



## Pressure transducer industrial version

### benefits

- DMU 04 CP/MR for hygienic processes
- small temperature error
- Options: Ex, field housing or high temperature version (up to 300 °C) and SIL 2

## Application

For applications requiring hygienic process connections, materials or processing, especially food technology, pharmaceutical and biotechnology applications.

## Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. DMU 4 is equipped with an oil-filled piezo-resistive silicon measuring cell. DMU 04 has safety integrity level SIL 2 (IEC 61508/61511).

## 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

Medium: short-term (60 min) up to 150 °C

Ambient: -40/+85 °C

Storage: -40/+100 °C

### dynamic characteristics

Response time: ≤ 10 ms

### Process connection

Conical dairy fitting DN 25 DIN 11851

### material

Housing: Stainless steel 316 L

pressure connection: Stainless steel 316 L

diaphragm: Stainless steel 316 L

### pressure transmission liquid

Food oil, FDA-compliant

### Supply voltage

DC 8 – 32 V

**Output signal**

2-wire, 4–20 mA

**Load**

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

**Current input**

< 25 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

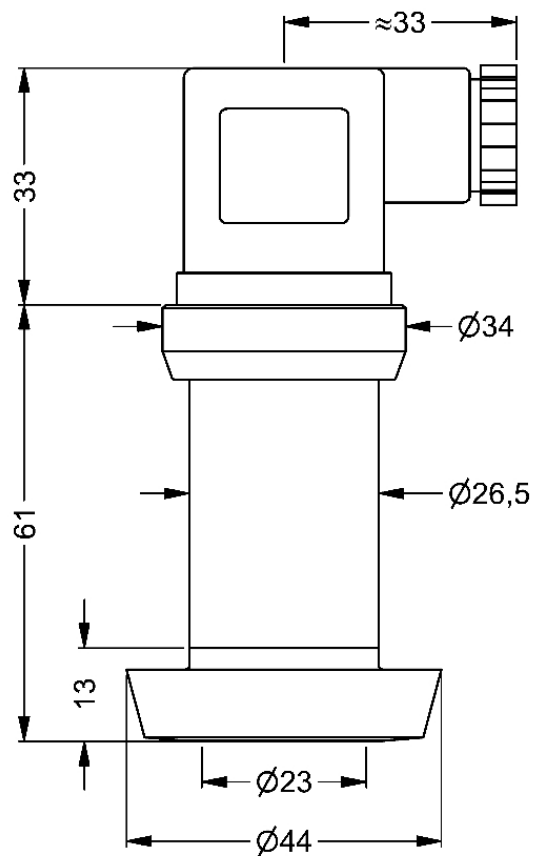
Pressure Equipment Directive 2014/68/EU

**Options**

- other process connections
- other electrical connections
- Field housing (stainless steel 303)
- High temperature version up to 300 °C
- higher accuracy
- Union nut DN 25/40/50
- EX version (II 1G Ex ia IIC T4 Ga, II 1D Ex ia IIIC T85°C Da)
- SIL 2 (IEC 61508/61511) 2-wire

## Technical Drawings

DMU 04 - dairy cone DIN 11851 DN 25



Dimensions (mm)

## Versions

| Range | Measuring range | Type      | Version                                                                               | Part no. |
|-------|-----------------|-----------|---------------------------------------------------------------------------------------|----------|
|       | -1/+0 bar       | DMU 04 MR |    | 31719    |
|       | -1/+1.5 bar     | DMU 04 MR |    | 31720    |
|       | -1/+3 bar       | DMU 04 MR |    | 31721    |
|       | -1/+5 bar       | DMU 04 MR |    | 31722    |
|       | 0/250 mbar      | DMU 04 MR |    | 33025    |
|       | 0/400 mbar      | DMU 04 MR |    | 31726    |
|       | 0/600 mbar      | DMU 04 MR |    | 31727    |
|       | 0/1 bar         | DMU 04 MR |    | 31728    |
|       | 0/1.6 bar       | DMU 04 MR |    | 31729    |
|       | 0/2.5 bar       | DMU 04 MR |  | 31730    |
|       | 0/4 bar         | DMU 04 MR |  | 31731    |
|       | 0/6 bar         | DMU 04 MR |  | 31732    |
|       | 0/10 bar        | DMU 04 MR |  | 31733    |
|       | 0/16 bar        | DMU 04 MR |  | 31734    |
|       | 0/25 bar        | DMU 04 MR |  | 31735    |
|       | 0/40 bar        | DMU 04 MR |  | 31736    |

-  in-stock items
-  Non-stock items