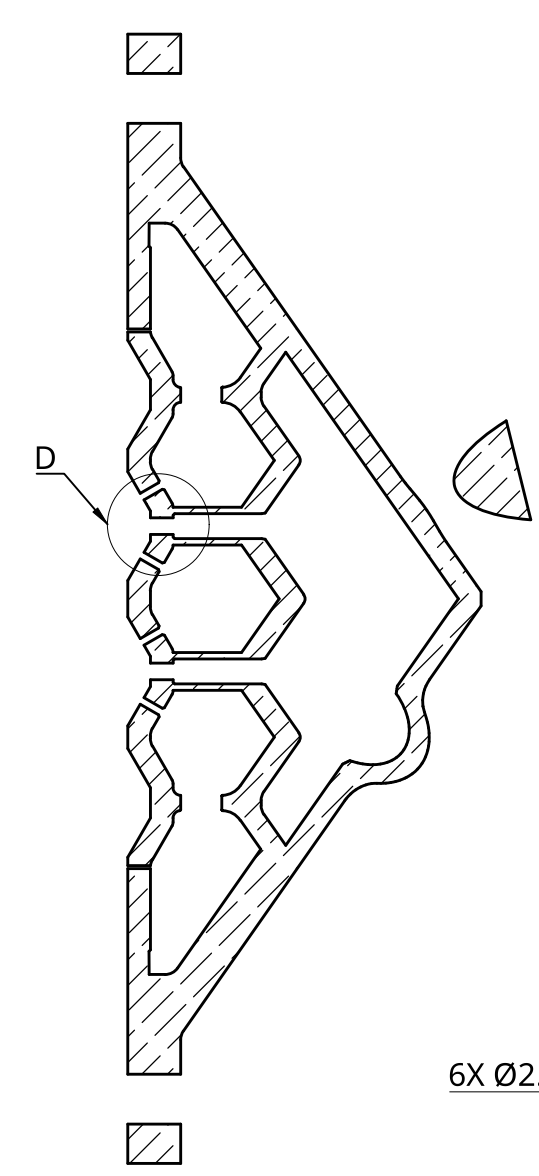
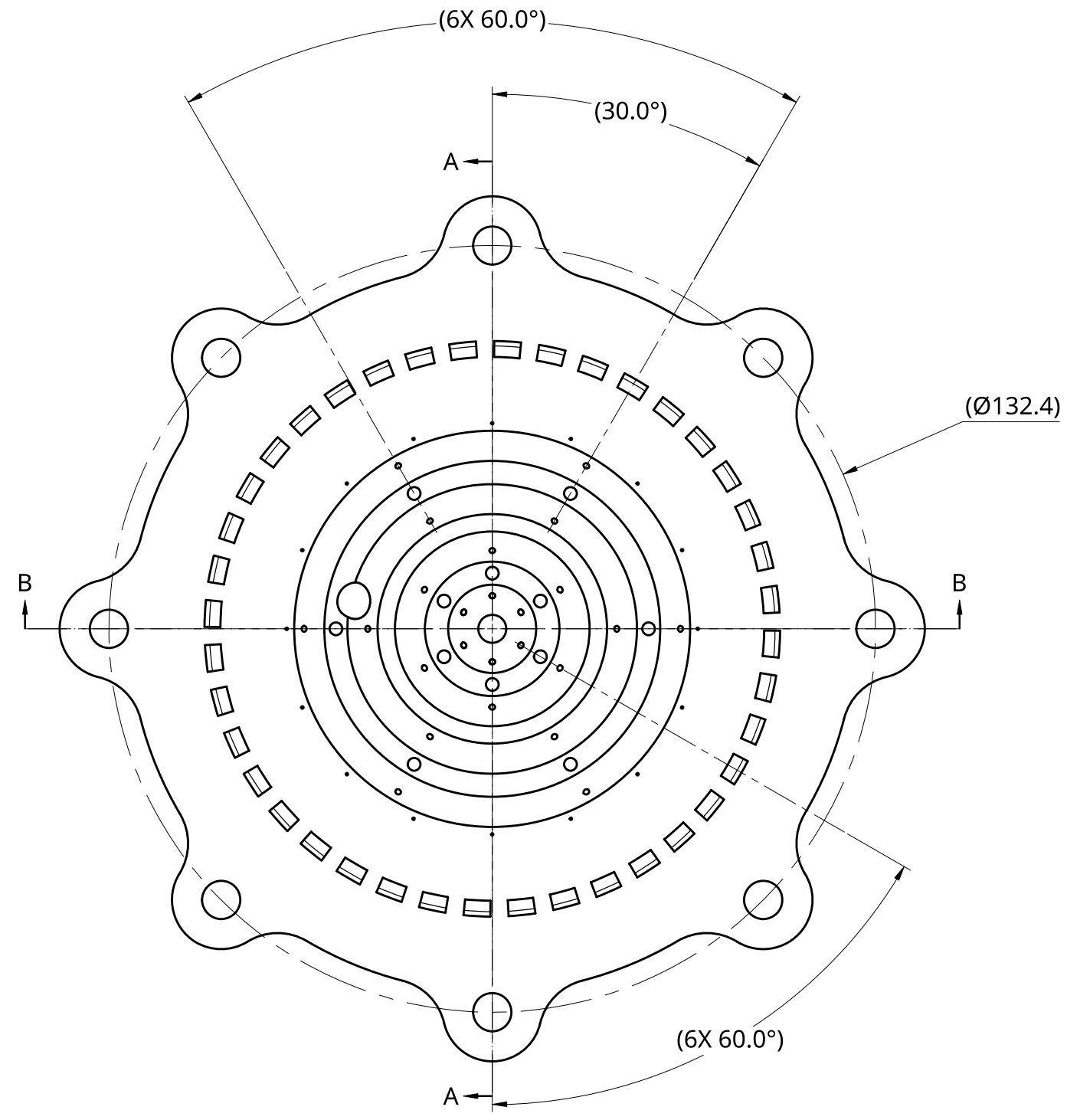
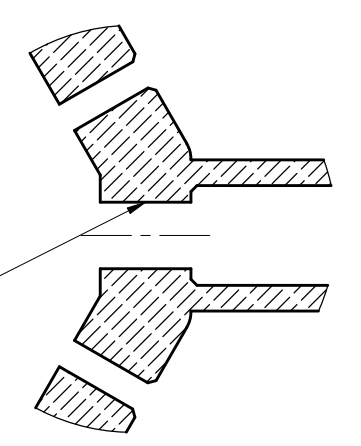




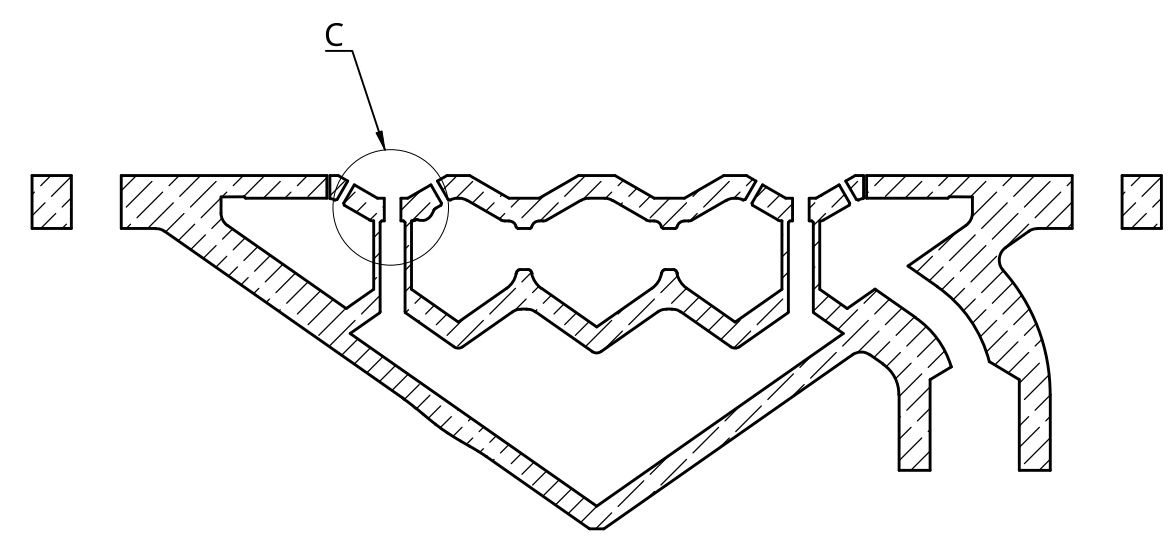
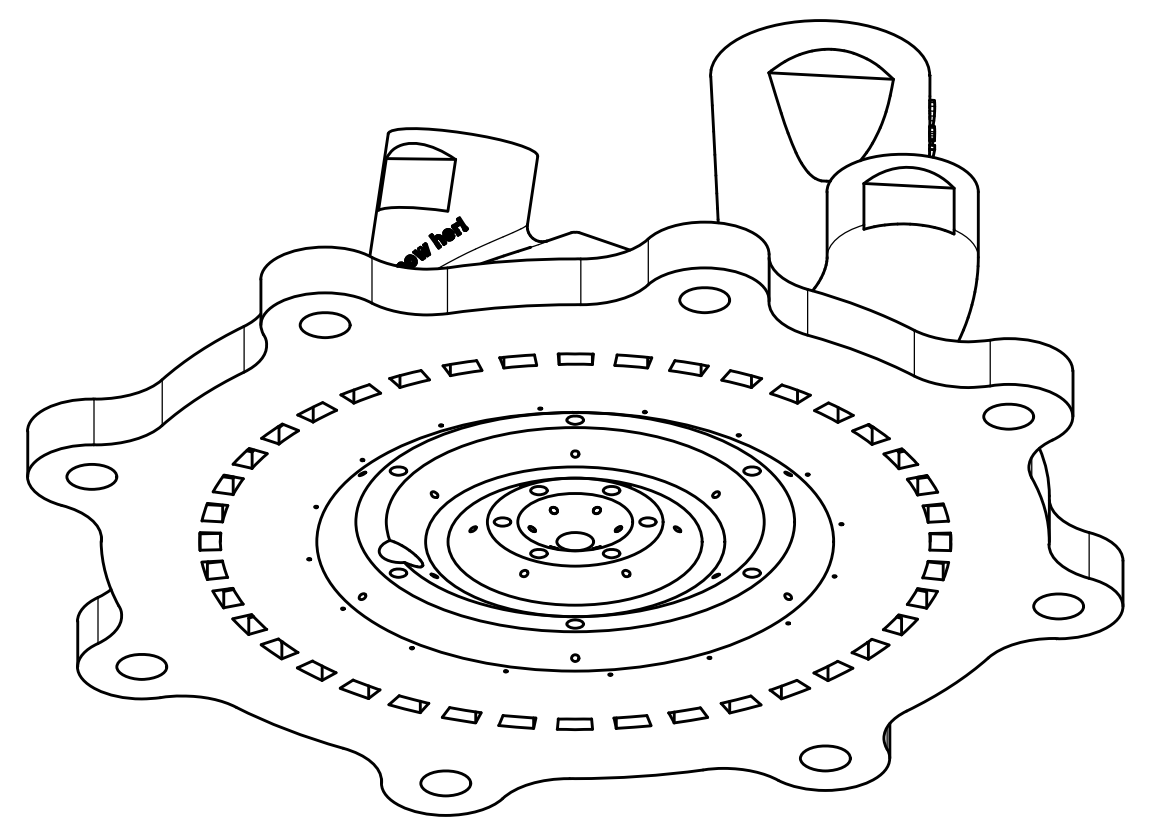




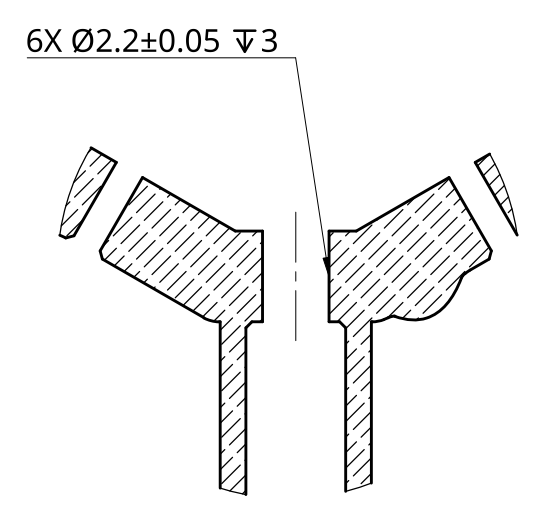
A - A



D  
4:1



B - B

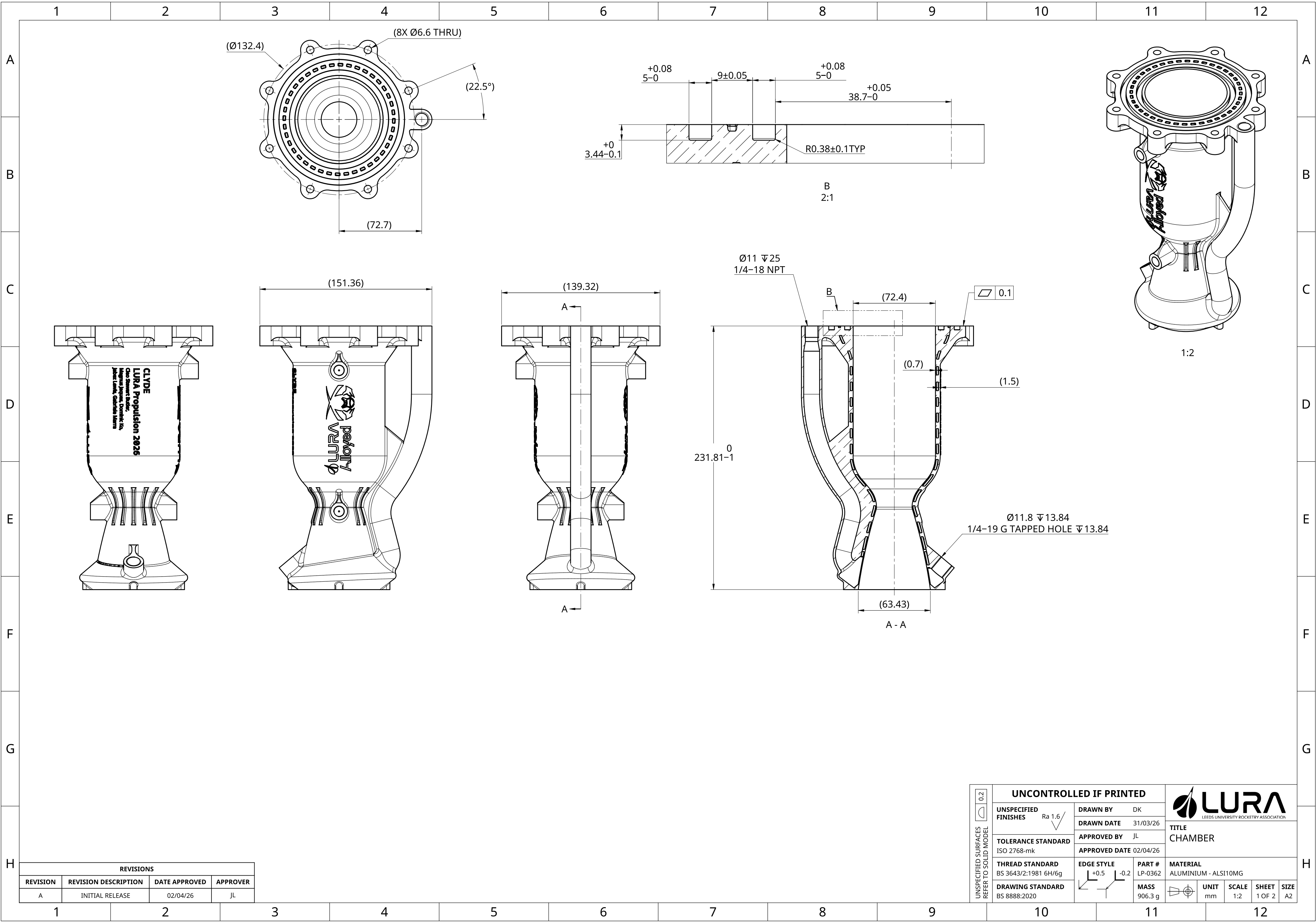


C  
4:1

**NOTES:**  
1. USE EXISTING GEOMETRY FOR POSITIONAL REFERENCES UNLESS OTHERWISE STATED.

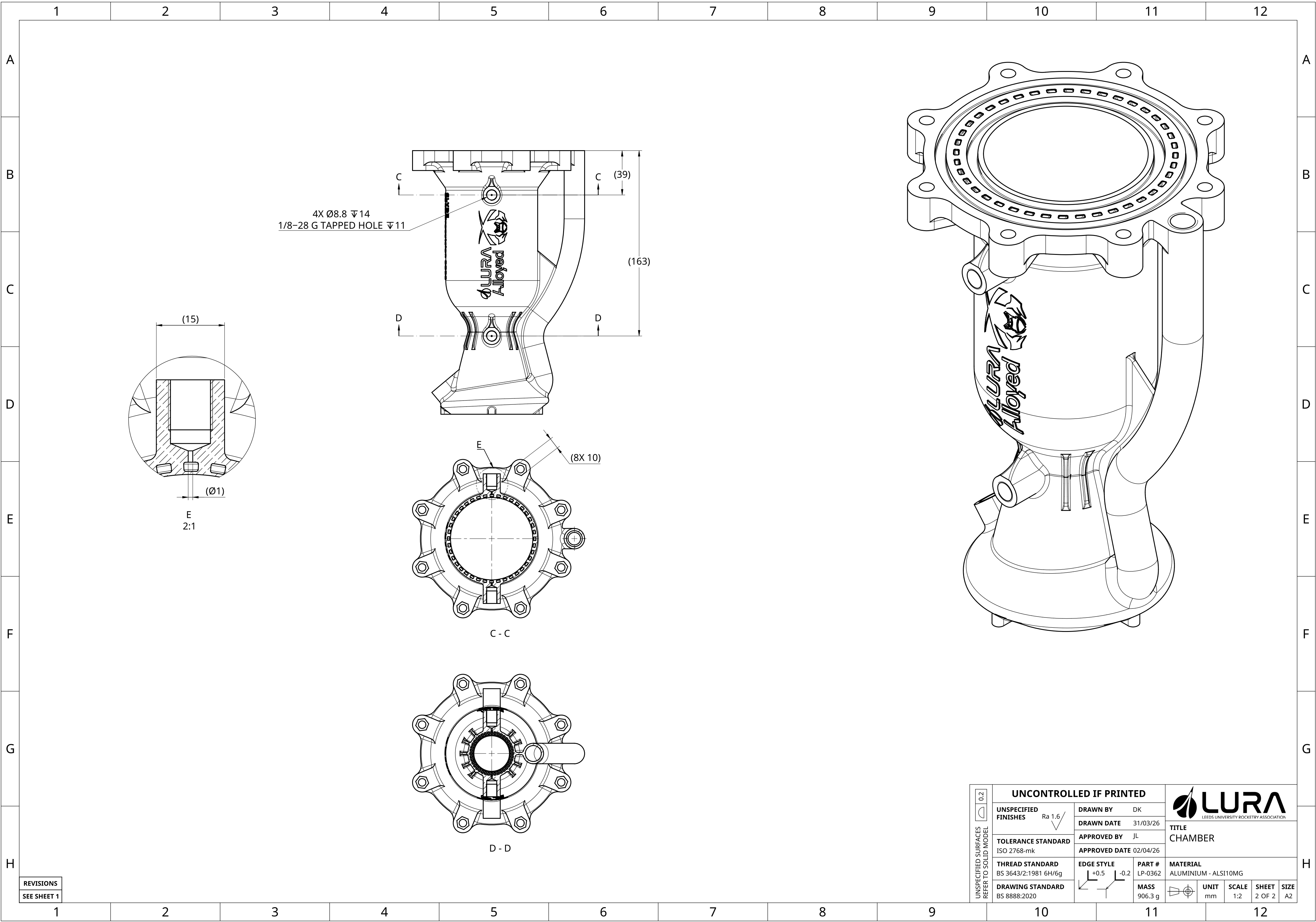
| REVISIONS |                      |               |          |
|-----------|----------------------|---------------|----------|
| REVISION  | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
| A         | INITIAL RELEASE      | 31/05/26      | JL       |

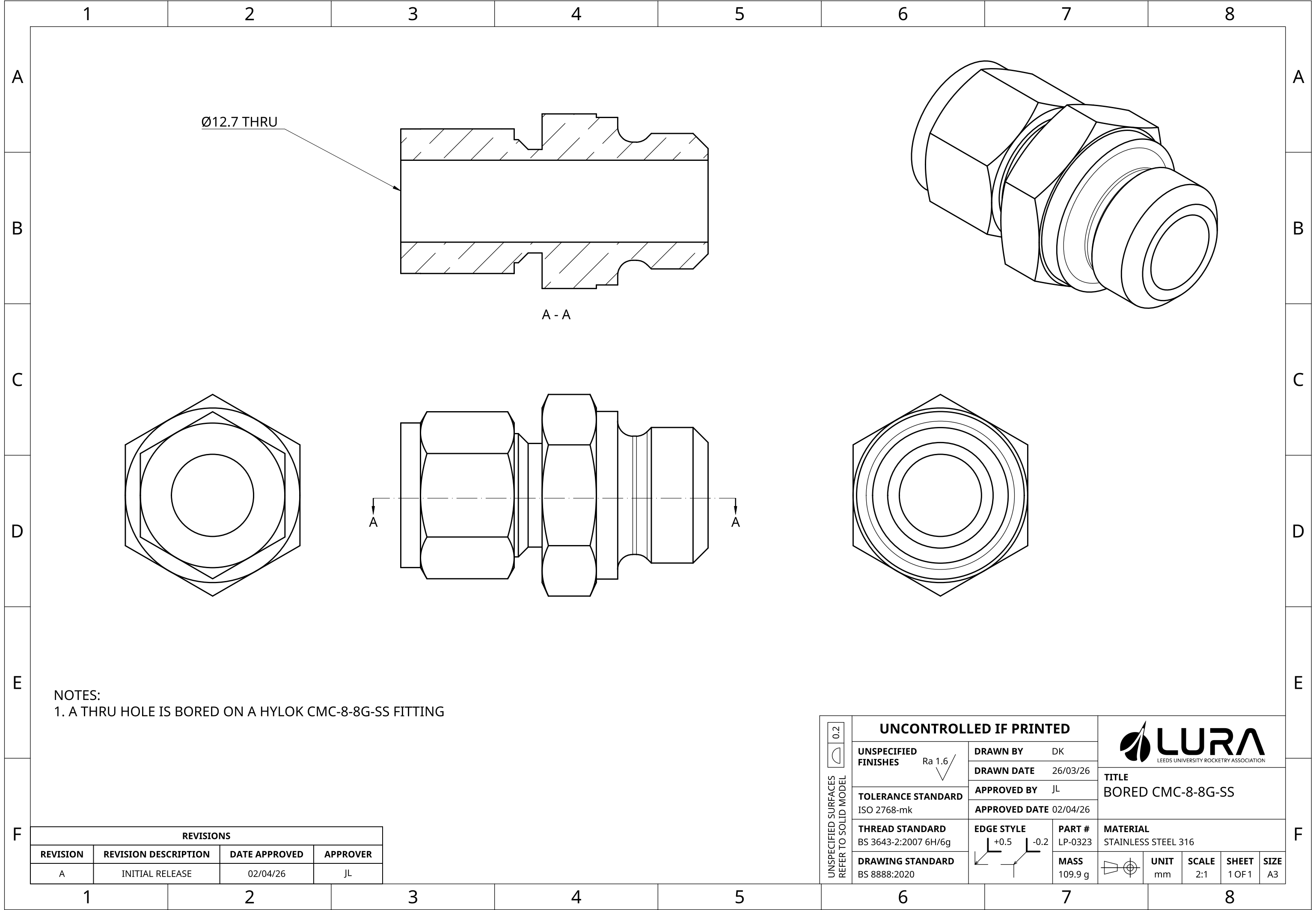
|                                              |                                                                                                                         |                                                                                                    |                         |         |          |                 |                                                                                                                                |                 |  |            |                                                                                       |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------|---------|----------|-----------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------|--|------------|---------------------------------------------------------------------------------------|
| UNSPECIFIED SURFACES<br>REFER TO SOLID MODEL | 0.2                                                                                                                     |                                                                                                    | UNCONTROLLED IF PRINTED |         |          |                 | <br>LEEDS UNIVERSITY ROCKETRY ASSOCIATION |                 |  |            |                                                                                       |
|                                              | <br>UNSPECIFIED FINISHES<br>Ra 1.6 |                                                                                                    | DRAWN BY                |         | DK       |                 | TITLE<br>INJECTOR                                                                                                              |                 |  |            |                                                                                       |
|                                              |                                                                                                                         |                                                                                                    | DRAWN DATE              |         | 31/05/26 |                 |                                                                                                                                |                 |  |            |                                                                                       |
|                                              | TOLERANCE STANDARD<br>ISO 2768-mk                                                                                       |                                                                                                    | APPROVED BY             |         | JL       |                 | MATERIAL<br>ALUMINIUM - ALS10MG                                                                                                |                 |  |            |                                                                                       |
|                                              |                                                                                                                         |                                                                                                    | APPROVED DATE           |         | 31/05/26 |                 |                                                                                                                                |                 |  |            |                                                                                       |
|                                              | THREAD STANDARD<br>BS 3643/2:1981 6H/6g                                                                                 |                                                                                                    | EDGE STYLE              |         | PART #   |                 | UNIT<br>mm                                                                                                                     |                 |  |            |                                                                                       |
| DRAWING STANDARD<br>BS 8888:2020             |                                                                                                                         | <br>+0.5 -0.2 |                         | LP-0226 |          | MASS<br>422.6 g |                                                                                                                                |                 |  |            |  |
|                                              |                                                                                                                         |                                                                                                    |                         |         |          | SCALE<br>1:1    |                                                                                                                                | SHEET<br>1 OF 1 |  | SIZE<br>A2 |                                                                                       |

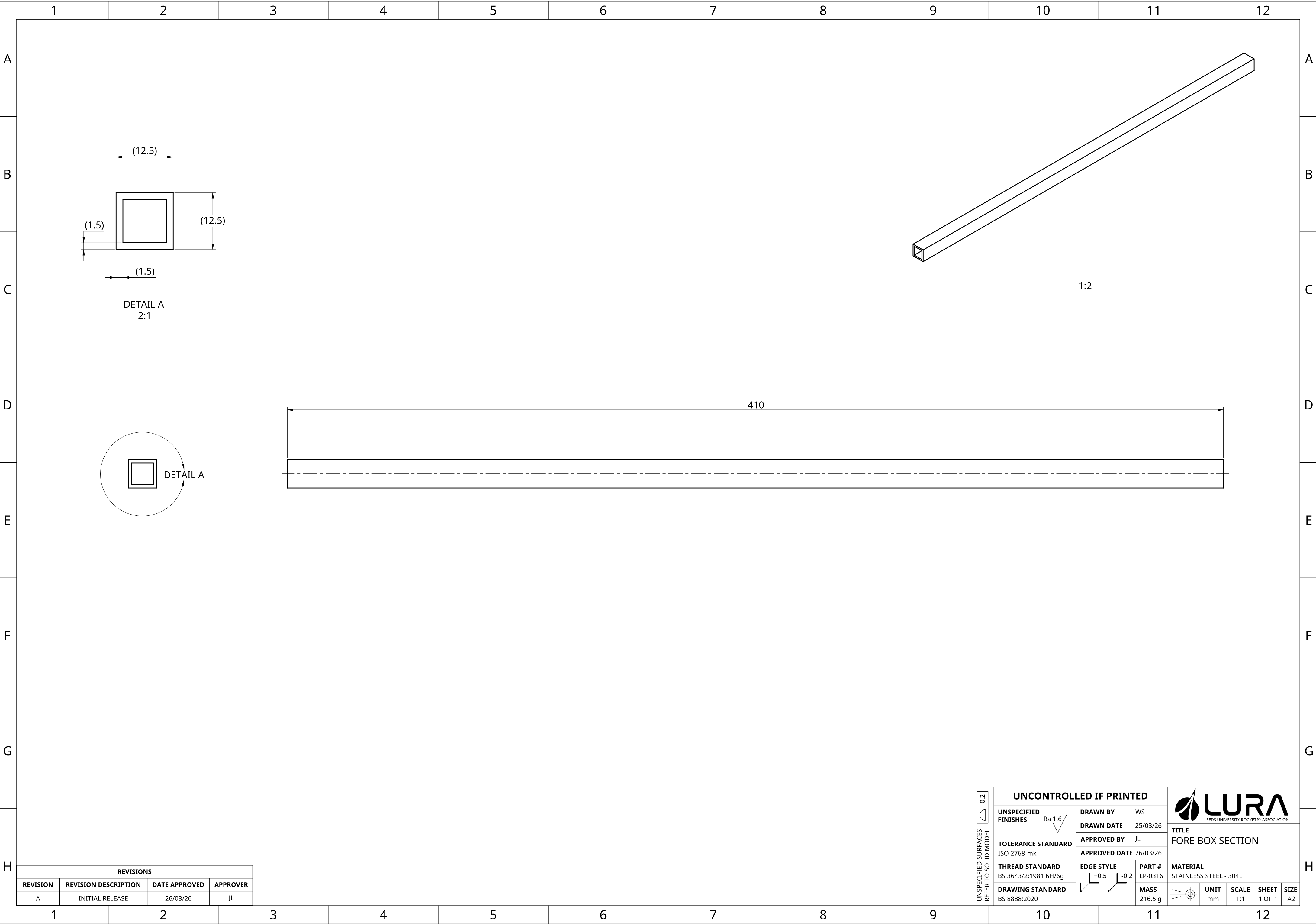


| REVISIONS |                      |               |          |
|-----------|----------------------|---------------|----------|
| REVISION  | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
| A         | INITIAL RELEASE      | 02/04/26      | JL       |

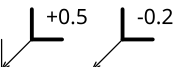
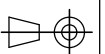
| UNCONTROLLED IF PRINTED                      |                      |                      |               | <br>LEEDS UNIVERSITY ROCKETRY ASSOCIATION |                   |                                  |        |
|----------------------------------------------|----------------------|----------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------|--------|
| UNSPECIFIED SURFACES<br>REFER TO SOLID MODEL | UNSPECIFIED FINISHES | Ra 1.6               | DRAWN BY      | DK                                                                                                                             | TITLE<br>CHAMBER  |                                  |        |
|                                              | TOLERANCE STANDARD   | ISO 2768-mk          | DRAWN DATE    | 31/03/26                                                                                                                       |                   |                                  |        |
|                                              | THREAD STANDARD      | BS 3643/2:1981 6H/6g | APPROVED BY   | JL                                                                                                                             | PART #<br>LP-0362 |                                  |        |
|                                              | DRAWING STANDARD     | BS 8888:2020         | APPROVED DATE | 02/04/26                                                                                                                       |                   |                                  |        |
| EDGE STYLE                                   |                      |                      |               | ±0.5                                                                                                                           | ±0.2              | MATERIAL<br>ALUMINIUM - ALS110MG |        |
|                                              |                      |                      |               |                                                                                                                                |                   |                                  |        |
|                                              |                      |                      |               | MASS                                                                                                                           | 906.3 g           | UNIT                             | mm     |
|                                              |                      |                      |               | SCALE                                                                                                                          | 1:2               | SHEET                            | 1 OF 2 |
|                                              |                      |                      |               | SIZE                                                                                                                           | A2                |                                  |        |

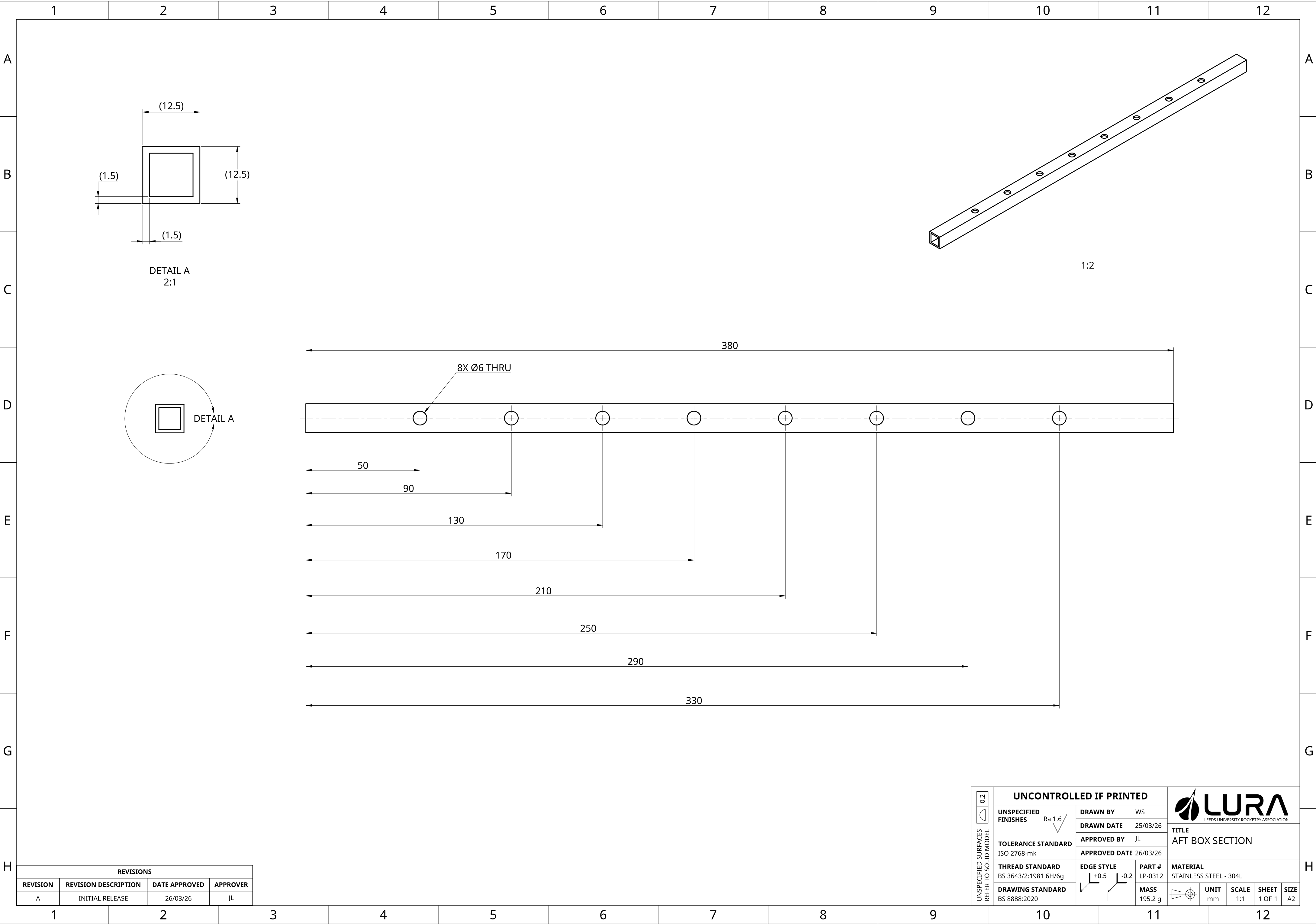




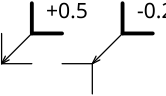
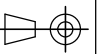


| REVISIONS |                      |               |          |
|-----------|----------------------|---------------|----------|
| REVISION  | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
| A         | INITIAL RELEASE      | 26/03/26      | JL       |

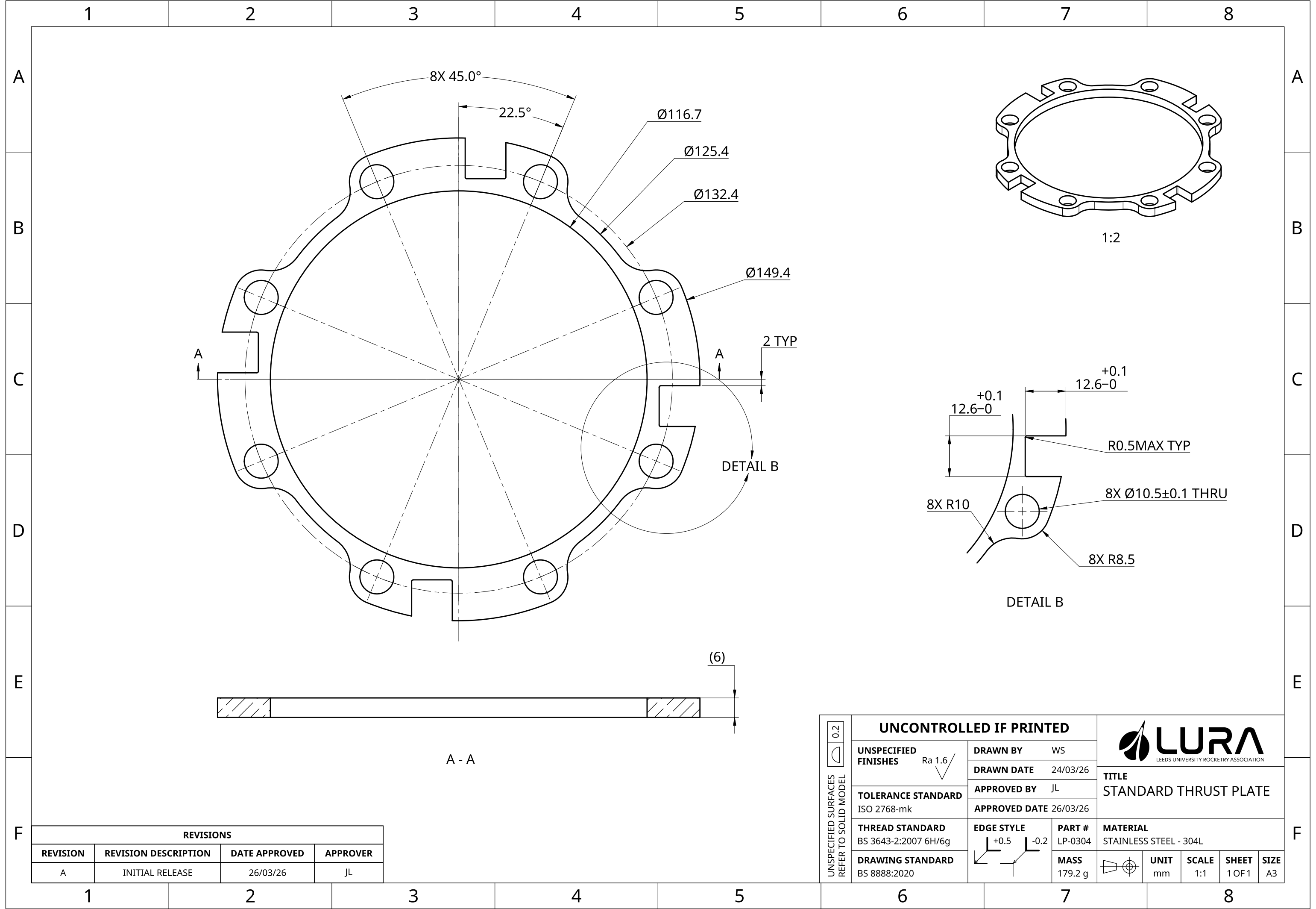
|                                              |                                                                                                                      |                                                                                                     |                                                                                       |                                                                                                                                |              |                 |            |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|------------|
| UNSPECIFIED SURFACES<br>REFER TO SOLID MODEL | UNCONTROLLED IF PRINTED                                                                                              |                                                                                                     |                                                                                       | <br>LEEDS UNIVERSITY ROCKETRY ASSOCIATION |              |                 |            |
|                                              | UNSPECIFIED FINISHES<br>Ra 1.6  | DRAWN BY<br>WS                                                                                      |                                                                                       | TITLE<br>FORE BOX SECTION                                                                                                      |              |                 |            |
|                                              |                                                                                                                      | DRAWN DATE<br>25/03/26                                                                              |                                                                                       |                                                                                                                                |              |                 |            |
|                                              | TOLERANCE STANDARD<br>ISO 2768-mk                                                                                    | APPROVED BY<br>JL                                                                                   |                                                                                       |                                                                                                                                |              |                 |            |
|                                              |                                                                                                                      | APPROVED DATE<br>26/03/26                                                                           |                                                                                       |                                                                                                                                |              |                 |            |
|                                              | THREAD STANDARD<br>BS 3643/2:1981 6H/6g                                                                              | EDGE STYLE<br> | PART #<br>LP-0316                                                                     | MATERIAL<br>STAINLESS STEEL - 304L                                                                                             |              |                 |            |
| DRAWING STANDARD<br>BS 8888:2020             |                                                                                                                      | MASS<br>216.5 g                                                                                     |  | UNIT<br>mm                                                                                                                     | SCALE<br>1:1 | SHEET<br>1 OF 1 | SIZE<br>A2 |

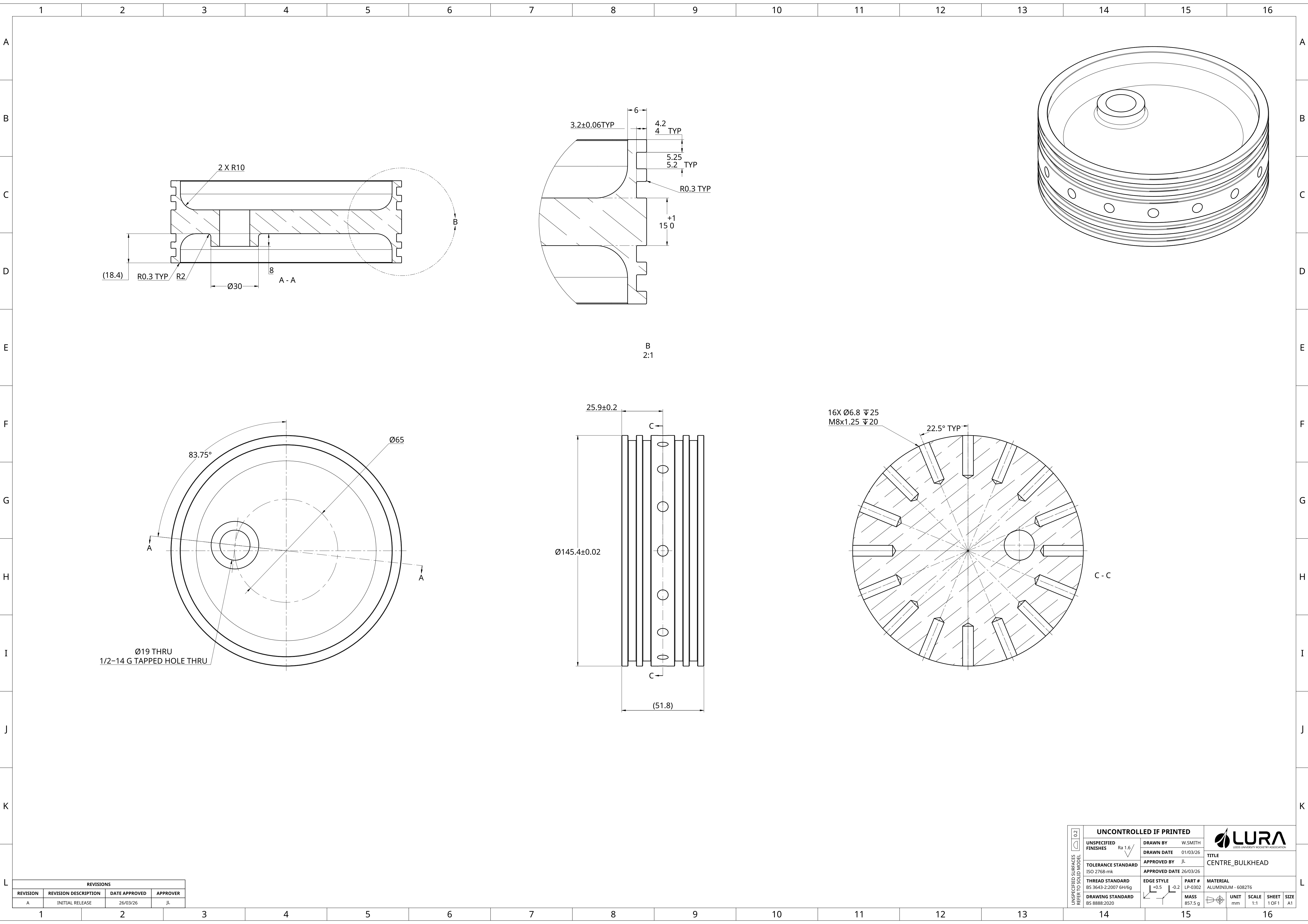


| REVISIONS |                      |               |          |
|-----------|----------------------|---------------|----------|
| REVISION  | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
| A         | INITIAL RELEASE      | 26/03/26      | JL       |

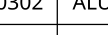
|                                              |                         |                      |                                                                                                                                |         |                                                                                       |                        |
|----------------------------------------------|-------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------|------------------------|
| UNSPECIFIED SURFACES<br>REFER TO SOLID MODEL | UNCONTROLLED IF PRINTED |                      | <br>LEEDS UNIVERSITY ROCKETRY ASSOCIATION |         |                                                                                       |                        |
|                                              | UNSPECIFIED FINISHES    | Ra 1.6               |                                                                                                                                |         |                                                                                       |                        |
|                                              | TOLERANCE STANDARD      | ISO 2768-mk          |                                                                                                                                |         |                                                                                       |                        |
|                                              | THREAD STANDARD         | BS 3643/2:1981 6H/6g | EDGE STYLE                                                                                                                     | PART #  |                                                                                       |                        |
|                                              | DRAWING STANDARD        | BS 8888:2020         |                                           | LP-0312 |                                                                                       |                        |
|                                              |                         |                      |                                                                                                                                | MASS    |  | MATERIAL               |
|                                              |                         |                      |                                                                                                                                | 195.2 g | UNIT                                                                                  | STAINLESS STEEL - 304L |
|                                              |                         |                      |                                                                                                                                |         | mm                                                                                    |                        |
|                                              |                         |                      |                                                                                                                                |         | SCALE                                                                                 |                        |
|                                              |                         |                      |                                                                                                                                |         | 1:1                                                                                   |                        |
|                                              |                         |                      |                                                                                                                                |         | SHEET                                                                                 |                        |
|                                              |                         |                      |                                                                                                                                |         | 1 OF 1                                                                                |                        |
|                                              |                         |                      |                                                                                                                                |         | SIZE                                                                                  |                        |
|                                              |                         |                      |                                                                                                                                |         | A2                                                                                    |                        |

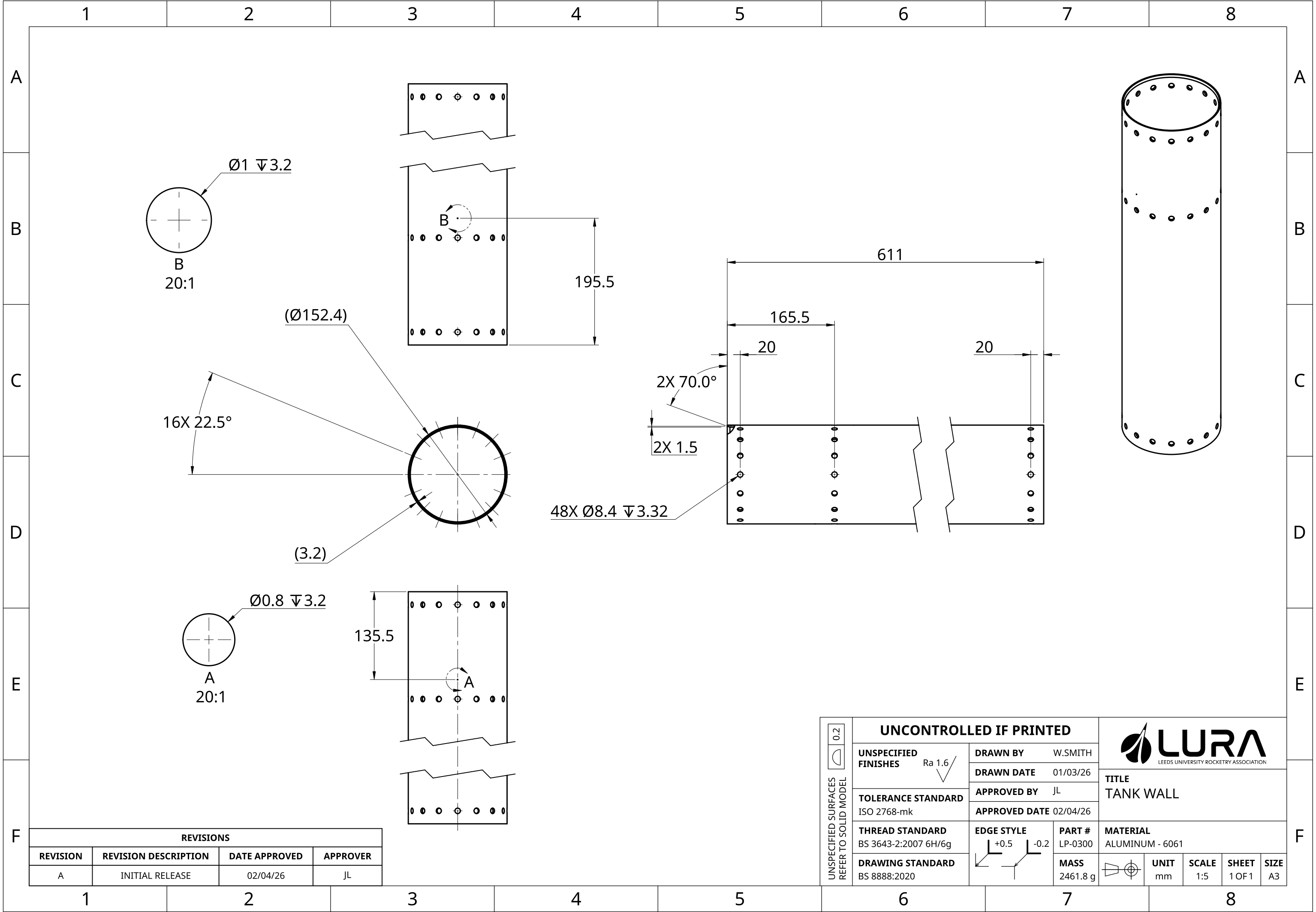


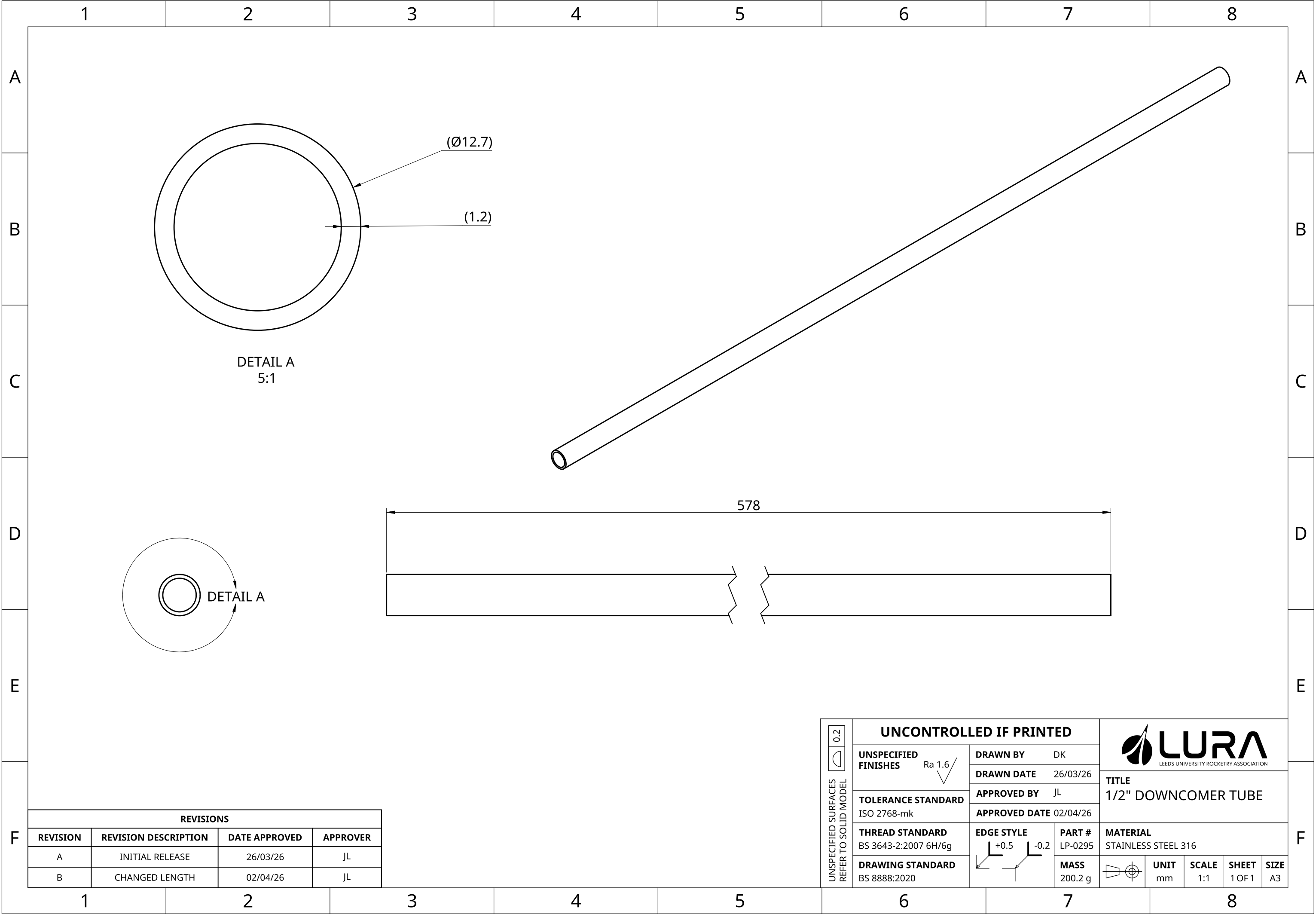




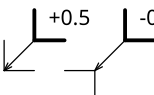
| REVISIONS |                      |               |          |
|-----------|----------------------|---------------|----------|
| REVISION  | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
| A         | INITIAL RELEASE      | 26/03/26      | JL       |

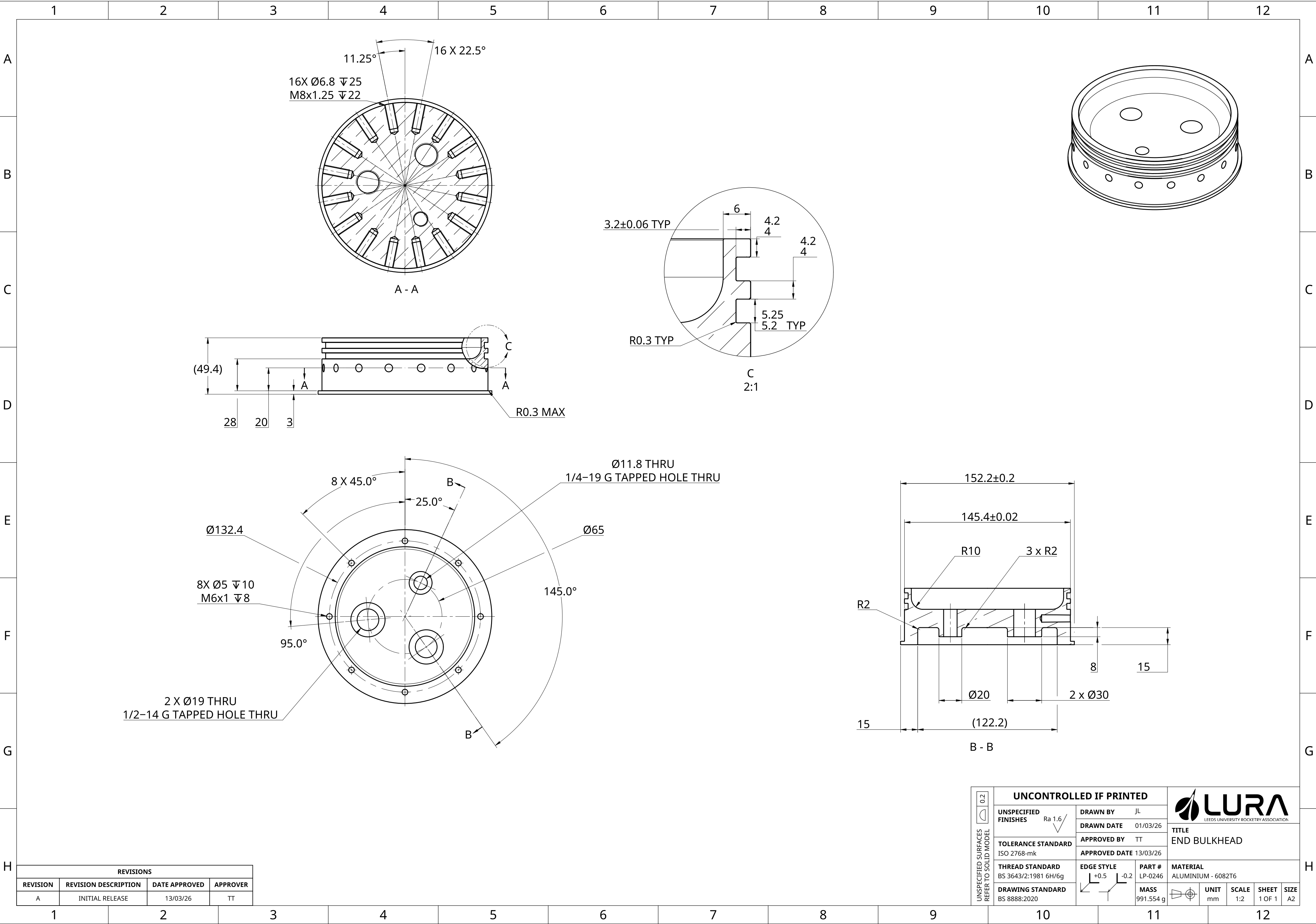
|                                              |                                         |                         |                                                                                       |  |                                                                                       |                                                                                                                                |                                |  |              |  |                 |  |            |
|----------------------------------------------|-----------------------------------------|-------------------------|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--|--------------|--|-----------------|--|------------|
| 0.2                                          |                                         | UNCONTROLLED IF PRINTED |                                                                                       |  |                                                                                       | <br>LEEDS UNIVERSITY ROCKETRY ASSOCIATION |                                |  |              |  |                 |  |            |
| UNSPECIFIED SURFACES<br>REFER TO SOLID MODEL | UNSPECIFIED FINISHES<br>Ra 1.6          |                         | DRAWN BY<br>W.SMITH                                                                   |  | DRAWN DATE<br>01/03/26                                                                |                                                                                                                                | TITLE<br>CENTRE_BULKHEAD       |  |              |  |                 |  |            |
|                                              | TOLERANCE STANDARD<br>ISO 2768-mk       |                         | APPROVED BY<br>JL                                                                     |  | APPROVED DATE<br>26/03/26                                                             |                                                                                                                                |                                |  |              |  |                 |  |            |
|                                              | THREAD STANDARD<br>BS 3643-2:2007 6H/6g |                         | EDGE STYLE<br>+0.5 -0.2                                                               |  | PART #<br>LP-0302                                                                     |                                                                                                                                | MATERIAL<br>ALUMINIUM - 6082T6 |  |              |  |                 |  |            |
|                                              | DRAWING STANDARD<br>BS 8888:2020        |                         |  |  | MASS<br>857.5 g                                                                       |                                                                                                                                |                                |  |              |  |                 |  |            |
|                                              |                                         |                         |                                                                                       |  |  |                                                                                                                                | UNIT<br>mm                     |  | SCALE<br>1:1 |  | SHEET<br>1 OF 1 |  | SIZE<br>A1 |



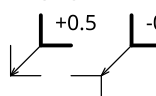


| REVISIONS |                      |               |          |
|-----------|----------------------|---------------|----------|
| REVISION  | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
| A         | INITIAL RELEASE      | 26/03/26      | JL       |
| B         | CHANGED LENGTH       | 02/04/26      | JL       |

|                                              |                                                                                                                      |                                                                                                               |                                                                                                                                |                                                                                       |                              |              |                 |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------|--------------|-----------------|
| UNSPECIFIED SURFACES<br>REFER TO SOLID MODEL | UNCONTROLLED IF PRINTED                                                                                              |                                                                                                               | <br>LEEDS UNIVERSITY ROCKETRY ASSOCIATION |                                                                                       |                              |              |                 |
|                                              | UNSPECIFIED FINISHES<br>Ra 1.6  | DRAWN BY                                                                                                      | DK                                                                                                                             |                                                                                       | TITLE<br>1/2" DOWNCOMER TUBE |              |                 |
|                                              |                                                                                                                      | DRAWN DATE                                                                                                    | 26/03/26                                                                                                                       |                                                                                       |                              |              |                 |
|                                              | TOLERANCE STANDARD<br>ISO 2768-mk                                                                                    | APPROVED BY                                                                                                   | JL                                                                                                                             |                                                                                       |                              |              |                 |
|                                              |                                                                                                                      | APPROVED DATE                                                                                                 | 02/04/26                                                                                                                       |                                                                                       |                              |              |                 |
|                                              | THREAD STANDARD<br>BS 3643-2:2007 6H/6g                                                                              | EDGE STYLE<br> +0.5 -0.2 | PART #<br>LP-0295                                                                                                              | MATERIAL<br>STAINLESS STEEL 316                                                       |                              |              |                 |
|                                              | DRAWING STANDARD<br>BS 8888:2020                                                                                     |                                                                                                               | MASS<br>200.2 g                                                                                                                |  | UNIT<br>mm                   | SCALE<br>1:1 | SHEET<br>1 OF 1 |



| REVISIONS |                      |               |          |
|-----------|----------------------|---------------|----------|
| REVISION  | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
| A         | INITIAL RELEASE      | 13/03/26      | TT       |

|                                              |                         |                                                                                              |               |                                                                                                                                |                                                                                       |          |        |       |      |
|----------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------|--------|-------|------|
| UNSPECIFIED SURFACES<br>REFER TO SOLID MODEL | UNCONTROLLED IF PRINTED |                                                                                              |               | <br>LEEDS UNIVERSITY ROCKETRY ASSOCIATION |                                                                                       |          |        |       |      |
|                                              | UNSPECIFIED FINISHES    | Ra 1.6  | DRAWN BY      | JL                                                                                                                             | TITLE<br>END BULKHEAD                                                                 |          |        |       |      |
|                                              |                         |                                                                                              | DRAWN DATE    | 01/03/26                                                                                                                       |                                                                                       |          |        |       |      |
|                                              | TOLERANCE STANDARD      | ISO 2768-mk                                                                                  | APPROVED BY   | TT                                                                                                                             |                                                                                       |          |        |       |      |
|                                              |                         |                                                                                              | APPROVED DATE | 13/03/26                                                                                                                       |                                                                                       |          |        |       |      |
|                                              | THREAD STANDARD         | BS 3643/2:1981 6H/6g                                                                         | EDGE STYLE    |  +0.5 -0.2                                | PART #                                                                                | MATERIAL |        |       |      |
| DRAWING STANDARD                             | BS 8888:2020            |                                                                                              |               | LP-0246                                                                                                                        | ALUMINIUM - 6082T6                                                                    |          |        |       |      |
|                                              |                         |                                                                                              |               | MASS                                                                                                                           |  | UNIT     | SCALE  | SHEET | SIZE |
|                                              |                         |                                                                                              |               | 991.554 g                                                                                                                      | mm                                                                                    | 1:2      | 1 OF 1 | A2    |      |

Ø19 ±20  
1/2-14 G TAPPED HOLE ±18

Ø18.5 ±69.85

Ø11.8 ±16  
1/4-19 G TAPPED HOLE ±16

A - A

1

3

(Ø28.6)

A

A

15

15

87.5

108

25

25

#### REVISIONS

| REVISION | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
|----------|----------------------|---------------|----------|
| A        | INITIAL RELEASE      | 27/03/26      | JL       |

#### UNCONTROLLED IF PRINTED

UNSPECIFIED FINISHES Ra 1.6

TOLERANCE STANDARD  
ISO 2768-mk

THREAD STANDARD  
BS 3643-2:2007 6H/6g

DRAWING STANDARD  
BS 8888:2020

DRAWN BY MJ

DRAWN DATE 26/03/26

APPROVED BY JL

APPROVED DATE 27/03/26

EDGE STYLE

+0.5 -0.2

PART #

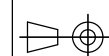
LP-0338

MASS  
112.6 g



TITLE  
SOLID IGNITOR CASING

MATERIAL  
ALUMINUM - 6061

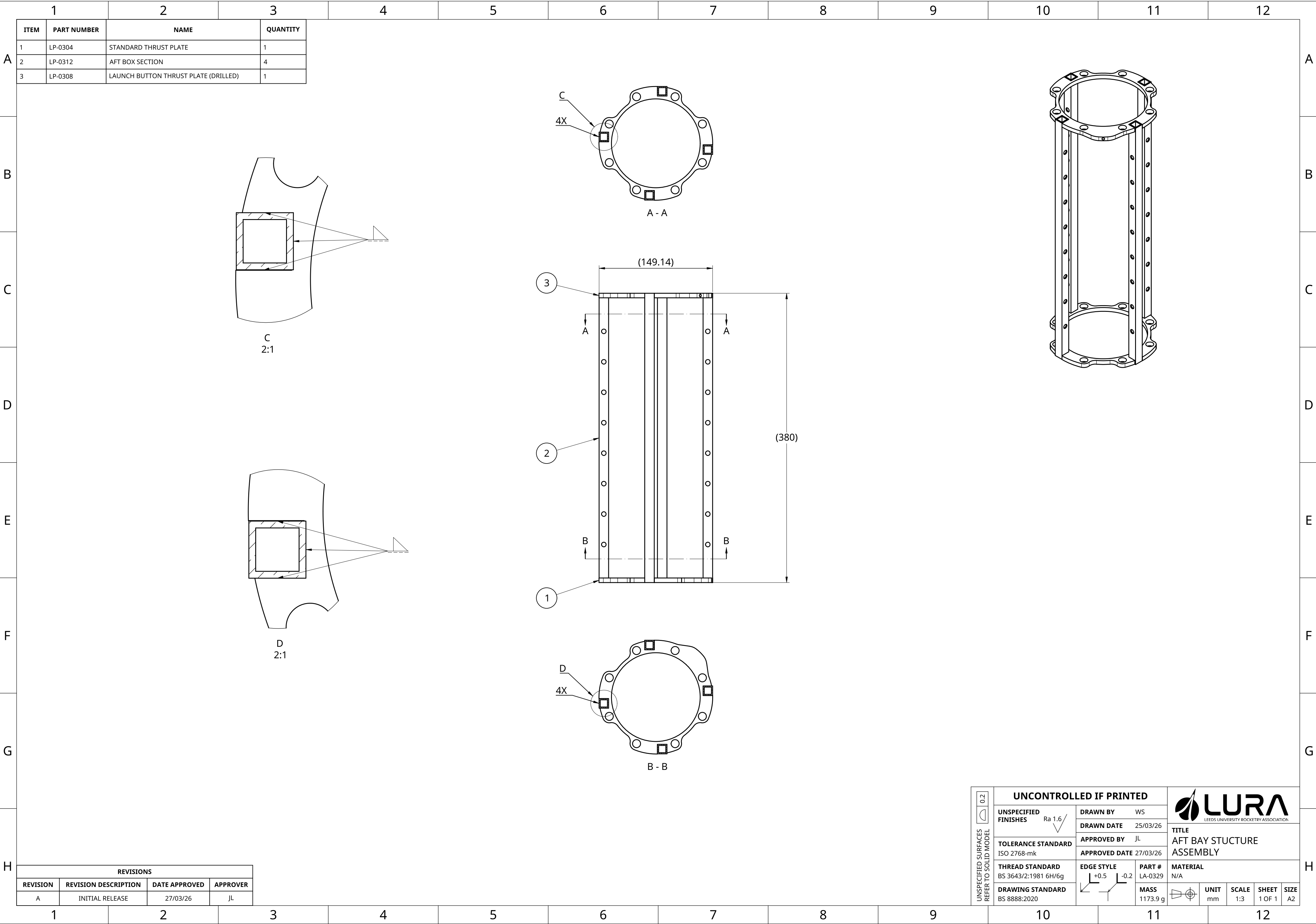


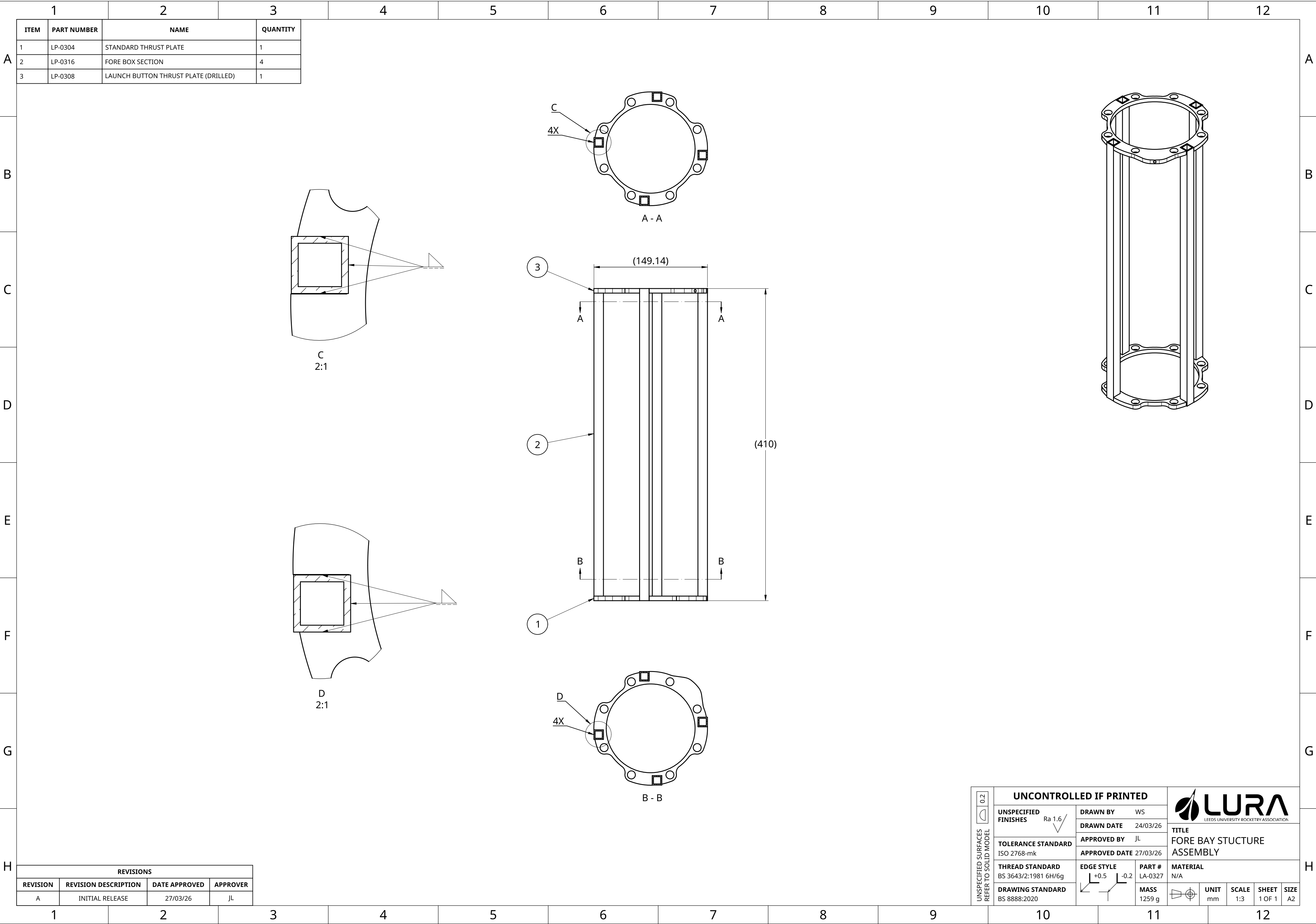
UNIT  
mm

SCALE  
1:1

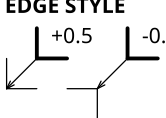
SHEET  
1 OF 1

SIZE  
A3

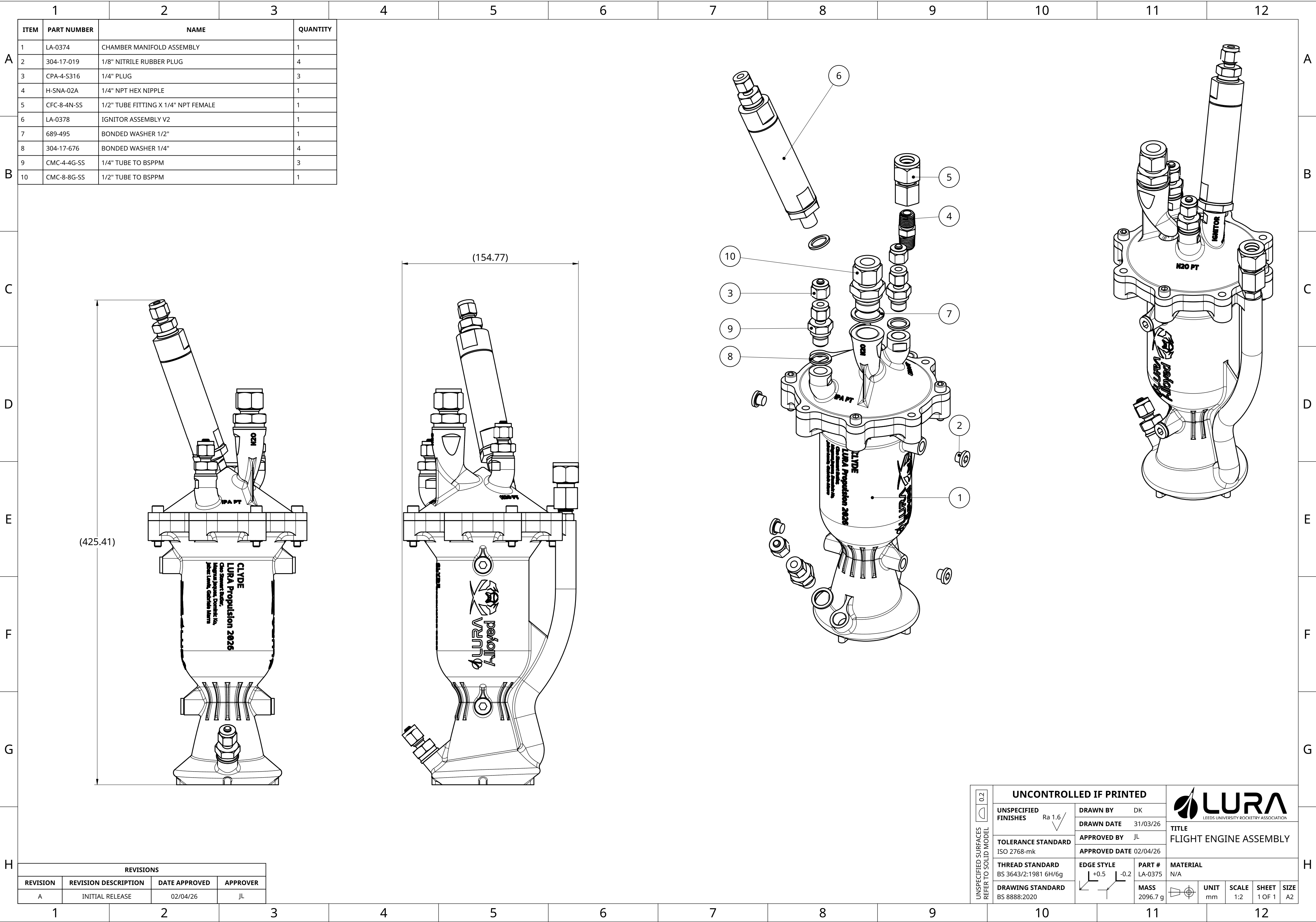


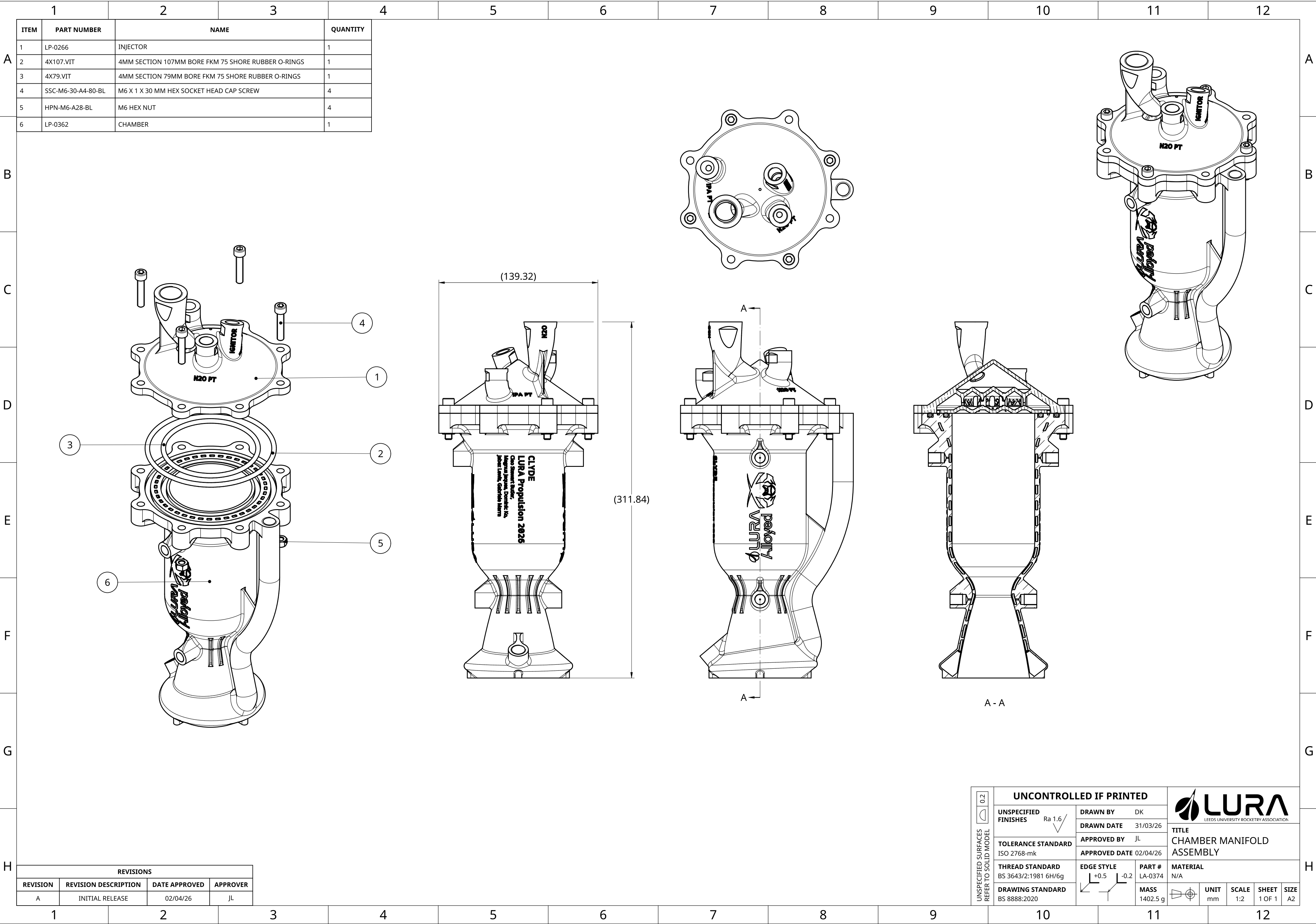


| REVISIONS |                      |               |          |
|-----------|----------------------|---------------|----------|
| REVISION  | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
| A         | INITIAL RELEASE      | 27/03/26      | JL       |

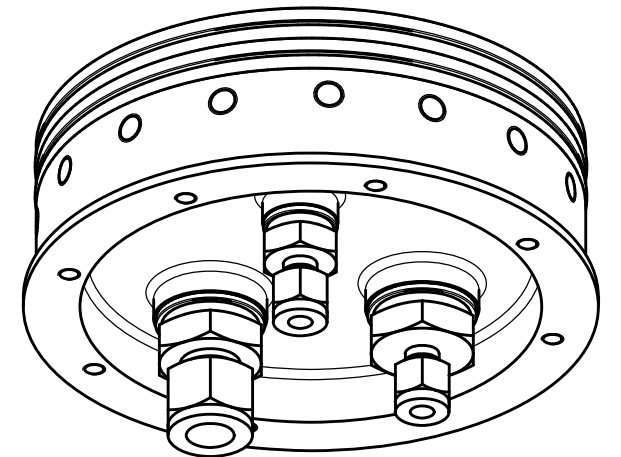
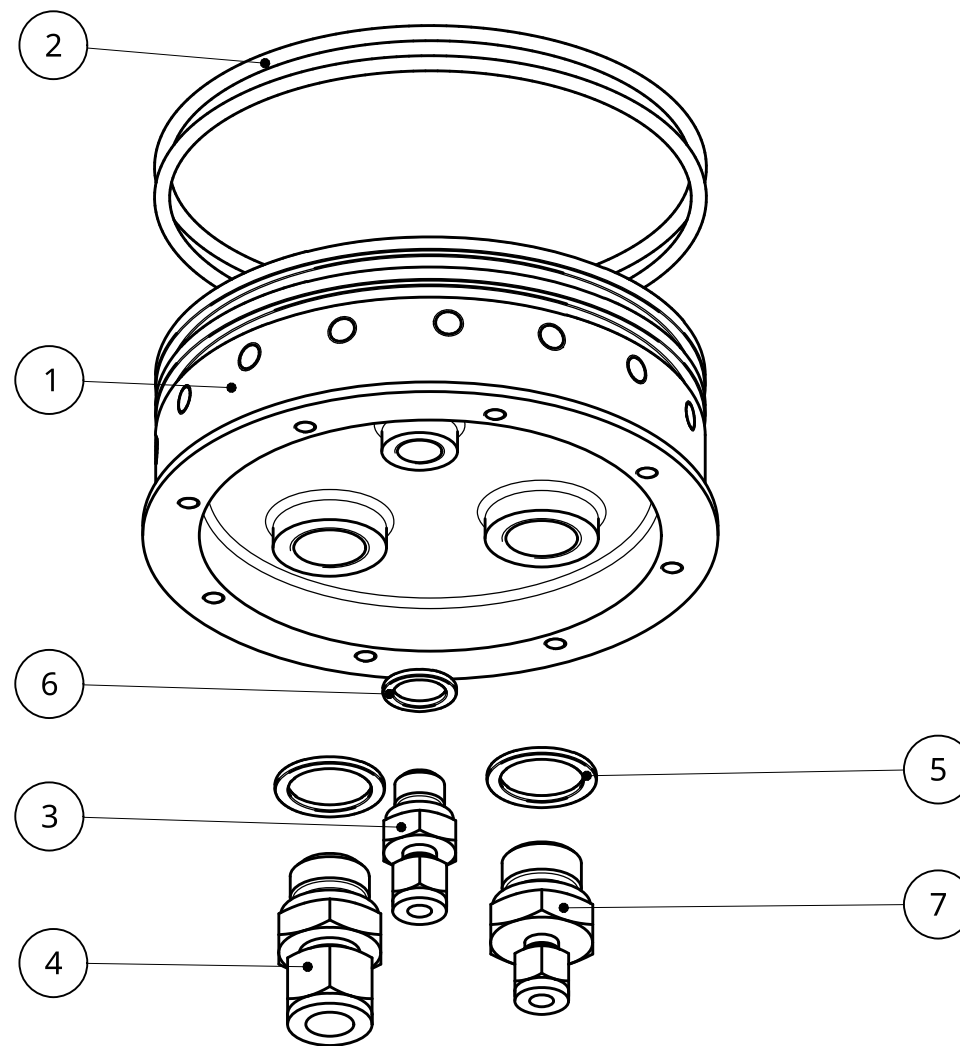
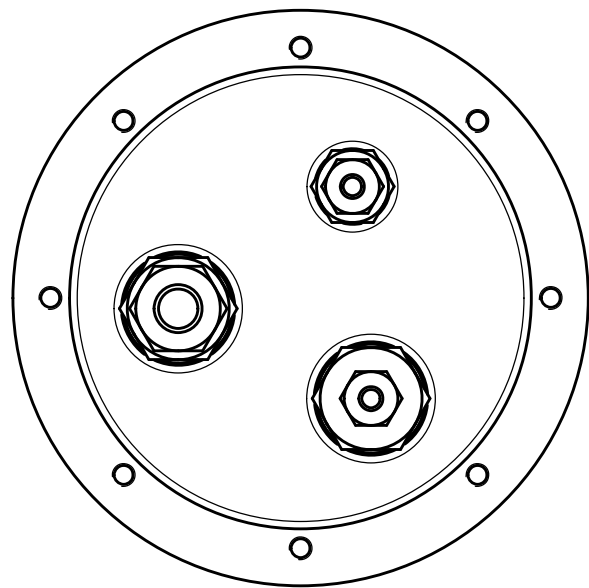
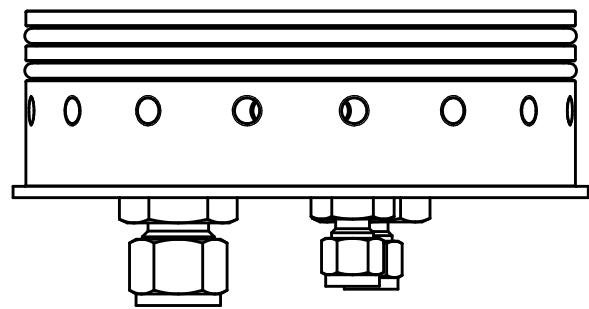
|                                              |                                                                                                                      |                                         |                |                                                                                                                                |                                                                                       |                                        |  |  |  |            |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------|--|--|--|------------|
| UNSPECIFIED SURFACES<br>REFER TO SOLID MODEL | UNCONTROLLED IF PRINTED                                                                                              |                                         |                | <br>LEEDS UNIVERSITY ROCKETRY ASSOCIATION |                                                                                       |                                        |  |  |  |            |
|                                              | UNSPECIFIED FINISHES<br>Ra 1.6  | DRAWN BY                                |                | WS                                                                                                                             |                                                                                       | TITLE<br>FORE BAY STUCTURE<br>ASSEMBLY |  |  |  |            |
|                                              |                                                                                                                      | DRAWN DATE                              |                | 24/03/26                                                                                                                       |                                                                                       |                                        |  |  |  |            |
|                                              |                                                                                                                      | APPROVED BY                             |                | JL                                                                                                                             |                                                                                       |                                        |  |  |  |            |
|                                              | TOLERANCE STANDARD<br>ISO 2768-mk                                                                                    | APPROVED DATE                           |                | 27/03/26                                                                                                                       |                                                                                       | MATERIAL<br>N/A                        |  |  |  |            |
|                                              |                                                                                                                      | THREAD STANDARD<br>BS 3643/2:1981 6H/6g | EDGE STYLE     |                                                                                                                                | PART #                                                                                |                                        |  |  |  |            |
|                                              |                                 |                                         | LA-0327        |                                                                                                                                |                                                                                       |                                        |  |  |  |            |
|                                              | DRAWING STANDARD<br>BS 8888:2020                                                                                     |                                         | MASS<br>1259 g |                                                                                                                                |  |                                        |  |  |  | UNIT<br>mm |







| 1    |             | 2                                                      | 3        |
|------|-------------|--------------------------------------------------------|----------|
| ITEM | PART NUMBER | NAME                                                   | QUANTITY |
| 1    | LP-0246     | END BULKHEAD                                           | 1        |
| 2    | 4X136.NBR90 | 4MM SECTION 136MM BORE NITRILE 90 SHORE RUBBER O-RINGS | 2        |
| 3    | CMC-4-4G-SS | 1/4" TUBE TO BSPPM                                     | 1        |
| 4    | CMC-8-8G-SS | 1/2" TUBE TO BSPPM                                     | 1        |
| 5    | CU-8-VCR-2  | COPPER GASKET 1/2"                                     | 2        |
| 6    | CU-4-VCR-2  | COPPER GASKET 1/4"                                     | 1        |
| 7    | CMC-4-8G-SS | 1/4" TUBE X 1/2" BSPPM                                 | 1        |



| REVISIONS |                      |               |          |
|-----------|----------------------|---------------|----------|
| REVISION  | REVISION DESCRIPTION | DATE APPROVED | APPROVER |
| A         | INITIAL RELEASE      | 02/04/26      | JL       |

|                                              |                                      |                             |                  |                                                              |                 |              |                                 |            |
|----------------------------------------------|--------------------------------------|-----------------------------|------------------|--------------------------------------------------------------|-----------------|--------------|---------------------------------|------------|
| UNSPECIFIED SURFACES<br>REFER TO SOLID MODEL | <div><div>0.2</div><div></div></div> | UNCONTROLLED IF PRINTED     |                  | <div></div> <div>LEEDS UNIVERSITY ROCKETRY ASSOCIATION</div> |                 |              |                                 |            |
|                                              |                                      | UNSPECIFIED FINISHES Ra 1.6 | DRAWN BY DK      |                                                              |                 |              | TITLE<br>FORE BULKHEAD ASSEMBLY |            |
|                                              | DRAWN DATE 22/03/26                  |                             |                  |                                                              |                 |              |                                 |            |
|                                              | APPROVED BY JL                       |                             |                  |                                                              |                 |              |                                 |            |
|                                              | APPROVED DATE 02/04/26               |                             |                  |                                                              |                 |              |                                 |            |
|                                              | TOLERANCE STANDARD<br>ISO 2768-mk    |                             | EDGE STYLE       | PART #<br>LA-0320                                            | MATERIAL<br>N/A |              |                                 |            |
| THREAD STANDARD<br>BS 3643-2:2007 6H/6g      |                                      |                             | +0.5 -0.2        |                                                              |                 |              |                                 |            |
| DRAWING STANDARD<br>BS 8888:2020             |                                      |                             | MASS<br>1286.3 g |                                                              | UNIT<br>mm      | SCALE<br>1:2 | SHEET<br>1 OF 1                 | SIZE<br>A3 |

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|





