Model 6210H 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.
Specifications subject to change without notice

Mechanical Specifications

Rated Angular Excursion: 40º
Rotor Inertia: 0.018 gm·cm², ±10%
Torque Constant: 2.79x10⁴ dyne·cm/amp, +/-10%
Maximum Rotor Temperature: 110°C
Thermal Resistance (Rotor to Case): 2°C/W

Electrical Specifications/Drive Mechanism

Coil Resistance: 3.7 Ohms, +/-10%
Coil Inductance: 109 µH, +/-10%
Back EMF Voltage: 48.7 µV/(deg/sec)
RMS Current: 2.4 A at Tcase of 50°C, Max
Peak Current: 8 A, Max
Small Angle Step Response: 100µs

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, 6210HB and 6210HBR connector versions.
Specifications are subject to change.