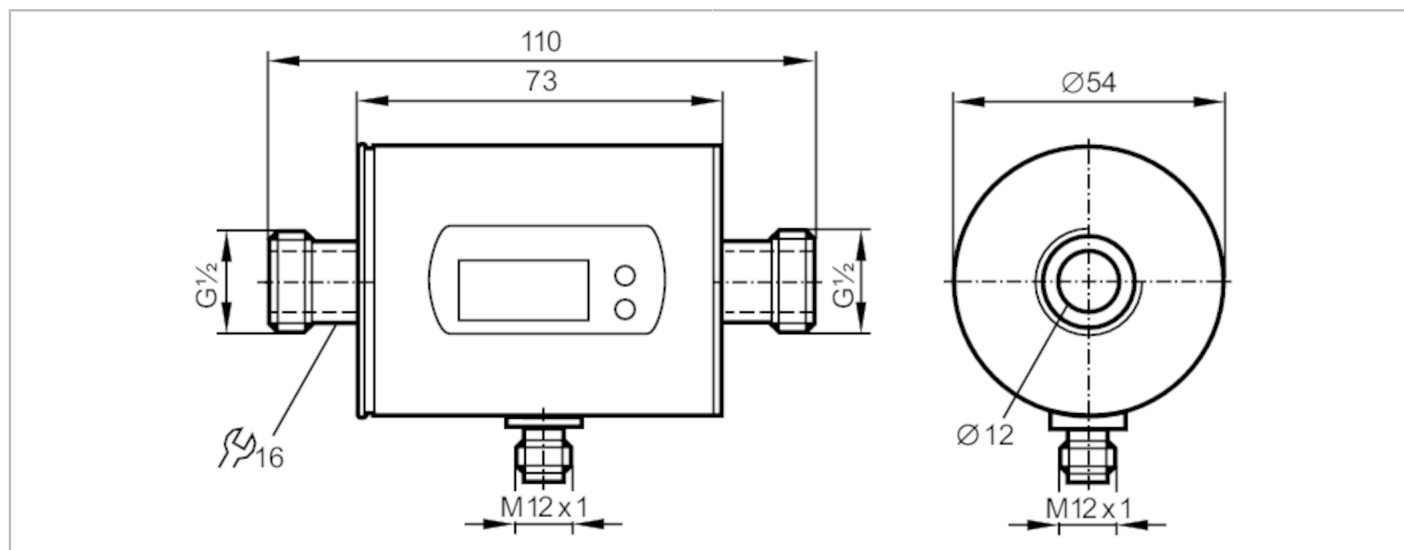


SM6004



Magnetic-inductive flow meter

SMR12GGX50KG/US-100



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 2	
Measuring range	0.1...25 l/min	0.03...6.6 gpm
Process connection	threaded connection G 1/2 DN15 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; hydrous media	
Note on media	conductivity: $\geq 20 \mu\text{S/cm}$	
	viscosity: $< 70 \text{ mm}^2/\text{s}$ (40 °C)	
Medium temperature	[°C]	-10...70
Pressure rating	[bar]	16
Pressure rating	[MPa]	1.6
MAWP (for applications according to CRN)	[bar]	17.7

Electrical data

Operating voltage	[V]	20...30 DC; (to SELV/PELV)
Current consumption	[mA]	120; (24 V)
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	5

Inputs / outputs

Number of inputs and outputs	Number of analogue outputs: 2
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Outputs

Total number of outputs	2
Output signal	analogue signal
Number of analogue outputs	2

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Analogue current output	[mA]	4...20; (scalable)
Max. load	[Ω]	500
Overload protection		yes
Measuring/setting range		
Measuring range	0.1...25 l/min	0.03...6.6 gpm
Display range	-30...30 l/min	-7.92...7.92 gpm
Resolution	0.02 l/min	0.01 gpm
Analogue start point ASP	0...20 l/min	0...5.28 gpm
Analogue end point AEP	5...25 l/min	1.32...6.6 gpm
In steps of	0.02 l/min	0.01 gpm
Temperature monitoring		
Measuring range	[°C]	-20...80
Resolution	[°C]	0.2
Analogue start point	[°C]	-20...60
Analogue end point	[°C]	0...80
In steps of	[°C]	0.2
Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)		± (2 % MW + 0,5 % MEW)
Repeatability		± 0,2% MEW
Temperature monitoring		
Accuracy	[K]	± 2,5 (Q > 1 l/min)
Response times		
Flow monitoring		
Response time	[s]	0.15; (dAP = 0, T19)
Damping process value dAP	[s]	0...3
Temperature monitoring		
Dynamic response T05 / T09	[s]	T09 = 20 (Q > 1 l/min)
Operating conditions		
Ambient temperature	[°C]	-10...60
Storage temperature	[°C]	-25...80
Protection		IP 67
Tests / approvals		
EMC	DIN EN 60947-5-9	500 V withstand voltage (V DC)
CPA approval	model number	008MI
	accuracy class	-
	maximum allowable error	± 2,5 % FS
	Q (min)	0,005 m³/h
	Q (t)	-
Shock resistance	Q (max)	1,5 m³/h
	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	

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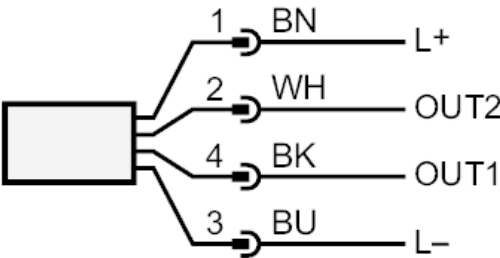
Mechanical data		
Weight	[g]	481.5
Materials	stainless steel (1.4404 / 316L); PBT-GF20; PC; FKM; TPE	
Materials (wetted parts)	stainless steel (1.4404 / 316L); PEEK; FKM	
Process connection	threaded connection G 1/2 DN15 flat seal	
Displays / operating elements		
Display	Display unit	6 x LED, green (l/min, 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: colours to DIN EN 60947-5-2
OUT2: analogue output Temperature monitoring
Core colours :
BK = black
BN = brown
BU = blue
WH = white

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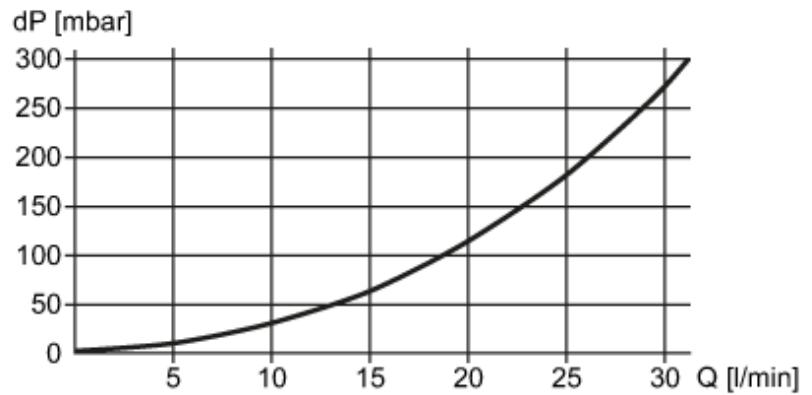
Magnetic-inductive flow meter

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Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity