



Pressure transducers DMU 13 Vario

Part no. 31213

Pressure transducers DMU 13 Vario with local display

benefits

- robust stainless steel housing
- high-precision measurements with integrated transducer
- mechanical, power-independent local display
- Zero calibration via magnet



Application

For pressure measurements with a power-independent local display in combination with an electrical output signal.

Description

The DMU 13 Vario pressure transducers consist of a mechanical Bourdon tube measuring element and a piezo-resistive polysilicon thin-film measuring cell. The Bourdon tube measuring element is used to provide an easy-to-read analogue local display. The display is power-independent. Due to the integrated pressure transducer, high-precision measurement in parallel is possible. A standardised current output is available for signal transmission and recording of measured data. The robust stainless steel housing has a solid baffle wall and blow out. The zero point of the electronic sensor can be corrected from the outside via a permanent magnet after voltage has been applied and within a given time window.

Technical Specifications

Nominal size

100

accuracy class (EN 837-1/6)

1.0

Measuring accuracy

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

Measuring range

0/250 bar

application area

static load: Full scale value
 dynamic load: 0.9 x full scale value
 short-term load: 1.3 x full scale value

Operating temperature range

Medium: -10/+85 °C
 Ambient: -10/+60 °C
 Storage: -10/+70 °C

Temperature error band

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

Housing

with solid baffle wall and blow-out

window

Laminated safety glass

Process connection

G1½B, bottom EN 837-1/7.3

material

Housing: Stainless steel 304
 pressure connection: stainless steel 316 Ti/316 L
 diaphragm: Stainless steel 630/304

wetted parts

stainless steel 316 Ti/316 L, Stainless steel 630/304

Supply voltage

DC 10 – 32 V

Output signal

2-wire, 4–20 mA

Load

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

Current input

< 25 mA

Electrical connection

Junction box

Degree of protection

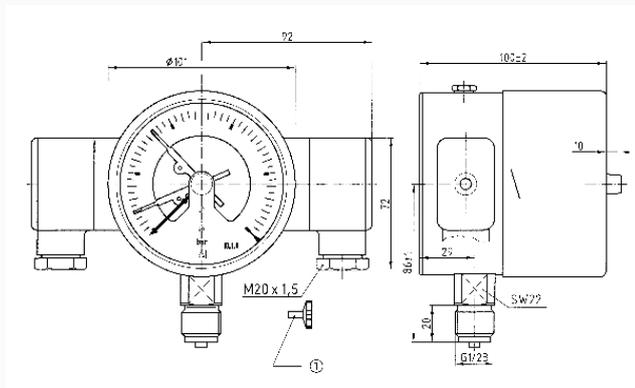
IP 54 (EN 60529)

Options

- Housing filling (paraffin oil)
- Electrical contacts
- other process connections
- Fitting of chemical seal
- Range for positive and negative overpressure, e.g. -1/+3 bar

Technical Drawings

DMU 13 Vario - bottom connection, with electrical contact



Dimensions (mm)

removable key, delivered loose with system

Versions

Range	Measuring range	Type	Version	Part no.
	0/250 bar	DMU 13 Vario	●	31213

- in-stock items
- Non-stock items