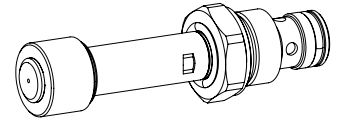


Solenoid operated poppet valve cartridge

- ◆ solenoid operated
- ◆ direct operated
- ◆ normally closed
- ◆ 2/2-way
- ◆ $Q_{max} = 15 \text{ l/min}$
- ◆ $p_{max} = 250 \text{ bar}$

M20 x 1,5



DESCRIPTION

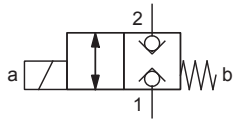
Direct operated 2/2-way solenoid poppet valve in screw-in cartridge construction for cavity according to Wandfluh standard. In case of the BA execution, the valve is closed in the de-energised position.

APPLICATION

Poppet valves are used where tight closing functions of the valve are essential like leakfree load holding, clamping or gripping. The poppet valve cartridge is mainly used in the mobile and stationary block construction.

SYMBOL

„Normally closed“ BA



TYPE CODE

| | | | | | | | | | |
|----------------------------------|---|---|---|--------|--|---|----|---|---|
| Poppet valve | S | D | E | PM20 - | | - | X5 | # | |
| Direct operated | | | | | | | | | |
| Solenoid | | | | | | | | | |
| Screw-in cartridge M20 x 1,5 | | | | | | | | | |
| 2/2 way, «normally closed» | | | | | | | | | BA |
| Without coil | | | | | | | | | (The coil has to be ordered separately) |
| Design index (subject to change) | | | | | | | | | |

1.11-205A

GENERAL SPECIFICATIONS

| | |
|---------------------|-------------------------|
| Designation | 2/2-way poppet valve |
| Construction | Direct operated |
| Mounting | Screw-in cartridge type |
| Nominal size | M20 x 1,5 |
| Actuation | Switching solenoid |
| Ambient temperature | -30...+110 °C |
| Weight | 0,12 kg |
| MTTFd | 150 years |

HYDRAULIC SPECIFICATIONS

| | |
|--------------------------|---|
| Working pressure | $p_{max} = 250 \text{ bar}$ |
| Maximum volume flow | $Q_{max} = 15 \text{ l/min}$, see characteristics |
| Leakage volume flow | Seat tight, max. 5 drops / min at p_{max} |
| Fluid | Mineral oil, other fluid on request |
| Viscosity range | 8 mm ² /s...420 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 |

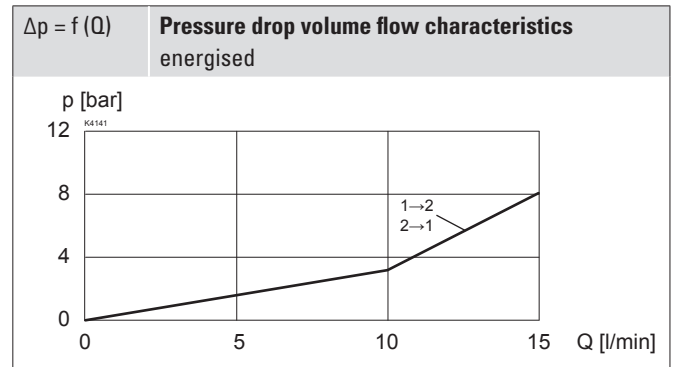
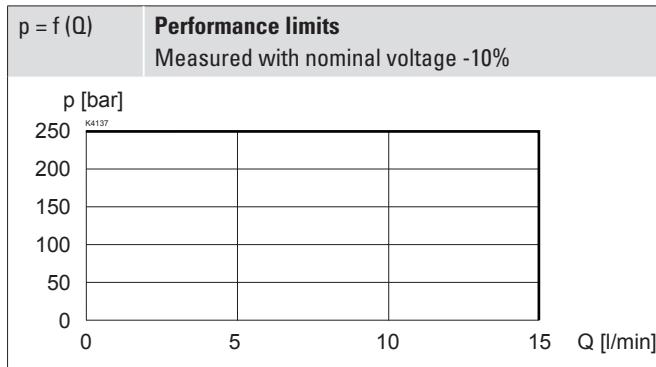
SURFACE TREATMENT

- ◆ The armature tube and the external parts of the cartridge body are zinc coated

MANUAL OVERRIDE

None

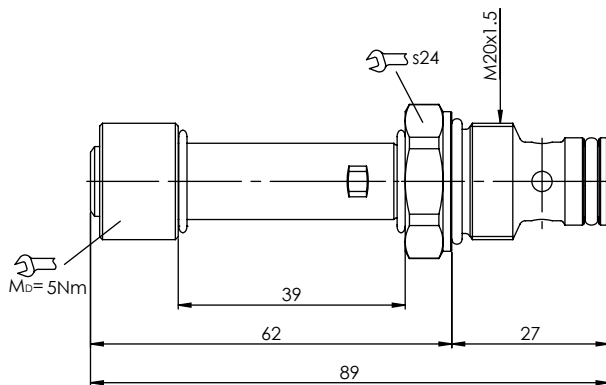
PERFORMANCE SPECIFICATIONS

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


Switching times

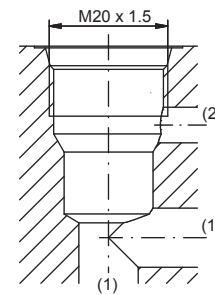
| SDEPM20 | Type | Switch on | Switch off |
|---------|------|---------------|---------------|
| | BA | approx. 20 ms | approx. 40 ms |

DIMENSIONS



HYDRAULIC CONNECTION

Cavity drawing according to Wandfluh standard


Note!


For detailed cavity drawing and cavity tools see data sheet 2.13-1042

ACCESSORIES

| | |
|------------------------|--------------------|
| 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 |

ACTUATION

| | |
|------------|--|
| Actuation | Switching solenoid, wet pin push type, pressure tight |
| Execution | K.E33 / 13 x 39 (data sheet 1.1-160) |
| Connection | Connector socket EN 175301 – 803 Connector socket AMP Junior-Timer Connector Deutsch DT04 – 2P |

Note!


The solenoid coil is not included in the delivery!

INSTALLATION NOTES

| | |
|-------------------|---|
| Mounting type | Screw-in cartridge M20 x 1,5 |
| Mounting position | Any, preferably horizontal |
| Tightening torque | $M_0 = 40-45 \text{ Nm}$ for screw-in cartridge |

STANDARDS

| | |
|--------------------------|-----------|
| Protection class | EN 60 529 |
| Contamination efficiency | ISO 4406 |

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