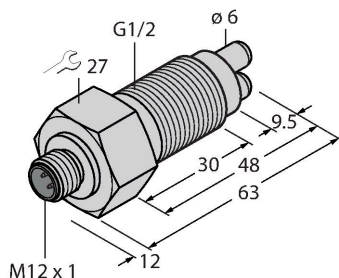


FCS-GL1/2A4-NAEX0-H1141/A

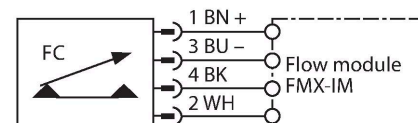
Flow Monitoring – Immersion Sensor without Integrated Processor



Features

- Ex sensor for gaseous media
- Calorimetric functionality
- Adjustment via Ex signal processor
- Status indicated via LED chain on signal processor
- Connector device, M12 × 1
- 4-wire connection to an Ex0 processor
- ATEX category II 1/2 G, Ex-zone 0
- ATEX category II 1 D, Ex zone 20

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.

Technical data

ID	6870348
Type	FCS-GL1/2A4-NAEX0-H1141/A
Mounting	Immersion sensor
Air Operating Range	2...25 m/s
Minimum immersion depth	≥ 11 mm
Stand-by time	5...20 s
Switch-on time	Typ. 3 s (2...30 s)
Switch-off time	Typ. 3 s (2...30 s)
Temperature jump, response time	max. 60 s
Temperature gradient	≤ 20 K/min
Medium temperature	-20...+60 °C
Electrical data	
Important note	For Ex applications, the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Device marking	EX II 1 G Ex ia IIC T6...T3 Ga EX II 1/2 G Ex ia IIC T6...T3 Ga/Gb EX II 1 D Ex ia IIIC T130 °C Da
Ignition protection category	Gas Ex ia IIC; dust Ex ia IIIC
Power	≤ 0.69 W
Internal capacitance (C)/inductance (L)	0.27 nF/1.3 µH
Ex approval acc. to conformity certificate	TÜV 99 ATEX 1517X
Protection class	IP67

Technical data

MTTF 534 years acc. to SN 29500 (Ed. 99) 40 °C

Mechanical data	
Design	Immersion
Housing material	Stainless steel, 1.4571 (AISI 316Ti)
Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Max. tightening torque of housing nut	30 Nm
Electrical connection	Connector, M12 × 1
Permissible ambient pressure for the device in explosive atmospheres	0.8...1.1 bar absolute
Process Pressure	10 bar
Process connection	G 1/2" long version
Included in delivery	2 × AFM 34 G1/2 flat seal
Tests/approvals	
Approvals	ATEX CE UKCA GOST