

Model 6240H 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: 2.4 gm*cm², +/-10%
 Torque Constant: 2.0x10⁵ Dyne-cm/Amp, +/-10%
 Maximum Coil Temperature: 110 °C
 Thermal Resistance, Coil to Case: 0.62°C/Watt, Max

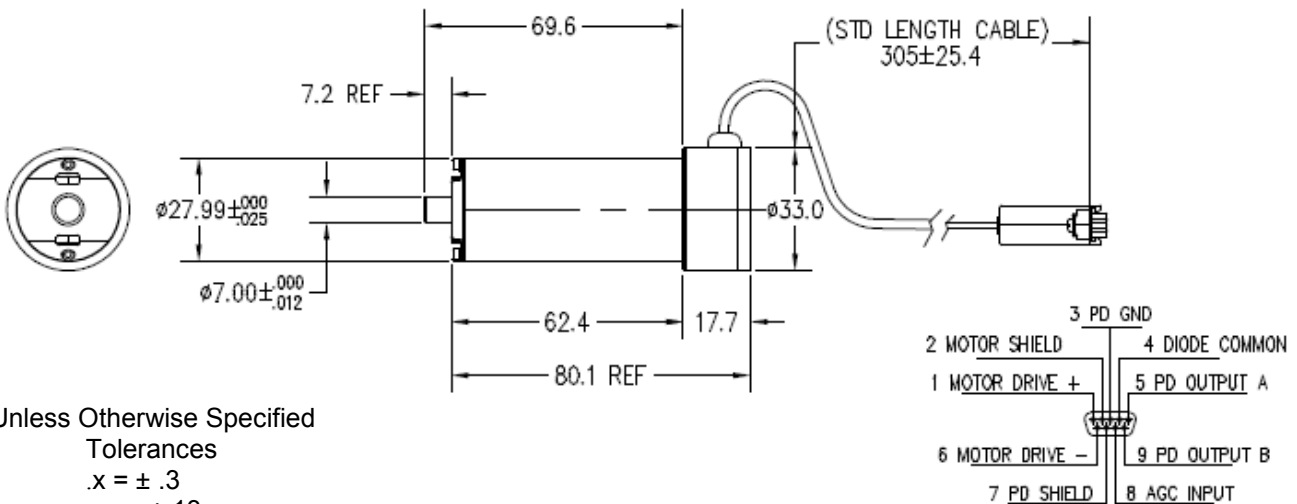


Electrical Specifications, Drive Armature

Coil Resistance: 1.03 Ohms, +/-10%
 Coil Inductance: 350 μH, +/-10%
 Back EMF Voltage: 346μV/Degree/Second, +/-10%
 Current, RMS: 8.2 A, Maximum
 Current, Peak: 25 A, Maximum
 Small Angle Step Response: 350 μs, with 15mm 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 Voltage of 30mA, +/-20%
 Output Signal, Differential Mode: 12μA/°, at common mode current of 155μA, +/- 20%



Unless Otherwise Specified
 Tolerances
 .x = ± .3
 .xx = ± .13