A young man with a black Vulcan E-Elbow prosthetic arm is drinking from a clear plastic water bottle. He is wearing a white t-shirt and is outdoors in a park-like setting with blurred autumn foliage in the background. The lighting is warm and golden.

# VULCAN E-ELBOW

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## 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:

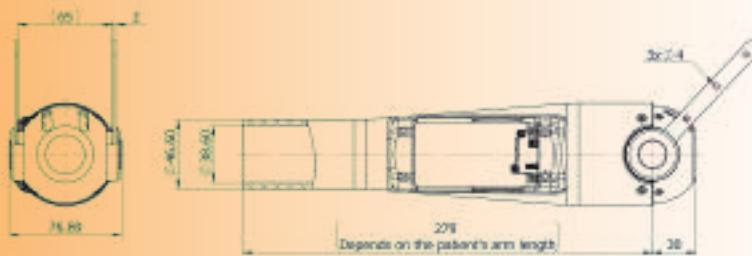
- Amputation Level: Designed for patients with transhumeral amputation (above-elbow) or elbow disarticulation.
- Patient Profile: Intended for use in adult patients.
- Physiological Requirement: The patient must have detectable myoelectric signals (or sufficient muscle activity) in the residual limb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

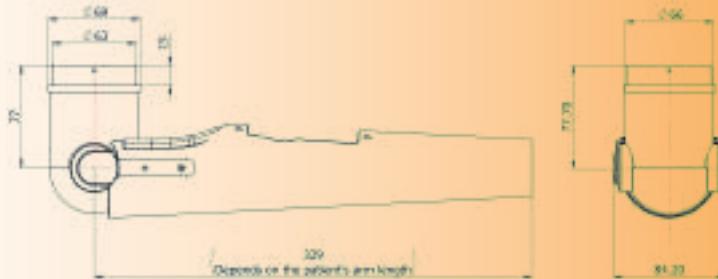


## Type 2: Short Transhumeral Elbow

- 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

<b>Product Mass</b>	≤ 1500 grams (depending on the user's hand size)
<b>Range of Motion</b>	5°-130°
<b>Speed (no load)</b>	1.2 seconds
<b>Speed (1kg load)</b>	1.8 seconds
<b>Operating voltage</b>	6 - 8.4 V
<b>Maximum torque</b>	5 Nm
<b>Compatible battery types</b>	Vulcan Battery V02/03
<b>Connection for hands</b>	Vulcan Connector
<b>Battery</b>	<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



Black



Dark Skin



Light Skin

### Type 2: Short Transhumeral Elbow



Black



Dark Skin



Light Skin

## 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**