SM7050
SMR34GGX10KG/US100

Flow sensors
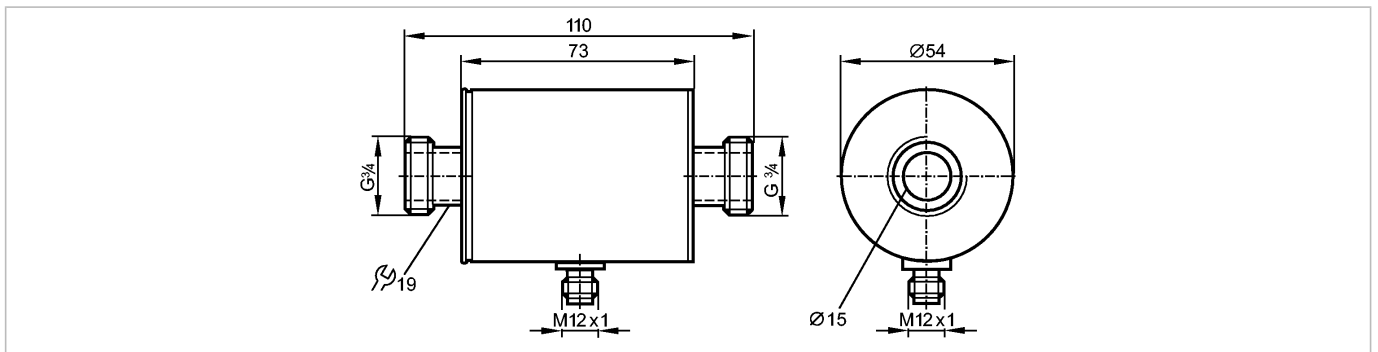
Product characteristics
Magnetic-inductive flow meter
Quick disconnect
Process connection: G¾ flat seal
connection to pipe by means of an adapter
Analog output 4...20 mA
Measuring range
0...50 l/min

Application		
Application		Conductive liquids (conductivity:>= 20 µS/cm / viscosity: < 70 cSt at 104 °F)
Pressure rating	[bar]	16
Medium temperature	[°C]	-10...70

Electrical data		
Electrical design		DC
Operating voltage	[V]	19...30 DC [1])
Current consumption	[mA]	90
Insulation resistance	[MΩ]	> 100 (500 V DC)
Protection class		III
Reverse polarity protection		yes

Outputs		
Output function		4...20 mA analog
Overload protection		yes
Analog output		4...20 mA
Max. load	[Ω]	500

Measuring / setting range		
Flow monitoring		
Measuring range	[l/min]	0...50

Accuracy / deviations		
Flow monitoring		
Accuracy		± (2% MW + 0.5% MEW)
Repeatability		± 0.2% MEW

Pressure loss (dP) / flow rate (Q)		

dP [mbar]

200
150
100
50
0

10   20   30   40   50   60   Q [l/min]
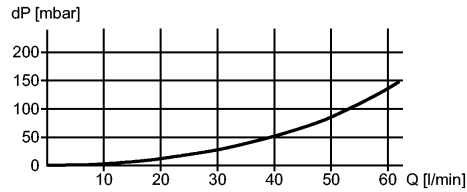
Reaction times

Power-on delay time	[s]	5
Flow monitoring		
Response time	[s]	< 0.150

Environment

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

Tests / approvals

Pressure equipment directive		article 3, section 3 - sound engineering practice	
EMC		EN 61000-4-2 ESD:	4 kV CD / 8 kV AD
		EN 61000-4-3 HF radiated:	10 V/m
		EN 61000-4-4 Burst:	2 kV
		EN 61000-4-5 Surge:	0.5 kV
		EN 61000-4-6 HF conducted:	10 V
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]	175	

Mechanical data

| Process connection		G¾ flat seal
Materials (wetted parts)		stainless steel 316L / 1.4404; PEEK (polyether ether ketone); FKM
Housing materials		stainless steel 316L / 1.4404; PBT-GF 20; FKM; TPE
Weight	[kg]	0.532

Electrical connection

Connection	M12 connector; gold-plated contacts

Wiring
Core colors
BN   brown
BU   blue
WH   white

2   1
3   4

1   BN   L+
2   WH   OUT
3   BU   L−
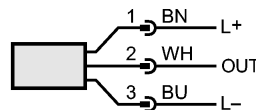
Colours to DIN EN 60947-5-2

OUT: Analog output

Remarks

Remarks		[1]) to EN50178, SELV, PELV
		MW = measured value
		MEW = final value of the measuring range
Pack quantity	[piece]	1