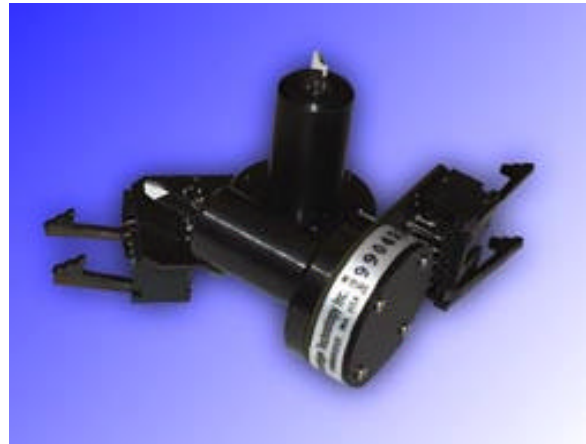


Technical Information

Cambridge CT 6800

Features

- Extremely high speed mirror positioning
- Wide angle scanning
- Rugged and reliable design
- Highest peak acceleration
- Low wobble and jitter
- Retrofittable into existing systems



Application

The scanner is specifically designed to meet the needs of professional industrial application.

Specification

Magnetic Driver Section	value	tolerance	units
Rated excursion	40	max	degrees (mechanical)
Rotor inertia	0.018	+/- 5%	gm x cm ²
Torque constant	2.5x10 ⁴	+/- 10%	dyne-cm/amp
Coil resistance	4.2	+/- 10%	Ohms, at 25°C
Coil inductance	120	+/- 10%	micro-henries
Back EMF voltage	0.41	+/- 10%	mV/degrees/sec
Wobble	50	p-p max	μrad.
Jitter	80	p-p max	μrad.
Thermal conductivity coil to case	6	Max	°C/ watt
Max. coil temperature	110	Max	°C
Max. Rms current	1.6	Max	amps at T _c = 50°C
Max. Peak current	5.0	Max	amps
Small Angle Step Response	0.3	Typ	msec, with balance inertia matched load
Position Detector			
Linearity	98	Min	% over 30° (mechanical)
Scale drift	0.05	Max.	%/°C
Zero drift	0.01	Max.	°/°C
Repeatability short term	20	Max	μrad.
Offset – mech. To electrical pos.	5	Max	degrees
Output signal	1.2	+/- 20%	μamps/deg diff.
	29	+/- 20%	μamps/deg comm.
Oscillator Frequency	4		MHz
Position detector	10	+/- 20%	VDC
Power requirements	26	Nominal	milliams
Scanner weight	45	Nominal	grams