



**ISAAC NEWTON
GROUP OF
TELESCOPES**

Apartado de Correos 321, 38780 S/C de La Palma, Canary Islands, SPAIN

TITLE:	Lens Holder 1 General Assembly INGRID Lens Mounts	NAME	PDJ	DATE	22/07/99	REVISION	1
DWG No:	BO320	CHECKED:					
		APPROVED:					

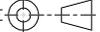
GA ITEM No.	DRAWING NUMBER	REV	DRAWING TITLE OR COMPONENT NAME	No. Per ASSEMBLY	REMARKS	MATERIAL
	BO320	1	General Assembly	1		
1	BO321	1	Mount 1 Axial Clip	3		PTFE
2	BO322	1	Vee Pad For Mount 1	2		PTFE
3	BO323	1	Preload Spring For Mount 1	1		Delrin
4	BO324	1	Lens Mount 1	1		Aluminium Alloy 6082 TF
5	BO325	1	Mount 2 Axial Clip	3		PTFE
6	BO326	1	Vee Pad For Mount 2	2		PTFE
7	BO327	1	Preload Spring For Mount 2	1		Delrin
8	BO328	1	Lens Mount 2	1		Aluminium Alloy 6082 TF
9	BO329	1	Lens Holder 1	1		Aluminium Alloy 6082 TF

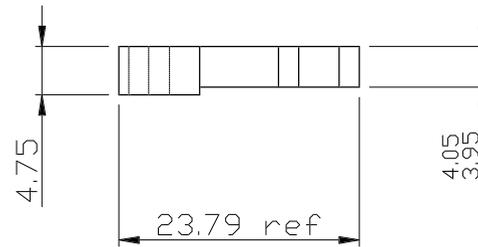
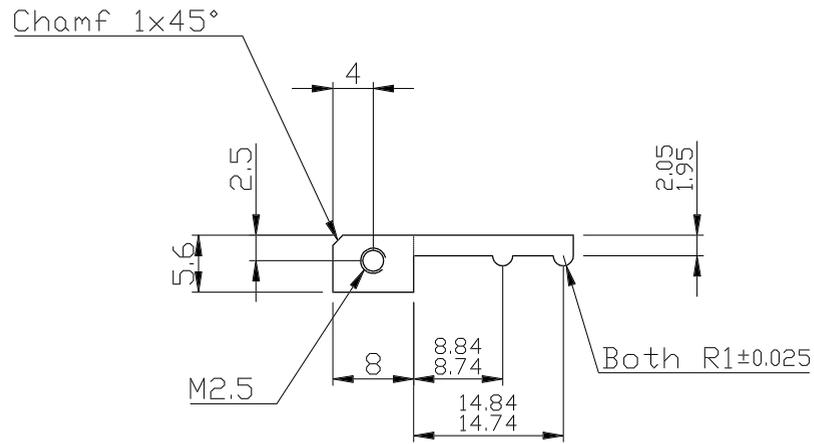
 ISAAC NEWTON GROUP OF TELESCOPES <i>Apartado de Correos 321, 38780 S/C de La Palma, Canary Islands, SPAIN</i>	TITLE:	Lens Holder 2 General Assembly INGRID Lens Mounts	DRAWN:	PDJ	DATE	22/07/99	REVISION	1
	DWG No:	BO330	CHECKED:					
			APPROVED:					

GA ITEM No.	DRAWING NUMBER	REV	DRAWING TITLE OR COMPONENT NAME	No. Per ASSEMBLY	REMARKS	MATERIAL
	BO330	1	General Assembly	1		
1	BO331	1	Mount 3 Axial Clip	3		PTFE
2	BO332	1	Vee Pad For Mount 3	2		PTFE
3	BO333	1	Preload Spring For Mount 3	1		Delrin
4	BO334	1	Lens Mount 3	1		Aluminium Alloy 6082 TF
5	BO335	1	Mount 4 Axial Clip	3		PTFE
6	BO336	1	Vee Pad For Mount 4	2		PTFE
7	BO337	1	Preload Spring For Mount 4	1		Delrin
8	BO338	1	Lens Mount 4	1		Aluminium Alloy 6082 TF
9	BO339	1	Lens Holder 2	1		Aluminium Alloy 6082 TF

Drawing No
B0337

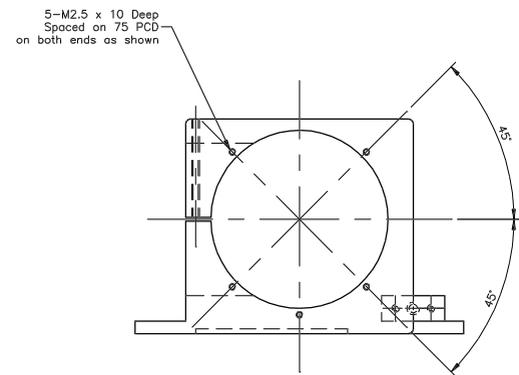
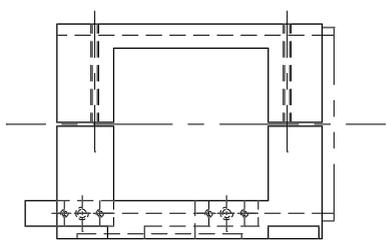
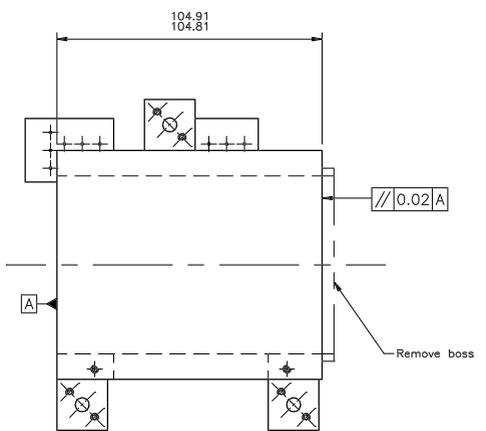
DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 



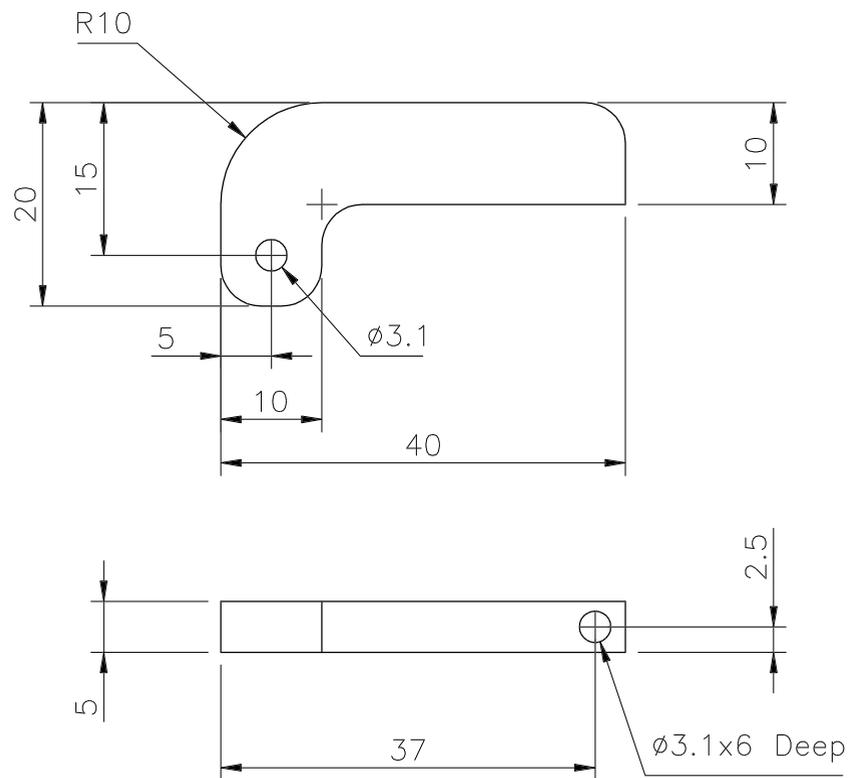
1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</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: Preload Spring For Mount 4 INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	MATERIAL: Delrin	ORIGINAL SCALE 2:1	MAIN SYSTEM INGRID	DWG TYPE Part	
	FINISH: Clean	SHEET SIZE A3	SUB-SYSTEM Lens Mount	LOCATION BO	
			ITEM Part	USED ON B0330	
		ENG DISCIPLINE MECHANICAL			<p>DRAWING NUMBER B0337</p> <p>SHEET 1 of 1</p>



1	PDJ	6/9/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

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	MATERIAL: B0178	ORIGINAL SCALE: 1:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
	FINISH: Clean	SHEET SIZE: A1	SUB-SYSTEM: Lens Mount	LOCATION: BO	USED ON: B0107
			ENG DISCIPLINE: MECHANICAL		DRAWING NUMBER: B0316
					SHEET 1 of 1



All Radii 4.0 unless otherwise stated

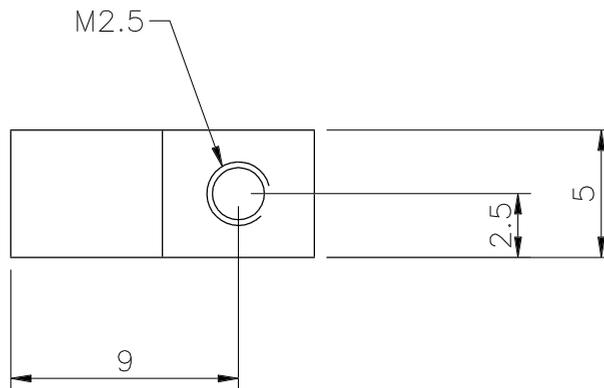
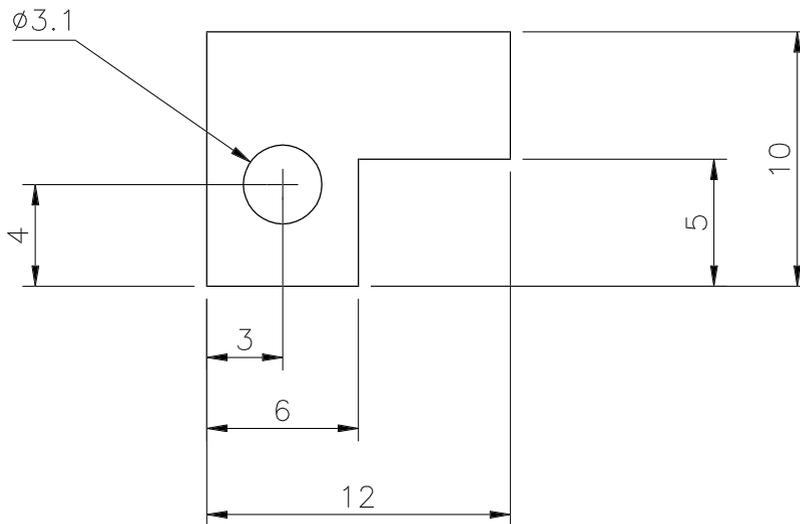
1	PDJ	6/8/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

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	<p>MATERIAL: Aluminium Alloy</p>	<p>ORIGINAL SCALE: 5:1</p>	<p>MAIN SYSTEM: INGRID</p>	<p>DWG TYPE: Part</p>
	<p>FINISH: Clean</p>	<p>SHEET SIZE: A3</p>	<p>SUB-SYSTEM: Lens Mount</p>	<p>LOCATION: BO</p>
			<p>ITEM: Lever</p>	<p>USED ON: B0320</p>
		<p>ENG DISCIPLINE: MECHANICAL</p>	<p>DRAWING NUMBER: B0317</p>	<p>SHEET 1 of 1</p>

Drawing No: B0318

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 ANGULAR TOL: ±
 SURFACE FINISH (MICRONS) ✓
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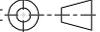
TITLE: Lens Holder Adjuster INGRID Lens Mount			
MATERIAL: Aluminium Alloy	ORIGINAL SCALE: 5:1	MAIN SYSTEM: INGRID	DWG TYPE: Part
FINISH: Clean	SHEET SIZE: A3	SUB-SYSTEM: Lens Mount	LOCATION: BO
		ITEM: Adjuster	USED ON: B0320
		ENG DISCIPLINE: MECHANICAL	

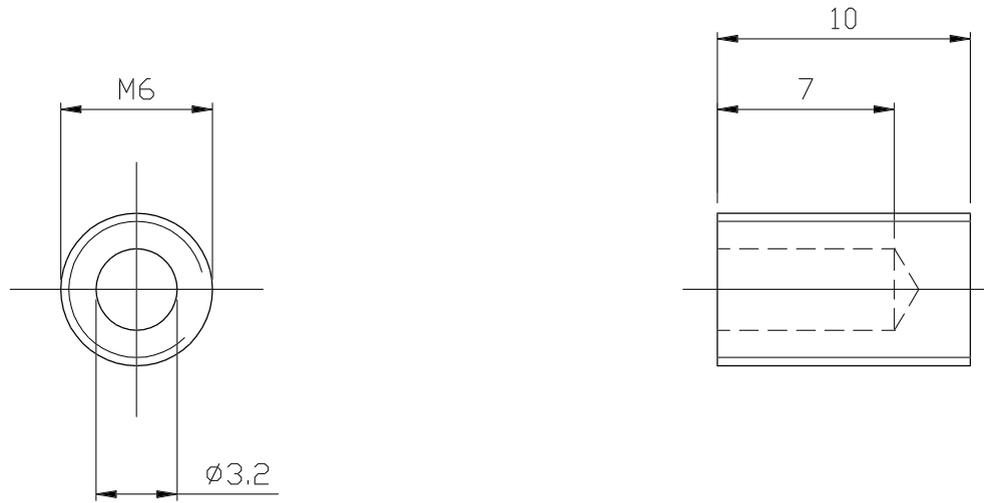
ISAAC NEWTON GROUP
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 38780 S/C de La Palma
 Canary Islands
 SPAIN
 Tel: +34 922 425 400

DRAWING NUMBER: B0318 SHEET 1 of 1

Drawing No
B0319

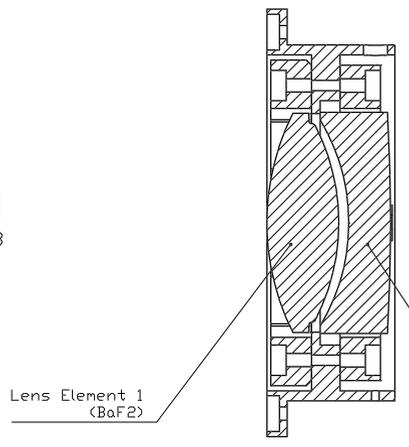
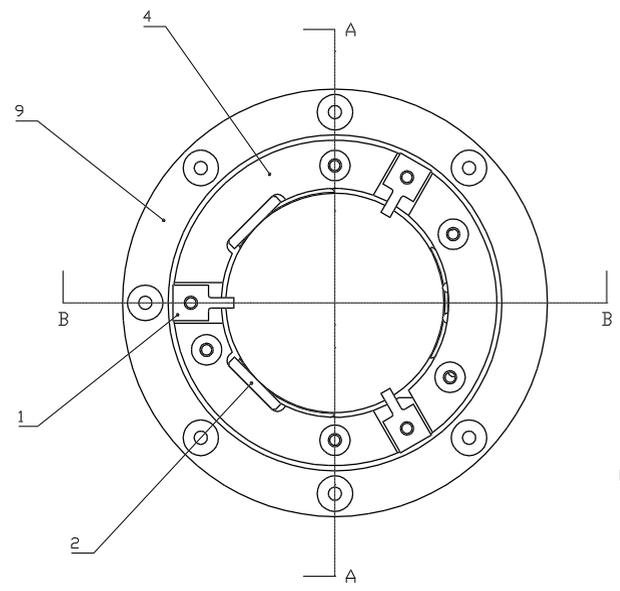
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THIRD ANGLE 

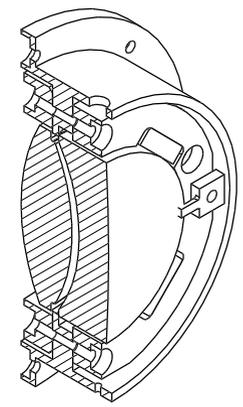


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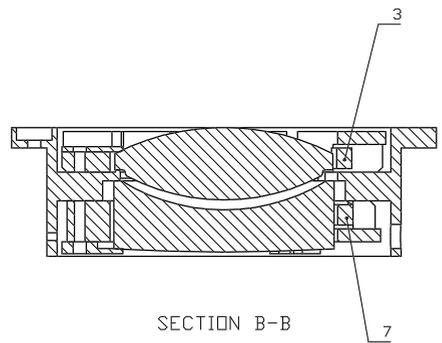
<p>UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: ± 0.1 ANGULAR TOL: ± 0.1 SURFACE FINISH 1.6 ✓ (MICRONS) REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	TITLE: Spring Housing INGRID Lens Mount			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	MATERIAL: Aluminium Alloy	ORIGINAL SCALE: 5:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
	FINISH: Clen	SHEET SIZE: A3	SUB-SYSTEM: Lens Mount	LOCATION: BO	
			ITEM: Part	USED ON: B0320, B0330	DRAWING NUMBER: B0319
		ENG DISCIPLINE: MECHANICAL		SHEET 1 of 1	



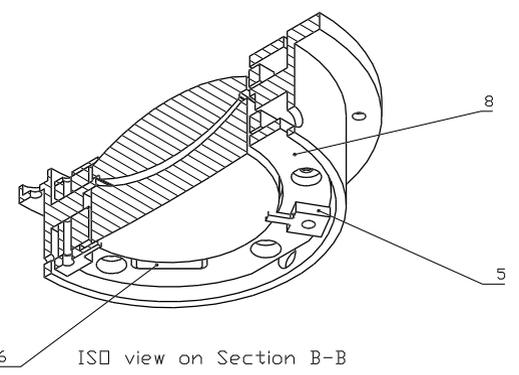
SECTION A-A



ISD view on Section A-A



SECTION B-B



ISD view on Section B-B

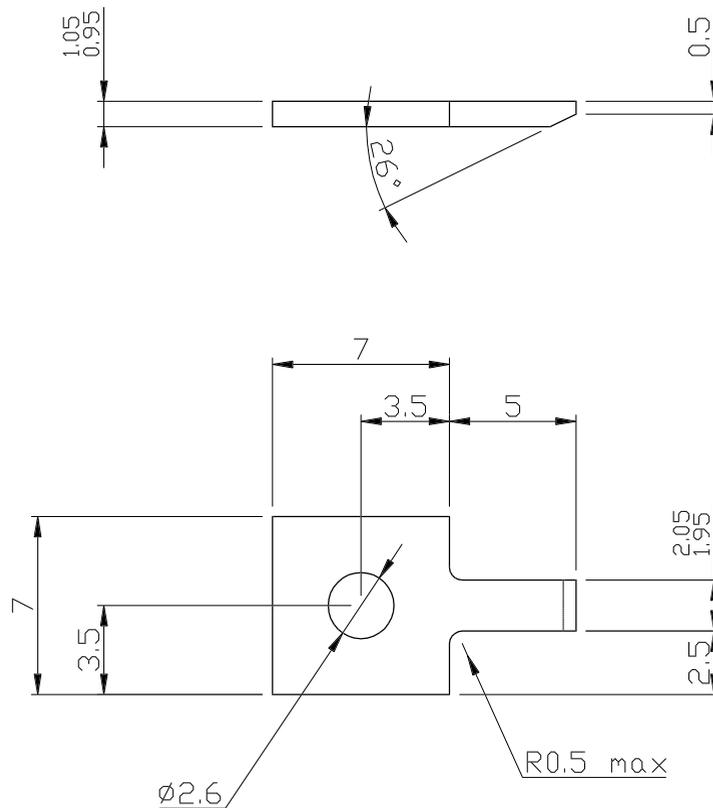
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<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ±</p> <p>ANGULAR TOL: ±</p> <p>SURFACE FINISH (MICRONS) ✓</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not 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: Lens Holder 1 General Assembly INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos,321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	MATERIAL:	ORIGINAL SCALE 2:1	MAIN SYSTEM INGRID	DWG TYPE Assembly	LOCATION BO
	FINISH:	SHEET SIZE A1	SUB-SYSTEM Lens Mount	ITEM Sub Assembly	USED ON
			ENG DISCIPLINE MECHANICAL		
				DRAWING NUMBER B0320	SHEET 1 of 1

Drawing No
B0321

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ANGULAR TOL: ± 0.1
SURFACE FINISH (MICRONS) 0.8 ✓
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TITLE: Mount 1 Axial Clip INGRID Lens Mount			
MATERIAL:	PTFE	ORIGINAL SCALE	5:1
FINISH:	Clean	SHEET SIZE	A3
MAIN SYSTEM	INGRID	DWG TYPE	Part
SUB-SYSTEM	Lens Mount	LOCATION	BO
ITEM	Part	USED ON	B0320
ENG DISCIPLINE	MECHANICAL		

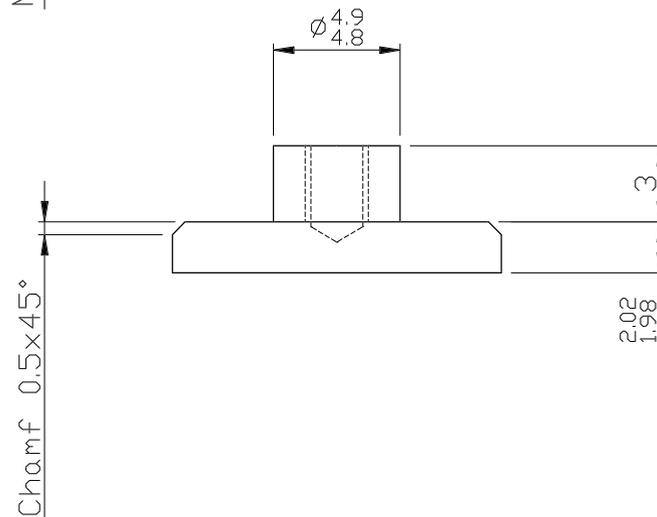
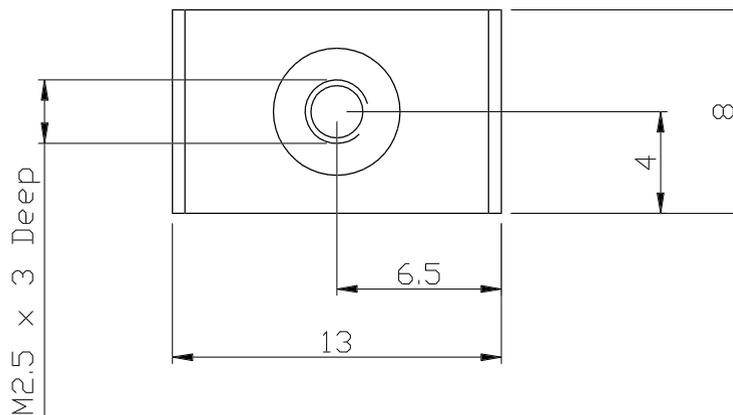
ISAAC NEWTON GROUP
Apartado de Correos, 321
38780 S/C de La Palma
Canary Islands
SPAIN
Tel: +34 922 425 400

DRAWING NUMBER B0321 SHEET 1 of 1

Drawing No
B0322

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	MATERIAL:	PTFE	ORIGINAL SCALE	5:1	DWG TYPE	Part
	FINISH:	Clean	SHEET SIZE	A3	SUB-SYSTEM	INGRID
					LOCATION	BO
				ITEM	Part	
				USED ON	B0320	
				ENG DISCIPLINE	MECHANICAL	
				DRAWING NUMBER	B0322	
				SHEET 1 of 1		

Drawing No

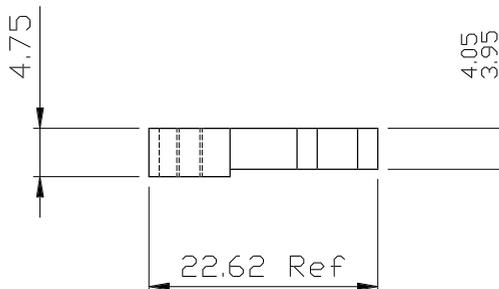
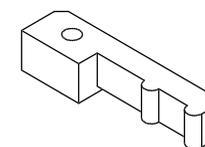
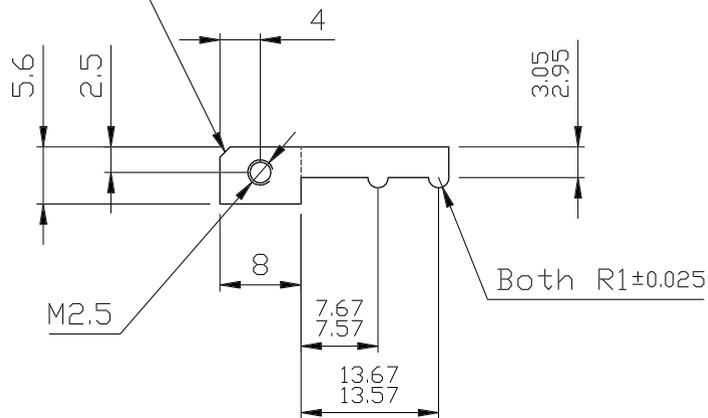
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THIRD ANGLE



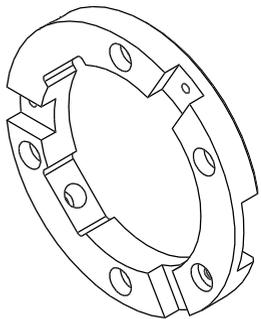
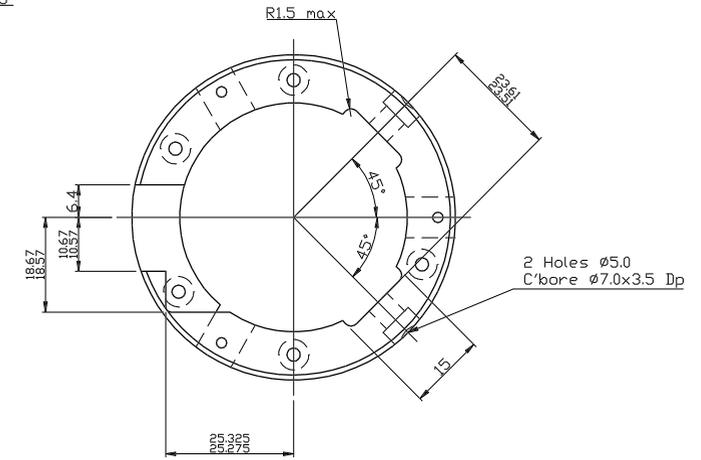
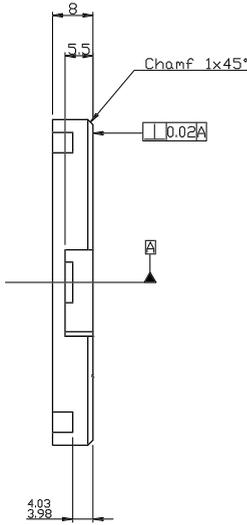
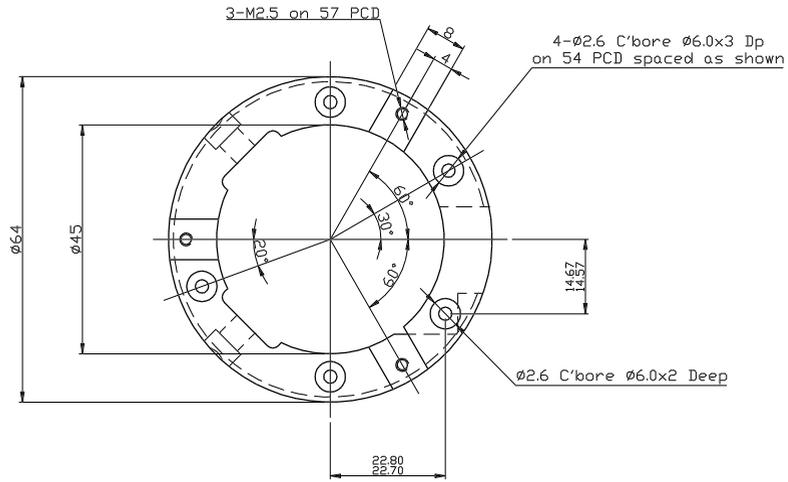
CHAM 1 x 45°



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	Preload Spring For Mount 1					DWG TYPE
	INGRID Lens Mount					Part
	MATERIAL: Delrin					LOCATION
FINISH:	ORIGINAL SCALE	MAIN SYSTEM	SUB-SYSTEM	USED ON	DRAWING NUMBER	
Clean	2:1	INGRID	Lens Mount	B0320		
	SHEET SIZE	ITEM	ENG DISCIPLINE			
	A3	Part	MECHANICAL		B0323	

SHEET 1 of 1



- Notes:
1. All dimensions are measured at 297K
 2. Machine from same billet as B0328, B0329, B0334, B0338 & B0339 to maintain consistent thermal expansion properties

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	MATERIAL: Aluminium Alloy 6082 TF	ORIGINAL SCALE: 2:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
	FINISH: Clean	SHEET SIZE: A1	SUB-SYSTEM: Lens Mount	LOCATION: BO	USED ON: B0320
			ITEM: Part	MECHANICAL	DRAWING NUMBER: B0324
				SHEET 1 of 1	

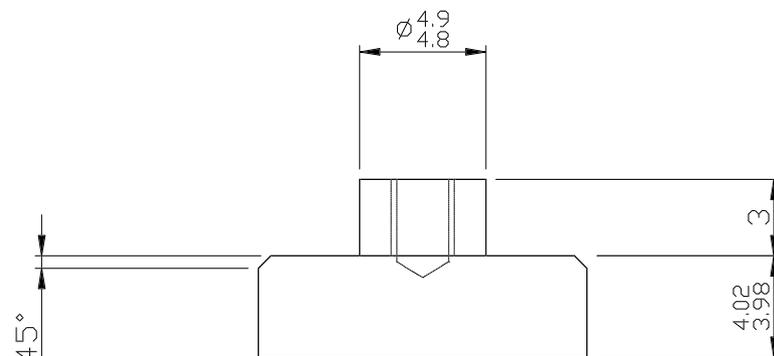
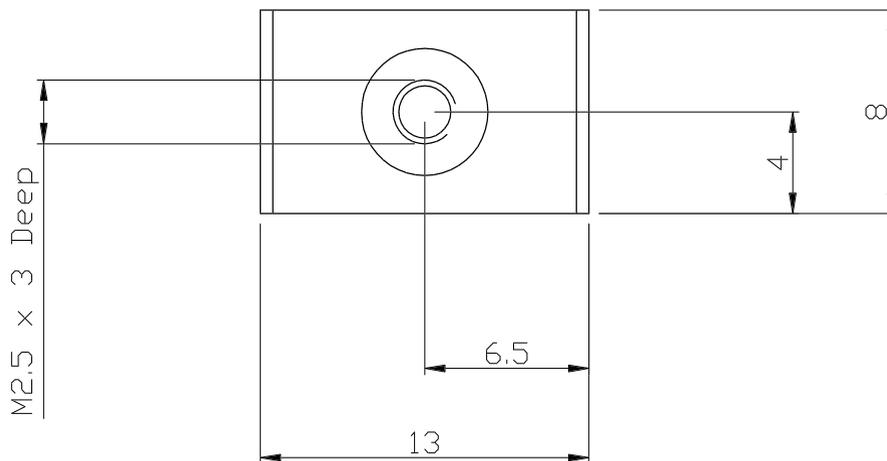
Drawing No
B0326

DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 

A
B
C
D
E
F

A
B
C
D
E
F

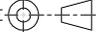


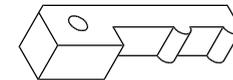
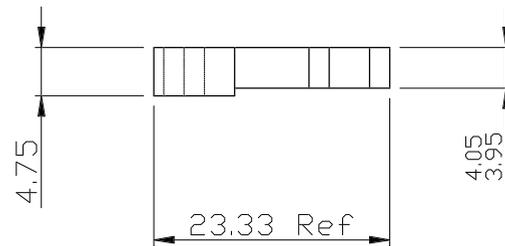
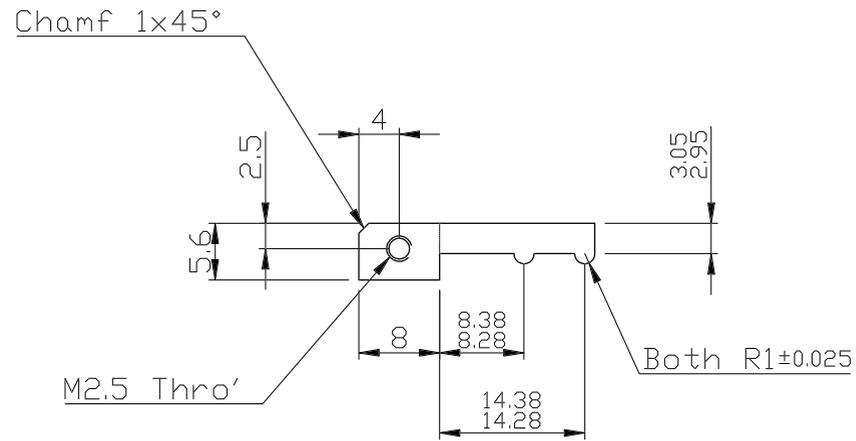
1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

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	MATERIAL:	PTFE	ORIGINAL SCALE	5:1	DWG TYPE	Part
	FINISH:	Clean	SHEET SIZE	A3	SUB-SYSTEM	INGRID
					ITEM	Part
				ENG DISCIPLINE	MECHANICAL	
				LOCATION	BO	
				USED ON	B0320	
				DRAWING NUMBER	B0326	
				SHEET 1 of 1		

Drawing No
B0327

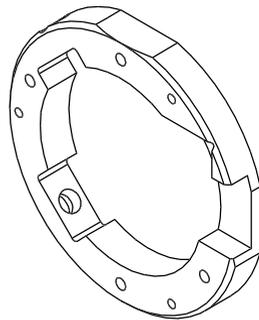
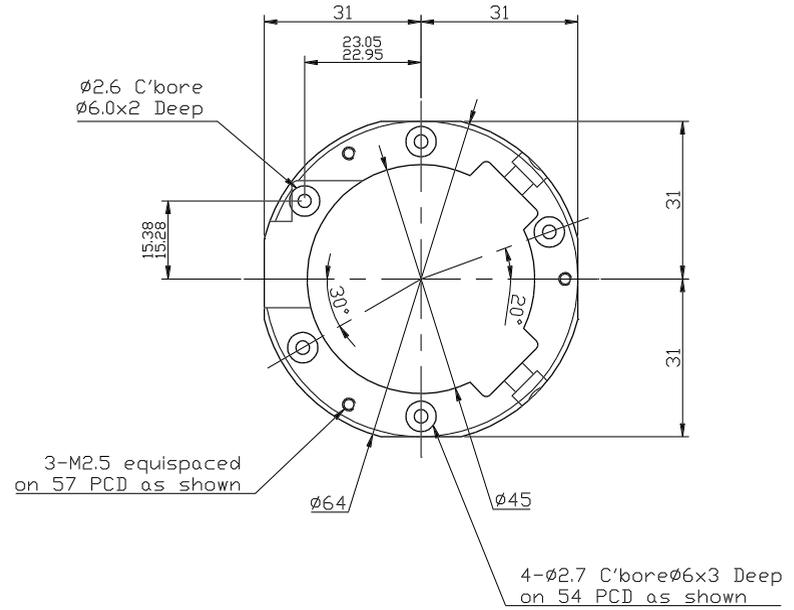
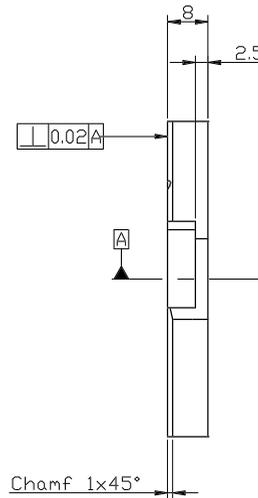
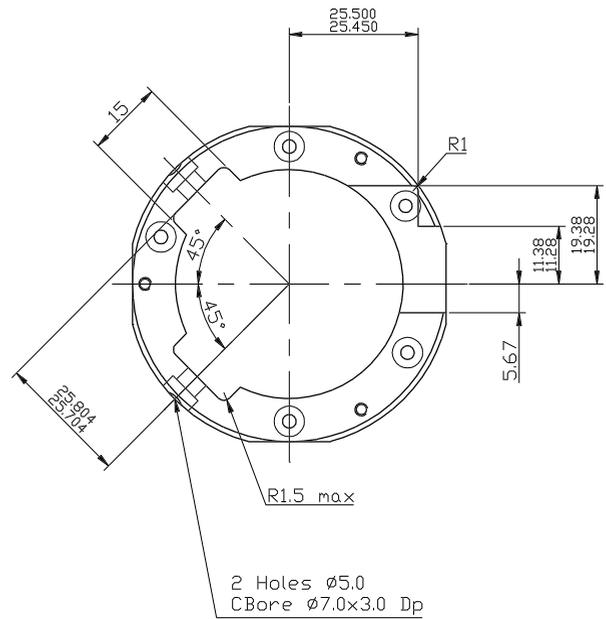
DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 



1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</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: Preload Spring For Mount 2 INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	MATERIAL: Delrin	ORIGINAL SCALE: 2:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
	FINISH: Clean	SHEET SIZE: A3	SUB-SYSTEM: Lens Mount	LOCATION: BO	
			ITEM: Part	USED ON: B0320	
		ENG DISCIPLINE: MECHANICAL			<p>DRAWING NUMBER: B0327</p> <p>SHEET 1 of 1</p>

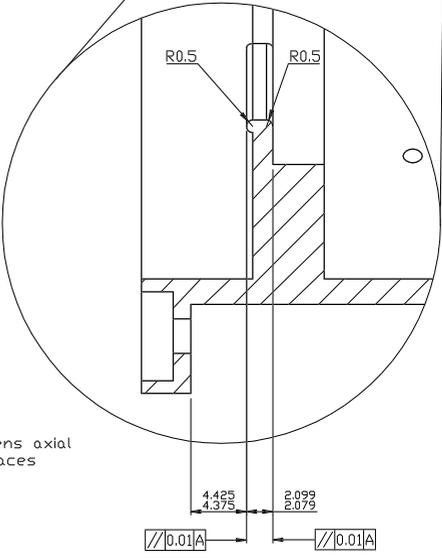
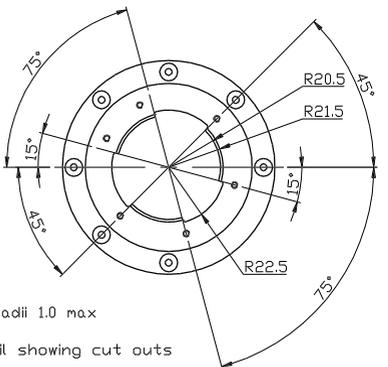
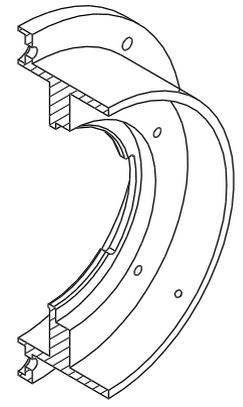
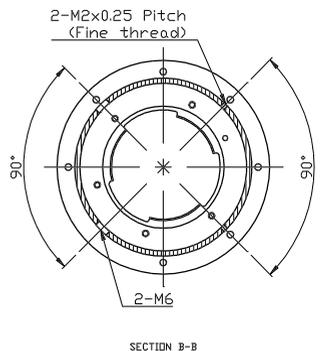
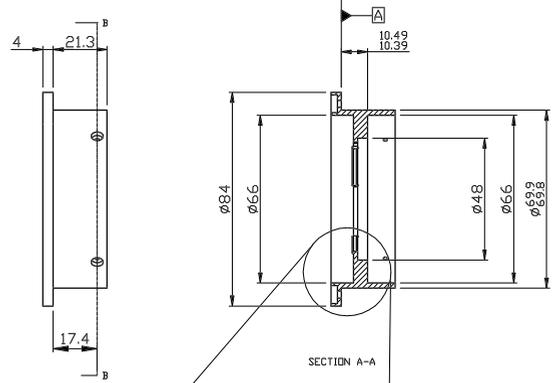
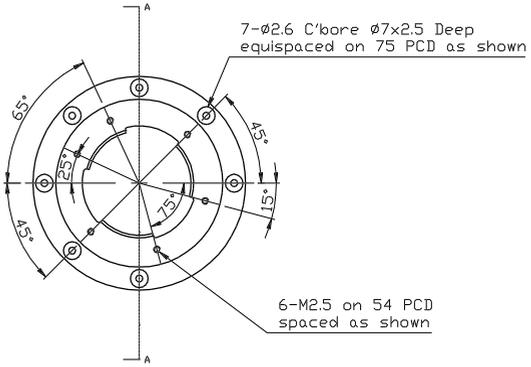


Notes:

1. All dimensions are measured at 297K
2. Machine from same billet as B0324, B0329, B0334, B0338 & B0339 to maintain consistent thermal expansion properties

1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: ± 0.1 ANGULAR TOL: ± 0.1 SURFACE FINISH (MICRONS) 0.8 ✓ REMOVE ALL SHARP EDGES	TITLE: Lens Mount 2 INGRID Lens Mount			ISAAC NEWTON GROUP Apartado de Correos,321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400	
	MATERIAL: Aluminium Alloy 6082 TF	ORIGINAL SCALE: 2:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
	FINISH: Clean	SHEET SIZE: A1	SUB-SYSTEM: Lens Mount	LOCATION: BO	USED ON: B0320
	<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>	ENG DISCIPLINE: MECHANICAL	DRAWING NUMBER: B0328	SHEET 1 of 1	



Notes:
1. All dimensions are measured at 297K
2. Machine from same billet as B0324, B0328,
B0334, B0338 & B0339 to maintain consistent
thermal expansion properties

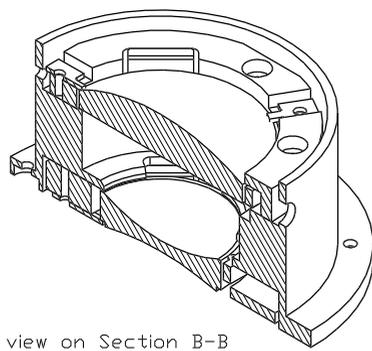
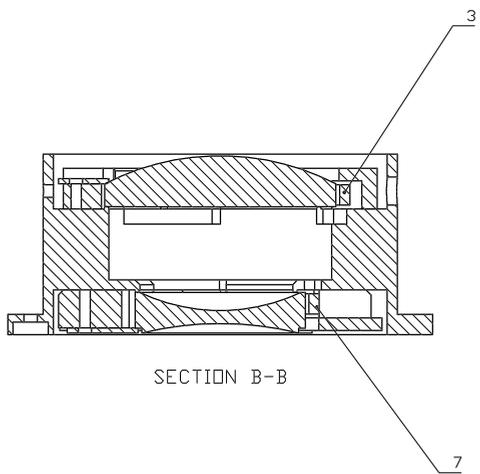
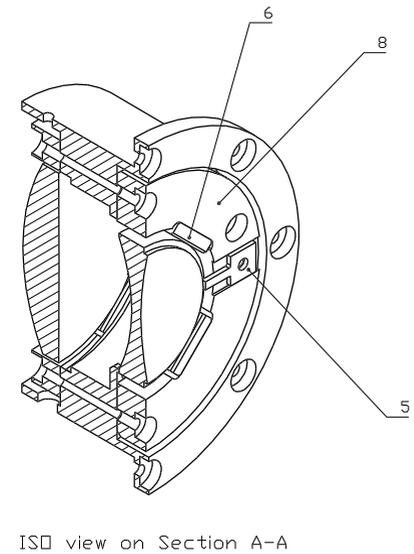
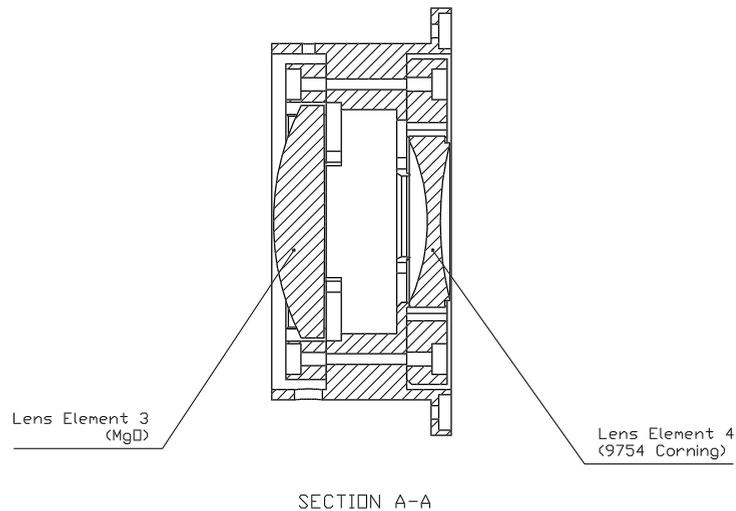
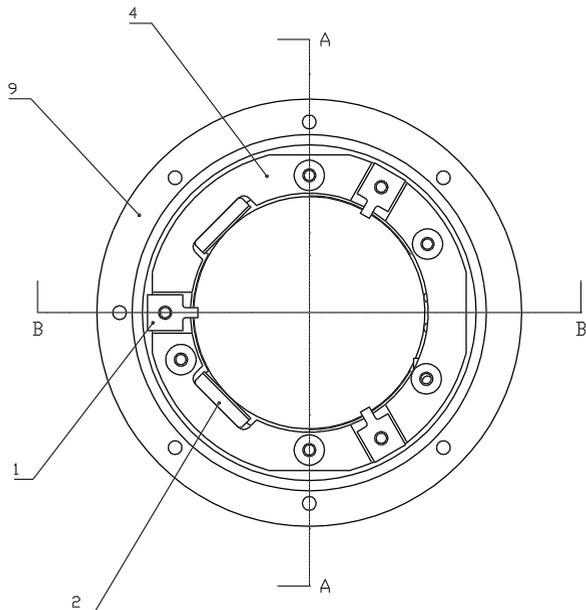
3	PDJ	26/10/98	KMD	26/10/99
2	PDJ	28/7/99	KMD	28/7/99
1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: \pm 0.1</p> <p>ANGULAR TOL: \pm 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</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: Lens Holder 1 INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos,321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>		
MATERIAL: Aluminium Alloy 6082 TF	ORIGINAL SCALE: 1:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	DRAWING NUMBER B0329 SHEET 1 of 1			
FINISH: Clean	SHEET SIZE: A1	SUB-SYSTEM: Lens Mount	LOCATION: BO				
		ITEM: Part	USED ON: B0320				
		ENG DISCIPLINE: MECHANICAL					

Drawing No B0330

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THIRD ANGLE 

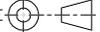


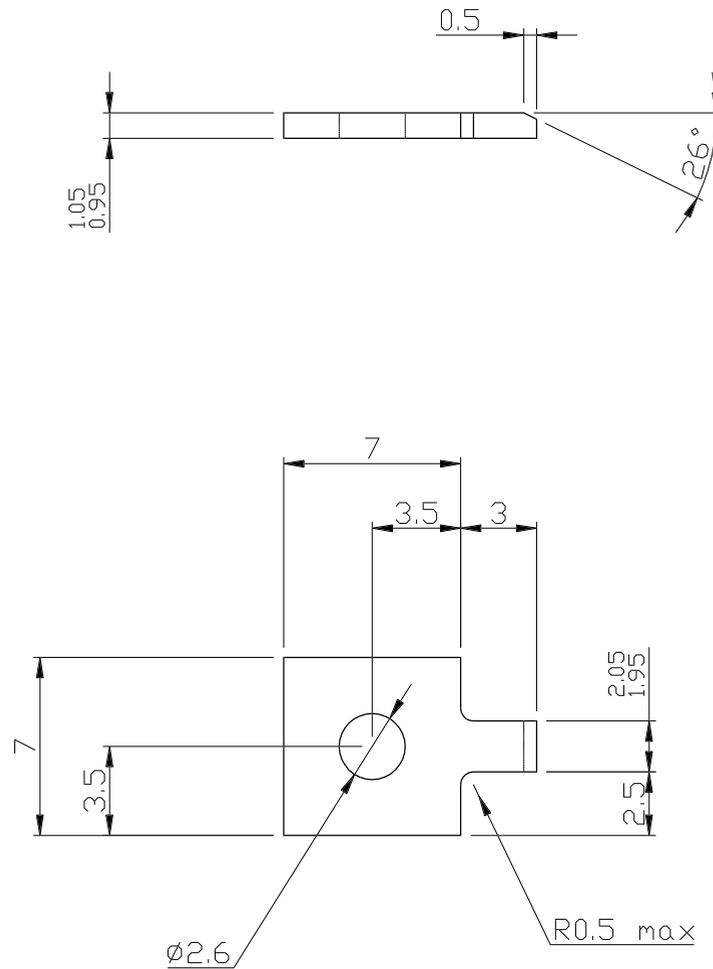
1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</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: Lens Holder 2 General Assembly INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP</p> <p>Apartado de Correos,321</p> <p>38780 S/C de La Palma</p> <p>Canary Islands</p> <p>SPAIN</p> <p>Tel: +34 922 425 400</p>	
	MATERIAL:	ORIGINAL SCALE: 2:1	MAIN SYSTEM: INGRID	DWG TYPE: Assembly	
	FINISH:	SHEET SIZE: A1	SUB-SYSTEM: Lens Mount	LOCATION: BO	
			ITEM: Sub Assembly	USED ON:	
		ENG DISCIPLINE: MECHANICAL			<p>DRAWING NUMBER: B0330</p> <p>SHEET 1 of 1</p>

Drawing No
B0331

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THIRD ANGLE 



1	PDJ	22/7/99		
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UNLESS OTHERWISE STATED
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 GENERAL TOL: ± 0.1
 ANGULAR TOL: ± 0.1
 SURFACE FINISH (MICRONS) 0.8 ✓
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TITLE: Mount 3 Axial Clip INGRID Lens Mount			
MATERIAL:	PTFE	ORIGINAL SCALE	5:1
FINISH:	Clean	SHEET SIZE	A3
		MAIN SYSTEM	INGRID
		SUB-SYSTEM	Lens Mount
		ITEM	Part
		ENG DISCIPLINE	MECHANICAL
		DWG TYPE	Part
		LOCATION	BO
		USED ON	B0330

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

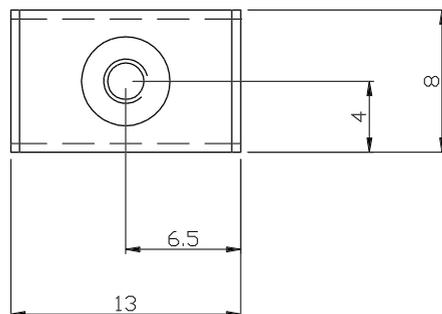
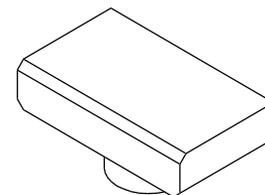
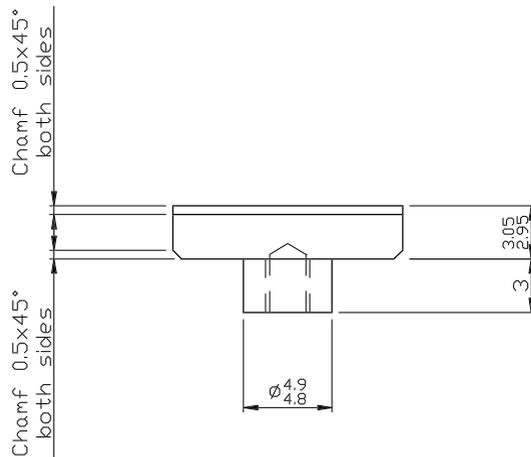
DRAWING NUMBER
B0331

SHEET 1 of 1

Drawing No B0332

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THIRD ANGLE 



1	PDJ	22/7/99		
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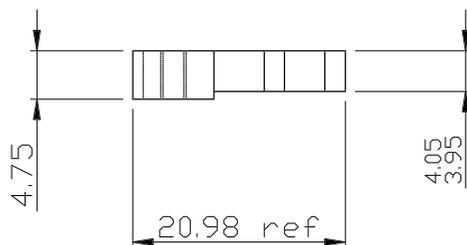
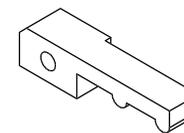
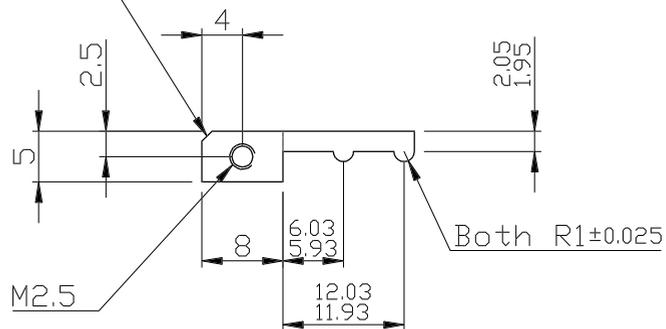
<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</p> <p>REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE: Vee Pad For Mount 3 INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	MATERIAL: PTFE	ORIGINAL SCALE: 5:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
	FINISH: Clean	SHEET SIZE: A3	SUB-SYSTEM: Lens Mount	LOCATION: BO	
			ITEM: Part	USED ON: B0330	
		ENG DISCIPLINE: MECHANICAL			
			DRAWING NUMBER: B0332	SHEET 1 of 1	

Drawing No
B0333

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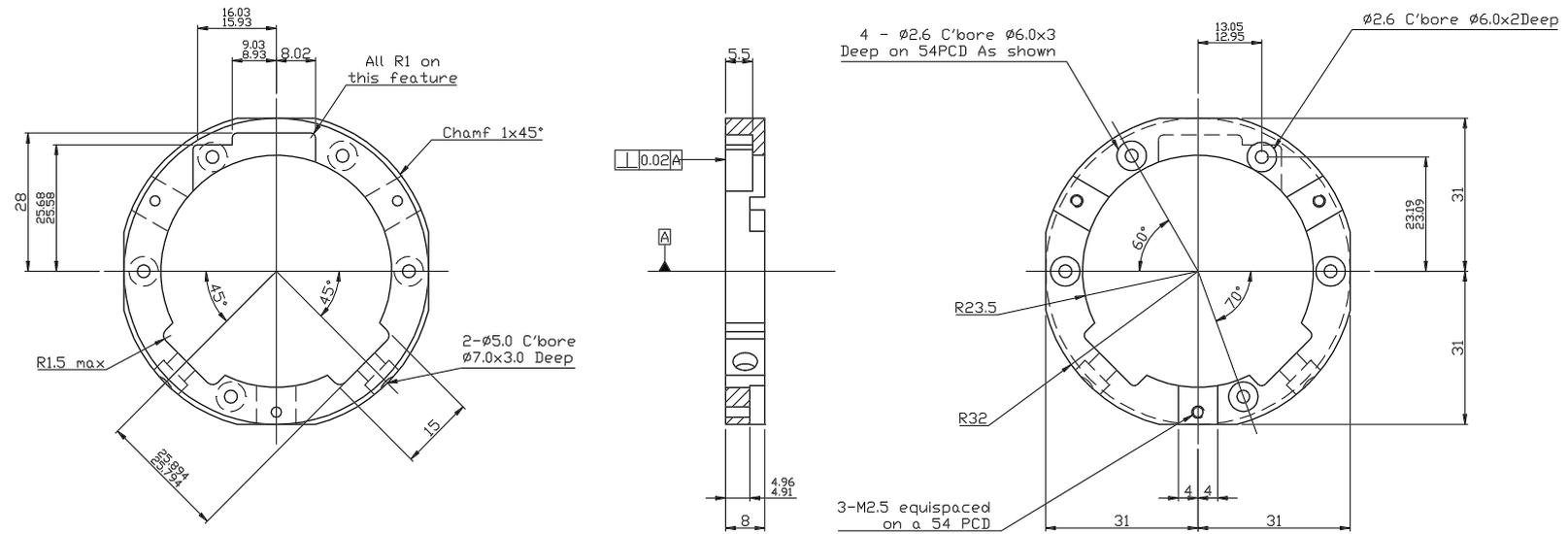
THIRD ANGLE 

Chamf 1x45°



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<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</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: Preload Spring For Mount 3 INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	MATERIAL: Delrin	ORIGINAL SCALE: 2:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
	FINISH: Clean	SHEET SIZE: A3	SUB-SYSTEM: Lens Mount	LOCATION: BO	
			ITEM: Part	USED ON: B0330	DRAWING NUMBER: B0333
		ENG DISCIPLINE: MECHANICAL		SHEET 1 of 1	



Notes:

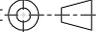
1. All dimensions are measured at 297K
2. Machine from same billet as B0324, B0328, B0329, B0338 & B0339 to maintain consistent thermal expansion properties

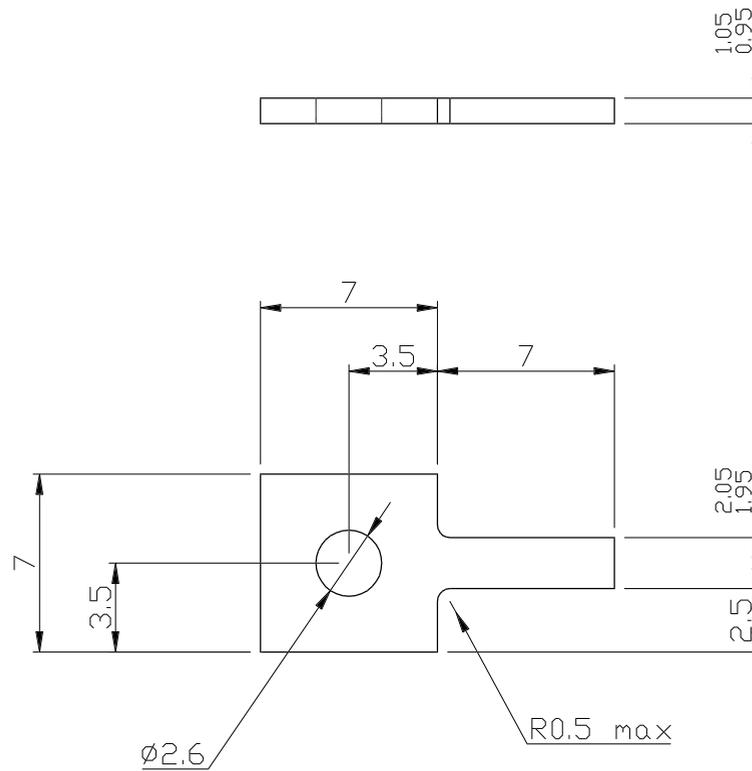
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ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: \pm 0.1</p> <p>ANGULAR TOL: \pm 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</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: Lens Mount 3 INGRID Lens Mounts</p>			<p>ISAAC NEWTON GROUP Apartado de Correos,321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	MATERIAL: Aluminium Alloy 6082 TF	ORIGINAL SCALE: 2:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
	FINISH: Clean	SHEET SIZE: A1	SUB-SYSTEM: Lens Mount	LOCATION: BO	
			ITEM: Part	USED ON: B0330	
		ENG DISCIPLINE: MECHANICAL			<p>DRAWING NUMBER: B0334</p> <p>SHEET 1 of 1</p>

Drawing No
B0335

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THIRD ANGLE 



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 ANGULAR TOL: ± 0.1
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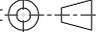
TITLE: Mount 4 Axial Clip INGRID Lens Mount			
MATERIAL:	PTFE	ORIGINAL SCALE	5:1
FINISH:	Clean	SHEET SIZE	A3
MAIN SYSTEM	INGRID	DWG TYPE	Part
SUB-SYSTEM	Lens Mount	LOCATION	BO
ITEM	Part	USED ON	B0330
ENG DISCIPLINE	MECHANICAL		

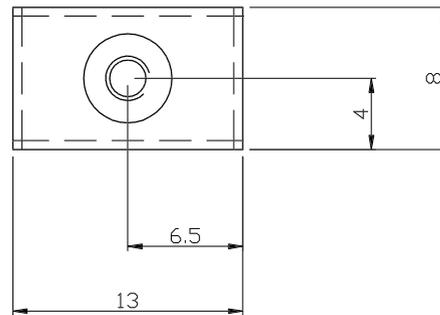
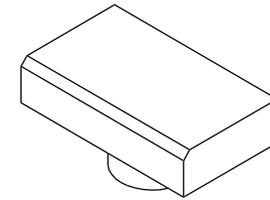
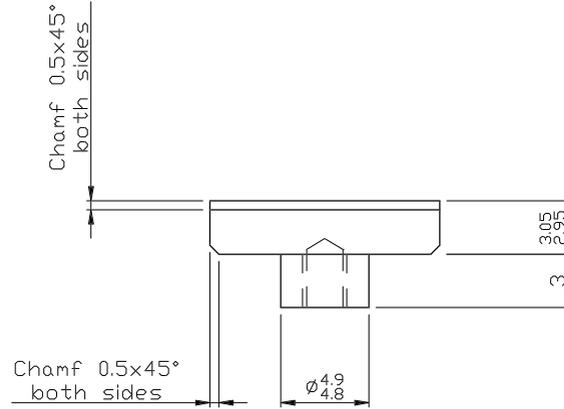
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DRAWING NUMBER B0335 SHEET 1 of 1

Drawing No
B0336

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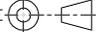


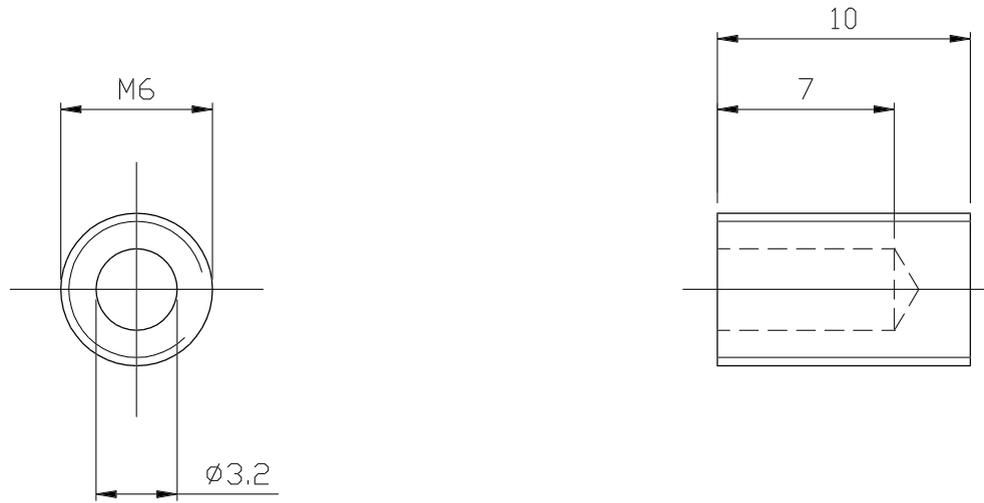
1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</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: Vee Pad For Mount 4 INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>				
	MATERIAL:	PTFE	ORIGINAL SCALE	5:1	MAIN SYSTEM	INGRID	DWG TYPE	Part
	FINISH:	Clean	SHEET SIZE	A3	SUB-SYSTEM	Lens Mount	LOCATION	BO
					ITEM	Part	USED ON	B0330
				ENG DISCIPLINE	MECHANICAL	DRAWING NUMBER	B0336	SHEET 1 of 1

Drawing No
B0319

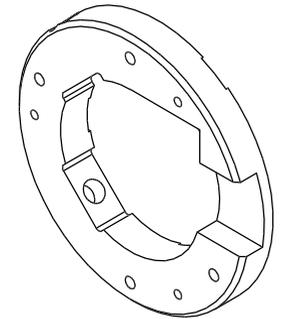
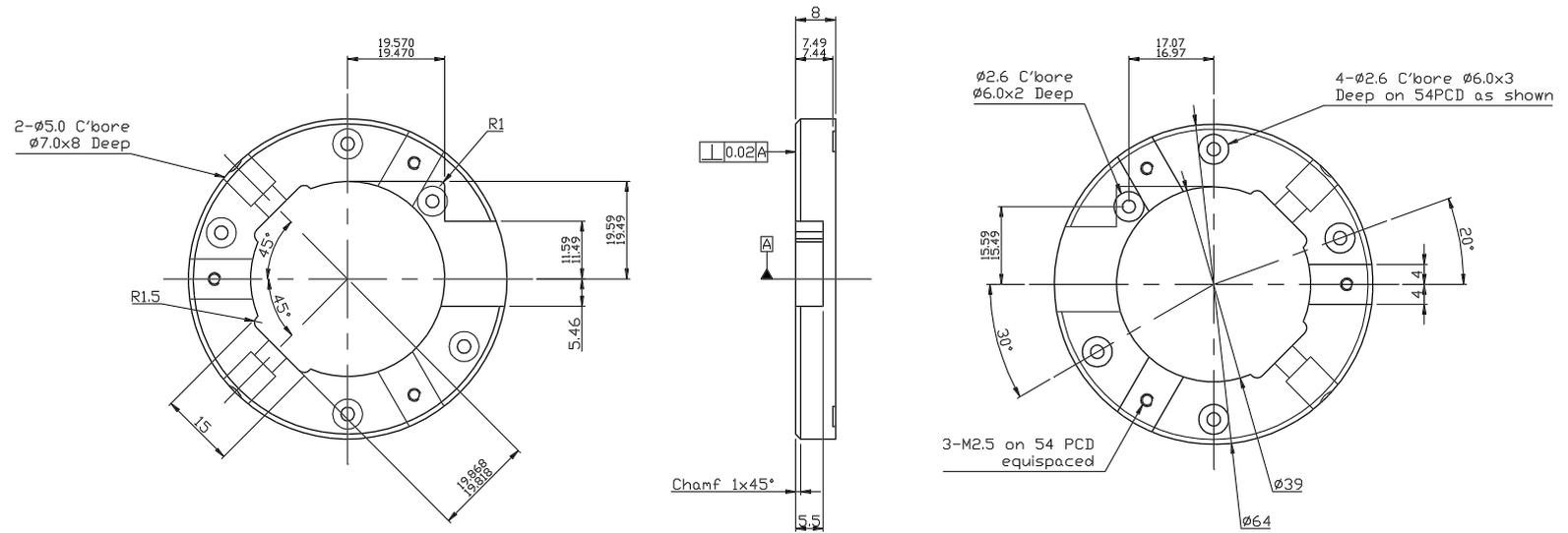
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THIRD ANGLE 



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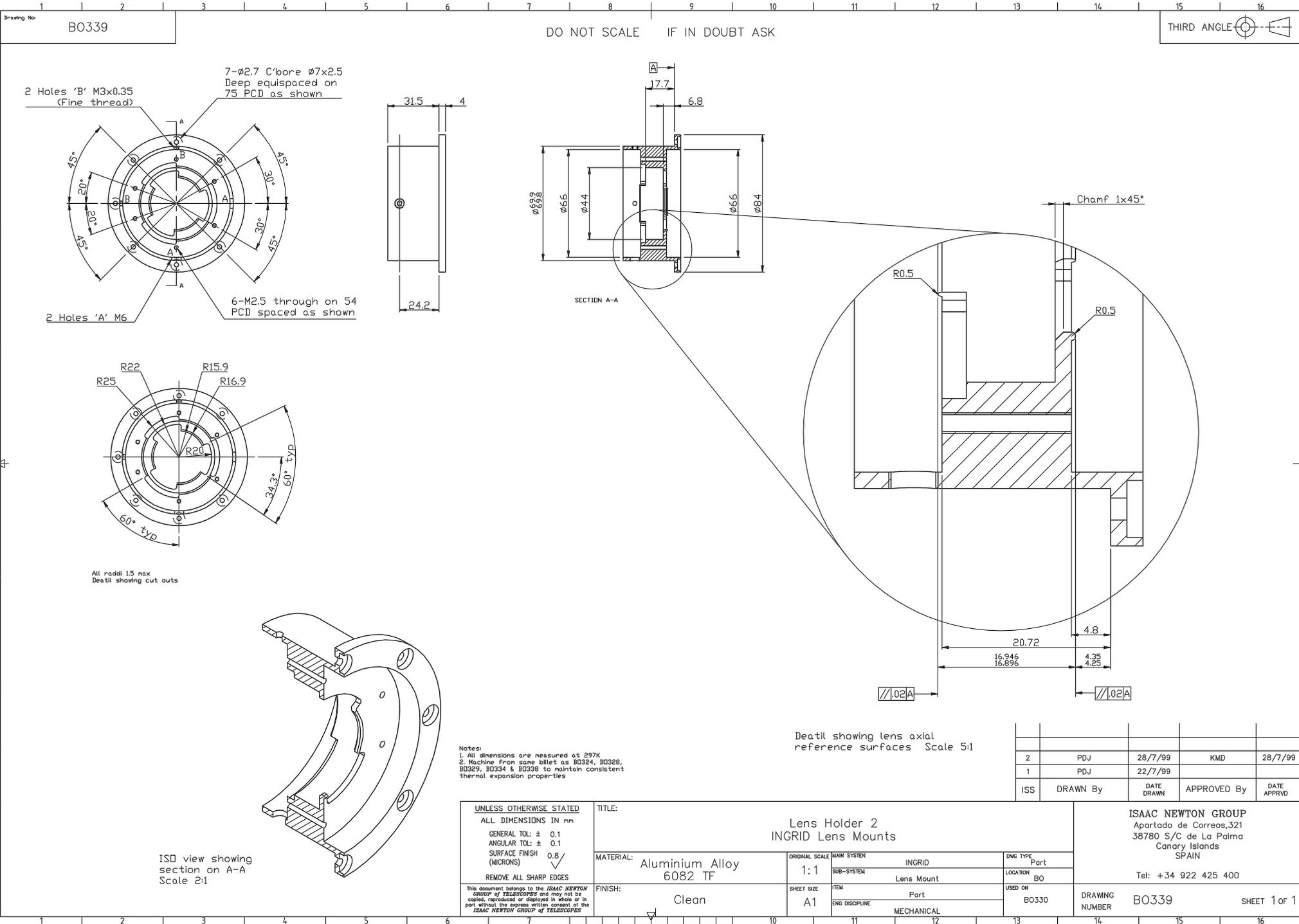
<p>UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: ± 0.1 ANGULAR TOL: ± 0.1 SURFACE FINISH 1.6 ✓ (MICRONS) REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or displayed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	TITLE: Spring Housing INGRID Lens Mount			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	MATERIAL: Aluminium Alloy	ORIGINAL SCALE 5:1	MAIN SYSTEM INGRID	DWG TYPE Part	DRAWING NUMBER B0319
	FINISH: Clen	SHEET SIZE A3	SUB-SYSTEM Lens Mount	LOCATION BO	
			ITEM Part	USED ON B0320, B0330	
		ENG DISCIPLINE MECHANICAL		SHEET 1 of 1	



- Notes:
- All dimensions are measured at 297K
 - Machine from same billet as B0324, B0328, B0329, B0334 & B0339 to maintain consistent thermal expansion properties

1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</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: Lens Mount 4 INGRID Lens Mount			<p>ISAAC NEWTON GROUP</p> <p>Apartado de Correos,321</p> <p>38780 S/C de La Palma</p> <p>Canary Islands</p> <p>SPAIN</p> <p>Tel: +34 922 425 400</p>	
	MATERIAL: Aluminium Alloy 6082 TF	ORIGINAL SCALE: 2:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
	FINISH: Clean	SHEET SIZE: A1	SUB-SYSTEM: Lens Mount	LOCATION: BO	USED ON: B0330
			ITEM: Part	MECHANICAL	DRAWING NUMBER: B0338
				SHEET 1 of 1	



Drawing No B0339

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THIRD ANGLE

2 Holes 'B' M3x0.35 (Fine thread)
 7- \varnothing 2.7 C'bore \varnothing 7x2.5 Deep equispaced on 75 PCD as shown
 2 Holes 'A' M6
 6-M2.5 through on 54 PCD spaced as shown

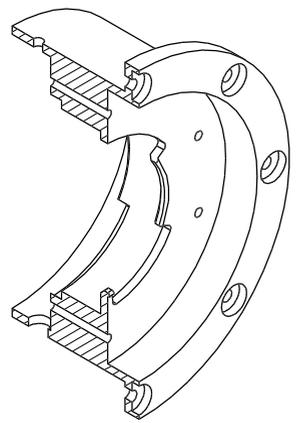
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 24.2

SECTION A-A
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 \varnothing 66
 \varnothing 44
 \varnothing 66
 \varnothing 84
 17.7
 6.8

Chamf 1x45°
 R0.5
 R0.5
 20.72
 16.946
 16.896
 4.8
 4.35
 4.25
 //0.02A
 //0.02A

R22
 R15.9
 R16.9
 R20
 34.3°
 60° typ
 60° typ

All radii 1.5 max
 Detail showing cut outs



ISO view showing section on A-A Scale 2:1

Detail showing lens axial reference surfaces Scale 5:1

Notes:
 1. All dimensions are measured at 297K
 2. Machine From same billet as B0324, B0328, B0329, B0334 & B0338 to maintain consistent thermal expansion properties

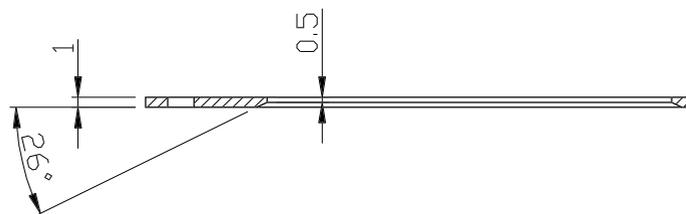
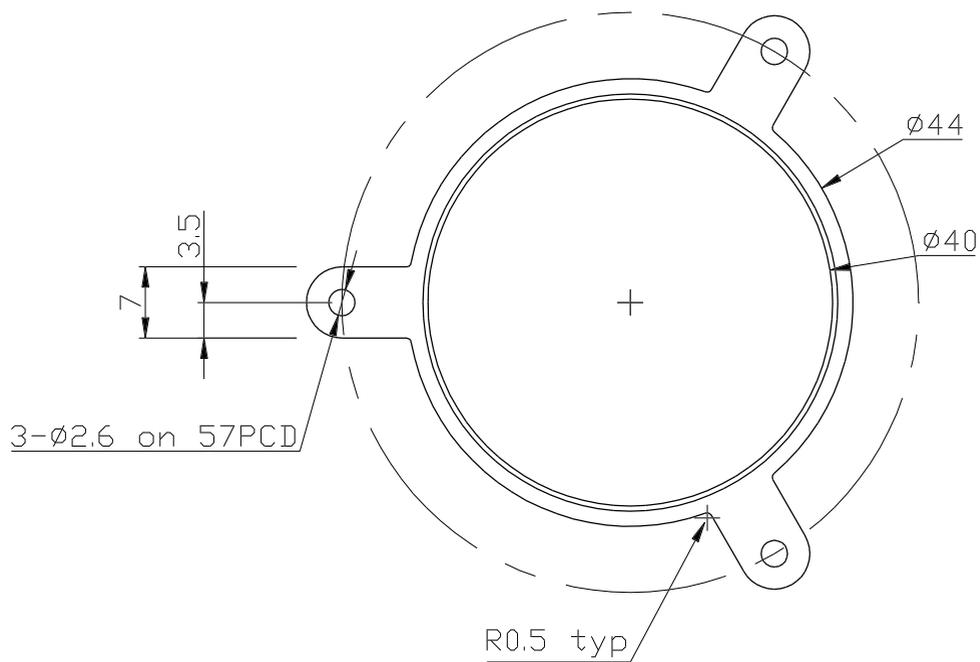
2	PDJ	28/7/99	KMD	28/7/99
1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: \pm 0.1 ANGULAR TOL: \pm 0.1 SURFACE FINISH (MICRONS) 0.8 ✓ REMOVE ALL SHARP EDGES		TITLE: Lens Holder 2 INGRID Lens Mounts		ISAAC NEWTON GROUP Apartado de Correos,321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400	
MATERIAL: Aluminium Alloy 6082 TF		ORIGINAL SCALE: 1:1	MAIN SYSTEM: INGRID	DWG TYPE: Part	
FINISH: Clean		SHEET SIZE: A1	SUB-SYSTEM: Lens Mount	LOCATION: BO	
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		ITEM: Part	ENG DISCIPLINE: MECHANICAL	USED ON: B0330	
				DRAWING NUMBER: B0339	SHEET 1 of 1

Drawing No
B0340

DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 

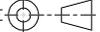


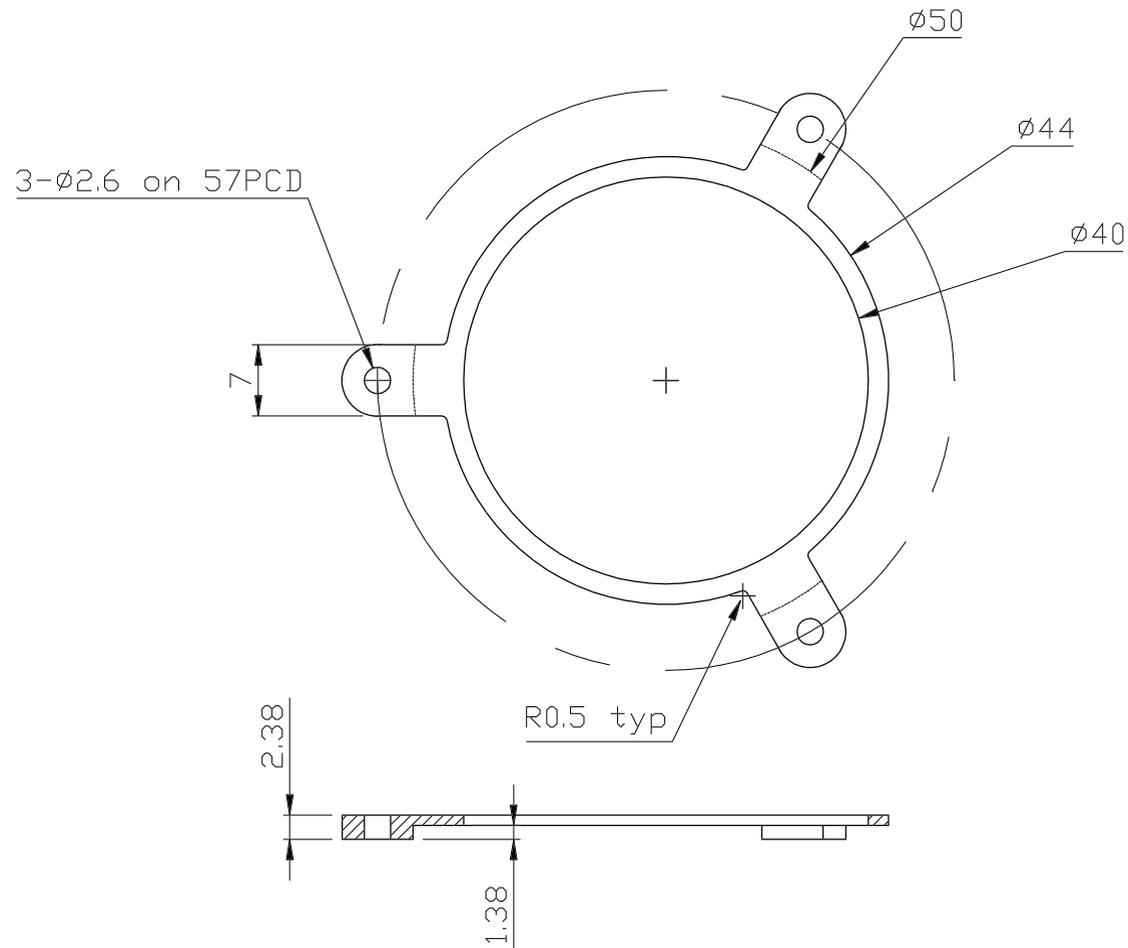
1	PDJ	22/07/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</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>Mount 1 Axial Clip INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>				
	MATERIAL:	PTFE	ORIGINAL SCALE	2:1	MAIN SYSTEM	INGRID	DWG TYPE	Part
	FINISH:	Clean	SHEET SIZE	A3	SUB-SYSTEM	Lens Mount	LOCATION	BO
					ITEM	Part	USED ON	B0320
				ENG DISCIPLINE	MECHANICAL			
						DRAWING NUMBER	B0340	SHEET 1 of 1

1 Drawing No
B0341

2 3 4 5 6 7 8
DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 



1	PDJ	22/07/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: ± 0.1 ANGULAR TOL: ± 0.1 SURFACE FINISH (MICRONS) 0.8 ✓ REMOVE ALL SHARP EDGES</p> <p><small>This document belongs to the ISAAC NEWTON GROUP of TELESCOPES and may not be copied, reproduced or deployed in whole or in part without the express written consent of the ISAAC NEWTON GROUP of TELESCOPES</small></p>	<p>TITLE: Mount 2 Axial Clip INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>				
	MATERIAL:	PTFE	ORIGINAL SCALE	2:1	MAIN SYSTEM	INGRID	DWG TYPE	Part
	FINISH:	Clean	SHEET SIZE	A3	SUB-SYSTEM	Lens Mount	LOCATION	BO
					ITEM	Part	USED ON	B0320
				ENG DISCIPLINE	MECHANICAL			

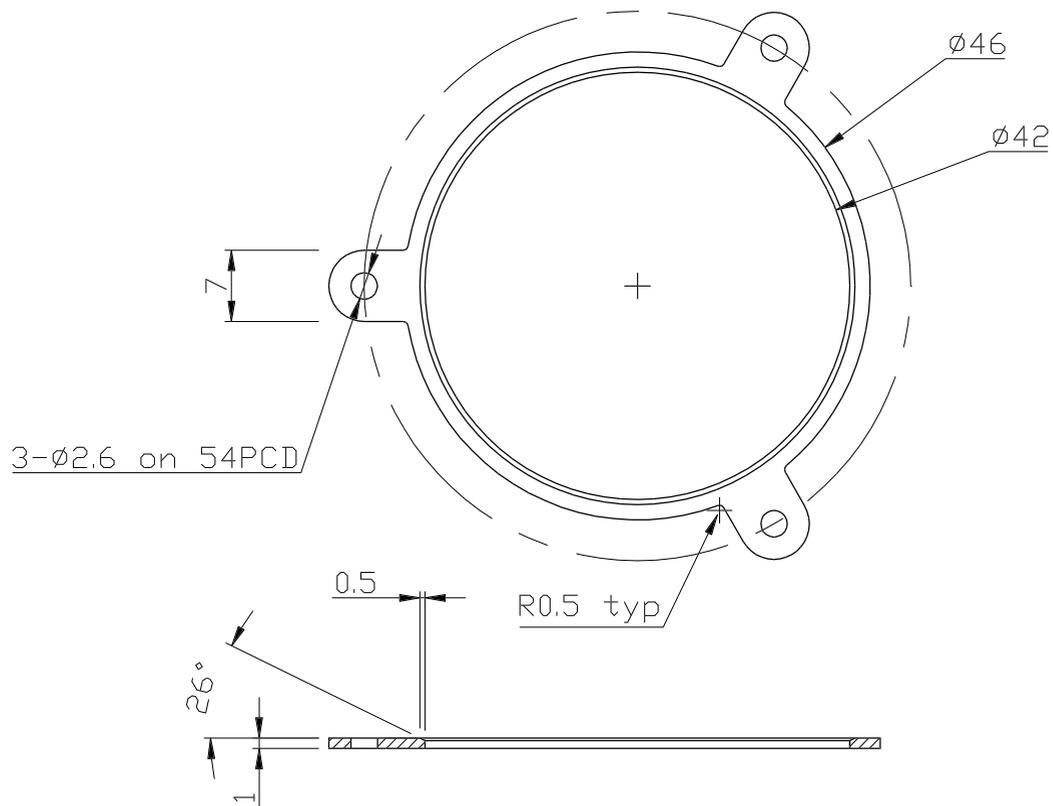
DRAWING NUMBER B0341 SHEET 1 of 1

1
Drawing No
B0342

2 3 4 5 6 7 8
DO NOT SCALE IF IN DOUBT ASK

THIRD ANGLE 

A
B
C
D
E
F



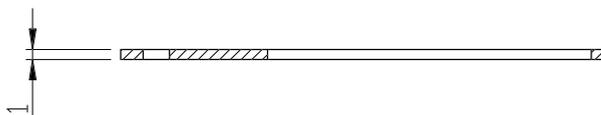
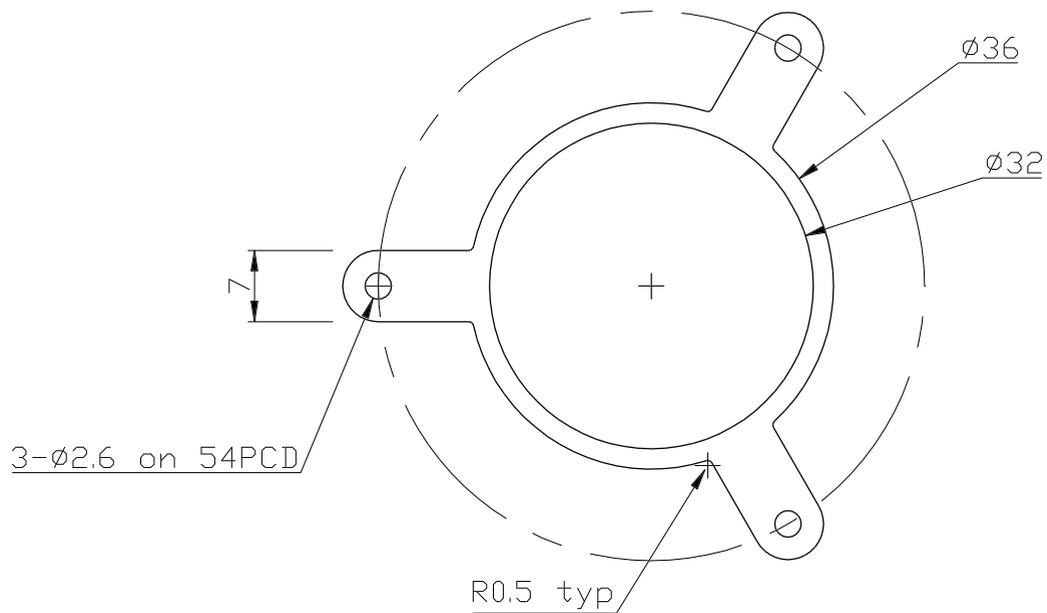
1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED ALL DIMENSIONS IN mm GENERAL TOL: ± 0.1 ANGULAR TOL: ± 0.1 SURFACE FINISH (MICRONS) 0.8 ✓ 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: Mount 3 Axial Clip INGRID Lens Mount		<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>	
	MATERIAL: PTFE	ORIGINAL SCALE 2:1	MAIN SYSTEM INGRID	DWG TYPE Part
	FINISH: Clean	SHEET SIZE A3	SUB-SYSTEM Lens Mount	LOCATION BO
			ITEM Part	USED ON B0330
			DRAWING NUMBER B0342	SHEET 1 of 1

Drawing No
B0343

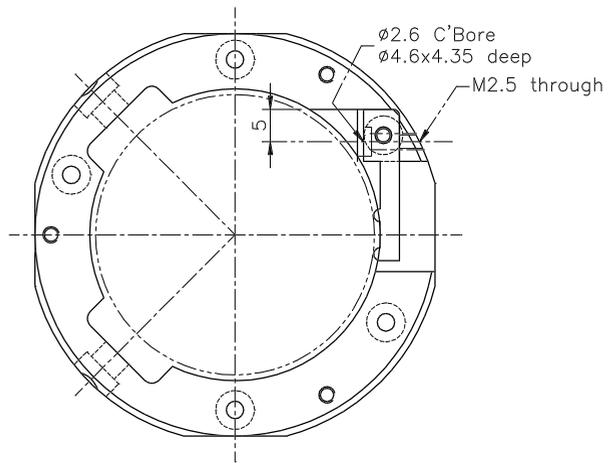
DO NOT SCALE IF IN DOUBT ASK

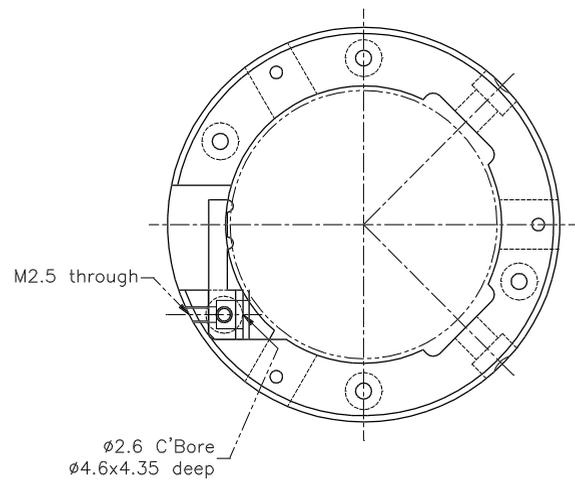
THIRD ANGLE 

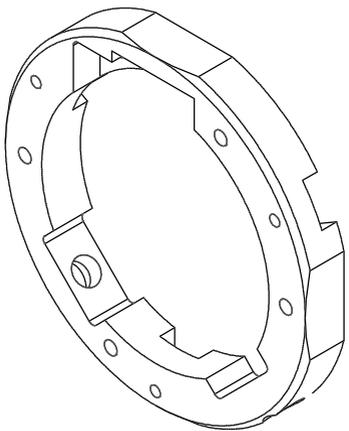
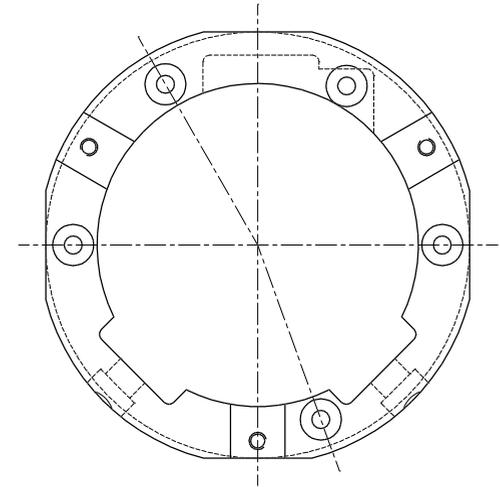
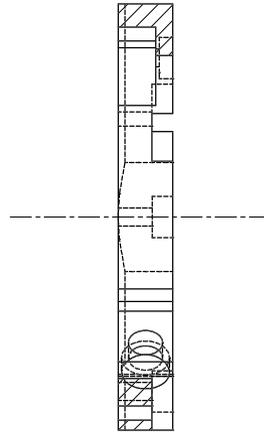
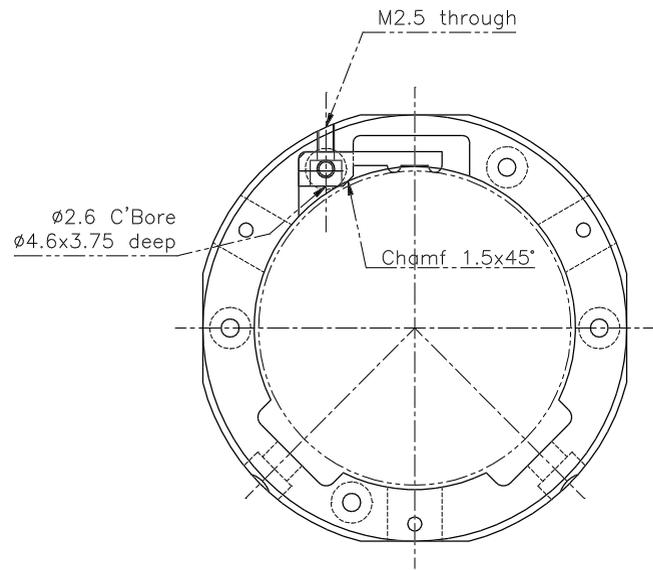


1	PDJ	22/7/99		
ISS	DRAWN By	DATE DRAWN	APPROVED By	DATE APPRVD

<p>UNLESS OTHERWISE STATED</p> <p>ALL DIMENSIONS IN mm</p> <p>GENERAL TOL: ± 0.1</p> <p>ANGULAR TOL: ± 0.1</p> <p>SURFACE FINISH (MICRONS) 0.8 ✓</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">Mount 4 Axial Clip INGRID Lens Mount</p>			<p>ISAAC NEWTON GROUP Apartado de Correos, 321 38780 S/C de La Palma Canary Islands SPAIN Tel: +34 922 425 400</p>				
	MATERIAL:	PTFE	ORIGINAL SCALE:	2:1	MAIN SYSTEM:	INGRID	DWG TYPE:	Part
	FINISH:	Clean	SUB-SYSTEM:	Lens Mount	LOCATION:	BO	USED ON:	B0330
			SHEET SIZE:	A3	ITEM:	Part	DRAWING NUMBER:	B0343
				ENG DISCIPLINE:	MECHANICAL			SHEET 1 of 1







Notes:

1. All dimensions are measured at 297K
2. Machine from same billet as B0324, B0328, B0329, B0338 & B0339 to maintain consistent thermal expansion properties

∅2.6 C'Bore
∅4.6x4.35 deep

M2.5 through

