

Cable-Extension Position Transducer

- ▼ Industrial Grade – Medium to Long Range
- ▼ 4...20 mA Output Signal
- ▼ Intrinsically Safe



PT9420



Specification Summary:

GENERAL

Full Stroke Ranges—on this datasheet 0-75 to 0-550 inches, see ① next page
 Output Signal 4 - 20 mA (2-wire), 0 - 20 mA (3-wire), see ⑦
 Accuracy $\pm 0.12\%$ full stroke, max.
 Repeatability $\pm 0.05\%$ full stroke, max.
 Resolution essentially infinite
 Measuring Cable stainless steel, nylon-coated or thermoplastic, see ⑥
 Enclosure Material powder-painted aluminum or stainless steel, see ②
 Sensor plastic-hybrid precision potentiometer
 Potentiometer Cycle Life 250,000, min.
 Maximum Retraction Acceleration see ⑤
 Maximum Velocity see ④
 Weight, Aluminum (Stainless Steel) Enclosure 8 lbs. (16 lbs.) max.

ELECTRICAL

Input Voltage 12 to 40 VDC
 Input Current 4 - 20 mA
 Loop Resistance (Load) (loop supply voltage - 12) / 0.02, max
 Circuit Protection 38 mA maximum
 Impedance 100 MW @ 100 VDC, min.
 Zero and Span Adjustment 2:1 turndown

ENVIRONMENTAL

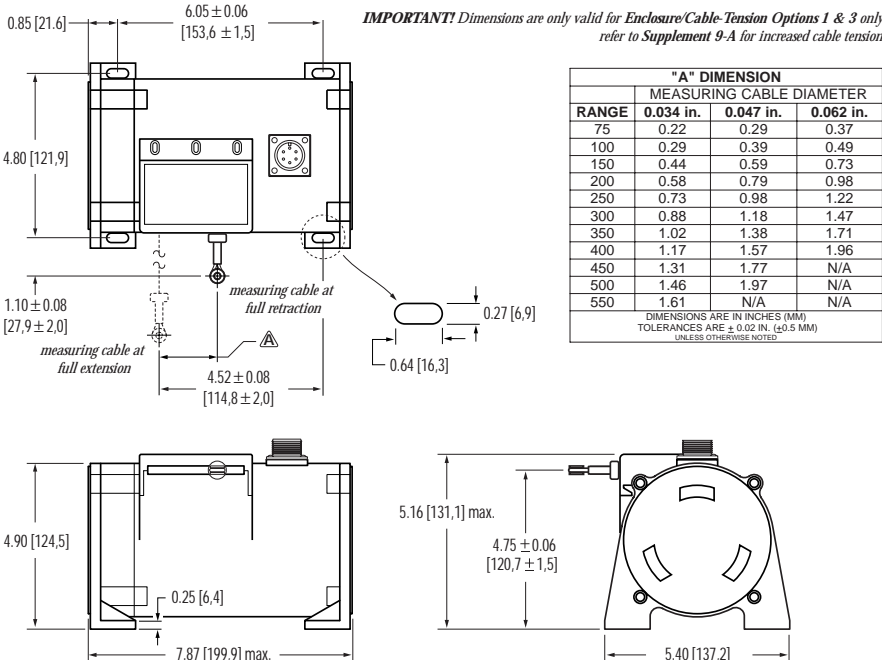
Enclosure Design NEMA 4/4X/6, IP 65/67/68, see ⑨ and ⑩
 Hazardous Area Certification (see ⑧)
 CSA 22.2: Class 1, Groups A, B, C and D
 Cenelec: LCIE EEx ia IIc T4
 Operating Temperature -40° F to 200° F
 Thermal Effects
 Zero 0.01% full stroke / °F, max.
 Span 0.01% / °F, max.
 Vibration up to 10 G's to 2000 Hz max.



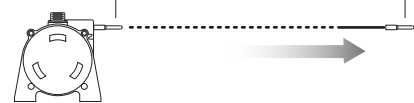
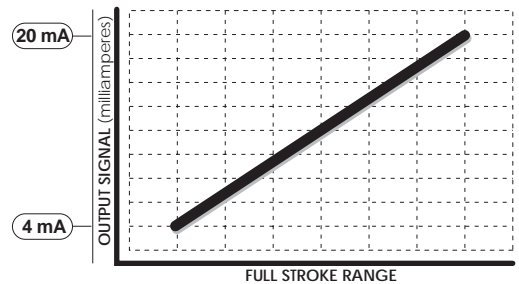
EMC COMPLIANCE PER DIRECTIVE 89/336/EEC

Emission / Immunity EN50081-2 / EN50082-2

The PT9420 is a great value for demanding long-range applications requiring a 4 - 20 mA linear position feedback signal. Sealed to meet NEMA 4 standards, this Cable-Extension Transducer will perform even under the harshest of environmental conditions. The PT9420 provides a 4 - 20 mA feedback signal that is proportional to the linear movement of a traveling stainless-steel extension cable. Simply mount the body of the transducer to a fixed surface and attach the extension cable to the moving object.



Electrical Output Signal:



Latin Tech, Inc.

PT9420 • Cable-Extension Transducer • 4...20 mA Output Signal

▼ Ordering Information

Model Number:

PT9420- _____ - _____ - **1** _____ - **0**
order code: **R** **A** **B** **C** **D** **E** **F** **G**

Full Stroke Range:

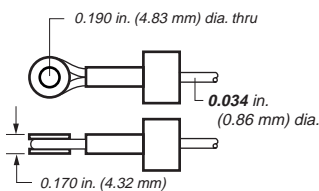
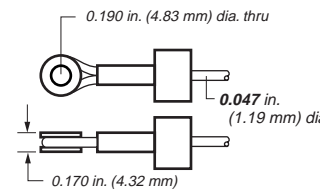
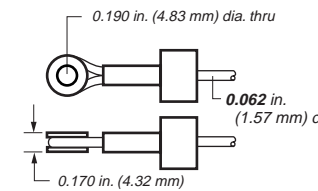
R order code:	0075	0100	0150	0200	0250	0300
① full stroke range, min:	75 inches	100 inches	150 inches	200 inches	250 inches	300 inches
R order code:	0350	0400	0450*	0500*	0550*	
full stroke range, min:	350 inches	400 inches	450 inches	500 inches	550 inches	

*note: *42 oz. cable tension (see ③ below) for these ranges is strongly recommended!*

Enclosure Material and Measuring Cable Tension:

A order code:	1	2	3	4
enclosure:	see drawing (front page)	see Supplement 9-A	see drawing (front page)	see Supplement 9-A
② enclosure material:	powder-painted aluminum		303 stainless steel	
③ cable tension (±30%):	26 oz.	42 oz.	26 oz.	42 oz.
④ maximum velocity:	60 inches per second	200 inches per second	20 inches per second	80 inches per second
⑤ max. retraction acceration:	1 G	5 G's	0.33 G	2 G's

Measuring Cable:

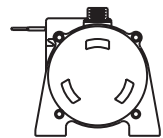
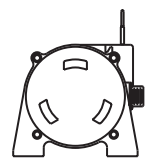
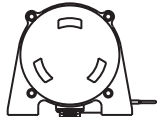
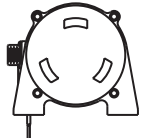
B order code:	1*	2**	3***
⑥ cable construction:	.034 nylon-coated stainless steel	.047 stainless steel	.062 thermoplastic
			

*notes: * available in all ranges*

*** available in ranges up to 500-inches only*

**** available in ranges up to 400-inches*

Cable Exit:

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

PT9420 • Cable-Extension Transducer • 4...20 mA Output Signal

Output Signals:

⑧ order code:	1	2	3	4	5*	6*
⑦ output signal configuration:	4...20 mA [2-wire]	20...4 mA [2-wire]	0...20 mA [3-wire]	20...0 mA [3-wire]	4...20 mA [2-wire]	20...4 mA [2-wire]
⑨ hazardous area certification	none	none	none	none	CSA Standard 22.2 Class 1 Groups A, B, C and D Cenelec LCIE EEx ia IIc T4	

***Important:** Intrinsically Safe when powered from a CSA certified zener barrier rated 28 VDC max, 110 mA max as per Installation Drawing 677984.

Electrical Connection:

⑩ order code:	1	2	3	4																																																												
electrical connection:	6-pin plastic connector and mating plug	10 ft. waterproof cable	6-pin metal connector and mating plug	25 ft. instrumentation cable																																																												
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⑨ IP rating:	67	67, 68*	65	67																																																												
⑩ NEMA rating:	6, 4X**	6, 4X**	4	6																																																												

notes: * requires factory submersion test ** applies to stainless steel enclosure, see ②

▼ Sample Model Number

PT9420-0200-111-1110
order code: ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯

Specifications:	Full Stroke Range:	200 inches
	Enclosure Material:	powder-painted aluminum
	Measuring Cable:	0.034-in dia. nylon coated stainless steel cable
	Cable Exit:	front
	Output Signals:	4-20 mA, 2-wire, output increasing with cable extension
	Electrical Connection:	6-pin plastic connector