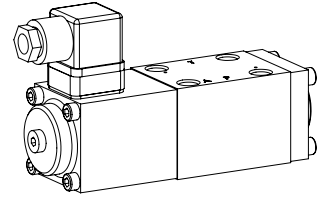


Solenoid operated poppet valve

Flange construction

- ◆ 3/2-way
- ◆ normally open and normally closed
- ◆ positive switching overlap
- ◆ $Q_{max} = 15 \text{ l/min}$
- ◆ $p_{max} = 300 \text{ bar}$

NG6

ISO 4401-03


DESCRIPTION

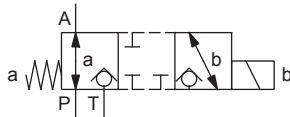
Direct operated 3/2-way solenoid poppet valve in sandwich construction. By means of the pressure tight switching solenoid, the poppet valve spool is opened or closed acting against the spring. Due to the poppet spool construction with pressure compensation on both sides, the flow through the valve is 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. The spool has been designed to create a positive switching overlap.

APPLICATION

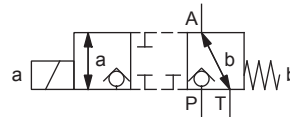
Poppet valves with positive switching overlap are used where oil losses are not allowed to occur neither in the static state nor in the dynamic state of the valve. In the use in accumulator loading systems, a rapid draining of the accumulator is avoided. Used as a pilot valve, no uncontrolled switching connections occur.

SYMBOL

A.32060b-S1779



A.32061a-S1779



TYPE CODE

International standard interface ISO	A		3	2	06	-	-	S1779	#	
Solenoid, Medium	<input type="checkbox"/>									
Solenoid, Super	<input type="checkbox"/>									
3 way (connections)										
2 switching positions										
Nominal size 6										
Normally closed	Solenoid on A-side	<input type="checkbox"/>								
Normally open	Solenoid on B-side	<input type="checkbox"/>								
Nominal voltage U_N	12 VDC	<input type="checkbox"/>	115 VAC	<input type="checkbox"/>						
	24 VDC	<input type="checkbox"/>	230 VAC	<input type="checkbox"/>						
Sealing material	NBR	<input type="checkbox"/>	FKM (Viton)	<input type="checkbox"/>						
Positive switching overlap										
Design index (subject to change)										

1.11-10010

GENERAL SPECIFICATIONS

Designation	3/2-way poppet valve
Construction	Direct operated
Mounting	Flange construction
Nominal size	NG6 according to ISO 4401-03
Actuation	Switching solenoid
Ambient temperature	-25...+70 °C (NBR) -20...+70 °C (FKM)
Weight	1,8 kg
MTTFd	150 years

ELECTRICAL SPECIFICATIONS

Protection class	IP65
Relative duty factor	100 % DF
Switching frequency	15'000 / h
Service life time	10 ⁷ (number of switching cycles, theoretically)
Voltage tolerance	± 10 % with regard to nominal voltage
Standard nominal voltage	12 VDC, 24VDC, 115 VAC, 230 VAC AC = 50 to 60 Hz, rectifier integrated in the connector socket

Note! Other electrical specifications see data sheet 1.1-120 (Medium) and 1.1-125 (Super)



ACTUATION

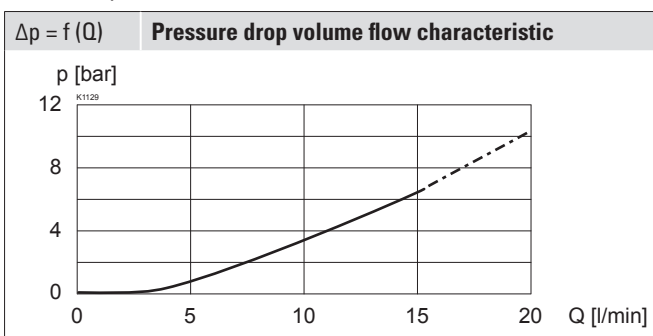
Actuation	Switching solenoid, wet pin push type, pressure tight
Execution	Medium: SIN45V (Data sheet 1.1-120) Super: SIS45V (Data sheet 1.1-125)
Connection	Connector socket EN 175301 – 803

HYDRAULIC SPECIFICATIONS

Working pressure	Medium: p _{max} = 160 bar Super: p _{max} = 300 bar
Maximum volume flow	Q _{max} = 15 l/min, see characteristic
Volume flow direction	Any
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	-20...+70 °C
Contamination efficiency	Class 20 / 18 / 14
Filtration	Required filtration grade β 10...16 ≥ 75, see data sheet 1.0-50

PERFORMANCE SPECIFICATIONS

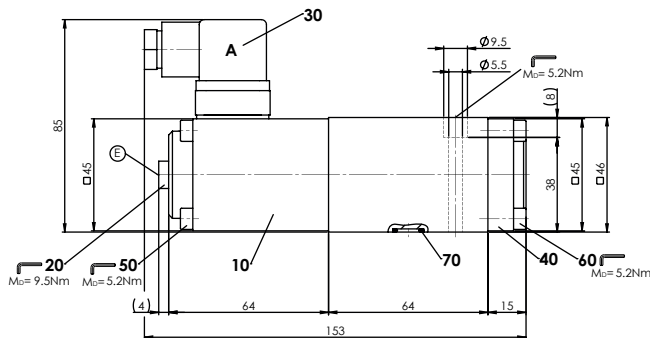
Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$



VALVES INSTALLED

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

DIMENSIONS



E = Air bleed screw

PARTS LIST

Position	Article	Description
10	260.6...	Solenoid SIN45V
	260.7...	Solenoid SIS45V
20	239.2033	Screw plug HB0 (incl. seal)
30	219.2001	Electric plug A (grey)
35	219.2002	Electric plug B (black)
40	058.4215	Cover
50	246.2160	Socket head screw M5 x 60 DIN 912
60	246.2117	Socket head screw M5 x 16 DIN 912
70	160.2093	O-ring ID 9,25 x 1,78 (NBR)
	160.6092	O-ring ID 9,25 x 1,78 (FKM)

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 solenoid and the cover are zinc coated
- ◆ The socket head screws are zinc coated

INSTALLATION NOTES

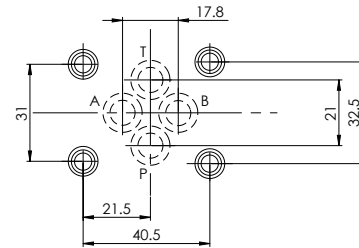
Mounting type	Flange mounting 4 fixing holes for socket head screws M5 x 45
Mounting position	Any, preferably horizontal
Tightening torque	Fixing screws $M_0 = 5,2 \text{ Nm}$ (screw quality 8.8, zinc coated)

Note!



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

HYDRAULIC CONNECTION



MANUAL OVERRIDE

Screw plug (HB0), no actuation possible
 Optionally: HB6, HN(K) or HR(K)
 → See data sheet 1.1-311

STANDARDS

Mounting interface	ISO 4401-03
Solenoids	DIN VDE 0580
Connection execution D	EN 175301 – 803
Protection class	EN 60 529
Contamination efficiency	ISO 4406

ACCESSORIES

Fixing screws	Data sheet 1.0-60
Threaded subplates	Data sheet 2.9-05
Multi-station subplates	Data sheet 2.9-45
Horizontal mounting blocks	Data sheet 2.9-85
Technical explanations	Data sheet 1.0-100
Hydraulic fluids	Data sheet 1.0-50
Filtration	Data sheet 1.0-50
Relative duty factor	Data sheet 1.1-430

COMMISSIONING

Attention! When commissioning, the valve must be vented under pressure (max. two rotations of screw E).

