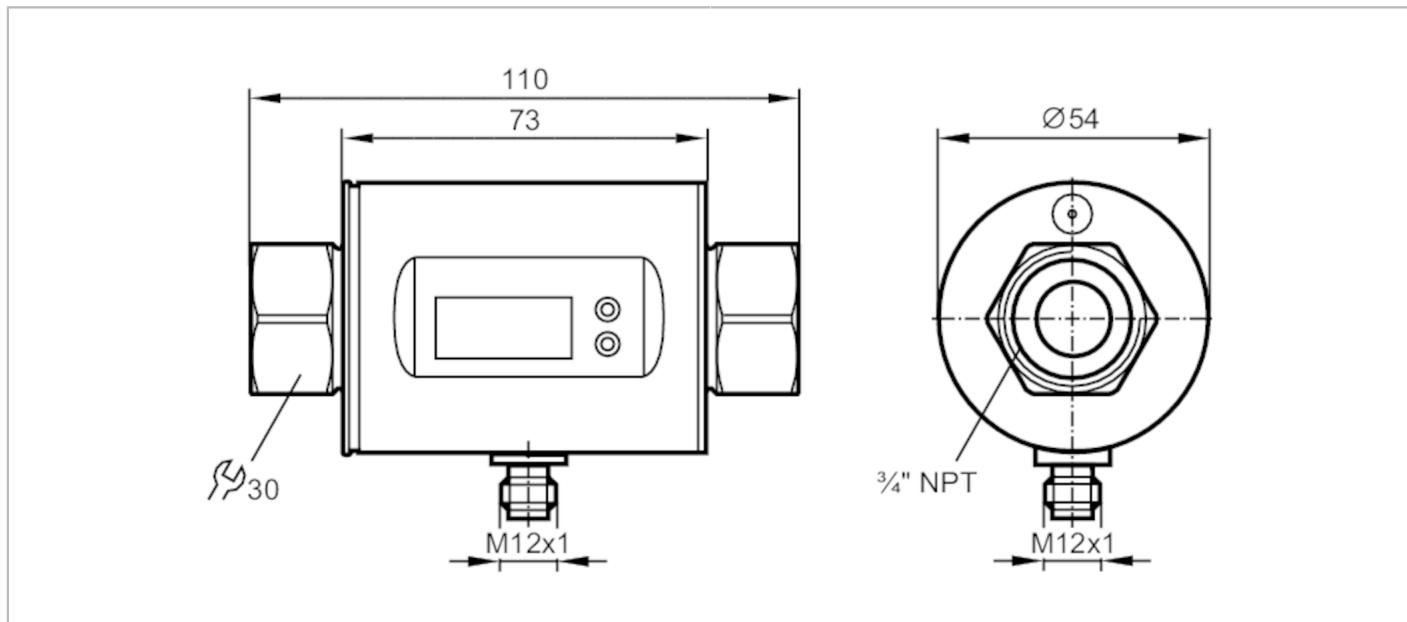


SM7604

Magnetic-inductive flow meter

SMN34GGX50KG/US-100



CE PA CRN cUL us LISTED EC 1935/2004 UK CA

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: $\geq 20 \mu\text{S}/\text{cm}$ 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]	11.2

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
------------------------------	-------------------------------

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		0.2...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	[°C]	-20...80
Resolution	[°C]	0.2
Analogue start point	[°C]	-20...60
Analogue end point	[°C]	0...80
In steps of	[°C]	0.2
Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)		± (2 % MW + 0,5 % MEW)
Repeatability		± 0,2% MEW
Temperature monitoring		
Accuracy	[K]	± 2,5 (Q > 1 l/min)
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)
Operating conditions		
Ambient temperature	[°C]	-10...60
Storage temperature	[°C]	-25...80
Protection		IP 67
Tests / approvals		
EMC		500 V withstand voltage (V DC)
CPA approval		008MI
		-
		± 2,5 % FS
		0,01 m³/h
		-
		3 m³/h
Shock resistance		20 g (11 ms)
Vibration resistance		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]	527.5
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 3/4" NPT DN20

Displays / operating elements

Display	Display unit	6 x LED, green (l/min, m³/h, gpm, gph, °C, °F)
	measured values	alphanumeric display, 4-digit
	programming	alphanumeric display, 4-digit
Display unit	l/min; m³/h; gpm; gph; °C; °F	

Remarks

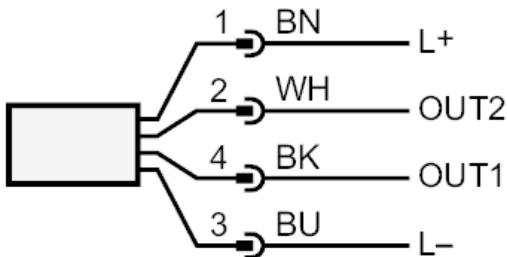
Remarks	MW = measured value
	MEW = Final value of the measuring range
Pack quantity	1 pcs.

Electrical connection

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



Connection



OUT1:	colours to DIN EN 60947-5-2
OUT2:	analogue output Temperature monitoring
	analogue output volumetric flow quantity monitoring
Core colours :	
BK =	black
BN =	brown
BU =	blue
WH =	white

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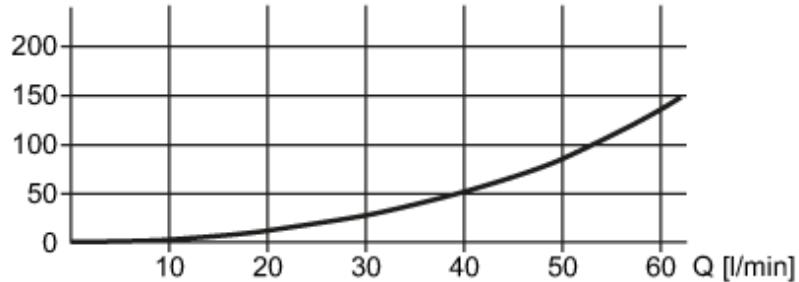
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Diagrams and graphs

Pressure loss

dP [mbar]



dP Pressure loss

Q volumetric flow quantity