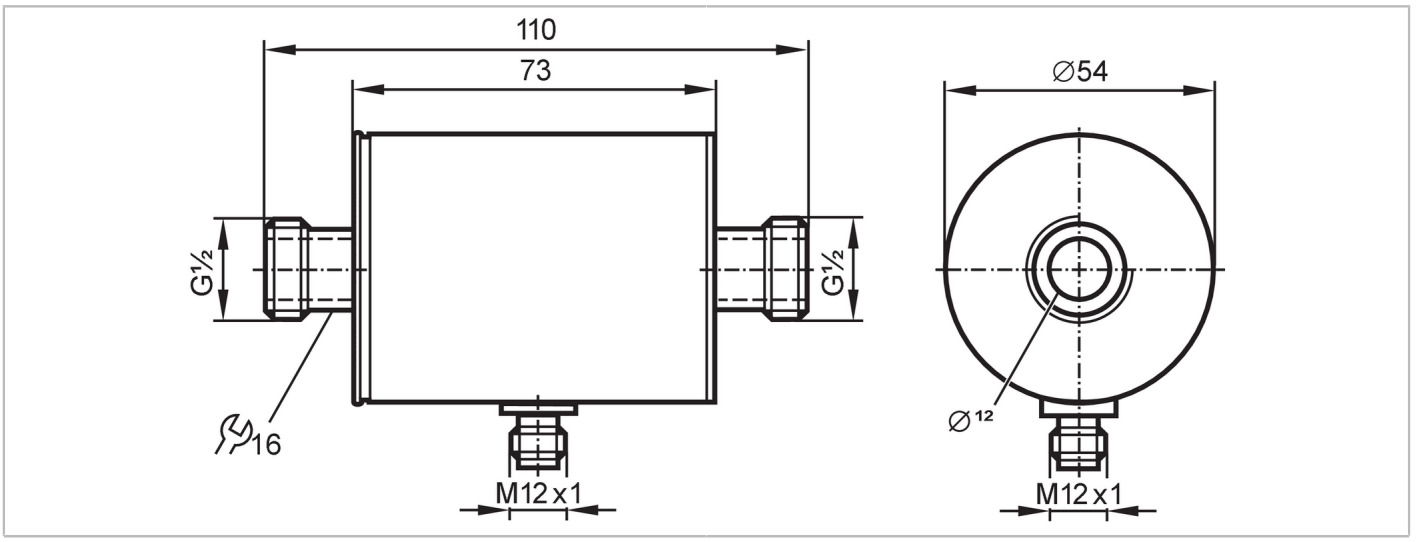
SM6050

Magnetic-inductive flow meter

SMR12GGX1OKG/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 external thread 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: ≥ 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		15.3 bar	1.53 MPa
Electrical data			
Operating voltage	[V]	18...30 DC; (to 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	
Measuring principle		magnetic-inductive	
Inputs / outputs			
Number of inputs and outputs		Number of analogue outputs: 1	
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]	0.1...25	
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)	
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 - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	571
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	± 1,5 % FS
		Q (min)	0,005 m³/h
		Q (t)	-
		Q (max)	1,5 m³/h

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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]	480.6
Housing		cylindrical
Inlet pipe length		5 x DN
Outlet pipe length		2 x DN
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 1/2 external thread DN15 flat seal

Remarks

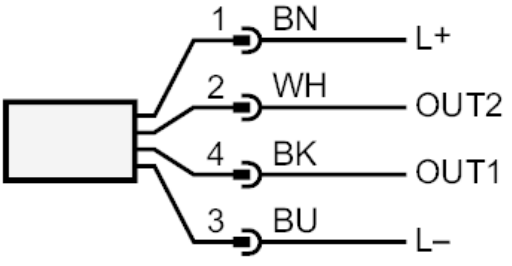
Remarks	MW = measured value
	MEW = Final value of the measuring range
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



Connection



	colours to DIN EN 60947-5-2
OUT1:	IO-Link
OUT2:	analogue output
	Core colours :
BN =	brown
WH =	white
BK =	black
BU =	blue

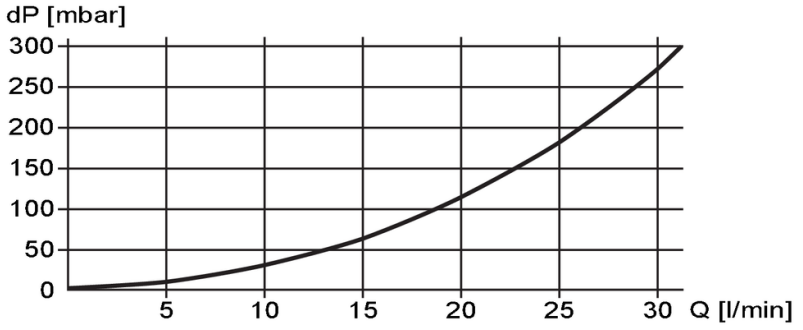
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Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity