

Cable-Extension Position Transducer

0...5, 0...10, -5...+5, -10...+10 VDC Output Options
 Ranges: 0-600 to 0-1700 inches
 Industrial Grade



<Extended Range>

PT9510



Specification Summary:

GENERAL

Full Stroke Range Options—on this datasheet 0-600 to 0-1700 inches
 Output Signal Options..... 0...10, 0...5, -5...+5, -10...+10 VDC
 Accuracy ± 0.12% full stroke
 Repeatability ± 0.05% full stroke
 Resolution essentially infinite
 Measuring Cable stainless steel *see ordering information*
 Enclosure Material powder-painted aluminum or stainless steel
 Sensor plastic-hybrid precision potentiometer
 Potentiometer Cycle Life 250,000, min. —before signal degradation can occur
 Maximum Retraction Acceleration..... *see ordering information*
 Maximum Velocity..... *see ordering information*
 Weight, Aluminum (Stainless Steel) Enclosure 8 lbs. (16 lbs.) max.

ELECTRICAL

Input Voltage 14.5-40VDC (10.5-40VDC for 0-5 volt output)
 Input Current 10 mA maximum
 Output Impedance 1000 ohms
 Maximum Output Load..... 5000 ohms
 Zero and Span Adjustment..... *see ordering information*

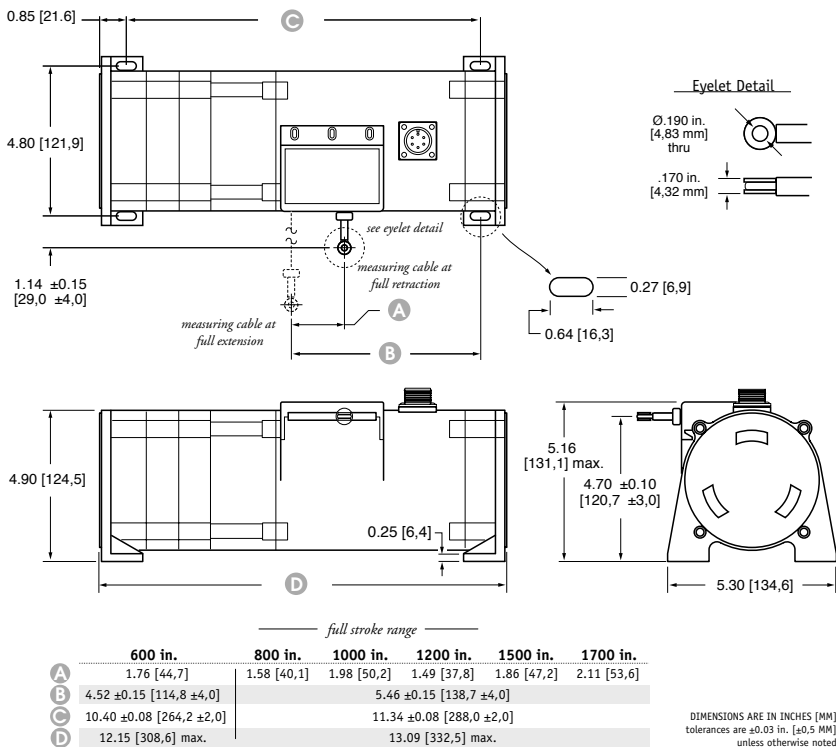
ENVIRONMENTAL

Enclosure NEMA 4/4X/6, IP 67/68
 Operating Temperature..... -40° to 200°F (-40° to 90°C)
 Vibration..... up to 10 G's to 2000 Hz maximum

EMC COMPLIANCE PER DIRECTIVE 89/336/EEC

Emission / Immunity..... EN50081-2 / EN50082-2

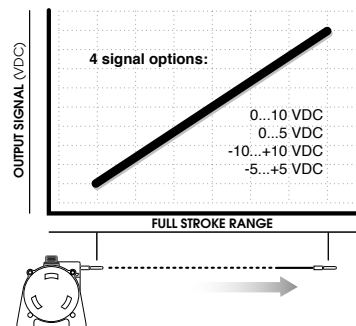
Outline Drawing



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".

Output Signal



Celesco Transducer Products, Inc.
 20630 Plummer Street • Chatsworth, CA 91311
 tel: 800.423.5483 • +1.818.701.2750 • fax: +1.818.701.2799

celesco
 celesco.com • info@celesco.com

Ordering Information:

Model Number:

PT9510- order code: **1** - **1** - **0**

Sample Model Number:

PT9510 - 1200 - 111 - 1110

- R** range: 500 inches
- A** enclosure/cable tension: aluminum
- C** cable exit: front
- B** output signal: 0...10 vdc
- F** electrical connection: 6-pin plastic connector

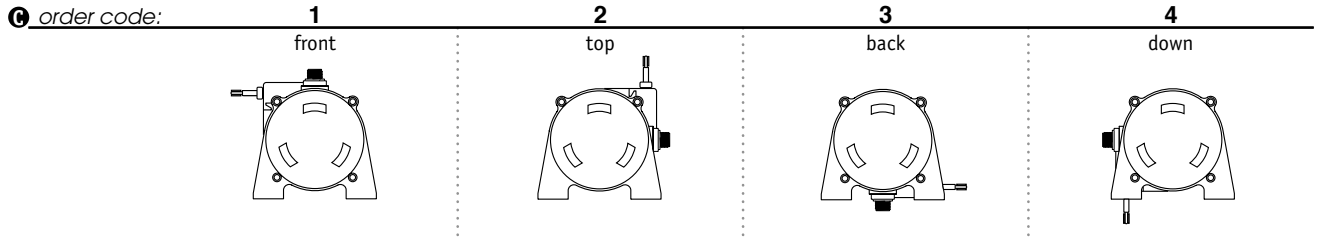
Full Stroke Range:

R order code:	0600	0800	1000	1200	1500	1700
full stroke range, min:	600 in.	800 in.	1000 in.	1200 in.	1500 in.	1700 in.
cable tension (30%):	25 oz.	25 oz.	24 oz.	24 oz.	23 oz.	23 oz.
measuring cable:	.034-in. dia. nylon-coated stainless	.024-in. dia. nylon-coated stainless	.024-in. dia. nylon-coated stainless	.019-in. dia. nylon-coated stainless	.015-in. dia. non-coated stainless	.015-in. dia. non-coated stainless

Enclosure Material:

A order code:	1	3
enclosure material:	powder-painted aluminum	303 stainless steel
max. acceleration:	1G	.33G
max. velocity:	60 inches/sec.	20 inches/sec.

Cable Exit:

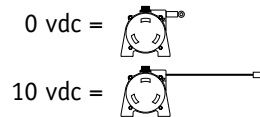


Output Signals:

B order code:	1	2	3	4	5	6	7	8
output signal options:	0...10 VDC	10...0 VDC	0...5 VDC	5...0 VDC	-10...+10 VDC	+10...-10 VDC	-5...+5 VDC	+5...-5 VDC
input voltage:	14.5 - 40 vdc		10.5 - 40 vdc		14.5 - 40 vdc		10.5 - 40 vdc	
span adjustment:	from 100% to 50% of full stroke range				from 100% to 75% of full stroke range			
zero adjustment:	from factory set zero to 50% of full stroke range				from factory set zero to 25% of full stroke range			

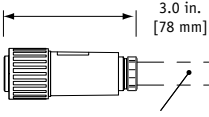
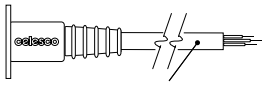
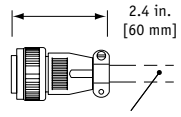
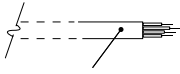
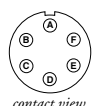
example:

ordercode = **1** = 0...10 VDC



Ordering Information:

Electrical Connection:

1		2		3		4																							
6-pin plastic connector with mating plug IP 67, NEMA 4X*,6		10-ft. waterproof cable 18 AWG, sealed strain relief IP 67,68** NEMA 4X*,6		6-pin metal connector with mating plug IP 65, NEMA 4		25-ft. instrumentation cable 24 AWG, shielded IP 67, NEMA 6																							
																													
.30 - .39 in. [8 - 10 mm] cable dia. 16 AWG max conductor size connector: MS3102E-14S-6P mating plug: MS3106E-14S-6S		10 ft. x 0.4-in. dia. [3 M x 10 mm dia.] 18 AWG, type SJOW-A		3/8-in. [9 mm] max cable dia. 16 AWG max conductor size connector: MS3102E-14S-6P mating plug: MS3106E-14S-6S		25 ft. x 0.2-in. dia. [7,5 M x 5 mm dia.] 24 AWG, shielded																							
<p>6-pin mating plug:</p> <table border="0"> <tr> <td>pin</td> <td>signal</td> </tr> <tr> <td>A</td> <td>input voltage</td> </tr> <tr> <td>B</td> <td>output signal</td> </tr> <tr> <td>C</td> <td>common</td> </tr> </table>  <p style="text-align: center;"><i>contact view</i></p>		pin	signal	A	input voltage	B	output signal	C	common	<p>10-ft. waterproof cable:</p> <table border="0"> <tr> <td>color code</td> <td>signal</td> </tr> <tr> <td>WHITE</td> <td>input voltage</td> </tr> <tr> <td>GREEN</td> <td>output signal</td> </tr> <tr> <td>BLACK</td> <td>common</td> </tr> </table>		color code	signal	WHITE	input voltage	GREEN	output signal	BLACK	common	<p>25-ft. instrumentation cable:</p> <table border="0"> <tr> <td>color code</td> <td>signal</td> </tr> <tr> <td>RED</td> <td>input voltage</td> </tr> <tr> <td>GREEN</td> <td>output signal</td> </tr> <tr> <td>BLACK</td> <td>common</td> </tr> </table>		color code	signal	RED	input voltage	GREEN	output signal	BLACK	common
pin	signal																												
A	input voltage																												
B	output signal																												
C	common																												
color code	signal																												
WHITE	input voltage																												
GREEN	output signal																												
BLACK	common																												
color code	signal																												
RED	input voltage																												
GREEN	output signal																												
BLACK	common																												

*-applies to stainless steel enclosure only. **-requires factory submersion test