



Pressure transducer industrial version

benefits

- extremely resistant to shock, pulsation and vibration
- high overload safety
- best dynamic pressure resistance at high load changes
- wetted area without seals due to welding
- no transmission liquid

Application

For electronic pressure measurement in industrial applications, e.g. hydraulic, pneumatic, gas industry, refrigeration, automation, medical, as well as general mechanical and plant engineering applications.

Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. DMU 02 is equipped with a piezo-resistive polysilicon thin-film measuring cell.

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/+105 °C

Storage: -40/+125 °C

Temperature error band

≤ ± 0.15 % FSO/10 K In compensated range -25/+85 °C

dynamic characteristics

Response time: < 1 ms

Process connection

G½B EN 837-1/7.3

material

Housing: Stainless steel 304

pressure connection: Stainless steel 304

electr. measuring cell: Stainless steel 630/304

Supply voltage

DC 10 – 32 V

Output signal

2-wire, 4–20 mA

Load

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

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)

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 connection threads
- fixed cable connection
- other connectors
- other output signals
- cleaned for oxygen

Versions

Range	Measuring range	Type	Version	Part no.
	-1/+0 bar	DMU 02		32801
	-1/+1.5 bar	DMU 02		32802
	-1/+3 bar	DMU 02		32803
	-1/+5 bar	DMU 02		32804
	-1/+9 bar	DMU 02		32805
	-1/+24 bar	DMU 02		32806
	0/600 mbar	DMU 02		32807
	0/1 bar	DMU 02		32808
	0/1.6 bar	DMU 02		32809
	0/2.5 bar	DMU 02		32810
	0/4 bar	DMU 02		32811
	0/6 bar	DMU 02		32812
	0/10 bar	DMU 02		32813
	0/16 bar	DMU 02		32814
	0/25 bar	DMU 02		32815
	0/40 bar	DMU 02		32816
	0/60 bar	DMU 02		32817
	0/100 bar	DMU 02		32818
	0/160 bar	DMU 02		32819
	0/250 bar	DMU 02		32820
	0/400 bar	DMU 02		32821
	0/600 bar	DMU 02		32822
	0/1000 bar	DMU 02		32823