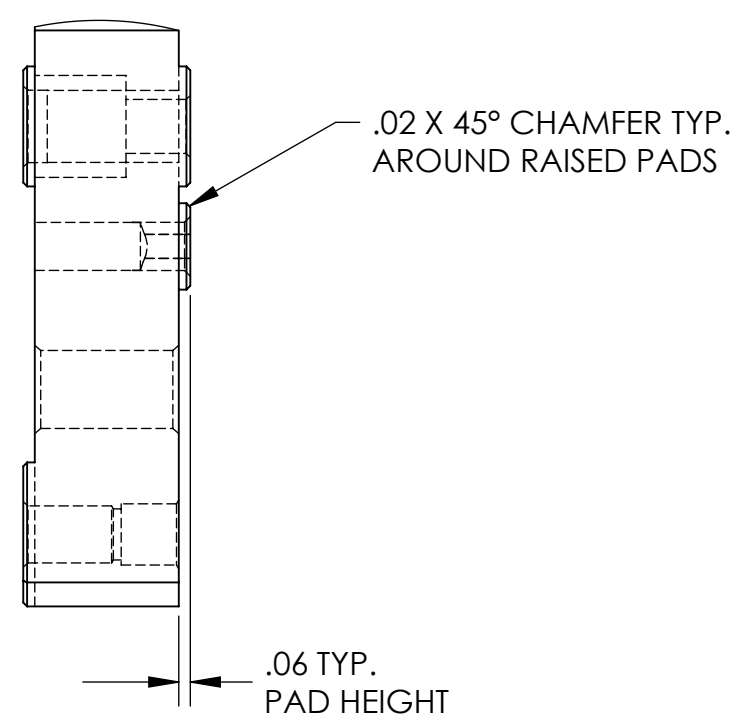
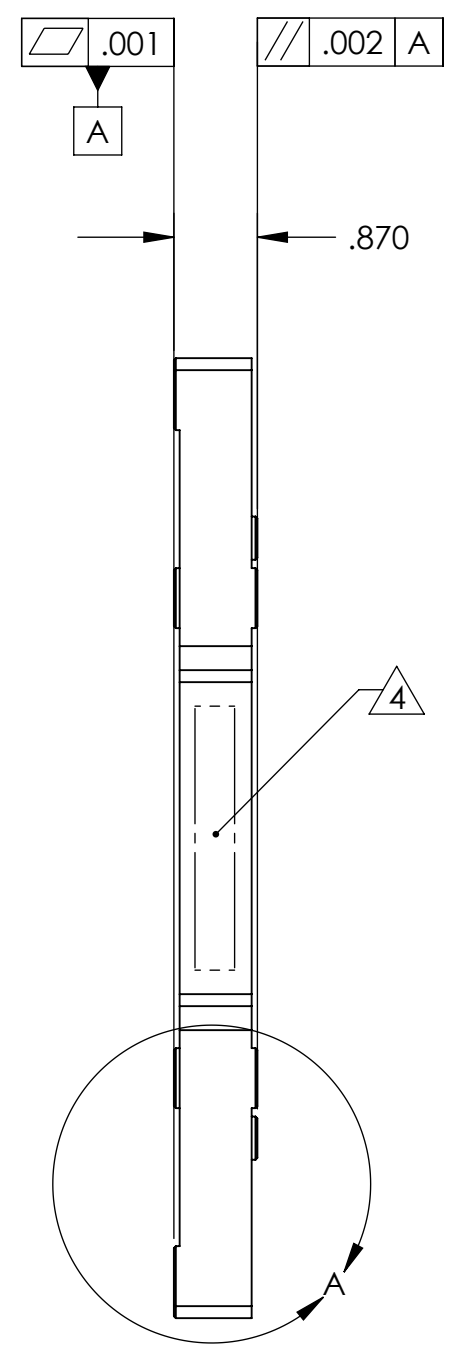
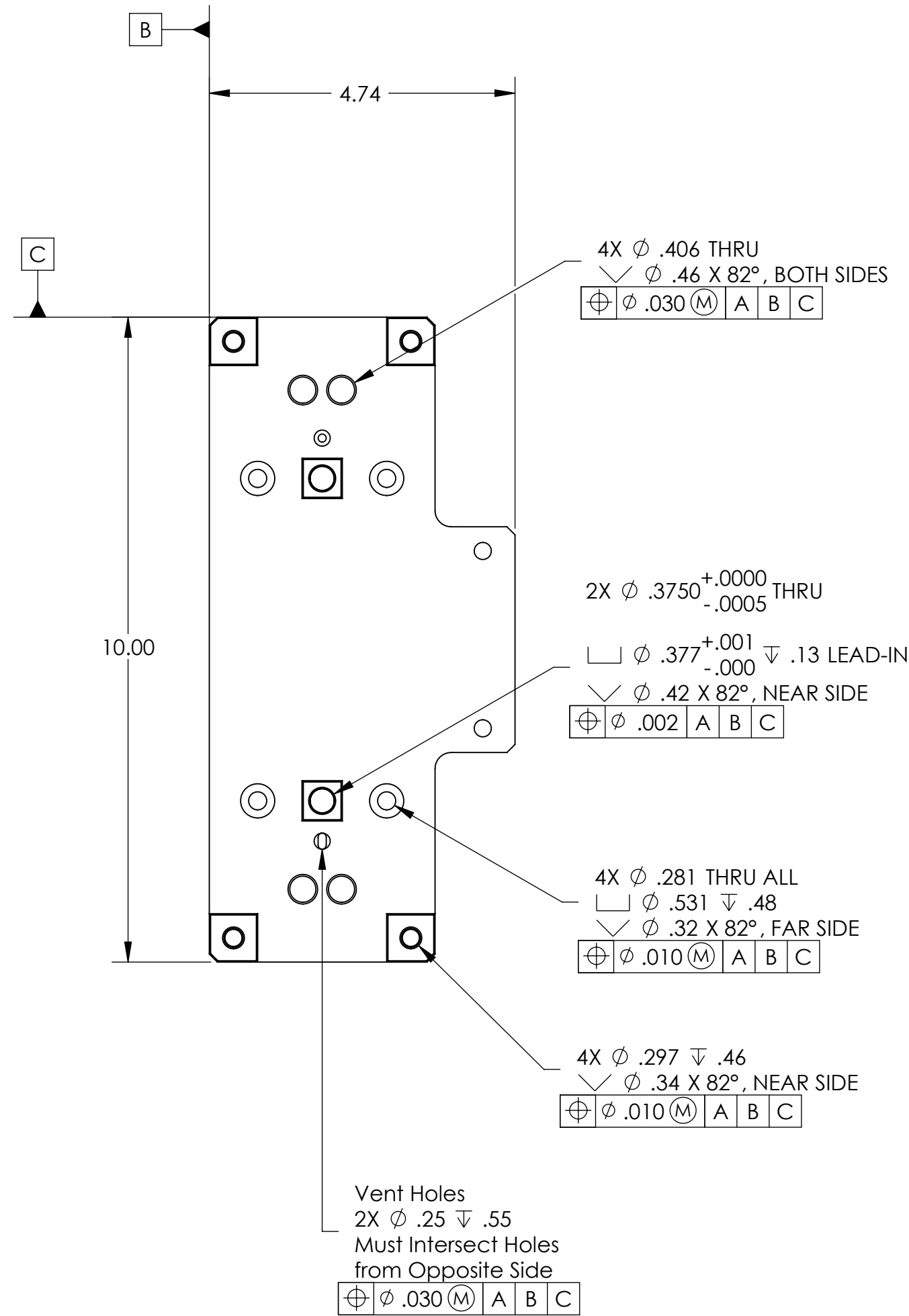
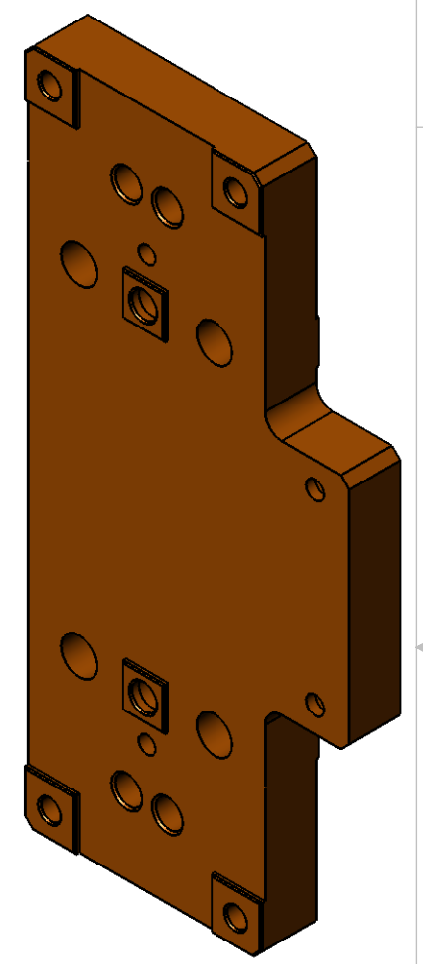
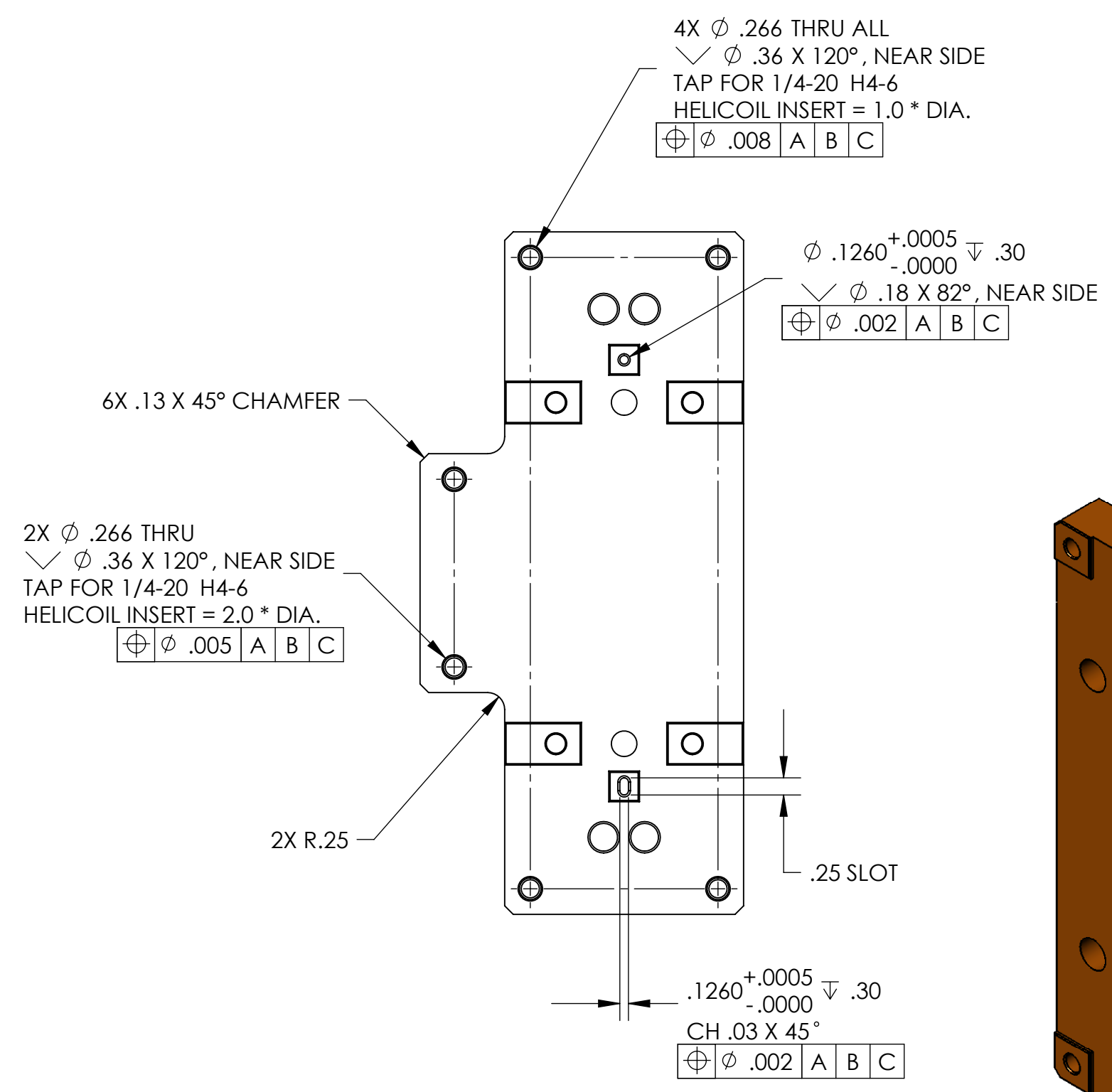


| REVISION HISTORY | | | | |
|------------------|-------------|------|------------|--|
| REV | DATE | ECO | APPROVAL | DESCRIPTION |
| V1 / D | 16 Oct 2007 | 1072 | D. Senders | Release for Enhanced LIGO. |
| V2 | 1 Apr 2009 | | A. Stein | Release for Advanced LIGO. Added chamfers and c/sinks. |



DETAIL A
SCALE 1 : 1



- MACHINING NOTES:
- 1) MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. ABRASIVE REMOVAL TECHNIQUES (OTHER THAN DRESSED BLANCHARD GRINDING) ARE NOT ACCEPTABLE.
 - 2) ALL MACHINING FLUIDS MUST BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE, AND SILICONE, SUCH AS CINCINNATI MILACRON CIMTECH 410.
 - 3) THOROUGHLY CLEAN PART TO REMOVE ALL OIL, GREASE, DIRT, AND CHIPS.
 - 4) WHERE INDICATED, MECHANICALLY SCRIBE, STAMP, OR ENGRAVE THE FOLLOWING INFORMATION AS SHOWN BELOW: **PART NUMBER-REVISION** (AND **TYPE** IF INDICATED), FOLLOWED ON THE NEXT LINE WITH A UNIQUE 3-DIGIT **SERIAL NUMBER** STARTING AT 001 FOR THE FIRST PART AND INCREMENTING THEREAFTER. USE 0.38" TALL CHARACTERS UNLESS PART SIZE DICTATES SMALLER.
- D071120-V2
S/N - ###
- 5) DO NOT INSTALL HELI-COILS UNTIL POST-CLEANING.
- POST-MACHINING NOTES:
- P1) CLEAN TO LIGO STANDARDS, CLASS A.
- P2) INSTALL CLASS-A CLEAN HELI-COILS. BREAK OFF AND REMOVE TANGS. CHECK THAT END OF EACH INSERT REMAINS ENGAGED IN THREAD AFTER TANG REMOVAL.

| HELI-COIL TABLE (See Note 5) | | | | |
|---------------------------------|----------------|-------------|-----------------------|------|
| Item No. | Thread Size | Material | Heli-Coil P/N 1185... | Qty. |
| 1 | 1/4"-20 x .25" | Nitronic 60 | -4EN250 | 4 |
| 2 | 1/4"-20 x .50" | Nitronic 60 | -4EN500 | 2 |

| APPROVALS | DATE |
|----------------------------------|-------------------|
| ENGINEERING (HPD): D. Senders | 7/31/2007 |
| QUALITY (HPD): C. Danaher | 7/31/2007 |
| MATERIAL: | 6061-T6 Al |
| FINISH: | None |
| MASS: | 2.8 lbs |

| UNLESS OTHERWISE SPECIFIED: | | |
|---|--|------------|
| DIMENSIONS ARE IN INCHES DECIMAL TOLERANCES: .XX ±.015 .XXX ±.005 | | |
| ANG TOL: ± 1° SURFACE ROUGHNESS: 4.3 | | |
| REMOVE ALL SHARP EDGES. LEAVE .005 X 45° MIN CHAMFER, OR .005 MIN RADIUS. | | |
| THIS PRINT & THE EMBEDDED CAD MODEL ARE THE DOCUMENTATION OF RECORD. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS IN THE MODEL ARE BASIC, WITH TOLERANCES GIVEN BY: | | |
| | | .010 A B C |

| | | | |
|--|-------------------------------|---------------|---------------------------|
| ORIGINAL DESIGN BY: | High Precision Devices | MODIFIED BY: | LIGO |
| 1448 Valtec Lane, Suite C, Boulder, Colorado 80301 Phone: (303) 447-2558 Fax: (303) 447-2548 Web Site: www.hpd-online.com | | | |
| DESCRIPTION: | Actuator Magnet Mount | | |
| P/N: | D071120 | CONFIG: | - |
| CAD FILE NAME: | D071120_Actuator_Magnet_Mount | | |
| PROJECT: | HAM ISI, Advanced LIGO | | |
| SIZE | SCALE: 1:2 | DRAWN BY: | Dave Senders (HPD) |
| C | SHEET 1 OF 1 | DATE PRINTED: | 4/1/2009 |
| | | REV | V2 |