Pressure transducers DMU 30

Part no. DMU 30111180602

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)
< ± 0.5 % FSO

Long-term stability
≤ ± 0.2 % FSO/year at reference conditions

Measuring range
0/60 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
≤ ± 0.2 % FSO/10 K In compensated range -25/+85 °C

dynamic characteristics
Response time: ≤ 10 ms

Process connection
¼-18 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 µm (with reference to 10 dm^2)
Residual grease: Residual grease content < 0.2 mg/dm^2

Supply voltage
Ex version
DC 10 – 28 V

Output signal
4–20 mA, 2-wire

Load
R_{max} = [(UB – UB_{min})/0.02 A] Ω

Current input
< 25 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)

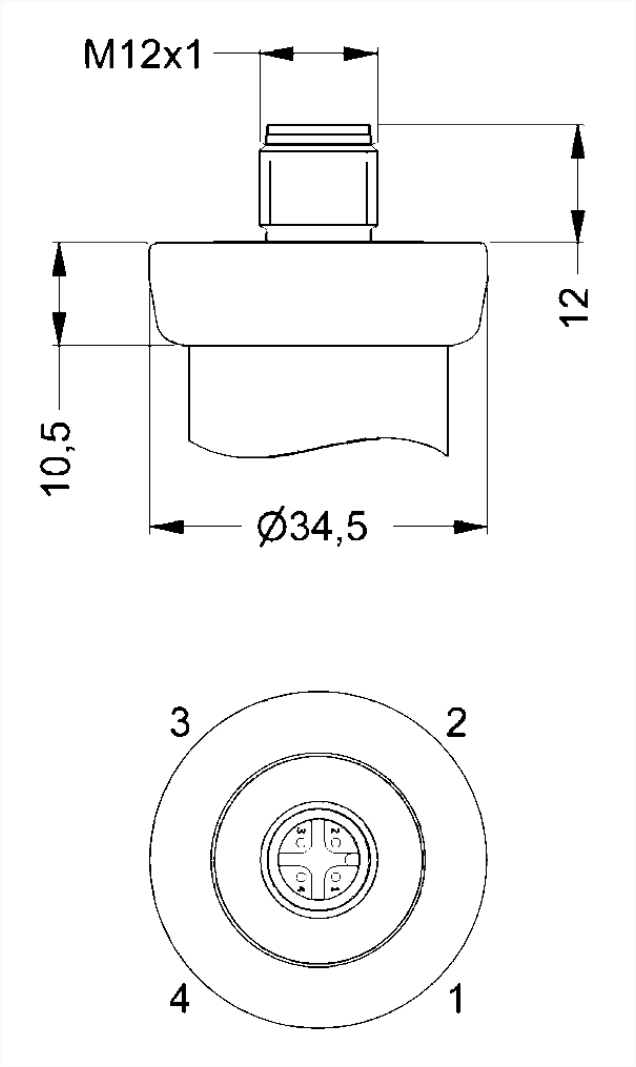
CE conformity
EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU
Pressure Equipment Directive 2014/68/EU

Options

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

Technical Drawings

electrical connections
M12 x 1, 4-pin (IP 67)



Dimensions (mm)

Versions

			Connection	Connection	Measuring range		Part no.
	M12 x 1, 4-pin	Ex version	¼-18 NPT		0/60 bar	○	DMU 30111180602

● in-stock items

○ Non-stock items