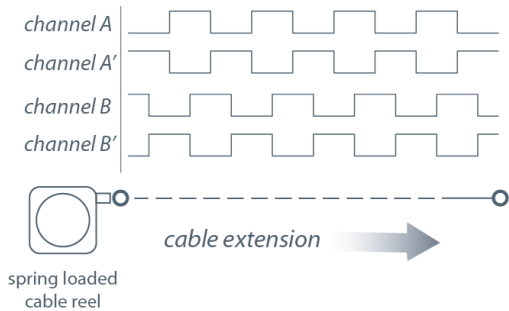




The MT2E is our new encoder-based member to our family of rugged, accurate miniature cable-extension position transducers. The Celesco MT2E features a highly-tensioned heavy-duty measuring cable that was designed for the high-acceleration demands encountered in flight testing and automotive crash tests.

The MT2E was designed with 2-axis 360° rotation in its mounting bracket which allows for fast and simple installation in any direction.

## Output Signal



-- see ordering information for available channels

# MT2E

## Cable Actuated Sensor

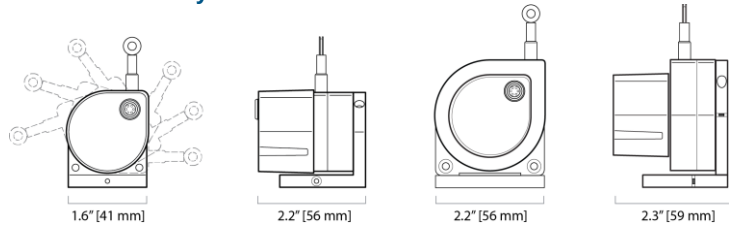
## Test Applications • Incremental Encoder

**Compact String Pot • 30-inch Stroke Range**

**Dual Axis 360° Mounting Bracket**

**Flight/Crash Test Applications**

**Aluminum & Polycarbonate Enclosure**



## General

<b>Full Stroke Range</b>	0-30 inches, min.
<b>Output Signal</b>	incremental encoder
<b>Accuracy</b>	0.04% full stroke
<b>Repeatability</b>	± 0.02% full stroke
<b>Resolution</b>	316 ± 7 pulses per inch (13 ± 1 pulses per mm)
<b>Measuring Cable</b>	Ø.019-in. nylon-coated stainless steel
<b>Enclosure Material</b>	anodized aluminum
<b>Sensor Cover</b>	polycarbonate
<b>Sensor</b>	optical incremental encoder
<b>Weight</b>	0.5 lb. max.

## Electrical

<b>Input Voltage</b>	5 - 26 VDC
<b>Input Current</b>	35 mA, no load
<b>Output Driver</b>	push-pull, 20 mA source/sink
<b>Output Voltage</b>	equal to the input voltage
<b>Mating Plug</b>	LEMO FGG.OB.304.CLAD52

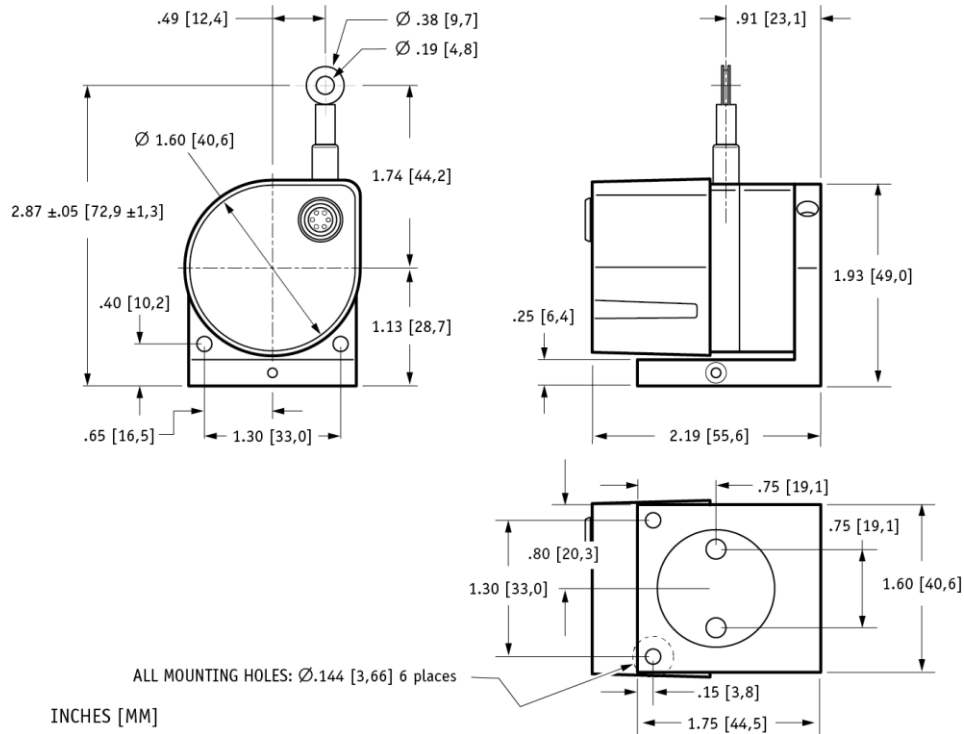
## Mechanical

<b>Measuring Cable</b>	9, 14 and 33 oz.
<b>Tension Options</b>	
<b>Maximum Measuring Cable Acceleration</b>	136 g

## Environmental

<b>Operating Temperature</b>	32° to 158° F ( 0° to 70°C)
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## Outline Drawing



## Ordering Information

### Model Number:

**MT2E - 30** **-** **- 316 -**

order code: **A** **B** **C**

### Sample Model Number:

**MT2E - 30E - 33 - 316 - M1**

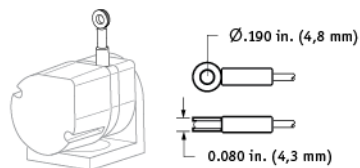
<b>R</b> range:	30 inches
<b>A</b> measuring cable termination:	eyelet
<b>B</b> measuring cable tension:	33 oz. ( $\pm 6$ oz.)
<b>C</b> electrical connection:	end-mounted connector

### Measuring Cable Termination:

#### **A** order code:

#### **E**

Eyelet



#### **L**

Leader Cable (24 in. long)



### Measuring Cable Tension:

#### **B** order code:


#### **9**

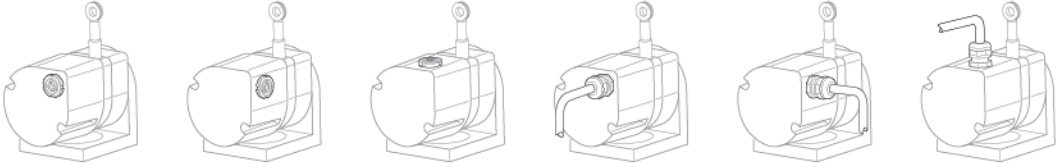
#### **14**

#### **33**


tension:	9 ( $\pm 2$ ) oz.	14 ( $\pm 4$ ) oz.	33 ( $\pm 6$ ) oz.
max. cable acceleration:	99 g	136 g	136 g
spring cycle-life, 25-inch extension:	$\geq 1$ million	150,000	75,000
spring cycle-life, 15-inch extension:	$\geq 1$ million	$\geq 1$ million	$\geq 1$ million

Electrical Connection

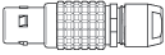
 order code:	M1	M2	M3	C1	C2	C3
connection:	end-mount connector	side-mount connector	top-mount connector	end-mount strain relief	side-mount strain relief	top-mount strain relief
available channels:	A, B	A, B	A, B	A, A', B, B'	A, A', B, B'	A, A', B, B'



4-pin Connector



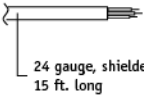
contact view



Lemo FGG.0B.304.CLA052

pin#	signal
1	input voltage (V+)
2	common (gnd.)
3	channel A
4	channel B

Instrumentation Cable



24 gauge, shielded,  
15 ft. long

color	signal
Red	input voltage (V+)
Black	common (gnd.)
Green	channel A
White	channel B
Blue	channel A
Brown	channel B

Accessories

Part Number	Description
9603957-0015	15 ft. long cordset. Includes mating connector with 15 ft., 24 gauge, shielded multi-conductor cable

SENSOR SOLUTIONS /// MT2E

12//2015

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