

MV-104

MASS-VIEW® MV-104

Mass Flow Meter for gases with integrated display

- Direct thermal mass flow measurement
- High accuracy
- 10 pre-installed gases
- Bright, graphical OLED display
- Digital or analog output; alarm and counter functions

MASSFLOW-ONLINE PRODUCT



Gas Mass Flow Meters with integrated display

MASS-VIEW® model MV-104 Direct Thermal Mass Flow Meters (MFMs) are suited for precise measurement of flow ranges between 0,04...2 l_n/min and 0,2...20 l_n/min at operating pressures up to 10 bar(g). The MFM has an integrated graphical OLED display, clearly visible at wide angles, which allows reading of actual flow (value and a bar graph), total flow and type of gas.

The display features easy set up via a user-friendly menu, using a 4-way navigation push button. The pre-installed gases eliminate the need to recalibrate for different gases and therefore reduce the cost of ownership. Additional features & functions include a variety of alarm and counter functions, an analog output signal, digital interfaces and two relay contacts.

The MASS-VIEW® series provides modern, novel and economical alternative to variable area meters (VA meters), also known as purge meters. Unlike conventional VA meters these new flow meters measure mass flow instead of volume flow.

Technische specificaties

Meet- / regelsysteem

| | |
|--|--|
| Flowbereik (tussenliggende bereiken beschikbaar) | min. 0,04...2 I _n /min max. 0,2...20 I _n /min (based on N ₂) |
| Nauwkeurigheid (incl. lineariteit) (gebaseerd op actuele kalibratie) | ± 2% Rd for flow > 50% of max. capacity; ± (1% Rd + 0,5% FS) on lower flows |
| Herhaalbaarheid | < 0,2 % FS typical |
| Turndown ratio | up to 1 : 100 |
| Bedrijfsdruk | 0 ... 10 bar(g) / 0 ... 150 psi(g) |
| Druk coëfficiënt | ± 0,2% Rd/bar typical at Air |
| Voorgeïnstalleerde gassen | Air, Ar, N ₂ , O ₂ , CO ₂ , CH ₄ , C ₃ H ₈ , N ₂ O, CO and C ₄ H ₁₀ |
| Standaard kalibratie gas | Air, other gases are converted using our Fluidat® conversion model which will introduce extra inaccuracy |
| Responstijd (sensor) | 2 sec. |
| Bedrijfstemperatuur | 0 ... 50 °C (32 ... 122°F) |
| Temperatuurcoëfficiënt | Zero: <0,1% FS/°C, Span: <0,2% Rd/°C |
| Lekdichtheid, naar buiten | tested < 2 x 10 ⁻⁹ mbar l/s He |
| Standgevoeligheid | < 0,1 % FS |

Mechanische delen

| | |
|--|--|
| Materiaal (onderdelen die in contact komen met het medium) | Aluminium |
| Testdruk | 21 bar(a) / 300 psi(a) |
| Procesaansluitingen | G 1/4" BSPP female thread (compression fittings optional) |
| Afdichtingen | Viton® |
| Gewicht | 0,7 kg |
| Beschermingsgraad (behuizing) | IP40 |

Elektrische eigenschappen

| | |
|-------------------------------|---|
| Stroomvoorziening | +15 ... 24 Vdc (+/- 10%) |
| Max. stroomverbruik | approx. 135 mA |
| Analoog signaal | 0 ... 5 Vdc |
| Digitale communicatie | RS232 / RS485 (Modbus RTU/ASCII) |
| Min. en max. relais contacten | switching current 0,5 A, 24 Vdc, one side grounded (0 Vdc power) |
| Elektrische aansluiting | 8-pin RJ-45 modular jack |

Technische specificaties kunnen zonder kennisgeving worden gewijzigd.

Voor technische maattekeningen en aansluitschema's bezoekt u de [productpagina](#) op onze [website](#)

Related products



MASS-VIEW® MV-304

Min. flow 0,04...2 l/min
Max. flow 0,2...20 l/min
Pressure rating 10 bar
Bright, graphical OLED display
High quality needle valve



MASS-VIEW® MV-404

Min. flow 0,04...2 l/min
Max. flow 0,2...20 l/min
Pressure rating 10 bar
Bright, graphical OLED display
Pressure compensated valve



MASS-VIEW® MV-194-H2

Min. flow 0,1...1 l/min H2
Max. flow 0,1...10 l/min H2
Bright, graphical OLED display
Electr. output, alarm and counter



MASS-VIEW® MV-194-HE

Min. flow 0,1...2 l/min He
Max. flow 0,2...20 l/min He
Bright, graphical OLED display
Electr. output, alarm and counter



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