

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

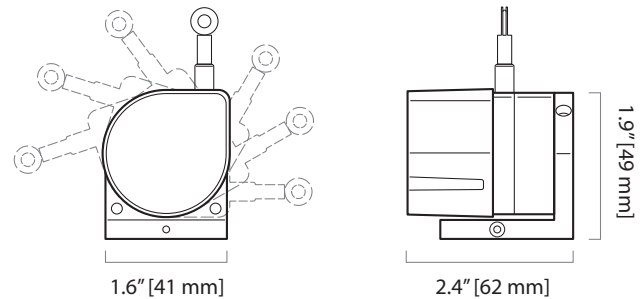
Input Resistance	10K ohms (± 10%)
Power Rating, Watts	2.0 at 158°F (70° C), derated to 0 @ 255°F (125°C)
Recommended Maximum Input Voltage	30V (AC or DC)
Electrical Stroke	94% ±4% of input voltage
Mating Plug	LEMO FGG.OB.304.CLAD52

MECHANICAL

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

ENVIRONMENTAL

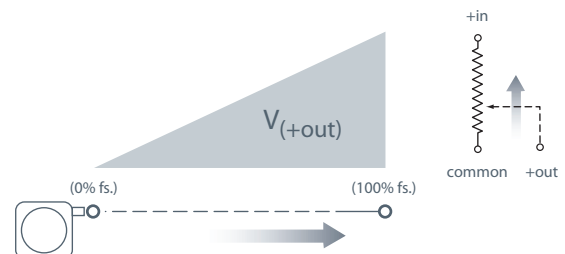
Enclosure	NEMA 4 / IP67
Operating Temperature	-40° to 250° F (-40° to 120°C)



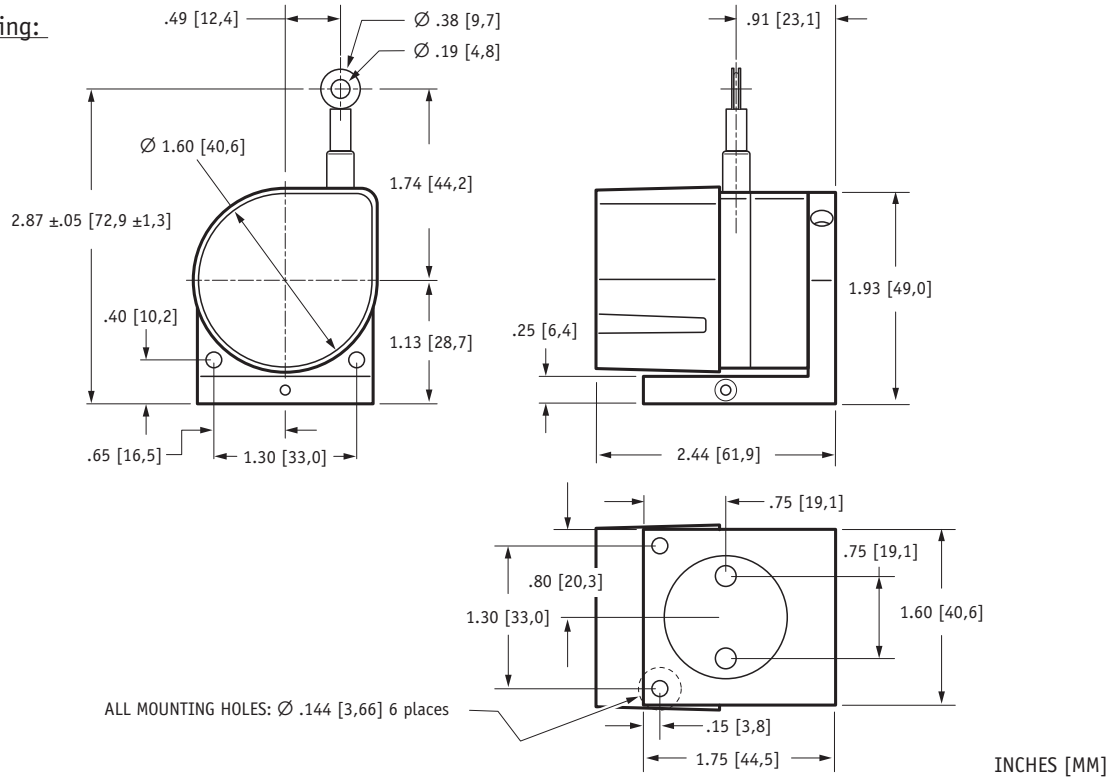
The MT3A is the solution for high-acceleration test applications in potentially wet environments. Just like the MT2A, the MT3A comes in 4 different full-stroke ranges, has a high-tension heavy-duty measuring cable designed for the demands of flight and automotive crash tests and comes with an easy to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

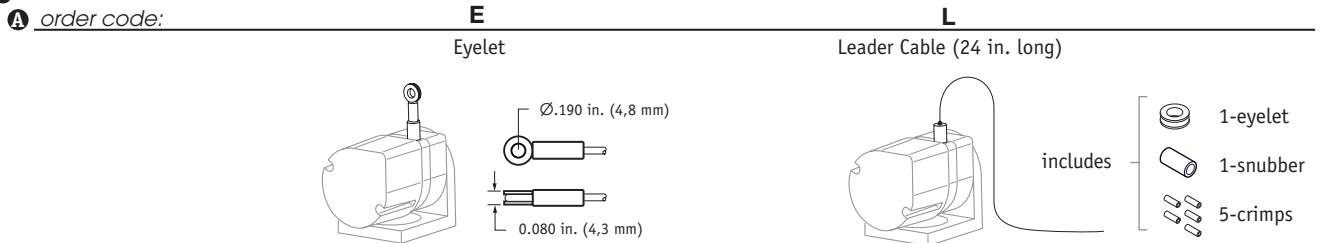
MT3A - 9E - 33 - 10K - C1A

- 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 order code:	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:

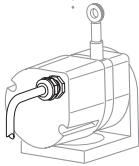
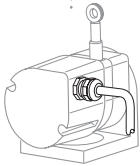


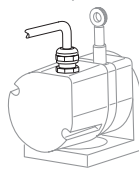
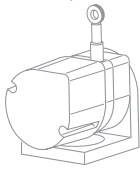
Measuring Cable Tension:


B order code:	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)	
	 <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>	

Signal Connection Color Code	color	signal
 <p>24 gauge, shielded</p>	Red	+in
	Black	common
	Green	+out

* **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.

version: 9.0 last updated: November 15, 2012