

DATASHEET MV-394-HE

MASS-VIEW® MV-394-HE

Helium Flow Regulator with integrated display

MASSFLOW-ONLINE PRODUCT



Helium Mass Flow Regulators with integrated display

MASS-VIEW® model MV-394-HE Mass Flow Regulators (MFRs) are suited for precise measurement and control of flow ranges between $0,1 \dots 1 I_n/\text{min}$ and $0,1 \dots 10 I_n/\text{min}$ helium 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. $0,1 \dots 1 I_n/\text{min}$ max. $0,1 \dots 10 I_n/\text{min}$ (based on helium)
Nauwkeurigheid (incl. lineariteit) (gebaseerd op actuele kalibratie)	$\pm 2\% \text{ Rd}$ for flow $> 50\%$ of max. capacity; $\pm (1\% \text{ Rd} + 0,5\% \text{ FS})$ on lower flows
Herhaalbaarheid	$< 0,2\% \text{ FS}$ typical
Turndown ratio	up to 1 : 100
Bedrijfsdruk	0 ... 10 bar(g) / 0 ... 150 psi(g)
Druk coëfficiënt	$\pm 0,2\% \text{ Rd}/\text{bar}$ typical at Air
Standaard kalibratie gas	Helium
Responstijd (sensor)	2 sec.
Bedrijfstemperatuur	0 ... 50 °C (32 ... 122°F)
Temperatuurcoëfficiënt	Zero: $< 0,1\% \text{ FS}/^\circ\text{C}$, Span: $< 0,2\% \text{ Rd}/^\circ\text{C}$
Lekdichtheid, naar buiten	getest $< 2 \times 10^{-9} \text{ mbar l/s He}$
Standgevoeligheid	$< 0,1\% \text{ FS}$

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-304

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



MASS-VIEW® MV-194-H2

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



MASS-VIEW® MV-392-HE

Min. flow 50...200 mIn/min He
Max. flow 50...2000 mIn/min He
Bright, graphical OLED display
High quality needle valve



MASS-VIEW® MV-396-HE

Min. flow 0,2...10 lN/min He
Max. flow 1...100 lN/min He
Bright, graphical OLED display
High quality needle valve