



## Pressure transducers DMU 02 Vario



### Benefits

- Connection technology with numerous versions
- Extremely resistant to shock, pulsation and vibration
- Best dynamic pressure resistance at high load changes
- Measuring cell welded without seals
- Without transmission medium
- Turn Down 1:4
- Zero calibration via magnet

### Application

For electronic pressure measurement in mechanical and plant engineering, and for gas and medical applications. Particularly suitable for pure media.

### Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. DMU 02 Vario is equipped with a piezo-resistive polysilicon thin-film measuring cell. All standard electrical connection types are available. The measuring ranges can be changed via optional parameterisation hardware and software. The zero point can be corrected from the outside via a permanent magnet after voltage has been supplied and within a given time window.



## Technical specifications

### Measuring accuracy

Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability)  
 $< \pm 0.3 \% \text{ FSO}$

### Measuring range

See ordering table

### Overpressure safety

$\leq 250 \text{ bar}$ : At least 2 x FS  
 $> 250 \text{ bar}$ : At least 1.5 x FS  
 $\geq 1,000 \text{ bar}$ : At least 1.2 x FS

### Burst pressure

$\leq 250 \text{ bar}$ : At least 3 x FS  
 $> 250 \text{ bar}$ : At least 2 x FS  
 $\geq 1,000 \text{ bar}$ : At least 1.5 x FS

### Operating temperature range

Medium:  $-40/+125 \text{ }^{\circ}\text{C}$   
 Ambient:  $-40/+105 \text{ }^{\circ}\text{C}$   
 Storage:  $-40/+125 \text{ }^{\circ}\text{C}$

### Temperature error band

$\leq \pm 0.15 \% \text{ FSO}/10 \text{ K}$  In compensated range  $-10/+80 \text{ }^{\circ}\text{C}$

### Dynamic characteristics

Response time:  $< 4 \text{ ms}$

### Process connection

G $\frac{1}{2}$ B EN 837-1/7.3

### Material

Housing: Stainless steel 304  
 Pressure connection: Stainless steel 630/316 Ti/316 L  
 Electr. measuring cell: Stainless steel 630/304

### Supply voltage

DC 10 – 32 V

### Output signal

2-wire, 4–20 mA

### 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

Connector and junction box as per ISO 4400 (DIN 43650-A)

### Degree of protection

IP 65 (EN 60529)

### CE conformity

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

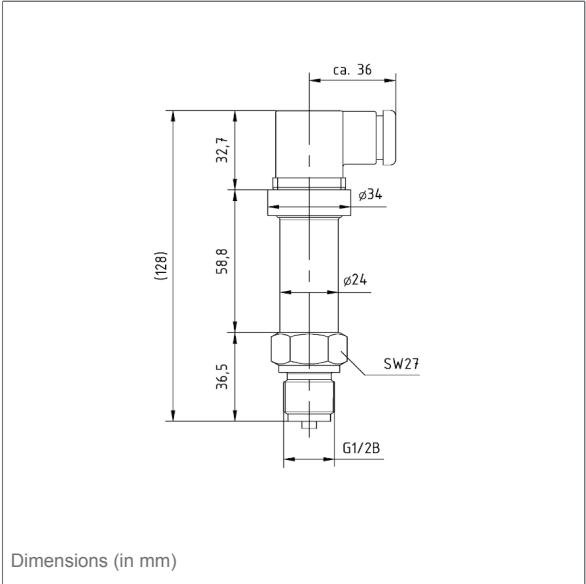
## Options

- Other process connections
- Other electrical connections
- Field housing (stainless steel)
- Cleaned for oxygen
- Other output signals
- Fitting of chemical seal
- Customer-specific setting (damping, unit)
- Programmable hardware and software
- Other operating temperature ranges



Technical drawings

DMU 02 Vario - connection G $\frac{1}{2}$ B EN 837



Versions

| Type         | Connection                     | Measuring range | Part no. |
|--------------|--------------------------------|-----------------|----------|
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | -1/0 bar        | 32833    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | -1/+1.5 bar     | 32834    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | -1/+3 bar       | 32835    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | -1/+5 bar       | 32836    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | -1/+9 bar       | 32837    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | -1/+24 bar      | 32838    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | 0/600 mbar      | 32841    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | 0/1 bar         | 32842    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | 0/1.6 bar       | 32843    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | 0/2.5 bar       | 32844    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | 0/6 bar         | 32846    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | 0/10 bar        | 32847    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | 0/16 bar        | 32848    |
| DMU 02 Vario | G $\frac{1}{2}$ B EN 837-1/7.3 | 0/25 bar        | 32849    |



Blue part no. = in-stock items



| Type         | Connection       | Measuring range | Part no. |
|--------------|------------------|-----------------|----------|
| DMU 02 Vario | G½B EN 837-1/7.3 | 0/40 bar        | 32850    |
| DMU 02 Vario | G½B EN 837-1/7.3 | 0/60 bar        | 32851    |
| DMU 02 Vario | G½B EN 837-1/7.3 | 0/100 bar       | 32852    |
| DMU 02 Vario | G½B EN 837-1/7.3 | 0/160 bar       | 32853    |
| DMU 02 Vario | G½B EN 837-1/7.3 | 0/250 bar       | 32854    |
| DMU 02 Vario | G½B EN 837-1/7.3 | 0/400 bar       | 32855    |
| DMU 02 Vario | G½B EN 837-1/7.3 | 0/600 bar       | 32856    |
| DMU 02 Vario | G½B EN 837-1/7.3 | 0/1,000 bar     | 32857    |

Blue part no. = in-stock items