

PFT-FRB100SF20SSALSSZ

PFT

PRESSURE TRANSMITTER





Ordering information

Туре	Part no.
PFT-FRB100SF20SSALSSZ	6044825

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 100 bar
Process temperature	-30 °C +100 °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 O-ring		
Wetted parts	Flush-mounted membrane: Stainless steel 1.4571 with NBR O-ring or FKM O-ring (FKM with in tegrated 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	NBR
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: \leq 0.2 $\%$ of span / 10 K (< 0.4 $\%$ for pressure ranges \leq 0.25 bar) Mean TC of span \leq 0.2 $\%$ of span / 10 K	
Rated temperature range	0 °C +80 °C	
Service life	Minimum 100 Mio. load cycles	

Ambient data

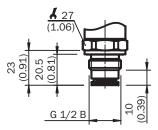
Ambient temperature	-20 °C +80 °C			
Storage temperature	–40 °C +100 °C, with flush-mounted membrane and cooling element –20 °C +100 °C			
Shock load	1000 g according to IEC 60068-2-27 (mechanical shock) 400 g according to IEC 60068-2-27 (mechanical shock) for version with integrated cooling element			
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

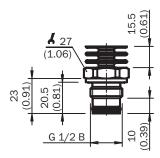
eCl@ss 5.0	27200614
eCl@ss 5.1.4	27200614
eCl@ss 6.0	27200614
eCl@ss 6.2	27200614
eCl@ss 7.0	27200614
eCl@ss 8.0	27200614
eCl@ss 8.1	27200614
eCl@ss 9.0	27200614
eCl@ss 10.0	27200614
eCl@ss 11.0	27200614
eCl@ss 12.0	27200614
ETIM 5.0	EC011478
ETIM 6.0	EC011478
ETIM 7.0	EC011478
ETIM 8.0	EC011478
UNSPSC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

Dimensional drawing (Dimensions in mm (inch))

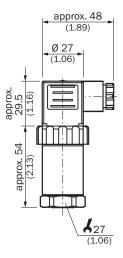
G 1/2 B without cooling section



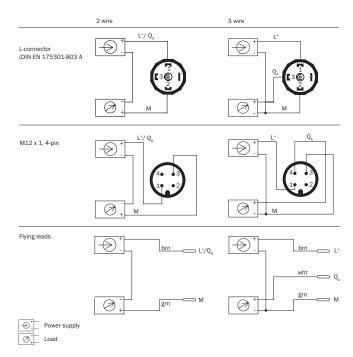
G 1/2 B with cooling section



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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