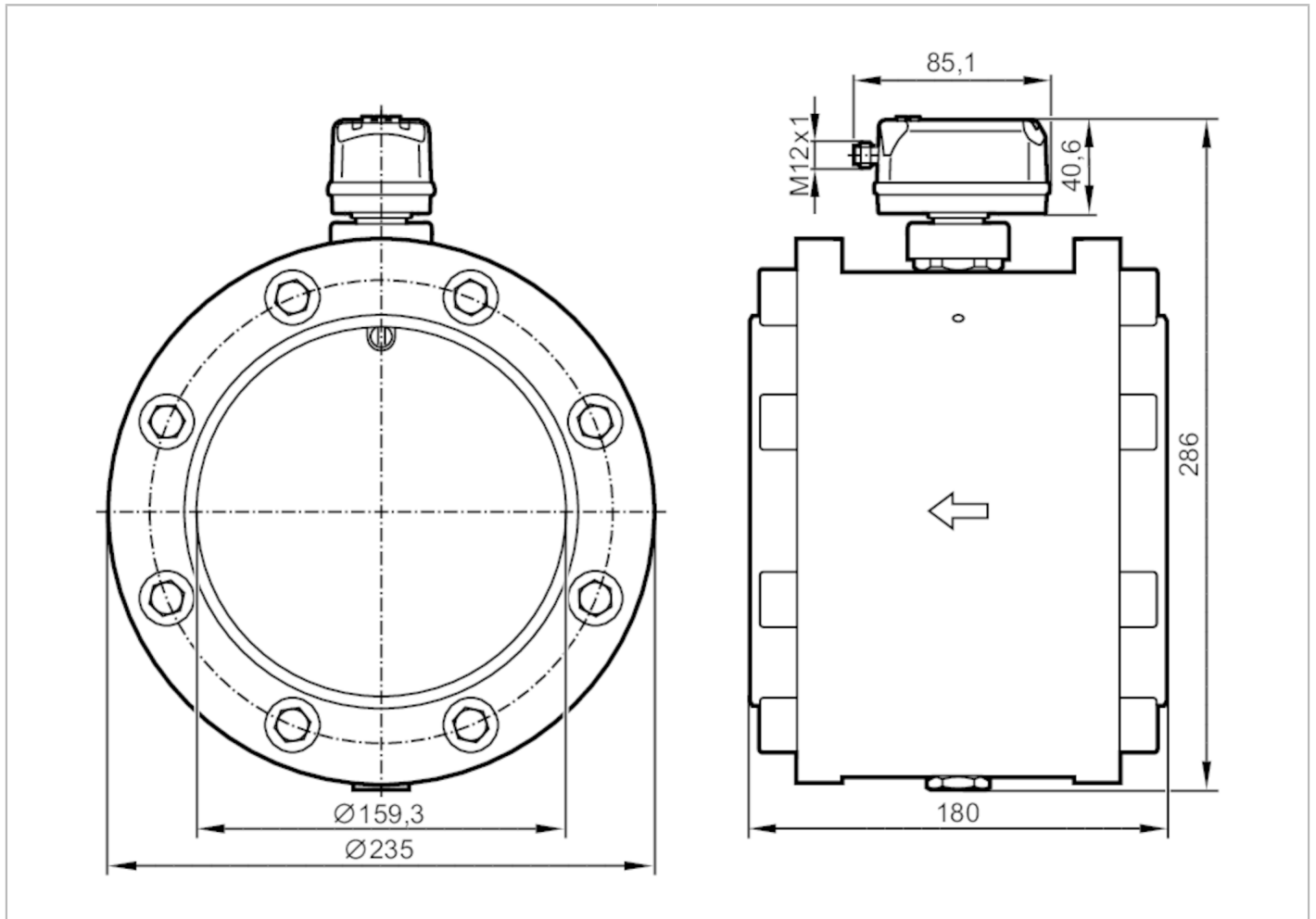


# SDG750



## Compressed air meter

SDG6"/METRIS PB DN150



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1
Process connection	flange DN150 DIN 2448
Pressure monitoring	
Measuring range [bar]	-1...16
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

# SDG750



## Compressed air meter

SDG6"/METRIS PB DN150

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 [ $\Omega$ ]	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	43...10320 m <sup>3</sup> /h
-----------------	-----------------	------------------------------

Display range	1.2...172.7 m/s	86...12384 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
-----------------	-------------	-------------



## Compressed air meter

SDG6"/METRIS PB DN150

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: $\pm (3 \% \text{ MW} + 0,3 \% \text{ MEW})$ ; class 344: $\pm (6 \% \text{ MW} + 0,6 \% \text{ MEW})$ ; air quality to ISO 8573-1:2010; reference conditions: inlet pipe length $\geq 266$ cm outlet pipe length $\geq 42$ cm; reference temperature: 18..26 °C; standard volume flow 43...5877 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)
--------------	---

## 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	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

# SDG750



## Compressed air meter

SDG6"/METRIS PB DN150

Supported DeviceIDs	Type of operation	DeviceID
	Default	1543

### 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]	1384.5
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; pipe section: steel galvanised	
Process connection	flange DN150 DIN 2448	

### 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.	

### Electrical connection

Connector: 1 x M12; coding: A



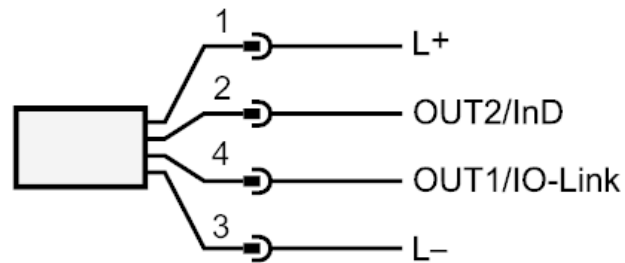
# SDG750



## Compressed air meter

SDG6"/METRIS PB DN150

### 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