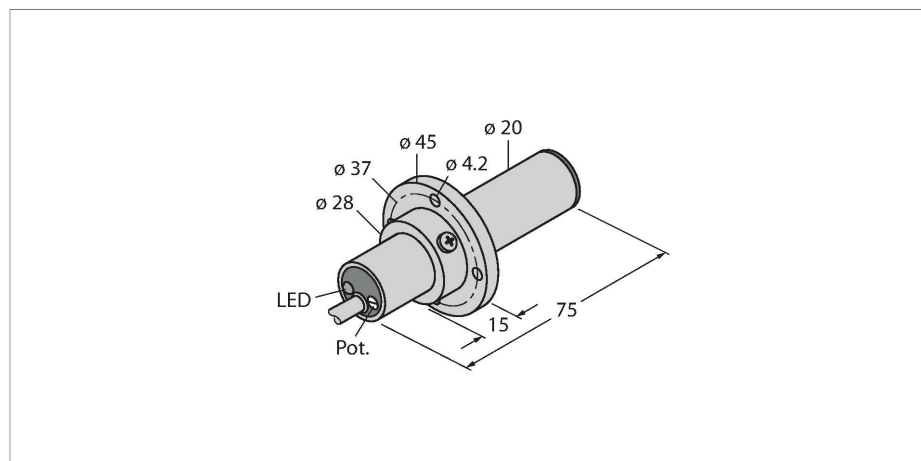


FCS-K20-AP8X

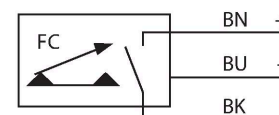
Flow Monitoring – Immersion Sensor with Integrated Processor



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 |
| Electrical data | |
| Operating voltage | 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 |
| Mechanical data | |
| 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 ² |
| 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 |