

3000 SERIES SUBSEA LINEAR ACTUATOR

GENERAL SPECIFICATIONS:

- CONTINUOUS OUTPUT FORCE: 500 LB
- CONTINUOUS OUTPUT SPEED: 2.0 IN/S (AT 24 VDC)
- PEAK OUTPUT FORCE: 800 LB
- STROKE LENGTH:
 - 2, 4, 6, 8, OR 10 INCH, WITH INTERNAL COMPENSATOR
 - CUSTOM UNITS AVAILABLE WITH LONGER STROKE LENGTHS. REQUIRES EXTERNAL COMPENSATOR. CONTACT 2G FOR DETAILS.
- INTEGRATED SERVO CONTROL AND MOTOR DRIVER
- INTERNAL PRESSURE COMPENSATOR
- OPTIONAL SPRING-ENGAGED, POWER OFF BRAKE^[1]
- AVAILABLE WITH STANDARD BALL SCREW DRIVE OR OPTIONAL SELF-LOCKING ACME SCREW DRIVE^[2]
- STANDARD CONNECTOR: 9-PIN LOW-PROFILE SUBCONN LPBH9M
- COMMUNICATION PHYSICAL LAYER OPTIONS: RS-232, RS-485, CAN, ETHERNET, ANALOG VOLTAGE CONTROL, AND ANALOG CURRENT CONTROL

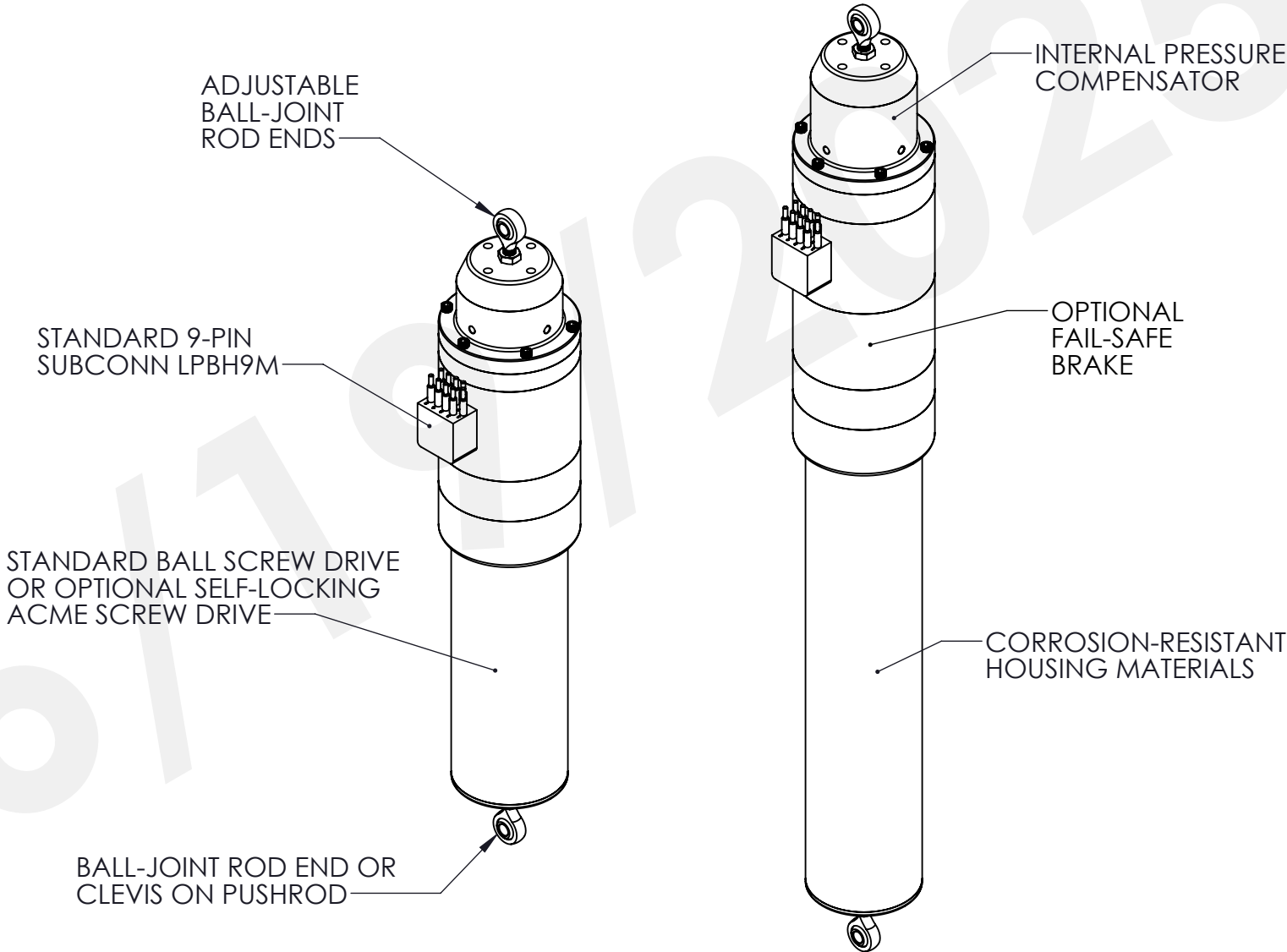
OPERATING ENVIRONMENT:

- DESIGNED FOR MISSION-CRITICAL SUBSEA USE
- PRESSURE-BALANCED OIL-FILLED HOUSING
- CORROSION RESISTANT HOUSING MATERIAL OPTIONS
 - STAINLESSS STEEL, PASSIVATED
 - ALUMINUM, HARDCOAT ANODIZED
 - TITANIUM
- OPERATIONAL DEPTH RATING: >6000 METERS SEAWATER
- DESIGN PRESSURE: 10,000 PSI
- OPERATING TEMPERATURE RANGE: -20°C TO 65°C
- STORAGE TEMPERATURE RANGE: -30°C TO 85°C
- OPERATING VOLTAGE:
 - STANDARD: 24 VDC NOMINAL (12-55 VDC RANGE)
 - CUSTOM UNITS AVAILABLE WITH OPERATING VOLTAGES UP TO 400V. DIMENSIONS MAY BE IMPACTED. CONTACT 2G FOR DETAILS.



ONBOARD MOTOR DRIVER AND SERVO SYSTEM:

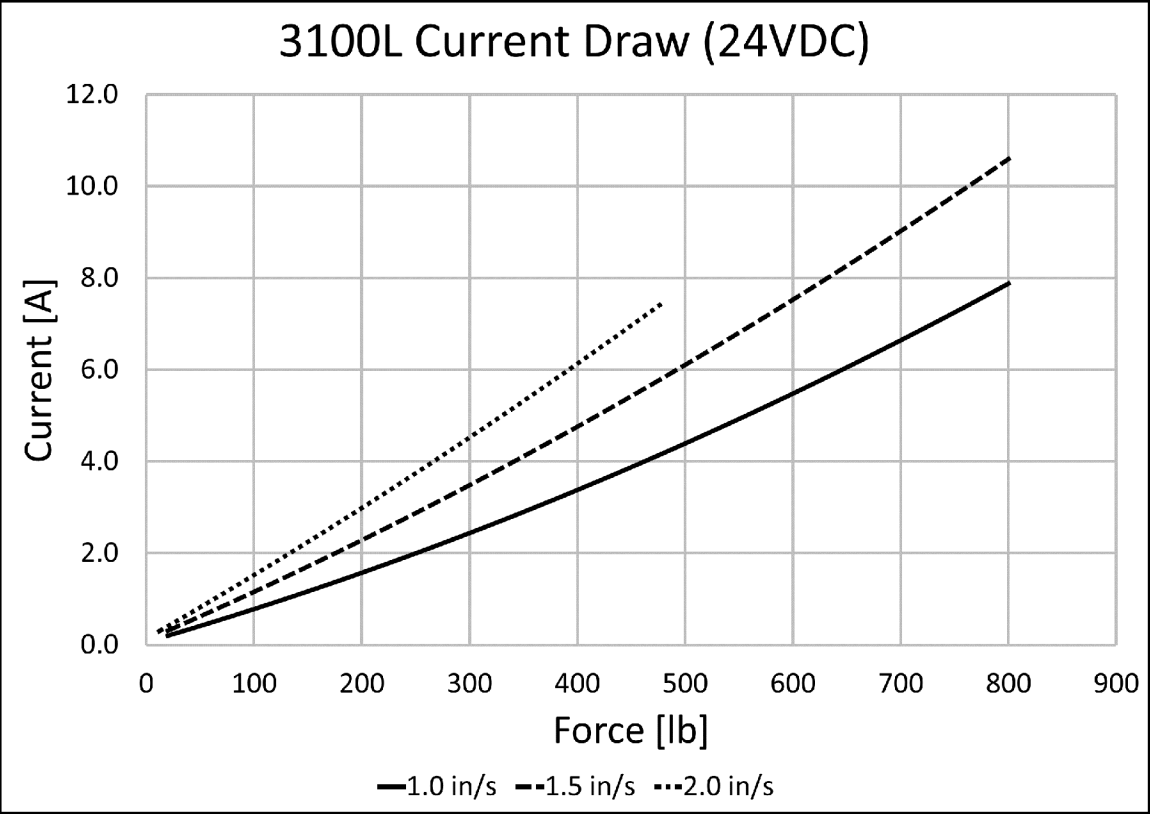
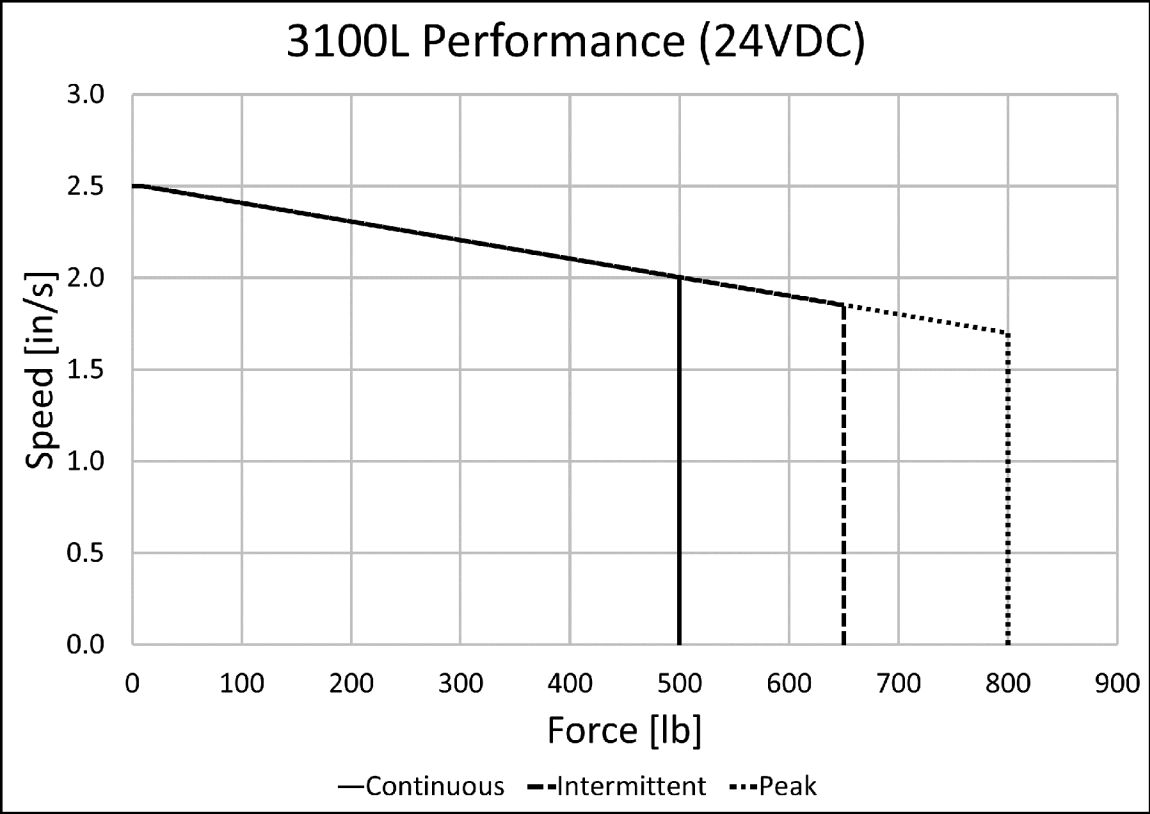
- CLOSED-LOOP POSITION CONTROL WITH PID TUNING
- CONFIGURABLE LIMITS FOR CURRENT, POWER, VELOCITY, AND ACCELERATION
- CONFIGURABLE MOTION PROFILE GENERATOR
- CONTACTLESS NON-WEARING ABSOLUTE POSITION SENSOR
- DOES NOT REQUIRE HOMING
- 0.010" ACCURACY, 0.001" RESOLUTION
- COMMS PROTOCOL: MODBUS & 2G PACKETS
- DEFAULT BAUD RATE: 115200

[1] BRAKE OPTION ADDS LENGTH. CONTACT 2G FOR DIMENSIONS OF MODELS NOT SHOWN HERE.
[2] ACME SCREW DRIVE REDUCES FORCE AND SPEED OUTPUT. CONTACT 2G FOR SPECIFICATIONS.





MODELS SHOWN:
3000LS-SS04CCN-9S01 (4 INCH STROKE)
3000LB-AL10CCN-9S01 (10 INCH STROKE WITH BRAKE)

MATERIAL:	<div>UNLESS OTHERWISE SPECIFIED:</div> <div>- DIMENSIONS ARE IN INCHES</div> <div>- DIMENSIONS IN [] ARE IN mm</div> <div>- TOLERANCES:</div> <div>DECIMALS:</div> <div>.X ±.05</div> <div>.XX ±.015</div> <div>.XXX ±.005</div> <div>ANGULAR:</div> <div>MACHINED: ±0.5°</div> <div>OTHER: ±2°</div> <div>- THREAD DEPTHS ON TAPPED HOLES ARE MINIMUMS</div> <div>- TAP DRILL DIAMETERS ARE REFERENCE</div> <div>- MAX FILLET RADIUS ON INSIDE SHARP CORNERS: 0.005</div> <div>- BREAK ALL SHARP EDGES 0.010 MAX AND REMOVE BURRS</div> <div>- SURFACE FINISH: ≤63 Ra (µin)</div>	INITIALS		DATE		<div></div> <div>2G ENGINEERING</div> <div>WWW.2G-ENG.COM</div> <div>608-825-4799</div>		
MATERIAL COMMENTS:		DRAWN	DJF	08/24/2023				
		APPROVED	DJF	08/25/2023				
		PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF 2G ENGINEERING. ANY DISTRIBUTION OR REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF 2G ENGINEERING IS PROHIBITED.						
FINISH:		SIZE		THIRD ANGLE PROJECTION			DWG. NO.	
	B				3000L		C	
	INTERPRET GEOMETRIC DIMENSIONING & TOLERANCING PER ASME Y14.5-2009				SCALE: 1:4		SHEET 1 OF 7	



CHARTS SHOW PERFORMANCE AT 24 VDC.
OPERATION AT OTHER VOLTAGES WILL IMPACT PERFORMANCE.

- ACTUATOR RATED LIFE (L_{10}):
- CONTINUOUS: 50,000 INCHES OF TRAVEL
 - INTERMITTENT: 20,000 INCHES OF TRAVEL
 - PEAK: 1,000 INCHES OF TRAVEL
 - INSPECT SEAL EVERY 5,000 INCHES OF TRAVEL

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	SIZE B THIRD ANGLE PROJECTION 					
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				SCALE: 1:5	SHEET 2 OF 7	

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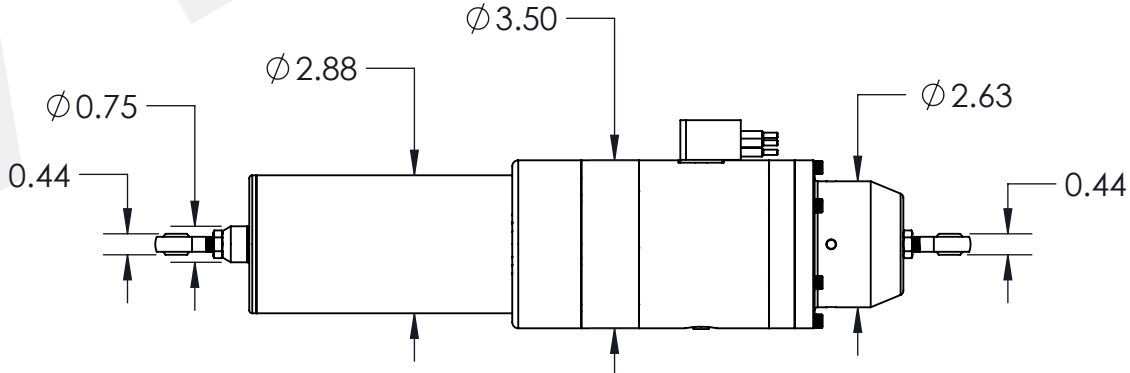
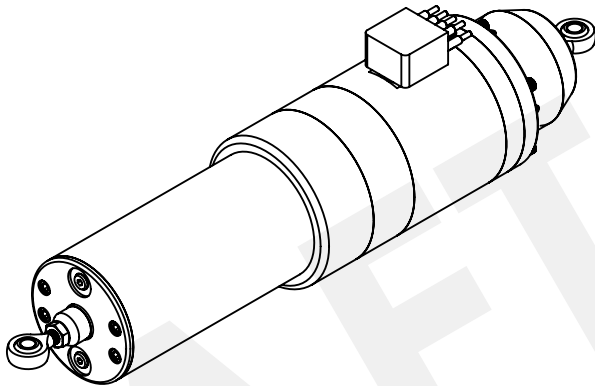
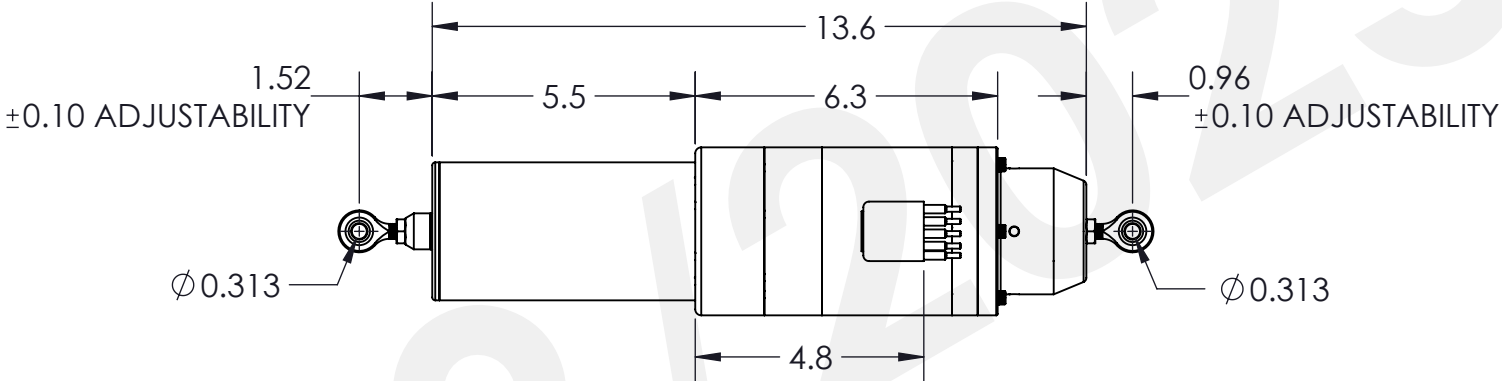
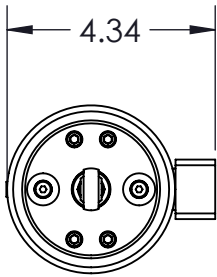
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2



DWG. NO. 3000L

REV. C



MODEL SHOWN: 3000LS-SS02CCN-9S01

- 2 INCH STROKE
- 3/16" ROD ENDS

MATERIAL:	<div>UNLESS OTHERWISE SPECIFIED:</div> <div>- DIMENSIONS ARE IN INCHES</div> <div>- DIMENSIONS IN [] ARE IN mm</div> <div>- TOLERANCES:</div> <div>DECIMALS:</div> <div>.X ±.05</div> <div>.XX ±.015</div> <div>.XXX ±.005</div> <div>ANGULAR:</div> <div>MACHINED: ±0.5°</div> <div>OTHER: ±2°</div> <div>- THREAD DEPTHS ON TAPPED HOLES ARE MINIMUMS</div> <div>- TAP DRILL DIAMETERS ARE REFERENCE</div> <div>- MAX FILLET RADIUS ON INSIDE SHARP CORNERS: 0.005</div> <div>- BREAK ALL SHARP EDGES 0.010 MAX AND REMOVE BURRS</div> <div>- SURFACE FINISH: ≤63 Ra (µin)</div>	INITIALS	DATE	<div></div> <div>2G ENGINEERING</div> <div>WWW.2G-ENG.COM</div> <div>608-825-4799</div>	<div>TITLE:</div> <div>3000 SERIES LINEAR ACTUATOR</div>		
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		INTERPRET GEOMETRIC DIMENSIONING & TOLERANCING PER ASME Y14.5-2009			SCALE: 1:4	SHEET 4 OF 7	

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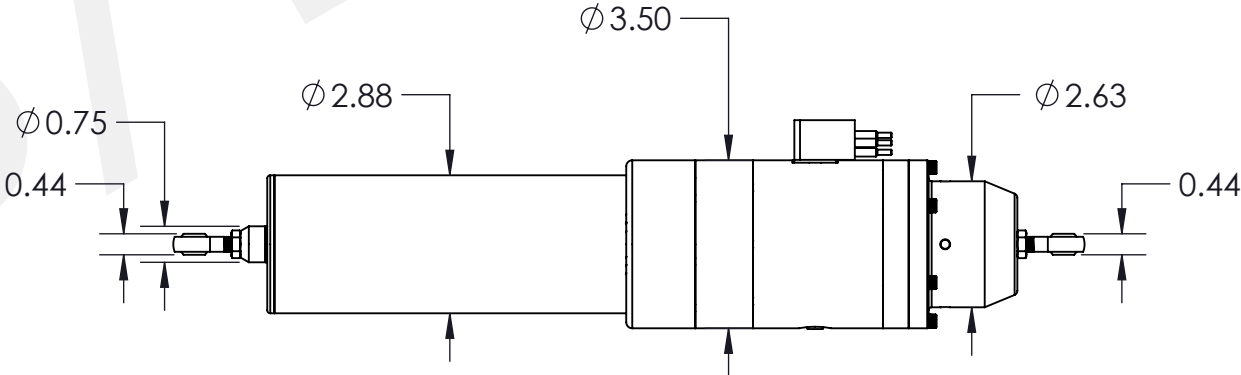
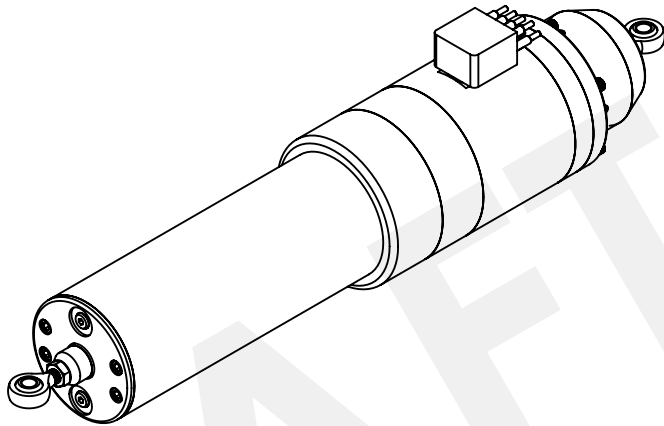
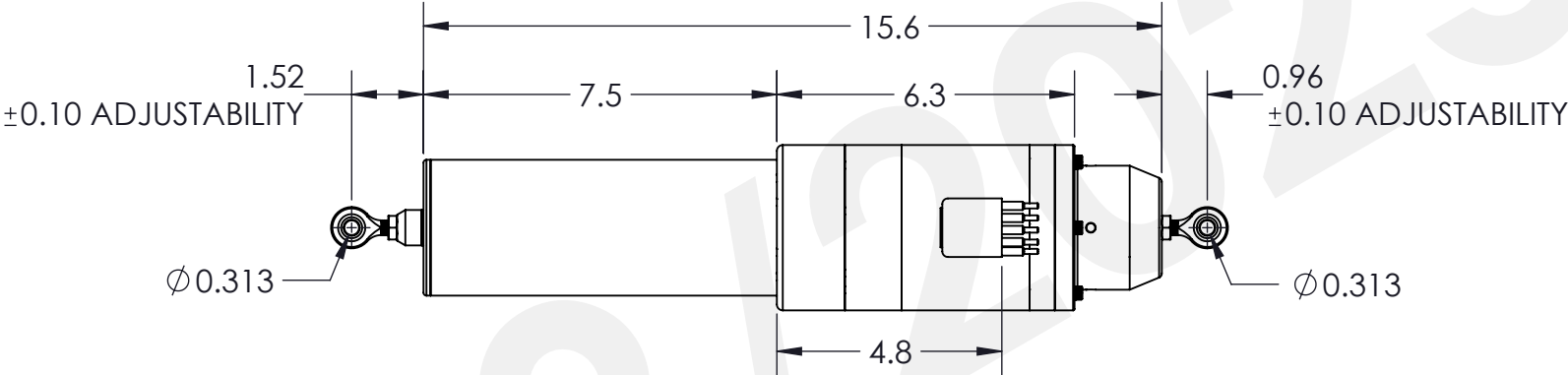
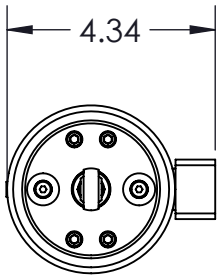
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2



DWG. NO. 3000L

REV. C



MODEL SHOWN: 3000LS-SS04CCN-9S01

- 4 INCH STROKE
- 3/16" ROD ENDS

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		SIZE B				
		INTERPRET GEOMETRIC DIMENSIONING & TOLERANCING PER ASME Y14.5-2009			SCALE: 1:4	SHEET 5 OF 7

6

5

4

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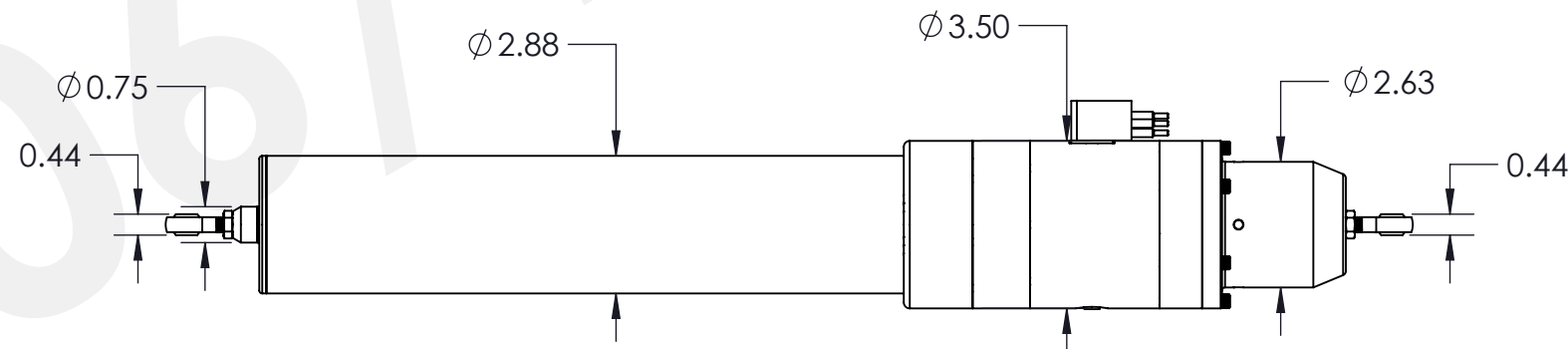
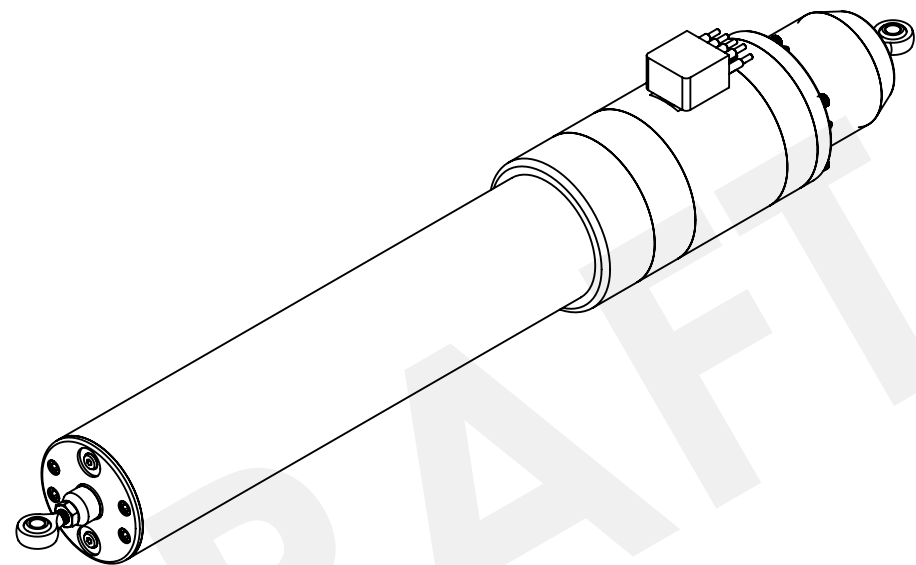
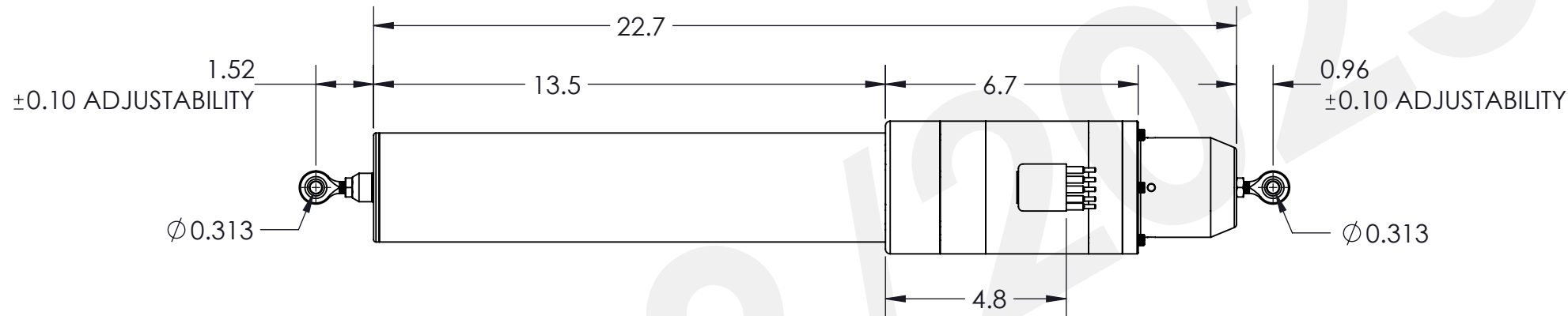
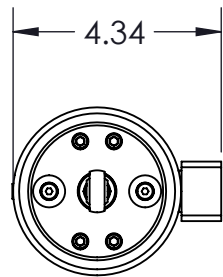
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DWG. NO.

3000L

REV

C



MODEL SHOWN: 3000LS-AL10CCN-9S01

- 10 INCH STROKE
- 3/16" ROD ENDS

MATERIAL:

UNLESS OTHERWISE SPECIFIED:

- DIMENSIONS ARE IN INCHES
- DIMENSIONS IN [] ARE IN mm
- TOLERANCES:

DECIMALS:

.X ±.05

.XX ±.015

.XXX ±.005

ANGULAR:

MACHINED: ±0.5°

OTHER: ±2°

MATERIAL COMMENTS:

FINISH:

- THREAD DEPTHS ON TAPPED HOLES ARE MINIMUMS
- TAP DRILL DIAMETERS ARE REFERENCE
- MAX FILLET RADIUS ON INSIDE SHARP CORNERS: 0.005
- BREAK ALL SHARP EDGES 0.010 MAX AND REMOVE BURRS
- SURFACE FINISH: ≤63 Ra (µin)

INITIALS

DATE

DRAWN

DJF

08/24/2023

APPROVED

DJF

08/25/2023

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SIZE
BTHIRD ANGLE
PROJECTION

INTERPRET GEOMETRIC DIMENSIONING & TOLERANCING PER ASME Y14.5-2009

**2G ENGINEERING**

WWW.2G-ENG.COM

608-825-4799

TITLE: 3000 SERIES LINEAR
ACTUATOR

DWG. NO.

3000L

REV.

C

SCALE: 1:4

SHEET 6 OF 7

6

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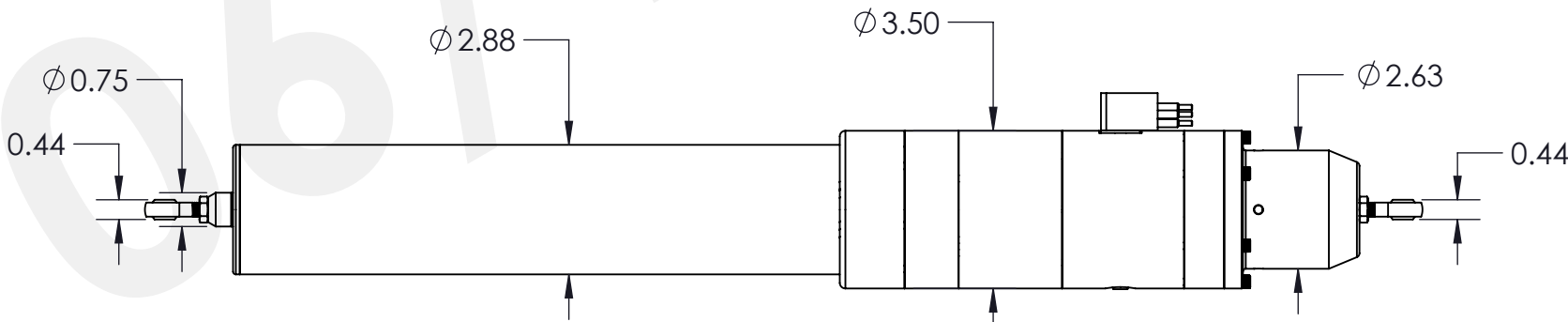
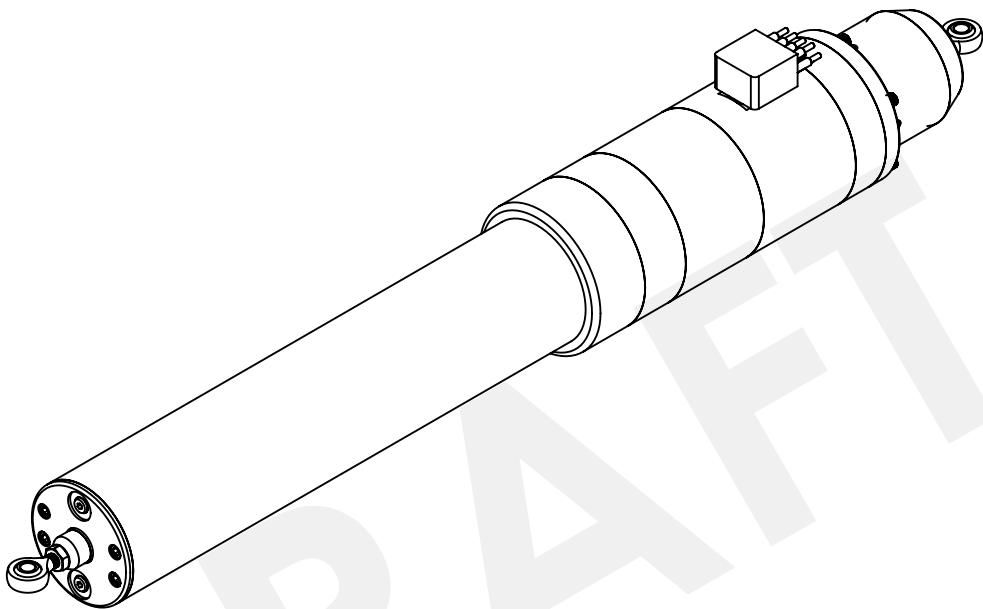
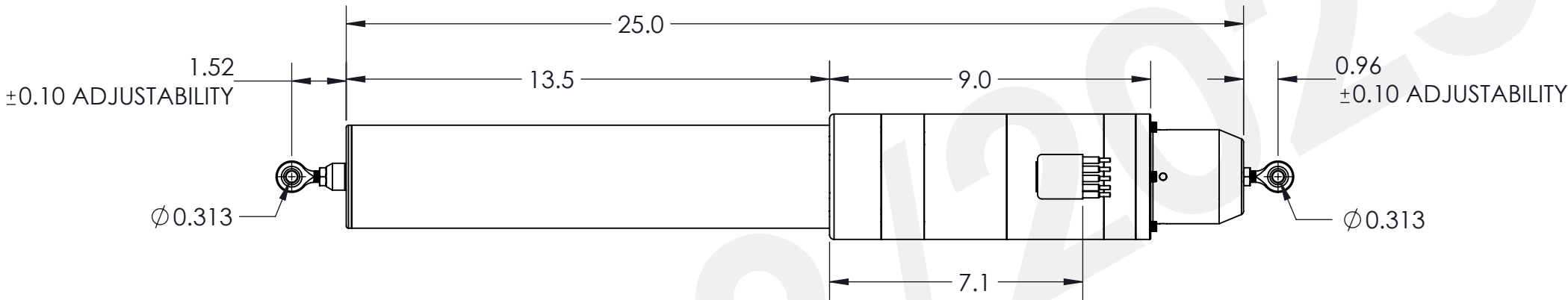
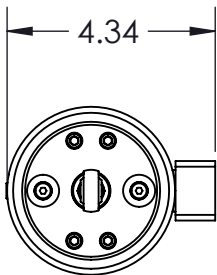
2

DWG. NO.

3000L

REV

C



- MODEL SHOWN: 3000LB-AL10CCN-9S01
- 10 INCH STROKE
 - 3/16" ROD ENDS
 - FAIL-SAFE BRAKE OPTION

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08/24/2023

APPROVED

DJF

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SIZE

B

THIRD ANGLE
PROJECTION



INTERPRET GEOMETRIC DIMENSIONING & TOLERANCING PER ASME Y14.5-2009



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TITLE: 3000 SERIES LINEAR
ACTUATOR

DWG. NO.

3000L

SCALE: 1:4

REV.

C

SHEET 7 OF 7