

# String Encoder

Mates To Virtually Any Encoder  
 Ranges: 0-600 to 0-1700 inches  
 Available With or Without Encoder

<Extended Range>

# PT9600

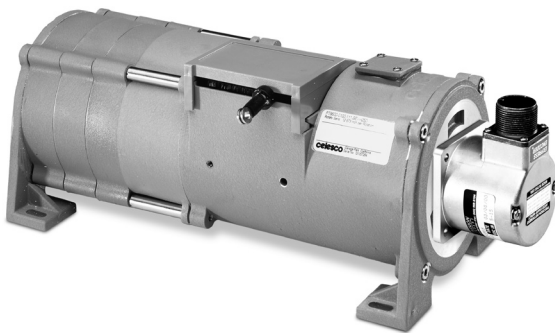
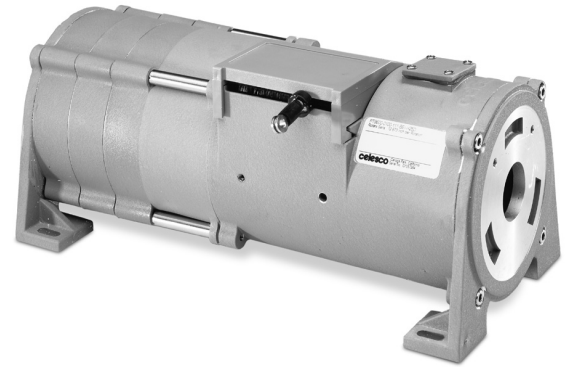
## Specification Summary:

### GENERAL

Full Stroke Range Options—on this datasheet . . . . . 0-600 to 0-1700 inches  
 Motion Conversion Ratio . . . . . 12.6 inches per turn, see ordering information  
 Accuracy  
 Typical . . . . . the lesser of 0.02% f.s. or 0.04% of measurement  $\pm 1/2$  pulse max.  
 Best . . . . . not less than 0.001 in. (0.03 mm)  
 Repeatability . . . . .  $\pm 0.02\%$  of measurement  $\pm 1/2$  pulse max.  
 Measuring Cable . . . . . nylon-coated stainless steel  
 Enclosure Material . . . . . powder-painted aluminum  
 Encoder Shaft Coupling . . . . . aluminum flexible coupling  
 Maximum Allowable Rotational Sensor Torque . . . . . 1.0 in-lbs.  
 Maximum Retraction Acceleration . . . . . see ordering information  
 Maximum Velocity . . . . . see ordering information  
 Weight, Aluminum (Stainless Steel) Enclosure . . . . . 14 lbs. (28 lbs.) max.

### ENVIRONMENTAL

Operating Temperature . . . . . -40° to 200°F (-40° to 90°C)



Our unique string encoder module mates to virtually any encoder, giving you a cost-effective long-range linear position measurement solution that precisely fits your requirements.

This modular approach delivers the ultimate in flexibility. To order, simply select the measurement range, the cable tension and encoder mounting style—it's that easy! We even supply all the necessary encoder mounting tools and attaching hardware. If you can't find your encoder mounting style or you want us to provide the encoder, please give us a call.

## Ordering Information:

### Model Number:

**PT9600-** \_\_\_\_\_ **1** \_\_\_\_\_  
order code:                      R                      A                      B                      C                      D

Sample Model Number:

**PT9600 - 1500 - 111 - F01**

- R** range: 1500 inches
- A** enclosure: aluminum
- C** cable exit: front
- D** rotational sensor mounting style: F01 (2.5-in. sq. flange)

» Trying to reorder but can't find your existing model number? Please contact factory for help.

### Full Stroke Range/Conversion Ratio:

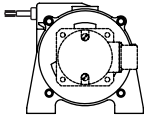
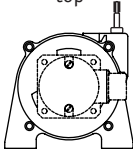
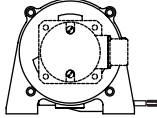
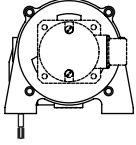
<b>R</b> order code:	<b>0600</b>	<b>0800</b>	<b>1000</b>	<b>1200</b>	<b>1500</b>	<b>1700</b>
full stroke range, min:	600 in.	800 in.	1000 in.	1200 in.	1500 in.	1700 in.
cable tension ( $\pm 35\%$ ):	27 oz.	24 oz.	20 oz.	19 oz.	18 oz.	17 oz.
measuring cable:	.034-in. dia. nylon-coated stainless	.019-in. 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
aluminum enclosure, 1 turn =	12.673 $\pm$ .010 in.	12.626 $\pm$ .010 in.	12.626 $\pm$ .010 in.	12.626 $\pm$ .010 in.	12.613 $\pm$ .010 in.	12.613 $\pm$ .010 in.
stainless steel enclosure, 1 turn =	12.579 $\pm$ .010 in.	12.532 $\pm$ .010 in.	12.532 $\pm$ .010 in.	12.532 $\pm$ .010 in.	12.519 $\pm$ .010 in.	12.519 $\pm$ .010 in.

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## Enclosure Material:

Ⓐ 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:

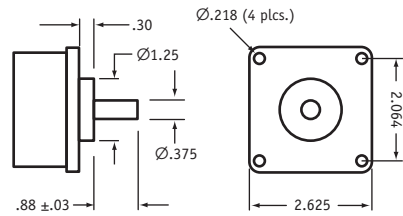
Ⓒ order code:	1	2	3	4
	front	top	back	down
				

## Rotational Sensor Mounting Style:

Ⓓ order code:	F01	F02	S01	S02	S04
	2.5-in. Flange Mount 3/8-inch shaft	2-in. Flange Mount 3/8-inch shaft	Face-Mount 6 mm shaft M4 mounting screws	Face-Mount 10 mm shaft M4 mounting screws	Face-Mount 10 mm shaft M3 mounting screws

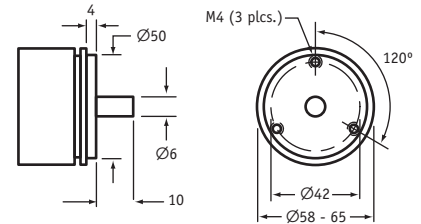
Note: If you don't see your encoder style, please contact factory. All encoder types supported.

### F01 - 2½-inch Sq. Flange Mount (3/8-inch shaft)



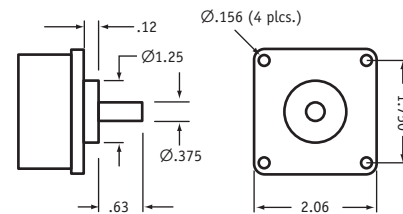
all dimensions are in inches

### S01 - Face-Mount (6mm shaft/M4 screws)



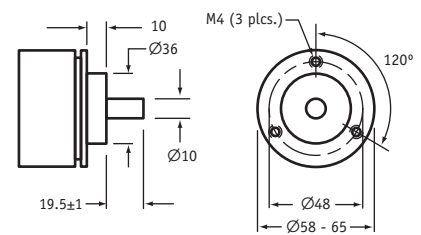
all dimensions are in mm

### F02 - 2-inch Sq. Flange Mount (3/8-inch shaft)



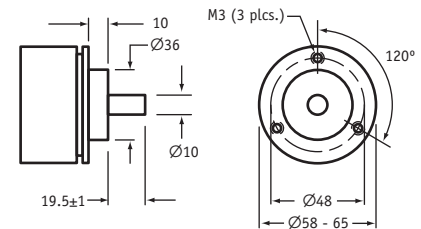
all dimensions are in inches

### S02 - Face-Mount (10mm shaft/M4 screws)



all dimensions are in mm

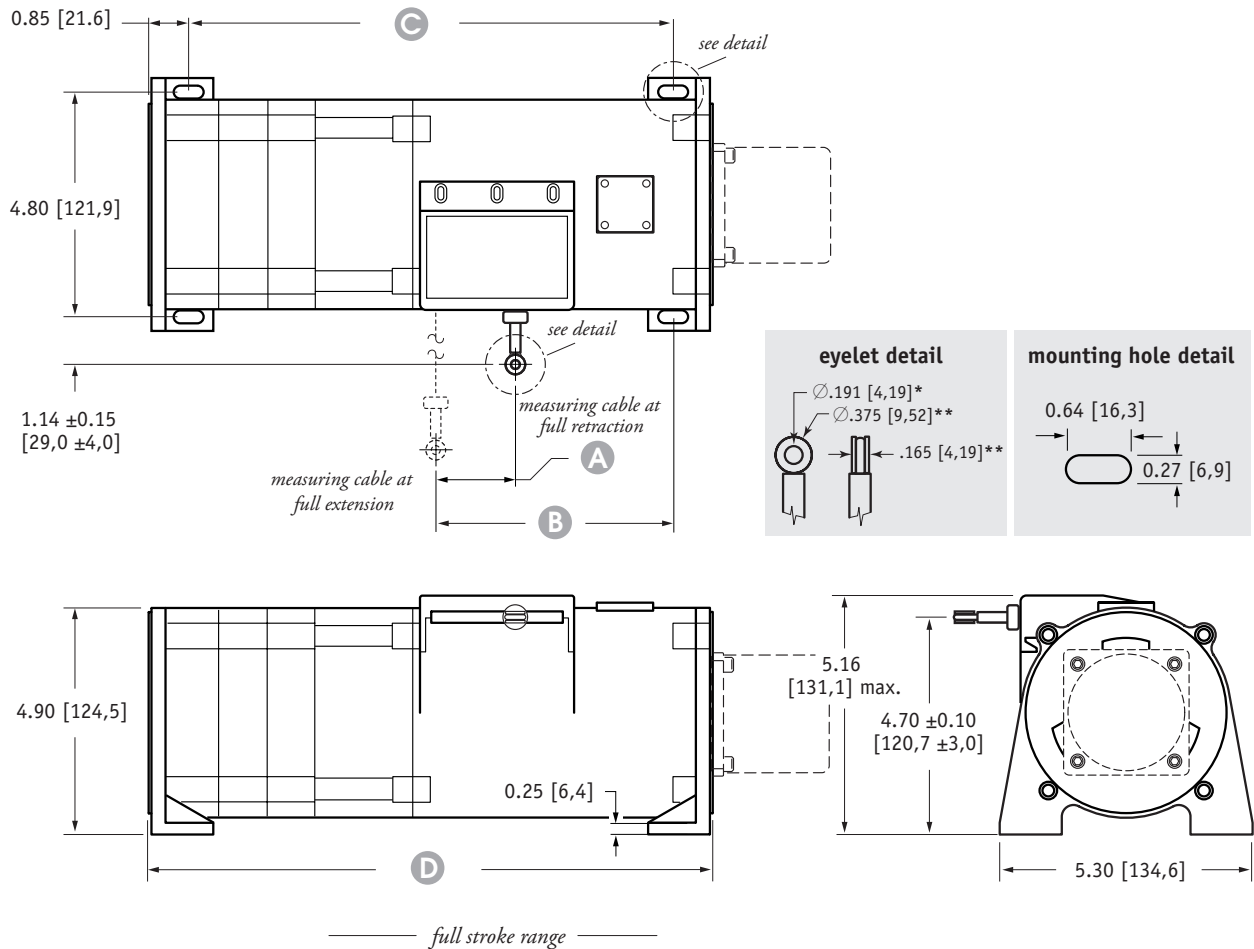
### S04 - Face-Mount (10mm shaft/M3 screws)



all dimensions are in mm

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Outline Drawing



	600 in.	800 in.	1000 in.	1200 in.	1500 in.	1700 in.
<b>A</b>	1.76 [44,7]	1.58 [40,1]	1.98 [50,2]	1.49 [37,8]	1.86 [47,2]	2.11 [53,6]
<b>B</b>	4.52 ±0.15 [114,8 ±4,0]					
<b>C</b>	10.40 ±0.08 [264,2 ±2,0]					
<b>D</b>	12.15 [308,6] max.					

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]

version: 4.0 last updated: September 6, 2011