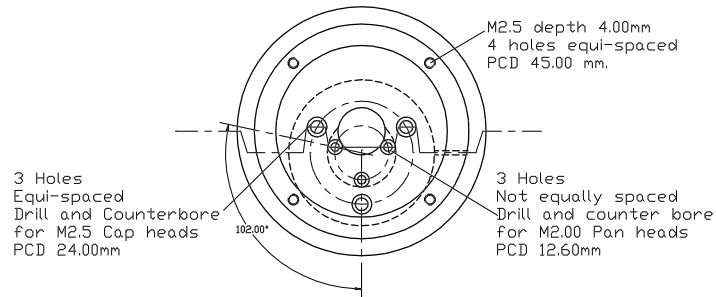
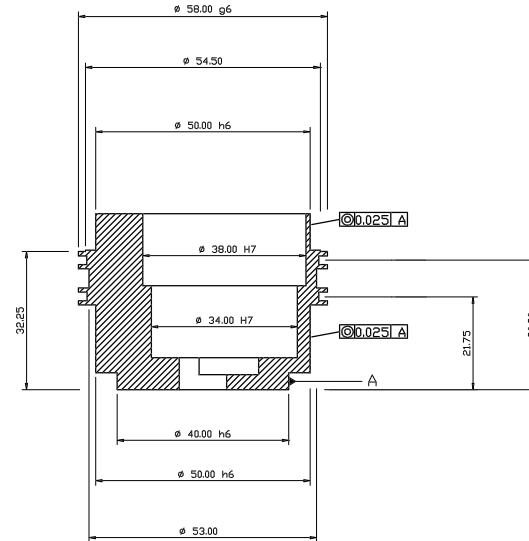
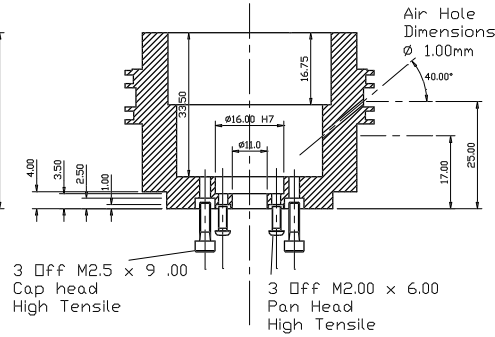
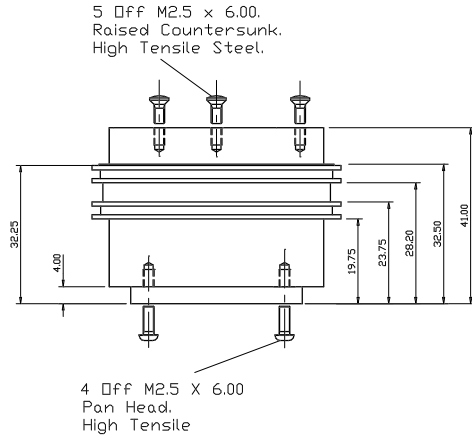
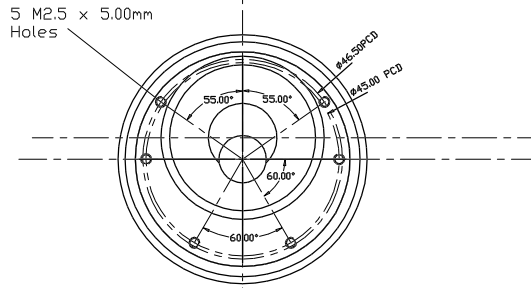


Please Note.  
Cut outs are for 2mm nominal diameter O rings.  
Exact dimensions for grooves in pistons are to be taken from the O ring data sheets.

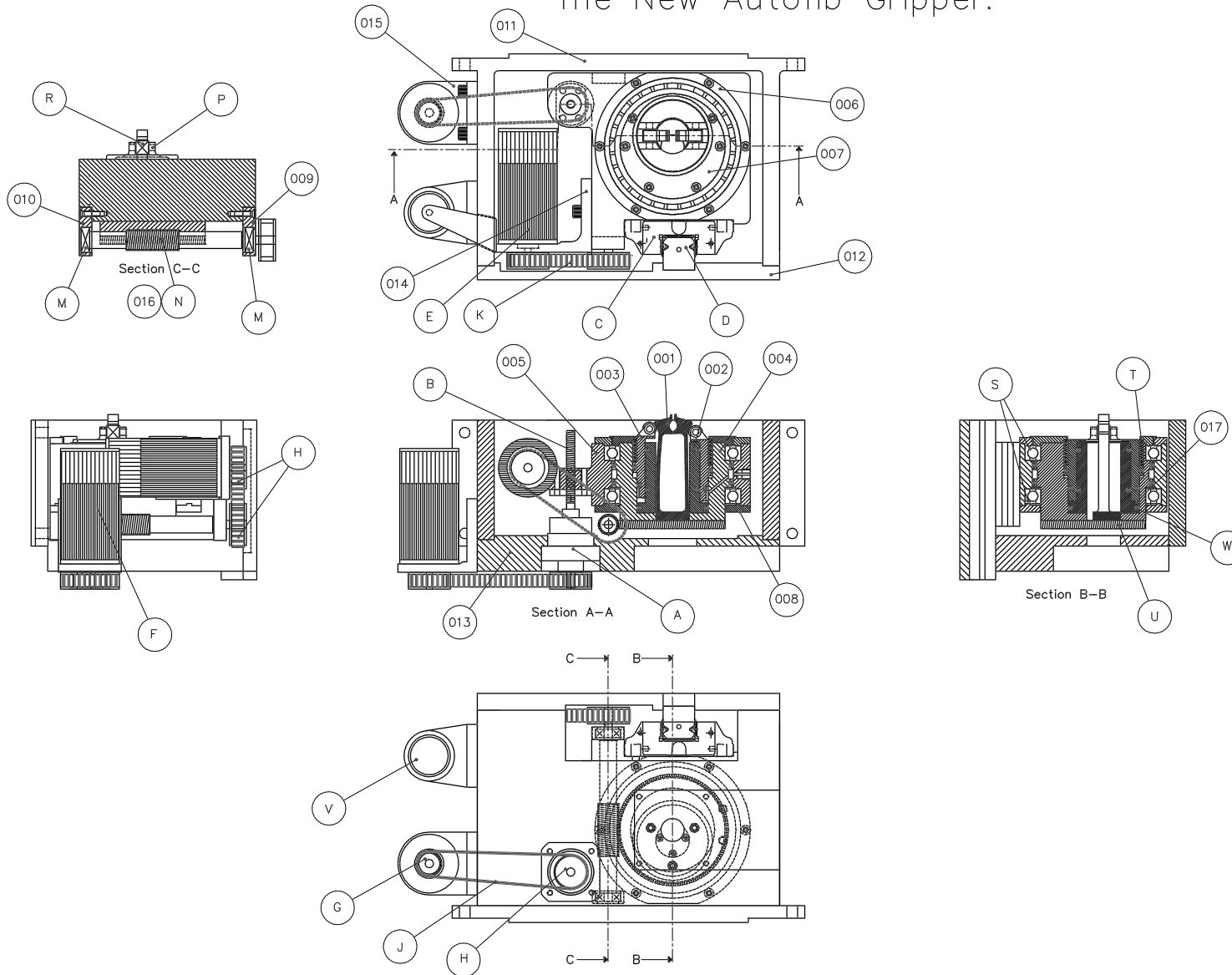


TITLE: Inner bearing body		
MATERIAL: Dural	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N6	Checked: Date	Drawing No. GRP 004

Scale: XXX	Dimensions in mm	General Tolerance: 0.05
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The New Autofib Gripper.

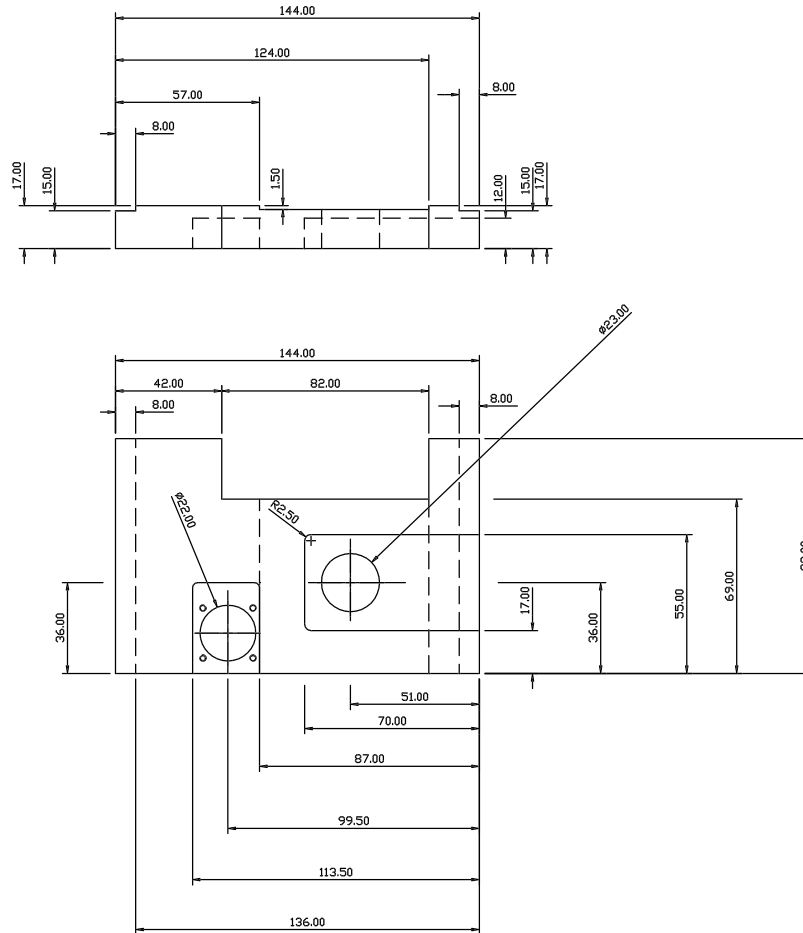


ITEM	DESCRIPTION	DRAWING NO	FILE
001	Gripper Forks	LP\AF2\GRP\001	GRP_001
002	Inner Cylinder	LP\AF2\GRP\002	GRP_002
003	Piston	LP\AF2\GRP\003	GRP_003
004	Inner bearing shaft	LP\AF2\GRP\004	GRP_004
005	Outer bearing block	LP\AF2\GRP\005	GRP_005
006	Top retaining plate 1	LP\AF2\GRP\006	GRP_006
007	Top retaining plate2	LP\AF2\GRP\007	GRP_007
008	Bot. retaining plate	LP\AF2\GRP\008	GRP_008
009	Worm shaft housing	LP\AF2\GRP\009	GRP_009
010	Worm shaft housingA	LP\AF2\GRP\010	GRP_010
011	Support Brkt. Back	LP\AF2\GRP\011	GRP_011
012	Support Brkt. Front	LP\AF2\GRP\012	GRP_012
013	Support Brkt. Base	LP\AF2\GRP\013	GRP_013
014	Theta Motor Bracket	LP\AF2\GRP\014	GRP_014
015	Z motion motor Brkt.	LP\AF2\GRP\014	GRP_014
016	Theta Worm shaft	LP\AF2\GRP\016	GRP_016
017	Piston PTFE washer	LP\AF2\GRP\003	GRP_003

PART	DESCRIPTION	Part Number	Supplier
A	Ball Screw support	WBK06-11	NSK
B	Ball Lead screw	W0400MA-1PYC3Z1	NSK
C	Linear Bearing	LAS15KLSZ	NSK
D	Linear guide rail	L1S15 076SZ	NSK
E	Theta drive Motor	28L28-416EBP144Y49	Escap
F	Z drive motor	As above	
G	Z Axis motor pulley	A15 T 2.5-8x1off	HPC
H	Z ball screw pulley	A20 T 2.5-8	HPC
H	Theta drive pulleys	A20 T 2.5-8x2off	HPC
J	Z timing belt	T 2.5/180	HPC
K	Theta timing belt	T 2.5/145	HPC
M	Theta bearings	61810 Y	SKF
N	Worm Shaft(Modified)	SW 0.4-1	HPC
P	Dowel pin	3mm diax12mm	
R	Gripper Action Bearings	BK 0306 TNA	SKF
S	Theta worm bearings	604	SKF
T	Piston Spring	LC-022A-8 SSx8	Lee spring
U	Theta worm gear.	PM 0.4-130/1	HPC
V	Z Linear encoder	MTN/UL --10	Monitran
W	Various "O" rings	see drawing details	

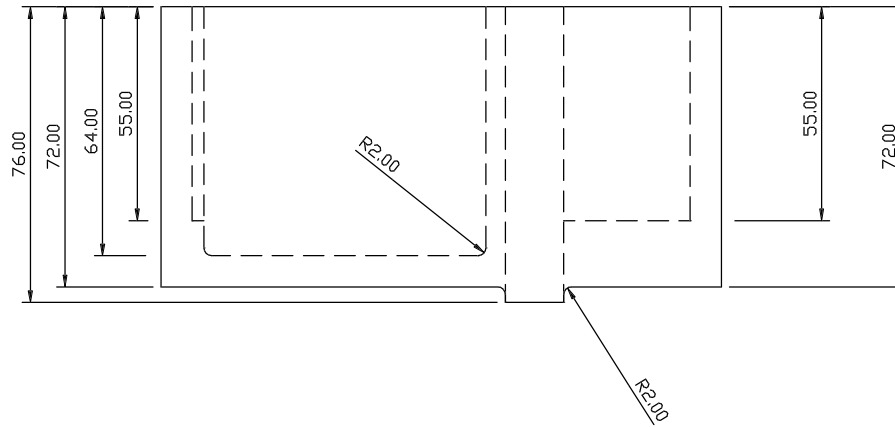
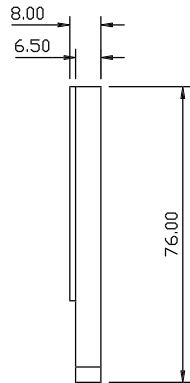
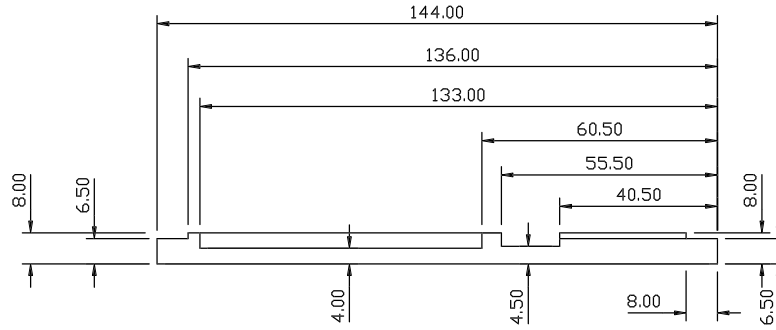
Notes  
 Existing electronic Components are to be fitted once the gripper has been assembled.  
 Details of fasteners and O rings are given on the detailed drawings.

TITLE: AF2 Gripper General Arrangement.		
MATERIAL:	Drawn By: K.Deer Date: 24/07/97	ISAAC NEWTON GROUP Santa Cruz La Palma Canary Islands
FINISH:	Checked: Date	
Scale:	Dimensions in mm	General Tolerance:
Dwg No.		LP\AF2\GRP\GRP_GA1



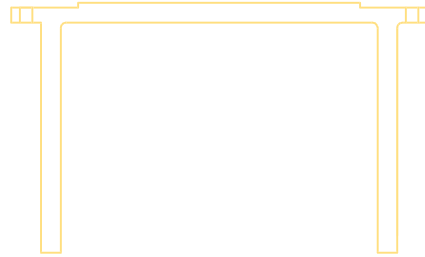
TITLE: Support bracket bottom		
MATERIAL: Dural	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N7	Checked: Date	Drawing No. GRP_013

Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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TITLE: Support bracket front		
MATERIAL: Dural	Drawn By: K. Dee Date: 17/09/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N7	Checked: Date	
Drawing No. GRP 012		

Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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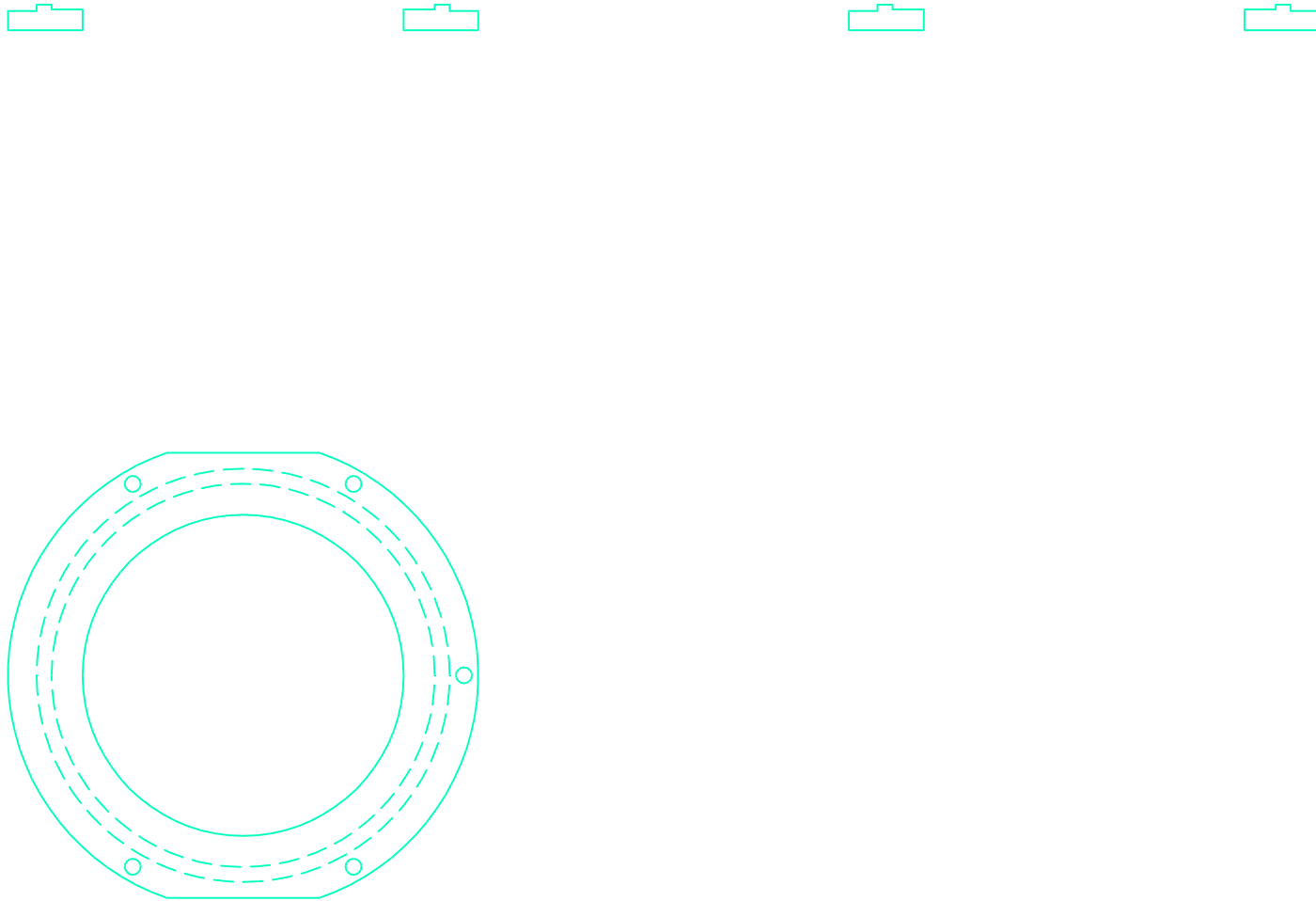
TITLE: Support bracket back		
MATERIAL: Dural	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N7	Checked: Date	Drawing No. GRP_011

Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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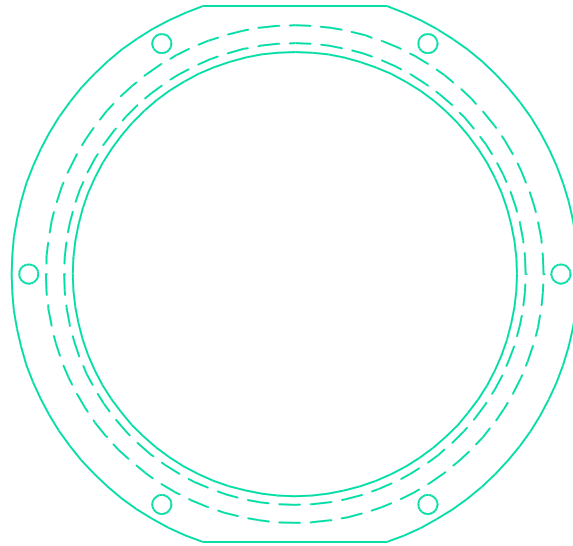
TITLE: Worm Shaft housings		
MATERIAL: Dural	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N7	Checked: Date	Drawing No. GRP 010

Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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TITLE: Bottom retaining plate		
MATERIAL: Dural	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N7	Checked: Date	Drawing No. GRP 008

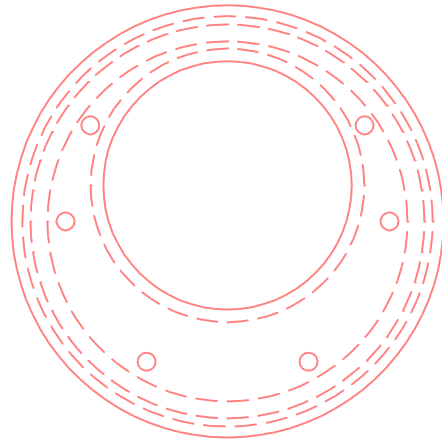
Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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TITLE: Top retaining plate 2		
MATERIAL: Dural	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N7	Checked: Date	Drawing No. GRP 007

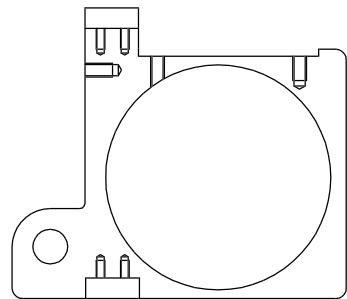
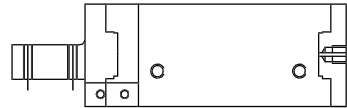
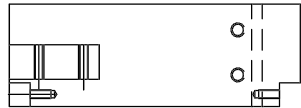
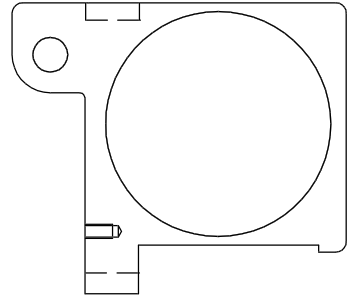
Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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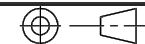
TITLE: Inner bearing body		
MATERIAL: Dural	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N8	Checked: Date	Drawing No. GRP_006

Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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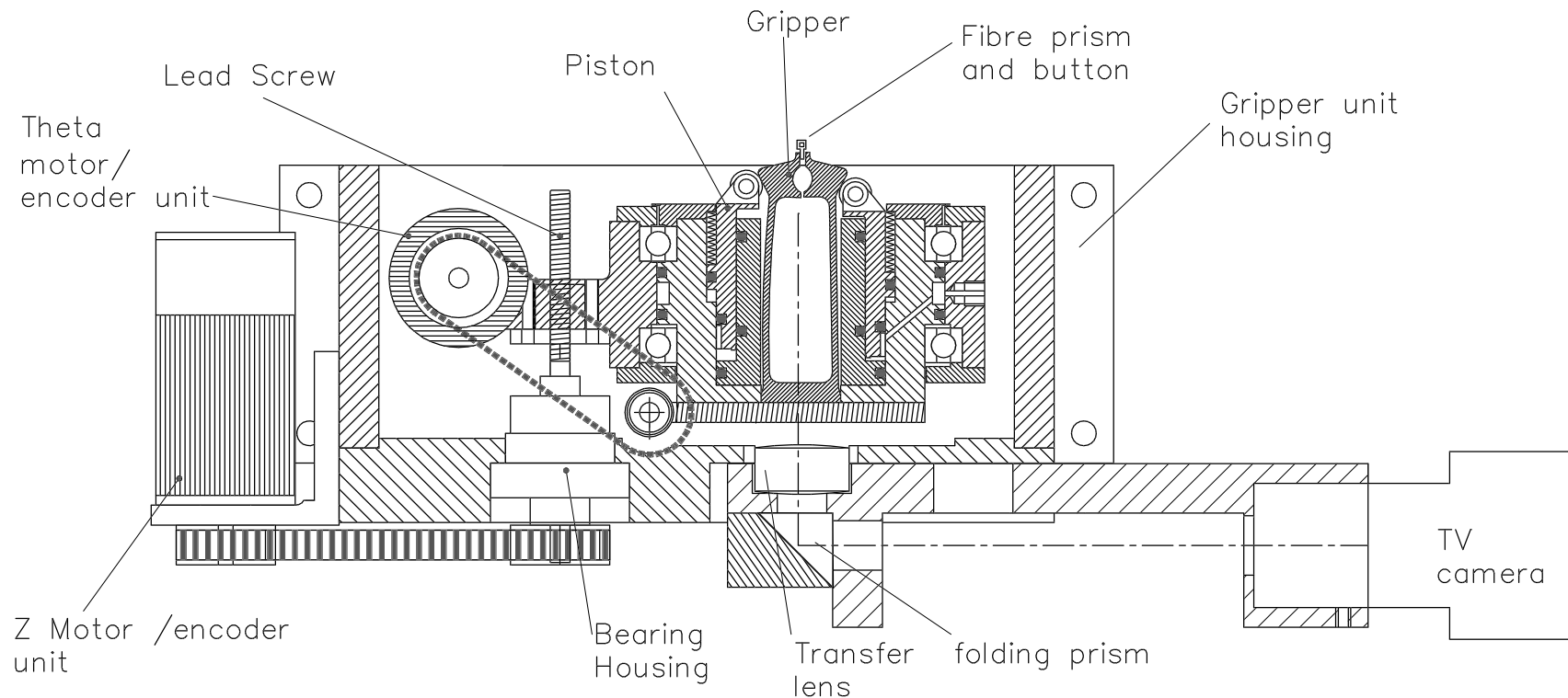


TITLE: Inner bearing body		
MATERIAL: Dural	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N8	Checked: Date	Drawing No. GRP_004

Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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# New Gripper and Robot Vision System



TITLE: AF2 Gripper General Arrangement.

MATERIAL:

Drawn By: K.Deer

Date: 24/07/97

FINISH:

Checked:

Date

ISAAC NEWTON GROUP  
Santa Cruz La Palma  
Canary Islands

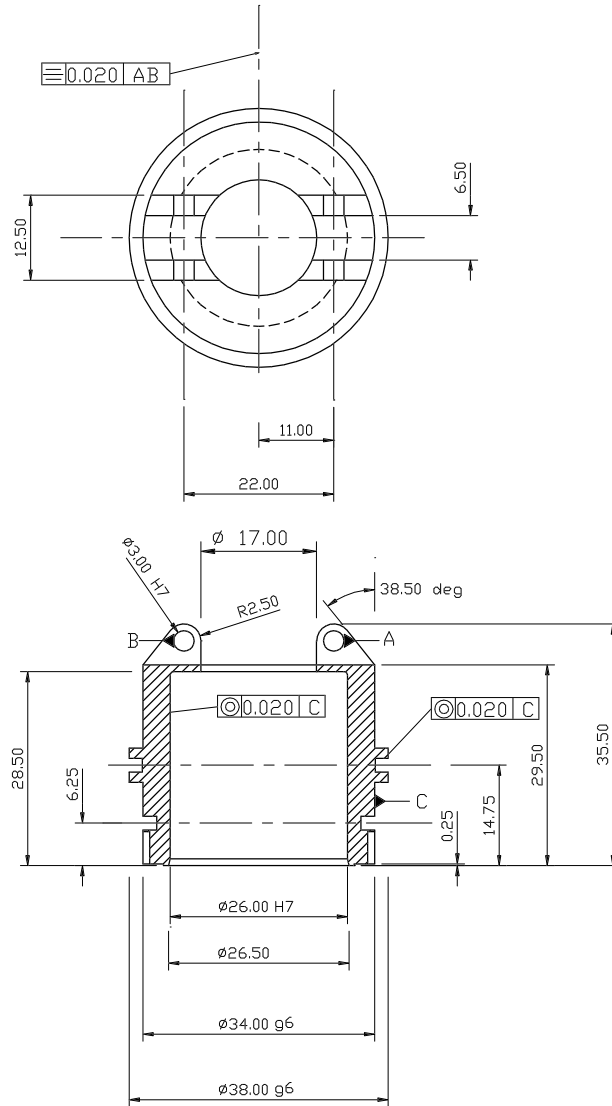
Scale:

Dimensions in mm

General Tolerance:

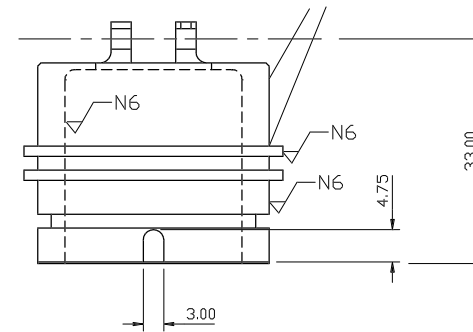
Dwg No.

LP\AF2\GRP\GRP\_GA1



Please Note.  
 Cut outs are for 2mm nominal diameter □ rings.  
 Exact dimensions for grooves in pistons are to be taken from the □ ring data sheets.

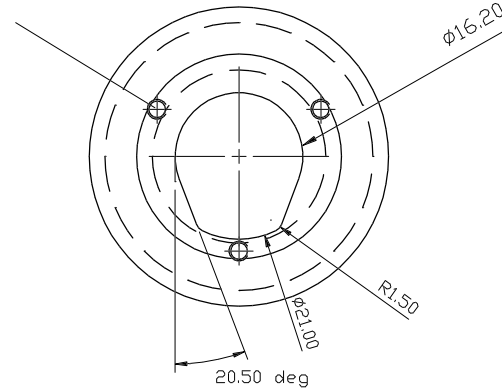
Manufacturing note.  
 This diameter section houses the springs.  
 Therefore the tolerance is general. You can use this area to grip, while the other 3 diameters are produced.



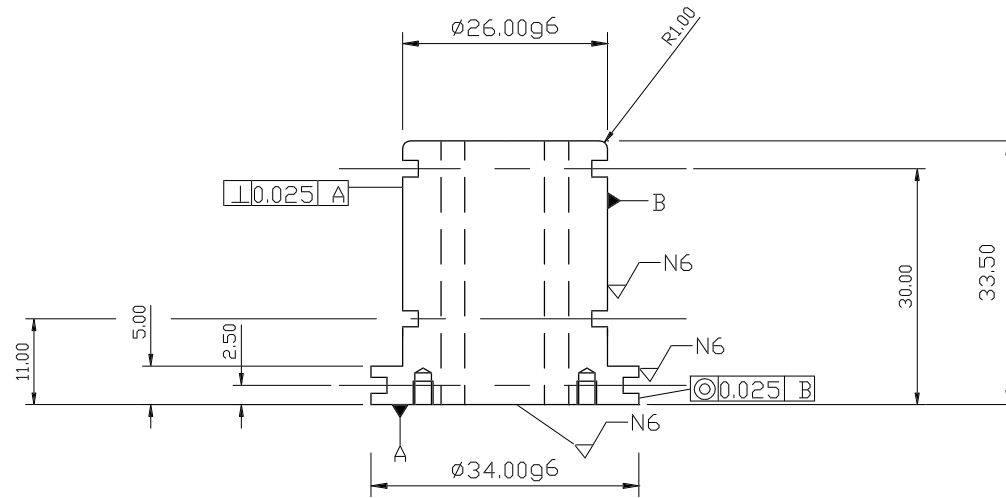
TITLE: Gripper Piston		
MATERIAL: Brass	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N8	Checked: Date	Drawing No. GRP 003

Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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3 x M2.5 x4mm deep  
equi-spaced  
PCD 24



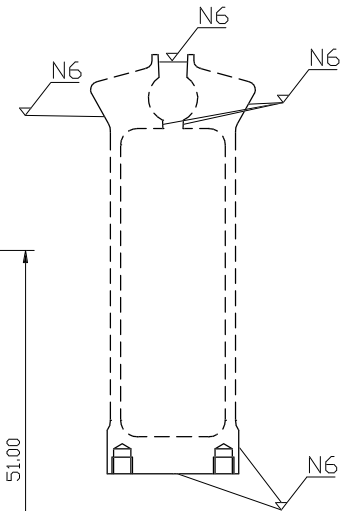
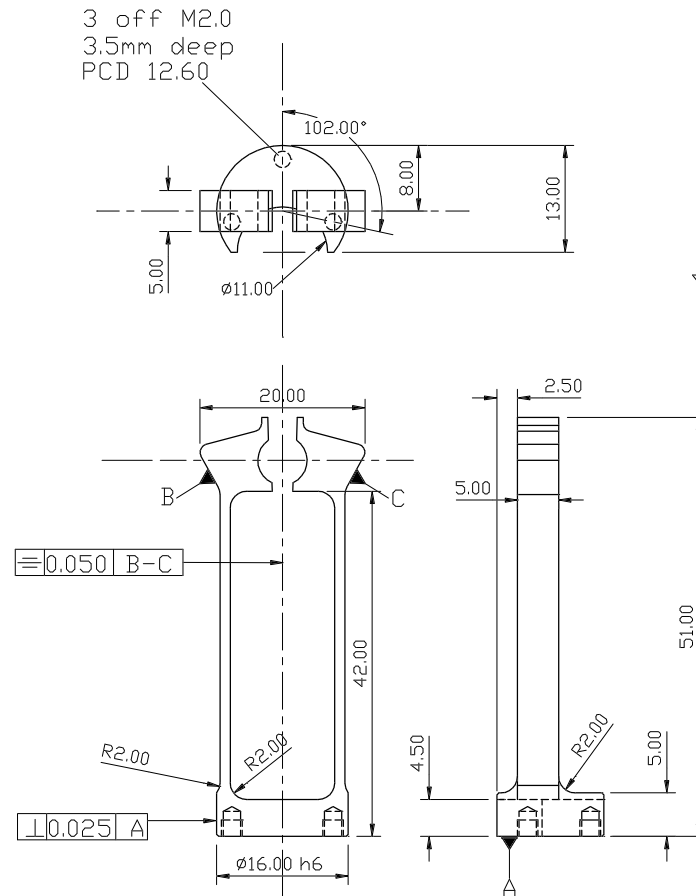
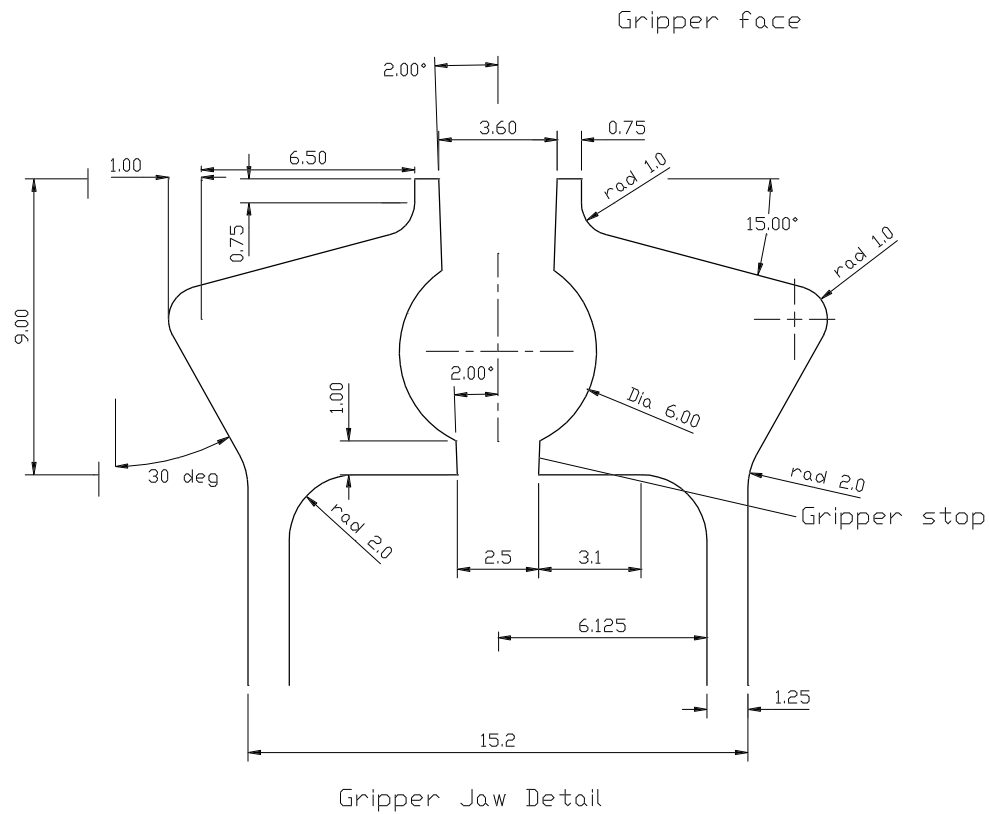
Please Note.  
Cut outs are for 2mm nominal  
diameter  $\square$  rings.  
Exact dimensions for grooves  
in pistons are to be taken from  
the  $\square$  ring data sheets.



TITLE: Inner cylinder		
MATERIAL: S/S 304	Drawn By: K. Dee Date: 27/07/97	ISAAC NEWTON GROUP La Palma Santa Cruz Canary Islands
GENERAL FINISH: N8	Checked: Date	
Drawing No. GRP 002		

Scale: XXX	Dimensions in mm	General Tolerance: 0.1
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Manufacturing notes.  
 Leave 0.1mm on gripper jaw faces and stops.  
 Final machining of jaws will take place when  
 partially assembled.



Surface Finish  
 All surfaces N8 with the  
 exception of the above  
 indicated by the continuous  
 lines

