

A man with a prosthetic arm is shown in profile, drinking from a clear plastic water bottle. He is wearing a white sleeveless shirt. The background is a warm, out-of-focus outdoor scene with sunlight filtering through trees, creating a bokeh effect. The prosthetic arm is black and glossy, with visible joints and a hand that is gripping the bottle. The overall tone is positive and highlights the functionality of the prosthetic.

**VULCAN  
E-ELBOW**

# VULCAN E-ELBOW

## Advanced Elbow Control for Daily Life

- ◆ The Vulcan E-Elbow is a modular electromechanical elbow system designed for transhumeral applications.
- ◆ Utilizing the Vulcan MyoLink for precise myoelectric control, the device delivers smooth flexion and extension. It enables a more natural range of motion, empowering users in their daily lives and rehabilitation journey.

There are **2 types of Vulcan E-Elbow**:

**Type 1: Long Transhumeral Elbow**



**Type 2: Short Transhumeral Elbow**



### Indications for Use:

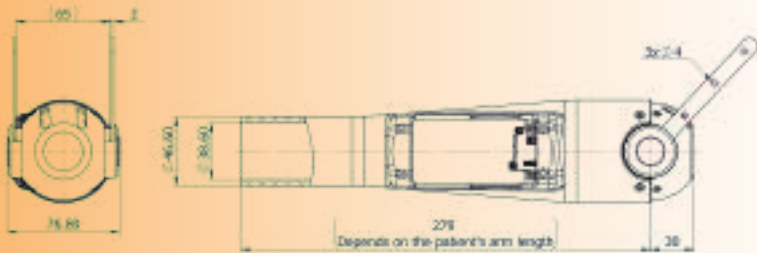
- Amputation Level: Designed for patients with transhumeral amputation (above-elbow) or elbow disarticulation.
- Patient Profile: Intended for use in adult patients.
- Physiological Requirement: The patient must have detectable myoelectric signals (or sufficient muscle activity) in the residual limb to control the device.



## Type 1: Long Transhumeral Elbow

- Configuration: Fixed humeral interface (Non-rotational).
- Target User: Ideal for patients with long residual limbs (long stumps), requiring a compact build height and lightweight design.

### Technical Dimensions

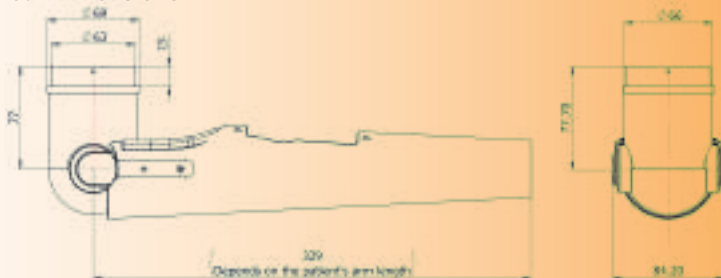


## Type 2: Short Transhumeral Elbow

- Configuration: Integrated humeral rotation ( $\pm 90^\circ$ ) for versatile positioning.
- Target User: Ideal for patients with short-to-standard residual limbs, offering an expanded functional range for complex Activities of Daily Living (ADLs).



### Technical Dimensions



# Technical Specifications

Product Mass	≤ 1500 grams <i>(depending on the user's hand size)</i>
Range of Motion	5°-130°
Speed (no load)	1.2 seconds
Speed (1kg load)	1.8 seconds
Operating voltage	6 - 8.4 V
Maximum torque	5 Nm
Compatible battery types	Vulcan Battery V02/03
Connection for hands	Vulcan Connector
Battery	<ul style="list-style-type: none"><li>- Using removable 2000 mAh Li-ion battery</li><li>- 3-4 hours of continuous operation</li><li>- Fully charged in 1.5 hours</li></ul>

## Custom Finish Options

- ◆ 03 colors: Black, Light Skin (Fair), Dark Skin (Tan)
- ◆ Surface: Matte or Glossy

### Type 1: Long Transhumeral Elbow



### Type 2: Short Transhumeral Elbow



## **WARNINGS & SAFETY PRECAUTIONS**

### ◆ **Load Capacity & Weight Bearing:**

- **Active Lifting Limit:** Do not attempt to lift more than 1 kg using the motor.
- **Heavy Loads:** For loads exceeding 1 kg, the device must be engaged in High-Load Lock Mode.
- **Body Support:** This device is NOT designed for body-weight support (e.g., pushing off a chair to stand up). Doing so may cause mechanical failure.

### ◆ **Environmental & Electrical Safety:**

- **Moisture Ingress:** The device is non-waterproof (IP Rating pending). Do not immerse in water or expose to heavy rain.
- **Charging:** Use ONLY the original Vulcan charger. Use of unauthorized accessories may result in battery damage, fire hazards, or warranty voidance.

### ◆ **Mechanical Hazards:**

- **Pinch Points:** Keep fingers, loose clothing, and jewelry clear of the joint pivot areas during operation to avoid entrapment or injury.

### ◆ **Thermal Management:**

- **Overheating:** If the elbow generates excessive heat during continuous operation, power off the device immediately and allow it to cool down for at least 20 minutes.

### ◆ **Vehicle Operation:**

- **Driving:** Do not operate a motor vehicle while the device is in active mode. The elbow must be securely LOCKED or powered off. Always comply with local traffic laws regarding prosthetic use.

## **Ordering Information**

- ◆ Email: [hello@wearevulcan.com](mailto:hello@wearevulcan.com)
- ◆ Hotline: (+84) 03 3838 0737







**VULCAN AUGMETICS**