

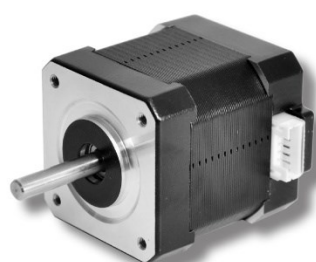
NEMA17 Stepper Motor

NEMA 17 high torque stepper motors provide great value with no quality sacrifice. The version with a steep angle of 0.9° is more precise than the typical 1.8° version of the motor. These motors are engineered to provide the highest possible torque but minimize vibration and audible noise. A wide range of motor windings and stack lengths are readily available, or the motors can be customized to meet your machine's requirements. We can also have the windings customized to perfectly match your voltage, current and maximum torque at operating speeds.

Technical Specification:

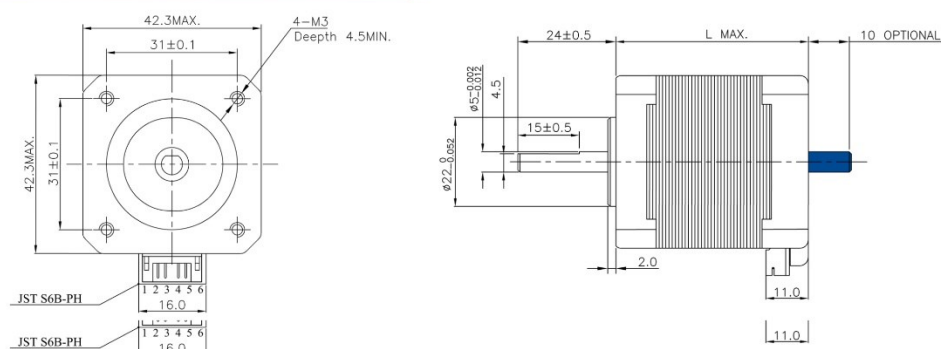
1.8° Size 17(42mm)

Item	Specifications
Step Angle	1.8°
Step Angle Accuracy	1.8° ±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	85°C Max.(2 phase on)
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩMin., 500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max. (450 g-load)
Shaft Axial Play	0.08Max. (450 g-load)
Max. radial force	28N (20mm from the flange)
Max. axial force	10N



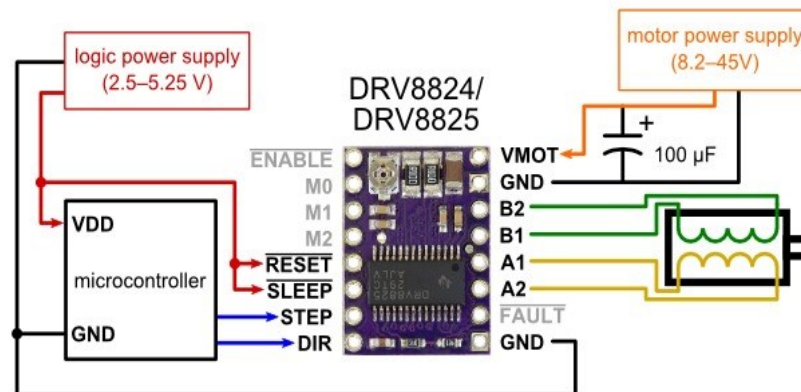
Dimension	Model #	Rated Current (Amps/Phase)	Holding Torque (oz.in)	Holding Torque (kg.cm)	Resistance (Ohms/Phase)	Inductance (mH/Phase)	Inertia (g.cm ²)	Detent Torque (g.cm)	Weight (kg)
"L" Max									
26.0mm (1.02")	1701HS140A	1.40	21.0	1.5	1.9	2.0	20	75	0.15
34.0mm (1.34")	1702HS133A	1.33	44.0	3.2	2.1	2.5	35	120	0.22
40.0mm (1.58")	1703HS168A	1.68	62.0	4.4	1.65	3.6	54	150	0.28
48.0mm (1.89")	1704HS168A	1.68	77.0	5.5	1.65	2.8	68	200	0.35
60.0mm (1.89")	1705HS200A	2.00	114	8.2	2.0	3.3	102	280	0.55

DIMENSIONS (INTEGRAL CONNECTOR)



1. DRV8825 Stepper Driver Module

The **DRV8825** is a Motor Driver with two H-bridge drivers and a micro-stepping indexer. The driver has a maximum output capacity of 45 V and ± 2.5 A. It can operate bipolar stepper motors in full, 1/2, 1/4, 1/8, 1/16, and 1/32-step modes. This driver module is generally used in Robotics, ATMs, and gaming machines. The module has a pinout and interfaces nearly identical to the **A4988 stepper motor driver** carrier.



2. A4988 Stepper Driver Module

The **A4988** stepper motor driver has an output drive capacity of up to 35V and ± 2 A. Which lets you control a bipolar stepper motor such as the NEMA 17 at up to 2A output current per coil. The driver has a built-in translator for easy operation. This reduces the number of control pins to just two, one for controlling the steps and the other for controlling the spinning direction.

