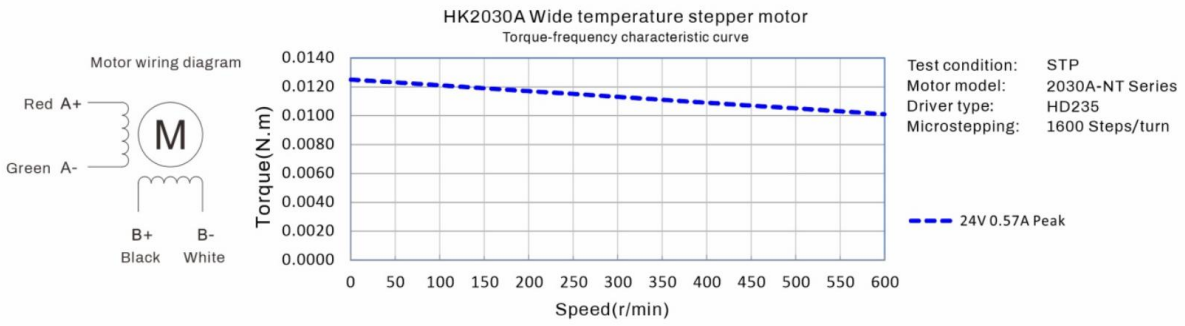
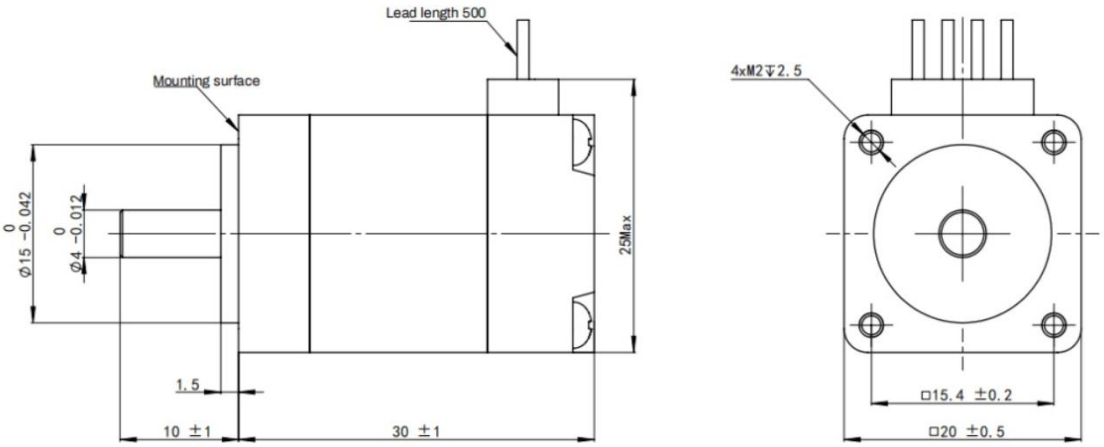
Torque curve and dimensions of High and low temperature stepper motor

1、Wide temperature stepper motor:

HK2030A Wide temperature stepper motor





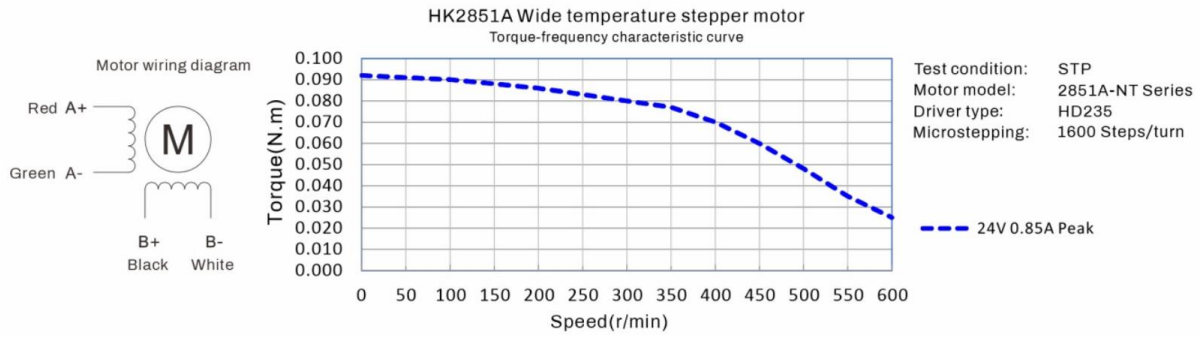
Parameters

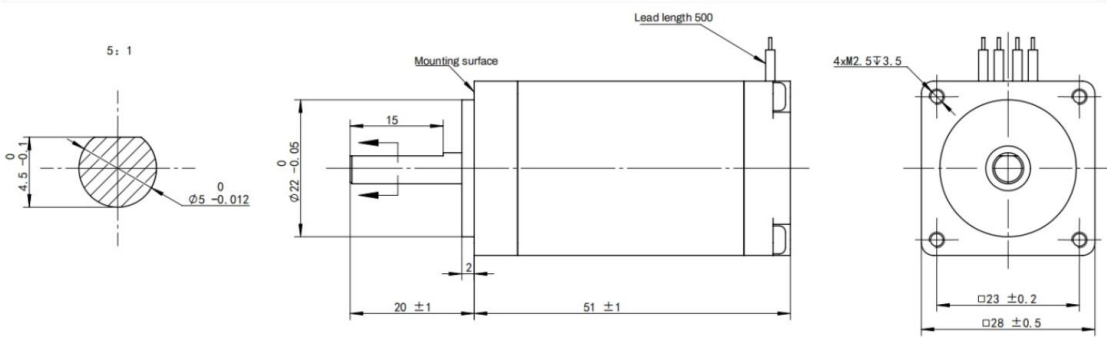
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	11	2.6	0.57	0.4	0.013	0.08	IP40	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	2N Max(8mm from the flange face)
Insulation resistance	100MΩ	Axial load	5N Max

HK2851A Wide temperature stepper motor





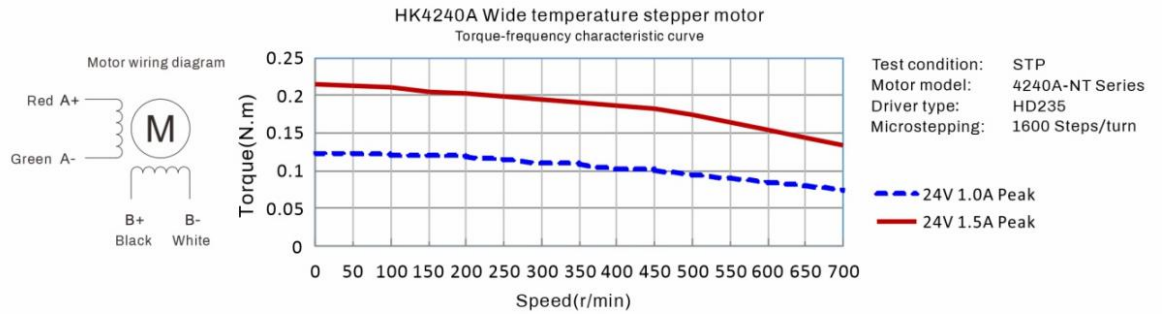
Parameters

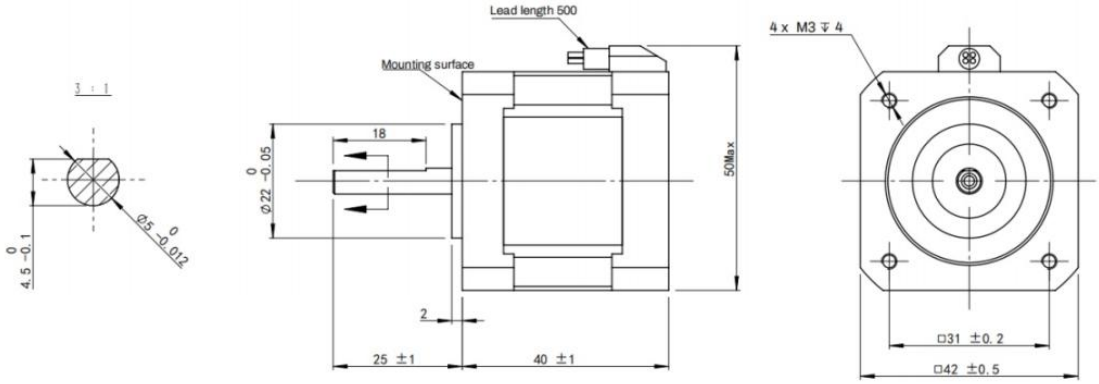
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	8.2	7.3	0.85	0.6	0.09	0.21	IP40	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	10N Max(18mm from the flange face)
Insulation resistance	100MΩ	Axial load	5N Max

HK4240A Wide temperature stepper motor





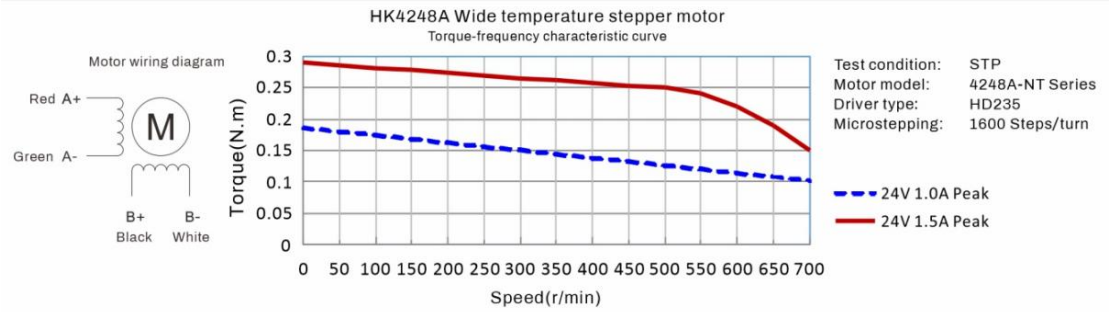
Parameters

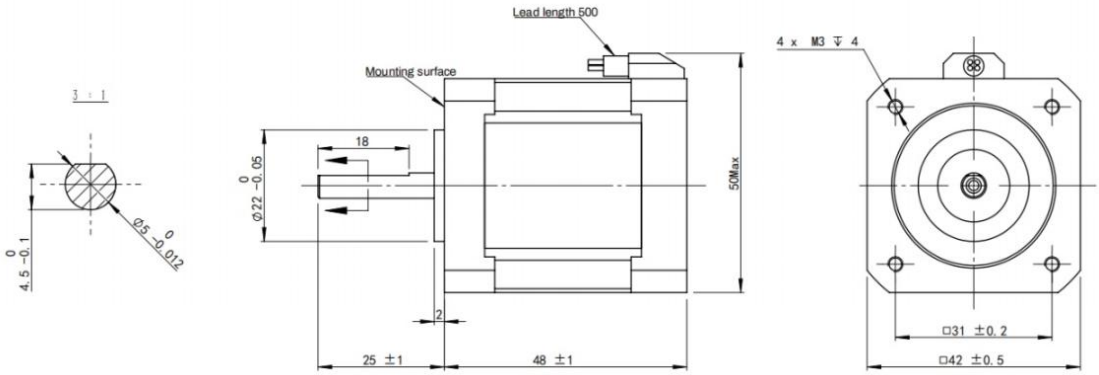
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1.5	2.1	1.5	1.1	0.25	0.4	IP65	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	28N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	15N Max

HK4248A Wide temperature stepper motor:





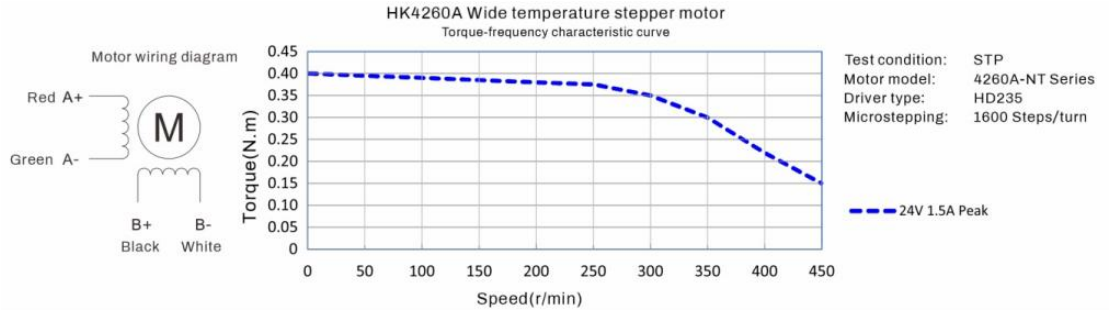
Parameters

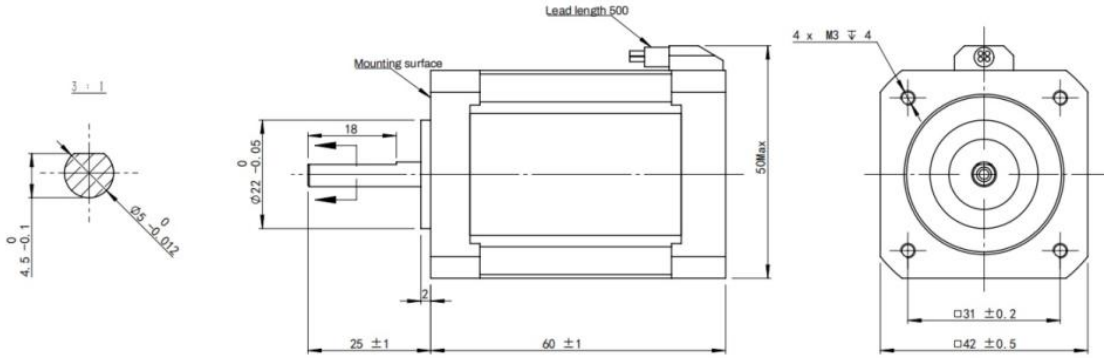
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1.8	2.6	1.5	1.1	0.35	0.48	IP65	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	28N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	15N Max

HK4260A Wide temperature stepper motor





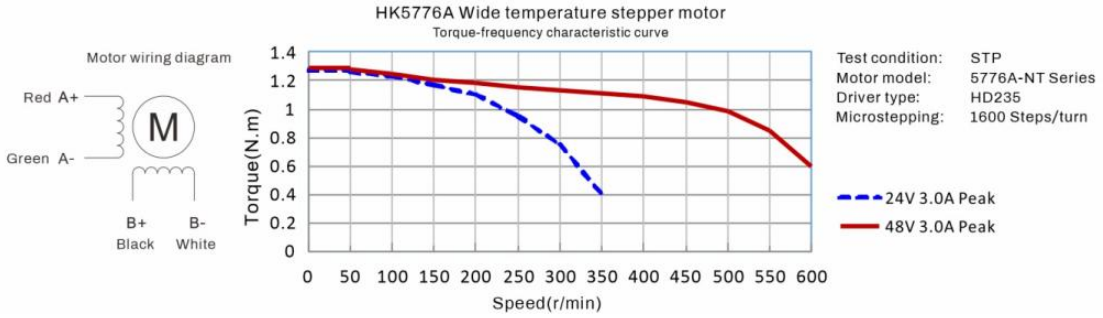
Parameters

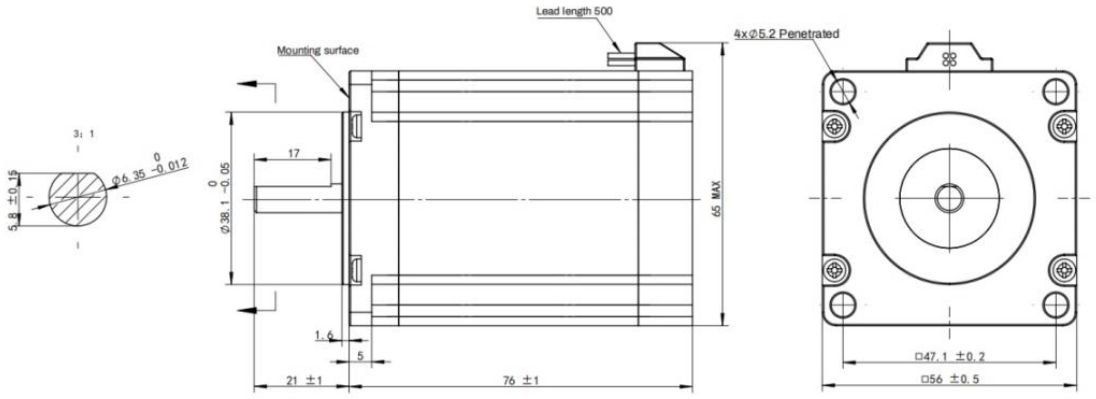
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	2.75	6.4	1.5	1.1	0.6	0.6	IP65	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	28N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	10N Max

HK5756A Wide temperature stepper motor:





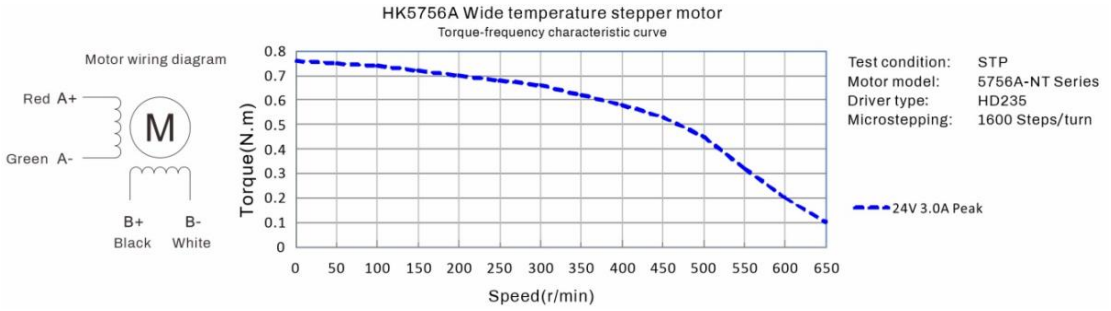
Parameters

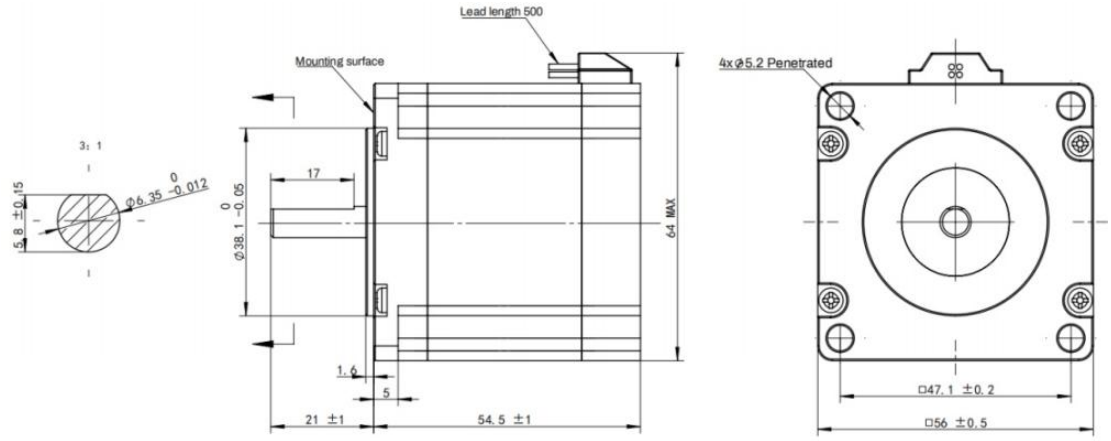
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	0.65	1.6	3	2.1	0.8	0.78	IP65	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	75N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	15N Max

HK5776A Wide temperature stepper motor





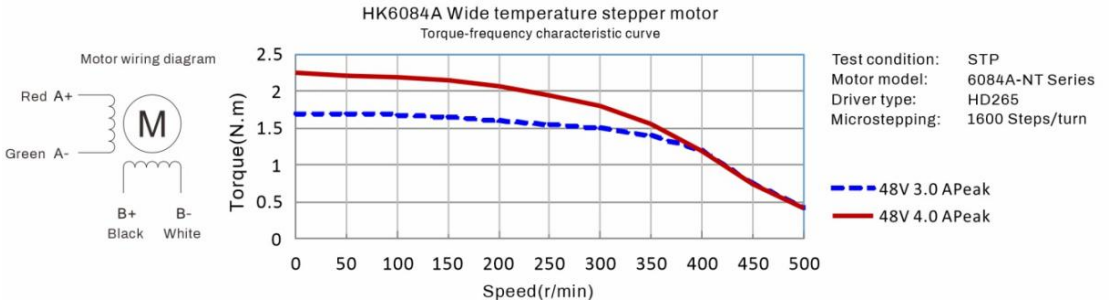
Parameters

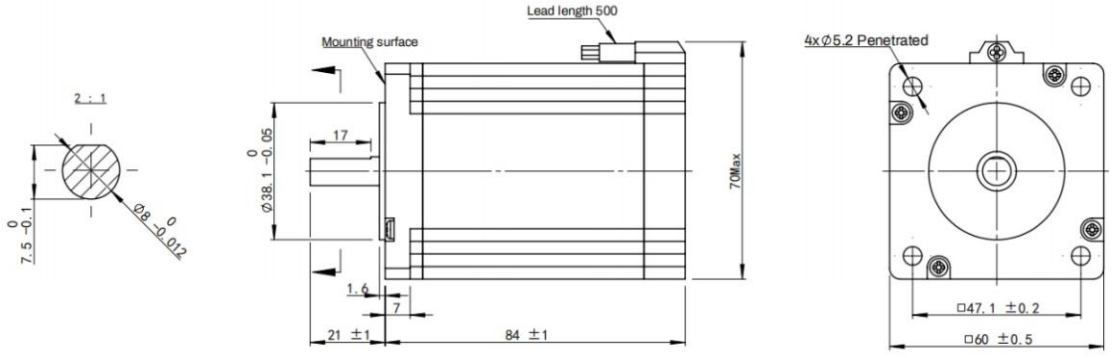
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1.0	2.7	3	2.1	1.3	1.3	IP65	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	75N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	15N Max

HK6084A Wide temperature stepper motor





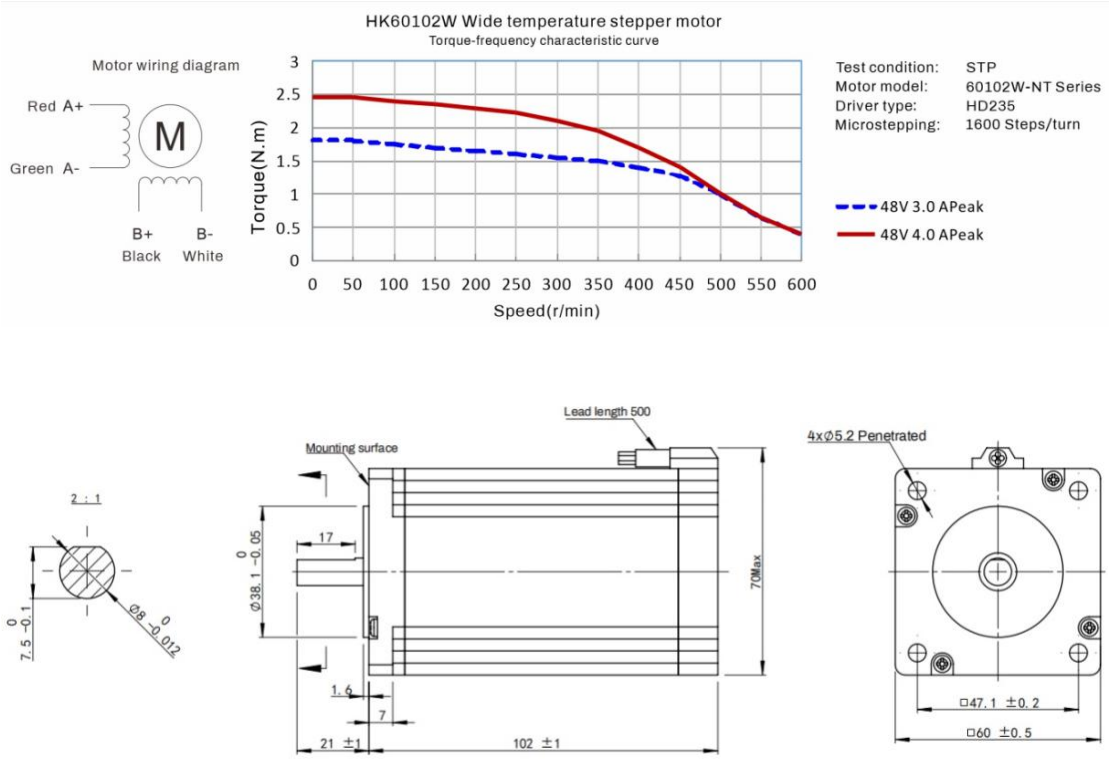
Parameters

Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1.4	4.1	4	2.8	2.5	1.4	IP65	HD265

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	75N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	15N Max

HK60102W Wide temperature stepper motor



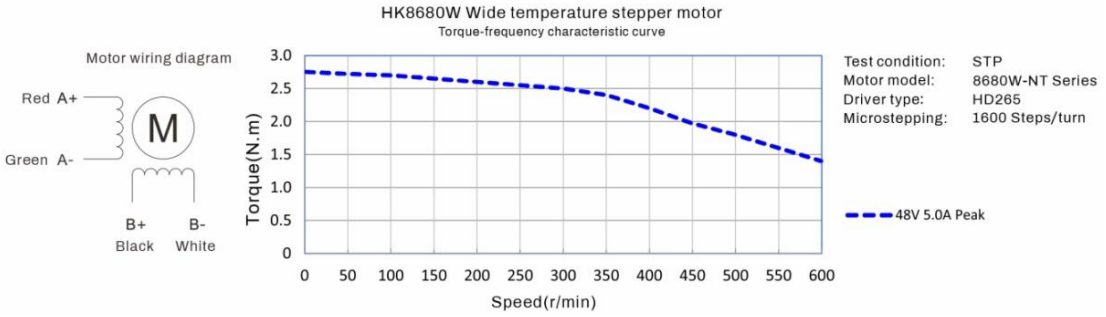
Parameters

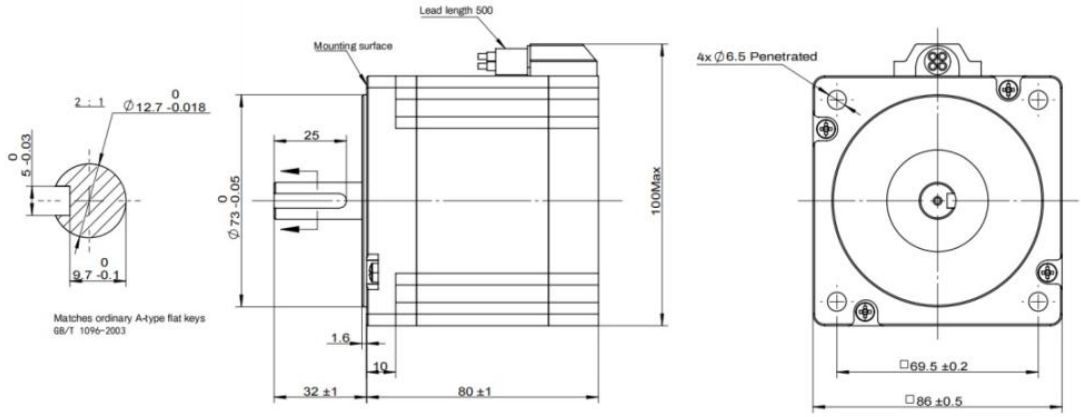
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1.3	2.7	4	2.8	2.5	1.75	IP65	HD265

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	75N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	15N Max

HK8680W Wide temperature stepper motor





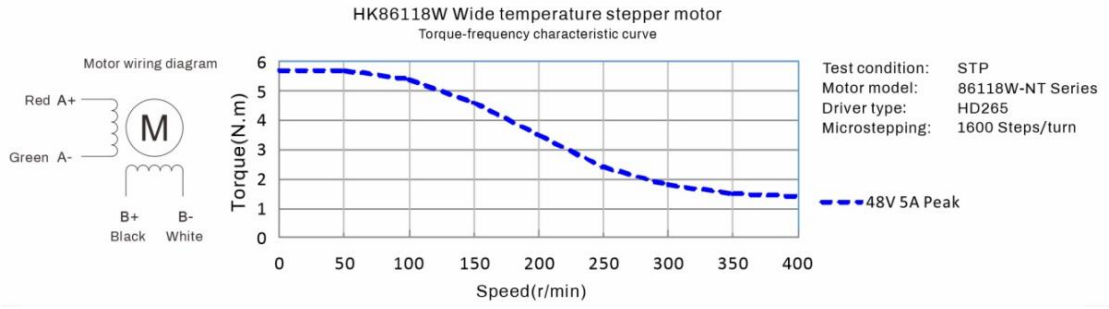
Parameters

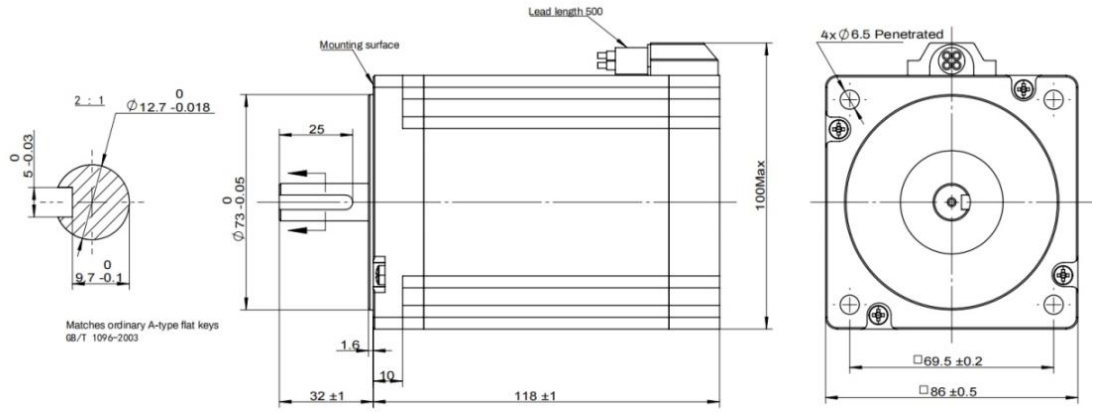
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	0.45	2.8	5	3.5	4.5	2.92	IP65	HD265

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	220N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	60N Max

HK86118W Wide temperature stepper motor





Parameters

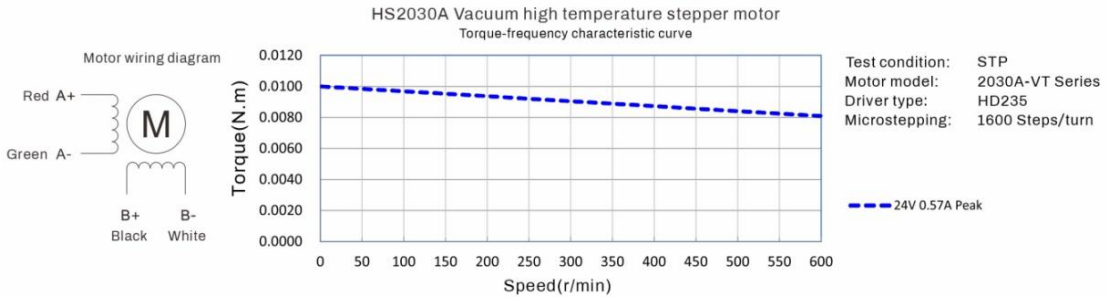
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	0.6	4.3	5	3.5	5.5	4.2	IP65	HD265

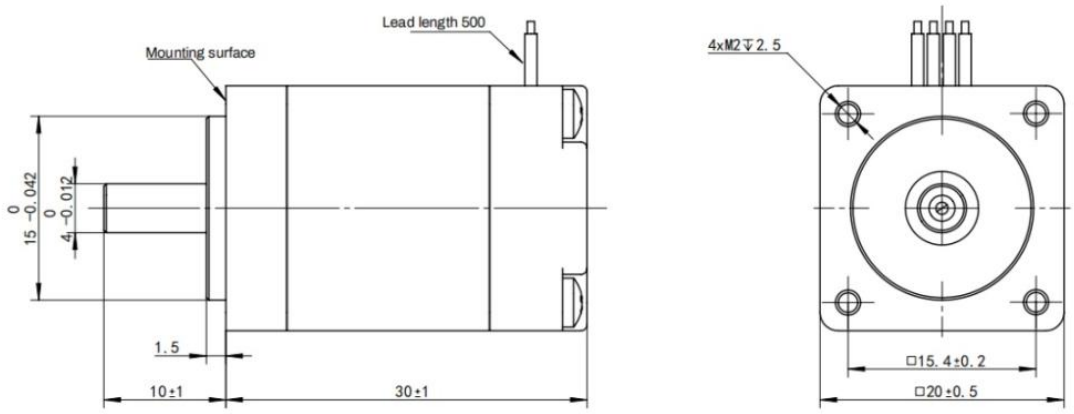
Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity: 450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity: 450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	NTL2 / NTL3
Inductance Accuracy	±20%	Radial load	220N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	60N Max

2、vacuum high-temperature stepper motor：

HS2030A vacuum high-temperature stepper motor





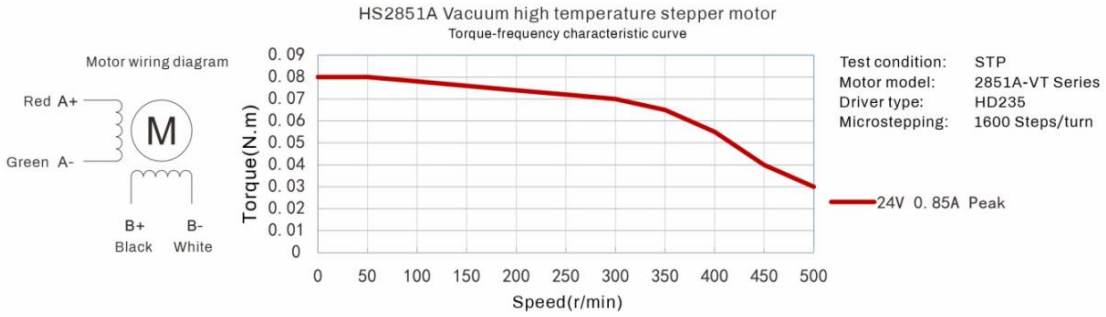
---------- Parameters ----------

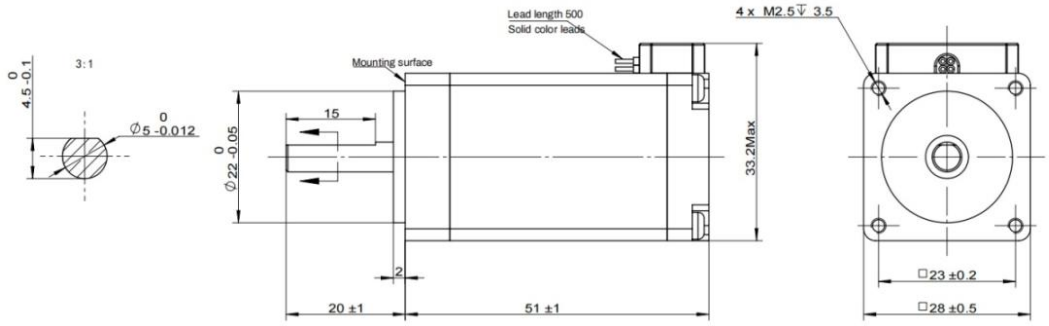
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	11	2.6	0.57	0.4	0.01	0.08	IP20	HD235

---------- Technical Specifications ----------

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	VMT1 VHT1 VMT2 VHT2
Inductance Accuracy	±20%	Radial load	2N Max(8mm from the flange face)
Insulation resistance	100MΩ	Axial load	5N Max

HS2851A vacuum high-temperature stepper motor





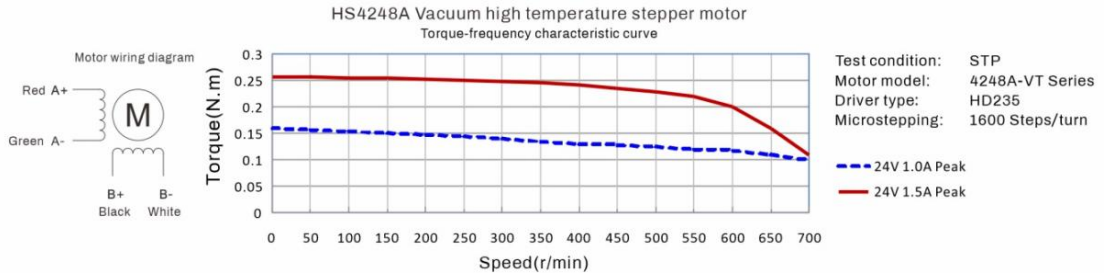
Parameters

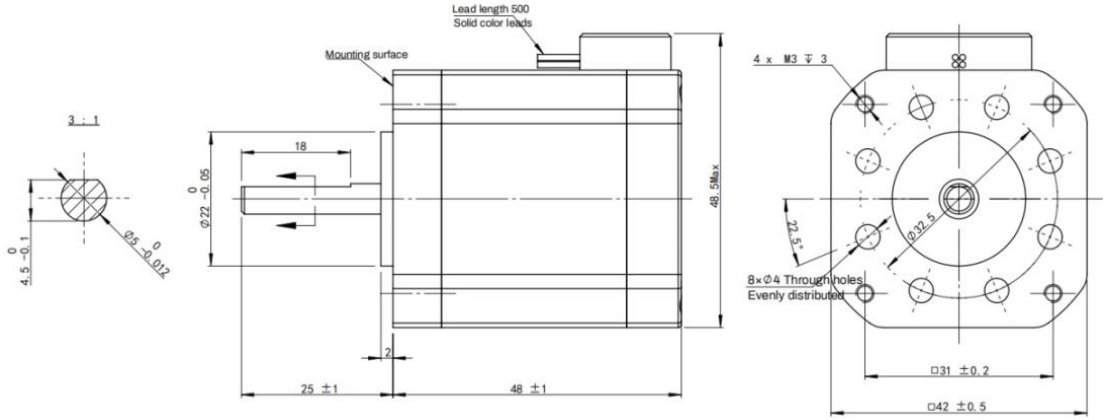
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	8.2	7.3	0.85	0.6	0.09	0.25	IP20	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level C
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	VMT1 VHT1 VMT2 VHT2
Inductance Accuracy	±20%	Radial load	10N Max(18mm from the flange face)
Insulation resistance	100MΩ	Axial load	5N Max

HS4248A vacuum high-temperature stepper motor





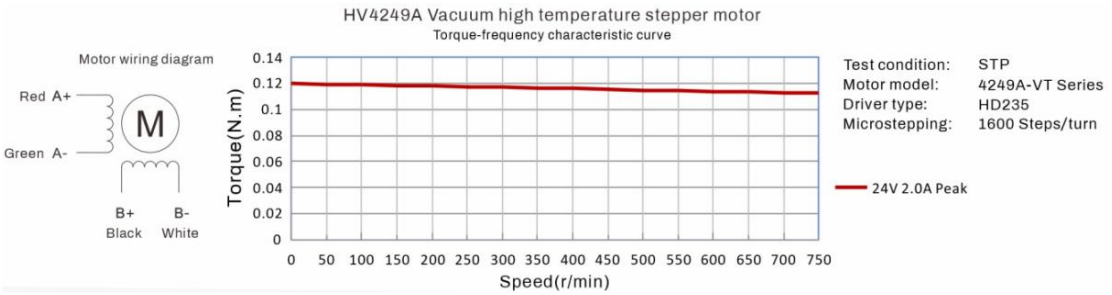
Parameters

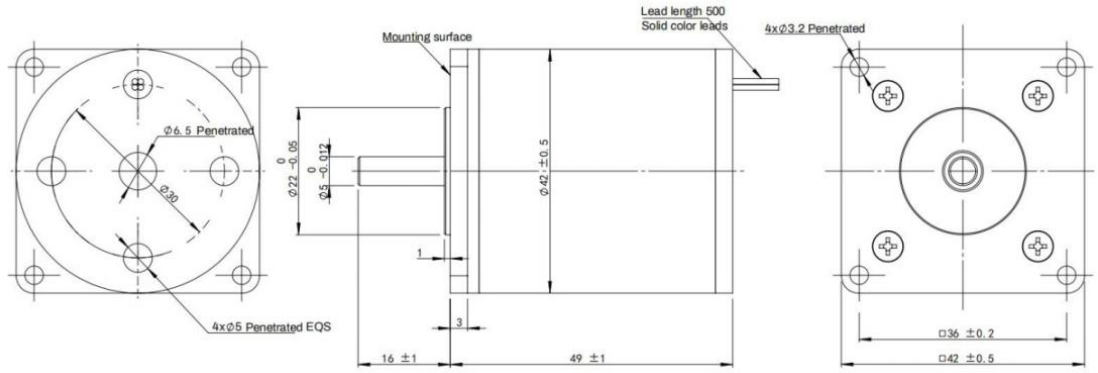
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1.8	2.6	1.5	1.1	0.35	0.58	IP20	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level C
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	VMT1 VHT1 VMT2 VHT2
Inductance Accuracy	±20%	Radial load	28N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	10N Max

HV4249A vacuum high-temperature stepper motor





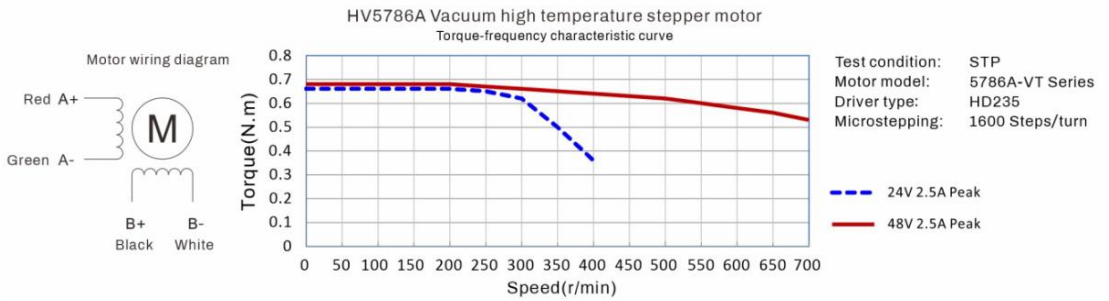
Parameters

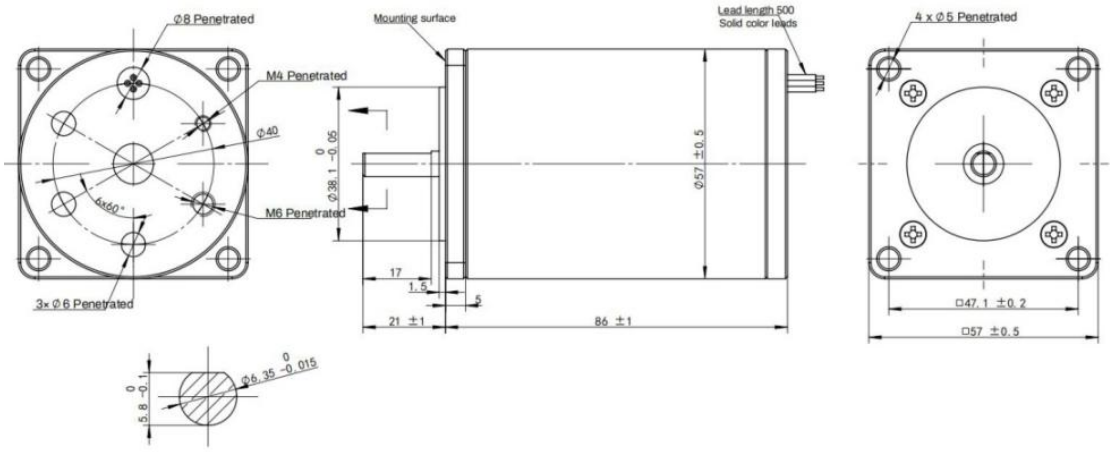
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1.2	0.8	2	1.4	0.15	0.42	IP20	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level C
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	VMT1 VHT1 VMT2 VHT2
Inductance Accuracy	±20%	Radial load	28N Max(14mm from the flange face)
Insulation resistance	100MΩ	Axial load	10N Max

HV5786A vacuum high-temperature stepper motor





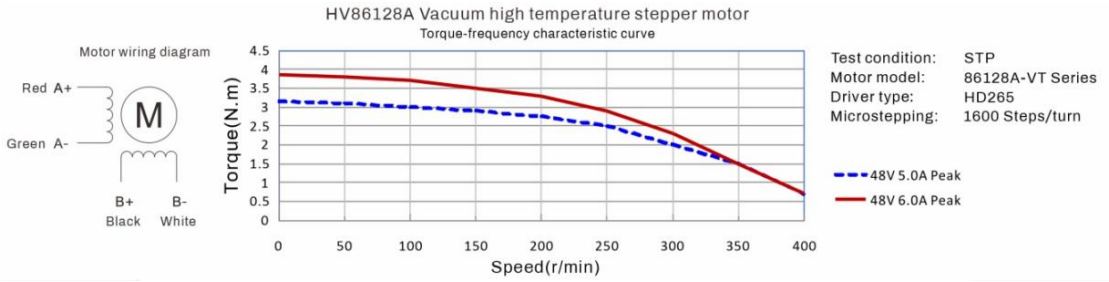
Parameters

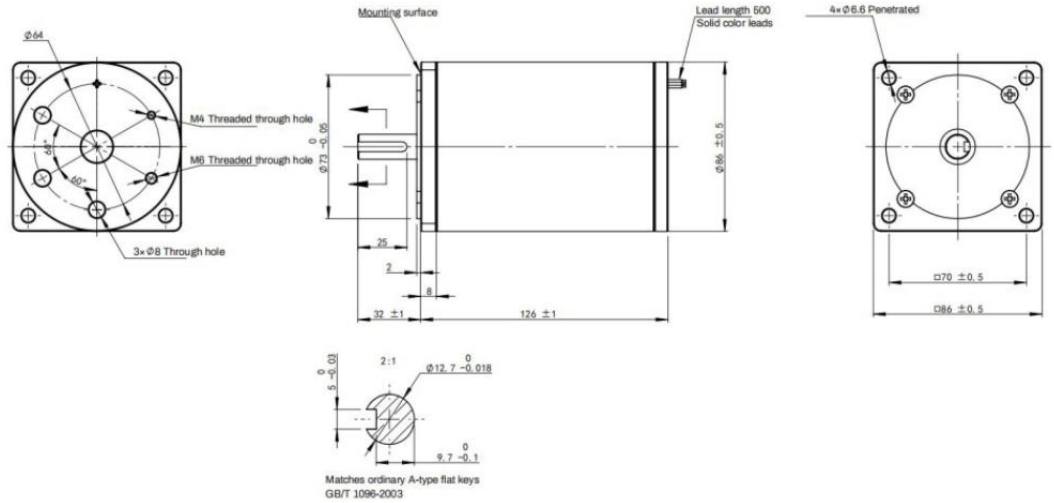
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1.4	2.7	2.5	2.1	0.8	1.3	IP20	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level C
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	VMT1 VHT1 VMT2 VHT2
Inductance Accuracy	±20%	Radial load	75N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	15N Max

HV86128A vacuum high-temperature stepper motor





Parameters

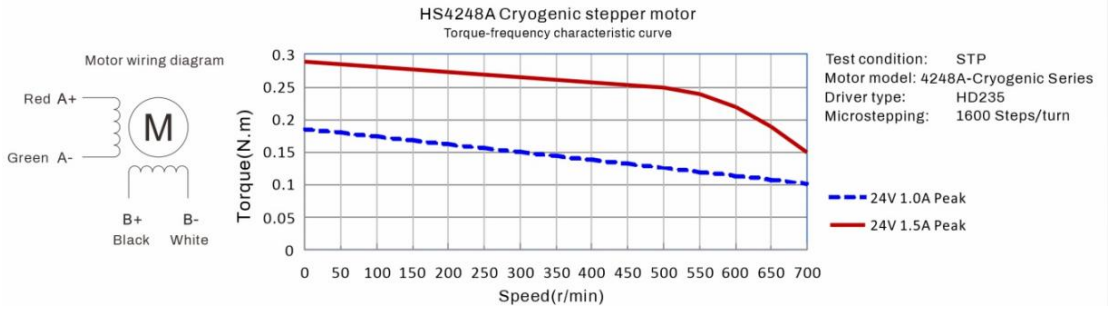
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	0.55	2.4	6	4.2	4	4.5	IP20	HD265

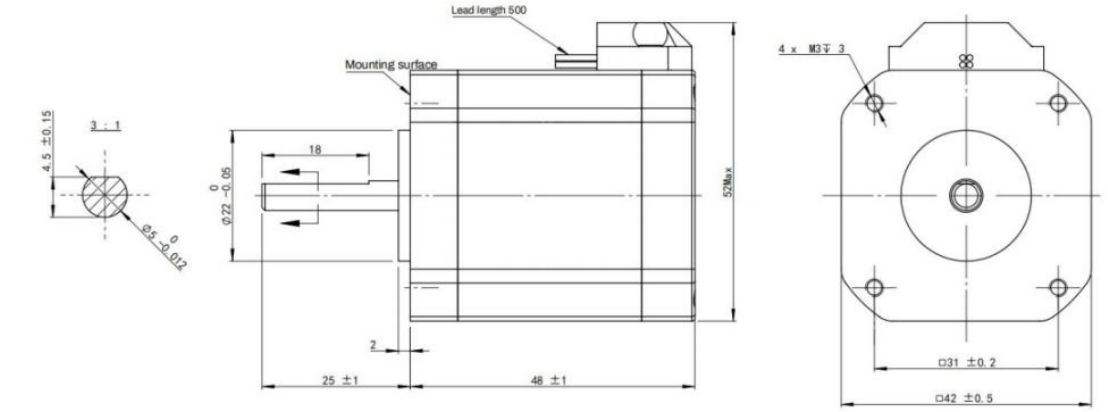
Technical Specifications

Step angle(°)	1.8°	Insulation class	Level C
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	VMT1 VHT1 VMT2 VHT2
Inductance Accuracy	±20%	Radial load	220N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	60N Max

3、Cryogenic stepper motor：

HS4248A Cryogenics tepper motor





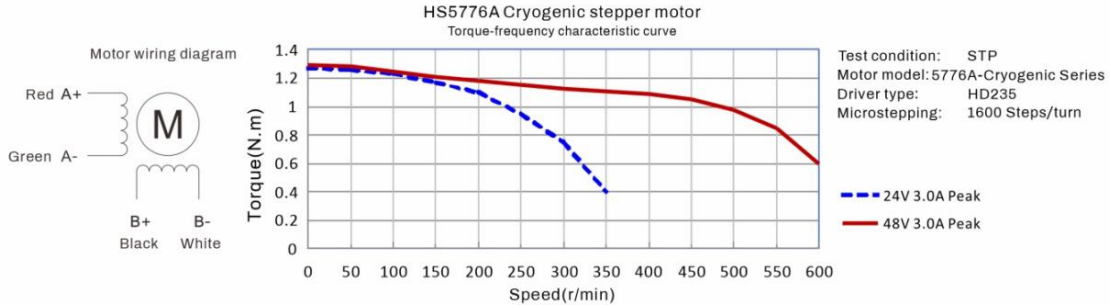
Parameters

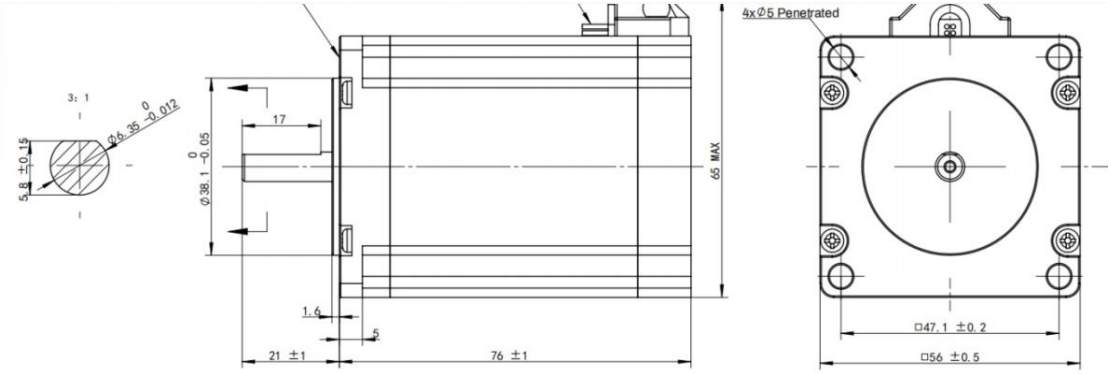
Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1.8	2.6	1.5	1.1	0.35	0.58	IP40	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	VTL3 NTL4
Inductance Accuracy	±20%	Radial load	28N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	10N Max

HS5776A Cryogenics tepper motor





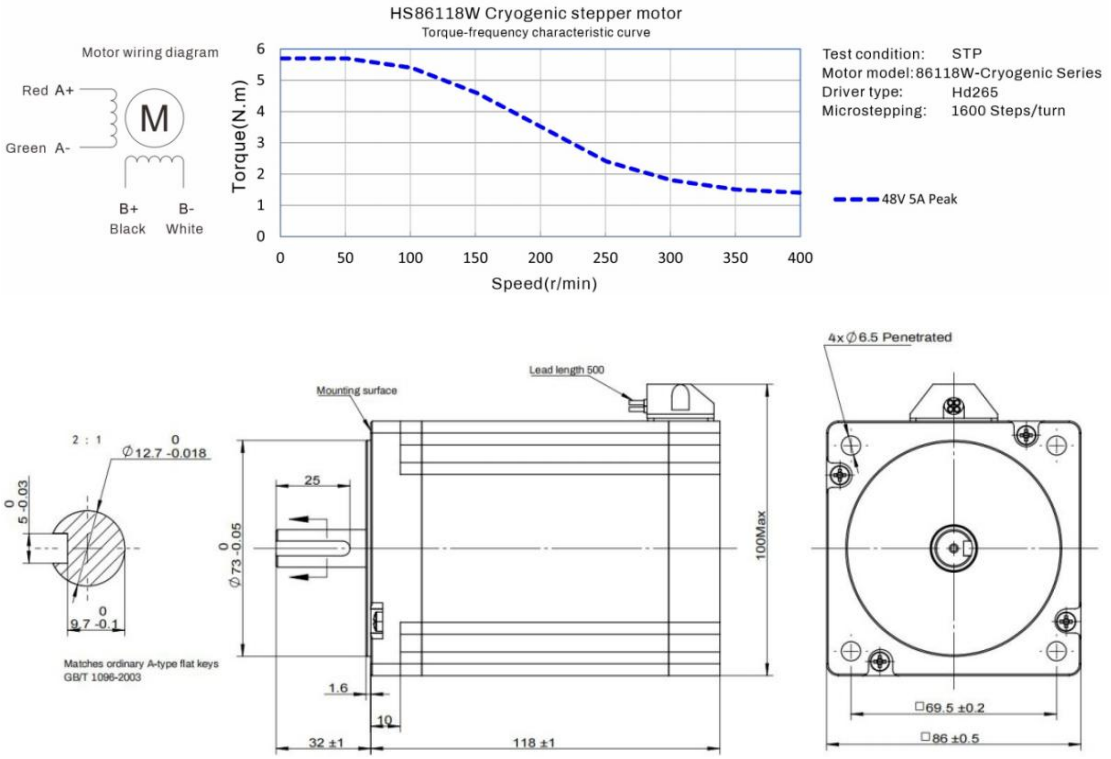
Parameters

Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	1	2.7	3	2.1	1.3	1.5	IP40	HD235

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	VTL3 NTL4
Inductance Accuracy	±20%	Radial load	75N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	15N Max

HS86118W Cryogenics tepper motor



Parameters

Step angle (°)	Phase resistance (Ω)	Phase inductance (mH)	Phase Current Peak Value (A)	Phase Current Effective Value (Arms)	Holding Torque (N.m)	Weight (kg)	Protection Class	Adapt drive
1.8	0.6	4.3	5	3.5	5.5	4.6	IP54	HD265

Technical Specifications

Step angle(°)	1.8°	Insulation class	Level B
Radial clearance	0.02mm Max (Load capacity:450g)	Insulation strength	500VAC 50Hz 1mA 1Minute
Axial clearance	0.08mm Max (Load capacity:450g)	Motor temperature rise	80℃ Max (Rated current、NTP)
Resistance Accuracy	±10%	Ambient temperature	VTL3 NTL4
Inductance Accuracy	±20%	Radial load	220N Max(20mm from the flange face)
Insulation resistance	100MΩ	Axial load	60N Max