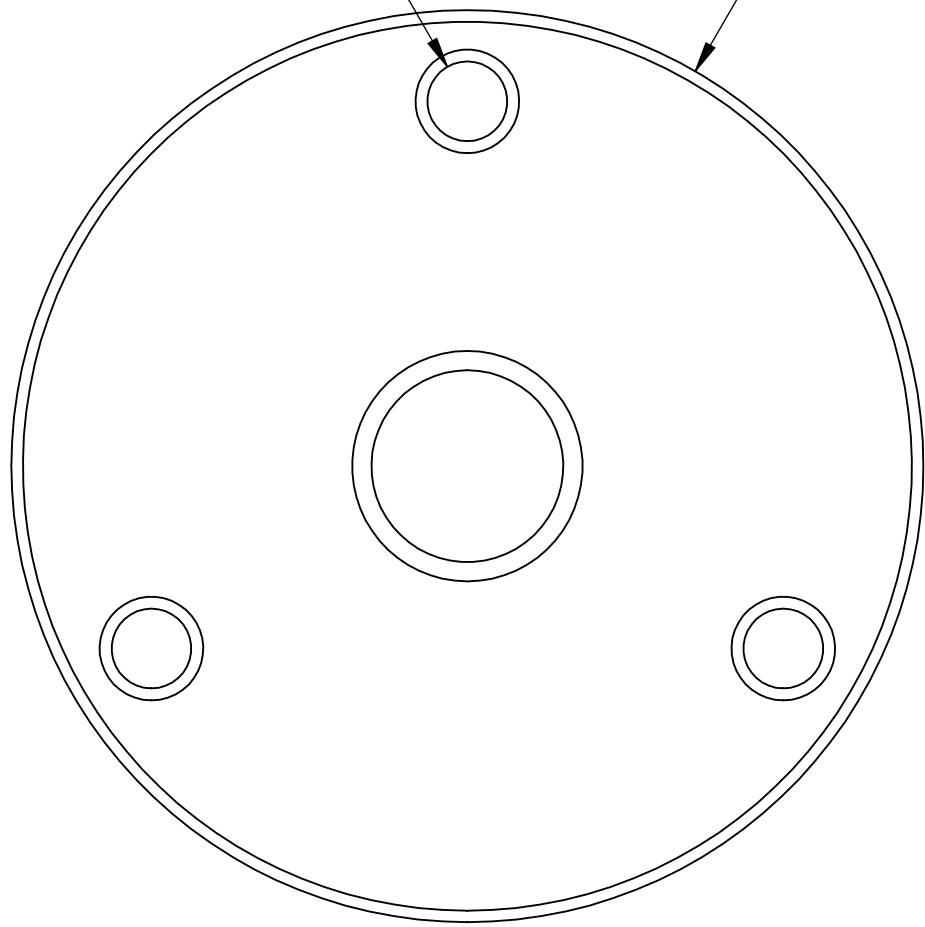


REVISION HISTORY				
REV	DATE	ECO	APPROVAL	DESCRIPTION
V1 / C	21 Jun 2007	1065	D. Senders	Release for Enhanced LIGO.
V2	14 Apr 2009		A. Stein	Release for Advanced LIGO. Added 3x oversized vent holes. Added c'sink to far-side of pin hole.

3X  $\phi$  .173 THRU ALL  
 $\surd$   $\phi$  .27 X 120°, NEAR SIDE  
 TAP FOR #8-32 H4-6  
 HELICOIL INSERT = 2.0 \* DIA.

$\phi$ .010	A	B
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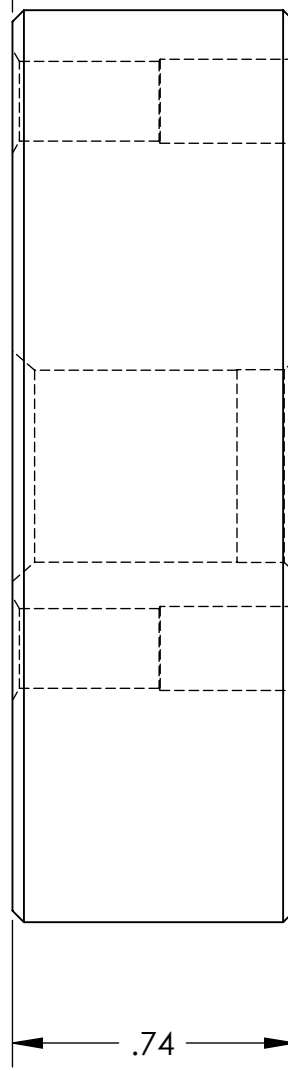
$\phi$  2.375 $\pm$ .010



$\surd$ .0005	A
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2X .03 X 45° CHAMFER

.74



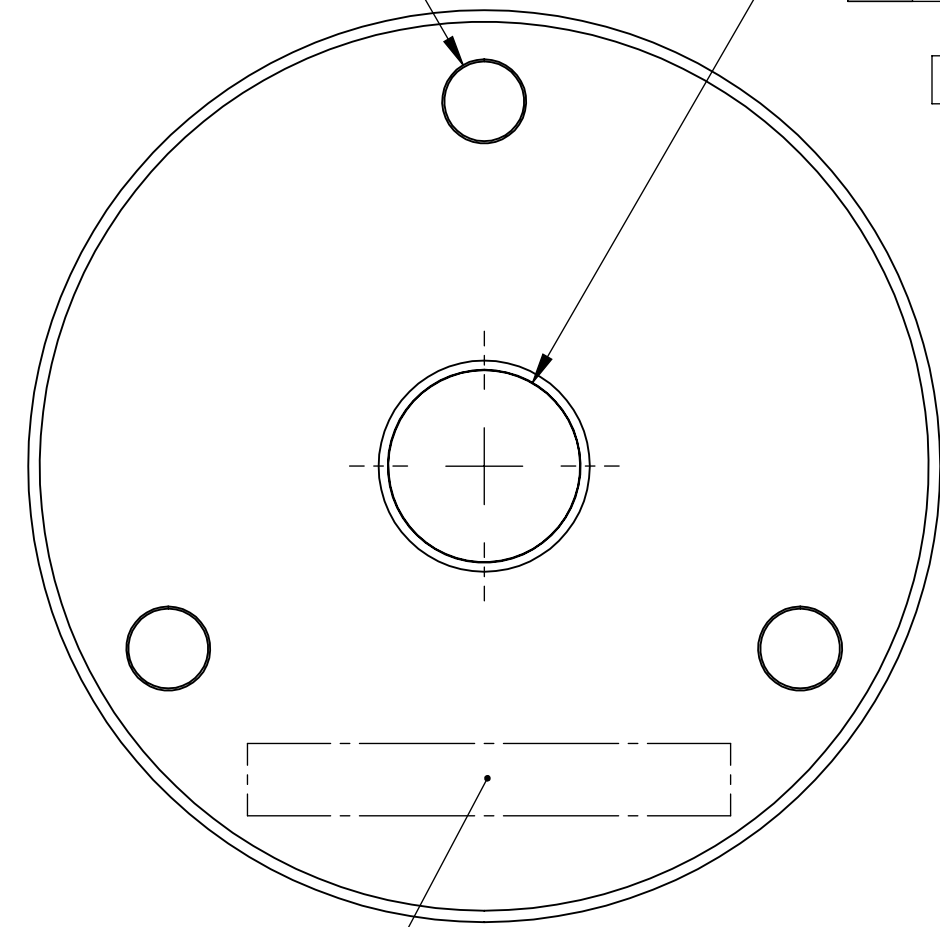
Vent Hole  
 3X  $\phi$  .219  $\surd$  .35  
 $\phi$  .015 (M) A B

$\phi$  .4995<sup>+.0000</sup><sub>-.0005</sub> THRU ALL

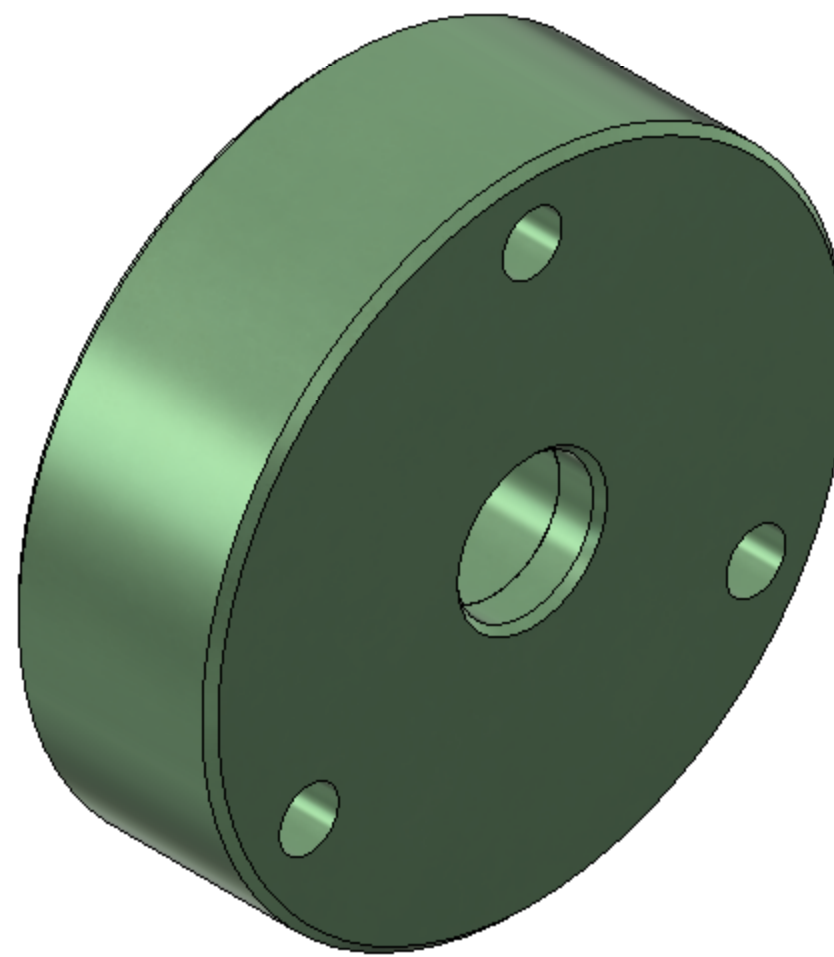
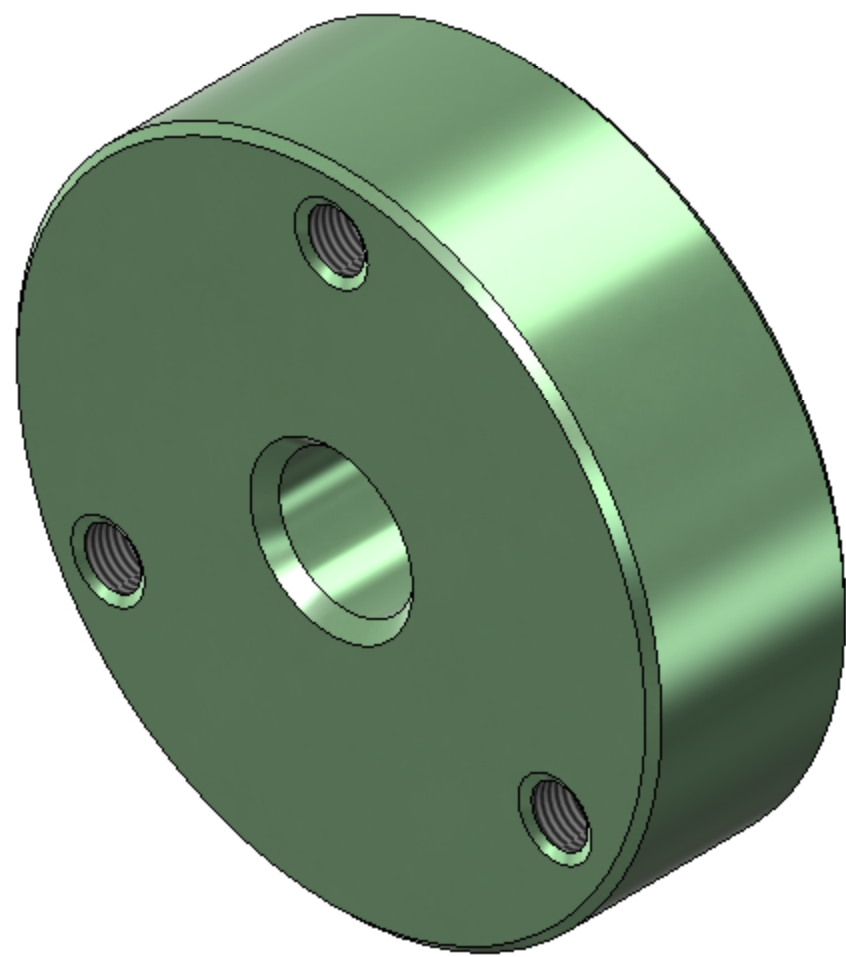
$\surd$   $\phi$  .502<sup>+.001</sup><sub>-.000</sub>  $\surd$  .15 LEAD-IN  
 $\surd$   $\phi$  .55 X 82°, NEAR SIDE  
 $\surd$   $\phi$  .60 X 82°, FAR SIDE

.0005	A
-------	---

B



4



MANUFACTURING NOTES:

- MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. ABRASIVE REMOVAL TECHNIQUES (OTHER THAN DRESSED BLANCHARD GRINDING) ARE NOT ACCEPTABLE.
- ALL MACHINING FLUIDS MUST BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE, AND SILICONE, SUCH AS CINCINNATI MILACRON CIMTECH 410.
- THOROUGHLY CLEAN PART TO REMOVE ALL OIL, GREASE, DIRT, AND CHIPS.
- 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.  
 D071166-V2  
 S/N - ###
- DO NOT INSTALL HELI-COILS UNTIL POST-CLEANING.

POST-MANUFACTURING NOTES:

- CLEAN TO LIGO STANDARDS, CLASS A (PER E0900047 AND E960022).
- 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	#8-32 x .33"	Nitronic 60	-2EN382	3

APPROVALS	DATE
D. Senders	5/22/2007
C. Danaher	5/22/2007
MATERIAL:	<b>6061-T6 Al</b>
FINISH:	<b>None</b>
MASS:	<b>0.3 lbs</b>

**UNLESS OTHERWISE SPECIFIED:**  
 DIMENSIONS ARE IN INCHES  
 DECIMAL TOLERANCES:  
 .XX ±.015 .XXX ±.005  
 ANG TOL: ± 1° SURFACE ROUGHNESS:  
 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:

$\surd$ .010	A	B
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ORIGINAL DESIGN BY:	MODIFIED BY:
<b>High Precision Devices</b>	<b>LIGO</b>
1448 Valtec Lane, Suite C, Boulder, Colorado 80301 Phone: (303) 447-2558 Fax: (303) 447-2548 Web Site: www.hpd-online.com	
DESCRIPTION:	<b>Sensor Target Body</b>
P/N: <b>D071166</b>	CONFIG: -
CAD FILE NAME: D071166_Sensor_Target_Body	
PROJECT: HAM ISI, Advanced LIGO	
SIZE	SCALE: <b>2:1</b>
<b>C</b>	DRAWN BY: <b>Dave Senders (HPD)</b>
SHEET 1 OF 1	DATE PRINTED: <b>4/14/2009</b>
REV	<b>V2</b>