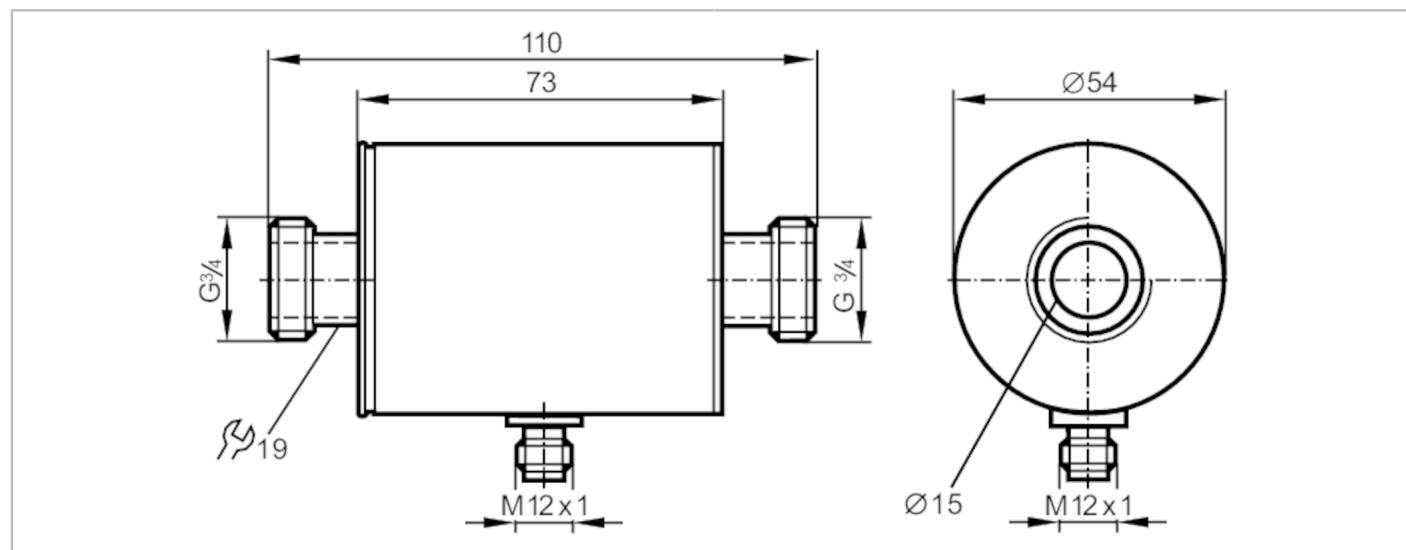


SM7050



Magnetic-inductive flow meter

SMR34GGX10KG/US-100



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1
Measuring range [l/min]	0.2...50
Process connection	threaded connection G 3/4 external thread 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
Pressure rating [MPa]	1.6
MAWP (for applications according to CRN) [bar]	11.2

Electrical data

Operating voltage [V]	18...30 DC; (to SELV/PELV)
Current consumption [mA]	95; (24 V)
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	5
Measuring principle	magnetic-inductive

Inputs / outputs

Number of inputs and outputs	Number of analogue outputs: 1
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Outputs

Total number of outputs	1
Output signal	analogue signal; IO-Link; (configurable)



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Permanent current rating of switching output DC	[mA]	250
Number of analogue outputs		1
Analogue current output	[mA]	4...20
Max. load	[Ω]	500
Overload protection		yes

Measuring/setting range

Measuring range	[l/min]	0.2...50
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Accuracy / deviations

Flow monitoring		
Accuracy (in the measuring range)		$\pm (0,8 \% \text{ MW} + 0,5 \% \text{ MEW})$
Repeatability		$\pm 0,2\% \text{ MEW}$

Response times

Flow monitoring		
Response time	[s]	0.15; (dAP = 0, T19)

Interfaces

Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9
Profiles		Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis
SIO mode		yes
Required master port type		A
Process data analogue		2
Min. process cycle time	[ms]	3
Supported DeviceIDs	Type of operation	DeviceID
	default	574

Operating conditions

Ambient temperature	[°C]	-10...60
Storage temperature	[°C]	-25...80
Protection		IP 67

Tests / approvals

EMC	DIN EN 60947-5-9	
CPA approval	model number	001MI
	accuracy class	-
	maximum allowable error	$\pm 1,5 \% \text{ FS}$
	Q (min)	0,01 m³/h
	Q (t)	-
	Q (max)	3 m³/h
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]	145
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

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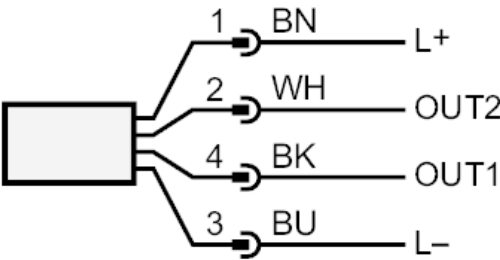
Mechanical data		
Weight	[g]	517.55
Housing		cylindrical
Dimensions	[mm]	Ø 54 / L = 110
Materials		stainless steel (316L/1.4404); PBT-GF20; FKM; TPE
Materials (wetted parts)		stainless steel (316L/1.4404); PEEK; FKM
Process connection		threaded connection G 3/4 external thread DN20 flat seal
Remarks		
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: IO-Link
Core colours :
BN = brown
WH = white
BK = black
BU = blue

SM7050

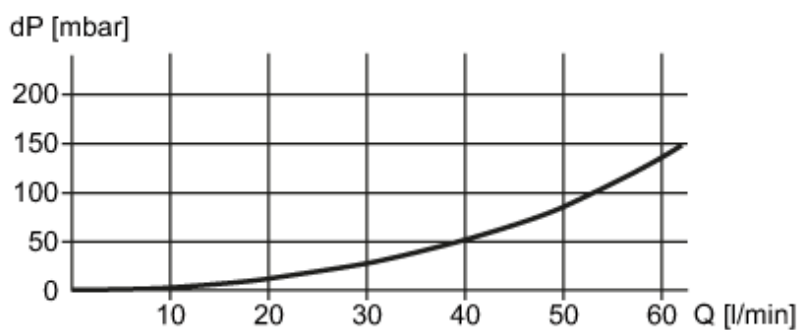
Magnetic-inductive flow meter

SMR34GGX10KG/US-100



Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity