## Cable-Extension Position Transducer

- Short to Medium Range
- Unregulated Input / 0...10 VDC Output



#### **GENERAL**

Range0-2, -5, -10, -15, -20,	-25, -30, -40, -50, -60, -75, -100 inches
Weight	powder coated and anodized aluminum
Enclosure Materials	powder coated and anodized aluminum
Sensor	plastic-hybrid precision potentiometer
Electrical Connector	MS3102E-14S-6P
	MS3106E-14S-6S

ELECTRICAL	
Sensing Circuit Options 1 & 3*:	
Input Voltage	14.5 - 50 VDC
Output Voltage	0 -10 VDC
Output Voltage	
Innut Voltage	10.5 - 50 VDC
Output Voltage	0 - 5 VDC
Input Current	10mA maximum
Output Impedance	1000 ohms
Output Voltage Input Current Output Impedance Maxium Output Load	5000 ohms
•	*see ordering information
	3

#### **PERFORMANCE**

Accuracy:

2 and 5 inch ranges	± 0.25% full stroke
10. 15 and 25 inch ranges	± 0.15% full stroke
20 inch, 30 inch, and greater	± 0.10% full stroke
Resolution	essentially infinite
Zero and Span Adjustment Range	2:1 túrndown

#### **MECHANICAL**

Measurement Range (Inches)	Cable Tension (Ounces, ±30%)	Max. Cable Acceleration (Gravities)
0- 2, -10, -20	12	11
0- 5, -25, -50	5	2
0-15, -30	8	3
0-40	6	4
0-60	13	4
0-75	10	3
0-100	13	2

Optional Cable Tension .....see ordering information 

#### ENIVIDONIMENTAL

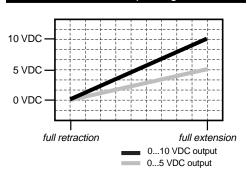
ENVIRONMENTAL	
Operating Temperature	40 <sup>o</sup> F to +200 <sup>o</sup> F
Operating Humidity, Splash	NEMA 1
Vibration	up to 10G's to 2000 Hz

The PT510 Cable-Extension Transducer provides a regulated 0-10V feedback signal that is linearly proportional to the position of a traveling stainless steel extension cable.

For industrial applications, users can adjust the zero and span settings in order to match the sensitivities of multiple transducer systems. For applications requiring position feedback data from mobile equipment or sites with access only to unregulated 12V power supplies, the PT510 is ideal.

The PT510 installs in minutes by mounting its base to a fixed surface and attaching its cable to the movable object. The PT510 works without perfect parallel alignment, and when its stainless steel cable is retracted, its height is less than 5".

#### **Electrical Output Signal**



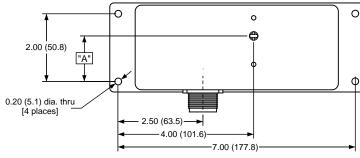
Latin Tech, Inc.

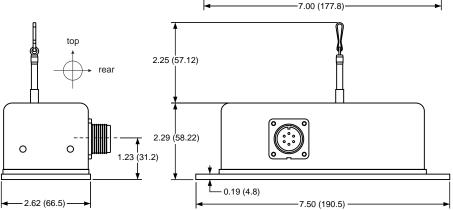
### PT510 Short to Medium Range • 0...10 VDC Output

#### outline drawing (2 thru 50 inch f.s. ranges)

"A" DIMENSION		
RANGE	INCHES (MM)	
2", 10", 20"	1.34 (34.0)	
5", 25", 50"	1.83 (46.8)	
15", 30"	1.56 (39.6)	
40"	1.63 (41.4)	
ALL DIMENSIONS ARE IN		
INCHES (MM)		
tolerances are +0.02 in. (+0.5mm)		

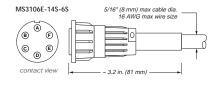
unless otherwise noted



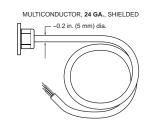


#### Electrical:

### Mating Plug



### **Instrumentation Cable**



## Ordering Information / Model Number:

# PT510 - - 1 0

#### Full Stroke Range

<b>0002</b> = 2 inches	<b>0030</b> = 30 inches
<b>0005</b> = 5 inches	0040 = 40  inches
<b>0010</b> = 10 inches	0050 = 50  inches
<b>0015</b> = 15 inches	0060 = 60  inches
<b>0020</b> = 20 inches	<b>0075</b> = 75 inches
<b>0025</b> = 25 inches	<b>0100</b> = 100 inches

#### **Electrical Connections**

		input voltage	output voltage	com.
	Α	•		
	В		•	
6-pin	С			•
conn.	D			
	Е			
	F			
	WHT	•		
instr. cable	BLK			•
	GRN		•	

#### A Measuring Cable Tension

1 = standard (see MECHANICAL specifications)

NOTE: options 2, 3, and 7 below are available for RE-ORDER only!

- **2** = increased (approx. 4 x standard cable tension, 0.024 inch dia. measuring cable)\*
- 3 = high (approx. 8 x standard cable tension, 0.024 inch dia. measuring cable)\*
- 7 = decreased (same as standard cable tension)

#### C Measuring Cable Exit

NOTE: options 2, 3, and 4 below are available for RE-ORDER only!

1 = top exit 2 = front exit 3 = rear exit 4 = bottom exit

#### E Output

- **1** = 0-10 VDC, output increasing with cable extension
- **2** = 0-5 VDC, output increasing with cable extension
- **3** = 10-0 VDC, output decreasing with cable extension
- **4** = 5-0 VDC, output decreasing with cable extension

#### F Electrical Connection

- 1 = 6-pin plastic connector and mating plug
- 2 = terminal strip
- 3 = 6-pin metal connector and mating plug
- 4 = 25 ft. instrumentation cable

sample: PT510-0025-111-1110

<sup>\*</sup> note: mechanical dimensions may vary from outline drawing above