

# Model 6215H Optical Scanner

## Mechanical and Electrical Specifications

*All angles are in mechanical degrees.*

### Mechanical Specifications

Rated Angular Excursion: 40°  
 Rotor Inertia: 0.028 gm·cm<sup>2</sup>, +/-10%  
 Torque Constant: 3.78x10<sup>4</sup> dyne·cm/amp, +/-10%  
 Maximum Rotor Temperature: 110°C  
 Thermal Resistance (Rotor to Case): 1°C/W

### Electrical Specifications/Drive Mechanism

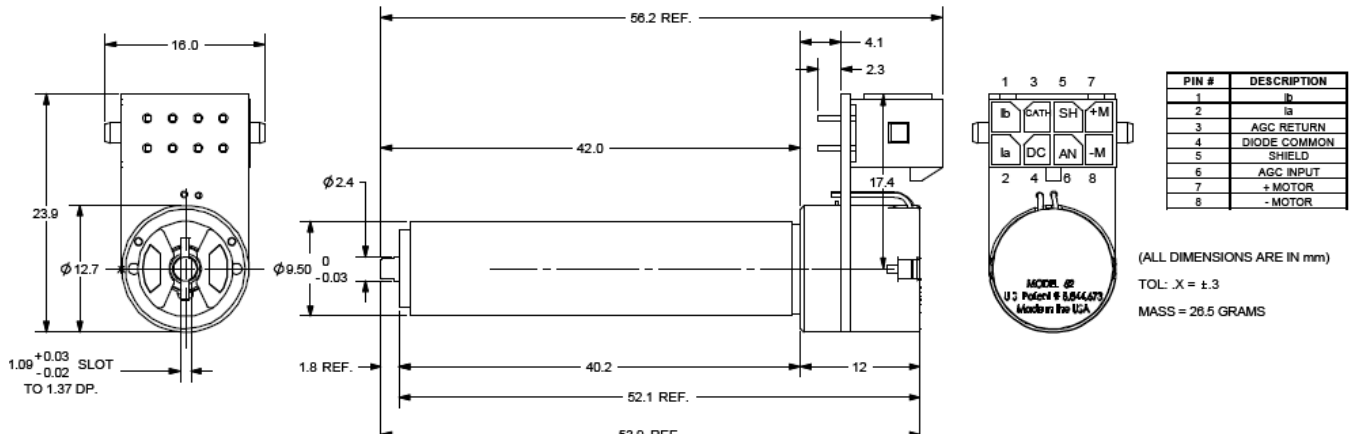
Coil Resistance: 2.5 Ohms, +/-10%  
 Coil Inductance: 94μH, +/-10%  
 Back EMF Voltage: 66μV/(deg/sec)  
 RMS Current: 4.1A, at T<sub>case</sub>=50°C  
 Peak Current: 20 A, Max  
 Small Angle Step Response: 130μs



Shown With B Connector

### Position Detector

Linearity: 99.9 %, Minimum over 20 degrees, 99.5% Typical, over 40 degrees  
 Scale Drift: 50 PPM/°C, Maximum  
 Zero Drift: 15μrad/°C, Maximum  
 Repeatability, Short Term: 8 microradians  
 Output Signal, Common Mode: 155μA with an AGC current of 30mA, +/-20%  
 Output Signal, Differential Mode: 12μA/°, at common mode current of 155μA, +/-20%



Also, available in 6210HL, 6210HR, 6210H and 6210HBR connector versions.  
 Specifications are subject to change.