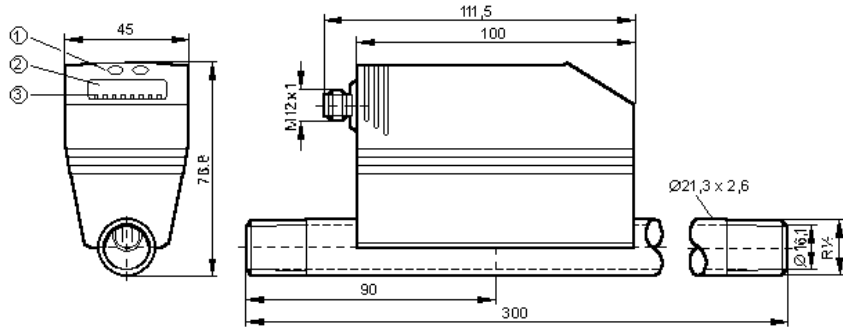


SD6000

SDR12DXAFPKG/US
Process connection R $\frac{1}{2}$ (DN15)
Plug and socket

Function programmable
2 outputs
OUT1 = switching output
OUT2 = switching output, pulse
output or analogue output
Totalizer function
Monitoring range
0...90 Nm³/h
Measuring range
0.25 (0.3)...75 Nm³/h *



1: Programming buttons, 2: 4-digit alphanumeric display, 3: LEDs (display unit / switching status)

Application

Compressed air
Air quality(DIN 8573-1):

Class 141 (measuring error: see below, value 1)
Class 344 (measuring error: see below, value 2)

Electrical design

DC PNP

Output

2 x normally open / closed programmable or 1 x normally open / closed
programmable + 1 x analogue (4...20 mA scalable) or 1 x normally open /
closed programmable + 1 x pulse output (programmable)

Operating voltage [V]	19...30 DC ¹⁾
Current rating [mA]	2 x 250
Short-circuit protection	pulsed
Reverse polarity protection	yes
Overload protection	yes
Voltage drop [V]	< 2
Current consumption [mA]	< 100
Power-on delay time [s]	0.5
Analogue output	4...20 mA
Load for analogue output [ohms]	< 500
Pulse output	consumed quantity meter
Pulse value	1 standard litre / 1 standard cubic metre
Pulse length [ms]	2 / 100
Programming options	hysteresis / window function; NO / NC; current / pulse output; display can be rotated / deactivated; display unit, totalizer

ifm electronic gmbh · Teichstraße 4 · D-45127
Essen

We reserve the right to make technical alterations without prior notice. — GB - SD6000 - 1/2 — 04.03.2005

SD6000

Flow monitoring

Display range [Nm ³ /h]	0.0...90.0 0...1500 NI/min
Measuring range [Nm ³ /h]	0.25 (0.3)...75.0 4...1250 NI/min *)

Setting range

Switch-on point, SP [Nm ³ /h]	0.4...75.0 6...1250 NI/min
Switch-off point, rP [Nm ³ /h]	0.0...74.6 0...1244 NI/min
Analogue output/lower end, ASP [Nm ³ /h]	0.0...56.3 0...938 NI/min
Analogue output/upper end, AEP [Nm ³ /h]	18.8...75.0 313...1250 NI/min
in steps of [Nm ³ /h]	0.1 1 NI/min
Response time [s]	< 0.1
Measuring error [% of the final value]	(1) ± (3% MW + 0.3% MEW) / (2) ± (6% MW + 0.6% MEW)
Measuring dynamics	1:300

Pressure rating [bar]	16
Max. relative air humidity [%]	90
Operating temperature [°C]	0...60
Medium temperature [°C]	0...60
Storage temperature [°C]	-20...85
Protection	IP 65, III
Vibration resistance [g]	5 (DIN / IEC 68-2-6, 55-2000 Hz)

EMC	IEC 1000/4/2 ESD: 4 kV CD / 8 kV AD IEC 1000/4/3 HF radiated: 10 V/m IEC 1000/4/4 Burst: 2 KV IEC 1000/4/6 HF conducted: 10 V
-----	--

Housing material	PBT-GF 20 PC (APEC) Makrolon stainless steel (304S15) Viton
------------------	---

Sensor material	stainless steel (304S15); ceramics; glass passivated; PEEK (polyether-etherketone); polyester; Viton; aluminium; anodised
-----------------	---

Display	Display unit 3 LED green (NI/min, Nm ³ /h, Nm ³) Function display 1 LED yellow Switching status 2 LED yellow Measured values 4-digit alphanumeric display Programming 4-digit alphanumeric display
---------	---

Connection	M12 connector
------------	---------------

Wiring

Programming of the output function

(OUT1 / OUT2):

Hno = hysteresis / normally open

Hnc = hysteresis / normally closed

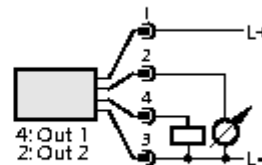
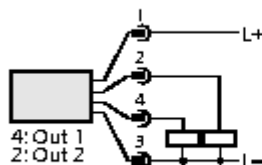
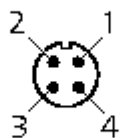
Fno = window function / normally open

Fnc = window function / normally closed

Programming of the output function (OUT2):

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

ImP = pulse output



Remarks

1) to EN50178, SELV, PELV;
referring to UL: "limited voltage" with overcurrent protection in accordance with UL508

*) in brackets: displayed value

MW = measured value

MEW = final value of the measuring range

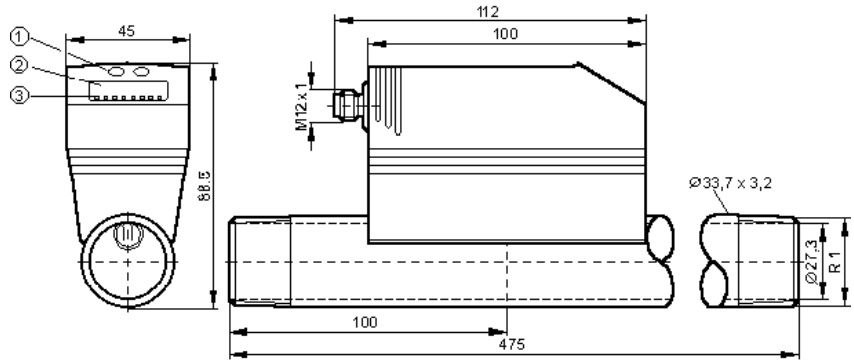
Measuring, display and setting ranges refer to standard volume flow according to DIN ISO 2533.

For information about installation and operation please see the operating instructions.

SD8000

SDR11DXAFPKG/US
Process connection R1 (DN25)
Plug and socket

Function programmable
2 outputs
OUT1 = switching output
OUT2 = switching output, pulse
output or analogue output
Totalizer function
Monitoring range
0...270 Nm³/h
Measuring range
0.75 (0.8)...225 Nm³/h *



1: Programming buttons, 2: 4-digit alphanumeric display, 3: LEDs (display unit / switching status)

Application

Compressed air
Air quality(DIN 8573-1):
Class 141 (measuring error: see below, value 1)
Class 344 (measuring error: see below, value 2)

Electrical design

DC PNP

Output

2 x normally open / closed programmable or 1 x normally open / closed programmable + 1 x analogue (4...20 mA scaleable) or 1 x normally open / closed programmable + 1 x pulse output (programmable)

Operating voltage [V]	19...30 DC 1)
Current rating [mA]	2 x 250
Short-circuit protection	pulsed
Reverse polarity protection	yes
Overload protection	yes
Voltage drop [V]	< 2
Current consumption [mA]	< 100
Power-on delay time [s]	0.5
Analogue output	4...20 mA
Load for analogue output [ohms]	< 500
Pulse output	consumed quantity meter
Pulse value	1 standard litre / 1 standard cubic metre
Pulse length [ms]	2 / 100
Programming options	hysteresis / window function; NO / NC; current / pulse output; display can be rotated / deactivated; display unit, totalizer

SD8000

Flow monitoring

Display range [Nm ³ /h]	0.0...270.0 0...4500 NI/min
Measuring range [Nm ³ /h]	0.75 (0.8)...225.0 12.5 (13)...3750 NI/min *)
Setting range	
Switch-on point, SP [Nm ³ /h]	1.1...225.0 19...3750 NI/min
Switch-off point, rP [Nm ³ /h]	0.0...223.9 0...3731 NI/min
Analogue output/lower end, ASP [Nm ³ /h]	0.0...169.0 0...2812 NI/min
Analogue output/upper end, AEP [Nm ³ /h]	56.0...225.0 937...3750 NI/min
in steps of [Nm ³ /h]	0.1 1 NI/min
Response time [s]	< 0.1
Measuring error (within measuring range)	(1) ± (3% MW + 0.3% MEW) / (2) ± (6% MW + 0.6% MEW)
Measuring dynamics	1:300
Pressure rating [bar]	
Pressure rating [bar]	16
Max. relative air humidity [%]	
Max. relative air humidity [%]	90
Operating temperature [°C]	
Operating temperature [°C]	0...60
Medium temperature [°C]	
Medium temperature [°C]	0...60
Storage temperature [°C]	
Storage temperature [°C]	-20...85
Protection	
Protection	IP 65, III
Vibration resistance [g]	
Vibration resistance [g]	5 (DIN / IEC 68-2-6, 55-2000 Hz)
EMC	
EMC	IEC 1000/4/2 ESD: 4 kV CD / 8 kV AD
	IEC 1000/4/3 HF radiated: 10 V/m
	IEC 1000/4/4 Burst: 2 kV
	IEC 1000/4/6 HF conducted: 10 V
Housing material	
Housing material	PBT-GF 20 PC (APEC) Makrolon stainless steel (304S15) Viton
Sensor material	
Sensor material	stainless steel (304S15); ceramics; glass passivated; PEEK (polyether-etherketone); polyester; Viton; aluminium; anodised
Display	
Display	Display unit 3 LED green (NI/min, Nm ³ /h, Nm ³) Function display 1 LED yellow Switching status 2 LED yellow Measured values 4-digit alphanumeric display Programming 4-digit alphanumeric display
Connection	
Connection	M12 connector
Wiring	

Programming of the output function

(OUT1 / OUT2):

Hno = hysteresis / normally open

Hnc = hysteresis / normally closed

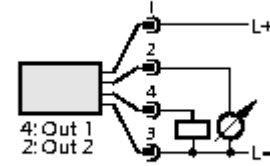
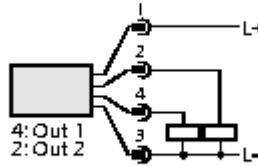
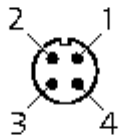
Fno = window function / normally open

Fnc = window function / normally closed

Programming of the output function (OUT2):

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

ImP = pulse output



Remarks

1) to EN50178, SELV, PELV;
referring to UL: "limited voltage" with overcurrent protection in accordance with UL508
*) in brackets: displayed value
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.