# **MTA** Voltage Divider Output

Compact String Pot • Absolute Linear Position 0-3, 0-5 inch Stroke Range Options High Cycle Applications Crash Testing • Flight Testing • OEM

CE

Full Stroke Ranges	0-3 and 0-5 inches, min.
Output Signal	voltage divider (potentiometer)
Accuracy	±0.4 % full stroke
Repeatability	±0.02% full stroke
Resolution	essentially infinite
Potentiometer Cycle Life	50 million cycles*
Measuring Cable	0.024-in. dia. nylon-coated stainless steel
Measuring Cable Tension	see ordering information
Enclosure Material	anodized aluminum
Sensor	conductive plastic potentiometer
Weight (maximum)	3-inch: 0.10 lbs., 5-inch: 0.26 lbs.

GENERAL

#### ELECTRICAL

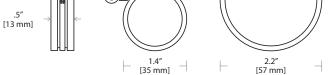
Input Resistance		5K ohms (±10%)
Power Rating, Watts	1.0 at 40° C (de	erated to 0 @ 110°C)
Recommended Maximum Input Voltage		30V (AC or DC)
Temperature coefficient of voltage dividing ratio		< 2 ppm/°C
Temperature coefficient of resistance, -50+75°C		±200 ppm/°C
Temperature coefficient of resistance, +75+100°C		±300 ppm/°C
Maximum Output Signal	94% ±	4% of input voltage

#### ENVIRONMENTAL

Enclosure Design	NEMA 12, IP55
Operating Temperature	-67° to 212°F (-55° to 100°C)

\*-potentiometer cycle life is defined as the minimum number of times the measuring cable can be fully extended and retracted before any measureable degradation of the output signal occurs.

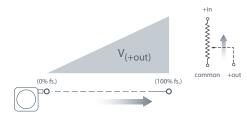




The MTA is part of Celesco's miniature line of cable-extension position transducers that is perfect for short-ranged testing and control applications where space is at a premium.

This transducer uses a high-cyle conductive plastic potentiometer to provide a precision voltage divider feedback signal for measurement ranges of 3 or 5 inches full stroke. With an accuracy of  $\pm 0.4\%$  and a repeatability of  $\pm 0.02\%$ , the MTA conveniently mounts using servo-clips for easy rotational adjustment.

Output Signal





Ordering Information:

#### Model Number: Sample Model Number: <u>- 5K</u> MT **R** range/cable tension: ß C order code: **B** electrical connection:

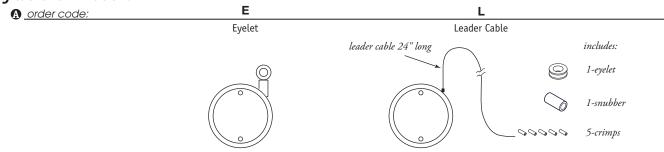
#### MTA - 3AE - 5KC - MB

measuring cable termination: **(**mounting bracket:

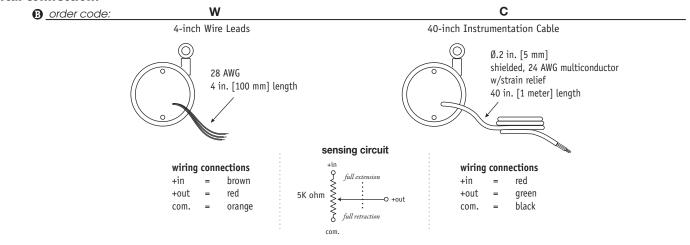
3 inches/4 oz. eyelet instrumentation cable, 40-in. yes

#### Full Stroke Range: B order code: 3 3A 5 5A full stroke range, min: 3 inches 5 inches std. cable tension (±25%): 2.0 oz. 4.0 oz. 1.2 oz. 2.4 oz. max. acceleration: 30 G's 60 G's 3 G's 6 G's

## Measuring Cable Termination:



## **Electrical Connection:**

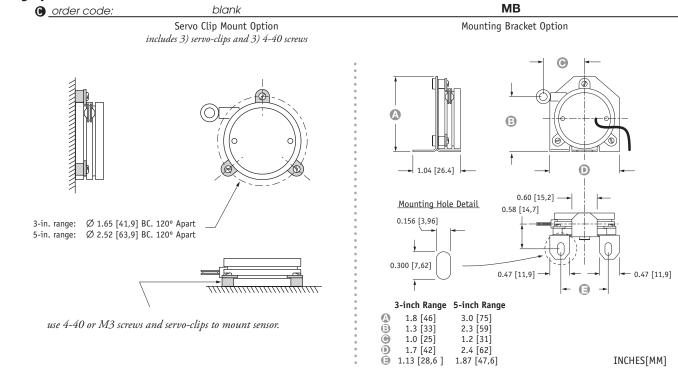


celesco

celesco.com • info@celesco.com

Ordering Information (cont.):

## **Mounting Options:**



version: 4.0 last updated: January 10, 2013

celesco

celesco.com • info@celesco.com