

AH-WH...type Hydraulic Directional Control Valve



AH-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

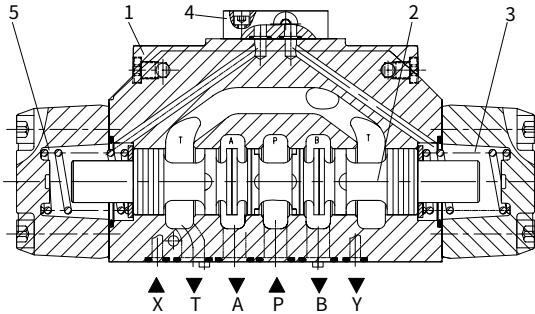
- Valves used to control the start, stop and direction of a fluid flow
- Hydraulic operation (WH)
- Porting pattern conforms o DIN 24 340 form A, ISO 4401 and CETOP-RP 121 H

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:

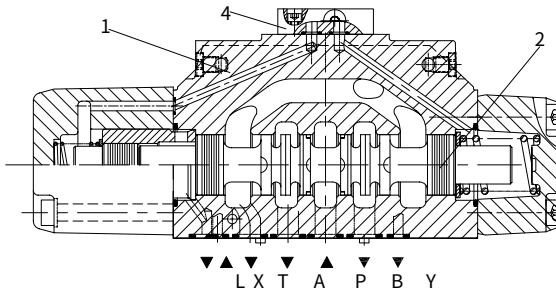
The main spool (2) is kept in the centre position by the return springs (3). If external control fluid enters main valve(1) from port X then enters left spring chamber(5) via cover(4), the main spool is pushed into the switching position. The oil of right spring chamber returns to tank from port Y. When 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 AH-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 AH-WH25 with spring-centred

Switching time adjustment (see AH-WEH) Flow area when valve is in central position (see AH-WEH)

Characteristic curve (see AH-WEH)

Technical data (see hydraulic part of AH-WEH technical data)

Performance limits (see AH-WEH)

Additional device (stroke adjustment) (see AH-WEH)

Specification



280 bar = No code
 350 bar = H-
 (Not for size 10)

3 way = 3
 (only for spool A and B)
 4 way = 4

Nominal size: 10 = 10
 16 = 16
 25 = 25
 32 = 32

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)

Further details
 in clear text

No code = NBR seals
 V = FKM seals

Additional device code
 (see WEH)
 (not for size 10)

No code = Without switching time
 adjustment

S = With switching time
 adjustment, meter in throttle

S2 = With switching time
 adjustment, meter out throttle

40S= Series 40S to 49S (size 10)
 70S= Series 70S to 79S (size 16,25 and 32)

