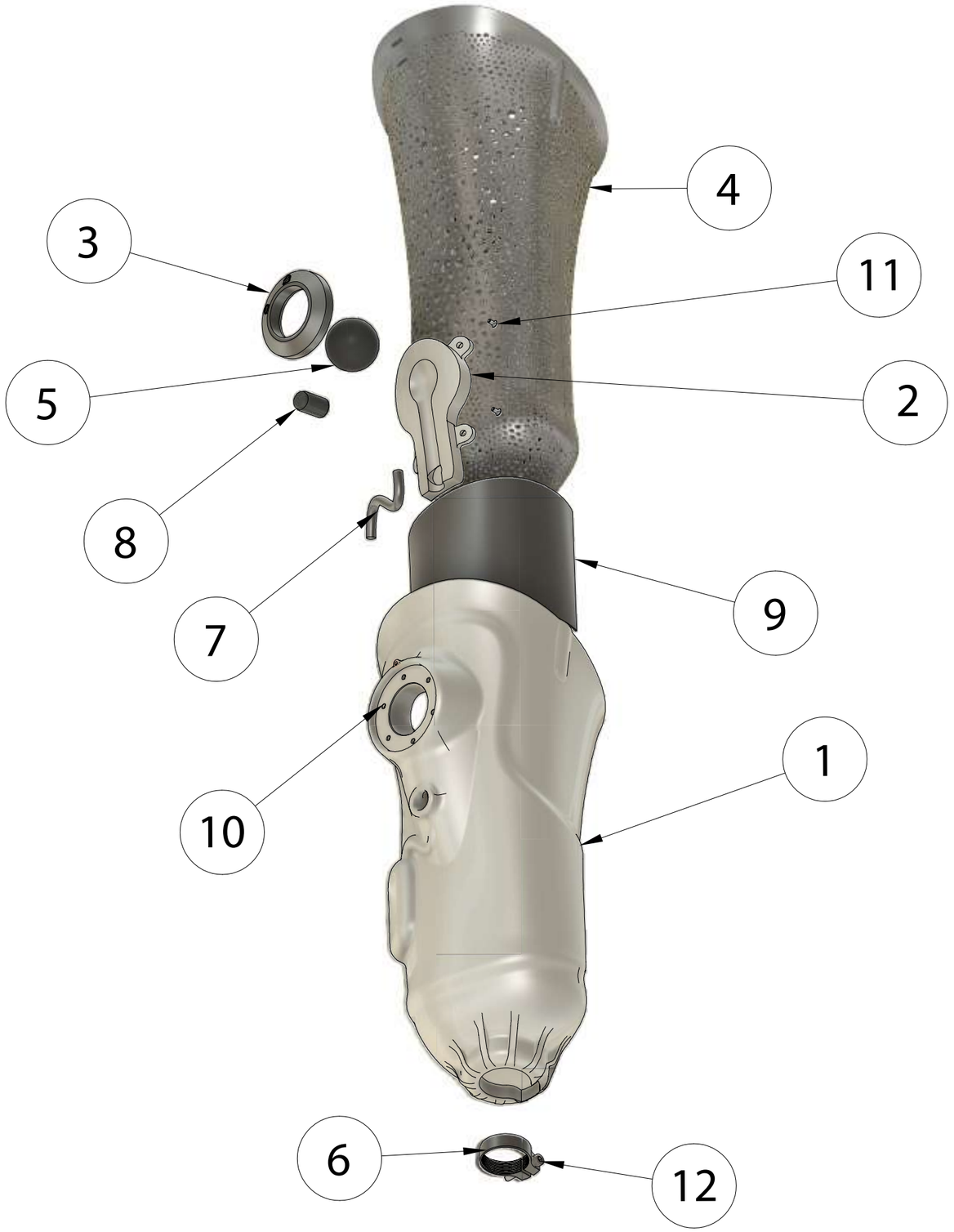



# Airliner.

## TECHNICAL DRAWINGS

Jordan Greensill - n11578955




AIRLINER SOCKET SYSTEM

# AIRLINER EXPLODED VIEW

PART/ASSY. NUMBER: ALL | REV. 1 | SHEET 1 OF 4

MATERIAL: VARIOUS
COLOUR: VARIOUS
FINISH: VARIOUS

DRAWN BY: JG
DATE: 20/10/2026
DRAWING NO.: 04

GENERAL TOLERANCES
0.000 ±0.05
0.00 ±0.1
0.0 ±0.2
0 ±0.5
ANGLE ±0.5 °

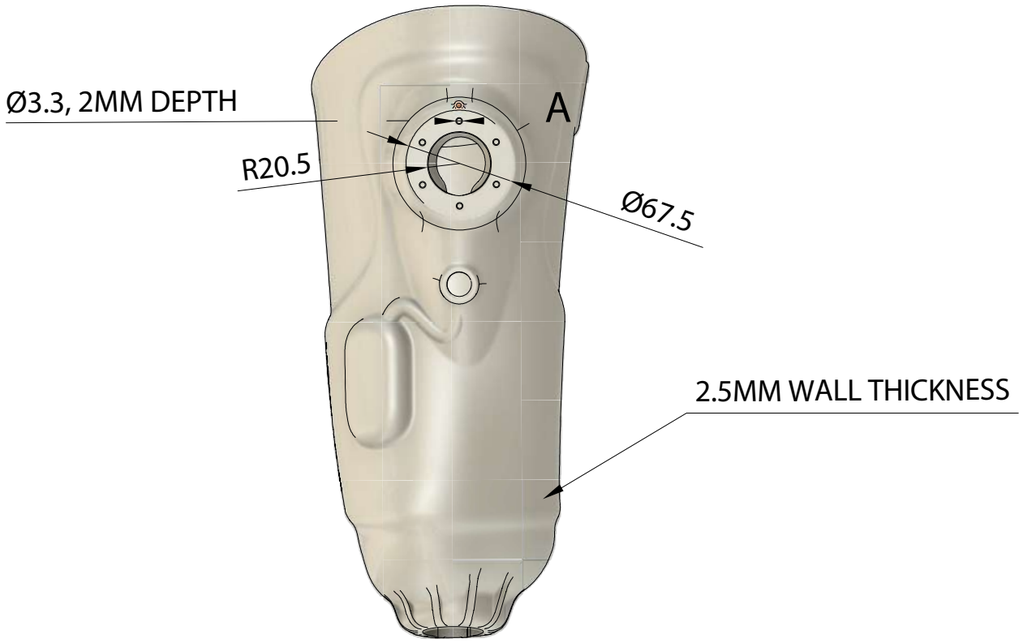
1: 5 | A3 | ALL DIMS. IN MM

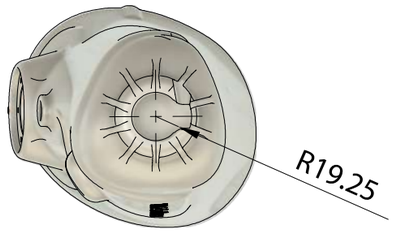
DO NOT SCALE DRAWING

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FREEFORM SURFACES ARE DEFINED BY CAD MODEL.
DIMENSIONS SHOWN ARE FOR REFERENCE OR
CRITICAL TO FUNCTION.




UNDERSIDE



A (1:2)



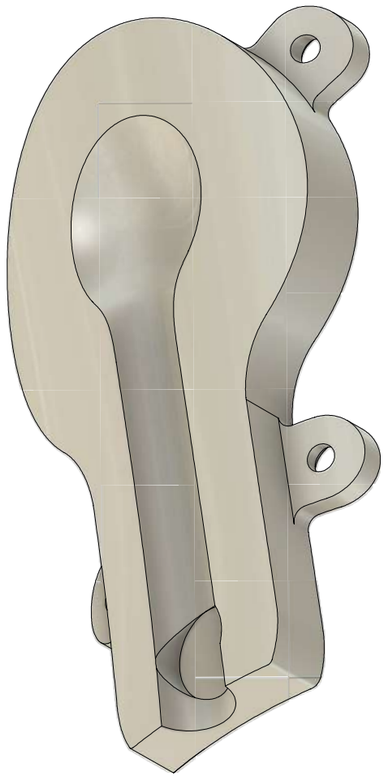

FRONT

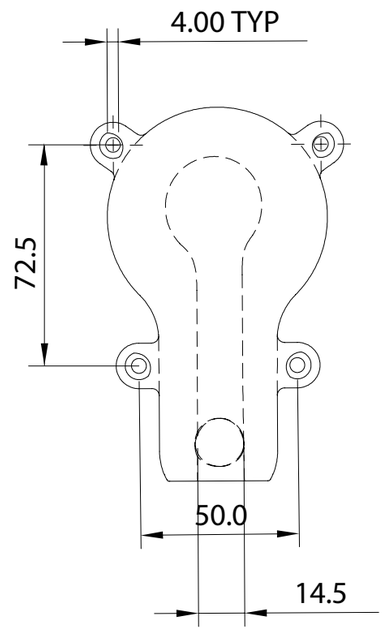



SIDE

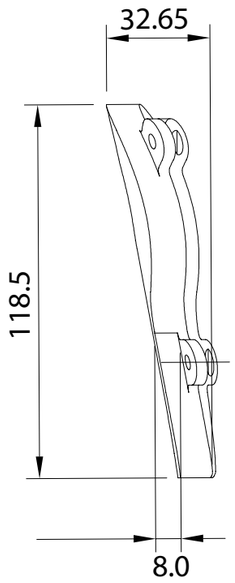
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | AIRLINER SOCKET SYSTEM<br>AIRLINER ANATOMICA BODY | | | MATERIAL<br>POLYBUTYLENE TEREPHTHALATE (PBT) | DRAWN BY<br>JG | GENERAL TOLERANCES<br>0.000 ±0.05<br>0.00 ±0.1<br>0.0 ±0.2<br>0 ±0.5<br>ANGLE ±0.5 ° | 1: 5 | A3 | DO NOT SCALE DRAWING | © JORDAN GREENSILL 2026 |
| | | | | COLOUR<br>PEARLESCENT WHITE | DATE<br>20/10/2026 | | | ALL DIMS. IN MM | | qut.edu.au |
| | PART/ASSY. NUMBER 01 | REV. 1 | SHEET 2 OF 4 | FINISH<br>FDM PRINT | DRAWING NO.<br>01 | | | | | |

FREEFORM SURFACES ARE DEFINED BY CAD MODEL.
DIMENSIONS SHOWN ARE FOR REFERENCE OR
CRITICAL TO FUNCTION.

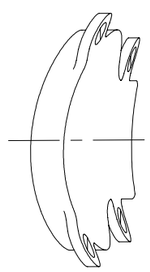





FRONT



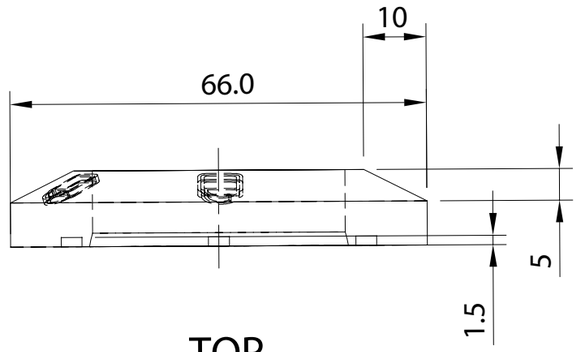

SIDE



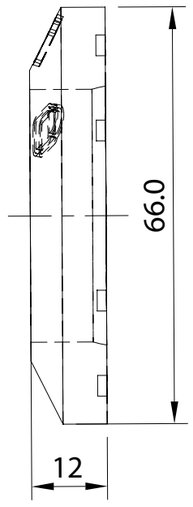
TOP

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AIRLINER SOCKET SYSTEM<br>AIRLINER ANATOMICA CAP<br>PART/ASSY. NUMBER 02 REV. 1 SHEET 3 OF 4 | MATERIAL<br>POLYBUTYLENE TEREPHTHALATE (PBT)<br>COLOUR<br>PEARLESCENT WHITE<br>FINISH<br>FDM PRINT | DRAWN BY<br>JG<br>DATE<br>20/10/2026<br>DRAWING NO.<br>01 | GENERAL TOLERANCES<br>0.000 ±0.05<br>0.00 ±0.1<br>0.0 ±0.2<br>0 ±0.5<br>ANGLE ±0.5 ° | 1: 2 | A3<br>ALL DIMS. IN MM | DO NOT SCALE DRAWING | © JORDAN GREENSILL 2026<br>qut.edu.au |

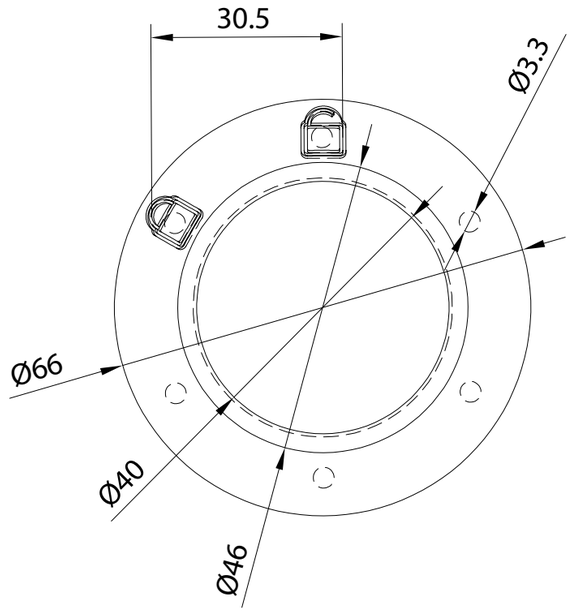





TOP




SIDE




FRONT

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AIRLINER SOCKET SYSTEM<br>AIRLINER ANATOMICA LOCKING DIAL<br>PART/ASSY. NUMBER 03 · REV. 1 · SHEET 4 OF 4 | MATERIAL<br>POLYBUTYLENE TEREPHTHALATE (PBT)<br>COLOUR<br>GLOSS GREY<br>FINISH<br>FDM PRINT | DRAWN BY<br>JG<br>DATE<br>20/10/2026<br>DRAWING NO.<br>03 | GENERAL TOLERANCES<br>0.000 ±0.05<br>0.00 ±0.1<br>0.0 ±0.2<br>0 ±0.5<br>ANGLE ±0.5 ° | 1:1 | A3<br>ALL DIMS. IN MM | DO NOT SCALE DRAWING | © JORDAN GREENSILL 2026<br>qut.edu.au |

# AIRLINER SOCKET SYSTEM

| Part Name | Sub-Assembly | Part Number | Component name | Image (photograph?) | Drawing number | Description | Phase | Total Qty | Material | Primary Process | 2nd process | Part Weight (Approx) - grams | Colour | Texture | Off-the-Shelf / Made to Spec | Supplier | cost / item ($) | Cost / Product ($) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Airliner Anatomica Shell | N | 1 | Airliner Anatomica Shell |  | 1 | Rigid perforated outer shell housing the pump, air bladder and lamination anchor. | In Design | 1 | PBT | FDM Printing | N/A | 580 | Pearlescent White | Matte | Made to Spec | In-house | 17.40 | 17.40 |
| Airliner Anatomica Shell Cap | N | 2 | Airliner Anatomica Shell Cap |  | 2 | Cap fixed to the shell with M3 hardware. | In Design | 1 | PBT | FDM Printing | N/A | 60 | Pearlescent White | Matte | Made to Spec | In-house | 1.80 | 1.80 |
| Locking Dial | N | 3 | Locking Dial |  | 3 | Dial around the pump. Locks out accidental adjustment and water ingress. | In Design | 1 | PBT | FDM Printing | N/A | 20 | Grey | Gloss | Made to Spec | In-house | 0.90 | 0.90 |
| Airliner Cell Liner | N | 4 | Airliner Cell Liner |  | 4 | Washable variable-density lattice liner. | In Design | 1 | TPU (60A) | MJF Printing | Depowdering | 500 | Grey | Matte | Made to Spec | MJF service (TBC) | 250.00 | 250.00 |
| Bulb Pump | N | 5 | Bulb Pump |  | 5 | Hand bulb that inflates the air bladder. | In Production | 1 | PVC / rubber (TBC) | N/A | N/A | 25 | Black | Matte | Off-the-Shelf | Shenzhen Alister Technology Co., Ltd. | 1.00 | 1.00 |
| Lamination Anchor | N | 6 | Lamination Anchor |  | 6 | Stainless lamination anchor connecting the shell to the prosthetic components. | In Production | 1 | 312 Stainless Steel | N/A | N/A | 150 | Silver | Metallic | Off-the-Shelf | Cascade Orthopedic (4PA-R) | 45.00 | 45.00 |
| Air Tube 70mm | N | 7 | Air Tube 70mm |  | 7 | 70 mm air line linking the pump, release valve and bladder. | In Production | 1 | Silicone | N/A | N/A | 1 | Clear | Matte | Off-the-Shelf | Core Electronics (AU) | 0.41 | 0.41 |
| Pressure Release Valve | N | 8 | Pressure Release Valve |  | 8 | Air release (bleed) valve. Deflates the bladder when the dial is unlocked. | In Production | 1 | ABS | N/A | N/A | 10 | Black | Matte | Off-the-Shelf | Ningbo Leyuan Hengyi Electromechanical Technology Co., Ltd | 0.90 | 0.90 |
| Air Bladder | N | 9 | Air Bladder |  | 9 | Inflatable bladder that compresses the liner to tighten the fit. | In Production | 1 | TPU | N/A | N/A | 50 | Grey | Matte | Off-the-Shelf | Dongguan Leixin Plastic And Hardware Products Co., Ltd. | 1.01 | 1.01 |
| M3 Brass Nutsert | N | 10 | M3 Brass Nutsert |  | 10 | Threaded insert for the M3 bolts. | In Production | 4 | Brass | N/A | N/A | 1 | Brass | Metallic | Off-the-Shelf | Dongguan Leixin Plastic And Hardware Products Co., Ltd. | 0.02 | 0.08 |
| M3x10 Countersunk Hex Screw | N | 11 | M3x10 Countersunk Hex Screw |  | 11 | M3 countersunk hex-socket screw, 10 mm. | In Production | 4 | 312 Stainless Steel | N/A | N/A | 1 | Silver | Metallic | Off-the-Shelf | Bolts.co.uk (pack of 100) | 0.14 | 0.56 |
| M5x20 Hex Head Cap Screw | N | 12 | M5x20 Hex Head Cap Screw |  | 12 | M5 hex head screw, 20 mm. Fixes the lamination anchor. | In Production | 1 | 312 Stainless Steel | N/A | N/A | 5 | Silver | Metallic | Off-the-Shelf | RS Components (RS PRO, pack of 100) | 0.40 | 0.40 |
| Total | | | | | | | | 18 | | | | | | | | | | 319.46 |

