

Cable-Extension Position Transducer

- ▼ Long Range
- ▼ Industrial Grade
- ▼ Incremental Encoder Output

EXTENDED RANGE

PT9150



Specification Summary:

GENERAL

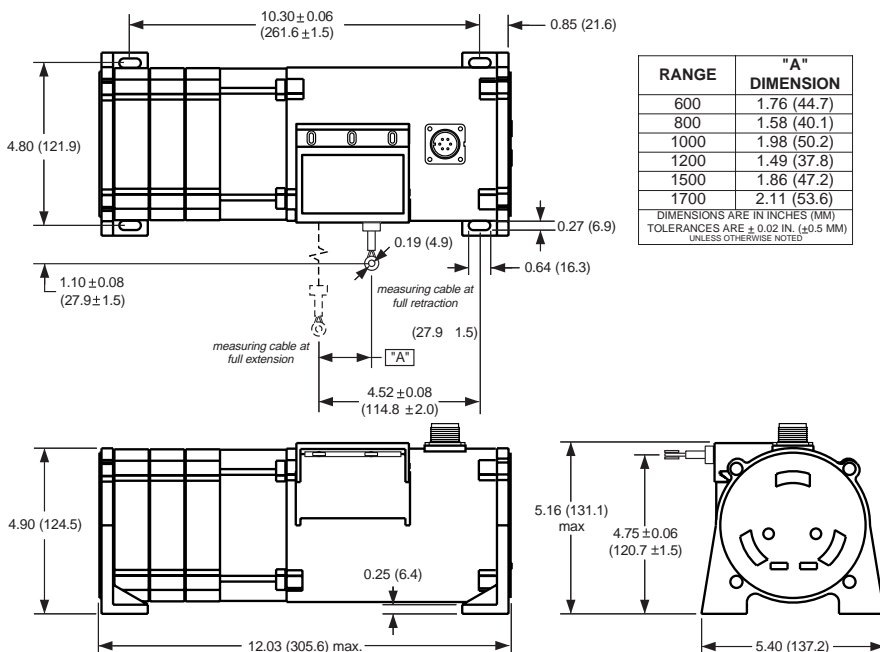
Full Stroke Ranges—on this data sheet ... 0-600 to 0-1700 inches, see ① next page
 Output Signal incremental encoder (quadrature) signal
 Output Driver TTL/CMOS, open collector or line driver, see ⑥
 Accuracy
 Typical the lesser of 0.02% f.s. or 0.04% of measurement $\pm 1/2$ pulse max.
 Best not less than 0.001 in. (0.03 mm)
 Repeatability 0.02% of measurement $\pm 1/2$ pulse max.
 Resolution 10 to 100 pulses per inch, see ⑦ and ⑧
 Measuring Cable stainless steel, nylon-coated or thermoplastic, see ②
 Enclosure Material powder-painted aluminum or stainless steel, see ③
 Sensor optical encoder
 Maximum Retraction Acceleration see ⑤
 Maximum Velocity see ④
 Weight, Aluminum (Stainless Steel) Enclosure 14 lbs. (28 lbs.), max.

ENVIRONMENTAL

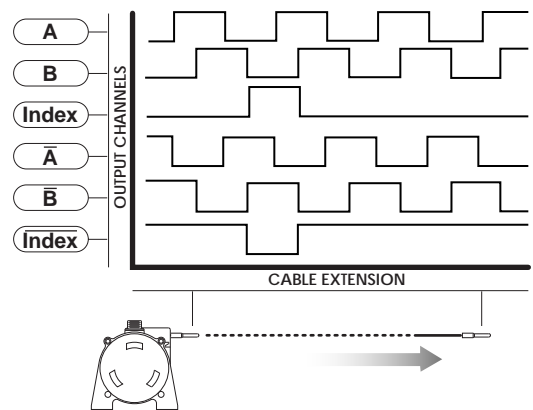
Enclosure Design NEMA 4/4X/6, IP 65/67/68, see ⑨ and ⑩
 Operating Temperature 0° to 160°F
 Vibration up to 10 G's to 2000 Hz maximum

With its incremental optical encoder and industrial design this rugged transducer provides the highest accuracy and longest life of any measurement device of its kind. This model is available in a wide variety of resolutions and output stages to fit virtually any requirement.

It can measure up to 1700", yet when its cable is retracted it is only 6" long. Its small size and low-cost-to-measurement ratio offers remarkable flexibility and value.



Electrical Output Signal:



Latin Tech, Inc.

www.lt-automation.com • info@lt-automation.com

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▼ Ordering Information

Model Number:

PT9150- _____ **1** _____ **0**
order code: **R** **A** **B** **C** **D** **E** **F** **G**

Full Stroke Range:

R order code:	0600	0800	1000	1200	1500	1700
① full stroke english range, min:	600 inches	800 inches	1000 inches	1200 inches	1500 inches	1700 inches
R order code:	15000	20000	25000	30000	35000	40000
full stroke metric range, min:	15,000 mm	20,000 mm	25,000 mm	30,000 mm	35,000 mm	40,000 mm
② cable tension (±30%):	25 oz.	25 oz.	24 oz.	24 oz.	23 oz.	23 oz.
cable construction:	nylon-coated stainless steel				stainless steel	

Enclosure Material:

A order code:	1	3
③ enclosure material:	powder-painted aluminum	303 stainless steel
④ maximum velocity:	60 inches per second	20 inches per second
⑤ max. retraction acceleration:	1 G	0.33 G

Cable Exit:

G order code:	1	2	3	4
direction:	front	top	rear	bottom

Output Signals:

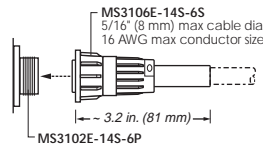
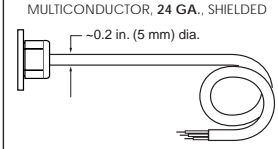
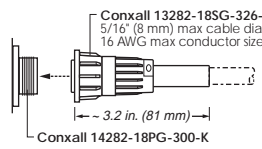
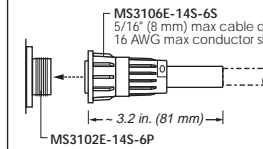
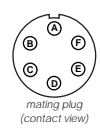
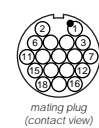
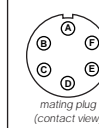
I order code:	1	2	3	4
output driver:	TTL - CMOS	Open Collector	5 V - Line Driver	Universal Line Driver
⑥	Input voltage (V+): 4.5...13.2 Vdc Sink current: 20 mA max. Input current: 80 mA max.	Input voltage (V+): 10.8...26.4 Vdc Sink current: 20 mA max. Input current: 80 mA max.	Input voltage (V+): 5 Vdc Sink current: 20 mA max. Input current: 150 mA max.	Input voltage (V+): 5...30 VDC Source/Sink: 20 mA max. Input current: 100 mA max, no load

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Resolution:

⑩ order code:	1	2	3	4
⑦ resolution for english ranges:	100 ±2 pulses per inch	200 ±4 pulses per inch	250 ±5 pulses per inch	10 ±0.2 pulses per inch
⑧ resolution for metric ranges:	5 ±0.1 pulses per mm	10 ±0.2 pulses per mm	12.5 ±0.25 pulses per mm	0.5 ±0.01 pulses per mm

Electrical Connection:

⑩ order code:	1 ^(*1)	2	3	4 ^(*1)
electrical connection:	6-pin plastic connector and mating plug	25 ft. instrumentation cable	18-pin plastic connector and mating plug	6-pin metal connector and mating plug
				
	connections	connections	connections	connections
	 <p>A = input power (V+) B = common (ground) C = channel A D = channel B E = channel A^(*2) F = channel B^(*2)</p>	<p>RED = input power (V+) BLU = channel A^(*2) BLK = common (gnd.) BRN = channel B^(*2) GRN = channel A YEL = index^(*2) WHT = channel B ORG = index^(*2)</p>	 <p>1 = input power (V+) 2 = common (gnd.) 3 = channel B 6 = channel A 7 = index^(*2) 11 = channel B^(*2) 12 = channel A^(*2) 15 = index^(*2)</p>	 <p>A = input power (V+) B = common (ground) C = channel A D = channel B E = channel A^(*2) F = channel B^(*2)</p>
⑨ IP rating:	67	67, 68 ^(*3)	67	65
⑩ NEMA rating:	6, 4X ^(*4)	6, 4X ^(*4)	6	4

notes: ^{*1}–6-pin connector not available when Index channels are required

^{*2}–no signal present when TTL-CMOS or Open Collector output drivers are selected

^{*3}–requires factory submersion test

^{*4}–applies to stainless steel enclosure,

▼ Sample Model Number

PT9150-1500 - 1 1 1 - 1 1 1 0
order code: ⑩ ⑨ ⑧ ⑦ ⑥ ⑤ ④ ③ ② ①

Specifications: Full Stroke Range: 200 inches
 Enclosure Material: powder-painted aluminum
 Measuring Cable: 0.015-in dia. stainless steel cable
 Cable Exit: front
 Output Driver: TTL/CMOS, 4.5...13.2 VDC
 Resolution: 98 - 102 pulses per inch
 Electrical Connection: 6-pin plastic connector