

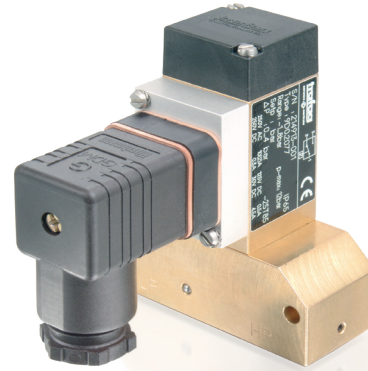
DIFFERENTIAL PRESSURE PICOSTAT

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for measurement of pressure and temperature.



Applications

- Shipbuilding
- Engine manufacturing
- Machine tools
- Hydraulics



Features

- Compact design
- Rugged housing
- High repeatability
- Protection IP65 (with plug connector)
- Any mounting position possible

| Technical Data | | | |
|------------------------|---------------------------------------|-----------------------|---|
| Measuring principle | Bellow | Repeatability | ± 1.0 % FS typ. |
| Measuring range | -1 ... 6 and -1 ... 8 bar | Media temperature | -25°C ... +120°C |
| Differential pressure | 0 ... 4 and 0 ... 6 bar | Ambient temperature | -25°C ... +85°C |
| Output signal | 1 Floating change-over contact (SPDT) | Approval / conformity | GL EN60730-1/ EN60730-2-6: Typ 2.B.H |
| Switching differential | Not adjustable | | |

02/2017

Data sheet H72273f

Subject to change

Ordering information/type code

| | | | | | 9D0 | XX | XX | XXX | XX | XX |
|----------------------------|--|------------------------------------|----------------------------|-----------------------------|-----|-----|----|-----|----|----|
| Microswitch | Big switching differential ¹⁾ | | | | | 20 | | | | |
| | Small switching differential ¹⁾ | | | | | 28 | | | | |
| | Switch with gold plated contacts ¹⁾ | | | | | 83 | | | | |
| Range | Range [bar] | Differential pressure [bar] | Over pressure [bar] | Burst pressure [bar] | | | | | | |
| | -1 ... 6 | 0 ... 4 | 8 | 11.5 | | 76 | | | | |
| | -1 ... 8 | 0 ... 6 | 12 | 26 | | 77 | | | | |
| Sensor | Sensor material | Sensor housing material | | Range | | | | | | |
| | Bronze (CuZn6) | Brass (CuZn39Pb3) | | 76 | | 770 | | | | |
| | Bronze (CuZn6) | Brass (CuZn39Pb3) | | 77 | | 771 | | | | |
| Pressure connection | G1/4" female | | | | | | | | | 04 |
| Accessories | Flange with O-Ring | | | | | | | | | 11 |
| | Covering | | | | | | | | | 15 |
| | Lead seal (manipulation protection) | | | | | | | | | 16 |
| | Female electrical connector DIN43650-A | | | | | | | | | 58 |
| | Welsh plug G1/8" | | | | | | | | | 57 |
| | Welsh plug G1/4" | | | | | | | | | 74 |
| | Fixing set | | | | | | | | | V3 |
| | Damping elements and snubber see data sheet H72258 | | | | | | | | | |

¹⁾ Switching differential not adjustable

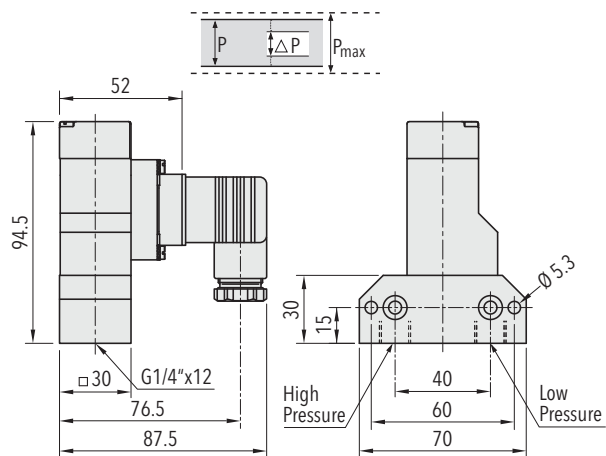
Standard products (extra short lead time)

| Product No. | Type Code | Pressure range [bar] | Differential pressure [bar] | Over pressure max. [bar] | Switching differential [bar] |
|-------------|------------------------------------|----------------------|-----------------------------|--------------------------|------------------------------|
| PSTD4 | 9D0 2076 770 04 0000 0000 15 58 V3 | -1 ... 6 | 0 ... 4 | 8 | 0.2 (fixed) |
| PSTD6 | 9D0 2077 771 04 0000 0000 15 58 V3 | -1 ... 8 | 0 ... 6 | 12 | 0.3 (fixed) |

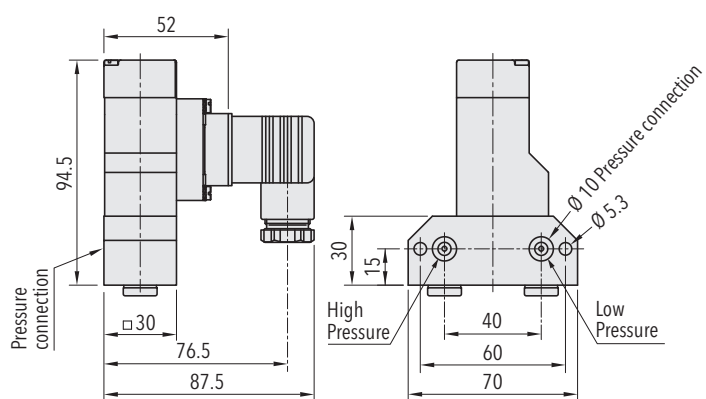
| Specifications | | |
|---------------------------------|--|---|
| Accuracy | Repeatability | ± 1.0 % FS typ. |
| | Switching differential | See table |
| | Adjustment range switchpoint ¹⁾ | 10% ... 90% FS |
| Environmental conditions | Ambient temperature | -25°C ... +85°C |
| | Media temperature | -25°C ... +120°C |
| | Storage temperature | -40°C ... +85°C |
| | Protection | IP65 |
| | Humidity | Max. 95 % relative |
| | Vibration | 5...25 Hz: ±1.6 mm 25...100 Hz: 4g |
| | Shock | 50g/ 11ms |
| Mechanical Data | Sensor | Bronze (CuSn8) |
| | Housing | Brass CuZn39Pb3 |
| | Sealing | - |
| | Male electrical plug | Polyamide PA |
| | Mounting torque | Max. 25 Nm |
| | Installation | any position |
| | Weight | ~ 800 g |
| Microswitch | Rating | See table |
| | Resistance of insulation | > 2 MΩ |
| | Dielectric strength | 1.45 kV terminal ground |
| | Life time (mechanical) | Microswitch 20: 1 Mio. cycles Microswitch 28/83: 10 Mio. cycles |
| Electrical connection | Electrical connections | EN175301-803-A (DIN43650-A) |
| | Female electrical connector | Cable-Ø: 6...13 mm Terminal screw: 4 x 0.5...1.5 mm ² |

¹⁾ Other adjustment ranges upon request

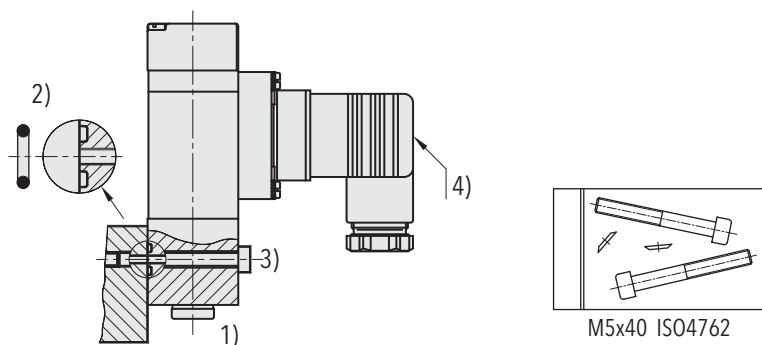
Dimensions



9D0.XX7X.77X.04.58.V3



9D0.XX7X.77X.04.11.58.74.V3



9D0.XXXX.XXX.XX.11

9D0.XXXX.XXX.XX.V3

- 1) Torque: G 1/8": $M_A = 16 \dots 20 \text{ Nm}$
G 1/4": $M_A = 32 \dots 40 \text{ Nm}$
- 2) O-Ring: $\phi 6.75 \times 1.78 \text{ NBR 70 Sh}$
- 3) Fixing screw: M5; property class: 8.8; torque: 4.5...6 Nm
- 4) Torque connector center screw: max. 0.4 Nm

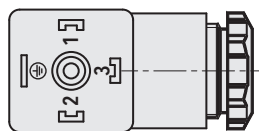
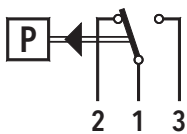
Switching differential typ. @ 25°C

| | | | |
|---|-------|----------|----------|
| Measuring range of bellows sensor | [bar] | -1 ... 6 | -1 ... 8 |
| Microswitch 20 Switching differential (not adjustable) | [bar] | 0.2 | 0.3 |
| Microswitch 28/83 Switching differential (not adjustable) | [bar] | 0.15 | 0.2 |

Electrical data switch

| Type | Features | Rating | |
|------|--|--|---|
| | | Resistive Load (Inductive Load) | |
| | | AC | DC |
| 20 | Big switching differential | 250 V, 10 (3) A | 250 V, 0.1 (0.05) A 220 V, 0.25 (0.2) A 110 V, 0.5 (0.3) A 24 V, 2 (1) A |
| 28 | Small switching differential | 250 V, 3 (1) A | 250 V, 0.1 (0.05) A 220 V, 0.25 (0.2) A 110 V, 0.5 (0.3) A 24 V, 2 (1) A |
| 83 | Gold plated contacts, suitable for intrinsically safe control circuits | max. 30 V, 0.3 (0.2) A min. 5 V, 1 mA | |

Electrical Connection



DIN 43650-5

Additional information

| | | |
|------------------|--------------|--|
| Documents | Data sheet | www.trafag.com/H72273 |
| | Instructions | www.trafag.com/H73273 |
| | Flyer | www.trafag.com/H70913 |