

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	2021-05-08

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
28	1010-S	4-INCH 1010-S FRAME	2
27	30-8631	8020 CORNER BRACKET	24
26	8020CM-005-R	R. RAIL BASE, Z-AXIS	1
25	8020CM-006	BRACKET, Z-AXIS	8
24	1010-S	22-INCH 1010-S FRAME	1
23	8020CM-035	UPPER BEARING BLOCK	2
22	1020-S	22-INCH 1020-S FRAME	5
21	1010-S	5-INCH 1010-S FRAME	4
20	8020CM-022-R	R. LEADSCREW FIX. PLATE	1
19	8020CM-004-R	R. BASEPLATE, Z-AXIS	1
18	MMC-9540K742	RUBBER FOOT	10
17	1020-S	6-INCH 1020-S FRAME	4
16	8020CM-067	BELLOWS MOUNT, Z-AXIS	2
15	8020CM-004-L	L. BASEPLATE, Z-AXIS	1
14	8020CM-017	BEARING BLOCK	2
13	8020CM-023	LEADSCREW PASS-THROUGH	2
12	APS11700-600	HALL SENSOR	6
11	8020CM-005-L	L. RAIL BASE, Z-AXIS	1
10	ARC-20-P	20 X 450 mm LINEAR RAIL	4
9	MMC-98935A718	1/2-10 ACME LEADSCREW	2
8	60355K601	LEADSCREW BEARING	4
7	8020CM-022-L	L. LEADSCREW FIX. PLATE	1
6	5909K31	THRUST BEARING	4
5	5909K44	THRUST WASHER	8
4	9961K17	SET COLLAR	4
3	8020CM-020	STEPPER MOUNT	2
2	6208K565	SHAFT COUPLER	2
1	NEMA 24	NEMA 24 STEPPER MOTOR	2

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DETAIL A

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

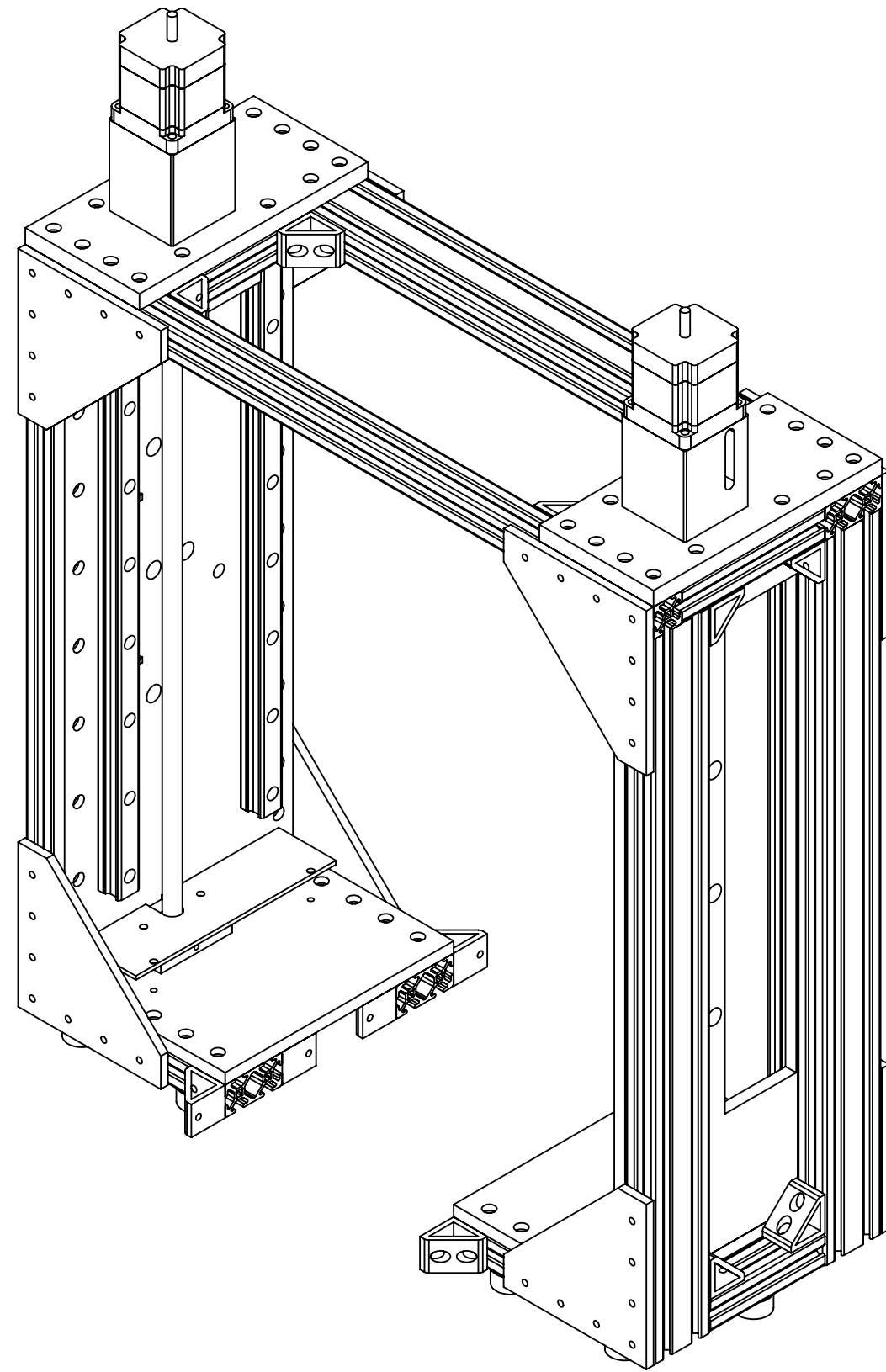
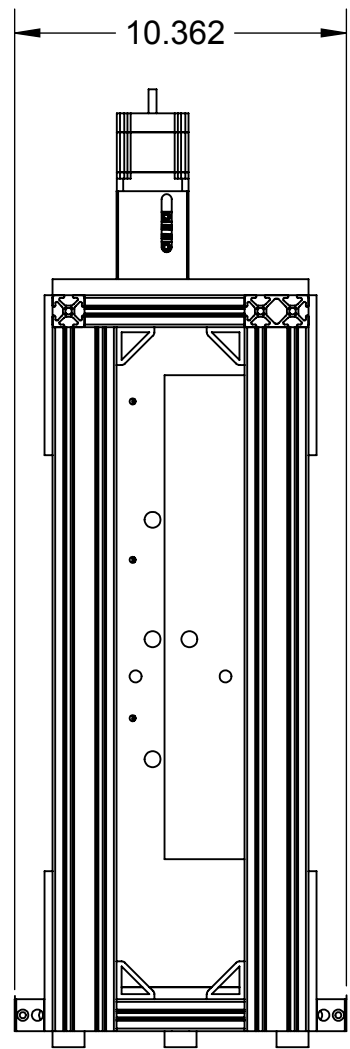
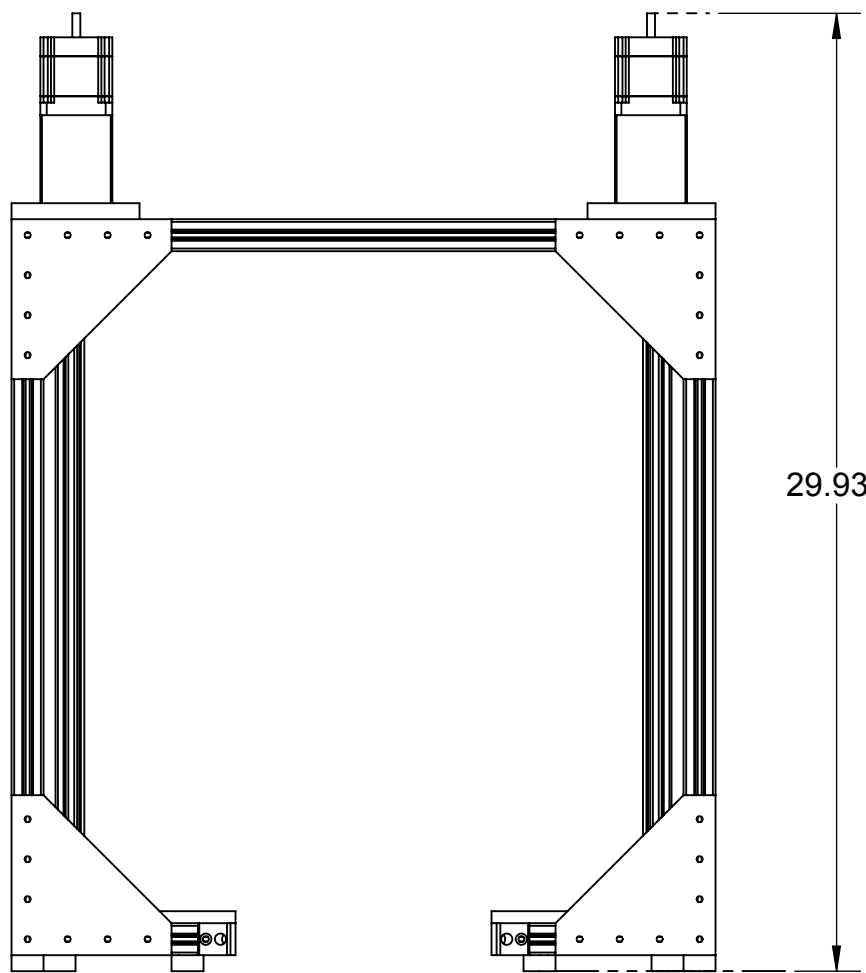
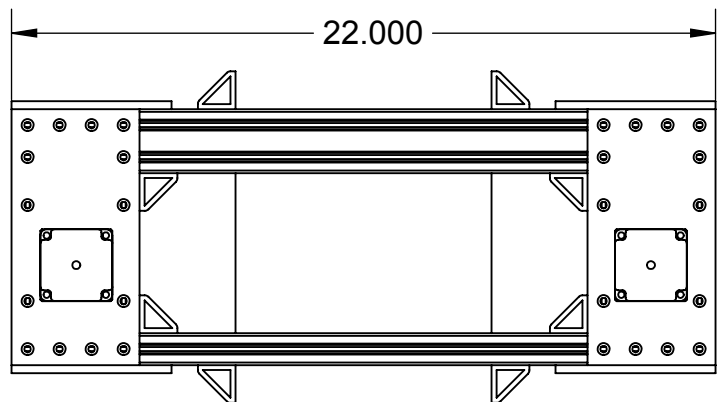
	TITLE Z-AXIS ASSEMBLY	
	DWG. NO. Z Axis	REV A
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NOTES:
1. WEIGHT ESTIMATE: 45 LBS



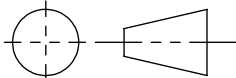
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DIMENSIONS IN INCHES [mm]

TOLERANCES (U.O.S.)

THIRD ANGLE PROJECTION

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



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TITLE OVERALL DIMENSIONS

DWG. NO. Z Axis

REV A

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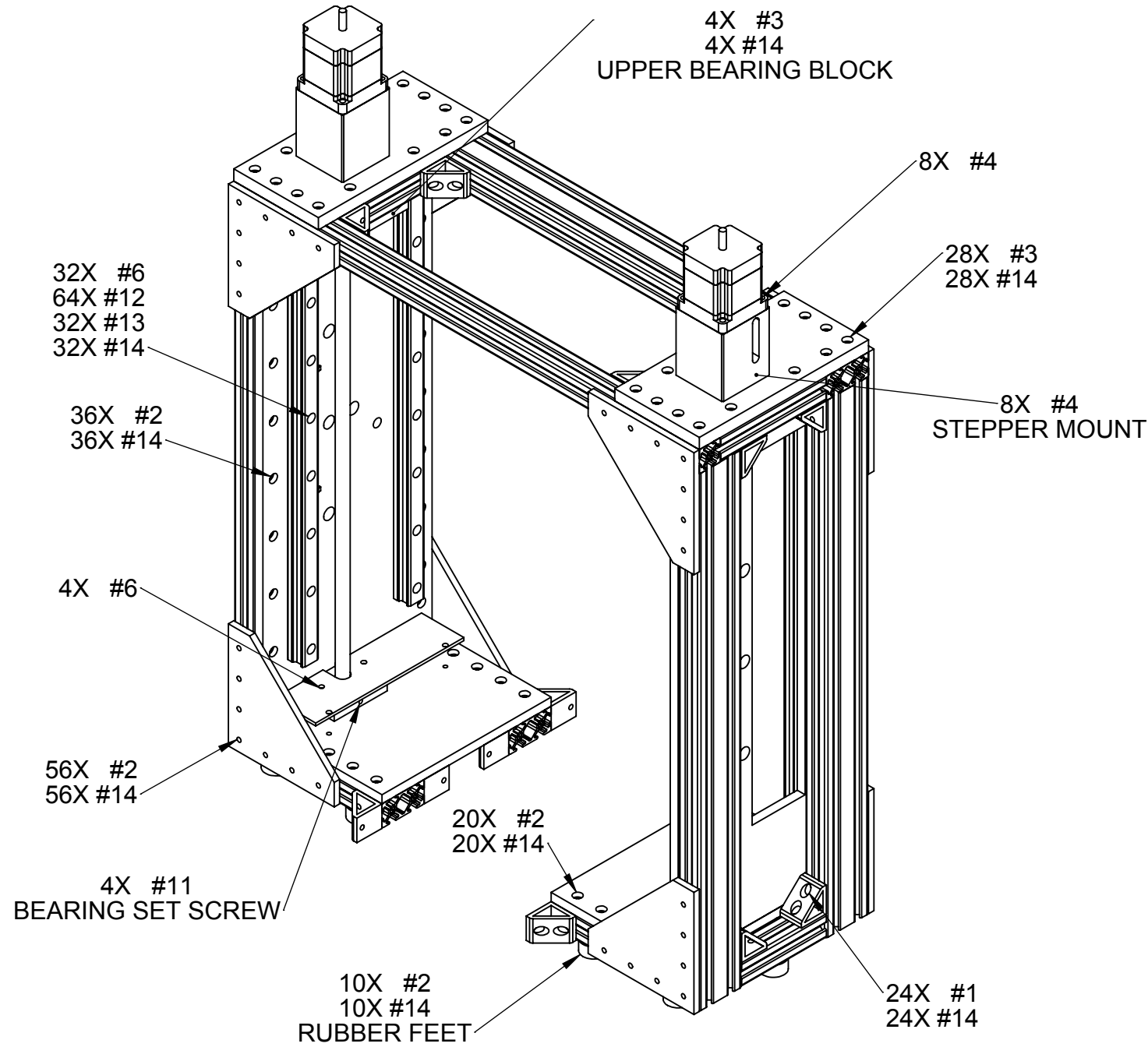
SHEET 2 OF 4

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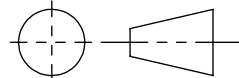
- NOTES:
1. SCREWS NOT INCLUDED IN CAD MODEL. THIS SHEET ESTIMATES THE QUANTITY OF HARDWARE USED.
 2. ALL SCREWS ZINC-PLATED STEEL
 3. MCMASTER-CARR PN 98001A125 LOW-PROFILE, 10-32 WELD NUT USED FOR MOUNTING TO 8020 FRAME.



14	WELD NUT	10-32	210
13	LOCK WASH.	10-32	32
12	WASHER	#10 .365-IN OD	64
11	SET SCREW	10-32 X 3/8	4
10	SHCS	M5-0.8 X 16 mm	0
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	32
5	SHCS	10-32 X 1	0
4	SHCS	10-32 X 3/4	16
3	SHCS	10-32 X 5/8	32
2	SHCS	10-32 X 1/2	122
1	SHCS	10-32 X 3/8	24
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. Z Axis

REV A

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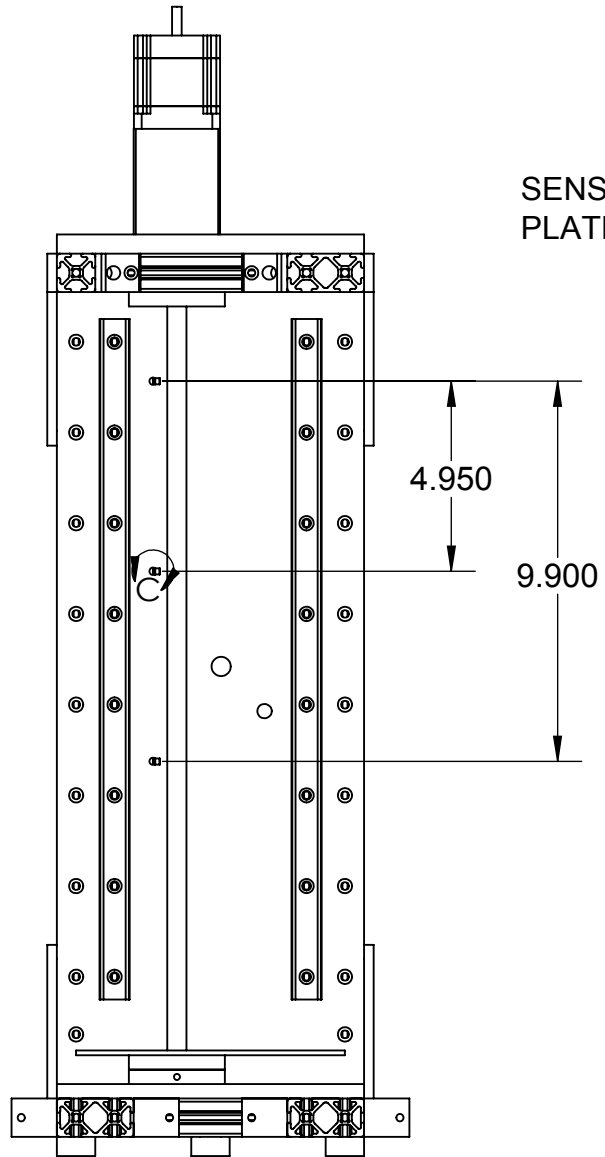
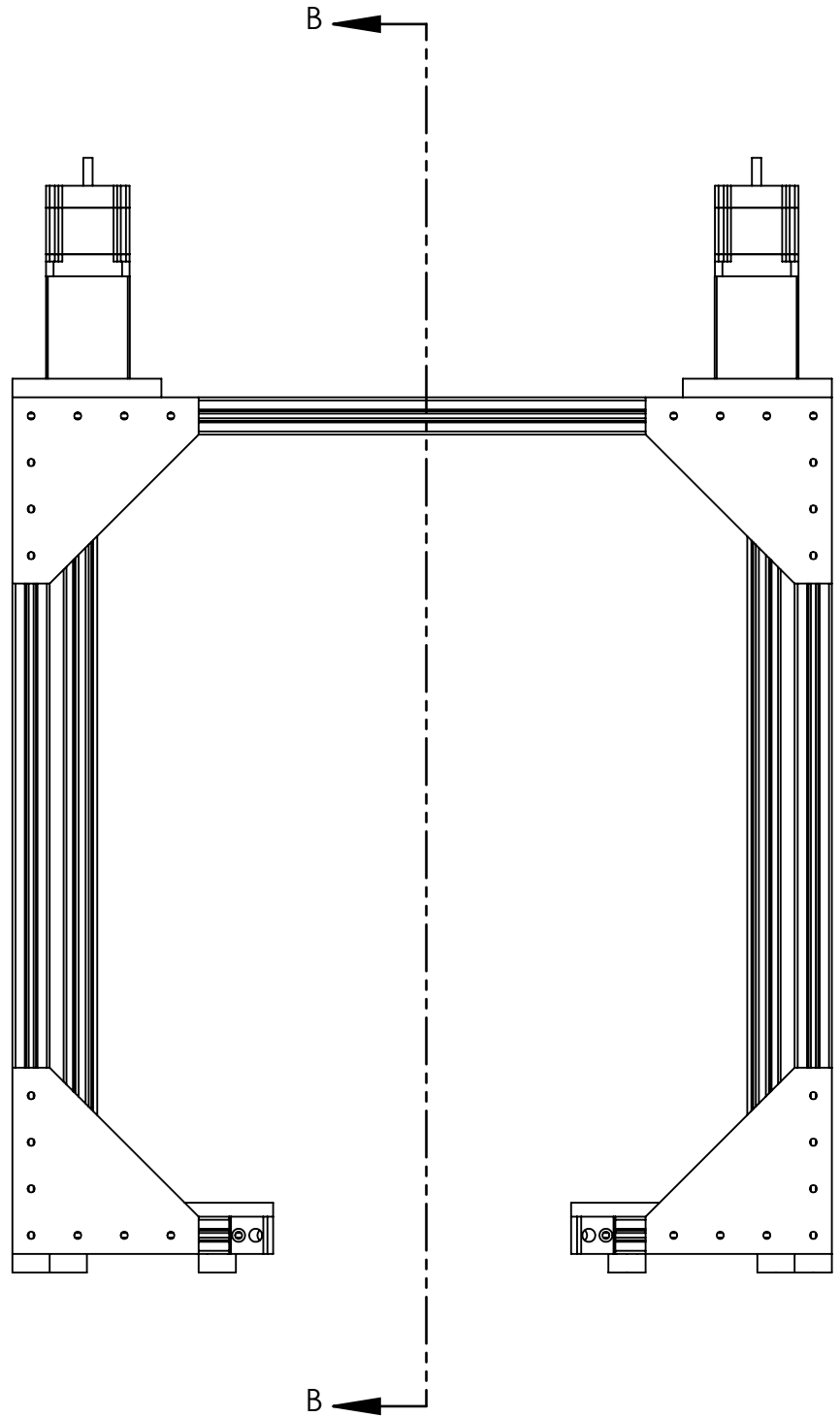
SHEET 3 OF 4

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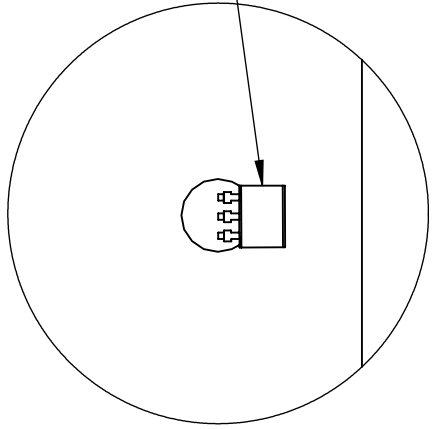
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NOTES:
1. 3X SENSORS WERE INSTALLED ON EACH Z-AXIS COLUMN. ONLY THE MIDDLE SENSOR ON ONE COLUMN WAS USED IN ACTUAL OPERATION, AS THE HOMING SWITCH.



SENSOR EPOXIED TO ALUMINUM PLATE, LEADS BENT THROUGH HOLE



DETAIL C

SECTION B-B

DIMENSIONS IN INCHES [mm]
THIRD ANGLE PROJECTION

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



LAST UPDATED 2021-05-09

TITLE LIMIT SWITCHES

DWG. NO. Z Axis

REV A

DO NOT SCALE DRAWING

SHEET 4 OF 4

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