

DIFFERENTIAL PRESSURE TRANSMITTER

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

Features

- High zero point stability
- High resistance to pressure cycling
- EMC protection, IEC 61000

04/2020

Data sheet H72218k

Technical Data

| | | | |
|-----------------------|-------------------------|----------------------|------------------|
| Measuring principle | Thin-film-on-steel | Accuracy @ 25°C typ. | ± 0.8 % FS typ |
| Measuring range | 0 ... 1 to 0 ... 16 bar | Media temperature | -25°C ... +125°C |
| Output signal | 4 ... 20 mA (P1-P2) | Ambient temperature | -25°C ... +85°C |
| NLH @ 25°C (BSL) typ. | ± 0.5 % FS typ. | | |

Subject to change

Ordering information/type code

| | | | | 8204 . XX | XXXX | XX | XX |
|--------------------------------------|--|--------------------------------------|---------------------------------------|-----------|------|----|----|
| Measuring range ¹⁾ | Pressure measurement range [bar] | Maximum system pressure [bar] | Overpressure on one side [bar] | | | | |
| | 0 ... 1.0 | 2.5 | 6 | 71 | | | |
| | -1 ... 1.5 | 6 | 15 | 55 | | | |
| | 0 ... 2.5 | 6 | 15 | 75 | | | |
| | -1 ... 5 | 16 | 32 | 58 | | | |
| | 0 ... 6 | 16 | 32 | 77 | | | |
| | 0 ... 10 | 40 | 80 | 78 | | | |
| 0 ... 16 | 40 | 80 | 79 | | | | |
| Pressure connection | G1/4" female | | | | 2210 | | |
| | | | | | | | |
| Fixing | Fixation standard | | | | | 00 | |
| | Wall mounting bracket | | | | | | 31 |
| Accessories | Screwed cable gland DIN89280, M24x1.5 (Cable- \varnothing 14 ... 16.5) | | | | | | 27 |
| | Screwed cable gland DIN89280, M18x1.5 (Cable- \varnothing 8 ... 10.5) | | | | | | 40 |
| | Damping elements and snubber see data sheet H72258 | | | | | | |

¹⁾ Customized pressure ranges upon request

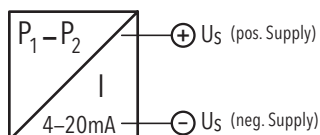
Standard products (extra short lead time)

| Product No. | Type Code | Differential pressure (measuring range) [bar] | Maximum system pressure [bar] | Over pressure max. [bar] | Supply [VDC] | Accuracy @ 25°C typ. [%] |
|-------------|--------------|---|-------------------------------|--------------------------|--------------|--------------------------|
| ND1.0 | 8204 71 2210 | 0 ... 1.0 | 2.5 | 6 | 12 ... 34 | ± 0.8 |
| ND1.5 | 8204 55 2210 | -1 ... 1.5 | 6 | 15 | 12 ... 34 | ± 0.8 |
| ND2.5 | 8204 75 2210 | 0 ... 2.5 | 6 | 15 | 12 ... 34 | ± 0.8 |
| ND5 | 8204 58 2210 | -1 ... 5.0 | 16 | 32 | 12 ... 34 | ± 0.8 |
| ND6 | 8204 77 2210 | 0 ... 6.0 | 16 | 32 | 12 ... 34 | ± 0.8 |

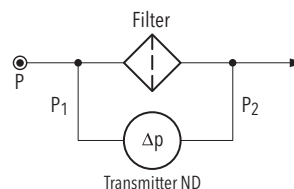
| Specifications | | |
|---------------------------------|------------------------------------|---|
| Accuracy | TEB typ. @ -25 ... +85°C | ± 3.5 % FS typ. |
| | Accuracy @ 25°C typ. | ± 0.8 % FS typ. |
| | NLH @ 25°C (BSL) typ. | ± 0.5 % FS typ. |
| | TC zero point and span typ. | ± 0.04 % FS/K typ. |
| | Long term stability 1 year typ. | ± 0.4 % FS typ. |
| Electrical Data | Output / supply voltage | 4 ... 20 mA; 24 (12 ... 34) VDC |
| | Load | $U_{\text{supply}} - 12\text{V}/20\text{ mA}$ |
| | Rise time | typ. 1 ms/10...90 % nominal pressure |
| Environmental conditions | Media temperature | -25°C ... +125°C |
| | Ambient temperature | -25°C ... +85°C |
| | Protection ¹⁾ | Min. IP65 |
| | Humidity | Max. 95 % relative |
| | Vibration | 6g (25...2000 Hz) |
| | Shock | 50g/ 1 ms |
| EMC Protection | Emission | EN/IEC 61000-6-3 |
| | Immunity | EN/IEC 61000-6-2 |
| Mechanical Data | Electrical connections | Terminal screw 0.75 ... 2.5 mm ² |
| | Screwed cable gland | M20x1.5 Cable-Ø 6...13 mm |
| | Sensor (wetted parts) | 1.4542 (AISI630) |
| | Pressure connection (wetted parts) | 1.4542 (AISI630) |
| | Housing | AlSi10Mg/ Epoxy coated |
| | Sealing | NBR 70 Sh |
| | Weight | ~ 720 g |
| | Mounting torque | 25 Nm |

¹⁾ Provided female connector is mounted according to instructions

Electrical Connection

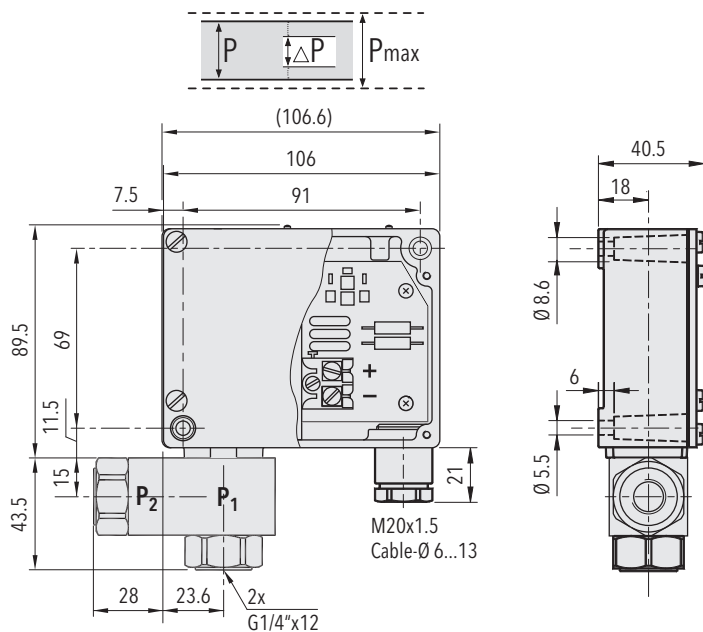


Functional diagram

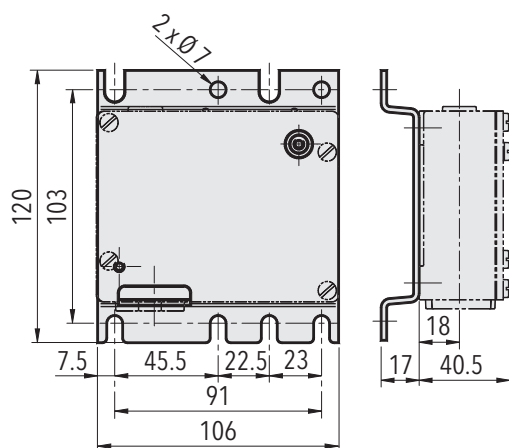


Δp = Differential Pressure
 P_1 = Higher pressure
 P_2 = Lower pressure
 P = System pressure

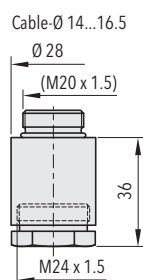
Dimensions



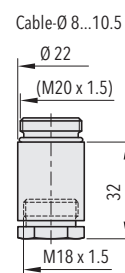
8204.XX.2210.XX.XX



8204.XX.2210.31.XX



8204.XX.XXXX.XX.27



8204.XX.XXXX.XX.40

Additional information

Documents

| | |
|--------------|--|
| Data sheet | www.trafag.com/H72218 |
| Instructions | www.trafag.com/H73218 |
| Flyer | www.trafag.com/H70678 |