

SD8001



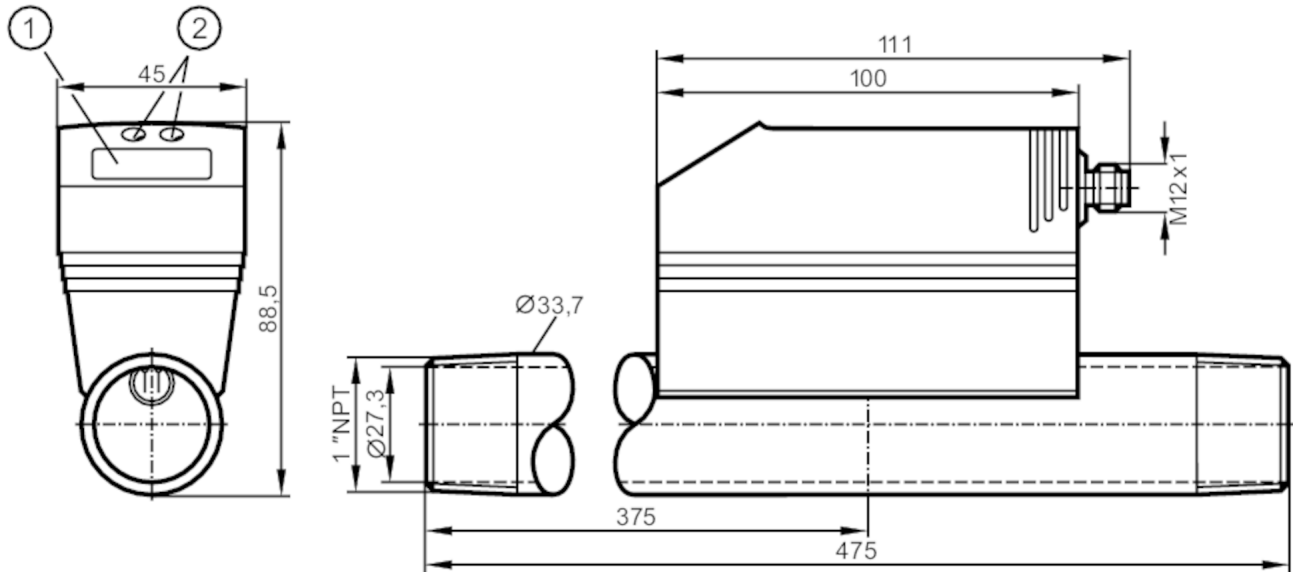
Compressed air meter

SDN11DGXFPKG/US-100

discontinued article

Alternative articles: SD8501

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 analogue outputs: 1	
Measuring range	30...7946 scfh	1...132.4 scfm
Process connection	threaded connection 1" NPT DN25	

Application

Application	for industrial applications	
Media	compressed air	
	air quality ISO 8573-1	
Note on media	class 141	
	class 344	
Medium temperature	[°F]	32...140
Pressure rating	[bar]	16
Pressure rating	[psi]	232
MAWP (for applications according to CRN)	[bar]	16

Electrical data

Operating voltage	[V]	19...30 DC; (according to EN 50178 SELV/PELV)
Current consumption	[mA]	< 100
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.5



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Inputs / outputs	
Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1
Outputs	
Total number of outputs	2
Output signal	switching signal; analogue signal; pulse signal; (configurable)
Electrical design	PNP
Number of digital outputs	2
Output function	normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC [V]	2
Permanent current rating of switching output DC [mA]	250; (per output)
Number of analogue outputs	1
Analogue current output [mA]	4...20; (scalable)
Max. load [Ω]	500
Pulse output	consumed quantity meter
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes
Measuring/setting range	
Measuring range	30...7946 scfh
Display range	0...9535 scfh
Set point SP	70...7945 scfh
Reset point rP	30...7905 scfh
Analogue start point ASP	0...5960 scfh
Analogue end point AEP	1985...7945 scfh
In steps of	5 scfh
Volumetric flow quantity monitoring	
Pulse value	0.120...4 000 000 scf
In steps of	0.020...1000 scf
Pulse length [s]	0,045...2
Temperature monitoring	
Measuring range [$^{\circ}$ F]	32...140
Display range [$^{\circ}$ F]	32...140
Accuracy / deviations	
Flow monitoring	
Repeatability [% of the measured value]	$\pm 1,5$
Accuracy (in the measuring range)	$\pm (3 \% MW + 0,3 \% MEW) / \pm (6 \% MW + 0,6 \% MEW)$; (class 141 /; class 344; conditions: installation to DIN ISO 2533; installation in pipes: DN25)
Temperature monitoring	
Accuracy [K]	± 2 ; (medium flow in the limit area of the flow measurement range)

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Response times		
Flow monitoring		
Response time [s]	0.1; (dAP = 0)	
Damping for the switching output dAP in steps [s]	0 - 0,2 - 0,4 - 0,6 - 0,8 - 1	
Software / programming		
Parameter setting options	Flow monitoring; quantity meter; Preset counter; hysteresis / window; normally open / normally closed; current/pulse output; display can be rotated and switched off; Display unit	
Operating conditions		
Ambient temperature [°F]	32...140	
Storage temperature [°F]	-4...185	
Max. relative air humidity [%]	90	
Protection	IP 65	
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
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	
Mechanical data		
Weight [g]	1979.5	
Materials	PBT-GF20; NBR; PC; stainless steel (1.4306 / 304L); PTFE; brass coated; aluminium powder-coated	
Materials (wetted parts)	stainless steel (1.4306 / 304L); FKM; ceramics glass passivated; PEEK GF30; polyester; aluminium	
Process connection	threaded connection 1" NPT DN25	
Displays / operating elements		
Display	Display unit	4 x LED, green (scfm, scfh, scf, °F)
	function display	1 x LED, yellow
	switching status	2 x LED, yellow
	measured values	alphanumeric display, 4-digit
	programming	alphanumeric display, 4-digit
Remarks		
Remarks	scf = standard cubic feet	
	scfh = standard cubic feet per hour	
	scfm = standard cubic feet per minute	
	MW = measured value	
	MEW = Final value of the measuring range	
	Measuring, display and setting ranges refer to the standard volume flow according to DIN ISO 2533.	
Pack quantity	For information about installation and operation please see the operating instructions. 1 pcs.	
Electrical connection		
Connector: 1 x M12		

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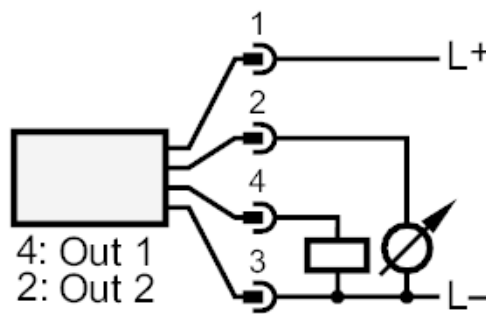
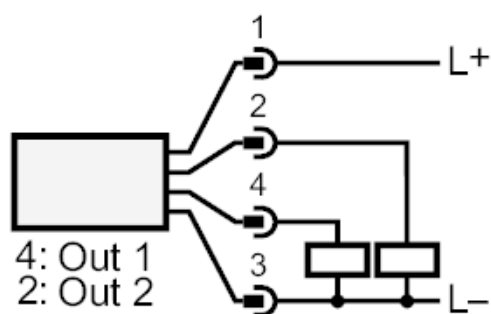


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Connection



- OUT1: switching output
 Pulse output quantity meter
 signal output Preset counter
- OUT2: switching output
 analogue output