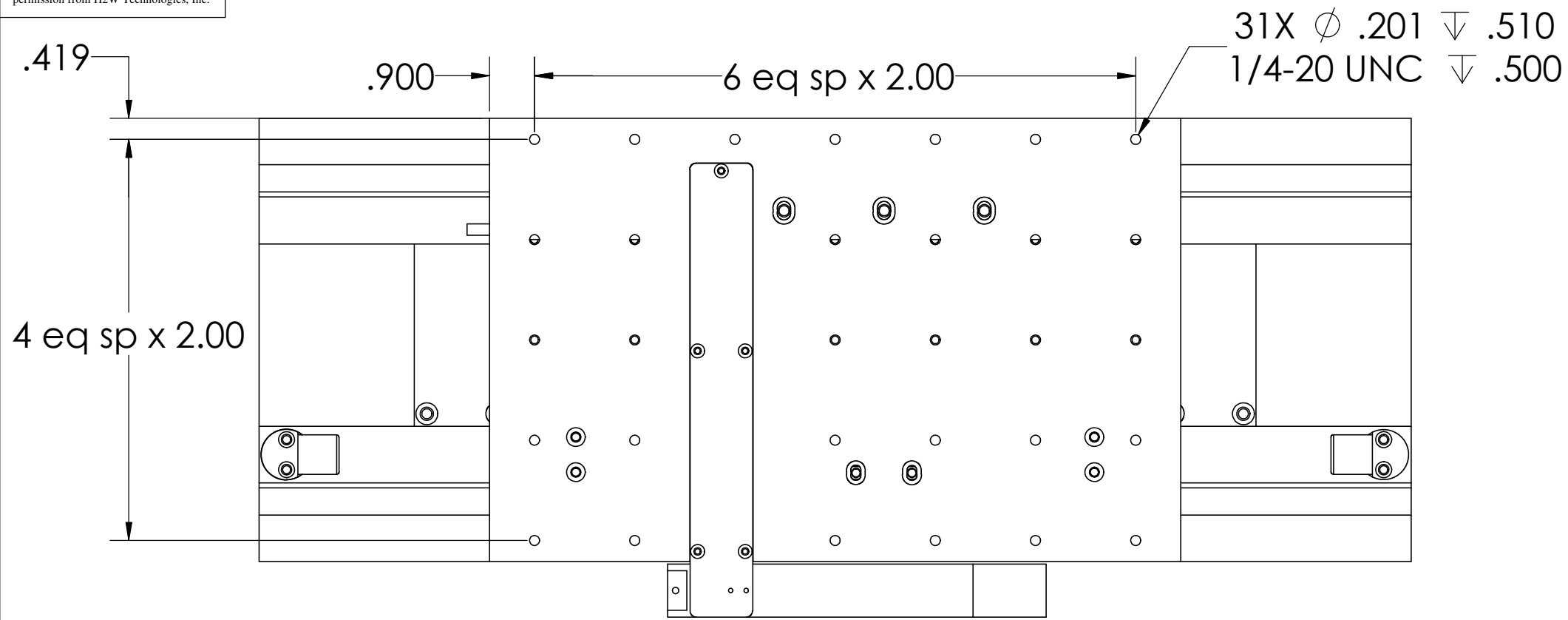


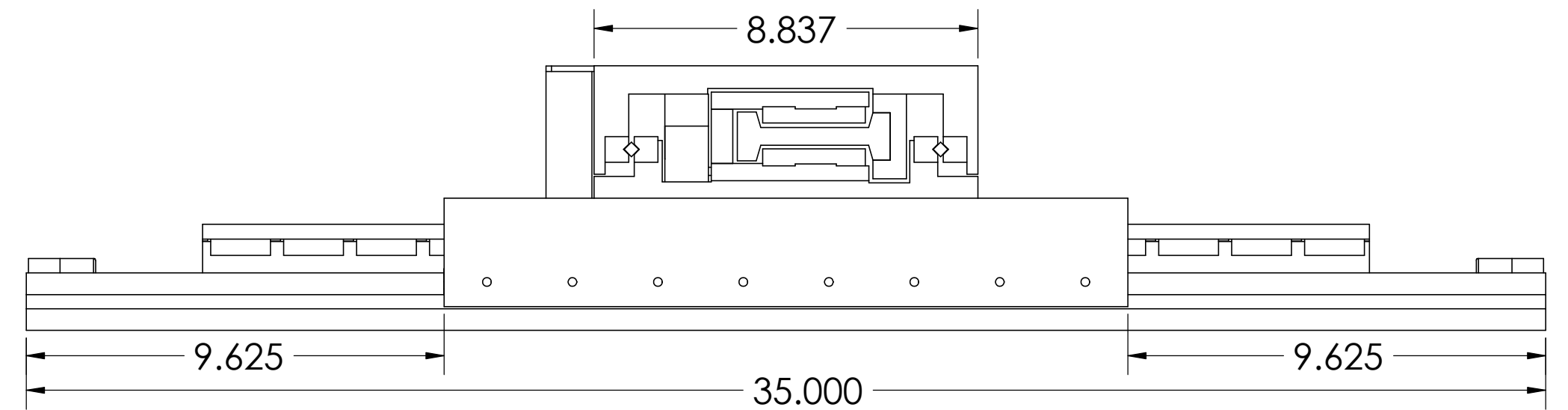
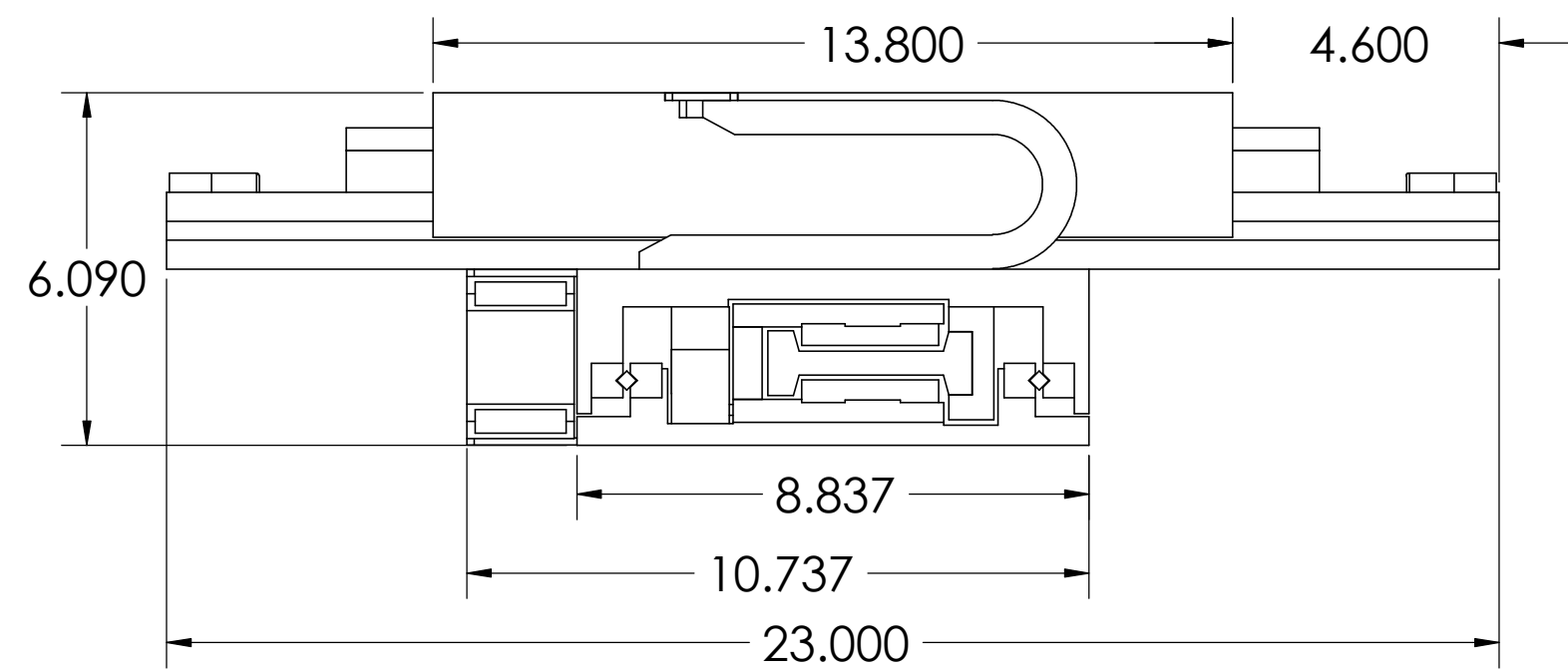
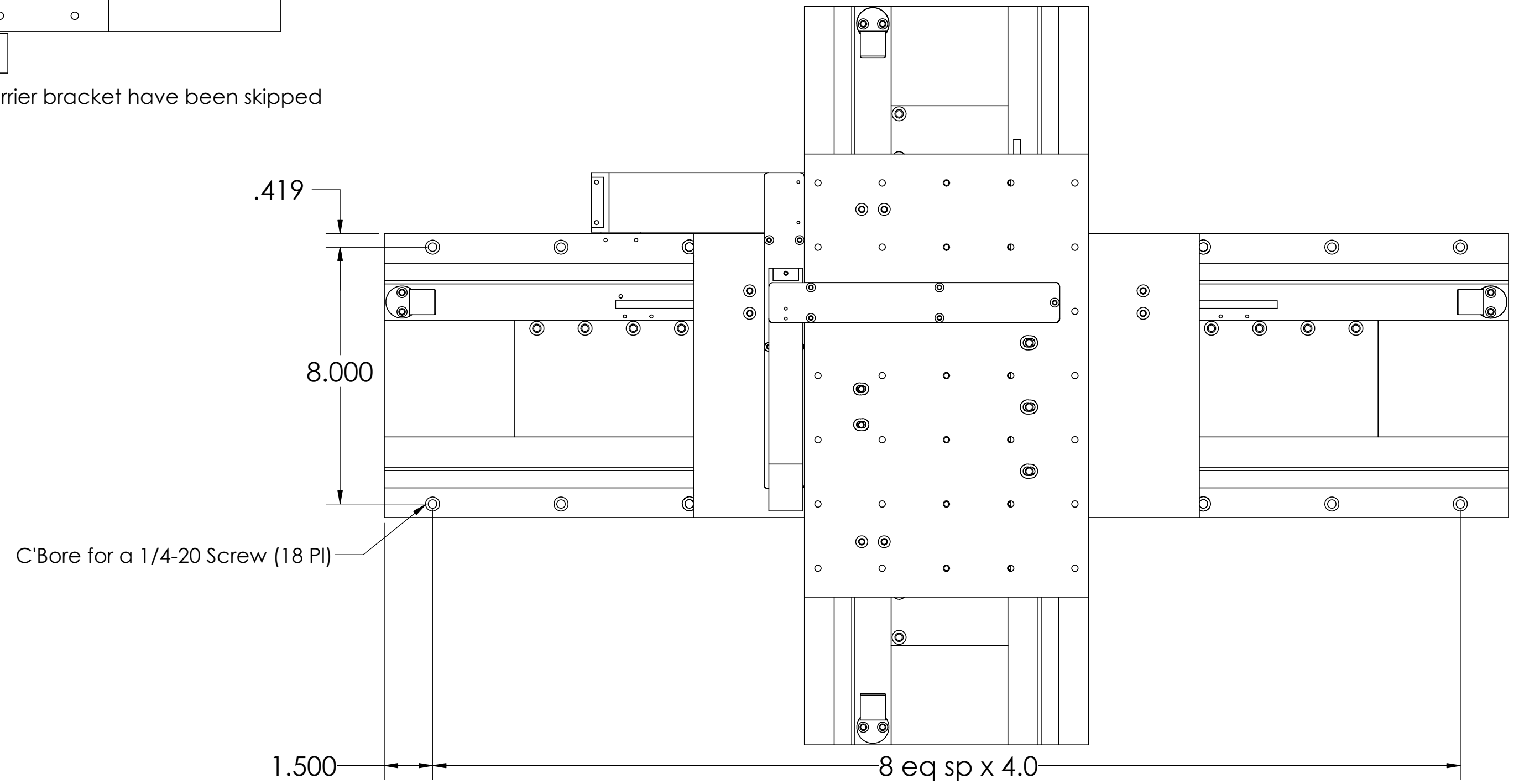
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### Y-Axis Table Payload Mounting Holes



NOTE: Instances where mounting holes interfere with cable carrier bracket have been skipped

REVISION TABLE					
REV	ECN#	DESCRIPTION	REV BY	APPROVED	DATE
---	---	Original Drawing	OOG	MPW	3-25-11
A	1343	Increased Strokes: X = 17.65", Y = 7.95"	OOG	MPW	3-25-11
B	1344	Increased Strokes: X = 19.0", Y = 9.0"	OOG	MPW	3-31-11
C	1376	Added 1/4-20 Mounting Holes to Y-Axis Table	OOG	MPW	8-9-11



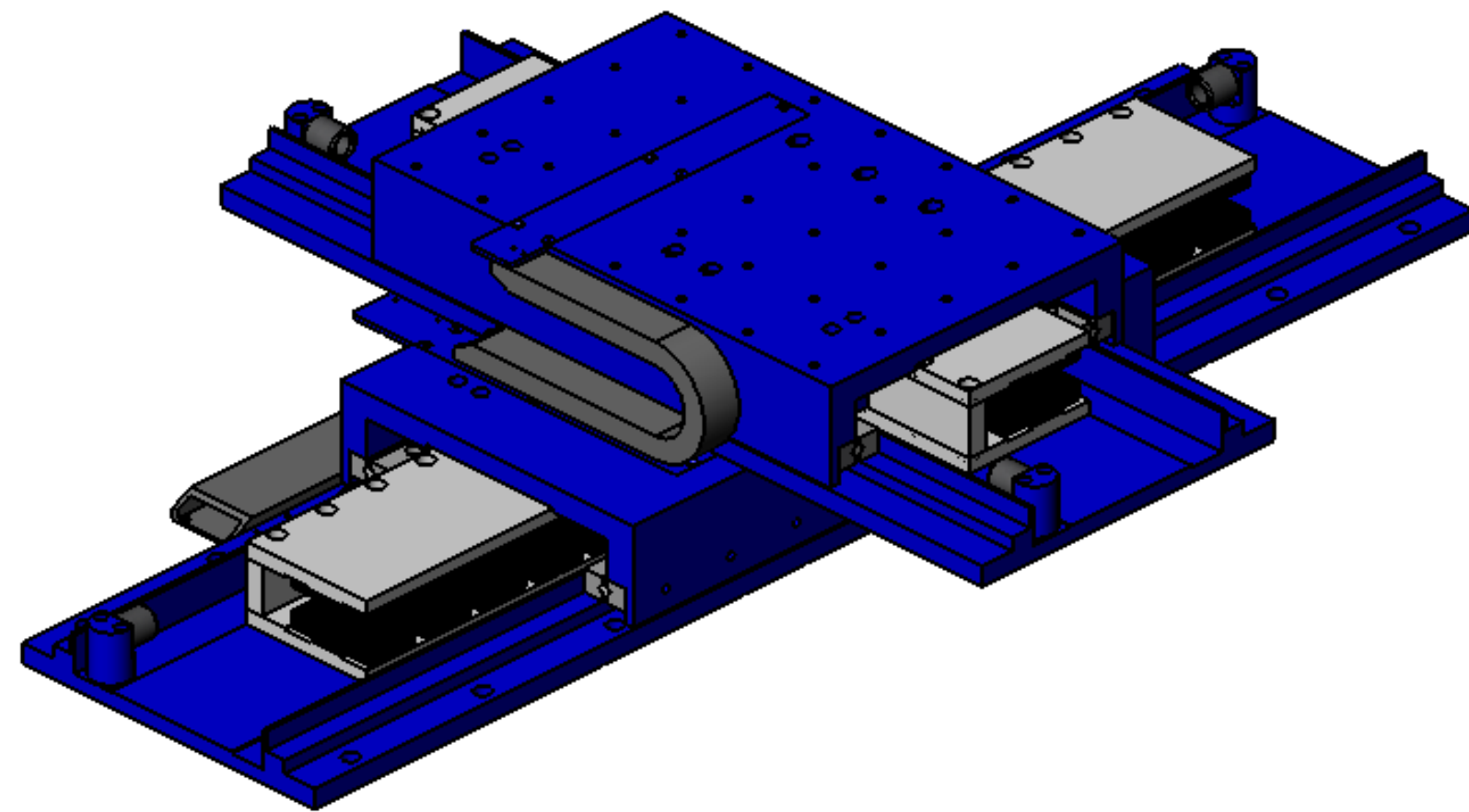
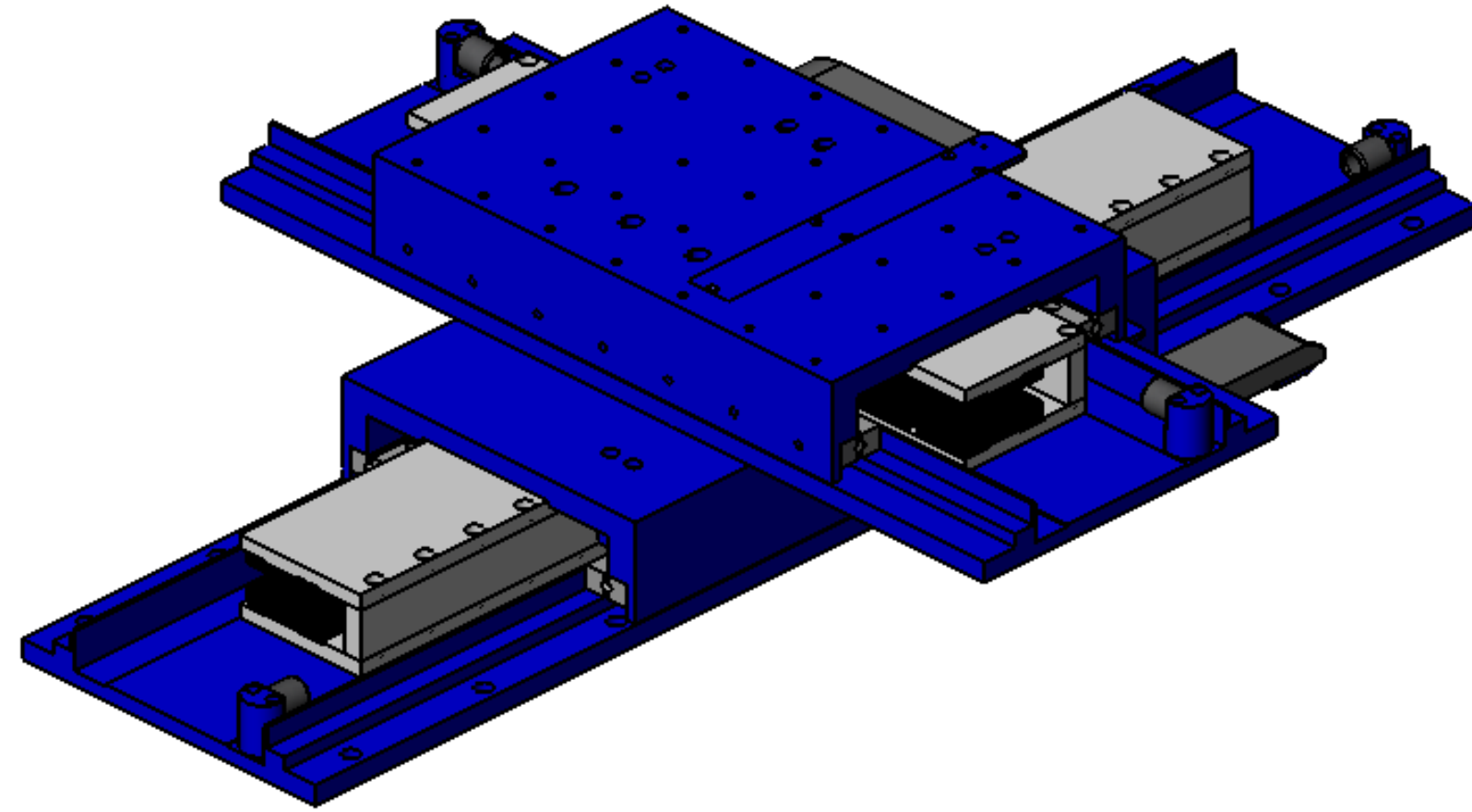
UNLESS SPECIFIED OTHERWISE:  
All dimensions are in inches  
Standard Tolerances are as follows  
XXX ±.005 ANGLES ±1°  
XX ±.010 FILLETS AND  
X ±.020 CORNERS 0.010  
Remove All Burs and Sharp Edges

MATERIAL  
Aluminum 6061-T6  
FINISH  
Anodize Blue

TITLE  
Crossed Roller Positioning Stage  
Model #: XRS-19-09-XY-001

**H2W Technologies, Inc.**  
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DWG# 42-0042 REV C SHEET 1 of 2



**CROSSED ROLLER POSITIONING STAGE SPECIFICATIONS (Top Axis)**

Motor P/N	BLDD-02	
Stroke	9 in	228.6 mm
Encoder Resolution	0.1 micron	
Bearing Type	Crossed Roller	
Moving Mass	13.04 lbs	5914 g
Total Mass	51.39 lbs	23310 g
Resistance @ 20C	8.0 ohms	
Inductance @ 20C	10 mH	
Electrical Time Constant	1.3 msec	
Motor Constant	4.40 LBS/SQRT(Watt)	19.57 N/SQRT(Watt)
Force Constant	12.3 LBS/Amp	54.5 N/Amp
Back EMF	1.60 V/ips	63.0 V/m/sec
Force @ 100% Duty	52.4 lbs	233.1 N
Power @ 100% Duty	142 watts	
Current @ 100% Duty	4.3 amps	
Force @ 10% Duty	157.2 lbs	669.3 N
Power @ 10% Duty	1278 watts	
Current @ 10% Duty	12.9 amps	
Stage Length	23 in	584.2 mm
Stage Width	9.95 in	252.73 mm
Stage Height	3.05 in	77.47 mm

**CROSSED ROLLER POSITIONING STAGE SPECIFICATIONS (Bottom Axis)**

Motor P/N	BLDD-02	
Stroke	19 in	482.6 mm
Encoder Resolution	0.1 micron	
Bearing Type	Crossed Roller	
Moving Mass	14.25 lbs	6463 g
Total Mass	72.15 lbs	32726 g
Resistance @ 20C	8.0 ohms	
Inductance @ 20C	10 mH	
Electrical Time Constant	1.3 msec	
Motor Constant	4.40 LBS/SQRT(Watt)	19.57 N/SQRT(Watt)
Force Constant	12.3 LBS/Amp	54.5 N/Amp
Back EMF	1.60 V/ips	63.0 V/m/sec
Force @ 100% Duty	52.4 lbs	233.1 N
Power @ 100% Duty	142 watts	
Current @ 100% Duty	4.3 amps	
Force @ 10% Duty	157.2 lbs	669.3 N
Power @ 10% Duty	1278 watts	
Current @ 10% Duty	12.9 amps	
Stage Length	35 in	889 mm
Stage Width	10.74 in	272.8 mm
Stage Height	3.05 in	77.47 mm

NOTE:  
 - Electrical specs & masses are per individual axis  
 - Total stage weight = 125 lbs (56.5 kg)