

REQUIRED TOOLING	
SNAP-ON CROWFOOT WRENCH, 1/2" SQ. DR. X 1-3/8" OPENING	SNAP-ON PART NUMBER SC044
MAGNETIC VISE JAWS - PART NUMBER 1000-100	LOCTITE #243 BLUE
TORQUE WRENCH, 1/2" DRIVE	EXTERNAL SNAP RING PLIERS
LOCTITE #263 RED	HEX KEY - 9/64"
	HEX KEY - 3/32"
	HEX KEY - 1/16"
PHILLIPS HEAD SCREW DRIVER	TORX - T8
	TORX - T10

TOOL MODEL	TRANSDUCER SUB-ASM.	GEAR CASE SUB-ASM.
AES4A22020BVM	25761 (20Nm)	24901 (14T/14T)
AES4A22025BVM	25762 (40Nm)	24894 (12T/12T)
AES4A22030BVM	25762 (40Nm)	24902 (8T/14T)
AES4A22035BVM	25762 (40Nm)	24903 (8T/12T)
AES4A22040BVM	25762 (40Nm)	24904 (6T/14T)

COMMENTS	ITEM NO.	PART NUMBER	QTY.	DESCRIPTION
	1	26787	1	MOTOR ASM., MID-EXIT
	2	24780	1	MOTOR COUPLER SUB-ASM.
	3	25763	1	TRANSDUCER ADAPTOR
	4	SEE CHART	1	TRANSDUCER SUB-ASM
	5	SEE CHART	1	GEAR CASE SUB-ASM
	6	26695	1	TOOL CONNECTOR HOUSING
	7	26696	1	TOOL CONNECTOR ASSEMBLY, MID-EXIT
	8	25745	4	SCREW, BHC 4-40X.188, STEEL, BLACK OXIDE
	9	25814	1	SCREW, PAN HEAD PHILLIPS, 4-40 x 3/16, STAR WASH, SS
	10	24174	A/R	HEAT SHRINK, Ø.125
	11	26166	8	SCREW, BHSC 6-32X.312, STEEL, BLACK OXIDE
	12	25868	2	SCREW, PLASTITE, PH TORX, M2.5 X 1.06 X 5, STEEL
	13	25735	1	EXT. STRAIGHT OUTPUT ASM., 3/8" SQ. DR.
	14	26691	2	TRIGGER MOUNT
	15	20132	1	THROTTLE SPRING
	16	26697	1	LEVER ASM., MID-EXIT
	17	26719	2	SCREW, LHSC 8-32X .375, STEEL, BLACK OXIDE
	18	26686	1	MOTOR COVER
	19	25557	1	REV BUTTON SUB-ASSEMBLY
	20	24683	1	SPRING, REV BUTTON
	21	24679	1	RETAINING RING
	22	26698	2	SCREW, PH TORX 4-20 X 1/2" LG. PLASTIC
	23	20534	1	SERIAL/MODEL LABEL
	24	25471	1	CLEAR LABEL COVER
	25	26699	1	LIGHT RING
	26	26720	1	O-RING, LIGHT RING
	27	24697	1	REACTION BAR, STEEL, 2000 SERIES

**◆ LABEL ATTACHMENT:**

- ATTACH THE TOOL LABEL ITEM (23) INTO THE GROOVE AND COVER IT WITH CLEAR LABEL ITEM (24).
- SLIDE LED COVER OVER TOOL CONNECTOR INTO PLACE OVER THE LABEL, ROLL THE O-RING OVER THE TOOL CONNECTOR AND INTO THE GROOVE.

APPLY LOCTITE #243 BLUE TIGHTEN TO 1Nm (9 IN-LBS) TYP 4 SCREWS

ROUTE HALL SWITCH THRU SLOTS IN REAR OF MOTOR HOUSING THEN FASTEN TO TOOL CONNECTOR HOUSING (6) WITH (12) SCREWS

FEED EXCESS WIRE LENGTH INTO REAR CAVITY OF MOTOR

APPLY LOCTITE #243 BLUE TIGHTEN TO GEAR CASE TO 60Nm (44 FT.LBS.)

APPLY LOCTITE #243 BLUE 1.7Nm (15 IN-LBS.) TYP 4 PLACES

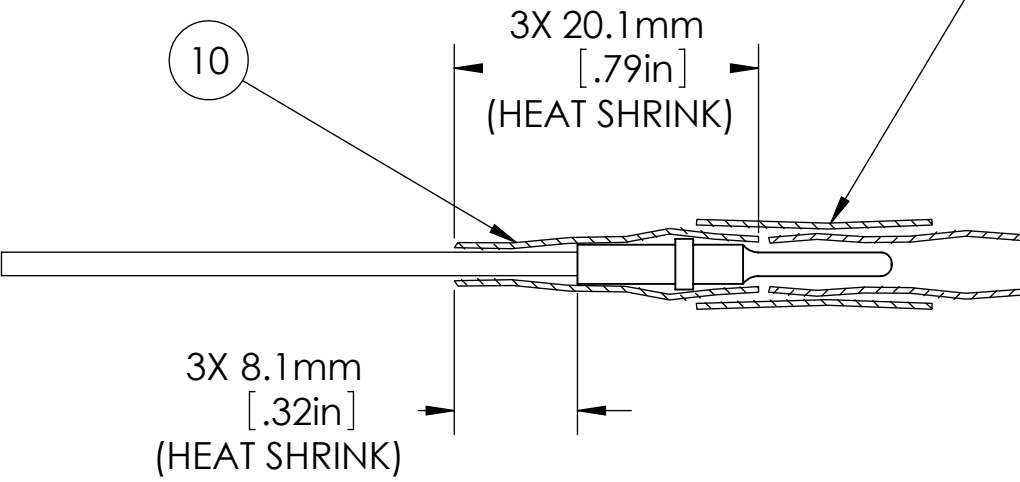
APPLY LOCTITE #243 BLUE TIGHTEN TO 1.7Nm (15 IN-LBS) 9/64 HEX - 2 PLACES

APPLY LOCTITE #243 BLUE ASSEMBLE OUTPUT ASM TO GEAR CASE. TIGHTEN TO 60Nm (44 FT-LBS)

APPLY LOCTITE #243 BLUE 1.7Nm (15 IN-LBS.) TYP 4 PLACES

34.9mm (1 3/8") FLATS 60Nm (44 FT.LBS.)

◆ APPLY THIS LAYER OF HEAT SHRINK (10) AFTER CONNECTING PIN AND SOCKET 3 PLC'S AS SHOWN



MOTOR PHASE WIRE TERMINATION SCALE 2:1

TIGHTEN TO 1.7 Nm (15 IN-LBS)

APPLY LOCTITE #243 BLUE TIGHTEN TO GEAR CASE TO 60Nm (44 FT.LBS.)

APPLY LOCTITE #243 BLUE 1.7Nm (15 IN-LBS.) TYP 4 PLACES

APPLY LOCTITE #243 BLUE TIGHTEN TO 1.7Nm (15 IN-LBS) 9/64 HEX - 2 PLACES

- ◆ ASSEMBLY INSTRUCTIONS
- ◇ SUB-ASSEMBLY

- GEARS & SPLINES: LUBRICATE WITH DOW CORNING MOLYKOTE BR2 PLUS GREASE.
- BEARINGS: LUBRICATE WITH CHEVRON SR1 GREASE
- O-RINGS: LUBRICATE WITH O-RING LUBE



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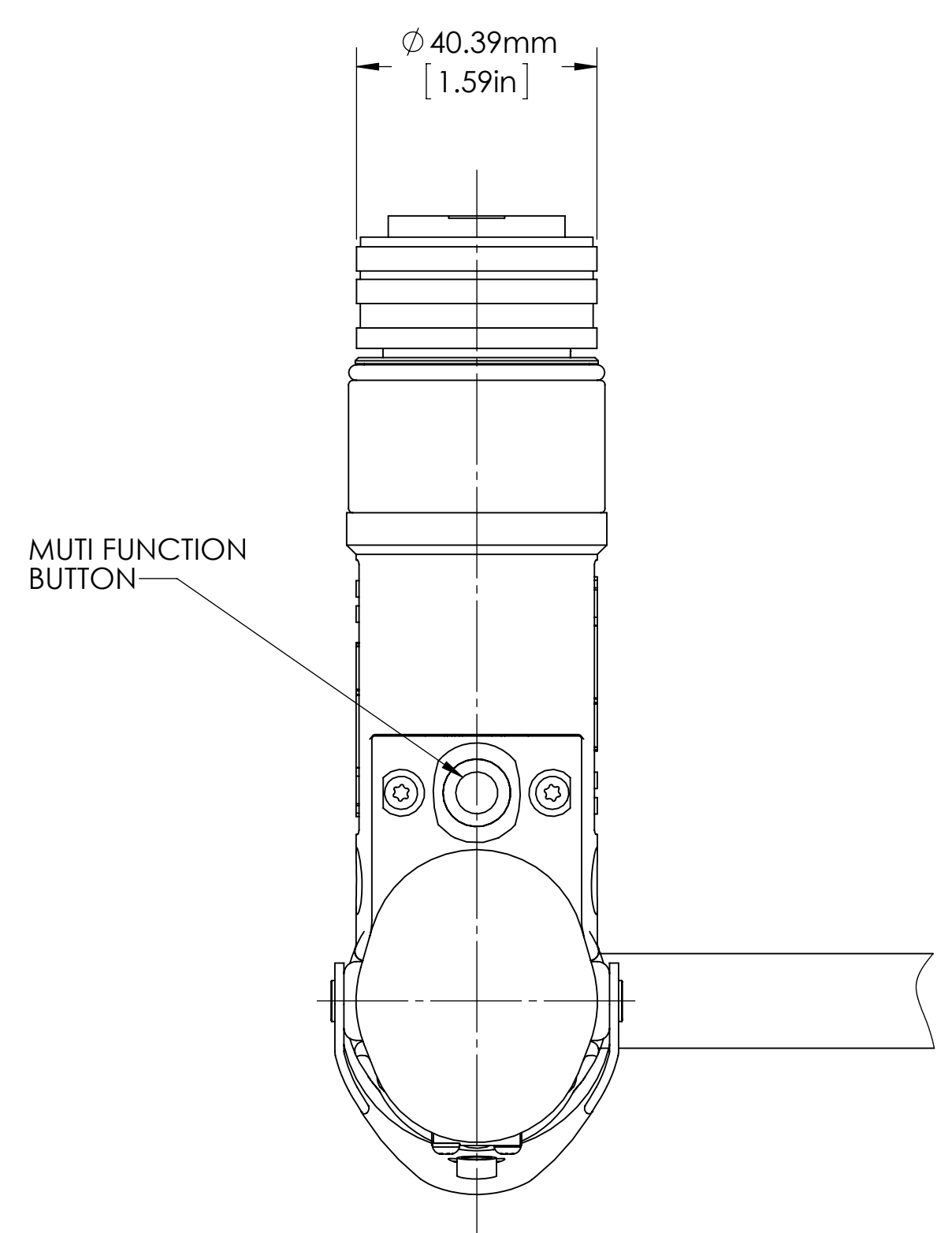
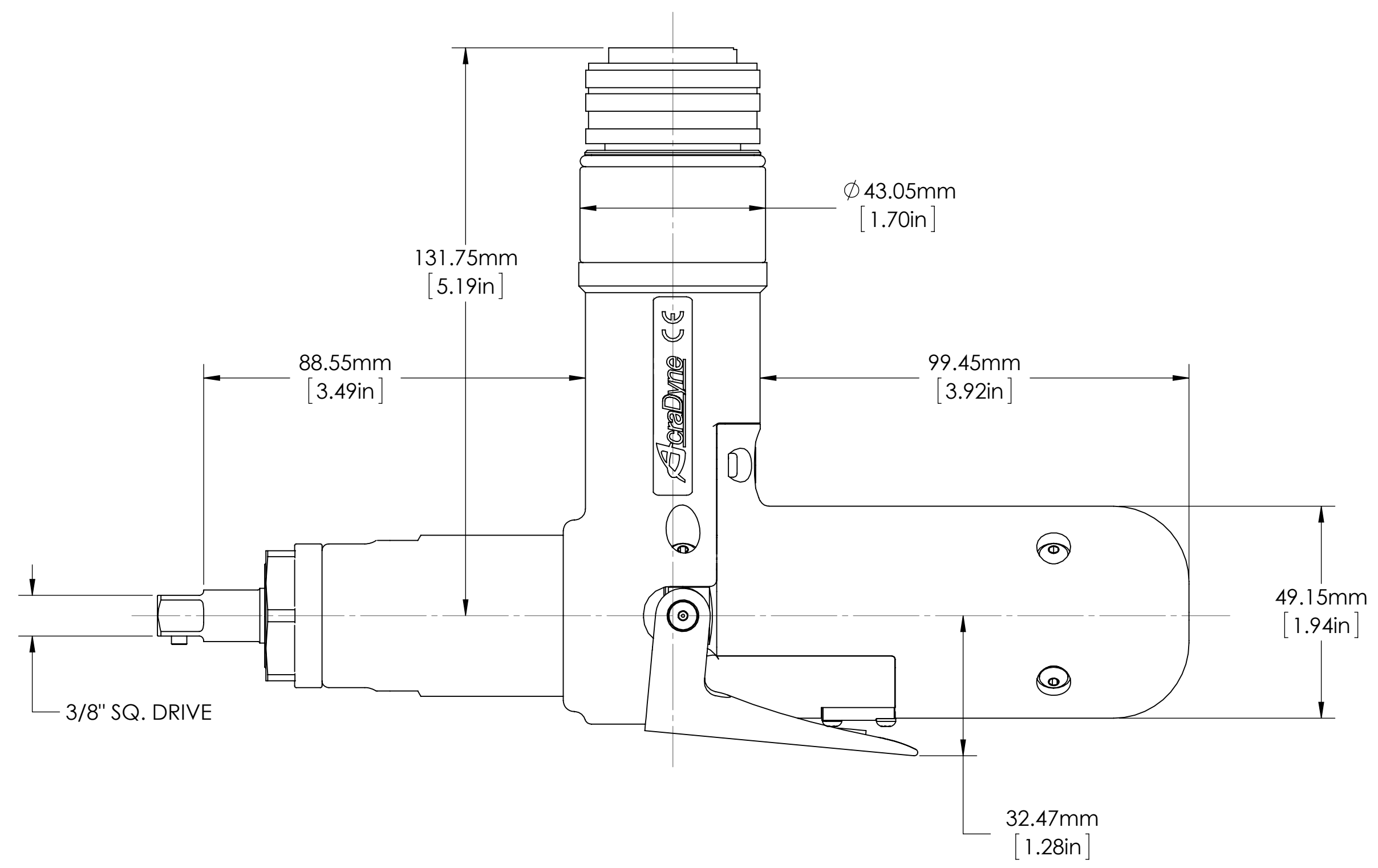
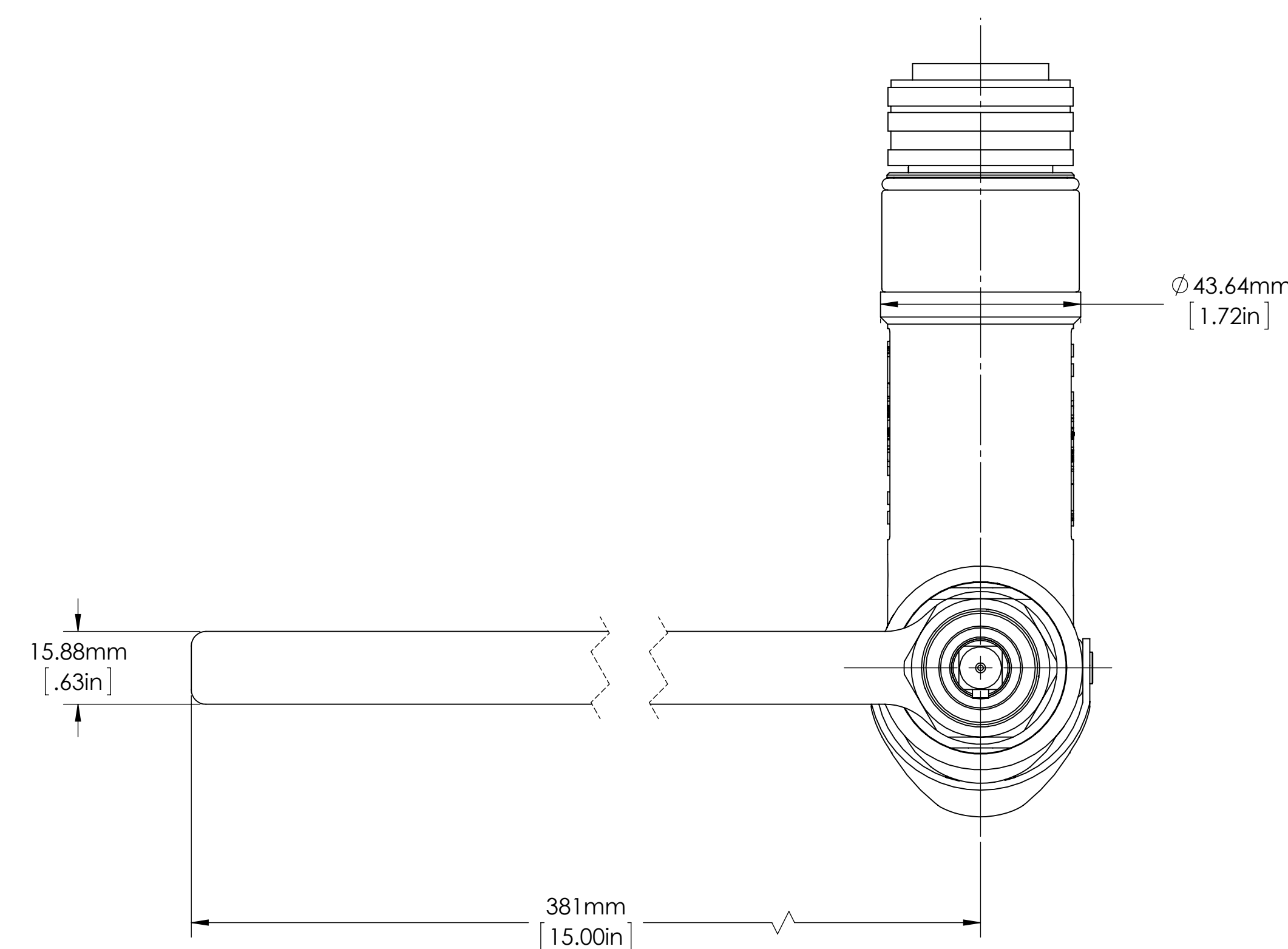
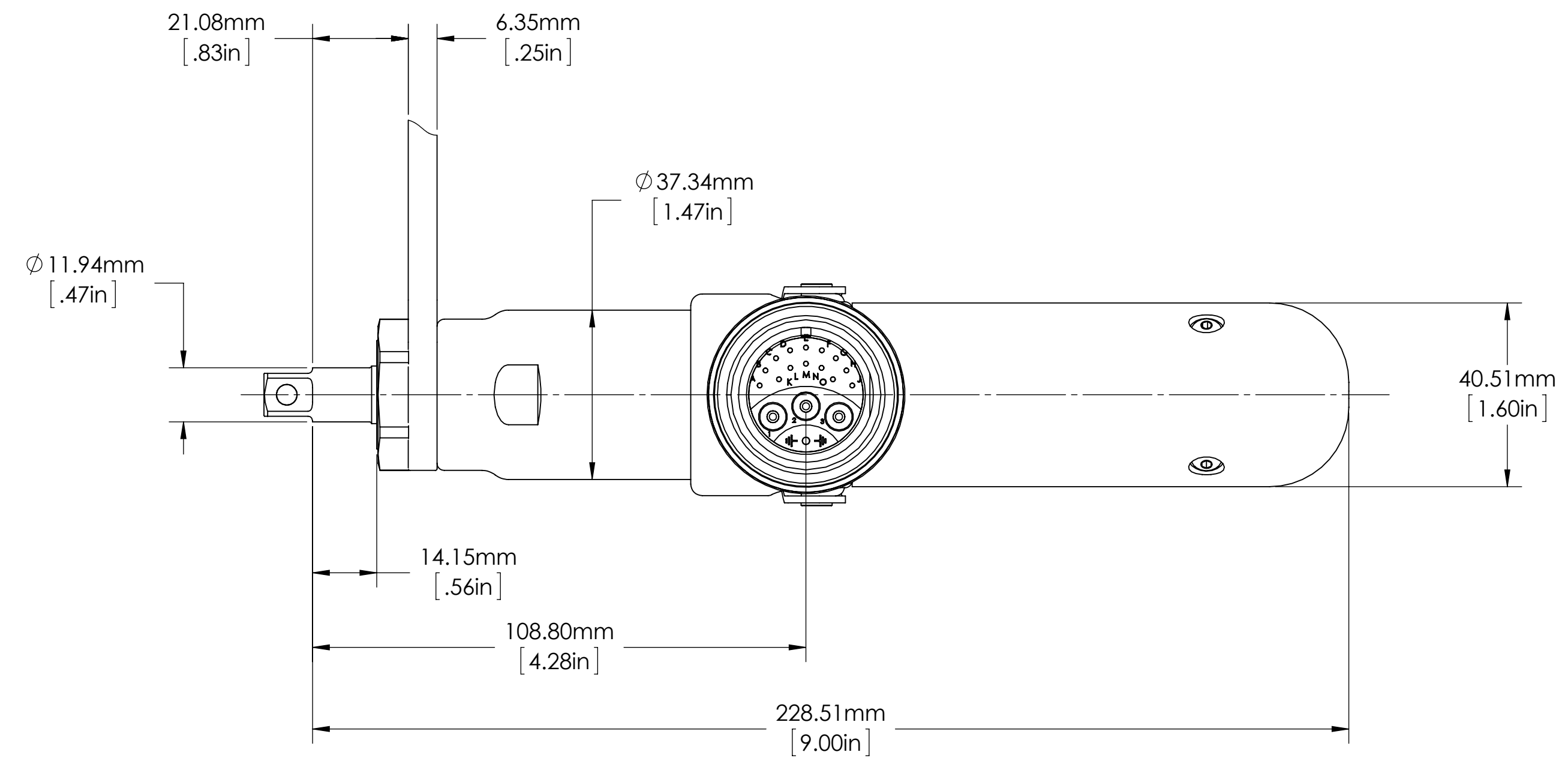
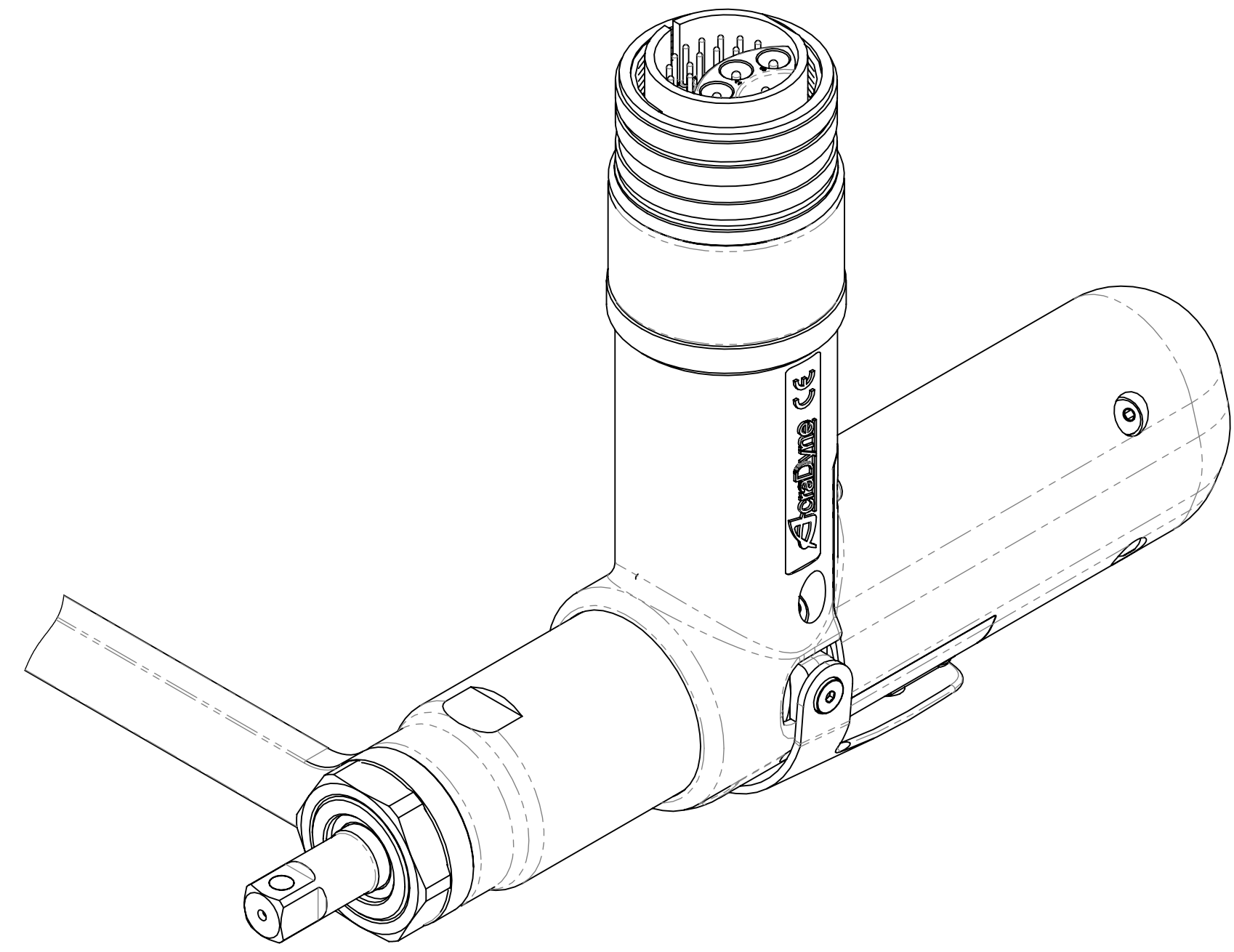
**BLOCK TOLERANCING PER DECIMAL:**  
X = ±.030 .XX = ±.010 .XXX = ±.005 .XXXX = ±.0005  
ANGLE = ±0°30'

REMOVE BURRS AND SHARP EDGES: R.015 MAX MACHINE SURFACE FINISH: 125 RMS OR BETTER

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**AES4A220\_BVM INLINE NUTRUNNER GEN 4, 2000 SERIES**

SIZE	PART / DRAWING NUMBER	REVISION
D	AES4A220_BVM	A
SCALE: 1:1	DO NOT SCALE DRAWING	SHEET 1 OF 2



TOOL MODEL
AES4A22020BVM
AES4A22025BVM
AES4A22030BVM
AES4A22035BVM
AES4A22040BVM



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 DIMENSIONS AND TOLERANCING PER ANSI Y14.5  
 SURFACE ROUGHNESS PER ANSI Y14.36

**BLOCK TOLERANCING PER DECIMAL:**  
 .X = ±.030 .XX = ±.010 .XXX = ±.005 .XXXX = ±.0005  
 ANGLE = ±0° 30'

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 MACHINE SURFACE FINISH: 125 RMS OR BETTER

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**AES4A220\_BVM INLINE NUTRUNNER GEN 4, 2000 SERIES**

SIZE	PART / DRAWING NUMBER	REVISION
D	<b>AES4A220_BVM</b>	<b>A</b>
SCALE 1:1	DO NOT SCALE DRAWING	SHEET 2 OF 2