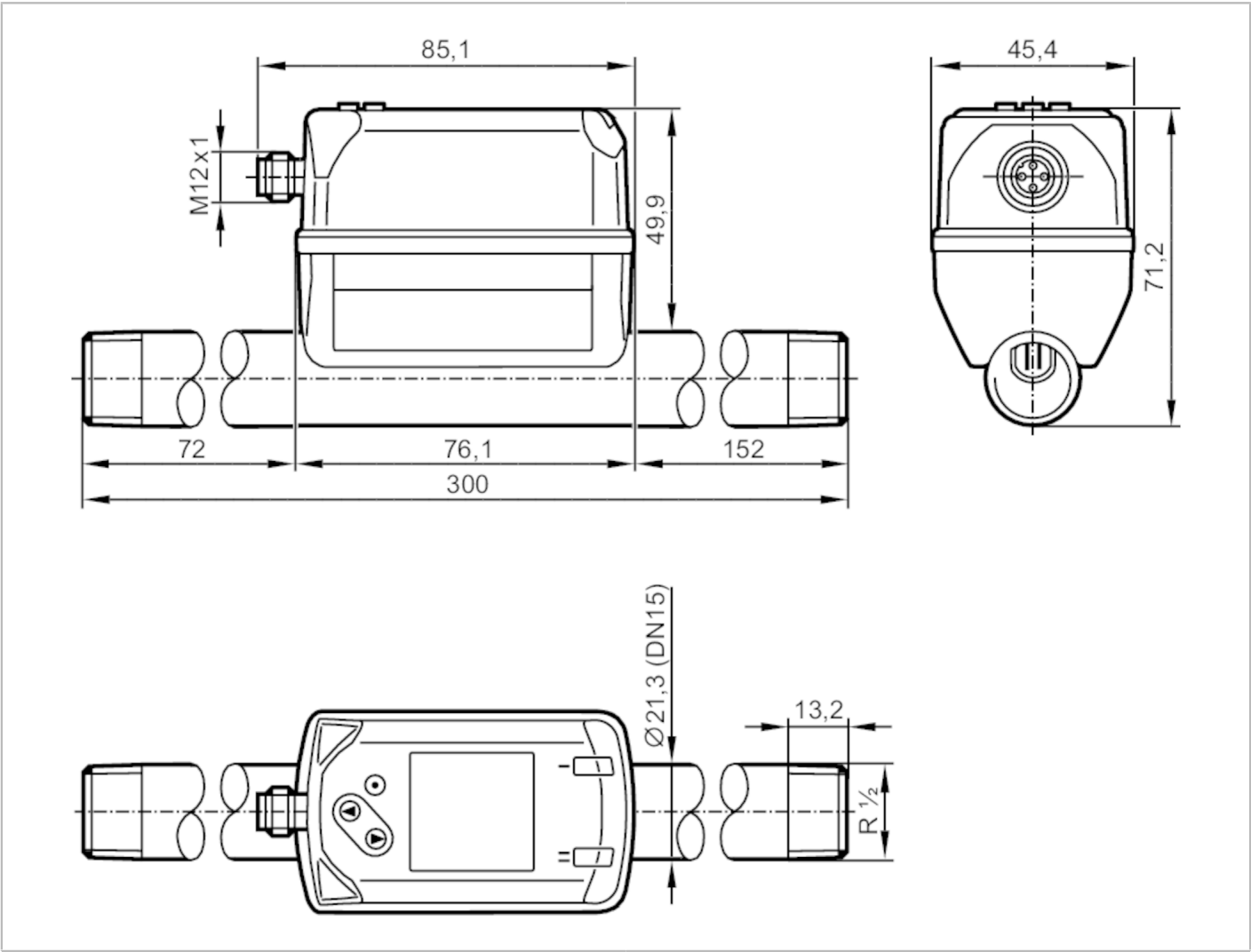


SD6600



Industrial gas counter

SDR12DGXFRKG/US-100



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		
Measuring range	4...1250 l/min	0.3...99.8 m/s	0.25...75 m³/h
Process connection	threaded connection R 1/2 DN15		

Application

Application	for industrial applications	
Media	Argon (Ar); carbon dioxide (CO2); nitrogen (N2); compressed air	
Medium temperature [°C]	-10...60	
Min. bursting pressure [bar]	64	
Min. bursting pressure [MPa]	6.4	
Pressure rating [bar]	16	
Pressure rating [MPa]	1.6	
MAWP (for applications according to CRN) [bar]	9.7	

Electrical data

Operating voltage [V]	18...30 DC; (to SELV/PELV)
-----------------------	----------------------------



Industrial gas counter

SDR12DGXFRKG/US-100

Current consumption	[mA]	< 80
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
------------------------------	---

Inputs

Inputs	counter reset
--------	---------------

Outputs

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

Measuring/setting range

Measuring range	4...1250 l/min	0.3...99.8 m/s	0.25...75 m³/h
Display range	0...1500 l/min	0...119.8 m/s	0...90 m³/h
Resolution	1 l/min	0.1 m/s	0.05 m³/h
Set point SP	11...1250 l/min	0.9...99.8 m/s	0.65...74.97 m³/h
Reset point rP	5...1243 l/min	0.4...99.3 m/s	0.28...74.6 m³/h
Analogue start point ASP	0...1000 l/min	0...79.8 m/s	0...60 m³/h
Analogue end point AEP	250...1250 l/min	20...99.8 m/s	15...75 m³/h
Low flow cut-off LFC	1...13 l/min	0.1...1.1 m/s	0.09...0.8 m³/h
In steps of	1 l/min	0.1 m/s	0.01 m³/h

Pressure monitoring

Measuring range	[bar]	-1...16
Display range	[bar]	-1...20
Resolution	[bar]	0.05
Set point SP	[bar]	-0.92...16
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



Industrial gas counter

SDR12DGXFRKG/US-100

Volumetric flow quantity monitoring		
Measuring range	0...100000000 m³	0...353146667.2 scf
Display range	0...100000000 m³	0...353146667.2 scf
Set point SP	0.001...10000000 m³	0.05...353146667.2 scf
Pulse value	0.001...10000000 m³	0.05...353146667.2 scf
In steps of	0.0001 m³	0.005 scf
Pulse length [s]	0.002...2	
Temperature monitoring		
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
Accuracy / deviations		
Temperature coefficient [1/K]	± 0,07 % MW	
Accuracy (in the measuring range)	± (6 % MW + 0,6 % MEW); at medium temperature 23 °C	
Repeatability	± (0,4 % MW + 0,1 % MEW)	
Pressure monitoring		
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	
Temperature monitoring		
Accuracy [K]	± 0,5; (medium flow in the limit area of the flow measurement range)	
Response times		
Response time [s]	0.1; (dAP = 0)	
Damping process value dAP [s]	0...5	
Pressure monitoring		
Response time [s]	0.05	
Temperature monitoring		
Dynamic response T05 / T09 [s]	T09 = 0,5	
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)	

SD6600



Industrial gas counter

SDR12DGXFRKG/US-100

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	<table> <tr> <th>Type of operation</th><th>DeviceID</th></tr> <tr> <td>default</td><td>864</td></tr> </table>	Type of operation	DeviceID	default	864
Type of operation	DeviceID				
default	864				

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	003TG
	accuracy class	-
	maximum allowable error	± 7 % FS
	Q (min)	0,25 m³/h
	Q (t)	-
	Q (max)	75 m³/h
Vibration resistance	DIN EN 68000-2-6	5 g (10...2000 Hz)
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]	730
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 1/2 DN15

Displays / operating elements	
Display	colour display 1,44", 128 x 128 pixels
	2 x LED, yellow

Remarks	
Remarks	MW = measured value
	MEW = Final value of the measuring range
	Standard conditions: 1013.25 mbar / 15 °C / 0 % relative humidity
	For information about installation and operation please see the operating instructions.
Pack quantity	1 pcs.

SD6600



Industrial gas counter

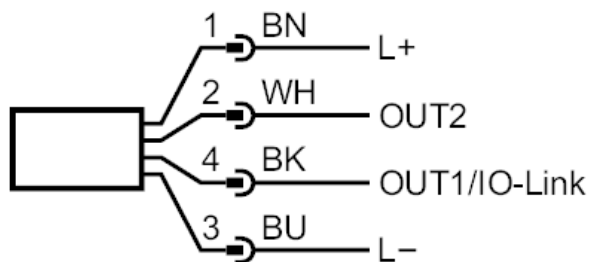
SDR12DGXFRKG/US-100

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
- OUT2/InD:
- signal output Preset counter
 - 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