

# Model 6230H Optical Scanner

## Mechanical and Electrical Specifications

*All position detector specifications apply with Cambridge Technology servo driver after a 30 second warm-up.  
 All angles are in mechanical degrees.  
 Consult manual for complete operating instructions.*

### Mechanical Specifications

- Rated Angular Excursion: 40°
- Rotor Inertia: 0.97 gm\*cm<sup>2</sup>, +/-10%
- Torque Constant: 1.31x10<sup>5</sup> Dyne-cm/Amp, +/-10%
- Maximum Coil Temperature: 110 °C
- Thermal Resistance, Coil to Case: 0.80°C/Watt, Max

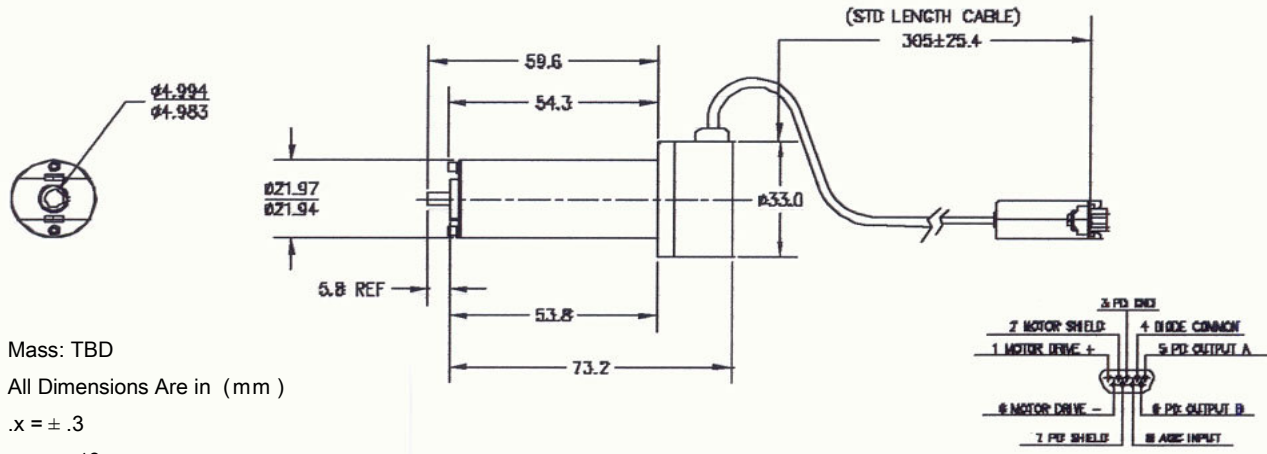
### Electrical Specifications, Drive Armature

- Coil Resistance: 1.07 Ohms, +/-10%
- Coil Inductance: 173 μH, +/-10%
- Back EMF Voltage: 229 μV/Degree/Second, +/-10%
- Current, RMS: 7.1 A, at T case of 50° Maximum
- Current, Peak: 25 A, Maximum
- Small Angle Step Response: 250 μs, with appropriate CTI Y mirror



### Electrical Specifications, Position Detector

- Linearity: 99.9 %, minimum, over 40° optical
- Scale Drift: 50 PPM/°C, Maximum
- Zero Drift: 15 Microradians/°C, Maximum
- Repeatability: 8 Microradians, Maximum
- Output Signal, Common Mode: 155 μA, with AGC current of 30mA, +/-20%
- Output Signal, Differential Mode: 11.7 μA/Deg., with Common Mode of 155μA,± 20%



Mass: TBD  
 All Dimensions Are in (mm)  
 .x = ± .3  
 .xx = ± .13

Specifications are subject to change without notice.