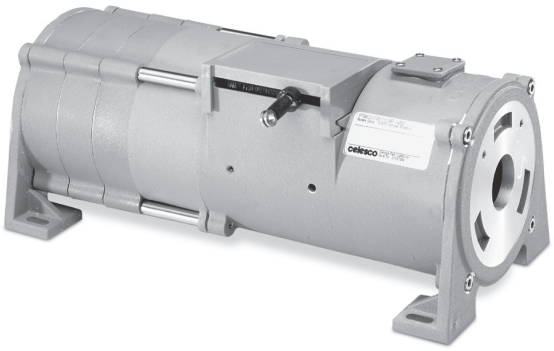
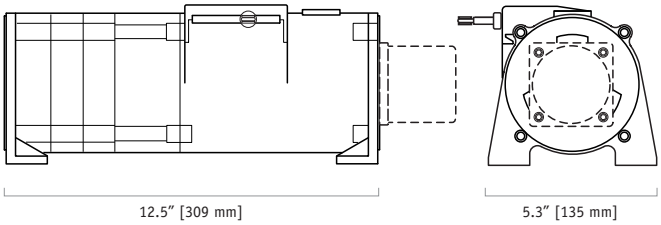
PT9600 (Extended Range)

Long Stroke String Encoder

Converts ANY Rotary Encoder to a Linear Position Sensor
Stroke Range Options: 0-600 to 0-1700 inches
Mates Virtually ANY Customer Supplied Encoder
Factory Supplied Encoder Available





GENERAL

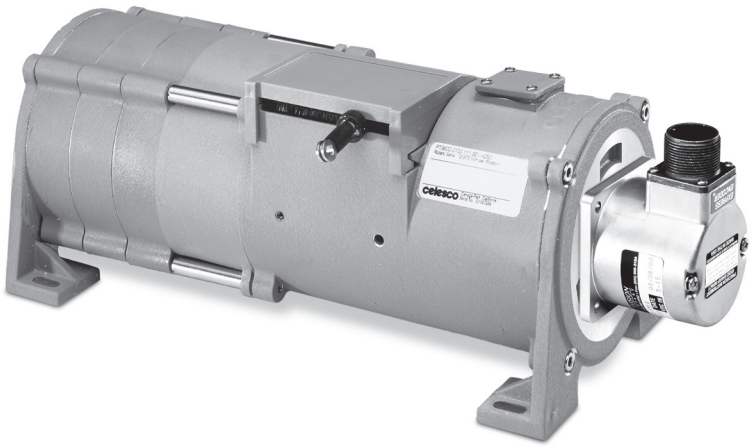
Full Stroke Range Options (on this datasheet)	0-600 to 0-1700 in.
Motion Conversion Ratio	12.6 inches per turn, see ordering information
Accuracy	the lessor of ±0.02% f.s. or ±0.04% measurement ±1/2 pulse
Accuracy, best	not less than 0.001 in. (0.03mm)
Repeatability	±0.02% of measurement ±1/2 pulse
Measuring Cable Options	see ordering information
Module Material Options	powder-painted aluminum or stainless
Encoder 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

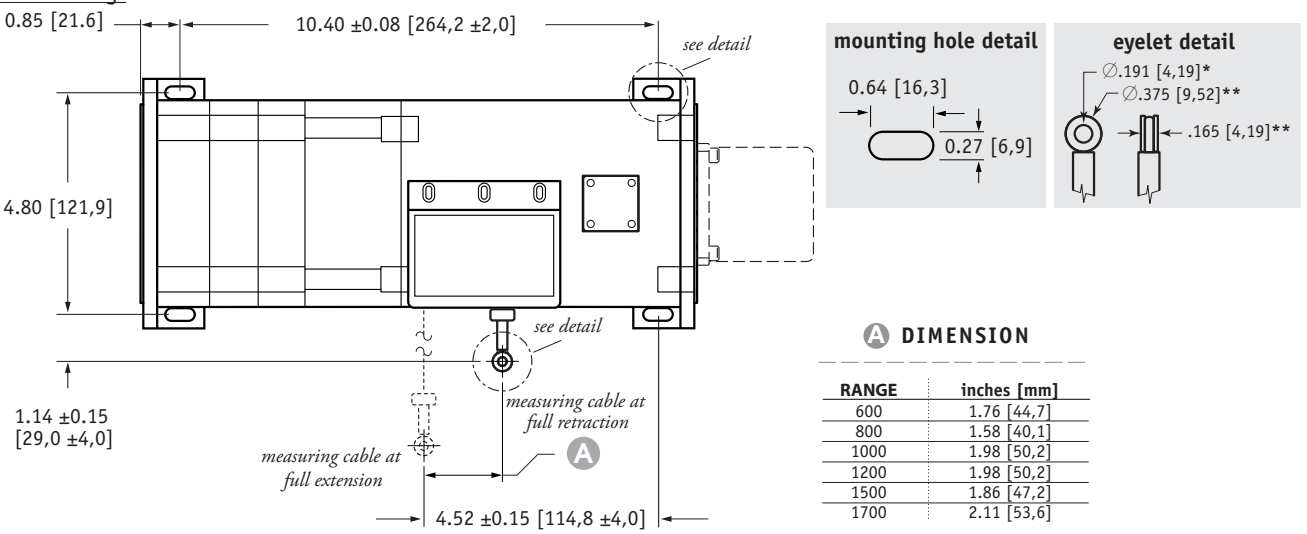
Operating Temperature	-40° to 200°F (-40° to 90°C)

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.

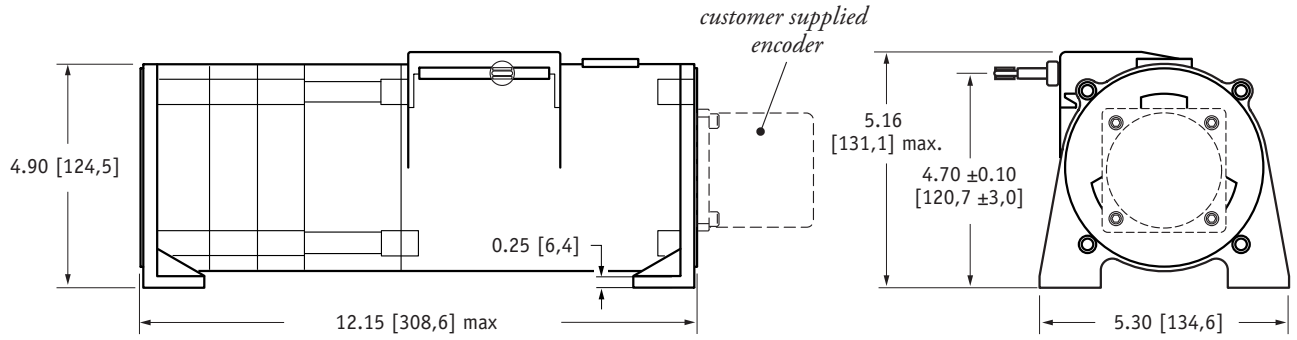


Outline Drawing



A DIMENSION

RANGE	inches [mm]
600	1.76 [44,7]
800	1.58 [40,1]
1000	1.98 [50,2]
1200	1.98 [50,2]
1500	1.86 [47,2]
1700	2.11 [53,6]



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:

PT9600- ____ **-** ____ ____ ____ **-** ____
order code: Ⓡ Ⓐ Ⓑ Ⓒ Ⓓ

Sample Model Number:

PT9600 - 1500 - 111 - F01

Ⓡ	range:	1500 inches
Ⓐ	enclosure:	aluminum
Ⓑ	measuring cable:	nylon coated stainless steel (Ø.014 in.)
Ⓒ	cable exit:	front
Ⓓ	rotational sensor mounting style:	F01 (2.5-in. sq. flange)

Full Stroke Range:

Ⓡ *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.
conversion ratio (nylon-coated stainless steel rope option)						
measuring cable diameter:	Ø.034-in.	Ø.019-in.	Ø.019-in.	Ø.019-in.	Ø.014-in.	Ø.014-in.
aluminum enclosure, 1 turn =	12.673 ± .010 in.	12.626 ± .010 in.	12.626 ± .010 in.	12.626 ± .010 in.	12.613 ± .010 in.	12.613 ± .010 in.
stainless steel enclosure, 1 turn =	12.579 ± .016 in.	12.532 ± .016 in.	12.532 ± .016 in.	12.532 ± .016 in.	12.519 ± .016 in.	12.519 ± .016 in.
conversion ratio (bare stainless steel rope option)						
measuring cable diameter:	Ø.031-in.	Ø.018-in.	Ø.018-in.	Ø.018-in.	Ø.014-in.	Ø.014-in.
aluminum enclosure, 1 turn =	12.662 ± .010 in.	12.623 ± .010 in.	12.623 ± .010 in.	12.623 ± .010 in.	12.613 ± .010 in.	12.613 ± .010 in.
stainless steel enclosure, 1 turn =	12.570 ± .016 in.	12.529 ± .016 in.	12.529 ± .016 in.	12.529 ± .016 in.	12.519 ± .016 in.	12.519 ± .016 in.

Ordering Information (cont.):

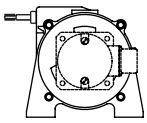
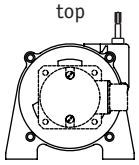
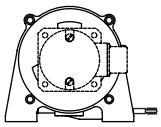
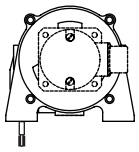
Measuring Cable:

Ⓑ order code:	1	2
cable construction:	nylon-coated stainless steel rope*	bare stainless steel rope*
general use:	*indoor*	*outdoor, debris, high temperature*

*cable diameter:

stroke range:	0600	0800	1000	1200	1500	1700
nylon-coated stainless:	.034 in.	.019 in.	.019 in.	.019 in.	.014 in.	.014 in.
bare stainless:	.031 in.	.018 in.	.018 in.	.018 in.	.015 in.	.015 in.

Cable Exit:

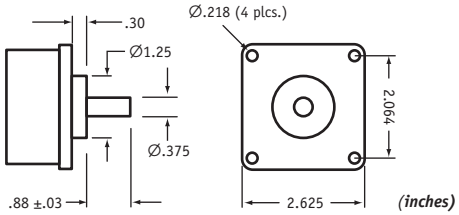
Ⓒ order code:	1	2	3	4
	front	top	back	down
				

Rotational Sensor Mounting Style:

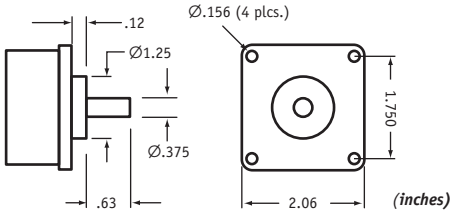
Ⓓ order code:	F01	F02	S01	S02	S04
	2.5-in. Flange Mount 3/8-inch shaft	2-in. Flange Mount 3/8-inch shaft	Face-Mount 6 mm shaft M4 mounting screws	Face-Mount 10 mm shaft M4 mounting screws	Face-Mount 10 mm shaft M3 mounting screws

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

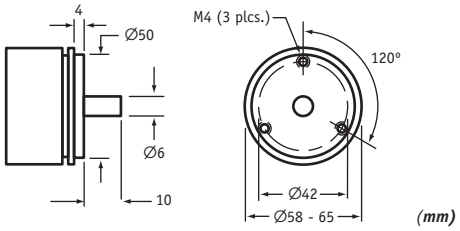
F01 - 2½-inch Sq. Flange Mount (3/8-inch shaft)



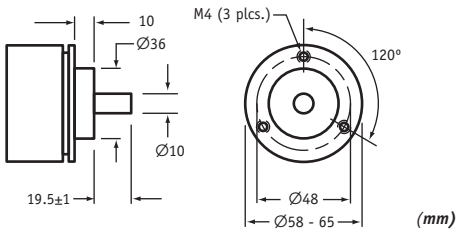
F02 - 2-inch Sq. Flange Mount (3/8-inch shaft)



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



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



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