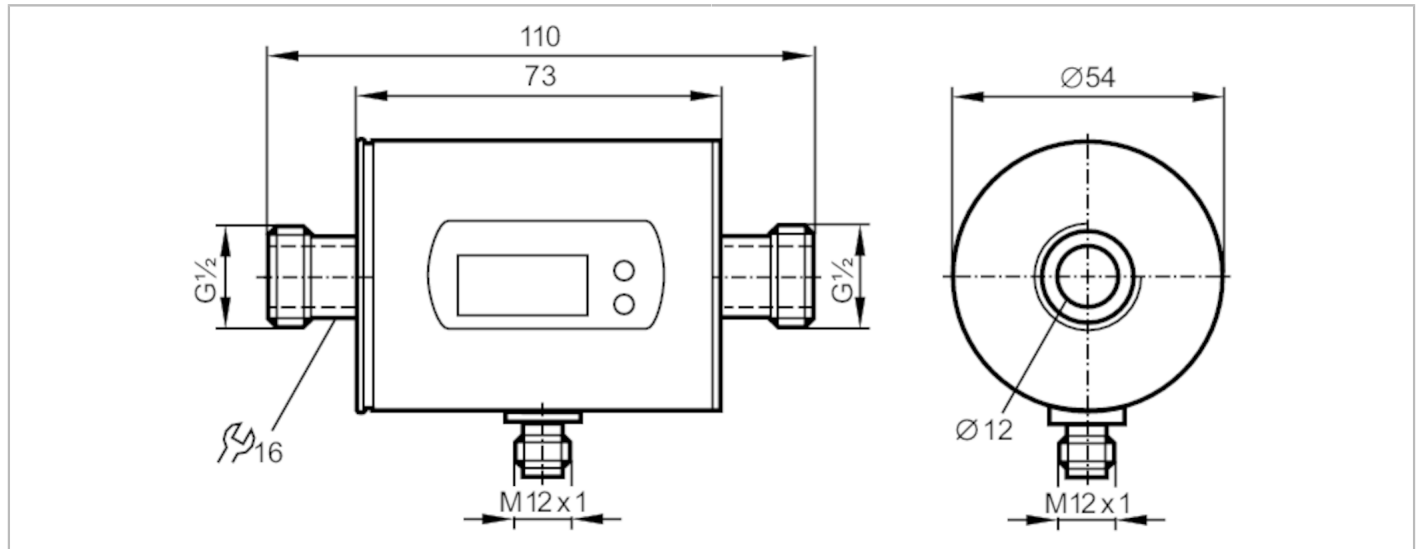


SM6004



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; (according to EN 50178 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
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 [$^{\circ}\text{C}$]		-20...80
Resolution [$^{\circ}\text{C}$]		0.2
Analogue start point [$^{\circ}\text{C}$]		-20...60
Analogue end point [$^{\circ}\text{C}$]		0...80
In steps of [$^{\circ}\text{C}$]		0.2
Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)		$\pm (2 \% \text{ MW} + 0,5 \% \text{ MEW})$
Repeatability		$\pm 0,2\% \text{ MEW}$
Temperature monitoring		
Accuracy [K]		$\pm 2,5 (Q > 1 \text{ l/min})$
Response times		
Flow monitoring		
Response time [s]		0.15; (dAP = 0, T19)
Damping for the switching output dAP [s]		0...3
Temperature monitoring		
Dynamic response T05 / T09 [s]		T09 = 20 (Q > 1 l/min)
Operating conditions		
Ambient temperature [$^{\circ}\text{C}$]		-10...60
Storage temperature [$^{\circ}\text{C}$]		-25...80
Protection		IP 67

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Tests / approvals		
EMC	DIN EN 60947-5-9	500 V withstand voltage (V DC)
	model number	008MI
CPA approval	accuracy class	-
	maximum allowable error	± 2,5 % FS
	Q (min)	0,005 m ³ /h
	Q (t)	-
	Q (max)	1,5 m ³ /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]	175	
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data		
Weight [g]	516.5	
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, m ³ /h, gpm, gph, °C, °F)
	measured values	alphanumeric display, 4-digit
	programming	alphanumeric display, 4-digit
Display unit	l/min; m ³ /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; Contacts: gold-plated



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Connection



colours to DIN EN 60947-5-2

OUT1: analogue output Temperature monitoring

OUT2: analogue output volumetric flow quantity monitoring

Core colours :

BK = black

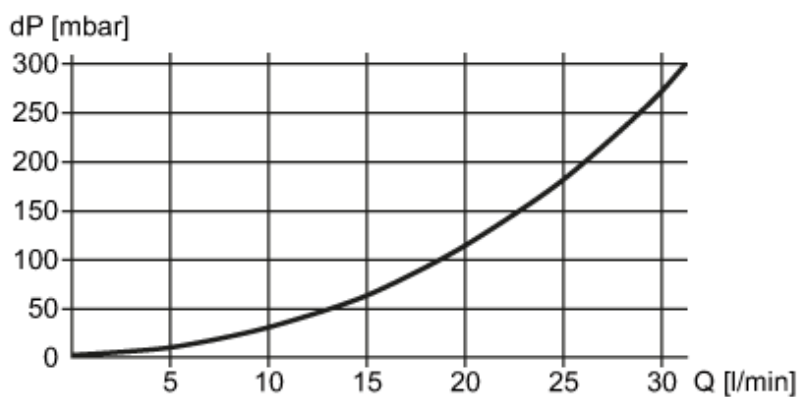
BN = brown

BU = blue

WH = white

Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity