

Cable-Extension Position Transducer

- ▼ Medium to Long Range
- ▼ Industrial Grade
- ▼ 0...10 VDC Output Signal



PT9510

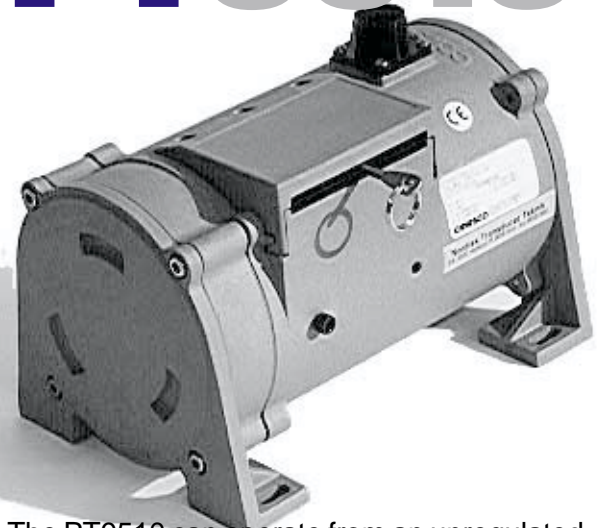
Specification Summary:

GENERAL
 Full Stroke Ranges-on this datasheet0-75 to 0-550 inches (1.9m to 14m) see ① next page
 Output Signal 0-10, 0-5 VDC, see ⑦
 Accuracy $\pm 0.12\%$ full stroke
 Repeatability $\pm 0.05\%$ full stroke
 Resolution essentially infinite
 Measuring Cable nylon-coated stainless steel or thermoplastic, see ⑥
 Enclosure Material powder-painted aluminum or stainless steel, see ②
 Sensor plastic-hybrid precision potentiometer
 Maximum Retraction Acceleration see ⑤
 Maximum Velocity see ④
 Weight, Aluminum (Stainless Steel) Enclosure 4kg. (7kg) max.

ELECTRICAL
 Input Voltage 14.5-40VDC (10.5-40VDC for 0-5 volt output)
 Input Current 10 mA maximum
 Output Impedance 10 ohms max.
 Output Load 5000 ohms min.
 Zero and Span Adjustment 2:1 turndown

ENVIRONMENTAL
 Enclosure Design NEMA 4/4X, IP65/67/68, see ⑧ and ⑨
 Operating Temperature -10° to 60° C
 Vibration up to 10 G's to 2000 Hz maximum

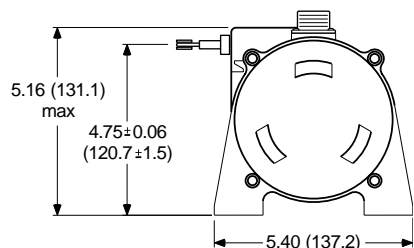
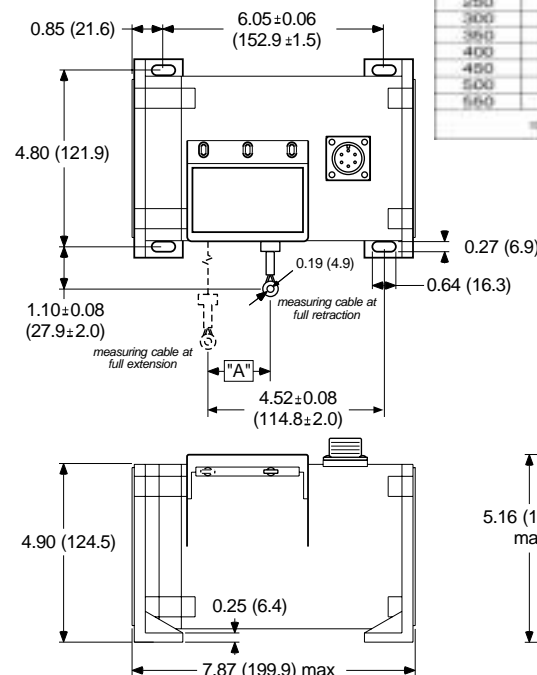
EMC COMPLIANCE PER DIRECTIVE 89/336/EEC
 Emission / Immunity EN50081-2 / EN50082-2
 CE



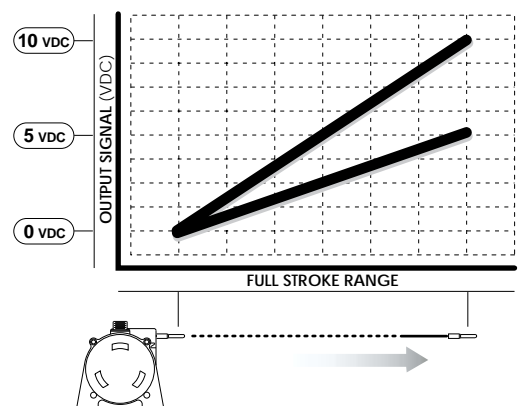
The PT9510 can operate from an unregulated 14.5 to 40 VDC power supply while providing a regulated output signal over it's full extended range of up to 1700". It provides a 0 - 10 VDC position feedback signal proportional to the linear movement of it's stainless steel measuring cable.

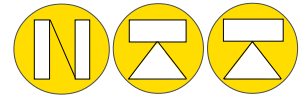
As a member of Celesco's innovative family of NEMA-4 rated cable-extension transducers, the PT9510 offers numerous benefits. It installs in minutes, functions properly without perfectly parallel alignment, and when its cable is retracted, it measures only 6".

RANGE	"A" DIMENSION MEASURING CABLE DIAMETER		
	0.034 in.	0.047 in.	0.062 in.
75	0.23	0.29	0.37
100	0.29	0.36	0.46
150	0.44	0.55	0.73
200	0.58	0.73	0.98
250	0.73	0.98	1.22
300	0.88	1.18	1.47
350	1.02	1.38	1.71
400	1.17	1.57	1.96
450	1.31	1.77	N/A
500	1.46	1.97	N/A
550	1.61	N/A	N/A



Electrical Output Signal:





▼ **Ordering Information**

Model Number:

PT9510- _____ **-** _____ **-** _____ **-** **1** _____ **-** _____ **-** _____ **-** **0** _____
order code: **R** **A** **B** **C** **D** **E** **F** **G**

Full Stroke Range:

	R <i>order code:</i> 0075	A <i>order code:</i> 0100	B <i>order code:</i> 0150	C <i>order code:</i> 0200	D <i>order code:</i> 0250	E <i>order code:</i> 0300
① full stroke range, min:	75 inches	100 inches	150 inches	200 inches	250 inches	300 inches
	F <i>order code:</i> 0350	G <i>order code:</i> 0400	H <i>order code:</i> 0450*	I <i>order code:</i> 0500*	J <i>order code:</i> 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 <i>order code:</i> 1	B <i>order code:</i> 2	C <i>order code:</i> 3	D <i>order code:</i> 4
enclosure:	see front page	refer to supplement 9-A	see front page	refer to 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:

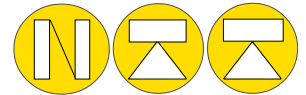
	B <i>order code:</i> 1*	C <i>order code:</i> 2**	D <i>order code:</i> 3***
⑥ cable construction:	nylon-coated stainless steel	stainless steel	thermoplastic

*notes: *available in all ranges **available in ranges up to 500-inches only ***available in ranges up to 400-inches only*

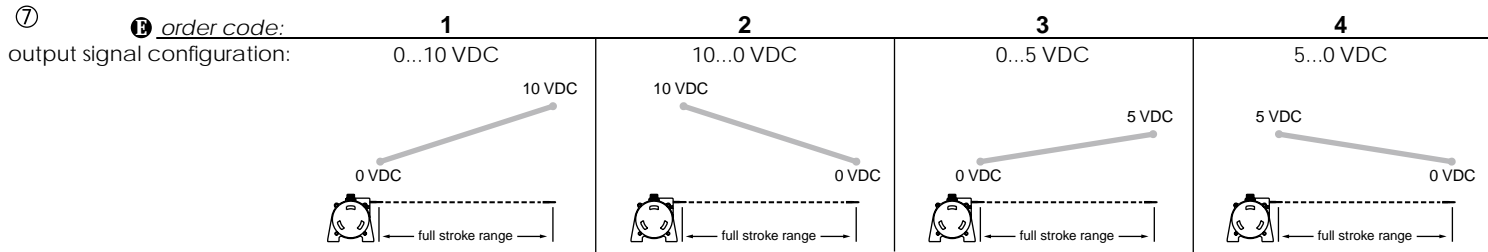
Cable Exit:

D <i>order code:</i> direction:	1	2	3	4
	front	top	rear	bottom

PT9510 • Cable-Extension Transducer • 0...10 VDC Output Signal



Output Signals:



Electrical Connection:

⑧ **order code:**

electrical connection:	1	2	3	4
	6-pin plastic connector and mating plug	10 ft. waterproof cable	6-pin metal connector and mating plug	25 ft. instrumentation cable
	connections A = input voltage B = output signal C = common	connections WHT = input voltage GRN = output signal BLK = common	connections A = input voltage B = output signal C = common	connections RED = input voltage GRN = output signal BLK = common
⑧ IP rating:	67	67, 68*	65	67
⑨ NEMA rating:	4, 4X**	4, 4X**	4	4

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

▼ Sample Model Number

PT9510-0200 - 1 1 1 - 1 1 1 0
order code: ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮

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: 0-10 VDC, output increasing with cable extension
 Electrical Connection: 6-pin plastic connector