

NOTES (UNLESS OTHERWISE SPECIFIED)

1. LINEAR SPECIFICATIONS:

- LINEAR STROKE: 50 +2/0 mm
- ENC. RESOLUTION(+A/-A;+B/-B): 1, 5 um
- ENCODER REPEATABILITY: 20 um
- INDEX LOCATION(+Z/-Z): 2.0±0.5 mm R.H.STOP
- OPERATING VOLTAGE: 48 Vdc, 2.5A
- COIL RESISTANCE PER PHASE: 22 Ohm
- COIL INDUCTANCE PER PHASE: 6 mH
- PEAK FORCE: 100 N @ 48Vdc, 2.5A
- FORCE CONSTANT: 40 N/A
- MOVING MASS: 0.9 kg
- TOTAL MASS: 7.2 kg

2. THETA SPECIFICATIONS.

- ROTARY MOTOR TYPE: HT35, BRUSHLESS
- R.MOTOR PEAK TORQUE: 0.45 Nm
- TORQUE CONSTANT: 0.12 N/A
- GEAR RATIO: N/A
- ENC. RESOLUTION: 2000 CPR
- MAX. SPEED OUTPUT SHAFT: 2100 RPM (NON VACUUM), 500 RPM (VACUUM)

3. GEAR OPTION: 4:1 OR 16:1

4. VACUUM OPTION: AVAILABLE

5. SPRING OPTION: AVAILABLE

6. OPERATING TEMPERATURE: 0°C TO 40°C

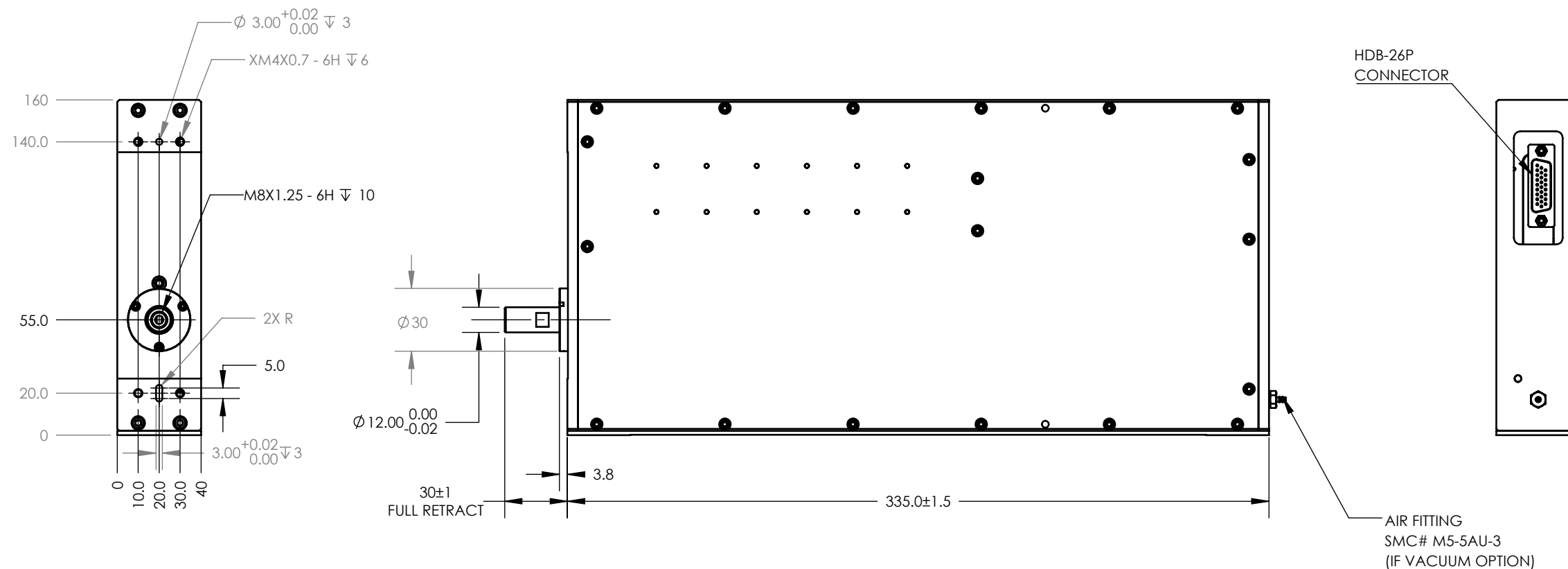
7. PLATING: CERAKOTE, COLOR, CLEAR

8. TOLERANCES

X.: ±0.5

X.X: 0.25

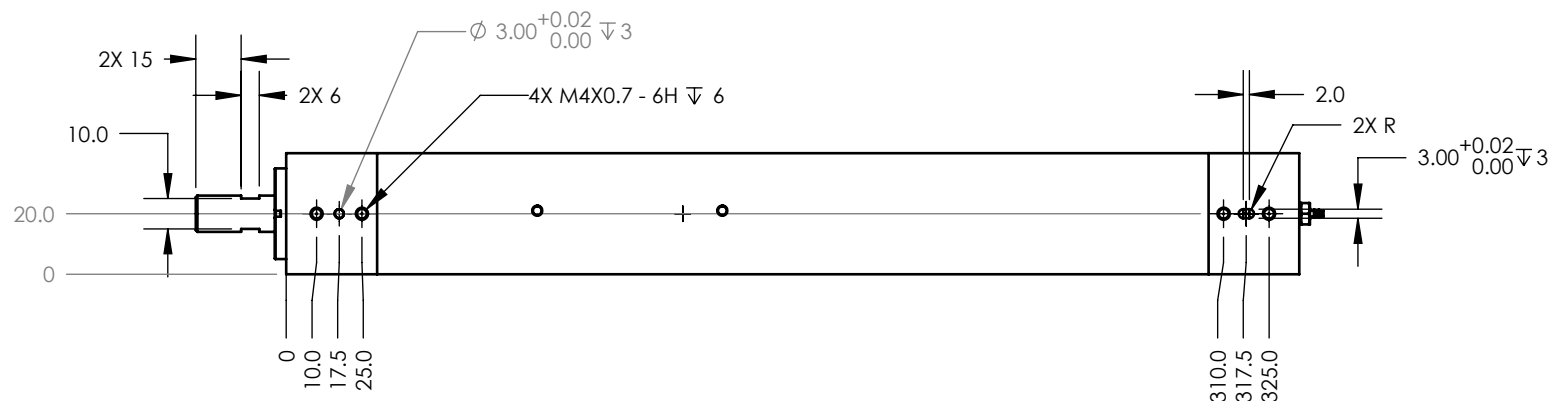
REV.	ECN.	DESCRIPTION	DATE	APPROVED
E	6915	INITIAL RELEASE	10/28/2019	TW
F		CORRECTED THREAD	1/8/2020	TW
G	7084	UPDATED SPECIFICATION	2/20/2020	TW



PIN No	HDB-26P
1	(L) PH. A+
2	(L) PH. B+
3	(L) PH. Z+
4	NC
5	NC
6	NC
7	(R) PH. B+
8	(R) PH. A+
9	(R) PH. Z+
10	(L) PH. A-
11	(L) PH. B-
12	(L) PH. Z-
13	(R) COARSE (OPTION)
14	NC
15	NC
16	(R) PH. B -
17	(R) PH. A -
18	(R) PH. Z -
19	+5 VDC
20	5V RTN
21	(R) MOTOR (U)
22	(L) MOTOR (U)
23	(L) MOTOR (V)
24	(L) MOTOR (W)
25	(R) MOTOR (V)
26	(R) MOTOR (W)

SPECIFICATION WITH GEAR OPTION

STANDARD OPTION SPEC	4:1 GEAR	16:1 GEAR
ENC. RESOLUTION(+A/-A,+B/-B)	4 X 2000 CPR	16 X 2000 CPR
FINE INDEX (+Z/-Z)	YES	YES
MOTOR TYPE:	HT35, BRUSHLESS	HT35, BRUSHLESS
PEAK TORQUE: Nm@VDC, A	1.6 Nm @ 48 V	6.1 Nm @ 48 V
TORQUE CONSTANT: Nm/A	0.46 Nm/A	1.74 Nm/A
MAXIMUM SPEED: RPM	480 RPM (WITH 0 LOAD)	110 RPM (WITH 0 LOAD)
GEAR BACK LASH:	LESS THAN 20 arcmin	LESS THAN 35 arcmin



<p>UNLESS OTHERWISE SPECIFIED</p> <p>ALL DIMENSIONS ARE IN MM</p> <p>BREAK EDGES AND REMOVE BURRS</p> <p>TOLERANCES</p> <p>X.: ±0.5 X.X: ±0.1</p> <p>X.XX: ±0.03 ANGLE: ±0.1°</p> <p>CONCENTRICITY: ±0.025</p> <p>ROUNDNESS: ±0.025</p> <p>EDGE BREAKS: 0.2 MAX</p> <p>ALL DIMENSIONS AND TOLERANCES ARE FINAL</p>	<p>MATERIAL: SEE BOM</p> <p>FINISH: SEE BOM</p> <p>MACHINE FINISH: 1.6/</p>	<p>NAME: TW</p> <p>DATE: 10/28/2019</p> <p>CHK BY: TMV</p> <p>ENG APP: TMV</p> <p>MFG APP:</p> <p>QA APP:</p>	<p>SMAC</p> <p>MOVING COIL ACTUATORS</p> <p>5807 VAN ALLEN WAY</p> <p>CARLSBAD CA, 92008</p> <p>(760) 929-7588</p>	
	<p>INTERPRET PER: ASME Y14.5-2009</p> <p>THIRD ANGLE PROJECTION</p>	<p>PROPRIETARY AND CONFIDENTIAL</p> <p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SMAC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SMAC IS PROHIBITED.</p>	<p>TITLE: LINEAR ROTARY ACTUATOR</p> <p>SIZE: B</p> <p>PART NO: LBR40-050-XX-3</p> <p>SCALE: 2:5 DO NOT SCALE</p> <p>SHEET: 1 / 1</p>	<p>REV: G</p>
	<p>REF. NUMBER: LBR40-050</p> <p>CONTRACT: STD</p>			