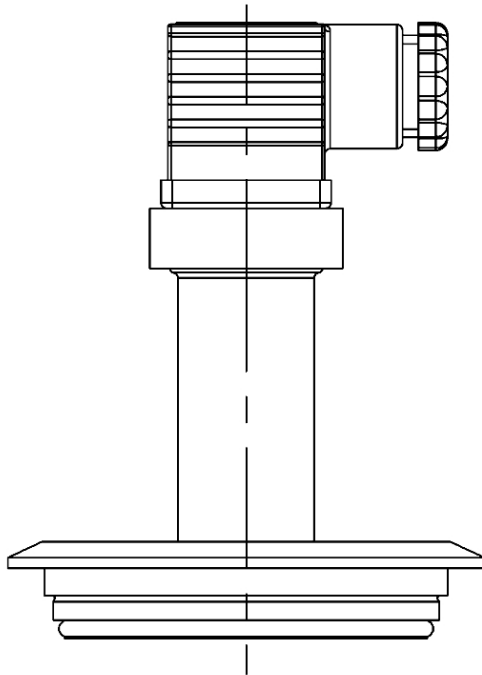


## Pressure transducers



### benefits

- ideal for hygienic processes
- connection technology with numerous versions
- extremely resistant to shock, pulsation and vibration
- best dynamic pressure resistance at high load changes
- Zero calibration via magnet

## Application

For electronic pressure measurement in mechanical and plant engineering, and for gas and medical applications. With flush diaphragm, the pressure transducers are also suitable for use with viscous, highly viscous or crystallising 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. DMU 02 Vario is available in a virtually unlimited number of versions. All standard and customer-specific connections can be connected to the electronic precision measuring system. All standard electrical connection types are available. 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)

### Measuring range

see ordering table

### Operating temperature range

Medium: -10/+125 °C  
Ambient: -10/+105 °C  
Storage: -10/+125 °C

### Temperature error band

$\leq \pm 0.15 \% \text{ FSO}/10 \text{ K}$  In compensated range 0/70 °C

### dynamic characteristics

Response time: < 20 ms

### Process connection

VARIVENT® F (DN 25 and 1")

### material

Housing: Stainless steel 304  
pressure connection: Stainless steel 316 L  
diaphragm: Stainless steel 316 L

**pressure transmission liquid**

multi-grade oil, FDA-compliant

**Supply voltage**

DC 10 – 32 V

**Output signal**

2-wire, 4–20 mA

**Load**

$R_{\max} = [(UB - UB_{\min})/0.02 \text{ A}] \Omega$

**Current input**

< 25 mA

**Options**

- other process connections
- other electrical connections
- Field housing (stainless steel)
- Filling for oxygen
- other output signals
- customer-specific setting (damping, unit)

**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

## Versions

| Range | Measuring range | Type            | Version   |   | Part no. |
|-------|-----------------|-----------------|-----------|---|----------|
|       | -1/+0 bar       | DMU 02 Vario VT | VARIVENT® | ● | 32938    |
|       | -1/+1.5 bar     | DMU 02 Vario VT | VARIVENT® | ● | 32939    |
|       | -1/+3 bar       | DMU 02 Vario VT | VARIVENT® | ● | 32940    |
|       | -1/+5 bar       | DMU 02 Vario VT | VARIVENT® | ● | 32941    |
|       | -1/+9 bar       | DMU 02 Vario VT | VARIVENT® | ● | 32942    |
|       | -1/+24 bar      | DMU 02 Vario VT | VARIVENT® | ● | 32943    |
|       | 0/1 bar         | DMU 02 Vario VT | VARIVENT® | ● | 32947    |
|       | 0/1.6 bar       | DMU 02 Vario VT | VARIVENT® | ● | 32948    |
|       | 0/2.5 bar       | DMU 02 Vario VT | VARIVENT® | ● | 32949    |
|       | 0/4 bar         | DMU 02 Vario VT | VARIVENT® | ● | 32950    |
|       | 0/6 bar         | DMU 02 Vario VT | VARIVENT® | ● | 32951    |
|       | 0/10 bar        | DMU 02 Vario VT | VARIVENT® | ● | 32952    |
|       | 0/16 bar        | DMU 02 Vario VT | VARIVENT® | ● | 32953    |
|       | 0/25 bar        | DMU 02 Vario VT | VARIVENT® | ● | 32954    |

● in-stock items

● Non-stock items