



MT2E

Cable Actuated Sensor

Test Applications • Incremental Encoder

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

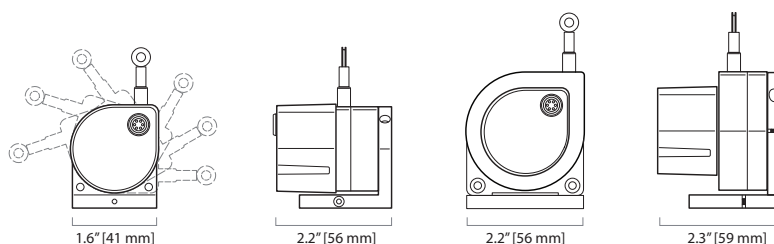
Dual Axis 360° Mounting Bracket

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 Celestco 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

Output Signal

Accuracy

Repeatability

Resolution:

30-inch Range

50-inch Range

Measuring Cable

Enclosure Material

Sensor Cover

Sensor

Weight, 30-inch

Weight, 50-inch

0-30, 0-50 inches

incremental encoder

0.04% full stroke

± 0.02% full stroke

316 ± 5 pulses per inch

188 ± 2 pulses per inch

Ø.019-in. nylon-coated stainless steel

anodized aluminum

polycarbonate

optical incremental encoder

0.5 lb. max.

1.0 lb. max.

ELECTRICAL

Input Voltage

Input Current

Output Driver

Output Voltage

Mating Plug

5 - 26 VDC

35 mA, no load

push-pull, 20 mA source/sink

Vin = Vout

LEMO FGG.OB.304.CLAD52

MECHANICAL

Measuring Cable Tension

Maximum Acceleration

see ordering information

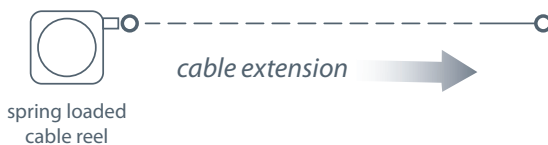
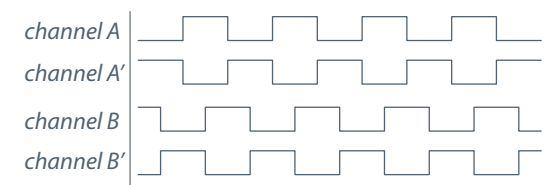
see ordering information

ENVIRONMENTAL

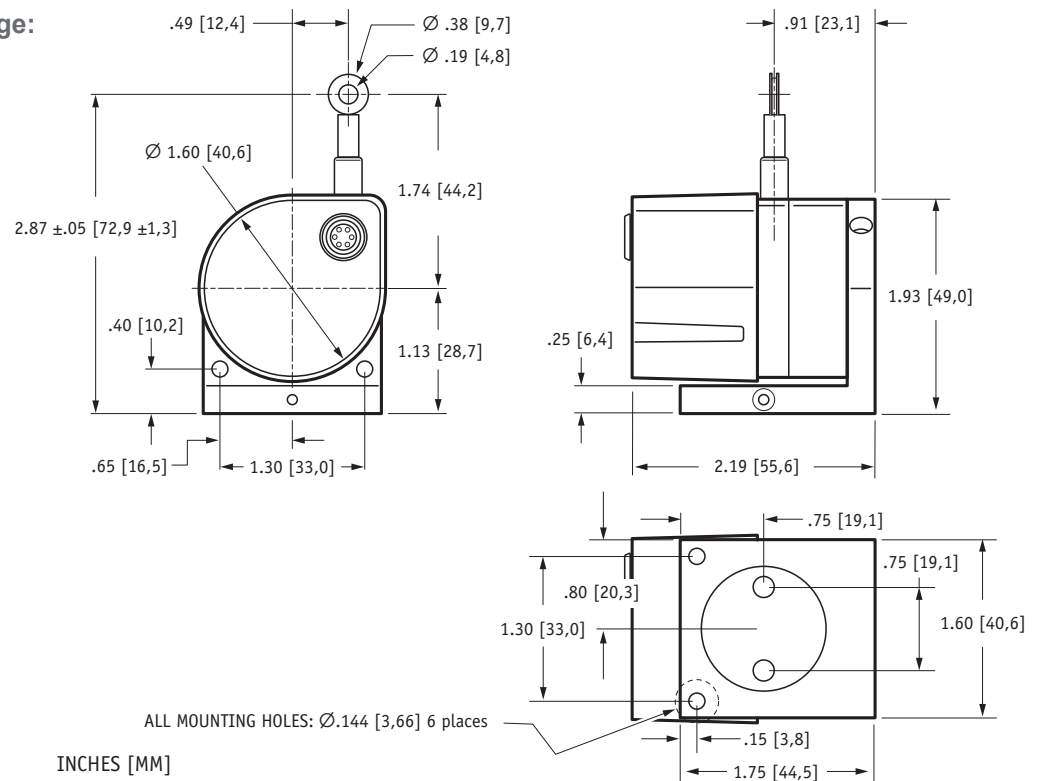
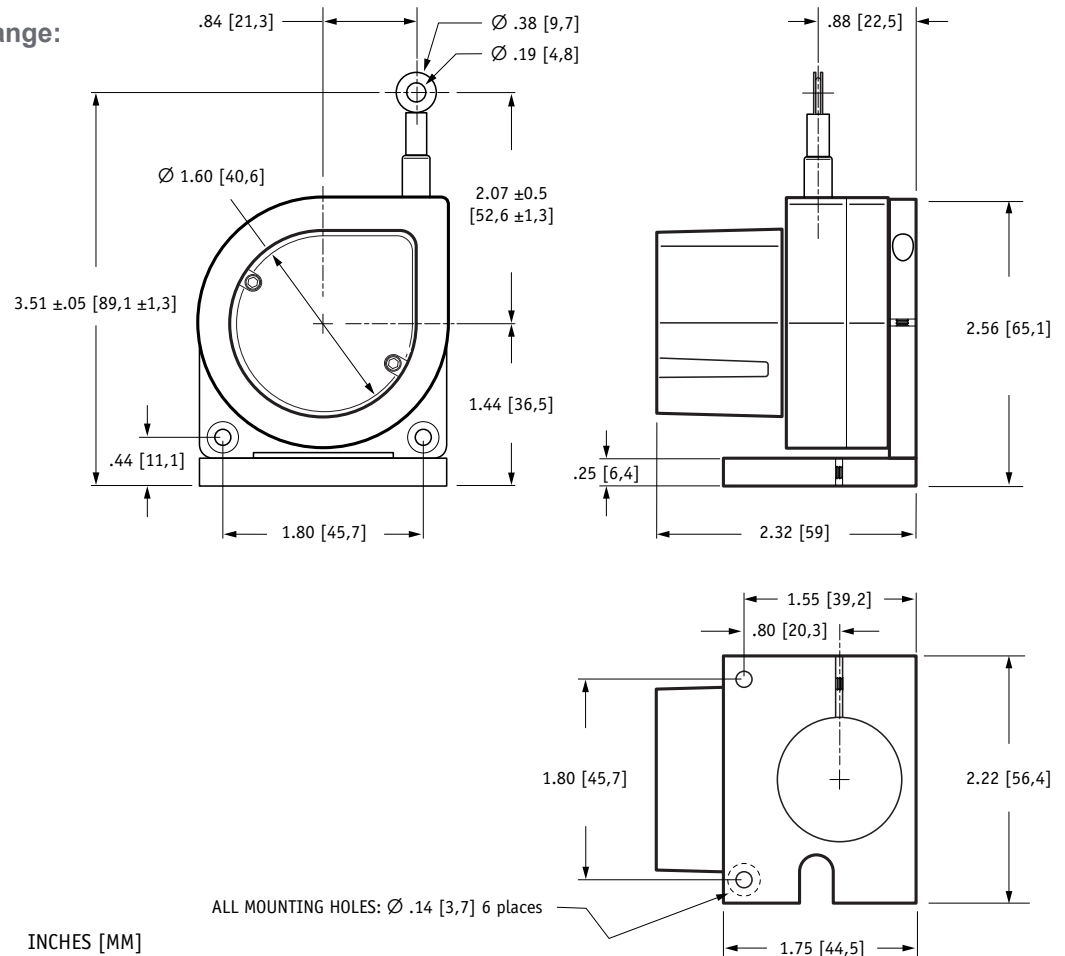
Operating Temperature

32° to 158° F (0° to 70°C)

Output Signal



-- see ordering information for available channels

Outline Drawing, 30-inch range:

Outline Drawing, 50-inch range:


Ordering Information:

Model Number:

30-inch Range Ordering Guide

MT2E - 30 order code: **-** **- 316 -**

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

50-inch Range Ordering Guide

MT2E - 50 order code: **-** **- 188 -**

A B C

Sample Model Number:

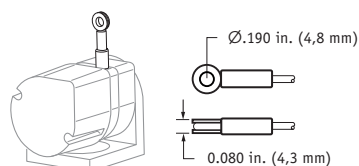
MT2E - 50E - 22 - 188 - M1

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

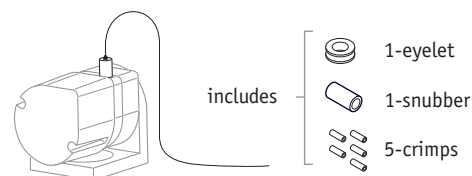
Measuring Cable Termination:

A order code:

E
Eyelet



L
Leader Cable (24 in. long)



Measuring Cable Tension:

B order code:

30-inch range option:
 max. cable acceleration:
 spring cycle-life, 80% extension:
 spring cycle-life, 50% extension:

9

9 (±3) oz.
 99 g
 ≥ 1 million
 ≥ 1 million

14

14 (±5) oz.
 136 g
 150,000
 ≥ 1 million

33

33 (±11) oz.
 136 g
 75,000
 ≥ 1 million

B order code:

50-inch range option:
 max. cable acceleration:
 spring cycle-life, 80% extension:
 spring cycle-life, 50% extension:

9

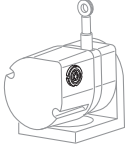
9 (±3) oz.
 99 g
 ≥ 1 million
 ≥ 1 million

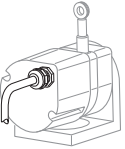
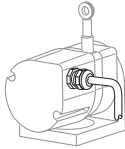
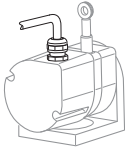
22

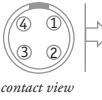
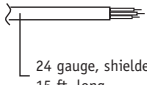
14 (±5) oz.
 136 g
 150,000
 ≥ 1 million

Ordering Information (cont.):

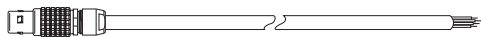
Electrical Connection:

 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 <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
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 <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>

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

Accessories:



Part Number	Description
9603957-0015	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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