

# MT2E1

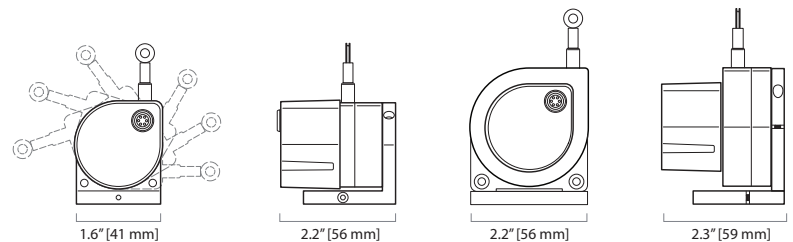
## Cable-Actuated Position Sensor Incremental Encoder Output • Test Applications

소형 스트링 포트 • 0–30 및 0–50인치 스트로크 범위 옵션  
이중 축 360° 장착 브래킷  
낙하 및 충돌 테스트 애플리케이션  
알루미늄 및 폴리카보네이트 인클로저



MT2E1은 견고하고 정확한 소형 케이블 작동 위치 변환기 제품군의 인코더 기반 제품입니다. MT2E1은 낙하 테스트 및 자동차 충돌 테스트에서 발생하는 높은 가속 요구 사항을 위해 설계된 고장력 헤비 듀티 측정 케이블을 특징으로 합니다.

MT2E1은 마운팅 브래킷에서 2축 360° 회전으로 설계되어 어떤 방향으로든 빠르고 간단하게 설치할 수 있습니다.



30 inch

50 inch

### GENERAL

**Full Stroke Range Options**

**Output Signal**

**Accuracy**

**Repeatability Resolution:**

0-30, 0-50 inches  
incremental encoder  
0.04% full stroke  
± 0.02% full stroke

### 30-inch Range

**50-inch Range**

**Measuring Cable**

**Enclosure Material**

**Sensor Cover Options**

**Sensor**

**Weight, 30-inch**

**Weight, 50-inch**

316 ± 5 pulses per inch  
188 ± 2 pulses per inch  
Ø.019-in. nylon-coated stainless steel  
anodized aluminum  
polycarbonate and aluminum optical  
incremental encoder  
0.5 lb. max.  
1.0 lb. max.

### ELECTRICAL

**Input Voltage, Vin**

**Input Current**

**Output Driver**

**Output Voltage,**

**Vout Mating Plug**

5 - 26 VDC  
50 mA (max, no load)  
push-pull (sink/source, 20mA max.)  
Vout = Vin  
LEMO FGG.OB.304.CLAD52

### MECHANICAL

**Measuring Cable Tension**

**Maximum Acceleration**

see ordering information  
see ordering information

### ENVIRONMENTAL

**Operating Temperature**

-32° to 158° F (0° to 70°C)

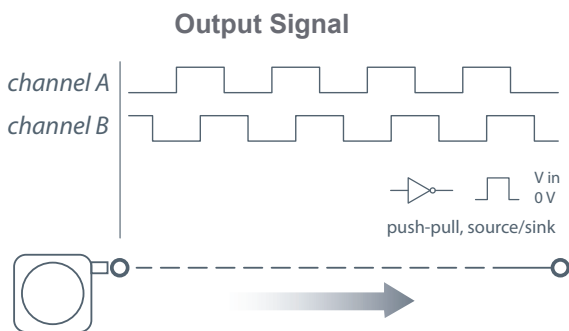


Fig. 1 - Outline Drawing, 30-inch range:

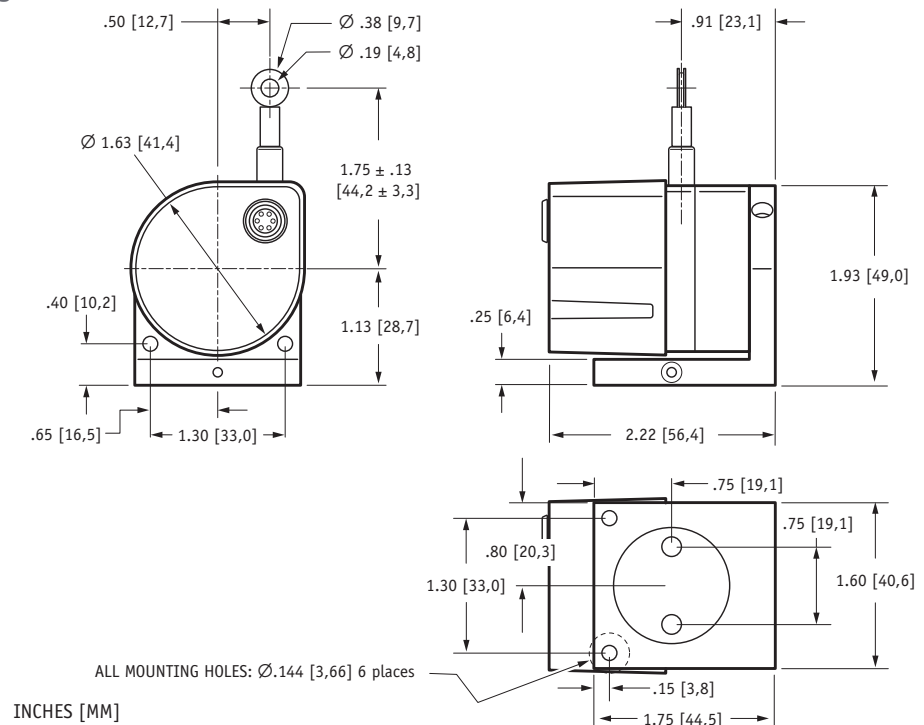
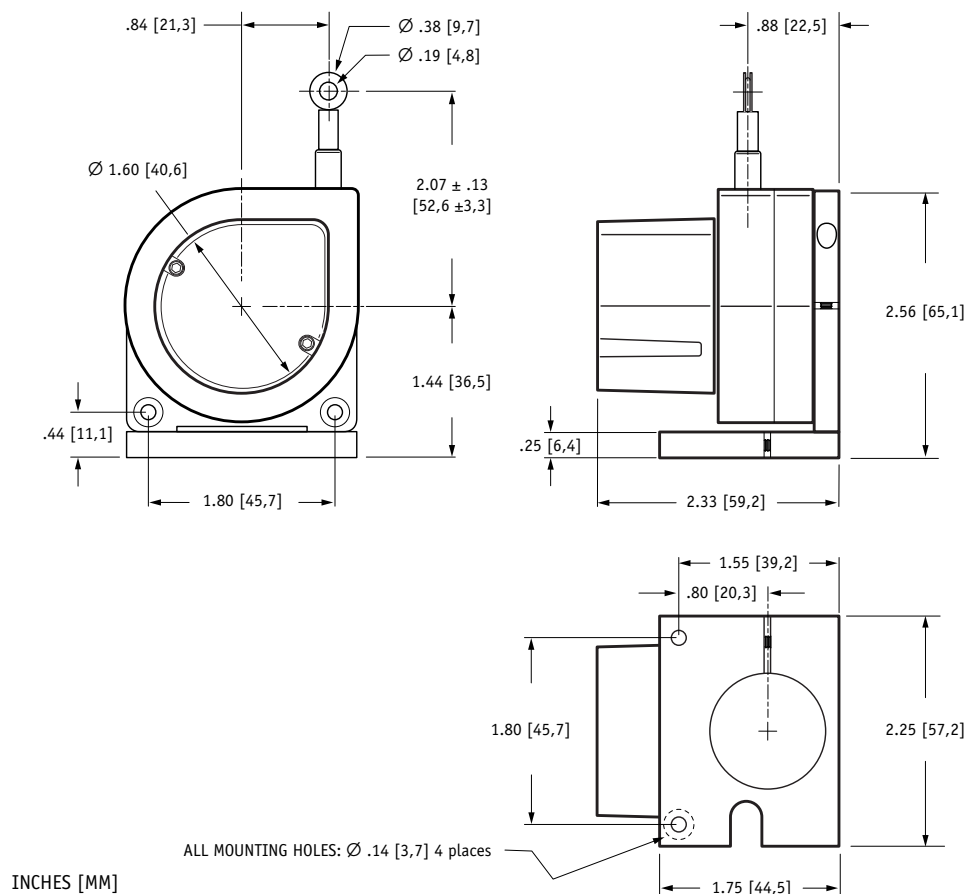


Fig. 2 - Outline Drawing, 50-inch range:



## Ordering Information:

### Model Number:

#### 30-inch Ordering Guide

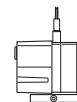
**MT2E1 - 30**     A     -     B     - **316** -     C    

order code:

Sample Model Number:

**MT2E1 - 30E - 33 - 316 - M1**

**R** range: 30 inches  
**A** measuring cable termination: eyelet  
**B** measuring cable tension: 33 oz. (±6 oz.)  
**C** electrical connection: end-mounted connector



see fig. 1

#### 50-inch Ordering Guide

**MT2E1 - 50**     A     -     B     - **188** -     C    

order code:

Sample Model Number:

**MT2E1 - 50E - 22 - 188 - M1**

**R** range: 50 inches  
**A** measuring cable termination: eyelet  
**B** measuring cable tension: 22 oz. (±6 oz.)  
**C** electrical connection: end-mounted connector



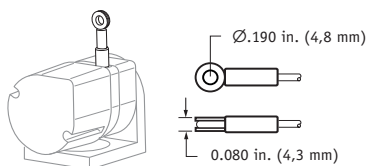
see fig. 2

### Measuring Cable Termination:

**A** order code:

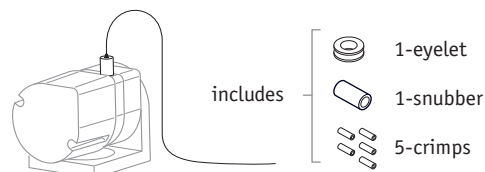
**E**

Eyelet



**L**

Leader Cable (24 in. long)



### Measuring Cable Tension:

**B** order code:

**9**

**14**

**33**

30-inch range option:	9 (±3) oz.	14 (±5) oz.	33 (±10) oz.
max. cable acceleration:	99 g	136 g	136 g
spring cycle-life, 80% extension:	≥ 1 million	150,000	75,000
spring cycle-life, 50% extension:	≥ 1 million	≥ 1 million	≥ 1 million

**B** order code:

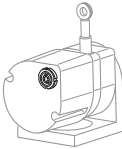
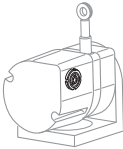

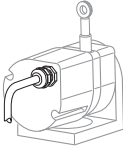
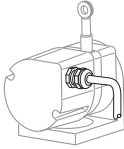
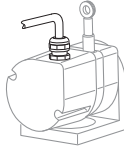

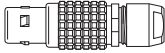
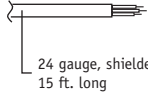
**9**

**22**

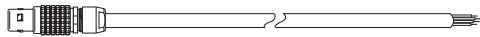
50-inch range option:	9 (±3) oz.	22 (±7) oz.
max. cable acceleration:	46 g	68 g
spring cycle-life, 80% extension:	≥ 1 million	150,000
spring cycle-life, 50% extension:	≥ 1 million	≥ 1 million

# Ordering Information (cont.):

## Electrical Connection:

C order code:		M1	M1A	M2	M2A	M3	M3A											
sensor cover:		polycarbonate	aluminum	polycarbonate	aluminum	polycarbonate	aluminum											
electrical connection:		end-mount connector <i>mating plug included</i>			side-mount connector <i>mating plug included</i>			top-mount connector <i>mating plug included</i>										
C order code:		C1	C1A	C2	C2A	C3	C3A											
sensor cover:		polycarbonate	aluminum	polycarbonate	aluminum	polycarbonate	aluminum											
electrical connection:		end-mount instrumentation cable <i>15-ft. long, 24 gauge shielded</i>			side-mount instrumentation cable <i>15-ft. long, 24 gauge shielded</i>			top-mount instrumentation cable <i>15-ft. long, 24 gauge shielded</i>										
		 Lemo FGG.0B.304.CLAD52			 24 gauge, shielded, 15 ft. long			<table><thead><tr><th>color</th><th>signal</th></tr></thead><tbody><tr><td>Red</td><td>input voltage (V+)</td></tr><tr><td>Black</td><td>common (gnd.)</td></tr><tr><td>Green</td><td>channel A</td></tr><tr><td>White</td><td>channel B</td></tr></tbody></table>	color	signal	Red	input voltage (V+)	Black	common (gnd.)	Green	channel A	White	channel B
color	signal																	
Red	input voltage (V+)																	
Black	common (gnd.)																	
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White	channel B																	
contact view																		

## Accessories:



Part Number	Description
9603957-0015	15 ft. long cordset. Includes mating connector with 15 ft., 24 gauge, shielded multiconductor cable. Signals: V+, Gnd, Channel A, Channel B

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