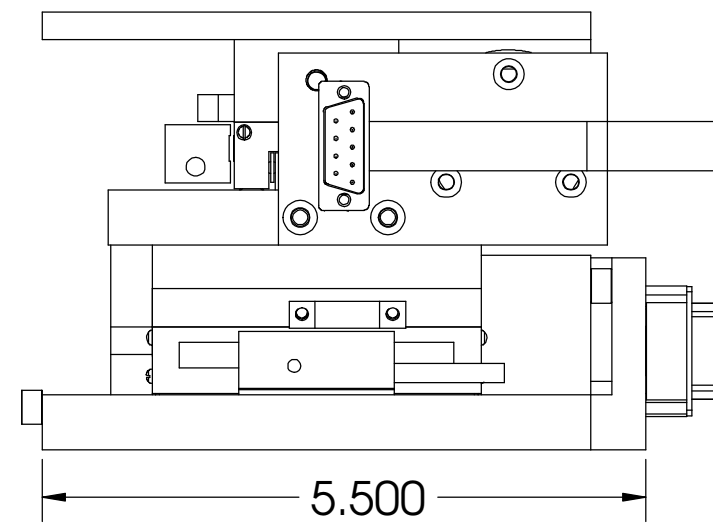
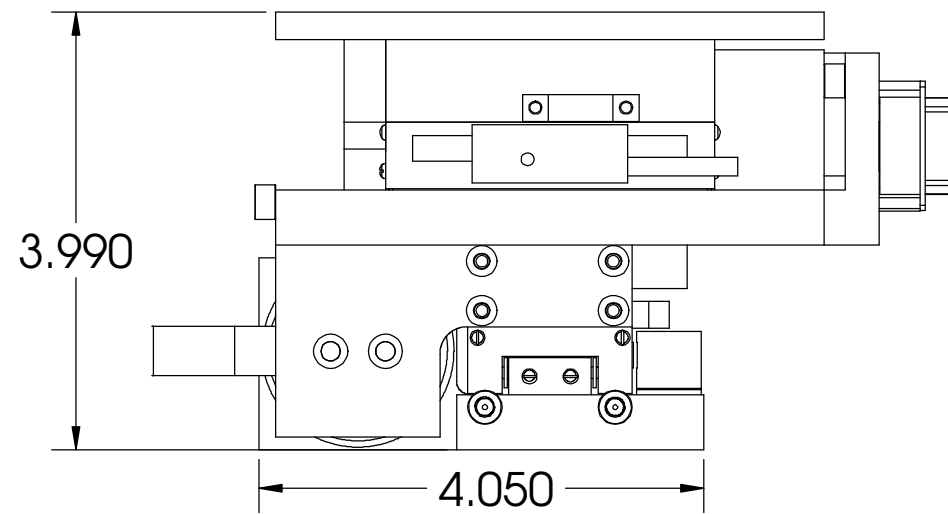
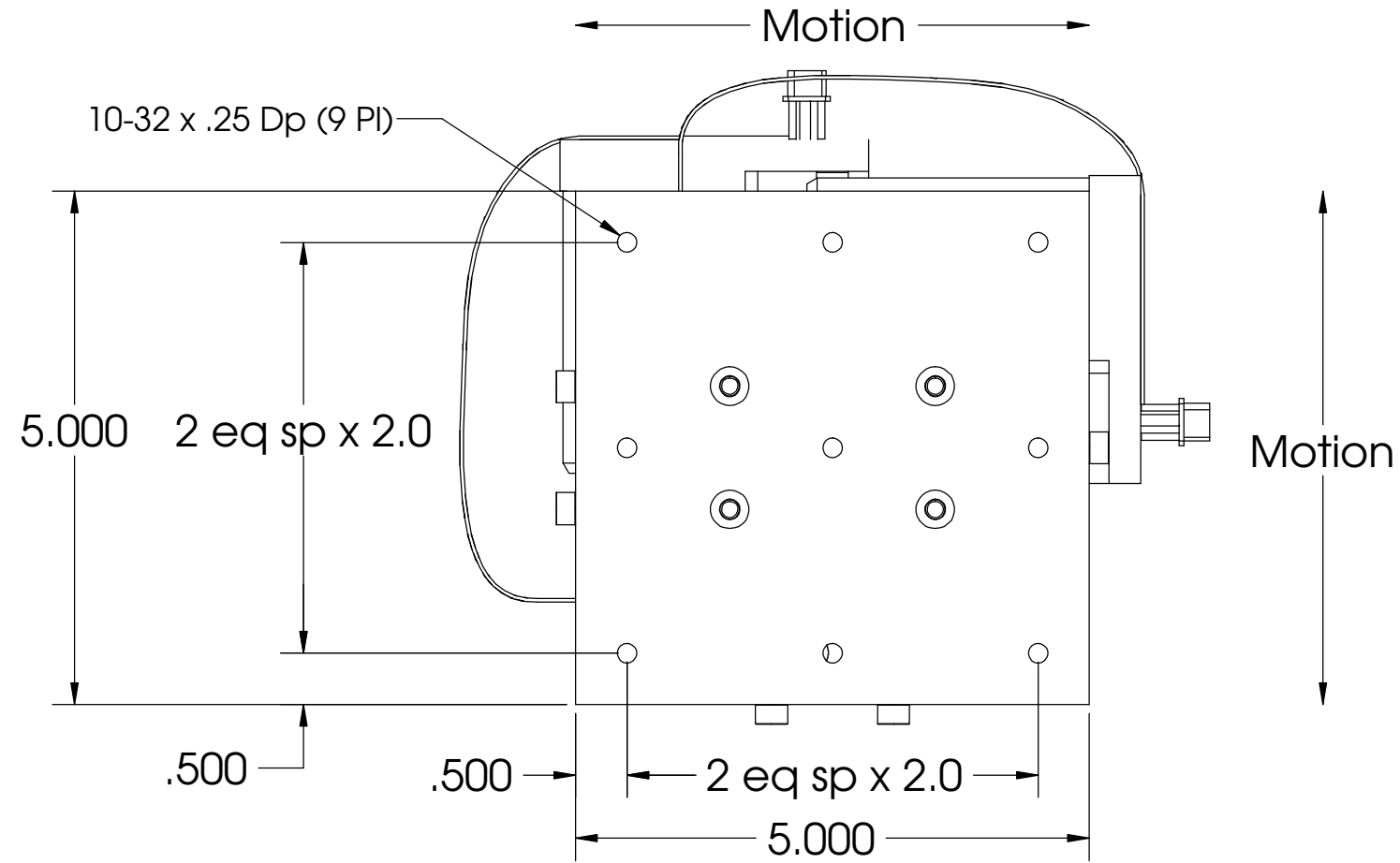


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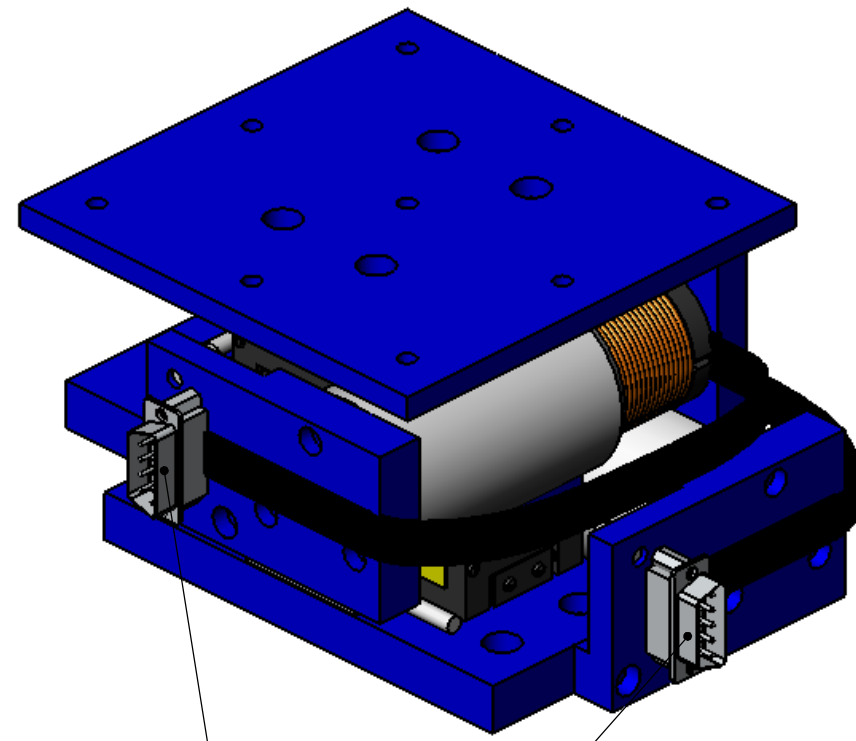


MOTORS SHOWN AT MID-STROKE

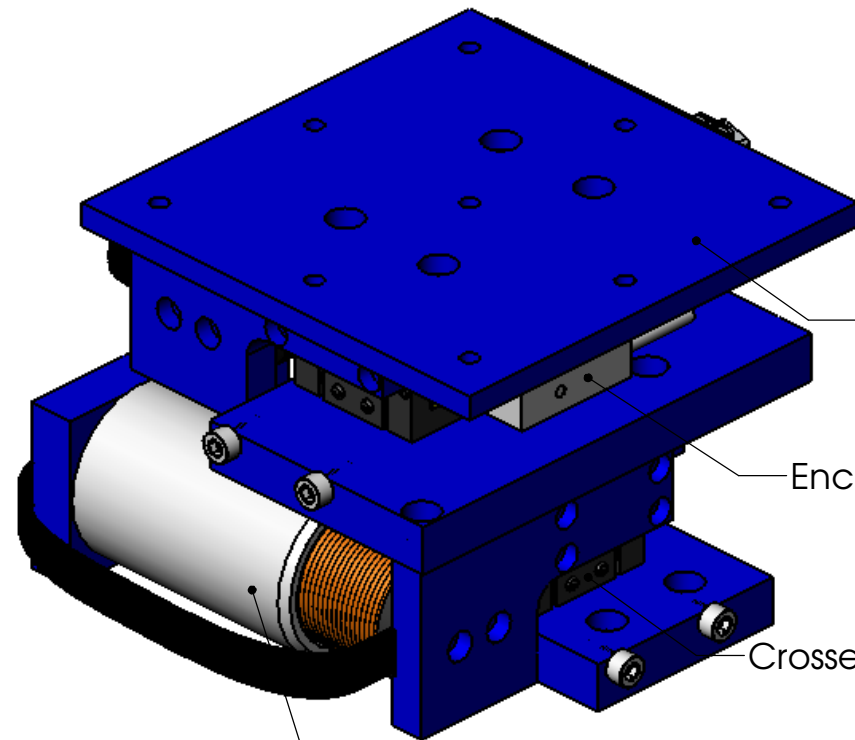
H2W Technologies, Inc.
 26470 Ruether Ave #102 Santa Clarita, CA 91350 USA
 Tel: (661) 251-2081 Fax: (661) 251-2067
 www.h2wtech.com

UNLESS SPECIFIED OTHERWISE: All dimensions are in inches Standard Tolerances are as follows .XXX ±.005 ANGLES ±1° .XX ±.010 FILLETS AND .X ±.020 CORNERS .010 Remove All Burrs and Sharp Edges				MATERIAL		TITLE	
FINISH				DRAWN		Voice Coil Positioning Stage	
DATE				APPROVED		Model #: VCS20-020-CR-001-XY	
OOG				MPW		DWG# 31-0152	
4-30-09				4-30-09		REV B	
						SHEET 1 of 3	

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Motor Power Connector

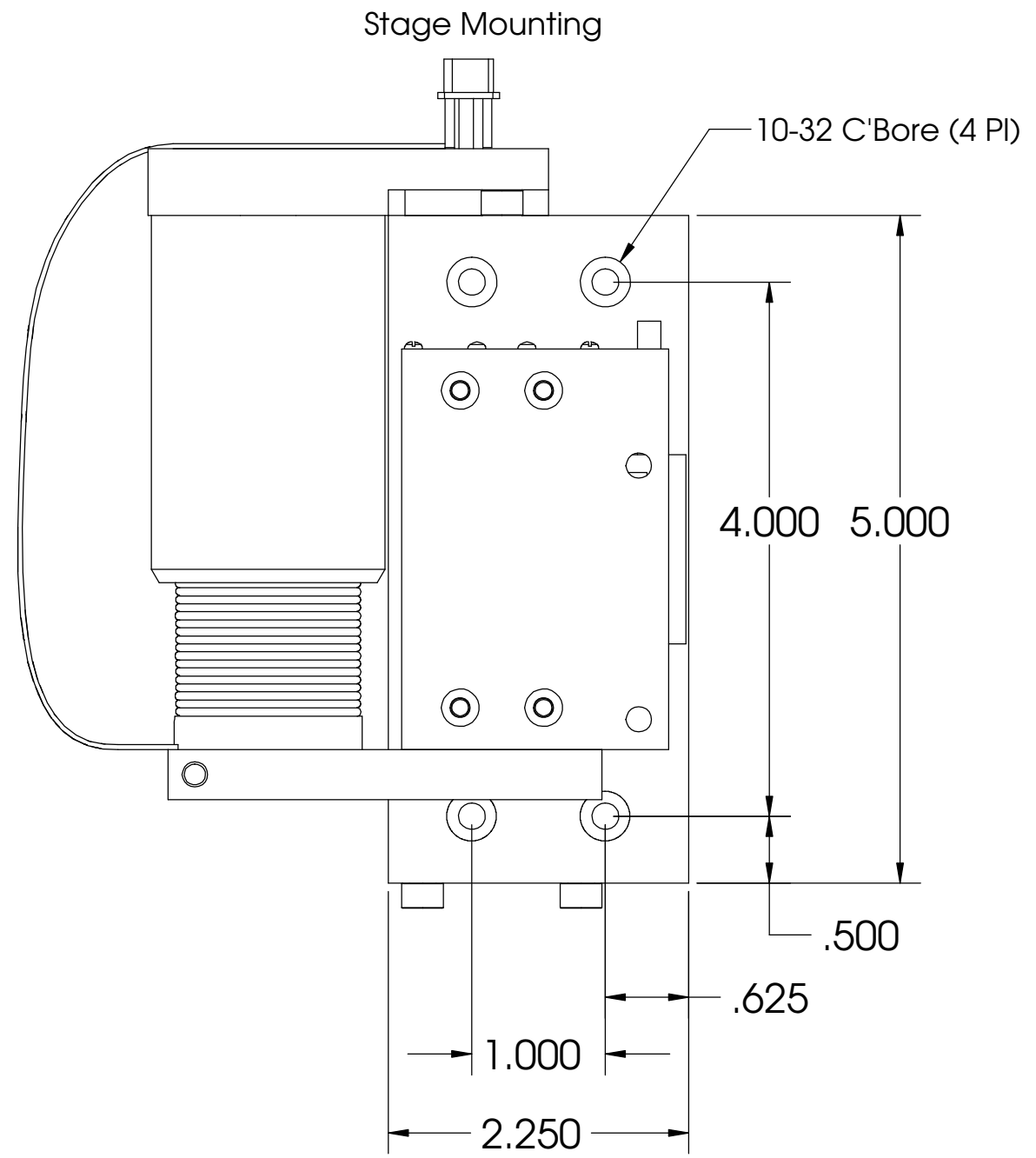


Payload Mounting Plate

Encoder Head

Crossed Roller Bearing

Voice Coil (Moving Coil)



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VOICE COIL POSITIONING STAGE SPECIFICATIONS (Top Axis)		
Motor P/N	NCC20-18-020-1X	
Stroke	2.00"	50.8 mm
Encoder Resolution	0.1 micron	
Bearing Type	Crossed Roller	
Moving Mass	1.35 lbs	611 grams
Total Mass	3.61 lbs	1639 grams
Resistance @ 20C	3.50 ohms	
Inductance @ 20C	3.70 mH	
Electrical Time Constant	1.05 msec	
Motor Constant	0.75 LBS/SQRT(Watt)	3.34 N/SQRT(Watt)
Force Constant	1.4 LBS/Amp	6.1 N/Amp
Back EMF	0.2 V/ips	6.1 V/m/sec
Continuous Force	2.0 LBS	8.9 N
Max Power @ 100% Duty	7 Watts	
Peak Force	6.0 LBS	26.7 N
Max Power @ 10% Duty	64 Watts	

VOICE COIL POSITIONING STAGE SPECIFICATIONS (Bottom Axis)		
Motor P/N	NCC20-18-020-1X	
Stroke	2.00"	50.8 mm
Encoder Resolution	0.1 micron	
Bearing Type	Crossed Roller	
Moving Mass	0.81 lbs	370 grams
Total Mass	3.0 lbs	1362 grams
Resistance @ 20C	3.50 ohms	
Inductance @ 20C	3.70 mH	
Electrical Time Constant	1.05 msec	
Motor Constant	0.75 LBS/SQRT(Watt)	3.34 N/SQRT(Watt)
Force Constant	1.4 LBS/Amp	6.1 N/Amp
Back EMF	0.2 V/ips	6.1 V/m/sec
Continuous Force	2.0 LBS	8.9 N
Max Power @ 100% Duty	7 Watts	
Peak Force	6.0 LBS	26.7 N
Max Power @ 10% Duty	64 Watts	

NOTE: Electrical specs & masses are per individual axis