

DATASHEET MV-196-H2

MASS-VIEW® MV-196-H2

Hydrogen Flow Meter with integrated display

MASSFLOW-ONLINE PRODUCT



Hydrogen Mass Flow Meters with integrated display

MASS-VIEW® model MV-196-H2 Direct Thermal Mass Flow Meters (MFM) are suited for precise measurement 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 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. 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)
Temperatuurcoefficient	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)	Aluminium
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Mechanische delen

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

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-106



MASS-VIEW® MV-396-H2



MASS-VIEW® MV-194-H2

Min. flow 0,4...20 ln/min

Max. flow 2...200 ln/min

Drukklasse 10 bar

Helder, grafisch OLED
display

10 vooraf geïnstalleerde
gassen

Min. flow 0,2...10 ln/min

H2

Max. flow 1...100 ln/min

H2

Bright, graphical OLED
display

High quality needle
valve

Min. flow 0,1...1 ln/min

H2

Max. flow 0,1...10 ln/min

H2

Bright, graphical OLED
display

Electr. output, alarm
and counter



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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®!