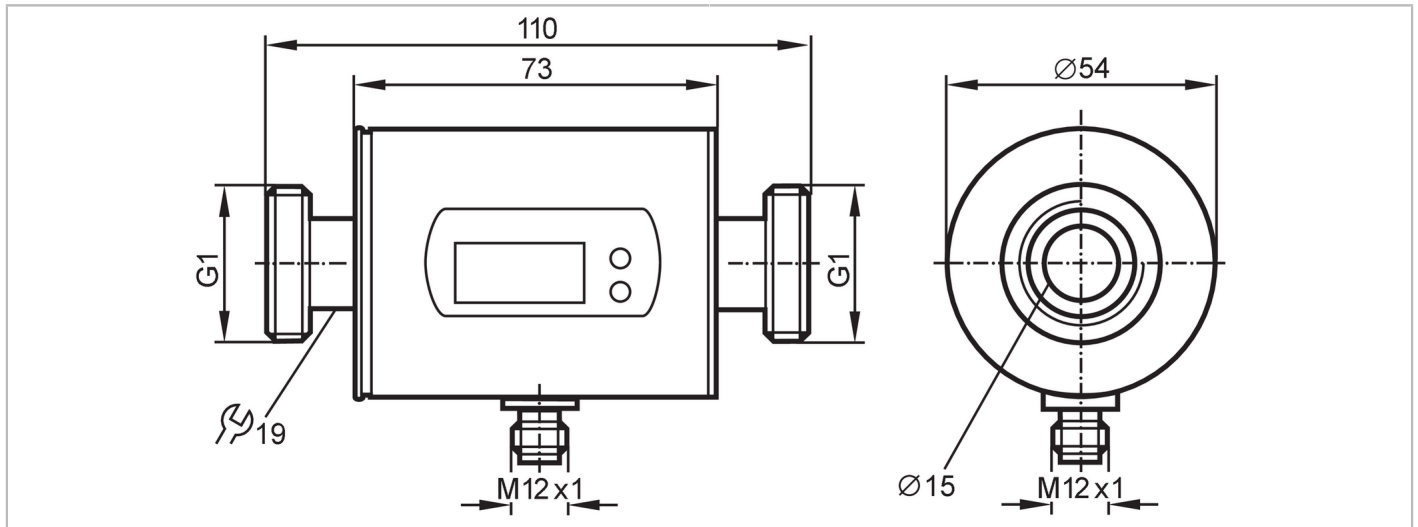


# SM8004



## Magnetic-inductive flow meter

SMR11GGX50KG/US100



Product characteristics	
Number of inputs and outputs	Number of analog outputs: 2
Measuring range	0.2...100 l/min      0.1...26.4 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: $\geq 20 \mu\text{S/cm}$ viscosity: $< 70 \text{ mm}^2/\text{s}$ (40 °C)
Medium temperature [°C]	-10...70
Pressure rating	16 bar      1.6 MPa
MAWP (for applications according to CRN)	10.4 bar      1.04 MPa
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
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
Analog current output [mA]	4...20; (scalable)

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Max. load	[Ω]	500
Overload protection		yes
<b>Measuring/setting range</b>		
Measuring range	0.2...100 l/min	0.1...26.4 gpm
Display range	-120...120 l/min	-31.7...31.7 gpm
Resolution	0.1 l/min	0.05 gpm
Analog start point ASP	0...80 l/min	0...21.1 gpm
Analog end point AEP	20...100 l/min	5.3...26.4 gpm
In steps of	0.1 l/min	0.05 gpm
<b>Temperature monitoring</b>		
Measuring range	[°C]	-20...80
Resolution	[°C]	0.2
Analog start point	[°C]	-20...60
Analog end point	[°C]	0...80
In steps of	[°C]	0.2
<b>Accuracy / deviations</b>		
<b>Flow monitoring</b>		
Accuracy (in the measuring range)		± (2 % MW + 0,5 % MEW)
Repeatability		± 0,2% MEW
<b>Temperature monitoring</b>		
Accuracy	[K]	± 2,5 (Q > 1 l/min)
<b>Reaction times</b>		
<b>Flow monitoring</b>		
Response time	[s]	0.15; (dAP = 0, T19)
Damping process value dAP	[s]	0...3
<b>Temperature monitoring</b>		
Dynamic response T05 / T09	[s]	T09 = 20 (Q > 1 l/min)
<b>Operating conditions</b>		
Ambient temperature	[°C]	-10...60
Storage temperature	[°C]	-25...80
Protection		IP 67
<b>Tests / approvals</b>		
EMC	DIN EN 60947-5-9	500 V withstand voltage (V DC)
CPA approval	model number	009MI
	accuracy class	-
	maximum allowable error	± 2,5 % FS
	Q (min)	0,01 m <sup>3</sup> /h
	Q (t)	-
	Q (max)	6 m <sup>3</sup> /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

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## Magnetic-inductive flow meter

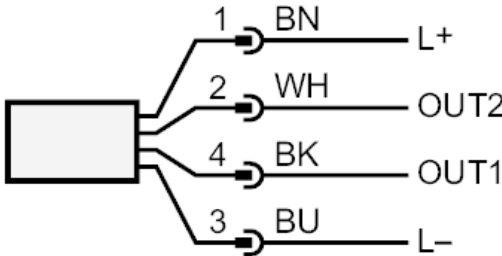
SMR11GGX50KG/US100

Mechanical data	
Weight [g]	576.9
Housing	tubular
Inlet pipe length	3 x DN
Outlet pipe length	1 x DN
Dimensions [mm]	Ø 54 / L = 110
Material	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 external thread DN25 flat seal

Displays / operating elements		
Display	Display unit	6 x LED, green (l/min, m <sup>3</sup> /h, gpm, gph, °C, °F)
	Measured values	alphanumeric display, 4-digit
	Programming	alphanumeric display, 4-digit
Display unit	l/min; m <sup>3</sup> /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: 4, gold-plated	
	

Connection	
	
OUT1:	Colors to DIN EN 60947-5-2 analog output Temperature monitoring
OUT2:	analog output Volumetric flow quantity monitoring
Core colors :	
BK =	black
BN =	brown
BU =	blue
WH =	white

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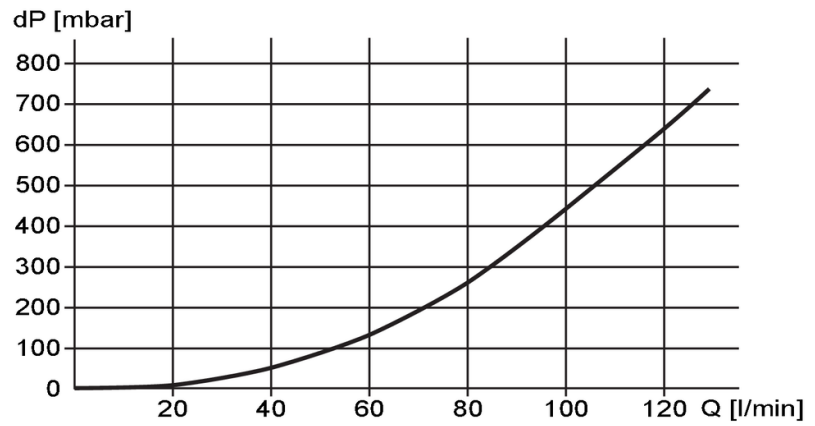


## Magnetic-inductive flow meter

SMR11GGX50KG/US100

### Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity