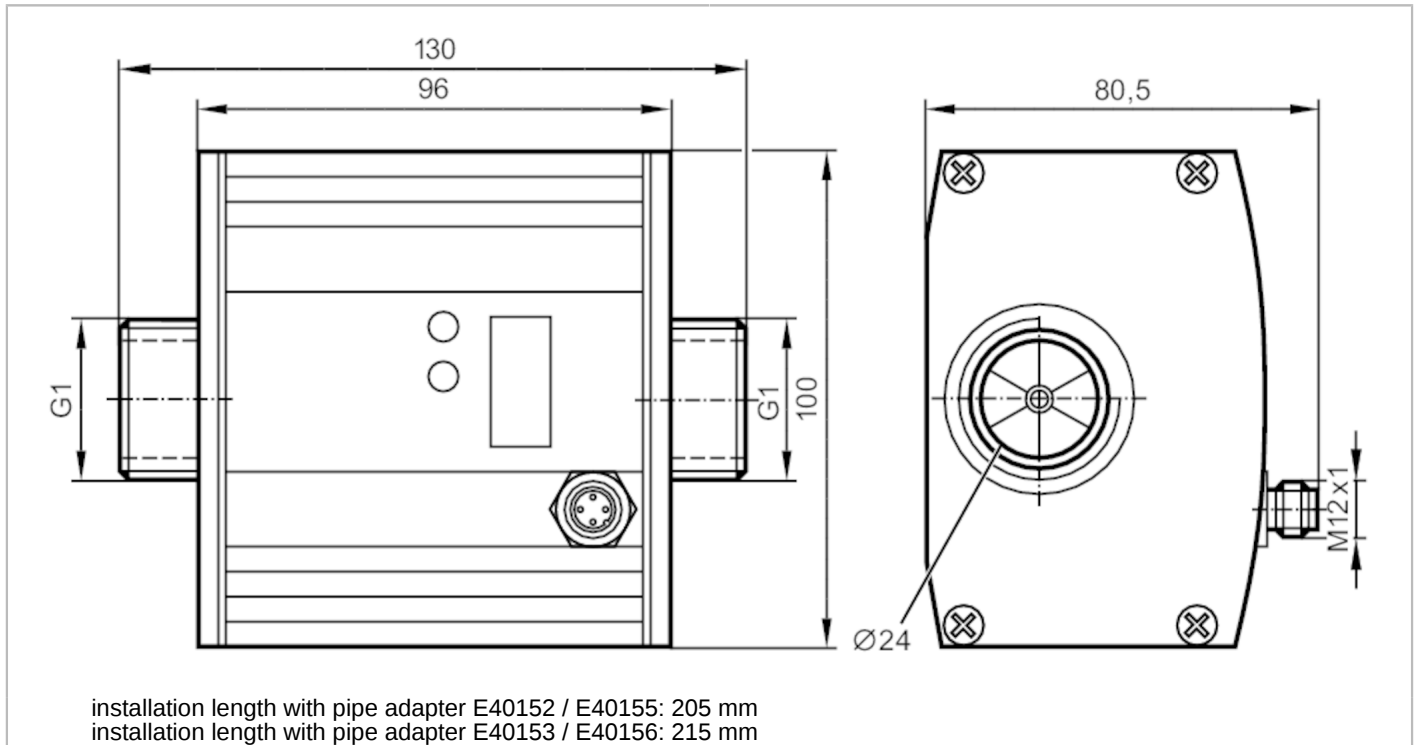


# SU8200



## Ultrasonic flow meter

SUR11HGBFPKG/W/US-100-IPF



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 2
Measuring range	0...100 l/min      0...26.42 gpm
Process connection	threaded connection G 1 flat seal
Application	
System	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 <sup>2</sup> /s (40 °C) high-viscosity oils with viscosity: 30...68 mm <sup>2</sup> /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

# SU8200



## Ultrasonic flow meter

SUR11HGBFPKG/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 / closed; (configurable)	
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	yes (non-latching)	
Overload protection	yes	
Measuring/setting range		
Measuring range	0...100 l/min	0...26.42 gpm
Display range	0...120 l/min	0...31.7 gpm
Resolution	0.1 l/min	0.02 gpm
Set point SP	0.2...100 l/min	0.06...26.42 gpm
Reset point rP	0...99.8 l/min	0...26.38 gpm
Max. flow rate [l/min]	110	
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 <sup>2</sup> /s at 40 °C): $< \pm (5 \% MW + 0,5 \% MEW)$	
Repeatability	0,2 l/min (0,05 gpm)	
Temperature monitoring		
Accuracy [K]	0,2	
Reaction 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)	
Software / programming		
Parameter setting options	Flow monitoring; Temperature monitoring	

# SU8200



## Ultrasonic flow meter

SUR11HGBFPKG/W/US-100-IPF

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	
	CPA approval	model number	001US
accuracy class		3	
maximum allowable error		-	
Q (min)		0,3 m³/h	
Q (t)		0,54 m³/h	
Q (max)		6 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]	1694	
Material		housing: AlMgSi0.5 anodized; sealing: FKM; PA 6.6; cover film: PA	
Materials (wetted parts)		stainless steel (1.4404 / 316L); FKM; PES; Centellen 200	
Process connection		threaded connection G 1 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 R 1/2, stainless steel, E40179	
		adapter for pipe: 1 x R 3/4, stainless steel, E40180	
		adapter for pipe: 1 x 1/2" NPT, stainless steel, E40192	
		adapter for pipe: 1 x 3/4" NPT, stainless steel, E40193	
		adapter for pipe: 1 x R 1/2, brass, E40152	
		adapter for pipe: 1 x R 3/4, brass, E40153	
		adapter for pipe: 1 x 1/2" NPT, brass, E40155	
		adapter for pipe: 1 x 3/4" NPT, brass, E40156	
Remarks			
Remarks		MW = Measured value	
		MEW = Final value of the measuring range	
		sealing: only with supplied Centellen seals	
Pack quantity		1 pcs.	

# SU8200



## Ultrasonic flow meter

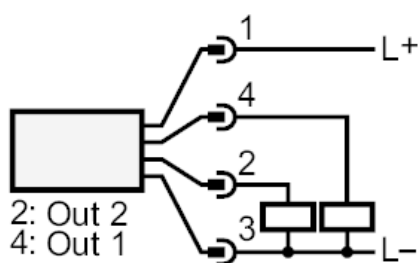
SUR11HGBFPKG/W/US-100-IPF

### Electrical connection

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

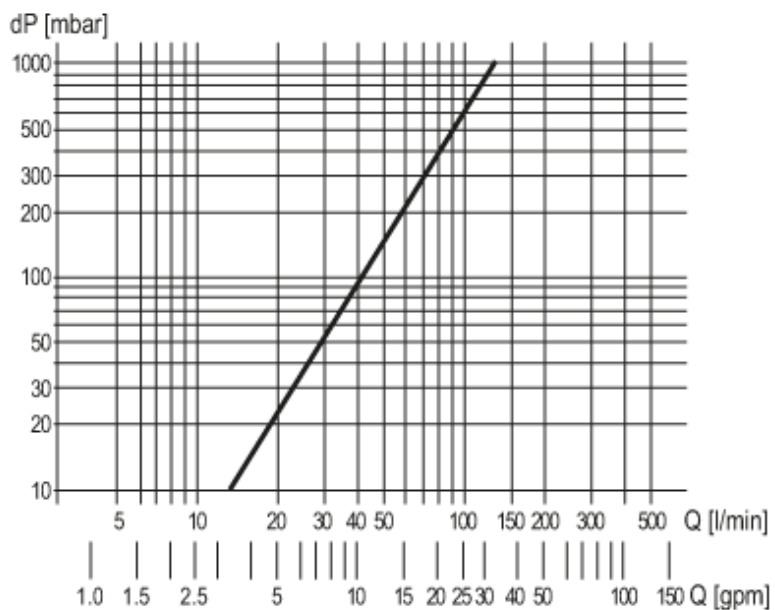


### Connection



### Diagrams and graphs

#### Pressure loss



dP Pressure loss

Q volumetric flow quantity