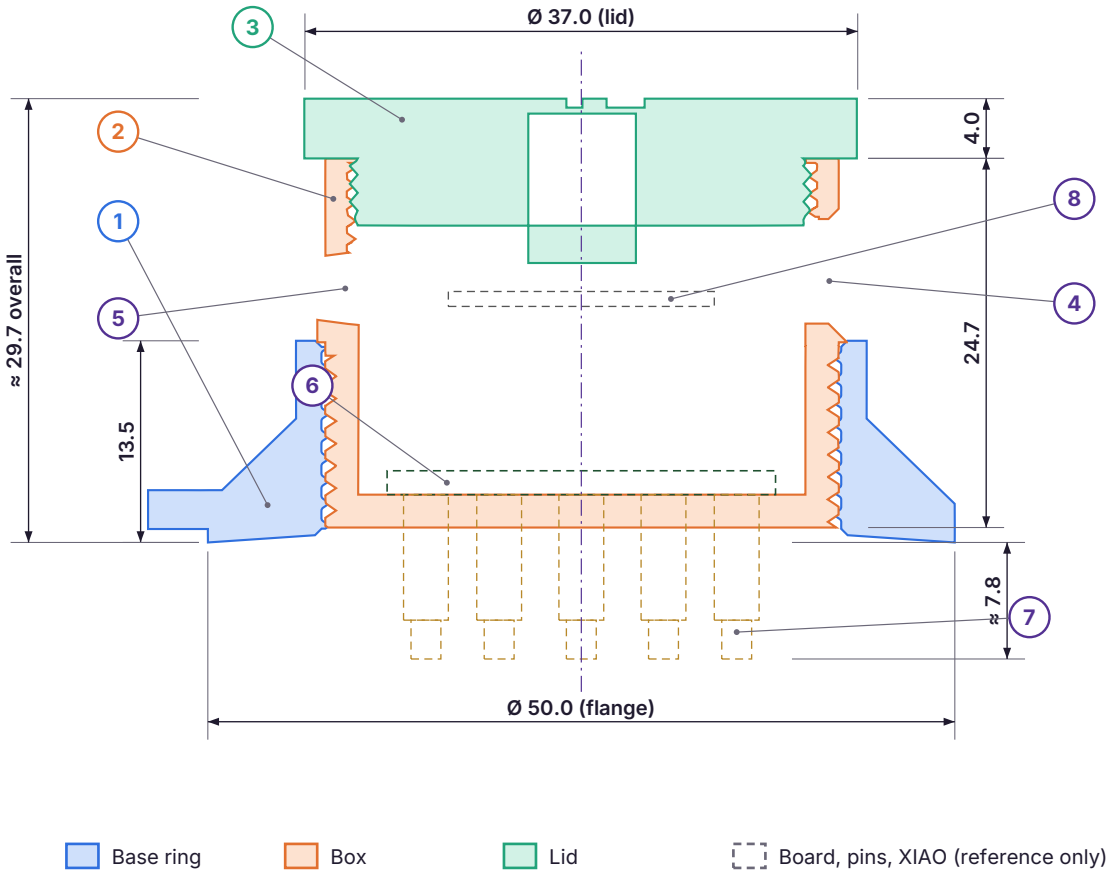
Octopus 16 Enclosure Mechanical & Dimensional Drawing

PIEEG

SECTION A–A · assembled, through both side openings



Key

1. Base ring (PLA)
2. Threaded box (PLA)
3. Screw-on lid (PLA)
4. USB-C opening ≈ 12 × 7
5. Cable opening ≈ 6 × 6
6. Octopus 16 board on the 2.2 mm box floor
7. Pogo pins Ø 4 × 11 (not in plane)
8. XIAO ESP32-S3 (reference)

Notes

- Twist-lock: the box screws into the base ring and the lid into the box. No screws or tools.
- 18 floor holes Ø 4.7 match the 18 pogo pins.
- Overall height depends on how far the box is screwed in; shown seated.
- Dimensions measured from the released STL files.

Doc. No.	OC16ENC-MD-002
Revision	Rev. A · 18 Nov 2026
Units	mm; datum = underside of base ring
SKU	PIA40213P
Source	STL: Base V3, Box V3 USB-C, Lid V3

For research and education only. Not a medical device. Specifications subject to change.

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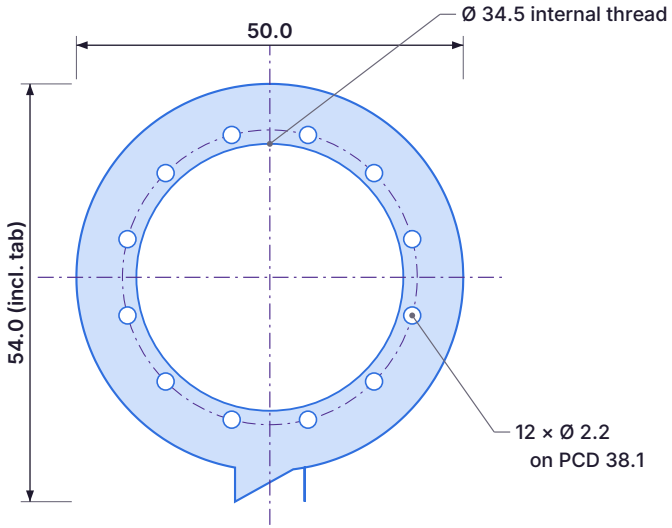
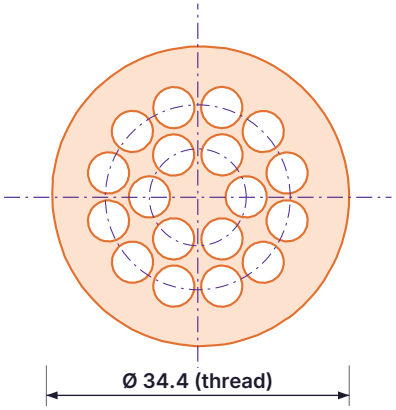
BASE RING · top view



Height 13.5 · flange Ø 50

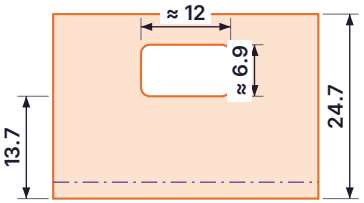
BOX · floor, bottom view



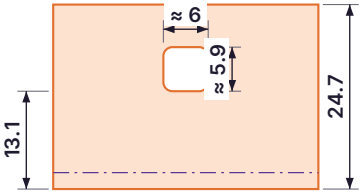
18 × Ø 4.7 · 6 on R 5.5, 12 on R 10.5

BOX · side elevations

openings on the outer wall (approx.)



USB-C side

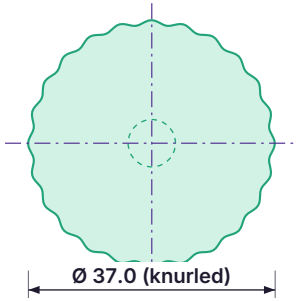


Cable side

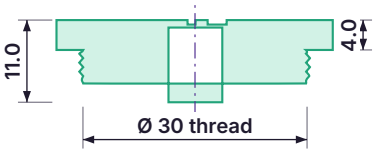
Box Ø 35.5 · floor 2.2 (dashed) · heights from box underside

PART DIMENSIONS	
Base ring	50 × 54 × 13.5 mm
Box	Ø 35.5 × 24.7 mm, floor 2.2 mm
Lid	Ø 37 × 11 mm, post Ø 7.1
Assembled	≈ 50 × 54 × 30 mm
Pin length	≈ 8 mm below base

LID · top view and section



Section through the axis



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