Pressure transducers DeltaFox DMU 20 D Version for differential pressure measurement

Benefits

- Multiple-range transmitter with up to 3 switchable measuring ranges
- Easy parameterisation via 2-line LC display
- Min./Max. value indication
- Ideal for clean room and filter monitoring

Application

The differential pressure transducer DMU 20 D can be used with all dry, gaseous, non-corrosive media. The device detects even smallest differential pressures and is particularly suitable for heating, air conditioning and ventilation applications. Clean rooms and filter monitoring are other application areas.

Description

The devices equipped with silicon sensors. When pressure is applied, the pressure difference between the positive side and the negative side is converted into a current and voltage signal which is proportional to the differential pressure. The 2-line LC display shows the measured value and the unit and optionally the status of the switching outputs. The customer can parameterise up to three measuring ranges.

Technical specifications

Measuring accuracy
Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability)

< 0/6 mbar:	≤ ± 1 % FSO (BFSL)
≥ 0/6 mbar:	≤ ± 0.5 % FSO (BFSL)

Display
2-line LC display,
Visible area 32.5 x 22.5 mm,
5-digit 7-segment main display,
Character height 8 mm,
Range ± 9,999,
8-digit 14-segment additional display,
Height 5 mm, 52-segment bar chart,
Accuracy 0.1 % ± 1 digit,
Pressure units switchable mbar, bar, Pa, hPa, kPa, psi, Atm, torr, mmHg

Measuring range
See ordering table

Long-term stability

< 0/6 mbar:	≤ ± 0.5 % FSO/Jahr
≥ 0/6 mbar:	≤ ± 0.2 % FSO/Jahr

Operating temperature range

Medium:	0/50 °C
Ambient:	0/50 °C
Storage:	-10/+70 °C

Housing

W x H x D:	132 x 68.5 x 50 mm

Process connection
Hose olive ⌀ 6.6 x 11 mm (for flexible hoses with ID 6 mm)
Hose olive ⌀ 4.4 x 10 mm (for flexible hoses with ID 4 mm)

Material

Housing:	Plastic (ABS)
Process/pressure connection:	Brass, nickel-plated
Sensor:	Ceramic, Silicone, epoxy, RTV

Wetted parts
Pressure connection, PVC/silicone hose, Sensor

Supply voltage
DC 19 – 32 V

Output signal
3-wire, 0/4–20 mA and 0–10 (5) V

Load

0/4–20 mA:	R_{max} = 330 Ω
0–10 V:	R_{min} = 10 kΩ

Electrical protection
Short circuit proof and protected against reverse polarity

Electrical connection
Cable gland M16 x 1.5

Degree of protection
IP 54 (EN 60529)

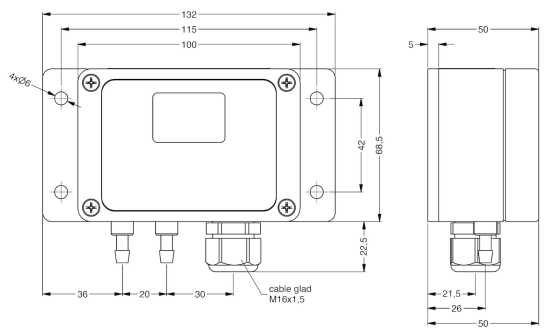
CE conformity
EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU

Options

- Other process connections
- Other output signals

Technical drawings

differential pressure transmitter DMU 20 D



Dimensions (in mm)

Versions

	Process/pressure connection	Switchable measuring ranges			Static pressure	Part no.
		I	II	III		
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 6.6 x 11 mm	0/1.6 mbar	0/1 mbar		Max. 200 mbar	33409R010531
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 6.6 x 11 mm	0/4 mbar	0/2.5 mbar		Max. 200 mbar	33409R010541
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 6.6 x 11 mm	0/10 mbar	0/6 mbar		Max. 200 mbar	33409R010021
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 6.6 x 11 mm	0/40 mbar	0/25 mbar		Max. 345 mbar	33409R010051
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 6.6 x 11 mm	0/250 mbar	0/60 mbar	0/160 mbar	Max. 1,000 mbar	33409R010091
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 6.6 x 11 mm	0/1,000 mbar	0/400 mbar	0/600 mbar	Max. 3,000 mbar	33409R010121
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 4.4 x 10 mm	0/1.6 mbar	0/1 mbar		Max. 200 mbar	33409R010532
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 4.4 x 10 mm	0/4 mbar	0/2.5 mbar		Max. 200 mbar	33409R010542
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 4.4 x 10 mm	0/10 mbar	0/6 mbar		Max. 200 mbar	33409R010022
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 4.4 x 10 mm	0/40 mbar	0/25 mbar		Max. 345 mbar	33409R010052
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 4.4 x 10 mm	0/250 mbar	0/60 mbar	0/160 mbar	Max. 1,000 mbar	33409R010092
Pressure transducers DeltaFox DMU 20 D	Hose olive ⌀ 4.4 x 10 mm	0/1,000 mbar	0/400 mbar	0 mbar	Max. 3,000 mbar	33409R010122

Blue part no. = in-stock items