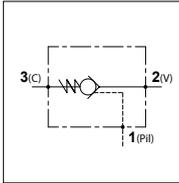
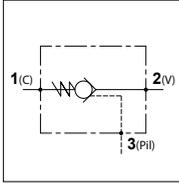
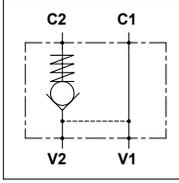
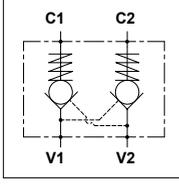
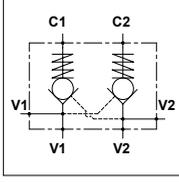
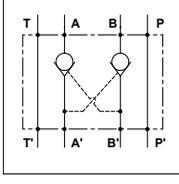


WUC ISI	Max 120	350	1/8; 1/4; 3/8; 1/2; 3/4	96



WUC	Max 350	400	1/8;1/4;3/8;1/2;3/4;1;1 1/4;1 1/2	97
WUC JIC 08 MF	30	350	3/4 - 16 JIC 08	98
WUC ORFS 08 MF	30	350	13/16 - 16 BSW/ORFS	99
WUC ORFS 08 MM	30	350	13/16-16 UN / 3/4-16 UNF	100
WUCR ORFS 08 MM	30	350	3/4-16 UNF / 13/16-16 UN	101
WUC ORFS 16 MM	250	350	1-7/16-12UN / 1-5/16-12UN	102

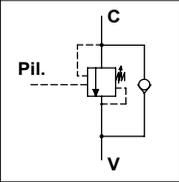
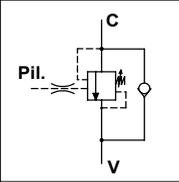
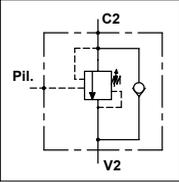
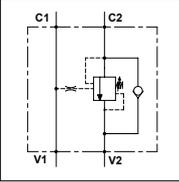
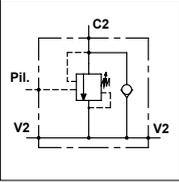
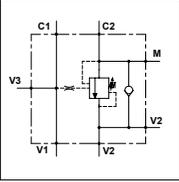
**PILOT OPERATED CHECK VALVES**  
VALVOLE DI BLOCCO PILOTATE

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WBS C 25	25	350	M18 x 1,5	106
	WBS C 30	30	350	SAE 08	107
	WBS C 60 M22	60	350	M22 x 1,5	108
	WBS C 60	60	350	SAE 10	109
	WBS	Max 130	350	1/4, 3/8, 1/2, 3/4, 1	111
	WBS CR 80	80	350	SAE 12	110
	WBS - L	Max 40	250 (A) - 350 (S)	3/8, 1/2	112
	WBS - 1F	Max 40	250 (A) - 350 (S)	3/8, 1/2	113
	WBD 1SC	Max 50	250 (A) - 350 (S)	1/4, 3/8VP, 3/8, 1/2	114
	WBD	Max 50	250 (A) - 350 (S)	1/4, 3/8VP, 3/8, 1/2	115
	WBD 2OC - VP	30	350 (S)	1/4, 3/8	116
	WBD 30 L	30	250 (A) - 350 (S)	1/4, 3/8, 1/2	117
	WBD 30 2F	30	250 (A) - 350 (S)	1/4, 3/8	118; 119
	WBD 40 L	40	250 (A) - 350 (S)	1/2	122
	WBD 30 2F - DL	30	250 (A) - 350 (S)	1/4, 3/8	120
	WBD 30 6F	30	250 (A) - 350 (S)	CETOP 3	121

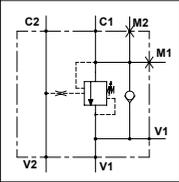
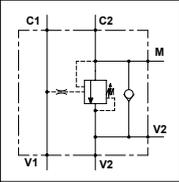
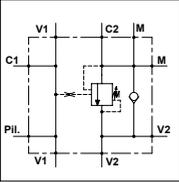
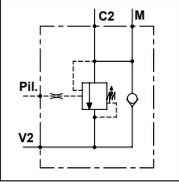
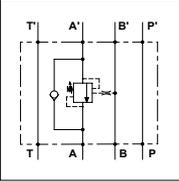
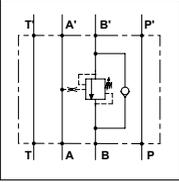
Legend:

(A)= Aluminium ; (S)= Steel

**COUNTERBALANCE VALVES**  
VALVOLE OVERCENTER

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WOC 60	60	350	1 1/16 - 12 UN	129
	WOC 30 M20	30	350	M20 x 1,5	126
	WOC 30 S08	30	350	SAE 08	127
	WOC 60 S10	60	350	SAE 10	128
	WOC 60	60	350	1 1/16 - 12 UN	129
	WOS 30 - L PE	30	350 (S)	1/4	130
	WOS 60 - L PE	60	350 (S)	3/8; 1/2	140
	WOS 30 - L PP	30	350 (S)	1/4	131
	WOS 60 - L PP	60	350 (S)	3/8; 1/2	141
	WOS 90 - L PP	90	350 (S)	1/2; 3/4	157
	WOS 60 - 1F PE	60	350 (S)	3/8; 1/2	142
	WOS 30 - 1F PP	30	350 (S)	1/4	132
	WOS 60 - 2F PP	60	350 (S)	3/8; 1/2	144

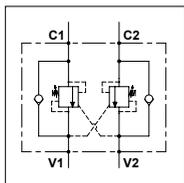
**COUNTERBALANCE VALVES**  
VALVOLE OVERCENTER

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WOS 30 - 1F PP - SPNS	30	350 (S)	1/4	133
	WOS 60 - 1F PP	60	350 (S)	3/8; 1/2	143
	WOS 30 - 2F PP	30	350 (S)	1/4	134
	WOS 60 - B PE	60	350 (S)	3/8	145
	WOS 60 6F A	60	250 (A) - 350 (S)	CETOP 3	146
	WOS 60 6F B	60	250 (A) - 350 (S)	CETOP 3	146

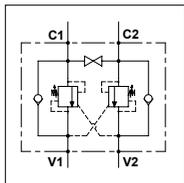
Legend:

(A)= Aluminium ; (S)= Steel

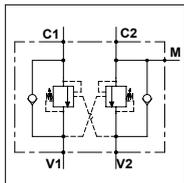
**COUNTERBALANCE VALVES**  
VALVOLE OVERCENTER



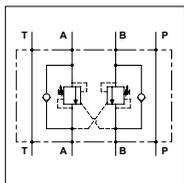
CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WODS 30 - L	30	350 (S)	1/4	135
WODS 30 - 2F	30	350 (S)	1/4	136
WOD 30 - L	30	350 (S)	1/4; 3/8	137
WOD 30 - L A	30	250 (A)	1/4	138
WOD 30 - 2F	30	350 (S)	1/4; 3/8	139
WOD 60 - L	60	350 (S)	3/8; 1/2	147
WOD 60 - L A	60	250 (A)	3/8; 1/2	148
WOD 60 - L - SPOM	60	350 (S)	3/8; 1/2	149
WODS 60 - L	60	350 (S)	3/8; 1/2	150
WOD X 60 - L A	60	250 (A)	3/8; 1/2	151
WOD 60 - 2F	60	350 (S)	3/8; 1/2	155
WOD 90 - L	90	350 (S)	1/2; 3/4	158
WOD 90 - L A	90	250 (A)	1/2; 3/4	159



WOD X 60 - L A BP	60	250 (A)	3/8	152
WOD 60 - 2F A BP	60	250 (A)	3/8	153

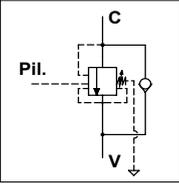
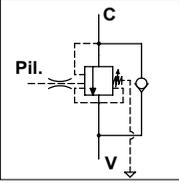
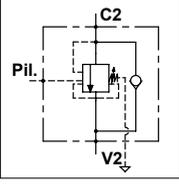
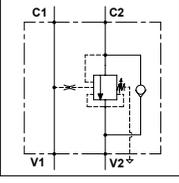
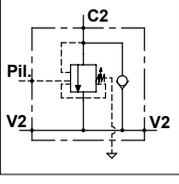
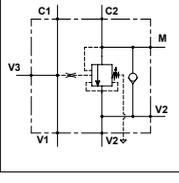


WOD 60 - 1F	60	350 (S)	3/8; 1/2	154

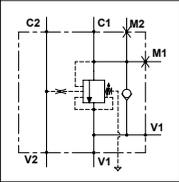
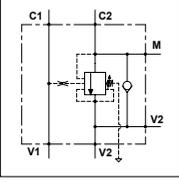
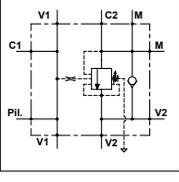
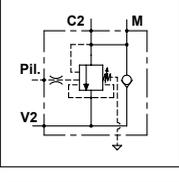
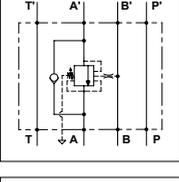
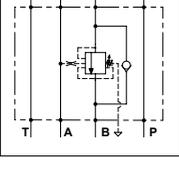


WOD 60 6F	60	250 (A) - 350 (S)	CETOP 3	156

**FULLY COMPENSATED COUNTERBALANCE VALVES**  
VALVOLE OVERCENTER COMPENSATE

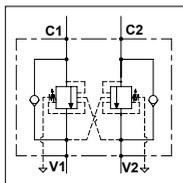
	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WOCFC 60	60	350	1 1/16 - 12 UN	164
	WOCFC 30 M20	30	350	M20 x 1,5	162
	WOCFC 30 S08	30	350	SAE 08	163
	WOCFC 60	60	350	1 1/16 - 12 UN	164
	WOSFC 30 - L PE	30	350 (S)	1/4	165
	WOSFC 60 - L PE	60	350 (S)	3/8; 1/2	175
	WOSFC 30 - L PP	30	350 (S)	1/4	166
	WOSFC 60 - L PP	60	350 (S)	3/8; 1/2	176
	WOSFC 60 - 1F PE	60	350 (S)	3/8; 1/2	177
	WOSFC 30 - 1F PP	30	350 (S)	1/4	167
	WOSFC 60 - 2F PP	60	350 (S)	3/8; 1/2	179

**FULLY COMPENSATED COUNTERBALANCE VALVES**  
VALVOLE OVERCENTER COMPENSATE

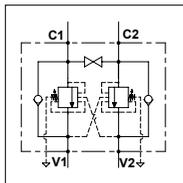
	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WOSFC 30 - 1F PP - SPNS	30	350 (S)	1/4	168
	WOSFC 60 - 1F PP	60	350 (S)	3/8; 1/2	178
	WOSFC 30 - 2F PP	30	350 (S)	1/4	169
	WOSFC 60 - B PE	60	350 (S)	3/8	180
	WOSFC 60 6F A	60	250 (A) - 350 (S)	CETOP 3	181
	WOSFC 60 6F B	60	250 (A) - 350 (S)	CETOP 3	181

Legend:  
(A)= Aluminium ; (S)= Steel

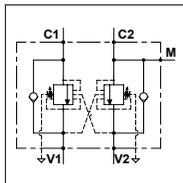
**FULLY COMPENSATED COUNTERBALANCE VALVES**  
VALVOLE OVERCENTER COMPENSATE



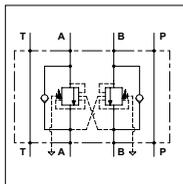
CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WODSFC 30 - L	30	350 (S)	1/4	170
WODSFC 30 - 2F	30	350 (S)	1/4	171
WODFC 30 - L	30	350 (S)	1/4; 3/8	172
WODFC 30 - L A	30	250 (A)	1/4	173
WODFC 30 - 2F	30	350 (S)	1/4; 3/8	174
WODFC 60 - L	60	350 (S)	3/8; 1/2	182
WODFC 60 - L A	60	250 (A)	3/8; 1/2	183
WODFC 60 - L - SPOM	60	350 (S)	3/8; 1/2	184
WODSFC 60 - L	60	350 (S)	3/8; 1/2	185
WODFC X 60 - L A	60	250 (A)	3/8; 1/2	186
WODFC 60 - 2F	60	350 (S)	3/8; 1/2	190



WODFC X 60 - L A BP	60	250 (A)	3/8	187
WODFC 60 - 2F A BP	60	250 (A)	3/8	188

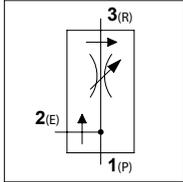
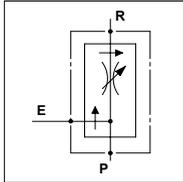
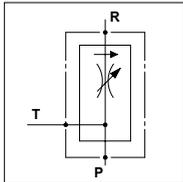
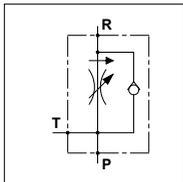
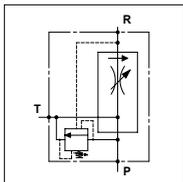
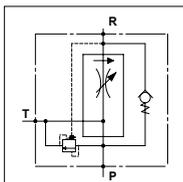


WODFC 60 - 1F	60	350 (S)	3/8; 1/2	189

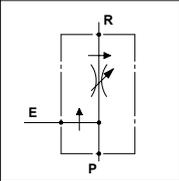
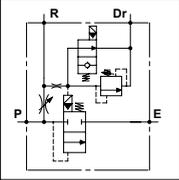
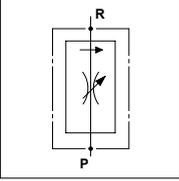
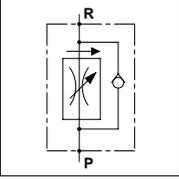
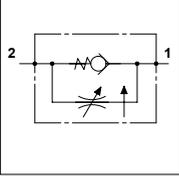


WODFC 60 6F	60	250 (A) - 350 (S)	CETOP 3	191

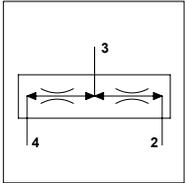
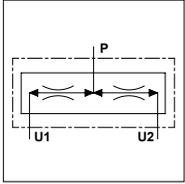
**COMPENSATED FLOW CONTROL VALVES**  
VALVOLE REGOLATRICI DI FLUSSO COMPENSATE

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WPR C 50	50	350	SAE 10	194
	WPR C 90	90	350	SAE 12	196
	WPR C 50	50	250 (A) - 350 (S)	3/8; 1/2	195
	WPR C 90	90	250 (A) - 350 (S)	1/2; 3/4	197
	WPR ET	Max 240	250 (A) - 350 (S)	3/8; 1/2; 3/4; 1	198
	WPR ET - SPW	Max 90	250 (A) - 350 (S)	3/8; 1/2	199
	WPR ET - VU	Max 90	250(A) - 350(S)	3/8; 1/2	200
	WPR ET - VM	Max 240	250 (A) - 350 (S)	3/8; 1/2; 3/4;	201
	WPR ET - VU/VM	Max 90	250 (A) - 350 (S)	3/8; 1/2	202

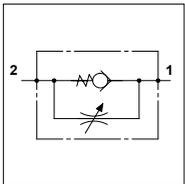
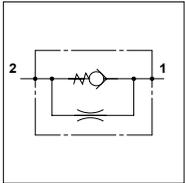
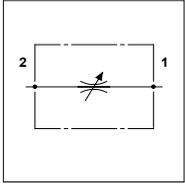
**COMPENSATED FLOW CONTROL VALVES**  
VALVOLE REGOLATRICI DI FLUSSO COMPENSATE

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WPR EP	Max 150	250 (A) - 350 (S)	3/8; 1/2; 3/4	203
	WPR EP - VM/VE	Max 90	250 (A) - 350 (S)	3/8; 1/2	204
	WPR 2	Max 50	250 (A)	3/8; 1/2	205
	WPR 2 VU	Max 90	250 (A) - 350 (S)	1/2	206
	WRCU	Max 20	250 (S)	1/4; 3/8	207

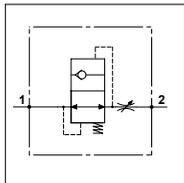
**FLOW DIVIDER/COMBINER VALVES**  
VALVOLE DIVISORI/RIUNIFICATORI DI FLUSSO

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WDF A S10	40	350	SAE 10	210
	WDF A S10	40	250 (A) - 350 (S)	3/8; 1/2	211

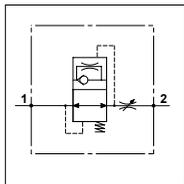
**FLOW CONTROL VALVES**  
VALVOLE REGOLATRICI DI FLUSSO

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WFU C S08	40	350	SAE 08	214
	WFU	Max 160	350	1/4; 3/8; 1/2; 3/4; 1	215
	WFU M	Max 160	350	1/4; 3/8; 1/2; 3/4; 1	216
	WFU M - SPFP	Max 160	350	1/4; 3/8; 1/2; 3/4; 1	217
	WUC F	Max 350	400	1/8; 1/4; 3/8; 1/2; 3/4; 1; 1 1/4; 1 1/2	218
	WFC C S08	30	350	SAE 08	219
	WFB	Max 110	350	1/4; 3/8; 1/2; 3/4; 1	220

**HOSE BURST VALVES**  
 VALVOLE PARACADUTE

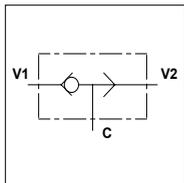


CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WHB	Max 180	350 (S)	1/4; 3/8; 1/2; 3/4; 1	224; 225



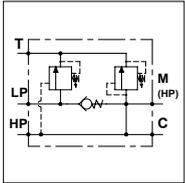
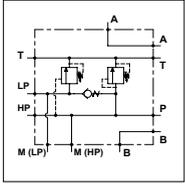
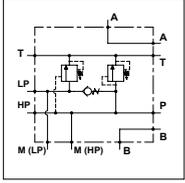
WHB (with orifice)	Max 180	350 (S)	1/4; 3/8; 1/2; 3/4; 1	224; 225

**SHUTTLE VALVES**  
 VALVOLE SELETRICI

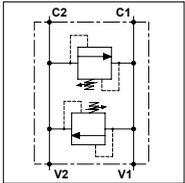
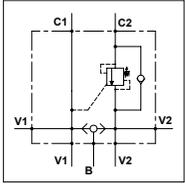


CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
WS I	Max 35	350	1/8; 1/4	228
WS	Max 160	350 (S)	1/4; 3/8; 1/2; 3/4; 1	229

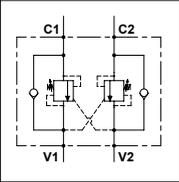
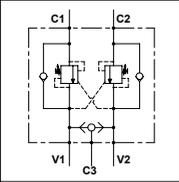
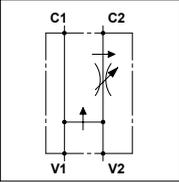
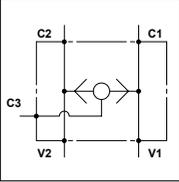
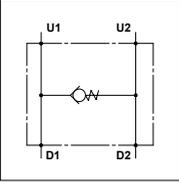
**HIGH LOW UNLOADING VALVES**  
VALVOLE ESCLUSIONE POMPA DOPPIA

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WEPD L	Max 80	350 (S)	3/8; 1/2; 3/4	232
	WEPD 6F	30	250 (A)	CETOP 3	233
	WEPD 10F	45	250 (A)	CETOP 5	234

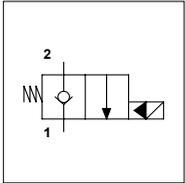
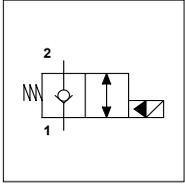
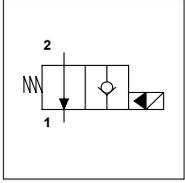
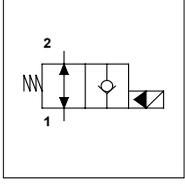
**VALVES FLANGED ON MOTORS**  
VALVOLE FLANGIATE SU MOTORI

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WMD FDB OMM 25	25	250 (A) - 350 (S)	3/8	238
	WMD FDB OMR 40	40	250 (A)	3/8; 1/2	239
	WMD FD OMR 40	40	250 (A) - 420 (S)	1/2	240
	WMD FD OMS 40	40	250 (A) - 420 (S)	1/2	241
	WOS FD OMR 60 - DL	60	250 (A) - 350 (S)	3/8; 1/2	242

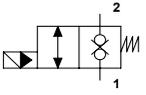
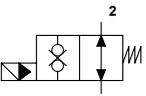
**VALVES FLANGED ON MOTORS**  
VALVOLE FLANGIATE SU MOTORI

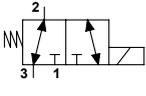
	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WOD FD OMR 60 - NOSF	60	250 (A) - 350 (S)	3/8; 1/2	243
	WOD FD OMR 60	60	250 (A) - 350 (S)	3/8; 1/2	244
	WOD FD OMS 60	60	250 (A) - 350 (S)	3/8; 1/2	245
	WOD FR 60	60	250 (A) - 350 (S)	1/2	246
	WOD FR 60 - NOPV	60	250 (A) - 350 (S)	1/2	247
	WOD FM 60	60	250 (A) - 350 (S)	3/8	248
	WPR FDB OMR 90	90	250 (A) - 350 (S)	1/2	249
	WS FD OMR	60	250 (A) - 350 (S)	1/2	250
	WUC FD OMR	70	250 (A) - 350 (S)	1/2	251

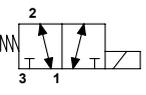
**SOLENOID OPERATED VALVES**  
 VALVOLE ELETTRICHE

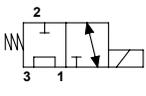
	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WST S08 NC L	30	300	SAE 08	254; 255
	WST - NC	Max 150	350	SAE 08; SAE 10; SAE 12	258; 259
	WST S08 NC 2F L	30	300	SAE 08	254; 255
	WST - NC 2F	Max 150	350	SAE 08; SAE 10; SAE 12	258; 259
	WST S08 NA L	30	300	SAE 08	256; 257
	WST - NA	Max 150	350	SAE 08; SAE 10; SAE 12	260; 261
	WST S08 NA 2F L	30	300	SAE 08	256; 257
	WST - NA 2F	Max 150	350	SAE 08; SAE 10; SAE 12	260; 261

**SOLENOID OPERATED VALVES**  
VALVOLE ELETTRICHE

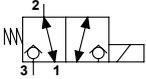
	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WDT - NC	Max 150	350	SAE 08; SAE 10; SAE 12	262; 263
	WDT - NA	Max 150	350	SAE 08; SAE 10; SAE 12	264; 265

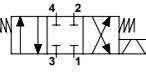
	WTW - 01	Max 20	Max 210	SAE 08; SAE 10	266; 267

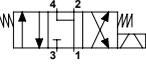
	WTW - 02	Max 20	Max 210	SAE 08; SAE 10	268; 269

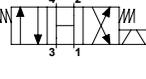
	WTW S08 03	12	Max 210	SAE 08	270; 271

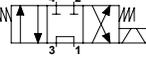
**SOLENOID OPERATED VALVES**  
 VALVOLE ELETTRICHE

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WTWT S10 02	20	210	SAE 10	272; 273

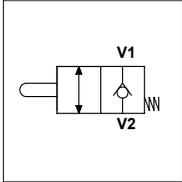
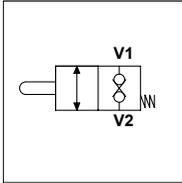
	WFW - 1	Max 20	Max 210	SAE 08; SAE 10	274; 275

	WFW - 2	Max 20	Max 210	SAE 08; SAE 10	274; 275

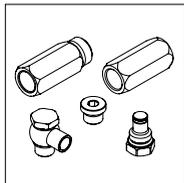
	WFW - 3	Max 20	Max 210	SAE 08; SAE 10	274; 275

	WFW - 4	Max 18	Max 210	SAE 08; SAE 10	274; 275

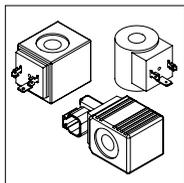
**END STROKE VALVES**  
 VALVOLE DI FINE CORSA

	CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
	WFC NC	Max 60	350 (S)	3/8; 1/2	278
	WFC NC - SPG	Max 60	350 (S)	3/8; 1/2	280
	WFC DT	Max 60	350 (S)	3/8; 1/2	279

**ACCESSORIES FOR VALVES**  
ACCESSORI PER VALVOLE

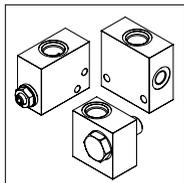


CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
ICC MF WHB	-	350 (S)	1/4; 3/8; 1/2; 3/4; 1	284
ICC FF WHB	-	350 (S)	1/4; 3/8; 1/2; 3/4; 1	284
FIXING KIT	-	350 (S)	1/4; 3/8	285
SAE PLUGS	-	350 (S)	SAE 08; SAE 10	286
DIN PLUGS	-	420 (S)	1/8; 1/4; 3/8; 1/2; 3/4	287
TAMPER PROOF CAP	-	-	M6; M10; Hex 19	288



CODE	POWER WATT	PROTECTION	RATED VOLTAGE(Vdc)	PAGE
3BO	18	Class H	12; 24	289
3BO	22	Class H	12; 24	290
3BO	36	Class H	12; 24	291

**STANDARD BODY**  
CORPI STANDARDIZZATI



CODE	FLOW (L/MIN)	P. MAX (BAR)	SIZE/PORTS	PAGE
1CC - 02	-	250 (A) - 350 (S)	1/4; 3/8; 1/2; 3/4	294
1CC - 03	-	250 (A) - 350 (S)	1/4; 3/8; 1/2; 3/4	295
1CC - 04	-	250 (A) - 350 (S)	1/4; 3/8; 1/2; 3/4	296
1CC - B	-	250 (A) - 350 (S)	3/8	297
1CC - EMS	-	250 (A) - 350 (S)	3/8; 1/2	298; 299

**SAE STANDARD CAVITIES**  
 CAVITA' STANDARD SAE

CODE	TYPE OF CAVITIES	PAGE
FW3402000	SAE 08 - 2 WAY	302
FW7802000	SAE 10 - 2 WAY	302
FW1160200	SAE 12 - 2 WAY	302
FW1516020	SAE 16 - 2 WAY	302
FW3403000	SAE 08 - 3 WAY	303
FW7803000	SAE 10 - 3 WAY	303
FW1160300	SAE 12 - 3 WAY	303
FW1516030	SAE 16 - 3 WAY	303
FW3403001	SAE 08 - 3 WAY SHORT	304
FW7803001	SAE 10 - 3 WAY SHORT	304
FW1160301	SAE 12 - 3 WAY SHORT	304
FW1516031	SAE 16 - 3 WAY SHORT	304
FW3404000	SAE 08 - 4 WAY	305
FW7804000	SAE 10 - 4 WAY	305
FW1160400	SAE 12 - 4 WAY	305
FW1516040	SAE 16 - 4 WAY	305

**SPECIAL CAVITIES**  
CAVITA' SPECIALI

CODE	TYPE OF CAVITIES	PAGE
FW1802100	WUC I G1/8	306
FW1402100	WUC I G1/4	306
FW3802100	WUC I G3/8	306
FW1202100	WUC I G1/2	306
FW3402100	WUC I G3/4	306
FW1802101	WUC IS / WUC ISI G1/8	307
FW1402101	WUC IS / WUC ISI G1/4	307
FW3802101	WUC IS / WUC ISI G3/8	307
FW1202101	WUC IS / WUC ISI G1/2	307
FW3402101	WUC IS / WUC ISI G3/4	307
FW1803100	WS I G1/8	308
FW1403100	WS I G1/4	308
FW11160302	1 1/16-12UN - 3 WAY	309
FW1602100	M16 x 1,5 - 2 WAY	310
FW1803101	M18 x 1,5 - 3WAY	311
FW2002100	M20 x 1,5 - 2 WAY	312
FW2003100	M20 x 1,5 - 3WAY	313
FW22000211	M22 x 1,5 - 2 WAY	314
FW2203000	M22 x 1,5 - 3WAY	315
FW2602100	M26 x 1,5 - 2 WAY	316
FW7802100	7/8 - 14 UNF - 2B - 2 WAY	317
FW7803100	7/8 - 14 UNF - 2B - 3WAY	318
FW0103000	1 - 14 UNS - 2B - 3WAY	319

**DIRECTIONAL ELECTRO-HYDRAULIC SYSTEMS**  
SISTEMA ELETTRO-IDRAULICO DIRETTO

**TECHNICAL FEATURES**  
*CARATTERISTICHE TECNICHE*

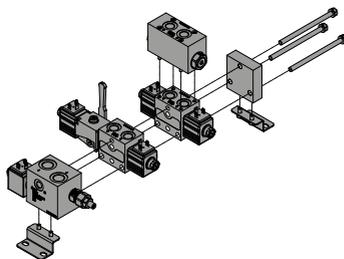
**PAG. 322**

**EXAMPLE OF ORDER**  
*ESEMPIO DI ORDINE*

**PAG. 324**

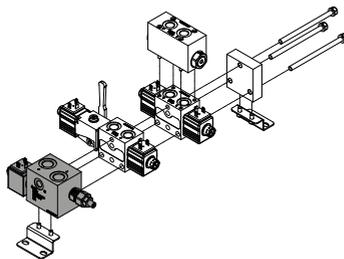
**GENERAL CONFIGURATIONS**  
*CONFIGURAZIONI GENERALI*

**PAG. 326**



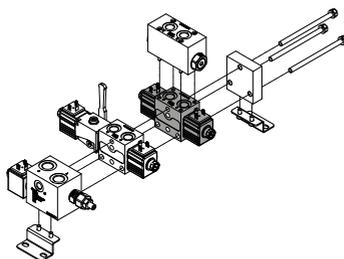
**INLET ELEMENTS**  
*FIANCATE DI INGRESSO*

**PAG. 330**



**WORK SECTIONS**  
*SEZIONI DI LAVORO*

**PAG. 336**

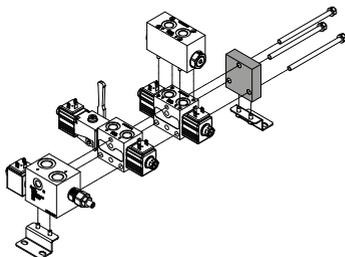


**DIRECTIONAL ELECTRO-HYDRAULIC SYSTEMS**  
*SISTEMA ELETTRO-IDRAULICO DIRETTO*

**OUTLET ELEMENTS**

*FIANCATE DI CHIUSURA*

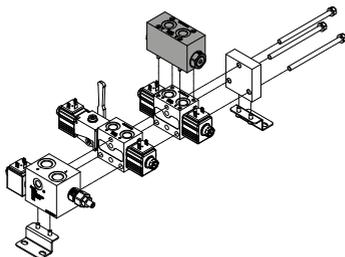
**PAG. 344**



**FLANGEABLE VALVES**

*VALVOLE FLANGIATE*

**PAG. 350**



**PERFORMANCE**

*PRESTAZIONI*

**PAG. 364**



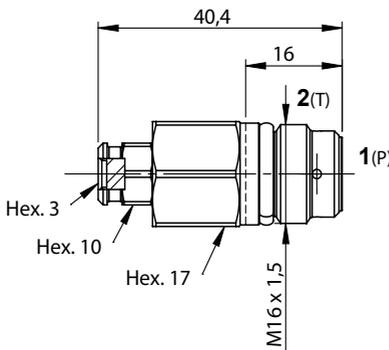
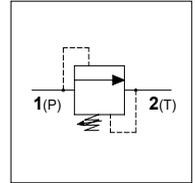
**PRESSURE RELIEF VALVES**  
*VALVOLE DI MASSIMA PRESSIONE*



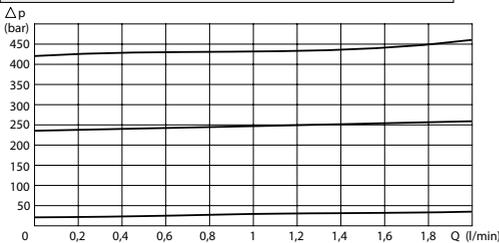
## WMD 5

### TECHNICAL DATA

- **Flow:** 2 l/min
- **Max setting pressure:** 450 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** FW1602100
- **Installation torque:** 30-35 Nm
- **Weight:** 0,050 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar
<b>03</b>	1-30
<b>25</b>	100-250
<b>45</b>	250-450

### ORDERING CODE

WMD

5

S

**Springs:**

- 03
- 25
- 45

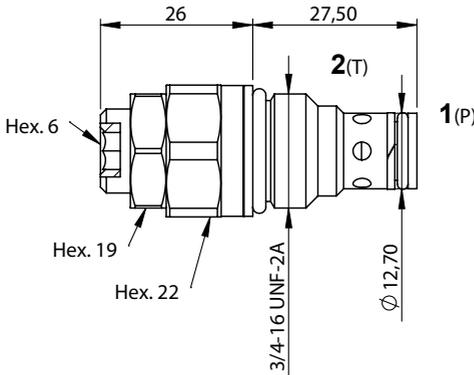
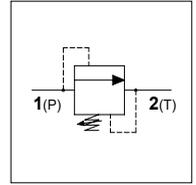
**Adjustment if Required:**

- Omit if not required
- Value

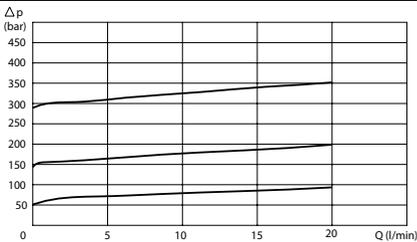
## WMD 25

### TECHNICAL DATA

- **Flow:** 20 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** FW3402000
- **Installation torque:** 30-35 Nm
- **Weight:** 0,100 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

### ORDERING CODE

WMD

25

S

**Springs:**

- 05
- 20
- 35

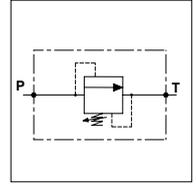
**Adjustment if Required:**

- Omit if not required
- Value

## WMD 25

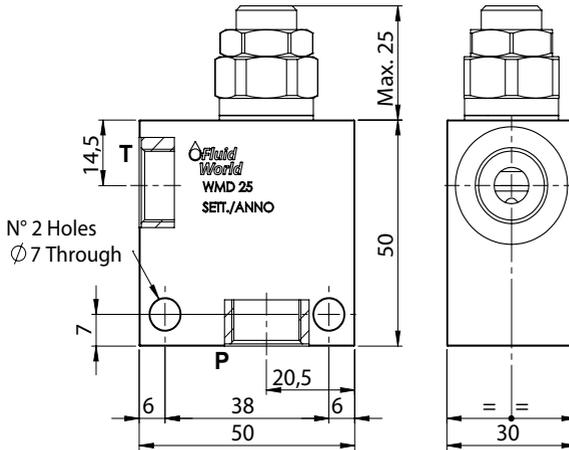
### TECHNICAL DATA

- **Flow:** 20 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,280 kg (0,580 kg)

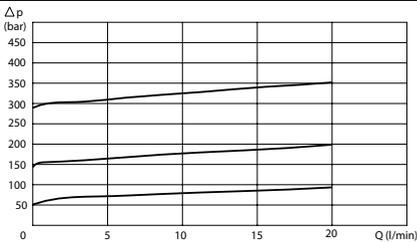


### PORTS

P - T	1/4	3/8
-------	-----	-----



### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

### ORDERING CODE

WMD

25

**Ports Size:**

- 1/4
- 3/8

**Material Body:**

- Omit if aluminium
- S = Steel

**Springs:**

- 05
- 20
- 35

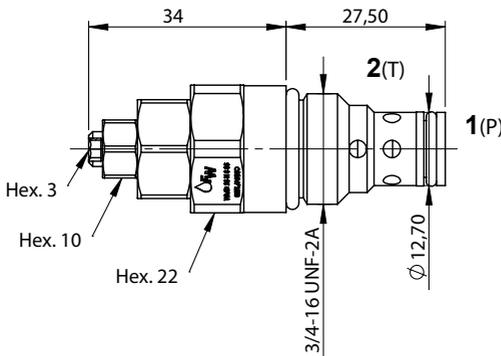
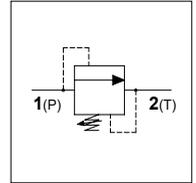
**Adjustment if Required:**

- Omit if not required
- Value

# WMD 25 H

## TECHNICAL DATA

- **Flow:** 25 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** FW3402000
- **Installation torque:** 30-35 Nm
- **Weight:** 0,100 kg

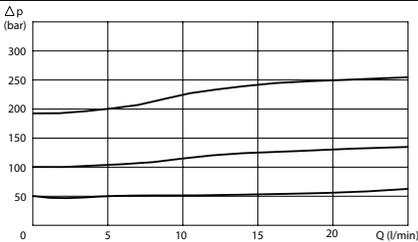


## OPTION

Tamper Proof Cap



## PRESSURE DROP CURVES



## SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

## ORDERING CODE

WMD

25

H

S

**Springs:**

- 05
- 20
- 35

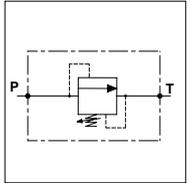
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

# WMD 25 H

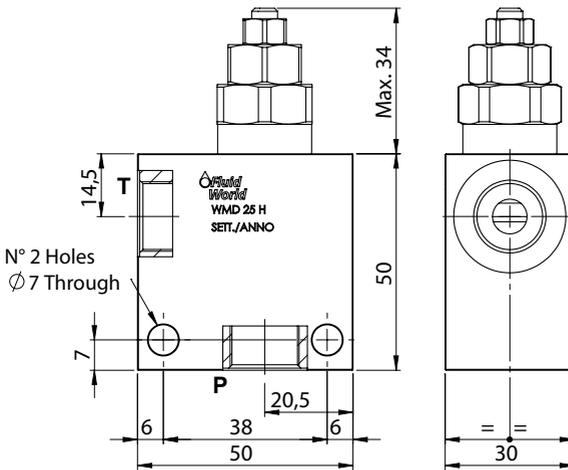
## TECHNICAL DATA

- **Flow:** 25 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,280 kg (0,570 kg)



## PORTS

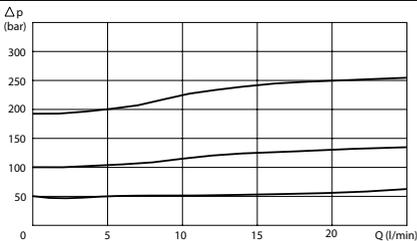
P - T	1/4	3/8
-------	-----	-----



## OPTION

<input checked="" type="checkbox"/> Tamper Proof Cap	
--	---

## PRESSURE DROP CURVES



## SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

## ORDERING CODE



**Ports Size:**

- 1/4
- 3/8

**Material Body:**

- Omit if aluminium
- S = Steel

**Springs:**

- 05
- 20
- 35

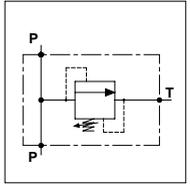
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

## WMD 25 H - SPW

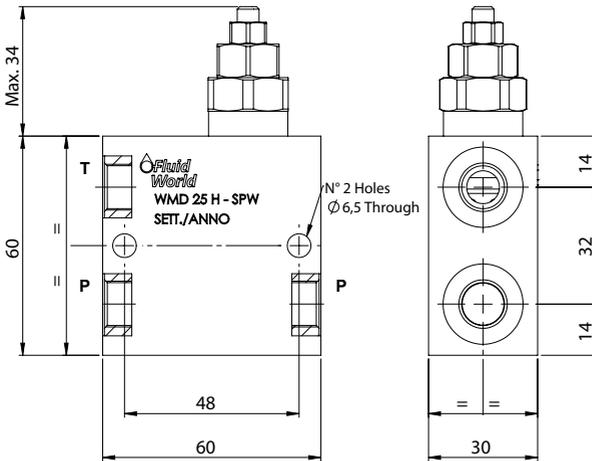
### TECHNICAL DATA

- **Flow:** 25 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,350 kg (0,790 kg)



### PORTS

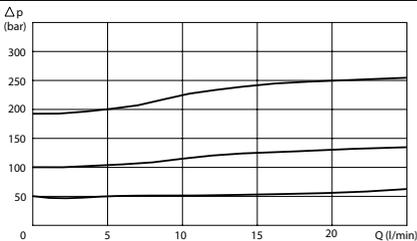
P - T	1/4	3/8
-------	-----	-----



### OPTION

(X) Tamber Proof Cap	
-------------------------------	---

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

### ORDERING CODE



**Ports Size:**

- 1/4
- 3/8

**Material Body:**

- Omit if aluminium
- S = Steel

**Springs:**

- 05
- 20
- 35

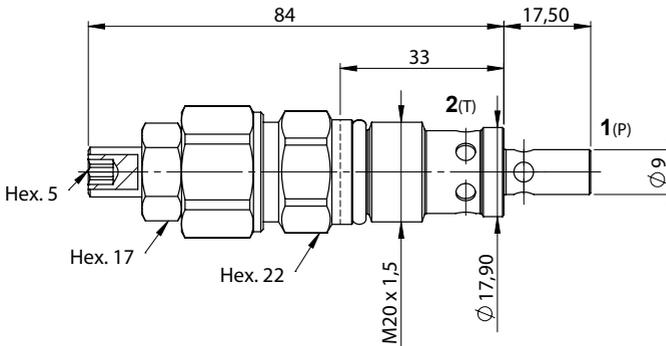
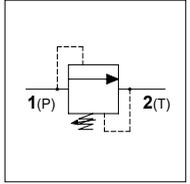
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

## WMD 40

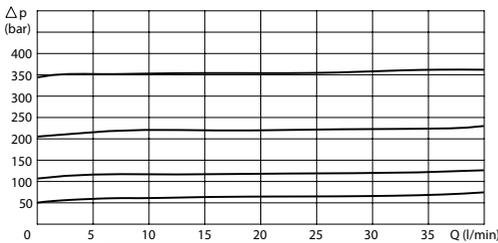
### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** FW2002100
- **Installation torque:** 35-40 Nm
- **Weight:** 0,150 kg



REGULATOR	
(S) Screw	
(V) Handknob	
OPTION	
(X) Tamper Proof Cap	

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	15	5
10	25-110	25	25
20	50-215	50	50
35	100-350	90	100

### ORDERING CODE

WMD

40

#### Type of Regulator:

- S = Screw
- V = Handknob

#### Springs:

- 05
- 10
- 20
- 35

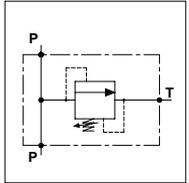
#### Adjustment if Required:

- Omit if not required
- Value
- Value with X

## WMD 40

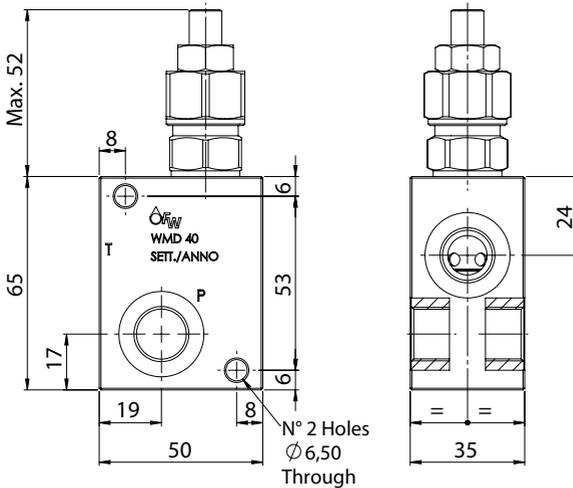
### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,400 kg (0,800 kg)



### PORTS

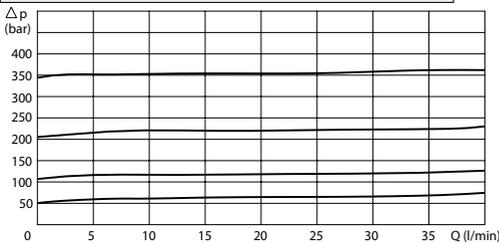
P - T	3/8	1/2
-------	-----	-----



### REGULATOR

(S) Screw	
(V) Handknob	
OPTION	
(X) Tamber Proof Cap	

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	15	5
10	25-110	25	25
20	50-215	50	50
35	100-350	90	100

### ORDERING CODE

WMD

40

**Ports Size:**

- 3/8
- 1/2

**Material Body:**

- Omit if aluminium
- S = Steel

**Type of Regulator:**

- S = Screw
- V = Handknob

**Springs:**

- 05
- 10
- 20
- 35

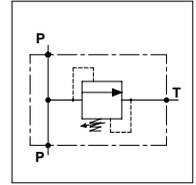
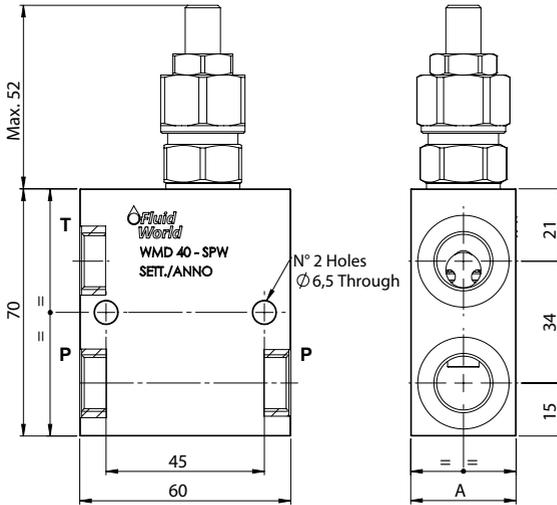
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

## WMD 40 - SPW

### TECHNICAL DATA

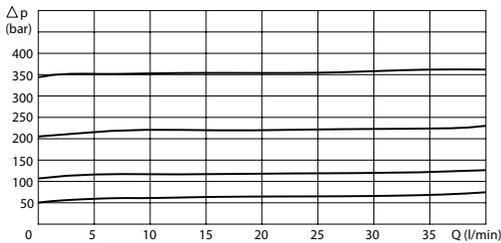
- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,450 kg (0,950 kg)



PORTS		
P - T	3/8	1/2
DIMENSIONS		
A	30	35

REGULATOR	
(S) Screw	
(V) Handknob	
OPTION	
(X) Tammer Proof Cap	

### PRESSURE DROP CURVES



SPRINGS			
Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	15	5
10	25-110	25	25
20	50-215	50	50
35	100-350	90	100

### ORDERING CODE

WMD    40                             SPW

- Ports Size:**  
- 3/8  
- 1/2
- Material Body:**  
- Omit if aluminium  
- S = Steel
- Type of Regulator:**  
- S = Screw  
- V = Handknob
- Springs:**  
- 05  
- 10  
- 20  
- 35
- Adjustment if Required:**  
- Omit if not required  
- Value  
- Value with X

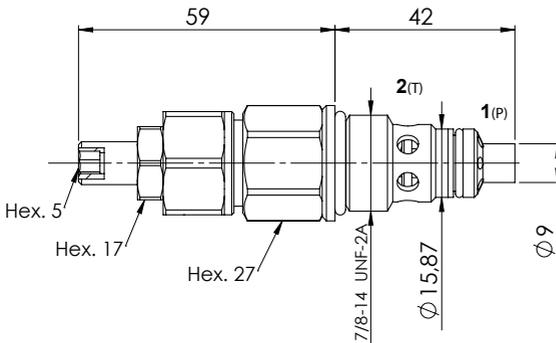
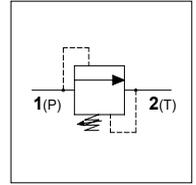
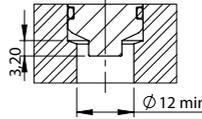
## WMD 50

### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** See table
- **Installation torque:** 40-45 Nm
- **Weight:** 0,170 kg

### CAVITY

FW7802000 with the addition of a minimum hole of  $\varnothing 12$  to house the valve nose.



### REGULATOR

(S)  
Screw



(V)  
Handknob

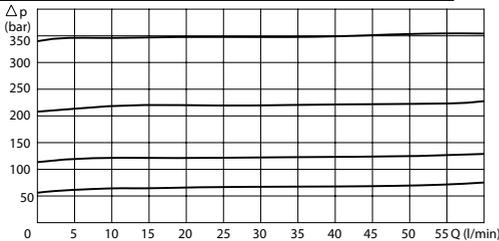


### OPTION

(X)  
Tamper  
Proof  
Cap



### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	15	5
10	25-110	25	25
20	50-215	50	50
35	100-350	90	100

### ORDERING CODE

WMD

50

S



**Springs:**

- 05
- 10
- 20
- 35



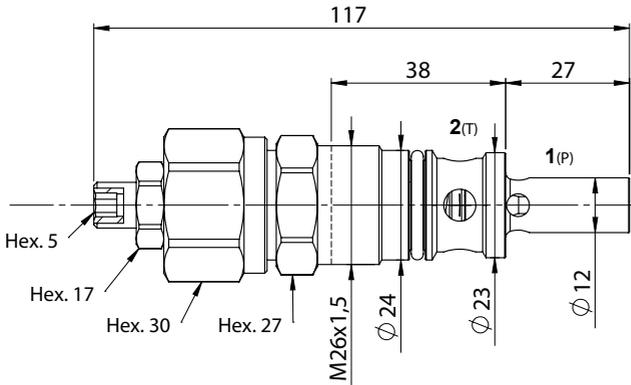
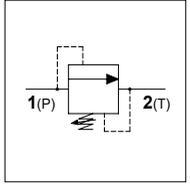
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

## WMD 80

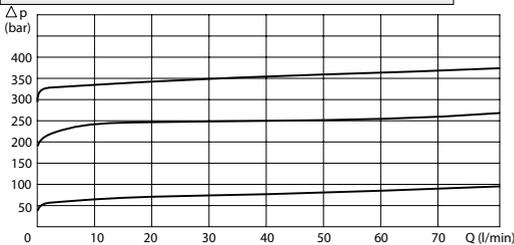
### TECHNICAL DATA

- **Flow:** 80 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** FW2602100
- **Installation torque:** 70-75 Nm
- **Weight:** 0,300 kg



REGULATOR	
(S) Screw	
(V) Handknob	
OPTION	
(X) Tamper Proof Cap	

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	5	5
10	25-250	12	25
25	130-350	30	130

### ORDERING CODE

WMD

80

Type of Regulator:

- S = Screw
- V = Handknob

Springs:

- 05
- 10
- 25

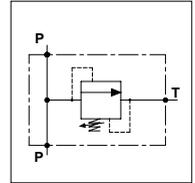
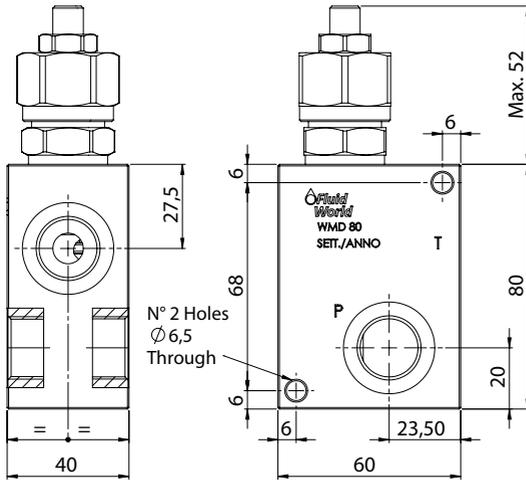
Adjustment if Required:

- Omit if not required
- Value
- Value with X

## WMD 80

### TECHNICAL DATA

- **Flow:** 80 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,750 kg (1,400 kg)



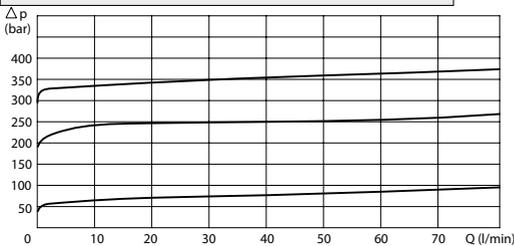
### PORTS

P - T	1/2	3/4
-------	-----	-----

### REGULATOR

(S) Screw	
(V) Handknob	
<b>OPTION</b>	
(X) Tammer Proof Cap	

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	5	5
10	25-250	12	25
25	130-350	30	130

### ORDERING CODE

WMD

80

**Ports Size:**

- 1/2
- 3/4

**Material Body:**

- Omit if aluminium
- S = Steel

**Type of Regulator:**

- S = Screw
- V = Handknob

**Springs:**

- 05
- 10
- 25

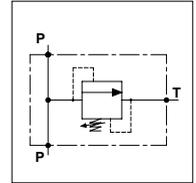
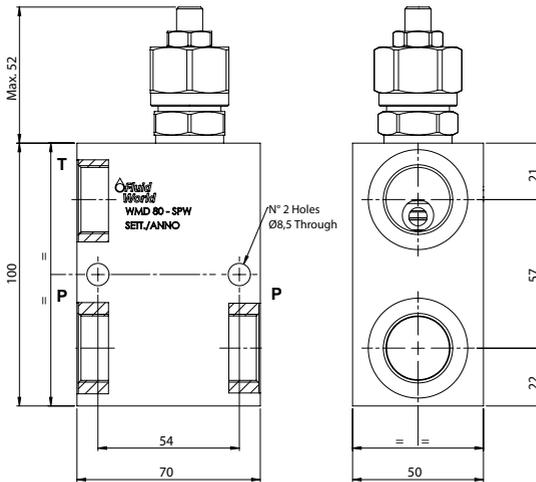
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

## WMD 80 - SPW

### TECHNICAL DATA

- **Flow:** 80 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 1,100 kg (2,470 kg)



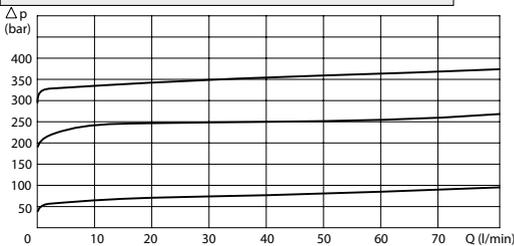
### PORTS

P - T	3/4
-------	-----

### REGULATOR

<b>(S)</b> Screw	
<b>(V)</b> Handknob	
<b>OPTION</b>	
<b>(X)</b> Tamper Proof Cap	

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
<b>05</b>	5-55	5	5
<b>10</b>	25-250	12	25
<b>25</b>	130-350	30	130

### ORDERING CODE

WMD

80

3/4



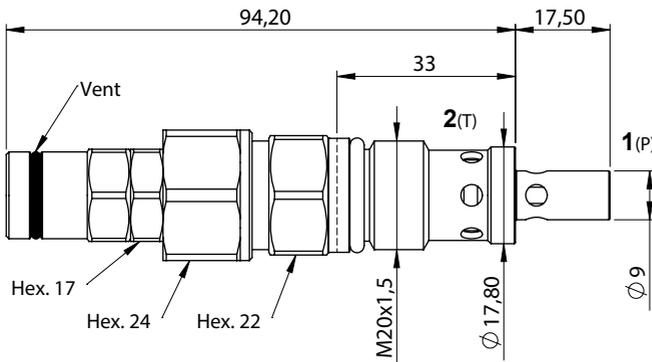
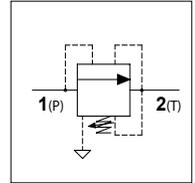
SPW

- Material Body:**  
- Omit if aluminium  
- S = Steel
- Type of Regulator:**  
- S = Screw  
- V = Handknob
- Springs:**  
- 05  
- 10  
- 25
- Adjustment if Required:**  
- Omit if not required  
- Value  
- Value with X

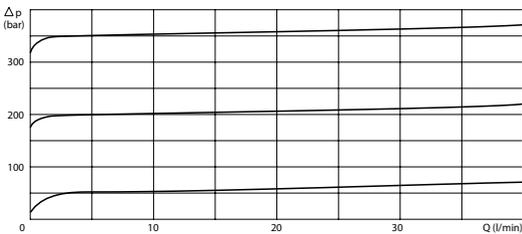
## WMD 40 CC

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** FW2002100
- **Installation torque:** 35-40 Nm
- **Weight:** 0,160 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar
10	5-50
20	40-210
30	100-350

### ORDERING CODE

WMD

40

CC

Springs:

- 10
- 20
- 30

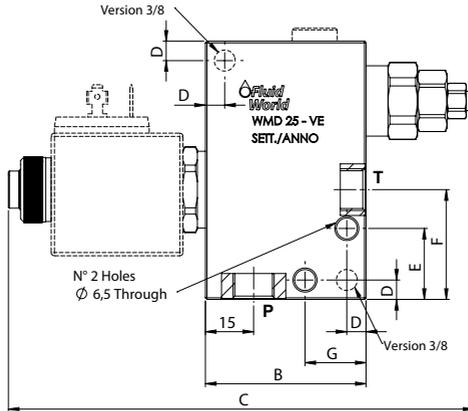
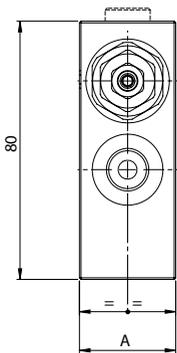
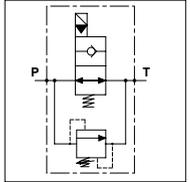
Adjustment if Required:

- Omit if not required
- Value

## WMD 25 - VE

### TECHNICAL DATA

- **Flow:** 25 l/min
- **Max working pressure:** 250 bar
- **Materials:** Aluminium Body
- **Note:** The Coil is not included
- **Weight:** 0,700 kg



### PORTS

P - T	1/4	3/8
-------	-----	-----

### DIMENSIONS

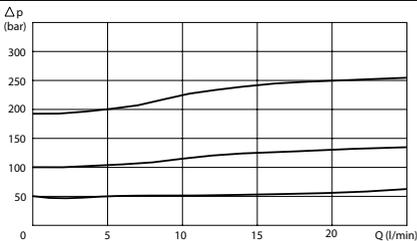
A	30	35
B	50	55
C	145	150
D	6	6
E	22	-
F	34	30
G	19	-

### OPTION

Tamper Proof Cap



### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

### ORDERING CODE

WMD

25

VE

S

**Ports Size:**

- 1/4
- 3/8

**Type of VE:**

- NA
- NC

**Springs:**

- 05
- 20
- 35

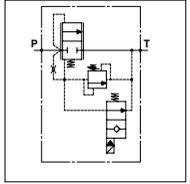
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

## WMD 100 - VE

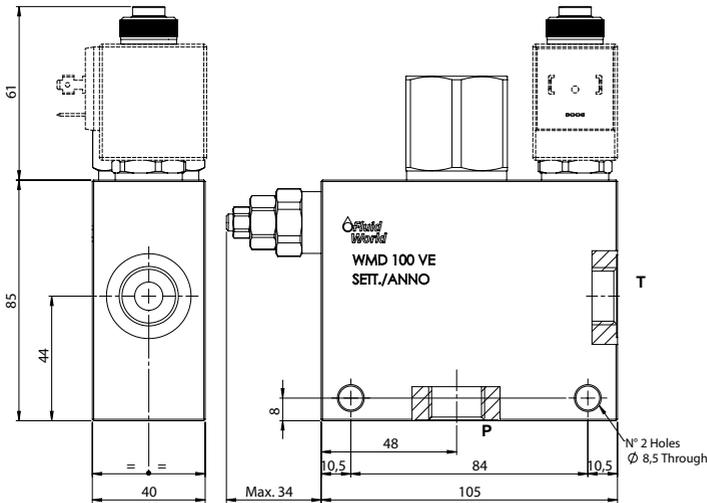
### TECHNICAL DATA

- **Flow:** 100 l/min
- **Max working pressure:** 250 bar
- **Materials:** Aluminium Body
- **Note:** The Coil is not included
- **Weight:** 1,400 kg



### PORTS

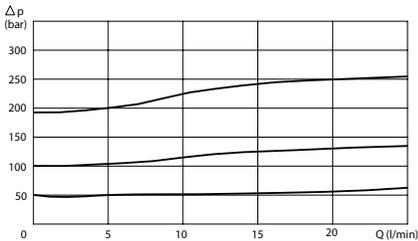
P - T	3/8	1/2
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### OPTION

(X) Tamper Proof Cap	
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### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

### ORDERING CODE



**Ports Size:**

- 3/8
- 1/2

**Type of VE:**

- NA
- NC

**Springs:**

- 05
- 20
- 35

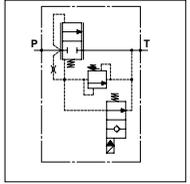
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

## WMD 200 - VE

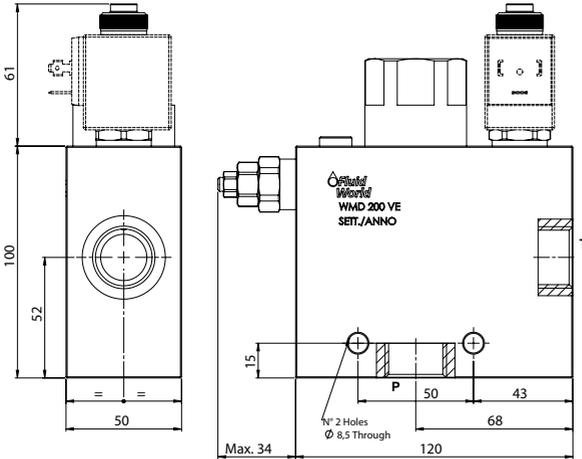
### TECHNICAL DATA

- **Flow:** 200 l/min
- **Max working pressure:** 250 bar
- **Materials:** Aluminium Body
- **Note:** The Coil is not included
- **Weight:** 2,100 kg



### PORTS

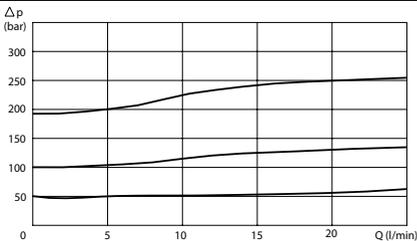
P - T	3/4	1
-------	-----	---



### OPTION

(X) Tamper Proof Cap	
----------------------	---

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

### ORDERING CODE



**Ports Size:**

- 3/4
- 1

**Type of VE:**

- NA
- NC

**Springs:**

- 05
- 20
- 35

**Adjustment if Required:**

- Omit if not required
- Value
- Value with X





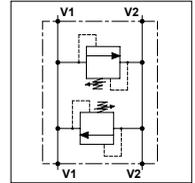
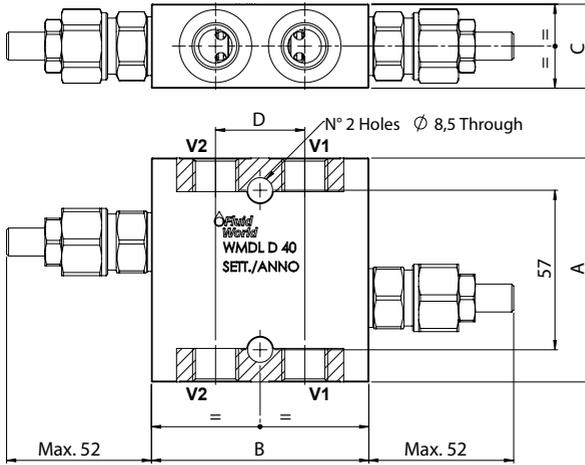
**DUAL CROSS RELIEF VALVES**  
*VALVOLE REGOLATRICI DI PRESSIONE INCROCIATE*



## WMDL D 40

### TECHNICAL DATA

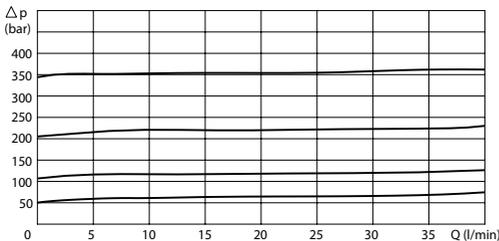
- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Weight:** 0,700 kg (1,300 kg)



PORTS		
V1 - V2	3/8	1/2
DIMENSIONS		
A	80	90
B	78	90
C	30	35
D	30	36

REGULATOR	
(S) Screw	
(V) Handknob	
OPTION	
(X) Tamper Proof Cap	

### PRESSURE DROP CURVES



SPRINGS			
Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	15	5
10	25-110	25	25
20	50-215	50	50
35	100-350	90	100

### ORDERING CODE

WMDL

D

40

**Ports Size:**

- 3/8
- 1/2

**Material Body:**

- Omit if aluminium
- S = Steel

**Type of Regulator:**

- S = Screw
- V = Handknob

**Springs:**

- 05
- 10
- 20
- 35

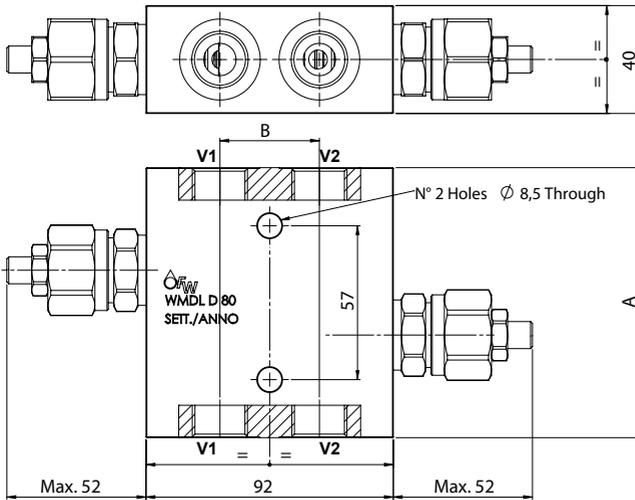
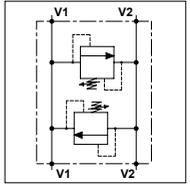
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

## WMDL D 80

### TECHNICAL DATA

- **Flow:** 80 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Weight:** 1,500 kg (2,850 kg)



### PORTS

V1 - V2	1/2	3/4
---------	-----	-----

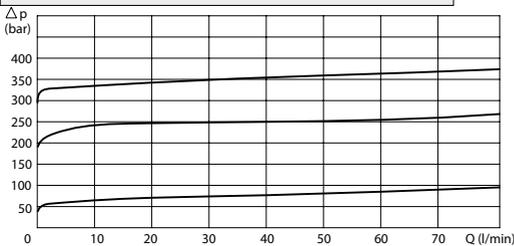
### DIMENSIONS

A	100	110
B	34	40

### REGULATOR

<b>(S)</b> Screw	
<b>(V)</b> Handknob	
<b>OPTION</b>	
<b>(X)</b> Tamper Proof Cap	

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
<b>05</b>	5-55	5	5
<b>10</b>	25-250	12	25
<b>25</b>	130-350	30	130

### ORDERING CODE

WMDL

D

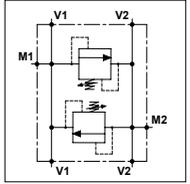
80

- Ports Size:** - 1/2  
- 3/4
- Material Body:** - Omit if aluminium  
- S = Steel
- Type of Regulator:** - S = Screw  
- V = Handknob
- Springs:** - 05  
- 10  
- 25
- Adjustment if Required:** - Omit if not required  
- Value  
- Value with X

## WMD D 40

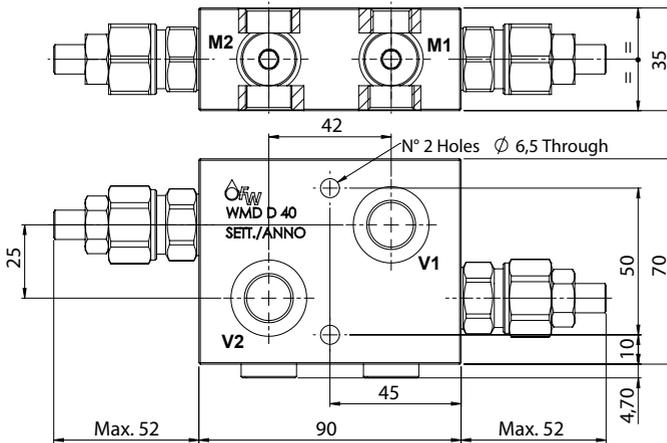
### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Weight:** 0,800 kg (1,600 kg)



### PORTS

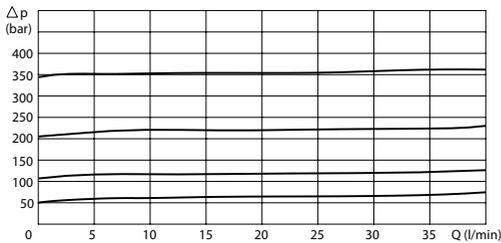
V1 - V2	3/8	1/2
M1 - M2	1/4	



### REGULATOR

(S) Screw	
(V) Handknob	
OPTION	
(X) Tamper Proof Cap	

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	15	5
10	25-110	25	25
20	50-215	50	50
35	100-350	90	100

### ORDERING CODE

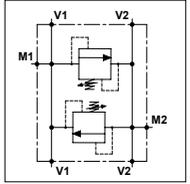


- |                                      |   |  |   |   |
|--------------------------------------|---|--|---|---|
| <b>Ports Size:</b><br>- 3/8<br>- 1/2 | <b>Material Body:</b><br>- Omit if aluminium<br>- S = Steel | <b>Type of Regulator:</b><br>- S = Screw<br>- V = Handknob | <b>Springs:</b><br>- 05<br>- 10<br>- 20<br>- 35 | <b>Adjustment if Required:</b><br>- Omit if not required<br>- Value<br>- Value with X |
|--------------------------------------|---|--|---|---|

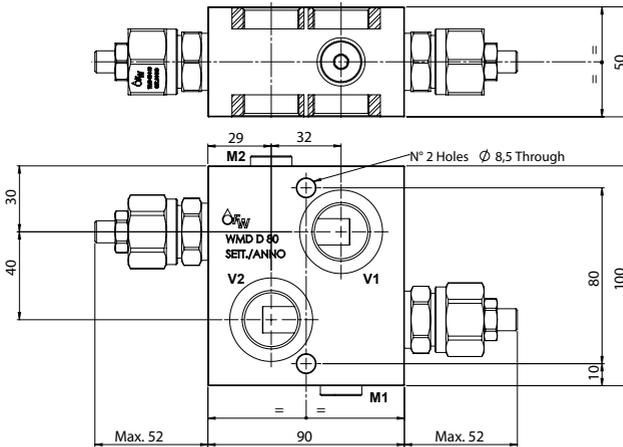
## WMD D 80

### TECHNICAL DATA

- **Flow:** 80 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Weight:** 1,700 kg (3,300 kg)

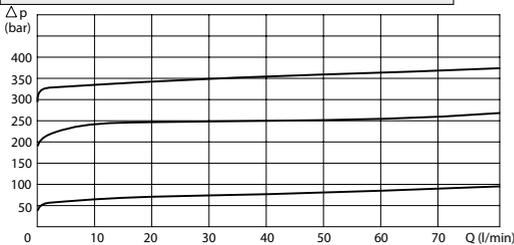


PORTS		
V1 - V2	1/2	3/4
M1 - M2	1/4	



REGULATOR	
(S) Screw	
(V) Handknob	
OPTION	
(X) Tamper Proof Cap	

### PRESSURE DROP CURVES



SPRINGS			
Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	5	5
10	25-250	12	25
25	130-350	30	130

### ORDERING CODE

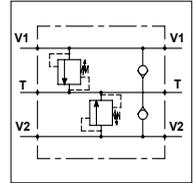
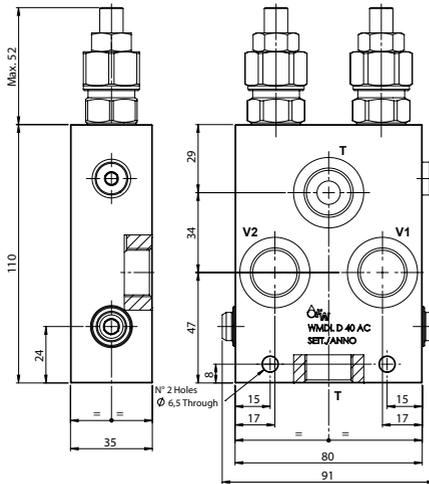


- Ports Size:** - 1/2  
- 3/4
- Material Body:** - Omit if aluminium  
- S = Steel
- Type of Regulator:** - S = Screw  
- V = Handknob
- Springs:** - 05  
- 10  
- 25
- Adjustment if Required:** - Omit if not required  
- Value  
- Value with X

## WMDL D 40 AC

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar
- **Materials:** Aluminium Body
- **Version:** Poppet Type - Direct Acting
- **Weight:** 1,100 kg (2,100 kg)



### PORTS

V1 - V2 - T	3/8	1/2
-------------	-----	-----

### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	15	5
10	25-110	25	25
20	50-215	50	50
35	100-350	90	100

### REGULATOR

(S)  
Screw



(V)  
Handknob

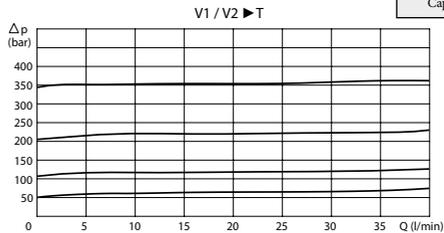
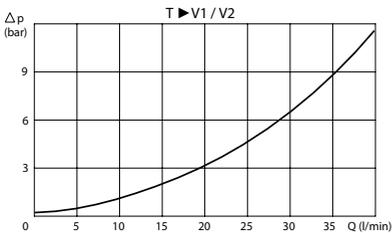


### OPTION

(X)  
Tammer Proof Cap



### PRESSURE DROP CURVES



### ORDERING CODE

WMDL

D

40

AC



- Ports Size:**  
- 3/8  
- 1/2
- Type of Regulator:**  
- S = Screw  
- V = Handknob
- Springs:**  
- 05  
- 10  
- 20  
- 35
- Adjustment if Required:**  
- Omit if not required  
- Value  
- Value with X





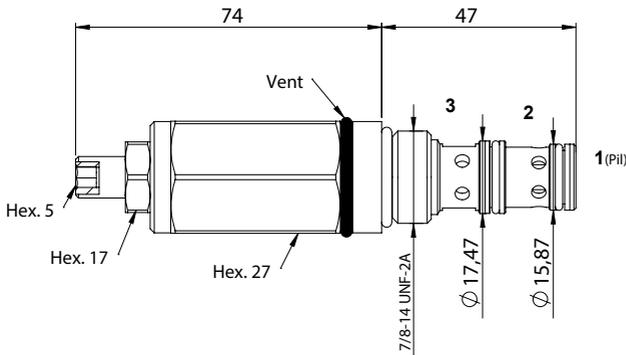
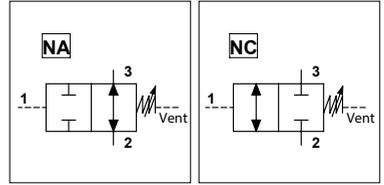
**SEQUENCE VALVES**  
*VALVOLE DI SEQUENZA*



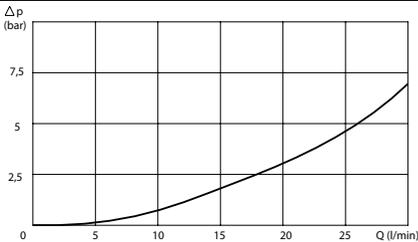
## WSD C 30 S10

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 120 bar
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Direct Acting, fully compensated
- **Cavity:** FW7803000
- **Installation torque:** 40-45 Nm
- **Weight:** 0,320 kg



### PRESSURE DROP CURVES



### REGULATOR

(S) Screw	
(V) Handknob	

### SPRINGS

Code	Adjustable pressure range bar	Standard setting bar
02	5-50	15
06	20-85	30
12	50-120	60

### ORDERING CODE

WSD

C

30

S10

**Type of Scheme:**

- NA = Open
- NC = Close

**Type of Regulator:**

- S = Screw
- V = Handknob

**Springs:**

- 02
- 06
- 12

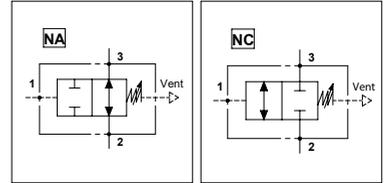
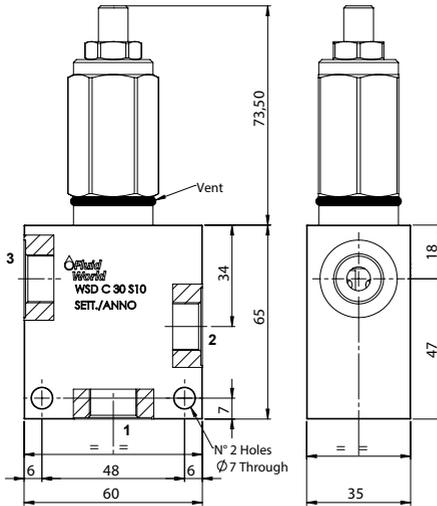
**Adjustment if Required:**

- Omit if not required
- Value

## WSD C 30 S10

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 120 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Direct Acting, fully compensated
- **Weight:** 0,650 kg (1,200 kg)



### PORTS

P - T - R	3/8	1/2
-----------	-----	-----

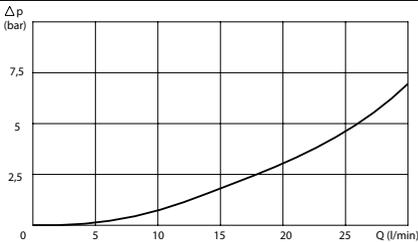
### REGULATOR

(S) Screw	
(V) Handknob	

### SPRINGS

Code	Adjustable pressure range bar	Standard setting bar
02	5-50	15
06	20-85	30
12	50-120	60

### PRESSURE DROP CURVES



### ORDERING CODE

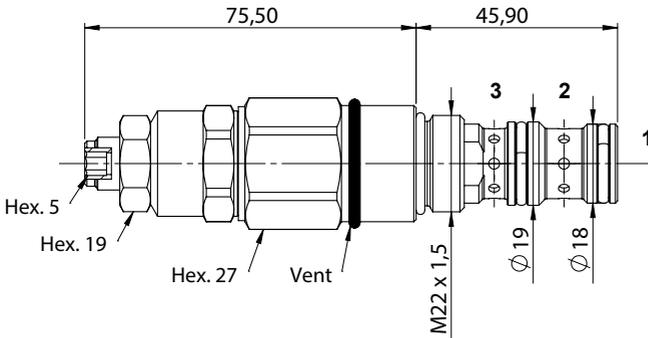
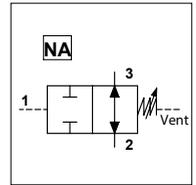


- Type of Scheme:** - NA = Open  
- NC = Close
- Ports Size:** - 3/8  
- 1/2
- Material Body:** - Omit if aluminium  
- S = Steel
- Type of Regulator:** - S = Screw  
- V = Handknob
- Springs:** - 02  
- 06  
- 12
- Adjustment if Required:** - Omit if not required  
- Value

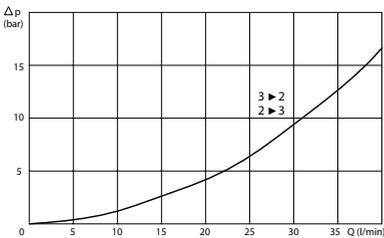
# WSD C 40 M22 NA

## TECHNICAL DATA

- **Flow:** 40 l/min
- **Max working pressure:** 300 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Spool Type - Direct Acting
- **Cavity:** FW2203000
- **Installation torque:** 45-50 Nm
- **Adjustable pressure range:** 15-60 bar
- **Weight:** 0,330 kg



## PRESSURE DROP CURVES



## ORDERING CODE

WSD

C

40

M22

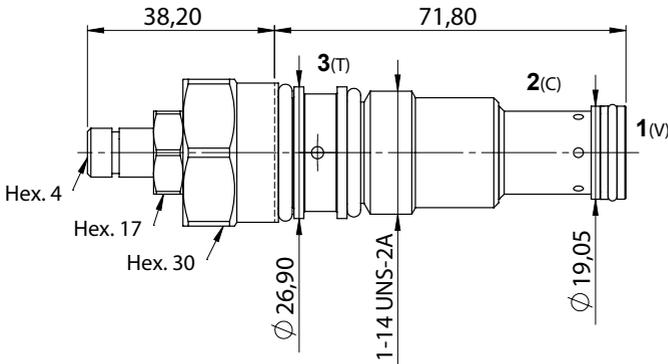
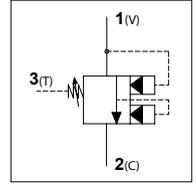
NA

Adjustment if Required:  
- Omit if not required  
- Value

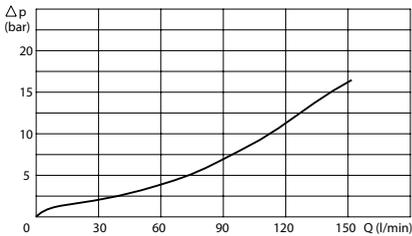
## WSD C 150 KD

### TECHNICAL DATA

- **Flow:** 150 l/min
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Spool Type - Pilot Operated
- **Cavity:** FW0103000
- **Installation torque:** 60 Nm
- **Adjustable pressure range:** 10-200 bar
- **Weight:** 0,300 kg



### PRESSURE DROP CURVES



### ORDERING CODE

WSD

C

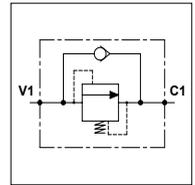
150

KD

# WSD LF 30

## TECHNICAL DATA

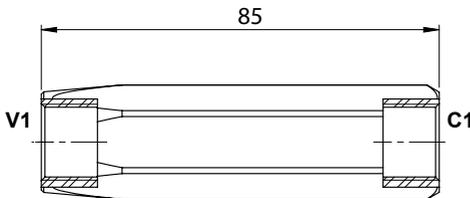
- **Flow:** 30 l/min
- **Max working pressure:** 350 bar
- **Materials:** Steel Body
- **Version:** Fixed Setting - Multiple of 10 bar
- **Weight:** 0,200 kg



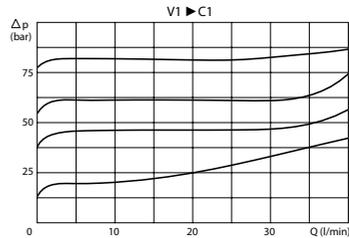
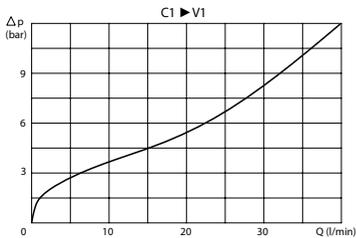
## PORTS

C1 - V1

3/8



## PRESSURE DROP CURVES



## ORDERING CODE

WSD

LF

30

3/8

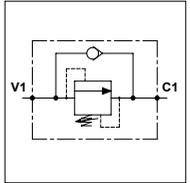
**Value Setting:**

-20 -30  
-40 -50  
-60 -70  
-... -420

### WSD 25

#### TECHNICAL DATA

- **Flow:** 25 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,310 kg (0,640 kg)

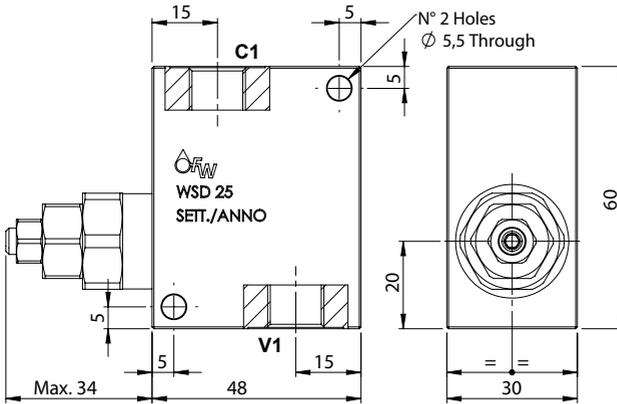


#### PORTS

C1 - V1	1/4
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#### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

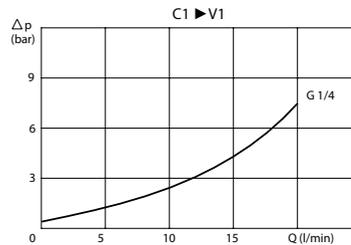
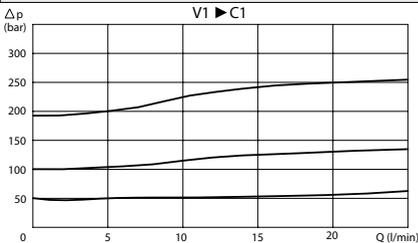


#### OPTION

Tamper Proof Cap



#### PRESSURE DROP CURVES



#### ORDERING CODE

WSD

25

1/4



**Material Body:**

- Omit if aluminium
- S = Steel



**Springs:**

- 05
- 20
- 35



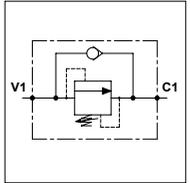
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

### WSD 40

#### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,665 kg (1,465 kg)



#### PORTS

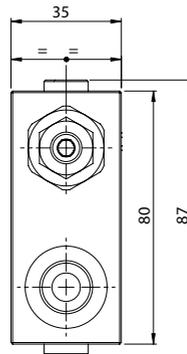
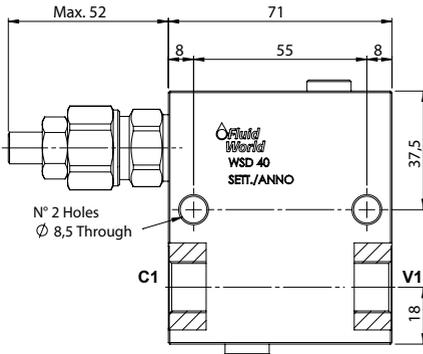
C1 - V1	3/8	1/2
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#### SPRINGS

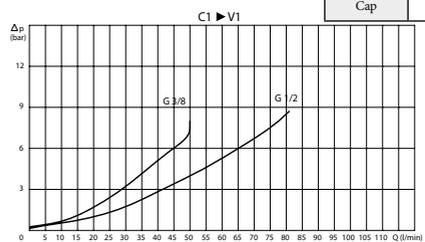
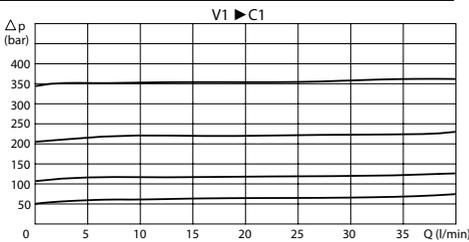
Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
<b>05</b>	5-55	15	5
<b>10</b>	25-110	25	25
<b>20</b>	50-215	50	50
<b>35</b>	100-350	90	100

#### REGULATOR

<b>(S)</b> Screw	
<b>(V)</b> Handknob	
<b>OPTION</b>	
<b>(X)</b> Tammer Proof Cap	



#### PRESSURE DROP CURVES



#### ORDERING CODE

WSD

40

**Ports Size:**

- 3/8
- 1/2

**Material Body:**

- Omit if aluminium
- S = Steel

**Type of Regulator:**

- S = Screw
- V = Handknob

**Springs:**

- 05
- 10
- 20
- 35

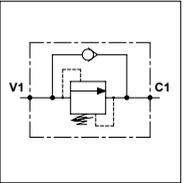
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

### WSD 80

#### TECHNICAL DATA

- **Flow:** 80 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 1,280 kg (2,680 kg)

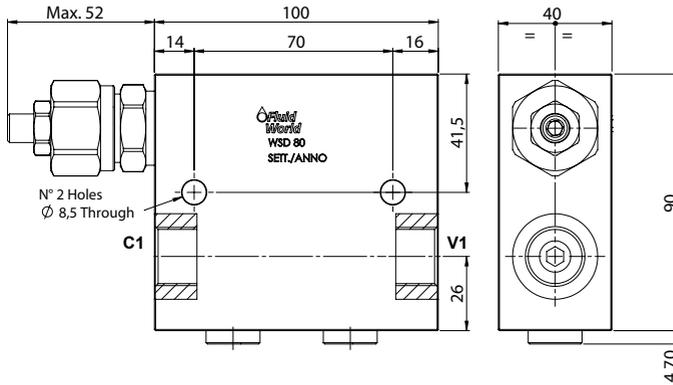


#### PORTS

C1 - V1	1/2	3/4
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#### SPRINGS

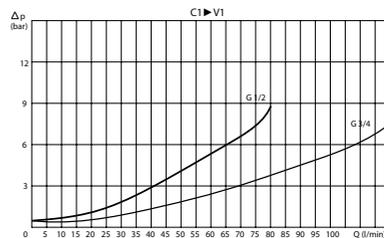
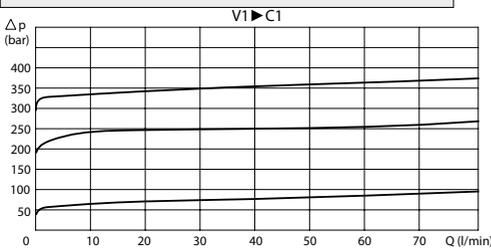
Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	5	5
10	25-250	12	25
25	130-350	30	130



#### REGULATOR

<b>(S)</b> Screw	
<b>(V)</b> Handknob	
<b>OPTION</b>	
<b>(X)</b> Tammer Proof Cap	

#### PRESSURE DROP CURVES



#### ORDERING CODE

WSD

80

**Ports Size:**

- 1/2
- 3/4

**Material Body:**

- Omit if aluminium
- S = Steel

**Type of Regulator:**

- S = Screw
- V = Handknob

**Springs:**

- 05
- 10
- 25

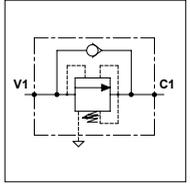
**Adjustment if Required:**

- Omit if not required
- Value
- Value with X

## WSD 40 CC

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,675 kg (1,475 kg)

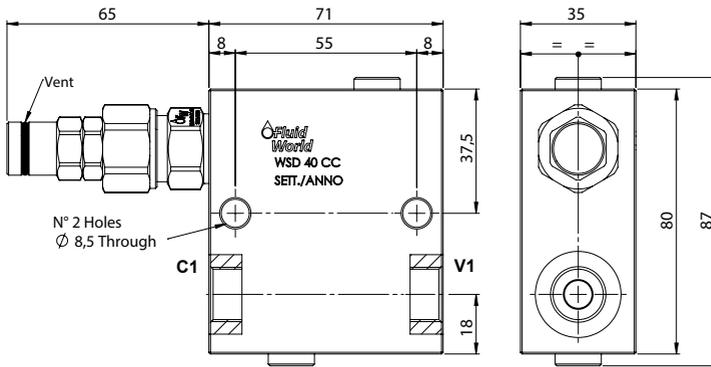


### PORTS

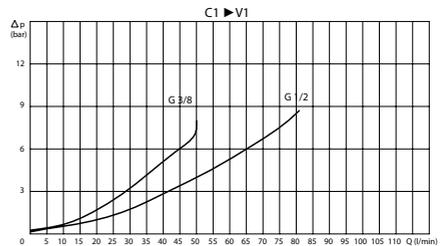
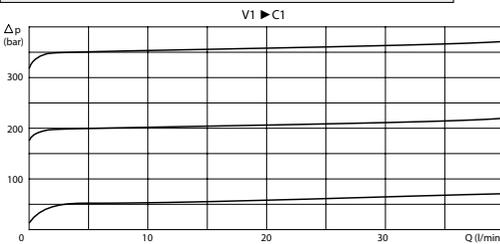
C1 - V1	3/8	1/2
---------	-----	-----

### SPRINGS

Code	Adjustable pressure range bar
10	5-50
20	40-210
30	100-350



### PRESSURE DROP CURVES



### ORDERING CODE

WSD

40

CC

Ports Size:

- 3/8
- 1/2

Material Body:

- Omit if aluminium
- S = Steel

Springs:

- 10
- 20
- 30

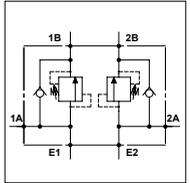
Adjustment if Required:

- Omit if not required
- Value

## WSD D 40

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar
- **Materials:** Aluminium Body
- **Version:** Poppet Type - Direct Acting
- **Weight:** 1,480 kg



### PORTS

A1 - B1 - E1 A2 - B2 - E2	1/2
------------------------------	-----

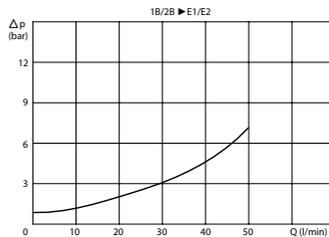
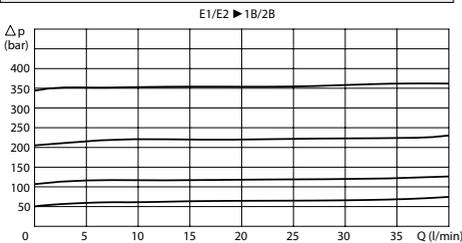
### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	15	5
10	25-110	25	25
20	50-215	50	50
35	100-350	90	100

### REGULATOR

(S) Screw	
(V) Handknob	
<b>OPTION</b>	
(X) Tammer Proof Cap	

### PRESSURE DROP CURVES



### ORDERING CODE

WSD

D

40

1/2

#### Type of Regulator:

- S = Screw
- V = Handknob

#### Springs:

- 05
- 10
- 20
- 35

#### Adjustment if Required:

- Omit if not required
- Value
- Value with X



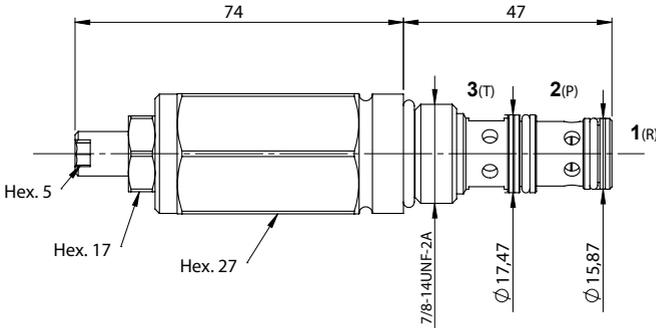
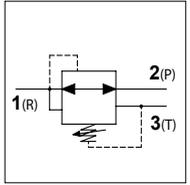
**PRESSURE REDUCING VALVES**  
*VALVOLE RIDUTTRICI DI PRESSIONE*



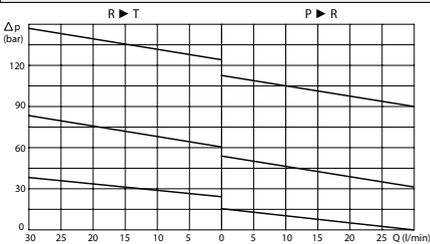
### WRP 30 S10

#### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 180 bar
- **Max working pressure:** 350 bar
- **Max differential:** 210 bar between R and P
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Direct Acting
- **Cavity:** FW7803000
- **Installation torque:** 40-45 Nm
- **Note:** With Relief
- **Weight:** 0,310 kg



#### PRESSURE DROP CURVES



#### REGULATOR

(S) Screw	
(V) Handknob	

#### SPRINGS

Code	Adjustable pressure range bar	Standard setting bar
<b>02</b>	5-35	5
<b>06</b>	10-60	10
<b>12</b>	35-180	35

#### ORDERING CODE

WRP

30

S10

#### Type of Regulator:

- S = Screw
- V = Handknob

#### Springs:

- 02
- 06
- 12

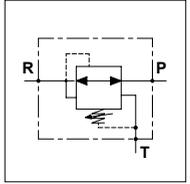
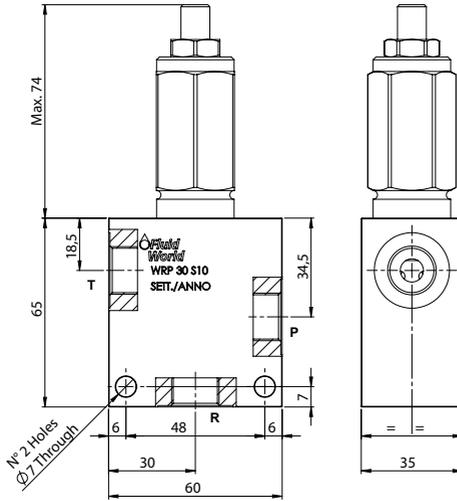
#### Adjustment if Required:

- Omit if not required
- Value

### WRP 30 S10

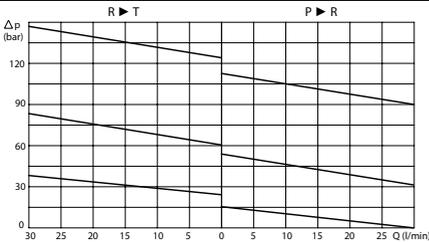
#### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 180 bar
- **Max working pressure:** 250 bar (350 bar)
- **Max differential:** 210 bar between R and P
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Direct Acting
- **Note:** With Relief
- **Weight:** 0,650 kg (1,190kg)



PORTS		
P - T - R	3/8	1/2

#### PRESSURE DROP CURVES



#### REGULATOR

(S) Screw	
(V) Handknob	

#### SPRINGS

Code	Adjustable pressure range bar	Standard setting bar
02	5-35	5
06	10-60	10
12	35-180	35

#### ORDERING CODE

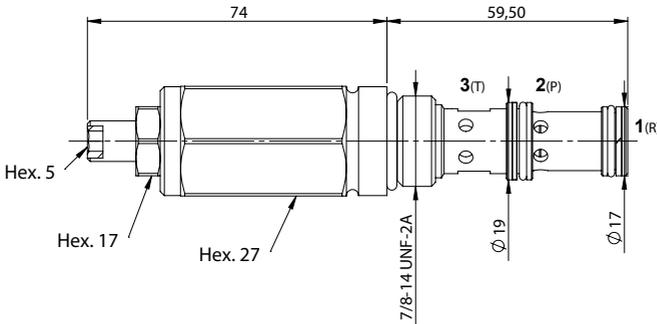
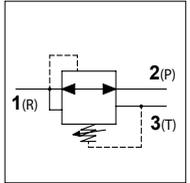


- Ports Size:** - 3/8  
- 1/2
- Material Body:** - Omit if aluminium  
- S = Steel
- Type of Regulator:** - S = Screw  
- V = Handknob
- Springs:** - 02  
- 06  
- 12
- Adjustment if Required:** - Omit if not required  
- Value

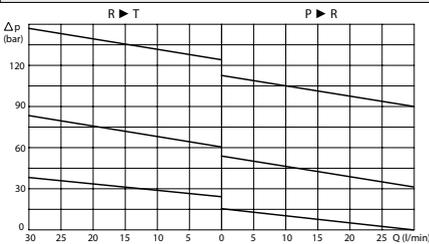
## WRP 30

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 180 bar
- **Max working pressure:** 350 bar
- **Max differential:** 210 bar between R and P
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Direct Acting
- **Cavity:** FW7803100
- **Installation torque:** 40-45 Nm
- **Note:** With Relief
- **Weight:** 0,240 kg



### PRESSURE DROP CURVES



### REGULATOR

(S) Screw	
(V) Handknob	

### SPRINGS

Code	Adjustable pressure range bar	Standard setting bar
<b>02</b>	5-35	5
<b>06</b>	10-60	10
<b>12</b>	35-180	35

### ORDERING CODE

WRP

30

#### Type of Regulator:

- S = Screw
- V = Handknob

#### Springs:

- 02
- 06
- 12

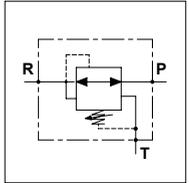
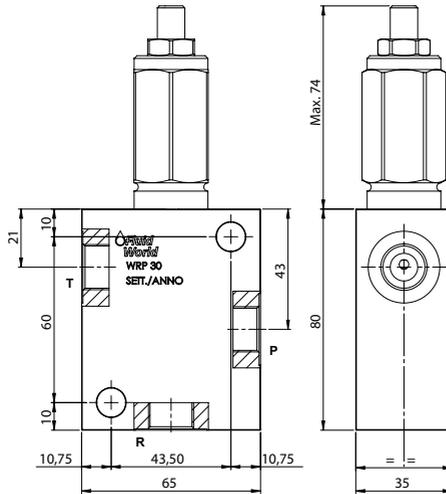
#### Adjustment if Required:

- Omit if not required
- Value

### WRP 30

#### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 180 bar
- **Max working pressure:** 250 bar (350 bar)
- **Max differential:** 210 bar between R and P
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Direct Acting
- **Note:** With Relief
- **Weight:** 0,760 kg (1,480kg)



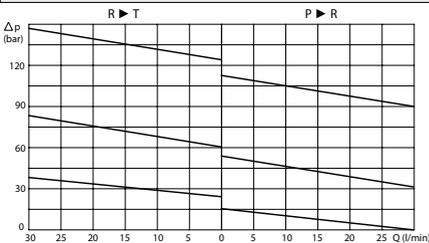
#### PORTS

P - T - R	3/8
-----------	-----

#### REGULATOR

(S) Screw	
(V) Handknob	

#### PRESSURE DROP CURVES



#### SPRINGS

Code	Adjustable pressure range bar	Standard setting bar
02	5-35	5
06	10-60	10
12	35-180	35

#### ORDERING CODE

WRP

30

3/8

#### Material Body:

- Omit if aluminium
- S = Steel

#### Type of Regulator:

- S = Screw
- V = Handknob

#### Springs:

- 02
- 06
- 12

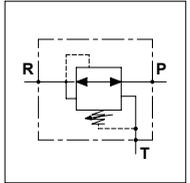
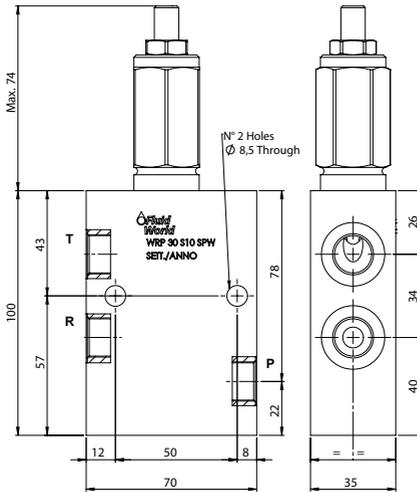
#### Adjustment if Required:

- Omit if not required
- Value

# WRP 30 S10 - SPW

## TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 180 bar
- **Max working pressure:** 250 bar (350 bar)
- **Max differential:** 210 bar between R and P
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Direct Acting
- **Note:** With Relief
- **Weight:** 0,930 kg (1,950 kg)



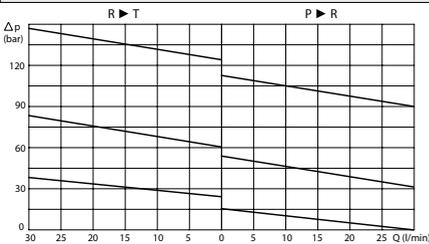
## PORTS

P - T - R	3/8
-----------	-----

## REGULATOR

(S) Screw	
(V) Handknob	

## PRESSURE DROP CURVES



## SPRINGS

Code	Adjustable pressure range bar	Standard setting bar
02	5-35	5
06	10-60	10
12	35-180	35

## ORDERING CODE

WRP 30 S10 3/8         SPW

### Material Body:

- Omit if aluminium
- S = Steel

### Type of Regulator:

- S = Screw
- V = Handknob

### Springs:

- 02
- 06
- 12

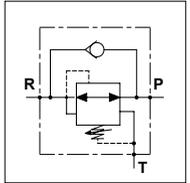
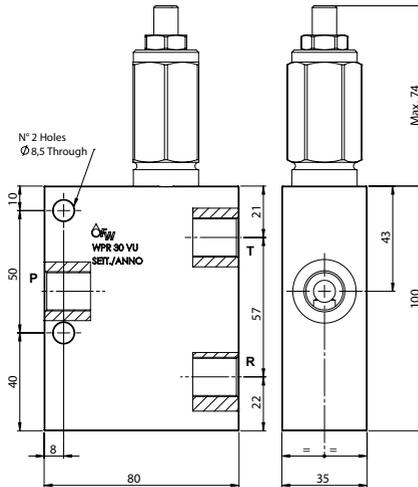
### Adjustment if Required:

- Omit if not required
- Value

### WRP 30 VU

#### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 180 bar
- **Max working pressure:** 250 bar (350 bar)
- **Max differential:** 210 bar between R and P
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Direct Acting
- **Note:** With Relief
- **Weight:** 0,950 kg (2,100 kg)



#### PORTS

P - T - R	3/8
-----------	-----

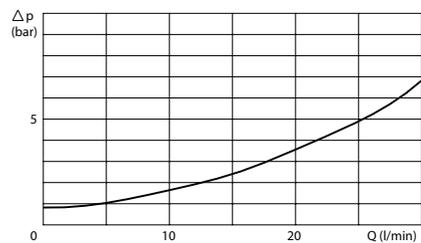
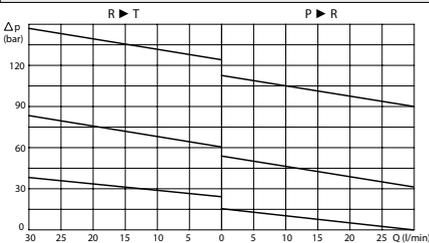
#### SPRINGS

Code	Adjustable pressure range bar	Standard setting bar
02	5-35	5
06	10-60	10
12	35-180	35

#### REGULATOR

(S) Screw	
(V) Handknob	

#### PRESSURE DROP CURVES



#### ORDERING CODE

WRP

30

3/8

VU

- |                                    |                               |                      |                                   |
|------------------------------------|-------------------------------|----------------------|-----------------------------------|
| <b>Material Body:</b>              | <b>Type of Regulator:</b>     | <b>Springs:</b>      | <b>Adjustment if Required:</b>    |
| - Omit if aluminium<br>- S = Steel | - S = Screw<br>- V = Handknob | - 02<br>- 06<br>- 12 | - Omit if not required<br>- Value |



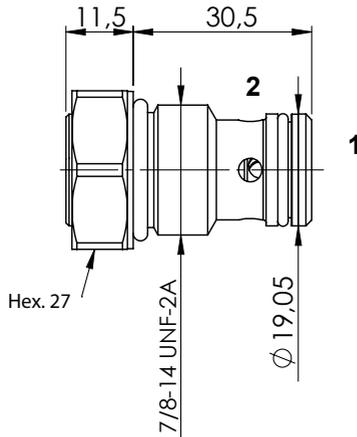
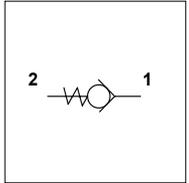
**CHECK VALVES**  
*VALVOLE DI RITEGNO UNIDIREZIONALI*



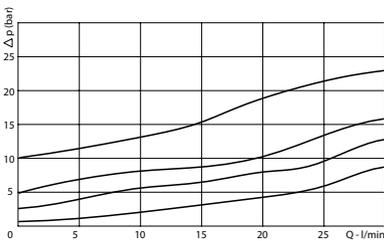
# WUC C 30

## TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type
- **Cavity:** FW7802100
- **Installation torque:** 40-45 Nm
- **Weight:** 0,100 kg



## PRESSURE DROP CURVES



## SPRINGS

Code	Cracking pressure bar
Standard	1
<b>2,5</b>	2,5
<b>5</b>	5
<b>10</b>	10

## ORDERING CODE

WUC

C

30



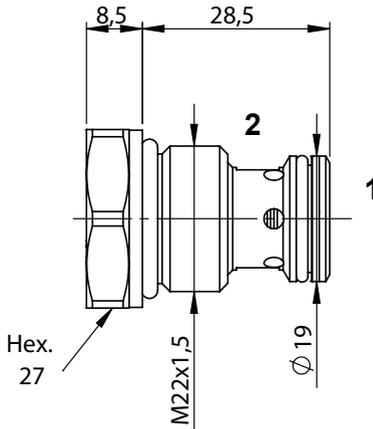
### Opening Pressure:

- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

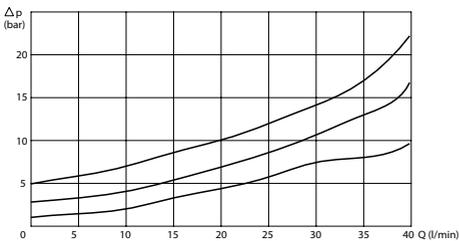
## WUC C 40 M22

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max working pressure:** 420 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type
- **Cavity:** FW22000211
- **Installation torque:** 30-35 Nm
- **Weight:** 0,090 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	1
2,5	2,5
5	5

### ORDERING CODE

WUC

C

40

M22



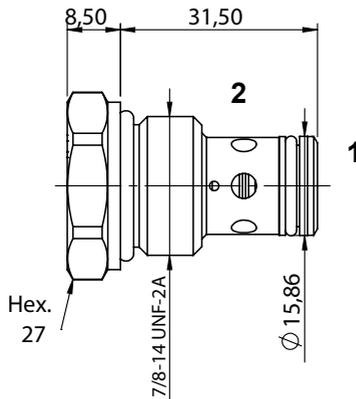
### Opening Pressure:

- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar

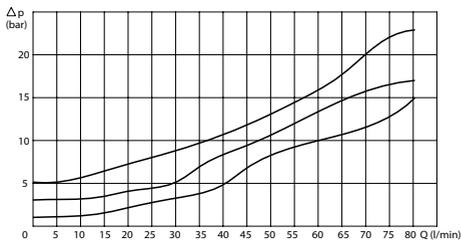
# WUC C 80

## TECHNICAL DATA

- **Flow:** 80 l/min
- **Max working pressure:** 420 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type
- **Cavity:** FW7802000
- **Installation torque:** 40-45 Nm
- **Weight:** 0,090 kg



## PRESSURE DROP CURVES



## SPRINGS

Code	Cracking pressure bar
Standard	1
<b>2,5</b>	2,5
<b>5</b>	5

## ORDERING CODE

WUC

C

80



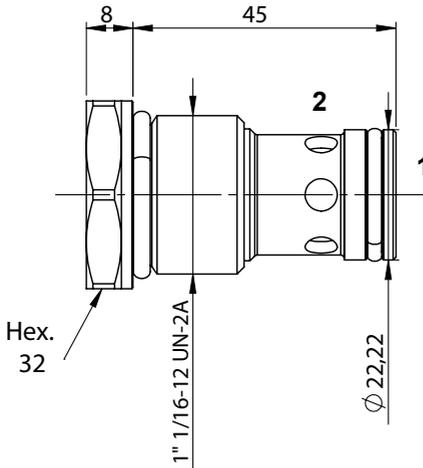
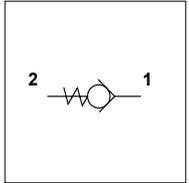
### Opening Pressure:

- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar

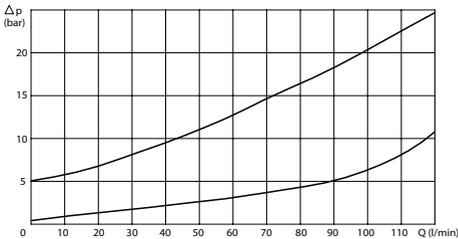
# WUC C 120

## TECHNICAL DATA

- **Flow:** 120 l/min
- **Max working pressure:** 420 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type
- **Cavity:** FW1160200
- **Installation torque:** 60-65 Nm
- **Weight:** 0,160 kg



## PRESSURE DROP CURVES



## SPRINGS

Code	Cracking pressure bar
Standard	1
5	5

## ORDERING CODE

WUC

C

120

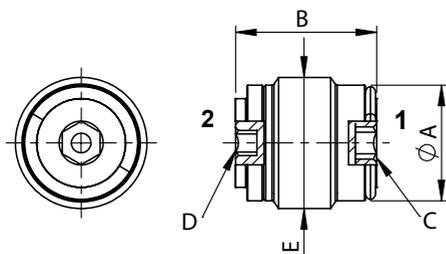


**Opening Pressure:**  
 - Omit if 1 bar  
 - 5 = 5 bar

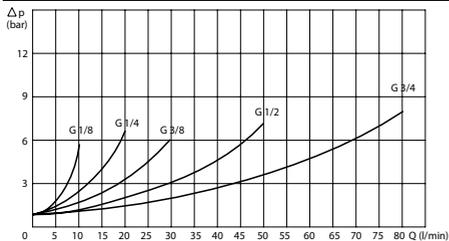
## WUC I

### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Cracking pressure:** Standard 1 bar, other springs only on request
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Ball Type - Direct Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table



### PRESSURE DROP CURVES



PORTS					
E	1/8	1/4	3/8	1/2	3/4
DIMENSIONS					
A	8,4	11,3	14,8	18,5	24
B	12,5	17	18,5	22,5	28
C (Hex)	-	3	4	6	8
D (Hex)	2	2,5	3	5	8
Max Flow (l/min)	10	20	30	50	80
Cavity	FW1802100	FW1402100	FW3802100	FW1202100	FW3402100
Install. Torque (N/m)	2	4	6	10	20
Weight (kg)	0,004	0,013	0,020	0,040	0,082

### ORDERING CODE

WUC

I

Ports Size:

- 1/8
- 1/4
- 3/8
- 1/2
- 3/4

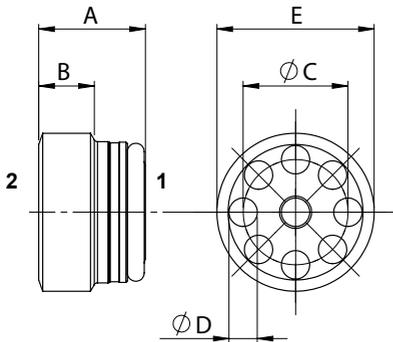
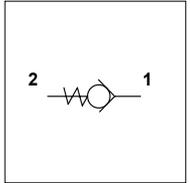
Opening Pressure:

- Omit if 1 bar
- 0,3 bar
- 3 bar

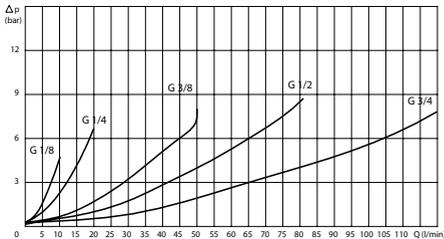
## WUC IS

### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Cracking pressure:** 0,5 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table



### PRESSURE DROP CURVES



PORTS					
E	1/8	1/4	3/8	1/2	3/4
DIMENSIONS					
A	7,5	8,5	11,3	12,7	14,8
B	3,5	4,4	6	6,5	7,6
C	5,6	8,4	11,1	13,5	16,5
D	1,6	2,2	3	3,8	5
Max Flow (l/min)	10	20	50	80	120
Cavity	FW1802101	FW1402101	FW3802101	FW1202101	FW3402101
Install. Torque (N/m)	6	15	30	30	50
Weight (kg)	0,002	0,005	0,011	0,019	0,040

### ORDERING CODE

WUC

IS

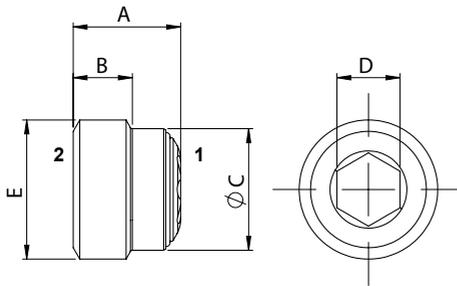
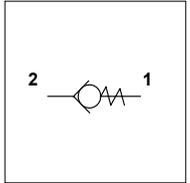
Ports Size:

- 1/8
- 1/4
- 3/8
- 1/2
- 3/4

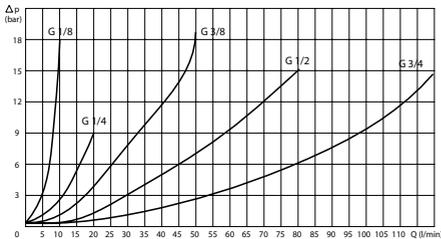
## WUC ISI

### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Cracking pressure:** 0,5 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table



### PRESSURE DROP CURVES



PORTS					
E	1/8	1/4	3/8	1/2	3/4
DIMENSIONS					
A	8	10,2	11,7	13,5	17,1
B	3,9	5,5	7	7,9	11,5
C	8,5	11,5	14,9	18,7	24
D (Hex)	4	6	8	10	10
Max Flow (l/min)	10	20	50	80	120
Cavity	FW1802101	FW1402101	FW3802101	FW1202101	FW3402101
Install. Torque (N/m)	10	15	30	40	50
Weight (kg)	0,003	0,007	0,015	0,023	0,050

### ORDERING CODE

WUC

ISI

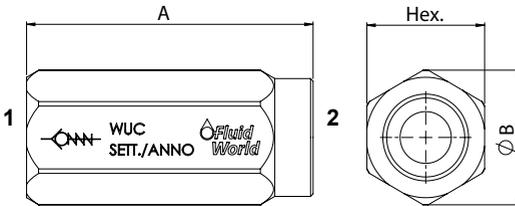
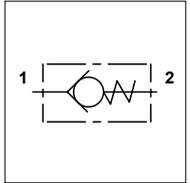
Ports Size:

- 1/8
- 1/4
- 3/8
- 1/2
- 3/4

## WUC

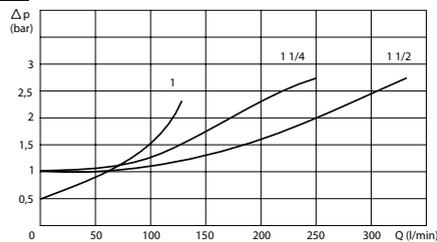
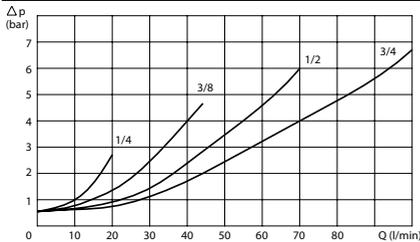
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** See table
- **Cracking pressure:** See table
- **Materials:** Steel Zinc Plated Body
- **Weight:** See table



PORTS							
1 - 2	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
DIMENSIONS							
A	62	68	77	88	105	135	145
B	21	27	34	40	46	63	69
Hex.	19	24	30	36	41	55	60
Max Pressure (bar)	350	350	350	350	350	300	300
Max Flow (l/min)	20	45	70	110	160	250	350
Weight (kg)	0,104	0,184	0,322	0,492	0,676	1,646	1,950

### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	0,5
<b>4</b>	4
<b>8</b>	8

### ORDERING CODE

WUC



#### Ports Size:

- 1/4 - 1
- 3/8 - 1 1/4
- 1/2 - 1 1/2
- 3/4



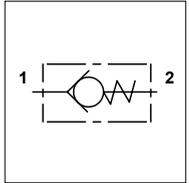
#### Opening Pressure:

- Omit if 0,5 bar
- 4 = 4 bar
- 8 = 8 bar

## WUC JIC 08 MF

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 350 bar
- **Cracking pressure:** <0,5 bar
- **Materials:** Steel Zinc Plated Body
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,110 kg

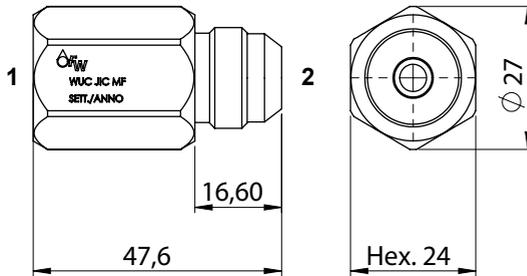


### PORTS

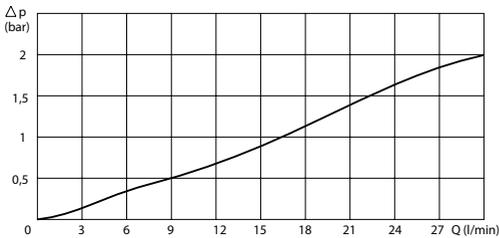
1 - 2	Jic
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### DIMENSIONS

Thread	3/4-16
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### PRESSURE DROP CURVES



### ORDERING CODE

WUC

JIC

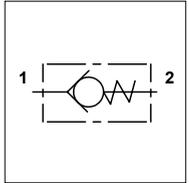
08

MF

## WUC ORFS 08 MF

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 350 bar
- **Cracking pressure:** <0,5 bar
- **Materials:** Steel Zinc Plated Body
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,120 kg

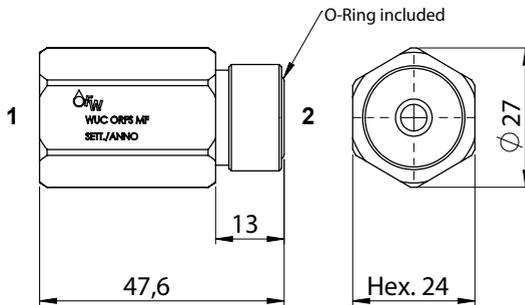


### PORTS

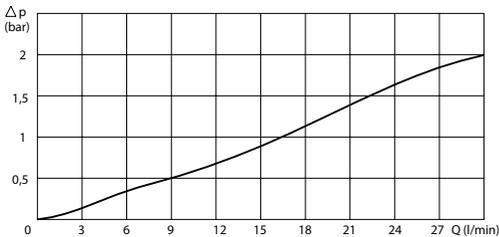
1 - 2	Orfs
-------	------

### DIMENSIONS

Thread	13/16-16
--------	----------



### PRESSURE DROP CURVES



### ORDERING CODE

WUC

ORFS

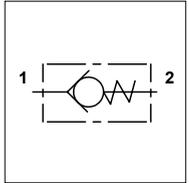
08

MF

## WUC ORFS 08 MM

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 350 bar
- **Cracking pressure:** <0,5 bar
- **Materials:** Steel Zinc Plated Body
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,090 kg

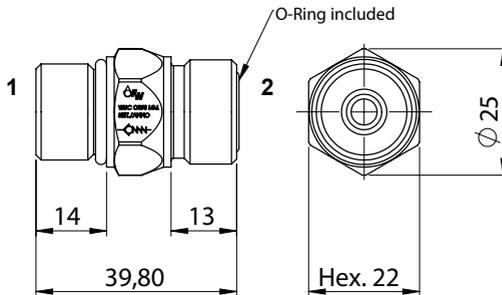


### PORTS

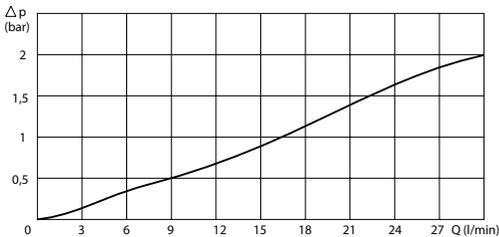
1 - 2	Orfs
-------	------

### DIMENSIONS

Thread 1	13/16-16
Thread 2	3/4-16



### PRESSURE DROP CURVES



### ORDERING CODE

WUC

ORFS

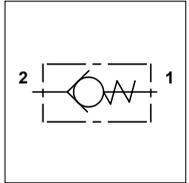
08

MM

## WUCR ORFS 08 MM

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 350 bar
- **Cracking pressure:** <0,5 bar
- **Materials:** Steel Zinc Plated Body
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,090 kg

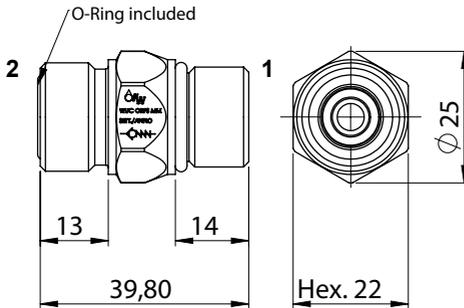


### PORTS

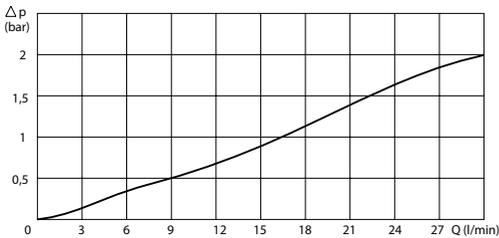
1 - 2	Orfs
-------	------

### DIMENSIONS

Thread 1	13/16-16
Thread 2	3/4-16



### PRESSURE DROP CURVES



### ORDERING CODE

WUCR

ORFS

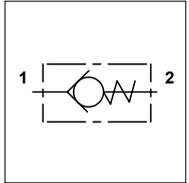
08

MM

## WUC ORFS 16 MM

### TECHNICAL DATA

- **Flow:** 250 l/min
- **Max working pressure:** 350 bar
- **Cracking pressure:** <0,5 bar
- **Materials:** Steel Zinc Plated Body
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,330 kg

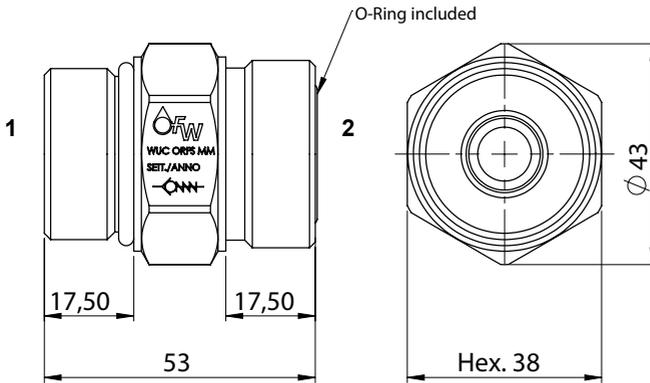


### PORTS

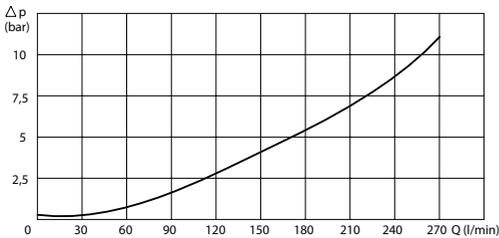
1 - 2	Orfs
-------	------

### DIMENSIONS

Thread 1	1-5/16-12
Thread 2	1-7/16-12



### PRESSURE DROP CURVES



### ORDERING CODE

WUC

ORFS

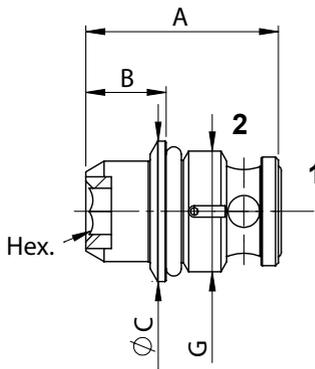
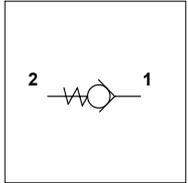
16

MM

## WRS

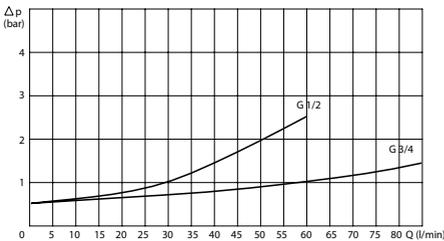
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Cracking pressure:** 0,5 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** BallType - Direct Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table
- **Note:** Valve supplied with single components



PORTS		
G	1/2	3/4
DIMENSIONS		
A	33,5	45,5
B	14	14
C	24,5	31
Hex.	8	10
Max Flow (l/min)	60	90
Cavity	FW12000210	FW34000210
Install. Torque (N/m)	50	70
Weight (kg)	0,055	0,110

### PRESSURE DROP CURVES



### ORDERING CODE

WRS

Ports Size:

- 1/2
- 3/4



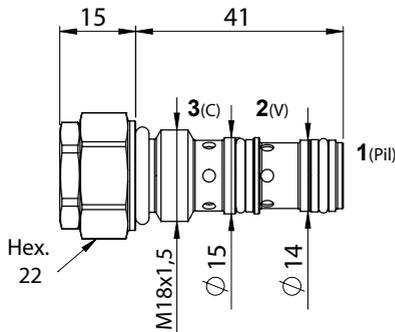
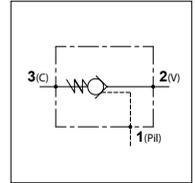
**PILOT OPERATED CHECK VALVES**  
*VALVOLE DI BLOCCO PILOTATE*



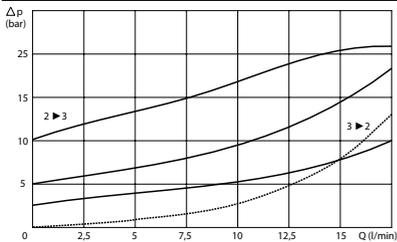
## WBS C 25

### TECHNICAL DATA

- **Flow:** 15 l/min
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** FW1803101
- **Installation torque:** 30-35 Nm
- **Pilot ratio:** 3:1 (if request 5:1)
- **Note:** O-Ring on pilot piston
- **Weight:** 0,060 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	2,5
<b>5</b>	5
<b>10</b>	10

### ORDERING CODE

WBS

C

25



G

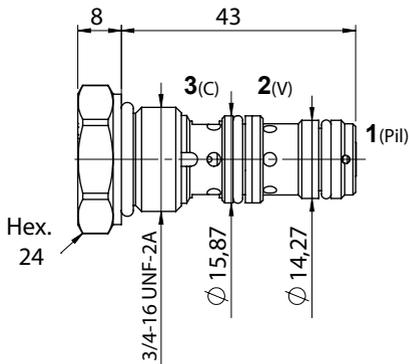
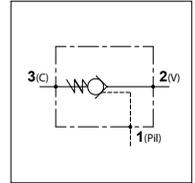
### Opening Pressure:

- Omit if 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

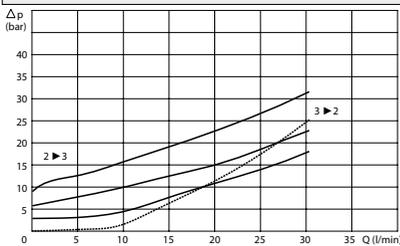
## WBS C 30

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** FW3403000
- **Installation torque:** 30-35 Nm
- **Pilot ratio:** 3:1
- **Weight:** 0,075 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	2,5
<b>5</b>	5
<b>10</b>	10

### ORDERING CODE

WBS

C

30



#### Opening Pressure:

- Omit if 2,5 bar
- 5 = 5 bar
- 10 = 10 bar



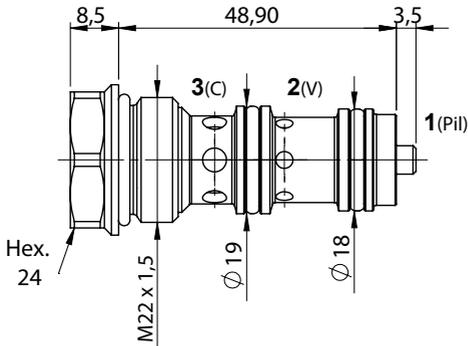
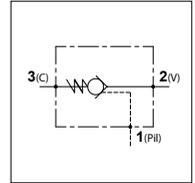
#### Seal on Piston:

- Omit if not required
- G = Required

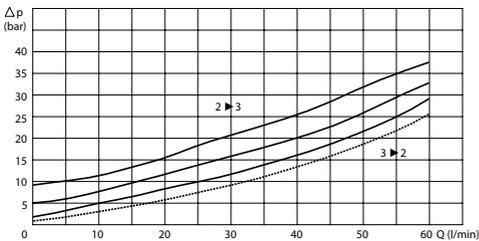
## WBS C 60 M22

### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** FW2203000
- **Installation torque:** 40-45 Nm
- **Pilot ratio:** 3,5:1
- **Note:** O-Ring on pilot piston
- **Weight:** 0,110 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	2,5
<b>5</b>	5
<b>10</b>	10

### ORDERING CODE

WBS

C

60

M22



G

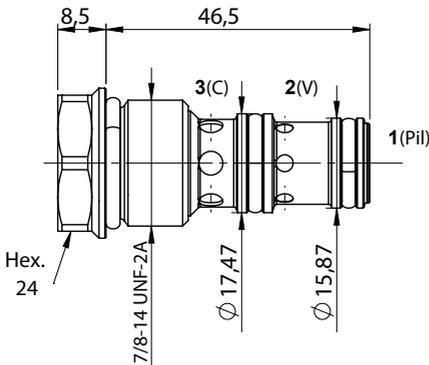
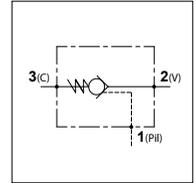
### Opening Pressure:

- Omit if 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

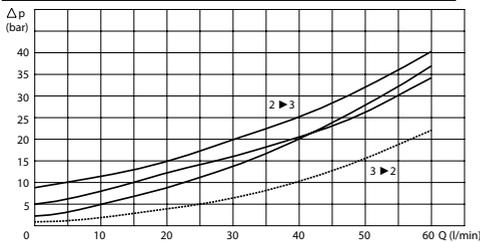
## WBS C 60

### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** FW7803000
- **Installation torque:** 40-45 Nm
- **Pilot ratio:** 3:1
- **Note:** O-Ring on pilot piston
- **Weight:** 0,100 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	2,5
<b>5</b>	5
<b>10</b>	10

### ORDERING CODE

WBS

C

60



G

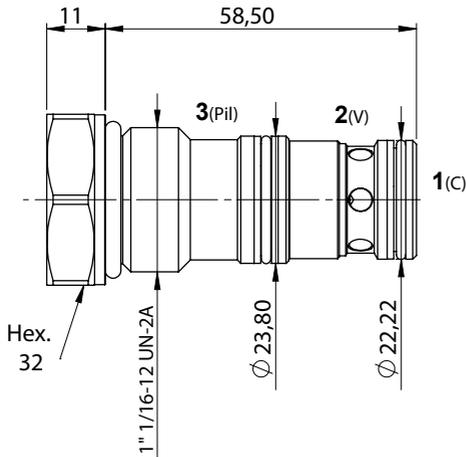
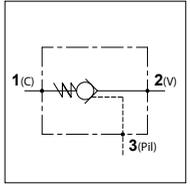
### Opening Pressure:

- Omit if 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

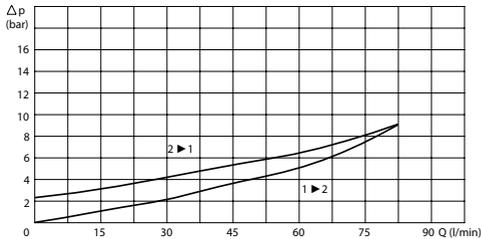
## WBS CR 80

### TECHNICAL DATA

- **Flow:** 80 l/min
- **Max working pressure:** 350 bar
- **Cracking Pressure:** 2,5 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** FW1160301
- **Installation torque:** 60-65 Nm
- **Pilot ratio:** 3:1
- **Weight:** 0,220 kg



### PRESSURE DROP CURVES



### ORDERING CODE

WBS

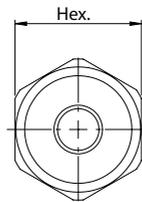
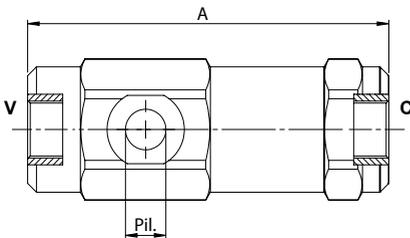
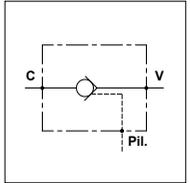
CR

80

## WBS

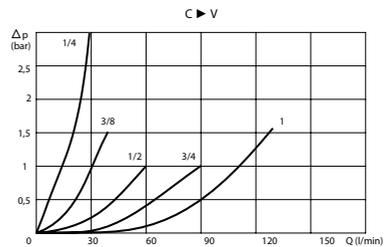
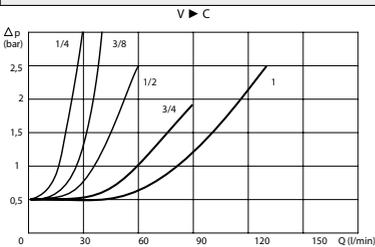
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** See table
- **Cracking pressure:** 0,5 bar
- **Materials:** Steel Body
- **Version:** Poppet Type - Pilot Acting
- **Pilot ratio:** See table
- **Weight:** See table



PORTS					
C - V	1/4	3/8	1/2	3/4	1
Pil.	1/4				
DIMENSIONS					
A	103	112	122	145	164
Hex.	36	40	42	55	55
Pilot Ratio	9:1	6:1	4:1	4:1	3,5:1
Max Pressure (bar)	350	350	350	300	250
Max Flow (l/min)	25	40	60	90	130
Weight (kg)	0,700	0,980	1,100	2,300	2,450

### PRESSURE DROP CURVES



### ORDERING CODE

WBS



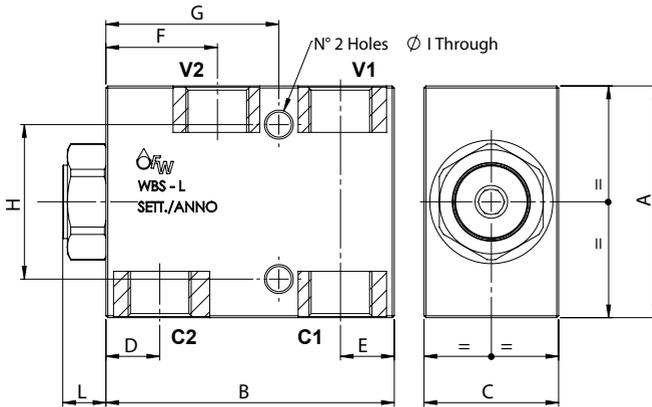
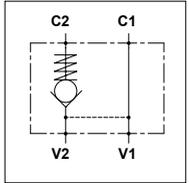
Ports Size:

- 1/4
- 3/8
- 1/2
- 3/4
- 1

## WBS - L

### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** See table
- **Weight:** 0,450 kg (1,070 kg)



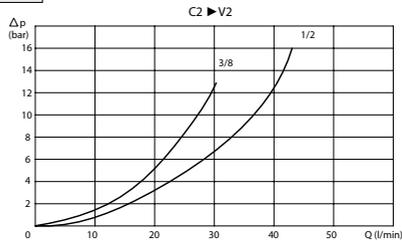
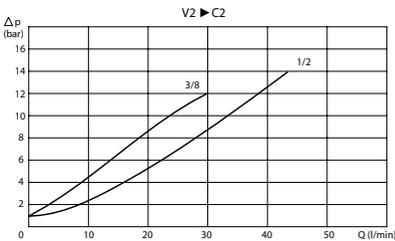
### PORTS

C1 - C2 V1 - V2	3/8	1/2
--------------------	-----	-----

### DIMENSIONS

A	60	70
B	75	95
C	35	35
D	14	21
E	14	19
F	29	38
G	45	55
H	40	40
I	6,5	8,5
L	11	8
Pilot Ratio	7:1	4:1
Max Flow (l/min)	<b>30</b>	<b>40</b>

### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	1
<b>2,5</b>	2,5
<b>5</b>	5
<b>10</b> (only for 30 l/min)	10

### ORDERING CODE

WBS  L

**Flow Size:**  
- 30 l/min  
- 40 l/min

**Ports Size:**  
- 3/8  
- 1/2

**Material Body:**  
- Omit if aluminium  
- S = Steel

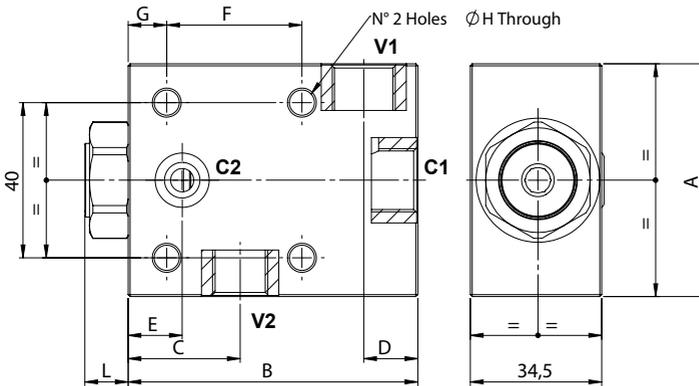
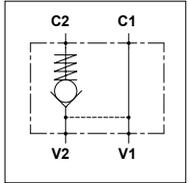
**Cracking Pressure:**  
- Omit if 1 bar  
- 2,5 = 2,5 bar  
- 5 = 5 bar  
- 10 = 10 bar

**Seal on Piston:**  
- Omit if not required  
- G = Required

## WBS - 1F

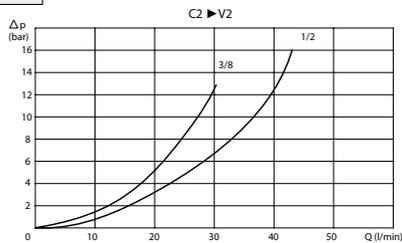
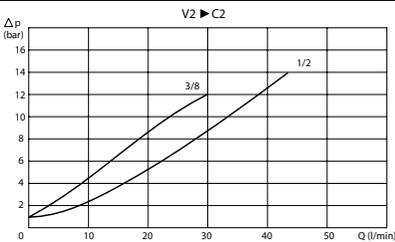
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** See table
- **Weight:** 0,450 kg (1,040 kg)



PORTS		
C1 V1 - V2	3/8	1/2
C2	ø6	ø8
DIMENSIONS		
A	60	70
B	75	95
C	29	38
D	14	19
E	14	22,5
F	35	40
G	10	15
H	6,5	8,5
L	11	8
Pilot Ratio	7:1	4:1
Max Flow (l/min)	<b>30</b>	<b>40</b>

### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	1
<b>2,5</b>	2,5
<b>5</b>	5
<b>10</b> (only for 30 l/min)	10

### ORDERING CODE

WBS

1F

**Flow Size:**  
- 30 l/min  
- 40 l/min

**Ports Size:**  
- 3/8  
- 1/2

**Material Body:**  
- Omit if aluminium  
- S = Steel

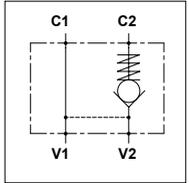
**Cracking Pressure:**  
- Omit if 1 bar  
- 2,5 = 2,5 bar  
- 5 = 5 bar  
- 10 = 10 bar

**Seal on Piston:**  
- Omit if not required  
- G = Required

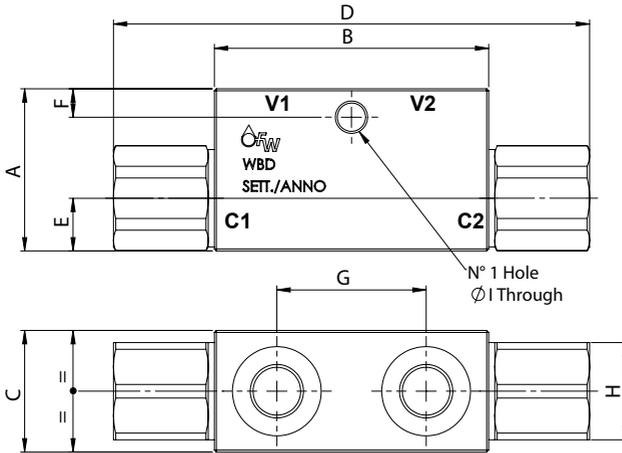
## WBD 1SC

### TECHNICAL DATA

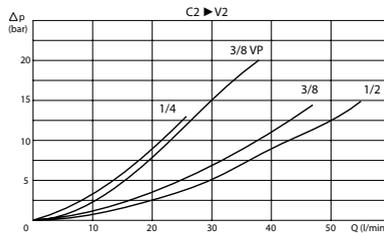
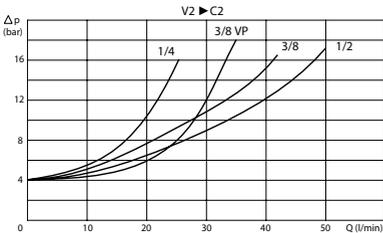
- **Flow:** See table
- **Max working pressure:** 350 bar (250 bar)
- **Cracking pressure:** See table
- **Materials:** Steel Body (Aluminium body if required)
- **Pilot ratio:** See table
- **Weight:** See table



PORTS				
C1 - C2 V1 - V2	1/4	3/8VP	3/8	1/2
DIMENSIONS				
A	40	40	50	60
B	68	68	80	80
C	30	30	30	35
D	118	118	144	144
E	13	13	16	16
F	8	8	8	18
G	38	38	40	40
H	22	22	27	30
I	M8	M8	M8	M8
Pilot Ratio	5,5:1	5,5:1	5:1	4:1
Max Pressure (bar)	350	350	350	350
Max Flow (l/min)	25	30	45	70
Weight (Kg)	0,670	0,630	0,950	1,280



### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
<b>05</b>	0,5
Standard	4
<b>8</b>	8

### ORDERING CODE

WBD

1SC

#### Ports Size:

- 1/4
- 3/8VP
- 3/8
- 1/2

#### Material Body:

- Omit if steel
- A = Aluminium

#### Cracking Pressure:

- Omit if 4 bar
- 05 = 0,5 bar
- 8 = 8 bar

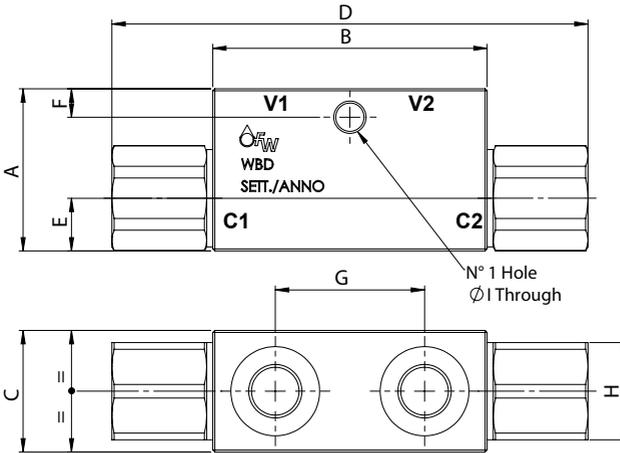
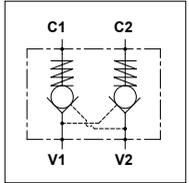
#### Seal on Piston:

- Omit if required
- NG = no required

## WBD

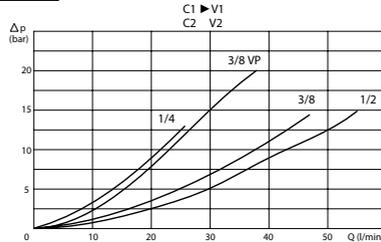
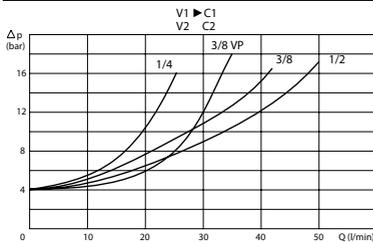
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar (250 bar)
- **Cracking pressure:** See table
- **Materials:** Steel Body (Aluminium body if required)
- **Pilot ratio:** See table
- **Weight:** See table



PORTS				
C1 - C2 V1 - V2	1/4	3/8VP	3/8	1/2
DIMENSIONS				
A	40	40	50	60
B	68	68	80	80
C	30	30	30	35
D	118	118	144	144
E	13	13	16	16
F	8	8	8	18
G	38	38	40	40
H	22	22	27	30
I	M8	M8	M8	M8
Pilot Ratio	5,5:1	5,5:1	5:1	4:1
Max Pressure (bar)	350	350	350	350
Max Flow (l/min)	25	30	45	70
Weight (Kg)	0,670	0,630	0,950	1,280

### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
<b>05</b>	0,5
Standard	4
<b>8</b>	8

### ORDERING CODE

**WBD**

#### Ports Size:

- 1/4
- 3/8VP
- 3/8
- 1/2

#### Material Body:

- Omit if steel
- A = Aluminium

#### Cracking Pressure:

- Omit if 4 bar
- 05 = 0,5 bar
- 8 = 8 bar

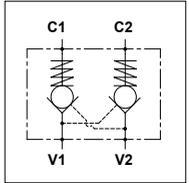
#### Seal on Piston:

- Omit if required
- NG = no required

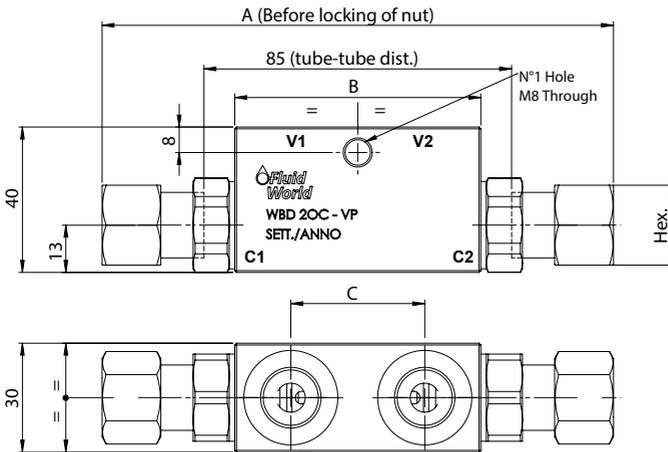
## WBD 20C - VP

### TECHNICAL DATA

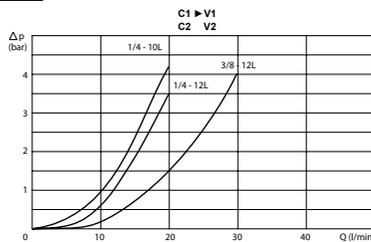
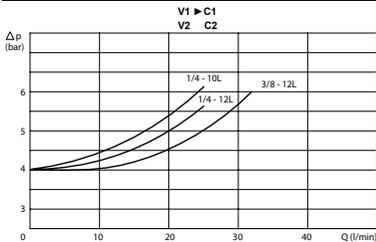
- **Flow:** See table
- **Max working pressure:** 350 bar
- **Cracking pressure:** See table
- **Materials:** Steel body
- **Pilot ratio:** 5,5:1
- **Weight:** See table



PORTS			
V1 - V2	1/4	1/4	3/8
C1 - C2	10L	12L	12L
DIMENSIONS			
A	128	131	135
B	68	64	68
C	38	36	38
Hex.	19	22	22
Max Flow (l/min)	20	20	30
Cracking Pressure (Bar)	7	4	4
Weight (kg)	0,680	0,650	0,630



### PRESSURE DROP CURVES



### ORDERING CODE

WBD

20C

VP

Ports Size:

- 1/4
- 3/8

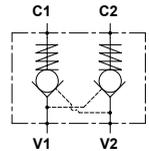
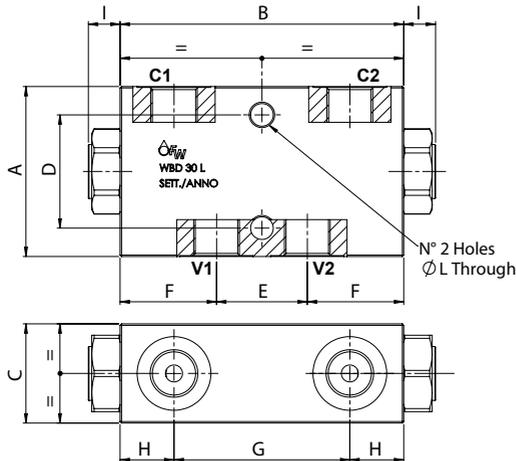
Size Pipe:

- Omit if 12 L
- 10 L (only for 1/4)

## WBD 30 L

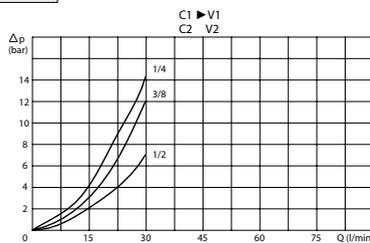
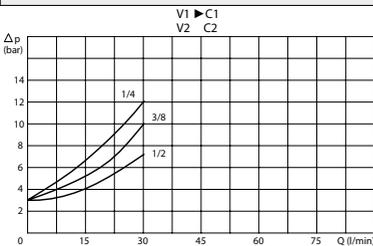
### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** See table
- **Weight:** 0,670 kg (1,500 kg)



PORTS			
C1 - C2 V1 - V2	1/4	3/8	1/2
DIMENSIONS			
A	60	60	60
B	90	100	102
C	30	35	35
D	40	40	40
E	34	32	35
F	28	34	33,5
G	60	62	62
H	15	19	20
I	11	11	11
L	8,5	6,5	6,5
Pilot Ratio	7:1	7:1	7:1

### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	1
<b>2,5</b>	2,5
<b>5</b>	5
<b>10</b>	10

### ORDERING CODE

WBD

30

L

**Ports Size:**

- 1/4
- 3/8
- 1/2

**Material Body:**

- Omit if aluminium
- S = Steel

**Cracking Pressure:**

- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

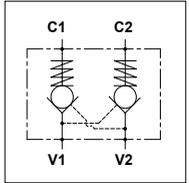
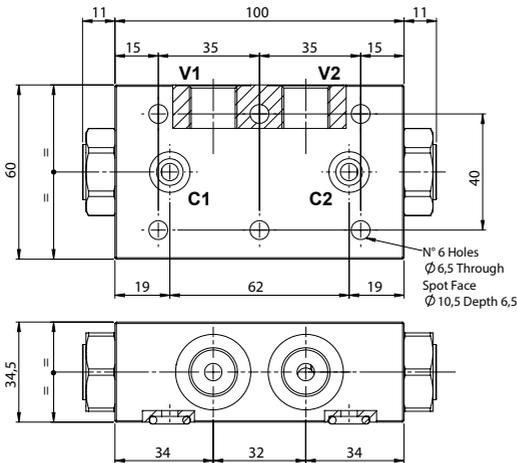
**Seal on Piston:**

- Omit if not required
- G = Required

## WBD 30 2F

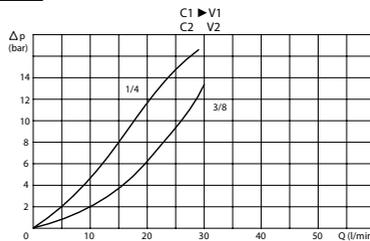
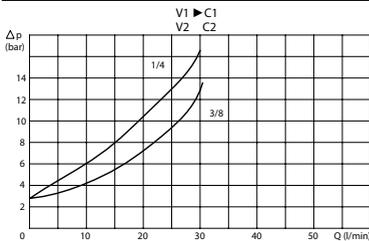
### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** See table
- **Weight:** 0,660 kg (1,470 kg)



PORTS		
V1 - V2	1/4	3/8
C1 - C2	ø6	
Pilot Ratio	7:1	7:1

### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	1
<b>2,5</b>	2,5
<b>5</b>	5
<b>10</b>	10

### ORDERING CODE

WBD

30

2F

**Ports Size:**

- 1/4
- 3/8

**Material Body:**

- Omit if aluminium
- S = Steel

**Cracking Pressure:**

- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

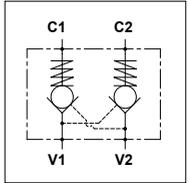
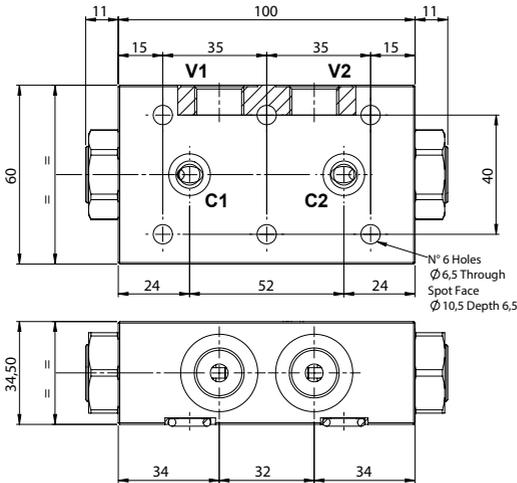
**Seal on Piston:**

- Omit if not required
- G = Required

## WBD 30 2F - SPOM

### TECHNICAL DATA

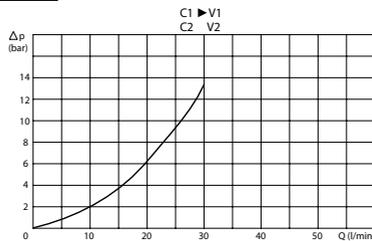
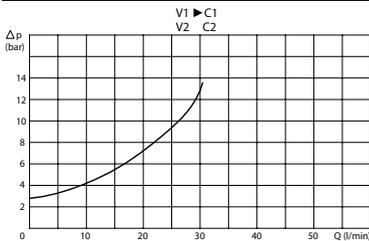
- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** See table
- **Weight:** 0,660 kg (1,470 kg)



### PORTS

V1 - V2	3/8
C1 - C2	ø6
Pilot Ratio	7:1

### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	1
<b>2,5</b>	2,5
<b>5</b>	5
<b>10</b>	10

### ORDERING CODE

WBD

30

2F

3/8



SPOM

#### Material Body:

- Omit if aluminium
- S = Steel

#### Cracking Pressure:

- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

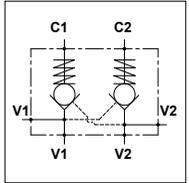
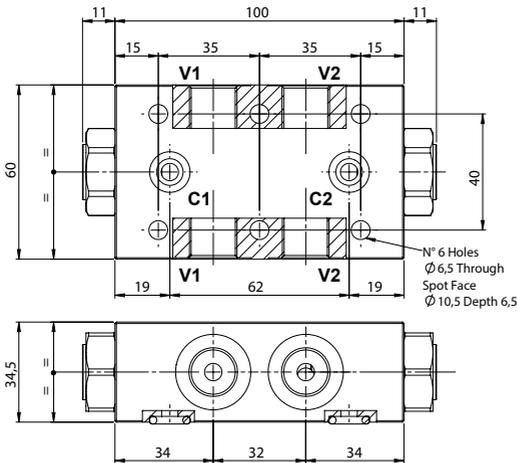
#### Seal on Piston:

- Omit if not required
- G = Required

## WBD 30 2F - DL

### TECHNICAL DATA

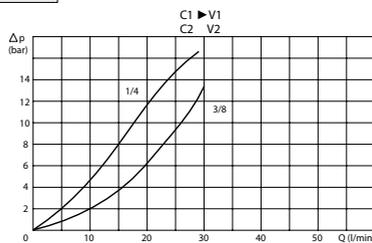
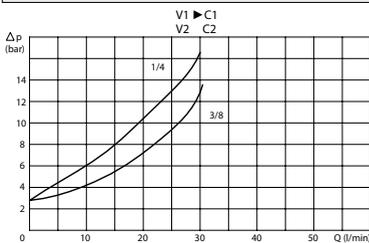
- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** See table
- **Weight:** 0,660 kg (1,470 kg)



### PORTS

V1 - V2	1/4	3/8
C1 - C2	ø6	
Pilot Ratio	7:1	7:1

### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	1
<b>2,5</b>	2,5
<b>5</b>	5
<b>10</b>	10

### ORDERING CODE

WBD

30

2F

DL

**Ports Size:**

- 1/4
- 3/8

**Material Body:**

- Omit if aluminium
- S = Steel

**Cracking Pressure:**

- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

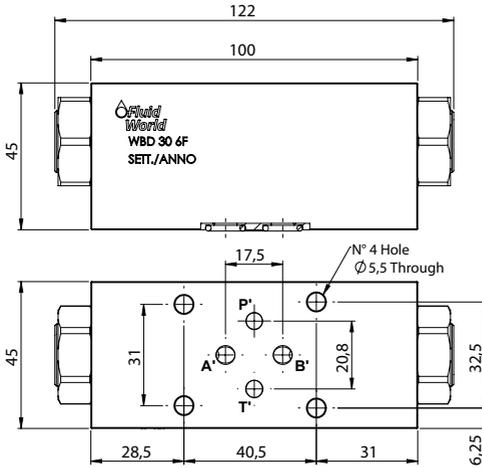
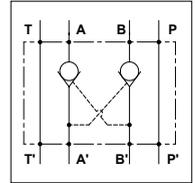
**Seal on Piston:**

- Omit if not required
- G = Required

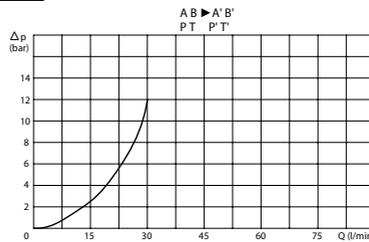
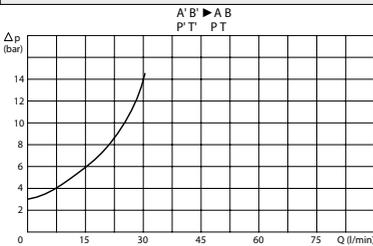
### WBD 30 6F

#### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 10:1 (if request 7:1; 4:1)
- **Weight:** 0,670 kg (1,480 kg)



#### PRESSURE DROP CURVES



#### SPRINGS

Code	Cracking pressure bar
Standard	1
<b>2,5</b>	2,5
<b>5</b>	5
<b>10</b>	10

#### ORDERING CODE

WBD

30

6F

#### Material Body:

- Omit if aluminium
- S = Steel

#### Cracking Pressure:

- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

#### Pilot Ratio:

- Omit if 10:1
- 7 = 7:1
- 4 = 4:1

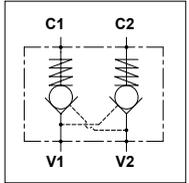
#### Seal on Piston:

- Omit if not required
- G = Required

## WBD 40 L

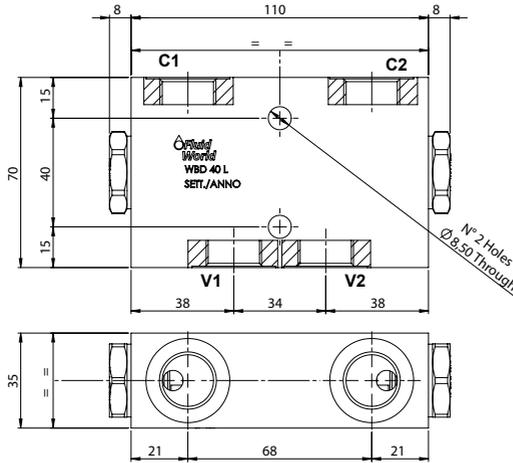
### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 5,5:1
- **Weight:** 0,660 kg (1,540 kg)

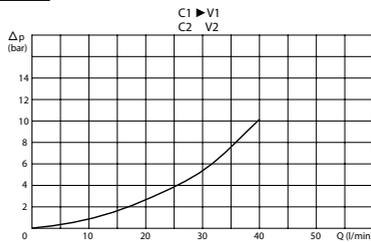
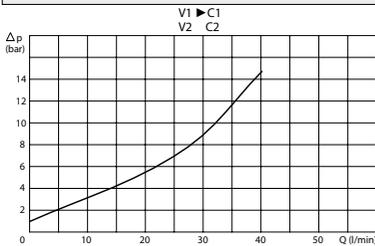


### PORTS

C1 - C2 V1 - V2	1/2
--------------------	-----



### PRESSURE DROP CURVES



### SPRINGS

Code	Cracking pressure bar
Standard	1
2,5	2,5
5	5

### ORDERING CODE

WBD

40

L

1/2

#### Material Body:

- Omit if aluminium
- S = Steel

#### Cracking Pressure:

- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar

#### Seal on Piston:

- Omit if not required
- G = Required





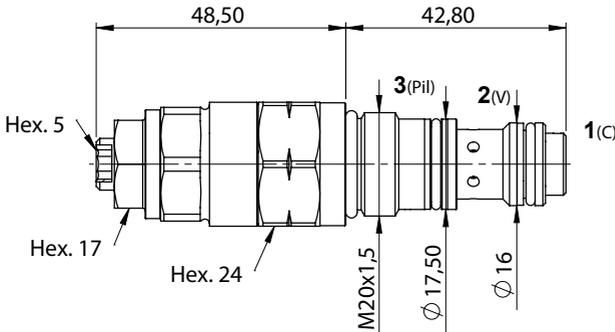
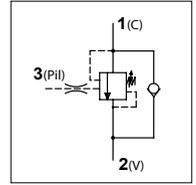
**COUNTERBALANCE VALVES**  
*VALVOLE OVERCENTER*



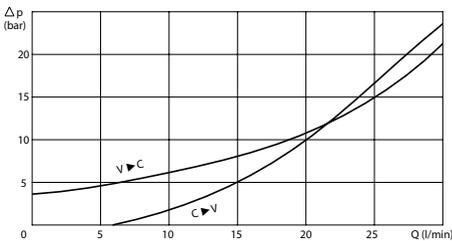
## WOC 30 M20

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** FW2003100
- **Installation torque:** 30-35 Nm
- **Weight:** 0,150 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4,5:1	50-210	50	170	80-350	70	280

### ORDERING CODE

WOC

30

M20

Springs:

- 20
- 35

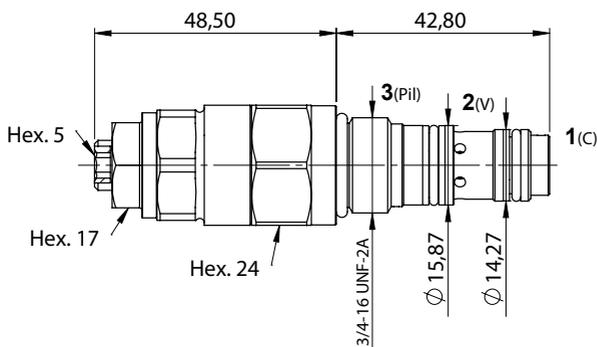
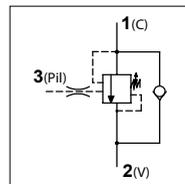
Adjustment if Required:

- Omit if not required
- Value

# WOC 30 S08

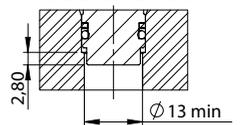
## TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** See table
- **Installation torque:** 30-35 Nm
- **Weight:** 0,150 kg

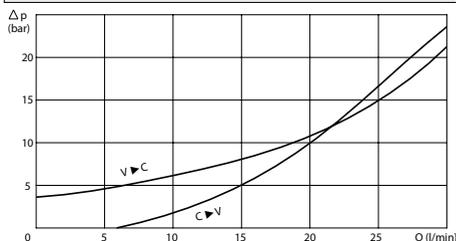


## CAVITY

FW3403001 with the addition of a minimum hole of Ø13 to house the valve nose.



## PRESSURE DROP CURVES



## SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4,5:1	50-210	50	170	80-350	70	280

## ORDERING CODE

WOC

30

S08



**Springs:**

- 20
- 35



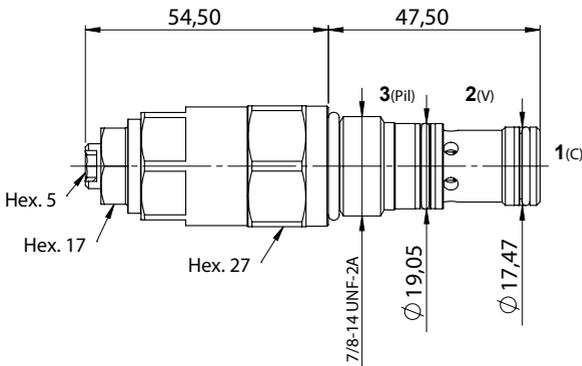
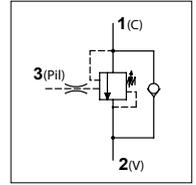
**Adjustment if Required:**

- Omit if not required
- Value

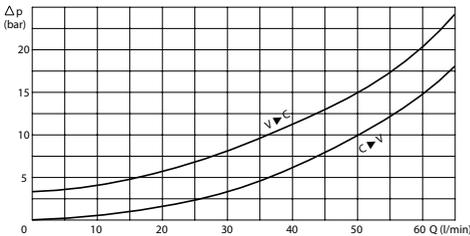
# WOC 60 S10

## TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** FW7803001
- **Installation torque:** 40-45 Nm
- **Weight:** 0,250 kg



## PRESSURE DROP CURVES



## SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-220	50	170	80-350	75	280
8:1	60-220	50		80-350	75	

## ORDERING CODE

WOC

60

S10

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1

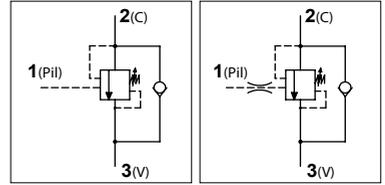
**Adjustment if Required:**

- Omit if not required
- Value

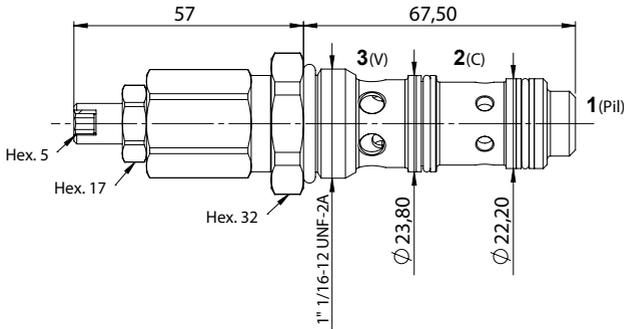
## WOC 60

### TECHNICAL DATA

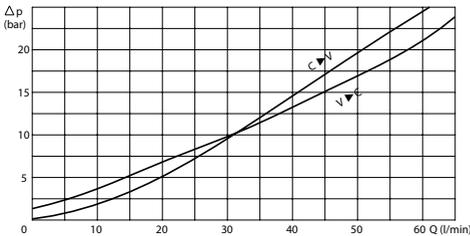
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** FW11160302
- **Installation torque:** 60-65 Nm
- **Weight:** 0,280 kg
- **Note:** It's not SAE cavity



With orifice



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOC

60

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Orefice  
if Required:**

- Omit if not required
- P05 = Orefice 0,5

**Adjustment if  
Required:**

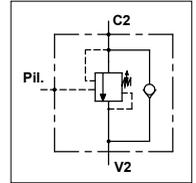
- Omit if not required
- Value

## WOS 30 - L PE

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,100 kg

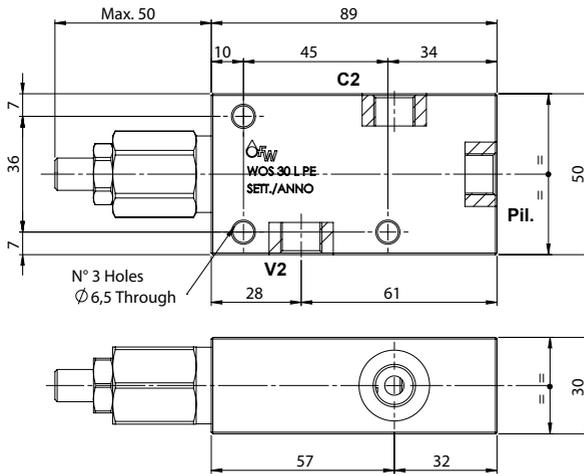
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



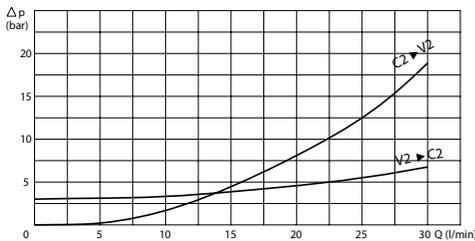
### PORTS

C2 - V2 Pil.	1/4
-----------------	-----

Possibility 3/8 ports.  
Please contact our sales department.



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE



**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

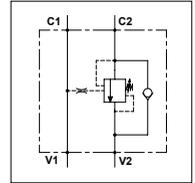
- Omit if not required
- Value

### WOS 30 - L PP

#### TECHNICAL DATA

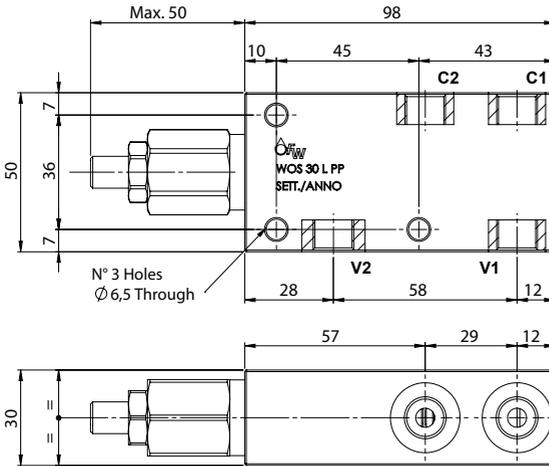
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,300 kg

- **Note:** Pressure setting must be 30 % higher than pressure induced by the load

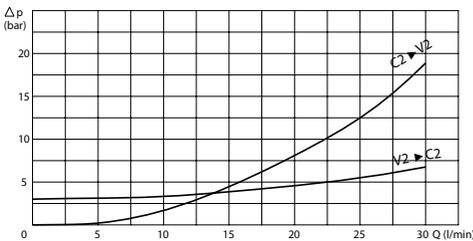


PORTS	
C1 - C2 V1 - V2	1/4

Possibility 3/8 ports.  
Please contact our sales department.



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

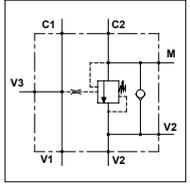
WOS	30		L	PP			
		<b>Ports Size:</b>			<b>Springs:</b>	<b>Pilot Ratio:</b>	<b>Adjustment if Required:</b>
		- 1/4			- 20	- Omit if 4:1	- Omit if not required
		- 3/8			- 35	- 8 = 8:1	- Value
						- 11 = 11:1	

## WOS 30 - 1F PP

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,250 kg

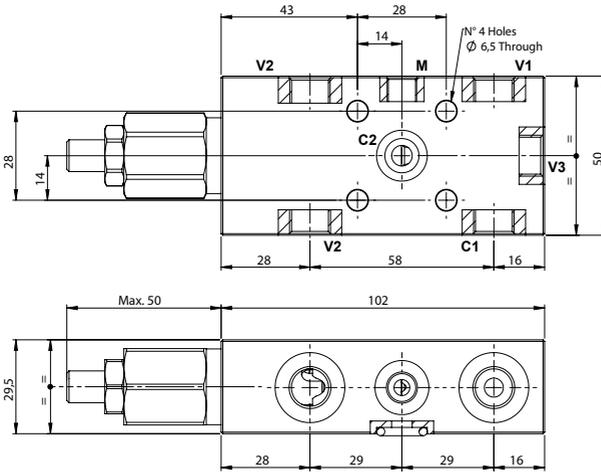
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



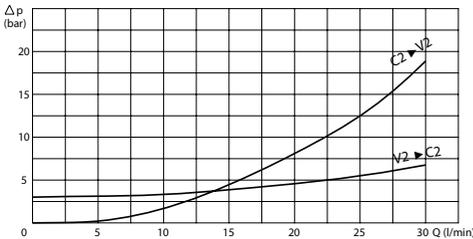
### PORTS

C1 - V3 V1 - V2	1/4
C2	ø6
M	1/4

Possibility 3/8 ports.  
Please contact our sales department.



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOS

30

1F

PP

**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

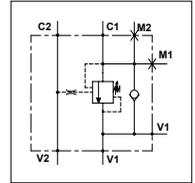
- Omit if not required
- Value

### WOS 30 - 1F PP - SPNS

#### TECHNICAL DATA

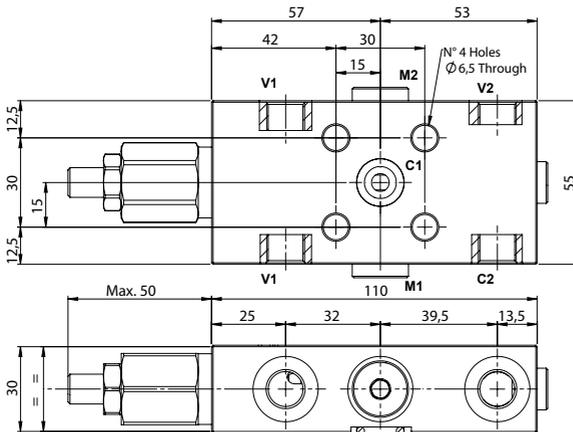
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,350 kg

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load

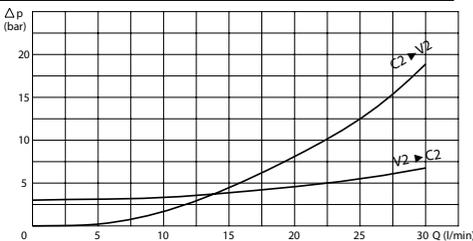


PORTS	
C2 V1 - V2	1/4
C1	ø6
M1 - M2	1/4

Possibility 3/8 ports.  
Please contact our sales department.



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOS 30 [ ] 1F PP [ ] [ ] [ ] SPNS

#### Ports Size:

- 1/4
- 3/8

#### Springs:

- 20
- 35

#### Pilot Ratio:

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

#### Adjustment if Required:

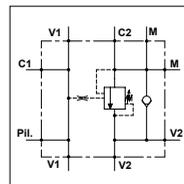
- Omit if not required
- Value

### WOS 30 - 2F PP

#### TECHNICAL DATA

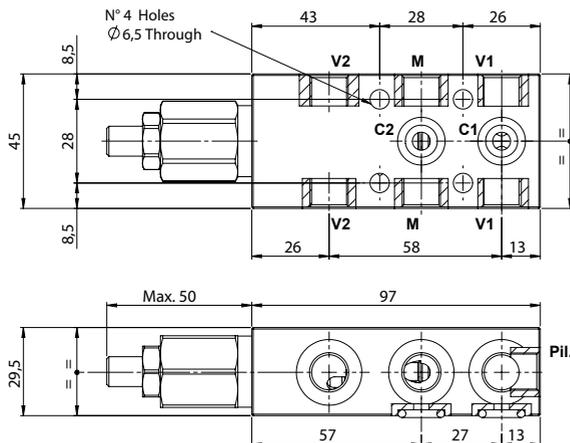
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,250 kg

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load

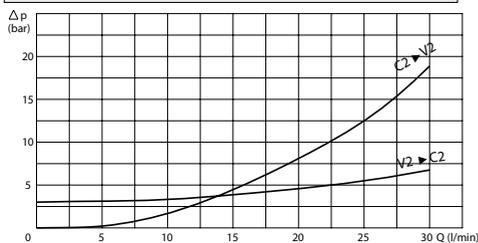


PORTS	
V1 - V2	1/4
C1 - C2	ø6
M - Pil.	1/4

Possibility 3/8 ports.  
Please contact our sales department.



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOS

30

2F

PP

Ports Size:

- 1/4
- 3/8

Springs:

- 20
- 35

Pilot Ratio:

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

Adjustment if Required:

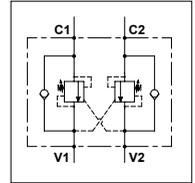
- Omit if not required
- Value

## WODS 30 - L

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 2,050 kg

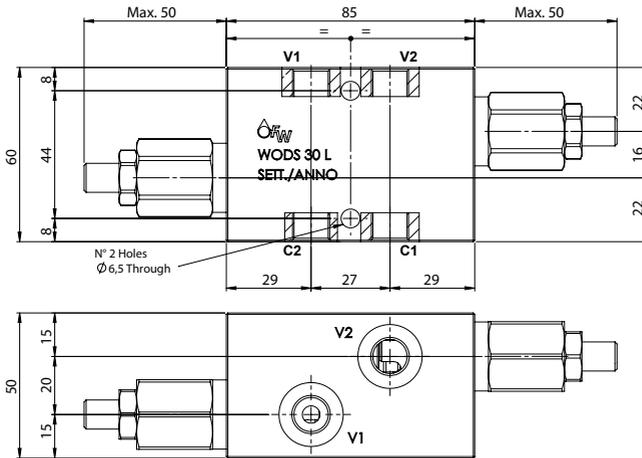
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



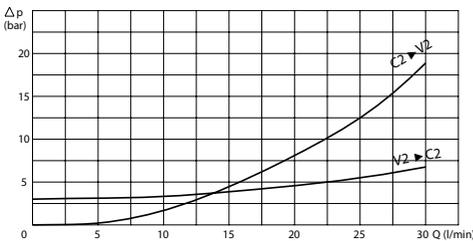
### PORTS

C1 - C2 V1 - V2	1/4
--------------------	-----

Possibility 3/8 ports.  
Please contact our sales department.



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WODS

30

L

**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

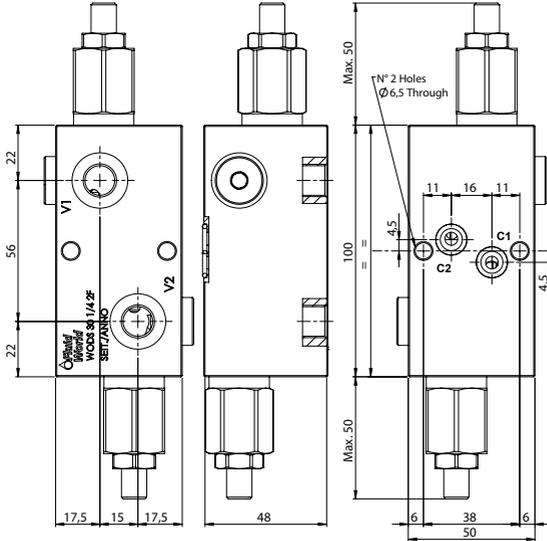
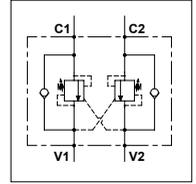
- Omit if not required
- Value

### WODS 30 - 2F

#### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,950 kg

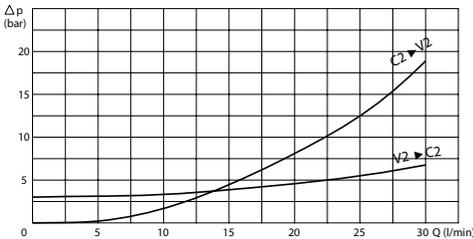
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS	
V1 - V2	1/4
C1 - C2	ø5

Possibility 3/8 ports.  
Please contact our sales department.

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODS

30

2F

Ports Size:

- 1/4
- 3/8

Springs:

- 20
- 35

Pilot Ratio:

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

Adjustment if Required:

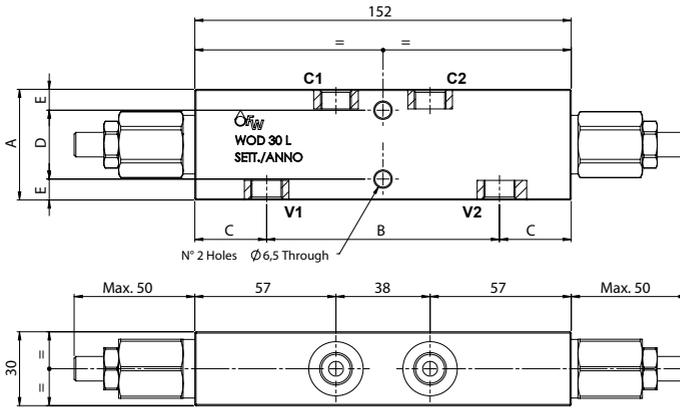
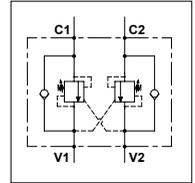
- Omit if not required
- Value

### WOD 30 - L

#### TECHNICAL DATA

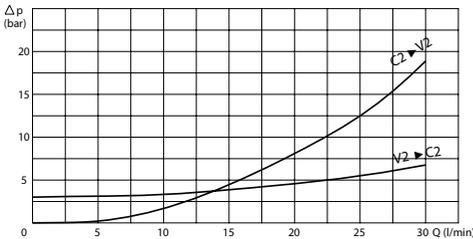
- Flow:** 30 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 8:1; 11:1)
- Weight:** See Table

- Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
C1 - C2 V1 - V2	1/4	3/8
DIMENSIONS		
A	45	50
B	94	92
C	29	30
D	28	28
E	8,5	11
Weight (kg)	1,700	1,820

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

30

L

Ports Size:

- 1/4
- 3/8

Springs:

- 20
- 35

Pilot Ratio:

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

Adjustment if Required:

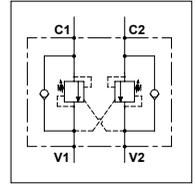
- Omit if not required
- Value

### WOD 30 - L A

#### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 250 bar
- **Materials:** Aluminium Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 0,850 kg

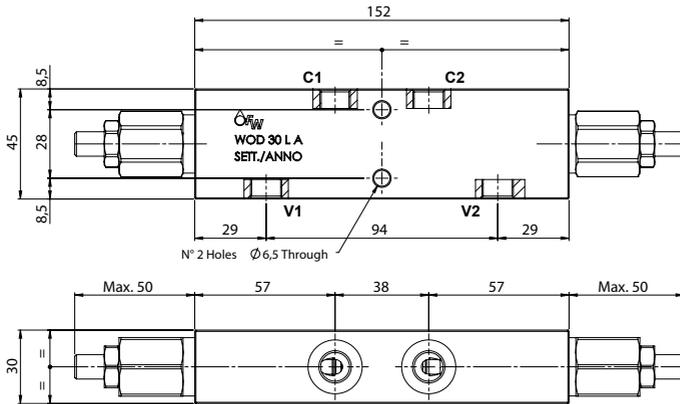
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



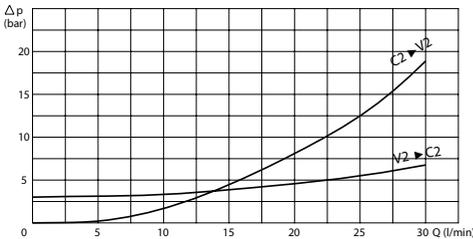
#### PORTS

C1 - C2  
V1 - V2

1/4



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

30

1/4

L

A

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

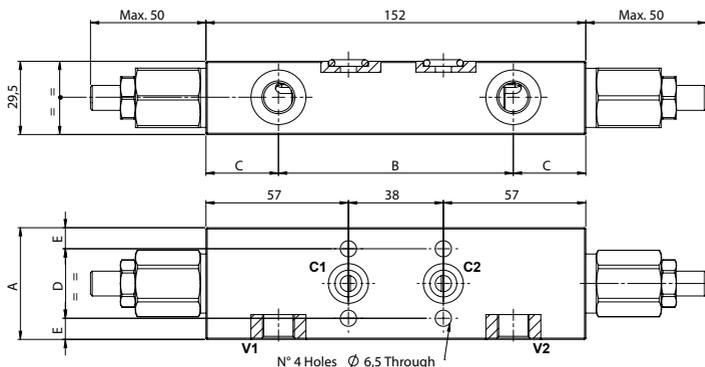
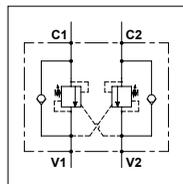
- Omit if not required
- Value

### WOD 30 - 2F

#### TECHNICAL DATA

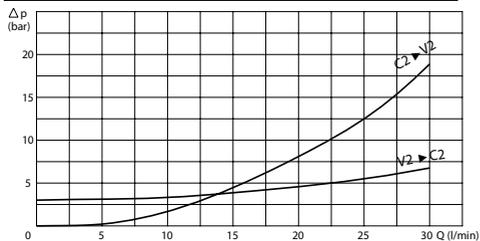
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** See Table

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
V1 - V2	1/4	3/8
C1 - C2	ø6,5	
DIMENSIONS		
A	45	50
B	94	92
C	29	30
D	28	28
E	8,5	11
Weight (kg)	1,650	1,780

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
Pilot ratio			170			280
4:1	60-210	70		80-350	120	
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

30

2F

**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

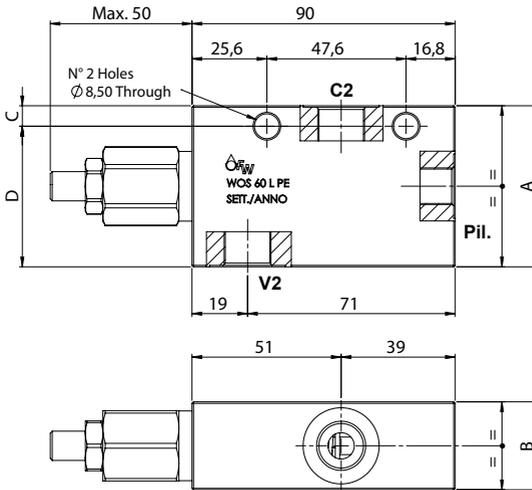
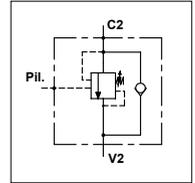
- Omit if not required
- Value

## WOS 60 - L PE

### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

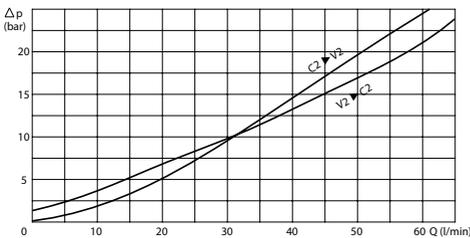
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



### PORTS

PORTS		
C2 - V2	3/8	1/2
Pil.	1/4	1/4
	3/8	
DIMENSIONS		
A	55	65
B	30	35
C	7	11
D	48	54
Weight (kg)	1,150	1,550

### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

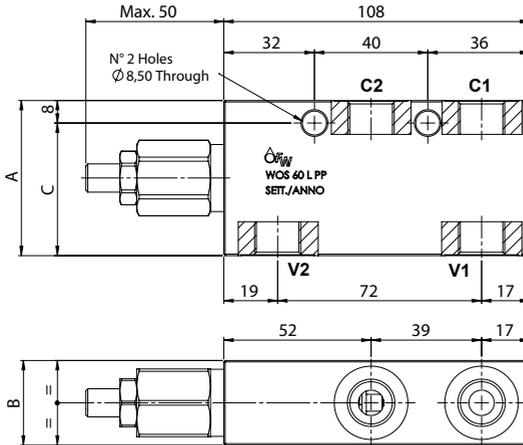
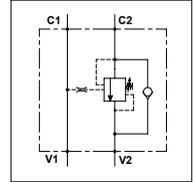
WOS	60		L	PE				
<b>Ports Size:</b>		<b>Pilot Port:</b>		<b>Springs:</b>		<b>Pilot Ratio:</b>		<b>Adjustment if Required:</b>
- 3/8 - 1/2		- Omit if 1/4 - 3/8		- 20 - 35		- Omit if 4:1 - 8 = 8:1 - 11 = 11:1		- Omit if not required - Value

### WOS 60 - L PP

#### TECHNICAL DATA

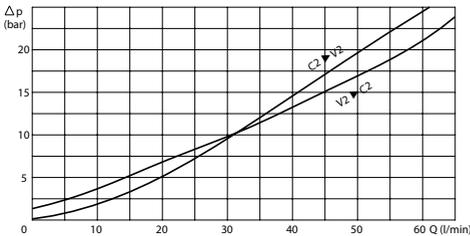
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
C1 - C2 V1 - V2	3/8	1/2
DIMENSIONS		
A	55	65
B	30	35
C	47	57
Weight (kg)	1,350	1,800

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

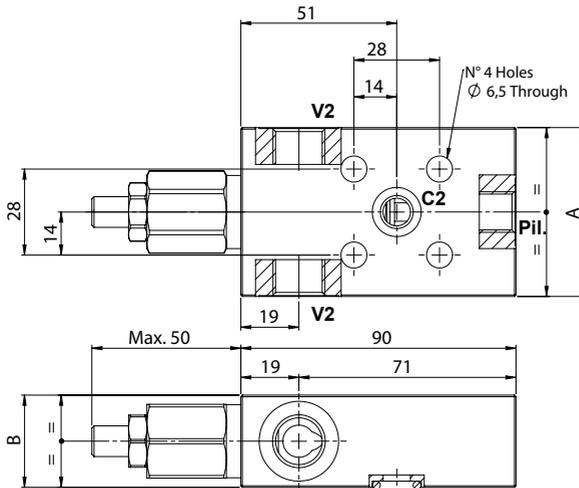
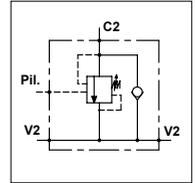
WOS	60		L	PP			
<b>Ports Size:</b>		- 3/8	- 1/2	<b>Springs:</b>		- 20	- 35
<b>Pilot Ratio:</b>		- Omit if 4:1	- 1 = 1:1	<b>Adjustment if Required:</b>		- Omit if not required	- Value
						- 8 = 8:1	- 11 = 11:1

### WOS 60 - 1F PE

#### TECHNICAL DATA

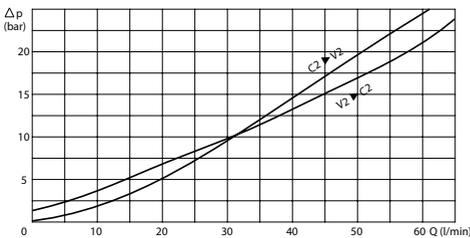
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
V2	3/8	1/2
C2	$\varnothing 9$	
Pil.	1/4	1/4
	3/8	
DIMENSIONS		
A	55	65
B	30	35
Weight (kg)	1.150	1.500

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOS

60

Ports Size:

1F

PE

Pilot Port:

Springs:

Pilot Ratio:

Adjustment if Required:

- 3/8  
- 1/2

- Omit if 1/4  
- 3/8

- 20  
- 35

- Omit if 4:1  
- 8 = 8:1  
- 11 = 11:1

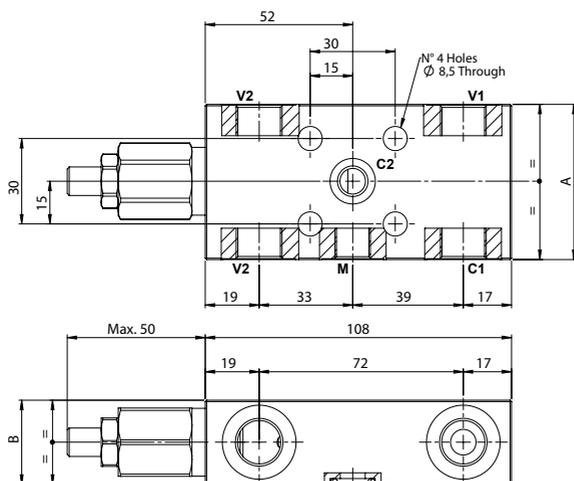
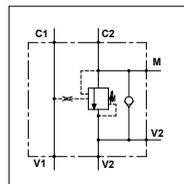
- Omit if not required  
- Value

### WOS 60 - 1F PP

#### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

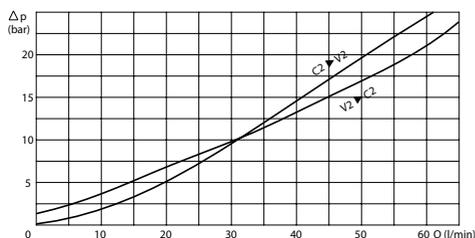
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



#### PORTS

C1 V1 - V2	3/8	1/2
C2	$\varnothing$ 9	
M	1/4	
DIMENSIONS		
A	55	65
B	30	35
Weight (kg)	1,300	1,740

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35			
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30	
4:1	60-210	70	170	80-350	120	280	
8:1	60-220	50		100-350	85		
11:1	60-250	90		80-350	150		

#### ORDERING CODE

WOS

60

1F

PP

**Ports Size:**

- 3/8
- 1/2

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

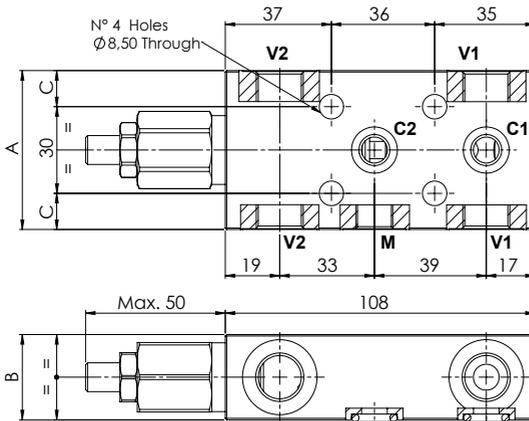
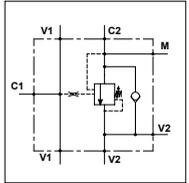
- Omit if not required
- Value

## WOS 60 - 2F PP

### TECHNICAL DATA

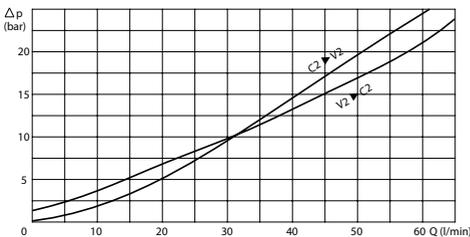
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
V1 - V2	3/8	1/2
C1 - C2	ø9	
M	1/4	
DIMENSIONS		
A	55	65
B	29,5	34,5
C	12,5	17,5
Weight (kg)	1,250	1,670

### PRESSURE DROP CURVES



### SPRINGS

Code	20			35			
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30	
4:1	60-210	70	170	80-350	120	280	
8:1	60-220	50		100-350	85		
11:1	60-250	90		80-350	150		

### ORDERING CODE

WOS

60

2F

PP

**Ports Size:**

- 3/8
- 1/2

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

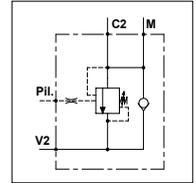
- Omit if not required
- Value

## WOS 60 - B PE

### TECHNICAL DATA

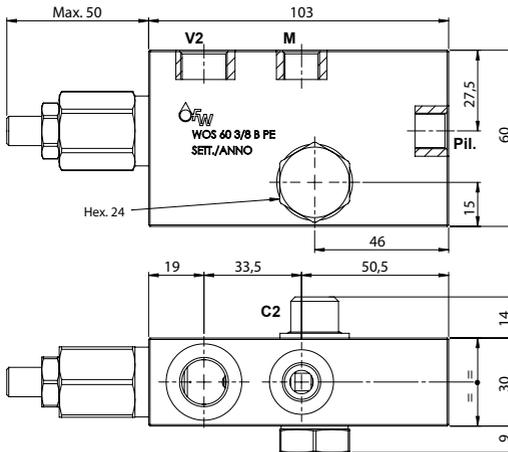
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,400 kg

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load

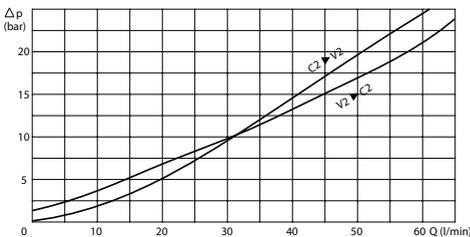


### PORTS

C2 - V2	3/8
M - Pii.	1/4



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOS

60

3/8

B

PE

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

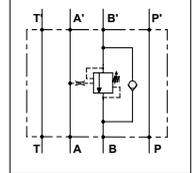
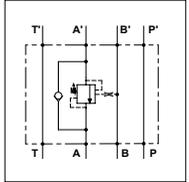
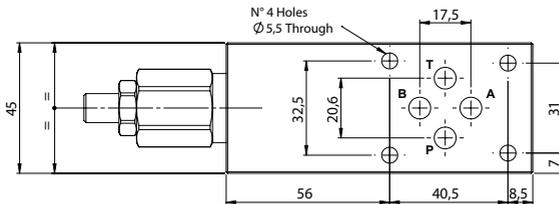
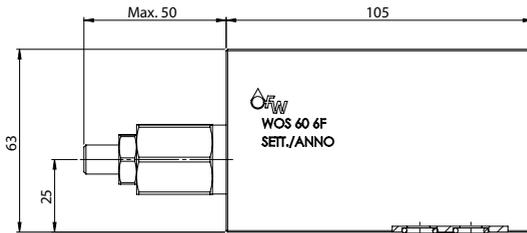
- Omit if not required
- Value

### WOS 60 6F

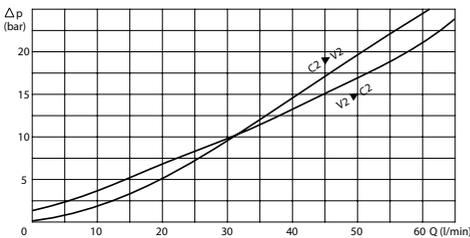
#### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar (250 bar)
- **Materials:** Steel Body (Aluminium body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,600 kg (0,750 kg)

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOS

60

6F

**Material Body:**  
- Omit if steel  
- A = Aluminium

**Setting Up:**  
- A  
- B

**Springs:**  
- 20  
- 35

**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

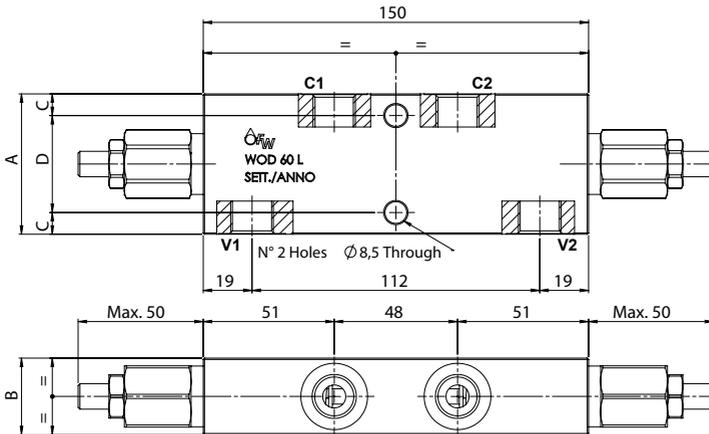
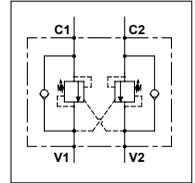
**Adjustment if Required:**  
- Omit if not required  
- Value

### WOD 60 - L

#### TECHNICAL DATA

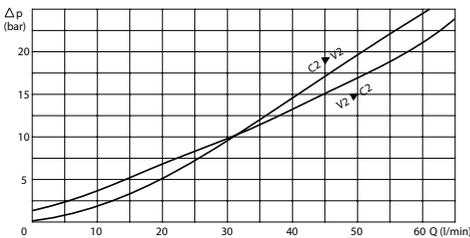
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
C1 - C2 V1 - V2	3/8	1/2
DIMENSIONS		
A	55	65
B	30	35
C	8,5	11
D	38	43
Weight (kg)	1,950	2,600

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

60

L

**Ports Size:**  
- 3/8  
- 1/2

**Springs:**  
- 20  
- 35

**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

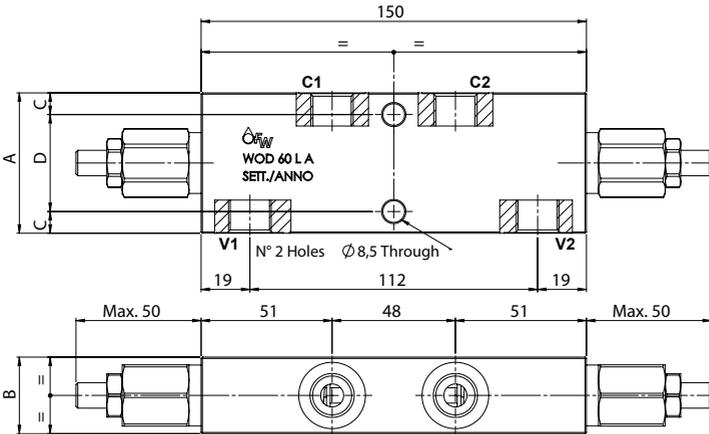
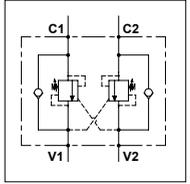
**Adjustment if Required:**  
- Omit if not required  
- Value

### WOD 60 - L A

#### TECHNICAL DATA

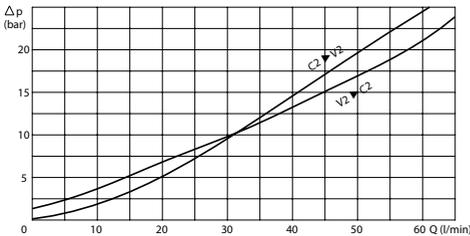
- Flow:** 60 l/min
- Max setting pressure:** 250 bar
- Materials:** Aluminium Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
C1 - C2 V1 - V2	3/8	1/2
DIMENSIONS		
A	55	65
B	30	35
C	8,5	11
D	38	43
Weight (kg)	0,950	1,250

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

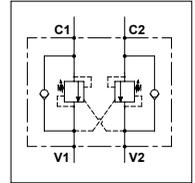
#### ORDERING CODE

WOD	60		L	A			
		<b>Ports Size:</b>			<b>Springs:</b>	<b>Pilot Ratio:</b>	<b>Adjustment if Required:</b>
		- 3/8			- 20	- Omit if 4:1	- Omit if not required
		- 1/2			- 35	- 1 = 1:1	- Value
						- 8 = 8:1	
						- 11 = 11:1	

### WOD 60 - L - SPOM

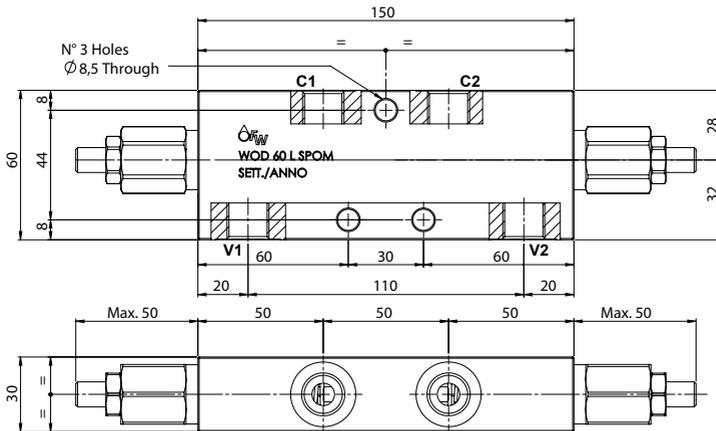
#### TECHNICAL DATA

- **Flow:** 60 l/min
  - **Max setting pressure:** 350 bar
  - **Materials:** Steel Body
  - **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
  - **Weight:** 2,100 kg
  - **Note:** Only on request, please contact our sales department
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load

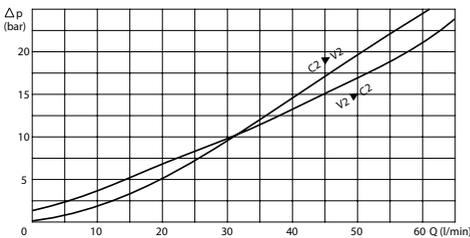


#### PORTS

C1 - C2 V1 - V2	3/8
--------------------	-----



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

60

3/8

L

SPOM

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

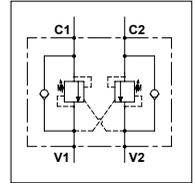
**Adjustment if Required:**

- Omit if not required
- Value

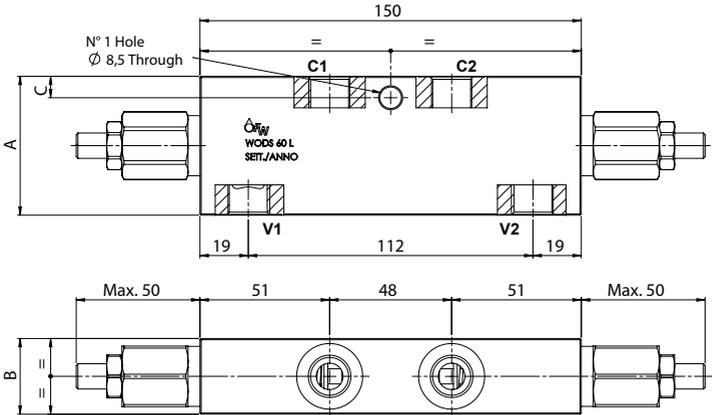
## WODS 60 - L

### TECHNICAL DATA

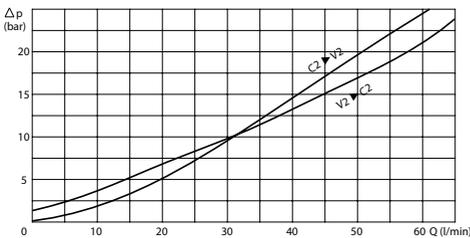
- **Flow:** 60 l/min
  - **Max setting pressure:** 350 bar
  - **Materials:** Steel Body
  - **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
  - **Weight:** See Table
  - **Note:** Only on request, please contact our sales department
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
C1 - C2 V1 - V2	3/8	1/2
DIMENSIONS		
A	55	65
B	30	35
C	8,5	11
Weight (kg)	2,000	2,650



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WODS

60

L

Ports Size:

- 3/8  
- 1/2

Springs:

- 20  
- 35

Pilot Ratio:

- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

Adjustment if Required:

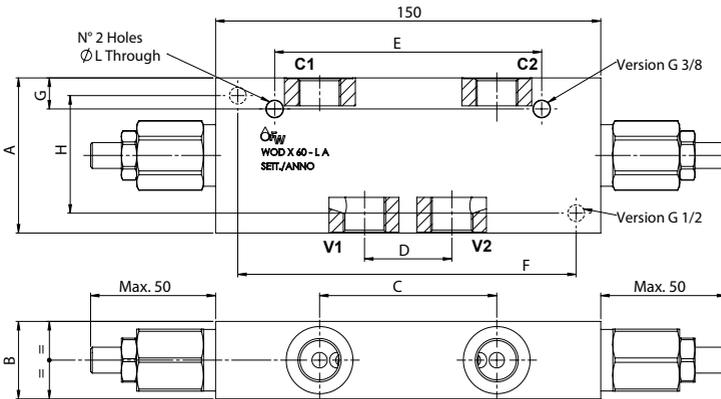
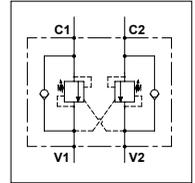
- Omit if not required  
- Value

### WOD X 60 - L A

#### TECHNICAL DATA

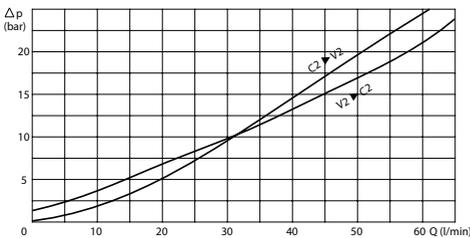
- Flow:** 60 l/min
- Max setting pressure:** 250 bar
- Materials:** Aluminium Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
C1 - C2 V1 - V2	3/8	1/2
DIMENSIONS		
A	60	70
B	30	35
C	69	80
D	34	36
E	104	-
F	-	125
G	12	-
H	-	54
L	6,5	8,5
Weight (kg)	1,020	1,255

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

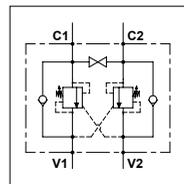
WOD	X	60		L	A			
			<b>Ports Size:</b>			<b>Springs:</b>	<b>Pilot Ratio:</b>	<b>Adjustment if Required:</b>
			- 3/8 - 1/2			- 20 - 35	- Omit if 4:1 - 1 = 1:1 - 8 = 8:1 - 11 = 11:1	- Omit if not required - Value

## WOD X 60 - L A BP

### TECHNICAL DATA

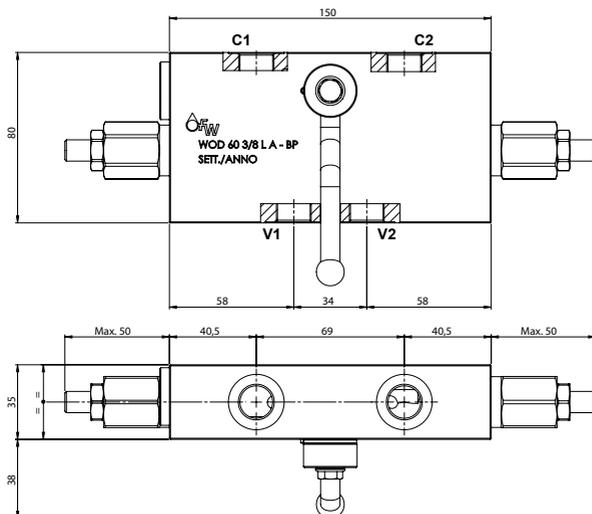
- **Flow:** 60 l/min
- **Max setting pressure:** 250 bar
- **Materials:** Aluminium Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,570 kg

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load

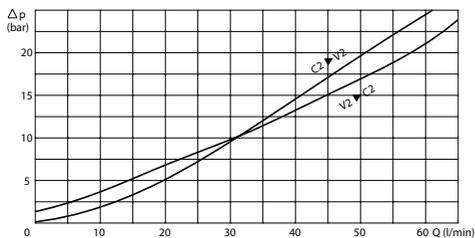


### PORTS

C1 - C2 V1 - V2	3/8
--------------------	-----



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOD

X

60

3/8

L

A

BP

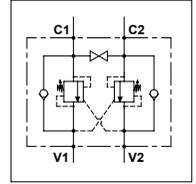
- Springs:** - 20  
- 35
- Pilot Ratio:** - Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1
- Adjustment if Required:** - Omit if not required  
- Value

## WOD 60 - 2F A BP

### TECHNICAL DATA

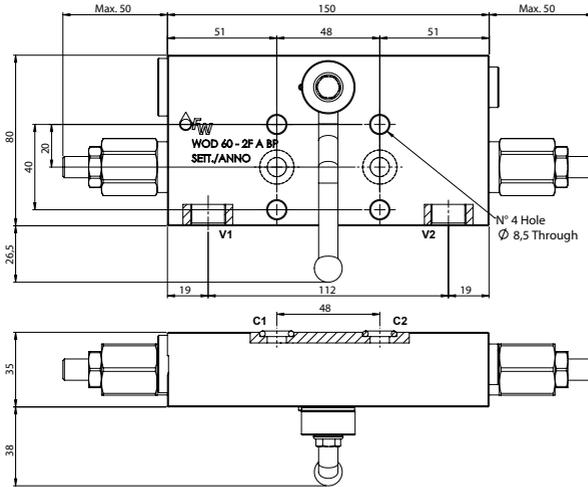
- **Flow:** 60 l/min
- **Max setting pressure:** 250 bar
- **Materials:** Aluminium Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,550 kg

- **Note:** Pressure setting must be 30 % higher that pressure induced by the load

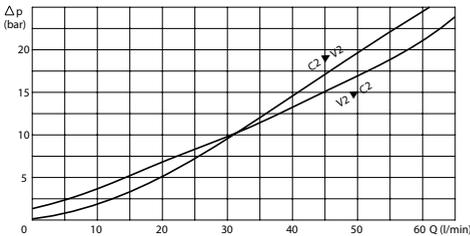


### PORTS

V1 - V2	3/8
C1 - C2	ø9



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOD

60

3/8

2F

A

BP

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

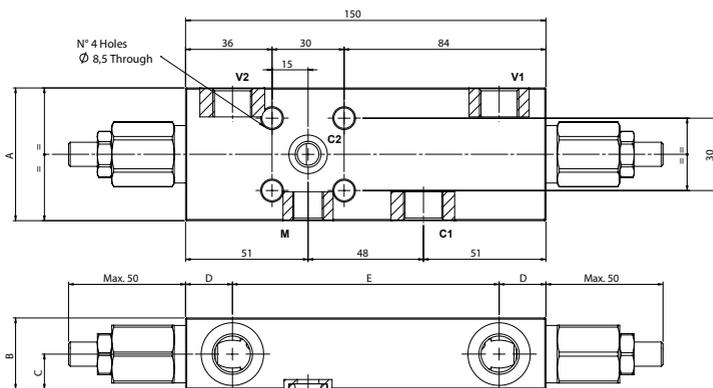
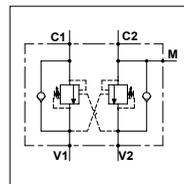
- Omit if not required
- Value

### WOD 60 - 1F

#### TECHNICAL DATA

- Flow:** 60 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

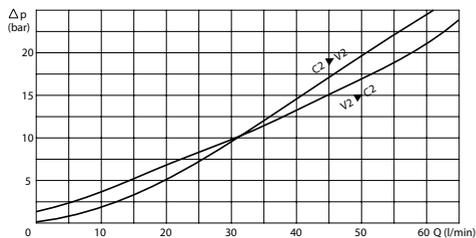
- Note:** Pressure setting must be 30 % higher that pressure induced by the load



#### PORTS

C1 V1 - V2	3/8	1/2
C2	ø9	
M	1/4	
DIMENSIONS		
A	55	65
B	29,5	34,5
C	14,5	17
D	19	18
E	112	114
Weight (kg)	1,700	2,100

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

60

**Ports Size:**  
- 3/8  
- 1/2

1F

**Springs:**  
- 20  
- 35

**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

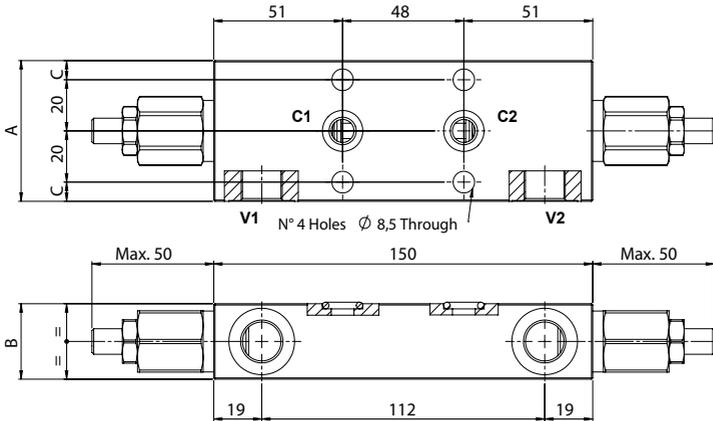
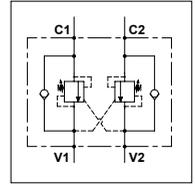
**Adjustment if Required:**  
- Omit if not required  
- Value

### WOD 60 - 2F

#### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

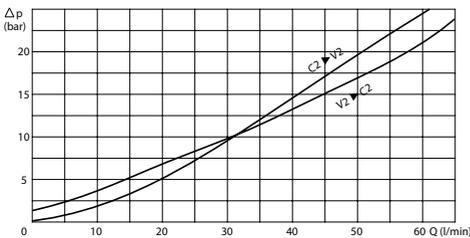
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



#### PORTS

V1 - V2	3/8	1/2
C1 - C2	$\varnothing$ 9	
DIMENSIONS		
A	55	65
B	29,5	34,5
C	7,5	12,5
Weight (kg)	1,950	2,620

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

60

2F

**Ports Size:**  
- 3/8  
- 1/2

**Springs:**  
- 20  
- 35

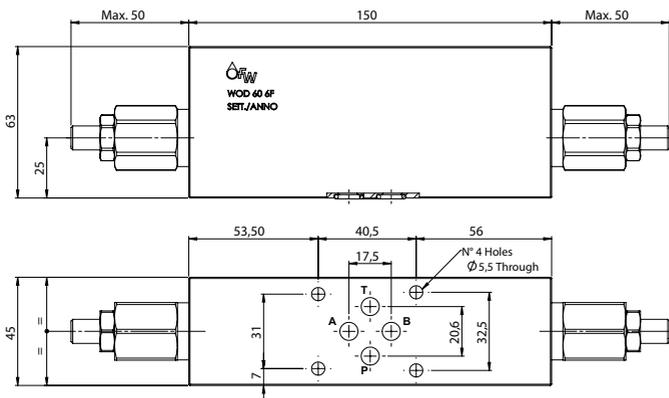
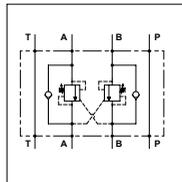
**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

**Adjustment if Required:**  
- Omit if not required  
- Value

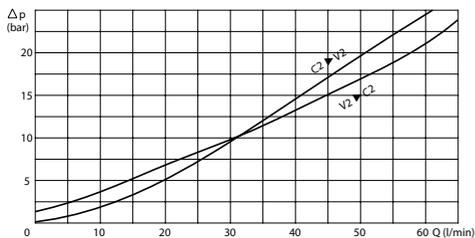
### WOD 60 6F

#### TECHNICAL DATA

- **Flow:** 60 l/min
  - **Max setting pressure:** 350 bar (250 bar)
  - **Materials:** Steel Body (Aluminium body if required)
  - **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
  - **Weight:** 3,350 kg (1,560 kg)
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

60

6F

**Material Body:**  
- Omit if steel  
- A = Aluminium

**Springs:**  
- 20  
- 35

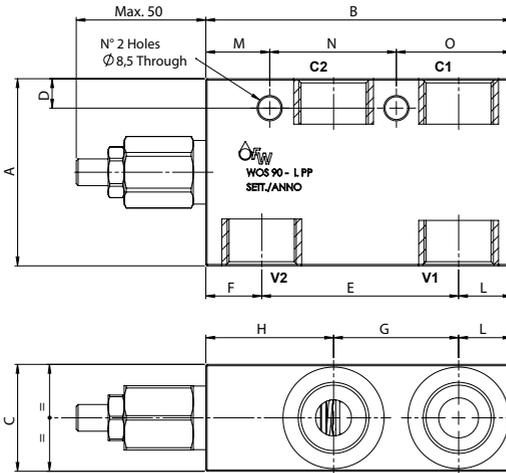
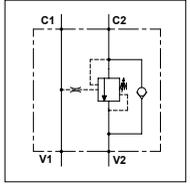
**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

**Adjustment if Required:**  
- Omit if not required  
- Value

## WOS 90 - L PP

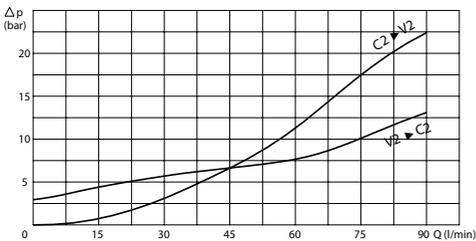
### TECHNICAL DATA

- **Flow:** 90 l/min
  - **Max setting pressure:** 350 bar
  - **Materials:** Steel Body
  - **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
  - **Weight:** See Table
  - **Note:** Only on request, please contact our sales department
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
C1 - C2 V1 - V2	1/2	3/4
DIMENSIONS		
A	65	70
B	108	115
C	35	40
D	8	11
E	72	74
F	19	21
G	39	47
H	52	48
L	17	20
M	32	24
N	40	47,6
O	36	43,4
Weight (kg)	1,800	2,700

### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

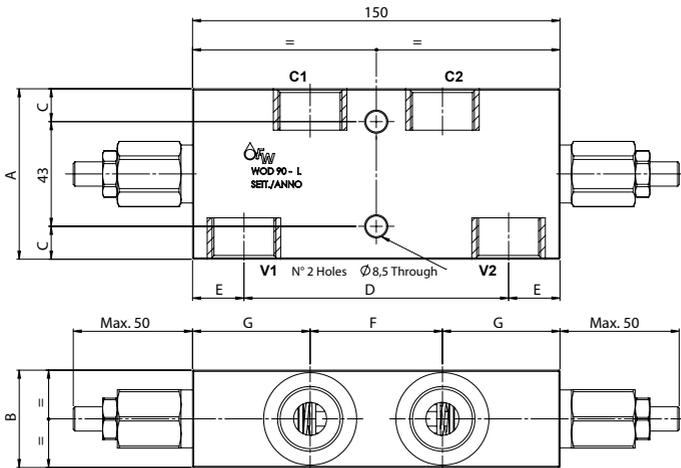
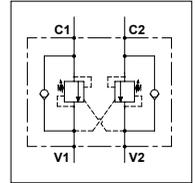
### ORDERING CODE

WOS	90		L	PP			
		<b>Ports Size:</b>			<b>Springs:</b>	<b>Pilot Ratio:</b>	<b>Adjustment if Required:</b>
		- 1/2			- 20	- Omit if 4:1	- Omit if not required
		- 3/4			- 35	- 1 = 1:1	- Value
						- 8 = 8:1	
						- 11 = 11:1	

### WOD 90 - L

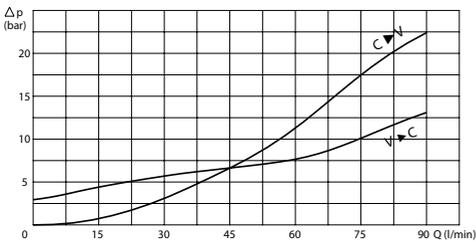
#### TECHNICAL DATA

- **Flow:** 90 l/min
  - **Max setting pressure:** 350 bar
  - **Materials:** Steel Body
  - **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
  - **Weight:** See Table
  - **Note:** Only on request, please contact our sales department
- **Note:** Pressure setting must be 30 % higher than pressure induced by the load



PORTS		
C1 - C2 V1 - V2	1/2	3/4
DIMENSIONS		
A	65	70
B	35	40
C	11	13,5
D	112	108
E	19	21
F	48	54
G	51	48
Weight (kg)	2,600	3,650

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

90

L

Ports Size:

- 1/2
- 3/4

Springs:

- 20
- 35

Pilot Ratio:

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

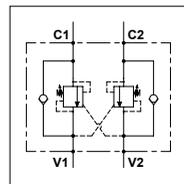
Adjustment if Required:

- Omit if not required
- Value

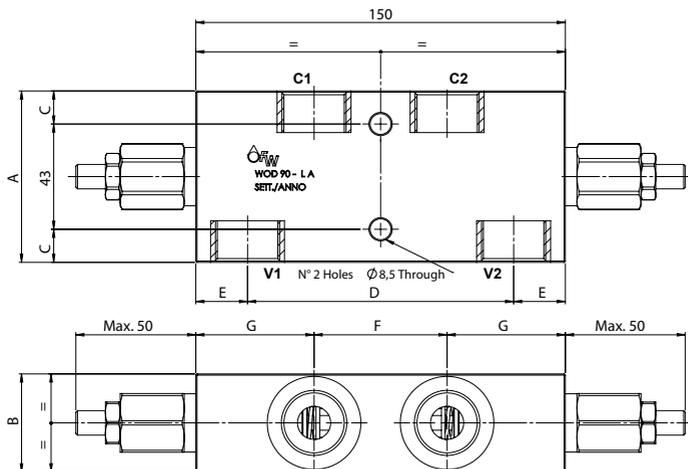
### WOD 90 - L A

#### TECHNICAL DATA

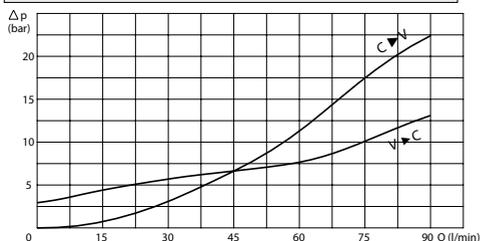
- Flow:** 90 l/min
  - Max setting pressure:** 250 bar
  - Materials:** Aluminium Body
  - Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
  - Weight:** See Table
  - Note:** Only on request, please contact our sales department
- Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS		
C1 - C2 V1 - V2	1/2	3/4
DIMENSIONS		
A	65	70
B	35	40
C	11	13,5
D	112	108
E	19	21
F	48	54
G	51	48
Weight (kg)	1,250	1,860



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

90

L

A

**Ports Size:**

- 1/2
- 3/4

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

- Omit if not required
- Value



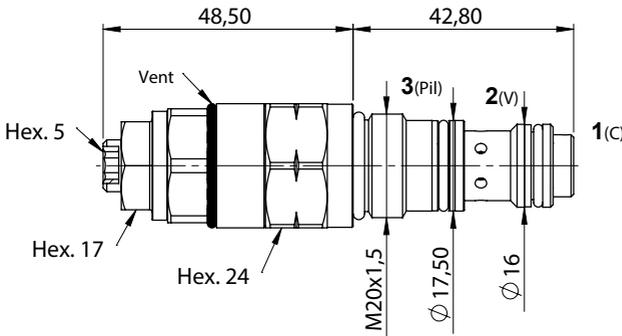
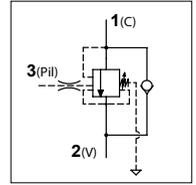
**FULLY COMPENSATED COUNTERBALANCE VALVES**  
*VALVOLE OVERCENTER COMPLETAMENTE COMPENSATA*



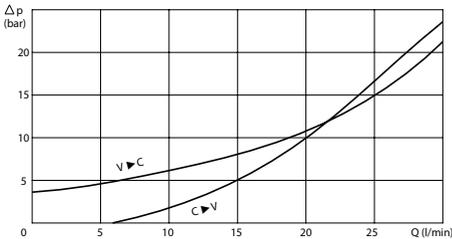
## WOCFC 30 M20

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** FW2003100
- **Installation torque:** 30-35 Nm
- **Weight:** 0,150 kg



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4,5:1	50-210	50	170	80-350	70	280

### ORDERING CODE

WOCFC

30

M20

Springs:

- 20
- 35

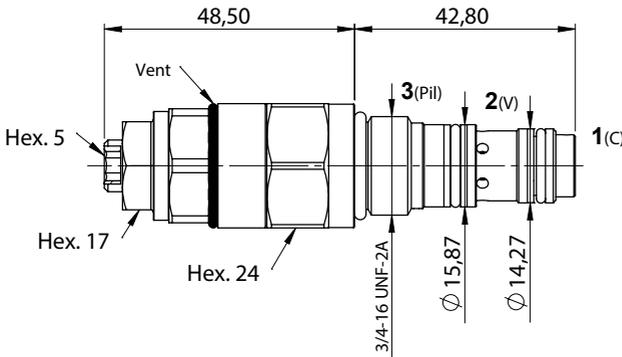
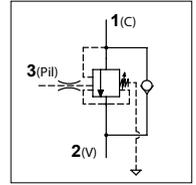
Adjustment if Required:

- Omit if not required
- Value

## WOCFC 30 S08

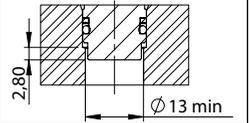
### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** See table
- **Installation torque:** 30-35 Nm
- **Weight:** 0,150 kg

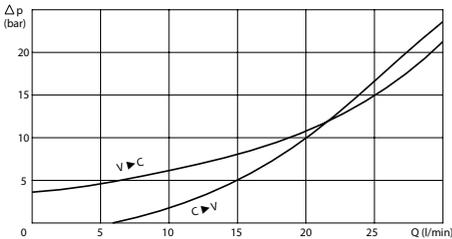


### CAVITY

FW3403001 with the addition of a minimum hole of  $\varnothing 13$  to house the valve nose.



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4,5:1	50-210	50	170	80-350	70	280

### ORDERING CODE

WOCFC

30

S08

Springs:

- 20
- 35

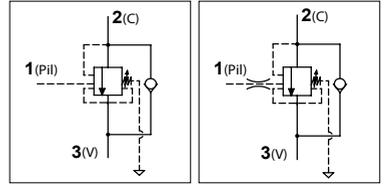
Adjustment if Required:

- Omit if not required
- Value

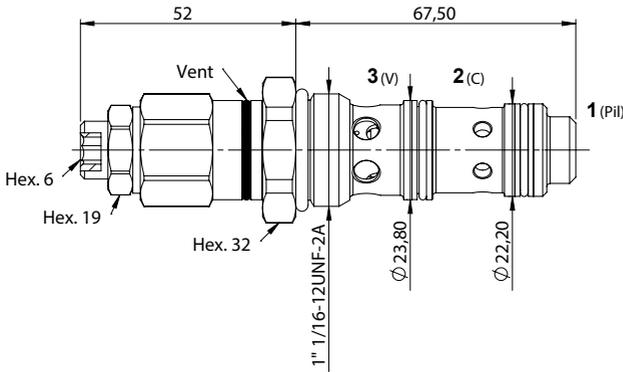
## WOCFC 60

### TECHNICAL DATA

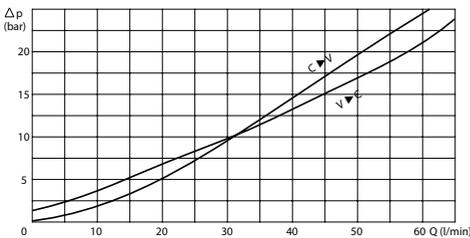
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** FW11160302
- **Installation torque:** 60-65 Nm
- **Weight:** 0,280 kg
- **Note:** It's not SAE cavity



With orifice



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOCFC

60

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Orifice if Required:**

- Omit if not required
- P05 = Orifice 0,5

**Adjustment if Required:**

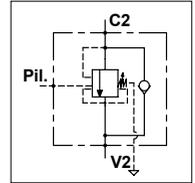
- Omit if not required
- Value

## WOSFC 30 - L PE

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,100 kg

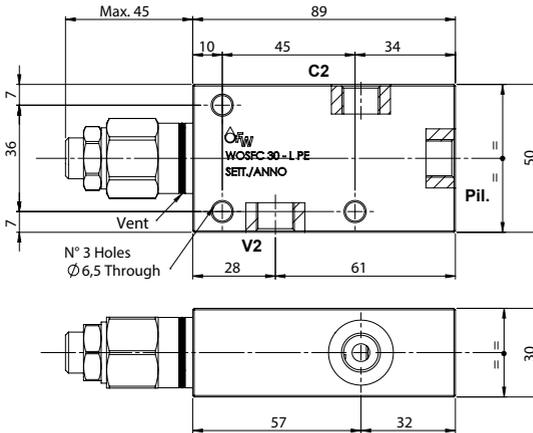
- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.



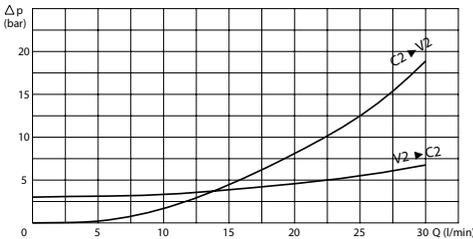
### PORTS

C2 - V2 Pil.	1/4
-----------------	-----

Possibility 3/8 ports.  
Please contact our sales department.



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOSFC    30         L    PE    1/4               

**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

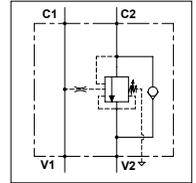
- Omit if not required
- Value

## WOSFC 30 - L PP

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,300 kg

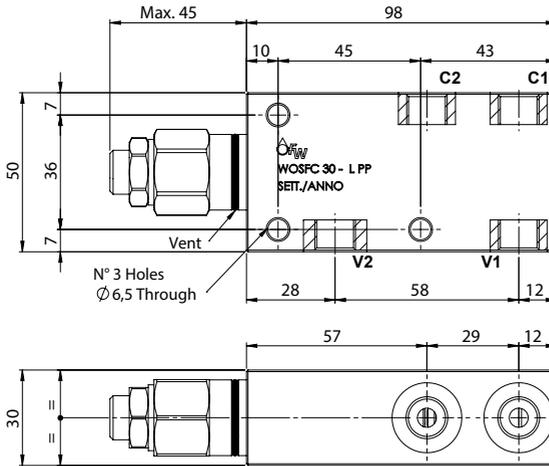
- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.



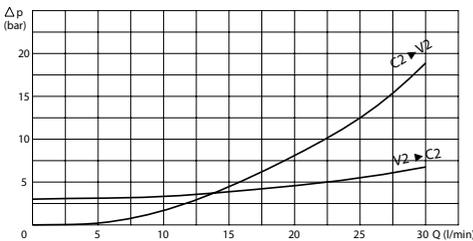
### PORTS

C1 - C2 V1 - V2	1/4
--------------------	-----

Possibility 3/8 ports.  
Please contact our sales department.



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOSFC

30

L

PP

**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

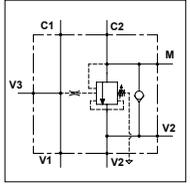
- Omit if not required
- Value

### WOSFC 30 - 1F PP

#### TECHNICAL DATA

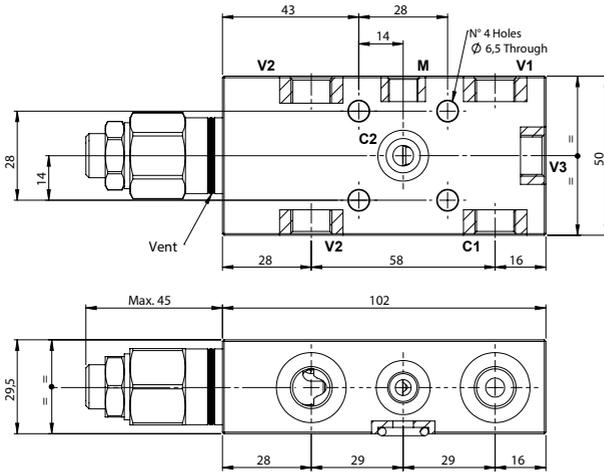
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,250 kg

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.

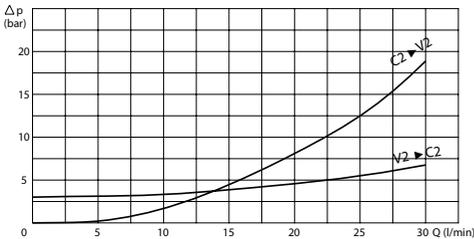


PORTS	
C1 - V3 V1 - V2	1/4
C2	ø6
M	1/4

Possibility 3/8 ports.  
Please contact our sales department.



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOSFC 30 [ ] 1F PP [ ] [ ] [ ]

**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

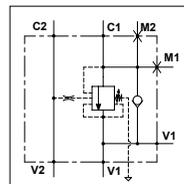
- Omit if not required
- Value

## WOSFC 30 - 1F PP - SPNS

### TECHNICAL DATA

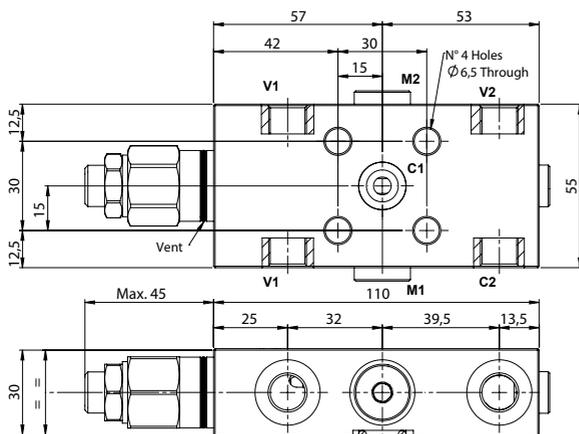
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,350 kg

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.

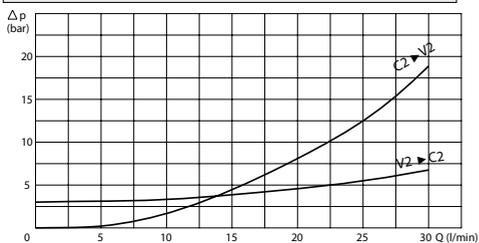


PORTS	
C2 V1 - V2	1/4
C1	ø6
M1 - M2	1/4

Possibility 3/8 ports.  
Please contact our sales department.



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOSFC 30 [ ] 1F PP [ ] [ ] [ ] SPNS

#### Ports Size:

- 1/4
- 3/8

#### Springs:

- 20
- 35

#### Pilot Ratio:

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

#### Adjustment if Required:

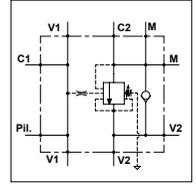
- Omit if not required
- Value

### WOSFC 30 - 2F PP

#### TECHNICAL DATA

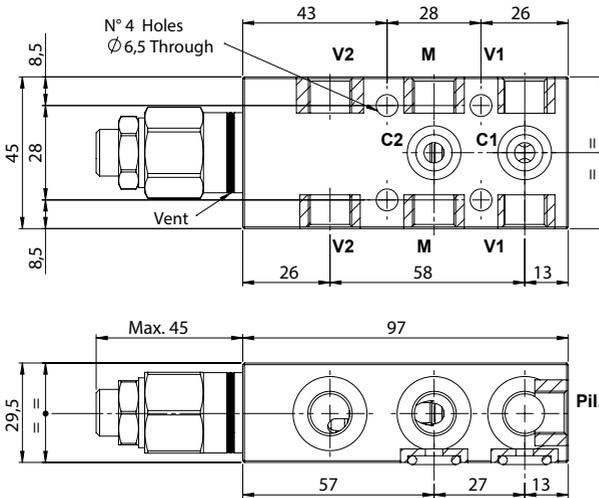
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,250 kg

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.

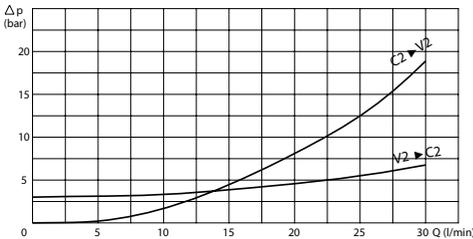


PORTS	
V1 - V2	1/4
C1 - C2	ø6
M - Pil.	1/4

Possibility 3/8 ports.  
Please contact our sales department.



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOSFC

30

2F

PP

**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

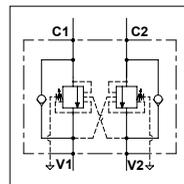
- Omit if not required
- Value

## WODSFC 30 - L

### TECHNICAL DATA

- Flow:** 30 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 8:1; 11:1)
- Weight:** 2,050 kg

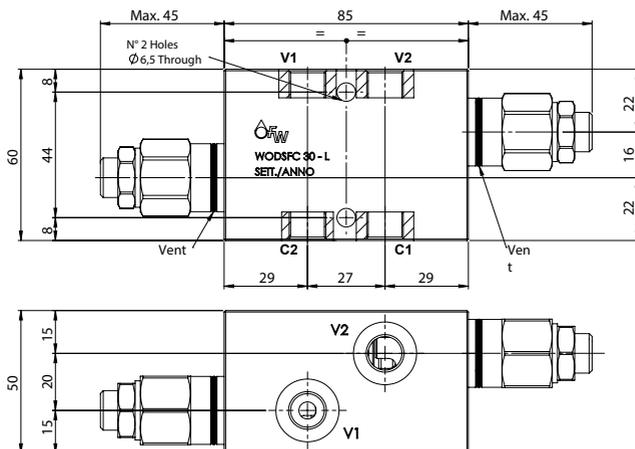
- Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



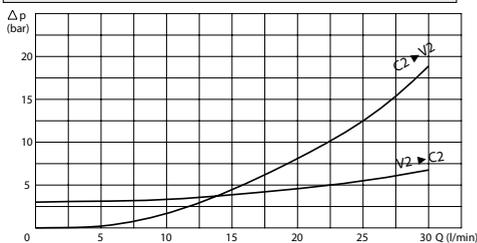
### PORTS

C1 - C2 V1 - V2	1/4
--------------------	-----

Possibility 3/8 ports.  
Please contact our sales department.



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WODSFC

30

L

Ports Size:

- 1/4
- 3/8

Springs:

- 20
- 35

Pilot Ratio:

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

Adjustment if Required:

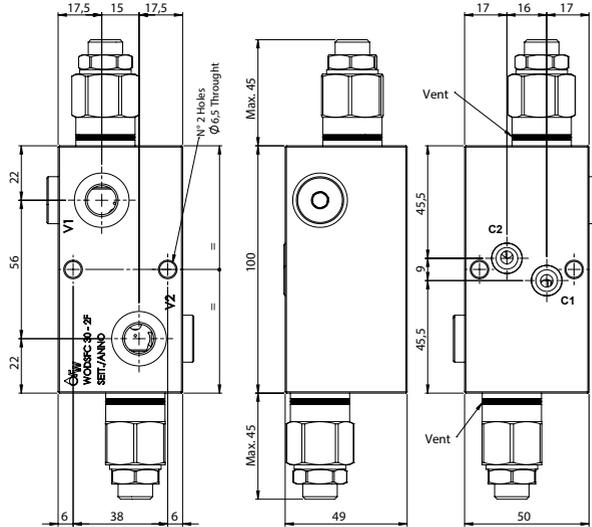
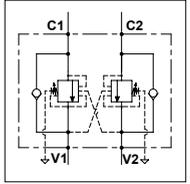
- Omit if not required
- Value

### WODSFC 30 - 2F

#### TECHNICAL DATA

- Flow:** 30 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 8:1; 11:1)
- Weight:** 1,950 kg

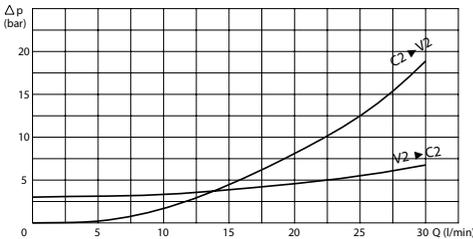
- Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



PORTS	
V1 - V2	1/4
C1 - C2	ø5

Possibility 3/8 ports.  
Please contact our sales department.

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODSFC
30
 
2F
 
 
 

**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

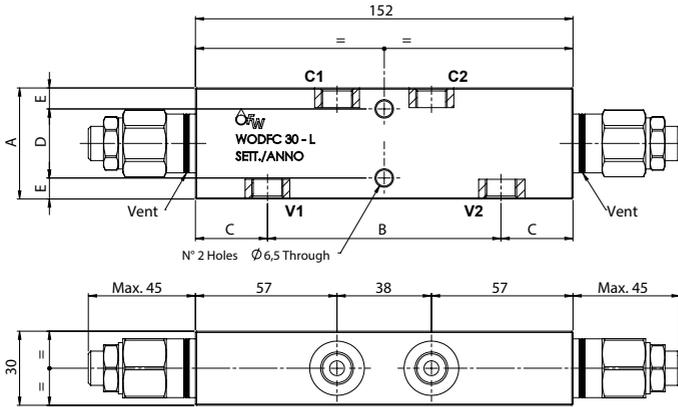
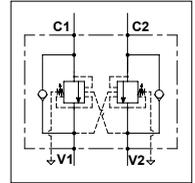
- Omit if not required
- Value

### WODFC 30 - L

#### TECHNICAL DATA

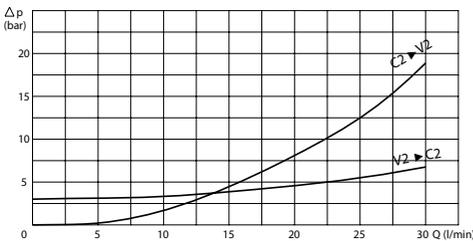
- Flow:** 30 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 8:1; 11:1)
- Weight:** See Table

- Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



PORTS		
C1 - C2 V1 - V2	1/4	3/8
DIMENSIONS		
A	45	50
B	94	92
C	29	30
D	28	8,5
E	28	11
Weight (kg)	1,700	1,820

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODFC

30

L

Ports Size:

- 1/4
- 3/8

Springs:

- 20
- 35

Pilot Ratio:

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

Adjustment if Required:

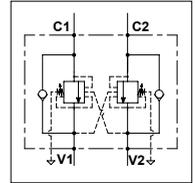
- Omit if not required
- Value

### WODFC 30 - L A

#### TECHNICAL DATA

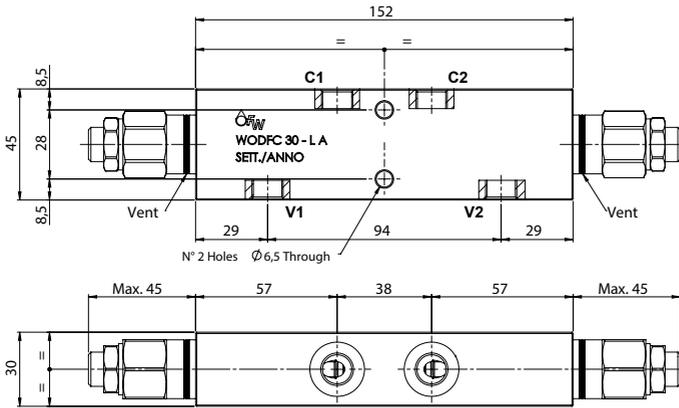
- Flow:** 30 l/min
- Max setting pressure:** 250 bar
- Materials:** Aluminium Body
- Pilot ratio:** 4:1 (if request 8:1; 11:1)
- Weight:** 0,850 kg

- Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.

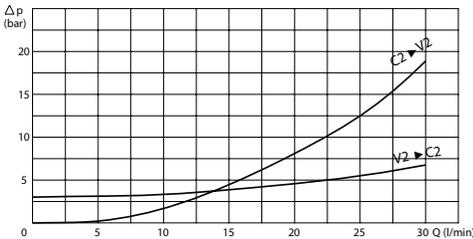


#### PORTS

C1 - C2 V1 - V2	1/4
--------------------	-----



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODFC

30

1/4

L

A

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

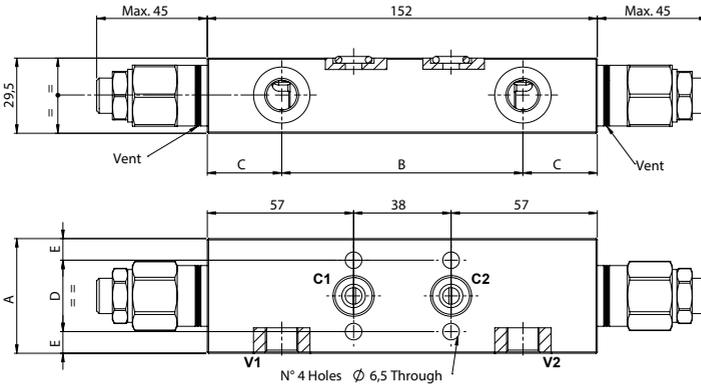
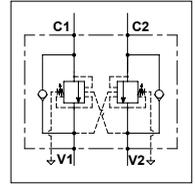
- Omit if not required
- Value

### WODFC 30 - 2F

#### TECHNICAL DATA

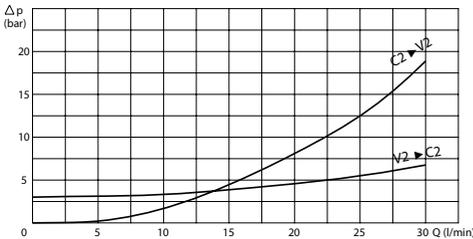
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** See Table

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



PORTS		
V1 - V2	1/4	3/8
C1 - C2	$\varnothing$ 6,5	
DIMENSIONS		
A	45	50
B	94	92
C	29	30
D	28	28
E	8,5	11
Weight (kg)	1,650	1,780

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODFC

30

2F

**Ports Size:**

- 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

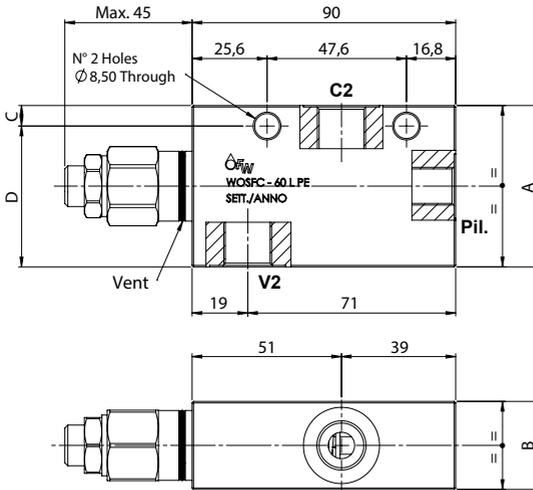
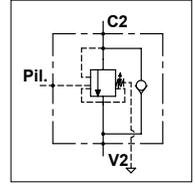
- Omit if not required
- Value

## WOSFC 60 - L PE

### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

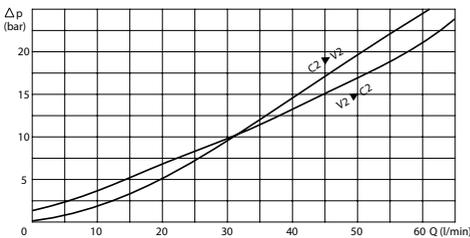
- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



### PORTS

PORTS		
C2 - V2	3/8	1/2
Pil.	1/4	1/4
	3/8	
DIMENSIONS		
A	55	65
B	30	35
C	7	11
D	48	54
Weight (kg)	1,150	1,550

### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOSFC 60 [ ] L PE [ ] [ ] [ ] [ ]

**Ports Size:**

- 3/8
- 1/2

**Pilot Port:**

- Omit if 1/4
- 3/8

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

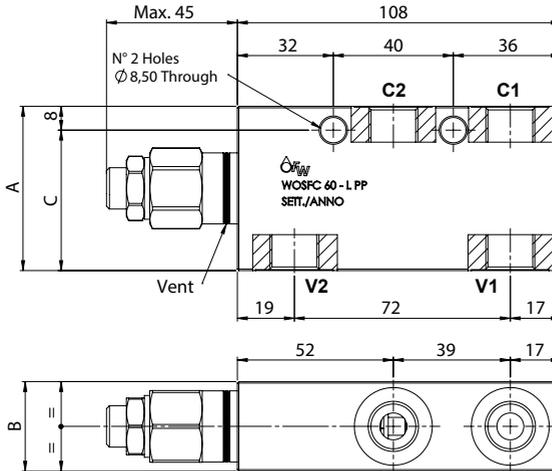
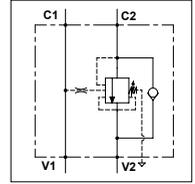
- Omit if not required
- Value

## WOSFC 60 - L PP

### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** - Pressure setting must be 30 % higher than pressure induced by the load.
- Recommended for use with closed center spools.



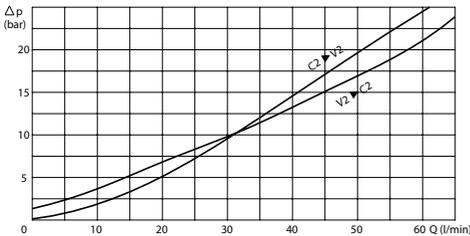
### PORTS

C1 - C2 V1 - V2	3/8	1/2
--------------------	-----	-----

### DIMENSIONS

A	55	65
B	30	35
C	47	57
Weight (kg)	1,350	1,800

### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOSFC

60

L

PP

**Ports Size:**

- 3/8
- 1/2

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

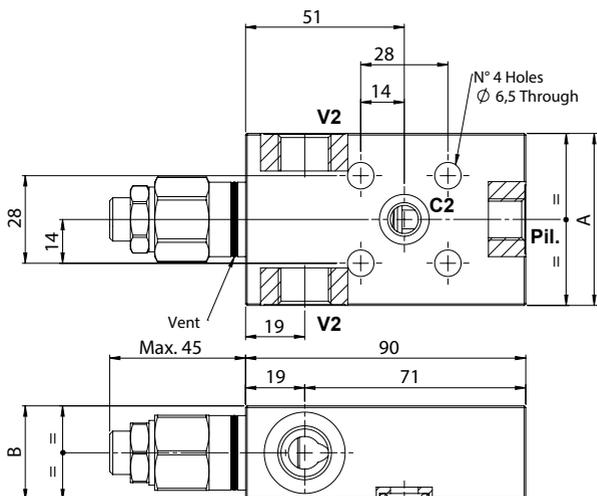
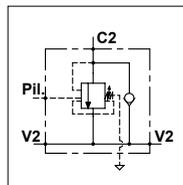
- Omit if not required
- Value

# WOSFC 60 - 1F PE

### TECHNICAL DATA

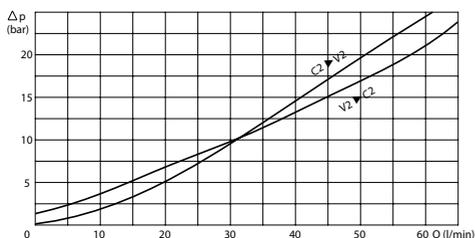
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.



PORTS		
V2	3/8	1/2
C2	Ø9	
Pil.	1/4	1/4
	3/8	
DIMENSIONS		
A	55	65
B	30	35
Weight (kg)	1.150	1.500

### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOSFC

60

1F

PE

Ports Size:

- 3/8
- 1/2

Pilot Port:

- Omit if 1/4
- 3/8

Springs:

- 20
- 35

Pilot Ratio:

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

Adjustment if Required:

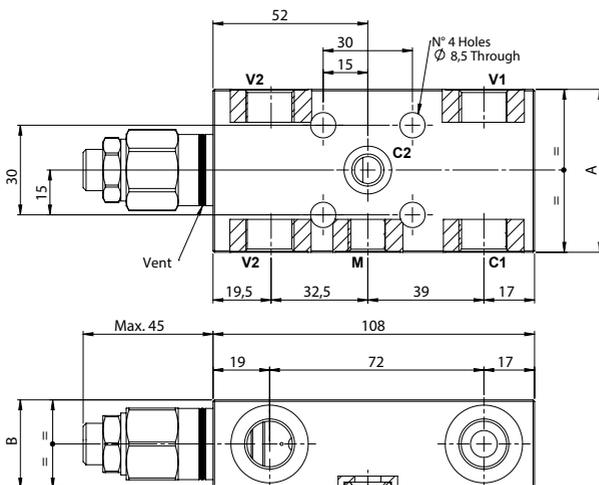
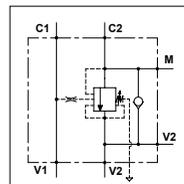
- Omit if not required
- Value

### WOSFC 60 - 1F PP

#### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

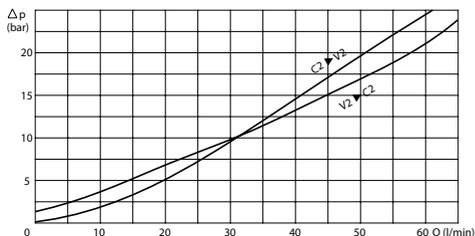
- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.



#### PORTS

PORTS		
C1 V1 - V2	3/8	1/2
C2	ø9	
M	1/4	
DIMENSIONS		
A	55	65
B	30	35
Weight (kg)	1,300	1,740

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOSFC

60

1F

PP

**Ports Size:**

- 3/8
- 1/2

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

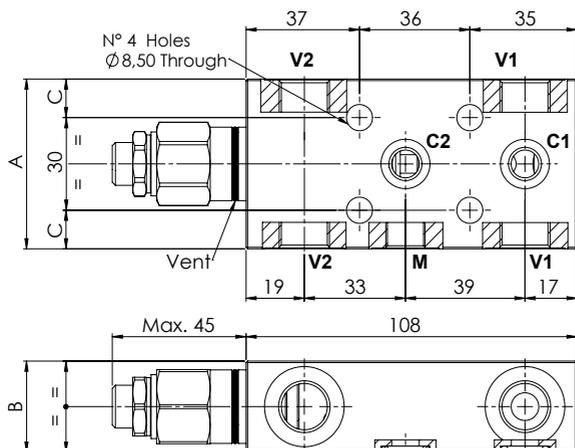
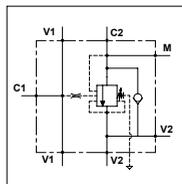
- Omit if not required
- Value

### WOSFC 60 - 2F PP

#### TECHNICAL DATA

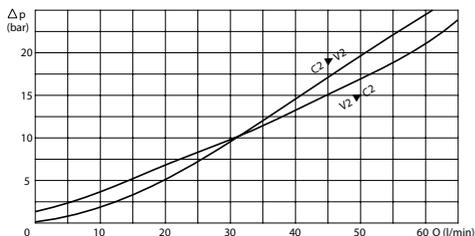
- Flow:** 60 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- Note:** - Pressure setting must be 30 % higher than pressure induced by the load.
- Recommended for use with closed center spools.



PORTS		
V1 - V2	3/8	1/2
C1 - C2	ø9	
M	1/4	
DIMENSIONS		
A	55	65
B	29,5	34,5
C	12,5	17,5
Weight (kg)	1,250	1,670

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOSFC

60

2F

PP

**Ports Size:**

- 3/8
- 1/2

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

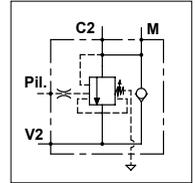
- Omit if not required
- Value

## WOSFC 60 - B PE

### TECHNICAL DATA

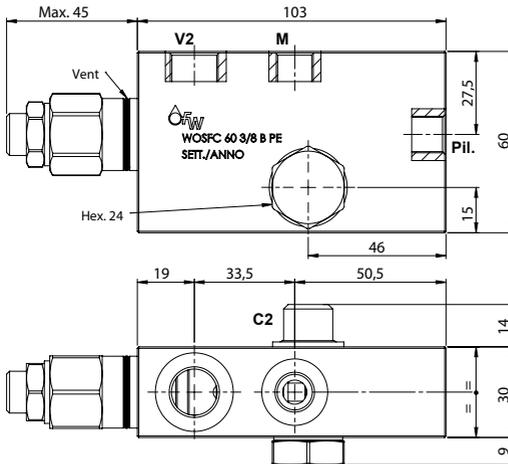
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,400 kg

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.

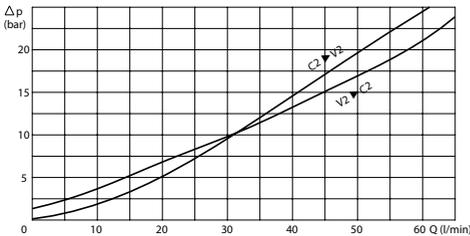


### PORTS

C2 - V2	3/8
M - Pil.	1/4



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOSFC    60    3/8    B    PE

### Springs:

- 20
- 35

### Pilot Ratio:

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

### Adjustment if Required:

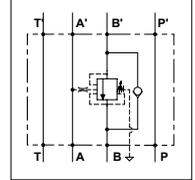
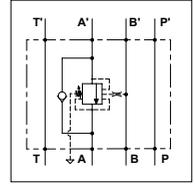
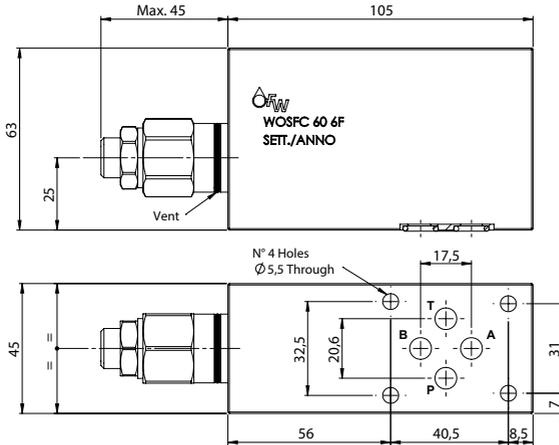
- Omit if not required
- Value

### WOSFC 60 6F

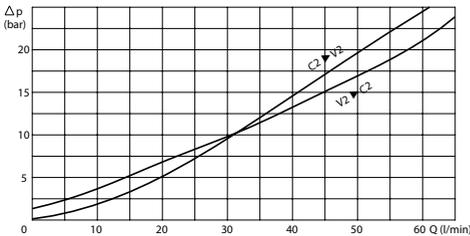
#### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar (250 bar)
- **Materials:** Steel Body (Aluminium body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,600 kg (0,750 kg)

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOSFC

60

6F

**Material Body:**  
- Omit if steel  
- A = Aluminium

**Setting Up:**  
- A  
- B

**Springs:**  
- 20  
- 35

**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

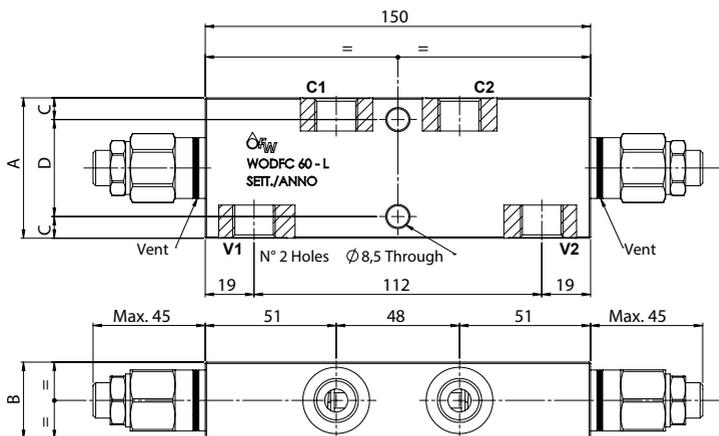
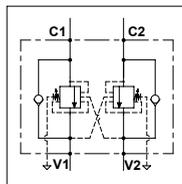
**Adjustment if Required:**  
- Omit if not required  
- Value

### WODFC 60 - L

#### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** - Pressure setting must be 30 % higher than pressure induced by the load.  
- Recommended for use with closed center spools.



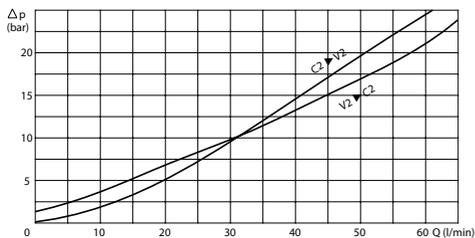
#### PORTS

C1 - C2 V1 - V2	3/8	1/2
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#### DIMENSIONS

A	55	65
B	30	35
C	8,5	11
D	38	43
Weight (kg)	1,950	2,600

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODFC

60

L

**Ports Size:**

- 3/8
- 1/2

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

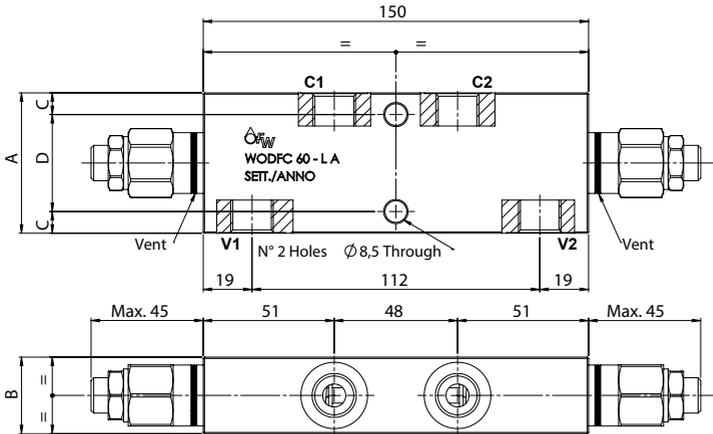
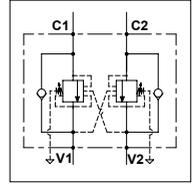
- Omit if not required
- Value

### WODFC 60 - L A

#### TECHNICAL DATA

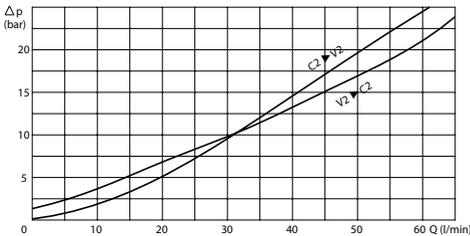
- Flow:** 60 l/min
- Max setting pressure:** 250 bar
- Materials:** Aluminium Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



PORTS		
C1 - C2 V1 - V2	3/8	1/2
DIMENSIONS		
A	55	65
B	30	35
C	8,5	11
D	38	43
Weight (kg)	0,950	1,250

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODFC

60

L

A

**Ports Size:**  
- 3/8  
- 1/2

**Springs:**  
- 20  
- 35

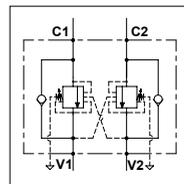
**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

**Adjustment if Required:**  
- Omit if not required  
- Value

### WODFC 60 - L - SPOM

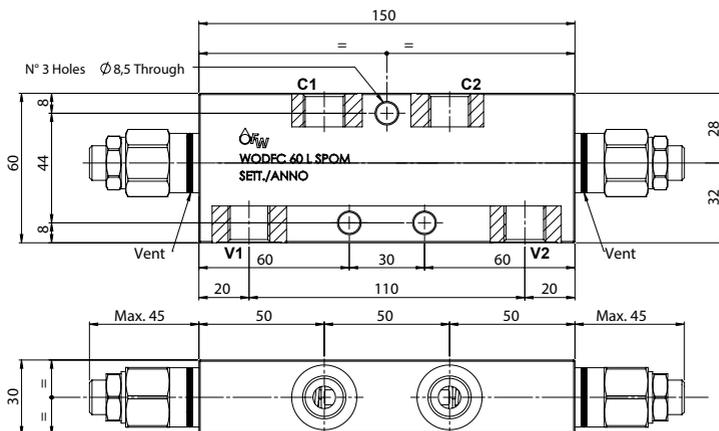
#### TECHNICAL DATA

- **Flow:** 60 l/min
  - **Max setting pressure:** 350 bar
  - **Materials:** Steel Body
  - **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
  - **Weight:** 2,100 kg
  - **Note:** Only on request, please contact our sales department
- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.

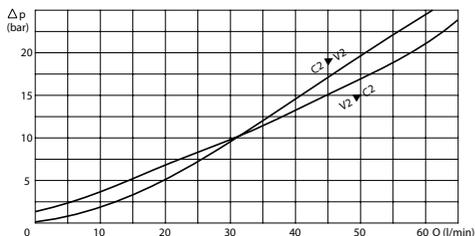


#### PORTS

C1 - C2 V1 - V2	3/8
--------------------	-----



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODFC

60

3/8

L

SPOM

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

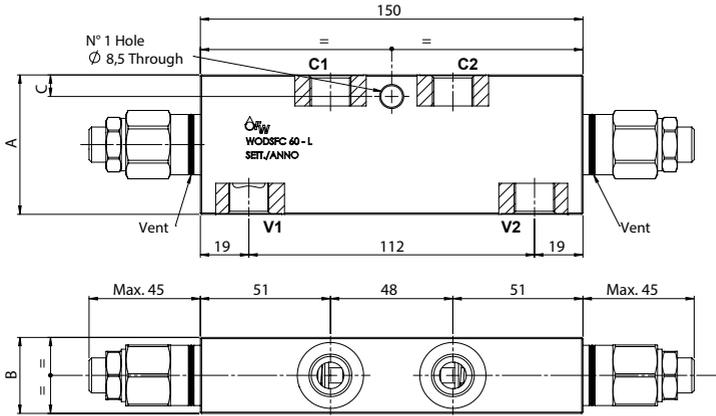
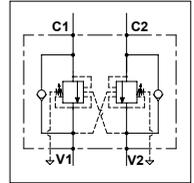
**Adjustment if Required:**

- Omit if not required
- Value

### WODSFC 60 - L

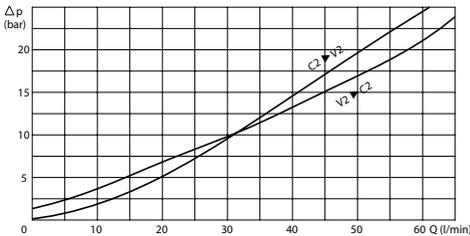
#### TECHNICAL DATA

- Flow:** 60 l/min
  - Max setting pressure:** 350 bar
  - Materials:** Steel Body
  - Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
  - Weight:** See Table
  - Note:** Only on request, please contact our sales department
- Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



PORTS		
C1 - C2 V1 - V2	3/8	1/2
DIMENSIONS		
A	55	65
B	30	35
C	8,5	11
Weight (kg)	2,000	2,650

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODSFC

60

L

**Ports Size:**  
- 3/8  
- 1/2

**Springs:**  
- 20  
- 35

**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

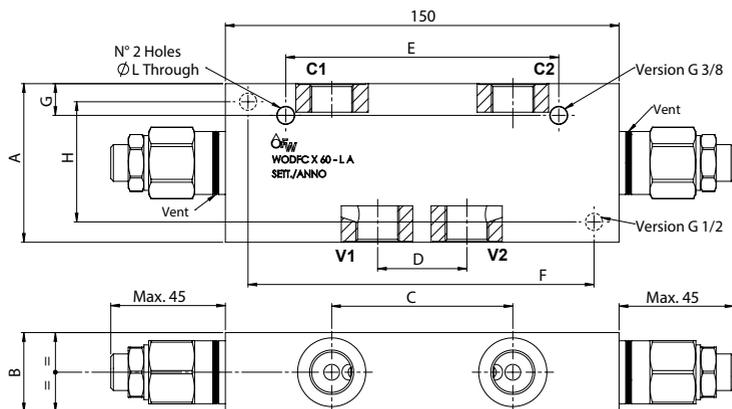
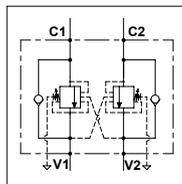
**Adjustment if Required:**  
- Omit if not required  
- Value

### WODFC X 60 - L A

#### TECHNICAL DATA

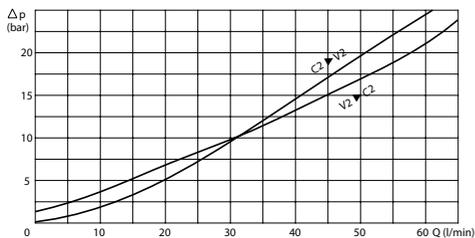
- Flow:** 60 l/min
- Max setting pressure:** 250 bar
- Materials:** Aluminium Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



PORTS		
C1 - C2 V1 - V2	3/8	1/2
DIMENSIONS		
A	60	70
B	30	35
C	69	80
D	34	36
E	104	-
F	-	125
G	12	-
H	-	54
L	6,5	8,5
Weight (kg)	1,020	1,255

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35			
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30	
4:1	60-210	70	170	80-350	120	280	
8:1	60-220	50		100-350	85		
11:1	60-250	90		80-350	150		

#### ORDERING CODE

WODFC

X

60

[ ]

L

A

[ ]

[ ]

[ ]

**Ports Size:**  
- 3/8  
- 1/2

**Springs:**  
- 20  
- 35

**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

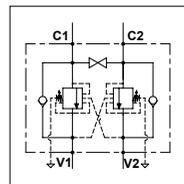
**Adjustment if Required:**  
- Omit if not required  
- Value

## WODFC X 60 - L A BP

### TECHNICAL DATA

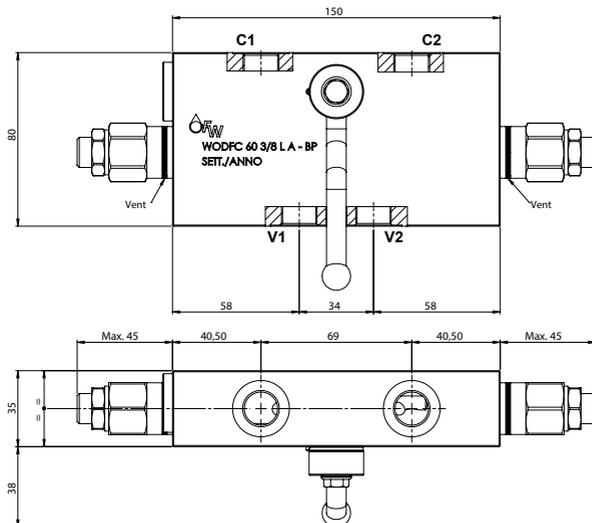
- **Flow:** 60 l/min
- **Max setting pressure:** 250 bar
- **Materials:** Aluminium Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,570 kg

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.

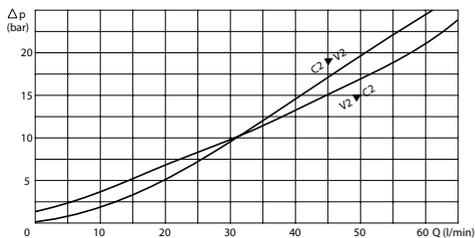


### PORTS

C1 - C2 V1 - V2	3/8
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### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WODFC X 60 3/8 L A BP

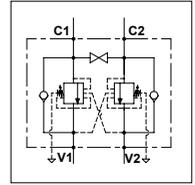
- Springs:**  
- 20  
- 35
- Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1
- Adjustment if Required:**  
- Omit if not required  
- Value

## WODFC 60 - 2F A BP

### TECHNICAL DATA

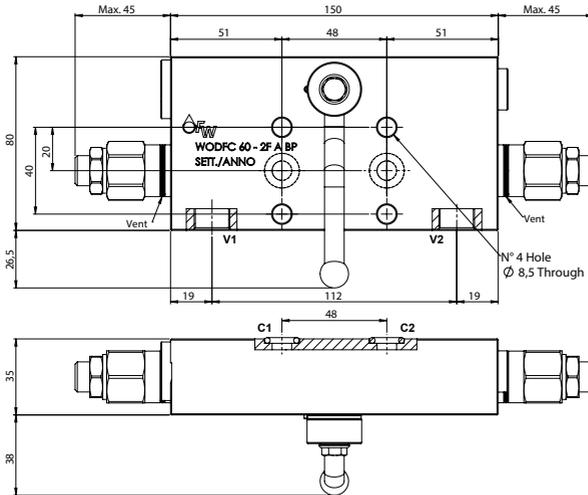
- **Flow:** 60 l/min
- **Max setting pressure:** 250 bar
- **Materials:** Aluminium Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,550 kg

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.

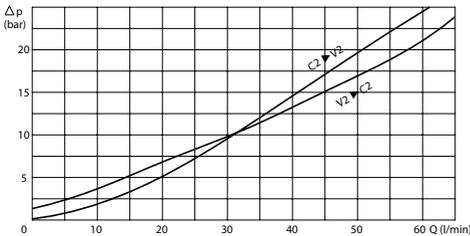


### PORTS

V1 - V2	3/8
C1 - C2	ø9



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WODFC

60

3/8

2F

A

BP

Springs:

- 20
- 35

Pilot Ratio:

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

Adjustment if Required:

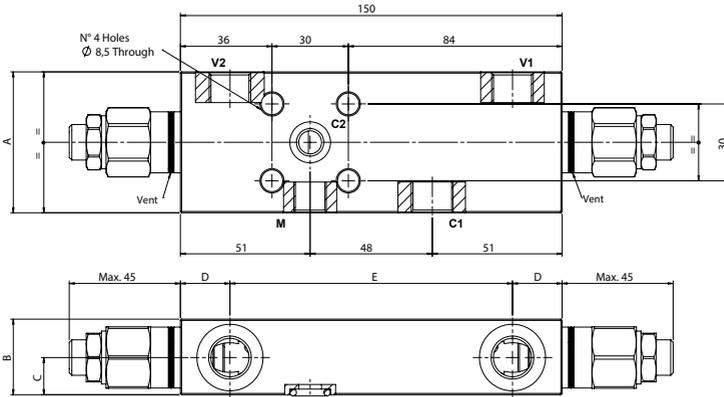
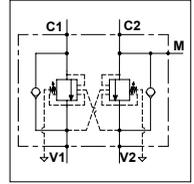
- Omit if not required
- Value

### WODFC 60 - 1F

#### TECHNICAL DATA

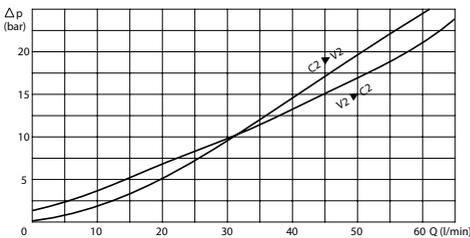
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** - Pressure setting must be 30 % higher than pressure induced by the load.
- Recommended for use with closed center spools.



PORTS		
C1 V1 - V2	3/8	1/2
C2	ø9	
M	1/4	
DIMENSIONS		
A	55	65
B	29,5	34,5
C	14,5	17
D	19	18
E	112	114
Weight (kg)	1,700	2,100

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODFC

60

1F

**Ports Size:**

- 3/8
- 1/2

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

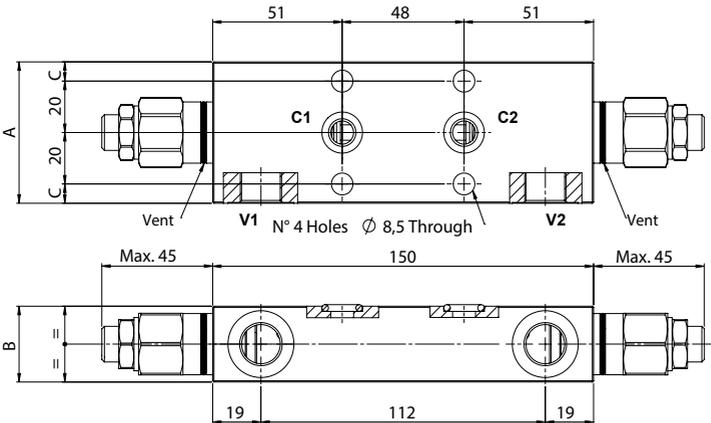
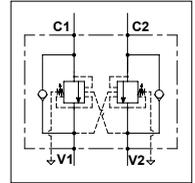
- Omit if not required
- Value

## WODFC 60 - 2F

### TECHNICAL DATA

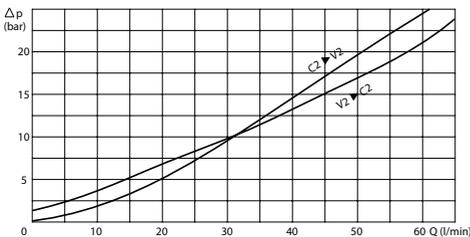
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.  
- Recommended for use with closed center spools.



PORTS		
V1 - V2	3/8	1/2
C1 - C2	$\varnothing$ 9	
DIMENSIONS		
A	55	65
B	29,5	34,5
C	7,5	12,5
Weight (kg)	1,950	2,620

### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WODFC

60

2F

**Ports Size:**

- 3/8
- 1/2

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

**Adjustment if Required:**

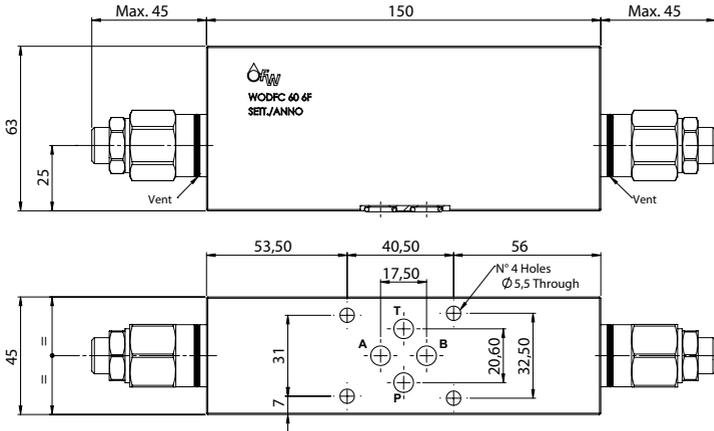
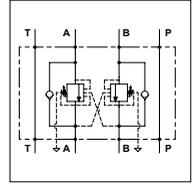
- Omit if not required
- Value

### WODFC 60 6F

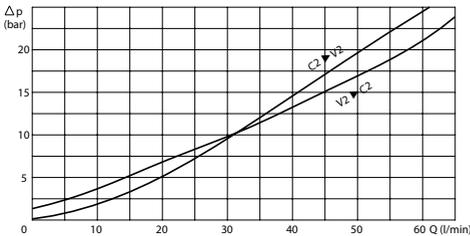
#### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar (250 bar)
- **Materials:** Steel Body (Aluminium body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 3,350 kg (1,560 kg)

- **Note:** - Pressure setting must be 30 % higher than pressure induced by the load.  
- Recommended for use with closed center spools.



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WODFC

60

6F

**Material Body:**  
- Omit if steel  
- A = Aluminium

**Springs:**  
- 20  
- 35

**Pilot Ratio:**  
- Omit if 4:1  
- 1 = 1:1  
- 8 = 8:1  
- 11 = 11:1

**Adjustment if Required:**  
- Omit if not required  
- Value



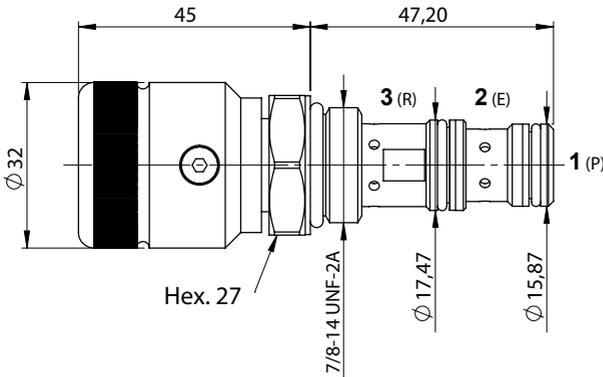
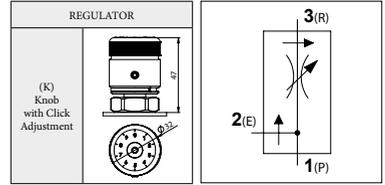


**COMPENSATED FLOW CONTROL VALVES**  
*VALVOLE REGOLATRICI DI FLUSSO COMPENSATE*

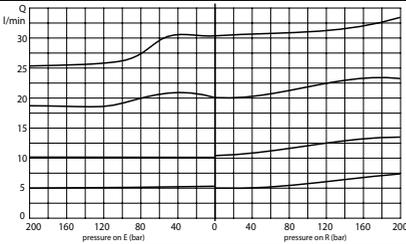
### WPR C 50

#### TECHNICAL DATA

- **Flow:** 50 l/min with 30 l/min in R
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Exceeding Flow in Pressure
- **Cavity:** FW7803000
- **Installation torque:** 40-45 Nm
- **Weight:** 0,200 kg
- **Note:** Knob with black anodized



#### COMPENSATION CURVES



#### ORDERING CODE

WPR

C

50

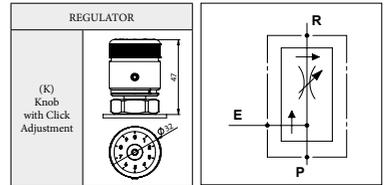
#### Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

### WPR C 50

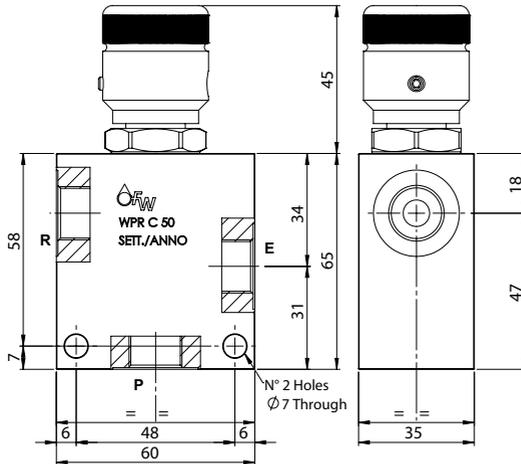
#### TECHNICAL DATA

- **Flow:** 50 l/min with 30 l/min in R
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Exceeding Flow in Pressure
- **Weight:** 0,500 kg (1,050 kg)
- **Note:** Knob with black anodized

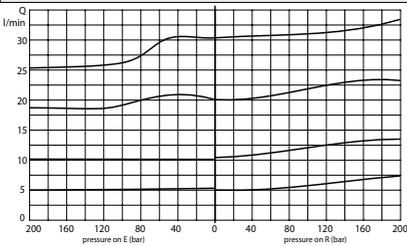


#### PORTS

P - E - R	3/8	1/2
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#### COMPENSATION CURVES



#### ORDERING CODE

WPR

C

50

Ports Size:

- 3/8
- 1/2

Material Body:

- Omit if aluminium
- S = Steel

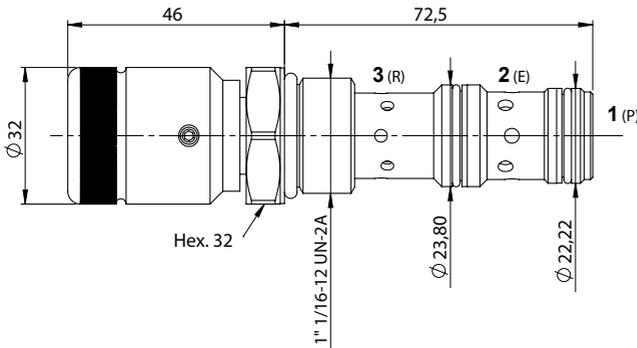
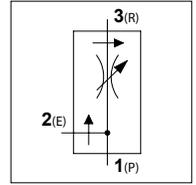
Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

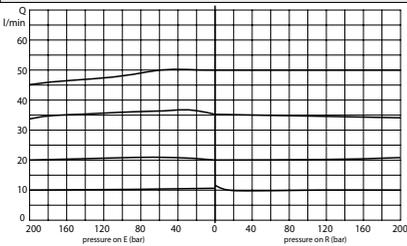
## WPR C 90

### TECHNICAL DATA

- **Flow:** 90 l/min with 50 l/min in R
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Exceeding Flow in Pressure
- **Cavity:** FW1160300
- **Installation torque:** 60-65 Nm
- **Weight:** 0,330 kg
- **Note:** Knob with black anodized



### COMPENSATION CURVES



### ORDERING CODE

WPR

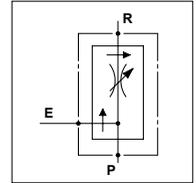
C

90

## WPR C 90

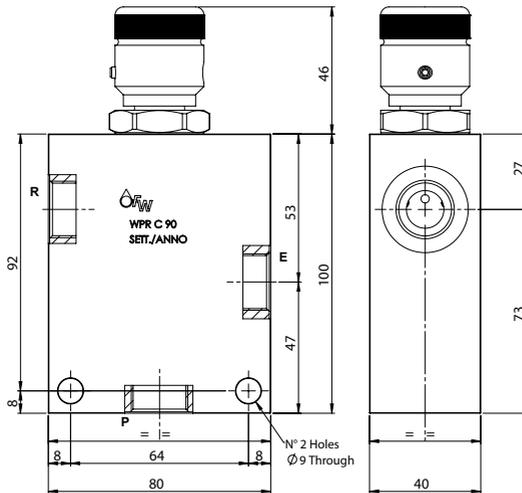
### TECHNICAL DATA

- **Flow:** 90 l/min with 50 l/min in R
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Exceeding Flow in Pressure
- **Weight:** 1,070 kg (2,350 kg)
- **Note:** Knob with black anodized

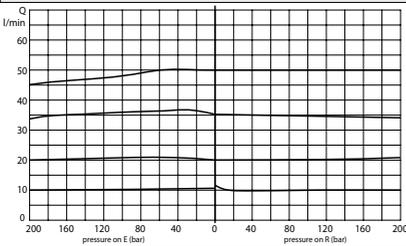


### PORTS

P - E - R	1/2	3/4
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### COMPENSATION CURVES



### ORDERING CODE

WPR

C

90

### Ports Size:

- 1/2
- 3/4

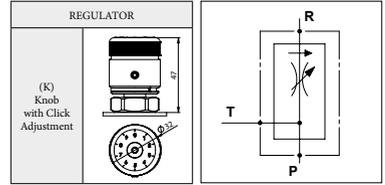
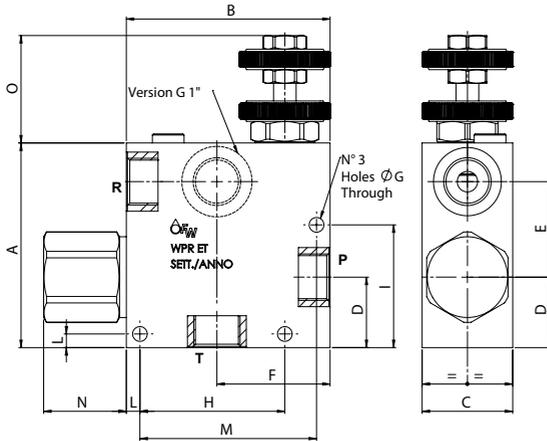
### Material Body:

- Omit if aluminium
- S = Steel

### WPR ET

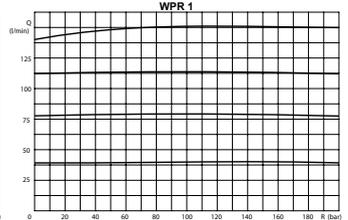
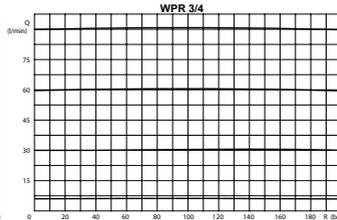
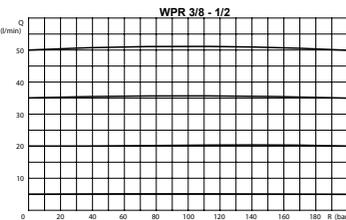
#### TECHNICAL DATA

- Flow:** G 3/8: 50 l/min with 30 l/min in R  
G 1/2: 90 l/min with 50 l/min in R  
G 3/4: 150 l/min with 90 l/min in R  
G 1 : 240 l/min with 150 l/min in R
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Exceeding Flow to Tank
- Note:** Handwheel in Aluminium Black Anodized
- Optional RF:** Fine Adjustment Reduces the Range in R
- Weight:** See table



PORTS				
P - R - T	3/8	1/2	3/4	1
DIMENSIONS				
A	90	90	110	110
B	90	90	110	110
C	40	40	50	50
D	31	31	35	46
E	42	42	50	41
F	50	50	66	65
G	6,5	6,5	8,5	8,5
H	64	64	88	88
I	54	54	63,5	-
L	6	6	8	10
M	78	78	94	-
N	36,5	36,5	36,5	37,5
O	47,5	47,5	49,5	47,5
Weight (Kg)	1,150	1,100	1,900	2,000

#### COMPENSATION CURVES



#### ORDERING CODE

WPR

ET

Ports Size:

- 3/8
- 1/2
- 3/4
- 1

Material Body:

- Omit if aluminium
- S = Steel

Type of Setting  
(only for 3/8 and 1/2):

- Omit if standard
- RF = Fine Adjustment

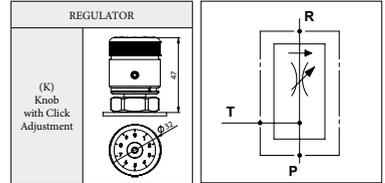
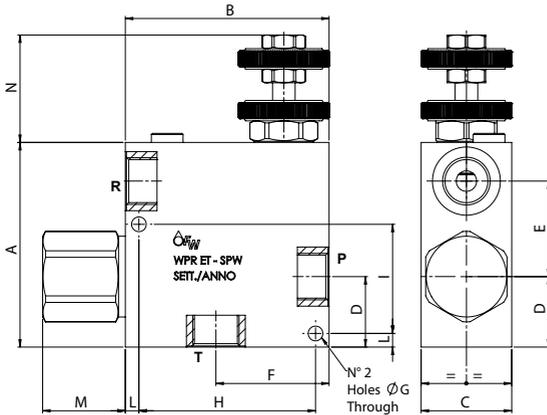
Type of Regulator  
(only for 3/8 and 1/2):

- Omit if standard
- K = Knob with click adjustment

## WPR ET - SPW

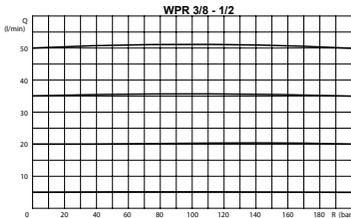
### TECHNICAL DATA

- Flow:** G 3/8: 50 l/min with 30 l/min in R  
G 1/2: 90 l/min with 50 l/min in R
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Exceeding Flow to Tank
- Note:** Handwheel in Aluminium Black Anodized
- Optional RF:** Fine Adjustment Reduces the Range in R
- Weight:** See table



PORTS		
P - R - T	3/8	1/2
DIMENSIONS		
A	90	90
B	90	90
C	40	40
D	31	31
E	42	42
F	50	50
G	6,5	6,5
H	78	78
I	48	48
L	6	6
M	36,5	36,5
N	47,5	47,5
Weight (Kg)	1,150	1,100

### COMPENSATION CURVES



### ORDERING CODE

WPR

ET



SPW

**Ports Size:**

- 3/8
- 1/2

**Material Body:**

- Omit if aluminium
- S = Steel

**Type of Setting:**

- Omit if standard
- RF = Fine Adjustment

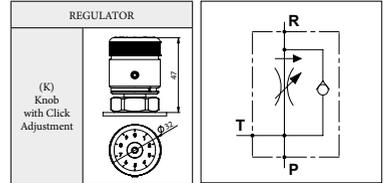
**Type of Regulator:**

- Omit if standard
- K = Knob with click adjustment

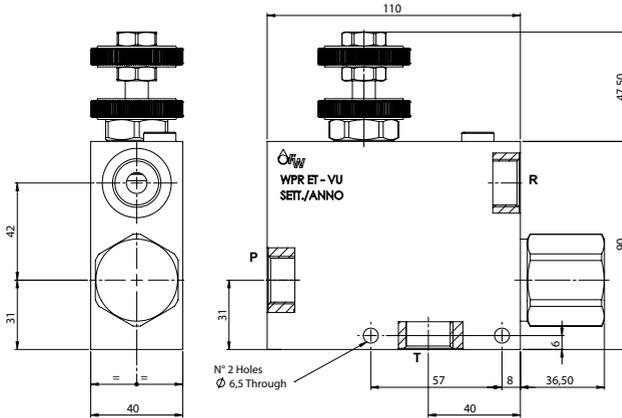
## WPR ET - VU

### TECHNICAL DATA

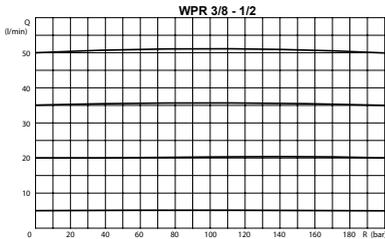
- Flow:** G 3/8: 50 l/min with 30 l/min in R  
G 1/2: 90 l/min with 50 l/min in R
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Exceeding Flow to Tank
- Note:** Handwheel in Aluminium Black Anodized
- Optional RF:** Fine Adjustment Reduces the Range in R
- Weight:** 1,400 kg (2,900 kg)



PORTS		
P - T - R	3/8	1/2



### COMPENSATION CURVES



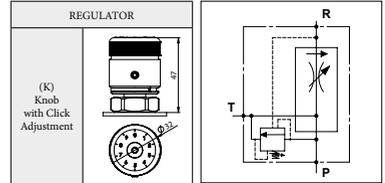
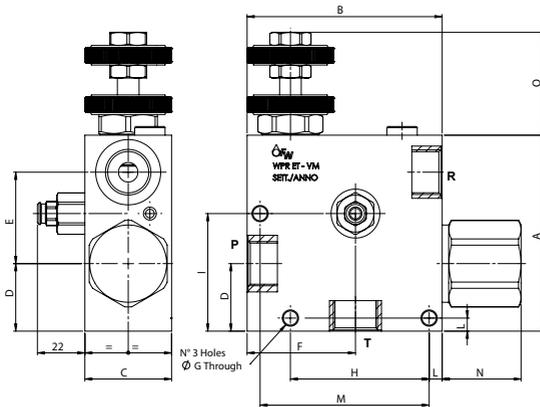
### ORDERING CODE

WPR	ET		VU				
		<b>Ports Size:</b>			<b>Material Body:</b>	<b>Type of Setting:</b>	<b>Type of Regulator:</b>
		- 3/8 - 1/2			- Omit if aluminium - S = Steel	- Omit if standard - RF = Fine Adjustment	- Omit if standard - K = Knob with click adjustment

### WPR ET - VM

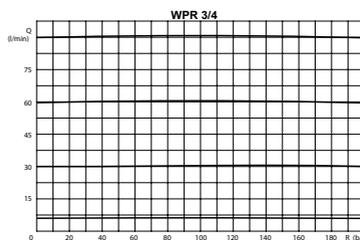
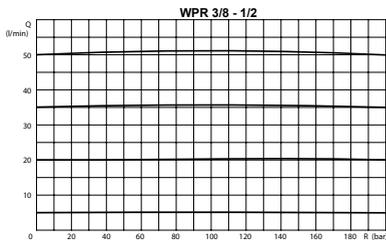
#### TECHNICAL DATA

- Flow:** G 3/8: 50 l/min with 30 l/min in R  
G 1/2: 90 l/min with 50 l/min in R  
G 3/4: 150 l/min with 90 l/min in R
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Exceeding Flow to Tank
- Note:** Handwheel in Aluminium Black Anodized  
WMD 5 with Spring 25 (range 100-250)
- Optional RF:** Fine Adjustment Reduces the Range in R
- Weight:** See table



PORTS			
P - R - T	3/8	1/2	3/4
DIMENSIONS			
A	90	90	110
B	90	90	110
C	40	40	50
D	31	31	35
E	42	42	50
F	50	50	66
G	6,5	6,5	8,5
H	64	64	88
I	54	54	63,5
L	6	6	8
M	78	78	94
N	36,5	36,5	36,5
O	47,5	47,5	49,5
Weight (Kg)	1,250	1,200	2,000

#### COMPENSATION CURVES



#### ORDERING CODE



#### Ports Size:

- 3/8
- 1/2
- 3/4

#### Adjustment if Required:

- Omit if not required
- Value

#### Material Body:

- Omit if aluminium
- S = Steel

#### Type of Setting (only 3/8 and 1/2):

- Omit if standard
- RF = Fine Adjustment

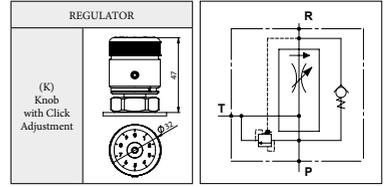
#### Type of Regulator (only 3/8 and 1/2):

- Omit if standard
- K = Knob with click adjustment

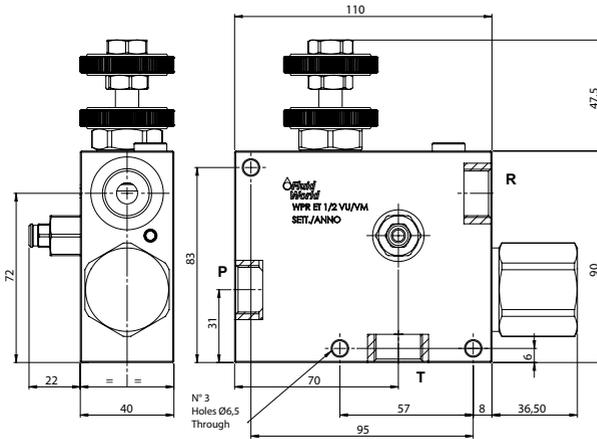
## WPR ET - VU/VM

### TECHNICAL DATA

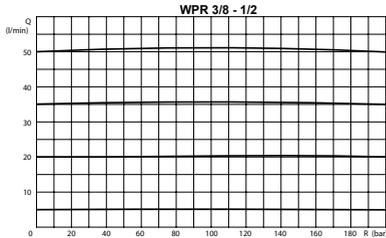
- Flow:** G 3/8: 50 l/min with 30 l/min in R  
G 1/2: 90 l/min with 50 l/min in R
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Exceeding Flow to Tank
- Note:** Handwheel in Aluminium Black Anodized  
WMD 5 with Spring 25 (range 100-250)
- Optional RF:** Fine Adjustment Reduces the Range in R
- Weight:** 1,450 kg (2,950 kg)



PORTS		
P - T - R	3/8	1/2



### COMPENSATION CURVES



### ORDERING CODE



#### Ports Size:

- 3/8
- 1/2

#### Adjustment if Required:

- Omit if not required
- Value

#### Material Body:

- Omit if aluminium
- S = Steel

#### Type of Setting:

- Omit if standard
- RF = Fine Adjustment
- K = Knob with click adjustment

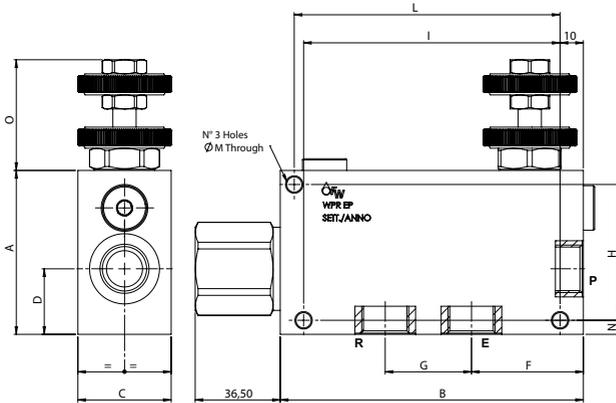
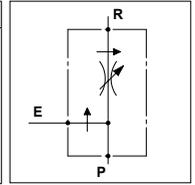
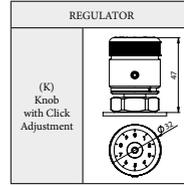
#### Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

### WPR EP

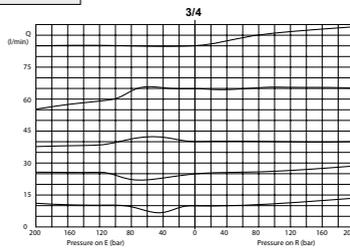
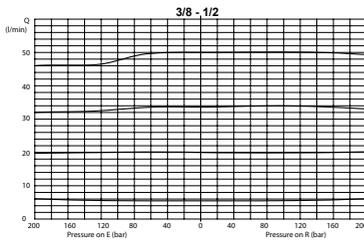
#### TECHNICAL DATA

- Flow:** G 3/8: 50 l/min with 30 l/min in R  
G 1/2: 90 l/min with 50 l/min in R  
G 3/4: 150 l/min with 90 l/min in R
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Exceeding Flow to Pressure
- Note:** Handwheel in Aluminium Black Anodized
- Optional RF:** Fine Adjustment Reduces the Range in R
- Weight:** See table



PORTS			
P - R - E	3/8	1/2	3/4
DIMENSIONS			
A	70	70	90
B	130	130	155
C	40	40	50
D	28	28	35
F	48	48	57
G	37	37	44
H	58	58	74
I	110	110	-
L	114	114	135
M	6,5	6,5	8,5
N	6	6	8
O	47,5	47,5	49,5
Weight (Kg)	1,300	1,250	2,500

#### COMPENSATION CURVES



#### ORDERING CODE

WPR

EP

**Ports Size:**

- 3/8
- 1/2
- 3/4

**Material Body:**

- Omit if aluminium
- S = Steel

**Type of Setting**  
**(only for 3/8 and 1/2):**

- Omit if standard
- RF = Fine Adjustment

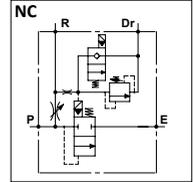
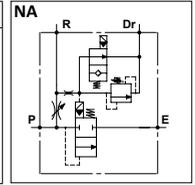
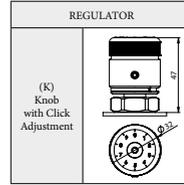
**Type of Regulator**  
**(only for 3/8 and 1/2):**

- Omit if standard
- K = Knob with click adjustment

### WPR EP - VM/VE

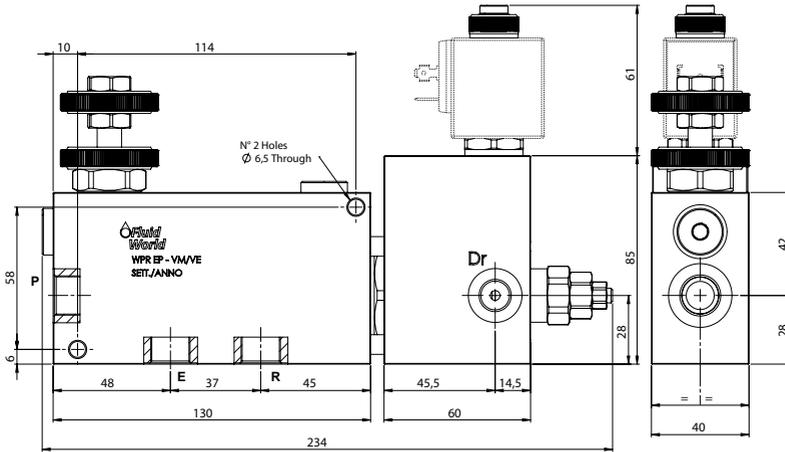
#### TECHNICAL DATA

- Flow:** G 3/8: 50 l/min with 30 l/min in R  
G 1/2: 90 l/min with 50 l/min in R
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Exceeding Flow to Pressure
- Note:** Handwheel in Aluminium Black Anodized
- Weight:** 2,300 Kg (3,900 Kg)

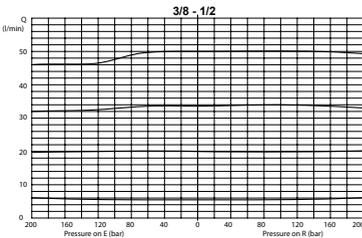


PORTS		
P - R - E	3/8	1/2
Dr	1/4	

OPTION	
<input checked="" type="checkbox"/> Tamper Proof Cap	



#### COMPENSATION CURVES



#### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

#### ORDERING CODE

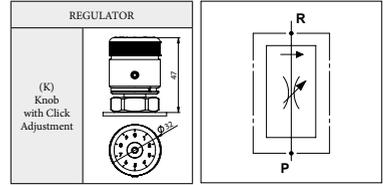
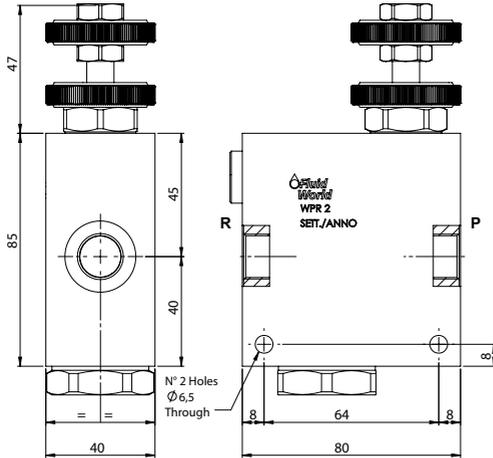


- |                    |                         |                        |                        |                          |                        |                       |                                  |
|--------------------|-------------------------|------------------------|------------------------|--------------------------|------------------------|-----------------------|----------------------------------|
| <b>Ports Size:</b> | <b>Spring Pressure:</b> | <b>Adjustment:</b>     | <b>Solenoid Valve:</b> | <b>Manual Overrides:</b> | <b>Coil:</b>           | <b>Material Body:</b> | <b>Type of Regulator:</b>        |
| - 3/8              | <b>Relief Valve:</b>    | <b>if Required:</b>    | <b>if Required:</b>    | <b>if Required:</b>      | - Omit if not required | - Omit if standard    | - Omit if standard               |
| - 1/2              | - Omit if not required  | - Omit if not required | - Omit if not required | - Omit if not required   | - 12                   | - S = Steel           | - K = Knob with click adjustment |
|                    | - VM05                  | - Value                | - VE NA                | - EMS = Screw            | - 24                   |                       |                                  |
|                    | - VM20                  | - Value with X         | - VE NC                | - EMP = Push             |                        |                       |                                  |
|                    | - VM35                  |                        | - VE NC                | - EMPT = Push & Twist    |                        |                       |                                  |

## WPR 2

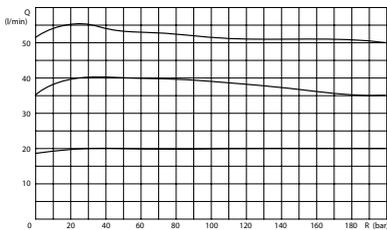
### TECHNICAL DATA

- **Flow:** G 3/8: Max inlet 30 l/min in P  
G 1/2: Max inlet 50 l/min in P
- **Max working pressure:** 250 bar
- **Materials:** Aluminium Body
- **Note:** Handwheel in Aluminium Black Anodized
- **Weight:** 1,060 kg



PORTS		
P - R	3/8	1/2

### COMPENSATION CURVES



### ORDERING CODE

WPR

2

Ports Size:

- 3/8
- 1/2

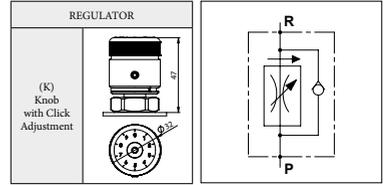
Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

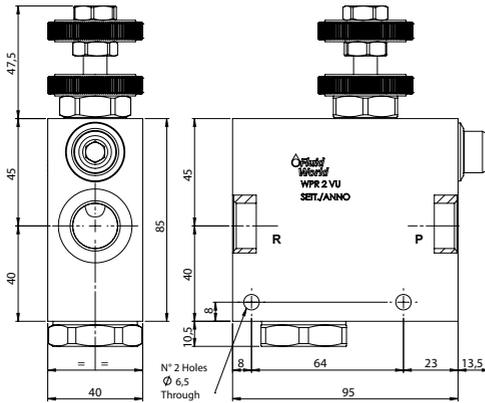
### WPR 2 VU

#### TECHNICAL DATA

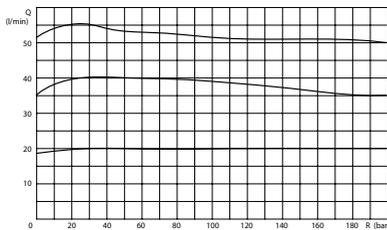
- Flow:** G 3/8: Max inlet 30 l/min in P  
G 1/2: Max inlet 50 l/min in P
- Max working pressure:** 250 bar
- Materials:** Aluminium Body
- Note:** Handwheel in Aluminium Black Anodized
- Weight:** 1,100 kg



PORTS		
P - R	3/8	1/2



#### COMPENSATION CURVES



#### ORDERING CODE

WPR

2

VU

**Ports Size:**

- 3/8
- 1/2

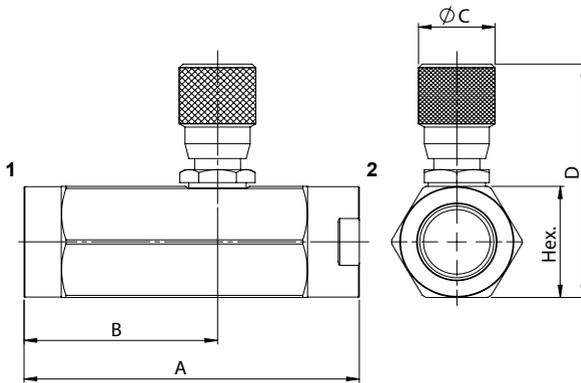
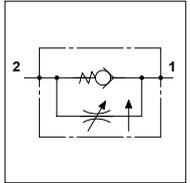
**Type of Regulator:**

- Omit if standard
- K = Knob with click adjustment

## WRCU

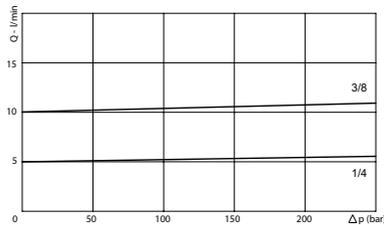
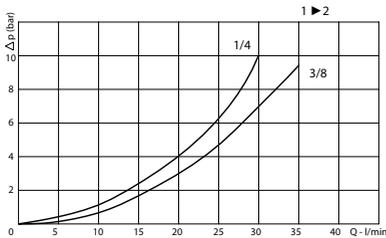
### TECHNICAL DATA

- **Flow:** See Table
- **Max working pressure:** 250 bar
- **Materials:** Steel Body
- **Note:** Aluminium Knob
- **Weight:** See Table



PORTS		
1 - 2	1/4	3/8
DIMENSIONS		
A	87,5	87,5
B	51	51
Hex.	27	27
C	20	20
D	60	60
Flow Max (l/min)	10	18
Weight (Kg)	0,390	0,370

### PRESSURE DROP CURVES



### ORDERING CODE

WRCU



Ports Size:

- 1/4
- 3/8



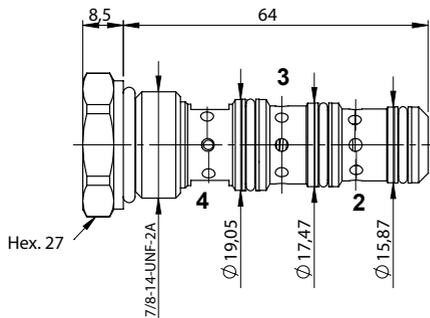
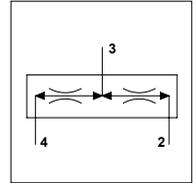


**FLOW DIVIDER/COMBINER VALVES**  
*VALVOLE DIVISORI/RIUNIFICATORI DI FLUSSO*

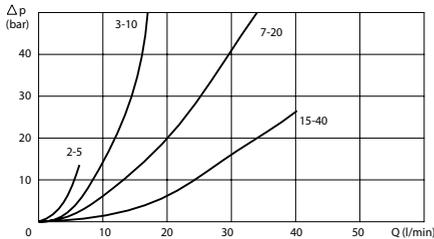
## WDF A S10

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** FW7804000
- **Installation torque:** 30-35 Nm
- **Ratio division:** 50/50 standard
- **Weight:** 0,100 kg



### PRESSURE DROP CURVES



### FLOW RANGE

Code	L/Min
1	2-5
2	3-10
3	7-20
4	15-40

### ORDERING CODE

WDF

A

S10

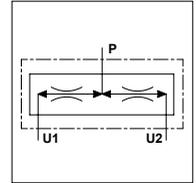
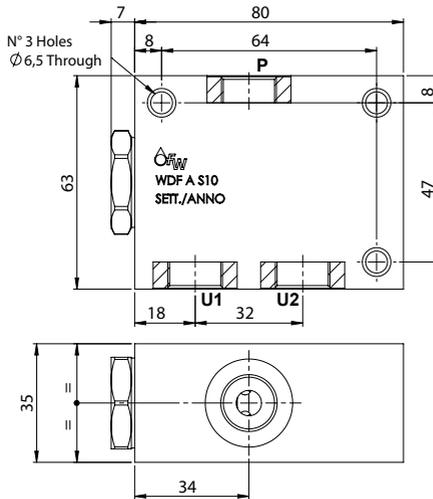
### Flow Range:

- 1 = 2-5 l/min
- 2 = 3-10 l/min
- 3 = 7-20 l/min
- 4 = 15-40 l/min

## WDF A S10

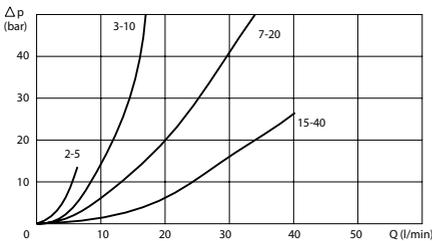
### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Ratio division:** 50/50 standard
- **Weight:** 0,500 kg (1,230 kg)



PORTS			
P	3/8	1/2	1/2
U1 - U2	3/8	3/8	1/2

### PRESSURE DROP CURVES



### FLOW RANGE

Code	L/Min
1	2-5
2	3-10
3	7-20
4	15-40

### ORDERING CODE

WDF

A

S10



#### Flow Range:

- 1 = 2-5 l/min
- 2 = 3-10 l/min
- 3 = 7-20 l/min
- 4 = 15-40 l/min



#### Material Body:

- Omit if aluminium
- S = Steel



#### Ports Size P:

- 3/8
- 1/2



#### Ports Size U1, U2:

- 3/8
- 1/2



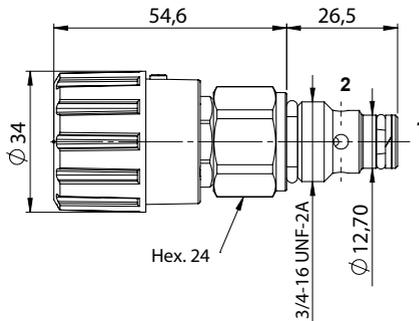
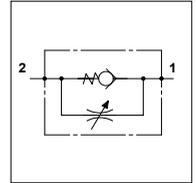


**FLOW CONTROL VALVES**  
*VALVOLE REGOLATRICI DI FLUSSO*

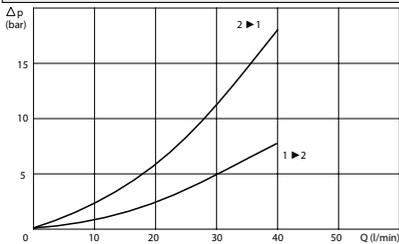
## WFU C S08

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** FW3402000
- **Installation torque:** 30-35 Nm
- **Weight:** 0,130 kg



### PRESSURE DROP CURVES



### ORDERING CODE

WFU

C

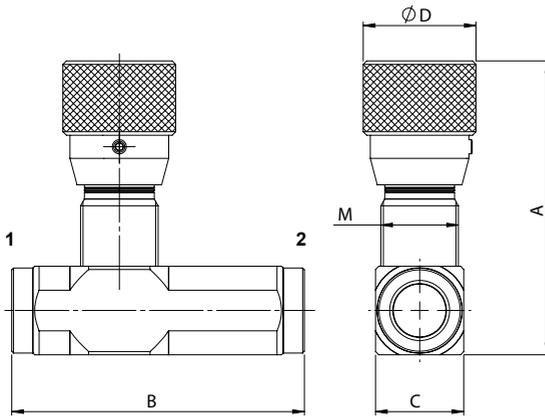
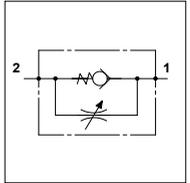
S08

V

## WFU

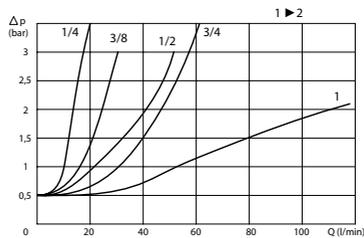
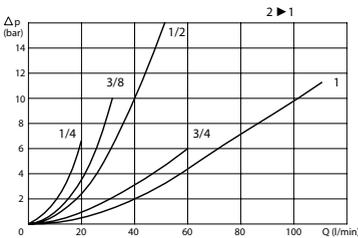
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** See table
- **Cracking pressure:** 0,5 bar
- **Materials:** Steel Body
- **Note:** Aluminium Knob
- **Weight:** See table



PORTS					
1 - 2	1/4	3/8	1/2	3/4	1
DIMENSIONS					
A	82	82	87	108	126
B	73	83	94	110	135
C	25	25	30	40	40
D	32	32	32	42	42
M	22x1,5	22x1,5	22x1,5	35x1,5	35x1,5
Max Pressure (bar)	350	350	350	320	300
Max Flow (l/min)	20	30	50	80	110
Weight (kg)	0,320	0,420	0,580	1,360	1,390

### PRESSURE DROP CURVES



### ORDERING CODE

WFU

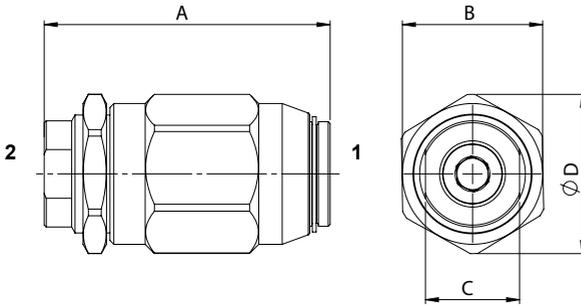
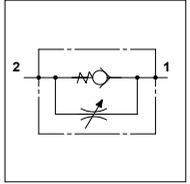
Ports Size:

- 1/4
- 3/8
- 1/2
- 3/4
- 1

## WFU M

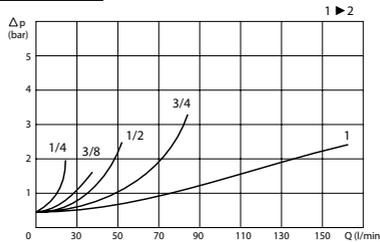
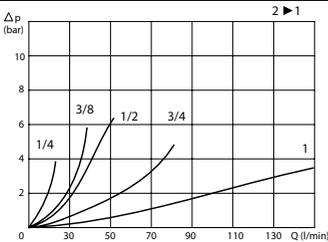
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** See table
- **Cracking pressure:** 0,5 bar
- **Materials:** Steel Body
- **Weight:** See table



PORTS					
1 - 2	1/4	3/8	1/2	3/4	1
DIMENSIONS					
A	62	73	83	102	109
B (Hex)	30	36	41	55	55
C (Hex)	19	24	30	36	41
D	34	41	46	61	61
Max Pressure (bar)	350	350	350	300	250
Max Flow (l/min)	20	40	50	80	160
Weight (kg)	0,250	0,440	0,680	1,100	1,320

### PRESSURE DROP CURVES



### ORDERING CODE

WFU

M

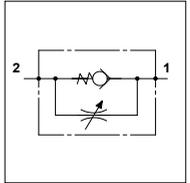
Ports Size:

- 1/4
- 3/8
- 1/2
- 3/4
- 1

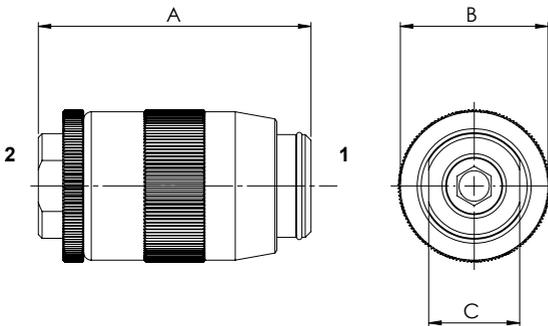
## WFU M - SPFP

### TECHNICAL DATA

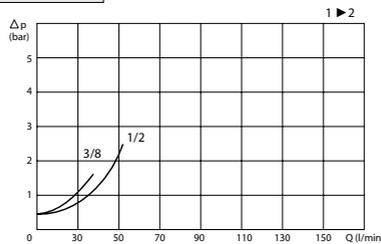
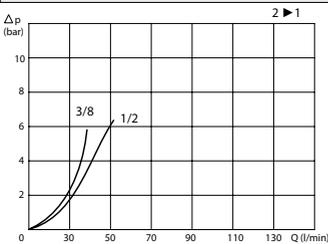
- **Flow:** See table
- **Max working pressure:** See table
- **Cracking pressure:** 0,5 bar
- **Materials:** Steel Body
- **Weight:** See table



PORTS		
1 - 2	3/8	1/2
DIMENSIONS		
A	73	83
B	40	45
C	24	30
Max Pressure (bar)	350	350
Max Flow (l/min)	40	50
Weight (kg)	0,480	0,700



### PRESSURE DROP CURVES



### ORDERING CODE

WFU

M

SPFP

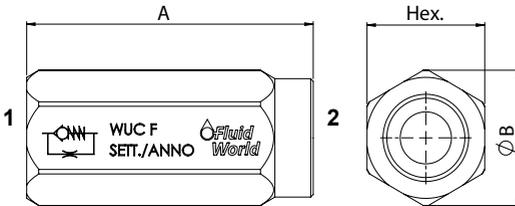
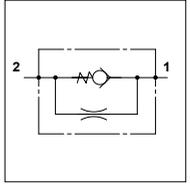
Ports Size:

- 3/8
- 1/2

### WUC F

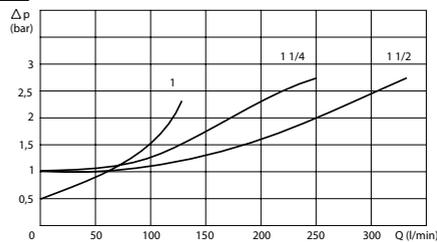
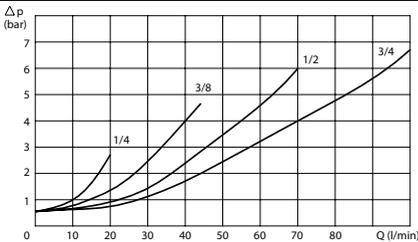
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Cracking pressure:** See table
- **Materials:** Steel Body
- **Weight:** See table
- **Note:** Only on request, please contact our sales department



PORTS							
1 - 2	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
DIMENSIONS							
A	62	68	77	88	105	135	145
B	21	27	34	40	46	63	69
Hex.	19	24	30	36	41	55	60
Max Pressure (bar)	350	350	350	350	350	300	300
Max Flow (l/min)	20	45	70	110	160	250	350
Weight (kg)	0,104	0,184	0,322	0,492	0,676	1,646	1,950
ORIFICE							
Ø Min (mm)	0,5	0,5	0,5	0,5	On Request		
Ø Max (mm)	2	3,5	4	4			

#### PRESSURE DROP CURVES



#### SPRINGS

Code	Cracking pressure bar
Standard	0,5
<b>4</b>	4
<b>8</b>	8

#### ORDERING CODE

WUC

F

#### Ports Size:

- 1/4 - 1
- 3/8 - 1 1/4
- 1/2 - 1 1/2
- 3/4

#### Opening Pressure:

- Omit if 0,5 bar
- 4 = 4 bar
- 8 = 8 bar

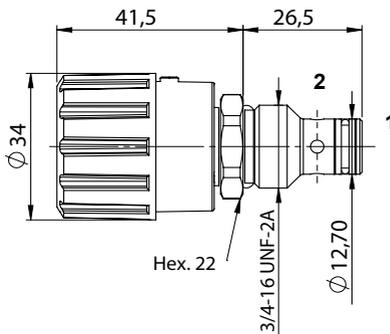
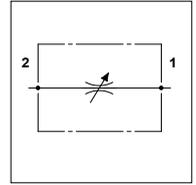
#### Throttling Hole:

- Value

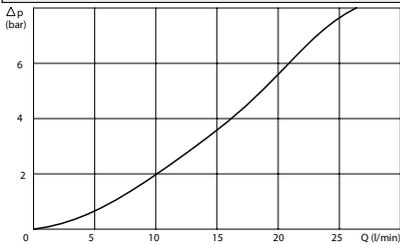
## WFB C S08

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Poppet Type - Direct Acting
- **Cavity:** FW3402000
- **Installation torque:** 30-35 Nm
- **Weight:** 0,090 kg



### PRESSURE DROP CURVES



### ORDERING CODE

WFB

C

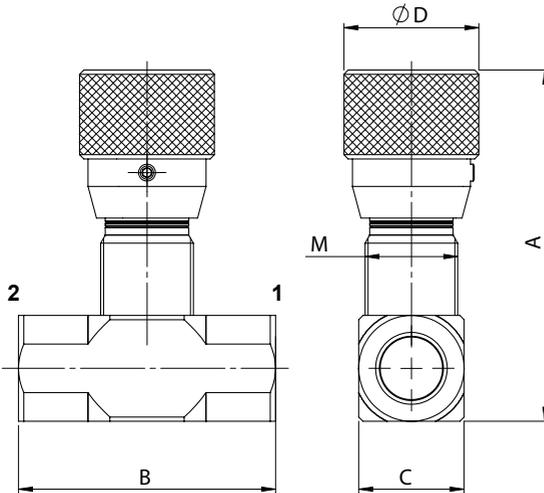
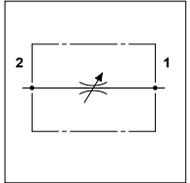
S08

V

## WFB

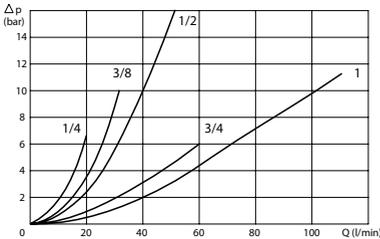
### TECHNICAL DATA

- **Flow:** See Table
- **Max working pressure:** See Table
- **Materials:** Steel Body
- **Note:** Aluminium Knob
- **Weight:** See table



PORTS					
1 - 2	1/4	3/8	1/2	3/4	1
DIMENSIONS					
A	82	82	87	108	129
B	60	61	70	89	90
C	25	25	30	40	40
D	32	32	32	42	42
M	22x1,5	22x1,5	22x1,5	35x1,5	35x1,5
Max Pressure (bar)	350	350	350	320	300
Max Flow (l/min)	20	30	50	80	110
Weight (kg)	0,370	0,350	0,470	1,100	1,000

### PRESSURE DROP CURVES



### ORDERING CODE

WFB

Ports Size:

- 1/4
- 3/8
- 1/2
- 3/4
- 1





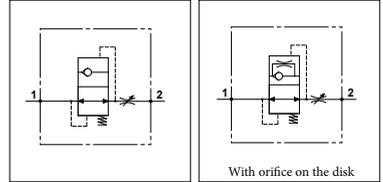
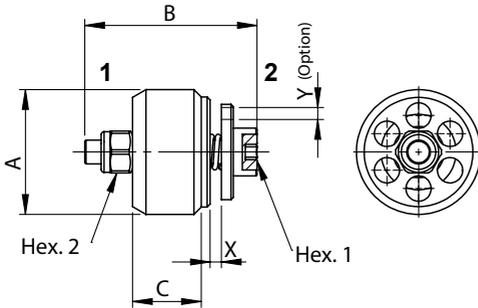


**HOSE BURST VALVES**  
*VALVOLE PARACADUTE*

## WHB

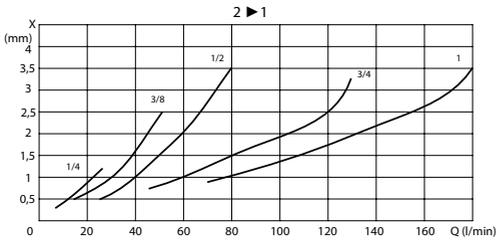
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Materials:** Steel Body
- **Installation torque:** See table
- **Weight:** See table



PORTS					
A	1/4	3/8	1/2	3/4	1
DIMENSIONS					
B	19	23	29	34	40
C	8,2	11	13	18	20
Hex. 1	2,5	2,5	3	3	4
Hex. 2	5,5	5,5	7	7	8
Max Flow (l/min)	25	50	80	150	180
Install. Torque (N/m)	2	3	4	10	12
Weight (kg)	0,008	0,014	0,025	0,054	0,100
ORIFICE					
Ø Min (mm)	0,5	0,5	0,5	0,5	0,5
Ø Max (mm)	1	1,25	1,5	2,5	3

### PRESSURE SETTING CURVES



### ORDERING CODE

WHB

Ports Size:

- 1/4
- 3/8
- 1/2
- 3/4
- 1

X Setting:

- Omit if not required
- Value in mm

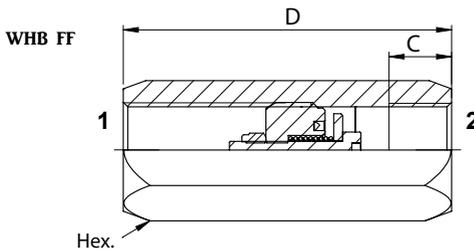
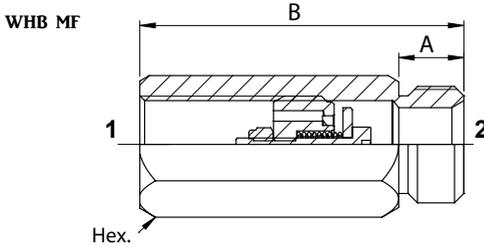
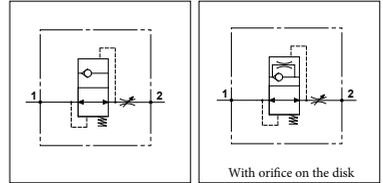
Y Orifice:

- Omit if not required
- Value in mm

### WHB

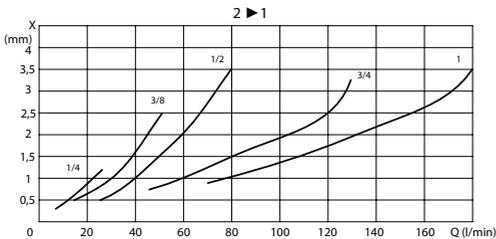
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Materials:** Body in Steel zinc plated
- **Weight:** See table



PORTS					
1 - 2	1/4	3/8	1/2	3/4	1
DIMENSIONS					
A	12	12	16	18	20
B	50	60	65	81	92
C	12	14	16	18	20
D	59	64	73	76	86
Hex.	19	22	27	32	41
Max Flow (l/min)	25	50	80	150	180
Weight (kg)	0,083	0,110	0,185	0,365	0,770
ORIFICE					
Ø Min (mm)	0,5	0,5	0,5	0,5	0,5
Ø Max (mm)	1	1,25	1,5	2,5	3

#### PRESSURE SETTING CURVES



#### ORDERING CODE

WHB

#### Type:

- MF = Male Female
- FF = Female Female

#### Ports Size:

- 1/4
- 3/8
- 1/2
- 3/4
- 1

#### X Setting:

- Value in mm

#### Y Orifice:

- Omit if not required
- Value in mm



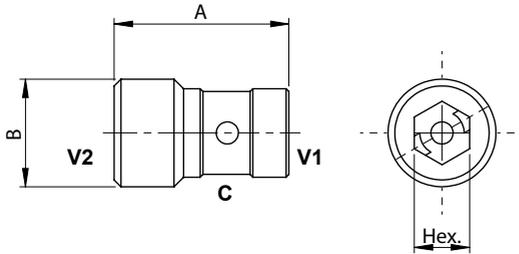
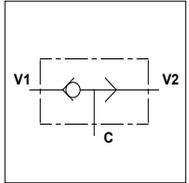


**SHUTTLE VALVES**  
*VALVOLE SELETTICCI*

## WS I

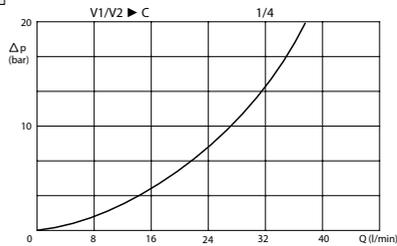
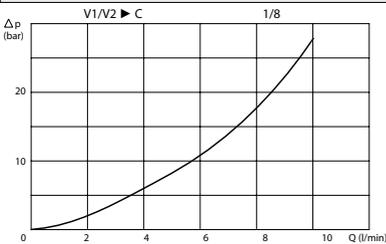
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Materials:** Steel Body
- **Version:** Ball Type
- **Cavity:** See table
- **Weight:** See table



PORTS		
B	1/8	1/4
DIMENSIONS		
A	14,9	22,5
Hex.	5	6
Max Flow (l/min)	10	35
Cavity	FW1803100	FW1403100
Weight (kg)	0,010	0,040

### PRESSURE DROP CURVES



### ORDERING CODE

WS

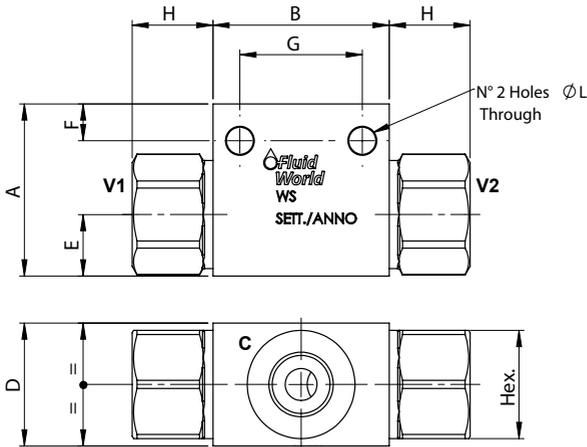
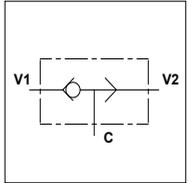
I

Ports Size:  
- 1/8  
- 1/4

## WS

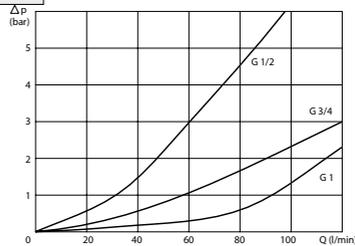
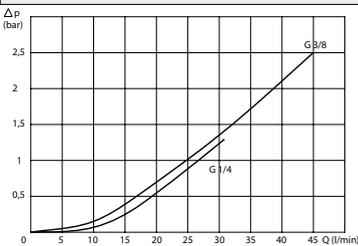
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Materials:** Steel Body
- **Weight:** See table



PORTS					
C - V1 - V2	1/4	3/8	1/2	3/4	1
DIMENSIONS					
A	35	45	50	60	80
B	36	45	57	65	80
D	25	30	35	50	50
E	12,5	15	18	22,5	25,5
F	7,5	8	9	8	12
G	25	29	36	50	65
H	16,5	15	18,5	17,5	23
L	5,5	6,5	5,5	6,5	10,5
Hex.	22	27	30	41	46
Max Flow (l/min)	25	50	85	120	160
Weight (kg)	0,270	0,460	0,740	1,400	1,870

### PRESSURE DROP CURVES



### ORDERING CODE

WS

### Ports Size:

- 1/4
- 3/8
- 1/2
- 3/4
- 1



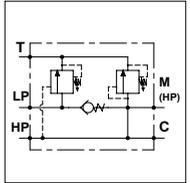
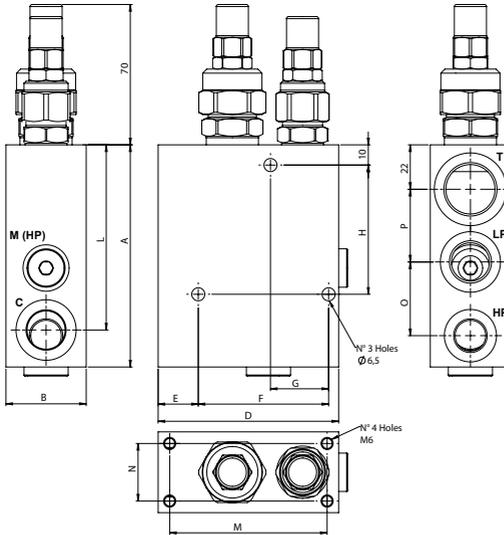


**HIGH LOW UNLOADING VALVES**  
*VALVOLA ESCLUSIONE POMPA DOPPIA*

## WEPD L

### TECHNICAL DATA

- **Max flow rate LP>C:** See table
- **Max working pressure:** 350 Bar
- **Materials:** Steel Body, Cartridge in Steel zinc plated
- **Weight:** See table



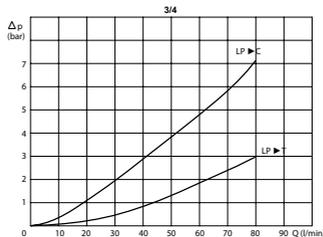
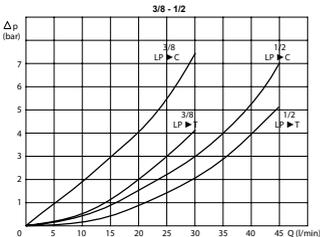
### PORTS

C - LP	3/8	1/2	3/4
HP	1/4	3/8	1/2
T	1/2	3/4	1

### DIMENSIONS

A	110	110	125
B	40	40	50
D	90	90	110
E	20	20	25
F	65	65	80
G	29	29	37
H	64	64	65
L	94,5	94,5	101
M	78,5	78,5	98
N	28,5	28,5	38
O	36	36	40
P	36	36	43
Max Flow (l/min)	30	45	80
Weight (kg)	2,400	2,100	5,15

### PRESSURE DROP CURVES



### SPRINGS

Code	LP		HP	
	10	20	20	30
3/8	5 - 50	20 - 260	40 - 210	100 - 350
1/2	5 - 50	20 - 260	40 - 210	100 - 350
3/4	5 - 120	50 - 350	20 - 260	120 - 350

### ORDERING CODE

WEPD

L

Ports Size:

- 3/8
- 1/2
- 3/4

LP - Spring:

- 10
- 20

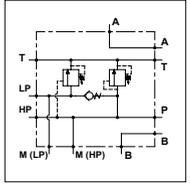
HP - Spring:

- 20
- 30

### WEPD 6F

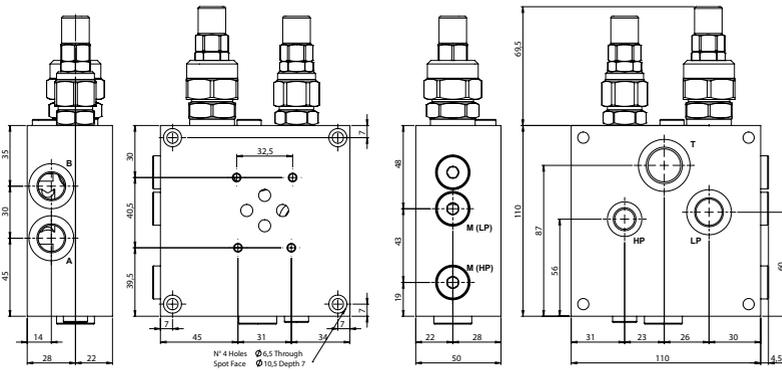
#### TECHNICAL DATA

- **Max flow rate LP>C:** 30 l/min
- **Max setting pressure:** 350 Bar
- **Max working pressure:** 250 Bar
- **Materials:** Aluminium Body, Cartridge in Steel zinc plated
- **Weight:** 2,700 kg

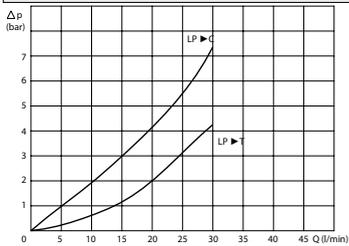


#### PORTS

HP	1/4
LP	3/8
T	1/2
A	3/8
B	3/8
M(HP)	1/4
M(LP)	1/4



#### PRESSURE DROP CURVES



#### ORDERING CODE

WEPD

6F

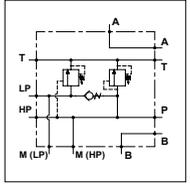
LP - Spring:  
- 10 = 5-50  
- 20 = 20-260

HP - Spring:  
- 20 = 40-210  
- 30 = 100-350

### WEPD 10F

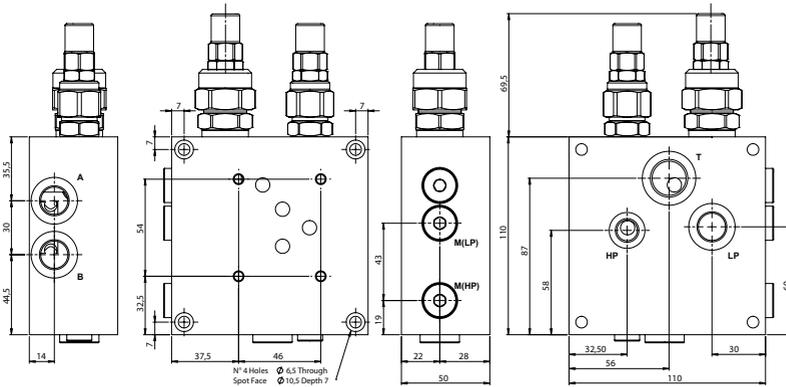
#### TECHNICAL DATA

- **Max flow rate LP>C:** 45 l/min
- **Max setting pressure:** 350 Bar
- **Max working pressure:** 250 Bar
- **Materials:** Aluminium Body, Cartridge in Steel zinc plated
- **Weight:** 3,800 kg

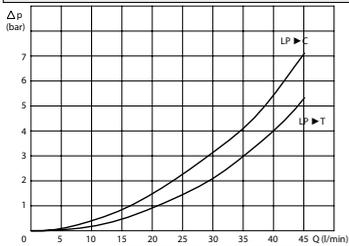


#### PORTS

HP	1/4
LP	3/8
T	1/2
A	3/8
B	3/8
M(HP)	1/4
M(LP)	1/4



#### PRESSURE DROP CURVES



#### ORDERING CODE

WEPD

10F

LP - Spring:

- 10 = 5-50
- 20 = 20-260

HP - Spring:

- 20 = 40-210
- 30 = 100-350





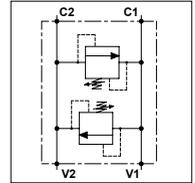


**VALVES FLANGED ON MOTORS**  
*VALVOLE FLANGIATE SU MOTORI*

## WMD FDB OMM 25

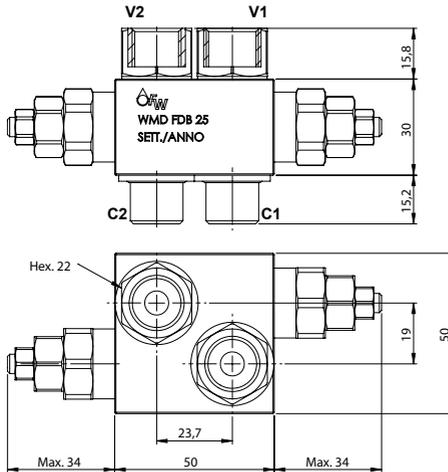
### TECHNICAL DATA

- **Flow:** 25 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Note:** Flangeable on Danfoss motors OMM
- **Weight:** 0,500 kg (0,750 kg)



### PORTS

C1 - C2	3/8
V1 - V2	

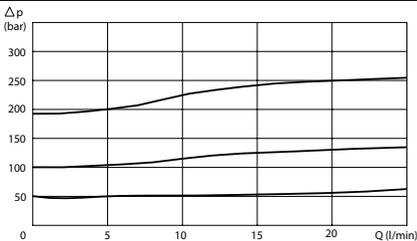


### OPTION

Tamper Proof Cap



### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	20-70	10	20
20	50-180	25	50
35	130-350	60	130

### ORDERING CODE

WMD

FDB

OMM

25

3/8



S



#### Material Body:

- Omit if aluminium
- S = Steel

#### Springs:

- 05
- 20
- 35

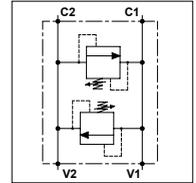
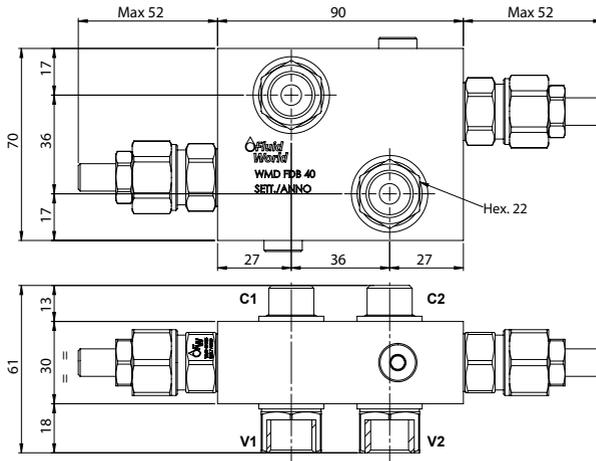
#### Adjustment if Required:

- Omit if not required
- Value
- Value with X

## WMD FDB OMR 40

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar
- **Materials:** Aluminium Body
- **Note:** Flangeable on Danfoss motors OMP/R/H
- **Weight:** 0,920 kg



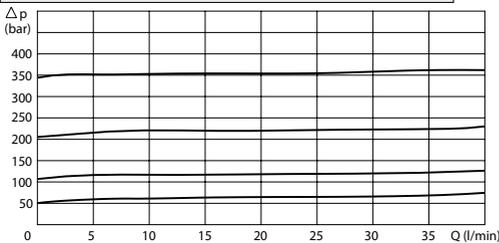
### PORTS

C1 - C2 V1 - V2	3/8	1/2
--------------------	-----	-----

### REGULATOR

(S) Screw	
(V) Handknob	
<b>OPTION</b>	
(X) Tammer Proof Cap	

### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
05	5-55	15	5
10	25-110	25	25
20	50-215	50	50
35	100-350	90	100

### ORDERING CODE

WMD FDB OMR 40

Ports Size: - 3/8  
- 1/2

Type of Regulator: - S = Screw  
- V = Handknob

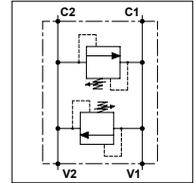
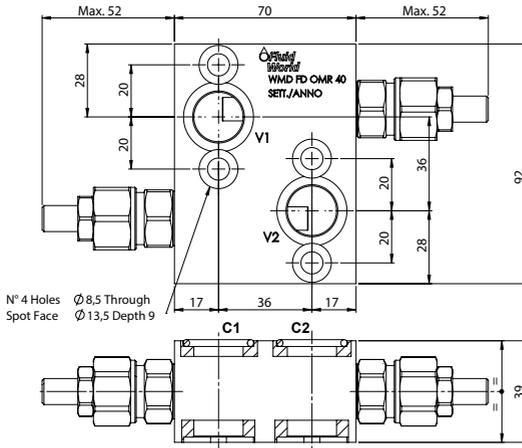
Springs: - 05  
- 10  
- 20  
- 35

Adjustment if Required: - Omit if not required  
- Value  
- Value with X

## WMD FD OMR 40

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Note:** Flangeable on Danfoss motors OMP/R/H
- **Weight:** 0,850 kg (1,800 kg)



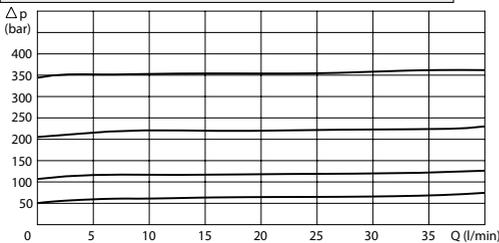
### PORTS

C1 - C2	ø19
V1 - V2	1/2

### REGULATOR

<b>(S)</b> Screw	
<b>(V)</b> Handknob	
<b>OPTION</b>	
<b>(X)</b> Tammer Proof Cap	

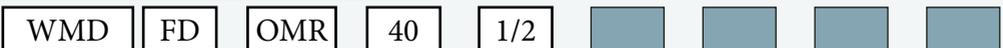
### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
<b>05</b>	5-55	15	5
<b>10</b>	25-110	25	25
<b>20</b>	50-215	50	50
<b>35</b>	100-350	90	100

### ORDERING CODE

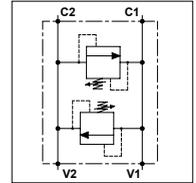
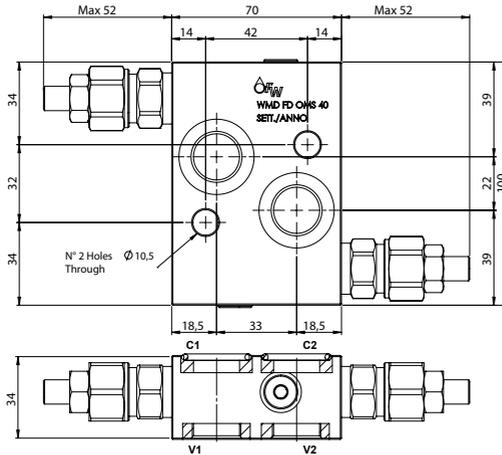


- Material Body:**
- Omit if aluminium
  - S = Steel
- Type of Regulator:**
- S = Screw
  - V = Handknob
- Springs:**
- 05
  - 10
  - 20
  - 35
- Adjustment if Required:**
- Omit if not required
  - Value
  - Value with X

## WMD FD OMS 40

### TECHNICAL DATA

- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Note:** Flangeable on Danfoss motors OMS/T/V
- **Weight:** 0,900 kg (1,950 kg)



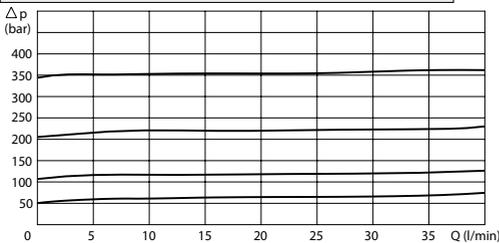
### PORTS

C1 - C2	ø19
V1 - V2	1/2

### REGULATOR

<b>(S)</b> Screw	
<b>(V)</b> Handknob	
<b>OPTION</b>	
<b>(X)</b> Tamper Proof Cap	

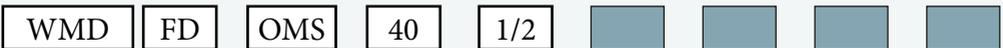
### PRESSURE DROP CURVES



### SPRINGS

Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
<b>05</b>	5-55	15	5
<b>10</b>	25-110	25	25
<b>20</b>	50-215	50	50
<b>35</b>	100-350	90	100

### ORDERING CODE



#### Material Body:

- Omit if aluminium
- S = Steel

#### Type of Regulator:

- S = Screw
- V = Handknob

#### Springs:

- 05
- 10
- 20
- 35

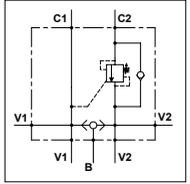
#### Adjustment if Required:

- Omit if not required
- Value
- Value with X

## WOS FD OMR 60 - DL

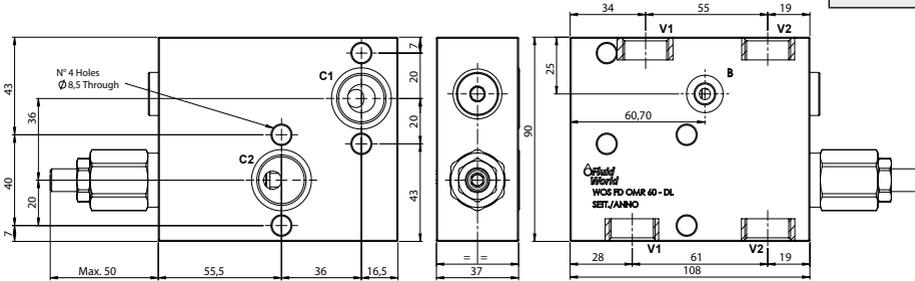
### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Note:** Flangeable on Danfoss motors OMP/R/H
- **Weight:** 1,220 kg (2,670 kg)

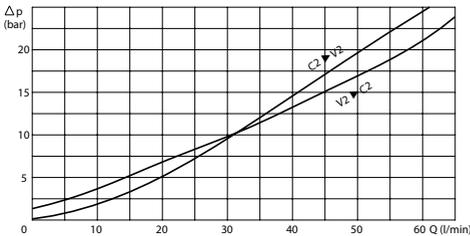


### PORTS

V1 - V2	1/2
B	1/8
C1 - C2	ø8,5



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE



#### Material Body:

- Omit if aluminium
- S = Steel

#### Springs: Pilot Ratio:

- 20
- 35
- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

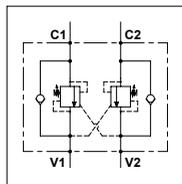
#### Adjustment if Required:

- Omit if not required
- Value

## WOD FD OMR 60 - NOSF

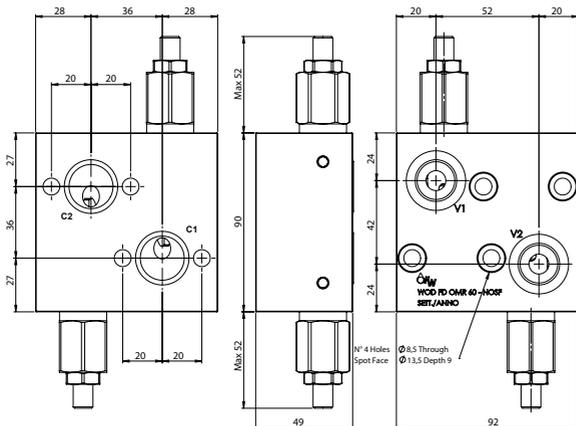
### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Note:** Flangeable on Danfoss motors OMP/R/H
- **Weight:** 1,600 kg (3,400 kg)

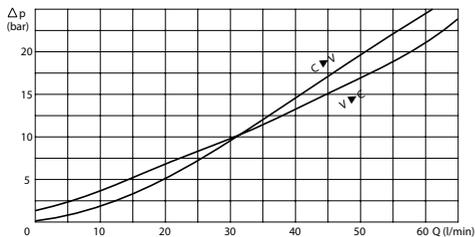


### PORTS

V1 - V2	3/8	1/2
C1 - C2	ø8,5	



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35		
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

### ORDERING CODE

WOD

FD

OMR

60

NOSF

### Ports Size:

- 3/8
- 1/2

### Material Body:

- Omit if aluminium
- S = Steel

### Springs:

- 20
- 35

### Pilot Ratio:

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

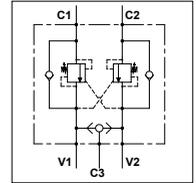
### Adjustment if Required:

- Omit if not required
- Value

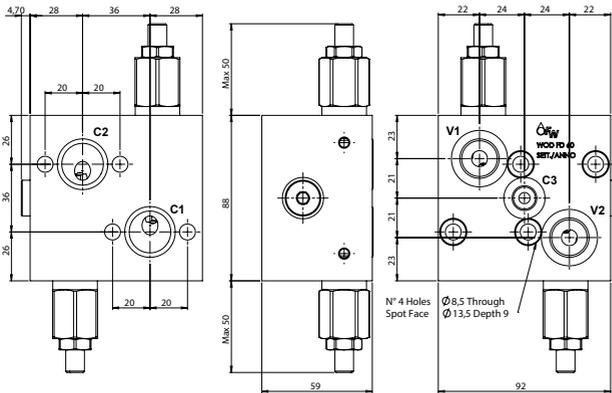
### WOD FD OMR 60

#### TECHNICAL DATA

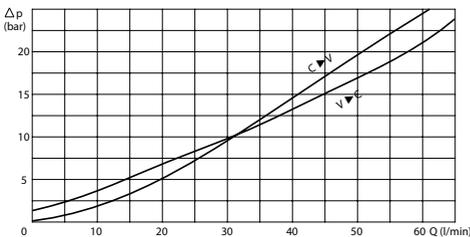
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Note:** Flangeable on Danfoss motors OMP/R/H
- **Weight:** 1,550 kg (3,350 kg)



PORTS		
V1 - V2	3/8	1/2
C3	1/4	
C1 - C2	ø8,5	



#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

FD

OMR

60

**Ports Size:**

- 3/8
- 1/2

**Material Body:**

- Omit if aluminium
- S = Steel

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

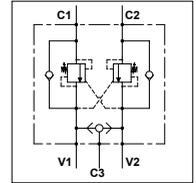
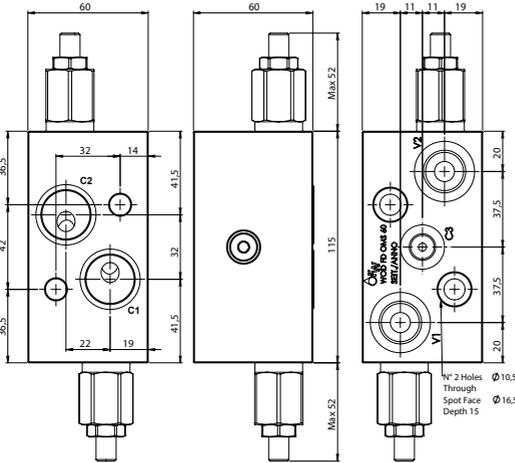
**Adjustment if Required:**

- Omit if not required
- Value

### WOD FD OMS 60

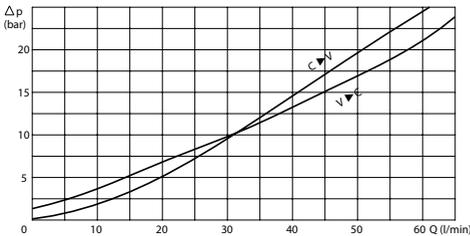
#### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Note:** Flangeable on Danfoss motors OMS/T/V
- **Weight:** 1,350 kg (3,050 kg)



PORTS		
V1 - V2	3/8	1/2
C3	1/4	
C1 - C2	ø8,5	

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35		
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

#### ORDERING CODE

WOD

FD

OMS

60

**Ports Size:**

- 3/8
- 1/2

**Material Body:**

- Omit if aluminium
- S = Steel

**Springs:**

- 20
- 35

**Pilot Ratio:**

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

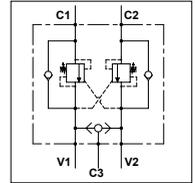
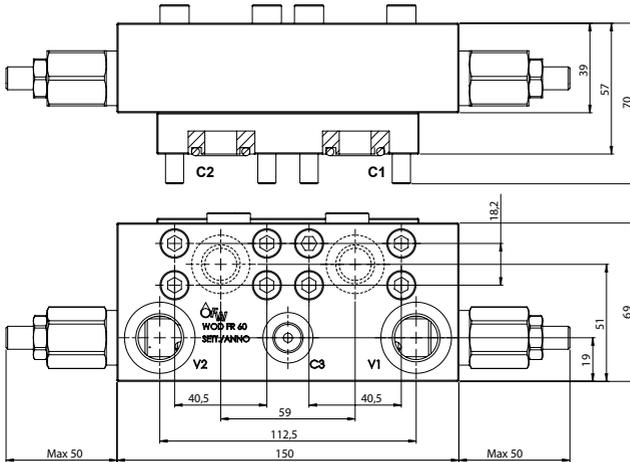
**Adjustment if Required:**

- Omit if not required
- Value

### WOD FR 60

#### TECHNICAL DATA

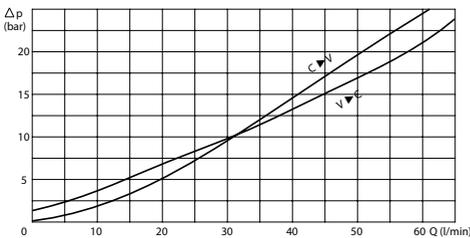
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Note:** Flangeable on Rexroth motors A2FE 28-32  
Included Screw M8
- **Weight:** 1,850 kg (3,800 kg)



#### PORTS

V1 - V2	1/2
C3	1/4
C1 - C2	ø14

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35			
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30	
4:1	60-210	70	170	80-350	120	280	
8:1	60-220	50		100-350	85		
11:1	60-250	90		80-350	150		

#### ORDERING CODE

WOD

FR

60

1/2

#### Material Body:

- Omit if aluminium
- S = Steel

#### Springs:

- 20
- 35

#### Pilot Ratio:

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

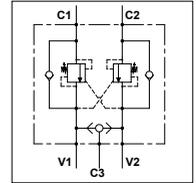
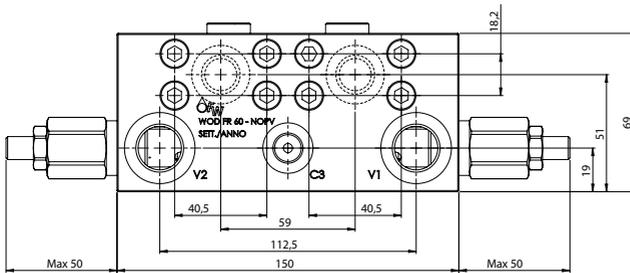
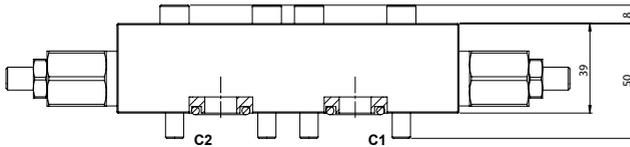
#### Adjustment if Required:

- Omit if not required
- Value

### WOD FR 60 - NOPV

#### TECHNICAL DATA

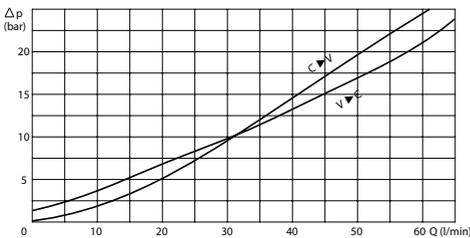
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Note:** Flangeable on Rexroth motors A2FE 28-32  
Included Screw M8
- **Weight:** 1,550 kg (3,200 kg)



#### PORTS

V1 - V2	1/2
C3	1/4
C1 - C2	ø14

#### PRESSURE DROP CURVES



#### SPRINGS

Code	20			35			
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30	
4:1	60-210	70	170	80-350	120	280	
8:1	60-220	50		100-350	85		
11:1	60-250	90		80-350	150		

#### ORDERING CODE

WOD FR 60 1/2 [ ] [ ] [ ] NOPV

#### Material Body:

- Omit if aluminium
- S = Steel

#### Springs:

- 20
- 35

#### Pilot Ratio:

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

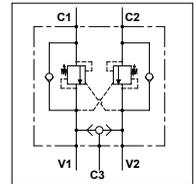
#### Adjustment if Required:

- Omit if not required
- Value

## WOD FM 60

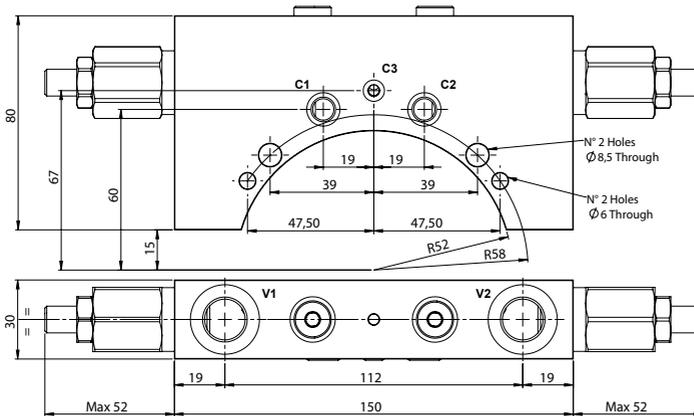
### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Note:** Flangeable on Meta motors ORSX
- **Weight:** 1,050 kg (2,200 kg)

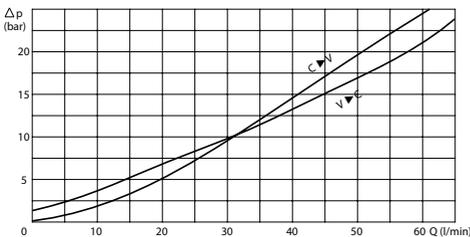


### PORTS

V1 - V2	3/8
C3	ø4
C1 - C2	ø8



### PRESSURE DROP CURVES



### SPRINGS

Code	20			35			
	Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30	
4:1	60-210	70	170	80-350	120	280	
8:1	60-220	50		100-350	85		
11:1	60-250	90		80-350	150		

### ORDERING CODE

WOD

FM

60

3/8

#### Material Body:

- Omit if aluminium
- S = Steel

#### Springs:

- 20
- 35

#### Pilot Ratio:

- Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1

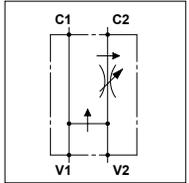
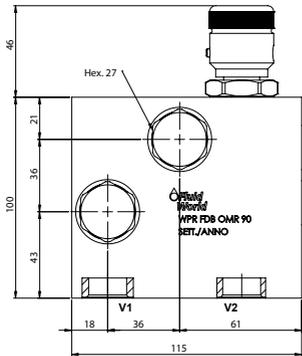
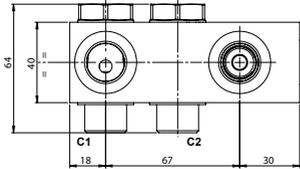
#### Adjustment if Required:

- Omit if not required
- Value

## WPR FDB OMR 90

### TECHNICAL DATA

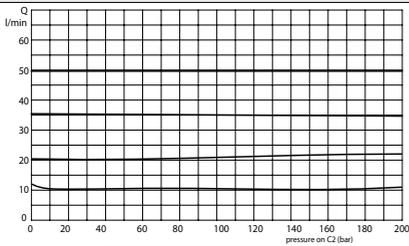
- **Flow:** 90 l/min with 50 l/min in C2
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Note:** Flangeable on Danfoss motors OMP/R/H
- **Weight:** 1,650 kg (3,470 kg)



### PORTS

V1 - V2	1/2
C1 - C2	1/2

### PRESSURE DROP CURVES



### ORDERING CODE

WPR

FDB

OMR

90

1/2

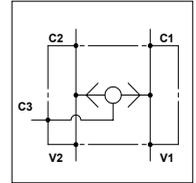
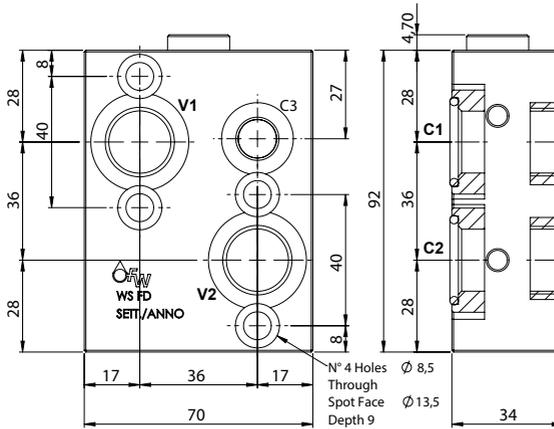
### Material Body:

- Omit if aluminium
- S = Steel

## WS FD OMR

### TECHNICAL DATA

- **Flow:** 60 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Note:** Flangeable on Danfoss motors OMP/R/H
- **Weight:** 0,550 kg (1,400 kg)



### PORTS

V1 - V2	1/2
C3	1/4
C1 - C2	ø19

### ORDERING CODE

WS

FD

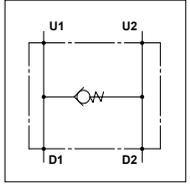
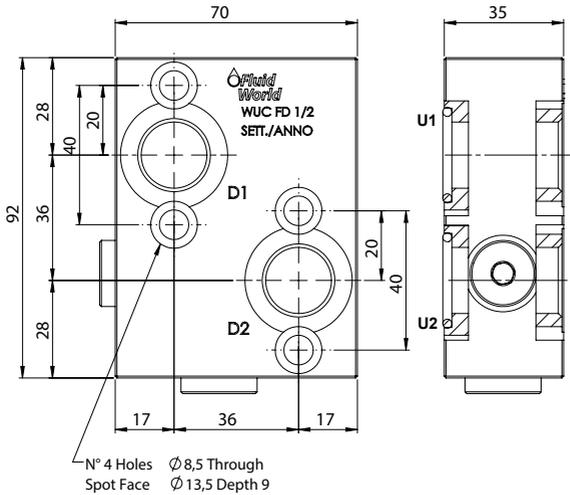
OMR

1/2

## WUC FD OMR

### TECHNICAL DATA

- **Flow:** 70 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Cracking pressure:** 0,5 bar
- **Note:** Flangeable on Danfoss motors OMP/R/H
- **Weight:** 0,560 kg (1,450 kg)



### PORTS

D1 - D2	1/2
U1 - U2	ø19

### ORDERING CODE

WUC

FD

OMR

1/2



### Material Body:

- Omit if aluminium
- S = Steel



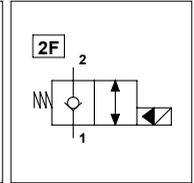
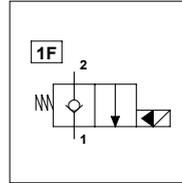
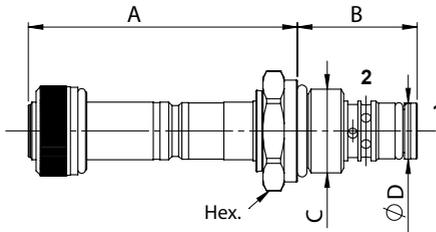


**SOLENOID OPERATED VALVES**  
*VALVOLE ELETTRICHE*

## WST S08 NC - L

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 300 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** FW3402000
- **Installation torque:** 30 Nm
- **Weight:** 0,120 kg



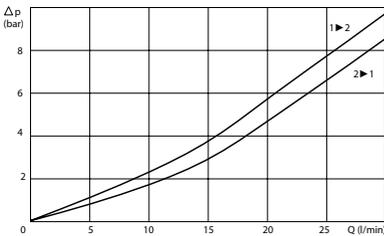
### PORTS

Size S08

### DIMENSIONS

A	61,1
B	27,2
C	3/4-16UNF
D	12,7
Hex.	24

### PRESSURE DROP CURVES



### MANUAL OVERRIDE

(EMS)  
Screw



### ORDERING CODE

WST

S08

NC

L

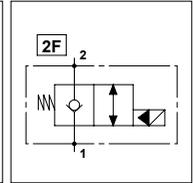
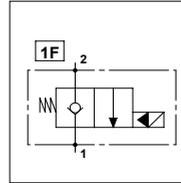
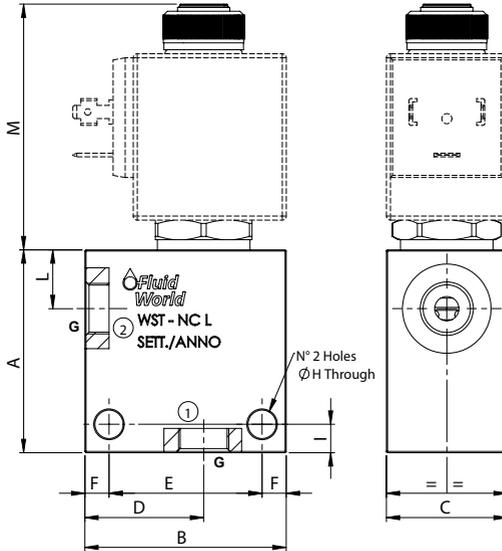
**Type of Scheme:**  
- Omit for scheme 1F  
- 2F = Scheme 2F

**Manual Override:**  
- Omit if not required  
- EMS = Screw

# WST S08 NC - L

## TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (300 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Poppet Type - Pilot Acting
- **Note:** 18W coil on the page 289



## PORTS

Size

S08

G

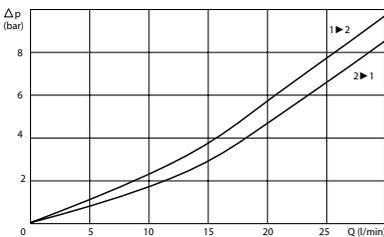
1/4

3/8

## DIMENSIONS

A	50
B	50
C	30
D	30
E	38
F	6
H	7
I	7
L	14,5
M	60,6

## PRESSURE DROP CURVES



## MANUAL OVERRIDE

(EMS)  
Screw



## ORDERING CODE

WST

S08

NC

L

### Type of Scheme:

- Omit for scheme 1F
- 2F = Scheme 2F

### Manual Override:

- Omit if not required
- EMS = Screw

### Ports Size:

- 1/4
- 3/8

### Material Body:

- Omit if Aluminium
- S = Steel

### Optional Body (Only for S08):

- Omit if not required
- B
- EMS

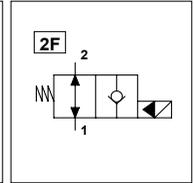
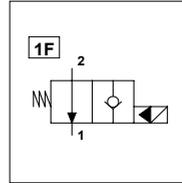
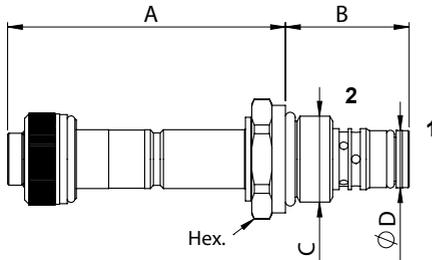
### Rated Voltage Coil:

- Omit if not required
- 12
- 24

## WST S08 NA - L

### TECHNICAL DATA

- **Flow:** 30 l/min
- **Max working pressure:** 300 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** FW3402000
- **Installation torque:** 30 Nm
- **Weight:** 0,120 kg



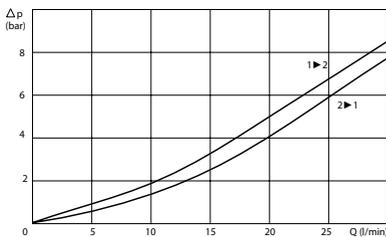
### PORTS

Size S08

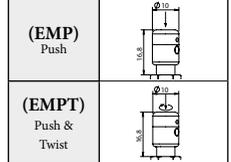
### DIMENSIONS

A	61,8
B	27,5
C	3/4-16UNF
D	12,7
Hex.	24

### PRESSURE DROP CURVES



### MANUAL OVERRIDE



### ORDERING CODE

WST

S08

NA

L

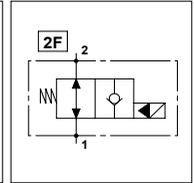
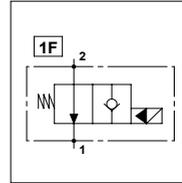
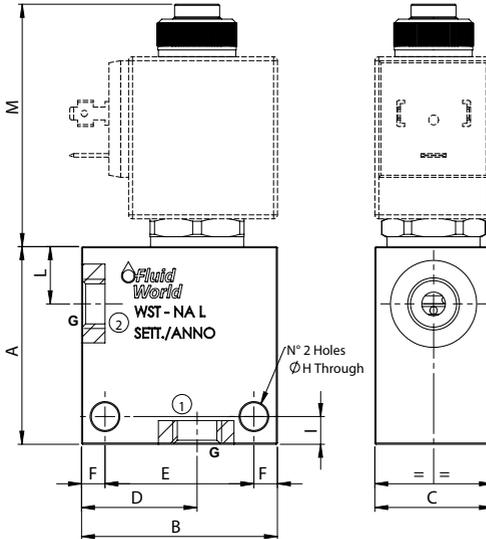
**Type of Scheme:**  
 - Omit for scheme 1F  
 - 2F = Scheme 2F

**Manual Override:**  
 - Omit if not required  
 - EMP = Push  
 - EMPT = Push & Twist

## WST S08 NA - L

### TECHNICAL DATA

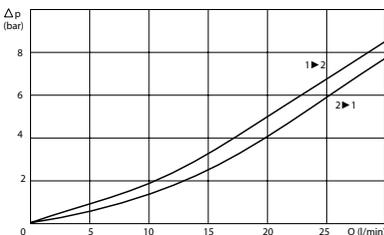
- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (300 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Poppet Type - Pilot Acting
- **Note:** 18W coil on the page 289



### PORTS

Size	S08
G	1/4
	3/8
DIMENSIONS	
A	50
B	50
C	30
D	30
E	38
F	6
H	7
I	7
L	14,5
M	61,3

### PRESSURE DROP CURVES



### MANUAL OVERRIDE

(EMP) Push	
(EMPT) Push & Twist	

### ORDERING CODE

WST S08 NA   L              

#### Type of Scheme:

- Omit for scheme 1F
- 2F = Scheme 2F

#### Manual Override:

- Omit if not required
- EMP = Push
- EMPT = Push & Twist

#### Ports Size:

- 1/4
- 3/8

#### Material Body:

- Omit if Aluminium
- S = Steel

#### Optional Body (Only for S08):

- Omit if not required
- B
- EMS

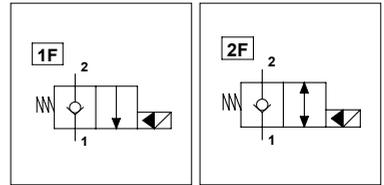
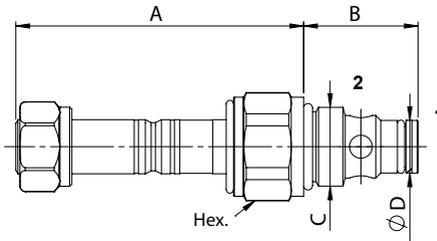
#### Rated Voltage Coil:

- Omit if not required
- 12
- 24

### WST - NC

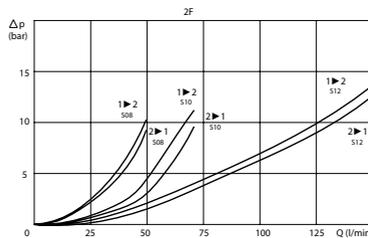
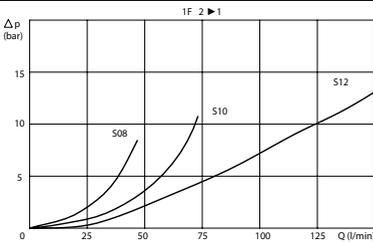
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table



PORTS			
Size	S08	S10	S12
DIMENSIONS			
A	69,4	67	64
B	27,6	32	46
C	3/4-16UNF	7/8-14UNF	1 1/16-12UNF
D	12,7	15,8	22,2
Hex.	24	27	32
Max Flow (l/min)	40	70	150
Cavity	FW3402000	FW7802000	FW1160200
Installation torque (Nm)	30	40	60
Weight (kg)	0,160	0,190	0,260

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE

(EMS)  
Screw



#### ORDERING CODE

WST

NC

#### Ports Size:

- S08 = SAE 08/2
- S10 = SAE 10/2
- S12 = SAE 12/2

#### Type of Scheme:

- Omit for scheme 1F
- 2F = Scheme 2F

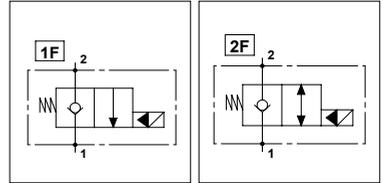
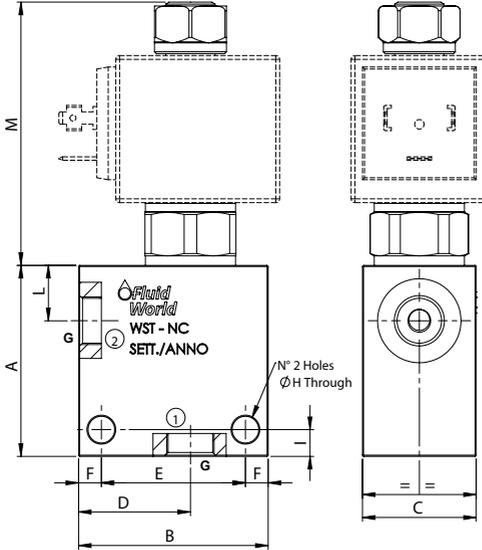
#### Manual Override:

- Omit if not required
- EMS = Screw

### WST - NC

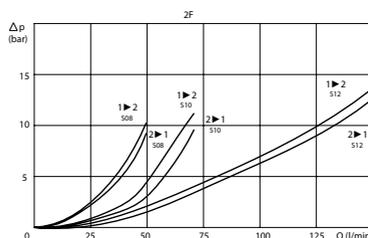
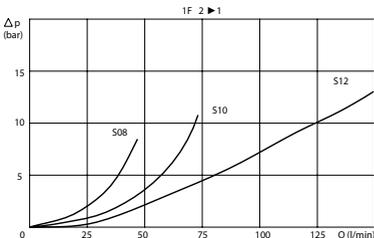
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Poppet Type - Pilot Acting
- **Note:** 22W coil on the page 290



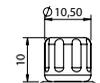
PORTS				
Size	<b>S08</b>	<b>S10</b>	<b>S12</b>	
G	1/4	1/2	3/4	1
	3/8			
DIMENSIONS				
A	50	56	70	80
B	50	60	70	80
C	30	35	40	50
D	30	35	40	46
E	38	48	54	60
F	6	6	8	10
H	7	7	9	8,5
I	7	7	8	8
L	14,5	18,5	26,5	26,5
M	68,9	66,5	63,5	63,5
Max Flow (l/min)	40	70	150	150

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE

(EMS)  
Screw



#### ORDERING CODE

WST

NC

#### Ports Size:

- S08 = SAE 08/2
- S10 = SAE 10/2
- S12 = SAE 12/2

#### Type of Scheme:

- Omit for scheme 1F
- 2F = Scheme 2F

#### Manual Override:

- Omit if not required
- EMS = Screw

#### Ports Size:

- 1/4 ; 3/8
- 1/2
- 3/4 ; 1

#### Material Body:

- Omit if Aluminium
- S = Steel

#### Optional Body (Only for S08):

- Omit if not required
- B
- EMS

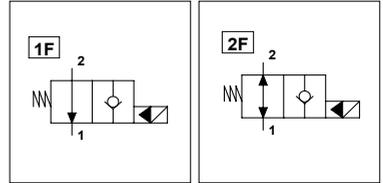
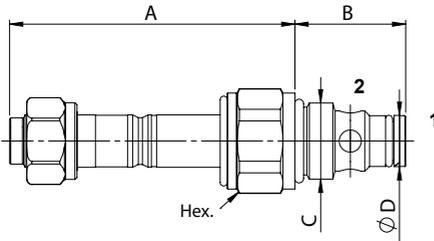
#### Rated Voltage Coil:

- Omit if not required
- 12
- 24

### WST - NA

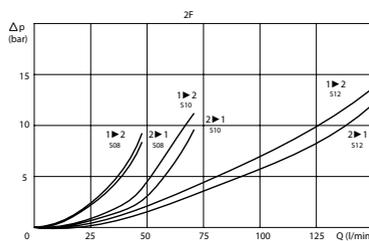
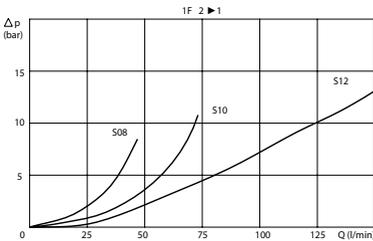
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table

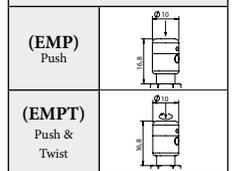


PORTS			
Size	S08	S10	S12
DIMENSIONS			
A	71,2	68,8	65,8
B	27,6	32	46
C	3/4-16UNF	7/8-14UNF	1 1/16-12UNF
D	12,7	15,8	22,2
Hex.	24	27	32
Max Flow (l/min)	40	70	150
Cavity	FW3402000	FW7802000	FW1160200
Installation torque (Nm)	30	40	60
Weight (kg)	0,160	0,190	0,260

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE



#### ORDERING CODE

WST

NA

#### Ports Size:

- S08 = SAE 08/2
- S10 = SAE 10/2
- S12 = SAE 12/2

#### Type of Scheme:

- Omit for scheme 1F
- 2F = Scheme 2F

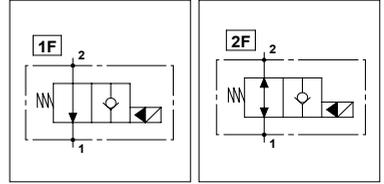
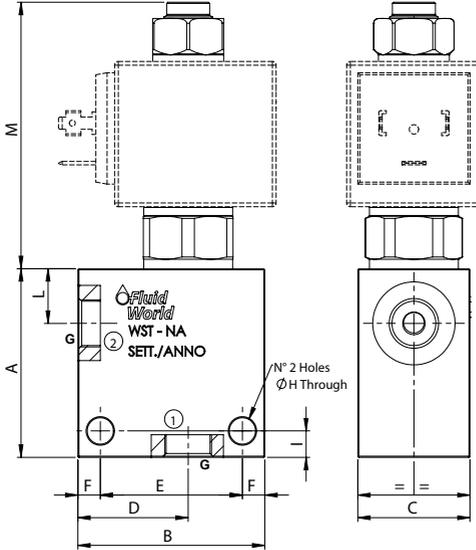
#### Manual Override:

- Omit if not required
- EMP = Push
- EMPT = Push & Twist

### WST - NA

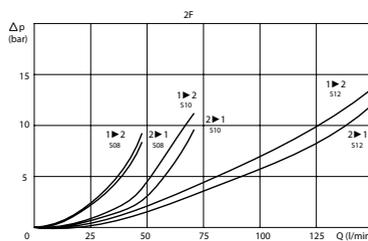
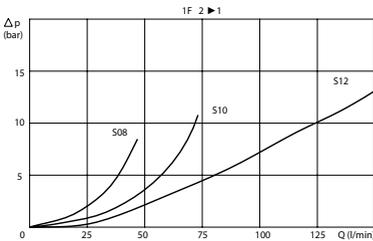
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Poppet Type - Pilot Acting
- **Note:** 22W coil on the page 290



PORTS				
Size	S08	S10	S12	
G	1/4	1/2	3/4	1
	3/8			
DIMENSIONS				
A	50	56	70	80
B	50	60	70	80
C	30	35	40	50
D	30	35	40	46
E	38	48	54	60
F	6	6	8	10
H	7	7	9	8,5
I	7	7	8	8
L	14,5	18,5	26,5	26,5
M	70,7	68,3	65,3	65,3
Max Flow (l/min)	40	70	150	150

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE

(EMP)  
Push



(EMPT)  
Push &  
Twist



#### ORDERING CODE

WST

NA

#### Ports Size:

- S08 = SAE 08/2
- S10 = SAE 10/2
- S12 = SAE 12/2

#### Type of Scheme:

- Omit for scheme 1F
- 2F = Scheme 2F

#### Manual Override:

- Omit if not required
- EMP = Push
- EMPT = Push & Twist

#### Ports Size:

- 1/4 ; 3/8
- 1/2
- 3/4 ; 1

#### Material Body:

- Omit if Aluminium
- S = Steel

#### Optional Body (Only for S08):

- Omit if not required
- B
- EMS

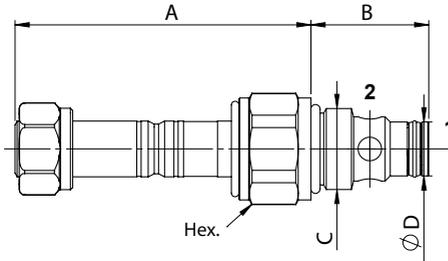
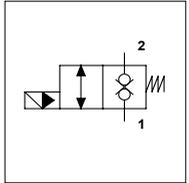
#### Rated Voltage Coil:

- Omit if not required
- 12
- 24

# WDT - NC

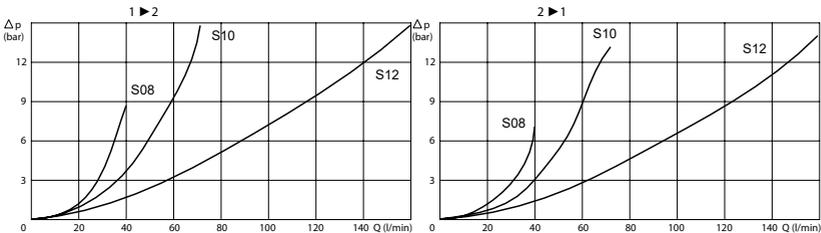
## TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table



PORTS			
Size	S08	S10	S12
DIMENSIONS			
A	69,4	67	64
B	27,6	32	46
C	3/4-16UNF	7/8-14UNF	1 1/16-12UNF
D	12,7	15,8	22,2
Hex.	24	27	32
Max Flow (l/min)	40	70	150
Cavity	FW3402000	FW7802000	FW1160200
Installation torque (Nm)	30	40	60
Weight (kg)	0,150	0,190	0,260

## PRESSURE DROP CURVES



## MANUAL OVERRIDE

(EMS)  
Screw



## ORDERING CODE

WDT

NC

### Ports Size:

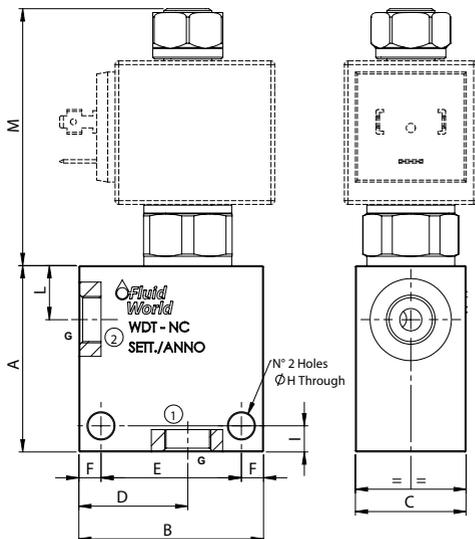
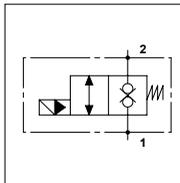
- S08 = SAE 08/2
- S10 = SAE 10/2
- S12 = SAE 12/2

- Manual Override:**
- Omit if not required
  - EMS = Screw

### WDT - NC

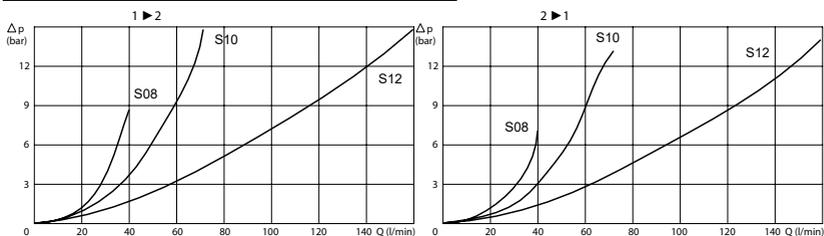
#### TECHNICAL DATA

- Flow:** See table
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Poppet Type - Pilot Acting
- Note:** 22W coil on the page 290



PORTS				
Size	S08	S10	S12	
G	1/4	1/2	3/4	1
	3/8			
DIMENSIONS				
A	50	56	70	80
B	50	60	70	80
C	30	35	40	50
D	30	35	40	46
E	38	48	54	60
F	6	6	8	10
H	7	7	9	8,5
I	7	7	8	8
L	14,5	18,5	26,5	26,5
M	68,9	66,5	63,5	63,5
Max Flow (l/min)	40	70	150	150

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE

(EMS)  
Screw



#### ORDERING CODE

WDT

NC

#### Ports Size:

- S08 = SAE 08/2
- S10 = SAE 10/2
- S12 = SAE 12/2

#### Manual Override:

- Omit if not required
- EMS = Screw

#### Ports Size:

- 1/4 ; 3/8
- 1/2
- 3/4 ; 1

#### Material Body:

- Omit if Aluminium
- S = Steel

#### Optional Body (Only for S08):

- Omit if not required
- B
- EMS

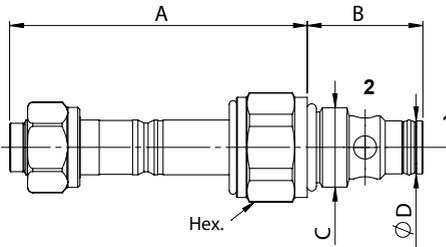
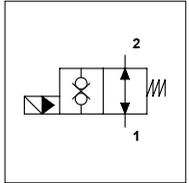
#### Rated Voltage Coil:

- Omit if not required
- 12
- 24

### WDT - NA

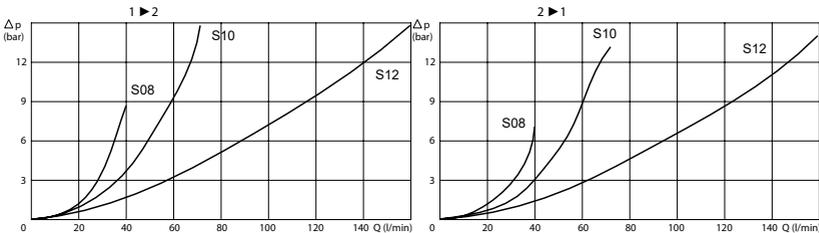
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Poppet Type - Pilot Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table

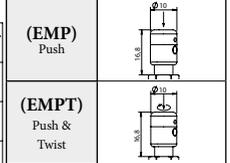


PORTS			
Size	S08	S10	S12
DIMENSIONS			
A	71,2	68,8	65,8
B	27,6	32	46
C	3/4-16UNF	7/8-14UNF	1 1/16-12UNF
D	12,7	15,8	22,2
Hex.	24	27	32
Max Flow (l/min)	40	70	150
Cavity	FW3402000	FW7802000	FW1160200
Installation torque (Nm)	30	40	60
Weight (kg)	0,150	0,190	0,260

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE



#### ORDERING CODE

WDT

NA

#### Ports Size:

- S08 = SAE 08/2
- S10 = SAE 10/2
- S12 = SAE 12/2

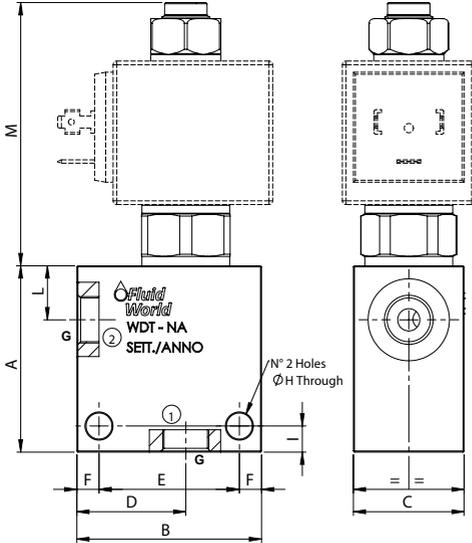
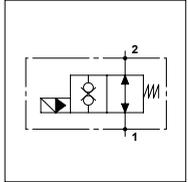
#### Manual Override:

- Omit if not required
- EMP = Push
- EMPT = Push & Twist

### WDT - NA

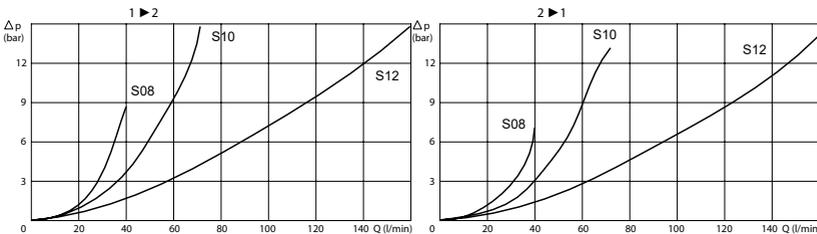
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Poppet Type - Pilot Acting
- **Note:** 22W coil on the page 290



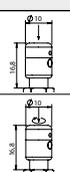
PORTS				
Size	S08	S10	S12	
G	1/4	1/2	3/4	1
	3/8			
DIMENSIONS				
A	50	56	70	80
B	50	60	70	80
C	30	35	40	50
D	30	35	40	46
E	38	48	54	60
F	6	6	8	10
H	7	7	9	8,5
I	7	7	8	8
L	14,5	18,5	26,5	26,5
M	70,7	68,3	65,3	65,3
Max Flow (l/min)	40	70	150	150

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE

(EMP)  
Push



(EMPT)  
Push &  
Twist



#### ORDERING CODE



#### Ports Size:

- S08 = SAE 08/2
- S10 = SAE 10/2
- S12 = SAE 12/2

#### Manual Override:

- Omit if not required
- EMP = Push
- EMPT = Push & Twist

#### Ports Size:

- 1/4 ; 3/8
- 1/2
- 3/4 ; 1

#### Material Body:

- Omit if Aluminium
- S = Steel

#### Optional Body (Only for S08):

- Omit if not required
- B
- EMS

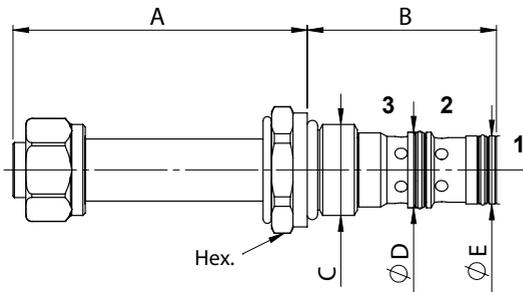
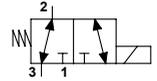
#### Rated Voltage Coil:

- Omit if not required
- 12
- 24

### WTW - 01

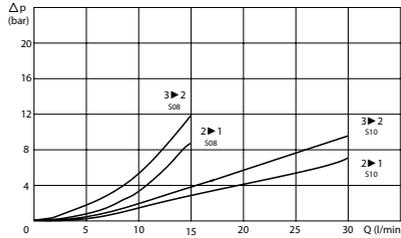
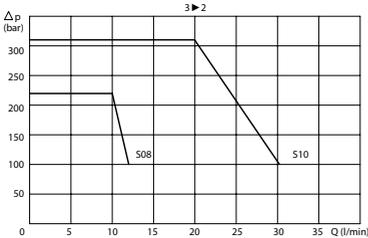
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** See table
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Spool Type - Direct Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table



PORTS		
Size	S08	S10
DIMENSIONS		
A	61,7	77
B	39,7	46,5
C	3/4-16UNF	7/8-14UNF
D	15,8	17,4
E	14,2	15,8
Hex.	24	27
Max Pressure (bar)	210	210
Max Flow (l/min)	12	20
Cavity	FW3403000	FW7803000
Installation torque (Nm)	30	40
Weight (kg)	0,150	0,300

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE

(EMS)  
Screw



#### ORDERING CODE

WTW

01

#### Ports Size:

- S08 = SAE 08/3
- S10 = SAE 10/3

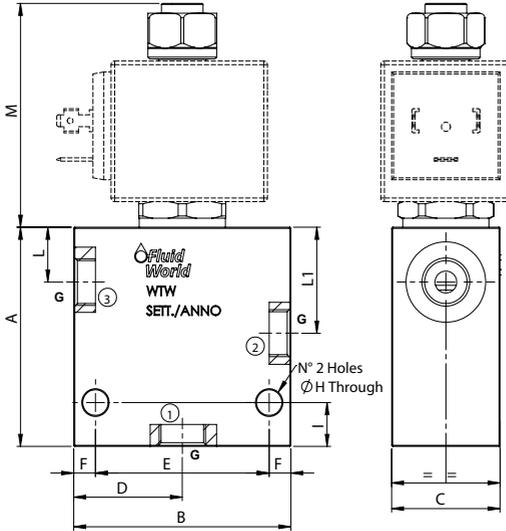
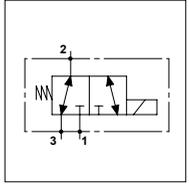
#### Manual Override:

- Omit if not required
- EMS = Screw

### WTW - 01

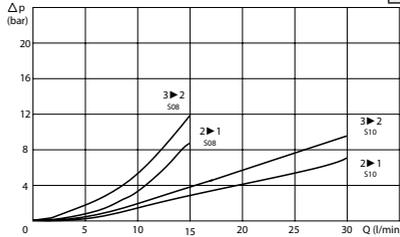
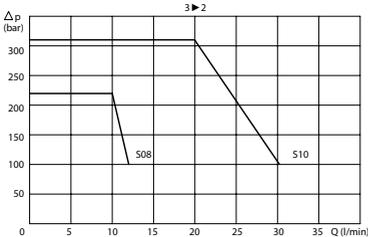
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 210 bar (210 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Spool Type - Direct Acting
- **Note:** 22W coil for S08 on the page 290  
36W coil for S10 on the page 291



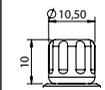
PORTS		
Size	<b>S08</b>	<b>S10</b>
G	1/4	1/2
	3/8	
DIMENSIONS		
A	60	65
B	60	60
C	30	35
D	30	30
E	46	48
F	7	6
H	7	7
I	12	7
L	15,5	18,5
L1	29,5	34,5
M	61,2	76,5
Max Flow (l/min)	12	20

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE

(EMS)  
Screw



#### ORDERING CODE

WTW

01

#### Ports Size:

- S08 = SAE 08/3
- S10 = SAE 10/3

#### Manual Override:

- Omit if not required
- EMS = Screw

#### Ports Size:

- 1/4 ; 3/8
- 1/2

#### Material Body:

- Omit if Aluminium
- S = Steel

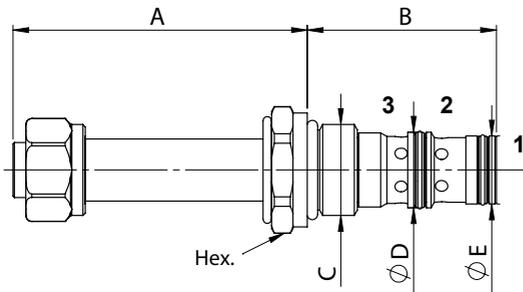
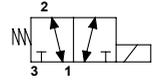
#### Rated Voltage

- Coil:**
- Omit if not required
- 12
- 24

### WTW - 02

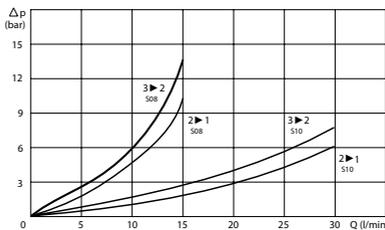
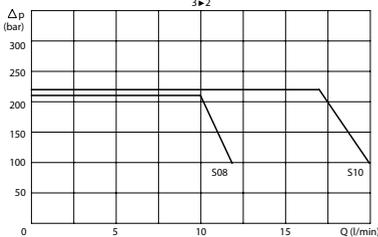
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** See table
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Spool Type - Direct Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table



PORTS		
Size	S08	S10
DIMENSIONS		
A	61,8	82,9
B	39,7	45,8
C	3/4-16UNF	7/8-14UNF
D	15,8	17,4
E	14,2	15,8
Hex.	24	27
Max Pressure (bar)	210	210
Max Flow (l/min)	12	20
Cavity	FW3403000	FW7803000
Installation torque (Nm)	30	40
Weight (kg)	0,150	0,290

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE

(EMS)  
Screw



#### ORDERING CODE

WTW

02

#### Ports Size:

- S08 = SAE 08/3
- S10 = SAE 10/3

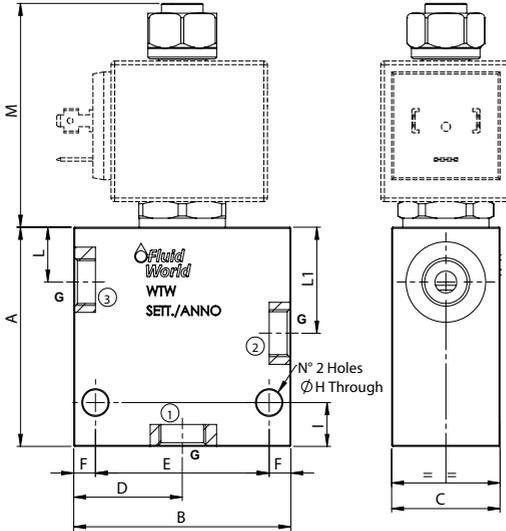
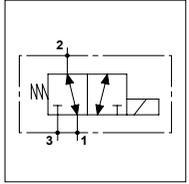
#### Manual Override:

- Omit if not required
- EMS = Screw

### WTW - 02

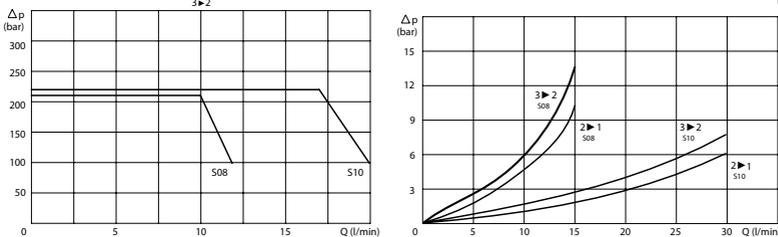
#### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 210 bar (210 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Spool Type - Direct Acting
- **Note:** 22W coil for S08 on the page 290  
36W coil for S10 on the page 291



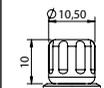
PORTS		
Size	<b>S08</b>	<b>S10</b>
G	1/4	1/2
	3/8	
DIMENSIONS		
A	60	65
B	60	60
C	30	35
D	30	30
E	46	48
F	7	6
H	7	7
I	12	7
L	15,5	18,5
L1	29,5	34,5
M	61,3	82,4
Max Flow (l/min)	12	20

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE

(EMS)  
Screw



#### ORDERING CODE

WTW

02

#### Ports Size:

- S08 = SAE 08/3
- S10 = SAE 10/3

#### Manual Override:

- Omit if not required
- EMS = Screw

#### Ports Size:

- 1/4 ; 3/8
- 1/2

#### Material Body:

- Omit if Aluminium
- S = Steel

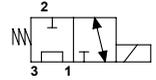
#### Rated Voltage

- Coil:**
- Omit if not required
- 12
- 24

# WTW S08 03

## TECHNICAL DATA

- **Flow:** 12 l/min
- **Max working pressure:** 210 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Spool Type - Direct Acting
- **Cavity:** FW3403000
- **Installation torque:** 30 Nm
- **Weight:** 0,150 kg

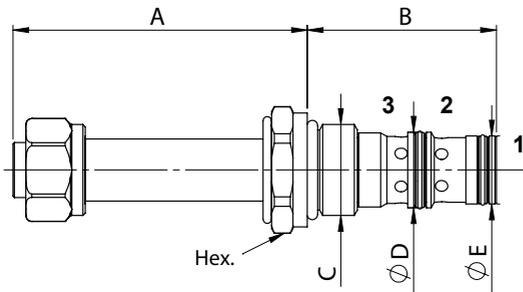


## PORTS

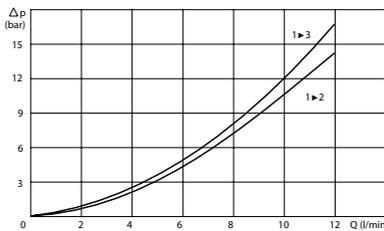
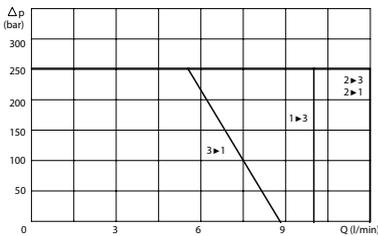
Size	S08
------	-----

## DIMENSIONS

A	61,8
B	39,7
C	3/4-16UNF
D	15,8
E	14,2
Hex.	24

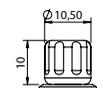


## PRESSURE DROP CURVES



## MANUAL OVERRIDE

(EMS)  
Screw



## ORDERING CODE

WTW

S08

03

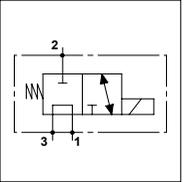
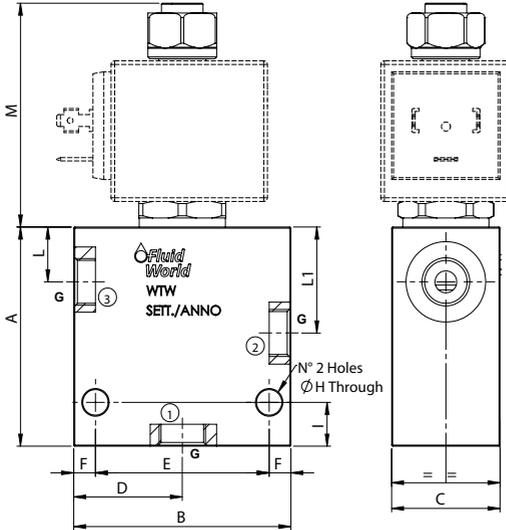


**Manual Override:**  
- Omit if not required  
- EMS = Screw

# WTW S08 03

## TECHNICAL DATA

- **Flow:** 12 l/min
- **Max working pressure:** 210 bar (210 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Spool Type - Direct Acting
- **Note:** 22W coil for S08 on the page 290



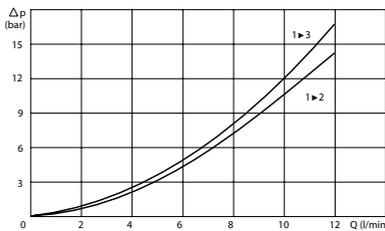
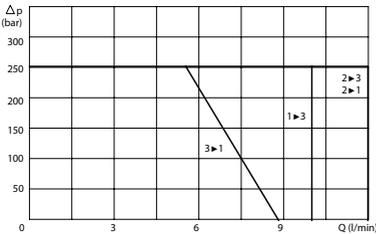
## PORTS

Size	S08
G	1/4
	3/8

## DIMENSIONS

A	60
B	60
C	30
D	30
E	46
F	7
H	7
I	12
L	15,5
L1	29,5
M	61,8

## PRESSURE DROP CURVES



## MANUAL OVERRIDE

(EMS)  
Screw



## ORDERING CODE

WTW

S08

03

### Manual Override:

- Omit if not required
- EMS = Screw

### Ports Size:

- 1/4
- 3/8

### Material Body:

- Omit if Aluminium
- S = Steel

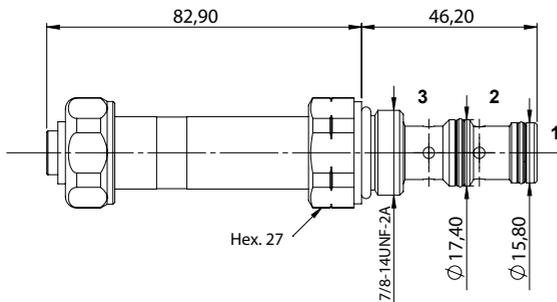
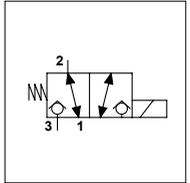
### Rated Voltage

- Coil:**
- Omit if not required
  - 12
  - 24

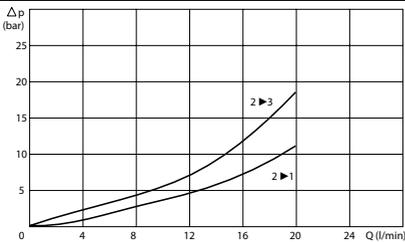
# WTWT S10 02

## TECHNICAL DATA

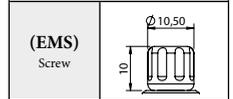
- **Flow:** 20 l/min
- **Max working pressure:** 210 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Spool Type - Direct Acting
- **Cavity:** FW7803000
- **Installation torque:** 40 Nm
- **Weight:** 0,270 kg



## PRESSURE DROP CURVES



## MANUAL OVERRIDE



## ORDERING CODE

WTWT

S10

02

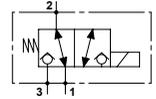
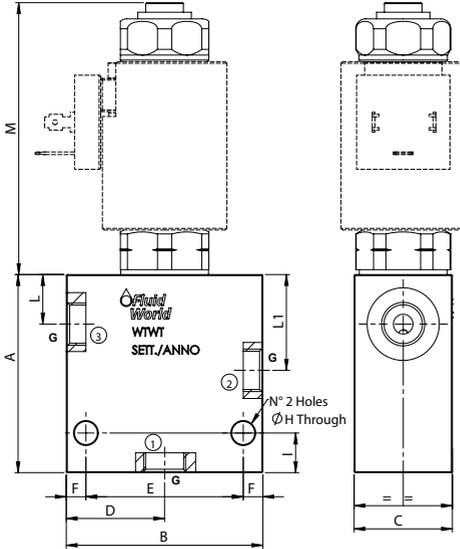


**Manual Override:**  
- Omit if not required  
- EMS = Screw

### WTWT S10 02

#### TECHNICAL DATA

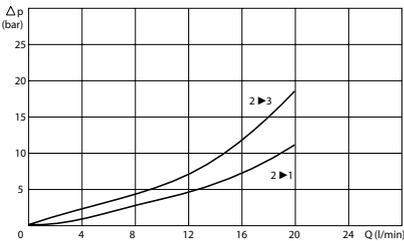
- **Flow:** 20 l/min
- **Max working pressure:** 210 bar (210 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Spool Type - Direct Acting
- **Note:** 36W coil on the page 291



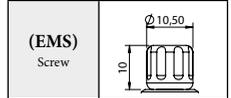
#### PORTS

Size	S10	
G	3/8	1/2
DIMENSIONS		
A	60	65
B	60	60
C	30	35
D	30	30
E	46	48
F	7	6
H	7	7
I	12	7
L	15,5	18,5
L1	29,5	34,5
M	82,4	82,4

#### PRESSURE DROP CURVES



#### MANUAL OVERRIDE



#### ORDERING CODE

WTWT

S10

02

#### Manual Override:

- Omit if not required
- EMS = Screw

#### Ports Size:

- 3/8
- 1/2

#### Material Body:

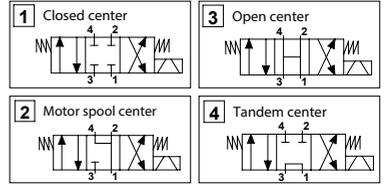
- Omit if Aluminium
- S = Steel

#### Rated Voltage

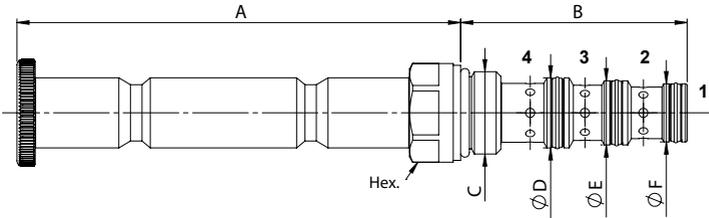
- Coil:**
- Omit if not required
  - 12
  - 24

### TECHNICAL DATA

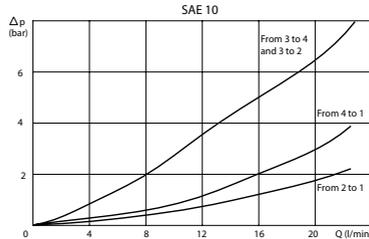
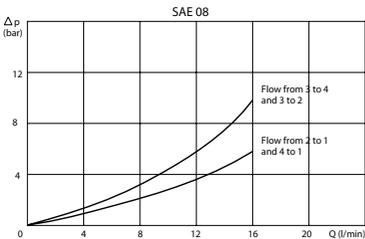
- **Flow:** See table
- **Max working pressure:** 210 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Spool Type - Direct Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table



PORTS		
Size	S08	S10
DIMENSIONS		
A	95,4	121
B	54,3	62
C	3/4-16UNF	7/8-14UNF
D	15,8	19
E	14,2	17,4
F	12,6	15,8
Hex.	24	24
Max Flow (l/min)	10	20
Cavity	FW3404000	FW7804000
Installation torque (Nm)	30	40
Weight (kg)	0,190	0,350



### PRESSURE DROP CURVES



### ORDERING CODE

FWW

#### Ports Size:

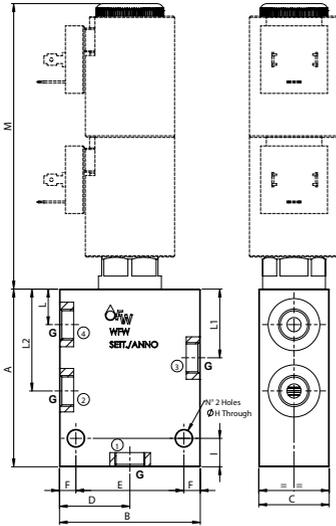
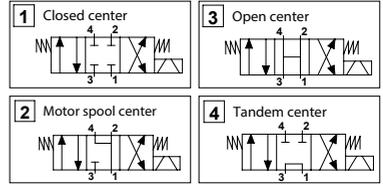
- S08 = SAE 08/4
- S10 = SAE 10/4

#### Hydraulic Scheme:

- 1
- 2
- 3
- 4

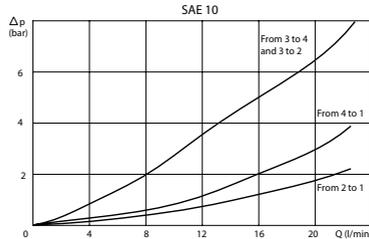
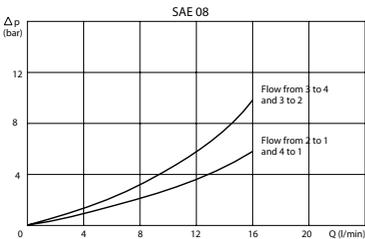
### TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 210 bar (210 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Spool Type - Direct Acting
- **Note:** 22W coil for S08 on the page 290  
36W coil for S10 on the page 291



PORTS		
Size	<b>S08</b>	<b>S10</b>
G	1/4	1/2
	3/8	
DIMENSIONS		
A	75	85
B	60	60
C	30	35
D	30	30
E	46	48
F	7	6
H	7	7
I	12	8
L	15,5	18,5
L1	29,5	34,5
L2	43,5	50,5
M	94	120,5
Max Flow (l/min)	10	20

### PRESSURE DROP CURVES



### ORDERING CODE

FWW

#### Ports Size:

- S08 = SAE 08/4
- S10 = SAE 10/4

#### Hydraulic Scheme:

- 1
- 2
- 3
- 4

#### Ports Size:

- 1/4 ; 3/8
- 1/2

#### Material Body:

- Omit if Aluminium
- S = Steel

#### Rated Voltage Coil:

- Omit if not required
- 12
- 24



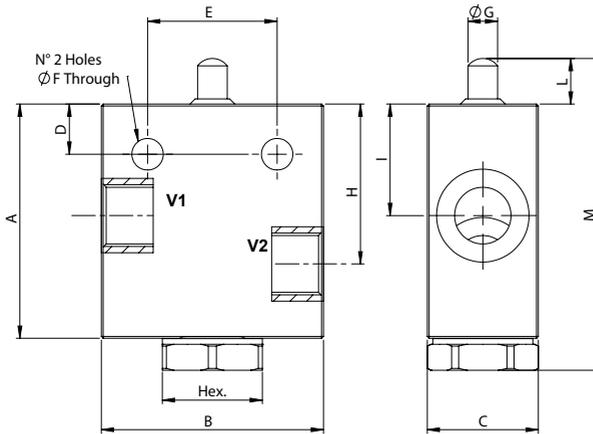
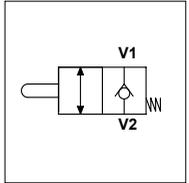


**END STROKE VALVES**  
*VALVOLE DI FINE CORSA*

## WFC NC

### TECHNICAL DATA

- **Flow:** See Table
- **Max working pressure:** See Table
- **Materials:** Steel Body
- **Weight:** See Table



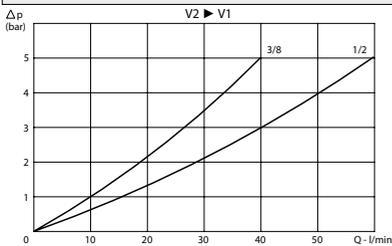
### PORTS

V1 - V2	3/8	1/2
---------	-----	-----

### DIMENSIONS

	3/8	1/2
A	65	77
B	60	70
C	30	35
D	13,5	13,5
E	35	40
F	8,5	8,5
G	8	12
H	43	51
I	30	37
L	12,3	11,8
M	83,9	95,5
Hex.	27	32
Max Pressure (bar)	350	350
Max Flow (l/min)	30	60
Weight (kg)	0,800	1,280

### PRESSURE DROP CURVES



### ORDERING CODE

WFC

NC

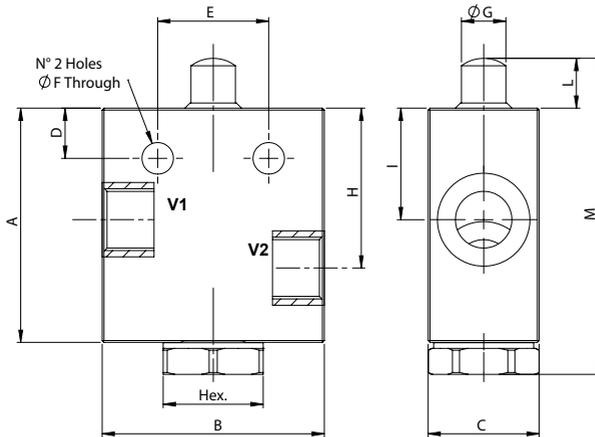
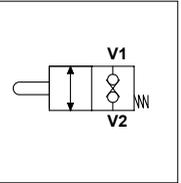
Ports Size:

- 3/8
- 1/2

## WFC DT

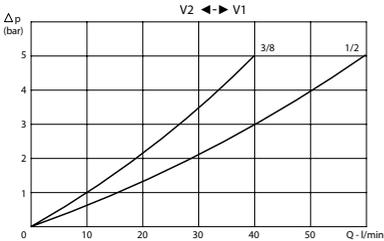
### TECHNICAL DATA

- **Flow:** See Table
- **Max working pressure:** See Table
- **Materials:** Steel Body
- **Weight:** See Table



PORTS		
V1 - V2	3/8	1/2
DIMENSIONS		
A	65	77
B	60	70
C	30	35
D	13,5	13,5
E	30	40
F	8,5	8,5
G	12	16
H	43	51
I	30	37
L	13,4	13,3
M	85	97
Hex.	27	32
Max Pressure (bar)	350	350
Max Flow (l/min)	30	60
Weight (kg)	0,800	1,280

### PRESSURE DROP CURVES



### ORDERING CODE

WFC

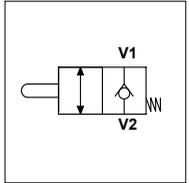
DT

Ports Size:  
- 3/8  
- 1/2

## WFC NC - SPG

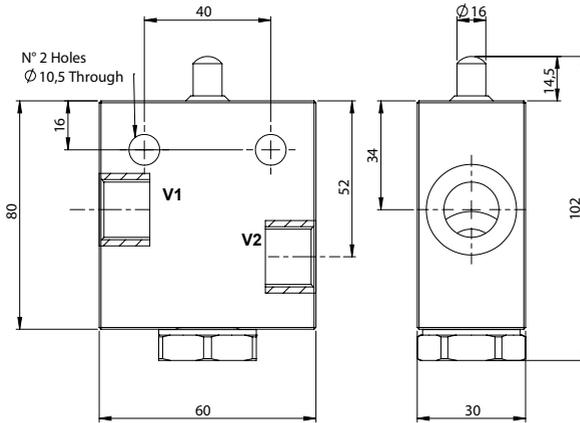
### TECHNICAL DATA

- **Flow:** See Table
- **Max working pressure:** See Table
- **Materials:** Steel Body
- **Weight:** See Table

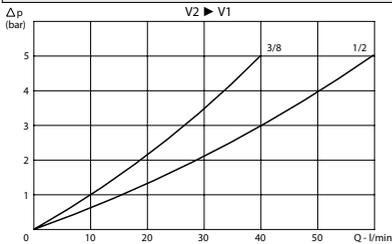


### PORTS

V1 - V2	3/8	1/2
Max Pressure (bar)	350	350
Max Flow (l/min)	40	60
Weight (kg)	1,000	0,980



### PRESSURE DROP CURVES



### ORDERING CODE

WFC

NC



SPG

Ports Size:

- 3/8
- 1/2





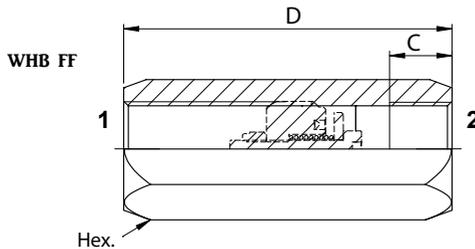
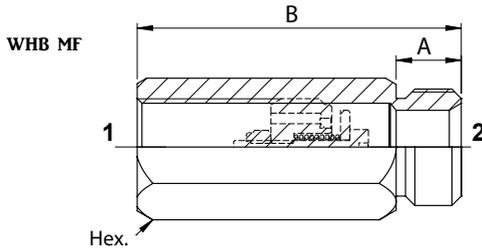


**ACCESSORIES FOR VALVES**  
*ACCESSORI PER VALVOLE*

## BODY FOR WHB

### TECHNICAL DATA

- **Materials:** Body in Steel zinc plated
- **Max pressure:** 350 bar
- **Weight:** See table
- **Note:** Valve is not included, only Body



PORTS					
1 - 2	1/4	3/8	1/2	3/4	1
DIMENSIONS					
A	12	12	16	18	20
B	50	60	65	81	92
C	12	14	16	18	20
D	59	64	73	76	86
Hex.	19	22	27	32	41
Weight (kg)	0,075	0,100	0,170	0,355	0,770

### ORDERING CODE

ICC



#### Type:

- MF = Male Female
- FF = Female Female

WHB

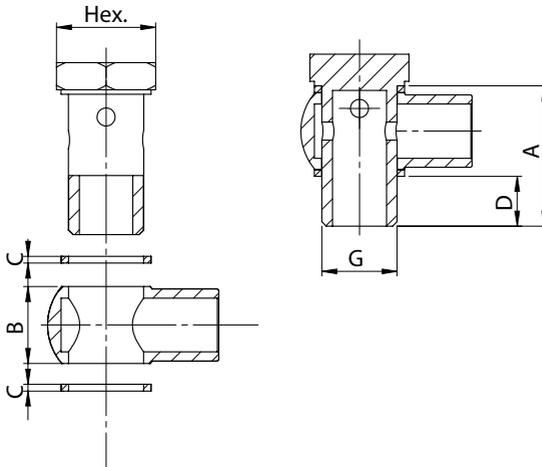


#### Ports Size:

- 1/4
- 3/8
- 1/2
- 3/4
- 1

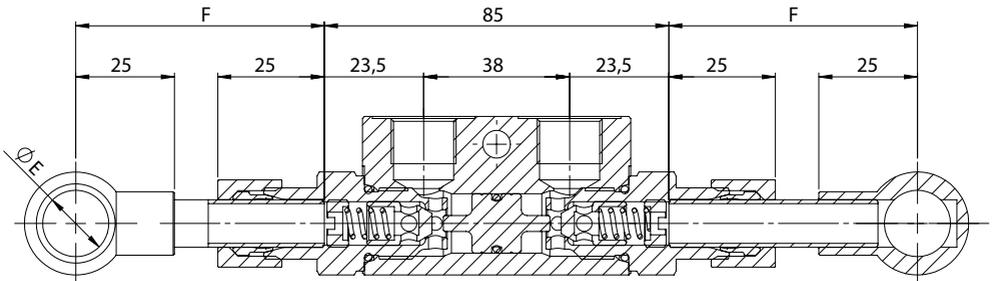
### TECHNICAL DATA

- **Max working pressure:** 350 bar
- **Materials:** Steel zinc plated



### PORTS

G	1/4	3/8
DIMENSIONS		
A	28	31
B	15	17
C	1,5	1,5
D	10	11
E	13,2	16,75
Hex.	19	22
F	38	
	52	
	56	
	75	
	100	
	150	
	200	
300		
400		
500		



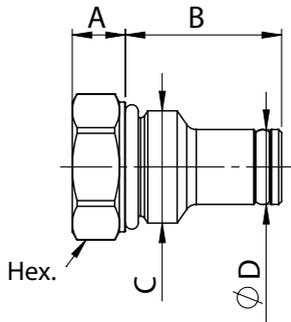
### ORDERING CODE

Contact our sales department

# 1XTP

## TECHNICAL DATA

- **Materials:** Steel Zinc Plated
- **Cavity:** See Table
- **Installation torque:** See Table
- **Weight:** See Table
- **Note:** O-Ring is included



DIMENSIONS							
C	A	B	D	Hex.	Code Cavity SAE	Install. Torque (N/m)	Weight (Kg)
<b>3/4-16-UNF</b>	10,5	26,5	12,7	22	FW3402000	35-40	0,070
<b>7/8-14-UNF</b>	9,6	32,4	15,8	27	FW7802000	50-55	0,120

## ORDERING CODE

1XTP



02

100

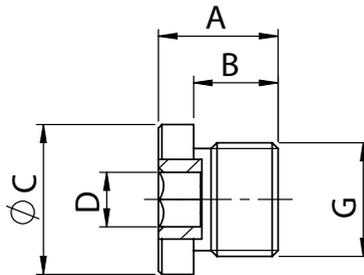
**Cavities:**

- 34 = SAE 08
- 78 = SAE 10

## 3TP

### TECHNICAL DATA

- **Materials:** Steel Zinc Plated
- **Cavity:** See Table
- **Weight:** See Table
- **Note:** O-Ring is included



DIMENSIONS					
G	A	B	C	D (Hex)	Weight (Kg)
<b>1/8</b>	13	9	15	5	0,010
<b>1/4</b>	16	11	19	6	0,015
<b>3/8</b>	17	11	22	8	0,030
<b>1/2</b>	20	14	27	10	0,050
<b>3/4</b>	20	14	32	12	0,070

### ORDERING CODE

3TP

00

000

#### Cavities:

- 18 = G 1/8
- 14 = G 1/4
- 38 = G 3/8
- 12 = G 1/2
- 34 = G 3/4

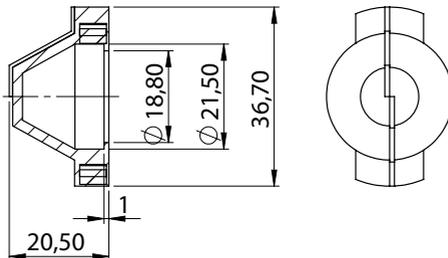
## 3TP

### TECHNICAL DATA

- **Materials:** Abs
- **Color:** Black

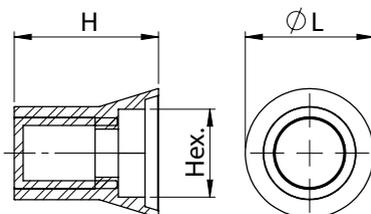
Shell protection:

**3TP1900000**



Protection for valve on tread:

**3TP0600000**  
**3TP1000000**



DIMENSIONS					
CODE	H	L	Hex.	Thread	Min. Thread
<b>3TP0600000</b>	28,2	15,7	10	6 x 0,75	6/7 mm
<b>3TP1000000</b>	28,3	25	17	10 x 1,5	5/6 min

### ORDERING CODE

3TP



00

000

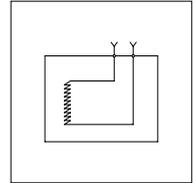
**Cavities:**

- 06 = M6
- 10 = M10
- 19 = Hex. 19

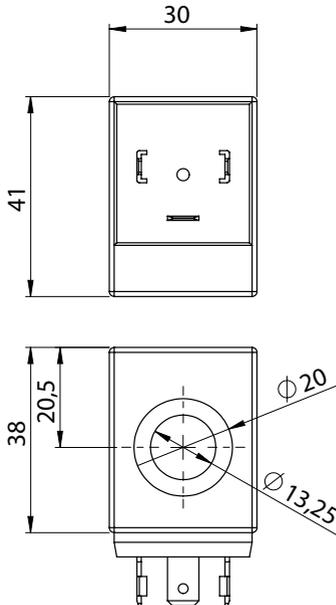
## COIL

### TECHNICAL DATA

- **Rated voltage:** See table
- **Power at 20 C°:** 18 W
- **Connection:** DIN 43650
- **Protection IEC 144:** IP 65
- **Insulation:** Class F
- **Wire insulation:** Class H
- **Nominal voltage:** +/- 10%
- **ED:** 100% with ambient temperature -20 +40 C°
- **Weight:** 0,150 kg



COIL			
Voltage V <sub>dC</sub>	Connector	Circuit	Resistance Ω
12	DIN 43650	Standard	7,5
24	DIN 43650	Standard	30,1



### ORDERING CODE

3BO

13



18

0

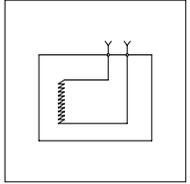
**Rated Voltage:**

- 12
- 24

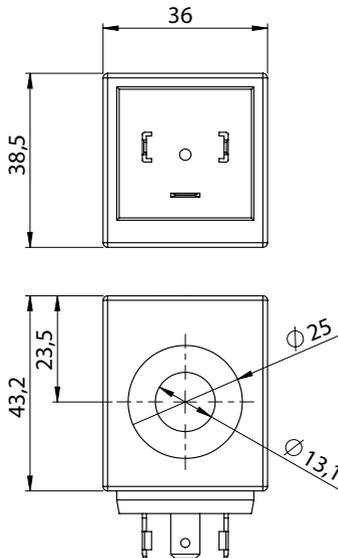
## COIL

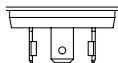
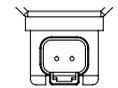
### TECHNICAL DATA

- **Rated voltage:** See table
- **Power at 20 C°:** 22 W
- **Connection:** See table
- **Protection IEC 144:** IP 65
- **Insulation:** Class H
- **Wire insulation:** Class H
- **Nominal voltage:** +/- 10%
- **ED:** 100% with ambient temperature -20 +40 C°
- **Weight:** 0,250 kg



COIL			
Voltage Vdc	Connector	Circuit	Resistance Ω
12	DIN 43650	Standard	6,5
24	DIN 43650	Standard	26,5
12	DEUTSCH	Bidirectional diode	6,5
24	DEUTSCH	Bidirectional diode	26,5



CONNECTION	
Code	Type
(0) DIN 43650	
(1) DEUTSCH	

### ORDERING CODE

3BO

13

**Rated Voltage:**

- 12  
- 24

22

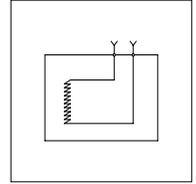
**Connector:**

- 0 = DIN 43650  
- 1 = DEUTSCH

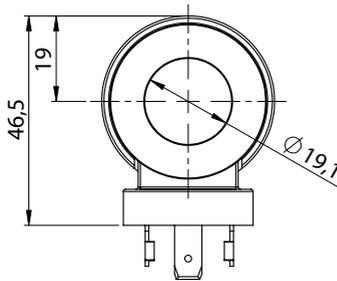
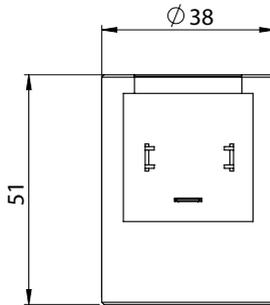
## COIL

### TECHNICAL DATA

- **Rated voltage:** See table
- **Power at 20 C°:** 36 W
- **Connection:** DIN 43650
- **Protection IEC 144:** IP 65
- **Insulation:** Class H
- **Wire insulation:** Class H
- **Nominal voltage:** +/- 10%
- **ED:** 100% with ambient temperature -20 +40 C°
- **Weight:** 0,225 kg



COIL				
Voltage Vdc	Connector	Circuit	Max current A	Resistance Ω
12	DIN 43650	Standard	0,9	3,9
24	DIN 43650	Standard	1,8	14,5



### ORDERING CODE

3BO

19



36

0

**Rated Voltage:**

- 12
- 24



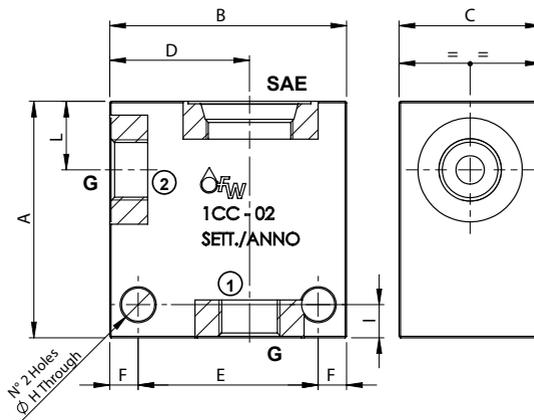


**STANDARD BODY**  
*CORPI STANDARDIZZATI*

# 1CC - 02

## TECHNICAL DATA

- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)



DIMENSIONS											
SAE	G	A	B	C	D	E	F	H	I	L	Code Cavity SAE
08	1/4	50	50	30	30	38	6	7	7	14,5	FW3402000
	3/8										
10	3/8	56	60	35	35	48	6	7	7	18,5	FW7802000
	1/2										
12	3/4	70	70	40	40	54	8	9	8	26,5	FW1160200
	1"	80	80	50	46	60	10	8,5	8	26,5	

## ORDERING CODE

1CC

02

### Cavities:

- 08 = SAE 08
- 10 = SAE 10
- 12 = SAE 12

### Ports Size:

- 1/4 - 3/8
- 3/8 - 1/2
- 3/4 - 1"

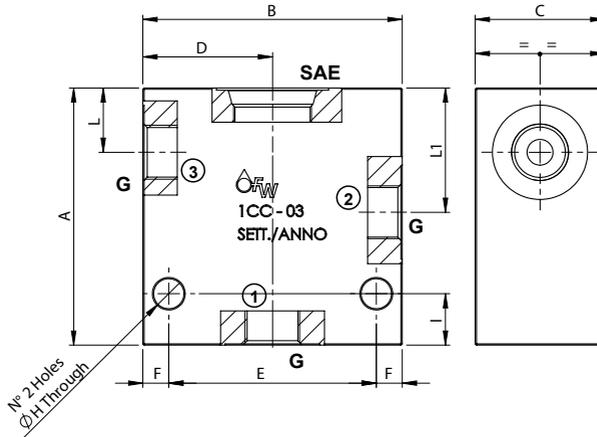
### Material Body:

- 0 = Aluminium
- 1 = Steel

# ICC - 03

## TECHNICAL DATA

- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)



## DIMENSIONS

SAE	G	A	B	C	D	E	F	H	I	L	L1	Code Cavity SAE
08	1/4	60	60	30	30	46	7	7	12	15,5	29,5	FW3403000
	3/8											
10	3/8	65	60	35	30	48	6	7	7	18,5	34,5	FW7803000
	1/2											
12	3/4	100	80	40	40	64	6	9	8	28,5	53,5	FW1160300

## ORDERING CODE

ICC

03

### Cavities:

- 08 = SAE 08
- 10 = SAE 10
- 12 = SAE 12

### Ports Size:

- 1/4 - 3/8
- 3/8 - 1/2
- 3/4

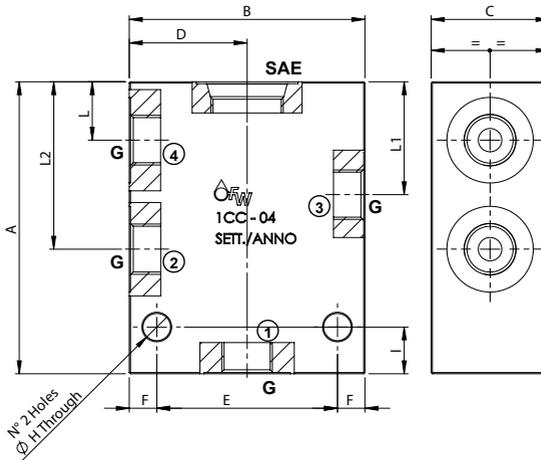
### Material Body:

- 0 = Aluminium
- 1 = Steel

# ICC - 04

## TECHNICAL DATA

- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)



## DIMENSIONS

SAE	G	A	B	C	D	E	F	H	I	L	L1	L2	Code Cavity SAE
08	1/4	75	60	30	30	46	7	7	12	15,5	29,5	43,5	FW3404000
	3/8												
10	3/8	85	60	35	30	48	6	7	8	18,5	34,5	50,5	FW7804000
	1/2												
12	3/4	120	80	40	40	64	8	9	8	28,5	53,5	78,5	FW1160400

## ORDERING CODE

ICC

04

### Cavities:

- 08 = SAE 08
- 10 = SAE 10
- 12 = SAE 12

### Ports Size:

- 1/4 - 3/8
- 3/8 - 1/2
- 3/4

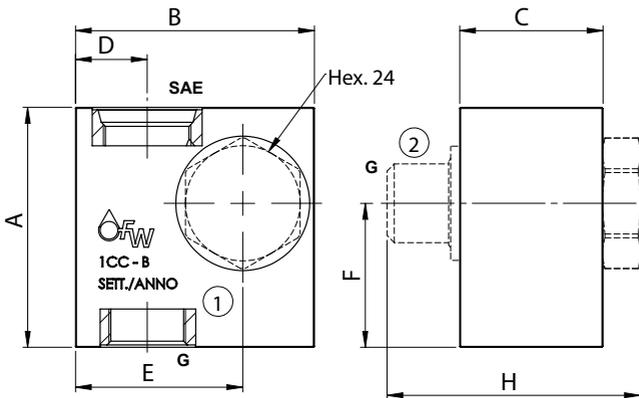
### Material Body:

- 0 = Aluminium
- 1 = Steel

# ICC - B

## TECHNICAL DATA

- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Note:** Bonded washer and bolt not included with code 2 and 4, complete of components with code 6 and 8



DIMENSIONS									
SAE	G	A	B	C	D	E	F	H	Code Cavity SAE
08	3/8	50	50	30	15	35	30	53	FW3402000

## ORDERING CODE

ICC

08

02

38

For body with SAE 10 and SAE 12,  
 Please contact our sales department.

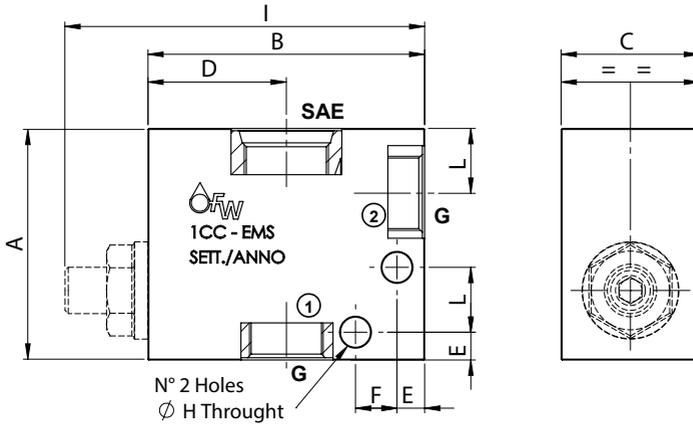
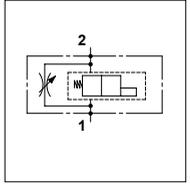
### Material Body:

- 2 = Aluminium
- 4 = Steel
- 6 = Aluminium Complete
- 8 = Steel Complete

## ICC - EMS

### TECHNICAL DATA

- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Note:** Screw and nut not included with code 3 and 5, complete of components with code 7 and 9



DIMENSIONS											
SAE	G	A	B	C	D	E	F	H	I	L	Code Cavity SAE
08	3/8	50	60	30	30	6	9	6,5	78	14	FW3402000

### ORDERING CODE

ICC

08

02

38

For body with SAE 12,  
 Please contact our sales department.

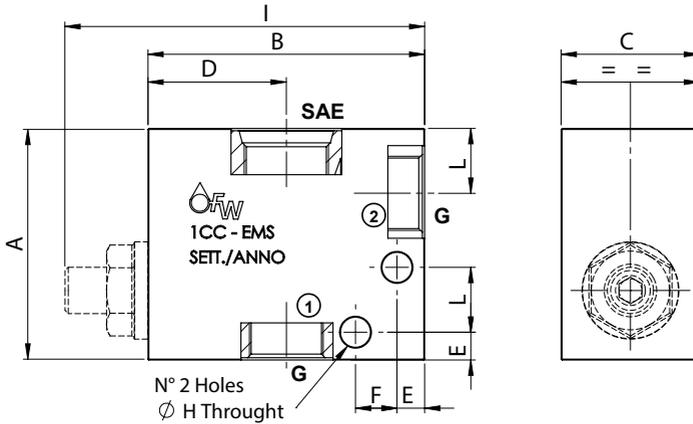
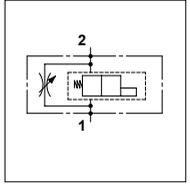
#### Material Body:

- 3 = Aluminium
- 5 = Steel
- 7 = Aluminium Complete
- 9 = Steel Complete

## ICC - EMS

### TECHNICAL DATA

- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Note:** Screw and nut not included with code 3 and 5, complete of components with code 7 and 9



### DIMENSIONS

SAE	G	A	B	C	D	E	F	H	I	L	Code Cavity SAE
10	1/2	65	70	35	35	6	9	6,5	88	18	FW7802000

### ORDERING CODE

ICC

10

02

12

For body with SAE 12,  
 Please contact our sales department.

### Material Body:

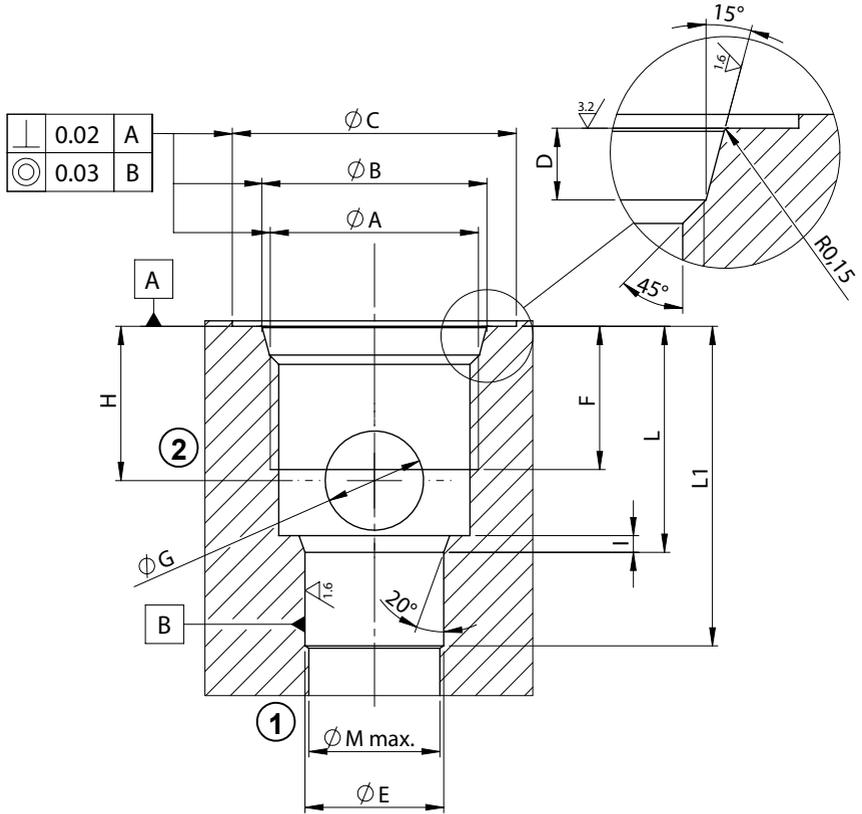
- 3 = Aluminium
- 5 = Steel
- 7 = Aluminium Complete
- 9 = Steel Complete





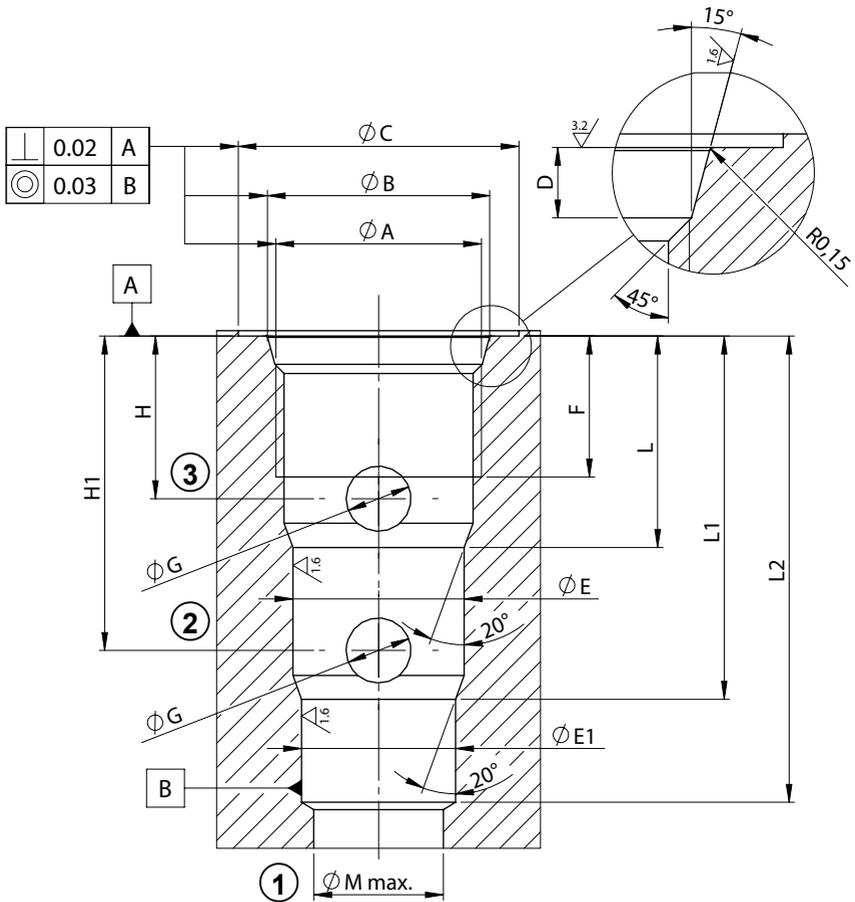
**CAVITIES**  
*CAVITA'*

## SAE 2 WAY



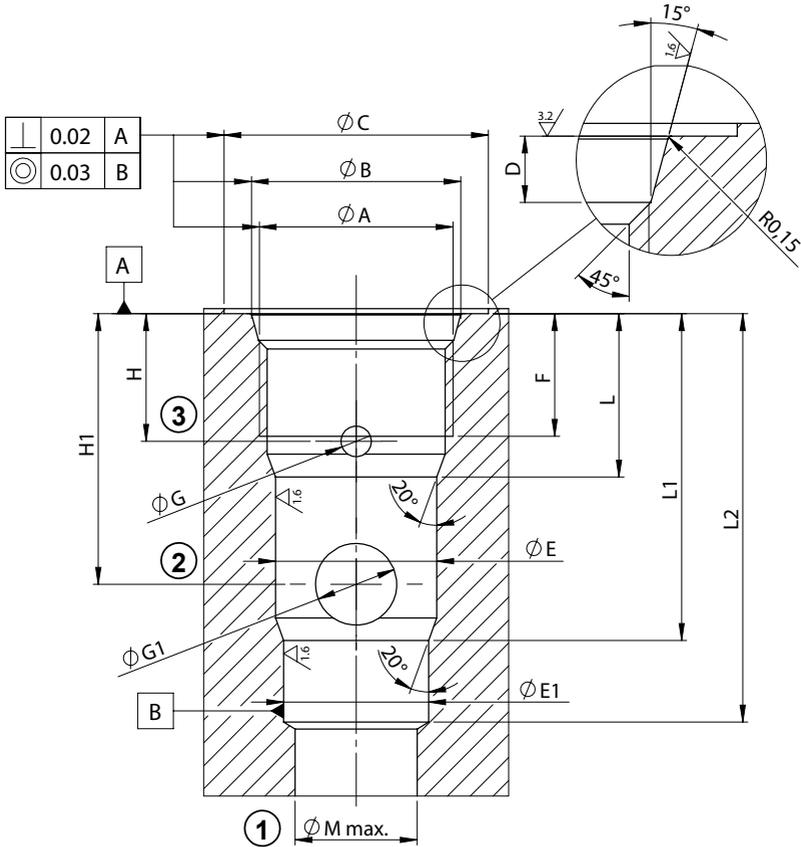
SAE	CODE	A	B	C	D	E	F	G	H	I	L	L1	M
08	FW3402000	3/4-16 UNF-2B	20,6 <sup>+0,1</sup> <sub>0</sub>	26	2,6 <sup>+0,3</sup> <sub>0</sub>	12,7 <sup>+0,05</sup> <sub>0</sub>	13	9	14	1,5	20,5	29	12
10	FW7802000	7/8-14 UNF-2B	23,9 <sup>+0,1</sup> <sub>0</sub>	30	2,6 <sup>+0,3</sup> <sub>0</sub>	15,87 <sup>+0,05</sup> <sub>0</sub>	15	12	18	1,5	25,5	34,5	15
12	FW1160200	1 1/16-12 UN-2B	29,2 <sup>+0,1</sup> <sub>0</sub>	35	3,3 <sup>+0,3</sup> <sub>0</sub>	22,22 <sup>+0,05</sup> <sub>0</sub>	20	18	26	1	36,5	48	19
16	FW1516020	1 5/16-12 UN-2B	35,5 <sup>+0,1</sup> <sub>0</sub>	42	3,3 <sup>+0,3</sup> <sub>0</sub>	28,60 <sup>+0,05</sup> <sub>0</sub>	20	19	25	1,5	36	49	24

## SAE 3 WAY



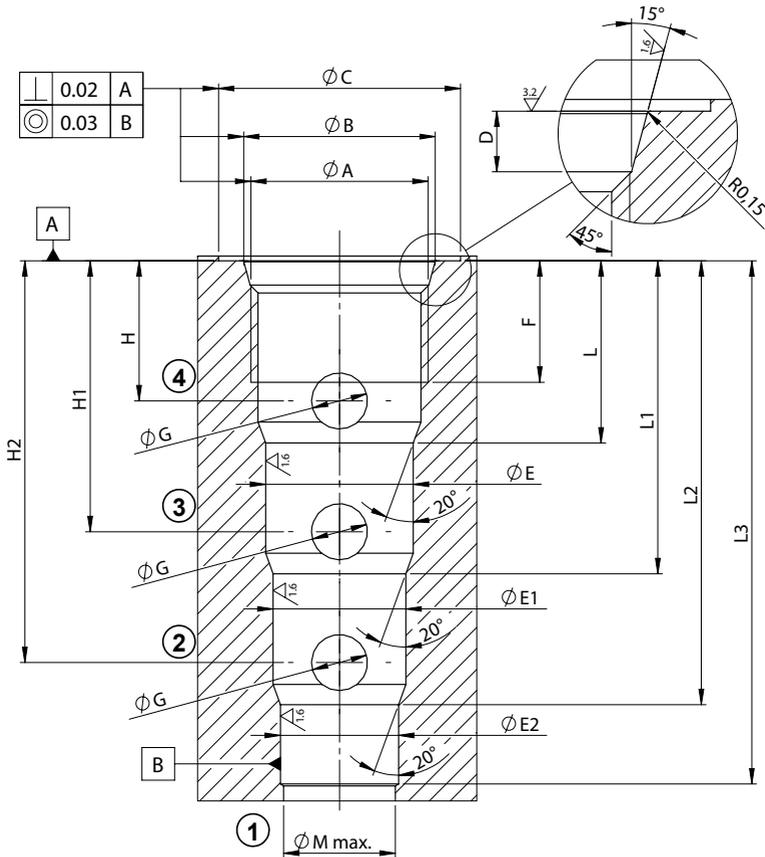
SAE	CODE	A	B	C	D	E	E1	F	G	H	H1	L	L1	L2	M
08	FW3403000	3/4-16 UNF-2B	20,6 <sup>+0.1</sup> <sub>0</sub>	26	2,6 <sup>+0.3</sup> <sub>0</sub>	15,87 <sup>+0.05</sup> <sub>0</sub>	14,27 <sup>+0.05</sup> <sub>0</sub>	13	6	15	29	19,5	33,5	43	12
10	FW7803000	7/8-14 UNF-2B	23,9 <sup>+0.1</sup> <sub>0</sub>	30	2,6 <sup>+0.3</sup> <sub>0</sub>	17,47 <sup>+0.05</sup> <sub>0</sub>	15,87 <sup>+0.05</sup> <sub>0</sub>	14	8	18	34	23,5	39,5	48,5	15
12	FW1160300	1 1/16-12 UN-2B	29,2 <sup>+0.1</sup> <sub>0</sub>	35	3,3 <sup>+0.3</sup> <sub>0</sub>	23,80 <sup>+0.05</sup> <sub>0</sub>	22,22 <sup>+0.05</sup> <sub>0</sub>	20	14	28	53	36,5	61,5	73	19
16	FW1516030	1 5/16-12 UN-2B	35,5 <sup>+0.1</sup> <sub>0</sub>	42	3,3 <sup>+0.3</sup> <sub>0</sub>	28,60 <sup>+0.05</sup> <sub>0</sub>	27,00 <sup>+0.05</sup> <sub>0</sub>	20	17	25,5	54	35,5	64	75	24

# SAE 3 WAY SHORT



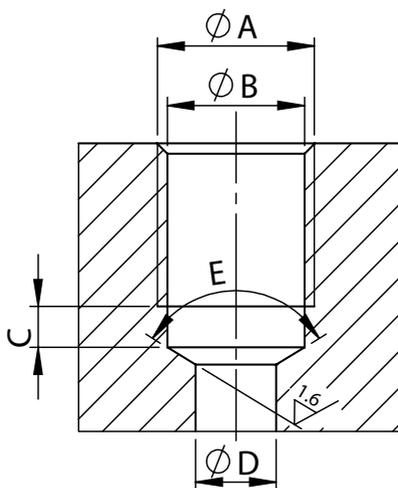
SAE	CODE	A	B	C	D	E	E1	F	G	G1	H	H1	L	L1	L2	M
08	FW3403001	3/4-16 UNF-2B	20,6 <sup>+0.1</sup> <sub>0</sub>	26	2,6 <sup>+0.3</sup> <sub>0</sub>	15,87 <sup>+0.05</sup> <sub>0</sub>	14,27 <sup>+0.05</sup> <sub>0</sub>	12	3	8	12,5	26,5	16	32	40	12
10	FW7803001	7/8-14 UNF-2B	23,9 <sup>+0.1</sup> <sub>0</sub>	30	2,6 <sup>+0.3</sup> <sub>0</sub>	19,05 <sup>+0.05</sup> <sub>0</sub>	17,47 <sup>+0.05</sup> <sub>0</sub>	13	4	14	14	31,5	18	40	49	15
12	FW1160301	1 1/16-12 UN-2B	29,2 <sup>+0.1</sup> <sub>0</sub>	35	3,3 <sup>+0.3</sup> <sub>0</sub>	23,80 <sup>+0.05</sup> <sub>0</sub>	22,22 <sup>+0.05</sup> <sub>0</sub>	21	5	14	22,5	40,5	26,5	49,5	60	19
16	FW1516031	1 5/16-12 UN-2B	35,5 <sup>+0.1</sup> <sub>0</sub>	42	3,3 <sup>+0.3</sup> <sub>0</sub>	28,60 <sup>+0.05</sup> <sub>0</sub>	25,42 <sup>+0.05</sup> <sub>0</sub>	16,5	5	15	17,5	38	22	47,5	58	24

## SAE 4 WAY



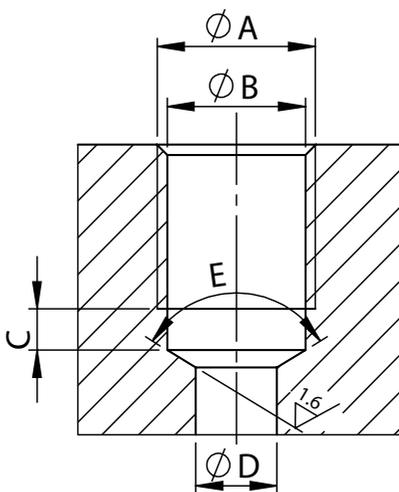
SAE	CODE	A	B	C	D	E	E1	E2	F	G	H	H1	H2	L	L1	L2	L3	M
08	FW3404000	3/4-16 UNF-2B	20,6 <sup>+0.1</sup> <sub>0</sub>	26	2,6 <sup>+0.3</sup> <sub>0</sub>	15,87 <sup>+0.05</sup> <sub>0</sub>	14,27 <sup>+0.05</sup> <sub>0</sub>	12,7 <sup>+0.05</sup> <sub>0</sub>	13	6	15	29	43	19,5	33,5	47,5	56	12
10	FW7804000	7/8-14 UNF-2B	23,9 <sup>+0.1</sup> <sub>0</sub>	30	2,6 <sup>+0.3</sup> <sub>0</sub>	19,05 <sup>+0.05</sup> <sub>0</sub>	17,47 <sup>+0.05</sup> <sub>0</sub>	15,87 <sup>+0.05</sup> <sub>0</sub>	15	8	18	34	50	23,5	39,5	55,5	64,5	15
12	FW1160400	1 1/16-12 UN-2B	29,2 <sup>+0.1</sup> <sub>0</sub>	35	3,3 <sup>+0.3</sup> <sub>0</sub>	23,8 <sup>+0.05</sup> <sub>0</sub>	22,22 <sup>+0.05</sup> <sub>0</sub>	20,62 <sup>+0.05</sup> <sub>0</sub>	19	14	28	53	78	36,5	61,5	87,5	99	19
16	FW1516040	1 5/16-12 UN-2B	35,5 <sup>+0.1</sup> <sub>0</sub>	42	3,3 <sup>+0.3</sup> <sub>0</sub>	28,6 <sup>+0.05</sup> <sub>0</sub>	27,00 <sup>+0.05</sup> <sub>0</sub>	25,42 <sup>+0.05</sup> <sub>0</sub>	20	16	25	53,5	82	35,5	64	92,5	104	24

## FWxx02100



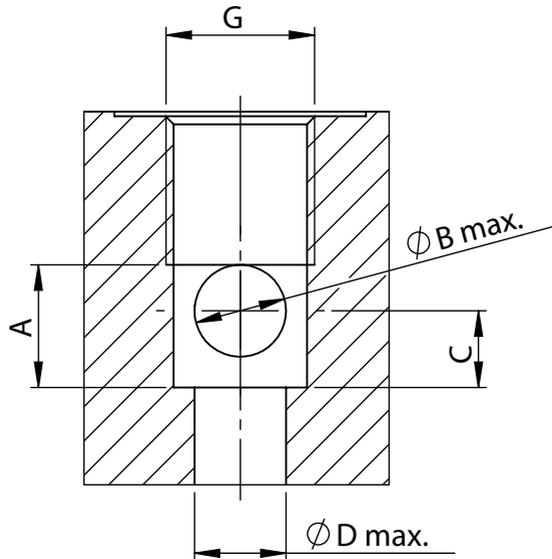
CODE	A	B	C	D	E
FW1802100	G 1/8	ø8,5	2,5	ø5	118°
FW1402100	G 1/4	ø11,4	3	ø7	118°
FW3802100	G 3/8	ø14,9	3	ø9	118°
FW1202100	G 1/2	ø18,6	4	ø12	118°
FW3402100	G 3/4	ø24,1	5	ø17	118°

## FWxx02101



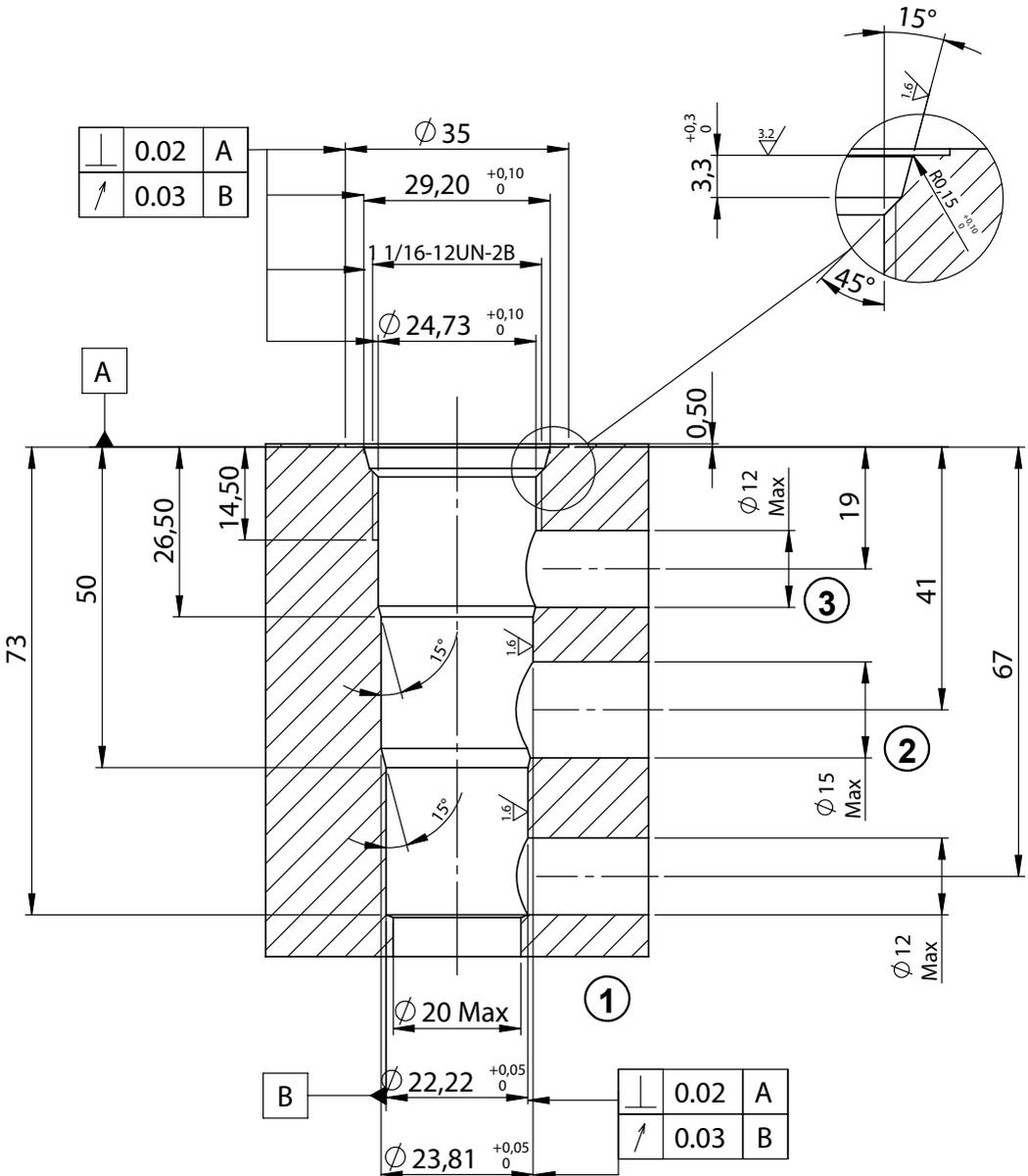
CODE	A	B	C	D	E
FW1802101	G 1/8	ø8,7	3	ø5	118°
FW1402101	G 1/4	ø11,6	3	ø7	118°
FW3802101	G 3/8	ø15,1	3	ø9	118°
FW1202101	G 1/2	ø18,8	3	ø12	118°
FW3402101	G 3/4	ø24,3	3	ø18	118°

# FWxx03100

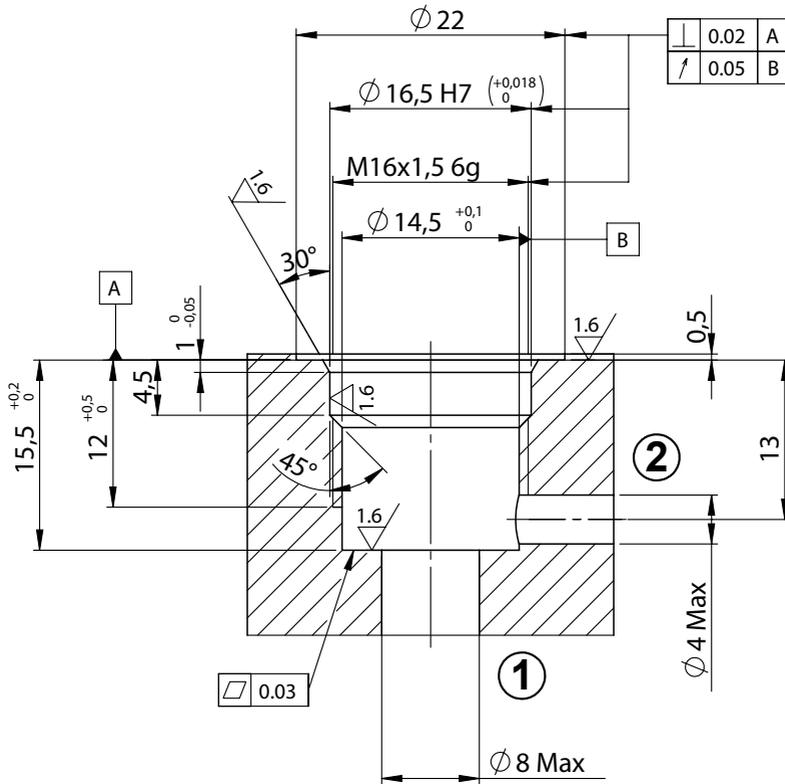


CODE	G	A	B	C	D
FW1803100	G 1/8	8	4	5	4
FW1403100	G 1/4	13	6	7,5	6

## FW11160302

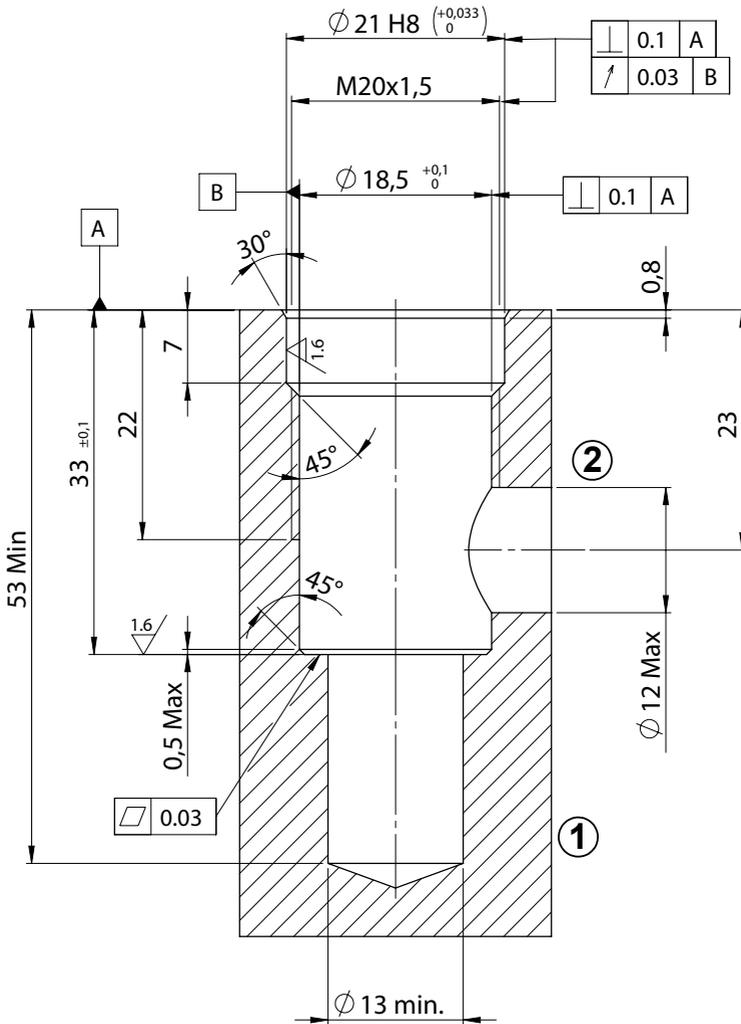


# FW1602100



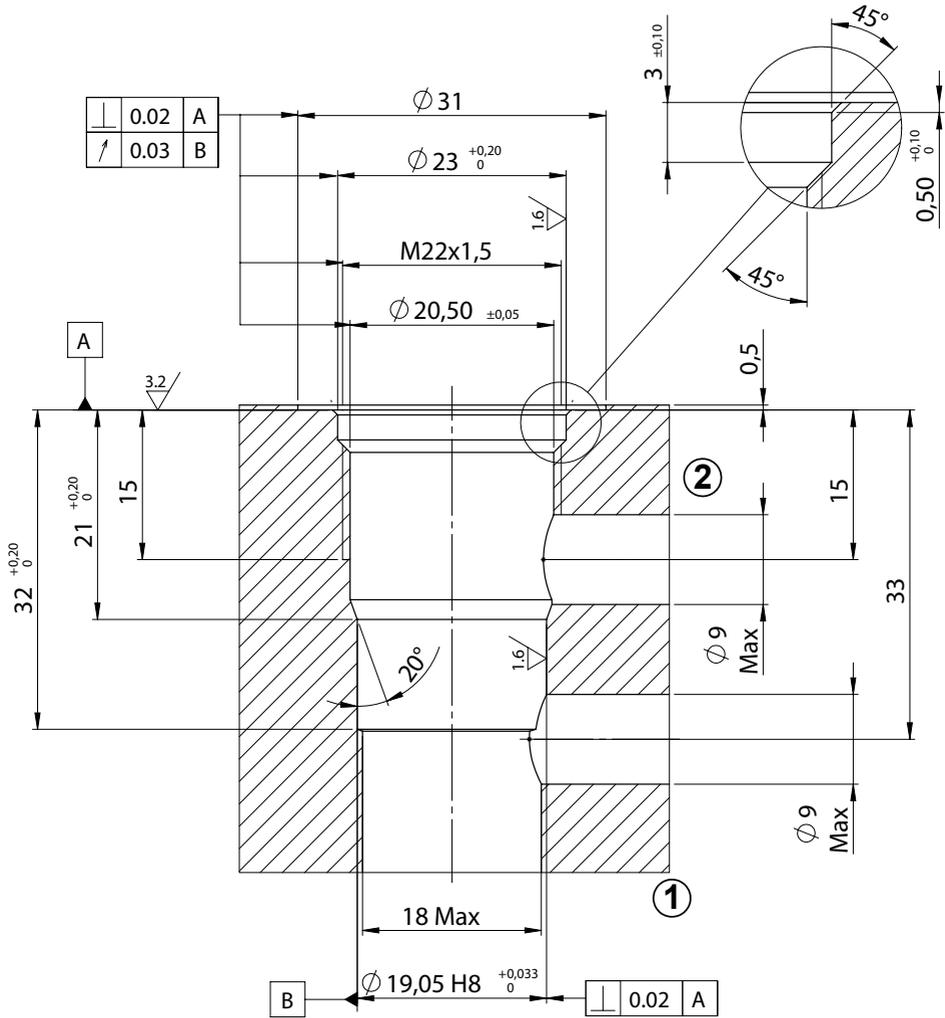


# FW2002100

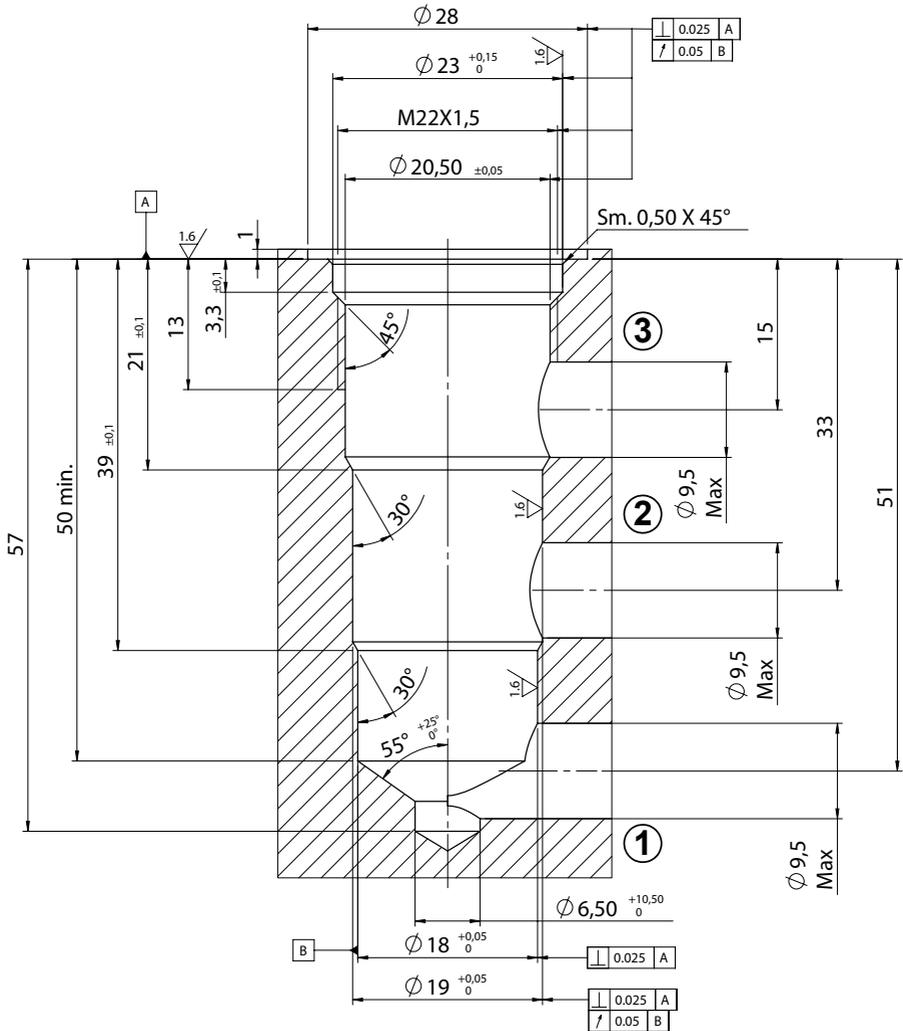




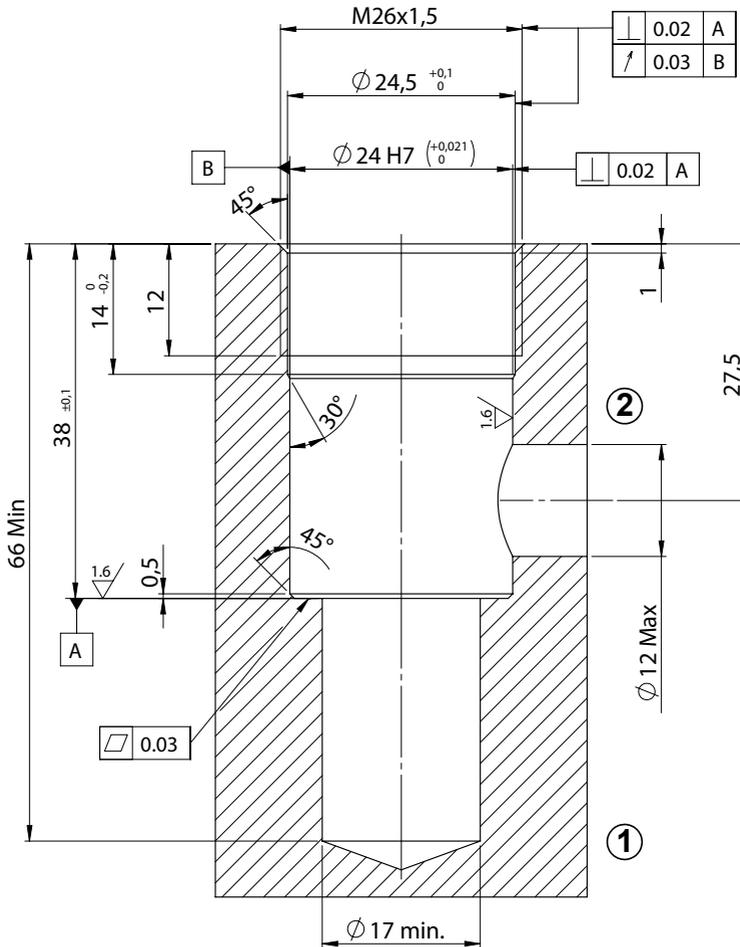
# FW22000211



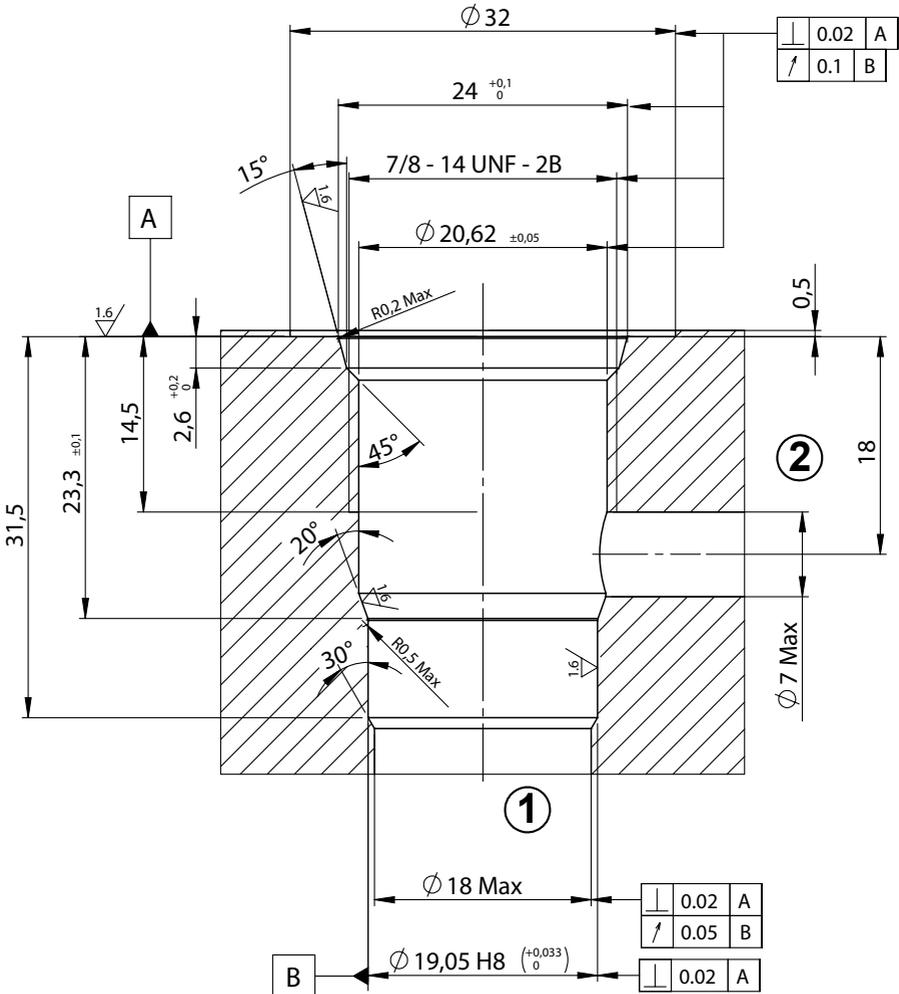
# FW2203000



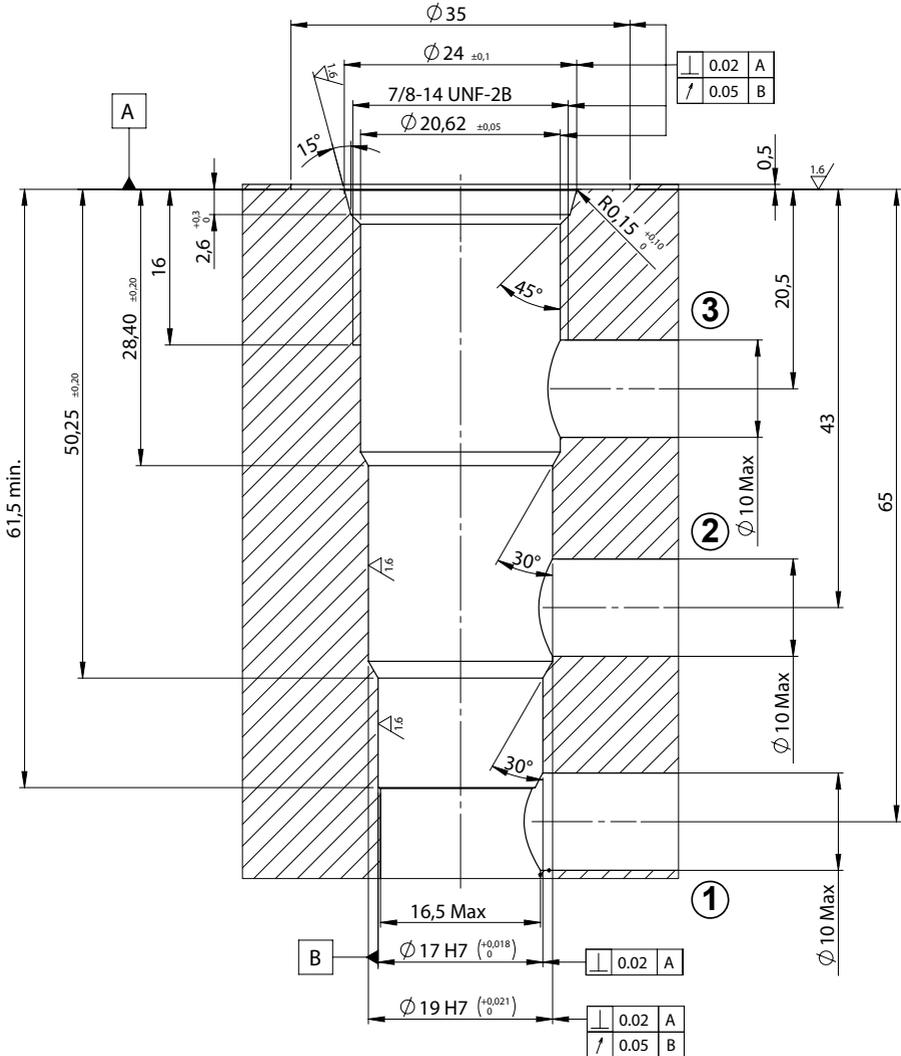
# FW2602100



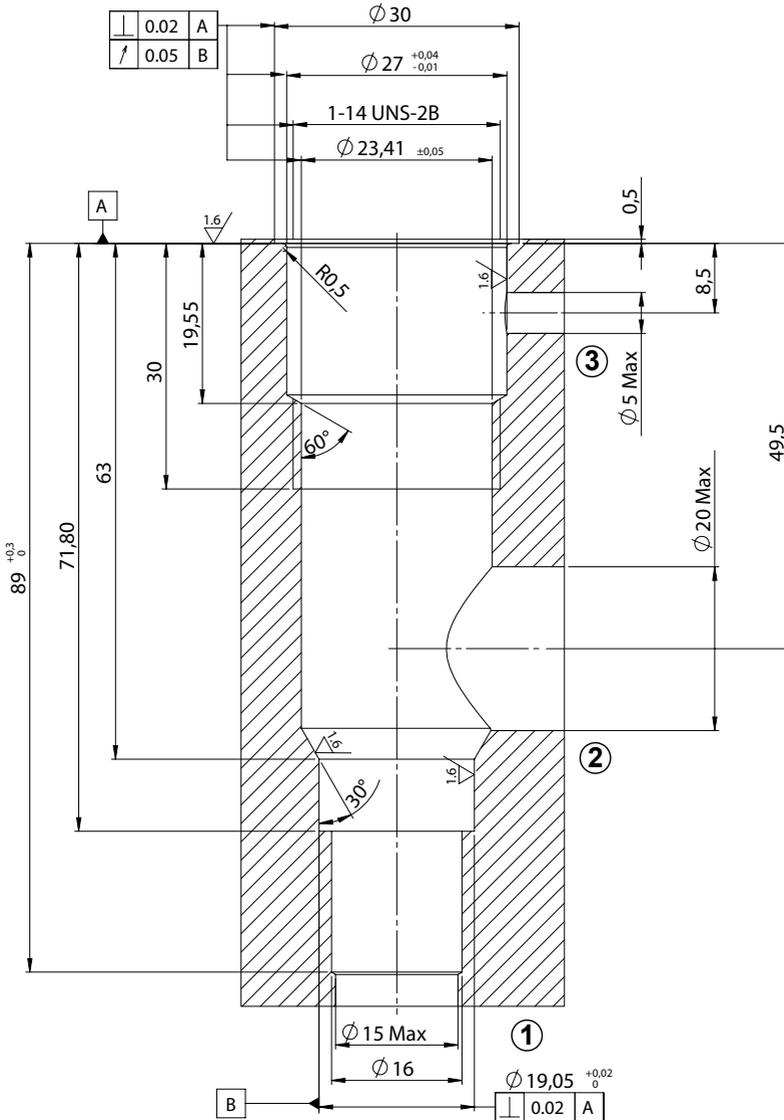
# FW7802100



# FW7803100



# FW0103000





**DIRECTIONAL ELECTRO-HYDRAULIC SYSTEM**  
*SISTEMA ELETTRO-IDRAULICO DIRETTO*



## DIRECTIONAL ELECTRO-HYDRAULIC SYSTEM

**DV3D** is a direct electro-hydraulic modular system to control the fluid and to direct according to the specific customizations that the customer requires.

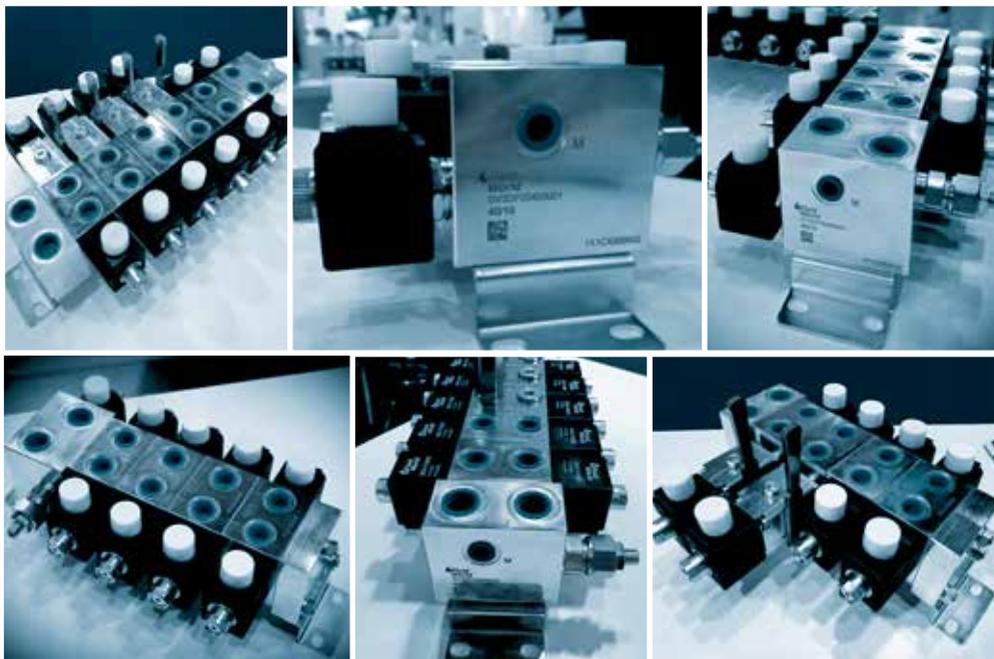
This system called **bankable** is composed of standard directional sections to which you can add various types of options (such as check pilot valves, solenoid valves, overcenter, etc ...) and from an inlet manifold can be achieved to pleasure with manual valves, solenoid on-off valves and proportional valves.

The small dimensions, great flexibility and **interchangeability with other competitors** make this type of system very interesting both for OEM'S and for dealers.

*DV3D è un sistema elettro-idraulico diretto componibile per controllare il fluido e direzionarlo secondo le specifiche personalizzazioni che il cliente richiede.*

*Il sistema comunemente chiamato **bancabile** è composto da sezioni direzionali standard a cui si possono aggiungere varie tipologie di opzioni (tipo valvole di blocco, valvole elettriche, overcenter, ecc...) e da un blocco in entrata realizzabile a piacere con valvole manuali, elettriche on-off e proporzionali.*

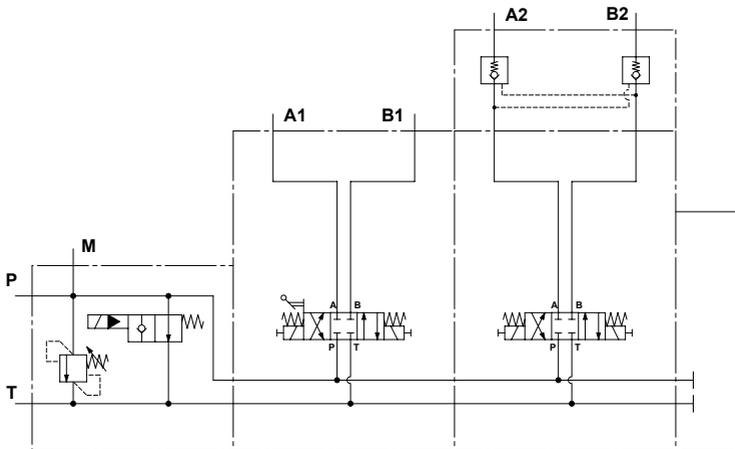
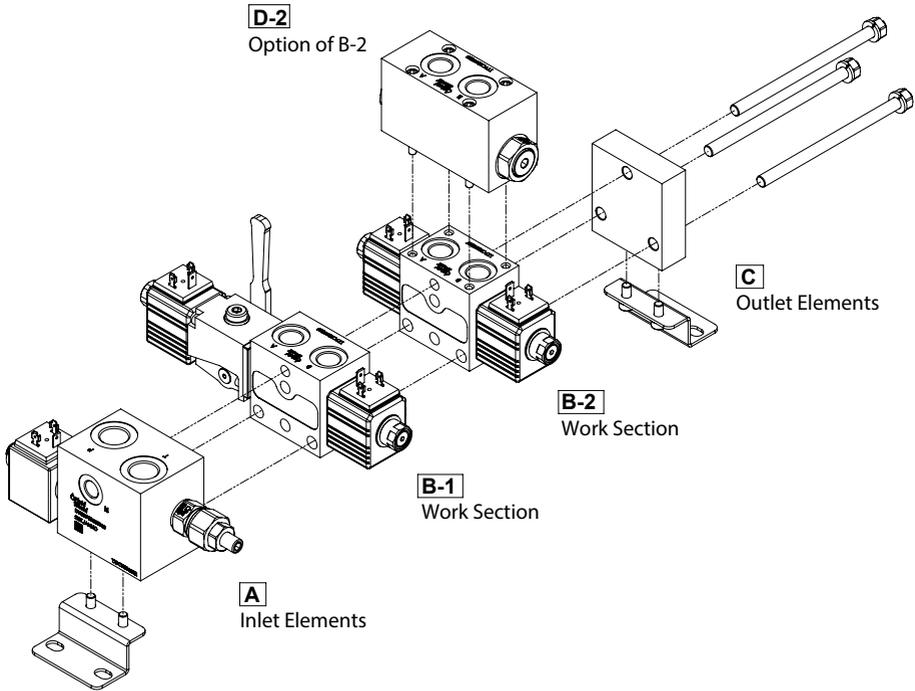
*L'ingombro ridotto, la grande flessibilità e l'**intercambiabilità con altri competitors** rende questo sistema molto interessante sia per costruttori di macchine che per qualsiasi rivenditore.*



## DIRECTIONAL ELECTRO-HYDRAULIC SYSTEM

Max Flow <i>Portata Massima</i>	30 l/min
Max Pressure <i>Pressione Massima</i>	325 bar
Max Back Pressure in T <i>Contropressione Massima in T</i>	30 bar
Material Working Section <i>Materiale Sezioni di Lavoro</i>	Cast Iron Zinc Plated
Ports Dimensions <i>Dimensioni Bocche</i>	A, B= G3/8
Fluid Viscosity <i>Viscosità Fluido</i>	10 to 200 cSt
Ambient Temperature <i>Temperatura Ambientale</i>	-20° C to 50° C
Fluid Temperature Range <i>Campo di Temperatura del Fluido</i>	-20 °C to 80 ° C
Fluid Contamination <i>Contaminazione Fluido</i>	ISO 4406: 19/17/14; NAS 1638: 8
Coil Power <i>Potenza della Bobina</i>	26 W
Connector Type <i>Tipi di Connettore</i>	DIN, Deutsch DT, AMP JPT

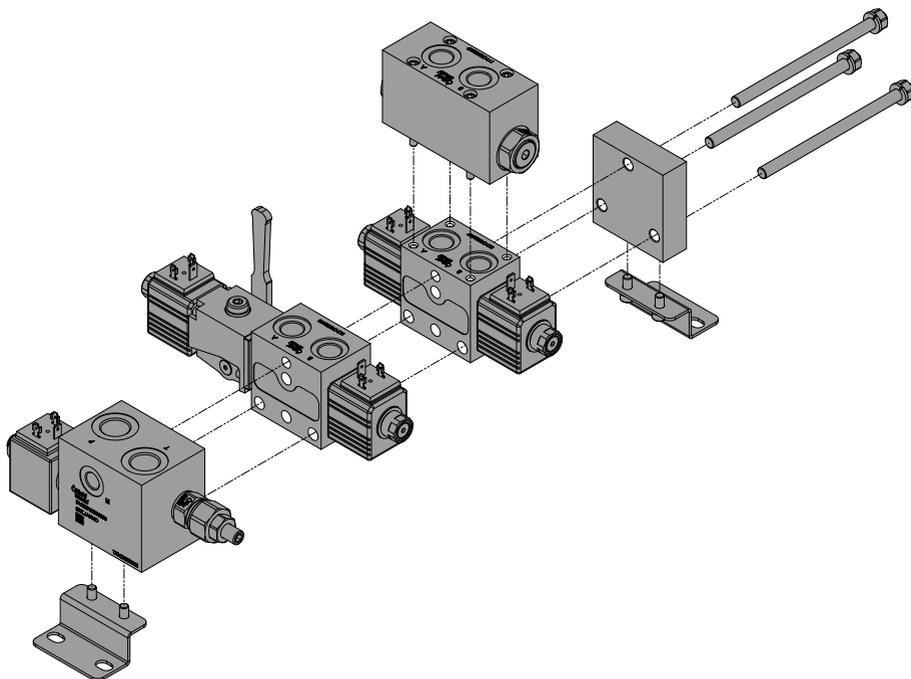
## EXAMPLE OF ORDER



## EXAMPLE OF ORDER

SECTIONS	SEQUENCE TO ORDER	PAGE
<b>DV3D</b> <b>General Configuration</b> (with 2 work section)	DV3D-P0-02-ST-00/	326
<b>A</b> <b>Inlet Elements</b>	IN-C3-G12N-A-20NSTD-NA-0000-V12-DNN/	330
<b>B-1</b> <b>Work Section 1</b>	SCC3-10-SA-38N-EE-01-V12-DNN-SS00N000-SF/	336
<b>B-2</b> <b>Work Section 2</b>	SCC3-00-NN-38N-EE-01-V12-DNN-SS00N000-VF/	336
<b>D-2</b> <b>Option of B</b> (B-2)	WBD-00AB-G38N-A-01-G07/	350
<b>C</b> <b>Outlet Elements</b>	EX-SNPT-N000-A/	344

## DV3D - GENERAL CONFIGURATION

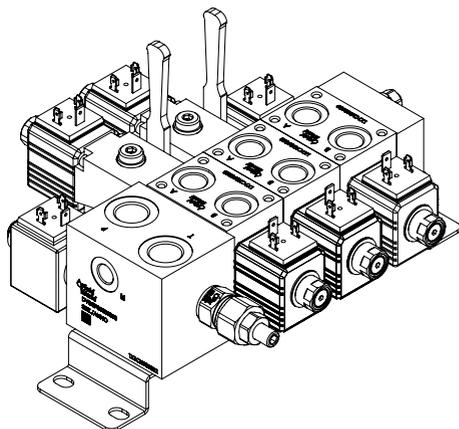


01		02		03		04		05	
DV3D	-	P0	-	02	-	ST	-	00	/

## DV3D – GENERAL CONFIGURATION

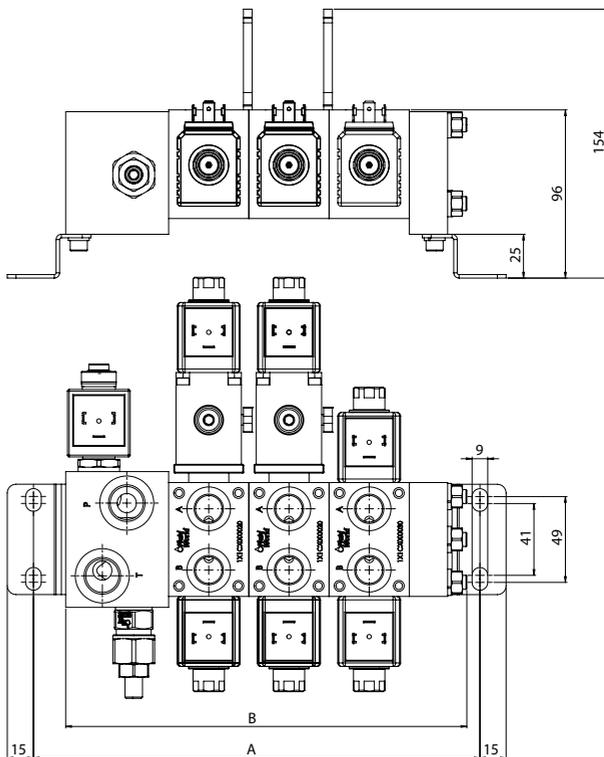
<b>01</b>	<b>Bankable size:</b> 30 l/min on/off	- DV3D
<b>02</b>	<b>Bankable circuit:</b> Parallel with seals NBR	- P0
<b>03</b>	<b>Number of sections:</b> From 2 to 10 sections	- 02 03 04
<b>04</b>	<b>Brackets:</b> Standard brackets No brackets	- ST NS
<b>05</b>	<b>Material protection:</b> Standard Inlet/outlet anodized aluminium and steel zinc plated components Inlet/outlet and components in zinkel nickel	- 00 01 02

# DV3D - GENERAL CONFIGURATION

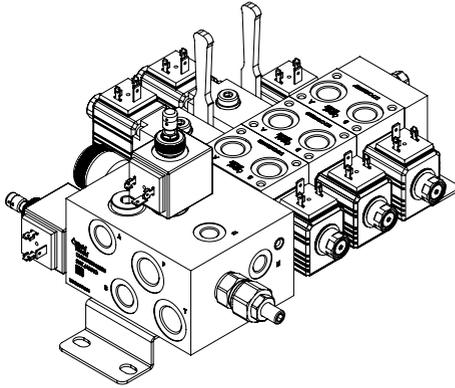


Sections N°	DIMENSIONS					
	A	B	A	B	A	B
2	190	164	210	184	246	220
3	236	210	256	230	292	266
4	282	256	302	276	338	312
5	328	302	348	322	384	358
6	374	348	394	368	430	404
7	420	394	440	414	476	450
8	466	440	486	460	522	496
9	512	486	532	506	568	542
10	558	532	578	552	614	588

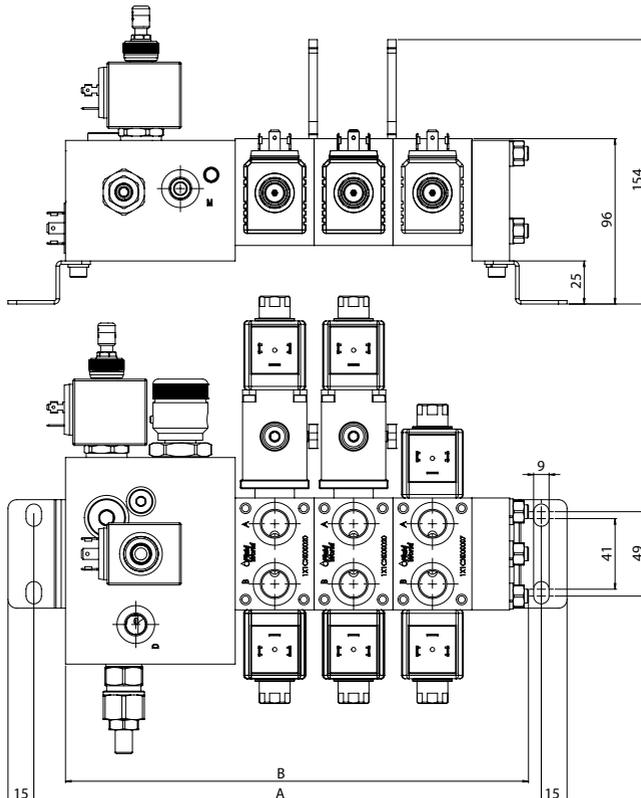
C3 inlet section with 3 work sections.



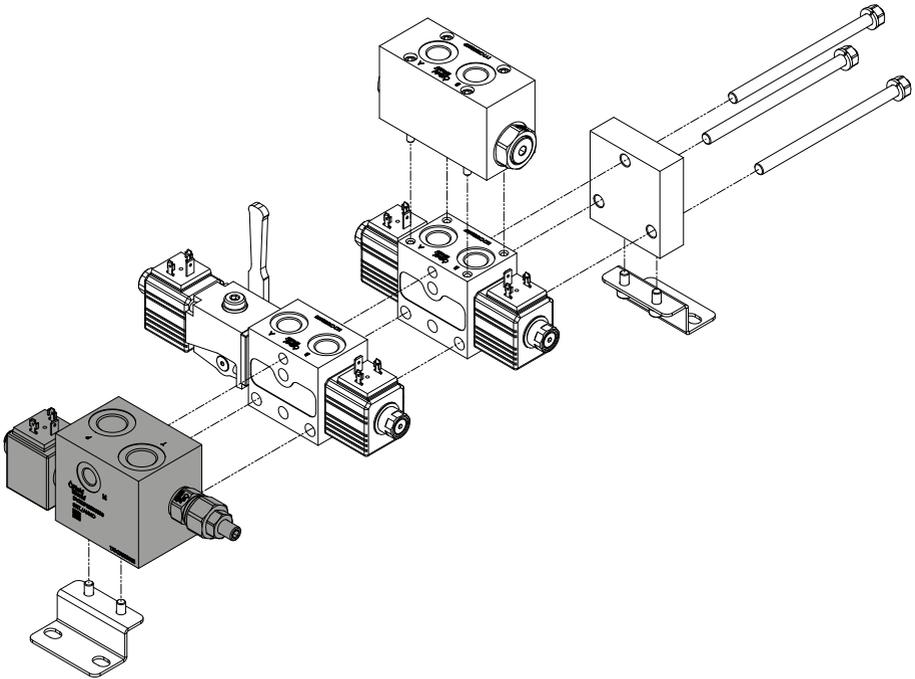
## DV3D - GENERAL CONFIGURATION



**C4** inlet section with  
3 work sections.



## A - INLET ELEMENTS



01	02	03a	03b	04	05a	05b	06	07	08	09a	09b									
IN	-	C3	-	G12	N	-	A	-	20	NSTD	-	NA	-	0000	-	V12	-	D	NN	/

**01** Inlet elements IN

**02** **Application scheme:** **pag. 332**  
 Basic (only connections) C1  
 With pressure relief valve C2  
 With pressure relief valve and electric unloading valve C3  
 With compensated flow control valve, pressure relief valve and electric unloading valve C4

**03a** **Ports:** -  
 Pe T G3/8 - M G1/4 (DIN 3852) G38  
 Pe T G1/2 - M G1/4 (DIN 3852) G12

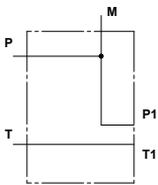
## A - INLET ELEMENTS

<b>03b</b>	<b>Option corking:</b> P, T e M open P e M closed, T open T e M closed, P open P, T e M closed	- N P T C
<b>04</b>	<b>Material:</b> Aluminium Steel zinc plated	- A S
<b>05a</b>	<b>Main pressure relief valve:</b> (Omit for C1) Range 5-55 Range 25-110 Range 50-215 Range 100-350 Plug (without pressure relief valve)	<b>pag. 332</b> 05 10 20 35 00
<b>05b</b>	<b>Setting pressure relief valve:</b> (Omit for C1) Standard adjustment Adjustment required Adjustment required with safety plug Plug (without pressure relief valve)	<b>pag. 332</b> NSTD N(XXX) T(XXX) NTAP
<b>06</b>	<b>Electric unloading valve:</b> (Omit for C1 and C2) Normally open Plug (without electric unloading valve)	- NA TS
<b>07</b>	<b>Option electric unloading valve:</b> (Omit for C1, C2 and choice plug in 06) Without emergency NA with push emergency NA with push&twist emergency	<b>pag. 333</b> 0000 EMPO EMPT
<b>08</b>	<b>Coil:</b> (Omit for C1, C2 and choice plug in 06) 12 Vdc 24 Vdc No coil	<b>pag. 333</b> V12 V24 BBO
<b>09a</b>	<b>Coil connector:</b> (Omit for C1, C2 and choice plug in 06) DIN EN 175301-803 (ex. DIN 43650) DT04-2P AMP-JUNIOR No coil	<b>pag. 333</b> D T J B
<b>09b</b>	<b>Option coil:</b> (Omit for C1, C2 and choice plug in 06) No connector With connector With connector and bidirectional diode No coil	<b>pag. 333</b> NN NC SC BO

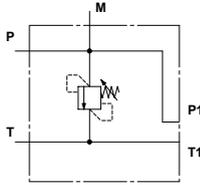
## A - INLET ELEMENTS

**02 Application scheme:**

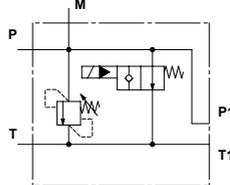
C1



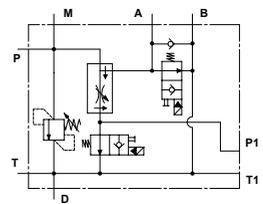
C2



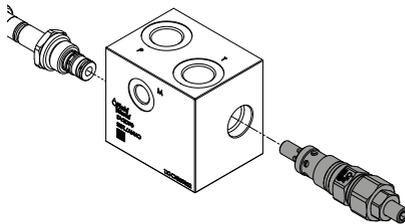
C3



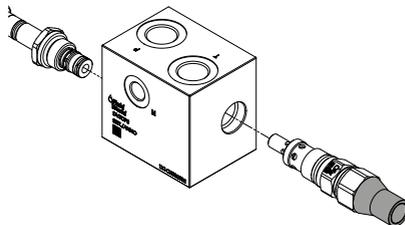
C4



**05 Main pressure relief valve:** (Omit for C1)



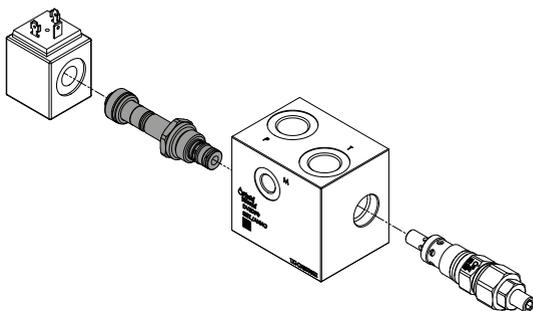
SPRINGS			
Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
<b>05</b>	5-55	15	5
<b>10</b>	25-110	25	25
<b>20</b>	50-215	50	50
<b>35</b>	100-350	90	100



(option)  
 T  
 Adjustment required with safety plug

## A - INLET ELEMENTS

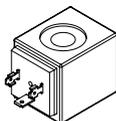
**07** Option electric unloading valve: (Omit for C1, C2 and choice plug in 06)



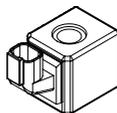
MANUAL OVERRIDE	
(EMP) Push	
(EMPT) Push & Twist	

**08** **09** **Coil:** (Omit for C1, C2 and choice plug in 06)

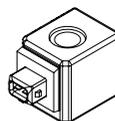
D



T



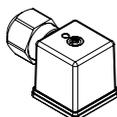
J



COIL CHARACTERISTICS					
Vdc	Average power	Resistance	Protection IEC 144	Insulation	Nominal Voltage
12	22	6,5	IP 65	Class H	+/- 10%
24		26,5			

**09b** **Coil connector:** (Omit for C1, C2 and choice plug in 06)

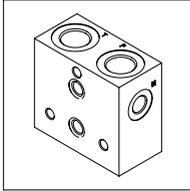
Option Connector



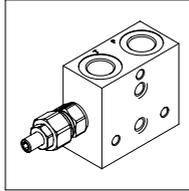
Option bidirectional diode  
(hydraulic scheme)



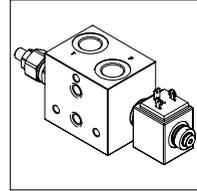
# A - INLET ELEMENTS



**C1**

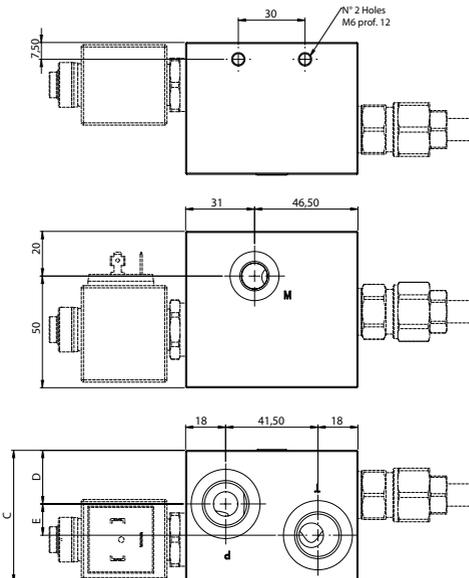
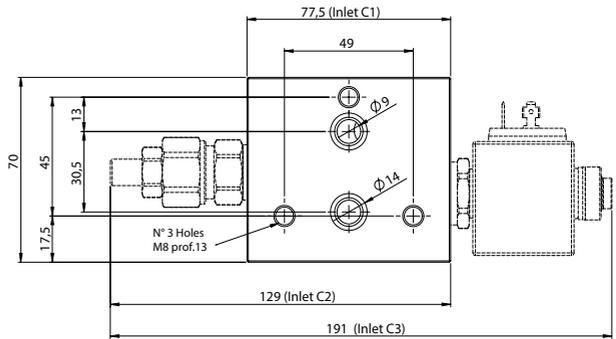


**C2**



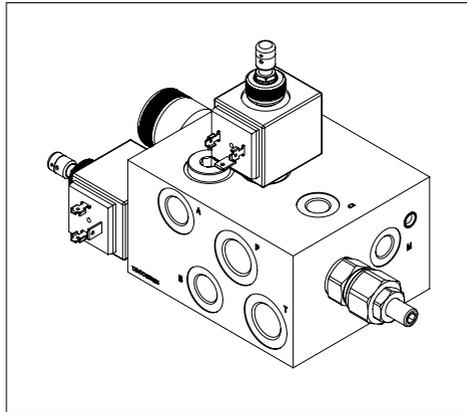
**C3**

General external dimensions of Inlet elements.

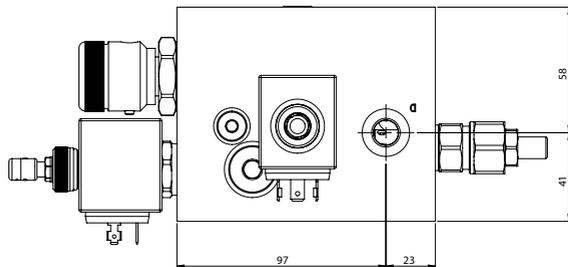
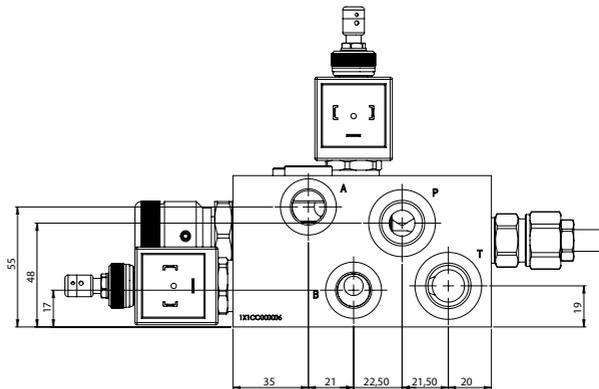
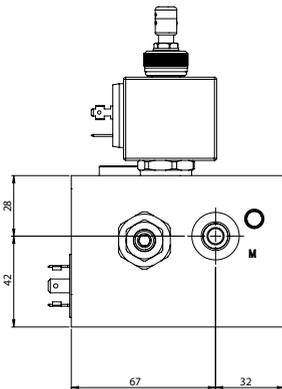


INLET DIMENSIONS		
	C1 and C2	C3
<b>C</b>	39	59
<b>D</b>	19,5	24
<b>E</b>	-	14

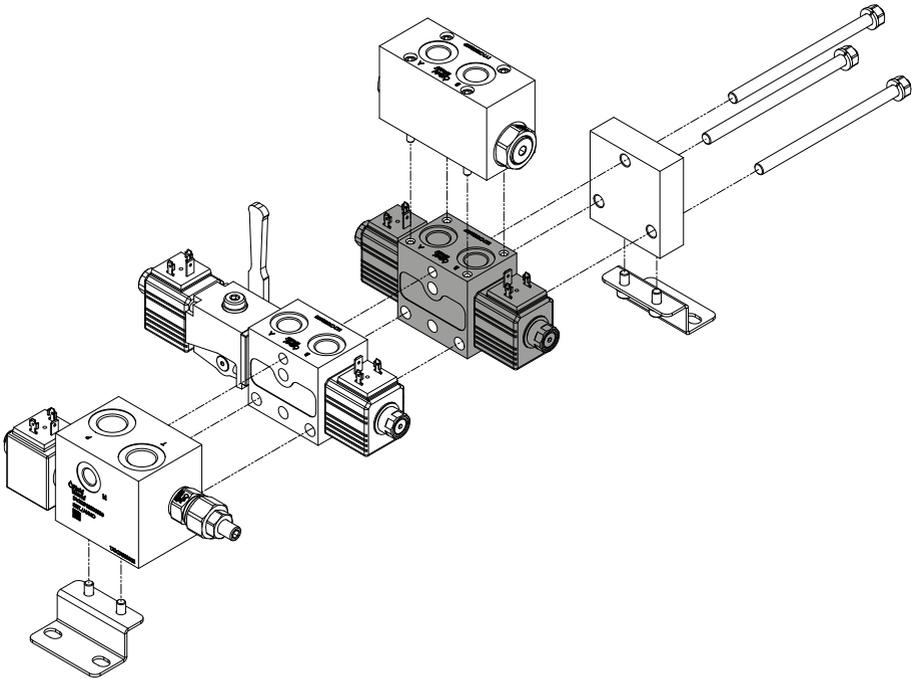
## A - INLET ELEMENTS



C4 inlet element



## B - WORK SECTION



01	02	03	04a	04b	05	06	07	08a	08b	09a	09b	10										
SCC3	-	00	-	NN	-	38	N	-	EE	-	01	-	V12	-	D	NN	-	SS00	N000	-	VF	/

**01 Work Section:**  
Spool closed center for 30 l/min  
Spool motor spool for 30 l/min  
Work section only with WPR C 50 (Accessory section)

**pag. 338**  
SCC3  
SCY3  
SPWPR C 50

**02 Manual emergency lever:**  
No lever  
Lever 1, side A  
Lever 1, side B

**pag. 338**  
00  
10  
01

**03 Lever position:**  
No lever  
Lever on the right upwards  
Lever on the right downwards  
Lever on the left upwards  
Lever on the left downwards

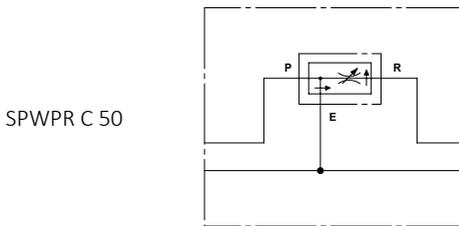
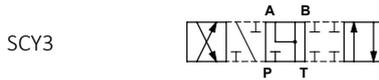
**pag. 339**  
NN  
DA  
DB  
SA  
SB

## B – WORK SECTION

<b>04a</b>	<b>Ports:</b> G3/8 (DIN 3852)	- 38
<b>04b</b>	<b>Option corking:</b> A e B open A closed, B open B closed, A open A e B closed	- N A B C
<b>05</b>	<b>Electromagnetic actuator:</b> 4/3 operated on both sides A and B 4/2 operated on side A only 4/2 operated on side B only	<b>pag. 340</b> EE ES ED
<b>06</b>	<b>Option emergency electromagnetic actuator:</b> No emergency Pin Emergency	<b>pag. 340</b> 00 01
<b>07</b>	<b>Coil:</b> 12 Vdc 24 Vdc No coil	<b>pag. 340</b> V12 V24 BB0
<b>08a</b>	<b>Coil connector:</b> DIN EN 175301-803 (ex. DIN 43650) DT04-2P AMP-JUNIOR No coil	<b>pag. 340</b> D T J B
<b>08b</b>	<b>Option coil:</b> No connector With connector With connector and bidirectional diode No coil	<b>pag. 341</b> NN NC SC B0
<b>09a</b>	<b>Auxiliary valve: (contact our sales department)</b> No valve Sides A and B, range 100-250 Valve on A, range 100-250 Valve on B, range 100-250 Predisposition for valves with plug	<b>pag. 341</b> SS00 AB25 AS25 SB25 AB00
<b>09b</b>	<b>Setting auxiliary valve: (contact our sales department)</b> No valve Standard adjustment Adjustment if required Standard adjustment with safety plug Adjustment if required with safety plug Predisposition for valves with plug	<b>pag. 341</b> N000 NSTD N(XXX) TSTD T(XXX) NTAP
<b>10</b>	<b>Flangeable valve:</b> No valve With flangeable valve on this section	- SF VF

## B - WORK SECTION

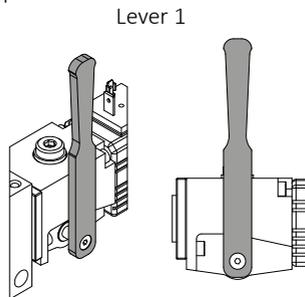
**01 Spool:**



Intermediate work section for regular flow to next section.

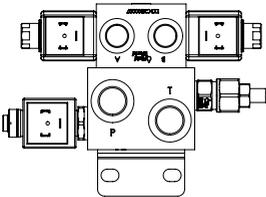
**02 Manual emergency lever:**

The value with the lever are lowered to 10 l/min and 210 bar.

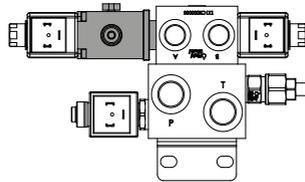


## B - WORK SECTION

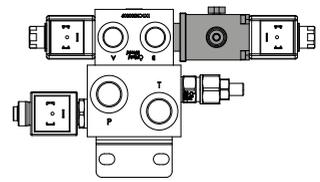
00  
No lever



10  
lever side A



01  
lever side B

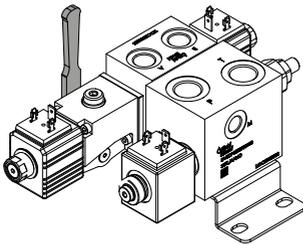


03

Lever position:

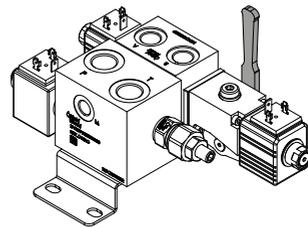
For choice  
lever side A

SA



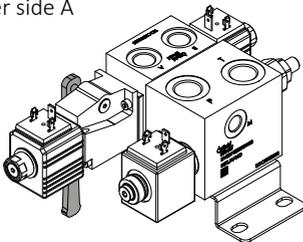
For choice  
lever side B

DA



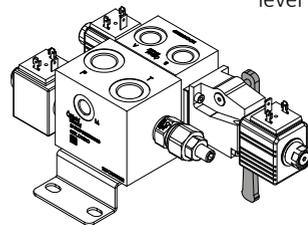
For choice  
lever side A

SB



For choice  
lever side B

DB



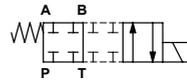
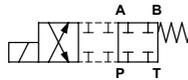
## B - WORK SECTION

**05 Electromagnetic actuator:**

ES

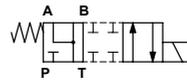
ED

Spool SCC3  
4/2 operated on side A



Spool SCC3  
4/2 operated on side B

Spool SCY3  
4/2 operated on side A



Spool SCY3  
4/2 operated on side B

**06 Option emergency electromagnetic actuator:**

00

01



No emergency



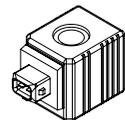
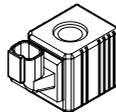
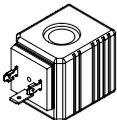
Pin emergency  
(push the pin for  
switches position)

**07 08 Coil:**

D

T

J



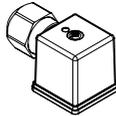
COIL CHARACTERISTICS

Vdc	Average power	Resistance	Protection IEC 144	Insulation	Nominal Voltage
12	26	5,5	IP 65	Class H	±10%
24		22			

## B - WORK SECTION

**08b** Option coil:

Option Connector



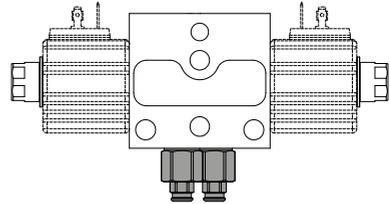
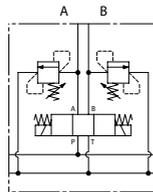
Option bidirectional diode  
(hydraulic scheme)



**09** Auxiliary valve:

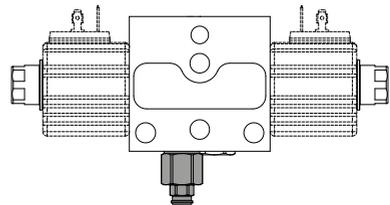
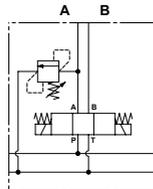
Contact our sales  
department

AB\_\_N\_\_

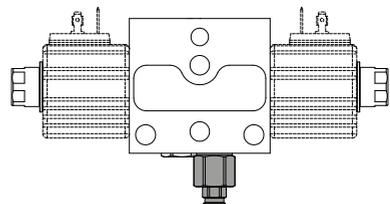
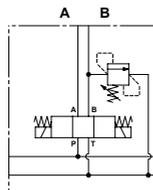


SPRINGS	
Code	Adjustable pressure range bar
03	1-30
25	100-250
45	250-450

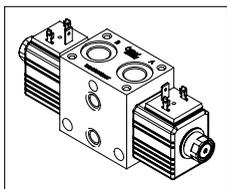
AS\_\_N\_\_



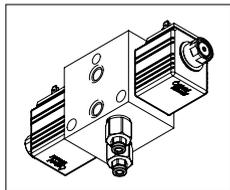
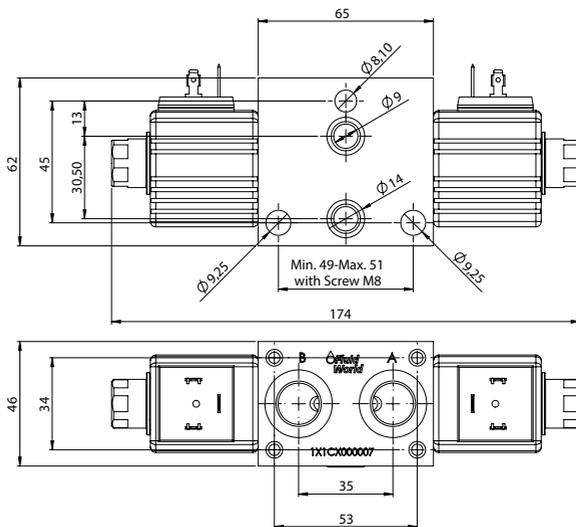
SB\_\_N\_\_



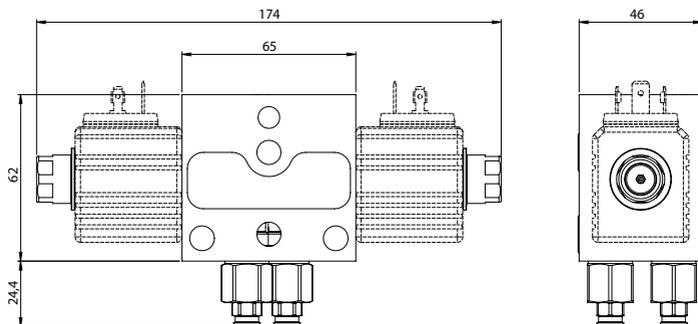
## B - WORK SECTION



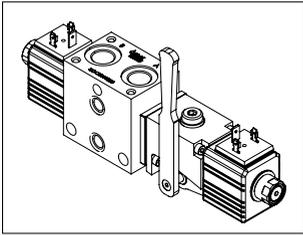
**Working section**  
with 4/3 operated on both  
sides A and B



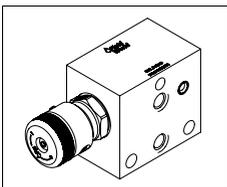
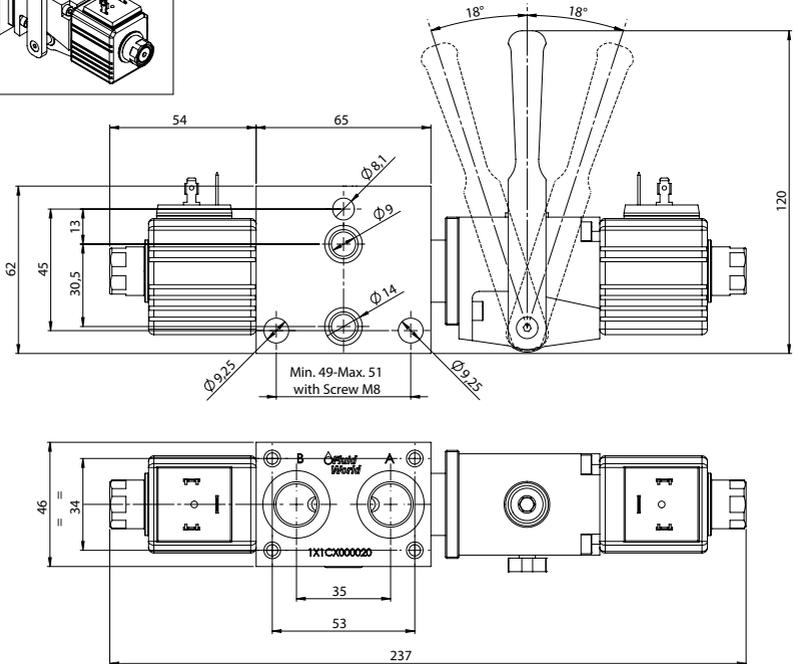
**Working section**  
with auxiliary valves.



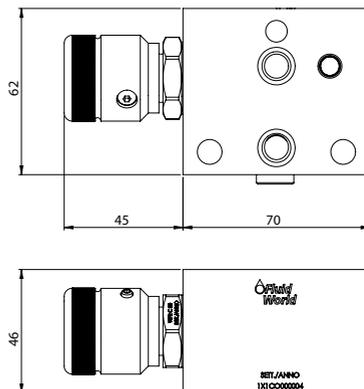
## B - WORK SECTION



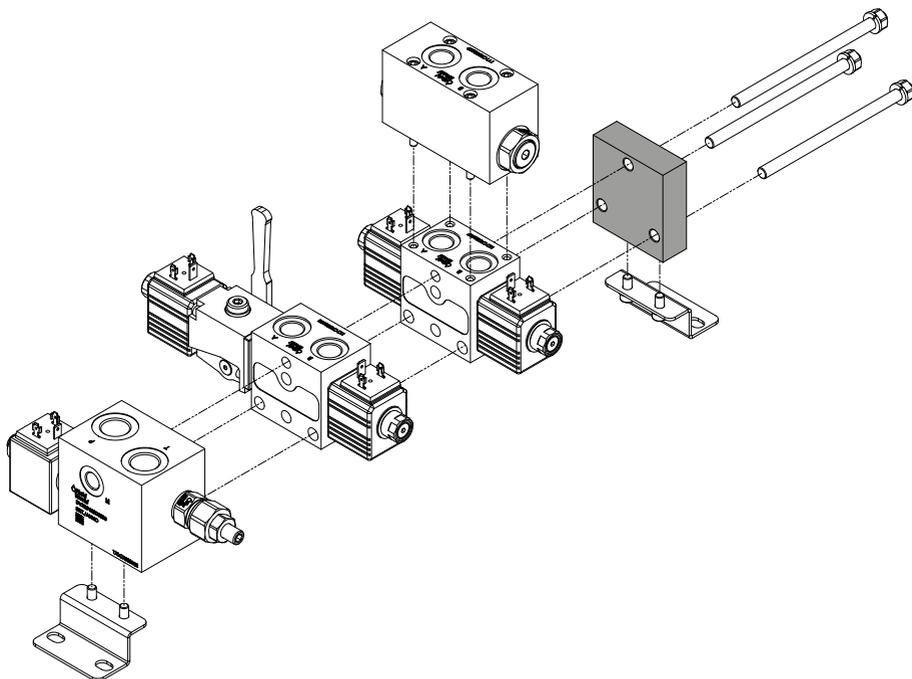
**Working section**  
with lever for manual control.



**Accessory section**  
with Cartridge WPR C 50



## C - OUTLET ELEMENTS



01	02	03a	03b	04	05a	05b					
EX	-	SNPT	-	N00	0	-	A	-			/

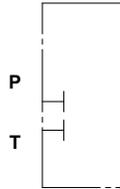
## C - OUTLET ELEMENTS

<b>01</b>	<b>Outlet elements</b>	EX
<b>02</b>	<b>Application scheme:</b> Basic (no connections) With additional tank port T1 With additional inlet port P1 With additional port P1, T1 and pressure measurement M1 With additional port P1, T1, M1 and pressure relief valve	<b>pag. 346</b> SNPT PNT1 P1TN P1T1 PTMP
<b>03a</b>	<b>Ports:</b> No ports (SNPT configuration) P and T G3/8 (DIN 3852) P and T G1/2 (DIN 3852)	- N00 G38 G12
<b>03b</b>	<b>Option corking:</b> No ports (SNPT configuration) P and T open P closed T open T closed P open P and T closed	- O N P T C
<b>04</b>	<b>Material:</b> Aluminium Steel zinc plated	- A S
<b>05a</b>	<b>Pressure relief valve:</b> (Only for PTMP) Range 5-55 Range 25-110 Range 50-215 Range 100-350 Plug (without pressure relief valve)	<b>pag. 347</b> 05 10 20 35 00
<b>05b</b>	<b>Setting pressure relief valve:</b> (Only for PTMP) Standard adjustment Adjustment required Adjustment required with safety plug Plug (without pressure relief valve)	<b>pag. 347</b> NSTD N(XXX) T(XXX) NTAP

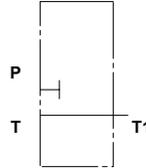
## C - OUTLET ELEMENTS

02 Application scheme:

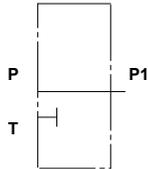
SNPT



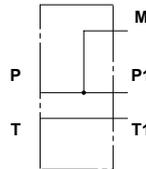
PNT1



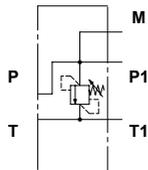
P1TN



P1T1



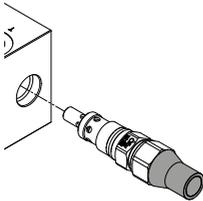
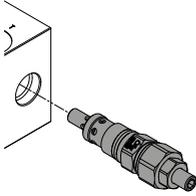
PTMP



## C - OUTLET ELEMENTS

05

**Pressure relief valve:** (Only for PTMP)



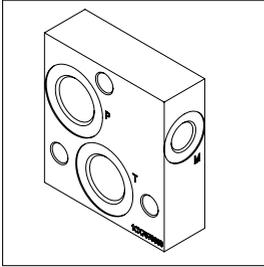
SPRINGS			
Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
<b>05</b>	5-55	15	5
<b>10</b>	25-110	25	25
<b>20</b>	50-215	50	50
<b>35</b>	100-350	90	100

(option)

T

Adjustment required with safety plug

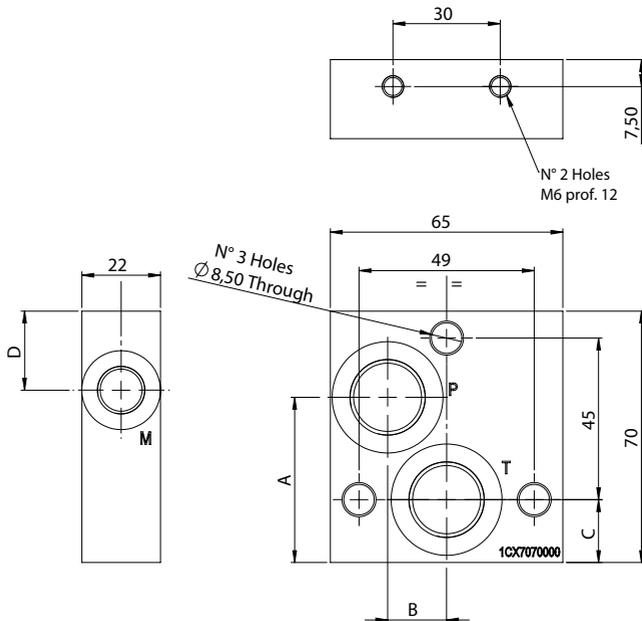
## C - OUTLET ELEMENTS



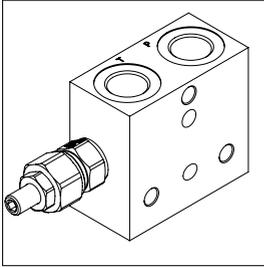
OUTLET DIMENSIONS G 3/8				
	SNPT	PNT1	P1TN	P1T1
<b>A</b>	-	-	42	42
<b>B</b>	-	-	-	-
<b>C</b>	-	13,5	-	13,5
<b>D</b>	-	-	-	22

OUTLET DIMENSIONS G 1/2				
	SNPT	PNT1	P1TN	P1T1
<b>A</b>	-	-	40	46
<b>B</b>	-	-	-	16,5
<b>C</b>	-	17,5	-	17,5
<b>D</b>	-	-	-	22

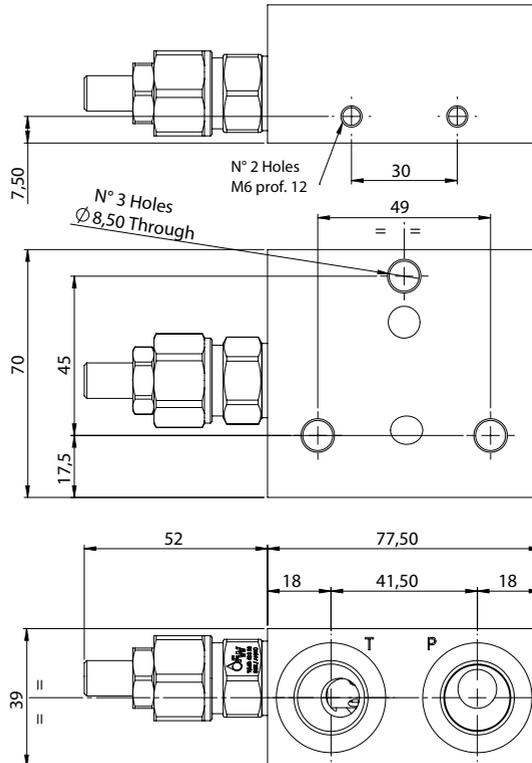
General external dimensions of  
**outlet elements.**



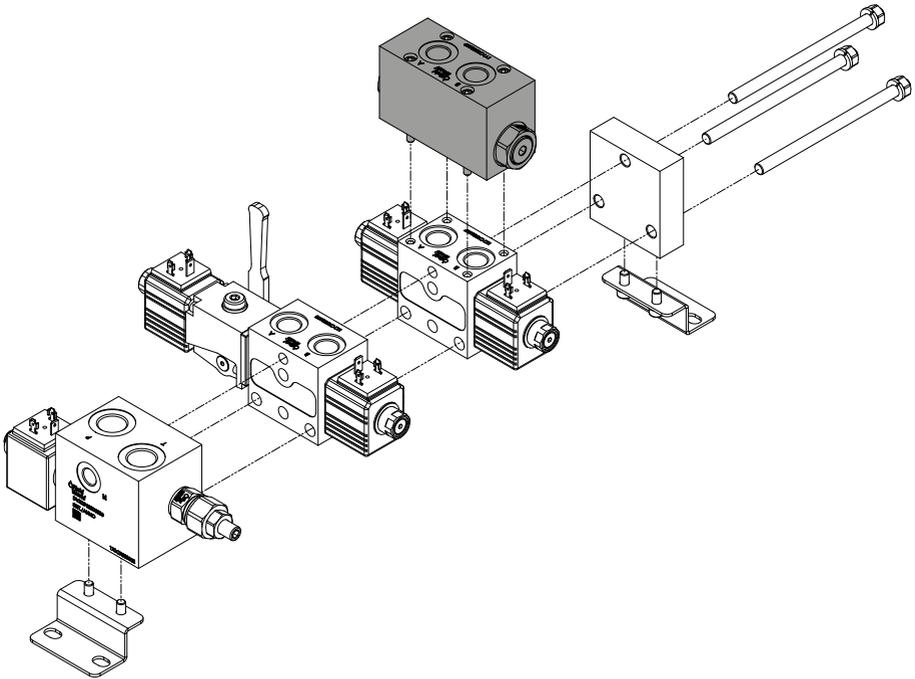
## C - OUTLET ELEMENTS



**PTMP** outlet element  
with P, T, M and pressure relief valve.



## D - FLANGEABLE VALVE

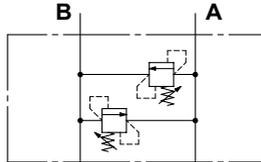


01	02	03a	03b	04	05	06	07	08	09											
WBD	-	00AB	-	G38	N	-	A	-	01	-	G07	-	-	-	-	-	-	-	-	/

## D - FLANGEABLE VALVE

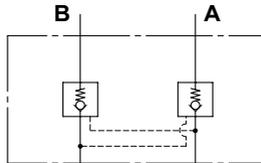
DUAL CROSS RELIEF VALVES

Pag. 352



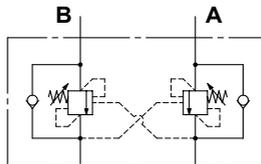
PILOT OPERATED CHECK VALVE

Pag. 354



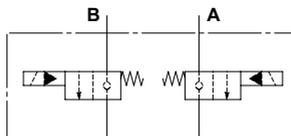
COUNTERBALANCE VALVES

Pag. 356



SOLENOID OPERATED VALVES

Pag. 358

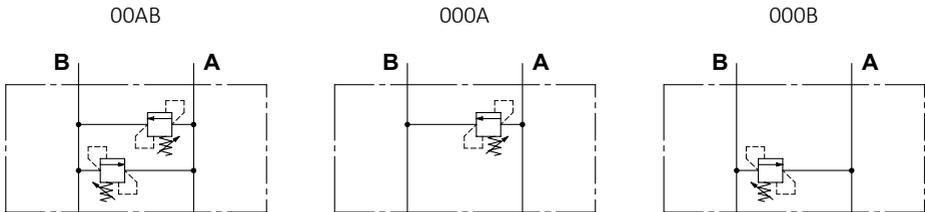


## D - FLANGEABLE VALVE

<b>01</b>	<b>Type of Valve:</b> Dual cross relief valves	- WMD
<b>02</b>	<b>Configuration:</b> Valves on side A and B Valve for port A only Valve for port B only	<b>pag. 353</b> 00AB 000A 000B
<b>03a</b>	<b>Ports:</b> A e B G3/8 (DIN 3852)	- G38
<b>03b</b>	<b>Option corking:</b> A e B open A closed, B open B closed, A open A e B closed	- N A B C
<b>04</b>	<b>Material:</b> Aluminium Steel zinc plated	- A S
<b>05a</b>	<b>Main pressure relief valve:</b> Range 5-55 Range 25-110 Range 50-215 Range 100-350 Plug (without pressure relief valve)	<b>pag. 353</b> 05 10 20 35 00
<b>05b</b>	<b>Setting pressure relief valve:</b> Standard adjustment Adjustment required Adjustment required with safety plug Plug (without pressure relief valve)	<b>pag. 353</b> NSTD N(XXX) T(XXX) NTAP

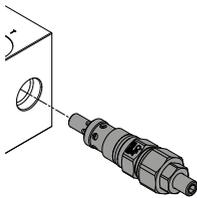
## D - FLANGEABLE VALVE

**02 Configuration:**

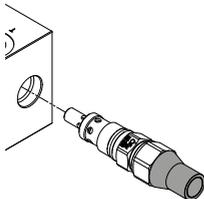


For configuration with only one valve,  
please contact our sales department.

**05 Main pressure relief valve:** (Omit for C1)



SPRINGS			
Code	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
<b>05</b>	5-55	15	5
<b>10</b>	25-110	25	25
<b>20</b>	50-215	50	50
<b>35</b>	100-350	90	100



(option)

T

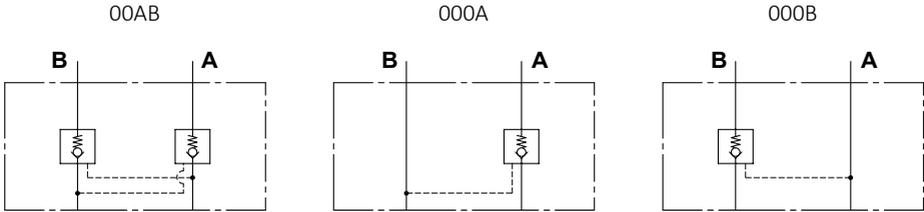
Adjustment required with safety plug

## D - FLANGEABLE VALVE

<b>01</b>	<b>Type of Valve:</b> Pilot operated check valve	- WBD
<b>02</b>	<b>Configuration:</b> Valves on side A and B Valve for port A only Valve for port B only	<b>pag. 355</b> 00AB 000A 000B
<b>03a</b>	<b>Ports:</b> A e B G3/8 (DIN 3852)	- G38
<b>03b</b>	<b>Option corking:</b> A e B open A closed, B open B closed, A open A e B closed	- N A B C
<b>04</b>	<b>Material:</b> Aluminium Steel zinc plated	- A S
<b>05</b>	<b>Cracking pressure:</b> 1 bar 2,5 bar 5 bar 10 bar	- 01 25 05 10
<b>06</b>	<b>Pilot ratio:</b> 7:1 with seal on piston (Standard) 4:1 with seal on piston 10:1 with seal on piston 7:1 4:1 10:1	- G07 G04 G10 N07 N04 N10

## D - FLANGEABLE VALVE

02 Configuration:

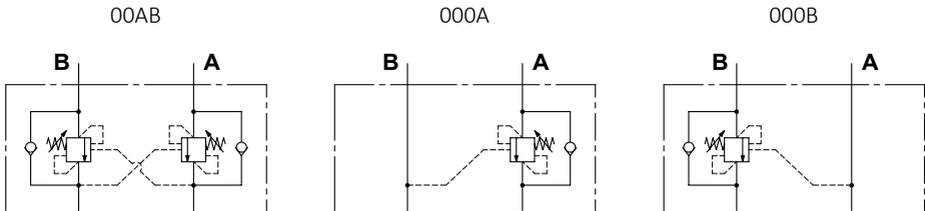


## D - FLANGEABLE VALVE

<b>01</b>	<b>Type of Valve:</b> Counterbalance Valves	- WOD
<b>02</b>	<b>Configuration:</b> Valves on side A and B Valve for port A only Valve for port B only	<b>pag. 357</b> 00AB 000A 000B
<b>03a</b>	<b>Ports:</b> A e B G3/8 (DIN 3852)	- G38
<b>03b</b>	<b>Option corking:</b> A e B open A closed, B open B closed, A open A e B closed	- N A B C
<b>04</b>	<b>Material:</b> Aluminium Steel zinc plated	- A S
<b>05</b>	<b>Size:</b> For 30 l/min	- 30
<b>06</b>	<b>Compensation:</b> Standard (no compensated) Fully compensated	- ST FC
<b>07</b>	<b>Spring:</b> 20 35	<b>pag. 357</b> 20S 35S
<b>08</b>	<b>Pilot ratio:</b> 4:1 8:1 11:1 1:1 (only for 60 l/min)	<b>pag. 357</b> 04 08 11 01
<b>09</b>	<b>Adjustement:</b> No required Value	- NSTD NXXX

## D - FLANGEABLE VALVE

**02 Configuration:**



**07 08 Spring and pilot ratio:**

SPRINGS						
Code	20			35		
Pilot ratio	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar	Adjustable pressure range bar	Pressure increase bar/turn	Standard setting bar
1:1	10-70	15	10	30-200	25	30
4:1	60-210	70	170	80-350	120	280
8:1	60-220	50		100-350	85	
11:1	60-250	90		80-350	150	

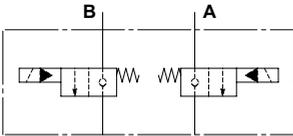
## D - FLANGEABLE VALVE

<b>01</b>	<b>Type of Valve:</b> Solenoid operated valves	- WE2
<b>02</b>	<b>Configuration:</b> Valves on side A and B Valve for port A only Valve for port B only	<b>pag. 359</b> 00AB 000A 000B
<b>03a</b>	<b>Ports:</b> A e B G3/8 (DIN 3852)	- G38
<b>03b</b>	<b>Option corking:</b> A e B open A closed, B open B closed, A open A e B closed	- N A B C
<b>04</b>	<b>Material:</b> Aluminium Steel zinc plated	- A S
<b>05</b>	<b>Type of valve:</b> Single lock normally closed, bidirectional Single lock normally open, bidirectional Double lock normally closed, bidirectional Double lock normally open, bidirectional	<b>pag. 359</b> STNC2 STNA2 DTNC2 DTNA2
<b>06</b>	<b>Option electric valve:</b> Without emergency NA with push emergency NA with push&twist emergency NC with screw emergency	<b>pag. 359</b> 0000 EMPO EMPT EMSO
<b>07</b>	<b>Coil:</b> 12 Vdc 24 Vdc No coil	<b>pag. 360</b> V12 V24 BBO
<b>08a</b>	<b>Coil connector:</b> DIN EN 175301-803 (ex. DIN 43650) DT04-2P AMP-JUNIOR No coil	<b>pag. 360</b> D T J B
<b>08b</b>	<b>Option coil:</b> No connector With connector With connector and bidirectional diode No coil	<b>pag. 360</b> NN NC SC BO

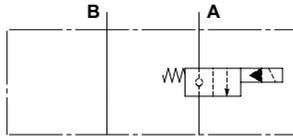
## D - FLANGEABLE VALVE

02 Configuration:

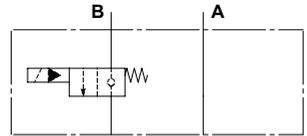
00AB



000A

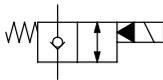


000B

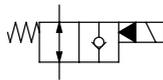


05 Type of valve:

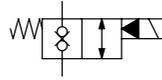
STNC2



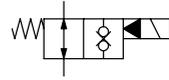
STNA2



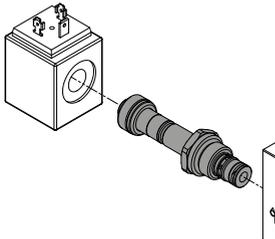
DTNC2



DTNA2



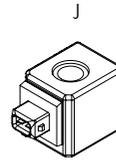
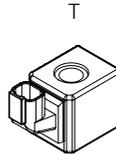
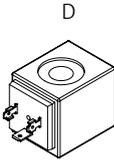
06 Option electric valve:



MANUAL OVERRIDE	
(EMP) Push	
(EMPT) Push & Twist	

## D - FLANGEABLE VALVE

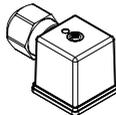
07 08 **Coil:**



COIL CHARACTERISTICS					
Vdc	Average power	Resistance	Protection IEC 144	Insulation	Nominal Voltage
12	22	6,5	IP 65	Class H	+/- 10%
24		26,5			

08b **Option coil:**

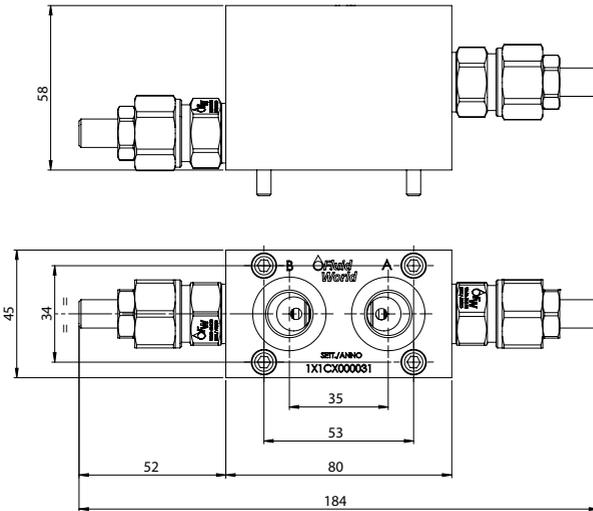
Option Connector



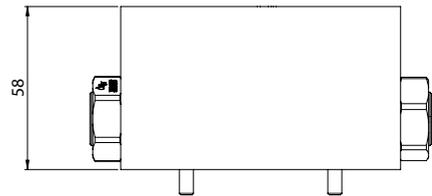
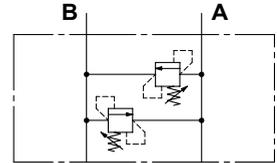
Option bidirectional diode  
(hydraulic scheme)



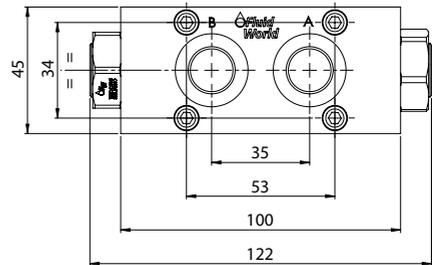
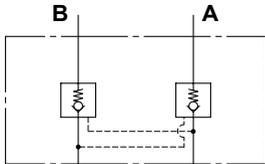
## D - FLANGEABLE VALVE



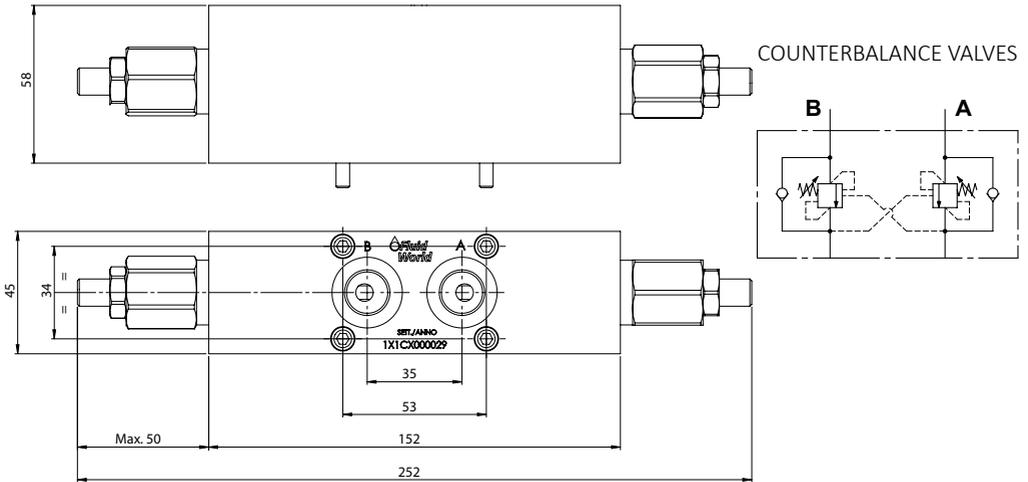
DUAL CROSS RELIEF VALVES



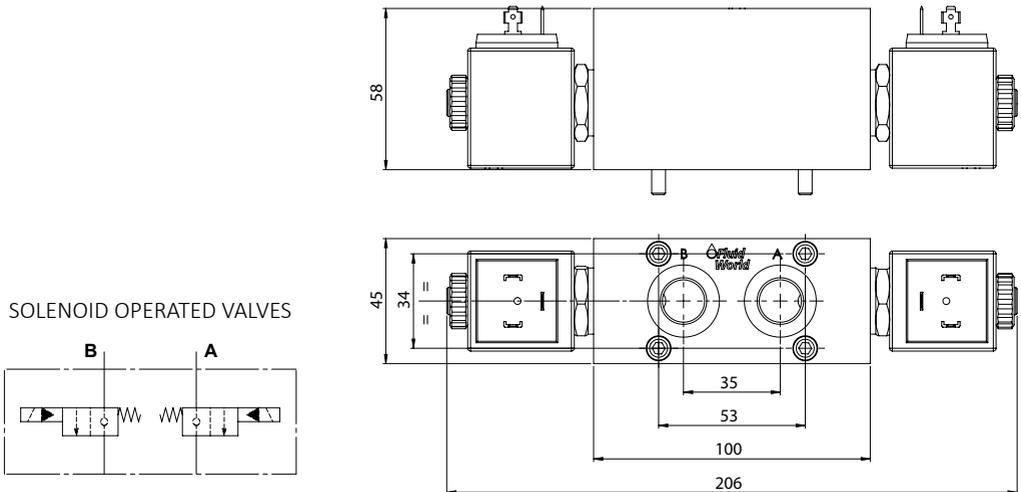
PILOT OPERATED CHECK VALVE



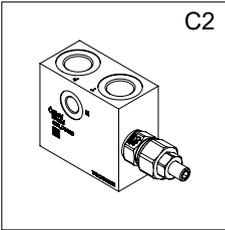
## D - FLANGEABLE VALVE



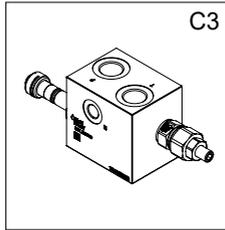
SOLENOID OPERATED VALVES



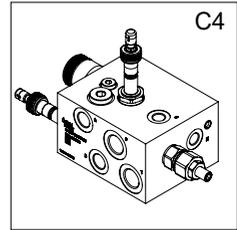
**PERFORMANCE**  
*PRESTAZIONI*



Pressure Relief Valve for Inlet Elements C2, C3 and C4.

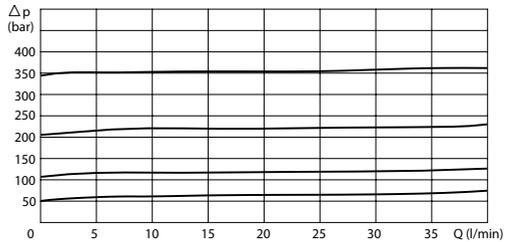


Solenoid Operated Valve for Inlet Elements C3 and C4.

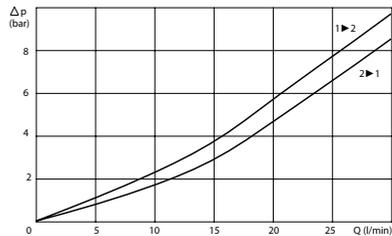


Flow Regulator Valve for Inlet Elements C4.

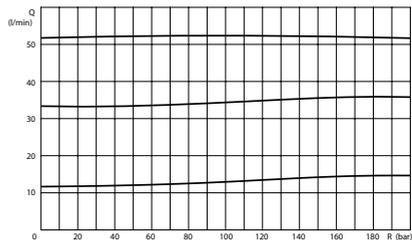
PRESSURE DROP CURVES



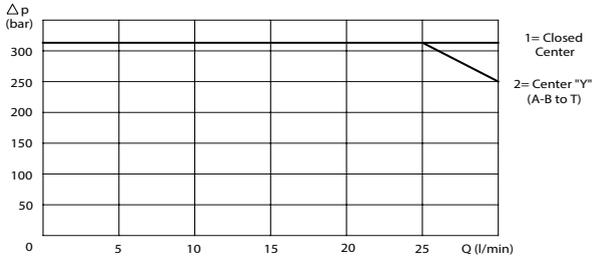
PRESSURE DROP CURVES



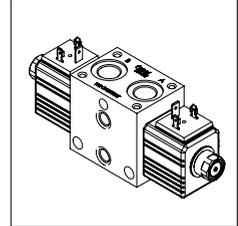
COMPENSATION CURVES



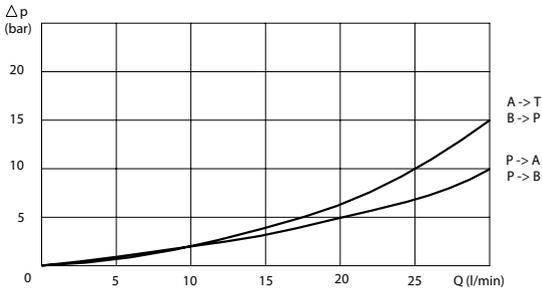
SPOOL OPERATING LIMITS



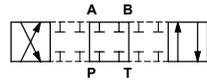
Working Section



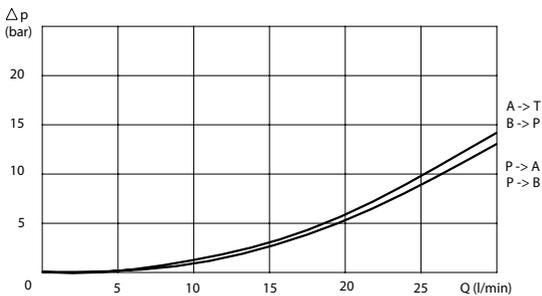
PRESSURE DROP CURVES



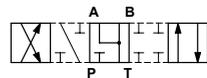
Spool Closed Center



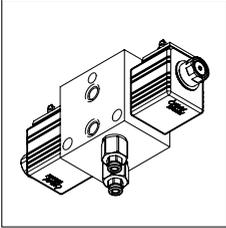
PRESSURE DROP CURVES



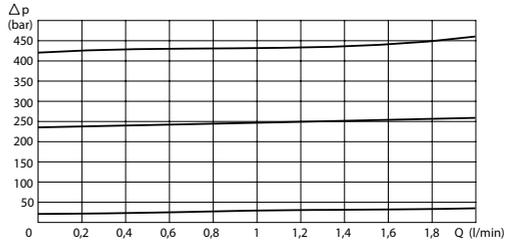
Motor spool centre



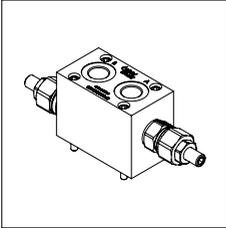
**Pressure Relief Valve for Working Section with ausiliary valves**



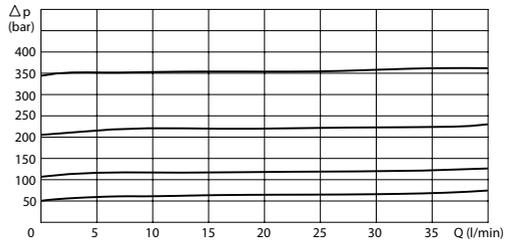
PRESSURE DROP CURVES



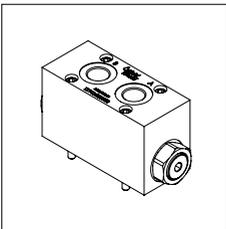
**Dual Cross Relief Valve**



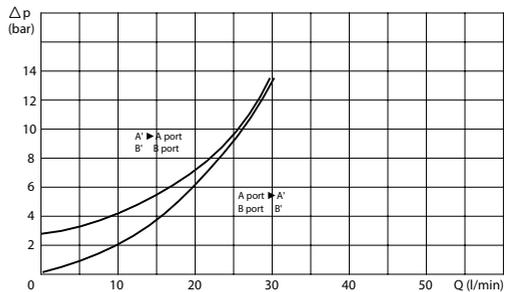
PRESSURE DROP CURVES



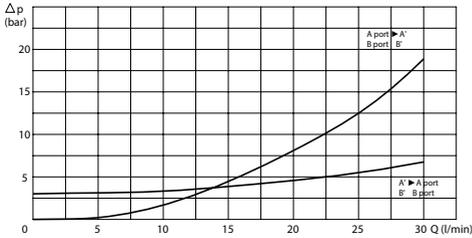
**Pilot Operated Check Valve**



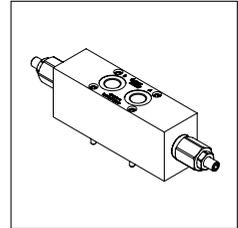
PRESSURE DROP CURVES



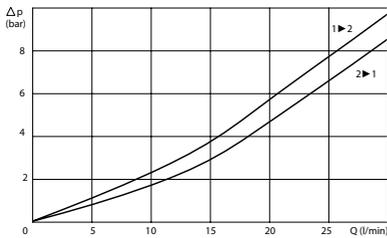
PRESSURE DROP CURVES



Counterbalance Valves

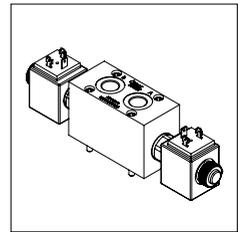


PRESSURE DROP CURVES

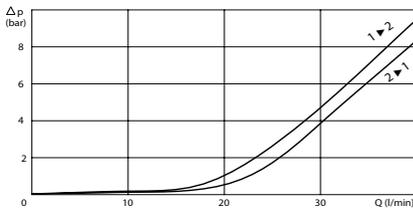


WST Valves

Solenoid Operated Valve



PRESSURE DROP CURVES



WDT Valves





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info@fluidworld.it - Tel.: +39 0522 1750620