



Pressure transducers DMU 30

Part no. DMU 30111240601

Pressure transducer industrial version

benefits

- for pressure ranges up to 1,000 bar
- suitable for high overloads
- insensitive to pressure peaks
- Ex version (optional)

Application

For electronic pressure measurement in machines and systems with technical gases (e.g. oxygen, oil-free, grease-free) and for use in hydrogen applications.

Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. DMU 30 is equipped with a welded stainless steel measuring cell.

Technical Specifications

Measuring accuracy

Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability)
 $< \pm 0.5 \% \text{ FSO}$

Long-term stability

$\leq \pm 0.2 \% \text{ FSO/year}$ at reference conditions

Measuring range

0/1000 bar

Overpressure safety

$> 600 \text{ bar}$
 at least $1.5 \times \text{FS}$

Burst pressure

1000 bar
 $3 \times \text{FS}$ (UL-compliant, max. burst pressure = 2,420 bar)
 Vacuum resistance: unlimited

Operating temperature range

Medium: $-40/+125 \text{ }^{\circ}\text{C}$
 Ambient: $-40/+100 \text{ }^{\circ}\text{C}$
 Storage: $-40/+85 \text{ }^{\circ}\text{C}$

Temperature error band
 $\leq \pm 0.2 \% \text{ FSO}/10 \text{ K}$ In compensated range $-25/+85 \text{ }^{\circ}\text{C}$
dynamic characteristics

Response time: $\leq 10 \text{ ms}$
Process connection
 $\frac{1}{4}$ -18 NPT ()

material

Housing: Stainless steel 316 L

pressure connection: Stainless steel 316 L

diaphragm: Stainless steel 316 L

Seal: without (welded)

Degree of cleanliness: oil- and grease-free version, based on ISO 15001

Residual particles: no particles $> 100 \text{ }\mu\text{m}$ (with reference to 10 dm^2)

Residual grease: Residual grease content $< 0.2 \text{ mg/dm}^2$
Supply voltage

Standard version

DC 8 – 32 V

Output signal

4–20 mA, 2-wire

Load
 $R_{\text{max}} = [(UB - UB_{\text{min}})/0.02 \text{ A}] \Omega$
Current input
 $< 25 \text{ mA}$
electrical protection

short circuit proof and protected against reverse polarity

Electrical connection

M12 x 1, 4-pin

Degree of protection

IP 67 (EN 60529)

CE conformity

EMC Directive 2014/30/EU

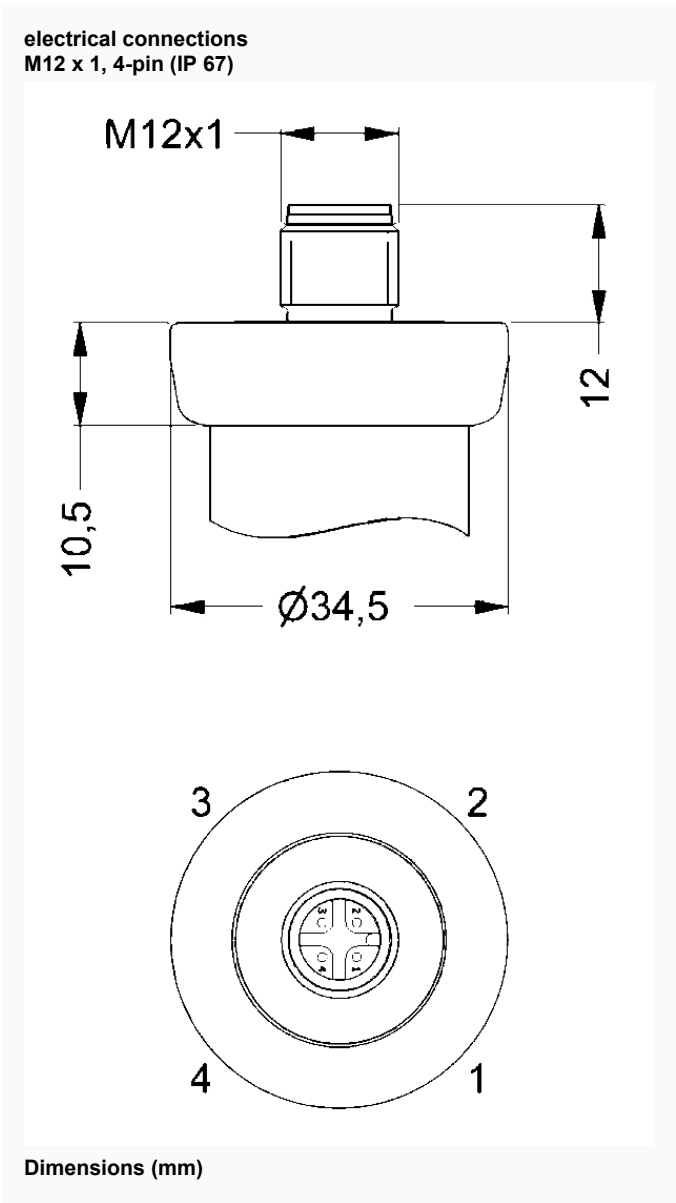
RoHS Directive 2011/65/EU

Pressure Equipment Directive 2014/68/EU

Options

- Ex version zone 0+20 (II 1G Ex ia IIC T4 Ga, II 1D Ex ia IIIC T135 $^{\circ}\text{C}$ Da)
- other electrical connections
- Other output signal
- Fitting of chemical seal

Technical Drawings



Versions

			Connection	Connection	Measuring range		Part no.
	M12 x 1, 4-pin	Standard version	¼-18 NPT		0/1000 bar	●	DMU 30111240601

- in-stock items
- Non-stock items