

SD6001



Compressed air meter

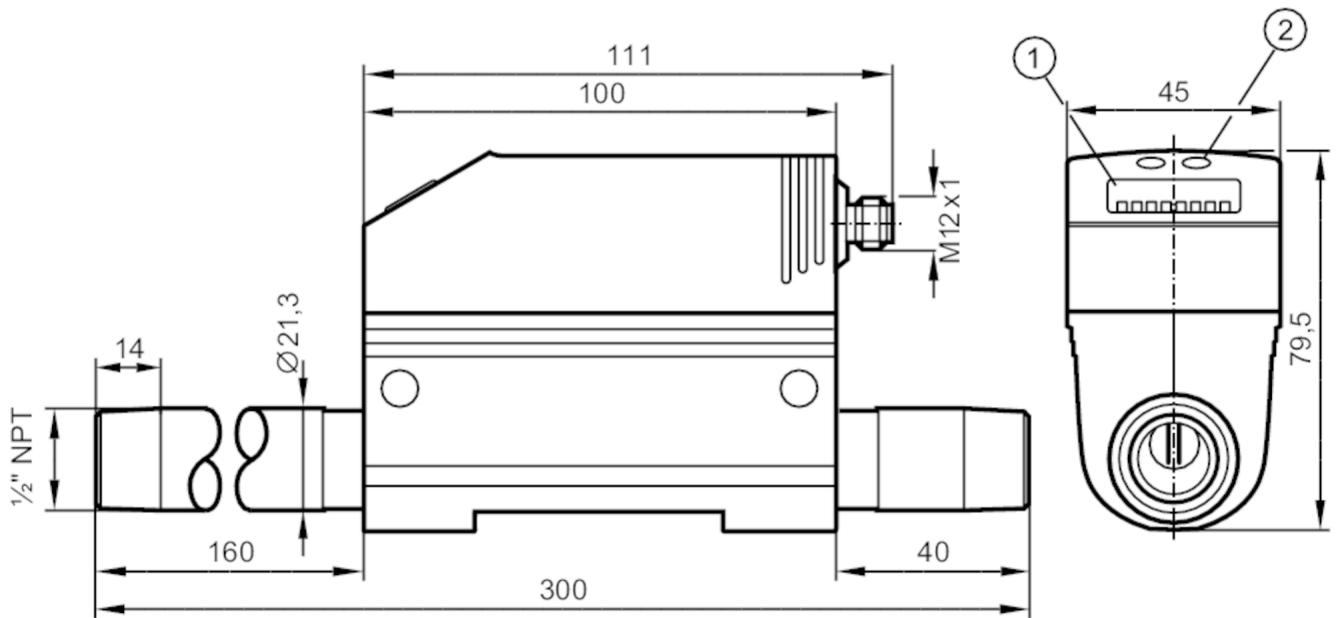
SDN12DGXFPKG/US-100

phase-out article

Discontinuation date: 12/31/2024

Alternative articles: SD6501

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



- 1 alphanumeric display 4-digit
- 2 programming buttons



Product characteristics

| | | |
|------------------------------|---|-----------------|
| Number of inputs and outputs | Number of digital outputs: 2; Number of analogue outputs: 1 | |
| Measuring range | 10...2650 scfh | 0.2...44.1 scfm |
| Process connection | threaded connection 1/2" NPT DN15 | |

Application

| | | |
|--|-----------------------------|----------|
| Application | for industrial applications | |
| Media | compressed air | |
| Note on media | air quality ISO 8573-1 | |
| | class 141 | |
| | class 344 | |
| Medium temperature | [°F] | 32...140 |
| Pressure rating | [bar] | 16 |
| Pressure rating | [psi] | 232 |
| MAWP (for applications according to CRN) | [bar] | 16 |

Electrical data

| | | |
|---------------------|------|----------------------------|
| Operating voltage | [V] | 19...30 DC; (to SELV/PELV) |
| Current consumption | [mA] | < 100 |
| Protection class | | III |

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| | |
|-----------------------------|-----|
| 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; (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 | 10...2650 scfh | 0.2...44.1 scfm |
| Display range | 0...3178 scfh | 0...53 scfm |
| Set point SP | 25...2650 scfh | 0.4...44.1 scfm |
| Reset point rP | 10...2635 scfh | 0.2...43.9 scfm |
| Analogue start point ASP | 0...1985 scfh | 0...33.1 scfm |
| Analogue end point AEP | 660...2650 scfh | 11...44.1 scfm |
| In steps of | 5 scfh | 0.1 scfm |

Volumetric flow quantity monitoring

| | |
|------------------|-----------------------|
| Pulse value | 0.040...4 000 000 scf |
| In steps of | 0.020...1000 scf |
| Pulse length [s] | 0,045...2 |

Temperature monitoring

| | |
|----------------------|----------|
| Measuring range [°F] | 32...140 |
| Display range [°F] | 32...140 |

Accuracy / deviations

Flow monitoring

| | |
|-----------------------------------|---|
| Repeatability [X17] | $\pm 1,5$ |
| Accuracy (in the measuring range) | $\pm (3 \% MW + 0,3 \% MEW) / \pm (6 \% MW + 0,6 \% MEW)$; (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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| 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 |
| Software / programming | | |
| Parameter setting options | Flow monitoring; quantity meter; Preset counter; hysteresis / window; normally open / normally closed; current/pulse output; display can be rotated and switched off; Display unit | |
| Operating conditions | | |
| Ambient temperature | [°F] | 32...140 |
| Storage temperature | [°F] | -4...185 |
| 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 | [ANN] | 227 |
| Pressure Equipment Directive | Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request | |
| Mechanical data | | |
| Weight | [g] | 925 |
| 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 | |
| Process connection | threaded connection 1/2" NPT DN15 | |
| Displays / operating elements | | |
| Display | Display unit | 4 x LED, green (scfm, scfh, scf, °F) |
| | function display | 1 x LED, yellow |
| | switching status | 2 x LED, yellow |
| | measured values | alphanumeric display, 4-digit |
| | programming | alphanumeric display, 4-digit |
| Remarks | | |
| Remarks | scf = standard cubic feet | |
| | scfh = standard cubic feet per hour | |
| | scfm = standard cubic feet per minute | |
| | 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. | |

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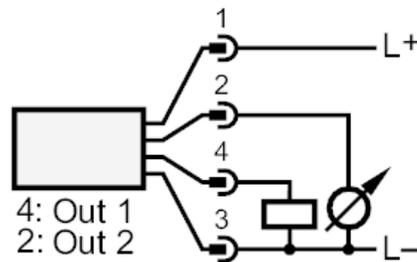
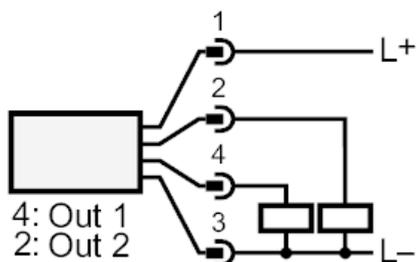
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Electrical connection

Connector: 1 x M12; coding: A



Connection



- OUT1: switching output
Pulse output quantity meter
signal output Preset counter
- OUT2: switching output
analogue output