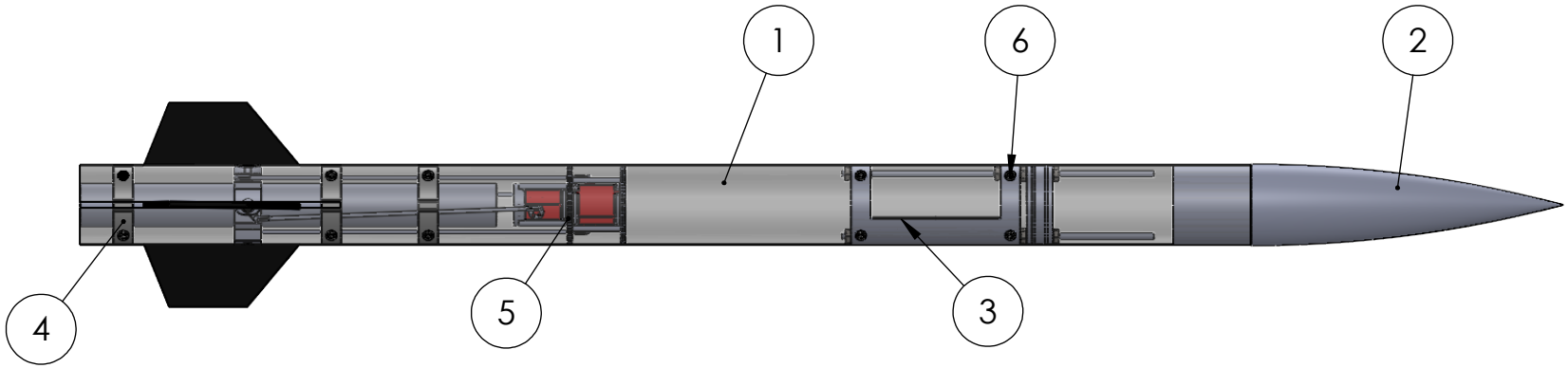
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Fusaloge (3in)	Body of Rocket	1
2	O-Give Nose Cone	Placed at the front end of the rocket. Parachute connects to the part.	1
3	Sled Assembly	Holds eletronics. Screws into the fusaloge.	1
4	Motor Tube Assembly	Holds I-500 rocket motor. Motor ring screws into fusaloge.	1
5	Control Mechanism Assembly	Changes orentation of the rocket. Will be used to induce or stop spin on z-axis.	1
6	1/4 in Allen Screws	Used to attach Sled and Control Mechanism to Assembly. Hand tighten.	20



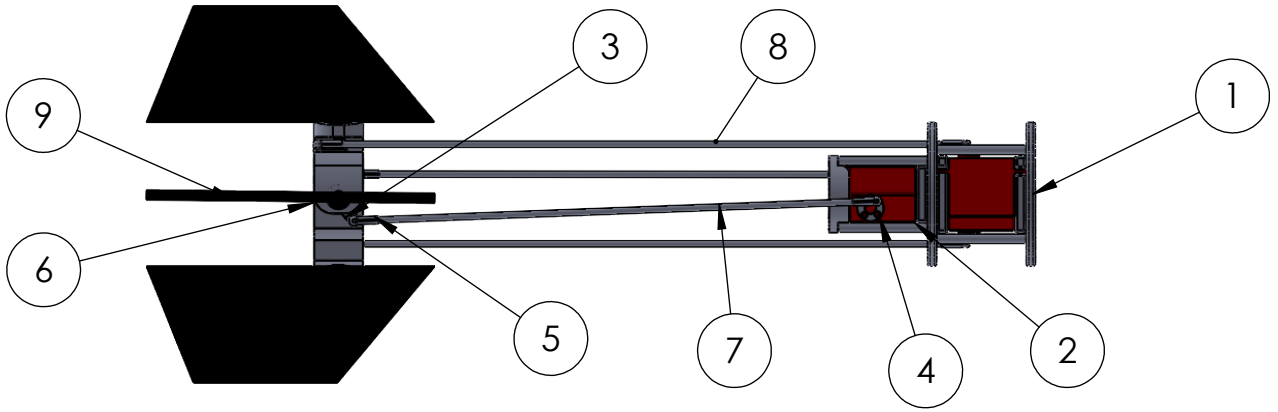
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Full ARC Assembly

SIZE	DWG. NO.	REV
A	Full ARC Assembly	
SCALE: 1:7	WEIGHT:	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Servo Holder	Holds Servos.	1
2	Servo Place Holder	Servo to control fins.	4
3	lower arm	Connects push rod to fins.	4
4	Upper Gear Round	Connects the servo to push rod.	4
5	Rod Holder	Holds push rods to the Upper lower arm	8
6	Fin Holder	Holds the fins and is meant to fix fin to rotate.	1
7	Short Push Rod	Rod to connect lower servo to fins.	2
8	Long Push Rod	Rod to connect top servo to fins.	2
9	ARC Fins	Fins to control the rocket.	4



		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
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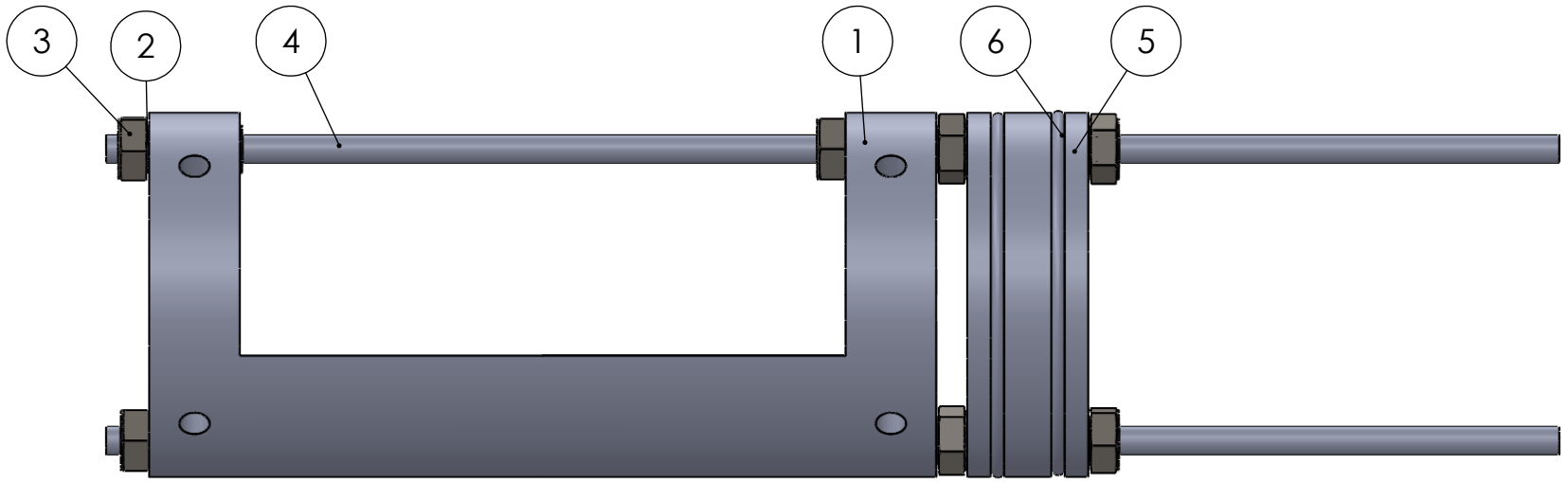
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
ARC Full	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Control Mechanism Assembly

SIZE	DWG. NO.	REV
A	Control Mechanism Assembly	
SCALE: 1:4	WEIGHT:	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	3in Sled	Holds Electronics and will connect to the fusaloge.	1
2	Washer 0.23in	Used to keep each part from being damaged by nuts.	8
3	Sled Nuts	Nuts to secure parts to all threads.	7
4	All Thread 12in long	Connects sled assembly together.	2
5	Oring Holder	Is used to hold O-Rings. Will also hold i-bolt for parachute.	1
6	3in O Ring	Used to keep black powder gasses out of sled.	2



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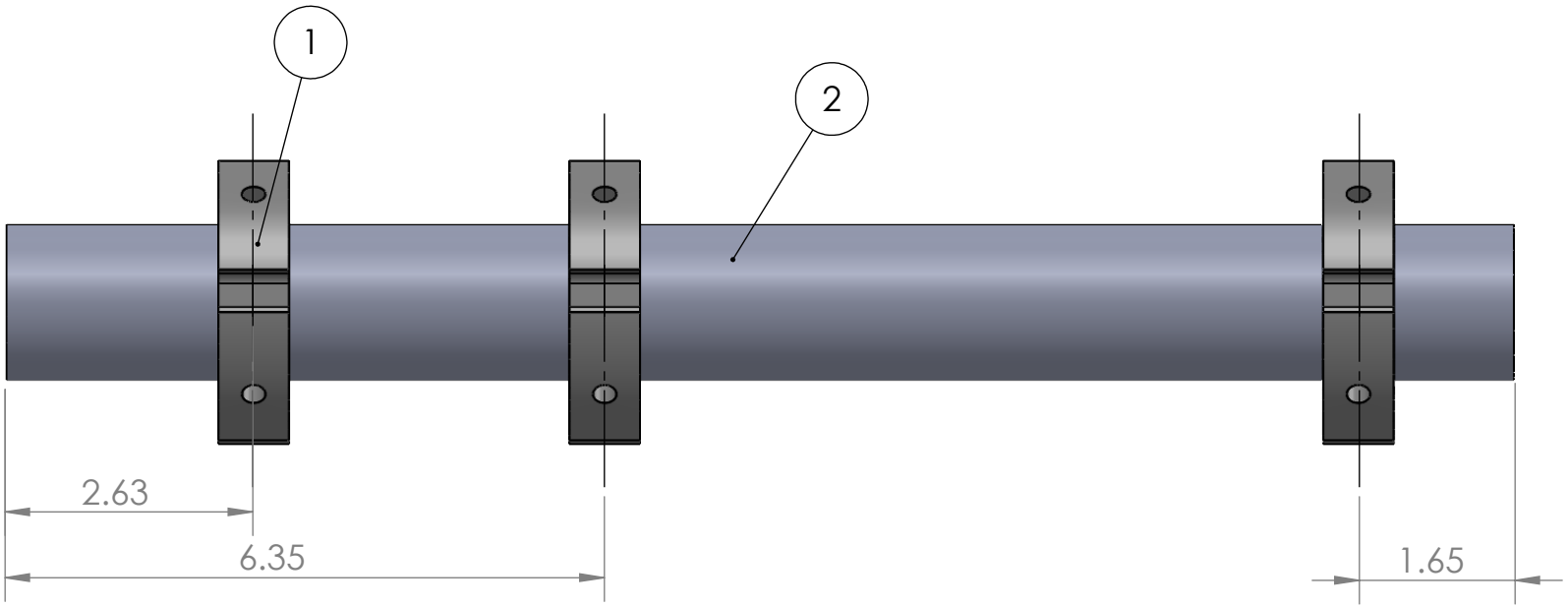
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
ARC FULL	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Full ARC Sled Assembly

SIZE	DWG. NO.	REV
A	Full Sled Assembly	
SCALE: 1:1.5	WEIGHT:	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	3 in Diamter Motor Ring	Ring to Connect to fusaloge.	3
2	38mm Motor Tube	Holds I-500 rocket motor. Friction fits motor into tube.	1



		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
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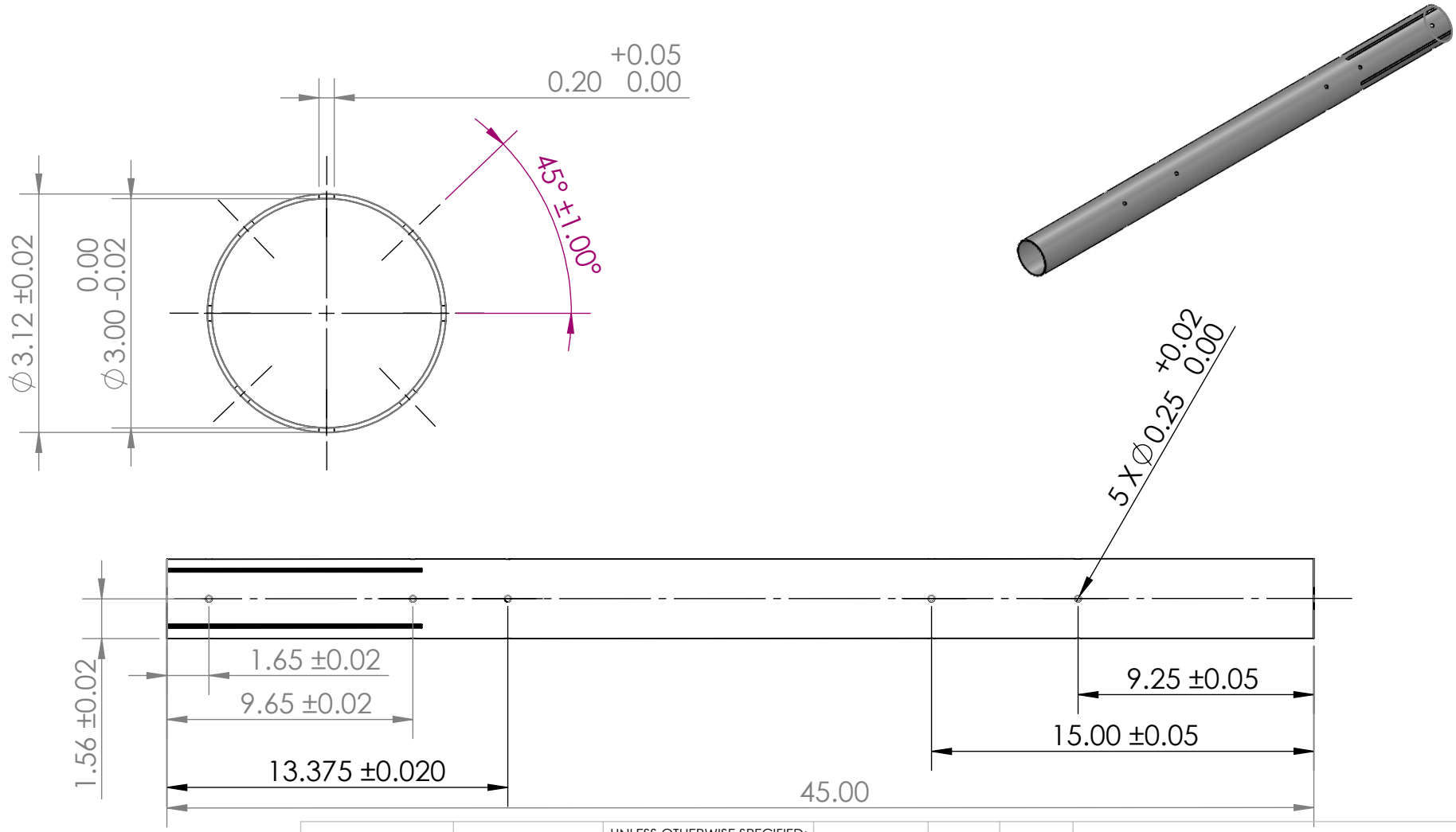
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
ARC	ARC	MATERIAL	COMMENTS: Adapter rings will be connected using epoxy.		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Motor Adapter Assembly

SIZE	DWG. NO.	REV
A	Motor Assembly	
SCALE:1:2	WEIGHT:	SHEET 1 OF 1



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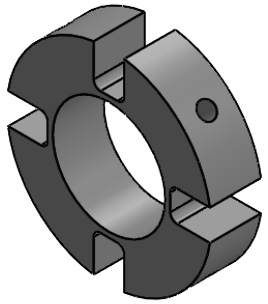
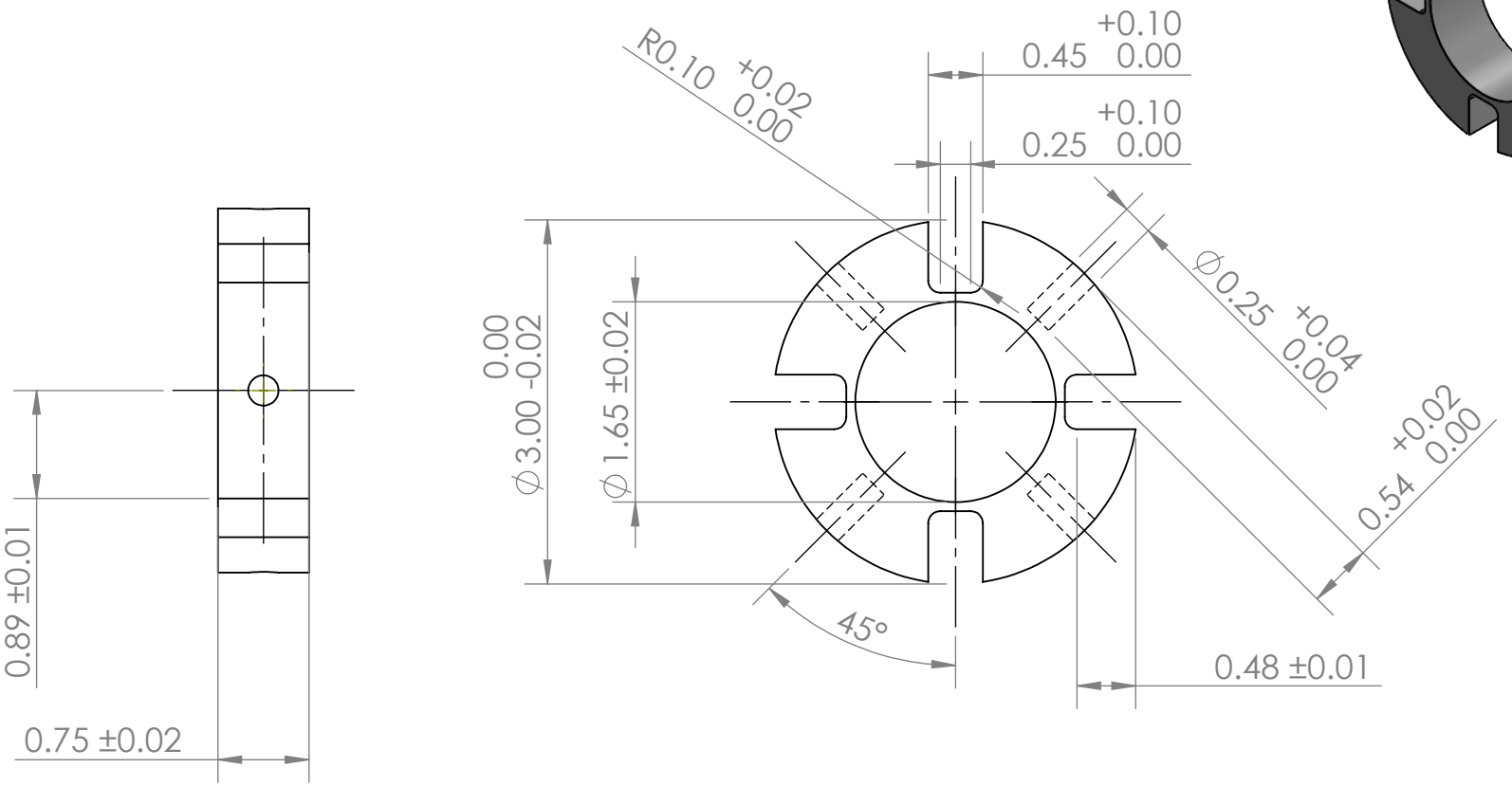
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
ARC Full	ARC	MATERIAL	COMMENTS: Use end mill to cut fin slots. 3/16 cut.		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

3 in FusalogeBody of Rocket

SIZE	DWG. NO.	REV
A	Fusaloge (3in)	
SCALE: 1:6	WEIGHT:	SHEET 1 OF 1





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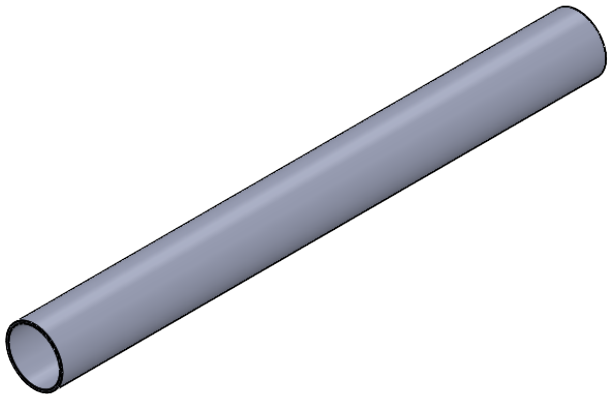
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Motor	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

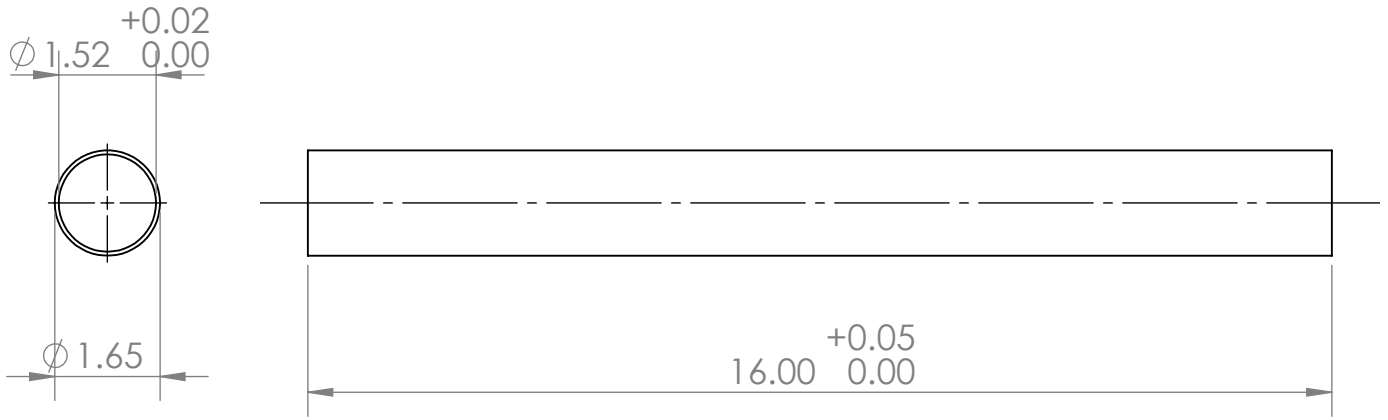
TITLE:

3 In Diamter MR

SIZE	DWG. NO.	REV
A	3 in diamter motor ring	

SCALE: 1:1.5 | WEIGHT: | SHEET 1 OF 1





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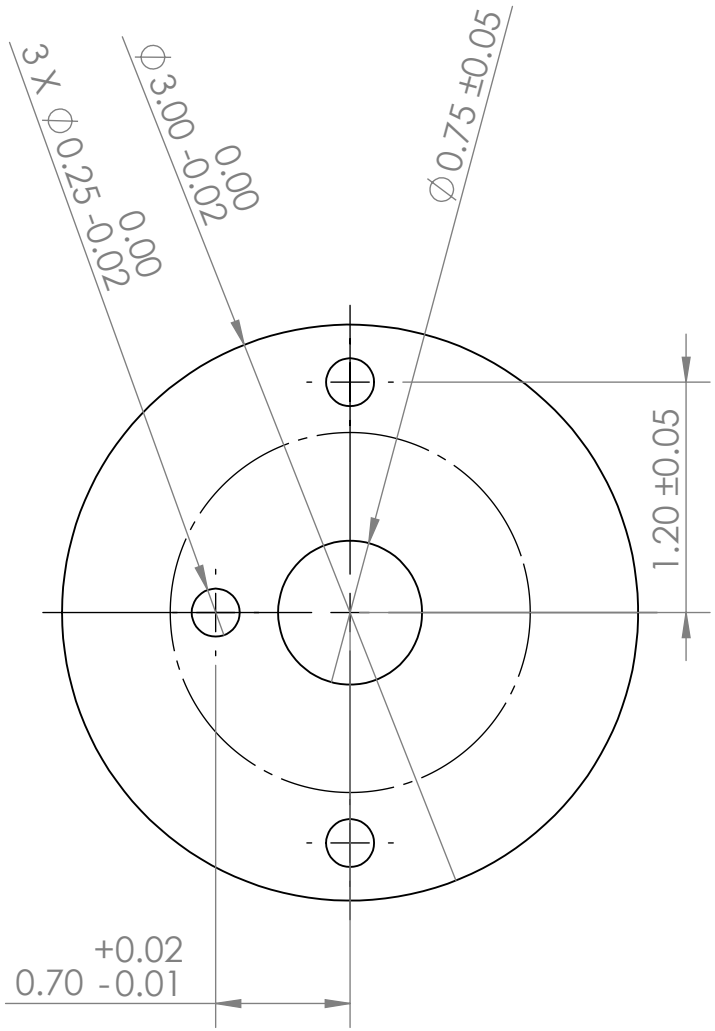
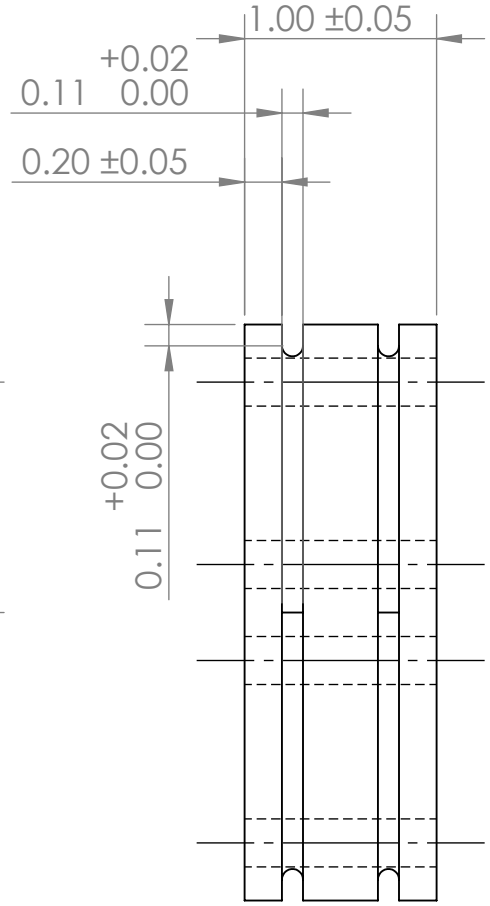
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Motor	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

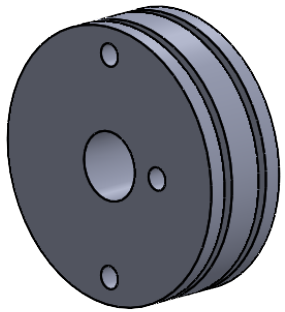
TITLE:

38 mm Motor Tube

SIZE	DWG. NO.	REV
A	Motor Tube 38mm 16in long	
SCALE: 1:3	WEIGHT:	SHEET 1 OF 1







		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
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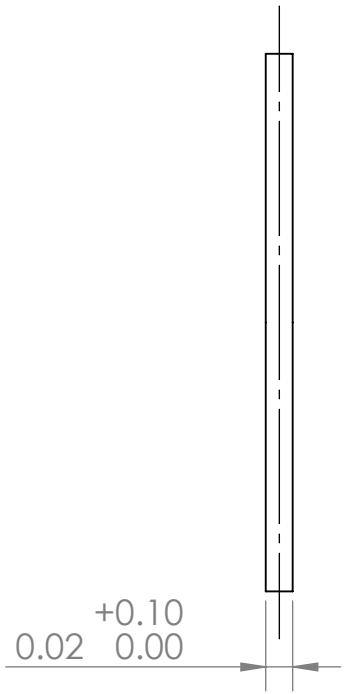
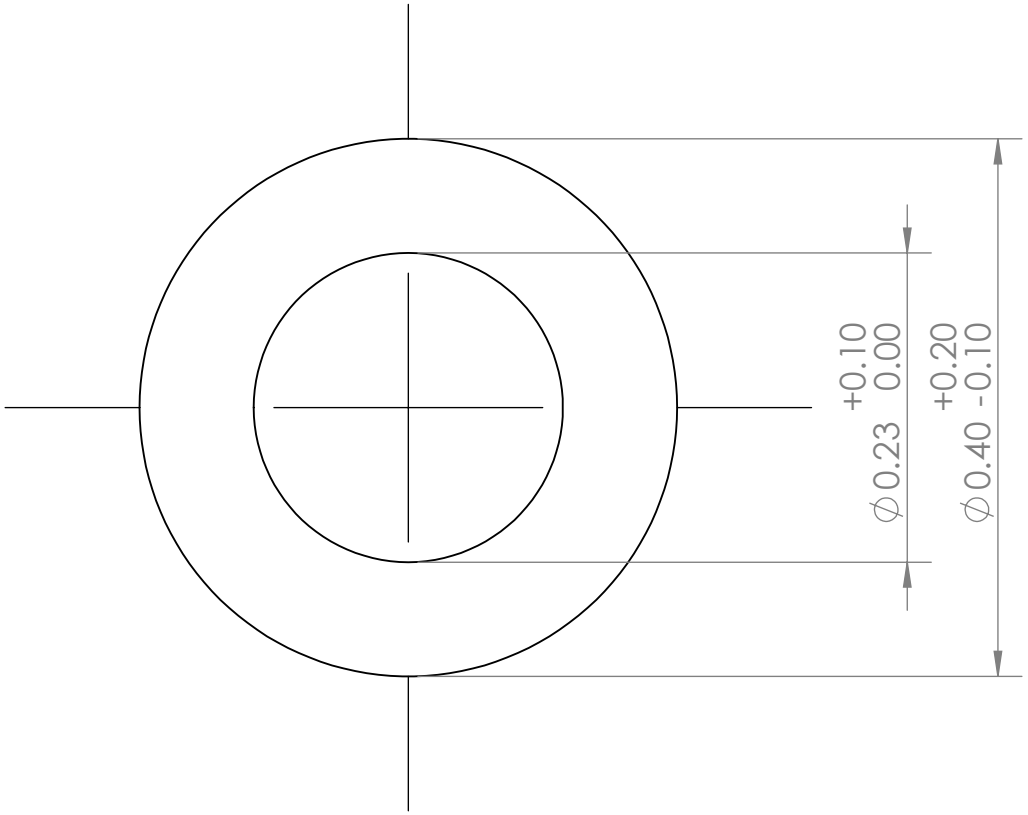
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
ARC Sled	ARC	MATERIAL	COMMENTS: Holds O-Rings to prevent gas from black powder charge to get to the electronics.		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

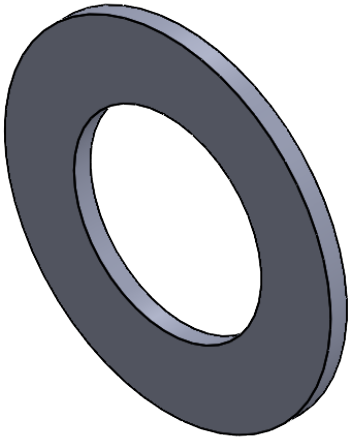
TITLE:

O-Ring Holder

SIZE	DWG. NO.	REV
A	Oring Holder	
SCALE: 1:1	WEIGHT:	SHEET 1 OF 1







		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
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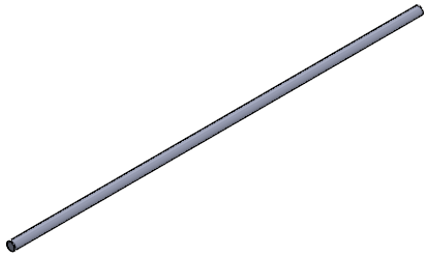
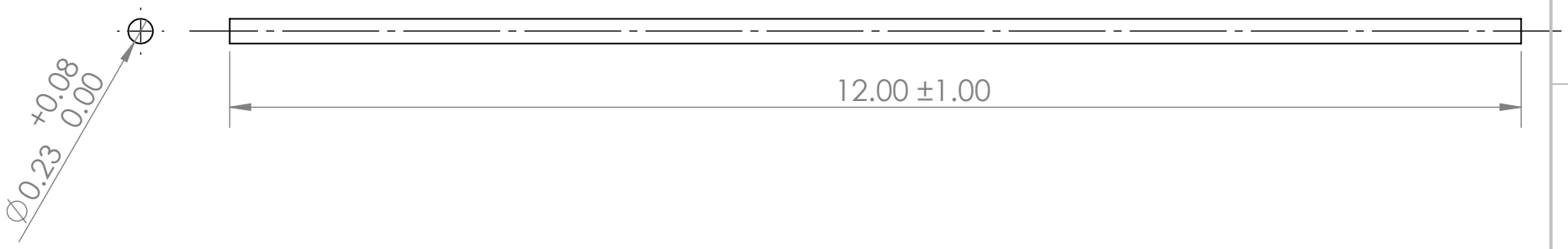
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Sled	ARC	MATERIAL	COMMENTS: Already owned, and was produced by outside company. Measured using caliper.		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Sled Washer

SIZE	DWG. NO.	REV
A	Washer 0.23in	
SCALE: 7:1	WEIGHT:	SHEET 1 OF 1



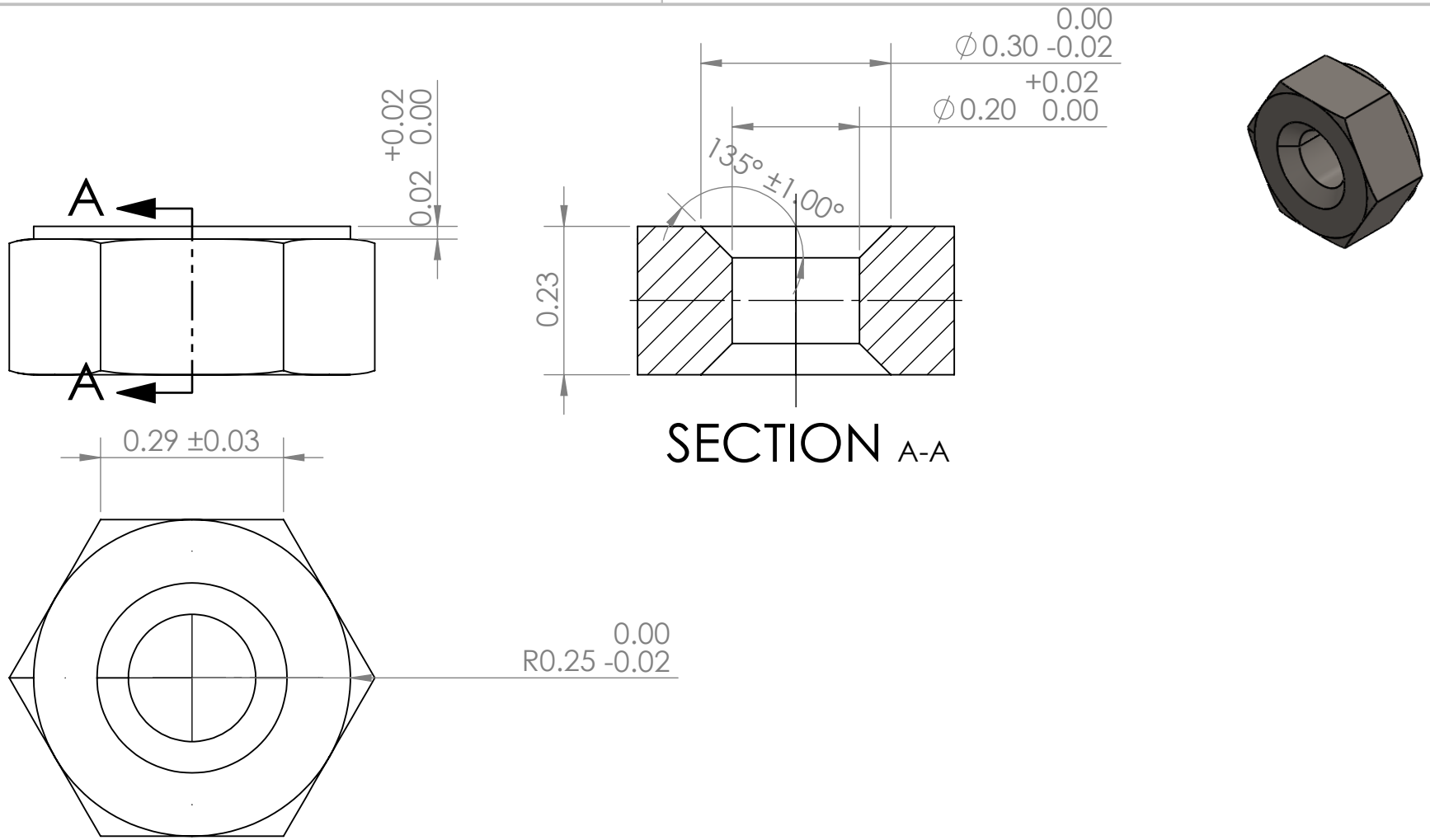


		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Sled	ARC	MATERIAL	COMMENTS: Part already owned and Is meant to be a place holder for the all thread that will be used.		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

12in All Thread

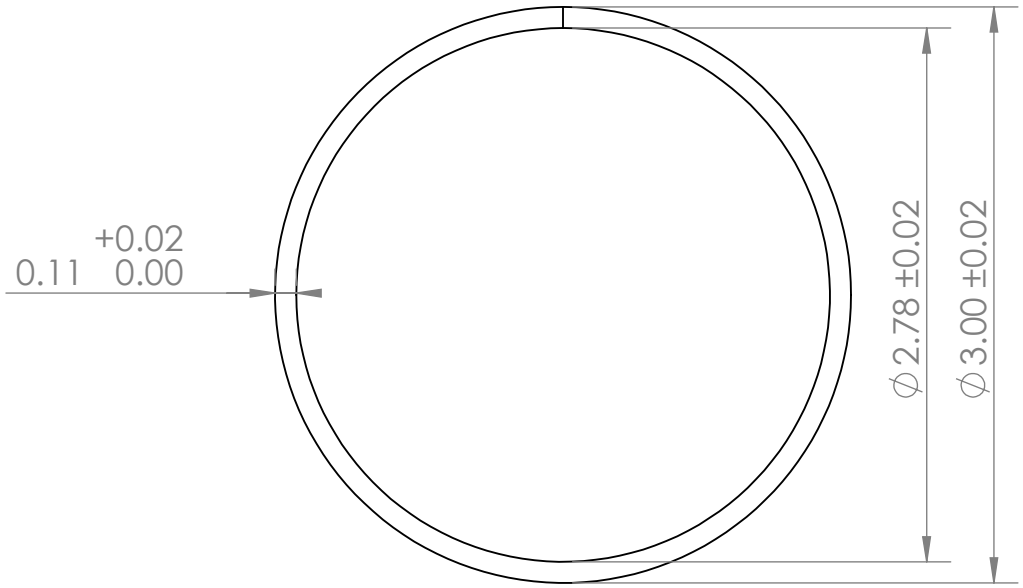
SIZE	DWG. NO.	REV
A	All Thread 12in long	
SCALE: 1:1.5	WEIGHT:	SHEET 1 OF 1

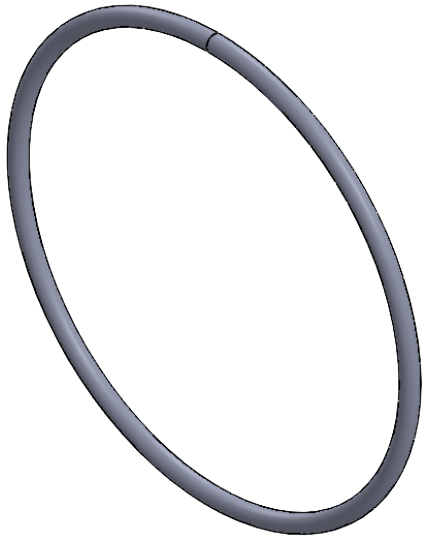


		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Sled	ARC	MATERIAL	COMMENTS: Already own bolts from previous projects. It will go on the all thread. Does not have thread since it is used as a place holder.		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE: **Sled Nut**

SIZE	DWG. NO.	REV
A	0.2500in without Thread	
SCALE: 4:1	WEIGHT:	SHEET 1 OF 1





		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
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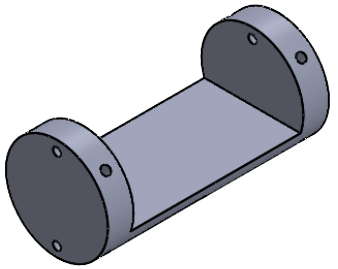
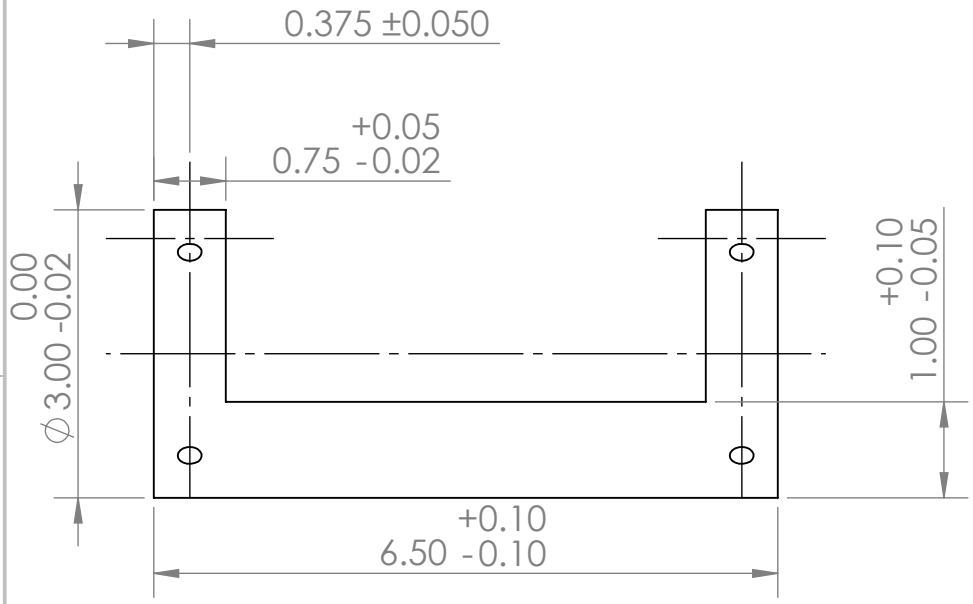
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Sled	ARC	MATERIAL	COMMENTS: Is used as a place holder for the assembly. Team already owns O-Rings from previous projects. The part will streach over O-Ring Holder.		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

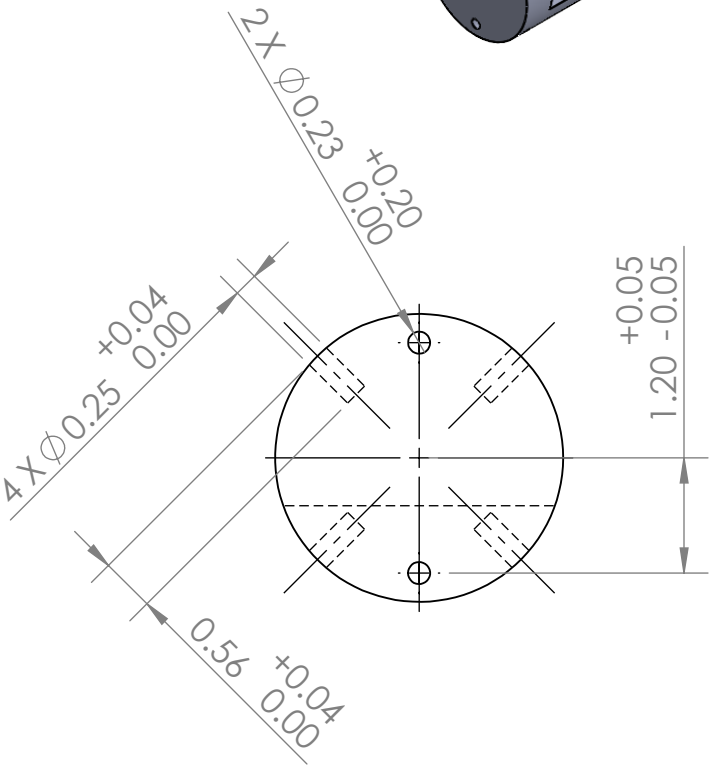
TITLE:

3in O-Ring

SIZE	DWG. NO.	REV
A	3in O Ring	
SCALE: 1:1	WEIGHT:	SHEET 1 OF 1







		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
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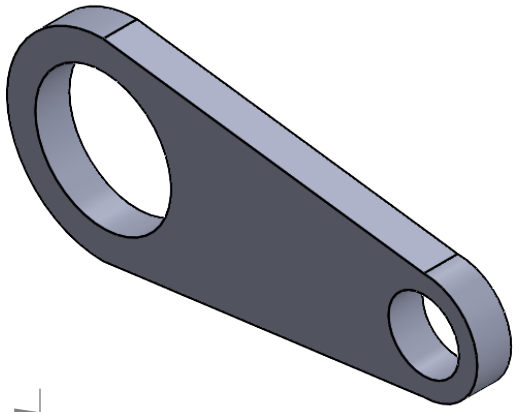
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
ARC Sled	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

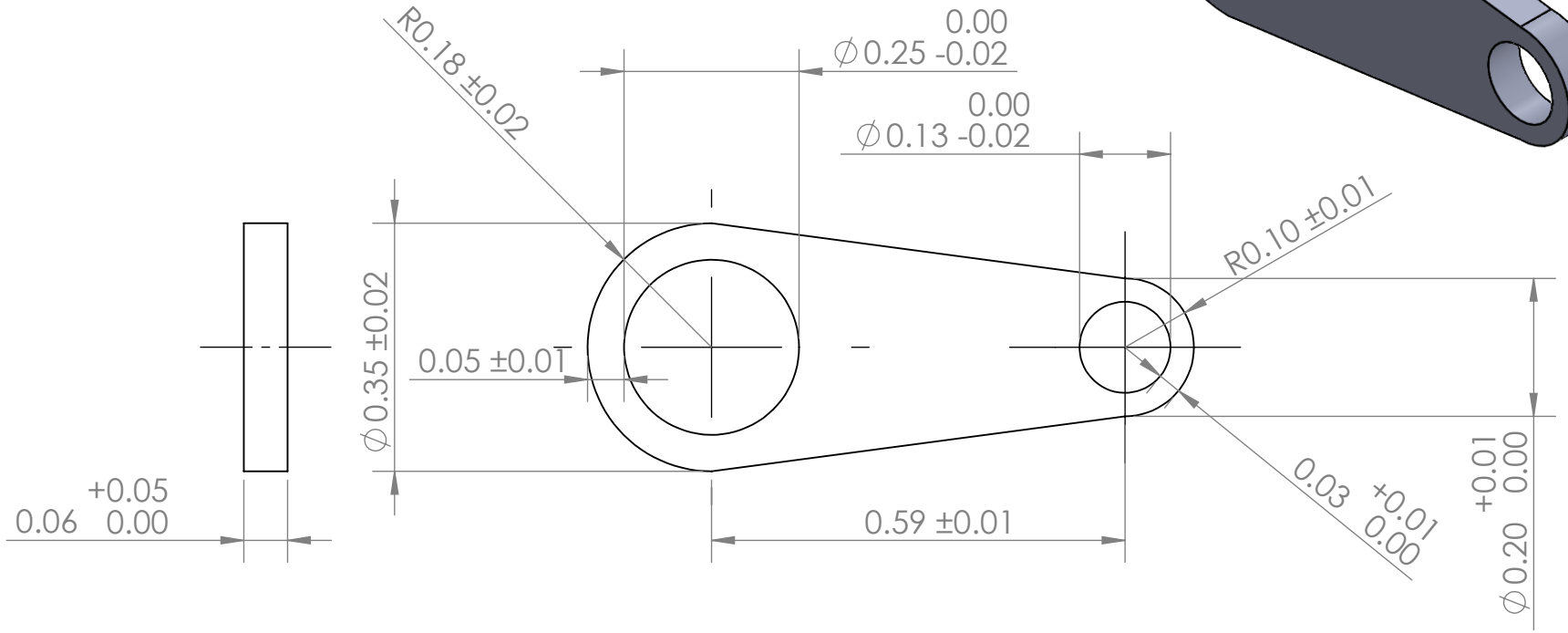
TITLE:

3in ARC Sled

SIZE	DWG. NO.	REV
A	3in Sled	

SCALE: 1:2 | WEIGHT: | SHEET 1 OF 1





		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
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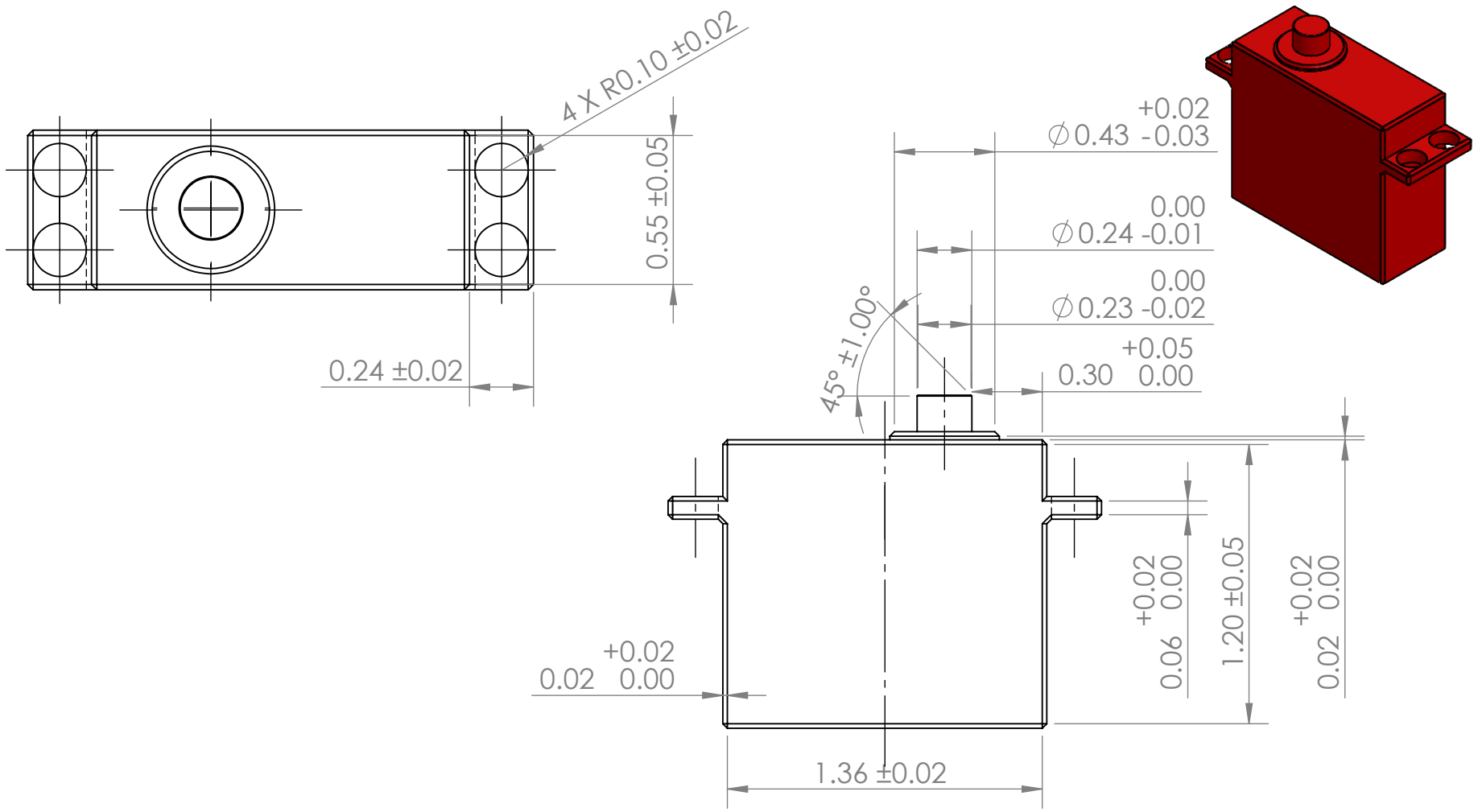
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Control Mech	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Lower Control Arm

SIZE	DWG. NO.	REV
A	lower arm	

SCALE: 4:1 | WEIGHT: | SHEET 1 OF 1



		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
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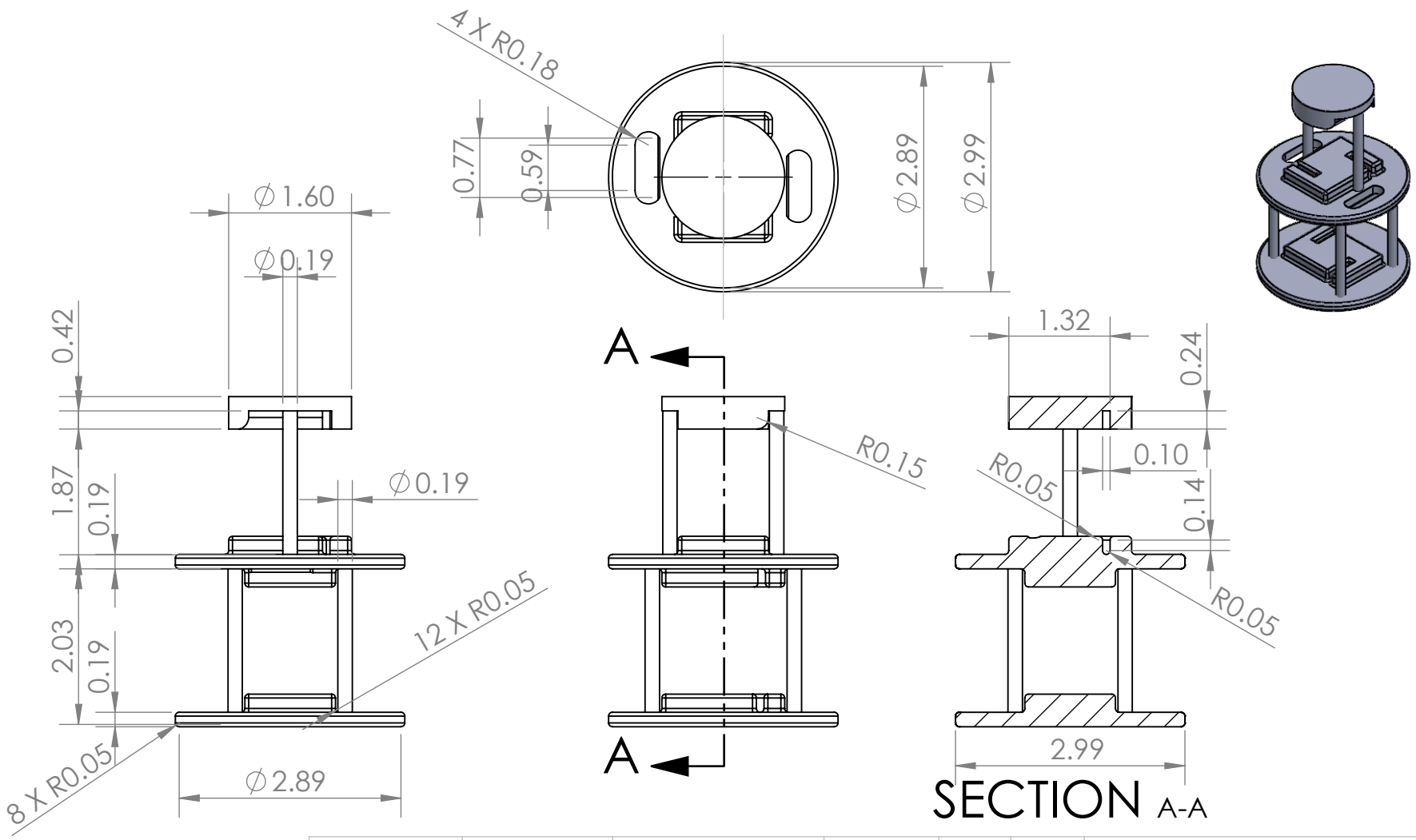
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Control Mech	ARC	MATERIAL	COMMENTS: all fillets are at a 45 degree angle.		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Servo Place Holder

SIZE	DWG. NO.	REV
A	servo.solid round pt2	
SCALE: 1.5:1	WEIGHT:	SHEET 1 OF 1

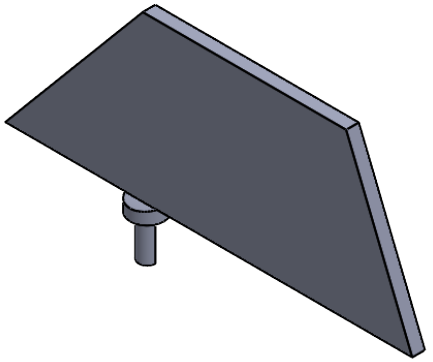


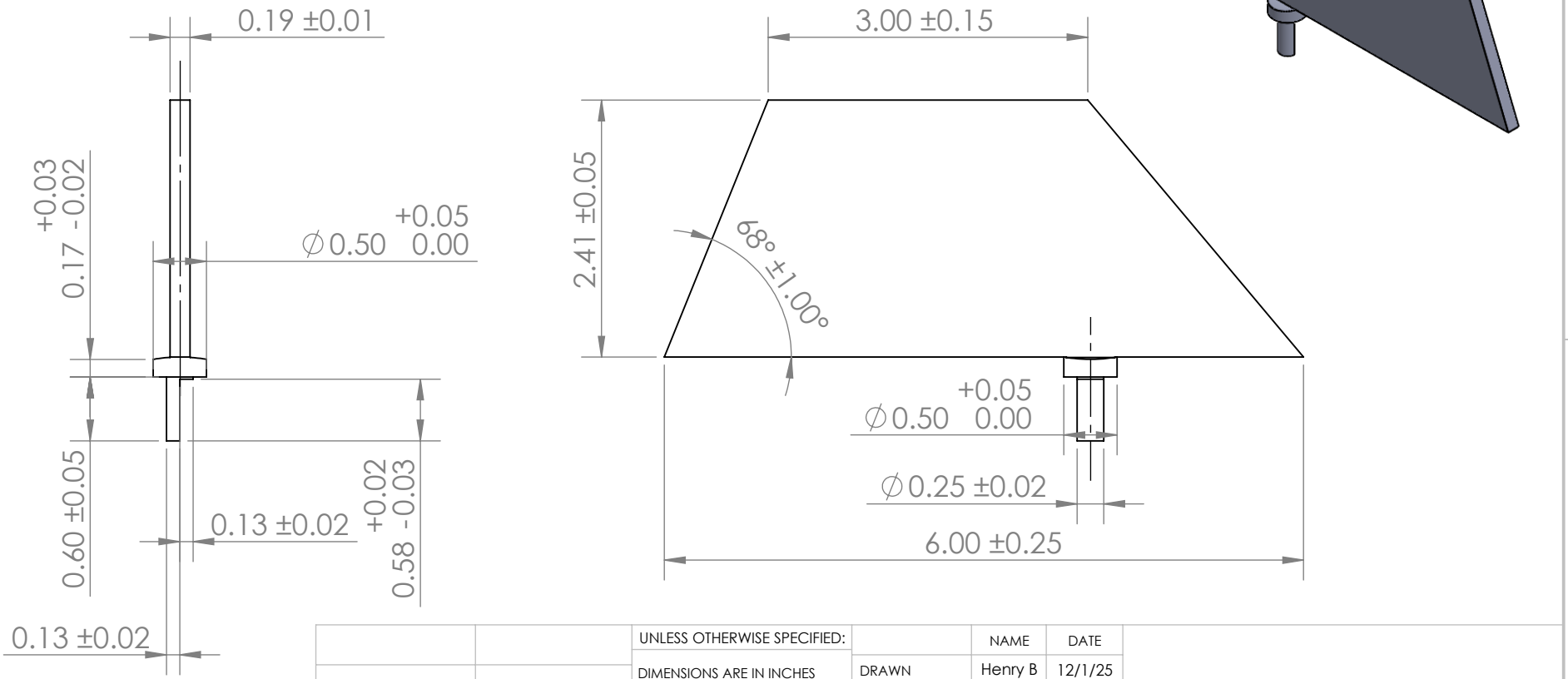
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: +0.02 FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Control Mech	ARC	MATERIAL	COMMENTS: All fillets are approximately 0.05in.		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Servo Holder

SIZE	DWG. NO.	REV
A	Servo holder pt 4	
SCALE: 1:2	WEIGHT:	SHEET 1 OF 1





		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Control Mech	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Rocket Fin

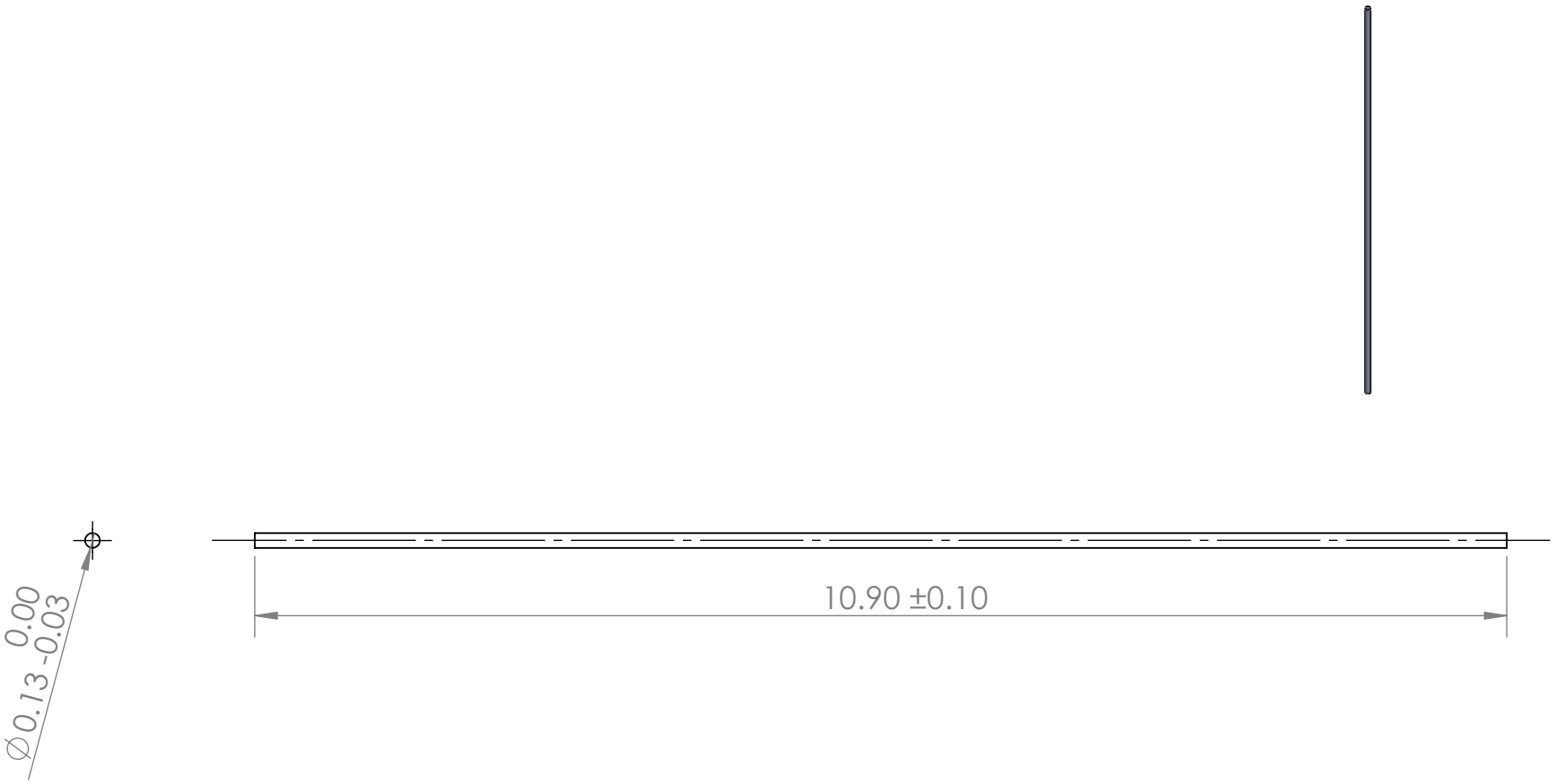
SIZE	DWG. NO.	REV
A	servo fin	
SCALE: 1:1.5	WEIGHT:	SHEET 1 OF 1

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Control Mech	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:
Long Push Rod

SIZE	DWG. NO.	REV
A	push rod long	

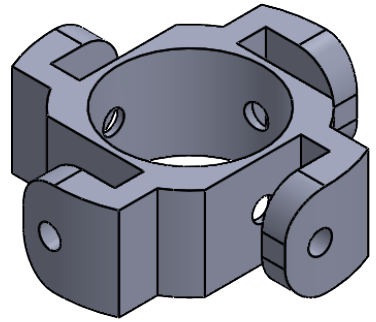
SCALE: 1:1.5 | WEIGHT: | SHEET 1 OF 1



		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Control Mech	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:
Short Push Rod

SIZE	DWG. NO.	REV
A	push rod	
SCALE: 1:1.5	WEIGHT:	SHEET 1 OF 1

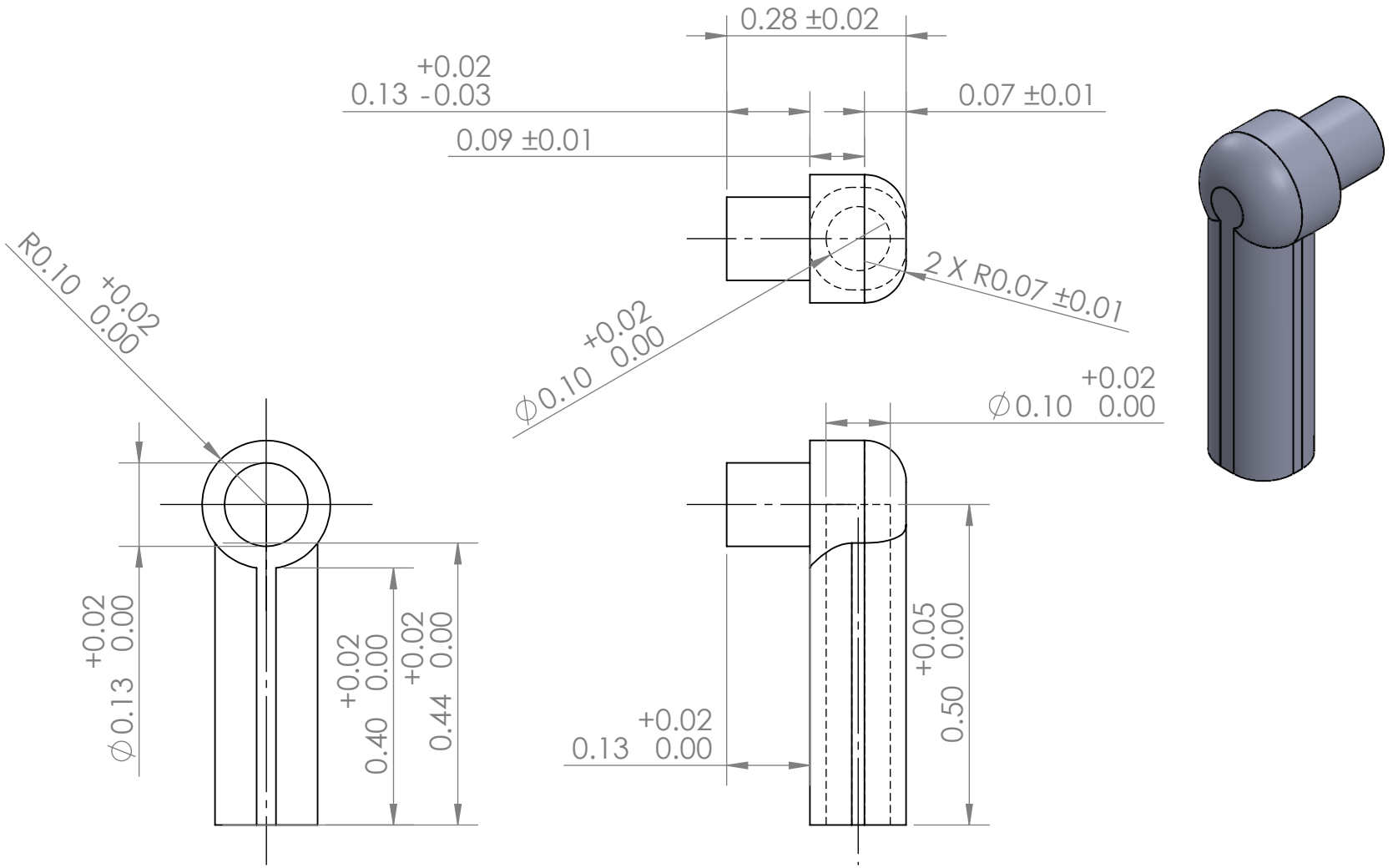


		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Control Mech	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Lower Control Mechanism

SIZE	DWG. NO.	REV
A	lower	
SCALE: 1:1	WEIGHT:	SHEET 1 OF 1



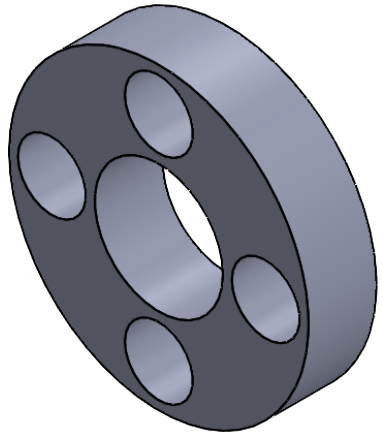
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Control Mech	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

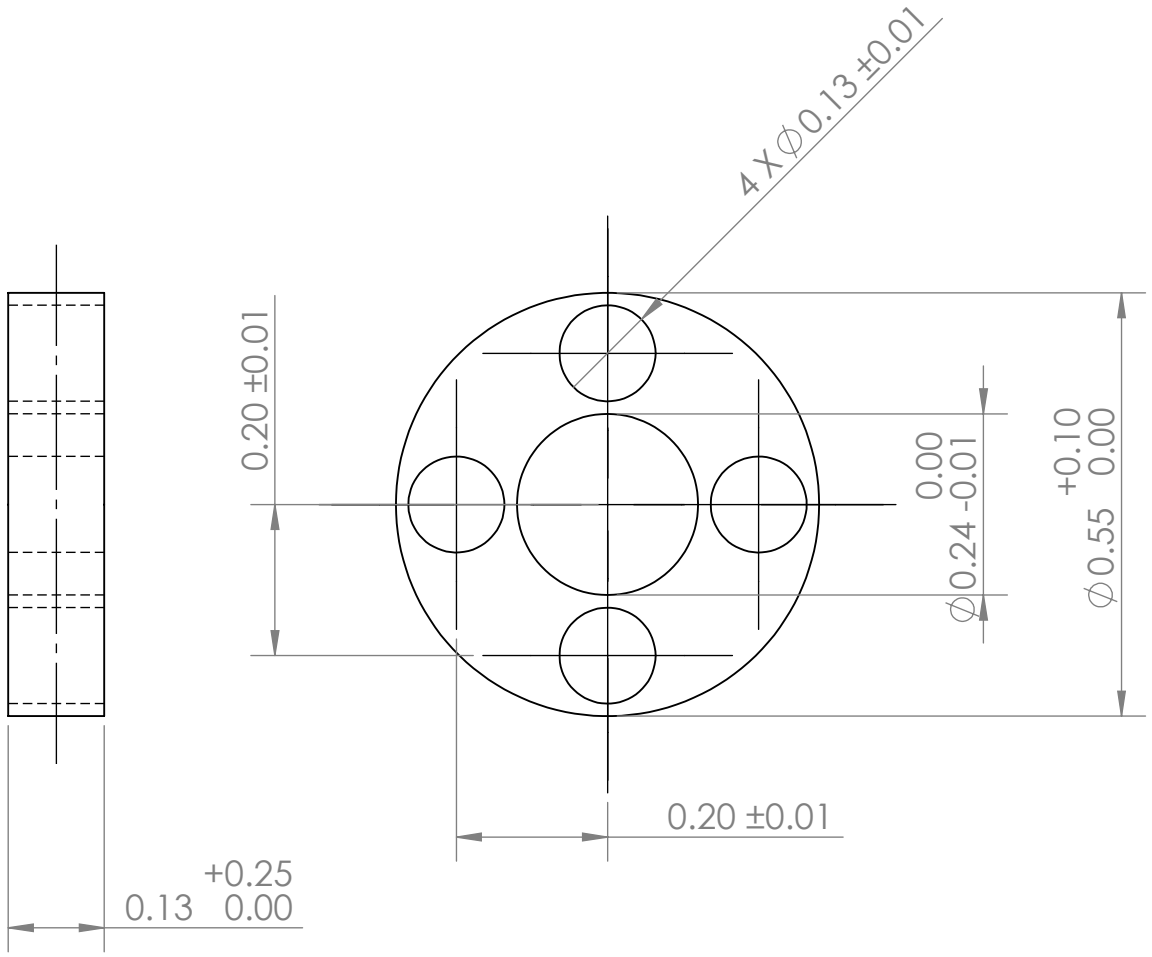
TITLE:

Control Rod Holder

SIZE	DWG. NO.	REV
A	rod holder	

SCALE: 4:1 | WEIGHT: | SHEET 1 OF 1



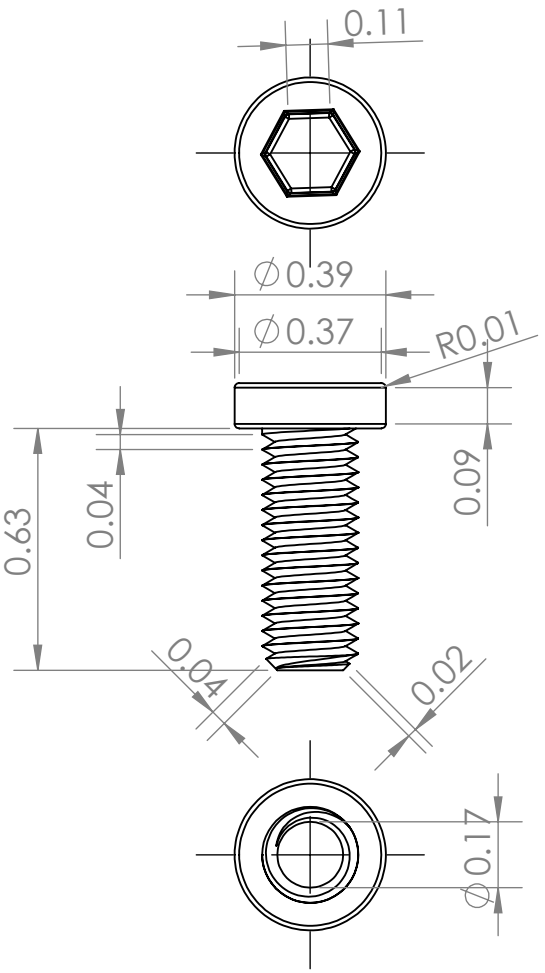


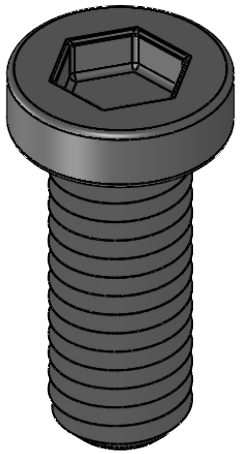
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	12/1/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Control Mech	ARC	MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Upper Gear Round

SIZE	DWG. NO.	REV
A	Upper gear round.pt	
SCALE: 4:1	WEIGHT:	SHEET 1 OF 1





		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: ±0.01 FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	Henry B	11/20/25
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
Full ARC	ARC	MATERIAL	COMMENTS:"Free CAD designs, Files & 3D models: The grabcad community library," Free CAD Designs, Files & 3D Models | The GrabCAD Community Library, https://grabcad.com/library/screw-1-4-1 (accessed Nov. 20, 2025).		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

1/4 in Screw

SIZE	DWG. NO.	REV
A	0.25 in Screw	

SCALE: 4:1 | WEIGHT: | SHEET 1 OF 1