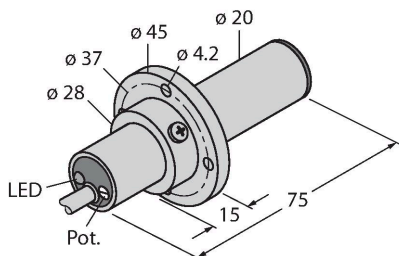


# FCS-K20-AP8X

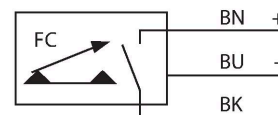
## Flow Monitoring – Immersion Sensor with Integrated Processor



### Features

- Flow sensor for gaseous media
- Calorimetric principle
- Adjustment via potentiometer
- Mounting flange, plastic, included
- Status display via 2-color LED
- Plastic sensor housing
- 3-wire DC, 19.2...28.8 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	6870702
Type	FCS-K20-AP8X
Mounting	Immersion sensor
Air Operating Range	0.5...15 m/s
Switch-on time	typ. 2 s (1...20 s)
Switch-off time	typ. 2 s (1...20 s)
Temperature gradient	≤ 200 K/min
Medium temperature	-20...+70 °C
Ambient temperature	0...+60 °C
<b>Electrical data</b>	
Operating voltage $U_s$	19.2...28.8 VDC
Current consumption	≤ 70 mA
Output function	PNP, NO contact
Rated operational current	0.4 A
Short-circuit protection	yes
Reverse polarity protection	yes
Protection class	IP67
MTTF	637 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Mechanical data</b>	
Design	Immersion
Housing material	Plastic, PBT-GF30-V0
Sensor material	Plastic, PBT-GF30-V0
Electrical connection	Cable

## Technical data

Cable length (L)	2 m
Core cross-section	3 x 0.5 mm <sup>2</sup>
Process Pressure	1 bar
Process connection	PVC flange (included in delivery)
Switching state	2-color LED, Red/green
Tests/approvals	
Approvals	cULus
UL registration number	E210608