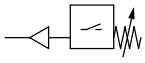
Sensor technologies → Pressure sensors

Pressure sensor, Series PE2

► Operating pressure: -1 - 40 bar ► electronic ► Output signal: 1 x PNP / 2 x PNP ► electr. connection: Plug, M12x1, 5-pin ► with sensor element based on piezo resistance

Measurement	Relative pressure
Display	LCD display, 4 digits
Units displayed	bar, psi, MPa
Operating pressure display	2 LED
Switching logic	NO/NC (customer-specific programming)
Ambient temperature min./max.	-10°C / +60°C
Medium temperature min./max.	-10°C / +60°C
Medium	Compressed air
Oil content of compressed air	0 mg/m³ / 40 mg/m³
Shock resistance max. (XYZ direction)	30 g
Vibration resistance (XYZ direction)	3 g (5 - 500 Hz)
Precision (% of full scale value)	± 1,5 %
Switching time	< 10 ms
Switching point	adjustable 0-100%
Resetting point	adjustable 0-100%
Hysteresis	adjustable
DC operating voltage min./max.	15 V - 32 V
Local power consumption	<50 mA
DC switching current, max.[A]	0,5
Maximum load (analog current output)	128 Ω
Short circuit resistance	short circuit resistant
Mounting orientation	Any
Mounting types	via through holes
Protection class	IP 65
Weight	0.3 kg
Materials:	
Housing	Aluminum
Seals	Acrylonitrile Butadiene Rubber
Electr. connection	Aluminum

	Type	Operating pressure range min./max.	Protection against overpressure	Output signal	Compressed air connection	Fig.	Part No.
		[bar]					
	PE2-P1-G014	-1 / 1	10 bar	1 x PNP	internal thread, G 1/4	Fig. 1	**0821100101**
	PE2-P2-G014			2 x PNP	internal thread, G 1/4	Fig. 1	**0821100105**
	PE2-P1-F001			1 x PNP	Flange with O-ring, Ø 5x1,5	Fig. 2	0821100102
	PE2-P2-F001			2 x PNP	Flange with O-ring, Ø 5x1,5	Fig. 2	0821100106

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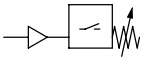
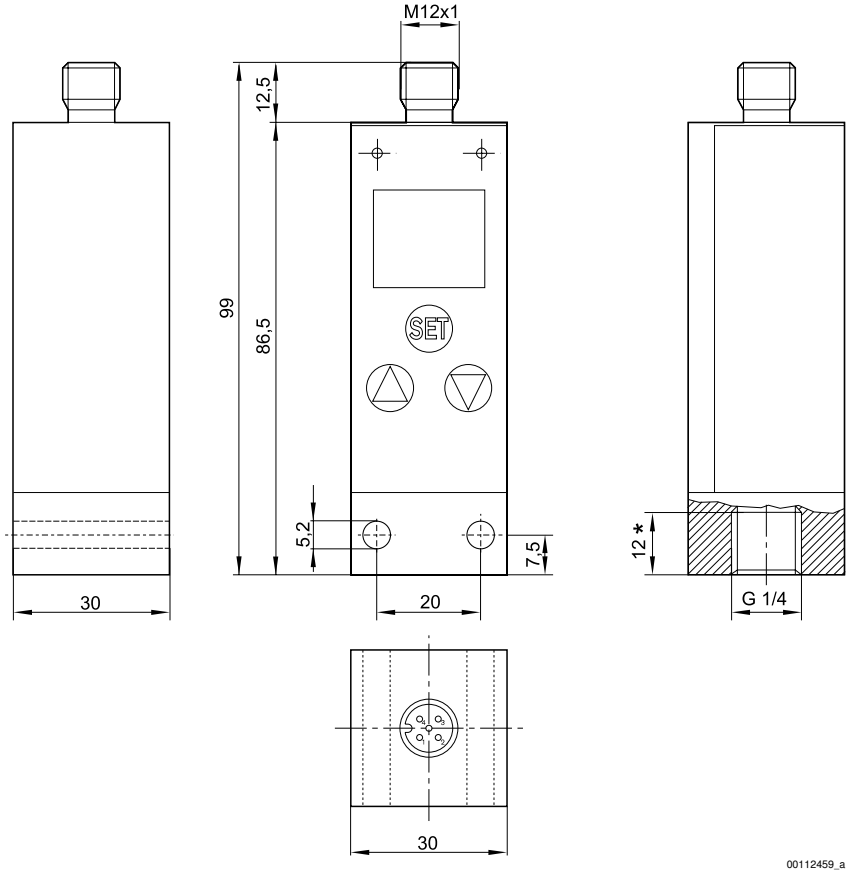
	PE2-P1-G014	0 / 16	30 bar	1 x PNP	internal thread, G 1/4	Fig. 1	**0821100103**
	PE2-P2-G014	0 / 16	30 bar	2 x PNP	internal thread, G 1/4	Fig. 1	**0821100107**
	PE2-P1-F001	0 / 16	30 bar	1 x PNP	Flange with O-ring, Ø 5x1,5	Fig. 2	**0821100104**
	PE2-P2-F001	0 / 16	30 bar	2 x PNP	Flange with O-ring, Ø 5x1,5	Fig. 2	**0821100108**
	PE2-P1-G014	0 / 40	100 bar	1 x PNP	internal thread, G 1/4	Fig. 1	**0821100094**

Fig. 1



* minimum screw-in depth

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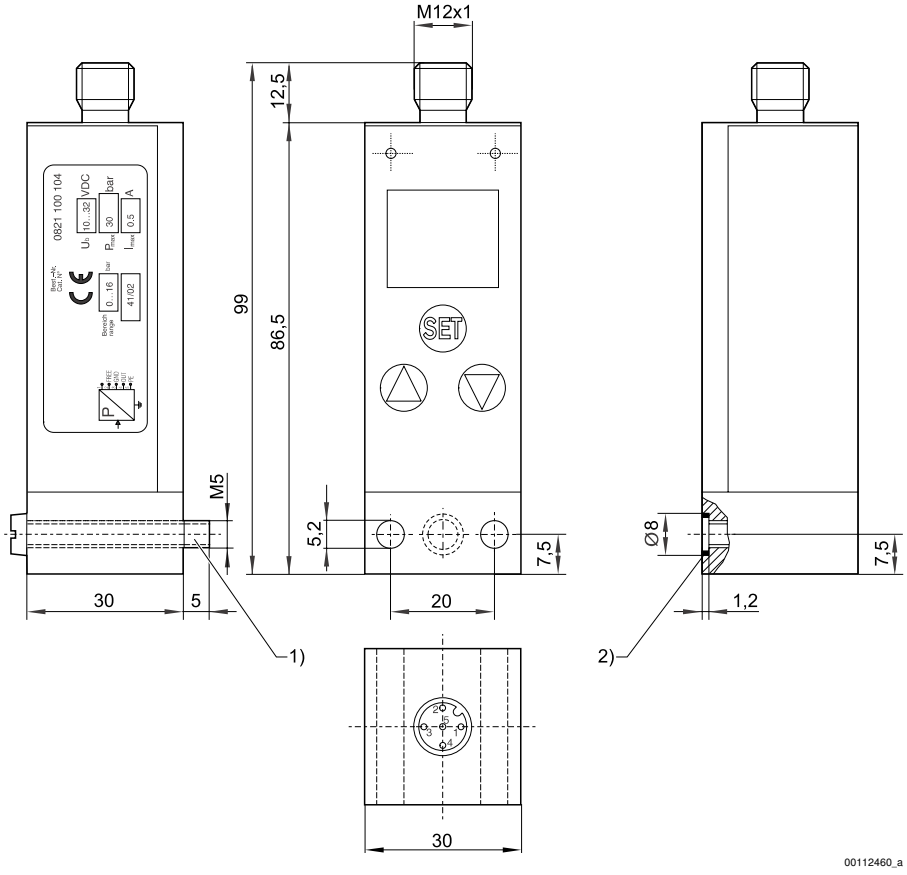
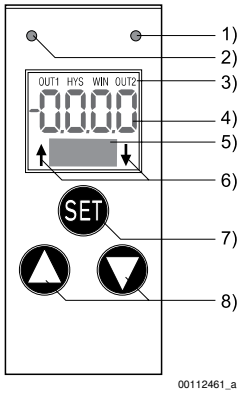
Fig. 2



1) cylinder screw M5x35 (included in scope of delivery)
2) O-ring Ø5x1,5 (included)

Display and operation area



1) LED for switch output 2
2) LED for switch output 1
3) operating modes
4) pressure indicator
5) switching function graph
6) indicator assistance
7) confirm selection menu selection
8) button to increase or decrease the switching or resetting point

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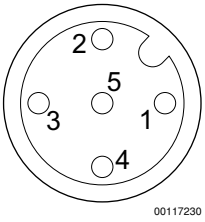
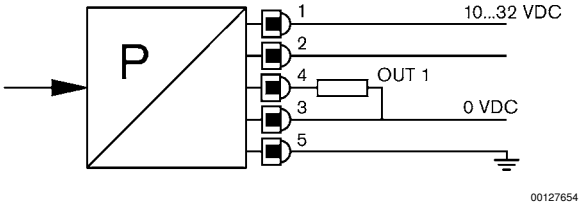
Pin assignment

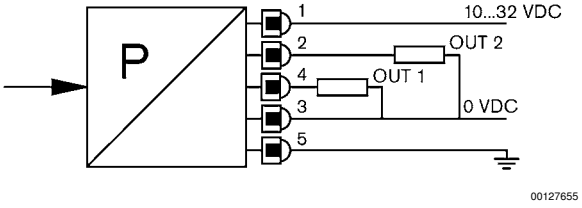


pin 1: signal + UB; color: brown
pin 2: signal: out 2 (PNP)/analog 4 - 20 mA; color: white
pin 3: signal: 0 volt; color: blue
pin 4: signal: out 1 (PNP); color: black
pin 5: signal: PE; color: gray

Block diagram, 1 x PNP



Block diagram, 2 x PNP



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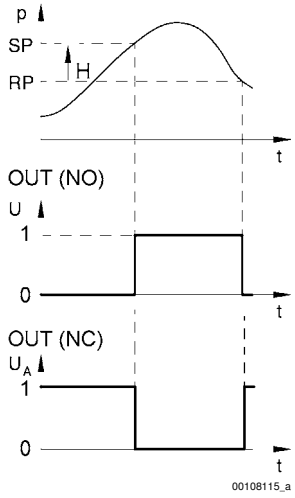
Pressure-voltage characteristics curve



H: Hysteresis
SP = switching point
RP = resetting point
Out (NC): Switch output, break contact
Out (NO): Switch output, make contact