

1

2

3

4

5

## REVISION TABLE

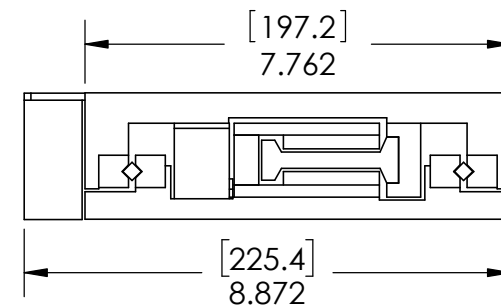
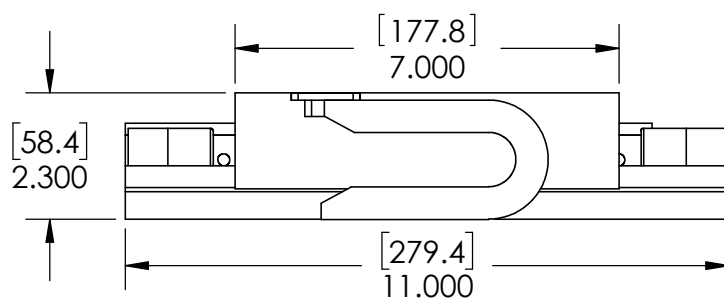
REV	ECN#	DESCRIPTION	REV BY	APPROVED	DATE
---	---	Original Drawing	OOG	MPW	12-8-10

16X TAP 1/4-20  $\nabla$ .50 [12.7][12.7]  
.500

3 eq sp x 2.0

[22.4]  
.881

3 eq sp x 2.0



NOTE:  
1. MOTOR SPECIFICATIONS AND MOUNTING PROVISIONS ON SHEET 2.



**H2W Technologies, Inc.**  
Santa Clarita, CA 91350 USA  
Tel: (661) 291-1620  
[www.h2wtech.com](http://www.h2wtech.com)

These drawings and specifications are the property of H2W Technologies, Inc. They are issued in confidence and shall not be reproduced, copied, or used without written permission from H2W Technologies, Inc.

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

**FOR  
REFERENCE  
ONLY**

MATERIAL

FINISH

TITLE  
Crossed Roller Positioning Stage Model #:  
**XRS-004-09-020-001**

DWG # **42-0046**

REV ----

DATE 12-8-10 SHEET 1 of 2

1

2

3

4

5

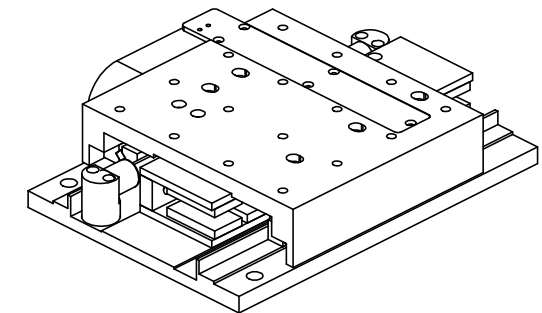
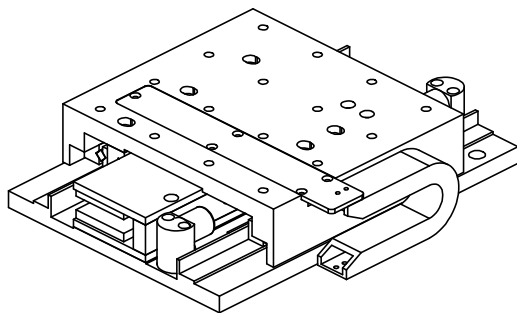
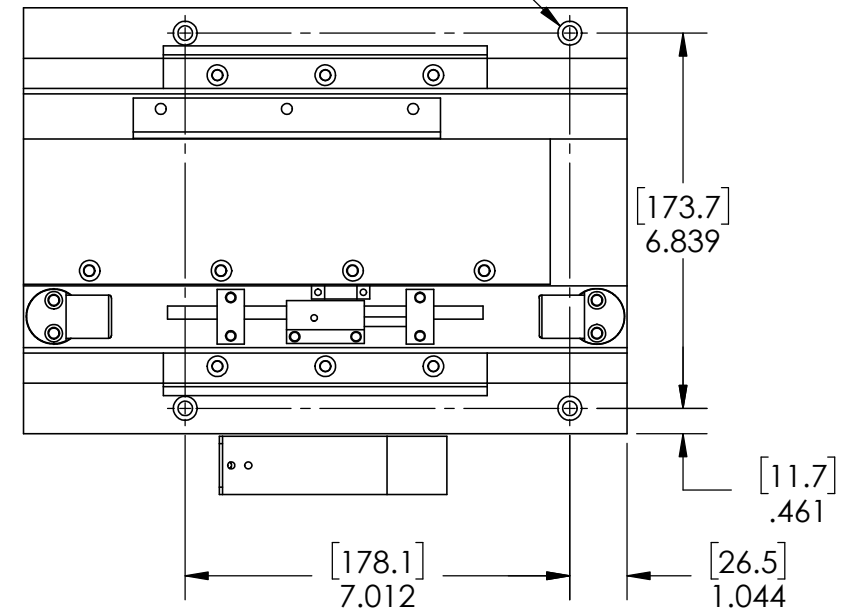
### CROSSED ROLLER POSITIONING STAGE SPECIFICATIONS

Motor P/N	BLDC-02	
Stroke	4 in	101.6 mm
Encoder Resolution	0.1 micron	
Bearing Type	Crossed Roller	
Moving Mass	4.44 lbs	2013 g
Total Mass	20.92 lbs	9489 g
Resistance @ 20C	8.2 ohms	
Inductance @ 20C	6.0 mH	
Electrical Time Constant	0.7 msec	
Motor Constant	2.12 LBS/SQRT(Watt)	9.43 N/SQRT(Watt)
Force Constant	6.1 LBS/Amp	27.3 N/Amp
Back EMF	0.80 V/ips	31.5 V/m/sec
Force @ 100% Duty	20.6 lbs	91.6 N
Power @ 100% Duty	95 watts	
Current @ 100% Duty	1.6 amps	
Force @ 10% Duty	61.8 lbs	274.8 N
Power @ 10% Duty	846 watts	
Current @ 10% Duty	6.4 amps	
Stage Length	11 in	279.4 mm
Stage Width	8.88 in	225.55 mm
Stage Height	2.3 in	58.42 mm

### MOUNTING PROVISIONS

PARTS HAVE BEEN HIDDEN  
TO SHOW MOUNTING HOLES

4X C'BORE FOR 1/4-20 SHCS



**H2W Technologies, Inc.**

Santa Clarita, CA 91350 USA  
Tel: (661) 291-1620

[www.h2wtech.com](http://www.h2wtech.com)

These drawings and specifications are the property of H2W Technologies, Inc. They are issued in confidence and shall not be reproduced, copied, or used without written permission from H2W Technologies, Inc.

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

**FOR  
REFERENCE  
ONLY**

MATERIAL

FINISH

TITLE  
Crossed Roller Positioning Stage Model #:

**XRS-004-09-020-001**

DWG # **42-0046**

REV ----

DATE 12-8-10 SHEET 2 of 2