

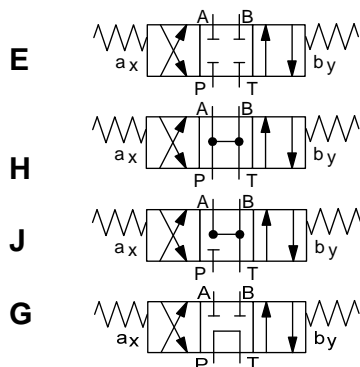


## 4/3-Directional control valve

Hydraulically operated  
Optional with diversion plate,  
or pilot valve

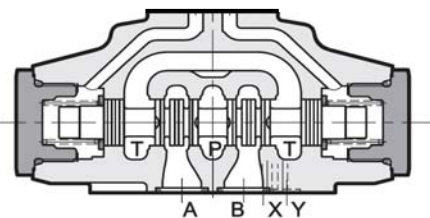
### 4WH E 16

#### SYMBOL



up to 320 bar  
up to 300 l/min

#### FUNCTION



#### FEATURES

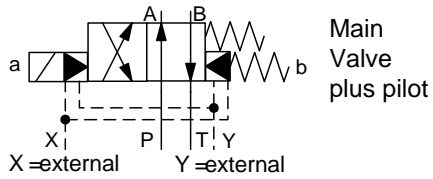
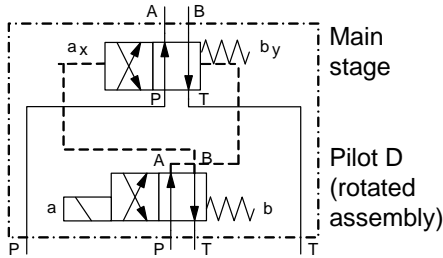
- Pattern according to DIN 24340, ISO 4401
- Hydraulically operated directional valve
- Electro-hydraulically operated by pilot valve NW6 or hydraulically operated with diversion plate
- Flows up to 300l/min
- Internal or external ported pilot supply and drain line selectable by internal plug setting
- Attention: Pilot valve, diversion plate and fixing screws are not in the scope of delivery

#### SPECIFICATIONS

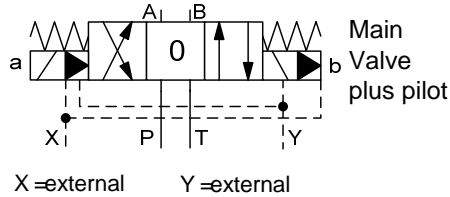
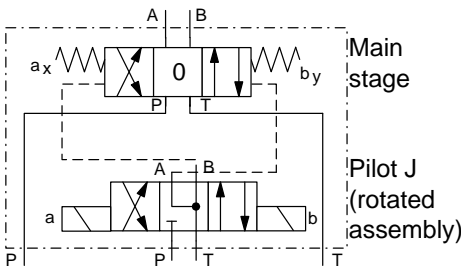
Operating pressure:	max. 320 bar
Flow rate symbols E, H, J:	max. 300 l/min at 320 bar
Symbol G:	max. 150 l/min at 320 bar (300 l/min at 60 bar)
Pilot pressure:	min. 12 up to max. 280 bar
Pressure on T line: (with internal drain)	max. 140 bar
Pressure on T line: (with external drain)	max. 250 bar
Fluids:	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 diversion plate

## Example for assembled pilot valve

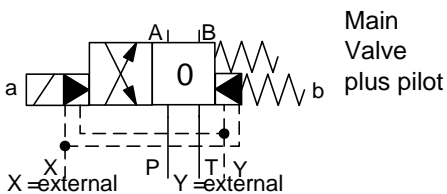
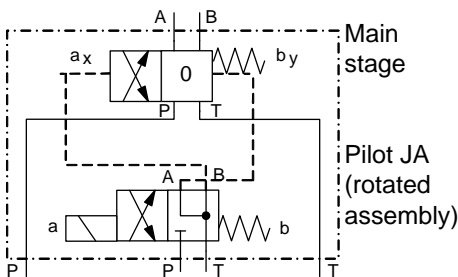
4/2 directional valve with spring offset Type 4WEH 10, 16



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

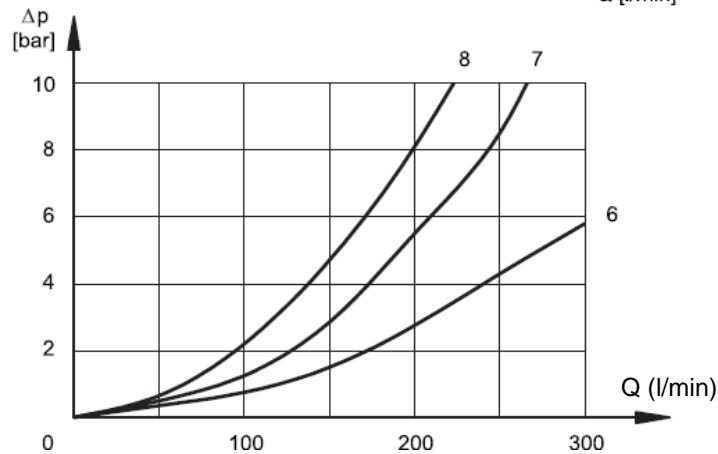
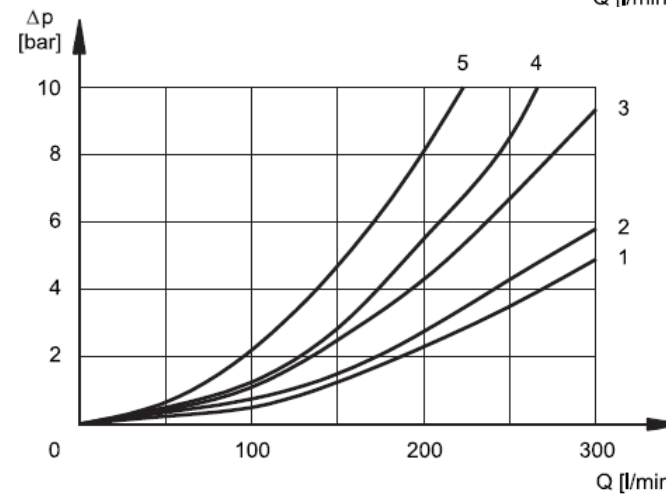
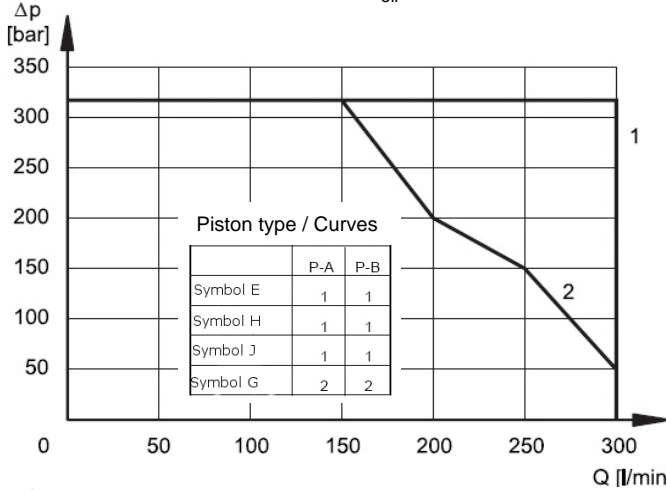


4/2 directional valve with spring offset Type 4WEH 10, 16



## PERFORMANCE

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

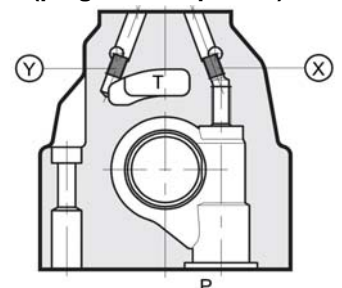


Piston	Loss - switched valve			
	P-A	P-B	A-T	B-T
	Curves			
E	1	1	3	4
H	1	1	4	4
J	1	1	4	4
G	2	2	4	5

Piston	Loss - valve in central position				
	P-A	P-B	A-T	B-T	P-T
	Curves				
H					6
J			7	7	
G					7

Valve type	Plug setting	
	X	Y
Internal pilot supply and external drain	no plug	plug
Internal pilot supply and drain	no plug	no plug
external pilot supply and drain	plug	plug
External pilot supply and internal drain	plug	no plug

## Sectional View (plugs M6 x 8 placed)



**Standard models**

4WH E 16 E S01 /V  
 4WH E 16 H S01 /V  
 4WH E 16 J S01 /V  
 4WH E 16 G S01 /V

**Part-no.**

6079049  
 3571991  
 6079050  
 6083975

Other models on request

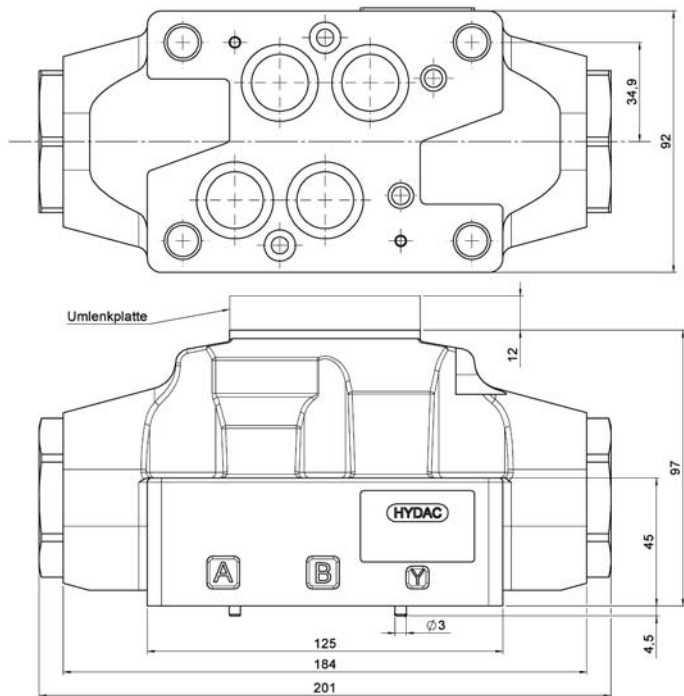
**Diversion plates (see accessory equipment)**

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

**MODEL CODE**

<b>Name</b>	4WH E 16 E S01 / V / U
4/3-directional control valve	
<b>Pilot supply and drain</b>	E = Control fluid inlet and outlet external
<b>Nominal size</b>	16 = NW 16
<b>Symbol for main stage</b>	Available symbols: E, J, G, H
<b>Type</b>	S01 = Standard
<b>Seals</b>	V = FKM (Standard) N = NBR
<b>Option</b>	U = with diversion plate PATB and Mounting screws Omission = without diversion plate (Standard)

**DIMENSIONS (with diversion plate)**

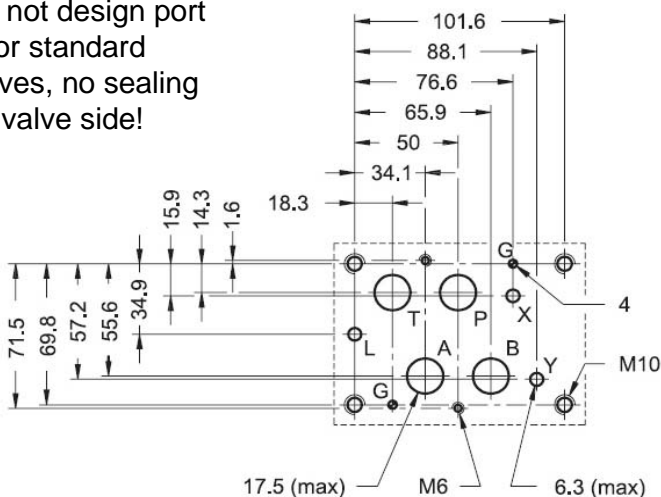


- Mounting Screws: 4x M10 x 60 DIN 912  
2x M6 x 50 DIN 912
- Torque: M10 x 60: 67 + 3 Nm for 12.9 or 40 Nm for 8.8  
M6 x 50: 14 + 2 Nm for 12.9 or 8 Nm for 8.8
- Seals: 4x 22,22 x 2,62 – 90 Sh  
2x 10,82 x 1,78 – 90 Sh

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

**HOLE Pattern according to ISO 4401-07**

Do not design port L for standard valves, no sealing on valve side!



**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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