

DC Brushless Motor
Stepper motor

宁波力圣电机有限公司

NINGBO LEISON MOTOR CO.,LIMITED

Company Profile

Ningbo Leison Motor Co.,Limited, is a professional manufacturer engaged in the research, development, production, sale of micro motor. Our main products include dc motor, gear motor, brushless motor, stepping motor, ac motor, etc. Our motors are mainly used in the industries of electronic door lock, robot, intelligent household appliance, medical equipment, industrial automation equipment, 3D printers, electric curtain, electric tools, etc.

The company is in compliance with ISO 9001 management requirements, and all our products have obtained CE certification and EU environmental protection ROSH certification requirements. In addition to the domestic market, our company has been exported to over 89 countries and regions including the United States, Germany, Japan and Australia by 2018.

Our company has strong research and development capabilities. In addition to the existing more than 300 conventional products, the company develops more than 10 new products every year to meet the different needs of customers.

We will continue to make efforts to innovate and improve our hardware facilities and customer service. We are committed to become the most reliable motor supplier and integrated solution service provider around you, Ningbo Leison Motor sincerely look forward to cooperate with you!

Product Ranges

DC Brush motor : 6mm-130mm diameter, 0.1W-500W output power
DC Spur Gear Motor : 12mm-104mm diameter, 0.1W-300W output power
DC Planetary Gear Motor : 10mm-120mm diameter, 0.1W-250W output power
Dc Brushless Motor : 24mm-110mm, 1W-1500W output power
Stepper Motor : 20mm - 130mm diameter
AC Gear Motor : 42mm - 104mm diameter, 3W-400W output power
Other Motor : Developing...

Certificates

DC MOTOR STEPPER MOTOR BRUSHLESS MOTOR LEISON MOTOR TRADEMAKE SGS CERTIFICATE



MANUFACTURING PLANT


Manufacture Building


CNC center

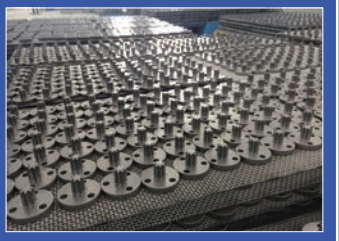

Thermal Treatment Machine


Dynamic Balance Process


Production Line


Wire Winding


Shaft Material in Hardware Workshop


Gear Material in Hardware Workshop


Precision Test

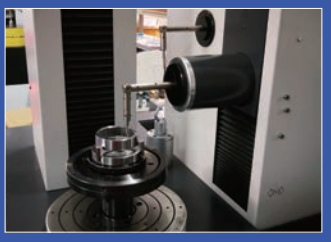

Gear Microscope


Motors Waiting for Inspection


In Process Inspection


Production Inspection


Moter Comprehensive Test Instrument


Gear Measuring Instrument


Resistance Tester


Lifetime Testing Instrumen


Noise Testing Room


Raw Material Warehouse



Sales Team Office

目录 CONTENT

DC Brushless Motor 01–09

Stepper Motor 10–34

DC Brushless Motor 28BL

Gereral Specifications

Item	Specification
Winding type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20˚C~ +50˚C
Insulation Resistance	100MΩMin.500V DC
Dielectric Strength	500V AC 1minute

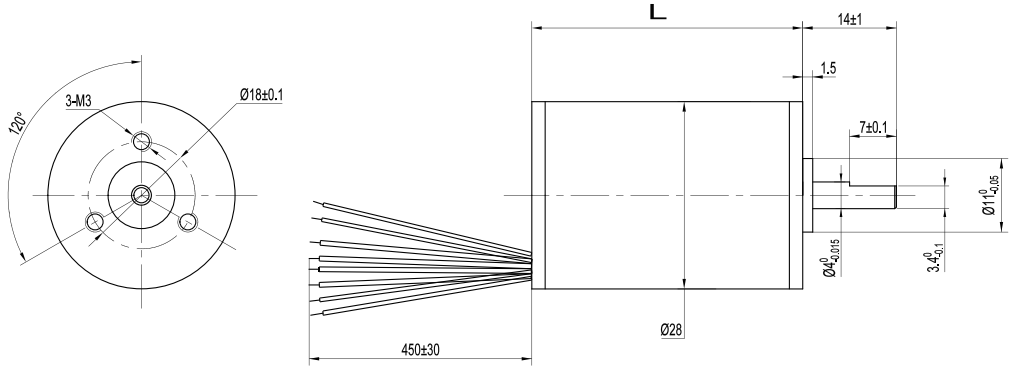


Electrical specifications

Model	Number of Poles	Number of Phases	Rated Voltage	Rated Speed	Rated Torque	Rated Current	Output Power	Peak Torque	Peak Current	Torque constant	Back EMF	Rotor inertia	Body Length	Mass
			VDC	RPM	N-m	Amps	Watts	N-m	Amps	N-m/Amps	V/KRPM	g·cm^2	mm	kg
28BL01	4	3	12	3000	0.015	0.9	2.5	0.045	2.7	0.035	3.37	1.5	40.5	0.08
28BL02			24	3000	0.03	1	4.8	0.09	3	0.058	6.1	2.5	53	0.1
28BL03			24	3000	0.05	1.5	9.5	0.15	4.5	0.057	6.1	6	78	0.3

Caution 1:Peak Torque is provided for the purpose of performance calculations only. Operate near, or at this condition will result in motor damaged.
Note: We can also manufacture products according to custonmer is requirements.

Mechnical dimenisons



Wiring Diagram

Lead NO.	Lead Color	Lead Gauge	Function
1	Red	UL1007/26AWG	+5V
2	Yellow		HALL A
3	Green		HALL B
4	Blue		HALL C
5	Black		GND
6	Yellow	UL1015/20AWG	PHASE A
7	Green		PHASE B
8	Blue		PHASE C

Gereral Specifications

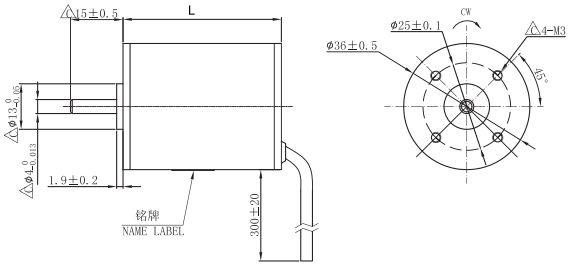
Item	Specification
Winding type	Delta
Hall effect angle	120° electrical angle
Shaft run out	0.025mm
Radial play	0.06mm@450g
End play	0.08mm@450g
Max.radial force	28N@20mm from the flange
Max.axial force	10N
Insulation class	Class B
Dielectric Strength	500VDC for one minute
Insulation resistance	100MΩMin.500VDC



Electrical specifications

Model	No.of Phase	Rated Voltage	Rated Speed	Rated Torque	Rated Power	Weight	Body length
		VDC	rpm	g·cm	W	Kg	mm
36BL01	3	12	4000	120	5	0.15	40
36BL02	3	24	5000	190	10	0.15	40
36BL03	3	12	6000	120	8	0.18	50
36BL04	3	24	6000	230	15	0.18	50
36BL05	3	12	8000	240	20	0.22	60
36BL06	3	24	8000	300	25	0.22	60

Mechnical dimenisons



Wiring Diagram

Lead NO.	Lead Color	Lead Gauge	Function	DESCRIPTION
1	Red	UL1007/26AWG	VCC	SUPPLY VOLTAGE FOR HALL SENSORS
2	Black		GND	GROUND FOR HALL SENSORS
3	Yellow		HALL 1A	
4	Blue		HALL B	
5	White		HALL C	
6	Orange	UL1007/26AWG	PHASE U	
7	Green		PHASE V	
8	Brown		PHASE W	

Gereral Specifications

Item	Specification
Winding type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20˚C~ +50˚C
Insulation Resistance	100MΩMin.500V DC
Dielectric Strength	500V AC 1minute

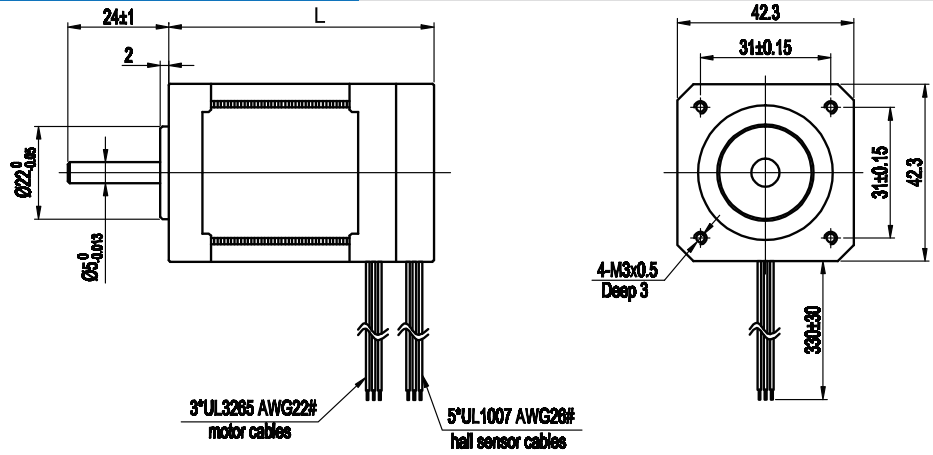


Electrical specifications

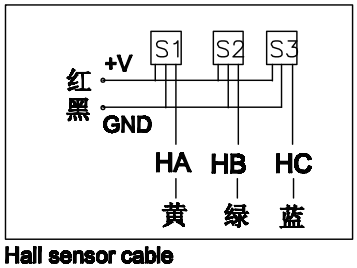
Model	Number of Poles	Number of Phases	Rated Voltage	Rated Speed	Rated Torque	Rated Current	Output Power	Peak Torque	Peak Current	Torque constant	Back EMF	Rotor inertia	Body Length	Mass
			VDC	RPM	N-m	Amps	Watts	N-m	Amps	N-m/Amps	V/KRPM	g·cm^2	mm	kg
42BLF01	8	3	24	4000	0.063	1.9	26	0.18	5.7	0.035	3.7	24	47	0.33
42BLF02			24	4000	0.125	3.4	52	0.38	10.2	0.036	3.8	48	63	0.48
42BLF03			24	4000	0.188	5.7	78	0.75	18	0.036	3.8	72	79	0.63

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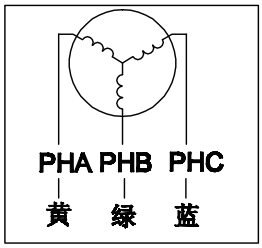
Mechnical dimenisons



Wiring Diagram



Hall sensor cable
Note: hall sensor power supply voltage +5 to +20VDC



Wiring cable

Gereral Specifications

Item	Specification
Winding type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20˚C~ +50˚C
Insulation Resistance	100MΩMin.500V DC
Dielectric Strength	500V AC 1minute

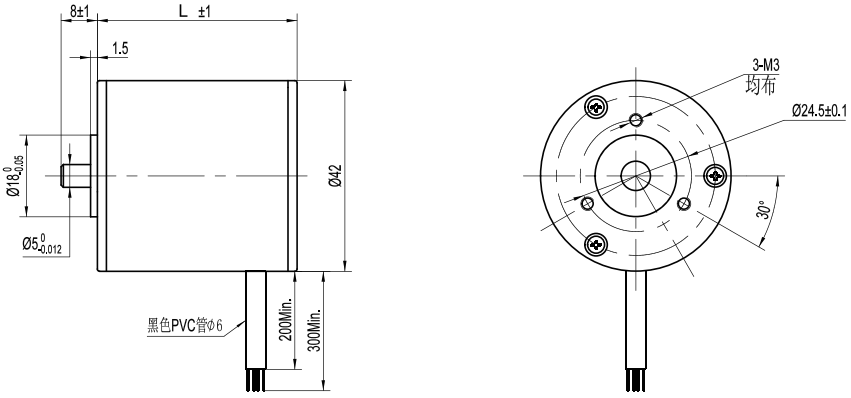


Electrical specifications

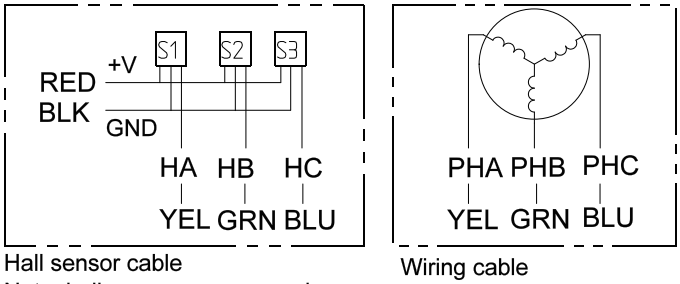
Model	Number of Poles	Number of Phases	Rated Voltage	Rated Speed	Rated Torque	Rated Current	Output Power	Peak Torque	Peak Current	Torque constant	Back EMF	Rotor inertia	Body Length	Mass
			VDC	RPM	N-m	Amps	Watts	N-m	Amps	N-m/Amps	V/KRPM	g·cm^2	mm	kg
42BLY01	4	3	24	3000	0.035	0.9	11	0.11	2.7	0.035	3.37	25	42	0.35
42BLY02			24	3000	0.07	2.1	22	0.21	6.3	0.035	3.37	35	60	0.5
42BLY03			24	3000	0.105	3	33	0.315	9	0.036	3.38	45	78	0.8

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Mechnical dimenisons



Wiring Diagram



Hall sensor cable
Note: hall sensor power supply voltage +5 to +20VDC

Wiring cable

Gereral Specifications

Item	Specification
Winding type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20˚C~ +50˚C
Insulation Resistance	100MΩMin.500V DC
Dielectric Strength	700V AC 1minute

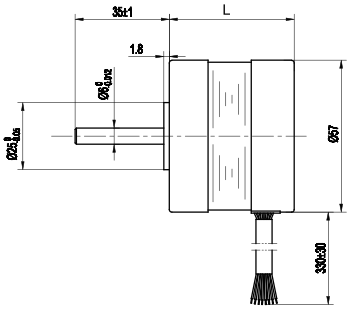


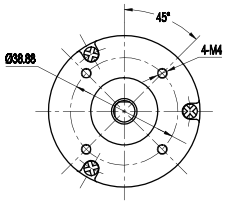
Electrical specifications

Model	Number of Poles	Number of Phases	Rated Voltage	Rated Speed	Rated Torque	Rated Current	Output Power	Peak Torque	Peak Current	Torque constant	Back EMF	Rotor inertia	Body Length	Mass
			VDC	RPM	N-m	Amps	Watts	N-m	Amps	N-m/Amps	V/KRPM	g·cm^2	mm	kg
57BL01	4	3	24	2500	0.057	1.2	15	0.18	3.6	0.074	7.75	32	41.5	0.43
57BL02			24	3000	0.11	2.3	34	0.38	6.8	0.059	6.2	42	46.5	0.5
57BL03			24	3000	0.165	3.0	52	0.58	9	0.06	6.3	58	56.5	0.67
57BL04			24	3000	0.22	4.4	69	0.8	13.2	0.062	6.5	72	66.5	0.75
57BL05			24	3000	0.33	6.6	103	1.2	19.8	0.062	6.5	106	86.5	1.0
57BL06			24	3000	0.44	8.6	138	1.6	25.8	0.063	6.6	140	106.5	1.25

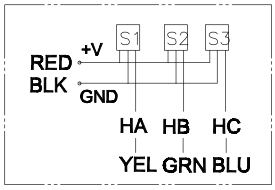
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Note: We can also manufacture products according to custonmer is requirements.

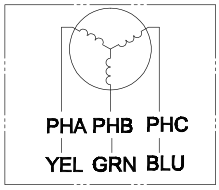
Mechnical dimenisons





Wiring Diagram

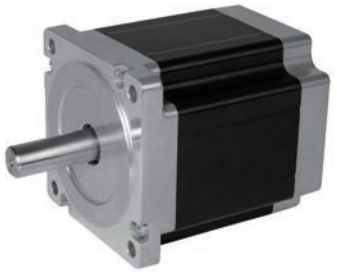




SIGNAL	GND	Z	A	+5V	B
COLOUR	colour l	2	3	4	5

Gereral Specifications

Item	Specification
Winding type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20˚C~ +50˚C
Insulation Resistance	100MΩMin.500V DC
Dielectric Strength	700V AC 1minute

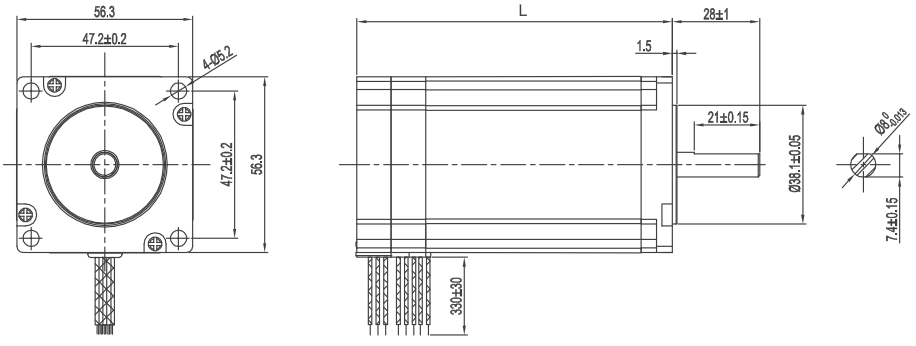


Electrical specifications

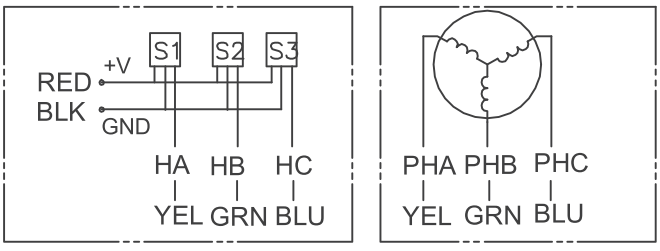
Model	Number of Poles	Number of Phases	Rated Voltage	Rated Speed	Rated Torque	Rated Current	Output Power	Peak Torque	Peak Current	Torque constant	Back EMF	Rotor inertia	Body Length	Mass
			VDC	RPM	N-m	Amps	Watts	N-m	Amps	N-m/Amps	V/KRPM	g·cm^2	mm	kg
57BLF01	8	3	24	3000	0.2	4	63	0.6	12	0.065	6.23	120	48	0.65
57BLF02			24	3000	0.4	7.8	125	0.12	23.5	0.066	6.3	170	69	1.0
57BLF03			24	3000	0.6	12	188	1.8	36	0.066	6.3	220	90	1.4
57BLF04			36	3000	0.8	15	250	2.4	45	0.066	6.3	270	111	2.0

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Mechnical dimenisons



Wiring Diagram



Gereral Specifications

Item	Specification
Winding type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20˚C~ +50˚C
Insulation Resistance	100MΩMin.500V DC
Dielectric Strength	1000V AC 1minute

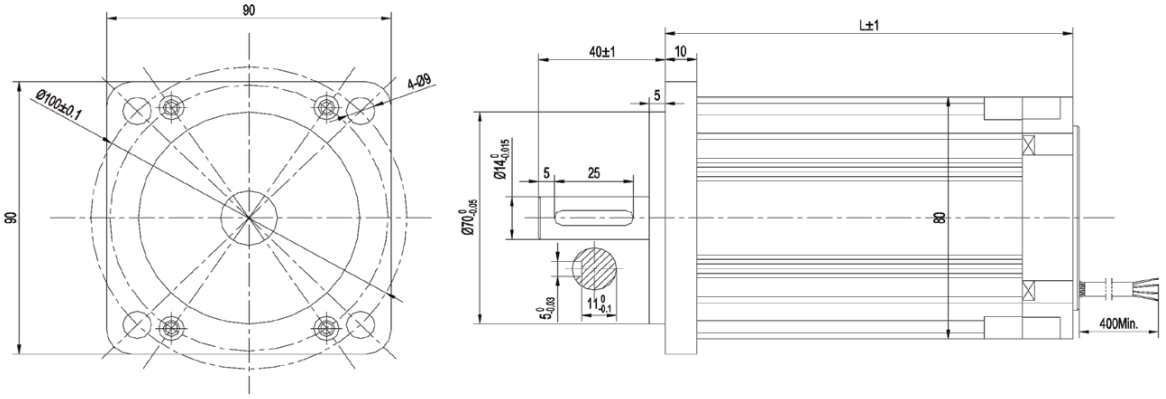


Electrical specifications

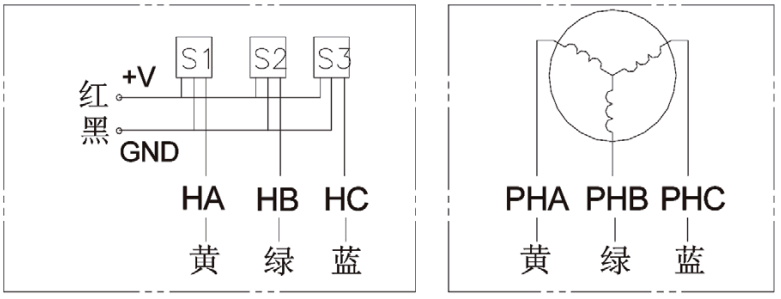
Model	Number of Poles	Number of Phases	Rated Voltage	Rated Speed	Rated Torque	Rated Current	Output Power	Peak Torque	Peak Current	Torque constant	Back EMF	Body Length	Mass
			VDC	RPM	N-m	Amps	Watts	N-m	Amps	N-m/Amps	V/KRPM	mm	kg
80BL01	4	3	48	3000	0.7	8.5	220	2.45	25	0.115	1.2	111	3
80BL02			310	3000	1.1	1.9	350	3.5	6.5	0.741	77.5	131	4.5
80BL03			310	3000	1.6	2.2	500	6.6	7	0.74	77.5	161	6

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Mechnical dimenisons

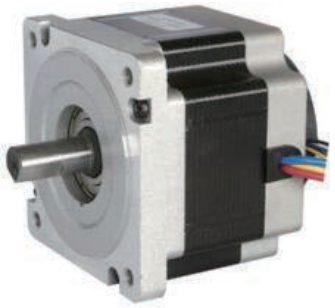


Wiring Diagram



Gereral Specifications

Item	Specification
Winding type	Star
Insulation Class	B
Ambient Temperature Range	-20˚C~ +50˚C
Insulation Resistance	100MΩMin.500V DC
Dielectric Strength	750V AC 1minute

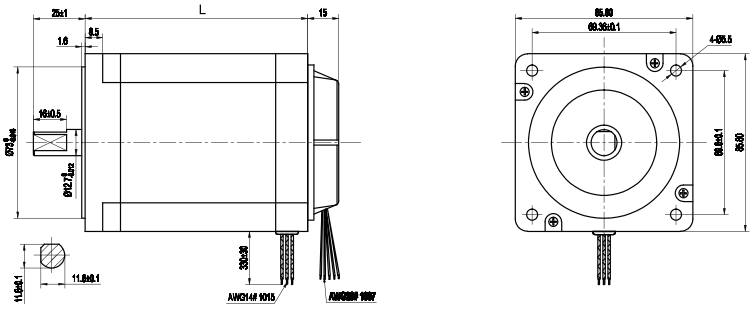


Electrical specifications

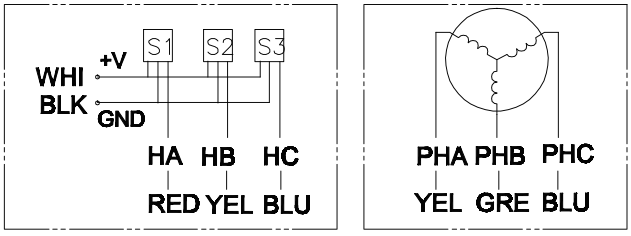
Model	Number of Poles	Number of Phases	Rated Voltage	Rated Speed	Rated Torque	Rated Current	Output Power	Peak Torque	Peak Current	Torque constant	Back EMF	Rotor inertia	Body Length	Mass
			VDC	RPM	N-m	Amps	Watts	N-m	Amps	N-m/Amps	V/KRPM	g·cm^2	mm	kg
86BLF07	8	3	48	3000	2.1	22	660	6.3	55	0.116	12.2	1850	124	2.75
86BLF06			48	3000	1.8	18	550	5.4	46	0.115	12.0	1150	109	2.75
86BLF01			48	3000	1.4	14	440	4.2	38.0	0.115	12.0	1250	94	2.75
86BLF02			48	3000	1.05	9.6	330	3.2	29.0	0.115	12.0	950	81	2.2
86BLF03			48	3000	0.7	6.6	220	2.1	19.8	0.112	11.8	650	67	1.75
86BLF04			48	3000	0.35	3.9	110	1.05	10.8	0.11	11.5	350	57	1.1

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Note: We can also manufacture products according to custonmer is requirements.

Mechnical dimenisons



Wiring Diagram



General Specifications

110BLF Series

Winding Type ———————————— Star
Hall Effect angle ———————————— 120° electrical angle
Insulation Class ———————————— B
Ambient Temperature Range ———— -20℃~+50℃
Insulation Resistance ———————— 100MΩ Min.500V DC
Dielectric Strength ———————————— 1000VAC 1minute



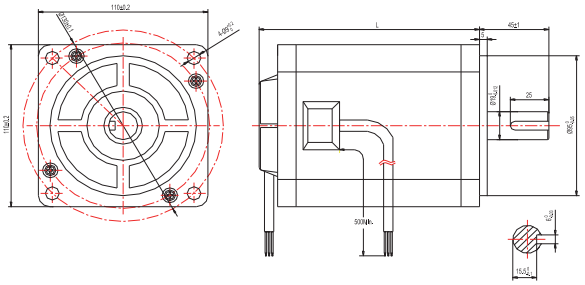
Electrical Specifications

Model 电机型号	110BLF01	110BLF02	110BLF03
Number of Poles 极数	8		
Number of Phases 相数	3		
Rated Voltage 额定电压 VDC	310	310	310
Rated speed 额定转速 RPM	3000	3000	3000
Rated Torque 额定力矩 N-m	3.5	4.5	6.5
Rated Current 额定电流 Amps	5	6	8.5
Output Power 输出功率 Watts	1000	1400	2000
Peak Torque 峰值力矩 N-m	10.5	13.5	19.5
Peak Current 峰值电流 Amps	15	18	25.5
Torqueconstant 力矩常数 N-m/Amps	0.75	0.75	0.75
Back EMF 反电势常数 V/kRPM	77.5	77.5	77.5
Rotor inertia 转动惯量 $g \cdot cm^2$	3000	3500	4000
Body Length (L)机身长度 mm	156	177	216
Mass 重量 kg	6	8	10

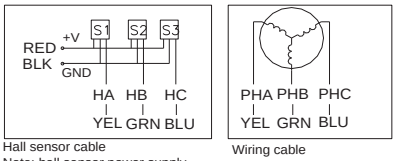
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Mechanical Dimensions&Winding Diagram



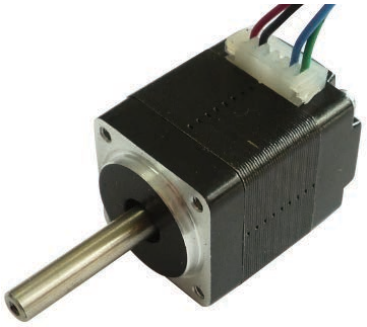
Connection diagram:



Hall sensor cable
Note: hall sensor power supply voltage +5 to +20VDC

Wiring cable

8HY(20mm) Series, 1.8 deg/step

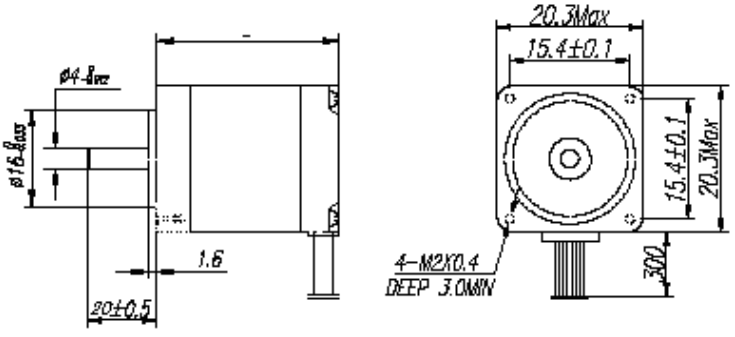


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
8HY2402	1.8	28	0.2	23	8.2	1.4	0.2	2.5	4	50
8HY2406	1.8	28	0.6	3.2	0.9	1.4	0.2	2.5	4	50
8HY3402	1.8	34	0.2	25	8.4	1.8	0.3	3.2	4	70
8HY3406	1.8	34	0.6	4.5	1.2	1.8	0.3	3.2	4	70
8HY4402	1.8	40	0.2	32	8.8	2.6	0.5	4.5	4	82
8HY4406	1.8	40	0.6	5.8	1.6	2.6	0.5	4.5	4	82

* Note: It's only typical technical data,special requirement can be customized.

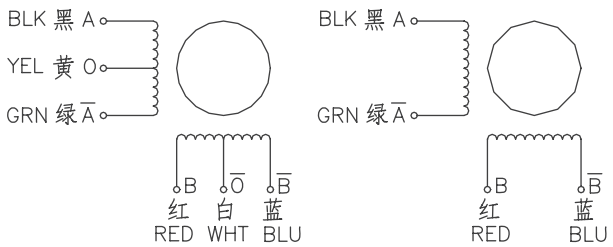
Mechanical Dimensions



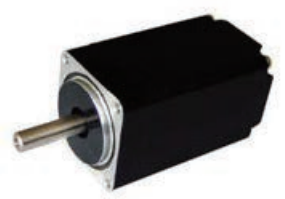
Description:

Model	Motor Length
8HY2xxx	28mm
8HY3xxx	34mm
8HY4xxx	40mm

Wiring Diagram



11HY (28mm) Series, 1.8 deg/step

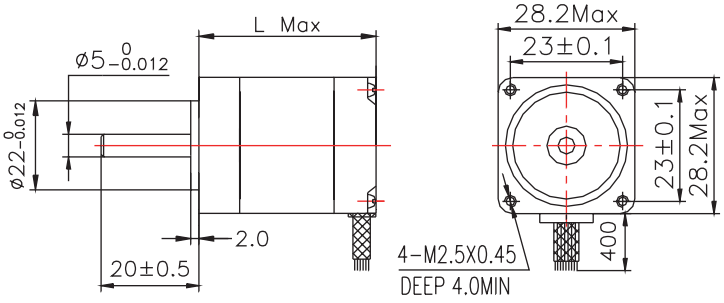


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
11HY2401	1.8	28	0.6	4.2	2.2	4.5	0.3	6	4	105
11HY2402	1.8	28	0.35	12	5.8	4.5	0.3	6	4	105
11HY3401	1.8	33	0.6	5.5	3.2	6.0	0.4	8	4	110
11HY3402	1.8	33	0.35	15	9.2	6.0	0.4	8	4	110
11HY4401	1.8	41	0.6	7.0	6.0	6.0	0.5	11	4	140
11HY4402	1.8	41	0.35	20	15	6.0	0.5	11	4	140
11HY5401	1.8	50	0.6	9.0	7.2	10	0.8	13	4	180
11HY5402	1.8	50	0.35	24	18.5	10	0.8	13	4	180

* Note: It's only typical technical data,special requirement can be customized.

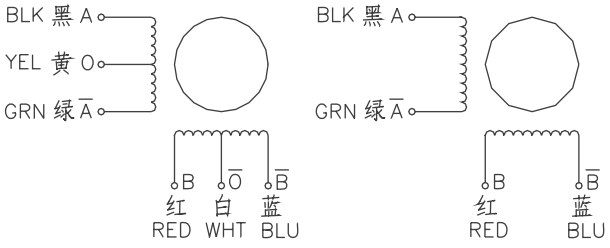
Mechanical Dimensions



Description:

Model	Motor Length
11HY2xxx	28mm
11HY3xxx	33mm
11HY4xxx	41mm
11HY5xxx	50mm

Wiring Diagram



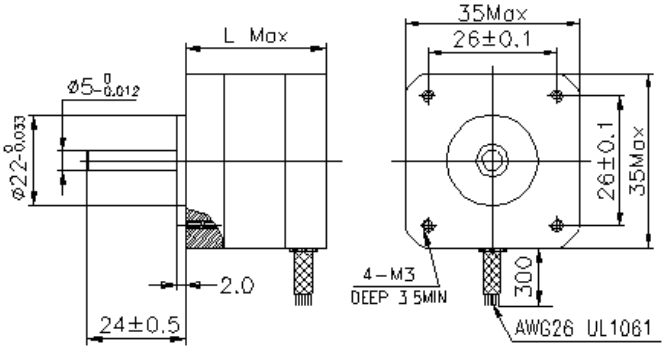
14HM (35mm) Series, 0.9 deg/step



Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
14HM2401	0.9	28	0.8	4.5	4.2	9	0.3	12	4	130
14HM2402	0.9	28	0.55	10	9.5	9	0.3	12	4	130
14HM2403	0.9	28	0.36	22	20	9	0.3	12	4	130
14HM2630	0.9	28	0.4	30	12	8	0.3	12	6	130
14HM3401	0.9	34	0.8	6	10	14	0.6	18	4	190
14HM3402	0.9	34	0.55	12	19	14	0.6	18	4	190
14HM3403	0.9	34	0.36	28	42	14	0.6	18	4	190
14HM3630	0.9	34	0.4	30	18	10	0.6	18	6	190
* Note: It's only typical technical data,special requirement can be customized.										

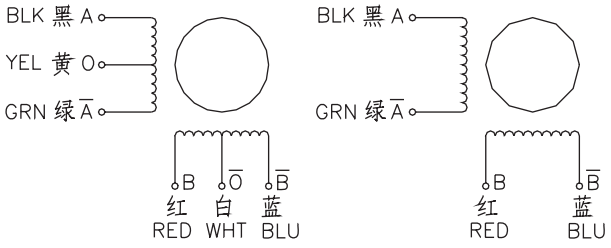
Mechanical Dimensions



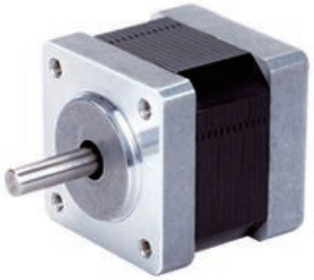
Description:

Model	Motor Length
14HM2xxx	28mm
14HM3xxx	34mm

Wiring Diagram



14HY (35mm) Series, 1.8 deg/step

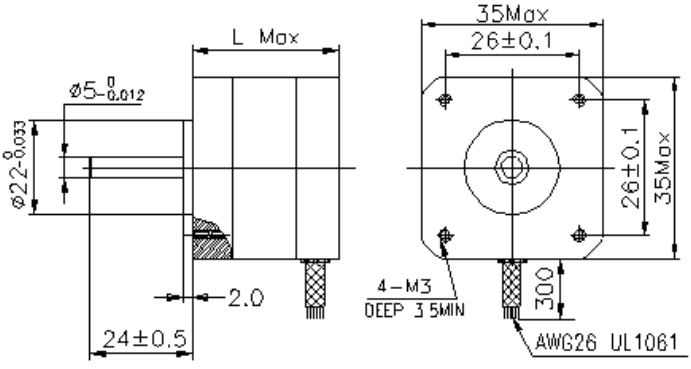


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
14HY0404	1.8	20	0.4	22	16	5.0	0.5	9	4	90
14HY1402	1.8	26	0.8	4.2	4.5	10	0.6	10	4	110
14HY2420	1.8	28	0.46	20	14	12	0.8	11	4	120
14HY2402	1.8	28	0.8	5.0	5.0	12	0.8	11	4	120
14HY2630	1.8	28	0.4	30	11	9	0.8	11	6	120
14HY3401	1.8	34	0.42	25	32	18	1.0	13	4	160
14HY3402	1.8	34	0.8	6.5	9.8	18	1.0	13	4	160
14HY3630	1.8	34	0.4	30	22	12	1.0	13	6	160
14HY4402	1.8	42	0.8	10.5	13	22	1.5	22	4	200
14HY5402	1.8	52	0.8	14.0	26	30	2.0	26	4	230

* Note: It's only typical technical data,special requirement can be customized.

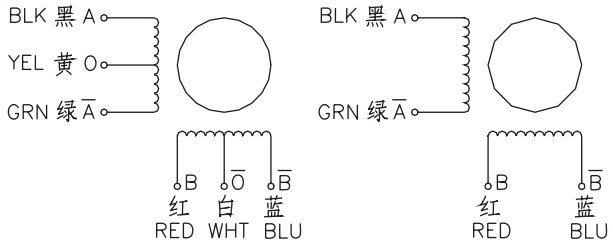
Mechanical Dimensions



Description:

Model	Motor Length
14HY2xxx	28mm
14HY3xxx	34mm

Wiring Diagram



16HM (39mm) Series, 0.9 deg/step

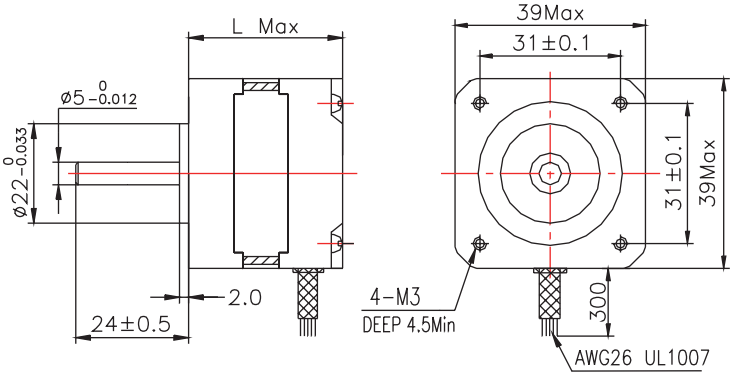


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
16HM0401	0.9	20	0.42	20	16	8	0.5	15	4	100
16HM2410	0.9	26	0.6	9	16	14	0.8	18	4	120
16HM3401	0.9	34	0.6	9	15	16	1.1	23	4	160
16HM3402	0.9	34	1.2	2.5	3.6	16	1.1	23	4	160
16HM3630	0.9	34	0.4	30	16	12	1.1	23	6	160
16HM4401	0.9	40	0.6	12	20	22	1.4	30	4	210
16HM4402	0.9	40	1.2	3.2	5.5	22	1.4	30	4	210
16HM4630	0.9	40	0.4	30	26	18	1.4	30	6	210

* Note: It's only typical technical data,special requirement can be customized.

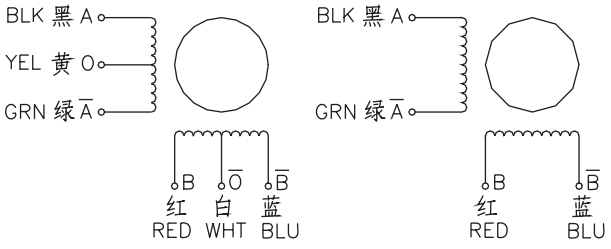
Mechanical Dimensions



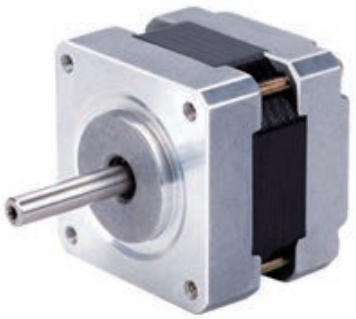
Description:

Model	Motor Length
16HM0xxx	20mm
16HM2xxx	26mm
16HM3xxx	34mm
16HM4xxx	40mm

Wiring Diagram



16HY (39mm) Series, 1.8 deg/step

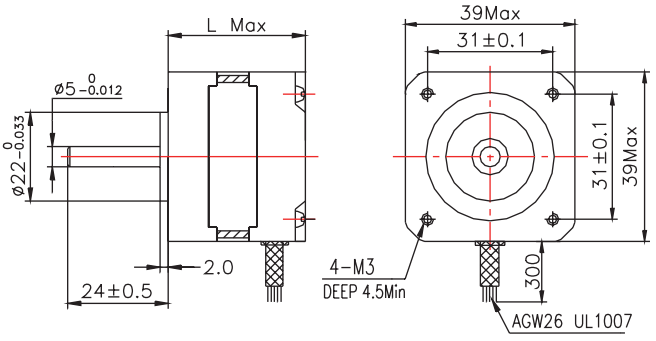


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
16HY0401	1.8	20	0.42	18	12	8	0.5	12	4	100
16HY2410	1.8	26	0.6	9	10	14	0.8	14	4	120
16HY3401	1.8	34	0.6	12	13	18	1.0	19	4	160
16HY3402	1.8	34	1.2	3.2	3.0	16	1.0	19	4	160
16HY3630	1.8	34	0.4	30	14	12	1.0	19	6	160
16HY4401	1.8	40	0.6	12	20	24	1.2	24	4	210
16HY4402	1.8	40	1.2	3.8	6.5	24	1.2	24	4	210
16HY4630	1.8	40	0.4	30	22	18	1.2	24	6	210

* Note: It's only typical technical data,special requirement can be customized.

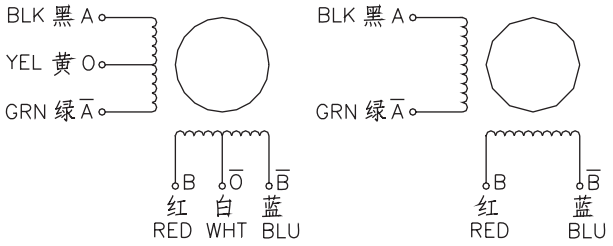
Mechanical Dimensions



Description:

Model	Motor Length
16HY0xxx	20mm
16HY2xxx	26mm
16HY3xxx	34mm
16HY4xxx	40mm

Wiring Diagram



17HM (42mm) Series, 0.9 deg/step

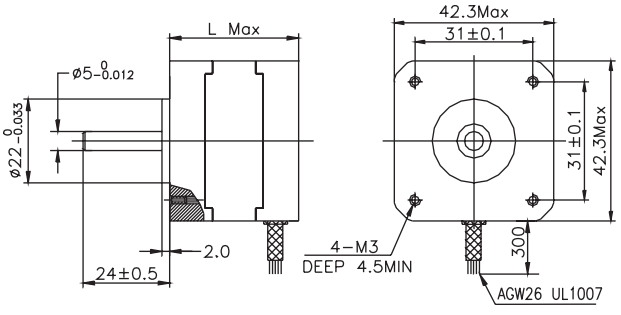


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
17HM0403	0.9	21	0.3	25	36	8	1.2	24	4	120
17HM2408	0.9	28	0.6	9	9	10	0.9	20	4	130
17HM3401	0.9	34	1.3	2.4	3.6	24	1.2	34	4	220
17HM3410	0.9	34	1.7	1.2	2.2	24	1.2	34	4	220
17HM3430	0.9	34	0.4	30	45	24	1.2	34	4	220
17HM3630	0.9	34	0.4	30	22	20	1.2	34	6	220
17HM3616	0.9	34	0.16	75	54	12	1.2	34	6	220
17HM4401	0.9	40	1.7	1.5	3.8	36	1.8	54	4	280
17HM4402	0.9	40	1.3	2.5	6.2	36	1.8	54	4	280
17HM4602	0.9	40	1.2	3.2	3.8	26	1.8	54	6	280
17HM4630	0.9	40	0.4	30	34	26	1.8	54	6	280
17HM8401	0.9	48	1.7	1.8	4.0	42	2.2	68	4	350
17HM8402	0.9	48	1.3	3.0	7.0	36	2.2	68	4	350
17HM8403	0.9	48	2.3	1.2	2.0	42	2.2	68	4	350

* Note: It's only typical technical data,special requirement can be customized.

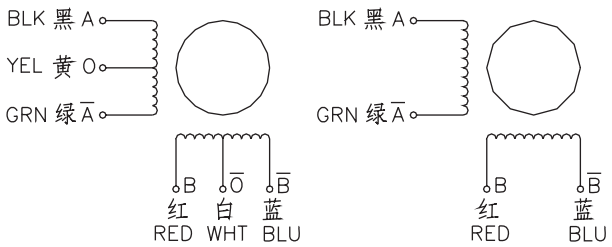
Mechanical Dimensions



Description:

Model	Motor Length
17HM2xxx	28mm
17HM3xxx	34mm
17HM4xxx	40mm
17HM8xxx	48mm
17HM9xxx	58mm
17HM6xxx	63mm

Wiring Diagram



17HS/42mm series 1.8 degree/step

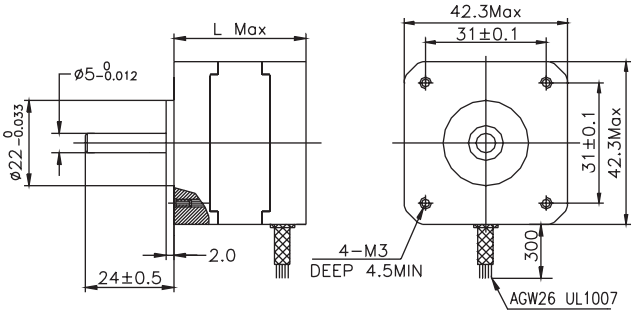


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
17HS0410	1.8	20	0.8	3.8	4.5	10	1.2	24	4	120
17HS2408	1.8	28	0.6	8	10	12	1.6	30	4	150
17HS3401	1.8	34	1.3	2.4	2.8	28	1.6	34	4	220
17HS3410	1.8	34	1.7	1.2	1.8	28	1.6	34	4	220
17HS3630	1.8	34	0.4	30	18	21	1.6	34	6	220
17HS4401	1.8	40	1.7	1.5	2.8	40	2.2	54	4	280
17HS4402	1.8	40	1.3	2.5	5.0	40	2.2	54	4	280
17HS4602	1.8	40	1.2	3.2	2.8	28	2.2	54	6	280
17HS8401	1.8	48	1.7	1.8	3.2	52	2.6	68	4	350
17HS8402	1.8	48	1.3	3.2	5.5	52	2.6	68	4	350
17HS8403	1.8	48	2.3	1.2	1.6	46	2.6	68	4	350
17HS8630	1.8	48	0.4	30	38	34	2.6	68	6	350
17HS9403	1.8	60	2.3	1.4	2.5	70	3.6	80	4	480
17HS6403	1.8	63	2.3	1.5	2.2	80	4.0	85	4	500

* Note: It's only typical technical data,special requirement can be customized.

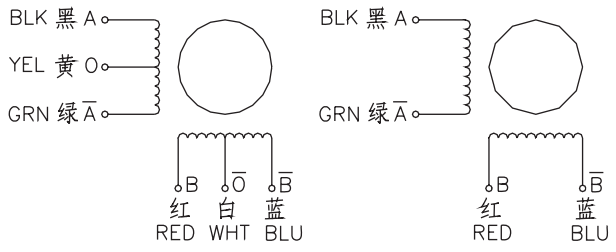
Mechanical Dimensions



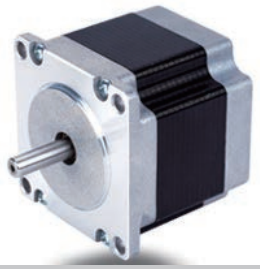
Description:

Model	Motor Length
17HS2xxx	28mm
17HS3xxx	34mm
17HS4xxx	40mm
17HS8xxx	48mm
17HS9xxx	58mm
17HS6xxx	63mm

Wiring Diagram



23HM (57mm) Series, 0.9 deg/step

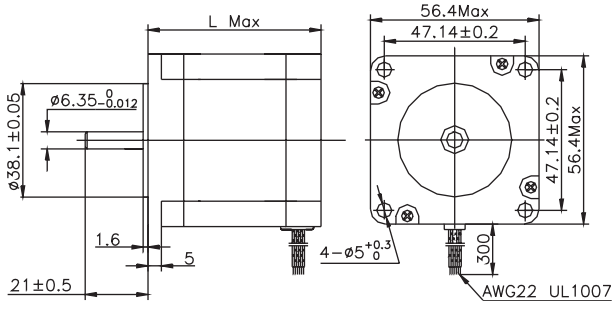


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
23HM0405	0.9	41	0.62	12	28	0.32	2.5	150	4	470
23HM0408	0.9	41	2.0	1.2	3.0	0.32	2.5	150	4	470
23HM4425	0.9	45	2.5	1.0	3.0	0.62	2.8	190	4	520
23HM5406	0.9	51	0.62	13	34	0.7	3.0	230	4	590
23HM5425	0.9	51	2.5	1.2	3.8	0.7	3.0	230	4	590
23HM6403	0.9	56	2.5	1.3	5.2	1.0	3.5	280	4	680
23HM6430	0.9	56	3.0	0.8	2.8	1.0	3.5	280	4	680
23HM6404	0.9	56	4.2	0.4	1.5	1.0	3.5	280	4	680
23HM7401	0.9	64	1.0	7.5	28	1.1	5.0	380	4	850
23HM7425	0.9	64	2.5	1.5	5.8	1.1	5.0	380	4	850
23HM7430	0.9	64	3.0	0.8	3.0	1.1	5.0	380	4	850
23HM7404	0.9	64	4.2	0.55	1.5	1.14	5.0	380	4	850
23HM8603	0.9	76	1.5	4.5	10	1.25	6.0	440	6	1050
23HM8425	0.9	76	2.5	1.8	8.2	1.2	6.0	440	4	1050
23HM8430	0.9	76	3.0	1.0	4.3	1.5	6.0	440	4	1050
23HM8404	0.9	76	4.2	0.65	2.2	1.5	6.0	440	4	1050

* Note: It's only typical technical data,special requirement can be customized.

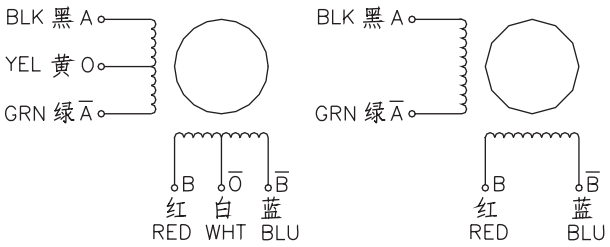
Mechanical Dimensions



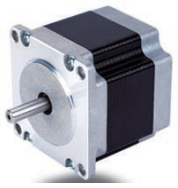
Description:

Model	Motor Length
23HM0xxx	41mm
23HM4xxx	45mm
23HM5xxx	51mm
23HM6xxx	56mm
23HM7xxx	64mm
23HM8xxx	76mm

Wiring Diagram



23HS (57mm) Series, 1.8 deg/step

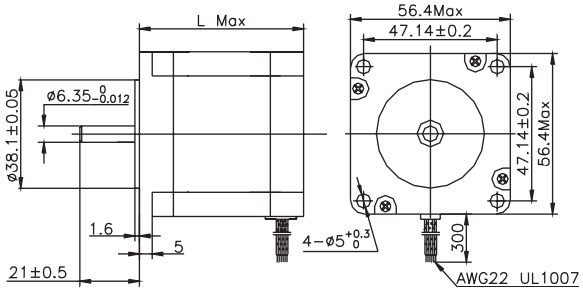


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
23HS0405	1.8	41	0.62	12	24	0.55	2.5	150	4	470
23HS0408	1.8	41	2.0	1.2	2.5	0.55	2.5	150	4	470
23HS4412	1.8	45	0.62	12	26	0.8	2.8	190	4	520
23HS4425	1.8	45	2.5	1.0	2.2	0.8	2.8	190	4	520
23HS5406	1.8	51	0.62	13	28	1.0	2.8	190	4	520
23HS5425	1.8	51	2.5	1.2	3.2	1.0	2.8	190	4	520
23HS6602	1.8	56	1.5	3.2	5.5	0.9	3.5	280	6	590
23HS6430	1.8	56	3.0	0.8	2.4	1.1	3.5	280	4	680
23HS6404	1.8	56	4.2	0.4	1.2	1.1	3.5	280	4	680
23HS7401	1.8	64	1.0	7.5	20	1.5	5.0	380	4	850
23HS7430	1.8	64	3.0	0.8	2.3	1.5	5.0	380	4	850
23HS7404	1.8	64	4.2	0.55	1.2	1.5	5.0	380	4	850
23HS8430	1.8	76	3.0	1.0	3.5	1.8	6.0	440	4	1050
23HS8404	1.8	76	4.2	0.6	1.8	1.8	6.0	440	4	1050
23HS1430	1.8	100	3.0	1.4	5.5	2.5	10	680	4	1250
23HS1404	1.8	100	4.2	0.8	3.0	2.5	10	680	4	1250
23HS2430	1.8	112	3.0	1.6	6.8	2.8	12	800	4	1400
23HS2404	1.8	112	4.2	0.9	3.8	2.5	12	800	4	1400

* Note: It's only typical technical data,special requirement can be customized.

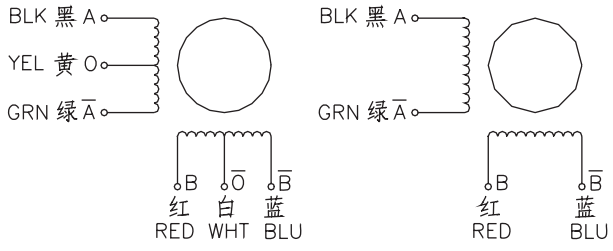
Mechanical Dimensions



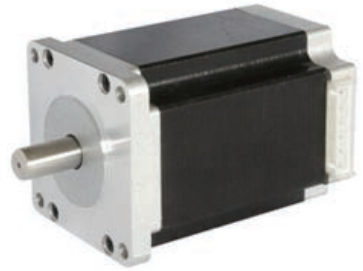
Description:

Model	Motor Length
23HS0xxx	41mm
23HS4xxx	45mm
23HS5xxx	51mm
23HS6xxx	56mm
23HS7xxx	64mm
23HS8xxx	76mm
23HS1xxx	100mm
23HS2xxx	112mm

Wiring Diagram



24HS (60mm) Series, 1.8 deg/step

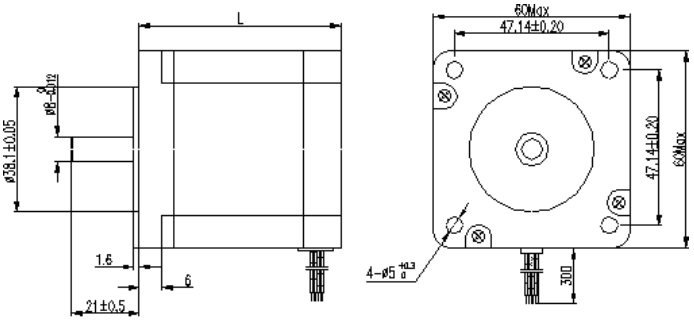


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
24HS0408	1.8	41	2.0	1.2	2.5	75	3.0	180	4	500
24HS4425	1.8	45	2.5	1.0	2.2	85	3.5	200	4	550
24HS5425	1.8	51	2.5	1.2	3.2	140	4.0	250	4	580
24HS6425	1.8	56	2.5	1.3	4.2	160	4.0	350	4	580
24HS6530	1.8	56	3.0	0.8	2.4	160	4.0	350	4	580
24HS6404	1.8	56	4.2	0.4	1.2	160	4.0	350	4	580
24HS7425	1.8	64	2.5	1.5	4.5	180	5.0	450	4	850
24HS7430	1.8	64	3.0	0.8	2.3	180	5.0	450	4	850
24HS7404	1.8	64	4.2	0.55	1.2	180	5.0	450	4	850
24HS8425	1.8	76	2.5	1.8	6.5	220	7.0	550	4	1150
24HS8430	1.8	76	3.0	1.0	3.5	220	7.0	550	4	1150
24HS8404	1.8	76	4.2	0.6	1.8	220	7.2	550	4	1150
24HS1430	1.8	90	3.0	1.4	5.5	260	12	780	4	1400
24HS1404	1.8	90	4.2	0.5	3.0	260	12	780	4	1400

* Note: It's only typical technical data,special requirement can be customized.

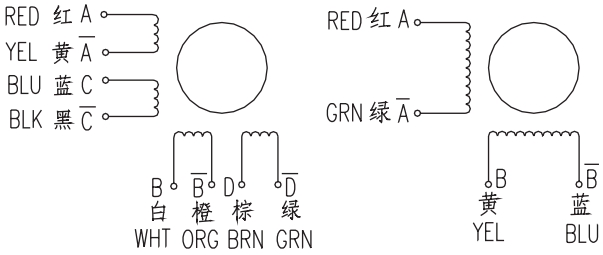
Mechanical Dimensions



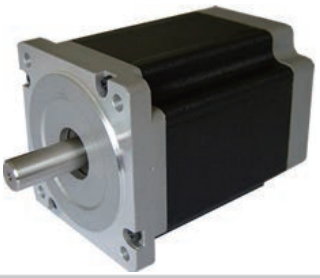
Description:

Model	Motor Length
24HS0xxx	41mm
24HS4xxx	45mm
24HS5xxx	51mm
24HS6xxx	56mm
24HS7xxx	64mm
24HS8xxx	76mm
24HS1xxx	90mm

Wiring Diagram



34HS (86mm) Series, 1.8 deg/step

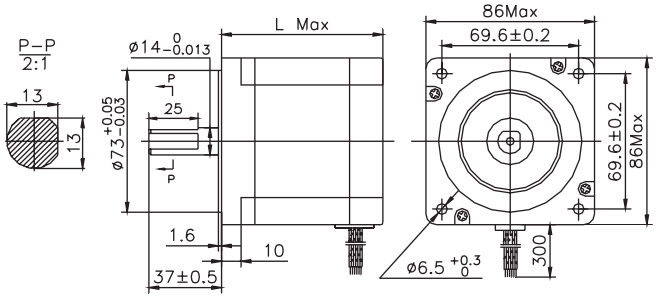


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
34HS6801	1.8	66	4.0	0.6	1.6	220	5.5	0.85	8	2.0
34HS6802	1.8	66	5.0	0.4	1.0	220	5.5	0.85	8	2.0
34HS6803	1.8	66	2.7	1.2	3.5	220	5.5	0.85	8	2.0
34HS8801	1.8	78	4.0	0.7	3.0	300	6.5	1.05	8	2.5
34HS8802	1.8	78	5.0	0.5	1.8	300	6.5	1.05	8	2.5
34HS8803	1.8	78	2.7	1.6	5.6	300	6.5	1.05	8	2.5
34HS9801	1.8	98	4.0	0.98	4.1	490	9.5	1.55	8	3.0
34HS9802	1.8	98	5.0	0.65	2.4	490	9.5	1.55	8	3.0
34HS9803	1.8	98	2.7	1.9	8.6	490	9.5	1.55	8	3.0
34HS4801	1.8	114	4.0	1.1	5.5	580	12.5	1.8	8	4.0
34HS4802	1.8	114	5.0	0.75	3.2	580	12.5	1.8	8	4.0
34HS4803	1.8	114	2.7	2.0	11.5	580	12.5	1.8	8	4.0
34HS2801	1.8	126	4.0	1.3	5.8	640	18.5	2.2	8	4.5
34HS2802	1.8	126	5.0	0.85	3.4	640	18.5	2.2	8	4.5
34HS2803	1.8	126	2.7	2.5	12.5	640	18.5	2.2	8	4.5
34HS5801	1.8	150	4.0	1.4	9.2	850	24.5	2.5	8	5.0
34HS5802	1.8	150	5.0	0.9	5.2	850	24.5	2.5	8	5.0
34HS5803	1.8	150	2.7	2.9	17.5	850	24.5	2.5	8	5.0

* Note: It's only typical technical data,special requirement can be customized.

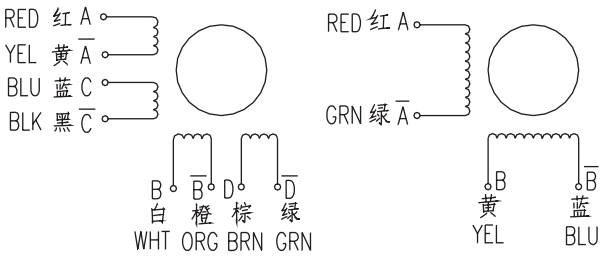
Mechanical Dimensions



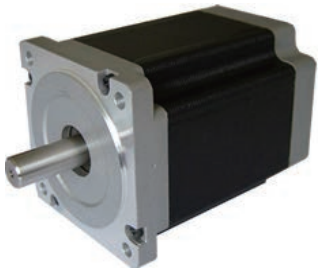
Description:

Model	Motor Length
34HS6xxx	66mm
34HS8xxx	78mm
34HS9xxx	98mm
34HS4xxx	114mm
34HS2xxx	126mm
34HS5xxx	150mm

Wiring Diagram



34HM (0.9 deg/step)

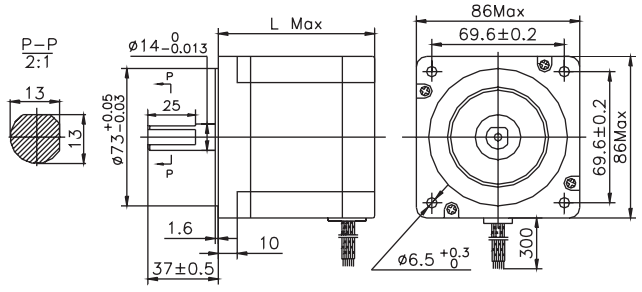


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.cmMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
34HM6801	0.9	66	4.0	0.6	1.6	200	5.0	0.85	8	2.0
34HM6802	0.9	66	5.0	0.4	1.0	200	5.0	0.85	8	2.0
34HM6803	0.9	66	2.7	1.2	3.5	200	5.0	0.85	8	2.0
34HM8801	0.9	78	4.0	0.7	3.0	270	5.8	1.05	8	2.5
34HM8802	0.9	78	5.0	0.5	1.8	270	5.8	1.05	8	2.5
34HM8803	0.9	78	2.7	1.6	5.6	270	5.8	1.05	8	2.5
34HM9801	0.9	98	4.0	0.98	4.1	450	8.5	1.55	8	3.0
34HM9802	0.9	98	5.0	0.65	2.4	450	8.5	1.55	8	3.0
34HM9803	0.9	98	2.7	1.9	8.6	450	8.5	1.55	8	3.0
34HM4801	0.9	114	4.0	1.1	5.5	520	11.0	1.8	8	3.5
34HM4802	0.9	114	5.0	0.75	3.2	520	11.0	1.8	8	3.5
34HM4803	0.9	114	2.7	2.0	11.5	520	11.0	1.8	8	3.5
34HM2801	0.9	126	4.0	1.3	5.8	580	16.5	2.2	8	3.9
34HM2802	0.9	126	5.0	0.85	3.4	580	16.5	2.2	8	3.9
34HM2803	0.9	126	2.7	2.5	12.5	580	116.5	2.2	8	3.9
34HM5801	0.9	150	4.0	1.4	9.2	780	20.5	2.5	8	4.2
34HM5802	0.9	150	5.0	0.9	5.2	780	20.5	2.5	8	4.2
34HM5803	0.9	150	2.7	2.9	17.5	780	20.5	2.5	8	4.2

* Note: It's only typical technical data,special requirement can be customized.

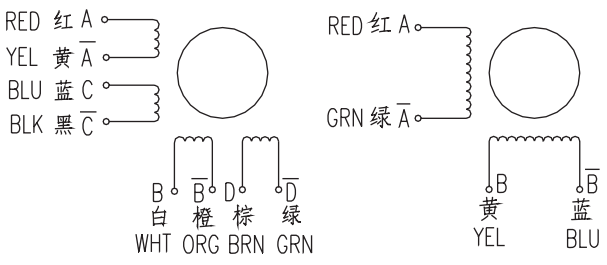
Mechanical Dimensions



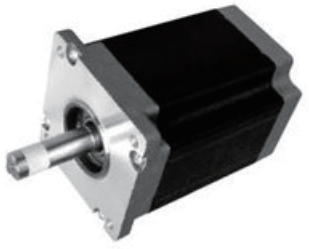
Description:

Model	Motor Length
34HM2XXX	126mm
34HM4XXX	114mm
34HM5XXX	150mm
34HM6XXX	66mm
34HM8XXX	78mm
34HM9XXX	98mm

Wiring Diagram



43HS (110mm) Series, 1.8 deg/step

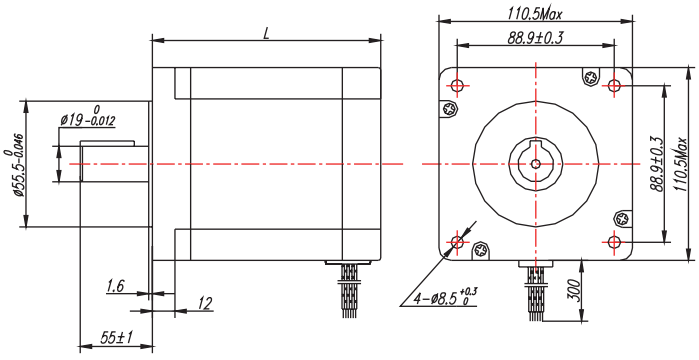


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.mMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
43HS1842	1.8	115	4.2	0.94	7.0	8.5	24.5	6	8	5.8
43HS5842	1.8	150	4.2	2.3	18.5	14.2	35.5	11	8	8.4
43HS6850	1.8	165	5.0	1.3	17.8	17.8	45.5	13	8	9.5
43HT1340	1.2	120	4.0	2.4	8.0	8.0	20.5	8.5	3	6.2
43HT4340	1.2	140	4.0	2.1	12.0	12.0	30.5	10.5	3	8.0
43HT7350	1.2	170	5.0	1.3	16.0	16.0	40.5	12.7	3	10

* Note: It's only typical technical data,special requirement can be customized.

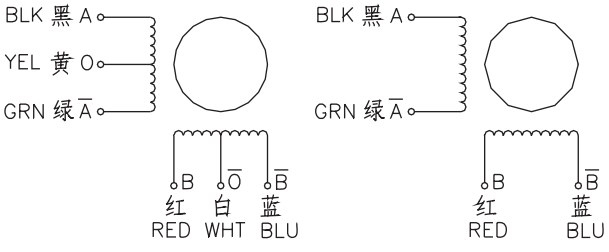
Mechanical Dimensions



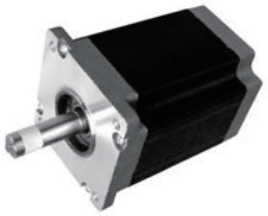
Description:

Model	Motor Length
43HS1xxx	115mm
43HS5xxx	150mm
43HS6xxx	165mm
43HT1xxx	120mm
43HT4xxx	140mm
43HT7xxx	170mm

Wiring Diagram



43HS (1.8 deg/step)

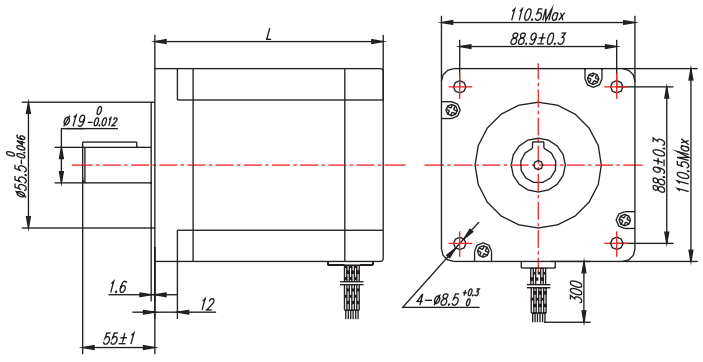


Electrical Specification

Model	Step Angle (°)	Motor Length (mm)	Rated Current(A)	Phase Resistance(Ω)	Phase Inductance(mH)	Holding Torque (N.mMin)	Detent Torque (N.cmMax)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight(g)
43HS0460	1.8	100	6.0	0.5	6.0	12	20.5	4	4	5.0
43HS1460	1.8	117	6.0	0.47	7.5	15	24.5	6	4	5.8
43HS2460	1.8	126	6.0	0.66	10.5	18	21.5	9	4	6.8
43HS5460	1.8	150	6.0	0.8	13.5	22	35.5	11	4	8.4
43HS6460	1.8	165	6.0	0.87	16.0	26	45.5	13	4	9.3
43HS8460	1.8	200	6.0	1.1	22.0	29	65.5	25	4	13.0
43HS8480	1.8	200	8.0	0.62	13.5	29	65.5	25	4	13.0

* Note: It's only typical technical data,special requirement can be customized.

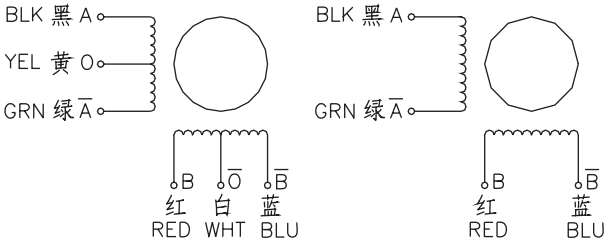
Mechanical Dimensions



Description:

Model	Motor Length
43HS0XXX	100mm
43HS1XXX	117mm
43HS2XXX	126mm
43HS5XXX	150mm
43HS6XXX	165mm
43HS8XXX	200mm

Wiring Diagram



Leaner Hybrid Stepping Motor

LS-2-Phase 8HY(1.8°)

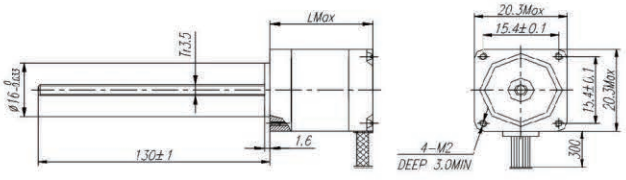


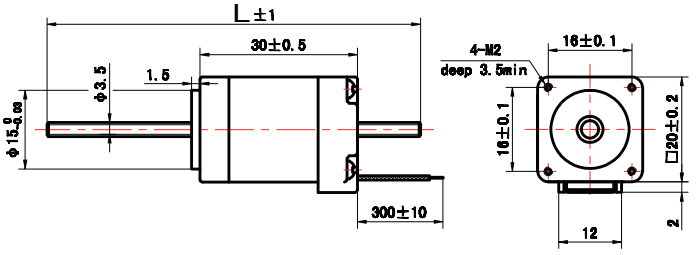
Electrical Specifications

Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
8HY2402	1.8	28	0.2	23	8.2	1.4	0.2	2.5	4	50
8HY2406	1.8	28	0.6	3.2	0.9	1.4	0.2	2.5	4	50
8HY3402	1.8	34	0.2	25	8.4	1.8	0.3	3.2	4	70
8HY3406	1.8	34	0.6	4.5	1.2	1.8	0.3	3.2	4	70
8HY4402	1.8	40	0.2	32	8.8	2.6	0.5	4.5	4	82
8HY4406	1.8	40	0.6	5.8	1.6	2.6	0.5	4.5	4	82

* Note: We can also customize according to customer's requirements.

Mechanical Dimensions





Series Modes	Motor Length
8HY2XXX	28mm
8HY3XXX	34mm
8HY4XXX	40mm

LS-2-Phase 14HY(1.8°)



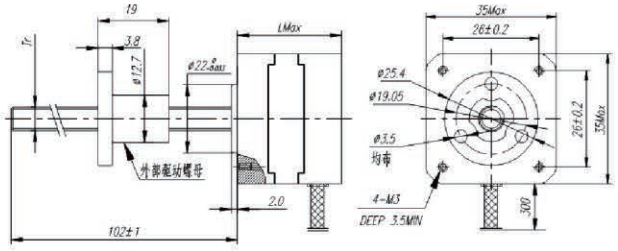


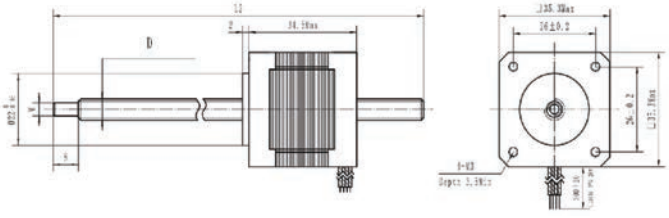
Electrical Specifications

Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
14HY2420	1.8	28	0.46	20	15	12	0.8	11	4	120
14HY2402	1.8	28	0.8	5.5	7.0	12	0.8	11	4	120
14HY3401	1.8	34	0.42	25	40	18	1.0	13	4	160
14HY3402	1.8	34	0.8	6.5	12	18	1.0	13	4	160

* Note: We can also customize according to customer's requirements.

Mechanical Dimensions

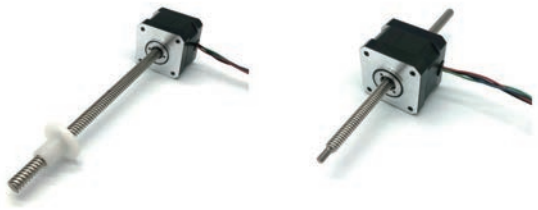




Specification	Screw Diameter	Step Length	Screw Lead
1	Tr6.35	0.0079	1.58
2	Tr8	0.0158	3.17
		0.0315	6.35
		0.04	8

* Shaft length can be custom-made.

LS-2-Phase 17HS(1.8°)

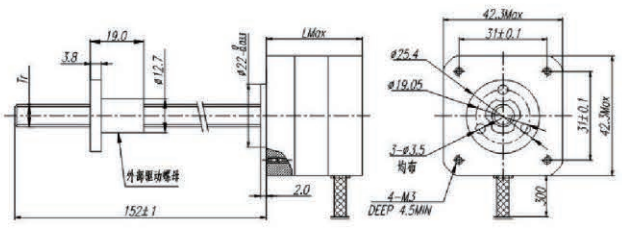


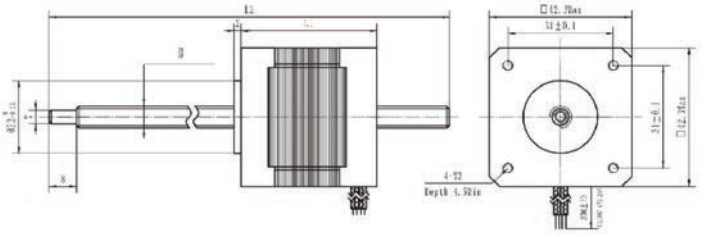
Electrical Specifications

Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
17HS3401	1.8	34	1.3	2.4	2.8	28	1.6	34	4	220
17HS3410	1.8	34	1.7	1.2	1.8	28	1.6	34	4	220
17HS4401	1.8	40	1.7	1.5	2.8	40	2.2	54	4	280
17HS8401	1.8	48	1.7	1.8	3.2	52	2.6	68	4	350
17HY8403	1.8	48	2.3	1.2	1.6	46	2.6	68	4	350

* Note: We can also customize according to customer's requirements.

Mechanical Dimensions

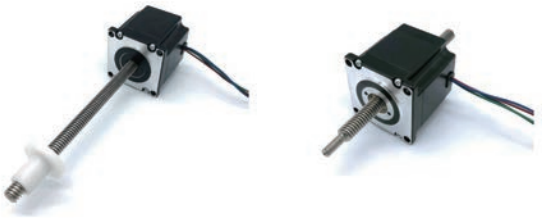




Specification	Screw Diameter	Step Length	Screw Lead
1	Tr6.35	0.0079	1.58
2	Tr8	0.0158	3.17
		0.0315	6.35
		0.04	8

* Shaft length can be custom-made.

LS-2-Phase 23HS(1.8º)

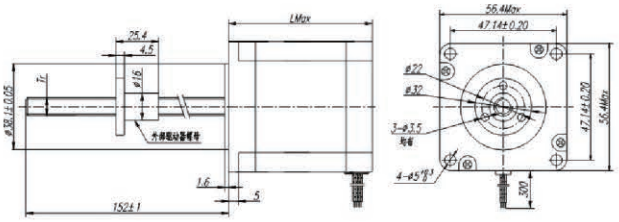


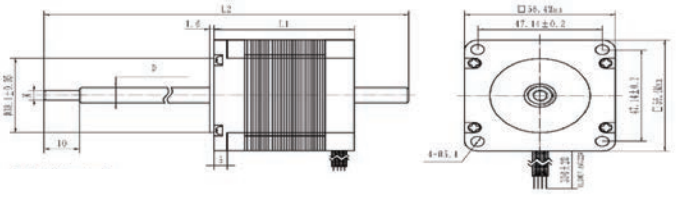
Electrical Specifications

Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
23HS0408	1.8	41	2.0	1.2	2.5	55	2.5	150	4	470
23HS4425	1.8	45	2.5	1.0	2.2	80	2.8	190	4	520
23HS5425	1.8	51	2.5	1.2	3.2	110	2.8	190	4	520
23HS6403	1.8	56	2.5	1.3	4.2	110	3.5	280	4	680
23HS7425	1.8	64	2.5	1.5	4.5	150	5.0	380	4	850
23HS8425	1.8	76	2.5	1.8	6.5	180	6.0	440	4	1050
23HS8404	1.8	76	4.2	0.6	1.8	180	6.0	440	4	1050
23HS1404	1.8	100	3.0	1.4	5.5	250	10	680	4	1250

* Note: We can also customize according to customer's requirements.

Mechanical Dimensions





Specification	Screw Diameter	Step Length	Screw Lead
1	Tr8	0.04	8
2	Tr9.53	0.0127	2.54
		0.0254	5.08
		0.0508	10.16

* Shaft length can be custom-made.

Planetary Geared Stepper Motor

LS-22PA/20BYG

Housing Material: Metal
Backlash at No Load: ≤1.5°
Bearing at Output: Ball or Sleeve
Permissible Overhung Load: ≤2.5kg
Permissible Thrust Load: ≤0.5kg
Max.Radial Play: ≤0.05mm
Max.Thrust Play: ≤0.3mm



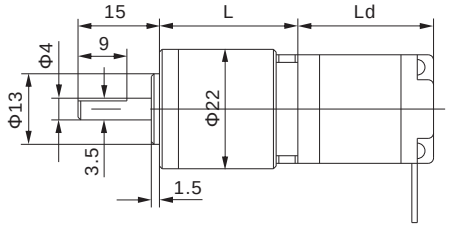
Motor Data

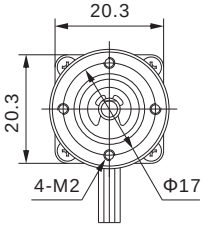
Model	Step Angle	Length (Ld)	Phase Voltage	Phase Current	Phase Resistance	Phase Inductance	Holding Torque	Lead Wire
		mm	V	A	Ω	mH	g.cm	
20BYGH28-020-4A/B	1.8	28	4.8	0.2	24	8	160	4
20BYGH30-050-6A/B	1.8	30	5.75	0.5	11.5	11.7	180	6
20BYGH33-060-4A/B	1.8	33	3.9	0.6	6.5	2.2	200	4
20BYGH38-060-4A/B	1.8	38	6	0.6	10	5.5	400	4

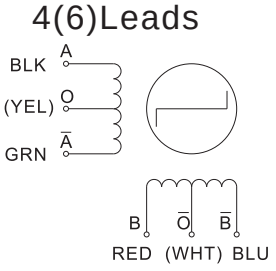
Gearbox Data

Reduction Ratio(X:1)	4	4.75	16	19	22.56	64	76	90.25	107
Number of gear trains	1	1	2	2	2	3	3	3	3
Rated output torque(kg.cm)	100	100	200	200	200	300	300	300	300
Gear Box Length(mm)	47.5	47.5	59.5	59.5	59.5	71.5	71.5	71.5	71.5

Mechanical Dimensions







Planetary Geared Stepper Motor

LS-28PA/28BYG

Housing Material: Metal
Backlash at No Load: ≤1.5°
Bearing at Output: Ball or Sleeve
Permissible Overhung Load: ≤2.5kg
Permissible Thrust Load: ≤0.5kg
Max.Radial Play: ≤0.05mm
Max.Thrust Play: ≤0.3mm



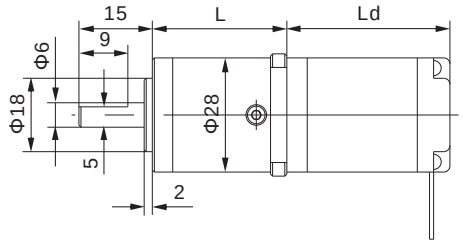
Motor Data

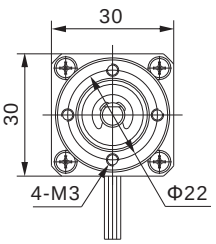
Model	Step Angle	Length (Ld)	Phase Voltage	Phase Current	Phase Resistance	Phase Inductance	Holding Torque	Lead Wire
		mm	V	A	Ω	mH	g.cm	
28BYGH32-067-4A/B	1.8	32	3.51	0.67	5.6	3.4	600	4
28BYGH32-095-6A/B	1.8	32	2.66	0.95	2.8	0.8	430	6
28BYGH45-067-4A/B	1.8	45	4.56	0.67	6.8	4.9	950	4
28BYGH45-095-6A/B	1.8	45	3.22	0.95	3.4	1.2	750	6
28BYGH51-067-4A/B	1.8	51	6.20	0.67	9.2	7.2	1200	4
28BYGH51-095-6A/B	1.8	51	4.35	0.95	4.6	1.8	900	6

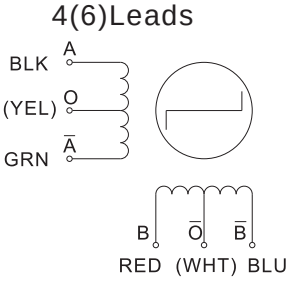
Gearbox Data

Reduction Ratio(X:1)	3.7	5.2	13	19	27	51	71	100	139	189	264
Number of gear trains	1	1	2	2	2	3	3	3	3	4	4
Rated output torque(kg.cm)	20	20	30	30	30	40	40	40	40	40	40
Gear Box Length(mm)	27	27	35	35	35	43	43	43	43	50.5	50.5

Mechanical Dimensions







LS-32PA/35BYG

Housing Material: Metal
Backlash at No Load: ≤1.5°
Bearing at Output: Ball or Sleeve
Permissible Overhung Load: ≤10kg
Permissible Thrust Load: ≤5kg
Max.Radial Play: ≤0.05mm
Max.Thrust Play: ≤0.3mm



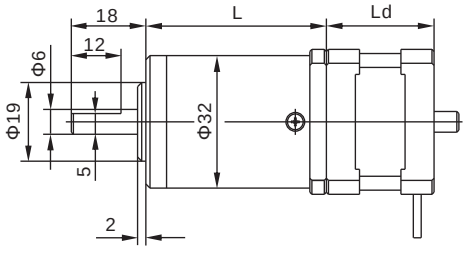
Motor Data

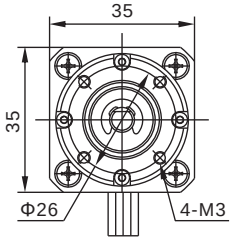
Model	Step Angle	Length (Ld)	Phase Voltage	Phase Current	Phase Resistance	Phase Inductance	Holding Torque	Lead Wire
		mm	V	A	Ω	mH	g.cm	
35BYGH20-073-4A/B	1.8	20	6.57	0.73	9	4	600	4
35BYGH20-040-4A/B	1.8	20	10.8	0.40	27	17	600	4
35BYGH26-075-4A/B	1.8	26	3.23	0.75	4.3	4	700	4
35BYGH28-058-4A/B	1.8	28	7	0.58	13	9.5	10000	4
35BYGH28-100-4A/B	1.8	28	3.50	1.00	3.5	3.5	1000	4
35BYGH34-050-4A/B	1.8	34	11	0.50	22	12	1000	6

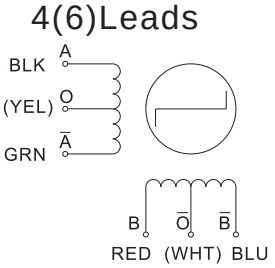
Gearbox Data

Reduction Ratio(X:1)	4	5	13	19	27	51	71	100	139
Number of gear trains	1	1	2	2	2	3	3	3	3
Rated output torque(kg.cm)	20	20	30	30	30	40	40	40	40
Gear Box Length(mm)	28	28	36	36	36	44	44	44	44

Mechanical Dimensions







Planetary Geared Stepper Motor

LS-36PA/39BYG

Housing Material: Metal
Backlash at No Load: ≤1.5°
Bearing at Output: Ball or Sleeve
Permissible Overhung Load: ≤10kg
Permissible Thrust Load: ≤5kg
Max.Radial Play: ≤0.05mm
Max.Thrust Play: ≤0.3mm



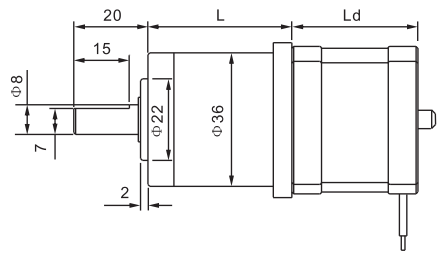
Motor Data

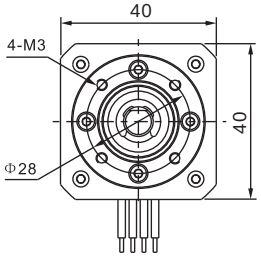
Model	Step Angle	Length (Ld)	Phase Voltage	Phase Current	Phase Resistance	Phase Inductance	Holding Torque	Lead Wire
		mm	V	A	Ω	mH	g.cm	
39BYGH20(M)-040-4A/B	1.8	20	5.6	0.40	14	11	800	4
39BYGH26(M)-046-4A/B	1.8	26	6.0	0.46	13	29	1000	4
39BYGH31(M)-046-4A/B	1.8	31	6.37	0.46	14	28	1400	4
39BYGH34(M)-057-4A/B	1.8	34	6.8	0.57	12	31	1800	4
39BYGH38(M)-056-4A/B	1.8	38	6.4	0.56	15	28	2400	4
39BYGH44(M)-035-4A/B	1.8	44	15.4	0.35	44	80	3000	4

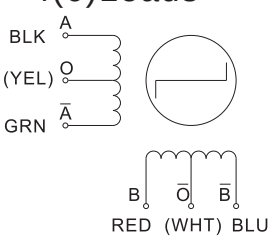
Gearbox Data

Reduction Ratio(X:1)	4	5	13	19	27	51	71	100	139
Number of gear trains	1	1	2	2	2	3	3	3	3
Rated output torque(kg.cm)	20	20	30	30	30	40	40	40	40
Gear Box Length(mm)	30	30	38	38	38	46	46	46	46

Mechanical Dimensions







LS-52PA/57BYG

Housing Material: Metal
Backlash at No Load: ≤1.5°
Bearing at Output: Ball or Sleeve
Permissible Overhung Load: ≤20kg
Permissible Thrust Load: ≤10kg
Max.Radial Play: ≤0.05mm
Max.Thrust Play: ≤0.3mm



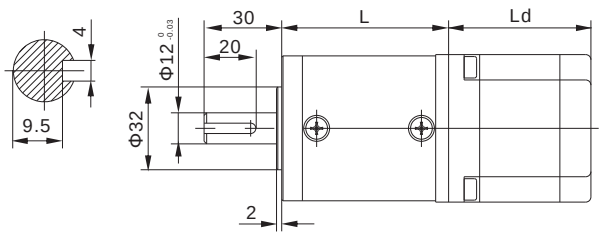
Motor Data

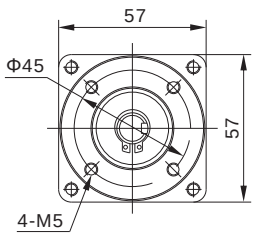
Model	Step Angle	Length (Ld)	Phase Voltage	Phase Current	Phase Resistance	Phase Inductance	Holding Torque	Lead Wire
		mm	V	A	Ω	mH	g.cm	
57BYGH41(M)-144-4A/B	1.8/0.9	41	4.1	1.44	2.85	5.4	4	4
57BYGH51(M)-144-4A/B	1.8/0.9	51	4.7	1.44	3.3	8.2	9	4
57BYGH56(M)-100-6A/B	1.8/0.9	56	7	1.0	7.6	10	9	6
57BYGH56(M)-280-6A/B	1.8/0.9	56	2.52	2.8	0.9	2.5	12.5	4
57BYGH76(M)-200-6A/B	1.8/0.9	76	5	2.8	2.25	3.6	13.5	6
57BYGH76(M)-280-4A/B	1.8/0.9	76	3.16	2.8	1.13	3.6	18.9	4

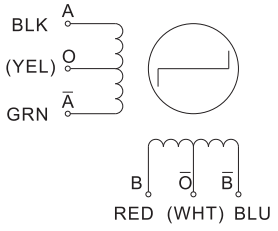
Gearbox Data

Reduction Ratio(X:1)	4	8	16	25	36	50	64	72	81	100	128	144	200
Number of gear trains	1	1	2	2	2	2	2	3	3	3	3	3	3
Rated output torque(kg.cm)	100	100	150	150	150	150	150	200	200	200	200	200	200
Gear Box Length(mm)	49.5	49.5	64.5	64.5	64.5	64.5	64.5	79.5	79.5	79.5	79.5	79.5	79.5

Mechanical Dimensions







Planetary Geared Stepper Motor

LS-56PA/57BYG

Housing Material: Metal
Backlash at No Load: ≤1.5°
Bearing at Output: Ball or Sleeve
Permissible Overhung Load: ≤20kg
Permissible Thrust Load: ≤10kg
Max.Radial Play: ≤0.05mm
Max.Thrust Play: ≤0.3mm



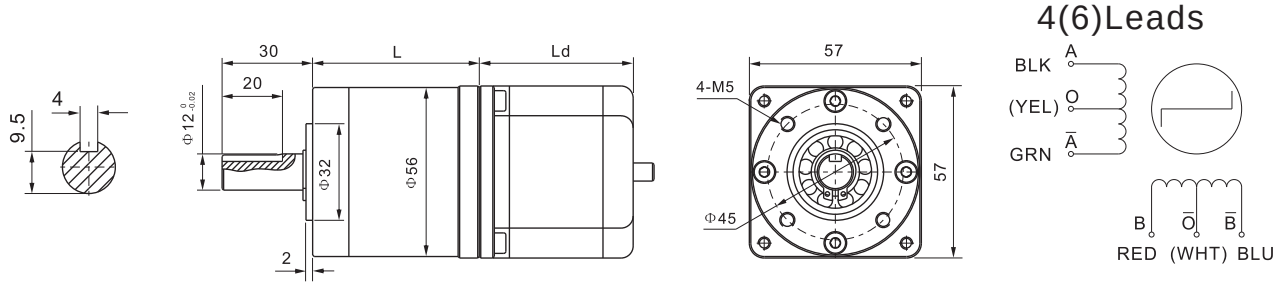
Motor Data

Model	Step Angle	Length (Ld)	Phase Voltage	Phase Current	Phase Resistance	Phase Inductance	Holding Torque	Lead Wire
		mm	V	A	Ω	mH	g.cm	
57BYGH41(M)-144-4A/B	1.8/0.9	41	4.1	1.44	2.85	5.4	4	4
57BYGH41(M)-144-4A/B	1.8/0.9	51	4.74	1.44	3.3	8.2	9	4
57BYGH41(M)-144-4A/B	1.8/0.9	56	7	1.0	7.6	10	9	6
57BYGH41(M)-144-4A/B	1.8/0.9	56	2.52	2.8	0.9	2.5	12.5	4
57BYGH41(M)-144-4A/B	1.8/0.9	76	5	2.8	2.25	3.6	13.5	6
57BYGH41(M)-144-4A/B	1.8/0.9	76	3.16	2.8	1.13	3.6	18.9	4

Gearbox Data

Reduction Ratio(X:1)	4	8	16	25	36	50	64	72	81	100	128	144	200
Number of gear trains	1	1	2	2	2	2	2	3	3	3	3	3	3
Rated output torque(kg.cm)	100	100	150	150	150	150	150	200	200	100	128	144	200
Gear Box Length(mm)	49.5	49.5	64.5	64.5	64.5	64.5	64.5	79.5	79.5	79.5	79.5	79.5	79.5

Mechanical Dimensions



Product Parameter Questionnaire

Company name						
Contact	Address					
	Your name					
	Dept.					
	Position					
	Tel.					
	Fax					
	E-mail					
	Website					
Motor Designation			_		_	(Ex: RS-360PA-12390)
Application						(Ex:Air pump)
Projected quantity		pcs/year		pcs/month		
Size of motor	Flat type	Diameter(φ)	height	length		mm
	Round type	Diameter(φ)	length			mm
Input voltage			☐ AC	☐ DC		
Direction of rotation(viewing from output shaft)		☐ 顺时针CW ☐ 逆时针CCW ☐ 双向Bi-directional				
Speed	At no load		RPM			
	At rated load		RPM			
Current	At no load		A			
	At rated load		A			
	At stall		A			
Torque	At rated load		mN.m		g.cm	
	At stall		mN.m		g.cm	
Life requirement	Continuous	Hours				
	Periodical	second on	second off	cycles		
	Total required running time	Hours				
Other requirements						



NINGBO LEISON MOTOR CO.,LIMITED

Adress : Build A2, R&D Park National Hi-tech Zone, NO.587 Juxian Road, Ningbo China

Website : www.nbleisonmotor.com

Tel : 0086-574-27950958

Email address : info@nbleisonmotor.com