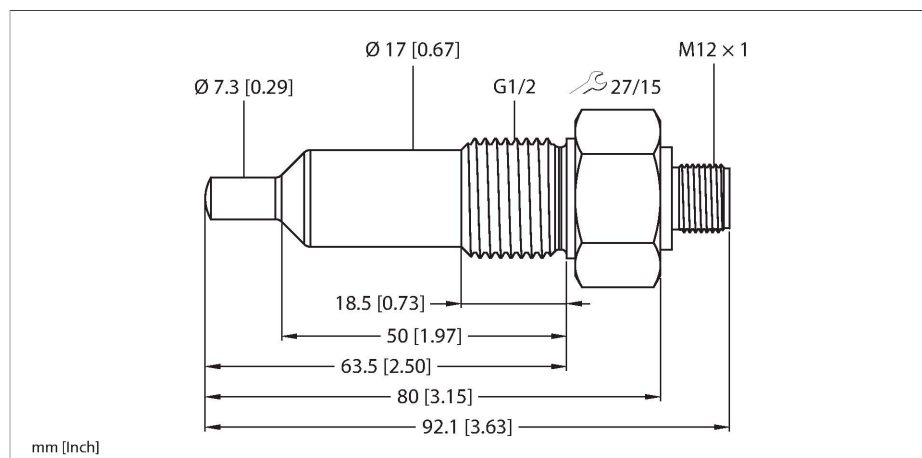


# FCS-G1/2A4-NAEX0-H1141/L065

## Flow Monitoring – Immersion Sensor without Integrated Processor



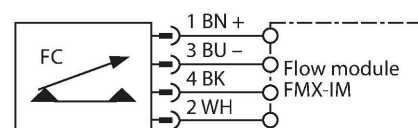
### Technical data

ID	6870375
Type	FCS-G1/2A4-NAEX0-H1141/L065
Mounting	Immersion sensor
Water Operating Range	1...100 cm/s
Oil Operating Range	3...200 cm/s
Minimum immersion depth	≥ 15 mm
Stand-by time	typ. 8 s (2...18 s)
Switch-on time	typ. 2 s (1...13 s)
Switch-off time	typ. 2 s (1...13 s)
Temperature jump, response time	max. 12 s
Temperature gradient	≤ 250 K/min
Medium temperature	-20...+60 °C
<b>Electrical data</b>	
Important note	For Ex applications, the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Device marking	<div> <div>Ex</div> <div>II 1 G Ex ia IIC T6...T3 Ga</div> </div> <div> <div>Ex</div> <div>II 1/2 G Ex ia IIC T6...T3 Ga/Gb</div> </div> <div> <div>Ex</div> <div>II 1 D Ex ia IIIC T125 °C Da</div> </div>
Ignition protection category	Gas Ex ia IIC; dust Ex ia IIIC
Power	≤ 0.69 W
Internal capacitance (C <sub>i</sub> )/inductance (L <sub>i</sub> )	0.27 nF/1.3 µH
Ex approval acc. to conformity certificate	TÜV 99 ATEX 1517X
Protection class	IP67

### Features

- Ex sensor for liquid media
- Calorimetric functionality
- Adjustment via Ex signal processor
- Status indicated via LED chain on signal processor
- Sensor length 65 mm
- 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

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	60 bar
Process connection	G 1/2"
Included in delivery	2 × AFM 34 G1/2 flat seal
Tests/approvals	
Approvals	ATEX CE UKCA GOST