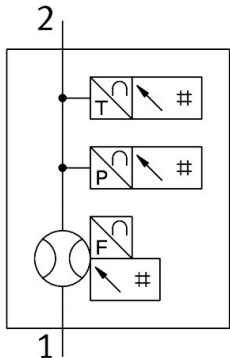


Flow sensor

SFAM-90-5000L-M-PNLK-PNVBA-M12

Part number: 8181247

FESTO



Data sheet

Feature	Value
Certification	RCM compliance mark
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
Flow direction	Unidirectional From left to right
Pressure measuring range initial value	0 MPa 0 bar 0 psi
Pressure measuring range end value	1.6 MPa 16 bar 232 psi
Flow measuring range start value	50 l/min
Flow measuring range end value	5000 l/min
Temperature measuring range start value	0 °C
Temperature measuring range end value	50 °C
Operating pressure	1.6 MPa 16 bar 232 psi
Overload pressure	2 MPa 20 bar 290 psi
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4] Nitrogen
Temperature of medium	0 °C...50 °C
Ambient temperature	0 °C...50 °C
Nominal temperature	23 °C

Feature	Value
Accuracy of pressure value in $\pm$ %FS	1.5 %FS
Accuracy of flow rate	$\pm$ (3% o.m.v. + 0.3% FS)
Accuracy of temperature in $\pm$ °C	5 °C
Repetition accuracy of pressure value in $\pm$ %FS	0.3 %FS
Zero point repetition accuracy in $\pm$ %FS	0.2 %FS
Repetition accuracy margin in $\pm$ %FS	0.8 %FS
Temperature co-efficient in $\pm$ %FS/K	0.05 %FS/K
Temperature co-efficient margin in $\pm$ %FS/K	typ. 0. 1%FS/K
Pressure influence of margin in $\pm$ %FS/bar	0.5 %FS/b.
Analog output	0 - 10 V 4 - 20 mA
Flow characteristic curve, start value	0 l/min
Flow characteristic curve, end value	5000 l/min
Temperature characteristic curve start value	0 °C
Temperature characteristic curve end value	100 °C
Output characteristic curve initial value	0 V 4 mA
End value output characteristic curve	10 V 20 mA
Max. load resistance of current output	500 Ohm
Min. load resistance of voltage output	20 kOhm
Short-circuit protection	yes
Overload protection	Available
Protocol	IO-Link®
IO-Link, revision ID	V1.1
IO-Link, device profile	Function Extended identification Function Measurement data, standard resolution Function Multiple switching signal Firmware update Function Locator Function Product URI Function Teach single value Identification and diagnosis Smart Sensor - SSP 4.1.2
IO-Link, transmission rate	COM3
IO-Link®, SIO mode support	Yes
IO-Link, port type	Class A
IO-Link, process data length output	0 bit
IO-Link, process data length input	96 bit
IO-Link®, process data content IN	Pressure measured value 16 bit MDC Flow rate monitoring 2-bit SSC Flow rate measured value 16-bit MDC Flow rate monitoring 2-bit SSC Temperature measured value 16-bit MDC Temperature monitoring 2-bit SSC Volume / mass pulse 1 bit SSC
IO-Link®, service data contents IN	Volume / mass measured value 32-bit
IO-Link®, minimum cycle time	1.5 ms
IO-Link®, data memory required	0.5 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 Compatible with screw lock rotatable
Max. cable length	20 m for IO-Link® operation 30 m

Feature	Value
Type of mounting	On service unit
Mounting position	Any
Pneumatic connection	Battery module
Product weight	600 g
Housing material	Die-cast aluminum PA-reinforced
Display type	Illuminated LCD, multi-color
Degree of protection	IP60
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L