



PFT

The flexible solution

PRESSURE SENSORS

SICK
Sensor Intelligence.



Technical data overview

Device type	Pressure transmitter						
Measuring ranges	<table border="0"> <tr> <td>Gauge pressure</td> <td>0 bar ... 0.1 bar up to 0 bar ... 600 bar</td> </tr> <tr> <td>Absolute pressure</td> <td>0 bar ... 0.25 bar up to 0 bar ... 25 bar</td> </tr> <tr> <td>Compound pressure</td> <td>-1 bar ... 0 bar up to -1 bar ... +30 bar</td> </tr> </table>	Gauge pressure	0 bar ... 0.1 bar up to 0 bar ... 600 bar	Absolute pressure	0 bar ... 0.25 bar up to 0 bar ... 25 bar	Compound pressure	-1 bar ... 0 bar up to -1 bar ... +30 bar
Gauge pressure	0 bar ... 0.1 bar up to 0 bar ... 600 bar						
Absolute pressure	0 bar ... 0.25 bar up to 0 bar ... 25 bar						
Compound pressure	-1 bar ... 0 bar up to -1 bar ... +30 bar						
Pressure unit	Bar, MPa, psi and kg/cm ²						
Accuracy	<table border="0"> <tr> <td>≤ ± 0.5 % of the span</td> </tr> <tr> <td>≤ ± 0.25 % of the span</td> </tr> <tr> <td>(depending on type)</td> </tr> </table>	≤ ± 0.5 % of the span	≤ ± 0.25 % of the span	(depending on type)			
≤ ± 0.5 % of the span							
≤ ± 0.25 % of the span							
(depending on type)							
Output signal	Analog						
Electrical connection	M12 round connector x 1, angled plug, cable connection						

Product description

The PFT electronic pressure transmitter is used for the precision measurement of pressures in liquids and gases. Distinguished by its high-quality measurement technology, the device is well suited to solve demanding measurement tasks in industrial applications. Designs with extended temperature range, enhanced measurement accuracy, or flush-mounted membrane open up a wide range of applications. Its vast configurability ensures the PFT can perfectly suit the most diverse customer requirements.

At a glance

- Measuring ranges from 0 mbar ... 100 mbar up to 0 bar ... 600 bar
- Relative, absolute, and ± measuring ranges
- Also available with flush-mounted membrane
- Process temperature up to 150 °C (optional)
- Large number of commonly used process connections
- High shock and vibration resistance
- Accuracy 0.5% or 0.25%
- Output signal 4 mA ... 20 mA, 0 V ... 5 V or 0 V ... 10 V
- Zero and span adjustable
- Round connector M12 x 1, angled plug (DIN 175301-803 A) or cable connection

Your benefits

- Reliable and highly accurate measurement technology
- Wide application range
- No mechanical wear, fatigue-proof, maintenance-free as no moving parts
- Simple and cost-saving installation
- Optimal solution for individual requirements due to very versatile configurability

Type code

Other models and accessories → www.sick.com/PFT

Type code

Type	
S	Standard
F	Flush-mounted membrane
Pressure type	
R	Relative
A	Absolute
C	Vacuum and ± measuring range
Pressure unit	
B	bar
M	MPa
P	psi
K	kg/cm ²
A	mbar
Measuring range (see below)	
Accuracy	
S	± 0,5% of the range
A	± 0.25% of the range
Process connection	
G1	G ¼ A, DIN 3852-E
G2	G ¼ internal
GD	G ½ B
N1	¼" NPT
U1	7/16"-20 UNF SAE #4 J514 external
R1	R ¼ ISO 7 (DIN2999)
F1	G 1 B flush-mounted with O-ring
F2	G ½ B flush-mounted with O-ring
F3	G 1 flush-mounted, up to 150 °C, on request
Canal drilling	
S	Standard canal drilling
N	0.3 mm erosion drilling
M	0.6 mm erosion drilling
O	Flush-mounted membrane
Process temperature	
S	-30... +100 °C
E	-40... +125 °C
H	-20... +150 °C
Parts in contact with measuring material	
S	In contact with measured material: CrNi steel + NBR O-ring
C	In contact with measured material: CrNi steel + FPM/FKM O-ring
A	-
Output signal	
A	4 ... 20 mA, 2-wire
V	0 ... 10 V, 3-wire
U	0 ... 5 V, 3-wire
Electrical connection	
M	M12 x 1, 4-pin. IP 67
L	Angled plug, DIN EN 175301-803 A, IP 65
1	Cable output, 1.5 m, IP 67
3	Cable output, 3 m, IP 67
4	Cable output, 1.5 m, IP 68 (zero point and span not adjustable)
5	Cable output, 3 m, IP 68 (zero point and span not adjustable)
Special features of the version	
Z	Without special features of the version
F	Oil- and grease-free
L	Food industry-compliant filling liquid

PFT -																			S	S
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Not all variants of the type code can be combined! Not all available variants are shown.

Measuring range

	Gauge pressure measuring range	Overload limit
X10	0 ... 0.1 bar	2 bar
X16	0 ... 0.16 bar	1.5 bar
X25	0 ... 0.25 bar	2 bar
X40	0 ... 0.4 bar	2 bar
X60	0 ... 0.6 bar	4 bar
1X0	0 ... 1 bar	5 bar
1X6	0 ... 1.6 bar	10 bar
2X5	0 ... 2.5 bar	10 bar
4X0	0 ... 4 bar	17 bar
6X0	0 ... 6 bar	35 bar
010	0 ... 10 bar	35 bar
016	0 ... 16 bar	80 bar
025	0 ... 25 bar	50 bar
040	0 ... 40 bar	80 bar
060	0 ... 60 bar	120 bar
100	0 ... 100 bar	200 bar
160	0 ... 160 bar	320 bar
250	0 ... 250 bar	500 bar
400	0 ... 400 bar	800 bar
600	0 ... 600 bar	1,200 bar

	Absolute pressure measuring range	Overload limit
X25	0 ... 0.25 bar abs	2 bar abs
X40	0 ... 0.4 bar abs	2 bar abs
X60	0 ... 0.6 bar abs	4 bar abs
1X0	0 ... 1 bar abs	5 bar abs
1X6	0 ... 1.6 bar abs	10 bar abs
2X5	0 ... 2.5 bar abs	10 bar abs
4X0	0 ... 4 bar abs	17 bar abs
6X0	0 ... 6 bar abs	35 bar abs
010	0 ... 10 bar abs	35 bar abs
016	0 ... 16 bar abs	80 bar abs
025	0 ... 25 bar abs	80 bar abs
400	800 ... 1,200 mbar abs	2,400 mbar abs

	± measuring range	Overload limit
100	-0.1 ... 0 bar	4 bar
160	-0.16 ... 0 bar	2 bar
250	-0.25 ... 0 bar	2 bar
400	-0.4 ... 0 bar	1.5 bar
600	-0.6 ... 0 bar	1 bar
1X0	-1 ... 0 bar	5 bar
1X6	-1 ... +0.6 bar	10 bar
2X5	-1 ... +1.5 bar	10 bar
4X0	-1 ... +3 bar	17 bar
6X0	-1 ... +5 bar	35 bar
010	-1 ... +9 bar	35 bar
016	-1 ... +15 bar	80 bar
025	-1 ... +24 bar	50 bar
031	-1 ... +30 bar	60 bar

	Gauge pressure measuring range	Overload limit
5X0	0 ... 5 psi	29 psi
010	0 ... 10 psi	29 psi
015	0 ... 15 psi	72.5 psi
025	0 ... 25 psi	145 psi
030	0 ... 30 psi	145 psi
050	0 ... 50 psi	240 psi
100	0 ... 100 psi	500 psi
160	0 ... 160 psi	500 psi
200	0 ... 200 psi	1,160 psi
300	0 ... 300 psi	1,160 psi
500	0 ... 500 psi	1,160 psi
1K0	0 ... 1,000 psi	1,740 psi
1K5	0 ... 1,500 psi	2,900 psi
2K0	0 ... 2,000 psi	4,600 psi
3K0	0 ... 3,000 psi	7,200 psi
5K0	0 ... 5,000 psi	11,600 psi
8K0	0 ... 8,000 psi	17,400 psi

	Absolute pressure measuring range	Overload limit
015	0 ... 15 psi abs	72.5 psi abs
025	0 ... 25 psi abs	145 psi abs
050	0 ... 50 psi abs	240 psi abs
100	0 ... 100 psi abs	500 psi abs
250	0 ... 250 psi abs	1,160 psi abs

	± measuring range	Overload limit
015	-14.5 ... +0 psi	72.5 psi
045	-14.5 ... +30 psi	240 psi
075	-14.5 ... +60 psi	240 psi
115	-14.5 ... +100 psi	500 psi
175	-14.5 ... +160 psi	1,160 psi
215	-14.5 ... +200 psi	1,160 psi
315	-14.5 ... +300 psi	1,160 psi

	Gauge pressure measuring range	Overload limit
10M	0 ... 0.01 MPa	0.02 MPa

	Absolute pressure measuring range	Overload limit
25M	0 ... 0.025 MPa abs	0.05 MPa abs

	± measuring range	Overload limit
X10	-1 ... 0 MPa	

	Gauge pressure measuring range	Overload limit
16M	0 ... 0.016 MPa	0.032 MPa
25M	0 ... 0.025 MPa	0.05 MPa
40M	0 ... 0.04 MPa	0.08 MPa
60M	0 ... 0.06 MPa	0.12 MPa
X10	0 ... 0.1 MPa	0.2 MPa
X16	0 ... 0.16 MPa	0.32 MPa
X25	0 ... 0.25 MPa	0.5 MPa
X40	0 ... 0.4 MPa	0.8 MPa
X60	0 ... 0.6 MPa	1.2 MPa
1X0	0 ... 1 MPa	2 MPa
1X6	0 ... 1.6 MPa	3.2 MPa
2X5	0 ... 2.5 MPa	5 MPa
4X0	0 ... 4 MPa	8 MPa
6X0	0 ... 6 MPa	12 MPa
010	0 ... 10 MPa	20 MPa
016	0 ... 16 MPa	32 MPa
025	0 ... 25 MPa	50 MPa
040	0 ... 40 MPa	80 MPa
060	0 ... 60 MPa	120 MPa

	Absolute pressure measuring range	Overload limit
40M	0 ... 0.04 MPa abs	0.08 MPa abs
60M	0 ... 0.06 MPa abs	0.12 MPa abs
X10	0 ... 0.1 MPa abs	0.2 MPa abs
X16	0 ... 0.16 MPa abs	0.32 MPa abs
X25	0 ... 0.25 MPa abs	0.5 MPa abs
X40	0 ... 0.4 MPa abs	0.8 MPa abs
X60	0 ... 0.6 MPa abs	1.2 MPa abs
1X0	0 ... 1 MPa abs	2 MPa abs
1X6	0 ... 1.6 MPa abs	3.2 MPa abs
2X5	0 ... 2.5 MPa abs	5 MPa abs

	± measuring range	Overload limit
X25	-1 ... +0.15 MPa	0.3 MPa
X40	-1 ... +0.3 MPa	0.6 MPa
X60	-1 ... +0.5 MPa	1 MPa
1X0	-1 ... +0.9 MPa	1.8 MPa
1X6	-1 ... +1.5 MPa	3 MPa
2X5	-1 ... +2.4 MPa	4.8 MPa

	Gauge pressure measuring range	Overload limit
X10	0 ... 0.1 kg/cm ²	0.2 kg/cm ²
X16	0 ... 0.16 kg/cm ²	0.32 kg/cm ²
X25	0 ... 0.25 kg/cm ²	0.5 kg/cm ²
X40	0 ... 0.4 kg/cm ²	0.8 kg/cm ²
X60	0 ... 0.6 kg/cm ²	1.2 kg/cm ²
1X0	0 ... 1 kg/cm ²	2 kg/cm ²
1X6	0 ... 1.6 kg/cm ²	3.2 kg/cm ²
2X5	0 ... 2.5 kg/cm ²	5 kg/cm ²
4X0	0 ... 4 kg/cm ²	8 kg/cm ²
6X0	0 ... 6 kg/cm ²	12 kg/cm ²
010	0 ... 10 kg/cm ²	20 kg/cm ²
016	0 ... 16 kg/cm ²	32 kg/cm ²
025	0 ... 25 kg/cm ²	50 kg/cm ²
040	0 ... 40 kg/cm ²	80 kg/cm ²
060	0 ... 60 kg/cm ²	120 kg/cm ²
100	0 ... 100 kg/cm ²	200 kg/cm ²
160	0 ... 160 kg/cm ²	320 kg/cm ²
250	0 ... 250 kg/cm ²	500 kg/cm ²
400	0 ... 400 kg/cm ²	800 kg/cm ²
600	0 ... 600 kg/cm ²	1,200 kg/cm ²

	Absolute pressure measuring range	Overload limit
X25	0 ... 0.25 kg/cm ² abs	0.5 kg/cm ² abs
X40	0 ... 0.4 kg/cm ² abs	0.8 kg/cm ² abs
X60	0 ... 0.6 kg/cm ² abs	1.6 kg/cm ² abs
1X0	0 ... 1 kg/cm ² abs	2 kg/cm ² abs
1X6	0 ... 1.6 kg/cm ² abs	3.2 kg/cm ² abs
2X5	0 ... 2.5 kg/cm ² abs	5 kg/cm ² abs
4X0	0 ... 4 kg/cm ² abs	8 kg/cm ² abs
6X0	0 ... 6 kg/cm ² abs	12 kg/cm ² abs
010	0 ... 10 kg/cm ² abs	20 kg/cm ² abs
016	0 ... 16 kg/cm ² abs	32 kg/cm ² abs
025	0 ... 25 kg/cm ² abs	50 kg/cm ² abs

	± measuring range	Overload limit
1X0	-1 ... 0 kg/cm ²	
1X6	-1 ... +0.6 kg/cm ²	1.2 kg/cm ²
2X5	-1 ... +1.5 kg/cm ²	3 kg/cm ²
4X0	-1 ... +3 kg/cm ²	6 kg/cm ²
6X0	-1 ... +5 kg/cm ²	10 kg/cm ²
010	-1 ... +9 kg/cm ²	18 kg/cm ²
016	-1 ... +15 kg/cm ²	30 kg/cm ²
025	-1 ... +24 kg/cm ²	48 kg/cm ²

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

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