

Mini Series: Cable-Extension Position Transducer

Range: 0-30 inches

Test Applications • 360° 2-Axis Mounting

Incremental Encoder Output



MT2E



Specification Summary:

GENERAL

Full Stroke Ranges 0-30 inches, min., *see ordering information*
 Output Signal incremental encoder (quadrature) signal
 Accuracy
 Typical the lesser of 0.02% f.s. or 0.04% of measurement $\pm 1/2$ pulse max.
 Best not less than 0.001 in. (0,03 mm)
 Repeatability $\pm 0.02\%$ of measurement $\pm 1/2$ pulse max.
 Resolution 316 ± 7 pulses per inch (13 ± 1 pulses per mm)
 Measuring Cable $\varnothing.019$ -in. nylon-coated stainless steel
 Enclosure Material anodized aluminum
 Sensor Cover polycarbonate
 Sensor optical incremental encoder

ELECTRICAL

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

MECHANICAL

Measuring Cable Tension Options 9 and 33 oz., *see ordering information*
 Maximum Measuring Cable Acceleration 136 G's, *see ordering information*

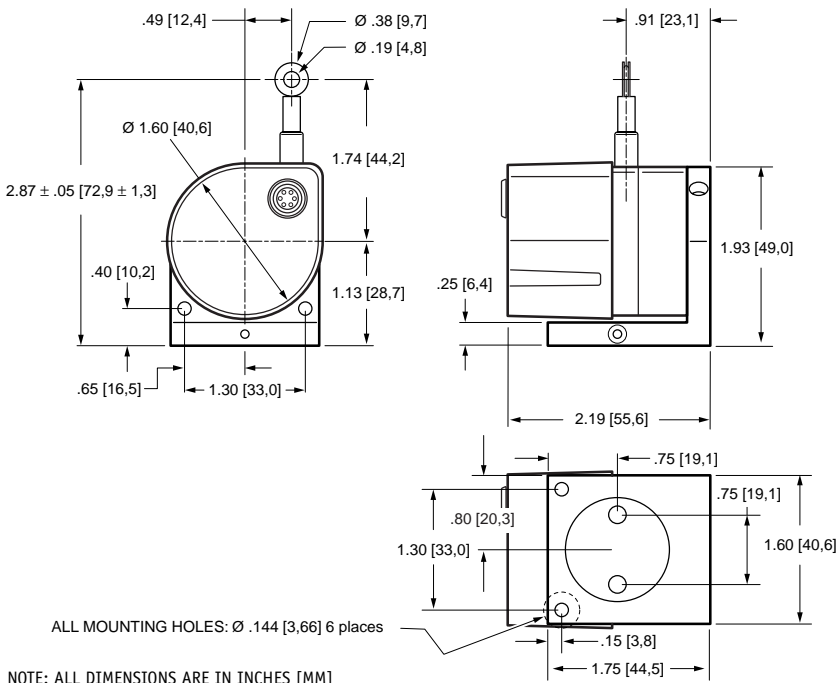
ENVIRONMENTAL

Operating Temperature 0° to 70°C

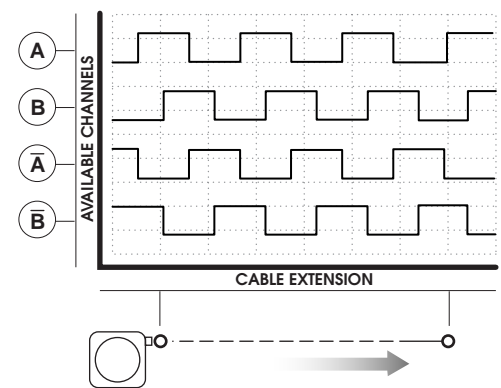
The MT2E is our new encoder-based member to our family of rugged, accurate miniature cable-extension position transducers. The Celesco MT2E features a highly-tensioned heavy-duty measuring cable that was designed for the high-acceleration demands encountered in flight testing and automotive crash tests.

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

Dimensions



Electrical Output Signal:



MT2E • Miniature Cable-Extension Transducer • Incremental Encoder Output

Ordering Information

Model Number:

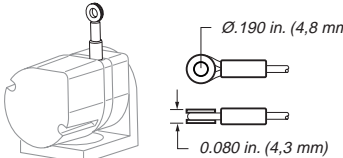
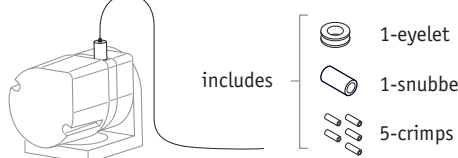
MT2E - 30 **-** **- 316**
order code: A B C

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

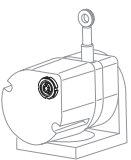
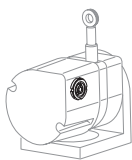
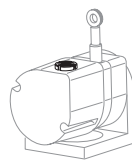
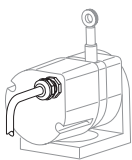
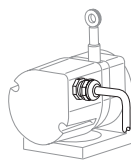
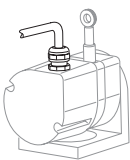
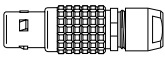
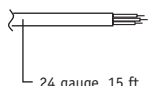
Measuring Cable Termination:

A order code: description:	E Eyelet	L Leader Cable (24 in. long)
		

Measuring Cable Tension:

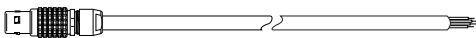
B order code: tension: max. cable acceleration: spring cycle-life:	9 9 (±2) oz. 99 G's 100,000	33 33 (±6) oz. 136 G's 25,000
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Electrical Connection:

C order code: description:	M1* end-mount connector	M2* side-mount connector	M3* top-mount connector	C1 end-mount strain relief	C2 side-mount strain relief	C3 top-mount strain relief																								
																														
	<p>4-pin Connector</p>  <p>Lemo FGG.0B.304.CLA052</p> <table border="1"> <thead> <tr> <th>pin#</th> <th>signal</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>input voltage (V+)</td> </tr> <tr> <td>2</td> <td>common (gnd.)</td> </tr> <tr> <td>3</td> <td>channel A</td> </tr> <tr> <td>4</td> <td>channel B</td> </tr> </tbody> </table>			pin#	signal	1	input voltage (V+)	2	common (gnd.)	3	channel A	4	channel B	<p>Instrumentation Cable</p>  <table border="1"> <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> <tr> <td>Blue</td> <td>channel A</td> </tr> <tr> <td>Brown</td> <td>channel B</td> </tr> </tbody> </table>			color	signal	Red	input voltage (V+)	Black	common (gnd.)	Green	channel A	White	channel B	Blue	channel A	Brown	channel B
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**Note! Connector options M1, M2 and M3 have only Channels A & B; complimentary channels are only available with options C1, C2 or C3.*

Accessories:



Part No.: 9603957-0015
 Description: 15 ft. long cordset
 includes mating connector and 15 ft., 24 gauge multiconductor cable