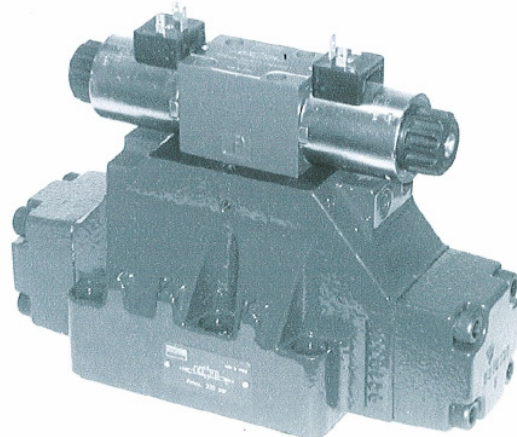
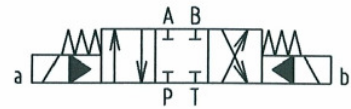


aidro	4/2- AND 4/3- WAY DIRECTIONAL CONTROL VALVES PILOT OPERATED			HD8-ES	Tab. HD8
	Size 25	320 bar	600 L/min		

- Solenoid pilot operated directional valves
- Hydraulic pilot operated directional valves
- Many standard spool types
- Small energy input
- Wet pin core tubes
- Manual overrides optional

- Installation dimensions to DIN 24 340, ISO 4401 and CETOP - RP 121H



Functional Description

The HD8-ES solenoid operated - hydropiloted valves are consisting of an HD3-ES type solenoid operated directional control valve (see data sheet HD-310/1) that operates a 4-way hydropiloted control valve with a connection surface in accordance with the CETOP standards. They are available in various configurations and spool types.

The pilot and the drain connections can be made internal or external by inserting or removing the accordant threaded plugs located in the main directional control valve.

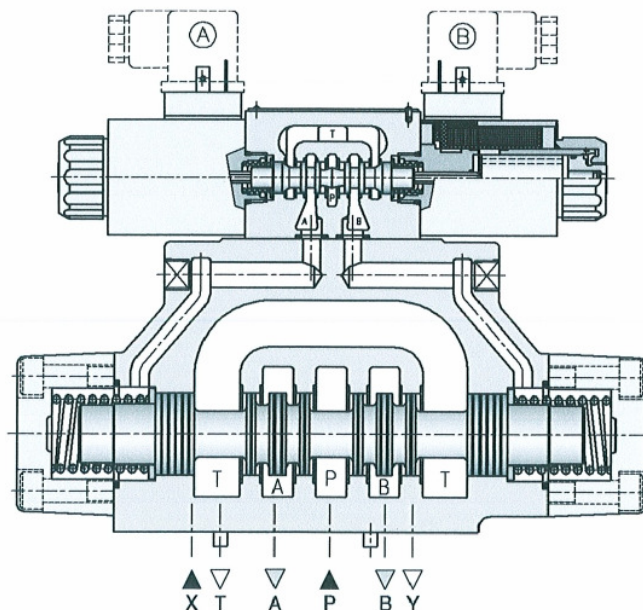
A wide range of configurations and different solenoid operated - hydropiloted directional control valve spool positions are available:

– 4-way, 3-position directional control valve, with two solenoids; positioning of the spool in center position is obtained with centering springs.

– 4-way, 2-position directional control valve with one solenoid; positioning of the spool in center position is determined hydraulically by the pilot valve and mechanically (even without pressure) by the main stage return spring.

– 4-way, 2-position directional valve, with two solenoids; with mechanical detent of the shifted pilot spool positions when solenoids are de-energized.

The basic surface treatment of the valve housing is phosphate coated and the solenoids are zinc coated.



1 How to read the model code for valves HD8-PS-*

HD8- (ES) - (1) (C) (-) / (*) (E) - (024C) / 40
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① HD8 : 4-way directional control valve Cetop 08- Pressure 32 Mpa (320 bar)
- ② (ES) : ES : electrically controlled, standard
HH: hydraulically piloted (main body)
- ③ (1) : spool type (see table)
- ④ (C) : Solenoid(s) and spring(s) arrangement, see also functional symbols
C : 2 sol., spool is spring centered (3 position)
N : 2 sol., pilot is detented (2 position)
LL : 1 sol. (a), spool is spring/hydr. offset (2 position, end to end)
ML: 1 sol. (a), spool is spring offset (2 position, middle to end)
LM: 1 sol. (a), spool is spring offset (2 position, end to middle)
- ⑤ (-) : Centering of the main spool
- : standard, by springs
S : by hydraulic centering device
- ⑥ (*) : Code reserved for options and variants
b : only for versions LL, MI, LM see also functional symbols
C : adjustable limits for main spool stroke
D : double flow control valve to adjust shifting speed
G : adjustable limits and adjustable shifting speed
P : check valve incorporated in P port of the valve
- ⑦ (E) : Pilot and drain arrangement
- : internal pilot and external drain (standard)
I : internal pilot and internal drain
E : external pilot and external drain
- ⑧ (024C) : Electric voltage and solenoid coils
0000 : no coil(s)
012C : coil(s) for V12DC
024C : coil(s) for V24DC
115A : coil(s) for V110/50 - V 115/60 AC
230A : coil(s) for V220/50 - V 230/60 AC
See also electric characteristics
- ⑨ Design number (progressive) of the valves

Technical Data

max recommended flow (spring centering)	400 l/min.
max recommended flow (hydraulic centering and hydraulic off set)	600 l/min.
max pressure at P,A,B ports	32 MPa (320 bar)
max pressure at T port (internal drain)	16 MPa (160 bar)
max pressure at T port (external drain)	25 MPa (250 bar)
pilot pressure minimum	0,5 MPa (5 bar)
pilot pressure max recommended	20 MPa (200 bar)
Mass : HD8-ES	approx 15,50 Kg
HD8-HH	approx 14,00 Kg

Functional Symbols

Symbols are referred to the solenoid valve. For the hydraulic control version please verify the connection scheme.

Three positions with spring centering		Three positions with hydraulic and spring centering	
1C		1CS	

ERROR: stackunderflow
OFFENDING COMMAND: ~

STACK: