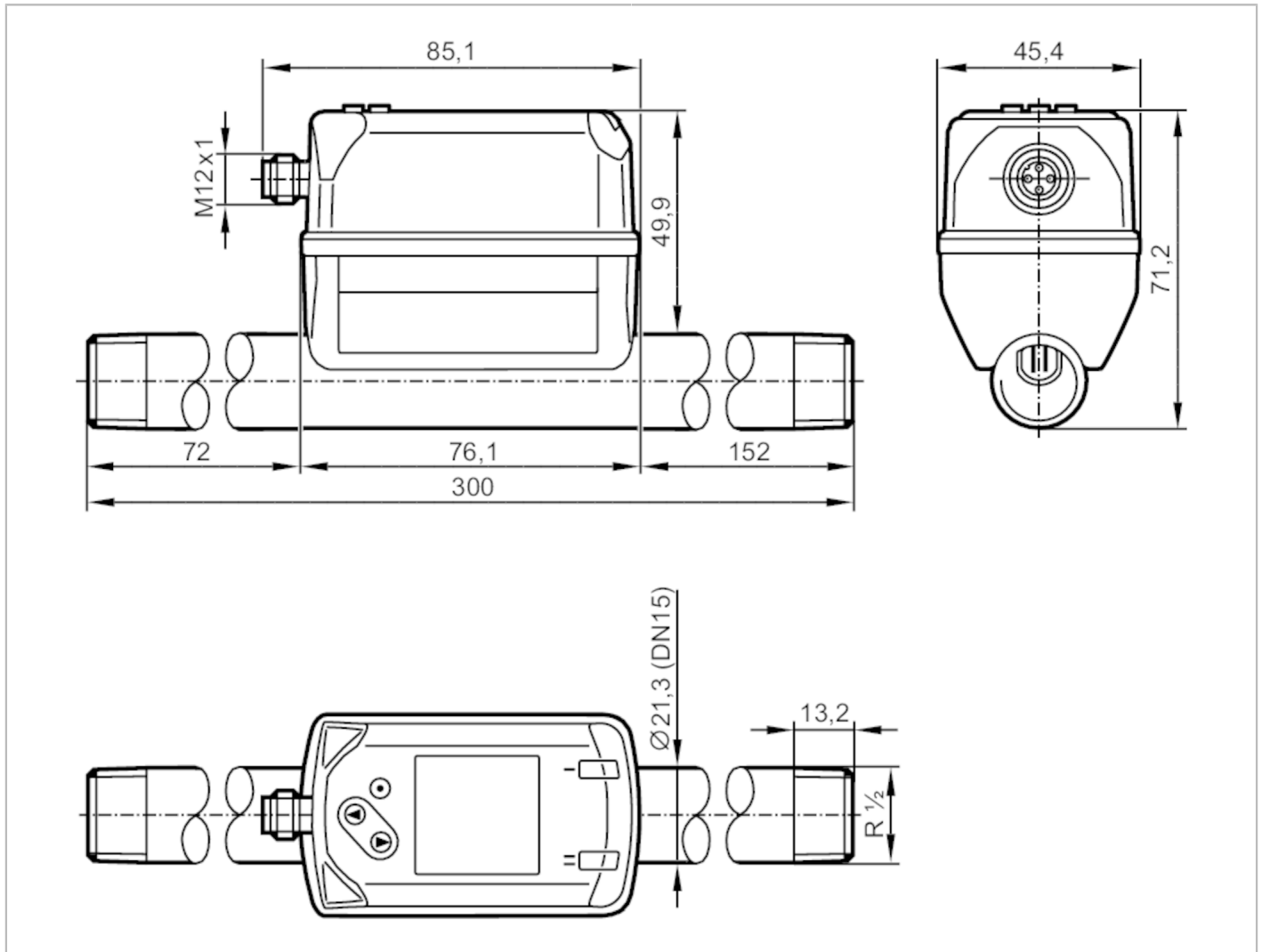


SD6600



Compressed air meter

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 (CO ₂); nitrogen (N ₂); air |
| Medium temperature [°C] | -10...60 |
| Min. bursting pressure [bar] | 64 |
| Pressure rating [bar] | 16 |
| Electrical data | |
| Operating voltage [V] | 18...30 DC; (according to EN 50178 SELV/PELV) |
| Current consumption [mA] | < 80 |
| Protection class | III |
| Reverse polarity protection | yes |
| Power-on delay time [s] | 1 |

SD6600



Compressed air meter

SDR12DGXFRKG/US-100

| 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 | | |



Compressed air meter

SDR12DGXFRKG/US-100

| Volumetric flow quantity monitoring | | |
|--|--|------------------------|
| Measuring range | 0...100000000 m ³ | 0...353146667.2 scf |
| Display range | 0...100000000 m ³ | 0...353146667.2 scf |
| Set point SP | 0.001...10000000 m ³ | 0.05...353146667.2 scf |
| Pulse value | 0.001...10000000 m ³ | 0.05...353146667.2 scf |
| In steps of | 0.0001 m ³ | 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 | 0,8 % MW + 0,2 % 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] | ± 0,15 | |
| Greatest TEMPCO of the zero point [% MEW / 10 K] | ± 0,25 | |
| 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 for the switching output 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 | |

SD6600



Compressed air meter

SDR12DGXFRKG/US-100

| Interfaces | |
|------------------------------|--|
| Communication interface | IO-Link |
| Transmission type | COM2 (38,4 kBaud) |
| IO-Link revision | 1.1 |
| SDCI standard | IEC 61131-9 CDV |
| IO-Link device ID | 864 d / 00 03 60 h |
| 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 |

| 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 | |
| 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 (1.4301 / 304); stainless steel (1.4305 / 303); steel (1.5523) galvanised; 2.0401 (brass / CW614N); FKM |
| Materials (wetted parts) | stainless steel (1.4301 / 304); stainless steel (1.4305 / 303); FKM; ceramics glass passivated; PPS GF40; Al ₂ O ₃ (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. |

| Electrical connection | |
|-----------------------|---------|
| Connector: | 1 x M12 |

SD6600

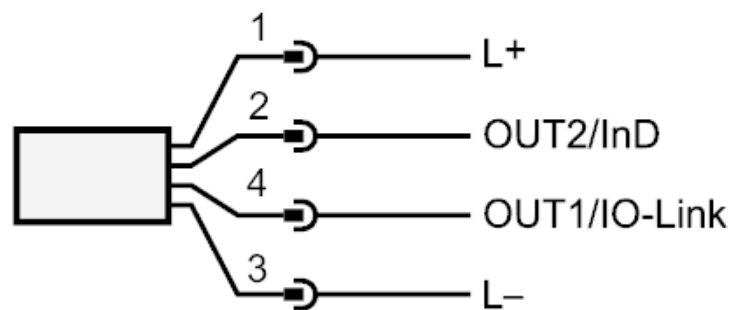


Compressed air meter

SDR12DGXFRKG/US-100



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