

SD9000



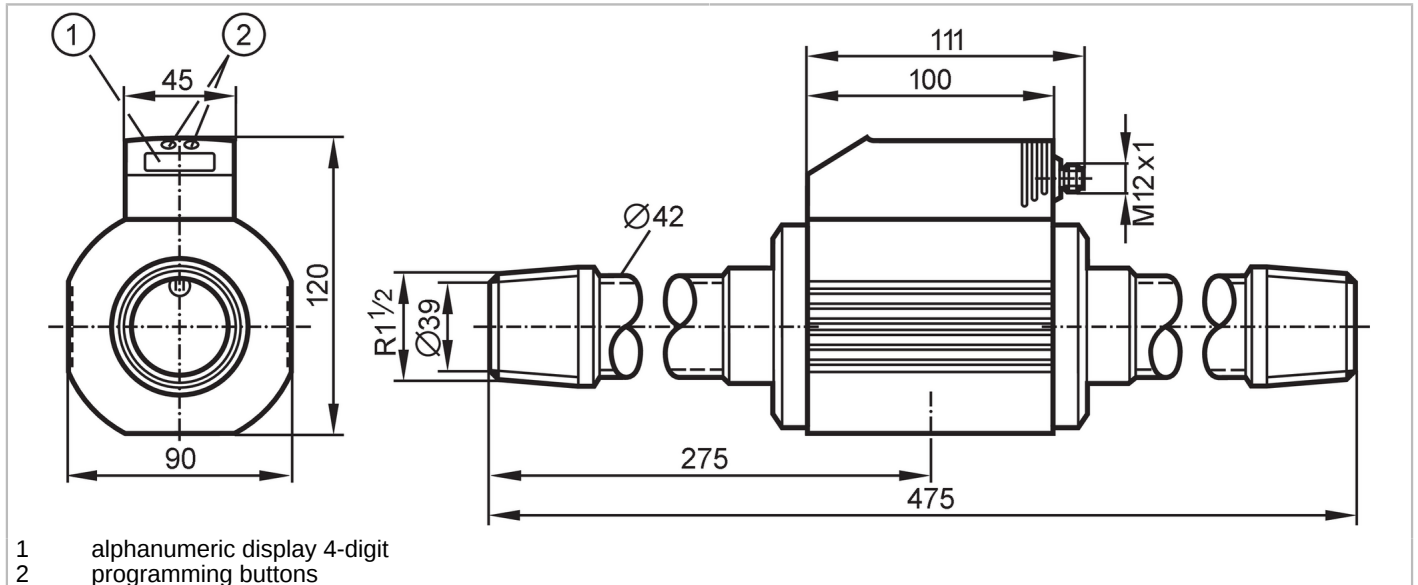
Compressed air meter

SDR32DGXFPKG/US-100

phase-out article

Alternative articles: SD9500

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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		
Measuring range	20...6835 l/min	0.3...95.3 m/s	1.5...410 m³/h
Process connection	threaded connection R 1 1/2 external thread DN40		

Application

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	16 bar	1.6 MPa	

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 analogue outputs: 1		
------------------------------	---	--	--

Outputs

Total number of outputs	2		
Output signal	switching signal; analogue signal; pulse signal; IO-Link; (configurable)		



Compressed air meter

SDR32DGXFPKG/US-100

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	20...6835 l/min	0.3...95.3 m/s	1.5...410 m ³ /h
Display range	0...8200 l/min	0...114.4 m/s	0...492 m ³ /h
Set point SP	55...6835 l/min	0.8...95.3 m/s	3.5...410 m ³ /h
Reset point rP	20...6800 l/min	0.3...94.8 m/s	1.5...408 m ³ /h
Analogue start point ASP	0...5125 l/min	0...71.5 m/s	0...307.5 m ³ /h
Analogue end point AEP	1710...6835 l/min	23.8...95.3 m/s	102.5...410 m ³ /h
In steps of	5 l/min	0.1 m/s	0.5 m ³ /h

Volumetric flow quantity monitoring

Pulse value	0.005...4 000 000 m ³
In steps of	0.001 m ³
Pulse length [s]	0,018...2

Temperature monitoring

Measuring range [°C]	0...60
Display range [°C]	-12...72

Accuracy / deviations

Flow monitoring	
Repeatability [% of the measured value]	± 1,5
Accuracy (in the measuring range)	± (3 % MW + 0,3 % MEW) / ± (6 % MW + 0,6 % MEW); (class 141 l; class 344; conditions: installation to DIN ISO 2533; installation in pipes: DN40)
Temperature monitoring	
Accuracy [K]	± 2; (medium flow in the limit area of the flow measurement range)

Response times

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



Compressed air meter

SDR32DGXFPKG/US-100

Software / programming													
Parameter setting options	Flow monitoring; quantity meter; Preset counter; Temperature monitoring; 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												
SIO mode	yes												
Required master port type	A												
Process data analogue	3												
Process data binary	2												
Min. process cycle time [ms]	4.1												
Supported DeviceIDs	<table border="1"> <thead> <tr> <th>Type of operation</th> <th>DeviceID</th> </tr> </thead> <tbody> <tr> <td>default</td> <td>269</td> </tr> </tbody> </table>	Type of operation	DeviceID	default	269								
Type of operation	DeviceID												
default	269												
Operating conditions													
Ambient temperature [°C]	0...60												
Storage temperature [°C]	-20...85												
Max. relative air humidity [%]	90												
Protection	IP 65												
Tests / approvals													
EMC	DIN EN 61000-6-2 DIN EN 61000-6-3												
CPA approval	<table border="1"> <tbody> <tr> <td>model number</td> <td>002TG</td> </tr> <tr> <td>accuracy class</td> <td>-</td> </tr> <tr> <td>maximum allowable error</td> <td>± 4 % FS</td> </tr> <tr> <td>Q (min)</td> <td>1,4 m³/h</td> </tr> <tr> <td>Q (t)</td> <td>-</td> </tr> <tr> <td>Q (max)</td> <td>410 m³/h</td> </tr> </tbody> </table>	model number	002TG	accuracy class	-	maximum allowable error	± 4 % FS	Q (min)	1,4 m³/h	Q (t)	-	Q (max)	410 m³/h
model number	002TG												
accuracy class	-												
maximum allowable error	± 4 % FS												
Q (min)	1,4 m³/h												
Q (t)	-												
Q (max)	410 m³/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												
Mechanical data													
Weight [g]	4004												
Housing	rectangular												
Dimensions [mm]	475 x 90 x 120												
Materials	PBT-GF20; NBR; PC; stainless steel (304/1.4301); PTFE; brass coated; aluminium powder-coated												
Materials (wetted parts)	stainless steel (304/1.4301); FKM; ceramics glass passivated; PEEK GF30; polyester; aluminium												
Process connection	threaded connection R 1 1/2 external thread DN40												

SD9000



Compressed air meter

SDR32DGXFPKG/US-100

Displays / operating elements

Display	Display unit	5 x LED, green (NI/min, Nm ³ /h, Nm/s, Nm ³ , °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

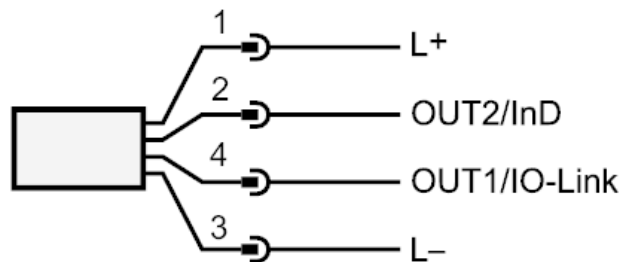
Remarks	MW = measured value
	MEW = Final value of the measuring range
	Measuring, display and setting ranges refer to the standard volume flow according to DIN ISO 2533.
	For information about installation and operation please see the operating instructions.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



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
analogue output volumetric flow quantity monitoring / Temperature monitoring
input counter reset