

0~1,000 SLM Mass Flow Meter / Controller

HFM-201 MASS FLOW METER / HFC-203 MASS FLOW CONTROLLER

Medium Flow



HFM 201 / HFC 203 은 일반적인 목적에 맞는
기체용 질량 유량계 및 제어기입니다.
신뢰성 및 안정성을 바탕으로 변화하는 주변환경에도
매우 안정적인 퍼포먼스를 보여줍니다.
스테인레스강 재질로 다양한 부식성 기체에도 적합합니다.
최대 허용 압력은 1,000 psig(옵션) 이며,
아날로그 출력을 지원합니다.
0~25 slm 에서 1,000 slm(N₂) 까지의
측정범위에 적합한 제품입니다.

Features (특징)

- Range 0~25 slm to 0~1,000 slm (N₂ Equivalent)
- ±1% of Full-Scale Accuracy
- Excellent Stability
- Proven Reliability
- Outstanding Zero Stability
- NIST Traceable Calibration

Applications and Industries (응용 분야)

- Gas Blending
- Environmental Monitoring
- Thin Film Deposition
- Leak Testing
- Medical Research
- Chromatography
- R&D

Flow Unit (유량 단위)

기준 STP : 0°C & 760 Torr / N₂

· SLM	25 ~ 1,000
· SCFH	52.97 ~ 2118.9
· Kg/Hr	1.87 ~ 74.99
· SM3/H	1.5 ~ 60
· Mole/Hr	66.92 ~ 2676.91

Specifications

HFM-201 (Meter)

HFC-203 (Controller)

	HFM-201 (Meter)	HFC-203 (Controller)
Range	0~25 slm to 0~1,000 slm (N ₂)	0~25 slm to 0~1,000 slm (N ₂)
Accuracy	±1% of full scale	±1% of full scale
Repeatability	±0.05% of full scale	±0.05% of full scale
Standard Operating Pressure	500 psig (optional 1,000 psig)	500 psig (optional 1,000 psig)
Pressure Coefficient	.0067% / psi	.0067% / psi
Leak Integrity	< 1x10 ⁻⁹ sccs He	< 1x10 ⁻⁹ sccs He
Temperature Coefficients	Zero : ±0.035%°C of F.S (0~60°C) Span : ±0.05%°C of Rdg (0~60°C)	Zero : ±0.035%°C of F.S (0~60°C) Span : ±0.05%°C of Rdg (0~60°C)
Standard Output	0~5 VDC	0~5 VDC
Optional Outputs	0~20 mA, 4~20 mA	0~20 mA, 4~20 mA
Connector (±15 VDC)	15 Pin D-sub	15 Pin D-sub
Connector (+24 VDC)	9 Pin D-sub	9 Pin D-sub
Fittings	VCR®, VCO®, NPT, Swagelok®	VCR®, VCO®, NPT, Swagelok®
Seals	Kalrez, Neoprene, Buna-N	Kalrez, Neoprene, Buna-N
Power Requirements (±15 V)	±(14~16) VDC @ ±30 mA (< 1 Watt)	±(14~16) VDC @ +60 mA / -185 mA (< 3 Watt)
Power Requirements (+24 V)	(14~32) VDC (< 1.9 Watt)	(14~32) VDC (< 4.2 Watt)
Wetted Materials	302 SS, 316 SS, Nickel 200, Viton®	302 SS, 316 SS, Nickel 200, Viton®, Kalrez (Valve Seat)
Setpoint Input		0~5 VDC (Std) / 4~20 mA (optional)
Weight (approx.)	201L - 3.55 lb (1.61 kg) 201H - 3.25 lb (1.47kg)	203L - 5.20 lb (2.36 kg) 203H - 5.15 lb (2.34 kg)

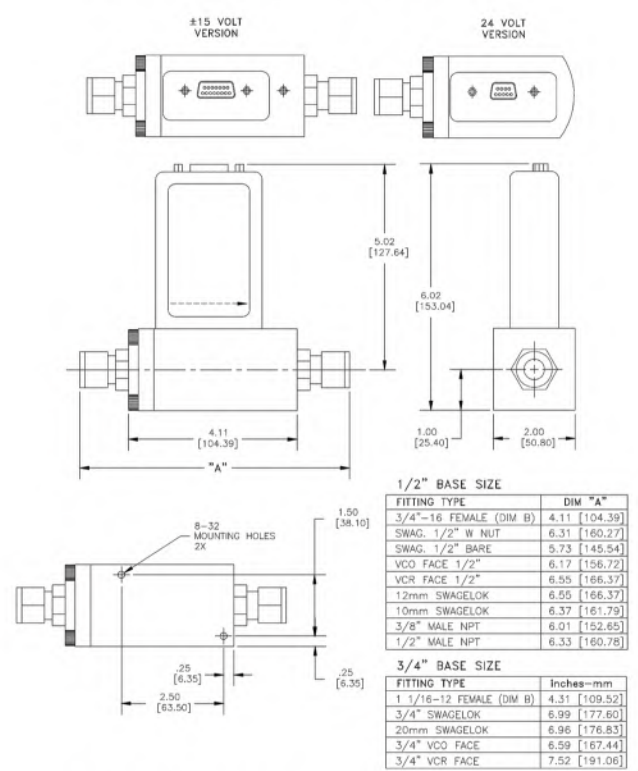
±15 VDC Pinout Diagram

PINOUTS	
PIN #	
1	Do Not Use
2	Do Not Use
3	Do Not Use
4	Do Not Use
5	Signal Common
6	Signal Output 0-5 VDC (4-20mA)
7	Case Ground
8	Control Valve Over-ride
9	-15 VDC
10	Do Not Use
11	+15 VDC
12	Valve Return
13	External Input
14	Set Point 0-5 VDC (4-20mA)
15	Do Not Use

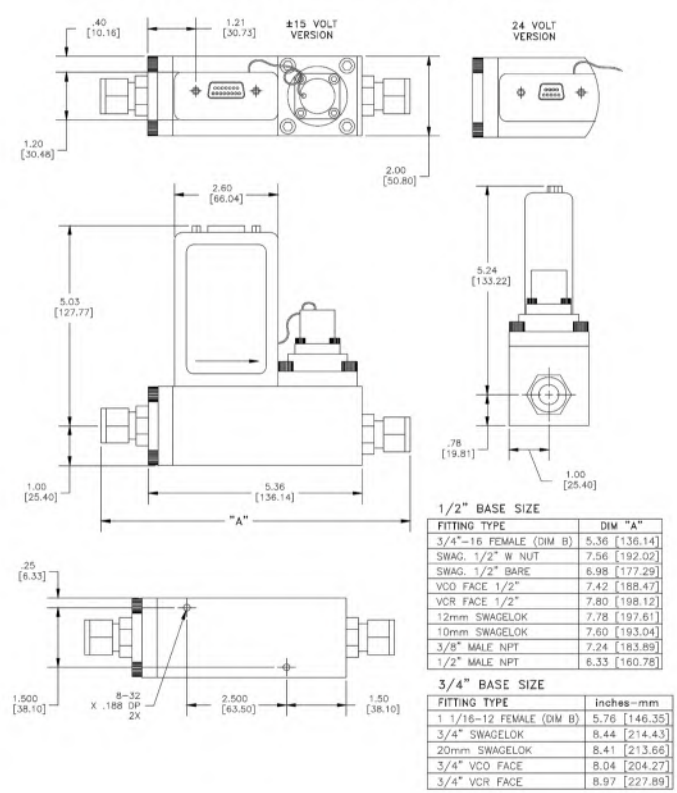
+24 VDC Pinout Diagram

PINOUTS	
PIN #	
1	+5VDC Ref/Ext In
2	Signal Output (0-5V/4-20mA)
3	Set Point In (0-5V/4-20mA)
4	Power Common
5	Valve Voltage
6	Control Over-Ride
7	Power Input (15-30VDC)
8	Signal Common
9	Case Ground

HFM-201 Outline Drawings



HFC-203 Outline Drawings



Selection chart

