Pressure transducers DMU 02 Industrial version



- Extremely resistant to shock, pulsation and vibration
- High overload safety
- Dynamic pressure resistance at high load changes
- Wetted area without seals due to welding
- No transmission liquid







Application 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 Measuring accuracy

specifications Deviation from the characteristic curve according to IEC 60770 - limit point calibration (non-linearity, hysteresis, repeatability): <±0.5 % FSO

Measuring ranges

Relative pressure: -1/0 to -1/+24 bar 0/0.6 to 0/1,000 bar

Overpressure safety

≤ 250 bar at least 2 x FS (burst pressure at least 3 x FS) \leq 250 bar at least 1.5 x FS (burst pressure at least 2 x FS) ≥ 1,000 bar at least 1.2 x FS (burst pressure at least 1.5 x FS)

Operating temperature range

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

Temperature error band

In compensated range -20/+85 °C ≤ 0.15 % FSO/10 K

Dynamic characteristics

Response time < 1 ms

Process connection

G1/2B (EN 837-1/7.3)

Material

- **Options** Other connection threads
 - Fixed cable connection
 - Other connectors
 - Other output signals
 - Cleaned for oxygen
 - EX version (II 1G Ex ia IIB T4) (Ex)

Stainless steel 304 Housina: Pressure connection: Stainless steel 630

Without Seal:

Supply voltage

DC 10-32 V EX version: DC 20-27 V

Output signal

4-20 mA, 2-wire 0-10 V, 3-wire

Load

$$4-20 \text{ mA} \leq \frac{U_B - U_{Bmin}}{0.02 \text{ A}}$$

At least 100 Ohm with EX version 0-10 V > 5 kOhm

Current input

4-20 mA < 25 mA 0-10 V < 20 mA

Electrical protection

Short circuit proof and protected against reverse polarity

Electrical connection/degree of protection

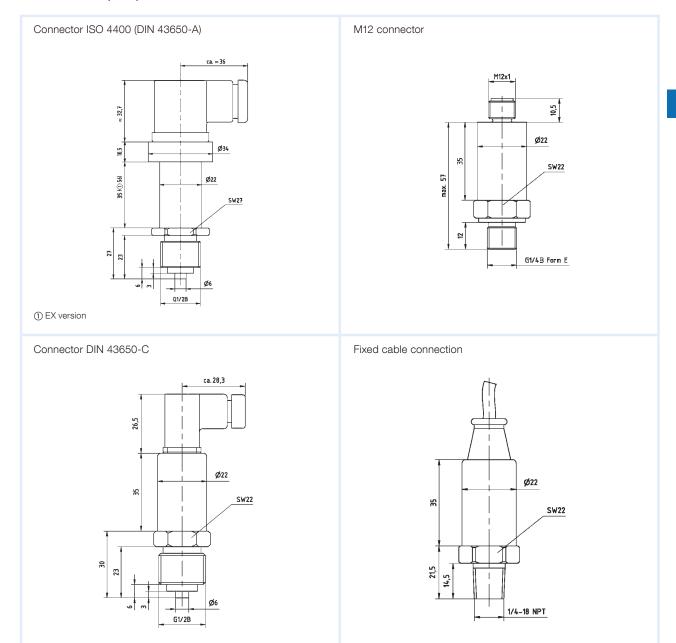
Connector and junction box as per ISO 4400 (DIN 43650-A), IP 65

CE conformity

EMC Directive 2014/30/EU RoHs Directive 2011/65/EU PED 2014/68/EU

Pressure transducers DMU 02

Dimensions (mm) and electrical connections



Pin assignment table	Electrical connections		
	ISO 4400 (DIN 43650-A, EN 175301-803)	M12 x 1 (4-pin) EN 61076-2-101	Cable outlet
2-wire system: Supply +	1	1	Red
Supply –	2	3	Black
Earth	Earth contact	_	_
3-wire system: Supply +	1	1	Red
Supply -	2	3	Black
Signal	3	4	White
Earth	Earth pin	_	_

The units are shipped with a detailed connection diagram.

