



Technical Data Sheet P-PS 101P

GVT.

2/2-Way pressure controlled dosing valve

Dosing valve for gaseous and liquid media

- Ideal for continuous media control
- Even in higher temperature ranges
- High dosing accuracy
- High control accuracy
- Three safety-setting-options (open/close/remain)
- No additional electronics required for adjustment

TECHNICAL SPECIFICATIONS

| | | | |
|-----------------------|--|-------------------------------|---|
| Type of control: | Pressure operated dosing valve | Supply voltage: | 24 VDC |
| Design: | Seat valve with cone-type piston | Voltage tolerance: | -10% / +10% |
| Connection: | Threaded G 1/2 - G 2 DIN ISO 228 (BSP) | Power consumption: | 100 mA |
| Installation: | Actuator preferable upright | Power: | 2.4 Watt |
| Pressure: | 0-40 bar (see table page 2) | Input signal: | 4-20 mA (basic setting) optional 0-10 V (selectable by menu) |
| Medium: | clean, neutral, gaseous and liquid | Output signal: | According to input signal (Selectable independant of the input signal) |
| Viscosity: | 600 mm ² /s | Protection class: | IP65 acc. to DIN 60529 |
| Temperature range: | Medium: -40 °C up to +150 °C Ambient: -15 °C up to +60 °C | Connection of control medium: | G 1/8 |
| Body material: | Red brass RG5 Stainless steel 1.4408 (AISI 316) | Control medium: | Clean and neutral gases |
| Metallic inner parts: | Brass and stainless steel | Control pressure: | 4-10 bar |
| Sealing: | PTFE | Quality: | Compressed air class 3 (Medium quality according to ISO 8573-1) |
| Funktion: | | | |

Certificates:



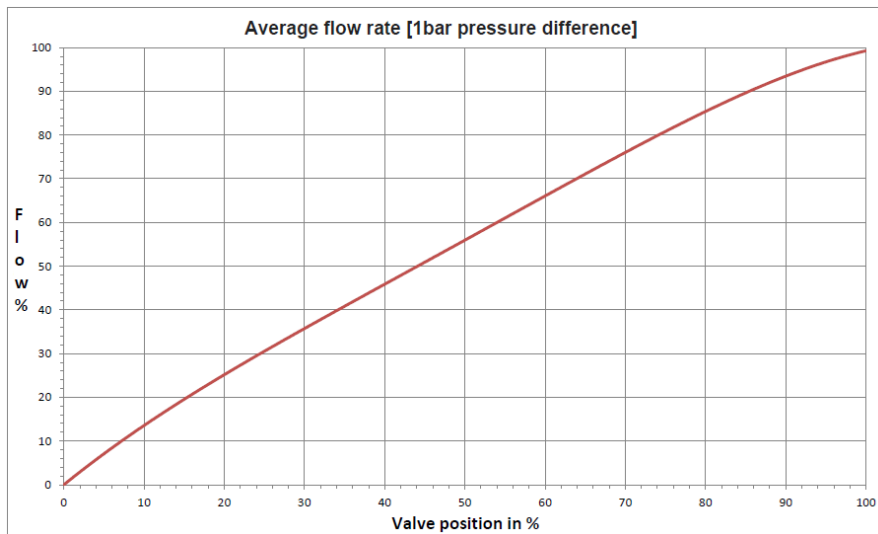
EMV
DIN EN 61000

ROHS

ORDERING SYSTEM

| | | | | | | | | |
|-------------|-----------------|------------|-----------------|--|---------------------|-------------------------|------------------|-----------------------------------|
| P-PS | 1 | 01P | G | D | 13.5 | H | D | P05 |
| Type | Control type | Code | Connection type | Connection size | Nominal diameter mm | Body material | Sealing material | Actuator type |
| | 1 direct acting | | G BSP N NPT | D 1/2 E 3/4 F 1 G 1 1/4 H 1 1/2 I 2 | | D AISI316 H Redbrass | D PTFE | 05 50 mm 08 80 mm 13 125 mm |

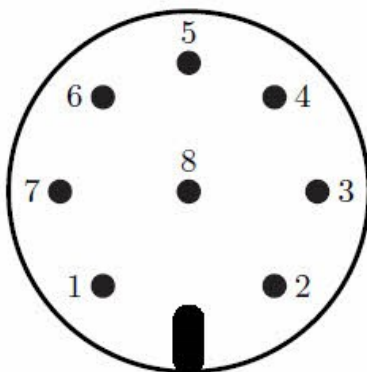
| Standard NC type | Seat ϕ mm | Kv-value m ³ /h | | max. pressure with actuator | | | | | |
|------------------|----------------|----------------------------|---------|-----------------------------|---------|------|---------|------|---------|
| | | RG5 | AISI316 | P05 | | P08 | | P13 | |
| | | | | RG5 | AISI316 | RG5 | AISI316 | RG5 | AISI316 |
| P-HD 101P GD | 13.5 | 3.2 | 3.4 | 0-16 | 0-40 | - | - | - | - |
| P-HD 101P GE | 27.5 | 6.0 | 6.5 | 0-16 | 0-20 | - | - | - | - |
| P-HD 101P GF | 27.5 | 13.4 | 13.8 | 0-10 | 0-10 | 0-16 | 0-22 | - | - |
| P-HD 101P GG | 40.0 | 17.0 | 18.0 | - | - | 0-12 | 0-12 | 0-16 | 0-40 |
| P-HD 101P GH | 40.0 | 30.0 | 30.0 | - | - | 0-8 | 0-8 | 0-16 | 0-30 |
| P-HD 101P GI | 50.0 | 35.0 | 40.0 | - | - | 0-5 | 0-5 | 0-16 | 0-20 |



Positioning details

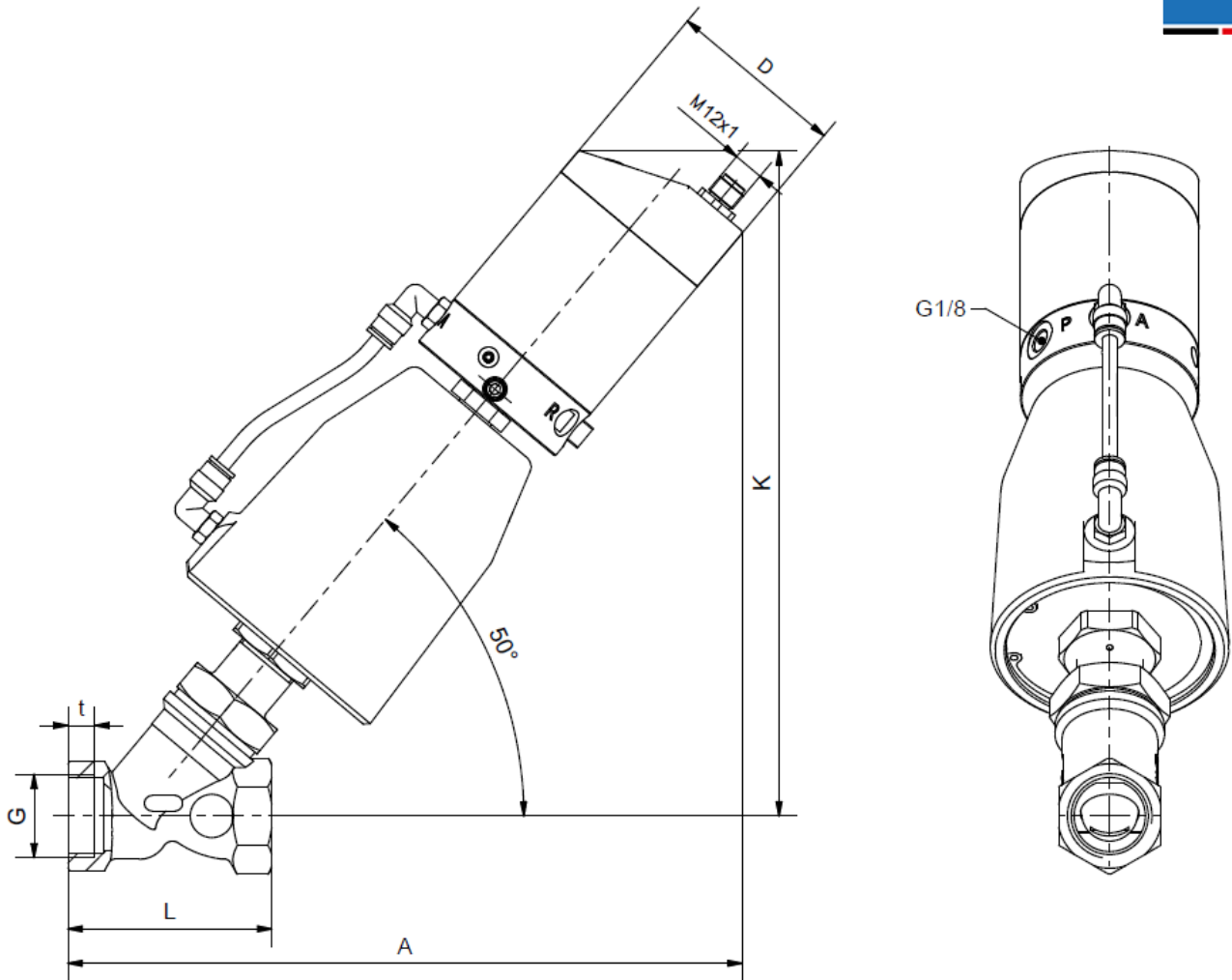
| | |
|-------------------|---------------------|
| Acquisition range | 0 - 23 mm |
| Resolution | 0.5% of max. stroke |
| Repeat accuracy | < 1% |
| Hysteresis | < 1% |
| Responsiveness | < 1% |
| Adjustment range | 1:200 |

Electrical Connection



| | |
|----------------|--------------------------------------|
| Pin 1 = white | Output 2: 0-5 VDC—digital / constant |
| Pin 2 = brown | Supply voltage: 24 VDC |
| Pin 3 = green | Ground: 0 V |
| Pin 4 = yellow | Input signal: 0-10 VDC |
| Pin 5 = gray | Output signal: 0-10 VDC |
| Pin 6 = pink | Output 1: 0-5 VDC—digital / constant |
| Pin 7 = blue | Input signal: 4-20 mA |
| Pin 8 = red | Output signal: 4-20 mA |

Note: The connected cable to the positioner must be not longer than 30 meters.



| Actuator | P05 | | | P08 | | | | P13 | | |
|-------------|-----------|------|------|-----------|-------|-------|------|-----------|-------|------|
| Type | P-HD 101P | | | P-HD 101P | | | | P-HD 101P | | |
| | GD | GE | GF | GF | GG | GH | GI | GG | GH | GI |
| G | 1/2 | 3/4 | 1 | 1 | 1 1/4 | 1 1/2 | 2 | 1 1/4 | 1 1/2 | 2 |
| A | 227 | 229 | 232 | 264 | 273 | 280 | 290 | 315 | 320 | 332 |
| D | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 |
| K | 219 | 220 | 222 | 260 | 265 | 271 | 280 | 315 | 322 | 330 |
| L (RG5) | 66 | 75 | 80 | 80 | 97 | 107 | 124 | 97 | 107 | 124 |
| L (AISI316) | 65 | 75 | 90 | 90 | 110 | 120 | 150 | 110 | 120 | 150 |
| t (RG5) | 13.0 | 14.5 | 10.5 | 10.5 | 12.5 | 14.5 | 16.5 | 12.5 | 14.5 | 16.5 |
| t (AISI316) | 12.0 | 13.0 | 15.0 | 15.0 | 17.0 | 19.0 | 21.0 | 17.0 | 19.0 | 21.0 |
| Kg | 1.9 | 2.0 | 2.0 | 2.8 | 3.1 | 3.3 | 3.9 | 6.4 | 6.9 | 7.2 |

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