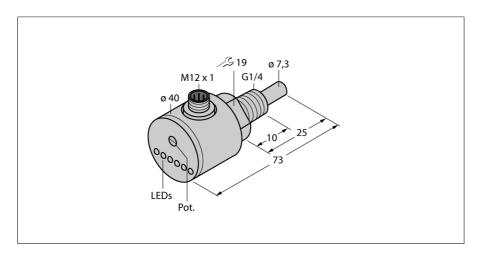
Flow monitoring Immersion sensor with integrated processor FCS-G1/4A4-AP8X-H1141





Type designation	FCS-G1/4A4-AP8X-H1141
Ident no.	6870101

Mounting conditions insertion style sensor Water Operating Range 1...150cm/s Oil Operating Range 3...300 cm/s Stand-by time typ. 8 s (2...15 s) Switch-on time typ. 2 s (1...15 s) Switch-off time typ. 2 s (1...15 s) Temperature jump, response time max. 12 s Temperature gradient \leq 250 K/min -20...80 °C Medium temperature Ambient temperature -20...80 °C

19.2... 28.8VDC Operating voltage Current consumption ≤ 70 mA Output function PNP, NO contact Rated operational current 0.4 A Voltage drop at I. ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67

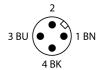
Switching state	LED chain green / yellow / red	
Process connection	G 1/4"	
Pressure resistance	100 bar	
Electrical connection	Flange connector, M12 x 1	
Max. tightening torque housing nut	30 Nm	
Sensor material	stainless steel, AISI 316Ti	
Housing material	Stainless steel, V4A (1.4571)	

Flow state display
Indication: Drop below setpoint
Indication: Setpoint reached
Indication: Setpoint exceeded
LED yellow
Indication: Setpoint exceeded
4 x LEDs green

- Flow sensor for liquid media
- Calorimetric principle
- Adjustment via potentiometer
- LED band
- DC 3-wire, 19.2...28.8 VDC
- NO contact, PNP output
- Plug-in device, M12 x 1

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.