

# SDG080



## Compressed air meter

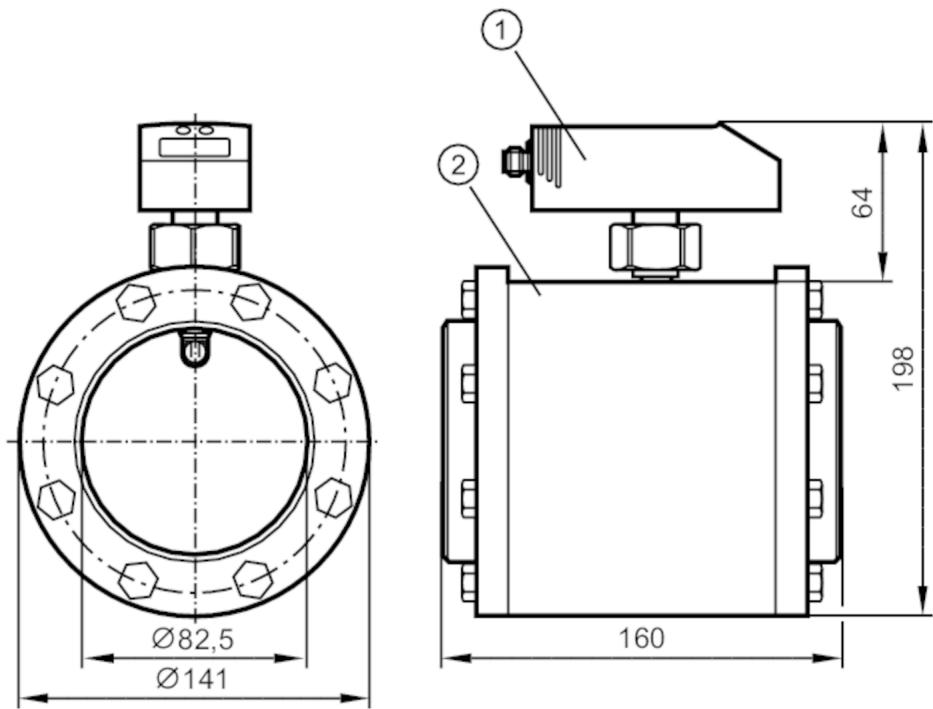
SDG3"/METRIS PB DN80

phase-out article

Discontinuation date: 12/31/2024

Alternative articles: SDG450

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



- 1 Flow sensor  
2 pipe section



### Product characteristics

|                              |                                                             |
|------------------------------|-------------------------------------------------------------|
| Number of inputs and outputs | Number of digital outputs: 2; Number of analogue outputs: 1 |
| Measuring range [m³/h]       | 9...2750                                                    |
| Process connection           | flange DN80 according to: DIN EN 10220                      |

### Application

|                         |                        |
|-------------------------|------------------------|
| Application             | totaliser function     |
| Media                   | compressed air         |
| Note on media           | air quality ISO 8573-1 |
|                         | class 141              |
|                         | class 344              |
| Medium temperature [°C] | 0...60                 |
| Pressure rating [bar]   | 16                     |
| Pressure rating [MPa]   | 1.6                    |

### Electrical data

|                          |            |
|--------------------------|------------|
| Operating voltage [V]    | 19...30 DC |
| Current consumption [mA] | < 100      |
| Protection class         | III        |



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|                                                 |        |                                                                           |
|-------------------------------------------------|--------|---------------------------------------------------------------------------|
| Reverse polarity protection                     |        | yes                                                                       |
| Power-on delay time                             | [s]    | 0.5                                                                       |
| <b>Inputs / outputs</b>                         |        |                                                                           |
| Number of inputs and outputs                    |        | Number of digital outputs: 2; Number of analogue outputs: 1               |
| <b>Outputs</b>                                  |        |                                                                           |
| 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                                                                       |
| <b>Measuring/setting range</b>                  |        |                                                                           |
| Measuring range                                 | [m³/h] | 9...2750                                                                  |
| Display range                                   | [m³/h] | 0...3300                                                                  |
| <b>Volumetric flow quantity monitoring</b>      |        |                                                                           |
| Pulse value                                     |        | 1 Nm³                                                                     |
| Pulse length                                    | [s]    | 0,1                                                                       |
| <b>Accuracy / deviations</b>                    |        |                                                                           |
| <b>Flow monitoring</b>                          |        |                                                                           |
| Accuracy (in the measuring range)               |        | ± (3 % MW + 0,3 % MEW) / ± (6 % MW + 0,6 % MEW); (class 141 /; class 344) |
| <b>Response times</b>                           |        |                                                                           |
| <b>Flow monitoring</b>                          |        |                                                                           |
| Response time                                   | [s]    | 0.1; (dAP = 0)                                                            |
| <b>Operating conditions</b>                     |        |                                                                           |
| Ambient temperature                             | [°C]   | 0...60                                                                    |
| Storage temperature                             | [°C]   | -20...85                                                                  |
| Max. relative air humidity                      | [%]    | 90                                                                        |
| Protection                                      |        | IP 65                                                                     |



Compressed air meter

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| Tests / approvals    |                           |                    |
|----------------------|---------------------------|--------------------|
| EMC                  | EN 61000-4-2 ESD          | 4 kV CD / 8 kV AD  |
|                      | EN 61000-4-3 HF radiated  | 10 V/m             |
|                      | EN 61000-4-4 Burst        | 2 kV               |
|                      | EN 61000-4-6 HF conducted | 10 V               |
| Vibration resistance | DIN IEC 68-2-6            | 5 g (55...2000 Hz) |
| MTTF [years]         |                           | 214                |

| Mechanical data          |                                                                                                                                                                     |       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Weight [g]               |                                                                                                                                                                     | 11625 |
| Materials                | PBT-GF20; PC; PC; stainless steel (1.4301 / 304); FKM; pipe section: steel galvanised                                                                               |       |
| Materials (wetted parts) | stainless steel (316 / 1.4401); stainless steel (1.4301 / 304); ceramics glass passivated; PEEK; polyester; FKM; aluminium anodised; pipe section: steel galvanised |       |
| Process connection       | flange DN80 according to: DIN EN 10220                                                                                                                              |       |

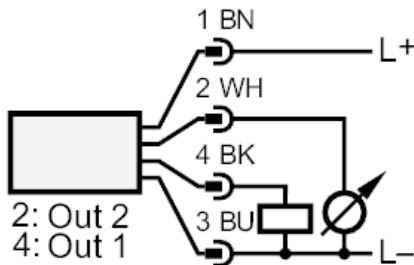
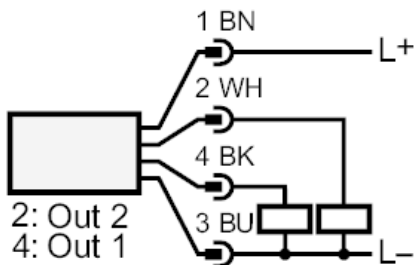
| Remarks       |                                                                                                    |
|---------------|----------------------------------------------------------------------------------------------------|
| Remarks       | MW = measured value                                                                                |
|               | 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:
- switching output  
Pulse output quantity meter
- OUT2:
- switching output  
input counter reset  
analogue output