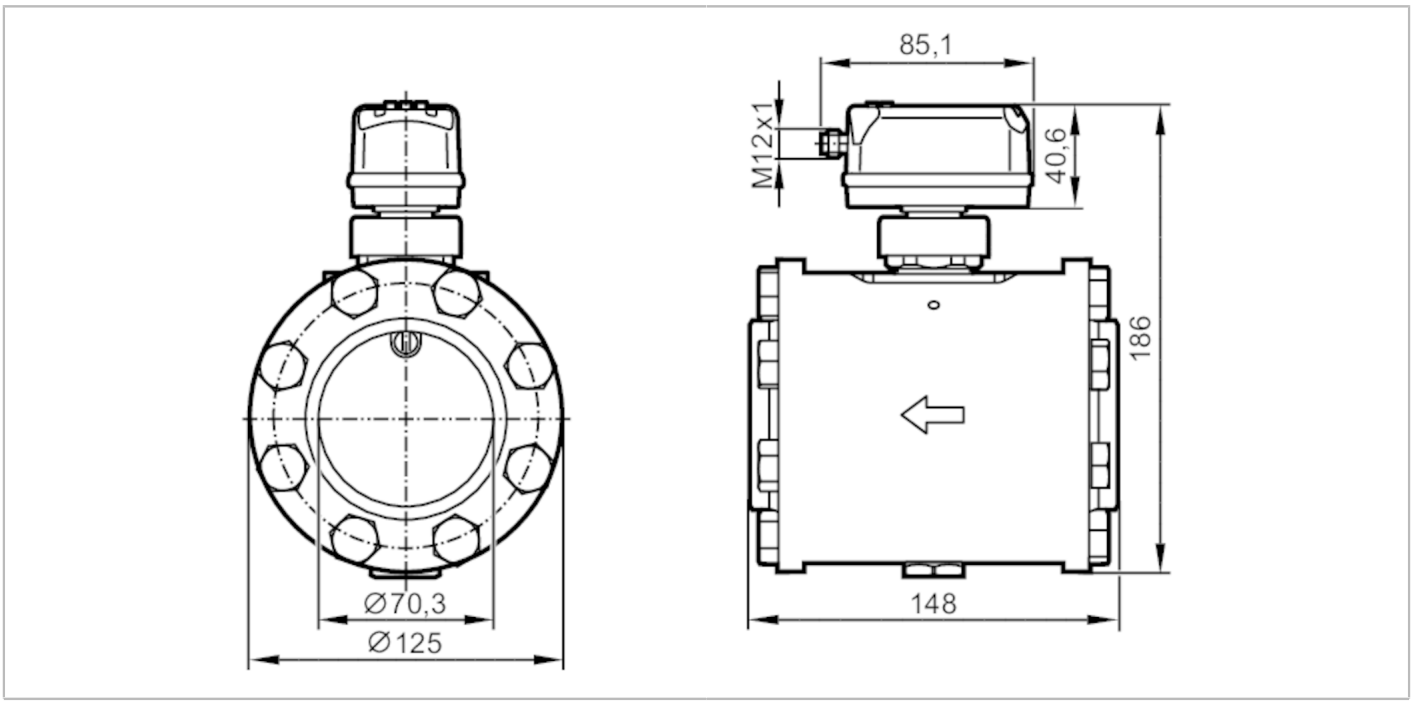
SDG350

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. burst 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 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	

SDG350

Compressed air meter

SDG2 1/2"METRIS PB DN65 SS

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	8...2011 m³/h
Display range		1.2...172.7 m/s	16...2413 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
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: ± (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 m³/h; (standard volume flow DIN_ISO_2533 15 °C , 1013,25 mbar, 0 % r.H.)	

SDG350

Compressed air meter

SDG2 1/2"METRIS PB DN65 SS

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)	
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		Common - I&D	Identification and Diagnosis
		Function	Measurement data, standard resolution
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		**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
Housing		rectangular
Dimensions	[mm]	148 x 125 x 186
Material		housing sensor: PBT+PC-GF30; PPS GF40; electronics fastener: stainless steel (1.4301 / 304); stainless steel (1.4305 / 303); knurled nut: stainless steel (1.4404 / 316L); sealing-Display: FKM
Materials (wetted parts)		sensor feedthrough: stainless steel (1.4301 / 304), stainless steel (1.4404 / 316L); Sealing sensor - Pipe section: FKM; sensor tip: ceramics glass passivated; PPS GF40; Al2O3 (ceramics); acrylate; Pipe section: stainless steel (1.4301 / 304); flange: 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
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

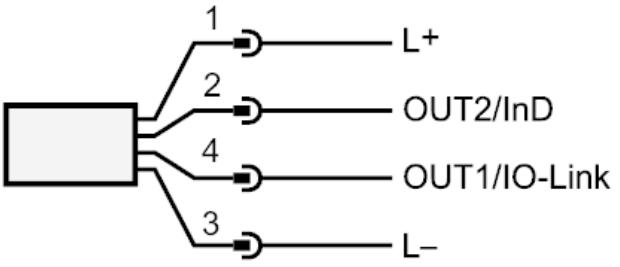
Connector: 1 x M12; coding: A

SDG350

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