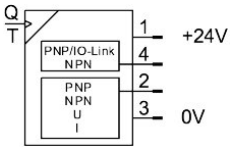
Flow sensor
SFAW-32-X-E-PNLK-PNVBA-M12

Part number: 8036887





Data sheet

Feature	Value
Certification	RCM compliance mark c UL us - Listed (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Note on materials	RoHS compliant
Measured variable	Flow rate Temperature
Flow direction	Unidirectional P1 -> P2
Method of measurement	Flow rate: Vortex Temperature. PT1000
Flow measuring range start value	1.8 l/min
Flow measuring range end value	32 l/min
Operating pressure	0 MPa...1.2 MPa 0 bar...12 bar 0 psi...174 psi
Information on operating pressure	max. 1.2 MPa (12 bar / 174 psi) at 40°C max. 0.6 MPa (6 bar / 87 psi) at 90°C
Overload pressure	4 MPa 40 bar 580 psi
Operating medium	Liquid media Water Neutral liquids
Information on operating and pilot media	Media with a kinematic viscosity = 1.8 mm²/sec. [cSt]. Compatibility of the media with the substances that come into contact with the media must be ensured.
Temperature of medium	0 °C...90 °C
Ambient temperature	0 °C...50 °C
Nominal temperature	23 °C
Accuracy of flow rate	±2 %FS for flow rate <= 50 %FS ±3% of measured value for flow rate >= 50 %FS
Accuracy of temperature in ± °C	2 °C
Repetition accuracy of flow rate value	<±0.5% FS for flow rate <= 50% FS

Feature	Value
	< ±1% o.m.v. for flow rate >= 50% FS
Temperature co-efficient margin in ± %FS/K	Typ. ±0.05%FS/K
Switching output	2 x PNP or 2 x NPN switchable
Switching function	Window comparator Threshold value comparator Freely programmable
Switching element function	N/C contact/N/O contact, switchable
Max. output current	100 mA
Analog output	0 - 10 V 4 - 20 mA 1 - 5 V
Flow characteristic curve, start value	0 l/min
Flow characteristic curve, end value	32 l/min
Max. load resistance of current output	500 Ohm
Min. load resistance of voltage output	15 kOhm
Short-circuit protection	Yes
Overload protection	Available
Protocol	IO-Link®
IO-Link®, protocol version	Device V 1.1
IO-Link®, profile	Smart sensor profile
IO-Link®, function classes	Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel
IO-Link®, communication mode	COM2 (38,4 kBd)
IO-Link®, SIO mode support	Yes
IO-Link®, port class	A
IO-Link®, process data width OUT	0 bytes
IO-Link®, process data width IN	3 Byte
IO-Link®, process data content IN	1 bit BDC (volume monitoring) 14 bit PDV (flow measurement) 2 bit BDC (flow monitoring)
IO-Link®, service data contents IN	32 bit volume measurement
IO-Link®, minimum cycle time	5 ms
IO-Link®, data memory required	0.5 KB
DC operating voltage range	18 V...30 V
Reverse polarity protection	for all electrical connections
Electrical connection 1, connection type	Plug
Electrical connection 1, connection technology	M12x1 A-coded as per EN 61076-2-101
Electrical connection 1, number of pins/wires	5
Electrical connection 1, type of mounting	Screw-type lock not rotatable Compatible with rotatable screw-type lock
Max. cable length	20 m for IO-Link® operation 30 m
Mounting position	Any
Fluid connector	Connection provided by the user
Product weight	140 g
Housing material	PA-reinforced
Materials in contact with the media	EPDM (peroxide) ETFE High-grade steel Reinforced PA6T/6I
Displayable unit(s)	US gal US gal/min cft cft/min l

Feature	Value
	l/h l/min
Degree of protection	IP65
Corrosion resistance class (CRC)	3 - High corrosion stress
LABS (PWIS) conformity	VDMA24364-B2-L