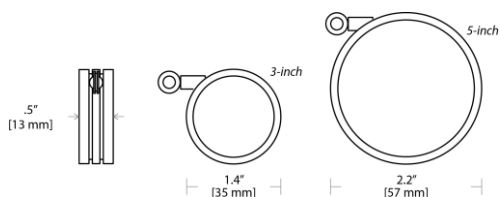




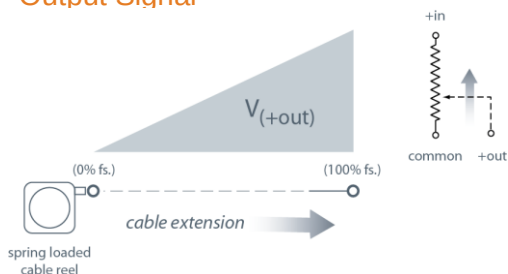
CE



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)	3-inch: 0.10 lbs., 5-inch: 0.26 lbs.

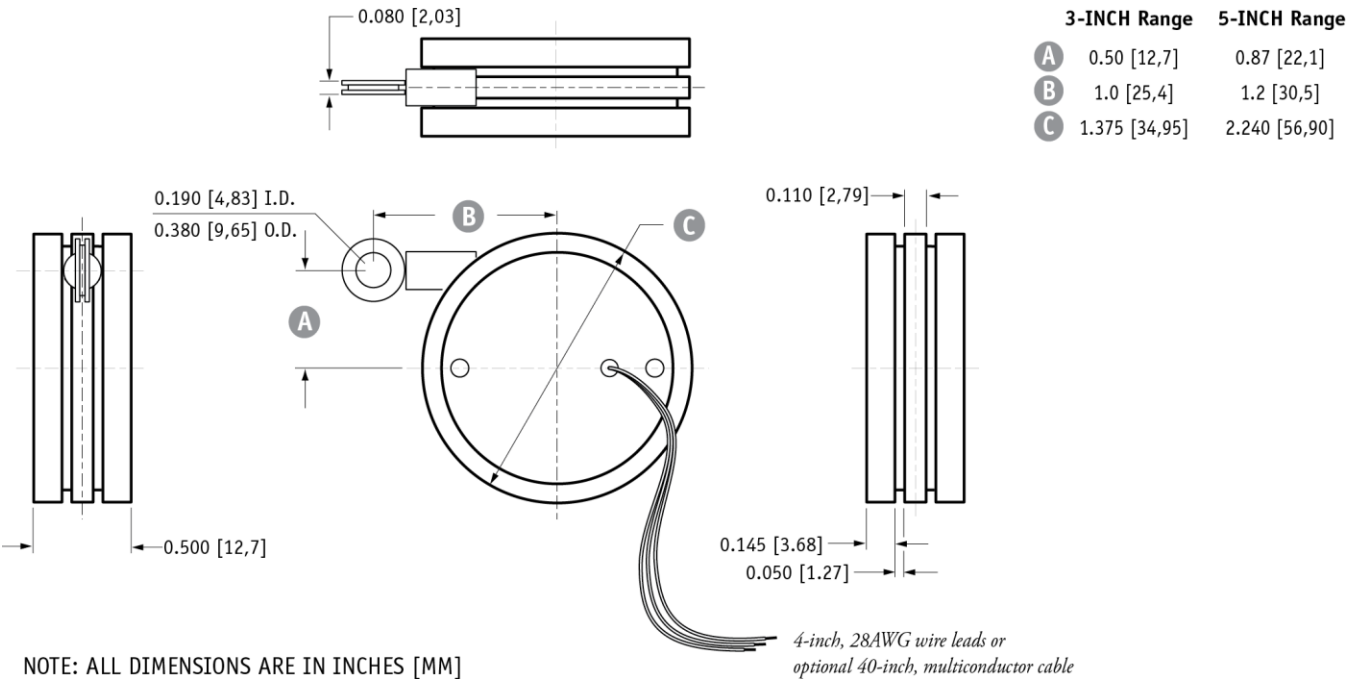
Electrical

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	± 200 ppm/°C
Temperature coefficient of resistance, +75...+100°C	± 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 - - - 5K - -
order code: R A B C

Sample Model Number:

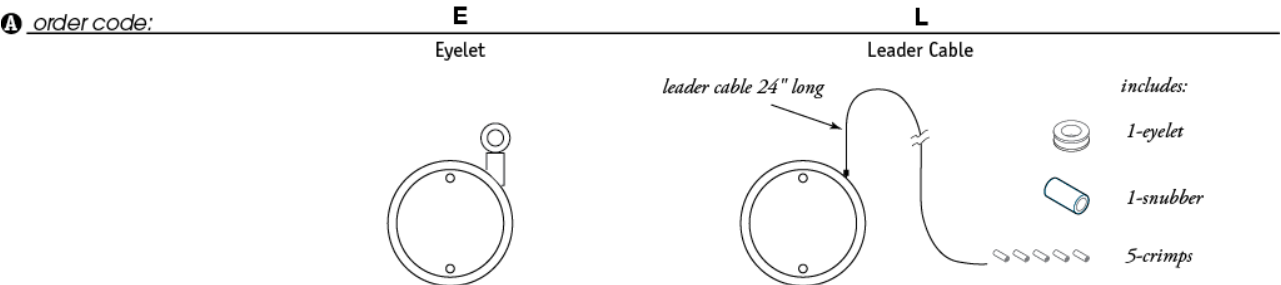
MTA - 3AE - 5KC - MB

- 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:

R 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:

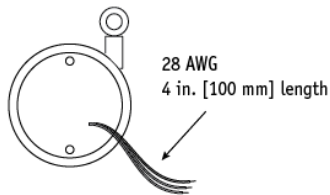


Electrical Connection:

B order code:

W

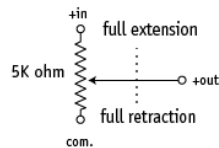
4-inch Wire Leads



wiring connections

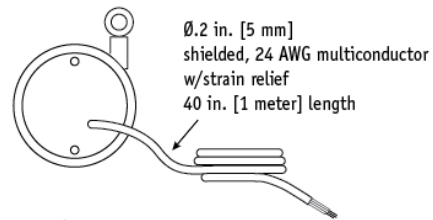
+in = brown
+out = red
com. = orange

sensing circuit



C

40-inch Instrumentation Cable



wiring connections

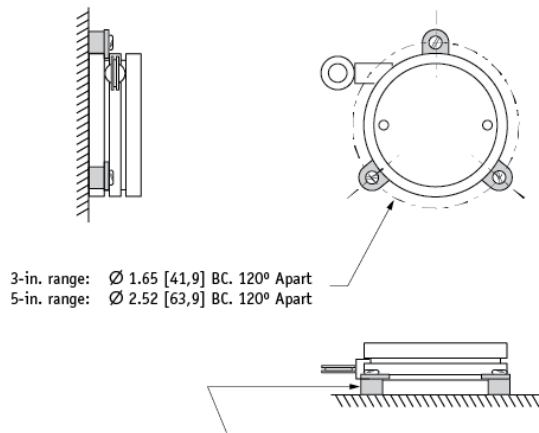
+in = red
+out = green
com. = black

Mounting Options

D order code:

blank

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

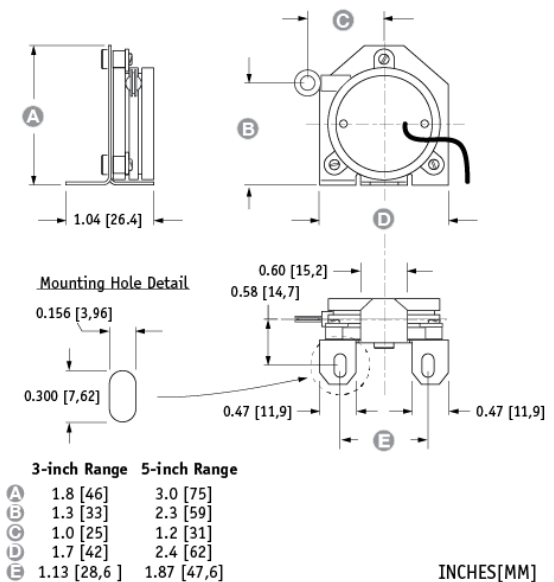


3-in. range: Ø 1.65 [41,9] BC. 120° Apart
5-in. range: Ø 2.52 [63,9] BC. 120° Apart

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

MB

Mounting Bracket Option



3-inch Range 5-inch Range

A	1.8 [46]	3.0 [75]
B	1.3 [33]	2.3 [59]
C	1.0 [25]	1.2 [31]
D	1.7 [42]	2.4 [62]
E	1.13 [28,6]	1.87 [47,6]

INCHES[MM]