



Pressure transducer version for differential pressure measurement

benefits

- LED display and open collector switching output
- turn down up to a maximum of 1:10 through customer
- Min./Max. value storage
- housing can be rotated by 330° and pressure connections by 300°

Application

For electronic differential pressure measurement which requires a local display in addition to the analogue output, for example for monitoring filters and fans. The differential pressure transducer can be used with all liquid and gaseous, corrosive media which are not highly viscous and which do not crystallize.

Description

The DeltaFox® DMU 21 D pressure transducers feature two oil-immersed piezo-resistive stainless steel measuring cells and a 4-digit, red LED display. When pressure is applied, the pressure difference between the positive pressure side and the negative pressure side is converted into a current signal which is proportional to the differential pressure. A menu and two keys allow for displaying the measured values and for configuring the individual parameters.

Technical Specifications

Measuring accuracy

Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability)
 $\leq \pm 1 \% \text{ FSO (BFSL)}$

Display

4-digit, red 7-segment, LED display,
 Character height 7 mm,
 range -1,999/+9,999,
 accuracy 0.1 % ± 1 digit,
 digital damping 0.3/30 s (programmable),
 Display housing can be rotated by 330°

adjustment possibilities

Turn down 1:10
 Reference point for switching and analogue output selectable on + connection, - connection or differential pressure

Measuring range

see ordering table

application area

The maximum pressure in the system (maximum static pressure, one end) must not exceed the full scale value (FS).

Operating temperature range

Medium: -40/+125 °C
 Ambient: -25/+85 °C
 Storage: -40/+85 °C

Process connection

G $\frac{1}{2}$ B (DIN 3852, both pressure connections rotatable by 300°)

material

Housing: plastic (PA 6.6, polycarbonate)
 diaphragm: Stainless steel 316 L
 pressure connection: Stainless steel 316 L
 Seal: FKM

wetted parts

diaphragm, pressure connection, Seal

Supply voltage

DC 24 V $\pm 10 \%$

Output signal

3-wire, 4–20 mA

Switching output

1 open collector (PNP), max. 125 mA
 Status indication via LED
 On/off delay 0 to 100 s
 repeatability: $\leq \pm 0.5\%$ FSO

Load

500 Ω

electrical protection

short circuit proof and protected against reverse polarity

Electrical connection

Connector M12 x 1, 5-pin

Options

- other process connections
- 2 x PNP open collector switching outputs
- fixed cable connection with 2 m PVC cable

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

Scope of delivery

- Pressure transducer DMU 21 D
- mounting bracket
- 2 screws

Versions

	Measuring range		Part no.
Pressure transducers DMU 21 D	0/1 bar	●	33410101109011
Pressure transducers DMU 21 D	0/2 bar	●	33410101150011
Pressure transducers DMU 21 D	0/3.5 bar	●	33410101151011
Pressure transducers DMU 21 D	0/7 bar	●	33410101152011
Pressure transducers DMU 21 D	0/20 bar	●	33410101153011
Pressure transducers DMU 21 D	0/35 bar	●	33410101154011
Pressure transducers DMU 21 D	0/70 bar	●	33410101155011

- in-stock items
- Non-stock items