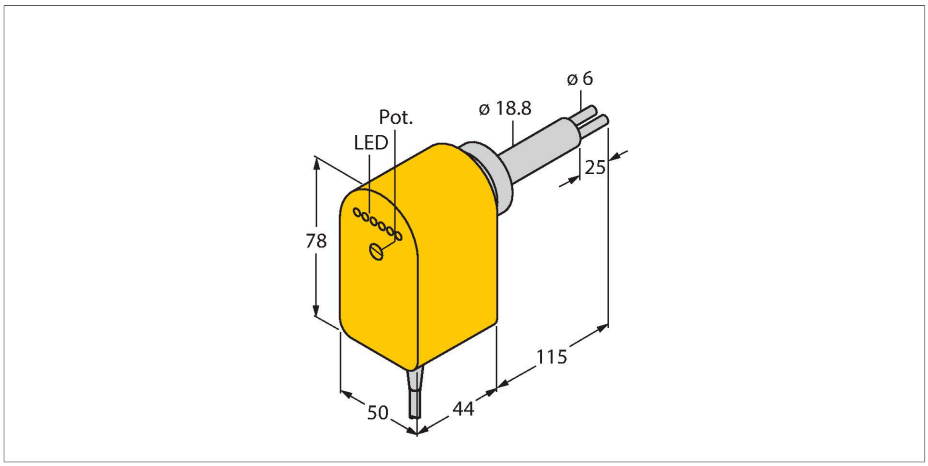
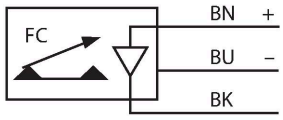
FCS-HA2P-LIX/AL115
Flow Monitoring – Immersion Sensor with Integrated Processor



Features

- Sensor for gaseous media
- Calorimetric principle
- Adjustments via potentiometer
- Sensor length 115 mm
- DC 3-wire, 19.2…28.8 VDC
- 4…20 mA analog output

Wiring diagram

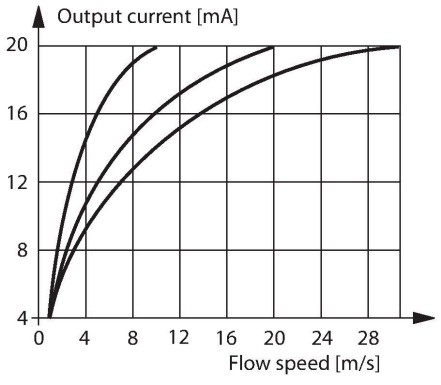


Technical data

ID	6870722
Type	FCS-HA2P-LIX/AL115
Mounting conditions	**Immersion sensor**
Air Operating Range	0.5…30 m/s
Stand-by time	20…90 s
Setting time	4…30 s
Temperature jump, response time	max. 100 s
Temperature gradient	≤ 20 K/min
Medium temperature	-20…+80 °C
Electrical data	
Current consumption	≤ 80 mA
Output function	Analog output
Short-circuit protection	yes
Reverse polarity protection	yes
Current output	4…20 mA
Load	200…500 Ω
MTBF	298acc. to SN 29500 (Ed. 99) 40 °C
Mechanical data	
Design	Immersion
Housing material	Plastic, PBT
Sensor material	Stainless steel, 1.4305 (AISI 303)
Max. tightening torque of housing nut	30 Nm
Electrical connection	Cable
Cable length	2 m
Core cross-section	3 x 0.5 mm²
Pressure resistance	3 bar

Functional principle

The function of immersion flow sensors is based on the thermodynamic principle. The sensor is heated up by a few degrees Celsius compared to the flow medium. If the medium flows past the sensor, the heat generated in the sensor is dissipated. The resulting temperature is measured and compared with the temperature of the medium. The flow condition of each medium can be derived from the temperature difference obtained. Thus, TURCK flow sensors reliably and wear-free monitor the flow of liquid or gaseous media.



Technical data

Process connection	G 1" female thread DIN 3852
Flow state display	LED chain, red (1x), green (5x)
Power on display	LED, Green
LED display	red = 4 mA 1x green > 4 mA 2x green > 8 mA 3x green > 12 mA 4x green > 16 mA 5x green = 20 mA