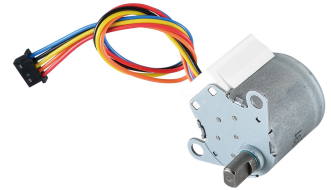


# Miniature Stepper Gear Motor

This miniature stepper gear motor features a metal gearbox and hexagonal output shaft. It is suitable for low-speed, high-torque applications such as robotics and automation.



## Overview

### Miniature Stepper Gear Motor VGSM20 Series

The VGSM20 series is a compact, high-precision stepper gear motor designed for demanding applications in robotics, automation, and hobbyist engineering. Featuring a durable metal gearbox and a specialized hexagonal output shaft, this motor delivers reliable performance with high torque capabilities. With flexible drive modes and standardized wiring, it integrates seamlessly into complex electronic control systems.

## Electrical Specifications

Rated Voltage	5 V
Resistance (VGSM2031)	20 $\Omega$
Resistance (VGSM2014)	11 $\Omega$

## Performance Metrics

### Key Performance Indicators

**80 mN.m**

Pull-in Torque

**70 mN.m**

Cogging Torque

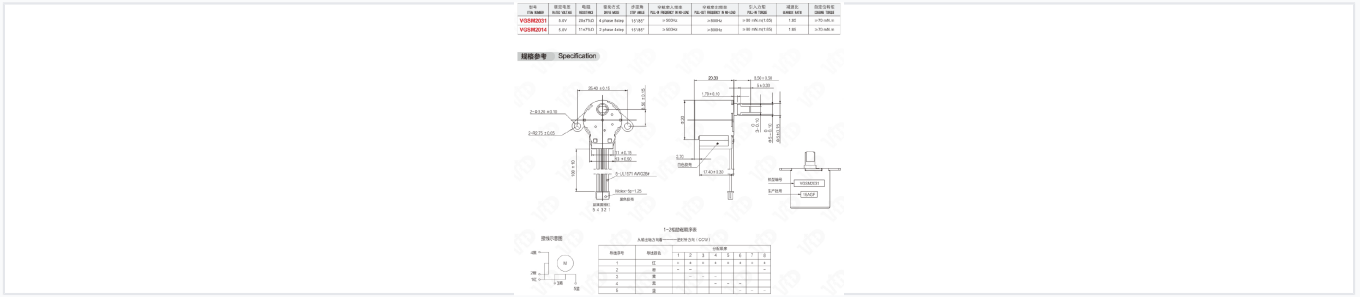
**15 °**

Step Angle

### Frequency Specifications

- Pull-in frequency (no-load): e500Hz
- Pull-out frequency (no-load): e800Hz

## Technical Details



Technical diagram and specification sheet for the VGSM20 series, detailing dimensions, wiring connections, and excitation sequences.

## Drive Modes

Model	Drive Mode
VGSM2031	4 phase 8 step
VGSM2014	2 phase 4 step

Gearbox Ratio	1:85
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## Connectivity

Wiring & Connector	5-pin Molex-1.25, UL1571 AWG28#, Color-coded (Blue/Yellow/Red/Orange/Black)
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