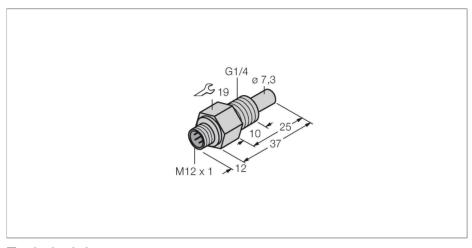


FCS-G1/4A4-NA-H1141 Flow Monitoring – Immersion Sensor without Integrated Processor



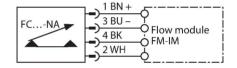
Technical data

Type FCS-G1/4A4-NA-H1141 Mounting Immersion sensor Water Operating Range 1150 cm/s Oil Operating Range 3300 cm/s Stand-by time typ. 8 s (215 s) Switch-on time typ. 2 s (115 s) Switch-off time typ. 2 s (115 s) Temperature jump, response time max. 12 s Temperature gradient ≤ 250 K/min Medium temperature -20+80 °C Electrical data Protection class IP67 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 Process Pressure 100 bar Process connection G 1/4"	ID	6870304
Water Operating Range 1150 cm/s Oil Operating Range 3300 cm/s Stand-by time typ. 8 s (215 s) Switch-on time typ. 2 s (115 s) Switch-off time typ. 2 s (115 s) Temperature jump, response time max. 12 s Temperature gradient ≤ 250 K/min Medium temperature -20+80 °C Electrical data Protection class IP67 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 Process Pressure 100 bar	Туре	FCS-G1/4A4-NA-H1141
Oil Operating Range 3300 cm/s Stand-by time typ. 8 s (215 s) Switch-on time typ. 2 s (115 s) Switch-off time typ. 2 s (115 s) Temperature jump, response time max. 12 s Temperature gradient ≤ 250 K/min Medium temperature -20+80 °C Electrical data Protection class IP67 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 Process Pressure 100 bar	Mounting	Immersion sensor
Stand-by timetyp. 8 s (215 s)Switch-on timetyp. 2 s (115 s)Switch-off timetyp. 2 s (115 s)Temperature jump, response timemax. 12 sTemperature gradient≤ 250 K/minMedium temperature-20+80 °CElectrical dataProtection classIP67Mechanical dataDesignImmersionHousing materialStainless steel, 1.4571 (AISI 316Ti)Sensor materialStainless steel, 1.4571 (AISI 316Ti)Max. tightening torque of housing nut30 NmElectrical connectionConnector, M12 × 1Process Pressure100 bar	Water Operating Range	1150 cm/s
Switch-on timetyp. 2 s (115 s)Switch-off timetyp. 2 s (115 s)Temperature jump, response timemax. 12 sTemperature gradient≤ 250 K/minMedium temperature-20+80 °CElectrical dataProtection classIP67Mechanical dataDesignImmersionHousing materialStainless steel, 1.4571 (AISI 316Ti)Sensor materialStainless steel, 1.4571 (AISI 316Ti)Max. tightening torque of housing nut30 NmElectrical connectionConnector, M12 × 1Process Pressure100 bar	Oil Operating Range	3300 cm/s
Switch-off time typ. 2 s (115 s) Temperature jump, response time max. 12 s Temperature gradient ≤ 250 K/min Medium temperature -20+80 °C Electrical data Protection class IP67 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 Process Pressure 100 bar	Stand-by time	typ. 8 s (215 s)
Temperature jump, response time Temperature gradient ≤ 250 K/min Medium temperature -20+80 °C Electrical data Protection class IP67 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 Electrical connection Connector, M12 × 1 Process Pressure	Switch-on time	typ. 2 s (115 s)
Temperature gradient ≤ 250 K/min Medium temperature -20+80 °C Electrical data Protection class IP67 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 Process Pressure 100 bar	Switch-off time	typ. 2 s (115 s)
Medium temperature -20+80 °C Electrical data Protection class IP67 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 Electrical connection Connector, M12 × 1 Process Pressure	Temperature jump, response time	max. 12 s
Electrical data Protection class IP67 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 Process Pressure 100 bar	Temperature gradient	≤ 250 K/min
Protection class IP67 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 Process Pressure 100 bar	Medium temperature	-20+80 °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 Process Pressure 100 bar	Electrical 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 Process Pressure 100 bar	Protection class	IP67
Housing material Stainless steel, 1.4571 (AISI 316Ti) Sensor material Stainless steel, 1.4571 (AISI 316Ti) Max. tightening torque of housing nut Electrical connection Connector, M12 × 1 Process Pressure 100 bar	Mechanical data	
Sensor material Stainless steel, 1.4571 (AISI 316Ti) Max. tightening torque of housing nut 30 Nm Electrical connection Connector, M12 × 1 Process Pressure 100 bar	Design	Immersion
Max. tightening torque of housing nut So Nm Electrical connection Connector, M12 × 1 Process Pressure 100 bar	Housing material	Stainless steel, 1.4571 (AISI 316Ti)
Electrical connection Connector, M12 × 1 Process Pressure 100 bar	Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Process Pressure 100 bar	Max. tightening torque of housing nut	30 Nm
	Electrical connection	Connector, M12 × 1
Process connection G 1/4"	Process Pressure	100 bar
	Process connection	G 1/4"

Features

- Sensor for liquid media
- Calorimetric functionality
- Adjustment via signal processor
- Status indicated via LED chain on signal processor
- Connector device, M12 × 1
- ■4-wire connection to the processor

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.