



## 57 Series 3-phase Stepping Motors



### General Specifications

Step Angle Accuracy	+5% (full step, no load)
Temperature Rise	80°C Max
Ambient Temperature	-10°C -- +50°C
Insulation Resistance	100MΩ min. 500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.06 Max. (450g-load)
Shaft Axial Play	0.08 max. (450g-load)

### Electrical Specifications

Model No.	Step Angle	Holding Torque	Current /phase	Inductance /phase	Resistance /phase	# of leads	Rotor Inertia	Detent Torque	Motor Weight	Motor Length L
	(°)	N.m	A	mH	Ohm		g.cm <sup>2</sup>	N.cm	Kg	mm
573S05	1.2	0.45	5.2	1.4	1.3	6	110	2.1	0.45	42
573S09	1.2	0.9	3.5	1.7	1.3	6	200	4.0	0.6	50
573S15	1.2	1.3	5.8	1.35	0.7	6	400	6.8	1.0	76

\* Above motors are our typical models, and if you need a customization motor, please contact us.

### Mechanical Specifications

Dimensions are in millimeters and 1 inch=25.4mm.

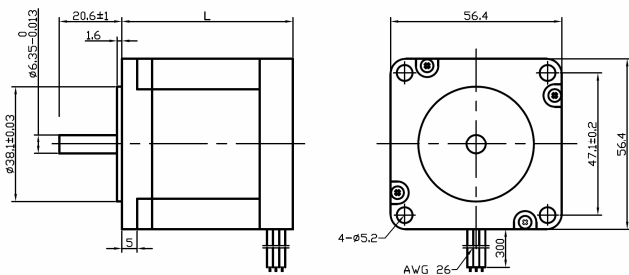


Figure 1: Mechanical specifications of 573S05

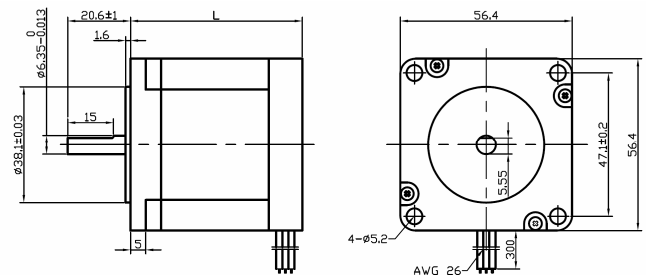


Figure 2: Mechanical specifications of 573S09

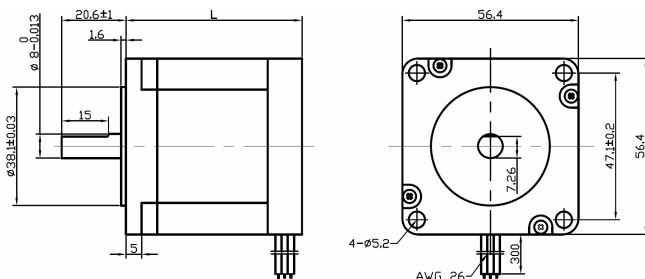


Figure 3: Mechanical specifications of 573S15



### Wiring Diagrams

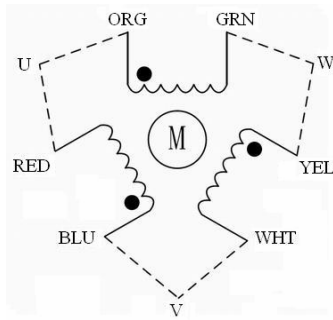


Figure 4: Wiring diagram of the 573S05

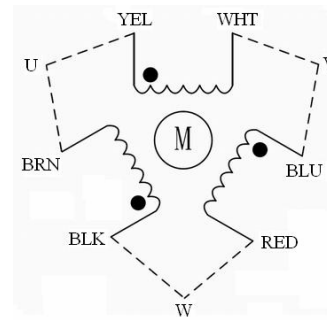


Figure 5: Wiring diagram of the 573Sxx

### Speed-Torque Characteristics

Speed-torque curves show the maximum torques that can be output at a given speed. When selecting a motor, make sure the required torque falls within the particular curve.

#### • 573S05

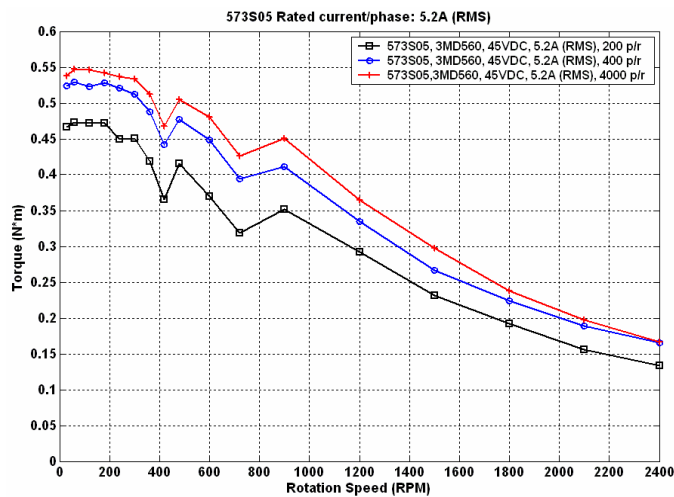


Figure 6: Speed-torque curves of the 573S05

#### • 573S09

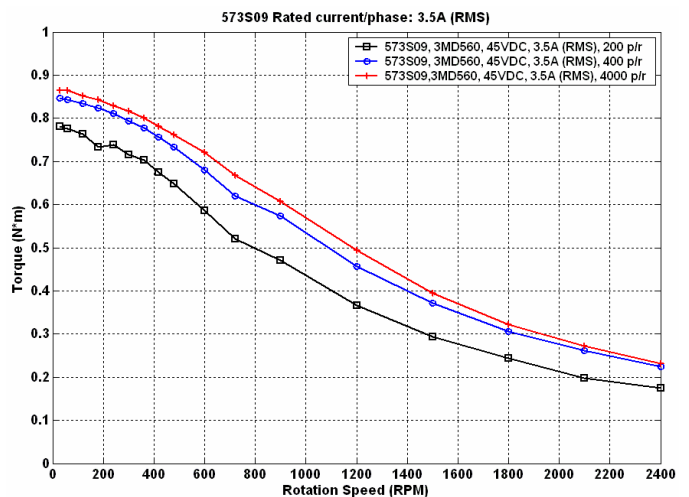


Figure 7: Speed-torque curves of the 573S09

#### • 573S15

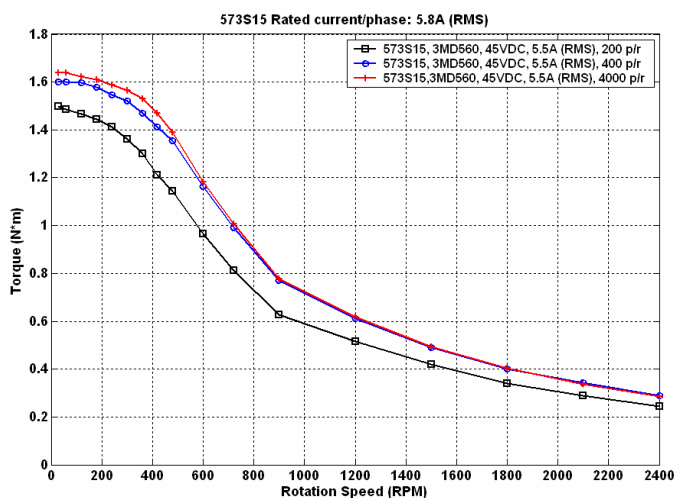


Figure 8: Speed-torque curves of the 573S15



**Remarks:**

1. Title "573S05 Rated current/phase: 5.2A (RMS)" means "The rated current/phase of the 573S05 is 5.2A (RMS) ".
2. Legend "573S05, 3MD560, 45VDC, 5.2A (RMS), 200p/r" means "This speed-torque curve of the 573S05 was done with the 3MD560 driver. The settings of the 3MD560 are 5.2A (RMS), resolution is 200 pulses per revolution and use 45VDC power supply ".
3. The actual characteristics will vary depending on the driver used. Please use these curves only for reference purposes when selecting a motor. You must also conduct a thorough evaluation with the actual driver to be used. Please consult "Leadshine Motor and Driver Packages" for more information about this issue.