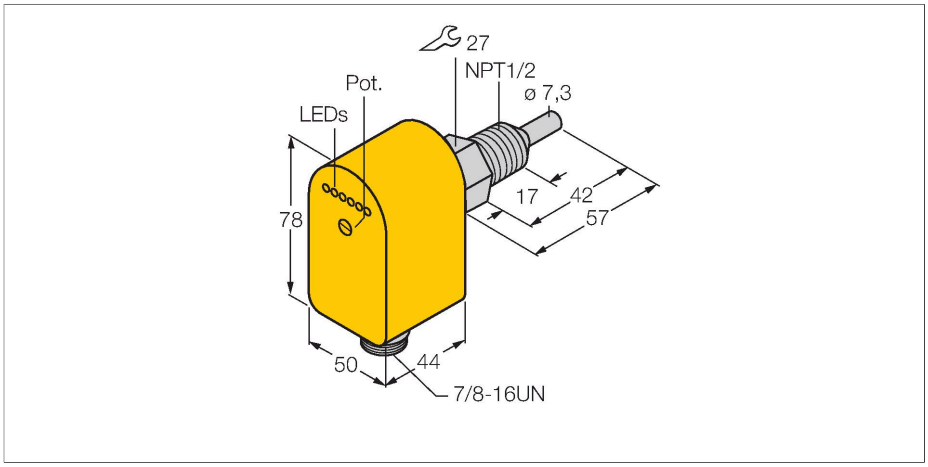
FCS-N1/2A4P-ARX-B1151/115VAC
Flow Monitoring – Immersion Sensor with Integrated Processor



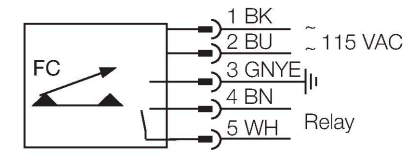
Technical data

ID	6871025
Type	FCS-N1/2A4P-ARX-B1151/115VAC
Mounting	Immersion sensor
Water Operating Range	1…150 cm/s
Oil Operating Range	3…300 cm/s
Stand-by time	typ. 8 s (2…15 s)
Switch-on time	typ. 2 s (1…15 s)
Switch-off time	typ. 2 s (1…15 s)
Temperature jump, response time	max. 12 s
Temperature gradient	≤ 250 K/min
Medium temperature	-20…+80 °C
Electrical data	
Operating voltage U_B	98…132 VAC
Output function	Relay output, NO contact
Rated operational current	2 A
Short-circuit protection	no
AC switching voltage	250 VAC
DC switching voltage	60 VDC
Max. AC switching capacity	500 VA
Max. DC switching capacity	50 W
Protection class	IP67
Mechanical data	
Design	Immersion
Housing material	Plastic, PBT

Features

- Sensor for liquid media
- Calorimetric principle
- Adjustment via potentiometer
- Status indicated via LED chain
- AC 5-wire, 98…132 VAC
- NO contact, relay output
- Plug-in device, 7/8"-16UN

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.

FCS-N1/2A4P-ARX-B1151/115VAC 02/21/2025 17-39 | technical changes reserved

Technical data

Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Max. tightening torque of housing nut	30 Nm
Electrical connection	Connector, 7/8"
Process Pressure	100 bar
Process connection	1/2" NPT
Switching state	LED chain, Green/yellow/red
Flow state display	LED chain
Indication: Drop below setpoint	LED Red
Indication: Setpoint reached	LED Yellow
Indication: Setpoint exceeded	4 × LEDs Green

FCS-N1/2A4P-ARX-B1151/115VAC| 02/21/2025 17-39 | technical changes reserved