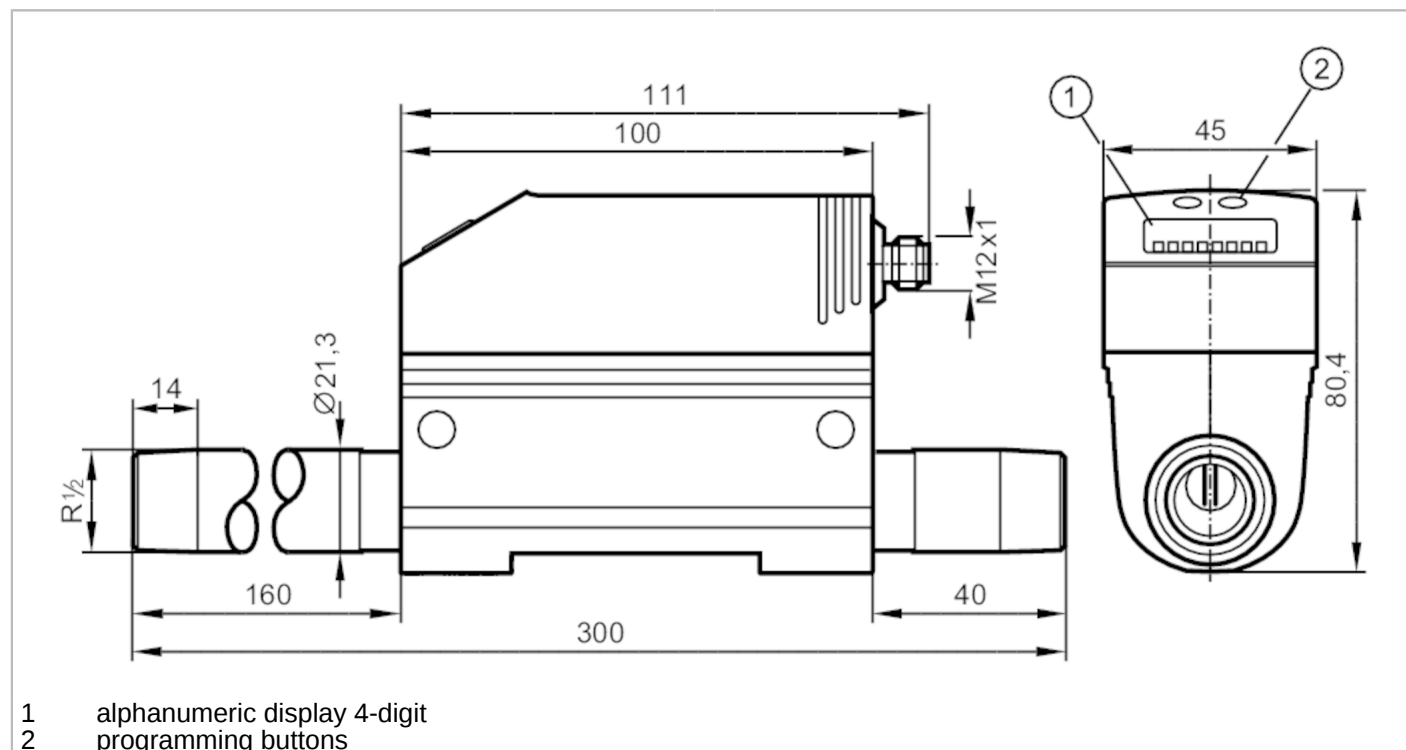


# SD6000



## Compressed air meter

SDR12DGXFPKG/US-100



| Application                                    |                                               |
|------------------------------------------------|-----------------------------------------------|
| Application                                    | for industrial applications                   |
| Media                                          | compressed air                                |
| Medien                                         | air quality ISO 8573-1                        |
|                                                | class 141                                     |
|                                                | class 344                                     |
| Medium temperature [°C]                        | 0...60                                        |
| Pressure rating [bar]                          | 16                                            |
| MAWP (for applications according to CRN) [bar] | 16                                            |
| Electrical data                                |                                               |
| Operating voltage [V]                          | 18...30 DC; (according to EN 50178 SELV/PELV) |
| Current consumption [mA]                       | < 110                                         |
| Protection class                               | III                                           |
| Reverse polarity protection                    | yes                                           |
| Power-on delay time [s]                        | 1                                             |



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| Outputs                                              |                                                                                                                                                   |                  |                  |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| Total number of outputs                              | 2                                                                                                                                                 |                  |                  |
| Output signal                                        | switching signal; analogue signal; pulse signal; IO-Link; (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                                      | 0.2...75 m³/h                                                                                                                                     | 10...1250 l/min  | 0.3...103.6 m/s  |
| Display range                                        | 0...90 m³/h                                                                                                                                       | 0...1500 l/min   | 0...124.3 m/s    |
| Set point SP                                         | 0.6...75 m³/h                                                                                                                                     | 10...1250 l/min  | 0.8...103.6 m/s  |
| Reset point rP                                       | 0.2...74.6 m³/h                                                                                                                                   | 4...1244 l/min   | 0.3...103.1 m/s  |
| Analogue start point ASP                             | 0...56.3 m³/h                                                                                                                                     | 0...938 l/min    | 0...77.7 m/s     |
| Analogue end point AEP                               | 18.7...75 m³/h                                                                                                                                    | 312...1250 l/min | 25.9...103.6 m/s |
| In steps of                                          | 0.1 m³/h                                                                                                                                          | 1 l/min          | 0.1 m/s          |
| volumetric flow quantity monitoring                  |                                                                                                                                                   |                  |                  |
| Pulse value                                          | 0.001...1000000 m³                                                                                                                                |                  |                  |
| In steps of                                          | 0.001 m³                                                                                                                                          |                  |                  |
| Pulse length [s]                                     | ≥ 0,02 / ≤ 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 / ; class 344; conditions: installation to DIN ISO 2533; installation in pipes: DN15) |                  |                  |
| Temperature monitoring                               |                                                                                                                                                   |                  |                  |
| Accuracy [K]                                         | ± 2; (medium flow in the limit area of the flow measurement range)                                                                                |                  |                  |

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## Compressed air meter

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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; 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                                                                                                                                                                                                       |                               |
| IO-Link device ID                             | 262 d / 00 01 06 h                                                                                                                                                                                                    |                               |
| Profiles                                      | no profile                                                                                                                                                                                                            |                               |
| SIO mode                                      | yes                                                                                                                                                                                                                   |                               |
| Required master port type                     | A                                                                                                                                                                                                                     |                               |
| Process data analogue                         | 3                                                                                                                                                                                                                     |                               |
| Process data binary                           | 2                                                                                                                                                                                                                     |                               |
| Min. process cycle time                       | [ms]                                                                                                                                                                                                                  | 4.1                           |
| 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                                                                                                                                                                                                      |                               |
| 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]                                                                                                                                                                                                                   | 961                           |
| Materials                                     | PBT-GF20; NBR; PC; stainless steel (1.4301 / 304); PTFE; brass coated; FKM; aluminium powder-coated                                                                                                                   |                               |
| Materials (wetted parts)                      | stainless steel (1.4301 / 304); FKM; ceramics glass passivated; PEEK GF30; polyester; aluminium                                                                                                                       |                               |
| Tightening torque                             | [Nm]                                                                                                                                                                                                                  | 50                            |
| Process connection                            | threaded connection R 1/2 DN15                                                                                                                                                                                        |                               |

SD6000



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Displays / operating elements

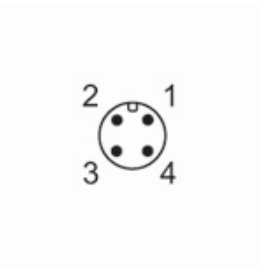
|         |                  |                                               |
|---------|------------------|-----------------------------------------------|
| Display | Display unit     | 5 x LED, green (NI/min, Nm³/h, Nm/s, Nm³, °C) |
|         | function display | 1 x LED, green                                |
|         | switching status | 2 x LED, yellow                               |
|         | measured values  | alphanumeric display, 4-digit                 |
|         | programming      | alphanumeric display, 4-digit                 |

Remarks

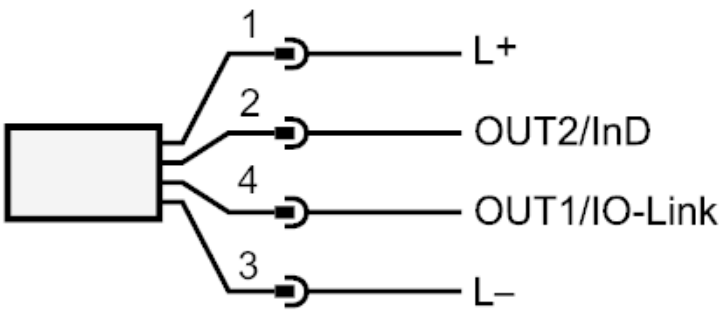
|               |                                                                                                    |
|---------------|----------------------------------------------------------------------------------------------------|
| Remarks       | MW = measured value                                                                                |
|               | 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



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