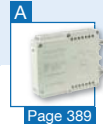


Pressure transducers DeltaFox® DMU 21 D

Version for differential pressure measurement



- 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°



3

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

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°

Adjustments

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

Supply voltage

DC 24 V ± 10 %

Load

500 Ω

Analogue output

4 – 20 mA / 3-wire

Switching output

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

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

Measuring ranges

0/1 bar to 0/70 bar

Measuring accuracy

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

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 $\frac{1}{2}$ (DIN 3852)
 Both pressure connections rotatable by 300°

Electrical connection

Connector M12 x 1, 5-pin

Electrical protection

Short circuit proof and protected against reverse polarity

Degree of protection

IP 65 (EN 60529)

CE conformity

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

Scope of delivery

DMU 21 D, mounting bracket and 2 screws
 RoHS Directive 2011/65/EU

Options

- Other process connections
- 2 x PNP open collector switching outputs
- Fixed cable connection with 2 metres PVC cable

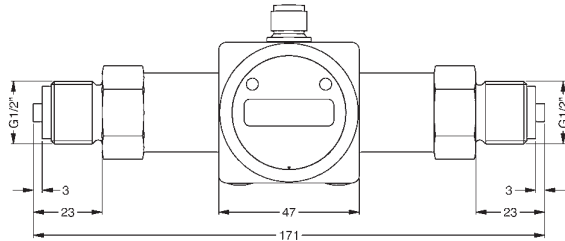
Pressure transducers DeltaFox® DMU 21 D

Version for differential pressure measurement

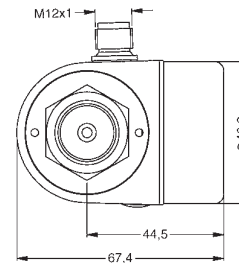
Dimensions (mm) and electrical connections

3

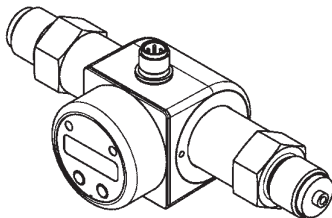
DMU 21 D



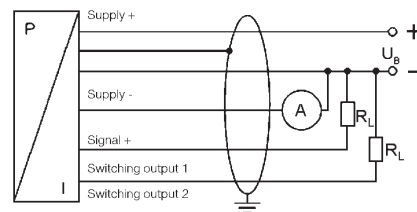
DMU 21 D



DMU 21 D



Wiring diagram



Pin assignment table

Electrical connections	M12 x 1 (5-pin), plastic	Cable outlet (IP 67)
Supply +	1	White
Supply -	3	Brown
Signal +	2	Green
Switching output 1	4	Grey
Switching output 2	5	Pink
Shield	Via pressure connection	Yellow/green

Pressure transducers DeltaFox® DMU 21 D

Version for differential pressure measurement

Ordering data

DG: H, PG: 4

Price €

1	Pressure transducer for differential pressure DMU 21 D	
	33410 DMU 21 D	
2	Electrical connection	
	1 Connector M12 x 1, 5-pin	
	2 Fixed cable connection with 2 metres PVC cable	On request
3	Output	
	01 Analogue output 4–20 mA / 3-wire + 1 x PNP open collector switching output	
	02 Analogue output 4–20 mA / 3-wire + 2 x PNP open collector switching outputs	
4	Measuring range in bar	
	109 0 / 1.0	
	150 0 / 2.0	
	151 0 / 3.5	
	152 0 / 7.0	
	153 0 / 20	
	154 0 / 35	
	155 0 / 70	
5	Process connection	
	01 G½B (DIN 3852)	
	02 G½B (EN 837-1)	
	03 G¼B (DIN 3852)	
	04 G¼B (EN 837-1)	
	05 ½-14 NPT	
	06 ¼-18 NPT	
6	Seal	
	1 FKM	
	9 Others	On request

3

Ordering code

Example: 0/20 bar,
G½B (DIN 3852)

33410	1	01	153	01	1
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