

Pressure Sensor TYPE DS01



Description:

Electronic pressure sensor for monitoring, controlling, and continuously measuring pressures in gases, vapors, liquids, and dusts.

Product Features:

- Suitable for **gaseous and liquid** media
- Applications in mechanical and plant engineering, hydraulics, and pneumatics
- High accuracy and digital calibratability

Connection:

G 1/4" A, G 1/2" A

Temperature:

-40°C to +100°C

Process pressure:

0 – 600.0 bar gauge – depending on model

Design:

Pressure sensor with internal ceramic diaphragm

Connection housing material:

CrNi steel

Process connection material:

CrNi steel

Seal:

FPM, EPDM

Diaphragm:

Ceramic Al₂O₃ 96%

Characteristic curve deviation:

≤±0.5% FSO

Long-term zero-point drift:

≤±0.2% FSO/year

Temperature effect:

Tk ≤±0.05% FSI/K

Device connector:

EN 175-301-803-A (DIN 43650-A)

Protection rating:

IP69K/IP67 (EN/IEC 60529)

Process pressure range:

0 – 600 bar relative

Temperature:

Process: -40°C to +100°C

Ambient: -40°C to +100°C

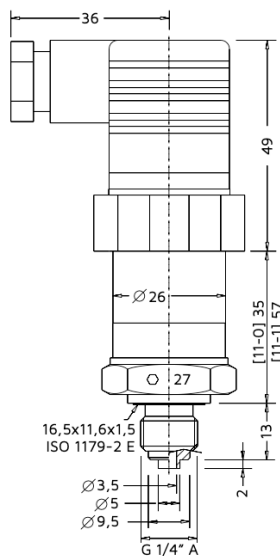
Electronics Specifications - Output:

Electronics - Output	Current 4–20 mA FSK, 2-wire	Voltage 0–10 V, 3- wire
Supply voltage	9–35 V DC*	14–35 V DC*
Input current	≤20.5 mA	≤25 mA (I _{uo} = 0 mA)
Power-on delay time	≤0.1 s (t _d =0 s)	≤0.1 s (t _d =0 s)
Output signal range	3.9–20.5 mA	0–10, 25 V
Time response t ₉₀ - min	≤5 ms (t _d =0 s)	≤5 ms (t _d =0 s)

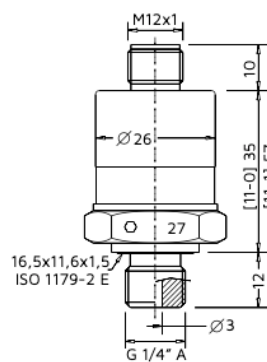
*Reverse-polarity protected / residual ripple ≤ 2 Vpp

Dimensions:

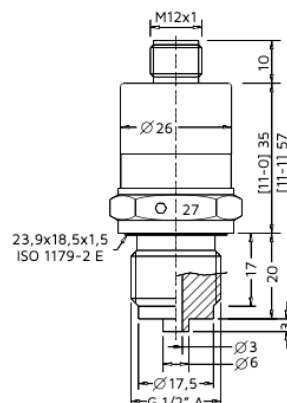
Pressure sensor with EN 175-301-803-A connector:



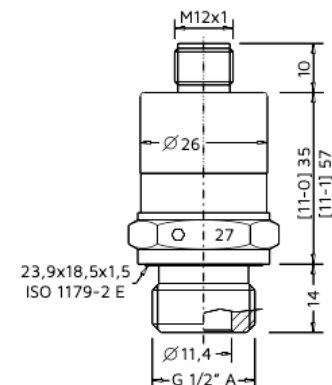
Process diaphragm:



G 1/4" A, ISO 1179-2 E



G 1/2" A, EN 837 pressure



G 1/2" A, 1179-2 E with internal bore

Options (upon request):

- ATEX II explosion protection
- Process connections, e.g., according to ANSI-NPT
- Measuring ranges: -1 to 0 bar or -1 to +1 bar
- 4-wire electronic output
- Process temperature from -40°C to +135°C
- Absolute pressure ranges ≤ 40 bar
- Measurement accuracy: 0.15%
- Electrical connection: M12 connector or EN 175-301-803-C (DIN 43650-C) connector
- LABS-free, silicone-free / paint-compatible design
- Measuring point designation / TAG laser marking
- Preset

Model number:

Version	Display range	Seal	Electronic Output	Size
DS01	00 – 0 – 250 mbar 01 – 0 – 400 mbar 02 – 0 – 600 mbar 03 – 0 – 1 bar 04 – 0 – 1.6 bar 05 – 0 – 2.5 bar 06 – 0 – 4 bar 07 – 0 – 6 bar 08 – 0 – 10 bar 09 – 0 – 16 bar 10 – 0 – 25 bar 11 – 0 – 40 bar 12 – 0 – 60 bar 13 – 0 – 100 bar 14 – 0 – 160 bar 15 – 0 – 250 bar 16 – 0 – 320 bar 17 – 0 – 400 bar 18 – 0 – 600 bar	0 – FPM 1 – EPDM	0 – 2-wire (4–20 mA) 1 – 3-wire (0–10 V)	01 – G 1/4" A (ISO 1179-2 E) 03 – G 1/2" A (EN 837 pressure gauge) 03.1 – G 1/2" A (ISO 1179-2 E with internal bore)

Example:

DS01030101

Pressure sensor with ceramic diaphragm

Output signal: 0 – 10 V

Seal: FPM

Display range: 0 – 1 bar

Size: G 1/4" A (ISO 1179-2 E)

Illustration is for illustrative purposes only; subject to technical and dimensional changes.