Model 6210 Moving Magnet Closed Loop Galvanometer Based Optical Scanner

Specifications

All angles are in mechanical degrees. Consult manual for complete operating instructions.

Mechanical

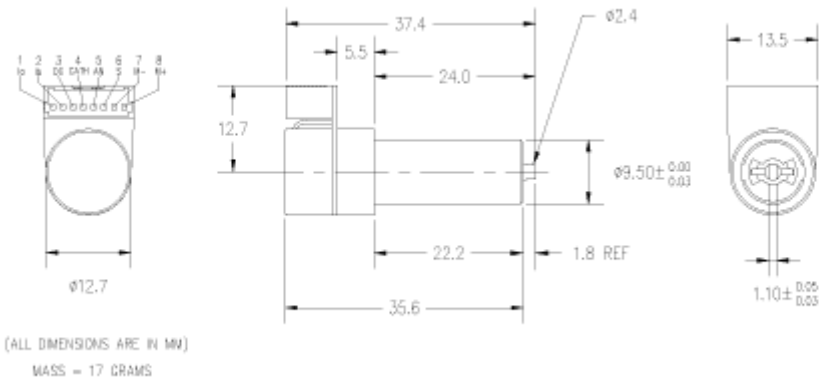
Rated Angular Excursion:	40°
Rotor Inertia:	0.018 gm cm^2 , +/-10%
Torque Constant:	$2.5x10^4$ dyne cm/amp, +/-10%
Maximum Coil Temperature:	110° C
Thermal Resistance (Coil to Case):	4° C/Watt, Max

Electrical/Drive Mechanism

Coil Resistance:	4.1 Ohms, +/-10%
Coil Inductance:	98 µH, +/-10%
Back EMF Voltage:	44 µV/degree/sec, +/-10%
RMS Current:	1.6 Amperes at Tcase of 50° C, Max
Peak Current:	6 Amperes, Max
Small Angle Step Response Time:	100 s, with 3mm, Y mirror, settled to 99%

Position Detector

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



PIN #	DESCRIPTION
1	Ia
2	Ib
3	DIODE COMMON
4	AGC RETURN
5	AGC INPUT
6	SHIELD
7	-MOTOR
8	+MOTOR