

# OEM Series: Cable-Extension Position Transducer

## Incremental Encoder Output

Ranges: 0-25, 0-150 in. • 0-625, 0-3750 mm

Compact Size • OEM Applications

# PTX150

### Specification Summary:

#### GENERAL

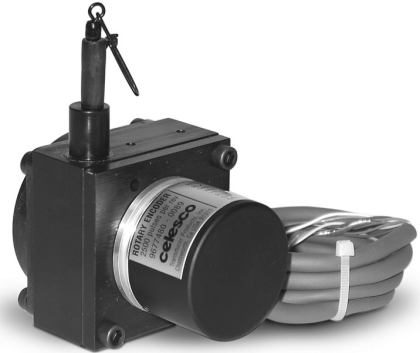
Full Stroke Range Options ..... 0-25 to 0-150 in., 0-625 to 0-3750 mm  
 Output Signal ..... incremental encoder (quadrature)  
 Accuracy ..... *see ordering information*  
 Repeatability ..... *see ordering information*  
 Resolution Options ..... 25 to 1250 pulses per inch  
 Measuring Cable .....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

#### ELECTRICAL

Input Voltage ..... *see ordering information*  
 Input Current ..... *see ordering information*  
 Electrical Connection ..... 18" multiconductor cable

#### ENVIRONMENTAL

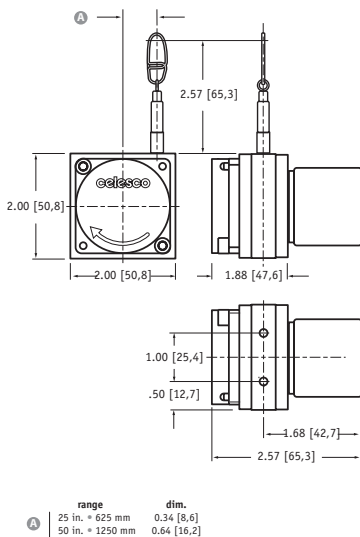
Enclosure ..... NEMA 1  
 Operating Temperature ..... 0° to 160°F (-17° to 71°C)  
 Vibration ..... up to 10 G's to 2000 Hz maximum



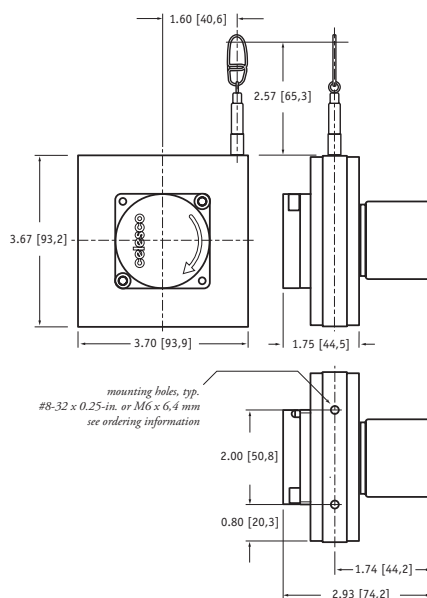
The PTX150 is a low cost, compact and easy to use encoder based cable-extension transducer. It is available with full stroke ranges up to 150 inches. The PTX150 provides an incremental encoder feed-back signal.

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.

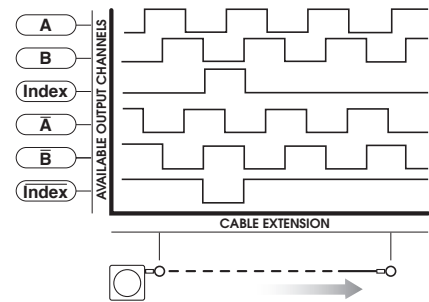
Outline (0-25, 0-50 in. range)



Outline (0-100, 0-150 in. range)



### Output Signal



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

**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**

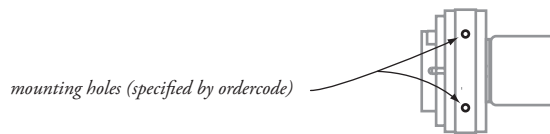
- R** range: 25 inches
- C** mounting holes: 8-32 x .25 in. threaded
- D** output signal: TTL/CMOS driver, Channels A,B
- E** resolution: 500 pulses per inch

**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:**

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



**Output Signals:**

<b>D</b> order code:	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
driver option:	 <b>TTL - CMOS</b>	 <b>Open Collector</b>	 <b>5 Volt Line Driver</b>	 <b>Universal Line Driver</b>
<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:**

<b>E</b> order code:	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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:	5 ppmm	10 ppmm	12,5 ppmm	0,5 ppmm

version: 4.0 last updated: June 15, 2010