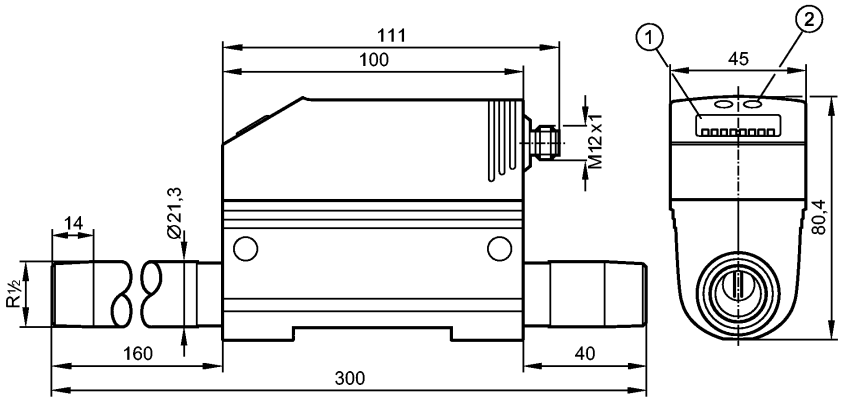
efector300
SD6000

SDR12DGXFPKG/US-100 Flow sensors



1: 4-digit alphanumeric display
2: Programming buttons

CE CRN cULus LISTED EAC IO-Link

Product characteristics

Compressed air meter
Quick disconnect
Process connection: R½ (DN15)
Function programmable
2 outputs
OUT1: flow monitoring (binary), quantity meter (pulse), preset counter (binary)
OUT2: flow or temperature monitoring (analogue or binary)
flow monitoring
Display range
0.0...90 Nm³/h
Measuring range
0.2...75 Nm³/h
Temperature monitoring
Display range
-12...72 °C

Application

Application		Compressed air Air quality(ISO 8573-1): Class 141 (measuring error: see below, value A) Class 344 (measuring error: see below, value B)
Pressure rating	[bar]	16
MAWP (for applications according to CRN)	[bar]	16
Medium temperature	[°C]	0...60

Electrical data

Electrical design		DC PNP
Operating voltage	[V]	18...30 DC [1])
Current consumption	[mA]	< 110
Protection class		III
Reverse polarity protection		yes

Outputs

Output function		OUT1: normally open / closed programmable or pulse OUT2: normally open / closed programmable or analog (4...20 mA scaleable)
Current rating	[mA]	2 x 250
Voltage drop	[V]	< 2
Short-circuit protection		yes (non-latching)

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Overload protection		yes		
Analog output		4...20 mA		
Max. load	[Ω]	< 500		
Pulse output		consumed quantity meter		
Measuring / setting range				
Flow monitoring				
Measuring range		0.2...75.0 Nm³/h	10...1250 Nl/min	0.3...103.6 Nm/s
Display range		0.0...90.0 Nm³/h	0...1500 Nl/min	0.0...124.3 Nm/s
Set point, SP		0.6...75.0 Nm³/h	10...1250 Nl/min	0.8...103.6 Nm/s
Reset point, rP		0.2...74.6 Nm³/h	4...1244 Nl/min	0.3...103.1 Nm/s
Analog start point, ASP		0.0...56.3 Nm³/h	0...938 Nl/min	0.0...77.7 Nm/s
Analog end point, AEP		18.7...75.0 Nm³/h	312...1250 Nl/min	25.9...103.6 Nm/s
in steps of		0.1 Nm³/h	1 Nl/min	0.1 Nm/s
Volumetric flow quantity monitoring				
Pulse value		0.001...1000000 m³		
in steps of		0.001 m³		
Pulse length	[s]	≥ 0.02 / ≤ 2		
Temperature monitoring				
Measuring range	[°C]	0...60		
Display range	[°C]	-12...72		
Accuracy / deviations				
Flow monitoring				
Accuracy (within measuring range)		A): ± (3% MW + 0.3% MEW) / B): ± (6% MW + 0.6% MEW) ***)		
Repeatability	[% of the measured value]	± 1.5		
Temperature monitoring				
Accuracy	[K]	± 2 **)		
Reaction times				
Power-on delay time	[s]	1		
Flow monitoring				
Response time	[s]	< 0.1 (dAP = 0)		
Damping, dAP	[s]	0 - 0.2 - 0.4 - 0.6 - 0.8 - 1		
Software / programming				
Programming options		hysteresis / window function; N.O. / N.C; current / pulse output; display can be rotated / deactivated; display unit, totalizer		
Interfaces				
IO-Link Device				
Transfer type		COM2 (38.4 kBaud)		
IO-Link revision		1.1		
SDCI standard		IEC 61131-9 CDV		
IO-Link Device ID		262 d / 00 01 06 h		
Profiles		no profile		
SIO mode		yes		
Required master port class		A		
Process data analogue		3		
Process data binary		2		
Min. process cycle time	[ms]	4.1		
Environment				
Ambient temperature	[°C]	0...60		
Storage temperature	[°C]	-20...85		
Max. relative air humidity	[%]	90		
Protection		IP 65		
Tests / approvals				
Pressure equipment directive		article 3, section 3 - sound engineering practice		
EMC		DIN EN 61000-6-2 DIN EN 61000-6-3		
Vibration resistance		DIN EN 68000-2-6:	5 g (55...2000 Hz)	
MTTF	[Years]	227		
Mechanical data				

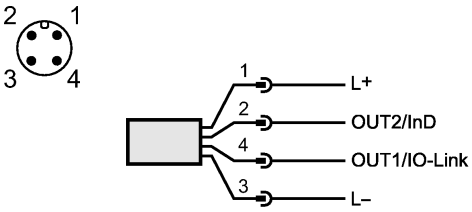
SD6000 - Compressed air meter - eclass: 27273101 / 27-27-31-01

Process connection		R½ (DN15)
Materials (wetted parts)		stainless steel (304S15); FKM; ceramics glass passivated; PEEK GF30; polyester; aluminum
Housing materials		PBT-GF 20; NBR; PC (polycarbonate); stainless steel (304S15); PTFE; brass coated; FKM; aluminum powder-coated
Tightening torque	[Nm]	50
Weight	[kg]	0.961

Displays / operating elements		
Display	Display unit	5 x LED green (Nl/min, Nm³/h, Nm/s, Nm³, °C)
	Function display	1 x LED green
	Switching status	2 x LED yellow
	Measured values	4-digit alphanumeric display
	Programming	4-digit alphanumeric display

Electrical connection	
Connection	M12 connector

Wiring



OUT1/IO-Link: 3 selection options
- switching output flow rate monitoring
- pulse output quantity meter
- signal output preset counter

OUT2/InD: 5 selection options
- switching output flow rate monitoring
- switching output temperature monitoring
- analogue output flow rate
- analogue output temperature
- input signal counter reset

Remarks	
Remarks	[1]) to EN50178, SELV, PELV **) medium flow in the limit area of the flow measurement range ***) under conditions acc. to DIN ISO 2533 and when installed in DN15 pipes MW = measured value MEW = final value of the measuring range Measuring, display and setting ranges refer to standard volume flow according to DIN ISO 2533. For information about installation and operation please see the operating instructions.

Pack quantity	[piece]	1