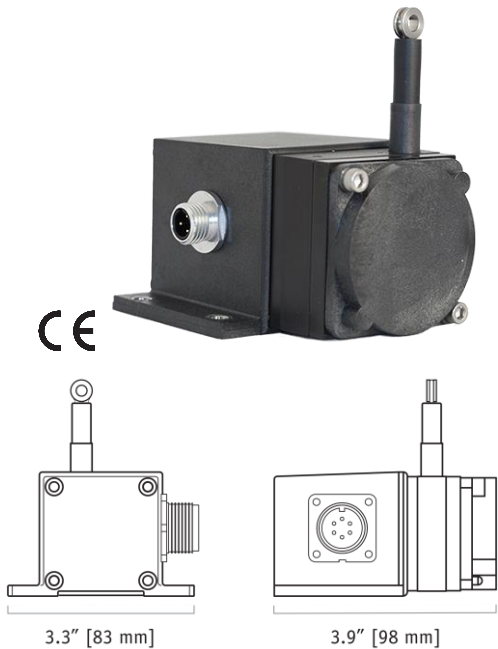
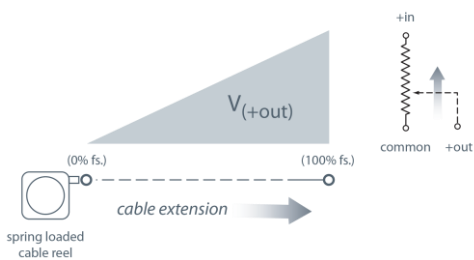




The PT1A is perfect where space and money are limited. The PT1A is part of Celesco's compact line of cable-extension transducers. Using a high cycle plastic-hybrid potentiometer, the PT1A provides a precision voltage divider position feedback signal for full-scale measurement ranges from 2 to 50 inches.

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



-- bridge circuit option available, see ordering information

PT1A

Cable Actuated Sensor Instrument Grade • Voltage Divider Output

Absolute Linear Position to 50 inches (1270 mm)

Aluminum and Polycarbonate Enclosure

Compact Design

IP65 • NEMA 4 Protection

General

Full Stroke Range	0-2 to 0-50 inches
Options	
Output Signal Options	voltage divider (potentiometer)
Accuracy	$\pm 0.25\%$ to $\pm 0.15\%$ full stroke (see ordering information)
Repeatability	$\pm 0.02\%$ full stroke
Resolution	essentially infinite
Measuring Cable	.019-in. dia. nylon-coated stainless steel
Enclosure	glass-filled polycarbonate and black anodized aluminum
Sensor	plastic-hybrid precision potentiometer
Potentiometer Cycle Life	see ordering information
Maximum Retraction	see ordering information
Acceleration	
Weight	1 lb. max.

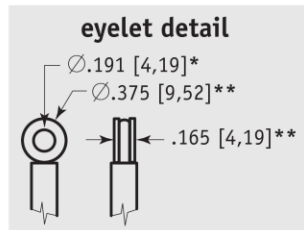
Electrical

Input Resistance	see ordering information
Options	
Power Rating, Watt	see ordering information
Recommended	see ordering information
Maximum Input Voltage	
Output Signal Change Over Full Stroke Range	94% $\pm 4\%$ of input voltage

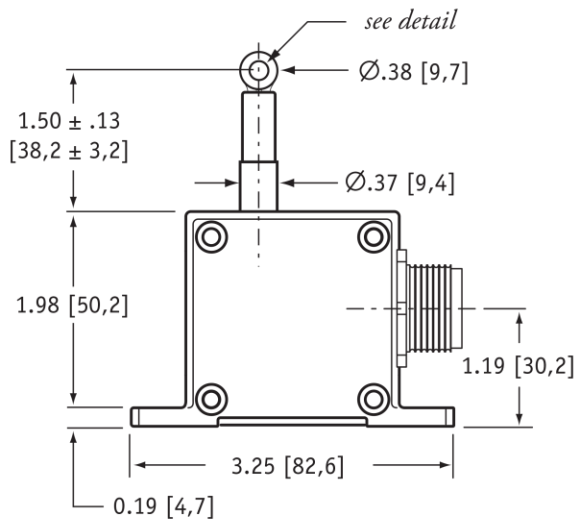
Environmental

Enclosure	NEMA 4, IP 65
Operating Temperature	-40° to 200°F (-40° to 90°C)
Vibration	up to 10 g to 2000 Hz maximum

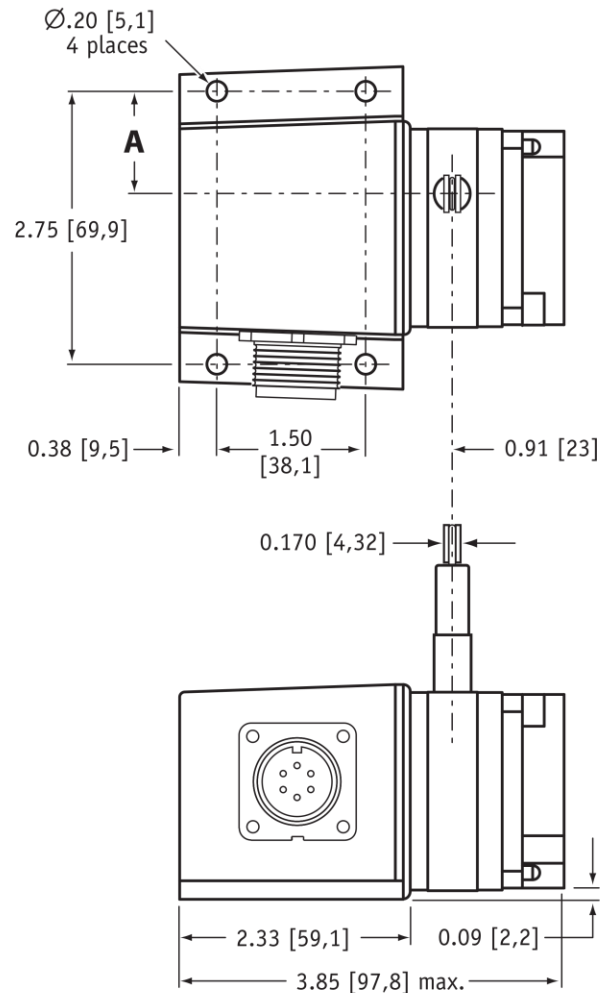
Outline Drawing



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]
<i>inches [mm]</i>	



DIMENSIONS ARE IN INCHES [MM]
tolerances are 0.03 IN. [0.5 MM] unless otherwise noted.



* tolerance = +.005 -.001 [+.13 -.03]
** tolerance = +.005 -.005 [+.13 -.13]

Ordering Information

Model Number:

PT1A - **R** - **A** - **B** - **C** - **D**
order code:

Sample Model Number:

PT1A - 30 - UP - 500 - MC4 - SG

R range: 30 inches
A measuring cable exit: up
B output signal: 500-ohm pot.
C electrical connection: 4-pin micro connector
D cable guide: spring-loaded guide

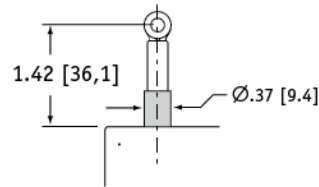
Full Stroke Range:

R order code:	2	5	10	15	20	25	30	40	50
full stroke range, min:	2 in.	5 in.	10 in.	15 in.	20 in.	25 in.	30 in.	40 in.	50 in.
accuracy (% of f.s.):	0.25%		0.15%				0.10%		
potentiometer cycle life:	2,500,000 cycles		500,000 cycles				250,000 cycles		
cable tension (20%):	12 oz.	5 oz.	12 oz.	9 oz.	6 oz.	5 oz.	9 oz.	6 oz.	5 oz.
max. cable acceleration:	11 g	3 g	11 g	5 g	4 g	3 g	5 g	4 g	3 g

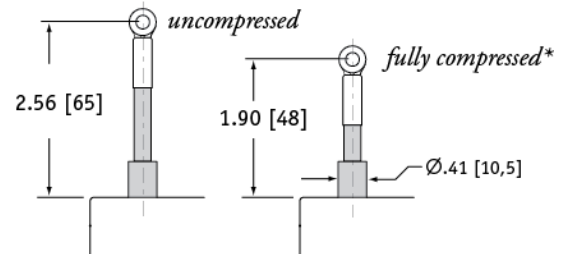
Cable Guide:

① *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).***NORTH AMERICA**

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PT1A 12/01/2015