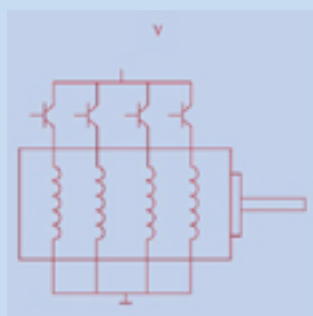


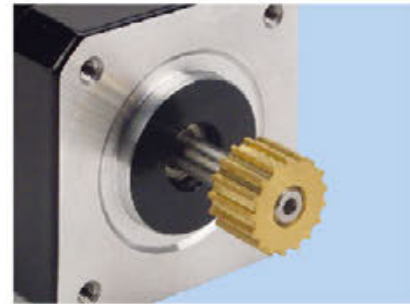
STEPPING MOTORS



- Digital controlled positioning and speed control operating without position feedback
- Diameter of 20 - 86 mm
- up to IP 68 protection
- Stepping angles of 0,9 - 1,8° / 120°
- High torque and high step angle accuracy
- Spindle stepping motors from 0,003 - 0,04 mm / step
- Digital controller for stepping and spindle stepping motors
- System integration with application engineers
- more than 40 years market experience
- ISO 9001:2008 certified since 1998



MEYER INDUSTRIE-ELECTRONIC GmbH – MEYLE
Carl-Bosch-Str. 8 · 49525 Lengerich/Germany
Phone +49 (0) 54 81-93 85-0 · Fax +49 (0) 54 81-93 85-12
www.meyle.de · E-Mail: sales@meyle.de



Pulley



Gear



Plastic Pulley



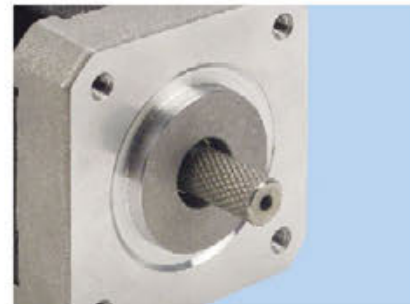
Single Flat



Double Flat



Key Way



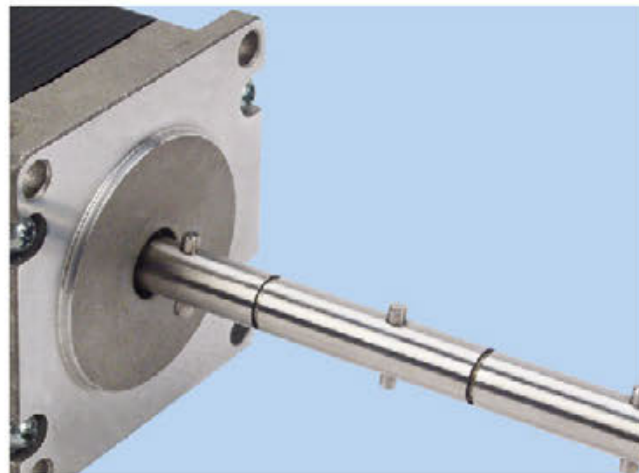
Knurl



Hobbed Gear



Hollow Shaft

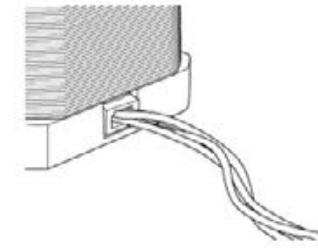


Dowel

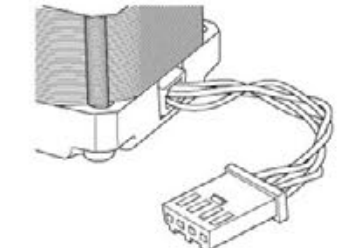


Worm Shaft

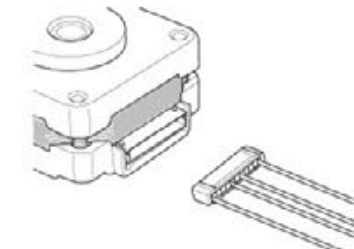
Note:
The styles above are in normal way.
Other special shafts can be customized.



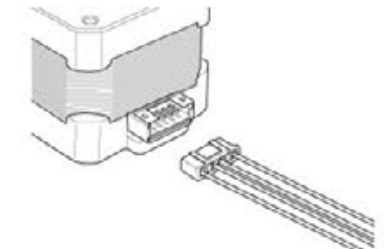
Lead Wire



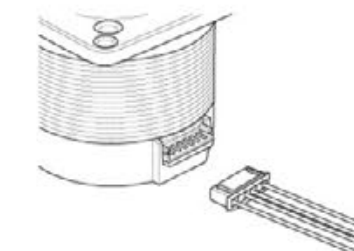
Lead Wire with Connector



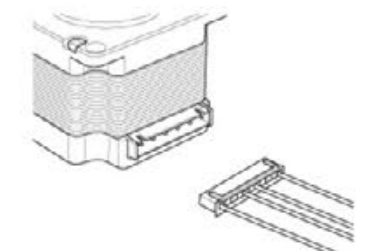
Connector with harness
Motor side: JST S11B-ER (LF)(SN)
Mate with: JST ZHR-11



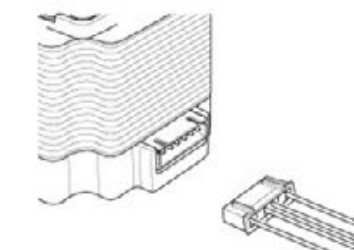
Connector with harness
Motor side: JST S6B-PH-K (LF)(SN)
Mate with: JST PHR-6



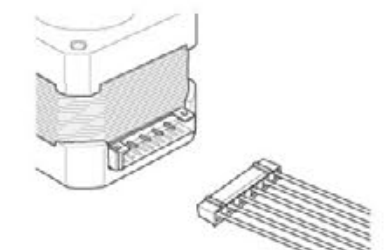
Connector with harness
Motor side: JST S11B-ER (LF)(SN)
Mate with: JST ZHR-11



Connector with harness
Motor side: JST S6B-PH-K (LF)(SN)
Mate with: JST PHR-6



Connector with harness
Motor side: JST S6B-EH (LF)(SN)
Mate with: JST PHR-6

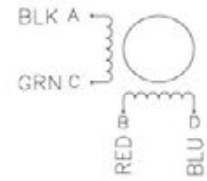


Connector with harness
Motor side: JST S11B-XH-A-1 (LF)(SN)
Mate with: JST XHP-11

Note:
The styles above are in normal way.
Other special connectors can be customized.

Bipolar - 4 Lead Wire

WIRING DIAGRAM



DRIVE SEQUENCE MODEL

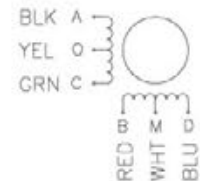
BI-POLAR FULL STEP

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

CW(CLOCKWISE)&CCW(COUNTER CLOCKWISE) ROTATION WHEN SEEN FROM THE FLANGE SIDE OF THE MOTOR

Unipolar - 6 Lead Wire

WIRING DIAGRAM



DRIVE SEQUENCE MODEL

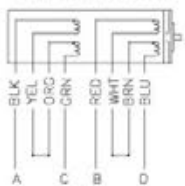
UNI-POLAR FULL STEP

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

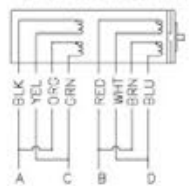
CW(CLOCKWISE)&CCW(COUNTER CLOCKWISE) ROTATION WHEN SEEN FROM THE FLANGE SIDE OF THE MOTOR

8 Lead Wire Series

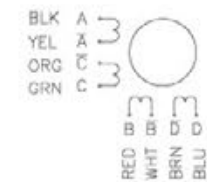
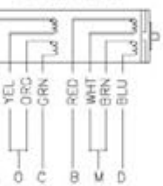
1. BI-POLAR SERIES



2. BI-POLAR PARALLEL



3. UNI-POLAR



1. BI-POLAR FULL STEP

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

CW(CLOCKWISE)&CCW(COUNTER CLOCKWISE) ROTATION WHEN SEEN FROM THE FLANGE SIDE OF THE MOTOR

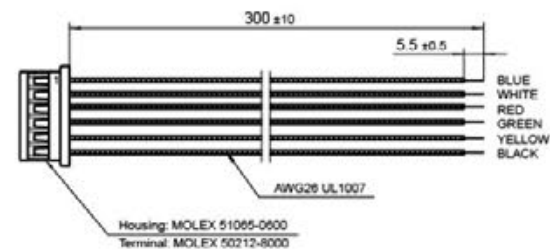
2. UNI-POLAR FULL STEP

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

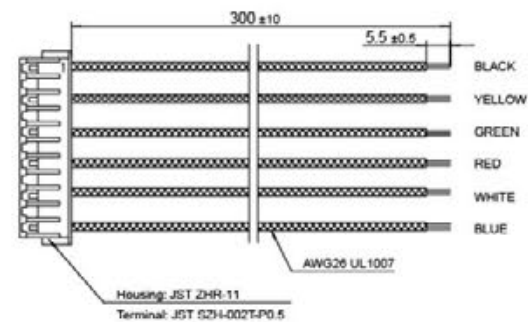
CW(CLOCKWISE)&CCW(COUNTER CLOCKWISE) ROTATION WHEN SEEN FROM THE FLANGE SIDE OF THE MOTOR

Accessory Harness Model

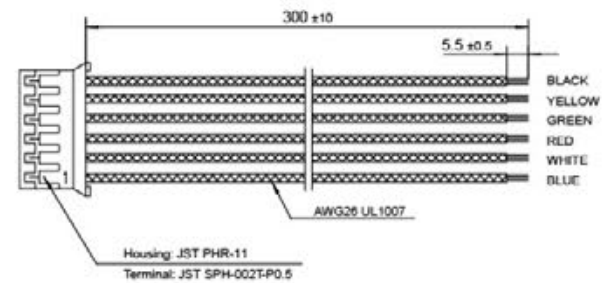
HB-28S series



HB-35S series



HB-42S series



Note:
The styles above are in normal way.
Other special harnesses can be customized.

HB-20S0001-01

1 2 3 4 5 6 7

- Size: Motor outside diameter in tenths of an inch (Motor Dimensions)
- Type of Stepping Motor: "H" means Hybrid Stepping Motor
- Type of Step Angle:
 - S: Step angle 1.8°, stator with 8 polar
 - C: Step angle 0.9°, stator with 8 polar
 - T: Step angle 1.2°
 - Y: Step angle 0.6°
 - F: Step angle 0.72°
- Length of stator core
- Type of lead wires:
 - "0" indicates connector only
 - "4, 5, 6, 8" indicates number of lead wires
- Electric variation: variety of current, torque, etc.
- Mechanical variation: variety of shaft, lead wires, screws, etc.

HB-20S

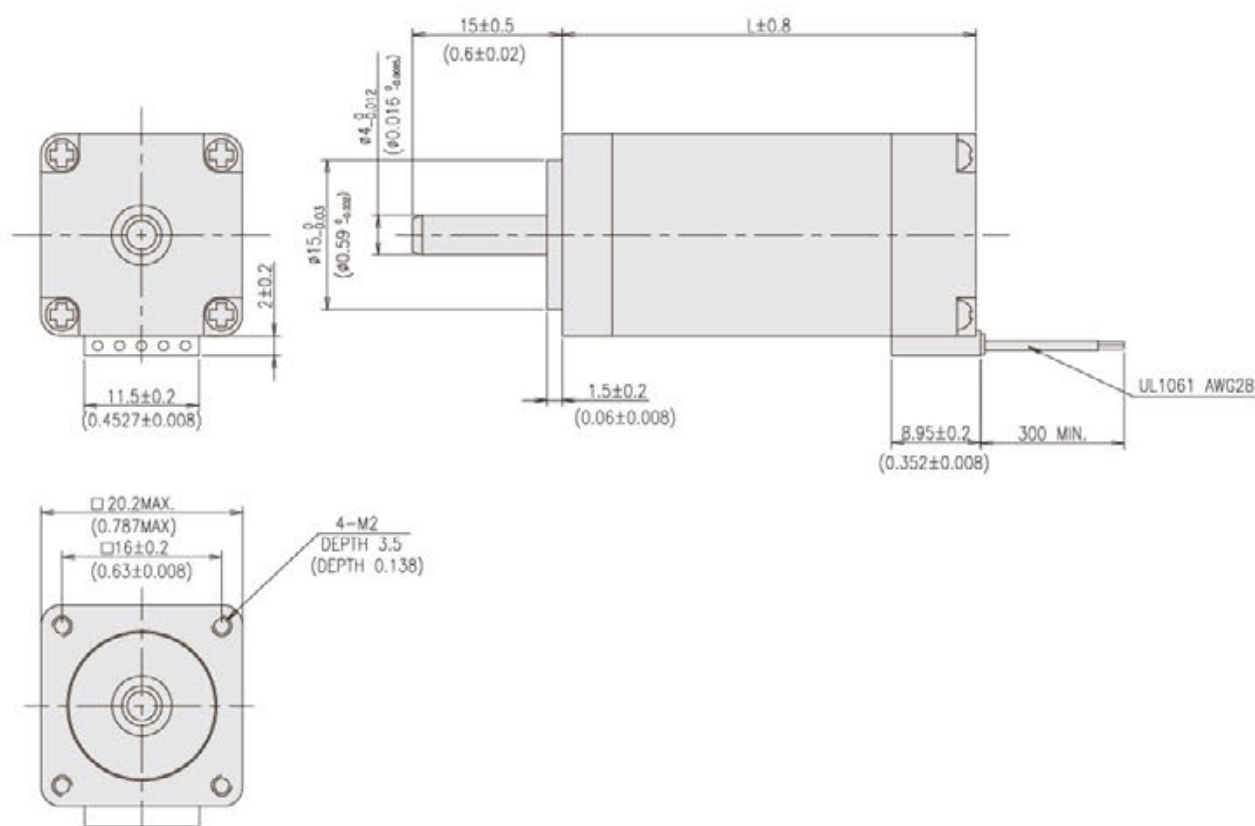


☐ 20mm ☐ 1.8° ☐ Bipolar

Bipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-20S2001	1.8°	2.8	0.60	6.6	1.8	1.19	2	4	100	30
HB-20S4001	1.8°	6.0	0.50	12.0	3.3	38	3.6	4	150	42
HB-20S4002	1.8°	4.3	0.80	5.3	1.4	39	3.6	4	150	42

Dimensions



mm(inch)

HB-28S



☐ 28mm ☐ 1.8° ☐ Unipolar ☐ Bipolar

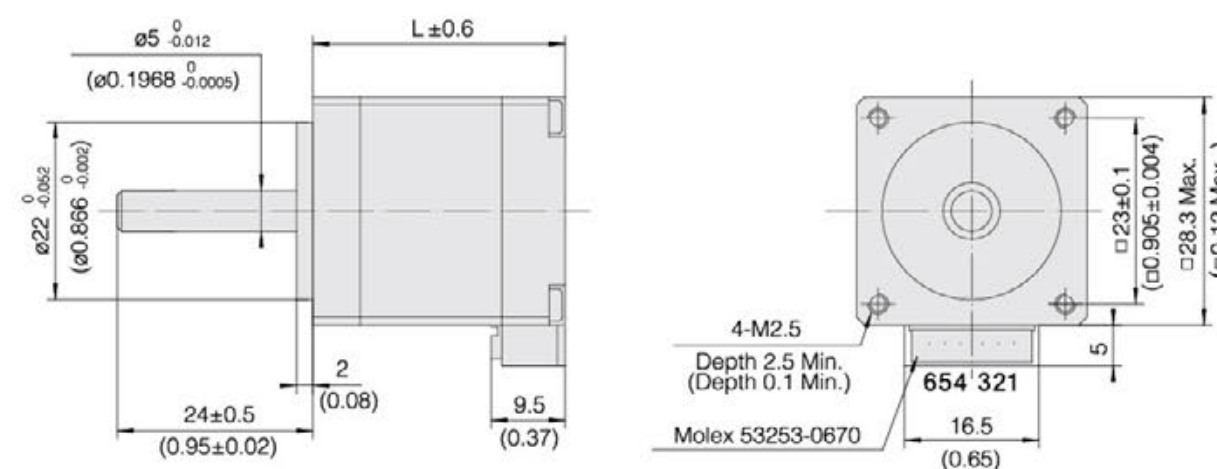
Unipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-28S2601	1.8°	1.9	1.00	1.9	0.9	35	9	6	100	31
HB-28S2602	1.8°	4.8	0.45	10.7	4.7	37	9	6	100	31
HB-28S4601	1.8°	3.4	1.00	3.4	1.6	68	12	6	150	40
HB-28S4602	1.8°	6.6	0.50	13.2	5.7	64	12	6	150	40
HB-28S6601	1.8°	4.6	1.00	4.6	2.3	90	18	6	200	51
HB-28S6602	1.8°	7.4	0.65	11.4	6.3	97	18	6	200	51

Bipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-28S2401	1.8°	2.8	1.50	0.9	0.9	35	9	4	100	31
HB-28S2402	1.8°	6.9	0.65	5.3	4.7	35	9	4	100	31
HB-28S4401	1.8°	4.8	0.40	1.7	1.6	96	12	4	150	40
HB-28S4402	1.8°	9.3	0.70	6.6	5.7	90	12	4	150	40
HB-28S6401	1.8°	6.4	1.40	2.3	2.3	133	18	4	200	51
HB-28S6402	1.8°	10.2	0.90	5.7	6.3	141	18	4	200	51

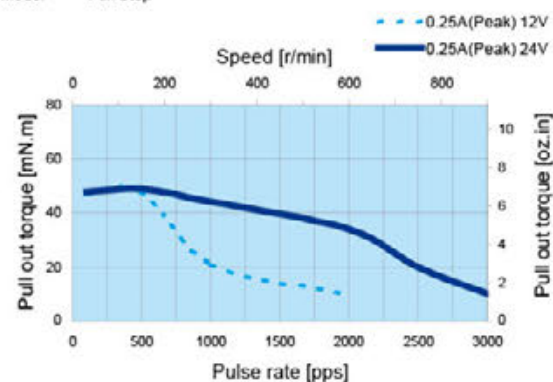
Dimensions



mm(inch)

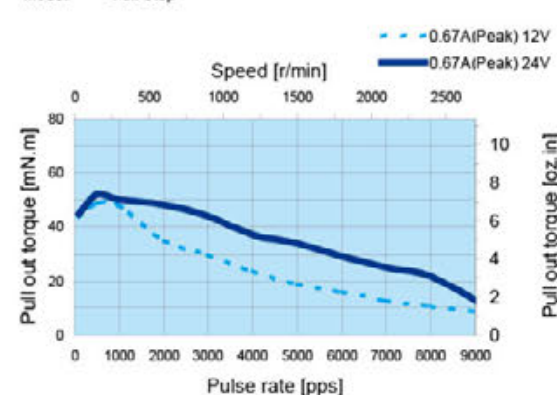
HB-28S2402

Conditions: Bi-polar Constant Current Driver
Driver: DMBS2528
Mode: Full Step



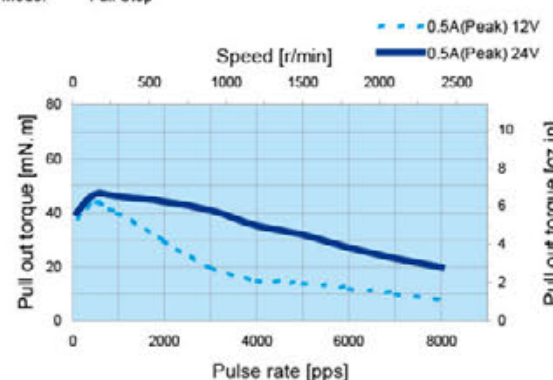
HB-28S2403

Conditions: Bi-polar Constant Current Driver
Driver: DMBS2528
Mode: Full Step



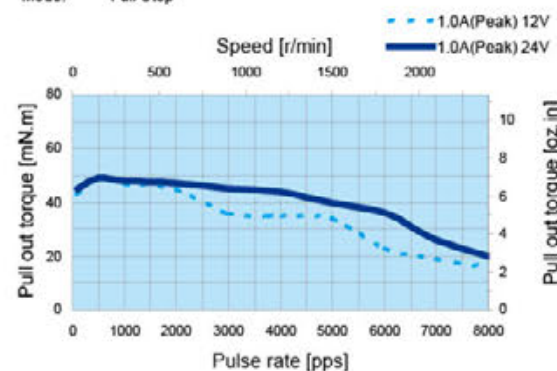
HB-28S4602

Conditions: Bi-polar Constant Current Driver
Driver: DMBS2528
Mode: Full Step



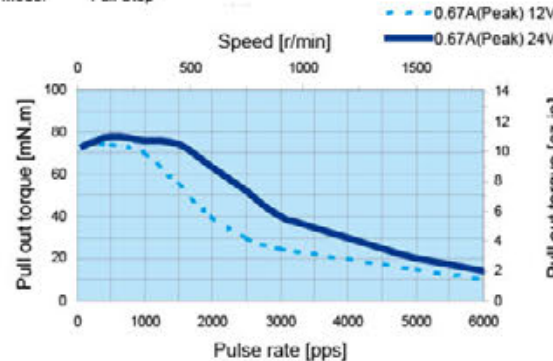
HB-28S2601

Conditions: Bi-polar Constant Current Driver
Driver: DMBS2528
Mode: Full Step



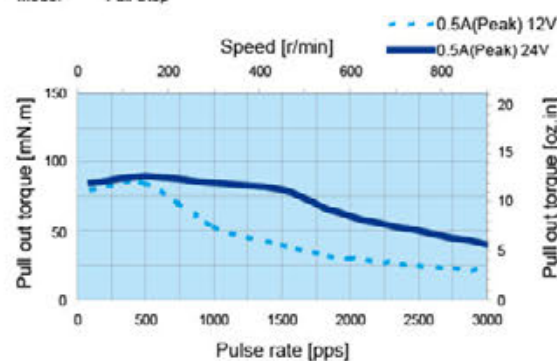
HB-28S4601

Conditions: Bi-polar Constant Current Driver
Driver: DMBS2528
Mode: Full Step



HB-28S6601

Conditions: Bi-polar Constant Current Driver
Driver: DMBS2528
Mode: Full Step



HB-42S



42mm 1.8° Unipolar Bipolar

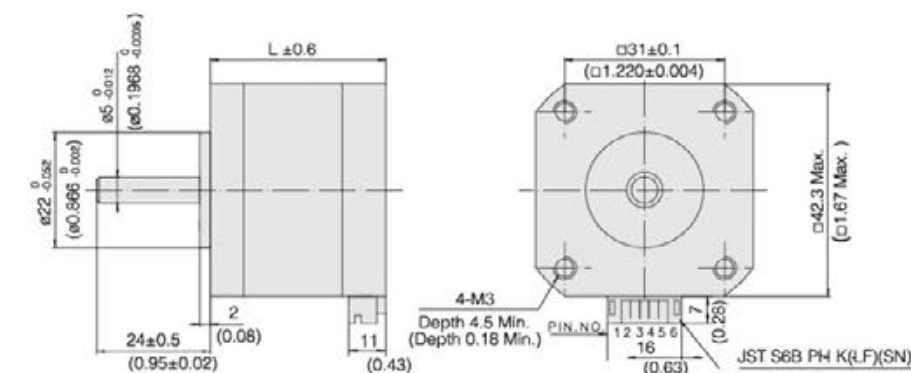
Unipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-42S1001	1.8°	3.9	1.0	3.9	3.0	200	40	6	210	33.5
HB-42S1002	1.8°	5.0	0.8	6.3	4.7	200	40	6	210	33.5
HB-42S1003	1.8°	9.5	0.4	23.7	18.9	200	40	6	210	33.5
HB-42S3001	1.8°	3.5	1.2	2.9	3.3	272	57	6	280	39.5
HB-42S3002	1.8°	5.8	0.8	7.3	6.8	258	57	6	280	39.5
HB-42S3003	1.8°	11.0	0.4	27.6	27.0	258	57	6	280	39.5
HB-42S5001	1.8°	4.2	1.2	3.5	2.9	441	82	6	360	47.5
HB-42S5002	1.8°	5.7	0.9	6.5	5.3	444	82	6	360	47.5
HB-42S5003	1.8°	9.8	0.5	19.6	17.0	441	82	6	360	47.5
HB-42S7001	1.8°	3.0	2	1.5	3.3	650	128	6	610	59.7
HB-42S7002	1.8°	6.8	1	6.8	13.2	650	128	6	610	59.7

Bipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-42S1004	1.8°	4.7	1.7	1.4	2.1	283	40	4	210	33.5
HB-42S1005	1.8°	7.2	1.15	3.1	4.7	288	40	4	210	33.5
HB-42S1006	1.8°	14.2	0.6	11.8	18.9	300	40	4	210	33.5
HB-42S3004	1.8°	4.6	1.80	1.3	2.5	357	57	4	280	39.5
HB-42S3005	1.8°	8.0	1.10	3.6	6.8	355	57	4	280	39.5
HB-42S3006	1.8°	15.2	0.55	13.8	27.0	355	57	4	280	39.5
HB-42S5004	1.8°	6.0	1.70	1.8	2.9	625	82	4	360	47.5
HB-42S5005	1.8°	8.4	1.20	3.5	6.5	655	82	4	360	47.5
HB-42S5006	1.8°	20.7	0.60	17.2	26.5	662	82	4	360	47.5
HB-42S7003	1.8°	4.2	2.80	0.8	3.3	910	128	4	610	59.7
HB-42S7004	1.8°	9.5	1.40	3.4	13.2	910	128	4	610	59.7

Dimensions

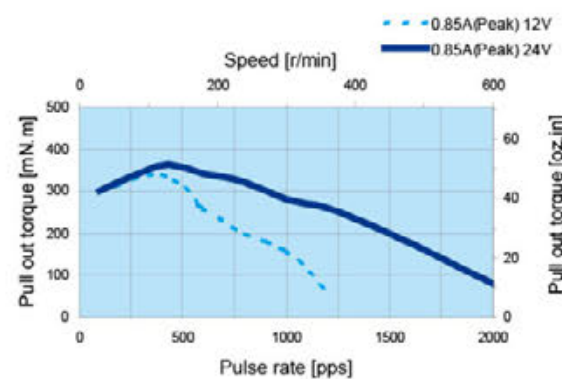


mm(Inch)

Note: If need special specification,pls contact with us.

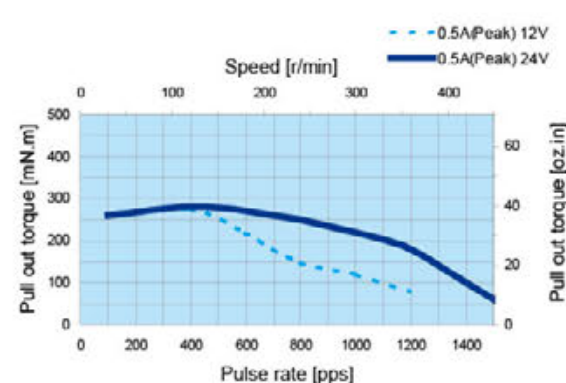
HB-42S1002

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



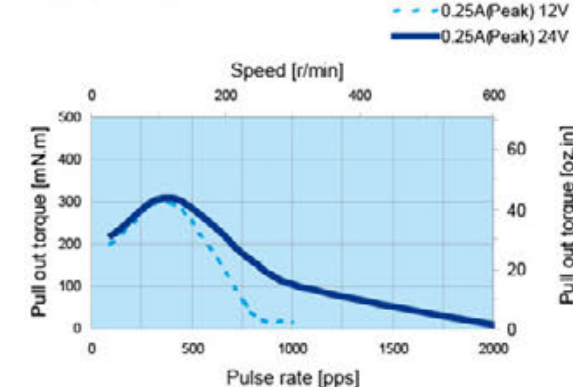
HB-42S1003

Conditions: BI-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



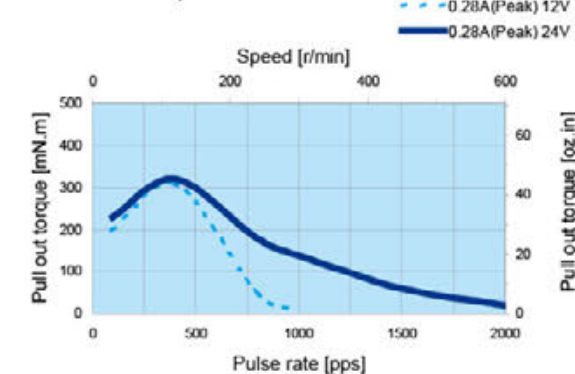
HB-42S1006

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



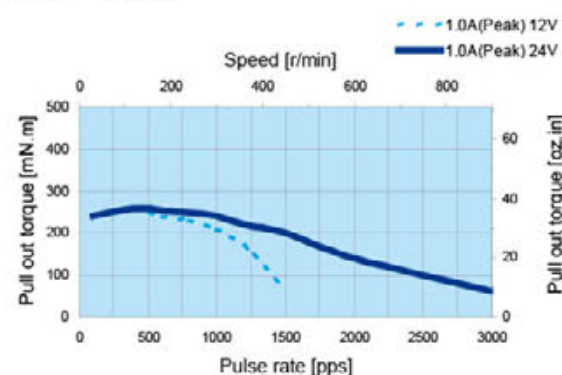
HB-42S1007

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



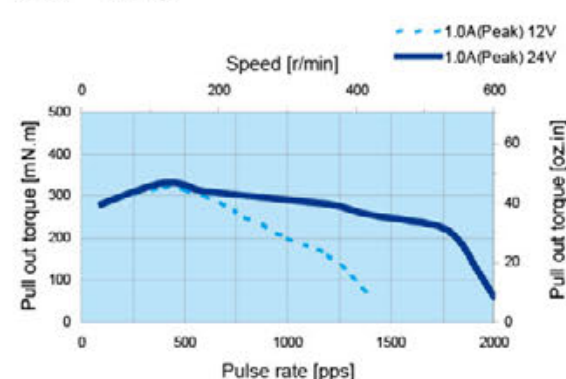
HB-42S1001

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



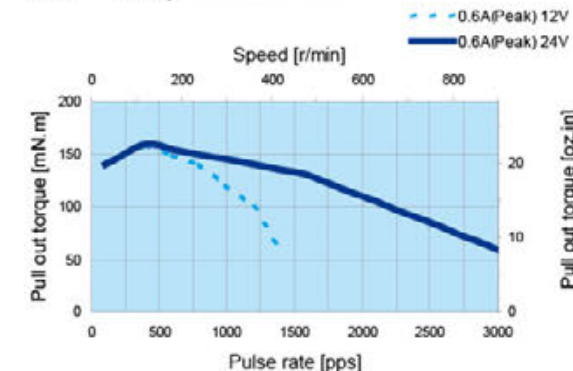
HB-42S1002

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



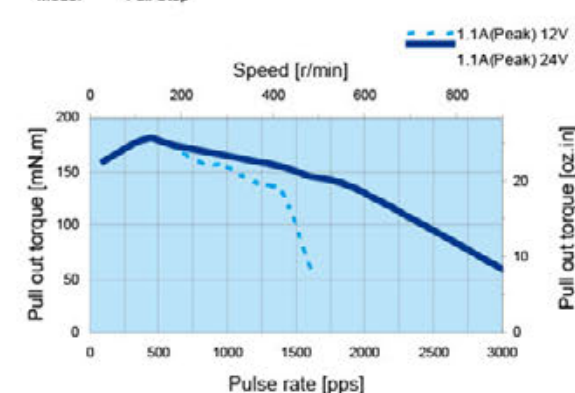
HB-42S3006

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



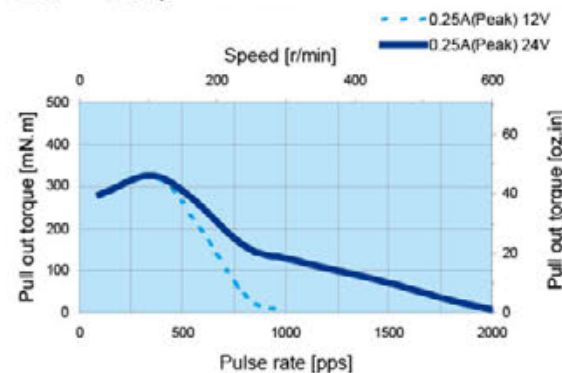
HB-42S3007

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



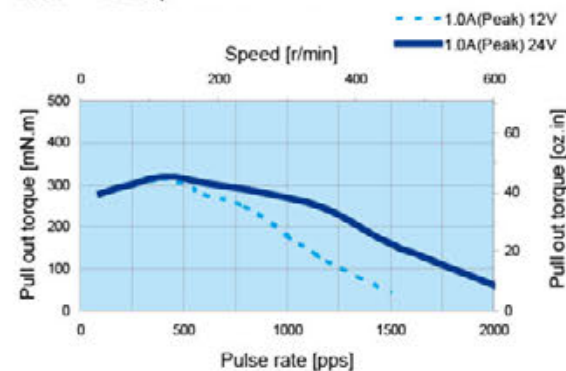
HB-42S1004

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



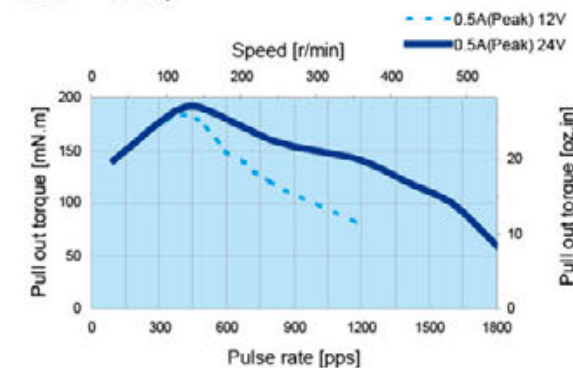
HB-42S1005

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



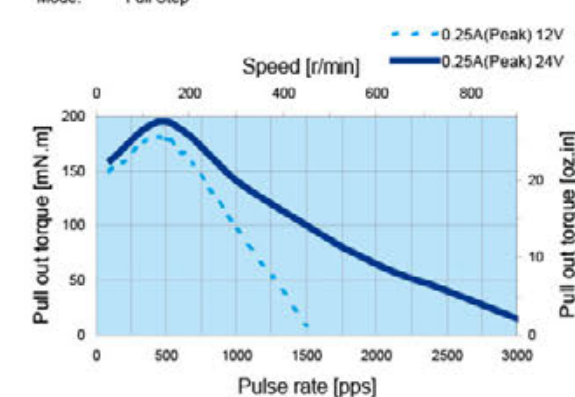
HB-42S1008

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



HB-42S3009

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Stop



HB-42C 系列

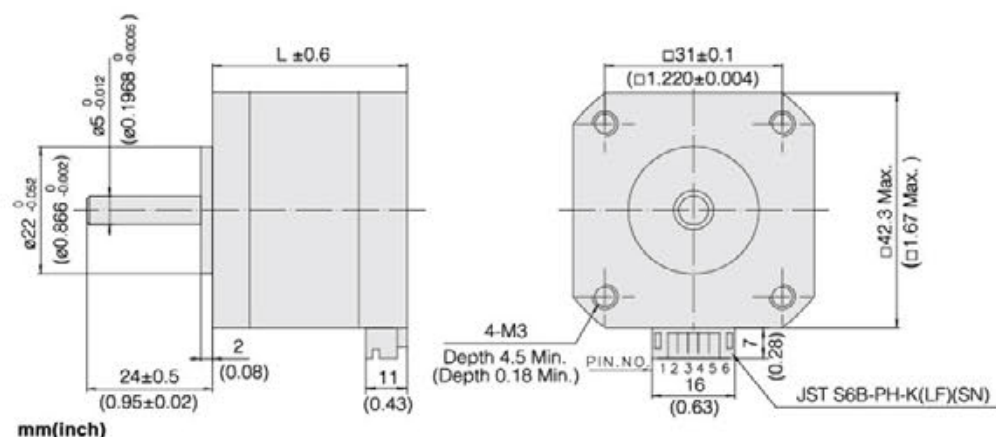


42mm 0.9° Bipolar

Bipolar

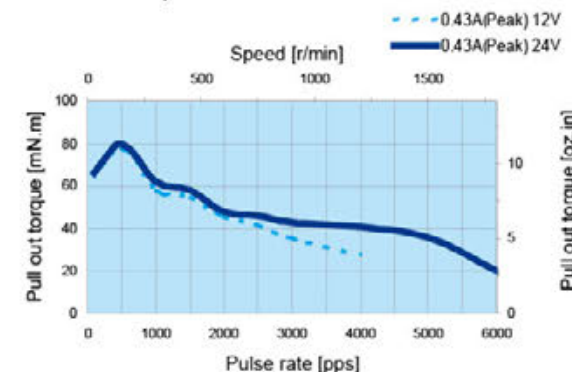
Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-42C1001	0.9°	3.2	2	1.6	2.0	188	27	4	140	29.5
HB-42C1002	0.9°	4.3	1.5	2.8	3.5	185	27	4	140	29.5
HB-42C1003	0.9°	10.9	0.6	18.2	24.2	194	27	4	140	29.5
HB-42C3001	0.9°	4.7	2.00	2.4	2.7	393	57	4	280	39.5
HB-42C3002	0.9°	8.5	1.10	7.7	9.5	405	57	4	280	39.5
HB-42C3003	0.9°	15.3	0.55	27.9	34.8	388	57	4	280	39.5
HB-42C5001	0.9°	3.3	1.50	2.2	6.4	530	82	4	360	47.5
HB-42C5002	0.9°	5.0	1.00	5.0	14.4	530	82	4	360	47.5
HB-42C5003	0.9°	7.8	0.70	11.1	32.4	557	82	4	360	47.5

Dimensions



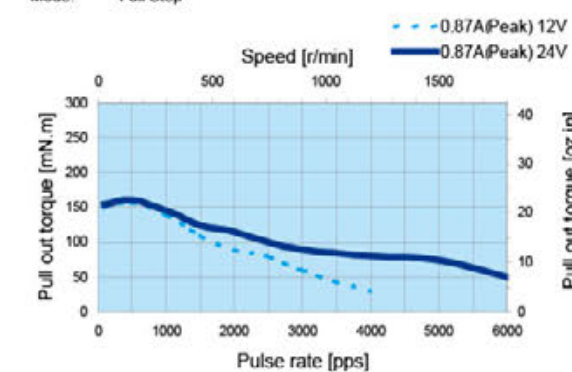
HB-42C1003

Conditions: Bi-polar Constant Current Driver
Driver: DMBS4548
Mode: Full Step



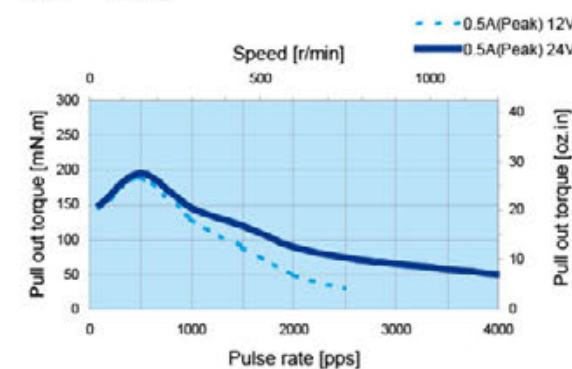
HB-42C1004

Conditions: Bi-polar Constant Current Driver
Driver: DMBS4548
Mode: Full Step



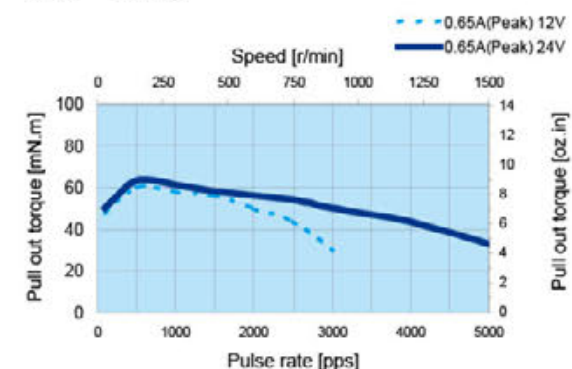
HB-42C1005

Conditions: Bi-polar Constant Current Driver
Driver: DMBS4548
Mode: Full Step



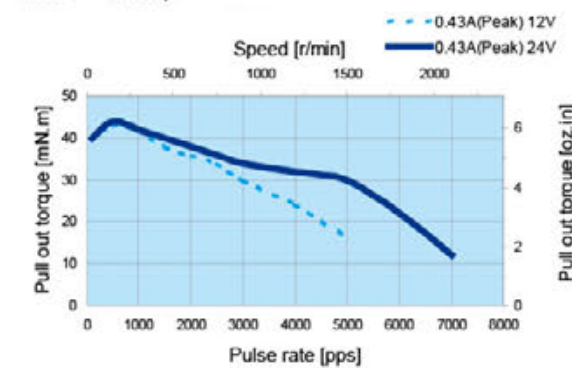
HB-42C1006

Conditions: Bi-polar Constant Current Driver
Driver: DMBS4548
Mode: Full Step



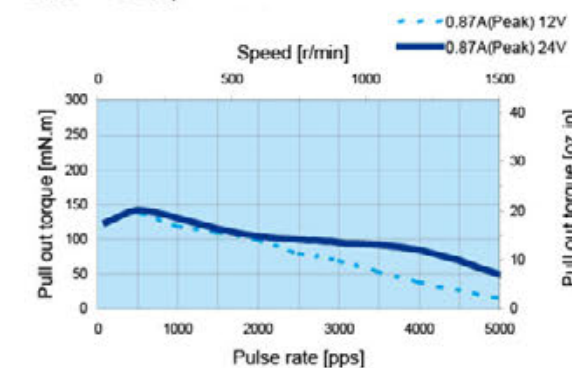
HB-42C5004

Conditions: Uni-polar Constant Current Driver
Driver: DMBS4548
Mode: Full Step



HB-42C5002

Conditions: Uni-polar Constant Current Driver
Driver: DMBS4548
Mode: Full Step



HB-57S



57mm 1.8° Unipolar High torque output

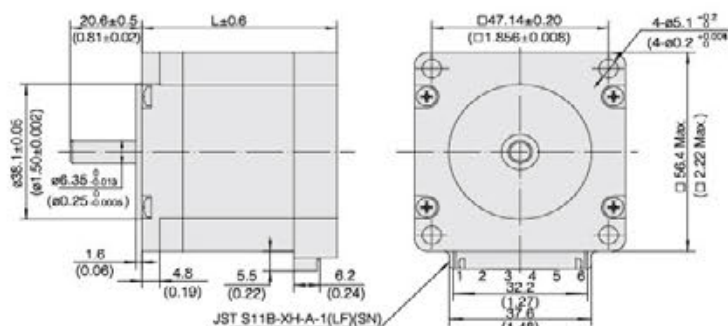
Unipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-57S1001	1.8°	2.0	3.0	0.7	1.0	663	170	6	420	42.3
HB-57S1002	1.8°	3.1	2.0	1.5	2.3	674	170	6	420	42.3
HB-57S1003	1.8°	6.0	1.0	6.0	8.8	663	170	6	420	42.3
HB-57S3001	1.8°	2.1	3.0	0.7	1.0	758	220	6	550	48.3
HB-57S3002	1.8°	3.2	2.0	1.6	2.3	770	220	6	550	48.3
HB-57S3003	1.8°	6.3	1.0	6.3	9.0	758	220	6	550	48.3
HB-57S4001	1.8°	2.4	3.0	0.8	1.2	1000	280	6	600	53.3
HB-57S4002	1.8°	3.7	2.0	1.9	2.8	1016	280	6	600	53.3
HB-57S4003	1.8°	7.3	1.0	7.3	10.8	1000	280	6	600	53.3
HB-57S6001	1.8°	3.5	3.0	1.2	1.8	1680	480	6	1000	77.3
HB-57S6002	1.8°	5.5	2.0	2.7	4.2	1707	480	6	1000	77.3
HB-57S6003	1.8°	10.7	1.0	10.7	16.2	1680	480	6	1000	77.3
HB-57S7001	1.8°	3.0	3.5	0.86	1.8	2030	530	6	1060	83.3
HB-57S7002	1.8°	7.2	1.5	4.78	10.0	2030	530	6	1060	83.3

Bipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-57S1004	1.8°	2.8	4.2	0.33	1.0	928	170	4	510	42.3
HB-57S1005	1.8°	4.3	2.8	0.77	2.3	943	170	4	510	42.3
HB-57S1006	1.8°	8.4	1.4	3	8.8	928	170	4	510	42.3
HB-57S3004	1.8°	2.9	4.2	0.35	1.0	1061	220	4	620	48.3
HB-57S3005	1.8°	4.5	2.8	0.8	2.3	1078	220	4	620	48.3
HB-57S3006	1.8°	8.8	1.4	3.2	9.0	1061	220	4	620	48.3
HB-57S4004	1.8°	3.4	4.2	0.4	1.2	1400	280	4	710	53.3
HB-57S4005	1.8°	5.2	2.8	0.9	2.8	1422	280	4	710	53.3
HB-57S4006	1.8°	10.2	1.4	3.9	10.8	1400	280	4	710	53.3
HB-57S6004	1.8°	4.9	4.2	0.6	1.8	2352	480	4	1100	77.3
HB-57S6005	1.8°	7.7	2.8	1.4	4.2	2389	480	4	1100	77.3
HB-57S6006	1.8°	15.0	1.4	5.4	16.2	2352	480	4	1100	77.3
HB-57S7003	1.8°	4.3	5.0	0.43	1.8	2640	530	4	1160	83.3
HB-57S7004	1.8°	10.0	2.0	2.4	10.0	2700	530	4	1160	83.3

Dimensions

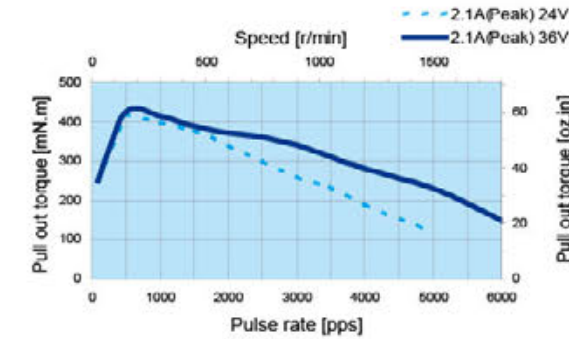


mm(inch)

Note: If need special specification,pls contact with us.

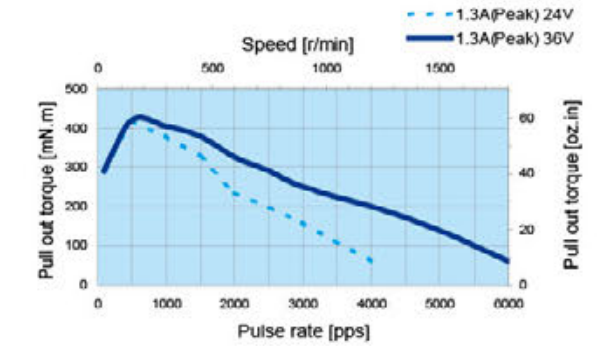
HB-57S1002

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



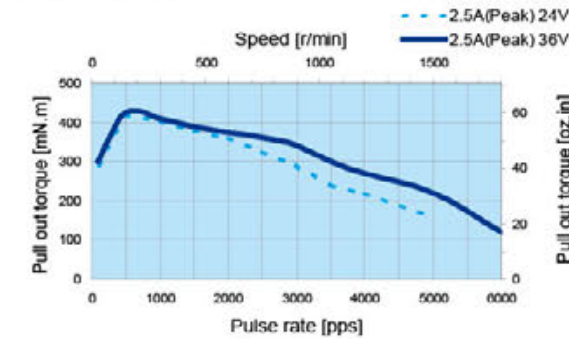
HB-57S1003

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



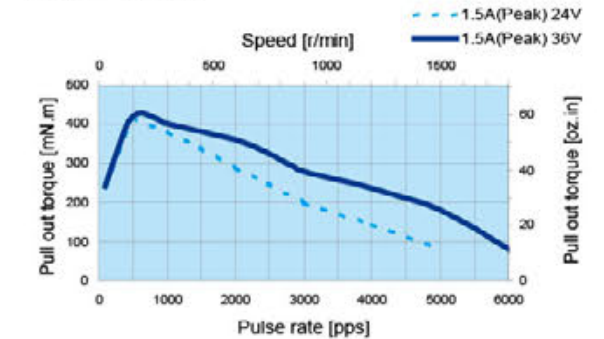
HB-57S1004

Conditions: Bi-polar Constant Current Drive
Driver: DMBSD4548
Mode: Full Step



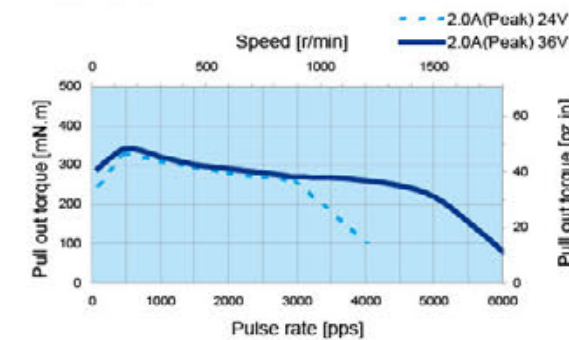
HB-57S1005

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



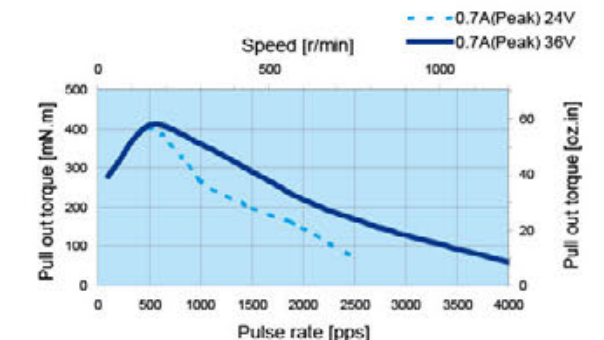
HB-57S1006

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



HB-57S1007

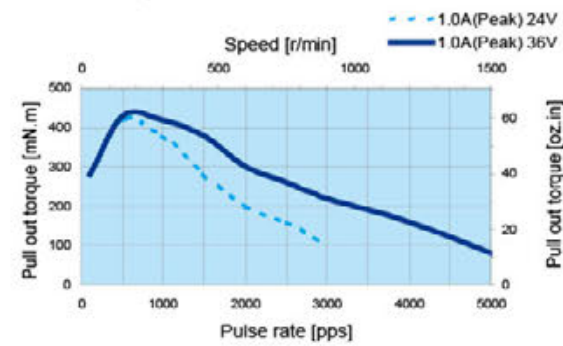
Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



Note: If need special specification,pls contact with us.

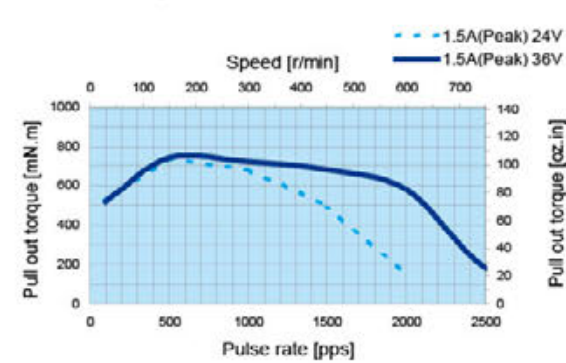
HB-57S1008

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



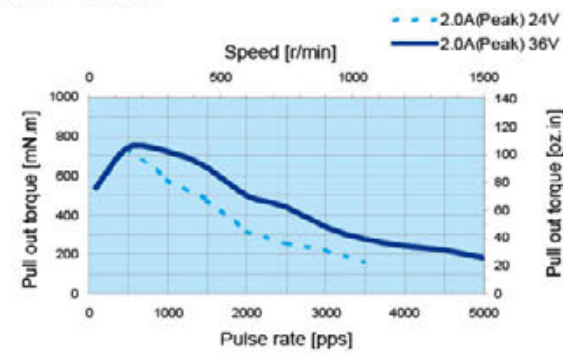
HB-57S3002

Conditions: BI-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



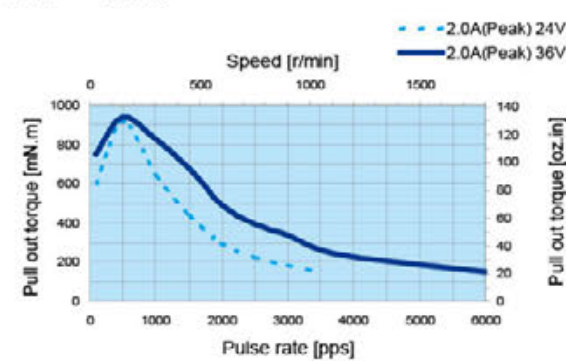
HB-57S3003

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



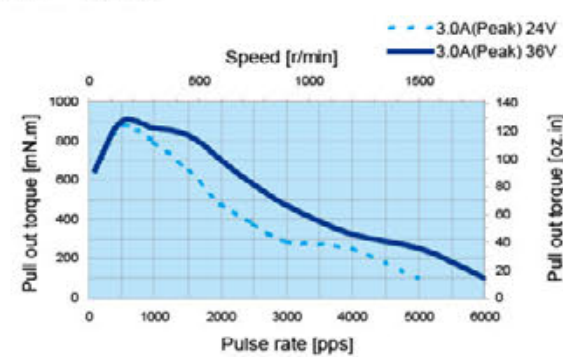
HB-57S4002

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



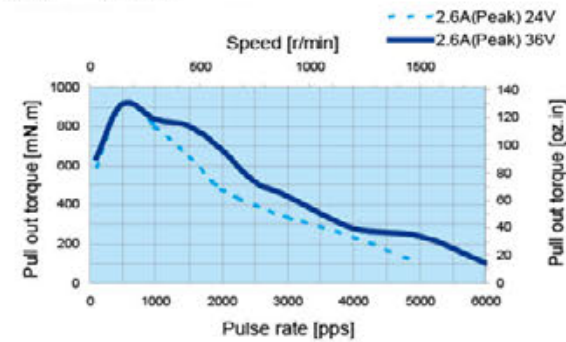
HB-57S4003

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



HB-57S3005

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



HB-57FS

Waterproof motor

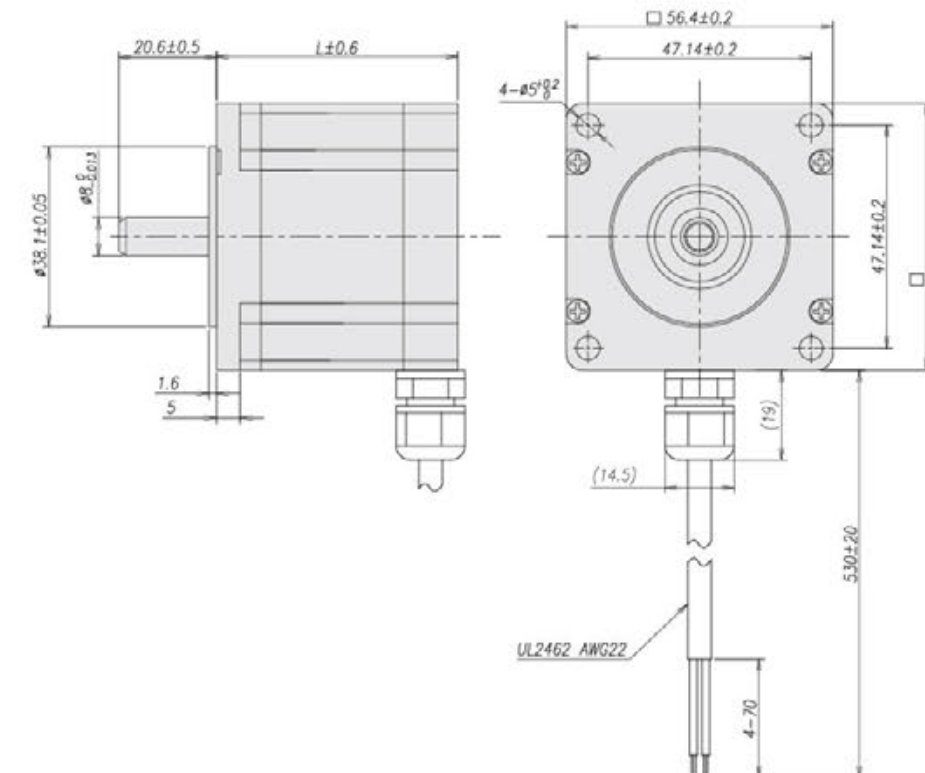


□57mm	1.8°	Unipolar	Waterproof performance is strong
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Bipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-57FS1004	1.8°	2.8	4.2	0.33	1.0	928	170	4	530	44
HB-57FS1005	1.8°	4.3	2.8	0.77	2.3	943	170	4	530	44
HB-57FS1006	1.8°	8.4	1.4	3	8.8	928	170	4	530	44
HB-57FS3004	1.8°	2.9	4.2	0.35	1.0	1061	220	4	640	50
HB-57FS3005	1.8°	4.5	2.8	0.8	2.3	1078	220	4	640	50
HB-57FS3006	1.8°	8.8	1.4	3.2	9.0	1061	220	4	640	50
HB-57FS4004	1.8°	3.4	4.2	0.4	1.2	1400	280	4	730	55
HB-57FS4005	1.8°	5.2	2.8	0.9	2.8	1422	280	4	730	55
HB-57FS4006	1.8°	10.2	1.4	3.9	10.8	1400	280	4	730	55
HB-57FS6004	1.8°	4.9	4.2	0.6	1.8	2352	480	4	1120	79
HB-57FS6005	1.8°	7.7	2.8	1.4	4.2	2389	480	4	1120	79
HB-57FS6006	1.8°	15.0	1.4	5.4	16.2	2352	480	4	1120	79
HB-57FS7003	1.8°	4.3	5.0	0.43	1.8	2640	530	4	1180	85
HB-57FS7004	1.8°	10.0	2.1	2.4	10.0	2700	530	4	1180	85

Dimensions



mm(inch)

HB-60S



☐ 60mm ☐ 1.8° ☐ Unipolar ☐ Bipolar

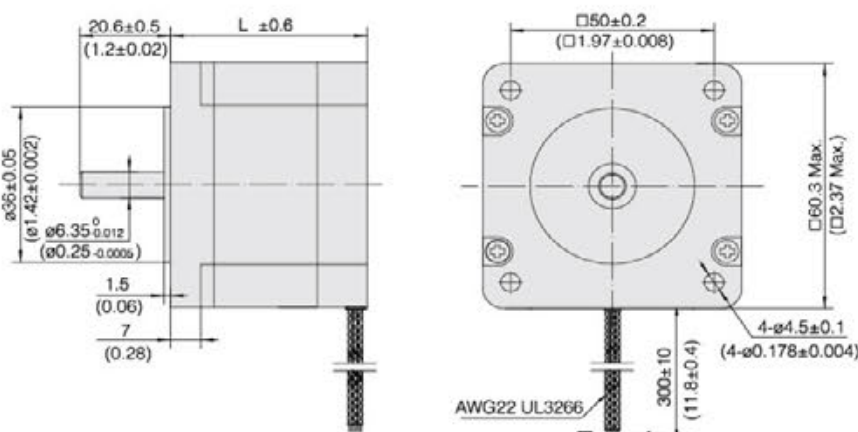
Unipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-60S1601	1.8°	2.2	3.0	0.74	0.8	793	280	6	600	44
HB-60S1602	1.8°	3.4	2.0	1.7	1.8	793	280	6	600	44
HB-60S2603	1.8°	6.7	1.0	6.7	7.2	793	280	6	600	44
HB-60S2601	1.8°	2.7	3.0	0.9	1.5	1311	450	6	800	54
HB-60S2602	1.8°	4.1	2.0	2.0	3.3	1311	450	6	800	54
HB-60S2603	1.8°	8.1	1.0	8.1	13.3	1311	450	6	800	54
HB-60S4601	1.8°	3.2	3.0	1.1	1.6	1571	560	6	1050	65
HB-60S4602	1.8°	4.8	2.0	2.4	3.6	1571	560	6	1050	65
HB-60S4603	1.8°	9.6	1.0	9.6	14.3	1571	560	6	1050	65
HB-60S6601	1.8°	4.3	3.0	1.4	3.0	2333	900	6	1400	85
HB-60S6602	1.8°	6.9	2.0	3.5	6.7	2333	900	6	1400	85
HB-60S6603	1.8°	13.7	1.0	13.7	26.7	2333	900	6	1400	85

Bipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-60S1401	1.8°	3.1	4.2	0.37	0.8	1110	280	4	600	44
HB-60S1402	1.8°	4.8	2.8	0.85	1.8	1110	280	4	600	44
HB-60S2403	1.8°	9.4	1.4	3.36	7.2	1110	280	4	600	44
HB-60S2401	1.8°	3.7	4.2	0.44	1.5	1836	450	4	800	54
HB-60S2402	1.8°	5.7	2.8	1.02	3.3	1836	450	4	800	54
HB-60S2403	1.8°	11.3	1.4	4.04	13.3	1836	450	4	800	54
HB-60S4401	1.8°	4.4	4.2	0.53	1.6	2200	560	4	1050	65
HB-60S4402	1.8°	6.8	2.8	1.21	3.6	2200	560	4	1050	65
HB-60S4403	1.8°	13.4	1.4	4.80	14.3	2200	560	4	1050	65
HB-60S6401	1.8°	6.1	4.2	0.72	3.0	3267	900	4	1400	85
HB-60S6402	1.8°	9.7	2.8	1.7	6.7	3267	900	4	1400	85
HB-60S6403	1.8°	19.2	1.4	6.9	26.7	3267	900	4	1400	85

Dimensions

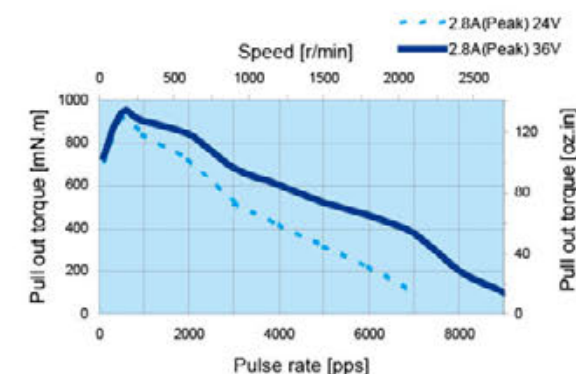


mm(inch)

Note: If need special specification,pls contact with us.

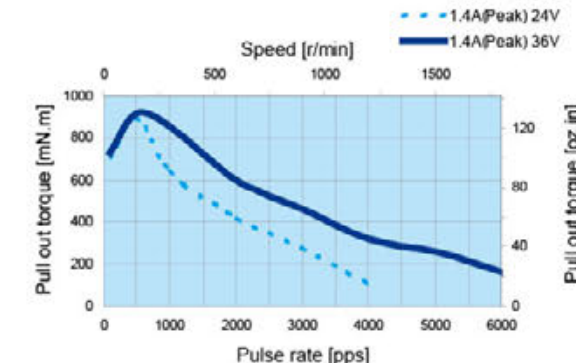
HB-60S1601

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



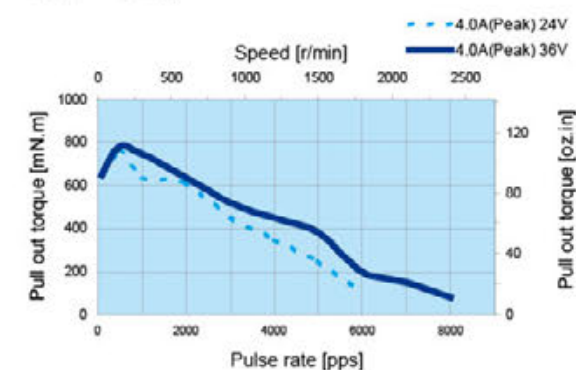
HB-60S1603

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



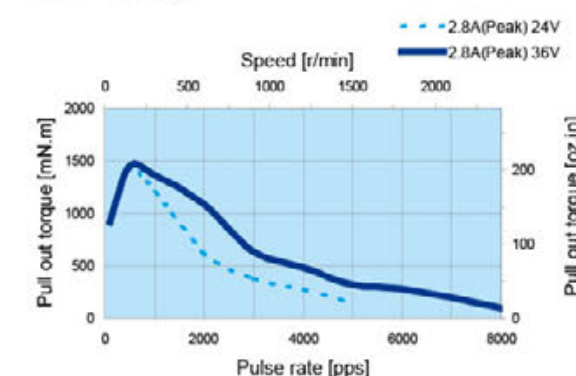
HB-60S1605

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



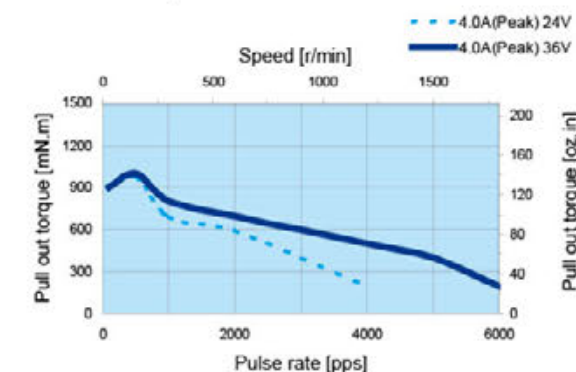
HB-60S2402

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



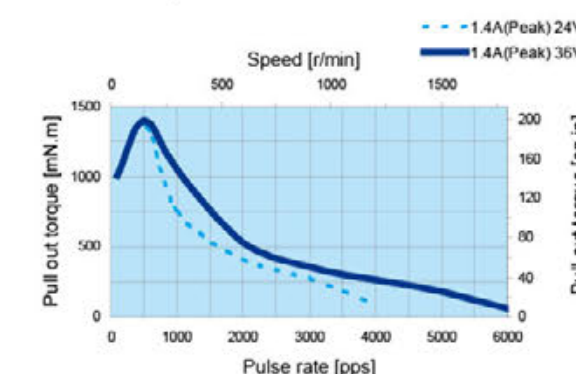
HB-60S2401

Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



HB-60S2403

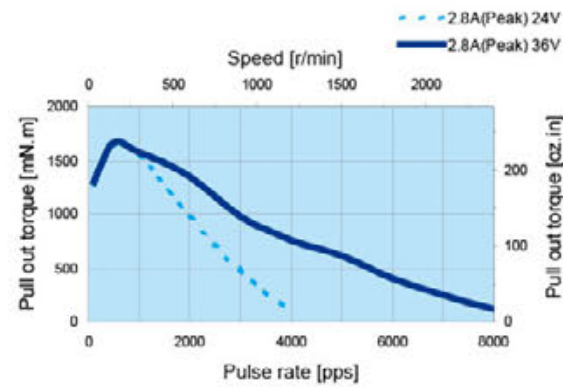
Conditions: Bi-polar Constant Current Driver
Driver: DMBSD4548
Mode: Full Step



Note: If need special specification,pls contact with us.

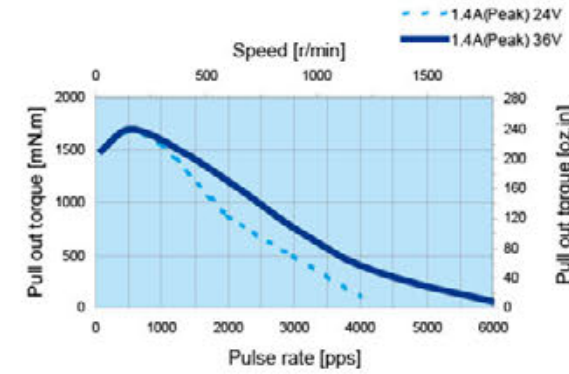
HB-60S4402

Conditions: Bi-polar Constant Current Driver
Driver: AMP MS3540M-301
Mode: Full Step



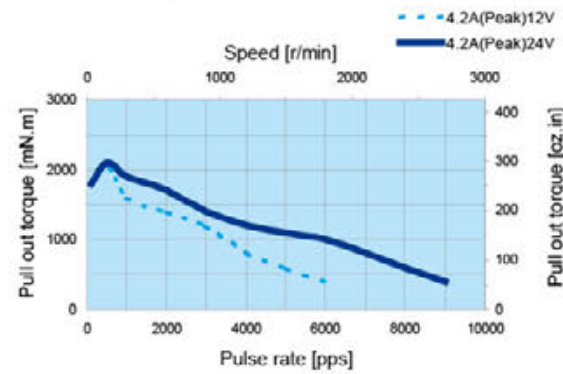
HB-60S4403

Conditions: Bi-polar Constant Current Driver
Driver: AMP MS3540M-301
Mode: Full Step



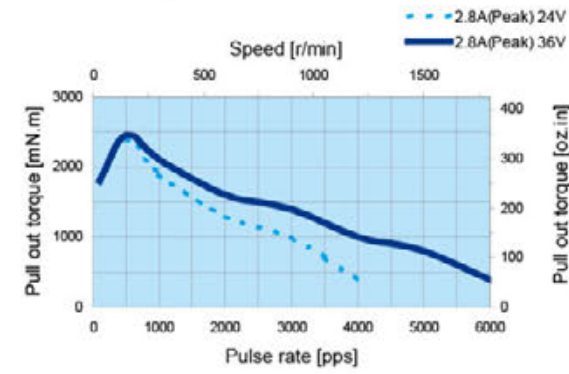
HB-60S6401

Conditions: Bi-polar Constant Current Driver
Driver: AMP MS3540M-301
Mode: Full Step



HB-60S6402

Conditions: Bi-polar Constant Current Driver
Driver: AMP MS3540M-301
Mode: Full Step



HB-86S

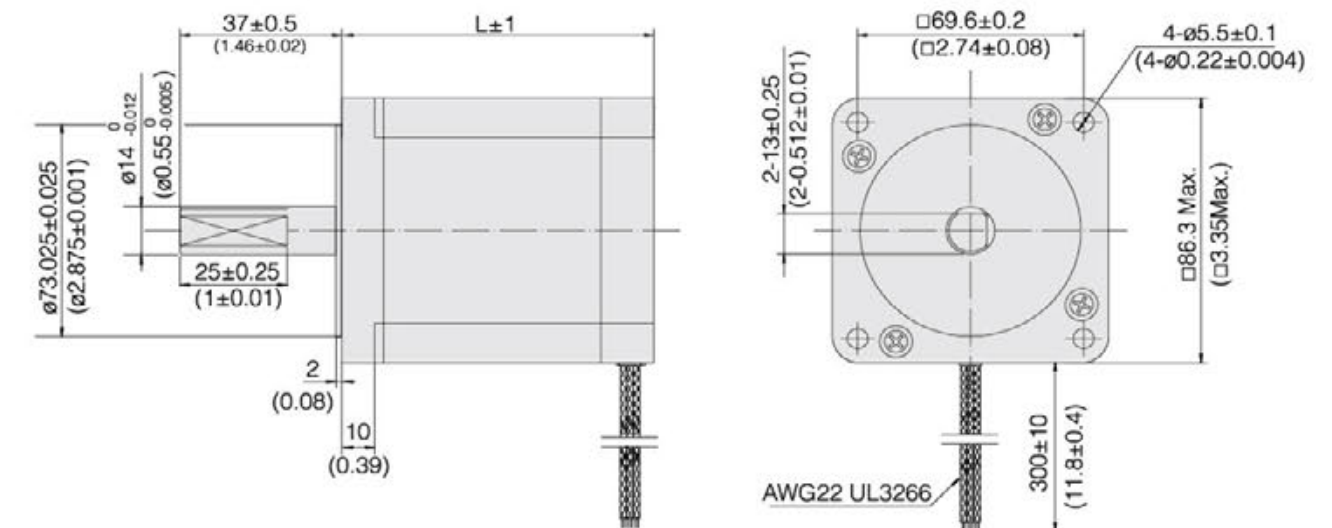


86mm 1.8° Unipolar Big torque output

Bipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-86S1801	1.8°	3.1	3.2	0.96	6.0	4	1100	4	1.7	66.5
HB-86S1801	1.8°	2.2	4.5	0.48	1.5	2.8	1100	4	1.7	66.5
HB-86S1801	1.8°	1.5	6.4	0.24	1.5	4	1100	4	1.7	66.5
HB-86S2801	1.8°	3.5	3.2	1.10	7.0	5.6	1400	4	2.3	79.5
HB-86S2801	1.8°	2.5	4.5	0.55	1.8	4	1400	4	2.3	79.5
HB-86S2801	1.8°	1.8	6.4	0.28	1.8	5.6	1400	4	2.3	79.5
HB-86S3801	1.8°	4.2	3.2	1.32	12.0	8.2	1950	4	2.7	95.5
HB-86S3801	1.8°	3.0	4.5	0.66	3.0	5.8	1950	4	2.7	95.5
HB-86S3801	1.8°	2.1	6.4	0.33	3.0	8.2	1950	4	2.7	95.5
HB-86S5801	1.8°	5.4	2.8	1.94	21.6	12	2850	4	3.8	124
HB-86S5801	1.8°	3.9	4.0	0.97	5.4	8.4	2850	4	3.8	124
HB-86S5801	1.8°	2.7	5.6	0.49	5.4	12	2850	4	3.8	124

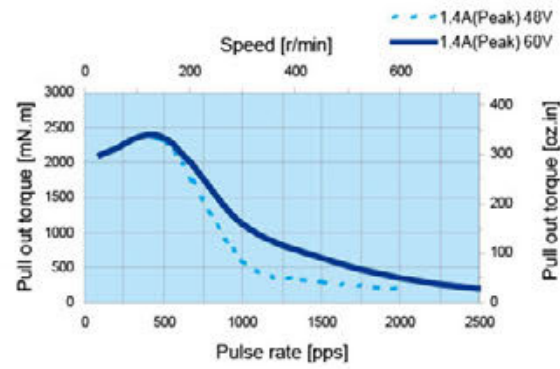
Dimensions



mm(inch)

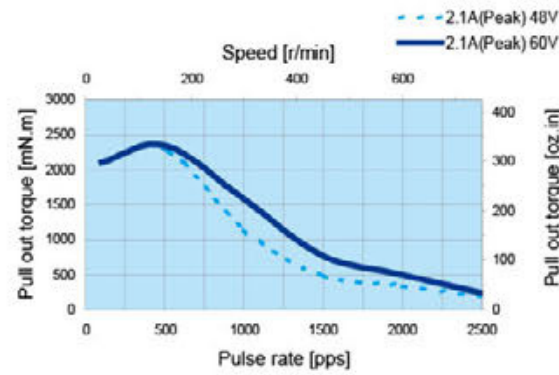
HB-86S0801 Bi-polar series

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



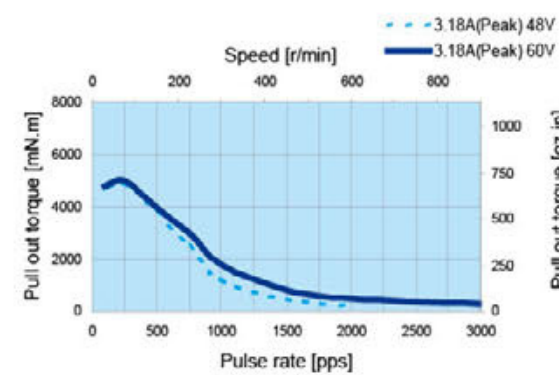
HB-86S0802 Bi-polar series

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



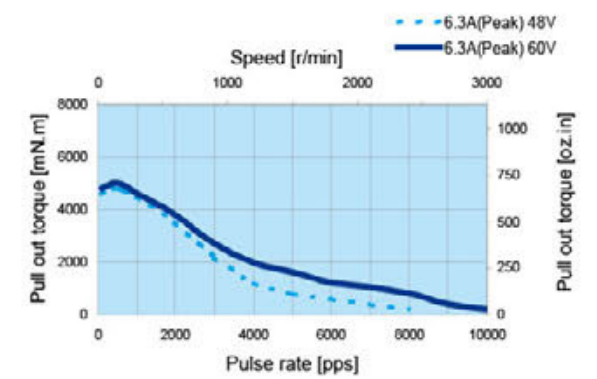
HB-86S1808 Bi-polar series

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



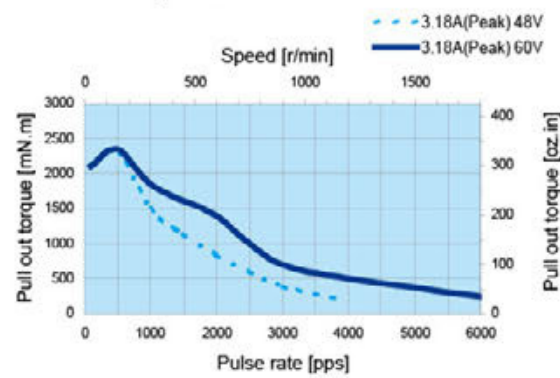
HB-86S1809 Bi-polar parallel

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



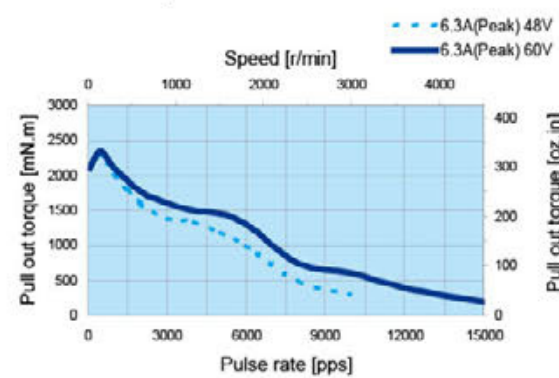
HB-86S0803 Bi-polar series

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



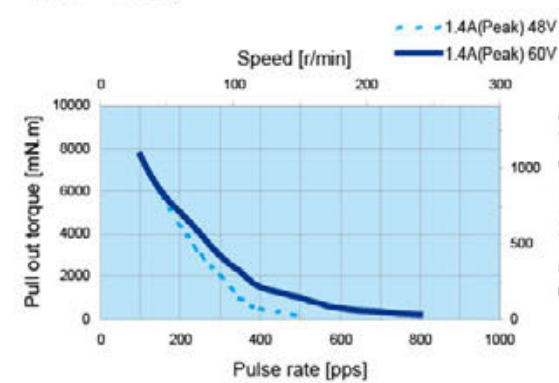
HB-86S0804 Bi-polar parallel

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



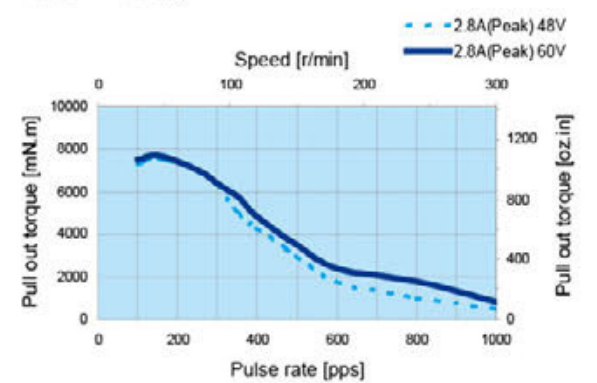
HB-86S4801 Bi-polar series

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



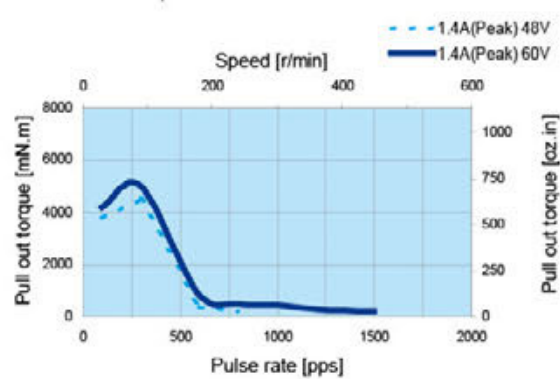
HB-86S4802 Bi-polar series

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



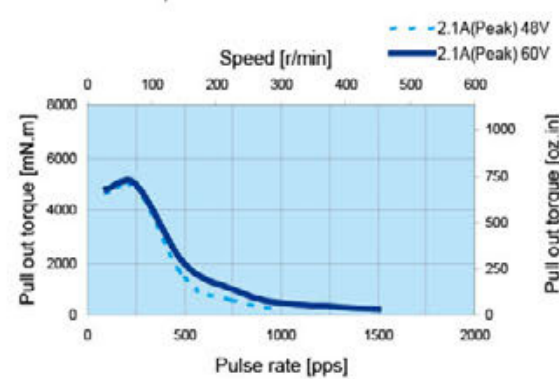
HB-86S1806 Bi-polar series

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



HB-86S1807 Bi-polar series

Conditions: Bi-polar Constant Current Driver
Driver: DMBS07875
Mode: Full Step



HB-60T

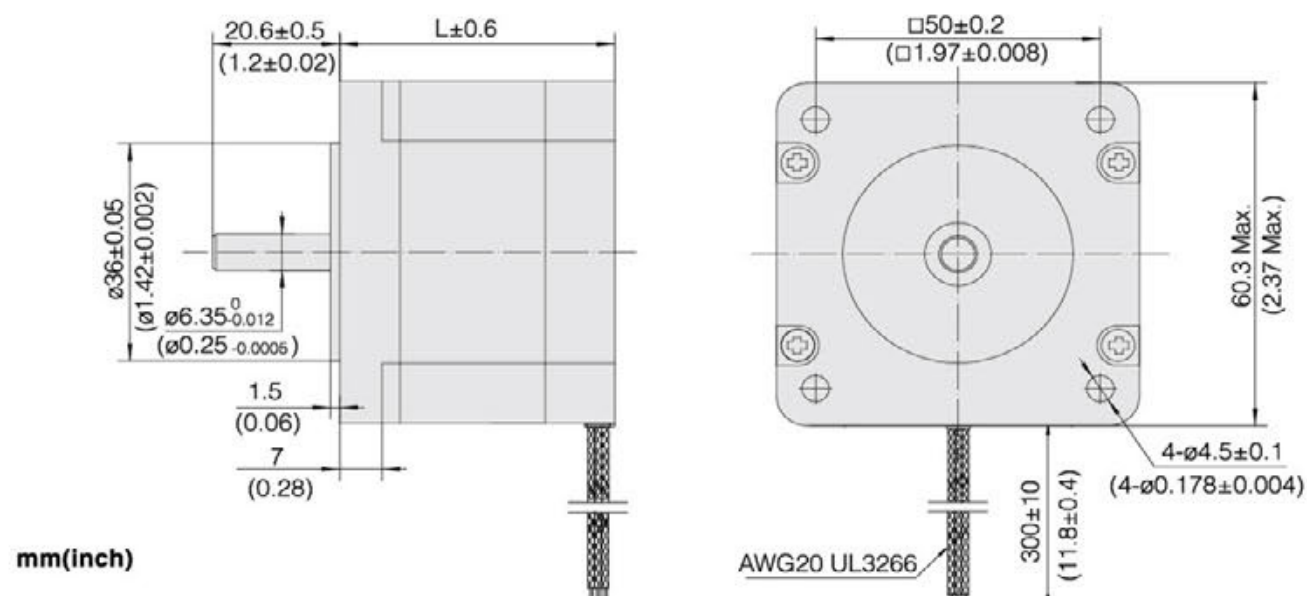


□60mm 1.2° Bipolar Low inertia

Bipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm ²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-60T1301	1.2°	8.0	1.8	4.4	10.4	764	180	4	500	46
HB-60T1302	1.2°	3.6	4.0	0.9	6.2	754	180	4	500	46
HB-60T3301	1.2°	5.9	1.5	3.9	10.9	9.4	260	4	800	55
HB-60T3302	1.2°	1.7	5.8	0.30	0.76	900	260	4	800	55
HB-60T5301	1.2°	4.5	2.0	2.2	11.8	1523	460	4	1300	77
HB-60T5302	1.2°	2.6	5.8	0.45	1.3	1510	460	4	1300	77

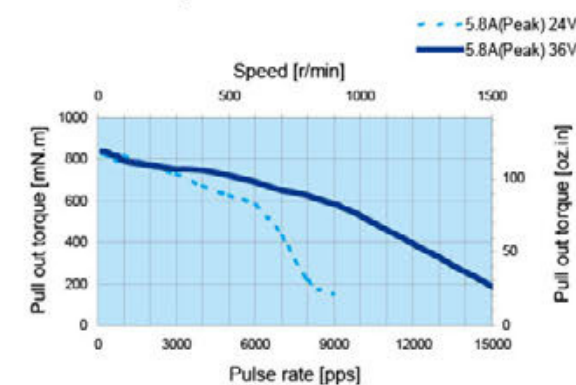
Dimensions



mm(inch)

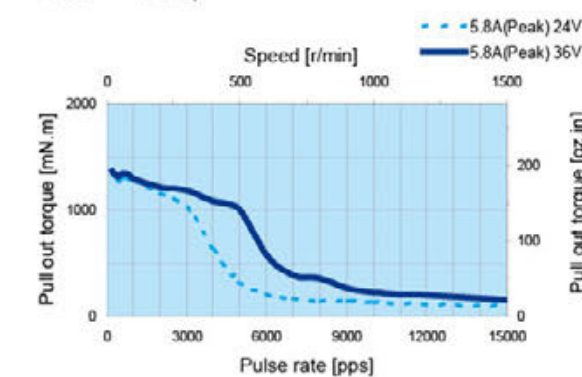
HB-60T3302

Conditions: 3-Phase Constant Current Driver
Driver: DMB3SD3538
Mode: Half Step



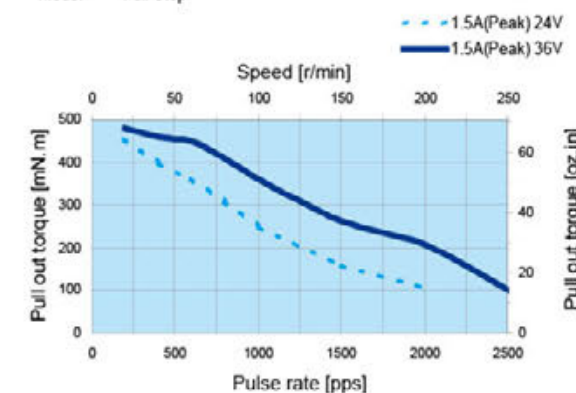
HB-60T5302

Conditions: 3-Phase Constant Current Drive
Driver: DMB3SD3538
Mode: Half Step



HB-60T3301

Conditions: 3-Phase Constant Current Driver
Driver: DMB3SD3538
Mode: Full Step



HB-86T

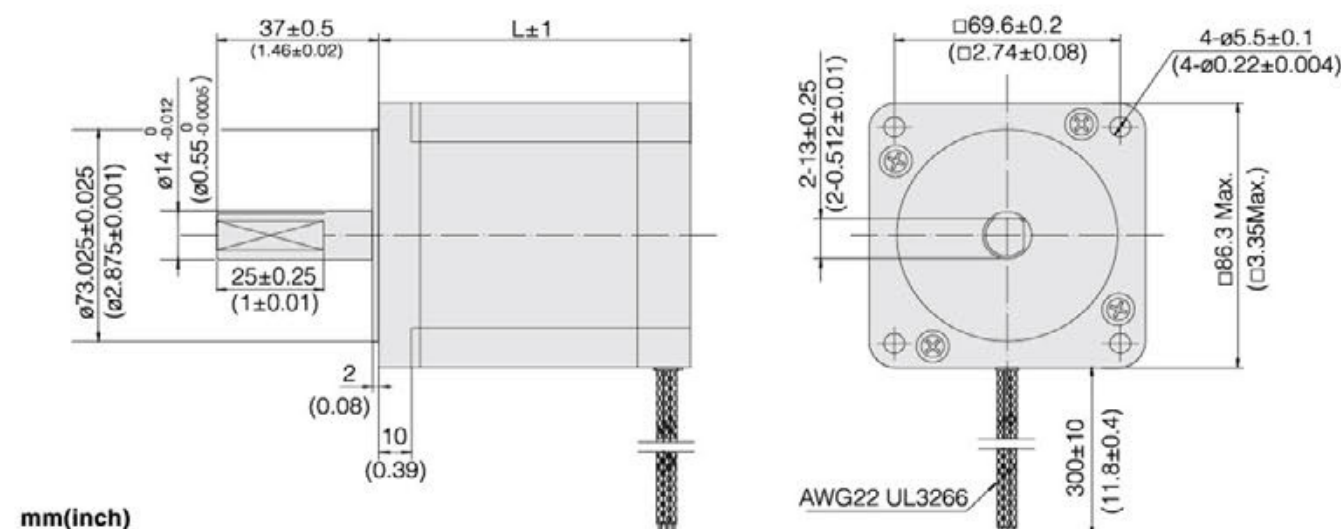


□86mm 1.2° Bipolar Low inertia

Bipolar

Model No.	(deg) Step torque angle	(V) Rated Voltage	(A) Current	(ohm) Resistance	(mH) Inductance	(mN.m) Holding Torque	(g.cm²) Rotor Inertia	Outgoing line	(g) Weight	(mm) Thickness
HB-86T1301	1.2°	6.0	3.0	1.32	26.7	1892	1100	4	1.7	66.5
HB-86T1302	1.2°	3.4	6.0	0.38	21.6	1966	1100	4	1.7	66.5
HB-86T2301	1.2°	7.6	3.0	1.70	26.7	2489	1400	4	2.3	79.5
HB-86T2302	1.2°	4.4	6.0	0.49	21.6	2586	1400	4	2.3	79.5
HB-86T3301	1.2°	9.1	3.0	2.02	50.0	4043	1950	4	2.7	95.5
HB-86T3302	1.2°	5.2	6.0	0.58	40.5	4200	1950	4	2.7	95.5
HB-86T5301	1.2°	12.5	3.0	2.79	73.4	6256	2850	4	3.8	124
HB-86T5302	1.2°	7.2	6.0	0.80	59.4	6500	2850	4	3.8	124

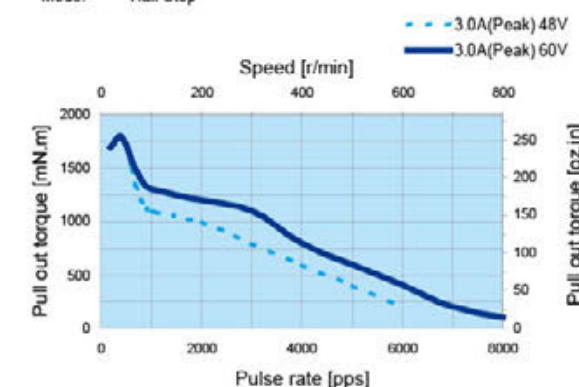
Dimensions



mm(inch)

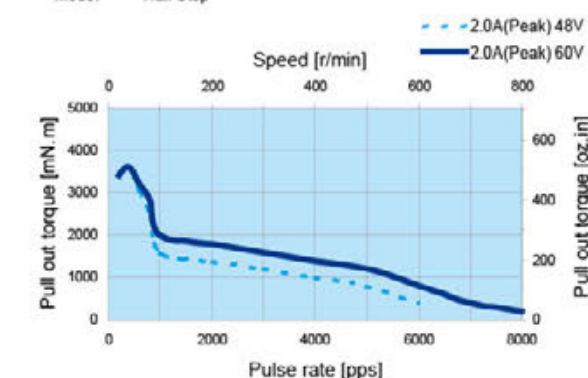
HB-86T1301

Conditions: 3-Phase Constant Current Driver
Driver: DMB3SD9895
Mode: Half Step



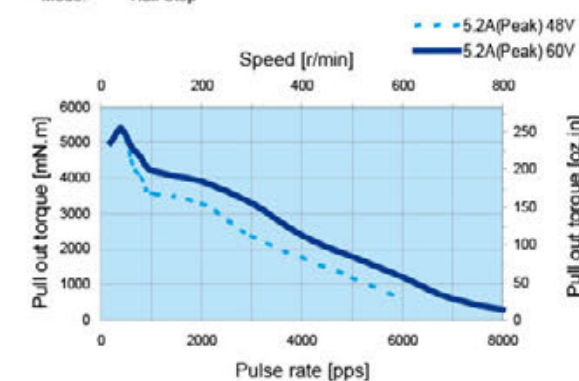
HB-86T2302

Conditions: 3-Phase Constant Current Driver
Driver: DMB3SD9895
Mode: Half Step



HB-86T3303

Conditions: 3-Phase Constant Current Driver
Driver: DMB3SD9895
Mode: Half Step



0.006mm, 0.01mm, 0.02mm, 0.04mm

Motor specifications

Motor type	Phase current	Resistance per phase	Each phase inductance	PIN number	Motor length
HL-20S83024-003	0.3A	20Ω ± 10%	5.0mH ± 20%	4	30mm
HL-20S83024-003	0.5A	5Ω ± 10%	1.5mH ± 20%	4	30mm
HL-20S84244-006	0.6A	10Ω ± 10%	5.5mH ± 20%	4	42mm

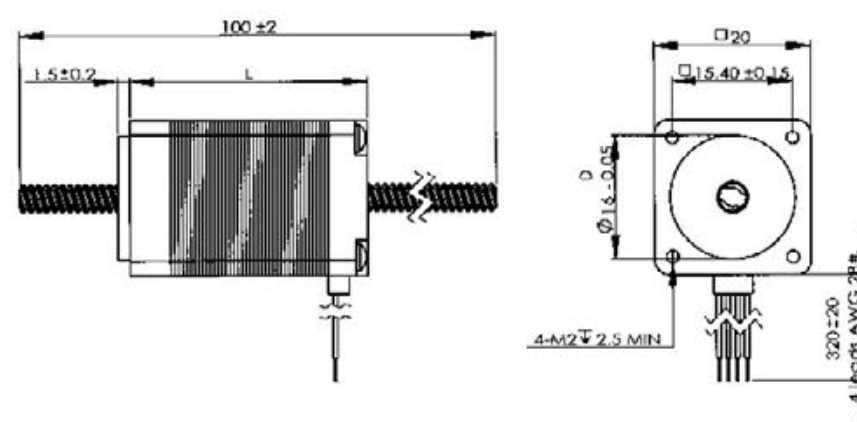


Optional screw lead and basic step

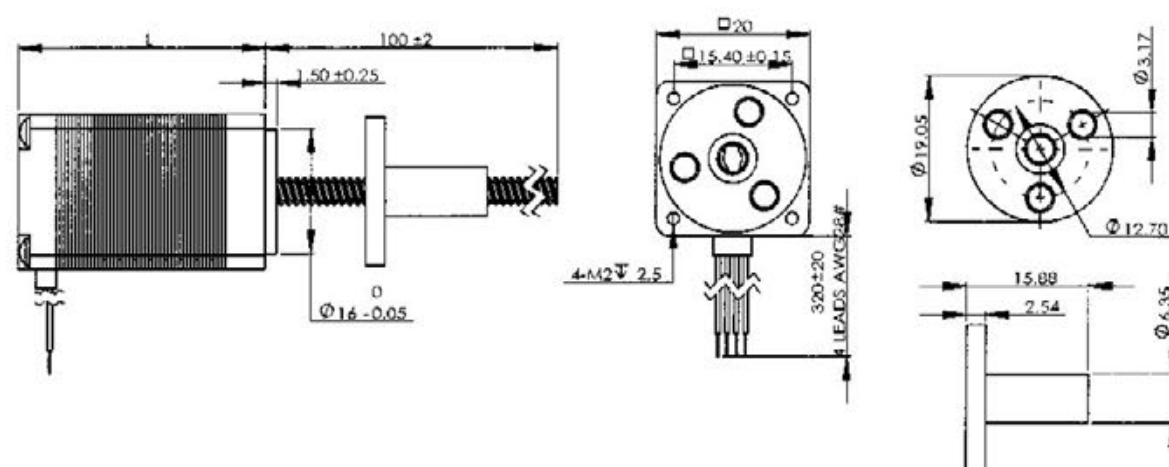
Screw diameter (in)	Screw diameter (mm)	Lead(in)	Lead(mm)	Step(mm)
0.138	3.5052	0.024	0.6096	0.0030
0.138	3.5052	0.048	1.2192	0.0061
0.138	3.5052	0.079	2	0.01
0.138	3.5052	0.158	4	0.02
0.138	3.5052	0.315	8	0.04

Motor outline (mm)

Connecting shaft



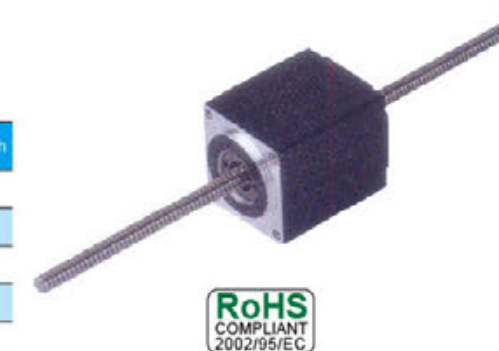
External driv



0.003175 0.0508mm

Motor specifications

Motor type	Phase current	Resistance per phase	Each phase inductance	PIN number	Motor length
HL-28S113424-002	0.2A	68Ω ± 10%	39mH ± 20%	4	34mm
HL-28S113424-005	0.5A	10Ω ± 10%	6mH ± 20%	4	34mm
HL-28S114044-001	1.0A	2.1Ω ± 10%	1.5mH ± 20%	4	44mm
HL-28S1140-0067	0.67A	6.8Ω ± 10%	4.9mH ± 20%	4	45mm
HL-28S115164-085	0.95A	3.2Ω ± 10%	5.0mH ± 20%	4	45mm
HL-28S115164-002	2.0A	1.1Ω ± 10%	1.1mH ± 20%	4	45mm

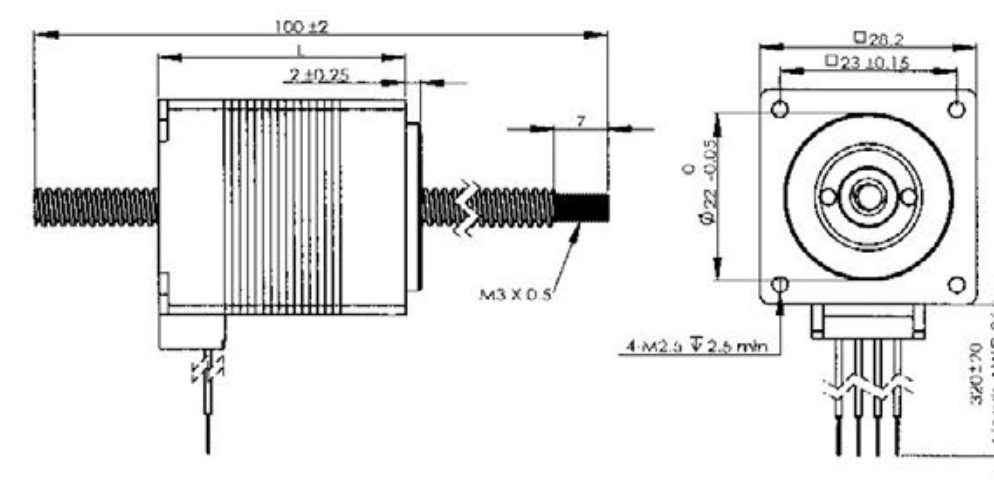


Optional screw lead and basic step

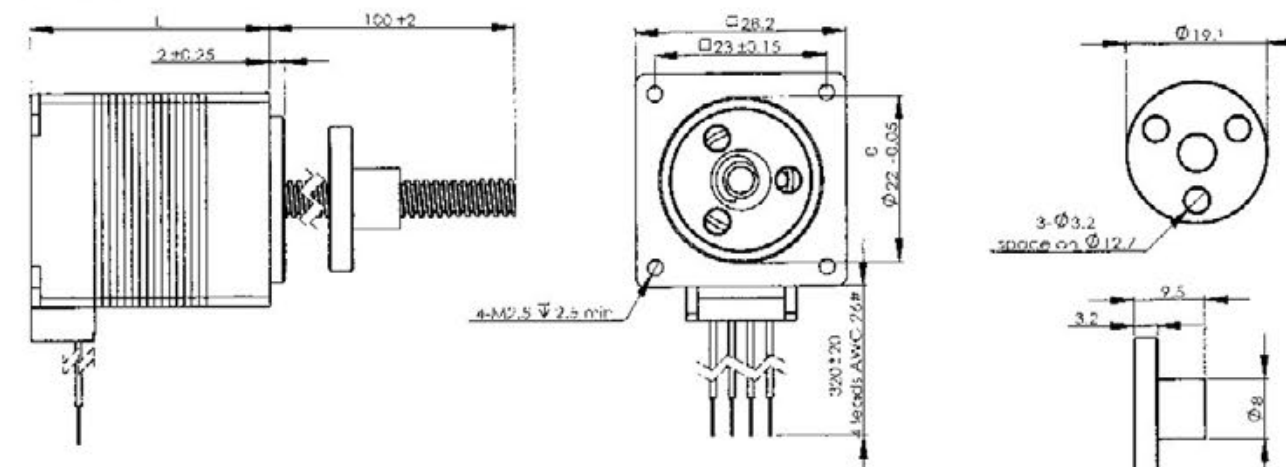
Screw diameter (in)	Screw diameter (mm)	Lead(in)	Lead(mm)	Step(mm)
0.188	4.7625	0.025	0.635	0.0032
0.188	4.7752	0.050	1.27	0.0063
0.188	4.7752	0.100	2.54	0.0127
0.188	4.7752	0.200	5.8	0.0254
0.188	4.7752	0.400	10.16	0.0508

Motor outline (mm)

Connecting shaft



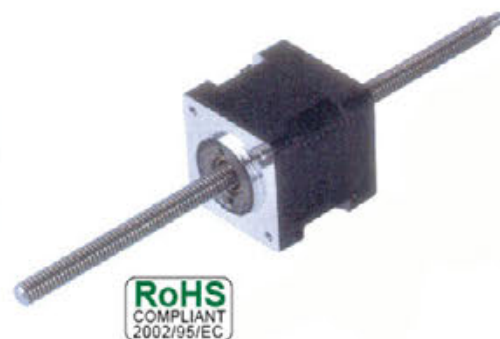
External driv



0.003 0.048768mm

Motor specifications

Motor type	Phase current	Resistance per phase	Each phase inductance	PIN number	Motor length
HL-35S143524-005	0.5A	14Ω ± 10%	20mH ± 20%	4	35mm
HL-35S143524-001	1.0A	3.5Ω ± 10%	4mH ± 20%	4	35mm
HL-35S144744-015	1.5A	1.5Ω ± 10%	2.0mH ± 20%	4	45mm
HL-35S144744-005	0.5A	28Ω ± 10%	40mH ± 20%	4	47mm
HL-35S144744-001	1.0A	5.5Ω ± 10%	7.6mH ± 20%	4	47mm
HL-35S144744-002	2.0A	1.2Ω ± 10%	1.95mH ± 20%	4	47mm

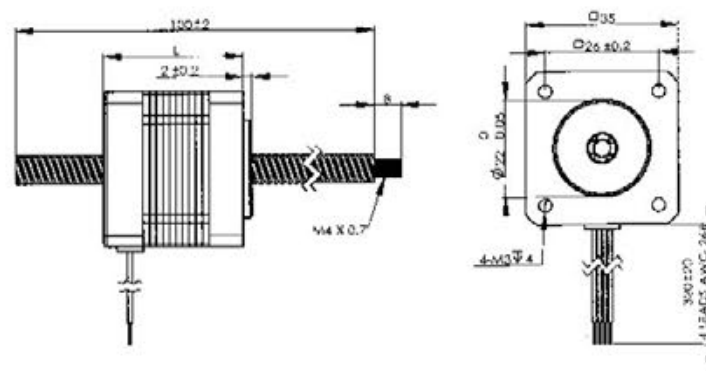


Optional screw lead and basic step

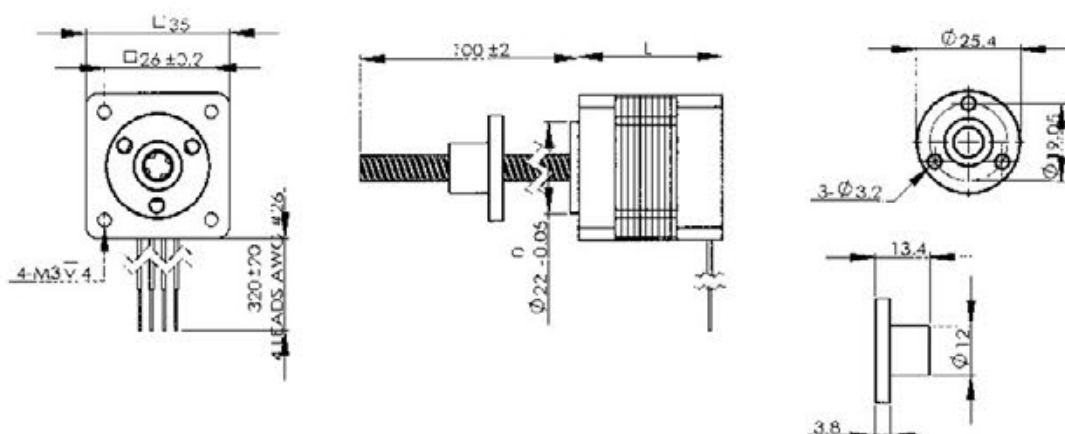
Screw diameter (in)	Screw diameter (mm)	Lead (in)	Lead (mm)	@1.8°Step (mm)	@0.9°Step (mm)
0.250	6.35	0.024	0.6096	0.003	0.015
0.250	6.35	0.048	1.2192	0.006	0.030
0.250	6.35	0.050	1.27	0.006	0.032
0.250	6.35	0.063	1.6002	0.008	0.040
0.250	6.35	0.096	2.4384	0.012	0.061
0.250	6.35	0.100	2.54	0.012	0.064
0.250	6.35	0.192	4.8768	0.024	0.122
0.250	6.35	0.025	6.35	0.031	0.159
0.250	6.35	0.330	8.382	0.041	0.210
0.250	6.35	0.384	9.7536	0.048	0.244

Motor outline (mm)

Connecting shaft



External driv



Note: If need special specification,pls contact with us.

0.003 0.127mm

Motor specifications

Motor type	Phase current	Resistance per phase	Each phase inductance	PIN number	Motor length
HL-42S1733514-005	0.5A	16Ω ± 10%	23mH ± 20%	4	35mm
HL-42S1733514-001	1.0A	4.2Ω ± 10%	6mH ± 20%	4	35mm
HL-42S1733515-015	1.5A	1.8Ω ± 10%	3mH ± 20%	4	35mm
HL-42S1747554-005	0.5A	23Ω ± 10%	50mH ± 20%	4	49mm
HL-42S1747554-012	1.2A	3.5Ω ± 10%	9mH ± 20%	4	49mm
HL-42S1747554-025	2.5A	1.0Ω ± 10%	1.5mH ± 20%	4	49mm

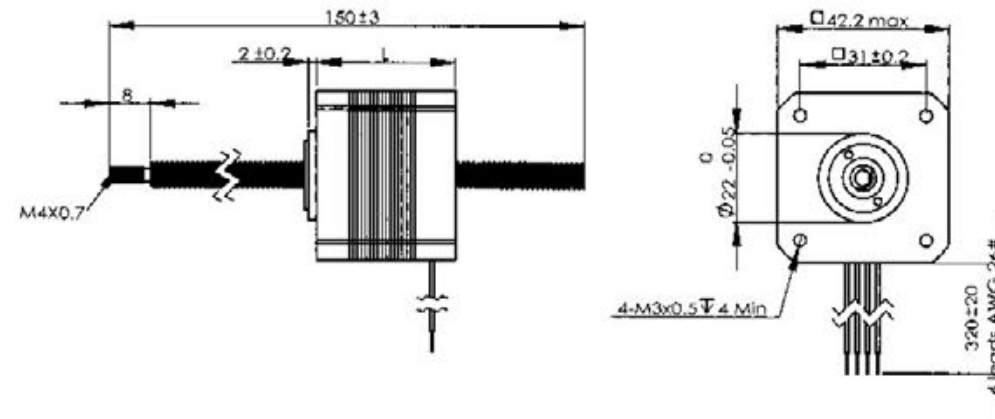


Optional screw lead and basic step

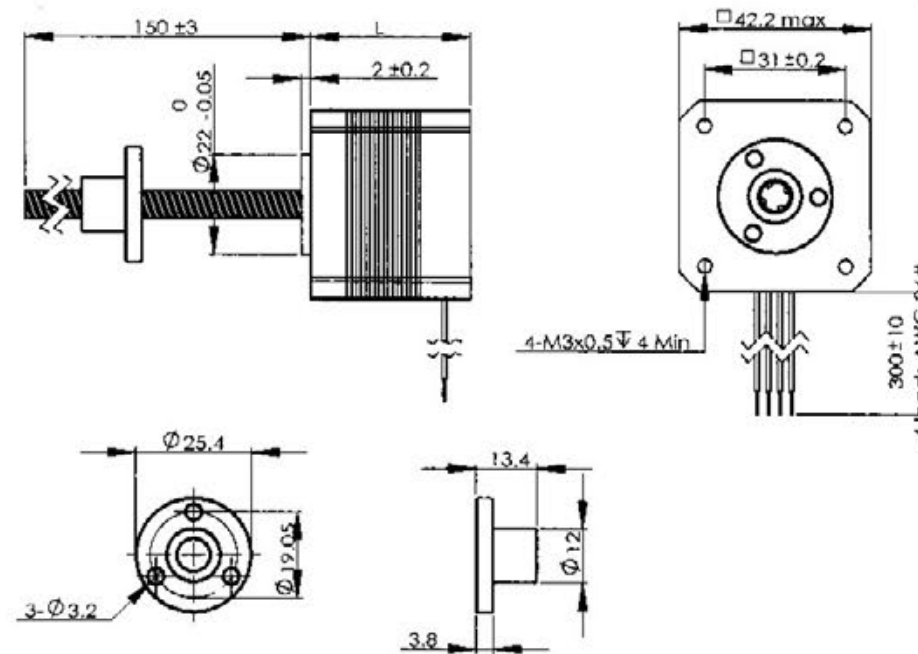
Screw diameter (in)	Screw diameter (mm)	Lead (in)	Lead (mm)	@1.8°Step (mm)	@0.9°Step (mm)
0.250	6.35	0.024	0.6096	0.003	0.0015
0.250	6.35	0.048	1.2192	0.006	0.0030
0.250	6.35	0.050	1.27	0.006	0.0032
0.250	6.35	0.063	1.6002	0.008	0.0040
0.250	6.35	0.096	2.4384	0.012	0.0061
0.250	6.35	0.100	2.54	0.012	0.0064
0.250	6.35	0.192	4.8768	0.024	0.0122
0.250	6.35	0.025	6.35	0.031	0.0159
0.250	6.35	0.330	8.382	0.041	0.0210
0.375	9.525	0.384	9.7536	0.048	0.0244
0.375	9.525	0.025	0.635	0.003	0.0016
0.375	9.525	0.050	1.27	0.006	0.0032
0.375	9.525	0.063	1.6002	0.008	0.0040
0.375	9.525	0.083	2.1082	0.010	0.0053
0.375	9.525	0.100	2.54	0.012	0.0064
0.375	9.525	0.125	3.175	0.015	0.0079
0.375	9.525	0.167	4.2418	0.021	0.0106
0.375	9.525	0.200	5.08	0.025	0.0127
0.375	9.525	0.250	6.35	0.031	0.0159
0.375	9.525	0.375	9.525	0.047	0.0238
0.375	9.525	0.384	9.7536	0.048	0.0244
0.375	9.525	0.500	12.7	0.063	0.0318
0.375	9.525	1.000	25.4	0.127	0.0635

Note: If need special specification,pls contact with us.

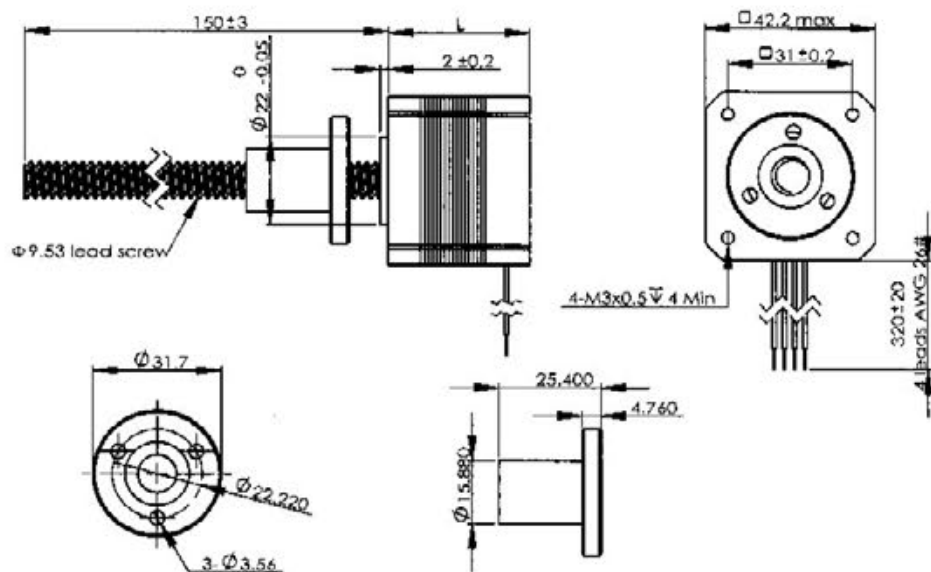
Motor outline (mm) Connecting shaft



External driv



9.525mm

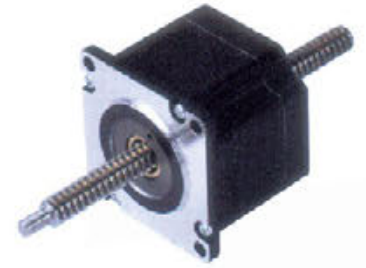


Note: If need special specification,pls contact with us.

0.0016 0.127mm

Motor specifications

Motor type	Phase current	Resistance per phase	Each phase inductance	Pin number	Motor length
HL-57S2348334-001	1.0A	5.0Ω ± 10%	15.7mH ± 20%	4	47mm
HL-57S2348334-002	2.0A	1.4Ω ± 10%	4.1mH ± 20%	4	47mm
HL-57S2348334-003	3.0A	0.6Ω ± 10%	1.9mH ± 20%	4	47mm
HL-57S236544-001	1.0A	12.0Ω ± 10%	35mH ± 20%	4	66mm
HL-57S236544-025	2.5A	2.0Ω ± 10%	7.6mH ± 20%	4	66mm
HL-57S236544-040	4.0A	0.7Ω ± 10%	2.1mH ± 20%	4	66mm

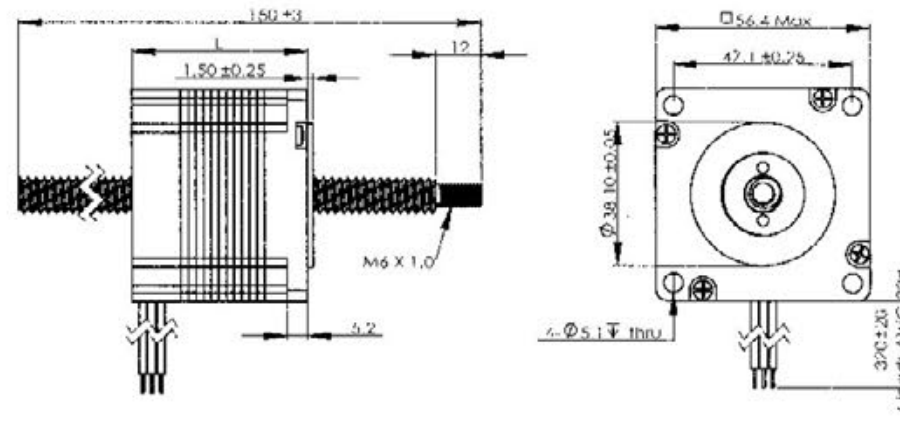


Optional screw lead and basic step

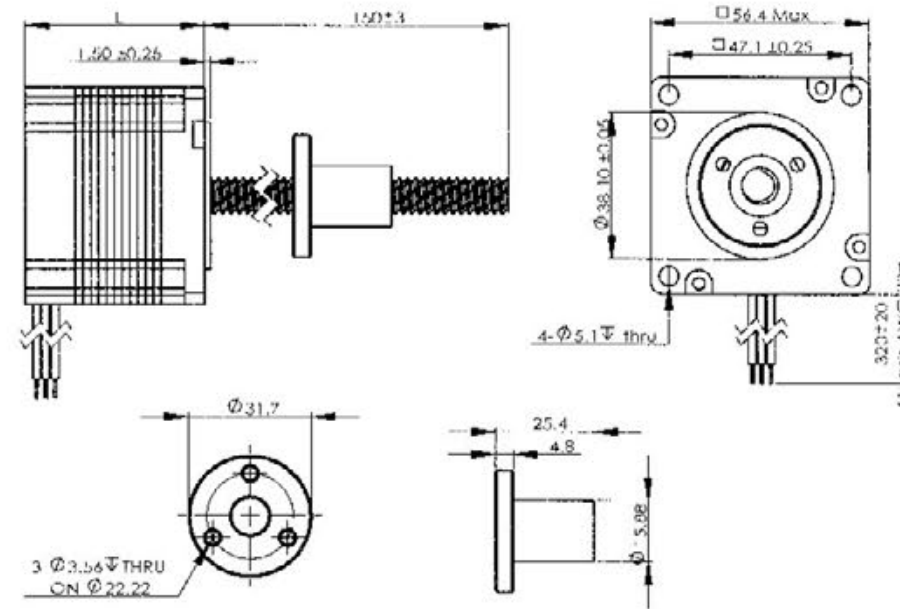
Screw diameter (in)	Screw diameter (mm)	Lead (in)	Lead (mm)	1.8°Step (mm)	0.9°Step (mm)
0.375	9.525	0.025	0.635	0.003	0.0016
0.375	9.525	0.050	1.27	0.006	0.0032
0.375	9.525	0.063	1.6002	0.008	0.0040
0.375	9.525	0.083	2.1082	0.010	0.0053
0.375	9.525	0.100	2.54	0.012	0.0064
0.375	9.525	0.125	3.175	0.015	0.0079
0.375	9.525	0.167	4.2418	0.021	0.0106
0.375	9.525	0.200	5.08	0.025	0.0127
0.375	9.525	0.250	6.35	0.031	0.0159
0.375	9.525	0.375	9.525	0.047	0.0238
0.375	9.525	0.384	9.7536	0.048	0.0244
0.375	9.525	0.500	12.7	0.063	0.0318
0.375	9.525	1.000	25.4	0.127	0.0635
0.625	15.875	0.100	2.54	0.012	0.0060
0.625	15.875	0.125	3.175	0.015	0.0075
0.625	15.875	0.200	5.08	0.025	0.0125
0.625	15.875	0.250	6.35	0.031	0.0155
0.625	15.875	1.000	25.4	0.127	0.0635

Note: If need special specification,pls contact with us.

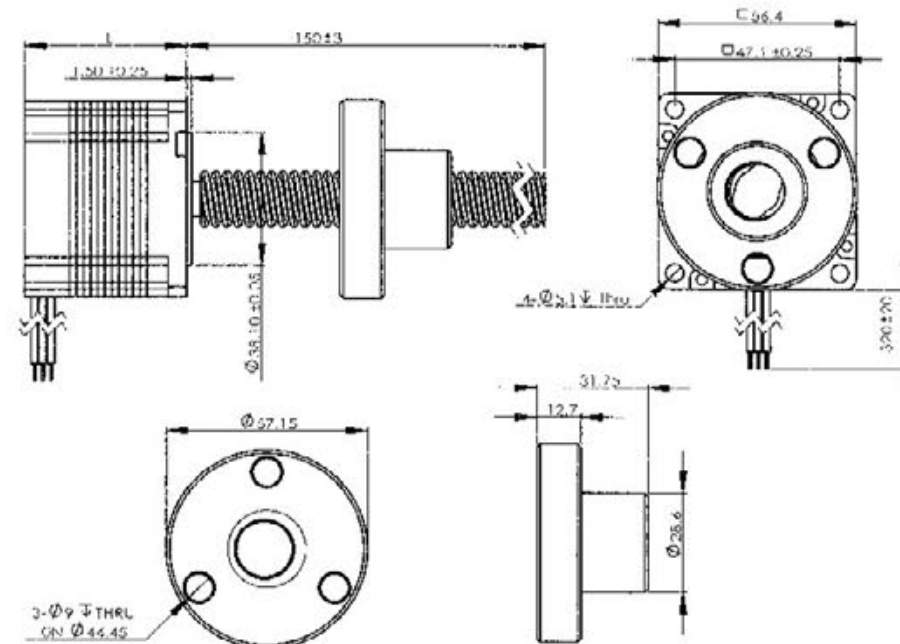
Motor outline (mm)
Connecting shaft



External driv
9.525mm



25.88



0.00508mm 0.127mm

Motor specifications

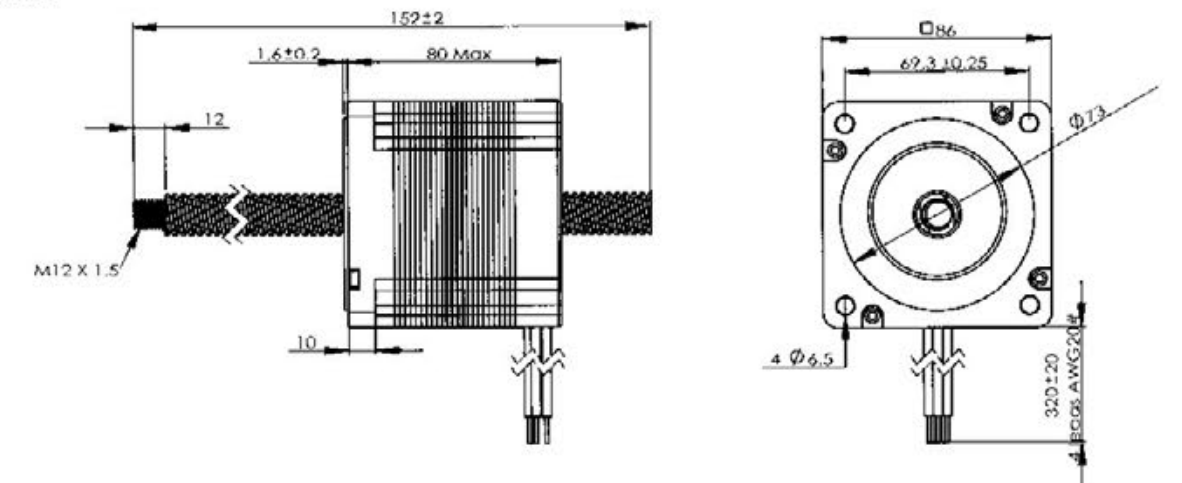
Motor type	Phase current	Resistance per phase	Each phase inductance	Pin number	Motor length
HL-86S348014-013	0.3A	9.2Ω ± 10%	51mH ± 20%	4	80mm
HL-86S348014-050	0.5A	1.6Ω ± 10%	8.8mH ± 20%	4	80mm
HL-86S348014-055	0.55A	0.52Ω ± 10%	2.9mH ± 20%	4	80mm



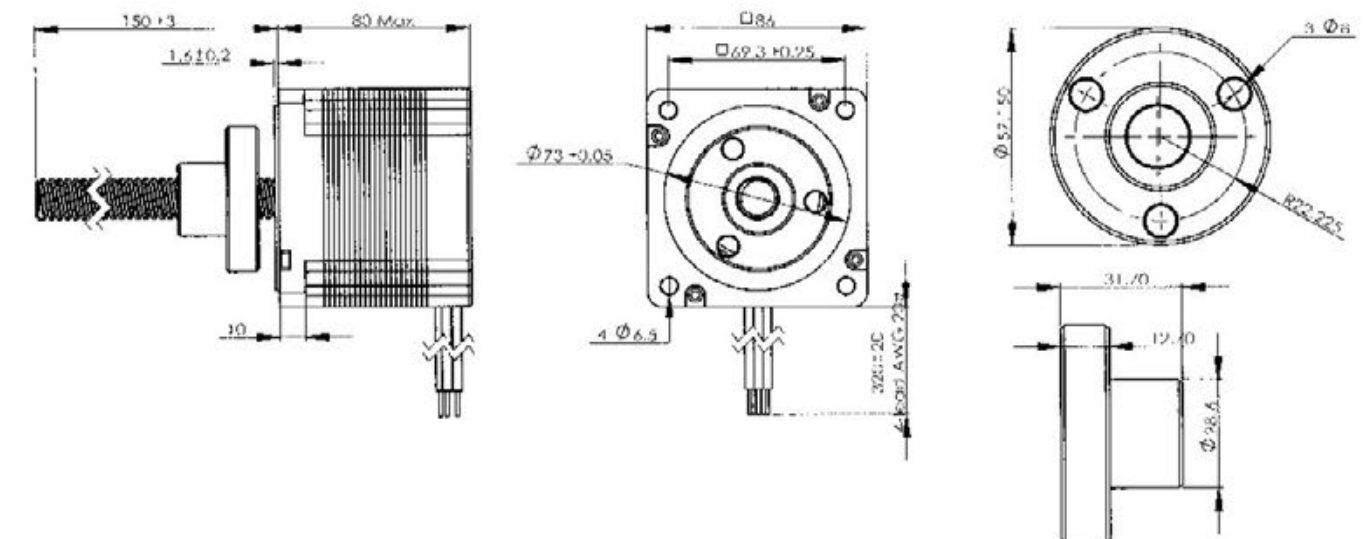
Optional screw lead and basic step

Screw diameter (in)	Screw diameter (mm)	Lead (in)	Lead (mm)	@1.8°Step (mm)	@0.9°Step (mm)
0.625	15.875	0.100	2.54	0.012	0.0051
0.625	15.875	0.125	3.175	0.015	0.0064
0.625	15.875	0.200	5.08	0.025	0.0102
0.625	15.875	0.250	6.35	0.031	0.0127
0.625	15.875	0.1000	2.54	0.127	0.0508

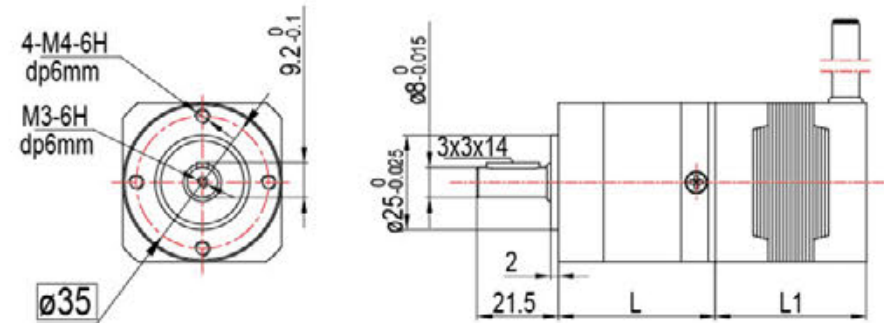
Motor outline (mm)
Connecting shaft



External driv



Mechanical Dimensions



Motor Specification

Motor Type	Phases	VDC	ohm	A	rpm	mm	KG	Nm	Nm
HB42K5402	2	5.7	6.3	0.9		48	0.36	0.3	0.45
BL420502440	3	24	0.8		4000	60	0.45	0.125	0.15

Mechanical Performance

Reduce Gearmotor	Output Torque (Nm)								
	1:5	1:10	1:15	1:20	1:25	1:30	1:40	1:50	1:100
PL42TxxxB+HB42K5402	1.425	2.85	4	5.4	6.75	8.1	10.8	13.5	15
PL42TxxxB+BL420502440	0.6	1.2	1.65	2.25	2.8	3.37	4.5	5.63	11.3

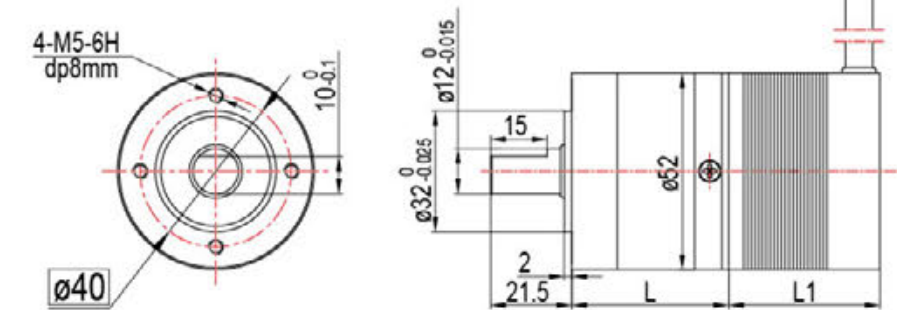
Electrical and Environmental

1. Insulation Class: B
2. Dielectric Strength: 500VDC, 1 minute
3. Insulation Resistance: > 100Mohm, 500VDC
4. Comply with CE
5. Comply with RoHS

Type Selection

According to the specific application to select the motor performance and speed reducer, the selection is for reference only

Mechanical Dimensions



Motor Specification

Motor Type	Phases	VDC	A	A	rpm	mm	KG	Nm	Nm
BL52012126	4	12	1.25	2.5	600	93	0.75	0.191	0.382

Mechanical Performance

Reduce Gearmotor	Output Torque (Nm)								
	1:5	1:10	1:15	1:20	1:25	1:30	1:40	1:50	1:100
PL42TxxxB+BL52012126	0.9	1.8	2.58	3.43	4.29	5.15	6.87	8.6	15

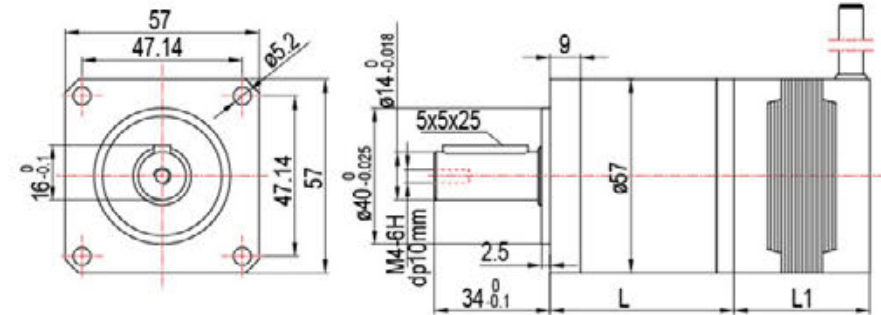
Electrical and Environmental

1. Insulation Class: B
2. Dielectric Strength: 500VDC, 1 minute
3. Insulation Resistance: > 100Mohm, 500VDC
4. Comply with CE
5. Comply with RoHS

Type Selection

According to the specific application to select the motor performance and speed reducer, the selection is for reference only

Mechanical Dimensions



Motor Specification

Motor Type	Phases	VDC	ohm	A	rpm	mm	KG	Nm	Nm
HB57K4406	2	10.2	3.6	1.4		55	0.73	0.8	1.4
BL570903640	3	36	0.7		4000	72	0.75	0.22	0.7

Mechanical Performance

Reduce Gearmotor	Output Torque (Nm)								
	1:5	1:10	1:15	1:20	1:25	1:30	1:40	1:50	1:100
PL57TxxxA+HB57K4406	3.8	6.0	10.8	14.4	18	21.6	25	25	25
PL57TxxxA+BL570903640	1.0	2.1	2.97	3.96	4.95	5.94	7.92	9.9	19.8

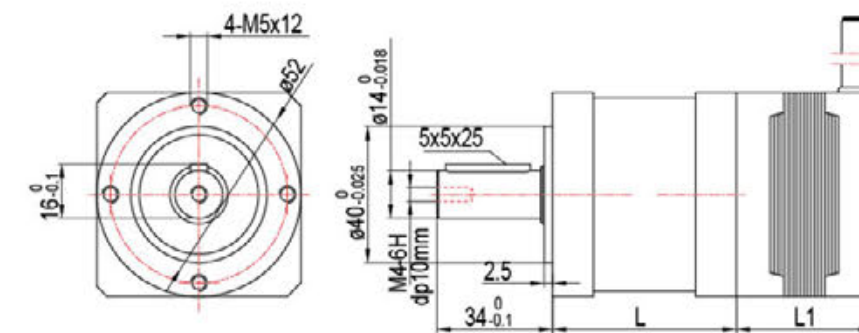
Electrical and Environmental

1. Insulation Class: B
2. Dielectric Strength: 500VDC, 1 minute
3. Insulation Resistance: > 100Mohm, 500VDC
4. Comply with CE
5. Comply with RoHS

Type Selection

According to the specific application to select the motor performance and speed reducer, the selection is for reference only

Mechanical Dimensions



Motor Specification

Motor Type	Phases	VDC	ohm	A	rpm	mm	KG	Nm	Nm
HB60K4602	2	4.8	2.4	2.0		65	0.73	0.89	1.56
BL601502430	3	24	0.7		3000	100	1.1	0.4	0.8

Mechanical Performance

Reduce Gearmotor	Output Torque (Nm)								
	1:5	1:10	1:15	1:20	1:25	1:30	1:40	1:50	1:100
PL60TxxxB+HB60K4602	4.2	6.0	12	16	20	24	25	25	25
PL60TxxxB+BL601502430	1.9	3.8	5.4	7.2	9	10.8	14.4	18	25

Electrical and Environmental

1. Insulation Class: B
2. Dielectric Strength: 500VDC, 1 minute
3. Insulation Resistance: > 100Mohm, 500VDC
4. Comply with CE
5. Comply with RoHS

Type Selection

According to the specific application to select the motor performance and speed reducer, the selection is for reference only

36 BLDC

General Specifications

Item	Specification
Winding type	Star/Delta
Hall effect angle	120 degree electric angle/120
Shaft runout	0.025mm
Radial play	0.06mm/50g
End play	0.06mm/50g
Max radial force	28N/20mm from the flange
Max axial force	10N
Insulation class	Class B
IP class	IP40
Dielectric strength	500VDC for one minute
Insulation resistance	100MΩ min 500VDC



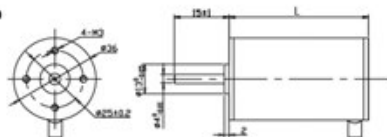
Electric Connection

Lead No.	Lead color	Lead gauge	Function	Description
1	Red	UL3266/26AWG	VCC+5VDC	SUPPLY VOLTAGE FOR HALL SENSORS
2	Black		GND	GROUND FOR HALL SENSORS
3	Yellow		HALL A	SIGNAL OF HALL A
4	Green		HALL B	SIGNAL OF HALL B
5	Blue	UL3266/26AWG	HALL C	SIGNAL OF HALL C
1	Yellow		PHASE U	MOTOR PHASE U
2	Green		PHASE V	MOTOR PHASE V
3	Blue		PHASE W	MOTOR PHASE W

Electrical Specification

Model	No. of Phase	Rated Voltage	Rated Speed	Rated Torque	Rated Power	Mass	Body length
		VDC	rpm	g.cm	W	Kg	mm
G36BLDC-001A	3	12	4000	120	5	0.15	40
G36BLDC-002A	3	24	5000	190	10	0.15	40
G36BLDC-003A	3	12	6000	120	8	0.18	50
G36BLDC-004A	3	24	6000	230	15	0.18	50
G36BLDC-005A	3	12	8000	240	20	0.22	60
G36BLDC-006A	3	24	8000	300	25	0.22	60

Dimensions diagram



Note: If need special specification, pls contact with us.

42Y BLDC

General Specifications

Item	Specification
Winding type	Star/Delta
Hall effect angle	120 degree electric angle/120
Shaft runout	0.025mm
Radial play	0.06mm/50g
End play	0.05mm/50g
Max radial force	28N/20mm from the flange
Max axial force	15N
Insulation class	Class B
IP class	IP40
Dielectric strength	500VDC for one minute
Insulation resistance	100MΩ min 500VDC



Electric Connection

Lead No.	Lead color	Lead gauge	Function	Description
1	Red	UL3266/28AWG	VCC+5VDC	SUPPLY VOLTAGE FOR HALL SENSORS
2	Black		GND	GROUND FOR HALL SENSORS
3	Yellow		HALL A	SIGNAL OF HALL A
4	Green		HALL B	SIGNAL OF HALL B
5	Blue	UL3266/22AWG	HALL C	SIGNAL OF HALL C
1	Yellow		PHASE U	MOTOR PHASE U
2	Green		PHASE V	MOTOR PHASE V
3	Blue		PHASE W	MOTOR PHASE W

Electrical Specification

Model	No. of Phase	Rated Voltage	Rated Speed	Rated Torque	Rated Power	Mass	Body length
		VDC	rpm	g.cm	W	Kg	mm
G42YBLDC-001A	3	12	4000	240	10	0.20	40
G42YBLDC-002A	3	24	5000	382	20	0.20	40
G42YBLDC-003A	3	12	6000	286	15	0.30	60
G42YBLDC-004A	3	24	6000	477	30	0.30	60
G42YBLDC-005A	3	12	8000	477	25	0.40	80
G42YBLDC-006A	3	24	8000	955	60	0.40	80

Dimensions diagram



Note: If need special specification, pls contact with us.

42 BLDC

General Specifications

Item	Specification
Winding type	Star/Delta
Hall effect angle	120 degree electric angle/120
Shaft runout	0.025mm
Radial play	0.05mm/50g
End play	0.05mm/50g
Max radial force	28N/20mm from the flange
Max axial force	15N
Insulation class	Class B
IP class	IP40
Dielectric strength	500VDC for one minute
Insulation resistance	100MΩ min 500VDC



Electric Connection

Lead No.	Lead color	Lead gauge	Function	Description
1	Red	UL3266/28AWG	VCC+5VDC	SUPPLY VOLTAGE FOR HALL SENSORS
2	Black		GND	GROUND FOR HALL SENSORS
3	Yellow		HALL A	SIGNAL OF HALL A
4	Green		HALL B	SIGNAL OF HALL B
5	Blue	UL3266/22AWG	HALL C	SIGNAL OF HALL C
1	Yellow		PHASE U	MOTOR PHASE U
2	Green		PHASE V	MOTOR PHASE V
3	Blue		PHASE W	MOTOR PHASE W

Electrical Specification

Model	No. of Phase	Rated Voltage	Rated Speed	Rated Torque	Rated Power	Mass	Body length
		VDC	rpm	g.cm	W	Kg	mm
G42BLDC-001A	3	24	4000	625	26	0.25	40
G42BLDC-002A	3	24	4000	1250	52.5	0.35	60
G42BLDC-003A	3	24	4000	1580	77.5	0.45	80
G42BLDC-004A	3	24	4000	2500	105	0.55	100

Dimensions diagram



Note: If need special specification, pls contact with us.

57 BLDC

General Specifications

Item	Specification
Winding type	Star/Delta
Hall effect angle	120 degree electric angle/120
Shaft runout	0.025mm
Radial play	0.05mm/50g
End play	0.04mm/50g
Max radial force	30N/20mm from the flange
Max axial force	20N
Insulation class	Class B
IP class	IP40
Dielectric strength	500VDC for one minute
Insulation resistance	100MΩ min 500VDC



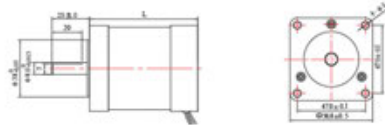
Electric Connection

Lead No.	Lead color	Lead gauge	Function	Description
1	Red	UL3266/28AWG	VCC+5VDC	SUPPLY VOLTAGE FOR HALL SENSORS
2	Black		GND	GROUND FOR HALL SENSORS
3	Yellow		HALL A	SIGNAL OF HALL A
4	Green		HALL B	SIGNAL OF HALL B
5	Blue	UL3266/20AWG	HALL C	SIGNAL OF HALL C
1	Yellow		PHASE U	MOTOR PHASE U
2	Green		PHASE V	MOTOR PHASE V
3	Blue		PHASE W	MOTOR PHASE W

Electrical Specification

Model	No. of Phase	Rated Voltage	Rated Speed	Rated Torque	Rated Power	Mass	Body length
		VDC	rpm	N.m	W	Kg	mm
G57BLDC-001A	3	36	4000	0.055	23	0.30	45
G57BLDC-002A	3	36	4000	0.08	50	0.35	55
G57BLDC-003A	3	36	6000	0.22	92	0.50	75
G57BLDC-004A	3	24	4000	0.32	133	0.65	95
G57BLDC-005A	3	24	4000	0.43	180	0.80	115

Dimensions diagram



Note: If need special specification, pls contact with us.

90 BLDC

General Specifications

Item	Specification
Winding type	Star/Delta
	120 degree electric angle/120
Shaft runout	0.03mm
Radial play	0.03mm/50g
End play	0.03mm/50g
Max radial force	35N/20mm from the flange
Max axial force	30N
Insulation class	Class B
IP class	IP40
Dielectric strength	500VDC for one minute
Insulation resistance	100MΩ min 500VDC



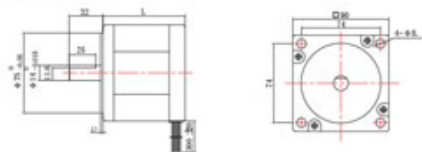
Electric Connection

Lead No.	Lead color	Lead gauge	Function	Description
1	Red	UL3266/28AWG	VCC+5VDC	SUPPLY VOLTAGE FOR HALL SENSORS
2	Black		GND	GROUND FOR HALL SENSORS
3	Yellow		HALL A	SIGNAL OF HALL A
4	Green		HALL B	SIGNAL OF HALL B
5	Blue	UL3266/16AWG	HALL C	SIGNAL OF HALL C
1	Yellow		PHASE U	MOTOR PHASE U
2	Green		PHASE V	MOTOR PHASE V
3	Blue		PHASE W	MOTOR PHASE W

Electrical Specification

Model	No. of Phase	Rated Voltage	Rated Speed	Rated Torque	Rated Power	Mass	Body length
		VDC	rpm	N.m	W	Kg	mm
G90BLDC-001A	3	48	3000	0.67	200	2.1	73
G90BLDC-002A	3	48	3000	1.34	400	3.3	133
G90BLDC-003A	3	48	3000	2.01	600	4.5	133

Dimensions diagram

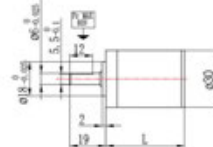
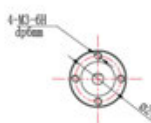


Note: If need special specification, pls contact with us.

Output flange: Aluminium, Type standard (Below Drawing)

Housing: Steel

Input flange: Aluminium, Type standard (Below Drawing)



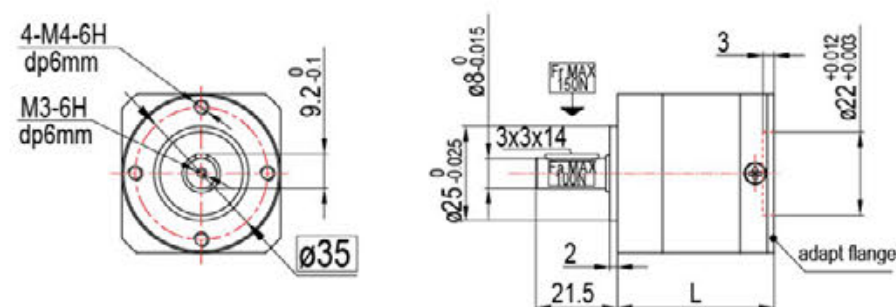
Technical and Performance Data		1-stage	2-stage	3-stage	4-stage
Ratio:		4, 5	16, 20	50, 100	200, 500
L:	mm	24	30	36	42
Rated load:	Nm	0.2	0.4	0.6	0.8
Max load:	Nm	0.4	0.8	1.8	3.0
Efficiency:	%	80	70	60	50
Backlash:	arcmin	≤90	≤120	≤120	≤150
Weight:	g	80	90	110	120
Storage temperature:	°C	-30~+60			
Storage humidity:	%	~80			
Running environment temperature:	°C	-10~+90			
Rated input speed:	rpm	3000			
Max input speed:	rpm	5000			
Protect class:	IP	44			
Lubrication:		life grease lubrication			
Noise:	dB	≤55			
Service life:	h	~1,000			

Note: If need special specification, pls contact with us.

Output flange:Aluminium,Type standard(Below Drawing)

Housing:Steel

Input flange:Aluminium,Type standard(Below Drawing)



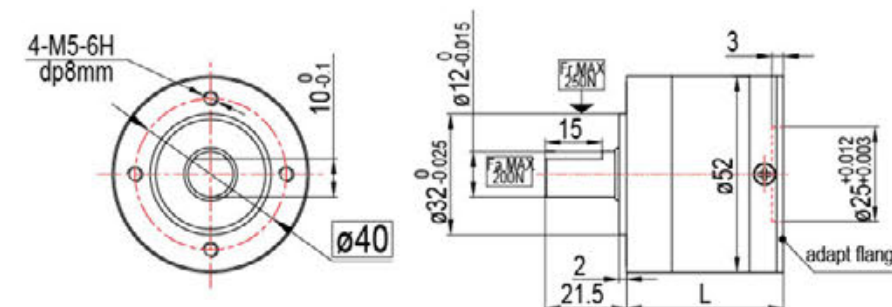
Technical and Performance Data		1-stage	2-stage
Ratio:		5, 10	15,20,25,30,40,50,100
L:	mm	42	52
Rated load:	Nm	3.5	15
Max load:	Nm	6	25
Efficiency:	%	95	90
Backlash:	arcmin	≤15	≤25
Weight:	KG	0.4	0.6
Storage temperature:	°C	-30~+60	
Storage humidity:	%	~80	
Running environment temperature:	°C	-10~+90	
Rated input speed:	rpm	3000	
Max input speed:	rpm	5000	
Protect class:	IP	65	
Lubrication:		life grease lubrication	
Noise:	dB	≤45	
Service life:	h	~8,000	

Note: If need special specification,pls contact with us.

Output flange:Aluminium,Type standard(Below Drawing)

Housing:Steel

Input flange:Aluminium,Type standard(Below Drawing)



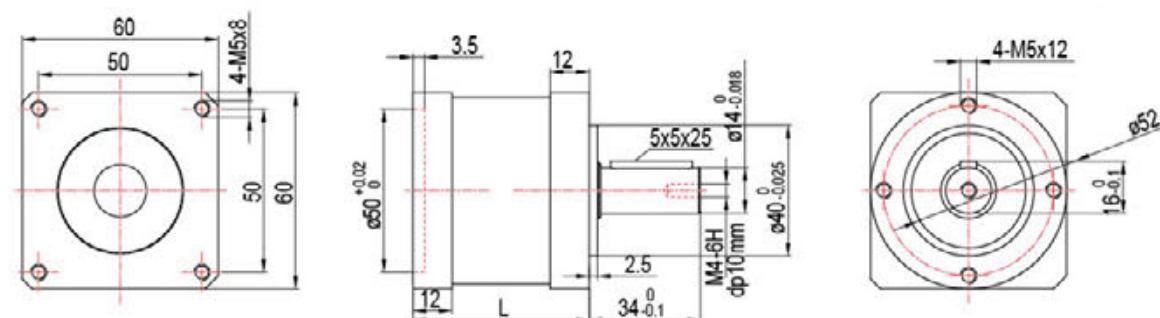
Technical and Performance Data		1-stage	2-stage
Ratio:		5, 10	15,20,25,30,40,50,100
L:	mm	43	53
Rated load:	Nm	3.5	15
Max load:	Nm	6	25
Efficiency:	%	95	90
Backlash:	arcmin	≤15	≤25
Weight:	KG	0.6	0.8
Storage temperature:	°C	-30~+60	
Storage humidity:	%	~80	
Running environment temperature:	°C	-10~+90	
Rated input speed:	rpm	3000	
Max input speed:	rpm	5000	
Protect class:	IP	65	
Lubrication:		life grease lubrication	
Noise:	dB	≤45	
Service life:	h	~8,000	

Note: If need special specification,pls contact with us.

Output flange:Aluminium,Type standard(Below Drawing)

Housing:Steel

Input flange:Aluminium,Type standard(Below Drawing)



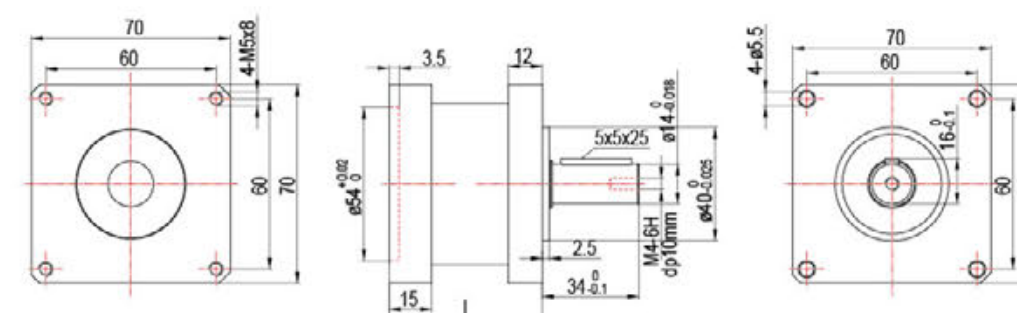
Technical and Performance Data		1-stage	2-stage
Ratio:		5, 10	15,20,25,30,40,50,100
L:	mm	53	70
Rated load:	Nm	6	25
Max load:	Nm	12	40
Efficiency:	%	95	90
Backlash:	arcmin	≤15	≤25
Weight:	KG	0.9	1.2
Storage temperature:	°C	-30~+60	
Storage humidity:	%	~80	
Running environment temperature:	°C	-10~+90	
Rated input speed:	rpm	3000	
Max input speed:	rpm	5000	
Protect class:	IP	65	
Lubrication:		life grease lubrication	
Noise:	dB	≤45	
Service life:	h	~8,000	

Note: If need special specification,pls contact with us.

Output flange:Aluminium,Type standard(Below Drawing)

Housing:Steel

Input flange:Aluminium,Type standard(Below Drawing)



Technical and Performance Data		1-stage	2-stage
Ratio:		5, 10	15,20,25,30,40,50,100
L:	mm	53	70
Rated load:	Nm	6	25
Max load:	Nm	12	40
Efficiency:	%	95	90
Backlash:	arcmin	≤15	≤25
Weight:	KG	1.0	1.3
Storage temperature:	°C	-30~+60	
Storage humidity:	%	~80	
Running environment temperature:	°C	-10~+90	
Rated input speed:	rpm	3000	
Max input speed:	rpm	5000	
Protect class:	IP	65	
Lubrication:		life grease lubrication	
Noise:	dB	≤45	
Service life:	h	~8,000	

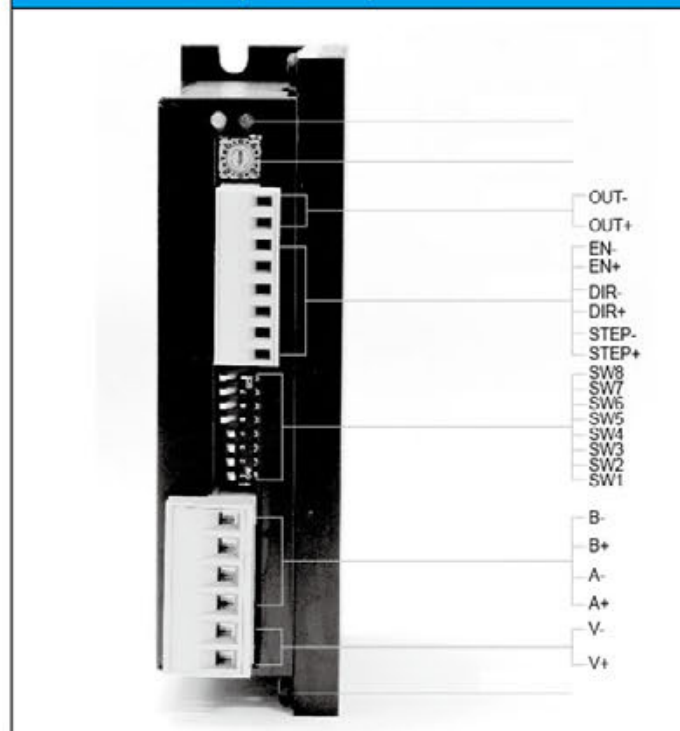
Note: If need special specification,pls contact with us.

Data Sheet

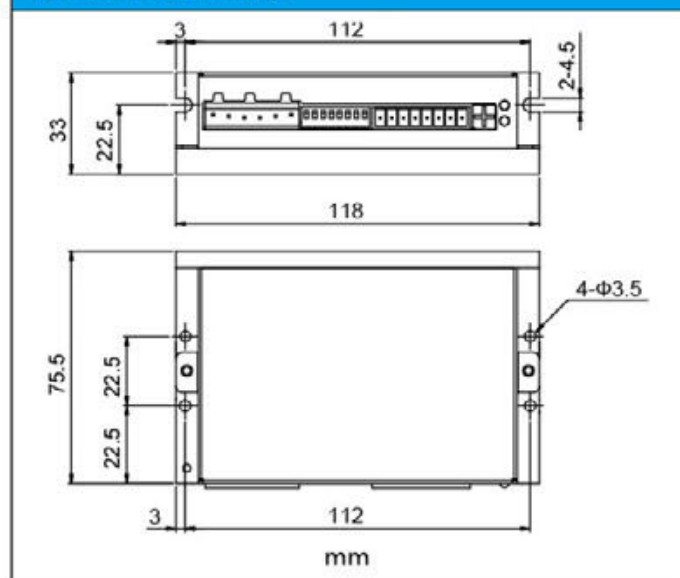
Description

series drive is a cost-effective, high performance 2 phase step drive. The design is based on advanced digital current control technology, and features high torque, low noise, and low vibration. The running current and microstep resolution are switch selectable.

Connections – Inputs & Outputs

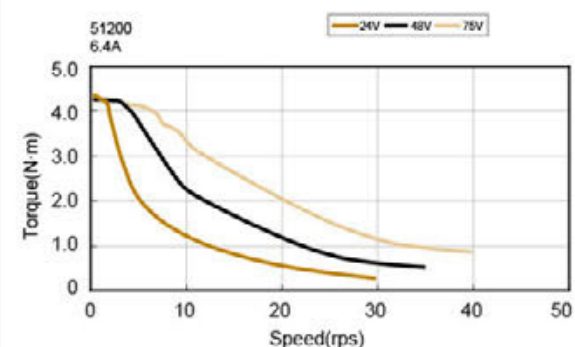
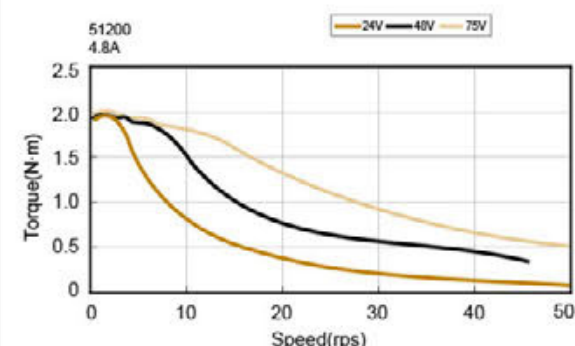
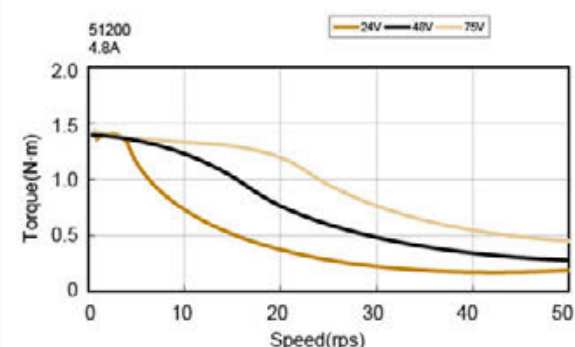
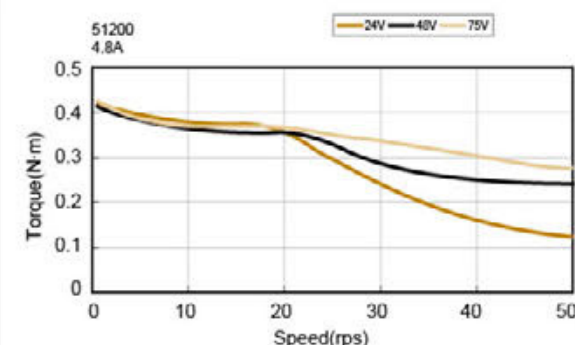


Mechanical Drawings



Torque Curves

The torque curves below were generated from some of the recommended motors.



Specifications

Electrical Specifications

Parameter	Min.	Typ.	Max.	Unit
Power Supply	24	–	75	VDC
Output Current (Peak)	2.4	–	7.8	amps
STEP/DIR Input Signal Average Forward Current	6	10	15	mA
Step Frequency	2	–	2M	Hz
STEP Minimum Pulse Width Hi and Low	250	–	–	ns
DIR Minimum Pulse Width	50	–	–	us
Under Voltage Protection	–	20	–	VDC
Over Voltage Protection	–	85	–	VDC
STEP/DIR Input Signal Voltage	4.0	–	28	VDC
Driver Initialization Time	–	–	2.5	S

Environmental Specifications

Heat Sinking Method	Natural cooling or fan-forced cooling
Surrounding Air Conditions	Avoid dust, oily mist and corrosive air
Operating Temperature	0 – 40 °C (32 – 104 °F)
Maximum Ambient Humidity	90%/non-condensing
Shock	5.9m/s² maximum
Storage Temperature	–10 – 70 °C (14 – 158 °F)

Switch Selections

Running current, idle current, microstep resolution and self test are selectable by a switch or a combination of on/off settings of 2 or more switches.

	SW1	SW2	SW3
2.4A	ON	ON	ON
3.2A	OFF	ON	ON
4A	ON	OFF	ON
4.8A	OFF	OFF	ON
5.6A	ON	ON	OFF
6.4A	OFF	ON	OFF
7A	ON	OFF	OFF
7.8A	OFF	OFF	OFF

Idle Current (SW4) – ON for 50% of running value, OFF for 90%

(step/rev)	SW5	SW6	SW7
400	ON	ON	ON
800	OFF	ON	ON
1600	ON	OFF	ON
3200	OFF	OFF	ON
6400	ON	ON	OFF
12800	OFF	ON	OFF
25600	ON	OFF	OFF
51200	OFF	OFF	OFF

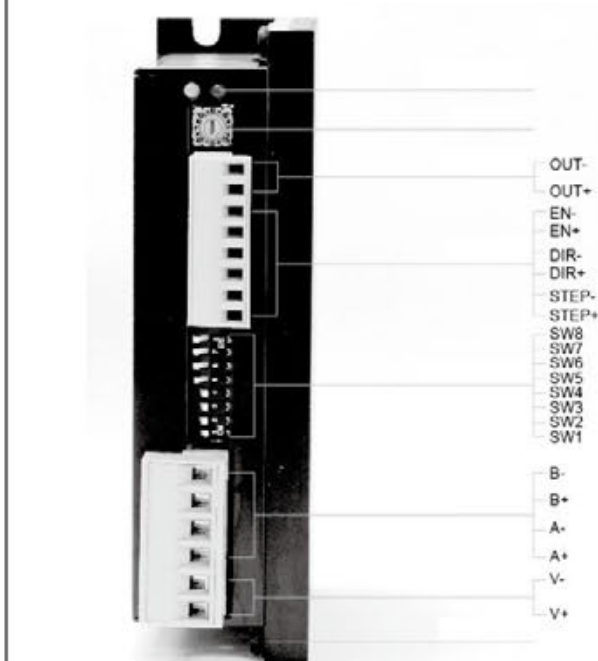
Self test (SW8) – ON for self test, OFF for none

Data Sheet

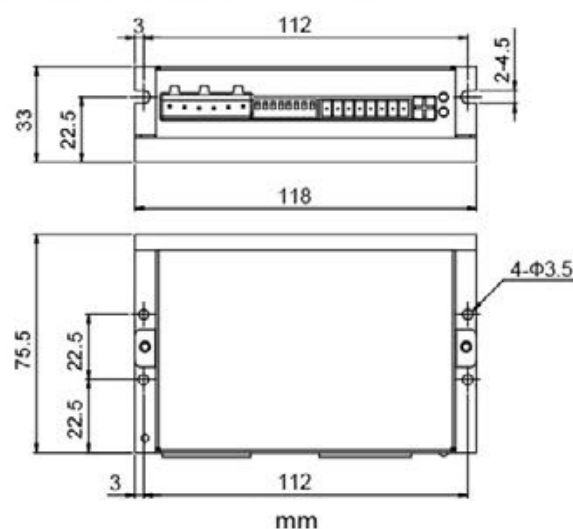
Description

series drive is a cost-effective, high performance 2 phase step drive. The design is based on advanced digital current control technology, and features high torque, low noise, and low vibration. The running current and microstep resolution are switch selectable.

Connections – Inputs & Outputs

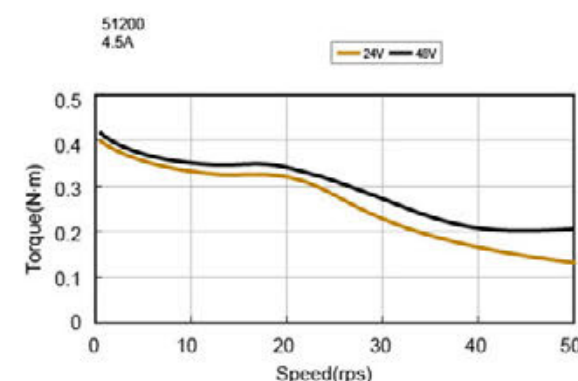
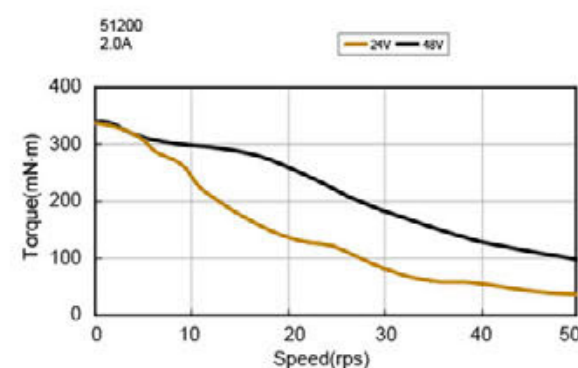
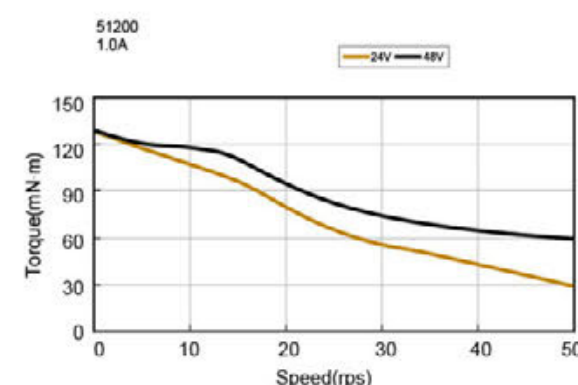
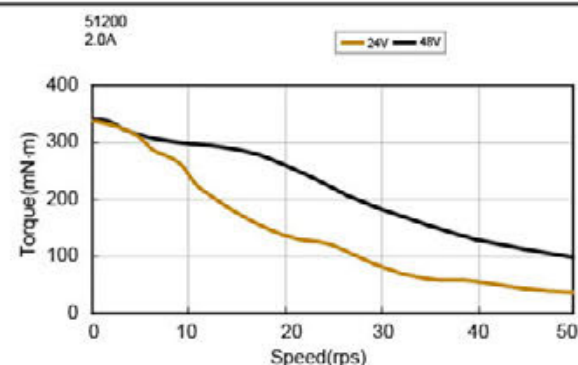


Mechanical Drawings



Torque Curves

The torque curves below were generated from some of the recommended motors.



Specifications

Electrical Specifications				
Parameter	Min.	Typ.	Max.	Unit
Power Supply	24	–	48	VDC
Output Current (Peak)	1	–	4.5	amps
STEP/DIR Input Signal Average Forward Current	6	10	15	mA
Step Frequency	2	–	2M	Hz
STEP Minimum Pulse Width Hi and Low	250	–	–	ns
DIR Minimum Pulse Width	50	–	–	us
Under Voltage Protection	–	20	–	VDC
Over Voltage Protection	–	60	–	VDC
STEP/DIR Input Signal Voltage	4.0	–	28	VDC
Driver Initialization Time	–	–	2.5	S

Environmental Specifications

Heat Sinking Method	Natural cooling or fan-forced cooling
Surrounding Air Conditions	Avoid dust, oily mist and corrosive air
Operating Temperature	0 – 40 °C (32 – 104 °F)
Maximum Ambient Humidity	90% non-condensing
Shock	5.9m/s ² maximum
Storage Temperature	–10 – 70 °C (14 – 158 °F)

Switch Selections

Running current, idle current, microstep resolution and self test are selectable by a switch or a combination of on/off settings of 2 or more switches.

	SW1	SW2	SW3
1A	ON	ON	ON
1.5A	OFF	ON	ON
2A	ON	OFF	ON
2.5A	OFF	OFF	ON
3A	ON	ON	OFF
3.5A	OFF	ON	OFF
4A	ON	OFF	OFF
4.5A	OFF	OFF	OFF

Idle Current (SW4) – ON for 50% of running value, OFF for 90%

(step/rev)	SW5	SW6	SW7
400	ON	ON	ON
800	OFF	ON	ON
1600	ON	OFF	ON
3200	OFF	OFF	ON
6400	ON	ON	OFF
12800	OFF	ON	OFF
25600	ON	OFF	OFF
51200	OFF	OFF	OFF

Self test (SW8) – ON for self test, OFF for none