

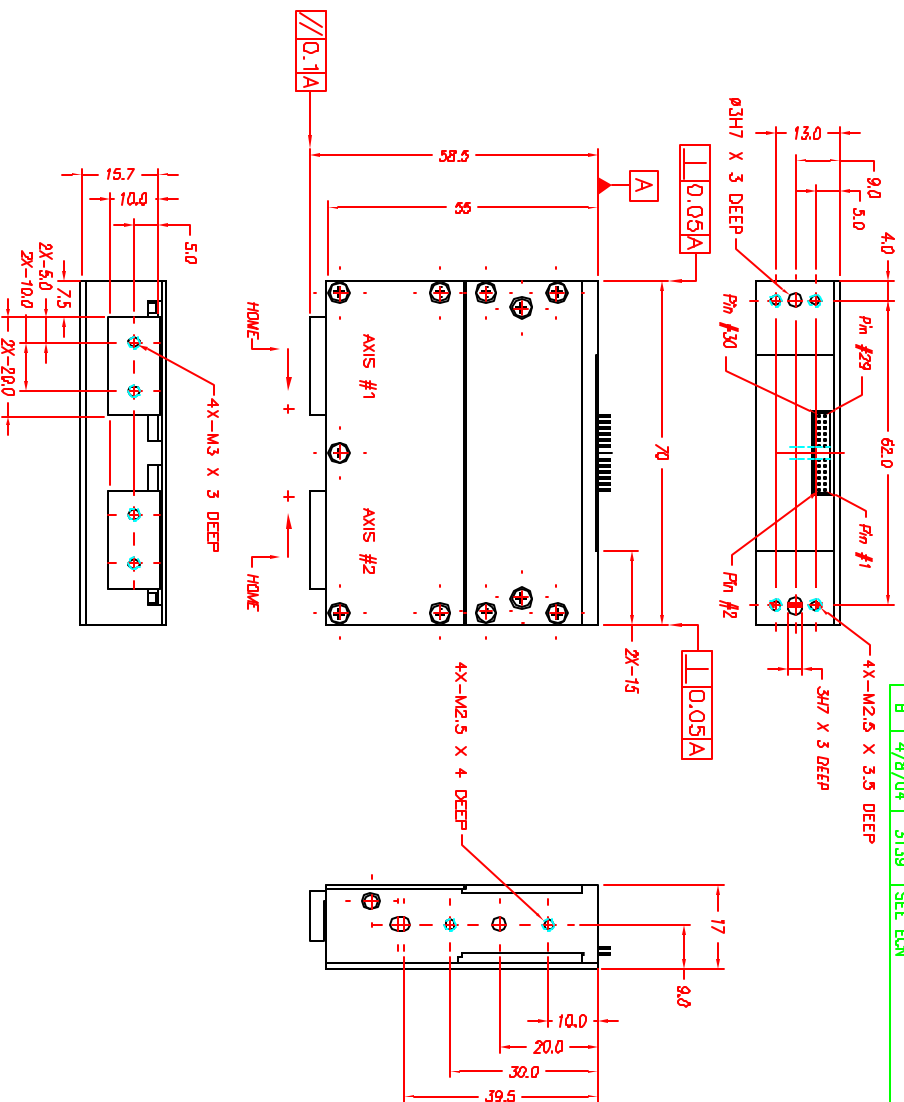
NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ALL DIMENSIONS ARE IN MM UNLESS NOTED.
2. ALL DIMENSIONS APPLY AFTER PLATING.
3. ACTUATOR SPECIFICATIONS:
 LINEAR STROKE: 5 MM (PER FINGER)
 FORCE CONSTANT: 350 GRAM/AMP (24 OR 12 VDC @1.5 AMP/COIL)
 PEAK FORCE: 500 GRAMS (PER FINGER)
 COIL DC RESISTANCE: 18 OHMS @ 22°C
 COIL INDUCTANCE: TBD MH @ 1KHz
 MAXIMUM POWER DISSIPATE TO COIL: TBD WATTS
 COIL HEAT RISE COEFFICIENT: XX%/WATT @ 22°C
 LINEAR ENCODER RESOLUTION: 5 MICRON-METER
 ENCODER ACCURACY: ±20 MICRON-METER
 ESTIMATE MOVING MASS: 20 GRAMS PER FINGER
 ESTIMATE TOTAL MASS: 250 GRAMS
 MAXIMUM ACCELERATION: 28 G (W/ X GRAMS LOAD)
 MAXIMUM OPERATING TEMPERATURE: -40°C TO +105°C
4. CONNECTOR TYPE WILL BE DETERMINE WHEN SAMPLE BUILD.
5. OPERATING TEMPERATURE: -40°C TO +105°C

SIGNATURE NEEDED FOR ORDER APPROVAL
 SIGN _____ DATE _____
 APPROVAL NOT RECEIVED WITHIN
 48 HOURS MAY AFFECT DELIVERY

CONNECTOR PIN OUT: 30 PINS

1	5V RHN	2	+5 VDC
3	(R) PH. A+	4	(R) PH. A-
5	(R) PH. B+	6	(R) PH. B-
7	(R) PH. I+	8	(R) PH. I-
9	NC	10	NC
11	(L) PH. A+	12	(L) PH. A-
13	(L) PH. B+	14	(L) PH. B-
15	(L) PH. I+	16	(L) PH. I-
17	NC	18	NC
19	NC	20	NC
21	NC	22	NC
23	COIL- (L)	24	COIL- (L)
25	COIL+ (L)	26	COIL+ (L)
27	COIL- (R)	28	COIL- (R)
29	COIL+ (R)	30	COIL+ (R)



REVISIONS				
REV	DATE	ECN	DESCRIPTION	APP
A	3/5/04	3034	INITIAL RELEASE	SMH
B	4/8/04	3139	SEE ECN	SMH

TOLERANCES ARE:		MATERIAL: ALUMINUM 6061-T6		DESIGNED BY: TDMN VU		DATE: 08/30/02		CHECKED BY:		DATE:		DRAWN BY: S. HODGMAN		DATE: 04/08/04		APPROVED BY:		DATE:		SHEET NUMBER: 1 OF 1	
X.1	± 0.50	HEAT TREAT: /		DRAWN BY: S. HODGMAN		DATE: 04/08/04		APPROVED BY:		DATE:		DRAWN BY: S. HODGMAN		DATE: 04/08/04		APPROVED BY:		DATE:		SHEET NUMBER: 1 OF 1	
X.2	± 0.1	MACHINE FINISH: /		DRAWN BY: S. HODGMAN		DATE: 04/08/04		APPROVED BY:		DATE:		DRAWN BY: S. HODGMAN		DATE: 04/08/04		APPROVED BY:		DATE:		SHEET NUMBER: 1 OF 1	
X.3	± 0.05	EDGE BREAK: 0.02 MAX		DRAWN BY: S. HODGMAN		DATE: 04/08/04		APPROVED BY:		DATE:		DRAWN BY: S. HODGMAN		DATE: 04/08/04		APPROVED BY:		DATE:		SHEET NUMBER: 1 OF 1	
X.4	± 0.02 MAX	CHAMFER: 0.02 MAX		DRAWN BY: S. HODGMAN		DATE: 04/08/04		APPROVED BY:		DATE:		DRAWN BY: S. HODGMAN		DATE: 04/08/04		APPROVED BY:		DATE:		SHEET NUMBER: 1 OF 1	
FILE NAME: GRP17-010-5		SPEC. NUMBER:		SCALE: NONE		DWG SIZE: B		PART NUMBER: GRP17-010-5		REVISION: B		DWG NUMBER: GRP17-010-5		REVISION: B		DWG NUMBER: GRP17-010-5		REVISION: B		DWG NUMBER: GRP17-010-5	