# Series 600

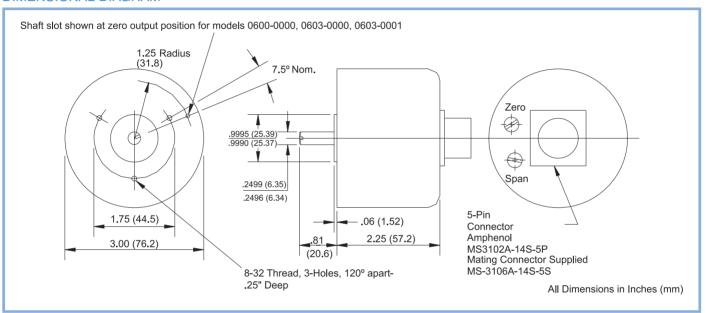
# Mechanical Specifications



### MECHANICAL SPECIFICATIONS

DISPLACEMENT RANGE	Continuous	NOMINAL WEIGHT 12.5 oz., 352 gm.	
TORQUE, MAX. STARTING (0.5 GM. CM. AVAILABLE)	5.0 gm. cm.	LIFE: LIMITED BY BEARINGS, EG.	10 lbs. radial load at 10 RPM; bearing life - 17,000 hours
TORQUE, MAX. RUNNING	3.5 gm. cm.	OPERATING TEMP. RANGE	+32°F to +167°F (0°C to +75°C)
MOMENT OF INERTIA, ROTOR	6 gm. cm.²	OPERATING TEMP. RANGE (EXPANDED)	-67°F to +257°F (-55°C to +125°C) available (see "Ordering Information", next pg.)
MAX. RADIAL LOAD, AT SHAFT END	10 lbs.	STORAGE TEMP. RANGE	-67°F to +257°F (-55°C to +125°C)
MAX. AXIAL LOAD	7 lbs.	MOUNTING Any position, gravity insensitive	

### **DIMENSIONAL DIAGRAM**



## **SLOT - ANGLE POSITION**

MODEL	SLOT-ANGLE POSITION	MODEL	SLOT-ANGLE POSITION
0600-0000	0° ±3°	0603-0000, 0603-0001	0° ±3°
0601-0000	40° CW ±3°	0603-0002, 0603-0003	80° CW ±3°
0602-0000	40° CCW ±3°	0603-0004, 0603-0005	80° CCW ±3°

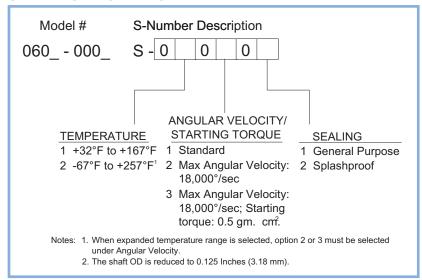
As seen in the output curves graph on the previous page, there is more than one linear range throughout one complete shaft revolution. Only one of these ranges is calibrated. To find the calibrated range, line up the slot in the shaft to the drill hole in the face of the unit. The output voltage at this position corresponds to the angular position within the linear range. For Models 0600-0000, 0603-0000, and 0603-0001, this is the zero position.

# **INSTALLATION**

There are no installation restrictions; the transducer can be mounted in any position. Three tapped holes are provided in the mounting surface. The close toleranced stainless steel pilot when fitted into a properly machined bore will predetermine the shaft position. Aligning the shaft slot with the drill spot on the transducer face will approximate the center of the working range. Refer to the physical diagram for mounting dimensions.

04C 52

## **ORDERING INFORMATION**



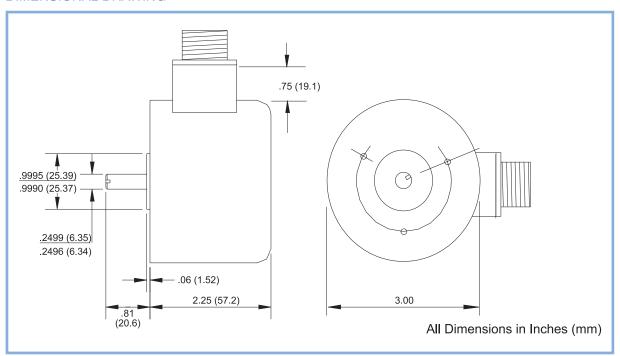
For an additional charge, the following options are available at the time of purchase:

- Units can be factory calibrated to your specified excitation voltage, ranging from 12 to 16 VDC to provide an output as stated in the electrical specifications per listed model number. The standard is 15 VDC.
- Units can be factory calibrated to your specified sensitivity; available sensitivity values will vary with the particular model selected, the input voltage and other factors. Please contact factory for details.
- Zero offset other than the standard models listed ranging from 0° to  $\pm 30^\circ$  (0600-0000) to 0 to  $\pm 60^\circ$  (0603-0000) can be ordered providing that the maximum output voltage is 4 VDC less than the supply voltage (12 to 16 VDC).

### SALES OPTIONS

Option #	Description
X0016:	Vibration Protection - Internal electronics are encapsulated in RTV to prevent free movement during high vibration
	and/or shock
X0033:	Material modification for operation in a vacuum environment; Span and Zero pots are replaced by fixed resistors
X0035:	Increase axial load tolerance to 14 pounds; not available with high speed option
X0042:	Optional side connector configuration; replaces axial connector; see diagram below

## **DIMENSIONAL DRAWING**





53 04C