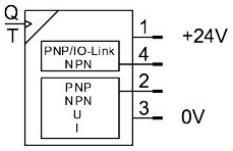
Flow sensor
SFAB-200U-HQ8-PNLK-PNVBA-M12

Part number: 8162828





Data sheet

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	Mass flow Temperature Volume Volumetric flow rate
Flow direction	Unidirectional P1 -> P2
Flow measuring range start value	2 l/min
Flow measuring range end value	200 l/min
Temperature measuring range start value	0 °C
Temperature measuring range end value	50 °C
Operating pressure	0 MPa...1 MPa 0 bar...10 bar 0 psi...145 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
Nominal temperature	23 °C
Accuracy of flow rate	±(3% o.m.v. + 0.3% FS)
Accuracy of temperature in ± °C	5 °C
Zero point repetition accuracy in ± %FS	0.2 %FS
Repetition accuracy margin in ± %FS	0.8 %FS
Temperature co-efficient margin in ± %FS/K	typ. 0.1%FS/K
Pressure influence of margin in ±%FS/bar	0.5 %FS/b.
Switching output	2 x PNP or 2 x NPN switchable
Switching function	Window comparator

Feature	Value
	Threshold value comparator
Switching element function	N/C contact/N/O contact, switchable
On time	10 ms
Switch-off time	10 ms
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	200 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	64 bit
IO-Link®, process data content IN	Flow-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	1.2 ms
IO-Link®, data memory required	0.5 KB
DC operating voltage range	15 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 Compatible with rotatable screw-type lock
Type of mounting	With through-hole With DIN rail
Mounting position	Any
Pneumatic connection	For pneumatic tubing outside diameter 8 mm
Product weight	160 g
Housing material	PA-reinforced

Feature	Value
Display type	Multi-color backlit LCD
Degree of protection	IP65
Pressure drop	100 mbar
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L