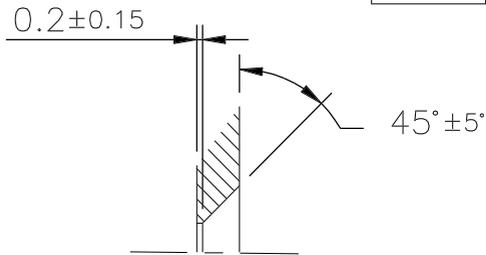


DWG. No. B0235

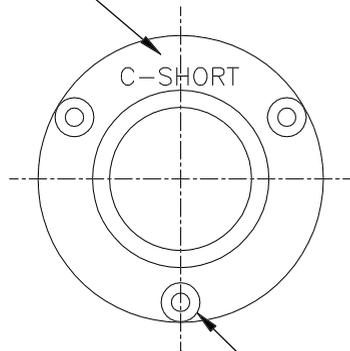
DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



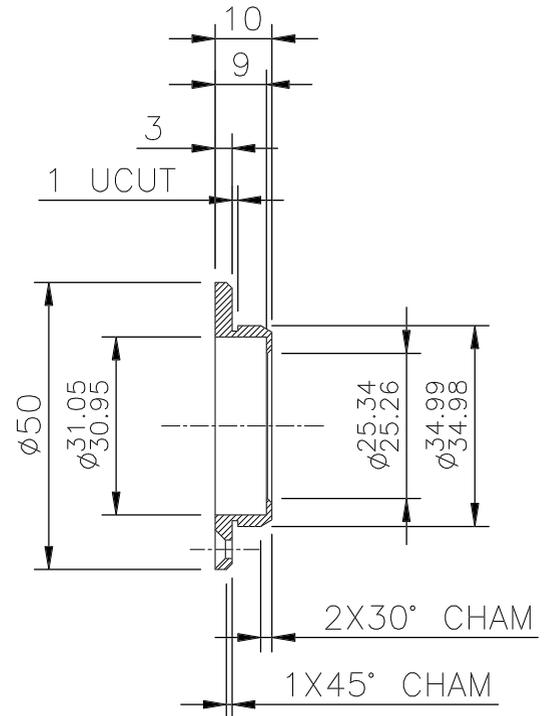
DETAILS OF TYPICAL KNIFE  
EDGE REQUIRED. SCALE 5:1

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SUBJECT TO CHANGE  
20/07/98  
PRELIMINARY ISSUE: 1  
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PROCUREMENT OR MANUFACTURE.

ENGRAVE TEXT  
3mm HIGH



3 HOLES  $\phi 3.2$  CSK AT  
90° EQUISPACED ON  
A 43 PCD AS SHOWN



REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	20/07/98
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED

DIMENSIONS ARE IN mm  
GENERAL TOLERANCE:  $\pm 0.1$   
ANGULAR TOLERANCE:  $\pm$   
SURFACE FINISH: (MICRONS) ✓  
REMOVE ALL SHARP EDGES

DO NOT SCALE THIS DRAWING

MATERIAL  
ALUMINUM ALLOY  
BS1470 6082 TF

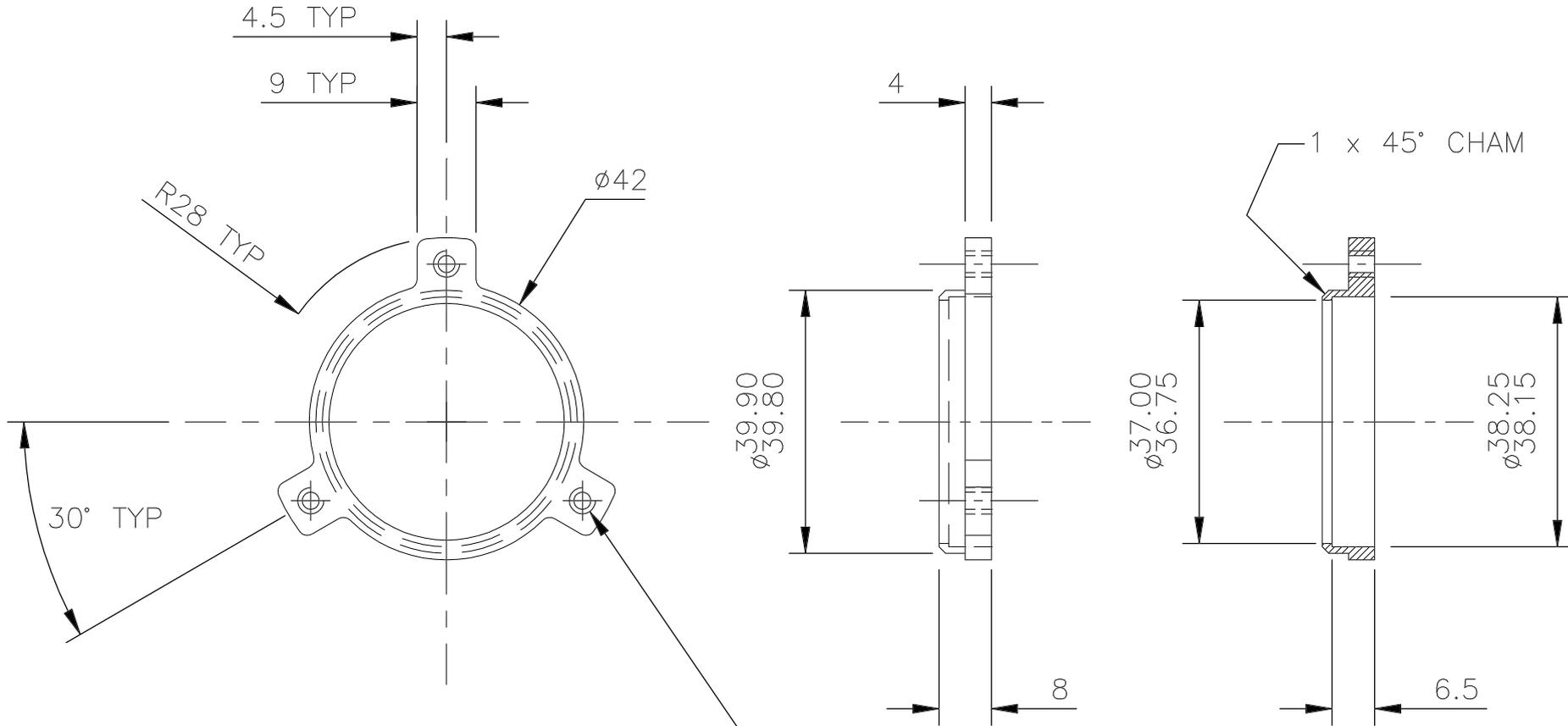
FINISH  
CLEAN

USED ON  
B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE		C-SHORT BAND PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY			
ORIGINAL SHEET A3	LOCATION N/A	DWG. No. B0235		REV 1	
ORIGINAL SCALE 1:1				SHEET 1 OF 1	







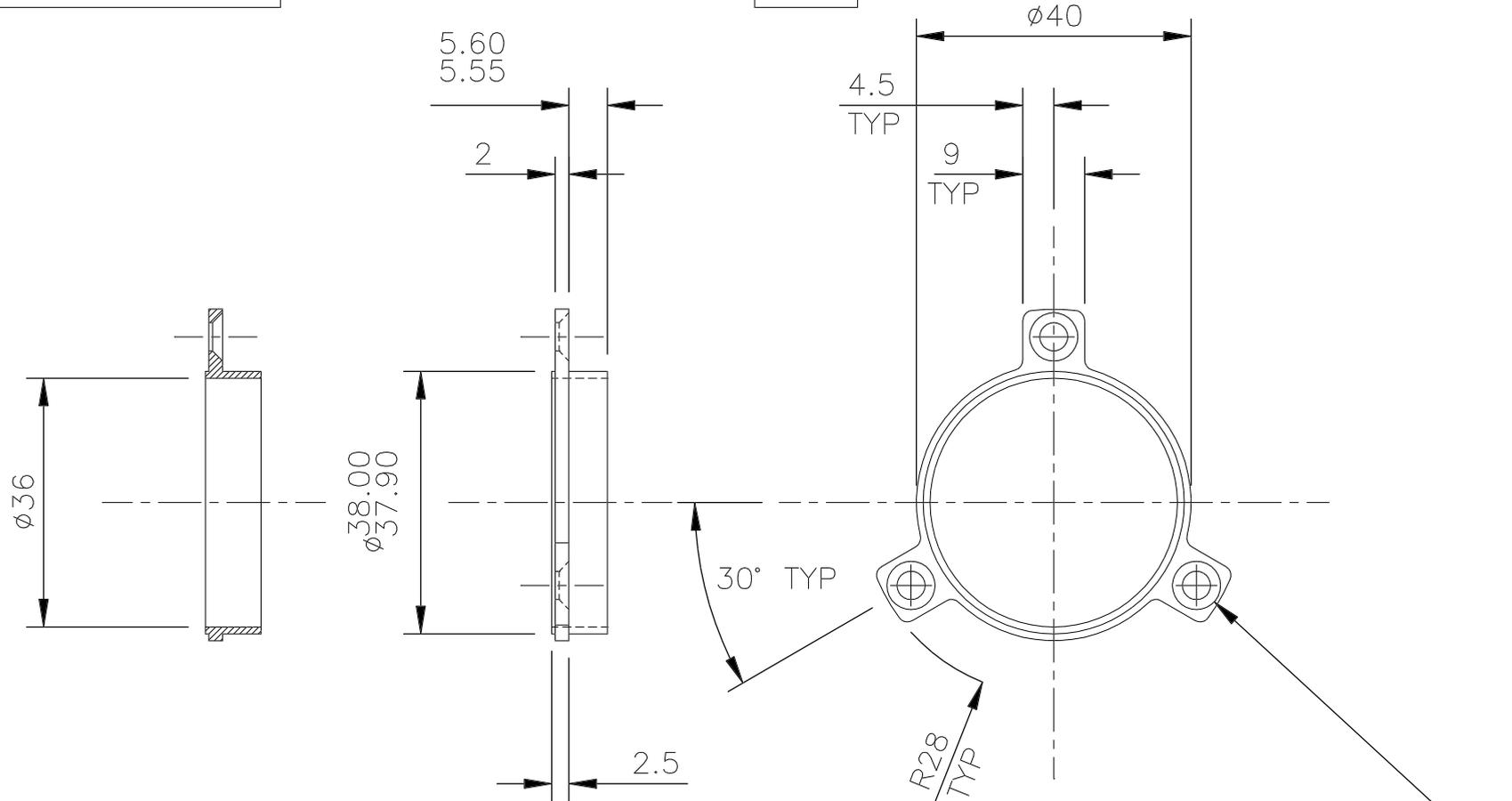
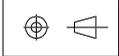
NOTES

1. ALL FILLET RADII TO BE R1.5

3 OFF HOLES HELICOILED THROUGH M4 EQUI-SPACED ON A 48 P.C.D.

**PRELIMINARY**  
 FOR INFORMATION ONLY  
 SUBJECT TO CHANGE  
 29/04/98  
 PRELIMINARY ISSUE: 5  
 DO NOT USE THIS DRAWING FOR  
 PROCUREMENT OR MANUFACTURE.

							UNLESS OTHERWISE STATED	MATERIAL ALUMINIUM ALLOY BS 1470 6082 TF	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
							DIMENSIONS ARE IN mm	FINISH NATURAL	TITLE FILTER HOLDER – BOTTOM FILTER SUB-ASSEMBLY			
							GENERAL TOLERANCE: ± 0.1	USED ON B0103	ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0131	REV 1
							ANGULAR TOLERANCE: ±					
							SURFACE FINISH: 1.6/ (MICRONS)					
							REMOVE ALL SHARP EDGES					
1	PRELIMINARY ISSUE	R.M.T	N/A	N/A	N/A	27.08.97						
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE						
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING	ORIGINAL SCALE	1:1	SHEET 1 OF 1		



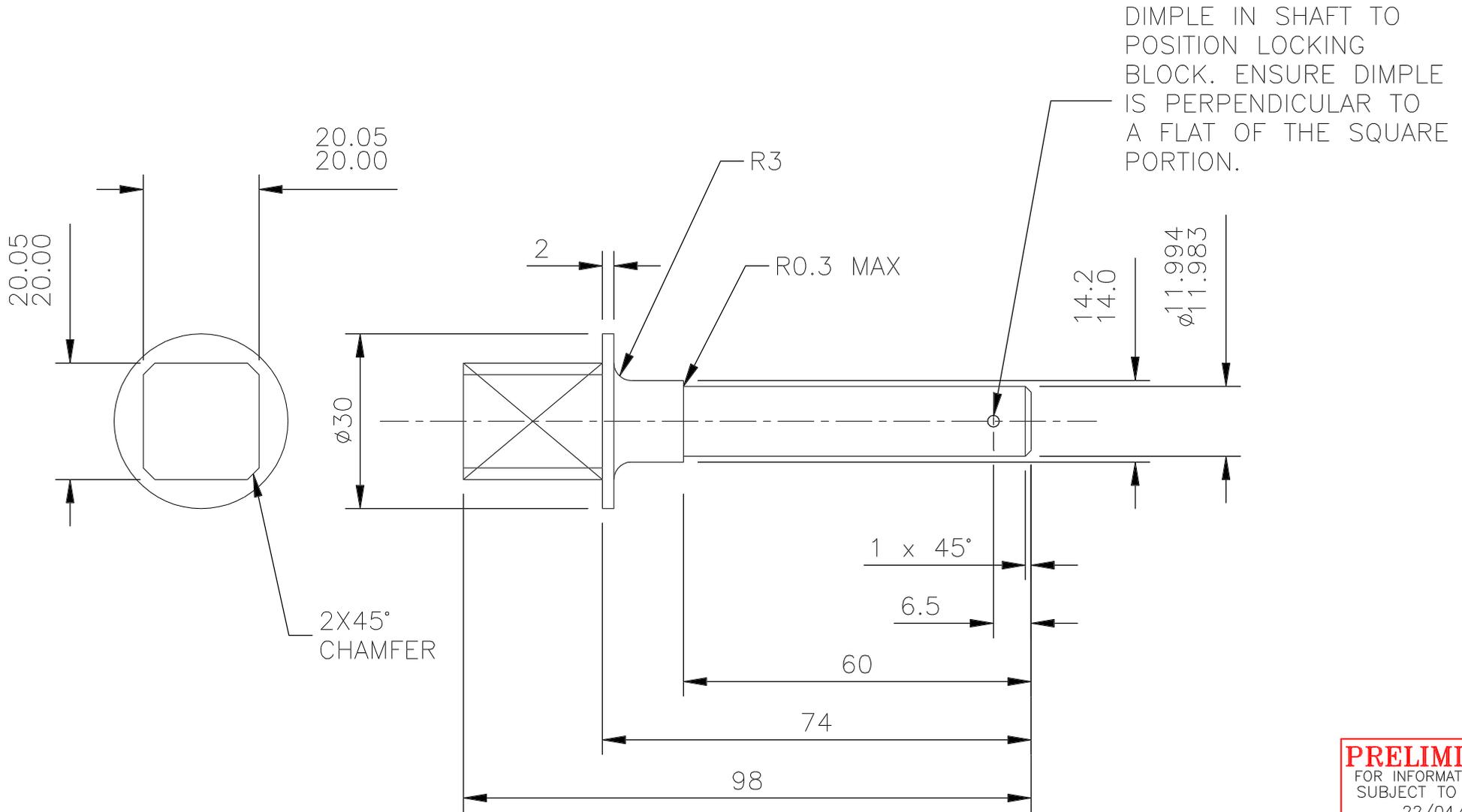
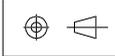
NOTE  
ALL FILLET RADII TO BE R1.5

3 OFF HOLES DRILL THRO'  $\phi 4.1$   
COUNTERSINK  $\phi 7 \times 90^\circ$   
EQUI-SPACED ON A 48 P.C.D.

**PRELIMINARY**  
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SUBJECT TO CHANGE  
05.11.97  
PRELIMINARY ISSUE: 3  
DO NOT USE THIS DRAWING FOR  
PROCUREMENT OR MANUFACTURE.

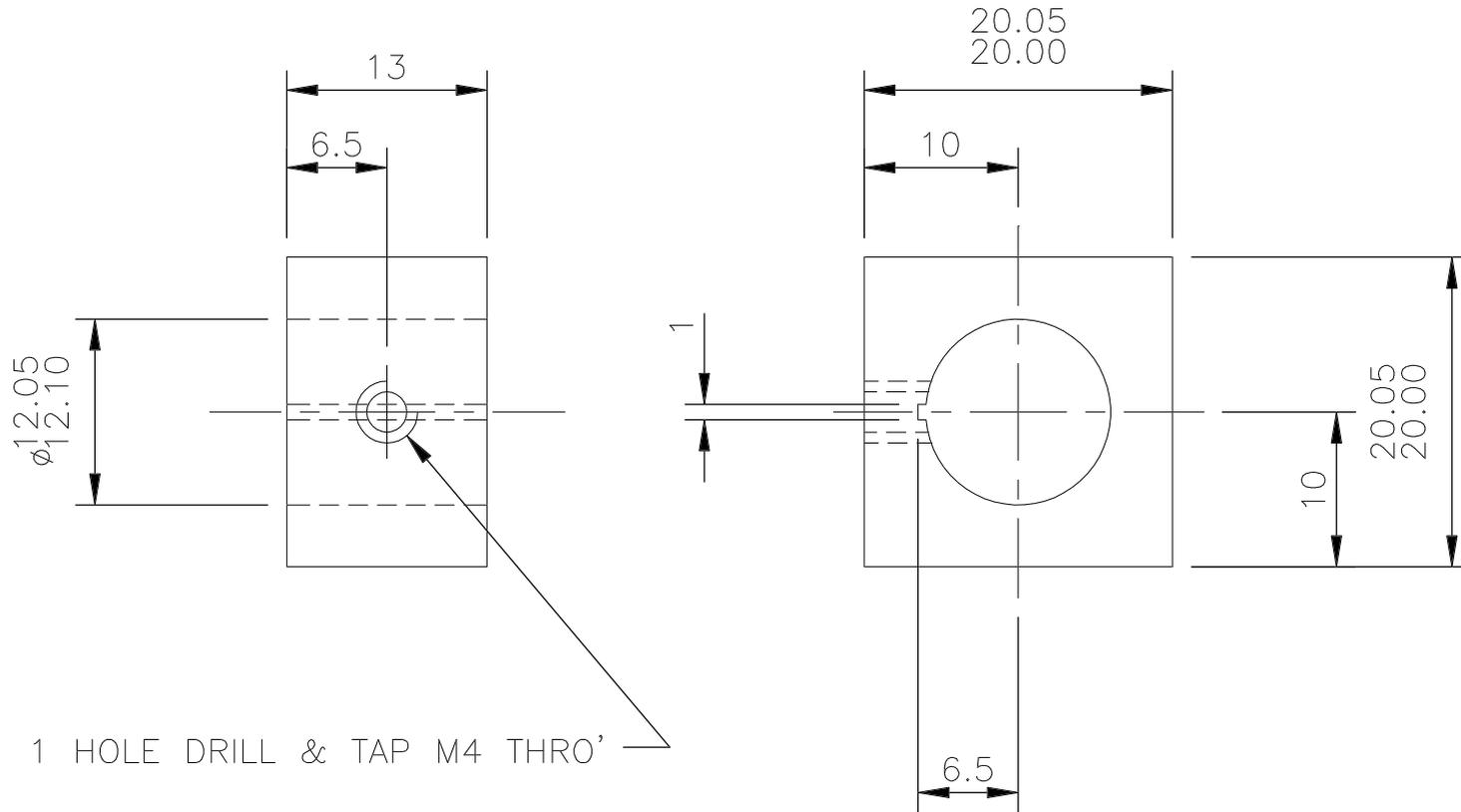
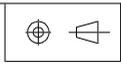
							UNLESS OTHERWISE STATED	MATERIAL ALUMINIUM ALLOY BS 1470 6082 TF	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
							DIMENSIONS ARE IN mm	FINISH NATURAL	TITLE FILTER HOLDER – TOP (2ND WHEEL) FILTER SUB-ASSEMBLY			
							GENERAL TOLERANCE: $\pm 0.1$	USED ON B0103	ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0132	REV 1
							ANGULAR TOLERANCE: $\pm$					
							SURFACE FINISH: 1.6/ (MICRONS)					
							REMOVE ALL SHARP EDGES					
1	PRELIMINARY ISSUE	R.M.T	N/A	N/A	N/A	28.08.97						
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE						
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING	ORIGINAL SCALE	1:1	SHEET 1 OF 1		





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 FOR INFORMATION ONLY  
 SUBJECT TO CHANGE  
 22/04/98  
 PRELIMINARY ISSUE: 6  
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 PROCUREMENT OR MANUFACTURE.

							UNLESS OTHERWISE STATED	MATERIAL STAINLESS STEEL BS 970 304 S11	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
							DIMENSIONS ARE IN mm	FINISH NATURAL	TITLE FILTER RING SHAFT FILTER SUB-ASSEMBLY			
							GENERAL TOLERANCE: ± 0.1	USED ON B0103	ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0134	REV 1
							ANGULAR TOLERANCE: ±					
							SURFACE FINISH: 1.6/ (MICRONS)					
							REMOVE ALL SHARP EDGES					
1	PRELIMINARY ISSUE	R.M.T	N/A	N/A	N/A	09.09.97						
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE						
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING	ORIGINAL SCALE	1:1		SHEET 1 OF 1	



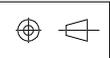
1 HOLE DRILL & TAP M4 THRO'

**PRELIMINARY**  
 FOR INFORMATION ONLY  
 SUBJECT TO CHANGE  
 05.11.97  
 PRELIMINARY ISSUE: 4  
 DO NOT USE THIS DRAWING FOR  
 PROCUREMENT OR MANUFACTURE.

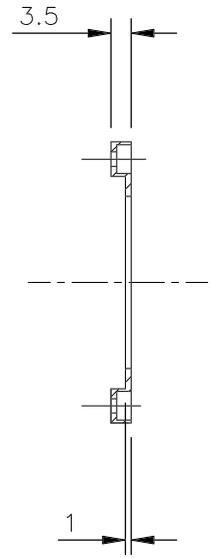
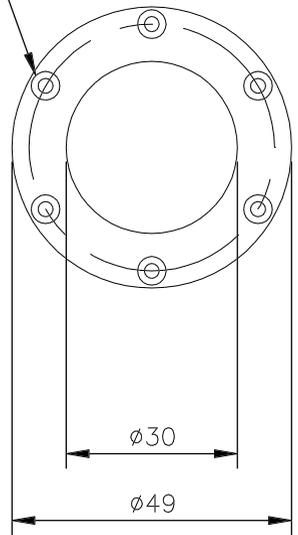
							UNLESS OTHERWISE STATED	MATERIAL STAINLESS STEEL BS 970 304 S11	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM 			
							DIMENSIONS ARE IN mm	FINISH NATURAL	TITLE SHAFT LOCKING BLOCK FILTER SUB-ASSEMBLY			
							GENERAL TOLERANCE: ± 0.1	USED ON B0103	ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0135	REV 1
							ANGULAR TOLERANCE: ±		ORIGINAL SCALE 2:1		SHEET 1 OF 1	
							SURFACE FINISH: 1.6/ (MICRONS)					
							REMOVE ALL SHARP EDGES					
1	PRELIMINARY ISSUE	r.m.t	N/A	N/A	N/A	09.09.97						
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE						
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING					

DWG. No. B0136

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



6 HOLES  $\phi 2.6$  C'BORE  
TO  $\%5.0 \times 2.5$  DP EQUI-  
SPACED ON A 43 PCD



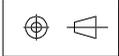
**PRELIMINARY**  
FOR INFORMATION ONLY  
SUBJECT TO CHANGE  
26/1/99  
PRELIMINARY ISSUE: 5  
DO NOT USE THIS DRAWING FOR  
PROCUREMENT OR MANUFACTURE.

REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY ISSUE	R.M.T	N/A	N/A	N/A	04.09.97
ISSUE DESCRIPTION						

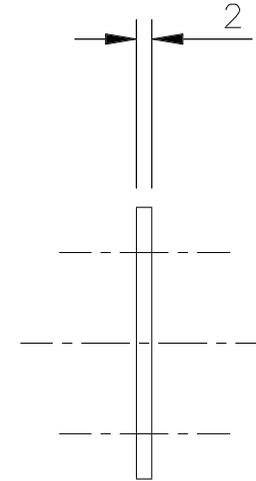
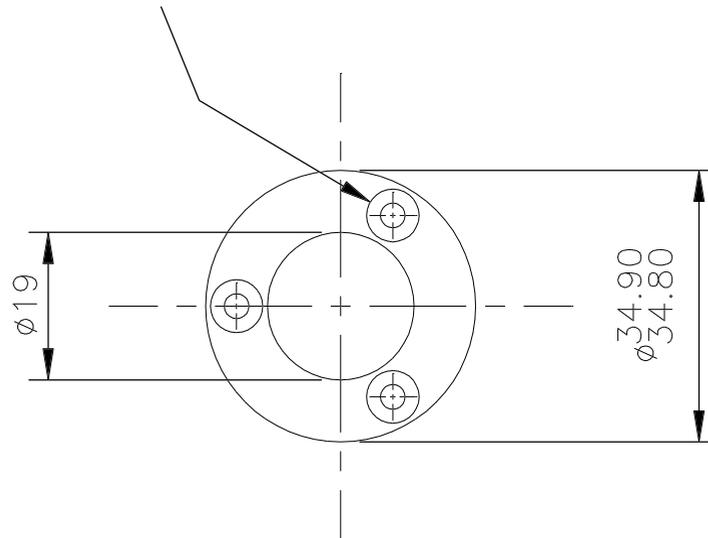
UNLESS OTHERWISE STATED  
DIMENSIONS ARE IN mm  
GENERAL TOLERANCE:  $\pm 0.1$   
ANGULAR TOLERANCE:  $\pm$   
SURFACE FINISH:  (MICRONS)  
REMOVE ALL SHARP EDGES  
DO NOT SCALE THIS DRAWING

MATERIAL  
ALUMINIUM ALLOY  
BS147 6082 TF  
FINISH  
NATURAL  
USED ON  
B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE		BEARING KEEP PLATE FILTER SUB-ASSEMBLY			
ORIGINAL SHEET A3	LOCATION N/A	DWG. No. B0136		REV 1	
ORIGINAL SCALE	1:1	SHEET		1	OF 1

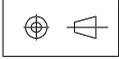


3 HOLES DRILL THRO'  $\phi 3.2$   
 COUNTERSINK  $\phi 5 \times 90^\circ$   
 EQUI-SPACED AS SHOWN  
 ON A 27 P.C.D.

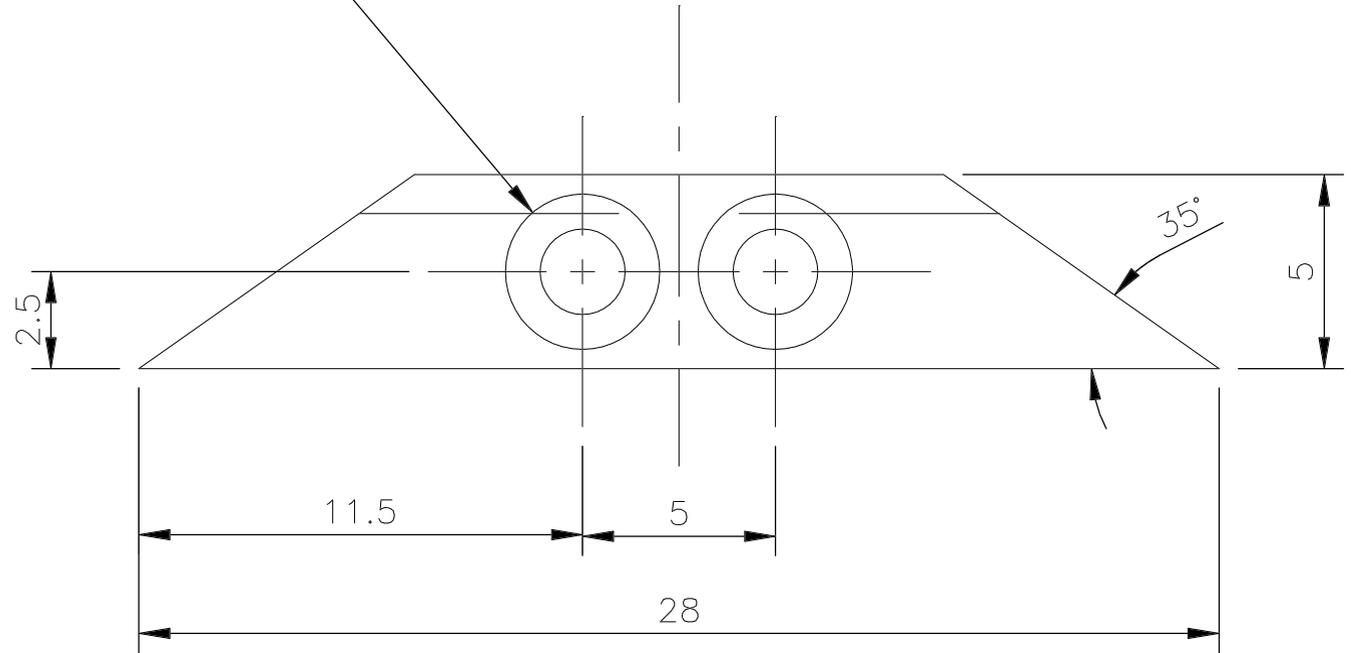
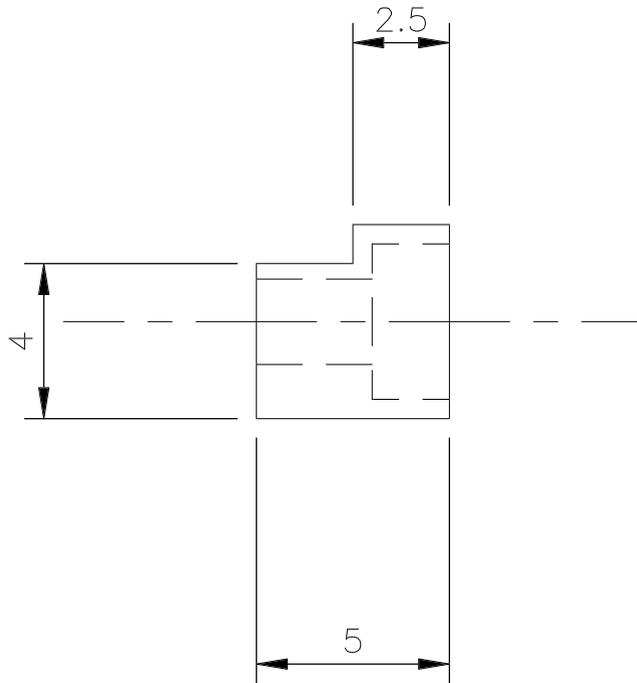


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 SUBJECT TO CHANGE  
 05.11.97  
 PRELIMINARY ISSUE: 4  
 DO NOT USE THIS DRAWING FOR  
 PROCUREMENT OR MANUFACTURE.

							UNLESS OTHERWISE STATED	MATERIAL ALUMINIUM ALLOY BS 1470 6082 TF	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM 			
							DIMENSIONS ARE IN mm	FINISH NATURAL	TITLE BEARING END PLATE FILTER SUB-ASSEMBLY			
							GENERAL TOLERANCE: $\pm 0.1$	USED ON B0103	ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0137	REV 1
							ANGULAR TOLERANCE: $\pm$					
							SURFACE FINISH: 1.6/ (MICRONS)					
							REMOVE ALL SHARP EDGES					
1	PRELIMINARY ISSUE	R.M.T	N/A	N/A	N/A	29.08.97						
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE						
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING	ORIGINAL SCALE	1:1	SHEET 1 OF 1		



2 HOLES DRILL THRO'  $\phi 2.2$   
COUNTERBORE  $\phi 4 \times 2$  DEEP



REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY ISSUE	R.M.T	N/A	N/A	N/A	16.09.97
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED

DIMENSIONS ARE IN mm

GENERAL TOLERANCE:  $\pm 0.1$

ANGULAR TOLERANCE:  $\pm$

SURFACE FINISH: 1.6/  
(MICRONS)

REMOVE ALL SHARP EDGES

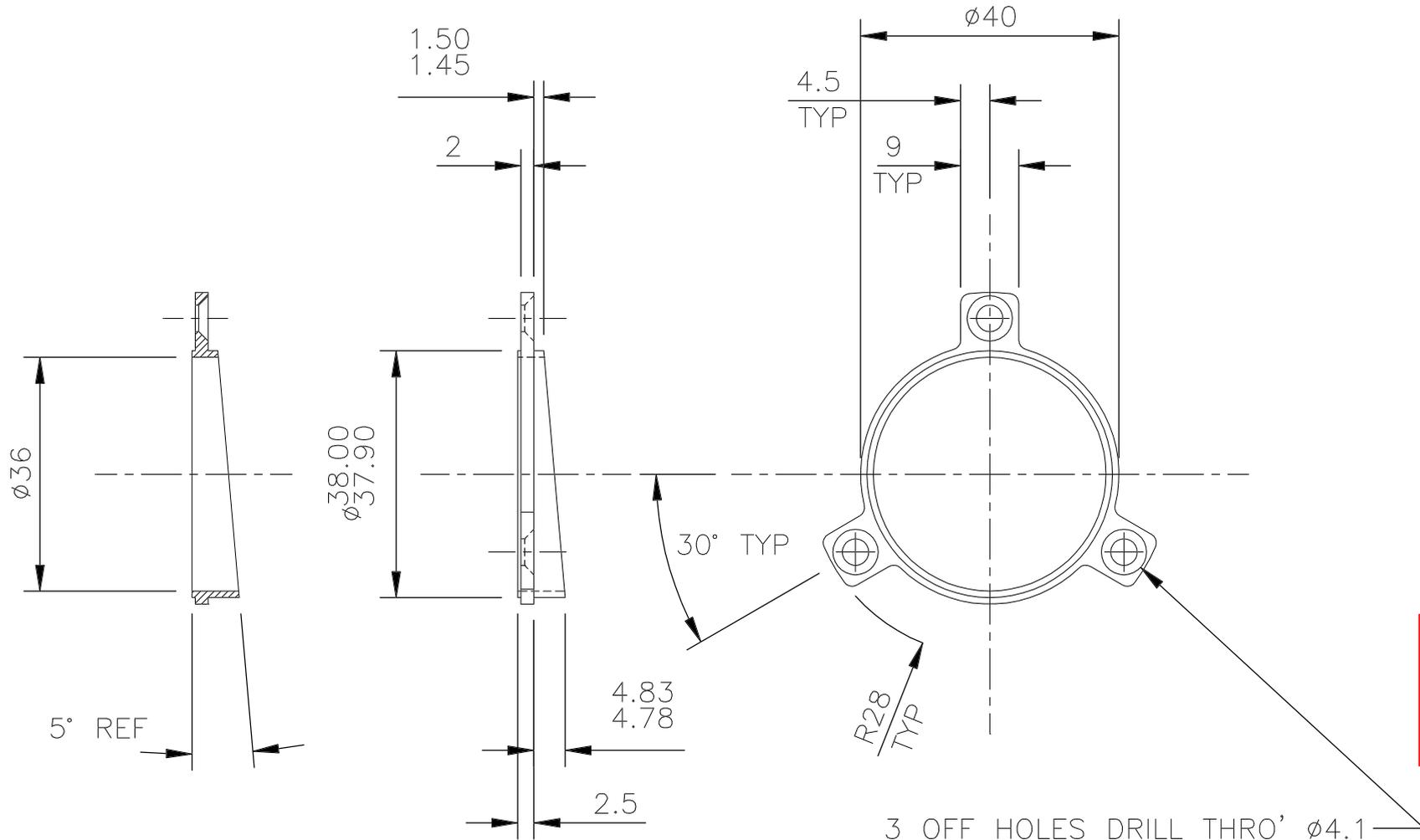
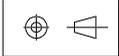
DO NOT SCALE THIS DRAWING

MATERIAL  
ALUMINIUM ALLOY  
BS 1470 6082 TF

FINISH  
NATURAL

USED ON  
B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE INDEX FINGER FILTER SUB-ASSEMBLY					
ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0138		REV 1	
ORIGINAL SCALE 5:1				SHEET 1 OF 1	



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 29/04/98  
 PRELIMINARY ISSUE: 6  
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 PROCUREMENT OR MANUFACTURE.

**NOTE**  
 ALL FILLET RADII TO BE R1.5

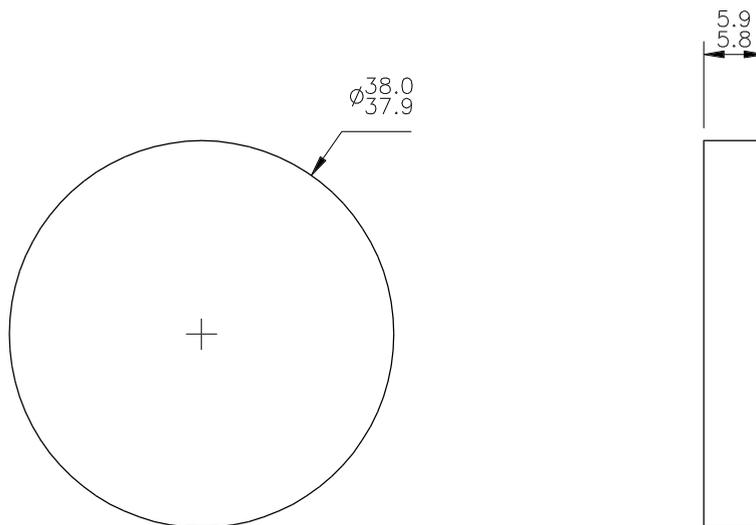
3 OFF HOLES DRILL THRO'  $\phi 4.1$   
 COUNTERSINK  $\phi 7 \times 90^\circ$   
 EQUI-SPACED ON A 48 P.C.D.

							UNLESS OTHERWISE STATED	MATERIAL ALUMINIUM ALLOY BS 1470 6082 TF	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
							DIMENSIONS ARE IN mm	FINISH NATURAL	TITLE FILTER HOLDER – TOP (1ST WHEEL) FILTER SUB-ASSEMBLY			
							GENERAL TOLERANCE: $\pm 0.1$	USED ON B0103	ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0139	REV 1
							ANGULAR TOLERANCE: $\pm$					
							SURFACE FINISH: 1.6/ (MICRONS)					
							REMOVE ALL SHARP EDGES					
1	PRELIMINARY ISSUE	R.M.T	N/A	N/A	N/A	28.08.97						
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE						
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING	ORIGINAL SCALE	1:1	SHEET 1 OF 1		

Drawing No: B0189

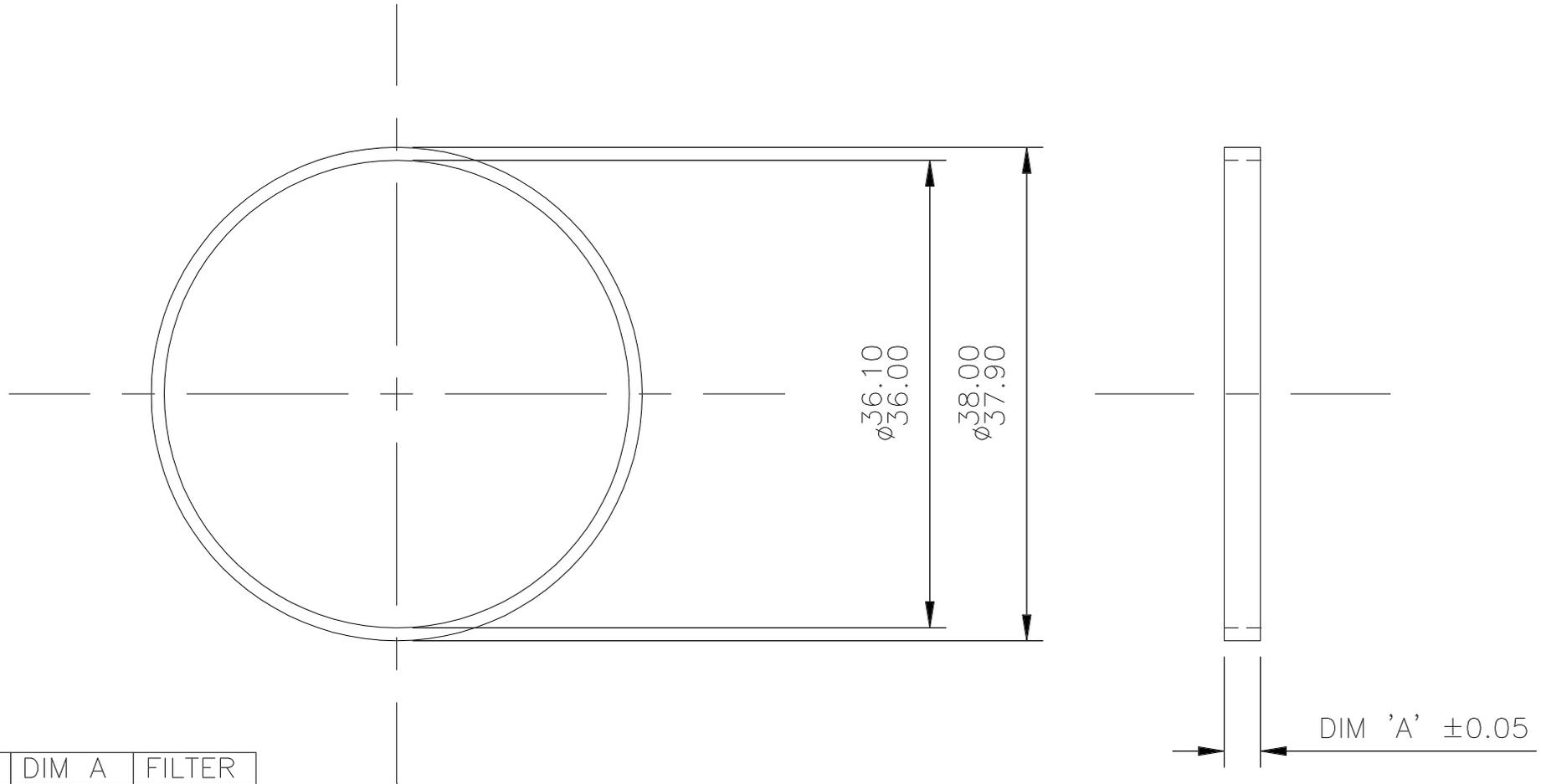
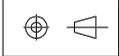
DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 



1	PDJ	5/4/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p><b>UNLESS OTHERWISE STATED</b></p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ±</p> <p>SURFACE FINISH (MICRONS) ✓</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE:</p> <p align="center"><b>FILTER BLANK INGRID SCIENCE CAMERA</b></p>		<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	<p>MATERIAL: ALUMINIUM ALLOY BS1470 6082 TF</p>	<p>ORIGINAL SCALE 2:1</p>	<p>MAIN SYSTEM INGRID</p>	<p>DWG TYPE PART</p>
	<p>FINISH: CLEAN</p>	<p>SHEET SIZE A3</p>	<p>SUB-SYSTEM FILTER WHEEL SUB ASSY</p>	<p>LOCATION BO</p>
			<p>ITEM BLANK</p>	<p>USED ON B0103</p>
		<p>ENG DISCIPLINE MECHANICAL</p>	<p>DRAWING NUMBER B0189</p>	<p>SHEET 1 of 1</p>



	DIM A	FILTER
DETAIL 4	2.80	K
DETAIL 3	2.82	K-S
DETAIL 2	2.89	J
DETAIL 1	2.82	H

REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY ISSUE	R.M.T	N/A	N/A	N/A	05.11.97
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED

DIMENSIONS ARE IN mm

GENERAL TOLERANCE: ± 0.1

ANGULAR TOLERANCE: ±

SURFACE FINISH: 1.6/  
(MICRONS) ✓

REMOVE ALL SHARP EDGES

DO NOT SCALE THIS DRAWING

MATERIAL	P.T.F.E.
FINISH	NATURAL
USED ON	B0103

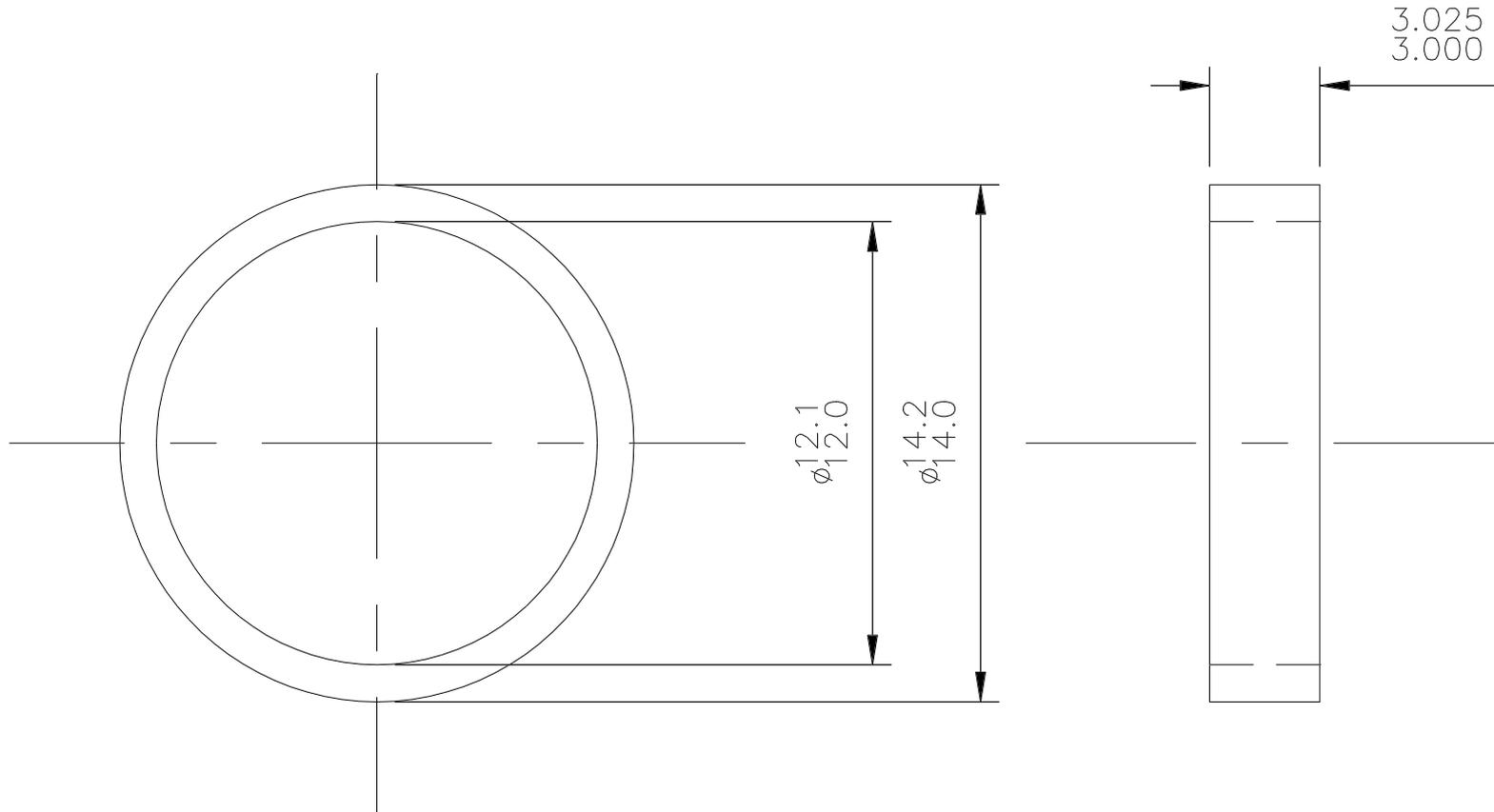
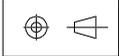


**ROYAL GREENWICH OBSERVATORY**

MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM

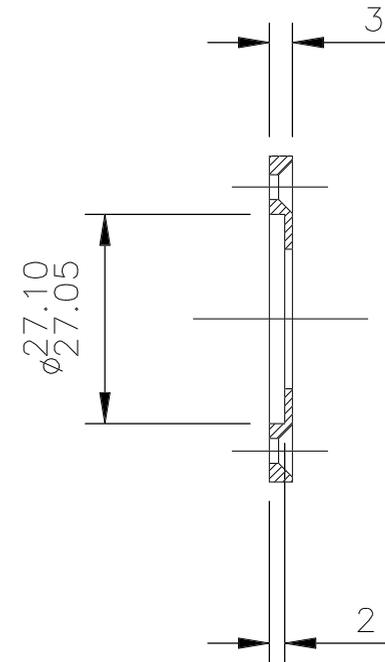
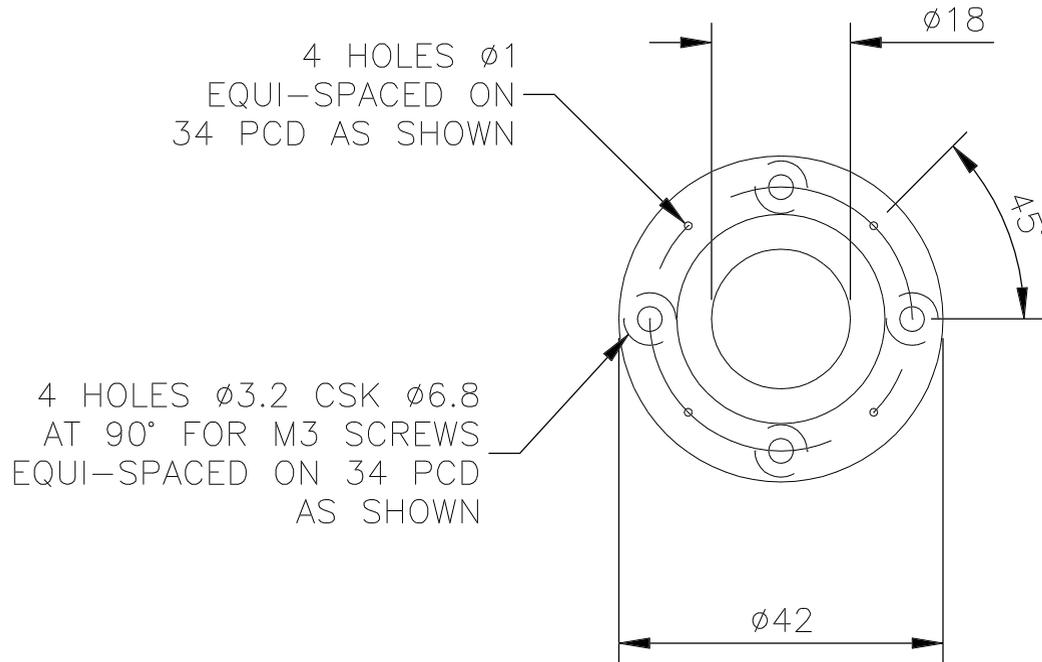
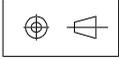


TITLE FILTER HOLDER SPACER FILTER SUB-ASSEMBLY			
ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0196	REV 1
ORIGINAL SCALE 2:1			SHEET 1 OF 1



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 SUBJECT TO CHANGE  
 22/04/98  
 PRELIMINARY ISSUE: 2  
 DO NOT USE THIS DRAWING FOR  
 PROCUREMENT OR MANUFACTURE.

							UNLESS OTHERWISE STATED	MATERIAL ALUMINIUM ALLOY BS 1470 6082 TF	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM 			
							DIMENSIONS ARE IN mm	FINISH NATURAL	TITLE INNER RACE BEARING SPACER FILTER SUB-ASSEMBLY			
							GENERAL TOLERANCE: $\pm 0.1$	USED ON B0103	ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0197	REV 1
							ANGULAR TOLERANCE: $\pm$					
							SURFACE FINISH: 1.6/ (MICRONS) ✓					
							REMOVE ALL SHARP EDGES					
1	PRELIMINARY ISSUE	R.M.T	N/A	N/A	N/A	05.11.97						
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE						
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING	ORIGINAL SCALE	5:1	SHEET 1 OF 1		

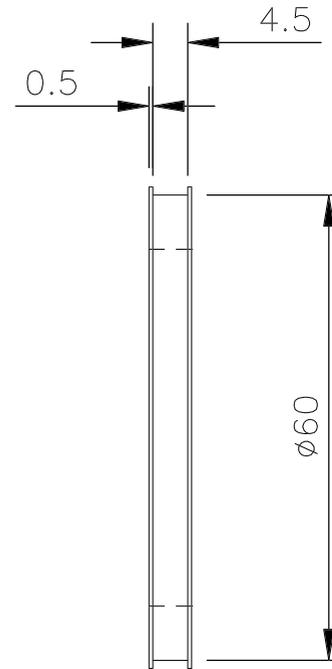
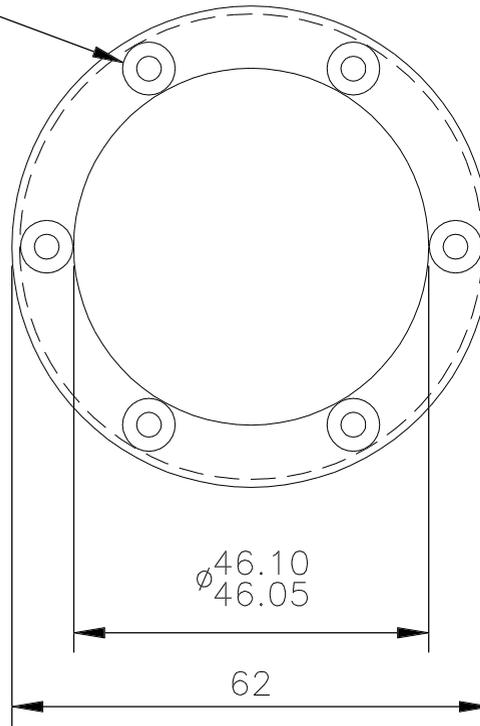


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FOR INFORMATION ONLY  
SUBJECT TO CHANGE  
22/04/98  
PRELIMINARY ISSUE: 1  
DO NOT USE THIS DRAWING FOR  
PROCUREMENT OR MANUFACTURE.

							UNLESS OTHERWISE STATED	MATERIAL ALUMINIUM ALLOY BS 1470 6082 TF	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM 			
							DIMENSIONS ARE IN mm	FINISH NATURAL	TITLE BEARING END PLATE FILTER SUB-ASSEMBLY			
							GENERAL TOLERANCE: $\pm 0.1$	USED ON B0103	ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0210	REV 1
							ANGULAR TOLERANCE: $\pm$					
							SURFACE FINISH: 1.6/ (MICRONS)					
							REMOVE ALL SHARP EDGES					
1	PRELIMINARY ISSUE	PDJ	N/A	N/A	N/A	22/04/98						
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE						
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING	ORIGINAL SCALE	1:1	SHEET 1 OF 1		



6 HOLES  $\phi 3.2$  CSK TO  
 $\phi 6.8$  BY  $90^\circ$  FOR M3  
 SCREWS EQUI-SPACE ON  
 53 PCD



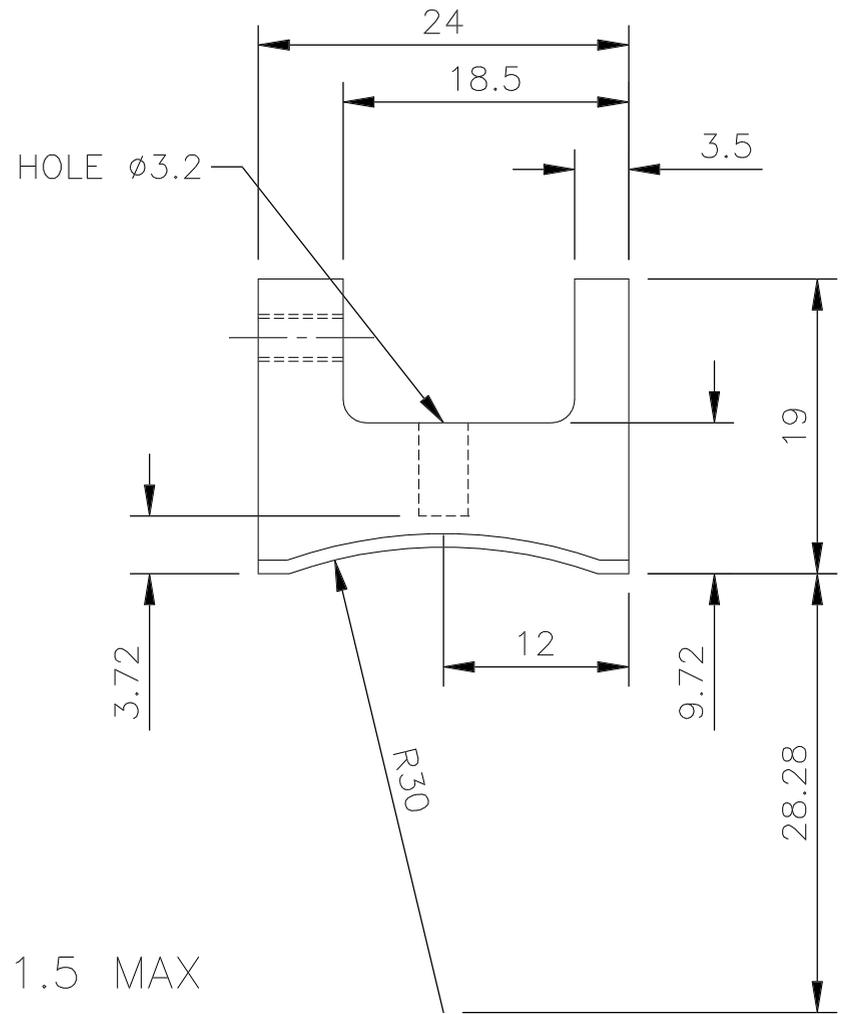
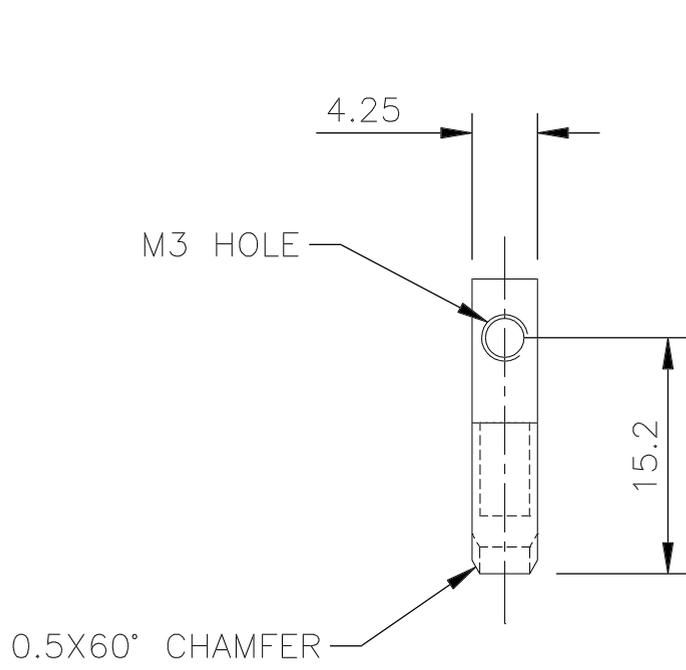
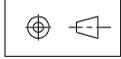
**PRELIMINARY**  
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 SUBJECT TO CHANGE  
 22/04/98  
 PRELIMINARY ISSUE: 1  
 DO NOT USE THIS DRAWING FOR  
 PROCUREMENT OR MANUFACTURE.

REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY ISSUE	PDJ	N/A	N/A	N/A	22/04/98

UNLESS OTHERWISE STATED  
 DIMENSIONS ARE IN mm  
 GENERAL TOLERANCE:  $\pm 0.1$   
 ANGULAR TOLERANCE:  $\pm$   
 SURFACE FINISH: 1.6/  
 (MICRONS) ✓  
 REMOVE ALL SHARP EDGES  
 DO NOT SCALE THIS DRAWING

MATERIAL	STAINLES STEEL BS 970 304 S11
FINISH	NATURAL
USED ON	B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE					
BRAKE DRUM FILTER SUB-ASSEMBLY					
ORIGINAL SHEET	LOCATION	DWG. No.		REV	
A4	N/A	B0211		1	
ORIGINAL SCALE	1:1		SHEET 1 OF 1		



ALL RADII 1.5 MAX

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 08/06/98  
 PRELIMINARY ISSUE: 1  
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REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY ISSUE	PDJ	N/A	N/A	N/A	22/04/98

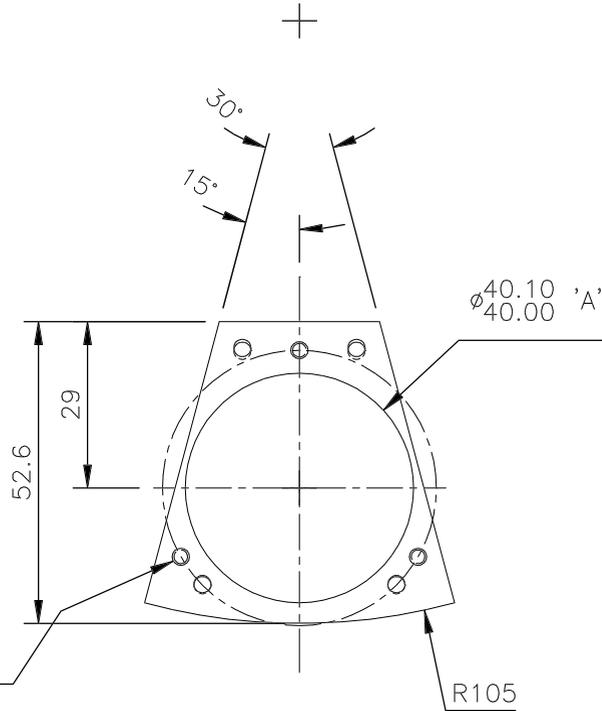
UNLESS OTHERWISE STATED  
 DIMENSIONS ARE IN mm  
 GENERAL TOLERANCE: ± 0.1  
 ANGULAR TOLERANCE: ±  
 SURFACE FINISH: 1.6/  
 (MICRONS)  
 REMOVE ALL SHARP EDGES  
 DO NOT SCALE THIS DRAWING

MATERIAL  
 BRASS  
 FINISH  
 NATURAL  
 USED ON  
 B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE BRAKE PAD FILTER SUB-ASSEMBLY					
ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0212	REV 1		
ORIGINAL SCALE 2:1				SHEET 1 OF 1	



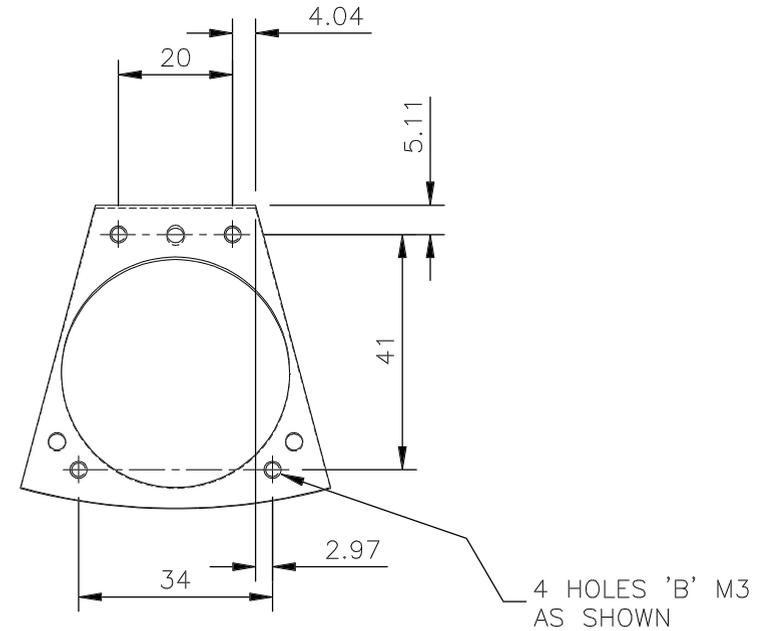
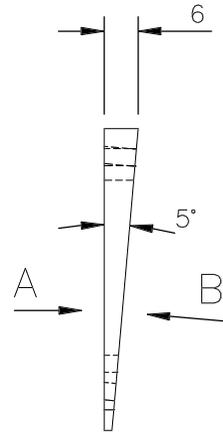
**PRELIMINARY**  
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 SUBJECT TO CHANGE  
 29/04/98  
 PRELIMINARY ISSUE: 1  
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 PROCUREMENT OR MANUFACTURE.



3 HOLES 'A' M3 EQUI-SPACED ON 48 PCD

VIEW ON A

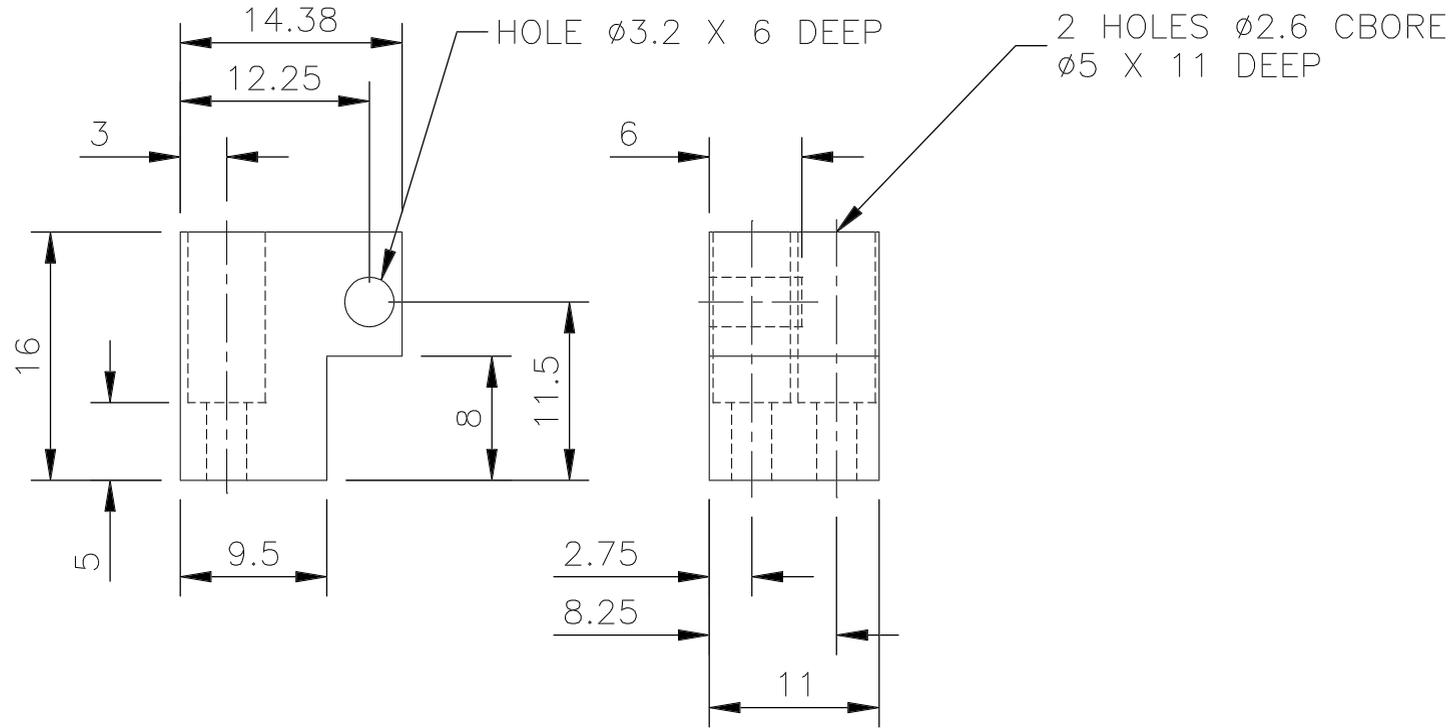
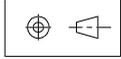
HOLES MARKED 'A' TO BE MACHINED PERPENDICULAR TO FACE A



VIEW ON B

HOLES MARKED 'B' TO BE MACHINED PERPENDICULAR TO FACE B

							UNLESS OTHERWISE STATED	MATERIAL	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM		
							DIMENSIONS ARE IN mm	ALUMINIUM ALLOY			
							GENERAL TOLERANCE: ± 0.1	BS 1470 6082 TF			
							ANGULAR TOLERANCE: ± 0.1	FINISH	TITLE		
							SURFACE FINISH: 1.6/√ (MICRONS)	CLEAN	FILTER WHEEL WEDGE		
							REMOVE ALL SHARP EDGES		FILTER SUB-ASSEMBLY		
1	PRELIMINARY ISSUE	PDJ	N/A	N/A	N/A	29/04/98	USED ON	ORIGINAL SHEET	LOCATION	DWG. No.	REV
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE	B0103	A3	N/A	B0213	1
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING	ORIGINAL SCALE	1:1	SHEET 1 OF 1	

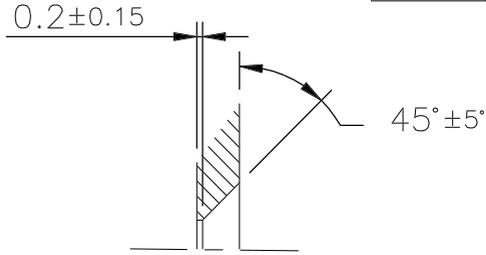
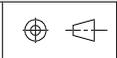


**PRELIMINARY**  
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 SUBJECT TO CHANGE  
 08/06/98  
 PRELIMINARY ISSUE: 1  
 DO NOT USE THIS DRAWING FOR  
 PROCUREMENT OR MANUFACTURE.

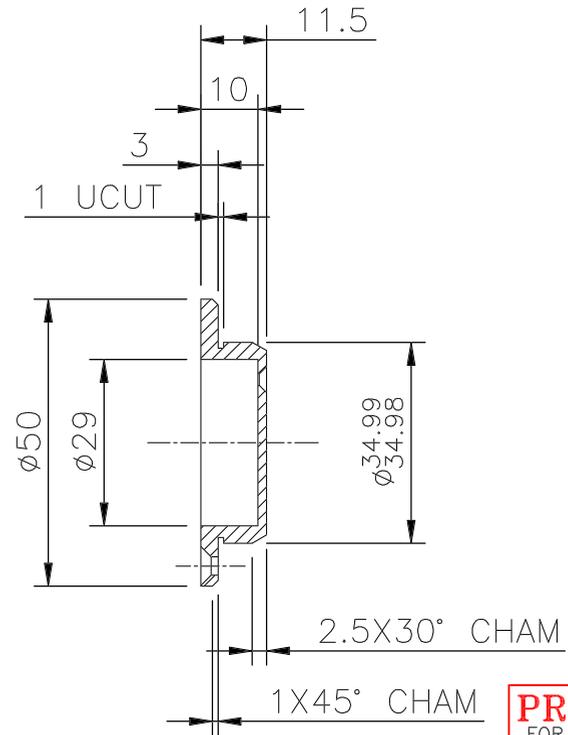
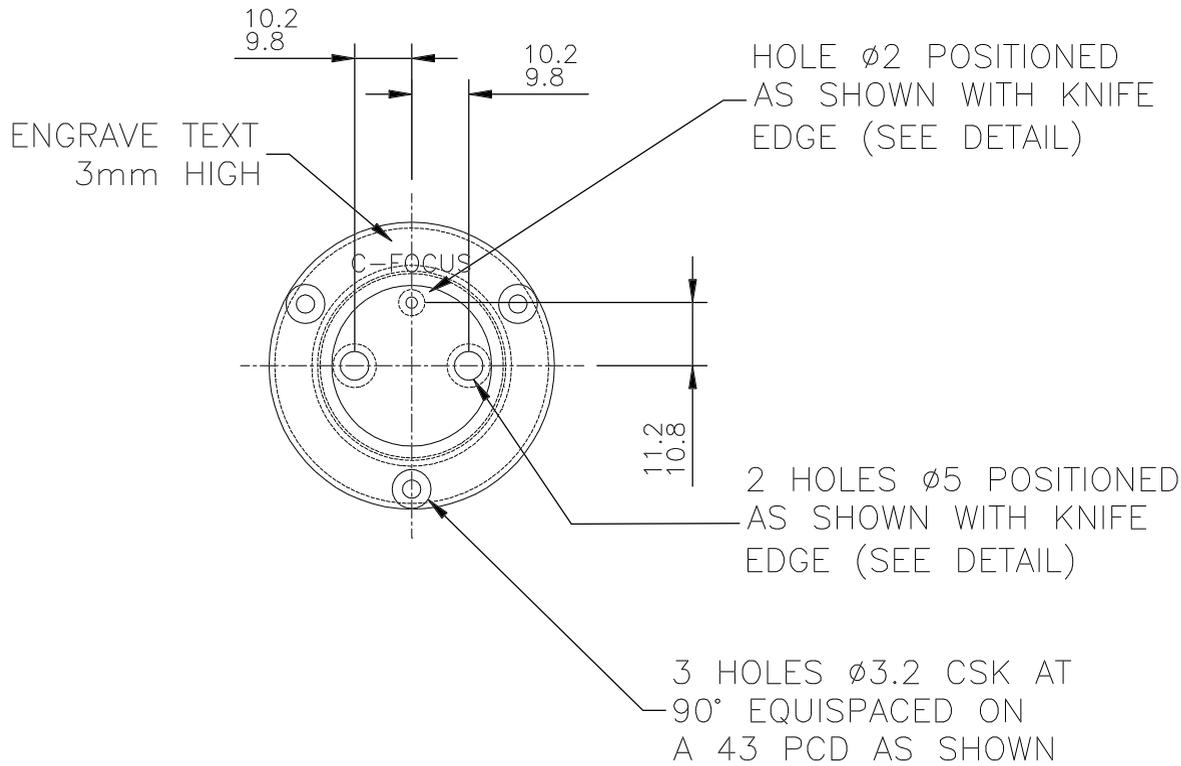
							UNLESS OTHERWISE STATED	MATERIAL ALUMINIUM ALLOY BS1470 6082 TF	 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
							DIMENSIONS ARE IN mm	FINISH NATURAL	TITLE SPRING ARM FILTER SUB-ASSEMBLY			
							GENERAL TOLERANCE: $\pm 0.1$	USED ON B0103	ORIGINAL SHEET A4	LOCATION N/A	DWG. No. B0214	REV 1
							ANGULAR TOLERANCE: $\pm$	DO NOT SCALE THIS DRAWING				
							SURFACE FINISH: 1.6/ (MICRONS)	ORIGINAL SCALE 2:1				
							REMOVE ALL SHARP EDGES	SHEET 1 OF 1				
1	PRELIMINARY ISSUE	PDJ	N/A	N/A	N/A	08/06/98						
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE						
ISSUE DESCRIPTION												

DWG. No. B0215

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



DETAILS OF TYPICAL KNIFE EDGE REQUIRED. SCALE 5:1



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 SUBJECT TO CHANGE  
 15/06/98  
 PRELIMINARY ISSUE: 1  
 DO NOT USE THIS DRAWING FOR  
 PROCUREMENT OR MANUFACTURE.

REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	15/06/98
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED

DIMENSIONS ARE IN mm

GENERAL TOLERANCE:  $\pm 0.1$

ANGULAR TOLERANCE:  $\pm$

SURFACE FINISH: (MICRONS) ✓

REMOVE ALL SHARP EDGES

DO NOT SCALE THIS DRAWING

MATERIAL  
 ALUMINUM ALLOY  
 BS1470 6082 TF

FINISH  
 CLEAN

USED ON  
 B0103



**ROYAL GREENWICH OBSERVATORY**  
 MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM



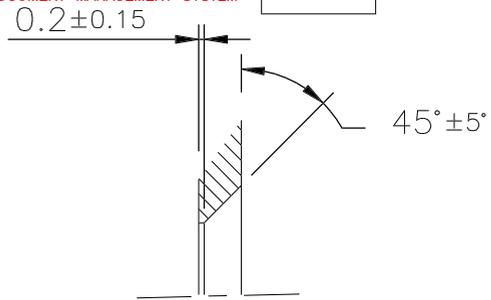
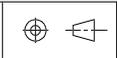
TITLE  
 C-FOCUS PUPIL STOP INSERT  
 FILTER WHEEL SUB ASSEMBLY

ORIGINAL SHEET A3 LOCATION N/A DWG. No. B0215 REV 1

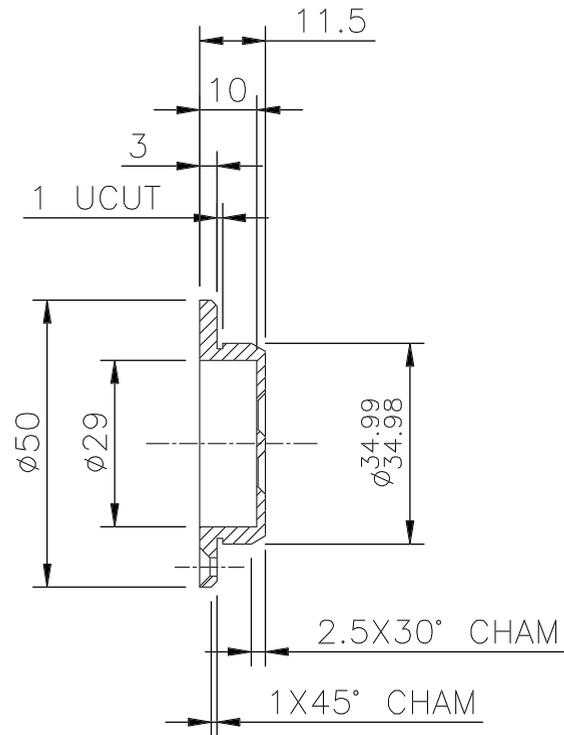
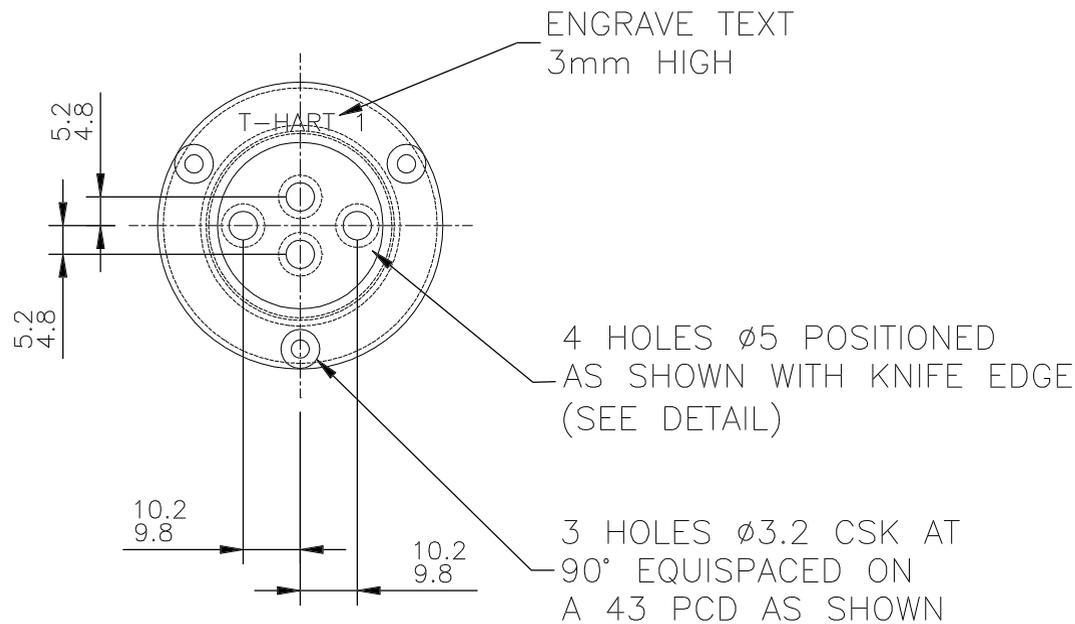
ORIGINAL SCALE 1:1 SHEET 1 OF 1

DWG. No. B0216

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



DETAILS OF TYPICAL KNIFE  
EDGE REQUIRED. SCALE 5:1



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SUBJECT TO CHANGE  
15/06/98  
PRELIMINARY ISSUE: 1  
DO NOT USE THIS DRAWING FOR  
PROCUREMENT OR MANUFACTURE.

REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	15/06/98

UNLESS OTHERWISE STATED

DIMENSIONS ARE IN mm  
GENERAL TOLERANCE:  $\pm 0.1$   
ANGULAR TOLERANCE:  $\pm$   
SURFACE FINISH: (MICRONS) ✓  
REMOVE ALL SHARP EDGES

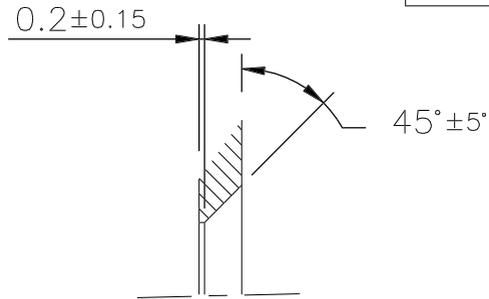
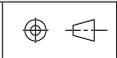
DO NOT SCALE THIS DRAWING

MATERIAL  
ALUMINUM ALLOY  
BS1470 6082 TF

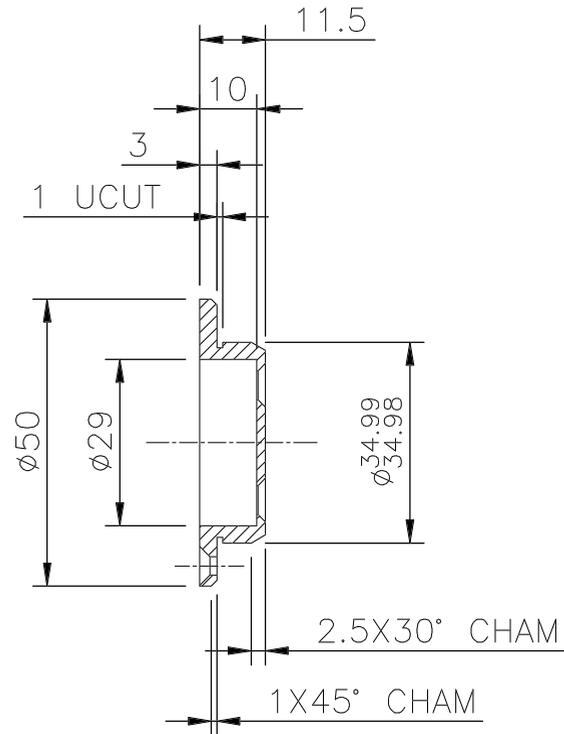
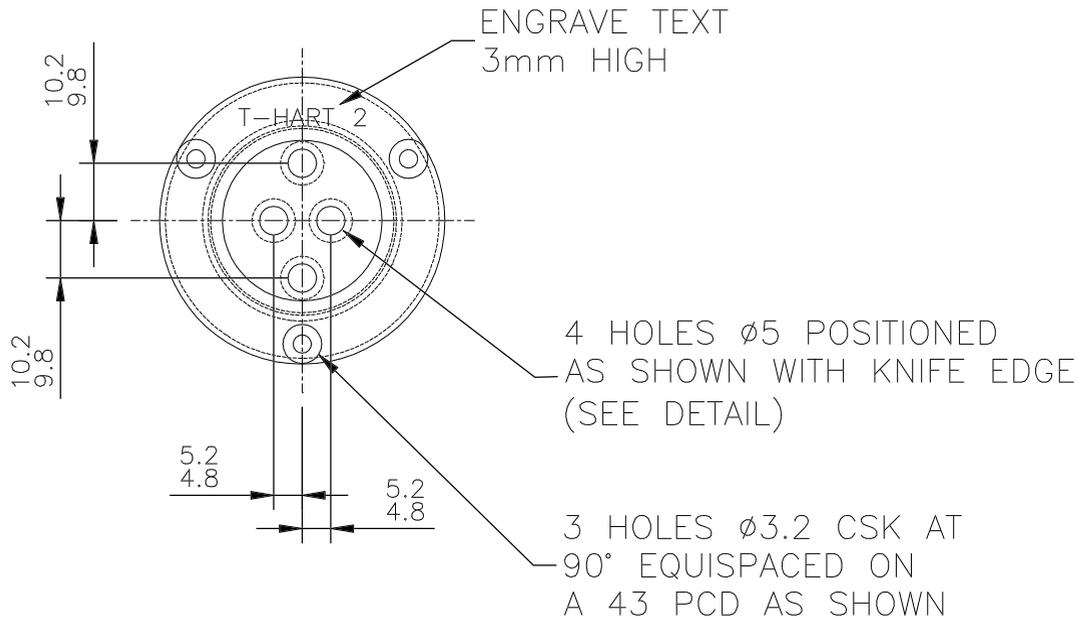
FINISH  
CLEAN

USED ON  
B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE		T-HART 1 PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY			
ORIGINAL SHEET A3	LOCATION N/A	DWG. No. B0216		REV 1	
ORIGINAL SCALE	1:1	SHEET		1 OF 1	



DETAILS OF TYPICAL KNIFE  
EDGE REQUIRED. SCALE 5:1



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SUBJECT TO CHANGE  
15/06/98  
PRELIMINARY ISSUE: 1  
DO NOT USE THIS DRAWING FOR  
PROCUREMENT OR MANUFACTURE.

REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	15/06/98
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED

DIMENSIONS ARE IN mm  
GENERAL TOLERANCE:  $\pm 0.1$   
ANGULAR TOLERANCE:  $\pm$   
SURFACE FINISH: (MICRONS) ✓  
REMOVE ALL SHARP EDGES

DO NOT SCALE THIS DRAWING

MATERIAL  
ALUMINUM ALLOY  
BS1470 6082 TF

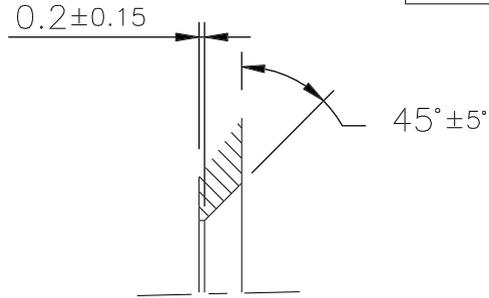
FINISH  
CLEAN

USED ON  
B0103

 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM		<b>PPARC</b>	
TITLE T-HART 2 PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY			
ORIGINAL SHEET A3	LOCATION N/A	DWG. No. B0217	REV 1
ORIGINAL SCALE 1:1	SHEET 1 OF 1		

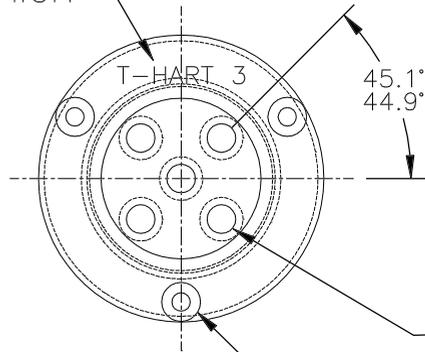
DWG. No. B0218

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



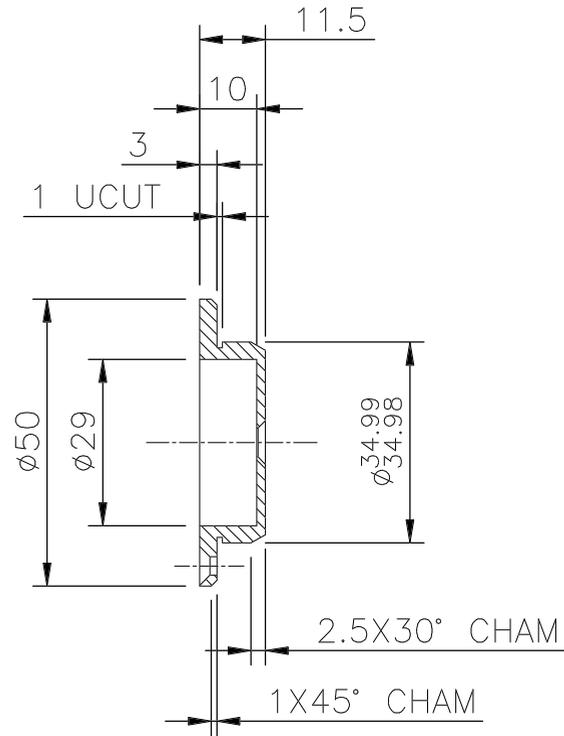
DETAILS OF TYPICAL KNIFE  
EDGE REQUIRED.  
SCALE 5:1

ENGRAVE TEXT  
3mm HIGH



5 HOLES  $\phi 5$  POSITIONED  
AS SHOWN ON 20 PCD WITH  
KNIFE EDGE (SEE DETAIL)

3 HOLES  $\phi 3.2$  CSK AT  
90° EQUISPACED ON  
A 43 PCD AS SHOWN



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15/06/98  
PRELIMINARY ISSUE: 1  
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PROCUREMENT OR MANUFACTURE.

REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	15/06/98
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED  
DIMENSIONS ARE IN mm  
GENERAL TOLERANCE:  $\pm 0.1$   
ANGULAR TOLERANCE:  $\pm$   
SURFACE FINISH: (MICRONS) ✓  
REMOVE ALL SHARP EDGES  
DO NOT SCALE THIS DRAWING

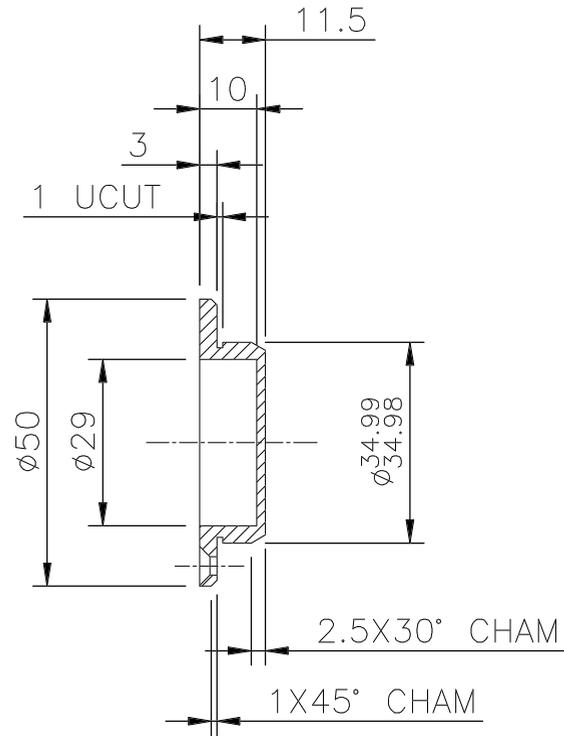
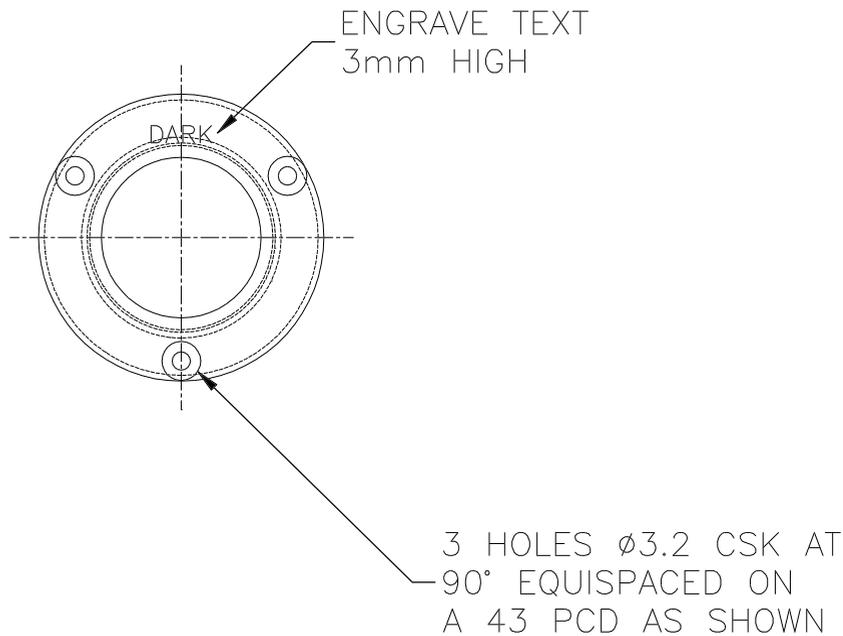
MATERIAL  
ALUMINUM ALLOY  
BS1470 6082 TF  
FINISH  
CLEAN  
USED ON  
B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE		T-HART 3 PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY			
ORIGINAL SHEET A3	LOCATION N/A	DWG. No. B0218		REV 1	
ORIGINAL SCALE 1:1				SHEET 1 OF 1	

DWG. No.

B0219

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



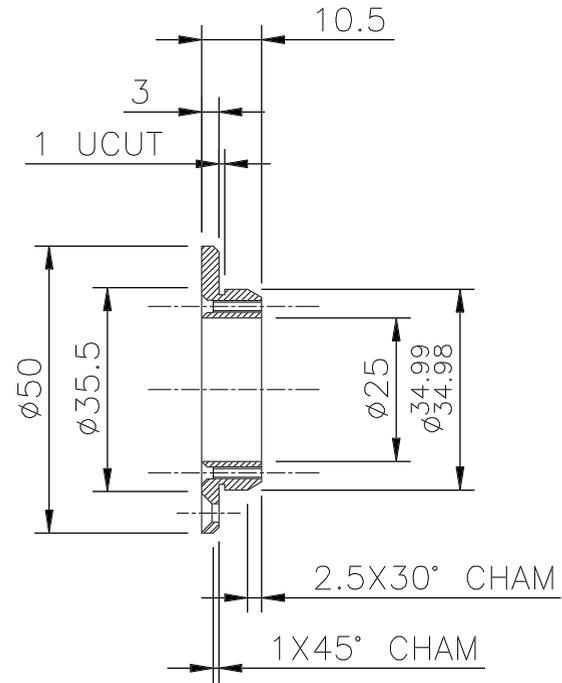
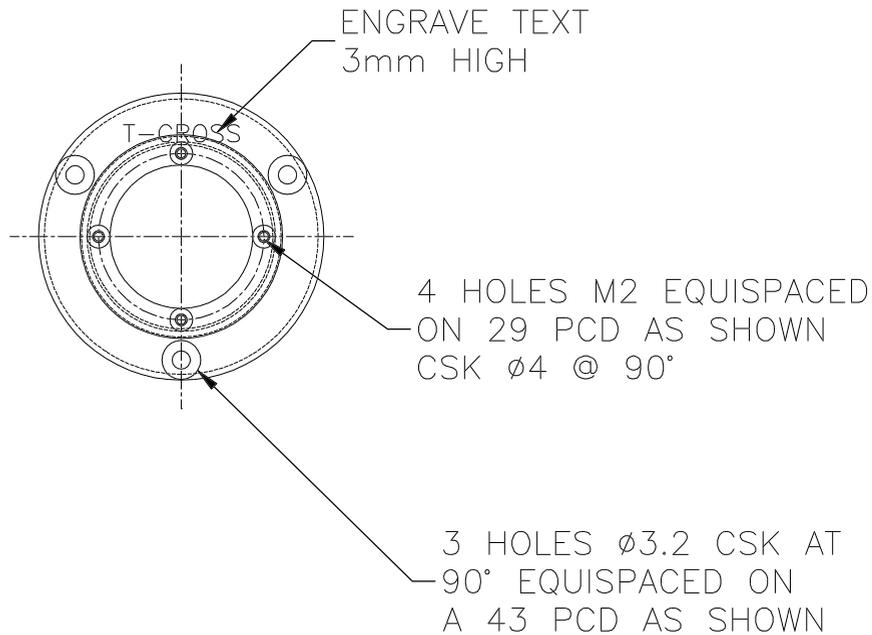
**PRELIMINARY**  
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15/06/98  
PRELIMINARY ISSUE: 1  
DO NOT USE THIS DRAWING FOR  
PROCUREMENT OR MANUFACTURE.

UNLESS OTHERWISE STATED							MATERIAL		ROYAL GREENWICH OBSERVATORY		PPARC		
DIMENSIONS ARE IN mm							ALUMINUM ALLOY		 MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM				
GENERAL TOLERANCE: $\pm 0.1$							BS1470 6082 TF						
ANGULAR TOLERANCE: $\pm$							FINISH		TITLE				
SURFACE FINISH: (MICRONS) ✓							CLEAN		DARK PUPIL STOP INSERT				
REMOVE ALL SHARP EDGES							USED ON		FILTER WHEEL SUB ASSEMBLY				
DO NOT SCALE THIS DRAWING							B0103		ORIGINAL SHEET	LOCATION	DWG. No.		REV
									A3	N/A	B0219		1
									ORIGINAL SCALE	1:1		SHEET 1 OF 1	

DWG. No.

B0227

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM

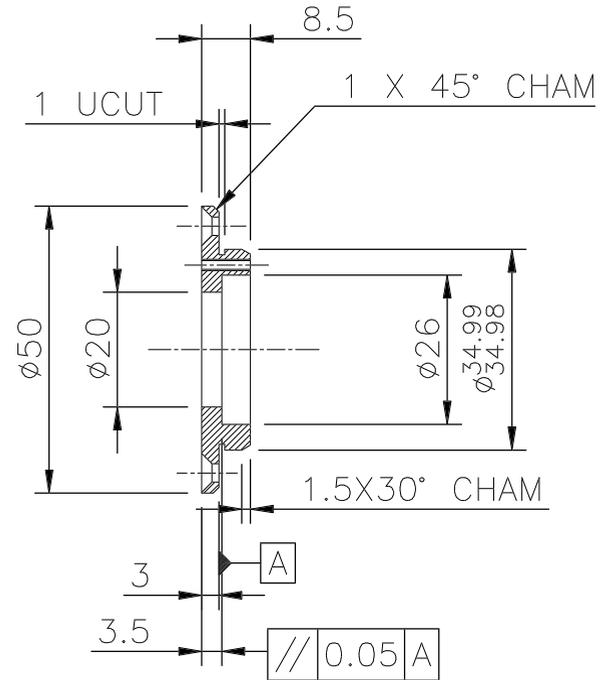
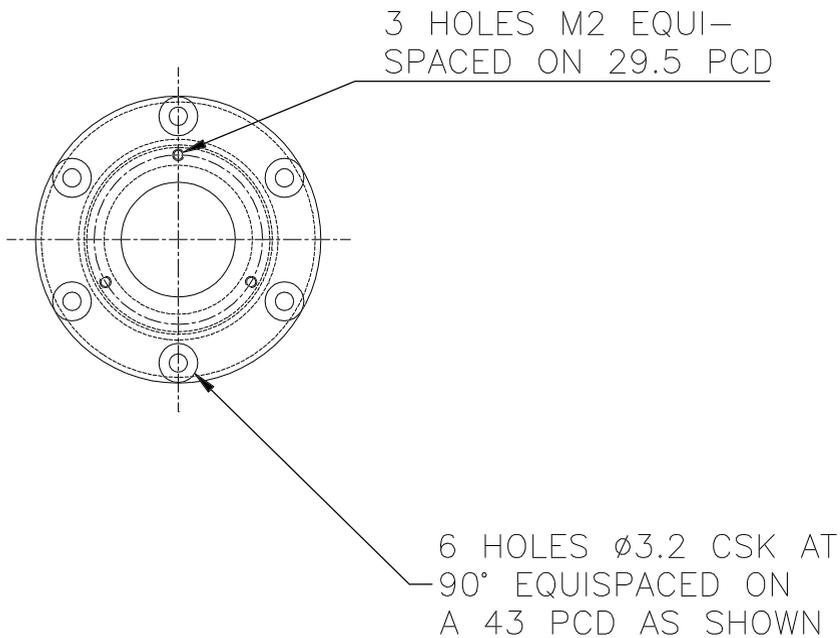
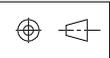


**PRELIMINARY**  
FOR INFORMATION ONLY  
SUBJECT TO CHANGE  
17/06/98  
PRELIMINARY ISSUE: 1  
DO NOT USE THIS DRAWING FOR  
PROCUREMENT OR MANUFACTURE.

UNLESS OTHERWISE STATED							MATERIAL		ROYAL GREENWICH OBSERVATORY		PPARC			
DIMENSIONS ARE IN mm							ALUMINUM ALLOY		MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM					
GENERAL TOLERANCE: $\pm 0.1$							BS1470 6082 TF							
ANGULAR TOLERANCE: $\pm$							FINISH		TITLE					
SURFACE FINISH: (MICRONS) ✓							CLEAN		T-CROSS PUPIL STOP INSERT					
REMOVE ALL SHARP EDGES							USED ON		ORIGINAL SHEET		LOCATION		DWG. No.	
DO NOT SCALE THIS DRAWING							B0103		A3		N/A		B0227	
ISSUE DESCRIPTION							ORIGINAL SCALE		1:1		SHEET		1 OF 1	
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	17/06/98								
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE								

DWG. No. B0228

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



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 17/06/98  
 PRELIMINARY ISSUE: 1  
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 PROCUREMENT OR MANUFACTURE.

REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIGN	PDJ	N/A	N/A	N/A	17/06/98

UNLESS OTHERWISE STATED

DIMENSIONS ARE IN mm

GENERAL TOLERANCE:  $\pm 0.1$

ANGULAR TOLERANCE:  $\pm$

SURFACE FINISH: (MICRONS) ✓

REMOVE ALL SHARP EDGES

DO NOT SCALE THIS DRAWING

MATERIAL  
 ALUMINUM ALLOY  
 BS1470 6082 TF

FINISH  
 CLEAN

USED ON  
 B0103



**ROYAL GREENWICH OBSERVATORY**  
 MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM

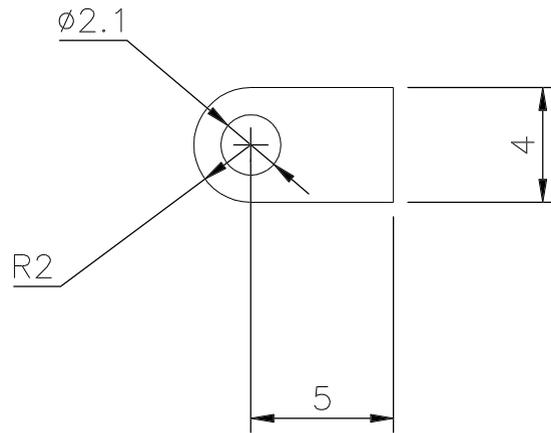
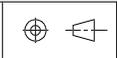


TITLE  
 T-MIRROR PUPIL STOP INSERT  
 FILTER WHEEL SUB ASSEMBLY

ORIGINAL SHEET A3	LOCATION N/A	DWG. No. B0228	REV 1
ORIGINAL SCALE 1:1	SHEET 1 OF 1		

DWG. No. B0229

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



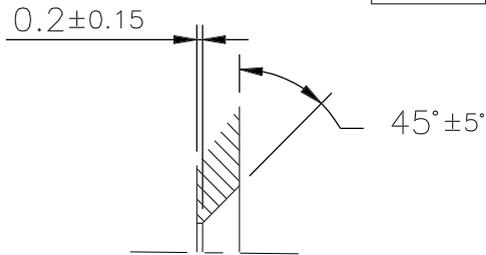
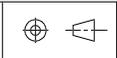
MATERIAL: 0.5THK PLASTIC SHIM STOCK

**PRELIMINARY**  
 FOR INFORMATION ONLY  
 SUBJECT TO CHANGE  
 17/06/98  
 PRELIMINARY ISSUE: 1  
 DO NOT USE THIS DRAWING FOR  
 PROCUREMENT OR MANUFACTURE.

UNLESS OTHERWISE STATED							MATERIAL		 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM				
DIMENSIONS ARE IN mm GENERAL TOLERANCE: $\pm 0.1$ ANGULAR TOLERANCE: $\pm$ SURFACE FINISH: (MICRONS) ✓ REMOVE ALL SHARP EDGES							SEE NOTE		TITLE T-MIRROR RETAINER FILTER WHEEL SUB ASSEMBLY				
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE	CLEAN		ORIGINAL SHEET	LOCATION	DWG. No.		REV
1	PRELIMINARY DESIGN	PDJ	N/A	N/A	N/A	17/06/98	USED ON B0103		A3	N/A	B0229		1
ISSUE DESCRIPTION							DO NOT SCALE THIS DRAWING		ORIGINAL SCALE	5:1			SHEET 1 OF 1

DWG. No. B0230

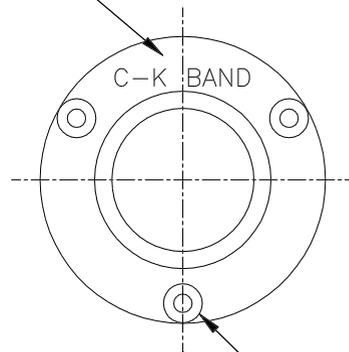
DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



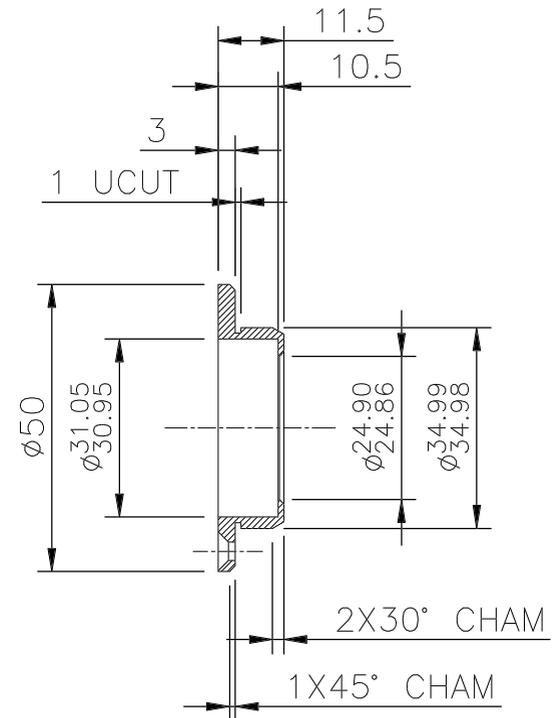
DETAILS OF TYPICAL KNIFE EDGE REQUIRED. SCALE 5:1

**PRELIMINARY**  
 FOR INFORMATION ONLY  
 SUBJECT TO CHANGE  
 13/07/98  
 PRELIMINARY ISSUE: 1  
 DO NOT USE THIS DRAWING FOR  
 PROCUREMENT OR MANUFACTURE.

ENGRAVE TEXT  
 3mm HIGH



3 HOLES  $\phi 3.2$  CSK AT  
 90° EQUISPACED ON  
 A 43 PCD AS SHOWN



REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	13/07/98
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED  
 DIMENSIONS ARE IN mm  
 GENERAL TOLERANCE:  $\pm 0.1$   
 ANGULAR TOLERANCE:  $\pm$   
 SURFACE FINISH: (MICRONS) ✓  
 REMOVE ALL SHARP EDGES  
 DO NOT SCALE THIS DRAWING

MATERIAL  
 ALUMINUM ALLOY  
 BS1470 6082 TF  
 FINISH  
 CLEAN  
 USED ON  
 B0103

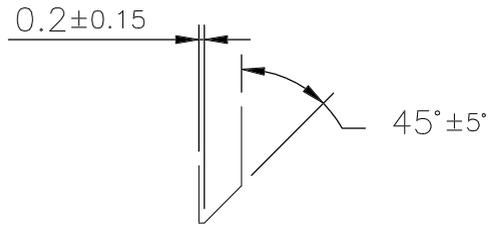
		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE		C-K BAND PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY			
ORIGINAL SHEET	LOCATION	DWG. No.		REV	
A3	N/A	B0230		1	
ORIGINAL SCALE	1:1			SHEET 1 OF 1	

DWG. No. B0231

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM

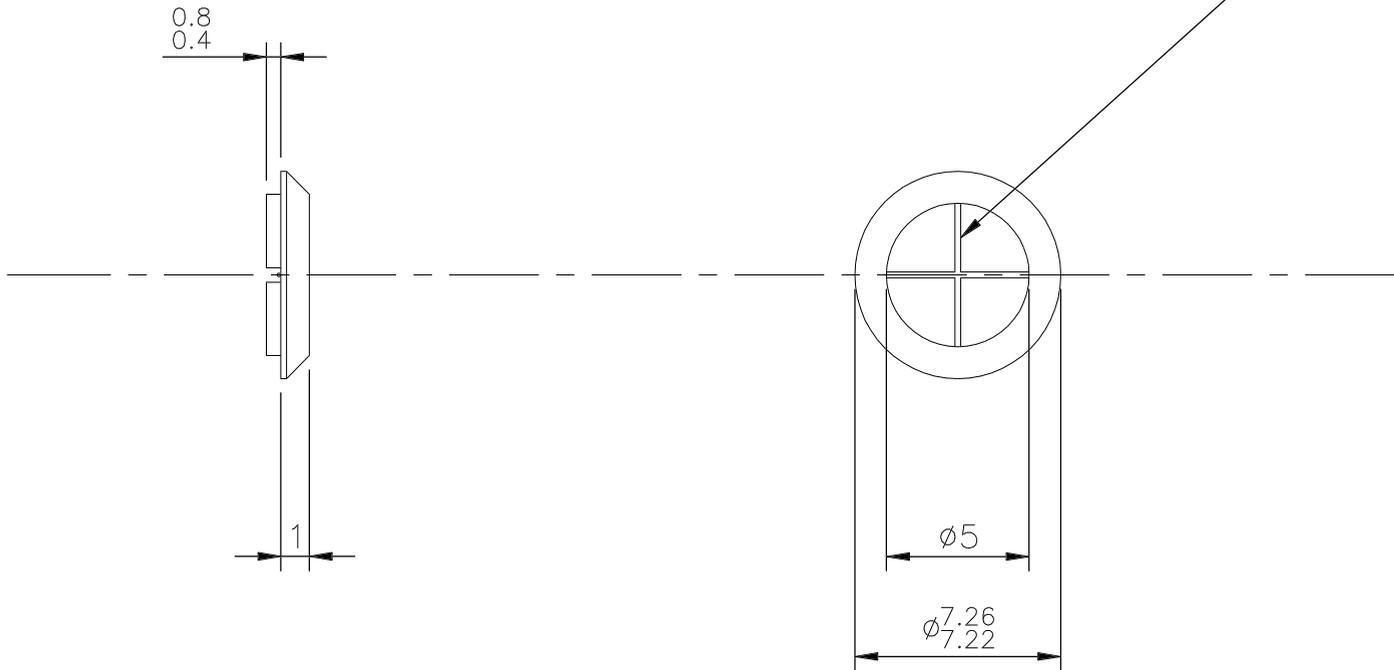


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 FOR INFORMATION ONLY  
 SUBJECT TO CHANGE  
 13/07/98  
 PRELIMINARY ISSUE: 1  
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 PROCUREMENT OR MANUFACTURE.



DETAILS OF TYPICAL KNIFE  
 EDGE REQUIERED. SCALE 5:1

ENGRAVE CROSS 0.25  
 WIDE BY 0.5 DEEP



REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	13/07/98
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED  
 DIMENSIONS ARE IN mm  
 GENERAL TOLERANCE: ± 0.1  
 ANGULAR TOLERANCE: ±  
 SURFACE FINISH: ✓  
 (MICRONS)  
 REMOVE ALL SHARP EDGES  
 DO NOT SCALE THIS DRAWING

MATERIAL  
 ALUMINUM ALLOY  
 BS1470 6082 TF  
 FINISH  
 CLEAN  
 USED ON  
 B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE		C-K CENTRAL OBSCURATION PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY			
ORIGINAL SHEET	LOCATION	DWG. No.		REV	
A3	N/A	B0231		1	
ORIGINAL SCALE	SHEET			OF	
5:1	1			1	

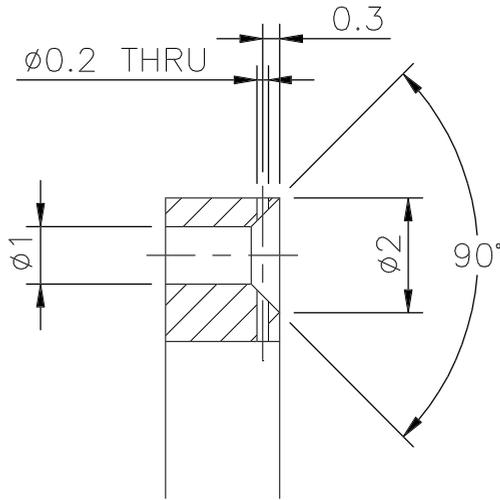
DWG. No.

B0232

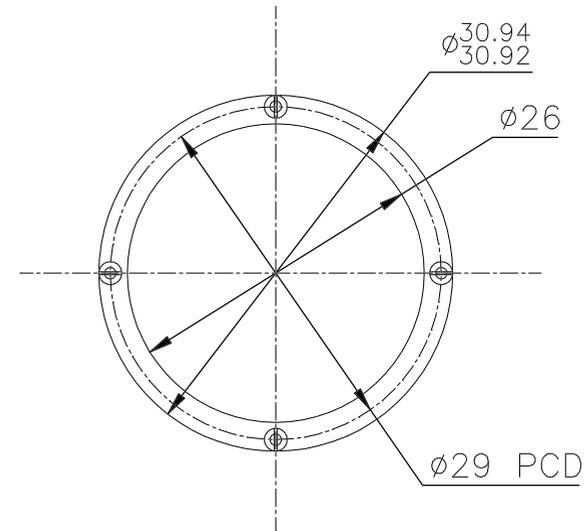
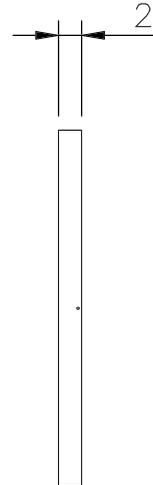
DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



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SECTION SHOWING TYPICAL HOLE  
 DETAILS. NOTE, REMOVE ALL  
 SHARP EDGES. SCALE 10:1



REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	13/07/98
ISSUE DESCRIPTION						

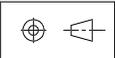
UNLESS OTHERWISE STATED  
 DIMENSIONS ARE IN mm  
 GENERAL TOLERANCE: ± 0.1  
 ANGULAR TOLERANCE: ±  
 SURFACE FINISH: (MICRONS) ✓  
 REMOVE ALL SHARP EDGES  
 DO NOT SCALE THIS DRAWING

MATERIAL  
 ALUMINUM ALLOY  
 BS1470 6082 TF  
 FINISH  
 CLEAN  
 USED ON  
 B0103

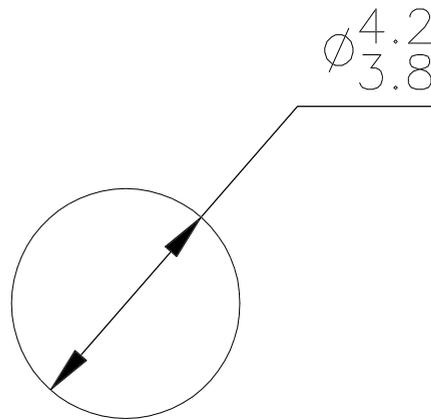
		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE		RETAINING RING – PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY			
ORIGINAL SHEET	LOCATION	DWG. No.		REV	
A3	N/A	B0232		1	
ORIGINAL SCALE	SHEET			1	OF 1
2:1					

DWG. No. B0233

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



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MATERIAL:  
 ALUMINIUM ALLOY BS1470  
 6082 TF 0.5 THK

							UNLESS OTHERWISE STATED	MATERIAL	SEE NOTE			 <b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM					
							DIMENSIONS ARE IN mm	FINISH	CLEAN					TITLE	C – PLATE PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY		
							GENERAL TOLERANCE: ± 0.1	USED ON	B0103	ORIGINAL SHEET	A3	LOCATION	N/A	DWG. No.	B0233	REV	1
							ANGULAR TOLERANCE: ±	REMOVE ALL SHARP EDGES	ORIGINAL SCALE	5:1	SHEET 1 OF 1						
							SURFACE FINISH: (MICRONS) ✓	DO NOT SCALE THIS DRAWING									
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	13/07/98											
REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE											
ISSUE DESCRIPTION																	

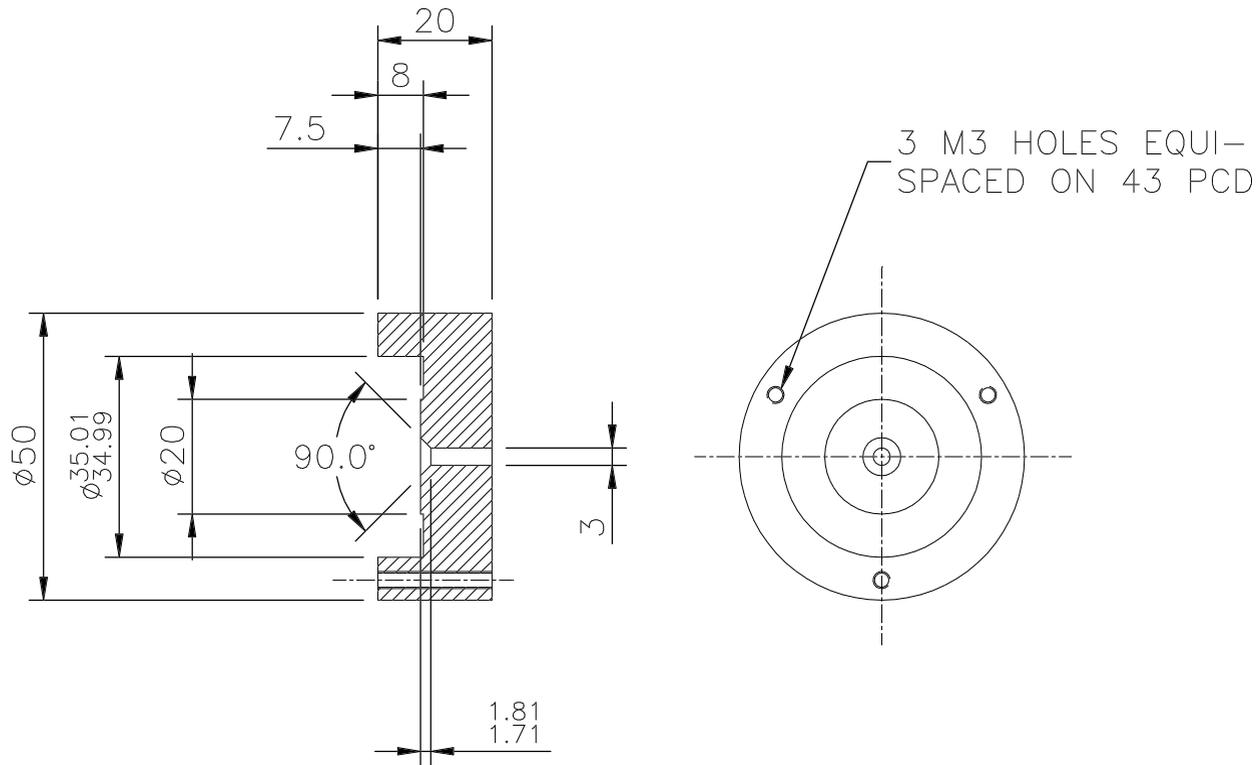
DWG. No.

B0234

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 SUBJECT TO CHANGE  
 13/07/98  
 PRELIMINARY ISSUE: 1  
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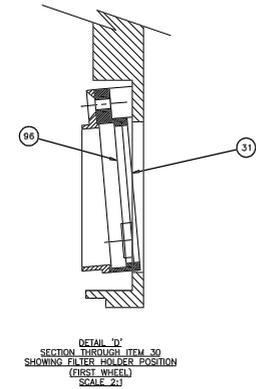
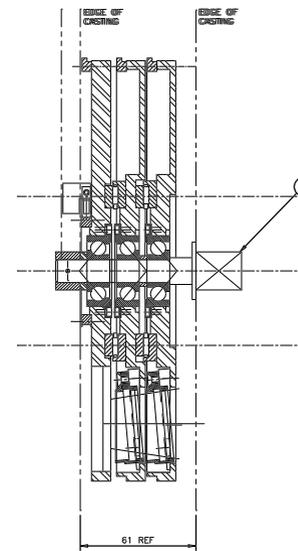
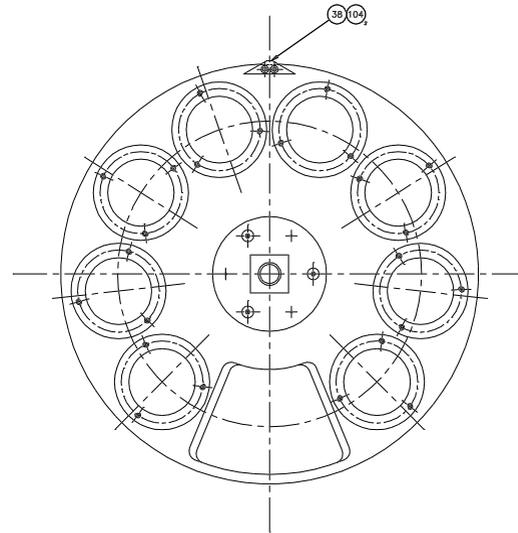
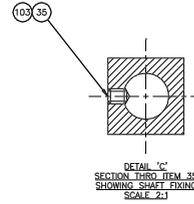


REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	13/07/98
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED  
 DIMENSIONS ARE IN mm  
 GENERAL TOLERANCE: ± 0.1  
 ANGULAR TOLERANCE: ±  
 SURFACE FINISH: (MICRONS) ✓  
 REMOVE ALL SHARP EDGES  
 DO NOT SCALE THIS DRAWING

MATERIAL  
 ALUMINUM ALLOY  
 BS1470 6082 TF  
 FINISH  
 CLEAN  
 USED ON  
 B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM			
TITLE		C-K ASSY BLOCK PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY			
ORIGINAL SHEET	LOCATION	DWG. No.		REV	
A3	N/A	B0234		1	
ORIGINAL SCALE	1:1			SHEET 1 OF 1	



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25/1/99  
PRELIMINARY ISSUE: 5  
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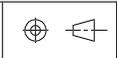
UNLESS OTHERWISE STATED  
DIMENSIONS ARE IN mm  
GENERAL TOLERANCE: ± 0.1  
ANGULAR TOLERANCE: ±  
SURFACE FINISH: 1.6/  
(MICRONS)  
REMOVE ALL SHARP EDGES  
DO NOT SCALE THIS DRAWING

MATERIAL  
SEE DETAILS  
FINISH  
SEE DETAILS  
USED ON  
B0101

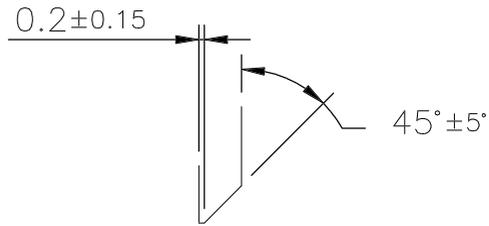
		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM		<b>PPARC</b>	
TITLE		FILTER SUB-ASSEMBLY CASTING SUB-ASSEMBLY			
ORIGINAL SHEET A0	LOCATION N/A	DWG. No. B0103			REV 1
ORIGINAL SCALE 1:1					SHEET 1 OF 1

DWG. No. B0236

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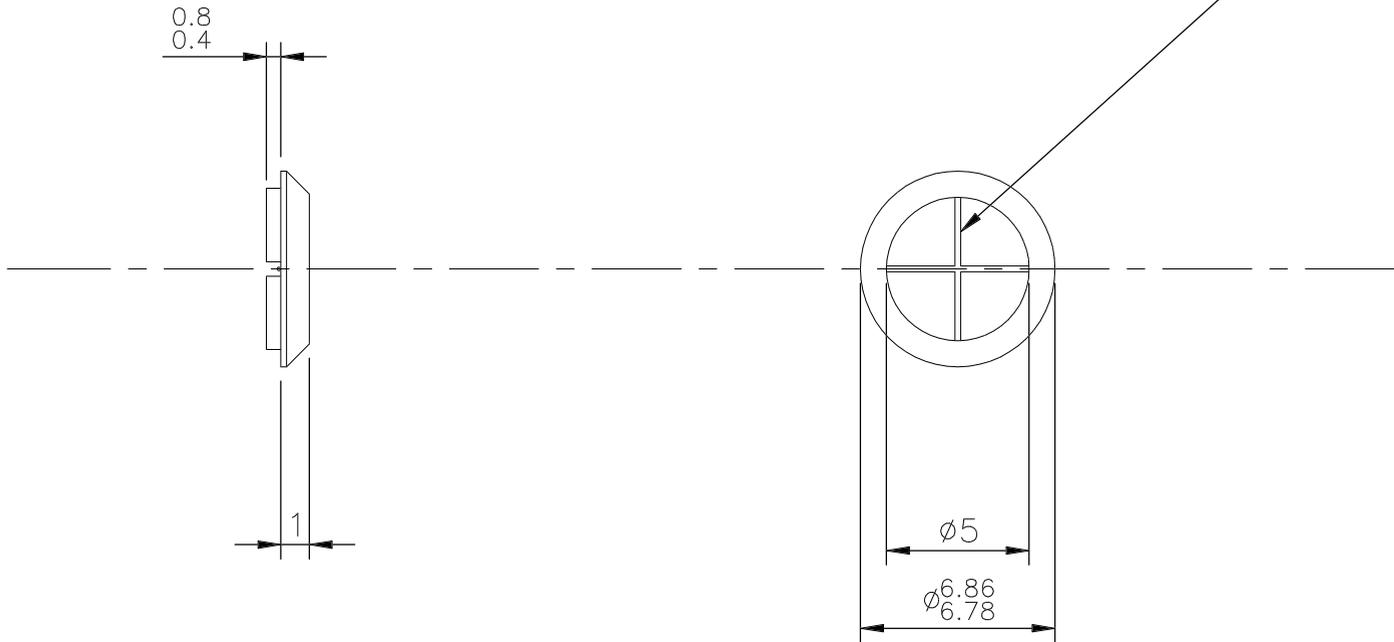


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 20/07/98  
 PRELIMINARY ISSUE: 1  
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 PROCUREMENT OR MANUFACTURE.



DETAILS OF TYPICAL KNIFE  
 EDGE REQUIERED. SCALE 5:1

ENGRAVE CROSS 0.25  
 WIDE BY 0.5 DEEP



REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	13/07/98
ISSUE DESCRIPTION						

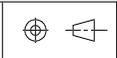
UNLESS OTHERWISE STATED  
 DIMENSIONS ARE IN mm  
 GENERAL TOLERANCE: ± 0.1  
 ANGULAR TOLERANCE: ±  
 SURFACE FINISH: ✓  
 (MICRONS)  
 REMOVE ALL SHARP EDGES  
 DO NOT SCALE THIS DRAWING

MATERIAL  
 ALUMINUM ALLOY  
 BS1470 6082 TF  
 FINISH  
 CLEAN  
 USED ON  
 B0103

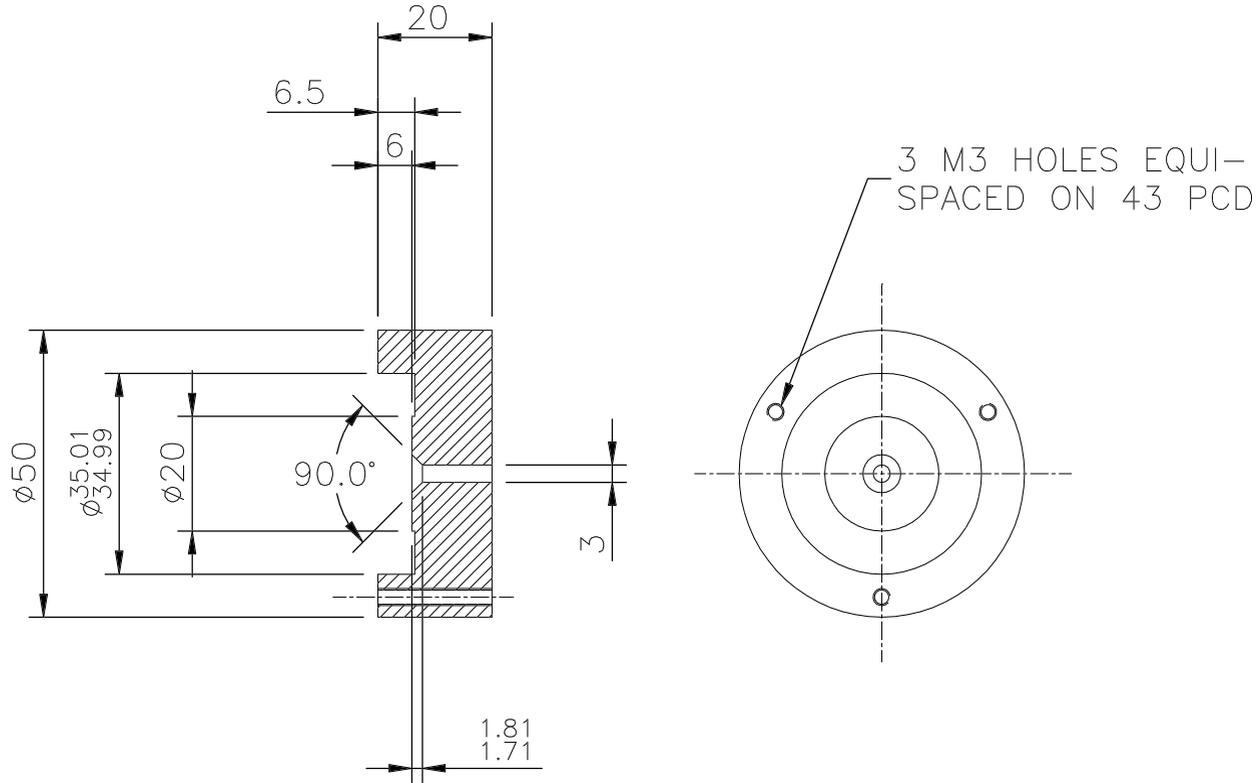
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TITLE C-SHORT CENTRAL OBSCURATION PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY					
ORIGINAL SHEET A3	LOCATION N/A	DWG. No. B0236		REV 1	
ORIGINAL SCALE	5:1	SHEET 1 OF 1			

DWG. No. B0237

DRAWING NOT REGISTERED ON DOCUMENT MANAGEMENT SYSTEM



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 20/07/98  
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REV	DESCRIPTION	DRAWN BY	CHECKED	APPROVED	STATUS	DATE
1	PRELIMINARY DESIG	PDJ	N/A	N/A	N/A	13/07/98
ISSUE DESCRIPTION						

UNLESS OTHERWISE STATED  
 DIMENSIONS ARE IN mm  
 GENERAL TOLERANCE: ± 0.1  
 ANGULAR TOLERANCE: ±  
 SURFACE FINISH: (MICRONS) ✓  
 REMOVE ALL SHARP EDGES  
 DO NOT SCALE THIS DRAWING

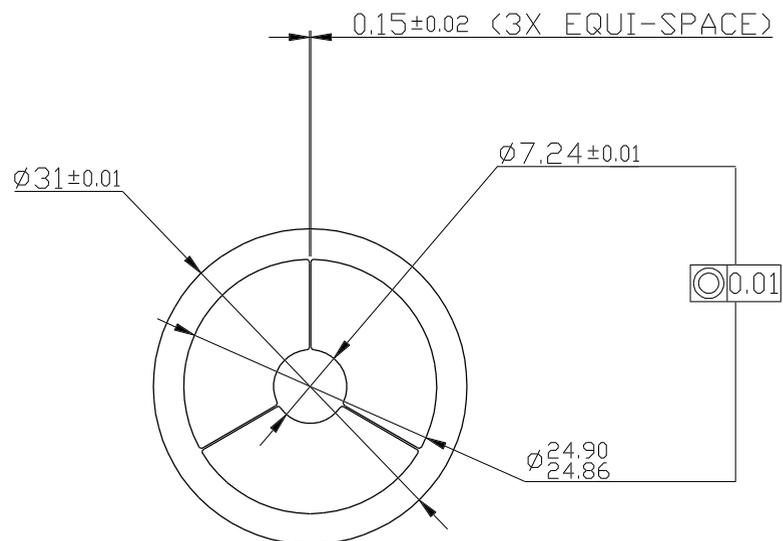
MATERIAL  
 ALUMINUM ALLOY  
 BS1470 6082 TF  
 FINISH  
 CLEAN  
 USED ON  
 B0103

		<b>ROYAL GREENWICH OBSERVATORY</b> MADINGLEY ROAD, CAMBRIDGE CB3 0EZ, UNITED KINGDOM		
TITLE		C-SHORT ASSY BLOCK PUPIL STOP INSERT FILTER WHEEL SUB ASSEMBLY		
ORIGINAL SHEET	LOCATION	DWG. No.		REV
A3	N/A	B0237		1
ORIGINAL SCALE	1:1	SHEET		1 OF 1

Drawing No  
B0238

DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 



ALL RADII 0.3 MAX

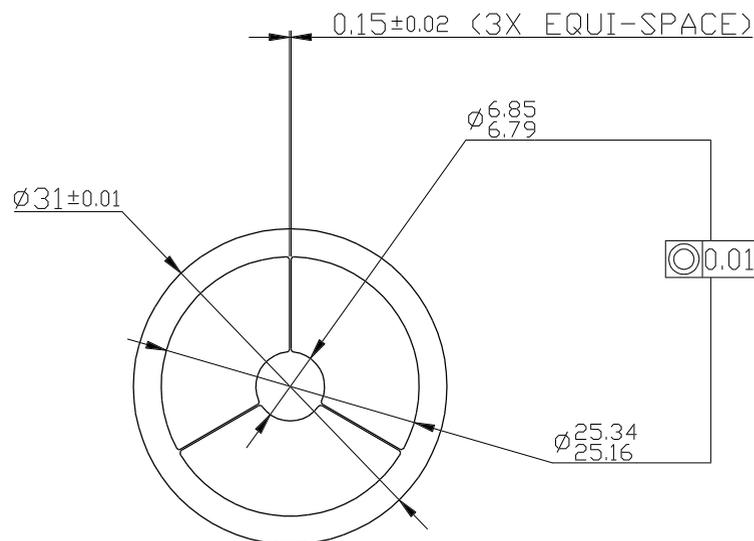
1	PDJ	18/02/99	KMD	18/02/99
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p><b>UNLESS OTHERWISE STATED</b></p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.05</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 1.6 ✓</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE: C/K CENTRAL OBSCURATION MASK FILTER WHEEL SUB ASSEMBLY</p>			<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>		
	<p>MATERIAL: STAINLESS STEEL 0.2 THICK</p>	<p>ORIGINAL SCALE: 2:1</p>	<p>MAIN SYSTEM: INGRID</p> <p>SUB-SYSTEM: PUPIL STOPS</p>	<p>DWG TYPE: PART</p> <p>LOCATION: BO</p>		
	<p>FINISH: CLEAN</p>	<p>SHEET SIZE: A3</p>	<p>ITEM: PART</p> <p>ENG DISCIPLINE: MECHANICAL</p>	<p>USED ON: B0230</p>	<p>DRAWING NUMBER: B0238</p>	<p>SHEET 1 of 1</p>

Drawing No  
B0239

DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 



ALL RADII 0.3 MAX

1	PDJ	18/02/99	KMD	18/02/99
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

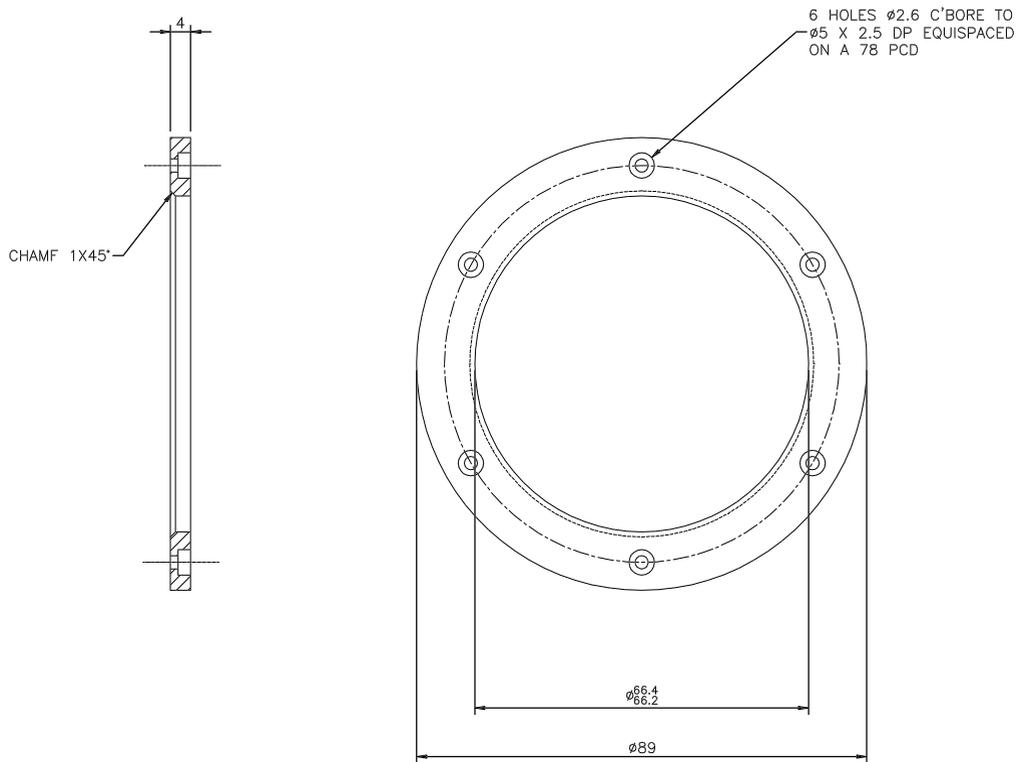
<p><b>UNLESS OTHERWISE STATED</b> ALL DIMENSIONS IN mm GENERAL TOL: ± 0.05 ANGULAR TOL: ± 0.1 SURFACE FINISH (MICRONS) 1.6 ✓ REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE: <b>C/SHORT CENTRAL OBSCURATION MASK FILTER WHEEL SUB ASSEMBLY</b></p>			<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	<p>MATERIAL: <b>STAINLESS STEEL 0.2 THICK</b></p>	<p>ORIGINAL SCALE <b>2:1</b></p>	<p>MAIN SYSTEM INGRID</p>	<p>DWG TYPE PART</p>	
	<p>FINISH: <b>CLEAN</b></p>	<p>SHEET SIZE <b>A3</b></p>	<p>SUB-SYSTEM PUPIL STOPS</p>	<p>LOCATION BO</p>	
			<p>ITEM PART</p>	<p>USED ON B0235</p>	
		<p>ENG DISCIPLINE MECHANICAL</p>	<p>DRAWING NUMBER B0239</p>		<p>SHEET 1 of 1</p>

Drawing No:

B0280

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THIRD ANGLE



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 26/1/99  
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 PROCUREMENT OR MANUFACTURE.

UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: ± 0.1 ANGULAR TOL: ± SURFACE FINISH (MICRONS) ✓ REMOVE ALL SHARP EDGES		TITLE: <b>THRUST BEARING INNER RACE FILTER WHEEL SUB ASSEMBLY</b>			<b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400			
MATERIAL: <b>STAINLESS STEEL BS 970 304</b>	ORIGINAL SCALE: <b>1:1</b>	MAIN SYSTEM: INGRID	DWG TYPE: PART	DRAWING NUMBER: <b>B0280</b> SHEET 1 of 1				
FINISH: <b>NATURAL</b>	SHEET SIZE: <b>A3</b>	SUB-SYSTEM: FILTER WHEEL	LOCATION: BO					
<small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small>		ITEM: PART	USED ON: B0103					
		ENG DISCIPLINE: MECHANICAL		ISS: 1	DRAWN By: PDJ	DATE DRAWN: 26/1/99	APPROVED By:	DATE APPRVD:

Drawing No:

BO281

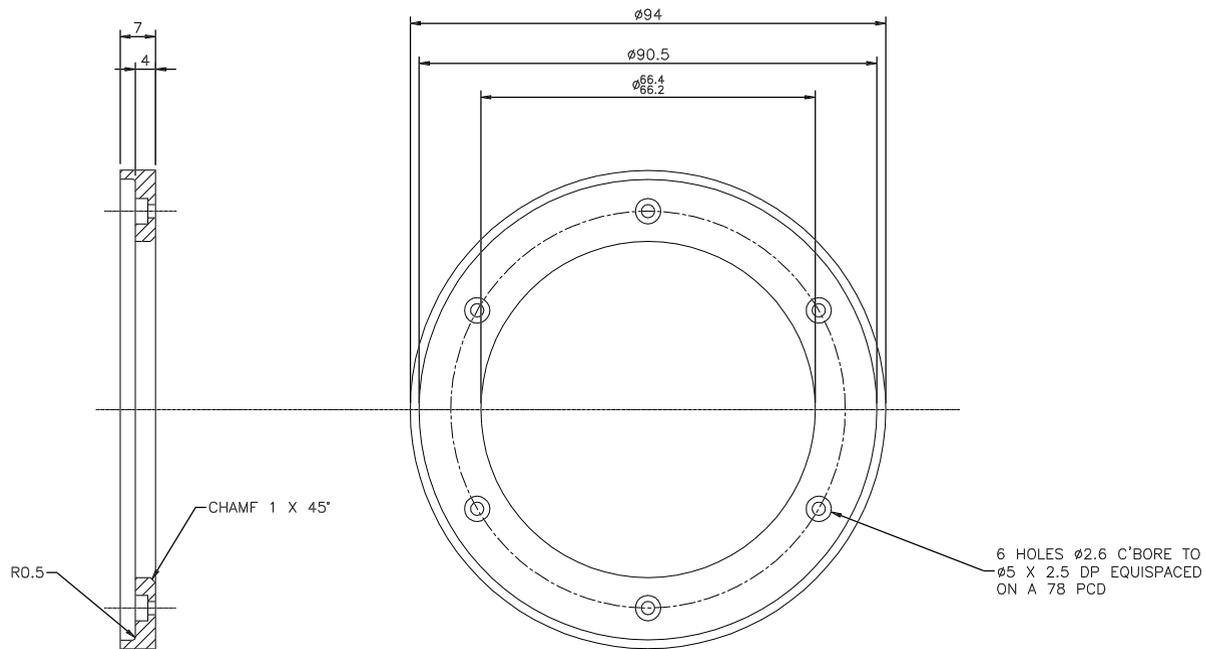
DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE



A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F



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 SUBJECT TO CHANGE  
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UNLESS OTHERWISE STATED  
 ALL DIMENSIONS IN mm  
 GENERAL TOL: ± 0.1  
 ANGULAR TOL: ±  
 SURFACE FINISH (MICRONS) ✓  
 REMOVE ALL SHARP EDGES

TITLE: THRUST BEARING OUTER RACE FILTER WHEEL SUB ASSEMBLY			
MATERIAL: STAINLESS STEEL BS 970 304	ORIGINAL SCALE: 1:1	MAIN SYSTEM: INGRID	DWG TYPE: PART
FINISH: NATURAL	SHEET SIZE: A3	SUB-SYSTEM: FILTER WHEEL	LOCATION: BO
<small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small>		ITEM: PART	USED ON: BO103
		ENG DISCIPLINE: MECHANICAL	

ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD
1	PDJ	26/1/99		

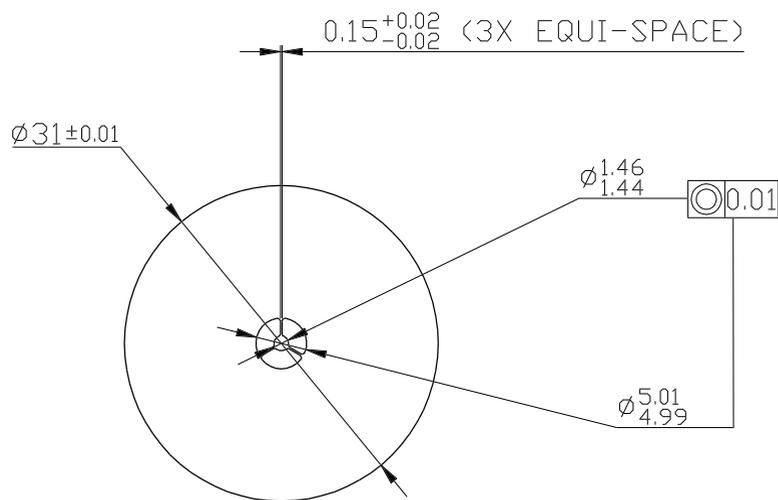
**ISAAC NEWTON GROUP**  
 Apartado de Correos, 321  
 38780 S/C de La Palma  
 Canary Islands  
 SPAIN  
 Tel: +34 922 425 400

DRAWING NUMBER: BO281  
 SHEET 1 of 1

Drawing No  
B0282

DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 



ALL RADII 0.3 MAX

1	PDJ	18/02/99	KMD	18/02/99
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p><b>UNLESS OTHERWISE STATED</b></p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.05</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 1.6 ✓</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE:</p> <p>ELECTRA CENTRAL OBSCURATION MASK FILTER WHEEL SUB ASSEMBLY</p>			<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	<p>MATERIAL: STAINLESS STEEL 0.2 THICK</p>	<p>ORIGINAL SCALE 2:1</p>	<p>MAIN SYSTEM INGRID</p>	<p>DWG TYPE PART</p>	
	<p>FINISH: CLEAN</p>	<p>SHEET SIZE A3</p>	<p>SUB-SYSTEM PUPIL STOPS</p>	<p>LOCATION BO</p>	
			<p>ITEM PART</p>	<p>USED ON B0233</p>	
		<p>ENG DISCIPLINE MECHANICAL</p>	<p>DRAWING NUMBER B0282</p>		<p>SHEET 1 of 1</p>

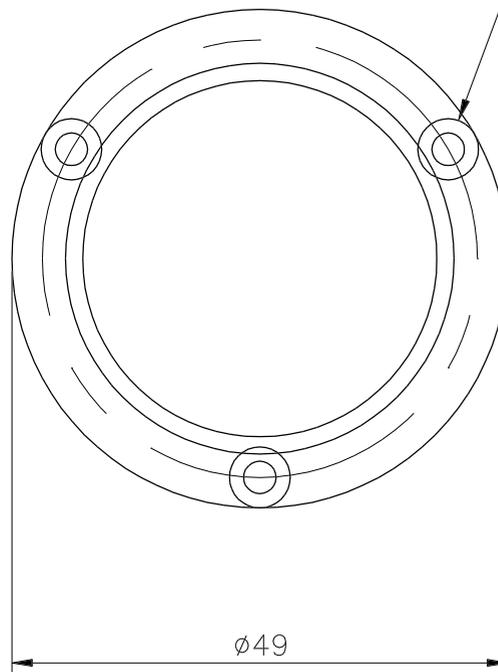
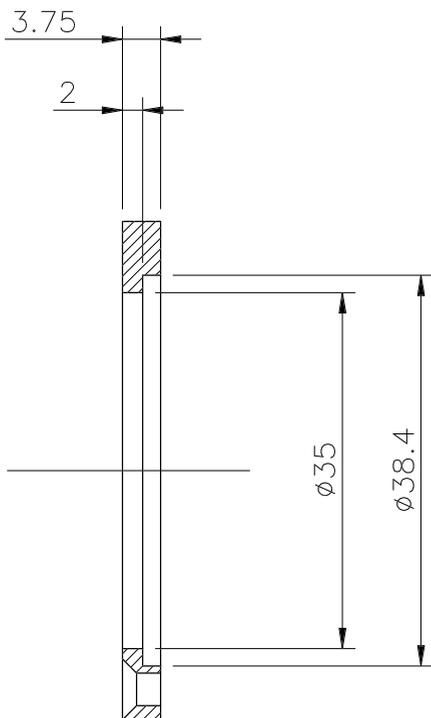


Drawing No:

BO291

DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 



3-  $\%C3.2$  Csk  $\phi 6$  Equi-spaced on a 43 PCD

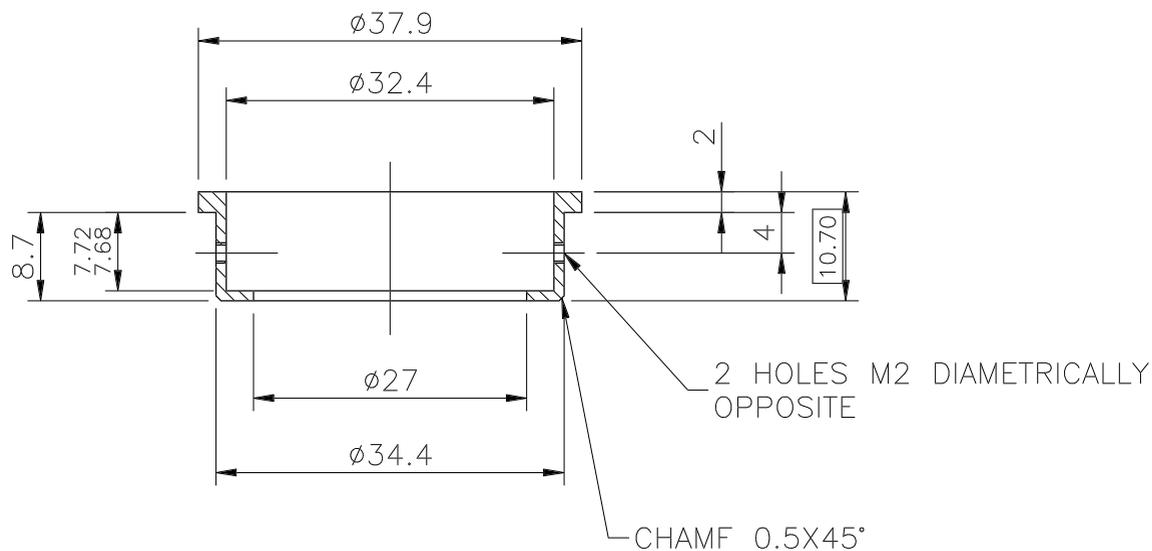
2	PDJ	03/02/00		
1	PDJ	23/02/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: <math>\pm 0.1</math></p> <p>ANGULAR TOL: <math>\pm</math></p> <p>SURFACE FINISH (MICRONS) 3.2 <math>\checkmark</math></p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	TITLE:		CLAMPING RING FILTER WHEEL SUB ASSEMBLY		<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>			
	MATERIAL:	ALUMINIUM ALLOY BS 1470 6082 TF	ORIGINAL SCALE	2:1			MAIN SYSTEM	INGRID
	FINISH:	CLEAN	SUB-SYSTEM	PUPIL STOP INSERTS	LOCATION	BO	USED ON	BO290
			SHEET SIZE	A3	ENG DISCIPLINE	MECHANICAL	DRAWING NUMBER	BO291

Drawing No: B0292

DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 



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 SUBJECT TO CHANGE  
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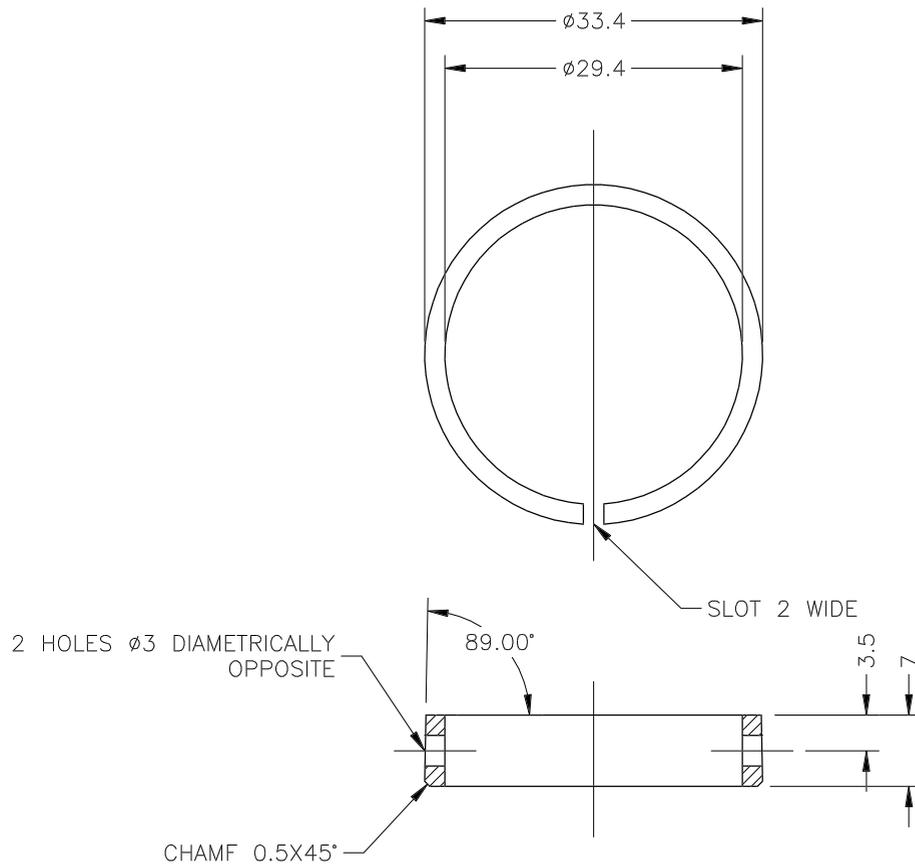
UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: ± 0.1 ANGULAR TOL: ± SURFACE FINISH 1.6 ✓ (MICRONS) REMOVE ALL SHARP EDGES		TITLE: <b>C-SHORT PUPIL STOP HOLDER PUPIL STOP INSERT ASSEMBLY</b>		DRAWING NUMBER <b>B0292</b>	
MATERIAL: ALUMINIUM ALLOY BS 1470 6082 TF		FINISH: CLEAN		DRAWING NUMBER <b>B0292</b>	
ORIGINAL SCALE 2:1		SHEET SIZE A3		DRAWING NUMBER <b>B0292</b>	
SUB-SYSTEM PUPIL STOP INSERTS		ITEM PART		DRAWING NUMBER <b>B0292</b>	
MAIN SYSTEM INGRID		LOCATION BO		DRAWING NUMBER <b>B0292</b>	
DWG TYPE PART		USED ON BO290		DRAWING NUMBER <b>B0292</b>	
MECHANICAL		MECHANICAL		DRAWING NUMBER <b>B0292</b>	
ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400		SHEET 1 of 1		SHEET 1 of 1	

Drawing No:

B0293

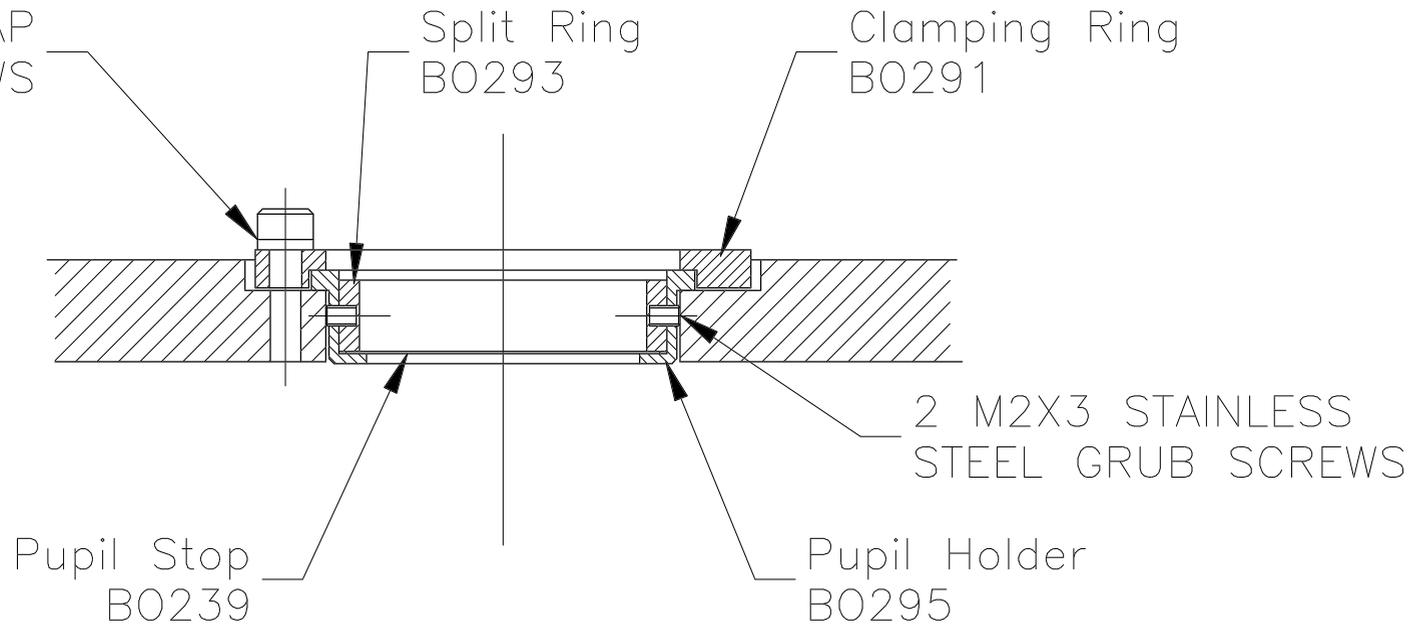
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2	PDJ	03/02/00		
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ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

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	<p>MATERIAL:</p> <p>ALUMINIUM ALLOY BS 1470 6082 TF</p>	<p>ORIGINAL SCALE</p> <p>2:1</p>	<p>MAIN SYSTEM</p> <p>INGRID</p>	<p>DWG TYPE</p> <p>PART</p>
	<p>FINISH:</p> <p>CLEAN</p>	<p>SHEET SIZE</p> <p>A3</p>	<p>SUB-SYSTEM</p> <p>PUPIL STOP INSERTS</p>	<p>LOCATION</p> <p>BO</p>
			<p>ITEM</p> <p>PART</p>	<p>USED ON</p> <p>B0290</p>
		<p>ENG DISCIPLINE</p> <p>MECHANICAL</p>	<p>DRAWING NUMBER</p> <p>B0293</p>	<p>SHEET 1 of 1</p>



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 GENERAL TOL: ±  
 ANGULAR TOL: ±  
 SURFACE FINISH (MICRONS) ✓  
 REMOVE ALL SHARP EDGES

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TITLE: C-SHORT PUPIL STOP INSERT ASSEMBLY FILTER WHEEL SUB ASSEMBLY			
MATERIAL:	ORIGINAL SCALE 2:1	MAIN SYSTEM INGRID	DWG. TYPE SUB-ASSEMBLY
FINISH: CLEAN	SHEET SIZE A3	SUB-SYSTEM PUPIL STOP INSERTS	LOCATION BO
		ITEM ENG DISCIPLINE MECHANICAL	USED ON B0294

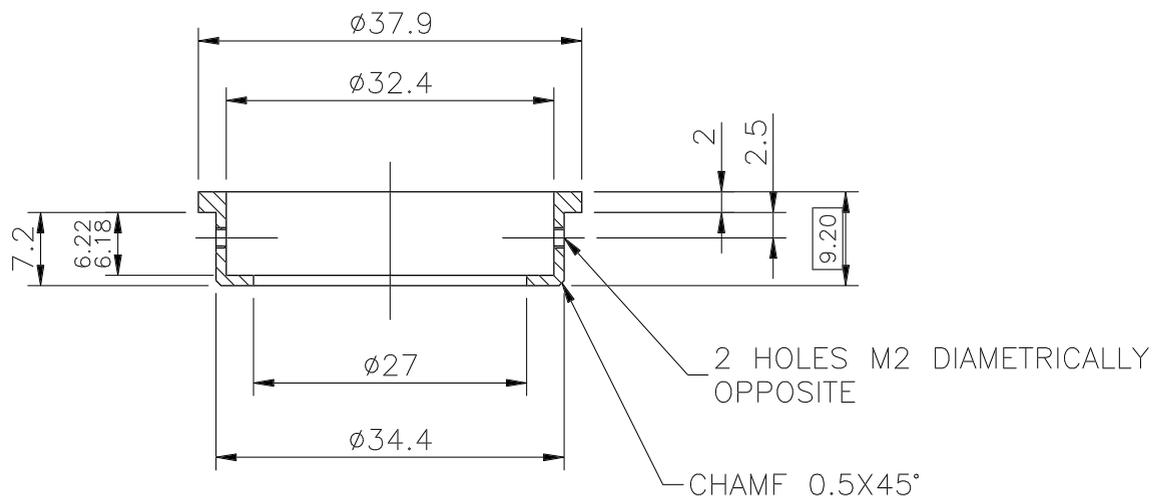
<b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400			
DRAWING NUMBER	B0294	SHEET 1 of 1	

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1	PDJ	23/02/99		

Drawing No: B0295

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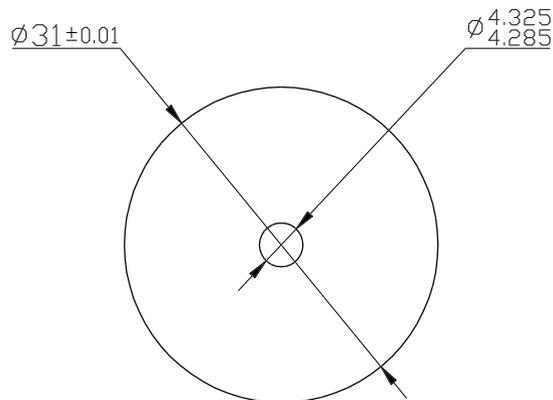
UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: ± 0.1 ANGULAR TOL: ± SURFACE FINISH 1.6 ✓ (MICRONS) REMOVE ALL SHARP EDGES		TITLE: <b>C-SHORT PUPIL STOP HOLDER PUPIL STOP INSERT ASSEMBLY</b>		<b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400	
MATERIAL: ALUMINIUM ALLOY BS 1470 6082 TF		ORIGINAL SCALE 2:1	MAIN SYSTEM INGRID	DWG TYPE PART	DRAWING NUMBER B0295 SHEET 1 of 1
FINISH: CLEAN		SHEET SIZE A3	SUB-SYSTEM PUPIL STOP INSERTS	LOCATION BO	
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1	PDJ	23/02/99		

Drawing No  
B0361

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THIRD ANGLE 



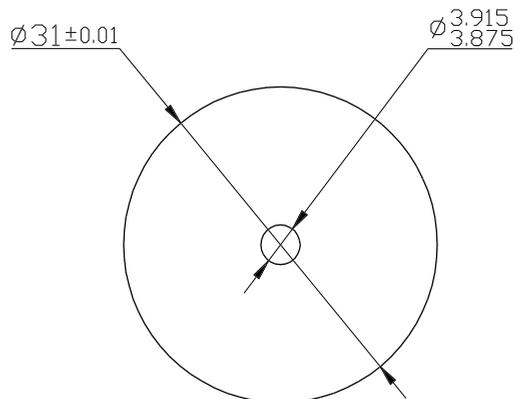
1	PDJ	14/12/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p><b>UNLESS OTHERWISE STATED</b></p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: <math>\pm 0.05</math></p> <p>ANGULAR TOL: <math>\pm 0.1</math></p> <p>SURFACE FINISH 1.6 <math>\checkmark</math></p> <p>(MICRONS)</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE:</p> <p>NAOMI Pupil Stop (J/H) FILTER WHEEL SUB ASSEMBLY</p>		<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	<p>MATERIAL: STAINLESS STEEL 0.2 THICK</p>	<p>ORIGINAL SCALE 2:1</p>	<p>MAIN SYSTEM INGRID</p> <p>SUB-SYSTEM PUPIL STOPS</p>	<p>DWG TYPE PART</p> <p>LOCATION BO</p>
	<p>FINISH: CLEAN</p>	<p>SHEET SIZE A3</p>	<p>ITEM PART</p> <p>ENG DISCIPLINE MECHANICAL</p>	<p>USED ON B0360</p>
		<p>DRAWING NUMBER B0361</p>		<p>SHEET 1 of 1</p>

Drawing No  
B0362

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THIRD ANGLE 



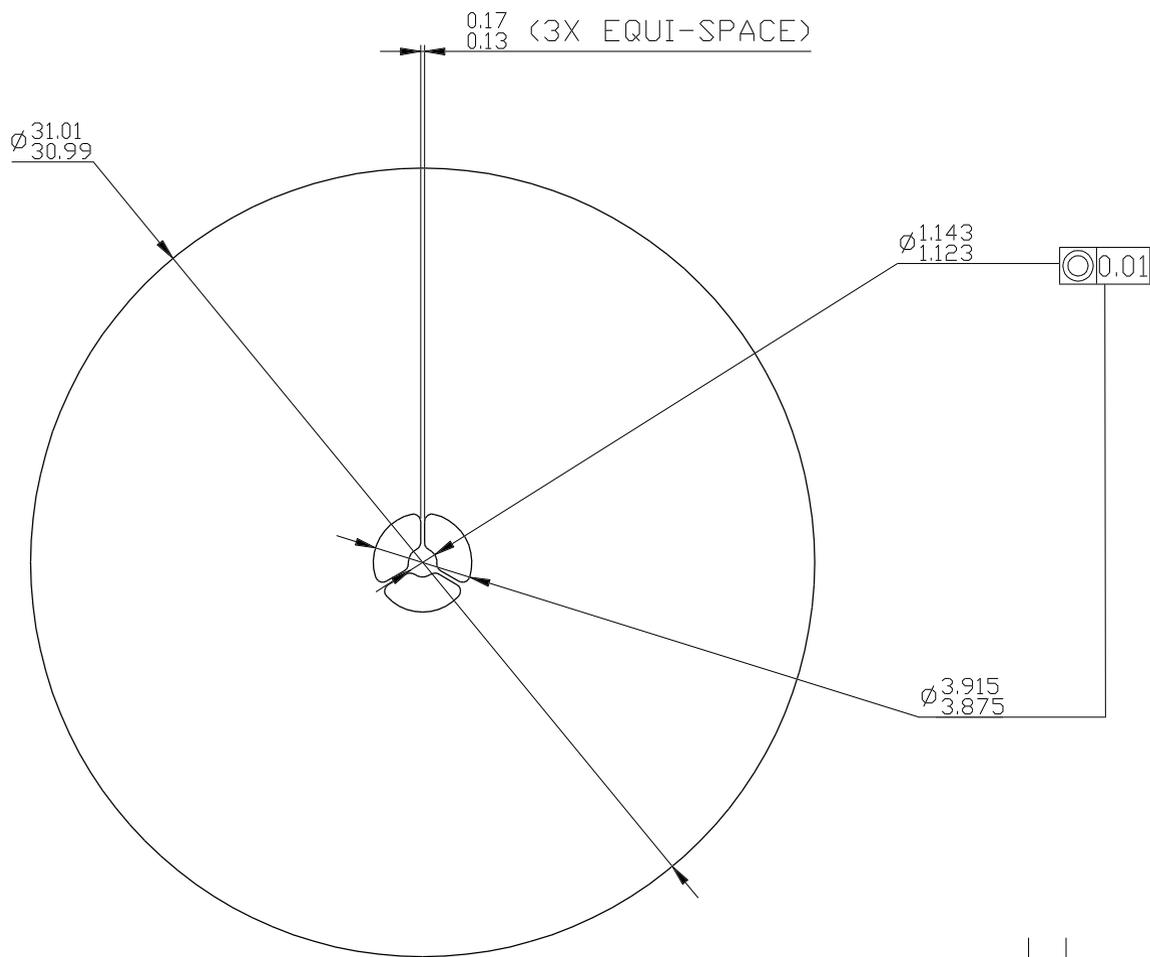
1	PDJ	14/12/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p><b>UNLESS OTHERWISE STATED</b></p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: <math>\pm 0.05</math></p> <p>ANGULAR TOL: <math>\pm 0.1</math></p> <p>SURFACE FINISH (MICRONS) 1.6 ✓</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE:</p> <p style="text-align: center;"><b>NAOMI Pupil Stop (K)</b> <b>FILTER WHEEL SUB ASSEMBLY</b></p>			<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>		
	<p>MATERIAL: STAINLESS STEEL 0.2 THICK</p>	<p>ORIGINAL SCALE 2:1</p>	<p>MAIN SYSTEM INGRID</p>	<p>DWG TYPE PART</p>	<p>DRAWING NUMBER <b>B0362</b></p> <p style="text-align: right;">SHEET 1 of 1</p>	
	<p>FINISH: CLEAN</p>	<p>SHEET SIZE A3</p>	<p>SUB-SYSTEM PUPIL STOPS</p>	<p>LOCATION BO</p>		
			<p>ITEM PART</p>	<p>USED ON B0360</p>		
		<p>ENG DISCIPLINE MECHANICAL</p>				

1 Drawing No B0363

2 DO NOT SCALE IF IN DOUBT ASK

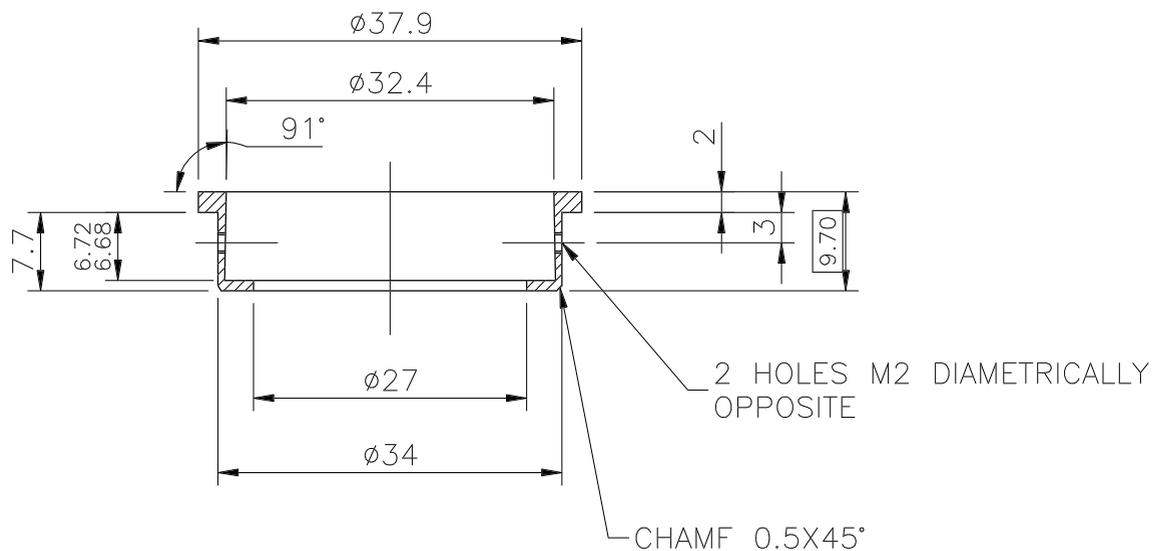
3 4 5 6 7 8 THIRD ANGLE



ALL RADII 0.3 MAX

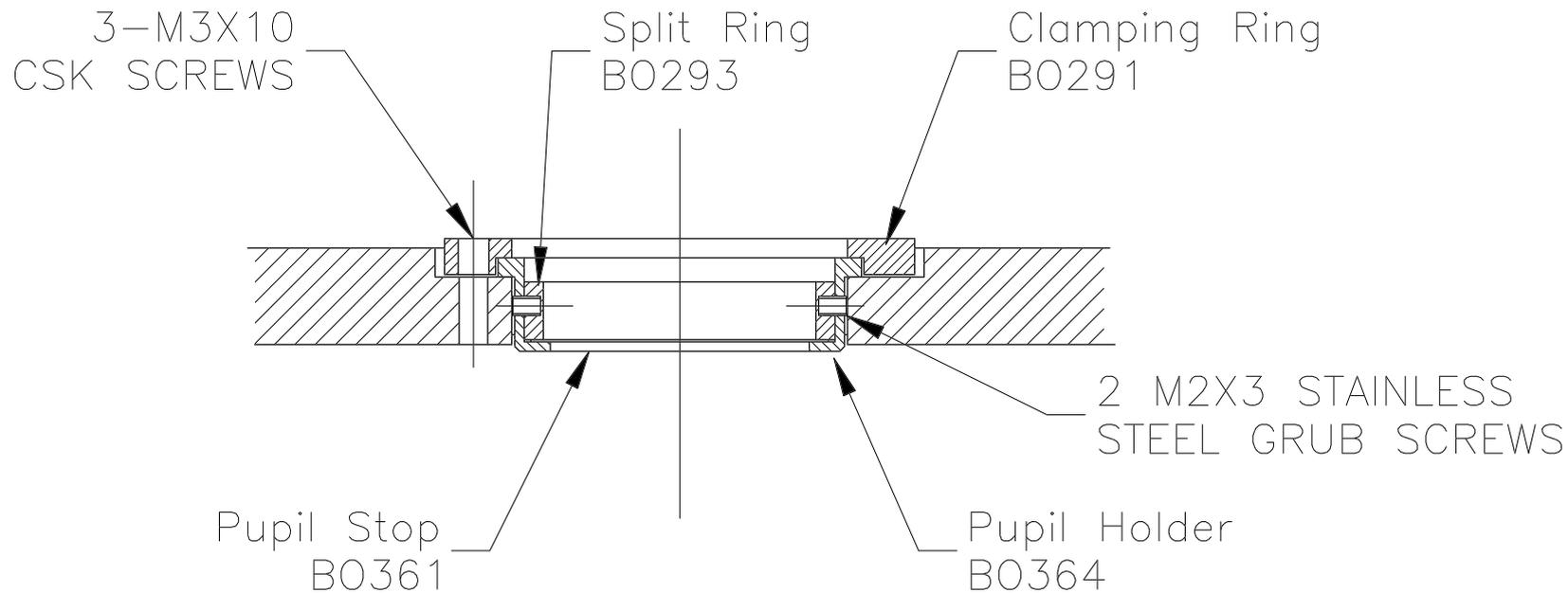
1	PDJ	14/12/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p><b>UNLESS OTHERWISE STATED</b></p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.05</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH 1.6 ✓ (MICRONS)</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE:</p> <p>NAOMI Pupil Stop (K) With Central Obscuration FILTER WHEEL SUB ASSEMBLY</p>		<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	<p>MATERIAL:</p> <p>STAINLESS STEEL 0.2 THICK</p>	<p>ORIGINAL SCALE</p> <p>5:1</p>	<p>MAIN SYSTEM</p> <p>INGRID</p>	<p>DWG TYPE</p> <p>PART</p>
	<p>FINISH:</p> <p>CLEAN</p>	<p>SHEET SIZE</p> <p>A3</p>	<p>SUB-SYSTEM</p> <p>PUPIL STOPS</p>	<p>LOCATION</p> <p>BO</p>
			<p>ITEM</p> <p>PART</p>	<p>USED ON</p> <p>B0360</p>
		<p>ENG DISCIPLINE</p> <p>MECHANICAL</p>	<p>DRAWING NUMBER</p> <p>B0363</p>	<p>SHEET 1 of 1</p>



1	PDJ	03/02/00		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

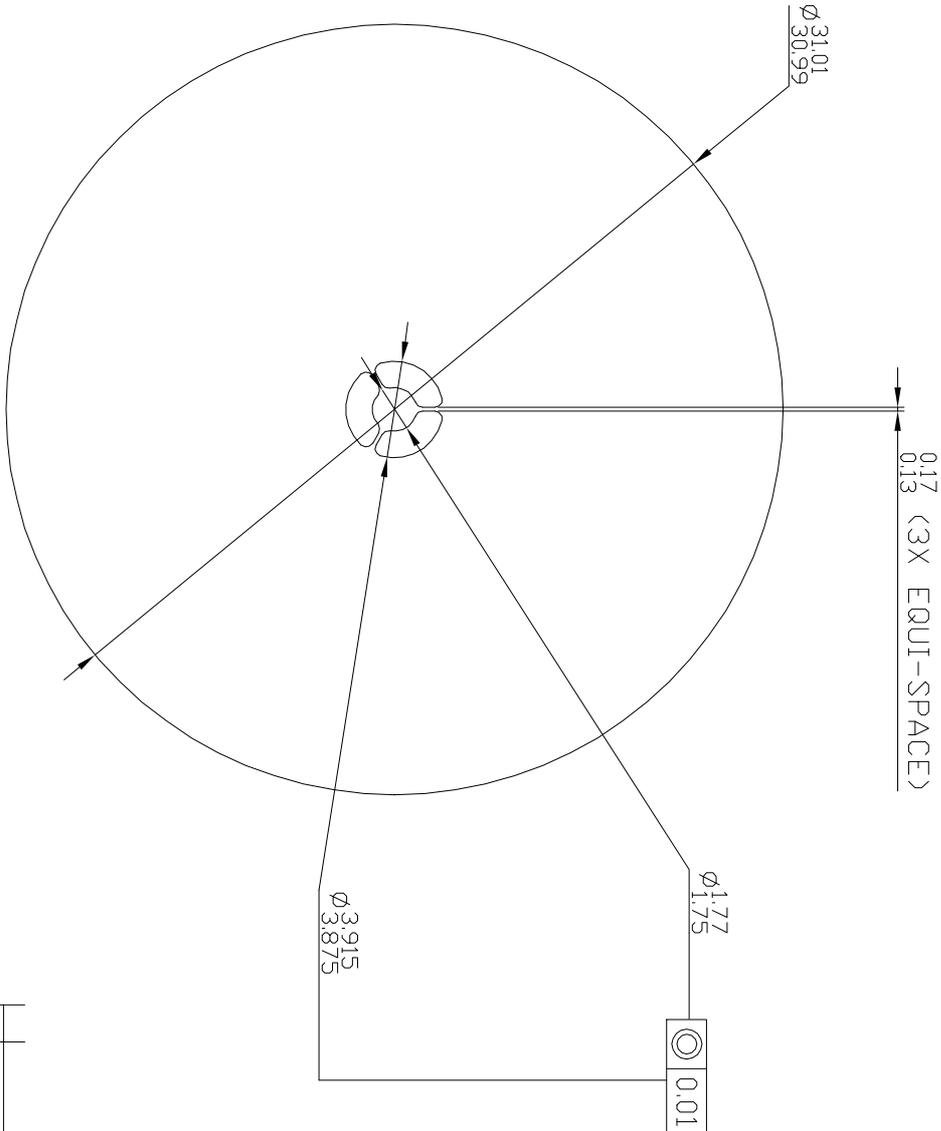
<p><b>UNLESS OTHERWISE STATED</b></p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ±</p> <p>SURFACE FINISH 1.6 ✓ (MICRONS)</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE:</p> <p align="center"><b>NAOMI PUPIL STOP HOLDER PUPIL STOP INSERT ASSEMBLY</b></p>		<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	<p>MATERIAL: ALUMINIUM ALLOY BS 1470 6082 TF</p>	<p>ORIGINAL SCALE 2:1</p>	<p>MAIN SYSTEM INGRID</p>	<p>DWG TYPE PART</p>
	<p>FINISH: CLEAN</p>	<p>SHEET SIZE A3</p>	<p>SUB-SYSTEM PUPIL STOP INSERTS</p>	<p>LOCATION BO</p>
			<p>ITEM PART</p>	<p>USED ON B0365</p>
		<p>ENG DISCIPLINE MECHANICAL</p>	<p>DRAWING NUMBER B0364</p>	<p>SHEET 1 of 1</p>



1	PDJ	03/02/00		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p><b>UNLESS OTHERWISE STATED</b></p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ±</p> <p>ANGULAR TOL: ±</p> <p>SURFACE FINISH (MICRONS) ✓</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE:</p> <p>NAOMI PUPIL STOP INSERT ASSEMBLY FILTER WHEEL SUB ASSEMBLY</p>		<p><b>ISAAC NEWTON GROUP</b> Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	<p>MATERIAL:</p>	<p>ORIGINAL SCALE</p> <p>2:1</p>	<p>MAIN SYSTEM</p> <p>INGRID</p>	<p>DWG. TYPE</p> <p>SUB-ASSEMBLY</p>
	<p>FINISH:</p> <p>CLEAN</p>	<p>SHEET SIZE</p> <p>A3</p>	<p>SUB-SYSTEM</p> <p>PUPIL STOP INSERTS</p>	<p>LOCATION</p> <p>BO</p>
			<p>ITEM</p> <p>ASSY</p>	<p>USED ON</p> <p>BO103</p>
		<p>ENG DISCIPLINE</p> <p>MECHANICAL</p>	<p>DRAWING NUMBER</p> <p>B0365</p>	<p>SHEET 1 of 1</p>

DO NOT SCALE IF IN DOUBT ASK



Note, Place a central  
ALL RADII 0.3 MAX pip/mark to aid alignment

UNLESS OTHERWISE STATED  
ALL DIMENSIONS IN mm

GENERAL TOL: ± 0.05  
ANGULAR TOL: ± 0.1  
SURFACE FINISH: 1.6  
(MICRONS) ✓  
REMOVE ALL SHARP EDGES

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TITLE: NAOMI Pupil Stop with Central Obscuration  
FILTER WHEEL SUB ASSEMBLY

MATERIAL: STAINLESS STEEL  
FINISH: CLEAN

ORIGINAL SCALE MAIN SYSTEM: 5:1  
SHEET SIZE: A3

ISO: SUB-SYSTEM: PUPIL STOPS  
PART: MECHANICAL

DWG TYPE: PART  
LOCATION: BO

ISS	DATE	APPROVED BY	DATE APPROV
1	13/12/01	PUJ	

USED ON: BO375

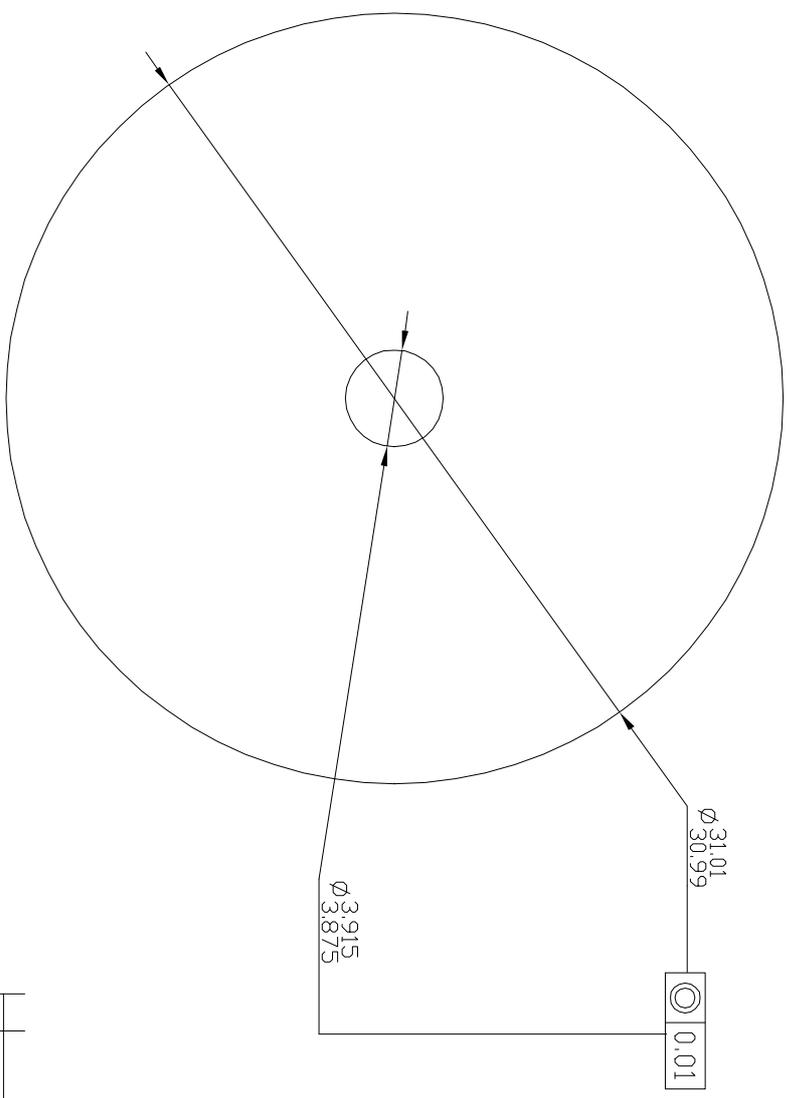
DRAWING NUMBER: B0368

SHEET 1 of 1

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Apartado de Correos 321  
58700 de Linares  
Cádiz, Spain  
Tel: +34 922 423 400

Drawing No  
B0369

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ALL RADII 0.3 MAX

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ALL DIMENSIONS IN mm

GENERAL TOL: ± 0.05  
ANGULAR TOL: ± 0.1  
SURFACE FINISH: 1.6  
(MICRONS) ✓  
REMOVE ALL SHARP EDGES

Material of manufacture and finish to be confirmed without the approval of the designer of the ISMAC

TITLE:  
FILTER WHEEL SUB ASSEMBLY  
NAOMI Pupil Stop

MATERIAL: STAINLESS STEEL  
FINISH: CLEAN

ORIGINAL SCALE MAIN SYSTEM  
SHEET SIZE: A3

GRID: PUPIL STOPS  
PART: MECHANICAL

DWG TYPE: PART  
LOCATION: BO

DRAWING NUMBER: B0369  
Tel: +34 922 423 400

ISMAC NEWTON GROUP  
Apartado de Correos 321  
58700 de Medina  
Caceres, Spain

ISS	DRAWN BY	DATE DRAWN	APPROVED BY	DATE APPROV
1	PDU	13/12/01		

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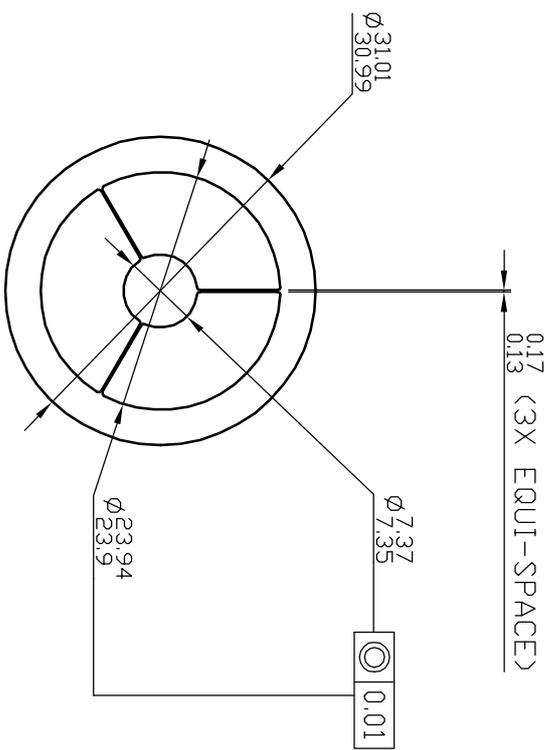
A B C D E F

CAD FILE B0369.dwg

SHEET 1 of 1

Drawing No  
B0370

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ALL RADII 0.3 MAX

Note, Place a central  
pip/mark to aid alignment

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1	PBJ	13/12/01		

UNLESS OTHERWISE STATED  
ALL DIMENSIONS IN mm

GENERAL TOL: ± 0.05  
ANGULAR TOL: ± 0.1  
SURFACE FINISH: 1.6  
(MICRONS)

REMOVE ALL SHARP EDGES

MATERIAL: STAINLESS STEEL  
FINISH: CLEAN

ORIGINAL SCALE: 2:1  
SHEET SIZE: A3

GRID: PUPIL STOPS  
PART: MECHANICAL

ISO TYPE: PART  
LOCATION: BO

USED ON: B0290 B0371 B0376

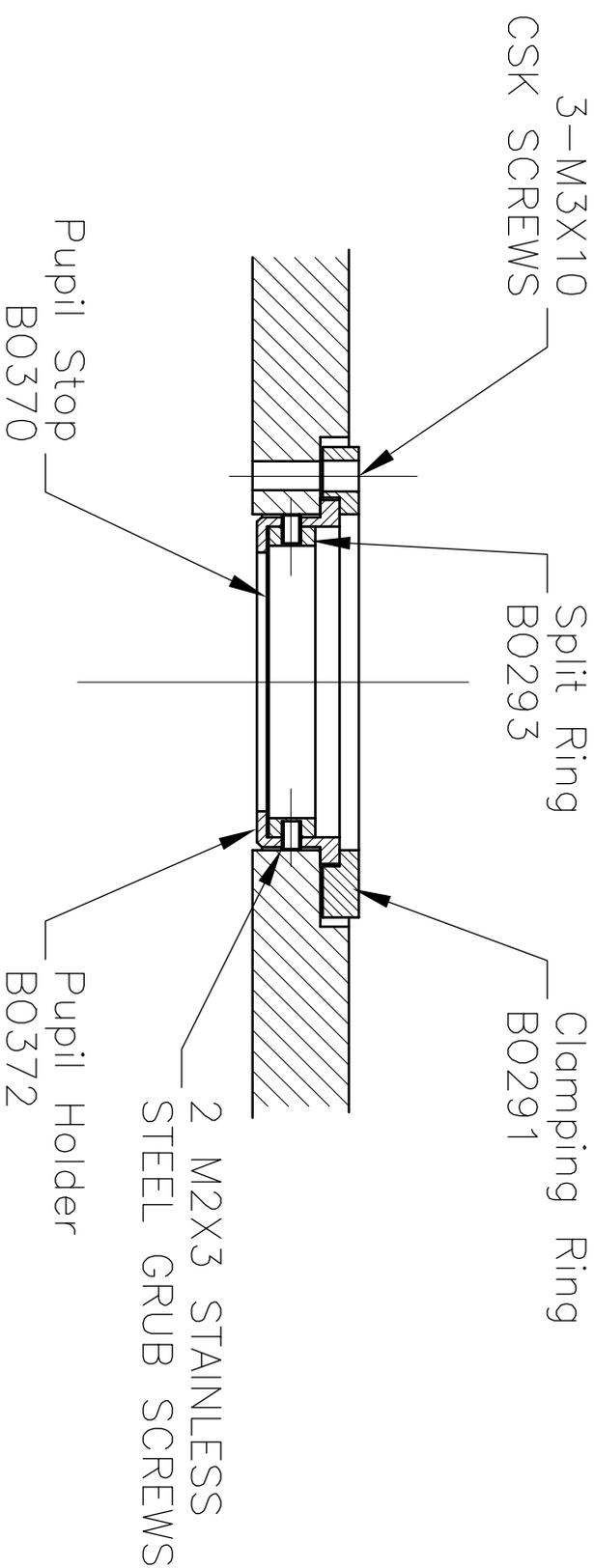
DRAWING NUMBER: B0370

SHEET 1 of 1

ISAAC NEWTON GROUP  
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80700 S/C de San Juan  
Cauvery, Irlanda  
SPAIN  
Tel: +34 922 426 400

Drawing No  
B0371

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UNLESS OTHERWISE STATED

ALL DIMENSIONS IN mm  
GENERAL TOL: ±  
ANGULAR TOL: ±  
SURFACE FINISH  
(MICRONS)

REMOVE ALL SHARP EDGES

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Cass J PUPIL STOP INSERT ASSEMBLY  
FILTER WHEEL SUB ASSEMBLY

TITLE:

MATERIAL:

FINISH:

ORIGINAL SCALE

SHEET SIZE

SUB-SYSTEM

ENG DESIGNER

DWG TYPE

LOCATION

USED ON

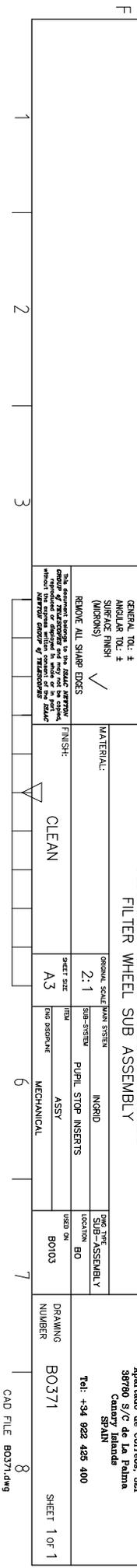
DRAWING NUMBER

DWG NUMBER

SHEET 1 of 1

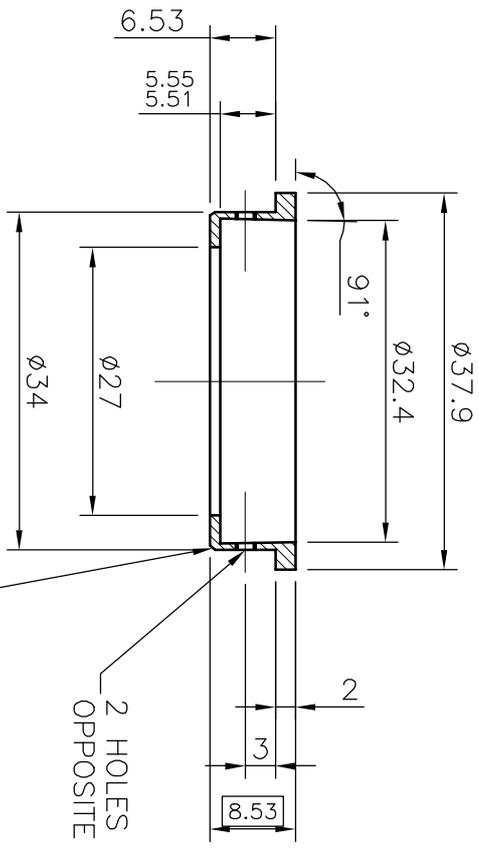
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50900 S/C de Llanena  
Caceres, España  
SPAIN  
Tel: +34 922 426 400

ISS	DRAWN BY	DATE DRAWN	APPROVED BY	DATE APPROV
1	PBJ	13/12/01		



CAD FILE B0371.dwg

DO NOT SCALE IF IN DOUBT ASK



2 HOLES M2 DIAMETRICALLY OPPOSITE  
 CHAMF 0.5X45°

ISS	DRAWN BY	DATE DRAWN	APPROVED BY	DATE APPROV
1	PBJ	13/12/01		

UNLESS OTHERWISE STATED  
 ALL DIMENSIONS IN mm  
 GENERAL TOL: ± 0.1  
 ANGULAR TOL: ±  
 SURFACE FINISH: 1.6 (MICRONS)  
 REMOVE ALL SHARP EDGES

**Cass J PUPIL STOP HOLDER**  
**PUPIL STOP INSERT ASSEMBLY**

MATERIAL: ALUMINIUM ALLOY  
 BS 1470 6082 TF

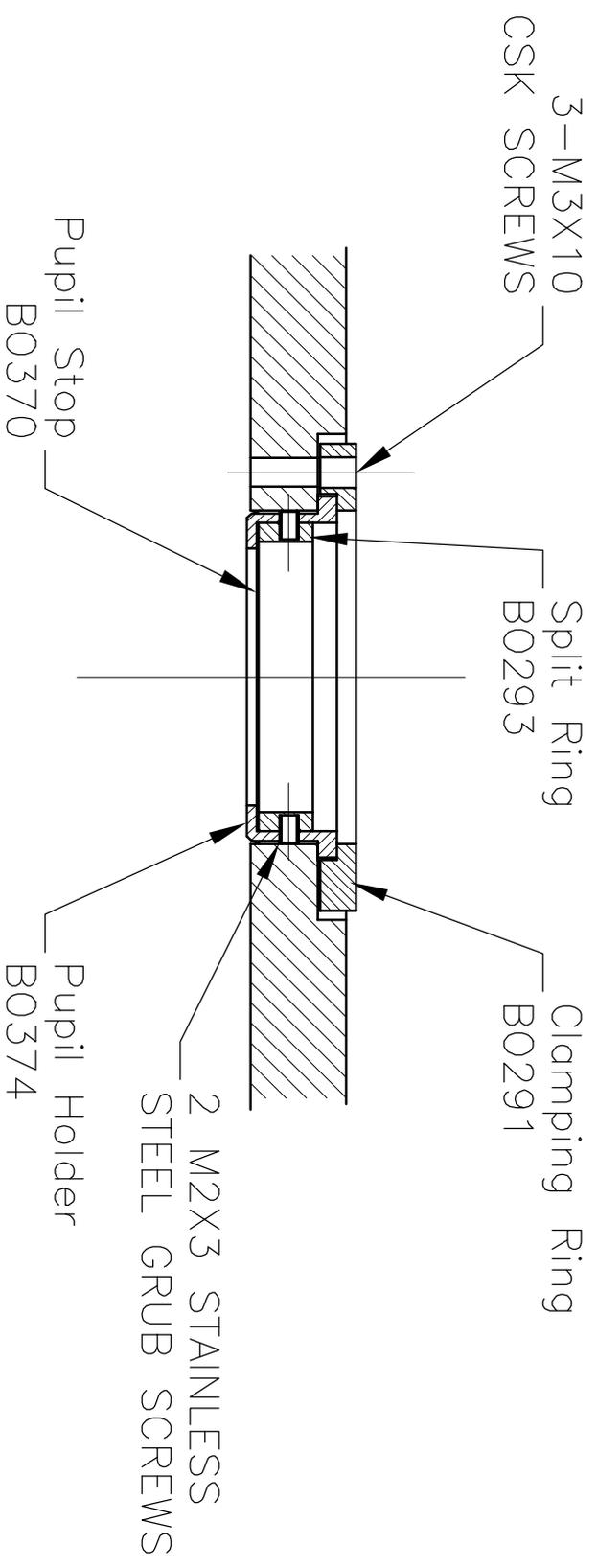
FINISH: CLEAN

ORIGINAL SCALE: MAIN SYSTEM: 2:1  
 SHEET SIZE: A3

DATE	DESCRIPTION	BY
	ISSUED ON	
	LOCATION	
	ISS	
	DRAWN BY	
	DATE DRAWN	
	APPROVED BY	
	DATE APPROV	

ISAAC NEWTON GROUP  
 Apartado de Correos 321  
 38700 S/C de Tenerife  
 Canary Islands  
 SPAIN  
 Tel: +34 922 426 400

DRAWING NUMBER: B0372  
 SHEET 1 of 1



ISS	DRAWN BY	DATE DRAWN	APPROVED BY	DATE APPROV
1	PBJ	13/12/01		

**TITLE:** COSS H PUPIL STOP INSERT ASSEMBLY  
FILTER WHEEL SUB ASSEMBLY

**UNLESS OTHERWISE STATED**  
ALL DIMENSIONS IN mm  
GENERAL TOL: ±  
ANGULAR TOL: ±  
SURFACE FINISH (MICRONS)  
REMOVE ALL SHARP EDGES

**MATERIAL:** INGRID  
**FINISH:** CLEAN

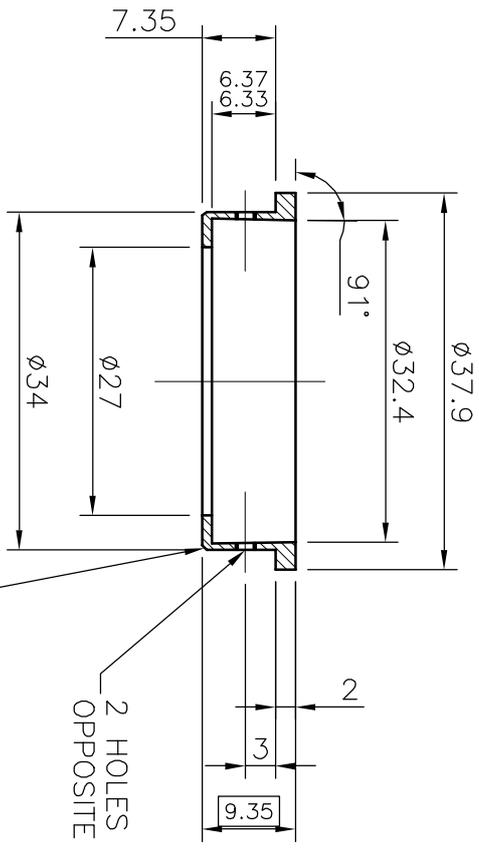
**ORIGINAL SCALE:** 2:1  
**SHEET SIZE:** A3  
**DATE:** 13/12/01  
**ENG DESCRIPTION:** PUPIL STOP INSERTS  
**USED ON:** B0103

**DWG TYPE:** SUB-ASSEMBLY  
**LOCATION:** BO

**DRAWING NUMBER:** B0373  
**SHEET:** 1 of 1

**ISMAAC NEWTON GROUP**  
Apartado de Correos 321  
80700 S/C de las Palmas  
Canary Islands  
SPAIN  
Tel: +34 922 426 400

DO NOT SCALE IF IN DOUBT ASK



2 HOLES M2 DIAMETRICALLY OPPOSITE  
 CHAMF 0.5X45°

UNLESS OTHERWISE STATED

ALL DIMENSIONS IN mm  
 GENERAL TOL: ± 0.1  
 ANGULAR TOL: ±  
 SURFACE FINISH: 1.6 (MICRONS)  
 REMOVE ALL SHARP EDGES

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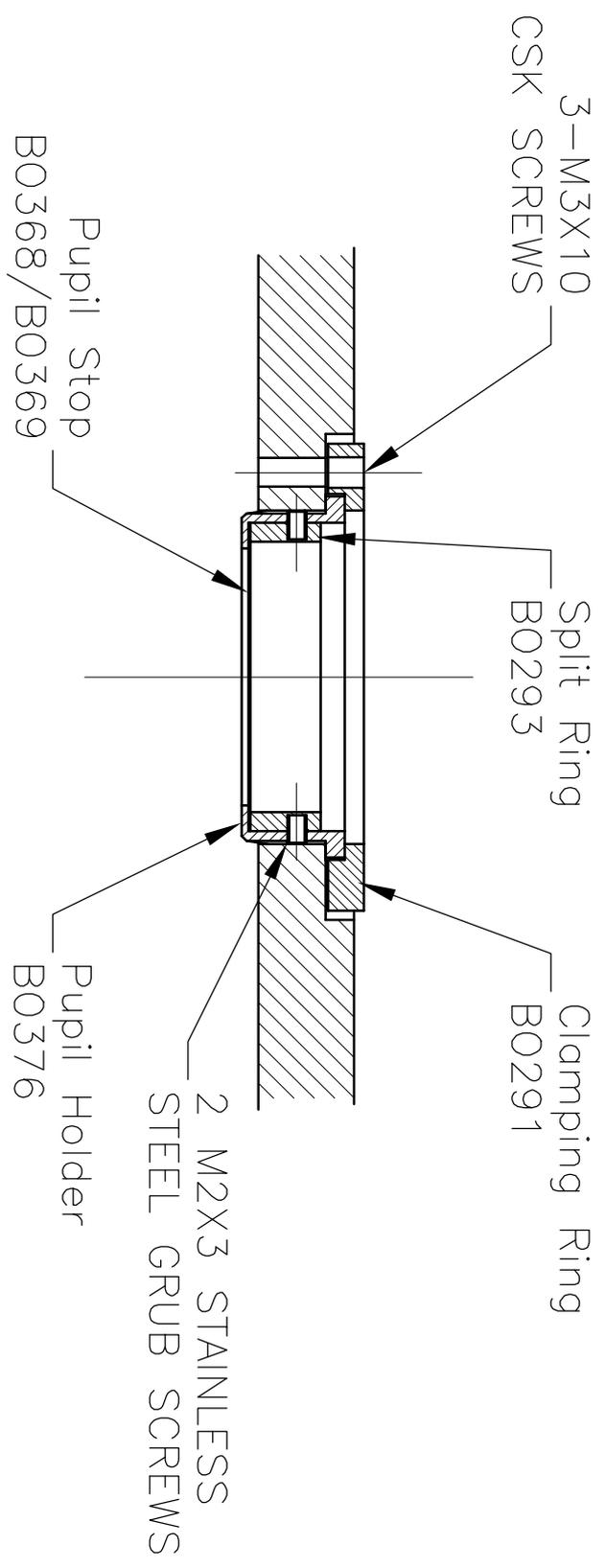
TITLE: Cass H PUPIL STOP HOLDER  
 PUPIL STOP INSERT ASSEMBLY  
 MATERIAL: ALUMINIUM ALLOY  
 BS 1470 6082 TF  
 FINISH: CLEAN

ORIGINAL SCALE: MAIN SYSTEM  
 SHEET SIZE: 2:1  
 SUB-SYSTEM: PUPIL STOP INSERTS  
 INGRID: PART  
 MECHANICAL

DWG TYPE: PART  
 LOCATION: BO  
 USED ON: B0373  
 DRAWING NUMBER: B0374  
 SHEET 1 OF 1

ISAAC NEWTON GROUP  
 Apartado de Correos 321  
 58760 S/C de Guadalupe  
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ISS	DRAWN BY	DATE DRAWN	APPROVED BY	DATE APPROV
1	PDU	13/12/01		



UNLESS OTHERWISE STATED

ALL DIMENSIONS IN mm

GENERAL TOL: ±  
ANGULAR TOL: ±  
SURFACE FINISH  
(MICRONS)

REMOVE ALL SHARP EDGES

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TITLE: NAOMI PUPIL STOP INSERT ASSEMBLY  
FILTER WHEEL SUB ASSEMBLY

MATERIAL:

FINISH: CLEAN

ORIGINAL SCALE DRAWN SYSTEM

SHEET SIZE: A3

SUB-SYSTEM

ENG DESCRIPTION

INGRID

ASSY

DWG TYPE

USED ON

LOCATION

BO103

ISMAAC NEWTON GROUP

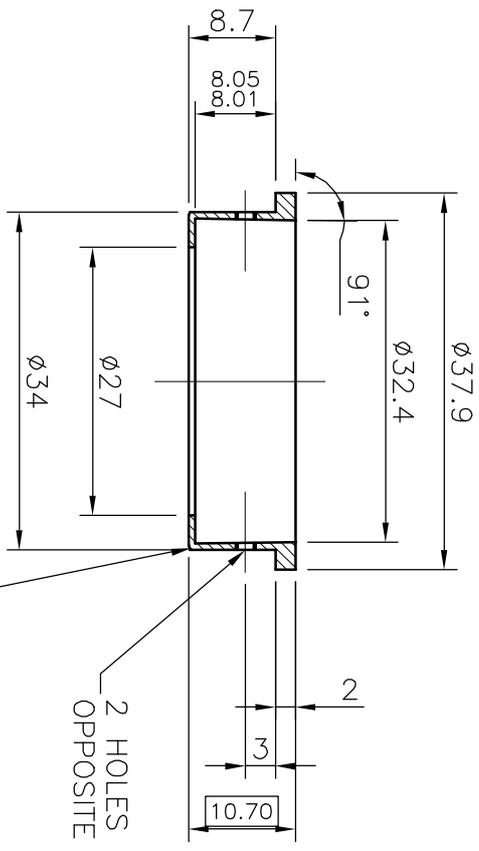
Apdo de Correo 321  
58960 S/C de las Minas  
Caceres, Huelva  
SPAIN  
Tel: +34 922 425 400

ISS	DRAWN BY	DATE DRAWN	APPROVED BY	DATE APPROV
1	PJU	13/12/01		

DRAWING NUMBER: B0375

SHEET 1 OF 1

DO NOT SCALE IF IN DOUBT ASK



2 HOLES M2 DIAMETRICALLY OPPOSITE  
 CHAMF 0.5X45°

ISS	DRAWN BY	DATE DRAWN	APPROVED BY	DATE APPROV
1	PDU	13/12/01		

UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: ± 0.1 ANGULAR TOL: ± SURFACE FINISH: 1.6 (MICRONS) REMOVE ALL SHARP EDGES		TITLE: NAOMI PUPIL STOP HOLDER PUPIL STOP INSERT ASSEMBLY	
MATERIAL: ALUMINIUM ALLOY BS 1470 6082 TF		FINISH: CLEAN	
ORIGINAL SCALE: MAIN SYSTEM 2:1		SHEET SIZE: A3	
SUB-SYSTEM: PUPIL STOP INSERTS		INGRID PART	
ENG DESCRIPTION: MECHANICAL		DWG TYPE: PART	
USED ON: B0375		DRAWING NUMBER: B0376	
ISMAIC NEWTON GROUP Apartado de Correos 321 58760 S/C de Guadalupe Canary Islands SPAIN Tel: +34 922 425 400			