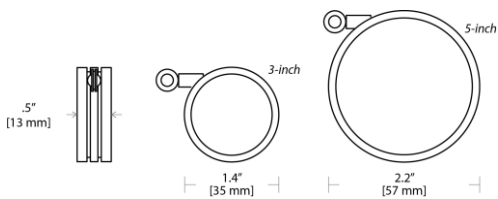




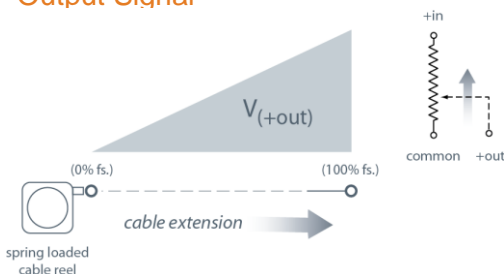
CE



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-cycle 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



## 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

### General

Full Stroke Range	0-3 and 0-5 inches, min.
Output Signal	voltage divider (potentiometer)
Accuracy	$\pm 0.4\%$ full stroke
Repeatability	$\pm 0.02\%$ 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)	<b>3-inch: 0.10 lbs., 5-inch: 0.26 lbs.</b>

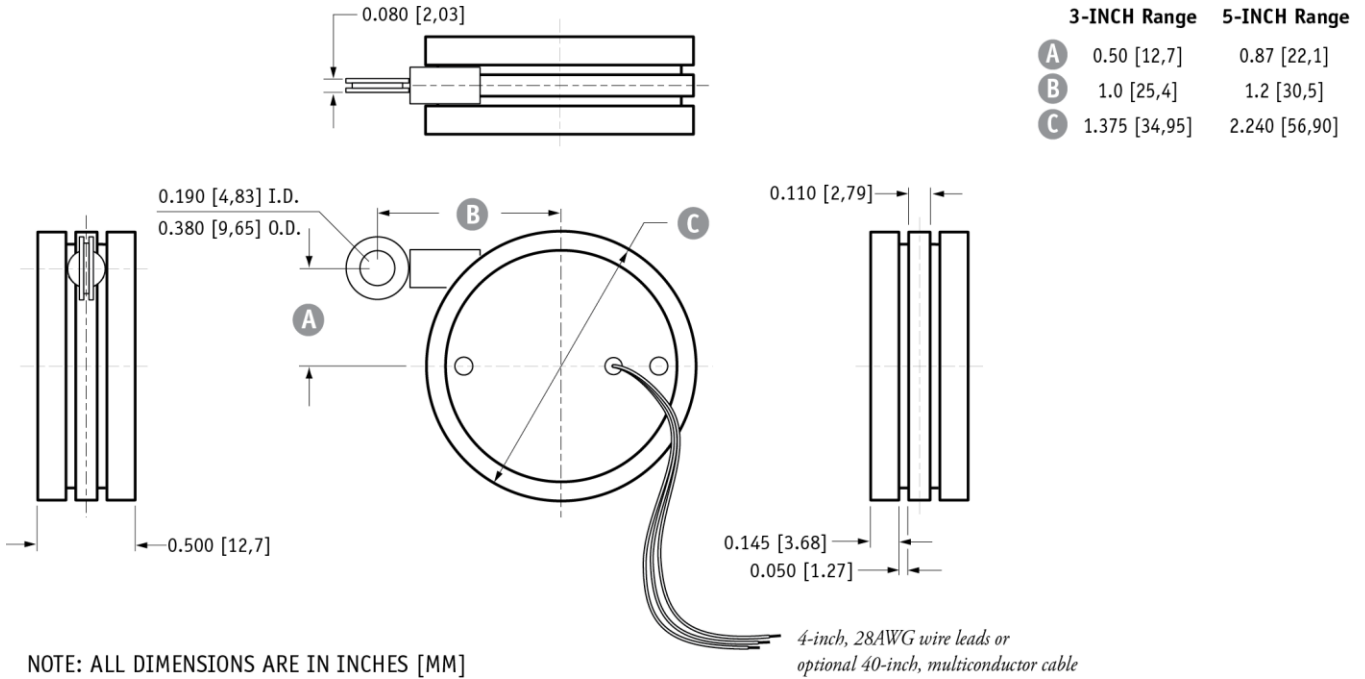
### Electrical

Input Resistance	5K ohms ( $\pm 10\%$ )
Power Rating, Watts	1.0 at 40° C (derated 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	$\pm 200$ ppm/°C
Temperature coefficient of resistance, +75...+100°C	$\pm 300$ ppm/°C
Maximum Output Signal	94% $\pm 4\%$ of input voltage

### Environmental

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

Outline Drawing



Ordering Information

Model Number:

**MTA** - **R** - **A** - **5K** - **B** - **C**  
*order code:*

Sample Model Number:

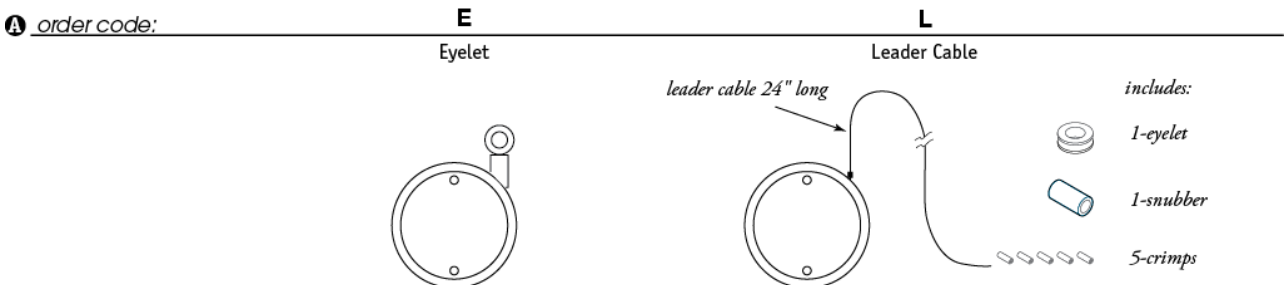
**MTA - 3AE - 5KC - MB**

- R** range/cable tension: 3 inches/4 oz.
- A** measuring cable termination: eyelet
- B** electrical connection: instrumentation cable, 40-in.
- C** mounting bracket: yes

Full Stroke Range:

<b>R</b> <i>order code:</i>	<b>3</b>	<b>3A</b>	<b>5</b>	<b>5A</b>
full stroke range, min:	3 inches		5 inches	
std. cable tension ( $\pm 25\%$ ):	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

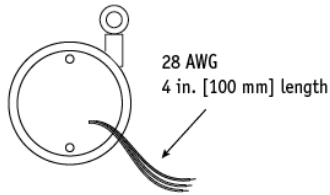
Measuring Cable Termination:



**Electrical Connection:**

**W** order code:

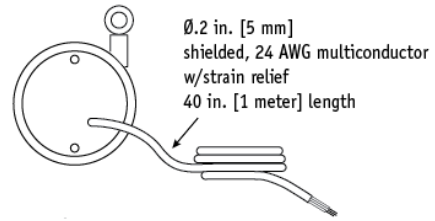
**W**  
4-inch Wire Leads



**wiring connections**  
+in = brown  
+out = red  
com. = orange

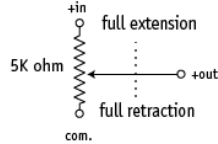
**C**

40-inch Instrumentation Cable



**wiring connections**  
+in = red  
+out = green  
com. = black

**sensing circuit**

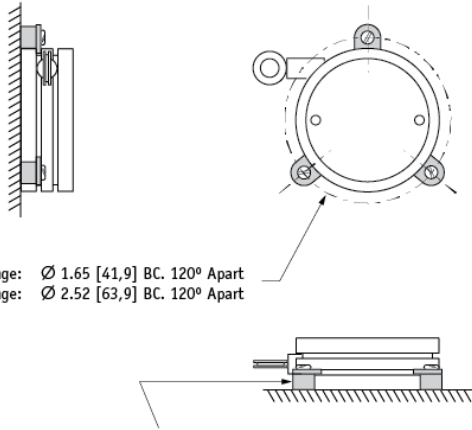


**Mounting Options**

**blank** order code:

**blank**

**Servo Clip Mount Option**  
includes 3) servo-clips and 3) 4-40 screws

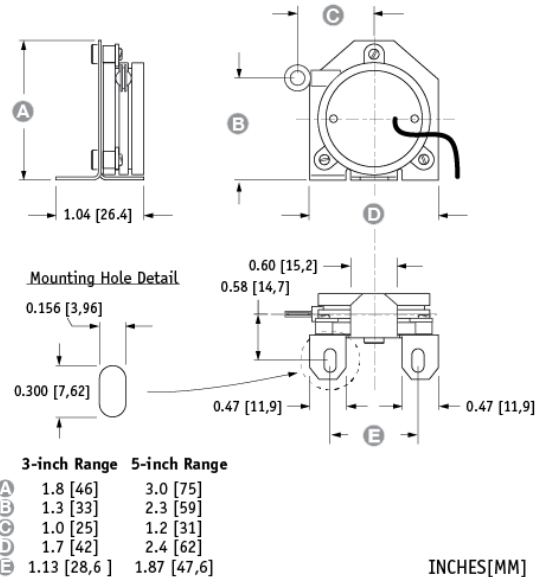


3-in. range: Ø 1.65 [41,9] BC. 120° Apart  
5-in. range: Ø 2.52 [63,9] BC. 120° Apart

*use 4-40 or M3 screws and servo-clips to mount sensor.*

**MB**

**Mounting Bracket Option**



INCHES[MM]

**NORTH AMERICA**

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MTA 12/01/2015