

# PTX150

## Incremental Encoder Output

Linear Position to 150 inches (3810 mm)

Compact Design • OEM Applications

Anodized Aluminum Enclosure

IP50 / NEMA 1 • Automation & Testing Applications



### GENERAL

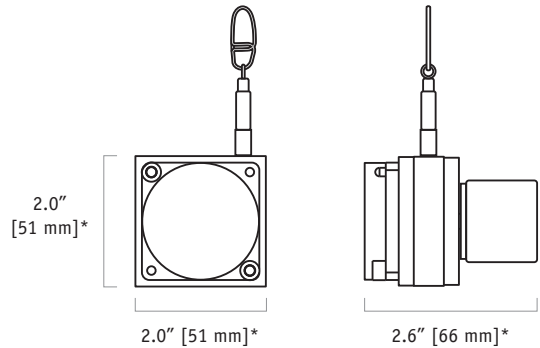
Full Stroke Range Options	0-25 to 0-150 in., 0-625 to 0-3750 mm
Output Signal Options	incremental encoder (quadrature)
Accuracy	see ordering information
Repeatability	± 0.02% full stroke
Resolution Options	25 to 1250 pulses per inch
Measuring Cable	0.019-in. dia. nylon-coated stainless steel
Enclosure Material	anodized aluminum
Sensor	optical encoder
Maximum Retraction Acceleration	see ordering information
Weight	1 lb. max.

### ELECTRICAL

Input Voltage	see ordering information
Input Current	see ordering information
Electrical Connection	18-inch multiconductor cable

### ENVIRONMENTAL

Enclosure	IP50, NEMA 1
Operating Temperature	0° to 160°F (-17° to 71°C)
Humidity	98% RH non-condensing
Vibration	up to 10 g @58 to 500 Hz

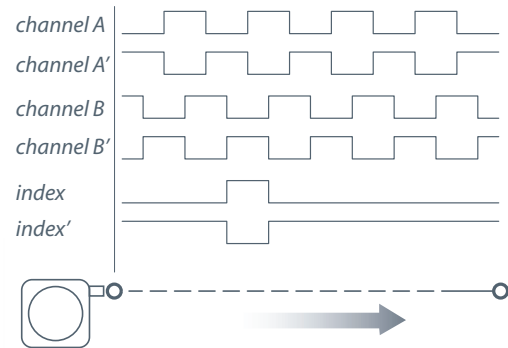


\*note: 25 & 50" range shown for illustration, see outline drawing for other range.

The PTX150 is a low cost, compact and easy to use encoder based cable-extension transducer. It is available with full stroke ranges up to 150 inches. The PTX150 provides an incremental encoder feedback signal.

Simply mount the body of the transducer to a fixed surface and attach the extension cable to the moving object. The PTX150 is recommended for application where space and money is limited.

### Output Signal:



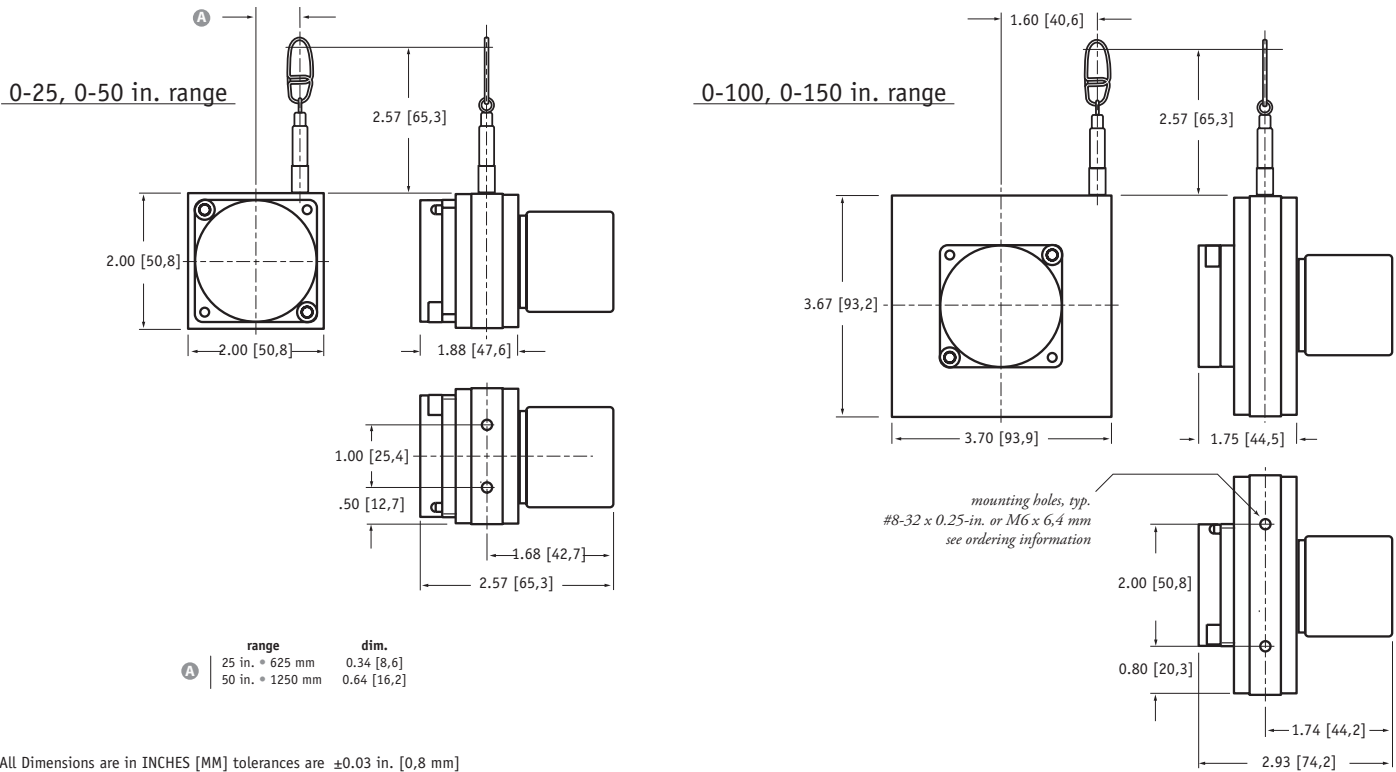
-- see ordering information for available channels

20630 Plummer Street • Chatsworth, CA 91311  
tel: 800.423.5483 • +1.818.701.2750 • fax: +1.818.701.2799



celesco.com • info@celesco.com

**Outline Drawing:**



**Ordering Information:**

**Model Number:**

**PTX150** -      - 1 1 -      -      -      0 0

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

Sample Model Number:

**PTX150 - 0025 - 111 - 1110**

- R** range: 25 inches
- A** mounting holes: 8-32 x .25 in. threaded
- D** output signal: TTL/CMOS driver, Channels A,B
- E** resolution: 500 pulses per inch

**Full Stroke Range:**

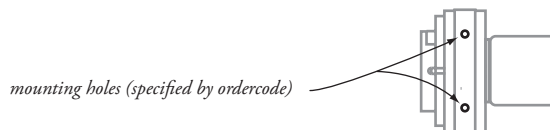
<b>R</b> order code:	<b>0025</b>	<b>0050</b>	<b>0100</b>	<b>0150</b>	<b>0625</b>	<b>1250</b>	<b>2500</b>	<b>3750</b>
full stroke range, min:	25 in.	50 in.	100 in.	150 in.	625 mm	1250 mm	2500 mm	3750 mm
accuracy:	±0.010 in.	±0.020 in.	±0.040 in.	±0.060 in.	±0.25 mm	±0.50 mm	±1.00 mm	±1.50 mm
repeatability:	±0.005 in.	±0.010 in.	±0.020 in.	±0.030 in.	±0.12 mm	±0.25 mm	±0.50 mm	±0.75 mm
cable tension (±20%):	13 oz.	6 oz.	14 oz.	8 oz.	3,6 N	1,8 N	5,0 N	3,0 N

**Mounting Holes:**

**G** order code:      **1**      **2**     





#8-32 x 0.25-in. threaded holes

M6 x 6,4 mm threaded holes



## Ordering Information (cont.):

### Output Signals:

order code:	1	2	3	4
driver option:	 TTL - CMOS	 Open Collector	 5 Volt Line Driver	 Universal Line Driver
<b>Specs:</b>	Input voltage (V+): 4.5...13.2 Vdc Sink current: 20 mA max. Input current: 80 mA max.	Input voltage (V+): 10.8...26.4 Vdc Sink current: 20 mA max. Input current: 80 mA max.	Input voltage (V+): 5 Vdc Sink current: 20 mA max. Input current: 150 mA max.	Input voltage (V+): 5...30 Vdc Source/Sink current: 20 mA max. Input current: 100 mA max, no load
<b>Signal:</b>	4.5 - 13.2 VDC Channel A Channel B Common	10.8 - 26.4 VDC Channel A Channel B Common	4.5 - 13.2 VDC Channel A Channel A' Channel B Channel B' Index Index' Common	5 - 30 VDC Channel A Channel A' Channel B Channel B' Index Index' Common
<b>Color Code:</b>	Red White Green Black	Red White Green Black	Red White Gray Green Blue Yellow Orange Black	Red White Gray Green Blue Yellow Orange Black

### Resolution:

order code:	1	2	3	4
25 in. range:	500 ppi	1000 ppi	1250 ppi	50 ppi
50 in. range:	250 ppi	500 ppi	625 ppi	25 ppi
100 in. range:	100 ppi	200 ppi	250 ppi	10 ppi
150 in. range:	100 ppi	200 ppi	250 ppi	10 ppi
625 mm range:	20 ppmm	40 ppmm	50 ppmm	2 ppmm
1250 mm range:	10 ppmm	20 ppmm	25 ppmm	1 ppmm
2500 mm range:	5 ppmm	10 ppmm	12,5 ppmm	0,5 ppmm
3750 mm range:	4 ppmm	10 ppmm	12,5 ppmm	0,5 ppmm



version: 6.0 last updated: November 6, 2013