

MT3A

Test Applications • Voltage Divider

Compact String Pot • Flight/Crash Test Applications
 Dual Axis 360° Mounting Bracket
 3, 9, 15 and 30-inch Stroke Range Options
 Wet Environments • Aluminum Enclosure

GENERAL

Full Stroke Range Options	0-3, 0-9, 0-15, 0-30 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 Options	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
Mating Plug	LEMO FGG.OB.304.CLAD52

MECHANICAL

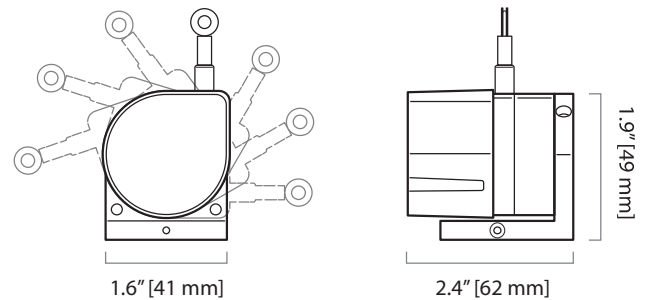
Measuring Cable Tension Options	9, 14 and 33 oz.
Maximum Measuring Cable Acceleration	90 g

ENVIRONMENTAL

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



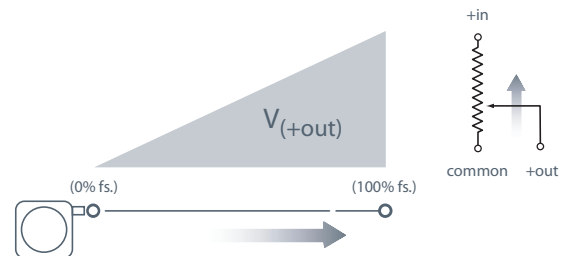
shown with aluminum cover



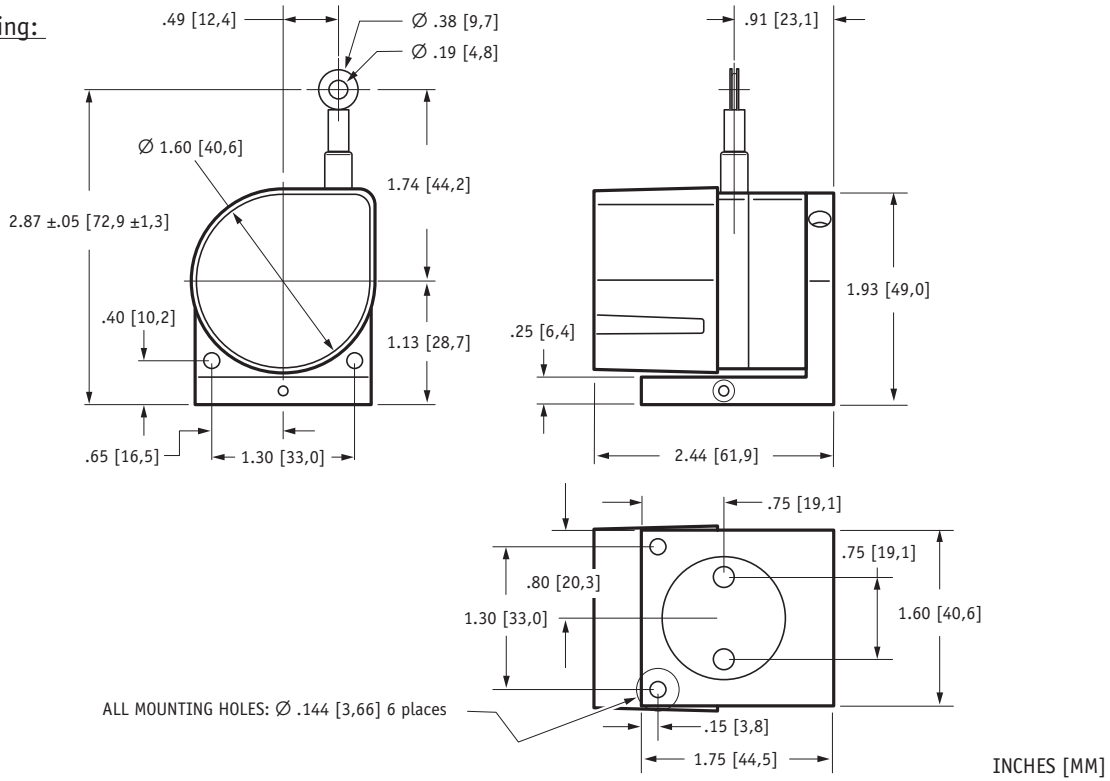
The MT3A is the solution for high-acceleration test applications in potentially wet environments. Just like the MT2A, the MT3A comes in 4 different full-stroke ranges, has a high-tension heavy-duty measuring cable designed for the demands of flight and automotive crash tests and comes with an easy to 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



Outline Drawing:



Ordering Information:

Model Number:

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

Sample Model Number:

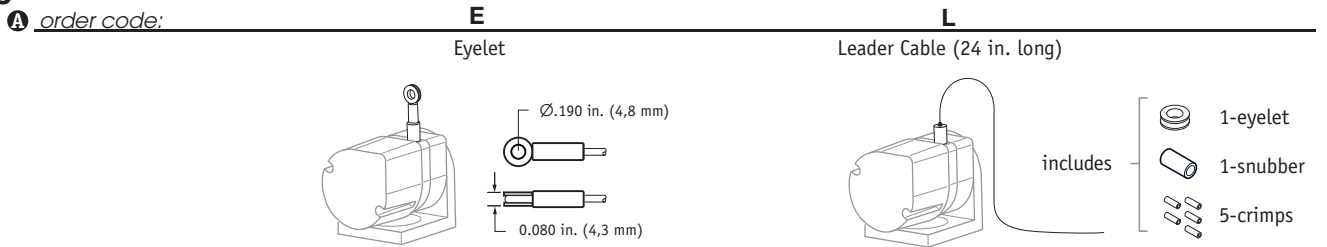
MT3A - 9E - 33 - 10K - C1A

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

Full Stroke Range:

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

Measuring Cable Termination:

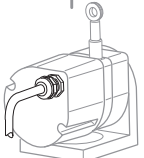
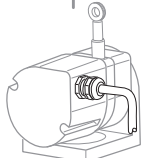
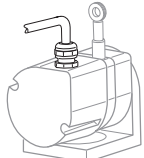
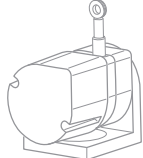
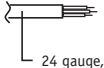


Measuring Cable Tension:

B <i>order code:</i>	9	14	33
tension:	9 (±2) oz.	14 (±4) oz.	33 (±6) oz.
max. cable acceleration:	17 g	50 g	90 g

Ordering Information (cont.):

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)									
end-mount strain relief																
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										
top-mount strain relief																
Signal Connection Color Code	 24 gauge, shielded		<table border="1"> <thead> <tr> <th>color</th> <th>signal</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>+in</td> </tr> <tr> <td>Black</td> <td>common</td> </tr> <tr> <td>Green</td> <td>+out</td> </tr> </tbody> </table>	color	signal	Red	+in	Black	common	Green	+out	<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>				
color	signal															
Red	+in															
Black	common															
Green	+out															

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