

# MV-191-HE

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## MASS-VIEW® MV-191-HE

Helium Flow Meter with integrated display

- Direct thermal mass flow measurement
- High accuracy
- Bright, graphical OLED display
- Digital or analog output
- Alarm and counter functions

MASSFLOW-ONLINE PRODUCT



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### Helium Mass Flow Meters with integrated display

MASS-VIEW® model MV-191-HE Direct Thermal Mass Flow Meters (MFMs) are suited for precise measurement of flow ranges between 20...50 ml<sub>n</sub>/min and 20...200 ml<sub>n</sub>/min helium 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. 20...50 ml <sub>n</sub> /min max. 20...200 ml <sub>n</sub> /min (based on helium)
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	Helium
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 <sup>-9</sup> 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-101**

Min. flow 10...50 mln/min  
Max. flow 10...200 mln/min  
Pressure rating 10 bar  
Bright, graphical OLED display  
10 pre-installed gases



**MASS-VIEW® MV-391-HE**

Min. flow 20...50 mln/min He  
Max. flow 20...200 mln/min He  
Bright, graphical OLED display  
High quality needle valve



**MASS-VIEW® MV-192-HE**

Min. flow 50...200 mln/min He  
Max. flow 50...2000 mln/min He  
Bright, graphical OLED display  
Electr. output, alarm and counter



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