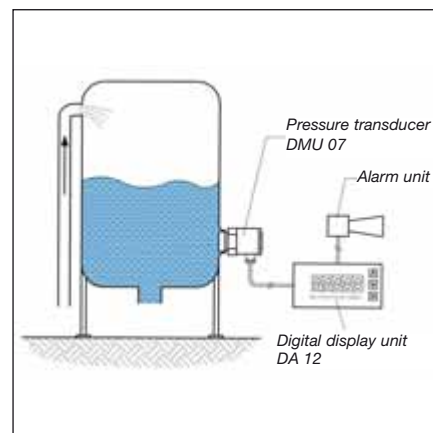


Pressure transducer DMU 07 for level measurement



Weatherproof housing version
(option)



Application

For continuous electronic level measurement of liquids and pressure measurement of liquids and gases in plant construction.

Description

The DMU 07 pressure transducers are equipped with a ceramic sensor element for capacitive measurement. They feature a calibrated, amplified sensor signal which is available as a standardised current output.

DMU 07 features:

- Flush mounted diaphragm
- Measuring cell without oil filling
- High resistance to chemicals
- Mechanically insensitive ceramic sensor
- Robust and reliable design; also suitable for arduous industrial applications (shock, vibration)
- Excellent long-term stability
- Good temperature characteristics

Accuracy of measurement

Deviation characteristics according to IEC 60770 – limit point setting (non-linearity, hysteresis, repeatability): $< \pm 0.35 \% \text{ FSO}$

Measuring ranges

Relative pressure:
0/40 mbar to 0/10 bar

Overpressure safety

$\leq 400 \text{ mbar min. } 8 \times \text{FS}$
 $> 400 \text{ mbar min. } 4 \times \text{FS}$

Operating temperature range

Medium: $-25^\circ\text{C}/+125^\circ\text{C}$
Ambient: $-25^\circ\text{C}/+85^\circ\text{C}$
Storage: $-40^\circ\text{C}/+100^\circ\text{C}$

Temperature error band

In compensated range
 $0/+85^\circ\text{C} \leq 0.1 \% \text{ FSO}/10 \text{ K}$

Dynamic characteristics

Response time $< 200 \text{ ms}$

Process connection

G1½B flush mounted diaphragm

Materials

Housing: stainless steel 1.4305
Pressure-connection: stainless steel 1.4571
Diaphragm: ceramic Al_2O_3 96 %
Seal: FKM (Viton)

Output signal/supply voltage

4–20 mA DC 9–36 V
2-wire

Load

$4\text{--}20 \text{ mA} \leq \frac{U_B - U_{Bmin}}{0,02 \text{ A}}$
 $0\text{--}10 \text{ V} > 10 \text{ kOhm}$

Current input

4–20 mA $< 21 \text{ mA}$

EProtective electrical measures

Short circuit proof and polarity protected

Electrical connection (protection)

Plug and junction box
DIN 43650-A (IP 65)

CE conformity (EMC)

EN 61326

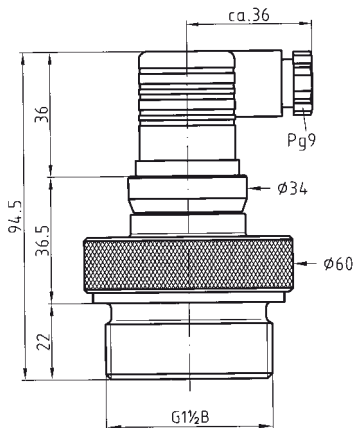
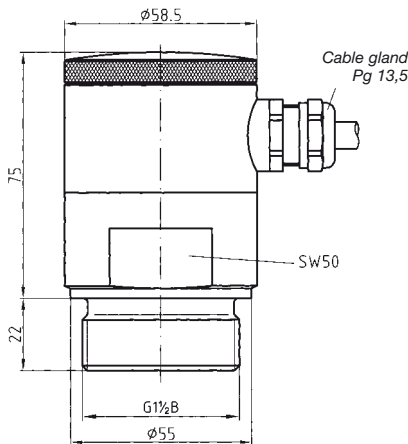
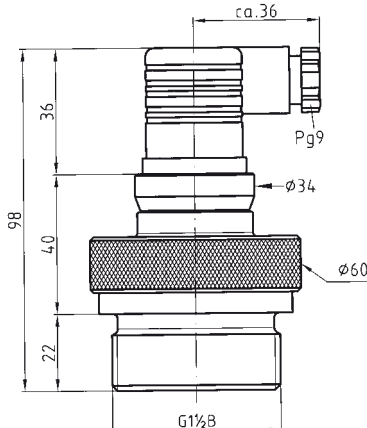
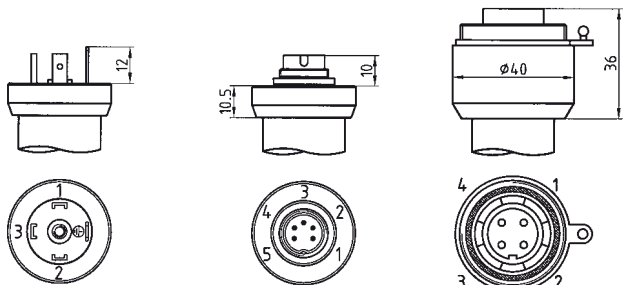
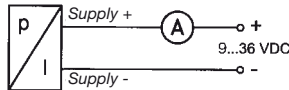
Options

- PVDF pressure connection
- Other seal materials
- Weatherproof housing (stainless steel 1.4305)
- Weatherproof housing with display
- Higher accuracy
- Other output signals

Please refer to chapter 1 for the complete „Level Measurement“ range.

Pressure transducers DMU 07

Dimensions (in mm) and electrical connections

<p>Connection G1½B – plug and junction box DIN 43650-A</p> 	<p>Connection G1½B – weatherproof housing</p> 																		
<p>Connection G1½B – PVDF pressure connection</p> 	<p>Electrical connections</p> <p>DIN 43650 „Binder“ plug 723 „Buccaneer“ plug</p> 																		
<p>Wiring diagram</p> <p>2-wire 4–20 mA</p> 	<p>Pin assignment table</p> <table><tr><th colspan="2"></th><th colspan="2">Electrical connections</th></tr><tr><th colspan="2"></th><th>DIN 43650</th><th>Cable colours (DIN 47100)</th></tr><tr><td rowspan="3">2-wire system:</td><td>Supply +</td><td>1</td><td>white</td></tr><tr><td>Supply -</td><td>2</td><td>brown</td></tr><tr><td>Earth</td><td>Earth contact</td><td>Screen</td></tr></table>			Electrical connections				DIN 43650	Cable colours (DIN 47100)	2-wire system:	Supply +	1	white	Supply -	2	brown	Earth	Earth contact	Screen
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The units are supplied with a detailed wiring diagram.