

MT2E

Test Applications • Incremental Encoder

Compact String Pot • 0-30,0-50 inch Stroke Range

Dual Axis 360° Mounting Bracket

Flight/Crash Test Applications

Aluminum & Polycarbonate Enclosure



GENERAL

Full Stroke Range	0-30 ,0-50 inches
Output Signal	incremental encoder
Accuracy	0.04% full stroke
Repeatability	± 0.02% full stroke
Resolution	0-30 inch, 316 ± 5 pulses per inch 0-50 inch, 188 ± 2 pulses per inch
Measuring Cable	Ø.019-in. nylon-coated stainless steel
Enclosure Material	anodized aluminum
Sensor Cover	polycarbonate
Sensor	optical incremental encoder
Weight	0.5 lb. max.

ELECTRICAL

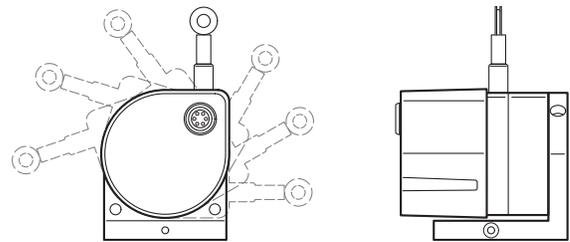
Input Voltage	5 - 26 VDC
Input Current	50 mA, no load
Output Driver	push-pull, 20 mA source/sink
Output Voltage	equal to the input voltage
Mating Plug	LEMO FGG.OB.304.CLAD52

MECHANICAL

Measuring Cable Tension Options	see ordering information
Maximum Measuring Cable Acceleration	see ordering information

ENVIRONMENTAL

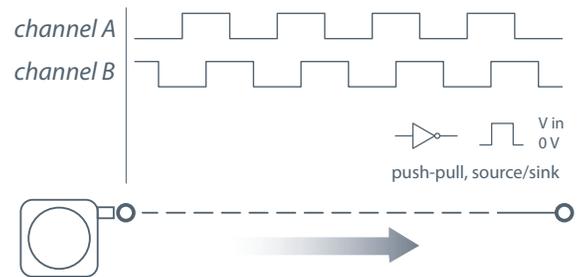
Operating Temperature	32° to 158° F (0° to 70°C)
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The MT2E is our new encoder-based member to our family of rugged, accurate miniature cable-extension position transducers. The Celesco MT2E features a highly-tensioned heavy-duty measuring cable that 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.

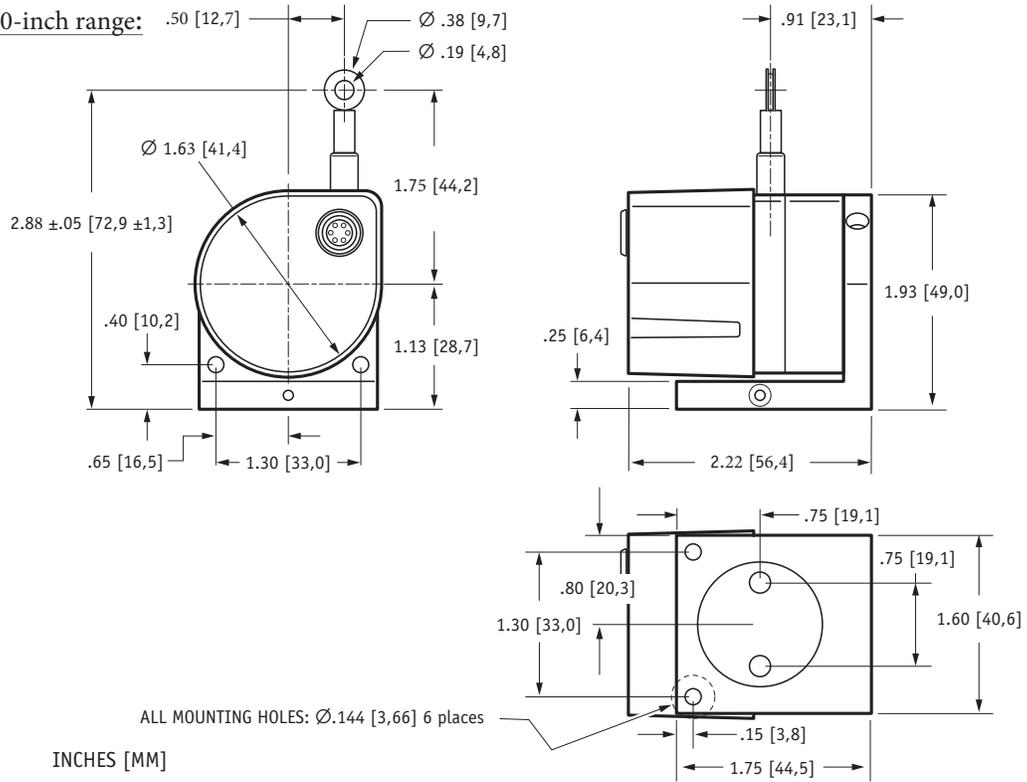
Output Signal



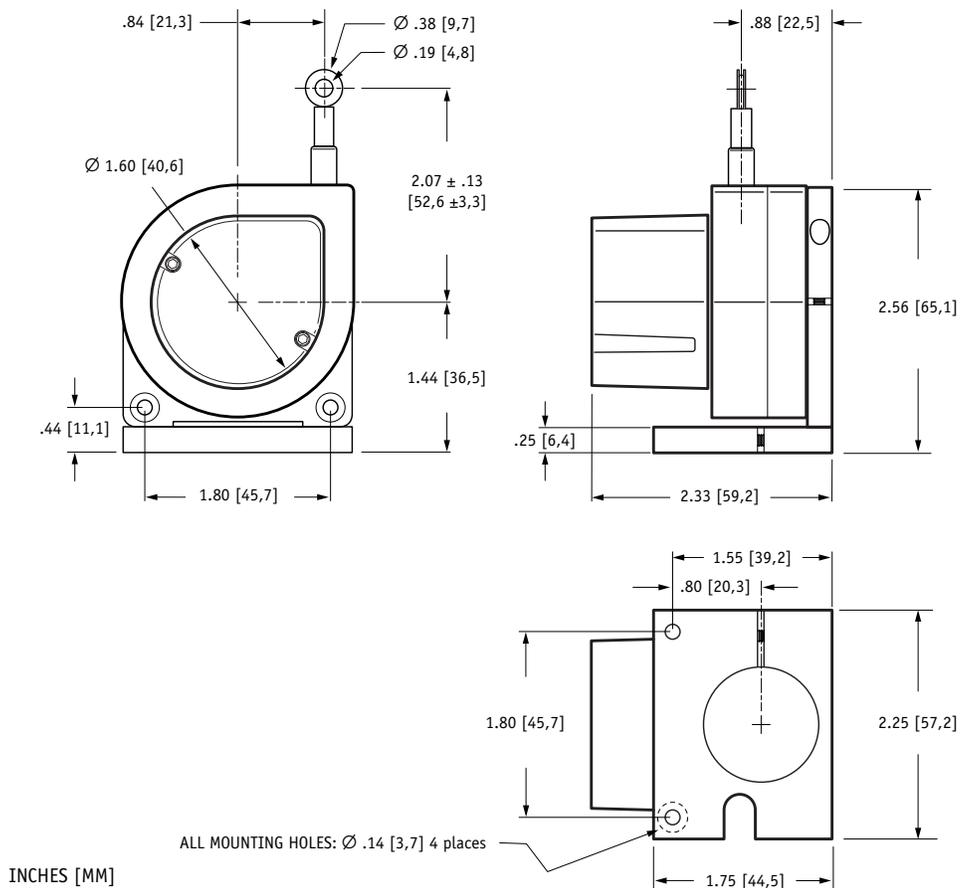
-- see ordering information for available channels



Outline Drawing, 30-inch range:



Outline Drawing, 50-inch range:



Ordering Information:

Model Number:

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

MT2E - 50 order code: ^A - ^B - **188** - ^C

Sample Model Number:

MT2E - 30E - 33 - 316 - M1

- ^R range: 30 inches
- ^A measuring cable termination: eyelet
- ^B measuring cable tension: 33 oz. (±10 oz.)
- ^C electrical connection: end-mounted connector

Sample Model Number:

MT2E - 50E - 22 - 188 - M1

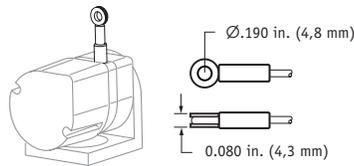
- ^R range: 50 inches
- ^A measuring cable termination: eyelet
- ^B measuring cable tension: 22 oz. (±7 oz.)
- ^C electrical connection: end-mounted connector

Measuring Cable Termination:

^A order code:

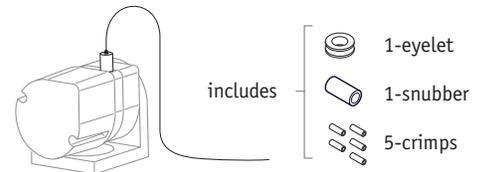
E

Eyelet



L

Leader Cable (24 in. long)



Measuring Cable Tension:

^B order code:

	9	14	33
30-inch range option:	9 (±3) oz.	14 (±4) 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

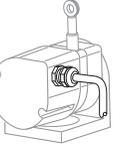
^B order code:

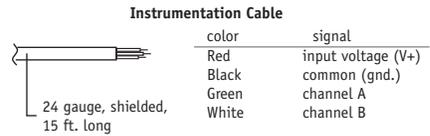
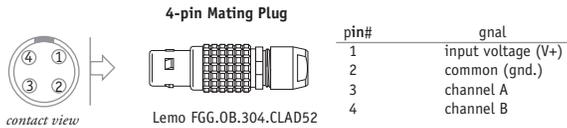
	9	22
50-inch range option:	9 (±3) oz.	22(±7) oz.
max. cable acceleration:	46 g	68 g
spring cycle-life, 80% extension:	≥ 1 million	150,000
spring cycle-life, 50% extension:	≥ 1 million	≥ 1 million

Ordering Information (cont.):

Electrical Connection:

	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>

	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>



Accessories:



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

version: 5.2 last updated: December 18, 2015

