

Pressure Switches

Electronic pressure sensor, series PE1
for analogue pressure ranges pipe and flange connection

Rexroth
Bosch Group



Technical Data

Type	The fluid signal (pressure) is converted to a proportional current signal 4 - 20 mA	
Operating pressure range	see table	
Hysteresis	$\pm < 0,15\%$ (with ref. to the measure range)	
Reproducibility	2% (of the measured value)	
Ambient temperature range	-10 °C to +85 °C (+14 °F to +185 °F)	
Medium	Compressed air, lubricated or non-lubricated	
Installation position	any	
Weight	0,2 kg (0.4 lbs)	
Materials	Body	Al
Min./max. operational voltage	10 to 32 V DC	
Max. residual ripple (within 10 - 32 V)	10%	
Linearity (with reference to the measurement range)	0,5	
Linearity deviation (with reference to the measurement range)	$< \pm 0,5\%$	
Temperature influence on the output signal,		
zero point/range (FS/10K)	$< \pm 0,3 / < \pm 0,4$	
Min./max. output signal (2-wire technology)	4-20 mA	
Protection class (with mounted plug)	IP 65	



Part no.

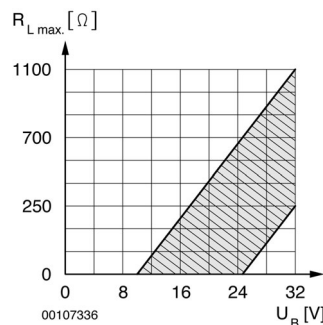
Operating pressure range [bar] (psi)	Electrical connection	Part no. Subplate connection	Part no. Pipe connection
-1 ± 1 ¹⁾ (-15 ± 15 ¹⁾	electrical connector	0821100076	0821100075
0 ± 10 ²⁾ (0 ± 145 ²⁾	form A	0821100080	0821100079
0 ± 25 ³⁾ (0 ± 363 ³⁾	DIN 43 650	0821100084	0821100083
-1 ± 1 ¹⁾ (-15 ± 15 ¹⁾	plug-in connection	0821100078	0821100077
0 ± 10 ²⁾ (0 ± 145 ²⁾	M12 x1	0821100082	0821100081
0 ± 25 ³⁾ (0 ± 363 ³⁾	according EN 50 044	0821100086	0821100085

Min. allowable pressure 0,01 abs¹⁾ 0,04 bar (0.6 psi)²⁾ 0,1 bar (1.5 psi)³⁾

Accessories (to be ordered separately)

Accessory	Electrical connector	Part no.
	Socket coupling shape A (PG 9)	1834484059
	Socket coupling shape A (PG 11)	1834484060
	Electrical connector with cable, threaded coupling M12x1 (DIN 50 044), straight, 3 m, PUR	1834484256
	Electrical connector with cable, threaded coupling M12x1 (DIN 50 044), straight, 5 m, PUR	1834484257
	Electrical connector with cable, threaded coupling M12x1 (DIN 50 044), straight, 10 m, PUR	1834484258
	Electrical connector with cable, threaded coupling M12x1 (DIN 50 044), angled, 3 m, PUR	1834484259
	Electrical connector with cable, threaded coupling M12x1 (DIN 50 044), angled, 5 m, PUR	1834484260
Electrical connector with cable, threaded coupling M12x1 (DIN 50 044), angled, 10 m, PUR	1834484261	

Load resistor characteristic curve

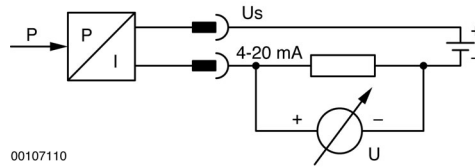


$$R_{Lmax} = (U_B - 10V) / 0,02A$$

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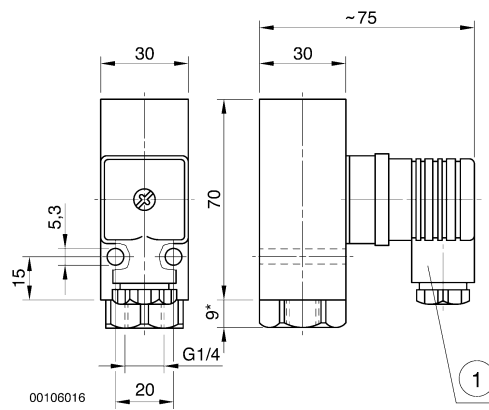
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Plug connection assignment



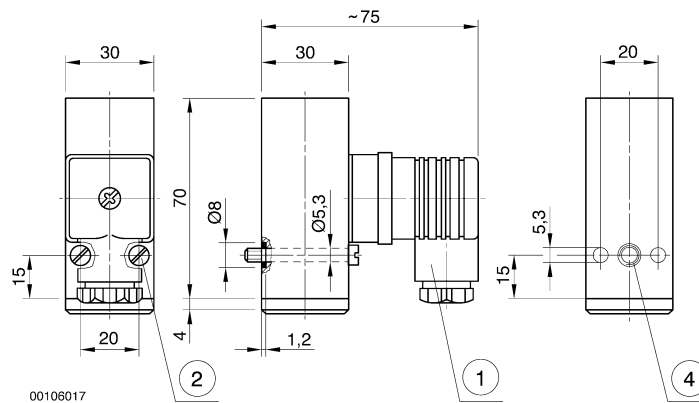
Plug-in connection for base M12x1: +U_B = 1; output = 4 Plug-in connection for base DIN 43 650: +U_B = 1; output = 2

0821100075 / 0821100079 / 821100083



1) Electrical connector

0821100076 / 0821100080 / 0821100084



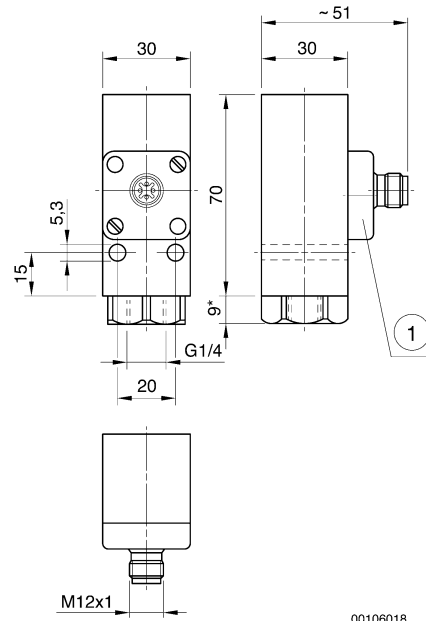
1) Electrical connector 2) Cylinder screw M5 4) O-ring

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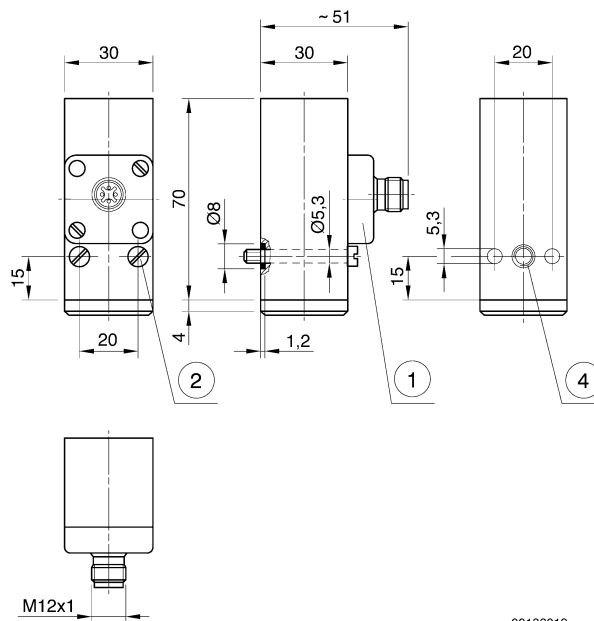
0821100077 / 0821100081 / 0821100085



00106018

1) Electrical connector

0821100078 / 0821100082 / 0821100086



00106019

1) Electrical connector 2) Cylinder screw M5 4) O-ring