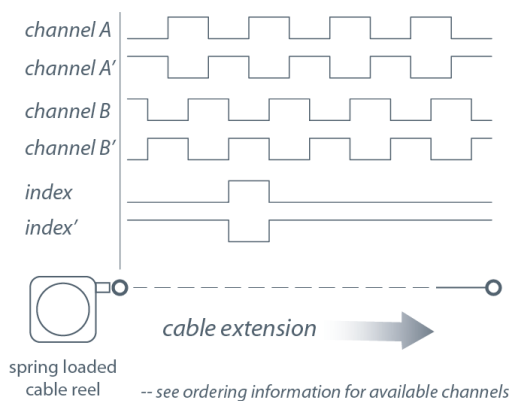


The PTX150 is a low cost, compact and easy to use encoder based cable-extension transducer. It is available with full stroke ranges up to 150 inches. The PTX150 provides an incremental encoder feedback signal.

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



## PTX150

### Cable Actuated Sensor Incremental Encoder Output

**Linear Position to 150 inches (3810 mm)**

**Compact Design • OEM Applications**

**Anodized Aluminum Enclosure**

**IP50 / NEMA 1 • Automation & Testing Applications**

#### General

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

#### Electrical

<b>Input Voltage</b>	see ordering information
<b>Input Current</b>	see ordering information
<b>Electrical Connection</b>	18-inch multiconductor cable

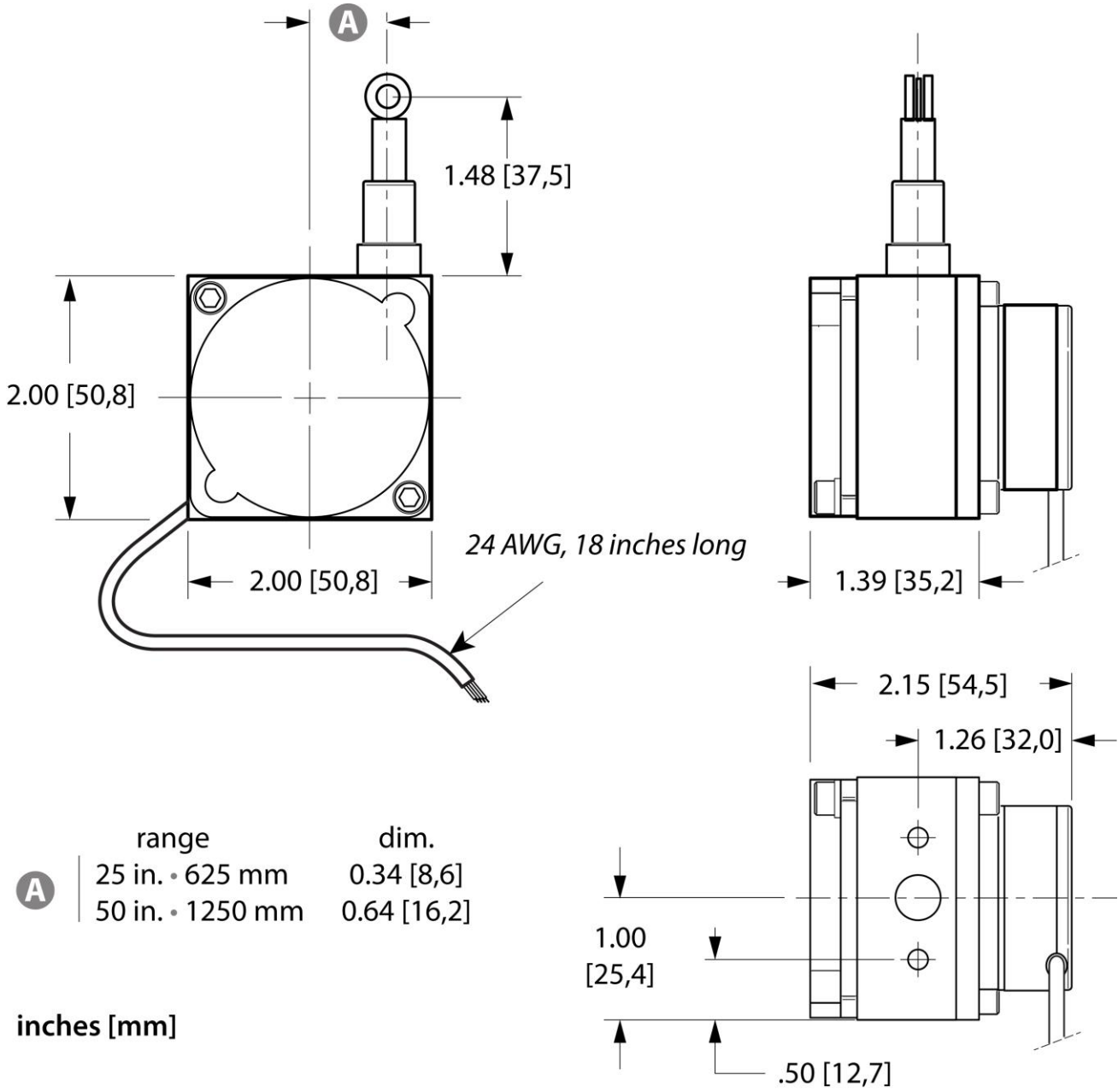
#### Environmental

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

**PTX150**

Incremental Encoder Output

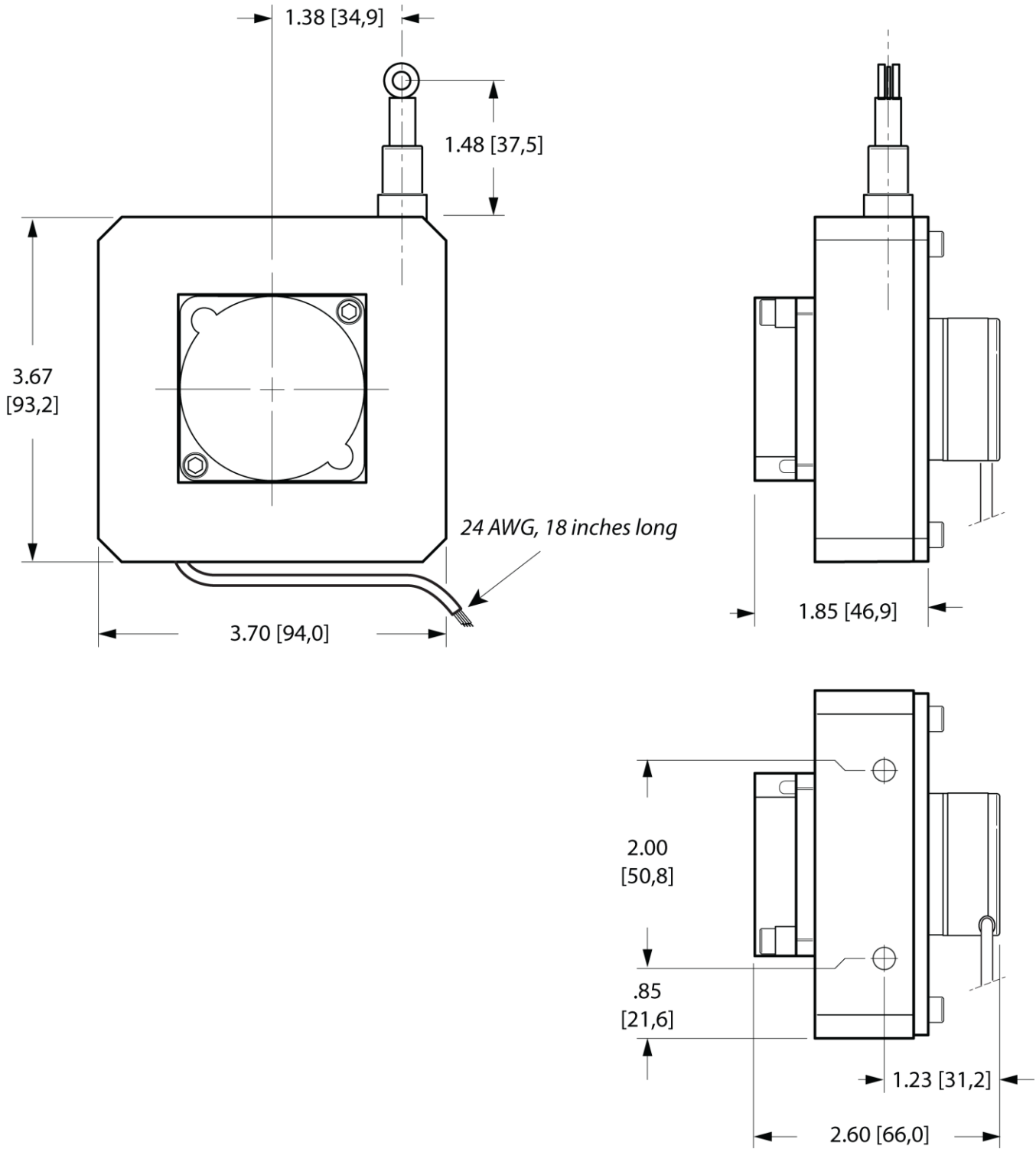
Outline Drawing (25, 50-inch & 625, 1250 mm ranges)



**PTX150**

Incremental Encoder Output

Outline Drawing (100, 150-inch & 2500, 3750 mm ranges)



# PTX150

Incremental Encoder Output

## Model Number:

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

order code:      R      A      B      C      D      E      F      G

Sample Model Number:

**PTX150 - 0025 - 111 - 1110**

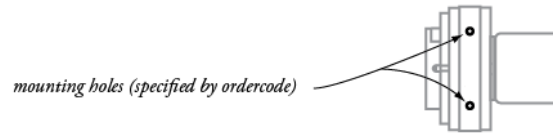
**R** range: 25 inches  
**A** mounting holes: 8-32 x .25 in. threaded  
**D** output signal: TTL/CMOS driver, Channels A,B  
**F** resolution: 500 pulses per inch

## Full Stroke Range:

<b>R</b> order code:	0025	0050	0100	0150	0625	1250	2500	3750
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>G</b> order code:	1	2
	#8-32 x 0.25-in. threaded holes	M6 x 6,4 mm threaded holes



## Output Signals:

<b>D</b> order code:	1	2	3	4
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>F</b> 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

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PTX150 12/01/2015