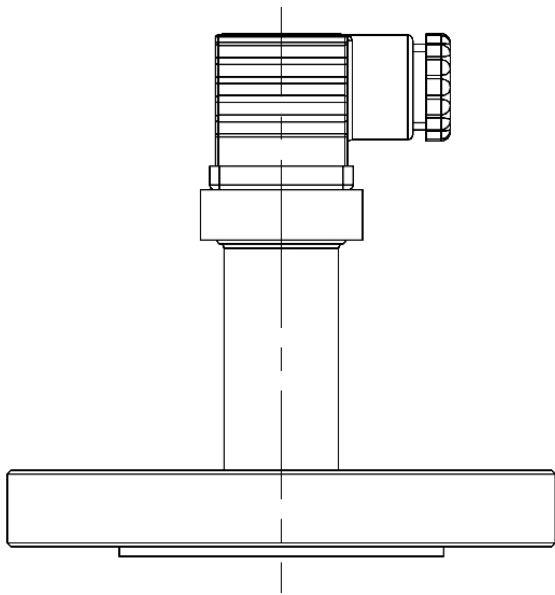




Pressure transducers

benefits

- ideal for hygienic processes
- connection technology with numerous versions
- extremely resistant to shock, pulsation and vibration
- best dynamic pressure resistance at high load changes
- Zero calibration via magnet

Application

For electronic pressure measurement in mechanical and plant engineering, and for gas and medical applications. With flush diaphragm, the pressure transducers are also suitable for use with viscous, highly viscous or crystallising 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. DMU 02 Vario is available in a virtually unlimited number of versions. All standard and customer-specific connections can be connected to the electronic precision measuring system. All standard electrical connection types are available. 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)

Measuring range

see ordering table

Operating temperature range

Medium: -10/+125 °C

Ambient: -10/+105 °C

Storage: -10/+125 °C

Temperature error band

± 0.15 % FSO/10 K In compensated range 0/70 °C

dynamic characteristics

Response time: < 20 ms

Process connection

flange connection DN 25 PN 40 EN 1092-1 type B 1

material

Housing: Stainless steel 304

pressure connection: Stainless steel 316 L

diaphragm: Stainless steel 316 L

pressure transmission liquid

multi-grade oil, FDA-compliant

Supply voltage

DC 10 – 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)

Options

- other process connections
- other electrical connections
- Field housing (stainless steel)
- Filling for oxygen
- other output signals
- customer-specific setting (damping, unit)

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

Versions

Range	Measuring range	Type	Version	Part no.
	-1/+0 bar	DMU 02 Vario FL		32981
	-1/+1.5 bar	DMU 02 Vario FL		32982
	-1/+3 bar	DMU 02 Vario FL		32983
	-1/+5 bar	DMU 02 Vario FL		32984
	-1/+9 bar	DMU 02 Vario FL		32985
	-1/+24 bar	DMU 02 Vario FL		32986
	0/1 bar	DMU 02 Vario FL		32990
	0/1.6 bar	DMU 02 Vario FL		32991
	0/2.5 bar	DMU 02 Vario FL		32992
	0/4 bar	DMU 02 Vario FL		32993
	0/6 bar	DMU 02 Vario FL		32994
	0/10 bar	DMU 02 Vario FL		32995
	0/16 bar	DMU 02 Vario FL		32996
	0/25 bar	DMU 02 Vario FL		32997
	0/40 bar	DMU 02 Vario FL		32998

-  in-stock items
-  Non-stock items