

Flow sensor SFAW-

Part number: 8022000

FESTO



 General operating condition

Data sheet

Overall data sheet – Individual values depend upon your configuration.

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 ... 5 l/min
Flow measuring range end value	32 l/min ... 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

Feature	Value
Repetition accuracy of flow rate value	$\leq \pm 0.5\%$ FS for flow rate $\leq 50\%$ FS $\leq \pm 1\%$ of measured value for flow rate $\geq 50\%$ FS
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	32 l/min ... 100 l/min
Temperature characteristic curve start value	0 °C
Temperature characteristic curve end value	90 °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	3 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	Screw-type lock not rotatable
Electrical connection 1, type of mounting	Compatible with screw lock rotatable
Electrical connection for input 1, connection pattern	00995383
Max. cable length	20 m for IO-Link® operation 30 m
Mounting position	Any

Feature	Value
Fluid connector	Internal thread 1/2 NPT Internal thread 3/4 NPT Internal thread G1 Internal thread G1/2 Internal thread G3/4 Internal thread Rc1/2 Internal thread Rc3/4 Connection provided by the user
Product weight	140 g ... 530 g
Housing material	PA-reinforced
Materials in contact with the media	PA6T/6I-reinforced
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