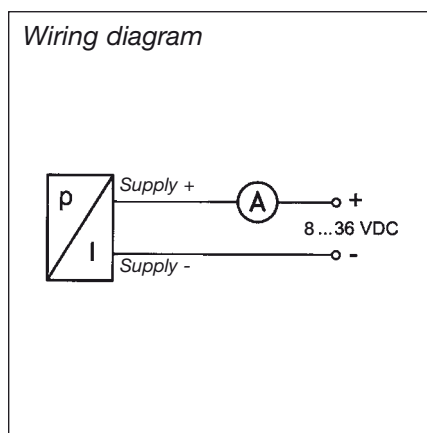
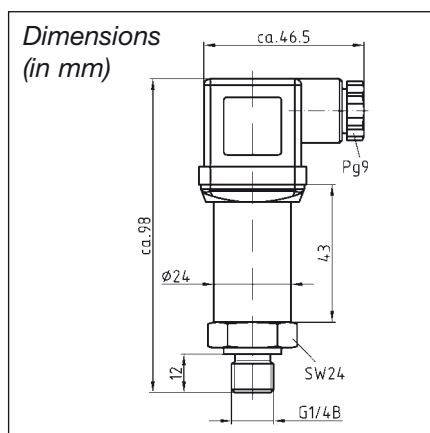


Pressure transducer DMU 01K

Compact version



Application
Special OEM unit. For electronic pressure measurement in industrial or HVAC applications (such as hydraulic, pneumatic, automation, heating or air conditioning).

Description
The DMU 01K pressure transducers use proven ceramic measuring cell technology and feature calibrated, amplified sensor signals which are available as standardised current outputs.

- DMU 01K features:**
- Compact design
 - Superior price/performance ratio due to automated mass production
 - High temperature resistance
 - No mechanical ageing

Accuracy of measurement
Deviation characteristics according to IEC 60770 - limit point setting (non-linearity, hysteresis, repeatability): $< \pm 1 \% \text{ FSO}$
(meas. ranges $\geq 0/100 \text{ bar}$ $< \pm 2 \% \text{ FSO}$)

Measuring ranges
Relative pressure: 0/1.6 to 0/250 bar

Overpressure safety
At least 2 x FS
(burst pressure at least 3 x FS)

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

Temperature error band
In compensated range
 $-25/+85 \text{ }^\circ\text{C} \leq 0.5 \% \text{ FSO}/10 \text{ K}$

Dynamic characteristics
Response time $< 10 \text{ ms}$

Process connection
G1/4B, DIN 3852

Materials
Housing: stainless steel 1.4301
Pressure-connection: stainless steel 1.4301
Diaphragm: ceramic Al_2O_3 96 %
Seal: FKM (Viton)

Supply voltage
DC 8–36 V

Output signal
4–20 mA, 2-wire

Load
 $4\text{--}20 \text{ mA} \leq \frac{U_B - U_{B,\text{min}}}{0,02 \text{ A}}$

Current input
4–20 mA $< 25 \text{ mA}$

Protective electrical measures
Short circuit proof and polarity protected

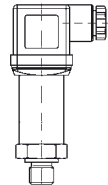
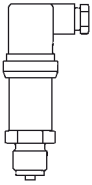
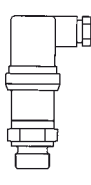
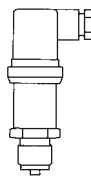
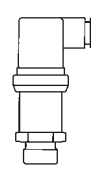
Electrical connection (protection)
Plug and junction box
DIN 43650-A (IP 65)

CE conformity (EMC)
EMC directive 2004 / 108 / EG

- Options**
- Fixed cable connection
 - Other output signals
 - Other connection threads

Pressure transducers

DG: H

Type	DMU 01 K*	DMU 01	DMU 01 VM	DMU 03	DMU 03 VM
Version					
Measuring principle	Piezo-resistive ceramic measuring cell			Piezo-resistive stainless steel meas. cell	
Accuracy (IEC 60770)	1 % FSO (≥ 100 bar 2 % FSO)	0.5 % FSO (-1/0 bar 1 % FSO)	0.5 % FSO	0.35 % FSO (≤ 0.4 bar 0.5 % FSO)	0.35 % FSO (≤ 0.4 bar 0.5 % FSO)
Wetted parts	Ceramic/stainless steel 1.4571			Stainless steel 1.4571/1.4435	
Connection	G ¹ / ₄ B DIN 3852	G ¹ / ₂ B EN 837	G ¹ / ₂ B DIN 3852 <i>with flush mounted diaphragm</i>	G ¹ / ₂ B EN 837	G ¹ / ₂ B <i>with flush mounted diaphragm</i>
Supply voltage	DC 8–36 V	DC 8–36 V	DC 8–36 V	DC 12–36 V	DC 12–36 V
Output	4–20 mA	4–20 mA	4–20 mA	4–20 mA	4–20 mA
System	2-wire	2-wire	2-wire	2-wire	2-wire
Electrical Connection	Plug DIN 43650-A	Plug DIN 43650-A	Plug DIN 43650-A	Plug DIN 43650-A	Plug DIN 43650-A
Measuring range	Part no.	Part no.	Part no.	Part no.	Part no.
Price €					
-1/0 bar	---	31114	31619	31634	---
-1/+1,5 bar	31608	31616	31620	31635	---
-1/+3 bar	31609	31617	31621	31636	---
-1/+5 bar	31610	31618	31622	31637	---
Price €					
0/40 mbar	---	---	---	32024	---
0/60 mbar	---	---	---	32025	---
0/100 mbar	---	---	---	31638	31643
0/160 mbar	---	---	---	31639	31644
0/250 mbar	---	---	---	31145	31165
0/400 mbar	---	---	---	31146	31166
0/600 mbar	---	---	---	31147	31167
Price €					
0/1 bar	---	31115	31623	31148	31168
0/1.6 bar	31511	31116	31624	31149	31169
0/2.5 bar	31512	31117	31625	31150	31170
0/4 bar	31513	31118	31626	31151	31171
0/6 bar	31514	31119	31627	31152	31172
0/10 bar	31515	31120	31628	31153	31173
0/16 bar	31516	31121	31629	31154	31174
0/25 bar	31517	31122	31630	31155	31175
0/40 bar	31518	31123	---	31156	32026
0/60 bar	31611	31124	---	31157	---
0/100 bar	31612	31125	---	31158	---
Price €					
0/160 bar	---	31126	---	31159	---
0/250 bar	---	31127	---	31160	---
0/400 bar	---	31128	---	31161	---
0/600 bar	---	---	---	31162	---

* Delivery only in packing units of 10 pieces per measuring range