

PRESSURE SENSOR DMU - 32.x

for industrial applications with an accuracy of 0.25% FS or 0.5% FS

DESCRIPTION

The DMU 32.x pressure transmitter for general industrial applications is the ideal solution for customers with demanding measurement tasks. It is characterized by very good accuracy, a robust design, and extremely high variability, making it adaptable to a wide range of applications.

The measuring ranges up to 1000 bar can be combined almost arbitrarily with the output signals commonly used in measurement technology, such as 4...20 mA or 0...10 V, and the standard process connections G1/2" or G1/4", as well as various electrical connections. Furthermore, it offers accuracy classes of 0.5% FS or 0.25% FS.

SPECIAL FEATURE

- high overload protection
- high acceleration and vibration resistance
- for dynamic and static measurements

APPLICATION

For all gaseous and liquid pressure media that do not crystallize or are highly viscous and do not attack the measuring system material.

EXECUTION

DMU 32.0: Connection G1/2B I 0.5 % FS
DMU 32.1: Connection G1/4B I 0.5% FS
DMU 32.2: Connection G1/2B I 0.25 % FS
DMU 32.3: Connection G1/4B I 0.25% FS

Measuring range: -1...0 bar,
0...1 bar to 0...1000 bar

Output signal: 4...20mA, 0...10 V
(2-, 3-wire)

Ambient temperature: -25°C to 80°C
Medium: -20°C to 100°C



Pressure sensor with internal diaphragm

Area of application

- Laboratory area,
- Process monitoring
- Mechanical and plant engineering
- Environmental technology

OPTION

Special measuring ranges available upon request

DAkKS/DKD calibration certificate

TECHNICAL DATA	
Measuring range (bar) Standard print areas *)	0...0.25; 0...0.6; 0...1; 0...1.6; 0...2.5; 0...4*; 0...6*; 0...10*; 0...16*; 0...25*; 0...40; 0...60; 0...100; 0...160; 0...250; 0...400; 0...600; 0...1000; -0.6..0; -1 ... 0; -1 ... +0.6, -1 ... +1.5, -1 ... +3, -1 ... +5, -1 ... +9, -1 ... +15, -1 ... +24
Overload range (bar) *)	Double, over 600 bar - 1.5 times
Pressure connection	G1/2" standard (option: G1/4"), SW 27, stainless steel 316L
Materials of parts in contact with measuring instruments	CrNi steel 316L, with piezoresistive stainless steel measuring cell up to 25 bar with Viton (FKM) O-ring Housing made of CrNi steel
Weight	0.2 kg
Output signal Operating voltage UB Permissible burden (RI)	4...20mA, 0...10V 10...30 VDC (14...30 VDC for output 0...10 V) Current (2-wire): $R_{max} = ((UB - UB_{min}) / 0.02)$ ohms, Voltage: $R_{min} =$ 10 kΩ
life	> 50 million load cycles
Electrical connection	Rectangular connector EN 175301-803 (DIN 43 650) Option circular connector M 12 x 1, 4-pole
Protection class according to DIN EN 60 529	IP 65 according to EN 60529 / IEC 529 and according to the plug system
Temperature influence	0.2% / 10 K, at zero point and span
Temperature range	0...80 °C
reproducibility	< 0.03% of final value
Stability per year	< 0.2% of final value under reference conditions
Reverse polarity protection	U+ versus U-
Setting time	< 1 ms (within 10% to 90% of the final value)
CE conformity	Pressure Equipment Directive - 97/23/EC EMC Directive - Emission and immunity (industrial sector) according to EN 61 326
Shock resistance (IEC 68-2-32)	1m (free fall onto a steel plate)
Vibration resistance (IEC 68-2-06 and IEC 68-2-36)	20 g

DMU 32.0: with G 1/2 BI connection, accuracy 0.5% of full scale value

DMU 32.1: with G 1/4 BI connection, accuracy 0.5% of full scale value

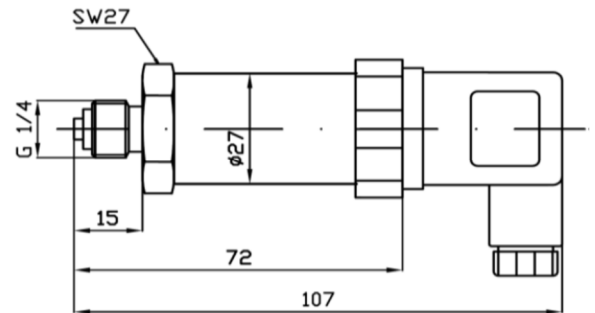
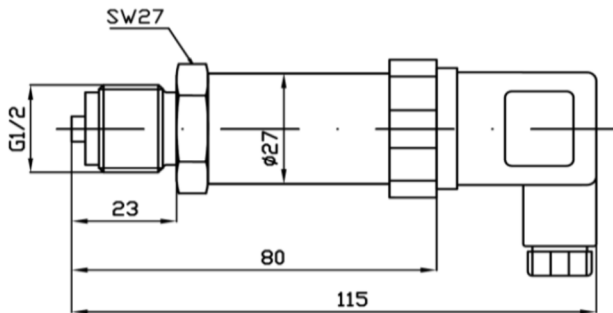
DMU 32.2: with G 1/2 BI connection, accuracy 0.25% of full scale value

DMU 32.3: with G 1/4 BI connection, accuracy 0.25% of full scale value

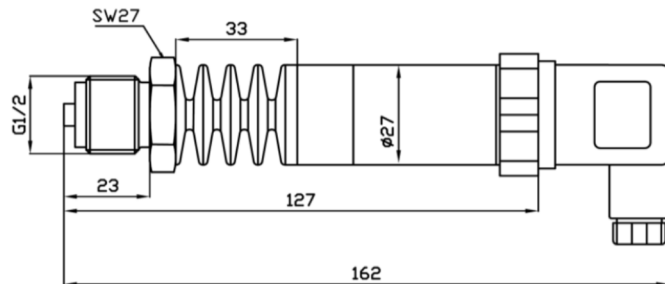
*) Others available on request

DESIGNS

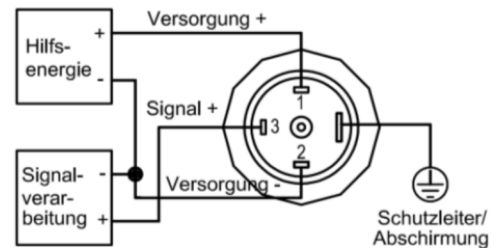
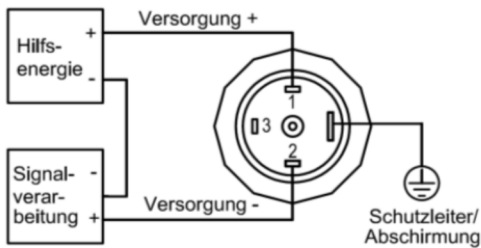
Standard version



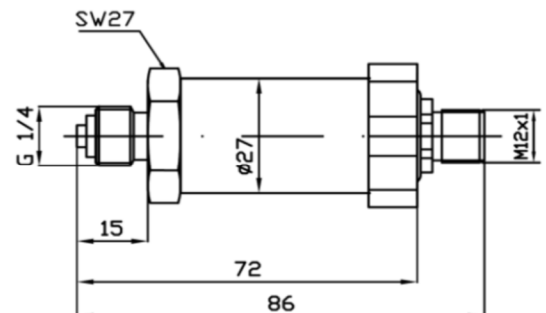
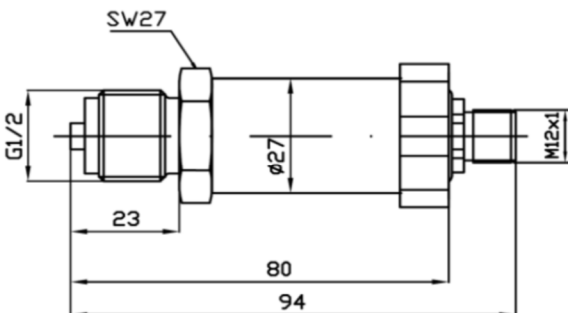
Optional, with temperature decoupler, T max. 200°C



Two-wire connection 4...20mA Three-wire connection 0...10V/ 0...5V



Option: Circular connector M 12 x 1, 4-pole



Two-wire connection 4...20mA Three-wire connection 0...10V/ 0...5V

