

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 $\pm 0.12\%$ full stroke
 Repeatability $\pm 0.05\%$ full stroke
 Resolution essentially infinite
 Measuring Cable nylon-coated stainless steel
 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

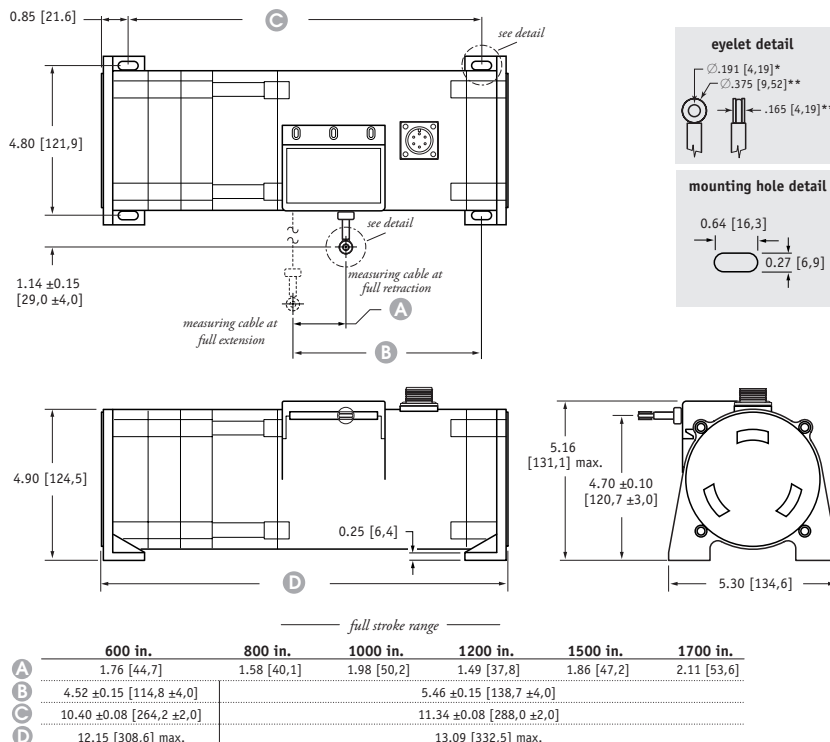
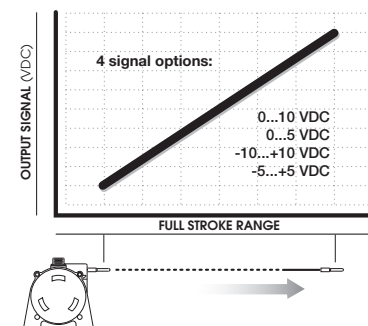
Emission / Immunity EN50081-2 / EN50082-2



PT9510은 조정되지 않은 14.5 ~ 40VDC 전원 공급 장치에서 작동할 수 있으며 최대 1700"의 전체 확장 범위에 걸쳐 조정된 출력 신호를 제공합니다. 스테인리스 스틸 측정 케이블의 선형 움직임에 비례하는 0 – 10VDC 위치 피드백 신호를 제공합니다.

Celeco의 혁신적인 NEMA-4 등급 케이블 연장 변환기 제품군의 일원인 PT9510은 다양한 이점을 제공합니다. 몇 분 안에 설치하고 완벽하게 평행하게 정렬하지 않고도 제대로 작동하며 케이블을 집어넣었을 때 크기가 6인치에 불과합니다.

Output Signal



DIMENSIONS ARE IN INCHES [MM]
 tolerances are 0.03 IN. [0.5 MM] unless otherwise noted.

* tolerance = ± 0.005 -0.001 [± 0.13 -0.03]
 ** tolerance = ± 0.005 -0.005 [± 0.13 -0.13]

Ordering Information:

Model Number:

PT9510-
order code: R - A 1 - C 1 - D E F 0

Sample Model Number:

PT9510 - 1200 - 111 - 1110

- R range:

A enclosure/cable tension:

C cable exit:

E output signal:

F electrical connection:
- 500 inches

aluminum

front

0...10 vdc

6-pin plastic connector

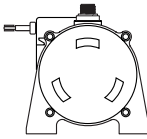
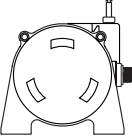
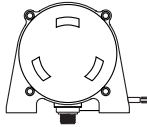
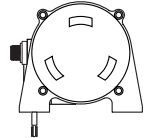
Full Stroke Range:

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 (±35%):	27 oz.	24 oz.	20 oz.	19 oz.	18 oz.	17 oz.
measuring cable:	.034-in. dia. nylon-coated stainless	.019-in. dia. nylon-coated stainless	.019-in. dia. nylon-coated stainless	.019-in. dia. nylon-coated stainless	.014-in. dia. nylon-coated stainless	.014-in. dia. nylon-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:

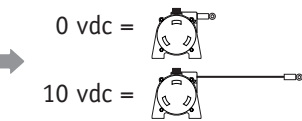
C order code:	1	2	3	4
	front	top	back	down
				

Output Signals:

E 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	10.5 – 40 vdc	10.5 – 40 vdc	14.5 – 40 vdc	14.5 – 40 vdc	10.5 – 40 vdc	10.5 – 40 vdc
span adjustment:	to 50% of full stroke range				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			

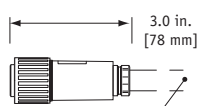
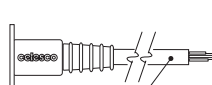
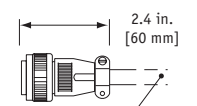
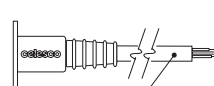
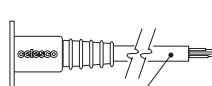
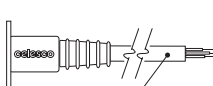
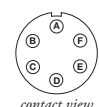
example:

ordercode = 1 = 0...10 VDC



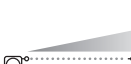
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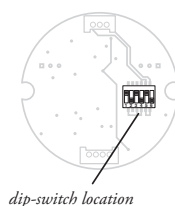
Electrical Connection:

F <i>order code:</i>	1 6-pin plastic connector w/mating plug IP 67, NEMA 4X**, 6  1/2 - 5/16" [14 - 8 mm] cable dia. 16 AWG max conductor size connector: MS3102E-14S-6P mating plug: MS3106E-14S-6S	2 10-ft. [3 M] waterproof cable IP 67, NEMA 4X**, 6  10 ft. x 0.4-in. dia. [3 M x 10 mm dia.] 18 AWG, type SJTW	3 6-pin metal connector w/mating plug IP 65, NEMA 4  3/8-in. [9 mm] max cable dia. 16 AWG max conductor size connector: MS3102E-14S-6P mating plug: MS3106E-14S-6S	4 25-ft. [7.5 M] instrumentation cable IP 67, NEMA 6  25 ft. x 0.2-in. dia. [7.5 M x 5 mm dia.] 24 AWG, shielded																								
F <i>order code:</i>	5 100-ft. [30 M] waterproof cable IP 67, NEMA 4X**, 6  100 ft. x 0.4-in. dia. [30 M x 10 mm dia.] 18 AWG, type SJTW	6 10-ft. [3 M] pressure tested* waterproof cable IP 68, NEMA 4X**, 6P  10 ft. x 0.4-in. dia. [3 M x 10 mm dia.] 18 AWG, type SJTW	7 100-ft. [30 M] pressure tested* waterproof cable IP 68, NEMA 4X**, 6P  100 ft. x 0.4-in. dia. [30 M x 10 mm dia.] 18 AWG, type SJTW																									
6-pin Mating Plug <table> <tr> <th>pin</th> <th>signal</th> </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>  <i>contact view</i>		pin	signal	A	input voltage	B	output signal	C	common	Waterproof Cable <table> <tr> <th>color code</th> <th>signal</th> </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	Instrumentation Cable <table> <tr> <th>color code</th> <th>signal</th> </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
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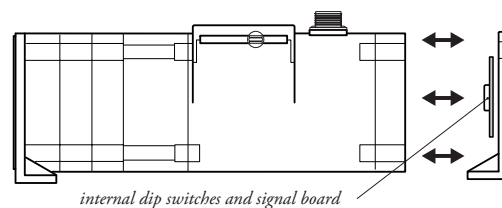
Notes: { * -Test pressure: 100 feet [30 meters] H₂O (40 PSID); Test Medium: Air; Duration: 2 hours.
 ** -NEMA 4X applies to stainless steel enclosure only.

Output Signal Selection (does not apply to -5...+5 & -10...+10 vdc options)

output signal	switch setting	signal board
0...10 vdc		
10...0 vdc		
0...5 vdc		
5...0 vdc		



To gain access to the signal board, remove four Allen-Head Screws and remove end cover bracket.



Caution! Do Not Remove Spring-Side End Cover

Removing spring-side end cover could cause spring to become unseated and permanently damaged.

The output signal direction can be reversed at any time by simply changing the dip-switch settings found on the internal signal board. After the settings have been changed, adjustment of the Zero and Span trimpots will be required to precisely match signal values to the beginning and end points of the stroke.