

# DATASHEET MV-392-H2

## MASS-VIEW® MV-392-H2

Hydrogen Flow Regulator with integrated display

MASSFLOW-ONLINE PRODUCT



### Hydrogen Mass Flow Regulators with integrated display

MASS-VIEW® model MV-392-H2 Mass Flow Regulators (MFRs) are suited for precise measurement and control of flow ranges between 50...100 ml<sub>n</sub>/min and 50...1000 ml<sub>n</sub>/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. 50...100 ml <sub>n</sub> /min max. 50...1000 ml <sub>n</sub> /min (based on H <sub>2</sub> )
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 : 10
Bedrijfsdruk	0 ... 10 bar(g) / 0 ... 150 psi(g)
Druk coëfficiënt	± 0,2% Rd/bar typical at Air
Standaard kalibratie gas	H <sub>2</sub>
Responstijd (sensor)	2 sec.
Bedrijfstemperatuur	0 ... 50 °C (32 ... 122°F)
Temperatuurcoefficient	Zero: <0,1% FS/°C, Span: <0,2% Rd/°C
Lekdichtheid, naar buiten	getest < 2 x 10 <sup>-9</sup> mbar l/s He
Standgevoeligheid	< 0,1 % FS

#### Mechanische delen

Materiaal (onderdelen die in contact komen met het medium)	Meter: Aluminium; Needle valve: SS316, Brass
Testdruk	21 bar(a) / 300 psi(a)
Procesaansluitingen	G 1/4" BSPP female thread (compression fittings optional)
Afdichtingen	Viton®, PTFE, Fluorosint®, Buna N
Gewicht	0,7 kg
Beschermingsgraad (behuizing)	IP40

### **Elektrische eigenschappen**

Stroomvoorziening	+15 ... 24 Vdc (+/- 10%)
Max. stroomverbruik	approx. 135 mA
Analooog 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-302



MASS-VIEW® MV-391-H2



MASS-VIEW® MV-394-HE

Min. flow 20...200

mln/min

Max. flow 20...2000

mln/min

Pressure rating 10 bar

Bright, graphical OLED

display

High quality needle  
valve

Min. flow 20...50

mln/min H2

Max. flow 20...200

mln/min H2

Bright, graphical OLED  
display

High quality needle  
valve

Min. flow 0,1...2 l/min

He

Max. flow 0,2...20 l/min

He

Bright, graphical OLED  
display

High quality needle  
valve



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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®!