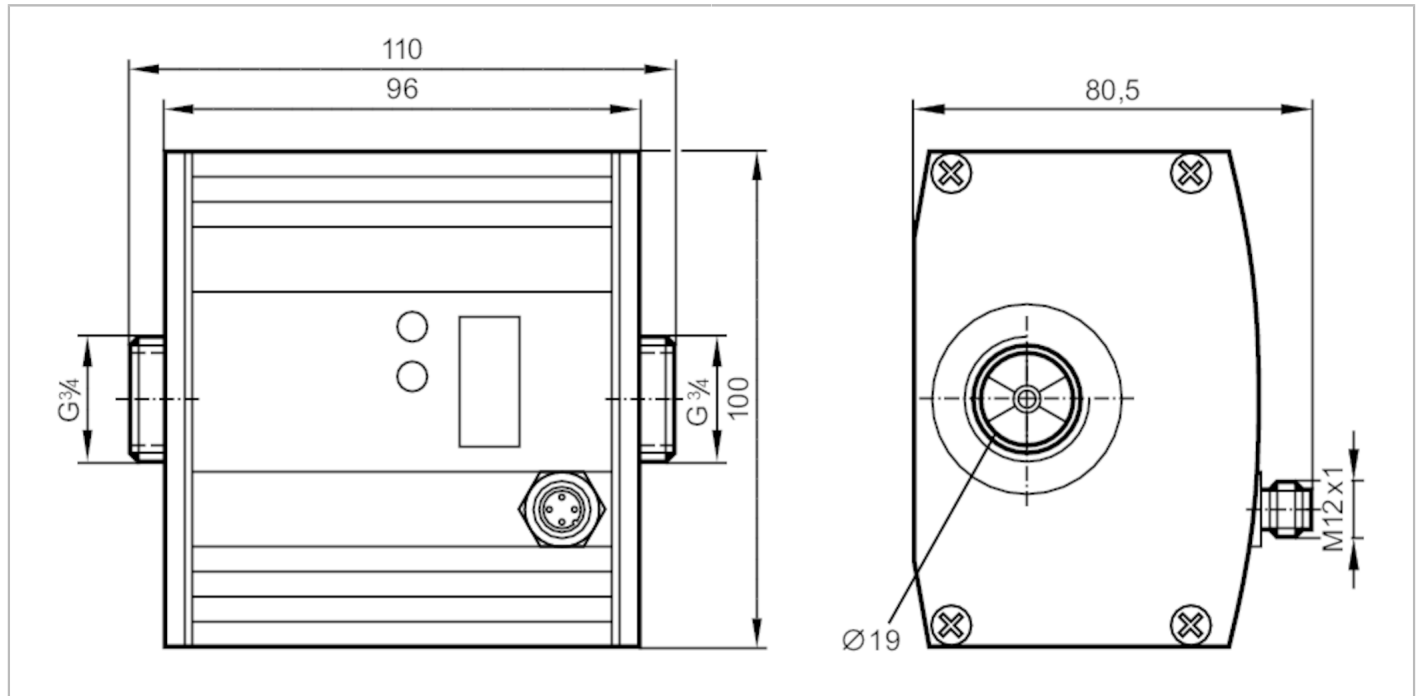


SU7200



Ultrasonic flow meter

SUR34HGBFPKG/W/US-100-IPF



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2	
Measuring range	0...50 l/min	0...13.2 gpm
Process connection	threaded connection G 3/4 flat seal	

Application

Special feature	Gold-plated contacts	
Application	for industrial applications	
Installation	connection to pipe by means of an adapter	
Media	water; glycol solutions; coolants; oil	
Note on media	low-viscosity oils with viscosity: 7...40 mm ² /s (40 °C) high-viscosity oils with viscosity: 30...68 mm ² /s (40 °C)	
Medium temperature [°C]	-10...80	
Pressure rating [bar]	16	

Electrical data

Operating voltage [V]	19...30 DC; (according to EN 50178 SELV/PELV)	
Current consumption [mA]	100	
Min. insulation resistance [MΩ]	100; (500 V DC)	
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time [s]	10	

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2	
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Ultrasonic flow meter

SUR34HGBFPKG/W/US-100-IPF

Outputs		
Total number of outputs		2
Output signal		switching signal
Electrical design		PNP
Number of digital outputs		2
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250; (per output)
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range	0...50 l/min	0...13.2 gpm
Display range	0...60 l/min	0...15.9 gpm
Resolution	0.1 l/min	0.02 gpm
Set point SP	0.1...50 l/min	0.04...13.22 gpm
Reset point rP	0...49.9 l/min	0...13.18 gpm
Max. flow rate	[l/min]	60
In steps of	0.1 l/min	0.02 gpm
Temperature monitoring		
Measuring range	[°C]	-10...80
Resolution	[°C]	0.2
Set point SP	[°C]	-9.8...80
Reset point rP	[°C]	-10...79.8
In steps of	[°C]	0.2
Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)	$< \pm (3 \% MW + 0,2 \% MEW) / < \pm (5 \% MW + 0,5 \% MEW);$ (water; glycol: 35%; oil: viscosity 68 mm ² /s at 40 °C)	
Repeatability	0,1 l/min (0,025 gpm)	
Temperature monitoring		
Accuracy	[K]	0,2
Response times		
Flow monitoring		
Response time	[s]	0.25; (dAP = 0)
Delay time programmable dS, dr	[s]	0...50
Damping for the switching output dAP	[s]	0...1
Temperature monitoring		
Dynamic response T05 / T09	[s]	T09 = 70 (Q > 5 l/min); (water)

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Software / programming		
Parameter setting options	Flow monitoring; Temperature monitoring	
Operating conditions		
Ambient temperature [°C]	-10...60	
Storage temperature [°C]	-25...80	
Protection	IP 67	
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 61000-4-5 Surge	0,5 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN IEC 68-2-27	20 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	5 g (10...2000 Hz)
MTTF [years]	246	
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight [g]	1535.5	
Materials	housing: AlMgSi0,5 anodised; Sealing: FKM; connector housing: brass Optalloy-plated; PA 6.6; cover film: PA	
Materials (wetted parts)	stainless steel (1.4404 / 316L); FKM; PES; Centellen 200	
Process connection	threaded connection G 3/4 flat seal	
Displays / operating elements		
Display	Display unit	4 x LED, green (l/min, m³/h, gal/min, gal/h)
	Display unit	2 x LED, yellow (°C / °F)
	switching status	2 x LED, yellow
	measured values	alphanumeric display, 4-digit
	programming	alphanumeric display, 4-digit
Display unit	l/min; m³/h; gpm; gph; °C; °F	
Accessories		
Accessories (supplied)	sealings: 2, Centellen	
Accessories (optional)	adapter for pipe: 1 x R1/2, stainless steel, E40178	
	adapter for pipe: 1 x 1/2 NPT, stainless steel, E40191	
	adapter for pipe: 1 x R1/2, brass, E40151	
	adapter for pipe: 1 x 1/2 NPT, brass, E40154	
Remarks		
Remarks	MW = measured value	
	MEW = Final value of the measuring range	
	sealing: only with supplied Centellen seals	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Moulded body: brass, Optalloy-plated; Contacts: gold-plated		

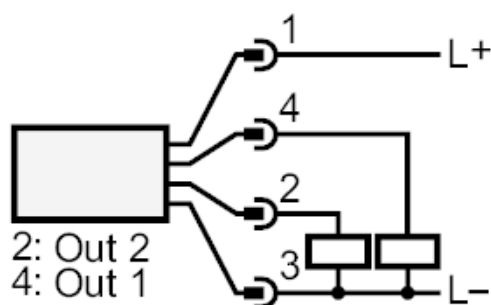
SU7200

Ultrasonic flow meter

SUR34HGBFPKG/W/US-100-IPF

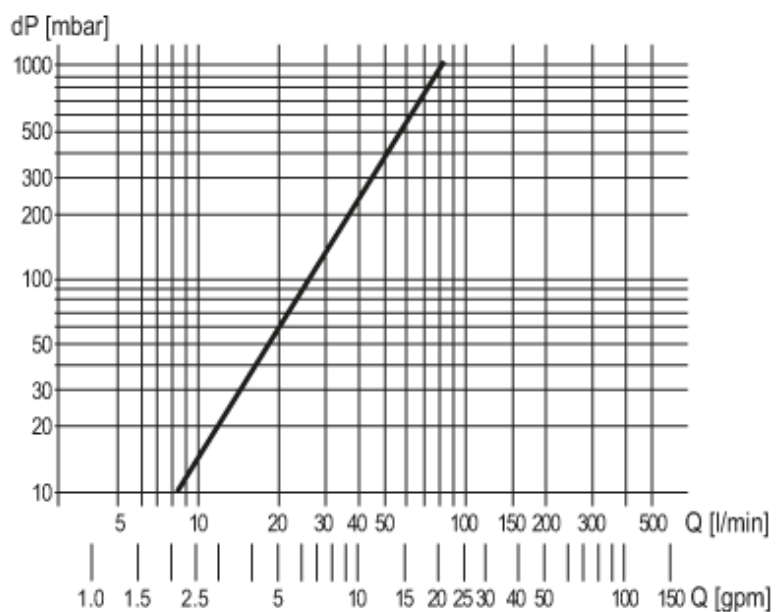


Connection



Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity