

PFT-FRB6X0SF20HCALSSZ

PFT

PRESSURE SENSORS





Ordering information

Туре	Part no.
PFT-FRB6X0SF20HCALSSZ	6051085

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

Illustration may differ



Detailed technical data

Features

Medium	Liquid, gaseous
Pressure type	Gauge pressure
Pressure unit	bar
Measuring range	0 bar 6 bar
Process temperature	-20 °C +150 °C
Maximum ohmic load R _A	4 mA 20 mA, 2-wire ($R_A \le (L^+ - 10 \text{ V}) / 0.02 \text{ A [Ohm]}$) 0 V 5 V, 3-wire ($R_A > 5 \text{ kOhm}$) 0 V 10 V, 3-wire ($R_A > 10 \text{ kOhm}$)
Output signal	4 mA 20 mA, 2-wire
Specialty	Without

Mechanics/electronics

Process connection	G ½ B flush-mounted with 0-ring
Wetted parts	Flush-mounted membrane: Stainless steel 1.4571 with NBR 0-ring or FKM 0-ring (FKM with integrated cooling element) $$
Internal transmission fluid	Synthetic oil (Not available for version with standard membrane for pressure ranges > 25 bar)
Pressure port	Front-flush membrane
Housing material	Stainless steel 1.4571
Connection type	L-connector (DIN EN 175301-803 A)
Supply voltage	10 V DC 30 V DC
Electrical safety	Overvoltage protection: 36 V DC Short-circuit protection: Q _A towards M Reverse polarity protection: L ⁺ to M Protection class: III
Dielectric strength	$500\ V$ DC, NEC Class 02 power supply (low voltage and low current max. $100\ VA$ even in the event of a fault)
CE-conformity	Pressure equipment directive: 2014/68/EU EMC directive: 2004/108/EC, EN 61326-2-3
Weight sensor	Approx. 200 g

¹⁾ Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

Seal	FPM/FKM
Enclosure rating	IP65 ¹⁾
Protection class III	✓
MTTF	403 years

¹⁾ Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

Performance

Non-linearity	$\leq \pm~0.2~\%,$ of span (Best Fit Straight Line, BFSL) according to IEC 61298-2	
Accuracy	\leq ± 0.5 % of the span	
Non-repeatability	\leq ± 0.1 % of the span	
Response time (10 % 90 %)	\leq 1 ms \leq 10 ms at medium temperatures below < –30 $^{\circ}$ C for pressure ranges up to 25 bar or with flush-mounted membrane	
Long-term drift/one-year stability	\leq ± 0.2 % of span (at reference conditions)	
Temperature coefficient in rated temperature range	Mean TC of zero: \le 0.2 % of span / 10 K (< 0.4 % for pressure ranges \le 0.25 bar) Mean TC of span \le 0.2 % of span / 10 K	
Rated temperature range	0 °C +80 °C	
Service life	Minimum 10 Mio. load cycles	

Ambient data

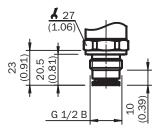
Ambient temperature	-20 °C +80 °C	
Storage temperature	–20 °C +100 °C, with flush-mounted membrane and cooling element –20 °C +100 °C	
Shock load	1000 g according to IEC 60068-2-27 (mechanical shock) 400 g according to IEC 60068-2-27 (mechanical shock) for version with integrated cooling element	
Vibration load	20 g according to IEC 60068-2-6 (vibration under resonance) 10 g according to IEC 60068-2-6 (vibration undencr resonae) for version with integrated cooling element	

Classifications

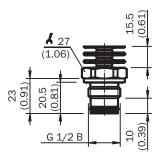
ECLASS 5.0	27200614
ECLASS 5.1.4	27200614
ECLASS 6.0	27200614
ECLASS 6.2	27200614
ECLASS 7.0	27200614
ECLASS 8.0	27200614
ECLASS 8.1	27200614
ECLASS 9.0	27200614
ECLASS 10.0	27200614
ECLASS 11.0	27200614
ECLASS 12.0	27200614
ETIM 5.0	EC011478
ETIM 6.0	EC011478
ETIM 7.0	EC011478
ETIM 8.0	EC011478
UNSPSC 16.0901	41112410

Dimensional drawing (Dimensions in mm (inch))

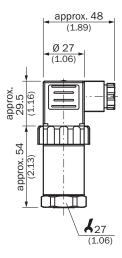
G 1/2 B without cooling section



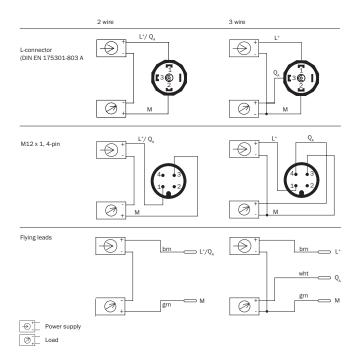
G 1/2 B with cooling section



Housing with L-connector (DIN EN 175301-803 A)



Connection type



Recommended accessories

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

	Brief description	Туре	Part no.
Mounting brad	ckets and plates		
Fair	Mounting bracket for simple and stable wall mounting of pressure sensors with 27 mm hexagon, Aluminum	BEF-FL-ALUPBS-HLDR	5322501

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