

9

5

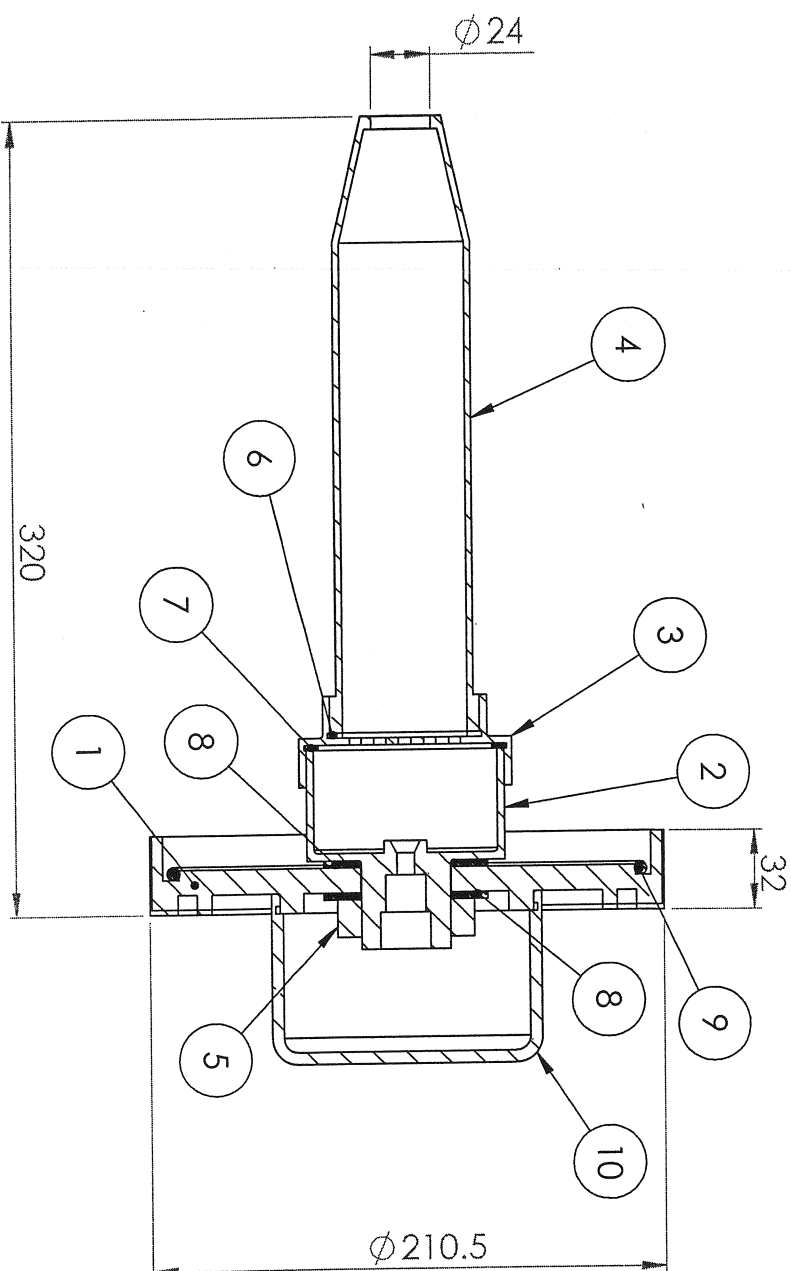
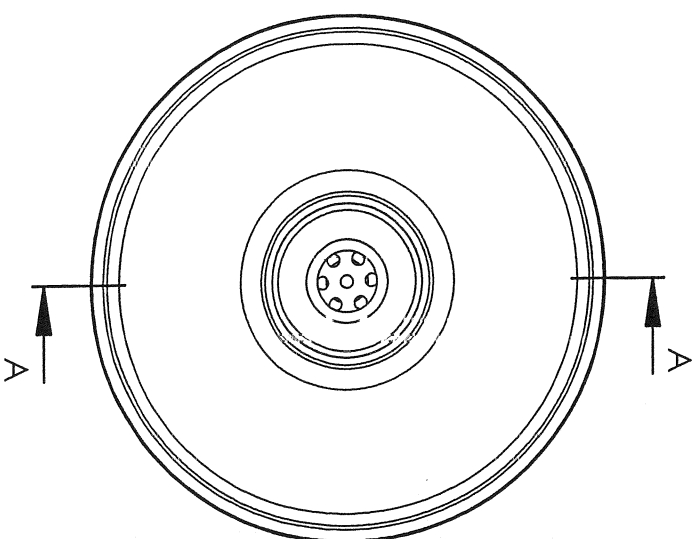
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GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED



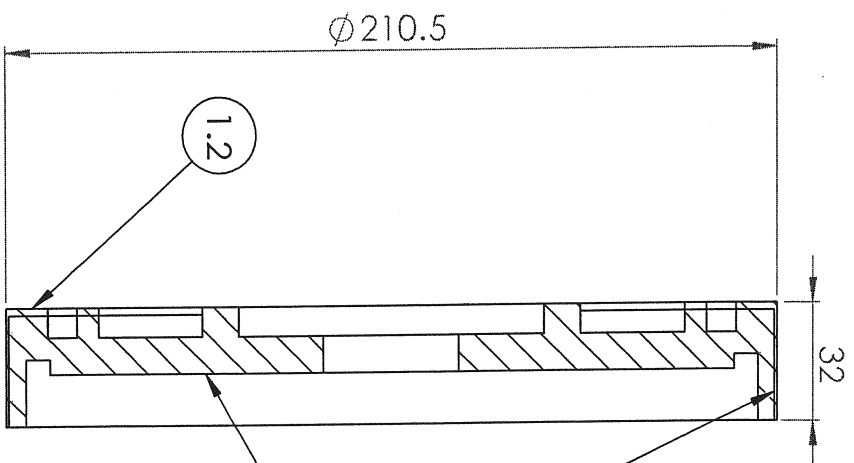
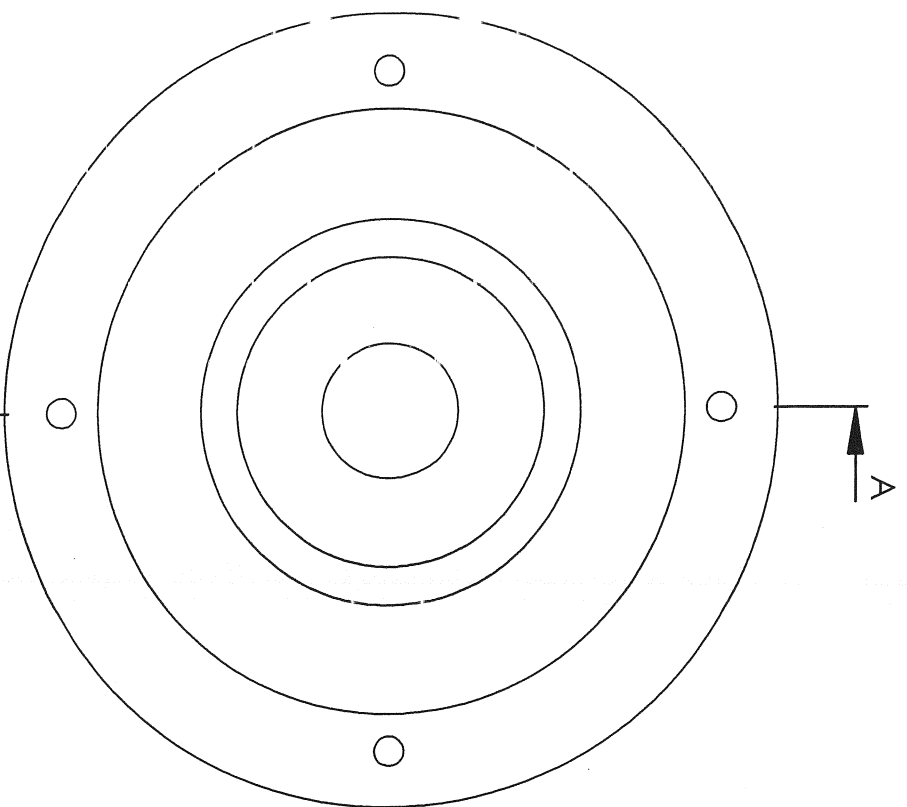
SECTION A-A

Note: Assembly of components as per doc. no. HEMRL/IGN/PIN/ALPHA/1

PART NO.	DESCRIPTION	QTY.
1	Cap & Rim Assembly	1
2	Cup	1
3	Lid	1
4	Al Tube	1
5	Nut	1
6	Rubber Gasket - 1	1
7	Rubber Gasket - 2	1
8	Rubber Gasket - 3	2
9	O-ring	1
10	Protective Cap	1

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: LINEAR: ANGULAR:			FINISH:	DEBUR AND BREAK SHARP EDGES
DRAWN	NAME	SIGNATURE	DATE	
CHKD	N.B. Doherty	13/07/23	13/07/23	
APPVD	R.S. Pridmore	13/07/23	13/07/23	
MFG				
QA				
			MATERIAL:	
WEIGHT: 2550 g (approx.)				
TITLE: Cap-Igniter Assembly (Empty)				
DWG NO. HEMRL/IGN/ALPHA/2022/01				
SCALE: 1:3 SHEET 1 OF 13				
A4				

GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED



SECTION A-A

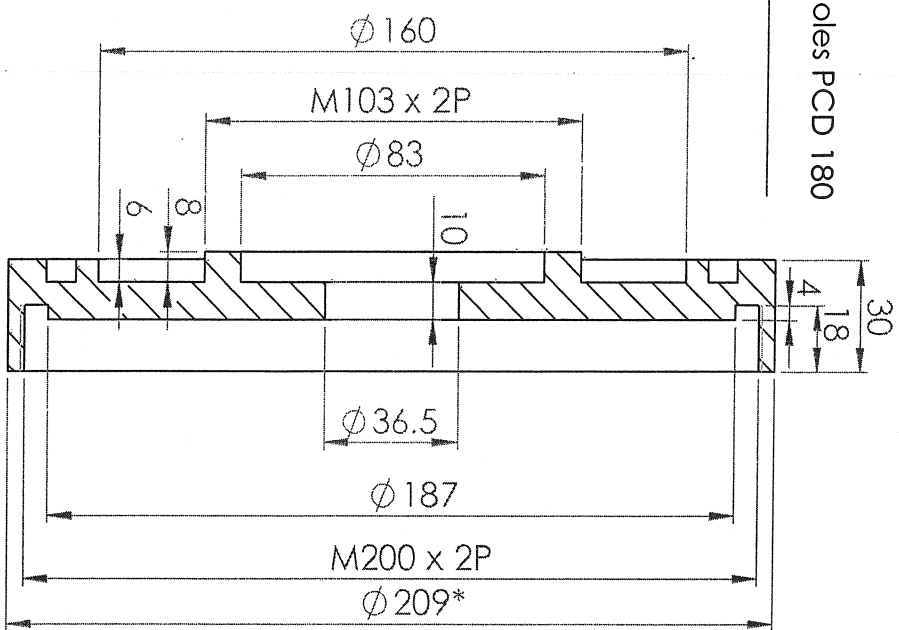
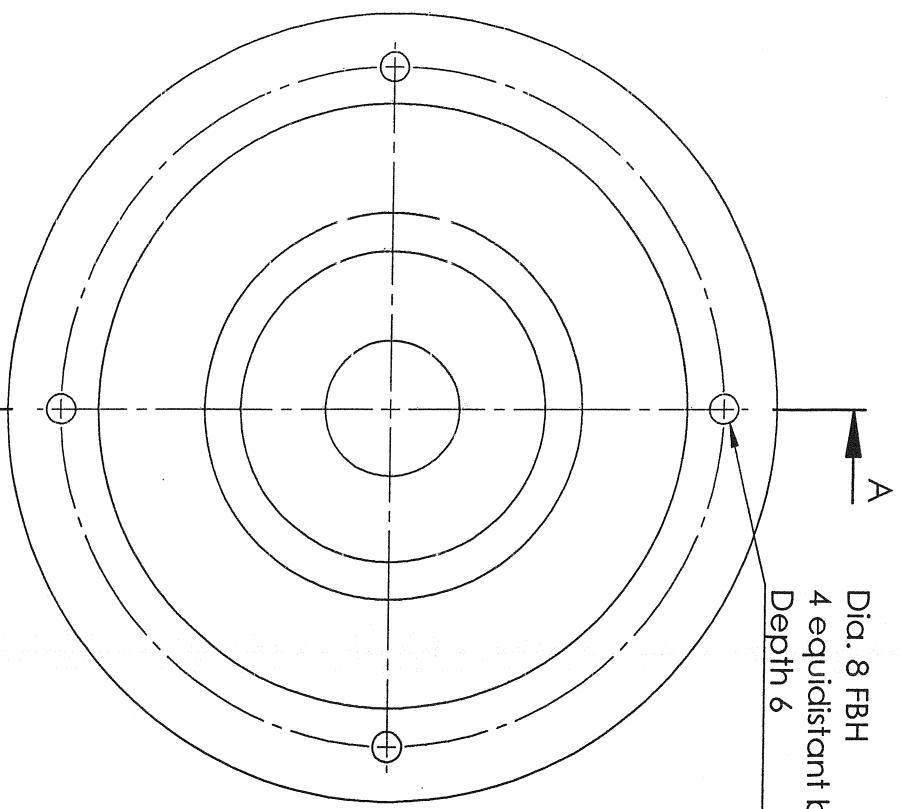
ITEM NO.	DESCRIPTION	QTY.
1.1	Cap	1
1.2	Rim	1

Note:

1. After bonding, Araldite must be allowed to cure for minimum 12 hrs.
2. After curing, trial assembly of the cap on the nozzle must be carried out. The cap must get smoothly assembled on the nozzle.
3. Bonding shall be carried out as per document no. HEMRL/IGN/PIN/ALPHA/1

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES	
SURFACE FINISH:				PART NO.: 1	
TOLERANCES:				REVISION	
LINEAR:					
ANGULAR:					
DRAWN	NAME	SIGNATURE	DATE	TITLE:	
CHKD	N.B. Dabhiwal	<i>[Signature]</i>	13/07/22	Cap & Rim Assembly	
APPVD	R.S. Patel	<i>[Signature]</i>	13/7/22	DWG NO. HEMRL/IGN/ALPHA/2022/01	
MFG				A4	
QA				SCALE: 1:2 SHEET 2 OF 13	

GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED



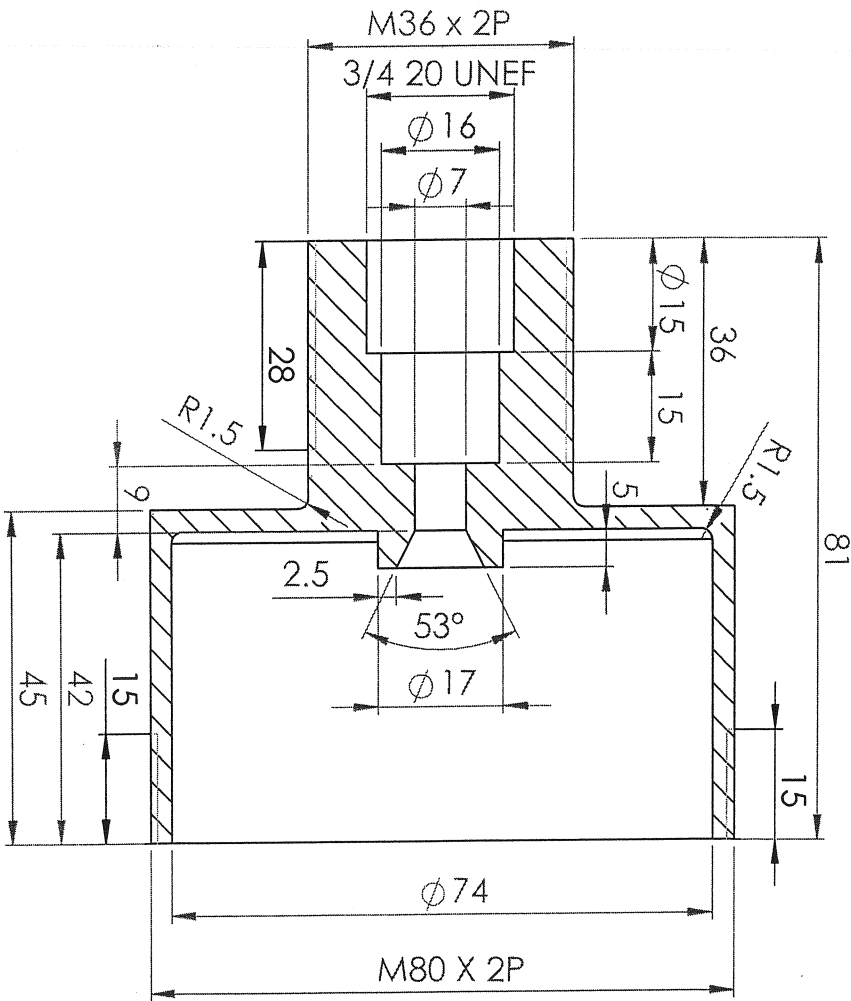
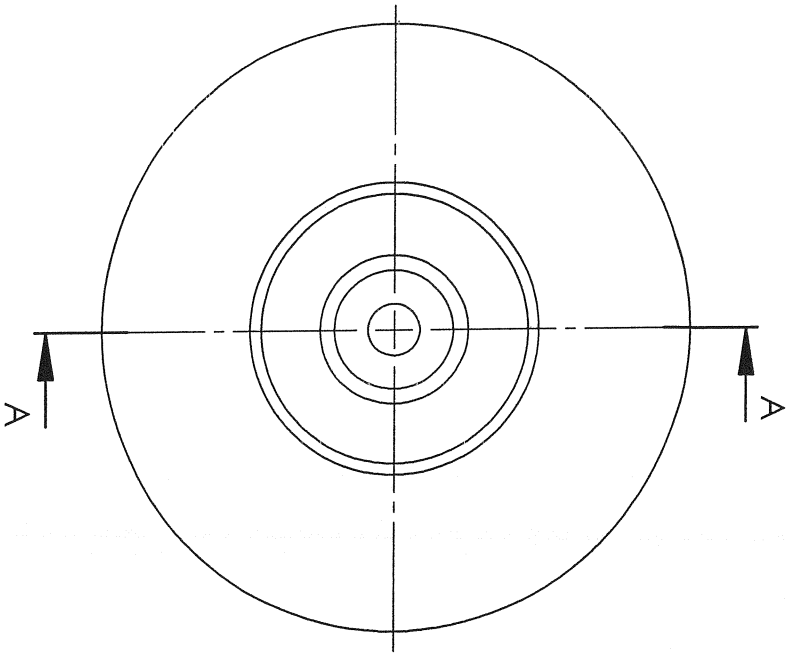
* : Tolerances to be matched with mating component by OD machining to achieve a gap of 50 micron for alraldite bonding

Note:

1. MATERIAL: FIBER GLASS REINFORCED MOULDING POWDER TO IA:1330, APPENDIX 'D'
2. BARCOL HARDNESS ON MOULDING SHOULD NOT BE LESS THAN 50 AND SHORE 'D'-60

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBURR AND BREAK SHARP EDGES	
TOLERANCES:		SURFACE FINISH:		PART NO.:	
LINEAR:		ANGULAR:		1.1	
DRAWN		NAME		TITLE:	
CHKD		SIGNATURE		Cap Closing	
APPRD		DATE		HEMRL/IGN/ALPHA/2022/01	
MFG		MATERIAL:		A4	
QA		See Note		SCALE: 1:2	
WEIGHT: 820 g (approx.)		SHEET 3 OF 13			

GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED



Material: EN8 (BSS 970:1955) 'Q' Condition

Hardness: 30-35 HRC

Finishing: ZINC PLATED TO IS:1573-1986
Fe/Zn 20 TYPE 'C' IRIDESCENT
THK 10-15 MICRON

SECTION A-A

Refer note

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS			FINISH:		DEBURR AND BREAK SHARP EDGES	PART NO.: 2		REVISION	
TOLERANCES: LINEAR: ANGULAR:			Refer note			2			
NAME			SIGNATURE			DATE			
DRAWN									
CHKD	N. B.								

Refer note

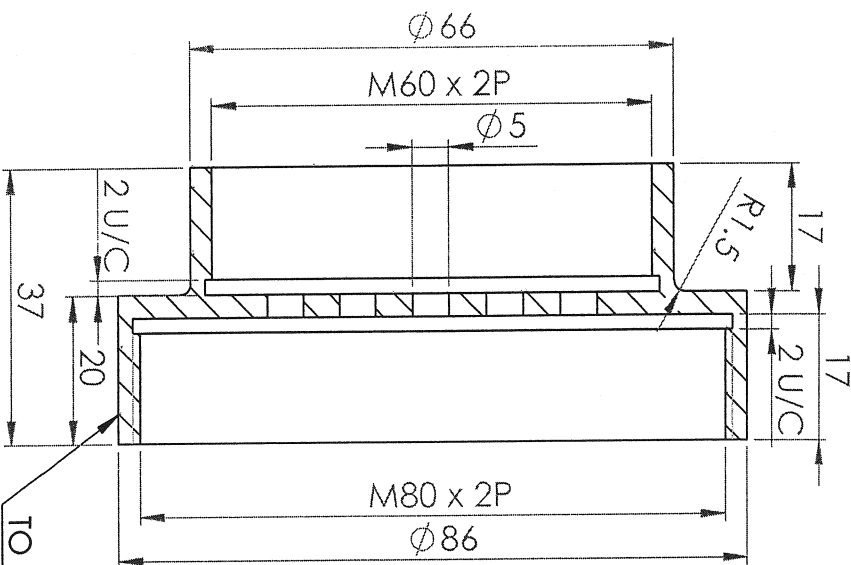
Cup

A4

Top view of a circular component. The component features a central hole pattern consisting of 14 holes arranged in a circular pattern (PCD 40) and 6 holes arranged in a circular pattern (PCD 20). The component has a diameter of 5. The diagram includes a section line A-A passing through the center.

Dia. 5
14 holes on PCD 40

6 holes on PCD 20



TO BE DIAMOND KNURLED

SECTION A-A

Material: EN8 (BSS 970:1955) 'Q' Condition

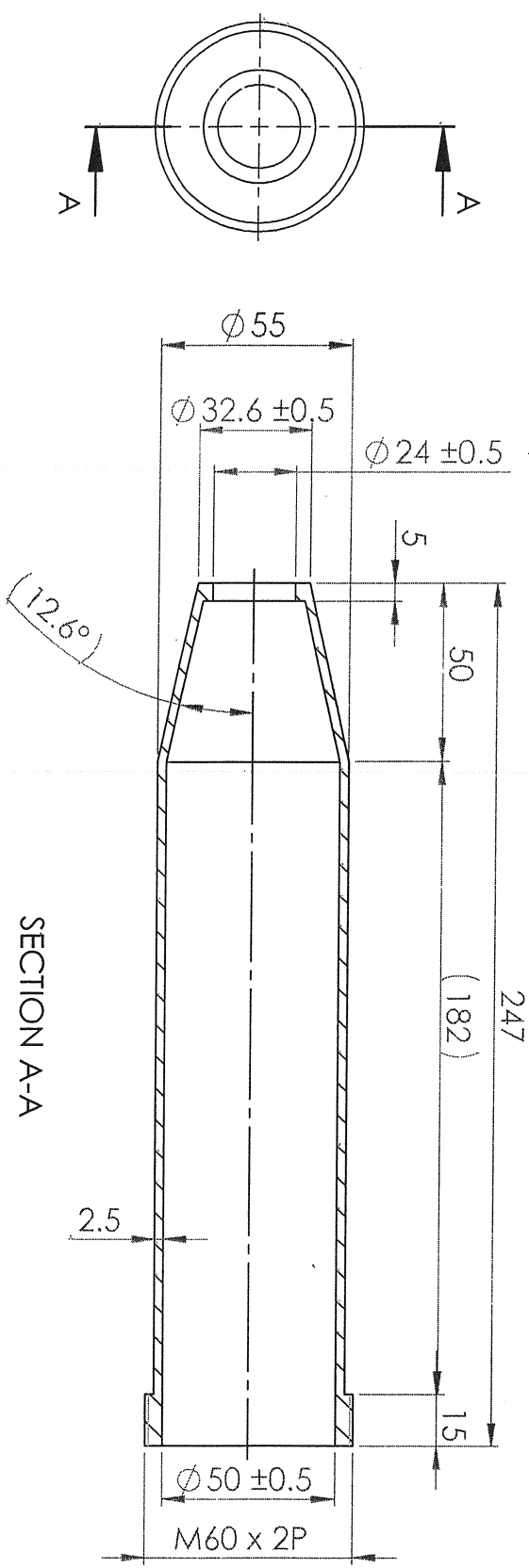
Hardness: 30-35 HRC

Finishing: ZINC PLATED TO IS:1573-1986
Fe/Zn 20 TYPE 'C' IRIDESCENT
THK 10-15 MICRON

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:						FINISH: See Note		DEBURR AND BREAK SHARP EDGES		REVISION	
								PART NO.: 3			
								TITLE: Lid			
DRAWN											
CHKD <i>N.B. D'Almeida</i>								<i>Junt</i>			
APPVD <i>R.S. Davis</i>								<i>13/6/22</i>			
MFG								<i>17-22</i>			
QA											
MATERIAL:								See Note			
WEIGHT: 310 g (approx.)											
SCALE: 1:1											
HEMRL/IGN/ALPHA/2022/01											
DMG NO.											
A4											
SHEET 6 OF 13											

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
C3, B4, C2, C5	1	a) tolerance on length of straight portion of Al tube changed to (182) b) tolerance on angle of tapered section of Al tube made (12.5°) c) 0.5 mm tolerance provided to $\phi 50$ mm, $\phi 32.6$ and $\phi 24$ mm.	

GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED

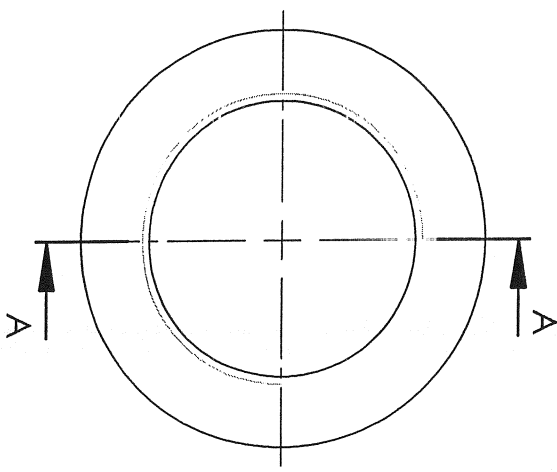


Note: Punching on part is forbidden

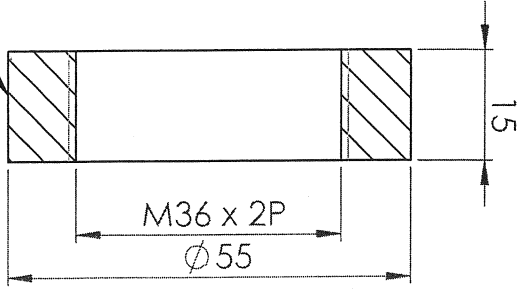
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS				FINISH: Anodised AC-15 Grade IS-1868		DEBUR AND BREAK SHARP EDGES				
TOLERANCES: LINEAR: ANGULAR:										
DRAWN	NAME	SIGNATURE	DATE							
CHKD	N.B. Dabir									
APPRD	N.B. Dabir									
MFG	13.07.22									
QA	13.07.22									
				MATERIAL:		DWG NO.				
				IS-733 Desig.		HEMRL/IGN/ALPHA/2022/01				
				64430-1983 (HE-30)						
				WEIGHT: 275 g (approx)		SCALE: 1:2				
						SHEET 7 OF 13				
				TITLE:		A4				
				PART NO.:		4				
				REVISION						

Al Tube

GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED



TO BE DIAMOND KNURLED



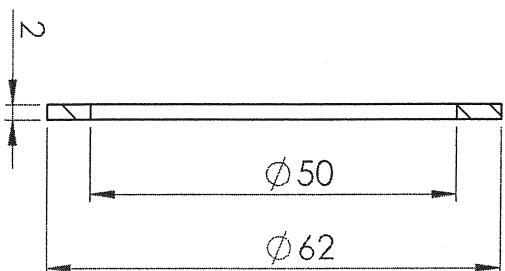
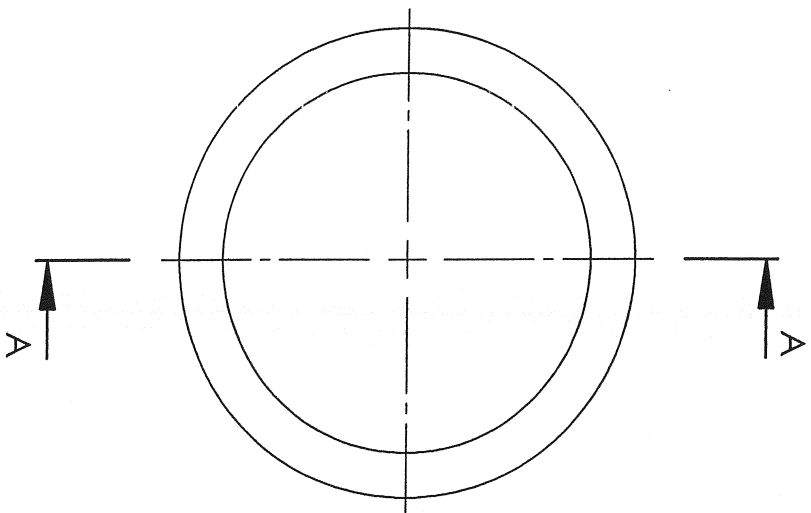
Material: EN8 (3SS 970:1955) 'Q' condition

Hardness: 30-35 HRC

Finishing: ZINC PLATED TO IS:1573-1986
Fe/Zn 20 TYPE 'C' IRIDESCENT
THK 13-15 MICRON

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS				FINISH:		DEBURR AND BREAK SHARP EDGES	PART NO.: 5	REVISION
SURFACE FINISH:				REFER NOTE				
TOLERANCES:								
LINEAR:								
ANGULAR:								
DRAWN	NAME	SIGNATURE	DATE					
CHKD	N. B. Dabunde		13/07/22					
APPVD	E. S. P. M. S. S.		12-2-22					
MFG								
QA								
				MATERIAL:		REFER NOTE		
				WEIGHT: 160 g (approx.)				

GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED



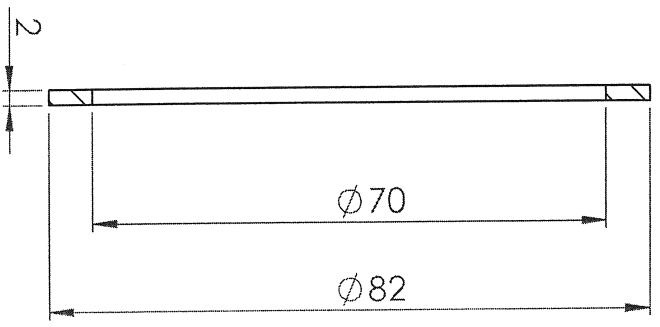
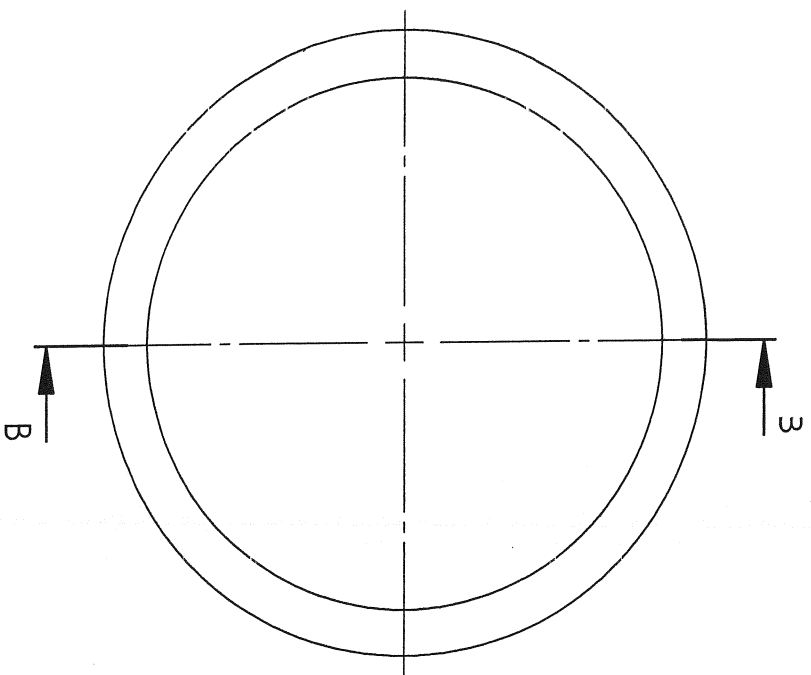
SECTION A-A

Note: Hardness: 70+-5 SHORE A

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:	
SURFACE FINISH:			
TOLERANCES:			
LINEAR:			
ANGULAR:			
NAME		SIGNATURE	DATE
DRAWN			
CHKD	<i>M.B. Dhanasek</i>	<i>Swile</i>	<i>3/07/22</i>
APPRD	<i>R.S. Radhak</i>	<i>M. J. J.</i>	<i>13.3.22</i>
MFG			
Q.A.			
MATERIAL:		TITLE:	
VITON OR NBR		Rubber Gasket -1	
WEIGHT:		PART NO.	REVISION
		6	
DWG. NO.		HEMRL/IGN/ALPHA/2022/01	
SCALE:1:1		SHEET 9 OF 13	
A4			

6 5 4 3 2 1

GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED



SECTION B-B

Note: Hardness: 70+-5 SHORE A

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS			FINISH:		DEBUR AND BREAK SHARP EDGES	
SURFACE FINISH:						
TOLERANCES:						
LINEAR:						
ANGULAR:						
DRAWN	NAME	SIGNATURE	DATE	TITLE:		
CHKD	N.B. Dabir		13/07/22	PART NO.: 7		
APPRD	R.S. Padman		13-7-22	REVISION		
MFG				DWG NO. HEMRL/IGN/ALPHA/2022/01		
QA				A4		
MATERIAL: VITON OR NBR				SCALE: 1:1		
WEIGHT:				SHEET 10 OF 13		

Rubber Gasket - 2

6 5 4 3 2 1

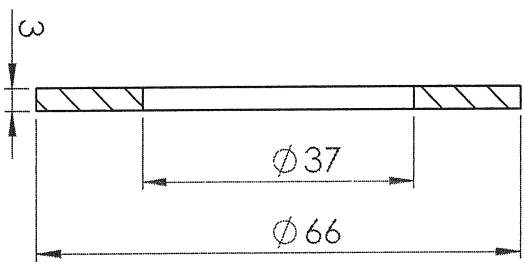
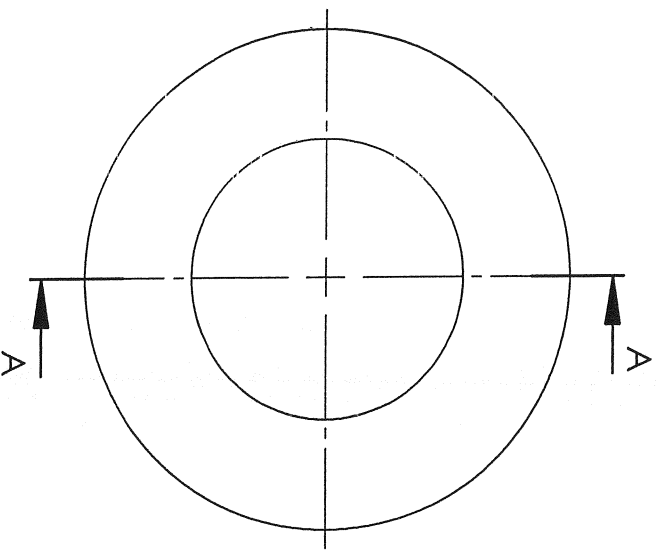
A

B

C

D

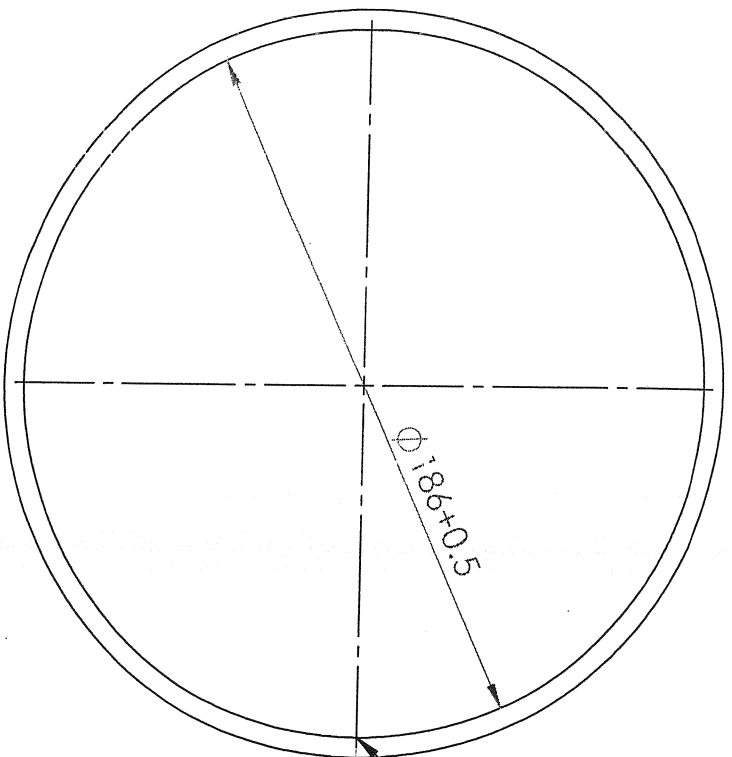
GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED



SECTION A-A

Note: Hardness: 70+-5 SHORE A

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS			FINISH:		DEBUR AND BREAK SHARP EDGES	
SURFACE FINISH:						
TOLERANCES:						
LINEAR:						
ANGULAR:						
DRAWN	NAME	SIGNATURE	DATE			
CHKD	N. S. Deliaud		13/07/22			
APPVD	R. S. Deliaud		13-07-22			
MFG						
Q.A						
MATERIAL:				Viton or NBR		
WEIGHT:						
TITLE:				Rubber Gasket - 3		
PART NO.:				8		
REVISION						
DWG NO.				HEMRL/IGN/ALPHA/2022/01		
SCALE: 1:1				SHEET 11 OF 13		
A4						



CHORD DIA. 5.4 + 0.15

NOTES:

1. MATERIAL: FLUORINATED ELASTOMER (HK) TO ASTM D 2000-05
2. MECHANICAL PROPERTIES:
 - I. HARDENESS: 80 +- 5 SHORE A
 - II. TENSILE STRENGTH (min): 10 MPa
 - III. ELONGATION AT BREAK(min): 150%
 - IV. COMPRESSION SET: NOT EXCEED TO 25% AT 70 DEG FOR 24 HRS (SPECIAL REQUIREMENT)
3. 'O' RING SHOULD BE FREE FROM POROSITY, VOIDS & SURFACE IMPERFECTION'
4. 'O' RING SHOULD RETAIN ITS PHYSICAL PROPERTIES BETWEEN -20 DEG C TO 55 DEG C
5. 'O' RING COLOUR: BLACK

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

PART NO.:

9

REVISION

TITLE:

O-ring

DWG NO.

HEMRL/IGN/ALPHA/2022/01

A4

MATERIAL:
Q.A.
MFG

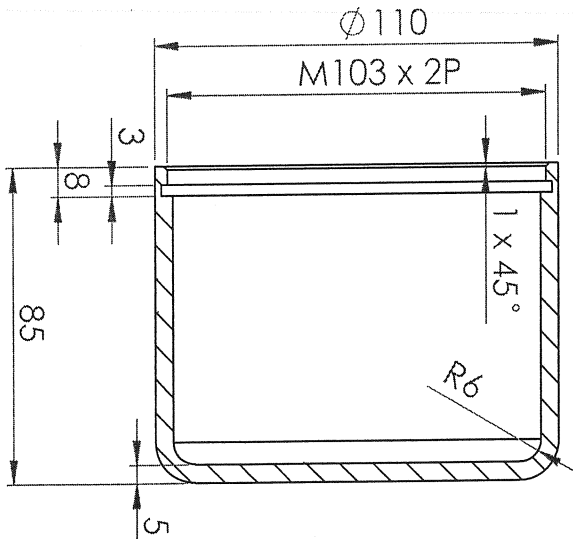
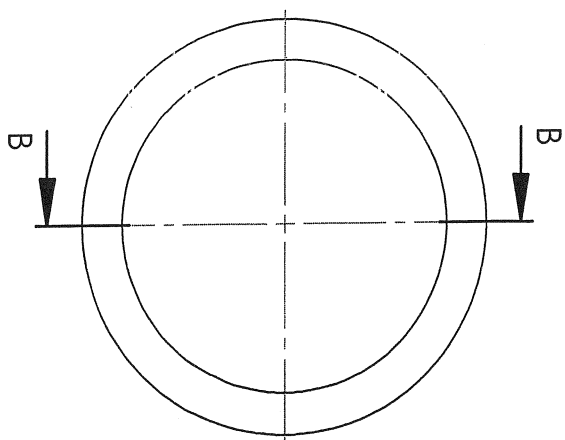
Refer Note

WEIGHT:

SCALE:1:5

SHEET 12 OF 13

GEN. TOL. MEDIUM CLASS TO IS:2102 UNLESS OTHERWISE STATED



SECTION B-B

- Note:**
- 1. MATERIAL: FIBER GLASS REINFORCED MOULDING POWDER TO IA:1330, APPENDIX 'D'
 - 2. BARCOL HARDNESS ON MOULDING SHOULD NOT BE LESS THAN 50 AND SHORE 'D'-60

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS			FINISH:		DEBUR AND BREAK SHARP EDGES	PART NO.: 10		REVISION
SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:								
DRAWN	NAME	SIGNATURE	DATE			TITLE: Protective cap		
CHKD	N.R. Subramani		13.07.22			DWG NO.: HEMRL/IGN/ALPHA/2022/01		
APPRVD	N.R. Subramani		13.7.22			A4		
MFG						SHEET 13 OF 13		
QA						SCALE: 1:2		
MATERIAL: See Note						A4		
WEIGHT: 250 g (approx.)						A4		