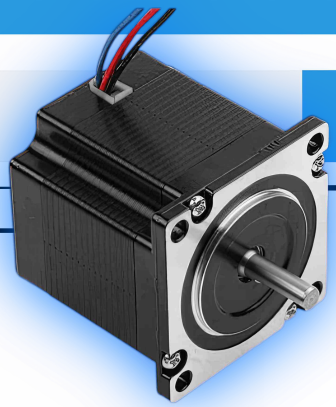
Stepper Ax Simplu 57AM13 0.9 NM



RTELLIGENT

2-PHASE STEPPER MOTOR

High Torque, High Precision | Low Vibration, Low Heating | No Loss of Step

General specification

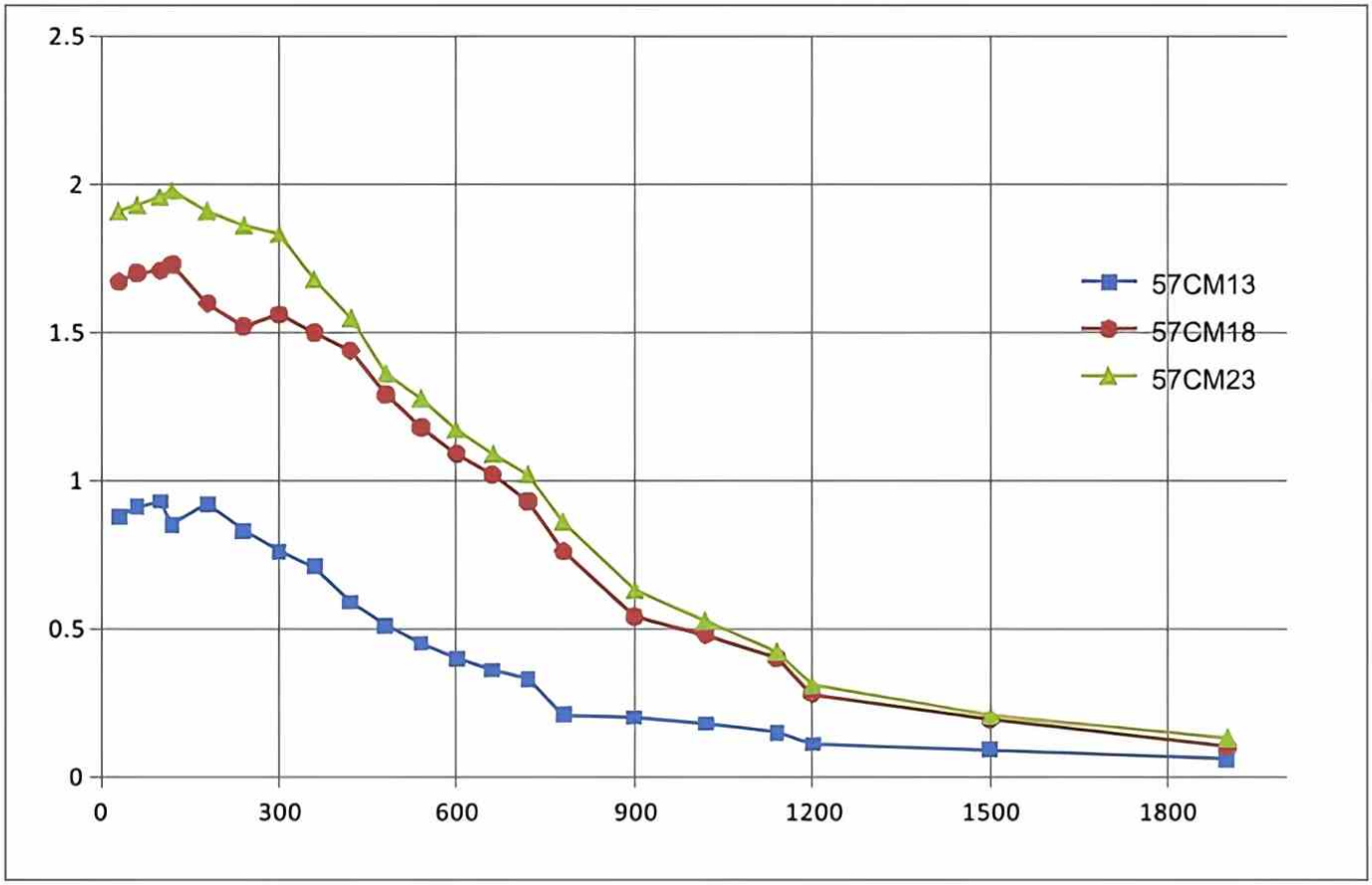
Step accuracy	±5%(synchronizing, no-load)
Temperature rise	80°CMax
Ambient temperature	-10°C — +50°C
Insulation resistance	100MΩmin. 500VDC
Voltage resistance	500VAC for one minute
Radial runout	0.06 Max. (450g-load)
Axial runout	0.08 Max. (450g-load)

Lead connection method

Technical specifications

Model	57CM13	57CM18	57CM23
Phase number	2	2	2
Step angle (o)	1.8	1.8	1.8
Holding torque N.M	0.9	1.3	2.2
Rated current(A)	2.8	2.8	4.0
Phase inductance(mH)	1.2	2.1	1.8
Phase resistance(Ohm)	0.8	1.0	0.8
Number of lead	4	4	4
Rotor inertia(g.cm2)	260	460	460
Shaft diameter(mm)	6.35	6.35	8
Motor weight(kg)	0.6	1.0	1.1
Motor body Length L(mm)	55	76	80

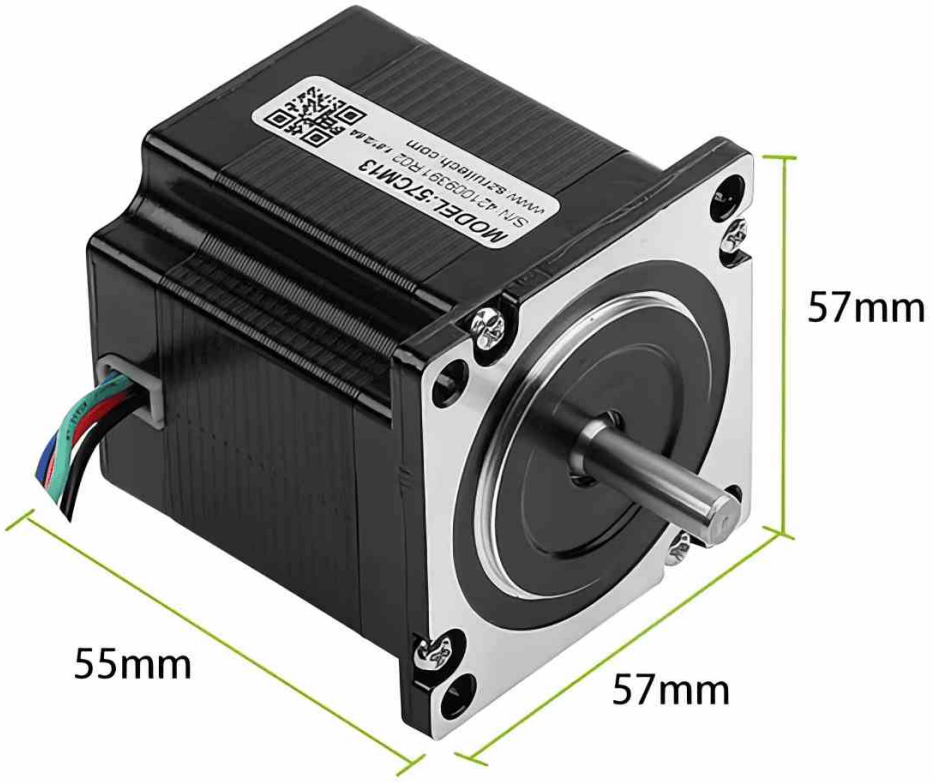
Torque-frequency curve

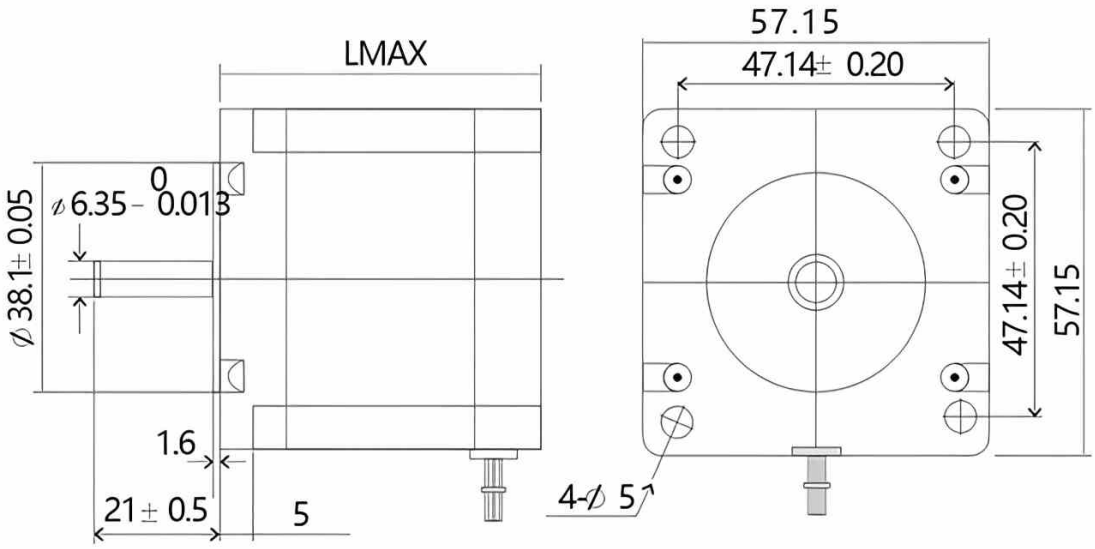


Drive: R60
Voltage: 36V DC

Current: rated
micro-stepping: 1600

Overall dimensions (mm)





*Above is the representative product only. The shaft diameter of the 57A2 motor is 8mm, with platform

Typical applications

textile, package, printing, carving, advertising, laser, electron and other Automatic industries.

Common Faults and Troubleshooting

Phenomenon	Possible situations	Solutions

Motor does not work	Power indicator is off	Check the power supply circuit for normal power supply
	The motor rotor is locked but the motor does not work	Pulse signal is weak; increase the signal current to 7-16mA
	The speed is too slow	Select the right micro-stepping
	Drive is protected	Solve the alarm and re-power
	Enable signal problem	Pull up or disconnect the enable signal
	Command pulse is incorrect	Check whether the upper computer has pulse output
The steering of motor is wrong	The rotary direction of motor is reverse	Replace the motor connection sequence or adjust the command direction
	The motor cable is disconnected	Check the connection
	The motor has only one direction	Pulse mode error or DIR port damaged
Alarm indicator is on	The motor connection is wrong	Check the motor connection
	The motor or drive damaged	Replace the motor or drive
	The voltage is too high or too low	Check the power supply
The position or speed is wrong	The signal is disturbed	Eliminate interference for reliable grounding
	The command input is incorrect	Check the upper computer instructions to ensure the output is correct
	The setting of Pulse per revolution is wrong	Check the DIP switch status and correctly connect the switches
	The motor lose step	Check the command make sure the speed is not too high or check the motor type is not smaller
The drive terminal burned up	Short circuit between terminals	Check power polarity or external short circuit
	Internal resistance between terminals is too large	Check whether there is any solder ball due to excessive addition of solder on the wire connections
The motor is out of tolerance	Acceleration and deceleration time is too short	Reduce command acceleration or increase drive filtering parameters
	Motor torque is too low	Select the motor with high torque
	The load is too heavy	Check the load weight and quality and adjust the mechanical structure
	The current of power supply is too low	Check the DIP, higher the drive's output current