

# 156 mm NEMA 34 Stepper Motor

MO-SM-001-0001



## TECHNICAL SPECIFICATIONS

The 186 mm NEMA 34 stepper motor is Vention's most powerful actuator. It provides up to 12 Nm of holding torque, up to 10 Nm of dynamic torque and 2250 rpm. It can be driven with 200 steps/turn, 1600 steps/turn or 3200 steps/turn accommodating several precision requirements. The motor includes a 3 meter long labelled and color-coded cable for easy connection with the MachineMotion™ controller. The control of the motor is natively supported by all Vention MachineMotion APIs and associated MachineApps™.

### Electrical Specifications

Motor Type	Bipolar Stepper
Motor Flange	NEMA 34, 86 mm
Motor Length	156 mm
Step Angle	1.8° ± 5%
Holding Torque	12 Nm
Rated Current	6.2 A
Inductance	9 mH ± 20%
Phase Resistance	0.7 mOhm ± 10%
Insulation Class	B
Insulation Resistance	100 MOhm
Controller Side Connector	Conxall / SwitchCraft 3382-4SG-3DC, MachineMotion Plug-&-Play

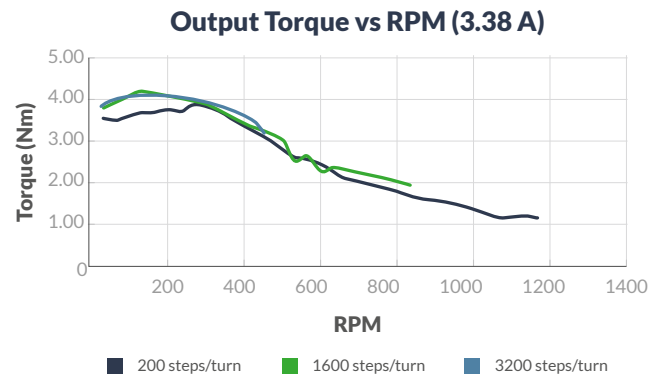
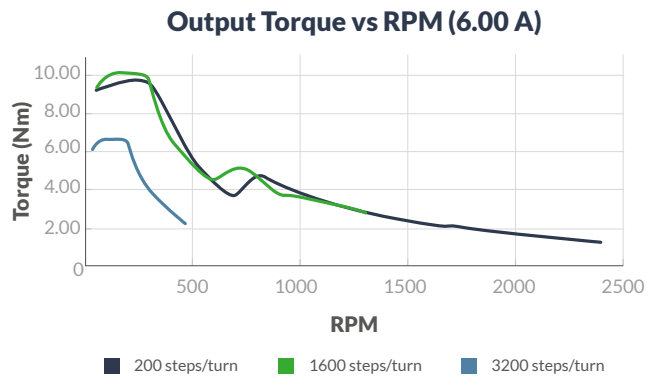
### Applications

Cartesian Robots  
Automated Gantries  
Multi-Axis Machines  
Conveyors

### Mechanical & Environmental Specifications

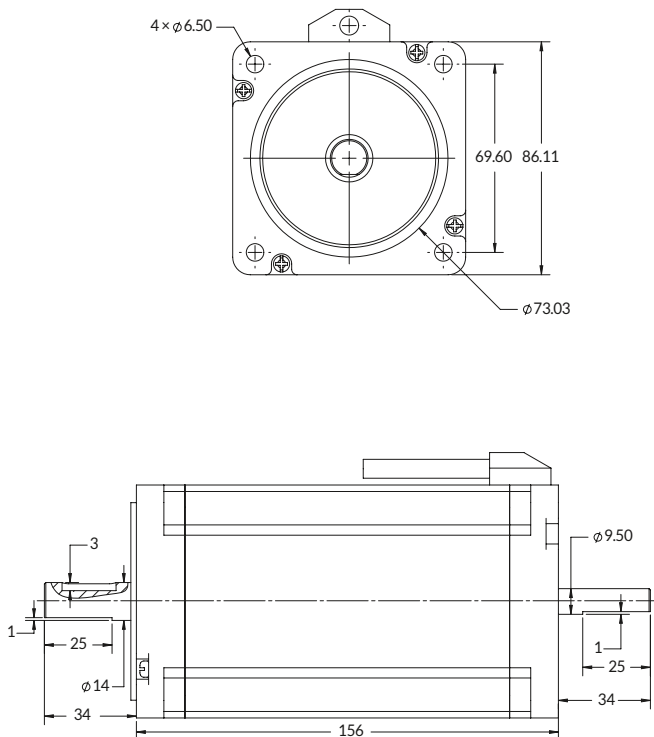
Operating Temperature	-25 C to +70 C
Relative Humidity	0% -85% RH, non-condensing, non-splash
Housing Material	Steel
Width	86 mm
Length	224 mm
Weight	5.217 kg

## Speed Torque Curves



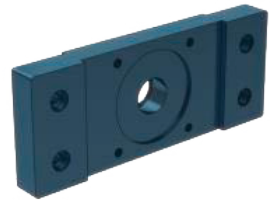
## HARDWARE

### Product Dimensions



### Mounting Hardware

Mounting Plate for  
Stepper Motor & Ball Screw  
**MO-LM-002-0002**



Belt-driven  
Linear Actuator  
**MO-LM-006-XXXX**



Belt-driven Linear Actuator  
(heavy-duty)  
**MO-LM-007-XXXX**

