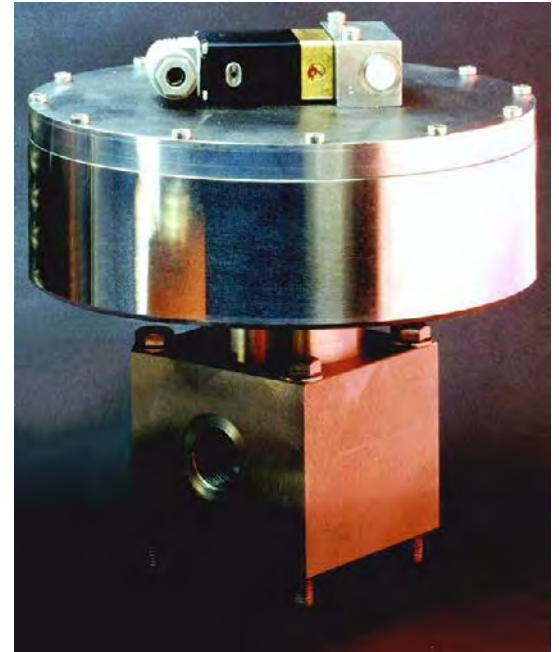
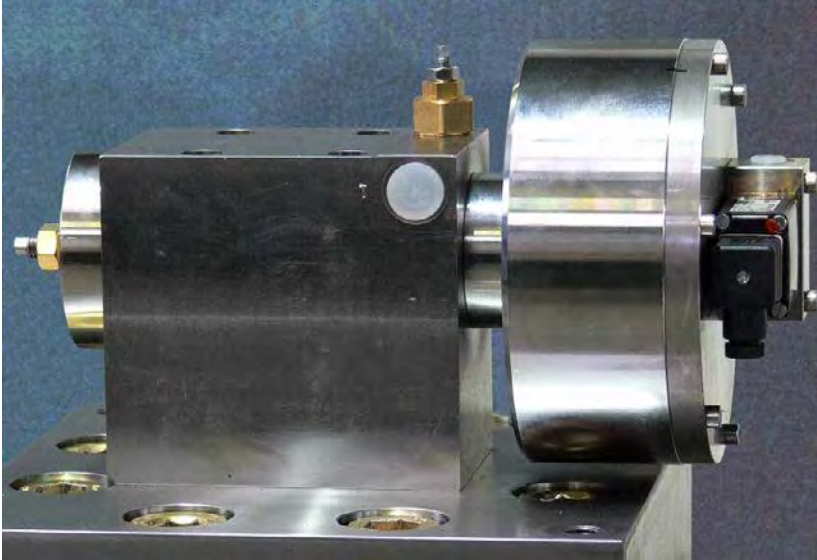


PILOT VALVES



Valves for water hydraulic and descaling applications

These pilot valves can be used to operate cartridge valves from size 10 to 250mm.

The robust construction and compact design provide direct operation in circuits.
Available as pressure and directional control valves up to 350bar.

2/2 and 3/2 way directional control valves ND 2 to 32mm

Pressure relief and reducing valves ND 2mm

Please also see our catalogues:

Cartridge program up to 350bar/pressure valves ND16 to 3/2 directional valves ND10 to 250

Complete Valves

Descaling Valves

High Pressure Valves up to 800bar

PILOT VALVES

2/2, 3/2 Directional Valves

Type WEV 06

These robust and smooth operating valves can be used with compressed air, oil, water and emulsions. All ports can be pressurised. The valves type 500100, 500106 and 500008 are equipped with soft seats for a leak-free function. The piston is spring biased in the closed position and allows a fail safe operation so that the valve can be used for accumulator safety valves also.

Variations:

- solenoid operated
- manually operated
- hydraulically operated
- Limit switches

Type WEV 06 - 500100

NP 250bar ND6mm

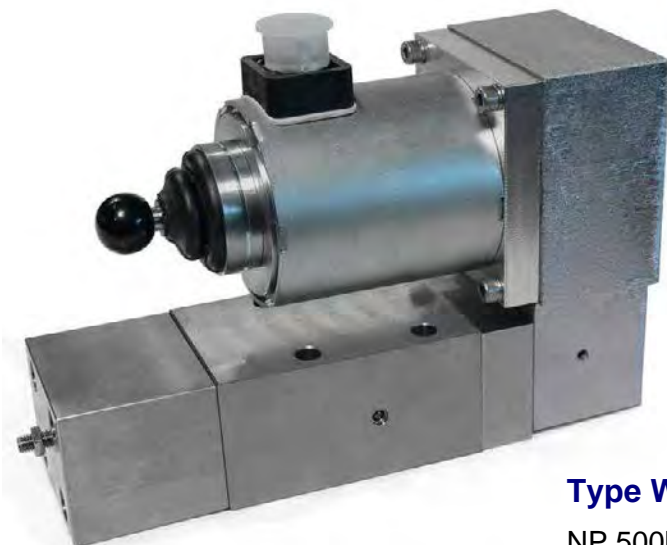
compressed air,
gases Group 2 on request



Type WEV 06 - 500138

NP 250bar ND6mm

Water, oil and emulsions



Type WEV 06 - 500106

NP 350bar ND6mm

compressed air,
gases Group 2 on request

Type WEV 06 - 500008

NP 500bar ND6mm

Water, oil and emulsions

PILOT VALVES

3/2 Directional Valves Type 500008

can be used with oil, water and emulsions up to pressures of 500bar. This robust and smooth operating valve can be used also in descaling or dirty water applications. It can be used for flow in any direction.

All ports can be pressurised with 500bar. The valve is equipped with soft seats for a leak-free function. The piston is spring biased in the closed position and allows a fail safe operation so that the valve can be used for accumulator safety valves.



Variations:

- solenoid operated
- gas or fluid operated
- manual operated

Technical Data

Operating Pressure	0-500 bar
Size	DN6
Operating Temperature	-20 bis +80 °C
Ambient Temperature	max 70 °C
Medium	Wasser, Öl Emulsion
Recommended Filtration	
0 to 350bar	25 micron
350 to 500bar	10 micron
Max. Power consumption	42 W
ED	100%
Protection Class	IP 65
Voltage Tolerance	+5 bis -10%
Opening and closing time	100-300 ms
Material	Stainles Steel, PTFE, PEEK, Viton

Ordering Code

Valve: WEV06P-250-500008-01-024G 24V DC
 120W 110V/50Hz (60Hz)
 240W 220V/50Hz (60Hz)
 — max. operating pressure in bar

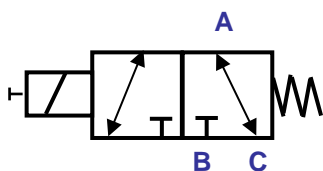
*other voltages on request

Seal Kit: WEV06VTS-500008-01-92

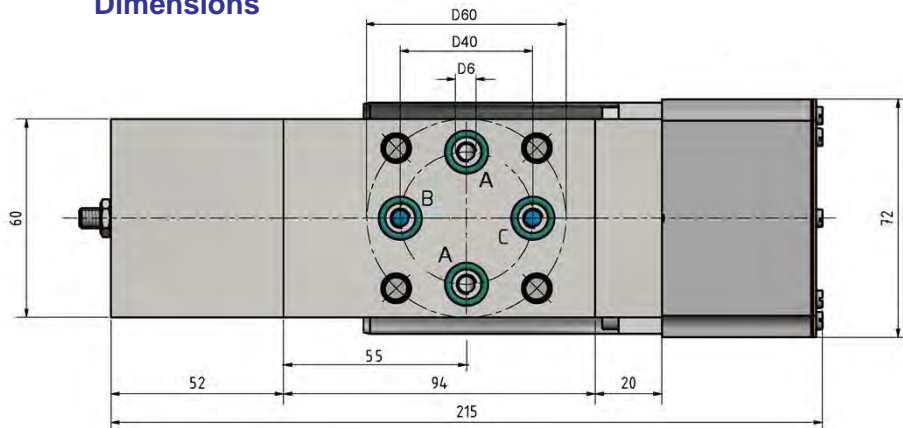


PILOT VALVES

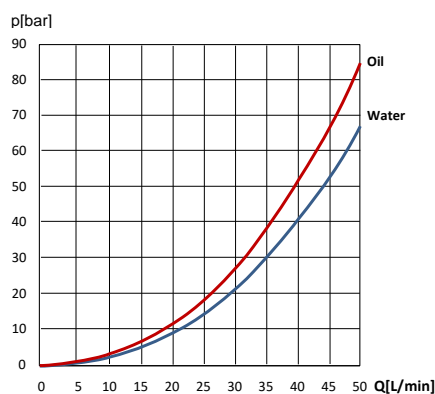
Symbol



Dimensions

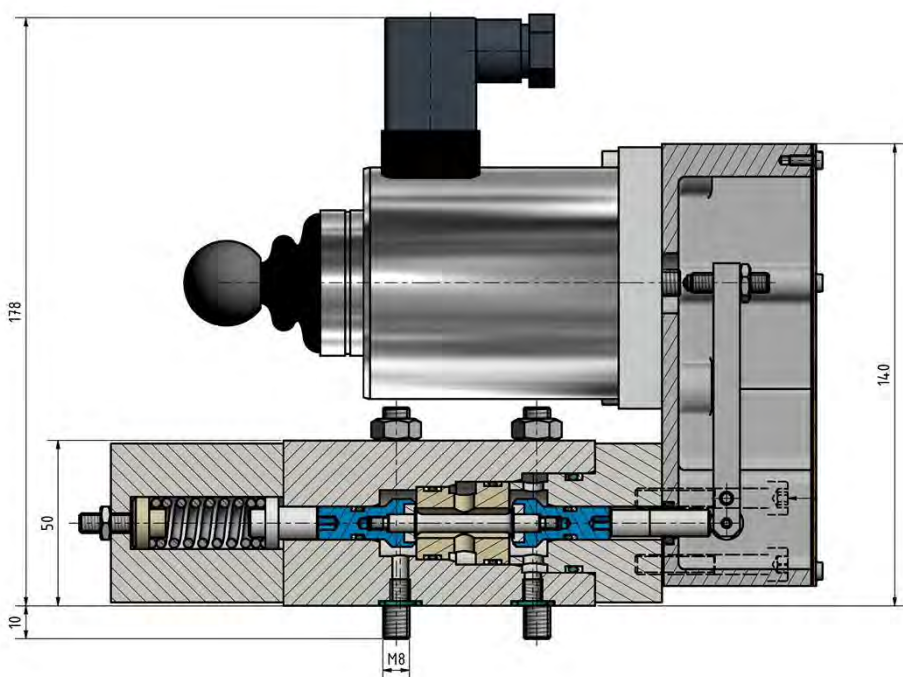


Flow Characteristics



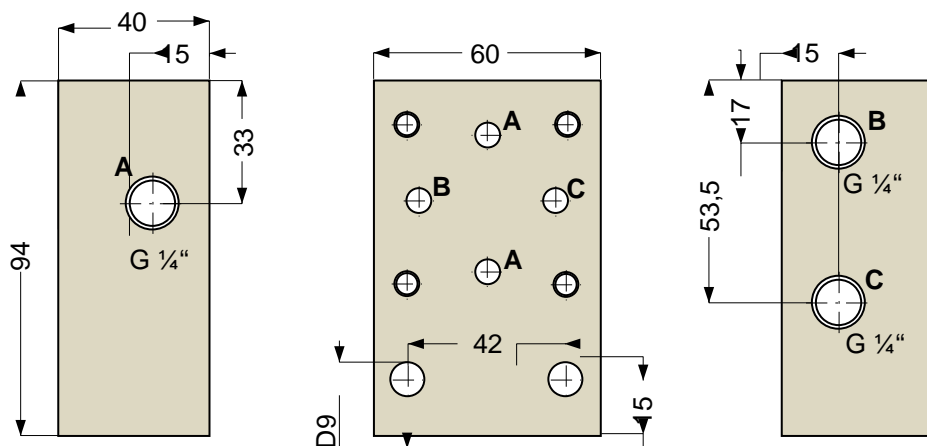
Higher operating pressures will require an orifice nozzle.

Ports A, B and C are equipped with M6 threads deep 8mm.



Subplate for WEV06P

Dimensions



Ordering Code

Subplate: 850252

PILOT VALVES

2/2, 3/2 Directional Valve Type 500138

can be used with oil, water and emulsions up to pressures of 250bar. This robust and smooth operating valve can be used also in descaling or dirty water applications. It can be used for flow in any direction.

All ports can be pressurised with 250bar. The valve is equipped with hardened seats. The piston is spring biased in the closed position and allows a fail safe operation so that the valve can be used for accumulator safety valves.

Variations:

- solenoid operated
- gas or fluid operated
- manual operated



Technical Data

Operating Pressure	0-250 bar
Size	DN6
Operating Temperature	-20 bis+80 °C
Ambient Temperature	max 70°C
Medium	Wasser, Öl, Emulsion
Recommended Filtration	
0-65bar	25 micron
65-250bar	10 micron
150-250bar water service only occasionally operated	
Max. Power consumption	42 W
ED	100%
Protection Class	IP 65
Voltage Tolerance	+5bis -10% VDE580
Opening and closing time	100 - 200 ms
Material	Stainless Steel, Brass, Delrin, Viton

Ordering Code

Valve: WEV06P-250-500138-01-024G 24V DC
 120W 110V/50Hz (60Hz)
 240W 220V/50Hz (60Hz)
 — max. operating pressure in bar

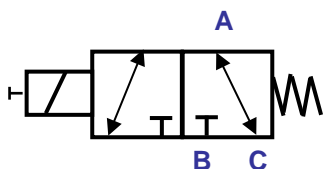
*other voltages on request

Seal Kit: WEV06VTS-500038-01-92

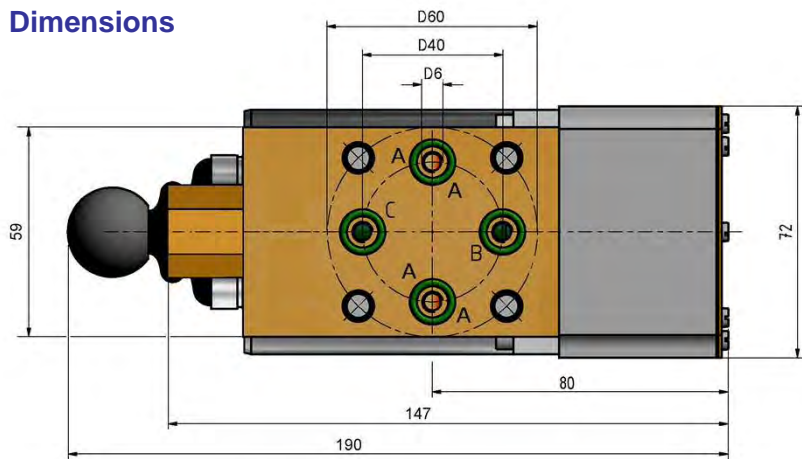


PILOT VALVES

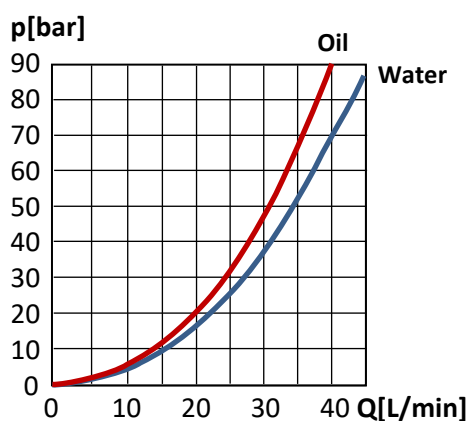
Symbol



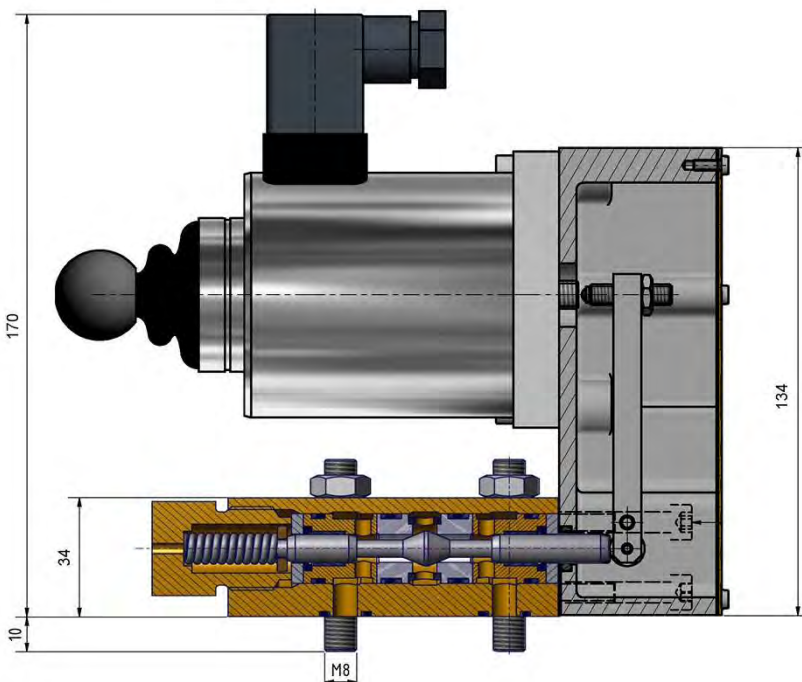
Dimensions



Flow Characteristics

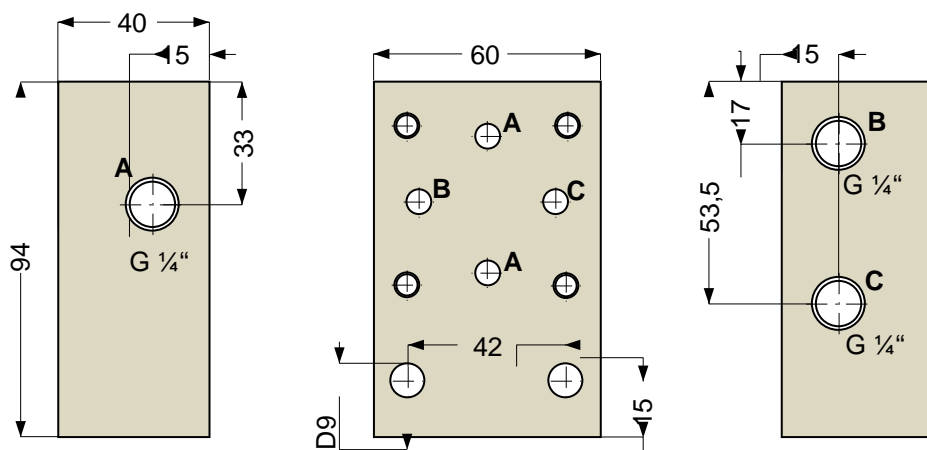


Higher operating pressures
will require an orifice nozzle.



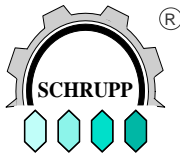
Subplate for WEV06P

Dimensions



Ordering Code

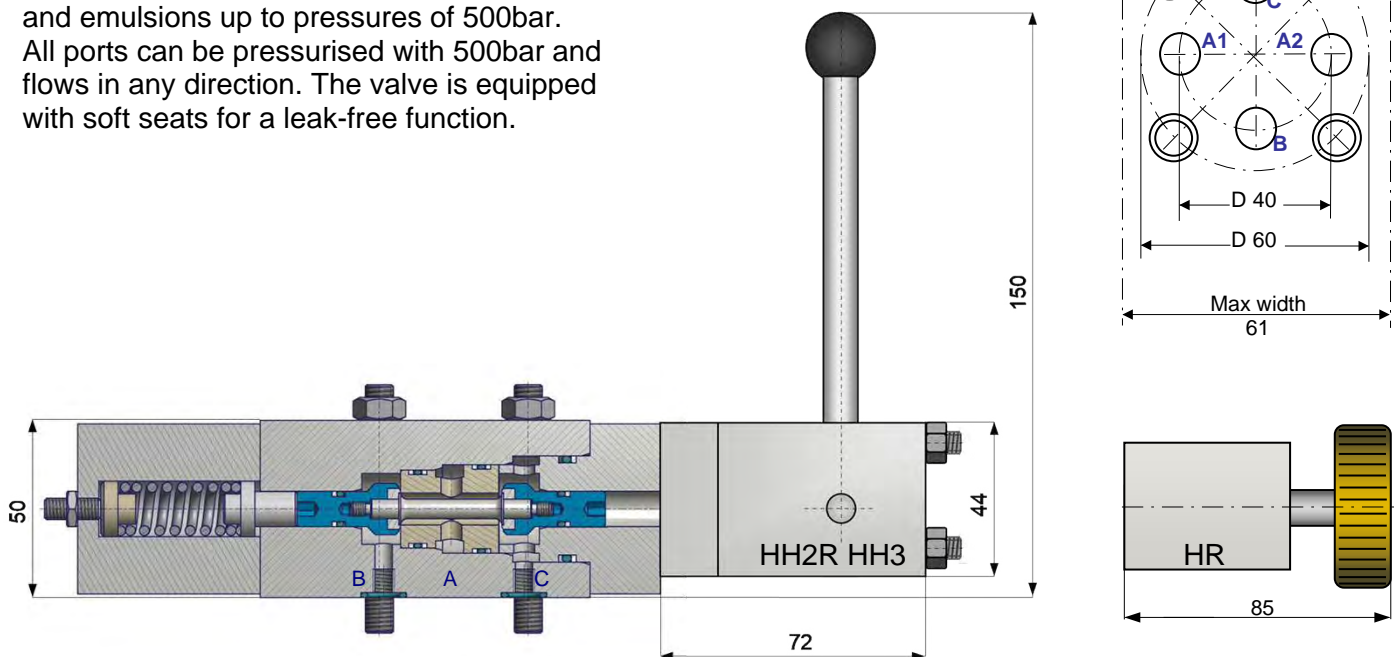
Subplate: 850252



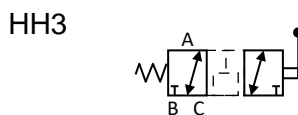
PILOT VALVES

Manual Operated Valves Type 500008 / 500106

can be used with compressed air, oil, water and emulsions up to pressures of 500bar. All ports can be pressurised with 500bar and flows in any direction. The valve is equipped with soft seats for a leak-free function.



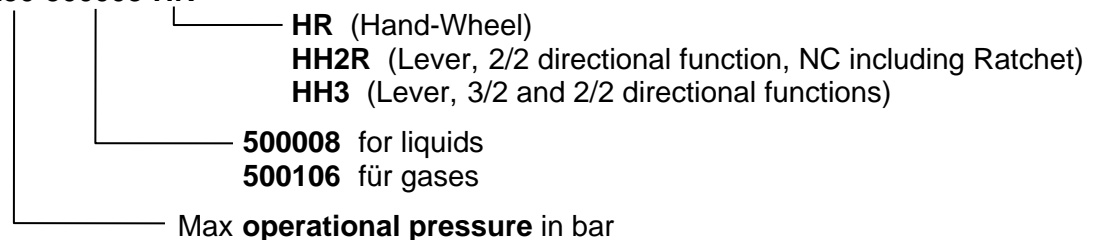
Technical Data



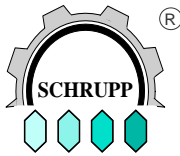
Operating Pressure	0-500 bar
Nominal Size	DN6
Operating Temperature	-20 bis +80 °C
Ambient Temperature	max 70 °C
Medium	Gases, Water, Oil
Recommended Filtration	25 my
0 to 350bar	10 my
350bar to 500bar	
Material	Stainless Steel, Brass, Delrin, Viton

Ordering Code

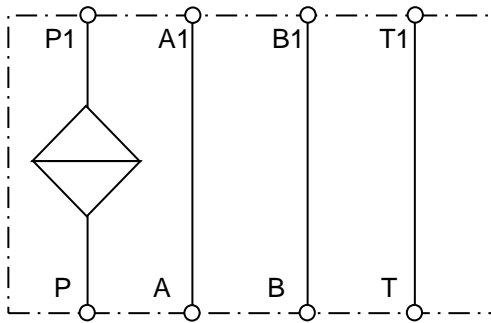
Valve: WEV06P-250-500008-HR



Others on request



PILOT VALVES



Filter Sandwich Plates Type 851014

Are used to protect type 500000 and 500002 pilot valves against contamination of dirt particles in compressed air, water or oil medium up to an operating pressure of 350bar. The spiral wound metal filter elements can be cleaned easily and have a filtration rate of 80 micr. These sandwich filters are used in systems with long distances between the central filter system and the pilot valves so that corrosion and dirt particles from the piping cannot penetrate into the pilot systems. The central filter system should have a filtration rate of 80micr or better.

Material

Stainless Steel, PTFE, PEEK, Viton

Technical Data

Operating pressure	0-350 bar
Nominal size	DN4
Operating temperature	-20 to +80 °C
Ambient temperature	max 45 °C
Medium	Air, Water, Oil
Filtration	80 micr
Spiral wound metal filter-element, cleanable	

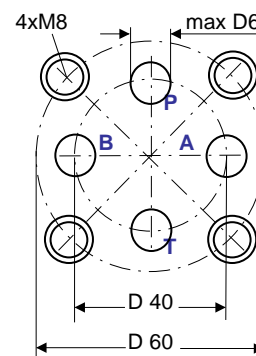
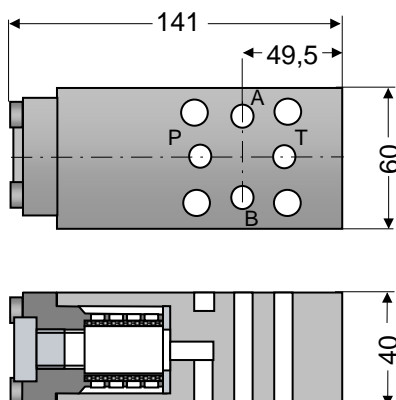
Order No.

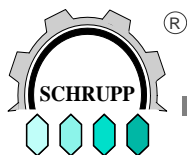
Sandwichfilter complete

851014

Spare filter-element

157346





PILOT VALVES

3/2 Directional Pilot Valves

Schrupp pilot valves are soft seated with metal support especially designed to withstand the high pressures and levels of contamination found in typical steel mill descaling systems. The integrated throttle valves allow an adjustment of the opening and closing speed of the main valve. The valves are designed for fail safe operation, which means that the main valve will close automatically even if the electric or pneumatic power is off

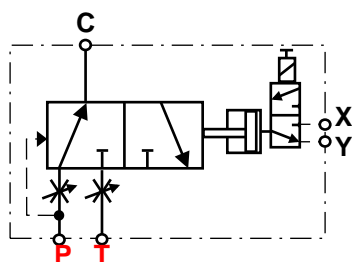
(i.e accumulator shut off valves).

Technical Data:

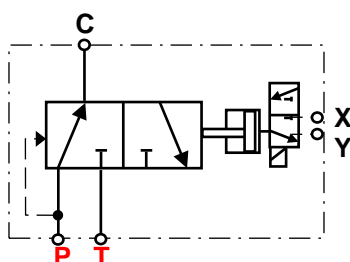
ND	10 mm
Hydraulically oper, pressure	15-350bar
Pneumatic Pressure	2-10bar
Filtration	50-100 mic
Power Consumption	8W
Tolerance Voltage	10%
Protection Class	IP65

Diagram

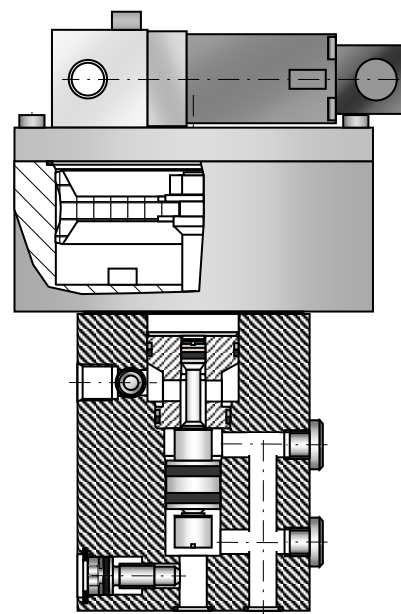
Version with integrated opening and closing speed adjustment



Version without speed adjustment



Type 851037



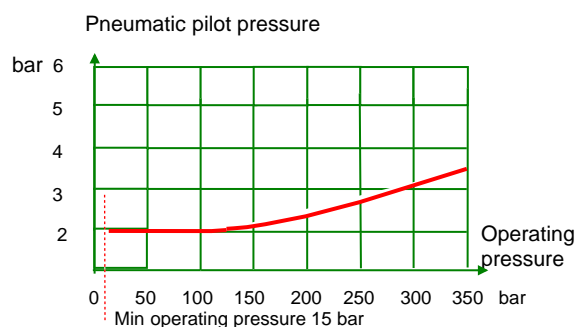
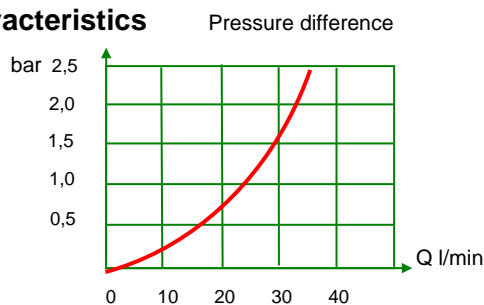
Ordering Code

Version with speed adjustment

24V GL	851037 24V
110-120V 50/60Hz	851037 120V
220-240V 50/60Hz	851037 240V

Special designs:
F.e. manual override, position indicator,
different pilot pressure range,
special materials

Characteristics



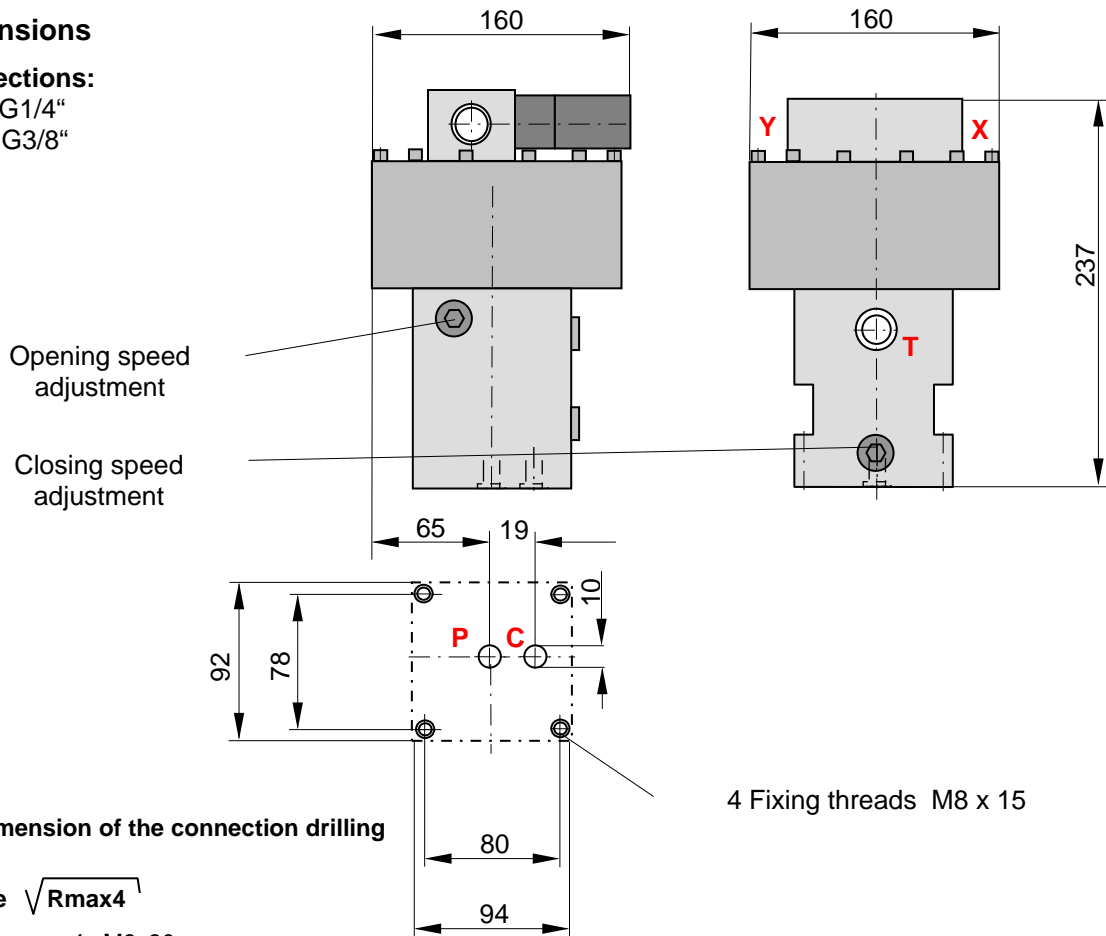
PILOT VALVES

Dimensions

Connections:

$X, Y = G^{1/4}$

T = G3/8"



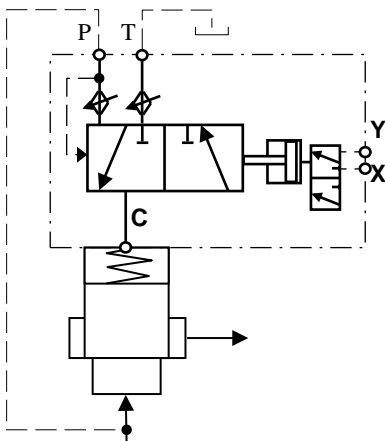
**Max dimension of the connection drilling
10mm.**

Surface $\sqrt{R_{max4}}$

Fixing screws 4x M8x30mm.

The fixing threads have to have a depth of 15mm min.

Altern. thread and screws 5/16" – 18 UNC

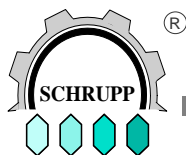


Example

Typical application for an ND10 pilot valve in combination with a large cartridge valve.

The valve is spring loaded and closed without electrical or pneumatic power.

The pilot valve can be used for cartridges ND50 to ND100mm



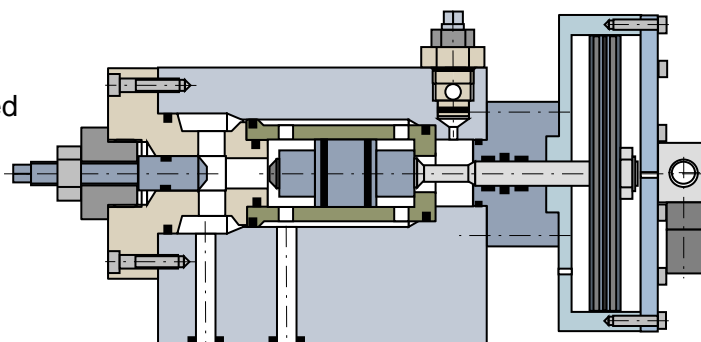
PILOT VALVES

3/2 Way Pilot Valve

Schrupp pilot valves are soft seated with metal support especially designed to withstand the high pressures and levels of contamination found in typical steel mill descaling systems. The integrated throttle valves allow an adjustment of the opening and closing speed of the main valve. The valves are designed for fail safe operation, which means that the main valve will close automatically even if the electric or pneumatic power is off

(i.e accumulator shut off valves).

Series 850885



Technical Data

ND	16 mm
Hydraulically oper, pressure	7-350bar
Pneumatic Pressure	3-10bar
Filtration	50-100 mic
Power Consumption	8W
Tolerance Voltage	10%
Protection Class	IP65

Ordering Code

Version with speed adjustment

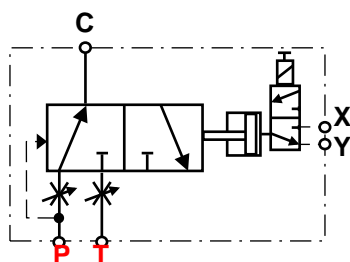
24V GL	850885 24V
110-120V 50/60Hz	850885 120V
220-240V 50/60Hz	850885 240V

Version without speed adjustment

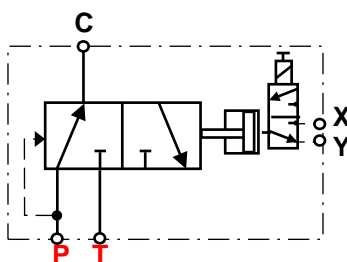
24V GL	850885-01 24V
110-120V 50/60Hz	850885-01 120V
220-240V 50/60Hz	850885-01 240V

Diagram

Version with integrated opening and closing speed adjustment

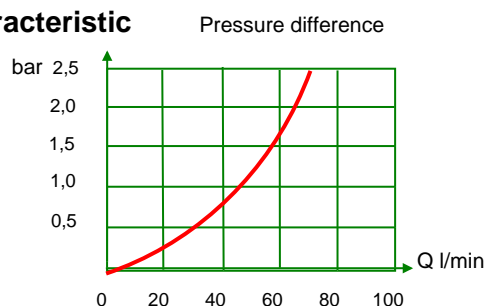


Version without speed adjustment

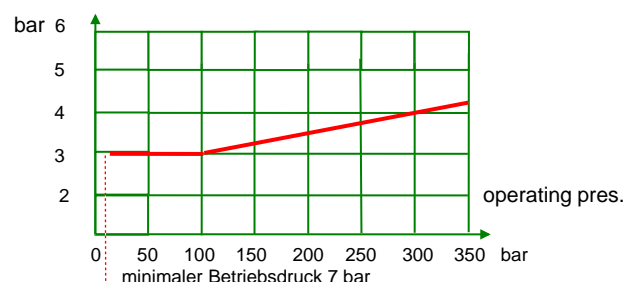


Special designs:
F.e. manual override, position indicator,
different pilot pressure range, special materials

Characteristic



Pneumatic pilot pressure



PILOT VALVES

Dimensions

Connections:

X, Y = G1/4"

T = G1/2"

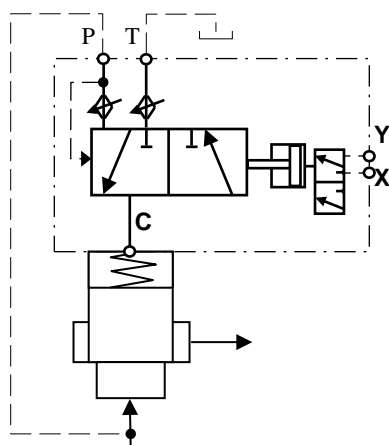
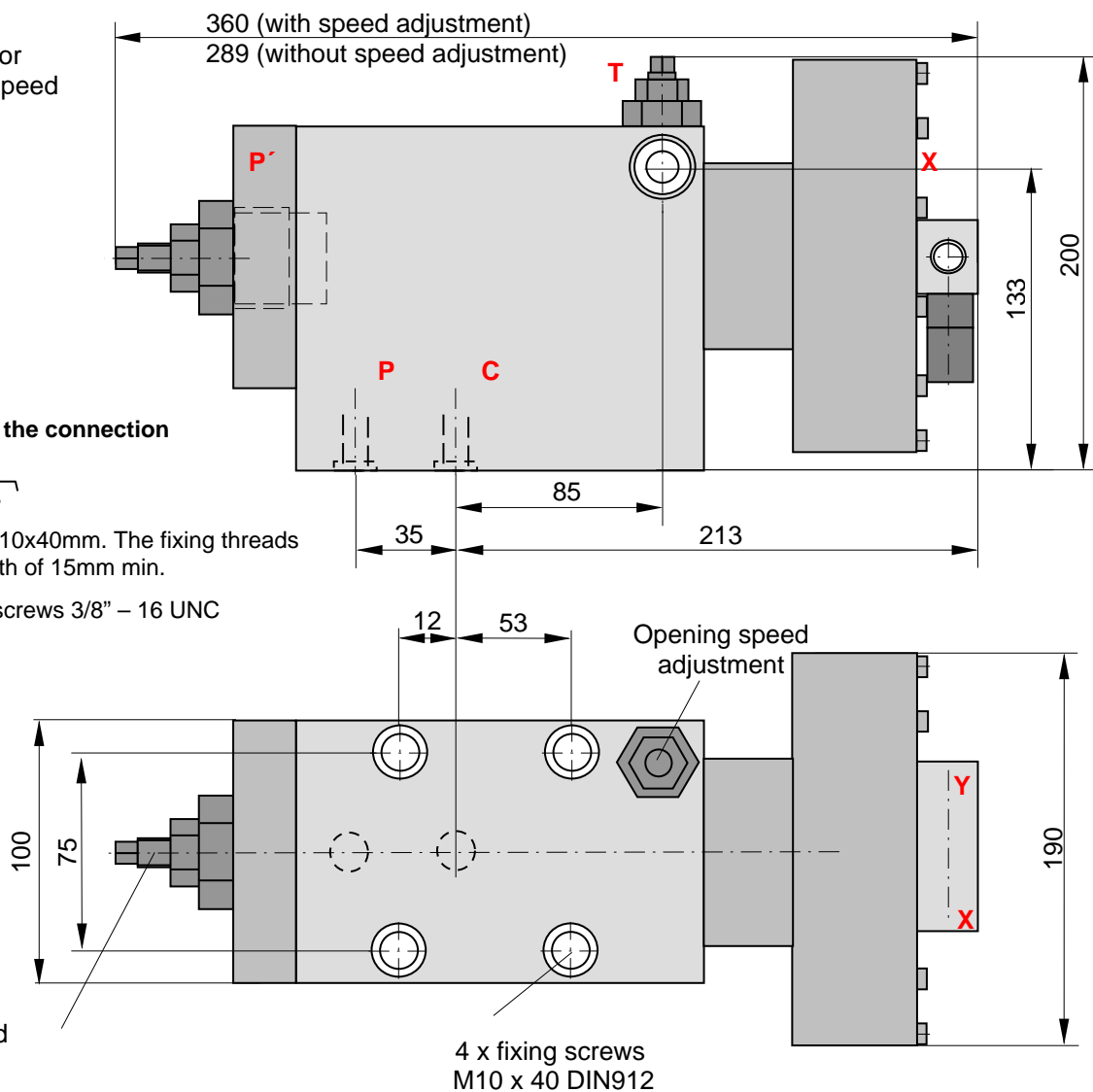
P' = G1" (only for version without speed adjustment)

Max dimension of the connection drilling 25mm.

Surface $\sqrt{R_{max}4}$

Fixing screws 4x M10x40mm. The fixing threads have to have a depth of 15mm min.

Altern. thread and screws 3/8" – 16 UNC

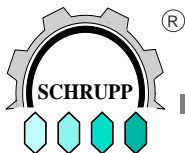


Example

Typical application for a P6P valve in combination with a large cartridge valve.

The valve is spring loaded and closed without electrical or pneumatic power.

The pilot valve can be used for cartridges ND65 to ND250mm



PILOT VALVES

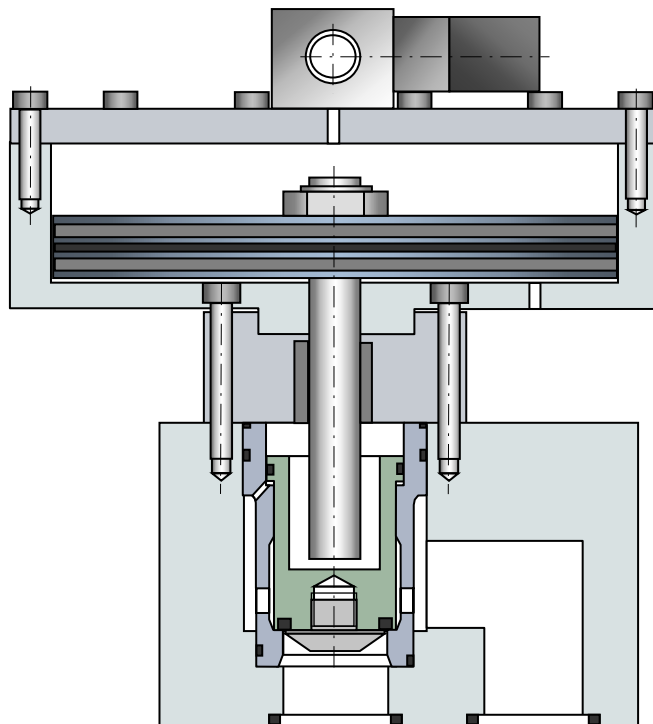
2/2 Directional Pilot Valve

Type P2P

Pilot valves Type 2 are used for control of Schrupp water hydraulic valves, especially in those systems with contaminated media such as descaling systems. These robustly designed valves are frequently used without pilot filtration and can also be used as 2/2 way directional control valves.

Technical Data

Size	10,16, 25 mm
Hydraulic pressure	350bar
Pneumatic pressure	2-10bar
Recommended filtration	50 mic
Electrical power consumption	8W
Voltage tolerance	10%
Electrical protection	IP65



Ordering Code

P2P 16 - 6 - 1 - F - 024G

- **S V** Ratio if special

024 G = 24v DC

220 W = 220v/50Hz

F = Fluid
G = Gas

0 = without Pilot
1 = normal open
2 = normal close

3 = Hard Seat
6 = Soft Seat (Standard)

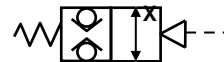
16 = Size 10,16, 25 (mm)

P2P = for subplate mounting

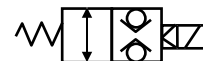
P2R = with threaded connections (on request)

Diagrams

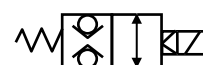
Without pilot valve



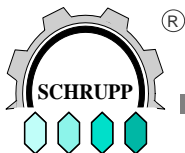
Normally open



Normally closed

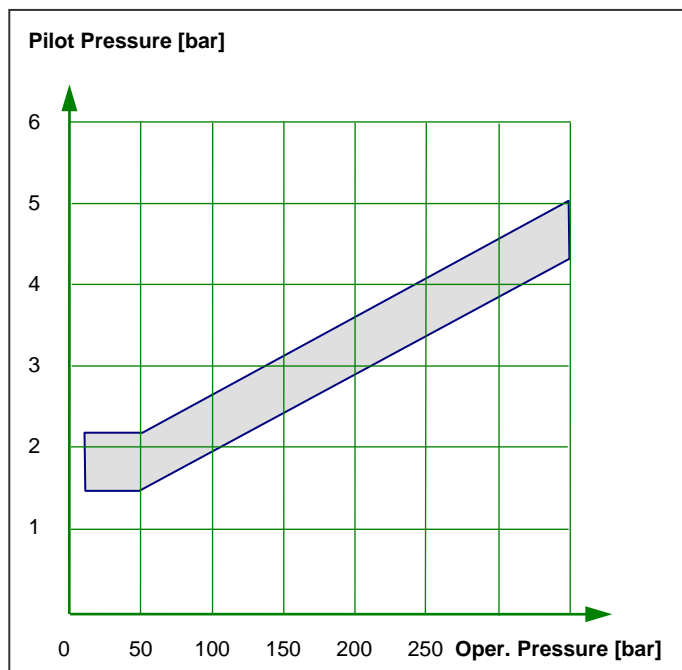
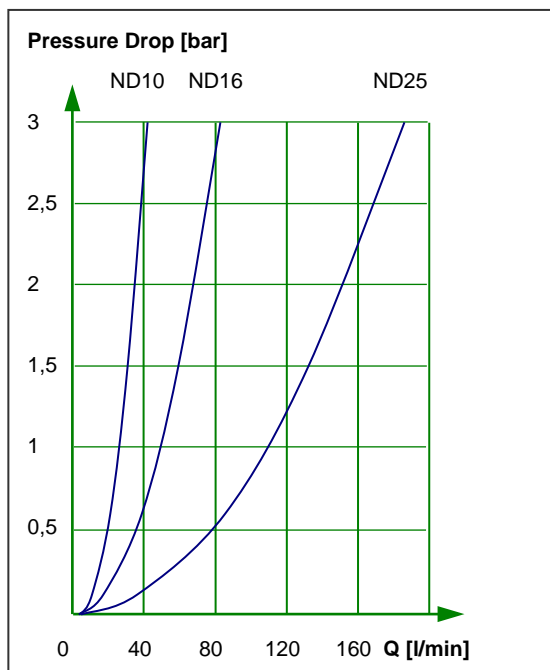


Others on request

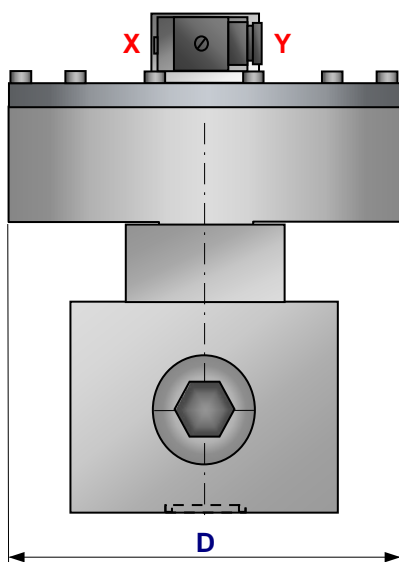


PILOT VALVES

Characteristics



Dimensions



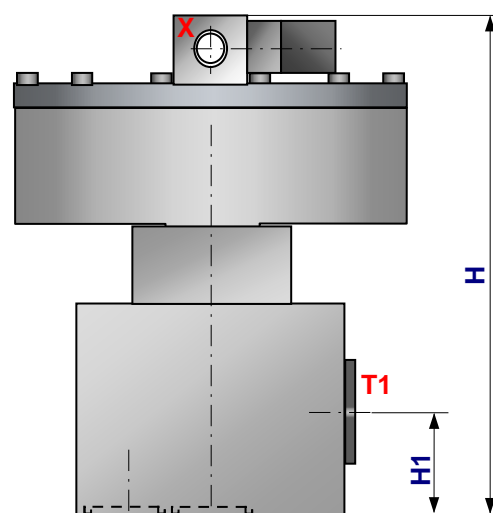
Connections:

X Pilot Pressure = G1/4"

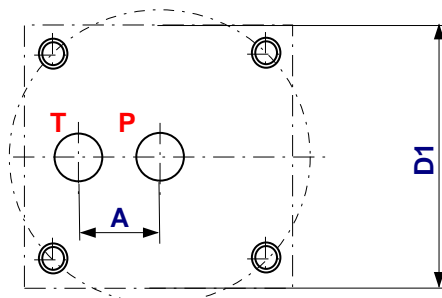
Y Vent = G1/4"

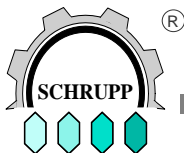
T, P main connections

T1 Alternative connection



NW	D	D1	H	H1	A	T, P	T1	Fixing Bolts	
								thread	Thread depth
25	275	140	268	(51)	38,5	D25	(G3/4")	M12	20
16	211	112	176	29	28	D16	G3/8"	M10	20
10	130	74	139	22,5	22	D10	G1/8	M8	12



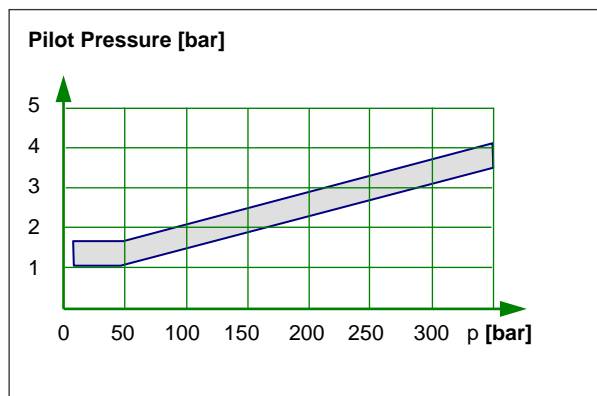
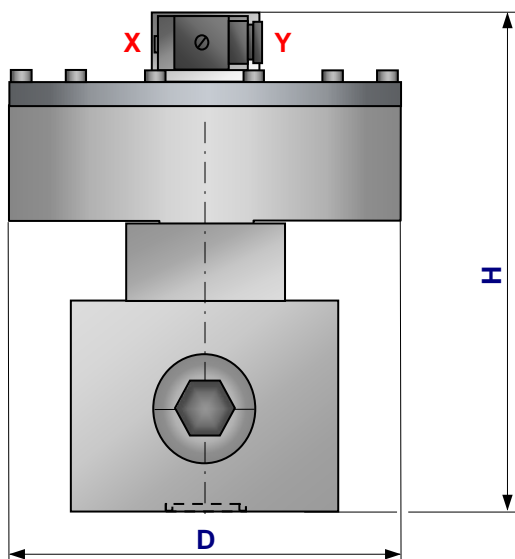


PILOT VALVES

2/2 Directional Pilot Valve

Type P2P

Special application with larger pilot cylinder



NW	D	H	Other dimensions and characteristics identical to standard version Ordering Code - SV
16	235	216	
10	160	156	

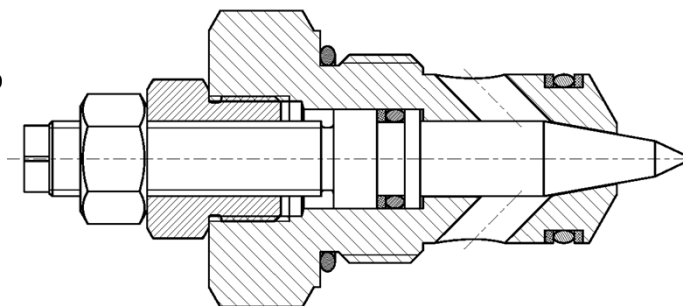
Throttle Valves

are used in combination with pilot valves type P2P for the adjustment of the opening and closing speed and can be integrated into the cartridge cover or into an separate sandwich plate.

Ordering Code:

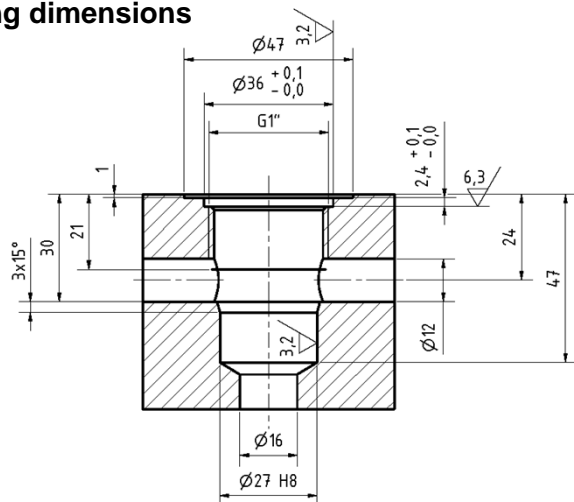
DN 10 PN350 **654261**

DN 16 PN350 **654192**

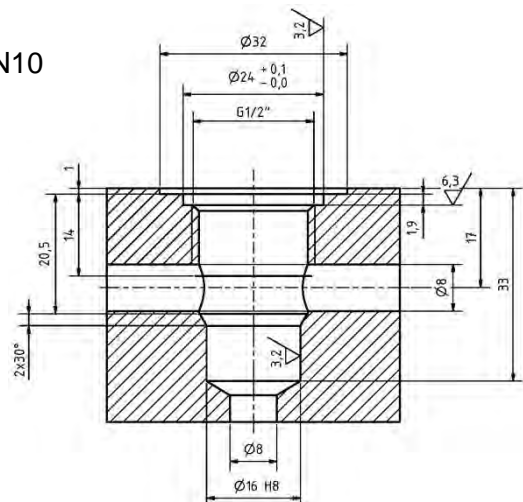


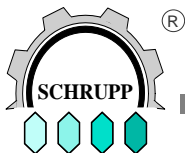
Drilling dimensions

DN16



DN10





PILOT VALVES

Pressure Valves

Valves DBP, DBZ are used to pilot cartridge valves in pressure control functions. Because of their robust design they are also used for direct operations.

Technical Data:

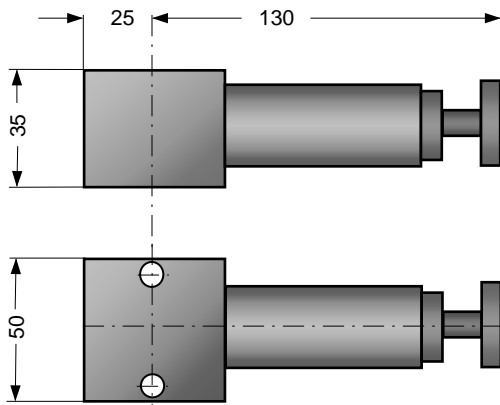
Size	2 mm
Pressure max		350bar / 400 bar
Filtration min		10 mic
Installation possible)		vertical (others

Example / ordering code

DBP2 - S

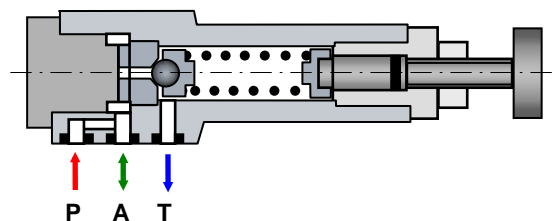
PDBP2= Relief valve sub plate for mounting NW 2
PDBZ2 = Sandwich type relief vale

Dimensions

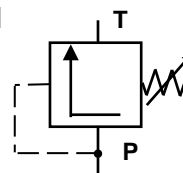


Type PDBP/PDBZ

Type

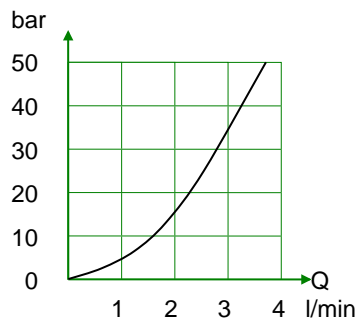


Symbol

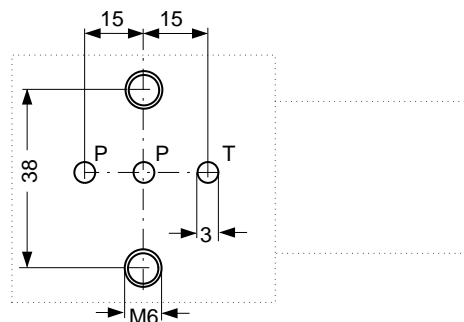


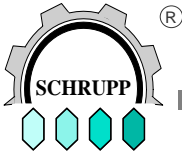
Diagram

Pressure difference, medium water



Connections





PILOT VALVES

Position indicator optical

to indicate the position of the piston of a cartridge type valve. The robust design is based on permanent magnets and does not need any dynamic seals, so that a safe operation even with contaminated water is possible.

Technical data:

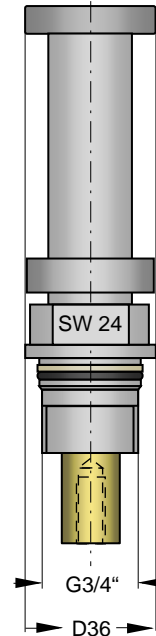
Operating pressure: 350 bar / 400 bar

Rec.filtration 300 micron or better

Media: Water, oil, gases

Installation: vertical (others possible)

Length: varies with cartridge valve dimension



Position indicator with adjustable switches

up to 4 individual adjustable switches indicates the actual position of the piston of a cartridge type valve. The robust design is based on permanent magnets and does not need any dynamic seals, so that a safe operation even with contaminated water is possible.

Technical data:

Operating pressure: 350 bar / 400 bar

Rec.filtration 300micron or better

Media: Water, oil, gases

Installation: vertical (others possible)

Length: varies with cartidge valve

Electrical switches 24v, 10W NO.

Others on request

