

FCIC-G1/4A4P-PL-H1141/1.0 Flow Monitoring – Compact Inline Flow Sensors of the FCIC Series Pulse Output



Technical data

ID	6870785		
Туре	FCIC-G1/4A4P-PL-H1141/1.0		
Mounting conditions	Inline sensor		
Flow operating range	0.051 l/min		
Stand-by time	typ. 10 s (215 s)		
Switch-on time	typ. 1 s (0.510 s)		
Medium temperature	0+60 °C		
Ambient temperature	0+60 °C		
Electrical data			
Operating voltage	21.626.4 VDC		
Current consumption	≤ 70 mA		
Output function	Pulse		
Protection class	IP67		
Mechanical data			
Design	Inline		
Housing material	Plastic, PBT-GF30		
Sensor material	Stainless steel, 1.4571 (AISI 316Ti)		
Electrical connection	Connector, M12 × 1		
Pressure resistance	10 bar		
Process connection	G 1/4"		

Features

- Thermodynamic operating principle
- flow monitoring of water
- Ready for use, no alignment
 Operating range 0.05...1.0 I/min
- Load resistance at least 1 kOhm
- Operating voltage side polarized
- Pulse output 1ml/pulse
- Pulse duration 5 ms
- Linearized for water
- Compact design
- Incl. adapter

Wiring diagram



Functional principle

The FCIC inline flow sensors operate on the thermodynamic principle.

Depending on the version the sensors detect aqueous media from 0.05 to 2 l/min. In addition to the classic transistor switching output there is also a linear 4 ... 20 mA and a linear pulse output available with a clock rate of 1 ml/pulse.

The sensors are already pre-configured and must no longer be matched by the customer. They are therefore immediately ready for operation.

To ensure a linear signal over the entire coverage, the sensors must be operated with the supplied adapter. The sensors with analog and pulse output provide a linear signal proportional to the flow rate in the specified operating range. However, it must be noted that water additives can lead to linear deviation.

In addition, the stable and small-scale design makes the sensors resistant to moisture and vibration. It also simplifies the integration into already existing and new applications. Not least in hard-to-reach places the FCIC play to their strengths.



Mounting instructions

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Mounting adapter	All sensors of the FCIC series are used with an adapter. This ensures a linear signal over the entire coverage. The adapter is screwed on to the process connection at the infeed side.
Mounting posi- tion	 In order to minimize potential misinterpretations due to disturbance, it is recommended to position the sensor with a minimum separation distance of 3 x di before and 5 x di after bends, changes in cross section, valves, etc If deposits are likely to built up, it is recommended to clean the sensor at regular intervals and to select the associated service interval accordingly. If the sensor is mounted in vertical piping systems, it is recommended to position the sensor within the riser.

Accessories

Dimension drawing	Туре	ID	
	RKC4.4T-P7X2-10/TXL	6626184	Connection cable, female M12, angled, 4-pin, cable length: 10m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com
M12 x1 0 15 2 14 + 11.5 + - 42	RKC4.4T-2/TXL	6625503	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com
+ #15 	WKC4.4T-2/TXL	6625515	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com