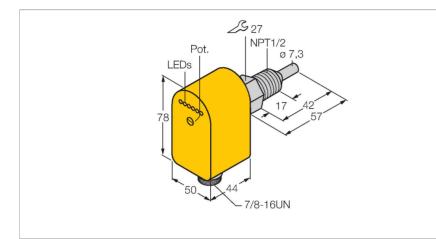


# FCS-N1/2A4P-ARX-B1151/115VAC





#### Technical data

TypeFCS-N1/2A4P-ARX-B1151/115VACMountingImmersion sensorWater Operating Range1150 cm/sOil Operating Range3300 cm/sStand-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 data98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataDesignDesignImmersionHousing materialPlastic, PBT	ID	6871025
Water Operating Range1150 cm/sOil Operating Range3300 cm/sStand-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 dataOperating voltage Us98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Туре	FCS-N1/2A4P-ARX-B1151/115VAC
Oil Operating Range $3300 \text{ cm/s}$ 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 $\leq 250 \text{ K/min}$ Medium temperature-20+80 °CElectrical data $\bigcirc$ 00 cOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Mounting	Immersion sensor
Stand-by timetyp. 8 s (215 s)Switch-on timetyp. 2 s (115 s)Switch-off timetyp. 2 s (115 s)Switch-off timetyp. 2 s (115 s)Temperature jump, response timemax. 12 sTemperature gradient $\leq 250$ K/minMedium temperature $-20+80$ °CElectrical data $0$ Operating voltage U <sub>B</sub> 98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	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 $\leq 250 \text{ K/min}$ Medium temperature $-20+80 \text{ °C}$ Electrical data $\bigcirc$ Operating voltage Us98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Oil Operating Range	3300 cm/s
Switch-off timetyp. 2 s (115 s)Temperature jump, response timemax. 12 sTemperature gradient≤ 250 K/minMedium temperature-20+80 °CElectrical dataOperating voltage UB98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Stand-by time	typ. 8 s (215 s)
Temperature jump, response timemax. 12 sTemperature gradient≤ 250 K/minMedium temperature-20+80 °CElectrical data-20+80 °COperating voltage U <sub>B</sub> 98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Switch-on time	typ. 2 s (115 s)
Temperature gradient≤ 250 K/minMedium temperature-20+80 °CElectrical data-20+80 °COperating voltage Us98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage250 VACDC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity500 VAProtection classIP67Mechanical dataImmersion	Switch-off time	typ. 2 s (115 s)
Medium temperature-20+80 °CElectrical data98132 VACOperating voltage UBB98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage250 VACDC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Temperature jump, response time	max. 12 s
Electrical dataOperating voltage UB98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage250 VACDC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Temperature gradient	≤ 250 K/min
Operating voltage UB98132 VACOutput functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage250 VACDC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Medium temperature	-20+80 °C
Output functionRelay output, NO contactRated operational current2 AShort-circuit protectionnoAC switching voltage250 VACDC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Electrical data	
Rated operational current2 AShort-circuit protectionnoAC switching voltage250 VACDC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Operating voltage U <sub>B</sub>	98132 VAC
Short-circuit protectionnoAC switching voltage250 VACDC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Output function	Relay output, NO contact
AC switching voltage250 VACDC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataImmersion	Rated operational current	2 A
DC switching voltage60 VDCMax. AC switching capacity500 VAMax. DC switching capacity50 WProtection classIP67Mechanical dataDesignImmersion	Short-circuit protection	no
Max. AC switching capacity 500 VA   Max. DC switching capacity 50 W   Protection class IP67   Mechanical data Immersion	AC switching voltage	250 VAC
Max. DC switching capacity 50 W   Protection class IP67   Mechanical data Immersion	DC switching voltage	60 VDC
Protection class IP67   Mechanical data Immersion	Max. AC switching capacity	500 VA
Mechanical data   Design	Max. DC switching capacity	50 W
Design Immersion	Protection class	IP67
g.	Mechanical data	
Housing material Plastic, PBT	Design	Immersion
	Housing material	Plastic, PBT

#### Features

- Sensor for liquid media
- Calorimetric principle
- Adjustment via potentiometer
- Status indicated via LED chain
- AC 5-wire, 98...132 VAC
- NO contact, relay output
- Plug-in device, 7/8"-16UN

#### Wiring diagram





## Functional principle

The function of immersion flow sensors is based on the thermodynamic principle. The sensor is heated up by a few degrees Celsius compared to the flow medium. If the medium flows past the sensor, the heat generated in the sensor is dissipated. The resulting temperature is measured and compared with the temperature of the medium. The flow condition of each medium can be derived from the temperature difference obtained. Thus, TURCK flow sensors reliably and wear-free monitor the flow of liquid or gaseous media.



### Technical data

Sensor material	Stainless steel, 1.4571 (AISI 316Ti)
Max. tightening torque of housing nut	30 Nm
Electrical connection	Connector, 7/8"
Process Pressure	100 bar
Process connection	1/2" NPT
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