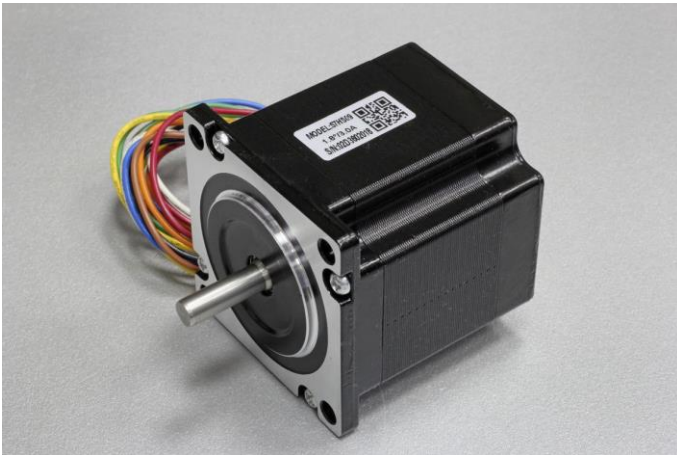


SM57HS09

HYBRID STEPPING MOTOR NEMA 23 1.3 Nm



SM57HS09 is high precision 2 phase NEMA 23 stepper motor with 1.8° stepping angle and holding torque of 1.3 Nm (184 oz-in).

FEATURE

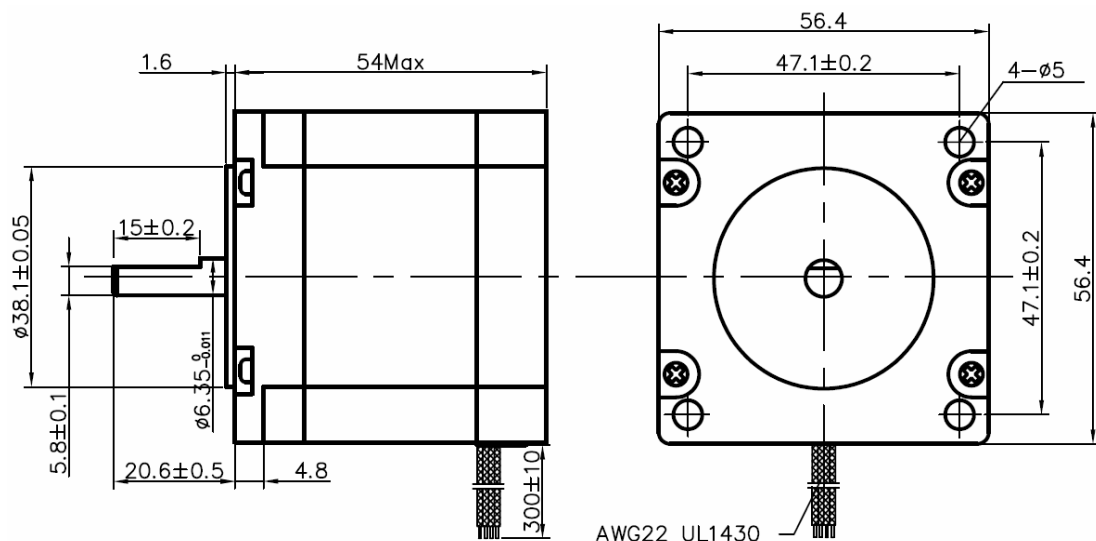
Step angle accuracy	±5 % (no load, full step)
Temperature rise	80 °C max
Ambient temperature	-10 °C do +50 °C
Insulation resistance	100 MΩ min. 500 VDC
Dielectric strength	500 VAC for 1 minute
Shaft radial play	0.06 mm max. @ 450 g load
Shaft axial play	0.08 mm max. @ 450 g load

ELECTRICAL SPECIFICATIONS

Connection	Holding torque (Nm)	Number of leads	Phase current (A)	Phase resistance (Ω)	Phase inductance (mH)	Rotor inertia (g·cm ²)	Weight (kg)
Bipolar – parallel	1.3	8	4.0	0.4 ± 10 %	1.2 ± 20 %	260	0.6
Bipolar – series	1.3		2.0	1.6 ± 10 %	4.8 ± 20 %		
Unipolar	0.9		2.8	0.8 ± 10 %	1.2 ± 20 %		

NOTE: Specifications are subject to change without notice.

MECHANICAL SPECIFICATIONS



NOTE: All dimensions are in mm.

WIRING DIAGRAMS

Wiring diagrams of stepper motor SM57HS09 with bipolar stepper motor drive is shown on Figure 1. In case of using microstep stepper motor drive MST-107 it is recommended to use parallel connection (Figure 1.a). Supply voltage of microstep drive MST-107 must be under 36 VDC.

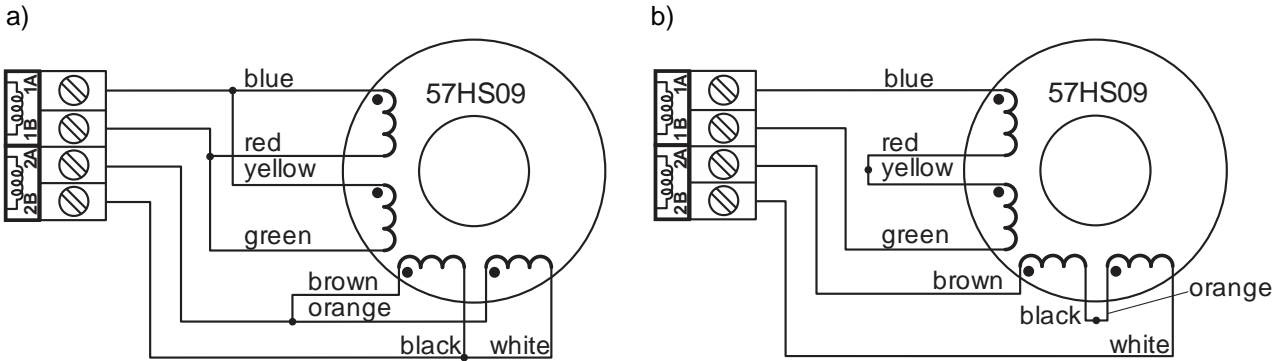


Figure 1 Wiring diagrams with bipolar stepper motor drive, a) parallel connection i b) serial connection

Wiring diagram of stepper motor SM57HS09 with unipolar stepper motor drive is shown on Figure 2.

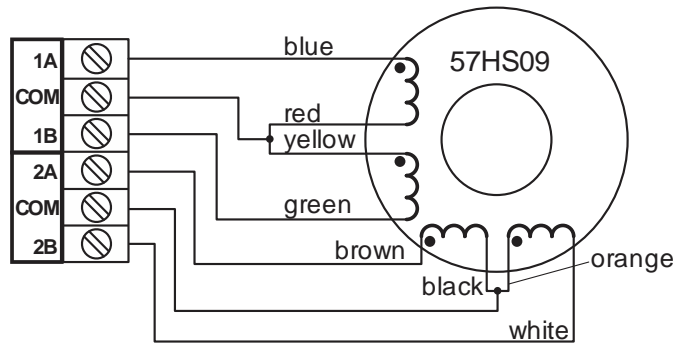


Figure 2 Wiring diagram with unipolar stepper motor drive

SPEED VS TORQUE CHARACTERISTICS

