

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 ± 1 to 0.25% full stroke, *see ordering information*
 Repeatability $\pm 0.02\%$ full stroke
 Resolution essentially infinite
 Measuring Cable $\varnothing.019$ -in. nylon-coated stainless steel
 Enclosure Material anodized aluminum
 Sensor Cover polycarbonate
 Sensor conductive plastic-hybrid potentiometer
 Weight 0.5 lb. max.

ELECTRICAL

Input Resistance 10K ohms ($\pm 10\%$)
 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 Tension33 (± 10) oz.
 Maximum Measuring Cable Acceleration 47 G's
 Spring Cycle Life 25,000 cycles

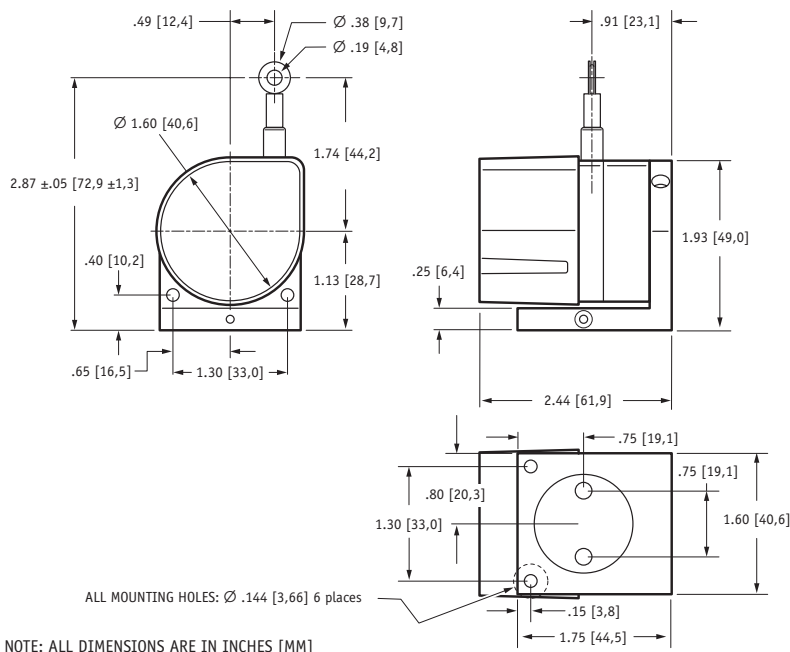
ENVIRONMENTAL

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

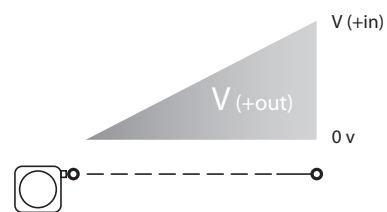
The MT3A is the solution for high-acceleration test applications in potentially wet environments. Just like the MT2A, the MT3A comes in 4 different full-stroke ranges with a high-tension heavy-duty measuring cable designed for the demands encountered in flight testing and automotive crash tests.

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.

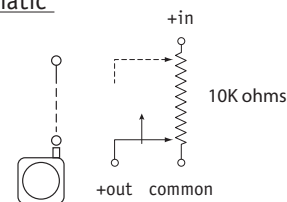
Outline Drawing



Output Signal



Schematic



Ordering Information:

Model Number:

MT3A - - **33** - **10K** -
order code: R A B

Sample Model Number:

MT3A - 9E - 33 - 10K - C1

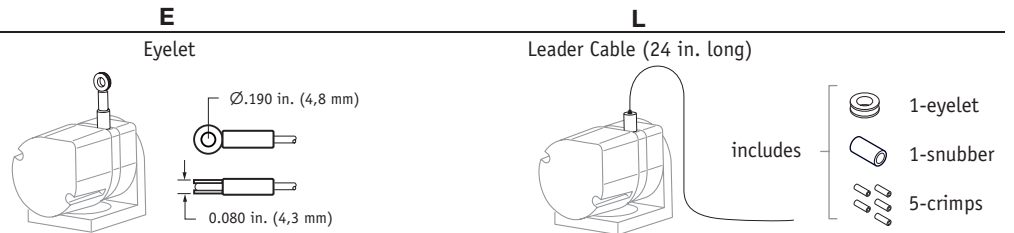
- R** range: 9 inches
- A** measuring cable termination: eyelet
- B** electrical connection: side-mounted strain relief

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
accuracy (% of full stroke):	1 %	.25%	.25%	.25%

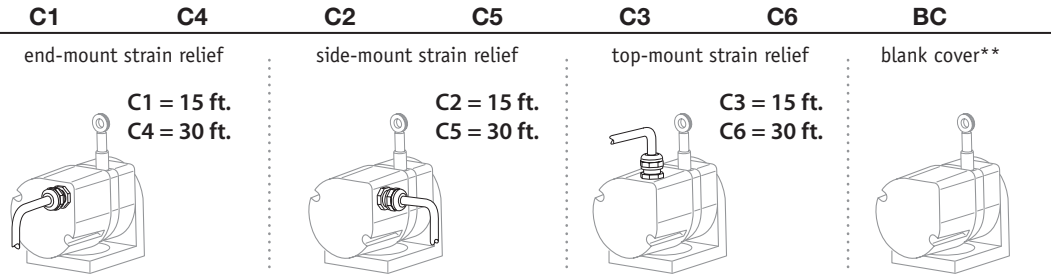
Measuring Cable Termination:

A order code:

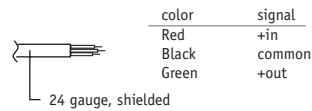


Electrical Connection:

B order code:



Signal Connection - Color Code



** **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.