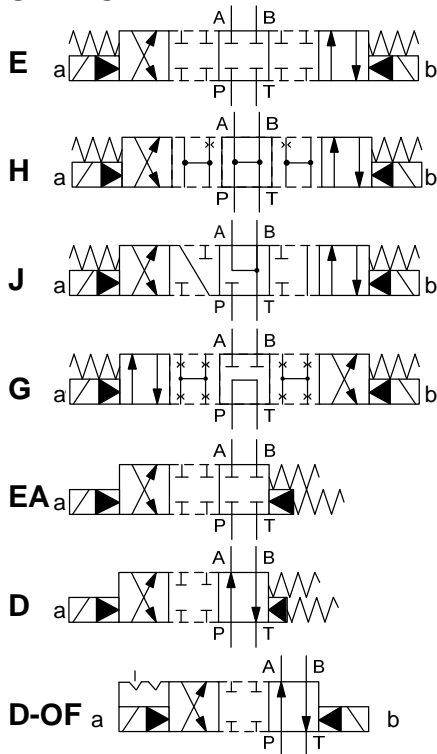




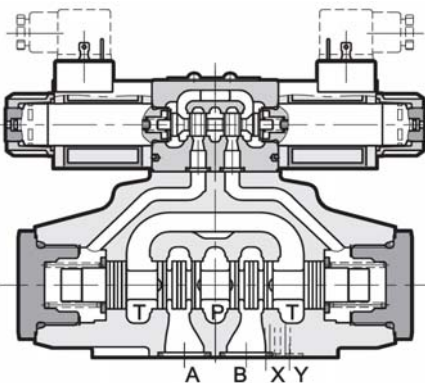
4/3-Directional control valve electro-hydraulically operated 4WEH I 16 / 4WEH EI 16

SYMBOL



up to 300 l/min
up to 320 bar

FUNCTION



FEATURES

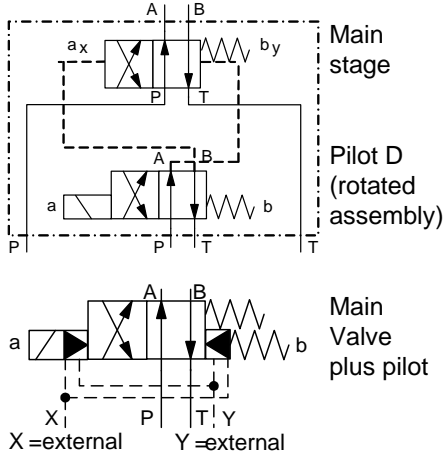
- Electro-hydraulically operated by pilot valve NW6
- Flows up to 300l/min
- Internal or external pilot supply and drain line selectable by internal plug setting

SPECIFICATIONS

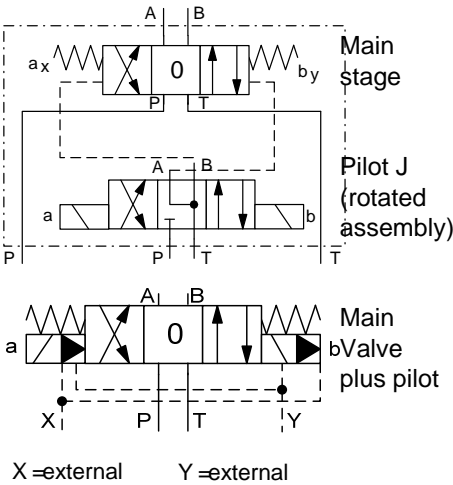
Nominal pressure:	max. 320 bar
Flow-rate:	max. 300 l/min (P nach A, B, T)
Control pressure:	min. 12 up to max. 280 bar
Pressure in line T: (with internal drain)	max. 140 bar
Pressure in line T: (with external drain)	max. 210 bar
Fluids:	Hydraulic oil to DIN 51524 part 1 and 2
Media operating temp. range:	-20°C up to max. +80°C
Ambient temperature range:	-20°C up to max. +50°C
Viscosity range:	10 – 400 mm ² /s is recommended
Filtration:	ISO 4406 class 20/18/15 or better
Weight:	8,6 kg incl. pilot valve with 2 coils 8,1 kg with pilot valve with 1 coil
Electrics	
Type of voltage:	DC
Voltage tolerance:	±10%
Nominal power:	30W (12V / 2,5A) resp. 32W (24V / 1,33A)
Switch-on time:	Main stage: 45 ms up to 75 ms
Switch-off time:	Main stage: 30 ms up to 60 ms (Control pressure 100bar)
Coil duty rating:	100%
Electrical connection:	plug according to DIN 43650
IP rating:	IP 65 nach EN 60529; DIN 40050 with correctly fitted connector

Example for the assembly with pilot valve (optional)

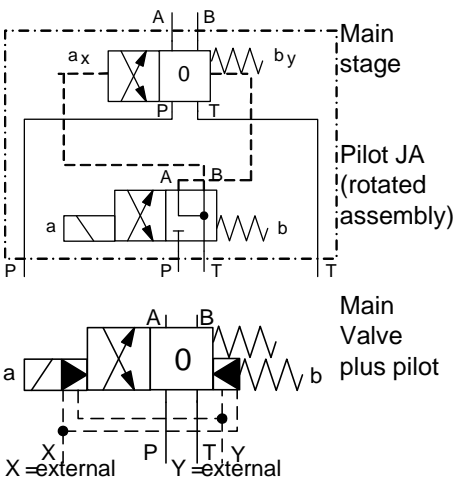
4/2 directional valve with spring offset Type 4WEH 10, 16



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

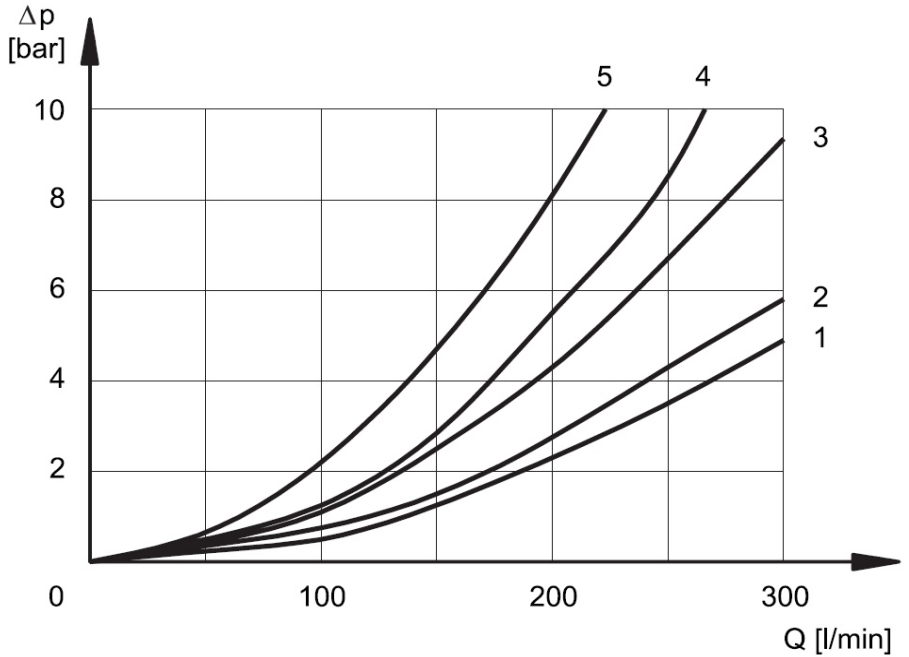


4/2 directional valve with spring offset Type 4WEH 10, 16



PERFORMANCE

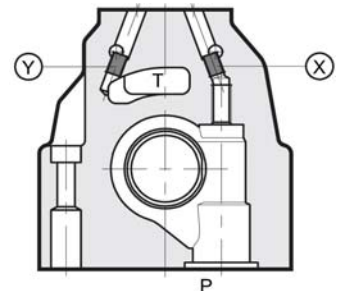
Measured at $v = 33 \text{ mm}^2/\text{s}$ and $T_{\text{oil}} = 46^\circ \text{ C}$



Symbol	piston position	Ports			
		P -> A	P -> B	A -> T	B -> T
E	not operated				
	operated	1	1	3	4
H	not operated				
	operated	1	1	4	4
J	not operated				
	operated	1	1	4	4
G	not operated				
	operated	2	2	4	5
Q	not operated				
	operated	1	1	3	4
EA	not operated				
	operated	-	1	3	-
HA	not operated				
	operated	-	1	4	-
JA	not operated				
	operated	-	1	4	-
GA	not operated				
	operated	2	-	-	5
D	not operated				
	operated	1	1	3	4
D/OF	not operated				
	operated	1	1	3	4

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

Cross section for plug setting



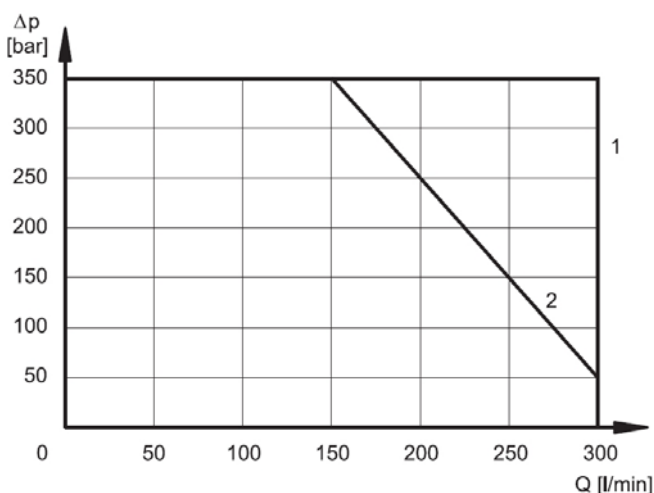
(X: plug M6x8 for external controls
Y: plug M6x8 for external drain)

Standard models

Standard models	Part no.
4WEH I 16 D S01 - 24DG/V	3640299
4WEH I 16 E S01 - 24DG/V	3640284
4WEH I 16 G S01 - 24DG/V	3640274
4WEH I 16 H S01 - 24DG/V	3640273
4WEH I 16 J S01 - 24DG/V	3640295

Other types on request

Range



Symbol	PA	PB
E	1	1
H	1	1
J	1	1
G	2	2
Q	1	1
D	1	1

MODEL CODE

4WEH I 16 E S01 - 24DG / V

Name _____
4/2- resp. 4/3-directional spool valve
with pilot spool valve

Pilot supply and drain _____
I = internal pilot supply and drain
EI = external pilot supply, internal drain
E = external pilot supply and drain
IE = internal pilot supply, external drain

Nominal size _____
16 = NW 16

Symbol _____
Available Symbols: E, J, G, H, Q, QA, HA, GA,
JA, D, EA, D-OF

Types _____
S01 = Standard

Nominal voltage and plug _____
12 = 12 Volt DC
24 = 24 Volt DC
DG: DIN plug according to EN 175301-803
DO: M12x1 plug

Seals _____
V = FKM (Standard)
N = NBR

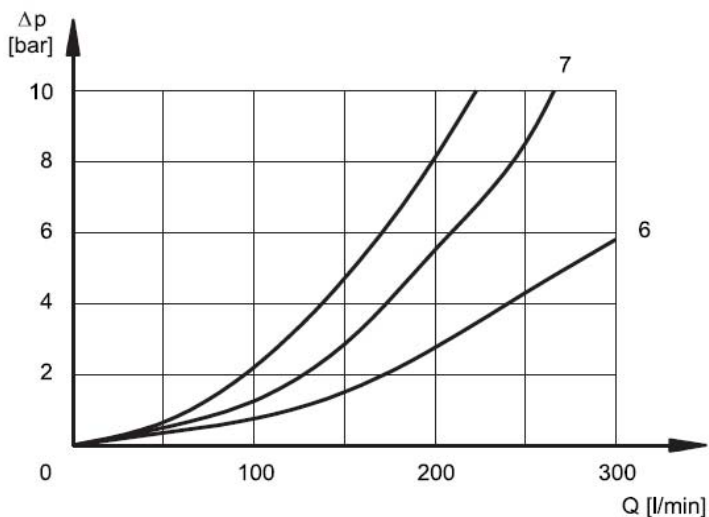
Electro-hydraulic pilot control

FUNCTION

HYDAC 4/2 und 4/3 directional valves for oil hydraulic systems are to open and close flow paths. In de-energized mode the main piston will be retained by a spring in the initial position. An under oil switching magnet pushes the pilot piston in its end position whereby the main piston – hydraulically operated – moves to his end position.

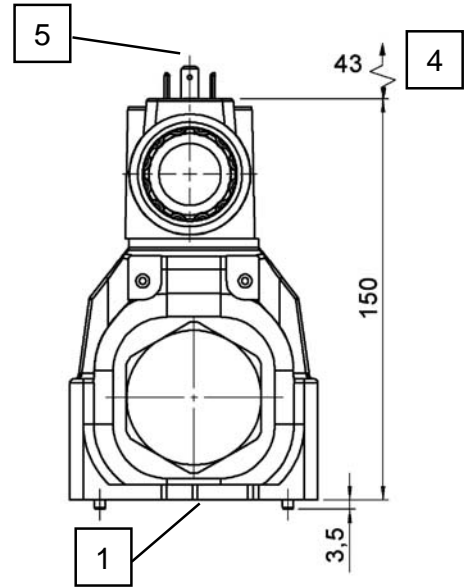
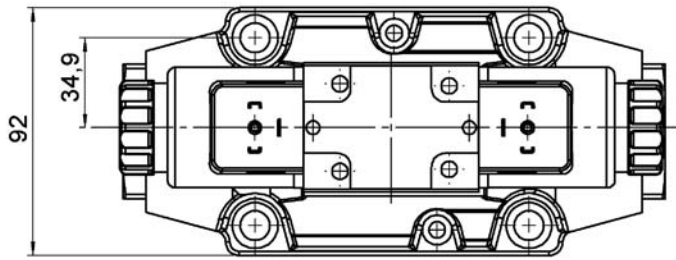
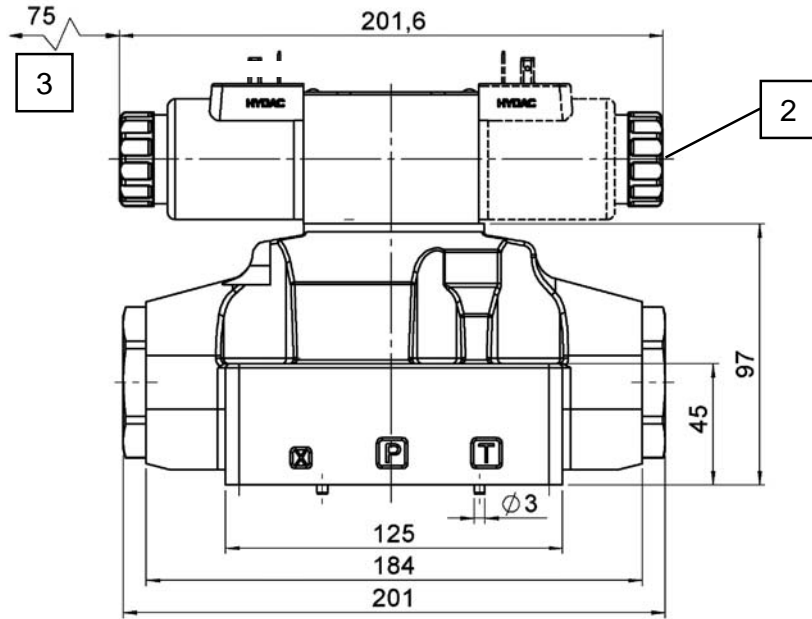
Hereby the chosen flow paths will be enabled according to the symbol of the valve. After switching-off the solenoid the pilot piston will be pushed back in its initial position by the spring. A manual override allow the switching of the pilot valve without erection of the solenoid.

Flow loss of the valve in central position



	Direction of flow				
	P-A	P-B	A-T	B-T	P-T
H, HA, HB					6
J, JA, JB			7	7	
G, GA, GB					7

DIMENSIONS



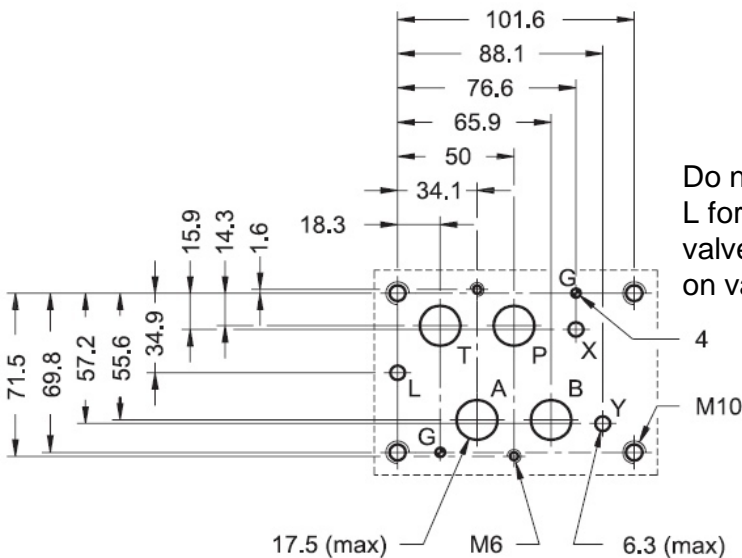
- 1) Mounting plate with O-rings
- 2) Manual override
- 3) Space for mounting the coil
- 4) Space for mounting the plugs
- 5) DIN plug (optional)

Fixing screws
 4x M10 x 60 DIN 912
 Torque 67 +5 Nm for 12.9 or 40 Nm for 8.8
 2x M6 x 50 DIN 912
 Torque 14 +1 Nm for 12.9 or 8 Nm for 8.8

O-rings hole pattern
 4x O-Ring 22,22 x 2,62 – 90 Sh
 2x O-Ring 10,82 x 1,78 – 90 Sh

All dimensions in mm.
 Fixing elements are not in the scope of supply .

Hole pattern to ISO 4401-07-06-0-05



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.