



## Pressure transducers DMU 30

Part no. DMU 30111170401

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

0/40 bar

#### Overpressure safety

$> 16 \text{ bar}$   
 $2 \times \text{FS}$

#### Burst pressure

$< 600 \text{ bar}$   
 at least  $5 \times \text{FS}$   
 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**
 $G\frac{1}{2}B$  (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  $> 100 \text{ }\mu\text{m}$  (with reference to  $10 \text{ dm}^2$ )

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

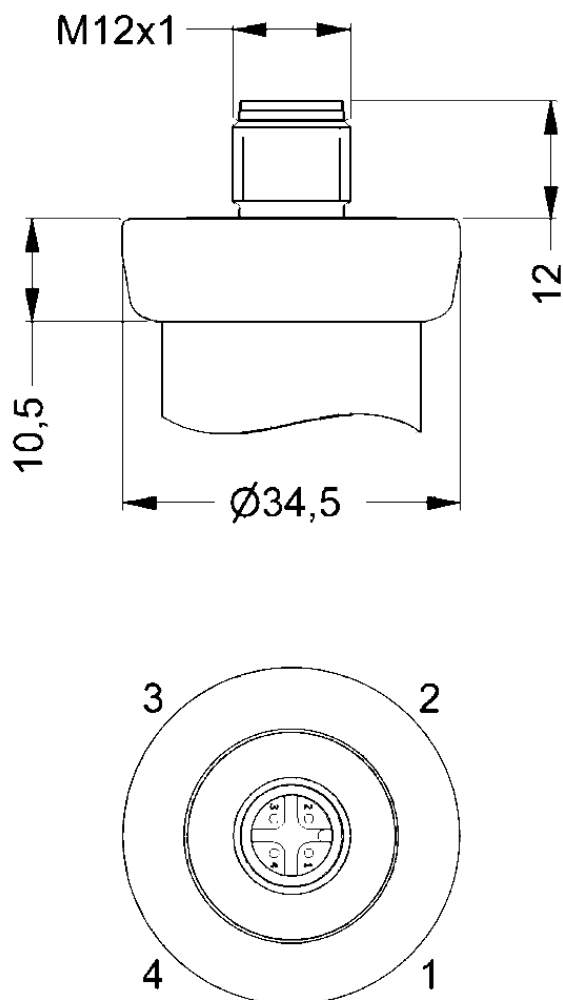
Pressure Equipment Directive 2014/68/EU

**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

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



Dimensions (mm)

Versions

|  |                |                  | Connection | Connection       | Measuring range |                                                                                     | Part no.        |
|--|----------------|------------------|------------|------------------|-----------------|-------------------------------------------------------------------------------------|-----------------|
|  | M12 x 1, 4-pin | Standard version | G½B        | ( EN 837-1/7.3 ) | 0/40 bar        |  | DMU 30111170401 |

-  in-stock items
-  Non-stock items