

MT3A

Cable Actuated Sensor

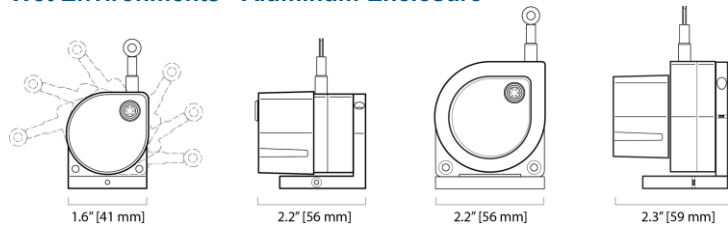
Test Applications • Voltage Divider

Compact String Pot • Flight/Crash Test Applications

Dual Axis 360° Mounting Bracket

3, 9, 15, 30 and 50-inch Stroke Range Options

Wet Environments • Aluminum Enclosure



General

Full Stroke Range Options 0-3, 0-9, 0-15, 0-30, 0-50 inches, min.

Output Signal	voltage divider (potentiometer)
Accuracy	± 1.1% to 0.15% full stroke (see ordering information)
Repeatability	± 0.02% full stroke
Resolution	essentially infinite
Measuring Cable	Ø.019-in. nylon-coated stainless steel
Enclosure Material	anodized aluminum
Sensor Cover	aluminum or polycarbonate
Sensor	conductive plastic-hybrid potentiometer
Weight	0.5 lb. max.

Electrical

Input Resistance	10K ohms (± 10%)
Power Rating, Watts	2.0 at 158°F (70° C), derated to 0 @ 255°F (125°C)
Recommended Maximum Input Voltage	30V (AC or DC)
Electrical Stroke	94% ±4% of input voltage

Mechanical

Measuring Cable Tension Options	9, 14 and 33 oz.
Maximum Measuring Cable Acceleration	90 g

Environmental

Enclosure	NEMA 4 / IP67
Operating Temperature	-40° to 250° F (-40° to 120°C)

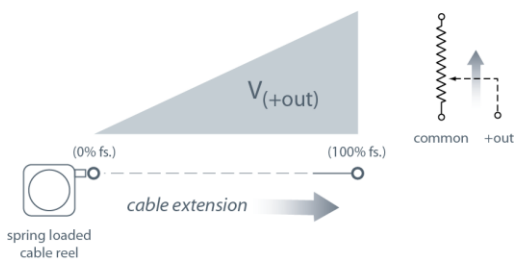


30-inch range model shown with aluminum cover

The MT3A is the solution for high-acceleration test applications in potentially wet environments. Just like the MT2A, the MT3A comes in 5 different full-stroke ranges, has a high-tension heavy-duty measuring cable designed for the demands of flight and automotive crash tests and comes with an easy to use 2-axis 360° rotation mounting bracket for installation in hard to fit areas.

For extreme high impact applications, the MT3A is now available with a rugged all aluminum sensor cover!

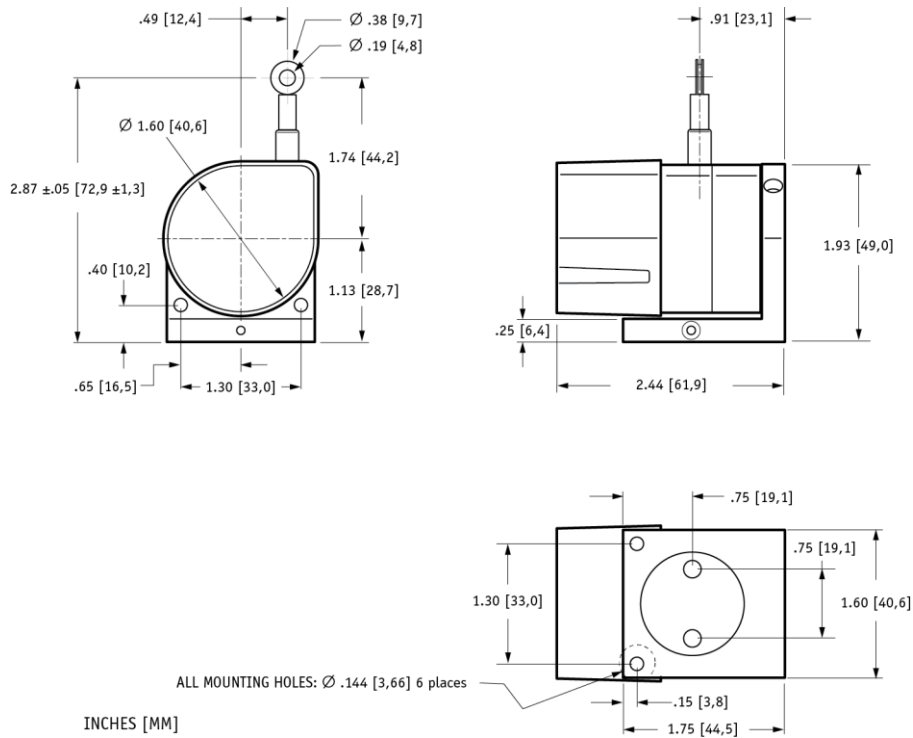
Output Signal



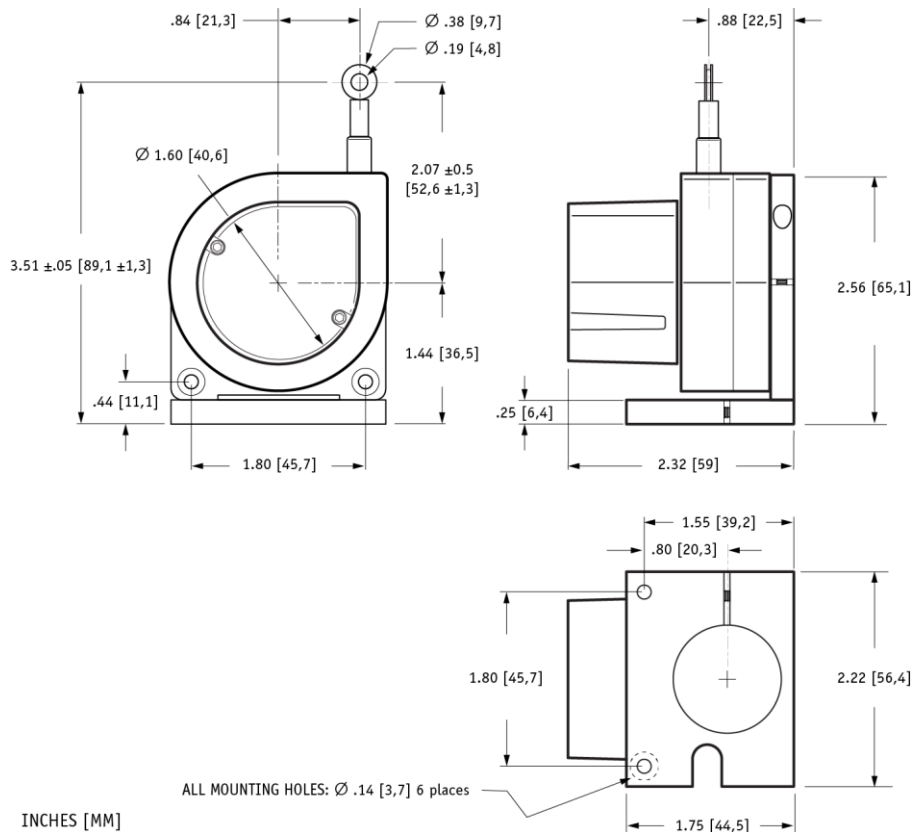
MT3A

Test Applications • Voltage Divider

Outline Drawing (0-3 to 0-30-inch ranges)



Outline Drawing (0-50-inch range)



MT3A

Test Applications • Voltage Divider

Ordering Information

Model Number:

MT3A - **R** - **A** - **B** - **10K** - **G**
order code:

Sample Model Number:

MT3A - 9E - 33 - 10K - C1A

- R** range: 9 inches
- A** measuring cable termination: eyelet
- B** measuring cable tension: 33 oz. (±6 oz.)
- G** electrical connection: 15-ft cable w/end-mounted strain relief/aluminum cover

Full Stroke Range:

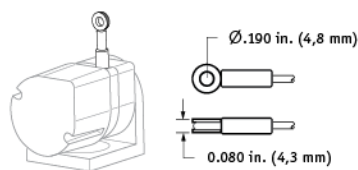
R <i>order code:</i>	3	9	15	30	50
full stroke range, min:	3 inches	9 inches	15 inches	30 inches	50 inches
potentiometer cycle-life:	2.5×10^6	8.3×10^5	5.0×10^5	2.5×10^5	2.5×10^5
accuracy (% of full stroke):	1.1 %	.25%	.20%	.15%	.15%

Measuring Cable Termination:

A *order code:*

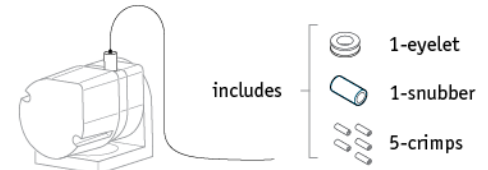
E

Eyelet



L

Leader Cable (24 in. long)



Measuring Cable Tension:

B *order code:*

9

14

33

3, 9, 15, 30-in. range options:	9 (±2) oz.	14 (±4) oz.	33 (±6) oz.
max. cable acceleration:	99 g	136 g	136 g

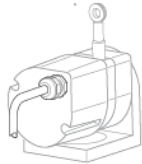
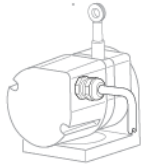


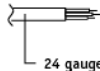
B *order code:*

9

22

50-in. range options:	9 (±2) oz.	22 (±6) oz.
max. cable acceleration:	46 g	68 g

Electrical Connection/ Sensor Cover:

Order Code	C1	C1A	C4	C4A	C2	C2A	C5	C5A
sensor cover:	polycarbonate	aluminum	polycarbonate	aluminum	polycarbonate	aluminum	polycarbonate	aluminum
electrical cable length:	15 ft (4.5 m)		30 ft (9 m)		15 ft (4.5 m)		30 ft (9 m)	
	 <p>end-mount strain relief</p>				 <p>side-mount strain relief</p>			
Order Code	C3	C3A	C6	C6A	BC	BCA		
sensor cover:	polycarbonate	aluminum	polycarbonate	aluminum	polycarbonate	aluminum		
electrical cable length:	15 ft (4.5 m)		30 ft (9 m)		n/a		n/a	
	 <p>top-mount strain relief</p>				 <p>blank cover*</p>			
<p>Signal Connection</p> <p>Color Code</p>  <p>24 gauge, shielded</p>			<p>color</p> <p>Red</p> <p>Black</p> <p>Green</p>	<p>signal</p> <p>+in</p> <p>common</p> <p>+out</p>	<p><i>* blank cover option is for customers who want to provide their own connector or strain relief. This cover comes without electrical wiring access holes so customer can drill to their requirements.</i></p>			

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.

中国大陆
 西安鑫源宇通电子科技有限公司
 陕西省西安市高新区锦业路70号航
 天恒星园区1号厂房一层南
 Tel: 400-780-9688
sales@senstechxyz.com

中国香港
 深大实业有限公司
 香港新界沙田安平街6号新贸易
 中心B座13楼06室
 Tel: +86 17792099916
info@caltropinstruments.com

新加坡
 深大实业有限公司
 香港新界沙田安平街6号新贸易
 中心B座13楼06室
 Tel: +86 17792099919
info@senstechxyz.com