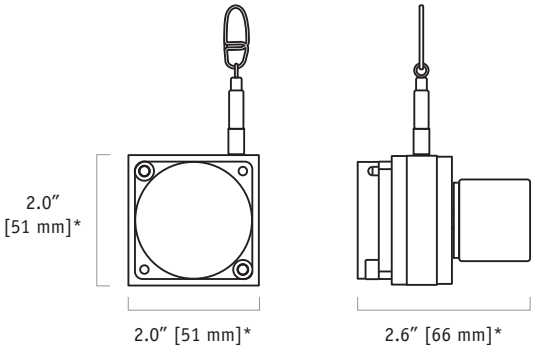
PTX150

Incremental Encoder Output

Linear Position to 150 inches (3810 mm)
Compact Design • OEM Applications
Anodized Aluminum Enclosure
IP50 / NEMA 1 • Automation & Testing Applications





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

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

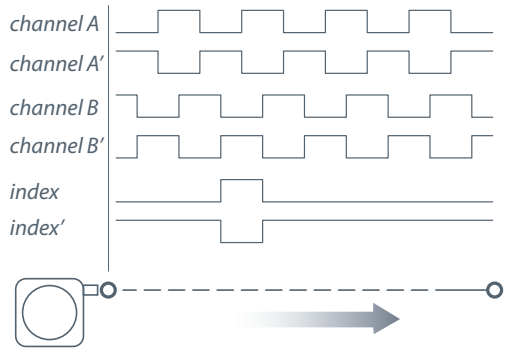
ENVIRONMENTAL

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

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.

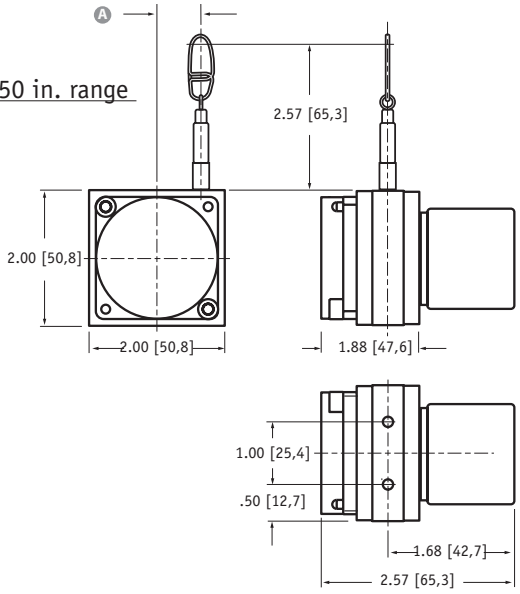
Output Signal:



-- see ordering information for available channels

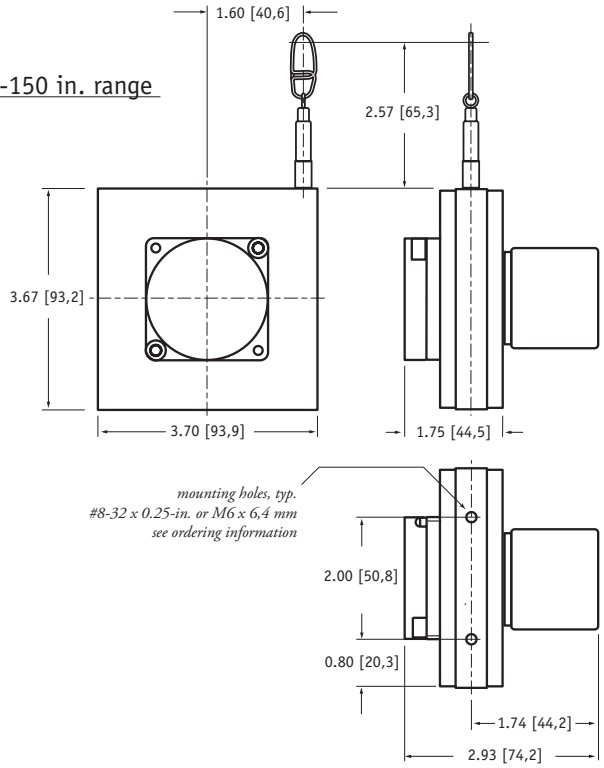
Outline Drawing:

0-25, 0-50 in. range



A	range	dim.
	25 in. • 625 mm	0.34 [8,6]
	50 in. • 1250 mm	0.64 [16,2]

0-100, 0-150 in. range



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: Ⓡ Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ

Sample Model Number:

PTX150 - 0025 - 111 - 1110

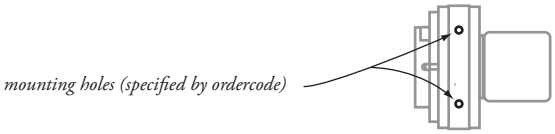
Ⓡ	range:	25 inches
Ⓒ	mounting holes:	8-32 x .25 in. threaded
Ⓓ	output signal:	TTL/CMOS driver, Channels A,B
Ⓔ	resolution:	500 pulses per inch

Full Stroke Range:

Ⓡ 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:

Ⓒ 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
Specs:				
Input voltage (V+):	4.5..13.2 Vdc	10.8...26.4 Vdc	5 Vdc	5..30 Vdc
Sink current:	20 mA max.	20 mA max.	20 mA max.	Source/Sink current: 20 mA max.
Input current:	80 mA max.	80 mA max.	150 mA max.	100 mA max, no load
Signal: / ***Color Code:***				
4.5 - 13.2 VDC / Red				
Channel A / White				
Channel B / Green				
Common / Black				
10.8 - 26.4 VDC / Red				
Channel A / White				
Channel B / Green				
Common / Black				
4.5 - 13.2 VDC / Red				
Channel A / White				
Channel A' / Gray				
Channel B / Green				
Channel B' / Blue				
Index / Yellow				
Index' / Orange				
Common / Black				
5 - 30 VDC / Red				
Channel A / White				
Channel A' / Gray				
Channel B / Green				
Channel B' / Blue				
Index / Yellow				
Index' / Orange				
Common / 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**