



Mat. No. 508 523

Product description

Flow sensor for volume flow measurements in compressed air and gases with integrated LED display and configurable outputs usable as analog, switching or pulse outputs. Two buttons for user configuration. Display of flow rate, total flow and medium temperature.


Applications

- ◆ Consumption measurement of compressed air
- ◆ Inert gas flow measurement
- ◆ Consumption measurement of compressed air tools
- ◆ Consumption measurement of air driven machines

Product advantages

- ◆ Simple installation
- ◆ Direct measuring of normal volume flow
- ◆ Small pressure loss
- ◆ Display of flow rate, total flow and medium temperature

Technical data

Technology / Design	Thermal flow sensor in Inline design	Output 1	switching output configurable as 4 ... 20 mA
Measuring range w_N	712 normal m ³ /h at 20 °C and 1013.25 hPa	Output 2	Switching output configurable as pulse output switching current 250 mA
Lower range limit	3 normal m ³ /h	Display	LED red, 7 segment, 4 digits, 7mm
Measurement inaccuracy	+/- (3 % of measured value + 0.3 % of measuring range)	Supply voltage	19 ... 30 V DC
Measuring direction		Current consumption	100 mA max. (without load at output)
Medium	Air, Nitrogen Other gases on request	Electrical connection	Plug 4 pin, M12
Medium resistance	Air quality class 141 or 344 according DIN 8573-1	Protection type	IP 65
Pressure range	16 bar max.	Material housing	PBT glass fibre reinforced
Operating temperature	Medium: 0 ... +60 °C Electronics: 0 ... +60 °C	Material sensor element	Ceramics, glass passivated
Response time (T_{90})	0.1 s	Material sensor tube	Stainless steel 1.4301
Pipe diameter / length	51 mm inside x 475 mm		
Nominal size	DN 50	Accessories (to be ordered separately)	Connection cable 5m Mat. No. 300 722 Female connector w. screw terminals Mat.No. 301 008
Mounting / Process connection	Male thread R 2		

Technical drawing of a 3000 Series 1/2" NPT x 1" NPT Check Valve. The drawing includes a front view (left) and a side view (right).

Front View (Left):

- Top flange diameter: 45
- Central port diameter: 133
- Top flange thickness: 111

Side View (Right):

- Body diameter: $\varnothing 54$
- Total length: 475
- Body length: 275
- Top flange diameter: 111
- Top flange thickness: 111
- Top flange bore diameter: 100
- Top flange thread: M12 x 1

Flow direction is indicated by an arrow pointing right.

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