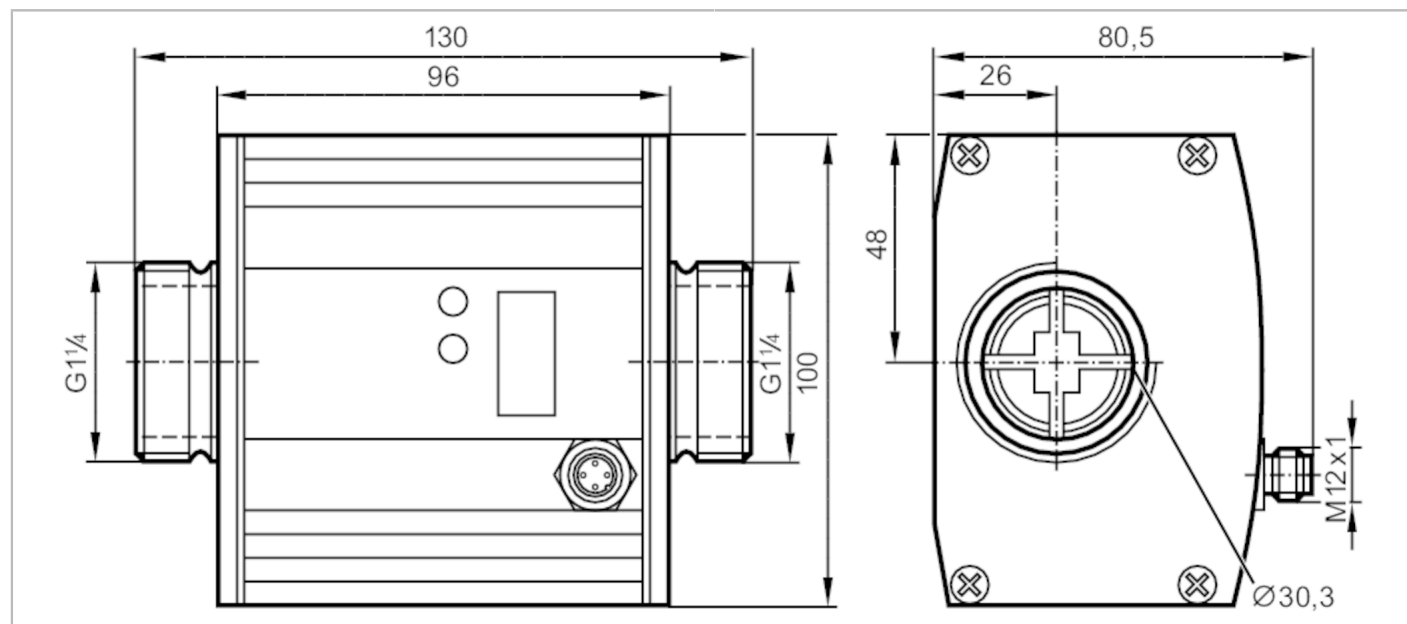


SUR54HGB50KG/W/US-100-IPF





Ultrasonic flow meter

SUR54HGB50KG/W/US-100-IPF

Number of analog outputs	2
Analog current output [mA]	4...20; (scalable)
Max. load [Ω]	500
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Measuring/setting range		
Measuring range	0...200 l/min	0...52.84 gpm
Display range	0...240 l/min	0...63.42 gpm
Resolution	0.1 l/min	0.02 gpm
Analog start point ASP	0...160 l/min	0...42.28 gpm
Analog end point AEP	40...200 l/min	10.28...52.84 gpm
Max. flow rate [l/min]	220	
In steps of	0.1 l/min	0.02 gpm

Temperature monitoring		
Measuring range [$^{\circ}\text{C}$]	-10...80	
Resolution [$^{\circ}\text{C}$]	0.2	
Analog start point [$^{\circ}\text{C}$]	-10...62	
Analog end point [$^{\circ}\text{C}$]	8...80	
In steps of [$^{\circ}\text{C}$]	0.2	

Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)	water: $< \pm (3 \% \text{ MW} + 0,2 \% \text{ MEW})$; glycol (35 %), oil (viscosity 68 mm ² /s at 40 $^{\circ}\text{C}$): $< \pm (8 \% \text{ MW} + 0,5 \% \text{ MEW})$	
Repeatability	1 l/min; 60 l/h; 0,05 gpm; 3 gph	

Temperature monitoring		
Accuracy [K]	± 3 (Q > 20 l/min)	

Reaction times		
Flow monitoring		
Response time [s]	0.25; (dAP = 0)	
Damping process value dAP [s]	0...1	

Temperature monitoring		
Dynamic response T05 / T09 [s]	T09 = 30 (Q > 20 l/min); (water)	

Operating conditions		
Ambient temperature [$^{\circ}\text{C}$]	-10...60	
Storage temperature [$^{\circ}\text{C}$]	-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

SU9004



Ultrasonic flow meter

SUR54HGB50KG/W/US-100-IPF

CPA approval	model number	001US
	accuracy class	3
	maximum allowable error	-
	Q (min)	0,3 m³/h
	Q (t)	0,84 m³/h
	Q (max)	12 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]	203	
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data

Weight [g]	1883
Housing	rectangular
Dimensions [mm]	130 x 100 x 80.5
Material	housing: AlMgSi0.5 anodized; sealing: FKM; PA 6.6; cover film: PA
Materials (wetted parts)	stainless steel (1.4404 / 316L); FKM; PPS; Centellen 200
Process connection	threaded connection G 1 1/4 external thread flat seal

Displays / operating elements

Display	Display unit	6 x LED, green (l/min, m³/h, gpm, gph, °C, °F)
	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 R 1, stainless steel, E40205
	adapter for pipe: 1 x 1" NPT, stainless steel, E40206

Remarks

Remarks	sealing: only with supplied Centellen seals
	MW = Measured value
	MEW = Final value of the measuring range
Pack quantity	1 pcs.

Electrical connection

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



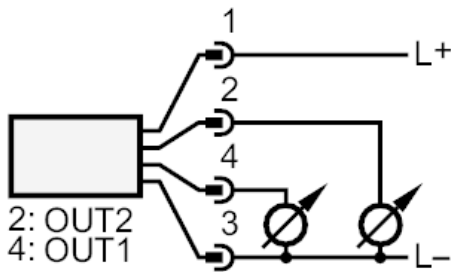
SU9004



Ultrasonic flow meter

SUR54HGB50KG/W/US-100-IPF

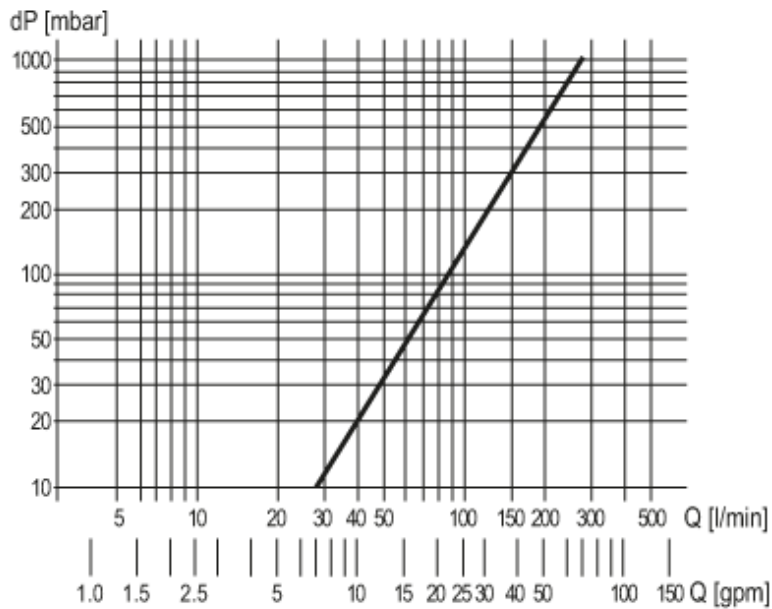
Connection



OUT1: analog output Temperature monitoring
OUT2: analog output Volumetric flow quantity monitoring

Diagrams and graphs

Pressure loss



dP Pressure loss
Q volumetric flow quantity