



Pressure transducers DMU 02 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)
 $< \pm 0.5 \% \text{ FSO}$

Measuring range

See ordering table

Overpressure safety

$\leq 250 \text{ bar}$: At least $2 \times \text{FS}$
 $> 250 \text{ bar}$: At least $1.5 \times \text{FS}$
 $\geq 1,000 \text{ bar}$: At least $1.2 \times \text{FS}$

Burst pressure

$\leq 250 \text{ bar}$: At least $3 \times \text{FS}$
 $> 250 \text{ bar}$: At least $2 \times \text{FS}$
 $\geq 1,000 \text{ bar}$: At least $1.5 \times \text{FS}$

Operating temperature range

Medium: $-40/+125 \text{ }^{\circ}\text{C}$
 Ambient: $-40/+105 \text{ }^{\circ}\text{C}$
 Storage: $-40/+125 \text{ }^{\circ}\text{C}$

Temperature error band

$\leq \pm 0.15 \% \text{ FSO}/10 \text{ K}$ In compensated range $-25/+85 \text{ }^{\circ}\text{C}$

Dynamic characteristics

Response time: $< 1 \text{ ms}$

Process connection

G $\frac{1}{2}$ B 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

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

Current input

$< 25 \text{ mA}$

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

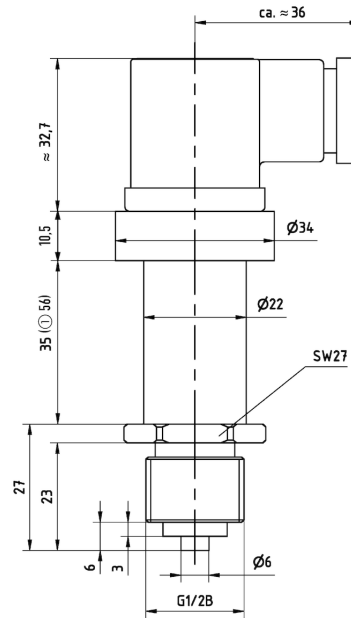
Options

- Other connection threads
- Fixed cable connection
- Other connectors
- Other output signals
- Cleaned for oxygen



Detail views

DMU 02 - connector ISO 4400 (DIN 43650-A)

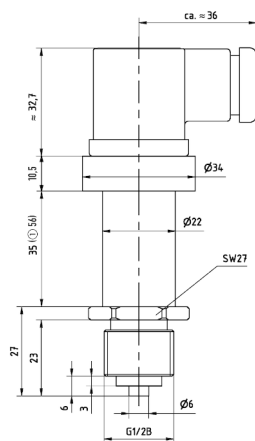


Dimensions (in mm)

1. Ex version

Technical drawings

DMU 02 - connector ISO 4400 (DIN 43650-A)



Dimensions (in mm)

1. Ex version



Versions

Type	Connection	Measuring range	Part no.
DMU 02	G½B EN 837-1/7.3	-1/0 bar	32801
DMU 02	G½B EN 837-1/7.3	-1/+1.5 bar	32802
DMU 02	G½B EN 837-1/7.3	-1/+3 bar	32803
DMU 02	G½B EN 837-1/7.3	-1/+5 bar	32804
DMU 02	G½B EN 837-1/7.3	-1/+9 bar	32805
DMU 02	G½B EN 837-1/7.3	-1/+24 bar	32806
DMU 02	G½B EN 837-1/7.3	0/600 mbar	32807
DMU 02	G½B EN 837-1/7.3	0/1 bar	32808
DMU 02	G½B EN 837-1/7.3	0/1.6 bar	32809
DMU 02	G½B EN 837-1/7.3	0/2.5 bar	32810
DMU 02	G½B EN 837-1/7.3	0/4 bar	32811
DMU 02	G½B EN 837-1/7.3	0/6 bar	32812
DMU 02	G½B EN 837-1/7.3	0/10 bar	32813
DMU 02	G½B EN 837-1/7.3	0/16 bar	32814
DMU 02	G½B EN 837-1/7.3	0/25 bar	32815
DMU 02	G½B EN 837-1/7.3	0/40 bar	32816
DMU 02	G½B EN 837-1/7.3	0/60 bar	32817
DMU 02	G½B EN 837-1/7.3	0/100 bar	32818
DMU 02	G½B EN 837-1/7.3	0/160 bar	32819
DMU 02	G½B EN 837-1/7.3	0/250 bar	32820
DMU 02	G½B EN 837-1/7.3	0/400 bar	32821
DMU 02	G½B EN 837-1/7.3	0/600 bar	32822
DMU 02	G½B EN 837-1/7.3	0/1,000 bar	32823



Blue part no. = in-stock items