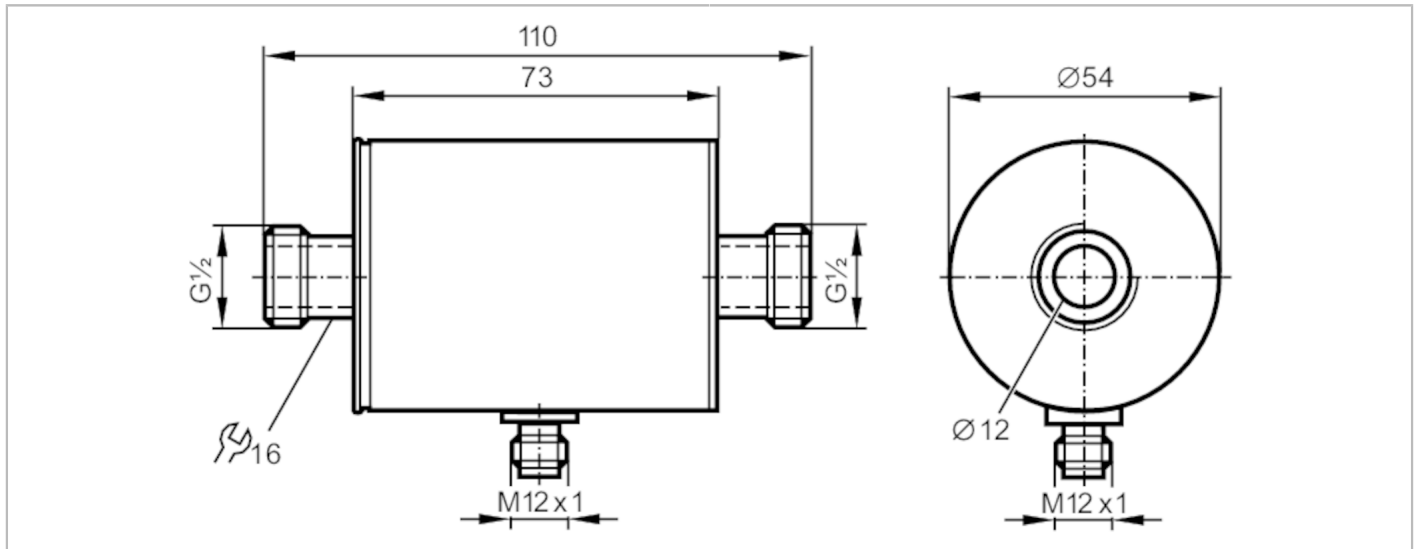


SM6050



Magnetic-inductive flow meter

SMR12GGX10KG/US-100



Product characteristics	
Number of inputs and outputs	Number of analogue outputs: 1
Measuring range [l/min]	0.1...25
Process connection	threaded connection G 1/2 DN15 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]	17.7
Electrical data	
Operating voltage [V]	18...30 DC; (according to EN 50178 SELV/PELV)
Current consumption [mA]	95; (24 V)
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	5
Inputs / outputs	
Number of inputs and outputs	Number of analogue outputs: 1

SM6050



Magnetic-inductive flow meter

SMR12GGX10KG/US-100

Outputs		
Total number of outputs	1	
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]	0.1...25	
Accuracy / deviations		
Flow monitoring		
Accuracy (in the measuring range)	$\pm (0,8 \% MW + 0,5 \% MEW)$	
Repeatability	$\pm 0,2\% MEW$	
Response times		
Flow monitoring		
Response time [s]	0.15; (dAP = 0, T19)	
Temperature monitoring		
Dynamic response T05 / T09 [s]	T09 = 20 (Q > 1 l/min)	
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	571
Operating conditions		
Ambient temperature [$^{\circ}\text{C}$]	-10...60	
Storage temperature [$^{\circ}\text{C}$]	-25...80	
Protection	IP 67	

SM6050



Magnetic-inductive flow meter

SMR12GGX1OKG/US-100

Tests / approvals		
EMC	DIN EN 60947-5-9	
	model number	001MI
	accuracy class	-
CPA approval	maximum allowable error	± 1,5 % FS
	Q (min)	0,005 m³/h
	Q (t)	-
	Q (max)	1,5 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	

Mechanical data		
Weight [g]	492.5	
Materials	stainless steel (1.4404 / 316L); PBT-GF20; FKM; TPE	
Materials (wetted parts)	stainless steel (1.4404 / 316L); PEEK; FKM	
Process connection	threaded connection G 1/2 DN15 flat seal	

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

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



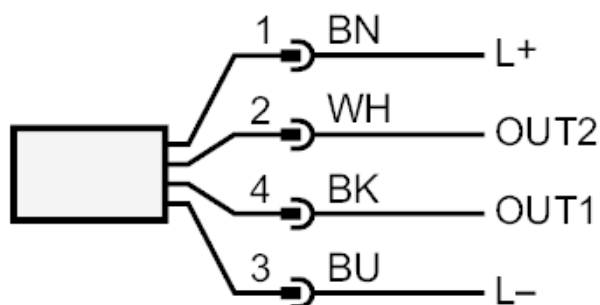
SM6050



Magnetic-inductive flow meter

SMR12GGX10KG/US-100

Connection



colours to DIN EN 60947-5-2

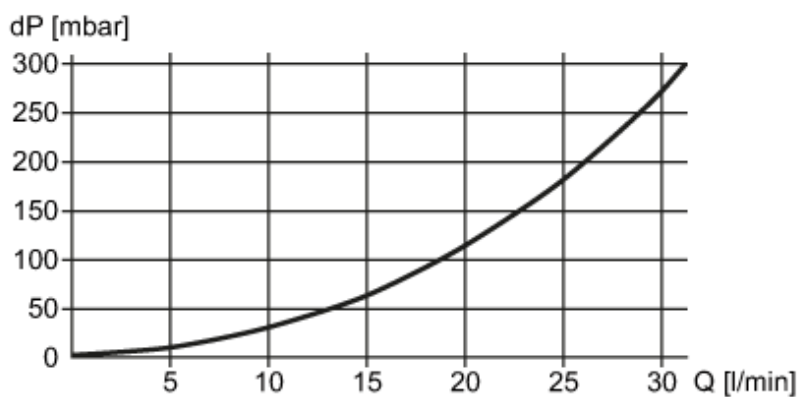
OUT1: IO-Link
OUT2: analogue output

Core colours :

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

Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity