

DATASHEET MV-396-H2

MASS-VIEW® MV-396-H2

Hydrogen Flow Regulator with integrated display

MASSFLOW-ONLINE PRODUCT



Hydrogen Mass Flow Regulators with integrated display

MASS-VIEW® model MV-396-H2 Mass Flow Regulators (MFRs) are suited for precise measurement and control of flow ranges between 0,2...10 l_n/min and 1...100 l_n/min hydrogen at operating pressures up to 10 bar(g). The MFR 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. A high quality needle valve offers smooth and fine adjustment of the gas flow.

The display features easy set up via a user-friendly menu, using a 4-way navigation push button. 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. 0,2...10 l _n /min max. 1...100 l _n /min (based on H 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 |
| Standaard kalibratie gas | H ₂ |
| 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 | getest < 2 x 10 ⁻⁹ mbar l/s He |
| Standgevoeligheid | < 0,1 % FS |

Mechanische delen

| | |
|--|--|
| Materiaal (onderdelen die in contact komen met het medium) | Meter: Aluminium; Needle valve: SS316 |
| Testdruk | 21 bar(a) / 300 psi(a) |
| Procesaansluitingen | G 1/4" BSPP female thread (compression fittings optional) |
| Afdichtingen | Viton®, PTFE |
| 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 |

Elektrische aansluiting

Control valve options

Externe actuatoropties die op de controller moeten worden aangesloten

Ex-proof specificaties

Goedkeuringen / certificaten

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-306

Min. flow 0,4...20 l/min
Max. flow 2...200 l/min
Pressure rating 10 bar
Bright, graphical OLED display
High quality needle valve



MASS-VIEW® MV-394-H2

Min. flow 0,1...1 l/min
H2
Max. flow 0,1...10 l/min
H2
Bright, graphical OLED display
High quality needle valve



Bronkhorst High-Tech designs and manufactures innovative instruments and subsystems for low-flow measurement and control for use in laboratories, machinery and industry. Driven by a strong sense of sustainability and with many years of experience, we offer an extensive range of (mass) flow meters and controllers for gases and liquids, based on thermal, Coriolis and ultrasonic measuring principles. Our global sales and service network provides local support in more than 40 countries. Discover Bronkhorst®!