

Cable-Extension Position Transducer

Precision Potentiometric Output
Ranges: 0-2 to 0-60 inches
Industrial Grade



PT8101



Specification Summary:

GENERAL

Full Stroke Range Options 0-2 to 0-60 inches
 Output Signal Options voltage divider (potentiometer)
 Accuracy $\pm 0.25\%$ to $\pm 0.10\%$ full stroke *see ordering information*
 Repeatability $\pm 0.02\%$ full stroke
 Resolution essentially infinite
 Measuring Cable Options nylon-coated stainless steel or thermoplastic
 Enclosure Material powder-painted aluminum or stainless steel
 Sensor plastic-hybrid precision potentiometer
 Potentiometer Cycle Life *see ordering information*
 Maximum Retraction Acceleration *see ordering information*
 Weight, Aluminum (Stainless Steel) Enclosure 3 lbs. (6 lbs.) max.

ELECTRICAL

Input Resistance Options 500, 1K, 5K, 10K or bridge, *see ordering information*
 Power Rating, Watt 2.0 at 70°F derated to 0 at 250°
 Recommended Maximum Input Voltage 30 V (AC/DC)
 Output Signal Change Over Full Stroke Range 94% $\pm 4\%$ of input voltage

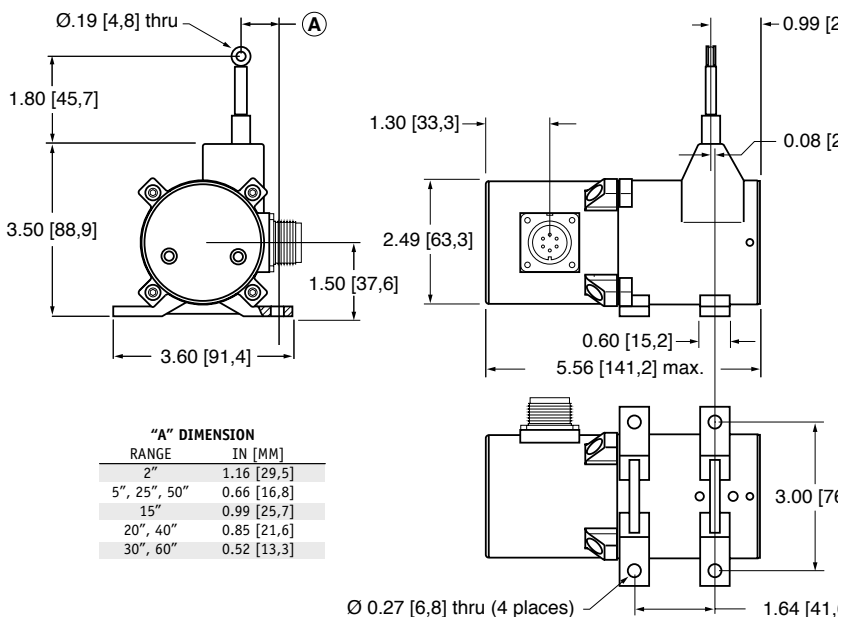
ENVIRONMENTAL

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

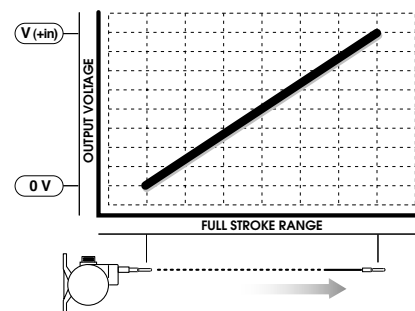
The PT8101, using a high cycle plastic-hybrid potentiometer, operates with any basic panel meter or programmable controller in factories and harsh environments requiring linear position measurements in ranges up to 60".

As a member of Celesco's innovative family of NEMA 4 rated cable-extension transducers, the PT8101: installs in minutes by mounting its body to a fixed surface and attaching its cable to the movable object, works without perfect parallel alignment, and when its stainless-steel cable is retracted, it measures only 5".

Outline Drawing

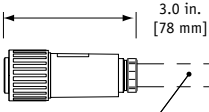
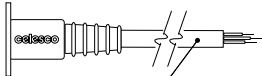
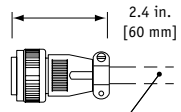
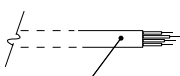
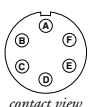


Output Signal



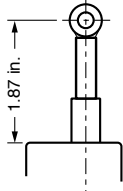
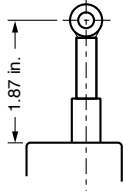
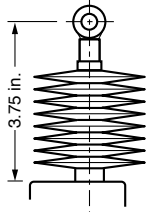
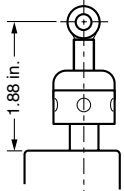
Ordering Information:

Electrical Connection:

① order code:		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
					
		1/2 - 5/16" [14 - 8 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
6-pin mating plug:		10-ft. waterproof cable:		25-ft. instrumentation cable:	
pin	standard	bridge	color code	standard	bridge
A	+ in	+ in	WHITE	+ in	n/a
B	common	- in	BLACK	common	n/a
C	+ out	- out	GREEN	+ out	n/a
D	-	+ out			
 <p>contact view</p>					

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

Cable Guide Options:

① order code:		0	1	2*	3
		standard cable guide	stainless steel cable guide	polyurethane cable bellows	integral cable brush
					

*note: all ranges up to 25 inches only