

Cable-Extension Position Transducer

Precision Potentiometric Output
Ranges: 0-2 to 0-50 inches
Compact Size • OEM Applications



PT1A

Specification Summary:

GENERAL

Full Stroke Range Options 0-2 to 0-50 inches
 Output Signal Options voltage divider (potentiometer)
 Accuracy $\pm 0.25\%$ to $\pm 0.10\%$ full stroke *see ordering information*
 Repeatability $\pm 0.02\%$ full stroke
 Resolution essentially infinite
 Measuring Cable019-in. dia. nylon-coated stainless steel
 Enclosure Material glass-filled polycarbonate and black anodized aluminum
 Sensor plastic-hybrid precision potentiometer
 Potentiometer Cycle Life *see ordering information*
 Maximum Retraction Acceleration *see ordering information*
 Weight 1 lb. max.

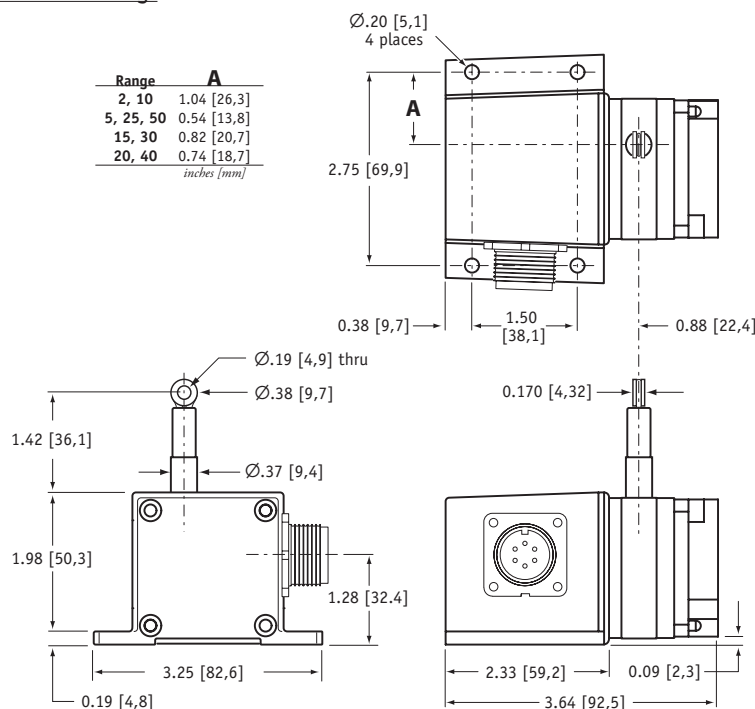
ELECTRICAL

Input Resistance Options 500, 1K, 5K, 10K or bridge, *see ordering information*
 Power Rating, Watt *see ordering information*
 Recommended Maximum Input Voltage *see ordering information*
 Output Signal Change Over Full Stroke Range $94\% \pm 4\%$ of input voltage

ENVIRONMENTAL

Enclosure NEMA 4, IP 65
 Operating Temperature 0° to 200°F (-17° to 90°C)
 Vibration up to 10 G's to 2000 Hz maximum

Outline Drawing



Range	A
2, 10	1.04 [26,3]
5, 25, 50	0.54 [13,8]
15, 30	0.82 [20,7]
20, 40	0.74 [18,7]

inches [mm]

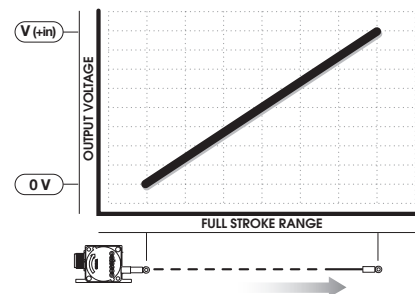
dimensions are in inches [mm], tolerances are 0.03 inches [0,8 mm]



The PT1A is perfect where space and money are limited. The PT1A is part of Celesco's compact line of cable-extension transducers. Using a high cycle plastic-hybrid potentiometer, the PT1A provides a precision voltage divider position feedback signal for full-scale measurement ranges from 2 to 50 inches.

The PT1A has many features to offer including 500 to 10K ohm potentiometer selection, adjustable bridge circuit and multiple measuring cable exit options.

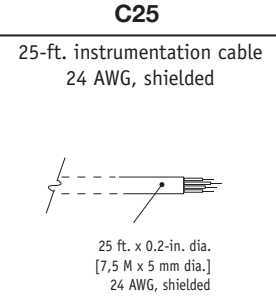
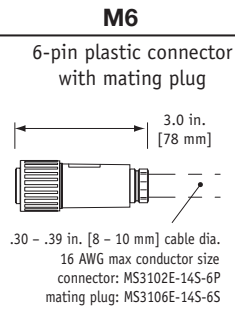
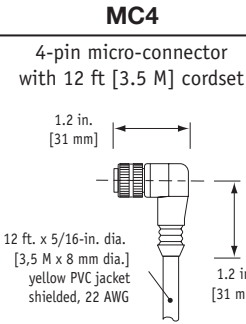
Output Signal



Ordering Information (cont.)

Electrical Connection:

ⓐ order code:

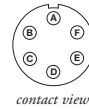


4-pin mating plug and cord set:



pin	color code	standard	bridge
1	RED-BLK TR.	+IN	+IN
2	RED-WHT TR.	COMMON	-IN
3	RED	+OUT	+OUT
4	GREEN	-	-OUT

6-pin mating plug:



pin	standard	bridge
A	+IN	+IN
B	COMMON	-IN
C	+OUT	-OUT
D	-	+OUT

25-ft. cable:

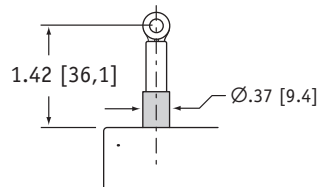
color code	standard	bridge
RED	+IN	+IN
BLACK	COMMON	-IN
GREEN	+OUT	+OUT
WHITE	-	-OUT

Cable Guide:

ⓓ order code:

blank

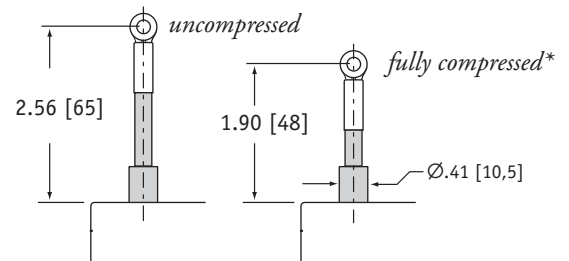
standard cable guide



SG

spring-loaded guide

cable-guide cushions impact from accidental free release



**note: start of full stroke range begins at full compression point*