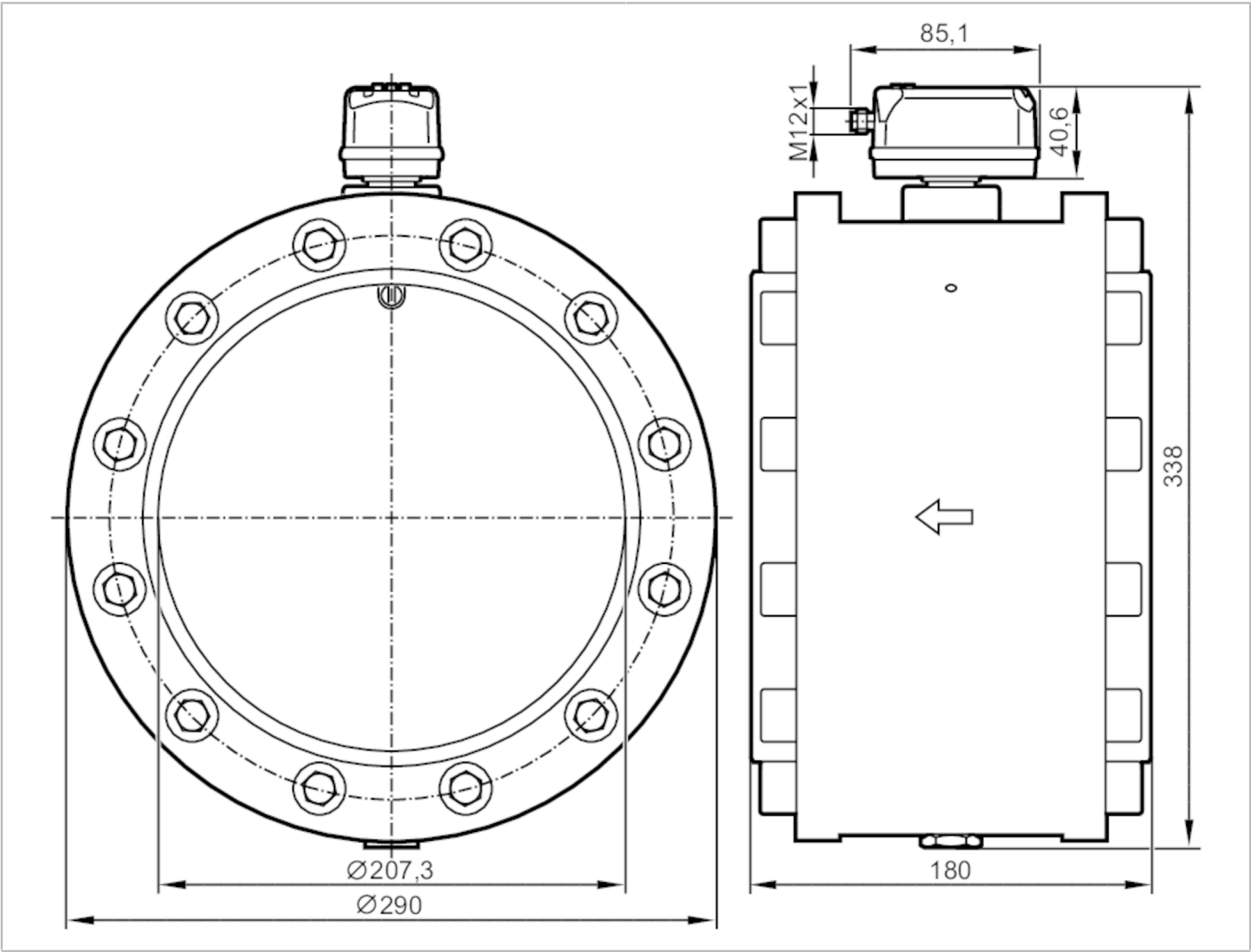


SDG850

Compressed air meter

SDG8"/METRIS PB DN200



Product characteristics		
Number of inputs and outputs	Number of digital outputs: 2; Number of analog outputs: 1	
Measuring range	0.6...143.9 m/s	73...17480 m³/h
Process connection	flange DN200 according to:DIN EN 10220	
Application		
Application	for industrial applications	
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	
Electrical data		
Operating voltage [V]	18...30 DC; (to SELV/PELV)	
Current consumption [mA]	< 80	
Protection class	III	



Compressed air meter

SDG8"/METRIS PB DN200

Reverse polarity protection	yes	
Power-on delay time [s]	1	
Inputs / outputs		
Number of inputs and outputs	Number of digital outputs: 2; Number of analog outputs: 1	
Inputs		
Inputs	counter reset	
Outputs		
Output signal	switching signal; analog signal; pulse signal; IO-Link; (configurable)	
Electrical design	PNP/NPN	
Number of digital outputs	2	
Output function	normally open / closed; (configurable)	
Max. voltage drop switching output DC [V]	2.5	
Permanent current rating of switching output DC [mA]	150; (per output)	
Number of analog outputs	1	
Analog current output [mA]	4...20; (scalable)	
Max. load [Ω]	500	
Pulse output	consumed quantity meter	
Short-circuit protection	yes	
Type of short-circuit protection	yes (non-latching)	
Overload protection	yes	
Measuring/setting range		
Measuring range	0.6...143.9 m/s	73...17480 m³/h
Display range	1.2...172.7 m/s	146...20976 m³/h
In steps of	0.1 m/s	1 m³/h
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	
Analog start point [bar]	-1...12.8	
Analog end point [bar]	2.2...16	
In steps of [bar]	0.01	
Volumetric flow quantity monitoring		
Measuring range	0...100000000 m³	0...353146667.2 scf
Display range	0...100000000 m³	0...353146667.2 scf
Set point SP	0.001...10000000 m³	0.05...353146667.2 scf
Pulse value	0.001...10000000 m³	0.05...353146667.2 scf
In steps of	0.0001 m³	0.005 scf
Pulse length [s]	0.002...2	
Temperature monitoring		
Measuring range	-10...60 °C	14...140 °F



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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
Analog start point	-10...46 °C	14...114.8 °F
Analog end point	4...60 °C	39.2...140 °F
In steps of	0.1 °C	0.1 °F

Accuracy / deviations

Accuracy (in the measuring range)	class 141: $\pm (3 \% \text{ MW} + 0,3 \% \text{ MEW})$; class 344: $\pm (6 \% \text{ MW} + 0,6 \% \text{ MEW})$; air quality to ISO 8573-1:2010; reference conditions: inlet pipe length ≥ 302 cm outlet pipe length ≥ 51 cm; reference temperature: 18..26 °C; standard volume flow 73...7896 m ³ /h; (standard volume flow DIN_ISO_2533 15 °C , 1013,25 mbar, 0 % r.H.)
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Pressure monitoring

Repeatability [% of the final value]	$\pm 0,2$
Characteristics deviation [% of the final value]	$< \pm 0,5$; (BFSL = Best Fit Straight Line)
Greatest TEMPCO of the span [% MEW / 10 K]	$\pm 0,3$
Greatest TEMPCO of the zero point [% MEW / 10 K]	$\pm 0,1$

Temperature monitoring

Accuracy [K]	$\pm 0,5$; (medium flow in the limit area of the flow measurement range)
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Reaction times

Response time [s]	0.1; (dAP = 0)
Damping process value dAP [s]	0...5

Pressure monitoring

Response time [s]	0.05
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Temperature monitoring

Dynamic response T05 / T09 [s]	T09 = 0,5
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Software / programming

Parameter setting options	hysteresis / window; normally open / closed; current/pulse output; display can be rotated and switched off; Display unit; totalizer
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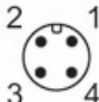
Interfaces

Communication interface	IO-Link
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 class	A
Process data analog	8
Process data binary	2
Min. process cycle time [ms]	7.2



Compressed air meter

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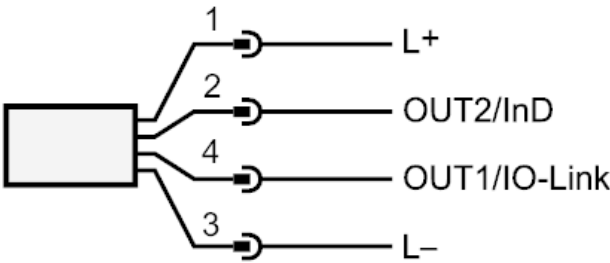
Supported DeviceIDs		Type of operation	DeviceID
		default	1545
Operating conditions			
Ambient temperature	[°C]	0...60	
Storage temperature	[°C]	-20...85	
Max. relative air humidity	[%]	90	
Protection		IP 65; IP 67	
Tests / approvals			
EMC		DIN EN 60947-5-9	
Vibration resistance		DIN EN 68000-2-6	5 g (10...2000 Hz)
MTTF		[years]	167
Pressure equipment directive		Modul A; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight		[g]	37790
Material		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; Pipe section: steel galvanized	
Process connection		flange DN200 according to:DIN EN 10220	
Displays / operating elements			
Display			Color 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 standard volume flow according to DIN ISO 2533.	
		For information about installation and operation please see the operating instructions.	
Pack quantity		1 pcs.	
Electrical connection			
Connector: 1 x M12; coding: A			
			



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SDG8"/METRIS PB DN200

Connection



- OUT1/IO-Link:

Switching output flow
Switching output temperature
Switching output pressure
Pulse output quantity meter
signal output Preset counter
- OUT2/InD:

Switching output flow
Switching output temperature
Switching output pressure
analog output flow
analog output temperature
analog output pressure
signal output Preset counter
Pulse output quantity meter
Input counter reset