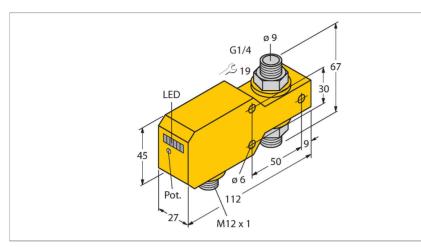


FCI-D10A4P-AP8X-H1141 Flow Monitoring – Inline Sensor with Integrated Processor



Technical data

TypeFCI-D10A4P-AP8X-H1141MountingInline sensorFlow operating range 0.16 l/minStand-by time 515 sSwitch-on time 0.51 sSwitch-off time 0.51 sTemperature gradient ≤ 400 K/minMedium temperature $0+80$ °CAmbient temperature $0+60$ °CElectrical data 0 cOperating voltage U _B $19.228.8$ VDCCurrent consumption ≤ 50 mAOutput functionPNP, NO contactRated operational current 0.2 AVoltage drop at I _a ≤ 1.5 VShort-circuit protectionyesProtection classIP67Mechanical data D lastic, PBT	ID	6870642
Flow operating range 0.16 l/minStand-by time 515 sSwitch-on time 0.51 sSwitch-off time 0.51 sTemperature gradient ≤ 400 K/minMedium temperature $0+80$ °CAmbient temperature $0+60$ °CElectrical data 0 Operating voltage U _B $19.228.8$ VDCCurrent consumption ≤ 50 mAOutput functionPNP, NO contactRated operational current 0.2 AVoltage drop at I _B ≤ 1.5 VShort-circuit protectionyesReverse polarity protectionyesProtection classIP67Mechanical dataInline	Туре	FCI-D10A4P-AP8X-H1141
Stand-by time 515 s Switch-on time 0.51 s Switch-off time 0.51 s Temperature gradient $\leq 400 \text{ K/min}$ Medium temperature $0+80 \text{ °C}$ Ambient temperature $0+60 \text{ °C}$ Electrical data 0 c Operating voltage Us $19.228.8 \text{ VDC}$ Current consumption $\leq 50 \text{ mA}$ Output functionPNP, NO contactRated operational current 0.2 A Voltage drop at Is $\leq 1.5 \text{ V}$ Short-circuit protectionyesProtection classIP67Mechanical dataInline	Mounting	Inline sensor
Switch-on time 0.51 sSwitch-off time 0.51 sTemperature gradient ≤ 400 K/minMedium temperature $0+80$ °CAmbient temperature $0+60$ °CElectrical data 0 Operating voltage U ₈ $19.228.8$ VDCCurrent consumption ≤ 50 mAOutput functionPNP, NO contactRated operational current 0.2 AVoltage drop at I ₈ ≤ 1.5 VShort-circuit protectionyesProtection classIP67Mechanical dataInline	Flow operating range	0.16 l/min
Switch-off time 0.51 sTemperature gradient ≤ 400 K/minMedium temperature $0+80$ °CAmbient temperature $0+80$ °CAmbient temperature $0+60$ °CElectrical data $0+60$ °COperating voltage U _B $19.228.8$ VDCCurrent consumption ≤ 50 mAOutput functionPNP, NO contactRated operational current 0.2 AVoltage drop at I ₆ ≤ 1.5 VShort-circuit protectionyesProtection classIP67Mechanical dataInline	Stand-by time	515 s
Temperature gradient ≤ 400 K/minMedium temperature $0+80$ °CAmbient temperature $0+80$ °CAmbient temperature $0+60$ °CElectrical data 0 Operating voltage Us $19.228.8$ VDCCurrent consumption ≤ 50 mAOutput functionPNP, NO contactRated operational current 0.2 AVoltage drop at Is ≤ 1.5 VShort-circuit protectionyesReverse polarity protectionyesProtection classIP67Mechanical dataInline	Switch-on time	0.51 s
Medium temperature $0+80$ °CAmbient temperature $0+60$ °CElectrical data 0 Operating voltage U _B $19.228.8$ VDCCurrent consumption ≤ 50 mAOutput functionPNP, NO contactRated operational current 0.2 AVoltage drop at I _B ≤ 1.5 VShort-circuit protectionyesProtection classIP67Mechanical dataInline	Switch-off time	0.51 s
Ambient temperature $0+60 ^{\circ}C$ Electrical data $0+60 ^{\circ}C$ Operating voltage Us $19.228.8 \text{VDC}$ Current consumption $\leq 50 \text{mA}$ Output functionPNP, NO contactRated operational current 0.2A Voltage drop at Is $\leq 1.5 \text{V}$ Short-circuit protectionyesReverse polarity protectionyesProtection classIP67Mechanical dataInline	Temperature gradient	≤ 400 K/min
Electrical dataOperating voltage U_8 19.228.8 VDCCurrent consumption \leq 50 mAOutput functionPNP, NO contactRated operational current0.2 AVoltage drop at I_8 \leq 1.5 VShort-circuit protectionyesReverse polarity protectionyesProtection classIP67Mechanical dataInline	Medium temperature	0+80 °C
Operating voltage U_{B} 19.228.8 VDCCurrent consumption \leq 50 mAOutput functionPNP, NO contactRated operational current0.2 AVoltage drop at I_{e} \leq 1.5 VShort-circuit protectionyesReverse polarity protectionyesProtection classIP67Mechanical dataInline	Ambient temperature	0+60 °C
Current consumption≤ 50 mAOutput functionPNP, NO contactRated operational current0.2 AVoltage drop at I₀≤ 1.5 VShort-circuit protectionyesReverse polarity protectionyesProtection classIP67Mechanical dataInline	Electrical data	
Output functionPNP, NO contactRated operational current 0.2 A Voltage drop at I. $\leq 1.5 \text{ V}$ Short-circuit protectionyesReverse polarity protectionyesProtection classIP67Mechanical dataInline	Operating voltage U _B	19.228.8 VDC
Rated operational current0.2 AVoltage drop at I₀≤ 1.5 VShort-circuit protectionyesReverse polarity protectionyesProtection classIP67Mechanical dataDesignInline	Current consumption	≤ 50 mA
Voltage drop at I₀ ≤ 1.5 V Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data Inline	Output function	PNP, NO contact
Short-circuit protection yes Reverse polarity protection yes Protection class IP67 Mechanical data IP67 Design Inline	Rated operational current	0.2 A
Reverse polarity protectionyesProtection classIP67Mechanical dataDesignInline	Voltage drop at I _e	≤ 1.5 V
Protection class IP67 Mechanical data	Short-circuit protection	yes
Mechanical data Design	Reverse polarity protection	yes
Design Inline	Protection class	IP67
	Mechanical data	
Housing material Plastic, PBT	Design	Inline
	Housing material	Plastic, PBT
Sensor material Stainless steel, 1.4571 (AISI 316Ti)	Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Max. tightening torque of housing nut 30 Nm	Max. tightening torque of housing nut	30 Nm

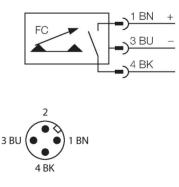


Features

Flow sensor for liquid media
Calorimetric principle
Adjustment via potentiometer

- LED band
- Operating range 0.1...6 l/min
- DC 3-wire, 19.2...28.8 VDC
- NO contact, PNP output
- Connector device, M12 × 1

Wiring diagram



Functional principle

The function of the inline flow sensors is based on the thermo-dynamic principle. Heat is generated in a measuring tube and absorbed by the flowing medium. The transported heat loss is thus a measure of the flow speed. Thus TURCK's wear-free flow sensors reliably monitor the flow of gaseous and liquid media. A low pressure drop and



Technical data

fast response to flow rate variations are the outstanding features of these devices.

Electrical connection	Connector, M12 × 1
Process Pressure	20 bar
Process connection	G 1/4"
Switching state	LED chain, Green/yellow/red
Flow state display	LED chain
Indication: Drop below setpoint	LED Red
Indication: Setpoint reached	LED Yellow
Indication: Setpoint exceeded	4 × LEDs Green