



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/acrylonitri (BUNA-N) and are suitable for temperature between the -20° and the +90° C. The anti-extrusion rings are made lubrifon (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

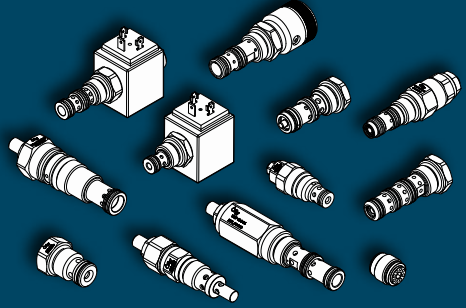
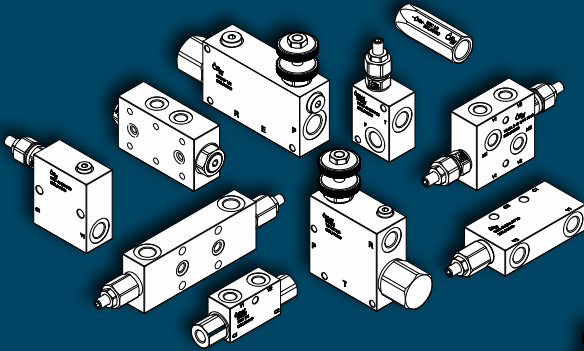
O -Ring: fatto di butadiene / acrilonitrile (BUNA-N) e sono adatti a temperature tra -20° e + 90° C.

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

MONTAGGIO VALVOLE A CARTUCCIA

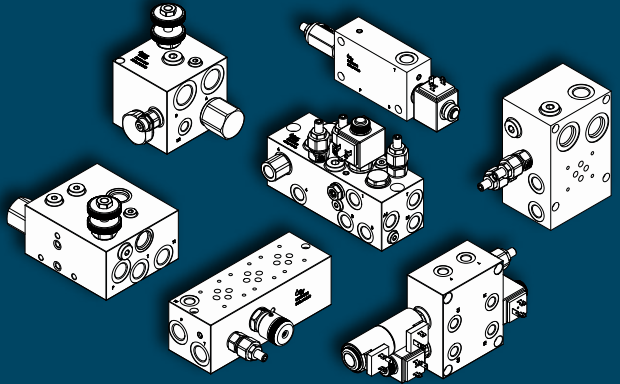
Ogni valvola a cartuccia dovrà essere montata nell'apposita cavità indicata a catalogo e dovrà essere montata seguendo le coppie di serraggio indicate. Inoltre si consiglia di lubrificare le guarnizioni per evitare il danneggiamento nel montaggio.

**CARTRIDGE
VALVES**

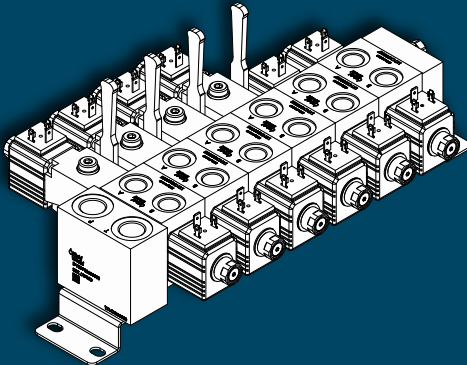


**PARTS-IN-BODY
VALVES**

**HYDRAULIC
INTEGRATED
CIRCUITS**

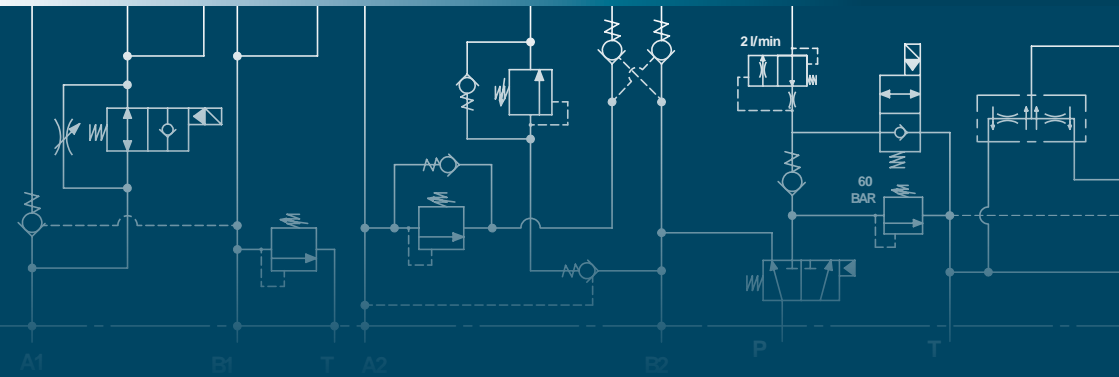


**DIRECTIONAL
ELECTRO-HYDRAULIC
SYSTEMS**

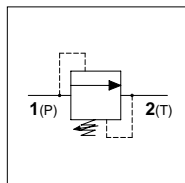


PRODUCT SELECTION GUIDE

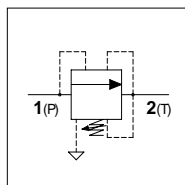
GUIDA ALLA SELEZIONE DEL PRODOTTO



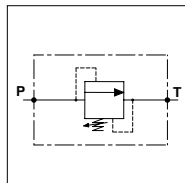
PRESSURE RELIEF VALVES
VALVOLE DI MASSIMA PRESSIONE



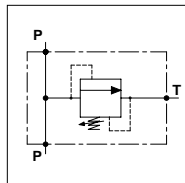
| CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|----------|--------------|--------------|------------|------|
| WMD 5 | 2 | 450 | M16 x 1,5 | 42 |
| WMD 25 | 20 | 350 | SAE 08 | 43 |
| WMD 25 H | 25 | 350 | SAE 08 | 45 |
| WMD 40 | 40 | 350 | M20 x 1,5 | 48 |
| WMD 50 | 50 | 350 | SAE 10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



| | | | | |
|-----------|----|-----|-----------|----|
| WMD 40 CC | 40 | 350 | M20 x 1,5 | 55 |
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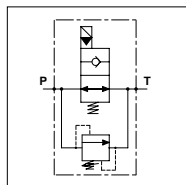


| | | | | |
|----------|----|-------------------|----------|----|
| WMD 25 | 20 | 250 (A) - 350 (S) | 1/4; 3/8 | 44 |
| WMD 25 H | 25 | 250 (A) - 350 (S) | 1/4; 3/8 | 46 |
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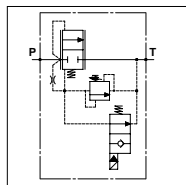


| | | | | |
|----------------|----|-------------------|----------|----|
| WMD 25 H - SPW | 25 | 250 (A) - 350 (S) | 1/4; 3/8 | 47 |
| WMD 40 | 40 | 250 (A) - 350 (S) | 3/8; 1/2 | 49 |
| WMD 40 - SPW | 40 | 250 (A) - 350 (S) | 3/8; 1/2 | 50 |
| WMD 80 | 80 | 250 (A) - 350 (S) | 1/2; 3/4 | 53 |
| WMD 80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

PRESSURE RELIEF VALVES
 VALVOLE DI MASSIMA PRESSIONE

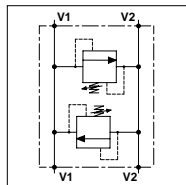


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|-------------|--------------|--------------|------------|------|
| WMD 25 - VE | 25 | 250 (A) | 1/4; 3/8 | 56 |
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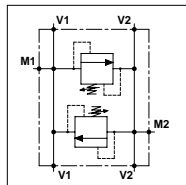


| | | | | |
|--------------|-----|---------|----------|----|
| WMD 100 - VE | 100 | 250 (A) | 3/8; 1/2 | 57 |
| WMD 200 - VE | 200 | 250 (A) | 3/4; 1 | 58 |
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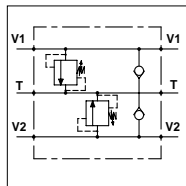
DUAL CROSS RELIEF VALVES
 VALVOLE REGOLATRICI DI PRESSIONE INCROCIATE



| 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 |
| | | | | |
| | | | | |



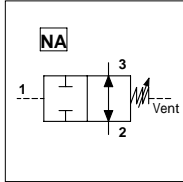
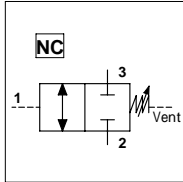
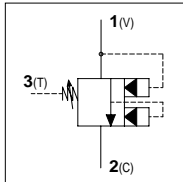
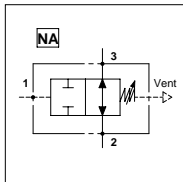
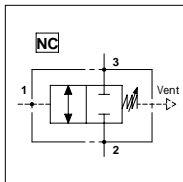
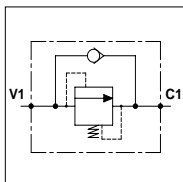
| | | | | |
|----------|----|-------------------|----------|----|
| WMD D 40 | 40 | 250 (A) - 350 (S) | 3/8; 1/2 | 64 |
| WMD D 80 | 80 | 250 (A) - 350 (S) | 1/2; 3/4 | 65 |
| | | | | |
| | | | | |



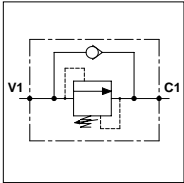
| | | | | |
|--------------|----|---------|----------|----|
| WMDL D 40 AC | 40 | 250 (A) | 3/8; 1/2 | 66 |
| | | | | |
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Legend:
 (A)= Aluminium ; (S)= Steel

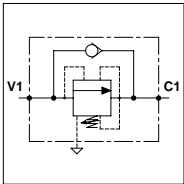
SEQUENCE VALVES
VALVOLE DI SEQUENZA

| | 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 |
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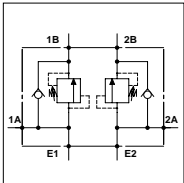
SEQUENCE VALVES
 VALVOLE DI SEQUENZA



| 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 |
| | | | | |
| | | | | |

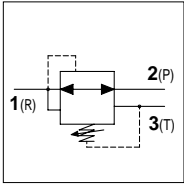


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|-----------|----|-------------------|----------|----|
| WSD 40 CC | 40 | 250 (A) - 350 (S) | 3/8; 1/2 | 78 |
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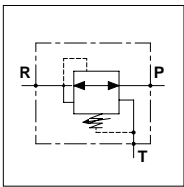


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|----------|----|---------|-----|----|
| WSD D 40 | 40 | 250 (A) | 1/2 | 79 |
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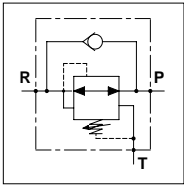
PRESSURE REDUCING VALVES
 VALVOLE RIDUTTRICI DI PRESSIONE



| 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 |
| | | | | |
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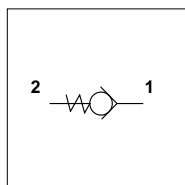


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|------------------|----|-------------------|----------|----|
| WRP 30 S10 | 30 | 250 (A) - 350 (S) | 3/8; 1/2 | 83 |
| WRP 30 | 30 | 250 (A) - 350 (S) | 3/8 | 85 |
| WRP 30 S10 - SPW | 30 | 250 (A) - 350 (S) | 3/8 | 86 |
| | | | | |

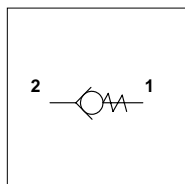


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|-----------|----|-------------------|-----|----|
| WRP 30 VU | 30 | 250 (A) - 350 (S) | 3/8 | 87 |
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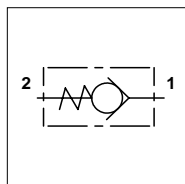
CHECK VALVES
VALVOLE DI RITEGNO UNIDIREZIONALI



| 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 |

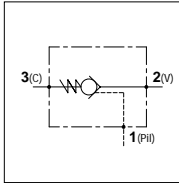
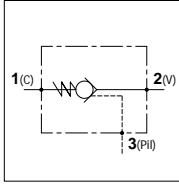
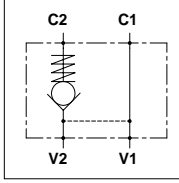
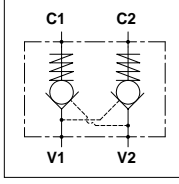
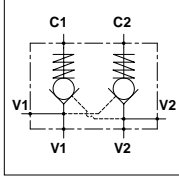
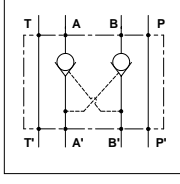


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|---------|---------|-----|-------------------------|----|
| WUC ISI | Max 120 | 350 | 1/8; 1/4; 3/8; 1/2; 3/4 | 96 |
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|-----------------|---------|-----|-----------------------------------|-----|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

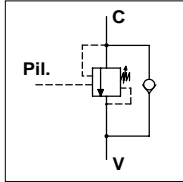
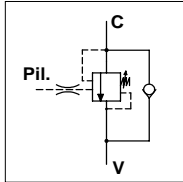
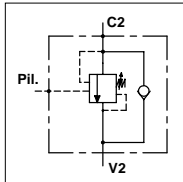
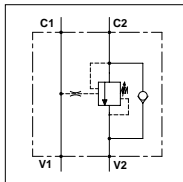
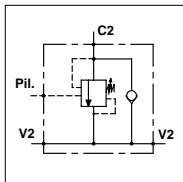
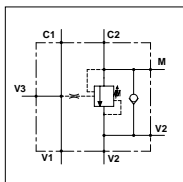
PILOT OPERATED CHECK VALVES
VALVOLE DI BLOCCO PILOTATE

| | 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 |
| | | | | | |
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|  | WBD 30 6F | 30 | 250 (A) - 350 (S) | CETOP 3 | 121 |
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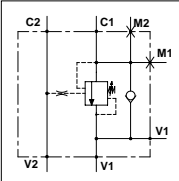
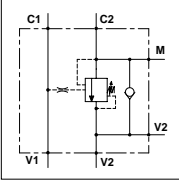
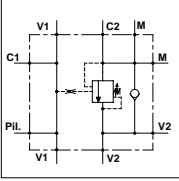
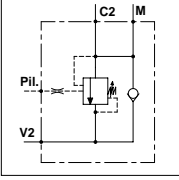
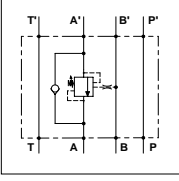
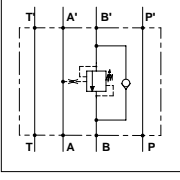
Legend:

(A)= Aluminium ; (S)= Steel

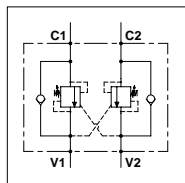
COUNTERBALANCE VALVES
VALVOLE OVERCENTER

| | 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 |
| | | | | | |
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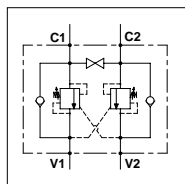
COUNTERBALANCE VALVES
 VALVOLE OVERCENTER

| | 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 |

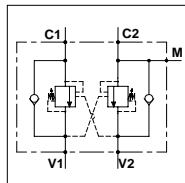
COUNTERBALANCE VALVES
VALVOLE OVERCENTER



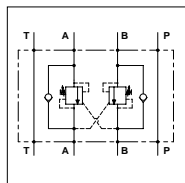
| CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|-------------------|--------------|--------------|------------|------|
| WODS 30 - L | 30 | 350 (S) | 1/4 | 135 |
| WODS 30 - 2F | 30 | 350 (S) | 1/4 | 136 |
| WOD 30 - L | 30 | 350 (S) | 1/4; 3/8 | 137 |
| WOD 30 - L A | 30 | 250 (A) | 1/4 | 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 |



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|-------------------|----|---------|-----|-----|
| WOD X 60 - L A BP | 60 | 250 (A) | 3/8 | 152 |
| WOD 60 - 2F A BP | 60 | 250 (A) | 3/8 | 153 |
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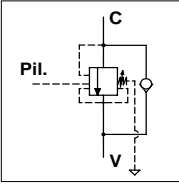
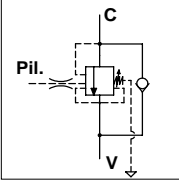
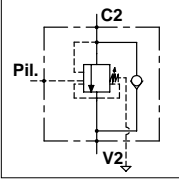
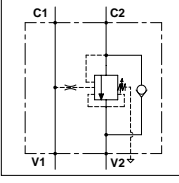
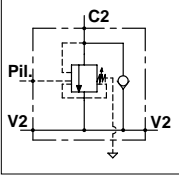
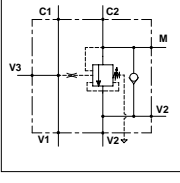
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|-------------|----|---------|----------|-----|
| WOD 60 - 1F | 60 | 350 (S) | 3/8; 1/2 | 154 |
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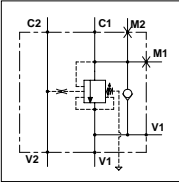
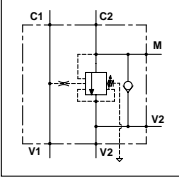
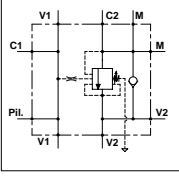
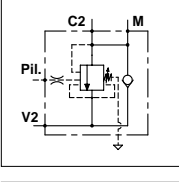
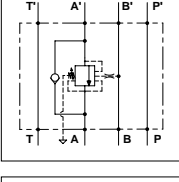
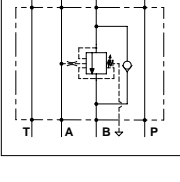
| | | | | |
|-----------|----|-------------------|---------|-----|
| WOD 60 6F | 60 | 250 (A) - 350 (S) | CETOP 3 | 156 |
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Legend:
(A)= Aluminium ; (S)= Steel

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 |
| | | | | | |
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| | | | | | |
|  | 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 |
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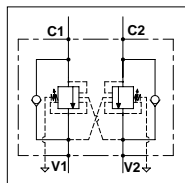
FULLY COMPENSATED COUNTERBALANCE VALVES
VALVOLE OVERCENTER COMPENSATE

| | 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 |

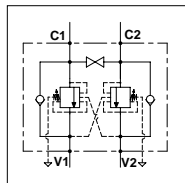
Legend:

(A)= Aluminium ; (S)= Steel

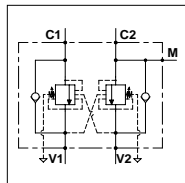
FULLY COMPENSATED COUNTERBALANCE VALVES
VALVOLE OVERCENTER COMPENSATE



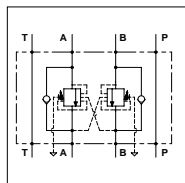
| CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|---------------------|--------------|--------------|------------|------|
| WODSFC 30 - L | 30 | 350 (S) | 1/4 | 170 |
| WODSFC 30 - 2F | 30 | 350 (S) | 1/4 | 171 |
| WODFC 30 - L | 30 | 350 (S) | 1/4; 3/8 | 172 |
| WODFC 30 - L A | 30 | 250 (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 |



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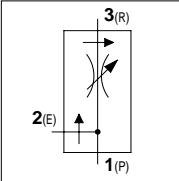
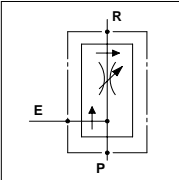
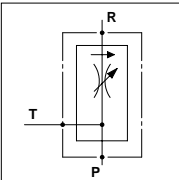
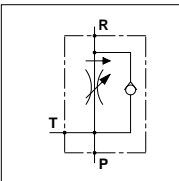
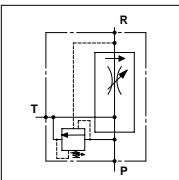
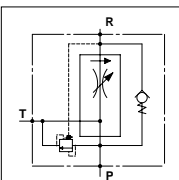


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|---------------|----|---------|----------|-----|
| WODFC 60 - 1F | 60 | 350 (S) | 3/8; 1/2 | 189 |
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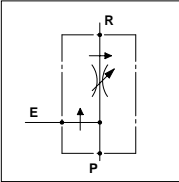
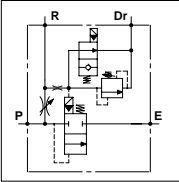
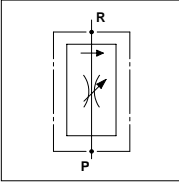
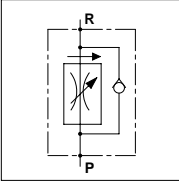
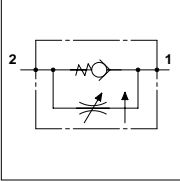


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|-------------|----|-------------------|---------|-----|
| WODFC 60 6F | 60 | 250 (A) - 350 (S) | CETOP 3 | 191 |
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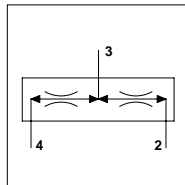
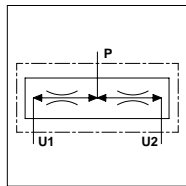
COMPENSATED FLOW CONTROL VALVES
VALVOLE REGOLATRICI DI FLUSSO COMPENSATE

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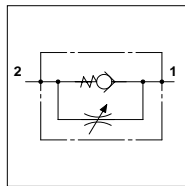
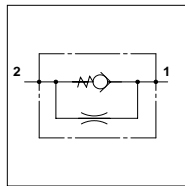
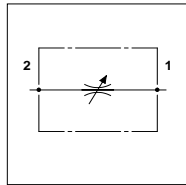
COMPENSATED FLOW CONTROL VALVES
VALVOLE REGOLATRICI DI FLUSSO COMPENSATE

| | 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

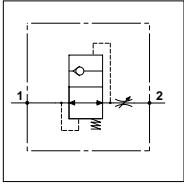
| | CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|--|-----------|--------------|-------------------|------------|------|
|  | WDF A S10 | 40 | 350 | SAE 10 | 210 |
| | | | | | |
| | | | | | |
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|  | WDF A S10 | 40 | 250 (A) - 350 (S) | 3/8;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

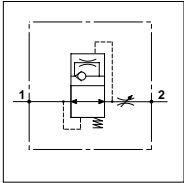
| | CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|--|--------------|--------------|--------------|--|------|
|  | WFU C S08 | 40 | 350 | SAE 08 | 214 |
| | WFU | Max 160 | 350 | 1/4; 3/8; 1/2; 3/4; 1 | 215 |
| | WFU M | Max 160 | 350 | 1/4; 3/8; 1/2; 3/4; 1 | 216 |
| | WFU M - SPFP | Max 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 |
| | | | | | |
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|  | WFC C S08 | 30 | 350 | SAE 08 | 219 |
| | WFB | Max 110 | 350 | 1/4; 3/8; 1/2; 3/4; 1 | 220 |
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Legend:
 (A)= Aluminium ; (S)= Steel

HOSE BURST VALVES
 VALVOLE PARACADUTE

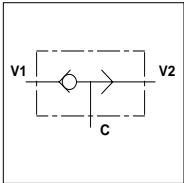


| CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|------|--------------|--------------|-----------------------|----------|
| WHB | Max 180 | 350 (S) | 1/4; 3/8; 1/2; 3/4; 1 | 224; 225 |
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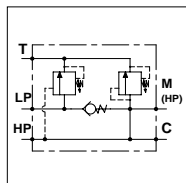
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|--------------------|---------|---------|-----------------------|----------|
| WHB (with orifice) | Max 180 | 350 (S) | 1/4; 3/8; 1/2; 3/4; 1 | 224; 225 |
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SHUTTLE VALVES
 VALVOLE SELETRICI

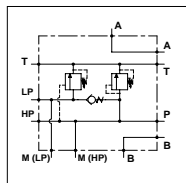


| CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|------|--------------|--------------|-----------------------|------|
| WS I | Max 35 | 350 | 1/8; 1/4 | 228 |
| WS | Max 160 | 350 (S) | 1/4; 3/8; 1/2; 3/4; 1 | 229 |
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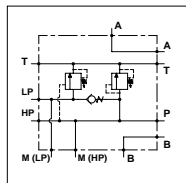
HIGH LOW UNLOADING VALVES
VALVOLE ESCLUSIONE POMPA DOPPIA



| CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|--------|--------------|--------------|---------------|------|
| WEPD L | Max 80 | 350 (S) | 3/8; 1/2; 3/4 | 232 |
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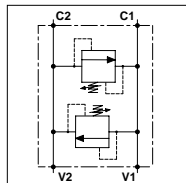


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|---------|----|---------|---------|-----|
| WEPD 6F | 30 | 250 (A) | CETOP 3 | 233 |
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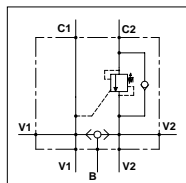


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|----------|----|---------|---------|-----|
| WEPD 10F | 45 | 250 (A) | CETOP 5 | 234 |
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VALVES FLANGED ON MOTORS
VALVOLE FLANGIATE SU MOTORI

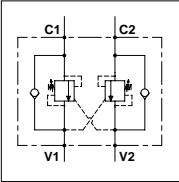
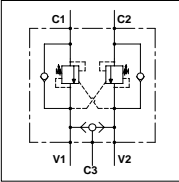
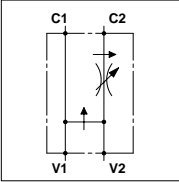
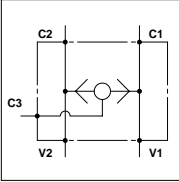
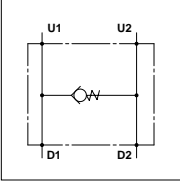


| CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|----------------|--------------|-------------------|------------|------|
| WMD FDB OMM 25 | 25 | 250 (A) - 350 (S) | 3/8 | 238 |
| WMD FDB OMR 40 | 40 | 250 (A) | 3/8; 1/2 | 239 |
| WMD FD OMR 40 | 40 | 250 (A) - 420 (S) | 1/2 | 240 |
| WMD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

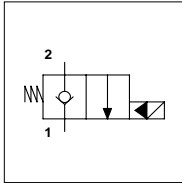
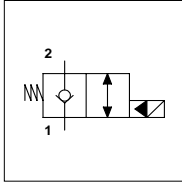
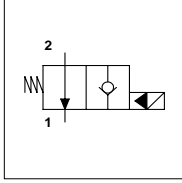
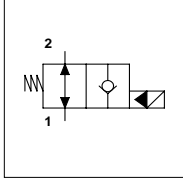


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|--------------------|----|-------------------|----------|-----|
| WOS FD OMR 60 - DL | 60 | 250 (A) - 350 (S) | 3/8; 1/2 | 242 |
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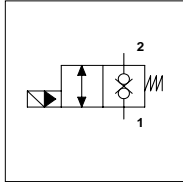
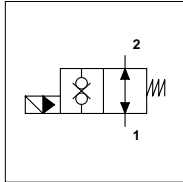
VALVES FLANGED ON MOTORS
 VALVOLE FLANGIATE SU MOTORI

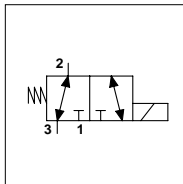
| | CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|--|----------------------|-----------------|-------------------|------------|------|
|  | WOD FD OMR 60 - NOSF | 60 | 250 (A) - 350 (S) | 3/8; 1/2 | 243 |
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| | | | | | |
|  | WOD FD OMR 60 | 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 |
| | | | | | |
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|  | WS FD OMR | 60 | 250 (A) - 350 (S) | 1/2 | 250 |
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|  | WUC FD OMR | 70 | 250 (A) - 350 (S) | 1/2 | 251 |
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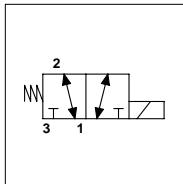
SOLENOID OPERATED VALVES
VALVOLE ELETTRICHE

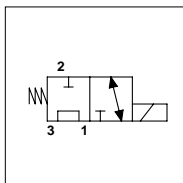
| | CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|---|-----------------|-----------------|-----------------|------------------------|----------|
|  | WST S08 NC L | 30 | 300 | SAE 08 | 254; 255 |
| | WST - NC | Max 150 | 350 | SAE 08; SAE 10; SAE 12 | 258; 259 |
| | | | | | |
| | | | | | |
|  | 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 |
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SOLENOID OPERATED VALVES
 VALVOLE ELETTRICHE

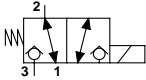
| | CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|--|----------|--------------|--------------|------------------------|----------|
|  | WDT - NC | Max 150 | 350 | SAE 08; SAE 10; SAE 12 | 262; 263 |
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| | | | | | |
| | | | | | |
|  | WDT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

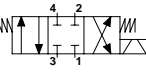
| | | | | | |
|---|----------|--------|---------|----------------|----------|
|  | WTW - 01 | Max 20 | Max 210 | SAE 08; SAE 10 | 266; 267 |
| | | | | | |
| | | | | | |
| | | | | | |

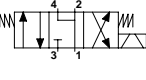
| | | | | | |
|--|----------|--------|---------|----------------|----------|
|  | WTW - 02 | Max 20 | Max 210 | SAE 08; SAE 10 | 268; 269 |
| | | | | | |
| | | | | | |
| | | | | | |

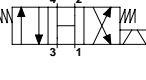
| | | | | | |
|--|------------|----|---------|--------|----------|
|  | WTW S08 03 | 12 | Max 210 | SAE 08 | 270; 271 |
| | | | | | |
| | | | | | |
| | | | | | |

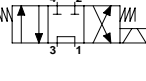
SOLENOID OPERATED VALVES
 VALVOLE ELETTRICHE

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

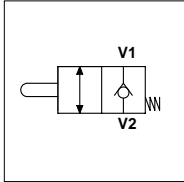
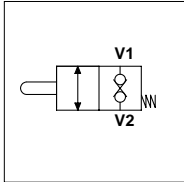
| | | | | | |
|--|---------|--------|---------|----------------|----------|
|  | FWF - 1 | Max 20 | Max 210 | SAE 08; SAE 10 | 274; 275 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---------|--------|---------|----------------|----------|
|  | FWF - 2 | Max 20 | Max 210 | SAE 08; SAE 10 | 274; 275 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

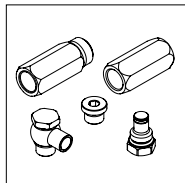
| | | | | | |
|--|---------|--------|---------|----------------|----------|
|  | FWF - 3 | Max 20 | Max 210 | SAE 08; SAE 10 | 274; 275 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|--|---------|--------|---------|----------------|----------|
|  | FWF - 4 | Max 18 | Max 210 | SAE 08; SAE 10 | 274; 275 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

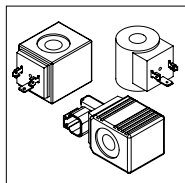
END STROKE VALVES
 VALVOLE DI FINE CORSA

| | 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

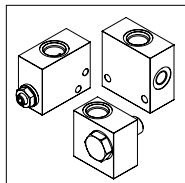


| CODE | FLOW (L/MIN) | P. MAX (BAR) | SIZE/PORTS | PAGE |
|------------------|--------------|--------------|-------------------------|------|
| ICC MF WHB | - | 350 (S) | 1/4; 3/8; 1/2; 3/4; 1 | 284 |
| ICC FF WHB | - | 350 (S) | 1/4; 3/8; 1/2; 3/4; 1 | 284 |
| FIXING KIT | - | 350 (S) | 1/4; 3/8 | 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

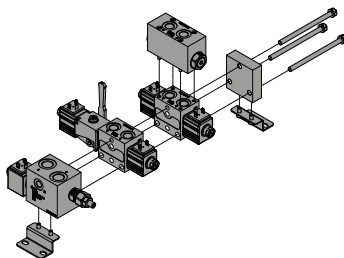
PAG. 322

EXAMPLE OF ORDER
ESEMPIO DI ORDINE

PAG. 324

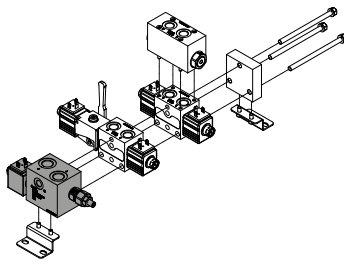
GENERAL CONFIGURATIONS
CONFIGURAZIONI GENERALI

PAG. 326



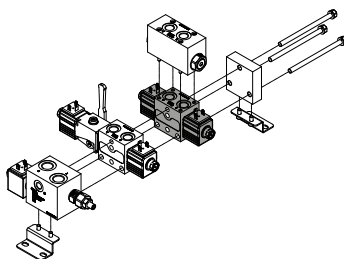
INLET ELEMENTS
FIANCATE DI INGRESSO

PAG. 330



WORK SECTIONS
SEZIONI DI LAVORO

PAG. 336

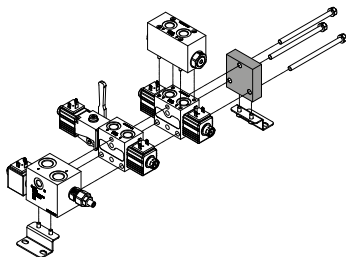


DIRECTIONAL ELECTRO-HYDRAULIC SYSTEMS
SISTEMA ELETTRO-IDRAULICO DIRETTO

OUTLET ELEMENTS

FIANCATE DI CHIUSURA

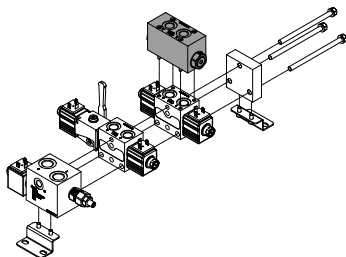
PAG. 344



FLANGEABLE VALVES

VALVOLE FLANGIATE

PAG. 350



PERFORMANCE

PRESTAZIONI

PAG. 364

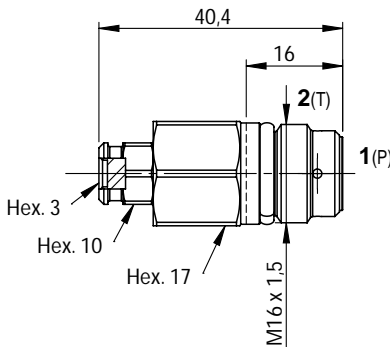
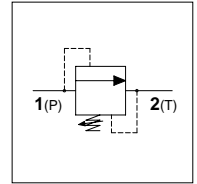
PRESSURE RELIEF VALVES
VALVOLE DI MASSIMA PRESSIONE



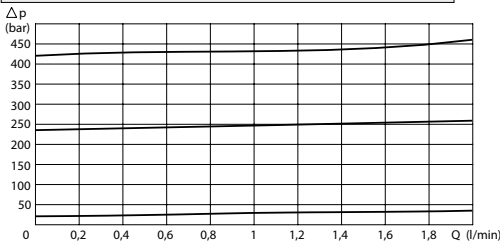
WMD 5

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 |
|-----------|-------------------------------|
| 03 | 1-30 |
| 25 | 100-250 |
| 45 | 250-450 |

ORDERING CODE

WMD

5

S

Springs:

- 03
- 25
- 45

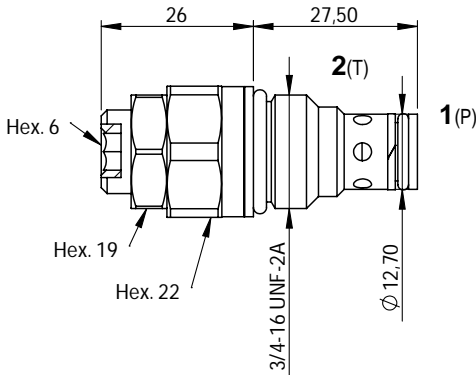
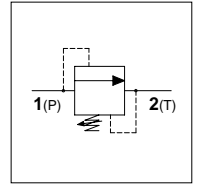
Adjustment if Required:

- Omit if not required
- Value

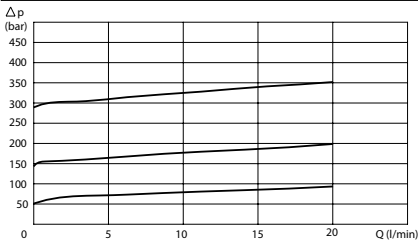
WMD 25

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

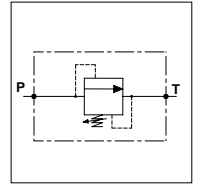
Adjustment if Required:

- Omit if not required
- Value

WMD 25

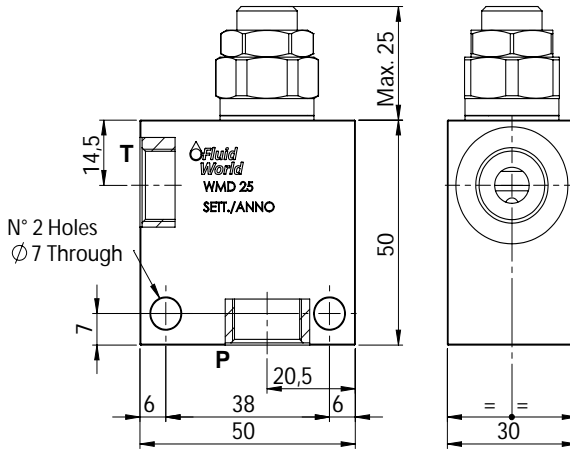
TECHNICAL DATA

- **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)

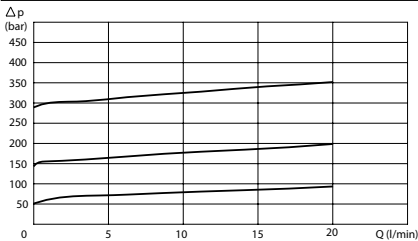


PORTS

| | | |
|-------|-----|-----|
| 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

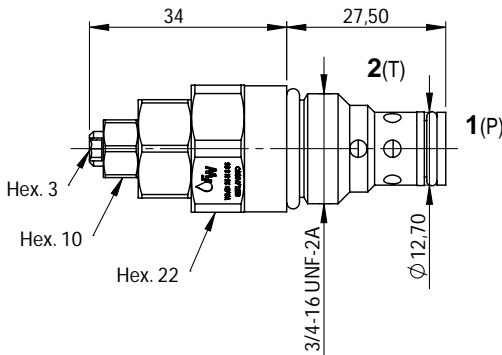
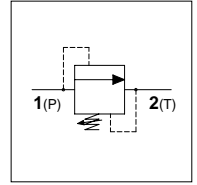
Adjustment if Required:

- 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

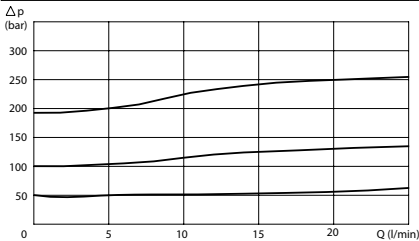


OPTION

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

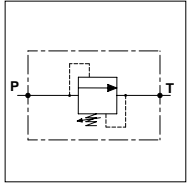
Adjustment if Required:

- Omit if not required
- Value
- Value with X

WMD 25 H

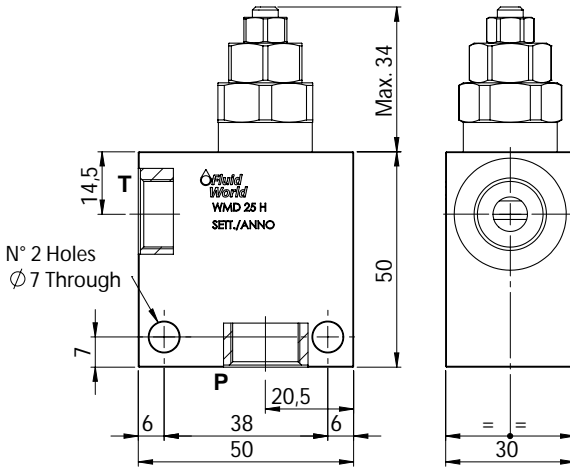
TECHNICAL DATA

- **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

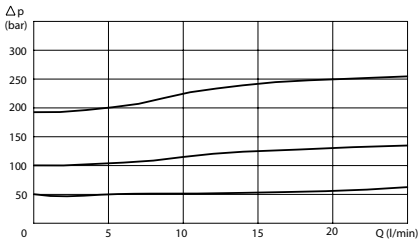
| | | |
|-------|-----|-----|
| P - T | 1/4 | 3/8 |
|-------|-----|-----|



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

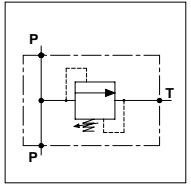
Adjustment if Required:

- Omit if not required
- Value
- Value with X

WMD 25 H - SPW

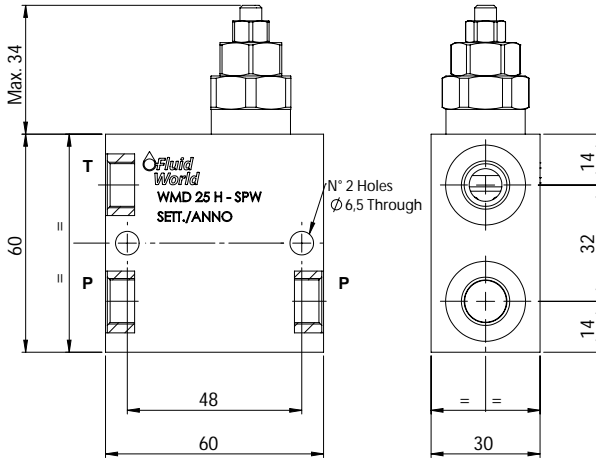
TECHNICAL DATA

- **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

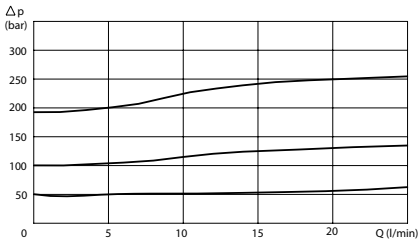
| | | |
|-------|-----|-----|
| P - T | 1/4 | 3/8 |
|-------|-----|-----|



OPTION

| | |
|-------------------------------|---|
| (X) 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

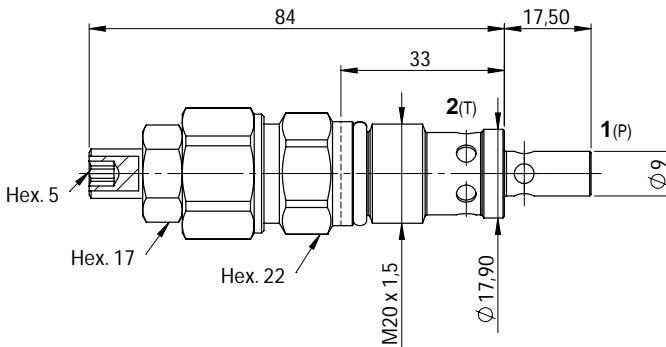
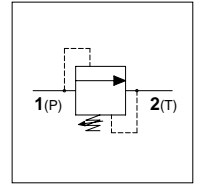
Adjustment if Required:




- Omit if not required
- Value
- Value with X

WMD 40

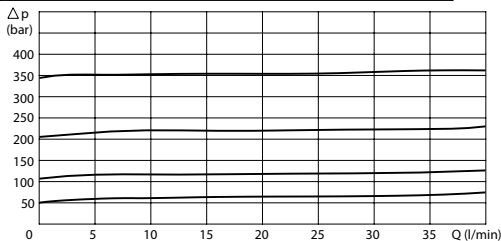
TECHNICAL DATA

- **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

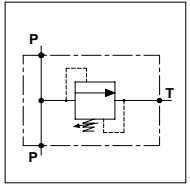
Adjustment if Required:

- Omit if not required
- Value
- Value with X

WMD 40

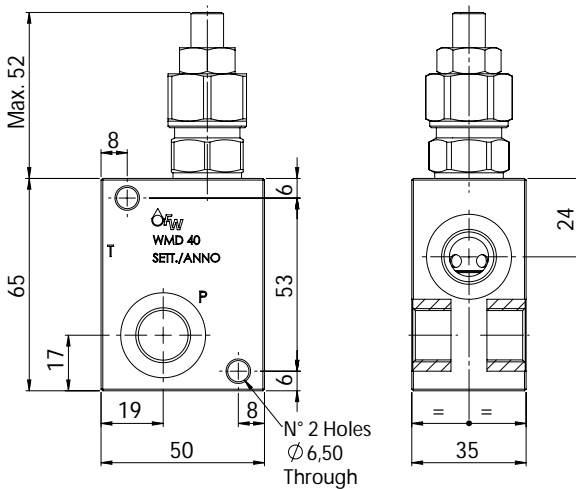
TECHNICAL DATA

- **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

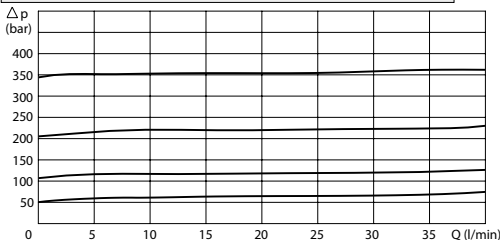
| | | |
|-------|-----|-----|
| P - T | 3/8 | 1/2 |
|-------|-----|-----|



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

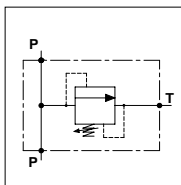
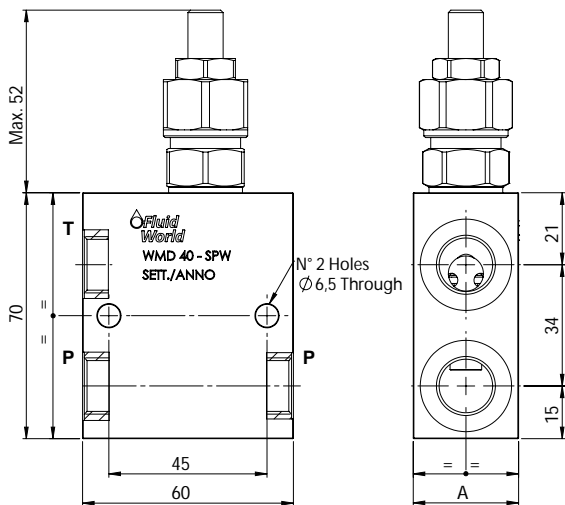
Adjustment if Required:

- Omit if not required
- Value
- Value with X

WMD 40 - SPW

TECHNICAL DATA

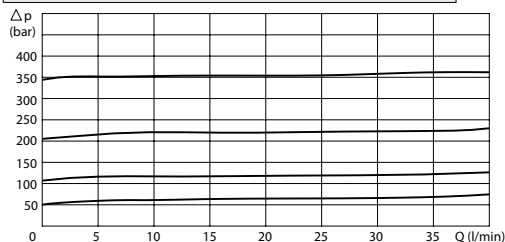
- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,45 kg (0,950 kg)



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

| 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 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

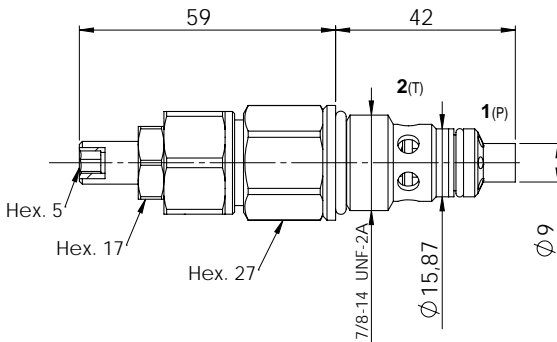
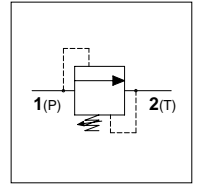
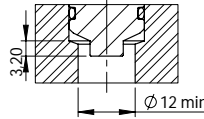
WMD 50

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

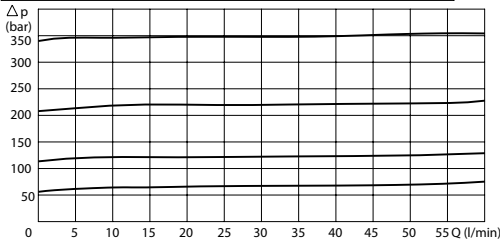


OPTION

(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

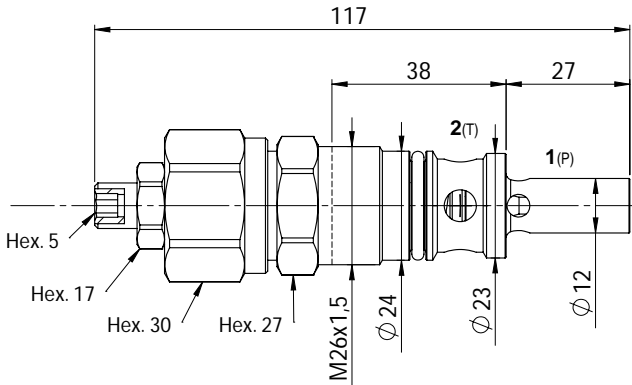
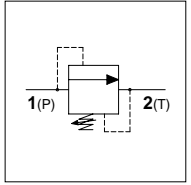
Adjustment if Required:




- Omit if not required
- Value
- Value with X

WMD 80

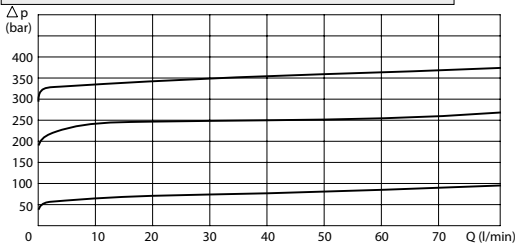
TECHNICAL DATA

- **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

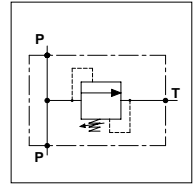
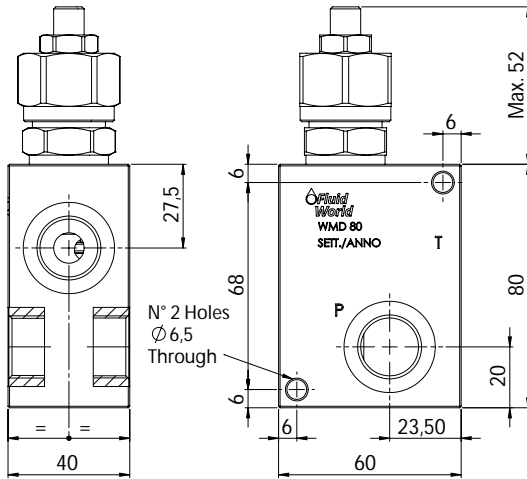
Adjustment if Required:

- Omit if not required
- Value
- Value with X

WMD 80

TECHNICAL DATA

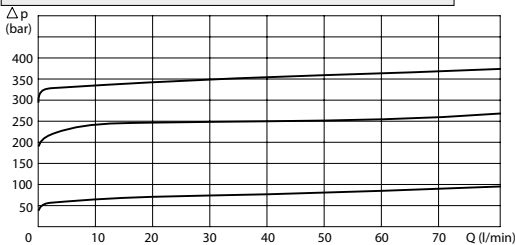
- **Flow:** 80 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 0,750 kg (1,400 kg)



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

| REGULATOR | |
|----------------------|--|
| (S) Screw | |
| (V) Handknob | |
| 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

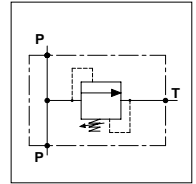
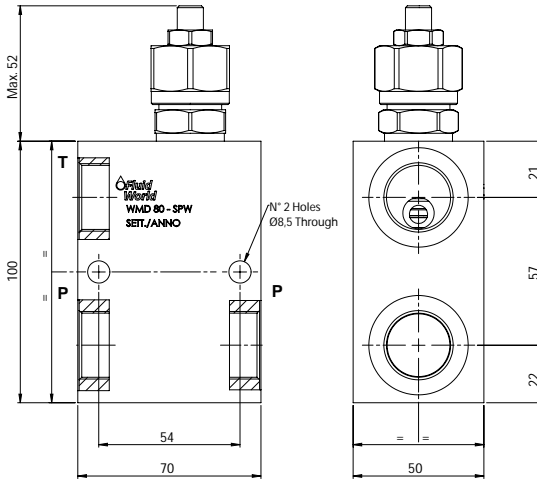


- Ports Size:** - 1/2 - 3/4
- Material Body:** - Omit if aluminium - S = Steel
- Type of Regulator:** - S = Screw - V = Handknob
- Springs:** - 05 - 10 - 25
- Adjustment if Required:** - Omit if not required - Value - Value with X

WMD 80 - SPW

TECHNICAL DATA

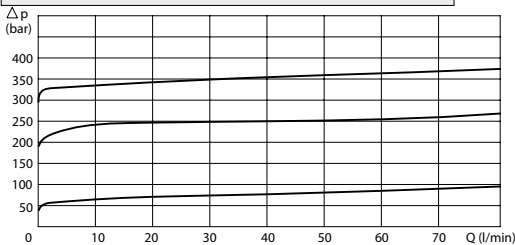
- **Flow:** 80 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Version:** Poppet Type - Direct Acting
- **Weight:** 1,100 kg (2,470 kg)



| PORTS | |
|-------|-----|
| P - T | 3/4 |

| REGULATOR | |
|-------------------------|--|
| (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
3/4

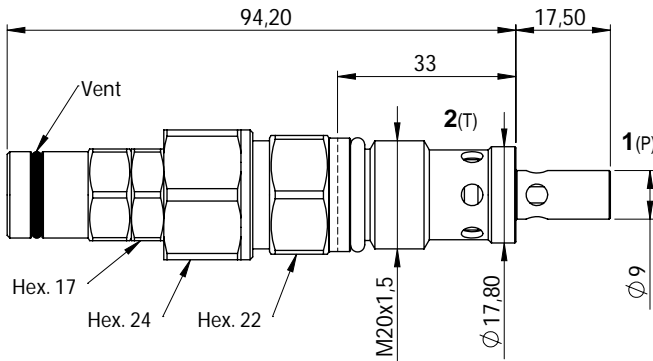
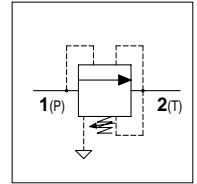
SPW

- 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

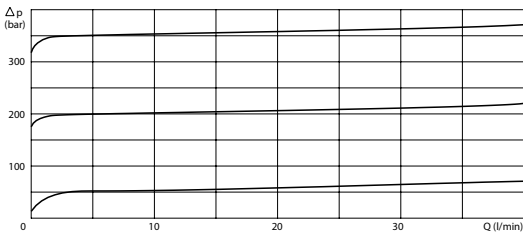
WMD 40 CC

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

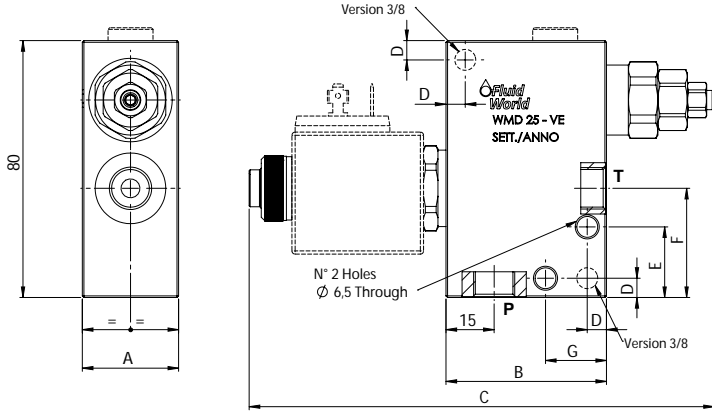
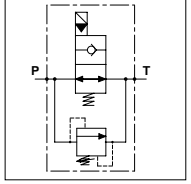
Adjustment if Required:

- Omit if not required
- Value


WMD 25 - VE

TECHNICAL DATA

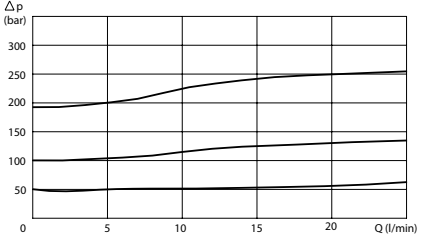
- **Flow:** 25 l/min
- **Max working pressure:** 250 bar
- **Materials:** Aluminium Body
- **Note:** The Coil is not included
- **Weight:** 0,700 kg



| 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 | |
|--|---|
| <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

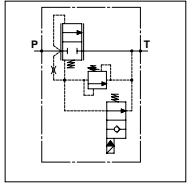
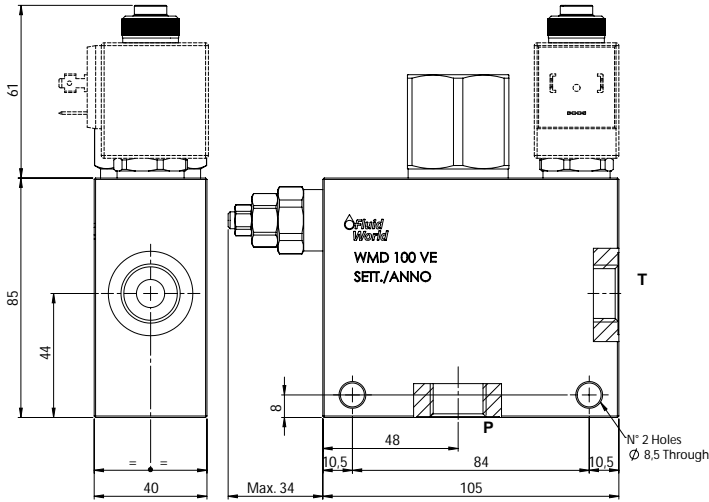


- | | | | |
|--------------------|--------------------|----------------------|---|
| Ports Size: | Type of VE: | Springs: | Adjustment if Required: |
| - 1/4 - 3/8 | - NA - NC | - 05 - 20 - 35 | - Omit if not required - Value - Value with X |

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



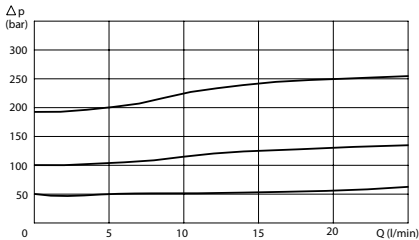
PORTS

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

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:

- 3/8
- 1/2

Type of VE:

- NA
- NC

Springs:

- 05
- 20
- 35

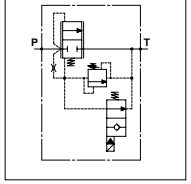
Adjustment if Required:

- Omit if not required
- Value
- Value with X

WMD 200 - VE

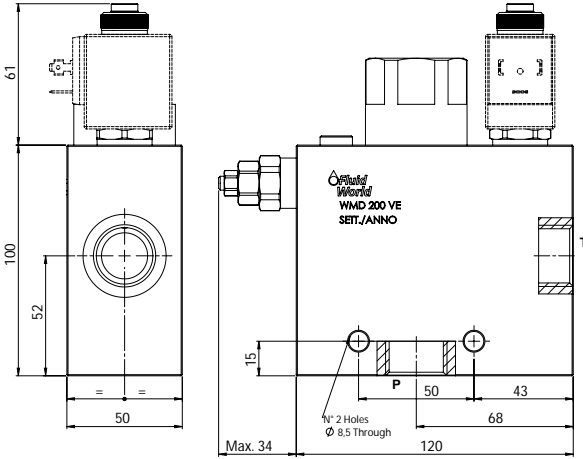
TECHNICAL DATA

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




PORTS

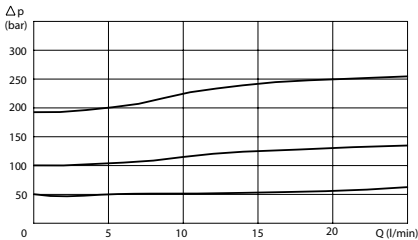
| | | |
|-------|-----|---|
| P - T | 3/4 | 1 |
|-------|-----|---|



OPTION

| | |
|--|---|
| <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:

- 3/4
- 1

Type of VE:

- NA
- NC

Springs:

- 05
- 20
- 35

Adjustment if Required:

- Omit if not required
- Value
- Value with X



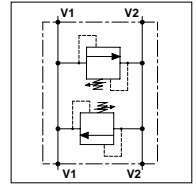
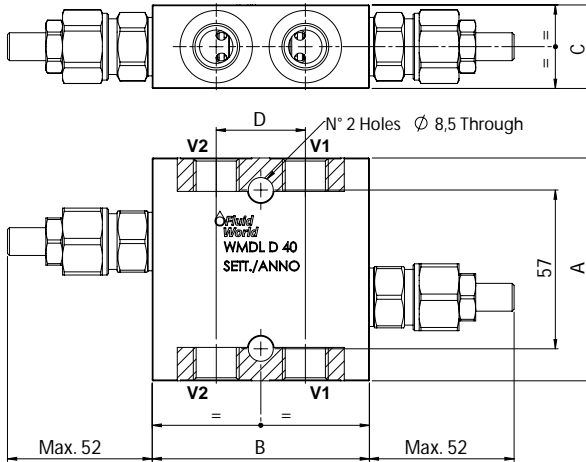
DUAL CROSS RELIEF VALVES
VALVOLE REGOLATRICI DI PRESSIONE INCROCIATE






WMDL D 40

TECHNICAL DATA

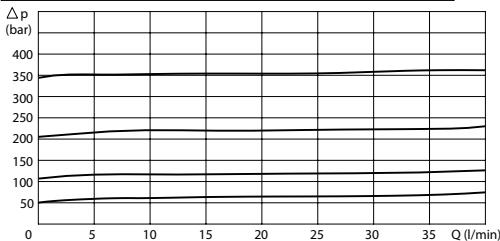
- **Flow:** 40 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel Body if required)
- **Weight:** 0,700 kg (1,300 kg)



| 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

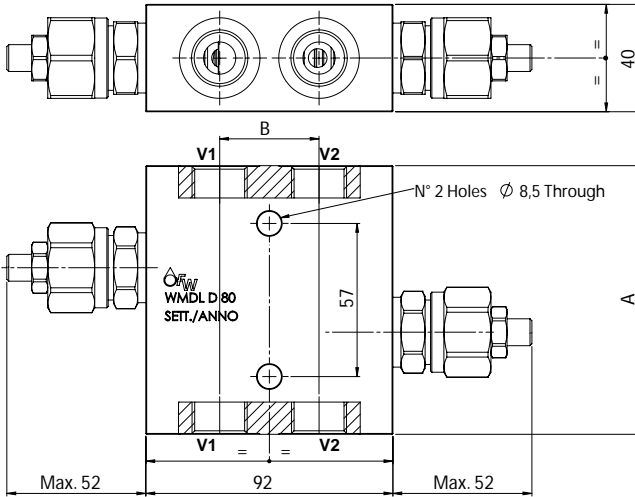
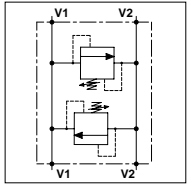
Adjustment if Required:

- 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 |
|---------|-----|-----|

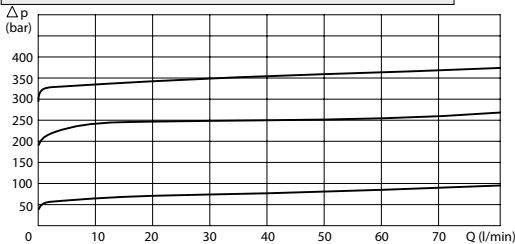
DIMENSIONS

| | | |
|---|-----|-----|
| A | 100 | 110 |
| B | 34 | 40 |

REGULATOR

| | |
|-------------------------|---|
| (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 | 5 | 5 |
| 10 | 25-250 | 12 | 25 |
| 25 | 130-350 | 30 | 130 |

ORDERING CODE

WMDL

D

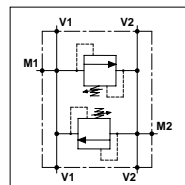
80

- 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

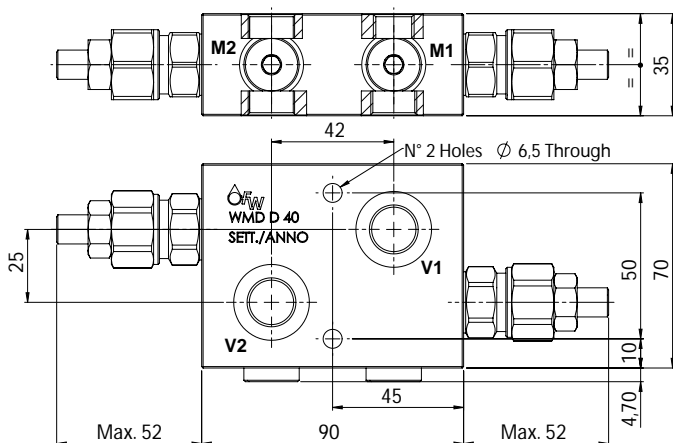
WMD D 40

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)

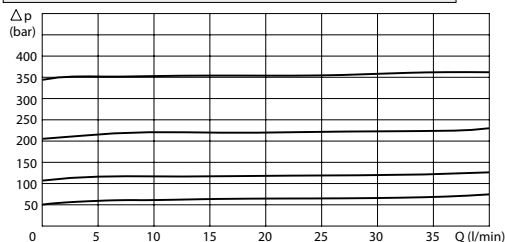


| PORTS | | |
|---------|-----|-----|
| V1 - V2 | 3/8 | 1/2 |
| M1 - M2 | 1/4 | |



| 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

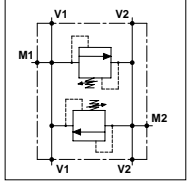


- | | | | | |
|--------------------|-----------------------|---------------------------|-----------------|--------------------------------|
| Ports Size: | Material Body: | Type of Regulator: | Springs: | Adjustment if Required: |
| - 3/8 | - Omit if aluminium | - S = Screw | - 05 | - Omit if not required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

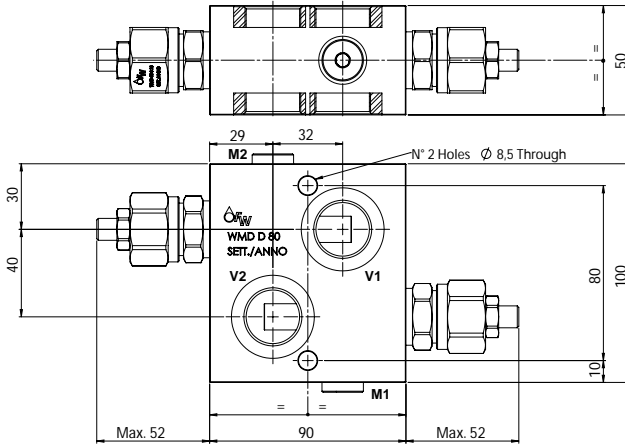
WMD D 80




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)

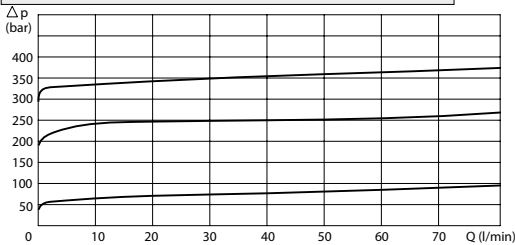


| PORTS | | |
|---------|-----|-----|
| V1 - V2 | 1/2 | 3/4 |
| M1 - M2 | 1/4 | |



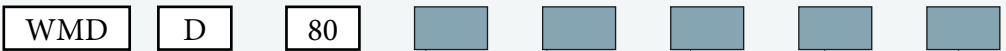
| REGULATOR | |
|----------------------|--|
| (S) Screw |  |
| (V) Handknob |  |
| OPTION | |
| (X) Tamper Proof Cap |  |

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

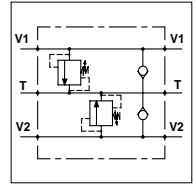
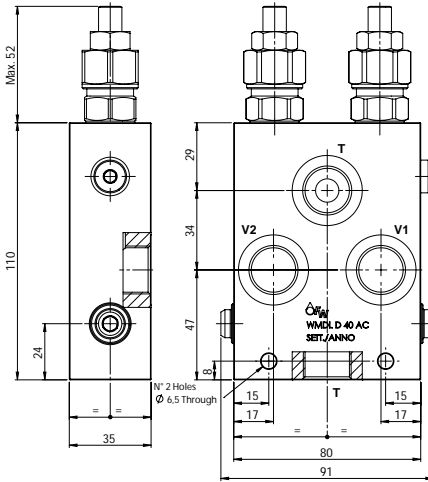


- Ports Size:** - 1/2 - 3/4
- Material Body:** - Omit if aluminium - S = Steel
- Type of Regulator:** - S = Screw - V = Handknob
- Springs:** - 05 - 10 - 25
- Adjustment if Required:** - Omit if not required - Value - Value with X

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 |
|-------------|-----|-----|

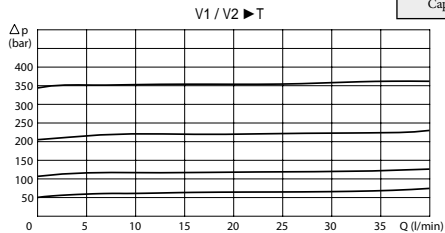
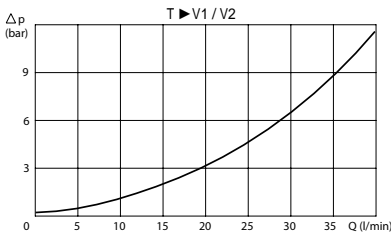
SPRINGS

| 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



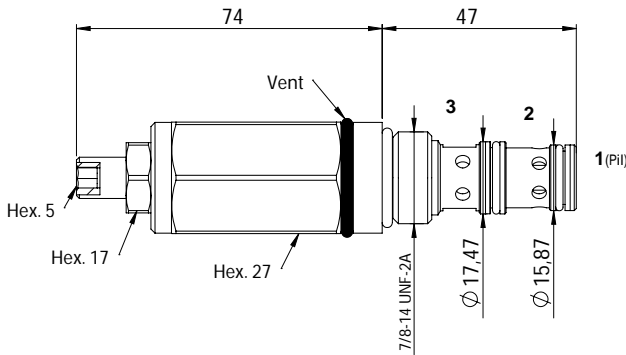
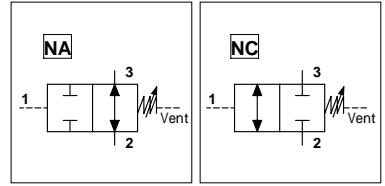
SEQUENCE VALVES
VALVOLE DI SEQUENZA



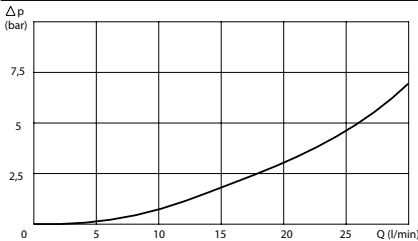
WSD C 30 S10

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

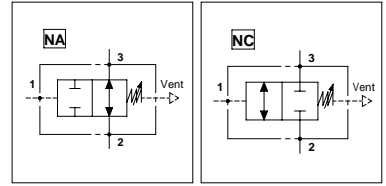
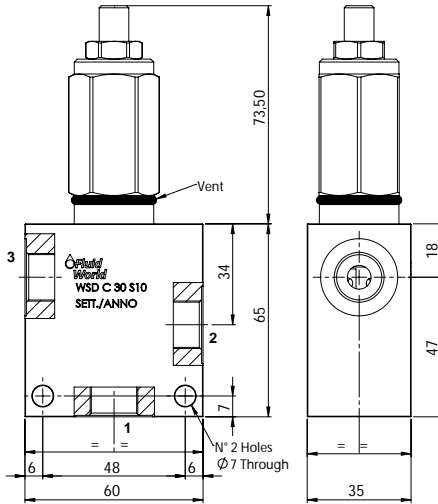
Adjustment if Required:

- 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)



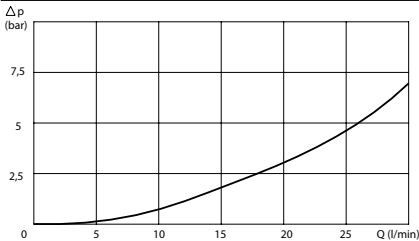
PORTS

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

REGULATOR

| | |
|-----------------|--|
| (S) Screw | |
| (V) Handknob | |

PRESSURE DROP CURVES



SPRINGS

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

ORDERING CODE

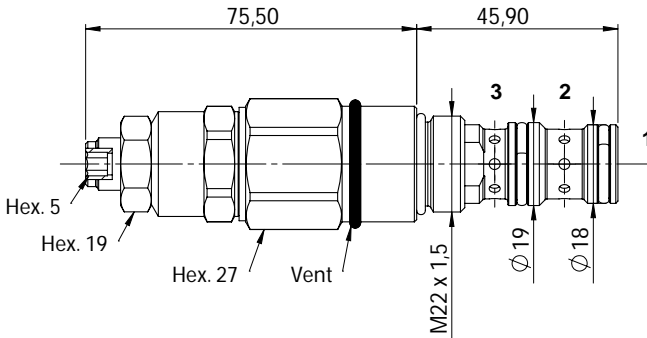
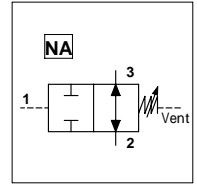


- Type of Scheme:** - NA = Open
- NC = Close
- Ports Size:** - 3/8
- 1/2
- Material Body:** - Omit if aluminium
- S = Steel
- Type of Regulator:** - S = Screw
- V = Handknob
- Springs:** - 02
- 06
- 12
- Adjustment if Required:** - Omit if not required
- Value

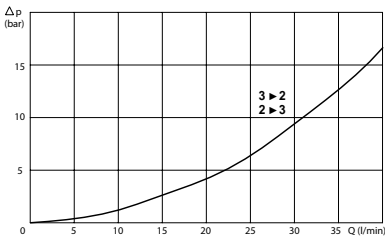
WSD C 40 M22 NA

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

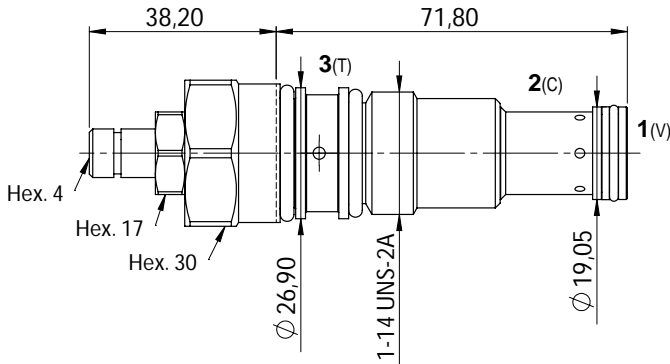
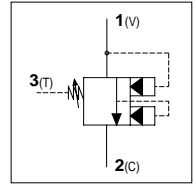
NA

Adjustment if Required:
 - Omit if not required
 - Value

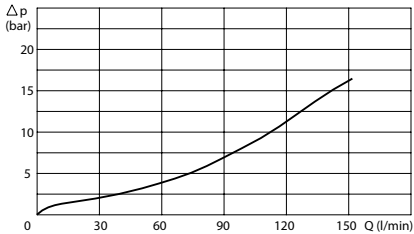
WSD C 150 KD

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

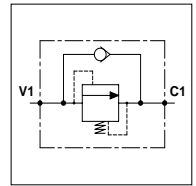
150

KD

WSD LF 30

TECHNICAL DATA

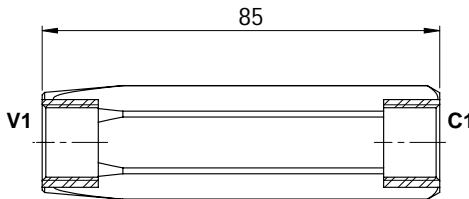
- **Flow:** 30 l/min
- **Max working pressure:** 350 bar
- **Materials:** Steel Body
- **Version:** Fixed Setting - Multiple of 10 bar
- **Weight:** 0,200 kg



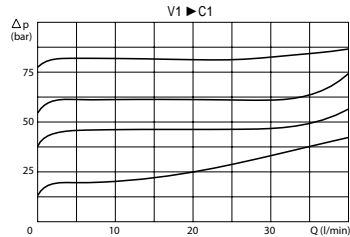
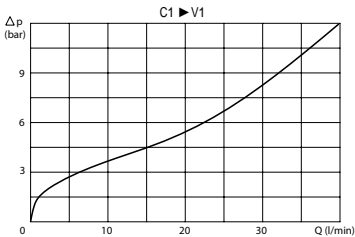
PORTS

C1 - V1

3/8



PRESSURE DROP CURVES



ORDERING CODE

WSD

LF

30

3/8

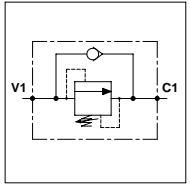
Value Setting:

-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)

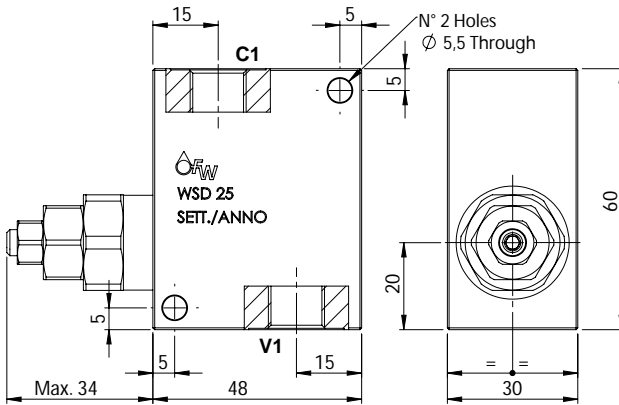


PORTS

| | |
|---------|-----|
| C1 - V1 | 1/4 |
|---------|-----|

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 |

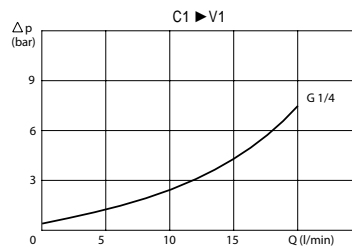
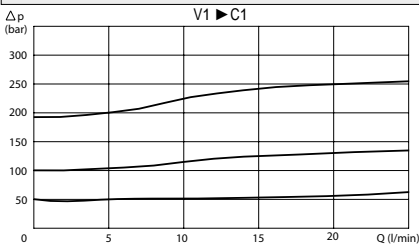


OPTION

Tamper Proof Cap



PRESSURE DROP CURVES



ORDERING CODE

WSD

25

1/4



Material Body:

- Omit if aluminium
- S = Steel



Springs:

- 05
- 20
- 35



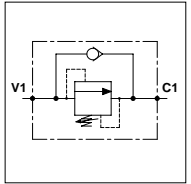
Adjustment if Required:

- 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)



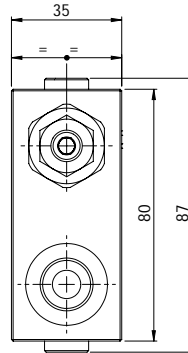
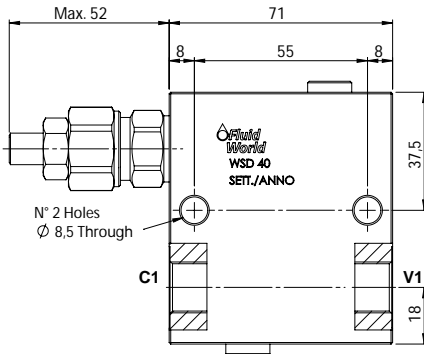
PORTS

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

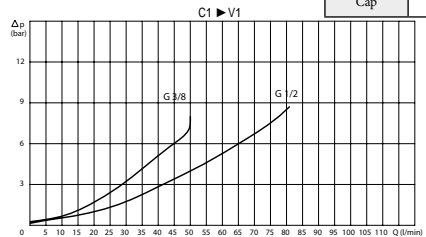
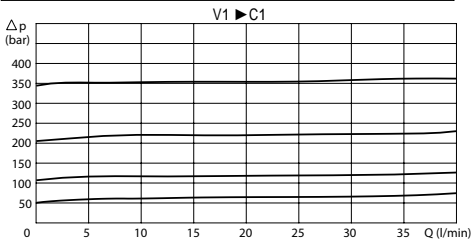
| SPRINGS | | | |
|-----------|-------------------------------|----------------------------|----------------------|
| Code | Adjustable pressure range bar | Pressure increase bar/turn | Standard setting bar |
| 05 | 5-55 | 15 | 5 |
| 10 | 25-110 | 25 | 25 |
| 20 | 50-215 | 50 | 50 |
| 35 | 100-350 |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

REGULATOR

| (S) Screw | |
|-------------------------|--|
| (V) Handknob | |
| OPTION | |
| (X) Tamper 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

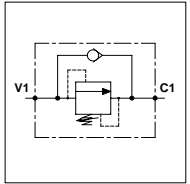
Adjustment if Required:

- 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)

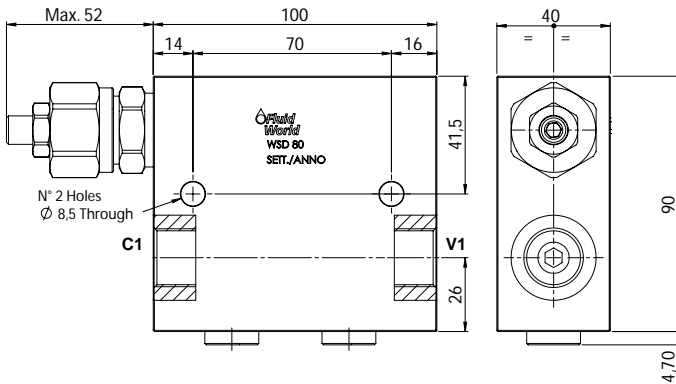


PORTS




| | | |
|---------|-----|-----|
| C1 - V1 | 1/2 | 3/4 |
|---------|-----|-----|

SPRINGS

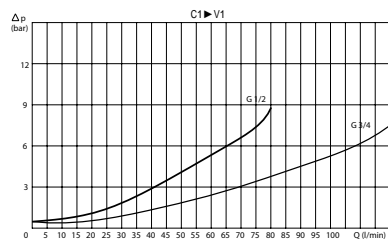
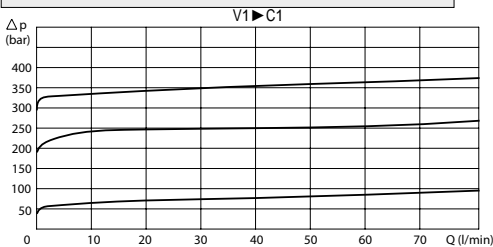
| Code | Adjustable pressure range bar | Pressure increase bar/turn | Standard setting bar |
|-----------|-------------------------------|----------------------------|----------------------|
| 05 | 5-55 | 5 | 5 |
| 10 | 25-250 | 12 | 25 |
| 25 | 130-350 | 30 | 130 |



REGULATOR

| | |
|--------------------------------|---|
| (S) Screw |  |
| (V) Handknob |  |
| OPTION | |
| (X) 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

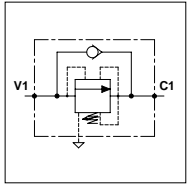
Adjustment if Required:

- 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)

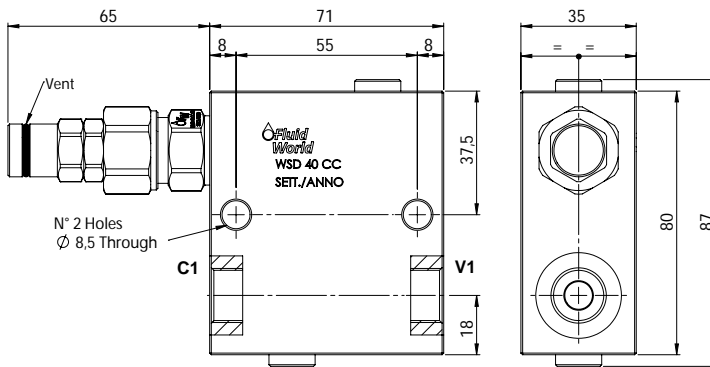


PORTS

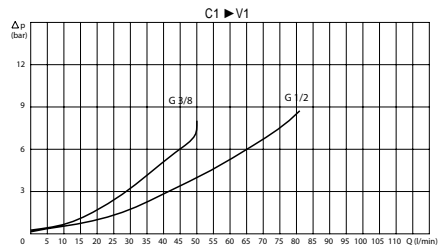
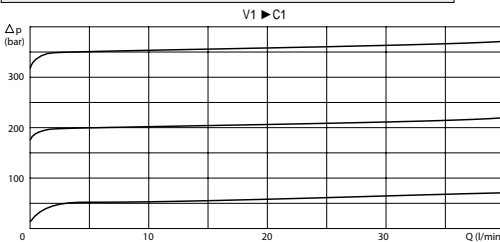
| | | |
|---------|-----|-----|
| C1 - V1 | 3/8 | 1/2 |
|---------|-----|-----|

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

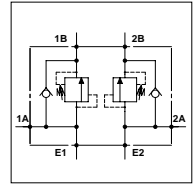
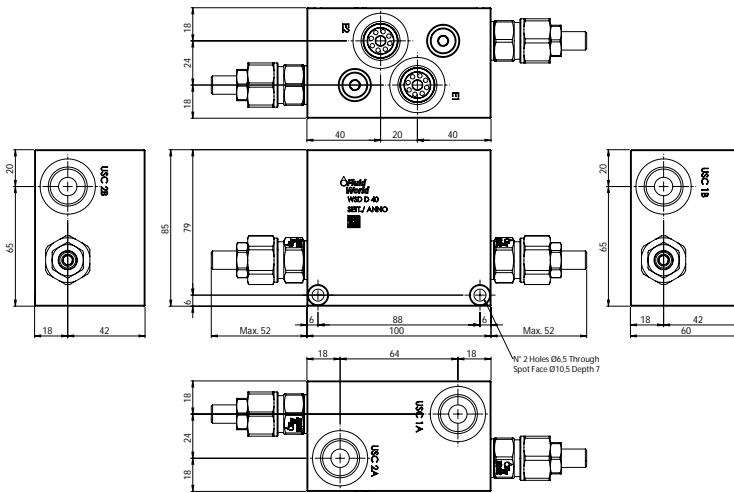
Adjustment if Required:

- 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 |
|------------------------------|-----|

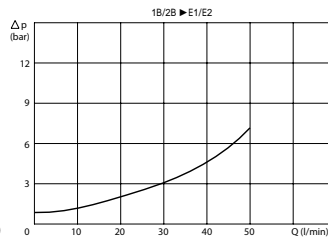
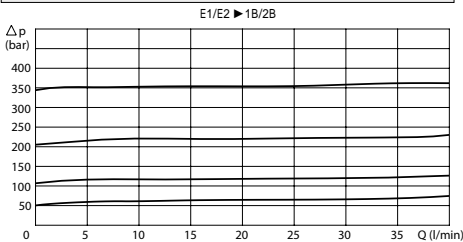
SPRINGS

| 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 |  |
| OPTION | |
| (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

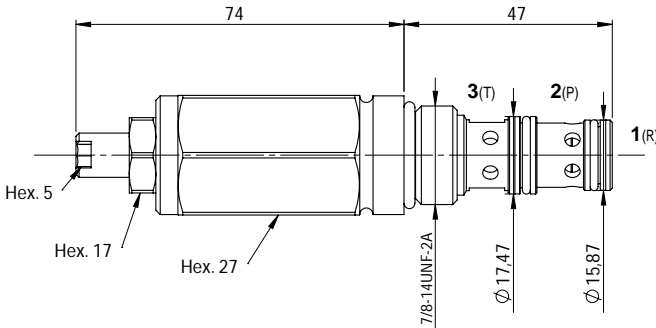
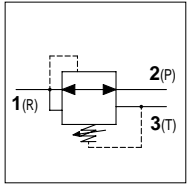
PRESSURE REDUCING VALVES
VALVOLE RIDUTTRICI DI PRESSIONE





WRP 30 S10

TECHNICAL DATA

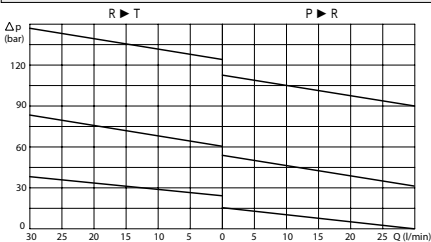
- **Flow:** 30 l/min
- **Max setting pressure:** 180 bar
- **Max working pressure:** 350 bar
- **Max differential:** 210 bar between R and P
- **Materials:** Cartridge in Steel Zinc Plated
- **Version:** Direct Acting
- **Cavity:** FW7803000
- **Installation torque:** 40-45 Nm
- **Note:** With Relief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



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

Type of Regulator:

- S = Screw
- V = Handknob

Springs:

- 02
- 06
- 12

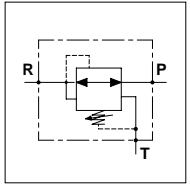
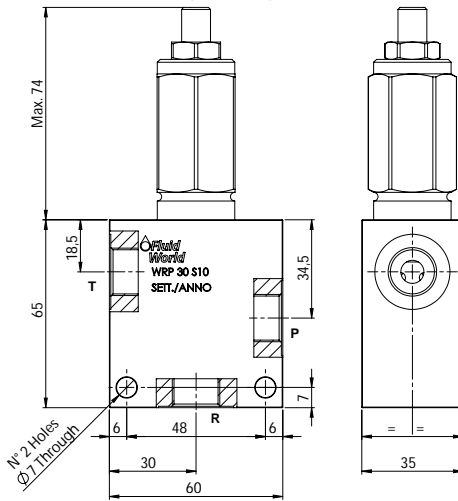
Adjustment if Required:

- Omit if not required
- Value

WRP 30 S10

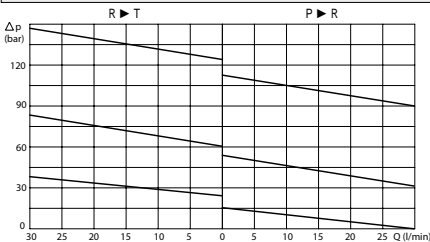
TECHNICAL DATA

- **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

WRP

30

S10

Ports Size:

- 3/8
- 1/2

Material Body:

- Omit if aluminium
- S = Steel

Type of Regulator:

- S = Screw
- V = Handknob

Springs:

- 02
- 06
- 12

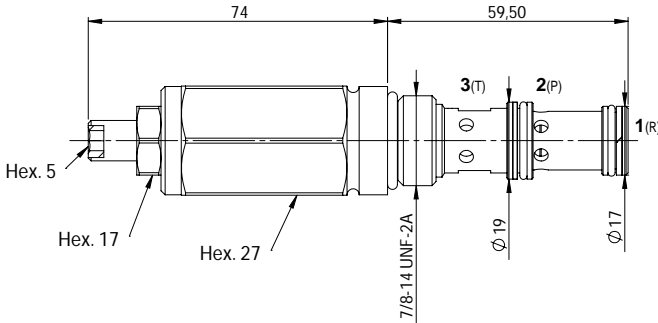
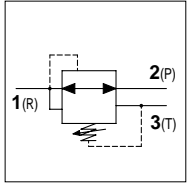
Adjustment if Required:

- Omit if not required
- Value

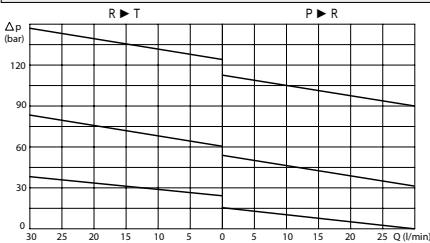
WRP 30

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 |
|-----------|-------------------------------|----------------------|
| 02 | 5-35 | 5 |
| 06 | 10-60 | 10 |
| 12 | 35-180 | 35 |

ORDERING CODE

WRP

30

Type of Regulator:

- S = Screw
- V = Handknob

Springs:

- 02
- 06
- 12

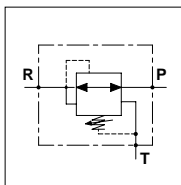
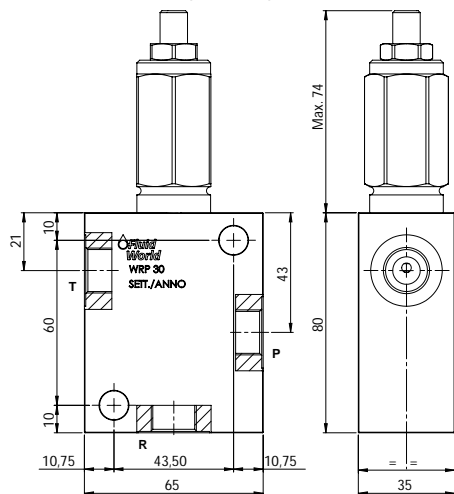
Adjustment if Required:

- 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)



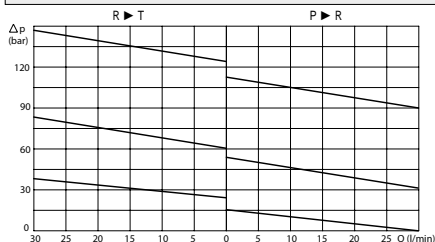
PORTS

| | |
|-----------|-----|
| 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

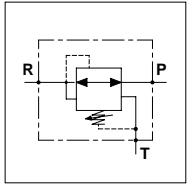
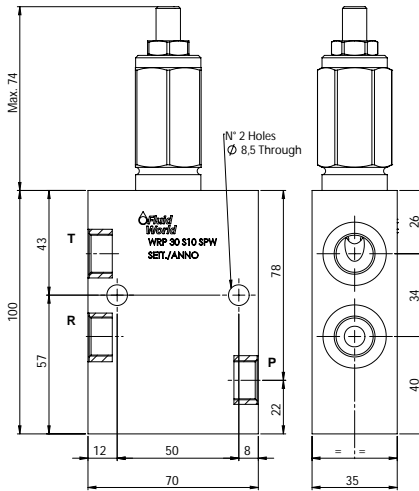
Adjustment if Required:

- 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)



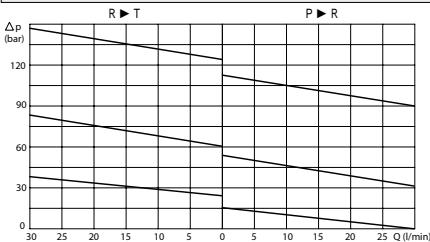
PORTS

| | |
|-----------|-----|
| 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

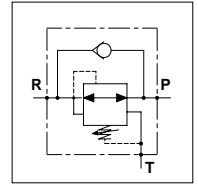
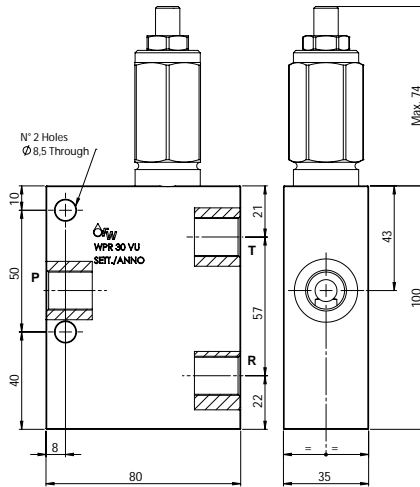
Adjustment if Required:

- 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 |
|-----------|-----|

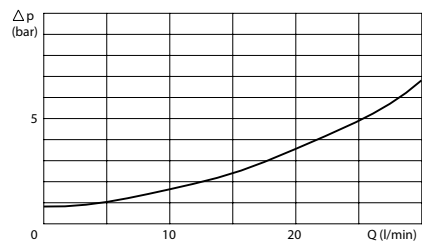
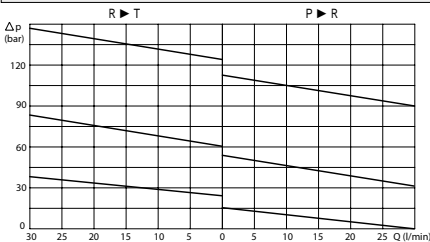
SPRINGS

| 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

- 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

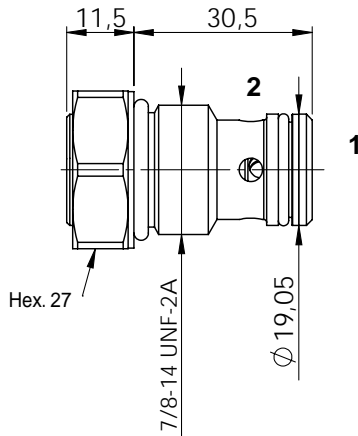
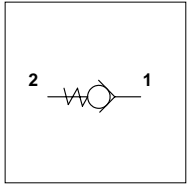
CHECK VALVES
VALVOLE DI RITEGNO UNIDIREZIONALI



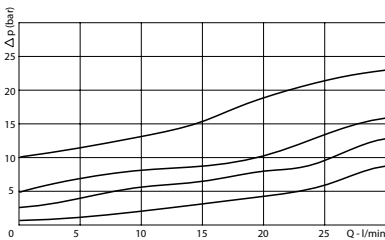
WUC C 30

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 |
| 2,5 | 2,5 |
| 5 | 5 |
| 10 | 10 |

ORDERING CODE

WUC

C

30



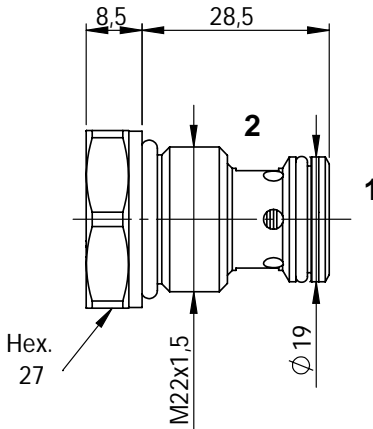
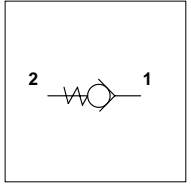
Opening Pressure:

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

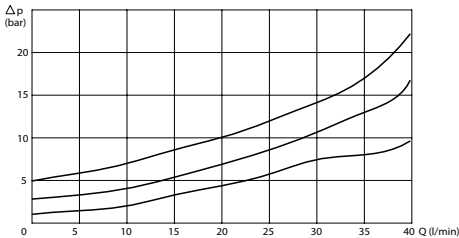
WUC C 40 M22

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



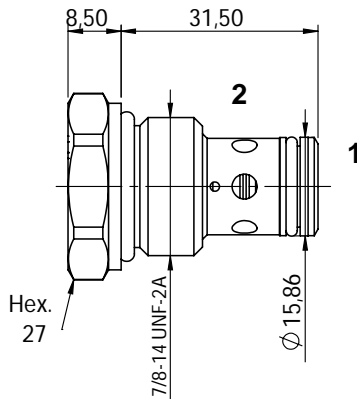
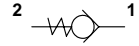
Opening Pressure:

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

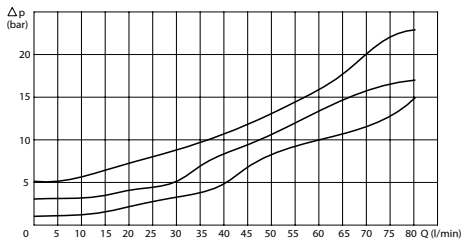
WUC C 80

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 |
| 2,5 | 2,5 |
| 5 | 5 |

ORDERING CODE

WUC

C

80



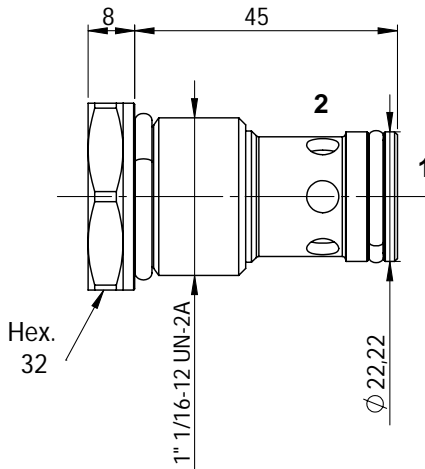
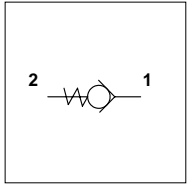
Opening Pressure:

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

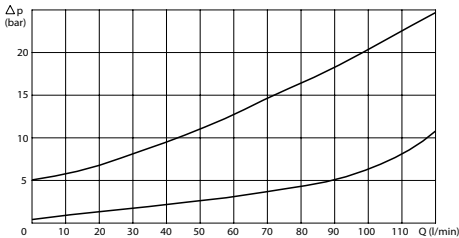
WUC C 120

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

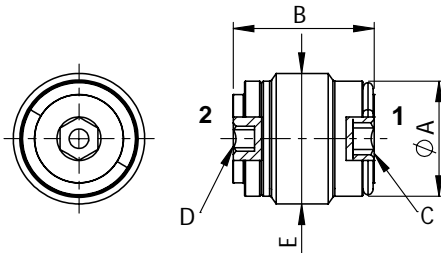
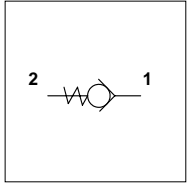


Opening Pressure:
 - Omit if 1 bar
 - 5 = 5 bar

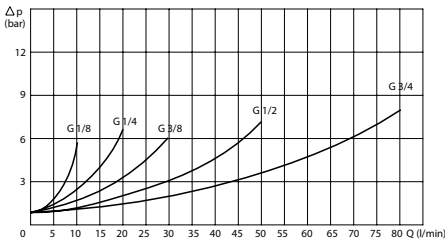
WUC I

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

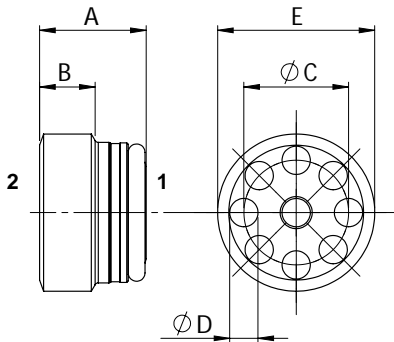
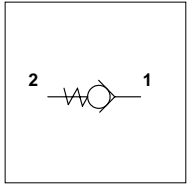
Opening Pressure:

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

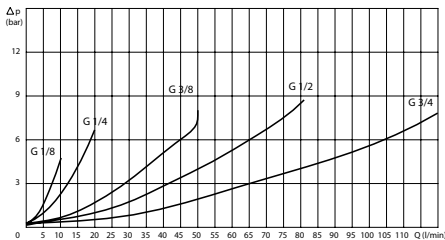
WUC IS

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

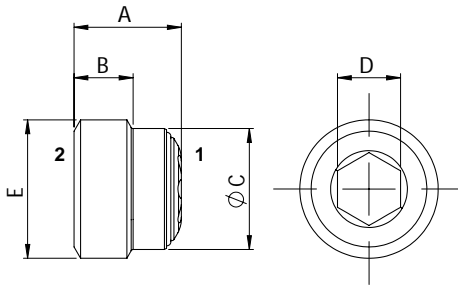
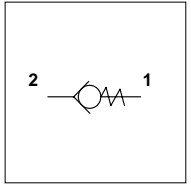
Ports Size:

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

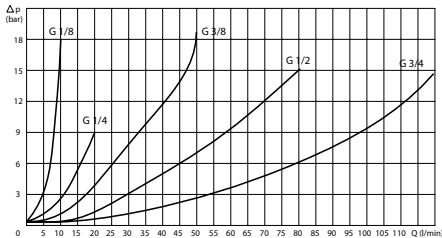
WUC ISI

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

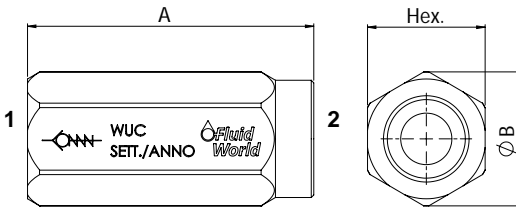
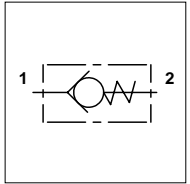
Ports Size:

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

WUC

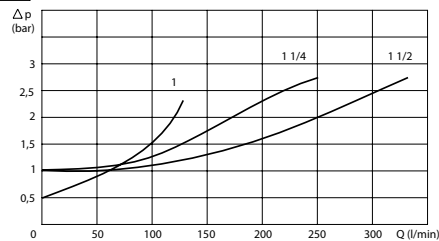
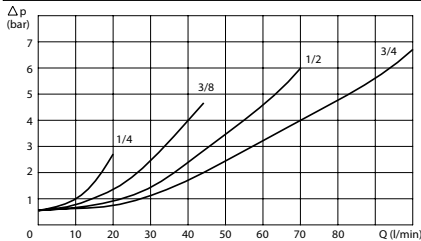
TECHNICAL DATA

- **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 |
| 4 | 4 |
| 8 | 8 |

ORDERING CODE

WUC

Ports Size:

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

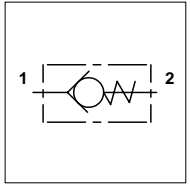
Opening Pressure:

- 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

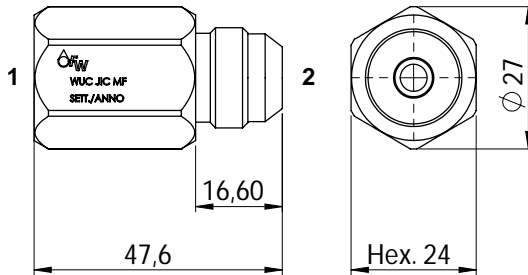


PORTS

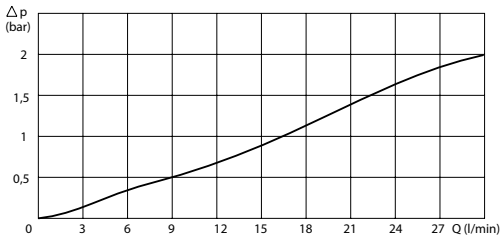
| | |
|-------|-----|
| 1 - 2 | Jic |
|-------|-----|

DIMENSIONS

| | |
|--------|--------|
| Thread | 3/4-16 |
|--------|--------|



PRESSURE DROP CURVES



ORDERING CODE

WUC

JIC

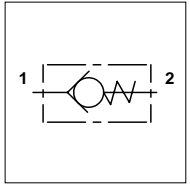
08

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

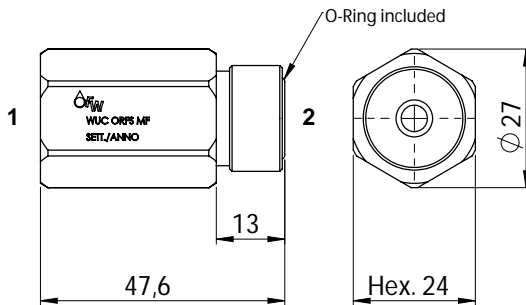


PORTS

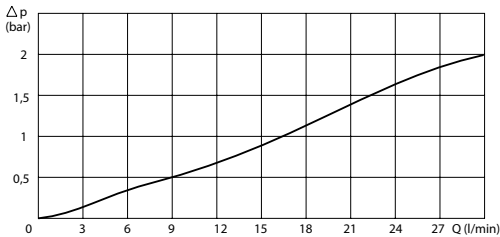
| | |
|-------|------|
| 1 - 2 | Orfs |
|-------|------|

DIMENSIONS

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



PRESSURE DROP CURVES



ORDERING CODE

WUC

ORFS

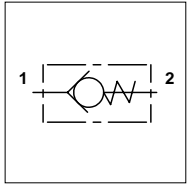
08

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

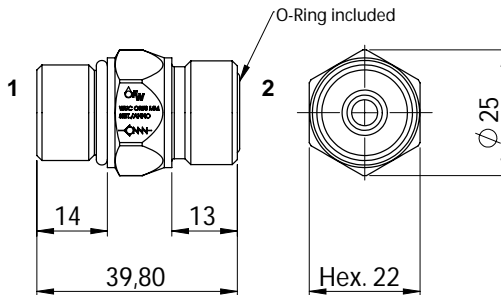


PORTS

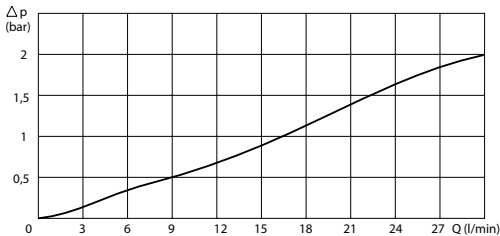
| | |
|-------|------|
| 1 - 2 | Orfs |
|-------|------|

DIMENSIONS

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



PRESSURE DROP CURVES



ORDERING CODE

WUC

ORFS

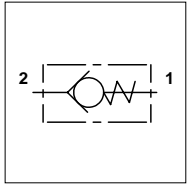
08

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

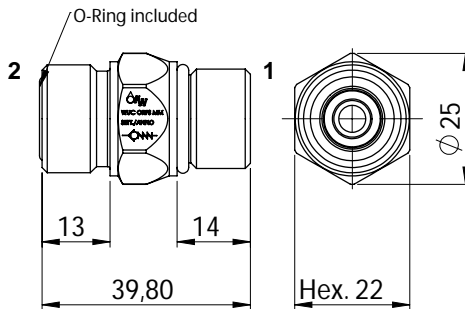


PORTS

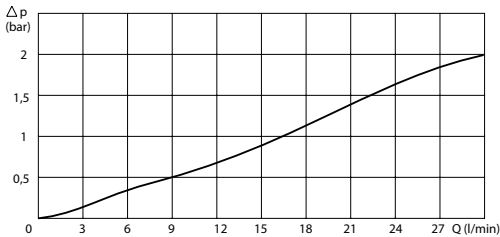
| | |
|-------|------|
| 1 - 2 | Orfs |
|-------|------|

DIMENSIONS

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



PRESSURE DROP CURVES



ORDERING CODE

WUCR

ORFS

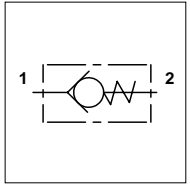
08

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

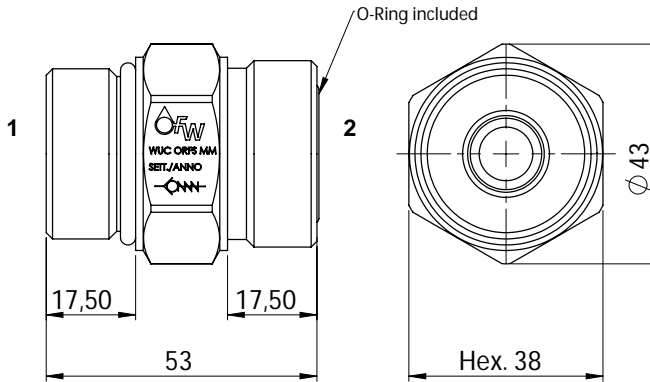


PORTS

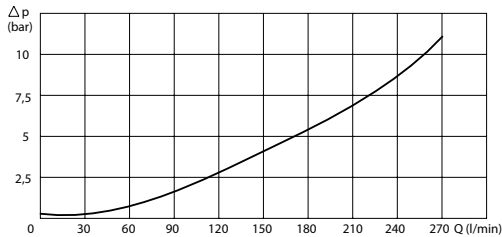
| | |
|-------|------|
| 1 - 2 | Orfs |
|-------|------|

DIMENSIONS

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



PRESSURE DROP CURVES



ORDERING CODE

WUC

ORFS

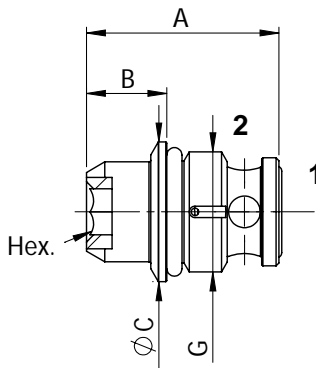
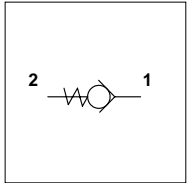
16

MM

WRS

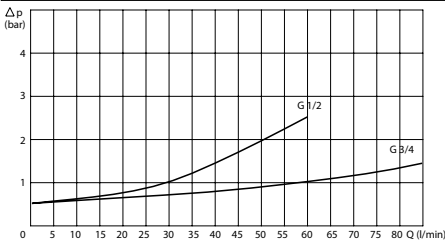
TECHNICAL DATA

- **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



V1 V2

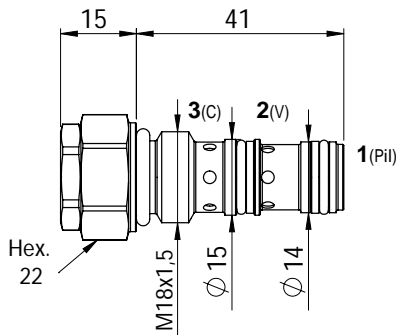
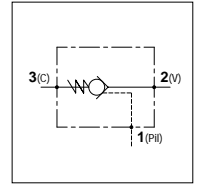
C1 WBD 20C 3/8 VP C2

52/20

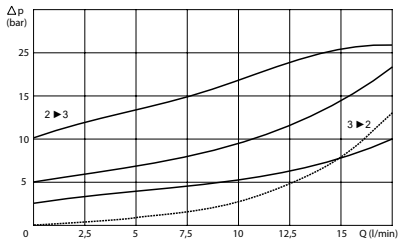
WBS C 25

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 |
| 5 | 5 |
| 10 | 10 |

ORDERING CODE

WBS

C

25



G

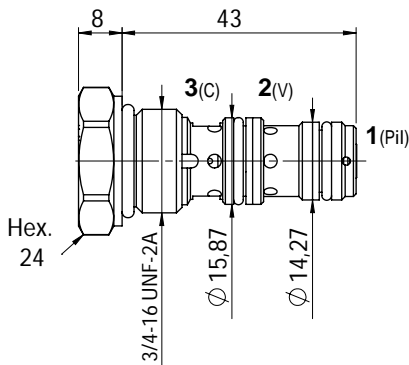
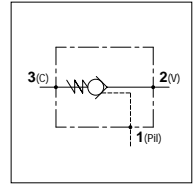
Opening Pressure:

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

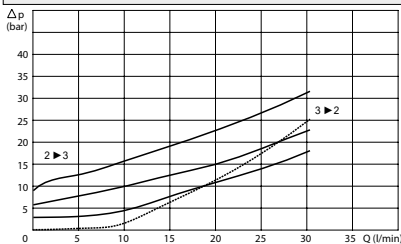
WBS C 30

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 |
| 5 | 5 |
| 10 | 10 |

ORDERING CODE

WBS

C

30



Opening Pressure:

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



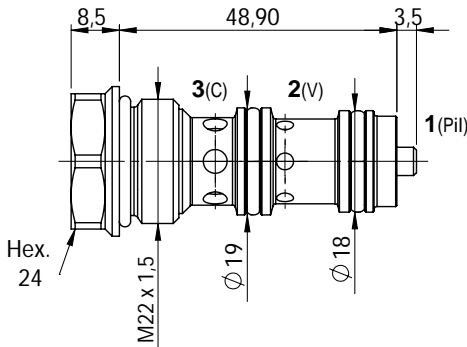
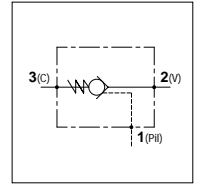
Seal on Piston:

- Omit if not required
- G = Required

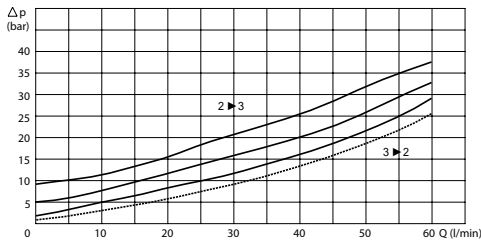
WBS C 60 M22

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 |
| 5 | 5 |
| 10 | 10 |

ORDERING CODE

WBS

C

60

M22



G

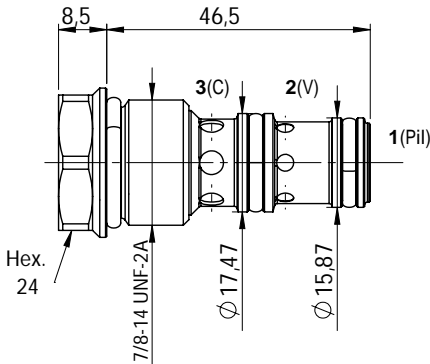
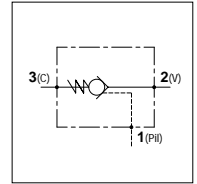
Opening Pressure:

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

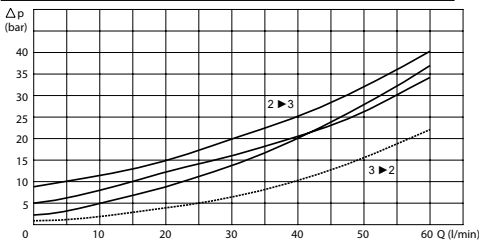
WBS C 60

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 |
| 5 | 5 |
| 10 | 10 |

ORDERING CODE

WBS

C

60



G

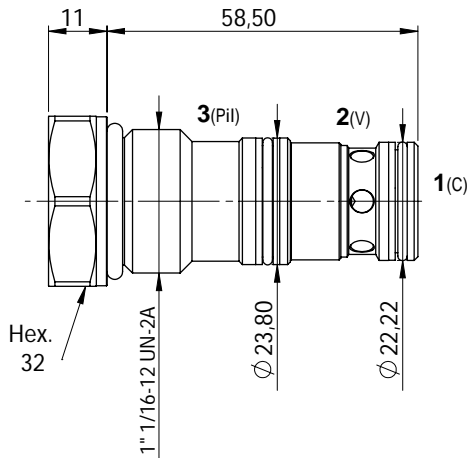
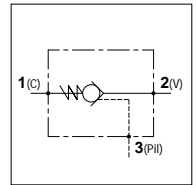
Opening Pressure:

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

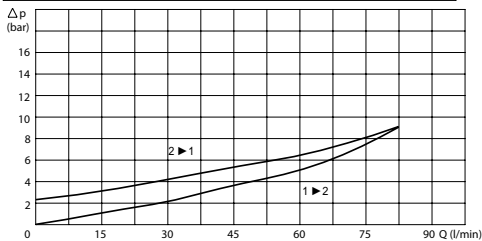
WBS CR 80

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

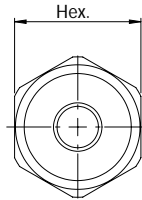
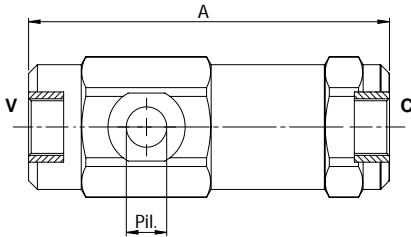
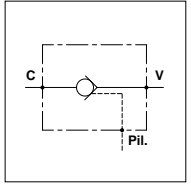
CR

80

WBS

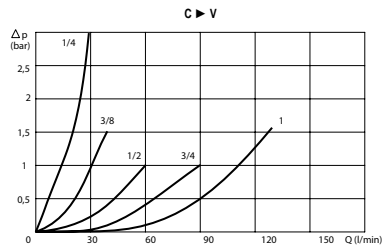
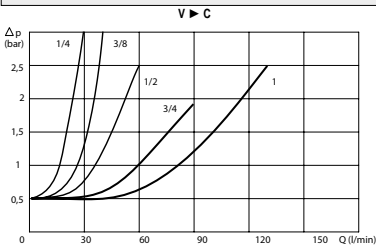
TECHNICAL DATA

- **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



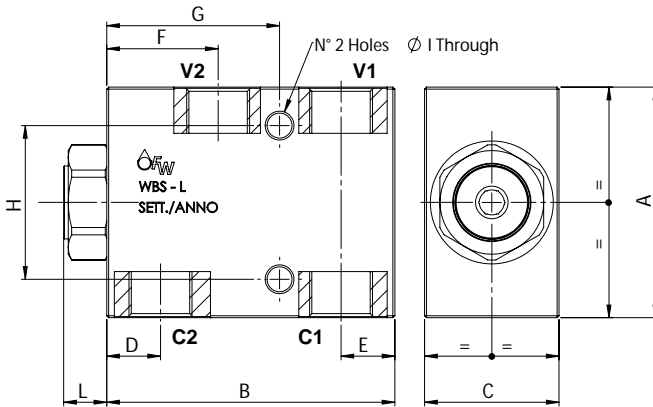
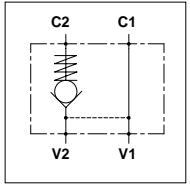
Ports Size:

- 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)



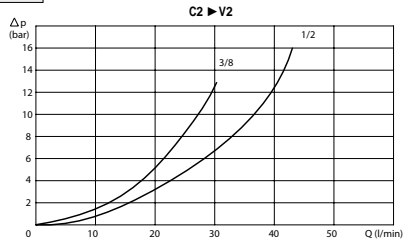
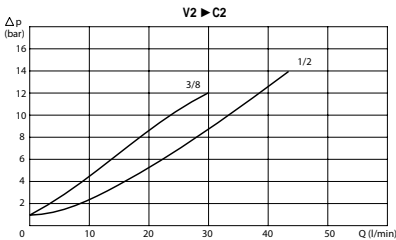
PORTS

| | | |
|--------------------|-----|-----|
| 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) | 30 | 40 |

PRESSURE DROP CURVES



SPRINGS

| Code | Cracking pressure bar |
|----------------------------------|-----------------------|
| Standard | 1 |
| 2,5 | 2,5 |
| 5 | 5 |
| 10 (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

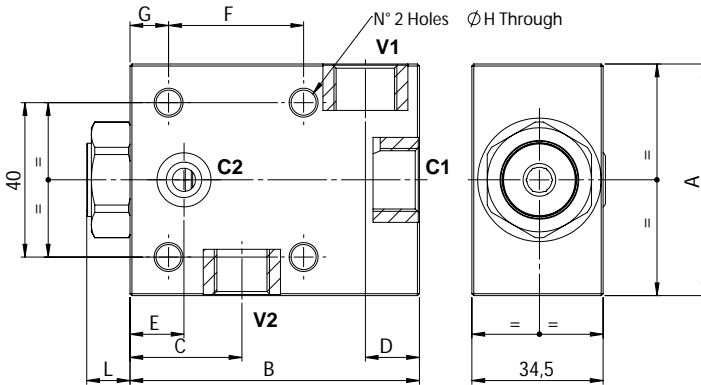
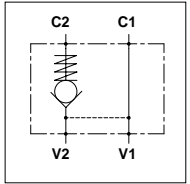
Cracking Pressure:
- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

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

WBS - 1F

TECHNICAL DATA

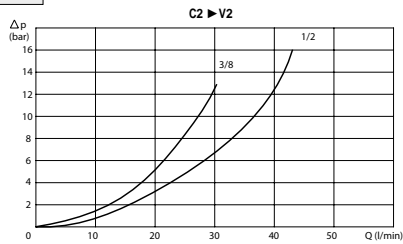
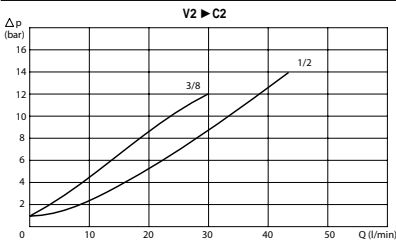
- **Flow:** See table
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** See table
- **Weight:** 0,450 kg (1,040 kg)



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) | 30 | 40 |

PRESSURE DROP CURVES



SPRINGS

| Code | Cracking pressure bar |
|----------------------------------|-----------------------|
| Standard | 1 |
| 2,5 | 2,5 |
| 5 | 5 |
| 10 (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

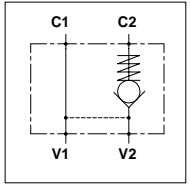
Cracking Pressure:
- Omit if 1 bar
- 2,5 = 2,5 bar
- 5 = 5 bar
- 10 = 10 bar

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

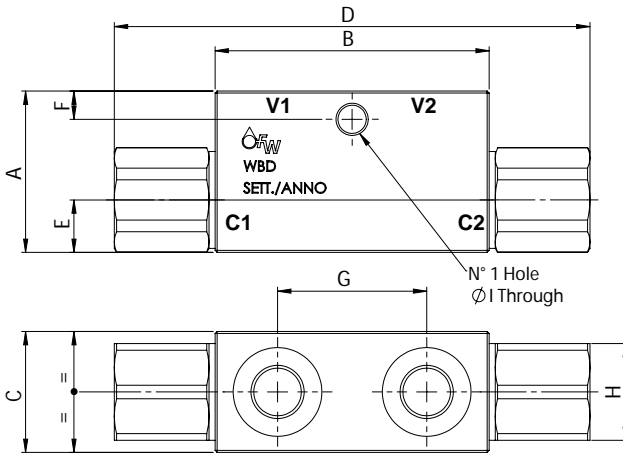
WBD 1SC

TECHNICAL DATA

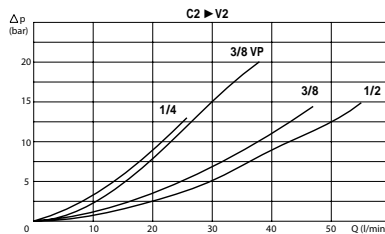
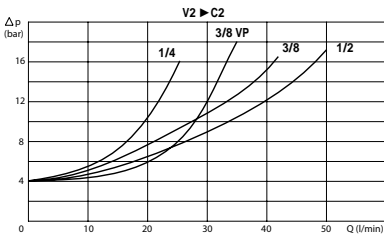
- **Flow:** See table
- **Max working pressure:** 350 bar (250 bar)
- **Cracking pressure:** See table
- **Materials:** Steel Body (Aluminium body if required)
- **Pilot ratio:** See table
- **Weight:** See table



| 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 |
|-----------|-----------------------|
| 05 | 0,5 |
| Standard | 4 |
| 8 | 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

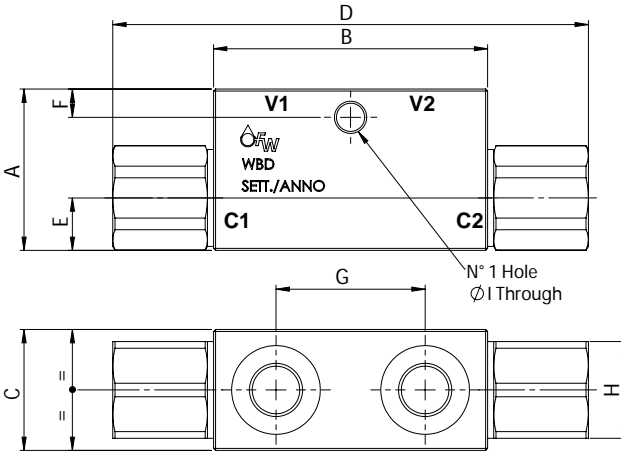
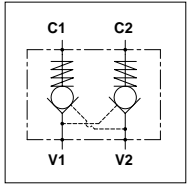
Seal on Piston:

- Omit if required
- NG = no required

WBD

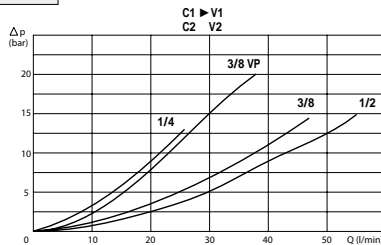
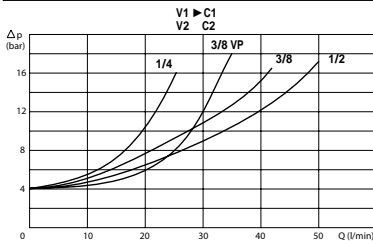
TECHNICAL DATA

- **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 |
|-----------|-----------------------|
| 05 | 0,5 |
| Standard | 4 |
| 8 | 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

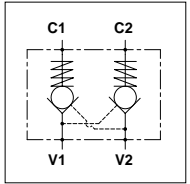
Seal on Piston:

- Omit if required
- NG = no required

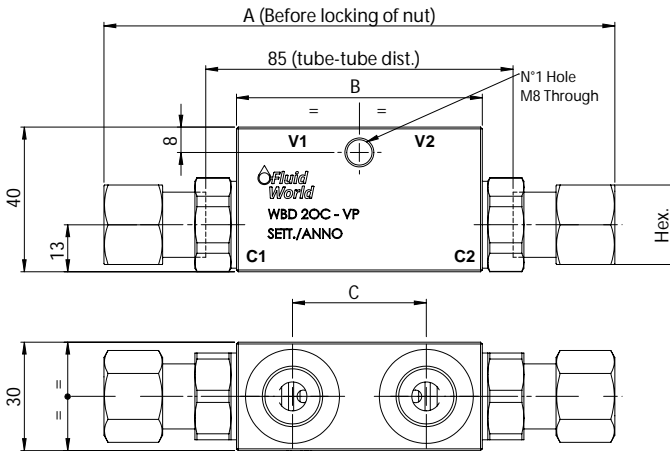
WBD 20C - VP

TECHNICAL DATA

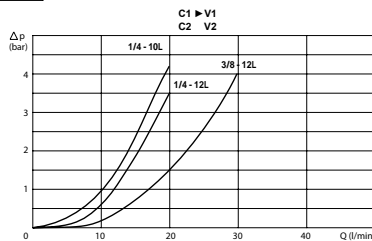
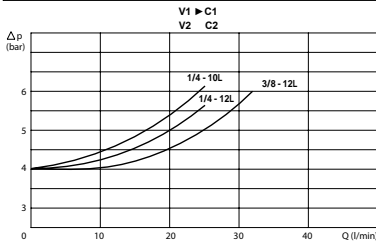
- **Flow:** See table
- **Max working pressure:** 350 bar
- **Cracking pressure:** See table
- **Materials:** Steel body
- **Pilot ratio:** 5,5:1
- **Weight:** See table



| 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

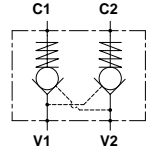
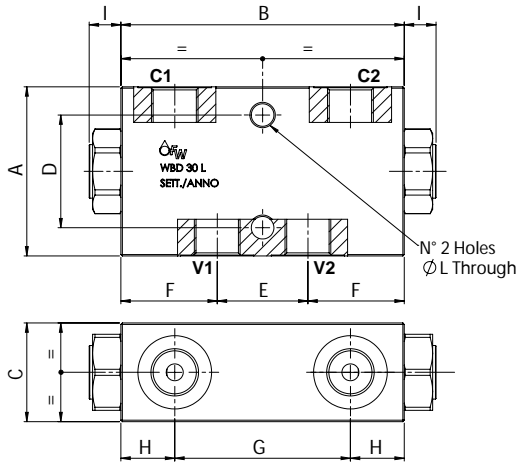
Size Pipe:

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

WBD 30 L

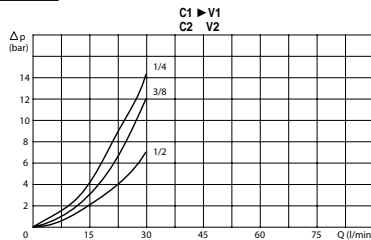
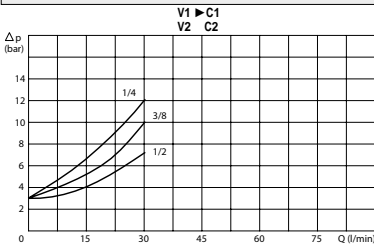
TECHNICAL DATA

- **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 |
| 2,5 | 2,5 |
| 5 | 5 |
| 10 | 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

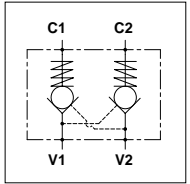
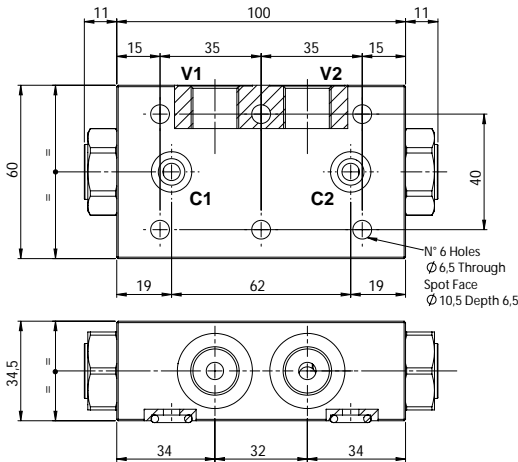
Seal on Piston:

- Omit if not required
- G = Required

WBD 30 2F

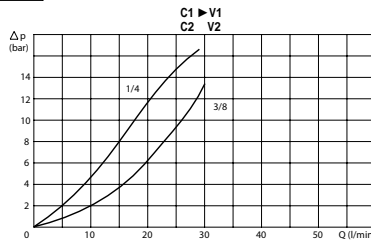
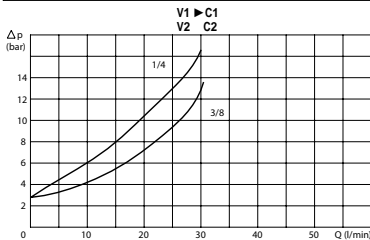
TECHNICAL DATA

- **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 |
| 2,5 | 2,5 |
| 5 | 5 |
| 10 | 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

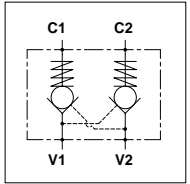
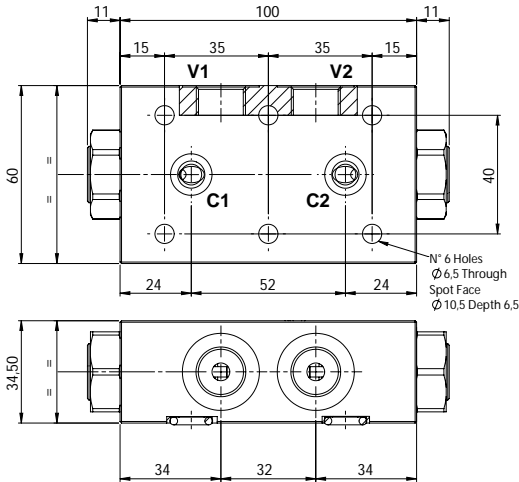
Seal on Piston:

- Omit if not required
- G = Required

WBD 30 2F - SPOM

TECHNICAL DATA

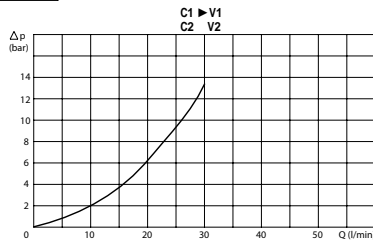
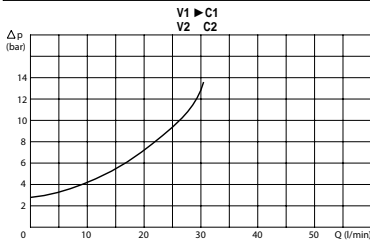
- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** See table
- **Weight:** 0,660 kg (1,470 kg)



PORTS

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

PRESSURE DROP CURVES



SPRINGS

| Code | Cracking pressure bar |
|------------|-----------------------|
| Standard | 1 |
| 2,5 | 2,5 |
| 5 | 5 |
| 10 | 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

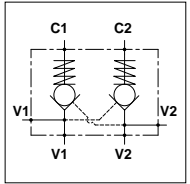
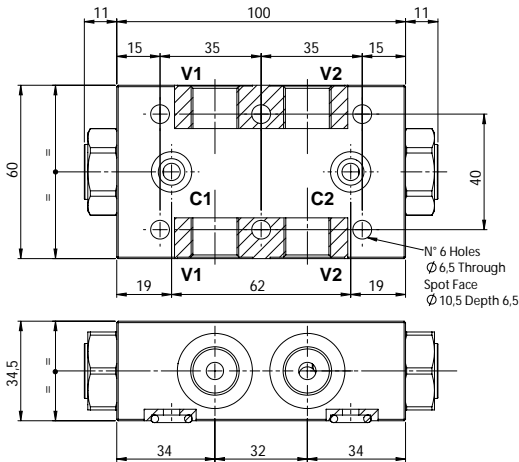
Seal on Piston:

- Omit if not required
- G = Required

WBD 30 2F - DL

TECHNICAL DATA

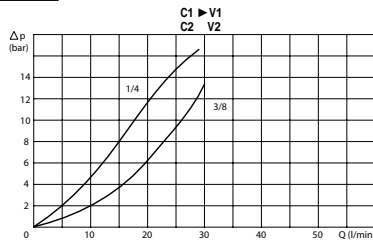
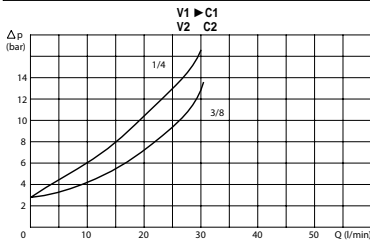
- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** See table
- **Weight:** 0,660 kg (1,470 kg)



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 |
| 2,5 | 2,5 |
| 5 | 5 |
| 10 | 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

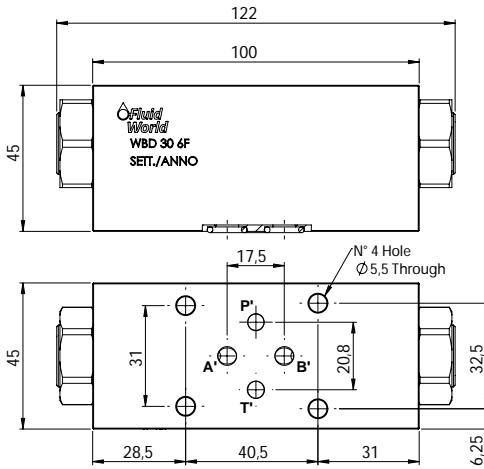
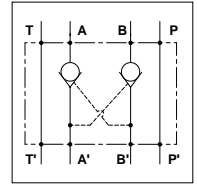
Seal on Piston:

- Omit if not required
- G = Required

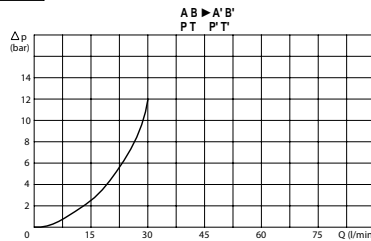
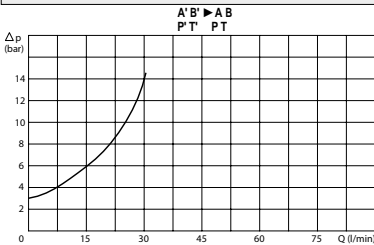
WBD 30 6F

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 |
| 2,5 | 2,5 |
| 5 | 5 |
| 10 | 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

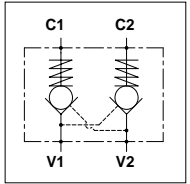
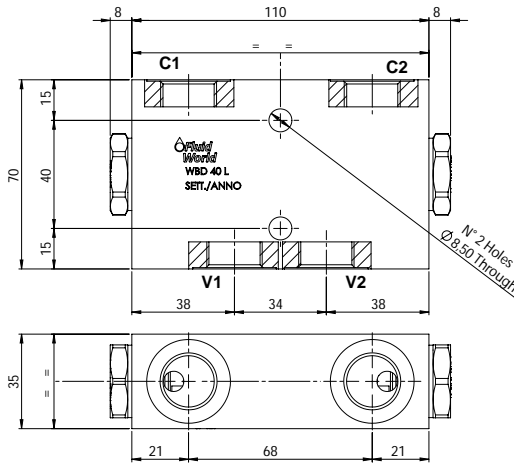
Seal on Piston:

- Omit if not required
- G = Required

WBD 40 L

TECHNICAL DATA

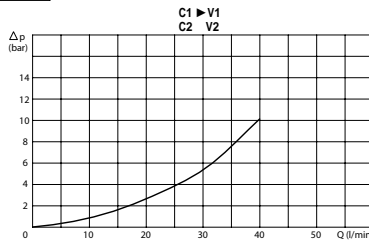
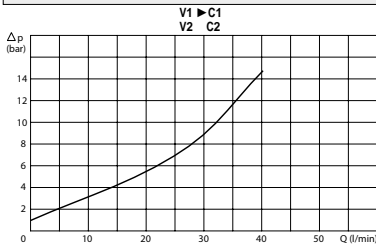
- **Flow:** 40 l/min
- **Max working pressure:** 250 bar (350 bar)
- **Cracking pressure:** See table
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 5,5:1
- **Weight:** 0,660 kg (1,540 kg)



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



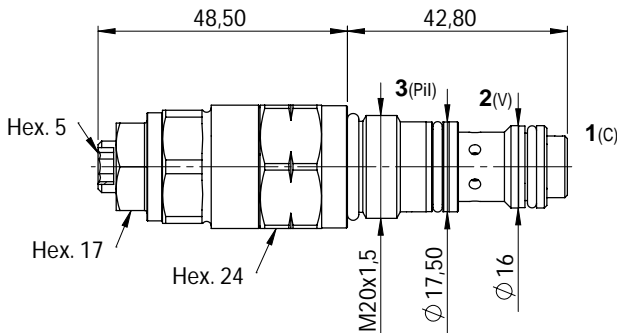
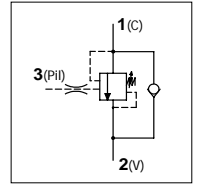
COUNTERBALANCE VALVES
VALVOLE OVERCENTER



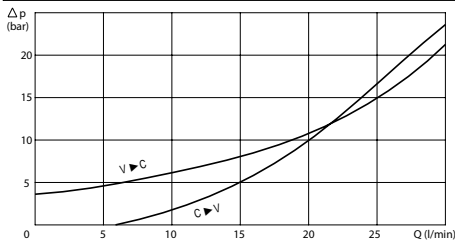
WOC 30 M20

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

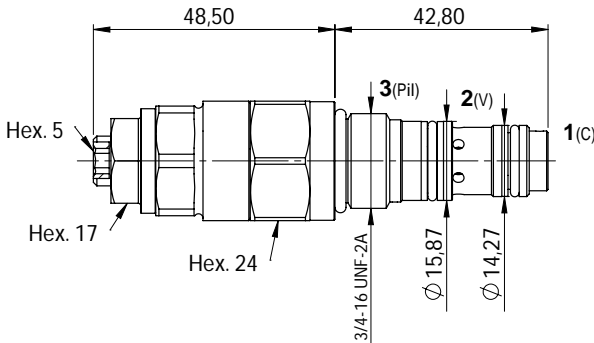
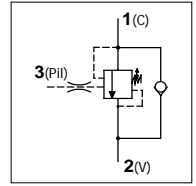
Adjustment if Required:

- Omit if not required
- Value

WOC 30 S08

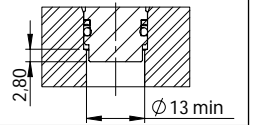
TECHNICAL DATA

- **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

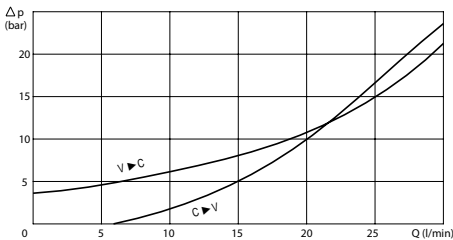


CAVITY

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

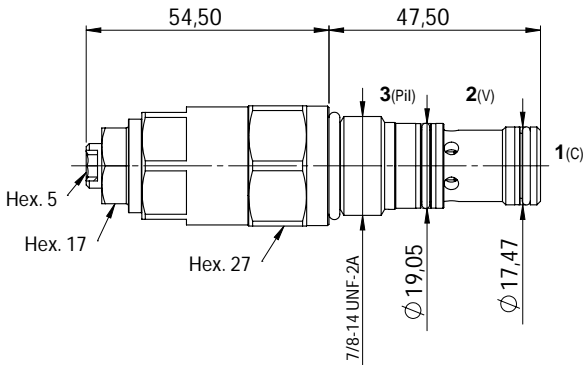
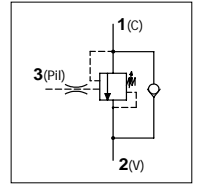
Adjustment if Required:

- Omit if not required
- Value

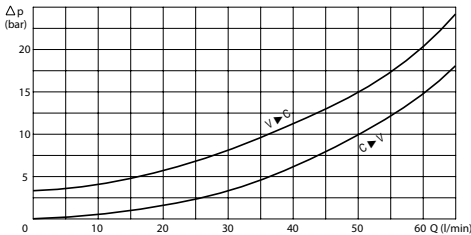
WOC 60 S10

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

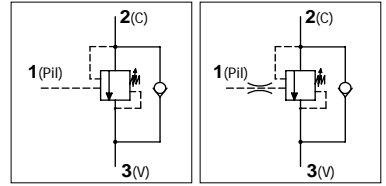
Adjustment if Required:

- Omit if not required
- Value

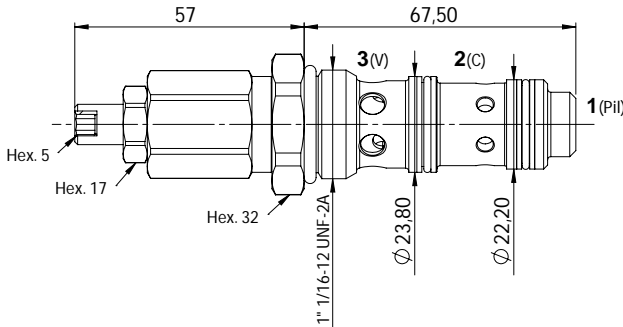
WOC 60

TECHNICAL DATA

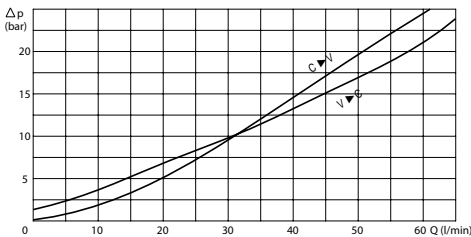
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** FW11160302
- **Installation torque:** 60-65 Nm
- **Weight:** 0,280 kg
- **Note:** It's not SAE cavity



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:

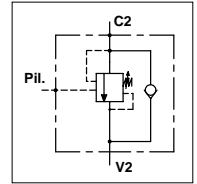
- Omit if not required
- Value

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

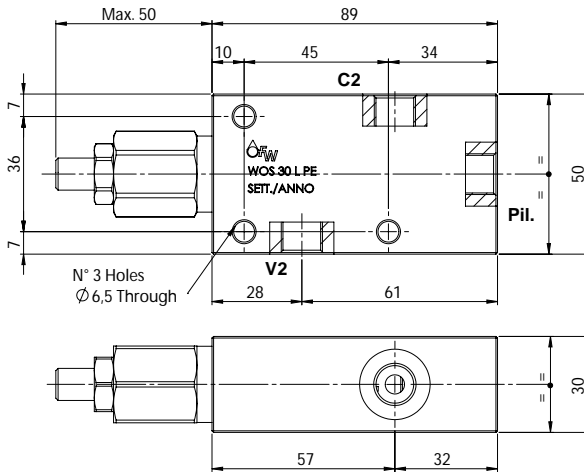
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



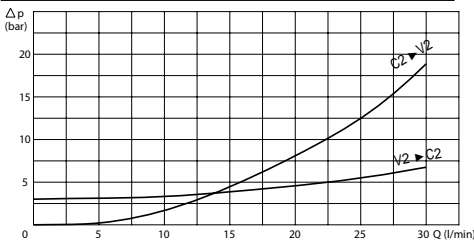
PORTS

| | |
|-----------------|-----|
| 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:

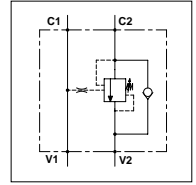
- Omit if not required
- Value

WOS 30 - L PP

TECHNICAL DATA

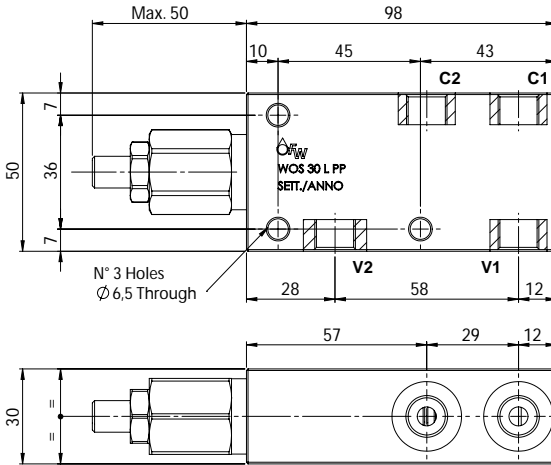
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,300 kg

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

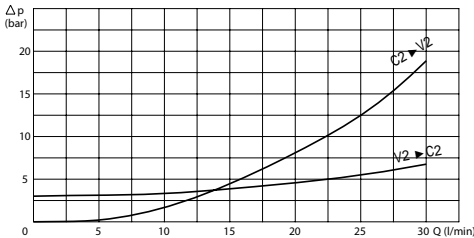


| PORTS | |
|--------------------|-----|
| C1 - C2 V1 - V2 | 1/4 |

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

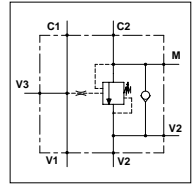
| | | | | | | | |
|-----|----|--------------------|---|----|-----------------|---------------------|--------------------------------|
| WOS | 30 | | L | PP | | | |
| | | Ports Size: | | | Springs: | Pilot Ratio: | Adjustment if Required: |
| | | - 1/4 | | | - 20 | - Omit if 4:1 | - Omit if not required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

WOS 30 - 1F PP

TECHNICAL DATA

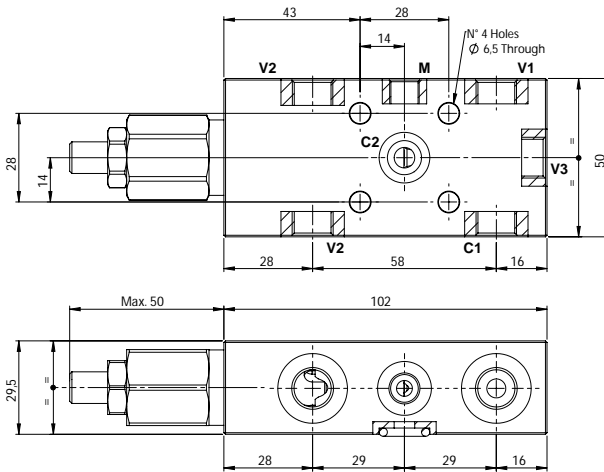
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,250 kg

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

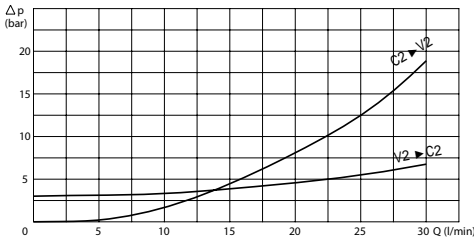


| PORTS | |
|--------------------|-----|
| C1 - V3 V1 - V2 | 1/4 |
| C2 | ø6 |
| M | 1/4 |

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:

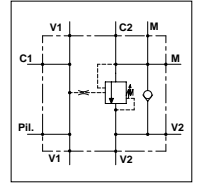
- Omit if not required
- Value

WOS 30 - 2F PP

TECHNICAL DATA

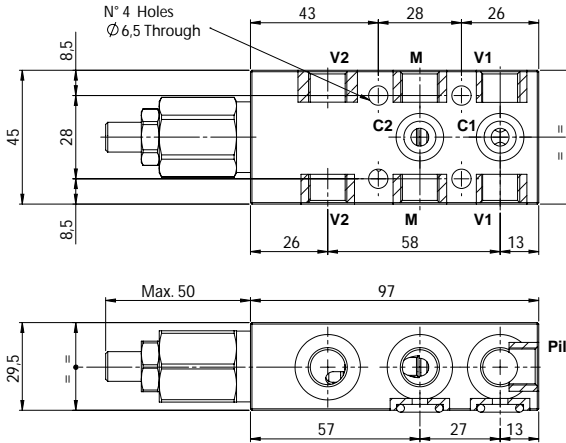
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,250 kg

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

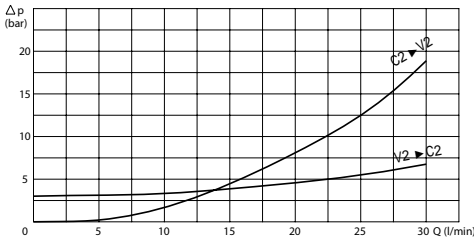


| PORTS | |
|----------|-----|
| V1 - V2 | 1/4 |
| C1 - C2 | ø6 |
| M - Pil. | 1/4 |

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:

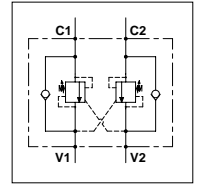
- Omit if not required
- Value

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

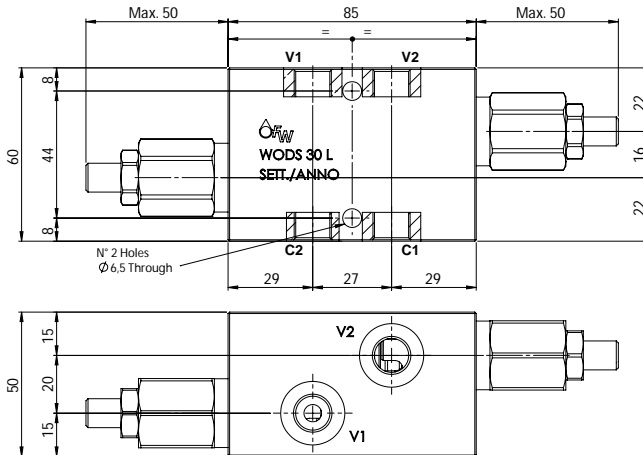
- Note:** Pressure setting must be 30 % higher that pressure induced by the load



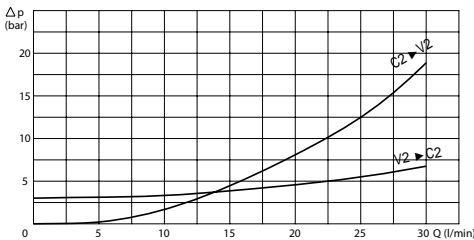
PORTS

| | |
|--------------------|-----|
| 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:

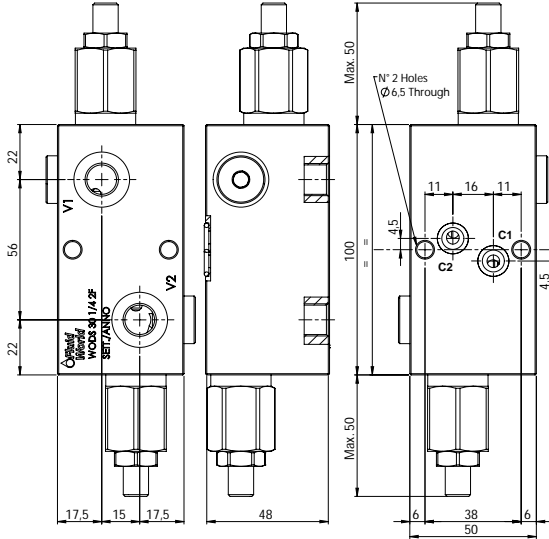
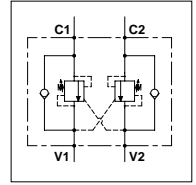
- Omit if not required
- Value

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

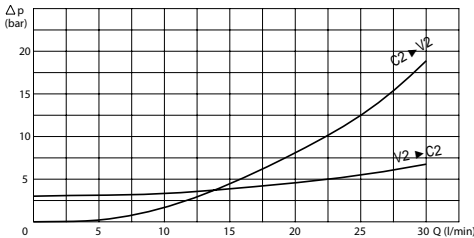
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



| 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:

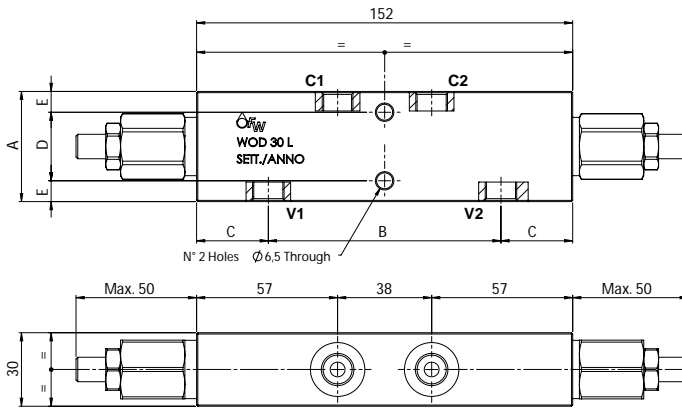
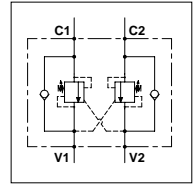
- Omit if not required
- Value

WOD 30 - L

TECHNICAL DATA

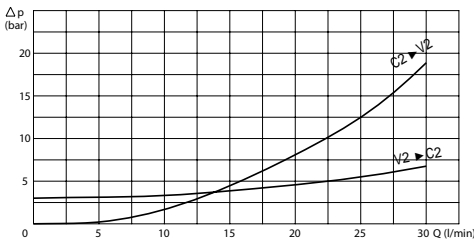
- Flow:** 30 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 8:1; 11:1)
- Weight:** See Table

- 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

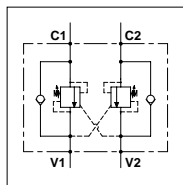
Adjustment if Required:
- Omit if not required
- Value

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

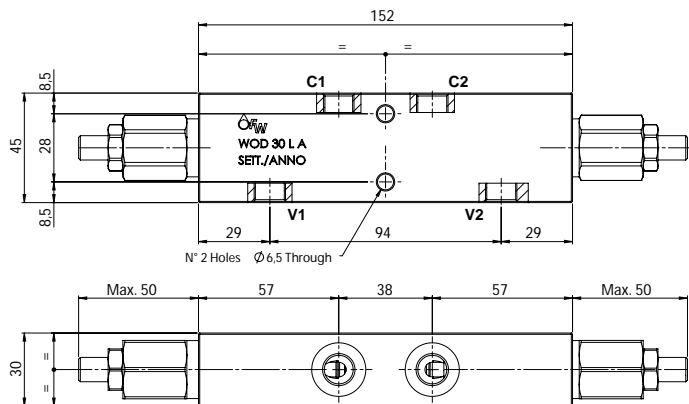
- Note:** Pressure setting must be 30 % higher that pressure induced by the load



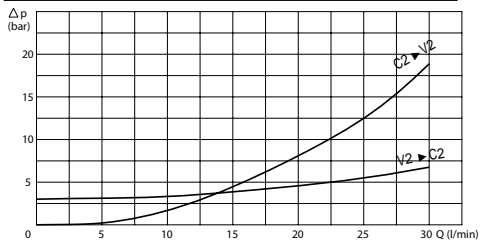
PORTS

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:

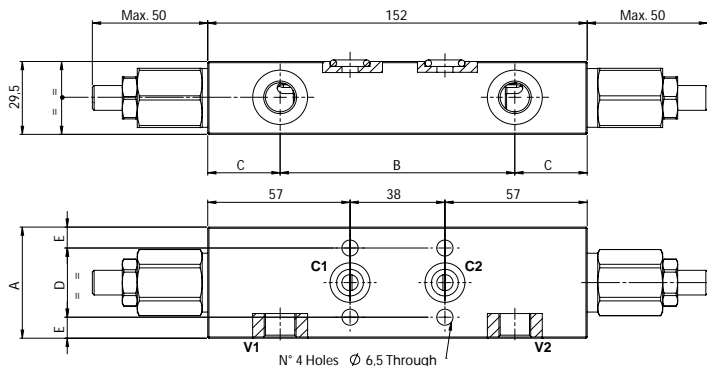
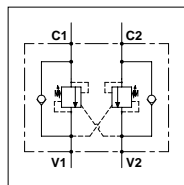
- Omit if not required
- Value

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

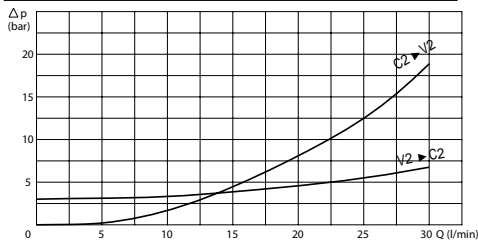
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS

| 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 |
| 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

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:

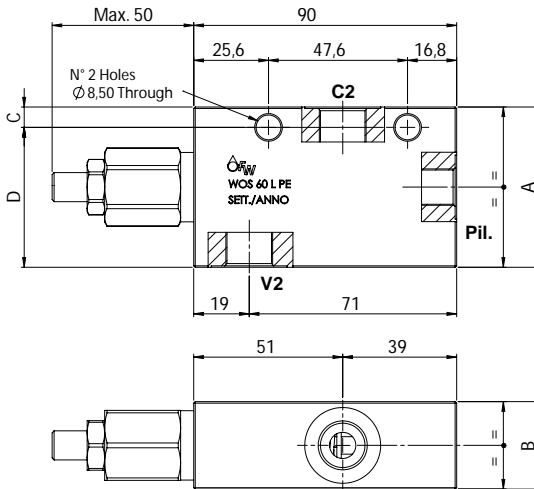
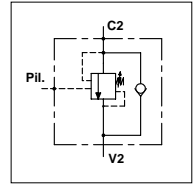
- Omit if not required
- Value

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

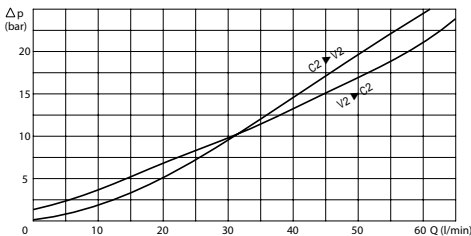
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



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

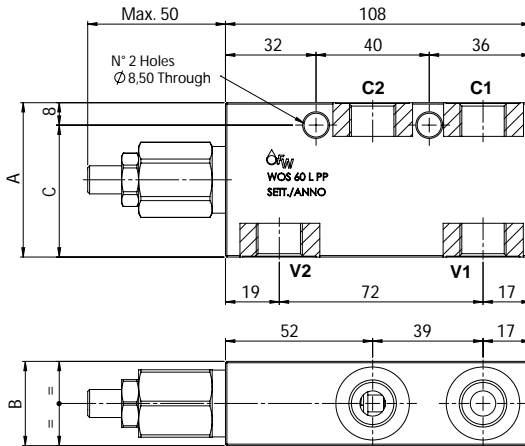
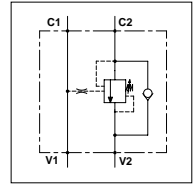
| | | | | | | | | |
|--------------------------------|----|--|---|----|--|--|--|--|
| WOS | 60 | | L | PE | | | | |
| Ports Size: | | | | | | | | |
| - 3/8 | | | | | | | | |
| - 1/2 | | | | | | | | |
| Pilot Port: | | | | | | | | |
| - Omit if 1/4 | | | | | | | | |
| - 3/8 | | | | | | | | |
| Springs: | | | | | | | | |
| - 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 | | | | | | | | |

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



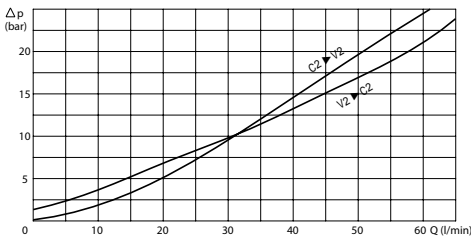
PORTS

| | | |
|--------------------|-----|-----|
| 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 | | |
|------|-------------------------------|----------------------------|----------------------|-------------------------------|----------------------------|----------------------|
| | 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

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:

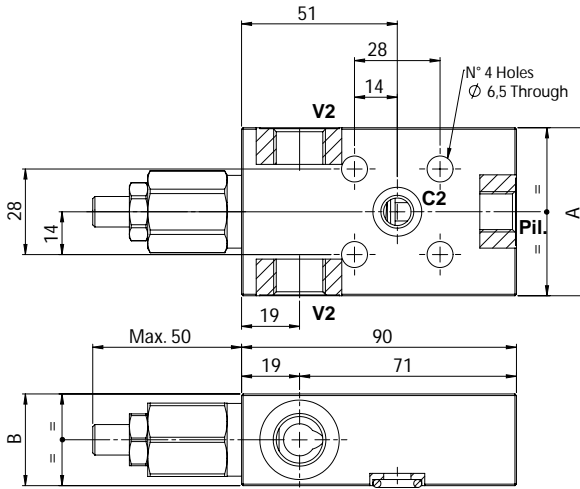
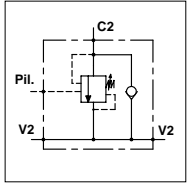
- Omit if not required
- Value

WOS 60 - 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

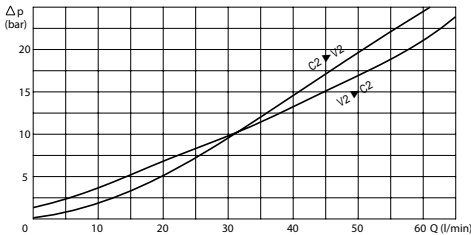
- **Note:** Pressure setting must be 30 % higher that pressure induced by the load



PORTS

| Ports | 3/8 | 1/2 |
|-------------|-----------------|-------|
| 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:

- 3/8
- 1/2

PE

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:

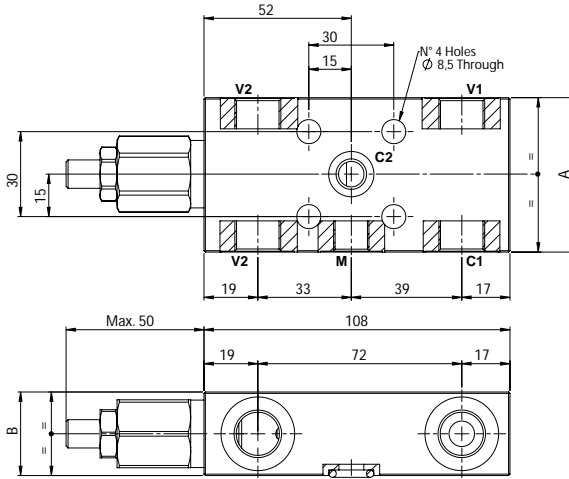
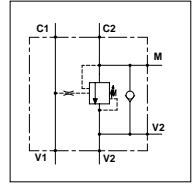
- Omit if not required
- Value

WOS 60 - 1F PP

TECHNICAL DATA

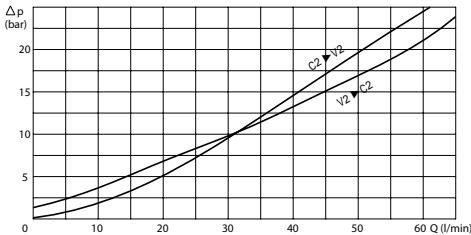
- Flow:** 60 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

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



| 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 | | |
|------|-------------------------------|----------------------------|----------------------|-------------------------------|----------------------------|----------------------|
| | 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

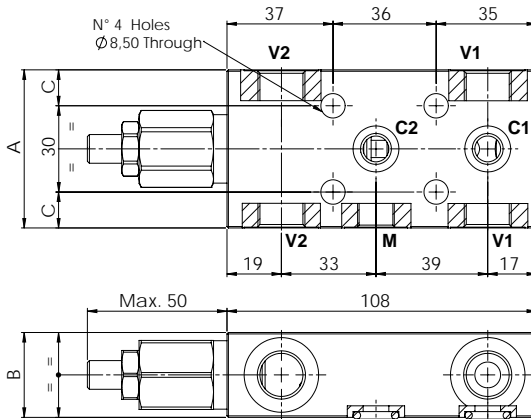
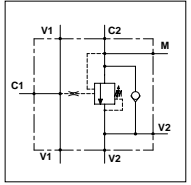
Adjustment if Required:

- Omit if not required
- Value

WOS 60 - 2F PP

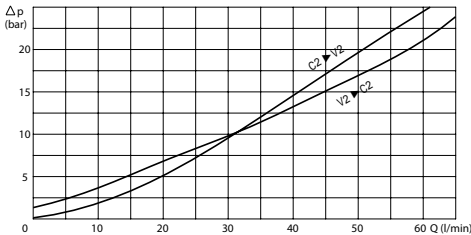
TECHNICAL DATA

- **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 |
| 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:

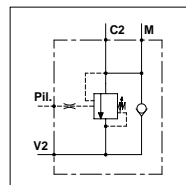
- Omit if not required
- Value

WOS 60 - B PE

TECHNICAL DATA

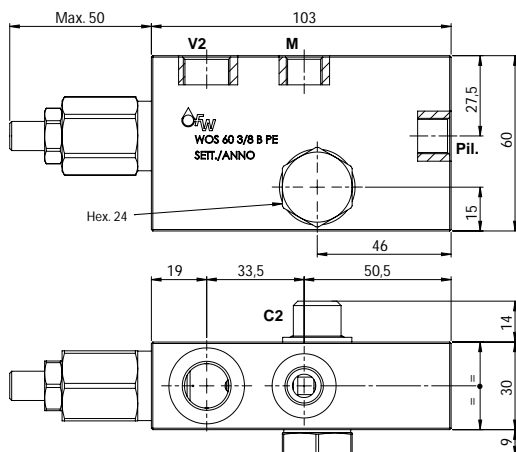
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,400 kg

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

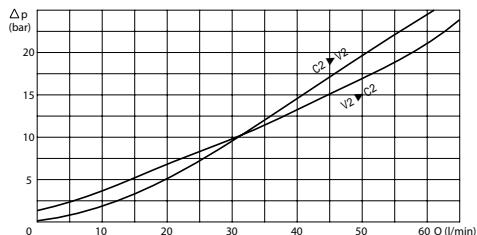


PORTS

| | |
|----------|-----|
| C2 - V2 | 3/8 |
| M - 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

WOS

60

3/8

B

PE

Springs:

- 20
- 35

Pilot Ratio:

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

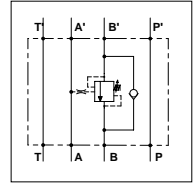
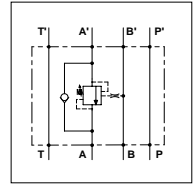
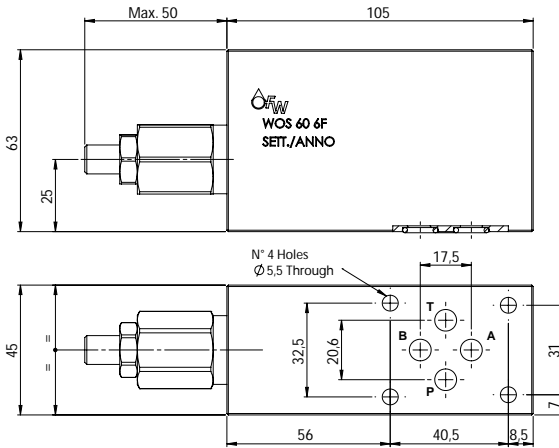
Adjustment if Required:

- Omit if not required
- Value

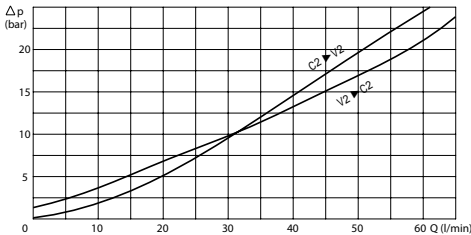
WOS 60 6F

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 | 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

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

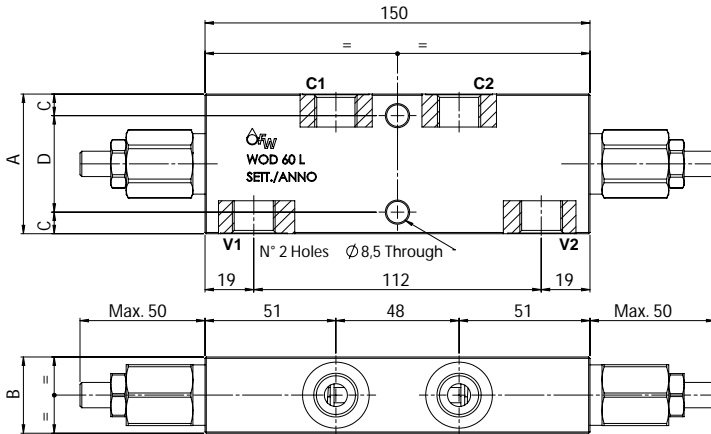
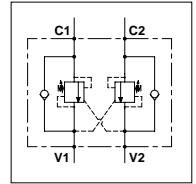
Adjustment if Required:
- Omit if not required
- Value

WOD 60 - L

TECHNICAL DATA

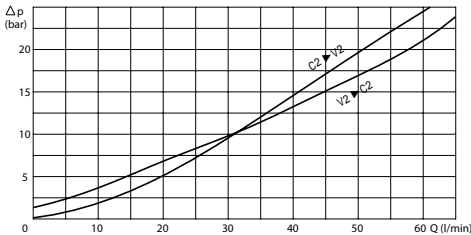
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **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

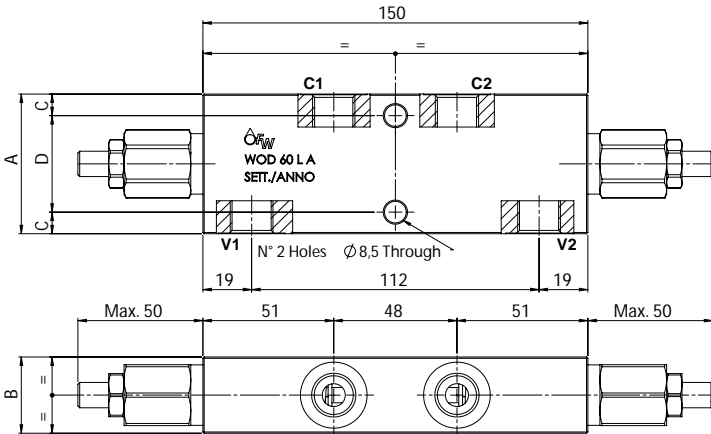
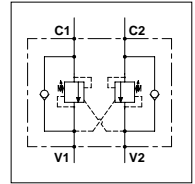
| | | | | | | |
|-----|----|--------------------|---|--|-----------------|--------------------------------|
| WOD | 60 | | L | | | |
| | | Ports Size: | | | Springs: | Pilot Ratio: |
| | | - 3/8 | | | - 20 | - Omit if 4:1 |
| | | - 1/2 | | | - 35 | - 1 = 1:1 |
| | | | | | | - 8 = 8:1 |
| | | | | | |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

WOD 60 - L A

TECHNICAL DATA

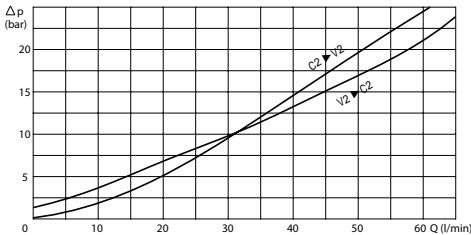
- Flow:** 60 l/min
- Max setting pressure:** 250 bar
- Materials:** Aluminium Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- 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 | | |
|------|-------------------------------|----------------------------|----------------------|-------------------------------|----------------------------|----------------------|
| | 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 | |

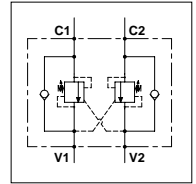
ORDERING CODE

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

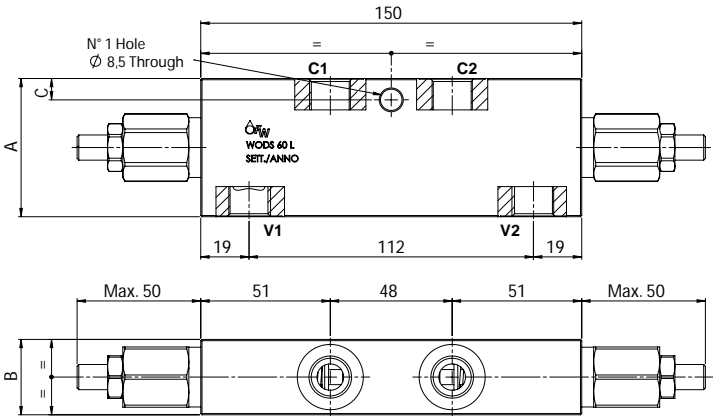
WODS 60 - L

TECHNICAL DATA

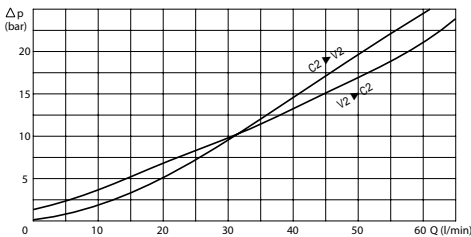
- **Flow:** 60 l/min
 - **Max setting pressure:** 350 bar
 - **Materials:** Steel Body
 - **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
 - **Weight:** See Table
 - **Note:** Only on request, please contact our sales department
- **Note:** Pressure setting must be 30 % higher that pressure induced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

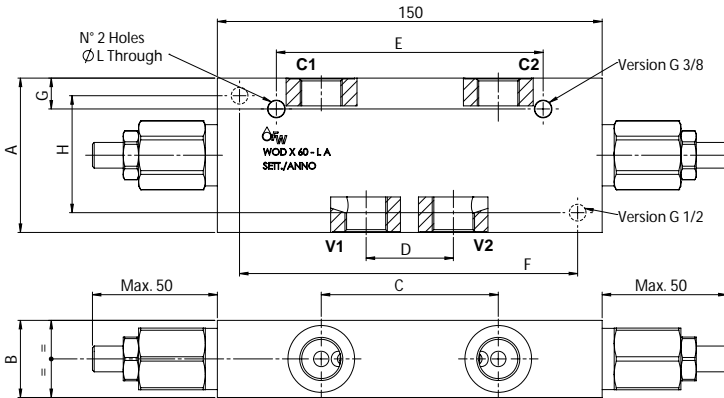
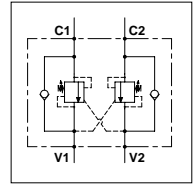
- Omit if not required
- Value

WOD X 60 - L A

TECHNICAL DATA

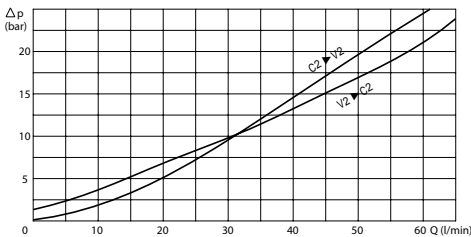
- Flow:** 60 l/min
- Max setting pressure:** 250 bar
- Materials:** Aluminium Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- 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



Ports Size:
- 3/8
- 1/2

Springs:
- 20
- 35

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

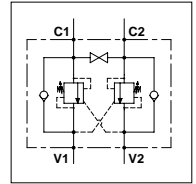
Adjustment if Required:
- Omit if not required
- Value

WOD X 60 - L A BP

TECHNICAL DATA

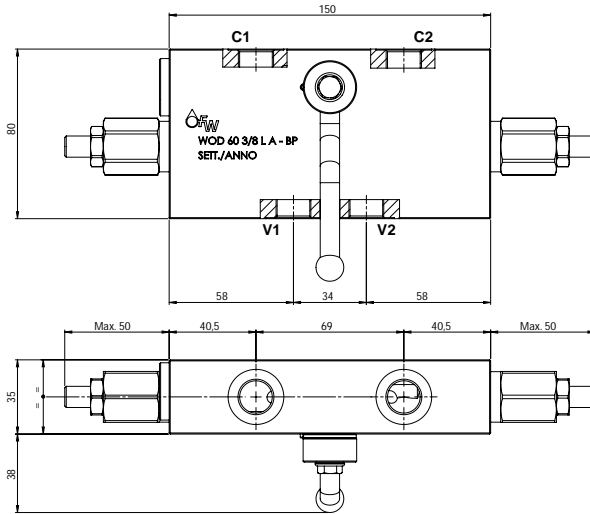
- **Flow:** 60 l/min
- **Max setting pressure:** 250 bar
- **Materials:** Aluminium Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,570 kg

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

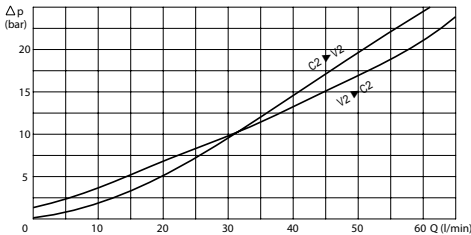


PORTS

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



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

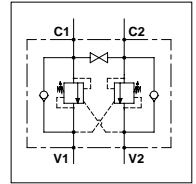
- Springs:** - 20
- 35
- Pilot Ratio:** - Omit if 4:1
- 1 = 1:1
- 8 = 8:1
- 11 = 11:1
- Adjustment if Required:** - Omit if not required
- Value

WOD 60 - 2F A BP

TECHNICAL DATA

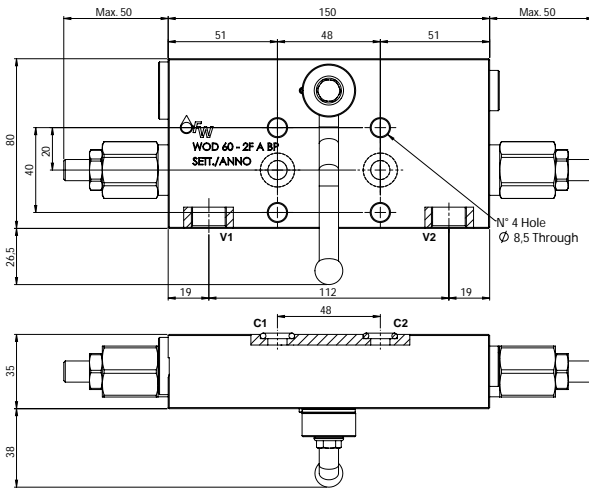
- **Flow:** 60 l/min
- **Max setting pressure:** 250 bar
- **Materials:** Aluminium Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,550 kg

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

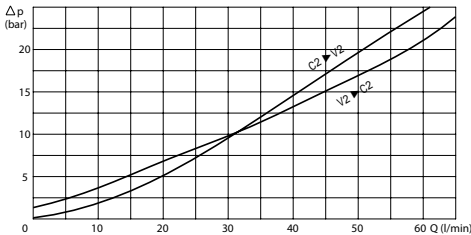


PORTS

| | |
|---------|-----|
| 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:

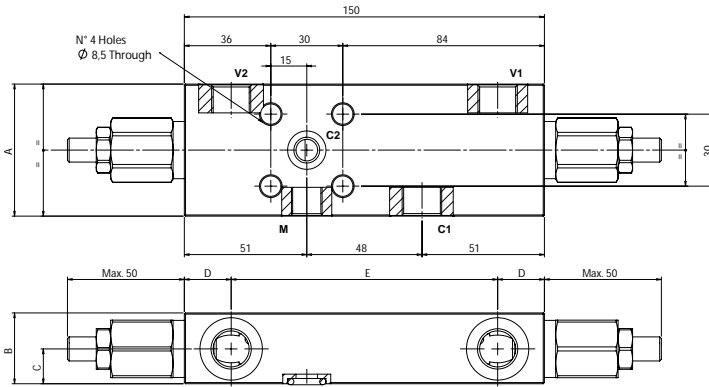
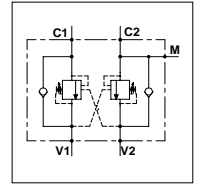
- Omit if not required
- Value

WOD 60 - 1F

TECHNICAL DATA

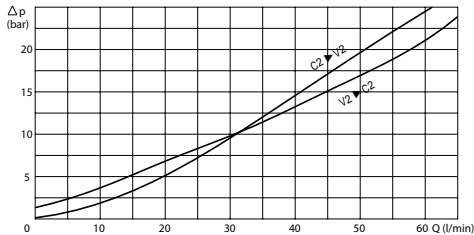
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **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

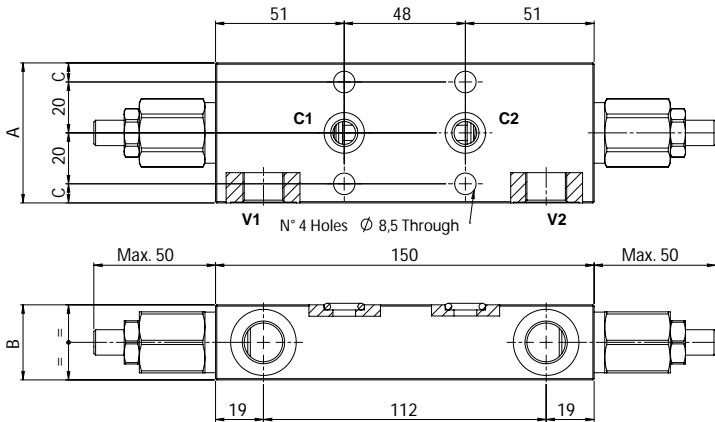
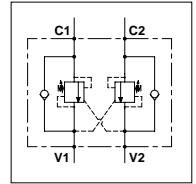
Adjustment if Required:
- Omit if not required
- Value

WOD 60 - 2F

TECHNICAL DATA

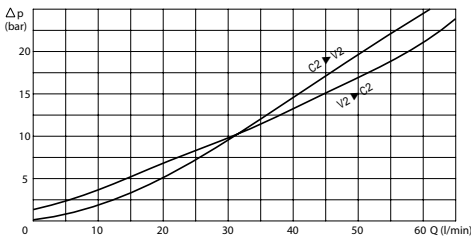
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **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

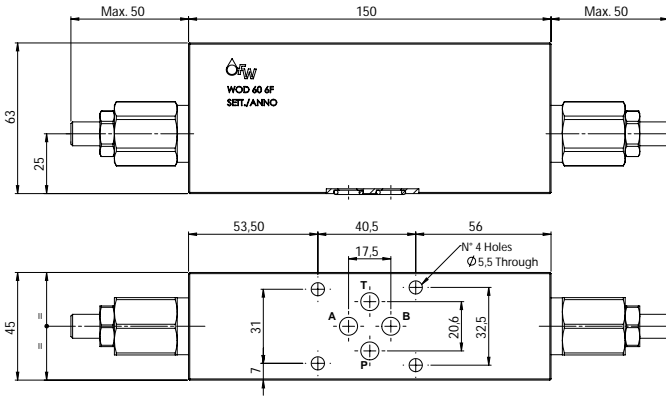
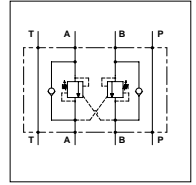
Adjustment if Required:
- Omit if not required
- Value

WOD 60 6F

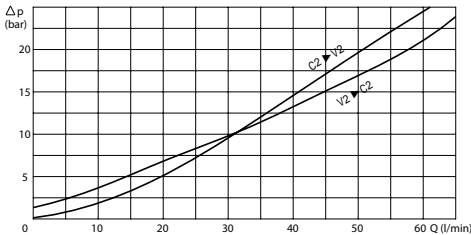
TECHNICAL DATA

- **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

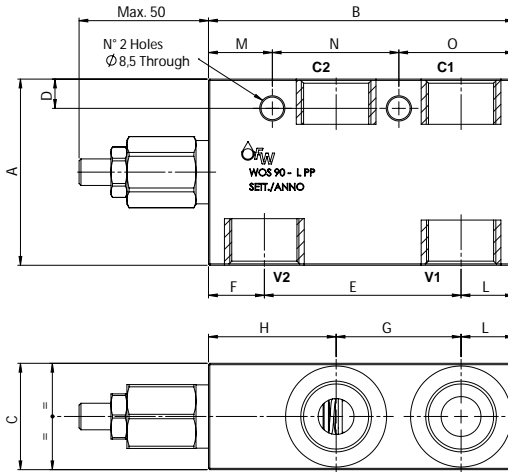
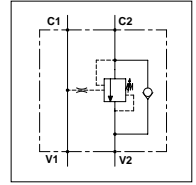
Adjustment if Required:

- Omit if not required
- Value

WOS 90 - L PP

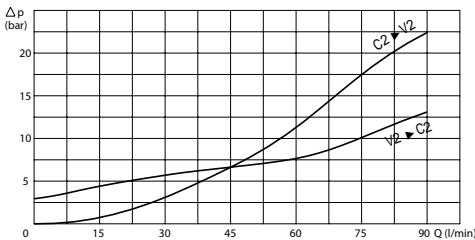
TECHNICAL DATA

- 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 | |

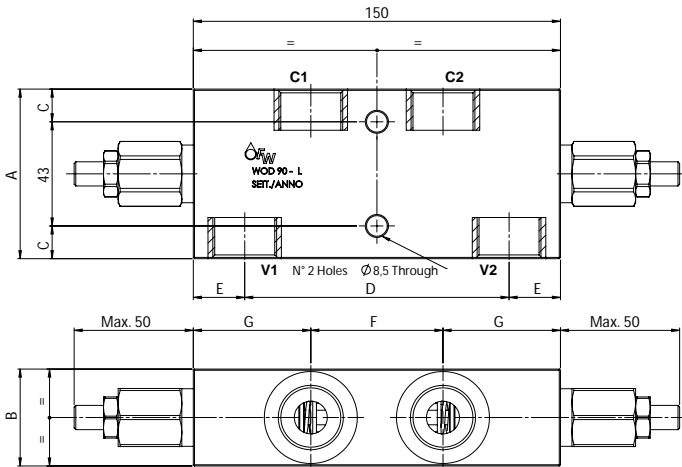
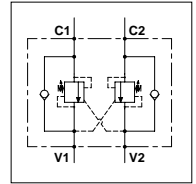
ORDERING CODE

| | | | | | | | |
|-----|----|--------------------|---|----|-----------------|---------------------|--------------------------------|
| WOS | 90 | | L | PP | | | |
| | | Ports Size: | | | Springs: | Pilot Ratio: | Adjustment if Required: |
| | | - 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

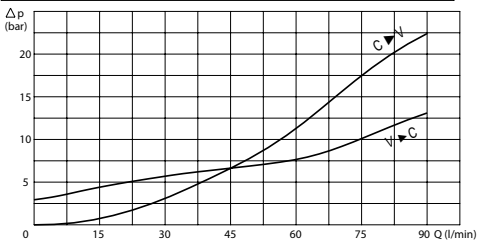
TECHNICAL DATA

- **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 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) | 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

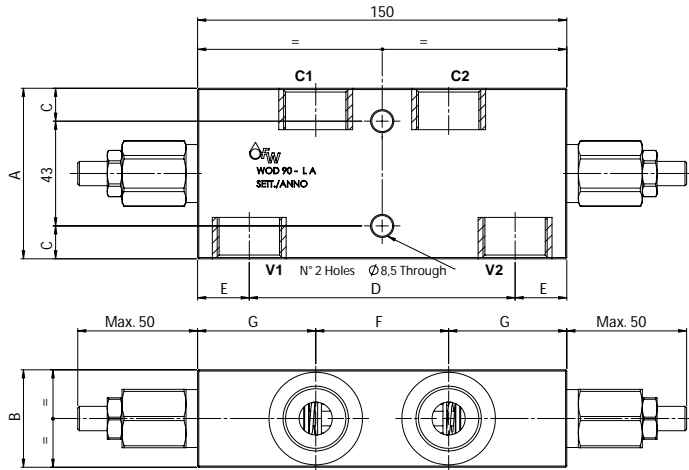
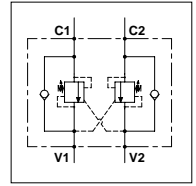
Adjustment if Required:

- Omit if not required
- Value

WOD 90 - L A

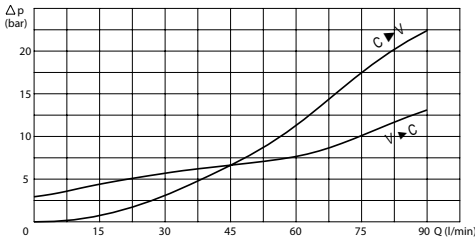
TECHNICAL DATA

- 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: | | Springs: | | Pilot Ratio: | | Adjustment if Required: | |
| - 1/2 - 3/4 | | - 20 - 35 | | - Omit if 4:1 - 1 = 1:1 - 8 = 8:1 - 11 = 11:1 | | - Omit if not required - Value | |

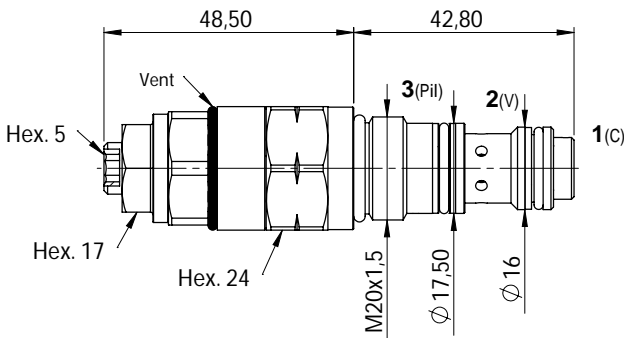
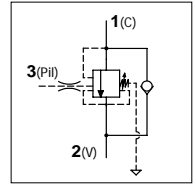
FULLY COMPENSATED COUNTERBALANCE VALVES
VALVOLE OVERCENTER COMPLETAMENTE COMPENSATA



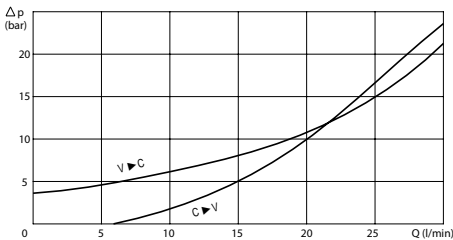
WOCFC 30 M20

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

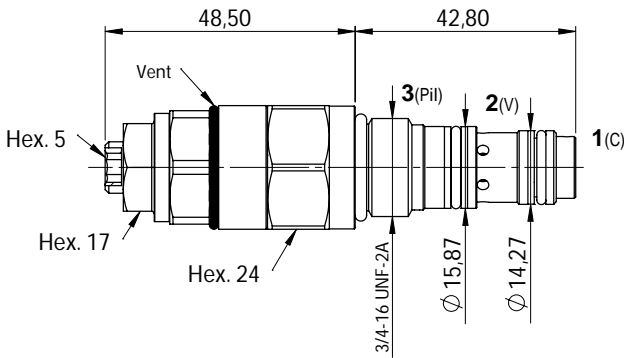
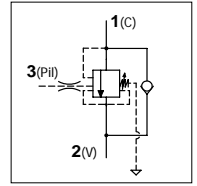
Adjustment if Required:

- Omit if not required
- Value

WOCFC 30 S08

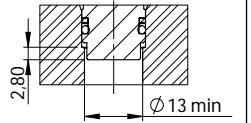
TECHNICAL DATA

- **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

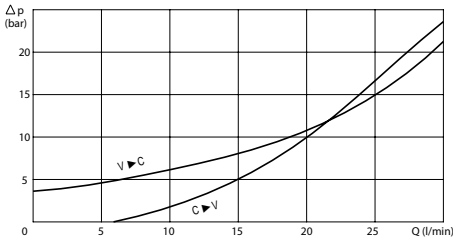


CAVITY

FW3403001 with the addition of a minimum hole of 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

WOCFC

30

S08

Springs:

- 20
- 35

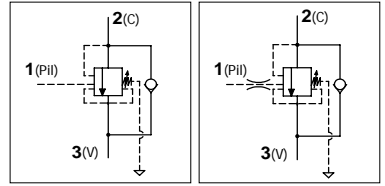
Adjustment if Required:

- Omit if not required
- Value

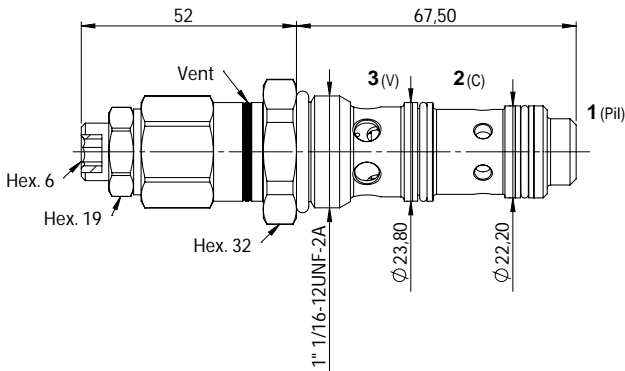
WOCFC 60

TECHNICAL DATA

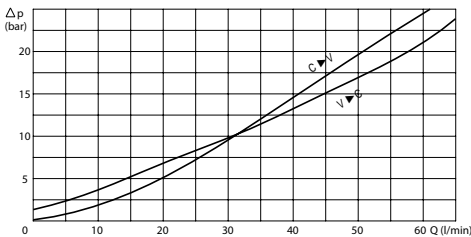
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Cartridge in Steel zinc plated
- **Cavity:** FW11160302
- **Installation torque:** 60-65 Nm
- **Weight:** 0,280 kg
- **Note:** It's not SAE cavity



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:

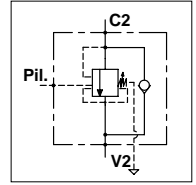
- Omit if not required
- Value

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

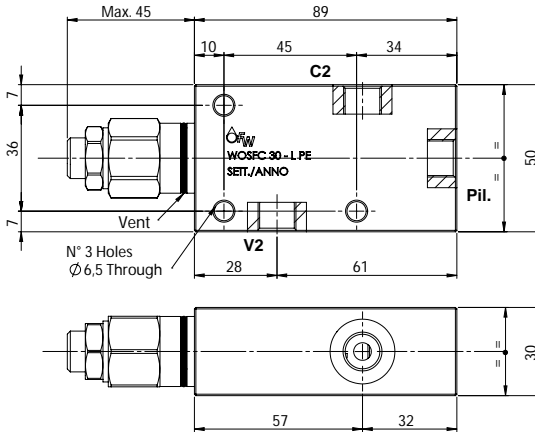
- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.



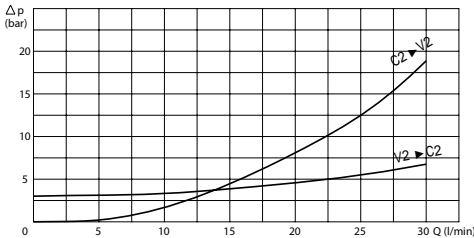
PORTS

| | |
|-----------------|-----|
| 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: **Pilot Ratio:** **Adjustment if**

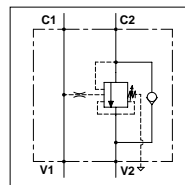
- 20
- 35
- Omit if 4:1
- 8 = 8:1
- 11 = 11:1
- Omit if not required
- Value

WOSFC 30 - L PP

TECHNICAL DATA

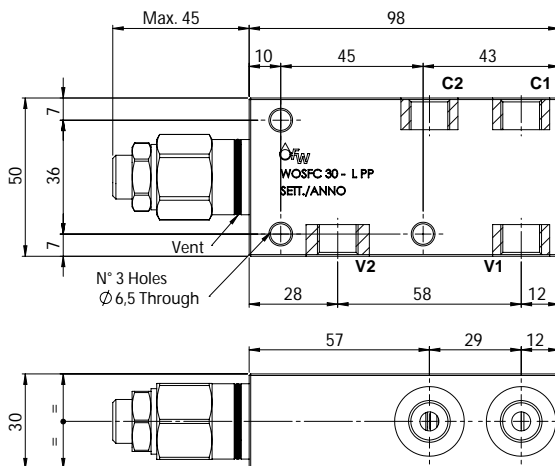
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,300 kg

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

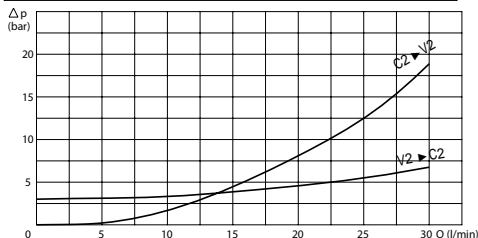


| PORTS | |
|--------------------|-----|
| C1 - C2 V1 - V2 | 1/4 |

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:

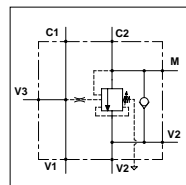
- Omit if not required
- Value

WOSFC 30 - 1F PP

TECHNICAL DATA

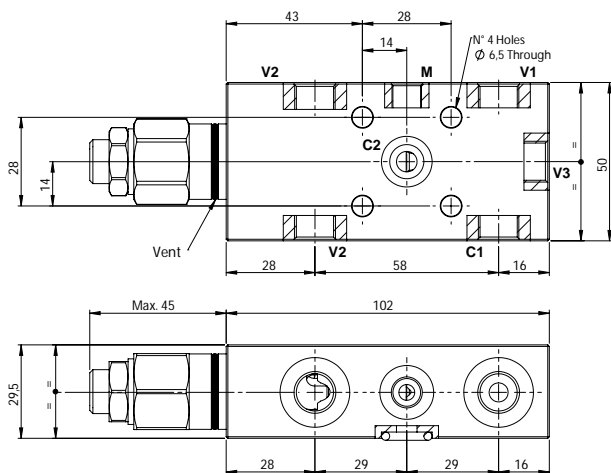
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** 1,250 kg

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

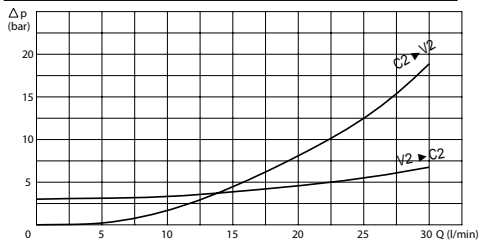


| PORTS | |
|--------------------|-----|
| C1 - V3 V1 - V2 | 1/4 |
| C2 | ø6 |
| M | 1/4 |

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:

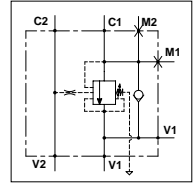
- Omit if not required
- Value

WOSFC 30 - 1F PP - SPNS

TECHNICAL DATA

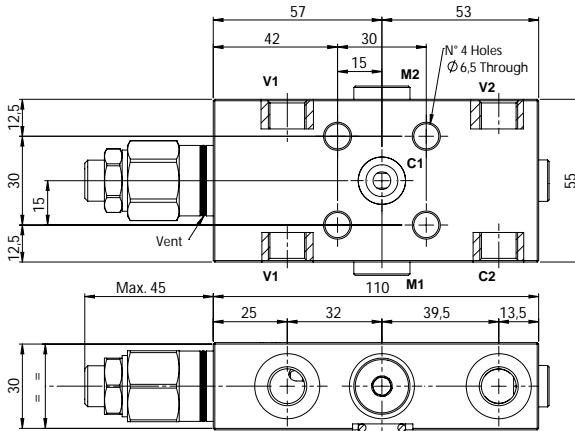
- Flow:** 30 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 8:1; 11:1)
- Weight:** 1,350 kg

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

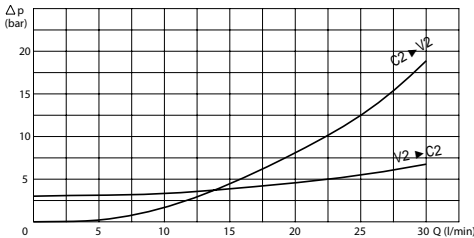


| PORTS | |
|---------------|-----|
| C2 V1 - V2 | 1/4 |
| C1 | ø6 |
| M1 - M2 | 1/4 |

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:

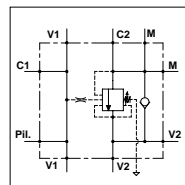
- Omit if not required
- Value

WOSFC 30 - 2F PP

TECHNICAL DATA

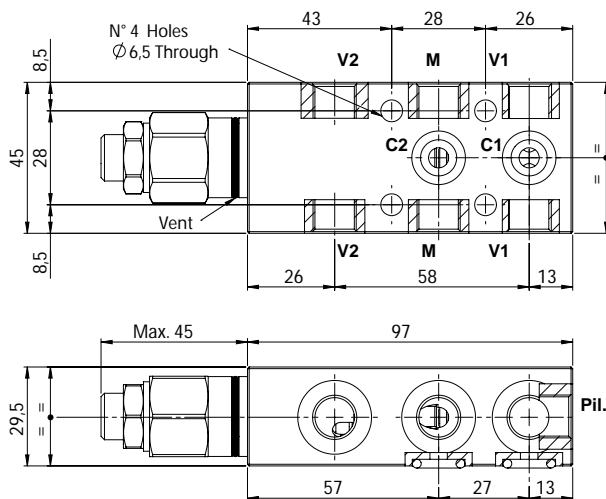
- Flow:** 30 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 8:1; 11:1)
- Weight:** 1,250 kg

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

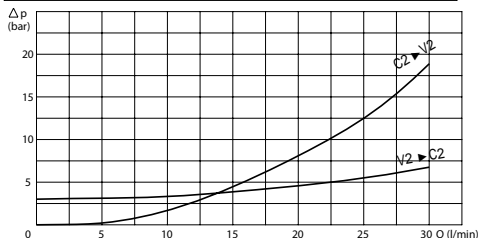


| PORTS | |
|----------|-----|
| V1 - V2 | 1/4 |
| C1 - C2 | ø6 |
| M - Pil. | 1/4 |

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:

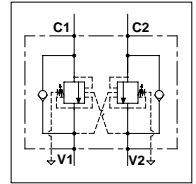
- Omit if not required
- Value

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

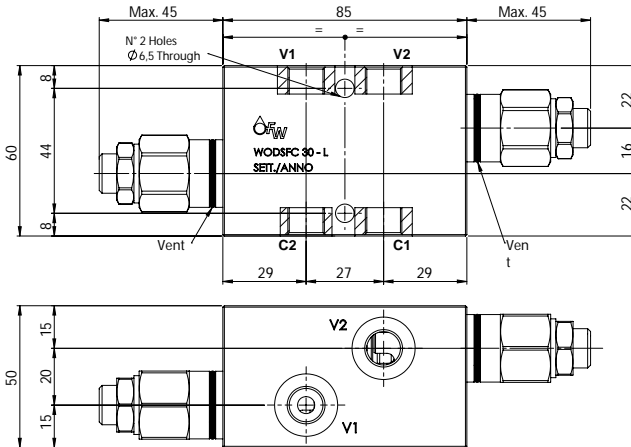
- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.



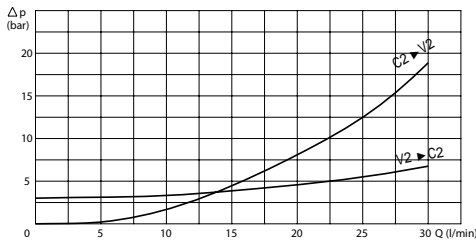
PORTS

| | |
|--------------------|-----|
| 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:

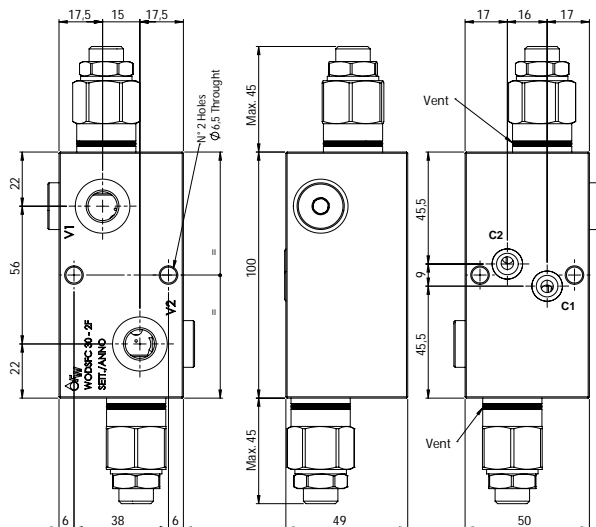
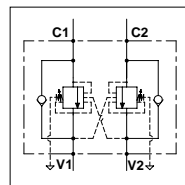
- Omit if not required
- Value

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

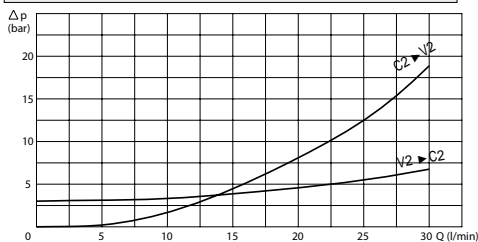
- Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.



| 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:

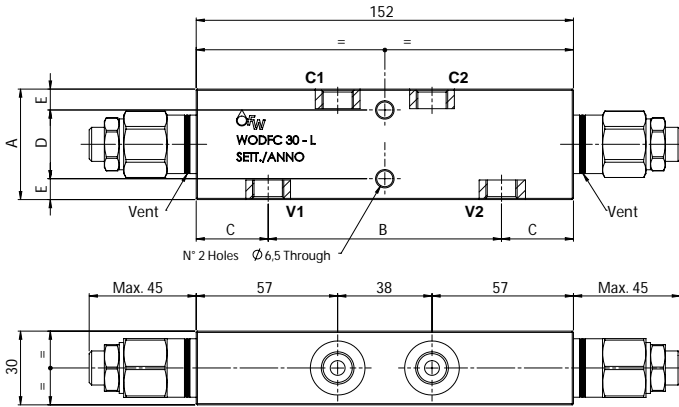
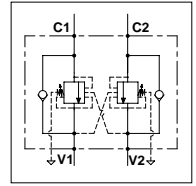
- Omit if not required
- Value

WODFC 30 - L

TECHNICAL DATA

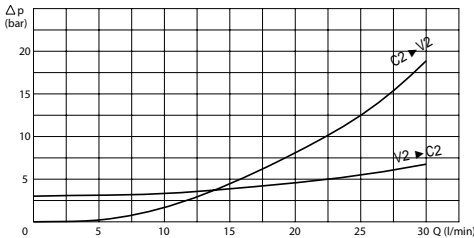
- Flow:** 30 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 8:1; 11:1)
- Weight:** See Table

- 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:

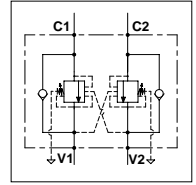
- Omit if not required
- Value

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

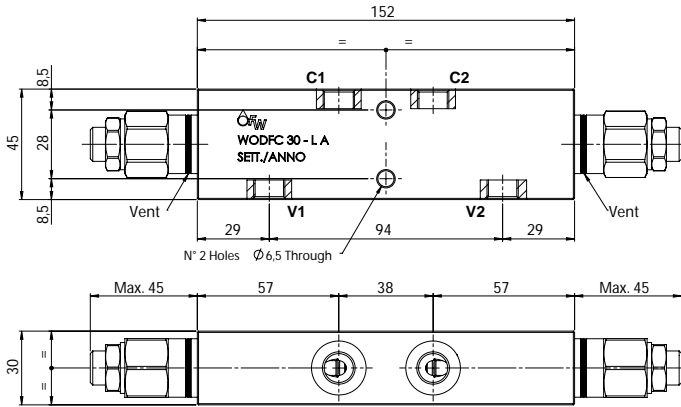
- Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.



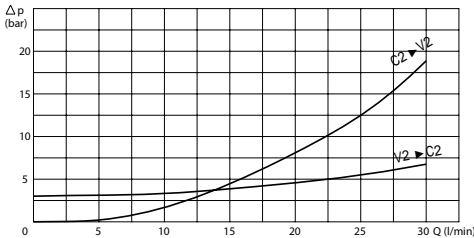
PORTS

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:

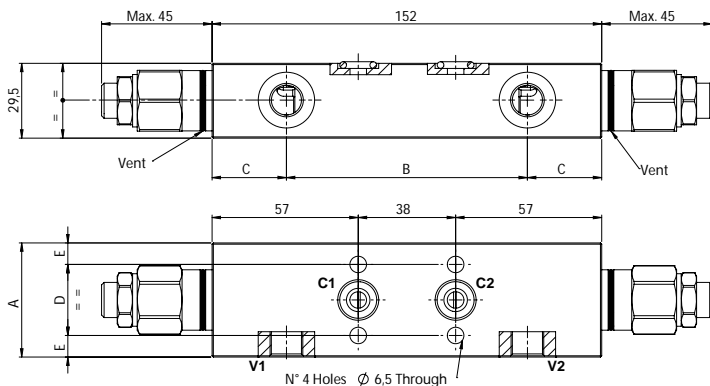
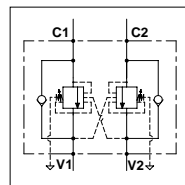
- Omit if not required
- Value

WODFC 30 - 2F

TECHNICAL DATA

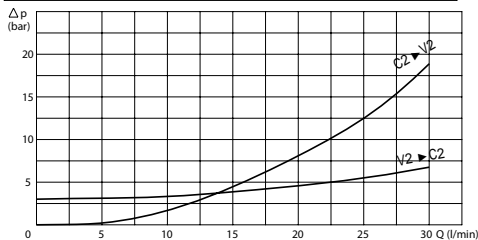
- **Flow:** 30 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 8:1; 11:1)
- **Weight:** See Table

- **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 | 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 |
| 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:

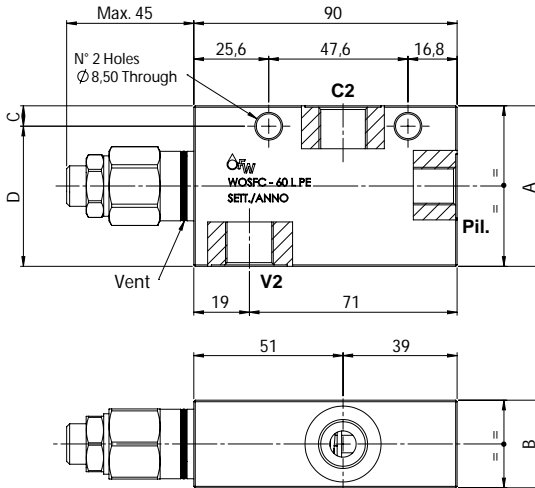
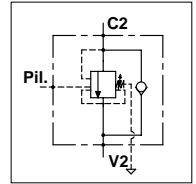
- Omit if not required
- Value

WOSFC 60 - L PE

TECHNICAL DATA

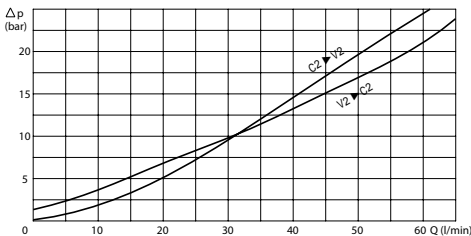
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

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



| PORTS | | |
|-------------|-------|-------|
| 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 | |

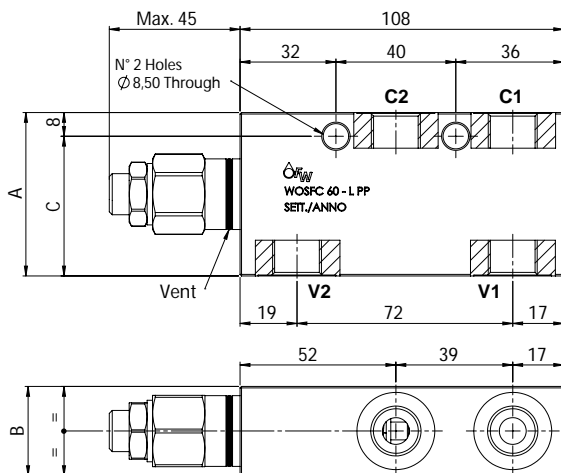
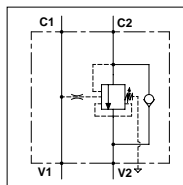
ORDERING CODE

| | | | | | | | | | |
|--------------------|----|--|------------------------|----|--|-----------------|--|---|-----------------------------------|
| WOSFC | 60 | | L | PE | | | | | |
| Ports Size: | | | 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 |

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 that pressure induced by the load.
- Recommended for use with closed center spools.



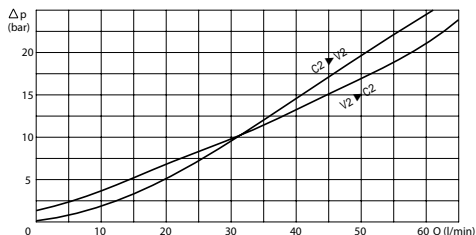
PORTS

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

DIMENSIONS

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

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

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:

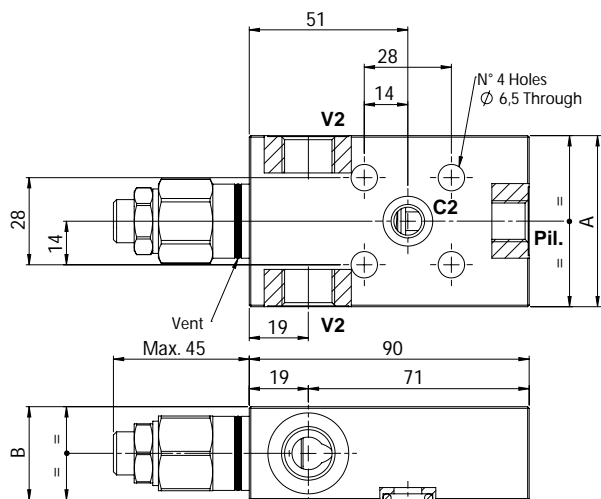
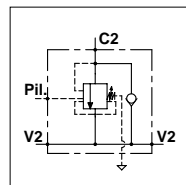
- Omit if not required
- Value

WOSFC 60 - 1F PE

TECHNICAL DATA

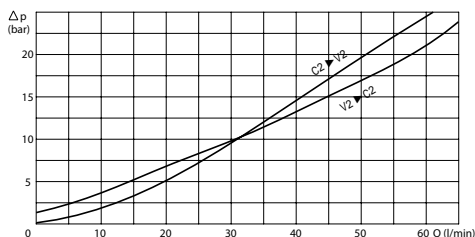
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **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:

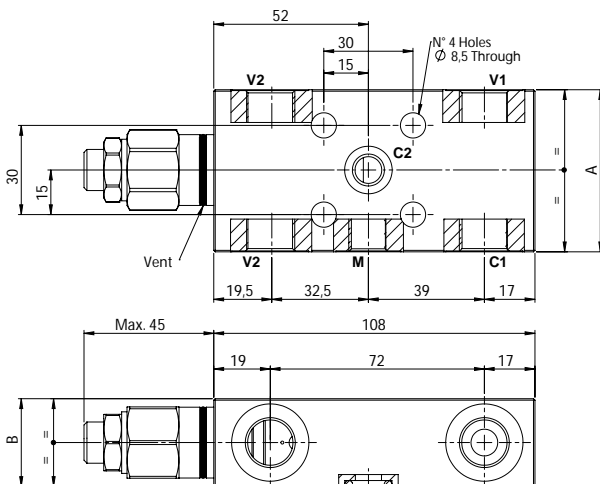
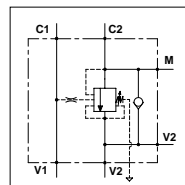
- Omit if not required
- Value

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

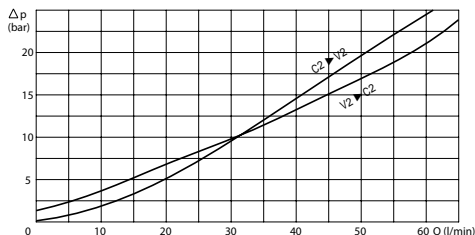
- **Note:** - Pressure setting must be 30 % higher than pressure induced by the load.
- Recommended for use with closed center spools.



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 | 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

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:

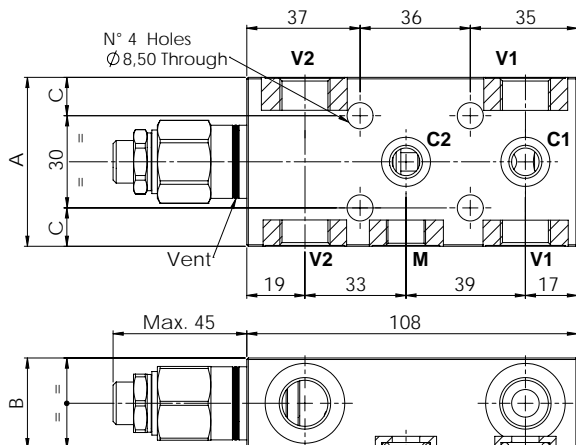
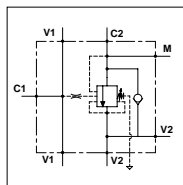
- Omit if not required
- Value

WOSFC 60 - 2F PP

TECHNICAL DATA

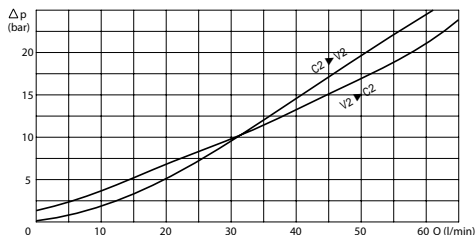
- Flow:** 60 l/min
- Max setting pressure:** 350 bar
- Materials:** Steel Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- Note:** - Pressure setting must be 30 % higher that 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:

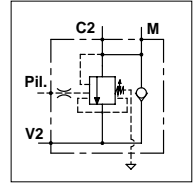
- Omit if not required
- Value

WOSFC 60 - B PE

TECHNICAL DATA

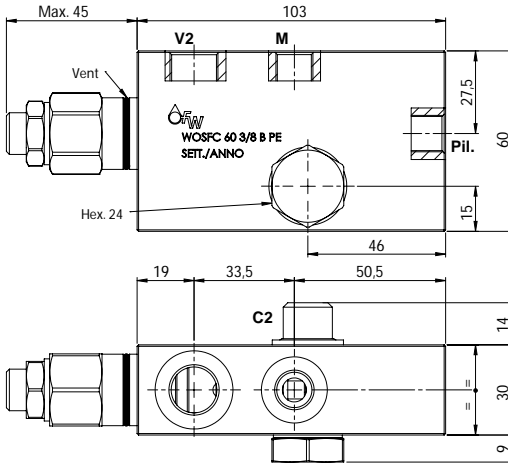
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,400 kg

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

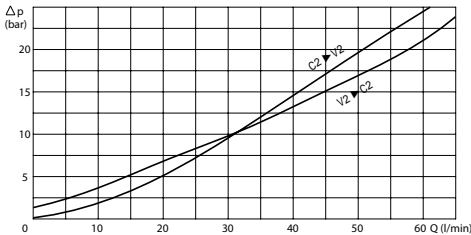


PORTS

| | |
|----------|-----|
| 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:

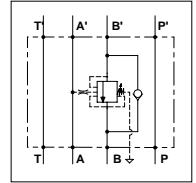
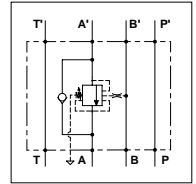
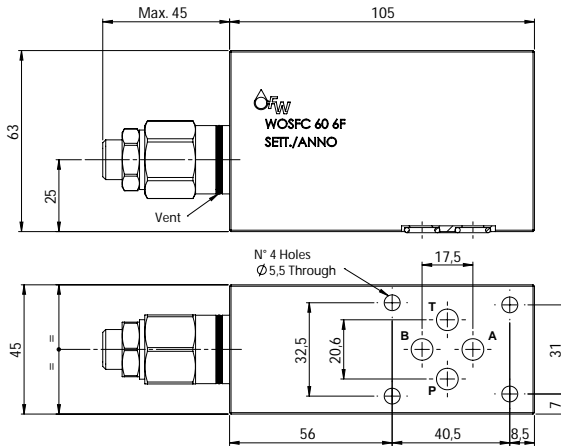
- Omit if not required
- Value

WOSFC 60 6F

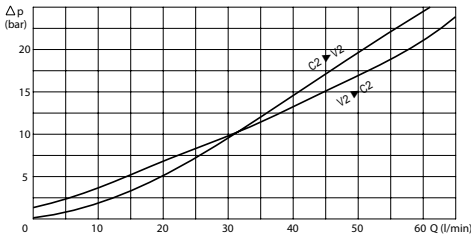
TECHNICAL DATA

- **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 | | |
|------|-------------------------------|----------------------------|----------------------|-------------------------------|----------------------------|----------------------|
| | 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

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

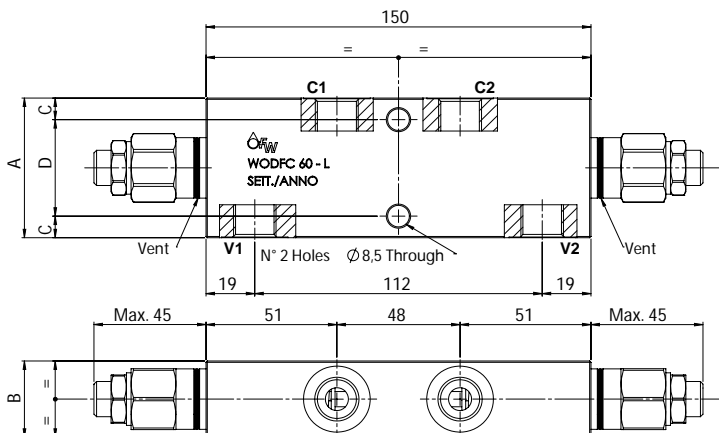
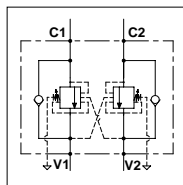
Adjustment if Required:
- Omit if not required
- Value

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

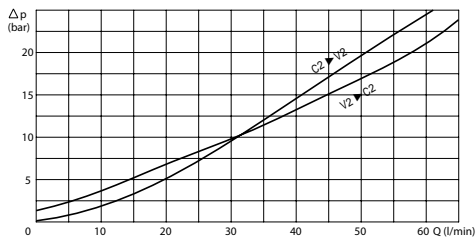
- **Note:** - Pressure setting must be 30 % higher that pressure induced by the load.
- Recommended for use with closed center spools.



PORTS

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

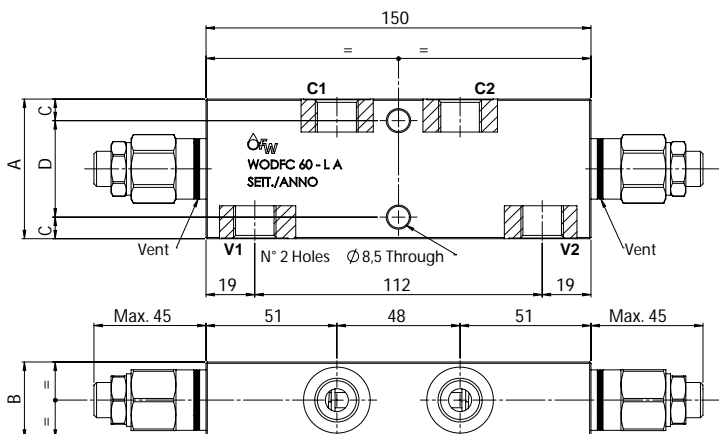
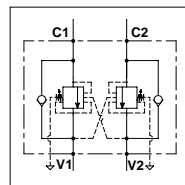
- Omit if not required
- Value

WODFC 60 - L A

TECHNICAL DATA

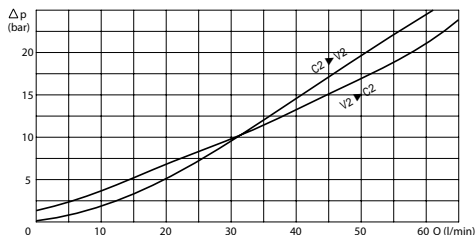
- Flow:** 60 l/min
- Max setting pressure:** 250 bar
- Materials:** Aluminium Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- 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

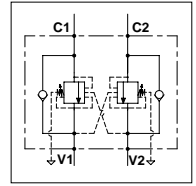
Adjustment if Required:

- Omit if not required
- Value

WODFC 60 - L - SPOM

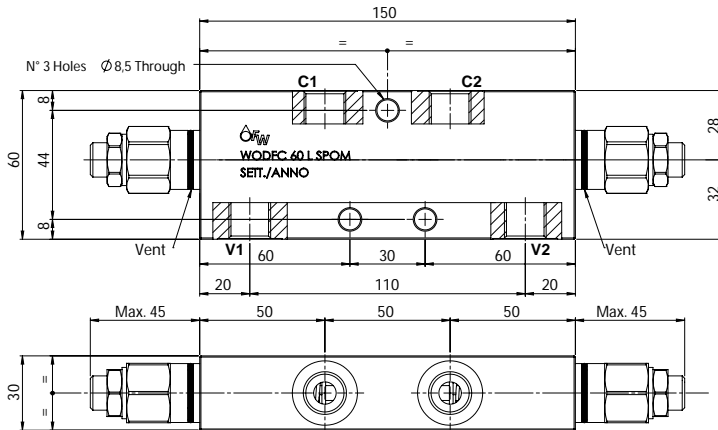
TECHNICAL DATA

- **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.

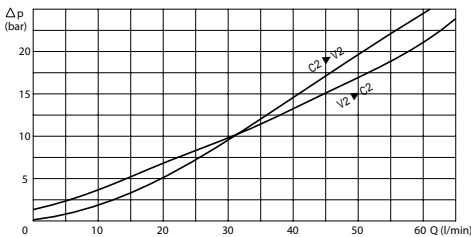


PORTS

| | |
|--------------------|-----|
| 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

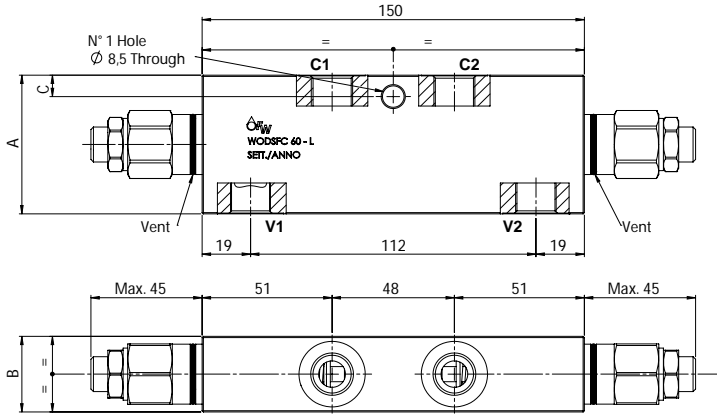
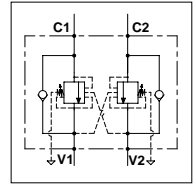
Adjustment if Required:

- Omit if not required
- Value

WODSFC 60 - L

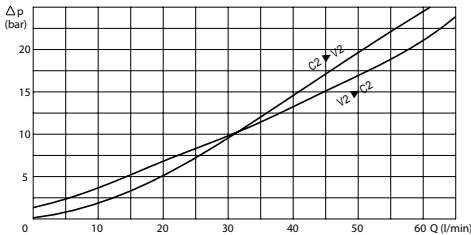
TECHNICAL DATA

- 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:

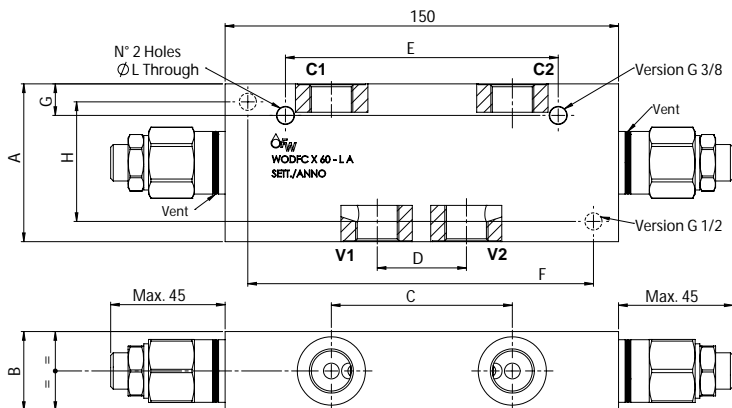
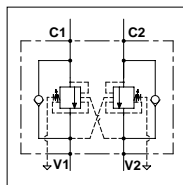
- Omit if not required
- Value

WODFC X 60 - L A

TECHNICAL DATA

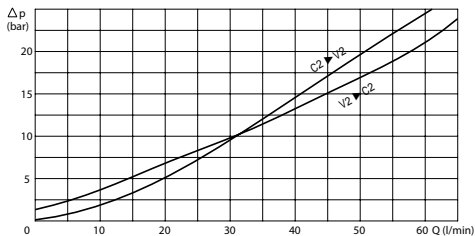
- Flow:** 60 l/min
- Max setting pressure:** 250 bar
- Materials:** Aluminium Body
- Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- Weight:** See Table

- 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 | | |
|------|-------------------------------|----------------------------|----------------------|-------------------------------|----------------------------|----------------------|
| | 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

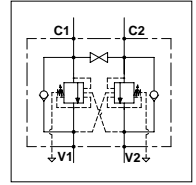
Adjustment if Required:
- Omit if not required
- Value

WODFC X 60 - L A BP

TECHNICAL DATA

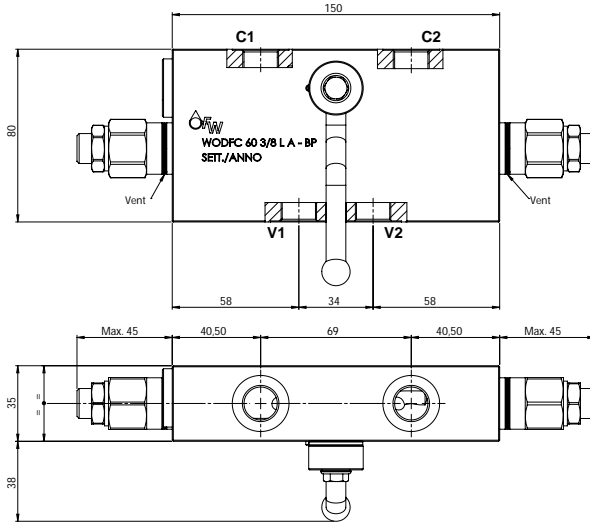
- **Flow:** 60 l/min
- **Max setting pressure:** 250 bar
- **Materials:** Aluminium Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,570 kg

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

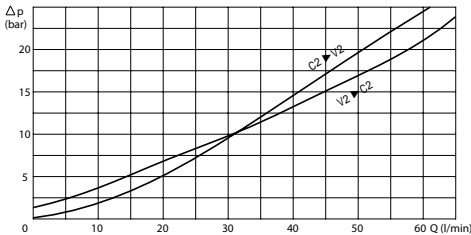


PORTS

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



PRESSURE DROP CURVES



SPRINGS

| Code | 20 | | | 35 | | |
|------|-------------|-------------------------------|----------------------------|----------------------|-------------------------------|----------------------------|
| | 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

WODFC X 60 3/8 L A BP

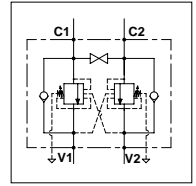
- Springs:**
 - 20
 - 35
- Pilot Ratio:**
 - Omit if 4:1
 - 1 = 1:1
 - 8 = 8:1
 - 11 = 11:1
- Adjustment if Required:**
 - Omit if not required
 - Value

WODFC 60 - 2F A BP

TECHNICAL DATA

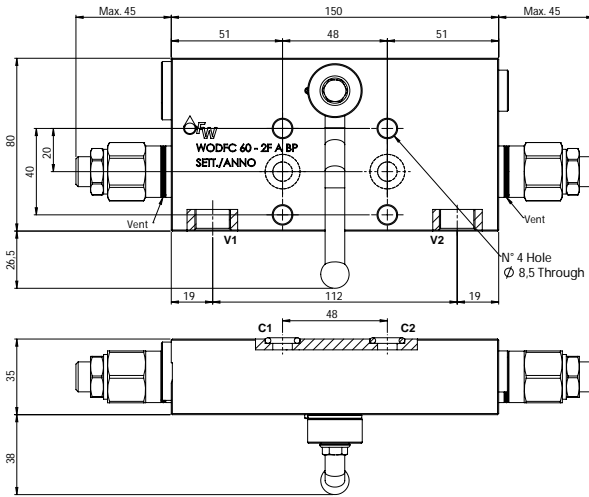
- **Flow:** 60 l/min
- **Max setting pressure:** 250 bar
- **Materials:** Aluminium Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** 1,550 kg

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

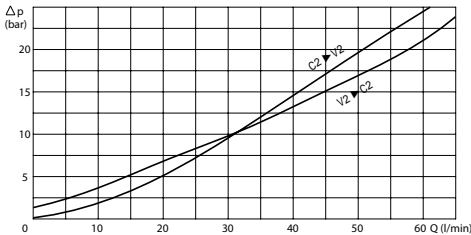


PORTS

| | |
|---------|-----|
| 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

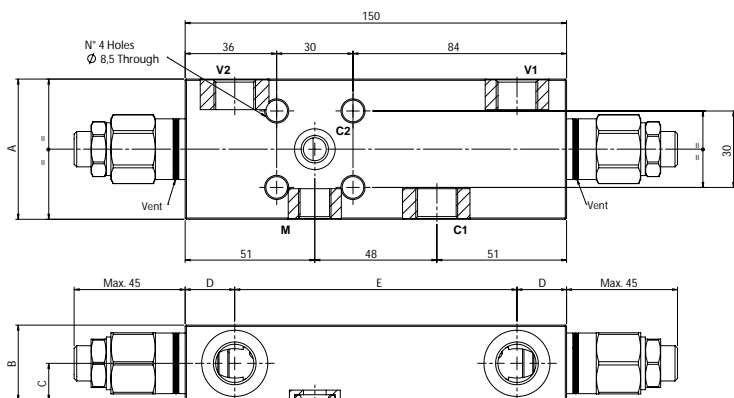
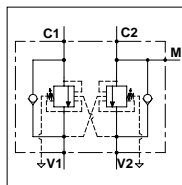
Adjustment if Required:

- Omit if not required
- Value

WODFC 60 - 1F

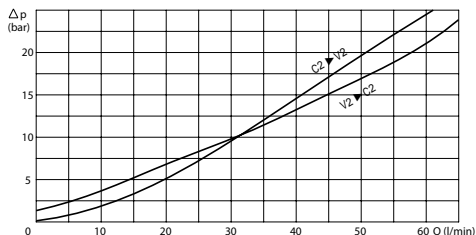
TECHNICAL DATA

- **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 that 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

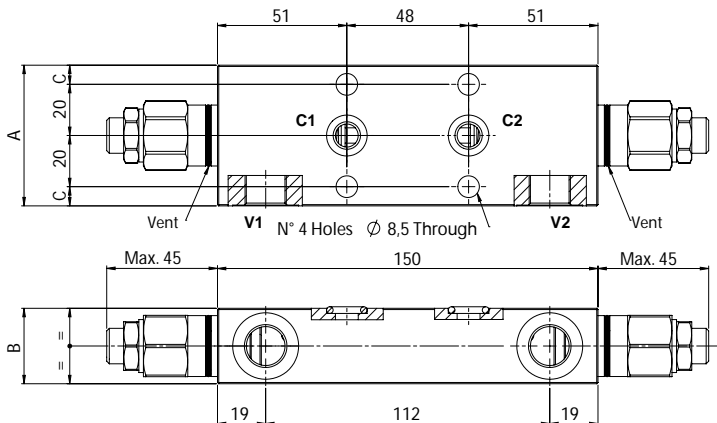
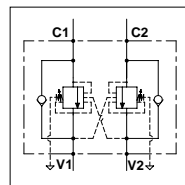
Adjustment if Required:
- Omit if not required
- Value

WODFC 60 - 2F

TECHNICAL DATA

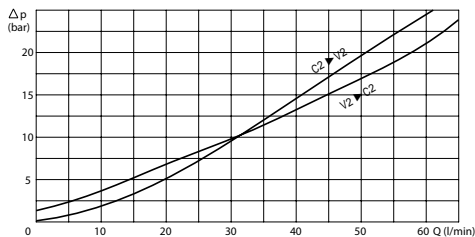
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Materials:** Steel Body
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Weight:** See Table

- **Note:** - Pressure setting must be 30 % higher than 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:

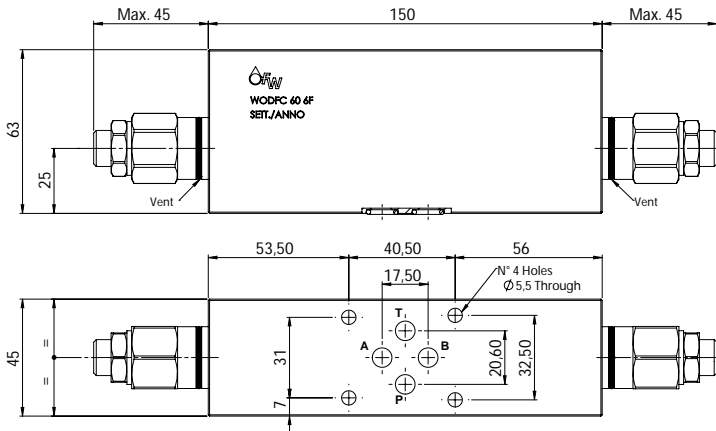
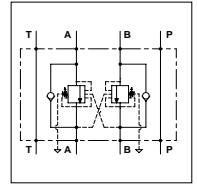
- Omit if not required
- Value

WODFC 60 6F

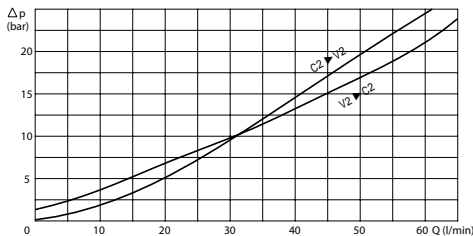
TECHNICAL DATA

- 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

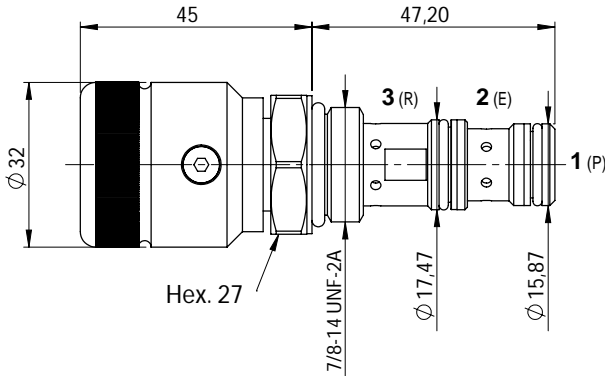
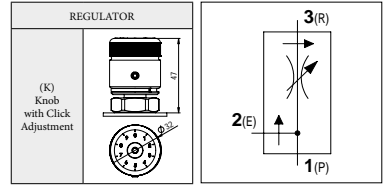


COMPENSATED FLOW CONTROL VALVES
VALVOLE REGOLATRICI DI FLUSSO COMPENSATE

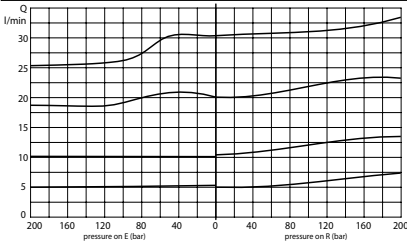
WPR C 50

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



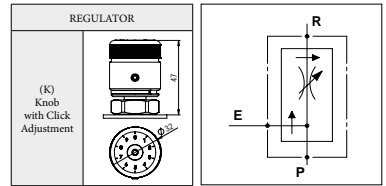
Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

WPR C 50

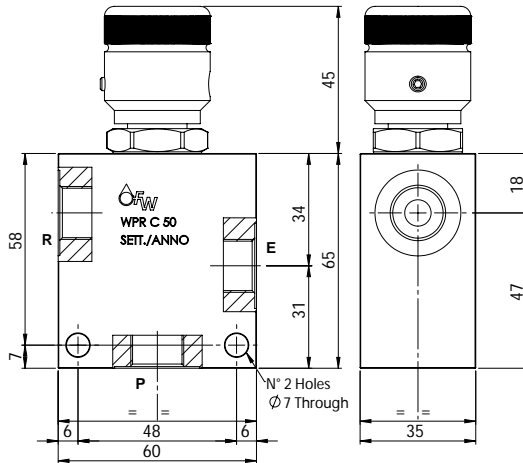
TECHNICAL DATA

- **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

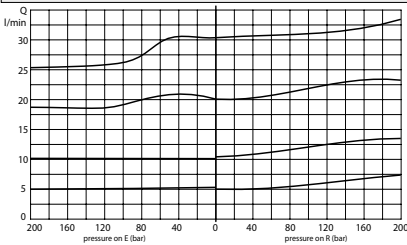


PORTS

| | | |
|-----------|-----|-----|
| P - E - R | 3/8 | 1/2 |
|-----------|-----|-----|



COMPENSATION CURVES



ORDERING CODE

WPR

C

50

Ports Size:

- 3/8
- 1/2

Material Body:

- Omit if aluminium
- S = Steel

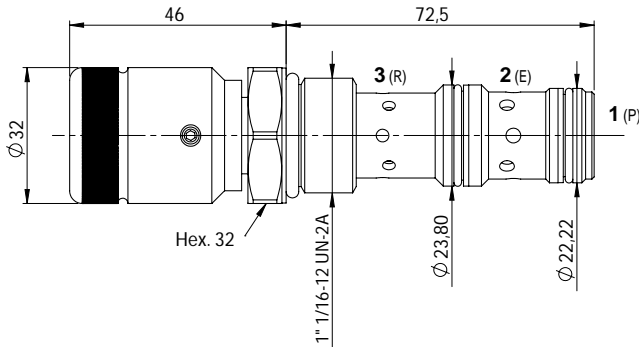
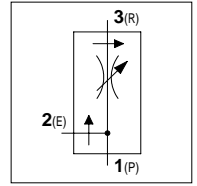
Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

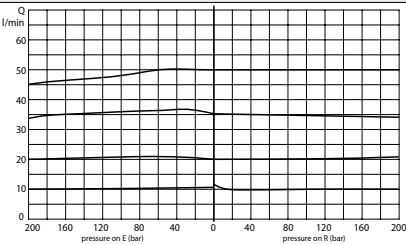
WPR C 90

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

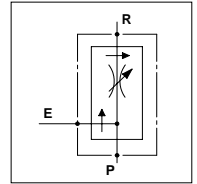
C

90

WPR C 90

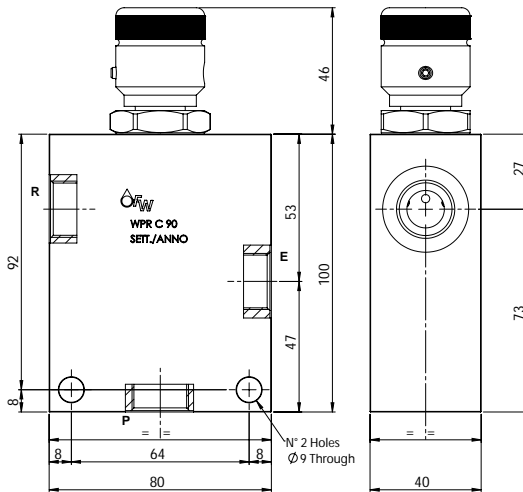
TECHNICAL DATA

- **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

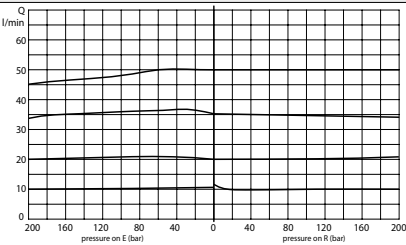


PORTS

| | | |
|-----------|-----|-----|
| P - E - R | 1/2 | 3/4 |
|-----------|-----|-----|



COMPENSATION CURVES



ORDERING CODE

WPR

C

90

Ports Size:

- 1/2
- 3/4

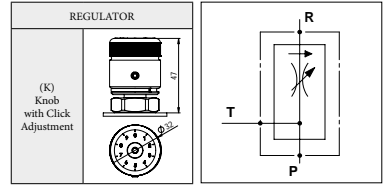
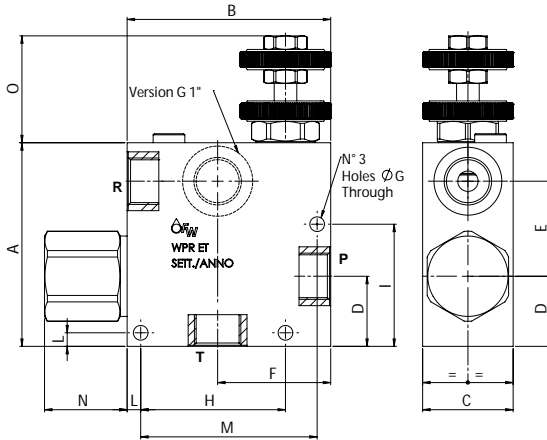
Material Body:

- Omit if aluminium
- S = Steel

WPR ET

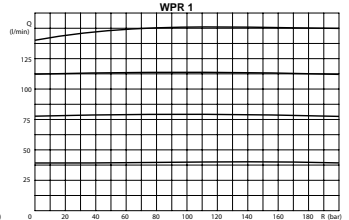
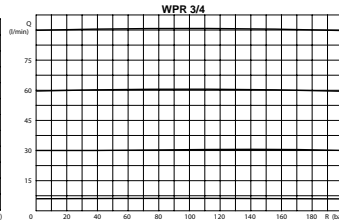
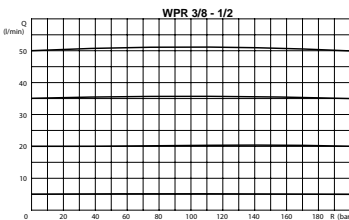
TECHNICAL DATA

- 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

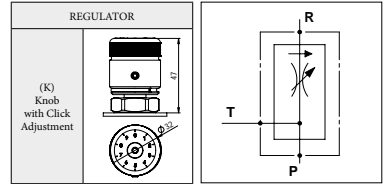
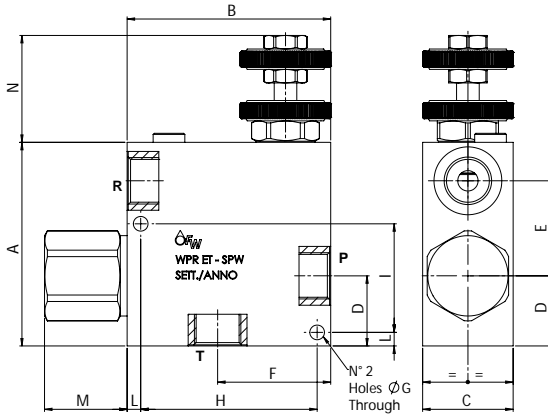
Type of Regulator (only for 3/8 and 1/2):

- Omit if standard
- K = Knob with click adjustment

WPR ET - SPW

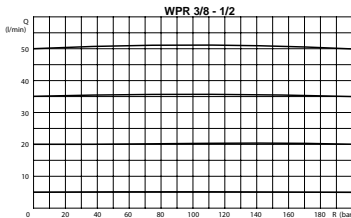
TECHNICAL DATA

- 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

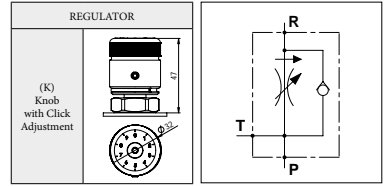
Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

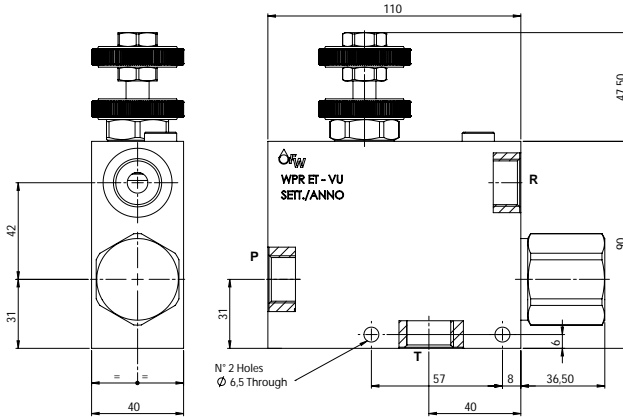
WPR ET - VU

TECHNICAL DATA

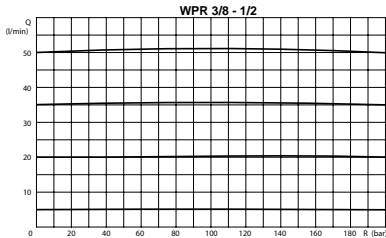
- Flow:** G 3/8: 50 l/min with 30 l/min in R
G 1/2: 90 l/min with 50 l/min in R
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Exceeding Flow to Tank
- Note:** Handwheel in Aluminium Black Anodized
- Optional RF:** Fine Adjustment Reduces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



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



COMPENSATION CURVES



ORDERING CODE



Ports Size:

- 3/8
- 1/2

Material Body:

- Omit if aluminium
- S = Steel

Type of Setting:

- Omit if standard
- RF = Fine Adjustment

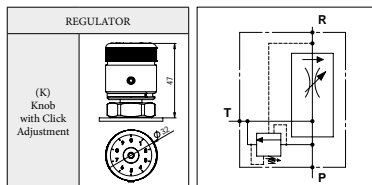
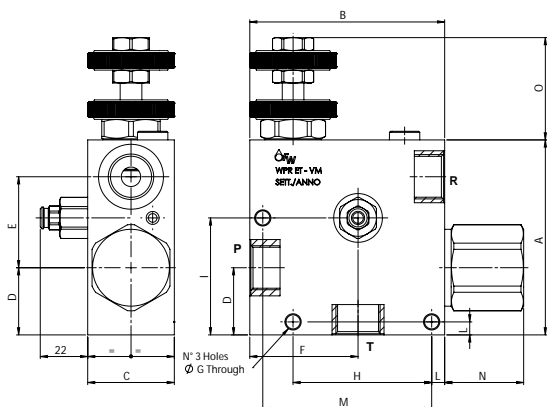
Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

WPR ET - VM

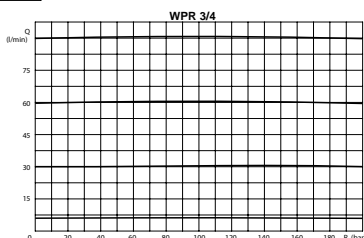
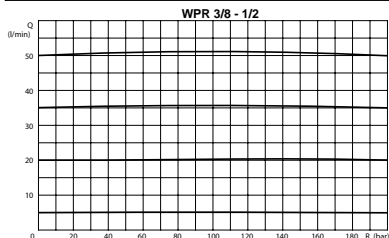
TECHNICAL DATA

- 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

WPR

ET

VM

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

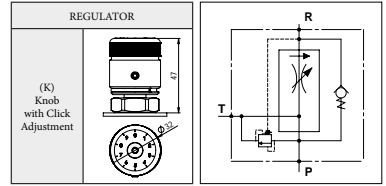
Type of Regulator (only 3/8 and 1/2):

- Omit if standard
- K = Knob with click adjustment

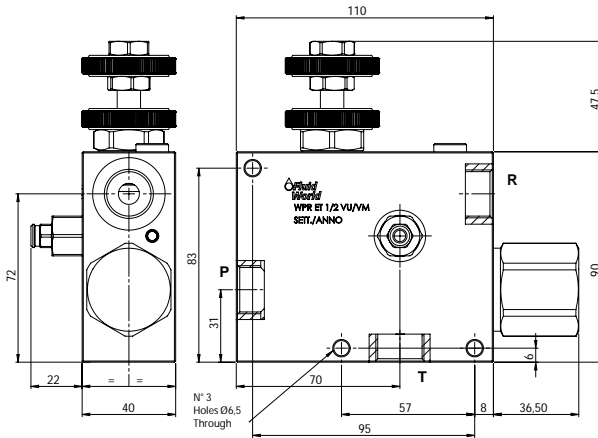
WPR ET - VU/VM

TECHNICAL DATA

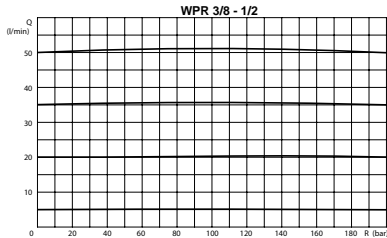
- Flow:** G 3/8: 50 l/min with 30 l/min in R
G 1/2: 90 l/min with 50 l/min in R
- Max working pressure:** 250 bar (350 bar)
- Materials:** Aluminium Body (Steel body if required)
- Version:** Exceeding Flow to Tank
- Note:** Handwheel in Aluminium Black Anodized
WMD 5 with Spring 25 (range 100-250)
- 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



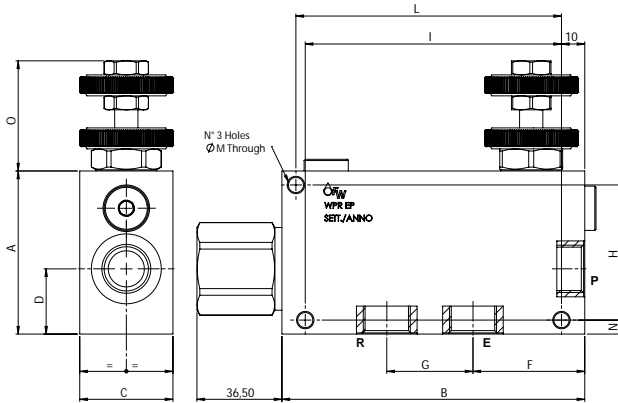
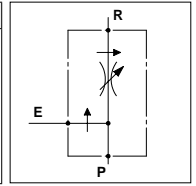
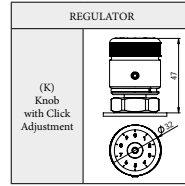
ORDERING CODE

| | | | | | | | |
|--------------------|-----------------------------------|------------------------------------|--|--|--|--|--|
| WPR | ET | | VU/VM | | | | |
| Ports Size: | Adjustment if Required: | Material Body: | Type of Setting: | Type of Regulator: | | | |
| - 3/8 - 1/2 | - Omit if not required - Value | - Omit if aluminium - S = Steel | - Omit if standard - RF = Fine Adjustment | - Omit if standard - K = Knob with click adjustment | | | |

WPR EP

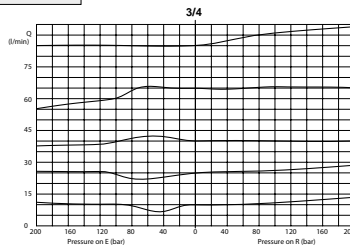
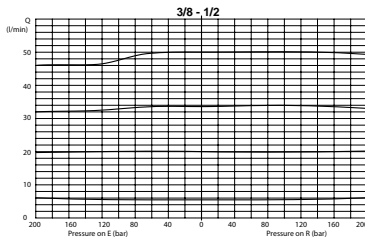
TECHNICAL DATA

- 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

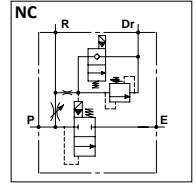
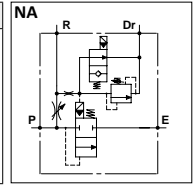
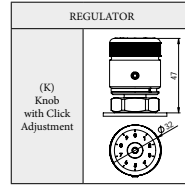
Type of Regulator
(only for 3/8 and 1/2):

- Omit if standard
- K = Knob with click adjustment

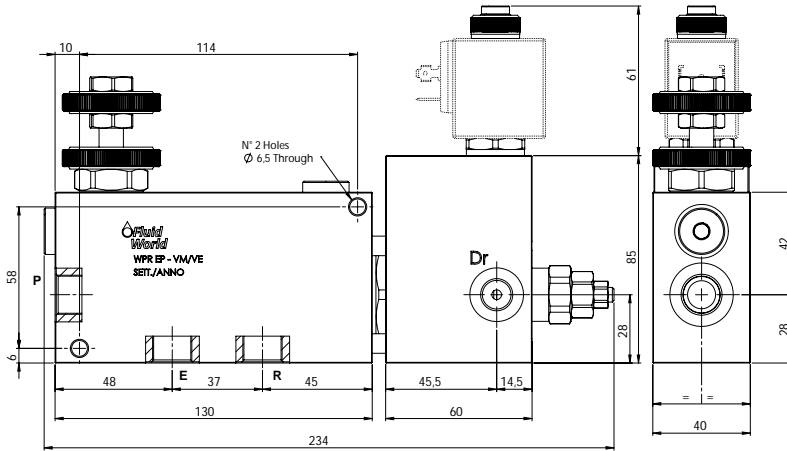
WPR EP - VM/VE

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)

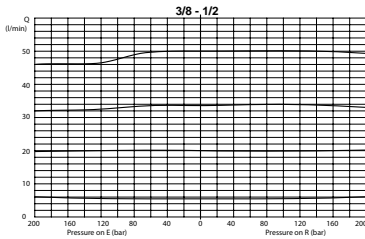


| PORTS | | |
|-----------|-----|-----|
| P - R - E | 3/8 | 1/2 |
| Dr | 1/4 | |



| 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

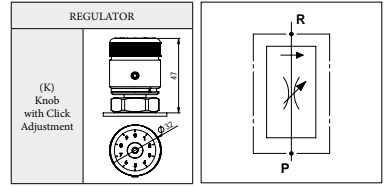
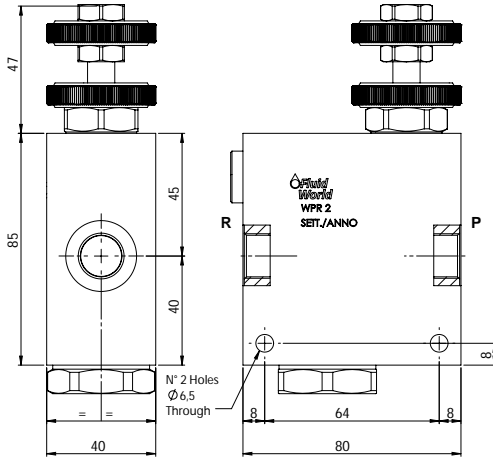


- | | | | | | | | |
|--------------------------------------|--|---|--|--|--|--|---|
| Ports Size: - 3/8 - 1/2 | Spring Pressure Relief Valve: - Omit if not required - VM05 - VM20 - VM35 | Adjustment if Required: - Omit if not required - Value - Value with X | Solenoid Valve: - Omit if not required -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

WPR 2

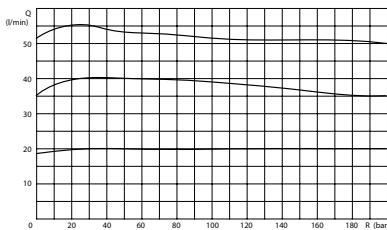
TECHNICAL DATA

- 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

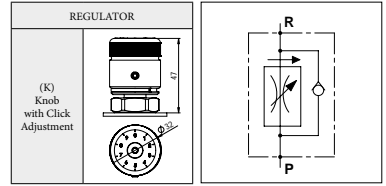
Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

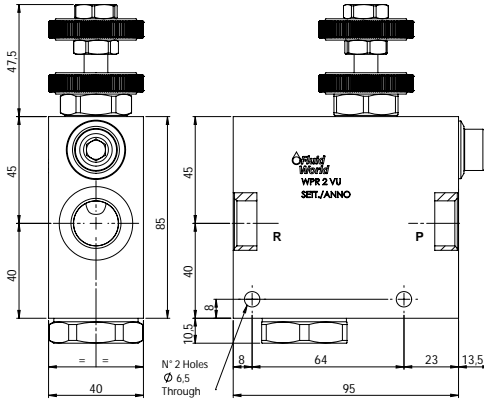
WPR 2 VU

TECHNICAL DATA

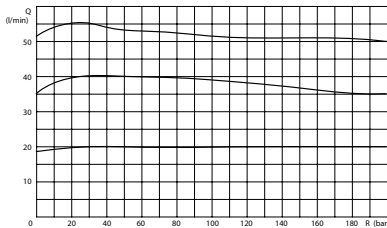
- Flow:** G 3/8: Max inlet 30 l/min in P
G 1/2: Max inlet 50 l/min in P
- Max working pressure:** 250 bar
- Materials:** Aluminium Body
- Note:** Handwheel in Aluminium Black Anodized
- Weight:** 1,100 kg



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



COMPENSATION CURVES



ORDERING CODE

WPR

2

VU

Ports Size:

- 3/8
- 1/2

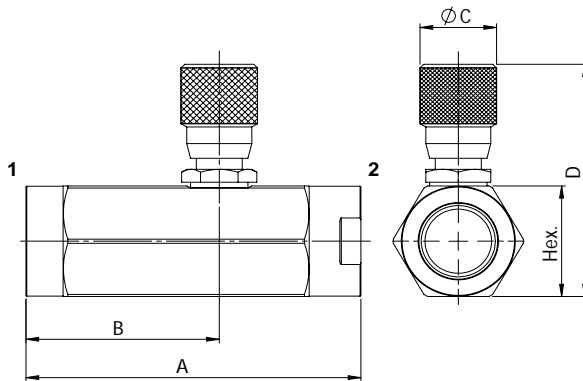
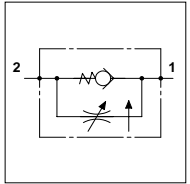
Type of Regulator:

- Omit if standard
- K = Knob with click adjustment

WRCU

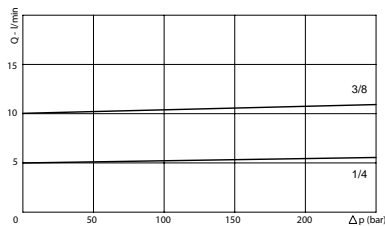
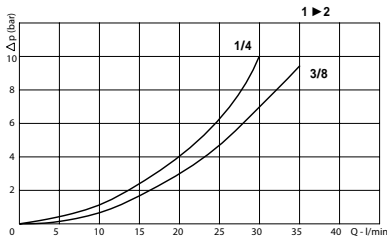
TECHNICAL DATA

- **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

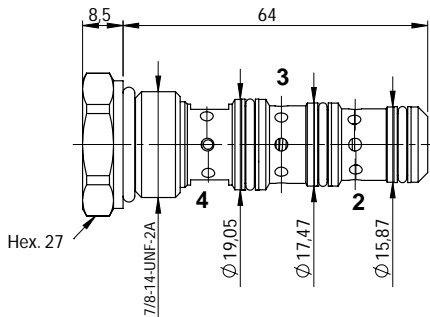
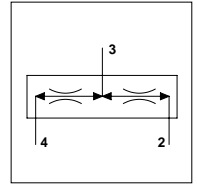


FLOW DIVIDER/COMBINER VALVES
VALVOLE DIVISORI/RIUNIFICATORI DI FLUSSO

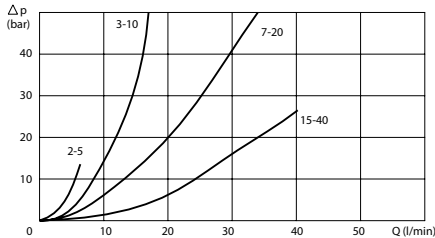
WDF A S10

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

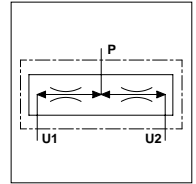
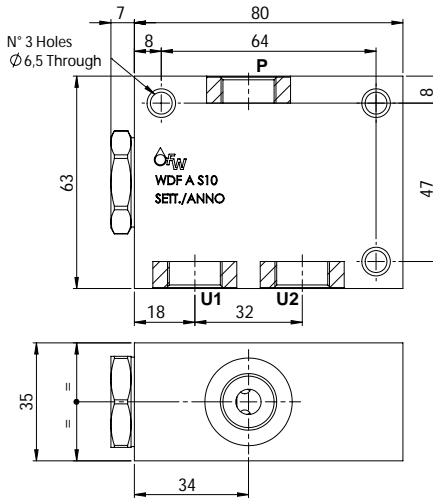
Flow Range:

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

WDF A S10

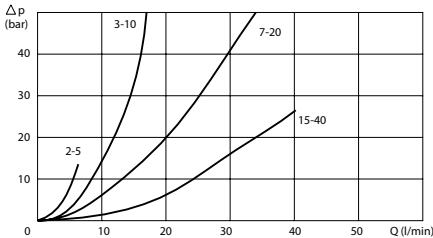
TECHNICAL DATA

- **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

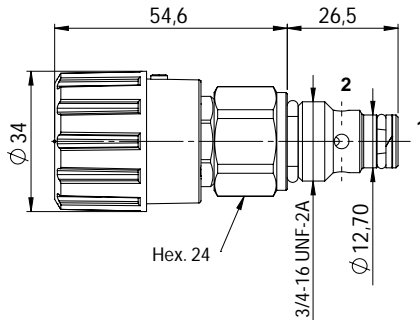
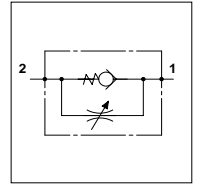


FLOW CONTROL VALVES
VALVOLE REGOLATRICI DI FLUSSO

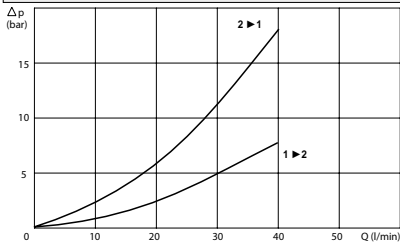
WFU C S08

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

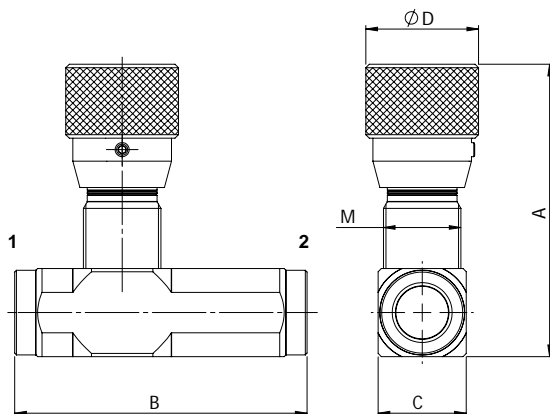
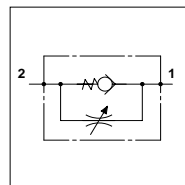
S08

V

WFU

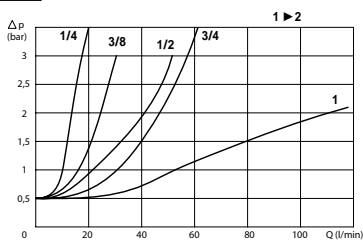
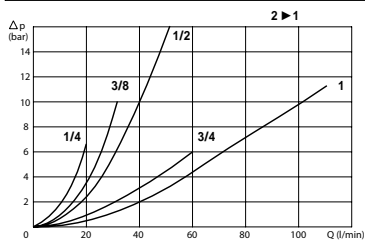
TECHNICAL DATA

- **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

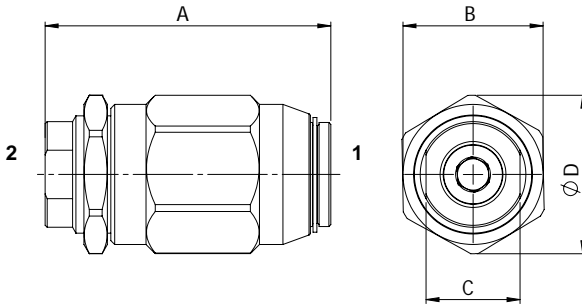
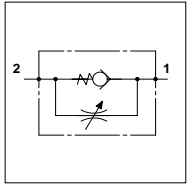
Ports Size:

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

WFU M

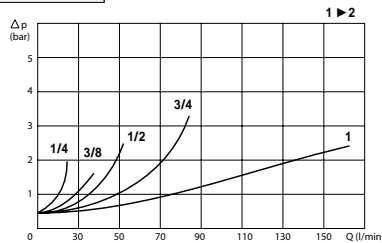
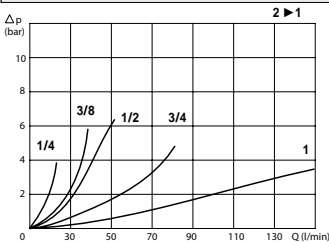
TECHNICAL DATA

- **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

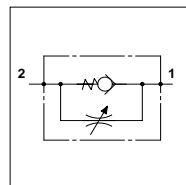
Ports Size:

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

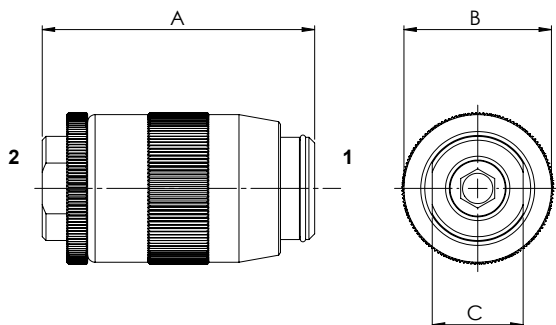
WFU M - SPFP

TECHNICAL DATA

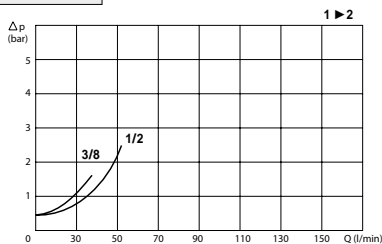
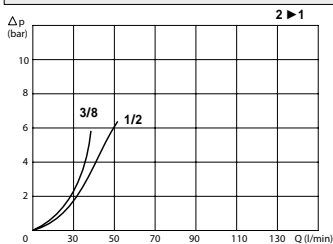
- **Flow:** See table
- **Max working pressure:** See table
- **Cracking pressure:** 0,5 bar
- **Materials:** Steel Body
- **Weight:** See table



| 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

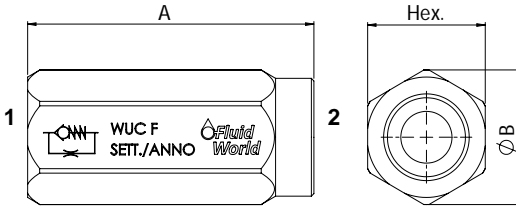
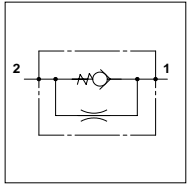
Ports Size:

- 3/8
- 1/2

WUC F

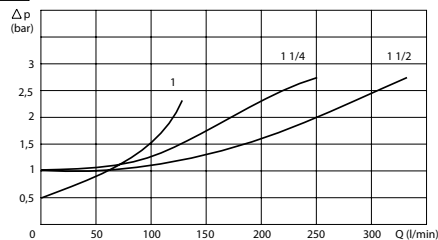
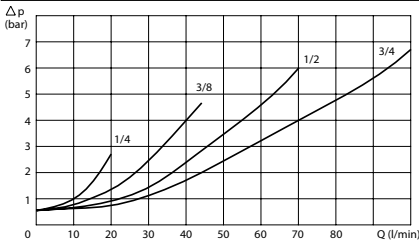
TECHNICAL DATA

- **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 |
| 4 | 4 |
| 8 | 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

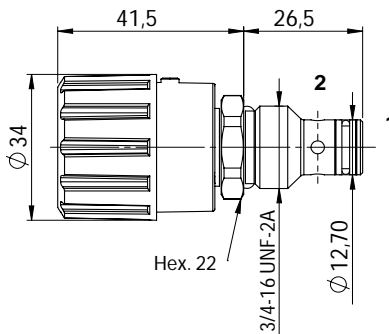
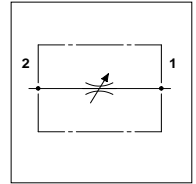
Throttling Hole:

- Value

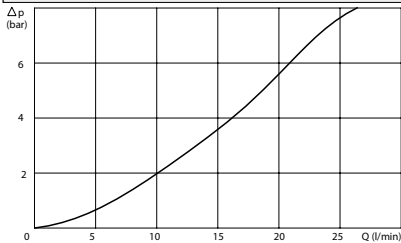
WFB C S08

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

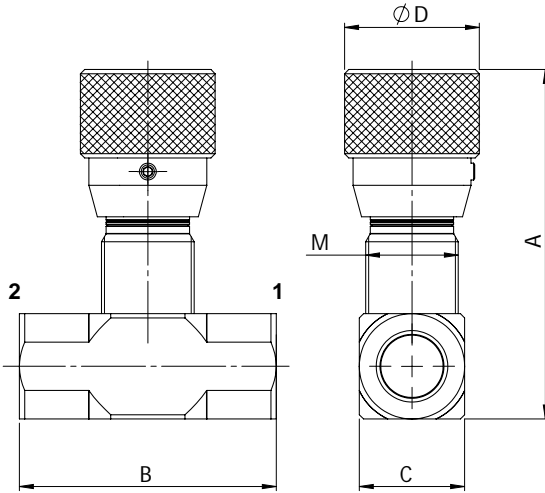
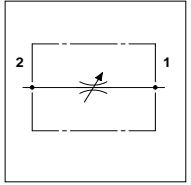
S08

V

WFB

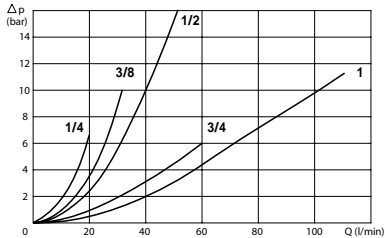
TECHNICAL DATA

- **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



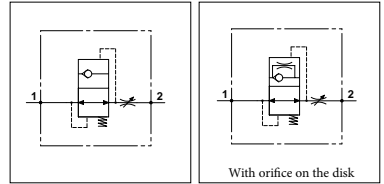
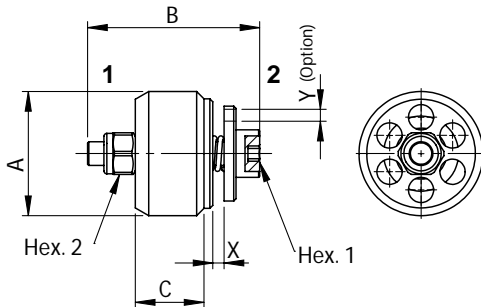


HOSE BURST VALVES
VALVOLE PARACADUTE

WHB

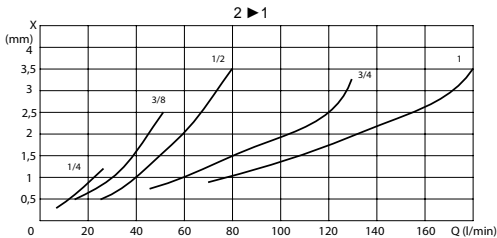
TECHNICAL DATA

- **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

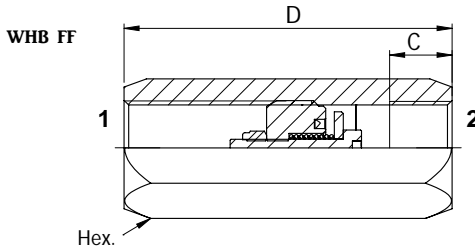
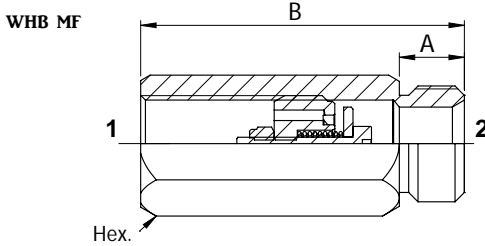
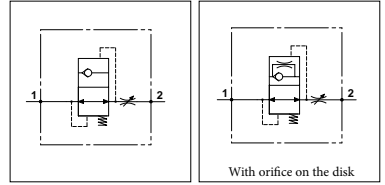
Y Orifice:

- Omit if not required
- Value in mm

WHB

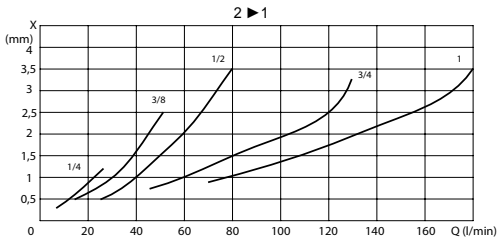
TECHNICAL DATA

- **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

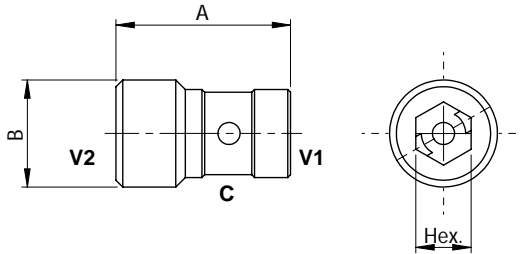
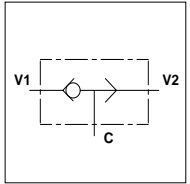


SHUTTLE VALVES
VALVOLE SELETTTRICI

WS I

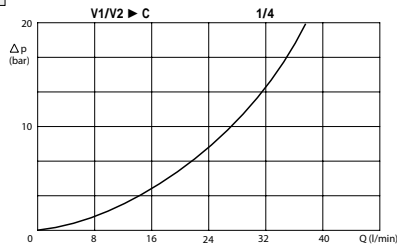
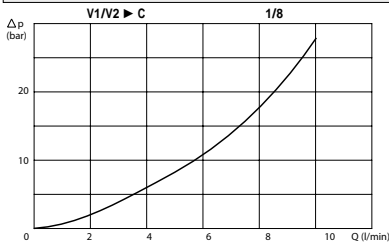
TECHNICAL DATA

- **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

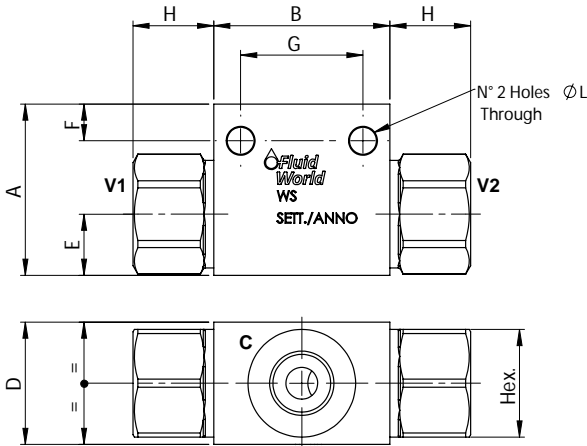
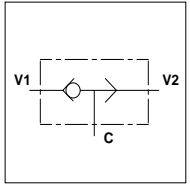
I

Ports Size:
- 1/8
- 1/4

WS

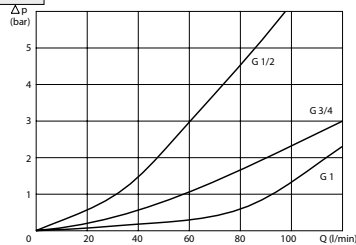
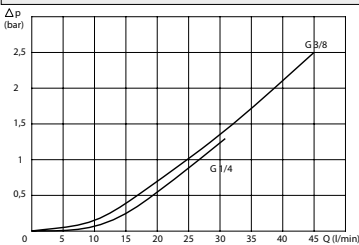
TECHNICAL DATA

- **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

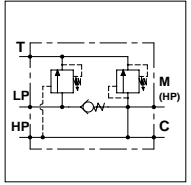
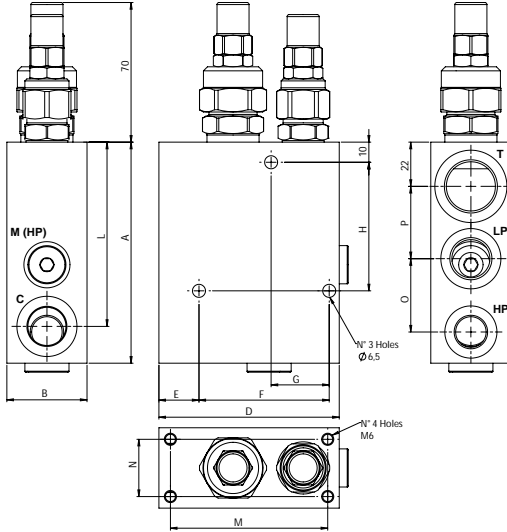


HIGH LOW UNLOADING VALVES
VALVOLA ESCLUSIONE POMPA DOPPIA

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



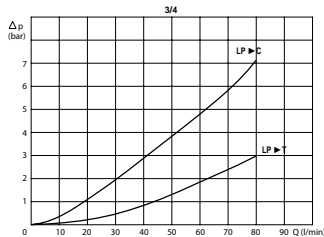
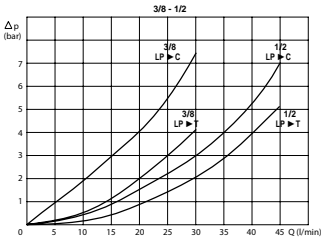
PORTS

| | 3/8 | 1/2 | 3/4 |
|--------|-----|-----|-----|
| C - LP | | | |
| HP | 1/4 | 3/8 | 1/2 |
| T | 1/2 | 3/4 | 1 |

DIMENSIONS

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

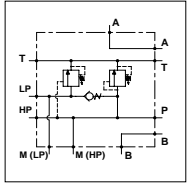
HP - Spring:

- 20
- 30

WEPD 6F

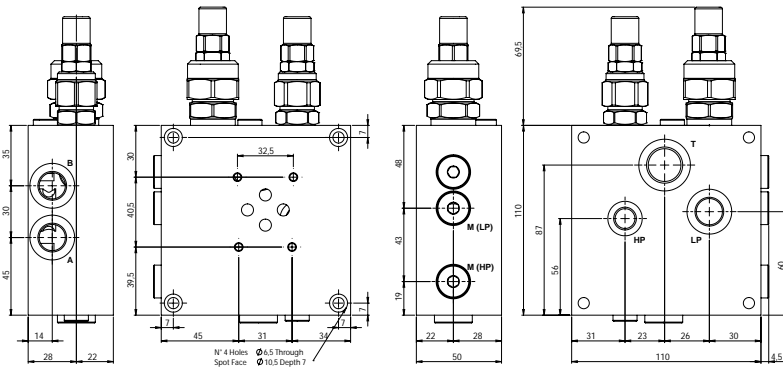
TECHNICAL DATA

- **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

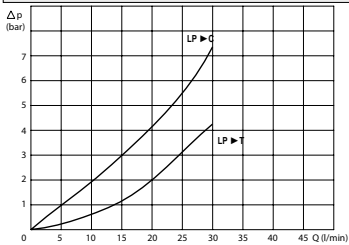


PORTS

| | |
|-------|-----|
| 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

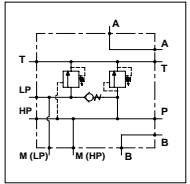
LP - Spring:
- 10 = 5-50
- 20 = 20-260

HP - Spring:
- 20 = 40-210
- 30 = 100-350

WEPD 10F

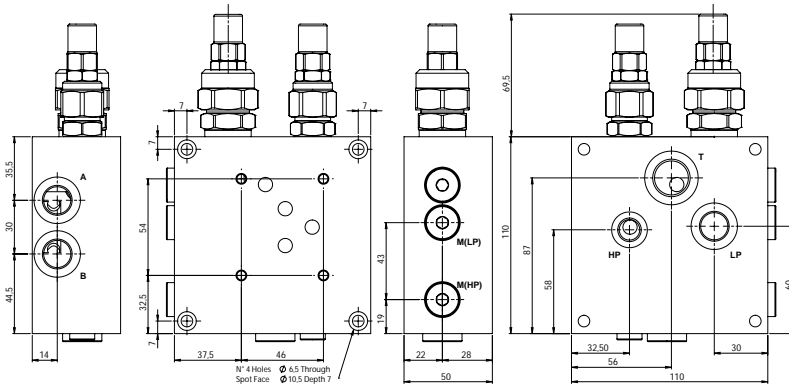
TECHNICAL DATA

- **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

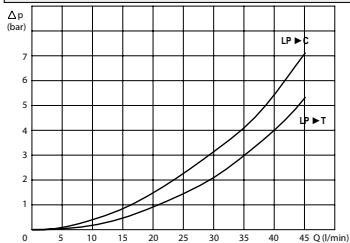


PORTS

| | |
|-------|-----|
| 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



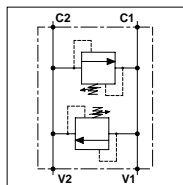


VALVES FLANGED ON MOTORS
VALVOLE FLANGIATE SU MOTORI

WMD FDB OMM 25

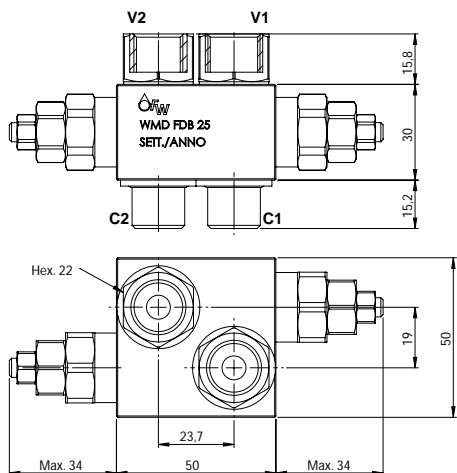
TECHNICAL DATA

- **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 | |

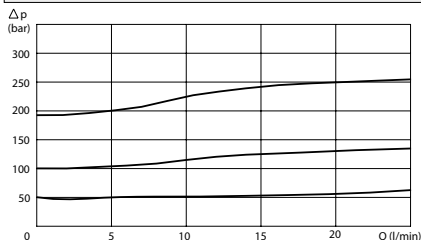


OPTION

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

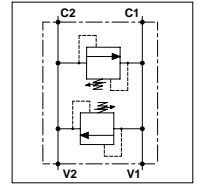
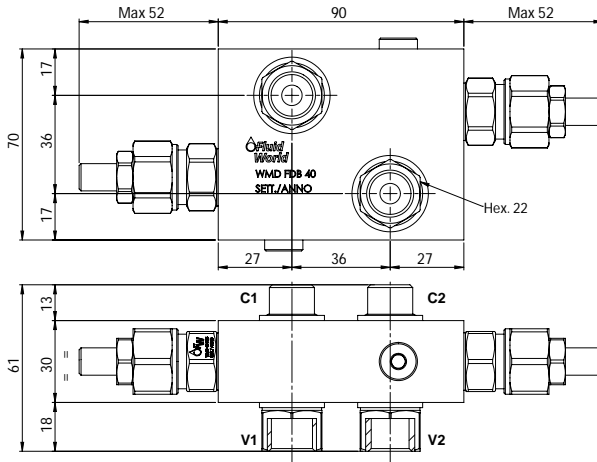
Adjustment if Required:

- 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



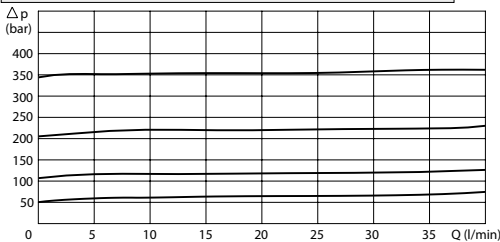
PORTS

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

REGULATOR

| | |
|-------------------------|--|
| (S) Screw | |
| (V) Handknob | |
| 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

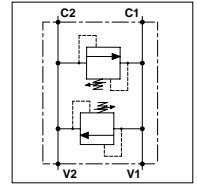
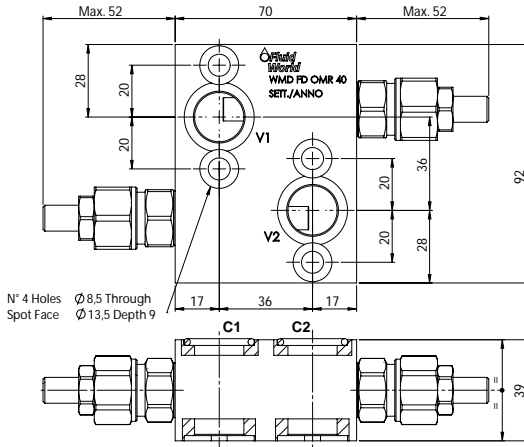
WMD FDB OMR 40

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

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)



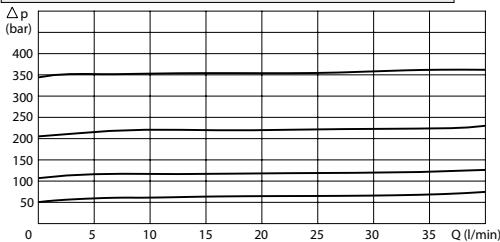
PORTS

| | |
|---------|-----|
| C1 - C2 | ø19 |
| V1 - V2 | 1/2 |

REGULATOR

| | |
|--------------------------------------|---|
| (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

FD

OMR

40

1/2

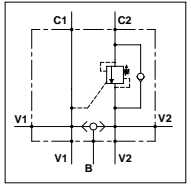


- Material Body:**
- Omit if aluminium
 - S = Steel
- Type of Regulator:**
- S = Screw
 - V = Handknob
- Springs:**
- 05
 - 10
 - 20
 - 35
- Adjustment if Required:**
- Omit if not required
 - Value
 - Value with X

WOS FD OMR 60 - DL

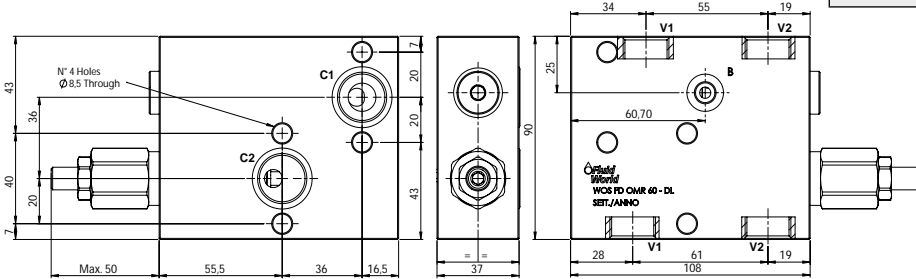
TECHNICAL DATA

- **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)

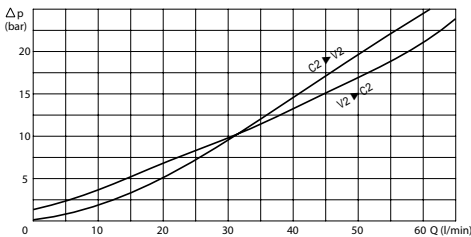


PORTS

| | |
|---------|------|
| 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

WOS

FD

OMR

60

1/2

DL

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

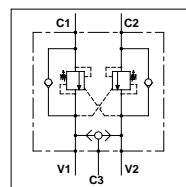
Adjustment if Required:

- Omit if not required
- Value

WOD FD OMR 60

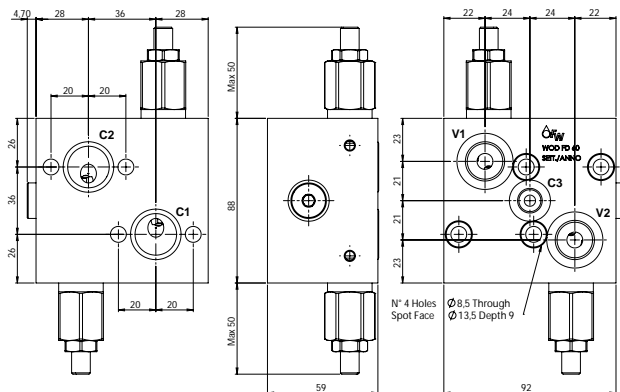
TECHNICAL DATA

- **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)

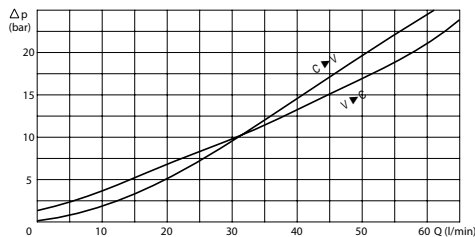


PORTS

| | | |
|---------|------|-----|
| 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

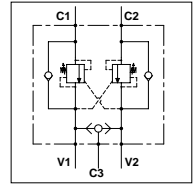
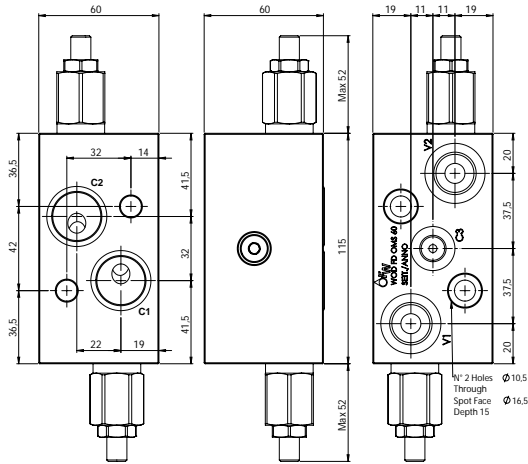
Adjustment if Required:

- Omit if not required
- Value

WOD FD OMS 60

TECHNICAL DATA

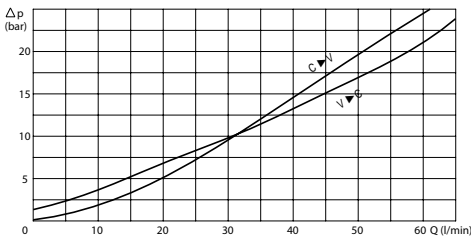
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Note:** Flangeable on Danfoss motors OMS/T/V
- **Weight:** 1,350 kg (3,050 kg)



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

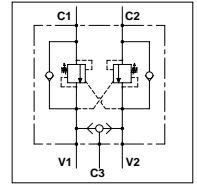
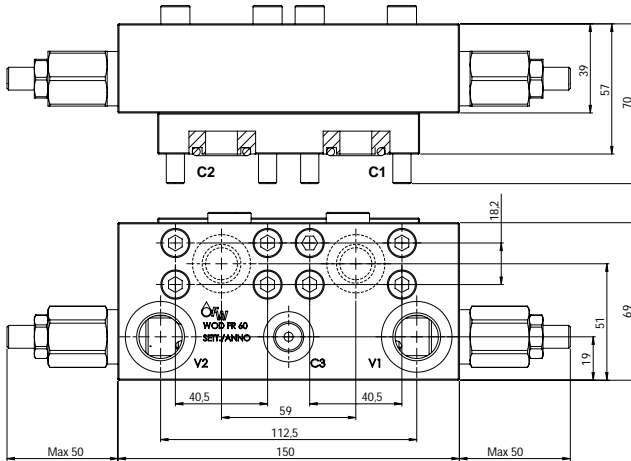
Adjustment if Required:

- Omit if not required
- Value

WOD FR 60

TECHNICAL DATA

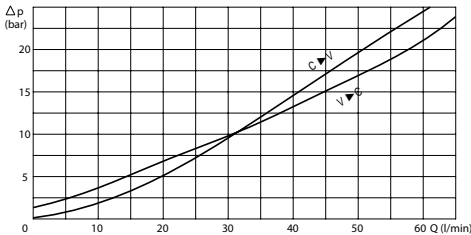
- **Flow:** 60 l/min
- **Max setting pressure:** 350 bar
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Pilot ratio:** 4:1 (if request 1:1; 8:1; 11:1)
- **Note:** Flangeable on Rexroth motors A2FE 28-32
Included Screw M8
- **Weight:** 1,850 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

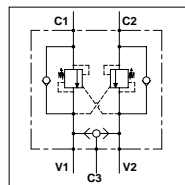
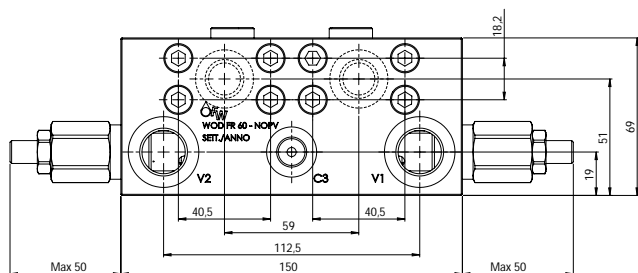
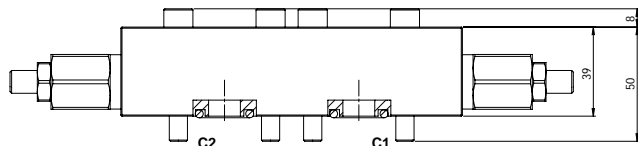
Adjustment if Required:

- Omit if not required
- Value

WOD FR 60 - NOPV

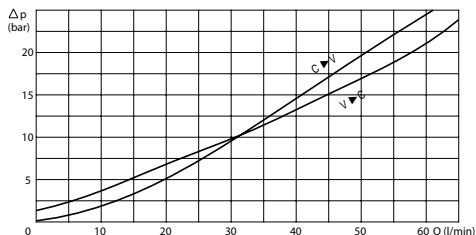
TECHNICAL DATA

- **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 |
| 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



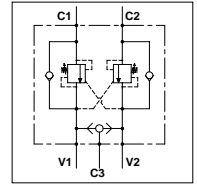
Adjustment if Required:

- Omit if not required
- Value

WOD FM 60

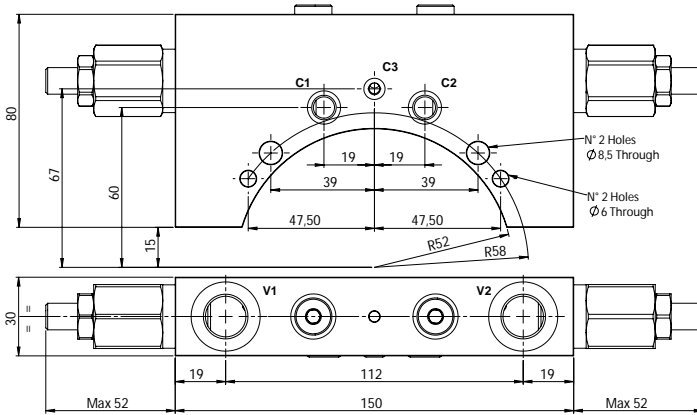
TECHNICAL DATA

- **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)

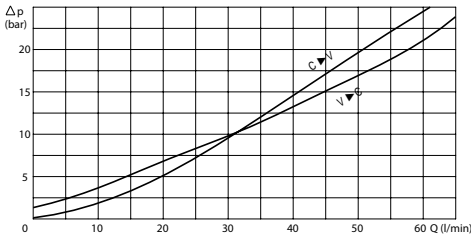


PORTS

| | |
|---------|-----|
| 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

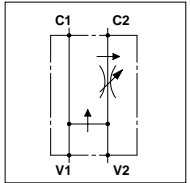
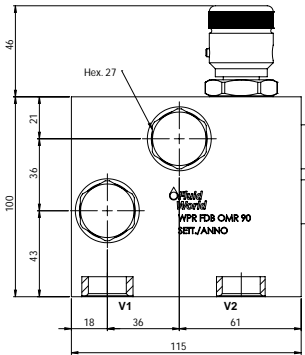
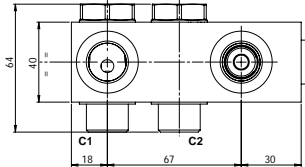
Adjustment if Required:

- Omit if not required
- Value

WPR FDB OMR 90

TECHNICAL DATA

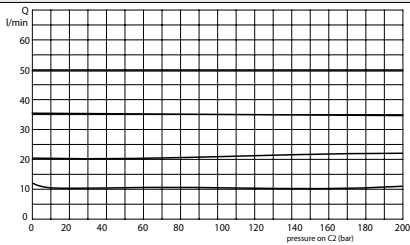
- **Flow:** 90 l/min with 50 l/min in C2
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Note:** Flangeable on Danfoss motors OMP/R/H
- **Weight:** 1,650 kg (3,470 kg)



PORTS

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

PRESSURE DROP CURVES



ORDERING CODE

WPR

FDB

OMR

90

1/2

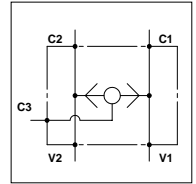
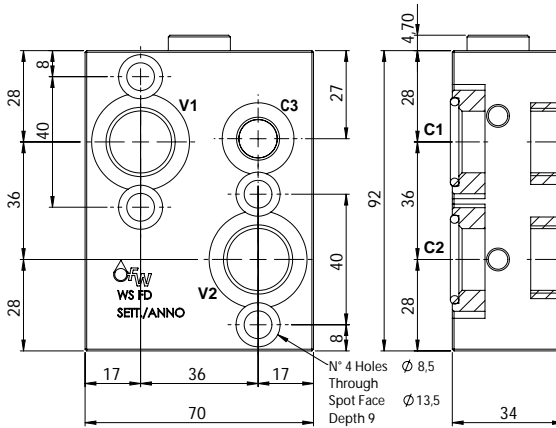
Material Body:

- 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 | $\varnothing 19$ |

ORDERING CODE

WS

FD

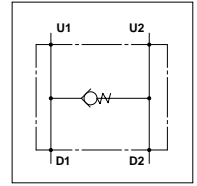
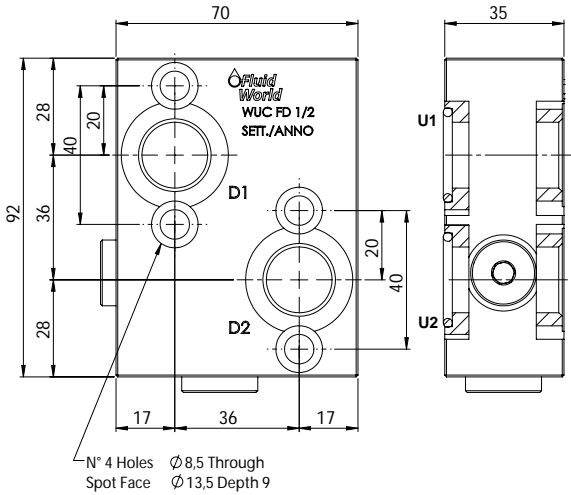
OMR

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

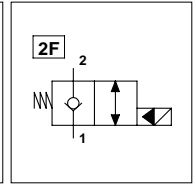
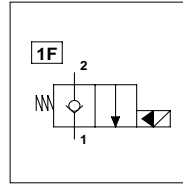
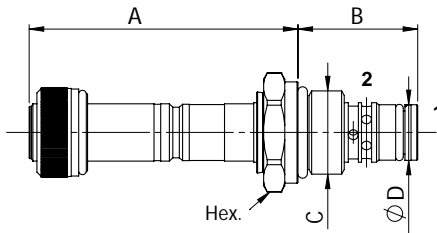


SOLENOID OPERATED VALVES
VALVOLE ELETTRICHE

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



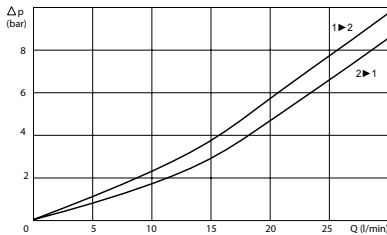
PORTS

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

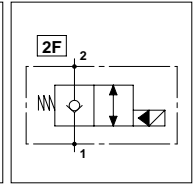
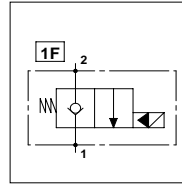
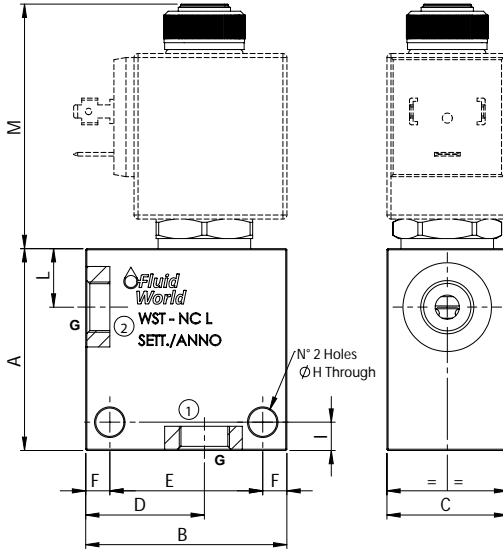
Type of Scheme:
- Omit for scheme 1F
- 2F = Scheme 2F

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

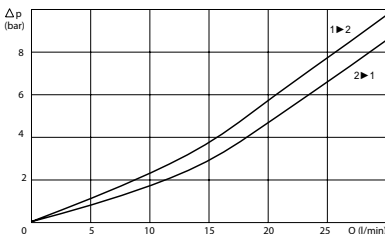
1/4

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

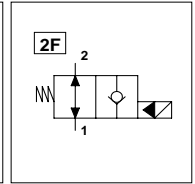
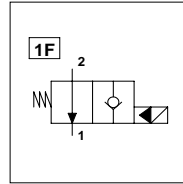
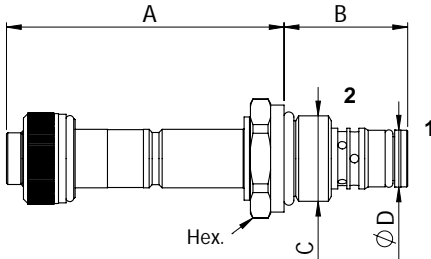
Rated Voltage Coil:

- 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



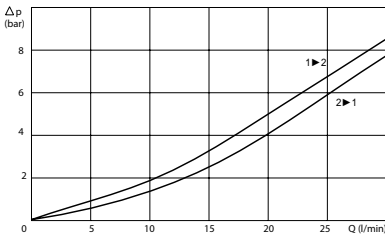
PORTS

Size S08

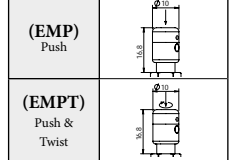
DIMENSIONS

| | |
|------|-----------|
| 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

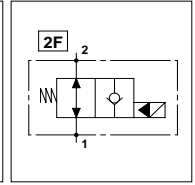
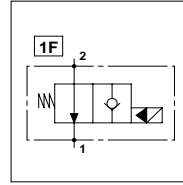
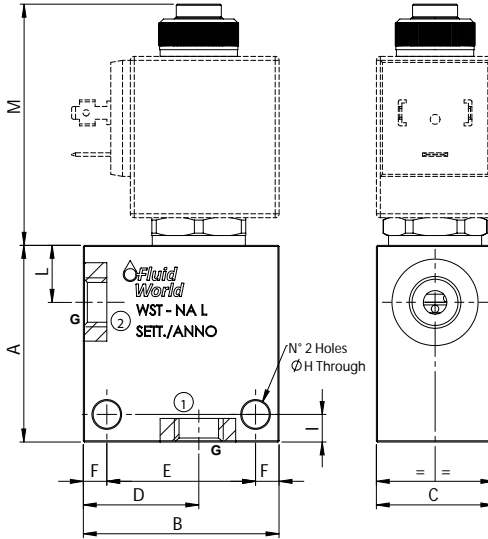
Type of Scheme:
 - Omit for scheme 1F
 - 2F = Scheme 2F

Manual Override:
 - Omit if not required
 - EMP = Push
 - EMPT = Push & Twist

WST S08 NA - L

TECHNICAL DATA

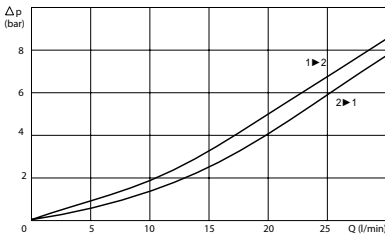
- **Flow:** 30 l/min
- **Max working pressure:** 250 bar (300 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Poppet Type - Pilot Acting
- **Note:** 18W coil on the page 289



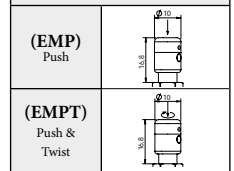
PORTS

| | |
|------------|------|
| 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



ORDERING CODE



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

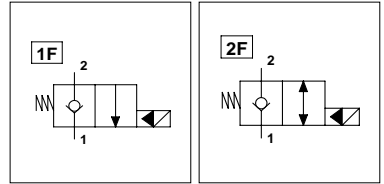
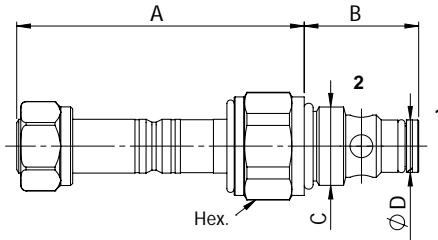
Rated Voltage Coil:

- Omit if not required
- 12
- 24

WST - NC

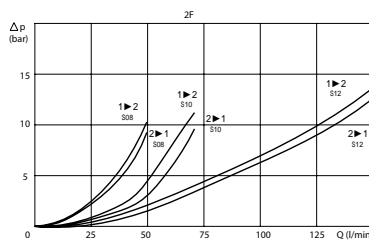
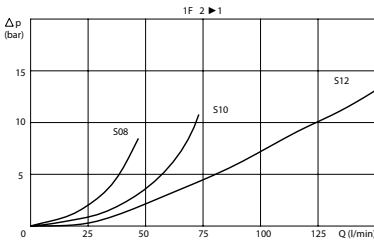
TECHNICAL DATA

- **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

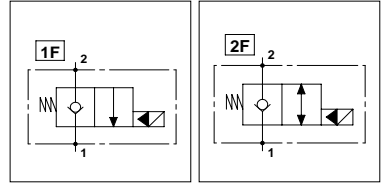
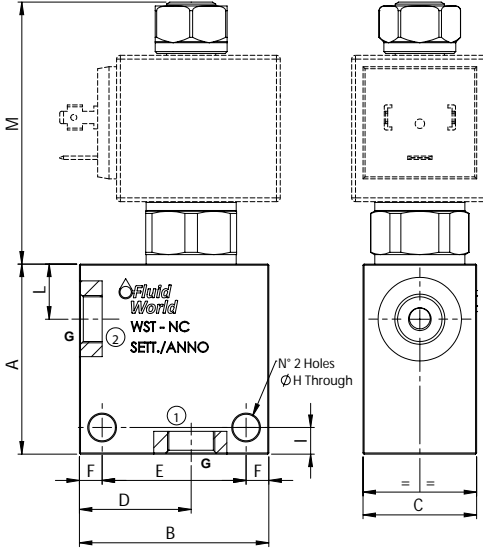
Manual Override:

- Omit if not required
- EMS = Screw

WST - NC

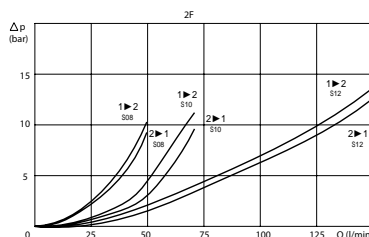
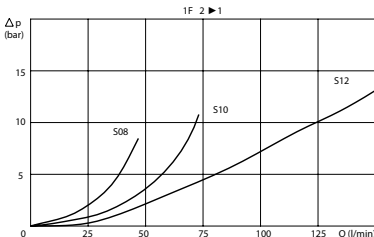
TECHNICAL DATA

- **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



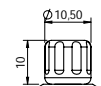
| PORTS | | | | |
|------------------|------------|------------|------------|------|
| Size | S08 | S10 | S12 | |
| G | 1/4 | 1/2 | 3/4 | 1 |
| | 3/8 | | | |
| DIMENSIONS | | | | |
| A | 50 | 56 | 70 | 80 |
| B | 50 | 60 | 70 | 80 |
| C | 30 | 35 | 40 | 50 |
| D | 30 | 35 | 40 | 46 |
| E | 38 | 48 | 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

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

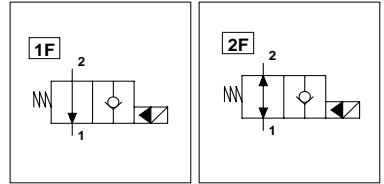
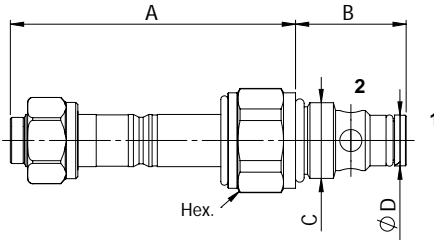
Rated Voltage

- Omit if not required
- 12
- 24

WST - NA

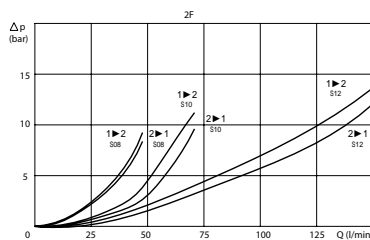
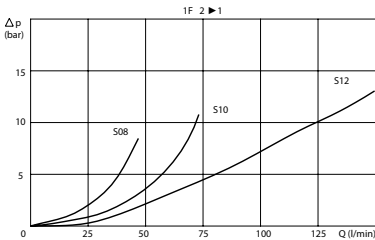
TECHNICAL DATA

- **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

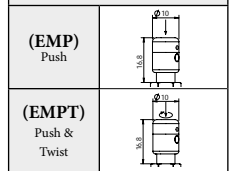


| PORTS | | | |
|--------------------------|-----------|-----------|--------------|
| Size | S08 | S10 | S12 |
| DIMENSIONS | | | |
| A | 71,2 | 68,8 | 65,8 |
| B | 27,6 | 32 | 46 |
| C | 3/4-16UNF | 7/8-14UNF | 1 1/16-12UNF |
| D | 12,7 | 15,8 | 22,2 |
| Hex. | 24 | 27 | 32 |
| Max Flow (l/min) | 40 | 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

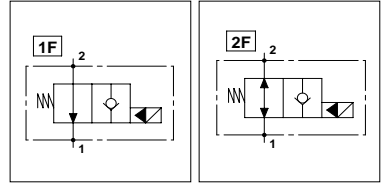
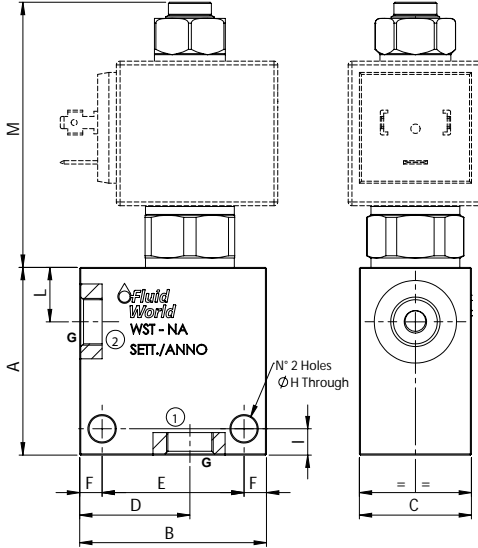
Manual Override:

- Omit if not required
- EMP = Push
- EMPT = Push & Twist

WST - NA

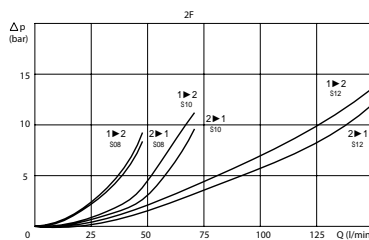
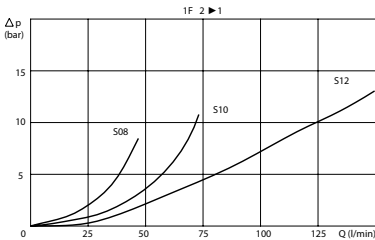
TECHNICAL DATA

- **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



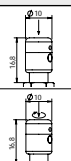
| PORTS | | | | |
|------------------|------|------|------|------|
| Size | S08 | S10 | S12 | |
| G | 1/4 | 1/2 | 3/4 | 1 |
| | 3/8 | | | |
| DIMENSIONS | | | | |
| A | 50 | 56 | 70 | 80 |
| B | 50 | 60 | 70 | 80 |
| C | 30 | 35 | 40 | 50 |
| D | 30 | 35 | 40 | 46 |
| E | 38 | 48 | 54 | 60 |
| F | 6 | 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

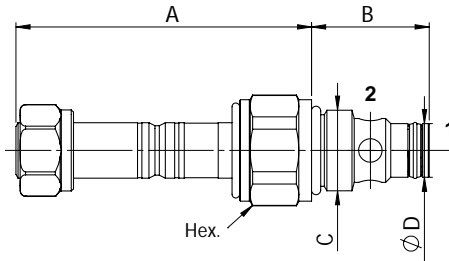
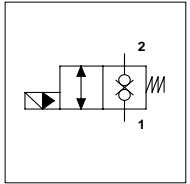
Rated Voltage Coil:

- Omit if not required
- 12
- 24

WDT - NC

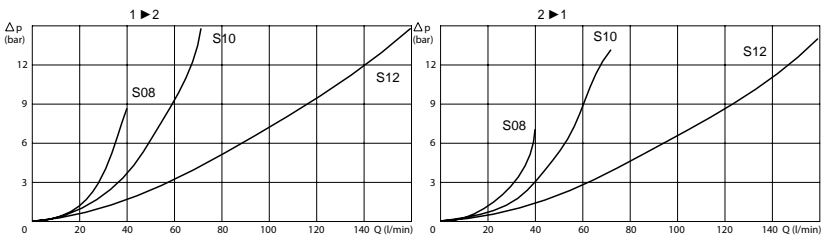
TECHNICAL DATA

- **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

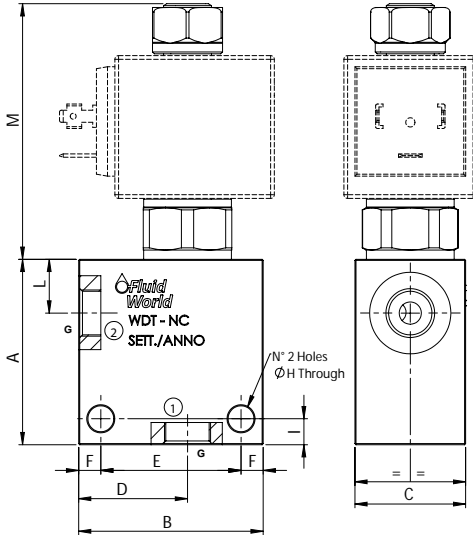
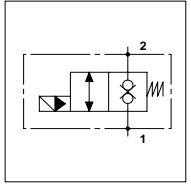
Manual Override:

- Omit if not required
- EMS = Screw

WDT - NC

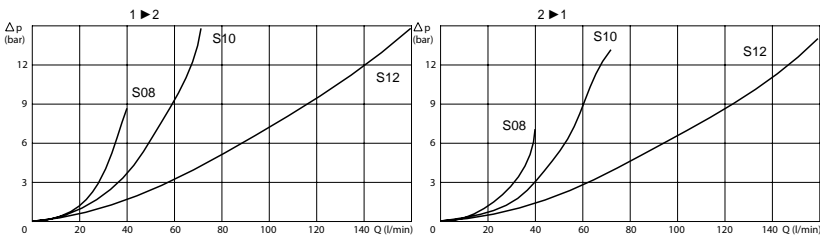
TECHNICAL DATA

- **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



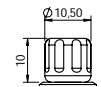
| PORTS | | | | |
|------------------|------|------|------|------|
| Size | S08 | S10 | S12 | |
| G | 1/4 | 1/2 | 3/4 | 1 |
| | 3/8 | | | |
| DIMENSIONS | | | | |
| A | 50 | 56 | 70 | 80 |
| B | 50 | 60 | 70 | 80 |
| C | 30 | 35 | 40 | 50 |
| D | 30 | 35 | 40 | 46 |
| E | 38 | 48 | 54 | 60 |
| F | 6 | 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



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

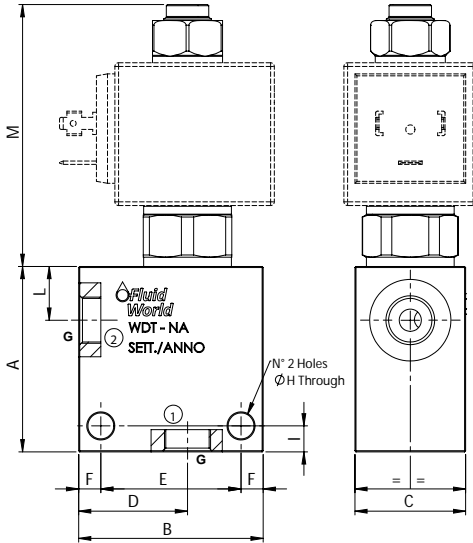
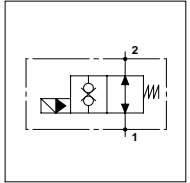
Rated Voltage Coil:

- Omit if not required
- 12
- 24

WDT - NA

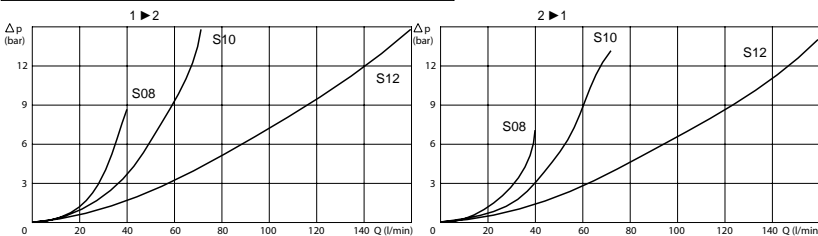
TECHNICAL DATA

- **Flow:** See table
- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Poppet Type - Pilot Acting
- **Note:** 22W coil on the page 290



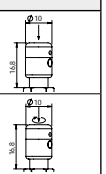
| PORTS | | | | |
|------------------|------|------|------|------|
| Size | S08 | S10 | S12 | |
| G | 1/4 | 1/2 | 3/4 | 1 |
| | 3/8 | | | |
| DIMENSIONS | | | | |
| A | 50 | 56 | 70 | 80 |
| B | 50 | 60 | 70 | 80 |
| C | 30 | 35 | 40 | 50 |
| D | 30 | 35 | 40 | 46 |
| E | 38 | 48 | 54 | 60 |
| F | 6 | 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

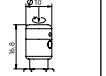


MANUAL OVERRIDE

(EMP)
Push



(EMPT)
Push &
Twist



ORDERING CODE

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

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

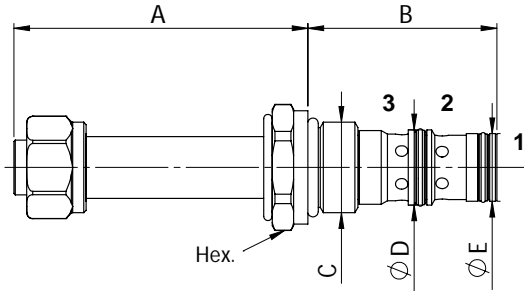
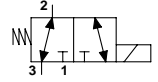
Rated Voltage Coil:

- Omit if not required
- 12
- 24

WTW - 01

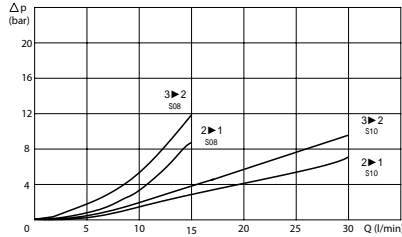
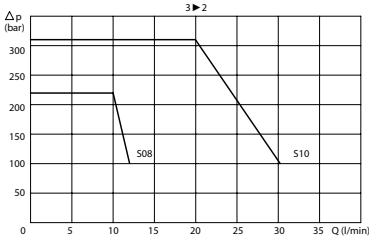
TECHNICAL DATA

- **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

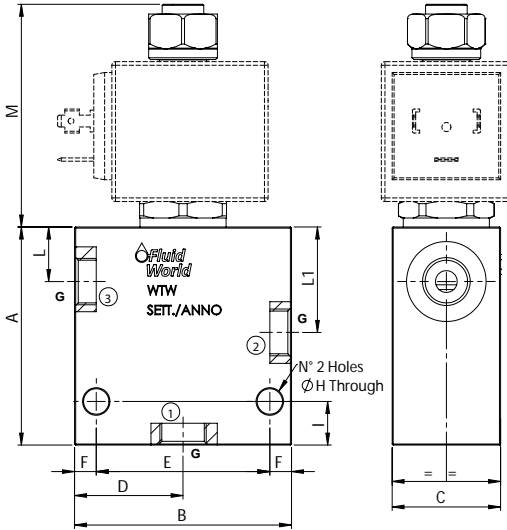
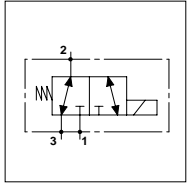
Manual Override:

- Omit if not required
- EMS = Screw

WTW - 01

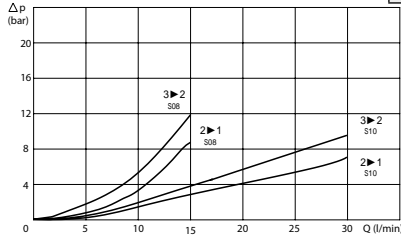
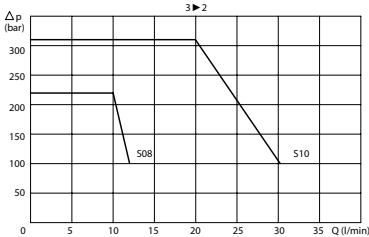
TECHNICAL DATA

- **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



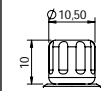
| PORTS | | |
|------------------|------------|------------|
| Size | S08 | S10 |
| G | 1/4 | 1/2 |
| | 3/8 | |
| DIMENSIONS | | |
| A | 60 | 65 |
| B | 60 | 60 |
| C | 30 | 35 |
| D | 30 | 30 |
| E | 46 | 48 |
| F | 7 | 6 |
| H | 7 | 7 |
| I | 12 | 7 |
| L | 15,5 | 18,5 |
| L1 | 29,5 | 34,5 |
| M | 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

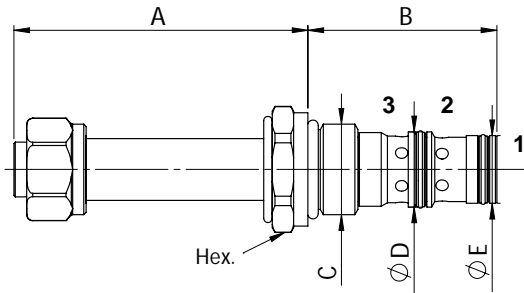
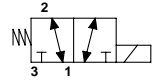
Rated Voltage

- Coil:**
- Omit if not required
 - 12
 - 24

WTW - 02

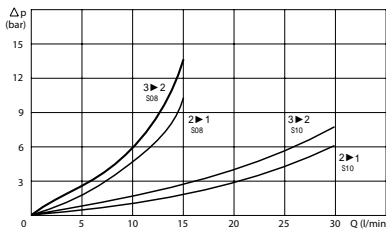
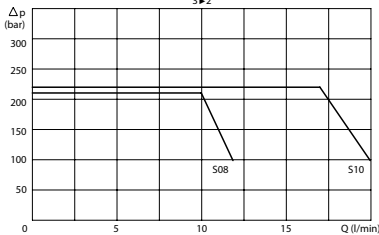
TECHNICAL DATA

- **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:

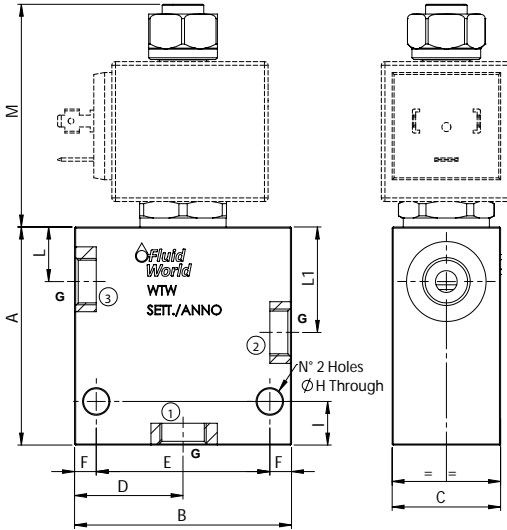
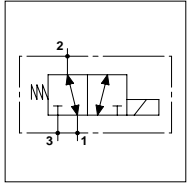
- S08 = SAE 08/3
- S10 = SAE 10/3

- Manual Override:**
- Omit if not required
 - EMS = Screw

WTW - 02

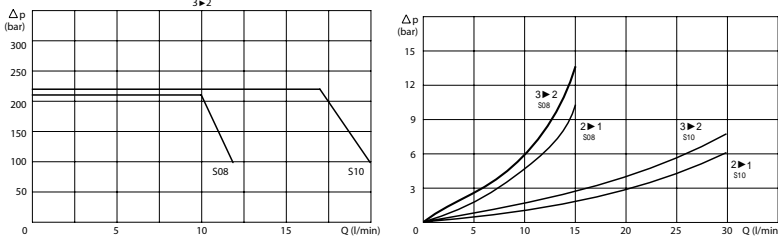
TECHNICAL DATA

- **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



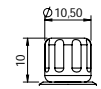
| PORTS | | |
|------------------|------------|------------|
| Size | S08 | S10 |
| G | 1/4 | 1/2 |
| | 3/8 | |
| DIMENSIONS | | |
| A | 60 | 65 |
| B | 60 | 60 |
| C | 30 | 35 |
| D | 30 | 30 |
| E | 46 | 48 |
| F | 7 | 6 |
| H | 7 | 7 |
| I | 12 | 7 |
| L | 15,5 | 18,5 |
| L1 | 29,5 | 34,5 |
| M | 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

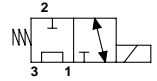
Rated Voltage

- 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

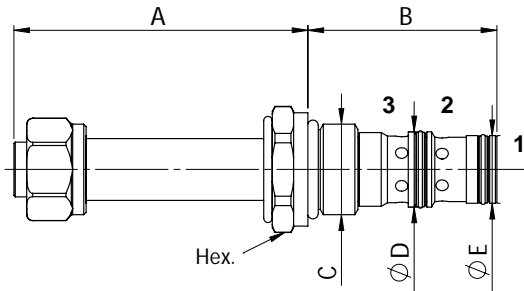


PORTS

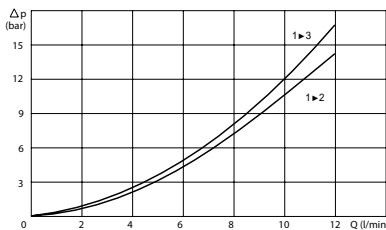
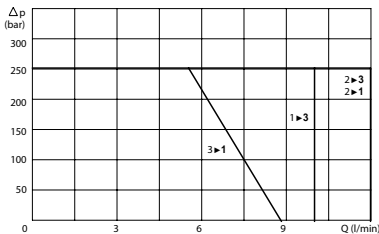
| | |
|------|-----|
| Size | S08 |
|------|-----|

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

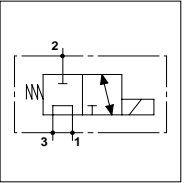
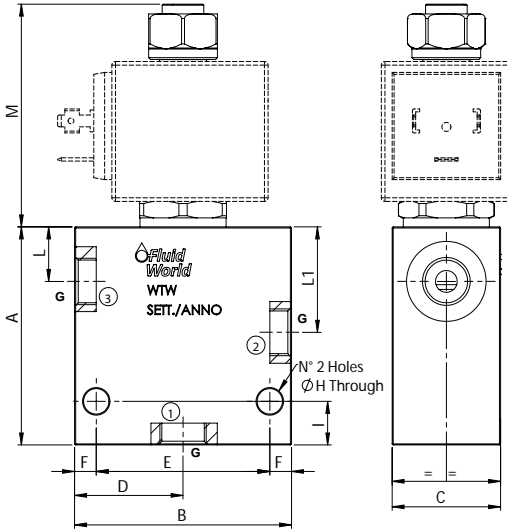


Manual Override:
- Omit if not required
- EMS = Screw

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



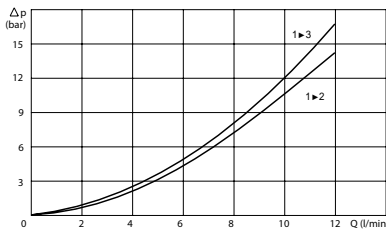
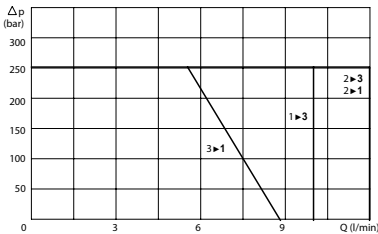
PORTS

| 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

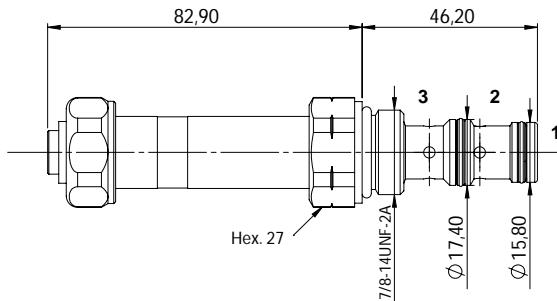
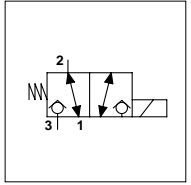
Rated Voltage

- Coil:**
- Omit if not required
 - 12
 - 24

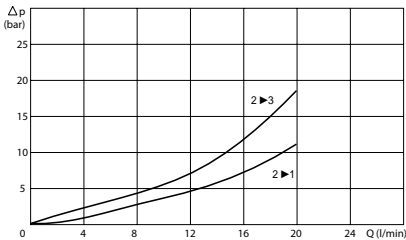
WTWT S10 02

TECHNICAL DATA

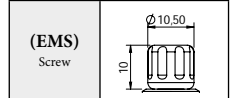
- **Flow:** 20 l/min
- **Max working pressure:** 210 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Spool Type - Direct Acting
- **Cavity:** FW7803000
- **Installation torque:** 40 Nm
- **Weight:** 0,270 kg



PRESSURE DROP CURVES



MANUAL OVERRIDE



ORDERING CODE

WTWT

S10

02

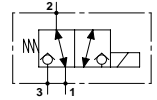
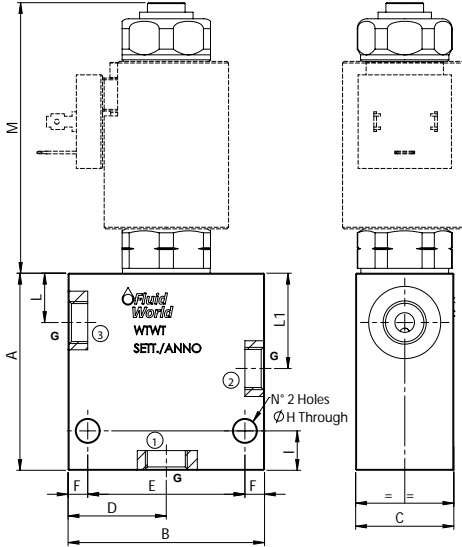


Manual Override:
- Omit if not required
- EMS = Screw

WTWT S10 02

TECHNICAL DATA

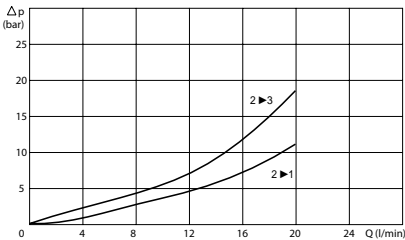
- **Flow:** 20 l/min
- **Max working pressure:** 210 bar (210 bar)
- **Materials:** Aluminium Body (Steel body if required)
- **Version:** Spool Type - Direct Acting
- **Note:** 36W coil on the page 291



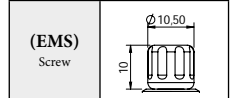
PORTS

| 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:

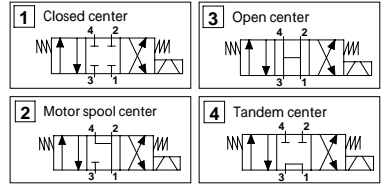
- Omit if Aluminium
- S = Steel

Rated Voltage

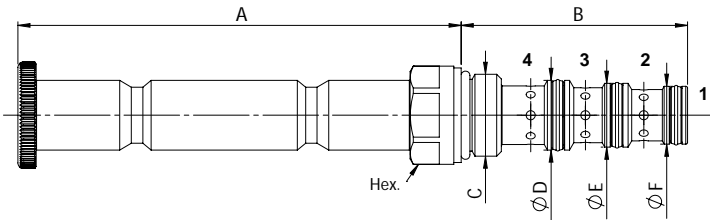
- Coil:**
- Omit if not required
 - 12
 - 24

TECHNICAL DATA

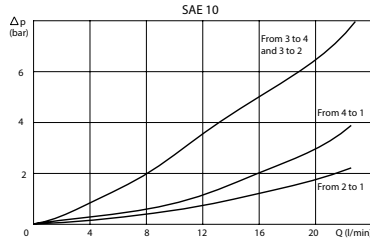
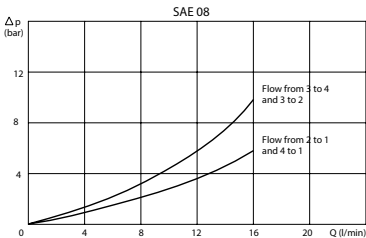
- **Flow:** See table
- **Max working pressure:** 210 bar
- **Materials:** Cartridge in Steel zinc plated
- **Version:** Spool Type - Direct Acting
- **Cavity:** See table
- **Installation torque:** See table
- **Weight:** See table



| 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:

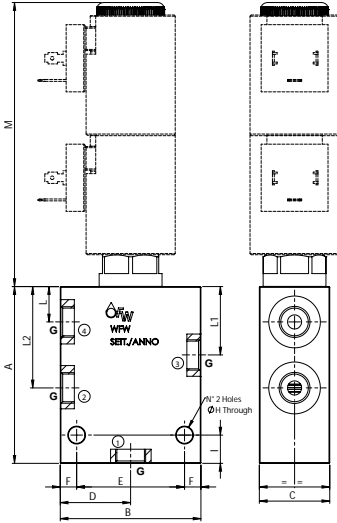
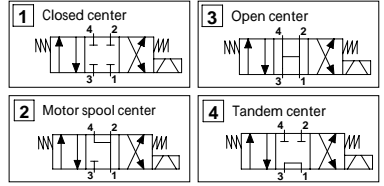
- S08 = SAE 08/4
- S10 = SAE 10/4

Hydraulic Scheme:

- 1
- 2
- 3
- 4

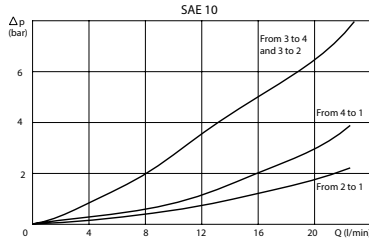
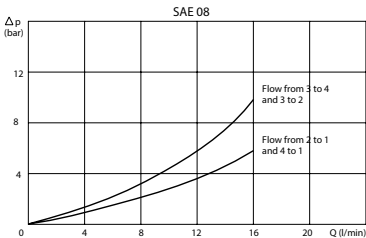
TECHNICAL DATA

- **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 | S08 | S10 |
| 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

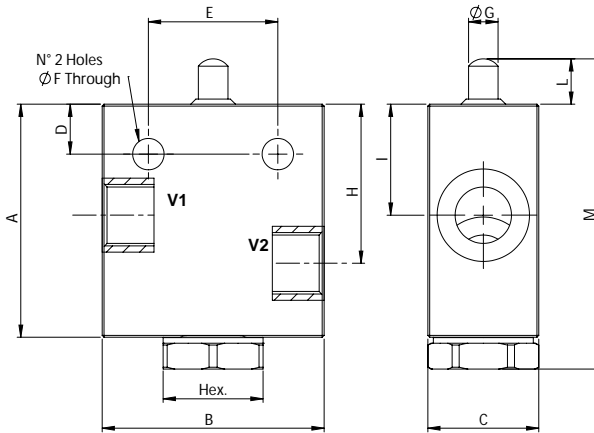
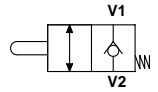


END STROKE VALVES
VALVOLE DI FINE CORSA

WFC NC

TECHNICAL DATA

- **Flow:** See Table
- **Max working pressure:** See Table
- **Materials:** Steel Body
- **Weight:** See Table



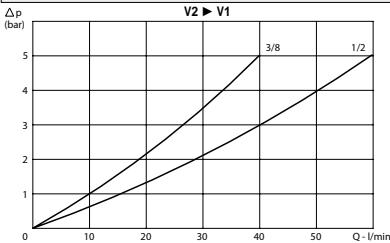
PORTS

| 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

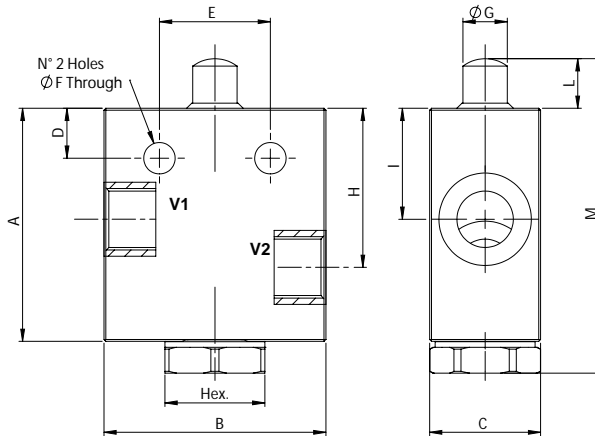
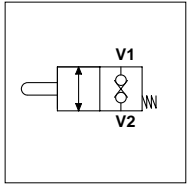
Ports Size:

- 3/8
- 1/2

WFC DT

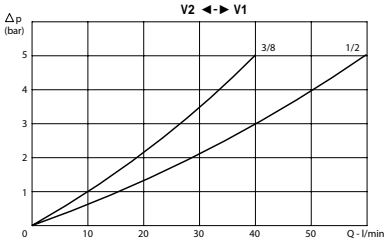
TECHNICAL DATA

- **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

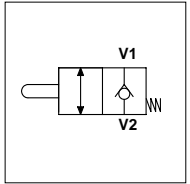
DT

Ports Size:
- 3/8
- 1/2

WFC NC - SPG

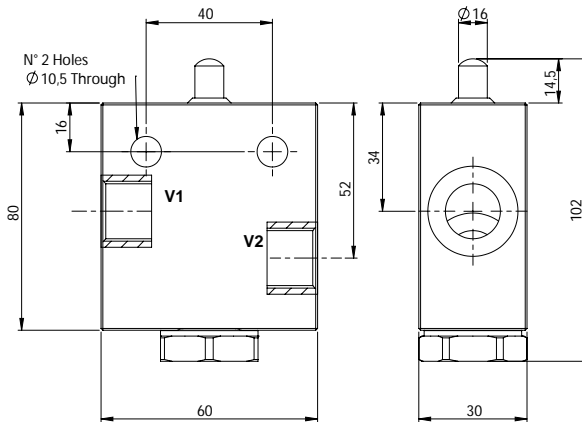
TECHNICAL DATA

- **Flow:** See Table
- **Max working pressure:** See Table
- **Materials:** Steel Body
- **Weight:** See Table

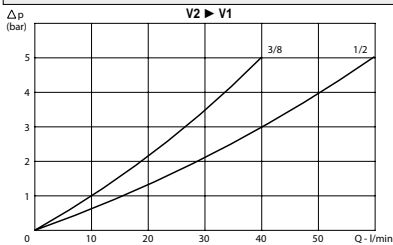


PORTS

| 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



Ports Size:

- 3/8
- 1/2

SPG



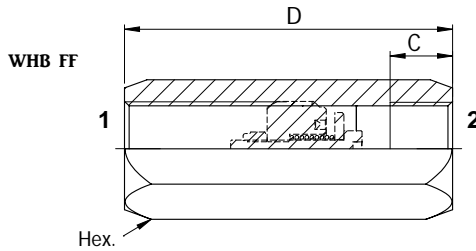
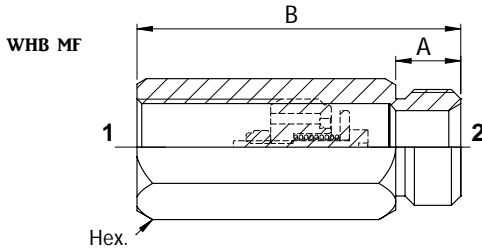


ACCESSORIES FOR VALVES
ACCESSORI PER VALVOLE

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

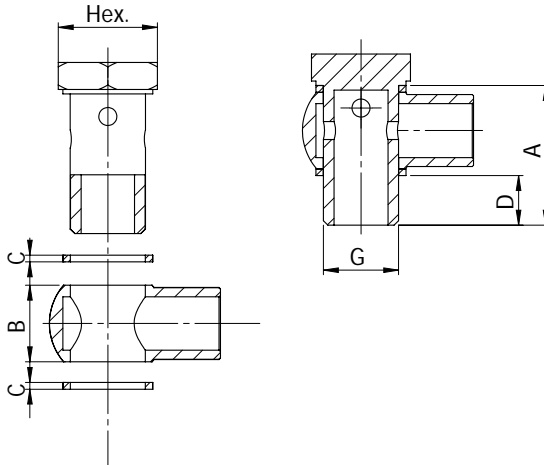


Ports Size:

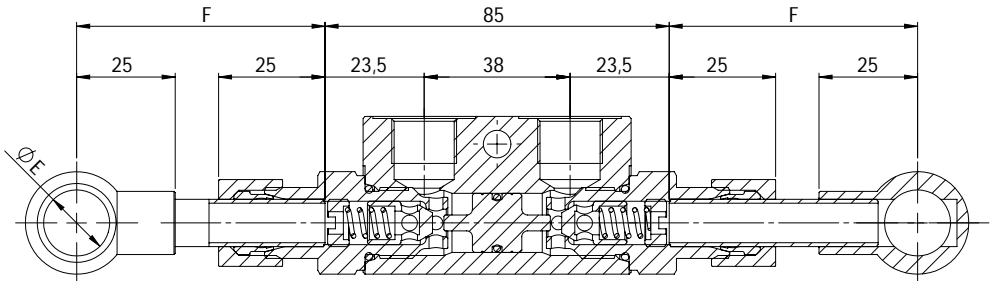
- 1/4
- 3/8
- 1/2
- 3/4
- 1

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 | |



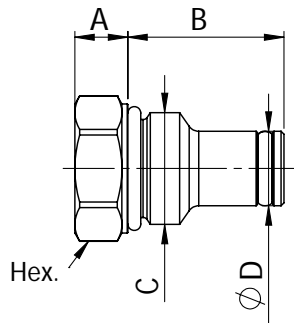
ORDERING CODE

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) |
| 3/4-16-UNF | 10,5 | 26,5 | 12,7 | 22 | FW3402000 | 35-40 | 0,070 |
| 7/8-14-UNF | 9,6 | 32,4 | 15,8 | 27 | FW7802000 | 50-55 | 0,120 |

ORDERING CODE

1XTP



Cavities:

- 34 = SAE 08
- 78 = SAE 10

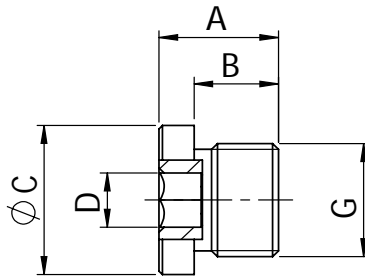
02

100

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) |
| 1/8 | 13 | 9 | 15 | 5 | 0,010 |
| 1/4 | 16 | 11 | 19 | 6 | 0,015 |
| 3/8 | 17 | 11 | 22 | 8 | 0,030 |
| 1/2 | 20 | 14 | 27 | 10 | 0,050 |
| 3/4 | 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

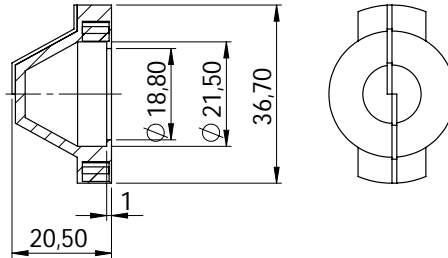
3TP

TECHNICAL DATA

- **Materials:** Abs
- **Color:** Black

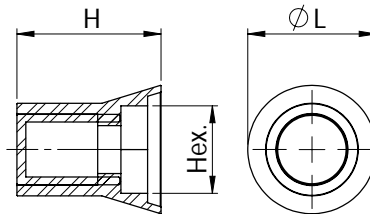
Shell protection:

3TP1900000



Protection for valve on tread:

3TP0600000
3TP1000000



DIMENSIONS

| CODE | H | L | Hex. | Thread | Min. Thread |
|-------------------|------|------|------|----------|-------------|
| 3TP0600000 | 28,2 | 15,7 | 10 | 6 x 0,75 | 6/7 mm |
| 3TP1000000 | 28,3 | 25 | 17 | 10 x 1,5 | 5/6 min |

ORDERING CODE

3TP



00

000

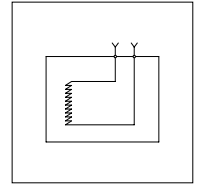
Cavities:

- 06 = M6
- 10 = M10
- 19 = Hex. 19

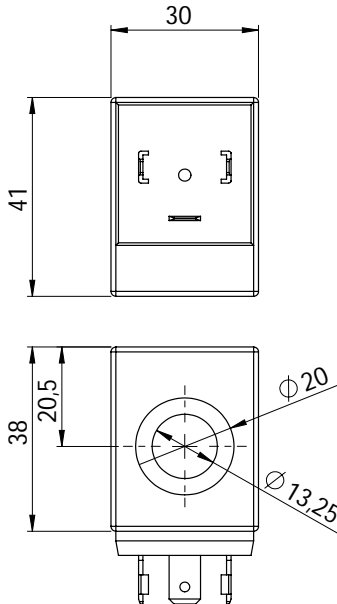
COIL

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 _{dC} | Connector | Circuit | Resistance Ω |
| 12 | DIN 43650 | Standard | 7,5 |
| 24 | DIN 43650 | Standard | 30,1 |



ORDERING CODE

3BO

13



18

0

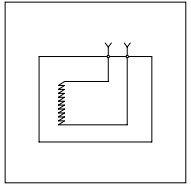
Rated Voltage:

- 12
- 24

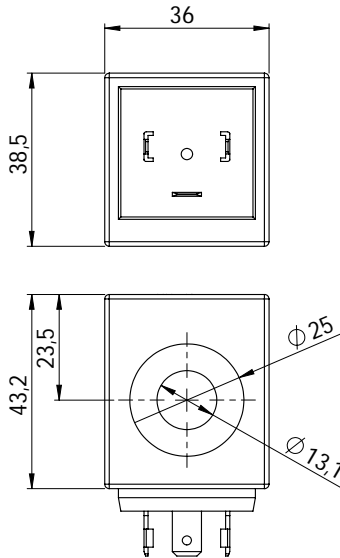
COIL

TECHNICAL DATA

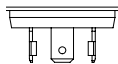
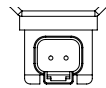
- **Rated voltage:** See table
- **Power at 20 C°:** 22 W
- **Connection:** See table
- **Protection IEC 144:** IP 65
- **Insulation:** Class H
- **Wire insulation:** Class H
- **Nominal voltage:** +/- 10%
- **ED:** 100% with ambient temperature -20 +40 C°
- **Weight:** 0,250 kg



| 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

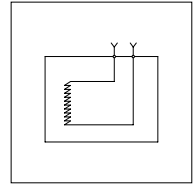
Connector:

- 0 = DIN 43650
- 1 = DEUTSCH

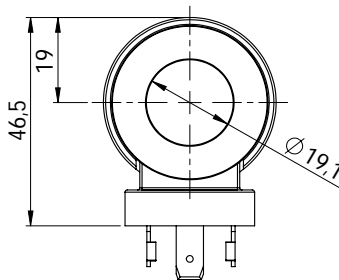
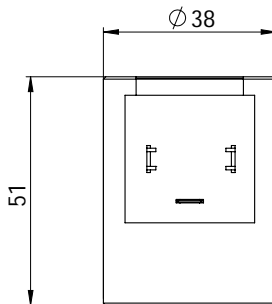
COIL

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

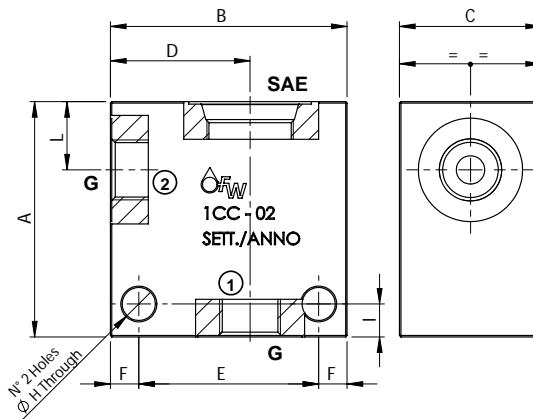


STANDARD BODY
CORPI STANDARDIZZATI

1CC - 02

TECHNICAL DATA

- **Max working pressure:** 250 bar (350 bar)
- **Materials:** Aluminium Body (Steel body if required)



| DIMENSIONS | | | | | | | | | | | Code Cavity SAE |
|------------|-----|----|----|----|----|----|----|-----|---|------|-----------------|
| SAE | G | A | B | C | D | E | F | H | I | L | |
| 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"

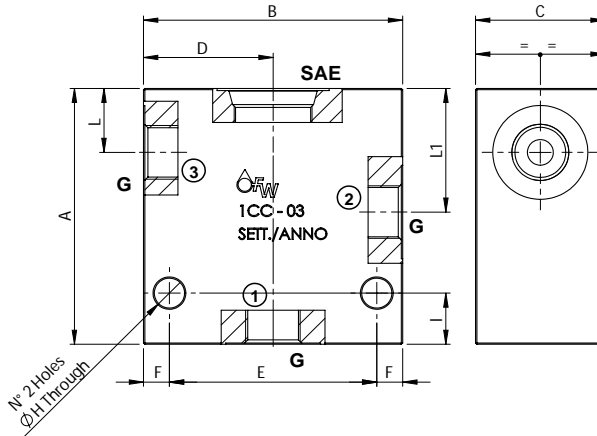
Material Body:

- 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

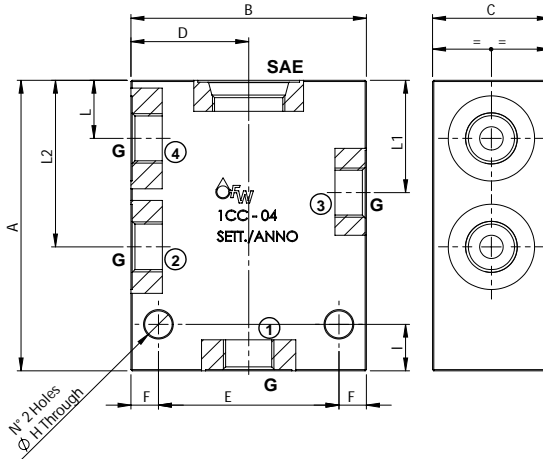
Material Body:

- 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

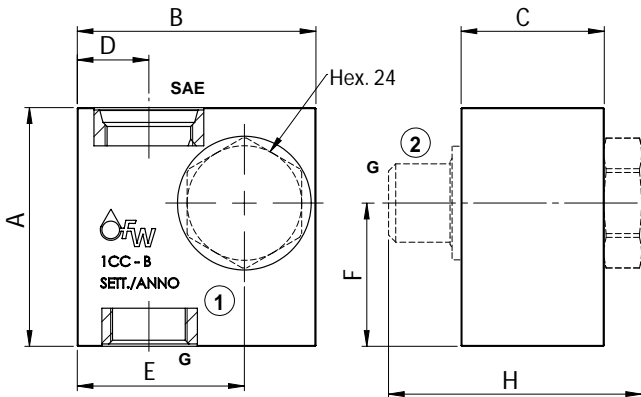
Material Body:

- 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.

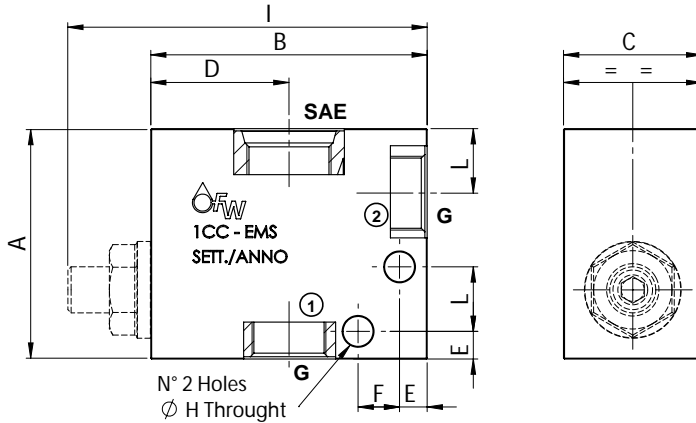
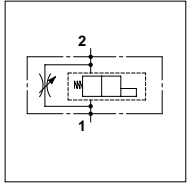
Material Body:

- 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.

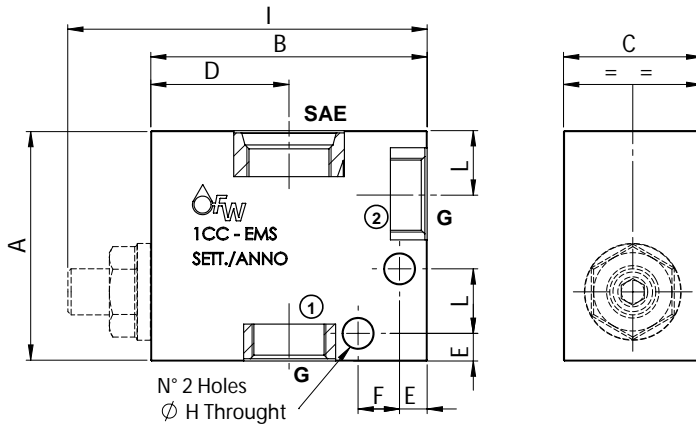
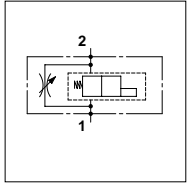
Material Body:

- 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

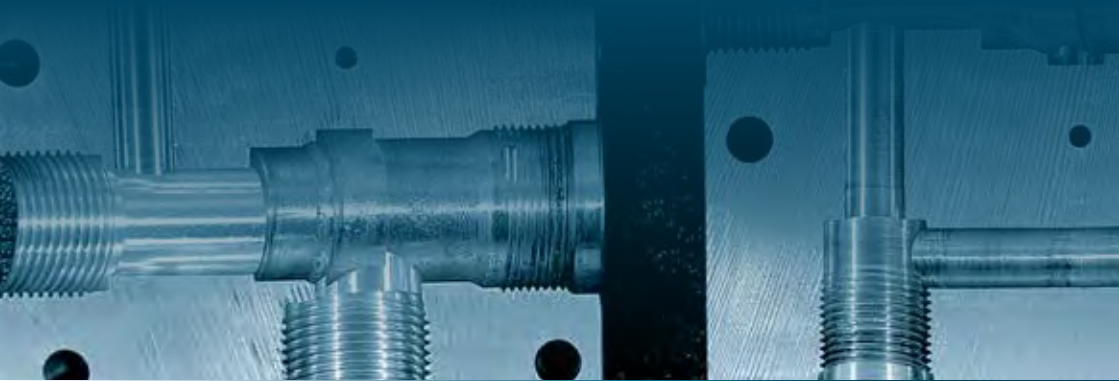
02

12

For body with SAE 12,
 Please contact our sales department.

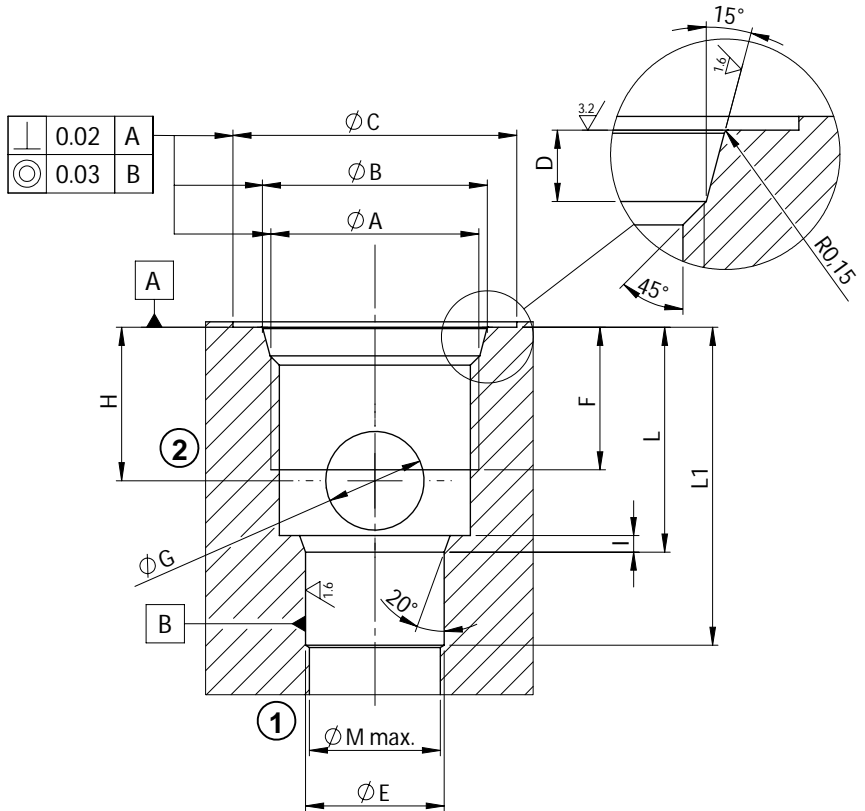
Material Body:

- 3 = Aluminium
- 5 = Steel
- 7 = Aluminium Complete
- 9 = Steel Complete



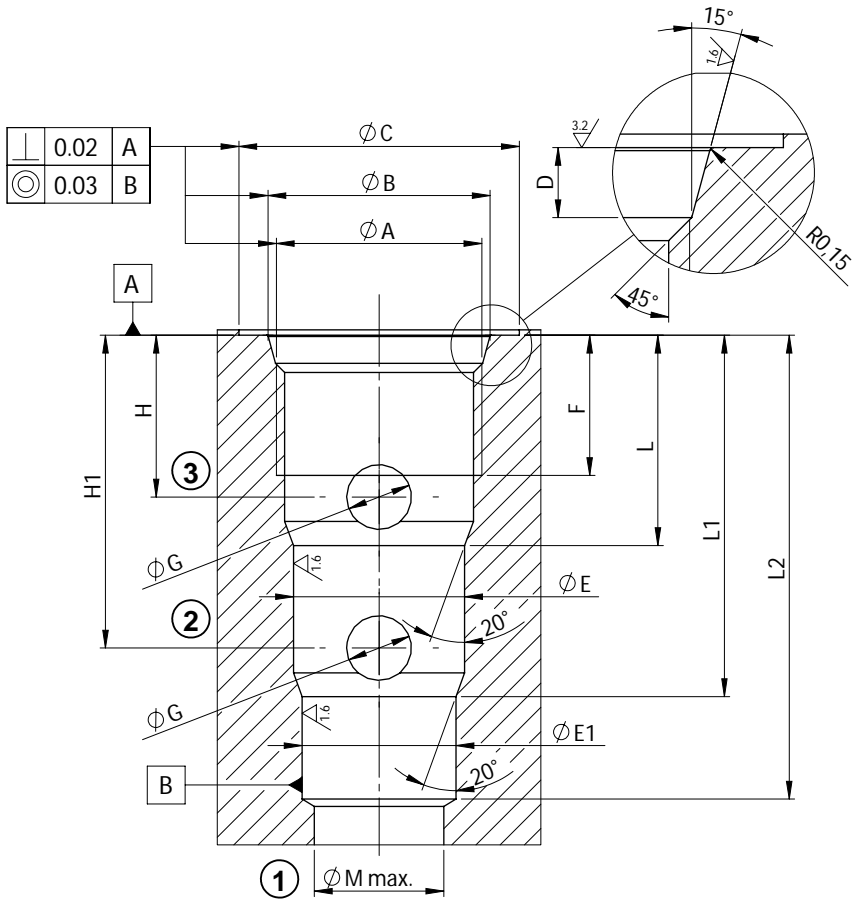
CAVITIES
CAVITA'

SAE 2 WAY



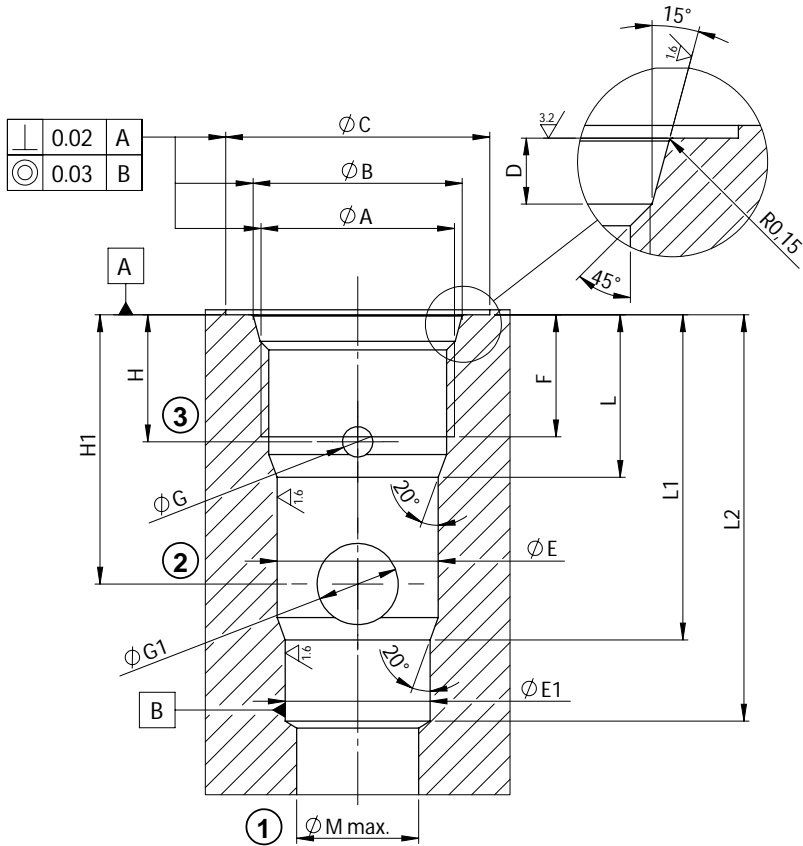
| SAE | CODE | A | B | C | D | E | F | G | H | I | L | L1 | M |
|-----|-----------|--------------------|-----------------------------------|----|----------------------------------|-------------------------------------|----|----|----|-----|------|------|----|
| 08 | FW3402000 | 3/4-16 UNF-2B | 20,6 ^{+0.1} ₀ | 26 | 2,6 ^{+0.3} ₀ | 12,7 ^{+0.05} ₀ | 13 | 9 | 14 | 1,5 | 20,5 | 29 | 12 |
| 10 | FW7802000 | 7/8-14 UNF-2B | 23,9 ^{+0.1} ₀ | 30 | 2,6 ^{+0.3} ₀ | 15,87 ^{+0.05} ₀ | 15 | 12 | 18 | 1,5 | 25,5 | 34,5 | 15 |
| 12 | FW1160200 | 1 1/16-12 UN-2B | 29,2 ^{+0.1} ₀ | 35 | 3,3 ^{+0.3} ₀ | 22,22 ^{+0.05} ₀ | 20 | 18 | 26 | 1 | 36,5 | 48 | 19 |
| 16 | FW1516020 | 1 5/16-12 UN-2B | 35,5 ^{+0.1} ₀ | 42 | 3,3 ^{+0.3} ₀ | 28,60 ^{+0.05} ₀ | 20 | 19 | 25 | 1,5 | 36 | 49 | 24 |

SAE 3 WAY



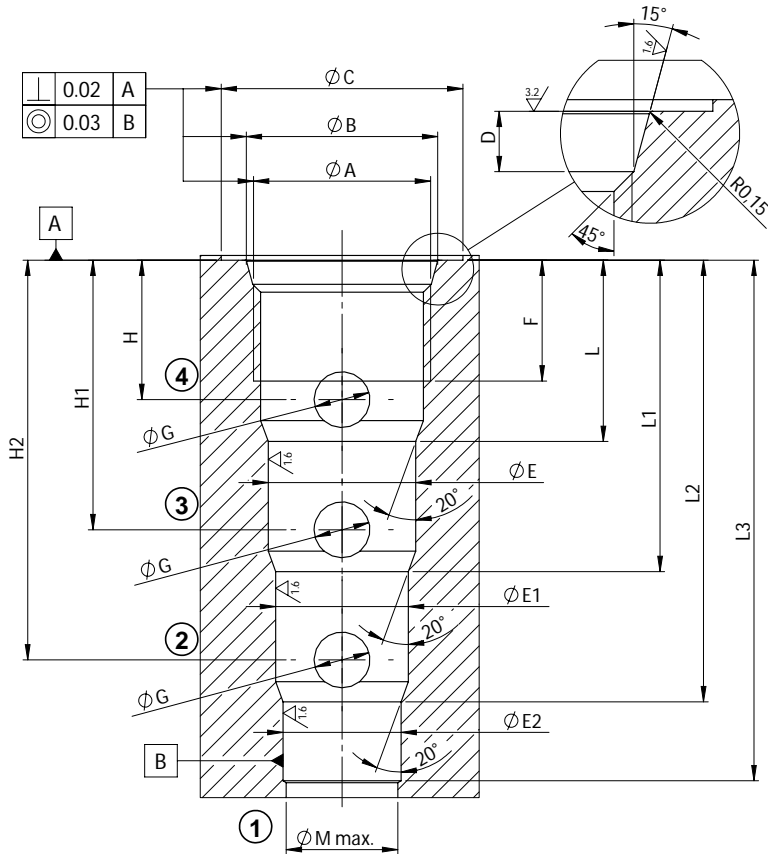
| SAE | CODE | A | B | C | D | E | E1 | F | G | H | H1 | L | L1 | L2 | M |
|-----|-----------|--------------------|-----------------------------------|----|----------------------------------|-------------------------------------|-------------------------------------|----|----|------|----|------|------|------|----|
| 08 | FW3403000 | 3/4-16 UNF-2B | 20,6 ^{+0.1} ₀ | 26 | 2,6 ^{+0.3} ₀ | 15,87 ^{+0.05} ₀ | 14,27 ^{+0.05} ₀ | 13 | 6 | 15 | 29 | 19,5 | 33,5 | 43 | 12 |
| 10 | FW7803000 | 7/8-14 UNF-2B | 23,9 ^{+0.1} ₀ | 30 | 2,6 ^{+0.3} ₀ | 17,47 ^{+0.05} ₀ | 15,87 ^{+0.05} ₀ | 14 | 8 | 18 | 34 | 23,5 | 39,5 | 48,5 | 15 |
| 12 | FW1160300 | 1 1/16-12 UN-2B | 29,2 ^{+0.1} ₀ | 35 | 3,3 ^{+0.3} ₀ | 23,80 ^{+0.05} ₀ | 22,22 ^{+0.05} ₀ | 20 | 14 | 28 | 53 | 36,5 | 61,5 | 73 | 19 |
| 16 | FW1516030 | 1 5/16-12 UN-2B | 35,5 ^{+0.1} ₀ | 42 | 3,3 ^{+0.3} ₀ | 28,60 ^{+0.05} ₀ | 27,00 ^{+0.05} ₀ | 20 | 17 | 25,5 | 54 | 35,5 | 64 | 75 | 24 |

SAE 3 WAY SHORT



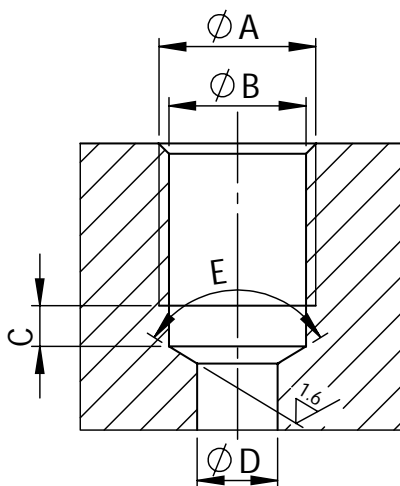
| SAE | CODE | A | B | C | D | E | E1 | F | G | G1 | H | H1 | L | L1 | L2 | M |
|-----|-----------|--------------------|-----------------------------------|----|----------------------------------|-------------------------------------|-------------------------------------|------|---|----|------|------|------|------|----|----|
| 08 | FW3403001 | 3/4-16 UNF-2B | 20,6 ^{+0.1} ₀ | 26 | 2,6 ^{+0.3} ₀ | 15,87 ^{+0.05} ₀ | 14,27 ^{+0.05} ₀ | 12 | 3 | 8 | 12,5 | 26,5 | 16 | 32 | 40 | 12 |
| 10 | FW7803001 | 7/8-14 UNF-2B | 23,9 ^{+0.1} ₀ | 30 | 2,6 ^{+0.3} ₀ | 19,05 ^{+0.05} ₀ | 17,47 ^{+0.05} ₀ | 13 | 4 | 14 | 14 | 31,5 | 18 | 40 | 49 | 15 |
| 12 | FW1160301 | 1 1/16-12 UN-2B | 29,2 ^{+0.1} ₀ | 35 | 3,3 ^{+0.3} ₀ | 23,80 ^{+0.05} ₀ | 22,22 ^{+0.05} ₀ | 21 | 5 | 14 | 22,5 | 40,5 | 26,5 | 49,5 | 60 | 19 |
| 16 | FW1516031 | 1 5/16-12 UN-2B | 35,5 ^{+0.1} ₀ | 42 | 3,3 ^{+0.3} ₀ | 28,60 ^{+0.05} ₀ | 25,42 ^{+0.05} ₀ | 16,5 | 5 | 15 | 17,5 | 38 | 22 | 47,5 | 58 | 24 |

SAE 4 WAY



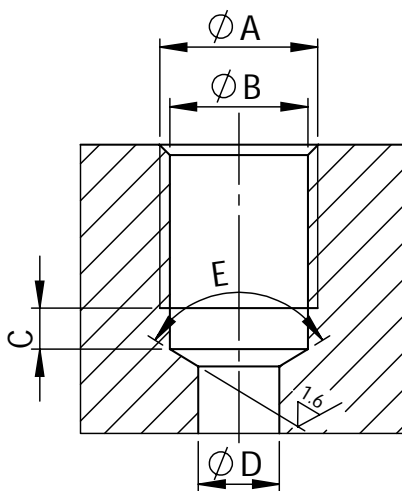
| SAE | CODE | A | B | C | D | E | E1 | E2 | F | G | H | H1 | H2 | L | L1 | L2 | L3 | M |
|-----|-----------|--------------------|-----------------------------------|----|----------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|----|----|----|------|----|------|------|------|------|----|
| 08 | FW3404000 | 3/4-16 UNF-2B | 20,6 ^{+0.1} ₀ | 26 | 2,6 ^{+0.3} ₀ | 15,87 ^{+0.05} ₀ | 14,27 ^{+0.05} ₀ | 12,7 ^{+0.05} ₀ | 13 | 6 | 15 | 29 | 43 | 19,5 | 33,5 | 47,5 | 56 | 12 |
| 10 | FW7804000 | 7/8-14 UNF-2B | 23,9 ^{+0.1} ₀ | 30 | 2,6 ^{+0.3} ₀ | 19,05 ^{+0.05} ₀ | 17,47 ^{+0.05} ₀ | 15,87 ^{+0.05} ₀ | 15 | 8 | 18 | 34 | 50 | 23,5 | 39,5 | 55,5 | 64,5 | 15 |
| 12 | FW1160400 | 1 1/16-12 UN-2B | 29,2 ^{+0.1} ₀ | 35 | 3,3 ^{+0.3} ₀ | 23,8 ^{+0.05} ₀ | 22,22 ^{+0.05} ₀ | 20,62 ^{+0.05} ₀ | 19 | 14 | 28 | 53 | 78 | 36,5 | 61,5 | 87,5 | 99 | 19 |
| 16 | FW1516040 | 1 5/16-12 UN-2B | 35,5 ^{+0.1} ₀ | 42 | 3,3 ^{+0.3} ₀ | 28,6 ^{+0.05} ₀ | 27,00 ^{+0.05} ₀ | 25,42 ^{+0.05} ₀ | 20 | 16 | 25 | 53,5 | 82 | 35,5 | 64 | 92,5 | 104 | 24 |

FWxx02100



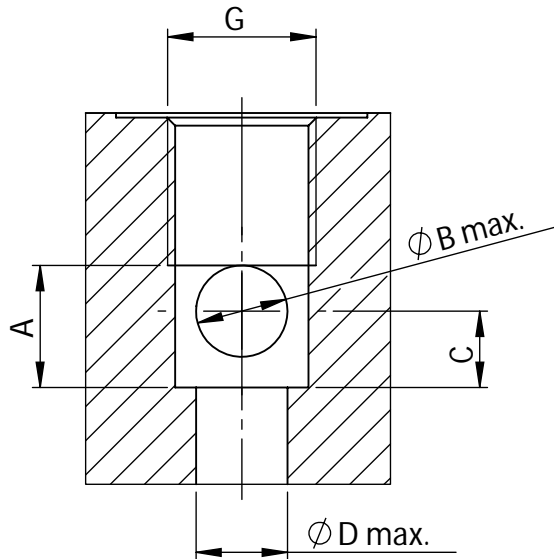
| CODE | A | B | C | D | E |
|-----------|-------|-------|-----|-----|------|
| FW1802100 | G 1/8 | ø8,5 | 2,5 | ø5 | 118° |
| FW1402100 | G 1/4 | ø11,4 | 3 | ø7 | 118° |
| FW3802100 | G 3/8 | ø14,9 | 3 | ø9 | 118° |
| FW1202100 | G 1/2 | ø18,6 | 4 | ø12 | 118° |
| FW3402100 | G 3/4 | ø24,1 | 5 | ø17 | 118° |

FWxx02101



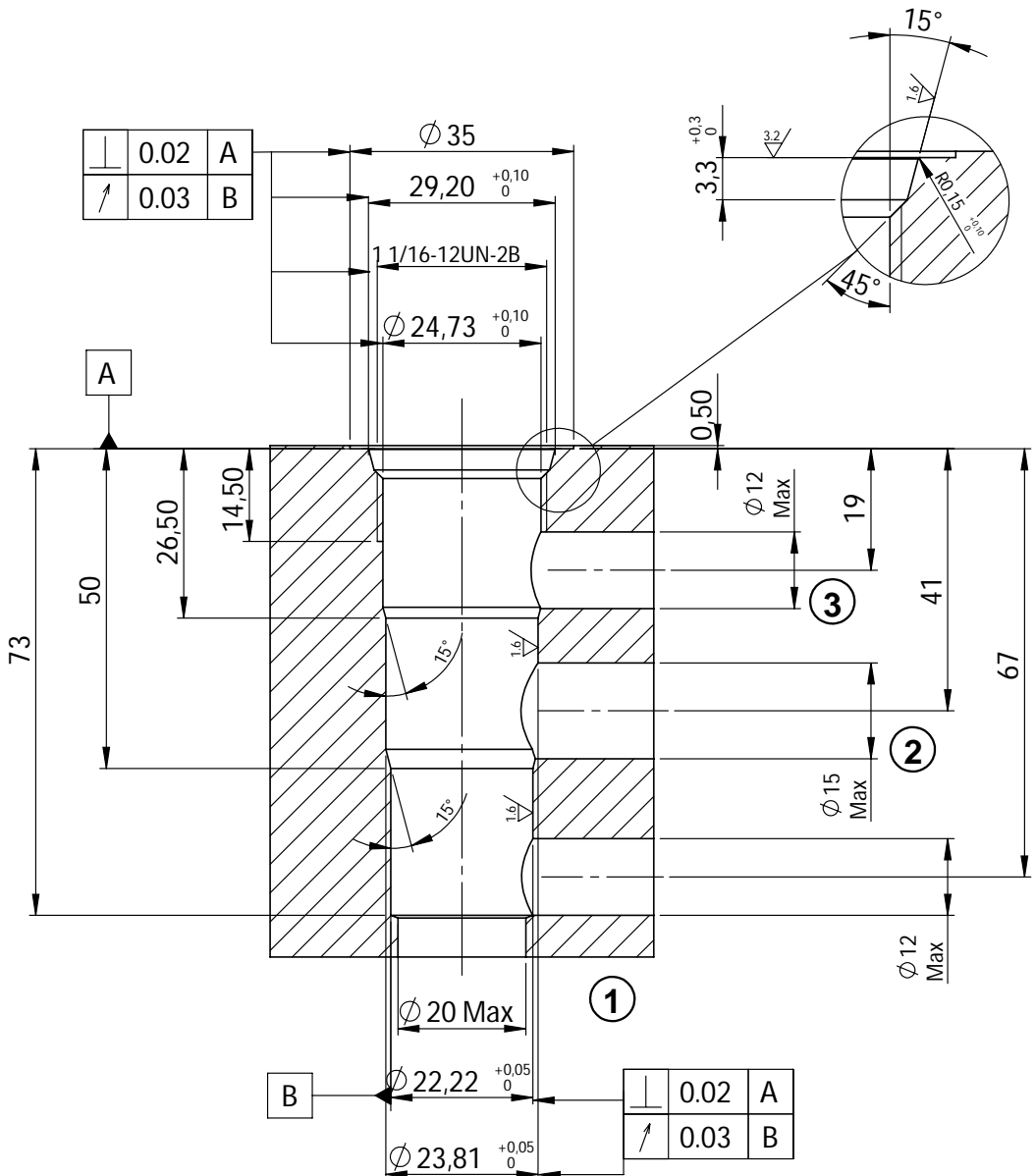
| CODE | A | B | C | D | E |
|-----------|-------|-------|---|-----|------|
| FW1802101 | G 1/8 | ø8,7 | 3 | ø5 | 118° |
| FW1402101 | G 1/4 | ø11,6 | 3 | ø7 | 118° |
| FW3802101 | G 3/8 | ø15,1 | 3 | ø9 | 118° |
| FW1202101 | G 1/2 | ø18,8 | 3 | ø12 | 118° |
| FW3402101 | G 3/4 | ø24,3 | 3 | ø18 | 118° |

FWxx03100

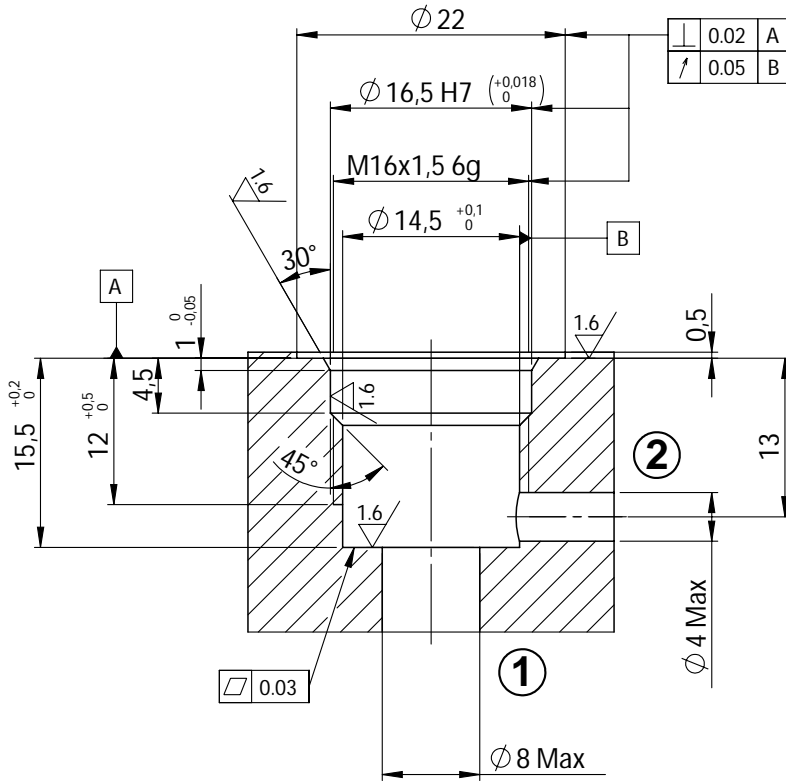


| CODE | G | A | B | C | D |
|-----------|-------|----|---|-----|---|
| FW1803100 | G 1/8 | 8 | 4 | 5 | 4 |
| FW1403100 | G 1/4 | 13 | 6 | 7,5 | 6 |

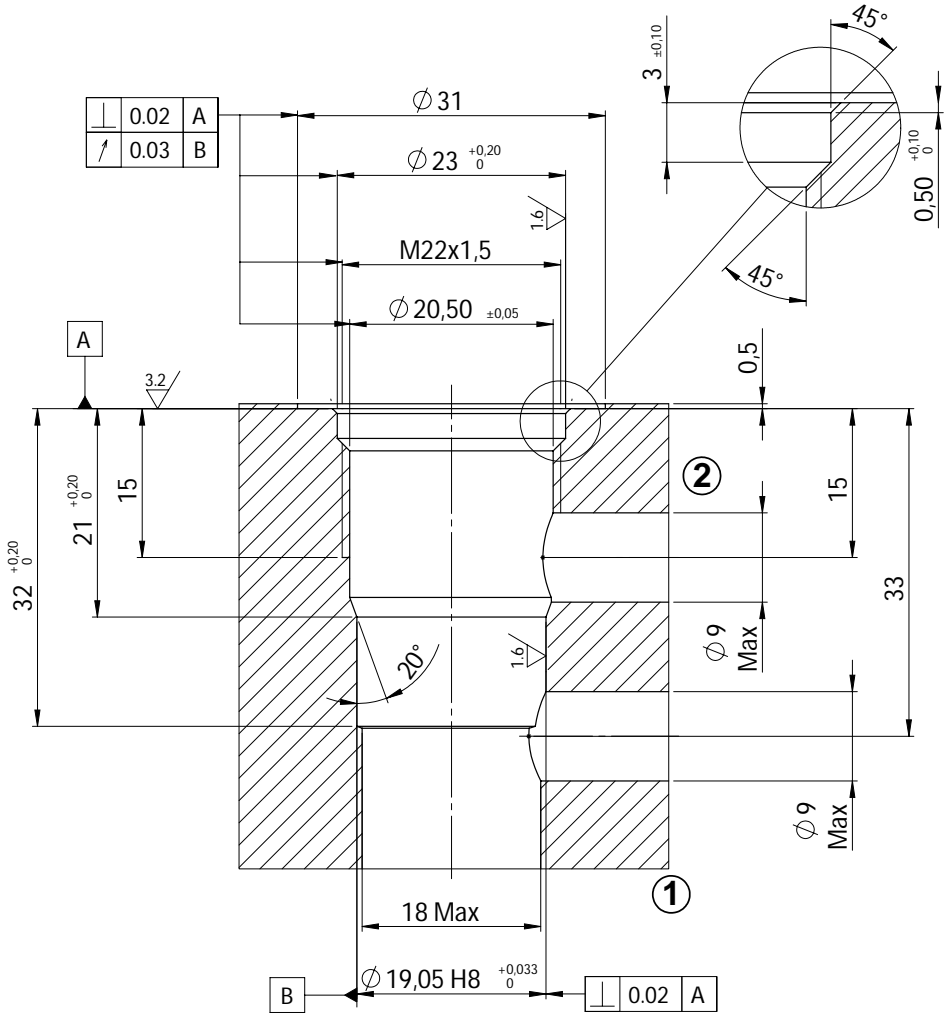
FW11160302



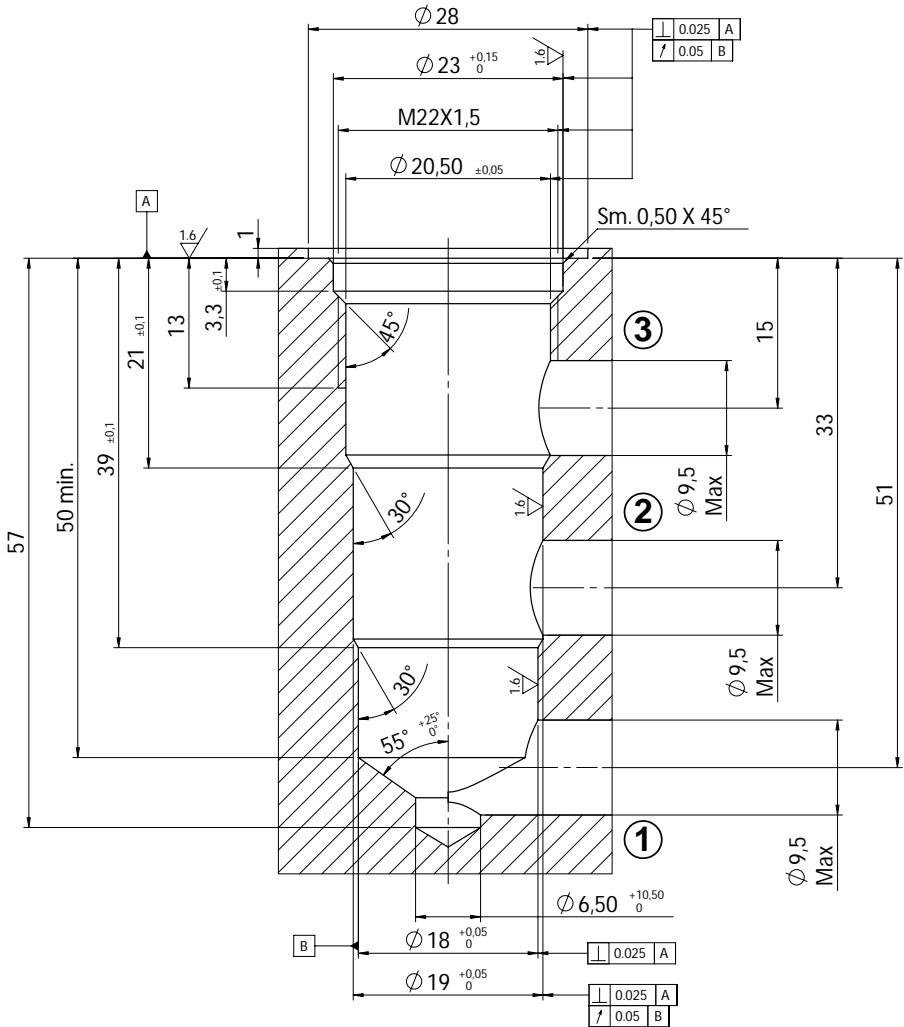
FW1602100



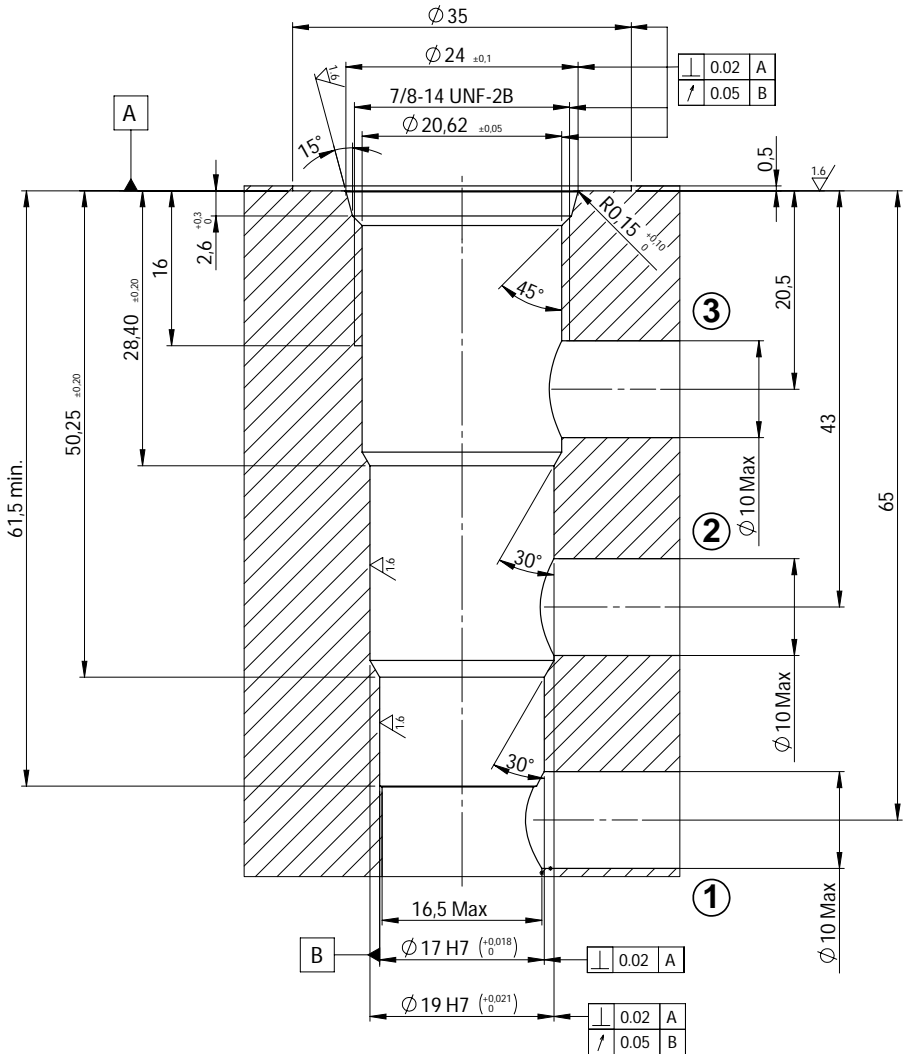
FW22000211



FW2203000



FW7803100



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.

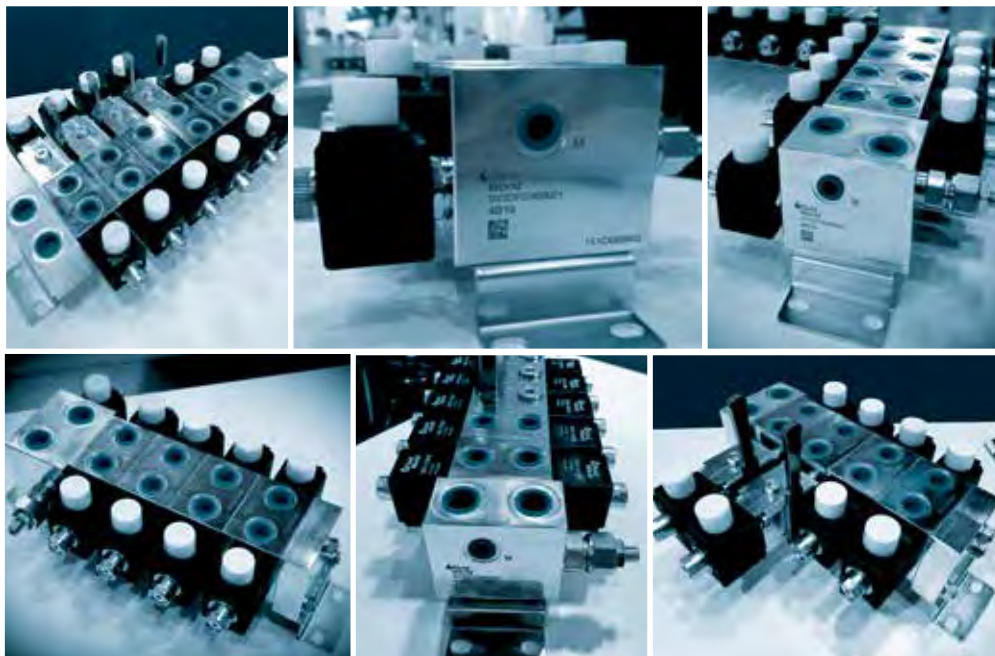
This system called **bankable** is composed of standard directional sections to which you can add various types of options (such as check pilot valves, solenoid valves, overcenter, etc ...) and from an inlet manifold can be achieved to pleasure with manual valves, solenoid on-off valves and proportional 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.*

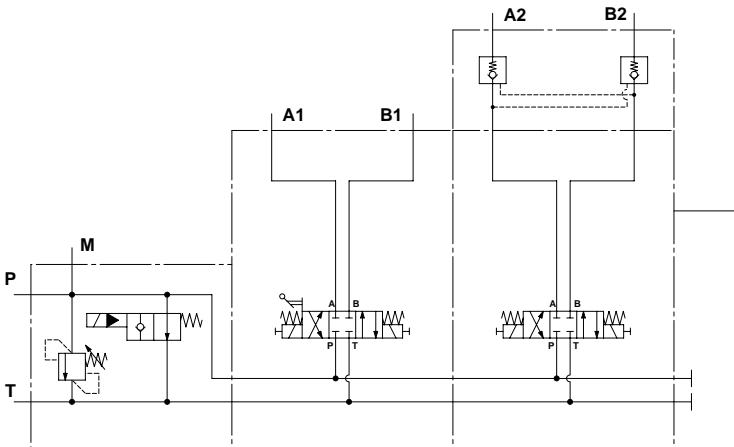
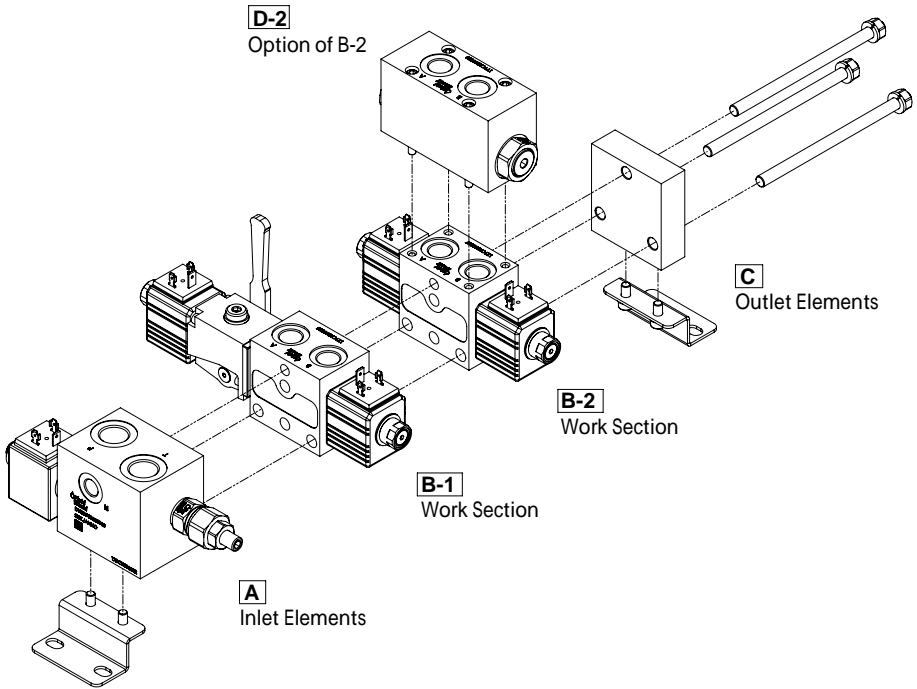
*L'ingombro ridotto, la grande flessibilità e l'**intercambiabilità con altri competitors** rende questo sistema molto interessante sia per costruttori di macchine che per qualsiasi rivenditore.*



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



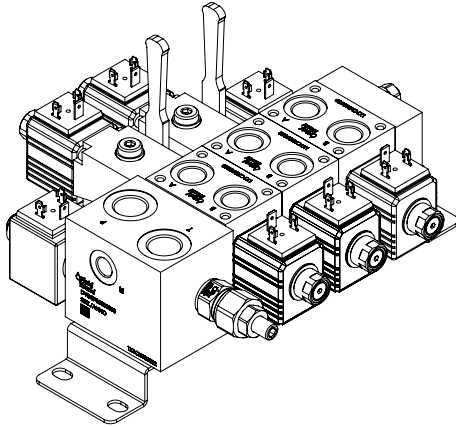
EXAMPLE OF ORDER

| SECTIONS | SEQUENCE TO ORDER | PAGE |
|--|---|------|
| DV3D General Configuration (with 2 work section) | DV3D-P0-02-ST-00/ | 326 |
| A Inlet Elements | IN-C3-G12N-A-20NSTD-NA-0000-V12-DNN/ | 330 |
| B-1 Work Section 1 | SCC3-10-SA-38N-EE-01-V12-DNN-SS00N000-SF/ | 336 |
| B-2 Work Section 2 | SCC3-00-NN-38N-EE-01-V12-DNN-SS00N000-VF/ | 336 |
| D-2 Option of B (B-2) | WBD-00AB-G38N-A-01-G07/ | 350 |
| C Outlet Elements | EX-SNPT-N000-A/ | 344 |

DV3D – GENERAL CONFIGURATION

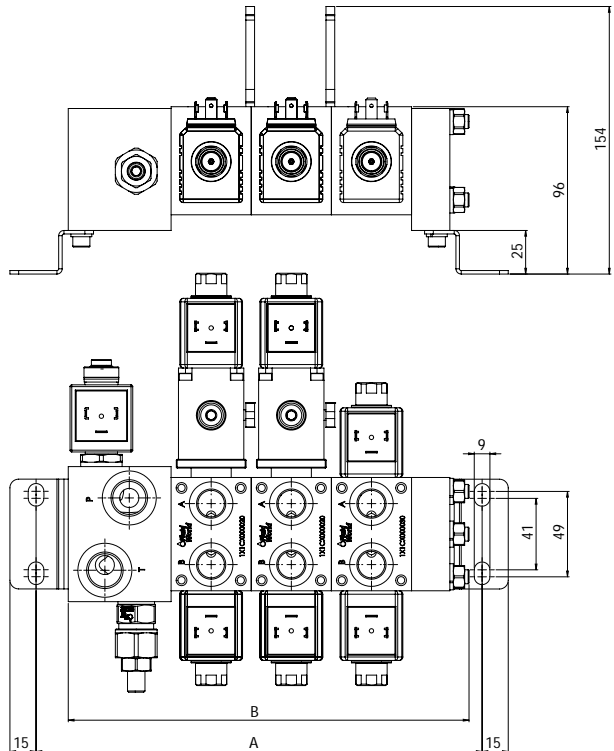
| | | |
|-----------|---|---------------------|
| 01 | Bankable size: 30 l/min on/off | - DV3D |
| 02 | Bankable circuit: Parallel with seals NBR | - P0 |
| 03 | Number of sections: From 2 to 10 sections | - 02 03 04 |
| 04 | Brackets: Standard brackets No brackets | - ST NS |
| 05 | Material protection: Standard Inlet/outlet anodized aluminium and steel zinc plated components Inlet/outlet and components in zinkel nickel | - 00 01 02 |

DV3D - GENERAL CONFIGURATION

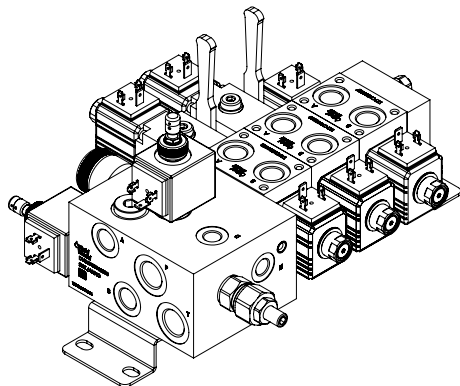


| Sections N° | DIMENSIONS | | | | | |
|-------------|------------|-----|-----|-----|-----|-----|
| | A | B | A | B | A | B |
| 2 | 190 | 164 | 210 | 184 | 246 | 220 |
| 3 | 236 | 210 | 256 | 230 | 292 | 266 |
| 4 | 282 | 256 | 302 | 276 | 338 | 312 |
| 5 | 328 | 302 | 348 | 322 | 384 | 358 |
| 6 | 374 | 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 |

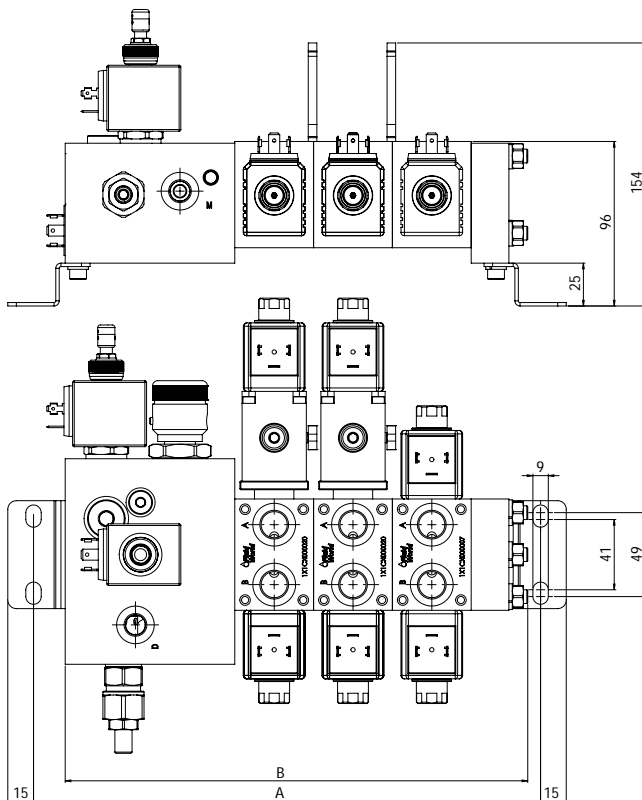
C3 inlet section with 3 work sections.



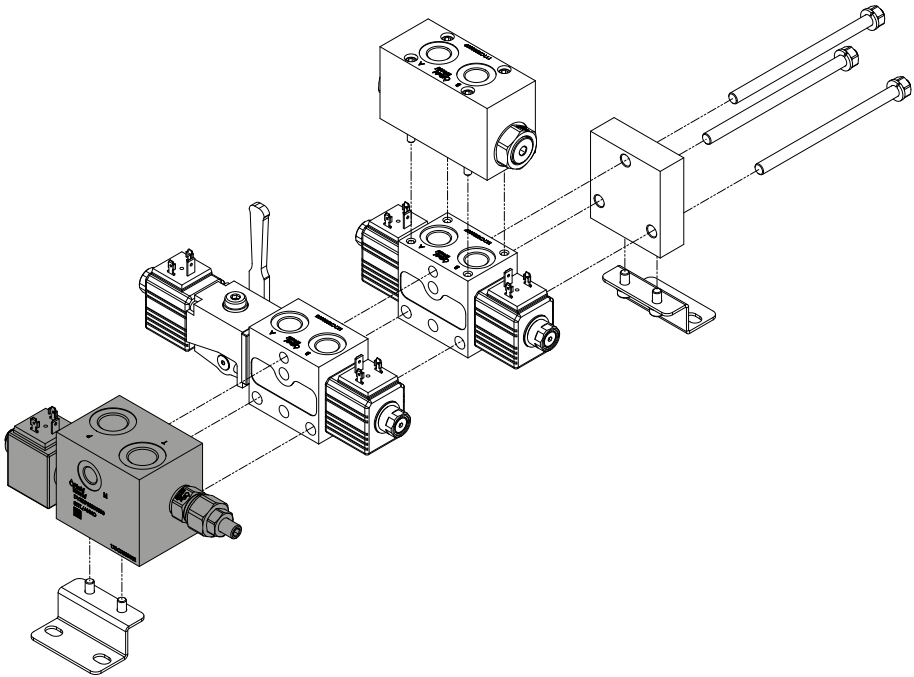
DV3D - GENERAL CONFIGURATION



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

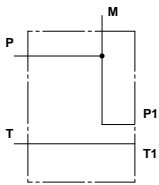
A - INLET ELEMENTS

| | | |
|------------|---|---|
| 03b | Option corking: 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 |
| 04 | Material: Aluminium Steel zinc plated | - A S |
| 05a | Main pressure relief valve: (Omit for C1) Range 5-55 Range 25-110 Range 50-215 Range 100-350 Plug (without pressure relief valve) | pag. 332 05 10 20 35 00 |
| 05b | Setting pressure relief valve: (Omit for C1) Standard adjustment Adjustment required Adjustment required with safety plug Plug (without pressure relief valve) | pag. 332 NSTD N(XXX) T(XXX) NTAP |
| 06 | Electric unloading valve: (Omit for C1 and C2) Normally open Plug (without electric unloading valve) | - NA TS |
| 07 | Option electric unloading valve: (Omit for C1, C2 and choice plug in 06) Without emergency NA with push emergency NA with push&twist emergency | pag. 333 0000 EMPO EMPT |
| 08 | Coil: (Omit for C1, C2 and choice plug in 06) 12 Vdc 24 Vdc No coil | pag. 333 V12 V24 BBO |
| 09a | Coil connector: (Omit for C1, C2 and choice plug in 06) DIN EN 175301-803 (ex. DIN 43650) DT04-2P AMP-JUNIOR No coil | pag. 333 D T J B |
| 09b | Option coil: (Omit for C1, C2 and choice plug in 06) No connector With connector With connector and bidirectional diode No coil | pag. 333 NN NC SC B0 |

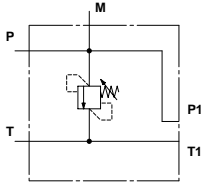
A - INLET ELEMENTS

02 Application scheme:

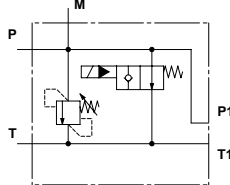
C1



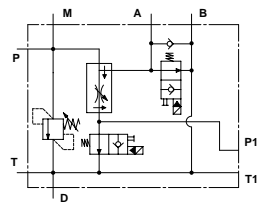
C2



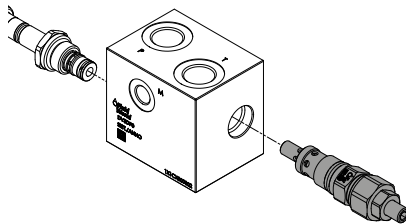
C3



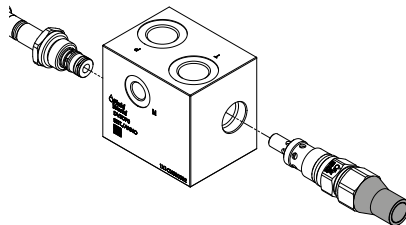
C4



05 Main pressure relief valve: (Omit for C1)



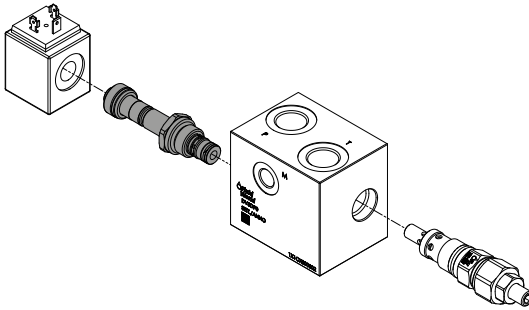
| SPRINGS | | | |
|-----------|-------------------------------|----------------------------|----------------------|
| Code | Adjustable pressure range bar | Pressure increase bar/turn | Standard setting bar |
| 05 | 5-55 | 15 | 5 |
| 10 | 25-110 | 25 | 25 |
| 20 | 50-215 | 50 | 50 |
| 35 | 100-350 |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





(option)
 T
 Adjustment required with safety plug

A - INLET ELEMENTS

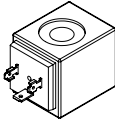
07 Option electric unloading valve: (Omit for C1, C2 and choice plug in 06)



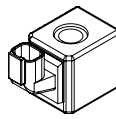
| MANUAL OVERRIDE | |
|---------------------------|---|
| (EMP) Push |  |
| (EMPT) Push & Twist |  |

08 **09** **Coil:** (Omit for C1, C2 and choice plug in 06)

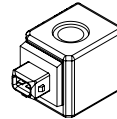
D



T



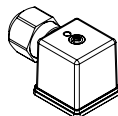
J



| 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)

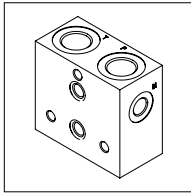
Option Connector



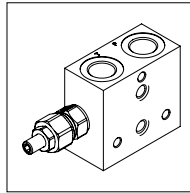
Option bidirectional diode
(hydraulic scheme)



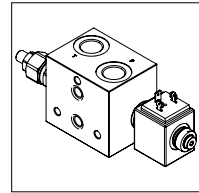
A - INLET ELEMENTS



C1

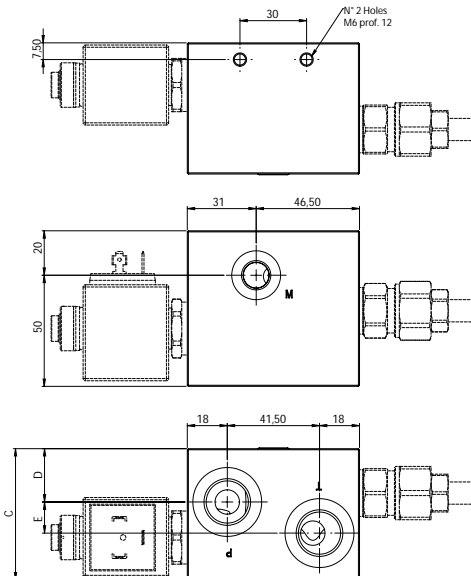
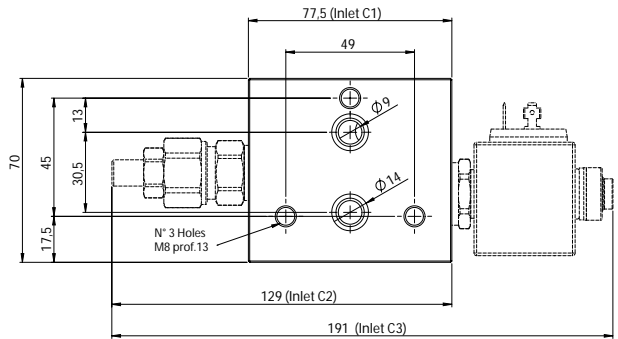


C2



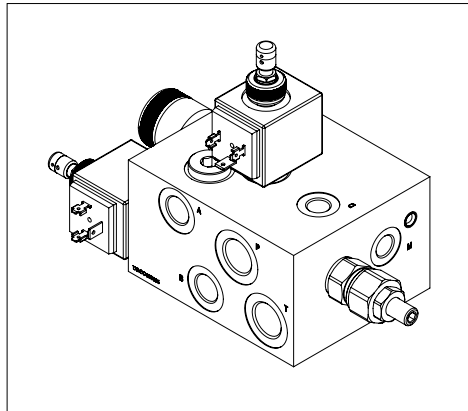
C3

General external dimensions of Inlet elements.

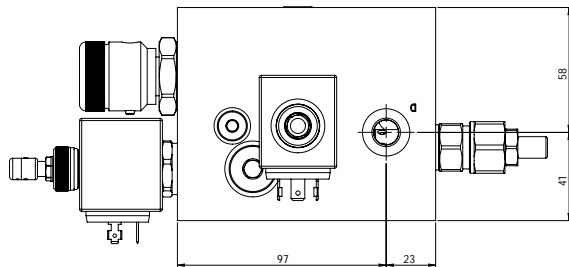
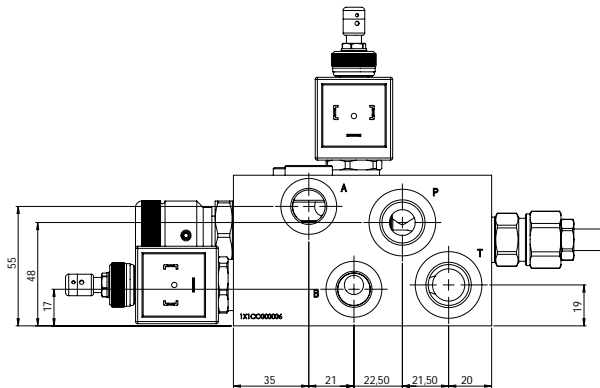
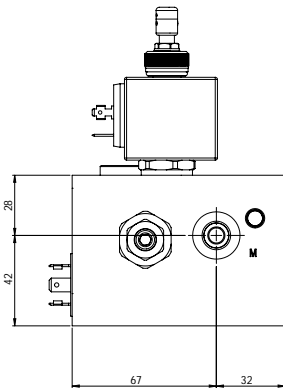


| INLET DIMENSIONS | | |
|------------------|-----------|----|
| | C1 and C2 | C3 |
| C | 39 | 59 |
| D | 19,5 | 24 |
| E | - | 14 |

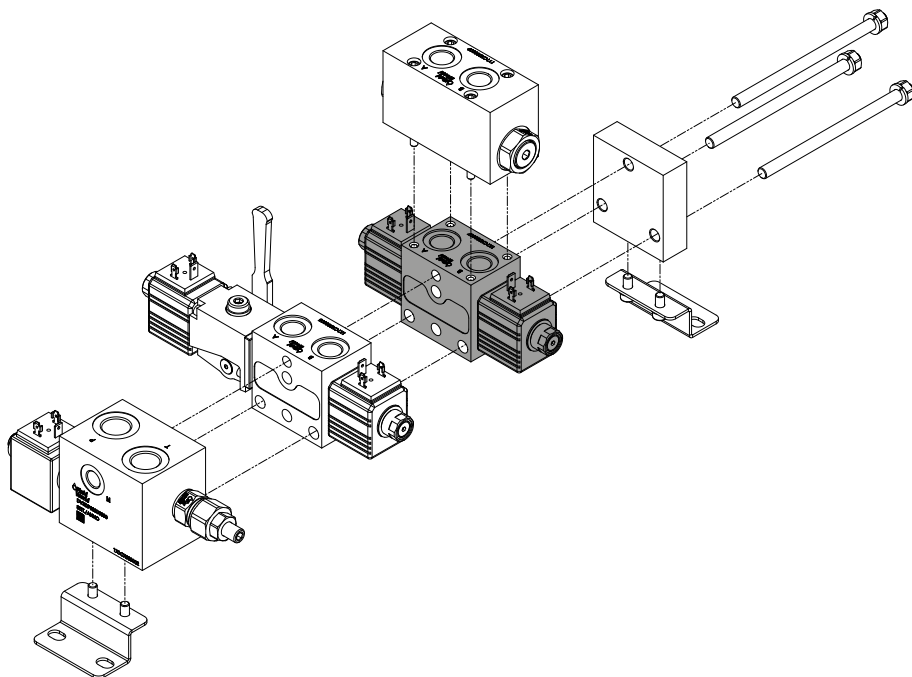
A - INLET ELEMENTS



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

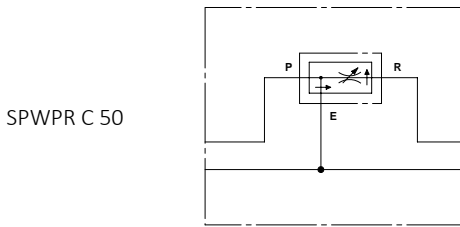
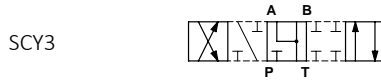
pag. 338
NN
DA
DB
SA
SB

B – WORK SECTION

| | | |
|------------|---|---|
| 04a | Ports: G3/8 (DIN 3852) | - 38 |
| 04b | Option corking: A e B open A closed, B open B closed, A open A e B closed | - N A B C |
| 05 | Electromagnetic actuator: 4/3 operated on both sides A and B 4/2 operated on side A only 4/2 operated on side B only | pag. 340 EE ES ED |
| 06 | Option emergency electromagnetic actuator: No emergency Pin Emergency | pag. 340 00 01 |
| 07 | Coil: 12 Vdc 24 Vdc No coil | pag. 340 V12 V24 BB0 |
| 08a | Coil connector: DIN EN 175301-803 (ex. DIN 43650) DT04-2P AMP-JUNIOR No coil | pag. 340 D T J B |
| 08b | Option coil: No connector With connector With connector and bidirectional diode No coil | pag. 341 NN NC SC B0 |
| 09a | Auxiliary valve: (contact our sales department) 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 | pag. 341 SS00 AB25 AS25 SB25 AB00 |
| 09b | Setting auxiliary valve: (contact our sales department) No valve Standard adjustment Adjustment if required Standard adjustment with safety plug Adjustment if required with safety plug Predisposition for valves with plug | pag. 341 N000 NSTD N(XXX) TSTD T(XXX) NTAP |
| 10 | Flangeable valve: No valve With flangeable valve on this section | - SF VF |

B - WORK SECTION

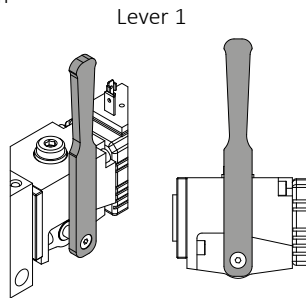
01 Spool:



Intermediate work section for regular flow to next section.

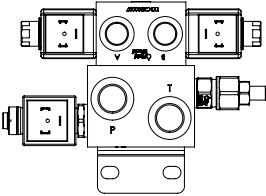
02 Manual emergency lever:

The value with the lever are lowered to 10 l/min and 210 bar.

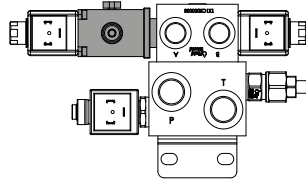


B - WORK SECTION

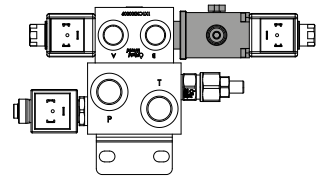
00
No lever



10
lever side A



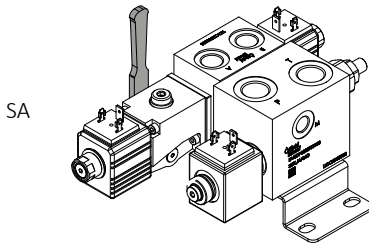
01
lever side B



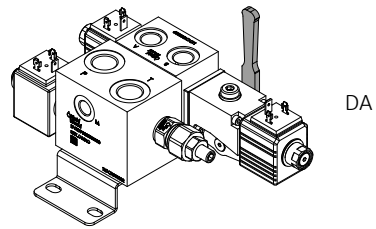
03

Lever position:

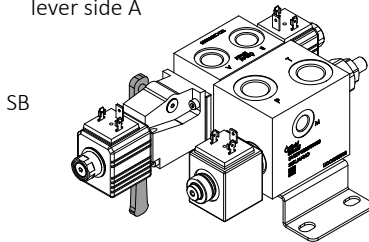
For choice
lever side A



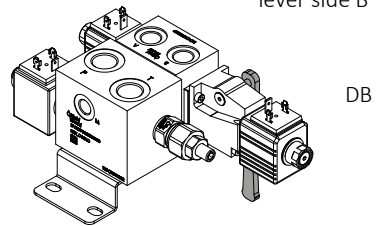
For choice
lever side B



For choice
lever side A



For choice
lever side B



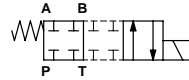
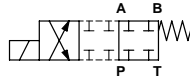
B - WORK SECTION

05 Electromagnetic actuator:

ES

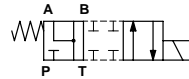
ED

Spool SCC3
4/2 operated on side A



Spool SCC3
4/2 operated on side B

Spool SCY3
4/2 operated on side A

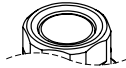


Spool SCY3
4/2 operated on side B

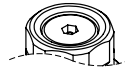
06 Option emergency electromagnetic actuator:

00

01



No emergency



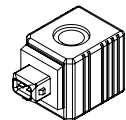
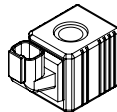
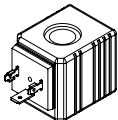
Pin emergency
(push the pin for
switches position)

07 08 Coil:

D

T

J



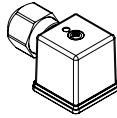
COIL CHARACTERISTICS

| 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



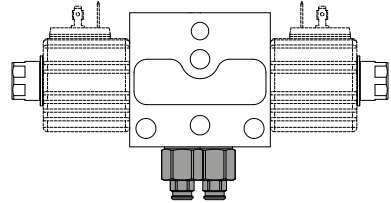
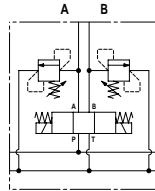
Option bidirectional diode
(hydraulic scheme)



09 **Auxiliary valve:**

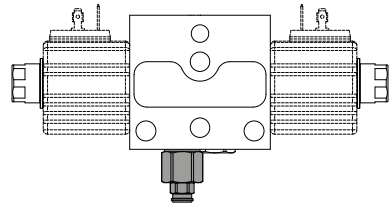
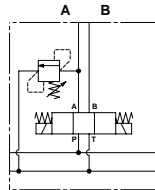
Contact our sales
department

AB__N__

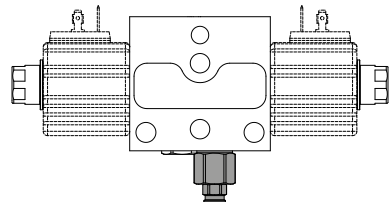
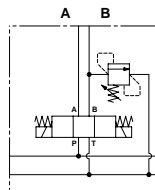


| SPRINGS | |
|---------|-------------------------------|
| Code | Adjustable pressure range bar |
| 03 | 1-30 |
| 25 | 100-250 |
| 45 | 250-450 |

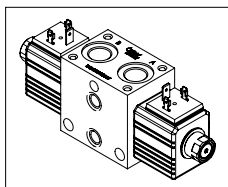
AS__N__



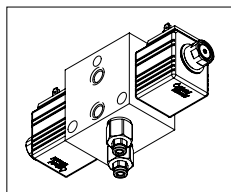
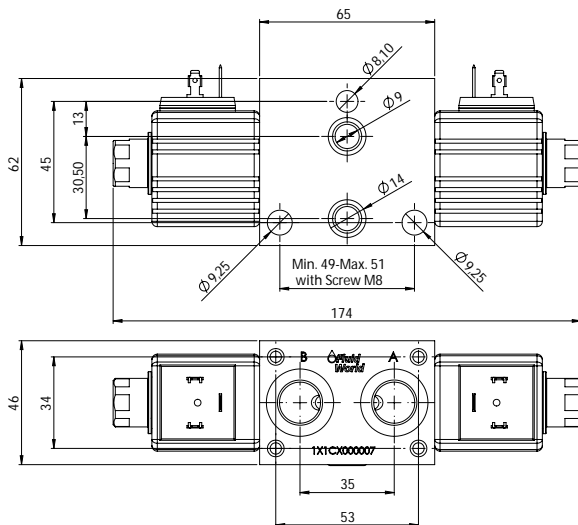
SB__N__



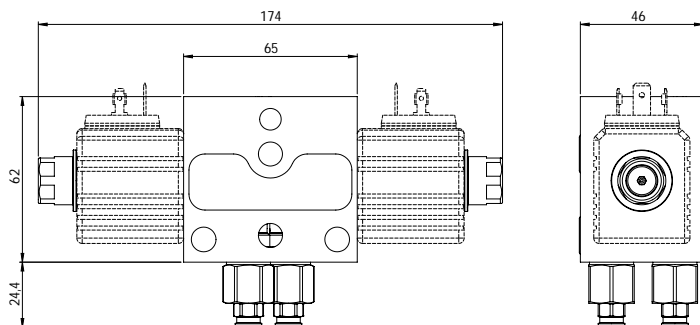
B - WORK SECTION



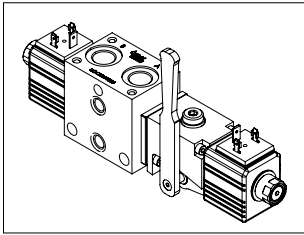
Working section
with 4/3 operated on both
sides A and B



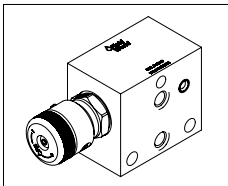
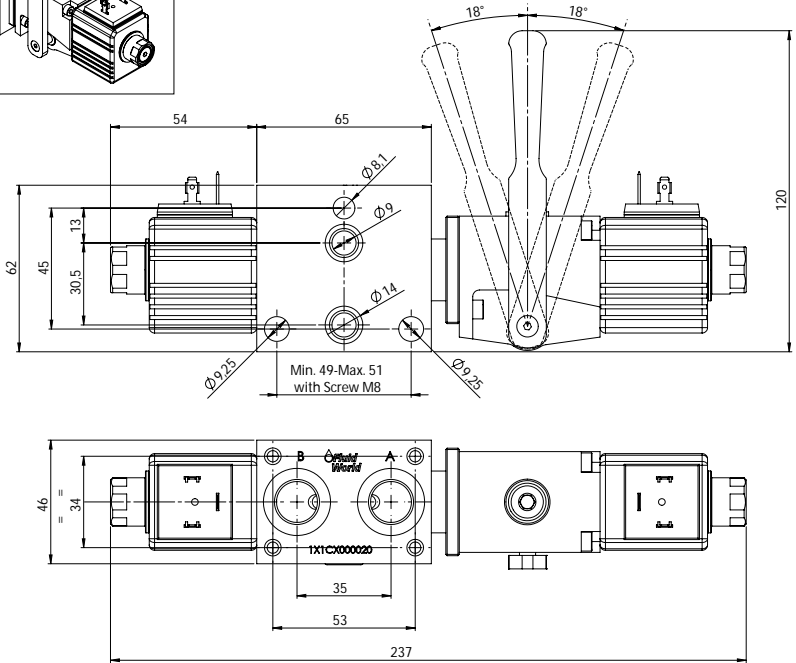
Working section
with auxiliary valves.



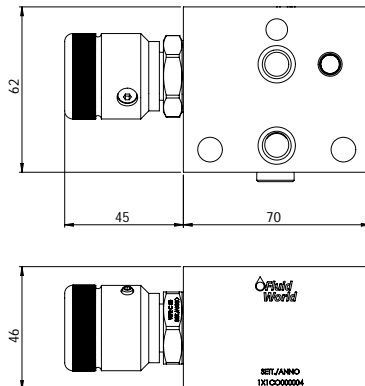
B - WORK SECTION



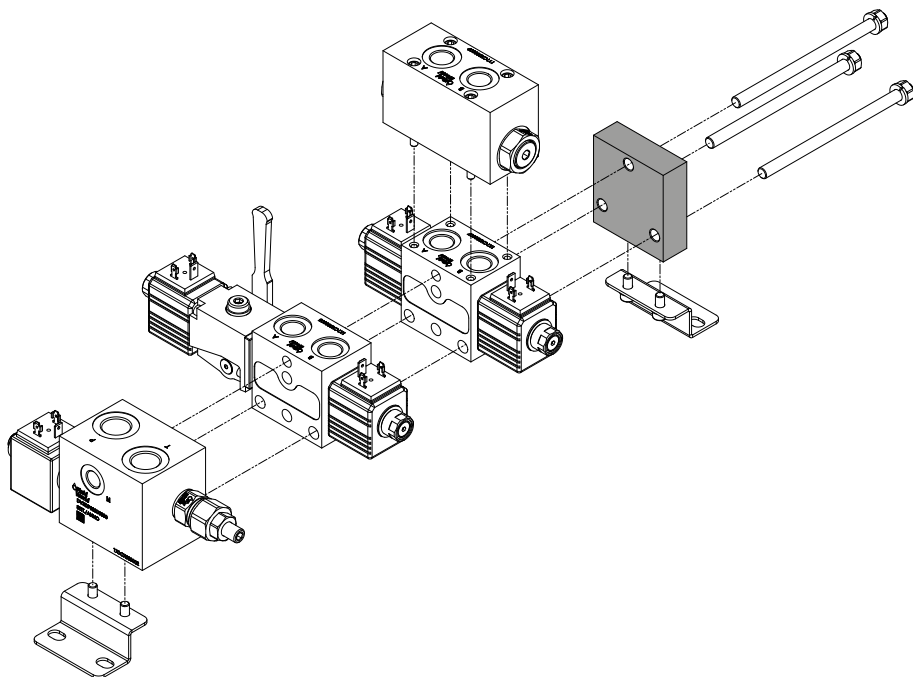
Working section
with lever for manual control.



Accessory section
with Cartridge WPR C 50



C - OUTLET ELEMENTS



| 01 | 02 | 03a | 03b | 04 | 05a | 05b | | | | | |
|----|----|------|-----|-----|-----|-----|---|---|--|--|---|
| EX | - | SNPT | - | N00 | 0 | - | A | - | | | / |

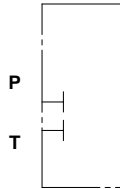
C - OUTLET ELEMENTS

| | | |
|------------|---|---|
| 01 | Outlet elements | EX |
| 02 | Application scheme: 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 | pag. 346 SNPT PNT1 P1TN P1T1 PTMP |
| 03a | Ports: No ports (SNPT configuration) P and T G3/8 (DIN 3852) P and T G1/2 (DIN 3852) | - N00 G38 G12 |
| 03b | Option corking: 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 |
| 04 | Material: Aluminium Steel zinc plated | - A S |
| 05a | Pressure relief valve: (Only for PTMP) Range 5-55 Range 25-110 Range 50-215 Range 100-350 Plug (without pressure relief valve) | pag. 347 05 10 20 35 00 |
| 05b | Setting pressure relief valve: (Only for PTMP) Standard adjustment Adjustment required Adjustment required with safety plug Plug (without pressure relief valve) | pag. 347 NSTD N(XXX) T(XXX) NTAP |

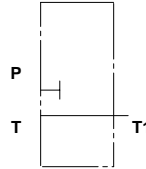
C - OUTLET ELEMENTS

02 Application scheme:

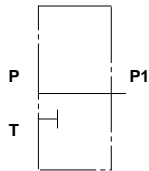
SNPT



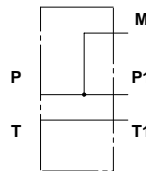
PNT1



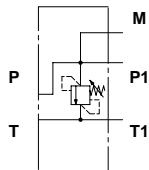
P1TN



P1T1

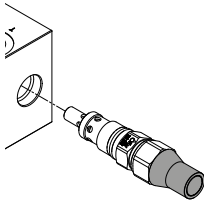
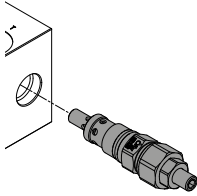


PTMP



C - OUTLET ELEMENTS

05 Pressure relief valve: (Only for PTMP)



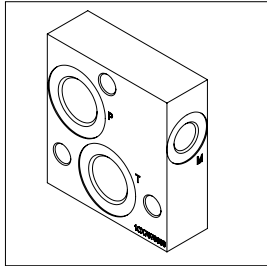
| SPRINGS | | | |
|-----------|-------------------------------|----------------------------|----------------------|
| Code | Adjustable pressure range bar | Pressure increase bar/turn | Standard setting bar |
| 05 | 5-55 | 15 | 5 |
| 10 | 25-110 | 25 | 25 |
| 20 | 50-215 | 50 | 50 |
| 35 | 100-350 |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

(option)

T

Adjustment required with safety plug

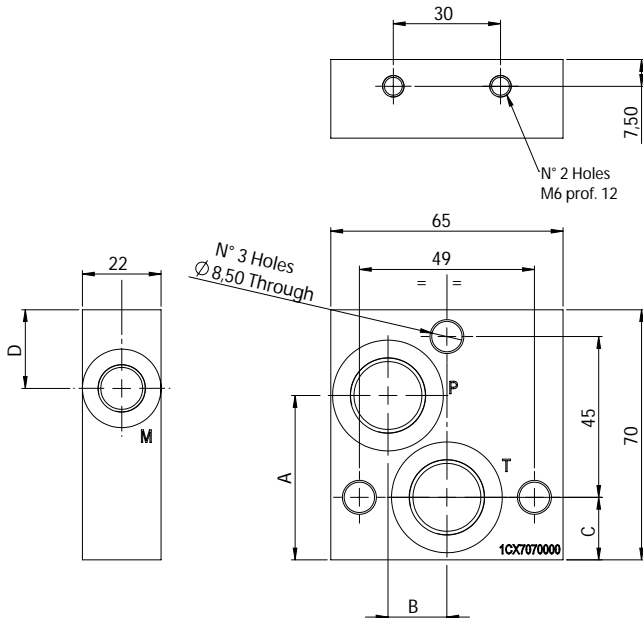
C - OUTLET ELEMENTS



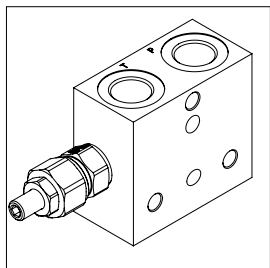
| OUTLET DIMENSIONS G 3/8 | | | | |
|-------------------------|------|------|------|------|
| | SNPT | PNT1 | P1TN | P1T1 |
| A | - | - | 42 | 42 |
| B | - | - | - | - |
| C | - | 13,5 | - | 13,5 |
| D | - | - | - | 22 |

| OUTLET DIMENSIONS G 1/2 | | | | |
|-------------------------|------|------|------|------|
| | SNPT | PNT1 | P1TN | P1T1 |
| A | - | - | 40 | 46 |
| B | - | - | - | 16,5 |
| C | - | 17,5 | - | 17,5 |
| D | - | - | - | 22 |

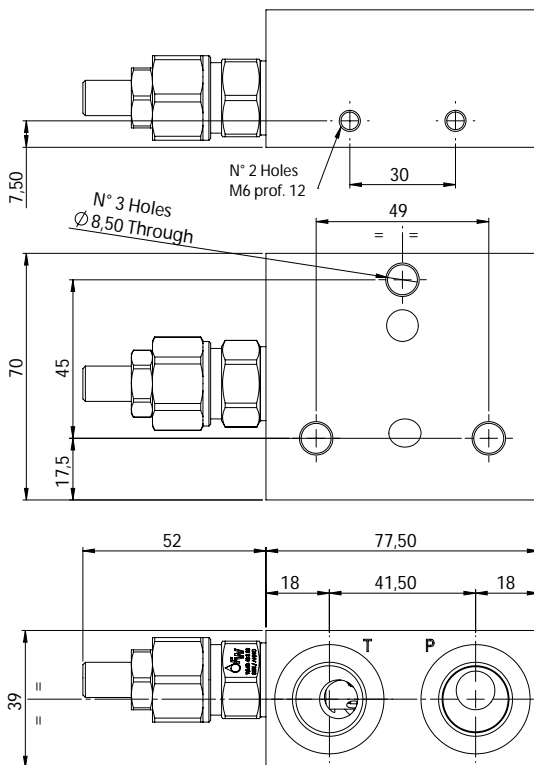
General external dimensions of **outlet elements**.



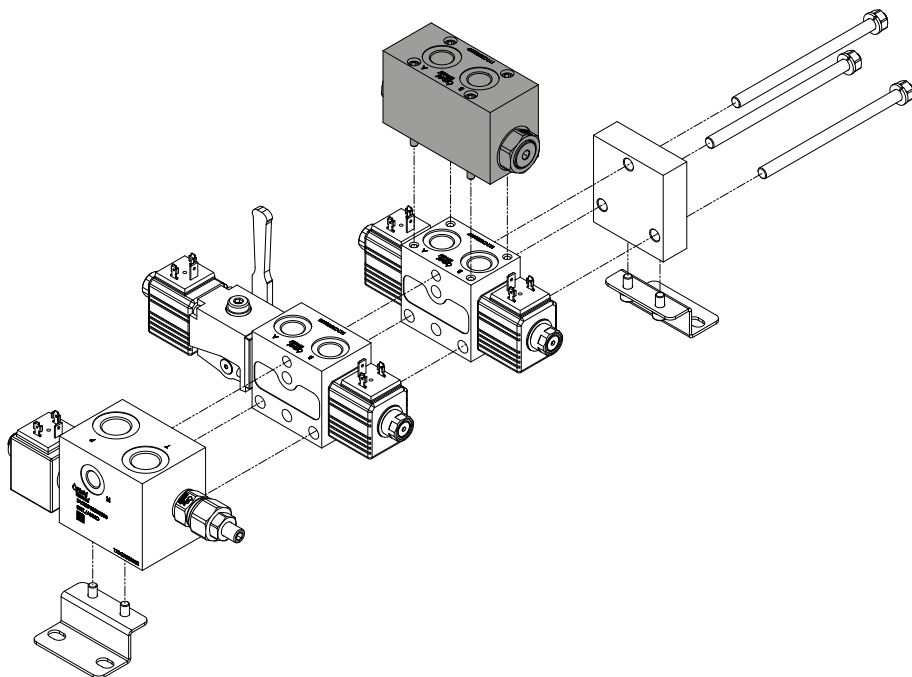
C - OUTLET ELEMENTS



PTMP outlet element
with P, T, M and pressure relief valve.



D - FLANGEABLE VALVE

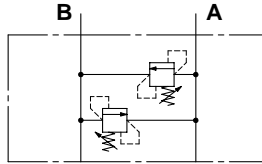


| 01 | 02 | 03a | 03b | 04 | 05 | 06 | 07 | 08 | 09 | | | | | | | | | | |
|-----|----|------|-----|-----|----|----|----|----|----|---|-----|---|---|---|---|---|---|---|---|
| WBD | - | 00AB | - | G38 | N | - | A | - | 01 | - | G07 | - | - | - | - | - | - | - | / |

D - FLANGEABLE VALVE

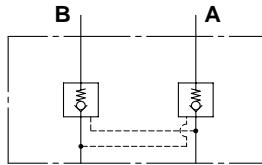
DUAL CROSS RELIEF VALVES

Pag. 352



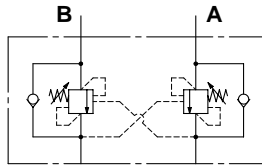
PILOT OPERATED CHECK VALVE

Pag. 354



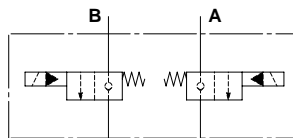
COUNTERBALANCE VALVES

Pag. 356



SOLENOID OPERATED VALVES

Pag. 358

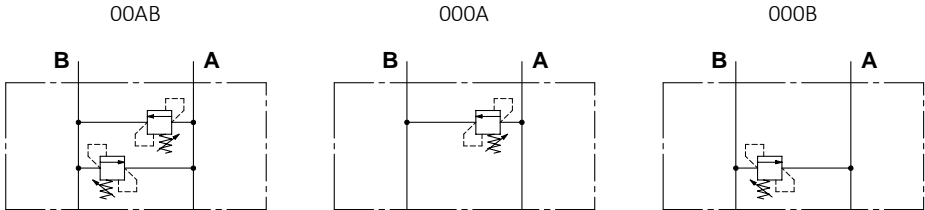


D - FLANGEABLE VALVE

| | | |
|------------|---|---|
| 01 | Type of Valve: Dual cross relief valves | - WMD |
| 02 | Configuration: Valves on side A and B Valve for port A only Valve for port B only | pag. 353 00AB 000A 000B |
| 03a | Ports: A e B G3/8 (DIN 3852) | - G38 |
| 03b | Option corking: A e B open A closed, B open B closed, A open A e B closed | - N A B C |
| 04 | Material: Aluminium Steel zinc plated | - A S |
| 05a | Main pressure relief valve: Range 5-55 Range 25-110 Range 50-215 Range 100-350 Plug (without pressure relief valve) | pag. 353 05 10 20 35 00 |
| 05b | Setting pressure relief valve: Standard adjustment Adjustment required Adjustment required with safety plug Plug (without pressure relief valve) | pag. 353 NSTD N(XXX) T(XXX) NTAP |

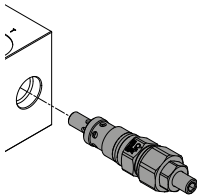
D - FLANGEABLE VALVE

02 Configuration:

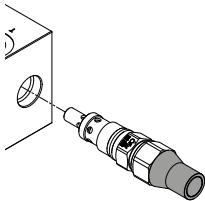


For configuration with only one valve,
 please contact our sales department.

05 Main pressure relief valve: (Omit for C1)



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



(option)

T

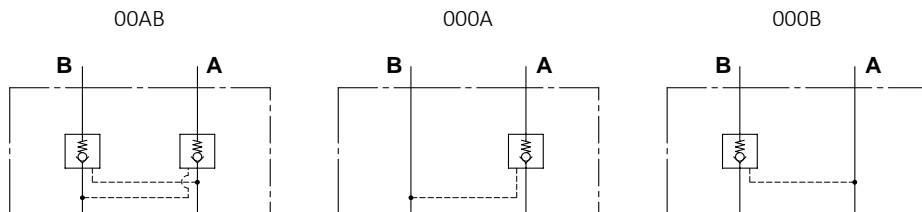
Adjustment required with safety plug

D - FLANGEABLE VALVE

| | | |
|------------|--|---|
| 01 | Type of Valve: Pilot operated check valve | - WBD |
| 02 | Configuration: Valves on side A and B Valve for port A only Valve for port B only | pag. 355 00AB 000A 000B |
| 03a | Ports: A e B G3/8 (DIN 3852) | - G38 |
| 03b | Option corking: A e B open A closed, B open B closed, A open A e B closed | - N A B C |
| 04 | Material: Aluminium Steel zinc plated | - A S |
| 05 | Cracking pressure: 1 bar 2,5 bar 5 bar 10 bar | - 01 25 05 10 |
| 06 | Pilot ratio: 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:

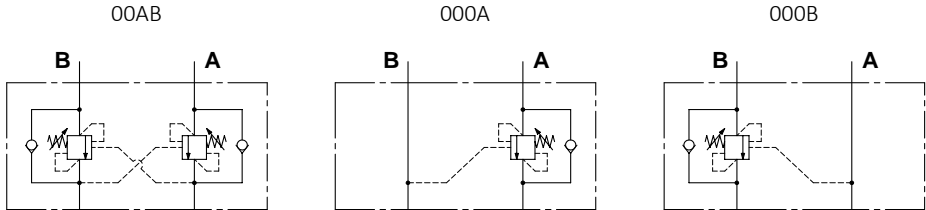


D - FLANGEABLE VALVE

| | | |
|------------|---|---|
| 01 | Type of Valve: Counterbalance Valves | - WOD |
| 02 | Configuration: Valves on side A and B Valve for port A only Valve for port B only | pag. 357 00AB 000A 000B |
| 03a | Ports: A e B G3/8 (DIN 3852) | - G38 |
| 03b | Option corking: A e B open A closed, B open B closed, A open A e B closed | - N A B C |
| 04 | Material: Aluminium Steel zinc plated | - A S |
| 05 | Size: For 30 l/min | - 30 |
| 06 | Compensation: Standard (no compensated) Fully compensated | - ST FC |
| 07 | Spring: 20 35 | pag. 357 20S 35S |
| 08 | Pilot ratio: 4:1 8:1 11:1 1:1 (only for 60 l/min) | pag. 357 04 08 11 01 |
| 09 | Adjustement: 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 | |

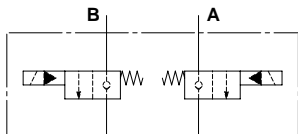
D - FLANGEABLE VALVE

| | | |
|------------|---|---|
| 01 | Type of Valve: Solenoid operated valves | - WE2 |
| 02 | Configuration: Valves on side A and B Valve for port A only Valve for port B only | pag. 359 00AB 000A 000B |
| 03a | Ports: A e B G3/8 (DIN 3852) | - G38 |
| 03b | Option corking: A e B open A closed, B open B closed, A open A e B closed | - N A B C |
| 04 | Material: Aluminium Steel zinc plated | - A S |
| 05 | Type of valve: Single lock normally closed, bidirectional Single lock normally open, bidirectional Double lock normally closed, bidirectional Double lock normally open, bidirectional | pag. 359 STNC2 STNA2 DTNC2 DTNA2 |
| 06 | Option electric valve: Without emergency NA with push emergency NA with push&twist emergency NC with screw emergency | pag. 359 0000 EMPO EMPT EMSO |
| 07 | Coil: 12 Vdc 24 Vdc No coil | pag. 360 V12 V24 BB0 |
| 08a | Coil connector: DIN EN 175301-803 (ex. DIN 43650) DT04-2P AMP-JUNIOR No coil | pag. 360 D T J B |
| 08b | Option coil: No connector With connector With connector and bidirectional diode No coil | pag. 360 NN NC SC B0 |

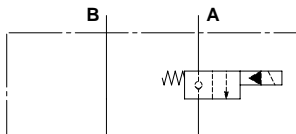
D - FLANGEABLE VALVE

02 Configuration:

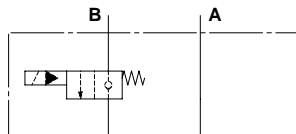
00AB



000A

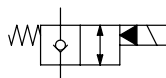


000B

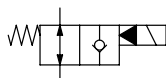


05 Type of valve:

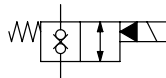
STNC2



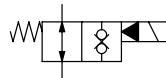
STNA2



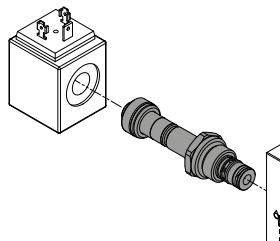
DTNC2





DTNA2



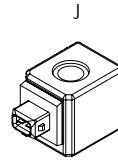
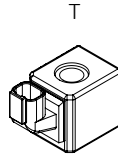
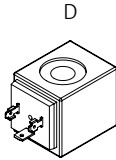
06 Option electric valve:



| MANUAL OVERRIDE | |
|---------------------------|---|
| (EMP) Push |  |
| (EMPT) Push & Twist |  |

D - FLANGEABLE VALVE

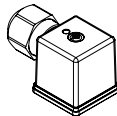
07 08 **Coil:**



| 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

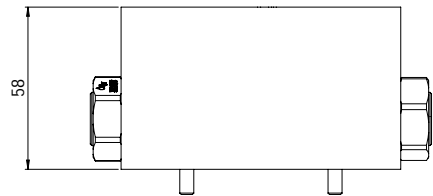
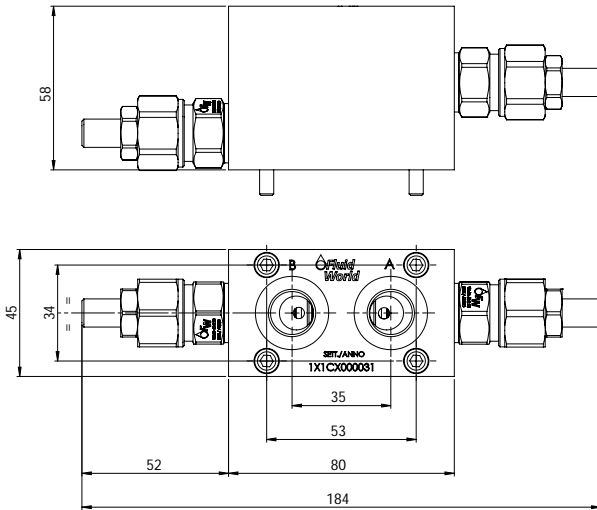
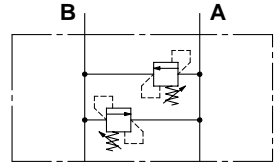


Option bidirectional diode
(hydraulic scheme)

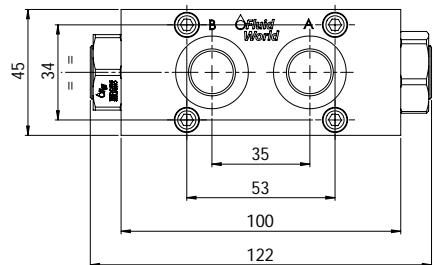
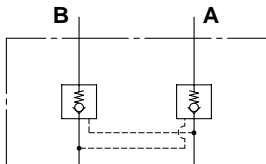


D - FLANGEABLE VALVE

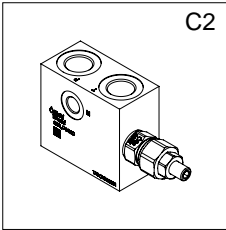
DUAL CROSS RELIEF VALVES



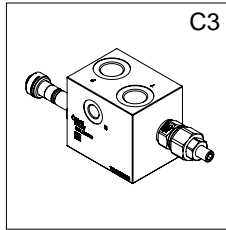
PILOT OPERATED CHECK VALVE



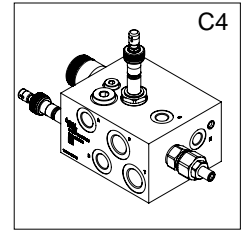
PERFORMANCE
PRESTAZIONI



Pressure Relief Valve for Inlet Elements C2, C3 and C4.

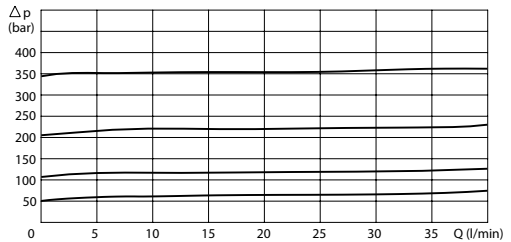


Solenoid Operated Valve for Inlet Elements C3 and C4.

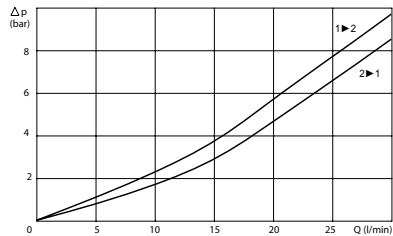


Flow Regulator Valve for Inlet Elements C4.

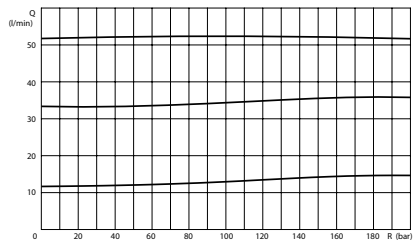
PRESSURE DROP CURVES



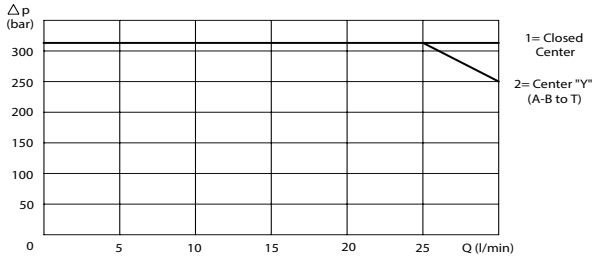
PRESSURE DROP CURVES



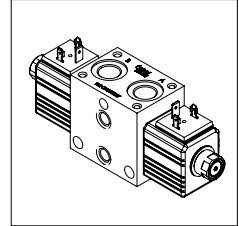
COMPENSATION CURVES



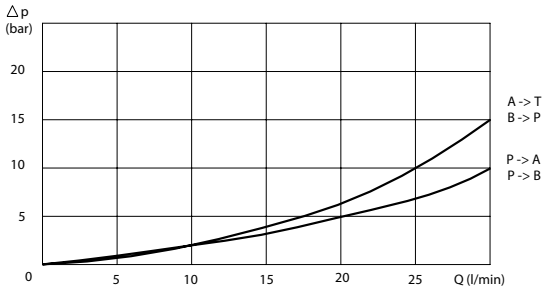
SPOOL OPERATING LIMITS



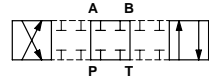
Working Section



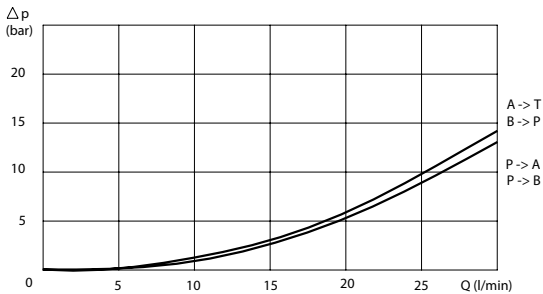
PRESSURE DROP CURVES



Spool Closed Center



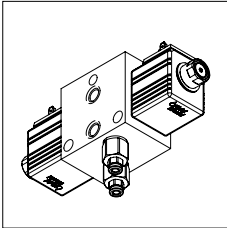
PRESSURE DROP CURVES



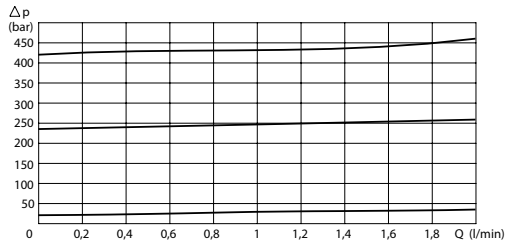
Motor spool centre



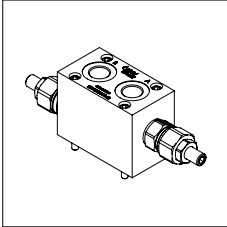
Pressure Relief Valve for Working Section with auxiliary valves



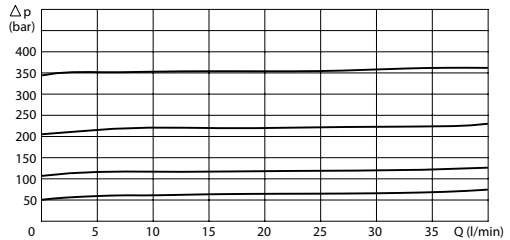
PRESSURE DROP CURVES



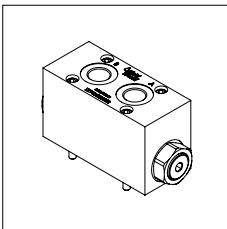
Dual Cross Relief Valve



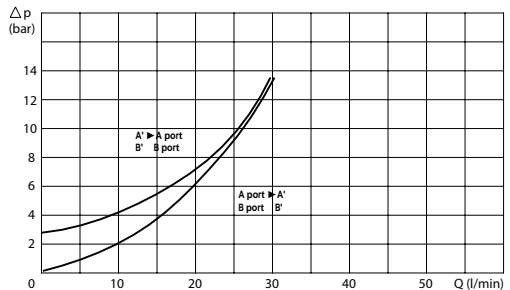
PRESSURE DROP CURVES



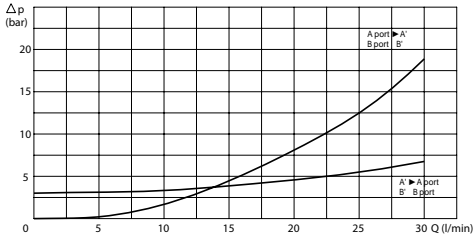
Pilot Operated Check Valve



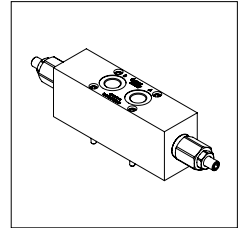
PRESSURE DROP CURVES



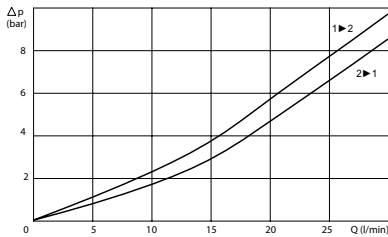
PRESSURE DROP CURVES



Counterbalance Valves

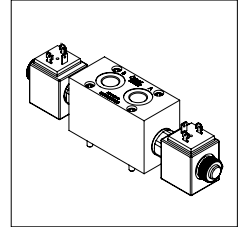


PRESSURE DROP CURVES

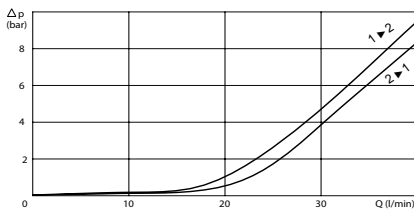


WST Valves

Solenoid Operated Valve



PRESSURE DROP CURVES



WDT Valves





fluidworld.it

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