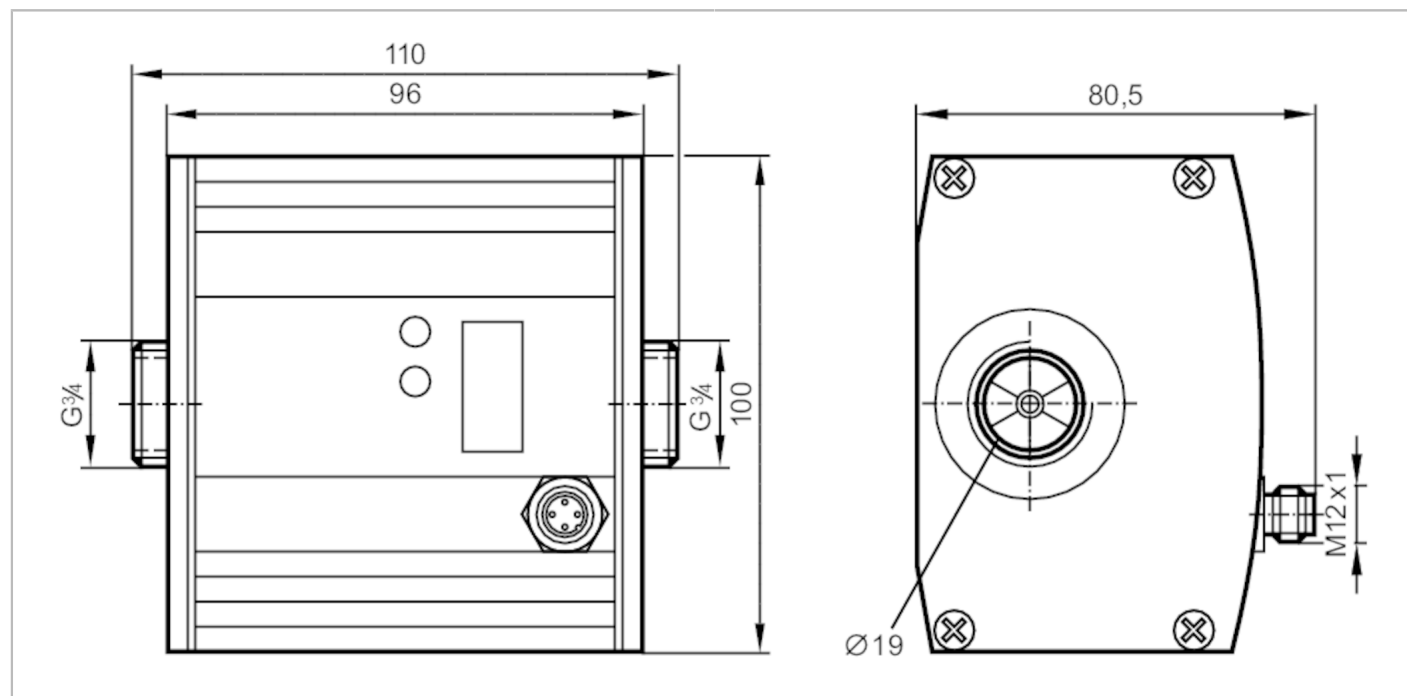


SU7200

Ultrasonic flow meter

SUR34HGBFPG/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; oils	
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	16 bar	1.6 MPa

Electrical data

Operating voltage	[V]	19...30 DC; (to 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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Outputs

Total number of outputs	2
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Ultrasonic flow meter

SUR34HGBFPKG/W/US-100-IPF

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)	water: $< \pm (3 \% MW + 0,2 \% MEW)$; glycol (35 %), oil (viscosity 68 mm ² /s at 40 °C): $< \pm (5 \% MW + 0,5 \% MEW)$
Repeatability	0,1 l/min (0,025 gpm)

Temperature monitoring

Accuracy [K]	0,2
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Response times

Flow monitoring

Response time [s]	0.25; (dAP = 0)
Delay time programmable dS, dr [s]	0...50
Damping process value 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
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Operating conditions

Ambient temperature [°C]	-10...60
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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
CPA approval	model number	001US
	accuracy class	3
	maximum allowable error	-
	Q (min)	0,5 m³/h
	Q (t)	-
	Q (max)	3 m³/h
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; PA 6.6; cover film: PA
Materials (wetted parts)		stainless steel (316L/1.4404); 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		
Items 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.

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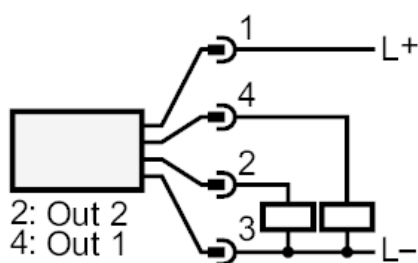


Electrical connection

Connector: 1 x M12; coding: A; Moulded body: brass, Optalloy-plated; Contacts: gold-plated

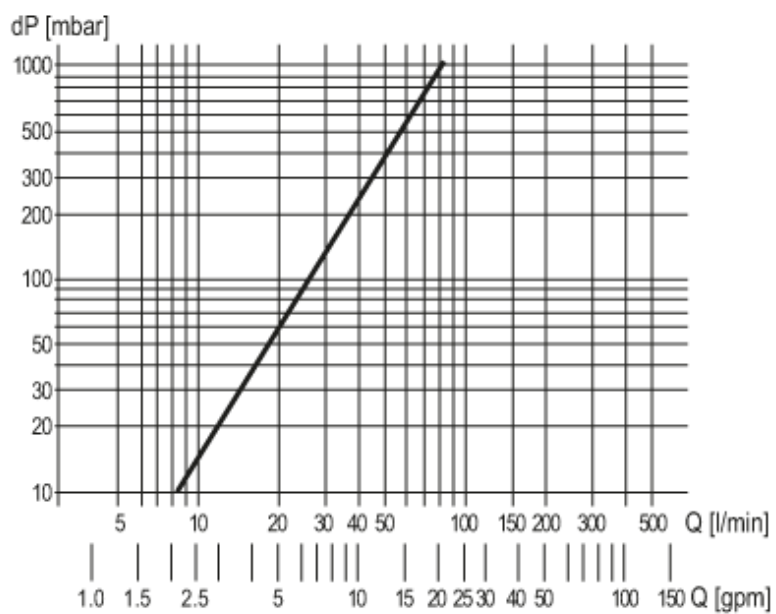


Connection



Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity