

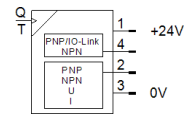
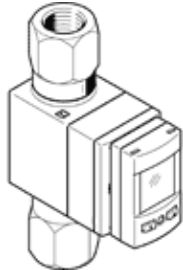
flow sensor

SFAW-100T-TG1-E-PNLK-PNVBA-M12

Part number: 8036878

FESTO

For measuring and monitoring flow rate, volume and temperature of liquid media, flow measuring range 100l/min.



Data sheet

Feature	Value
Authorisation	RCM Mark c UL us - Listed (OL)
CE mark (see declaration of conformity)	to EU directive for EMC in accordance with EU RoHS directive
KC mark	KC-EMV
Materials note	Conforms to RoHS
Measured variable	Flow rate Temperature
Direction of flow	Unidirectional P1 → P2
Measurement method	Flow: vortex Temperature: PT1000
Flow measurement range initial value	5 l/min
Flow measurement range final value	100 l/min
Temperature measuring range starting value	0 °C
Temperature measuring range end value	90 °C
Operating pressure	0 ... 12 bar
Note on operating pressure	Max. 12 bar at 40°C Max. 6 bar at 100°C
Operating medium	Fluid media Water Neutral fluids
Note on operating and pilot medium	It must be ensured that the operating medium is compatible with the materials with which it is in contact.
Medium temperature	0 ... 90 °C
Ambient temperature	0 ... 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% of measured value for flow rate ≥ 50% FS
Temperature co-efficient margin in ± %FS/K	typ. ±0,05%FS/K
Switch output	2 x PNP or 2 x NPN switchable
Switching function	Window comparator Threshold value comparator Freely programmable
Switching element function	N/C or N/O contact, switchable
Max. output current	100 mA
Analogue output	0 - 10 V 4 - 20 mA 1 - 5 V
Characteristic curve for flow rate initial value	0 l/min

Feature	Value
Characteristic curve for flow rate final value	100 l/min
Temperature characteristic curve starting value	0 °C
Temperature characteristic curve end value	100 °C
Max. load resistance, current output	500 Ohm
Min. load resistance, voltage output	15 kOhm
Short circuit strength	Yes
Overload withstand capability	Available
Protocol	IO-Link
IO-Link, protocol	Device V 1.1
IO-Link, profile	Smart sensor profile
IO-Link, function classes	Binary Data Channels (BDC) Process Data Variable (PDV) Identification diagnosis Teach channel
IO-Link, communication mode	COM2 (38,4 kBaud)
IO-Link, SIO mode support	Yes
IO-Link, port type	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 measured value) 14 bit PDV (temperature measured value) 2 bit BDC (flow monitoring)
IO-Link, Service data contents IN	32-bit measured volume value
IO-Link, minimum cycle time	5 ms
IO-Link, data memory required	0.5 Kilobyte
Operating voltage range DC	18 ... 30 V
Polarity protected	for all electrical connections
Electrical connection	5-pin A-coded M12x1 Plug straight
Max. line length	20 m with IO-Link operation 30 m
Assembly position	Any
Fluid connection	Female thread G1
Product weight	400 g
Material housing	PA-reinforced
Materials in contact with media	EPDM (perox.) ETFE Stainless steel PA6T/6I reinforced
Unit(s) that can be displayed	US gal US gal/min cft cft/min l l/h l/min m3 °C °F
Protection class	IP65
Corrosion resistance classification CRC	3 - High corrosion stress