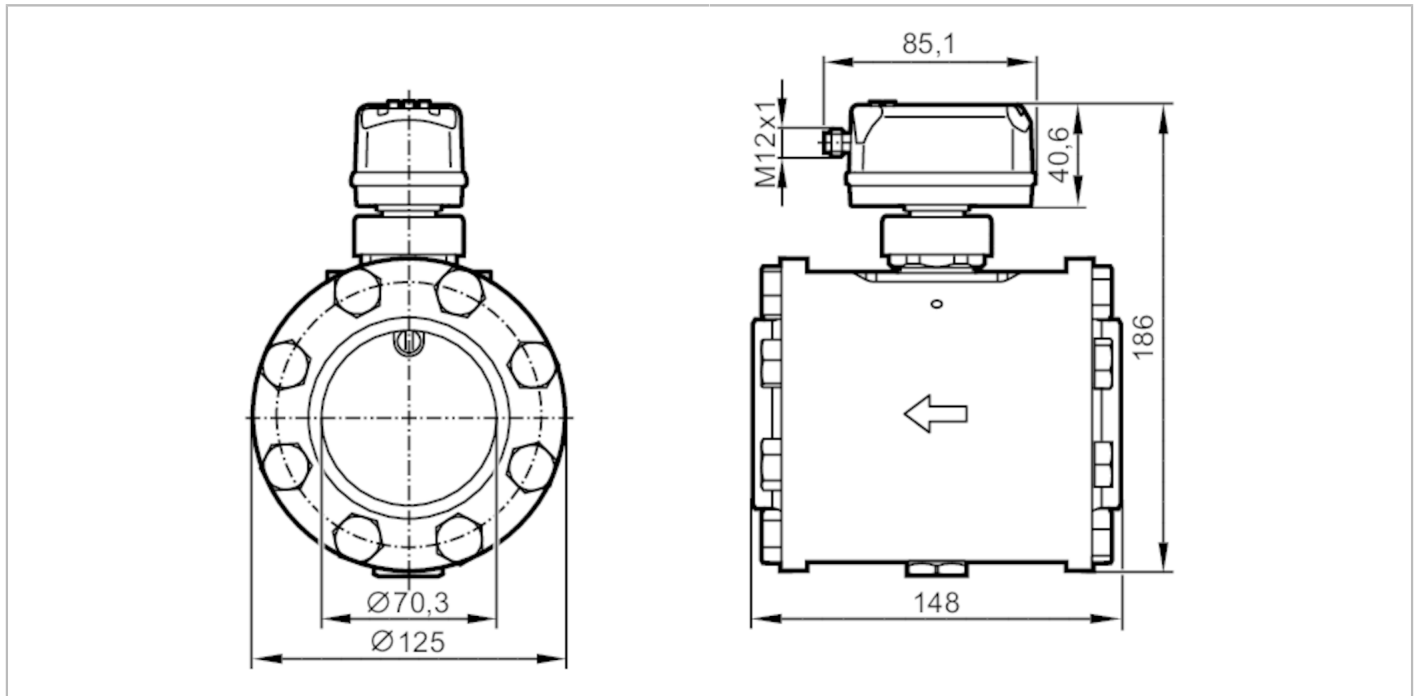


# SDG350



## Compressed air meter

SDG2 1/2"METRIS PB DN65 SS



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1
Measuring range	0.6...143.9 m/s      8...2011 m³/h
Process connection	flange DN65 according to: DIN EN 10220
Application	
Application	for industrial applications
Media	compressed air
Medium temperature [°C]	-10...60
Min. bursting pressure	64 bar      6.4 MPa
Pressure rating	16 bar      1.6 MPa
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

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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	8...2011 m <sup>3</sup> /h
Display range	1.2...172.7 m/s	16...2413 m <sup>3</sup> /h
In steps of	0.1 m/s	1 m <sup>3</sup> /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
Analogue start point	[bar]	-1...12.8
Analogue end point	[bar]	2.2...16
In steps of	[bar]	0.01

### Volumetric flow quantity monitoring

Measuring range	0...100000000 m <sup>3</sup>	0...353146667.2 scf
Display range	0...100000000 m <sup>3</sup>	0...353146667.2 scf
Set point SP	0.001...10000000 m <sup>3</sup>	0.05...353146667.2 scf
Pulse value	0.001...10000000 m <sup>3</sup>	0.05...353146667.2 scf
In steps of	0.0001 m <sup>3</sup>	0.005 scf
Pulse length	[s]	0.002...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

Accuracy (in the measuring range)	class 141: ± (3 % MW + 0,3 % MEW); class 344: ± (6 % MW + 0,6 % MEW) ; air quality to ISO 8573-1:2010; reference conditions: inlet pipe length >= 113 cm outlet pipe length >= 15 cm; reference temperature: 18..26 °C; standard volume flow 8...1155 m <sup>3</sup> /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]		± 0,2
Characteristics deviation [% of the final value]		< ± 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	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9 CDV	
Profiles	Common - I&D	Identification and Diagnosis
	Function	Measurement data, standard resolution
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	<b>Type of operation</b> default	<b>DeviceID</b> 1537
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)

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## Compressed air meter

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MTTF [years]	167
Pressure Equipment Directive	Modul A; can be used for group 2 fluids; group 1 fluids on request

### Mechanical data

Weight [g]	9630
Housing	rectangular
Dimensions [mm]	148 x 125 x 186
Materials	housing sensor: PBT+PC-GF30; PPS GF40; electronics fastener: stainless steel (304/1.4301); stainless steel (303/1.4305); Lock nut: stainless steel (316L/1.4404); Sealing-Display: FKM
Materials (wetted parts)	sensor feedthrough: stainless steel (304/1.4301), stainless steel (316L/1.4404); Sealing sensor - pipe section: FKM; sensor tip: ceramics glass passivated; PPS GF40; Al <sub>2</sub> O <sub>3</sub> (ceramics); acrylate; pipe section: stainless steel (304/1.4301); flange: stainless steel (304/1.4301)
Process connection	flange DN65 according to: DIN EN 10220

### Displays / operating elements

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

### Electrical connection

Connector: 1 x M12; coding: A



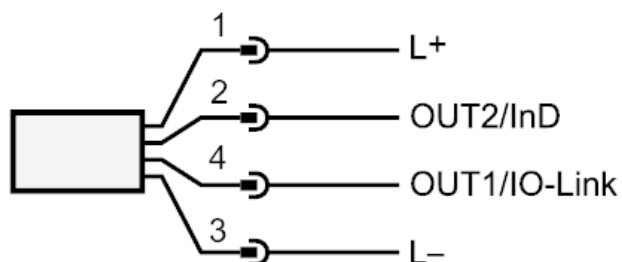
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## Compressed air meter

SDG2 1/2"METRIS PB DN65 SS

### 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  
analogue output flow  
analogue output temperature  
analogue output pressure  
signal output Preset counter  
Pulse output quantity meter  
input counter reset