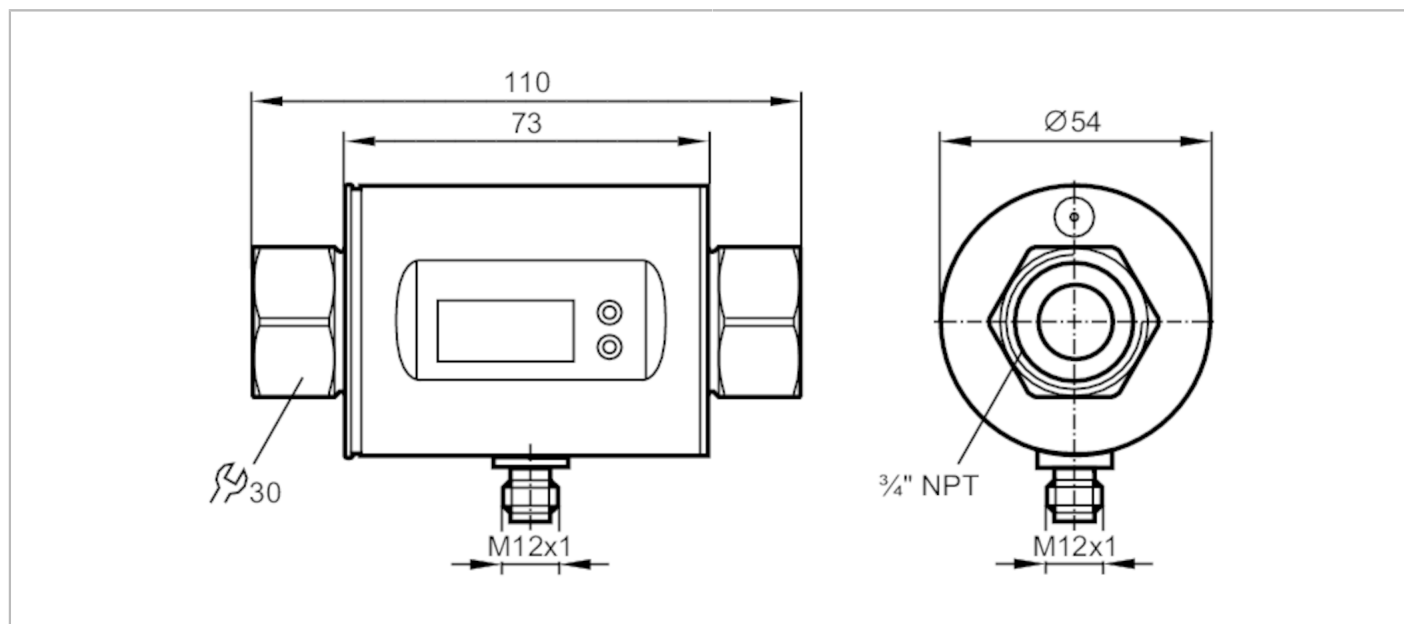


# SM7604



## Magnetic-inductive flow meter

SMN34GGX50KG/US-100



### Product characteristics

Number of inputs and outputs		Number of analog outputs: 2
Measuring range	0.2...50 l/min	0.02...13.22 gpm
Process connection		threaded connection 3/4" NPT DN20

### Application

System		gold-plated contacts
Application		for industrial applications
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	[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 analog outputs: 2
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### Outputs

Total number of outputs		2
Output signal		analog signal

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## Magnetic-inductive flow meter

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Number of analog outputs		2
Analog 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
Analog start point ASP	0...40 l/min	0...10.58 gpm
Analog 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
Analog start point	[°C]	-20...60
Analog 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)
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### Reaction 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	[°C]	-10...60
Storage temperature	[°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	± 2,5 % FS
	Q (min)	0,01 m³/h
	Q (t)	-
	Q (max)	3 m³/h
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

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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
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 3/4" NPT DN20

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	

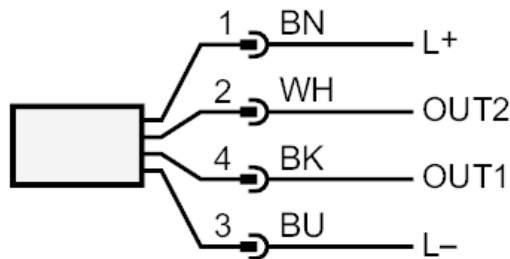
Remarks	
Remarks	MW = Measured value MEW = Final value of the measuring range
Pack quantity	1 pcs.

### Electrical connection

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



### Connection



OUT1: 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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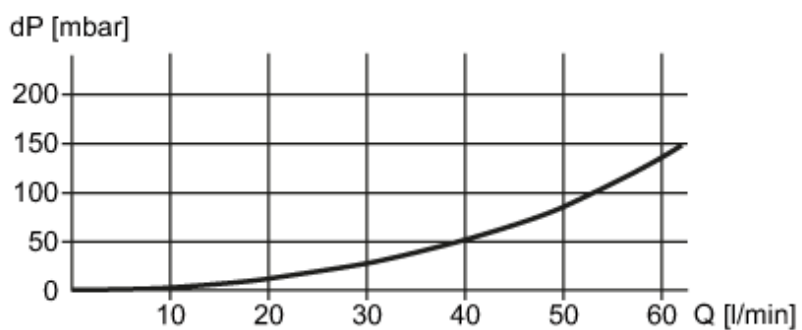


## Magnetic-inductive flow meter

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### Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity