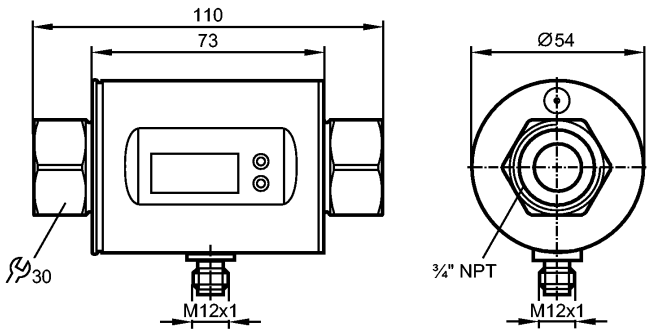
efector300

SM7604

SMN34GGX50KG/US-100

Flow sensors



Product characteristics

Magnetic-inductive flow meter

Quick disconnect

Process connection: 3/4" NPT

connection to pipe by means of an adapter

2 outputs

OUT1 = analogue signal temperature
OUT2 = analogue signal flow

Measuring range

0.2...50 l/min

Application

Application		conductive liquids of the fluid group 2 according to the Pressure Equipment Directive (PED) (conductivity: ≥ 20 µS/cm / viscosity: < 70 mm²/s at 40°C)
Pressure rating	[bar]	16
Medium temperature	[°C]	-10...70

Electrical data

Electrical design		DC
Operating voltage	[V]	20...30 DC [1])
Current consumption	[mA]	120 (24 V)
Insulation resistance	[MΩ]	> 100 (500 V DC)
Protection class		III
Reverse polarity protection		yes

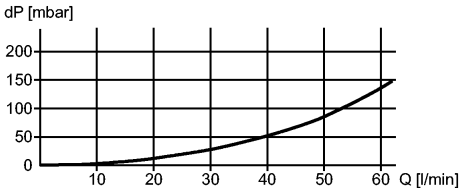
Outputs

Output function		2 x analog (4...20 mA scalable)
Overload protection		yes
Analog output		4...20 mA, max. 22 mA
Max. load	[Ω]	500

Measuring / setting range

Flow monitoring

Measuring range	0.2...50 l/min	0.02...13.22 gpm
Display range	-60...60 l/min	-15.86...15.86 gpm
Resolution	0.1 l/min	0.02 gpm
Analog start point, ASP	0...40 l/min	0...10.58 gpm
Analog end point, AEP	10...50 l/min	2.64...13.22 gpm

in steps of		0.1 l/min	0.02 gpm
Temperature monitoring			
Measuring range	[°C]	-20...80	
Resolution	[°C]	0.2	
Analog start point, ASP	[°C]	-20...60	
Analog end point, AEP	[°C]	0...80	
in steps of	[°C]	0.2	
Accuracy / deviations			
Flow monitoring			
Accuracy	[% of the final value]	± (2% MW + 0.5% MEW)	
Repeatability		± 0.2% MEW	
Pressure loss (dP) / flow rate (Q)			
Temperature monitoring			
Accuracy	[K]	± 2.5 (Q > 1 l/min)	
Reaction times			
Power-on delay time	[s]	5	
Flow monitoring			
Response time	[s]	< 0.150 (dAP = 0)	
Damping, dAP	[s]	0.0...3.0	
Temperature monitoring			
Response time	[s]	T09 = 20 (Q > 1 l/min)	
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		DIN EN 61000-6-2 DIN EN 61000-6-3	
Shock resistance		DIN EN 60068-2-27	20 g (11 ms)
Vibration resistance		DIN EN 60068-2-6	5 g (10...2000 Hz)
MTTF	[Years]	175	
Mechanical data			
Process connection		3/4" NPT	
Materials (wetted parts)		stainless steel 316L / 1.4404; PEEK (polyether ether ketone); FKM	
Housing materials		stainless steel 316L / 1.4404; PBT-GF 20; PC; FKM; TPE	
Weight	[kg]	0.56	
Displays / operating elements			
Display		Display unit 6 x LED green (l/min, m³/h, gpm, gph, °C, °F) Measured values 4-digit alphanumeric display Programming 4-digit alphanumeric display	

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Flow sensors

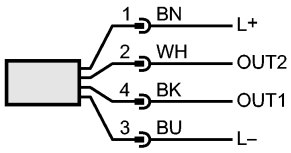
Electrical connection

Connection	M12 connector; gold-plated contacts

Wiring

Core colors

BK	black
BN	brown
BU	blue
WH	white



Colours to DIN EN 60947-5-2

OUT1: analogue output temperature

OUT2: analogue output flow rate

Remarks

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