



## Pressure transducers DMU 30

Part no. DMU 30211210201

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

0/250 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**

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

**dynamic characteristics**

Response time:  $\leq 10 \text{ ms}$

**Process connection**

G $\frac{1}{4}$ 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**

$R_{\text{max}} = [(U_B - U_{B_{\text{min}}})/0.02 \text{ A}] \Omega$

**Current input**

$< 25 \text{ mA}$

**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

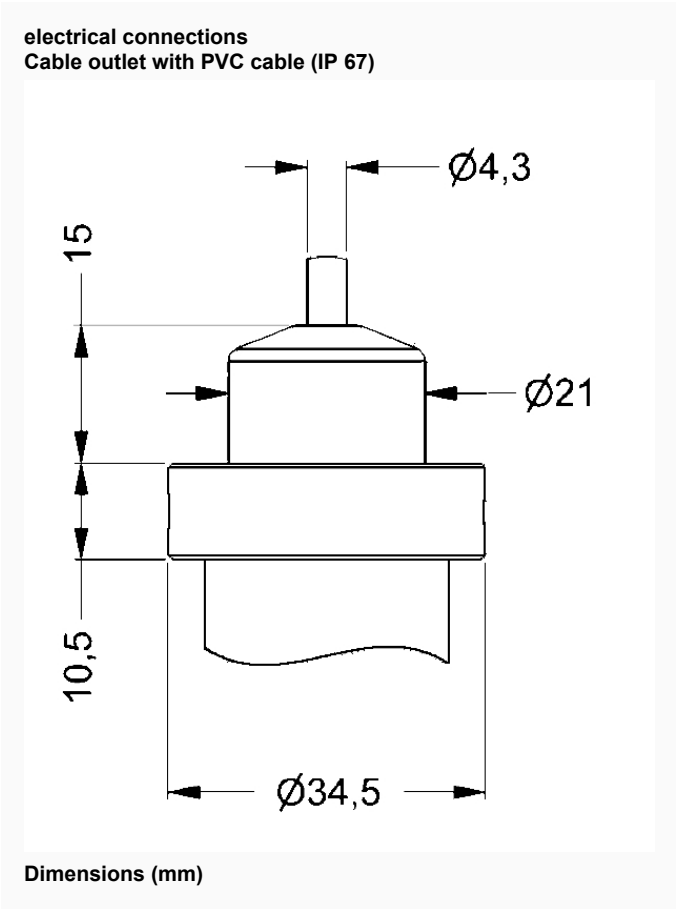
RoHS Directive 2011/65/EU

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  $^{\circ}\text{C}$  Da)
- other electrical connections
- Other output signal
- Fitting of chemical seal

Technical Drawings



Versions

|  |                             |                  | Connection | Connection       | Measuring range |   | Part no.        |
|--|-----------------------------|------------------|------------|------------------|-----------------|---|-----------------|
|  | Cable outlet with PVC cable | Standard version | G¼B        | ( EN 837-1/7.3 ) | 0/250 bar       | ● | DMU 30211210201 |

- in-stock items
- Non-stock items