

Cable-Extension Position Transducer

- ▼ Short to Medium Range
- ▼ Industrial Grade
- ▼ Incremental Encoder Output

Specification Summary:

GENERAL

Full Stroke Ranges 0-2 to 0-60 inches, see ① next page
 Output Signal incremental encoder (quadrature) signal
 Output Driver TTL/CMOS, open collector or line driver, see ⑤
 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 20 to 200 pulses per inch, see ⑥ and ⑦
 Measuring Cable stainless steel, nylon-coated or thermoplastic, see ④
 Enclosure Material powder-painted aluminum or stainless steel, see ③
 Sensor optical encoder
 Weight, Aluminum (Stainless Steel) Enclosure 3 lbs. (6 lbs.), max.

ENVIRONMENTAL

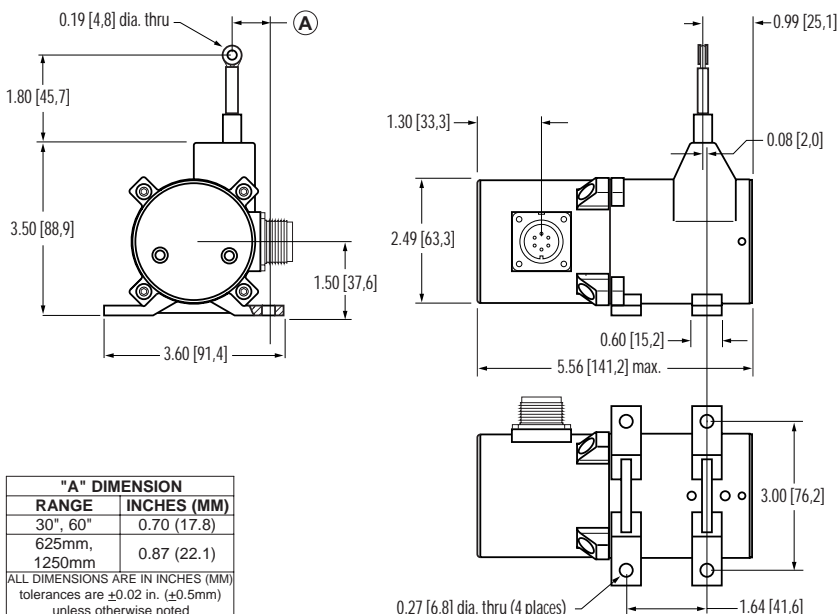
Enclosure Design NEMA 4/4X/6, IP 65/67/68, see ⑧ and ⑨
 Operating Temperature 0° to 160°F
 Vibration up to 10 G's to 2000 Hz maximum

PT8150

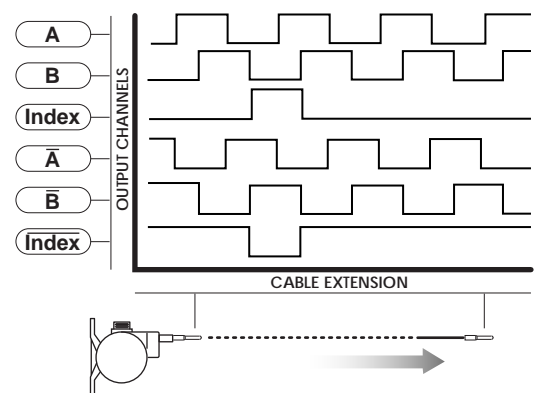


With its incremental optical encoder and industrial design, this rugged transducer provides the highest accuracy and longest life of any measurement device of its kind. For measurements up to 60 inches, this model is available in a variety of resolutions and output stages to fit virtually any requirement.

The PT8150 offers numerous advantages over other industrial-grade sensors: It installs in minutes by mounting its body to a fixed surface and attaching its cable to the movable object, fits into areas unsuited for rod-type measurement devices, and works without perfect parallel alignment.



Electrical Output Signal:



Latin Tech, Inc.

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

PT8150 • Cable-Extension Transducer • Incremental Encoder Output

▼ Ordering Information

Model Number:

PT8150- _____ **1** - _____
 order code: **R** **A** **B** **C** **D** **E** **F** **G**

Full Stroke Range:

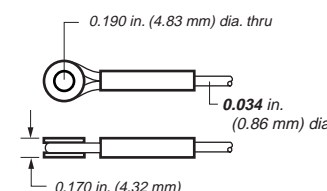
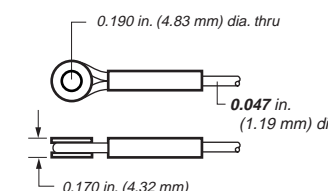
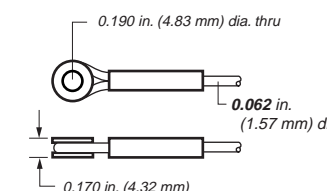
	R order code: 0030	0060	0625	1250
① full stroke range, min:	30 in.	60 in.	625 mm	1250 mm
accuracy (% of f.s.):	0.04 %	0.04%	0.04%	0.04%
maximum cable acceleration:	5 G's	5 G's	5 G's	5 G's
② std. cable tension (±20%):	12 oz.	12 oz.	15 oz.	15 oz.

Enclosure Material and Measuring Cable Tension:

	A order code: 1	2	3	4
③ enclosure material:	powder-painted aluminum		303 stainless steel	
cable tension* multiplier:	1x	3x	1x	3x

note: *refer to ② above

Measuring Cable:

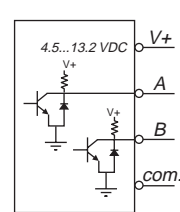
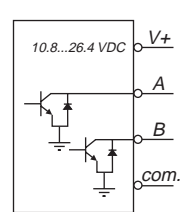
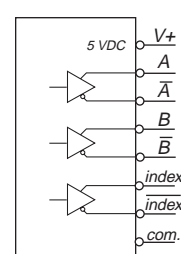
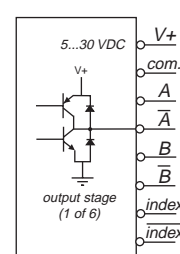
	B order code: 1*	2**	3***
④ cable construction:	.034 nylon-coated stainless steel	.047 stainless steel	.062 thermoplastic
			

notes: *available in all ranges

**30-inch and 625-mm ranges only

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Output Signals:

	D order code: 1	2	3	4
⑤ output driver:	TTL - CMOS	Open Collector	5 V - Line Driver	Universal Line Driver
	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:

⑥ resolution for english ranges:	1	2	3	4
⑦ resolution for metric ranges:	200 ±4 pulses per inch	400 ±8 pulses per inch	500 ±10 pulses per inch	20 ±0.4 pulses per inch
	10 ±0.2 pulses per mm	20 ±0.4 pulses per mm	25 ±0.5 pulses per mm	1 ±0.02 pulse per mm

Electrical Connection:

⑧	⑨	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
		IP rating:	67	67, 68 ^(*3)	67	65
		NEMA rating:	6, 4X ^(*4)	6, 4X ^(*4)	6	4
		notes:	*1-6-pin connector not available when Index channels are required			*3-requires factory submersion test
			*2-no signal present when TTL-CMOS or Open Collector output drivers are selected			*4-applies to stainless steel enclosure, see ③

Cable Guide Options:

⑩ order code:	0	1	2*	3
	standard nylon cable guide	stainless steel cable guide	polyurethane cable bellows	integral cable brush

note: *-will limit measurement range to **25 inches (635 mm)** maximum

▼ Sample Model Number

PT8150-0030 - 1 1 1 - 1 1 1 0

Specifications:	Full Stroke Range:	30 inches
	Enclosure Material:	powder-painted aluminum
	Measuring Cable:	0.034-in dia. nylon coated stainless steel cable
	Output Driver:	TTL/CMOS, 4.5...13.2 VDC
	Resolution:	200 (±4) pulses per inch
	Electrical Connection:	6-pin plastic connector
	Cable Guide:	standard nylon