

Series PE6

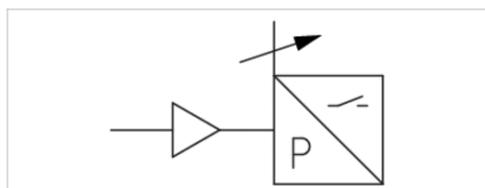


AVENTICS™ Series PE6



Pressure sensor, Series PE6

- Operating pressure -1 ... 0 0 ... 10 bar
- electronic
- with sensor element based on piezo resistance
- Electr. connection Plug M8x1 4-pin
- Compressed air connection Flange with O-ring Ø 1,2x1



Type	electronic
Function	2 x PNP
Compressed air connection	Flange with O-ring Ø 1,2x1
Working pressure min./max.	See table below
Ambient temperature min./max.	0 ... 60 °C
Medium temperature min./max.	0 ... 50 °C
Medium	Compressed air
Max. oil content of compressed air	1 mg/m ³
Measurement	Relative pressure
Display	LED
Switching logic	NO (make contact)
Operating pressure display	2 LED
Shock resistance max.	10 g
Vibration resistance	10 - 55 Hz, 0,1 mm
Repeatability (% of full scale value)	± 1 %
Switching time	2 ms
Switching point	adjustable 0 ... 100%
Resetting point	adjustable 0 ... 100%
Quiescent current consumption	20 mA
Short circuit resistance	clocking
Mounting types	via flange
Protection class	IP40
Electr. connection	Plug M8x1 4-pin
Weight	0.006 kg

Technical data

Part No.	Type	Operating pressure range		Protection against overpressure
		min./max.		
R412007880	PE6-P2-L HYST. FEST	-1 ... 0 bar		5 bar
R412007881	PE6-P2-L HYST EINST	-1 ... 0 bar		5 bar
R412007882	PE6-P2-S HYST FEST	-1 ... 0 bar		5 bar
R412007883	PE6-P2-S HYST EINST	-1 ... 0 bar		5 bar
R412007884	PE6-P2-L HYST. FEST	0 ... 10 bar		15 bar
R412007885	PE6-P2-L HYST. EINST	0 ... 10 bar		15 bar
R412007886	PE6-P2-S HYST. FEST	0 ... 10 bar		15 bar
R412007887	PE6-P2-S HYST. EINST	0 ... 10 bar		15 bar

Part No.	Output signal	Precision (% of full scale value)	Hysteresis
	digital		
R412007880	2 x PNP	± 3 %	2% of the final value, fixed
R412007881	2 x PNP	± 3 %	adjustable

Part No.	Output signal	Precision (% of full scale value)	Hysteresis
	digital		
R412007882	2 x PNP	$\pm 3 \%$	2% of the final value, fixed
R412007883	2 x PNP	$\pm 3 \%$	adjustable
R412007884	2 x PNP	$\pm 3 \%$	2% of the final value, fixed
R412007885	2 x PNP	$\pm 3 \%$	adjustable
R412007886	2 x PNP	$\pm 3 \%$	2% of the final value, fixed
R412007887	2 x PNP	$\pm 3 \%$	adjustable

Part No.	Mounting orientation
R412007880	L (horizontal)
R412007881	L (horizontal)
R412007882	S (vertical)
R412007883	S (vertical)
R412007884	L (horizontal)
R412007885	L (horizontal)
R412007886	S (vertical)
R412007887	S (vertical)

Technical information

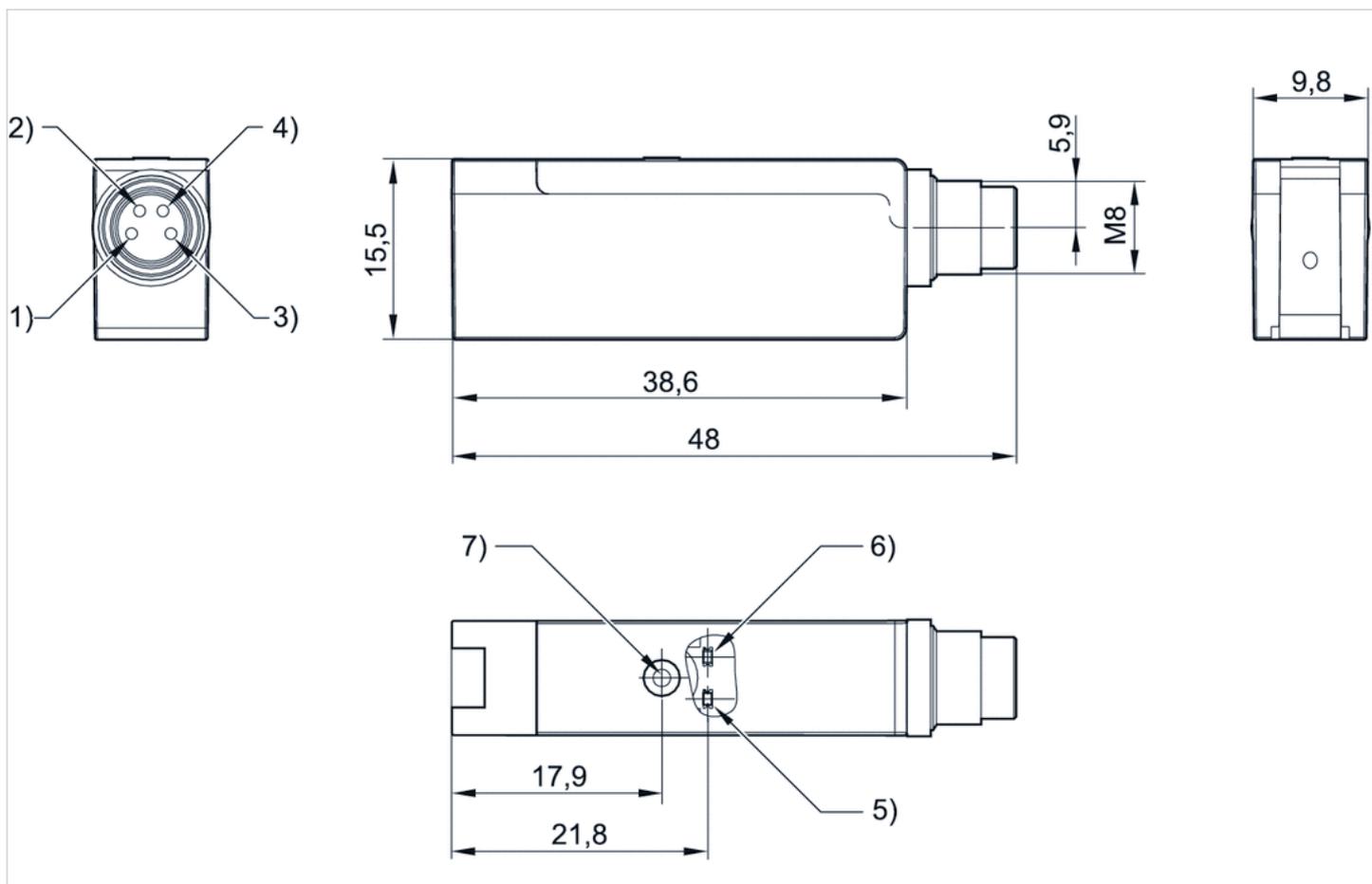
Notice: This product may only be operated with oil-free, dry compressed air.
Flange plate with screws and seals in scope of delivery

Technical information

Material	
Housing	Polycarbonate
Seals	Acrylonitrile butadiene rubber
Electr. connection	Brass, nickel-plated

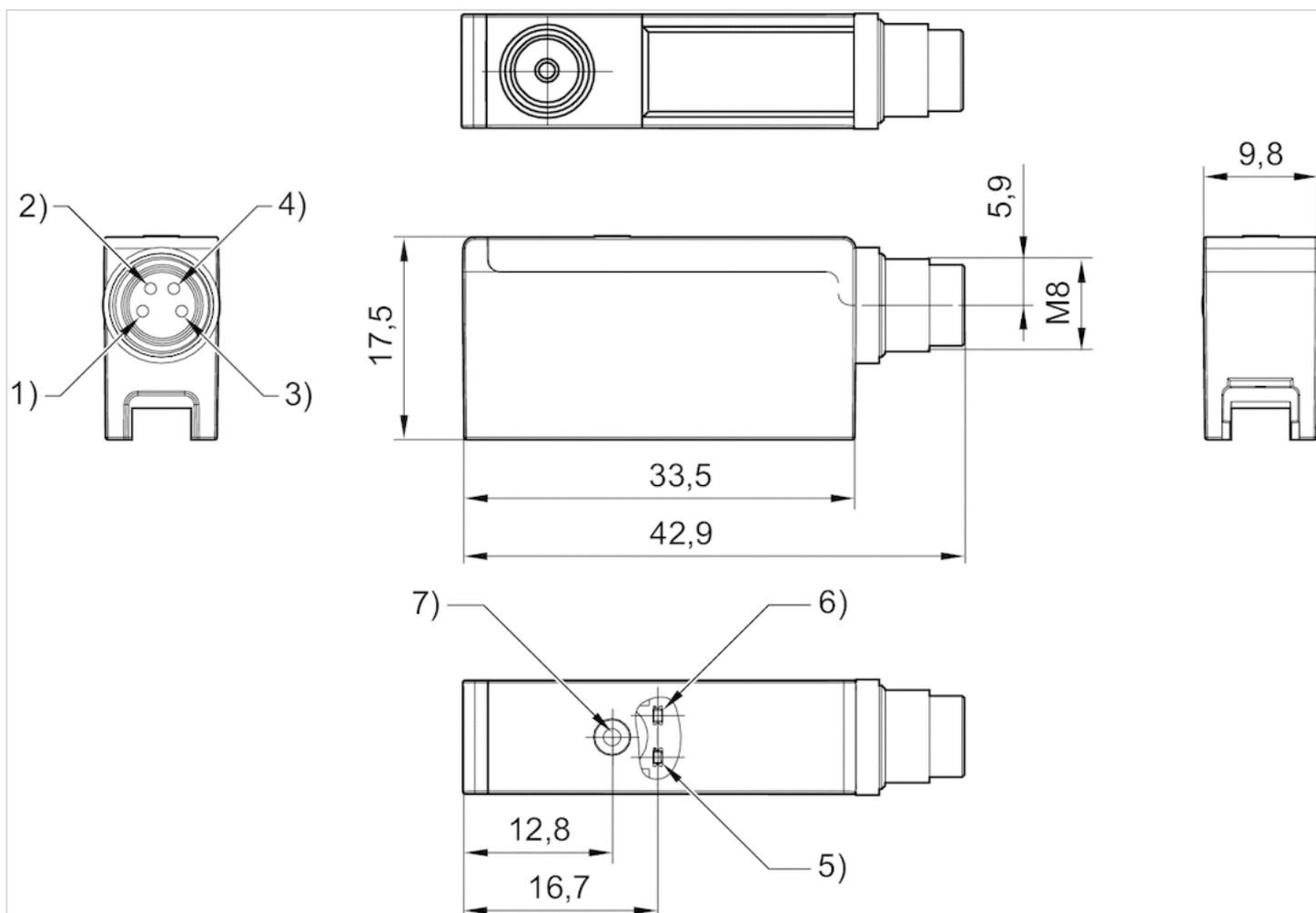
Dimensions

PE6...-S



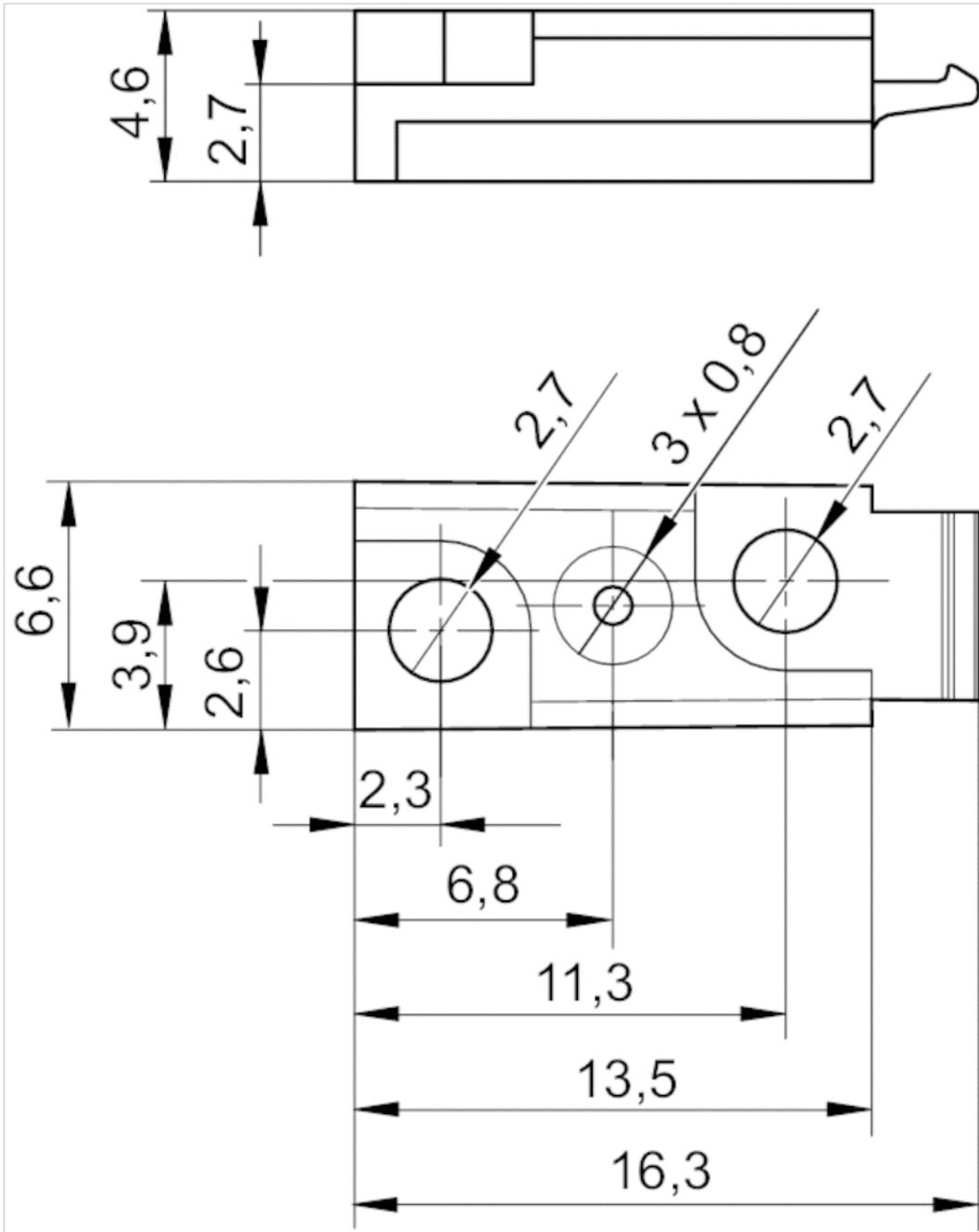
- 1) +UB
- 2) Switch output 2
- 3) GND
- 4) Switch output 1
- 5) LED for switch output 2
- 6) LED for switch output 1
- 7) setting knob

PE6...-L

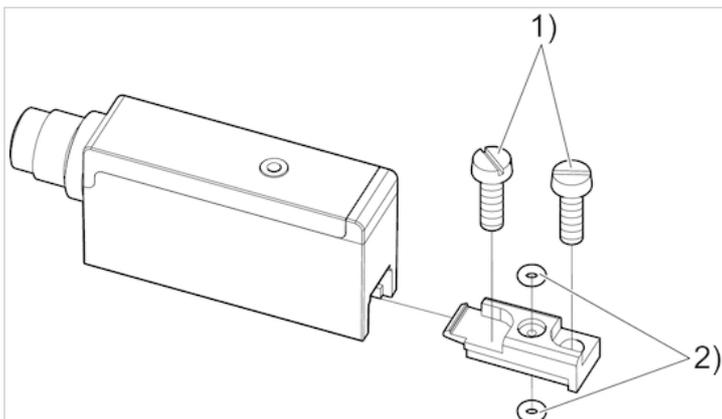


- 1) +UB
- 2) Switch output 2
- 3) GND
- 4) Switch output 1
- 5) LED for switch output 2
- 6) LED for switch output 1
- 7) setting knob

Flange plate, PE6



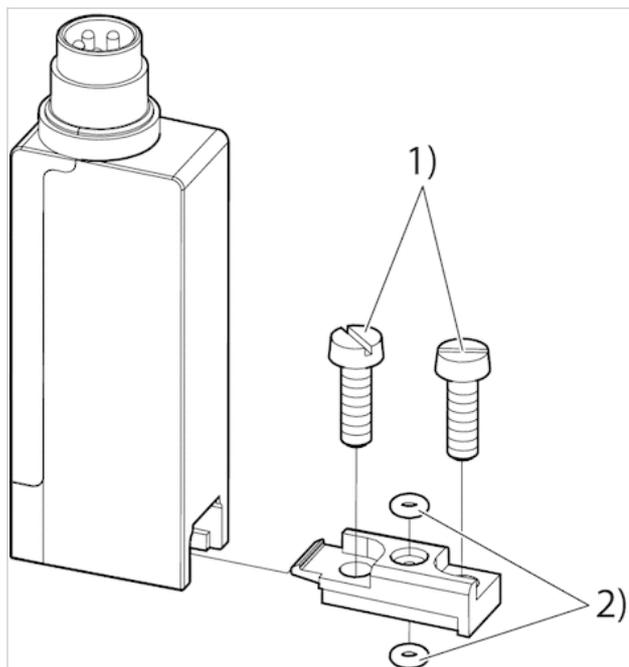
Pressure sensor, PE6...-L



1) Cylinder screw M2,5x8

2) O-ring Ø1,2x1 (included)

Pressure sensor, PE6...-S

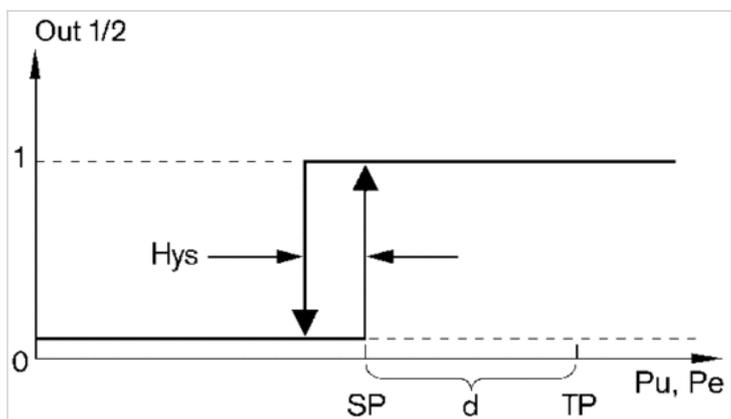


1) Cylinder screw M2,5x8

2) O-ring Ø1,2x1 (included)

Diagrams

switching function (fixed hysteresis)

Vacuum sensor: $d=20\%$ Pressure sensor: $d=5\%$

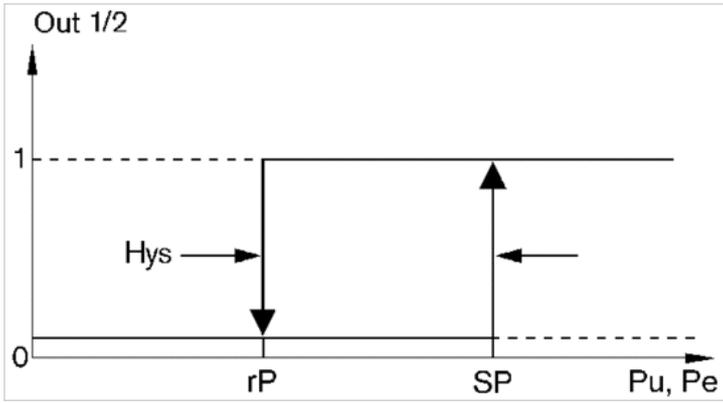
SP = switch-on point, TP = teach point

OUT: switch output

Pu = pressure 0 - vacuum sensor

Pe = pressure > 0 - pressure sensor

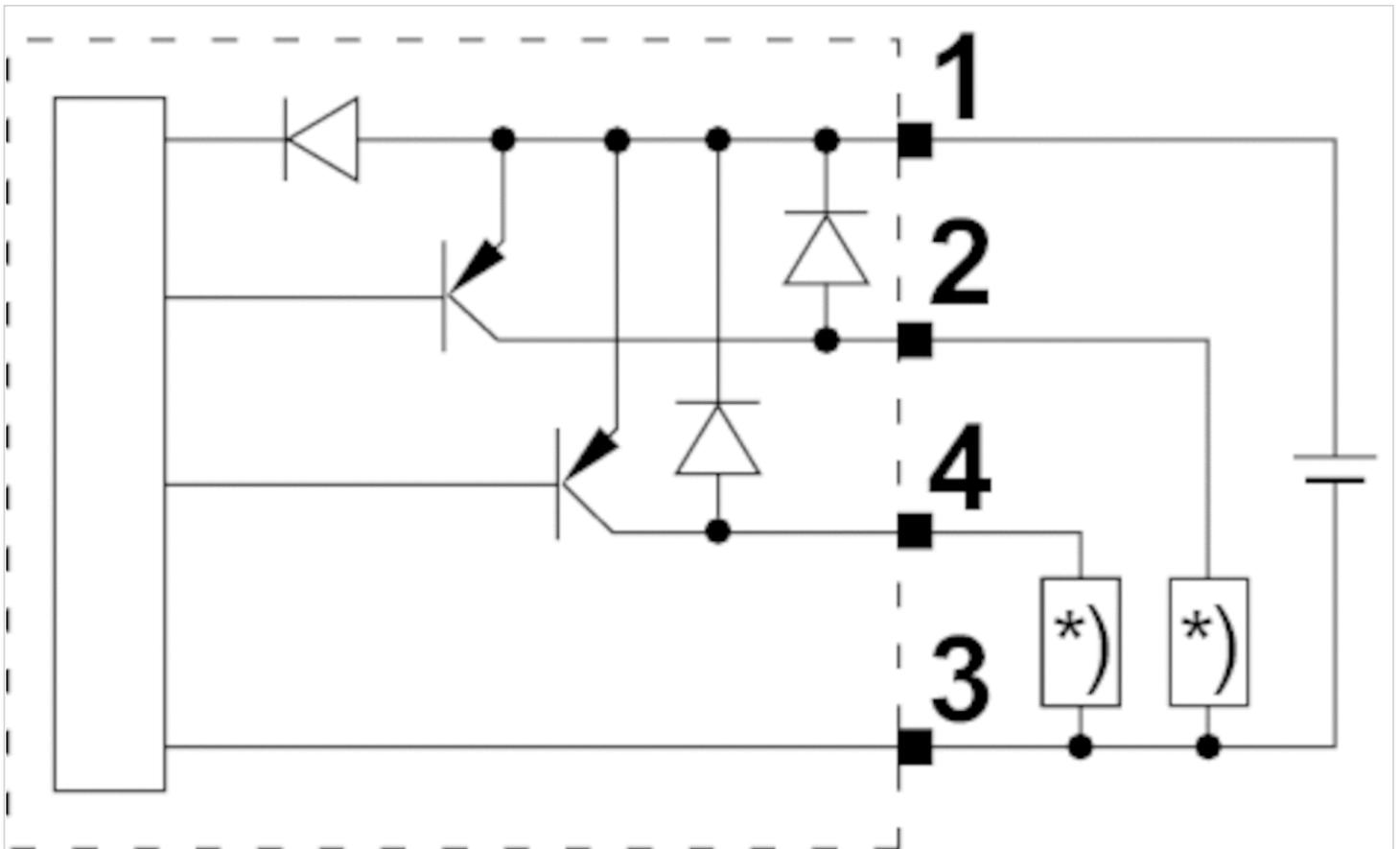
Switching function (adjustable hysteresis)



SP = switch-on point, rP = resetting point
 OUT: switch output
 Pu = pressure 0 - vacuum sensor
 Pe = pressure > 0 - pressure sensor

Circuit diagram

Block diagram



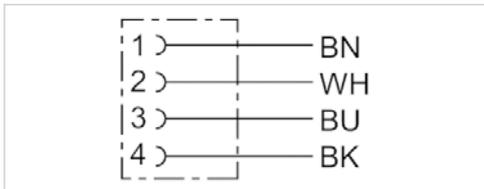
* Storable position

Round plug connector, Series CON-RD

- Socket M8x1 4-pin A-coded straight 180°
- open cable ends
- with cable
- UL (Underwriters Laboratories)
- unshielded



Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.25 mm ²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Certification	Weight
1834484144	4 A	4	4.5 mm	3 m	UL (Underwriters Laboratories)	0.087 kg
1834484146	4 A	4	4.5 mm	5 m	UL (Underwriters Laboratories)	0.14 kg

Technical information

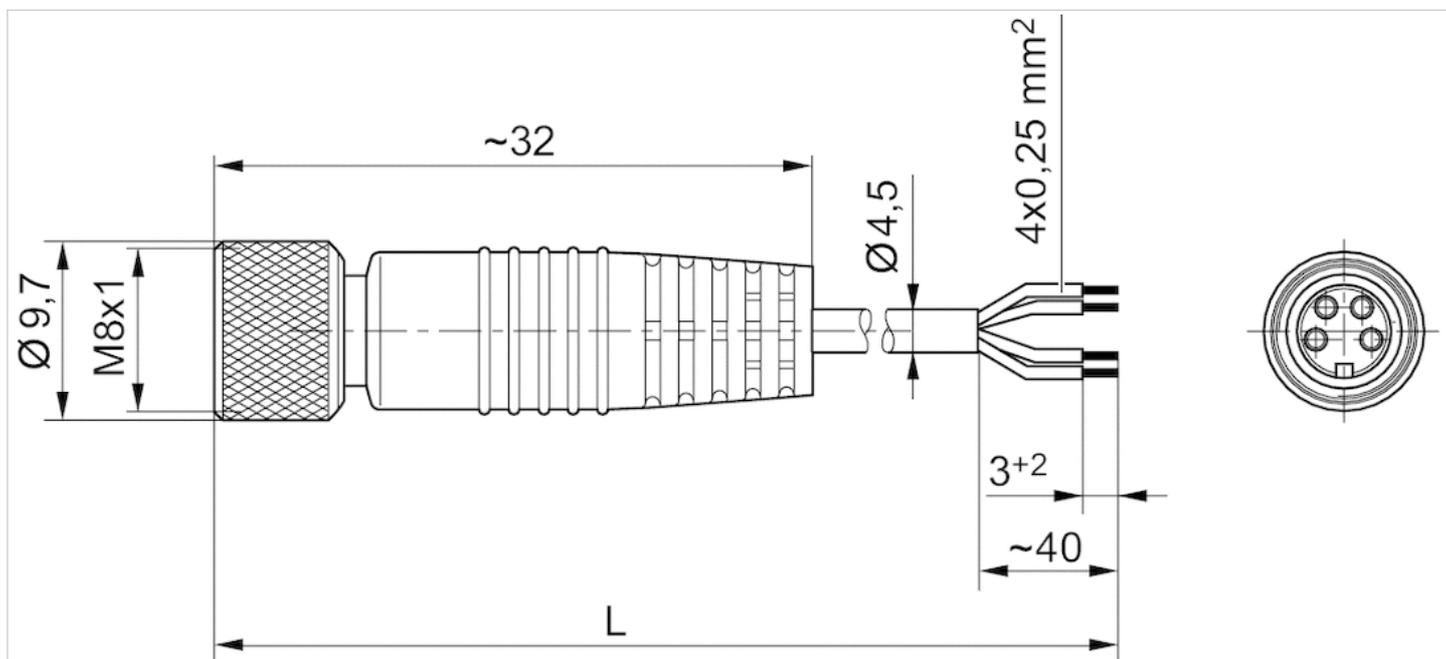
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

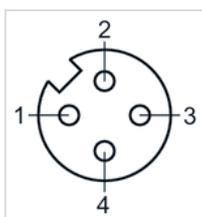
Dimensions



L = length

Pin assignments

Pin assignment, socket



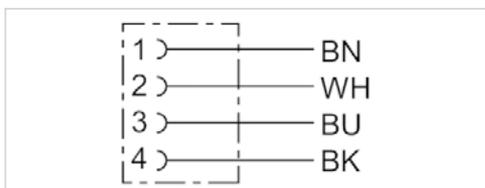
- (1) BN=brown
- (2) WH=white
- (3) BU=blue
- (4) BK=black

Round plug connector, Series CON-RD

- Socket M8x1 4-pin A-coded angled 90°
- open cable ends
- with cable
- unshielded



Ambient temperature min./max.	-25 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.25 mm ²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484145	4 A	4	4.5 mm	3 m	0.086 kg
1834484147	4 A	4	4.5 mm	5 m	0.141 kg

Technical information

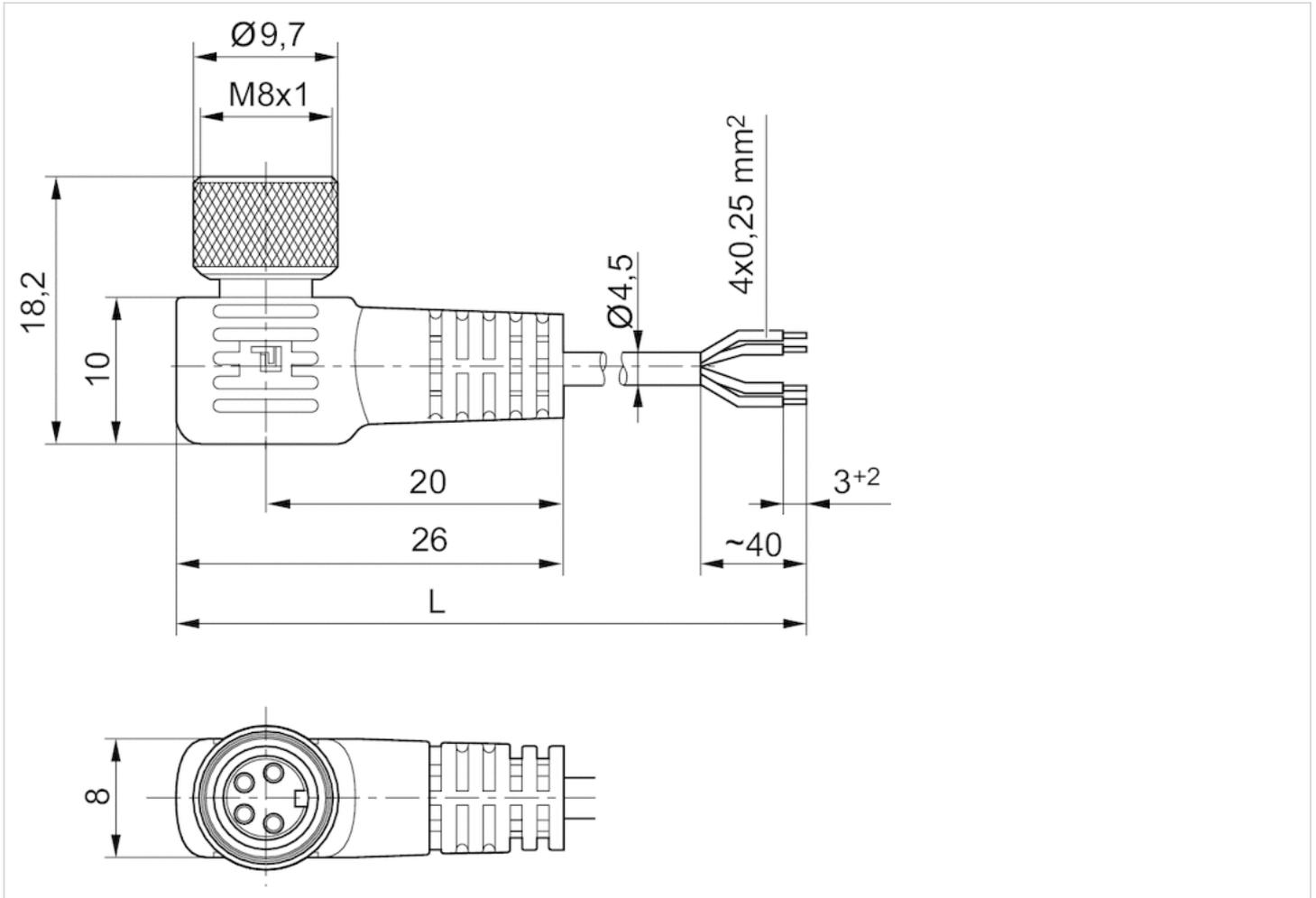
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

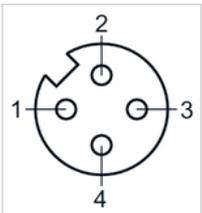
Dimensions



L = length

Pin assignments

Pin assignment, socket



- (1) BN=brown
- (2) WH=white
- (3) BU=blue
- (4) BK=black

Parts kit, Series PE6



Weight

0.003 kg

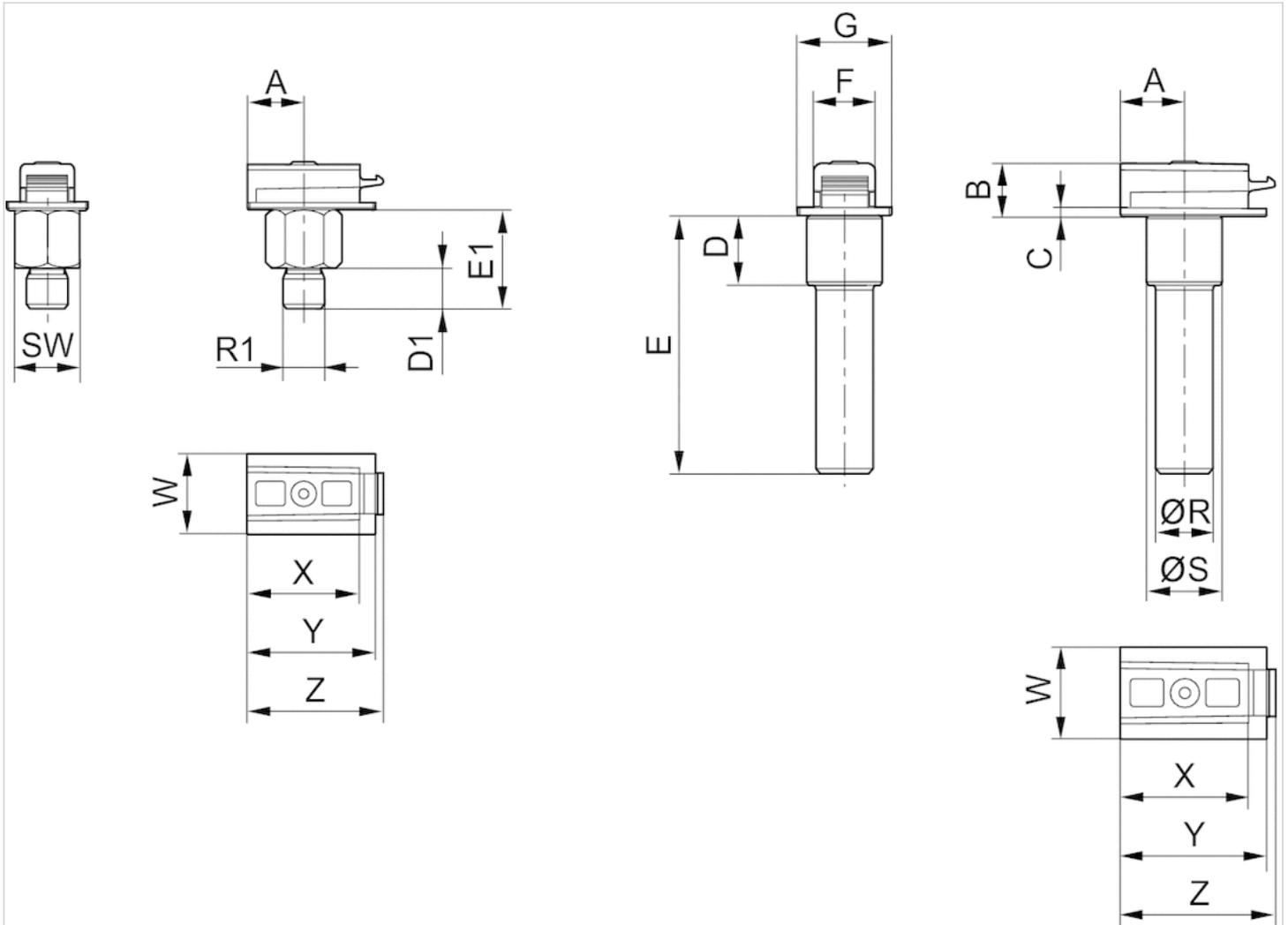
Technical data

Part No.	Suitable for
R412007888	flange with Ø6 pipe connection, flange with M5 thread connection

Technical information

Material	
Housing	Polycarbonate
Seal	Acrylonitrile butadiene rubber

Dimensions



Dimensions

Part No.	A	B	C	D	D1	E	E1	F	G	SW	ØR	R1	ØS	W	X	Y	Z
R412007888	6,8	5,6	1	7,3	5	27,3	12	6,6	9,8	8	6	M5	8	9,8	13,5	15,4	16,2

Material: flange: polycarbonate, pipe: polyoxymethylene, thread M5: aluminum, O-ring: acrylonitrile butadiene caoutchouc

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



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2019-03



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