



Pressure transducers DMU 30

Part no. DMU 30111200602

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)
 $\leq \pm 0.5 \% \text{ FSO}$

Long-term stability

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

Measuring range

0/160 bar

Overpressure safety

> 16 bar
 2 x FS

Burst pressure

< 600 bar
 at least 5 x FS
 Vacuum resistance: unlimited

Operating temperature range

Medium: -40/+125 °C
 Ambient: -40/+100 °C
 in Ex zZone 0: -20/+60 °C
 from Ex zone 1: -20/+70 °C
 Storage: -40/+85 °C

Temperature error band

$\leq \pm 0.2 \% \text{ FSO}/10 \text{ K}$ In compensated range -25/+85 °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 $> 100 \mu\text{m}$ (with reference to 10 dm^2)
 Residual grease: Residual grease content $< 0.2 \text{ mg/dm}^2$

Options

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

Supply voltage

Ex version
 DC 10 – 28 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

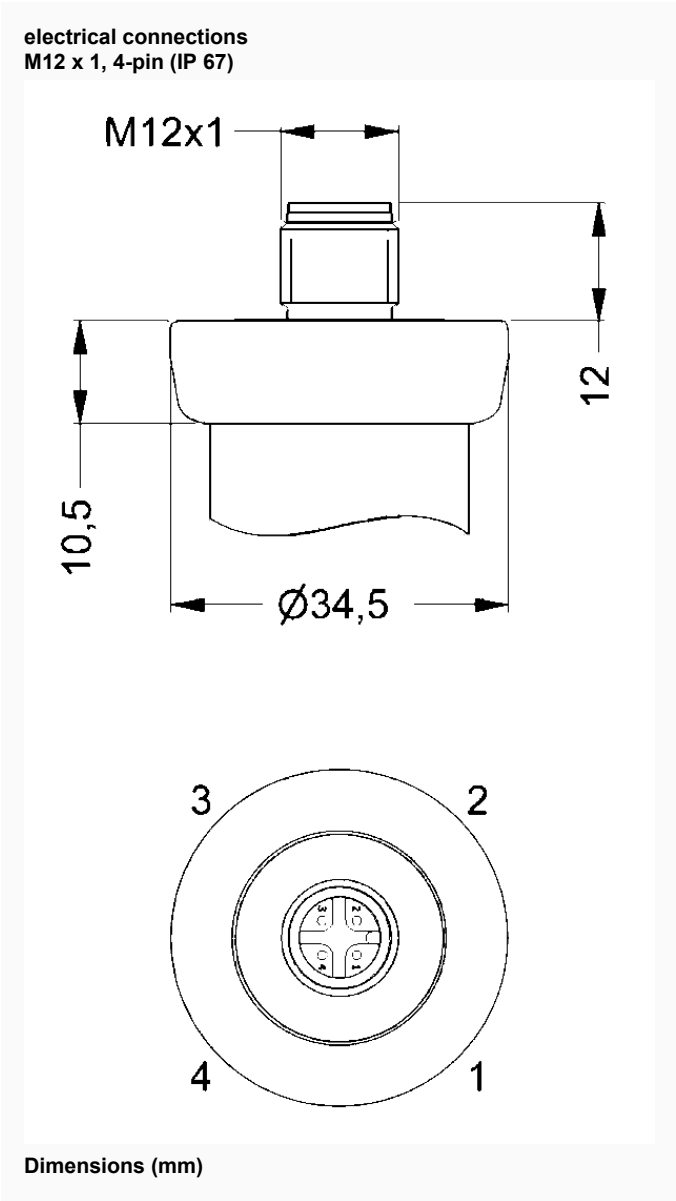
Degree of protection

IP 67 (EN 60529)

CE conformity

EMC Directive 2014/30/EU
 RoHS Directive 2011/65/EU
 Pressure Equipment Directive 2014/68/EU

Technical Drawings



Versions

			Connection	Connection	Measuring range	Part no.
	M12 x 1, 4-pin	Ex version	¼-18 NPT		0/160 bar	DMU 30111200602

-  in-stock items
-  Non-stock items