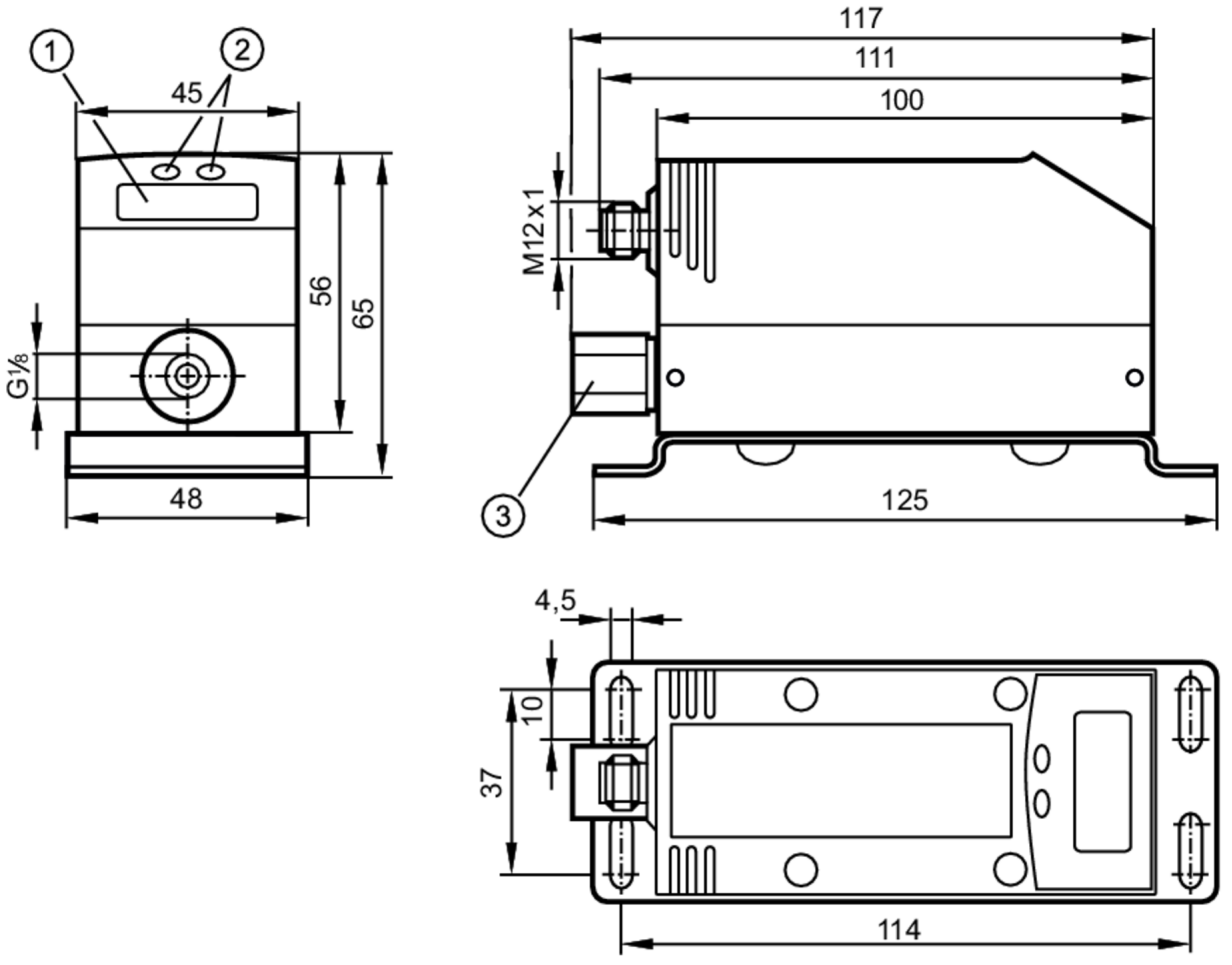
SQ0500

Flow meter

SQR18DXBFPKG/US-100



1 alphanumeric display 4-digit
2 programming buttons
3 flow conditioner

Product characteristics		
Number of inputs and outputs		Number of digital outputs: 2; Number of analogue outputs: 1
Measuring range	[ml/min]	1...200
Process connection		threaded connection G 1/8
Application		
Media		water; hydrous media
Medium temperature	[°C]	0...60
Pressure rating	[bar]	10
Electrical data		
Operating voltage	[V]	19...30 DC; (to SELV/PELV)
Current consumption	[mA]	< 110
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	5

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Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 2; Number of analogue outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analogue signal; pulse signal; (configurable)
Electrical design		PNP
Number of digital outputs		2
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250; (per output)
Number of analogue outputs		1
Analogue current output	[mA]	4...20; (scalable)
Max. load	[Ω]	500
Pulse output		consumed quantity meter
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Short-circuit proof		yes
Overload protection		yes
Measuring/setting range		
Measuring range	[ml/min]	1...200
Display range	[ml/min]	0...240
Set point SP	[ml/min]	6...200
Reset point rP	[ml/min]	1...195
Analogue start point ASP	[ml/min]	0...150
Analogue end point AEP	[ml/min]	50...200
In steps of	[ml/min]	1
Measuring dynamics		1:200
Volumetric flow quantity monitoring		
Pulse value		0.1...2000000000 ml
In steps of		0.1...1000000 ml
Pulse length	[s]	0,0125...2
Temperature monitoring		
Measuring range	[°C]	0...60
Display range	[°C]	0...72
Set point SP	[°C]	1.8...60
Reset point rP	[°C]	0.3...58.5
Analogue start point	[°C]	0...45
Analogue end point	[°C]	15...60
In steps of	[°C]	0.1

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Accuracy / deviations			
Flow monitoring			
Accuracy (in the measuring range)		± (15 % MW + 2 % MEW); (The values apply for the following conditions:; application: water; Medium temperature: 20 °C; Ambient temperature: 22...28 °C; unit with mounted flow conditioner)	
Repeatability		± 3% MW	
Response times			
Flow monitoring			
Response time	[s]	0.3; (dAP = 0; for rising flow; for falling flow)	
Damping process value dAP	[s]	1...5	
Damping process value dAP in steps	[s]	0 - 0,2 - 0,4 - 0,6 - 0,8 - 1...5	
Software / programming			
Parameter setting options		Flow monitoring; quantity meter; Preset counter; Temperature monitoring	
Operating conditions			
Ambient temperature	[°C]	0...60	
Storage temperature	[°C]	-25...85	
Protection		IP 65	
Tests / approvals			
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 61000-4-6 HF conducted	10 V
Shock resistance		DIN IEC 68-2-27	30 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	5 g (55...2000 Hz)
MTTF	[years]	231	
Mechanical data			
Weight	[g]	455.5	
Materials		stainless steel (1.4404 / 316L); PC; PBT-GF20; POM; NBR	
Materials (wetted parts)		stainless steel (1.4404 / 316L); FKM	
Process connection		threaded connection G 1/8	
Displays / operating elements			
Display		Display unit	3 x LED, green (ml/min, ml, °C)
		function	2 x LED, yellow
		switching status	2 x LED, yellow
		measured values	alphanumeric display, 4-digit
		programming	alphanumeric display, 4-digit
Remarks			
Remarks		MW = measured value	
		MEW = Final value of the measuring range	
		Pressure drop without flow conditioner: max. 5 mbar.	
		Pressure drop with flow conditioner: max. 23 mbar.	
Pack quantity		1 pcs.	

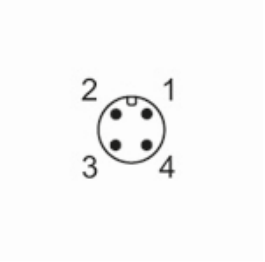
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Flow meter

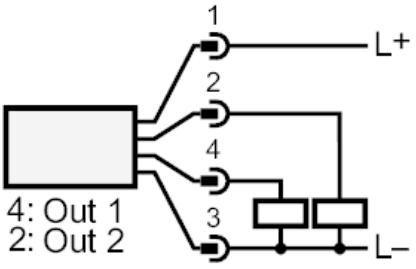
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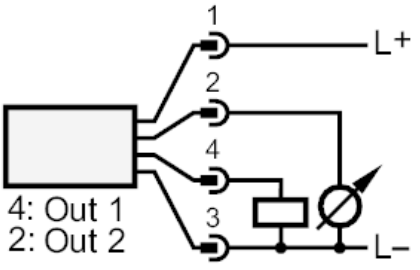
Electrical connection

Connector: 1 x M12; coding: A



Connection





OUT1:	switching output Pulse output quantity meter signal output Preset counter
OUT2:	switching output analogue output