

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

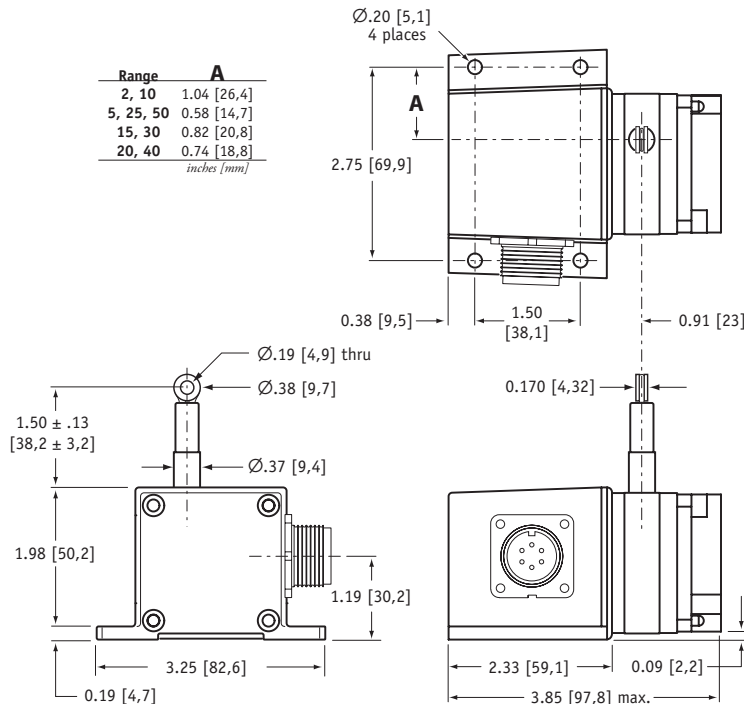
ENVIRONMENTAL

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 [26,4]
5, 25, 50	0.58 [14,7]
15, 30	0.82 [20,8]
20, 40	0.74 [18,8]

inches [mm]



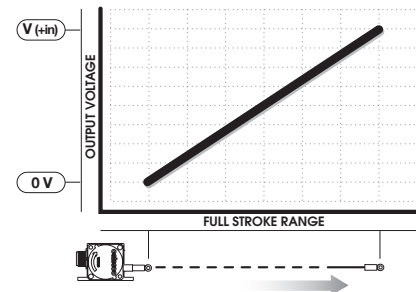
dimensions are in inches [mm], tolerances are 0.03 inches [0,8 mm]



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

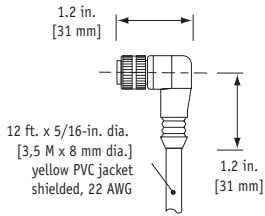


Ordering Information (cont.)

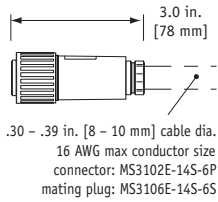
Electrical Connection:

ⓐ order code:

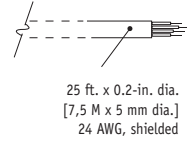
MC4
4-pin micro-connector
with 12 ft [3.5 M] cordset



M6
6-pin plastic connector
with mating plug



C25
25-ft. instrumentation cable
24 AWG, shielded

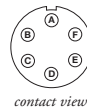


4-pin mating plug and cord set:



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

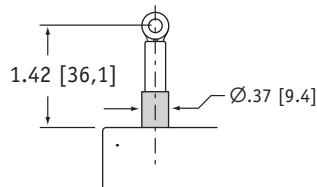
25-ft. cable:

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

Cable Guide:

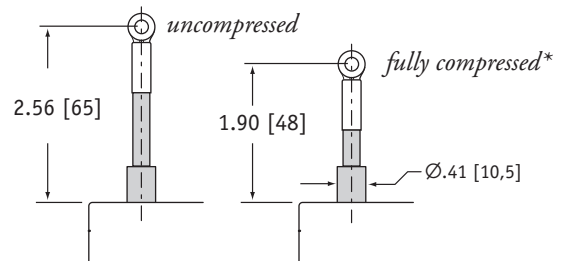
ⓓ order code:

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 (except 2-inch and 5-inch ranges).