



MT2E

Cable Actuated Sensor

Test Applications • Incremental Encoder

Compact String Pot • 0-30 & 0-50 inch Stroke Range Options

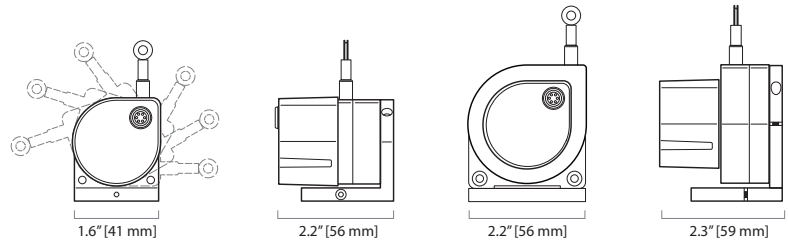
Dual Axis 360° Mounting Bracket

Flight/Crash Test Applications

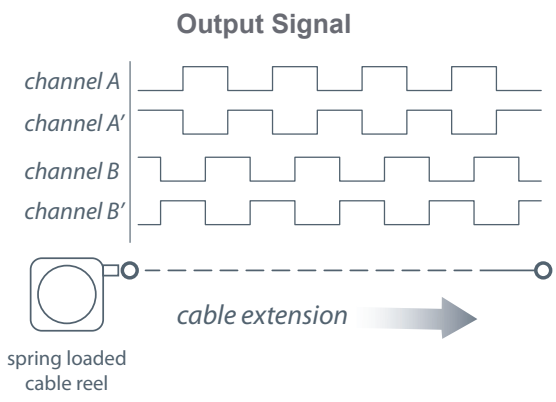
Aluminum & Polycarbonate Enclosure

The MT2E is our new encoder-based member to our family of rugged, accurate miniature cable-extension position transducers. The Celeco 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.



	30 inch	50 inch
GENERAL		
Full Stroke Range Options		0-30, 0-50 inches
Output Signal		incremental encoder
Accuracy		0.04% full stroke
Repeatability		± 0.02% full stroke
Resolution:		
30-inch Range		316 ± 5 pulses per inch
50-inch Range		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, 30-inch		0.5 lb. max.
Weight, 50-inch		1.0 lb. max.



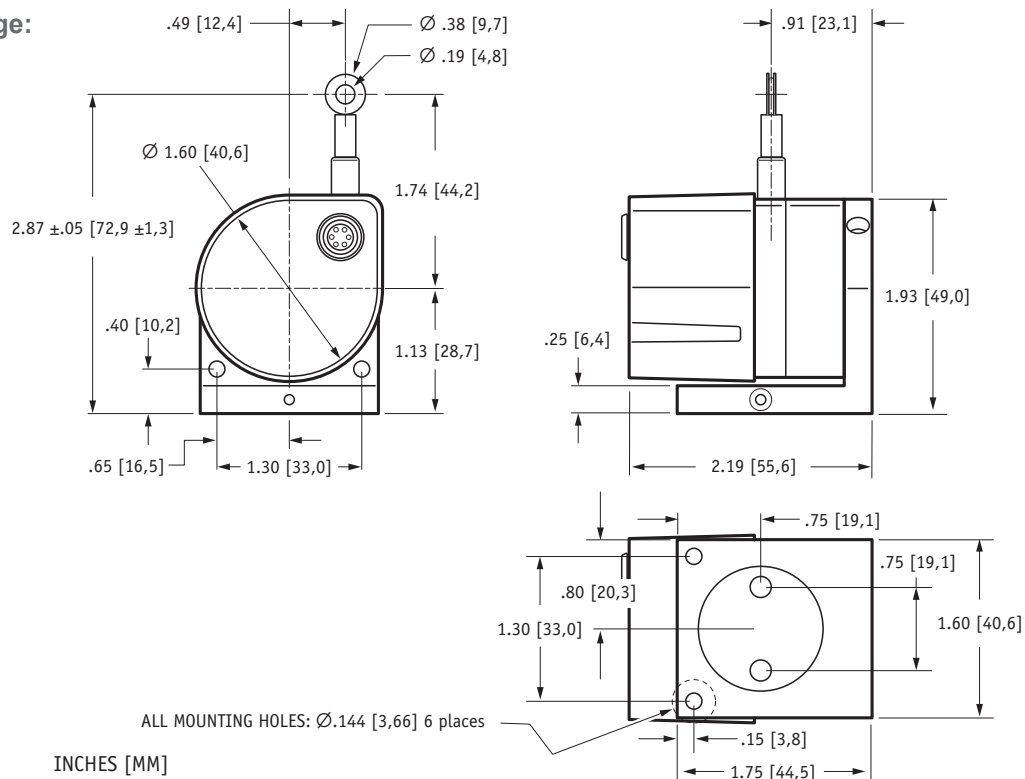
-- see ordering information for available channels

ELECTRICAL	
Input Voltage	5 - 26 VDC
Input Current	35 mA, no load
Output Driver	push-pull, 20 mA source/sink
Output Voltage	V _{in} = V _{out}
Mating Plug	LEMO FGG.OB.304.CLAD52

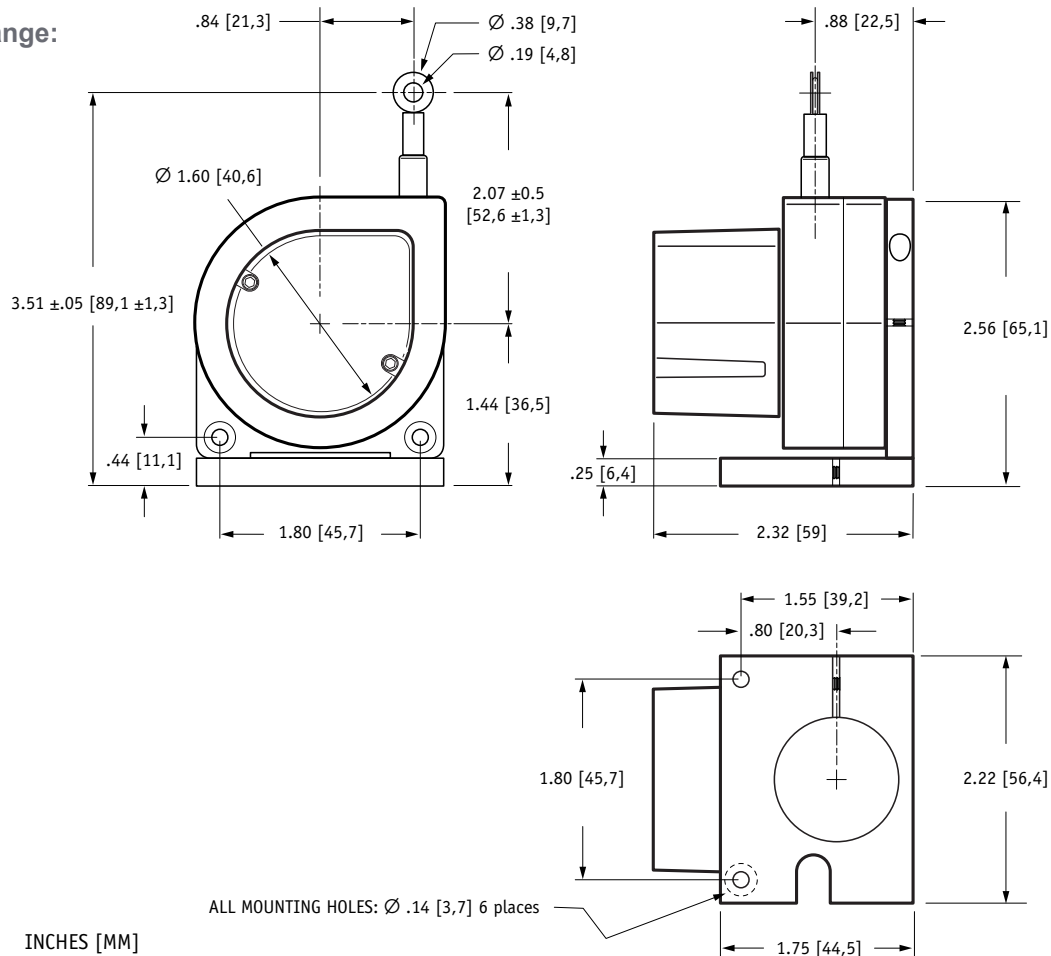
MECHANICAL	
Measuring Cable Tension	see ordering information
Maximum Acceleration	see ordering information

ENVIRONMENTAL	
Operating Temperature	32° to 158° F (0° to 70°C)

Outline Drawing, 30-inch range:



Outline Drawing, 50-inch range:



Ordering Information:

Model Number:

30-inch Range
Ordering Guide

MT2E - 30 _{order code:} ^A - ^B - **316** - ^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

50-inch Range
Ordering Guide

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

Sample Model Number:

MT2E - 50E - 22 - 188 - M1

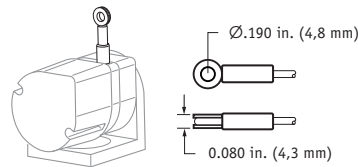
- R** range: 50 inches
- A** measuring cable termination: eyelet
- B** measuring cable tension: 22 oz. (±6 oz.)
- C** electrical connection: end-mounted connector

Measuring Cable Termination:

A order code:

E

Eyelet



L

Leader Cable (24 in. long)



Measuring Cable Tension:

B order code:

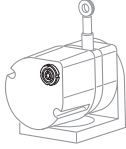
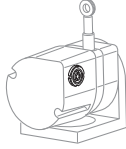

	9	14	33
30-inch range option:	9 (±3) oz.	14 (±5) oz.	33 (±11) oz.
max. cable acceleration:	99 g	136 g	136 g
spring cycle-life, 80% extension:	≥ 1 million	150,000	75,000
spring cycle-life, 50% extension:	≥ 1 million	≥ 1 million	≥ 1 million

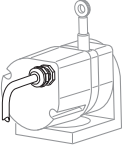
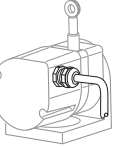

B order code:

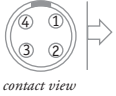
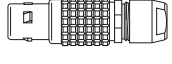
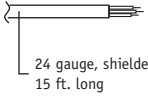
	9	22
50-inch range option:	9 (±3) oz.	14 (±5) oz.
max. cable acceleration:	99 g	136 g
spring cycle-life, 80% extension:	≥ 1 million	150,000
spring cycle-life, 50% extension:	≥ 1 million	≥ 1 million

Ordering Information (cont.):

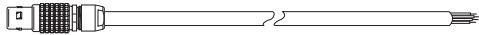
Electrical Connection:

Ⓢ order code:	M1	M1A	M2	M2A	M3	M3A
sensor cover:	polycarbonate	aluminum	polycarbonate	aluminum	polycarbonate	aluminum
available channels:	A, B	A, B	A, B	A, B	A, B	A, B
electrical connection:	 end-mount connector mating plug included		 side-mount connector mating plug included		 top-mount connector mating plug included	

Ⓢ order code:	C1	C1A	C2	C2A	C3	C3A
sensor cover:	polycarbonate	aluminum	polycarbonate	aluminum	polycarbonate	aluminum
available channels:	A, A', B, B'	A, A', B, B'	A, A', B, B'	A, A', B, B'	A, A', B, B'	A, A', B, B'
electrical connection:	 end-mount instrumentation cable 15-ft. long, 24 gauge shielded		 side-mount instrumentation cable 15-ft. long, 24 gauge shielded		 top-mount instrumentation cable 15-ft. long, 24 gauge shielded	

4-pin Connector		pin#	signal	Instrumentation Cable		
 contact view	 Lemo FGG.0B.304.CLAD52	1	input voltage (V+)	 24 gauge, shielded, 15 ft. long	Red	input voltage (V+)
		2	common (gnd.)		Black	common (gnd.)
		3	channel A		Green	channel A
		4	channel B		White	channel B
					Blue	channel A
					Brown	channel B

Accessories:



Part Number

9603957-0015

Description

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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