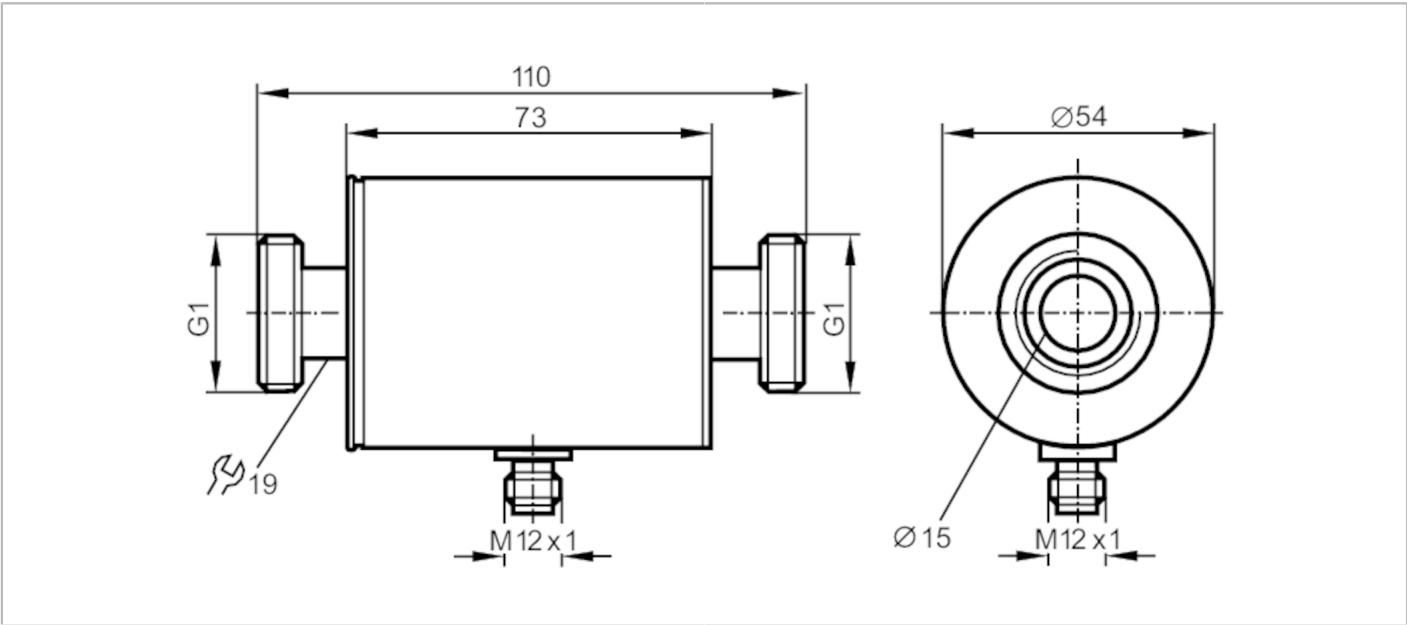


SM8050



Magnetic-inductive flow meter

SMR11GGX10KG/US



Product characteristics			
Number of inputs and outputs		Number of analogue outputs: 1	
Measuring range [l/min]		0.2...100	
Process connection		threaded connection G 1 external thread DN25 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: ≥ 20 μS/cm	
		viscosity: < 70 mm²/s (40 °C)	
Medium temperature [°C]		-10...70	
Pressure rating		16 bar	1.6 MPa
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	
Outputs			
Total number of outputs		1	

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Output signal	analogue signal; IO-Link; (configurable)
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...100

Accuracy / deviations	
Flow monitoring	
Accuracy (in the measuring range)	± (0,8 % MW + 0,5 % MEW)
Repeatability	± 0,2% 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	<table> <tr> <th>Type of operation</th><th>DeviceID</th></tr> <tr> <td>default</td><td>577</td></tr> </table>	Type of operation	DeviceID	default	577
Type of operation	DeviceID				
default	577				

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	<table> <tr> <td>model number</td><td>002MI</td></tr> <tr> <td>accuracy class</td><td>-</td></tr> <tr> <td>maximum allowable error</td><td>± 1,5 % FS</td></tr> <tr> <td>Q (min)</td><td>0,01 m³/h</td></tr> <tr> <td>Q (t)</td><td>-</td></tr> <tr> <td>Q (max)</td><td>6 m³/h</td></tr> </table>	model number	002MI	accuracy class	-	maximum allowable error	± 1,5 % FS	Q (min)	0,01 m³/h	Q (t)	-	Q (max)	6 m³/h
model number	002MI												
accuracy class	-												
maximum allowable error	± 1,5 % FS												
Q (min)	0,01 m³/h												
Q (t)	-												
Q (max)	6 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]	167												
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]	575
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 1 external thread DN25 flat seal

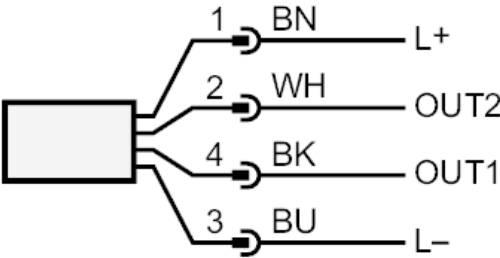
Remarks		
Remarks		MW = measured value
		MEW = Final value of the measuring range
Pack quantity		1 pcs.

Electrical connection

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



Connection



OUT1: IO-Link
OUT2: analogue output
Core colours :
BN = brown
WH = white
BK = black
BU = blue

colours to DIN EN 60947-5-2

SM8050

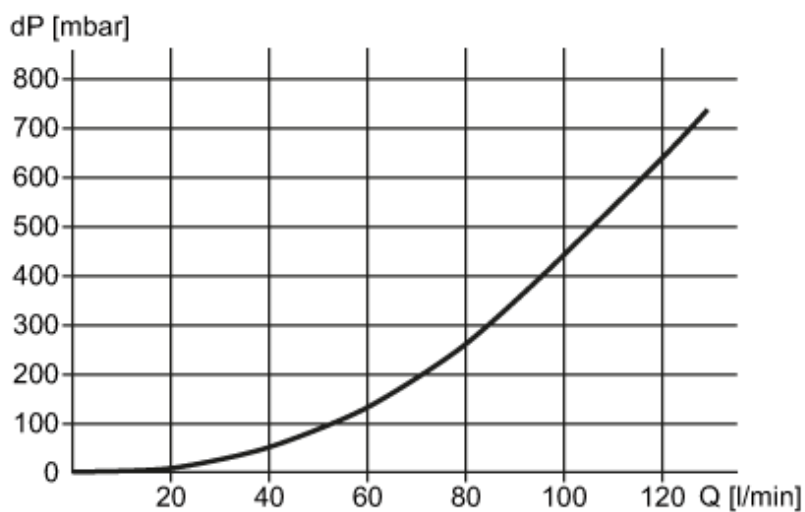


Magnetic-inductive flow meter

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Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity