Stepper Motor

(Hybrid Stepper Motor only)

OSM TECHNOLOGY CO.,LTD

■Wide Range of Stepper Motor Variations

Size Nema Size				
Nema 08	 1.8°			
Nema 11	 1.8°			
Nema 14	 0.9°	 1.8°	 0.9° Round	
Nema 16	 0.9°	 1.8°		
Nema 17	 0.9°	 1.8°	 3.6°	 3.75°
Nema 23	 0.9°	 1.2°	 1.8°	 1.8° Round
Nema 24	 1.2°	 1.8°		
Nema 34	 1.8°	 1.2°	 0.72°	 1.8° Round
Nema 42	 1.8°	 1.2°		

■Stepper Motor Products Code

17 H S 13 – 040 4 S – PG 14

Gear Ratio / Custom No.	eg. 14: Gear Ratio 14:1
Gearbox Type / Customized	PG: Planetary Gearbox SG: Spur Gearbox C: Customized
Shaft Type	S: Single Shaft D: Double Shaft
Number Of Lead Wires	3 4 5 6 8
Motor Rated Current	(Amp) eg. 040: 0.40A
Motor Body Length	(Inches x 10) eg. 13: 34mm(1.3in.)
Motor Step Angles	S: 1.8deg(Square) R: 1.8deg(Round) F: 0.72deg M: 0.9deg T: 1.2deg E: 3.6deg
Motor Type	H: Hybrid Stepper Motor L: Linear Stepper Motor
Motor Frame Size	8: 20mm 11: 28mm 14: 35mm(36mm) 16: 39mm 17: 42mm 23: 57mm 24: 60mm 34: 86mm 42: 110mm

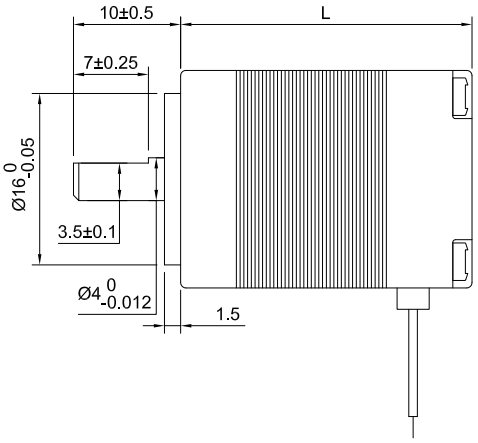
□20mm(□0.79in.)

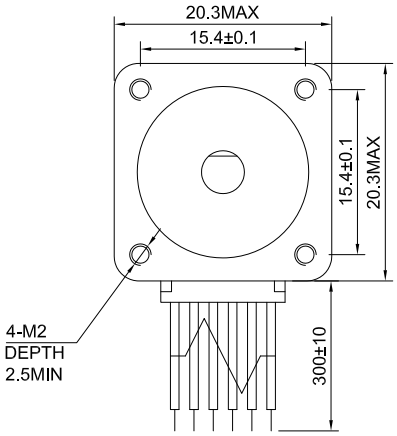
Step Angle 1.8°　8HS High-Torque Type

■Common Rating

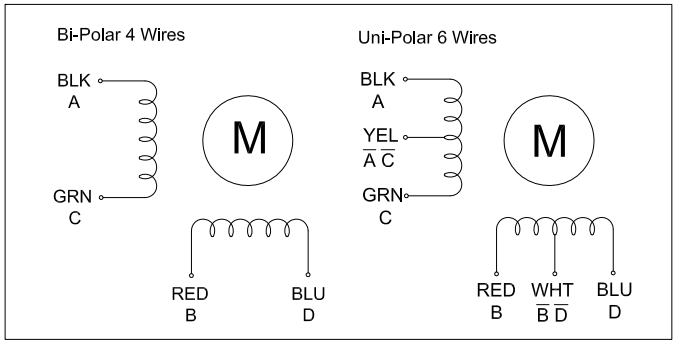
Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max.(450 g-load)
Shaft Axial Play	0.08Max.(450 g-load)

■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW

STEP	A	B	C	D
1	+	+		
2		+	+	
3			+	+
4	+			+

CW

Excitation: 2-1-2

CCW

STEP	A	B	C	D
1	+			
2	+	+		
3		+		
4		+	+	
5			+	
6			+	+
7				+
8	+			+

CW

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	# of Leads	Kg	mm	in
8HS11-0204S	1.6	2.3	4.8	0.2	24	8	Bi (4)	0.05	28	1.1
8HS12-0506S	1.8	2.5	5.75	0.5	11.5	1.7	Uni (6)	0.06	30	1.2
8HS13-0604S	2	2.8	3.9	0.6	6.5	2.2	Bi (4)	0.07	33	1.3
8HS15-0304S	3	4.2	12	0.3	40	18	Bi (4)	0.08	38	1.5
8HS15-0604S	4	5.7	6	0.6	10	5.5	Bi (4)	0.08	38	1.5

*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

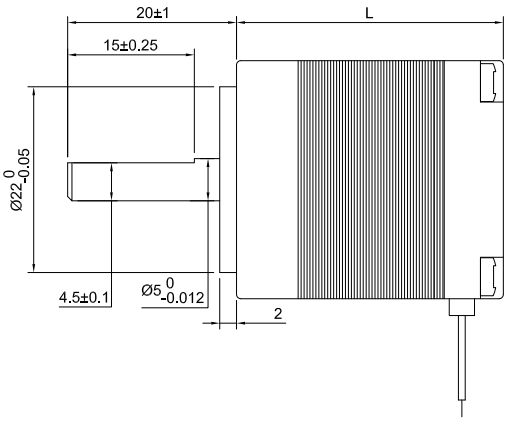
□28.2mm(□1.11in.)

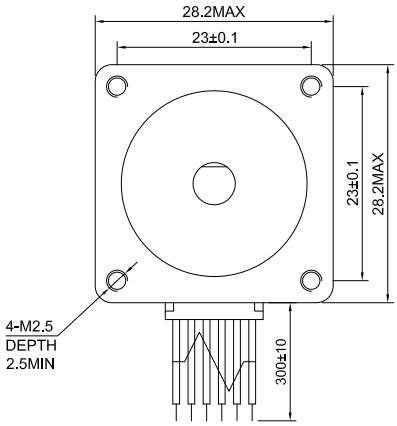
Step Angle 1.8°　11HS High-Torque Type

■Common Rating

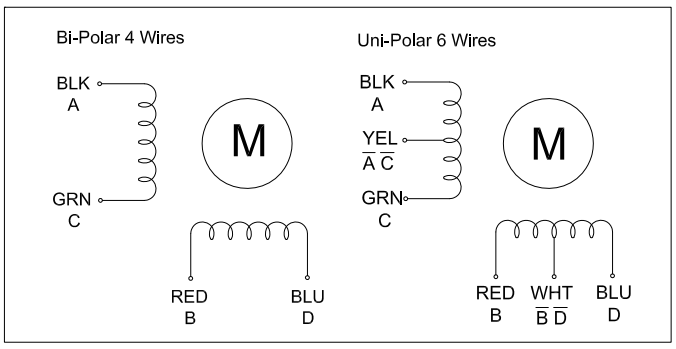
Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max.(450 g-load)
Shaft Axial Play	0.08Max.(450 g-load)

■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
11HS12-0956S	4.3	6.1	2.66	0.95	2.8	1	9	Uni (6)	0.11	31.5	1.24
11HS12-0674S	6	8.5	3.8	0.67	5.6	4.2	9	Bi (4)	0.11	31.5	1.24
11HS18-0956S	7.5	10.6	3.2	0.95	3.4	1.2	12	Uni (6)	0.14	44.5	1.75
11HS18-0674S	9.5	13.5	4.6	0.67	6.8	4.9	12	Bi (4)	0.14	44.5	1.75
11HS20-0956S	9	12.7	4.4	0.95	4.6	1.4	18	Uni (6)	0.2	50.5	1.99
11HS20-0674S	12	17.0	6.2	0.67	9.2	5.7	18	Bi (4)	0.2	50.5	1.99

*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

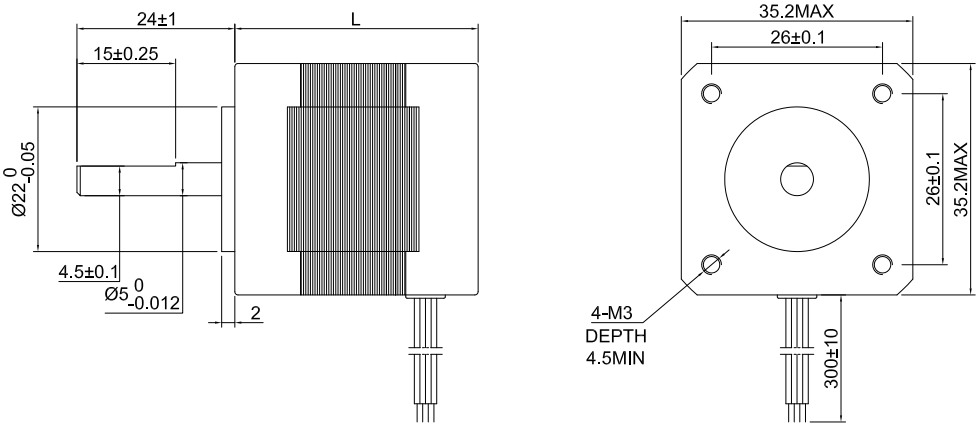
□35.2mm(□1.38in.)

Step Angle 0.9°　14HM High-Resolution Type

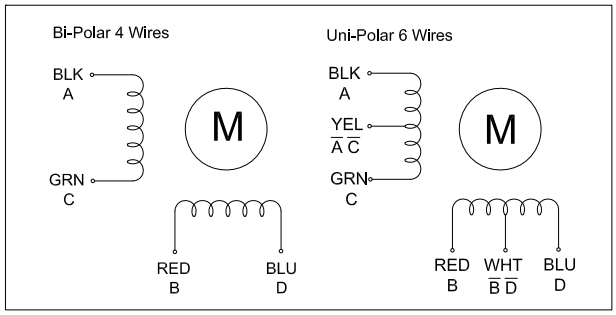
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max.(450 g-load)
Shaft Axial Play	0.08Max.(450 g-load)

■Dimension Unit = mm(in.)



■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
14HM08-0404S	4	5.7	4	0.4	10	8.2	8	Bi (4)	0.09	20	0.79
14HM08-0504S	5	7.1	5	0.5	10	8.2	8	Bi (4)	0.09	20	0.79
14HM11-0504S	9	12.7	5	0.5	10	12	10	Bi (4)	0.12	28	1.10
14HM11-1004S	10	14.2	2.5	1	2.5	2.8	10	Bi (4)	0.12	28	1.10
14HM11-0404S	11	15.6	10	1.4	2.5	24	10	Bi (4)	0.12	28	1.10
14HM13-0604S	13	18.4	7.2	0.6	12	16	14	Bi (4)	0.16	34	1.34

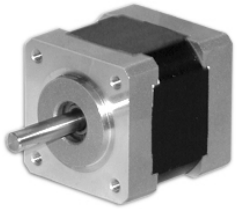
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□35.2mm(□1.38in.)

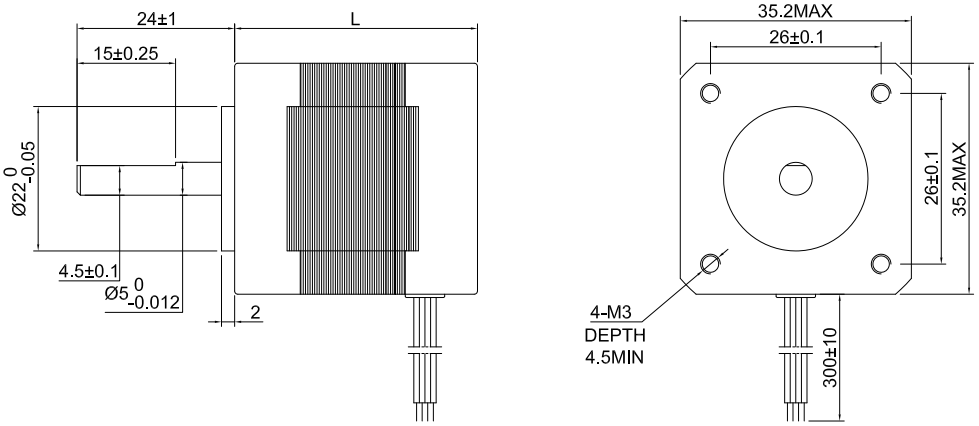
Step Angle 1.8° 14HS High-Torque Type

■Common Rating

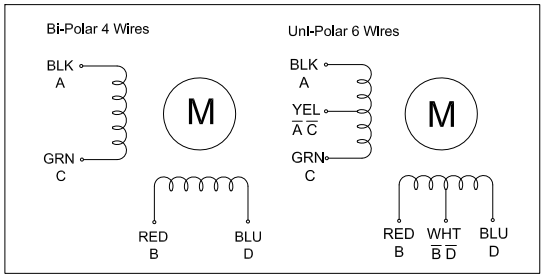
Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute



■Dimension Unit = mm(in.)



■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
14HS08-0304S	4	5.7	7.5	0.3	25	20	7	Bi (4)	0.09	20	0.79
14HS08-0504S	4	5.7	4.5	0.5	9	5	7	Bi (4)	0.09	20	0.79
14HS10-0284S	6.5	9.2	7.4	0.28	26	19.2	10	Bi (4)	0.12	26	1.02
14HS10-1504S	10	14.2	2.4	1.5	1.6	1.3	10	Bi (4)	0.12	26	1.02
14HS10-0404S	14	19.8	12	0.4	30	30	10	Bi (4)	0.12	26	1.02
14HS11-0256S	7	9.9	12	0.25	48	25	11	Uni (6)	0.12	28	1.10
14HS11-0504S	10	14.2	10	0.5	20	15	11	Bi (4)	0.12	28	1.10
14HS11-1004S	12.5	17.7	3.5	1	3.5	3.5	11	Bi (4)	0.12	28	1.10
14HS13-0406S	10	14.2	10	0.4	25	17	14	Uni (6)	0.17	34	1.34
14HS13-0654S	14	19.8	4.42	0.65	6.8	10	14	Bi (4)	0.17	34	1.34
14HS13-0804S	18	25.5	5.4	0.8	6.8	10	14	Bi (4)	0.17	34	1.34
14HS14-1004S	14	19.8	2.7	1	2.7	4.3	14	Bi (4)	0.17	36	1.42
14HS16-1004S	18.5	26.2	4.3	1	4.3	5.5	14	Bi (4)	0.19	41	1.61
14HS17-0504S	23	32.6	7.5	0.5	15	26	18	Bi (4)	0.2	42	1.65
14HS20-1504S	40	56.6	4.2	1.5	2.8	3.8	54	Bi (4)	0.35	52	2.05

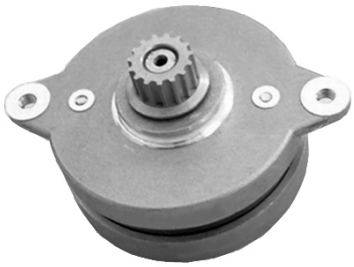
*** Specify -S for Single Shaft; -D for Double Shaft * All motor's specifications are based on full-step constant current operation**

○36.5mm(○14.4in.)

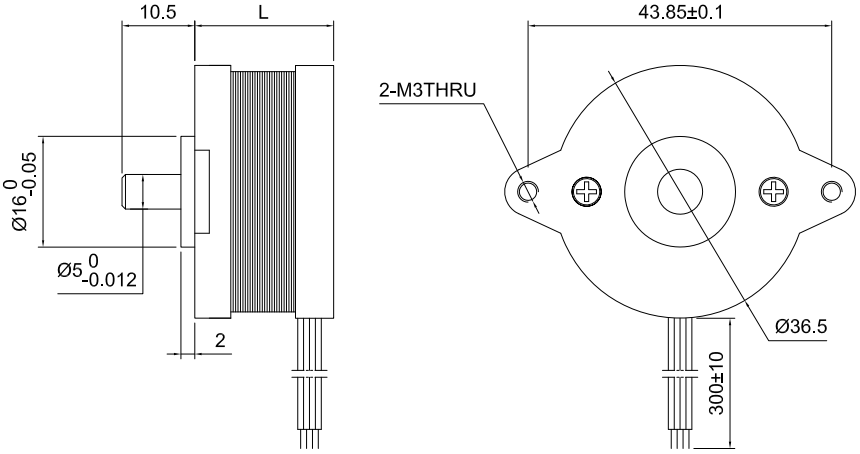
Step Angle 0.9°　14HR High-Resolution Type

■Common Rating

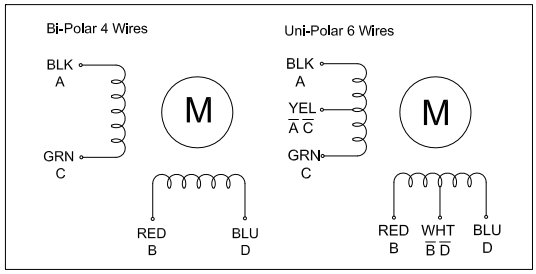
Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max.(450 g-load)
Shaft Axial Play	0.08Max.(450 g-load)



■Dimension Unit = mm(in.)



■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
14HR05-0304S	4	5.7	6.2	0.3	16.8	8.5	8	Bi (4)	0.06	12.5	0.49
14HR05-0404S	4	5.7	2.8	0.4	7	4	8	Bi (4)	0.06	12.5	0.49
14HR05-0504S	7	9.9	8.5	0.5	17	7.5	11	Bi (4)	0.08	12.5	0.49
14HR08-0404S	8	11.3	4.64	0.4	11.6	7.7	13	Bi (4)	0.09	19.5	0.77
14HR08-0504S	11	15.6	6	0.5	12	9	13	Bi (4)	0.09	19.5	0.77
14HR08-0654S	12	17.0	4.55	0.65	7	5	13	Bi (4)	0.09	19.5	0.77

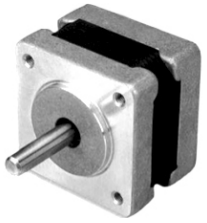
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□39.2mm(□15.4in.)

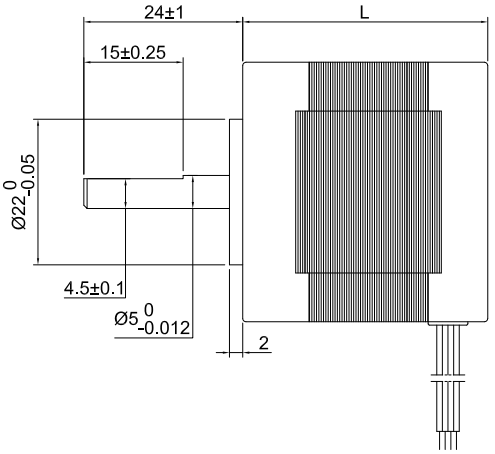
Step Angle 0.9°　16HM High-Resolution Type

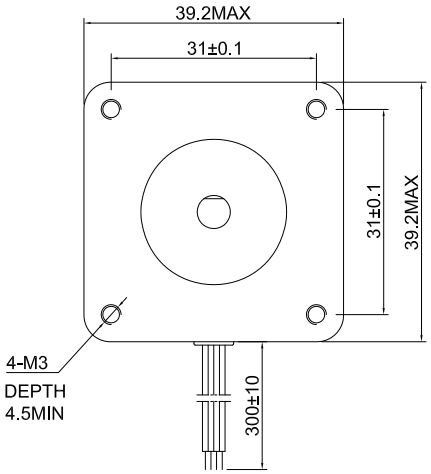
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

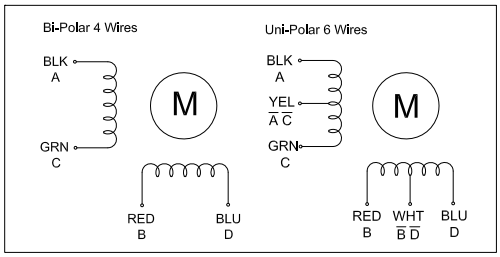


■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

STEP	A	B	C	D
1	+	+		
2		+	+	
3			+	+
4	+			+

CCW ▲ CW

Excitation: 2-1-2

STEP	A	B	C	D
1	+			
2	+	+		
3		+		
4		+	+	
5			+	
6			+	+
7				+
8	+			+

CCW ▲ CW

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
16HM08-0504S	9	12.7	4	0.5	8	9.5	10	Bi (4)	0.1	20	0.79
16HM09-1204S	11	15.6	3.6	1.2	3	1.2	10	Bi (4)	0.1	22	0.87
16HM10-0504S	12	17.0	5	0.5	10	15.5	11	Bi (4)	0.12	25	0.98
16HM10-0604S	16	22.7	6	0.6	10	15.5	11	Bi (4)	0.12	25	0.98
16HM12-0634S	12.5	17.7	5.7	0.63	9	14	14	Bi (4)	0.13	31	1.22
16HM13-0404S	18	25.5	12	0.4	30	43	20	Bi (4)	0.18	34	1.34
16HM15-0806S	17	24.1	6	0.8	7.5	7.5	28	Uni (6)	0.2	38	1.50
16HM15-0504S	26	36.8	12	0.5	24	60	28	Bi (4)	0.2	38	1.50
16HM17-0304S	25	35.4	12	0.3	40	110	36	Bi (4)	0.25	44	1.73

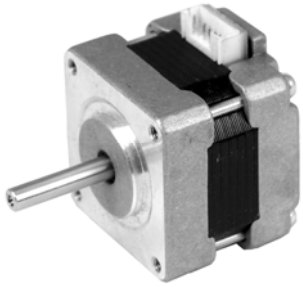
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□39.2mm(□1.54in.)

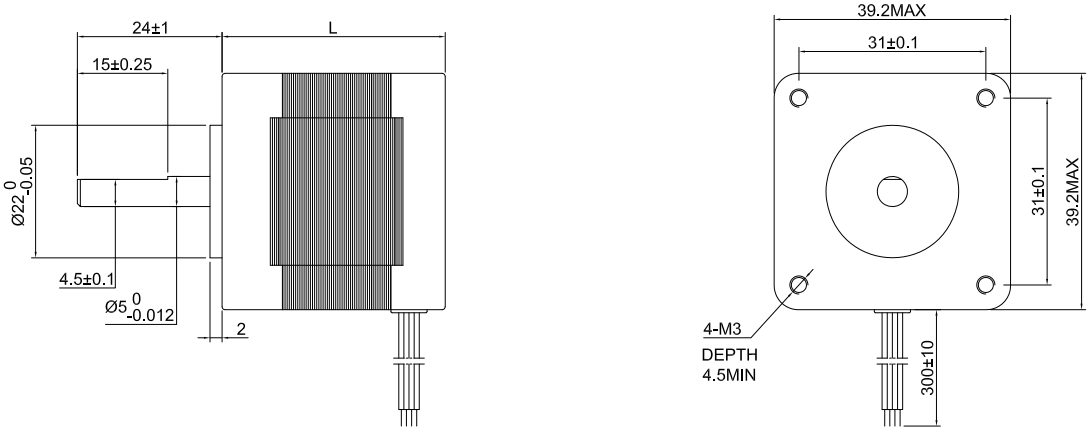
Step Angle 1.8° 16HS High-Torque Type

■Common Rating

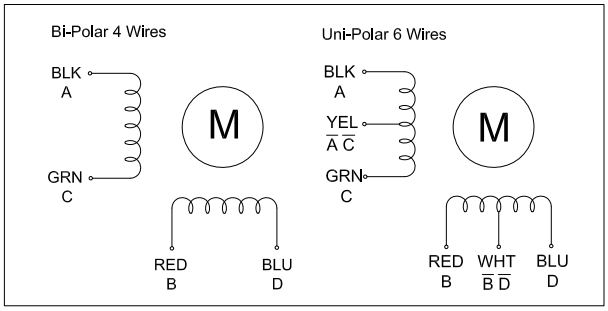
Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute



■Dimension Unit = mm(in.)



■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

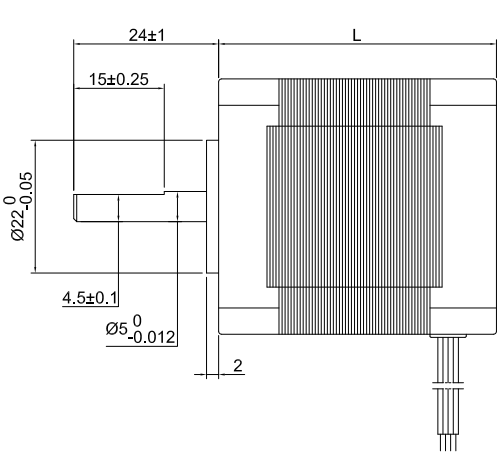
Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
16HS08-0404S	6.5	9.2	2.64	0.4	6.6	7.5	11	Bi (4)	0.12	20	0.79
16HS08-0506S	8	11.3	6.5	0.5	13	7.5	11	Uni (6)	0.12	20	0.79
16HS13-0166S	11	15.6	12	0.16	75	50	20	Uni (6)	0.18	34	1.34
16HS13-0306S	13	18.4	12	0.3	40	21	20	Uni (6)	0.18	34	1.34
16HS13-0654S	18	25.5	4.55	0.65	7	9.3	20	Bi (4)	0.18	34	1.34
16HS13-0404S	21	29.7	12	0.4	30	32	20	Bi (4)	0.18	34	1.34
16HS13-0604S	22	31.2	9	0.6	15	16	20	Bi (4)	0.18	34	1.34
16HS14-1004S	30	42.5	5.2	1	5.2	13	23	Bi (4)	0.2	36	1.42
16HS15-0806S	20	28.3	6	0.8	7.5	6	28	Uni (6)	0.2	38	1.50
16HS15-0504S	29	41.1	12	0.5	21	45	28	Bi (4)	0.2	38	1.50
16HS17-0304S	28	39.7	12	0.3	40	100	36	Bi (4)	0.25	44	1.73
16HS18-1004S	29	41.1	5.8	1	5.8	5	38	Bi (4)	0.28	46	1.81

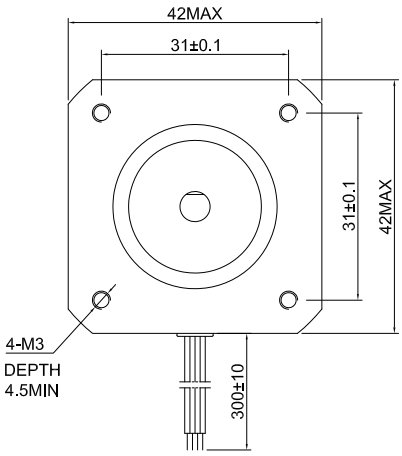
*** Specify -S for Single Shaft; -D for Double Shaft * All motor's specifications are based on full-step constant current operation**

□42.3mm(□1.67in.)

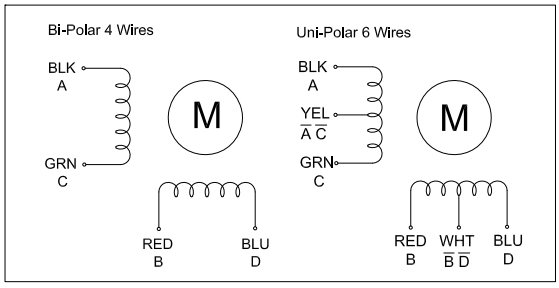
Step Angle 0.9° 17HS High-Resolution Type

■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

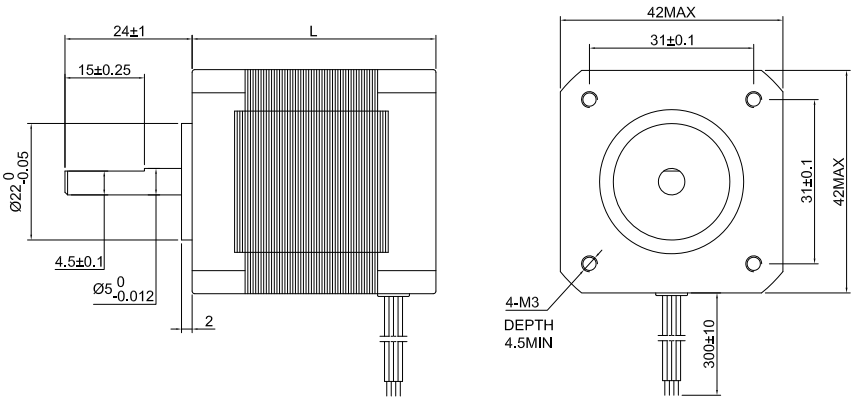
Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
17HM08-1204S	11	15.6	3.6	1.2	3	2.2	14	Bi (4)	0.15	21	0.83
17HM13-0316S	15.8	22.4	12	0.31	38.5	33	35	Uni (6)	0.22	34	1.34
17HM13-0606S	15.8	22.4	6	0.6	10	9.5	35	Uni (6)	0.22	34	1.34
17HM13-0956S	15.8	22.4	4	0.95	4.2	4	35	Uni (6)	0.22	34	1.34
17HM13-0554S	22	31.2	6.6	0.55	12	25	35	Bi (4)	0.22	34	1.34
17HM13-1334S	22	31.2	2.8	1.33	2.1	4.2	35	Bi (4)	0.22	34	1.34
17HM15-0406S	25.9	36.7	12	0.4	30	30	54	Uni (6)	0.28	39	1.54
17HM15-0806S	25.9	36.7	6	0.8	7.5	7.5	54	Uni (6)	0.28	39	1.54
17HM15-1206S	25.9	36.7	4	1.2	3.3	4	54	Uni (6)	0.28	39	1.54
17HM15-0904S	36	51.0	5.4	0.9	6	12	54	Bi (4)	0.28	39	1.54
17HM15-1684S	36	51.0	2.8	1.68	1.65	4	54	Bi (4)	0.28	39	1.54
17HM19-0406S	31.7	44.9	12	0.4	30	38	68	Uni (6)	0.35	48	1.89
17HM19-0806S	31.7	44.9	6	0.8	7.5	10	68	Uni (6)	0.35	48	1.89
17HM19-1206S	31.7	44.9	4	1.2	3.3	4	68	Uni (6)	0.35	48	1.89
17HM19-1204S	44	62.3	4.2	1.2	3.5	8.5	68	Bi (4)	0.35	48	1.89
17HM19-1684S	44	62.3	2.8	1.68	1.65	4.1	68	Bi (4)	0.35	48	1.89
17HM19-2004S	59	83.6	2.8	2	1.4	3	68	Bi (4)	0.4	48	1.89
17HM24-1204S	62	87.8	3.96	1.2	3.8	8.8	82	Bi (4)	0.45	60	2.36

*** Specify -S for Single Shaft; -D for Double Shaft * All motor's specifications are based on full-step constant current operation**

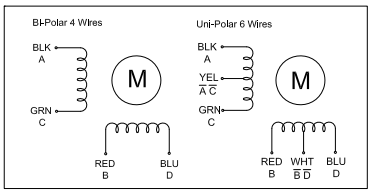
□42.3mm(□1.67in.)

Step Angle 1.8° 17HS High-Torque Type

■Dimension Unit = mm(in.)



■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
17HS08-1004S	13	18.4	3.5	1	3.5	4.5	15	Bi (4)	0.15	20	0.79
17HS13-0316S	16	22.7	12	0.31	38.5	21	35	Uni (6)	0.22	33	1.30
17HS13-0406S	16	22.7	9.6	0.4	24	15	35	Uni (6)	0.22	33	1.30
17HS13-0956S	16	22.7	4	0.95	4.2	2.5	35	Uni (6)	0.22	33	1.30
17HS13-1334S	22	31.2	2.8	1.33	2.1	2.5	35	Bi (4)	0.22	33	1.30
17HS13-1504S	23	32.6	1.65	1.5	1.1	1.6	35	Bi (4)	0.22	33	1.30
17HS13-0404S	26	36.8	12	0.4	30	37	35	Bi (4)	0.22	33	1.30
17HS13-0844S	28	39.7	4.83	0.84	5.75	9.3	35	Bi (4)	0.22	33	1.30
17HS15-0406S	26	36.8	12	0.4	30	30	54	Uni (6)	0.28	39	1.54
17HS15-0806S	26	36.8	6	0.8	7.5	6.7	54	Uni (6)	0.28	39	1.54
17HS15-1206S	26	36.8	4	1.2	3.3	3.2	54	Uni (6)	0.28	39	1.54
17HS15-0854S	36	51.0	5.4	0.85	6.3	10	54	Bi (4)	0.28	39	1.54
17HS15-1684S	36	51.0	2.8	1.68	1.65	3.2	54	Bi (4)	0.28	39	1.54
17HS15-0404S	40	56.6	12	0.4	30	58	54	Bi (4)	0.24	39	1.54
17HS16-2004S	45	63.7	2.2	2	1.1	2.6	54	Bi (4)	0.24	40	1.57
17HS19-0406S	32	45.3	12	0.4	30	25	68	Uni (6)	0.35	47	1.85
17HS19-0806S	32	45.3	6	0.8	7.5	6.3	68	Uni (6)	0.35	47	1.85
17HS19-1206S	32	45.3	4	1.2	3.3	2.8	68	Uni (6)	0.35	47	1.85
17HS19-1684S	44	62.3	2.8	1.68	1.65	2.8	68	Bi (4)	0.35	47	1.85
17HS19-0854S	44	62.3	5.3	0.85	6.2	11	68	Bi (4)	0.35	47	1.85
17HS19-2004S	59	83.6	2.8	2	1.4	3	68	Bi (4)	0.4	48	1.89
17HS20-0854S	55	77.9	8	0.85	9.3	20	72	Bi (4)	0.42	52	2.05
17HS24-0644S	60	85.0	10	0.64	15	13.2	82	Bi (4)	0.45	60	2.36
17HS24-1206S	65	92.0	7.2	1.2	6	7	82	Uni (6)	0.45	60	2.36
17HS24-2104S	65	92.0	3.4	2.1	1.6	3	82	Bi (4)	0.45	60	2.36

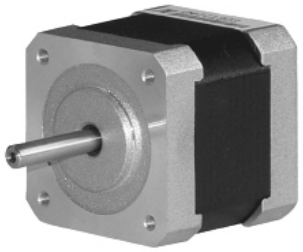
* Specify -S for Single Shaft; -D for Double Shaft * All motor's specifications are based on full-step constant current operation

□42.3mm(□1.67in.)

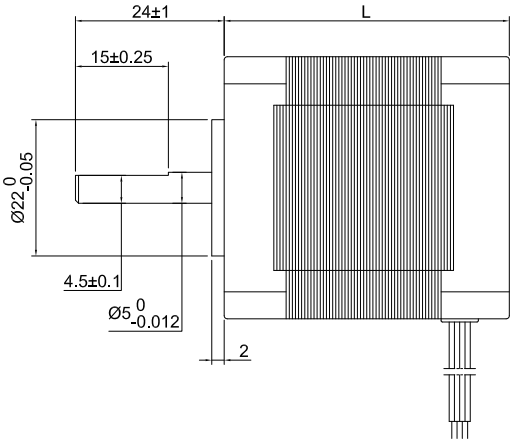
Step Angle 3.75°　17HT 3-Phase Type

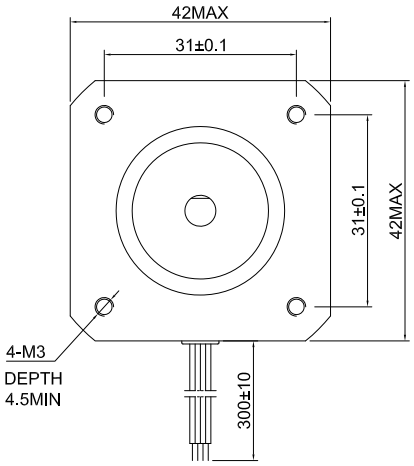
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

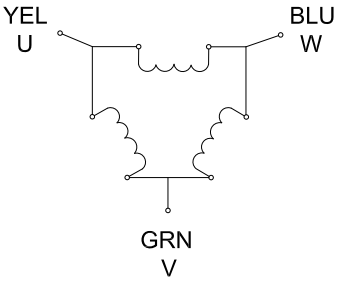


■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

STEP	1	2	3	4	5	6
U	+		-	-		+
V	-	-		+	+	
W		+	+		-	-

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Weight	Bi/Unipolar	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	Kg	# of Leads	mm	in
17HT08-0803S	5.4	7.6	5.28	0.8	6.6	4.8	15	0.14	Bi (3)	21	0.83
17HT08-0906S	7	9.9	5.3	0.9	5.9	2.6	15	0.15	Uni (6)	21	0.83
17HT15-1003S	16	22.7	2.1	1	2.1	2.8	54	0.3	Bi (3)	39	1.54
17HT15-0603S	20	28.3	6.4	0.6	10.7	26	54	0.3	Bi (3)	39	1.54

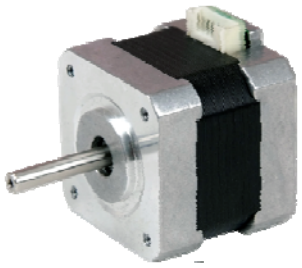
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□42.3mm(□1.66in.)

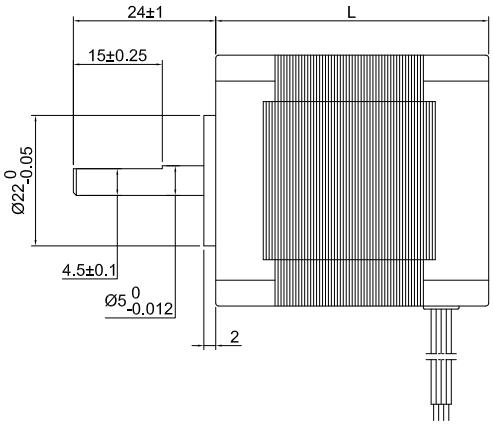
Step Angle 3.6°　17HE Special Type

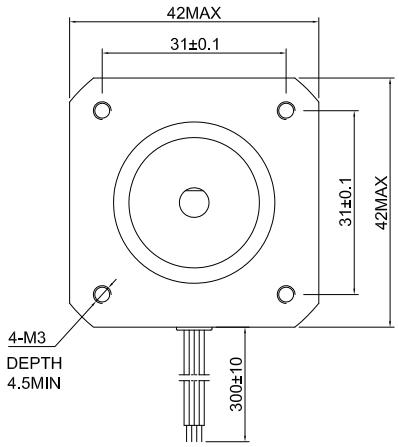
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

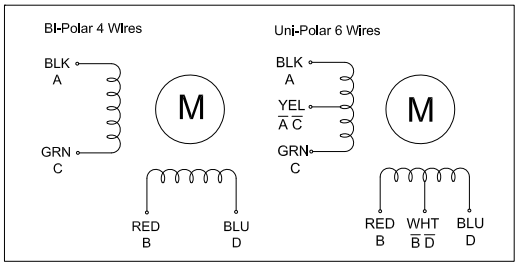


■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
17HE13-0104S	5.3	7.5	9.31	0.095	98	200	20	Bi (4)	0.22	34	1.34
17HE13-0164S	8	11.3	12	0.16	75	28	20	Bi (4)	0.22	34	1.34
17HE13-0604S	8.5	12.0	6.3	0.6	10.5	4.5	20	Bi (4)	0.22	34	1.34
17HE13-0584S	10	14.2	7	0.58	12	11.5	20	Bi (4)	0.22	34	1.34
17HE13-0524S	12	17.0	6.24	0.52	12	13.5	20	Bi (4)	0.22	34	1.34

*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

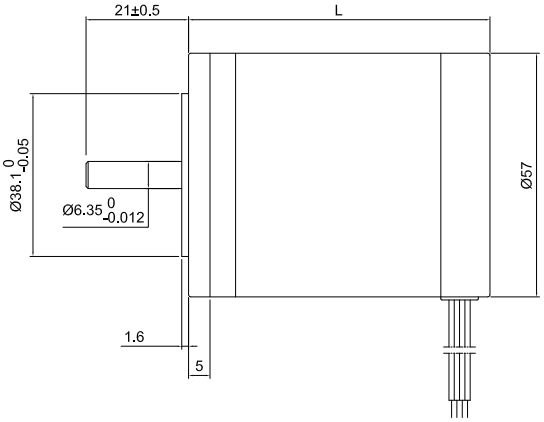
○56.4mm(○2.22in.)

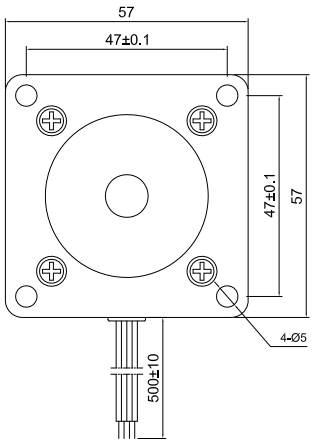
Step Angle 1.8°　23HR High-Torque Type

■Common Rating

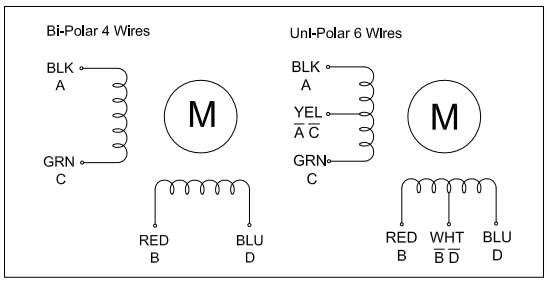
Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
23HR16-0406S	28.8	40.8	12	0.4	30	30	57	Uni (6)	0.54	41	1.61
23HR16-1106S	28.8	40.8	4	1.1	3.6	3.6	57	Uni (6)	0.54	41	1.61
23HR16-1564S	40	56.6	2.8	1.56	1.8	3.6	57	Bi (4)	0.54	41	1.61
23HR20-0426S	50	70.8	12	0.42	29	36	110	Uni (6)	0.6	51	2.01
23HR20-0856S	50	70.8	6	0.85	7.1	9	110	Uni (6)	0.6	51	2.01
23HR20-2804S	69	97.7	1.8	2.8	0.65	1.6	110	Bi (4)	0.6	51	2.01
23HR22-0606S	60.5	85.7	12	0.6	20	32	135	Uni (6)	0.65	56	2.20
23HR22-1206S	60.5	85.7	6	1.2	5	8	135	Uni (6)	0.65	56	2.20
23HR22-2554S	84	119.0	2.8	2.55	1.1	3.6	135	Bi (4)	0.65	56	2.20
23HR30-0686S	90	127.5	12	0.68	17.7	30	200	Uni (6)	0.95	76	2.99
23HR30-1506S	90	127.5	5.4	1.5	3.6	6	200	Uni (6)	0.95	76	2.99
23HR30-3304S	125	177.0	2.7	3.3	0.85	3	200	Bi (4)	0.95	76	2.99
23HR40-2004S	120	169.93	2.1	2	1.1	4.5	300	Bi (4)	1.25	100	3.94

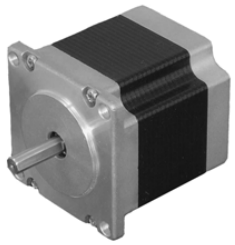
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□56.4mm(□2.22in.)

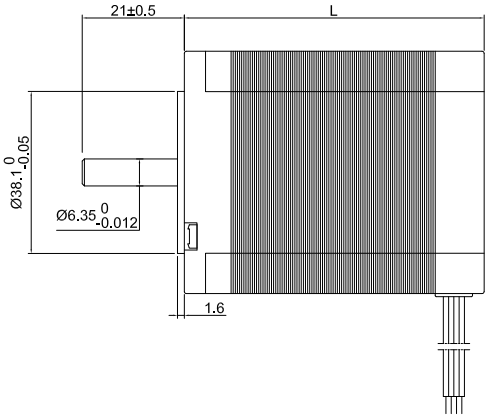
Step Angle 0.9°　23HM High-Resolution Type

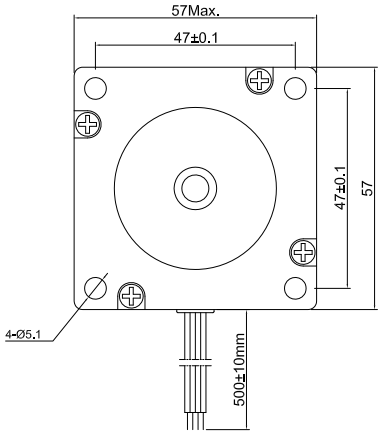
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

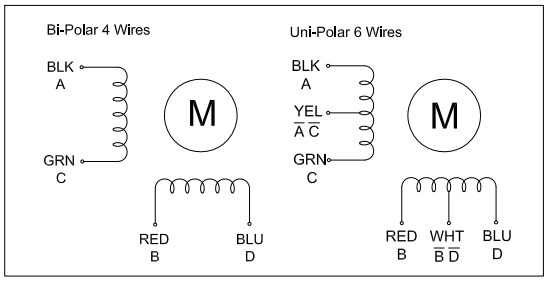


■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

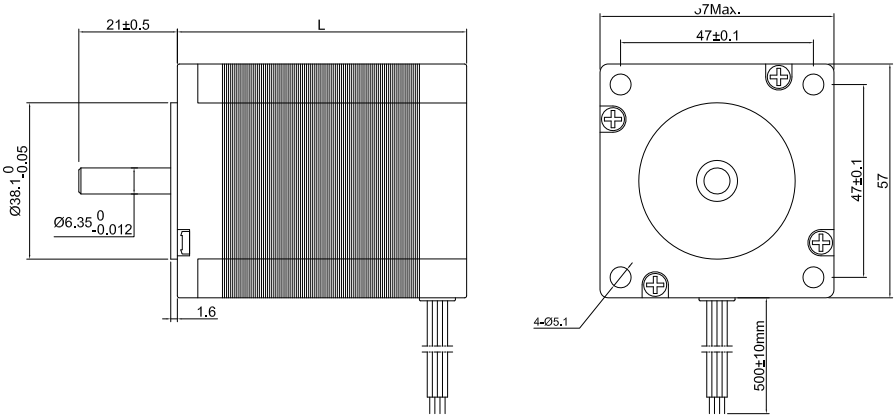
Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
23HM16-1006S	39	55.2	5.7	1	5.7	8	120	Uni (6)	0.45	41	1.61
23HM16-2006S	39	55.2	2.8	2	1.4	2.2	120	Uni (6)	0.45	41	1.61
23HM16-3006S	39	55.2	1.9	3	0.63	1	120	Uni (6)	0.45	41	1.61
23HM16-2804S	55	77.9	2	2.8	0.7	2.2	120	Bi (4)	0.45	41	1.61
23HM20-0384S	90	127.5	12.1	0.38	32	40	240	Bi (4)	0.6	51	2.01
23HM22-1006S	90	127.5	7.4	1	7.4	17.5	300	Uni (6)	0.7	56	2.20
23HM22-2006S	90	127.5	3.6	2	1.8	4.5	300	Uni (6)	0.7	56	2.20
23HM22-3006S	90	127.5	2.3	3	0.75	1.9	300	Uni (6)	0.7	56	2.20
23HM22-2804S	126	178.4	2.5	2.8	0.9	4.5	300	Bi (4)	0.7	56	2.20
23HM30-1006S	135	191.2	8.6	1	8.6	2	480	Uni (6)	1	76	2.99
23HM30-2006S	135	191.2	4.5	2	2.25	5.6	480	Uni (6)	1	76	2.99
23HM30-3006S	135	191.2	3	3	1	2.6	480	Uni (6)	1	76	2.99
23HM30-2804S	189	267.6	3.2	2.8	1.13	5.6	480	Bi (4)	1	76	2.99

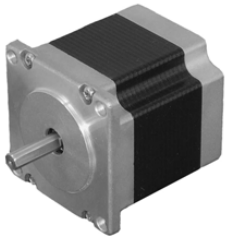
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□56.8mm(□2.24in.)

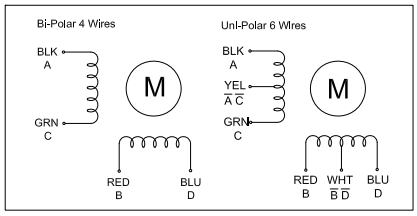
Step Angle 1.8° 23HS High-Torque Type

■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
23HS16-1006S	39	55.2	5.7	1	5.7	5.4	120	Uni (6)	0.45	41	1.6
23HS16-2006S	39	55.2	2.8	2	1.4	1.4	120	Uni (6)	0.45	41	1.6
23HS16-3006S	39	55.2	1.9	3	0.63	0.6	120	Uni (6)	0.45	41	1.6
23HS16-2804S	55	77.9	2	2.8	0.7	1.4	120	Bi (4)	0.45	41	1.6
23HS20-1006S	72	102.0	6.6	1	6.6	8.2	275	Uni (6)	0.65	51	2
23HS20-2006S	72	102.0	3.3	2	1.65	2.2	275	Uni (6)	0.65	51	2
23HS20-3006S	72	102.0	2.2	3	0.74	0.9	275	Uni (6)	0.65	51	2
23HS20-2804S	101	143.0	2.3	2.8	0.83	2.2	275	Bi (4)	0.65	51	2
23HS22-1006S	90	127.5	7.4	1	7.4	10	300	Uni (6)	0.7	56	2.2
23HS22-2006S	90	127.5	3.6	2	1.8	2.5	300	Uni (6)	0.7	56	2.2
23HS22-3006S	90	127.5	2.3	3	0.75	1.1	300	Uni (6)	0.7	56	2.2
23HS22-1504S	116	164.3	5.4	1.5	3.6	17	275	Bi (4)	0.7	56	2.2
23HS22-2804S	126	178.4	2.5	2.8	0.9	2.5	300	Bi (4)	0.7	56	2.2
23HS30-1006S	135	191.2	8.6	1	8.6	14	480	Uni (6)	1	76	30
23HS30-2006S	135	191.2	4.5	2	2.25	3.6	480	Uni (6)	1	76	30
23HS30-3006S	135	191.2	3	3	1	1.6	480	Uni (6)	1	76	30
23HS30-2804S	189	267.6	3.2	2.8	1.13	3.6	480	Bi (4)	1	76	30
23HS33-1508S	160	226.6	7.5	1.5	5	10	530	Bi (8)	1.13	84	33
23HS33-4008S	200	283.2	3.2	4	0.8	1.8	530	Bi (8)	1.13	84	33
23HS41-3006S	180	254.9	3.3	3	1.1	3.2	680	Uni (6)	1.25	104	4.1
23HS41-1804S	240	339.9	4.95	1.8	2.75	17	680	Bi (4)	1.25	104	4.1
23HS45-4208S	195	276.1	4.2	4.2	1	2.3	810	Bi (8)	1.55	115	4.5
23HS45-3004S	250	354.0	6.3	3	2.1	9	810	Bi (4)	1.55	115	4.5

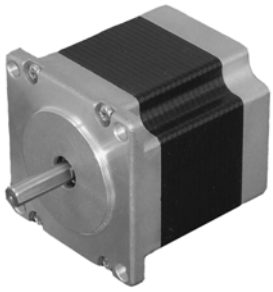
*** Specify -S for Single Shaft; -D for Double Shaft * All motor's specifications are based on full-step constant current operation**

□56.4mm(□2.22in.)

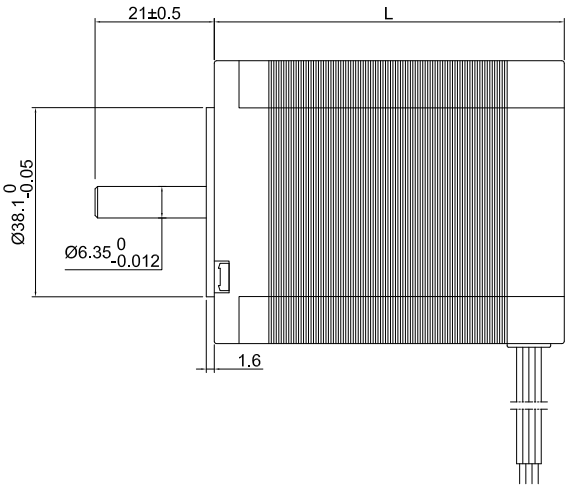
Step Angle 1.2°　23HT 3-Phase Type

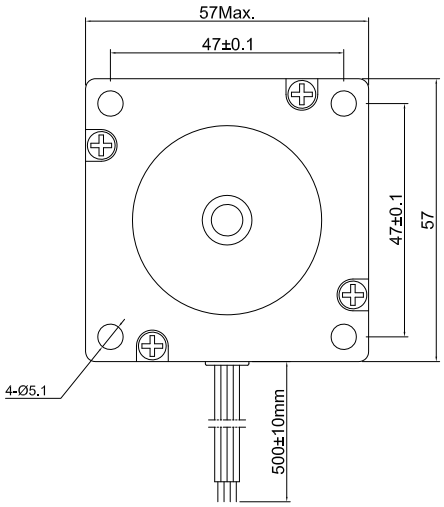
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

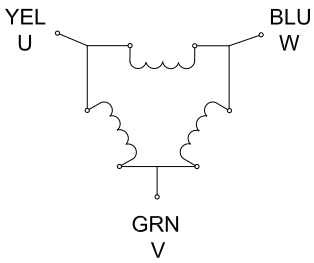


■Dimension Unit = mm(in.)





■Wiring Diagram



■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
23HT17-5206S	45	63.7	6.76	5.2	1.3	1.4	110	Uni (6)	0.45	42	1.65
23HT22-3006S	90	127.5	1.95	3	0.65	0.8	300	Uni (6)	0.75	56	2.20
23HT22-5606S	90	127.5	3.92	5.6	0.7	1.7	300	Uni (6)	0.75	56	2.20
23HT31-5206S	120	169.9	4.1	5.2	0.8	1.5	480	Uni (6)	1.1	79	3.11

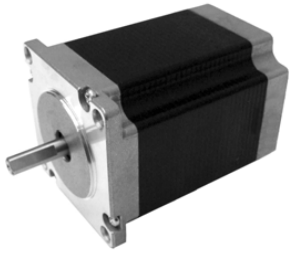
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□60mm(□2.36in.)

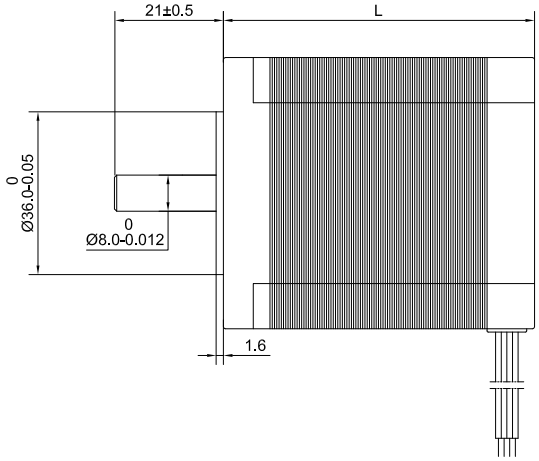
Step Angle 1.8°　24HS High-Torque Type

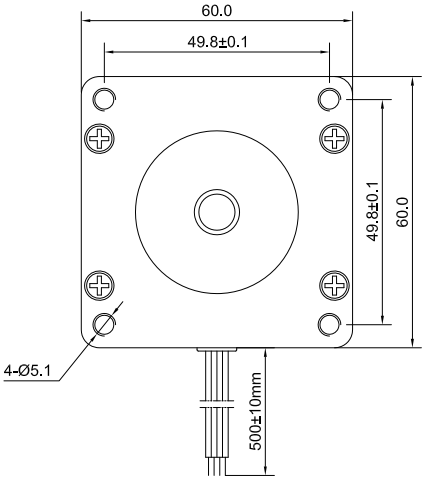
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

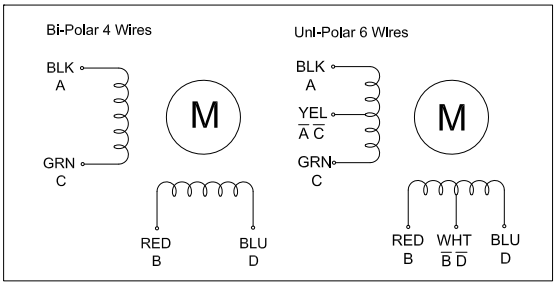


■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

Excitation: 2-2

CCW	STEP	A	B	C	D	CW
	1	+	+			
	2		+	+		
	3			+	+	
	4	+			+	

Excitation: 2-1-2

CCW	STEP	A	B	C	D	CW
	1	+				
	2	+	+			
	3		+			
	4		+	+		
	5			+		
	6			+	+	
	7				+	
	8	+			+	

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
24HS22-3006S	100	141.6	2.4	3	0.8	1.6	300	Uni (6)	0.77	57	2.24
24HS22-2006S	120	169.9	4	2	2	3.5	300	Uni (6)	0.77	57	2.24
24HS22-3004S	140	198.3	3.9	3	1.3	4.3	300	Bi (4)	0.77	57	2.24
24HS34-2006S	180	254.9	5.6	2	2.8	6	840	Uni (6)	1.34	87	3.43
24HS34-3006S	200	283.2	4.2	3	1.4	4.3	840	Uni (6)	1.34	87	3.43
24HS34-4004S	230	325.7	2.8	4	0.7	3.5	840	Bi (4)	1.34	87	3.43
24HS43-2004S	400	566.4	7	2	3.5	16	1080	Bi (4)	2	110	4.33

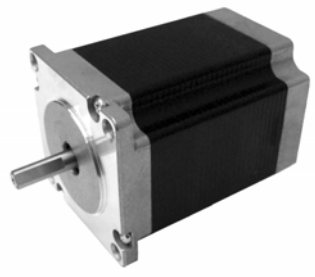
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□60mm(□2.36in.)

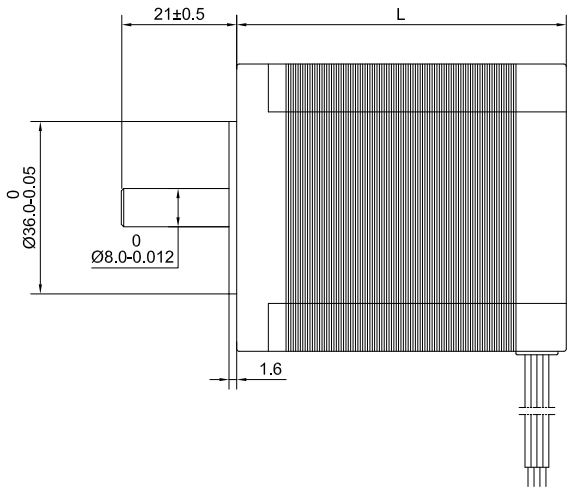
Step Angle 1.2°　24HT 3-Phase Type

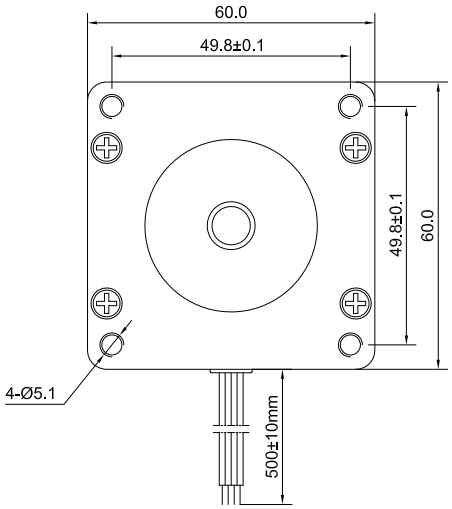
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

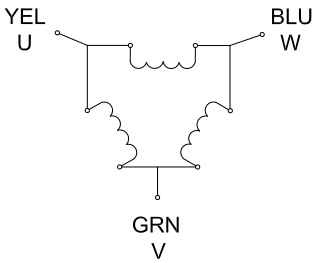


■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

STEP	1	2	3	4	5	6
U	+		-	-		+
V	-	-		+	+	
W		+	+		-	-

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
24HT17-1703S	45	63.7	7	1.7	4.1	7.4	170	Bi (3)	0.5	42	1.65
24HT18-1503S	54	76.5	9	1.5	6	10	190	Bi (3)	0.55	45	1.77
24HT18-1703S	80	113.3	9.18	1.7	5.4	7.5	190	Bi (3)	0.55	45	1.77
24HT22-2803S	65	92.0	4.2	2.8	1.5	2	280	Bi (3)	0.7	56	2.20
24HT22-2003S	66	93.5	3	2	1.5	3.5	280	Bi (3)	0.7	56	2.20
24HT22-1503S	82	116.1	7.2	1.5	4.8	10	280	Bi (3)	0.7	56	2.20
24HT30-2503S	130	184.1	8	2.5	3.2	5.8	440	Bi (3)	1.1	76	2.99
24HT33-3003S	156	220.9	2.1	3	0.7	2	530	Bi (3)	0.9	85	3.35
24HT35-5203S	170	240.7	1.72	5.2	0.33	0.55	570	Bi (3)	1.25	90	3.54

*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

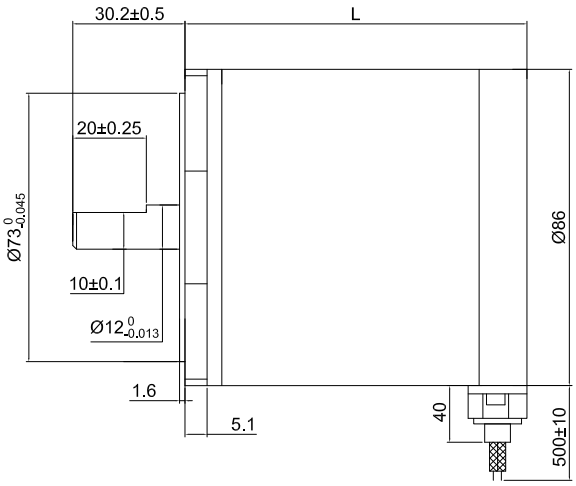
○86mm(○33.9in.)

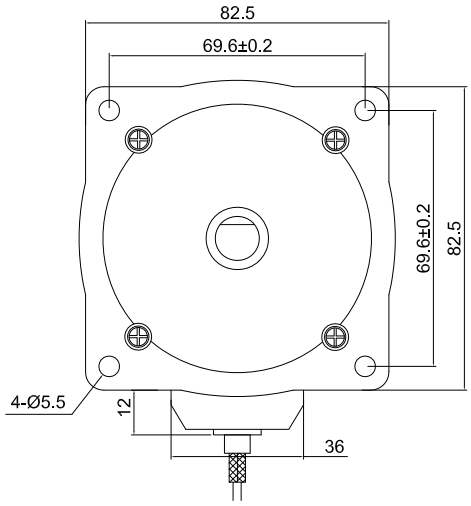
Step Angle 1.8°　34HR High-Torque Type

■Common Rating

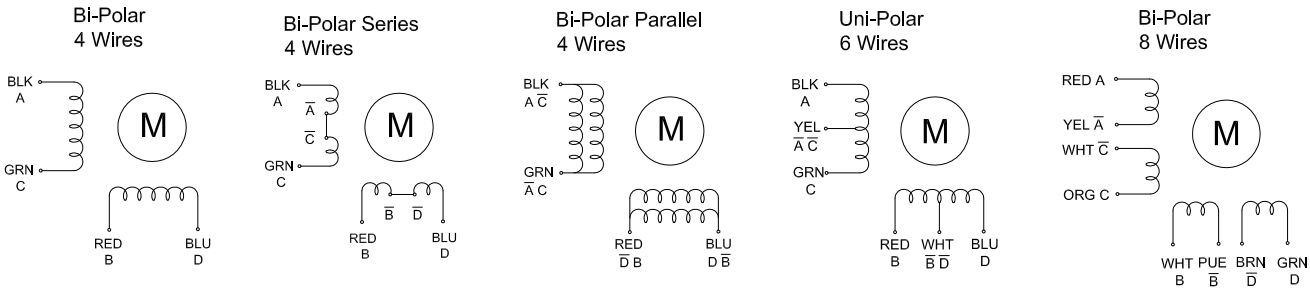
Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

■Dimension Unit = mm(in.)





■Wiring Diagram



■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	# of Leads	Weight	Length "L"	
	N.m	lb.ft	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2		Kg	mm	in
34HR24-4508S	1.6	1.2	1.4	4.5	0.31	1.3	640	8	1.6	62	2.44
34HR24-1604S	1.76	1.3	5.8	1.6	3.6	27	640	4	1.6	62	2.44
34HR24-2504S	1.96	1.4	2.35	2.5	0.94	7	640	4	1.6	62	2.44
34HR36-4008S	2.8	2.1	3	4	0.75	3.5	1300	8	2.6	92	3.62
34HR36-3004S	4	3.0	3.6	3	1.2	11	1300	4	2.6	92	3.62
34HR36-4004S	4.1	3.0	2.8	4	0.7	9.8	1300	4	2.6	92	3.62
34HR51-3508S	4	3.0	4.2	3.5	1.2	5.2	1900	8	3.8	129	5.08
34HR51-4008S	4	3.0	4	4	1	6	1900	8	3.8	129	5.08

*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

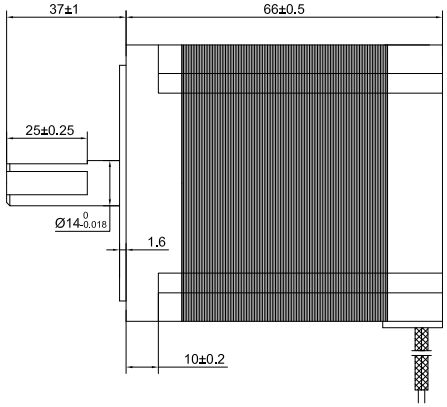
□86mm(□3.39in.)

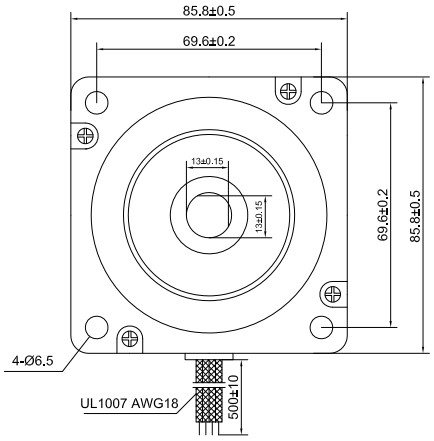
Step Angle 1.8° 34HS High-Torque Type

■Common Rating

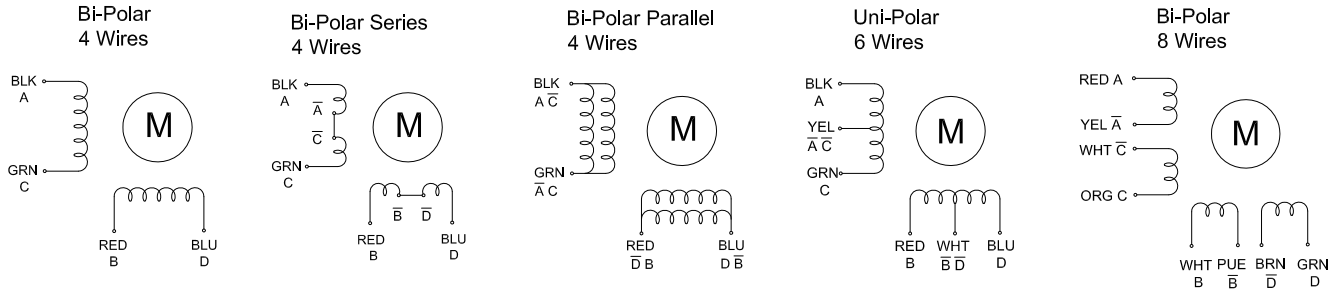
Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

■Dimension Unit = mm(in.)





■Wiring Diagram



■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	# of Leads	Weight	Length "L"	
	N.m	lb.ft	V/Phase	A/Phase	Ohm/Phase	mH/Phase	kg.cm2		Kg	mm	in
34HS27-1404S	2.8	2.1	5.6	1.4	4	24	1	4	1.8	68	2.68
34HS27-4004S	2.8	2.1	2.4	4	0.6	2.8	1	4	1.8	68	2.68
34HS31-3008S	3.2	2.4	4.6	3	1.55	6.76	1.4	8	2.3	80	3.15
34HS31-5504S	4.5	3.3	2.2	5.5	0.4	3.5	1.4	4	2.3	80	3.15
34HS38-3008S	5	3.7	4.8	3	1.6	8	1.8	8	2.8	97	3.82
34HS38-4006S	4.4	3.2	3.4	4	0.85	5	1.8	6	2.8	97	3.82
34HS46-4208S	6	4.4	5	4.2	1.2	6.5	2.7	8	3.6	116	4.57
34HS46-5004S	8.5	6.3	5	5	1	11	2.7	4	3.6	116	4.57
34HS50-6404S	7	5.2	1.8	6.4	0.28	2.85	3	4	3.8	126	4.96
34HS50-4008S	6.8	5.0	6	4	1.5	8	3	8	3.8	126	4.96
34HS52-7004S	9	6.6	2.8	7	0.4	4	3.3	4	4.2	131	5.16
34HS52-3004S	9	6.6	5.1	3	1.7	18	3.3	4	4.2	131	5.16
34HS59-5004S	13	9.6	5	5	1	11	3.6	4	5	150	5.91
34HS61-5004S	11	8.1	4	5	0.8	10	3.6	4	5	155	6.10
34HS61-6504S	11	8.1	3.9	6.5	0.6	7	3.6	4	5	155	6.10

*** Specify -S for Single Shaft; -D for Double Shaft * All motor's specifications are based on full-step constant current operation**

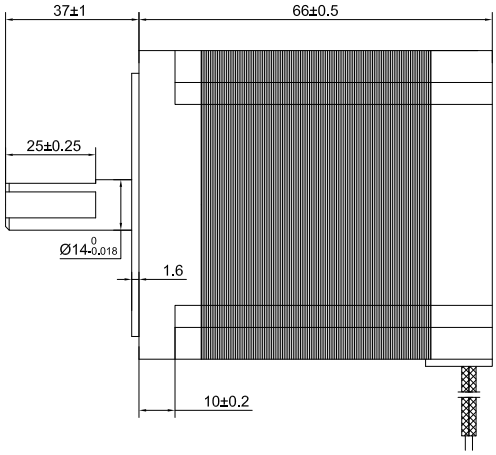
□86mm(□3.39in.)

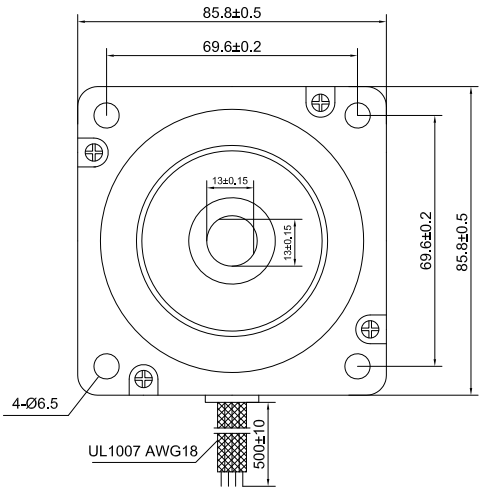
Step Angle 1.2°　34HS 3-Phase Type

■Common Rating

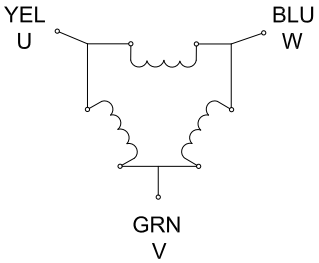
Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

STEP	1	2	3	4	5	6
U	+		-	-		+
V	-	-		+	+	
W		+	+		-	-

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	# of Leads	Weight	Length "L"	
	N.m	lb.ft	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2		Kg	mm	in
34HT27-4006S	2.3	1.7	4	4	1	4	1100	6	1.8	68	2.68
34HT27-1756S	2.3	1.7	7.4	1.75	4.25	12.3	1100	6	1.8	68	2.68
34HT38-5806S	4.5	3.3	4.6	5.8	0.8	3	2320	6	2.8	97	3.82
34HT38-2006S	4.5	3.3	10.8	2	5.4	23	2320	6	2.8	97	3.82
34HT50-5206S	6.8	5.0	13	5.2	2.5	13.5	3300	6	3.8	127	5.00

*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

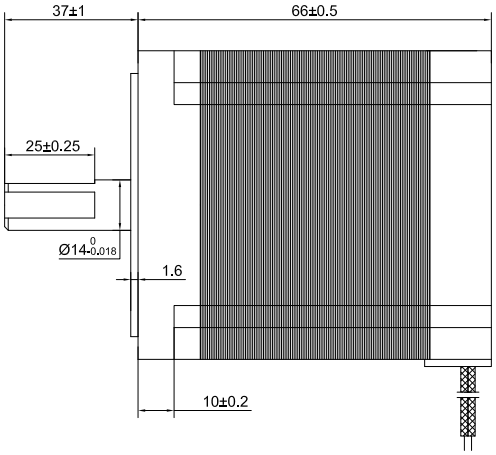
□86mm(□3.39in.)

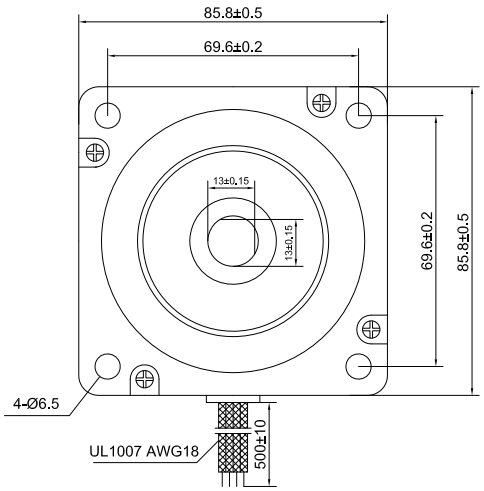
Step Angle 0.72°　34HF 5-Phase Type

■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

■Dimension Unit = mm(in.)





■Specifications

Model	Torque		Voltage	Current	Resistance	Inertia	Weight	Bi/Unipolar	Length "L"	
	N.m	lb.ft	V/Phase	A/Phase	Ohm/Phase	Kg.cm2	Kg	# of Leads	mm	in
34HF26-1405S	2.2	1.6	2.1	1.4	1.5	1.4	1.8	Bi (5)	66	2.60
34HF26-2805S	2.2	1.6	0.67	2.8	0.24	1.4	1.8	Bi (5)	66	2.60
34HF38-1405S	4	3.0	3.22	1.4	2.3	2.7	2.8	Bi (5)	96	3.78
34HF38-2805S	4	3.0	1.46	2.8	0.52	2.7	2.8	Bi (5)	96	3.78
34HF50-1405S	6.2	4.6	4.2	1.4	3	4	3.8	Bi (5)	126	4.96
34HF50-2805S	6.2	4.6	2.24	2.8	0.8	4	3.8	Bi (5)	126	4.96

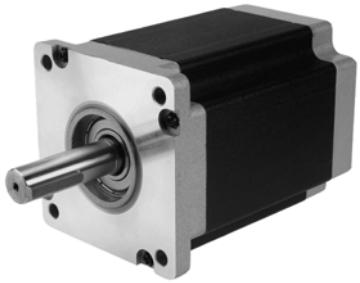
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□109.86mm(□4.33in.)

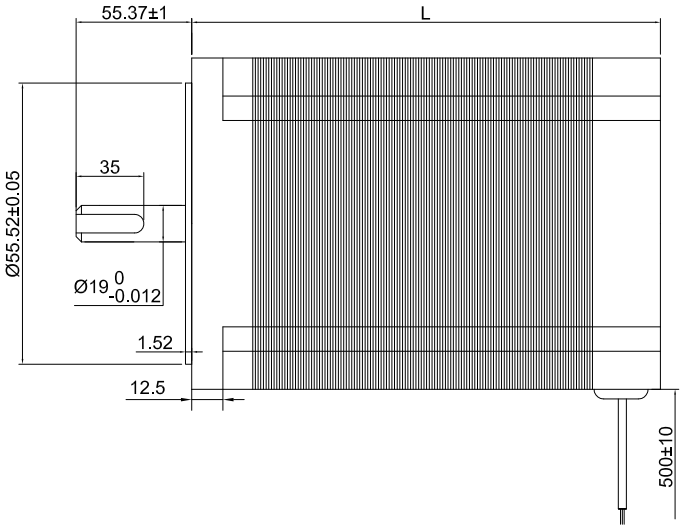
Step Angle 1.8°　42HS High-Torque Type

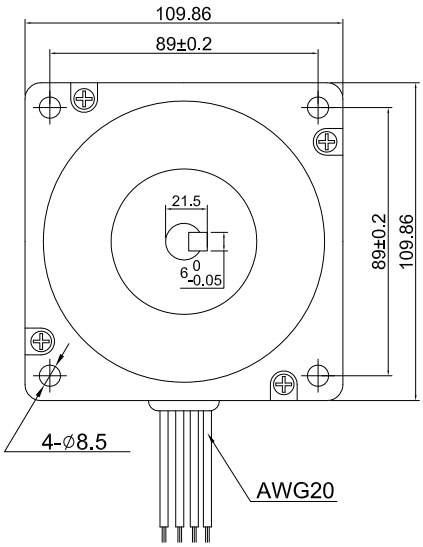
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

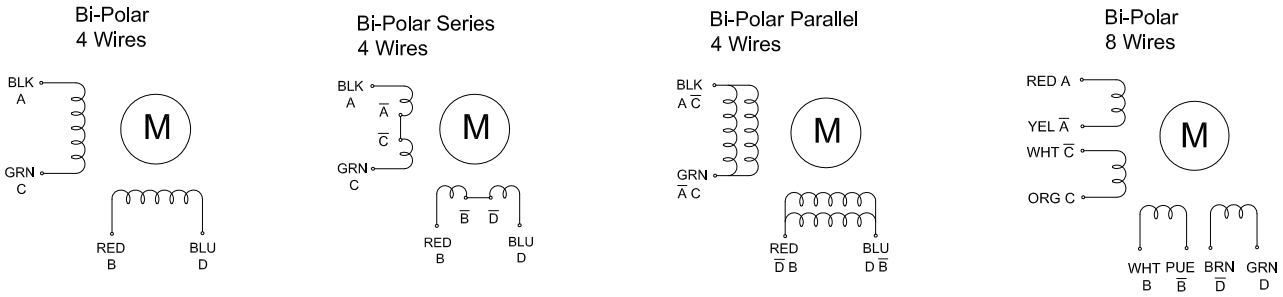


■Dimension Unit = mm(in.)





■Wiring Diagram



■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	N.m	lb.ft	V/Phase	A/Phase	Ohm/Phase	mH/Phase	kg.cm2	# of Leads	Kg	mm	in
42HS39-5504S	11.2	8.3	4.95	5.5	0.9	12	5.5	Bi (4)	5	99	3.90
42HS59-6804S	21	15.5	5.44	6.8	0.8	12	10.9	Bi (4)	8.4	150	5.91
42HS65-6004S	24	17.7	4.8	6	0.8	14	12.5	Bi (4)	9.5	165	6.50
42HS79-8004S	28	20.7	5.36	8	0.67	12	16.2	Bi (4)	11.7	201	7.91

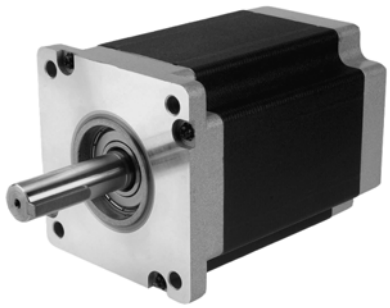
*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**

□109.86mm(□4.33in.)

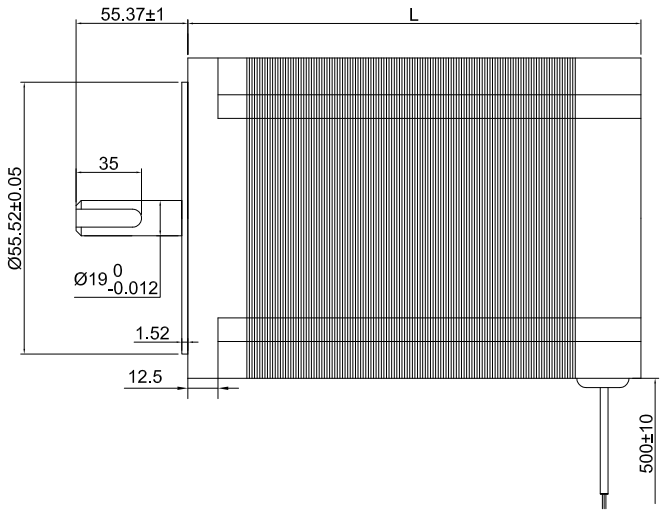
Step Angle 1.2°　42HT 3-Phase Type

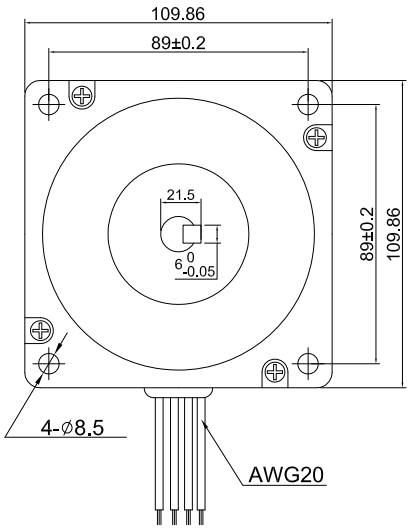
■Common Rating

Item	Specification
Step Angle Accuracy	±5%（full step,no load）
Temperature Rise	80℃Max.(rated current,2 phase on)
Ambient Temperature	-10℃-+50℃
Insulation Resistance	100MΩMin.500VDC
Dielectric Strength	500VAC for one minute

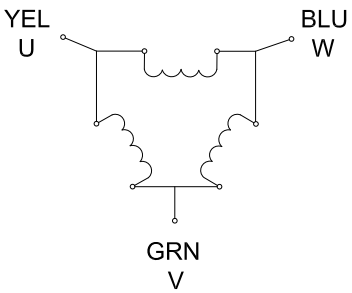


■Dimension Unit = mm(in.)





■Wiring Diagram



■Excitation Sequence

STEP	1	2	3	4	5	6
U	+		-	-		+
V	-	-		+	+	
W		+	+		-	-

■Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	N.m	lb.ft	V/Phase	A/Phase	Ohm/Phase	mH/Phase	kg.cm2	# of Leads	Kg	mm	in
42HT47-4303S	10	7.4	6	4.3	1.4	9.2	5.5	Bi (3)	5	120	4.72
42HT58-6003S	15	11.1	10.2	6	1.7	12	8.5	Bi (3)	7.4	148	5.83
42HT42-6403S	19	14.0	13.4	6.4	2.1	14.8	11.5	Bi (3)	9.8	182	7.17
42HT85-6903S	23	17.0	13.4	6.9	2.5	17.5	14.5	Bi (3)	11.7	216	8.50

*** Specify -S for Single Shaft; -D for Double Shaft　* All motor's specifications are based on full-step constant current operation**