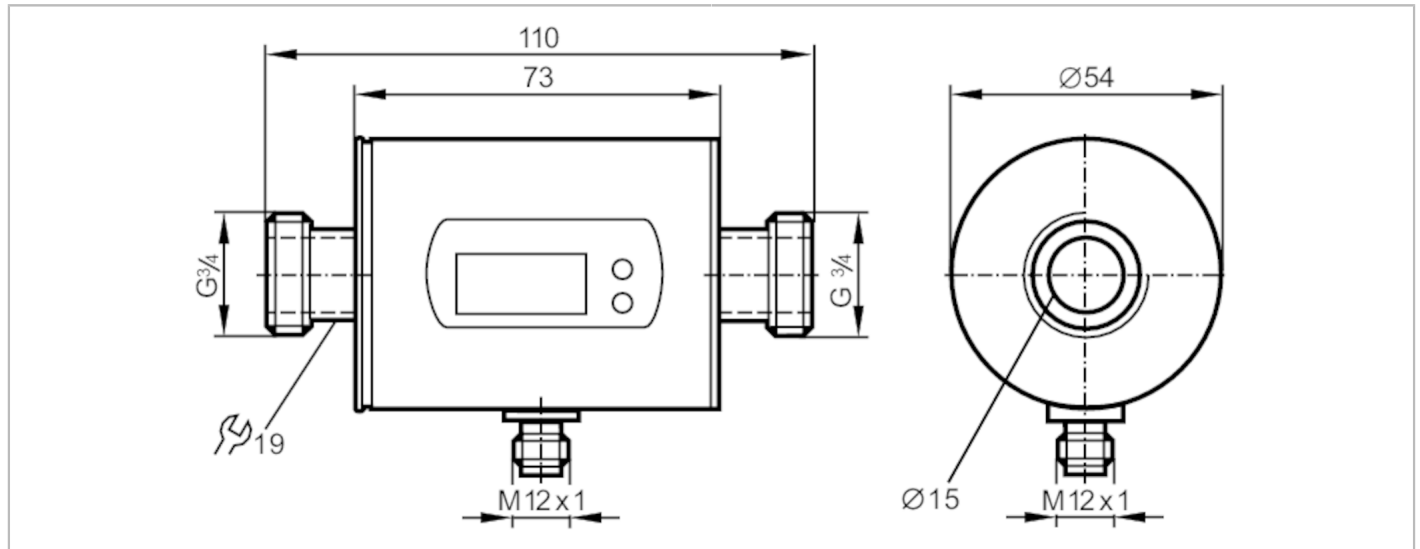


# SM7004



## Magnetic-inductive flow meter

SMR34GGX50KG/US100



### Product characteristics

Number of inputs and outputs	Number of analogue outputs: 2	
Measuring range	0.2...50 l/min	0.02...13.22 gpm
Process connection	threaded connection G 3/4 DN20 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
MAWP (for applications according to CRN)	[bar]	11.2

### 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 [ $\Omega$ ]		500
Overload protection		yes
Measuring/setting range		
Measuring range	0.2...50 l/min	0.02...13.22 gpm
Display range	-60...60 l/min	-15.86...15.86 gpm
Resolution	0.1 l/min	0.02 gpm
Analogue start point ASP	0...40 l/min	0...10.58 gpm
Analogue end point AEP	10...50 l/min	2.64...13.22 gpm
In steps of	0.1 l/min	0.02 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
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

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Mechanical data	
Weight [g]	559.5
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 3/4 DN20 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; Contacts: gold-plated



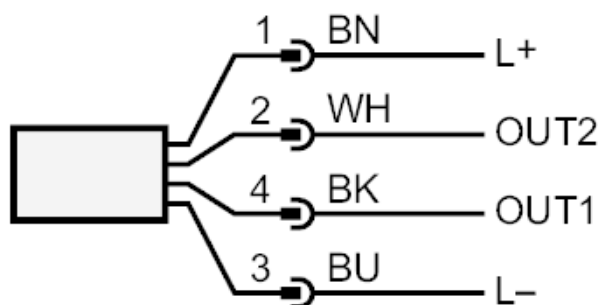
# SM7004



## Magnetic-inductive flow meter

SMR34GGX50KG/US100

### Connection



colours to DIN EN 60947-5-2

OUT1: analogue output Temperature monitoring

OUT2: analogue output volumetric flow quantity monitoring

Core colours :

BK = black

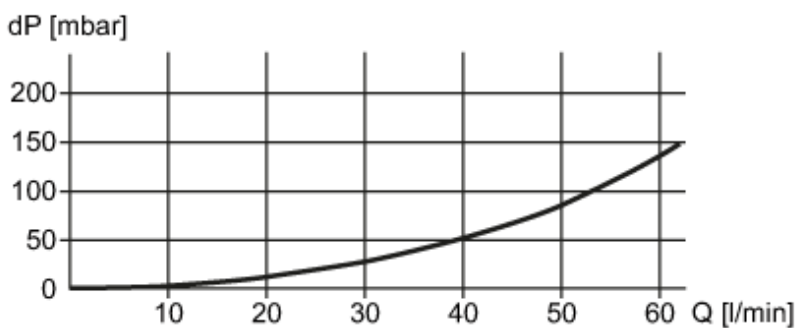
BN = brown

BU = blue

WH = white

### Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity