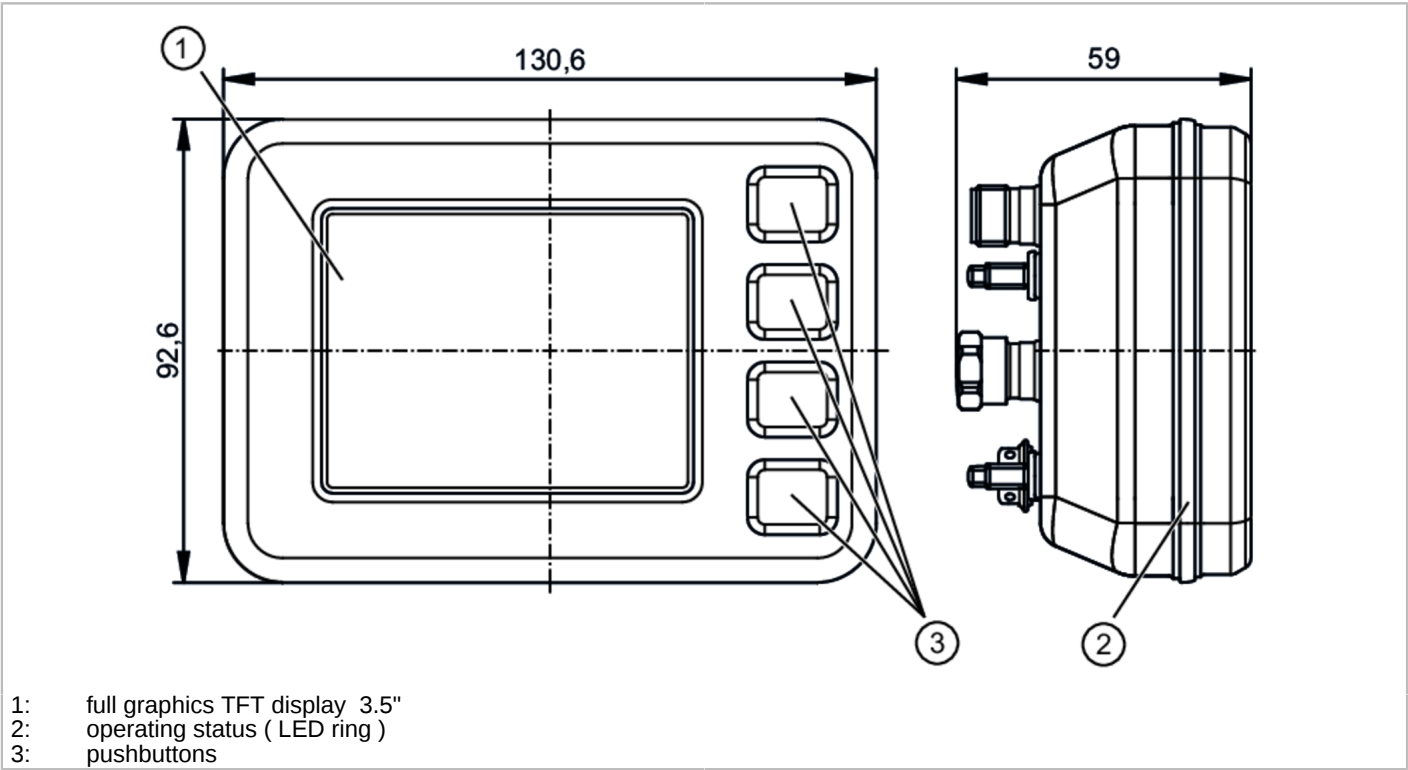




Electronic unit for SMFx2x magnetic-inductive flow sensor

MEASURING CONVERTER DISPLAY



Application		
Special feature	Gold-plated contacts	
Application	food and beverage industry	
Electrical data		
Operating voltage	[V]	18...32 DC
Current consumption	[mA]	250; (24V)
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time	[s]	< 5
Inputs / outputs		
Total number of inputs and outputs	2	
Inputs		
Inputs	OUT2	external totaliser reset
Outputs		
Total number of outputs	2	
Output signal	OUT1	pulse signal; totaliser switching signal; diagnostic signal; IO-Link
	OUT2	analogue signal; pulse signal; totaliser switching signal; diagnostic signal
Electrical design	PNP/NPN	
Pulse output	flow rate meter	
Short-circuit protection	yes	
Type of short-circuit protection	pulsed	
Overload protection	yes	



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Analogue		
Number of analogue outputs	1	
Analogue current output [mA]	4...20; (skalierbar)	
Max. load [Ω]	500	
Resolution of analogue output	0.38 μA	
Digital		
Number of digital outputs	2	
Max. voltage drop switching output DC [V]	2	
Permanent current rating of switching output DC [mA]	100	
Switching frequency DC [Hz]	0...10000	
Software / programming		
Diagnostic functions	direction of flow detection; liquid detection	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM3 (230,4 kBaud)	
IO-Link revision	1.1.3	
SDCI standard	IEC 61131-9	
Profiles	Common - I&D	Identification and Diagnosis
	Smart Sensor - SSP 4.3.4	Measuring and Switching Sensor, floating point, 4 channel
SIO mode	yes	
Required master port type	A	
Process data analogue	6	
Process data binary	8	
Min. process cycle time [ms]	1.9	
IO-Link process data (cyclical)	function	bit length
	totaliser	32
	flow	32
	temperature	32
	conductivity	32
	status	4
	binary switching information	8
IO-Link functions (acyclical)	direction of flow detection; totaliser; memory; operating hours counter; internal temperature; simulation function	
Operating conditions		
Ambient temperature	-20...65 °C	-4...149 °F
Storage temperature	-20...80 °C	-4...176 °F
Protection	IP 67; IP 69	
Tests / approvals		
EMC	DIN 61326-1	
Shock resistance	DIN IEC 68-2-27	20 g (18ms)
Vibration resistance	DIN IEC 68-2-6	5 g (10...2000Hz)



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Mechanical data		
Weight	[g]	922
Housing		rectangular
Dimensions	[mm]	92.6 x 130.6 x 59
Materials		electronics: stainless steel (316L/1.4404); Display: polysulfone; Display-Sealing: FKM; LED ring: PP
Displays / operating elements		
Display	process value	full graphics TFT display, multi-colour 3,5" 320 x 240 Pixel
		display layouts: 4
		display rotation: 4 x 90°
	operating status	LED ring, three-colour
Language		German; English; Spanish; French; Italian; Japanese; Korean; Portuguese; Chinese
Operating elements	4	capacitive pushbuttons
Accessories		
Items supplied		replacement electronics: 1 x (92,6 x 130,6 x 59 mm), for SMFx2x
		hexagon nuts: 4 x M5
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
Connection		
1:	L+	
2:	OUT MP2, DO, AO, reset	
3:	L-	
4:	OUT1 MP1, DO, IO-Link	