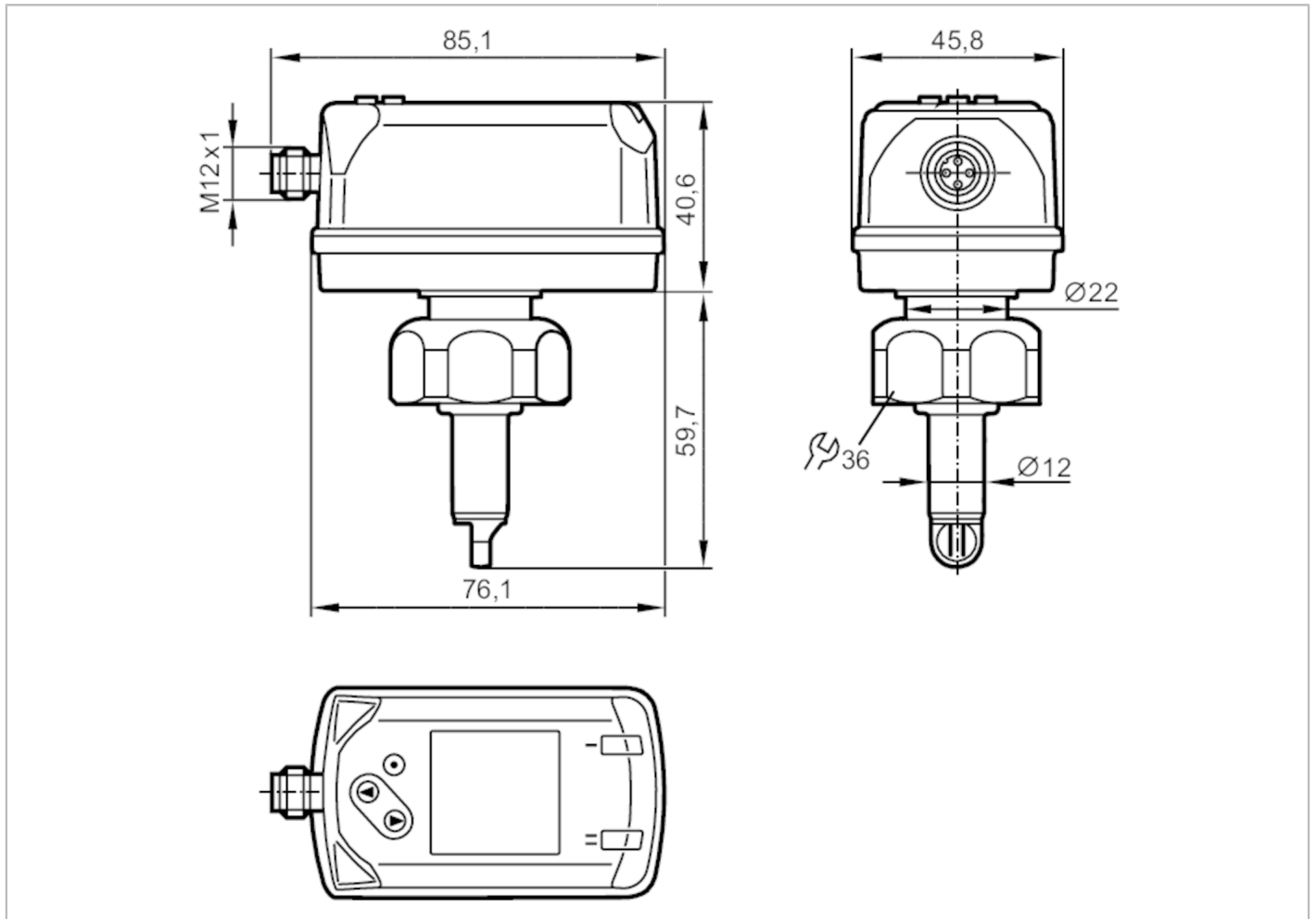


SD1540



Compressed air meter

SDD11DGXFRKG/US-100



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1
Process connection	threaded connection G 1 internal thread
Pressure monitoring	
Measuring range	[bar] -1...16
Application	
Application	for industrial applications
Installation	Налаштовується на внутрішній діаметр труби; (14...254 mm)
Media	compressed air
Medium temperature	[°C] -10...60
Min. bursting pressure	[bar] 64
Min. bursting pressure	[MPa] 6.4
Pressure rating	[bar] 16
Pressure rating	[Mpa] 1.6
MAWP (for applications according to CRN)	[bar] 10

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Electrical data			
Operating voltage	[V]	18...30 DC; (to SELV/PELV)	
Current consumption	[mA]	< 80	
Protection class		III	
Reverse polarity protection		yes	
Power-on delay time	[s]	1	
Inputs / outputs			
Number of inputs and outputs		Number of digital outputs: 2; Number of analogue outputs: 1	
Inputs			
Inputs		counter reset	
Outputs			
Output signal		switching signal; analogue signal; pulse signal; IO-Link; (configurable)	
Electrical design		PNP/NPN	
Number of digital outputs		2	
Output function		normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC	[V]	2.5	
Permanent current rating of switching output DC	[mA]	150; (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	
Overload protection		yes	
Measuring/setting range			
Measuring range		0.6...143.9 m/s	0.3...26260 m ³ /h
Display range		0...172.7 m/s	0...31520 m ³ /h
Resolution		0.1 m/s	0.05 m ³ /h
Set point SP		1.4...143.9 m/s	0.8...26260 m ³ /h
Reset point rP		0.7...143.2 m/s	0.4...26140 m ³ /h
Analogue start point ASP		0...115.1 m/s	0...21000 m ³ /h
Analogue end point AEP		28.8...143.9 m/s	422...26260 m ³ /h
Low flow cut-off LFC		0.2...1.4 m/s	0.1...260 m ³ /h
In steps of		0.1 m/s	0.01 m ³ /h
			0.005...437.6 m ³ /min
			0...525.2 m ³ /min
			0.013...437.6 m ³ /min
			0.007...435.6 m ³ /min
			0...350 m ³ /min
			7.04...437.6 m ³ /min
			0.002...4.4 m ³ /min
			0.001 m ³ /min
Pressure monitoring			
Measuring range	[bar]	-1...16	
Display range	[bar]	-1...20	
Resolution	[bar]	0.05	
Set point SP	[bar]	-0.92...16	
Reset point rP	[bar]	-1...15.92	
Analogue start point	[bar]	-1...12.8	
Analogue end point	[bar]	2.2...16	

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In steps of	[bar]	0.01
Volumetric flow quantity monitoring		
Measuring range	0...1000000000 m ³	0...35314666721 scf
Display range	0...1000000000 m ³	0...35314666721 scf
Set point SP	0.01...100000000 m ³	0.35...3531466672.1 scf
Pulse value	0.01...100000000 m ³	0.35...3531466672.1 scf
In steps of	0.001 m ³	0.05 scf
Pulse length	[s]	0.001...2
Temperature monitoring		
Measuring range	-10...60 °C	14...140 °F
Display range	-24...74 °C	-11.2...165.2 °F
Resolution	0.2 °C	0.5 °F
Set point SP	-9.7...60 °C	14.6...140 °F
Reset point rP	-10...59.7 °C	14...139.4 °F
Analogue start point	-10...46 °C	14...114.8 °F
Analogue end point	4...60 °C	39.2...140 °F
In steps of	0.1 °C	0.1 °F
Accuracy / deviations		
Temperature coefficient	[1/K]	± 0,07 % MW
Accuracy (in the measuring range)		± (6 % MW + 0,6 % MEW); (reference conditions: diA = 73 mm; inlet pipe length >= 3 m; outlet pipe length >= 0,5 m; reference temperature: 20...25 °C; standard volume flow: 50...850 Nm ³ /h)
Repeatability		± 1,5 % MW
Pressure monitoring		
Repeatability	[X16]	± 0,2
Characteristics deviation	[X16]	< ± 0,5; (BFSL = Best Fit Straight Line)
Greatest TEMPCO of the span	[% MEW / 10 K]	± 0,3
Greatest TEMPCO of the zero point	[% MEW / 10 K]	± 0,1
Temperature monitoring		
Accuracy	[K]	± 0,5; (medium flow in the limit area of the flow measurement range)
Response times		
Response time	[s]	0.1; (dAP = 0)
Damping process value dAP	[s]	0...5
Pressure monitoring		
Response time	[s]	0.05
Temperature monitoring		
Dynamic response T05 / T09	[s]	T09 = 0,5
Software / programming		
Parameter setting options		hysteresis / window; normally open / normally closed; current/pulse output; display can be rotated and switched off; Display unit; totaliser
Interfaces		
Communication interface		IO-Link

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Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9 CDV	
Profiles	Digital Measuring Sensor (0x800A), Identification and Diagnosis (0x4000)	
SIO mode	yes	
Required master port type	A	
Process data analogue	8	
Process data binary	2	
Min. process cycle time [ms]	7.2	
Supported DeviceIDs	Type of operation	DeviceID
	Default	872

Operating conditions

Ambient temperature [°C]	0...60	
Storage temperature [°C]	-20...85	
Max. relative air humidity [%]	90	
Protection	IP 65; IP 67	

Tests / approvals

EMC	DIN EN 60947-5-9	
CPA approval	model number	-
	accuracy class	-
	maximum allowable error	± 7 % FS
	Q (min)	0,3 m³/h
	Q (t)	-
	Q (max)	26260 m³/h
Vibration resistance	DIN EN 68000-2-6 5 g (10...2000 Hz)	
MTTF [ANN]	180	
UL approval	UL Approval no.	I013
	File number UL	E174189

Mechanical data

Weight [g]	408.3	
Materials	PBT+PC-GF30; PPS GF40; stainless steel (1.4301 / 304); stainless steel (1.4305 / 303); stainless steel (1.4404 / 316L); FKM	
Materials (wetted parts)	stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); FKM; ceramics glass passivated; PPS GF40; Al2O3 (ceramics); acrylate	
Process connection	threaded connection G 1 internal thread	

Displays / operating elements

Display	colour display 1,44", 128 x 128 pixels	
	2 x LED, yellow	

Remarks

Remarks	MW = measured value	
	MEW = Final value of the measuring range	
	D = inside pipe diameter	
	Measuring, display and setting ranges refer to the standard volume flow according to DIN ISO 2533.	
	For information about installation and operation please see the operating instructions.	
Pack quantity	1 pcs.	

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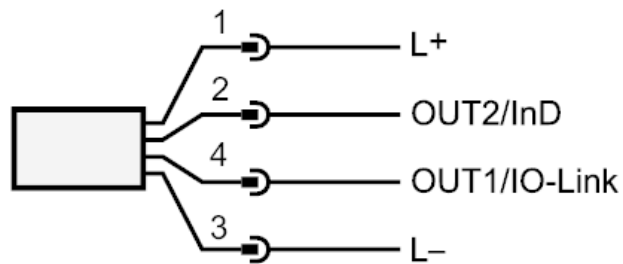
SDD11DGXFRKG/US-100

Electrical connection

Connector: 1 x M12; coding: A



Connection



OUT1/IO-Link: switching output flow
switching output temperature
switching output pressure
Pulse output quantity meter

OUT2/InD: signal output Preset counter
switching output flow
switching output temperature
switching output pressure
analogue output flow
analogue output temperature
analogue output pressure
signal output Preset counter
Pulse output quantity meter
input counter reset