Pressure transducers DMU 02 Vario

Benefits

- Connection technology with numerous versions
- Extremely resistant to shock, pulsation and vibration
- Best dynamic pressure resistance at high load changes
- Measuring cell welded without seals
- Without transmission medium
- Turn Down 1:4
- Zero calibration via magnet

Application

For electronic pressure measurement in mechanical and plant engineering, and for gas and medical applications. Particularly suitable for pure 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. All standard electrical connection types are available. The measuring ranges can be changed via optional parameterisation hardware and software. 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)
< ± 0.3 % FSO

Measuring range
See ordering table

Overpressure safety

≤ 250 bar:	At least 2 x FS
> 250 bar:	At least 1.5 x FS
≥ 1,000 bar:	At least 1.2 x FS

Burst pressure

≤ 250 bar:	At least 3 x FS
> 250 bar:	At least 2 x FS
≥ 1,000 bar:	At least 1.5 x FS

Operating temperature range

Medium:	-40/+125 °C
Ambient:	-40/+105 °C
Storage:	-40/+125 °C

Temperature error band
≤ ± 0.15 % FSO/10 K In compensated range -10/+80 °C

Dynamic characteristics
Response time: < 4 ms

Process connection
G½B EN 837-1/7.3

Material

Housing:	Stainless steel 304
Pressure connection:	Stainless steel 630/316 Ti/316 L
Electr. measuring cell:	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] Ω

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)

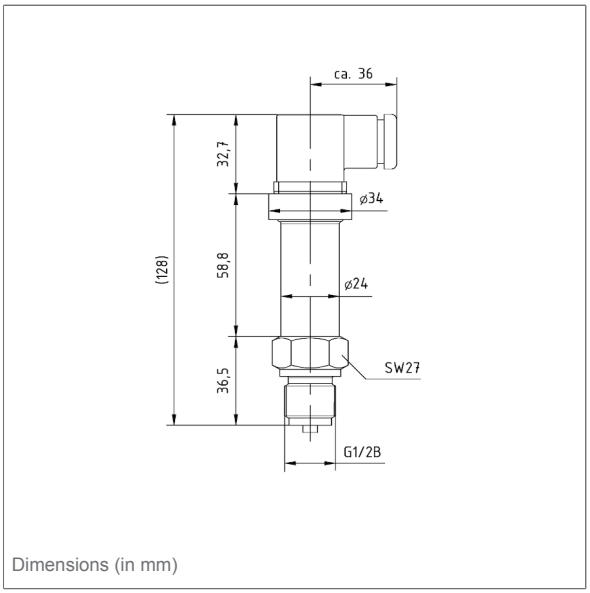
CE conformity
EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU
Pressure Equipment Directive 2014/68/EU

Options

- Other process connections
- Other electrical connections
- Field housing (stainless steel)
- Cleaned for oxygen
- Other output signals
- Fitting of chemical seal
- Customer-specific setting (damping, unit)
- Programmable hardware and software
- Other operating temperature ranges

Technical drawings

DMU 02 Vario - connection G½B EN 837



Dimensions (in mm)

Versions

	Type	Connection	Measuring range	Part no.
	DMU 02 Vario	G½B EN 837-1/7.3	-1/0 bar	32833
	DMU 02 Vario	G½B EN 837-1/7.3	-1/+1.5 bar	32834
	DMU 02 Vario	G½B EN 837-1/7.3	-1/+3 bar	32835
	DMU 02 Vario	G½B EN 837-1/7.3	-1/+5 bar	32836
	DMU 02 Vario	G½B EN 837-1/7.3	-1/+9 bar	32837
	DMU 02 Vario	G½B EN 837-1/7.3	-1/+24 bar	32838
	DMU 02 Vario	G½B EN 837-1/7.3	0/600 mbar	32841
	DMU 02 Vario	G½B EN 837-1/7.3	0/1 bar	32842
	DMU 02 Vario	G½B EN 837-1/7.3	0/1.6 bar	32843
	DMU 02 Vario	G½B EN 837-1/7.3	0/2.5 bar	32844
	DMU 02 Vario	G½B EN 837-1/7.3	0/6 bar	32846
	DMU 02 Vario	G½B EN 837-1/7.3	0/10 bar	32847
	DMU 02 Vario	G½B EN 837-1/7.3	0/16 bar	32848
	DMU 02 Vario	G½B EN 837-1/7.3	0/25 bar	32849

Blue part no. = in-stock items

Type	Connection	Measuring range	Part no.
DMU 02 Vario	G½B EN 837-1/7.3	0/40 bar	32850
DMU 02 Vario	G½B EN 837-1/7.3	0/60 bar	32851
DMU 02 Vario	G½B EN 837-1/7.3	0/100 bar	32852
DMU 02 Vario	G½B EN 837-1/7.3	0/160 bar	32853
DMU 02 Vario	G½B EN 837-1/7.3	0/250 bar	32854
DMU 02 Vario	G½B EN 837-1/7.3	0/400 bar	32855
DMU 02 Vario	G½B EN 837-1/7.3	0/600 bar	32856
DMU 02 Vario	G½B EN 837-1/7.3	0/1,000 bar	32857

Blue part no. = in-stock items