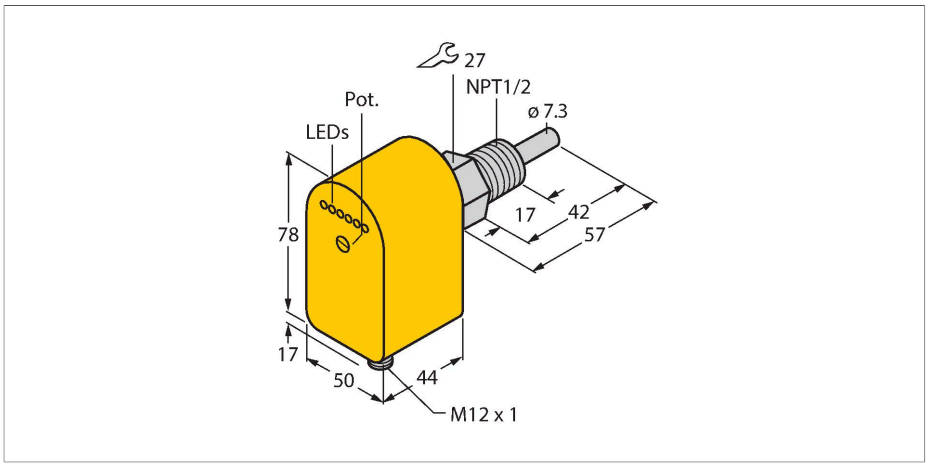
FCS-N1/2A4P-LIX-H1141
Flow Monitoring – Immersion Sensor with Integrated Processor



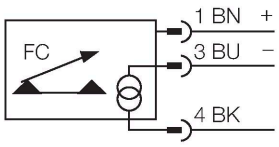
Technical data

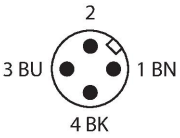
ID	6871041
Type	FCS-N1/2A4P-LIX-H1141
Mounting conditions	Immersion sensor
Water Operating Range	5…150 cm/s
Stand-by time	approx. 10 s
Setting time	1…15 s
Medium temperature	-20…+80 °C
Ambient temperature	-20…+70 °C
Electrical data	
Operating voltage U_B	19.2…28.8 VDC
Current consumption	≤ 100 mA
Output function	Analog output
Short-circuit protection	yes
Reverse polarity protection	yes
Current output	4…20 mA
Linearity deviation	≤ 10 %
Load	200…500 Ω
Protection class	IP65
Mechanical data	
Design	Immersion
Housing material	Plastic, PBT
Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Max. tightening torque of housing nut	30 Nm
Electrical connection	Connector, M12 × 1
Pressure resistance	100 bar
Process connection	1/2" NPT

Features

- Sensor only for water
- Calorimetric principle
- Adjustments via potentiometer
- Status indicated via LED band
- With linearized analog output
- DC 3-wire, 19.2…28.8 VDC
- 4…20 mA analog output
- Connector device, M12 × 1

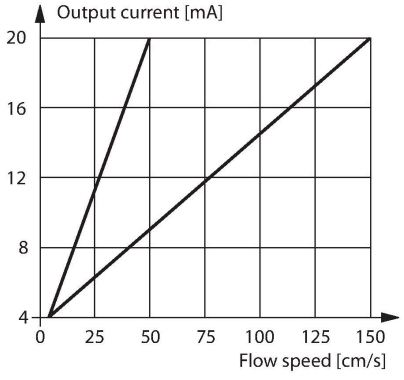
Wiring diagram





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

Flow state display	LED chain, red (1x), green (5x)
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
Tests/approvals	
Approvals	cULus
UL registration number	E210608