

Flow sensors

**SD6000**

SDR12DGXFPKG/US

Compressed air meter

Plug and socket

Process connection: R $\frac{1}{2}$  (DN15)

Function programmable

2 outputs

OUT1 = flow monitoring (binary), flow rate meter (pulse), preset meter (binary)

OUT2 = flow monitoring (analogue or binary)

Monitoring range

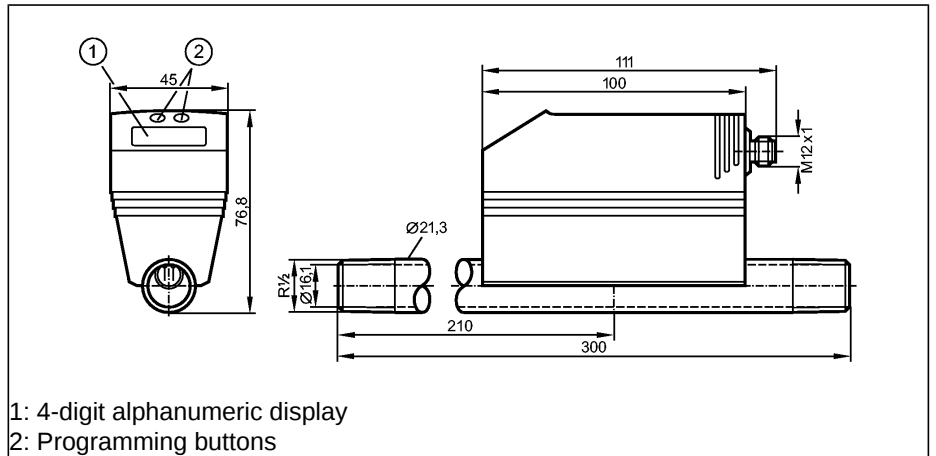
0...90 Nm<sup>3</sup>/h

Measuring range

0.25 (0.3)...75 Nm<sup>3</sup>/h \*)

Temperature indication

0...60 °C



1: 4-digit alphanumeric display  
2: Programming buttons



**Application**

**Electrical design**

**Output**

**Compressed air**  
**Air quality(DIN 8573-1):**  
**Class 141 (measuring error: see below, value A)**  
**Class 344 (measuring error: see below, value B)**  
**DC PNP**  
**OUT1: normally open / closed programmable or pulse**  
**OUT2: normally open / closed programmable or analogue (4...20 mA scaleable)**

Operating voltage	[V]
Current rating	[mA]
Short-circuit protection	
Reverse polarity protection	
Overload protection	
Voltage drop	[V]
Current consumption	[mA]
Power-on delay time	[s]
Analogue output	
Pulse output	
Pulse value / setting in steps of [m <sup>3</sup> ]	
Pulse length [s]	
Programming options	

19...30 DC <sup>1)</sup>
2 x 250
pulsed
yes
yes
< 2
< 100
0.5
4...20 mA (< 500 Ω)
consumed quantity meter
0.001...1 000 000 / 0.001...1000
min. 0.04 / max. 2
hysteresis / window function; NO / NC; current / pulse output; display can be rotated / deactivated; display unit

<b>Flow monitoring</b>	
Display range	
Measuring range	
<b>Setting range</b>	
Set point, SP	
Reset point, rP	
Analogue start point, ASP	
Analogue end point, AEP	
in steps of	
Damping, dAP	[s]
Response time	[s]
Accuracy (within measuring range)	
Measuring dynamics	
<b>Temperature monitoring</b>	
Display range	
Measuring range	[°C]
Accuracy	[°C]

0.0...90.0 Nm <sup>3</sup> /h	0...1500 NI/min
0.25 (0.3)...75.0 *) Nm <sup>3</sup> /h	4...1250 NI/min
0.7...75.0 Nm <sup>3</sup> /h	11...1250 NI/min
0.3...74.6 Nm <sup>3</sup> /h	5...1244 NI/min
0.0...56.3 Nm <sup>3</sup> /h	0...938 NI/min
18.8...75.0 Nm <sup>3</sup> /h	313...1250 NI/min
0.1 Nm <sup>3</sup> /h	1 NI/min
0 - 0.2 - 0.4 - 0.6 - 0.8 - 1	
< 0.1 (dAP = 0)	
A): ± (3% MW + 0.3% MEW) / B): ± (6% MW + 0.6% MEW)	
1:300	
0.0...60.0	
0.0...60.0	
± 2 **)	

**SD6000**

Max. relative air humidity [%]	90
Ambient temperature [°C]	0...60
Medium temperature [°C]	0...60
Storage temperature [°C]	-20...85
Protection	IP 65, III
Pressure rating [bar]	16
Vibration resistance	DIN IEC 68-2-6:5 g (55...2000 Hz)
EMC	EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-6 HF conducted: 10 V
Housing materials	PBT-GF 20; PC (APEC); Makrolon; stainless steel (304S15); Viton
Materials (wetted parts)	stainless steel (304S15); ceramics; glass passivated; PEEK (polyether ether ketone); polyester; Viton; aluminium; anodised
Display	Display unit 4 LED green (NI/min, Nm <sup>3</sup> /h, Nm <sup>3</sup> , °C) Function display 1 LED yellow Switching status 2 LED yellow Measured values 4-digit alphanumeric display Programming 4-digit alphanumeric display
Connection	M12 connector
Remarks	1) to EN50178, SELV, PELV; referring to UL: "limited voltage" with overcurrent protection in accordance with UL508 *) in brackets: displayed value **) medium flow in the limit area of the flow measurement range 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. For information about installation and operation please see the operating instructions.

**Wiring**

Programming of the output function

-----OUT1-----

- Switching output

Hno = hysteresis / normally open

Hnc = hysteresis / normally closed

Fno = window function / normally open

Fnc = window function / normally closed

- ImP = pulse output for flow rate meter / signal output for preset meter

-----OUT2-----

- Switching output

Hno = hysteresis / normally open

Hnc = hysteresis / normally closed

Fno = window function / normally open

Fnc = window function / normally closed

- Analogue output

I = current output (4...20 mA)

