

# SD6000

## Compressed air meter

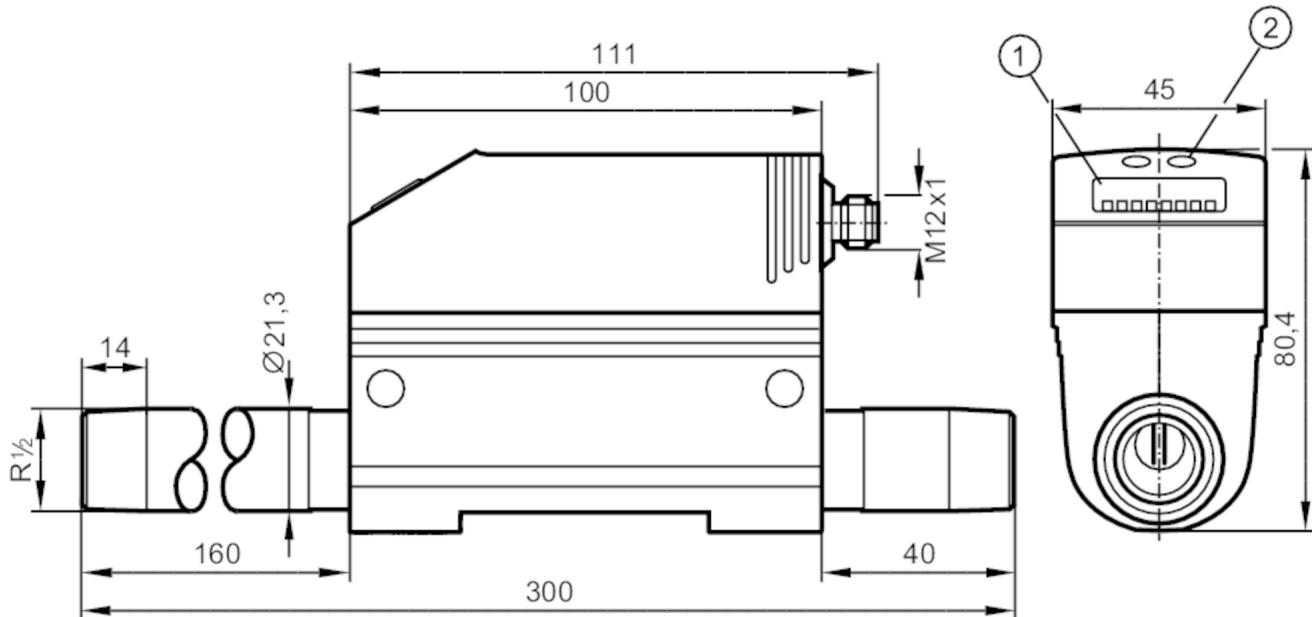
SDR12DGXFPKG/US-100



Article to be discontinued

Alternative articles: SD6500

When selecting an alternative article and accessories please note that technical data may differ!



- 1 alphanumeric display 4-digit  
2 Programming buttons



### Product characteristics

Number of inputs and outputs	Number of digital outputs: 2; Number of analog outputs: 1		
Measuring range	10...1250 l/min	0.3...103.6 m/s	0.2...75 m³/h
Process connection	threaded connection R 1/2 DN15		
<b>Application</b>			
Application	for industrial applications		
Media	compressed air		
Note on media	air quality ISO 8573-1 class 141 class 344		
Medium temperature [°C]	0...60		
Pressure rating [bar]	16		
Pressure rating [Mpa]	1.6		
MAWP (for applications according to CRN) [bar]	16		

# SD6000

## Compressed air meter

SDR12DGXFPKG/US-100



Electrical data			
Operating voltage	[V]	18...30 DC; (to SELV/PELV)	
Current consumption	[mA]	< 110	
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	
Outputs			
Total number of outputs		2	
Output signal		switching signal; analog signal; pulse signal; IO-Link; (configurable)	
Electrical design		PNP	
Number of digital outputs		2	
Output function		normally open / closed; (configurable)	
Max. voltage drop switching output DC	[V]	2	
Permanent current rating of switching output DC	[mA]	250; (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	10...1250 l/min	0.3...103.6 m/s	0.2...75 m³/h
Display range	0...1500 l/min	0...124.3 m/s	0...90 m³/h
Set point SP	10...1250 l/min	0.8...103.6 m/s	0.6...75 m³/h
Reset point rP	4...1244 l/min	0.3...103.1 m/s	0.2...74.6 m³/h
Analog start point ASP	0...938 l/min	0...77.7 m/s	0...56.3 m³/h
Analog end point AEP	312...1250 l/min	25.9...103.6 m/s	18.7...75 m³/h
In steps of	1 l/min	0.1 m/s	0.1 m³/h
Volumetric flow quantity monitoring			
Pulse value		0.001...1000000 m³	
In steps of		0.001 m³	
Pulse length	[s]	0,02...2	
Temperature monitoring			
Measuring range	[°C]	0...60	
Display range	[°C]	-12...72	
Accuracy / deviations			
Flow monitoring		± 1,5	
Repeatability		± 1,5	

# SD6000

## Compressed air meter

SDR12DGXFPKG/US-100



[% of the measured value]		
Accuracy (in the measuring range)	$\pm (3 \% \text{ MW} + 0,3 \% \text{ MEW}) / \pm (6 \% \text{ MW} + 0,6 \% \text{ MEW})$ ; (class 141 /; class 344; conditions: installation to DIN ISO 2533; installation in pipes: DN15)	
Temperature monitoring		
Accuracy	[K]	$\pm 2$ ; (medium flow in the limit area of the flow measurement range)
<b>Reaction times</b>		
Flow monitoring		
Response time [s]	0.1; (dAP = 0)	
Damping process value dAP in steps [s]	0 - 0,2 - 0,4 - 0,6 - 0,8 - 1	
<b>Software / programming</b>		
Parameter setting options	Flow monitoring; quantity meter; Preset counter; Temperature monitoring; hysteresis / window; normally open / closed; current/pulse output; display can be rotated and switched off; Display unit; totalizer	
<b>Interfaces</b>		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9 CDV	
Profiles	no profile	
SIO mode	yes	
Required master port class	A	
Process data analog	3	
Process data binary	2	
Min. process cycle time [ms]	4.1	
Supported DeviceIDs	Type of operation default	DeviceID 262
<b>Operating conditions</b>		
Ambient temperature [°C]	0...60	
Storage temperature [°C]	-20...85	
Max. relative air humidity [%]	90	
Protection	IP 65	
<b>Tests / approvals</b>		
EMC	DIN EN 61000-6-2 DIN EN 61000-6-3 model number accuracy class	002TG -
CPA approval	maximum allowable error Q (min) Q (t) Q (max)	$\pm 4 \% \text{ FS}$ 0,2 m <sup>3</sup> /h - 75 m <sup>3</sup> /h
Vibration resistance	DIN EN 68000-2-6	5 g (55...2000 Hz)
MTTF [years]	227	
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

# SD6000



## Compressed air meter

SDR12DGXFPKG/US-100

Mechanical data				
Weight	[g]	942.5		
Material		PBT-GF20; NBR; PC; stainless steel (1.4301 / 304); PTFE; brass coated; FKM; aluminum powder-coated		
Materials (wetted parts)		stainless steel (1.4301 / 304); FKM; ceramics glass passivated; PEEK GF30; polyester; aluminum		
Tightening torque	[Nm]	50		
Process connection		threaded connection R 1/2 DN15		
Displays / operating elements				
Display	Display unit	5 x LED, green (Nl/min, Nm <sup>3</sup> /h, Nm/s, Nm <sup>3</sup> , °C)		
	Function display	1 x LED, green		
	Switching status	2 x LED, yellow		
	Measured values	alphanumeric display, 4-digit		
	Programming	alphanumeric display, 4-digit		
Remarks				
Remarks	MW = Measured value			
	MEW = Final value of the measuring range			
	Measuring, display and setting ranges refer to standard volume flow according to DIN ISO 2533.			
Pack quantity	For information about installation and operation please see the operating instructions.			
Electrical connection				
Connector: 1 x M12; coding: A				



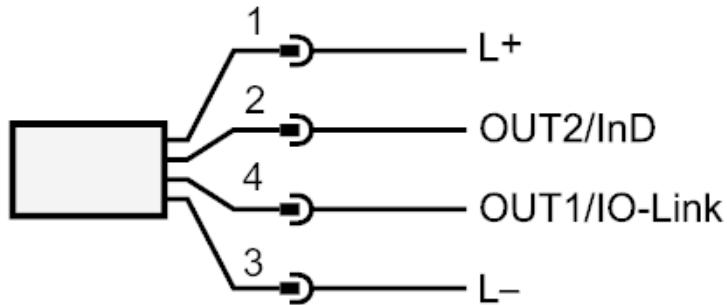
# SD6000



## Compressed air meter

SDR12DGXFPKG/US-100

### Connection



OUT1/IO-Link: Switching output Volumetric flow quantity monitoring

Pulse output quantity meter

signal output Preset counter

OUT2/InD: Switching output Volumetric flow quantity monitoring / Temperature monitoring

analog output Volumetric flow quantity monitoring / Temperature monitoring

Input counter reset