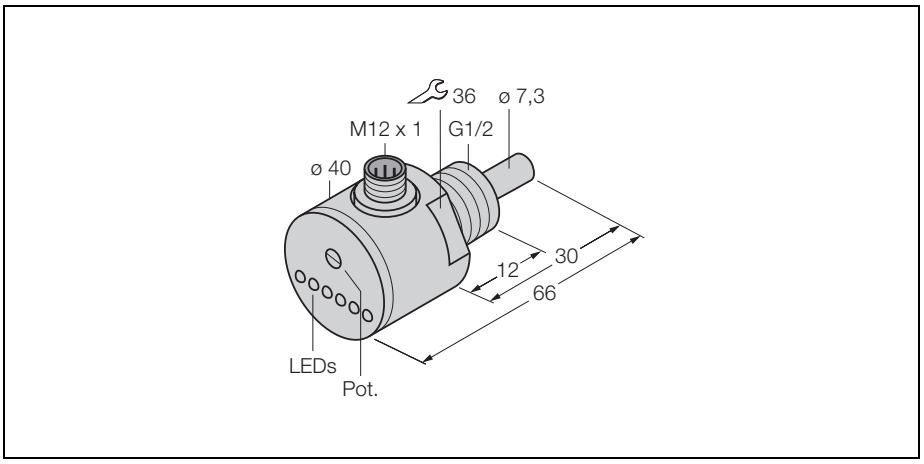
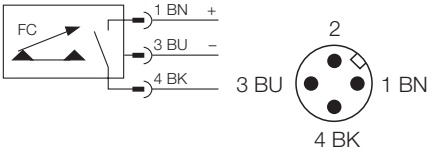
flow control sensor
insertion style sensor with integrated processor
FCS-G1/2A4-AP8X-H1141



- **flow sensor for liquid media**
- **calorimetric function principle**
- **adjustment via potentiometer**
- **status display via LED chain**
- **3-wire DC, 21...26 VDC**
- **normally open pnp output**
- **connector, M12 x 1**

Wiring diagram



Type	FCS-G1/2A4-AP8X-H1141
Ident-No.	6870004
Operating range water [cm/s]	1... 150cm/s
Operating range oil [cm/s]	3... 300 cm/s
Availability	typ. 8 s (2...15 s)
Switch-on time	typ. 2 s (1...15 s)
Switch-off time	typ. 2 s (1...15 s)
Response time to change in temperature	max. 12 s
Temperature gradient	≤ 250 K/min
Medium temperature	-20... 80 °C
Rated operational voltage U_B	21... 26 VDC
No-load current I_0	≤ 80 mA
Output function	normally open, PNP
Short-circuit protection	yes
Reverse polarity protection	yes
Max. voltage drop at I_e	≤ 1.5 V
Rated operational current (DC) I_e	0.4 A
Degree of protection	IP67
Housing material	stainless steel, A4 1.4571 (AISI 316Ti)
Sensor material	stainless steel, A4 (1.4571)
Max. fixing torque of coupling nut	max. 100 Nm
Wiring	connector, M12 x 1
Pressure resistance	100 bar
Mechanical connection	G1/2
Switching status indication	LED chain green / yellow / red
Indication 'below setpoint'	LED red
Indication 'at setpoint'	LED yellow
Indication 'above setpoint'	4 x LED green

Function principles

TURCK's wear-free flow controls reliably monitor the flow of gaseous and liquid media. The calorimetric operation principle of the sensors is based on the heat transport/ heat loss principle, i.e., when fluid moves over the heated sensing probe, heat is conducted away from the sensor. The heat loss is thus a measure of the flow speed.

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