

# NEMA 17 Stepper Motor with Toothed Pulley

This high-precision stepper motor is designed for accurate positioning and motion control. It features a compact design with a square flange and a toothed pulley for efficient power transmission.



## Product Overview

### High-Precision Stepper Motor

The VHSM42 is a high-precision stepper motor engineered for accurate motion control in demanding automation environments. Featuring a compact 42.3mm square flange design and a pre-installed toothed pulley, it enables efficient power transmission for 3D printers, CNC machines, and robotics. This motor provides reliable performance with a 1.8° step angle and 3.8 kg.cm holding torque, ensuring consistency and accuracy in positioning tasks.

## Performance Specifications

型號	線圈電阻	電壓	電流	步角	保持力矩	靜力矩	步距	脈動率	脈動率	脈動率
VHSM42	1.2Ω	12V	0.2A	1.8°	3.8 kg.cm	54 gf.cm	20	2.032	14	2-2

**規格書 Specification**

**CONNECTION DIAGRAM**

### Key Performance Indicators

<b>1.8 °</b> Step Angle	<b>3.8 kg.cm</b> Holding Torque	<b>12 V</b> Rated Voltage
----------------------------	------------------------------------	------------------------------

Resistance	14 Ω
Detent Torque	54 gf.cm
Drive Mode	2-2

## Pulley Specifications

### Pulley Geometry

Feature	Value
Tooth Profile	MXL
Teeth Count	20
Pitch	2.032
Diameter	42.3mm
Width	14.0 mm

## Mechanical Dimensions

### Mounting Configuration

- Square flange: 42.3mm max
- Mounting hole spacing: 31±0.10mm
- 4-M3 flat head screws
- Screw depth: 4.5mm min

## Electrical Connectivity

### Wiring Sequence

Pin	Color	Phase
1	Green	A
2	Black	A
3	Red	B
4	Blue	B

### Connector

PHR-4P2.0