Pressure transducers DMU 30

Part no. DMU 30211170402

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
0/40 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
G½B (EN 837-1/7.3)

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
Cable outlet with PVC cable

Degree of protection
IP 67 (EN 60529)

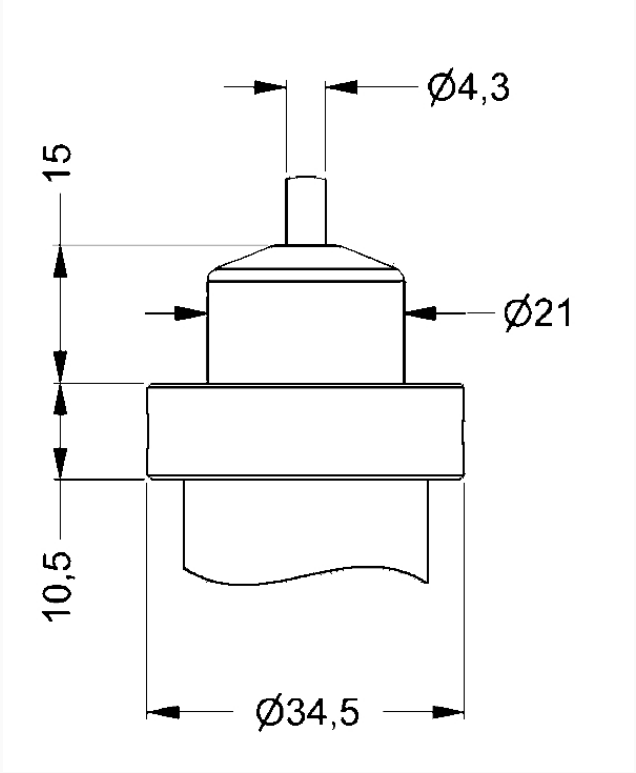
CE conformity
EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU
Pressure Equipment Directive 2014/68/EU

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
Cable outlet with PVC cable (IP 67)



Dimensions (mm)

Versions

			Connection	Connection	Measuring range		Part no.
	Cable outlet with PVC cable	Ex version	G½B	(EN 837-1/7.3)	0/40 bar	●	DMU 30211170402

● in-stock items

● Non-stock items