



# MT2E

## Cable Actuated Sensor

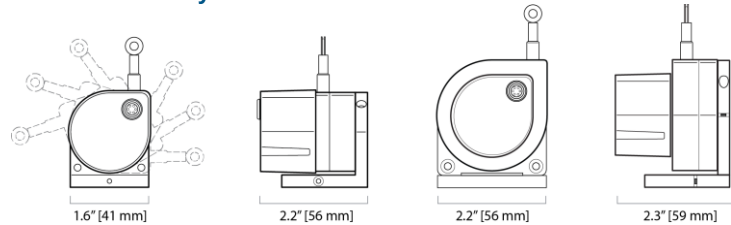
### Test Applications • Incremental Encoder

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

**Dual Axis 360° Mounting Bracket**

**Flight/Crash Test Applications**

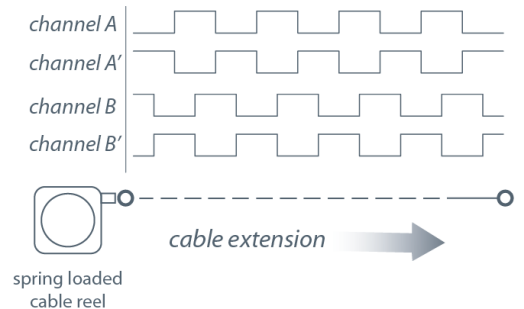
**Aluminum & Polycarbonate Enclosure**



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

### 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

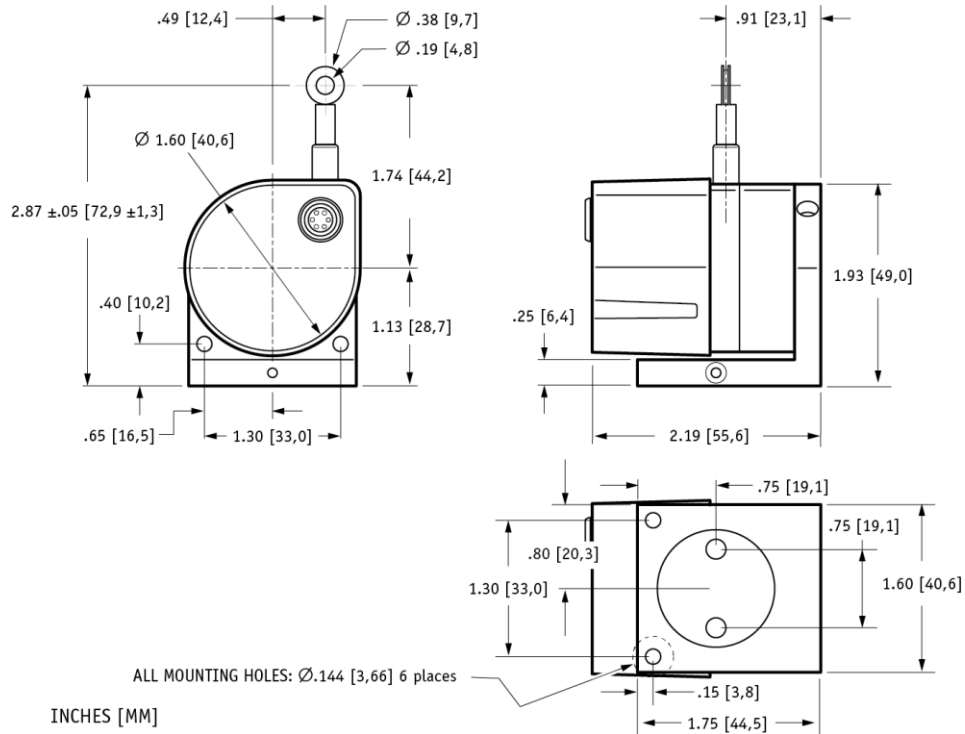
### Environmental

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

# MT2E

Test Applications • Incremental Encoder

## Outline Drawing



## Ordering Information

Model Number:

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

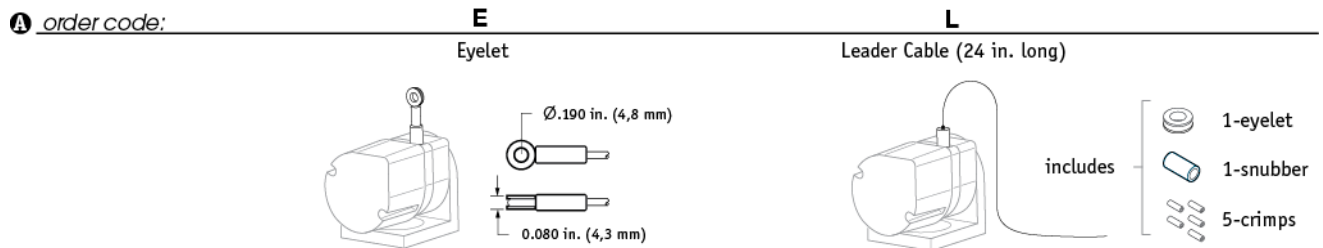
order code:                    **A**                    **B**                    **C**

Sample Model Number:

**MT2E - 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

### Measuring Cable Termination:

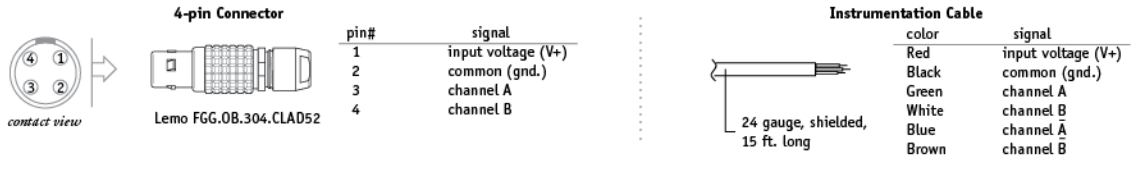
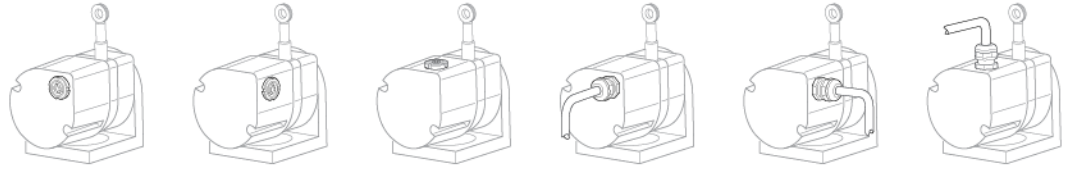


### Measuring Cable Tension:

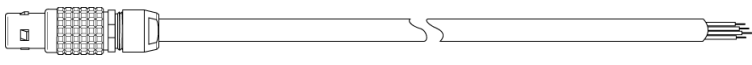
<b>B</b> order code:	<b>9</b>	<b>14</b>	<b>33</b>
tension:	9 (±2) oz.	14 (±4) oz.	33 (±6) oz.
max. cable acceleration:	99 g	136 g	136 g
spring cycle-life, 25-inch extension:	≥ 1 million	150,000	75,000
spring cycle-life, 15-inch extension:	≥ 1 million	≥ 1 million	≥ 1 million

**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'



**Accessories**



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

**NORTH AMERICA**

Measurement Specialties, Inc.,  
 a TE Connectivity company  
 20630 Plummer Street  
 Chatsworth, CA 91311  
 Tel +1 800 423 5483  
 Tel +1 818 701 2750  
 Fax +1 818 701 2799  
 info@celesco.com

**TE.com/sensorsolutions**

Measurement Specialties, Inc., a TE Connectivity company.  
 Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.

MT2E 12/01/2015