

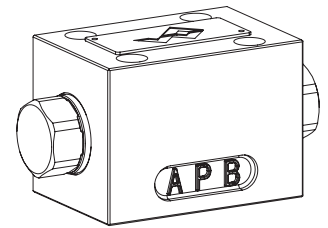
## Spool valve

### Flange construction

- ◆ hydraulically operated
- ◆ 4/2-way impulse execution detented
- ◆ 4/3-way with spring centred mid position
- ◆ 4/2-way with spring reset
- ◆  $Q_{max} = 80 \text{ l/min}$
- ◆  $p_{max} = 350 \text{ bar}$

### NG6

ISO 4401-03-03



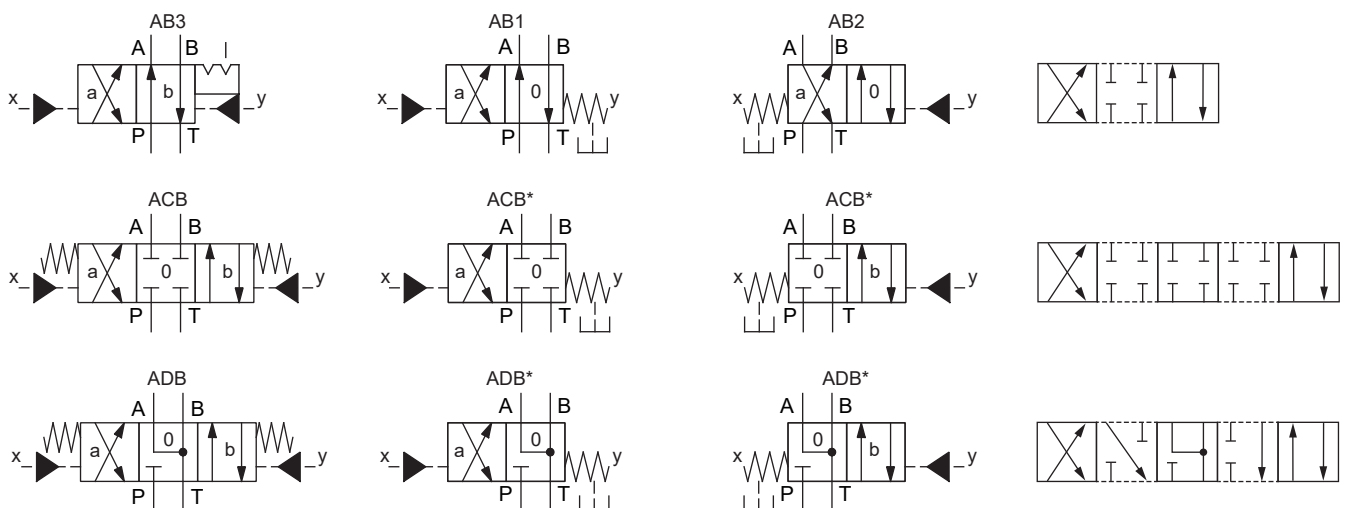
## DESCRIPTION

Direct operated spool valve hydraulically operated via pilot port with 4 connections in a 5 chamber system. Spool detented or with spring reset. Without actuation, the spool is held in the center position by the spring (4/3), or switched back to the offset position (4/2). With the detent, the spool is held in the last switching position selected.

## APPLICATION

Spool valves are mainly used for controlling direction of movement and stopping of hydraulic cylinders and motors.

## SYMBOL



\* These 4/2-way valves with spring reset are being delivered as 4/3-way valves.

### Note!



When the pilot ports are not actuated (without pressure), or not needed, the leakage oil must be discharged.

## GENERAL SPECIFICATIONS

Designation	4/2-, 4/3-spool valve
Construction	Direct operated
Mounting	Flange construction
Nominal size	NG6 to ISO 4401-03-03
Actuation	Hydraulically operated
Ambient temperature	-25...+70 °C
Weight	1,1 kg
MTTFd	150 years

## ACTUATION

Actuation	Hydraulically operated
Pilot pressure	$p_{min} = 15 \text{ bar}$ $p_{max} = 280 \text{ bar}$
Control volume	$V = 0,34 \text{ cm}^3$

**TYPE CODE**

WF F F A06 -  -  -  #

Spool valve, direct operated			
Hydraulically actuated			
Flange construction			
International standard interface ISO, NG6			
Designation of symbols acc. to table			
Pilot oil	sideways via mounting interface	<input type="checkbox"/> se <input type="checkbox"/> ae	
Sealing material	NBR FKM (Viton) NBR 872	<input type="checkbox"/> <input type="checkbox"/> D1 <input type="checkbox"/> y-Z604	
Design index (subject to change)			

1.7-32

**HYDRAULIC SPECIFICATIONS**

Working pressure	$p_{max} = 350$ bar
Tank pressure	$p_{Tmax} = 200$ bar Resp. 15 bar lower than the control pressure
Maximum volume flow	$Q_{max} = 80$ l/min, see characteristics
Leakage oil	See characteristics
Fluid	Mineral oil, other fluid on request
Viscosity range	12 mm <sup>2</sup> /s...320 mm <sup>2</sup> /s
Temperature range fluid	-20...+70 °C (NBR) -20...+70 °C (FKM)
Contamination efficiency	Class 20 / 18 / 14
Filtration	Required filtration grade $\beta_{10...16} \geq 75$ , see data sheet 1.0-50

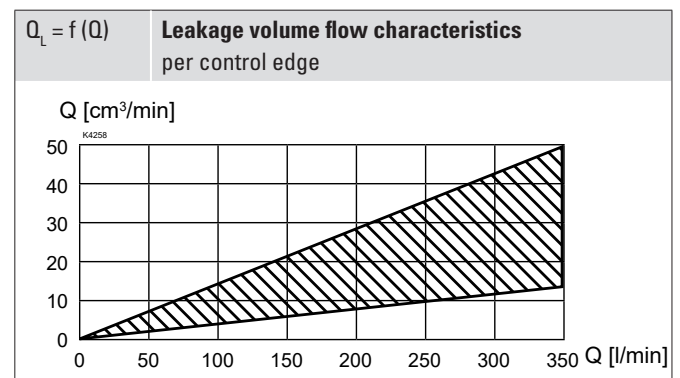
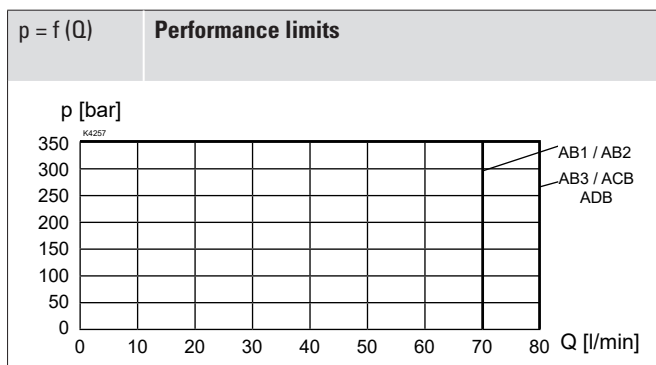
**STANDARDS**

Mounting interface	ISO 4401-03-03
Contamination efficiency	ISO 4406

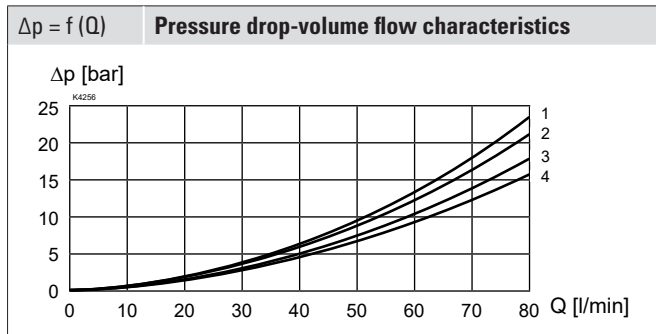
**ACCESSORIES**

Fixing screws	Data sheet 1.0-60
Threaded subplates	Data sheet 2.9-30
Multi-station subplates	Data sheet 2.9-60
Horizontal mounting blocks	Data sheet 2.9-100
Technical explanations	Data sheet 1.0-100
Filtration	Data sheet 1.0-50

**PERFORMANCE SPECIFICATIONS**

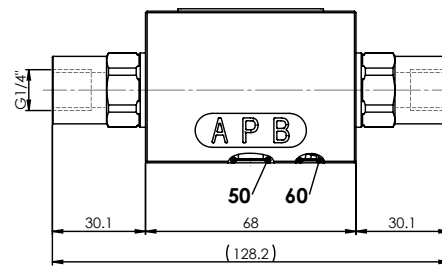
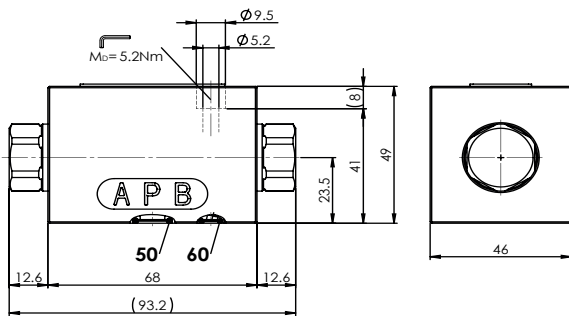
 Oil viscosity  $\nu = 30$  mm<sup>2</sup>/s


## PERFORMANCE SPECIFICATIONS

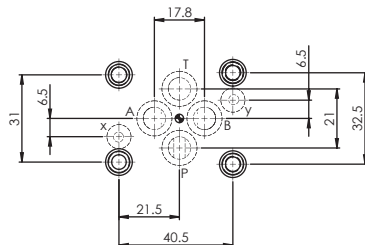
 Oil viscosity  $\nu = 30 \text{ mm}^2/\text{s}$ 


Symbol	Volume flow direction				
	P - A	P - B	P - T	A - T	B - T
AB1 / AB2	2	2	-	3	3
AB3	1	1	-	2	2
ACB	2	2	-	3	3
ADB	2	2	-	4	4

## DIMENSIONS



## HYDRAULIC CONNECTION



## PARTS LIST

Position	Article	Description
10	251.2225	Seal kit

### Seal kit consisting of

50	O-Ring	ID 9,25 x 1,78
60	O-Ring	ID 5,28 x 1,78

## INSTALLATION NOTES

Mounting type	Flange mounting 4 fixing holes for socket head screws M5 x 50
Mounting position	Any, preferably horizontal
Tightening torque	Fixing screws $M_0 = 5,2 \text{ Nm}$ (screw quality 8.8, zinc coated)



The length of the fixing screw depends on the base material of the connection element.

## SEALING MATERIAL

NBR or FKM (Viton) as standard, choice in the type code

## SURFACE TREATMENT

The valve body, the screw plug and the bush are zinc-nickel coated

ISO 9227 (800 h) salt spray test