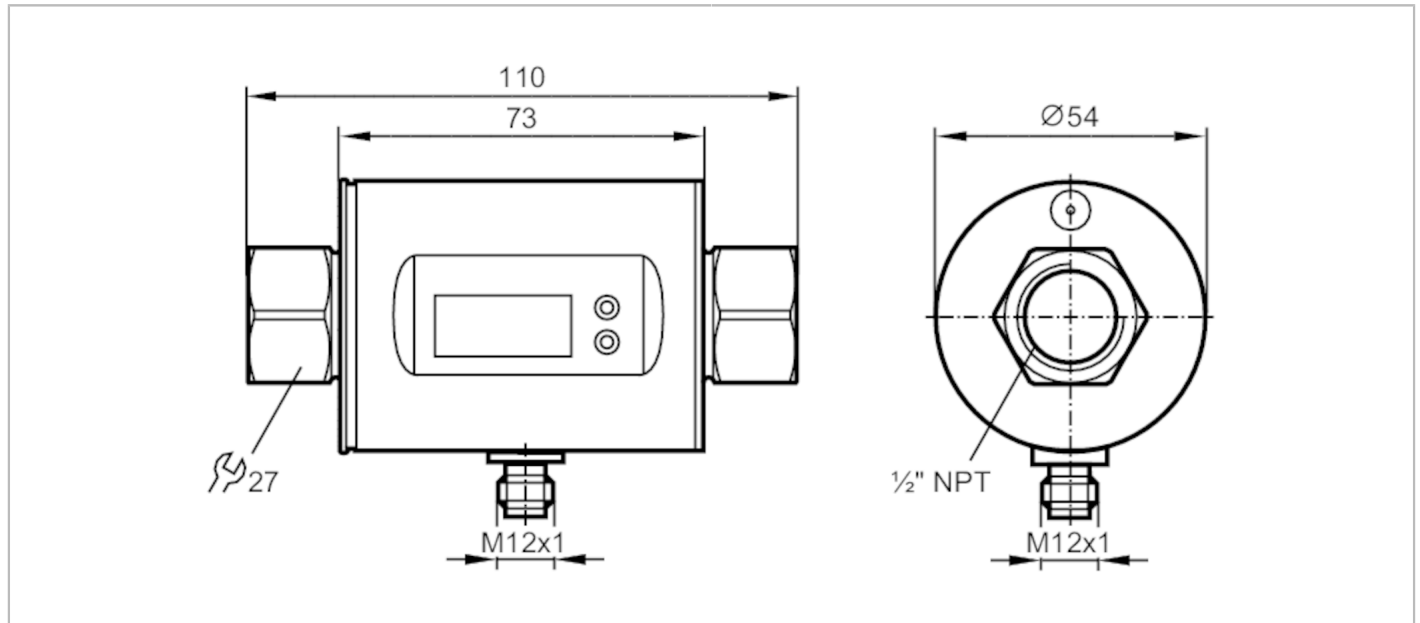


SM6604



Magnetic-inductive flow meter

SMN12GGX50KG/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 1/2" NPT DN15

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
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

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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]	$\pm 2,5 (Q > 1 \text{ l/min})$
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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)
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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)
CPA approval	model number	008MI
	accuracy class	-
	maximum allowable error	$\pm 2,5 \% \text{ FS}$
	Q (min)	0,005 m ³ /h
	Q (t)	-
	Q (max)	1,5 m ³ /h
Shock resistance	DIN EN 60068-2-27	20 g (11 ms)
Vibration resistance	DIN EN 68000-2-6	5 g (10...2000 Hz)
MTTF [years]		175

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Pressure Equipment Directive Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request

Mechanical data

Weight [g]	523.15
Materials	stainless steel (316L/1.4404); PBT-GF20; PC; FKM; TPE
Materials (wetted parts)	stainless steel (316L/1.4404); PEEK; FKM
Process connection	threaded connection 1/2" NPT DN15

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

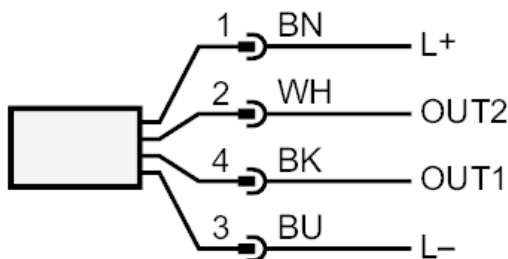
Remarks	MW = measured value
	MEW = Final value of the measuring range
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1: colours to DIN EN 60947-5-2
 analogue output Temperature monitoring

OUT2: analogue output volumetric flow quantity monitoring

Core colours :

BK = black
 BN = brown
 BU = blue
 WH = white

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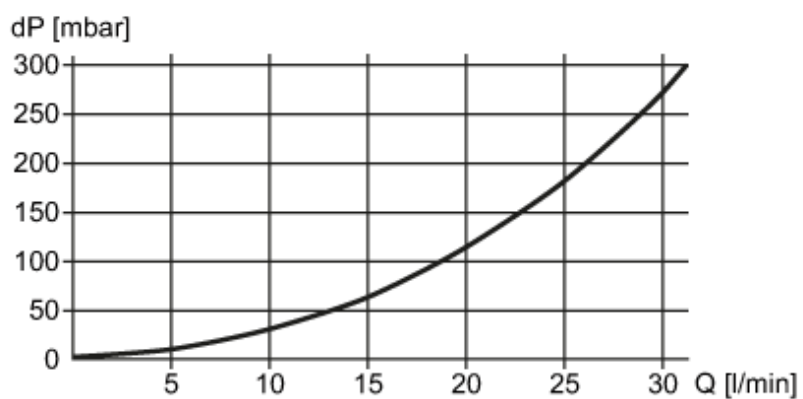


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Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity