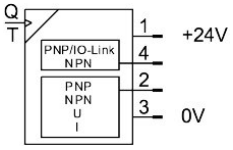
Flow sensor
SFAB-200U-WQ8-PNLK-PNVBA-M12

Part number: 8162829





Data sheet

Feature	Value
Approval	RCM c UL us - Listed (Oil)
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with 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 rate Temperature Volume
Flow direction	Unidirectional P1 -> P2
Start value for flow rate measuring range	2 l/min
End value for flow rate measuring range	200 l/min
Temperature measurement start value	0 °C
Temperature measurement end value	50 °C
Operating pressure	0 MPa...1 MPa 0 bar...10 bar 0 psi...145 psi
Operating medium	Argon Compressed air to ISO 8573-1:2010 [7:4:4] Carbon dioxide Nitrogen
Media temperature	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 temperature in ± °C	5 °C
Repetition accuracy offset in ± %FS	0.2 %FS
Repetition accuracy span in ± %FS	0.8 %FS
Temperature coefficient span in ± %FS/K	typ. 0.1%FS/K
Pressure influence span in ± %FS/bar	0.5 %FS/b.
Switching output	2 x PNP or 2 x NPN, switchable
Switching function	Window comparator Threshold value comparator

Feature	Value
Switching element function	NC or NO, switchable
Switch-on time	10 ms
Switch-off time	10 ms
Max. output current	100 mA
Analogue 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 start value	0 V
Output characteristic curve end value	10 V 20 mA
Output characteristic curve starting value	4 mA
Max. load resistance current output	500 Ohm
Min. load resistance voltage output	20 kOhm
Short circuit current rating	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 diagnostics 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 rate measurement 16 bit MDC Flow rate monitoring 2-bit SSC Measured temperature value 16 bit MDC Temperature monitoring 2-bit SSC Volume / mass pulse 1 bit SSC
IO-Link, Service data IN	Volume/mass measured value 32 bit
IO-Link, minimum cycle time	1.2 ms
IO-Link, Data storage required	0.5 KB
Operational voltage range DC	15 V...30 V
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Plug
Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection 1, number of connections/cores	5
Electrical connection 1, type of mounting	Screw-type lock Not rotatable
Electrical connection 1, compatible type of mounting	Compatible with rotatable screw-type lock
Type of mounting	With through-hole via DIN rail Via wall/surface bracket
Mounting position	Any
Pneumatic connection	For tubing O.D. 8 mm
Product weight	160 g
Material housing	Reinforced PA

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