



mm PT1A

Description

- Absolute Linear Position to 50 inches (1270 mm)
- Aluminum and Polycarbonate Enclosure
- Compact Design
- IP65 · NEMA 4 Protection

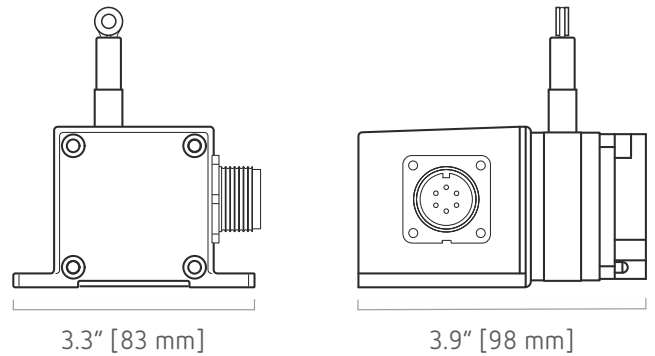


The PT1A is perfect where space and money are limited. The PT1A is part of our compact line of cable-extension transducers. Using a high cycle plastic-hybrid potentiometer, the PT1A provides a precision voltage divider position feedback signal for full-scale measurement ranges from 2 to 50 inches.

The PT1A has many features to offer including 500 to 10K ohm potentiometer selection, adjustable bridge circuit and multiple measuring cable exit options.

GENERAL

Full Stroke Range Options	0-2 to 0-50 inches
Output Signal Options	voltage divider (potentiometer)
Accuracy	see ordering information
Repeatability	± 0.02% full stroke
Resolution	essentially infinite
Measuring Cable	.019-in. dia. nylon-coated stainless steel
Enclosure	glass-filled polycarbonate and black anodized aluminum
Sensor	plastic-hybrid precision potentiometer
Potentiometer Cycle Life	see ordering information
Maximum Retraction Acceleration	see ordering information
Weight	1 lb. max.



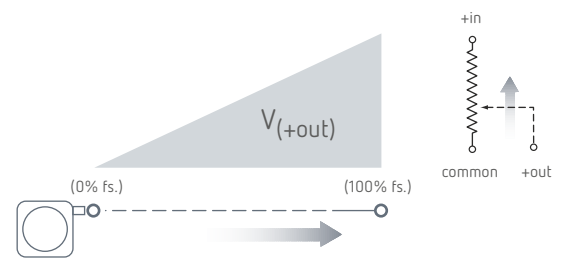
ELECTRICAL

Input Resistance Options	see ordering information
Power Rating, Watt	see ordering information
Recommended Maximum Input Voltage	see ordering information
Output Signal Change Over Full Stroke Range	94% ±4% of input voltage

ENVIRONMENTAL

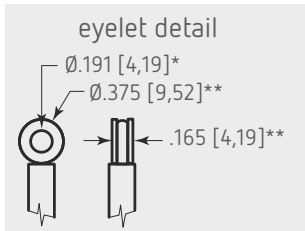
Enclosure	NEMA 4, IP 65
Operating Temperature	0° to 200°F (-17° to 90°C)
Vibration	up to 10 g to 2000 Hz maximum

Output signal



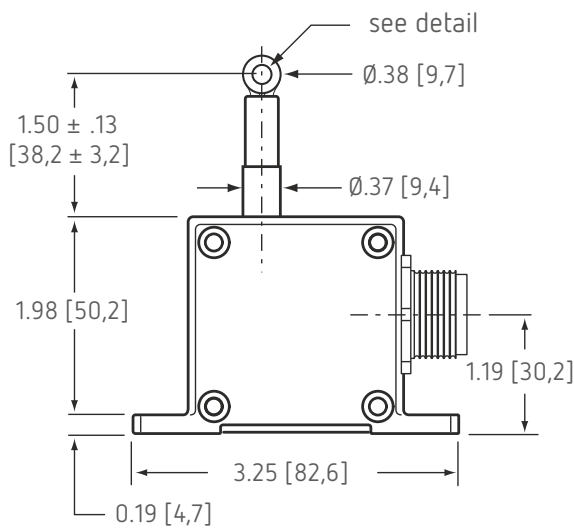
-- bridge circuit option available, see ordering information

Outline drawing

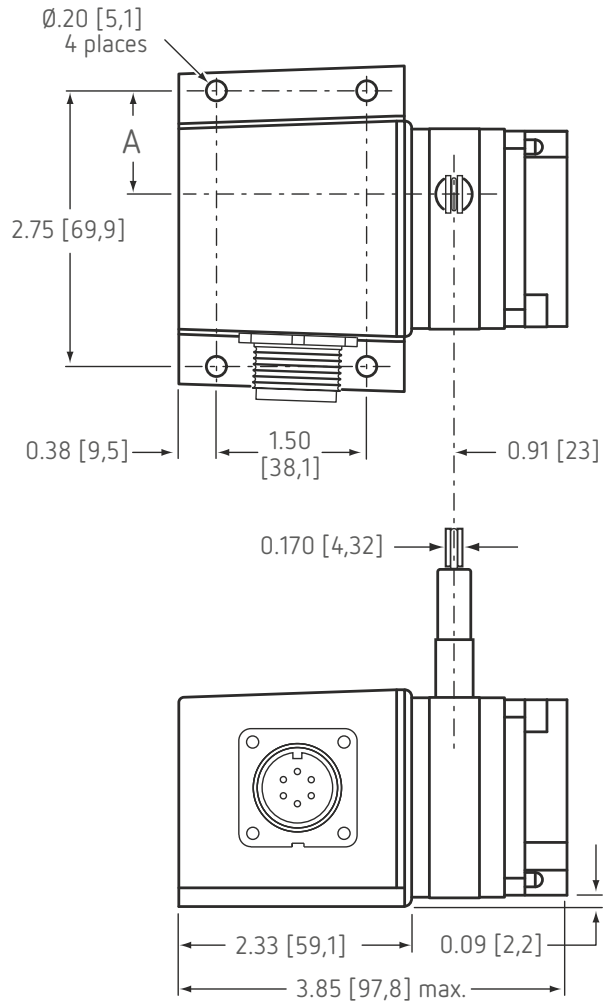


Range	A
2, 10	1.04 [26,4]
5, 25, 50	0.58 [14,7]
15, 30	0.82 [20,8]
20, 40	0.74 [18,8]

inches [mm]



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



* tolerance = +.005 - .001 [+13 - .03]
** tolerance = +.005 - .005 [+13 - .13]

Ordering Information:

Model Number:



Sample Model Number:

PT1A - 30 - UP - 500 - MC4 - SG

- R** range: 30 inches
- A** measuring cable exit: up
- B** output signal: 500-ohm pot.
- C** electrical connection: 4-pin micro connector
- D** cable guide: spring-loaded guide

Full Stroke Range:

R order code:	2	5	10	15	20	25	30	40	50
full stroke range, min:	2 in.	5 in.	10 in.	15 in.	20 in.	25 in.	30 in.	40 in.	50 in.
accuracy (% of f.s.):	0.25%			0.15%			0.10%		
potentiometer cycle life:	2,500,000			500,000 cycles			250,000 cycles		
cable tension (20%):	12 oz.	5 oz.	12 oz.	9 oz.	6 oz.	5 oz.	9 oz.	6 oz.	5 oz.
max. cable acceleration:	11 g	3 g	11 g	5 g	4 g	3 g	5 g	4 g	3 g

Ordering Information (cont.):

Cable Exit:

A order code: direction:	UP up	DN down	FR front	BK back																																								
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Output Signals:

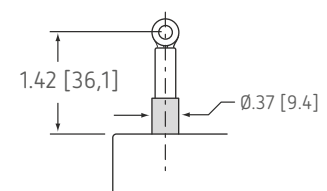
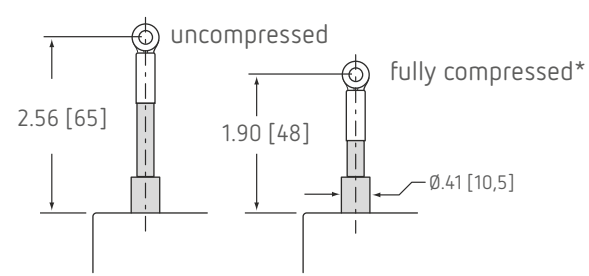
B order code:	500	1K	5K	10K	AB
	500 ohm*	1000 ohm*	5000 ohm*	10,000 ohm*	adjustable bridge (0...30 mV/V).....
					*tolerance = ±10%
	max. input voltage and power rating, options: 500, 1K, 5K, 10K				
	2-inch, 5-inch range		10-inch to 50-inch range		
500-ohms:	20 V AC/DC (1 W)		30 V AC/DC (2 W)		
1K to 10K-ohms:	30 V AC/DC (1 W)		30 V AC/DC (2 W)		
	circuit options: 500, 1K, 5K, 10K			circuit option: AB (adjustable bridge)	
				full scale output: adjustable from 0 to 30mV/V zero adjust: to 50% of full stroke	

Electrical Connection:

C order code:	MC4	M6	C25																																																					
	4-pin micro-connector with 12 ft [3.5 M] cordset	6-pin plastic connector with mating plug	25-ft. instrumentation cable 24 AWG, shielded																																																					
	4-pin mating plug and cord set:	6-pin mating plug:	25-ft. cable:																																																					
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Ordering Information (cont.):

Cable Guide:

D order code:	blank	SG
	standard cable guide	spring-loaded guide
		<p>cable-guide cushions impact from accidental free release</p> 

*note: start of full stroke range begins at full compression point (except 2-inch and 5-inch ranges).

The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification.

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