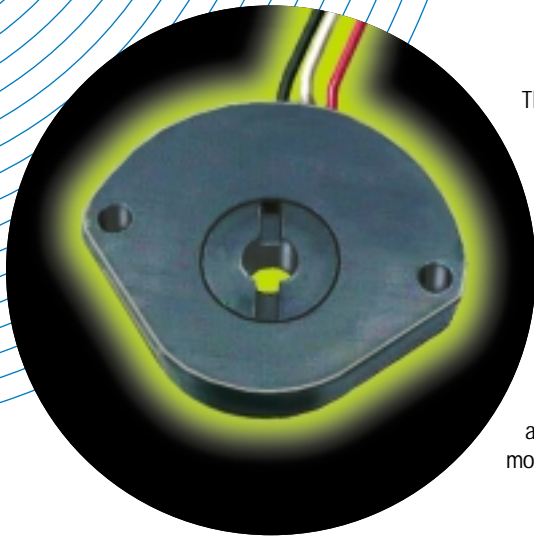


NEW

# Thru-Shaft Position Sensor

# Series TH100



The TH100 Series Thru-Shaft Position Sensor puts CLAROSTAT proven variable-resistor technology to work in angle-measurement applications such as control lever sensing and equipment positioning feedback. High performance and low cost make it attractive for a wide range of applications. A dual-contact version allows for two mechanically-tracking electrical sections, or true 360-degree quadrature voltage output. Almost any combination of resistance track and switch contact configuration (up to six signal wires) is possible.

Specify electrical output to suit application, even at low order volumes. Special mechanical stop and drive feature configurations are available for a modest tooling charge. Contact CLAROSTAT for more information.

## Specifications

<b>Housing Material</b>	Flame-retardant (UL 94 V-0) glass-reinforced thermoplastic	<b>Rotational Life</b>	>1 million full cycles, >5 million dither cycles (2 degree stroke, 60 strokes/sec), result in <10% total resistance change.
<b>Lead Wires</b>	Up to six 20 AWG, SAE J-1560 Type TXL Stranded (7 x 28AWG). Red, Black, White are standard. Header connector option available.	<b>Actuation Torque</b>	6 oz-in (splash-sealed), 10 oz-in (immersion-sealed)
<b>Resistance</b>	Values available from 1K to 1M. Contact Clarostat for information	<b>Vibration</b>	15g @ 50 to 1000 Hz
<b>Resistance Tolerance</b>	+/-15% standard, to +/-2% special (laser trimmed)	<b>Shock</b>	50g half-sine
<b>Linearity</b>	+/- 5% standard, to +/- 1% special (laser trimmed)	<b>Humidity</b>	0-95% non-condensing
<b>Temperature Coefficient</b>	+/-500 ppm max.	<b>Moisture Sealing</b>	Fully Sealed unit withstands hose-directed water spray and immersion at limited depth. Splash-Sealed unit withstands dripping and light splashing of liquids.
<b>Power Rating</b>	1/2W max.	<b>Dust Sealing</b>	Sealed against dust
<b>Switch Current Rating</b>	125 mA max at 28 VDC	<b>Storage &amp; Operating Temperature</b>	-40C to +120C
<b>Stop Torque</b>	5 in-lb min.	<b>Working Voltage</b>	350 VDC across resistance element, not to exceed power or current rating
<b>Mechanical travel w/stops</b>	Up to 330° (single contact), up to 150° (dual contact). Standard travel 90°, 106° and 313°. Other angles optional	<b>Dielectric Withstanding Voltage</b>	500 VAC RMS
<b>Mechanical travel w/o stops</b>	Continuous, or user can include stops in host drive mechanism.		
<b>Rotor Drive Configuration</b>	Standard 1/4" Thru-Shaft with 0.105" wide x 0.090" deep drive slot. Other drive features optional. Thru-Shaft 1/4" dia max.		

the **NEW**

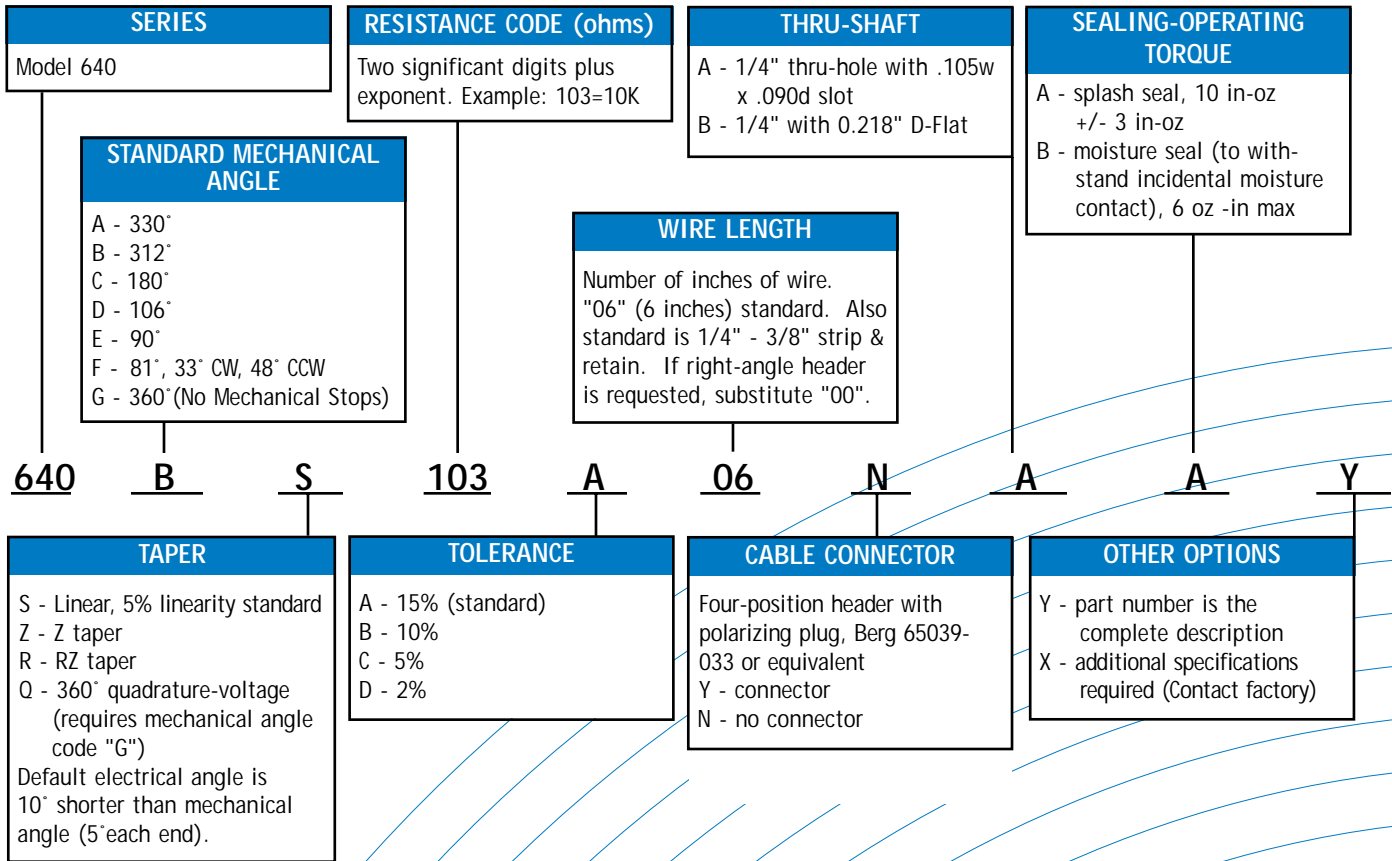


Telephone: 800.874.1874 Fax: 800.223.5138

12055 Rojas Drive • Suite K • El Paso, Texas USA 79936 • www.clarostat.com

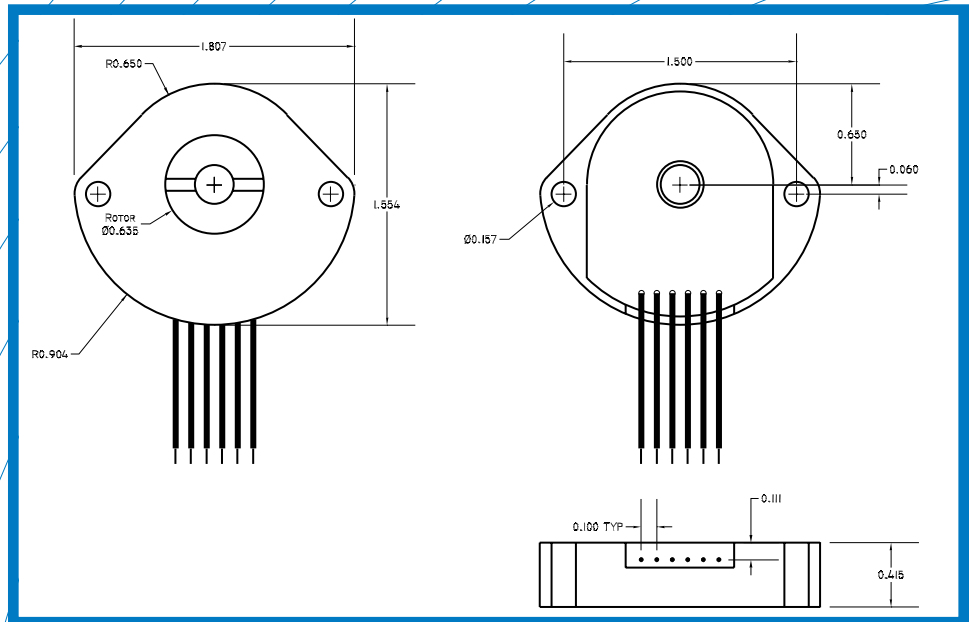
# How to Order . . . . .

When ordering, indicate the desired options as shown in this example:



# Dimensions . . . . .

Dimensions shown in inches



Ask about CLAROSTAT Value-Added options, including cables, connectors, switches, complete assemblies, custom sensing elements, proprietary design and manufacturing

**Telephone: 800.874.1874 Fax: 800.223.5138**

12055 Rojas Drive • Suite K • El Paso, Texas USA 79936 • [www.clarostat.com](http://www.clarostat.com)

the **NEW**

