

## Flush Type Pressure Transmitter Model MDS7

### Applications

- For gases, compressed air, vapour, liquids, pastes and powdery media
- Hydraulic aggregates
- Hydrostatic level measurement:
- Vacuum pressure monitoring, e.g. vacuum conveyors, pump monitoring
- Food and beverage manufacturing, pharmaceutical industry, biotechnology, sanitary applications

### Special features

- Wide variety of aseptic process connections, for process temperatures up to 150 °C
- Flush process connection
- Fully welded
- Large stocks for short delivery times
- Ingress protection up to IP 65
- Adjustability of zero point and span

### Description

#### Specialist for viscous and solids-containing media

The model MDS7 pressure transmitter with flush diaphragm has been specifically designed for the measurement of viscous, paste-like, adhesive, crystallising, particle-laden and contaminated media, which would clog the pressure channel of conventional process connections.

Through its optimised design, the flush process connection enables the cleanability of the wetted diaphragm to be integrated into the process. Low-maintenance and trouble-free pressure measurement is thus also guaranteed in critical applications with frequently changing media.

High accuracy, a robust design, high-quality workmanship and the high flexibility of configuration are key features of the model MDS7



#### Flush process connection

All process connections of the flush pressure transmitter are made of stainless steel, all welded and isolate the process medium from the pressure measuring instrument via a positive seal. A reliable, dead-space free sealing between the process connection and the measuring medium is thus assured.

For high medium temperatures of up to 302 °F (150 °C), the pressure transmitter is also available with an integrated cooling element.

## Specification

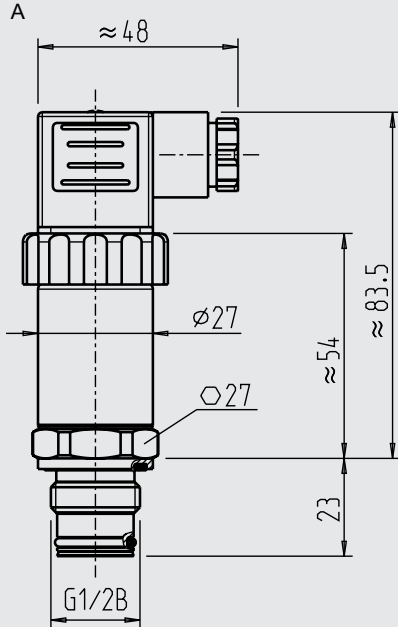
- **Measurement Range** 0 ... 100mbar~600 BAR
- **Proof pressure**  $\leq 1.5X$  rated pressure
- **Pressure type** Gauge, absolute ,sealed gauge
- **Accuracy**  $\pm 0.5\%$  (typical)  $\pm 0.25\%$  (option)
- **Long stability**  $\pm 0.1\%F.S/year$  (typical)  $\pm 0.2\%F.S/year$  (Max)
- **Temperature Error Zero**  $\pm 0.03\%F.S/$  ( $\leq 100KPa$ )  $\pm 0.02\%F.S/^{\circ}C$  ( $>100KPa$ )
- **Temperature Error Span**  $\pm 0.03\%F.S/$  ( $\leq 100KPa$ )  $\pm 0.02\%F.S/^{\circ}C$  ( $>100KPa$ )
- **Operating Temperature Range**  $-20 \dots 150^{\circ}C$  with cooling element-without cooling element  $-10 \dots 80^{\circ}C$
- **Storage Temperature Range**  $40 \dots 120^{\circ}C$
- **Power supply**  $12 \dots 30VDC$
- **Output signal**  $4 \dots 20mA$   $0 \dots 5$   $0.5 \dots 4.5VDC$   $0 \dots VDC$
- **Process connection** Flush  $1/2''$  &  $1''$
- **Housing material** stainless steel 1.4571
- **Diaphragm material** Fully welded 316L



## Dimensions in mm (inch)

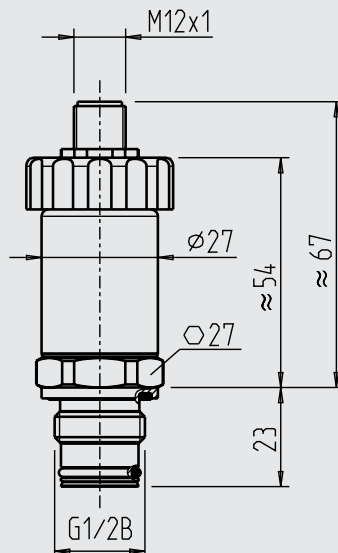
### Pressure transmitter

with angular connector DIN 175301-803



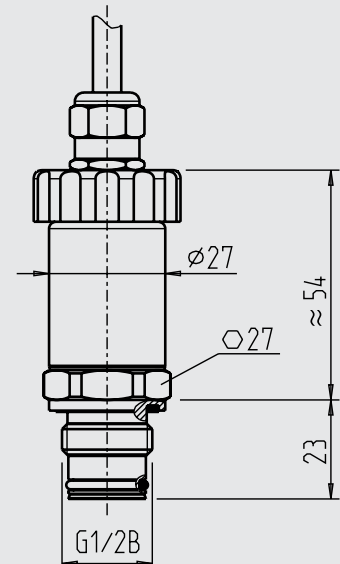
Weight approx. 0.2 kg / 7 oz

with M12 x 1 circular connector



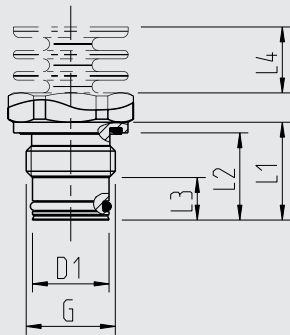
Weight approx. 0.2 kg / 7 oz

with cable outlet

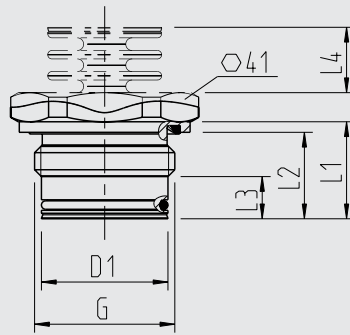


Weight approx. 0.2 kg / 7 oz

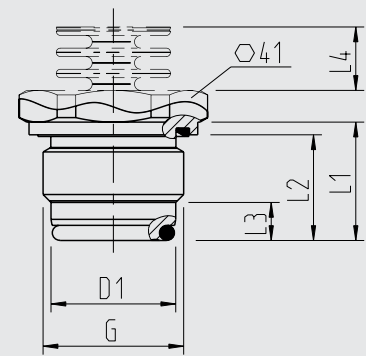
### Process connections



G	D1	L1	L2	L3	L4
G 1/2 B	18 (0.71)	23 (0.91)	20.5 (0.81)	10 (0.4)	15.5 (0.61)



G	D1	L1	L2	L3	L4
G 1 B	30 (1.19)	23 (0.91)	20.5 (0.81)	10 (0.4)	15.5 (0.61)



G	D1	L1	L2	L3	L4
G 1 B hygienic	29.5 (1.17)	28 (1.11)	25 (0.99)	9 (0.36)	15.5 (0.61)



## MDS7 Flush Type Pressure Transmitter

ORDERING CODE	Example: MDS7	4	250	P	D1	S1	J1	S	S	NOTE
<b>Electrical connection</b>										
4 - Circular connector M12*1 - 4pin		4								
5 - Cable with 1.5 m										
6 - Mini DIN										
7 - Big Din										
8 - Customer										
<b>Pressure Range</b>										
(0 - xxx)mbar or bar			250							
<b>Pressure Unit</b>										
B - Bar										
P - Psi				P						
M - mbar										
C - Customer										
<b>Power Supply</b>										
D1 - 24VDC					D1					
D2 - 5VDC										
C - Customer										
<b>Output Signal</b>										
S1 - 4 ... 20 mA DC						S1				
S2 - 1 ... 5 VDC										
S3 - 0 ... 5 VDC										
S4 - 0 ... 10 mA DC										
S5 - 0 ... 20 mA DC										
S6 - 0 ... 10 VDC										
S7 - 0.5 ... 4.5 VDC										
C - Customer										
<b>Process connection size</b>										
J1 - 1/2"							J1			
J2 - 1"										
J3 - Others										
<b>Diaphragm material</b>										
S - 316L Stainless steel										
M - Monel® 400										
H - Hastelloy										
T - Tantalum										
G - Gold plated								G		
C - Customer										
<b>Pressure Type</b>										
G - Gauge pressure										
A - Absolute pressure										
S - Sealed pressure									S	
C - Customer										
<b>Option</b>										
YW -316L Stainless steel housing										
OS - Overload stop										
CO - Cooling element for high temp. applications										
DS - Diaphragm seals for sanitary										
IN - Local indicator										
DH - Diaphragm seals for high viscous or crystallising media										
CC - Calibration certificate										
PD - Pulsation dampener										
IP - IP 68 housing										
AT - Exia										
I - Intrinsically safe (II 1/2 Ex ia IIC T4/T5)										
WA - One year warranty										WA
Other										





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