

Flow Monitoring

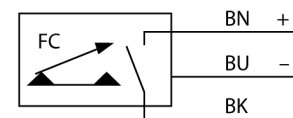
Immersion Sensor with Integrated Processor

FCS-M18-AP8X-0.2-RS4T

Type designation	FCS-M18-AP8X-0.2-RS4T
Ident-No.	6870794
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Type	FCS-M18-AP8X-0.2-RS4T
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
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
Design	Immersion
Housing material	Metal, CuZn
Sensor material	Brass, brass, nickel-plated
Electrical connection	Cable with connector
Cable length (L)	0.2 m
Core cross-section	3 x 0.5 mm ²
Process connection	M18 x 1
Switching state	2-color LED, Red/Green

- Flow sensor for gaseous media
- Calorimetric principle
- Adjustment via potentiometer
- Status display via 2-color LED
- Chrome-plated brass sensor
- 3-wire DC, 19.2...28.8 VDC
- NO contact, PNP output
- Cable device

Wiring Diagram



Functional principle

Our insertion - flow sensors operate on the principle of thermodynamics. The measuring probe is heated by several °C as against the flow medium. When fluid moves along the probe, the heat generated in the probe is dissipated. The resulting temperature is measured and compared to the medium temperature. The flow status of every medium can be derived from the evaluated temperature difference. Thus TURCK's wear-free flow sensors reliably monitor the flow of gaseous and liquid media.