





SYSTEM SPECIFICATIONS

Horizontal Axis			
Motor P/N	BLDM-D04		
Stroke	47.1 in	1196 mm	
Encoder Resolution	1 micron		
Bearing Type	Recirculating Ball		
Resistance @ 20C	18.2 ohms		
Inductance @ 20C	24.2 mH		
Electrical Time Constant	1.3 msec		
Motor Constant	2.6 LBS/SQRT(Watt)	11.6 N/SQRT(Watt)	
Force Constant	11.2 LBS/Amp	49.6 N/Amp	
Back EMF	1.3 V/ips	49.6 V/m/sec	
Force @ 100% Duty	16.5 lbs	73.6 N	
Power @ 100% Duty	51.8 watts		
Current @ 100% Duty	1.5 amps		
Force @ 10% Duty	49.0 lbs	220 N	
Power @ 10% Duty	466 watts		
Current @ 10% Duty	4.4 amps		
Moving Mass	4.25 LBS	1.9 Kg	
Total Mass	78.5 LBS	35.6 Kg	

Vertical Axis			
Motor P/N	BLDM-B04		
Stroke	7 in	177.8 mm	
Encoder Resolution	5 micron		
Bearing Type	Recirculating Ball		
Resistance @ 20C	6.4 ohms		
Inductance @ 20C	4.0 mH		
Electrical Time Constant	1 msec		
Motor Constant	1.2 LBS/SQRT(Watt)	5.20 N/SQRT(Watt)	
Force Constant	3.0 LBS/Amp	13.2 N/Amp	
Back EMF	0.34 V/ips	13.2 V/m/sec	
Force @ 100% Duty	6.2 lbs	27.8 N	
Power @ 100% Duty	39.3 watts		
Current @ 100% Duty	2.1 amps		
Force @ 10% Duty	18.7 lbs	83.3 N	
Power @ 10% Duty	353.7 watts		
Current @ 10% Duty	6.3 amps		
Moving Mass	1.30 LBS	0.6 Kg	
Total Mass	6.5 LBS	3.0 Kg	

NOTE:
- Moving and Total Mass are per each individual stage axis.
- System total mass is 100 Lbs [45.4 Kg](approx.)