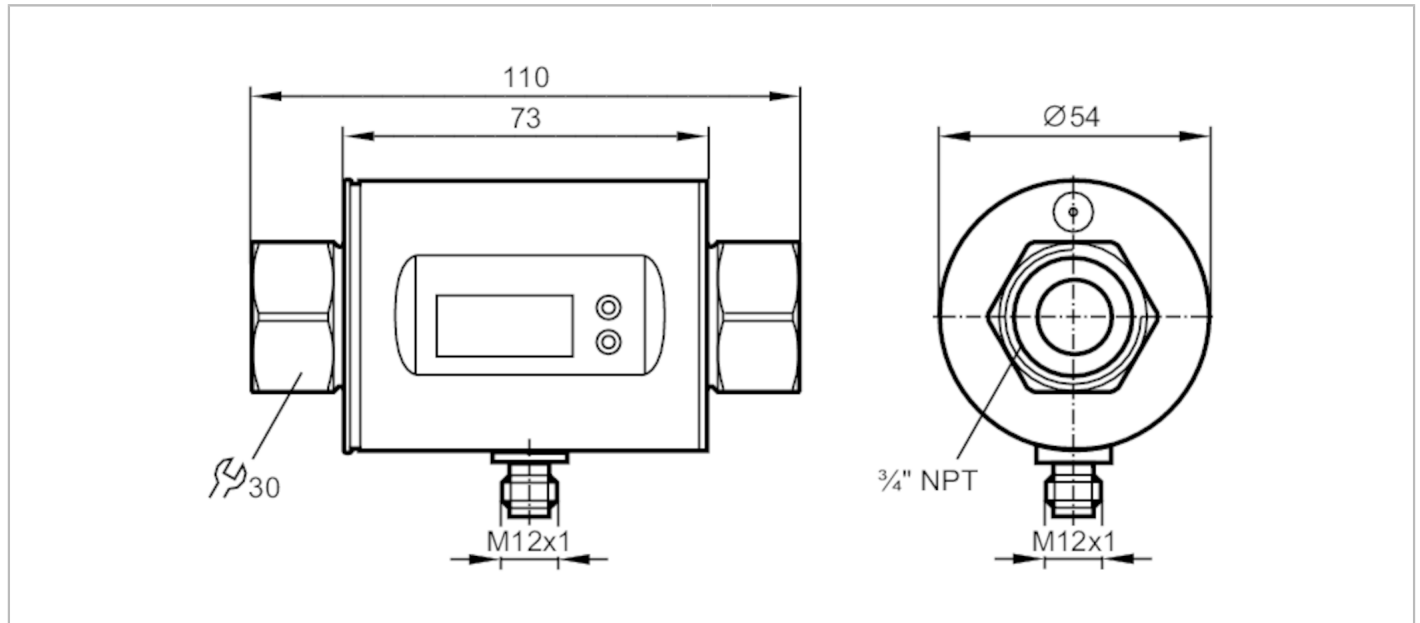


SM7604



Magnetic-inductive flow meter

SMN34GGX50KG/US-100



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 3/4 NPT DN20	

Application

Special feature	Gold-plated contacts	
Application	for industrial applications	
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 [Ω]	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 EN 60068-2-27	20 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	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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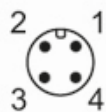
Mechanical data	
Weight [g]	564.5
Materials	stainless steel (1.4404 / 316L); PBT-GF20; PC; FKM; TPE
Materials (wetted parts)	stainless steel (1.4404 / 316L); PEEK; FKM
Process connection	threaded connection 3/4 NPT DN20

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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Magnetic-inductive flow meter

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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

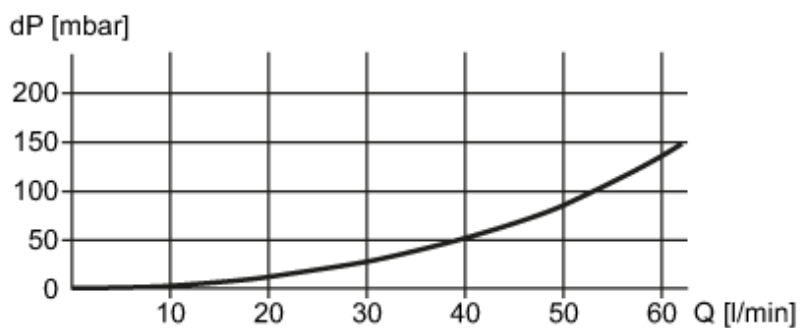
BN = brown

BU = blue

WH = white

Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity