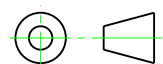
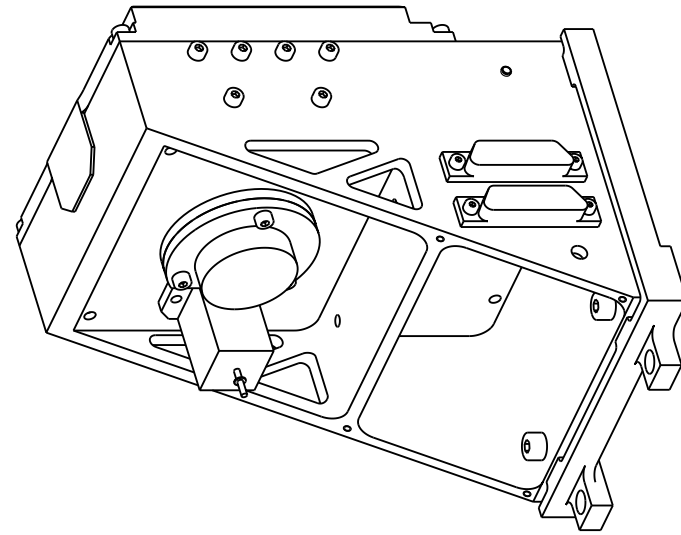
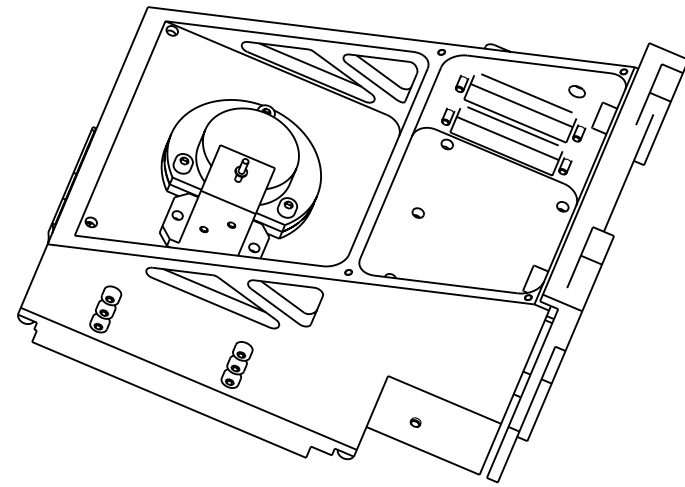
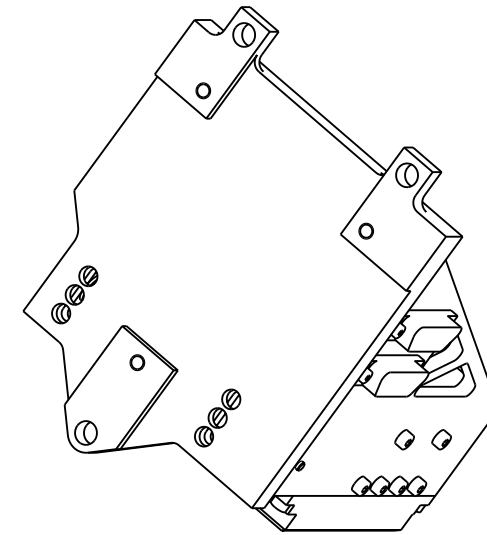
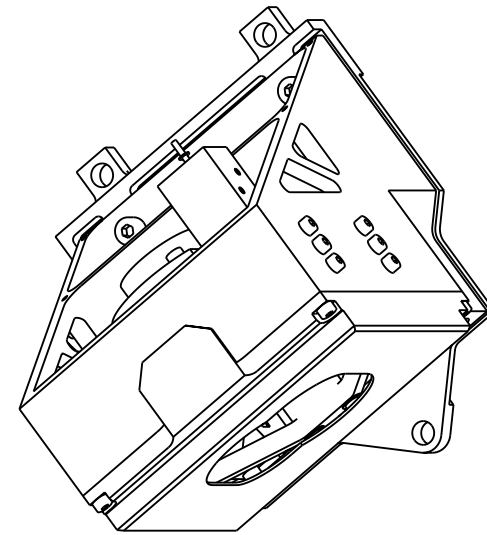
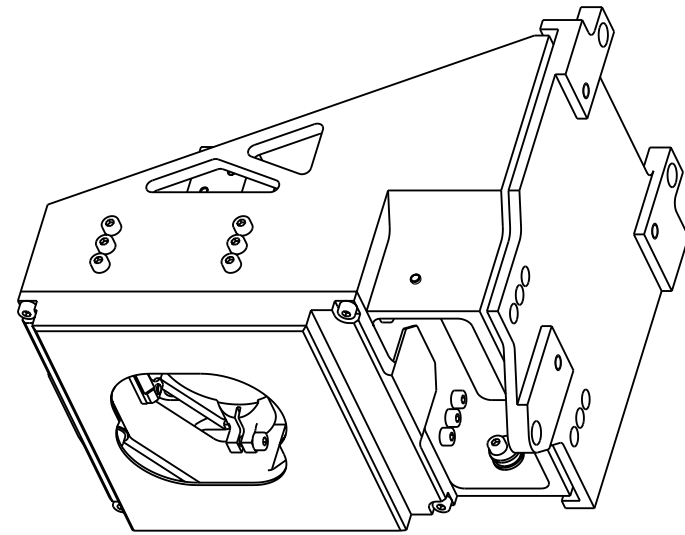


- NOTES:
1. MASS OF ASSEMBLY ESTIMATED AT 0.779 kg (-0, +0.105kg)
  2. ASSEMBLE IN CLASS 1000 CLEANROOM PER PA PLAN, DOCUMENT SPIRE-ATC-PRJ-000711
  3. 'CHOP-POSN' AXIS SHOWS BSM CHOPPED 'FORWARD'
  4. REST POSITION OF AXES MUST BE MEASURED WITH ASSEMBLY FACING UPWARDS PER PROCEDURE XXX (TO BE WRITTEN)
  5. MEASURE CoG POSITION AND MASS AND REPORT TO BSM PA MANAGER

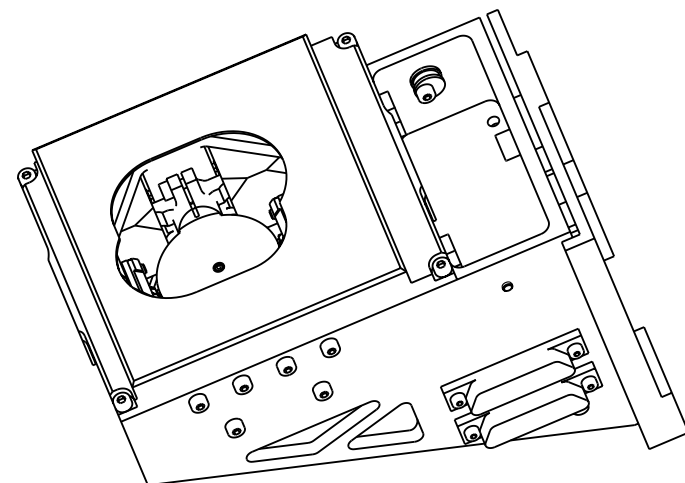
THIRD ANGLE PROJECTION DIMENSIONS IN MM		 Royal Observatory Blackford Hill Edinburgh EH9 3HJ <b>UK Astronomy Technology Centre</b>	
Material:	CTD: -	Drawn: IP	Date: 29.MAY.01
Finish:	01-12	Mod'd:	Date:
Unless otherwise stated		Last mod: CONSEQ. UPDATE DUE TO DEV. MODEL INTRODUCTION	
Tolerances: -		Title: BEAM STEERING MIRROR ASSEMBLY	
Linear : ±0.1		Size Dwg No: SPIRE-BSM-020-001	
Angular : ±0.5°		A2	
Remove all sharp edges		Scale:	MODEL: SPIRE-BSM-020-001
		Sheet: 1 of 5	Rev 3

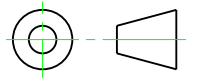



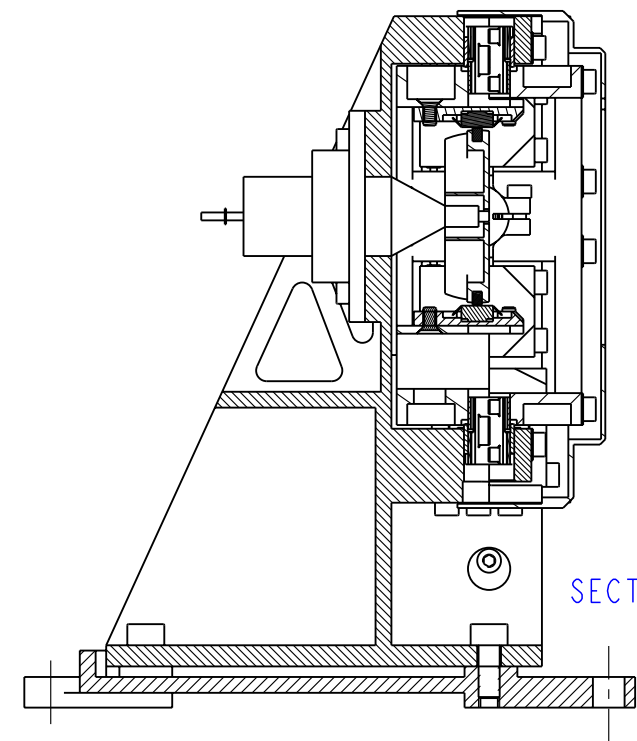
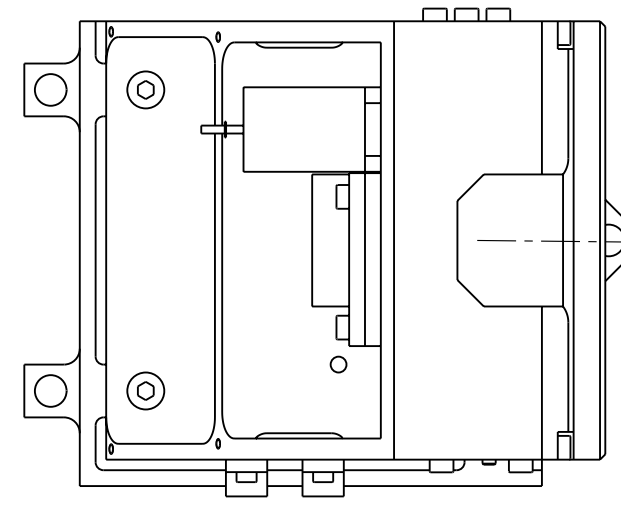
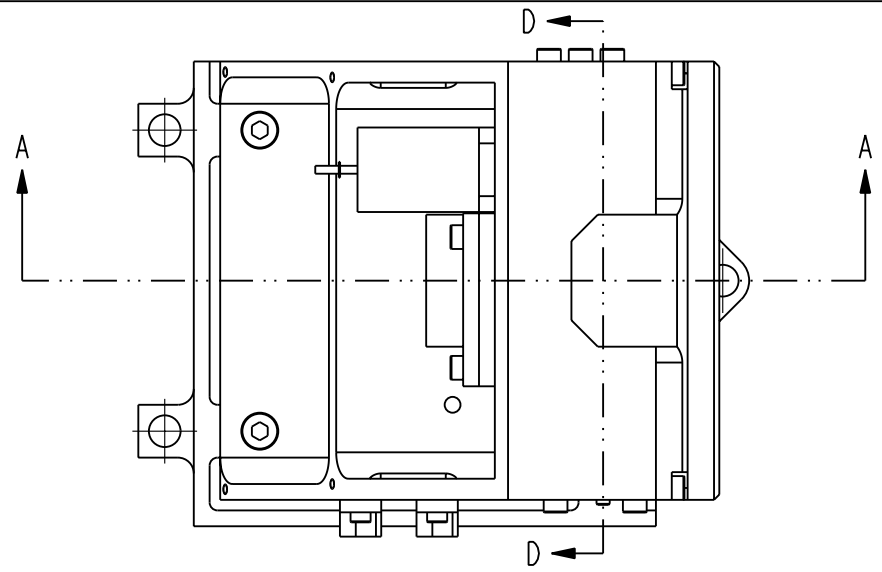
THIS SHEET SHOWS TRIMETRIC VIEWS OF THE ASSEMBLY WITH BAFFLE AND HARNESS REMOVED FOR CLARITY.



SCALE 0.600

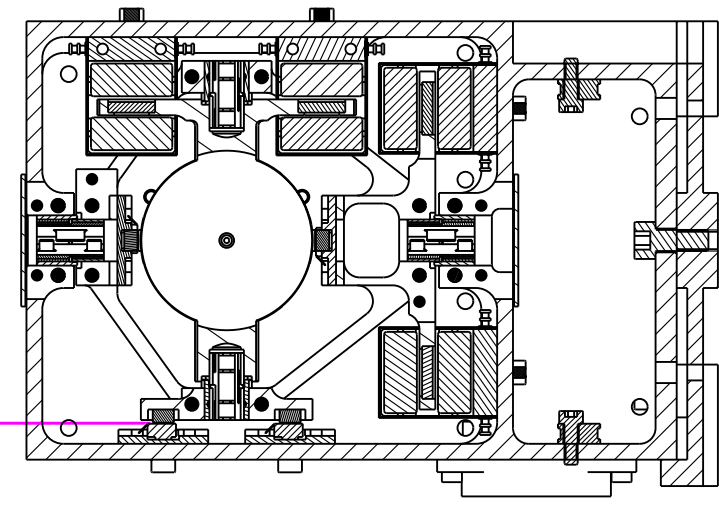


THIRD ANGLE PROJECTION DIMENSIONS IN MM				 Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
Material: N/A		CTD: -		Drawn: IP Date: 15.JUN.01	
Finish: SEE NOTE				Mod'd: Date:	
Unless otherwise stated		Last mod: CONSEQ. UPDATE			
Tolerances:-		Title: BSM ASSEMBLY (INFORMATION VIEWS)			
Linear : ±0.1		Size A3		Dwg No: SPIRE-BSM-020-001	
Angular : ±0.5°		Scale:		Rev 3	
Remove all sharp edges		MODEL: SPIRE-BSM-020-001		Sheet 2 OF 5	

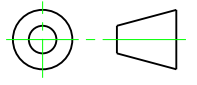



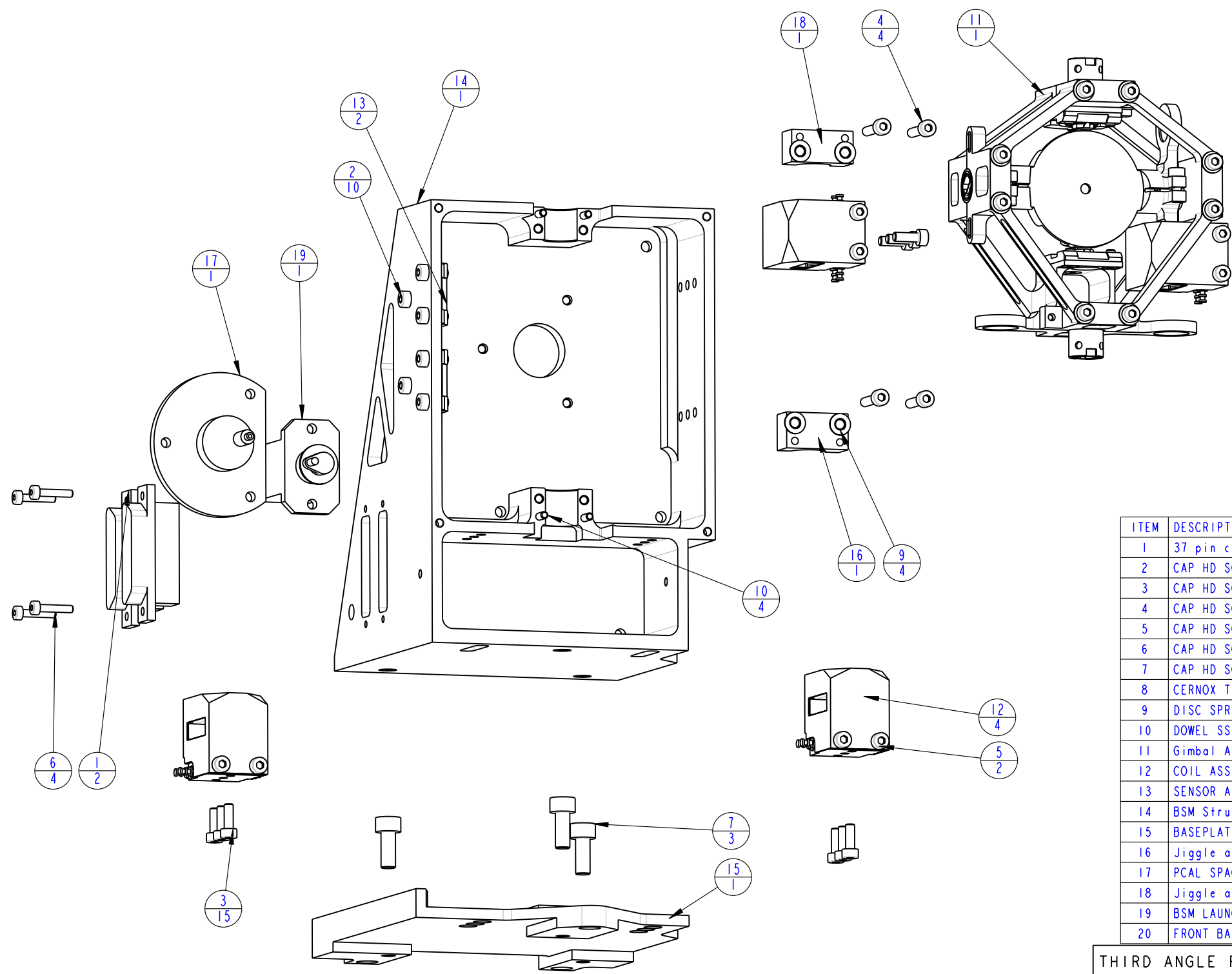
- NOTES:
1. 'JIGGLE AXIS' AXIS SHOWS MIRROR JIGGLED RIGHTWARDS
  2. AXIS ORTHOGONALITY TO BE MEASURED AS NOTED ON SHEET 1
  3. BAFFLE AND HARNESS OMITTED FOR CLARITY
  4. CHECK JIGGLE SENSOR SETTING DIMENSIONS AS SHOWN

JIGGLE-AXIS  
 JIGGLE MOTION  $\pm 0.6^\circ$



SECTION D-D

THIRD ANGLE PROJECTION DIMENSIONS IN MM				 Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
Material: N/A	CTD: -	Drawn: TAP	Date: 15. JUN. 01		
Finish: SEE NOTE	01-12	Mod'd:	Date:		
Unless otherwise stated		Last mod:			
Tolerances: -		Title: BEAM STEERING MIRROR ASSEMBLY (SECTIONS SHOWING MIRROR POSITION)			
Linear : $\pm 0.1$	Angular : $\pm 0.5^\circ$	Size A3	Dwg No: SPIRE-BSM-020-001	Rev 3	
Remove all sharp edges		Scale:	MODEL: SPIRE-BSM-020-001	Sheet 3 OF 5	



NOTES

1. FLYING HARNESS ARE PRESENT ON ITEMS 8, 11, 12, 13. HARNESS ROUTING IS TBD.
2. ASSEMBLE GIMBAL ITEM 11 WITH JIG, DRAWING NO. SPIRE-BSM-022-XXX (TBD)
3. FIT CHECK CONNECTORS, ITEMS 1, 6 BUT DO NOT ASSEMBLE UNTIL HARNESS COMPLETED (SEE SHEET 5)
4. MOTOR ASSEMBLIES ITEM 12, AND LOOSE MOTOR PACKAGED WITH GIMBAL ARE TO BE ALIGNED FOR POSITION BY TBD METHOD (ASSEMBLY FEATURE MACHINED INTO ITEM 16)
5. FRONT BAFFLE OMITTED FOR CLARITY

ITEM	DESCRIPTION	QUANTITY	FILENAME	REV.
1	37 pin connector MDM	2	37WAY_CONN	1
2	CAP HD SCREW SS M2.5 x 6mm	10	CAP-HD-SCREW-SS-M2-5X6	1
3	CAP HD SCREW SS M2.5x7mm	15	CAP-HD-SCREW-SS-M2-5X7	1
4	CAP HD SCREW SS M2x12	4	CAP-HD-SCREW-SS-M2-5X12	1
5	CAP HD SCREW SS M2.5X7.75	2	CAP-HD-SCREW-SS-M2-5X7_75	1
6	CAP HD SCREW SS M2X10	4	CAP-HD-SCREW-SS-M2X10	1
7	CAP HD SCREW SS M4x10	3	CAP-HD-SCREW-SS-M4X10	1
8	CERNOX THERMISTOR, Cu CANISTER MOUNT	2	CX-1030-CU	1
9	DISC SPRING SS 3.2mm ID	4	DISC-SPRING-ID-3_2	1
10	DOWEL SS 2mm dia x 8mm lg.	4	DOWEL_8X2	1
11	Gimbal Assembly (Jiggle + Chop stages)	1	SPIRE-BSM-020-003	3
12	COIL ASSEMBLY	4	SPIRE-BSM-020-005	2
13	SENSOR ASSY	2	SPIRE-BSM-020-007	2
14	BSM Structural Interface	1	SPIRE-BSM-020-001-001	3
15	BASEPLATE	1	SPIRE-BSM-020-001-002	2
16	Jiggle axis flexure clamp lower	1	SPIRE-BSM-020-001-003	2
17	PCAL SPACE ENVELOPE	1	SPIRE-BSM-020-001-004	1
18	Jiggle axis flexure clamp upper	1	SPIRE-BSM-020-001-005	2
19	BSM LAUNCH LATCH SPACE ENVELOPE	1	SPIRE-BSM-020-001-007	1
20	FRONT BAFFLE	1	SPIRE-BSM-020-001-009	1

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM

Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ  
**UK Astronomy Technology Centre**

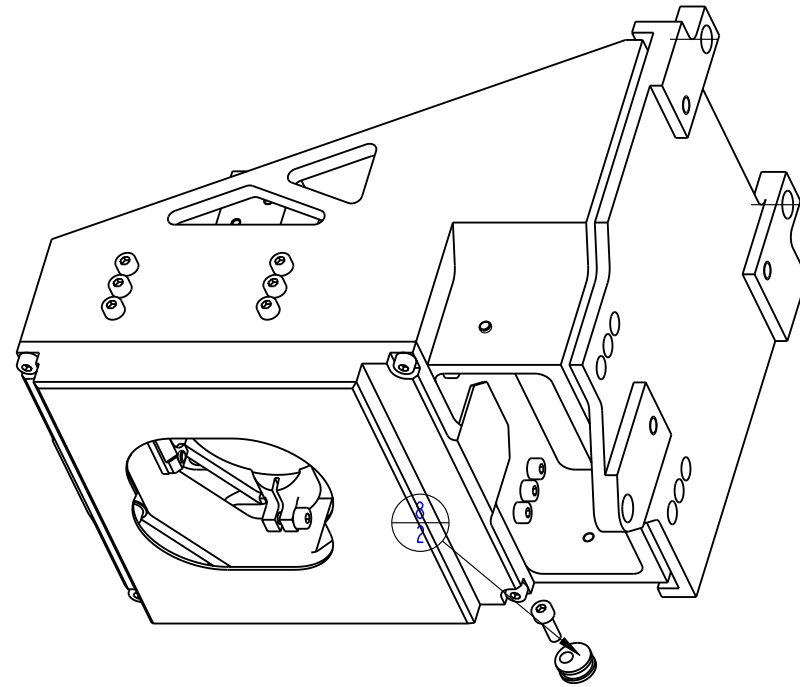
Material: CTD: - 01-25  
Finish: Drawn: TAP Date: 18.JUL.01  
Mod'd: Date:

Unless otherwise stated  
Tolerances: -  
Linear : ±0.1  
Angular : ±0.5°  
Remove all sharp edges

Last mod: CONSEQ. UPDATE  
Title: BEAM STEERING MIRROR (ASSEMBLY STAGE 1)

Size A2 Dwg No: SPIRE-BSM-020-001  
Scale: MODEL: SPIRE-BSM-020-001

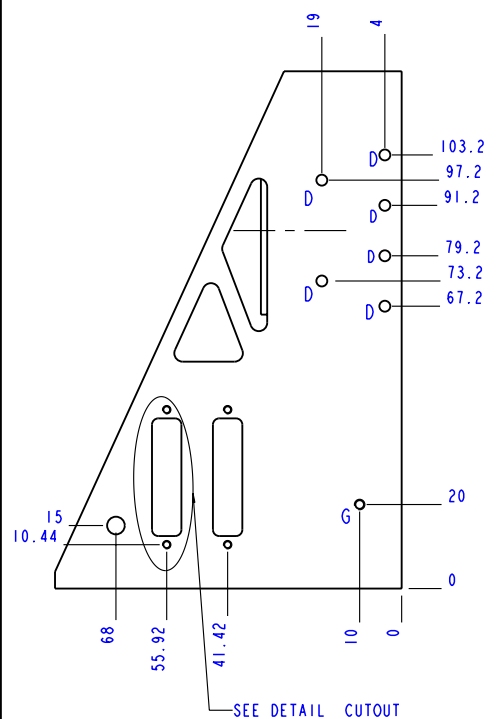
3 Rev  
Sheet: 4 of 5



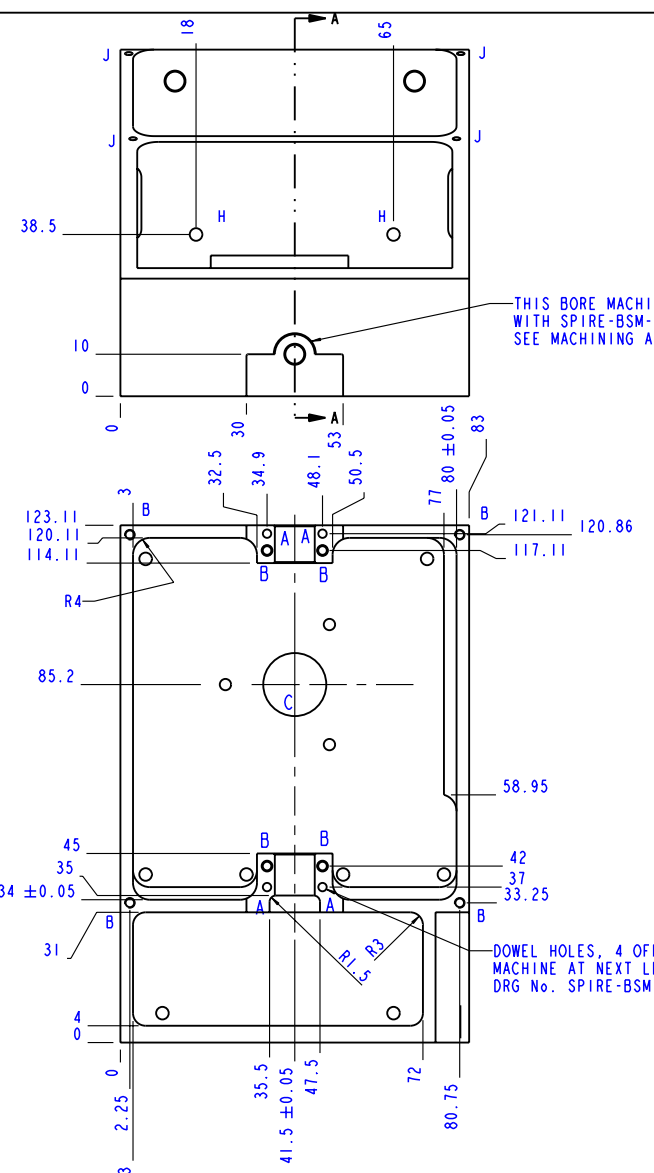
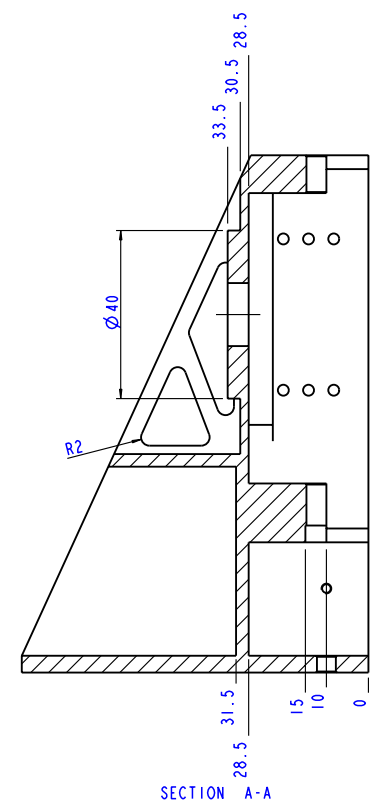
NOTES:

1. FIT BAFFLE, ITEM 22
2. HARNESS, ITEMS 14,15 SHOWN SEPARATELY, BUT IN PRACTICE IS ASSEMBLED IN-SITU FROM FLYING LEADS. HARNESS ASSEMBLY PROCEDURE (DRAFT!) OUTLINED BELOW. FULL PROCEDURE TO BE RAISED IN DRAWING XXX (TBD)
3. HARNESS ASSEMBLY:
  - 3.1 RUN ALL FLYING LEADS AND STAKE DOWN.
  - 3.2 TERMINATE LEADS FOR SOLDERING TO ITEM 1, LEAVING ADDITIONAL LENGTH 50-80mm (±bc) FOR ACCESSIBILITY.
  - 3.3 PROTECT ASSEMBLY AND CLEAN ROOM ENVIRONMENT FROM SOLDERING FUMES
  - 3.4 SOLDER COMPLETE TO DRG XXX (±bd)
4. ATTACH CONNECTORS ITEM 1,6 AND STAKE DOWN SPARE CABLE AS SHOWN IN DRG XXX (TBD)

THIRD ANGLE PROJECTION DIMENSIONS IN MM				Royal Observatory Blackford Hill Edinburgh EH9 3HJ
Material:	CTD: -	Drawn: IP	Date: 15.JUN.01	
Finish:	N/A	Mod'd:	Date:	
Unless otherwise stated	Last mod: CONSEQ. UPDATE			
Tolerances: -	Title: BEAM STEERING MIRROR ASSEMBLY (EXPLODED VIEW SHOWING PARTS COUNT)			
Linear : ±0.1	Size	Dwg No: SPIRE-BSM-020-001		3 Rev
Angular : ±0.5°	A2	Scale: NTS	MODEL: SPIRE-BSM-020-001	Sheet: 5 of 5
Remove all sharp edges				

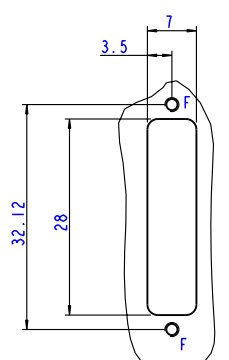
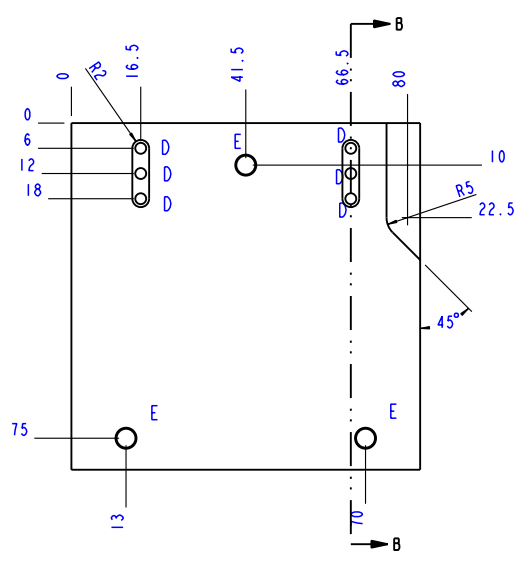
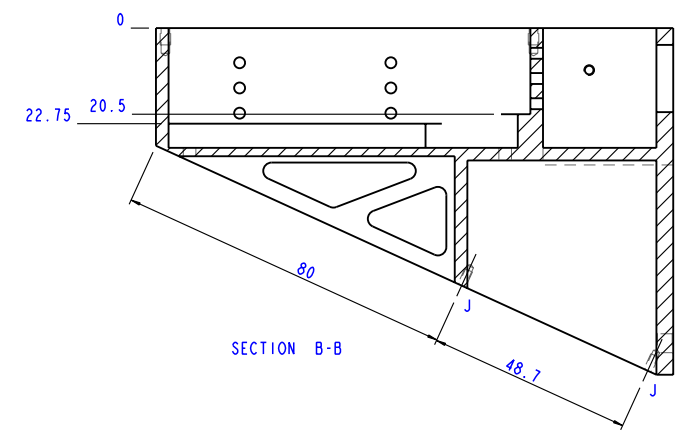
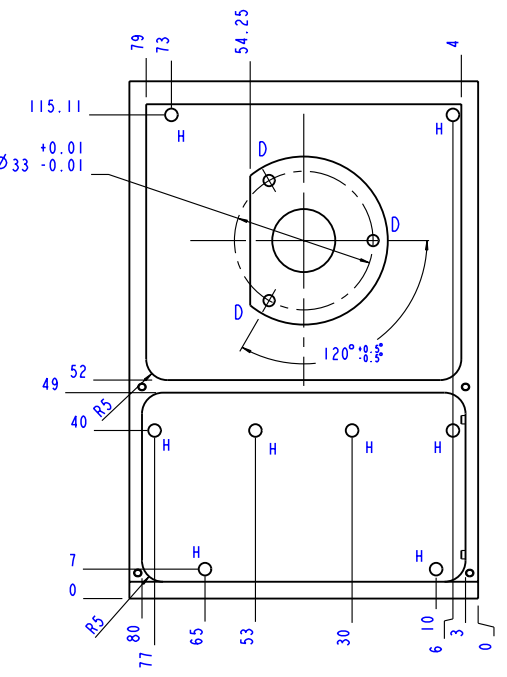
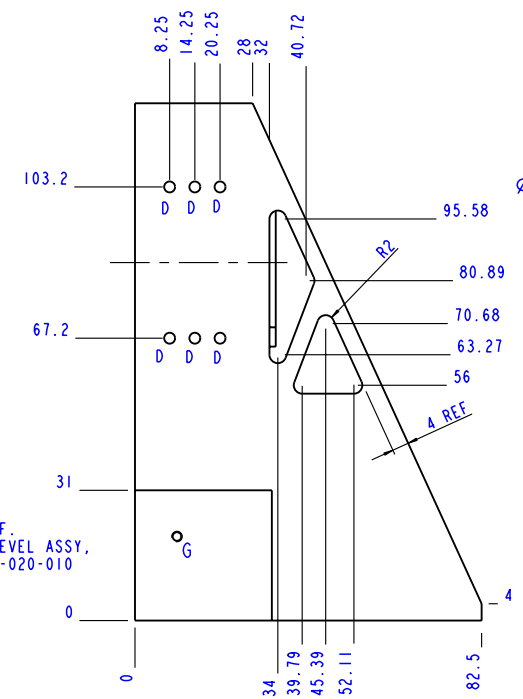


SEE DETAIL CUTOUT



THIS BORE MACHINED IN CONJUNCTION WITH SPIRE-BSM-020-001-005 & -003 SEE MACHINING ASSEMBLY DRAWING SPIRE-BSM-020-011

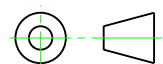
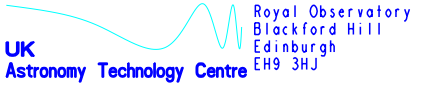
DOWEL HOLES, 4 OFF. MACHINE AT NEXT LEVEL ASSY. DRG No. SPIRE-BSM-020-010

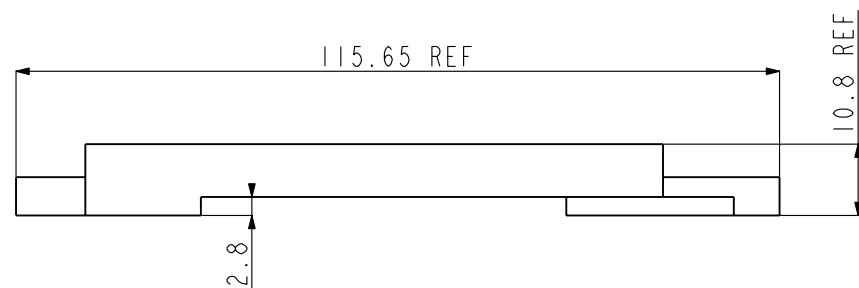
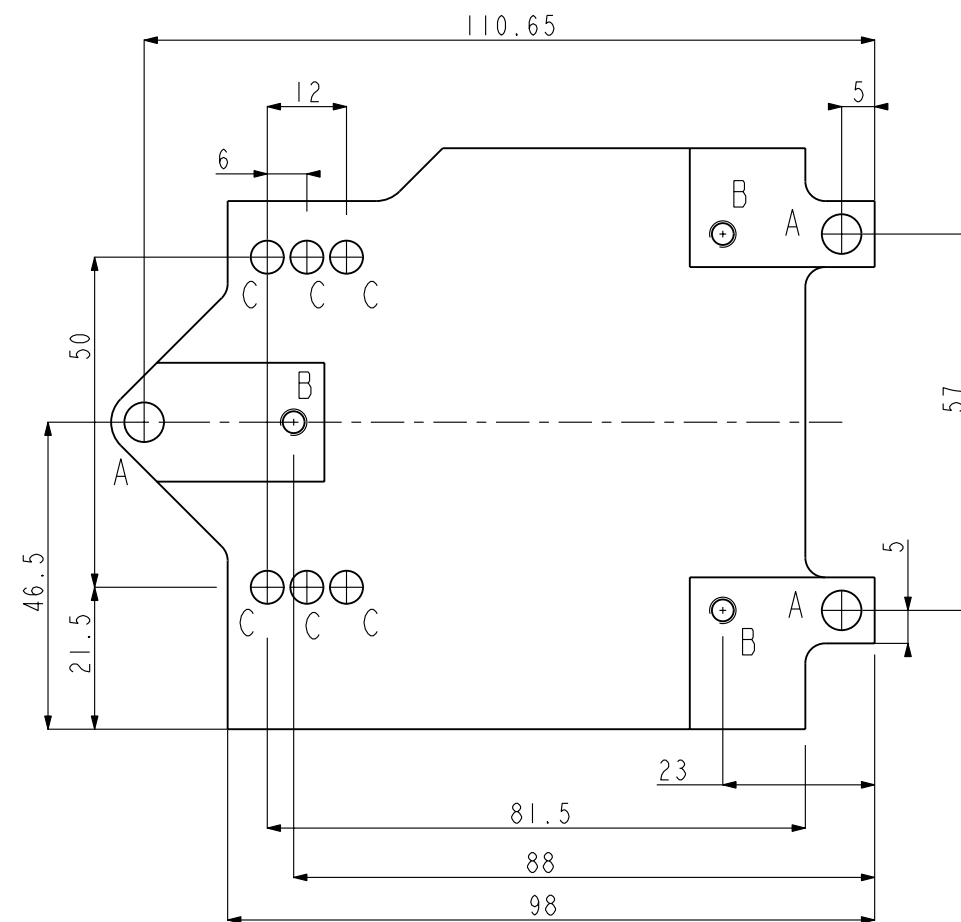
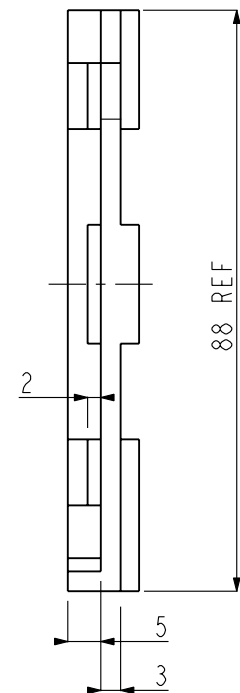
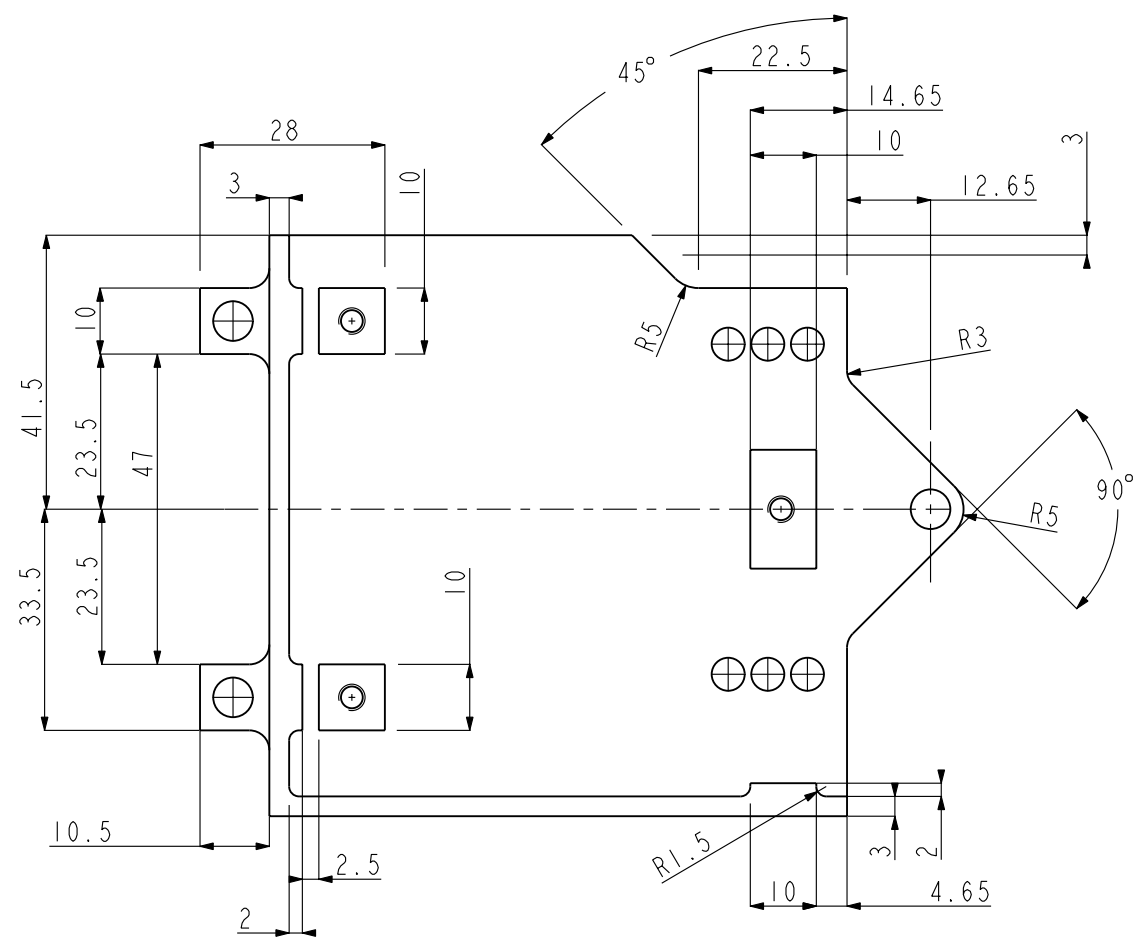


DETAIL CUTOUT (IN 2 POSNS)  
SCALE 1.500

SCALE 0.900

REF NO	SIZE	POS. TOL	DATUM
J	4 TAP M2.0	—	—
I	1 Ø4.2 (M4 CLEARANCE)	—	—
H	8 Ø3	—	—
G	2 TAP TO SUIT AN M2.5 X 1D HELICOIL LOCKING INSERT	—	—
F	4 Ø2.4	±0.1	—
E	3 Ø4.5	±0.15	—
D	21 Ø2.6	±0.1	—
C	1 Ø15.000 +0.018/-0	—	—
B	8 TAP TO SUIT AN M2.5 X 1.5D HELICOIL LOCKING INSERT	±0.1	—
A	4 Ø2 NOM (H7/s6)	±0.1	—

THIRD ANGLE PROJECTION DIMENSIONS IN MM					
Material:	ALUMINIUM 6082 -T6	CTD:	-	Drawn:	TAP Date: 26.JUL.01
Finish:			01-26	Mod'd:	IP Date: 6.FEB.02
Unless otherwise stated		Last mod:			
Tolerances: -		Title: BSM STRUCTURAL INTERFACE			
Linear : ±0.1		Size		Dwg No: SPIRE-BSM-020-001-001	
Angular : ±0.5°		A2		Rev 3	
Remove all sharp edges		Scale:		MODEL: SPIRE-BSM-020-001-001	
				Sheet: 1 of 1	



Note : 1. GOLD PLATE AS PER PROCESS LIST SPIRE-ATC-PRJ-708 ID10

REF	NO	SIZE	POS. TOL	DATUM
C	6	Ø5	±.2	—
B	3	TAP TO SUIT AN M4 X 1.5D HELICOIL	±0.15	—
		LOCKING INSERT		
A	3	REAM Ø6 TBC	±0.1	—

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM

Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

**UK**  
Astronomy Technology Centre

Material: AL ALLOY 6082  
Finish: SEE NOTE 1

CTD: -  
01-06

Drawn: TAP Date: 26. JUL. 01  
Mod'd: Date:

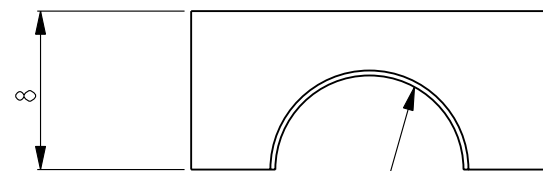
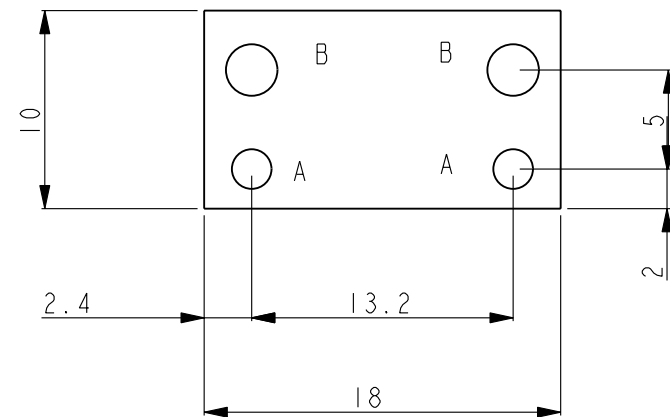
Unless otherwise stated Last mod: PROFILE ALTERED AND NOTE 1 ADDED

Tolerances: -  
Linear : ±0.1  
Angular : ±0.5°  
Remove all sharp edges

Title: BSM BASEPLATE

Size A3  
Dwg No: SPIRE-BSM-020-001-002  
Scale: MODEL: SPIRE-BSM-020-001-002

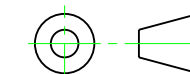
Rev 2  
Sheet 1 OF 1



CUTOUT PRODUCED AT THE STRUCTURE MACHINING  
ASSY STAGE DRG NO SPIRE-BSM-020-011

REF	NO	SIZE	POS. TOL	DATUM
B	2	∅2.6	±0.1	—
A	2	∅2 NOM (H7/h6)	±0.015	—

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



**UK**  
Astronomy Technology Centre  
Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material: AL ALLOY 6082 CTD:- Drawn: TAP Date: 9.OCT.01  
Finish: 01-07 Mod'd: Date:

Unless otherwise stated

Last mod:

Tolerances:-

Title: BOT FLEXURE CLAMP  
(JIGGLE AXIS)

Linear : ±0.1

Angular : ±0.5°

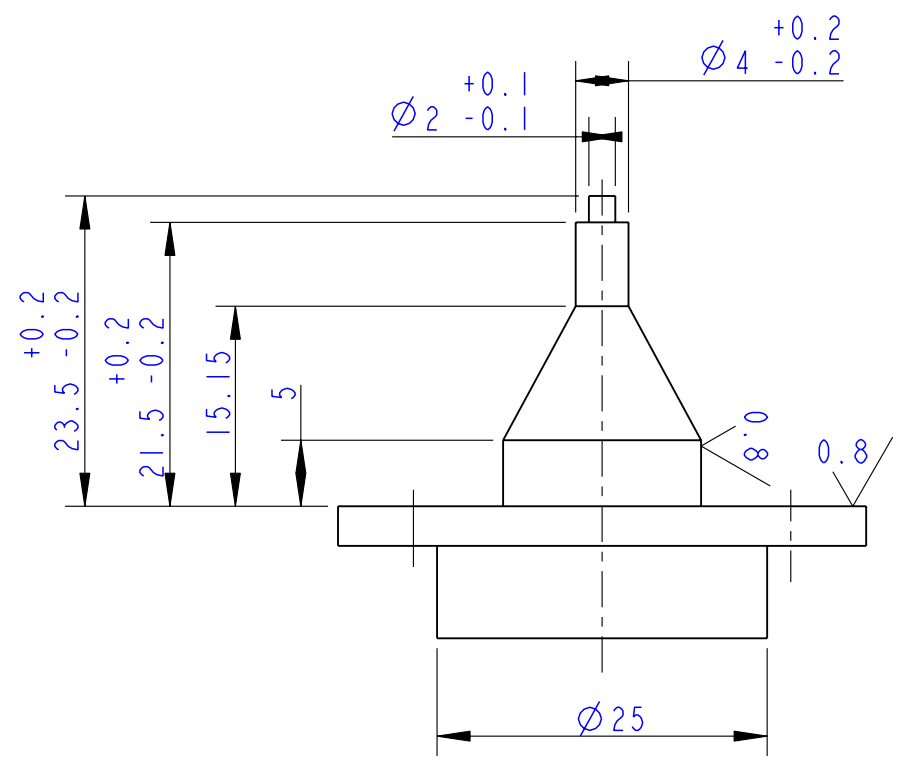
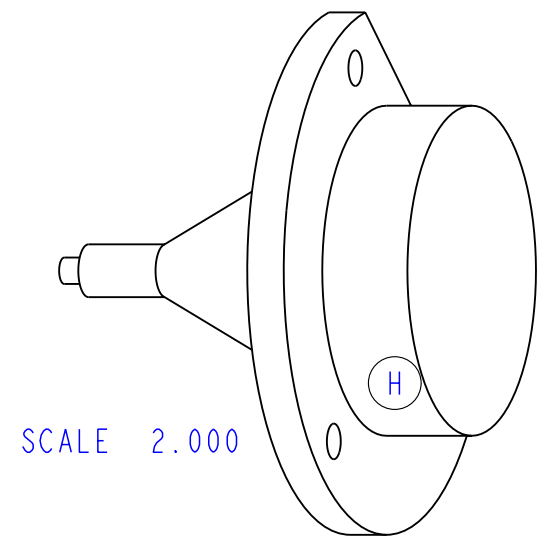
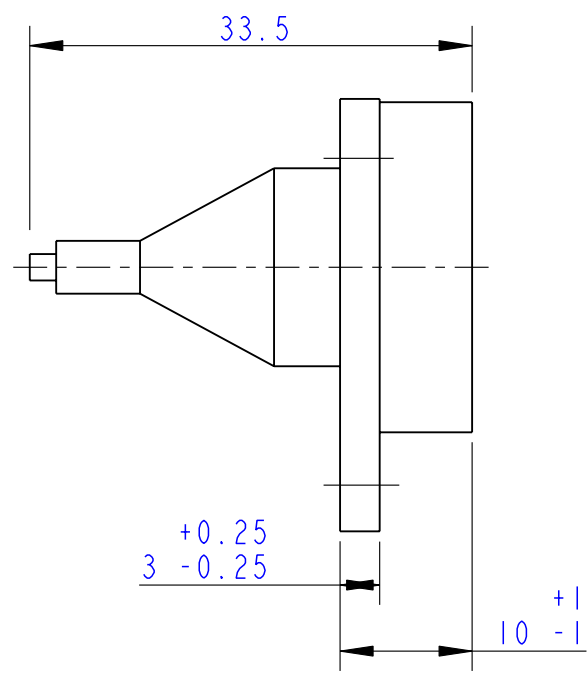
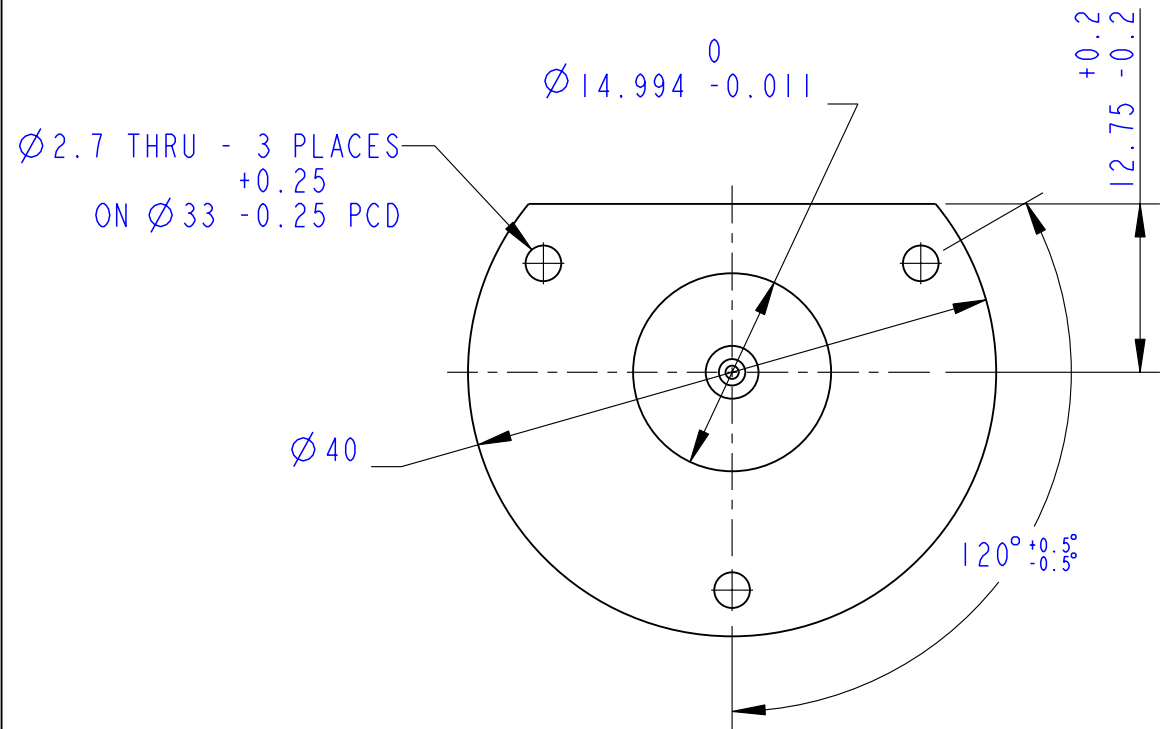
Size A3 Dwg No: SPIRE-BSM-020-001-003

Rev 2

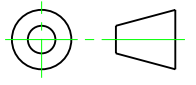

Remove all sharp edges

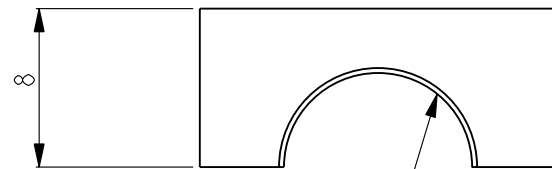
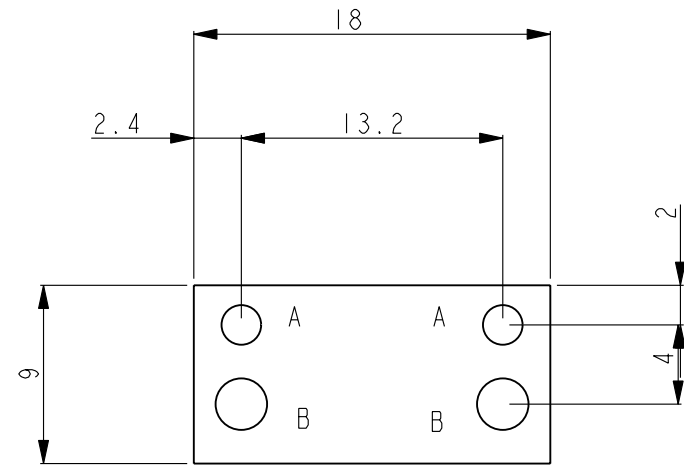
Scale: MODEL: SPIRE-BSM-020-001-003 Sheet 1 OF 1





- NOTES:
1. NOMINAL MASS (SPIRE-ATC-PRJ-000450 V2) 30G +/- 20%
  2. MAX. PERMISSIBLE MASS : 50 g
  3. ALL EXTERNAL SURFACES GOLD PLATED MIN 5 microns (TBC)
  4. HARNESS CONNECTION AT H (OPPOSITE FLAT)

THIRD ANGLE PROJECTION				 Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
DIMENSIONS IN MM					
Material: ASSY		CTD: -		Drawn: IP Date: 12.JUN.01	
Finish: SEE NOTES				Mod'd: Date:	
Unless otherwise stated		Last mod:			
Tolerances:-		Title: PCAL SPACE ENVELOPE			
Linear : ±0.1		Size A3		Dwg No: SPIRE-BSM-020-001-004	
Angular : ±0.5°				Rev	
Remove all sharp edges		Scale: 2:1		MODEL: SPIRE-BSM-020-001-004 Sheet 1 OF 1	



CUTOUT PRODUCED AT THE STRUCTURE MACHINING  
ASSY STAGE DRG NO SPIRE-BSM-020-011

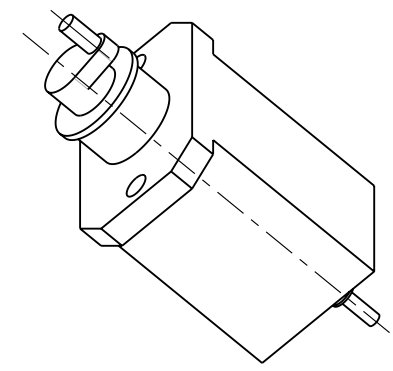
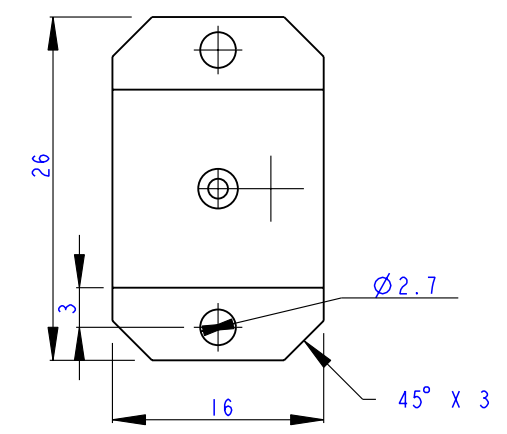
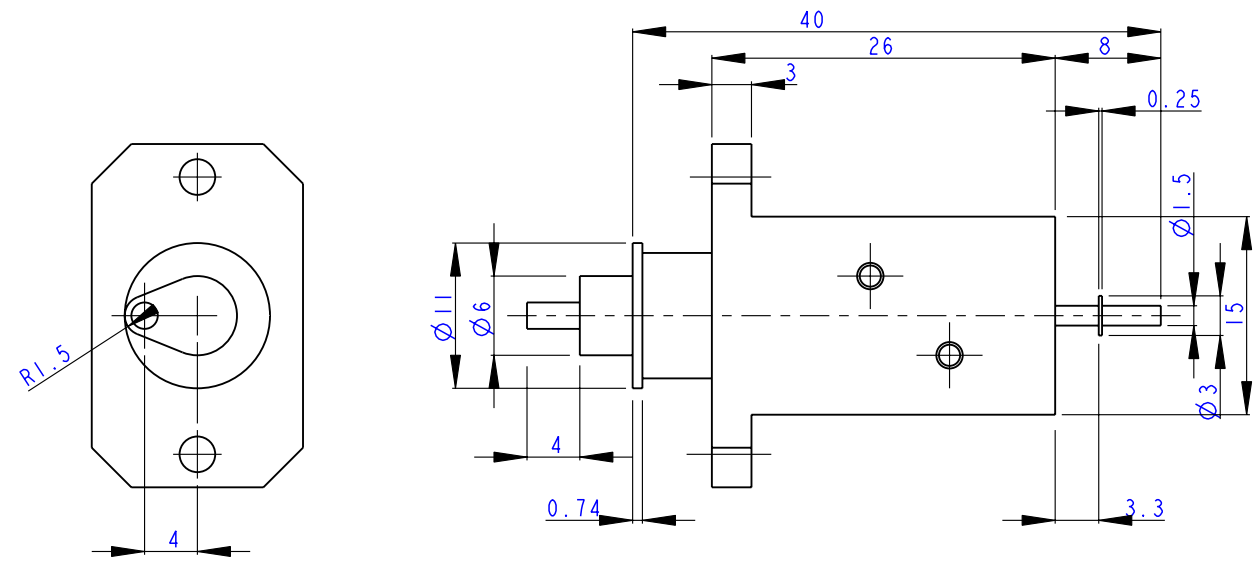
REF	NO	SIZE	POS. TOL	DATUM
B	2	∅2.6	±0.1	—
A	2	∅2 NOM (H7/h6)	±0.015	—

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM

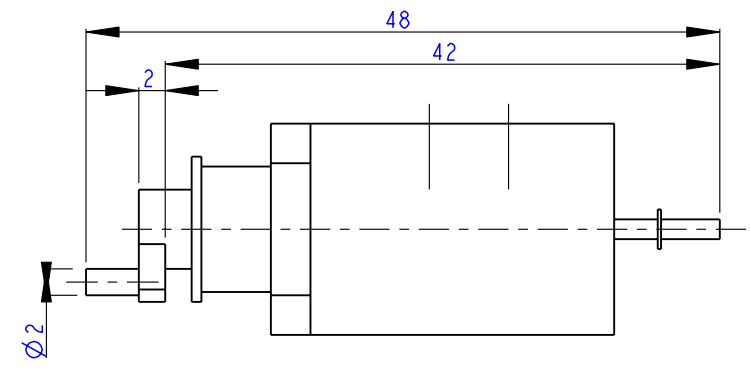
**UK** Astronomy Technology Centre  
Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material: AL ALLOY 6082	CTD: -	Drawn: TAP Date: 8.OCT.01
Finish:	01-07	Mod'd: Date:

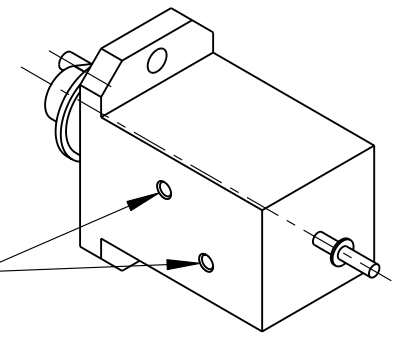
Unless otherwise stated	Last mod:		
Tolerances:- Linear : ±0.1 Angular : ±0.5°	Title: TOP FLEXURE CLAMP (JIGGLE AXIS)		
Remove all sharp edges	Size A3	Dwg No: SPIRE-BSM-020-001-005	Rev 2
	Scale:	MODEL: SPIRE-BSM-020-001-005	Sheet 1 OF 1



EXTENDED POSITION SHOWN. RETRACTION OF 2mm MIN REQUIRED



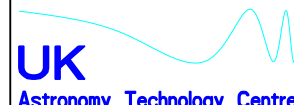
THESE HOLES NOT USED BY BSM

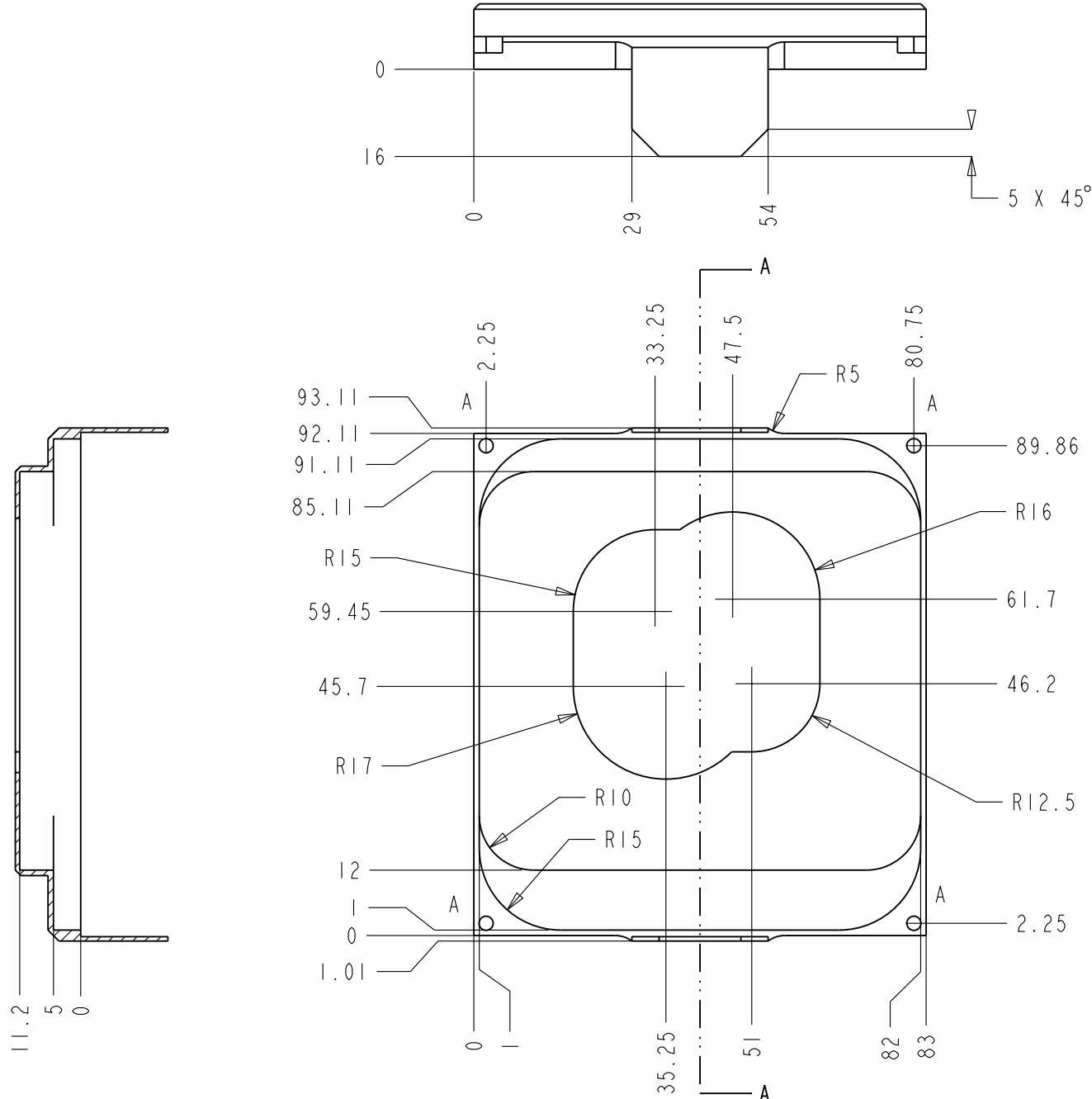


SCALE 1.500

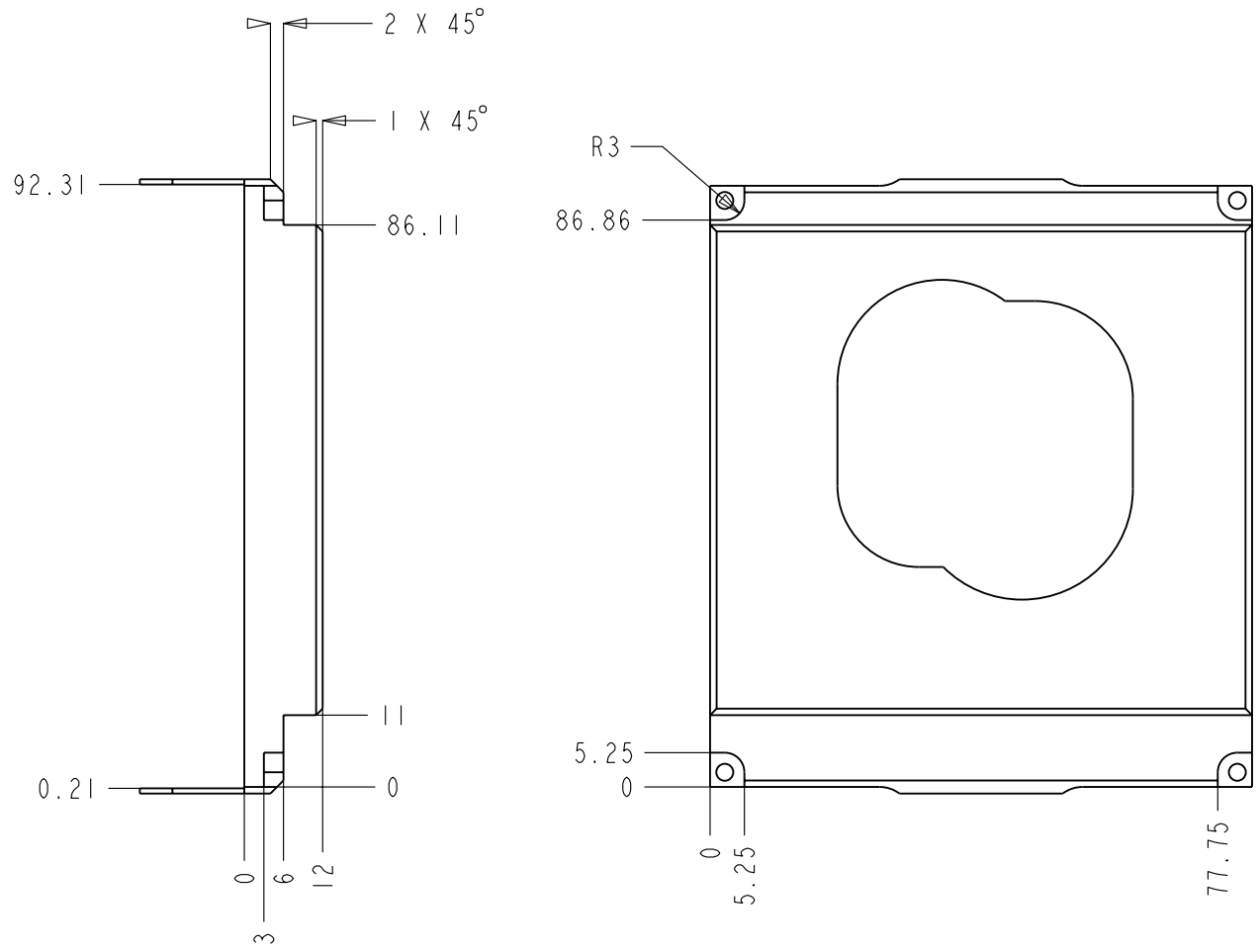
- NOTES:
1. THIS DRAWING OUTLINES A CANDIDATE LAUNCH LATCH FOR THE BSM
  2. THE DIMENSIONS SHOWN ARE BASED UPON THE SMEC CANDIDATE LATCH PART NO. SOLENIID-EAB-13, BUT SHOWING THE MAXIMUM ACCEPTABLE SPACE ENVELOPE FOR THE BSM, AND A PRESENTING A FRONT MOUNTING OPTION
  3. NOMINAL MASS ASSUMED 50 gm

SCALE 2.000

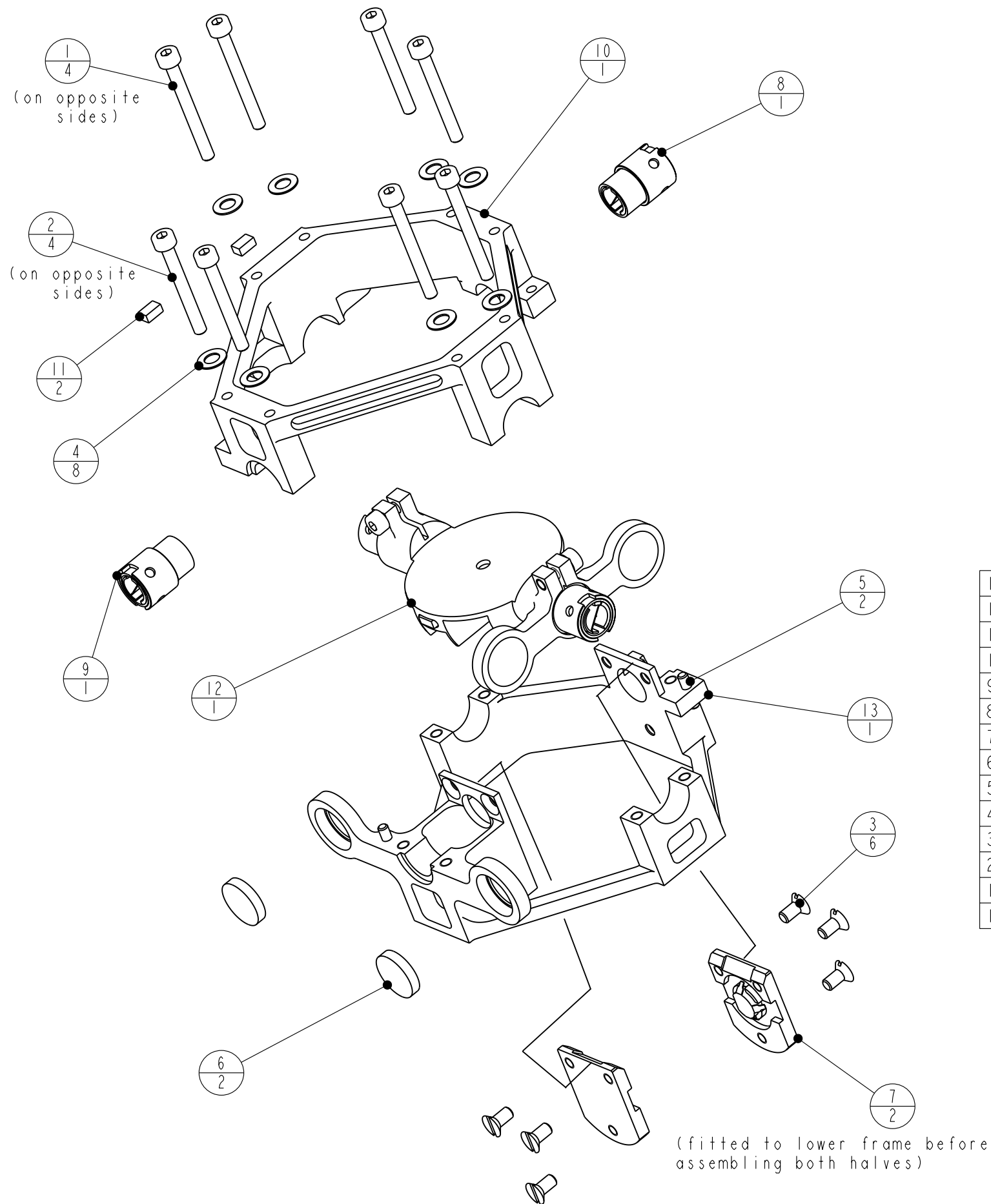
THIRD ANGLE PROJECTION DIMENSIONS IN MM		 Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
Material: ASSEMBLY	CTD: -	Drawn: IP	Date: 19.JUN.01
Finish: GOLD PLATE (TBC)		Mod'd:	Date:
Unless otherwise stated	Last mod:		
Tolerances:-	Title: BSM LAUNCH LATCH SPACE ENVELOPE		
Linear : ±0.1	Size	Dwg No: SPIRE-BSM-020-001-007	Rev
Angular : ±0.5°	A3	Scale: 2:1	MODEL: SPIRE-BSM-020-001-007
Remove all sharp edges		Sheet	1 OF 1



SECTION A-A

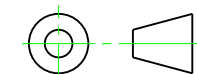


A	4	Ø2.6	±0.1	—
REF	NO	SIZE	POS. TOL	DATUM
THIRD ANGLE PROJECTION			 Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
DIMENSIONS IN MM				
Material: AL ALLOY 6082		CTD: -	Drawn: TAP Date: 17.DEC.01	
Finish:			Mod'd: Date:	
Unless otherwise stated		Last mod:		
Tolerances: -		Title: FRONT BAFFLE		
Linear : ±0.1		Size A3	Dwg No: SPIRE-BSM-020-001-009	
Angular : ±0.5°			Rev 1	
Remove all sharp edges		Scale:	MODEL: SPIRE-BSM-020-001-009	Sheet 1 OF 1



13	Jiggle Frame Bottom	1	SPIRE-BSM-020-003-001	3
12	BSM chop axis assembly	1	SPIRE-BSM-020-004	3
11	sensor actuator	2	SPIRE-BSM-020-004-004	2
10	Jiggle Frame Top	1	SPIRE-BSM-020-003-002	2
9	Shielded flexure assy (jiggle bot)	1	SPIRE-BSM-020-012	2
8	Shielded flexure assy (jiggle top)	1	SPIRE-BSM-020-008	2
7	SENSOR ASSY	2	SPIRE-BSM-020-007	2
6	PACS slim magnet	2	SPIRE-BSM-020-003-003	1
5	DOWEL SS 2mm dia x 8mm lg.	2	DOWEL_8X2	1
4	DISC SPRING SS 3.2mm ID	8	DISC-SPRING-ID-3_2	1
3	CSK HD SCREW SS M2.5X5	6	CSK-HD-SCREW-SS-M2-5X5	1
2	CAP HD SCREW SS M2.5x21.8mm	4	CAP-HD-SCREW-SS-M2-5X21_8	1
1	CAP HD SCREW SS M2.5x24mm	4	CAP-HD-SCREW-SS-M2-5X24	1
ITEM	DESCRIPTION	QTY	FILENAME	REV

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



**UK** Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ  
Astronomy Technology Centre

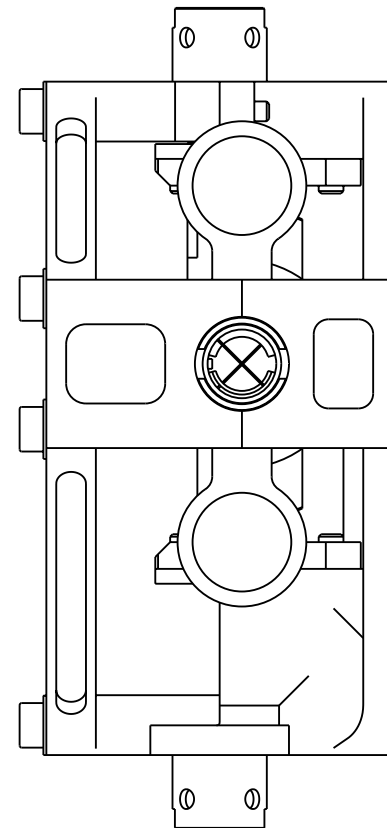
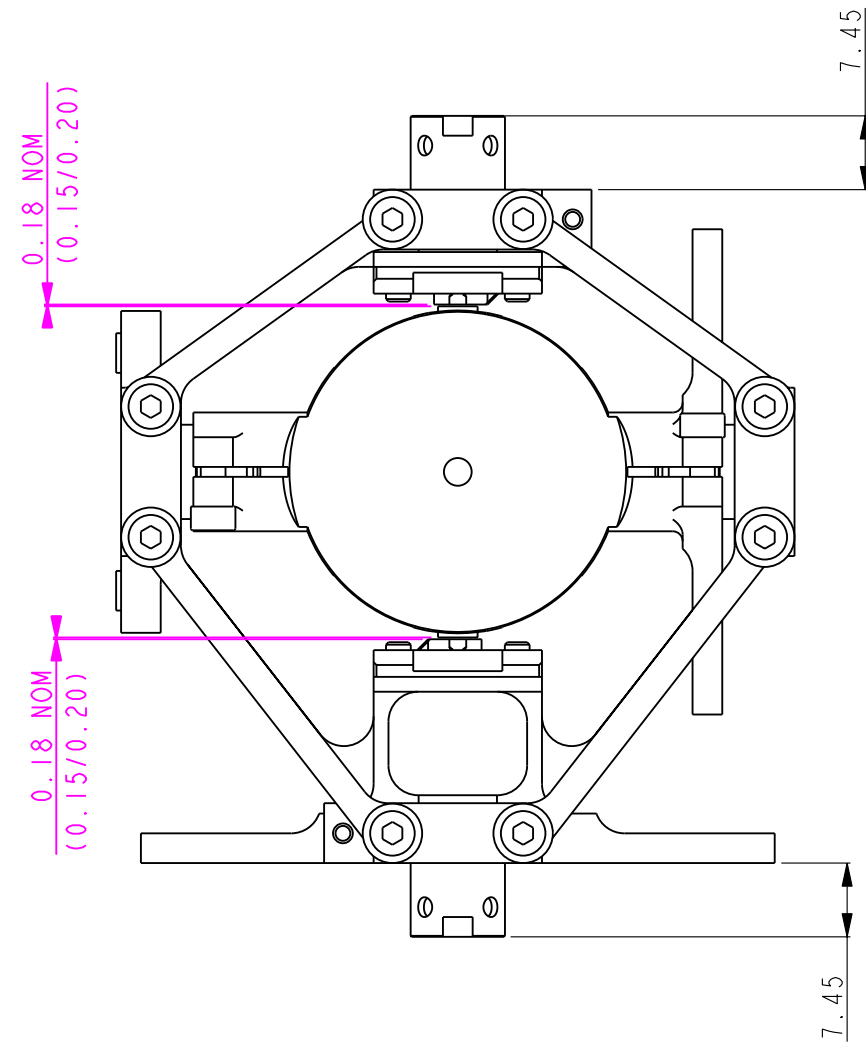
Material: CTD:- Drawn: TAP Date: 18.JUL.01  
Finish: 01-25 Mod'd: Date:

Unless otherwise stated Last mod: FLEX PIVOTS ALTERED

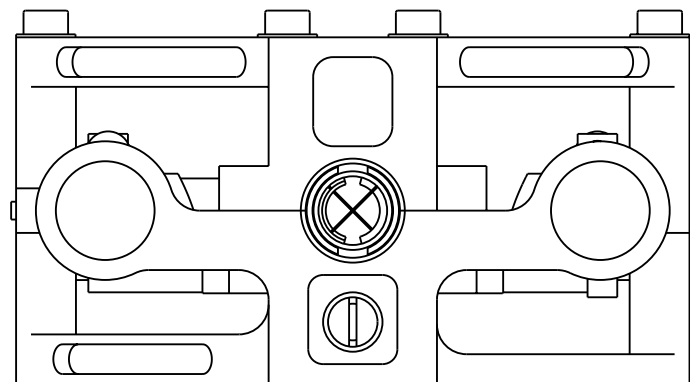
Tolerances:- Title: GIMBAL ASSY (JIGGLE & CHOP)

Linear :  $\pm 0.1$   
Angular :  $\pm 0.5^\circ$   
Remove all sharp edges

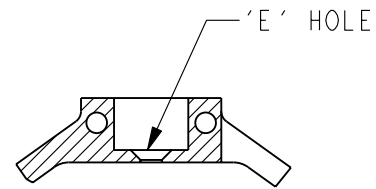
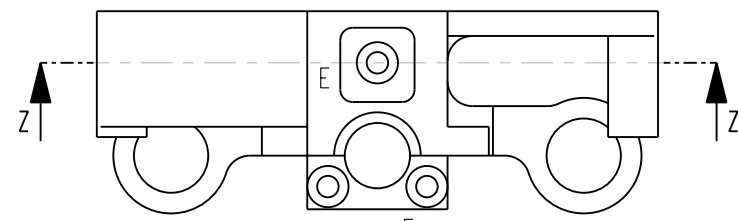
Size A3 Dwg No: SPIRE-BSM-020-003 Rev 3  
Scale: MODEL: SPIRE-BSM-020-003 Sheet 1 OF 2



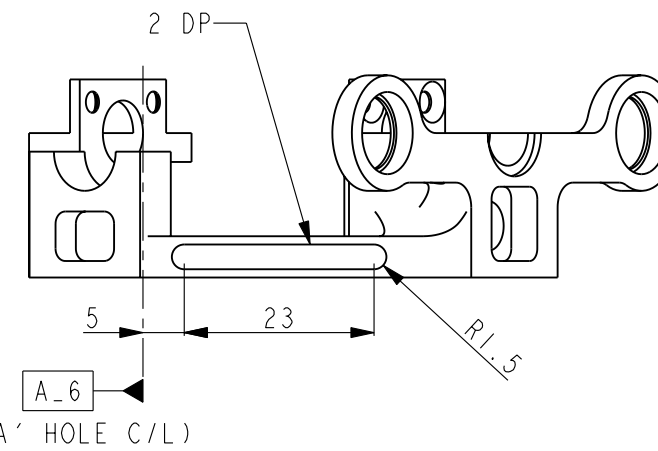
- NOTES: 1. ASSEMBLE BY JIG IN ACCORDANCE WITH INSTRUCTION SHEET SPIRE-BSM-022-XXX.  
 2. CHECK REF. DIMENSIONS AND CHOP SENSOR SETTING DIMENSIONS AS SHOWN.



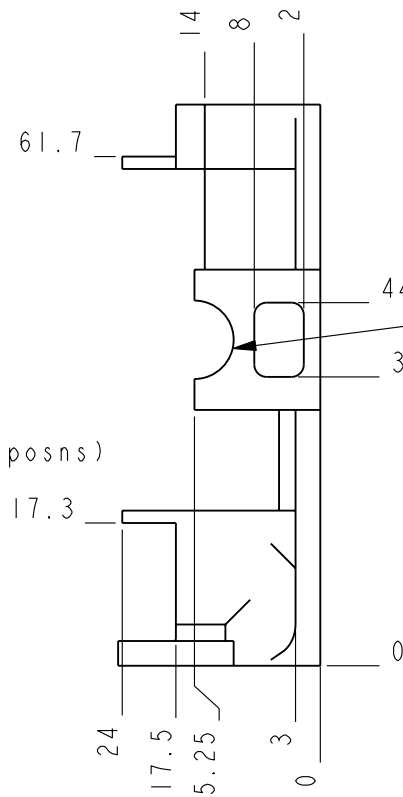
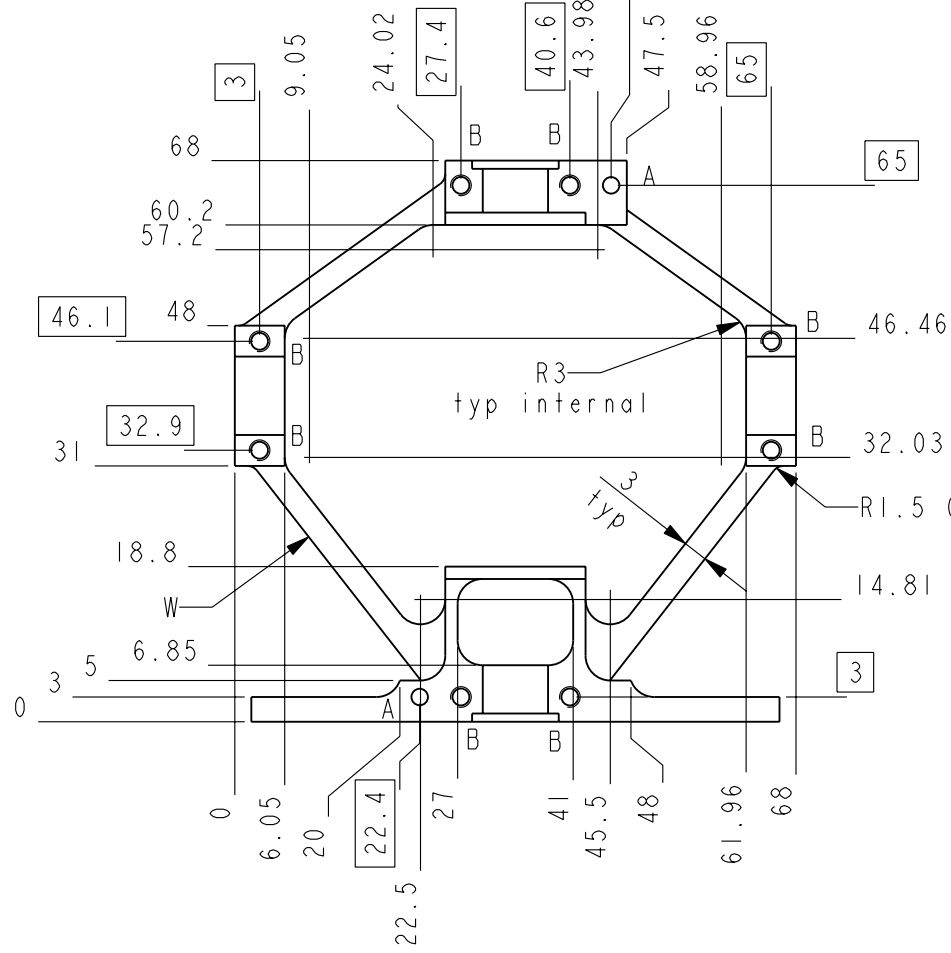
THIRD ANGLE PROJECTION DIMENSIONS IN MM				 Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
Material: -		CTD: -	Drawn: TAP Date: 18.JUL.01		
Finish: -		01-15	Mod'd: - Date: -		
Unless otherwise stated		Last mod: -			
Tolerances: -		Title: GIMBAL ASSY (JIGGLE & CHOP)			
Linear : ±0.1		Size A3		Dwg No: SPIRE-BSM-020-003	
Angular : ±0.5°		Scale: -		Rev 2	
Remove all sharp edges		MODEL: SPIRE-BSM-020-003		Sheet 2 OF 2	



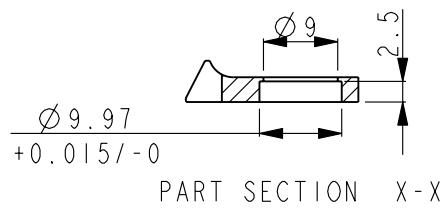
PART SECTION Z-Z



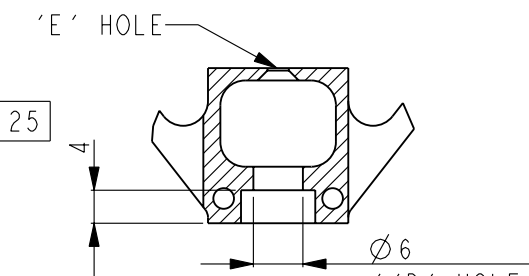
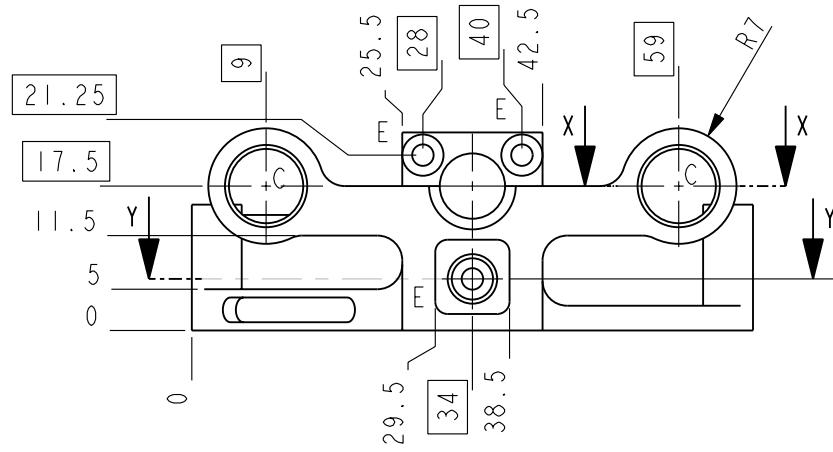
VIEW ON 'W' (TRUE VIEW)



MACHINED AT NEXT STAGE  
(SPIRE-BSM-020-013)



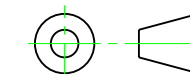
PART SECTION X-X



PART SECTION Y-Y

REF	NO	SIZE	POS.	TOL	DATUM
E	6	DRILL Ø2.6 & CSK Ø5 X 90°		±0.1	—
D	1	SEE SECT Y-Y		—	—
C	2	SEE SECT X-X		—	—
B	8	DRILL THRO' & TAP TO SUIT AN M2.5 X 1.5D HELICOIL LOCKING INSERT ON FACE SHOWN TAP M3 X 6DP MIN ON OPPOSITE SIDE		±0.1	—
A	2	Ø2 NOM (H7/s6)		±0.015	—

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



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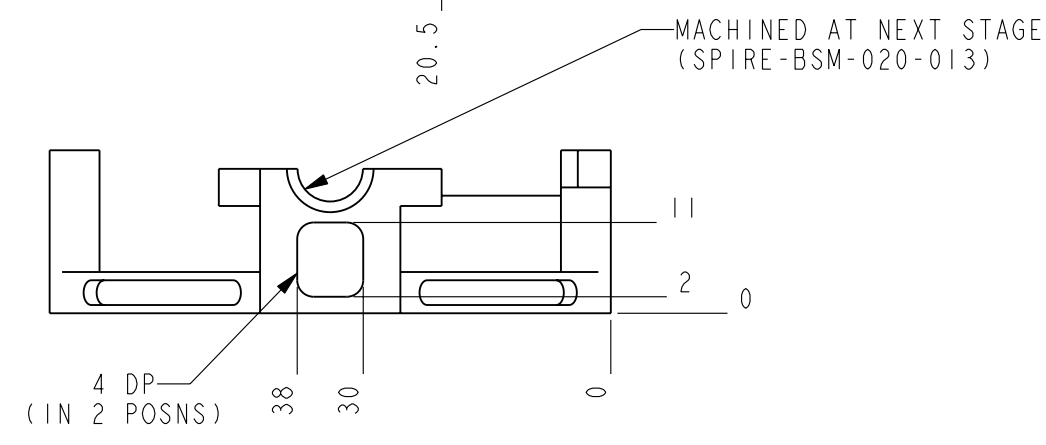
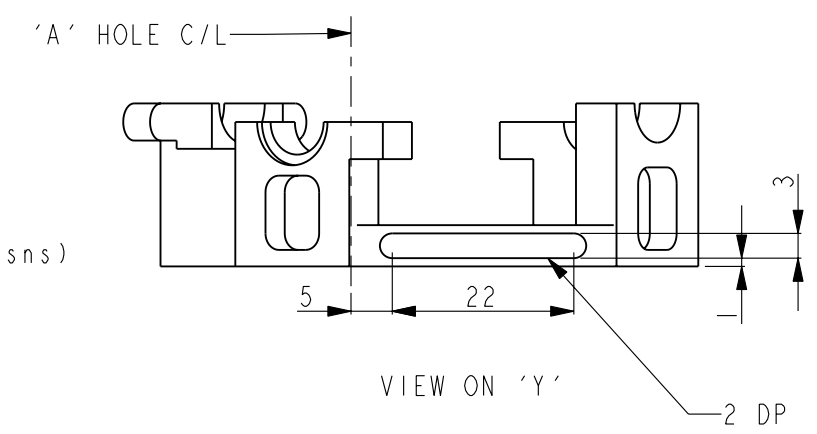
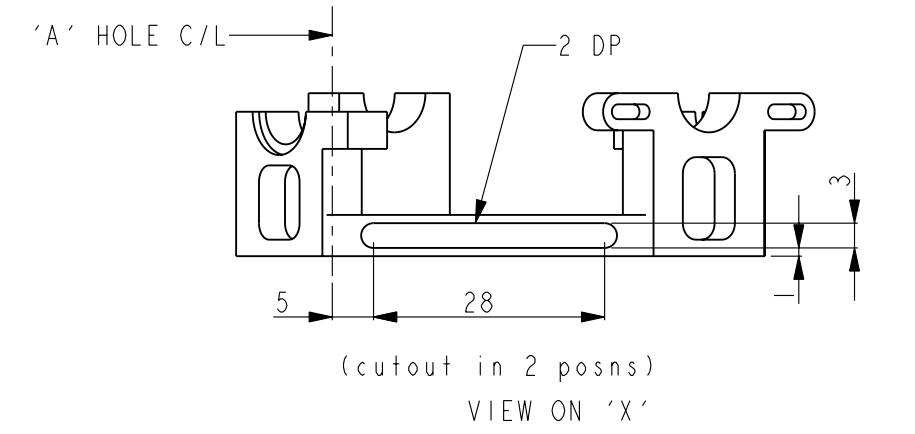
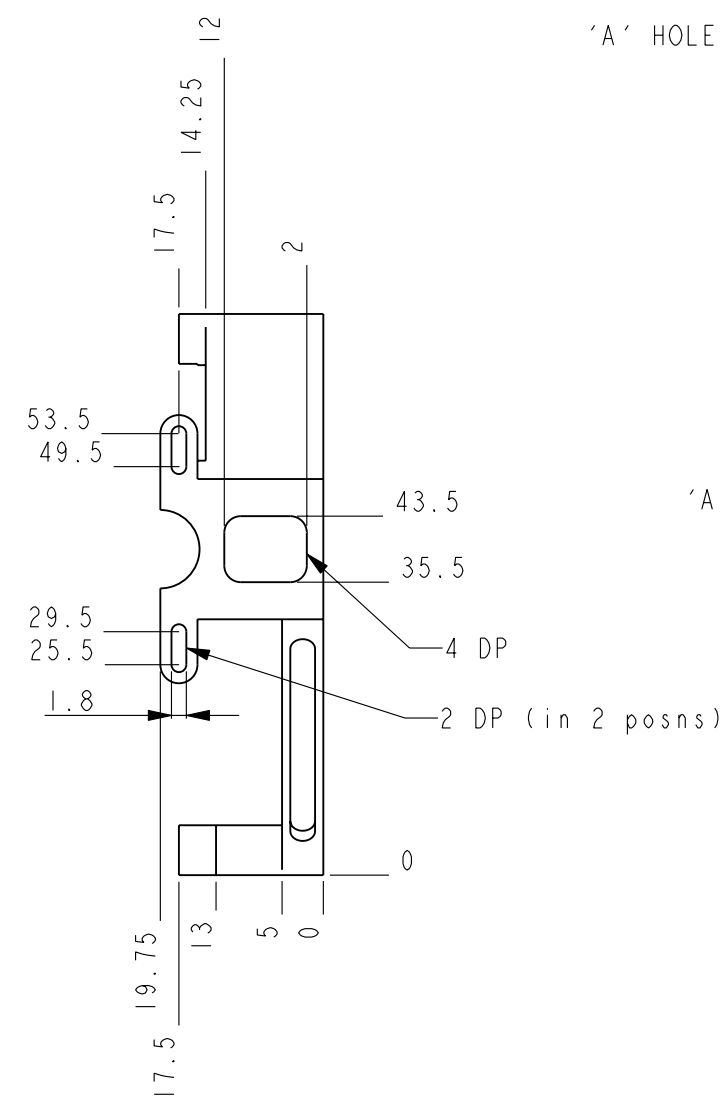
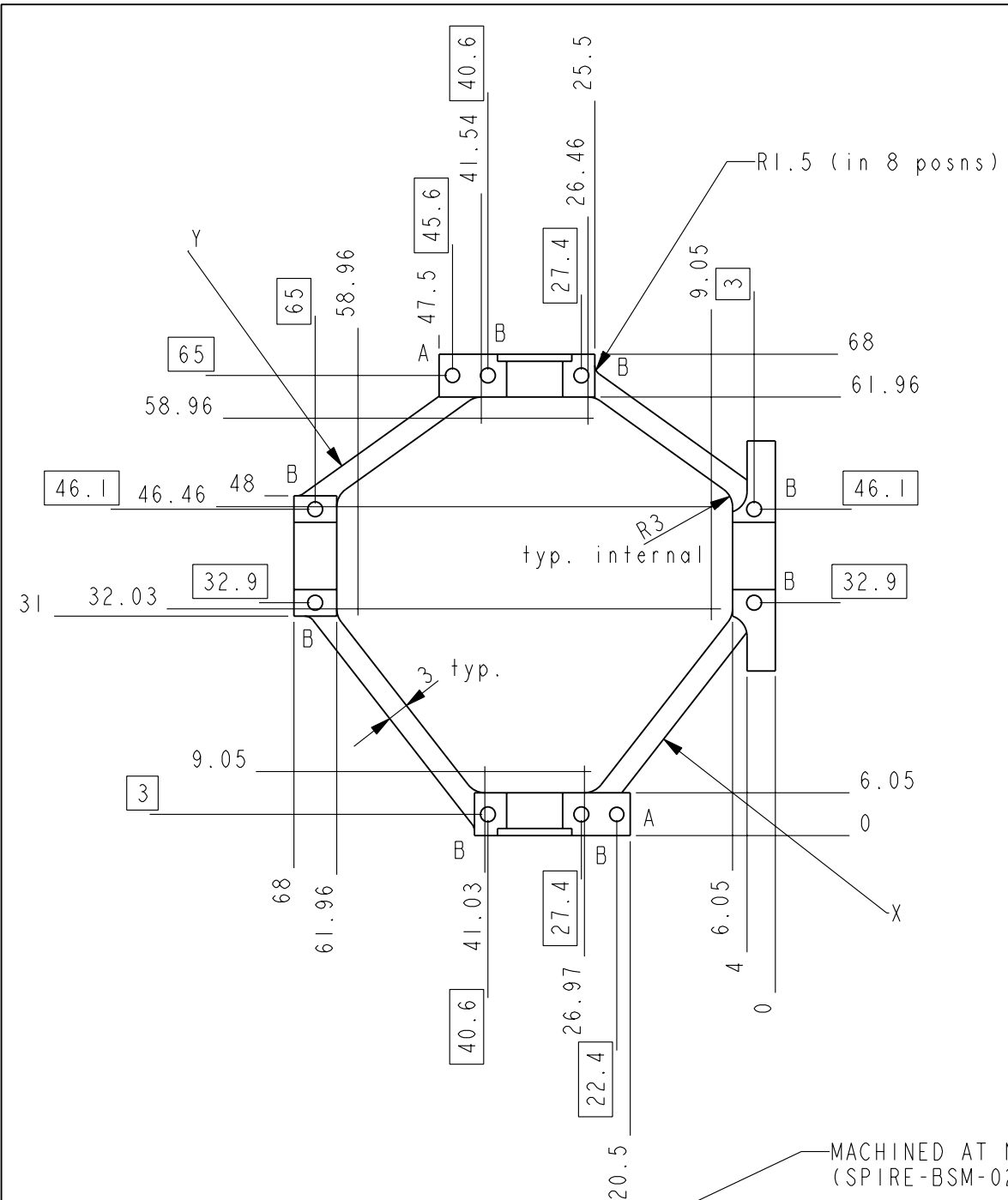
Material: AL ALLOY 6082 CTD: - Drawn: TAP Date: 11.JAN.02  
Finish: 01-24 Mod'd: Date:

Unless otherwise stated Last mod: MAGNET BORE ALTERED & SUPPT RAD. ADDED

Tolerances: -  
Linear : ±0.1  
Angular : ±0.5°

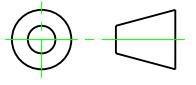
Remove all sharp edges

Title: JIGGLE FRAME (BOT)		
Size A3	Dwg No: SPIRE-BSM-020-003-001	Rev 3
Scale:	MODEL: SPIRE-BSM-020-003-001	Sheet 1 OF 1



REF	NO	SIZE	POS. TOL	DATUM
B	8	DRILL $\varnothing 2.6$	$\pm 0.1$	—
A	2	$\varnothing 2$ NOM (H7/s6)	$\pm 0.015$	—

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



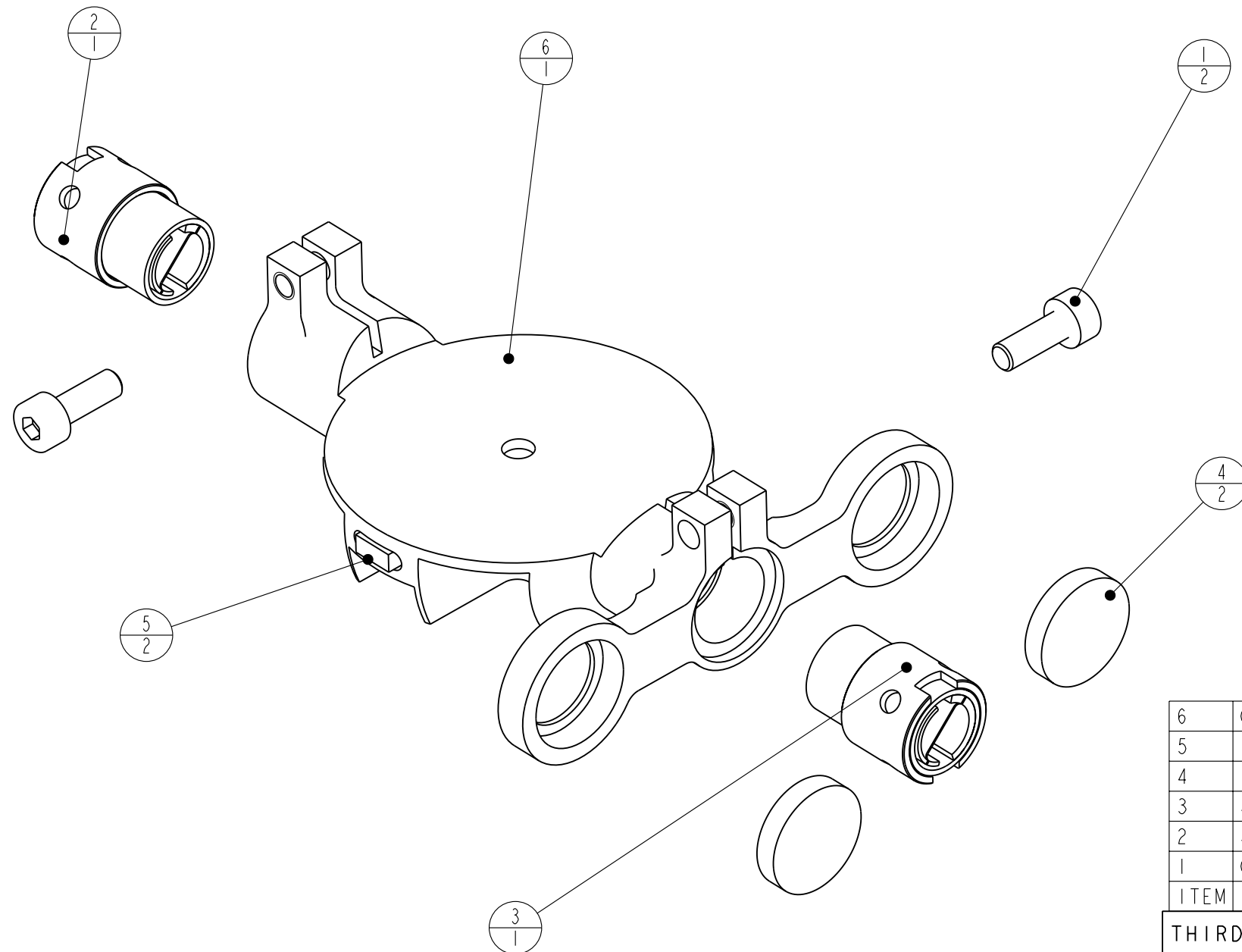
**UK**  
Astronomy Technology Centre

Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material: AL ALLOY 6082 CTD:- Drawn: TAP Date: 13.NOV.01  
Finish: 01-15 Mod'd: Date:

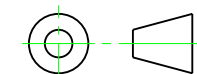
Unless otherwise stated		Last mod:	
Tolerances:-		Title: JIGGLE FRAME (TOP)	
Linear : $\pm 0.1$		Size A3	
Angular : $\pm 0.5^\circ$		Dwg No: SPIRE-BSM-020-003-002	
Remove all sharp edges		Scale: MODEL: SPIRE-BSM-020-003-002	
		Rev 2	
		Sheet 1 OF 1	





ITEM	DESCRIPTION	QTY	FILENAME	REV
6	Chop Stage	1	SPIRE-BSM-020-004-001	3
5	sensor actuator	2	SPIRE-BSM-020-004-004	2
4	PACS slim magnet	2	SPIRE-BSM-020-003-003	1
3	Shielded flexure assy (chop RH)	1	SPIRE-BSM-020-016	1
2	Shielded flexure assy (chop LH)	1	SPIRE-BSM-020-015	1
1	CAP HD SCREW SS M2.5x7mm	2	CAP-HD-SCREW-SS-M2-5X7	1

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



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Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material: CTD:- Drawn: TAP Date: 18.JUL.01  
Finish: 01-25 Mod'd: Date:

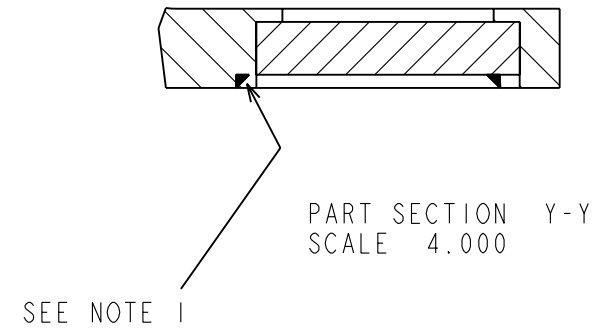
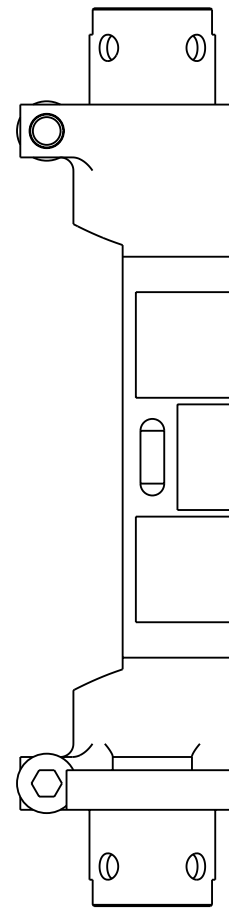
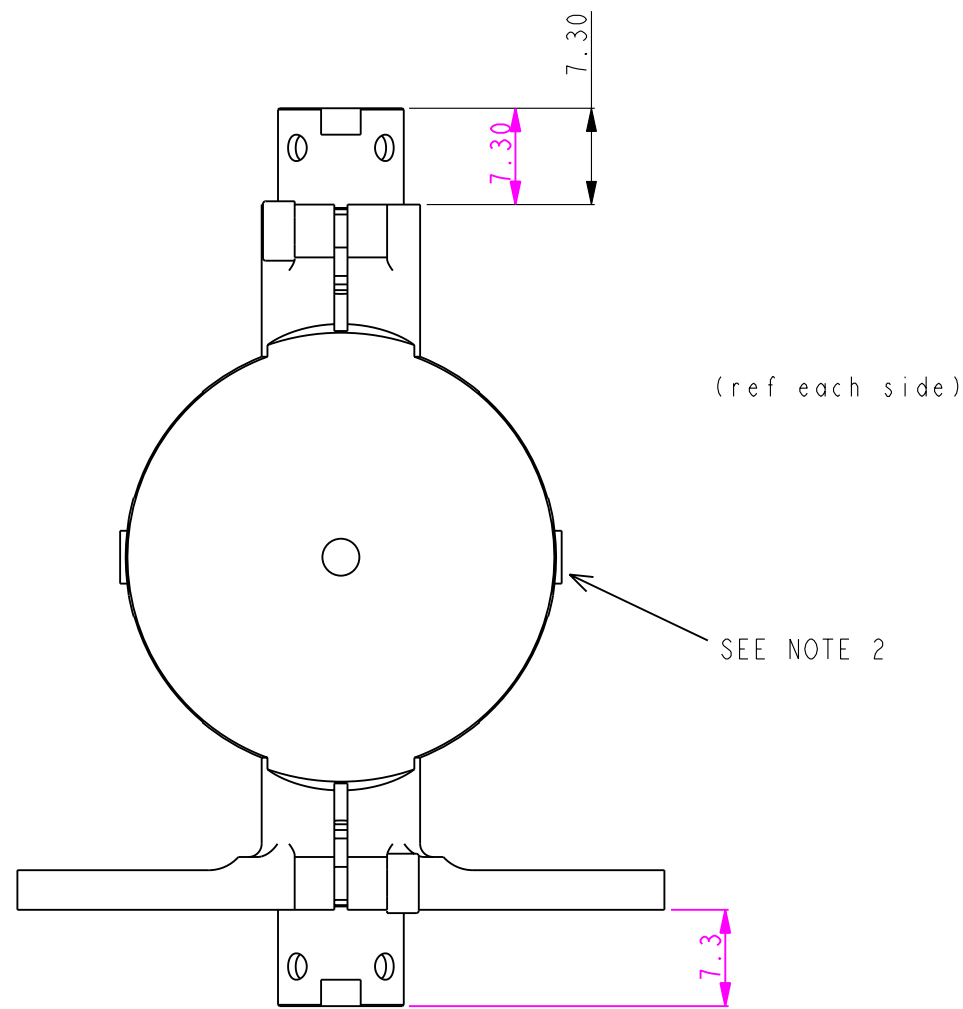
Unless otherwise stated Last mod: FLEX PIVOTS ALTERED

Tolerances:- Title: BSM CHOP AXIS ASSY

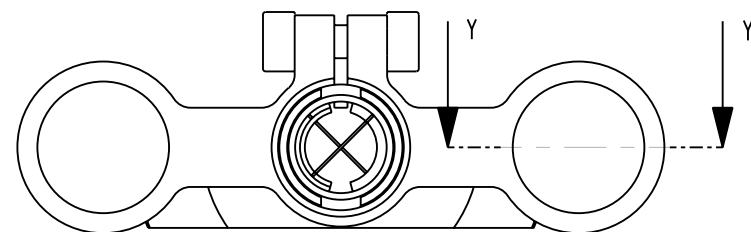
Linear : ±0.1  
Angular : ±0.5°  
Remove all sharp edges

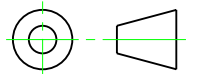

Size A3 Dwg No: SPIRE-BSM-020-004 Rev 3

Scale: MODEL: SPIRE-BSM-020-004 Sheet 1 OF 2

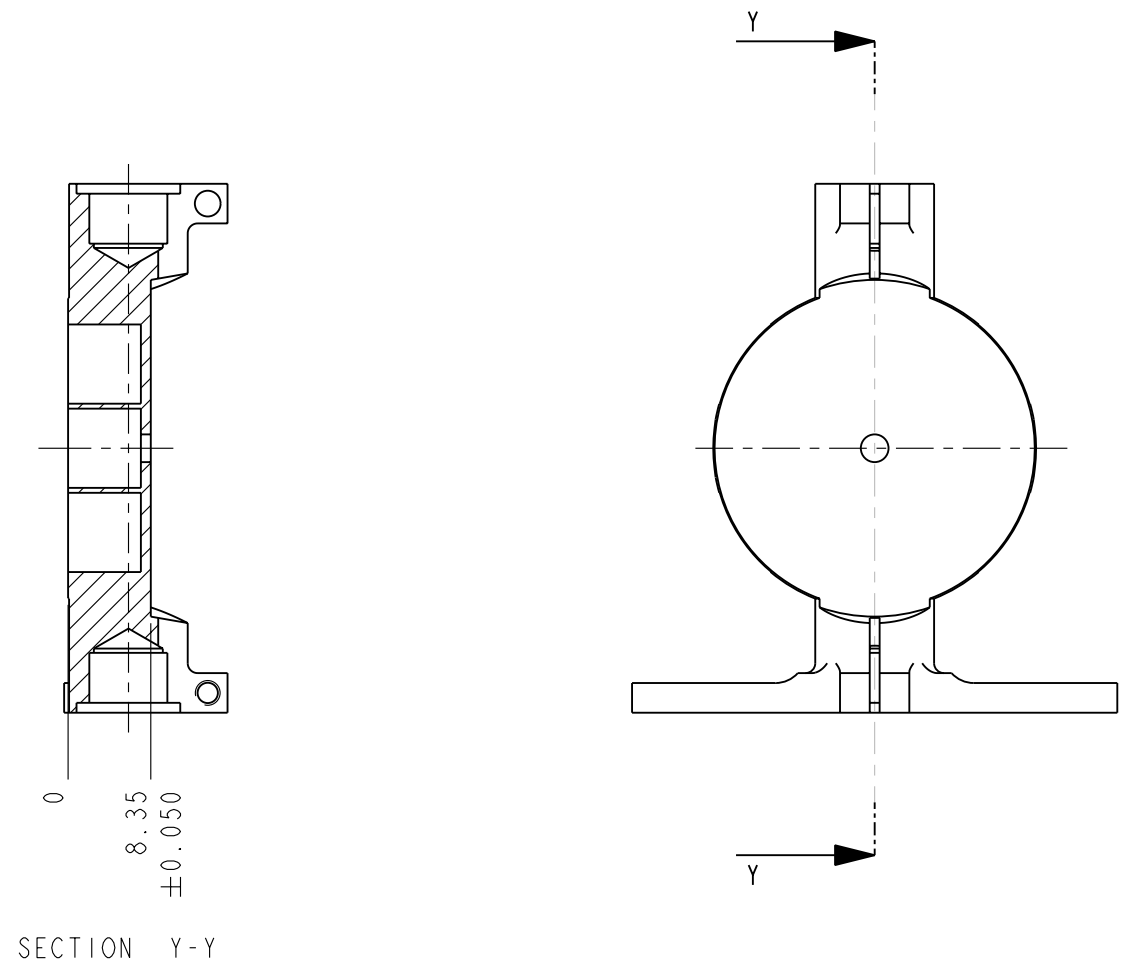


- NOTE: 1. ADD FILLET OF ADHESIVE AS PER PROCESS LIST  
SPIRE-ATC-PRJ-708 ID6 SPEC.XXX
2. ADD FILLET OF ADHESIVE AS PER PROCESS LIST  
SPIRE-ATC-PRJ-708 ID7 SPEC.XXX
3. CHECK REF. DIMENSIONS AS SHOWN.



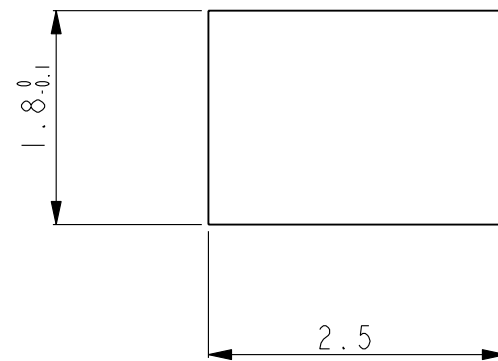
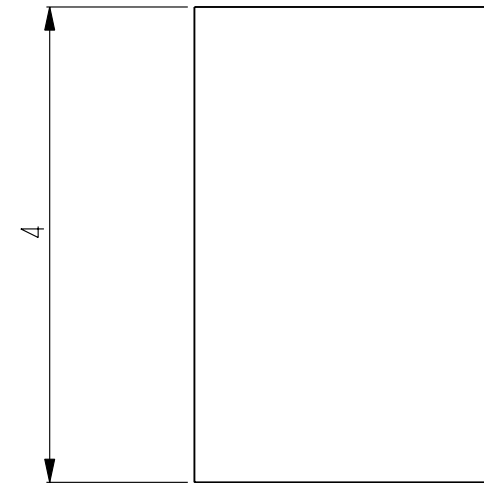
THIRD ANGLE PROJECTION DIMENSIONS IN MM					
Material: -		CTD: -		Drawn: TAP Date: 18.JUL.01	
Finish: -		01-16		Mod'd: - Date: -	
Unless otherwise stated		Last mod: -			
Tolerances: -		Title: BSM CHOP AXIS ASSY			
Linear : ±0.1		Size A3		Dwg No: SPIRE-BSM-020-004	
Angular : ±0.5°		Scale: -		Rev 2	
Remove all sharp edges		MODEL: SPIRE-BSM-020-004		Sheet 2 OF 2	





NOTES: 1. DIAMOND TURN SURFACE 'A' TO THE FOLLOWING TOLERANCES:-  
 FLATNESS : < 2 MICRON RMS OVER THE CLEAR APERTURE  
 ROUGHNESS : < 5nm OVER THE CLEAR APERTURE

THIRD ANGLE PROJECTION DIMENSIONS IN MM						Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
Material: AL ALLOY 6061 T651		CTD:-		Drawn: TAP Date: 19.OCT.01		Mod'd: Date:	
Finish:		Unless otherwise stated		Last mod:		Title: MIRROR (DIAMOND MACHINING)	
Tolerances:-		Linear : ±0.1		Angular : ±0.5°		Remove all sharp edges	
Size A3		Dwg No: SPIRE-BSM-020-004-001		Rev 1		Scale: MODEL: SPIRE-BSM-020-004-001 Sheet 2 OF 2	

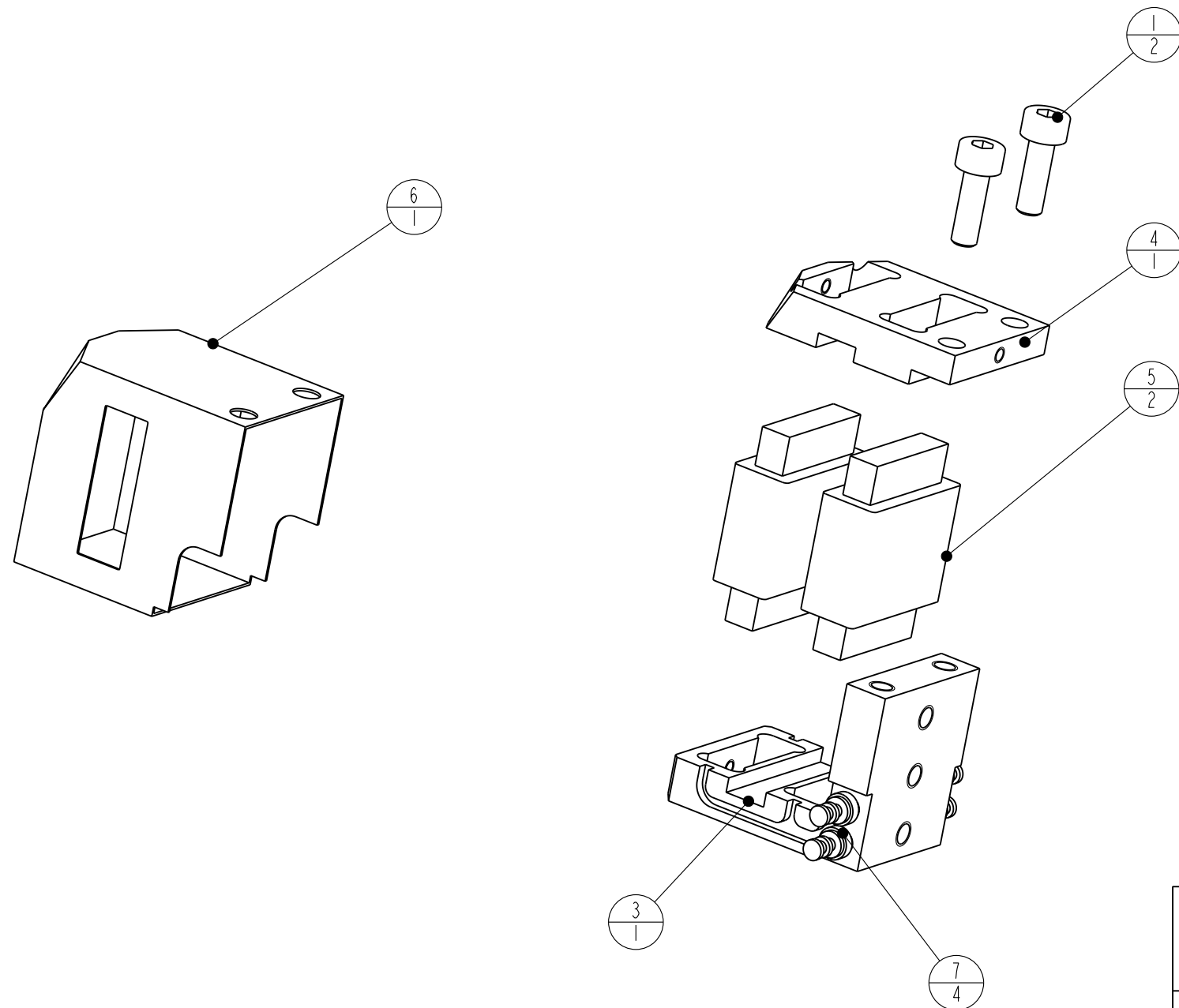


NOTE: 1. MATERIAL : R Fe 120 TO DIN 17405 OR EQUIV.  
CONDITION : ANNEALED

2. FINISH : GOLD PLATED TO PROCESS SPEC SPIRE-ATC -PRJ-708 ID 10

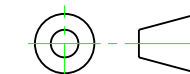
THIRD ANGLE PROJECTION DIMENSIONS IN MM				 Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
Material: SEE NOTE 1.		CTD: -		Drawn: TAP Date: 2.AUG.01	
Finish: SEE NOTE 2.		01-13		Mod'd: Date:	
Unless otherwise stated		Last mod:			
Tolerances:-		Title: SENSOR ACTUATOR			
Linear : $\pm 0.1$		Size		Dwg No: SPIRE-BSM-020-004-004	
Angular : $\pm 0.5^\circ$		A3		Rev	
Remove all sharp edges		Scale:		MODEL: SPIRE-BSM-020-004-004 Sheet 1 OF 1	

NOTE: 1. ASSEMBLE USING JIG NO SPIRE-BSM-022-002



ITEM	DESCRIPTION	QTY	FILENAME	REV
7	TERMINAL PIN	4	TERMINAL_PIN_571-4015	1
6	HEAT SHIELD	1	SPIRE-BSM-020-005-005	2
5	COIL	2	SPIRE-BSM-020-005-003	1
4	COIL RETAINER	1	SPIRE-BSM-020-005-002	2
3	COIL BRACKET	1	SPIRE-BSM-020-005-001	2
2	COIL ASSEMBLY	1	SPIRE-BSM-020-005	2
1	CAP HD SCREW SS M2.5X7.75	2	CAP-HD-SCREW-SS-M2-5X7_75	1

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



**UK** Astronomy Technology Centre  
Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material: CTD:- Drawn: TAP Date: 18. JUL. 01  
Finish: 01-14 Mod'd: Date:

Unless otherwise stated Last mod:

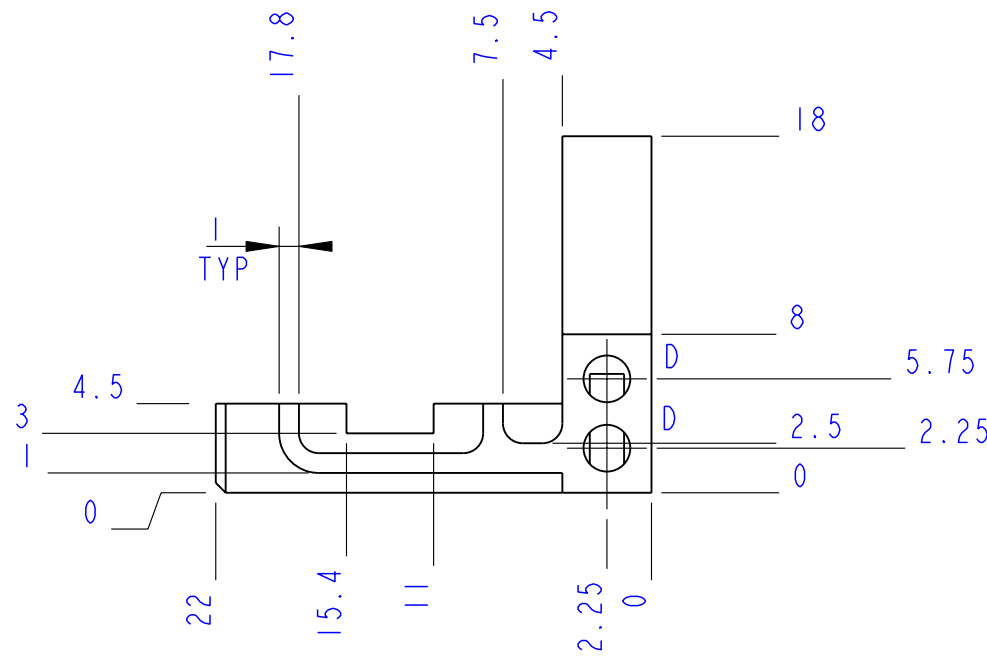
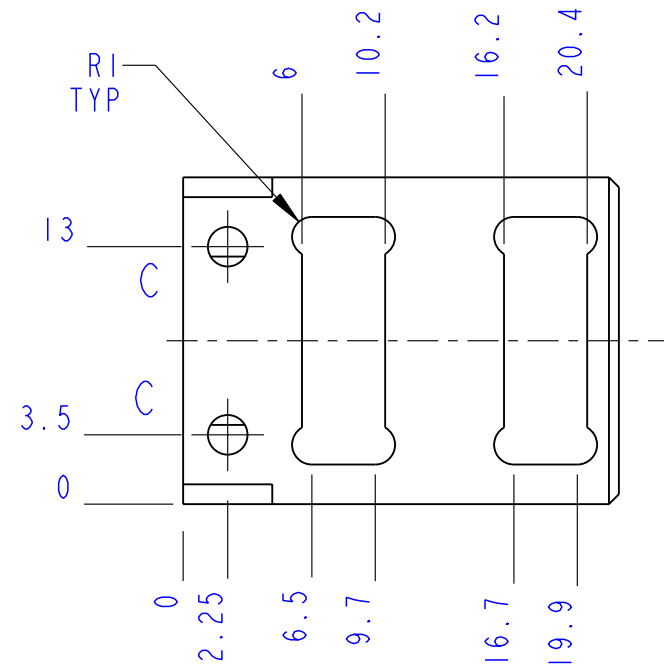
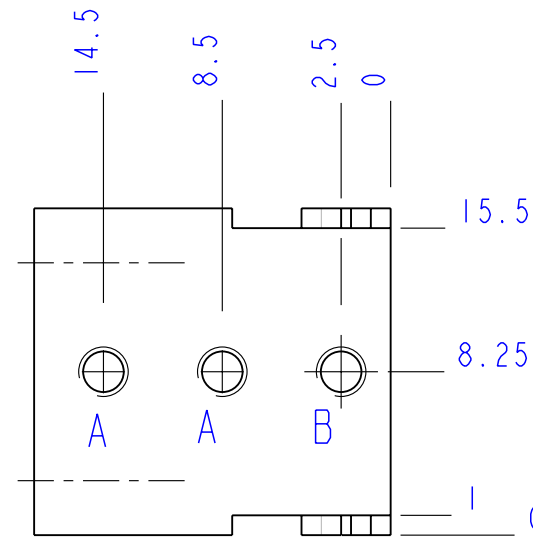
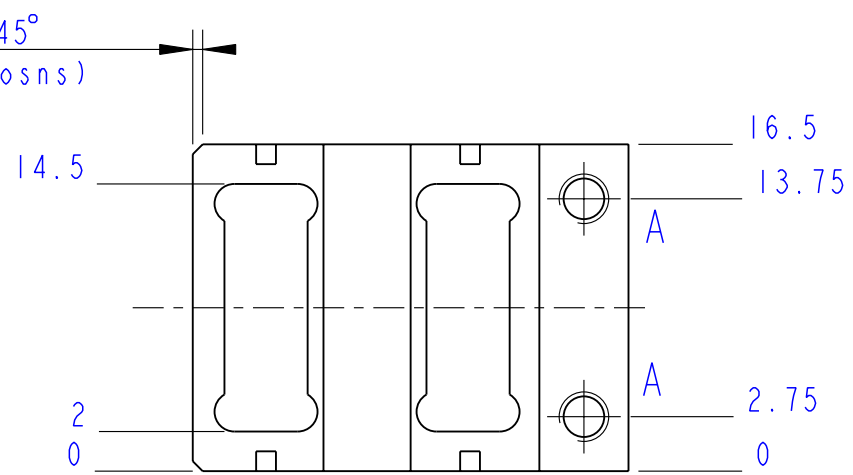
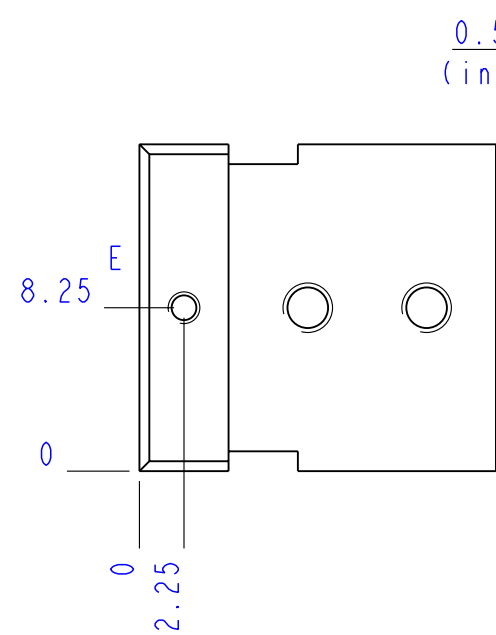
Tolerances:- Title: MOTOR ASSY

Linear : ±0.1 Size A3 Dwg No: SPIRE-BSM-020-005 Rev 2

Angular : ±0.5° Scale: MODEL: SPIRE-BSM-020-005 Sheet 1 OF 1

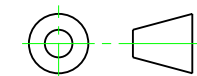
Remove all sharp edges

SCALE 2.000



E	1	TAP M1.6 INTO CUTOUT	—	—
D	4	DRILL Ø2.3	—	—
C	2	DRILL Ø2	—	—
B	1	TAP TO SUIT AN M2.5 X 1.5D HELICOIL LOCKING INSERT (TAP DRILL INTO RECESS)	±0.1	—
A	4	TAP TO SUIT AN M2.5 X 1.5D HELICOIL LOCKING INSERT	±0.1	—
REF	NO	SIZE	POS.TOL	DATUM

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



**UK**  
Astronomy Technology Centre  
Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material: AL ALLOY 6082  
Finish:

CTD:- 01-09  
Drawn: TAP Date: 24. JUL. 01  
Mod'd: Date:

Unless otherwise stated

Last mod: GROOVES ADDED TO EACH EDGE

Tolerances:-

Title: COIL BRACKET

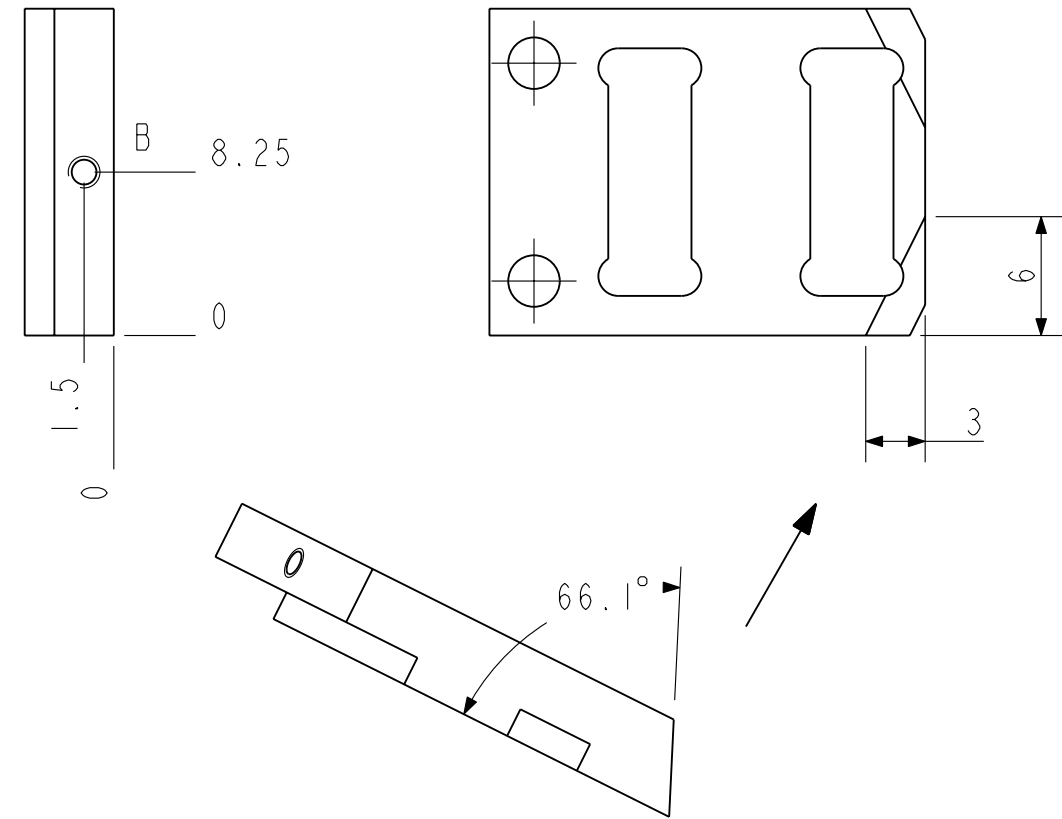
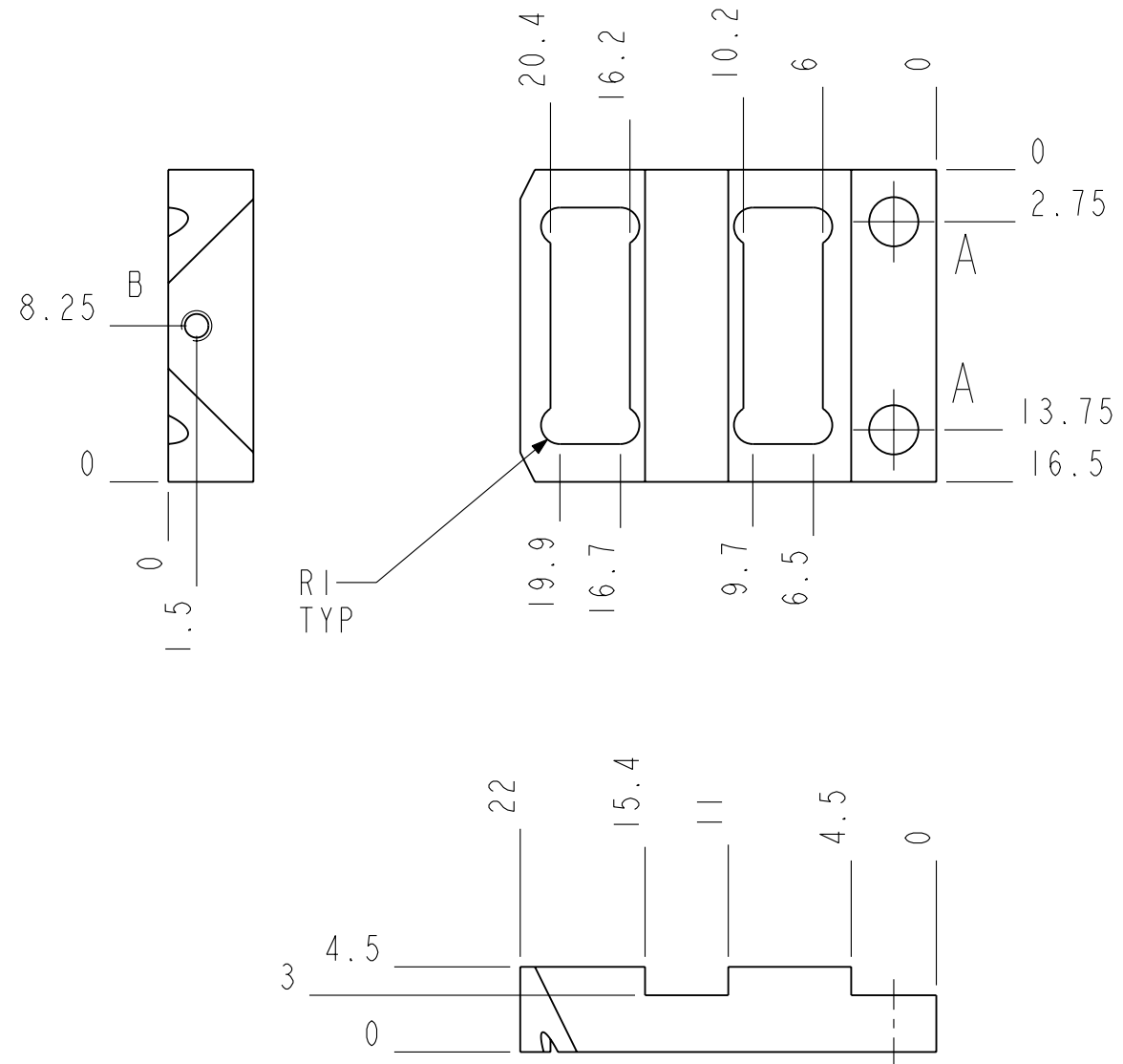
Linear : ±0.1  
Angular : ±0.5°

Size A3  
Dwg No: SPIRE-BSM-020-005-001

Rev 2

Remove all sharp edges

Scale: MODEL: SPIRE-BSM-020-005-001 Sheet 1 OF 1

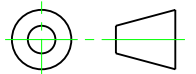



TRUE VIEW ON CHAMFERED EDGE  
(IN 2 POSNS)

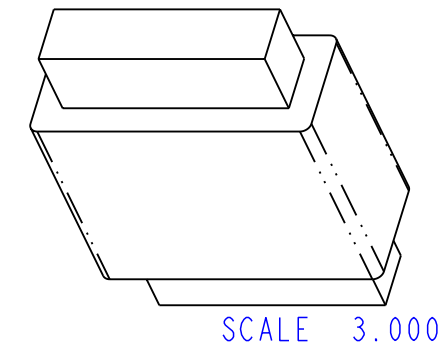
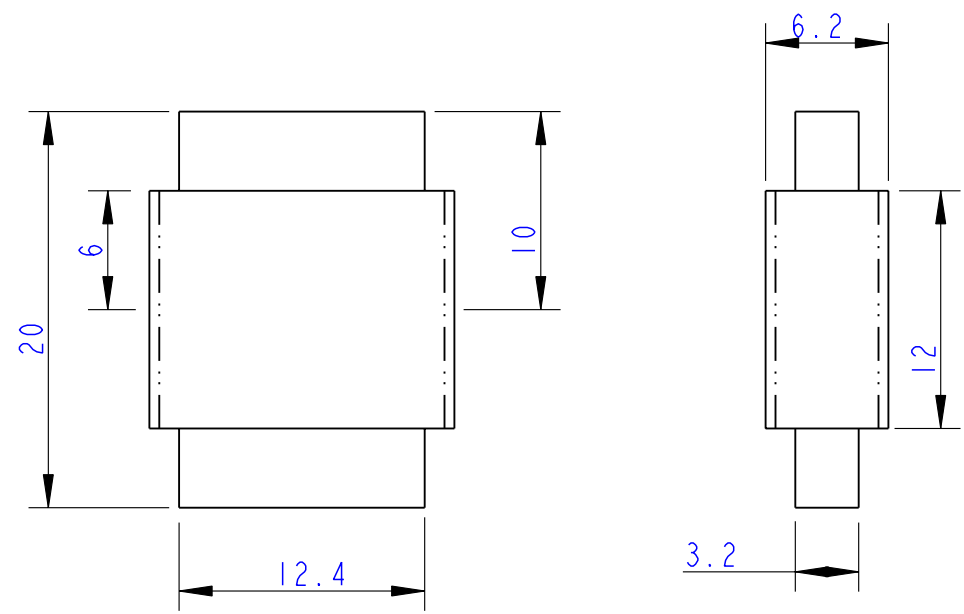
SCALE 3.000

REF	NO	SIZE	POS. TOL	DATUM
B	2	TAP M1.6 INTO CUTOUT	—	—
A	2	∅2.6	±0.1	—

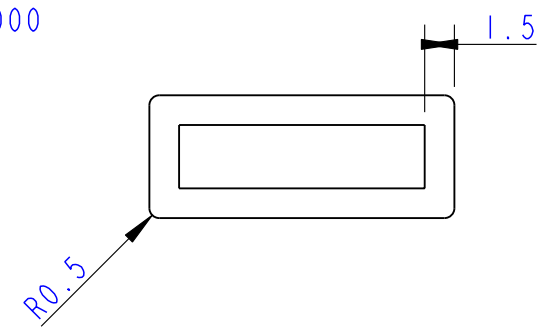
  

THIRD ANGLE PROJECTION DIMENSIONS IN MM					
Material: G10-40CR		CTD: - 01-14		Drawn: TAP Date: 24. JUL. 01	
Finish:		Mod'd:		Date:	
Unless otherwise stated		Last mod:			
Tolerances:-		Title: COIL RETAINER			
Linear : ±0.1		Size A3		Dwg No: SPIRE-BSM-020-005-002	
Angular : ±0.5°		Scale:		Rev 2	
Remove all sharp edges		MODEL: SPIRE-BSM-020-005-002		Sheet 1 OF 1	

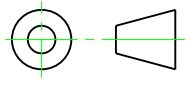



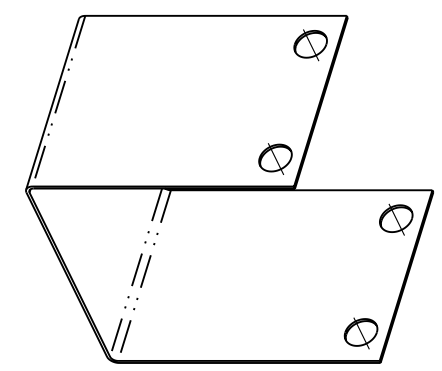
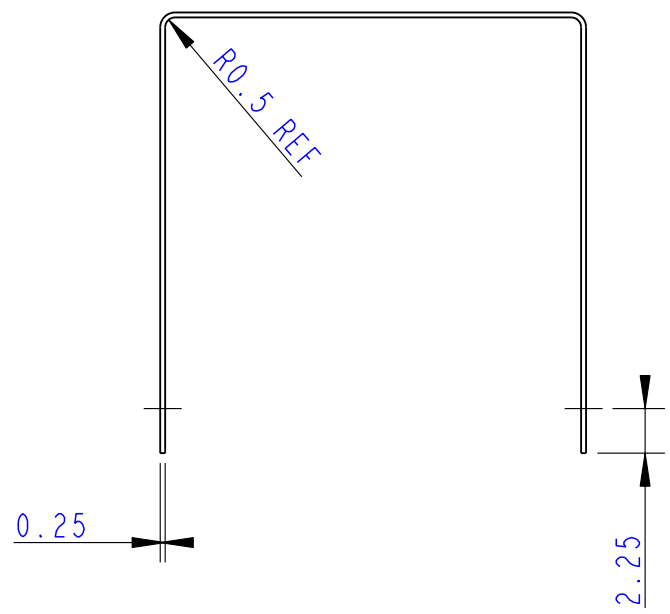
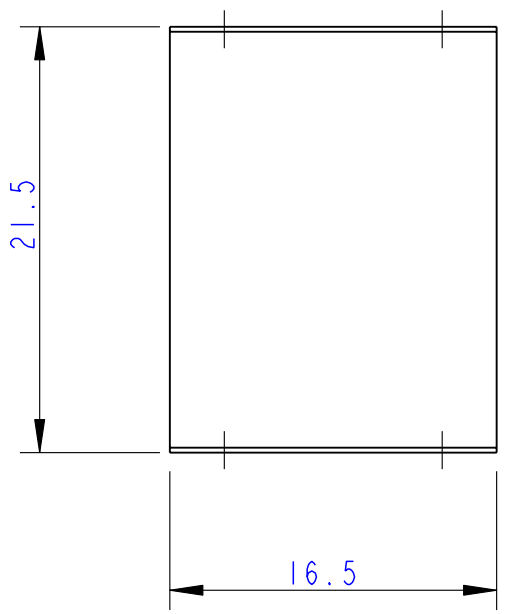
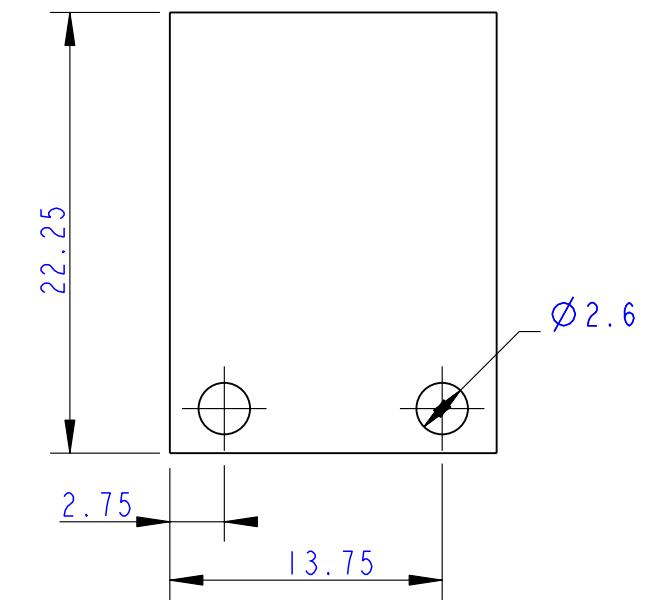


SCALE 3.000



NOTE:  
 THIS DRAWING SHOWS THE SPACE ENVELOPE FOR THE BSM COILS  
 THIS UNIT IS TO BE MANUFACTURED BY ZEISS AND SUPPLIED VIA MPIA  
 TO THE SPECIFICATIONS AND MANUFACTURING DRAWINGS OF THE PACS CHOPPER  
 MOTOR COILS. THESE REQUIREMENTS ARE TBD.

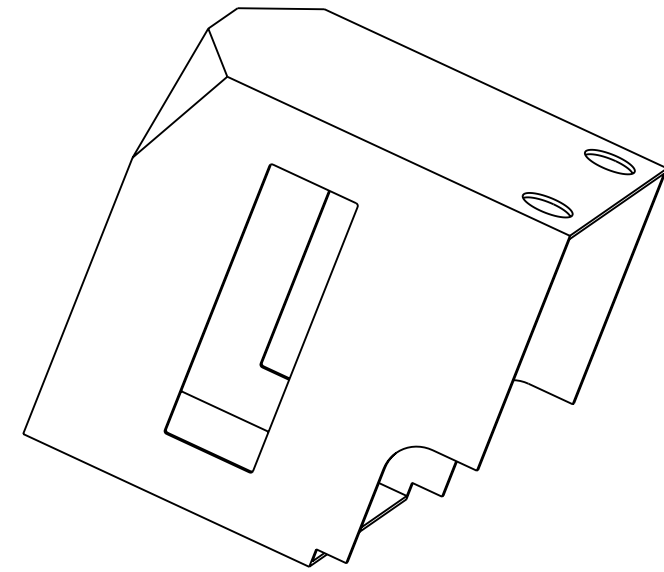
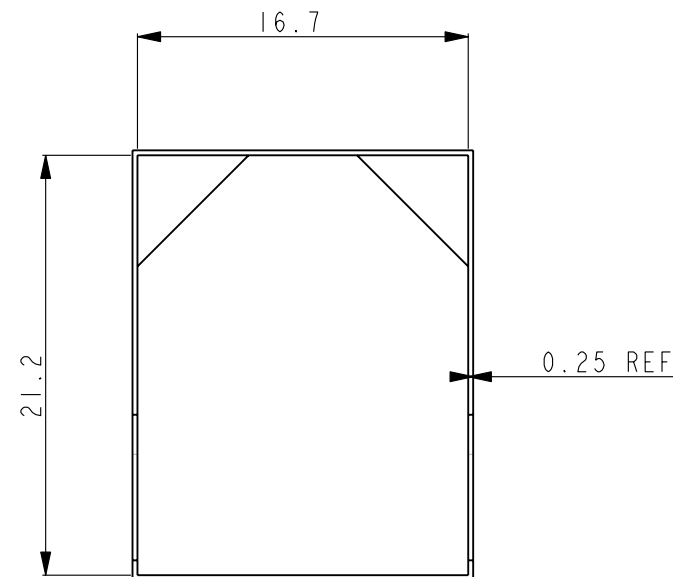
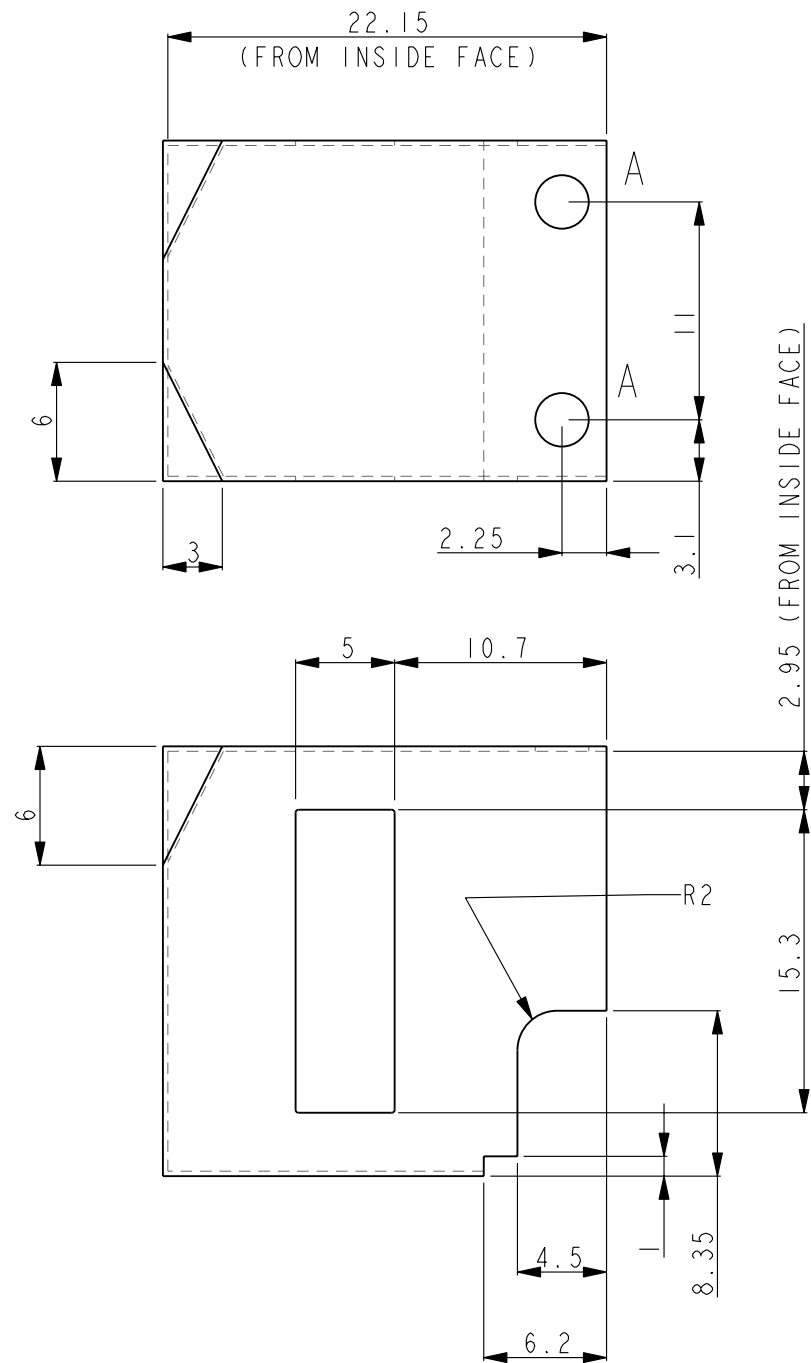
THIRD ANGLE PROJECTION DIMENSIONS IN MM						Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
Material:		CTD: -		Drawn: IP		Date: 27. JUN. 01	
Finish:				Mod'd:		Date:	
Unless otherwise stated		Last mod:					
Tolerances: -		Title: COIL (SPACE ENVELOPE)					
Linear : ±0.1		Size		Dwg No: SPIRE-BSM-020-005-003		Rev	
Angular : ±0.5°		A3		Scale:		Sheet 1 OF 1	
Remove all sharp edges				MODEL: SPIRE-BSM-020-005-003			



SCALE 2.000

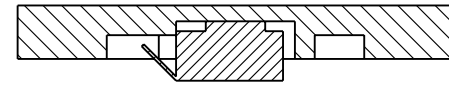
SCALE 3.000

THIRD ANGLE PROJECTION DIMENSIONS IN MM						Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
Material:		CTD:-		Drawn: IP		Date: 26.JUN.01	
Finish:				Mod'd:		Date:	
Unless otherwise stated		Last mod:					
Tolerances:-		Title: SHIELD					
Linear : ±0.1		Size A3		Dwg No: SPIRE-BSM-020-005-004		Rev	
Angular : ±0.5°		Scale:		MODEL: SPIRE-BSM-020-005-004		Sheet 1 OF 1	
Remove all sharp edges							



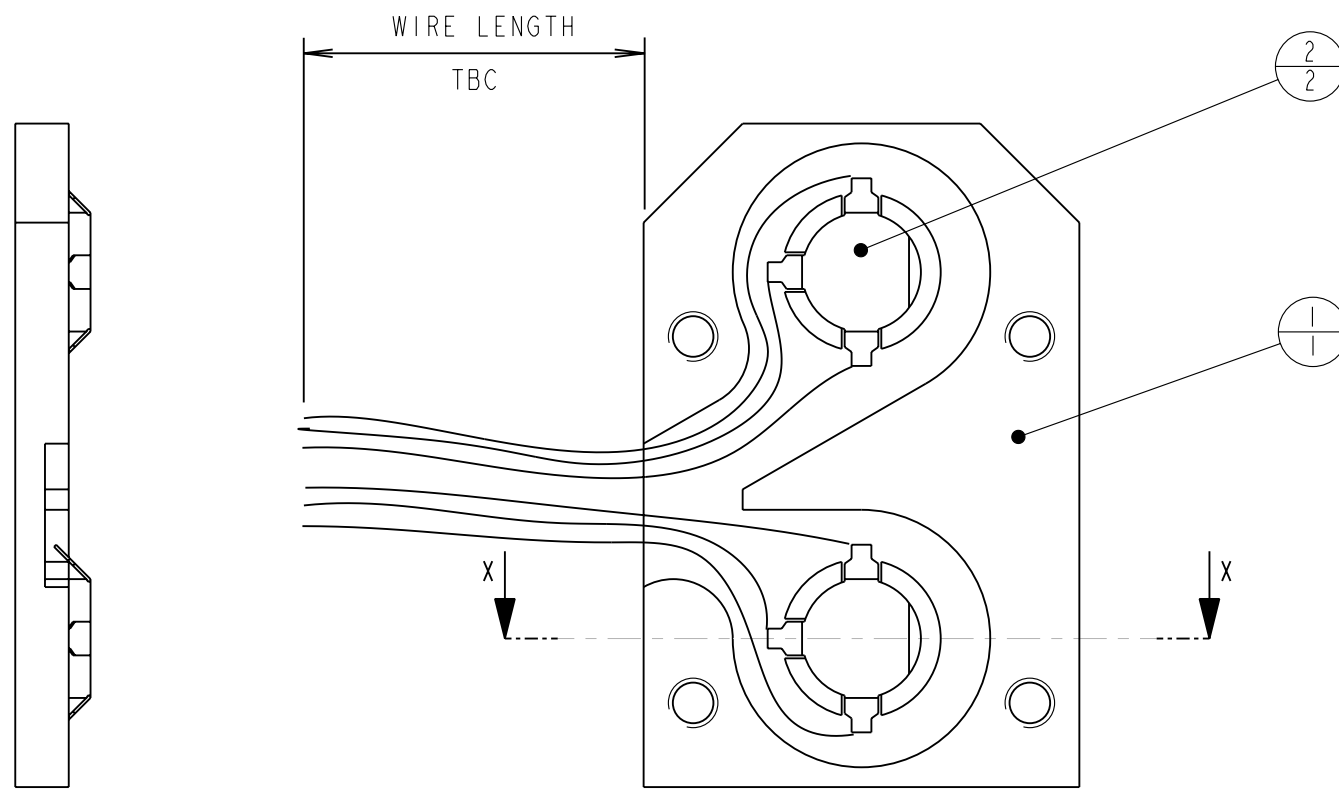
- NOTES: 1. ELECTROFORMED COPPER AS PER PROCESS LIST SPIRE-ATC-PRJ-708 ID9  
 2. ELECTRO GOLD PLATING ON OUTSIDE AS PER PROCESS LIST SPIRE-ATC-PRJ-708 ID10

A	2	Ø 2.6	±0.1	—
REF	NO	SIZE	POS. TOL	DATUM
THIRD ANGLE PROJECTION			 Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
DIMENSIONS IN MM				
Material: SEE NOTE 1		CTD: -	Drawn: TAP Date: 24.JUL.01	
Finish: SEE NOTE 2		01-14	Mod'd: Date:	
Unless otherwise stated		Last mod:		
Tolerances: -		Title: HEAT SHIELD		
Linear : ±0.1		Size A3	Dwg No: SPIRE-BSM-020-005-005	
Angular : ±0.5°			Rev 2	
Remove all sharp edges		Scale:	MODEL: SPIRE-BSM-020-005-005	Sheet 1 OF 1



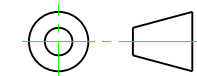
SECTION X-X

- NOTE: 1. BOND SENSORS INTO MOUNTS IN ACCORDANCE WITH  
PROCESS LIST SPIRE-ATC-PRJ-708 ID1  
2. SOLDER CONNECTIONS IN ACCORDANCE WITH  
PROCESS LIST SPIRE-ATC-PRJ-708 ID13  
3. POT WIRES IN ACCORDANCE WITH  
PROCESS LIST SPIRE-ATC-PRJ-708 IDXX



2	SENSOR	2	SPIRE-BSM-020-006-002	1
1	SENSOR HSG (OLD JIGGLE)	1	SPIRE-BSM-020-006-001	1
ITEM	DESCRIPTION	QTY	FILENAME	REV

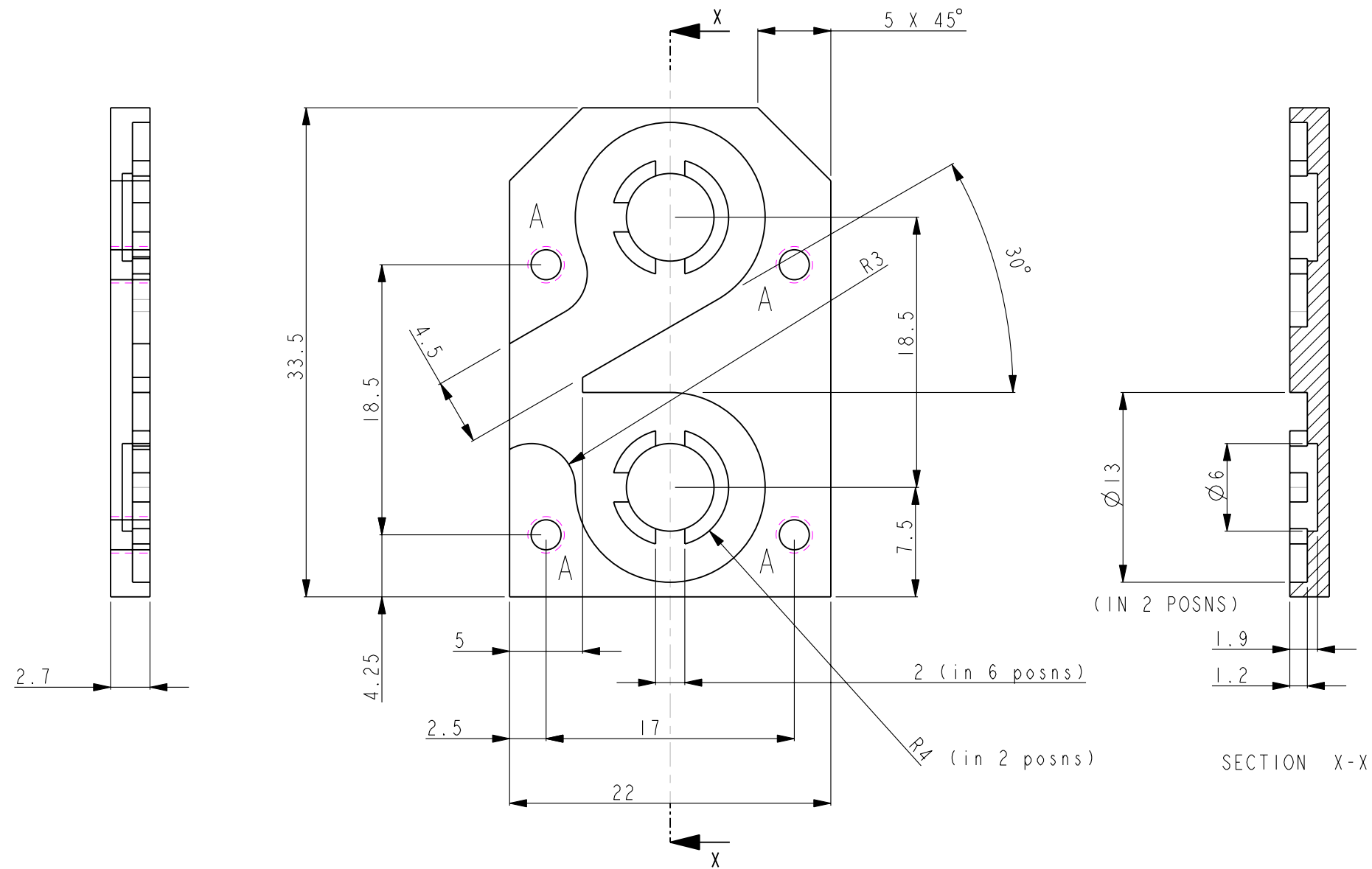
THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



**UK**  
Astronomy Technology Centre  
Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material:	CTD: -	Drawn: TAP Date: 18.JUL.01
Finish:		Mod'd: Date:

Unless otherwise stated	Last mod:		
Tolerances: -	Title: SENSOR ASSY (JIGGLE)		
Linear : ±0.1	Size A3	Dwg No: SPIRE-BSM-020-006	Rev 1
Angular : ±0.5°		Scale:	MODEL: SPIRE-BSM-020-006
Remove all sharp edges		Sheet 1	OF 1



A	4	TAP TO SUIT AN M2.5 X ID HELICOIL	±0.1	—
		LOCKING INSERT		
REF	NO	SIZE	POS. TOL	DATUM

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM

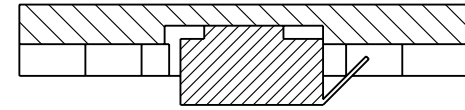
**UK**  
Astronomy Technology Centre

Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material: G10-40CR	CTD: -	Drawn: TAP Date: 24. JUN. 01
Finish:		Mod'd: Date:

Unless otherwise stated	Last mod:		
Tolerances: -	Title: SENSOR HOUSING (JIGGLE)		
Linear : ±0.1	Size A3	Dwg No: SPIRE-BSM-020-006-001	Rev
Angular : ±0.5°		Scale:	MODEL: SPIRE-BSM-020-006-001 Sheet 1 OF 1
Remove all sharp edges			

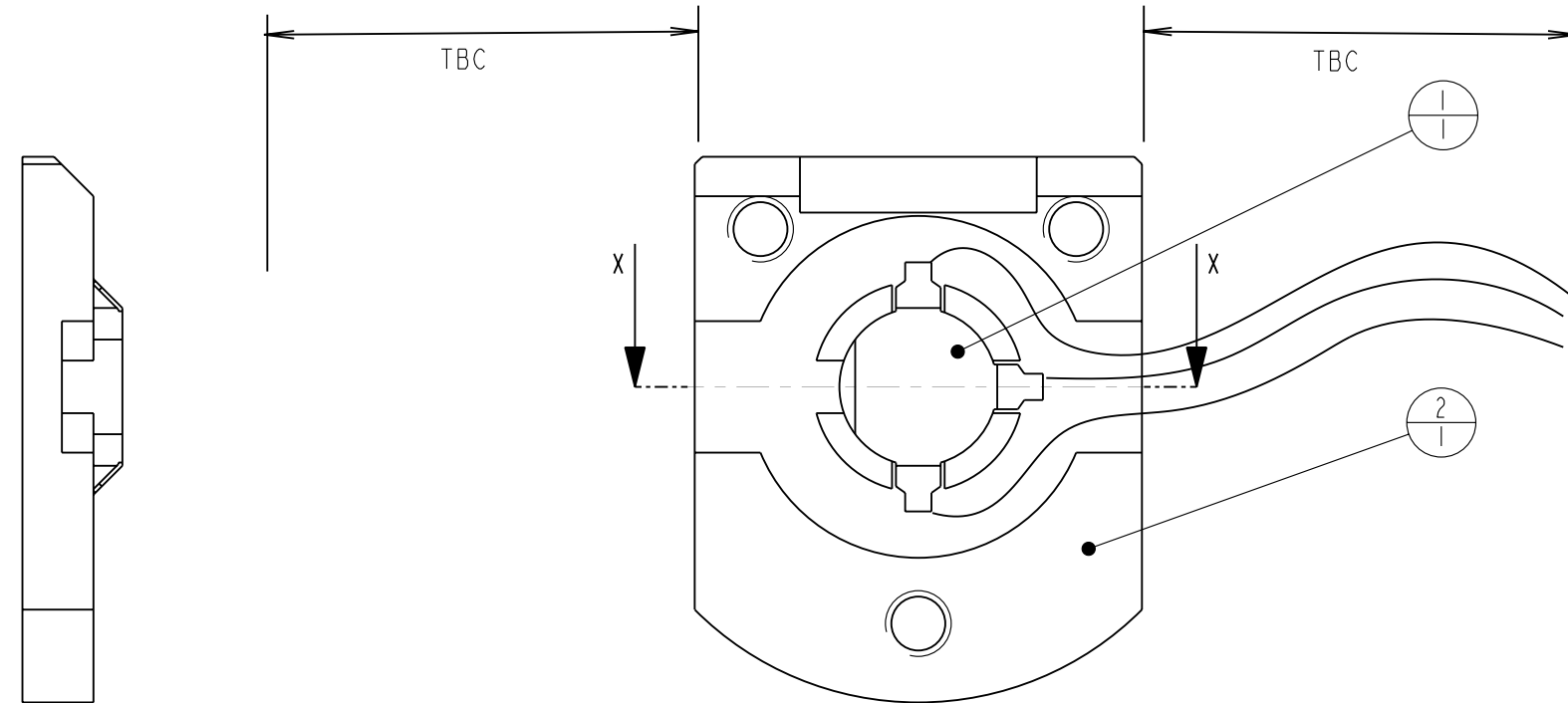
- NOTE: 1. BOND SENSOR INTO MOUNT IN ACCORDANCE WITH  
PROCESS LIST SPIRE-ATC-PRJ-708 ID1  
2. SOLDER CONNECTIONS IN ACCORDANCE WITH  
PROCESS LIST SPIRE-ATC-PRJ-708 ID13  
3. POT WIRES IN ACCORDANCE WITH  
PROCESS LIST SPIRE-ATC-PRJ-708 IDXX



SECTION X-X

WIRE LENGTH = 00 (TOP CHOP SENSOR ASSY)  
WIRE LENGTH = 00 (BOT JIGGLE SENSOR ASSY)

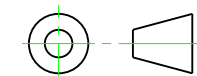
WIRE LENGTH = 00 (BOT CHOP SENSOR ASSY)  
WIRE LENGTH = 00 (TOP JIGGLE SENSOR ASSY)



BOT CHOP / TOP JIGGLE SENSOR ASSY SHOWN  
(TOP CHOP / BOT JIGGLE SENSOR ASSY HAVE WIRES  
AND SENSOR REVERSED)

ITEM	DESCRIPTION	QTY	FILENAME	REV
2	SENSOR HOUSING	1	SPIRE-BSM-020-007-001	2
1	SENSOR	1	SPIRE-BSM-020-006-002	1

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



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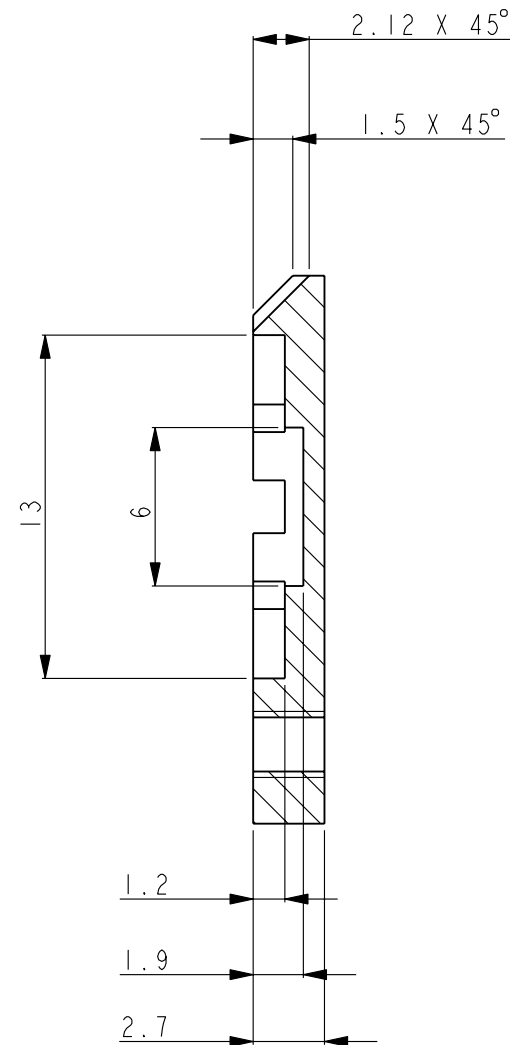
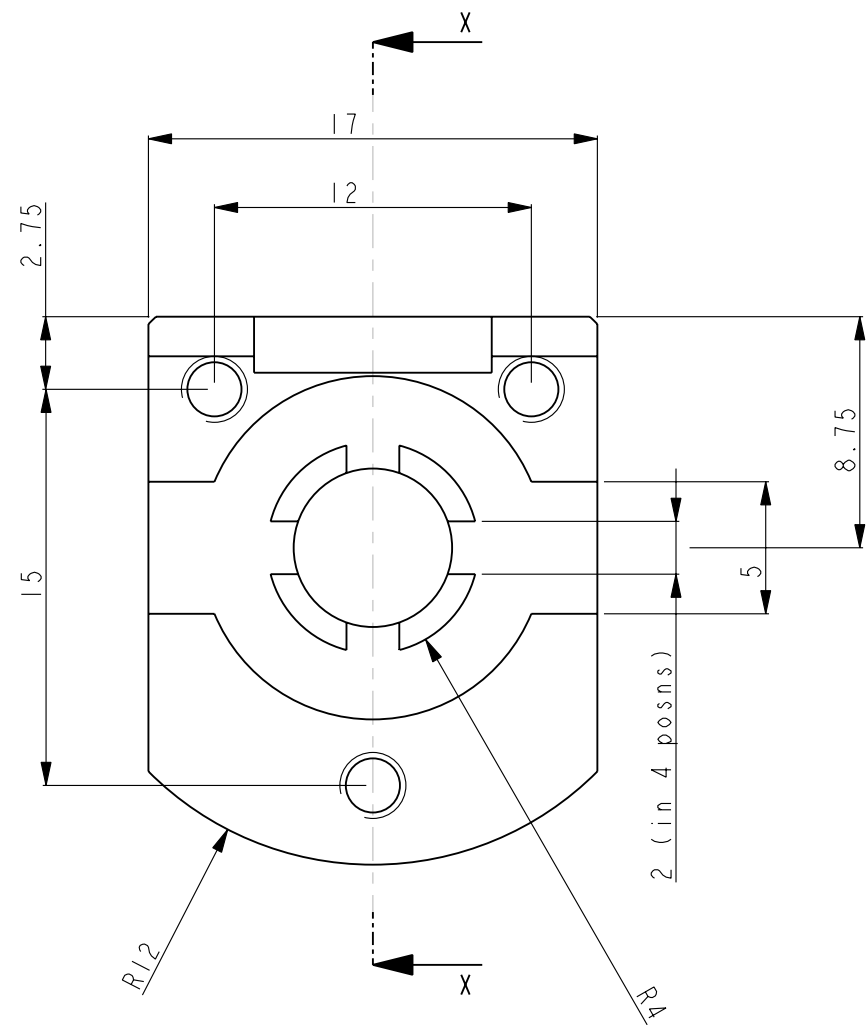
Material: CTD: -  
Finish: 01-15  
Drawn: TAP Date: 18. JUL. 01  
Mod'd: Date:

Unless otherwise stated Last mod:

Tolerances: -  
Linear :  $\pm 0.1$   
Angular :  $\pm 0.5^\circ$   
Remove all sharp edges

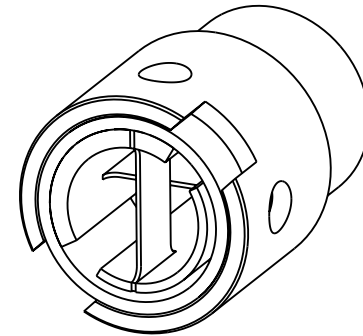
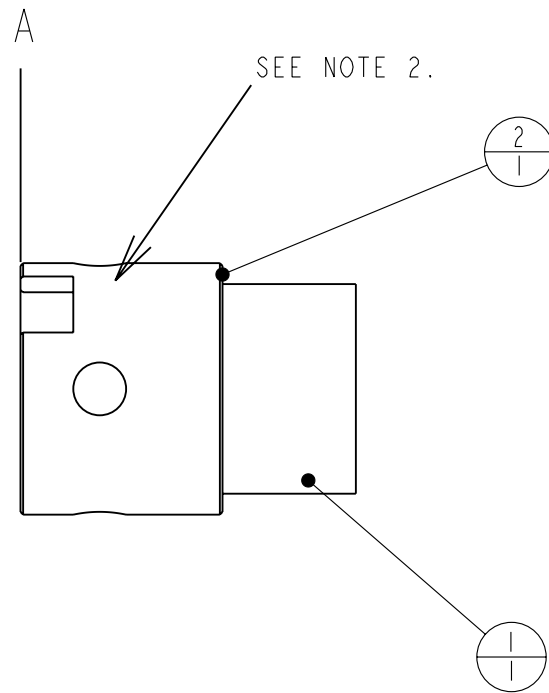
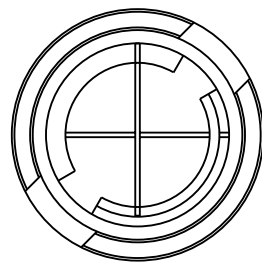
Title: SENSOR ASSY

Size: A3  
Dwg No: SPIRE-BSM-020-007  
Scale: MODEL: SPIRE-BSM-020-007  
Rev: 2  
Sheet 1 OF 1



SECTION X-X

A	3	TAP TO SUIT AN M2.5 X ID HELICOIL	±0.1	—
		LOCKING INSERT		
REF	NO	SIZE	POS. TOL	DATUM
THIRD ANGLE PROJECTION			 Royal Observatory Blackford Hill Edinburgh EH9 3HJ	
DIMENSIONS IN MM				
Material: G10-40CR		CTD: -	Drawn: TAP Date: 25.JUL.01	
Finish:		01-15	Mod'd: Date:	
Unless otherwise stated		Last mod:		
Tolerances: -		Title: SENSOR HOUSING		
Linear : ±0.1		Size A3	Dwg No: SPIRE-BSM-020-007-001	
Angular : ±0.5°			Rev 2	
Remove all sharp edges		Scale:	MODEL: SPIRE-BSM-020-007-001	Sheet 1 OF 1



- NOTE: 1. FLEX-PIVOT TO BE FLUSH WITH 'A'  
NOTE CORRECT FLEX-PIVOT ORIENTATION.
2. FILL EACH OF THE 4 HOLES (JUST BELOW FLUSH) WITH ADHESIVE.
3. REFER TO PROCESS LIST SPIRE-ATC-PRJ-708 ID2.

2	Flex Pivot Protective Shield	1	SPIRE-BSM-020-008-001	1
1	Lucas flex pivot 5010-600	1	ATC-BRG-FLEX-001	1
ITEM	DESCRIPTION	QTY	FILENAME	REV

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM

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Edinburgh  
EH9 3HJ

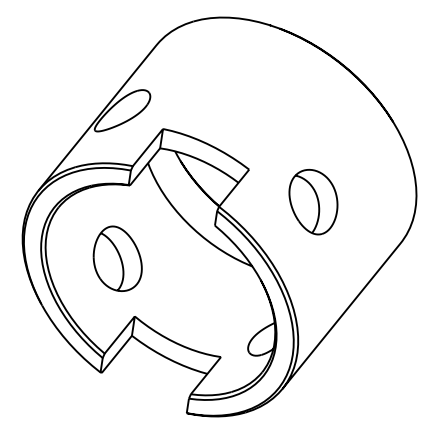
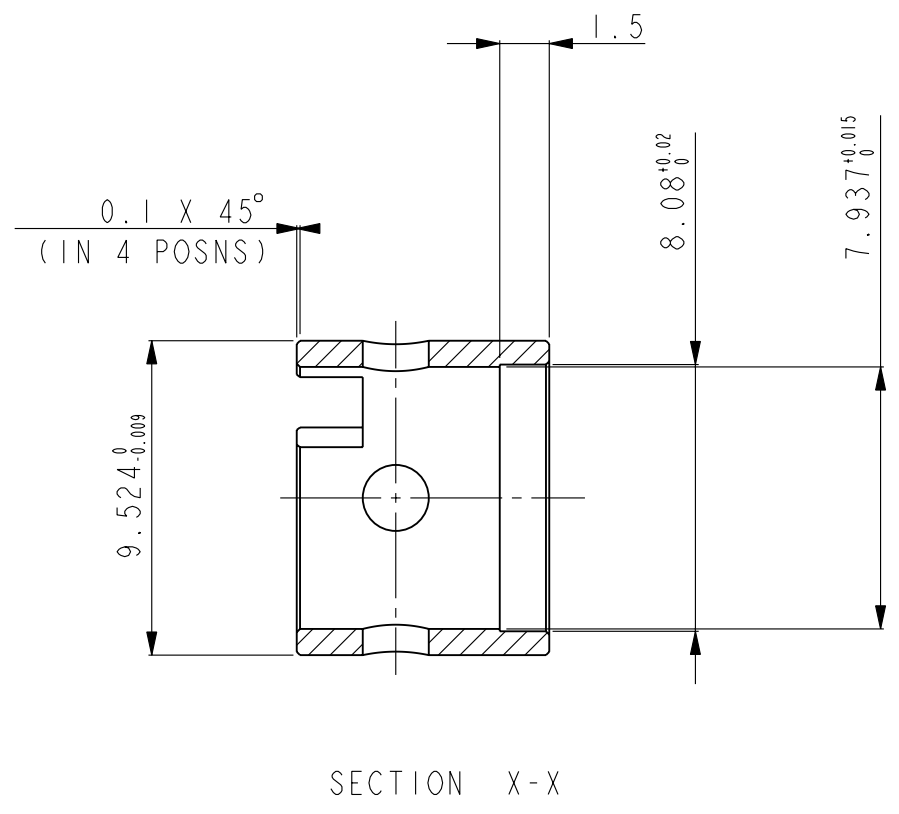
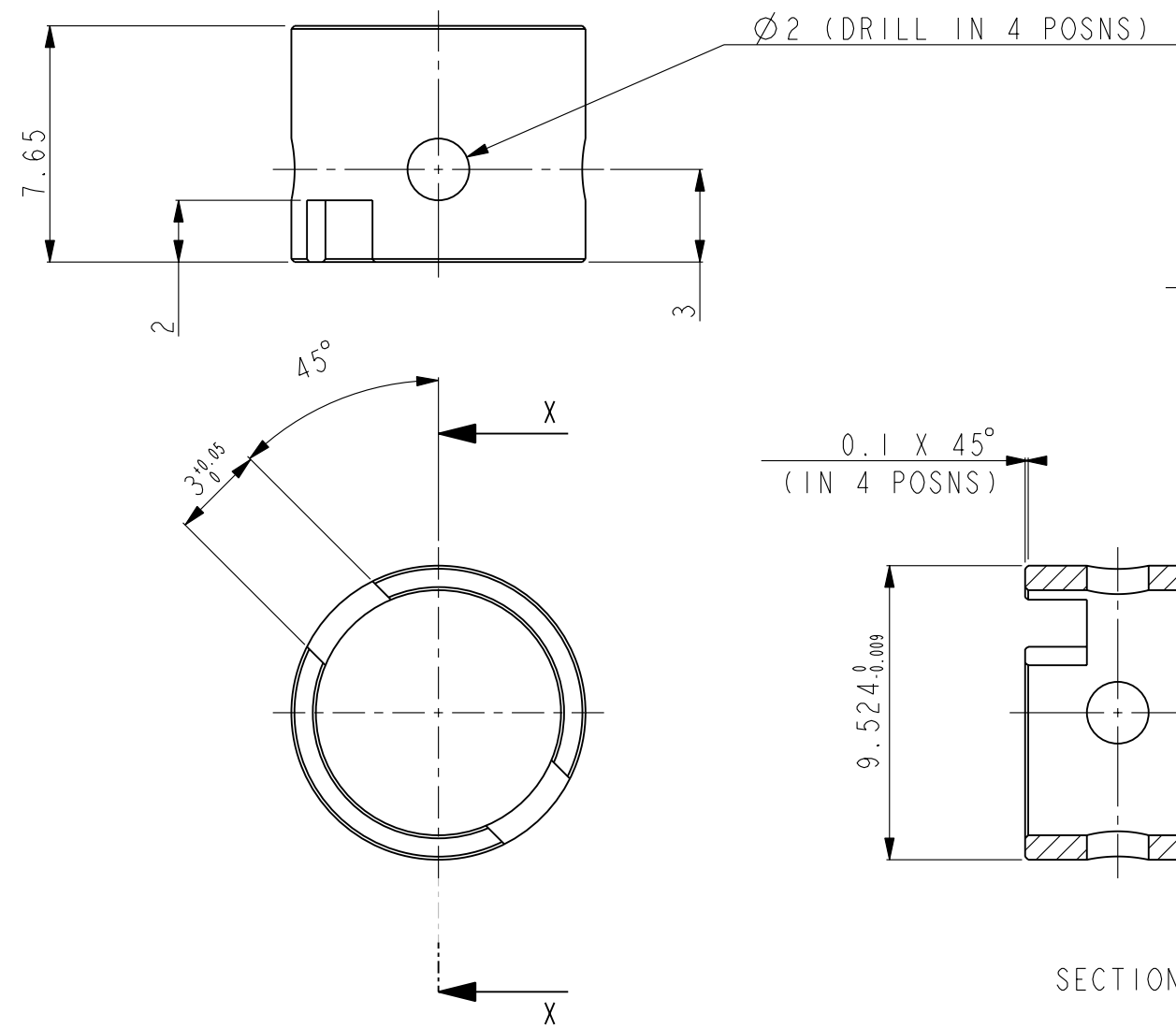
Material:	CTD:-	Drawn:TAP	Date: 18.JAN.02
Finish:	01-25	Mod'd:	Date:

Unless otherwise stated Last mod: PICTORIALY ALTERED

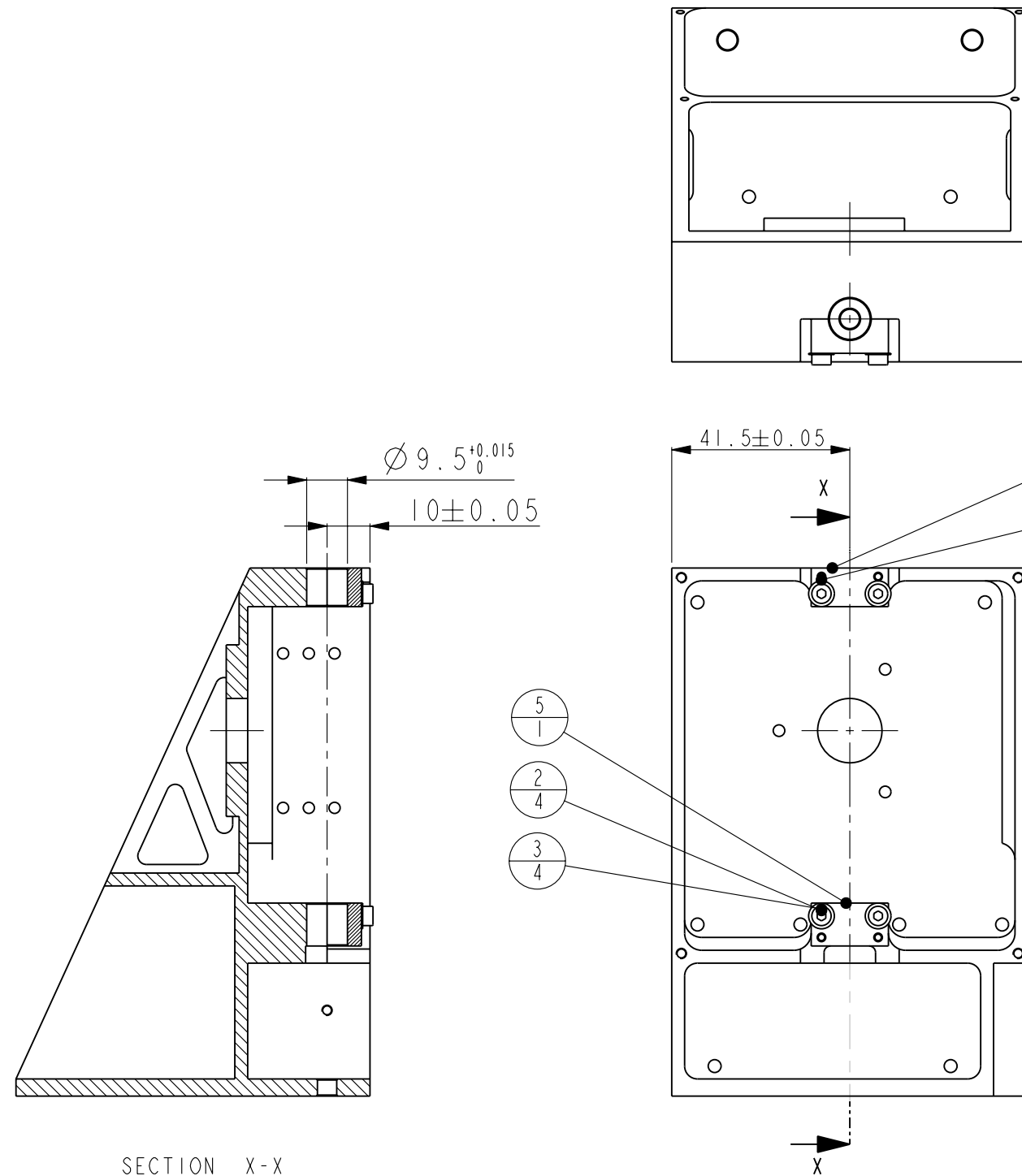
Tolerances:-		Title: SHIELDED FLEXURE ASSY (JIGGLE TOP)	
Linear : ±0.1	Angular : ±0.5°	Size A3	Rev 2
Remove all sharp edges	Scale:	MODEL: SPIRE-BSM-020-008	Sheet 1 OF 1

Dwg No: SPIRE-BSM-020-008






THIRD ANGLE PROJECTION DIMENSIONS IN MM					
Material: AL ALLOY 6082		CTD: -		Drawn: TAP Date: 23. JAN. 02	
Finish:				Mod'd: Date:	
Unless otherwise stated		Last mod:			
Tolerances: -		Title: FLEX PIVOT PROTECTIVE SHIELD			
Linear : ±0.1		Size A3		Dwg No: SPIRE-BSM-020-008-001	
Angular : ±0.5°		Scale:		Rev 1	
Remove all sharp edges		MODEL: SPIRE-BSM-020-008-001		Sheet 1 OF 1	

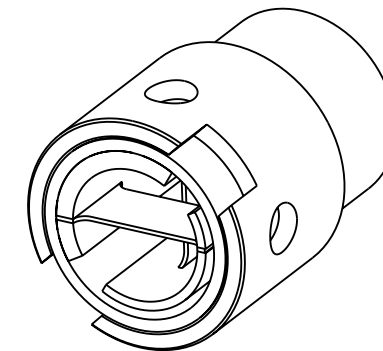
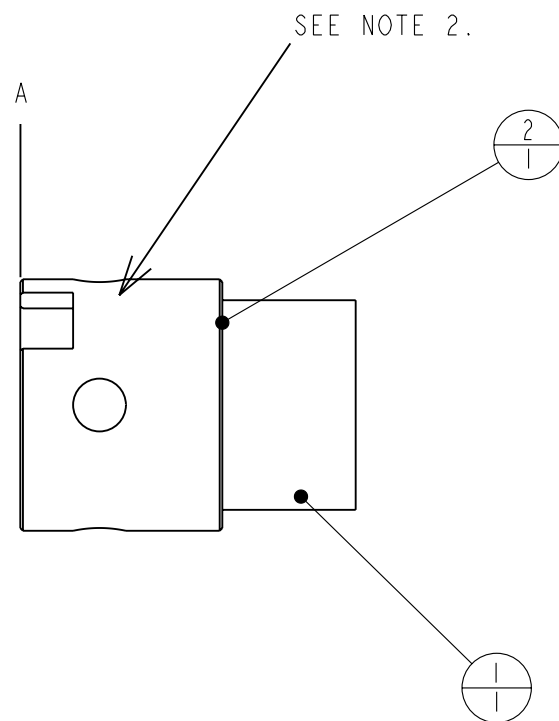
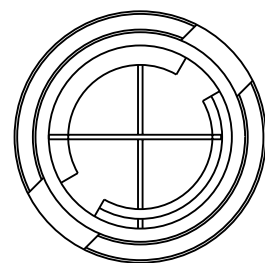


SECTION X-X

Note: 1. Dowel (item4) pushed 5mm into main structure.  
(ie: 3mm protrusion)

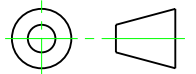

7	Structure machining assembly	1	SPIRE-BSM-020-011	2
6	Jiggle axis flexure clamp upper	1	SPIRE-BSM-020-001-005	2
5	Jiggle axis flexure clamp lower	1	SPIRE-BSM-020-001-003	2
4	DOWEL SS 2mm dia x 8mm lg.	4	DOWEL_8X2	1
3	DISC SPRING SS 3.2mm ID	4	DISC-SPRING-ID-3_2	1
2	CAP HD SCREW SS M2x12	4	CAP-HD-SCREW-SS-M2-5X12	1
1	BSM Structural Interface	1	SPIRE-BSM-020-001-001	3
ITEM	DESCRIPTION	QTY	FILENAME	REV

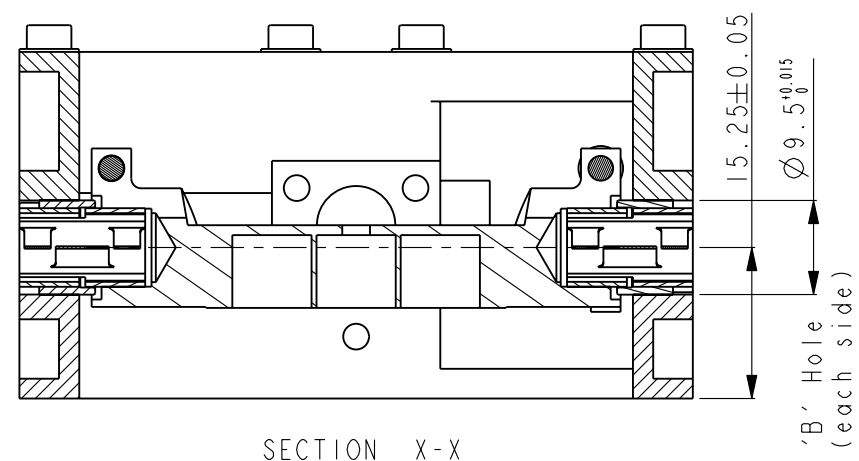
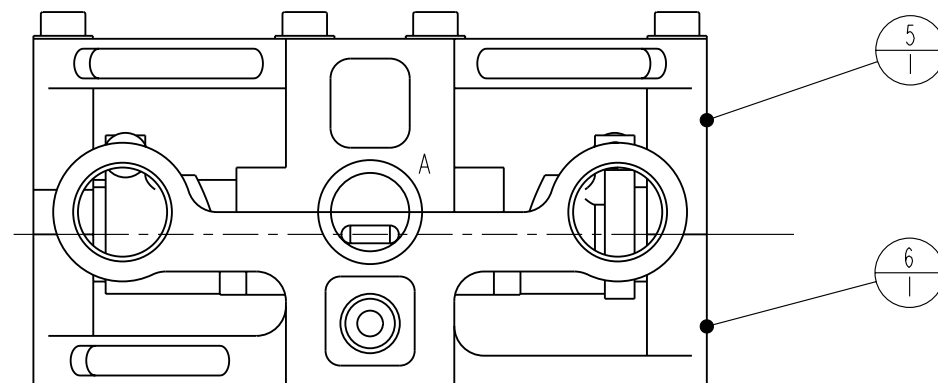
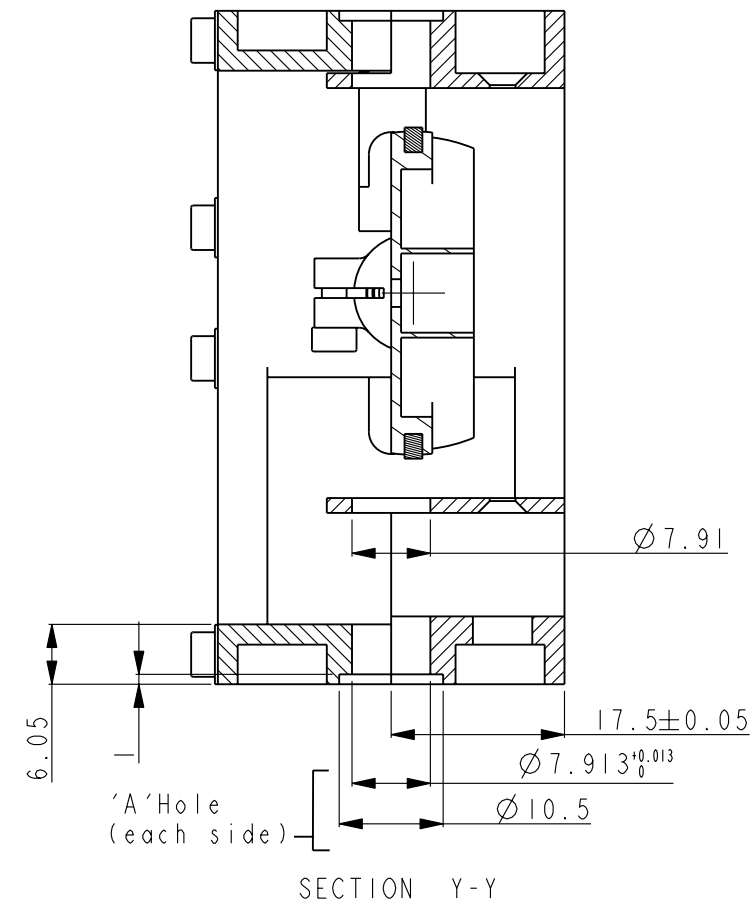
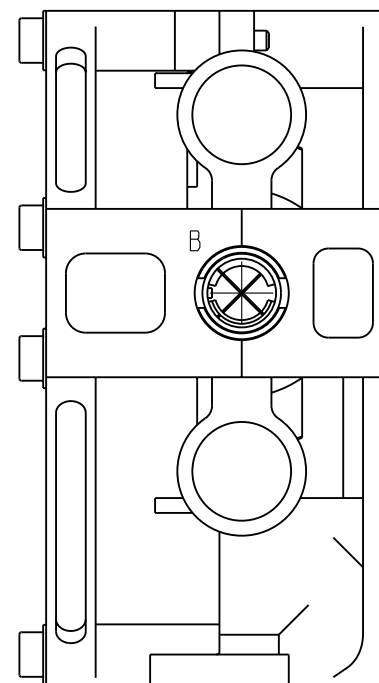
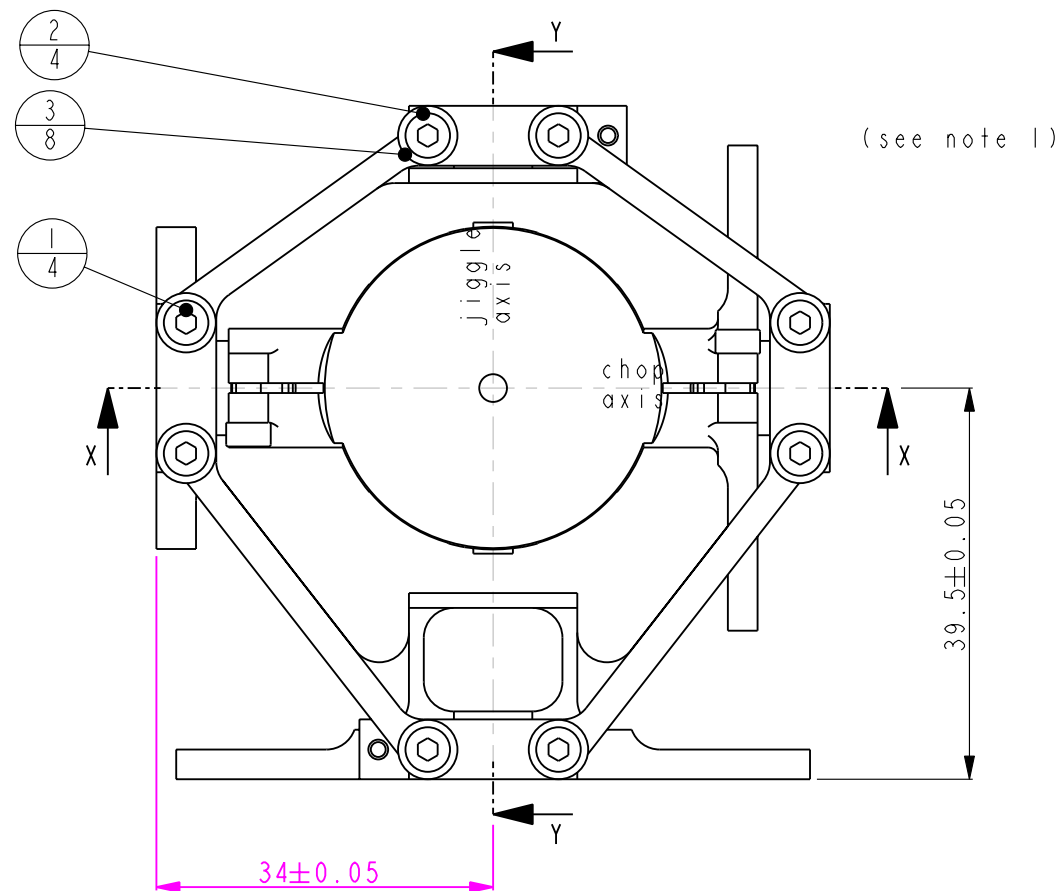
THIRD ANGLE PROJECTION DIMENSIONS IN MM			
Material:	CTD:-	Drawn:TAP	Date: 18. JUL.01
Finish:	01-07	Mod'd:	Date:
Unless otherwise stated	Last mod:		
Tolerances:-	Title: STRUCTURE MACHINING ASSY		
Linear : $\pm 0.1$	Size	Dwg No: SPIRE-BSM-020-011	Rev
Angular : $\pm 0.5^\circ$	A3		2
Remove all sharp edges	Scale:	MODEL: SPIRE-BSM-020-011	Sheet 1 OF 1



- NOTE: 1. FLEX-PIVOT TO BE FLUSH WITH 'A'  
NOTE CORRECT FLEX-PIVOT ORIENTATION.
2. FILL EACH OF THE 4 HOLES (JUST BELOW FLUSH) WITH ADHESIVE.
3. REFER TO PROCESS LIST SPIRE-ATC-PRJ-708 ID2.

2	Flex Pivot Protective Shield	1	SPIRE-BSM-020-008-001	1
1	Lucas flex pivot 5010-600	1	ATC-BRG-FLEX-001	1
ITEM	DESCRIPTION	QTY	FILENAME	REV

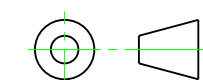
THIRD ANGLE PROJECTION DIMENSIONS IN MM					
Material: -		CTD: -		Drawn: TAP Date: 18. JAN. 02	
Finish: -		01-25		Mod'd: Date: -	
Unless otherwise stated		Last mod: PICTORIALY ALTERED			
Tolerances: -		Title: SHIELDED FLEXURE ASSY (JIGGLE BOT)			
Linear : ±0.1		Size A3		Dwg No: SPIRE-BSM-020-012	
Angular : ±0.5°		Scale: -		Rev 2	
Remove all sharp edges		MODEL: SPIRE-BSM-020-012		Sheet 1 OF 1	



Notes: 1. Dowel pushed 5mm into bot. frame (ie. 3mm protrusion)

ITEM	DESCRIPTION	QTY	FILENAME	REV
6	Jiggle Frame Bottom	1	SPIRE-BSM-020-003-001	3
5	Jiggle Frame Top	1	SPIRE-BSM-020-003-002	2
4	DOWEL SS 2mm dia x 8mm lg.	2	DOWEL_8X2	1
3	DISC SPRING SS 3.2mm ID	8	DISC-SPRING-ID-3_2	1
2	CAP HD SCREW SS M2.5x21.8mm	4	CAP-HD-SCREW-SS-M2-5X21_8	1
1	CAP HD SCREW SS M2.5x24mm	4	CAP-HD-SCREW-SS-M2-5X24	1

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM



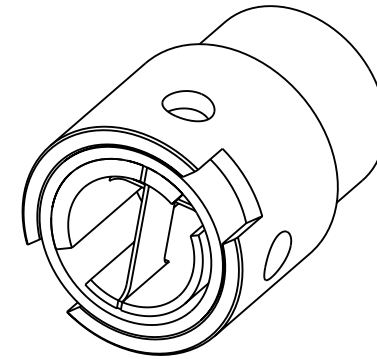
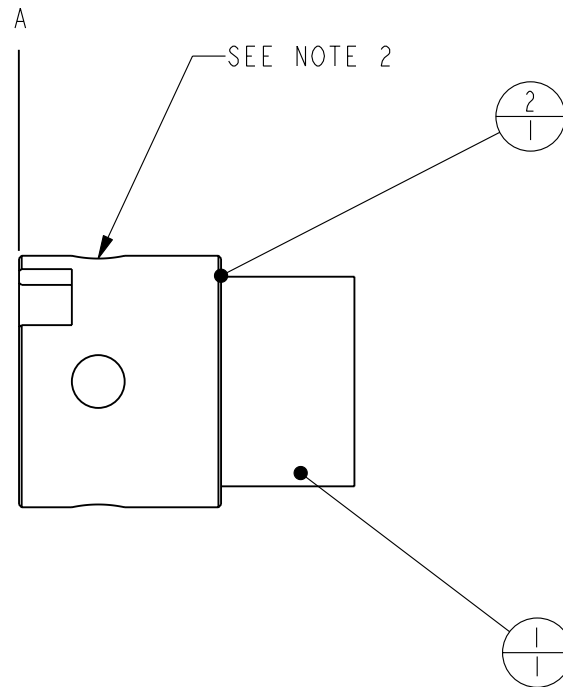
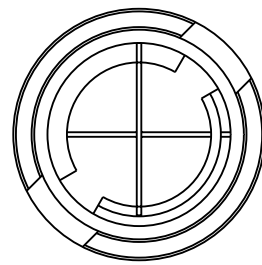
**UK**  
Astronomy Technology Centre  
Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material: CTD:-  
Finish: 01-15  
Drawn: TAP Date: 18.JUL.01  
Mod'd: Date:

Unless otherwise stated Last mod:

Tolerances:-  
Linear : ±0.1  
Angular : ±0.5°  
Title: JIGGLE FRAME MACHINING ASSY

Remove all sharp edges  
Size A3  
Dwg No: SPIRE-BSM-020-013  
Scale: MODEL: SPIRE-BSM-020-003  
Rev 1  
Sheet 1 OF 1



- NOTE: 1. FLEX-PIVOT TO BE FLUSH WITH 'A'  
NOTE CORRECT FLEX-PIVOT ORIENTATION.
2. FILL EACH OF THE 4 HOLES (JUST BELOW FLUSH) WITH ADHESIVE.
3. REFER TO PROCESS LIST SPIRE-ATC-PRJ-708 ID2.

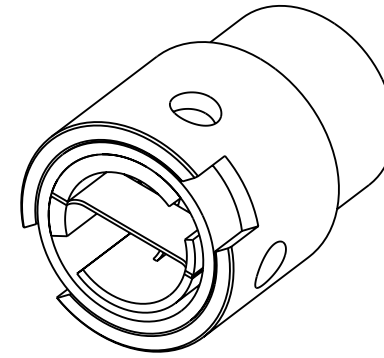
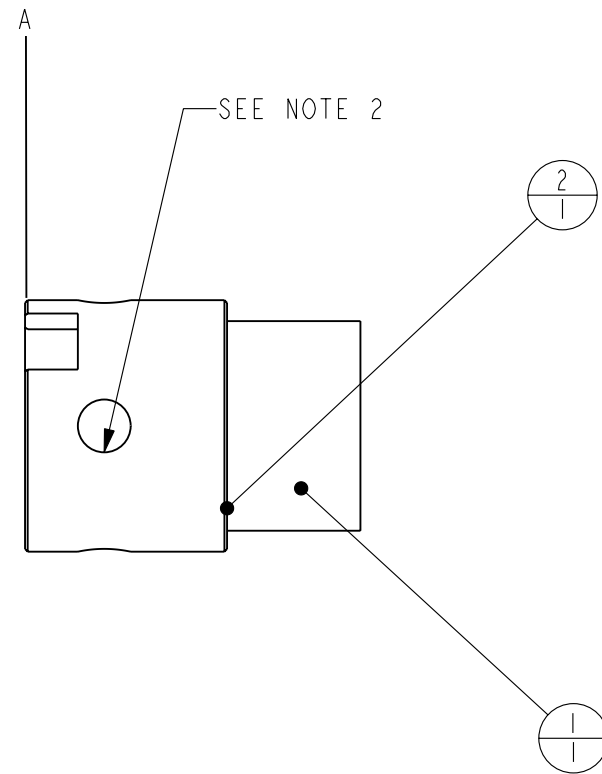
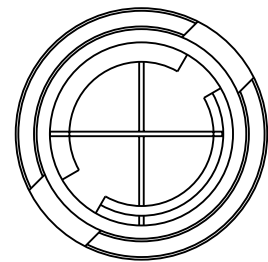
2	Flex Pivot Protective Shield	1	SPIRE-BSM-020-008-001	1
1	Lucas flex pivot 5010-600	1	ATC-BRG-FLEX-002	1
ITEM	DESCRIPTION	QTY	FILENAME	REV

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM

**UK** Astronomy Technology Centre  
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Blackford Hill  
Edinburgh  
EH9 3HJ

Material:	CTD: -	Drawn: TAP Date: 18.JAN.02
Finish:		Mod'd: Date:

Unless otherwise stated	Last mod:		
Tolerances:-	Title: SHIELDED FLEXURE ASSY (CHOP LH)		
Linear : ±0.1	Size	Dwg No: SPIRE-BSM-020-015	Rev
Angular : ±0.5°	A3	Scale:	1
Remove all sharp edges		MODEL: SPIRE-BSM-020-015	Sheet 1 OF 1



- NOTE: 1. FLEX-PIVOT TO BE FLUSH WITH 'A'  
NOTE CORRECT FLEX-PIVOT ORIENTATION.
2. FILL EACH OF THE 4 HOLES (JUST BELOW FLUSH) WITH ADHESIVE.
3. REFER TO PROCESS LIST SPIRE-ATC-PRJ-708 ID2.

2	Flex Pivot Protective Shield	1	SPIRE-BSM-020-008-001	1
1	Lucas flex pivot 5010-600	1	ATC-BRG-FLEX-002	1
ITEM	DESCRIPTION	QTY	FILENAME	REV

THIRD ANGLE PROJECTION  
DIMENSIONS IN MM

**UK** Astronomy Technology Centre  
Royal Observatory  
Blackford Hill  
Edinburgh  
EH9 3HJ

Material:	CTD: -	Drawn: TAP Date: 18. JAN. 02
Finish:		Mod'd: Date:

Unless otherwise stated	Last mod:		
Tolerances:-	Title: SHIELDED FLEXURE ASSY (CHOP RH)		
Linear : ±0.1	Size	Dwg No: SPIRE-BSM-020-016	Rev
Angular : ±0.5°	A3		1
Remove all sharp edges	Scale:	MODEL: SPIRE-BSM-020-016	Sheet 1 OF 1