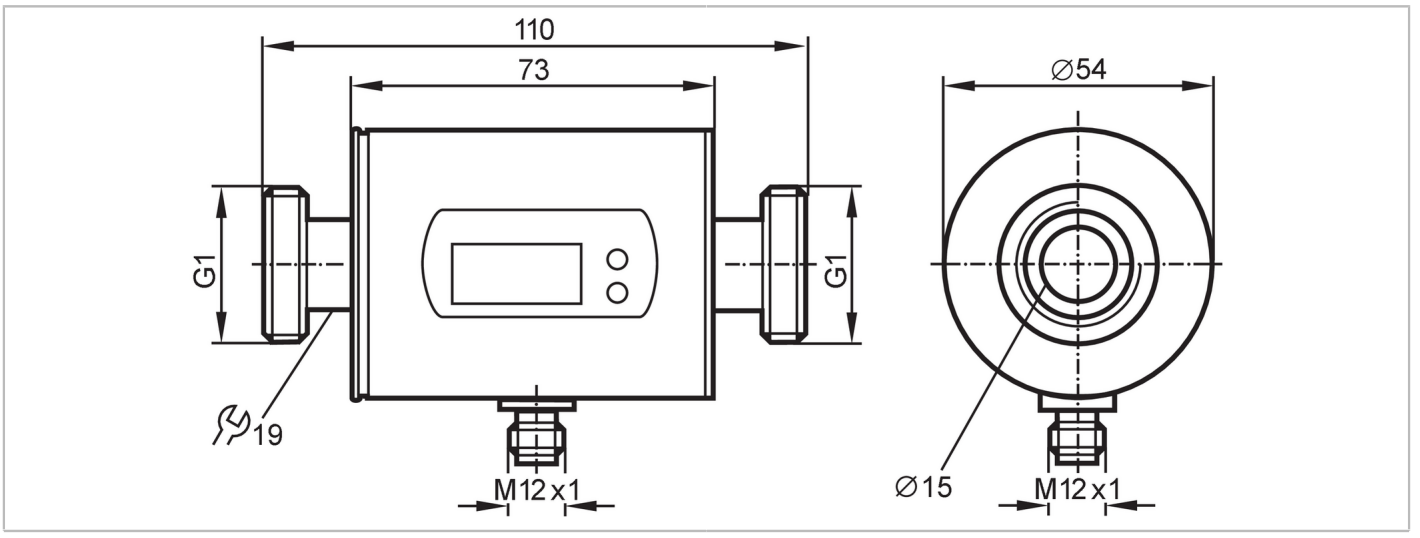
SM0504

Magnetic-inductive flow meter

SMR11GGX50KG/US100



CE CRN UKCA

Product characteristics				
Number of inputs and outputs		Number of analog outputs: 2		
Measuring range		6...1800 gph	0.1...30 gpm	
Process connection		threaded connection G 1 external thread DN25 flat seal		
Application				
Special feature		gold-plated contacts		
Application		for industrial applications		
Installation		connection to pipe by means of an adapter		
Media		Conductive liquids; water; water-based media		
Note on media		conductivity: ≥ 20 µS/cm		
		viscosity: < 70 mm²/s (40 °C)		
Medium temperature	[°F]	14...158		
Pressure rating		16 bar	232 psi	1.6 MPa
MAWP (for applications according to CRN)		10.4 bar	1.04 MPa	
Electrical data				
Operating voltage	[V]	18...30 DC; (to SELV/PELV)		
Current consumption	[mA]	95; (24 V)		
Min. insulation resistance	[MΩ]	100; (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		
Power-on delay time	[s]	5		
Measuring principle		magnetic-inductive		
Inputs / outputs				
Number of inputs and outputs		Number of analog outputs: 2		
Outputs				
Total number of outputs		2		
Output signal		analog signal		
Number of analog outputs		2		

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Analog current output	[mA]	4...20; (scalable)	
Max. load	[Ω]	500	
Overload protection		yes	
Measuring/setting range			
Measuring range		6...1800 gph	0.1...30 gpm
Display range		-1902...1902 gph	-31.7...31.7 gpm
Resolution		2 gph	0.05 gpm
Analog start point ASP		0...1268 gph	0...21.15 gpm
Analog end point AEP		318...1800 gph	5.3...30 gpm
In steps of		2 gph	0.05 gpm
Temperature monitoring			
Measuring range	[°F]	-4...176	
Resolution	[°F]	0.5	
Analog start point	[°F]	-4...140.5	
Analog end point	[°F]	31.5...176	
In steps of	[°F]	0.5	
Accuracy / deviations			
Flow monitoring			
Accuracy (in the measuring range)		± (0,8 % MW + 0,5 % MEW)	
Repeatability		± 0,2% MEW	
Temperature monitoring			
Accuracy	[K]	± 4,5 (Q > 0,26 gpm)	
Reaction times			
Flow monitoring			
Response time	[s]	0.15; (dAP = 0)	
Damping process value dAP	[s]	0...5	
Temperature monitoring			
Dynamic response T05 / T09	[s]	T09 = 20 (Q > 0,26 gpm)	
Operating conditions			
Ambient temperature	[°F]	14...140	
Storage temperature	[°F]	-13...176	
Protection		IP 67	
Tests / approvals			
EMC		DIN EN 60947-5-9	500 V withstand voltage (V DC)
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]	175	
Pressure equipment directive		sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	576	
Housing		tubular	
Inlet pipe length		5 x DN	
Outlet pipe length		2 x DN	

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Dimensions	[mm]	Ø 54 / L = 110
Material		stainless steel (1.4404 / 316L); PBT-GF20; PC; EPDM/X
Materials (wetted parts)		stainless steel (1.4404 / 316L); Hastelloy; PEEK; FKM
Process connection		threaded connection G 1 external thread DN25 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

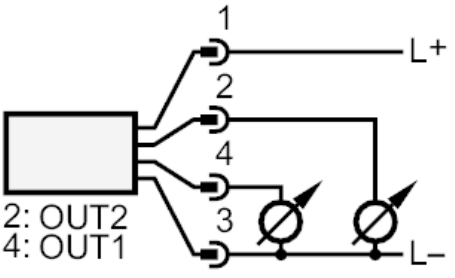
Remarks

Remarks	MW = Measured value
	MEW = Final value of the measuring range
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated

Connection



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

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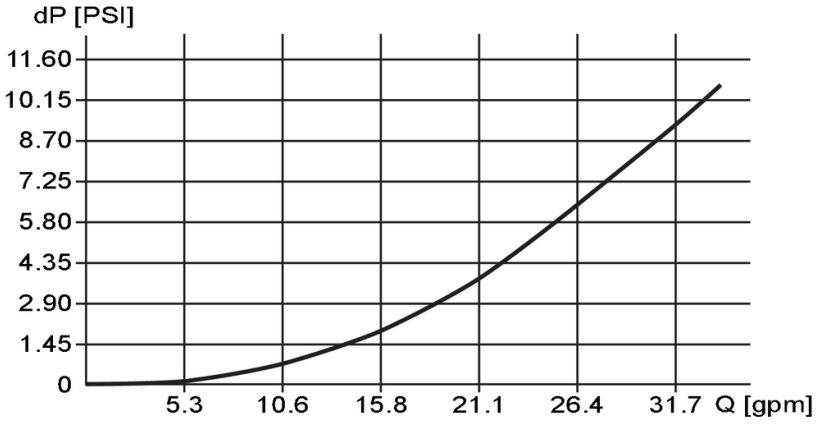
Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity