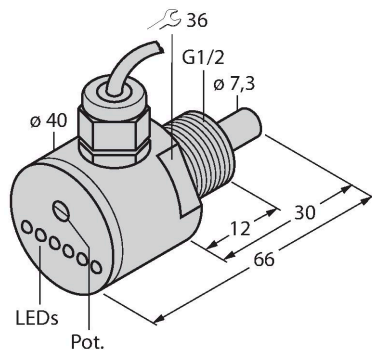


FCS-G1/2DY-AP8X

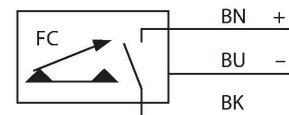
Flow Monitoring – Immersion Sensor with Integrated Processor



Features

- Sensor for liquid media
- Calorimetric principle
- Adjustment via potentiometer
- Status indicated via LED chain
- Sensor made of PVDF
- 3-wire DC, 21...26 VDC
- NO contact, PNP output
- Cable device

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

ID	6870005
Type	FCS-G1/2DY-AP8X
Mounting conditions	Immersion sensor
Water Operating Range	1...70 cm/s
Oil Operating Range	2...100 cm/s
Stand-by time	typ. 60 s (40...100 s)
Switch-on time	typ. 30 s (5...50 s)
Switch-off time	typ. 30 s (5...50 s)
Temperature jump, response time	typ. 100 s (50...100 s)
Temperature gradient	≤ 1 K/min
Medium temperature	-10...+70 °C
Electrical data	
Operating voltage U_B	19.2...28.8 VDC
Output function	PNP, NO contact
Rated operational current	0.4 A
Voltage drop at I_o	≤ 1.5 V
Short-circuit protection	yes
Reverse polarity protection	yes
Mechanical data	
Design	Immersion
Housing material	Plastic, PVDF
Sensor material	Plastic, PVDF
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable length	2 m
Cable Jacket Material	FEP

Technical data

Core cross-section	3 x 0.34 mm ²
Pressure resistance	5 bar
Process connection	G 1/2"
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
Tests/approvals	
Approvals	cULus
UL registration number	E210608