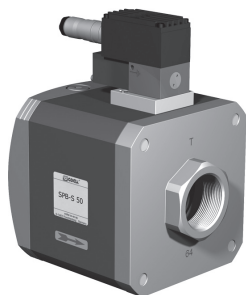
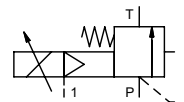



pressure limitation valve

type SPB-S 50



control valve proportional
pressure range PN 5-64 bar
orifice DN 50 mm
connection thread
function stepless
pressure regulation
bypass version



 Above stated body materials refer to the valve port connections that get in contact with the media only!

design externally controlled with spring return
body materials ① ② ③ ④ steel, nickel plated ⑤ ⑥
valve seat metal on metal
seal materials FPM, PTFE

details needed for main valve

- orifice
- port
- pressure regulating range
- flow rate
- media
- media temperature
- ambient temperature

details needed for proportional valve

- nominal voltage
- actuation pressure range min/max


| general specifications | | options |
|---------------------------|-------|---------------------|
| ports | SPB | threads G 1 1/2 |
| function | | stepless regulation |
| pressure regulation range | bar | 5-64 |
| Kv value | m³/h | 48,0 |
| media | | emulsions - oils |
| abrasive media | | |
| flow direction | P ⇌ T | as marked |
| operating time | ms | < 900 |
| media temperature | °C | 0 to +60 |
| ambient temperature | °C | 0 to +50 |
| approvals | | |
| mounting | | mounting holes |
| weight | kg | 11,9 |
| additional equipment | | |


electrical specifications**options**

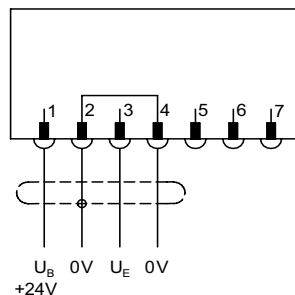
| | | |
|-----------------------|----------------|--|
| nominal voltage | U _B | DC 24 V (max. residual ripple 10%) |
| power consumption | DC | < 0,7 A |
| control signals | U _E | 0-10 V (R _E 100KΩ) |
| protection | IP65 | acc. DIN 40 050 |
| energized duty rating | ED | 100% (observe the connection conditions accordingly) |
| connection | | plug with 7 contacts / wire diameter 6-8 mm |

pneumatic specifications**options**

| | | |
|--------------------------|-----|--|
| actuation pressure range | bar | see actuation pressure-diagram |
| air consumption | | DIN ISO 8573-1 grade of compressed air quality 5/4/3 |
| control | | by 3/2-way proportional valve |
| actuator ports | 1 | G 1/8 |

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

connection plan**connection conditions**

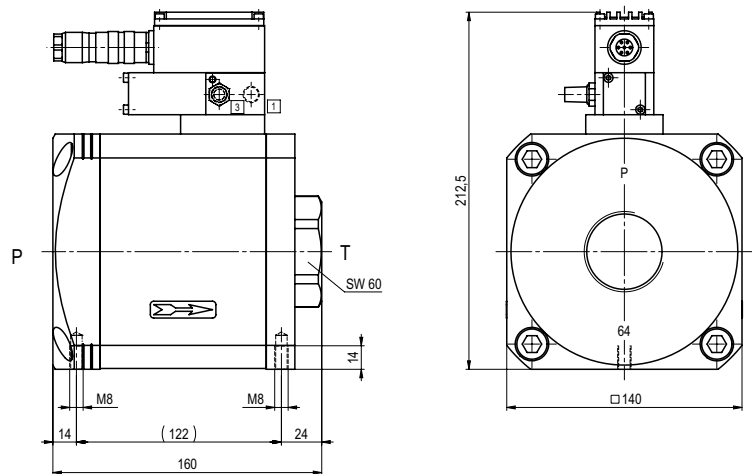
When supplying the electrical set point signal to the proportional valve, the actuating air must already be present. (see actuation pressure-diagram)

position of installation

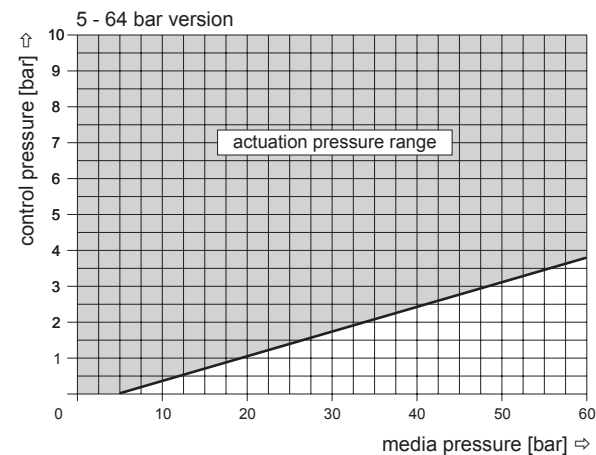
arbitrarily, but regulator not downwards

■ specifications not highlighted are standard
■ specifications highlighted in grey are optional

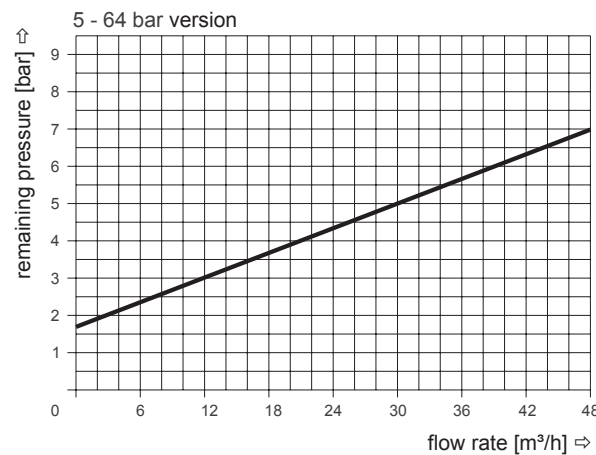
type **SPB-S 50**



actuation pressure-diagram



pressureless circulation mode



Sound creation during low pressure circulation mode and flow $Q=48\text{ m}^3/\text{h}$: ca. 74 dbA