Pressure sensor, Series PE2

- Operating pressure -1 ... 1, 0 ... 16 bar
- electronic
- Output signal analog 1 x PNP, 1 x analog 4-20 mA
- Electr. connection Plug M12x1 5-pin
- Compressed air connection Internal thread G 1/4 Flange with O-ring Ø 5x1,5

Type	electronic
Function	1 x PNP, 2 x PNP 1x PNP and 1x analog
Mounting orientation	Any
Certificates	CE declaration of conformity, EMV
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 75 °C
Medium temperature min./max.	-10 ... 75 °C
Medium	Compressed air, Neutral gases
Measurement	Relative pressure
Display	OLED
Units displayed	bar mbar psi kPa MPa %
Switching logic	Hysteresis function NO/NC (programmable) Window function NO/NC (programmable)
Operating pressure display	2 LED
Shock resistance max.	30 g
Vibration resistance	5 g (10 - 150 Hz)
Precision (% of full scale value)	± 1 % including temperature drift
Switching time	10 ms at loads 100 kΩ > 10 ms at loads > 100 kΩ
Switching point	Adjustable ≥ 0.5% ... 100% FS
Resetting point	Adjustable 0% FS to SP -0.5% FS (or +0.5% FS when SP 0)
Hysteresis	adjustable
Switching/reset delay	adjustable
DC operating voltage min./max.	15 ... 32 V DC
Analog output	1 x PNP, 1 x analog 4-20 mA
Quiescent current consumption	50 mA
Maximum load (analog current output)	600 Ω
Short circuit resistance	short circuit resistant
Mounting types	via through holes
Protection class	IP65
Electr. connection	Plug M12x1 5-pin
Weight	0,3 kg

Technical data

Part No.		Type	Operating pressure range
			min./max.
R412010848		PE2-P1-G014-V10-010-M012	-1 ... 1 bar
R412010849		PE2-P1-F001-V10-010-M012	-1 ... 1 bar
R412010853		PE2-P2-G014-V10-010-M012	-1 ... 1 bar
R412010856		PE2-PA-G014-V10-010-M012	-1 ... 1 bar
R412010850		PE2-P1-G014-000-160-M012	0 ... 16 bar
R412010851		PE2-P1-F001-000-160-M012	0 ... 16 bar
R412010854		PE2-P2-G014-000-160-M012	0 ... 16 bar
R412010855		PE2-P2-F001-000-160-M012	0 ... 16 bar
R412010857		PE2-PA-G014-000-160-M012	0 ... 16 bar
R412010858		PE2-PA-F001-000-160-M012	0 ... 16 bar

Part No.	Protection against overpressure	Output signal	Output signal	Compressed air connection
		Analog	digital	
R412010848	10 bar	-	1 x PNP	Internal thread, G 1/4
R412010849	10 bar	-	1 x PNP	Flange with O-ring, Ø 5x1,5
R412010853	10 bar	-	2 x PNP	Internal thread, G 1/4
R412010856	10 bar	4 ... 20 mA	1 x PNP	Internal thread, G 1/4
R412010850	40 bar	-	1 x PNP	Internal thread, G 1/4
R412010851	40 bar	-	1 x PNP	Flange with O-ring, Ø 5x1,5
R412010854	40 bar	-	2 x PNP	Internal thread, G 1/4
R412010855	40 bar	-	2 x PNP	Flange with O-ring, Ø 5x1,5
R412010857	40 bar	4 ... 20 mA	1 x PNP	Internal thread, G 1/4
R412010858	40 bar	4 ... 20 mA	1 x PNP	Flange with O-ring, Ø 5x1,5

Part No.	Fig.
R412010848	Fig. 1
R412010849	Fig. 2
R412010853	Fig. 1
R412010856	Fig. 1
R412010850	Fig. 1
R412010851	Fig. 2
R412010854	Fig. 1
R412010855	Fig. 2
R412010857	Fig. 1
R412010858	Fig. 2

Technical information

Menu navigation is based on the VDMA specification with an additional plain text menu.

Technical information

Material	
Housing	Aluminum, Vibration-ground
Seals	Fluorocaoutchouc
Electr. connection	Aluminum with polymer insert
flange connection	Nitrile butadiene rubber, Fluorocaoutchouc

Dimensions

Fig. 1

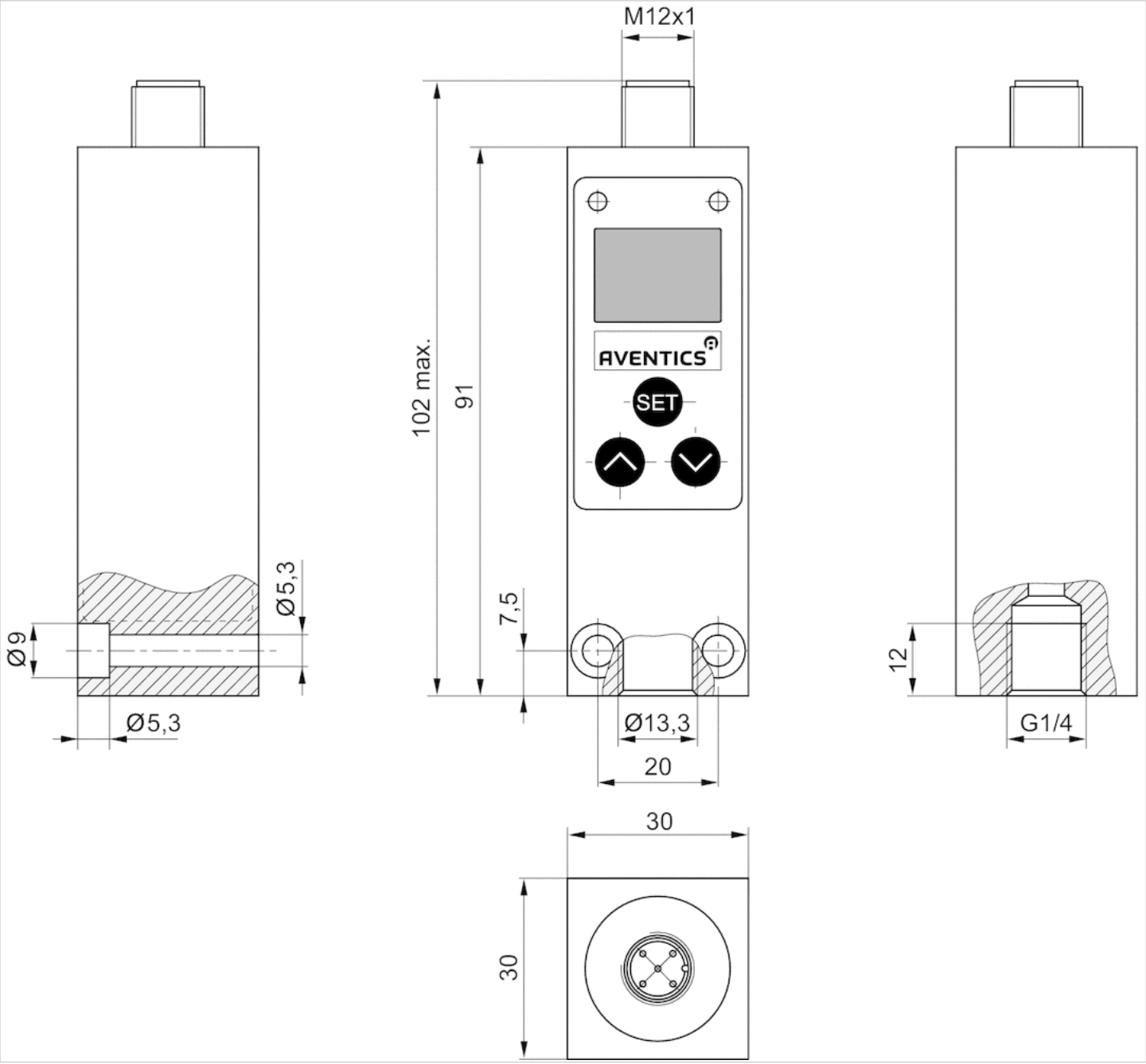
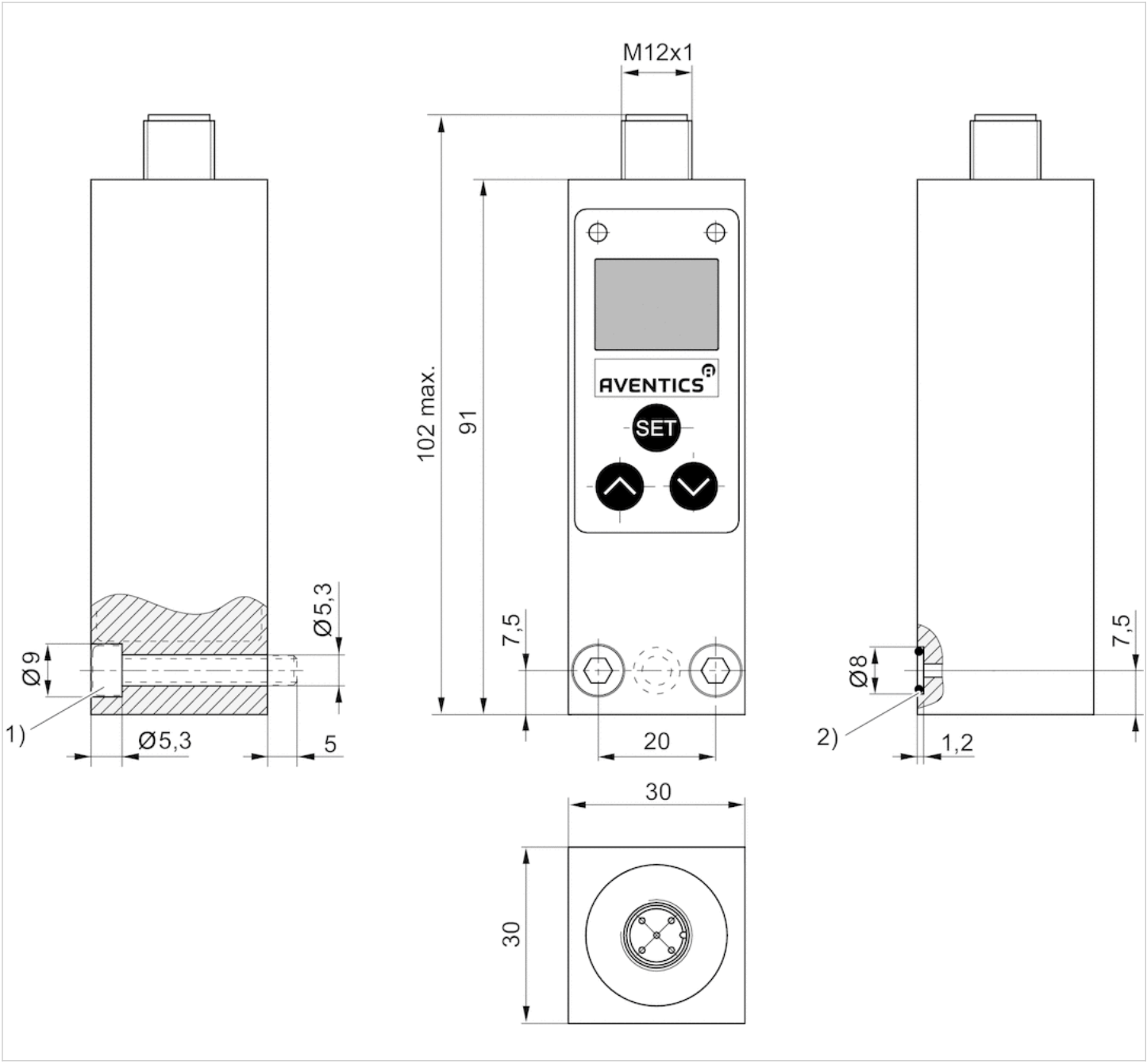
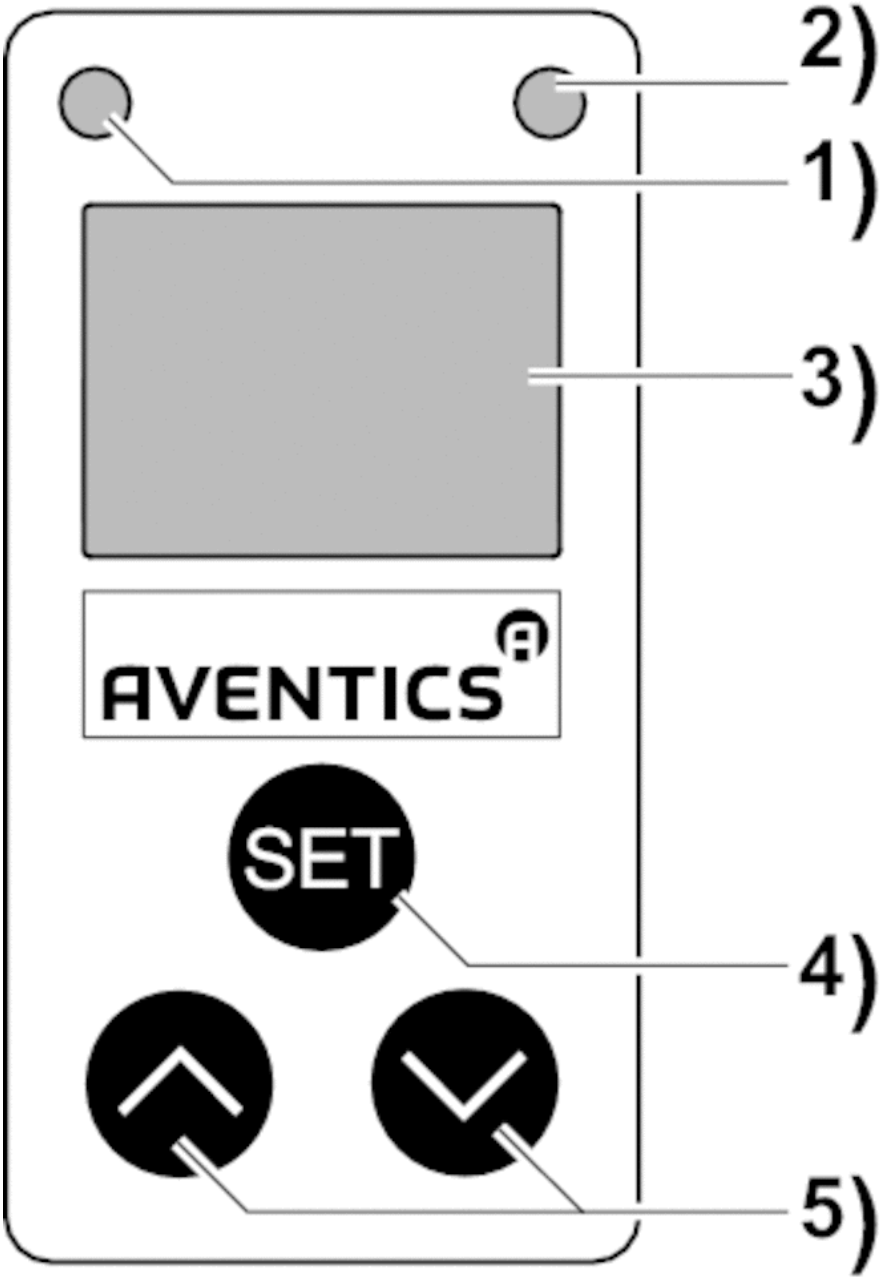


Fig. 2



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

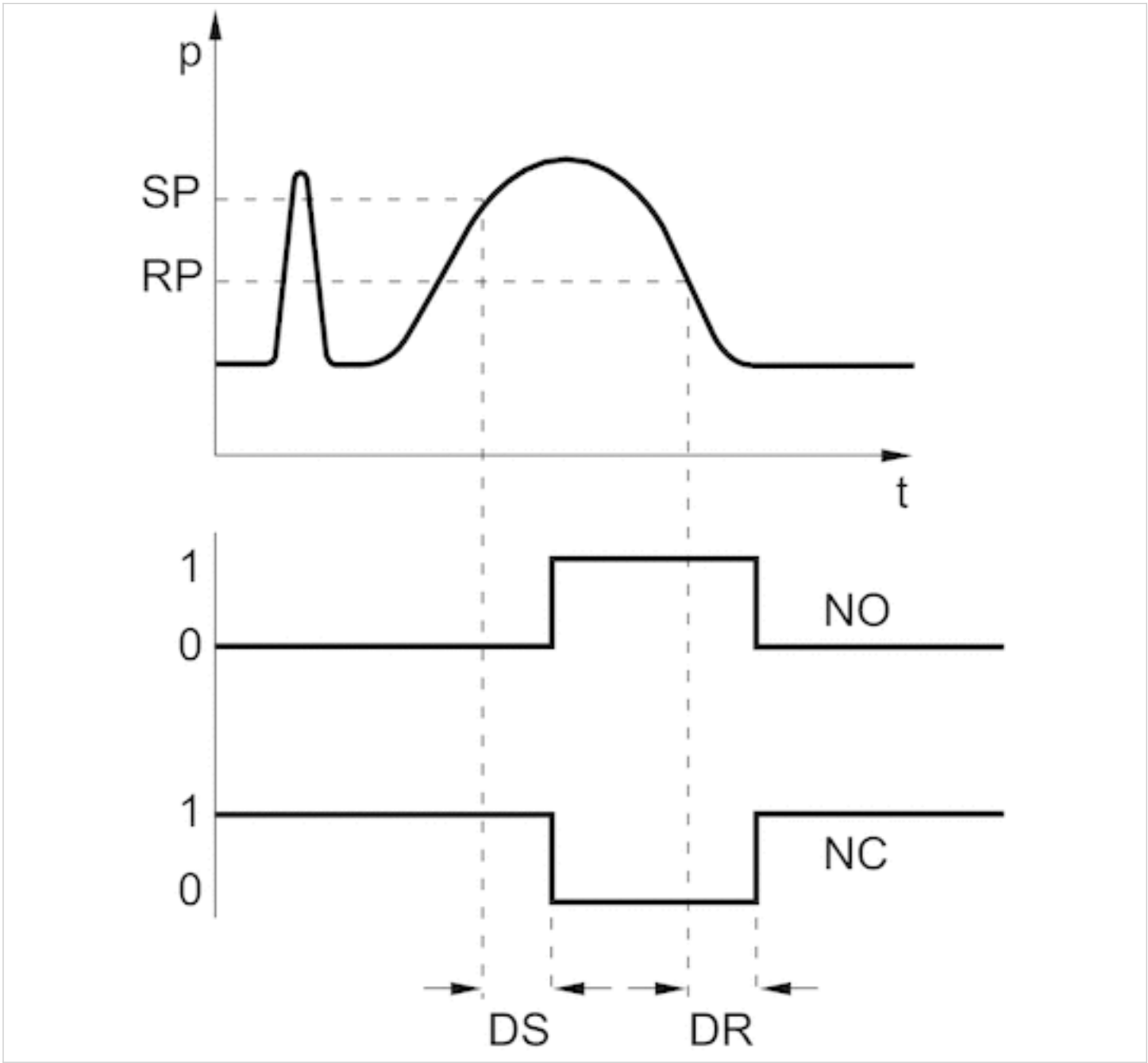
Display and operation area



1) LED for switch output 1
2) LED for switch output 2
3) Display (pressure, operating modes, navigation)
4) Confirm menu/menu item selection
5) Button for menu item/parameter change selection

Diagrams

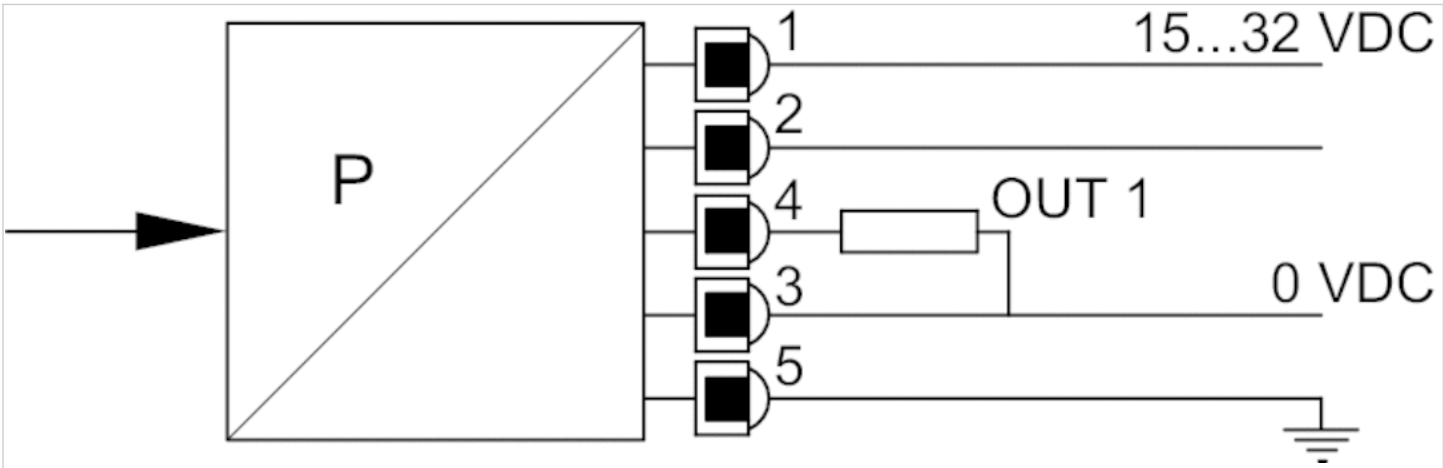
Pressure-voltage characteristics curve



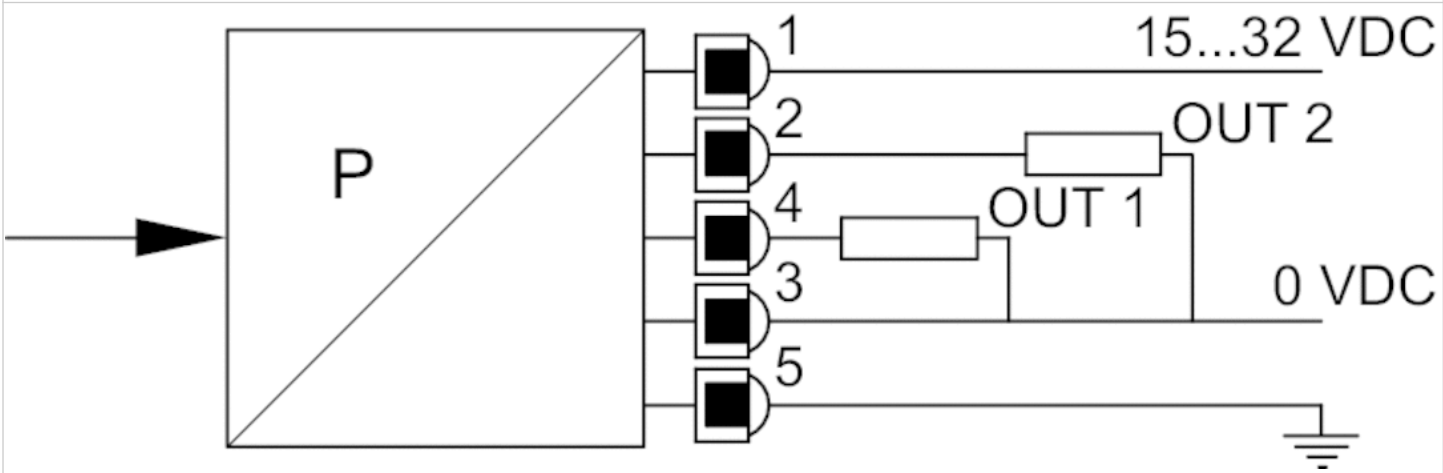
SP = switching point
RP = resetting point
NO = Switching function open
NC = Switching function closed without current
DS = Delay for the switching point
DR = Delay for the resetting point

Circuit diagram

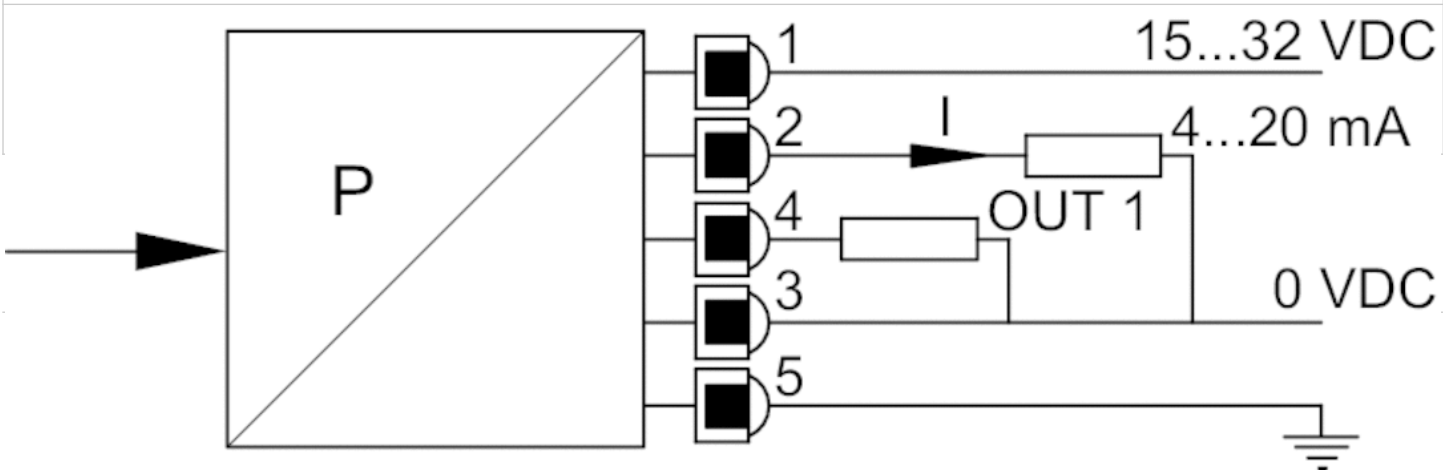
Block diagram, 1 x PNP



Block diagram, 2 x PNP



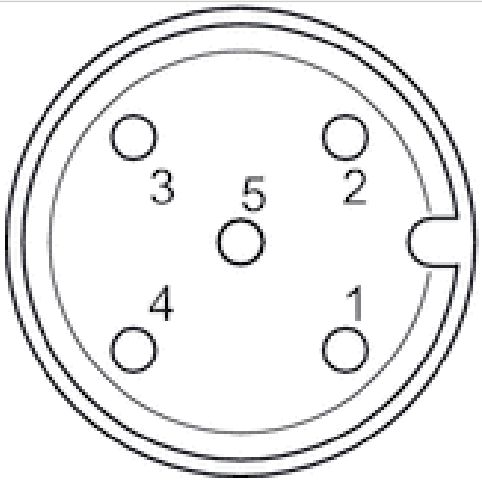
Block diagram, 1 x PNP and 1 x analog



Using the wrong EPLAN macro may result in short circuits.

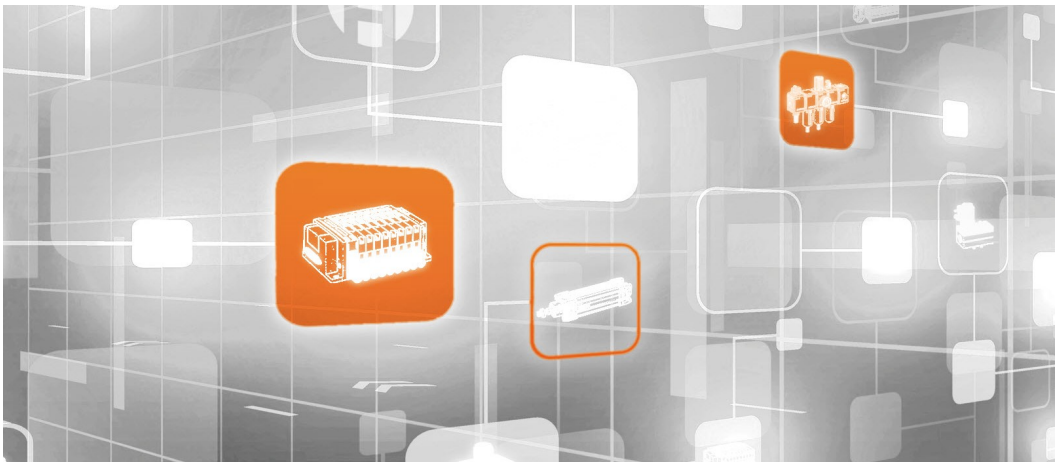
Pin assignments

Pin assignments



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: FE, color: gray

Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



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