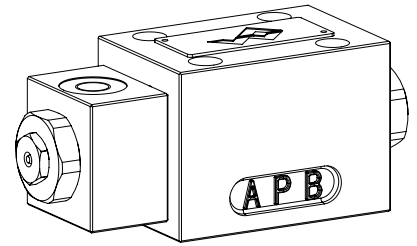


Spool valve

Flange construction

- ◆ hydraulically actuated
- ◆ 4/2-way impulse valve
- ◆ 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



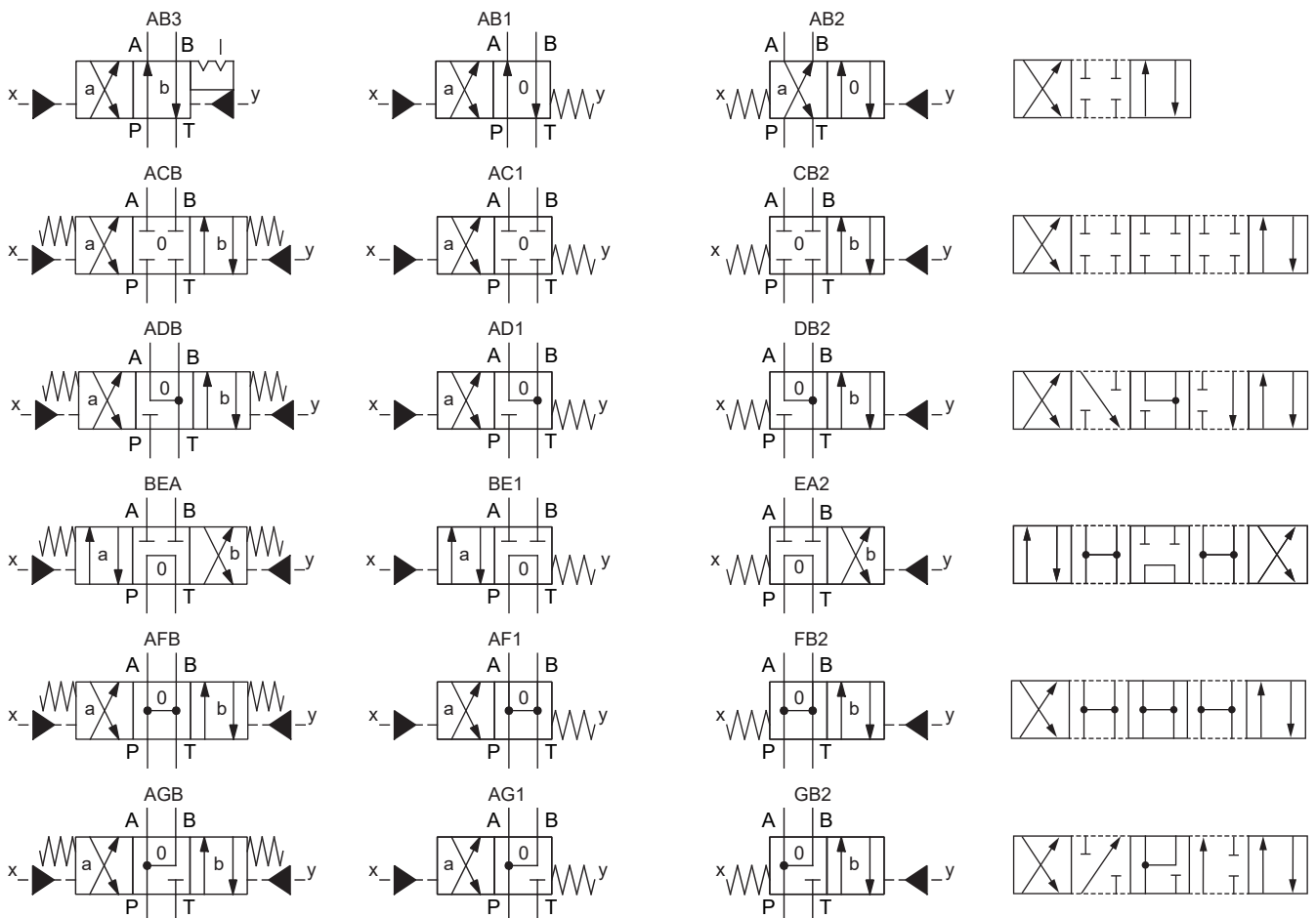
DESCRIPTION

Hydraulically operated spool valve via pilot head with 4 connections in a 5 chamber system. The hydraulic pilot head of the WFAFA06 offers the possibility to convert any WDM/YFA06 with a special spool, switching position monitoring P1, P2 and Z104 from an electric drive to a hydraulic drive.

APPLICATION

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

SYMBOL



TYPE CODE

WF A F A06 - - -

Spool valve, direct operated

Hydraulically actuated via control head

Flange construction

International standard interface ISO, NG6

Designation of symbols acc. to table

Sealing material NBR
 FKM (Viton)
 NBR 872 y-Z604

Actuation position standard front B1 back B2 bottom B4

Design index (subject to change)

1.7-33

GENERAL SPECIFICATIONS

Designation	4/2-, 4/3-spool valve
Construction	Direct operated
Mounting	Flange construction
Nominal size	NG6 according to ISO 4401-03
Actuation	Hydraulically operated
Ambient temperature	-25...+70 °C
Weight	1,25 kg (1 actuation) 1,5 kg (2 actuations)
MTTFd	150 years

ACTUATION

Actuation	Hydraulically operated
Execution	Actuation
Pilot pressure	$p_{V \min} = 50 \text{ bar} > p_T^*$ $p_{V \max} = 160 \text{ bar}$ (with HB or HN) $p_{V \max} = 280 \text{ bar}$ (with HB0)
Control volume	$V = 0,06 \text{ cm}^3$

Note!


*lower control pressures on request

*switch-over pressure adjustable with S770

HYDRAULIC SPECIFICATIONS

Working pressure	$p_{\max} = 350 \text{ bar}$
Tank pressure	$p_{T \max} = 200 \text{ bar}$
Maximum volume flow	$Q_{\max} = 80 \text{ l/min}$, see characteristics
Leakage oil	See characteristics
Fluid	Mineral oil, other fluid on request
Viscosity range	12 mm ² /s...320 mm ² /s
Temperature range fluid	-25...+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

SURFACE TREATMENT

 -All external parts are zinc-nickel coated
 ISO 9227 (800 h) salt spray test

MANUAL OVERRIDE

HB4,5 as standard

Optionally: HN (K), HB0 (plugged)

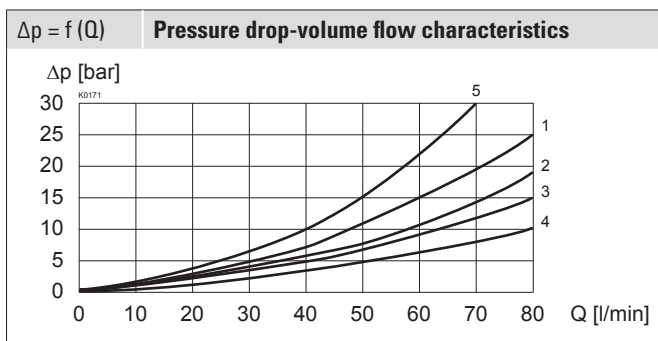
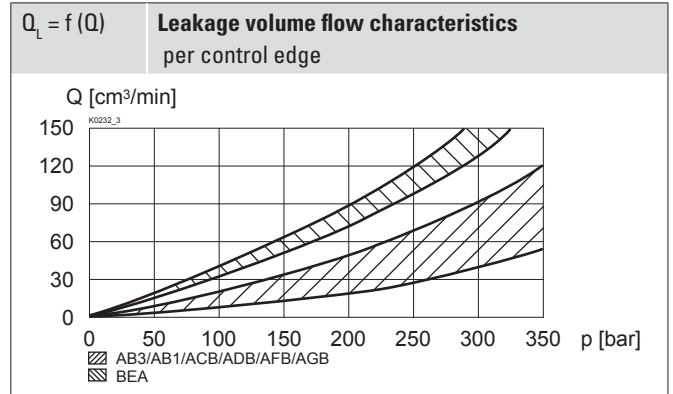
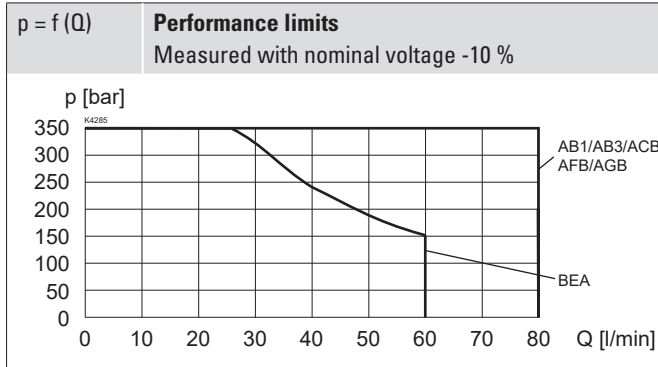
→ see data sheet 1.1-311

SEALING MATERIAL

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

PERFORMANCE SPECIFICATIONS

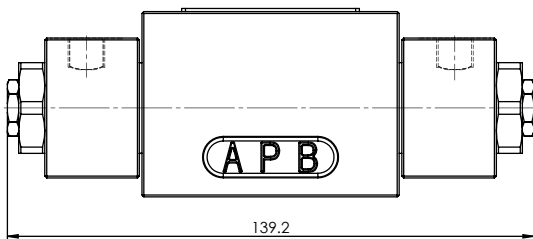
Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$



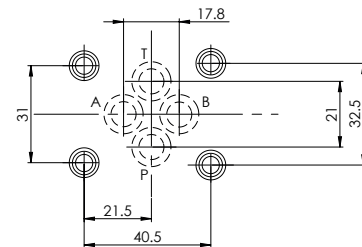
Symbol	Volume flow direction				
	P - A	P - B	P - T	A - T	B - T
AB1 / AB2 / AB3	2	2	-	1	1
ACB / AC1 / CB2	2	2	-	1	1
ADB / AD1 / DB2	2	2	-	3	3
BEA / BE1 / EA2	2	2	5	2	2
AFB / AF1 / FB2	4	4	-	3	3
AGB / AG1 / GB2	4	4	-	1	1

DIMENSIONS

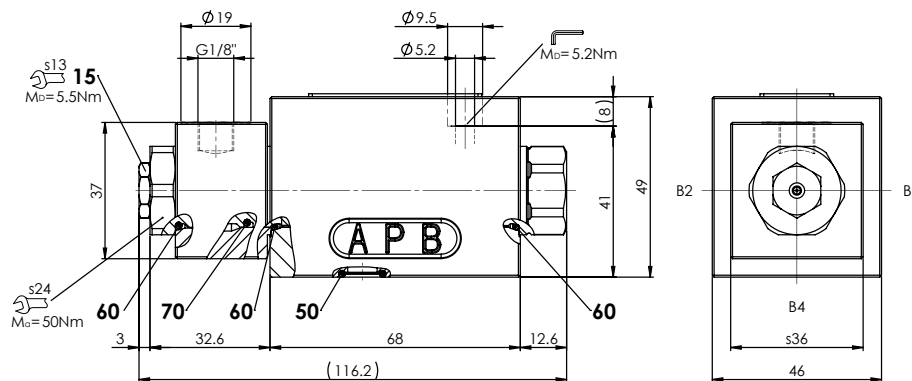
4/3-way valve (spring centring)
4/2-way valve (impulse)



HYDRAULIC CONNECTION



4/2-way valve (spring reset)



PARTS LIST

Position	Article	Description
15	253.8000	Manual override HB4,5
-	251.2224	Seal kit WFAFA06

Seal kit consisting of:

50	O-Ring	ID 9,25 x 1,78
60	O-Ring	ID 17,17 x 1,78
70	O-Ring	ID 15,60 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)

Note!


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

STANDARDS

Mounting interface	ISO 4401-03
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