

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	2021-05-06

27	APS11700-600	HALL SENSOR	3
26	MMC-9540K742	RUBBER FOOT	10
25	1020-S-4	4-INCH 1020-S FRAME	2
24	1020-S-18	18-INCH 1020-S FRAME	2
23	30-8631	8020 CORNER BRACKET	4
22	8020CM-002	BACK BLOCK, Y-AXIS	1
21	8020CM-001	BASE PLATE, Y-AXIS	1
20	NEMA 24	NEMA 24 STEPPER MOTOR	1
19	6208K565	SHAFT COUPLER	1
18	8020CM-020	STEPPER MOUNT	1
17	MMC-86825K844	FIXTURE PLATE	1
16	MMC-5862K202	LS SENSOR MAGNET	2
15	8020CM-003	PUSH BLOCK	1
14	5058K221	1/8 HOSE FITTING	1
13	95090A104	1/2-10 ACME NUT	2
12	8020CM-018	ACME NUT MOUNT	2
11	ARC-20-M-N-BZ-V1-H	20 mm LINEAR CARRIAGE	4
10	ARC-20-P	20 X 450 mm LINEAR RAIL	2
9	MMC-98935A718	1/2-10 ACME SCREW	1
8	8020CM-017	BEARING BLOCK	2
7	60355K601	LEADSCREW BEARING	2
6	8020CM-050	BELLOWS MOUNT, Y/Z-AXIS	3
5	8020CM-007	BRACKET, Y-AXIS	4
4	8020CM-002	FRONT BLOCK, Y-AXIS	1
3	5909K31	THRUST BEARING	2
2	5909K44	THRUST WASHER	4
1	9961K17	SET COLLAR	2
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.

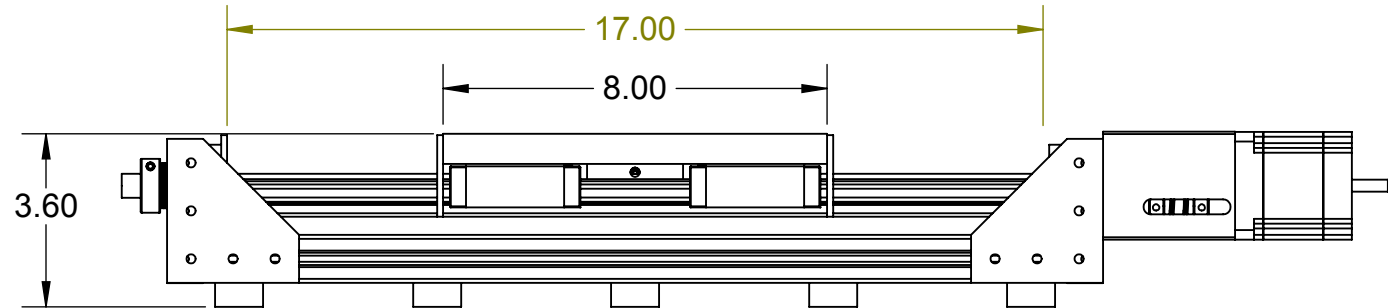
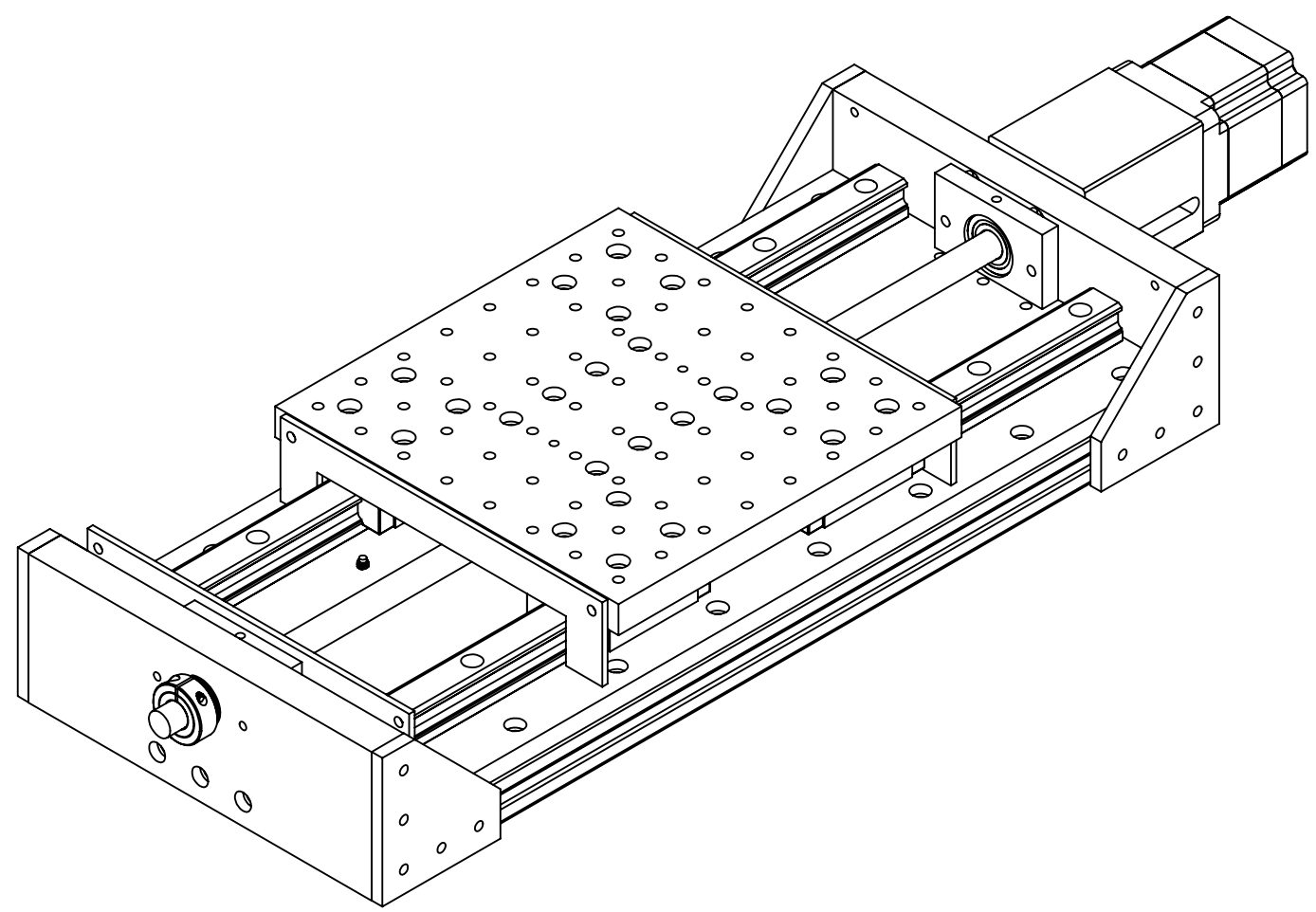
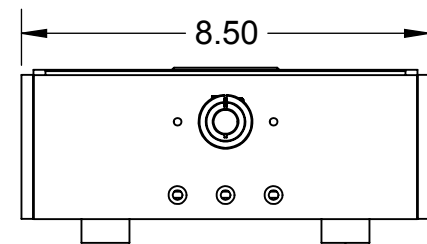
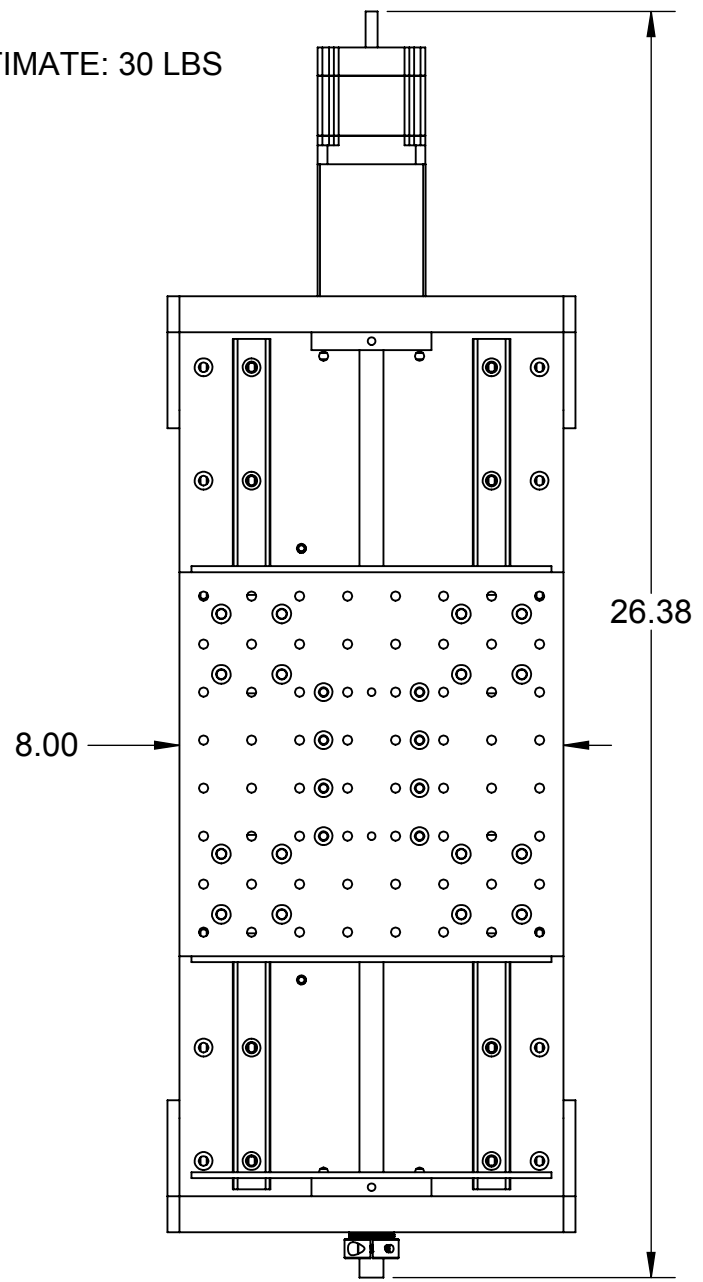
DIMENSIONS IN INCHES [mm]		TOLERANCES (U.O.S.)	
THIRD ANGLE PROJECTION		.X	±.1
		.XX	±.01
		.XXX	±.005
		ANGULAR	± 1°

	TITLE <b>Y-AXIS ASSEMBLY</b>	
	DWG. NO. <b>Y Axis</b>	REV <b>A</b>
LAST UPDATED <b>2021-05-09</b>	DO NOT SCALE DRAWING	SHEET 1 OF 4

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

A  
B  
C  
D  
E  
F  
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NOTES:  
1. WEIGHT ESTIMATE: 30 LBS



A  
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DIMENSIONS IN INCHES [mm]  
THIRD ANGLE PROJECTION

TOLERANCES (U.O.S.)  
.X ±.1  
.XX ±.01  
.XXX ±.005  
ANGULAR ±1°

**VriMech**  
LAST UPDATED 2021-05-09

TITLE OVERALL DIMENSIONS  
DWG. NO. Y Axis REV A  
DO NOT SCALE DRAWING SHEET 2 OF 4

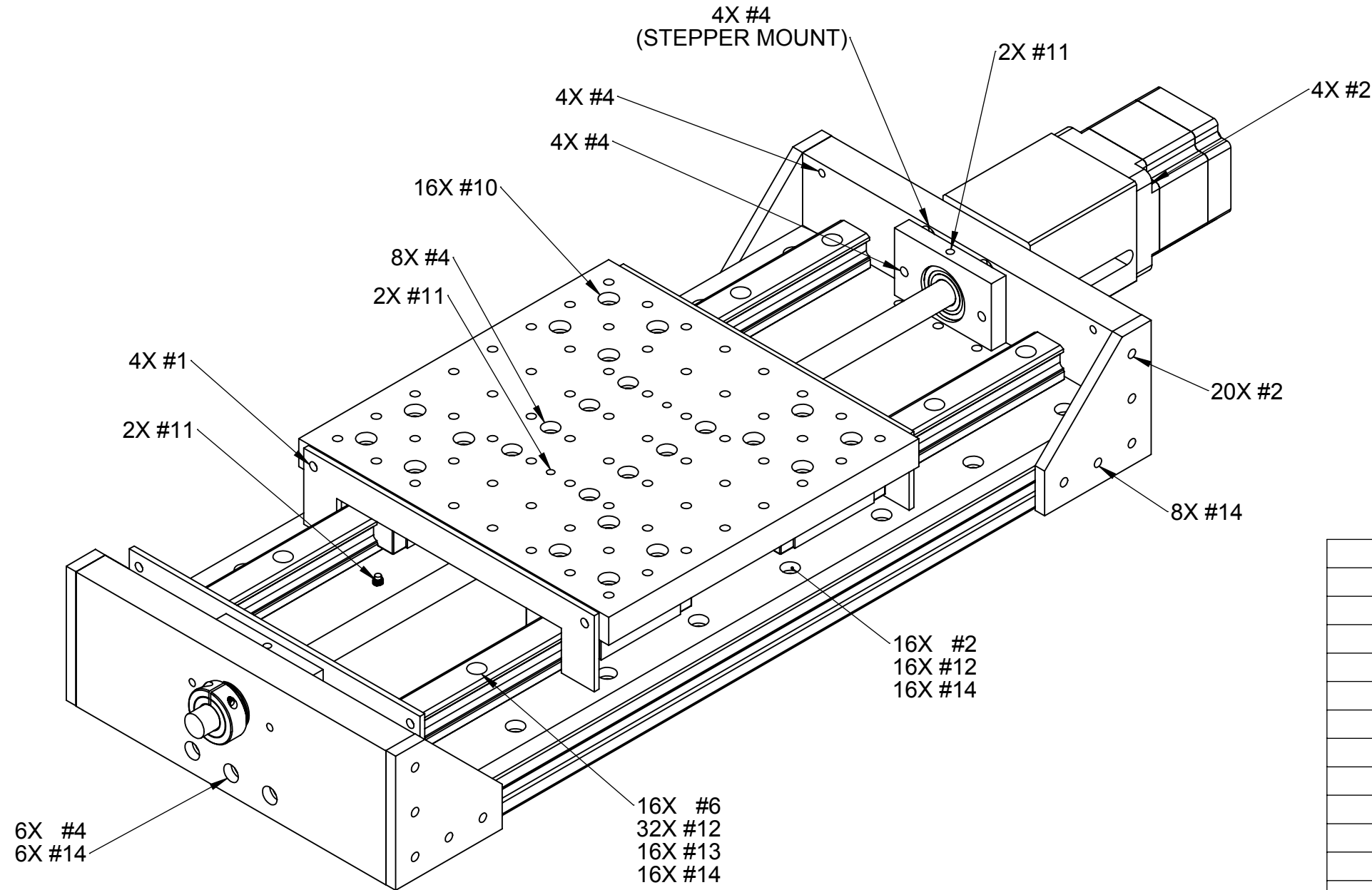
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

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**NOTES:**

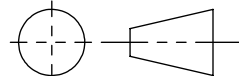
1. SCREWS NOT INCLUDED IN CAD MODEL. THIS SHEET ESTIMATES THE QUANTITY OF HARDWARE USED.
2. ALL SCREWS ZINC-PLATED STEEL
3. MCMASTER-CARR PN 98001A125 LOW-PROFILE, 10-32 WELD NUT USED FOR MOUNTING TO 8020 FRAME.



14	WELD NUT	10-32	76
13	LOCK WASH.	10-32	16
12	WASHER	#10 .365-IN OD	16
11	SET SCREW	10-32 X 3/8	6
10	SHCS	M5-0.8 X 16 mm	16
9	SHCS	M5-0.8 X 12 mm	0
8	SHCS	10-32 X 2-1/2	0
7	SHCS	10-32 X 2	0
6	SHCS	10-32 X 1-1/4	16
5	SHCS	10-32 X 1	0
4	SHCS	10-32 X 3/4	22
3	SHCS	10-32 X 5/8	0
2	SHCS	10-32 X 1/2	40
1	SHCS	10-32 X 3/8	4
ITEM NO.	TYPE	SIZE	QTY.

DIMENSIONS IN INCHES [mm]

THIRD ANGLE PROJECTION



TOLERANCES (U.O.S.)

.X ±.1  
.XX ±.01  
.XXX ±.005  
ANGULAR ± 1°

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TITLE HARDWARE

DWG. NO. Y Axis

REV A

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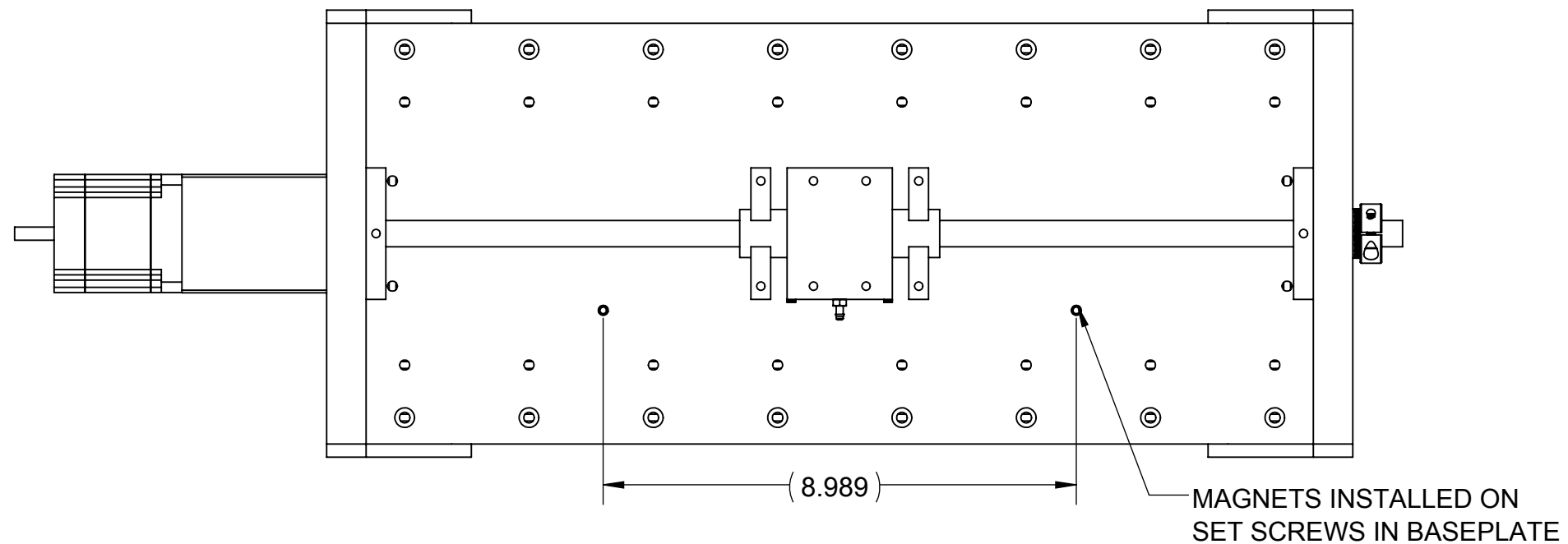
SHEET 3 OF 4

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

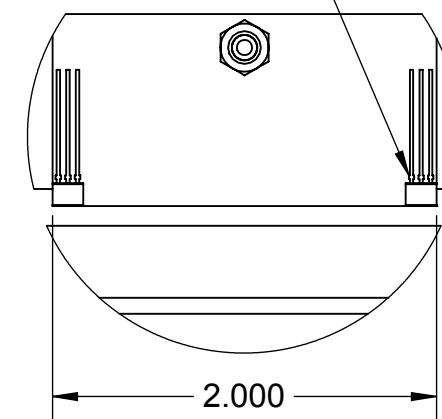
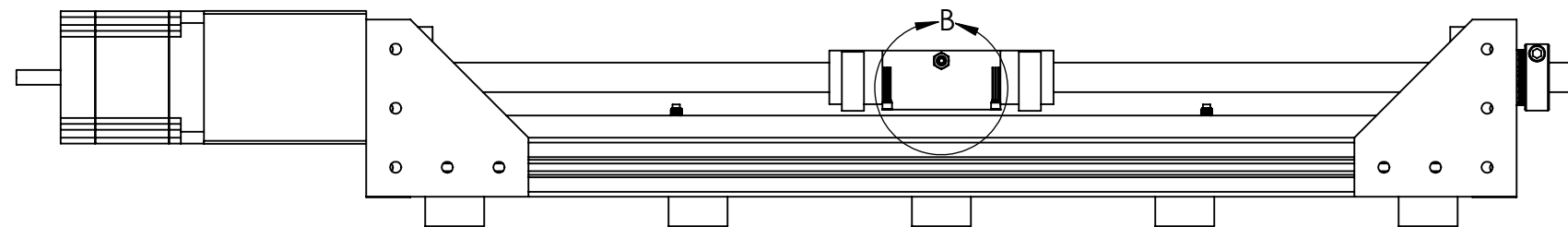
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

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NOTES:  
1. COULD BE MODIFIED TO USE 1X CENTER SENSOR AND 2X MAGNETS BY DECREASING MAGNET-MAGNET DISTANCE BY 2 INCHES



SENSORS EPOXIED TO CORNERS OF PUSH BLOCK, FACING OUTWARD

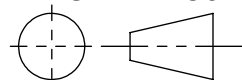


DETAIL B

DIMENSIONS IN INCHES [mm]

TOLERANCES (U.O.S.)

THIRD ANGLE PROJECTION



.X ±.1  
.XX ±.01  
.XXX ±.005  
ANGULAR ±1°∠

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LAST UPDATED 2021-05-09

TITLE LIMIT SWITCHES

DWG. NO. Y Axis

REV A

DO NOT SCALE DRAWING

SHEET 4 OF 4

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16