



*Differential pressure transmitter  
For monitoring the differential pressure of air  
or other non-flammable and non-aggressive gases*

Technical information TI02.18

### In brief



### Application

- Ventilation and air conditioning technology
- Heating technology
- Filter monitoring
- Flow monitoring
- Building technology
- Fuel technology

### Main features

- Precise detection of differential pressures in dry non-aggressive gases
- Suitable for dusty environments (ATEX approval)
- Ideal for filter monitoring
- Optimal adjustment of the measuring range
- Adjustment of the zero point possible
- Fast commissioning due to easy installation and easily accessible connection area



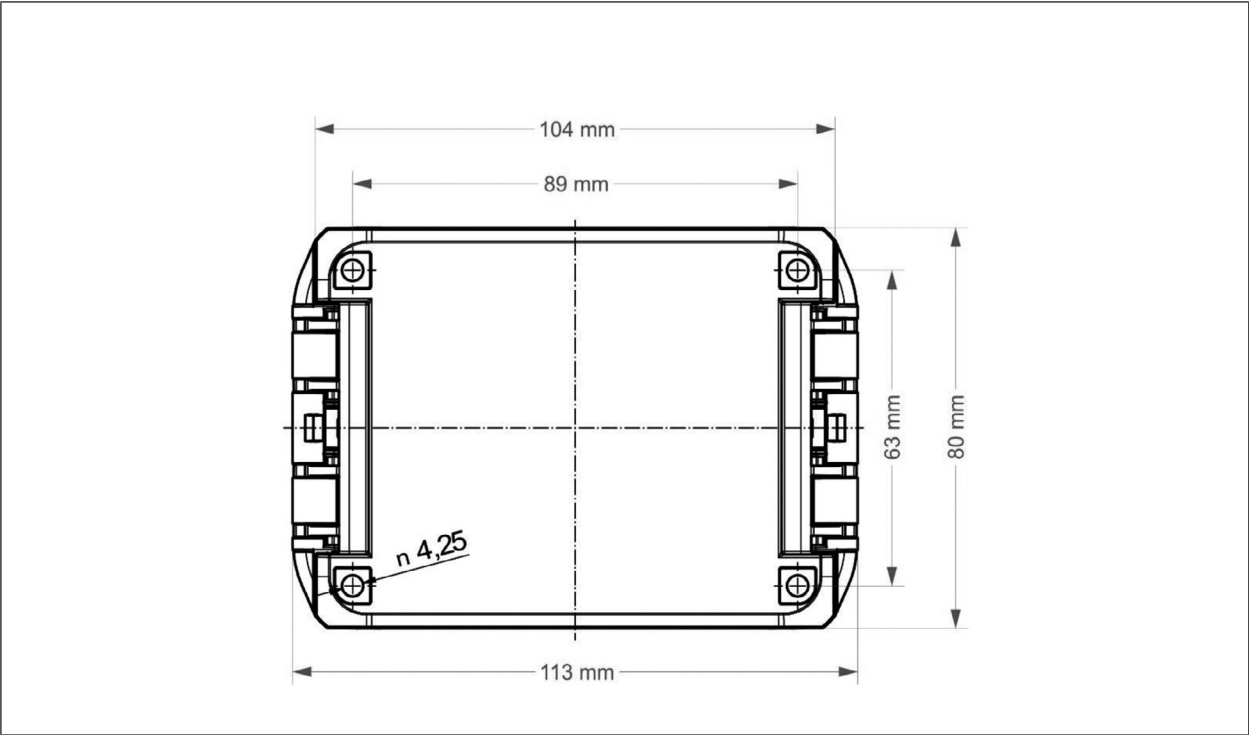
### Description

The differential pressure measuring transducer Precont DD109B is a universal measuring transducer for small and medium pressures. By fitting it with various pressure sensors, measuring ranges between 2.5 and 100 mbar can be realised. Two connection cables are used for the power supply. The feed current is the measurement signal from 4...20 mA. The operating state is indicated with an LED.



## Technical data

Measuring range (mbar)	0-10; 0-25; 0-50; 0-100; 0-1000
Max. Differential pressure	Measuring range 0-10 mbar: 100 mbar Measuring range 0-100 mbar: 750 mbar Measuring range 0-1000 mbar: 4000 mbar
Medium	air, as well as dry, non-aggressive gases
Basic accuracy	± 1% of the final value
Temperature drift	± 0.05% / K of the final value
Hysteresis	± 0.5% of full scale
Measuring system	semiconductor sensor
Power supply	Ub = 10 ... 36 V DC
Analog output	4 ... 20 mA, 2-wire technology
Max. Permissible load	$RA \leq (U_b - 9 V) / 0.02 A$
Pressure connection	bulkhead push-in fittings for 6 mm Tube outer diameter
Housing	Dust-proof polycarbonate housing
Dimension	113 × 80 × 60 (W × H × D)
Protection class	IP 65
Mounting	wall mounting, installation position vertical
Connection	Spring-loaded terminals
Cable gland	1 × M 16 × 1.5 N for cable diameters of 4 ... 8 mm
Device Identification / Explosion Protection	II3D Ex tc IIIC T135 ° Dc II3G Ex nR IIC T4 Gc
<b>Climatic environmental conditions</b>	
Storage	-20 ° ... + 70 ° C
Transport	-40 ° ... + 85 ° C
Operation	-20 ° ... + 55 ° C
Relative humidity	75% rel. Humidity, no condensation
<b>Safety metrics</b>	
Safety metrics	
MTBF	646 years
MTTFd	1292 years
Service life	Max. 10 years
Category according to EN-ISO 13849	B
Calculation method according to ENISO 13849	Parts-Count
Environmental temperature	50°C



# Order code

**Mounting**  
W Wall mounting

**Measuring range (difference)**  
A 0...2,5 mbar  
B 0...5 mbar  
C 0...10 mbar  
D 0...25 mbar  
G 0...50 mbar  
I 0...100 mbar  
Y Special measuring range

**Hose connection**  
6 Push-in bulkhead connector for 6mm outer diameter

**Power supply**  
0 10...36 V DC

**Output**  
0 4...20mA two-wire-technology

**Licence**  
Ex ATEX II 3D T135°C IP 65 Zone 22

Precont® DD109B W 6 0 0 Ex