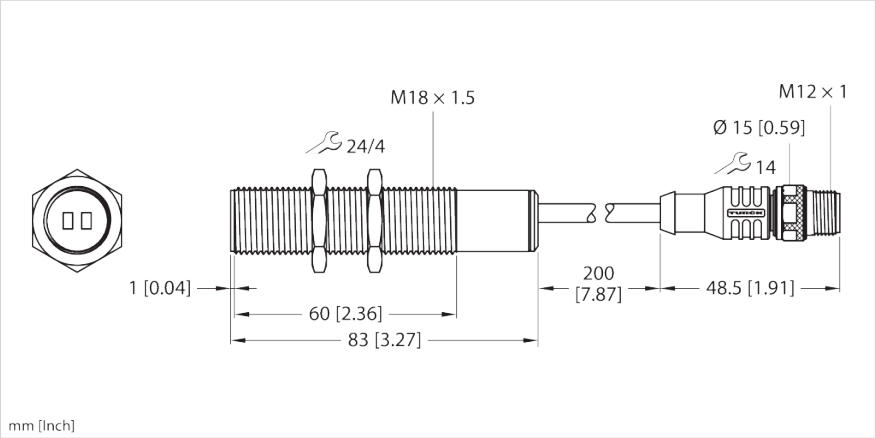
FCS-M18-IOL-0.2-RS4T

Flow monitoring sensor for air flow

With integrated processing unit

Calorimetric measuring principle — immersion design



Typ	FCS-M18-IOL-0.2-RS4T
Ident-No.	100052050

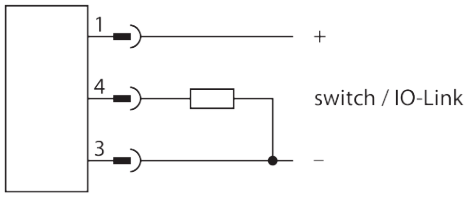
Technical data

General data	
Measuring principle	Calorimetric
Application area	
Application area	Standard
Medium temperature	-20…+70 °C
Medium	gases
Detection area/measuring range	
Air Operating Range	0.5...15 m/s
Flow	
Temperature gradient	≤200 K/min
Power supply	
Operating voltage U_B	18...30 VDC
Electrical data	
Output function	NO/NC (NO pre-set), PNP
Short-circuit protection	yes
Wire break/reverse polarity protection	yes
Current consumption	≤32 mA

Features

- Sensor for gaseous media
- Calorimetric functionality
- Chrome-plated brass sensor
- DC 3-wire, 24 VDC
- PNP NC/NO contact
- Parametrizable via IO-Link SSP 4.1.2
- 20-cm pigtail with M12 male connector
- 6-color LED red/yellow/green/cyan/purple/ blue

Wiring diagram



Functional principle

The function of our insertion flow sensors is based on the thermodynamic principle. The measuring probe is heated by several °C as against the flow medium. When fluid moves along the probe, the heat generated in the

Technical data

Stand-by time	20…40 s
Interfaces	
Communication protocol	IO-Link
Outputs	
Rated operational current	0,4 A
Switch-off time	Typ. 2 s (2…20 s)
Switch-on time	Typ. 2 s (2…20 s)
Switching current	150 mA
Mechanical data	
Design	Immersion
Housing material	Metal, CuZn
Max. tightening torque of housing nut	10 Nm
Electrical connection	Cable with connector, M12 × 1
Process connection	M18 × 1
Sensor material	Brass, brass, nickel-plated
Mounting conditions	Immersion sensor
Cable	
Cable length	0,2 m
Core cross-section	3 x 0,34 mm²
Environmental conditions	
Ambient temperature	-20...+70 °C
Protection class	IP67
Displays/controls	
Switching state	LED

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. This is the method that TURCK's wear-free flow sensors reliably monitor the flow of gaseous media.