

## **TECHNICAL BULLETIN 14**

**DATE:** 14 October 2025

**PRODUCTS:**

Blue Robotics Watertight Enclosure **aluminum** tubes (2", 3", 4", 5", 6", 8" Series)

- BR-100534-100
- BR-100534-150
- BR-100534-300
- BR-100611-150
- BR-100611-240
- BR-100611-300
- BR-100611-400
- BR-100195-200
- BR-100195-300
- BR-100195-400
- BR-101409-300
- BR-101409-500
- BR-101411-300
- BR-101411-500
- BR-101412-300
- BR-101412-500

**SUBJECT:** Depth Derating for Watertight Enclosure Aluminum Tubes with Racking Grooves

**SUMMARY:** We've identified that the latest version of the Watertight Enclosure **aluminum** tubes has reduced strength due to the addition of two large internal racking grooves. As a result, the maximum rated depth for these tubes is reduced by 50%. Updated depth ratings are provided below.

| Tube Size             | Part Number   | Original Depth Rating | Updated Depth Rating |
|-----------------------|---------------|-----------------------|----------------------|
| 2" Series 100 mm long | BR-100534-100 | 1000 m                | 500 m                |
| 2" Series 150 mm long | BR-100534-150 | 1000 m                | 500 m                |
| 2" Series 300 mm long | BR-100534-300 | 1000 m                | 500 m                |
| 3" Series 150 mm long | BR-100611-150 | 1000 m                | 500 m                |
| 3" Series 240 mm long | BR-100611-240 | 1000 m                | 500 m                |
| 3" Series 300 mm long | BR-100611-300 | 900 m                 | 450 m                |
| 3" Series 400 mm long | BR-100611-400 | 750 m                 | 375 m                |
| 4" Series 200 mm long | BR-100195-200 | 1000 m                | 500 m                |
| 4" Series 300 mm long | BR-100195-300 | 1000 m                | 500 m                |
| 4" Series 400 mm long | BR-100195-400 | 800 m                 | 400 m                |
| 5" Series 300 mm long | BR-101409-300 | 1000 m                | 500 m                |
| 5" Series 500 mm long | BR-101409-500 | 500 m                 | 250 m                |
| 6" Series 300 mm long | BR-101411-300 | 1000 m                | 500 m                |
| 6" Series 500 mm long | BR-101411-500 | 1000 m                | 500 m                |
| 8" Series 300 mm long | BR-101412-300 | 1000 m                | 500 m                |
| 8" Series 500 mm long | BR-101412-500 | 1000 m                | 500 m                |

**IDENTIFICATION:** Aluminum enclosure tubes shipped in orders starting January 2025 may be affected.

Affected tubes have two large “racking” grooves cut into the inner diameter of the tube (see Figure 1).

Acrylic tubes and earlier versions of the aluminum tubes without grooves **are not affected**.

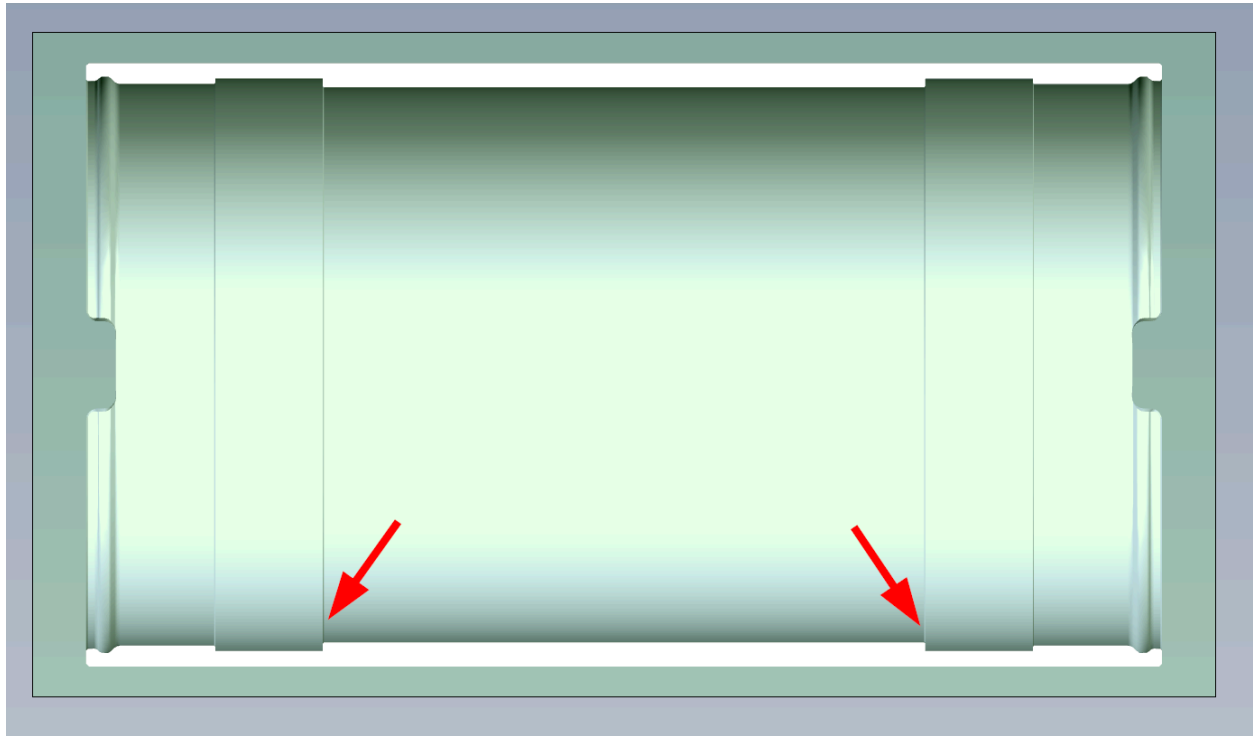


Figure 1. *Cross-section showing location of grooves.*

**CUSTOMER ACTION:**

- If your tube is acrylic or does not have racking grooves, no action is required.
- If your tube has racking grooves, refer to the updated depth ratings above. **It is safe** to continue using affected tubes **within the updated depth limit**.
- If your application requires operating beyond these depths, do not use the affected tubes and [contact Blue Robotics](#) for assistance.

**BLUE ROBOTICS ACTION:** This derating is temporary until redesigned tubes are available. Blue Robotics will provide a refund or store credit for affected tubes that cannot be used within the updated limits.

We sincerely apologize for any inconvenience. Please do not hesitate to [contact us](#) if you have any questions.