

Cable-Extension Position Transducer

Precision Potentiometric Output

Ranges: 0-3, 0-9, 0-15, 0-30 inches

Test Applications • Wet Environments



MT3A

Specification Summary:

GENERAL

Full Stroke Ranges.....0-3, 0-9, 0-15, 0-30 inches, min., *see ordering information*
 Output Signal voltage divider (potentiometer)
 Accuracy $\pm 0.25\%$ full stroke
 Repeatability $\pm 0.02\%$ full stroke
 Resolution essentially infinite
 Measuring Cable..... $\varnothing 0.019$ -in. nylon-coated stainless steel
 Enclosure Material anodized aluminum
 Sensor Cover polycarbonate
 Sensor conductive plastic-hybrid potentiometer

ELECTRICAL

Input Resistance 10K ohms ($\pm 5\%$)
 Power Rating, Watts..... 2.0 at 70° C (derated to 0 @ 125°C)
 Recommended Maximum Input Voltage..... 30V (AC or DC)
 Output Signal Change Over Measurement Range.. 94% $\pm 4\%$ of input voltage

MECHANICAL

Measuring Cable Tension 33 (± 10) oz.
 Maximum Measuring Cable Acceleration 47 G's
 Spring Cycle Life 25,000 cycles

ENVIRONMENTAL

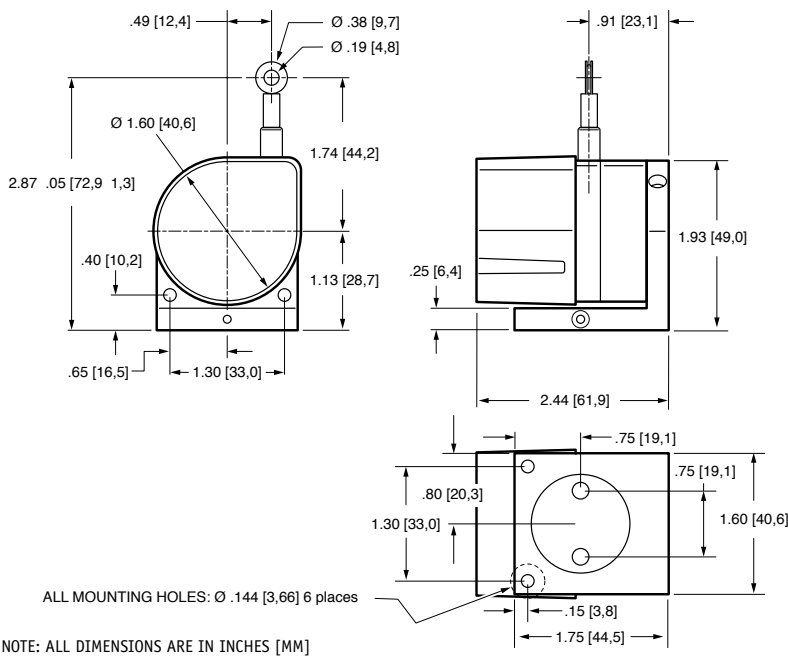
Enclosure NEMA 4 / IP67
 Operating Temperature -40° to 125°C



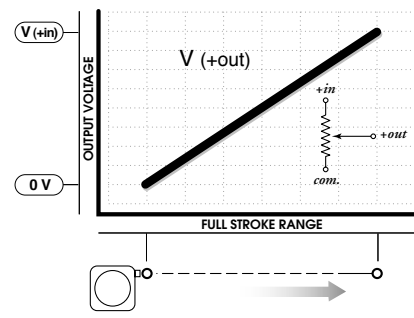
The MT3A is the solution for high-acceleration test applications in potentially wet environments. Just like the MT2A, the MT3A comes in 4 different full-stroke ranges with a high-tension heavy-duty measuring cable designed for the demands encountered in flight testing and automotive crash tests.

The MT3A also has the same 2-axis 360° rotation mounting bracket and is available with either a 15-ft electrical cable or a blank cover that the customer can drill for their own specific connector or strain relief.

Outline Drawing



Output Signal



Ordering Information:

Model Number:

MT3A - _____ **- 33 - 10K -** _____

order code: **R** **A** **B**

Sample Model Number:

MT3A - 9E - 33 - 10K - C1

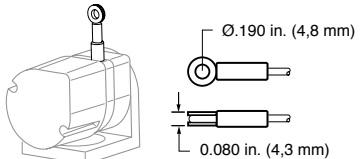
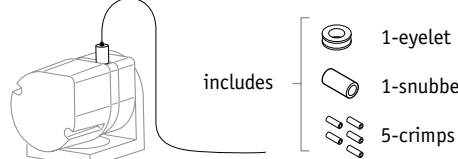
- R** range: 9 inches
- A** measuring cable termination: eyelet
- B** electrical connection: side-mounted strain relief

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

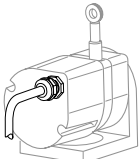
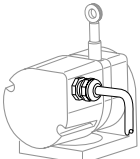
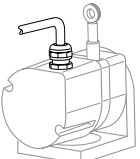
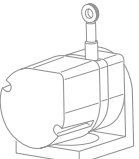
Measuring Cable Termination:

A order code:

E	L
Eyelet	Leader Cable (24 in. long)
 <p>Ø.190 in. (4,8 mm) 0.080 in. (4,3 mm)</p>	 <p>includes</p> <ul style="list-style-type: none"> 1-eyelet 1-snubber 5-crimps


Electrical Connection:

B order code:

C1	C2	C3	BC
end-mount strain relief	side-mount strain relief	top-mount strain relief	blank cover no access holes**
			

Signal Connection - Color Code

color	signal
Red	+in
Black	common
Green	+out

 24 gauge, shielded, 15 ft. long

** **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.