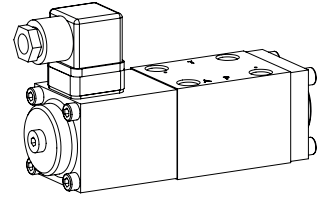


Solenoid operated poppet valve

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

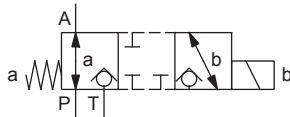
Direct operated 3/2-way solenoid poppet valve in sandwich construction. By means of the pressure tight switching solenoid, the poppet valve spool is opened or closed acting against the spring. Due to the poppet spool construction with pressure compensation on both sides, the flow through the valve is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

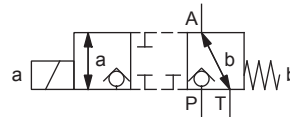
Poppet valves with positive switching overlap are used where oil losses are not allowed to occur neither in the static state nor in the dynamic state of the valve. In the use in accumulator loading systems, a rapid draining of the accumulator is avoided. Used as a pilot valve, no uncontrolled switching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

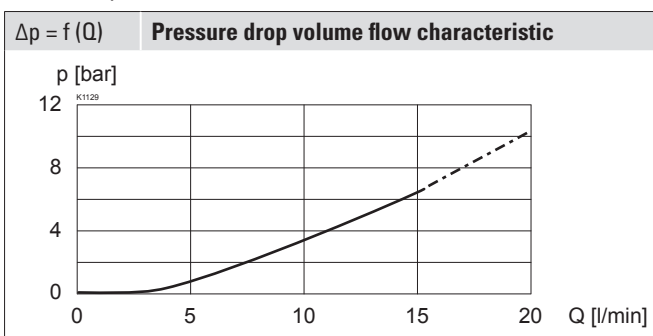
| | |
|------------|---|
| Actuation | Switching solenoid, wet pin push type, pressure tight |
| Execution | Medium: SIN45V (Data sheet 1.1-120) Super: SIS45V (Data sheet 1.1-125) |
| Connection | Connector socket EN 175301 – 803 |

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 $\beta_{10...16} \geq 75$, see data sheet 1.0-50 |

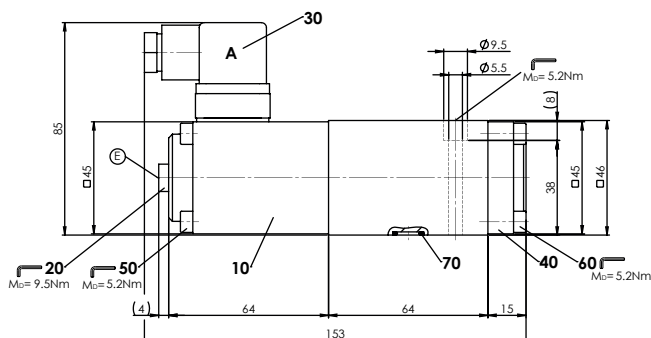
PERFORMANCE SPECIFICATIONS

Oil viscosity $\nu = 30$ mm²/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... 260.7... | Solenoid SIN45V 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 160.6092 | O-ring ID 9,25 x 1,78 (NBR) 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

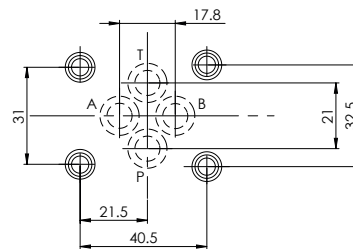
| | |
|-------------------|--|
| Mounting type | Flange mounting 4 fixing holes for socket head screws M5 x 45 |
| Mounting position | Any, preferably horizontal |
| Tightening torque | Fixing screws $M_0 = 5,2 \text{ Nm}$ (screw quality 8.8, zinc coated) |

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).

