



Pressure transducer standard version

benefits

- proven ceramic technology
- no mechanical ageing of the measuring cell
- no transmission liquid
- Versions for relative pressure and absolute pressure
- small temperature error

Application

For electronic pressure measurement in industrial applications (such as hydraulic and pneumatic applications as well as mechanical and plant engineering).

Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. DMU 01 is equipped with a piezo-resistive thick-film ceramic 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: -25/+125 °C

Ambient: -25/+85 °C

Storage: -40/+85 °C

Temperature error band

≤ ± 0.3 % FSO/10 K In compensated range -25/+85 °C

dynamic characteristics

Response time: ≤ 10 ms

Process connection

G½B EN 837-1/7.3

material

Housing: Stainless steel 304

pressure connection: Stainless steel 304

diaphragm: ceramic (Al₂O₃ 96 %)

Seal: FKM (Viton)

Supply voltage

DC 8 – 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, EN 175301-803)

Degree of protection

IP 65 (EN 60529)

CE conformity

EMC Directive 2014/30/EU

RoHS Directive 2011/65/EU

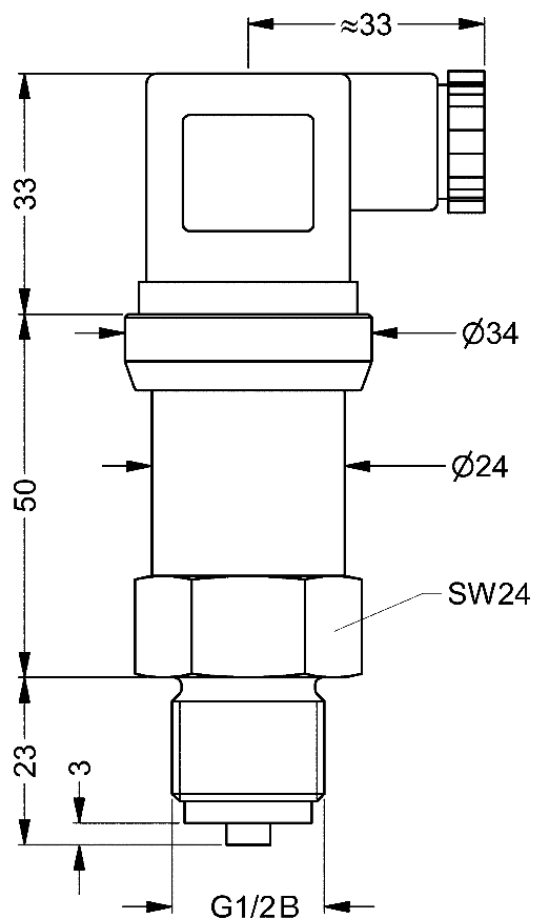
Pressure Equipment Directive 2014/68/EU

Options

- other connection threads
- fixed cable connection
- other output signals
- SIL 2 (IEC 61508/61511) 2-wire, for DMU 01 VM

Technical Drawings

DMU 01 - connection G1/2B EN 837



Dimensions (mm)

Versions

Range	Measuring range	Type	Version	Part no.
	-1/+0 bar	DMU 01		31114
	-1/+1.5 bar	DMU 01		31616
	-1/+3 bar	DMU 01		31617
	-1/+5 bar	DMU 01		31618
	0/1 bar	DMU 01		31115
	0/1.6 bar	DMU 01		31116
	0/2.5 bar	DMU 01		31117
	0/4 bar	DMU 01		31118
	0/6 bar	DMU 01		31119
	0/10 bar	DMU 01		31120
	0/16 bar	DMU 01		31121
	0/25 bar	DMU 01		31122
	0/40 bar	DMU 01		31123
	0/60 bar	DMU 01		31124
	0/100 bar	DMU 01		31125
	0/160 bar	DMU 01		31126
	0/200 bar	DMU 01		31878
	0/250 bar	DMU 01		31127
	0/400 bar	DMU 01		31128

-  in-stock items
-  Non-stock items