

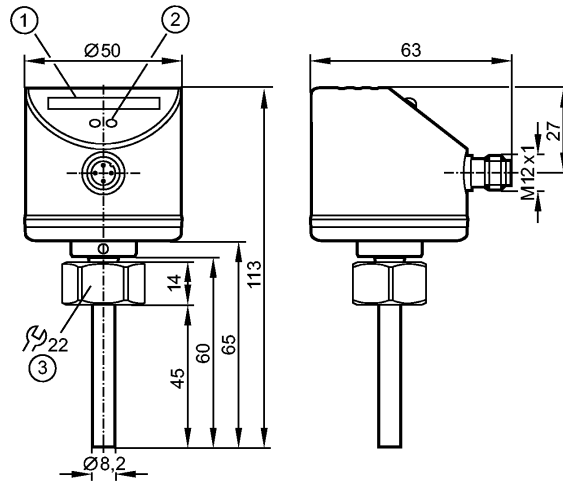


SI5100

SID10ADTFPKG/US-100



Flow sensors



- 1: LED display
- 2: setting pushbutton
- 3: tightening torque 25 Nm



Product characteristics

Flow monitor
Compact type for adapter
Process connection: internal thread M18 x 1.5 for adapter (titanium)
Probe length: 45 mm
Pressure rating: 300 bar
Setting range: 3...300 cm/s (liquids)

Application

Application	liquids and gases, aggressive media
Pressure rating [bar]	300
Medium temperature [°C]	-25...80

Electrical data

Electrical design	DC PNP
Operating voltage [V]	19...36 DC
Current consumption [mA]	< 60
Protection class	III
Reverse polarity protection	yes

Outputs

Output function	normally open / closed programmable
Current rating [mA]	250
Voltage drop [V]	< 2.5
Short-circuit protection	yes (non-latching)
Overload protection	yes

Measuring / setting range

Liquids	
Setting range [cm/s]	3...300
Greatest sensitivity [cm/s]	3...100
Gases	
Setting range [cm/s]	200...3000



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Flow sensors

Greatest sensitivity	[cm/s]	200...800
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Accuracy / deviations

Switch point accuracy	[cm/s]	$\pm 2... \pm 10$ *)
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Hysteresis	[cm/s]	2...5 *)
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Repeatability	[cm/s]	1...5 *)
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Temperature drift	[cm/s x 1/K]	0.1 **)
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Max. temperature gradient of medium	[K/min]	300
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Reaction times

Power-on delay time	[s]	10
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Response time	[s]	1...2 ***) / 1...10 ****)
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Software / programming

Adjustment of the switch point		pushbuttons
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Environment

Ambient temperature	[°C]	-25...80
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Storage temperature	[°C]	-25...100
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Protection		IP 67
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Tests / approvals

EMC	EN 61000-4-2 ESD:	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated:	10 V/m
	EN 61000-4-4 Burst:	2 kV
	EN 61000-4-6 HF conducted:	10 V

Shock resistance	DIN IEC 68-2-27:	50 g (11 ms)
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Vibration resistance	DIN EN 60068-2-6	20 g (55...2000 Hz)
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MTTF	[Years]	298
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Mechanical data

Process connection		internal thread M18 x 1.5 for adapter (titanium)
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Materials (wetted parts)		titanium (3.7035); O-ring: FKM 8 x 1.5 gr 80° Shore A
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Housing materials		stainless steel 316L / 1.4404; V2A / 301 / 1.4310; PC (polycarbonate); PBT-GF 20; EPDM/X
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Probe length L	[mm]	45
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Weight	[kg]	0.226
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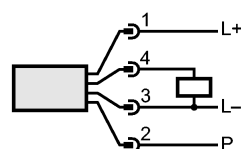
Displays / operating elements

Function display	LED	10 LEDs, three-colour
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Electrical connection

Connection		M12 connector
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Wiring



P = programming wire (for remote adjustment)

Remarks

Remarks		*) for water; 5...100 cm/s; 25°C (factory setting)
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Flow sensors

**) for water; 5...100 cm/s; 10...70°C
***) for liquids and temperature gradient 1 K/min
****) for gases

Pack quantity	[piece]	1
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