



Pressure transducer industrial version

benefits

- for low pressure ranges
- Versions for relative pressure and absolute pressure
- excellent long-term stability
- Ex version (optional)
- Option SIL 2

Application

For electronic pressure measurement in mechanical and plant engineering as well as process engineering applications. With flush diaphragm, the pressure transducers are also suitable for use with viscous, highly viscous media.

Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. DMU 03 is equipped with an oil-filled piezo-resistive silicon measuring cell. DMU 03 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: -40/+125 °C

Ambient: -40/+85 °C

Storage: -40/+100 °C

dynamic characteristics

Response time: ≤ 10 ms

Process connection

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

material

Housing: Stainless steel 316 L

DMU 03

Stainless steel 316 L

DMU 03

Stainless steel 316 L

Seal: FKM (Viton)

pressure transmission liquid

Silicone oil

Supply voltage

DMU 03

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

Options

- other process connections
- other electrical connections
- Field housing (stainless steel 303)
- other seal materials
- higher accuracy and overpressure safety
- Fitting of chemical seal
- EX version (II 1G Ex ia IIC T4 Ga, II 1D Ex ia IIIC T85°C Da)
- SIL 2 (IEC 61508/61511) 2-wire

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

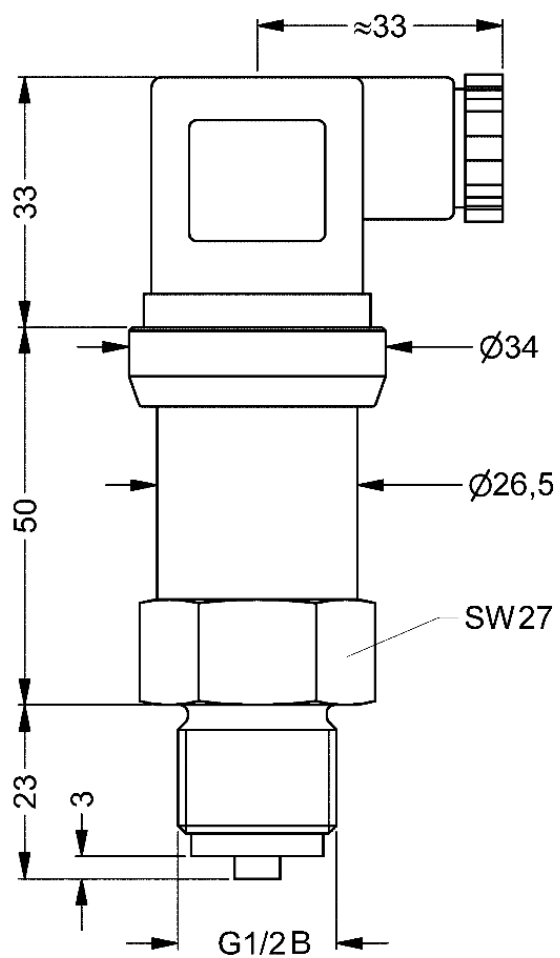
EMC Directive 2014/30/EU

RoHS Directive 2011/65/EU

Pressure Equipment Directive 2014/68/EU

Technical Drawings

DMU 03 - connection G1/2B EN 837 and ISO 4400



Dimensions (mm)

Versions

Range	Measuring range	Type	Version	Part no.
	-1/+0 bar	DMU 03	●	31634
	-1/+1.5 bar	DMU 03	●	31635
	-1/+3 bar	DMU 03	●	31636
	-1/+5 bar	DMU 03	●	31637
	0/40 mbar	DMU 03	●	32024
	0/60 mbar	DMU 03	●	32025
	0/100 mbar	DMU 03	●	31638
	0/160 mbar	DMU 03	●	31639
	0/250 mbar	DMU 03	●	31145
	0/400 mbar	DMU 03	●	31146
	0/600 mbar	DMU 03	●	31147
	0/1 bar	DMU 03	●	31148
	0/1.6 bar	DMU 03	●	31149
	0/2.5 bar	DMU 03	●	31150
	0/4 bar	DMU 03	●	31151
	0/6 bar	DMU 03	●	31152
	0/10 bar	DMU 03	●	31153
	0/16 bar	DMU 03	●	31154
	0/25 bar	DMU 03	●	31155
	0/40 bar	DMU 03	●	31156
	0/60 bar	DMU 03	●	31157
	0/100 bar	DMU 03	●	31158
	0/160 bar	DMU 03	●	31159
	0/250 bar	DMU 03	●	31160
	0/400 bar	DMU 03	●	31161