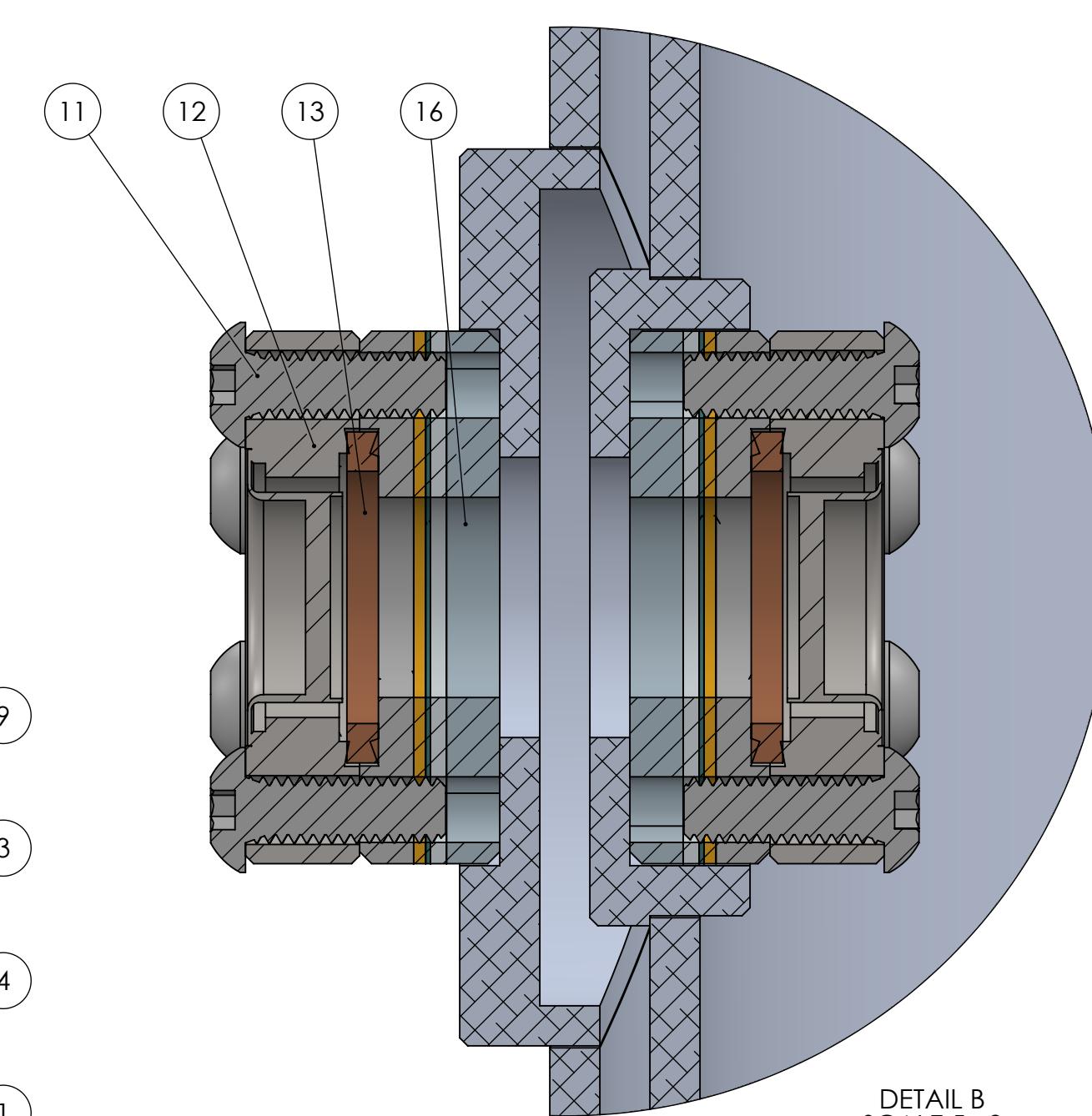
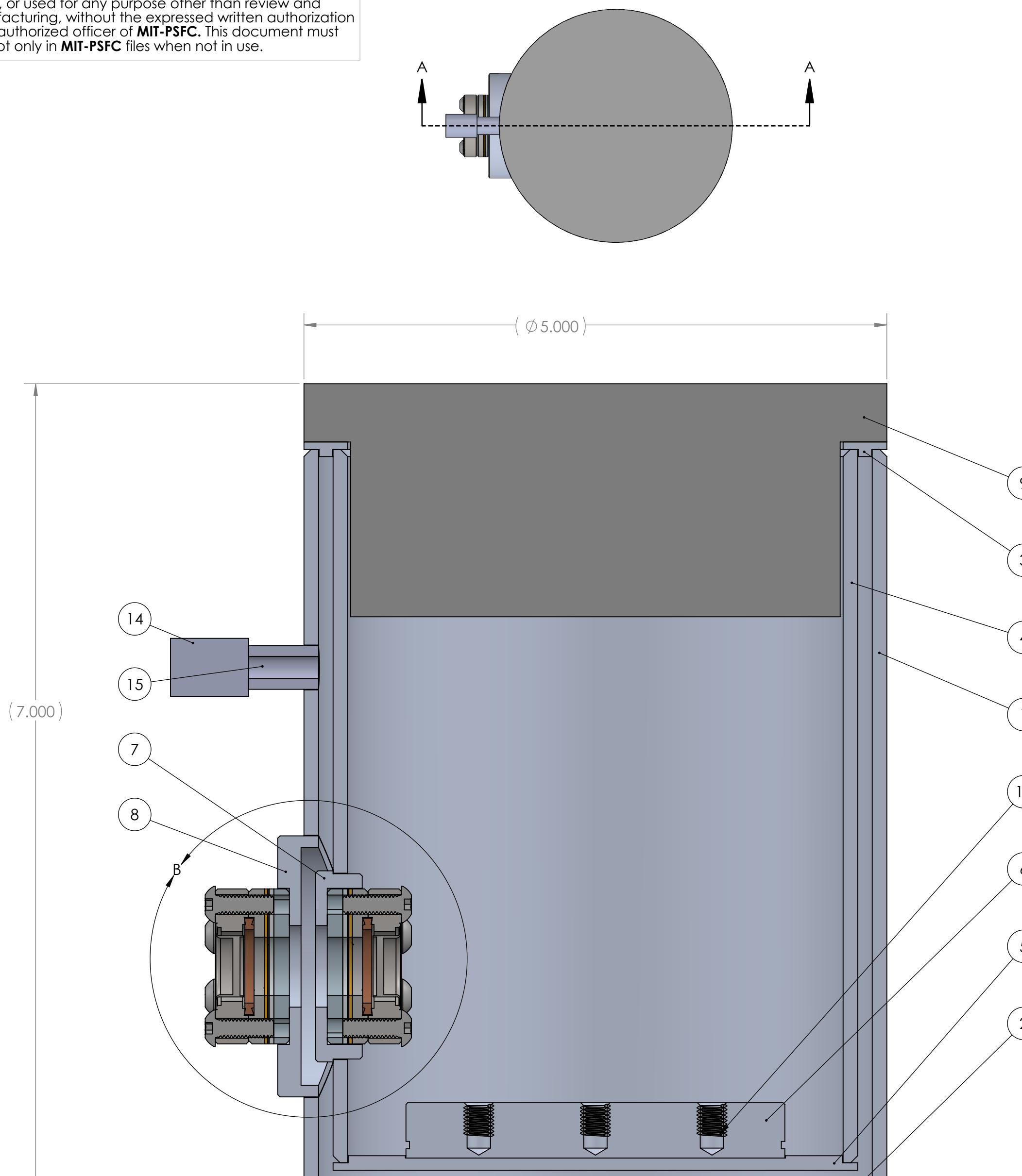


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REVISIONS

REV.	DESCRIPTION	DATE	APPROVED



ITEM NO.	DESCRIPTION	Vendor	PartNo	MakeOrBuy	QTY.
1	Outer cylinder	N/A	N/A	Make	1
2	Outer bottom plate	N/A	N/A	Make	1
3	Top flange	N/A	N/A	Make	1
4	Inside cylinder	N/A	N/A	Make	1
5	Inside bottom plate	N/A	N/A	Make	1
6	Base block	N/A	N/A	Make	1
7	ID boss	N/A	N/A	Make	1
8	OD boss	N/A	N/A	Make	1
9	Styrofoam plug	N/A	N/A	Make	1
10	18-8 Stainless Steel Helical Insert, 10-32 Right-Hand Thread, 0.285" Long	McMaster-Carr	91732A231	Buy	9
11	316 Stainless Steel Button Head Hex Drive Screw, Super-Corrosion-Resistant, 8-32 Thread Size, 1/2" Long	McMaster-Carr	98164A135	Buy	12
12	Sapphire viewprot	Kurt J. Lesker	VPZL-133SS	Buy	2
13	GASKET, COPPER, ANNEALED	Kurt J. Lesker	vzcu19	Buy	2
14	1/4" Valve operator	CRYOCOMP	V1025-2	Buy	1
15	1/4" AL_Seal off valve	Cryocomp	V1021-1	Buy	1
16	FLUSH MOUNT BIMETAL CF FLANGE	ATLAS Technologies	CFBI-0133-11	Buy	2

INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	ASSEMBLY DRAWING		TITLE: DEWAR ASSEMBLY
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	UNITS: INCHES	THIRD ANGLE PROJECTION	
ANGLES $\pm 1/2^\circ$			
INCHES MM			
Ra 125 μ m \checkmark	Ra 3.2 μ m \checkmark		
3 PLACES $\pm .005$	3 PLACES $\pm .01$		
2 PLACES $\pm .010$	2 PLACES $\pm .025$		
1 PLACE $\pm .100$	1 PLACE $\pm .75$		
DRAWN BY: J.Estrada DATE: 3/5/2024			
ENGINEERING APPR.: R.Vieira DATE: 3/5/2024			
PROJECT MANAGER:			
DO NOT SCALE DRAWING		SIZE DWG. NO. C REV. A	
SCALE: 1:2		SHEET 1 OF 1	

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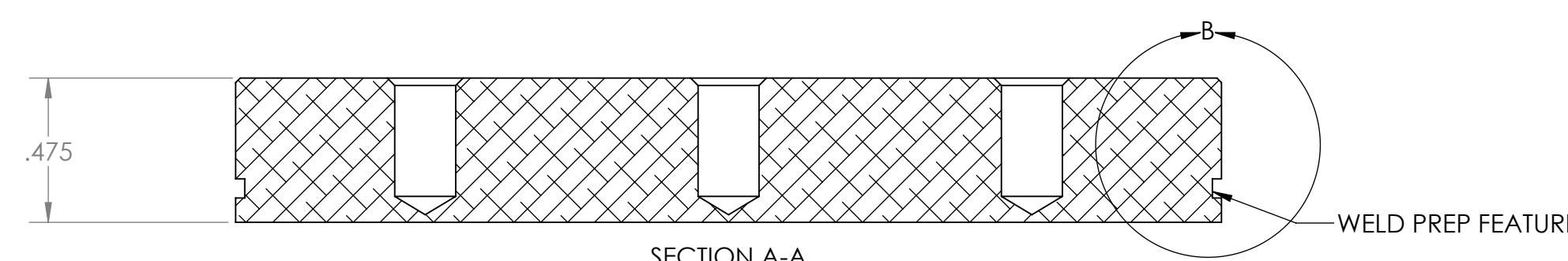
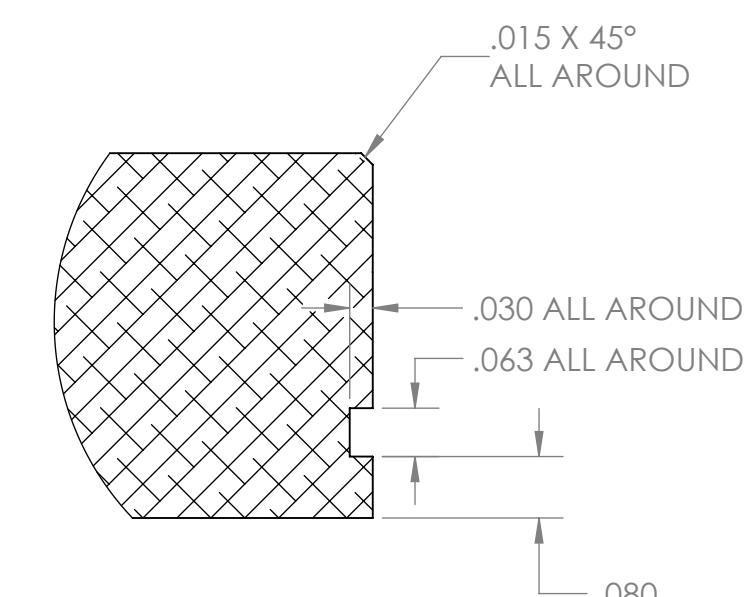
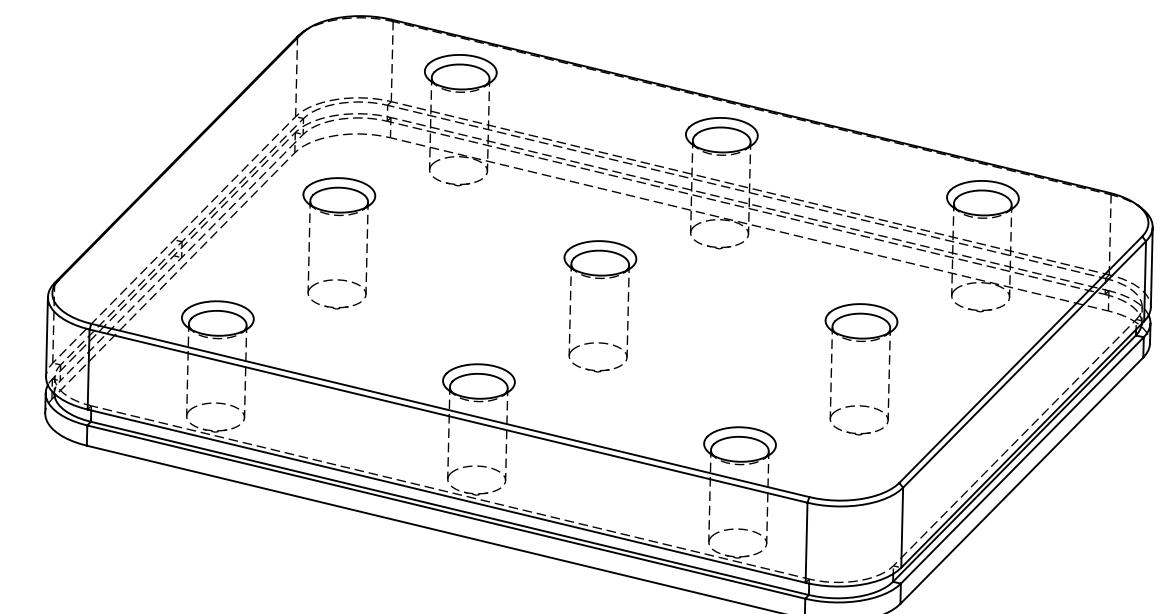
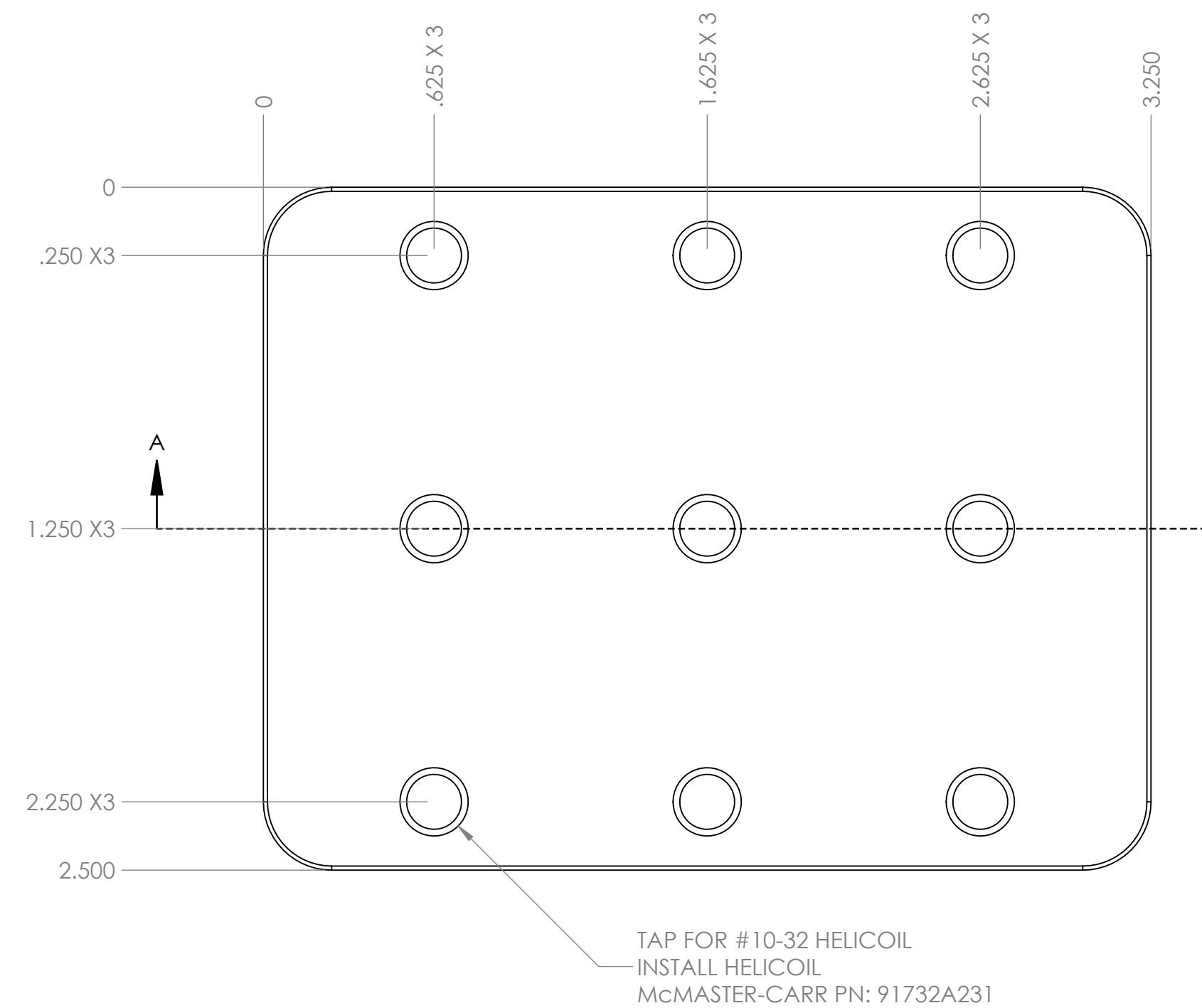
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A	INITIAL RELEASE	3/6/2024	R.VIEIRA

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Notes:

INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	UNITS: INCHES	WEIGHT: 0.10 Lbs.	MIT-PSFC TITLE: Base block
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	MATERIAL: 6061 Alloy	THIRD ANGLE PROJECTION	
ANGLES $\pm 1/2^\circ$	FINISH:		
INCHES MM	N/A		
Ra 125 μin ✓ Ra 3.2 μm ✓	DRAWN BY: J.Estrada	DATE: 3/5/2024	
3 PLACES $\pm .005$ 3 PLACES $\pm .01$	ENGINEERING APPR. R.Vieira	DATE: 3/5/2024	
2 PLACES $\pm .010$ 2 PLACES $\pm .025$	PROJECT MANAGER:		
1 PLACE $\pm .100$ 1 PLACE $\pm .75$	DO NOT SCALE DRAWING		
	SCALE: 2:1	DWG. NO. C	REV. A
		SHEET 1 OF 1	

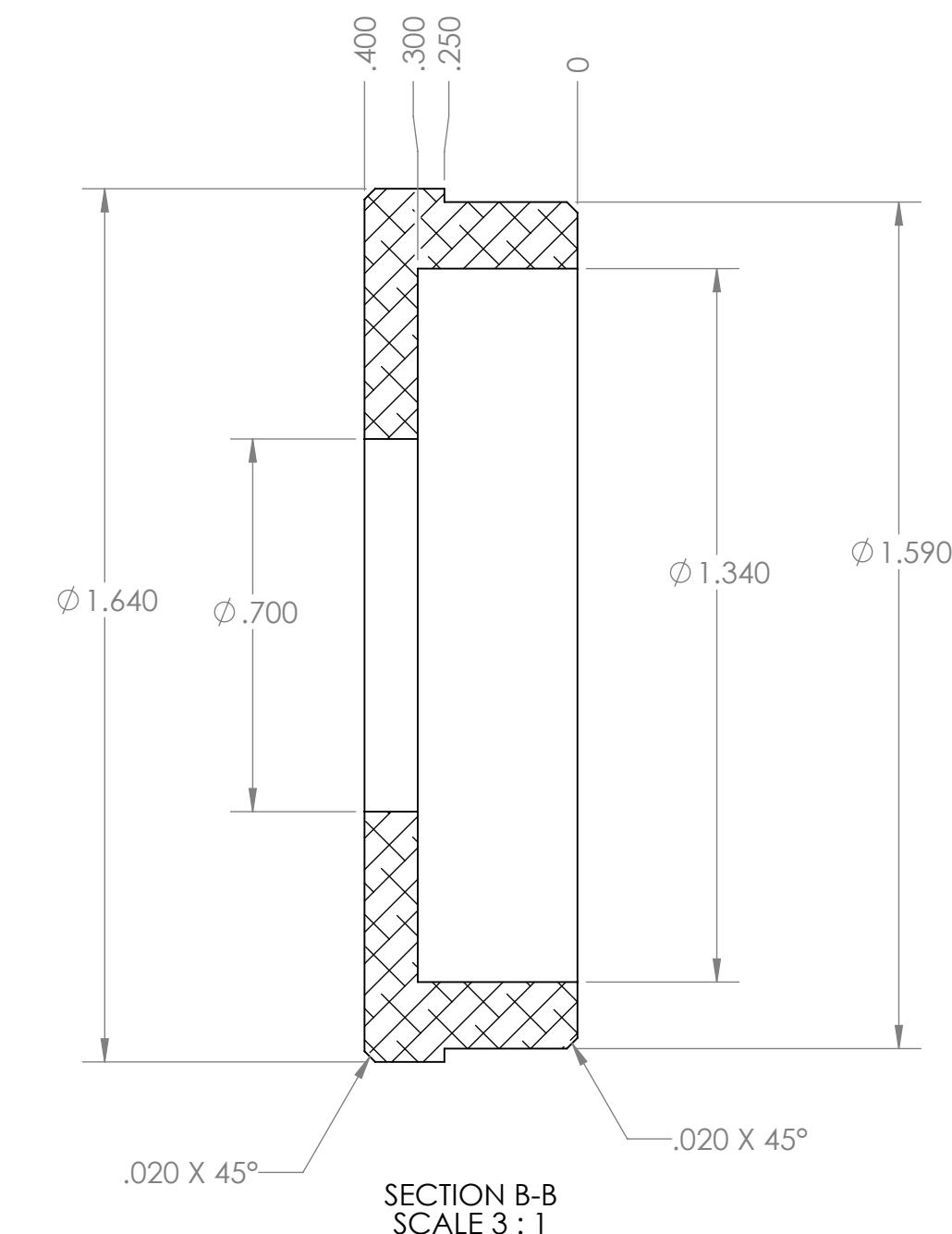
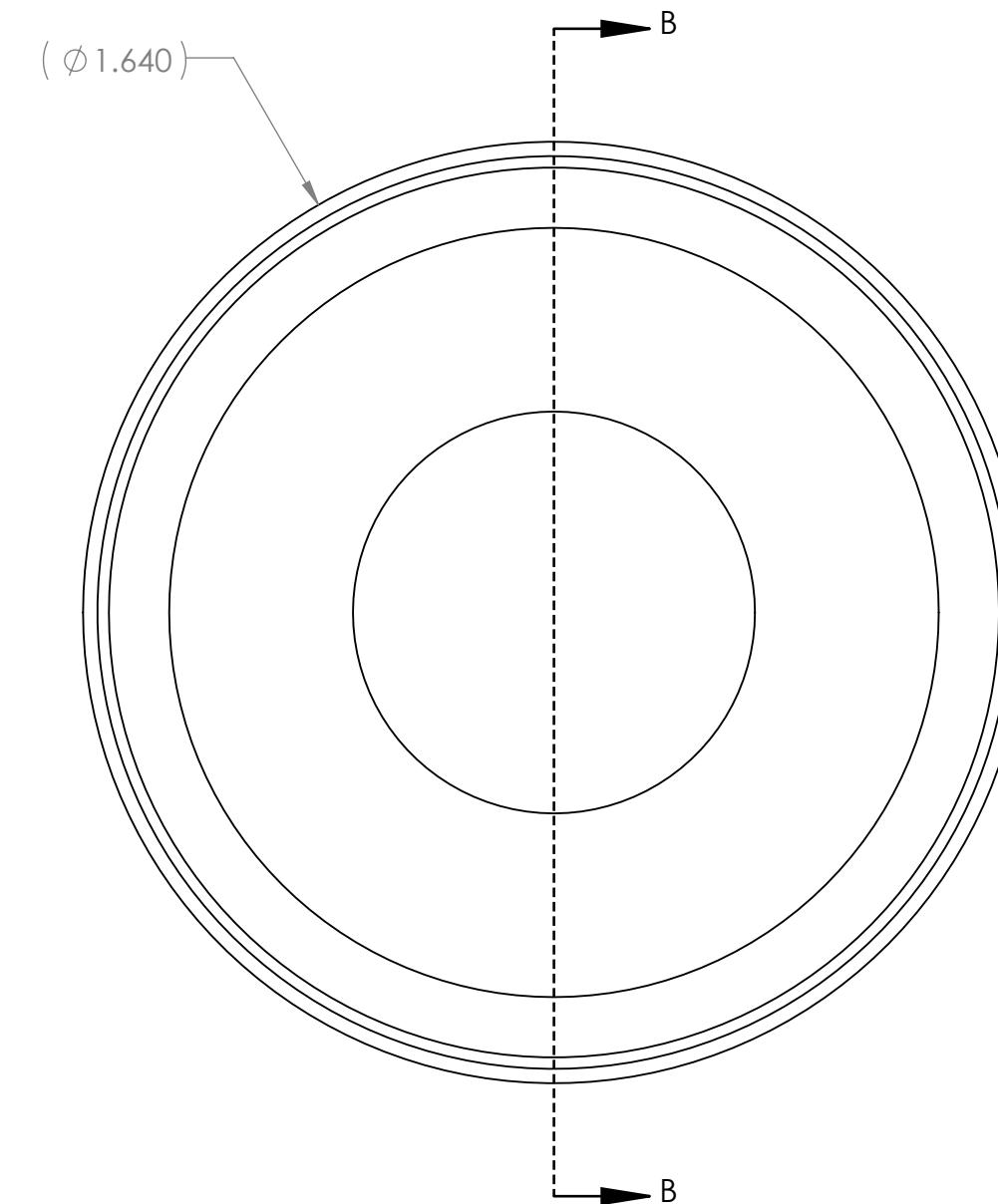
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REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	3/6/2024	R.VIEIRA

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A Notes:

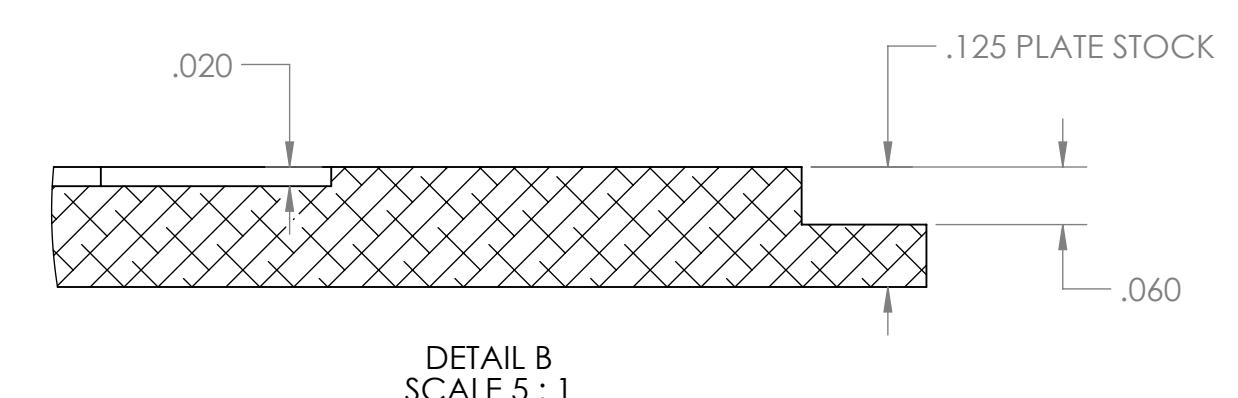
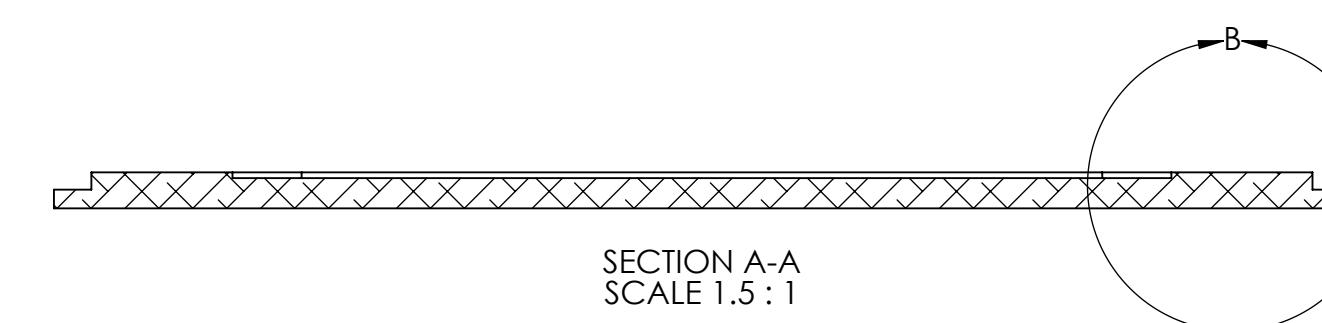
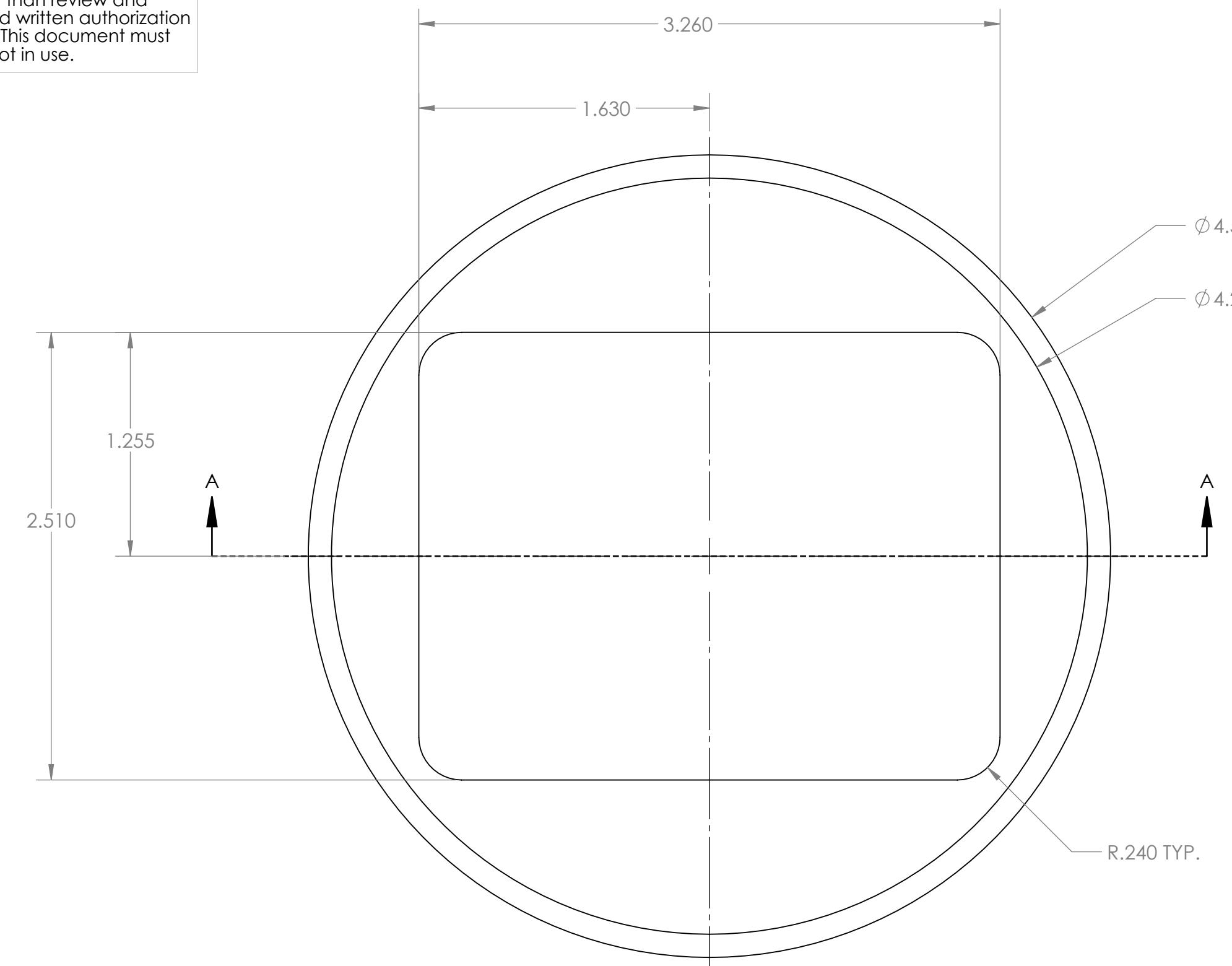
INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	UNITS: INCHES	WEIGHT: 0.10 Lbs.	MIT-PSFC
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	MATERIAL: Aluminum 6061	FINISH: 	
ANGLES $\pm 1/2^\circ$		THIRD ANGLE PROJECTION	
INCHES MM	N/A	DRAWN BY: J.Estrada	DATE: 3/5/2024
Ra 125 μin ✓ Ra 3.2 μm ✓	3 PLACES ± 0.005	ENGINEERING APPR. R.Vieira	DATE: 3/5/2024
3 PLACES ± 0.010	2 PLACES ± 0.25	PROJECT MANAGER:	
1 PLACE ± 0.100	1 PLACE ± 0.75	DO NOT SCALE DRAWING	REV. A
		SCALE: 2:1	SHEET 1 OF 1

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A	INITIAL RELEASE	3/6/2024	R.VIEIRA



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Notes:

INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	UNITS: INCHES	WEIGHT: 0.10 Lbs.	MIT-PSFC
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	MATERIAL: 6061 Alloy	FINISH: 	
ANGLES $\pm 1/2^\circ$			
INCHES	MM	THIRD ANGLE PROJECTION	
Ra 125 μin ✓	Ra 3.2 μm ✓	DRAWN BY: J.Estrada	DATE: 3/5/2024
3 PLACES $\pm .005$	3 PLACES ± 0.1	ENGINEERING APPR. R.Vieira	DATE: 3/5/2024
2 PLACES $\pm .010$	2 PLACES ± 0.25	PROJECT MANAGER:	
1 PLACE $\pm .100$	1 PLACE ± 0.75	DO NOT SCALE DRAWING	
SCALE: 1:1		DWG. NO. C	REV. A
SHEET 1 OF 1			

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A	INITIAL RELEASE	3/6/2024	R.VIEIRA

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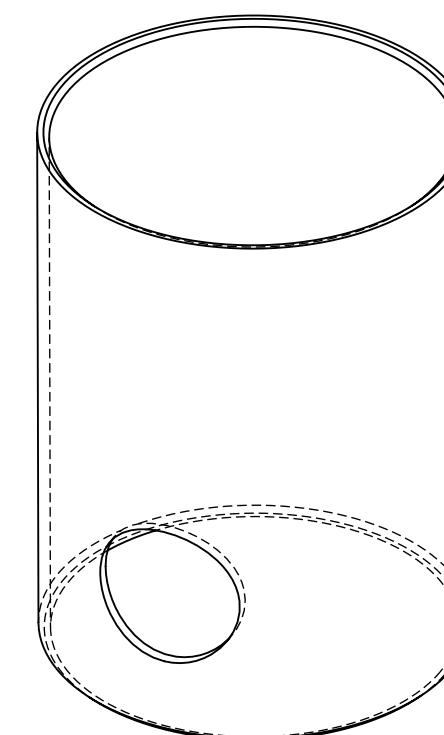
D

ϕ 4.50 OD X .125 WALL
ROUND TUBE

(ϕ 4.25 ID)

A

A



C

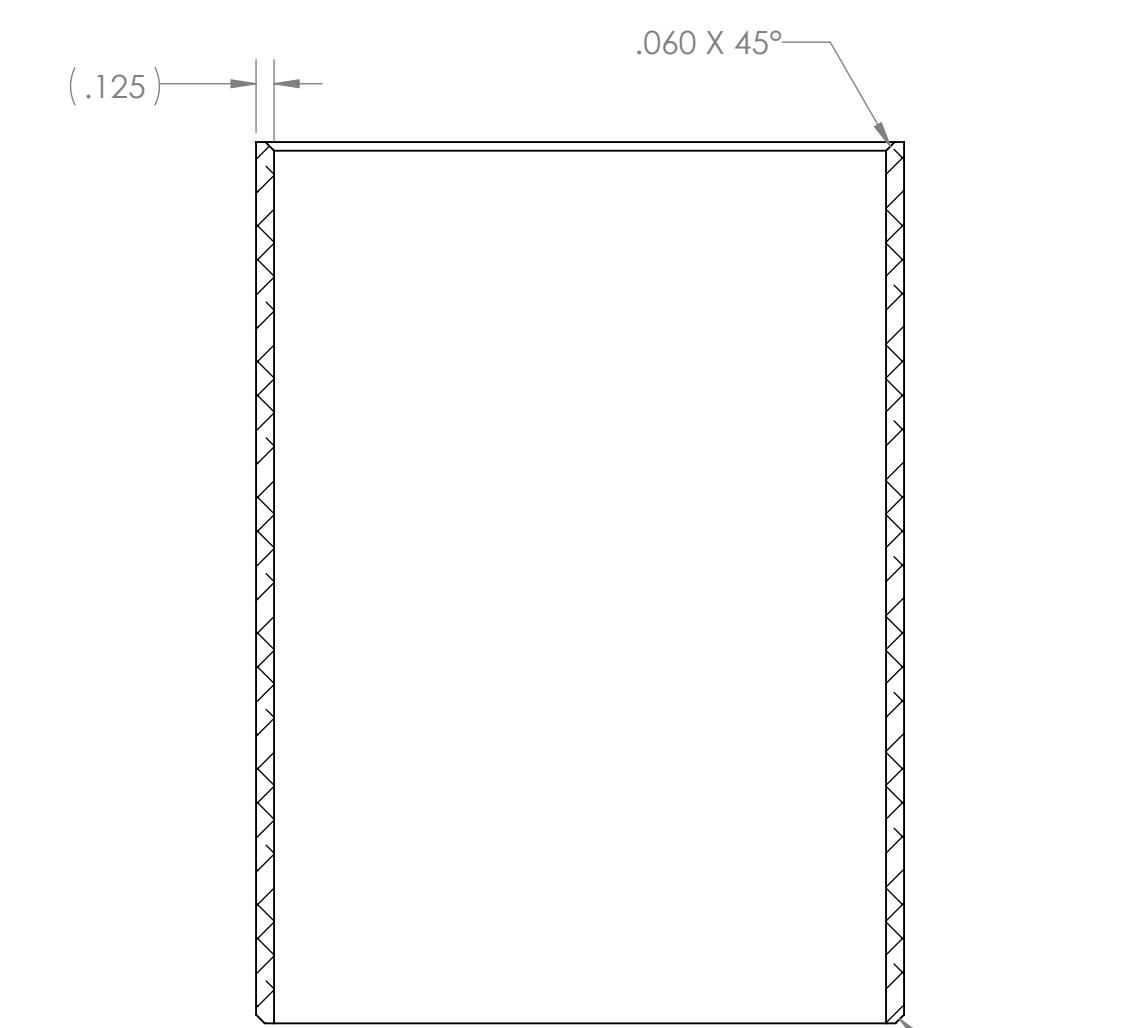
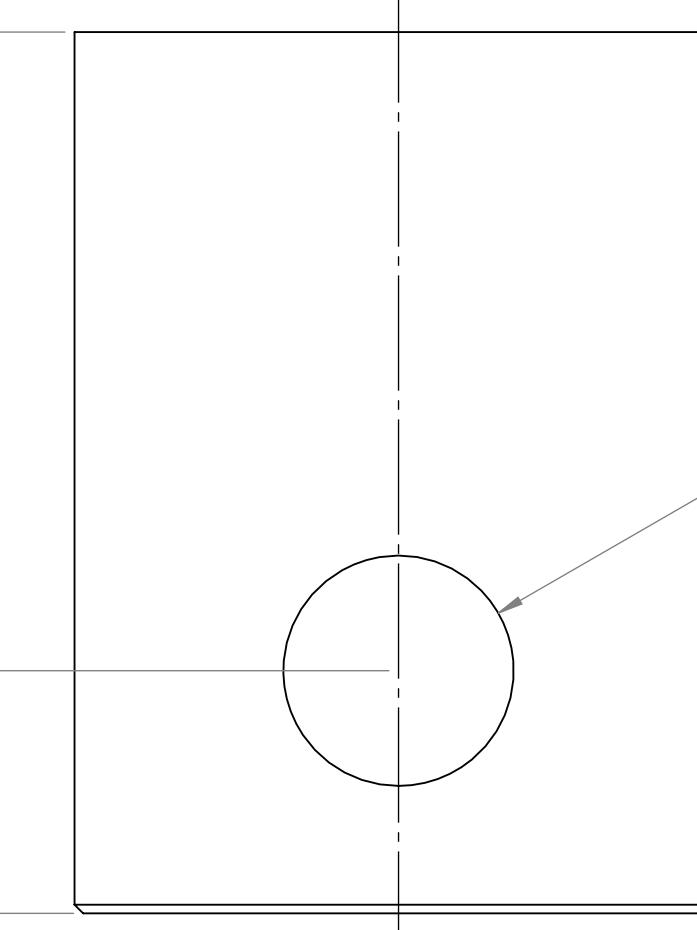
C

6.120

ϕ 1.600

1.685

0



SECTION A-A
SCALE 1.5 : 2

A Notes:

A

INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	UNITS: INCHES	WEIGHT: 0.10 Lbs.	MIT-PSFC
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	MATERIAL: 6061 Alloy	FINISH: 	
ANGLES $\pm 1/2^\circ$	INCHES Ra 125 μ m ✓ 3 PLACES $\pm .005$ 2 PLACES $\pm .010$ 1 PLACE $\pm .100$	MM Ra 3.2 μ m ✓ 3 PLACES ± 0.1 2 PLACES ± 0.25 1 PLACE ± 0.75	THIRD ANGLE PROJECTION
DRAWN BY: J.Estrada	DRAWN BY: R.Vieira	DATE: 3/5/2024	TITLE: Inside cylinder
ENGINEERING APPR. R.Vieira	ENGINEERING APPR. R.Vieira	DATE: 3/5/2024	SIZE DWG. NO. C N/A
PROJECT MANAGER:	DO NOT SCALE DRAWING	REV. A	SCALE: 1:2

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REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	3/6/2024	R.VIEIRA

D

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C

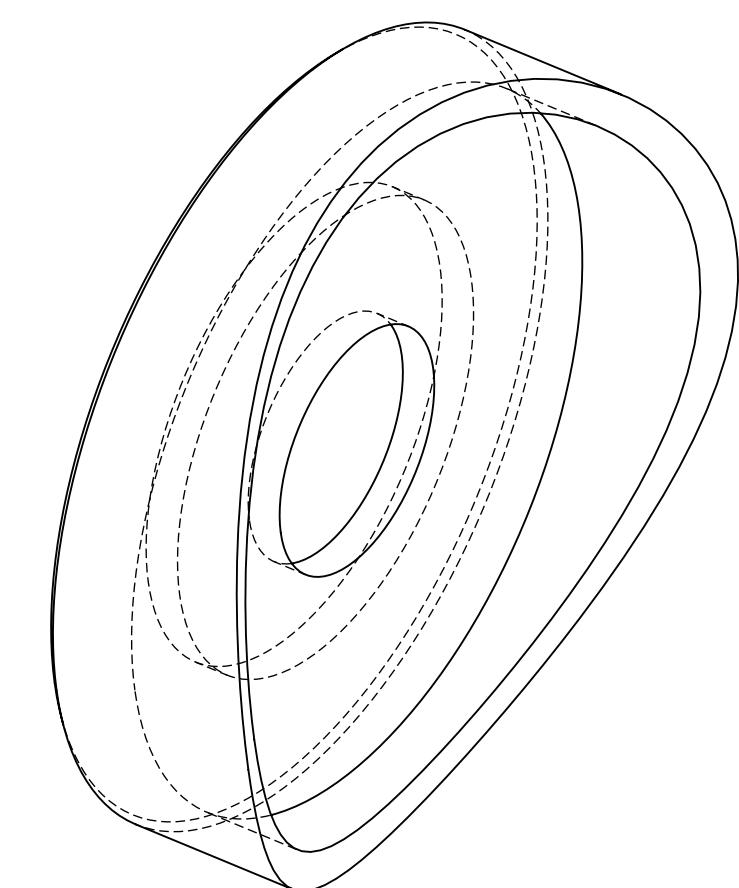
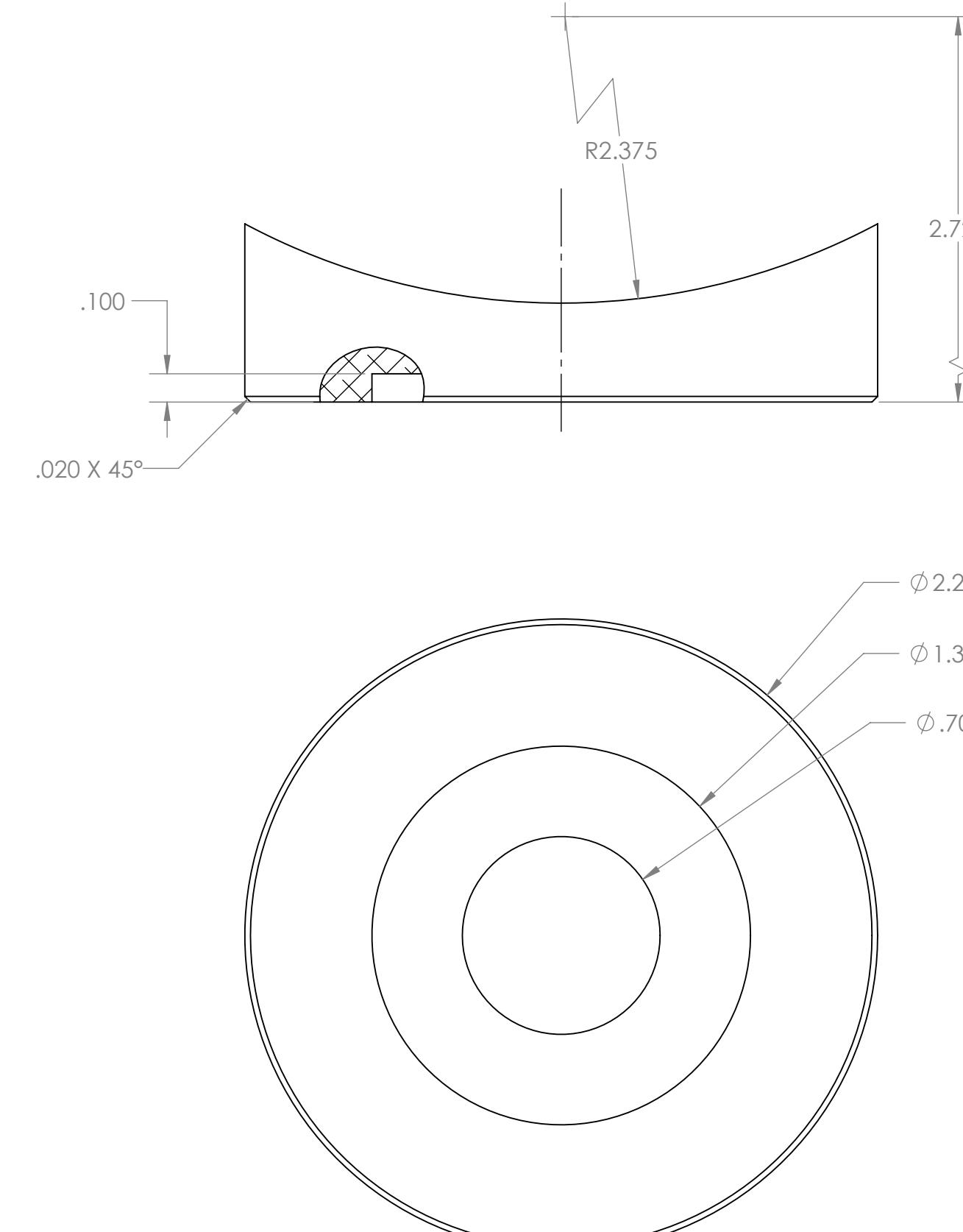
C

B

B

A Notes:

A



INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	UNITS: INCHES	WEIGHT: 0.10 Lbs.	MIT-PSFC
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	MATERIAL: Aluminum 6061	FINISH: 	TITLE: OD boss
	ANGLES ± 1/2°	THIRD ANGLE PROJECTION	
INCHES MM	N/A	DRAWN BY: J.Estrada	SIZE DWG. NO. C N/A
Ra 125 μin ✓	Ra 3.2 μm ✓	DATE: 3/5/2024	REV. A
3 PLACES ± .005	3 PLACES ± 0.1	ENGINEERING APPR. R.Vieira	
2 PLACES ± .010	2 PLACES ± 0.25	DATE: 3/5/2024	
1 PLACE ± .100	1 PLACE ± 0.75	PROJECT MANAGER: 	
DO NOT SCALE DRAWING		SCALE: 2:1	SHEET 1 OF 1

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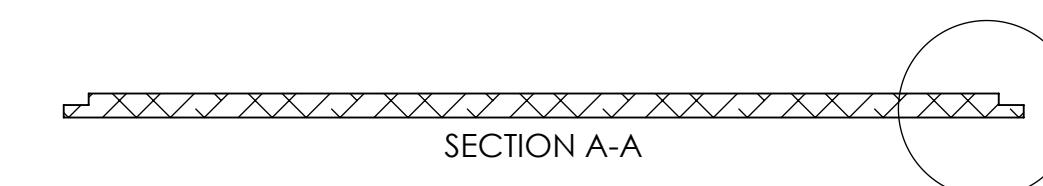
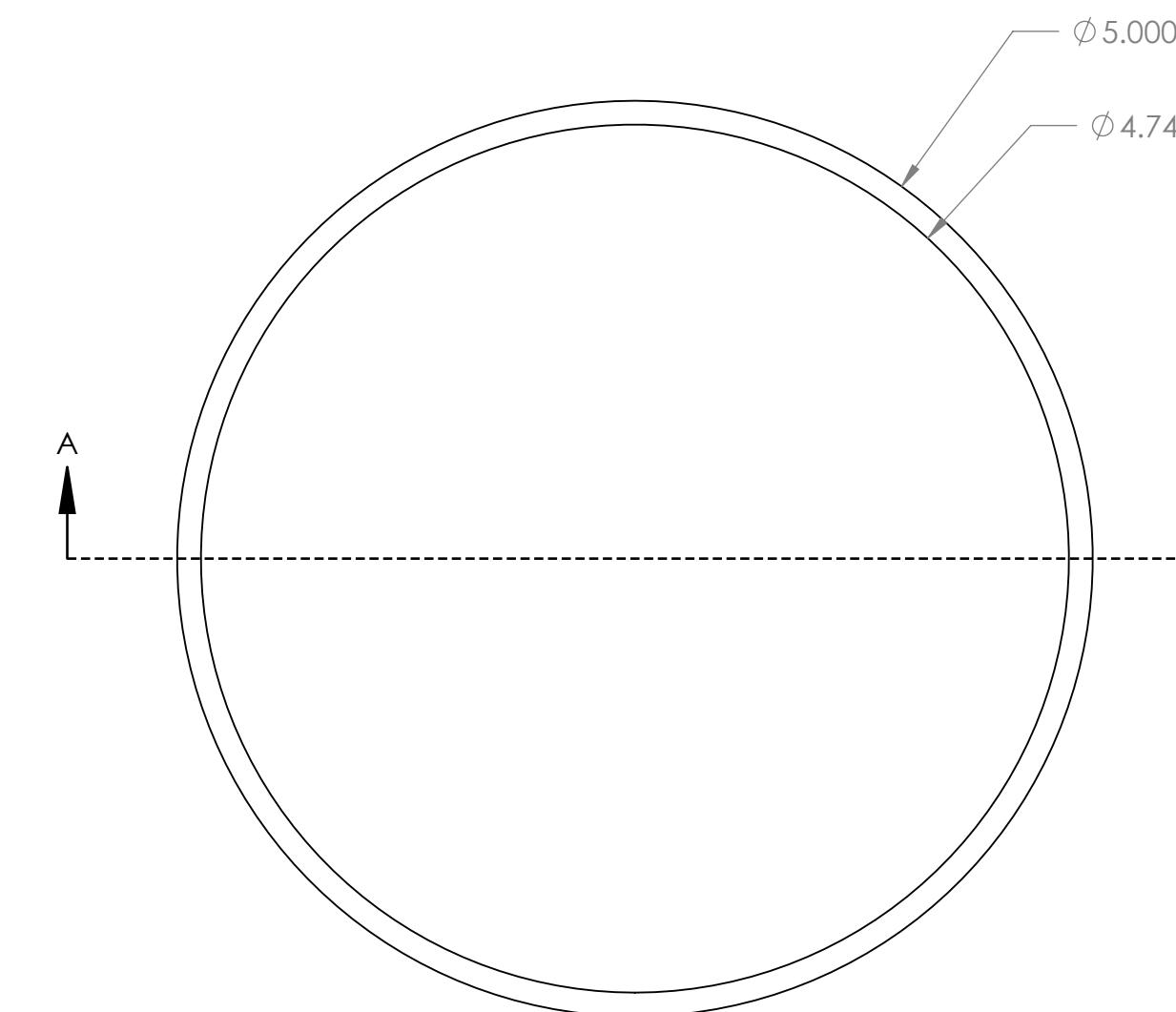
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A	INITIAL RELEASE	3/6/2024	R.VIEIRA

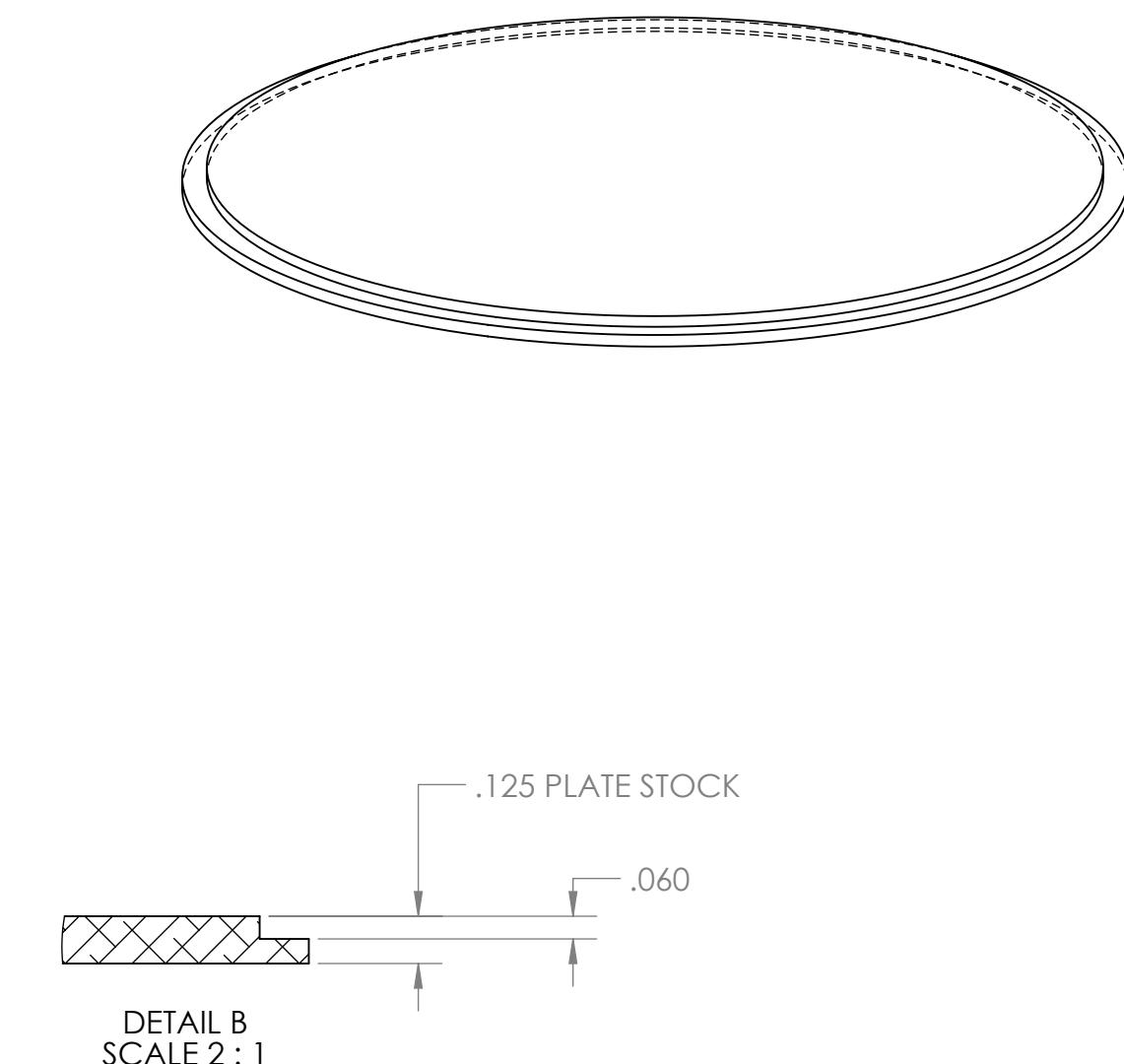
D

D



Notes:

INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	UNITS: INCHES	WEIGHT: 0.10 Lbs.	MIT-PSFC
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	MATERIAL: 6061 Alloy	FINISH: 	
ANGLES $\pm 1/2^\circ$		THIRD ANGLE PROJECTION	
INCHES MM	N/A	DRAWN BY: J.Estrada	DATE: 3/5/2024
Ra 125 μin ✓	Ra 3.2 μm ✓	ENGINEERING APPR. R.Vieira	DATE: 3/5/2024
3 PLACES $\pm .005$	3 PLACES ± 0.1	PROJECT MANAGER:	
2 PLACES $\pm .010$	2 PLACES ± 0.25		
1 PLACE $\pm .100$	1 PLACE ± 0.75		
DO NOT SCALE DRAWING		SCALE: 1:1	SHEET 1 OF 1

DETAIL B
SCALE 2 : 1

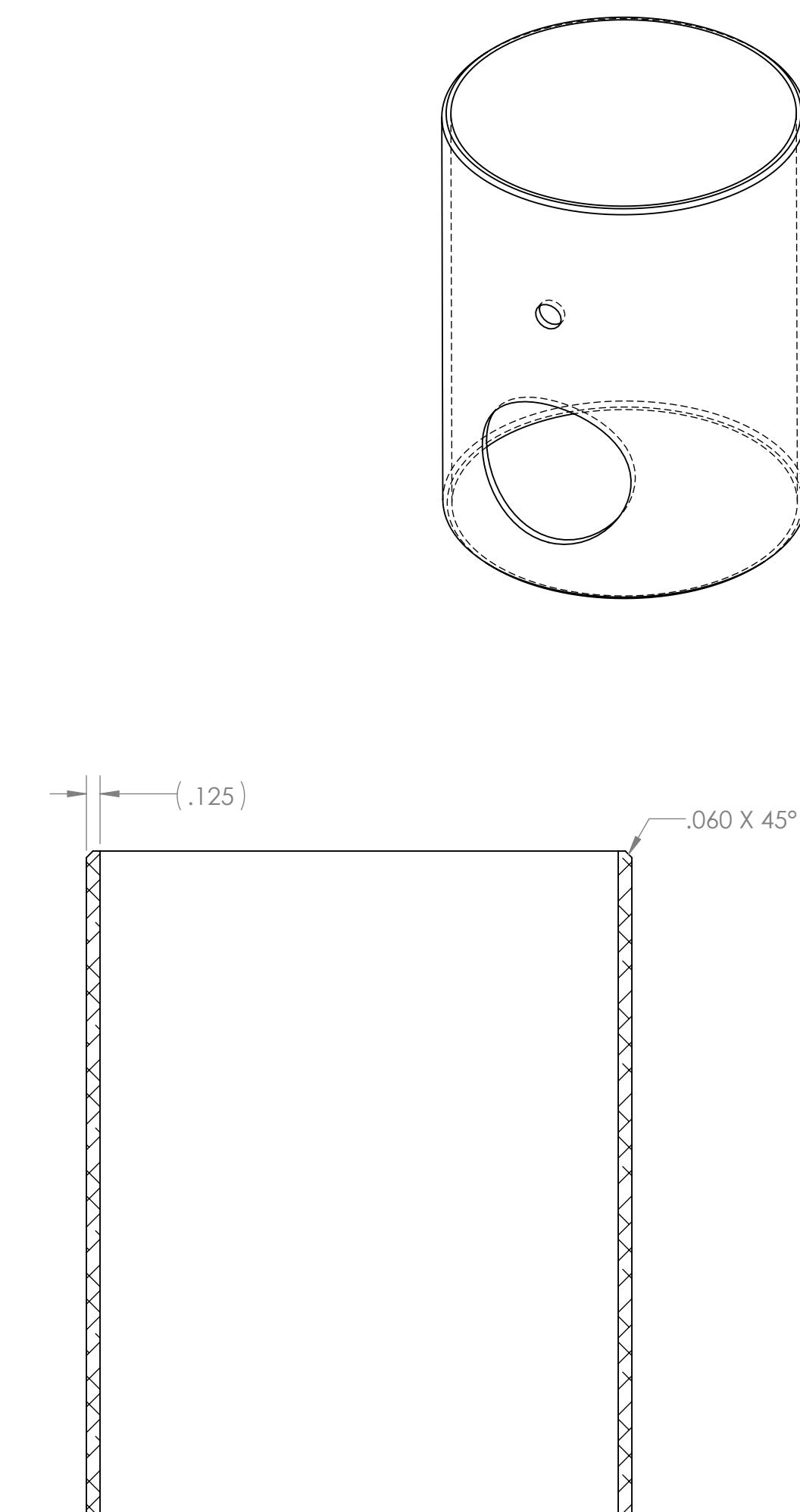
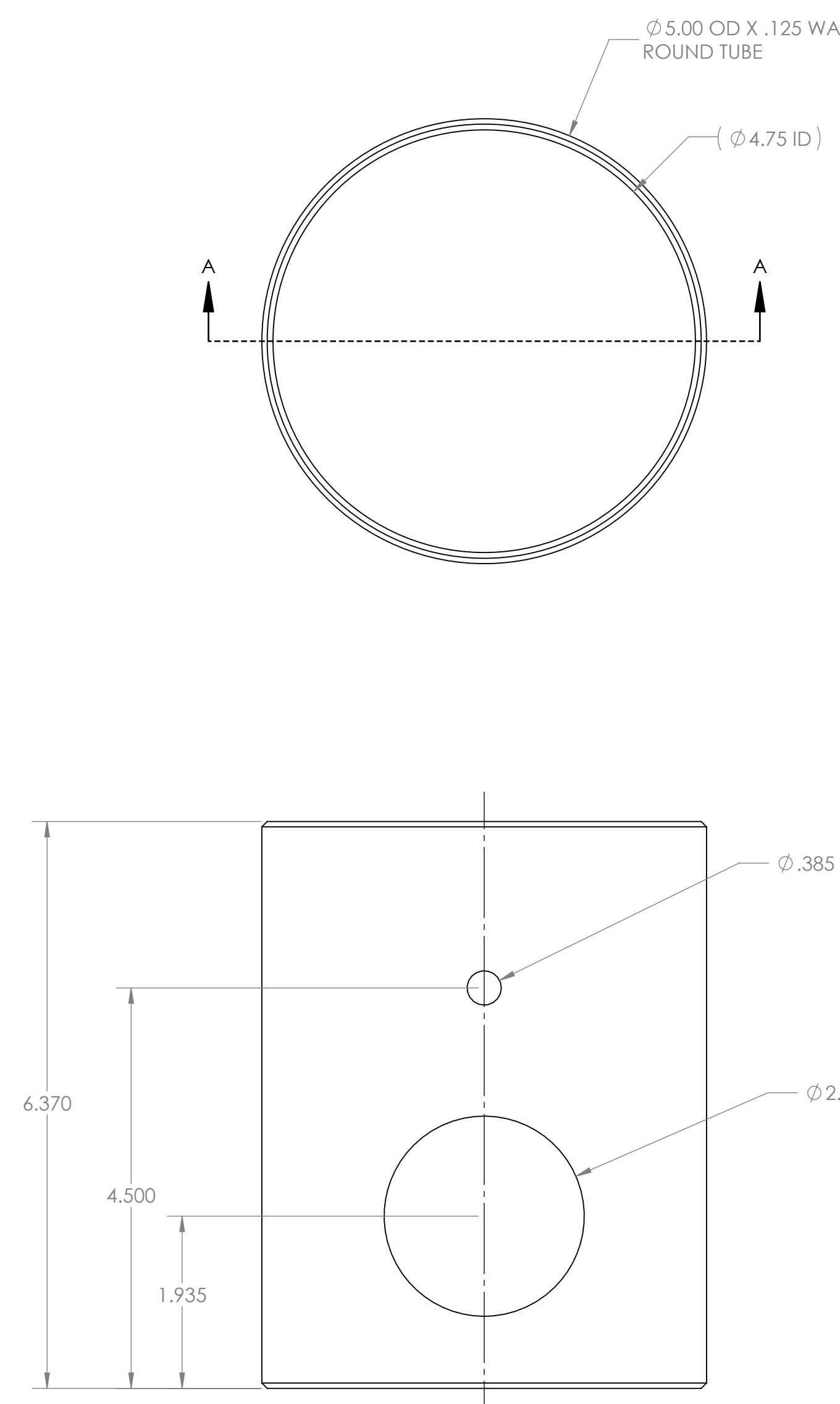
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REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	3/6/2024	R.VIEIRA

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A Notes:

INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	UNITS: INCHES	WEIGHT: 0.10 Lbs.	MIT-PSFC
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	MATERIAL: 6061 Alloy	FINISH: 	
ANGLES $\pm 1/2^\circ$	INCHES Ra 125 μ m ✓ 3 PLACES $\pm .005$ 2 PLACES $\pm .010$ 1 PLACE $\pm .100$	MM Ra 3.2 μ m ✓ 3 PLACES ± 0.1 2 PLACES ± 0.25 1 PLACE ± 0.75	THIRD ANGLE PROJECTION
	DRAWN BY: J.Estrada	DATE: 3/5/2024	TITLE: Outer cylinder
	ENGINEERING APPR. R.Vieira	DATE: 3/5/2024	SIZE DWG. NO. C N/A
	PROJECT MANAGER: DO NOT SCALE DRAWING	REV. A	SCALE: 1:2

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A	INITIAL RELEASE	3/6/2024	R.VIEIRA

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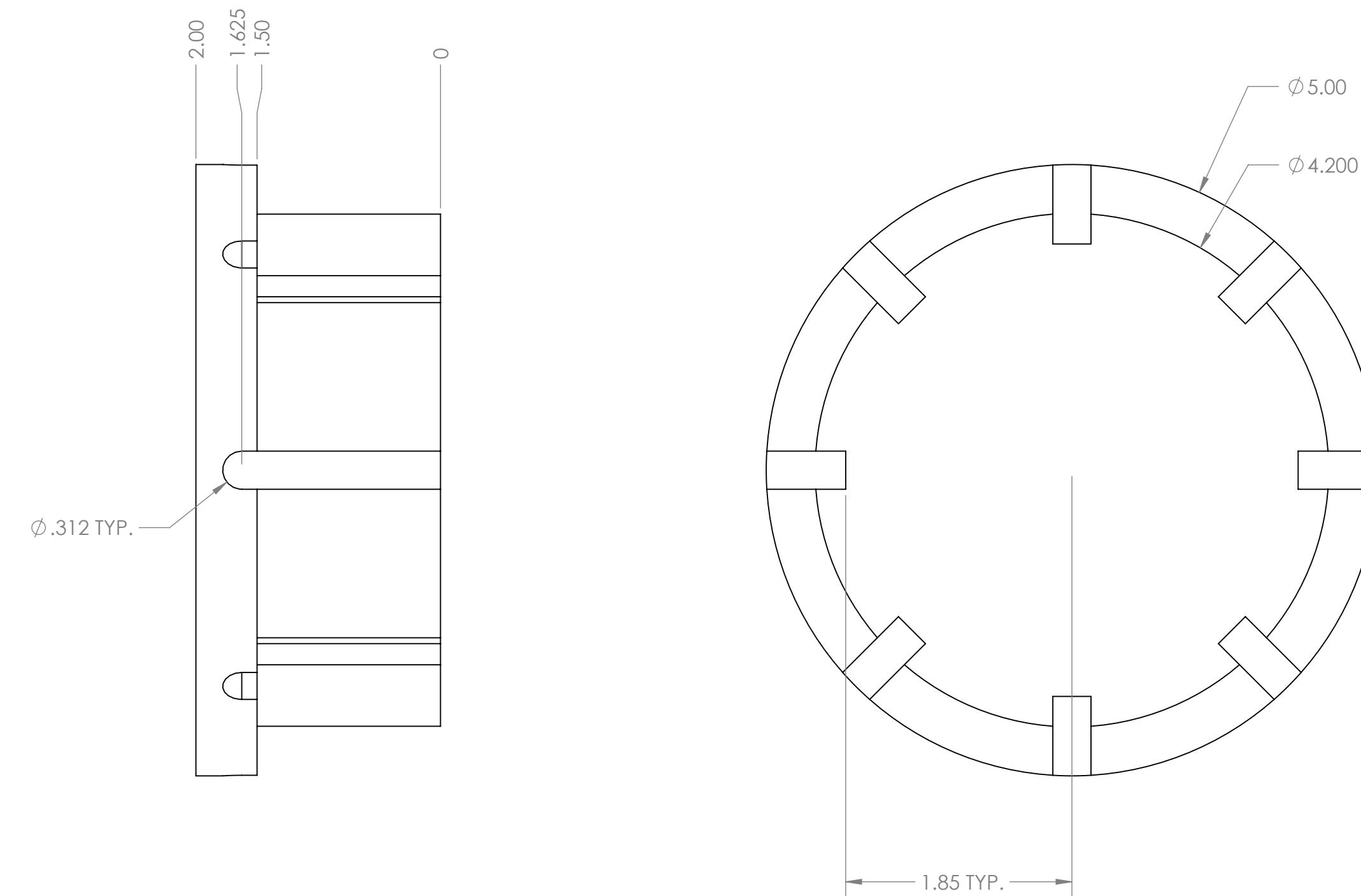
C

B

B

A Notes:

A



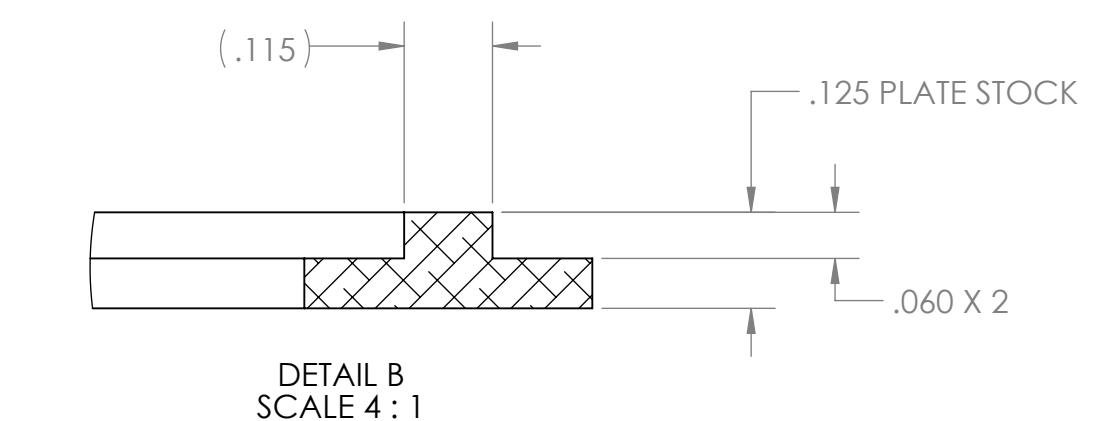
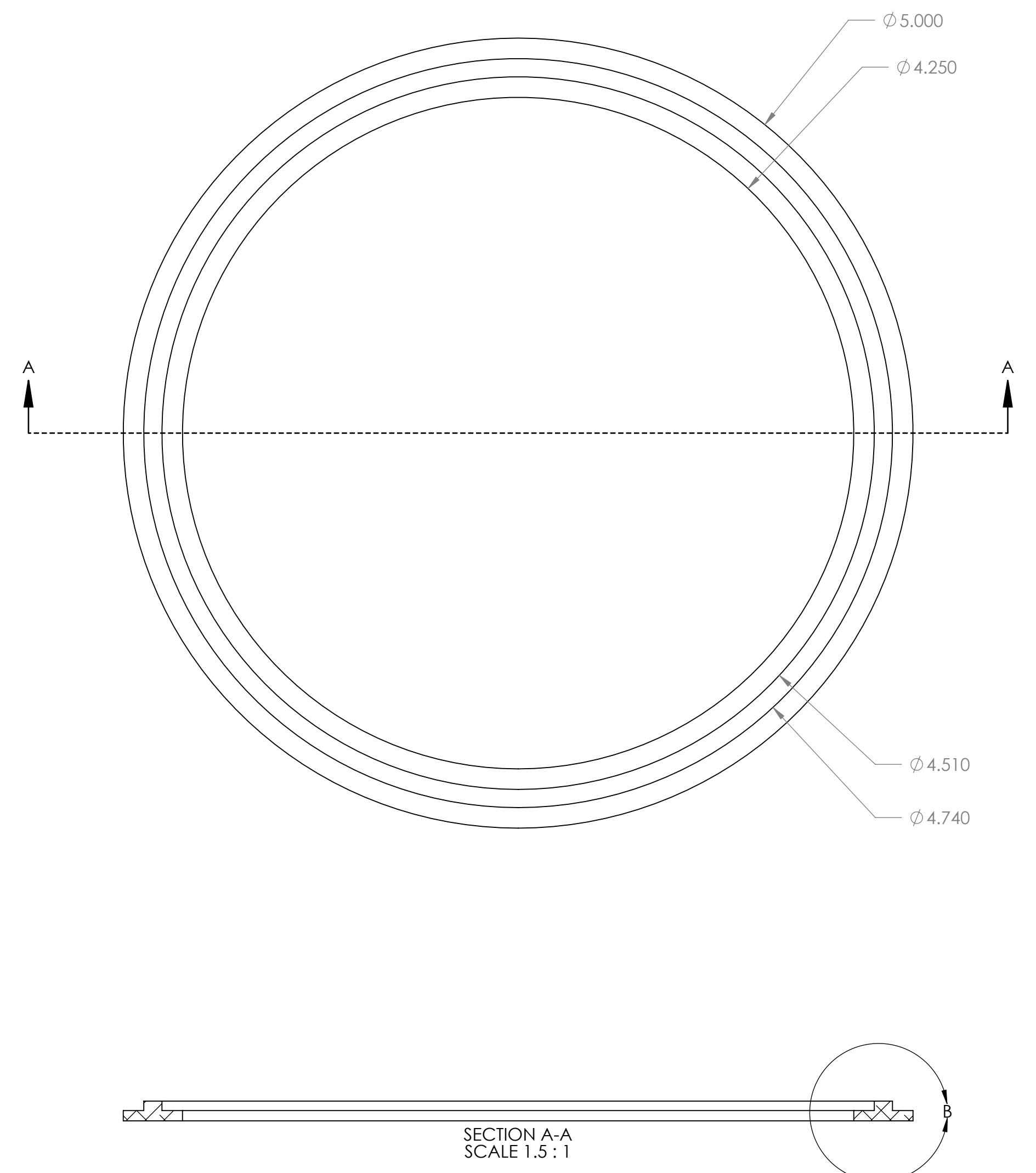
INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	UNITS: INCHES	WEIGHT: 0.01 Lbs.	MIT-PSFC
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	MATERIAL: FOAM BOARD	FINISH: 	
ANGLES $\pm 1/2^\circ$			
INCHES	MM	THIRD ANGLE PROJECTION	
Ra 125 μin ✓	Ra 3.2 μm ✓	DRAWN BY: J.Estrada	DATE: 3/5/2024
3 PLACES $\pm .005$	3 PLACES ± 0.1	ENGINEERING APPR. R.Vieira	DATE: 3/5/2024
2 PLACES $\pm .010$	2 PLACES ± 0.25	PROJECT MANAGER:	
1 PLACE $\pm .100$	1 PLACE ± 0.75	DO NOT SCALE DRAWING	REV. A
SCALE: 1:1		SHEET 1 OF 1	

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A	INITIAL RELEASE	3/6/2024	R.VIEIRA



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A Notes:

INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	UNITS: INCHES	WEIGHT: 0.10 Lbs.	MIT-PSFC
UNSPECIFIED TOLERANCES REMOVE ALL BURRS AND SHARP EDGES	MATERIAL: 6061 Alloy	FINISH: 	TITLE: Top flange
	ANGLES $\pm 1/2^\circ$	THIRD ANGLE PROJECTION	
INCHES MM	N/A	DRAWN BY: J.Estrada	SIZE DWG. NO. C N/A
Ra 125 μin ✓ Ra 3.2 μm ✓	Ra 3.2 μm ✓	DATE: 3/5/2024	REV. A
3 PLACES $\pm .005$	3 PLACES ± 0.1	ENGINEERING APPR. R.Vieira	DATE: 3/5/2024
2 PLACES $\pm .010$	2 PLACES ± 0.25	PROJECT MANAGER:	
1 PLACE $\pm .100$	1 PLACE ± 0.75	DO NOT SCALE DRAWING	SCALE: 1:1