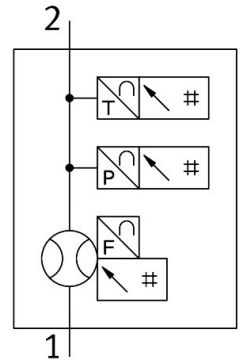


# Flow sensor

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

Part number: 8187367

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	Argon Compressed air as per ISO 8573-1:2010 [7:4:4] Carbon dioxide Nitrogen
Temperature of medium	0 °C...50 °C
Ambient temperature	0 °C...50 °C

Feature	Value
Nominal temperature	23 °C
Accuracy of pressure value in ± %FS	1.5 %FS
Accuracy of flow rate	± (3% o.m.v. + 0.3% FS)
Accuracy of temperature in ± °C	5 °C
Repetition accuracy of pressure value in ± %FS	0.3 %FS
Zero point repetition accuracy in ± %FS	0.2 %FS
Repetition accuracy margin in ± %FS	0.8 %FS
Temperature co-efficient in ± %FS/K	0.05 %FS/K
Temperature co-efficient margin in ± %FS/K	typ. 0. 1%FS/K
Pressure influence of margin in ±%FS/bar	0.5 %FS/b.
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	Firmware update Function Locator Function Product URI Function Quantity detection Identification and diagnosis Smart Sensor - SSP 4.1.3
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	Current operating status 4 bit Monitoring the pressure drop at peak flow 1 bit SSC Monitoring the pressure drop at medium flow rate 1 bit SSC Monitoring the pressure stability in active operating status 1 bit SSC Monitoring of pressure stability in passive operating status 1 bit SSC Monitoring the average flow rate 1 bit SSC Reference record unusable 1 bit Monitoring the peak flow rate 1 bit SSC Time monitoring of the active-static operating status 1 bit SSC
IO-Link®, service data contents IN	Volume / mass measured value 32-bit Pneumatic energy measurement 32 bit Pneumatic power measurement value 32 bit
IO-Link®, minimum cycle time	1.5 ms
IO-Link®, data memory required	1 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
Max. cable length	20 m for IO-Link® operation 30 m
Type of mounting	On service unit

Feature	Value
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	IP65
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L