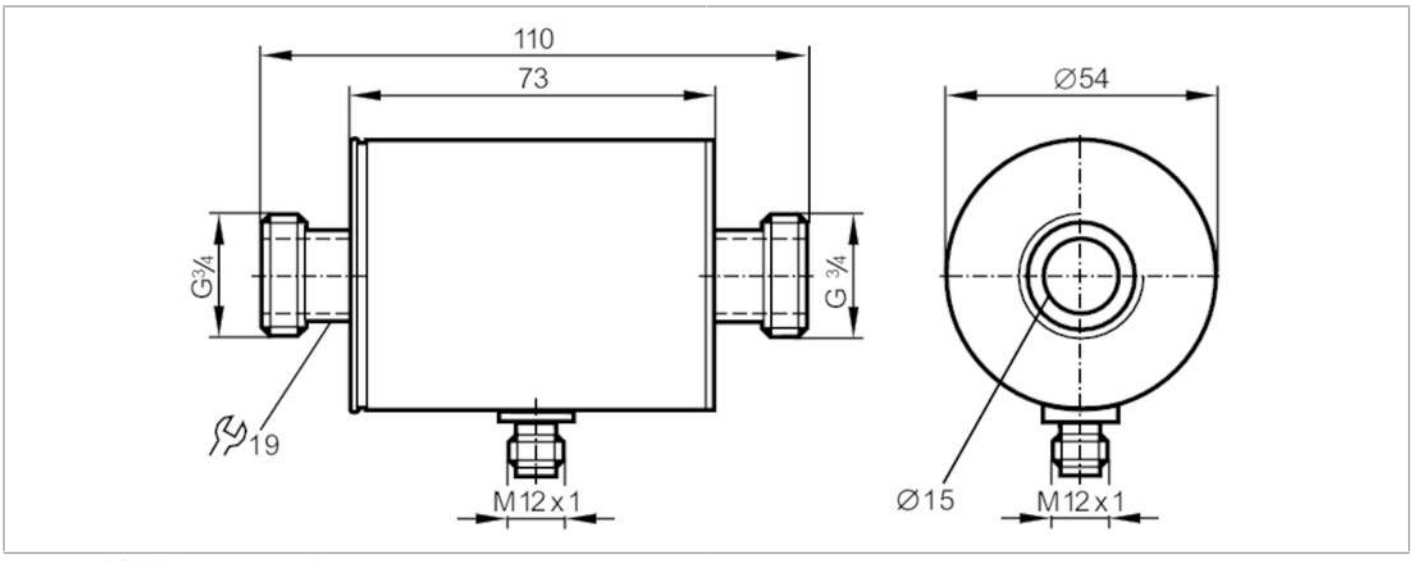
SM7050

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: ≥ 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	
Output signal		analogue signal; IO-Link; (configurable)	
Permanent current rating of switching output DC	[mA]	250	

SM7050

Magnetic-inductive flow meter

SMR34GGX10KG/US-100

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
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		**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	± 1,5 % 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
Mechanical data			
Weight	[g]		517.55

SM7050

Magnetic-inductive flow meter

SMR34GGX10KG/US-100

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

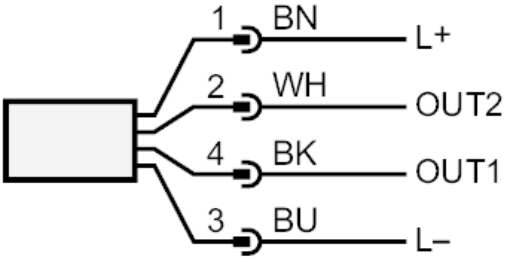
Remarks	MW = measured value
	MEW = Final value of the measuring range
Pack quantity	1 pcs.

Electrical connection

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



Connection



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

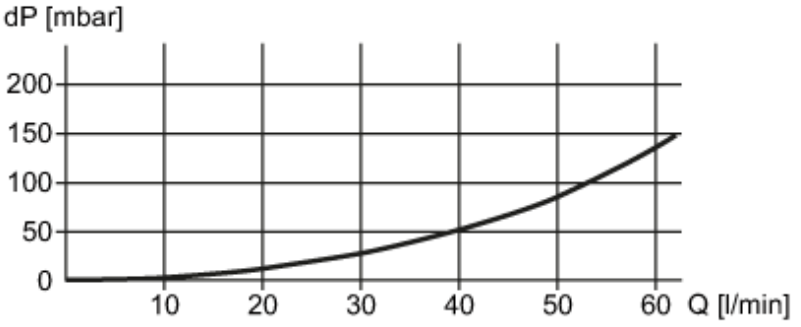
SM7050

Magnetic-inductive flow meter

SMR34GGX10KG/US-100

Diagrams and graphs

Pressure loss



dP Pressure loss

Q volumetric flow quantity