



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

See ordering table

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

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

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

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

Current input

< 25 mA

Electrical connection

Junction box

Degree of protection

IP 54 (EN 60529)

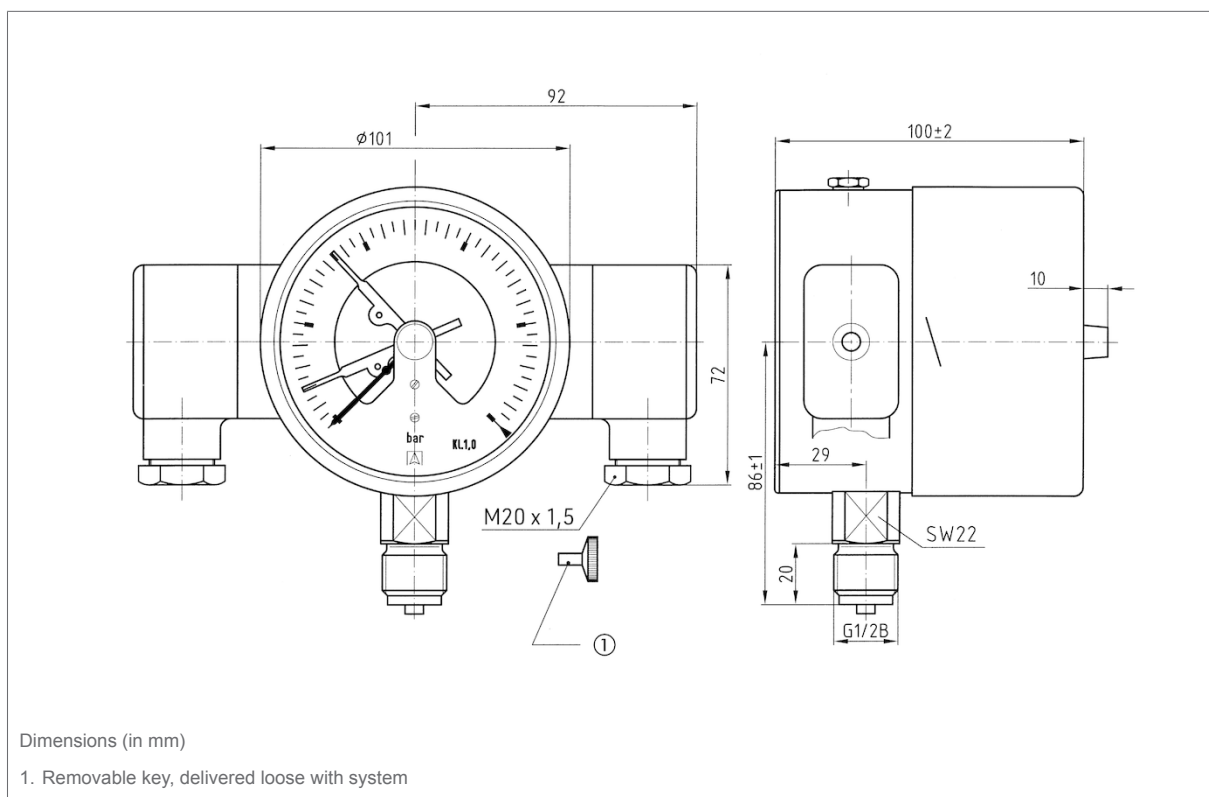
Options

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



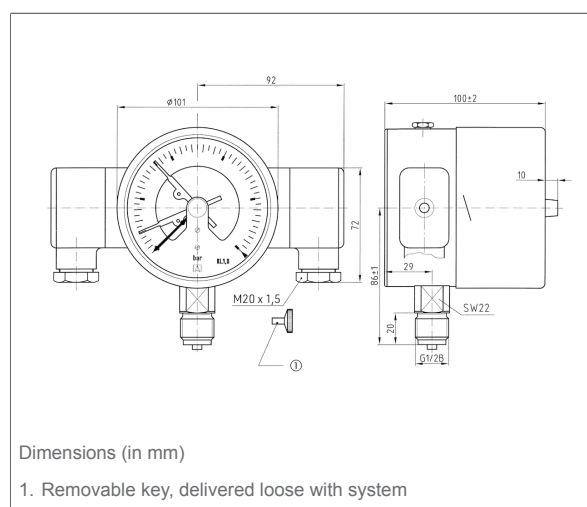
Detail views

DMU 13 Vario - bottom connection, with electrical contact

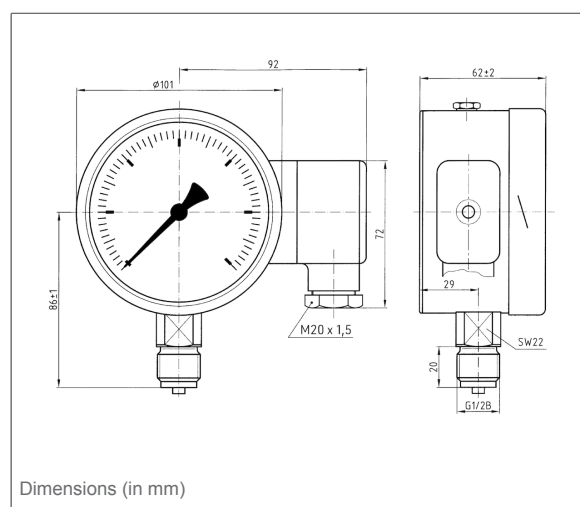


Technical drawings

DMU 13 Vario - bottom connection, with electrical contact



DMU 13 Vario - bottom connection





Versions



Type	Connection	Measuring range	Part no.
DMU 13 Vario	G½B EN 837-1/7.3	-1/0 bar	31200
DMU 13 Vario	G½B EN 837-1/7.3	0/0.6 bar	31201
DMU 13 Vario	G½B EN 837-1/7.3	0/1 bar	31202
DMU 13 Vario	G½B EN 837-1/7.3	0/2.5 bar	31203
DMU 13 Vario	G½B EN 837-1/7.3	0/4 bar	31204
DMU 13 Vario	G½B EN 837-1/7.3	0/6 bar	31205
DMU 13 Vario	G½B EN 837-1/7.3	0/10 bar	31206
DMU 13 Vario	G½B EN 837-1/7.3	0/16 bar	31207
DMU 13 Vario	G½B EN 837-1/7.3	0/25 bar	31208
DMU 13 Vario	G½B EN 837-1/7.3	0/40 bar	31209
DMU 13 Vario	G½B EN 837-1/7.3	0/60 bar	31210
DMU 13 Vario	G½B EN 837-1/7.3	0/100 bar	31211
DMU 13 Vario	G½B EN 837-1/7.3	0/160 bar	31212
DMU 13 Vario	G½B EN 837-1/7.3	0/250 bar	31213
DMU 13 Vario	G½B EN 837-1/7.3	0/400 bar	31214

Blue part no. = in-stock items