



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-KA21-0001

Description

| | | |
|-------------|-------------|---|
| Flange | | ISO-KF 25 |
| Actuator | | Pneumatic, single acting with closing spring – without solenoid valve – with position indicator |
| Feedthrough | – Main | Bellows |
| | – Soft-pump | Shaft feedthrough |

Technical data

| | | |
|--|------------------------|--|
| Leak rate | – Valve Body | $< 1 \cdot 10^{-9}$ mbar ls ⁻¹ |
| | – Valve seat | $< 1 \cdot 10^{-9}$ mbar ls ⁻¹ |
| Pressure range | | $1 \cdot 10^{-8}$ mbar to 1.2 bar (abs) |
| Differential pressure on the plate | – In opening direction | ≤ 1.2 bar |
| | – In closing direction | ≤ 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 | ≤ 150 °C |
| | – Actuator | ≤ 120 °C |
| | – Position indicator | ≤ 80 °C |
| Material | – Valve body | Aluminum (EN AW-6082) |
| | – Actuator | Aluminum |
| | – Plate | AISI 316L (1.4435 ESU) |
| | – Bellows | AISI 316L (1.4404, 1.4435), AISI 316 Ti (1.4571) |
| Seal | – Bonnet O-ring | FKM (Viton®) |
| | – Plate O-ring | FKM (Viton®) |
| | – Feedthrough O-ring | FKM (Viton®) |
| | – Actuator O-ring | 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 | | 0.64 kg / 1.41 lbs |

| | | |
|------------------|--------------------------|-----------------|
| Created by: WARO | Release date: 22.08.2014 | 1/2 |
| Modified by: | Release date: | 765319EA |



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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

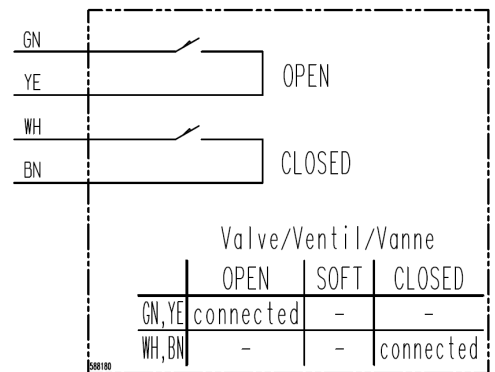
- Valve closed
- Valve opened
- During actuation

valve remains closed and leaktight
depending on customer installation
depending on customer installation

Electrical connections

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

conductance diagram

