

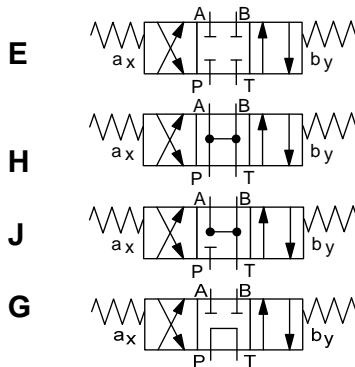


## 4/3-Directional control valve

Hydraulically operated  
Optional with diversion plate,  
or pilot valve

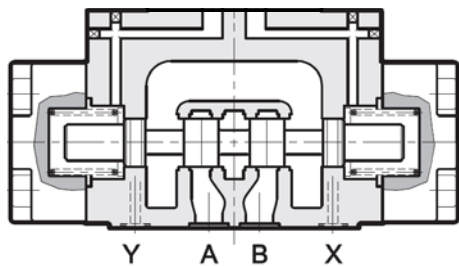
### 4WH E 10

#### SYMBOL



up to 150 l/min  
up to 320 bar

#### FUNCTION



#### FEATURES

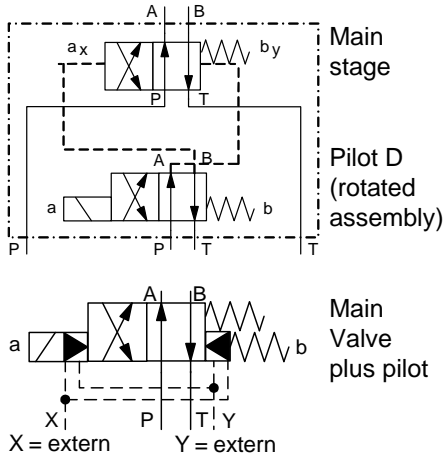
- Electro-hydraulically operated with pilot valve NW6 or hydraulically operated with diversion plate
- Flows up to 150l/min
- Internal or external ported pilot supply and drain line selectable by internal plug setting
- Attention: Pilot valve, diversion plate and fixing screws are not in the scope of delivery

#### SPECIFICATIONS

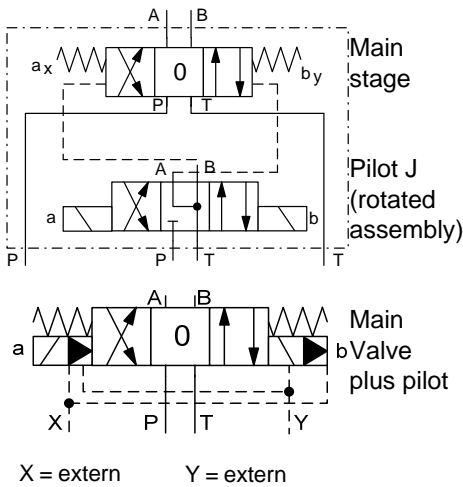
Operating pressure:	max. 320 bar
Flow rate symbols E, H, J:	max. 150 l/min at 210 bar (120 l/min at 320 bar)
Symbol G:	max. 120 l/min at 210 bar (100 l/min at 320 bar) max. 150 l/min
Pilot pressure:	min. 5 up to max. 210 bar
Pressure on T line: (with internal drain)	max. 140 bar
Pressure on T line: (with external drain)	max. 250 bar
Fluids:	Hydraulic oil according to DIN 51524 part 1 and 2
Media operating temp. range:	-20°C up to max. +80°C
Ambient temp. range:	-20°C up to max. +50°C
Viscosity range:	10 – 400 mm <sup>2</sup> /s is recommended
Filtration:	Class 20/18/15 according to ISO 4406
Weight:	6,6 kg without pilot valve and short-circuit subplate

## Example for assembled pilot valve

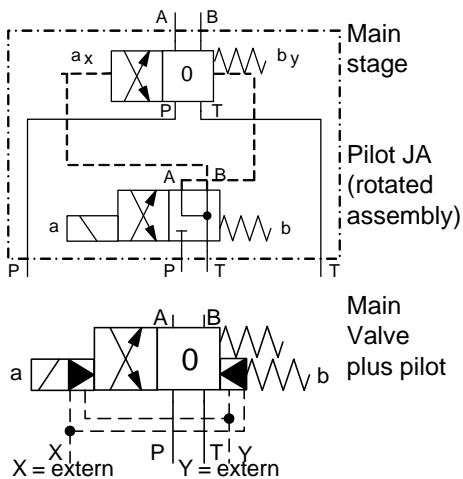
4/2 directional valve with spring offset Type 4WEH 10, 16



4/3 directional valve spring centered Type 4WEH 10, 16

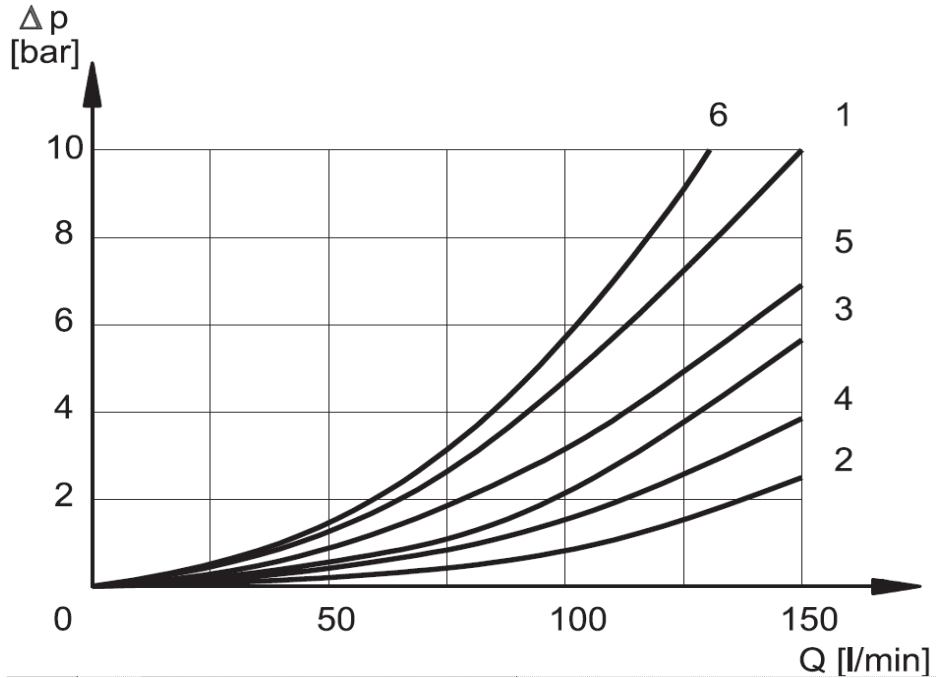


4/2 directional valve with spring offset Type 4WEH 10, 16



## PERFORMANCE

Measured at  $v = 33 \text{ mm}^2/\text{s}$  and  $T_{\text{oil}} = 46^\circ \text{ C}$

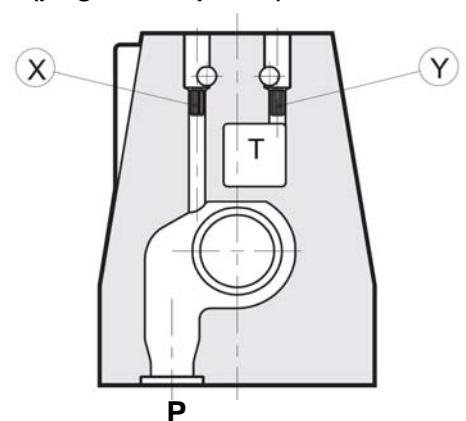


## Curves

Symbol	Piston position	Ports				
		P → A	P → B	A → T	B → T	P → T
E	not operated operated	1	1	2	3	
H	not operated operated	5	5	2	4	*6
J	not operated operated	1	1	1•	1○	
G	not operated operated	6	6	3	5	6
Q	not operated operated	1	1	2	2	
EA	not operated operated	-	1	2	-	
HA	not operated operated	-	5	2	-	*6
JA	not operated operated	-	1	1•	1○	
GA	not operated operated	6	-	-	5	6
QA	not operated operated	-	1	2	-	
D	not operated operated	1	-	-	3	
D/OF	operated	1	1	4	3	
	* A-B blocked	•B blocked	○A blocked			

## Sectional View (plugs M5 x 6 placed)

Valve type	Plug setting	
	X	Y
I Internal pilot supply and external drain	no plug	plug
II Internal pilot supply and drain	no plug	no plug
III external pilot supply and drain	plug	plug
EI external pilot supply and internal drain	plug	no plug



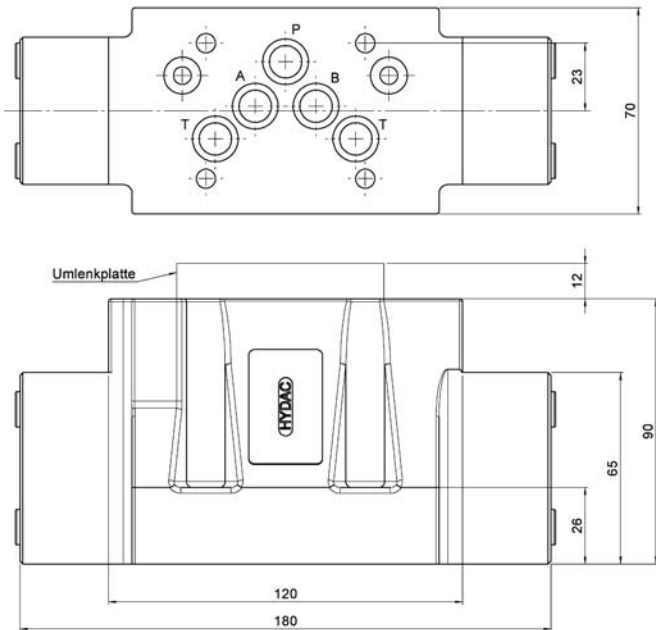
Standard models	Part-no.
4 WHE 10 E S01/V	3492056
4 WHE 10 J S01/V	3492059
4 WHE 10 G S01/V	3492060
4 WHE 10 H S01/V	3492061
4 WHE 10 E S01/N	3492062
4 WHE 10 J S01/N	3492063
4 WHE 10 G S01/N	3492064
4 WHE 10 H S01/N	3492065
Other models on request	

### Diversion plates (see accessory equipment)

UP-6-PATB-S01/1/V	3581661
UP-6-PBTA-S01/1/V	3581663

### DIMENSIONS

(with diversion plate)



### MODEL CODE

	4WHE 10 E S01 / V / U
Name	4/3 directional control valve
Pilot supply and drain	E = External Pilot supply and drain
Nominal size	10 = NW 10
Symbol for main stage	Available symbols: E, J, G, H (others on request)
Type	S01 = Standard S02 = ISO 4401 pattern (on request)
Seals	V = FKM (Standard) N = NBR
Option	no option = without diversion plate (Standard) U = with diversion plate PATB, fixing screws included

#### Fixing screws:

4 pcs. M6 x 50 DIN 912  
Torque 14 + 1 Nm for 12.9  
or 8 Nm for 8.8.

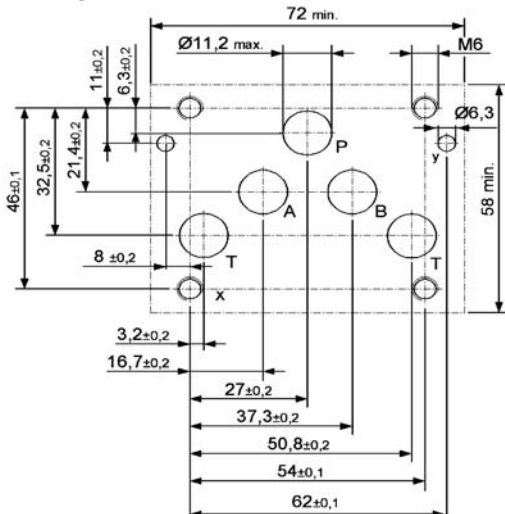
#### Hole pattern and seals:

5 pcs. O-Ring 12,42 x 1,78 - 90Sh  
2 pcs. O-Ring 9,25 x 1,78 - 90Sh

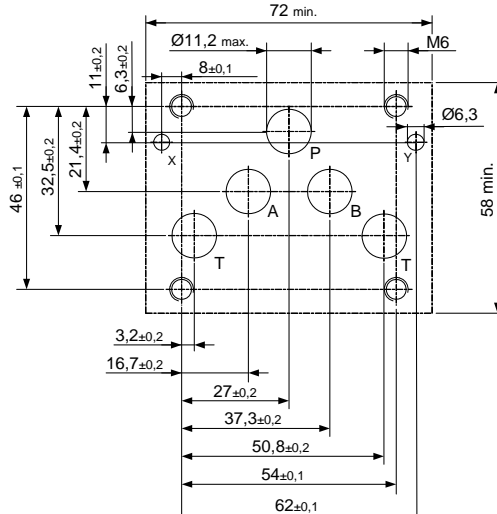
All dimensions in mm.

Plugs and fastening screws are not in the scope of supply.

### Hole pattern CETOP 4.2-4 P05-320



### Hole pattern according ISO 4401-05-04-0-05 (S02)



#### Annotation

The technical information in this brochure are relating to the operating conditions and applications. At deviant applications and/or operating conditions please contact the technical dept. Technical information are subject to technical modifications.

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