

Overview

- Flow and temperature measurement in a single sensor
- Binary or analog output signal
- Compact and robust
- Available with IO-Link interface



Picture similar



Technical data

Performance characteristics

Down time at temperature step	< 10 s
Max. measuring error	± 2 % FSR , water ± 15 % FSR , oil ± 1 °C , temperature measurement @ flow > 0 cm/s
Measuring range, flow	10 ... 400 cm/s , water 10 ... 300 cm/s , oil
Measuring range, temperature	-25 ... 150 °C
Step response time	< 5 s

Process conditions

Process temperature	-25 ... 125 °C , water 0 ... 90 °C , oil -25 ... 150 °C , temperature measurement @ flow > 0 cm/s
Process pressure	-1 ... 100 bar

Process connection

Connection variants	Refer to section "Dimensional drawings"
Mounting position	Any, top, bottom, side
Wetted parts material	AISI 316L (1.4404)
Surface roughness wetted parts	Ra ≤ 0.8 µm

Ambient conditions

Operating temperature range	-25 ... 80 °C
Storage temperature range	-25 ... 80 °C
Degree of protection (EN 60529)	IP67 IP68 , 30 min. @ 1 mH2O IP69K , with appropriate cable
Humidity	≤ 100 % RH , condensing

Ambient conditions

Shock (EN 60068-2-27)	30 g / 11 ms, 6 impulses per axis and direction
Vibration (sinusoidal) (EN 60068-2-6)	5 g (10 ... 2000 Hz)

Output signal

Current output	4 ... 20 mA
Voltage output	0 ... 10 V
Output type	Digital (push-pull) NPN PNP

Switching logic	Active high Active low Normally closed (NC) Normally open (NO)
-----------------	---

Voltage drop	< 2 V, switching output
Current rating	100 mA , max.
Residual current	< 250 µA
Short circuit protection	Yes
Interface	IO-Link 1.1

Housing

Style	Compact transmitter
Overall size	Refer to section "Dimensional drawings"
Material	Stainless steel

Electrical connection

Connector	M12-A, 4-pin
-----------	--------------

Power supply

Voltage supply range	12 ... 32 V DC , with 2 x 4 ... 20 mA 18 ... 30 V DC , with IO-Link
Power-up time	10 s , max.
Reverse polarity protection	Yes

The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

PF20S

PF20S-#1.010.####.2#.#.0000.0

Electrical connection

Output signal	Equivalent circuit	Electrical connection	Function	Pin assignment
Multi-parameter output 4 ... 20 mA, 3-wire (flow) 4 ... 20 mA, 3-wire (temperature)			+Vs Iout (flow) Iout (temperature) GND (0 V) Frame ground	1 2 4 3 Plug thread
Programmable output Factory setting with IO-Link			+Vs SW1 (IO-Link) Iout GND (0 V) Frame ground	1 4 2 3 Plug thread
Programmable output Configuration programmable by customer			+Vs SW1 (IO-Link) Uout GND (0 V) Frame ground	1 4 2 3 Plug thread
Programmable output Configuration programmable by customer			+Vs SW1 (IO-Link) SW2 GND (0 V) Frame ground	1 4 2 3 Plug thread
Programmable output Configuration programmable by customer			+Vs SW1 (IO-Link) SW2 GND (0 V) Frame ground	1 4 2 3 Plug thread
Programmable output Configuration programmable by customer			+Vs SW1 (IO-Link) SW2 GND (0 V) Frame ground	1 4 2 3 Plug thread

Ordering information

Ordering key - Configuration possibilities see website

Product	PF20S	-	#	1	.	010	.	####	.	2	#	.	#	.	0	00	0	.	0
Version																			
Version for Water																			1
Version for Oil																			2
Housing																			
Stainless steel, AISI 316L (1.4404)																			1
Electrical connection																			
M12-A, 4-pin, stainless steel						010													

The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change. 2025-09-23

Ordering information
Ordering key - Configuration possibilities see website

	PF20S	-	#	1	.	010	.	####	.	2	#	.	#	.	0	00	0	.	0	
Process connection																				
Sealing cone M18x1.5 (T44), Sensor length: 50 mm																				T445
Sealing cone M18x1.5 (T44), Sensor length: 100 mm																				T447
Compression fitting Ø 6 (T52), Sensor length: 100 mm																				T527
Compression fitting Ø 6 (T52), Sensor length: 200 mm																				T528
G 1/2 A ISO 228-1 with cone (G08), Sensor length: 16.4 mm																				G081
G 1/2 A ISO 228-1 with cone (G08), Sensor length: 50 mm																				G085
G 1/4 A ISO 228-1 (G03), Sensor length: 9.5 mm																				G030
G 1/4 A ISO 228-1 (G03), Sensor length: 32 mm																				G033
Process connection material																				
AISI 316L (1.4404)																				2
Seal																				
None																				0
FKM																				3
Output signal																				
Multi-parameter output, 2 x 4 - 20 mA (3-wire)																				0
Programmable output, IO-Link																				1
Explosion protection																				
Without																				0
Industrial approvals																				
Standard																				00
Special approvals																				
Standard																				0
Configuration																				
Factory settings																				0