

Flow sensor SFAW-100T-X-E-PNLK-PNVBA-M12

Part number: 8036890

FESTO



General operating condition

Data sheet

Feature	Value
Symbol	00995566
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 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	5 l/min
Flow measuring range end value	100 l/min
Temperature measuring range start value	0 °C
Temperature measuring range end value	90 °C
Operating pressure	0 MPa ... 1.2 MPa
Operating pressure	0 bar ... 12 bar
Operating pressure	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
Overload pressure	40 bar
Overload pressure	580 psi
Operating medium	Liquid media Water Neutral liquids
Information on operating and pilot media	Media with a kinematic viscosity = 1.8 mm ² /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 < ±1% o.m.v. for flow rate >= 50% FS

Feature	Value
Temperature co-efficient margin in \pm %FS/K	Typ. $\pm 0.05\%$ 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	100 l/min
Temperature characteristic curve start value	0 °C
Temperature characteristic curve end value	100 °C
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 Byte
IO-Link®, process data width IN	5 Byte
IO-Link®, process data content IN	1 bit BDC (temperature monitoring) 1 bit BDC (volume monitoring) 14 bit PDV (flow measurement) 14 bit PDV (temperature 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	500 byte
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	not rotatable
Electrical connection 1, type of mounting	Compatible with rotatable screw-type lock
Electrical connection for input 1, connection pattern	00995383
Max. cable length	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	PA6T/6I-reinforced

Feature	Value
Displayable unit(s)	US gal US gal/min cft cft/min l l/h l/min m3 °C °F
Degree of protection	IP65
Corrosion resistance class (CRC)	3 - High corrosion stress
LABS (PWIS) conformity	VDMA24364-B2-L