

NOTES (UNLESS OTHERWISE SPECIFIED)

1. LINEAR SPECIFICATIONS:

- POLE PITCH: N/A
- LINEAR STROKE: 50 +1/-0 mm
- ENC. RESOLUTION(+A/-A;+B/-B):0.5, 1 AND 5 Microns
- ENCODER REPEATABILITY: N/A
- INDEX LOCATION(+Z/-Z): N/A
- OPERATING VOLTAGE: 48V
- COIL RESISTANCE: 26.5 OHMS @ 22 °C
- COIL INDUCTANCE: N/A mH
- PEAK FORCE: N/A @ 48Vdc
- FORCE CONSTANT: N/A
- MOVING MASS: 930 kg
- TOTAL MASS: 3387 kg

2. ROTARY SPECIFICATIONS: (ANGLE : 360°)

- ENC. RESOLUTION(+A/-A;+B/-B): 2000 CPR
- FINE INDEX(+Z/-Z): YES
- MOTOR TYPE: DC BRUSH (PITTMAN 30mm #8542-48V)
- PEAK TORQUE: 0.21 Nm @ 48V, 4A
- TORQUE CONSTANT: 0.055 Nm/A
- MAXIMUM SPEED: 6400 RPM(WITH 0 LOAD & NO VACUUM) 500 RPM (WITH 0 LAOD &VACUUM)
- GEAR RATIO: N/A
- GEAR BACK LASH: N/A

3. STANDARD OPTION SPEC: 4:1, 16:1

4. OTHER OPTION: CONSULT FACTORY FOR OTHER ROTARY CONFIGURATION

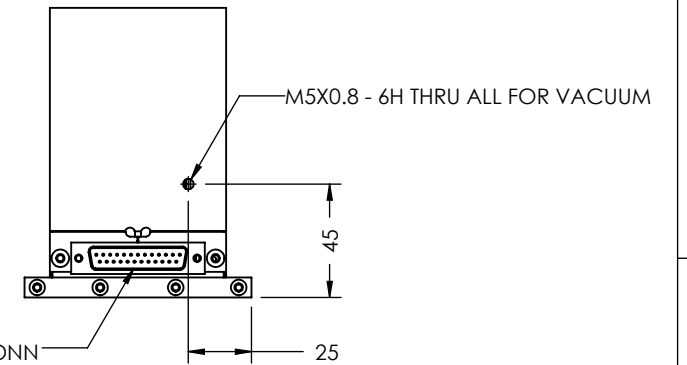
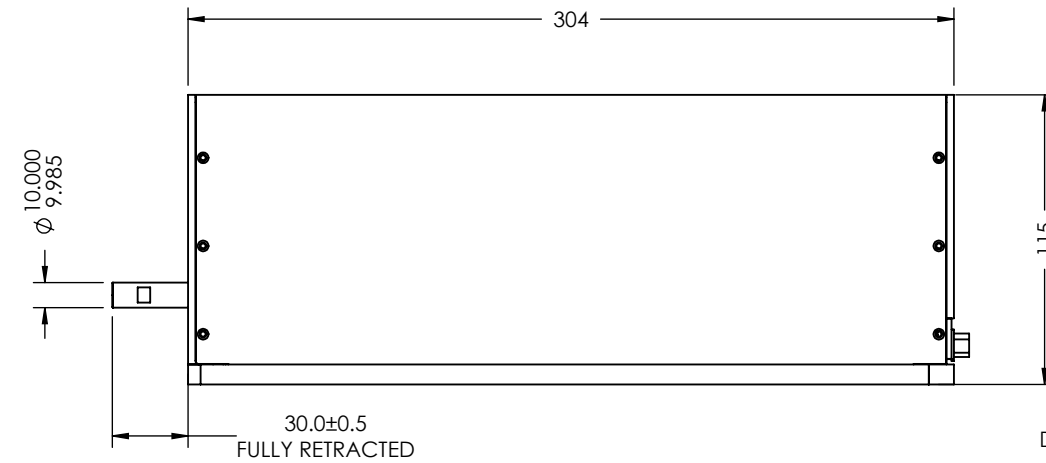
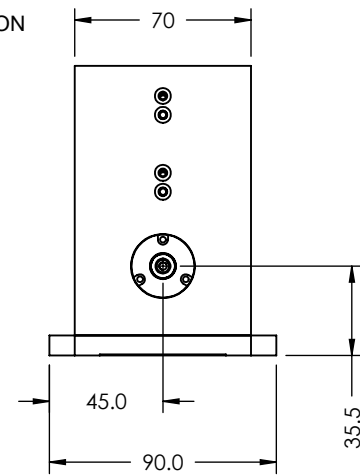
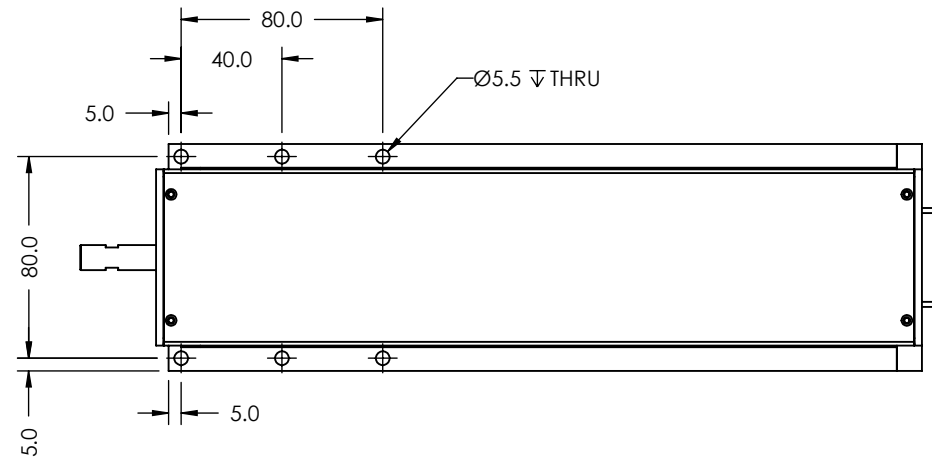
5. VACUUM OPTION: N/A

6. SPRING OPTION: N/A

7. OPERATING TEMPERATURE: -10°C TO +65°C

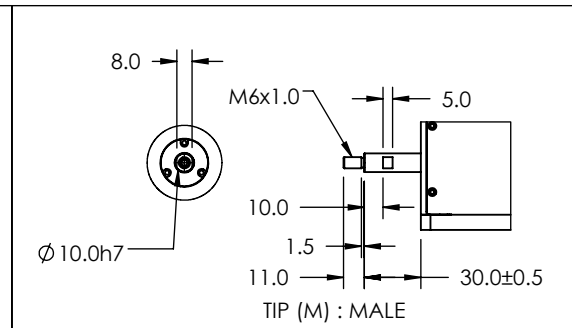
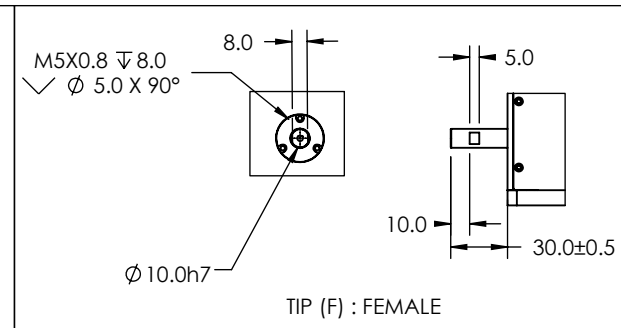
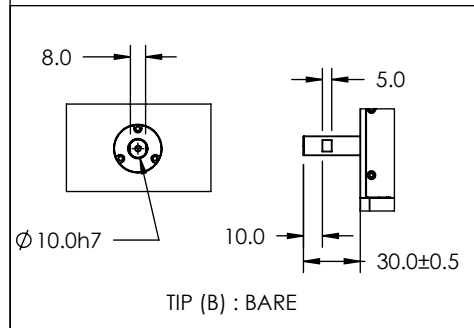
8. PLATING: ELECTROLESS NICKEL

REVISIONS				
REV	ECR	DESCRIPTION	DATE	APPROVED
A	2854	INITIAL RELEASE	9/24/03	BR
B	3041	UPDATE SHAFT END DIM. ADD FRONT LIMIT	1/28/04	SEK
C	3113	SEE ECN	3/19/04	SMH
D	3485	SEE ECN	2/16/05	CAW
E	4115	UPDATED ROTARY SPECS	1/22/07	LR
F	5688	PART NUMBER CHANGE	1/20/16	SB
G	6189	UPDATED ROTARY SPECS	9/13/2017	BJC
H	6787	UPDATED GEAR SPECS/OPTION	07/09/2019	DL



PIN No	DB-25P
1	+5 Vdc
2	5V RTN
3	(R) MOTOR -
4	(L) PH. A-
5	NC
6	TBD
7	(L) MOTOR+
8	(L) MOTOR+
9	(L) PH. B -
10	(R) MOTOR+
11	(L) LIMIT+ (OPTION)
12	(L) LIMIT - (OPTION)
13	(R) PH. B -
14	(L) PH. A+
15	(R) PH. A+
16	(L) PH. B+
17	(R) PH. B+
18	(L) PH. Z+
19	(L) MOTOR -
20	(L) MOTOR -
21	(R) PH. A -
22	(R) INDEX (COARSE)
23	(L) PH. Z -
24	(R) PH. Z+
25	(R) PH. Z -

STANDARD OPTION SPEC	4:1 GEAR	16:1
ENC. RESOLUTION(+A/-A,+B/-B)	4 X 2000 CPR	16 X 2000 CPR
FINE INDEX (+Z/-Z)	YES	YES
MOTOR TYPE:	DC BRUSH (PITTMAN 30mm #8542-48V)	DC BRUSH (PITTMAN 30mm #8542-48V)
PEAK TORQUE: Nm@VDC, A	0.77 Nm @ 48 V, 4A	2.9 Nm @ 48 V, 4A
TORQUE CONSTANT: Nm/A	0.20 Nm/A	0.75 Nm/A
MAXIMUM SPEED: RPM	1600 RPM (WITH 0 LOAD & NON VACUUM) 500 RPM (WITH 0 LOAD & VACUUM)	340 RPM (WITH 0 LOAD)
GEAR BACK LASH:	LESS THAN 20 arcmin	LESS THAN 35 arcmin



REF. NUMBER	LAR95-050-7
CONTRACT	STD

UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE IN MM
 BREAK EDGES AND REMOVE BURRS
 TOLERANCES
 X: ±0.5 X.X: ±0.1
 X.XX: ±0.03 ANGLE: ±0.1°
 CONCENTRICITY: ±0.025
 ROUNDNESS: ±0.025
 EDGE BREAKS: 0.2 MAX
 ALL DIMENSIONS AND TOLERANCES ARE FINAL

MATERIAL:	NAME	DATE
FINISH:	DWN BY: B. REDNOUR	5-9-03
MACHINE FINISH: 1.6	CHK BY: B. REDNOUR	5-9-03
INTERPRET PER: ASME Y14.5-2009	ENG APP	
THIRD ANGLE PROJECTION	MFG APP	
	QA APP	

SMAC 5807 VAN ALLEN WAY
 CARLSBAD CA, 92008
 (760) 929-7588

MOVING COIL ACTUATORS

TITLE: **LAR95-050-7X-1**

SIZE: B PART NO: **LAR95-050-7X-1** REV: **H**

SCALE: 1:5 **DO NOT SCALE** SHEET: 1 / 1