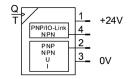
Flow sensor SFAW-32T-TG34-E-PNLK-PNVBA-M12

FESTO

Part number: 8036874





Data sheet

General operating condition

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 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
Flow measuring range end value	32 l/min
Temperature measuring range start value	0 ℃
Temperature measuring range end value	90 ℃
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 ℃ 90 ℃
Ambient temperature	0 ℃ 50 ℃
Nominal temperature	23 ℃
Accuracy of flow rate	±2 % FS for flow rate <= 50 % FS ±3 % o.m.v. for flow rate >= 50 %FS
Accuracy of temperature in ± °C	2 ℃

Feature	Value
Repetition accuracy of flow rate value	< ±0.5 % FS for flow rate <= 50 % FS
	< ±1 % o.m.v. for flow rate >= 50 %FS
Temperature co-efficient margin in ± %FS/K	Typ. ±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
, manag sanpar	4 - 20 mA
	1 - 5 V
Flow characteristic curve, start value	0 l/min
Flow characteristic curve, end value	32 l/min
Temperature characteristic curve start value	0 ℃
Temperature characteristic curve end value	100 ℃
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	Α
IO-Link®, process data width OUT	
I C LIIIKW, PIOCESS data Width OUT	0 Byte
IO-Link®, process data width IN	0 Byte 5 Byte
·	5 Byte 1 bit BDC (temperature monitoring)
IO-Link®, process data width IN	5 Byte 1 bit BDC (temperature monitoring) 1 bit BDC (volume monitoring)
IO-Link®, process data width IN	5 Byte 1 bit BDC (temperature monitoring)
IO-Link®, process data width IN	5 Byte 1 bit BDC (temperature monitoring) 1 bit BDC (volume monitoring) 14 bit PDV (flow measurement)
IO-Link®, process data width IN	5 Byte 1 bit BDC (temperature monitoring) 1 bit BDC (volume monitoring) 14 bit PDV (flow measurement) 14 bit PDV (temperature measurement)
IO-Link®, process data width IN IO-Link®, process data content IN	5 Byte 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®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN	5 Byte 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) 32 bit volume measurement
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time	5 Byte 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) 32 bit volume measurement 5 ms
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required	5 Byte 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) 32 bit volume measurement 5 ms 500 byte
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101 5
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, number of pins/wires Electrical connection 1, type of mounting	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101 5 Screw-type lock
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, number of pins/wires Electrical connection 1, type of mounting Electrical connection for input 1, connection pattern Max. cable length	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101 5 Screw-type lock 00995383
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires Electrical connection 1, type of mounting Electrical connection for input 1, connection pattern	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101 5 Screw-type lock 00995383 20 m for IO-Link® operation
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, number of pins/wires Electrical connection 1, type of mounting Electrical connection for input 1, connection pattern Max. cable length	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101 5 Screw-type lock 00995383 20 m for IO-Link® operation 30 m
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires Electrical connection 1, type of mounting Electrical connection for input 1, connection pattern Max. cable length Mounting position Fluid connector Product weight	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101 5 Screw-type lock 00995383 20 m for IO-Link® operation 30 m Any
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires Electrical connection 1, type of mounting Electrical connection for input 1, connection pattern Max. cable length Mounting position Fluid connector	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101 5 Screw-type lock 00995383 20 m for IO-Link® operation 30 m Any Internal thread G3/4
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires Electrical connection 1, type of mounting Electrical connection for input 1, connection pattern Max. cable length Mounting position Fluid connector Product weight	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101 5 Screw-type lock 00995383 20 m for IO-Link® operation 30 m Any Internal thread G3/4 530 g PA-reinforced EPDM (peroxide)
IO-Link®, process data width IN IO-Link®, process data content IN IO-Link®, service data contents IN IO-Link®, service data contents IN IO-Link®, minimum cycle time IO-Link®, data memory required DC operating voltage range Reverse polarity protection Electrical connection 1, connection type Electrical connection 1, connection technology Electrical connection 1, number of pins/wires Electrical connection 1, type of mounting Electrical connection for input 1, connection pattern Max. cable length Mounting position Fluid connector Product weight Housing material	5 Byte 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) 32 bit volume measurement 5 ms 500 byte 18 V 30 V for all electrical connections Plug M12x1 A-coded as per EN 61076-2-101 5 Screw-type lock 00995383 20 m for IO-Link® operation 30 m Any Internal thread G3/4 530 g PA-reinforced

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