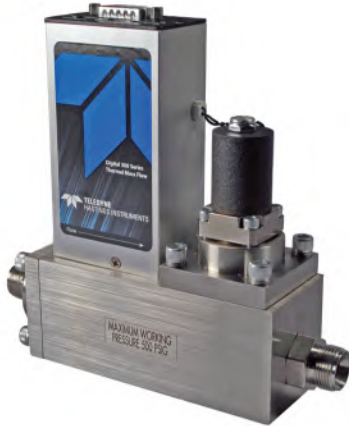


0~2,500 SLM Digital Mass Flow Meter / Controller

HFM-D-305A MASS FLOW METER / HFC-D-307A MASS FLOW CONTROLLER

Medium Flow



Full Metal Body 의 Digital HFM 305A / HFC 307A 는 1,000 slm 부터 2,500 slm(N₂) 구간에서 높은 정확도 $\pm(0.5\% Rd + 0.2\% F.S)$ 를 구현합니다. 아날로그 및 디지털 출력을 제공하며, 반복적으로 신뢰할 수 있는 정확한 가스 유량을 측정합니다. 센서와 밸브 및 오버 플로우에 대한 진단 및 자동 영점 기능을 가지고 있습니다. Data Logging Software 를 기본 제공해 드립니다.

Features (특징)

- Range 0~1,000 slm to 0~2,500 slm (N₂ Equivalent)
- Self-diagnostic Status LEDs
- Auto-Zero (HFC-D-307 Controller Only)
- Totalizer
- Large Diameter Sensor Tube
- Low Wetted Surface Area
- Operating Pressures to 500 psi or higher
- NIST Traceable Calibration

Applications and Industries (응용 분야)

- Leak Testings
- High Purity Gas Delivery
- Heat Treat
- Gas Blending
- Secondary Calibration Reference
- Fuel Cell R&D
- Environmental Monitoring

Flow Unit (유량 단위)

기준 STP : 0°C & 760 Torr / N₂

· SLM	1,000 ~ 2,500
· SCFH	2,118.9 ~ 5,297.25
· Kg/Hr	74.99 ~ 187.48
· SM3/H	60 ~ 150
· Mole/Hr	2.676.91 ~ 6,692.27

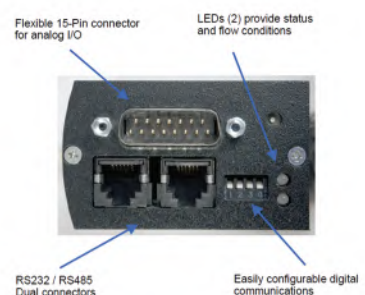
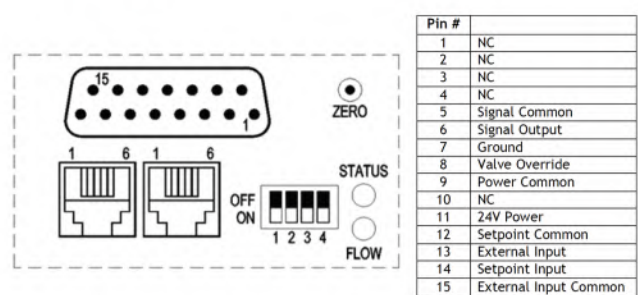
Specifications

HFM-D-305A (Meter)

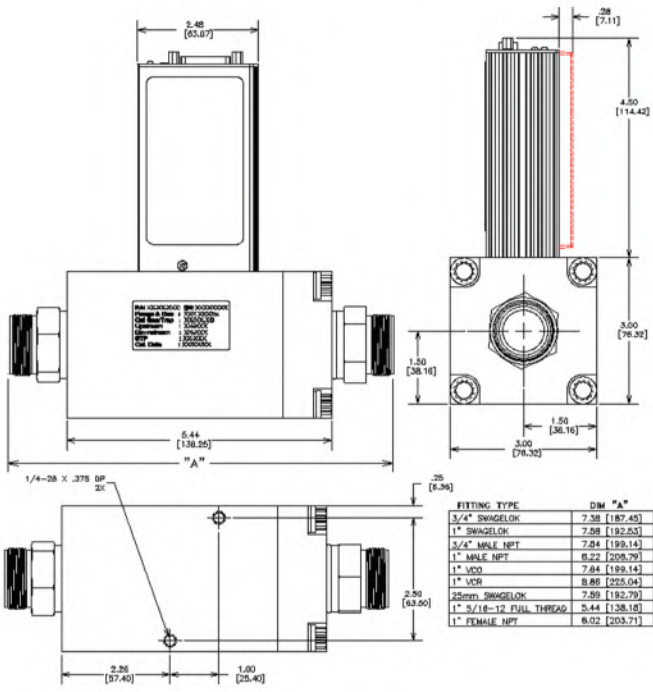
HFC-D-307A (Controller)

	HFM-D-305A (Meter)	HFC-D-307A (Controller)
Range	0~1,000 slm to 2,500 slm (N ₂)	0~1,000 slm to 2,500 slm (N ₂)
Accuracy	$\pm(0.5\% \text{ reading} + 0.2\% \text{ of full scale})$	$\pm(0.5\% \text{ reading} + 0.2\% \text{ of full scale})$
Repeatability	$\pm 0.15\% \text{ of F.S}$	$\pm 0.15\% \text{ of F.S}$
Maximum Working Pressure	500 psig	500 psig
Operating Temperature	-20~70°C in non-condensing environment	-20~70°C in non-condensing environment
Warm up time	30 min for optimum accuracy	30 min for optimum accuracy
	6min within rated accuracy	6min within rated accuracy
Settling Time	Typically ≤ 1 seconds	Typically $< 1\sim 2$ seconds
Temperature Coefficient of Zero	$< \pm 0.2\% / ^\circ\text{C}$ of full scale max (-20~70°C)	N/A for controller with auto-zero enabled
Temperature Coefficient of Span	$< \pm 0.1\% / ^\circ\text{C}$ of reading max (-20~70°C)	$< \pm 0.1\% / ^\circ\text{C}$ of reading max (-20~70°C)
Attitude Sensitivity of Zero	$< 1.4\%$ of full scale (N ₂ @ 50 psig)	$< 1.4\%$ of full scale before autozero (N ₂ @ 50 psig)
Analog I/O (standard)	0~5 VDC	0~5 VDC
Analog I/O (optional)	0~10 VDC, 0~20 mA, 4~20 mA	0~10 VDC, 0~20 mA, 4~20 mA
Wetted Materials	316L SS, Nickel 200, 302 SS, PTFE, Viton	316L SS, Nickel 200, 302 SS, PTFE, Viton, Kalrez® (valve seat)
Weight (approx.)	8.4 lb. (3.8kg)	15.5 lb. (7.0kg)
Analog Connector	15 Pin D-sub	15 Pin D-sub
Digital Connector	Dual RJ-12, 6P6C modular jack	Dual RJ-12, 6P6C modular jack
Power Requirements	11~36 VDC @ 3.1 Watt (max)	11~36 VDC @ 6.7 Watt (max)
	Unipolar or Bipolar (e.g. ± 15 VDC, ± 12 VDC)	Unipolar or Bipolar (e.g. ± 15 VDC, ± 12 VDC)

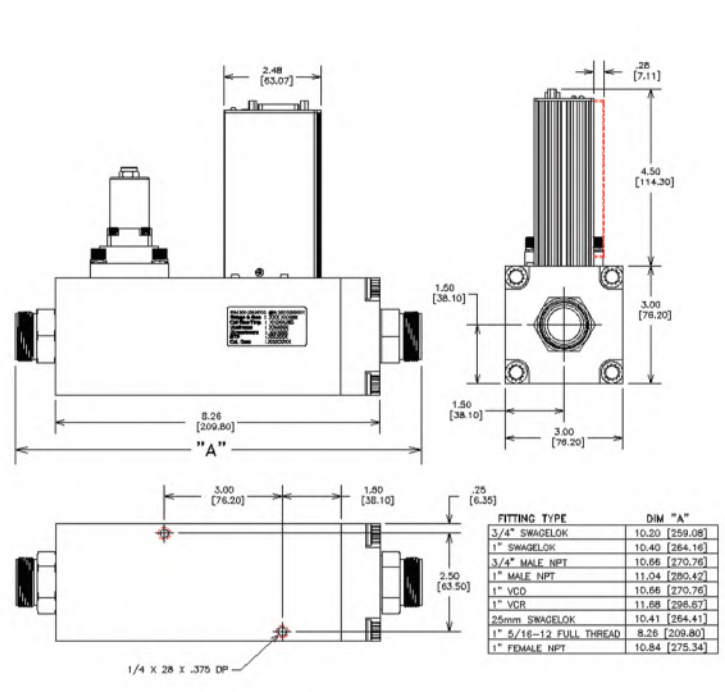
Pin Map



Outline Drawings - HFM-D-305A



Outline Drawings - HFC-D-307A



Selection chart

