

# Product Specification

## 1. Product Overview

1.1 Product Name: Thigh-Shank Joint Motor

1.2 Product Model: RU-JTM-90-065-110-90-D72-E

1.3 Product Description:

- The Joint Motor is a highly modular and integrated actuator that incorporates a frameless torque motor, reducer, and encoder. It is widely used in high-dynamic scenarios such as robotic arms, humanoid robots, and multi-legged robots.
- Rated Power:650 W
- Multiple Control Modes: Position / Speed / Torque Control
- Comprehensive Protection Mechanisms
- Operating Temperature:-40°C to +85°C
- Supported Communication Protocol: EtherCAT

## 2. Technical Specifications

### 2.1 Parameter Table

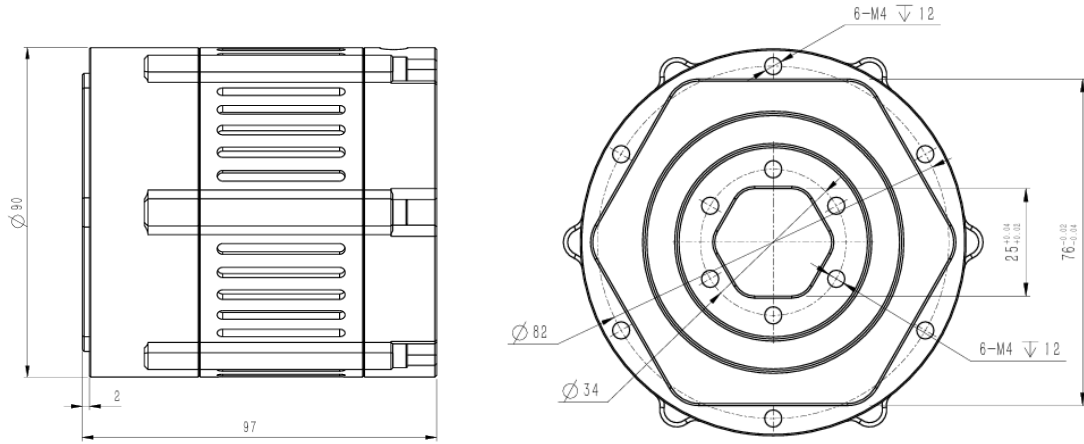
	Item	Parameter
<b>Parameter</b>	Rated Voltage	DC 72v
	Rated Power	650W
	Peak Power	1050W
	Rated Speed	65rpm
	Maximum Speed	110rpm
	Continuous Stall Torque	90N.m
	Peak Torque	431N.m
	Rated Current	10A
	Peak Current	65A
	Gear Ratio	1:30
	Communication Protocol	EtherCat
	Weight	1.9kg
	Operating Temperature	-40°C ~ +85°C

### 2.2 Interface Definition Table

Category	Interface No.	Number of Wires	Interface Definition	Remarks
Power	X01	3	DC Voltage Input	U/V/W
Encoder	X02	7	Encoder Interface	5v/GND/485+/485-/B+/B GND/PE

## 3. Dimensions and Appearance

### 3.1 Dimension Drawing



### 3.2 Appearance Drawing

