



## Pressure transducers DMU 30

Part no. DMU 30211200402

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

0/160 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 °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

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  $\mu\text{m}$  (with reference to 10  $\text{dm}^2$ )  
 Residual grease: Residual grease content < 0.2  $\text{mg}/\text{dm}^2$

### 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 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)

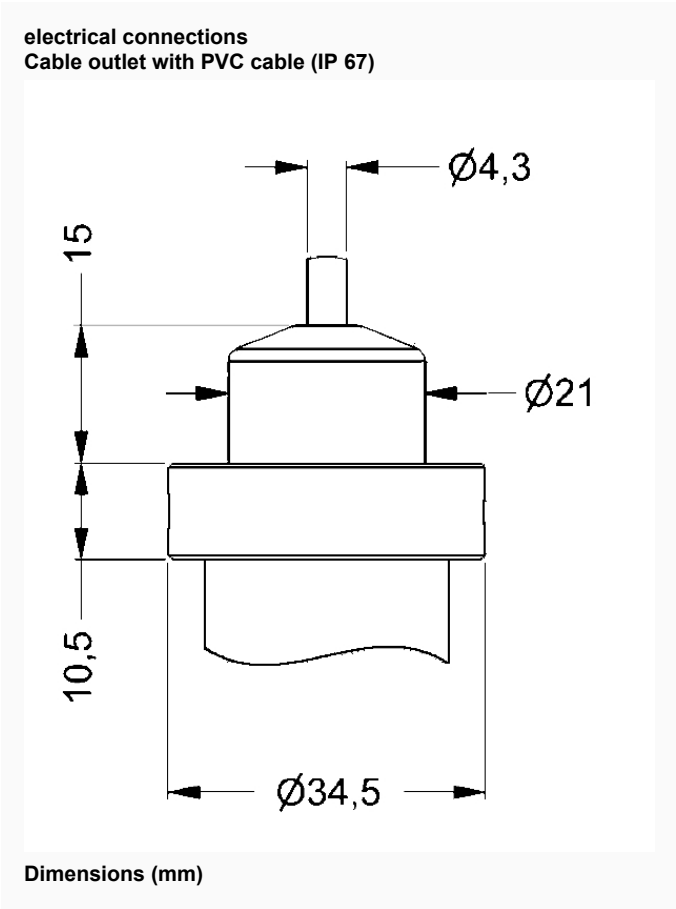
### CE conformity

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



Versions

|  |                             |            | Connection | Connection                | Measuring range |   | Part no.           |
|--|-----------------------------|------------|------------|---------------------------|-----------------|---|--------------------|
|  | Cable outlet with PVC cable | Ex version | G½B        | (<br>EN<br>837-1/7.3<br>) | 0/160 bar       | ● | DMU<br>30211200402 |

- in-stock items
- Non-stock items