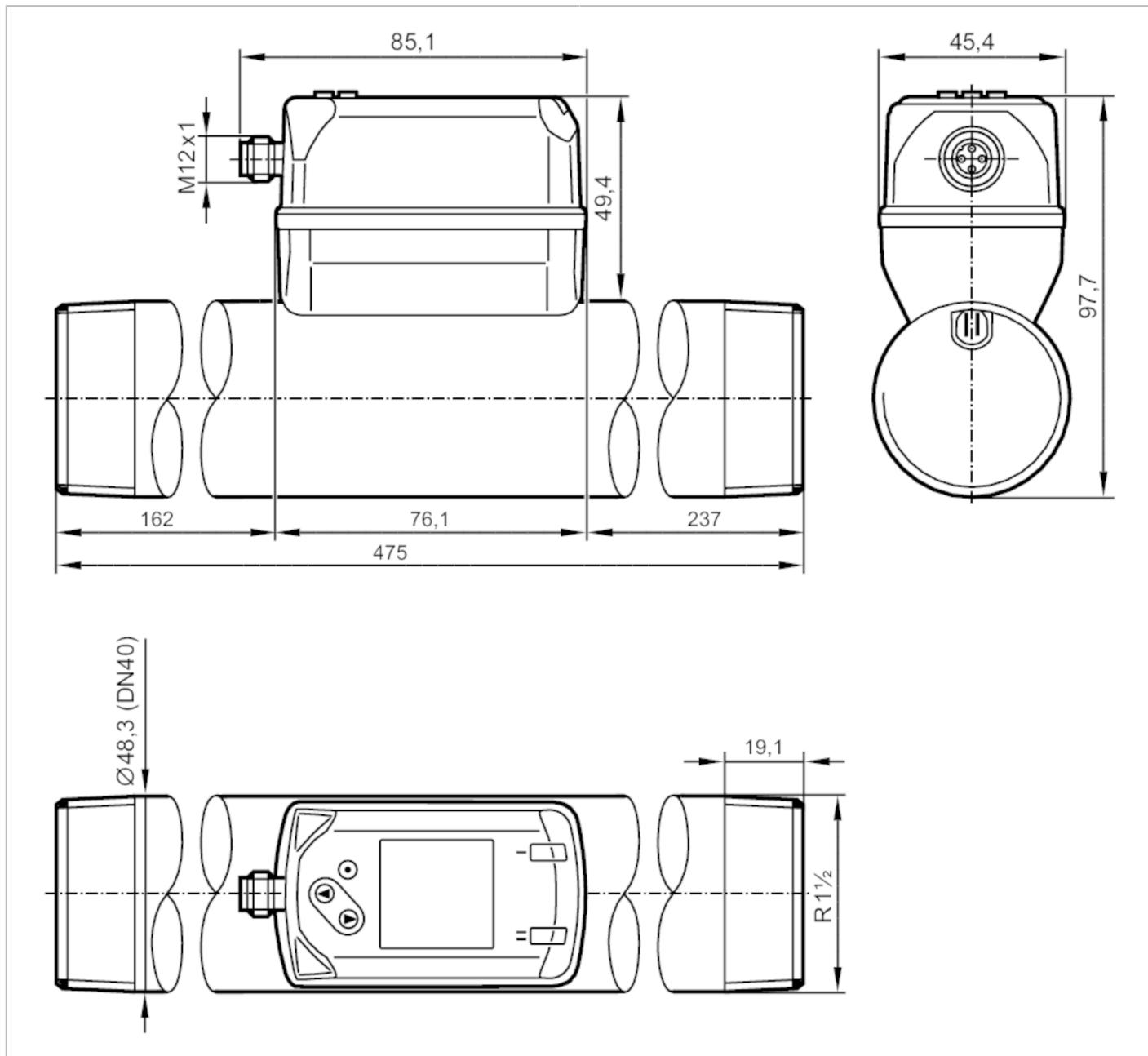


# SD9500



## Compressed air meter

SDR32DGXFRKG/US-100



### Product characteristics

Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		
Measuring range	20...6830 l/min	0.3...81 m/s	1.4...410 m³/h
Process connection	threaded connection R 1 1/2 DN40		

### Application

Application	for industrial applications
Media	compressed air
Medium temperature [°C]	-10...60
Min. bursting pressure [bar]	64
Min. bursting pressure [MPa]	6.4

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Pressure rating	[bar]	16
Pressure rating	[MPa]	1.6
MAWP (for applications according to CRN)	[bar]	8.9
<b>Electrical data</b>		
Operating voltage	[V]	18...30 DC; (to SELV/PELV)
Current consumption	[mA]	< 80
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	1
<b>Inputs / outputs</b>		
Number of inputs and outputs		Number of digital outputs: 2; Number of analogue outputs: 1
<b>Inputs</b>		
Inputs		counter reset
<b>Outputs</b>		
Output signal		switching signal; analogue signal; pulse signal; IO-Link; (configurable)
Electrical design		PNP/NPN
Number of digital outputs		2
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	150; (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
<b>Measuring/setting range</b>		
Measuring range		20...6830 l/min
Display range		0...8200 l/min
Resolution		10 l/min
Set point SP		60...6830 l/min
Reset point rP		30...6800 l/min
Analogue start point ASP		0...5460 l/min
Analogue end point AEP		1370...6830 l/min
Low flow cut-off LFC		10...70 l/min
In steps of		1 l/min
Pressure monitoring		0.3...81 m/s
Measuring range	[bar]	-1...16
Display range	[bar]	-1...20
Resolution	[bar]	0.05
Set point SP	[bar]	-0.92...16

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Reset point rP	[bar]	-1...15.92
Analogue start point	[bar]	-1...12.8
Analogue end point	[bar]	2.2...16
In steps of	[bar]	0.01
<b>Volumetric flow quantity monitoring</b>		
Measuring range	0...100000000 m <sup>3</sup>	0...353146667.2 scf
Display range	0...100000000 m <sup>3</sup>	0...353146667.2 scf
Set point SP	0.001...10000000 m <sup>3</sup>	0.05...353146667.2 scf
Pulse value	0.001...10000000 m <sup>3</sup>	0.05...353146667.2 scf
In steps of	0.0001 m <sup>3</sup>	0.005 scf
Pulse length	[s]	0.004...2
<b>Temperature monitoring</b>		
Measuring range	-10...60 °C	14...140 °F
Display range	-24...74 °C	-11.2...165.2 °F
Resolution	0.2 °C	0.5 °F
Set point SP	-9.7...60 °C	14.6...140 °F
Reset point rP	-10...59.7 °C	14...139.4 °F
Analogue start point	-10...46 °C	14...114.8 °F
Analogue end point	4...60 °C	39.2...140 °F
In steps of	0.1 °C	0.1 °F
<b>Accuracy / deviations</b>		
Temperature coefficient	[1/K]	± 0,07 % MW
Accuracy (in the measuring range)		class 141: ± (2 % MW + 0,5 % MEW); class 344: ± (6 % MW + 0,6 % MEW) ; air quality to ISO 8573-1:2010; at medium temperature 23 °C
Repeatability		± (0,4 % MW + 0,1 % MEW)
<b>Pressure monitoring</b>		
Repeatability	[% of the final value]	± 0,2
Characteristics deviation	[% of the final value]	< ± 0,5; (BFSL = Best Fit Straight Line)
Greatest TEMPCO of the span	[% MEW / 10 K]	± 0,3
Greatest TEMPCO of the zero point	[% MEW / 10 K]	± 0,1
<b>Temperature monitoring</b>		
Accuracy	[K]	± 0,5; (medium flow in the limit area of the flow measurement range)
<b>Response times</b>		
Response time	[s]	0.1; (dAP = 0)
Damping process value dAP	[s]	0...5
<b>Pressure monitoring</b>		
Response time	[s]	0.05
<b>Temperature monitoring</b>		
Dynamic response T05 / T09	[s]	T09 = 0,5

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Software / programming		
Parameter setting options		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
Profiles		Digital Measuring Sensor (0x800A), Identification and Diagnosis (0x4000)
SIO mode		yes
Required master port type		A
Process data analogue		8
Process data binary		2
Min. process cycle time [ms]		7.2
Supported DeviceIDs	Type of operation	DeviceID
	default	869
Operating conditions		
Ambient temperature [°C]		0..60
Storage temperature [°C]		-20...85
Max. relative air humidity [%]		90
Protection		IP 65; IP 67
Tests / approvals		
EMC		DIN EN 60947-5-9
CPA approval	model number	001TG
	accuracy class	-
	maximum allowable error	± 2,5 % FS
	Q (min)	0,05 m³/h
	Q (t)	-
	Q (max)	410 m³/h
Vibration resistance		DIN EN 68000-2-6
MTTF [years]		183
UL approval	UL Approval no.	I012
	File number UL	E174189
Pressure Equipment Directive	Sound engineering practice; can be used for stable gases fluid group 2	
Mechanical data		
Weight [g]		2262
Materials	PBT+PC-GF30; PPS GF40; stainless steel (304/1.4301); stainless steel (303/1.4305); steel (1.5523) galvanised; 2.0401 (brass / CW614N); FKM	
Materials (wetted parts)	stainless steel (304/1.4301); stainless steel (303/1.4305); FKM; ceramics glass passivated; PPS GF40; Al2O3 (ceramics); acrylate	
Process connection	threaded connection R 1 1/2 DN40	
Displays / operating elements		
Display	colour display 1,44", 128 x 128 pixels 2 x LED, yellow	

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### 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

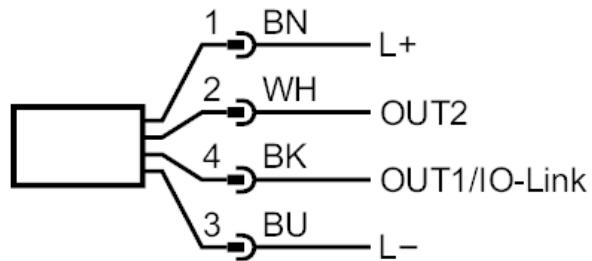
1 pcs.

### Electrical connection

Connector: 1 x M12; coding: A



### Connection



- OUT1/IO-Link:  
switching output flow  
switching output temperature  
switching output pressure  
Pulse output quantity meter  
signal output Preset counter
- OUT2/InD:  
switching output flow  
switching output temperature  
switching output pressure  
analogue output flow  
analogue output temperature  
analogue output pressure  
signal output Preset counter  
Pulse output quantity meter  
input counter reset