



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Angle valve with soft-pump function Series 290, DN 25 (ID 1") Ordering No. 29028-KE41-0001

Description

| | | |
|-------------|-----------------------|--|
| Actuator | | Pneumatic, single acting with closing spring – with solenoid valve – with position indicator |
| Feedthrough | – Main – Soft-pump | Bellows Shaft feedthrough |

Technical data

| | | |
|--|--|--|
| Leak rate | – Valve Body – Valve seat | $< 1 \cdot 10^{-9}$ mbar ls ⁻¹ $< 1 \cdot 10^{-9}$ mbar ls ⁻¹ |
| Pressure range | | $1 \cdot 10^{-8}$ mbar to 1.2 bar (abs) |
| Differential pressure on the plate | – In opening direction – In closing direction | ≤ 1.2 bar ≤ 1.2 bar |
| Differential pressure at opening | | ≤ 1 bar |
| Conductance (molecular flow) | | 14 ls ⁻¹ |
| Cycles until first service (Tmax 80 °C, under clean conditions) | | 2 million |
| Temperature (Maximum values: depending on operating conditions and sealing materials) | – Valve Body – Actuator – Solenoid valve – Position indicator | ≤ 150 °C ≤ 120 °C ≤ 80 °C ≤ 80 °C |
| Material | – Valve body – Actuator – Plate – Bellows | AISI 304 (1.4301) Aluminum AISI 316L (1.4435 ESU) AISI 316L (1.4404, 1.4435) AISI 316 Ti (1.4571) |
| Seal | – Bonnet O-ring – Plate O-ring – Feedthrough O-ring – Actuator O-ring | FKM (Viton®) FKM (Viton®) FKM (Viton®) FKM (Viton®) |
| Mounting position | | any |
| Volume of pneumatic actuator | | 0.011 l / 0.0004 ft ³ |
| Compressed air min. – max. overpressure | | 4 – 8 bar / 58 – 116 psi |
| Compressed air connection | | M5 female (10-32 UNF suitable) |
| Actuation time | – Closing | ≤ 0.20 sec. |
| Weight | | 0.90 kg / 1.98 lbs |

| | | |
|------------------|--------------------------|-----------------|
| Created by: WARO | Release date: 25.08.2014 | 1/3 |
| Modified by: | Release date: | 765474EA |



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Behavior in case of compressed air pressure drop

- Valve closed
- Valve opened
- During actuation

valve remains closed and leaktight
valve closes leaktight
valve closes leaktight

Behavior in case of power failure

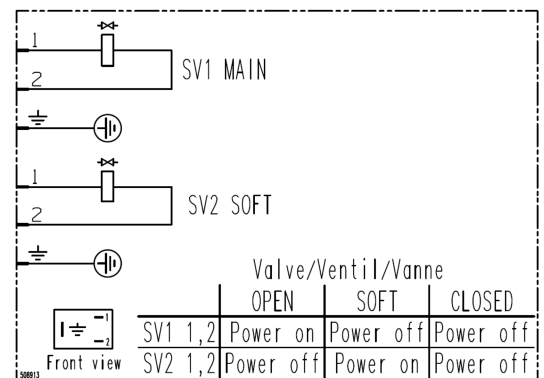
- Valve closed
- Valve opened
- During actuation

valve remains closed and leaktight
valve closes leaktight
valve closes leaktight

Electrical connections

Solenoid valve

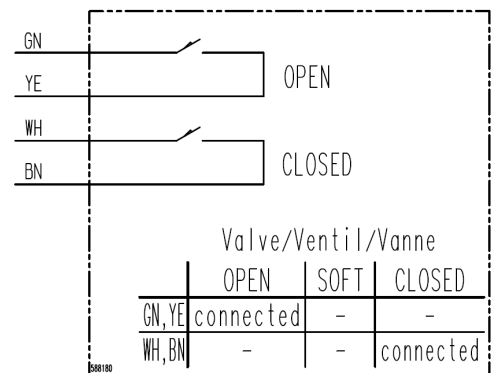
Type 3/2-way
Voltage See solenoid
Power See solenoid
Connector Rectangle plug, Type B (DIN standard)
Cable Ø6 – 8 mm



Wiring diagram

Position indicator

Type Micro switch
Voltage ≤ 50 V AC / DC
Current 5 – 100 mA
Short circuit protected No
Connection Cable, 4 wires
Cable length 500 mm
Cable cross section 0.25 mm²



Wiring diagram



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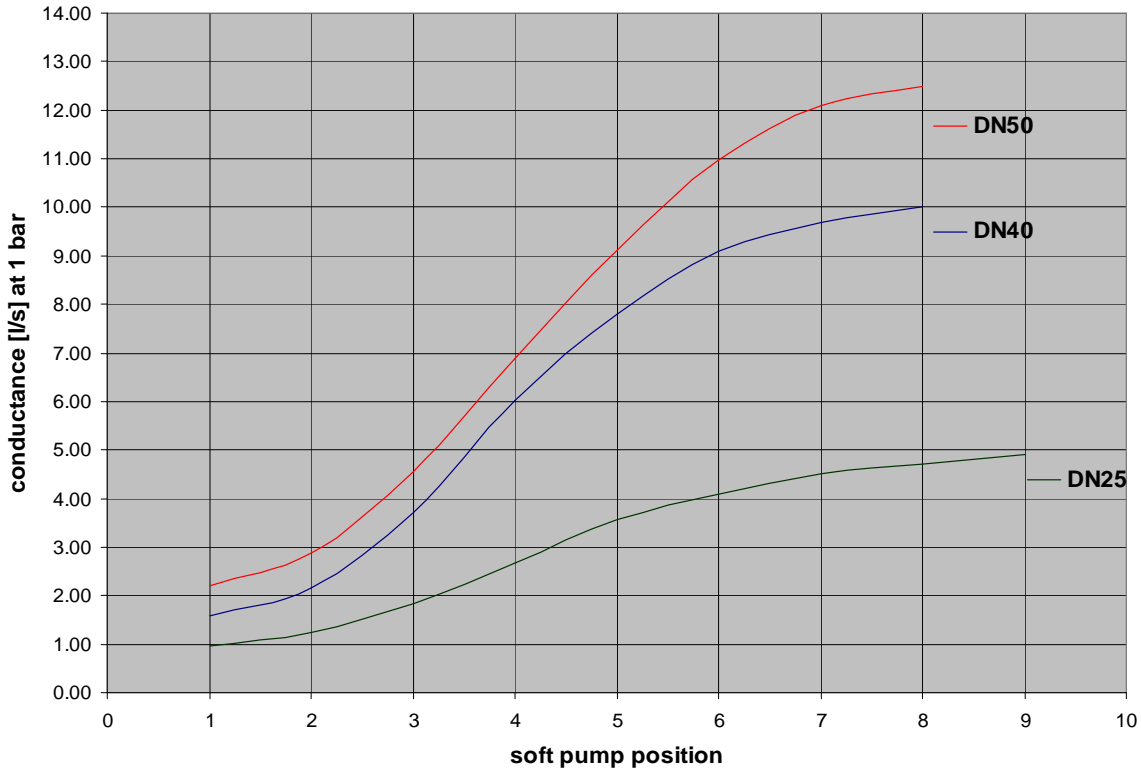
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conductance diagram



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