

OEM Series: Cable-Extension Position Transducer

Precision Potentiometric Output
Ranges: 0-2 to 0-100 inches
Compact Size • OEM Applications

PTX101

Specification Summary:

GENERAL

Full Stroke Range Options 0-2 to 0-100 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 Cable
 with standard cable tension019-in. dia. nylon-coated stainless steel
 with increased or high tension024-in. dia. nylon-coated stainless steel
 Enclosure Material anodized aluminum
 Sensor plastic-hybrid precision potentiometer
 Potentiometer Cycle Life *see ordering information*
 Maximum Retraction Acceleration *see ordering information*
 Weight 2 lbs. max.

ELECTRICAL

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

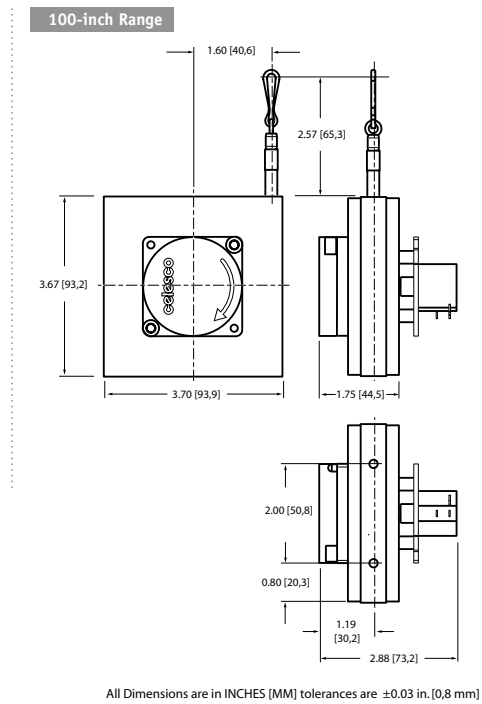
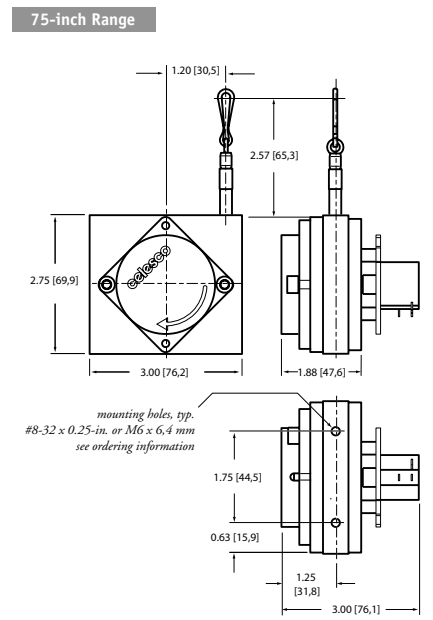
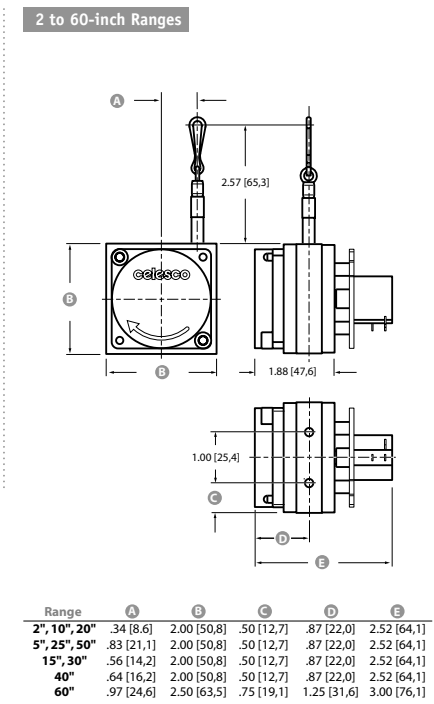
ENVIRONMENTAL

Enclosure NEMA 1
 Temperature Coefficient of Sensing Element 88 PPM/°F
 Humidity 100% RH @ 90°F (32 C)
 Operating Temperature -40° to 200°F (-40° to 90°C)
 Vibration up to 10 G's to 2000 Hz maximum



The PTX101 is a low cost, compact and easy-to-use cable-extension transducer. It is available with full-scale measurement ranges from 2 to 100 inches. The PTX101 provides a voltage feedback signal that is proportional to the linear movement of a traveling stainless-steel extension cable.

Simply mount the body of the transducer to a fixed surface and attach the extension cable to the moving object. The PTX101 is recommended for applications where space and money is limited.



All Dimensions are in INCHES (MM) tolerances are ± 0.03 in. [0,8 mm]



Celesco Transducer Products, Inc.

Ordering Information:

Model Number:

PTX101 - - **1** - **1** -

order code: **R** **A** **B** **C** **D** **E** **F** **G**

Sample Model Number:

PTX101 - 0025 - 111 - 1110

- R** range: 25 inches
- A** measuring cable tension: standard - 5 oz.
- C** mounting holes: 8-32 x .25 in. threaded
- D** sensing circuit: 500 ohms
- F** electrical connection: solder terminals

Full Stroke Range:

R order code:	0002	0005	0010	0015	0020	0025	0030	0040	0050	0060	0075	0100
full stroke range, min:	2 in.	5 in.	10 in.	15 in.	20 in.	25 in.	30 in.	40 in.	50 in.	60 in.	75 in.	100 in.
accuracy (% of f.s.):	0.25%	0.25%	0.15%	0.15%	0.10%	0.15%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
potentiometer cycle life*:	2.5×10^6	2.5×10^6	5×10^5	5×10^5	5×10^5	5×10^5	5×10^5	2.5×10^5	2.5×10^5	2.5×10^5	2.5×10^5	2.5×10^5

*-1 cycle is defined as the travel of the measuring cable from full retraction to full extension and back to full retraction

Measuring Cable Tension:

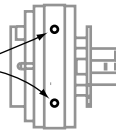
A order code:	1	2**	3**
	standard tension* (max. acceleration)	increased tension*	high tension*
2, 10, 20 inch range:	12 oz. (11 G)	72 oz.	144 oz.
5, 25, 50 inch range:	5 oz. (2 G)	30 oz.	60 oz.
15, 30 inch range:	8 oz. (3 G)	48 oz.	96 oz.
40 inch range:	6 oz. (4 G)	36 oz.	72 oz.
60 inch range:	13 oz. (4 G)	26 oz.	52 oz.
75, 80 inch range:	10 oz. (3 G)	20 oz.	40 oz.
100 inch range:	13 oz. (5 G)	26 oz.	52 oz.

*- tolerance: ±20% **-Options 2, 3 for re-orders only, Option 7 no longer available.

Mounting Holes:

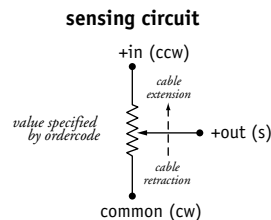
C order code:	1	2
	#8-32 x 0.25-in. threaded holes	M6 x 6,4 mm threaded holes

mounting holes (specified by ordercode)



Sensing Circuit:

D order code:	1	2	3	4
	500 ohm*	1000 ohm*	5000 ohm*	10,000 ohm*



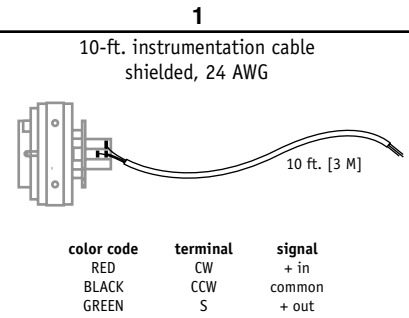
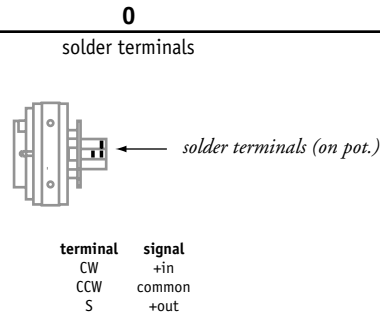
max. input voltage and power rating

	2-inch, 5-inch range	10-inch to 100-inch range
500-ohms:	20 V AC/DC (1 W)	30 V AC/DC (2 W)
1K to 10K-ohms:	30 V AC/DC (1 W)	30 V AC/DC (2 W)

*tolerance = ±10%

Electrical Connection:

i order code:



INTERTECHNOLOGY

1 Scarsdale Road, Don Mills, ON M3B 2R2
 Tel: 416-445-5500 Fax: 416-445-1170 TOLL FREE: 1-800-465-1600
 E-Mail: sales@intertechnology.com Website: www.intertechnology.com

version: 2.0 last updated: February 21, 2006