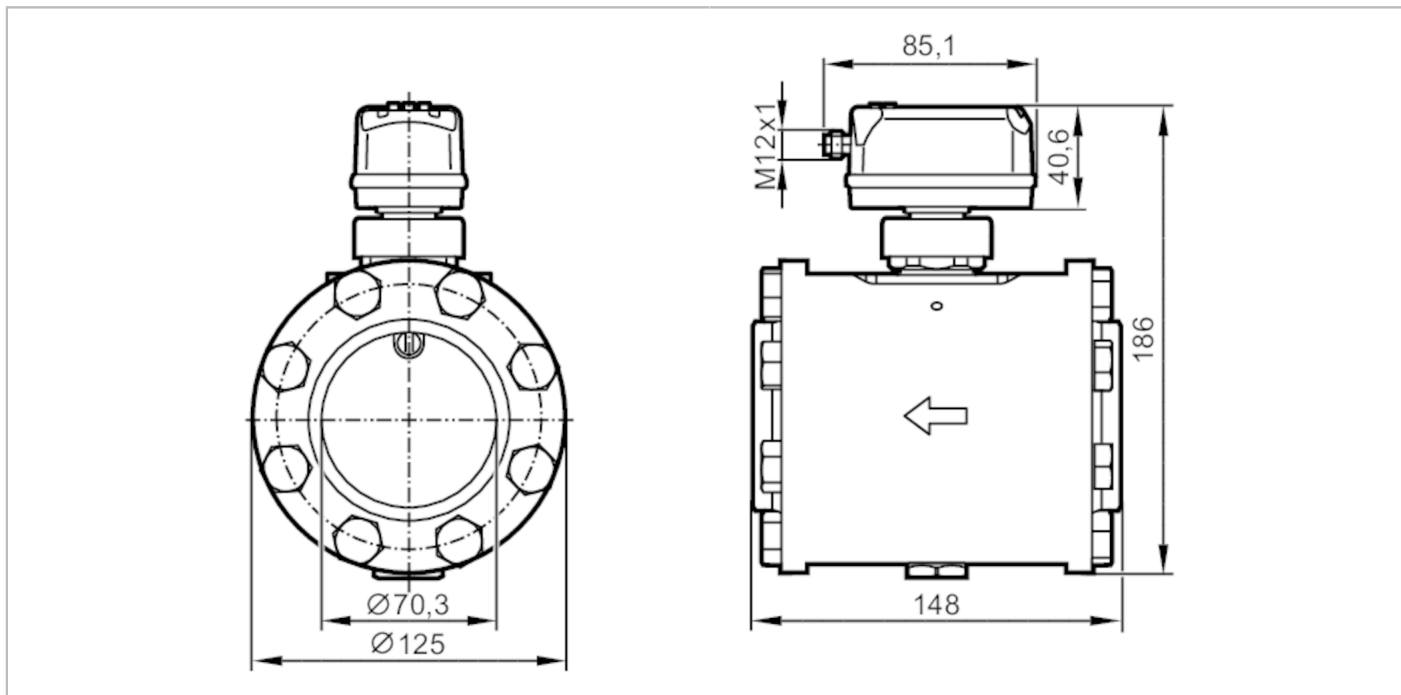


# SDG350



## Compressed air meter

SDG2 1/2"METRIS PB DN65 SS



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 2; Number of analog 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 [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
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)

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## Compressed air meter

SDG2 1/2"METRIS PB DN65 SS

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 [ $\Omega$ ]	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	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	
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 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
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 % MW + 0,3 % MEW); class 344: $\pm$ (6 % MW + 0,6 % MEW) ; air quality to ISO 8573-1:2010; reference conditions: inlet pipe length $\geq$ 113 cm outlet
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# SDG350



## Compressed air meter

SDG2 1/2"METRIS PB DN65 SS

pipe length  $\geq 15$  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.)

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)

Reaction 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 / closed; current/pulse output; display can be rotated and switched off; Display unit; totalizer

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				
Supported DeviceIDs	<table border="1"> <thead> <tr> <th>Type of operation</th> <th>DeviceID</th> </tr> </thead> <tbody> <tr> <td>default</td> <td>1537</td> </tr> </tbody> </table>	Type of operation	DeviceID	default	1537
Type of operation	DeviceID				
default	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)

# SDG350



## Compressed air meter

SDG2 1/2"METRIS PB DN65 SS

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
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: stainless steel (1.4301 / 304)
Process connection	flange DN65 according to: DIN EN 10220

### Displays / operating elements

Display	Color 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 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



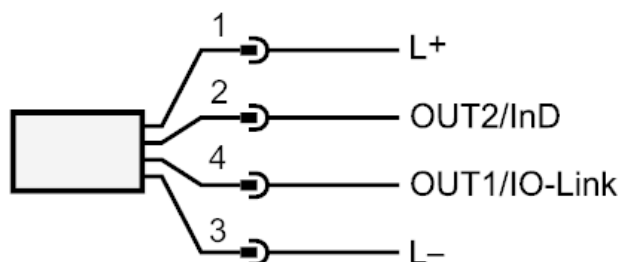
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## Compressed air meter

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