



Level



Pressure



Flow



Temperature



Liquid Analysis



Registration



Systems Components



Services



Solutions

Pressure transmitters for absolute and gauge pressure measurement up to 6000 psi

Cerabar T PMP131

E-direct

www.e-direct.us



- Polysilicon sensor with metallic diaphragm
- For process pressure ranges of 0 - 150 psig to 0 - 6000 psig
- Simple to install
- Reliable, with long-term stability

Application

The Cerabar T PMP131 allows measurement of absolute and gauge pressure in liquids, vapors and gases. The instrument with polysilicon sensor is a compact amplifier for undertaking simple and safe measurement of process pressures between 0-150 psig and 0-6000 psig. The process connection comes with internal or front connecting diaphragm. The front connecting version is especially suited to highly contaminated or viscous media. For the Cerabar PMP131 both the switchpoint and hysteresis in the range of 1.5 to 20% can be adjusted.

Measurement principle

The measurement pressure causes a slight deflection of the sensor diaphragm. The change in proportion to pressure is measured and is available as a 4 to 20 mA output signal. The pressure transducer comes with a plug connection (ISO 4400) for wiring to an external loop-power supply (e.g. an RNS221 power supply from E-direct).

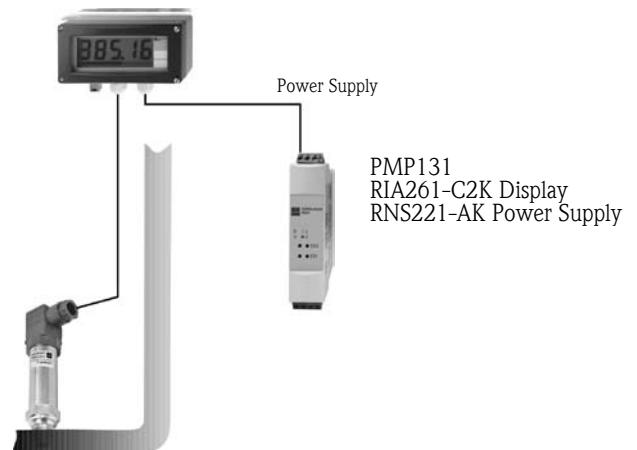
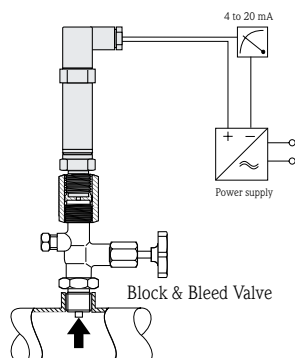
Product: liquids, vapors and gases	Output: 4 to 20 mA
Accuracy: < 0.5 %	Measuring range (limits): 0 up to 5800 psi

Application example

Cerabar T pressure transducer with 4 to 20 mA output and external power supply, such as RNS221 from E-direct.

Measurement system

Cerabar T pressure transducer with 4 to 20 mA output and external power supply, such as RNS221 from E-direct.



Cerabar T PMP131

Technical data

General

- Output signal 4 to 20 mA/2-wire
- Max. load R_a $R_a (\Omega) \leq (U_b - 12 \text{ V})/0.02 \text{ A}$

Accuracy

- Measurement accuracy Reference conditions according to DIN IEC 770; < 0.6% FS¹⁾ (linearity including hysteresis and repeatability)
- Effect of ambient temperature in relation to nominal value
Zero point: typ. < 0.2%/10 K
Range: typ. < 0.2%/10 K
- Long-term stability < 0.15% FS¹⁾ per year
- Response time T_{90} 6 ms

Operating conditions

- Material temperature -13 to +158°F (-25 to +70°C)
- Ambient temperature -13 to +158°F (-25 to +70°C)
- Storage temperature -40 to +185°F (-40 to +85°C)
- Climate class 4K4H according to DIN EN 60721-3
- Protection NEMA 4
- Vibration stability 4M5 according to DIN EN 60721-3
- Electromagnetic compatibility Interference emission according to EN 50081-1,
Interference emission according to EN 50082-2,
10 V/m according to EN 61000-4-3

Mechanical construction

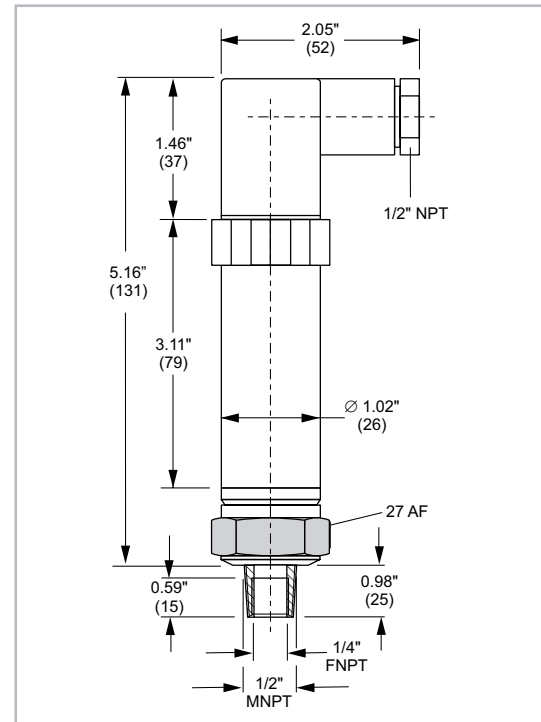
- Process connection 1/2" MNPT with 1/4" FNPT to 600 psi,
1/2" MNPT with 0.43" I.D. over 600 psi
- Materials in contact with medium Process connection and housing:
304 SS
Fill Fluid: silicone oil
Process diaphragm: 304SS
- Electrical connection 4-pole plug connection according to ISO 4400
with 1/2" NPT conduit entry

Power supply

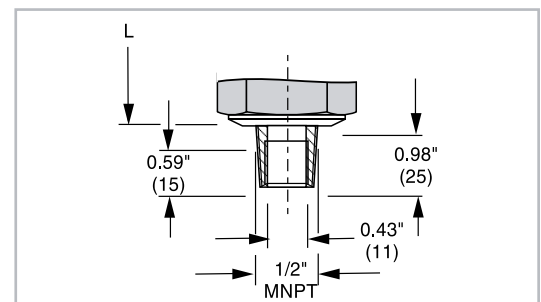
- Supply voltage 12 to 30 V DC at 5% wave
- Auxiliary power U_b Short circuit current < 100 mA
Power consumption < 0.8 W

¹⁾ FS = Full Scale = Measuring range

Dimensions in inches (mm) and materials



PMP131-A22

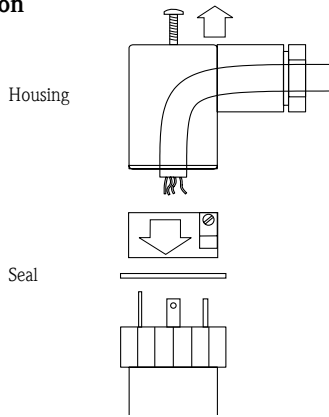


PMP131-A23....
High pressure version

Cerabar T PMP131

Electrical connection

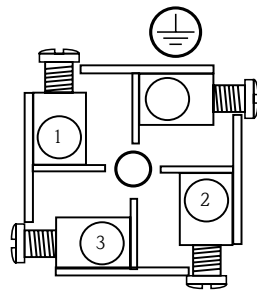
Plug version



Electrical connector

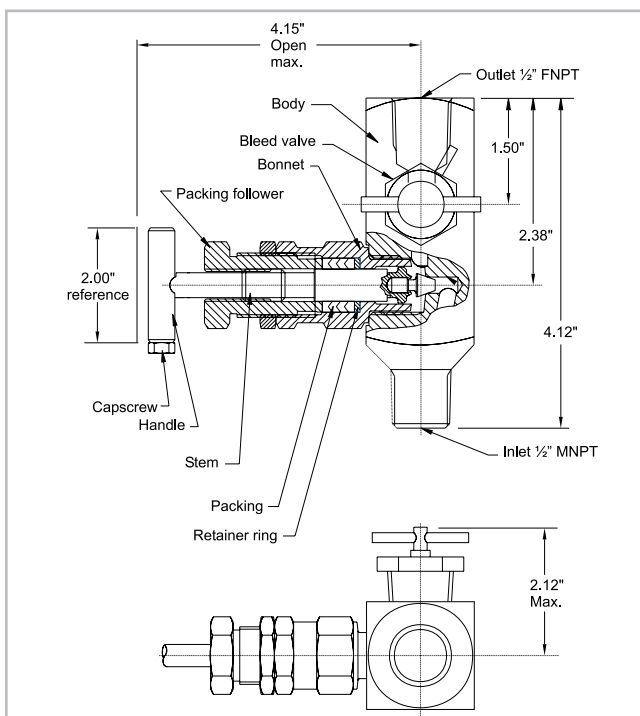
Analogue output 4 to 20 mA
2-wire

- ① Power supply and output (+)
- ② Power supply and output (-)
- ③ not assigned
- ⊕ Ground (PE)



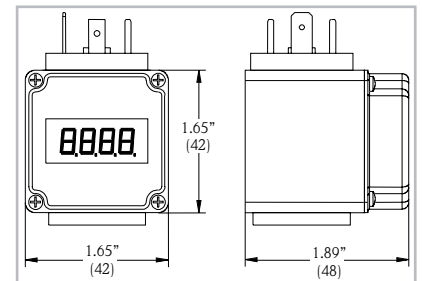
Accessories - Block and bleed valve

- Block and bleed valve Part No. 71037610 (316SS, PTFE)
Part No. 71037611 (316SS, grafoil)
max. 450 °F / 4800 psi
nom. 200 °F / 6000 psi
Teflon® packing
½" MNPT and ½" FNPT

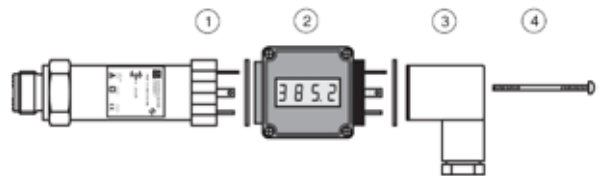


Accessories - MINIDIS display for plug version

- Display 4 digits, red LED, loop powered to use in 4 to 20 mA loops, angular connector DIN 43650 0.3" (7.62 mm) display height, turnable in angle of 90°
- Display range -1999 to +9999, programmable by two buttons
- Protection class NEMA 4
- Material plastic PA6 GF30, face plate PMMA
- Voltage drop ≤ 5 V (equivalent burden of max. 250 Ω)
- Temperature range 32 to 140 °F (0 to 60 °C) Ambient
- Programming By means of two keys, menu-guided; display scale, decimal point, damping, error message
- Dimensions in inches (mm)



Installation of MINIDIS



Mechanical connection (display rotated 90° compared to delivery status)

- Insert the MINIDIS display ② between the plug ③ and plug base ① of the sensor.
- Replace the screw ④ with the extended screw included in the package.
- Place seals (included) between sensor/MINIDIS display and MINIDIS display/plug
- The display can be rotated 90°
- A sticker which is included in the package and contains information on the engineering units can be affixed beneath the LED display.

Cerabar T PMP131

Measuring ranges

for Cerabar T PMP131-A2201xxx

	Measuring range, Unit	Overload
Code	Gauge pressure (psi)	
Q4R	0 to 150 psig	600 psi
Q4S	0 to 300 psig	1500 psi

please add to 'Order no.'

for Cerabar T PMP131-A2301xxx

	Measuring range, Unit	Overload
Code	Gauge pressure (psi)	
Q4V	0 to 1000 psig	3600 psi
Q74	0 to 6000 psig	9000 psi

please add to 'Order no.'

Many other models, versions and options are available. Please contact Endress+Hauser for more information.

* please add code for measuring range

Product	Version	Order no.	Price/piece in \$			we hereby order:	total price:
			1 to 5	6 to 15	16 to 35		
PMP131 150 & 300 psi	Plug version and gauge pressure connection	PMP131-A2201 ____ *	\$242.00	\$218.00	\$197.00	pcs	\$
PMP131 1000 & 6000 psi	Plug version and gauge pressure connection	PMP131-A2301 ____ *	\$242.00	\$218.00	\$197.00	pcs	\$
Accessories	Block & bleed valve, 1/2" NPT, 316SS, PTFE	71037610	\$140.00			pcs	\$
	Block & bleed valve, 1/2" NPT, 316SS, grafoil	71037611	\$165.00			pcs	\$
	MINIDIS, display for Cerabar T with analog output	52022914	\$204.00	\$184.00	\$166.00	pcs	\$

Net excluding cost of shipping and taxes.

Acceptance per our Standard Terms and Conditions (find at www.e-direct.us).

Total price:

FOB Greenwood, IN; shipped pre-paid; shipping charges and applicable taxes added to invoice.

\$ _____

E-direct catalog (free)

Shipping method

Ground

Priority One Day

Priority Two Day



E-direct
Endress+Hauser, Inc.
2350 Endress Place
Greenwood, IN 46143

(For customers in the USA only)

Online Shop www.e-direct.us

Order: by phone 888-EH DIRECT
(343-4732)

by fax 800-321-7754

For special requests, e-mail us: e-direct@us.endress.com

Warranty

Should an instrument fail during the 1 year warranty period, a replacement unit will be provided.

Delivery

Shipment from receipt of order for quantities 1-3 within 2 business days.

Endress+Hauser 

People for Process Automation