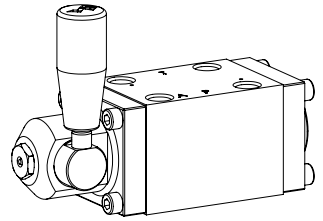


Poppet valve

Flange construction

- ◆ hand operated
- ◆ 2/2-, 3/2 and 3/4-way
- ◆ normally open and normally closed
- ◆ $Q_{max} = 40 \text{ l/min}$
- ◆ $p_{max} = 350 \text{ bar}$

NG6
ISO 4401-03



DESCRIPTION

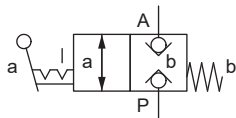
Direct operated 2/2-, 3/2 and 3/4-way poppet valve in flange construction. By means of the hand lever, the poppet valve spool is opened or closed acting against the spring. Due to the poppet spool construction with pressure compensation on both sides, the flow through the valve is possible in both directions. The seat spool guide is sealed by means of an O-ring. The metallic sealing seat closes the valve virtually leak free.

APPLICATION

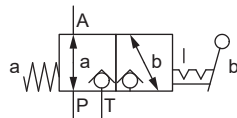
Poppet valves are used where tight closing functions of the valve are essential like leakage-free load holding, clamping or gripping.

SYMBOL

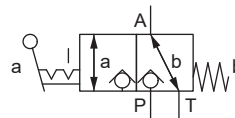
AG22061a



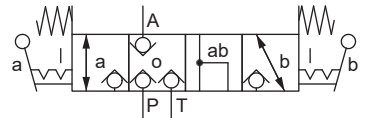
AG32060b



AG32061a



AG3406



TYPE CODE

2/2 or 3/2 way execution
3/4 way execution

International standard interface ISO

Hand lever

2 way (connections)

2

3 way (connections)

3

2 switching positions

4 switching positions

Nominal size 6

Normally closed

Hand lever on A-side

1a

Normally open

Hand lever on B-side

0b

Sealing material

NBR

FKM (Viton)

D1

Design index (subject to change)

1.11-5145

A G 2 06 - #
A G 3 4 06 - #

GENERAL SPECIFICATIONS

Designation	2/2-, 3/2- and 3/4-way poppet valve
Construction	Direct operated
Mounting	Flange construction
Nominal size	NG6 according to ISO 4401-03
Actuation	Hand operated
Ambient temperature	-25...+70 °C
Weight	1,45 kg (2/2- and 3/2-way) 2,00 kg (3/4-way)
MTTFd	150 years

HYDRAULIC SPECIFICATIONS

Working pressure	$p_{max} = 350 \text{ bar}$
Maximum volume flow	$Q_{max} = 40 \text{ l/min}$, see characteristic
Volume flow direction	Any (see characteristic)
Leakage oil	Seat tight, max. 0,05 ml / min (approx. 1 drop / min) at 30 cSt
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

ACTUATION

Actuation	Hand lever
Actuation angle	$\alpha_b = 90^\circ$
Actuation force	$F_b = 10 - 50 \text{ N}$ (depending on flow direction and pressure)

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

SEALING MATERIAL

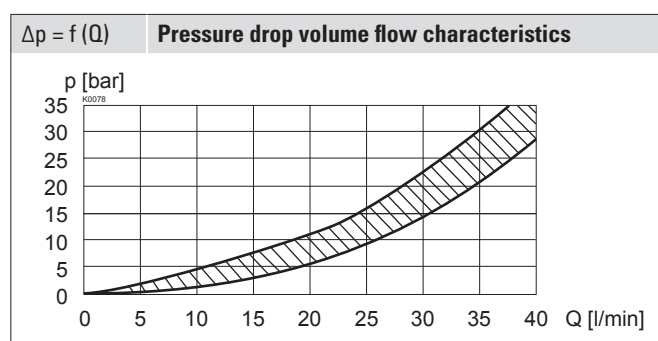
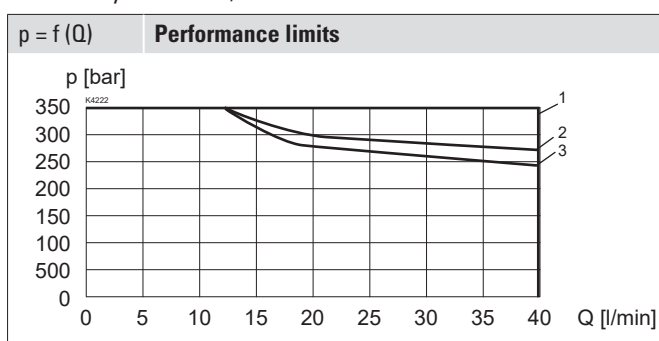
NBR or FKM (Viton) as standard, choice in the type code

SURFACE TREATMENT

- ◆ The valve body is painted with a two component paint
- ◆ The hand lever housing and the cover are zinc-nickel coated

PERFORMANCE SPECIFICATIONS

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



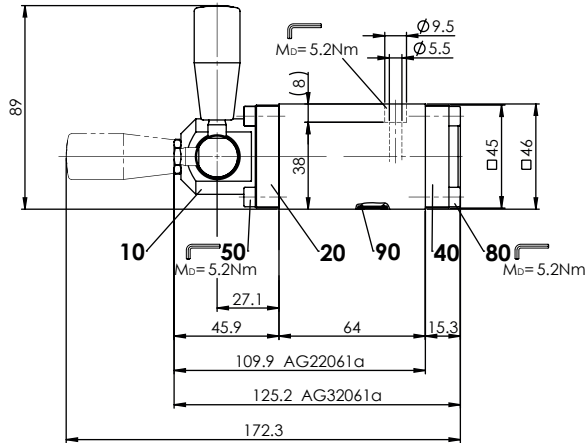
Type	Flow direction			
	P - A	A - T	A - P	T - A
AG22061a	1	-	2	-
AG32061a	1	2	3	1
AG32060b	1	2	3	1
AG3406	1	1	2	2

VALVES INSTALLED

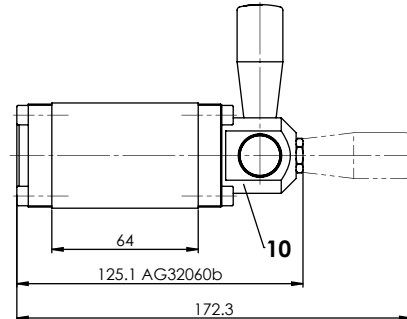
The central functioning element is the poppet valve cartridge NG6, data sheet 1.11-2030.

DIMENSIONS

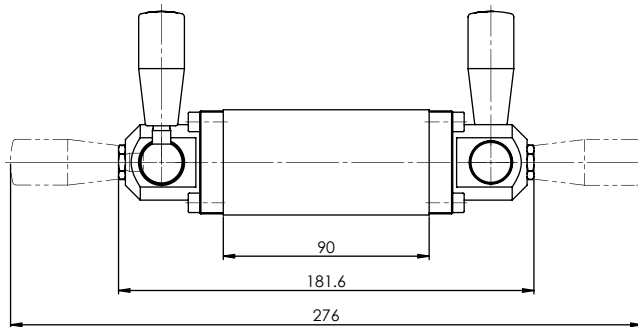
3/2-; 2/2-way



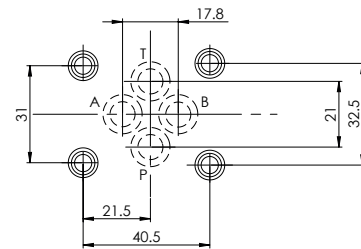
3/2-way



3/4-way



HYDRAULIC CONNECTION



PARTS LIST

Position	Article	Description
10	253.4501	Manual actuation AG..06
20	074.4805	Flange squarre
10	058.4215	Cover
50, 80	246.2117	Socket head screw M5 x 16 DIN 912
90	160.2093	O-ring ID 9,25 x 1,78 (NBR)
	160.6092	O-ring ID 9,25 x 1,78 (FKM)

INSTALLATION NOTES

Mounting type	Flange mounting 4 fixing holes for socket head screws M5 x 45
Mounting position	Any, preferably horizontal
Tightening torque	Fixing screws $M_D = 5,2 \text{ Nm}$ (screw quality 8.8, zinc coated)

Note!



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