유량계 (Turbine and Gear)

Turbine Flowmeters FMT Series



Feature

- ◆ 다양한 공정에 적합
- ◆ 액체에 대해 0.001 GPM : 가스에 대해 0.001 ACFM의 매우 저은 저소 으라도 추저 가느
- 매우 적은 저속 유량도 측정 가능

 ◆ 높은 출력 및 마그네틱 픽 오프로 출력하므로 유체 저항의 영향을 작게 받음
- ◆ Modulated carrier 픽 오프로 출력하므로 유체 저항의 영향을 받지 않음
- ◆ 특수한 목적으로 사용되는 베어링
- ♦ NIST 따른 교정

Specifications

Accuracy	Calibration Accuracy	Liquid: ±0.05%	Gas: ±0.25%	
	Repeatability	Liquid: ±0.1% of reading	Gas: ±0.2% of reading	
	Linearity	Maximum non-linearity is 5% to 50% depending upon range and viscosity of metered liquid or density of the metered gas IMPORTANT: Accuracy of primary flow calibration standard is directly traceable to NIST		
Pressure Drop		Liquid: Maximum pressure is 10 psid in normal 10:1 flow rate range with water at 70°F Gas: Maximum pressure drop is 12 inches of water in normal 10:1 flow rate range with air at S.T.P.		
End Connections		 3/4-16 UNF-3B per MS33649-08 1/2-14 FNPT ANSI Flange Others available upon request 		
Electrical Connections		MS3102 A-10SL-4P (2 pin connector) - For LD & CF Pickoff MS3102 A-10SL-3P (3 pin connector) - For LDA & CFA Pickoff Note: Mating connector MS3106A-10SL-4S (for LD & CF Pickoff) or MS3106A-10SL-3S (for LDA & CFA Pickoff) supplied. Explosion proof with 2 wire pigtails and 1/2"NPT connection terminates inside a condulet.		
Electrial Output	Magnetic Pickoff	30mV P-P at minimum linear rate		
	Modulated Carrier Pickof (with pre-amplifier)	0~5VDC or 0~10VDC pulse or open collector. Note: The unit is powered by a user supplied 8~30VDC. An on-board requlator provides the required regulation and noise rejection.		

Flow Range

Model Number	Liquid Service US Gallons/Min		Gas Service Actual Cubic Feet/Min		Orifice Size
Prefix	Normal	Extended	Normal	Extended	(Ref)
-3	0.20 - 2.00	0.10 - 2.00	0.25 - 2.00	0.15 - 2.00	0.250
-4	0.10 - 1.00	0.05 - 1.25	0.10 - 1.00	0.08 - 1.20	0.156
-5	0.07 - 0.70	0.02 - 0.80	0.07 - 0.70	0.04 - 0.80	0.084
-6	0.02 - 0.12	0.005 - 0.120	0.02-0.12	0.01 - 0.12	0.047
-7	Not Available	0.001 - 0.070	Not available	0.005 - 0.070	0.032



Premium Magnetic Pickups

<u>Features</u>

- ◆ VR(Variable reluctance)형 또는 유도전류형
- ◆ 2핀 커넥터(mate: MS3106-10SL-4P)
- ◆ 온도 범위 -270°C ~ 232°C
- ◆ 고충격 및 진동에도 견디도록 설계(impact: 25G's min.; vibration: 2G's at 2000Hz min.)

유량계 (Turbine and Gear)

Turbine Flowmeters FMT Series



Intrinsically Safe Pickups

Features

- ♦ VR(Variable reluctance)형 또는 유도전류형
- ♦ 2핀 커넥터(mate: MS3106-10SL-4P)
- ◆ 온도 범위 -54°F ~ 364°F (-65°C ~ 175°C)
- ◆ CSA (with NRTL/C) 및 CENELEC의 본질안전(intrinsically safe) 인증
- ◆ Class I, Zone O, IIC 및 Ex ia IIC T6 위험지역에서도 사용

Features



- ◆ VR(Variable reluctance)형 또는 유도전류형
- ◆ 2핀 커넥터(mate: MS3106-10SL-4P)
- ◆ 온도 범위 -450°F ~ 850°F (-270°C ~ 458°C)
- ◆ 충격 및 진동에도 견디도록 설계 (impact: 25 G's min.; vibration: 2 G's at 2000 Hz min.)

High Temperature Magnetic Pickups



Features

- ◆ 2핀 커넥터(mate: MS3106-10SL-4P) ◆ 온도 범위 -100°F ~ 400°F (-74°C ~ 204°C)
- ◆ 고충격 및 진동에도 견디도록 설계 (impact: 25 G''s min.; vibration: 2 G''s at 2000 Hz min.)

Modulated Carrier (RF) Pickups



Digi-Pulse Magnetic and RF Pickups

Туре	Variable reluctance or RF type	
Input Power	• 8 to 30VDC, 10mA max. @ no load	
Pulse Output	Choices of:	
	Open collector; maximum OFF voltage 30VDC Maximum ON current 0.40 amps	
	TTL/CMOS; fanout of 5 TTL/CMOS loads	
	• 0 to 10VDC square wave (requires 15 to 30VDC input power)	
Physical Features	• Operating temperature: 40°F to 185°F (-40°C to 85°C)	
Approvals	CE complaint to EMC Directive 89/336/EEC for use in residential,	
	commercial, light industrial and heavy industrial environments.	



Intrinsically Safe Digi-Pulse Magnetic and RF Pickups

Туре	Variable reluctance of RF type	
Input Power	• 13 to 28VDC, 35mA max. @ 24VDC (Class I, Zone 0, IIC models)	
	• 7.5 to 28VDC, 10mA @ \leq 10VDC (Class I, Zone 0 IIA models)	
Pulse Output	• TTL/CMOS; fanout of 5 TTL/CMOS loads	
	• Open collector; maximum OFF voltage 30VDC Maximum ON current 0.40 amps	
Physical Features	• Operating temperature: -40°F to 185°F(-40°C to 85°C)	
Approvals	Intrinsic Safety to CSA (with NRTL/C) and CENELEC	
	• CE compliant to EMC Directive 89/336/EEC for use residential,	
	commercial, light industrial and heavy industrial environments	