



WH...type Hydraulic Directional Control Valve

WH 10, 16, 25, 32 type

Sizes 10, 16, 25, 32
Max. Working Pressure: 315 bar
Max. Flow: 1100L/min



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Features

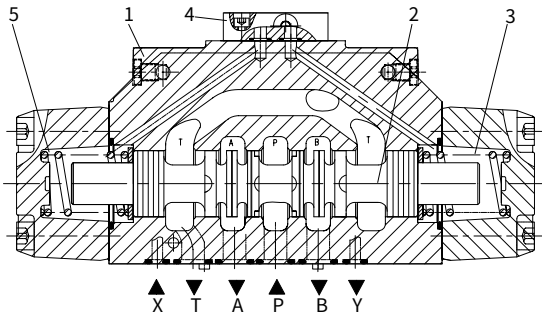
- Valves used to control the start, stop and direction of a fluid flow
- Hydraulic operation (WH)
- Porting pattern conforms to DIN 24 340 form A, ISO 4401 and CETOP-RP 121 H

Function and configuration

WH type valves are directional spool valves with hydraulic operation. They control the start, stop and direction of a flow.

1.Spring-centred valve:

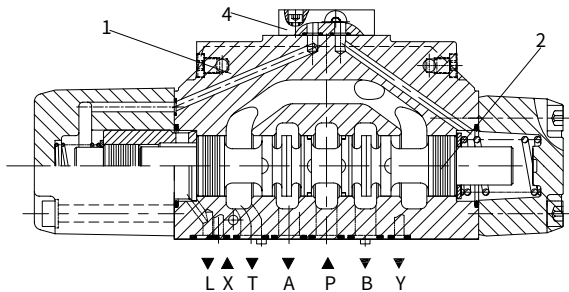
The main spool (2) is kept in the centre position by the return springs (3). If external control fluid enters main valve(1) from port X then enters left spring chamber(5) via cover(4), the main spool is pushed into the switching position. The oil of right spring chamber returns to tank from port Y. When the control fluid is cancelled, the main spool returns to centre position via the action of right spring force. And if the control fluid enters from port Y, then the main spring moves to left to switching direction and the oil of left spring chamber returns to tank from port X.



Structure chart of valve type WH25 with spring-centred

2. Hydraulic-centred valve:

Pressure fluid acts on both sides of main spool (2) and main spool(2) is fixed by a locating sleeve. It moves under pressure at opposite side to switch direction when one side of the main spool is unloaded. If the control fluid enters left chamber of main valve from port X, the main spool moves right, the fluid of right chamber returns to tank from port Y; and if the control fluid enters right chamber from port Y, the main spool moves left, the fluid of left chamber returns to tank from port X. Internal leakage oil directly returns to tank from port L.



Structure chart of valve type WH25 with spring-centred

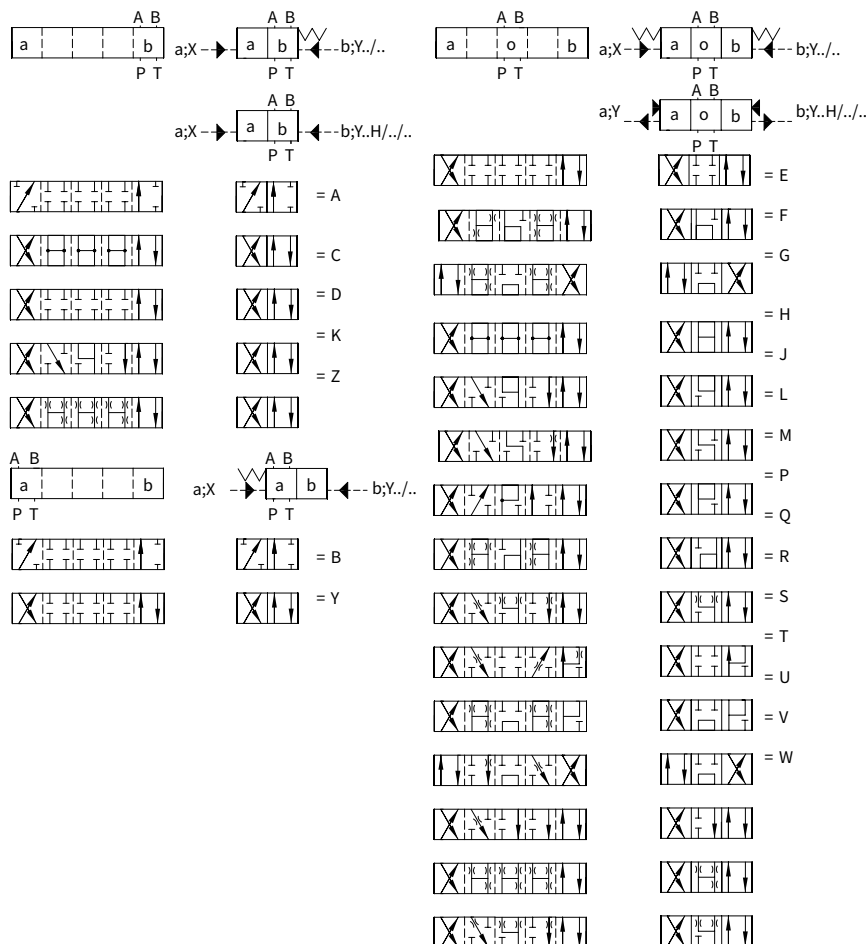
Switching time adjustment (see WEH)
Characteristic curve (see WEH)
Performance limits (see WEH)

Flow area when valve is in central position (see WEH)
Technical data (see hydraulic part of WEH technical data)
Additional device (stroke adjustment) (see WEH)

Specification

| | | | | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------|--|----|--|--|---|---|---|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | WH | | | - | / | / | | * |
| 280 bar = No code | | | | | | | | | Further details in clear text |
| 350 bar = H- (Not for size 10) | | | | | | | | | No code = NBR seals V = FKM seals |
| 3 way = 3 (only for spool A and B) | | | | | | | | | Additional device code (see WEH) (not for size 10) |
| 4 way = 4 | | | | | | | | | |
| Nominal size: 10 = 10 16 = 16 25 = 25 32 = 32 | | | | | | | | | No code = Without switching time adjustment S = With switching time adjustment, meter in throttle S2 = With switching time adjustment, meter out throttle |
| Spring-centred or offset = No code Hydraulic-centred or offset = H (For size 10, only symbols A, B, C, D, K, Z, Y with H) | | | | | | | | | |
| Spool symbol (see spool symbols) | | | | | | | | | 4XJ= Series 40J to 49J (size 10) 7XJ= Series 70J to 79J (size 16,25 and 32) |

Symbols



Connection dimensions and sub-plate

1. The installation, connection dimensions and sub-platesame of type WH is as same as type WEH.
2. Regarding dimation, only the height of type WH is different from that of type WEH.
For type WH, there is a cover (height:12mm) on top of the main valve.
Also switching time adjusted can be topped with a height of 40mm. Details see WEH.