**NOTES:** (UNLESS OTHERWISE SPECIFIED)

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
2. LINEAR SPECIFICATIONS:
   - LINEAR STROKE: 17 ±1.0 mm
   - FORCE CONSTANT: 10 N / A (24 VDC)
   - PEAK FORCE: 14 N @ 1.35 A (24 VDC)
   - COIL DC RESISTANCE: 15 OHMS ± 10%
   - COIL INDUCTANCE: 17.6 mH ± 10%
   - ENCODER RESOLUTION: 5.0um
   - ENCODER ACCURACY: ±5 COUNTS
3. THETA SPECIFICATION:
   - ROTARY MOTOR: TRANSICOIL DC BRUSHLESS (DIRECT DRIVE)
     - PEAK TORQUE: 66 mNm @ 3 A
     - TORQUE CONSTANT: 22 mNm / A
     - SUPPLY VOLTAGE: 24 VDC ± 10%
     - ENCODER SUPPLY VOLTAGE: 5 VDC
     - ENCODER RESOLUTION: 0.018° (20K COUNTS / 360°)
4. MOVING MASS: 220 gm
5. TOTAL MASS: 840 gm
6. OPERATING TEMPERATURE: 5°C TO +40°C

**DB-26P PINOUT**

- **1 (L) ENCODER A+**: 14 NC
- **2 (L) ENCODER B-**: 15 NC
- **3 (L) INDEX Z-**: 16 (R) ENCODER B-
- **4 NC**: 17 (R) ENCODER A-
- **5 (L) COIL+**: 18 (R) INDEX I-
- **6 NC**: 19 -5 VDC
- **7 (R) ENCODER B+**: 20 5V RTN
- **8 (R) ENCODER A+**: 21 (R) MOTOR U
- **9 (L) INDEX I+**: 22 (L) COIL +
- **10 (L) ENCODER A-**: 23 (L) COIL -
- **11 (L) ENCODER B-**: 24 (L) COIL -
- **12 (L) INDEX Z+**: 25 (R) MOTOR V
- **13 NC**: 26 (R) MOTOR W

**MATERIAL:**

SMAC

**REF. NUMBER**

LAR31-017-55-CVS

**CHECKED BY:**

N. ITAKURA

5/10/2007

**APPROVED BY:**

N. ITAKURA

6/14/2007

**CONTRACT:**

1

**SHEET NUMBER:**

1 OF 1

**REVISION:**

P4

**SIGNATURE NEEDED FOR ORDER APPROVAL**

SIGN: __________________

DATE: __________________

APPROVAL NOT RECEIVED WITHIN 48 HOURS MAY AFFECT DELIVERY

**FILE NAME:** LAR31-017-5OUTLINE.idw

**HEAT TREATMENT:**

MACHINE FINISH:

PROTECTIVE FINISH:

SPEC. NUMBER:

**APPROVAL NOT RECEIVED WITHIN 48 HOURS MAY AFFECT DELIVERY**

**THETA SPECIFICATION:**

ROTARY MOTOR: TRANSICOIL DC BRUSHLESS (DIRECT DRIVE)

- PEAK TORQUE: 66 mNm @ 3 A
- TORQUE CONSTANT: 22 mNm / A
- SUPPLY VOLTAGE: 24 VDC ± 10%
- ENCODER SUPPLY VOLTAGE: 5 VDC
- ENCODER RESOLUTION: 0.018° (20K COUNTS / 360°)

**REV. DATE ECN DESCRIPTION APPROVED**

**TOLERANCE ARE:**

XX XX 0.005

XX XX 0.005

ANGULARITY ± 0.1°

C-180°/270°  0.01

RUGHNESS 0.03

EDG. BREAK 0.03 MAX

CHAMFER 0.03 MAX

**FILE SIZE:**

LAR31-017-SOUTLINE.idw

**memo:** DO NOT SCALE DWG