

TWO-PHASE CLOSED-LOOP STEPPER MOTOR 42mm

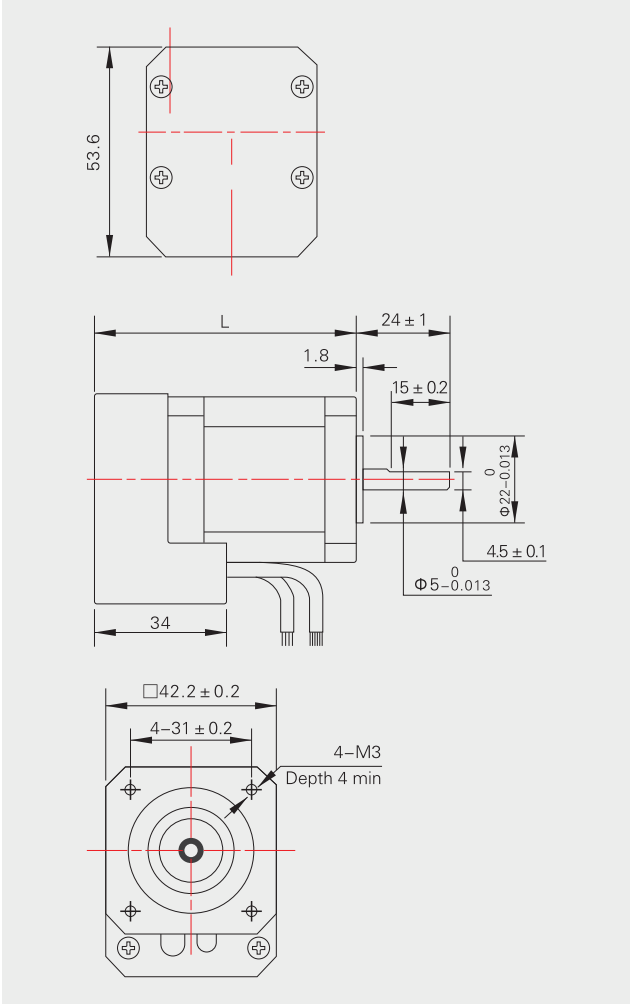
General Specifications

Item	Specifications	Icon
Step Angle Accuracy	±5%(full step,no load)	
Temperature Rise	80℃ MAX	
Ambient Temperature	-20℃~+50℃	
Insulation Resistance	100MΩ Min 500VDC	
Dielectric Strength	500VAC 1minute	
Shaft Radial Play	0.06mm Max (450g load)	
Shaft Axial Play	0.08mm Max (450g load)	

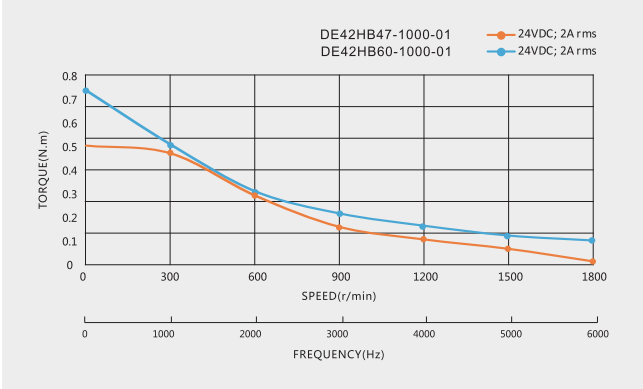
Electrical Specifications

Model	Step Angle(°)	Length (mm)	Current (A)	Resistance (Ω)	Inductance (mH)	Hold Torque (N.m)	Inertia (g.cm ²)	Encoder output circuit	Encoder Resolution
DE42HB47-1000-01	1.8	68	2.0	1.35	3.2	0.48	72	Differential output	1000CPR
DE42HB60-1000-01	1.8	80	2.0	1.75	4	0.72	110		1000CPR

Dimension



Frequency-torque Characteristics



Encoder Specifications

Resolution	1000cpr/4000ppr
Output method	Incremental
Output circuit	Differential output
Output signal	A+A-; B+B-
Input voltage	5VDC±5%

Brake Specifications

Brake type	Power off brake
Voltage	24VDC±5%
Brake power	3.5W
Braking torque	0.5N.m
Brake operation release time	50ms

TWO-PHASE CLOSED-LOOP STEPPER MOTOR 57mm

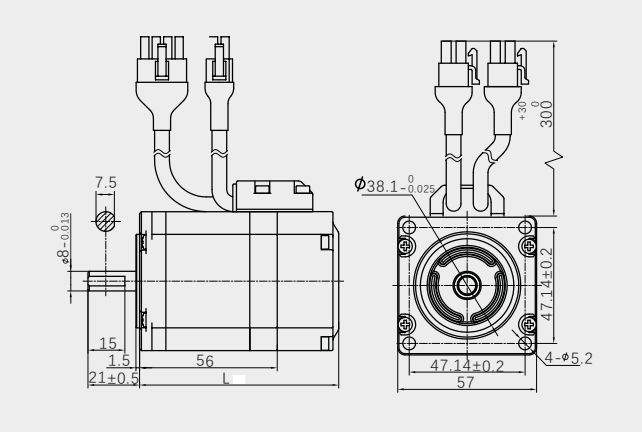
General Specifications

Item	Specifications	Icon
Step Angle Accuracy	±5%(full step,no load)	
Temperature Rise	80℃ MAX	
Ambient Temperature	-20℃~+50℃	
Insulation Resistance	100MΩ Min 500VDC	
Dielectric Strength	500VAC 1minute	
Shaft Radial Play	0.06mm Max (450g load)	
Shaft Axial Play	0.08mm Max (450g load)	

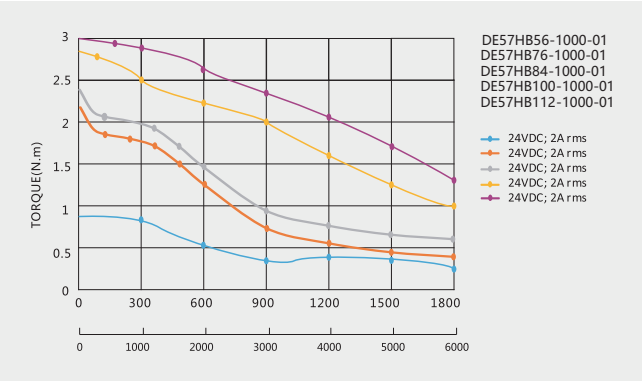
Electrical Specifications

Model	Step Angle(°)	Current (A)	Resistance(Ω)	Inductance (mH)	Hold Torque (N.m)	Inertia (g.cm ²)	Insulation resistance (M)	Insulation class
DE57HB56-1000-01	1.8	4.0	0.44	1.13	0.9	300	>500M(500V)	Class F
DE57HB76-1000-01	1.8	4.0	0.33	1.67	2.2	480	>500M(500V)	Class F
DE57HB84-1000-01	1.8	4.0	0.69	2.2	2.4	520	>500M(500V)	Class F
DE57HB100-1000-01	1.8	4.5	1.13	2.97	2.8	680	>500M(500V)	Class F
DE57HB112-1000-01	1.8	4.5	0.65	2.0	3.0	780	>500M(500V)	Class F

Dimension



Frequency-torque Characteristics



Outline

Model	L without brake (mm)
DE57HB56-1000-01	81
DE57HB76-1000-01	103
DE57HB84-1000-01	108
DE57HB100-1000-01	125
DE57HB112-1000-01	137

Encoder Specifications

Resolution	1000cpr/4000ppr
Output method	Incremental
Output circuit	Differential output
Output signal	A+A-; B+B-
Input voltage	5VDC±5%

Brake Specifications

Brake type	Power off brake
Voltage	24VDC±5%
Brake power	5W
Braking torque	2N.m
Brake operation release time	50ms

TWO-PHASE CLOSED-LOOP STEPPER MOTOR 60mm

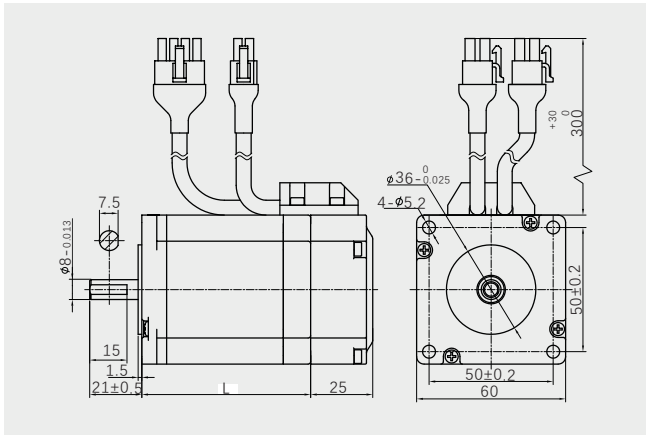
General Specifications

Item	Specifications	Icon
Step Angle Accuracy	±5%(full step,no load)	
Temperature Rise	80℃ MAX	
Ambient Temperature	-20℃~+50℃	
Insulation Resistance	100MΩ Min 500VDC	
Dielectric Strength	500VAC 1minute	
Shaft Radial Play	0.06mm Max (450g load)	
Shaft Axial Play	0.08mm Max (450g load)	

Electrical Specifications

Model	Step Angle(°)	Current (A)	Resistance (Ω)	Inductance (mH)	Hold Torque (N.m)	Inertia (g.cm ²)	Dielectric strength (VDC)	Insulation resistance (M)	Insulation class
DE60HB68-1000-01	1.8	4.0	0.41	1.1	2.4	560	1000V	>500M(500V)	Class F
DE60HB84-1000-01	1.8	4.0	0.5	2.04	3.0	900	1000V	>500M(500V)	Class F

Dimension



Outline

Model	L without brake (mm)
DE60HB68-1000-01	93
DE60HB84-1000-01	110

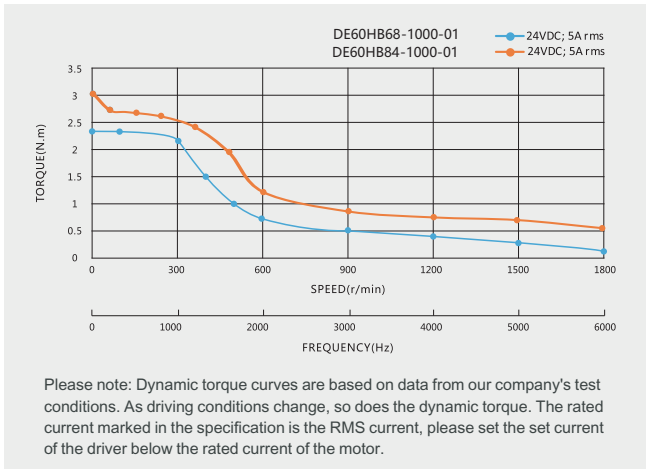
Encoder Specifications

Resolution	1000cpr/4000ppr
Output method	Incremental
Output circuit	Differential output
Output signal	A+A-; B+B-
Input voltage	5VDC±5%

Brake Specifications

Brake type	Power off brake
Voltage	24VDC±5%
Brake power	5W
Braking torque	2N.m
Brake operation release time	50ms

Frequency-torque Characteristics



TWO-PHASE CLOSED-LOOP STEPPER MOTOR 86mm

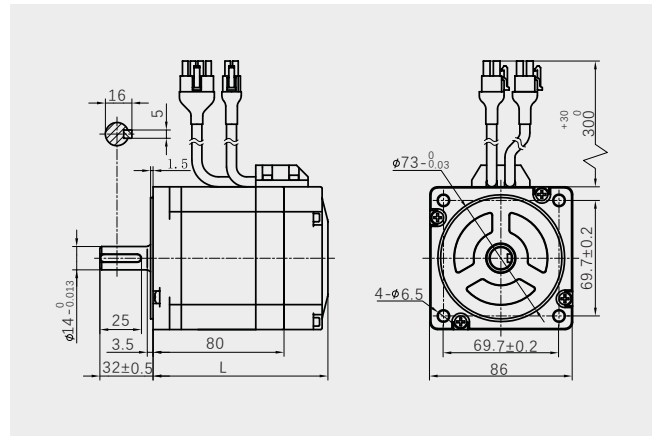
General Specifications

Item	Specifications	Icon
Step Angle Accuracy	±5%(full step,no load)	
Temperature Rise	80℃ MAX	
Ambient Temperature	-20℃~+50℃	
Insulation Resistance	100MΩ Min 500VDC	
Dielectric Strength	500VAC 1minute	
Shaft Radial Play	0.06mm Max (450g load)	
Shaft Axial Play	0.08mm Max (450g load)	

Electrical Specifications

Model	Step Angle(°)	Current (A)	Resistance (Ω)	Inductance (mH)	Hold Torque (N.m)	Inertia (g.cm ²)	Insulation resistance (M)	Insulation resistance (M)	Insulation class
DE86HB80-1000-01	1.8	6.0	0.35	3.0	4.5	1400	1000V	>500M(500V)	Class F
DE86HB98-1000-01	1.8	6.0	0.47	3.84	7.5	2100	1000V	>500M(500V)	Class F
DE86HB118-1000-01	1.8	6.0	0.51	6.2	8.5	2700	1000V	>500M(500V)	Class F
DE86HB156-1000-01	1.8	6.0	0.76	8.4	12.2	4000	1000V	>500M(500V)	Class F

Dimension



Outline

Model	L without brake (mm)
DE86HB80-1000-01	106
DE86HB98-1000-01	125
DE86HB118-1000-01	145
DE86HB156-1000-01	183

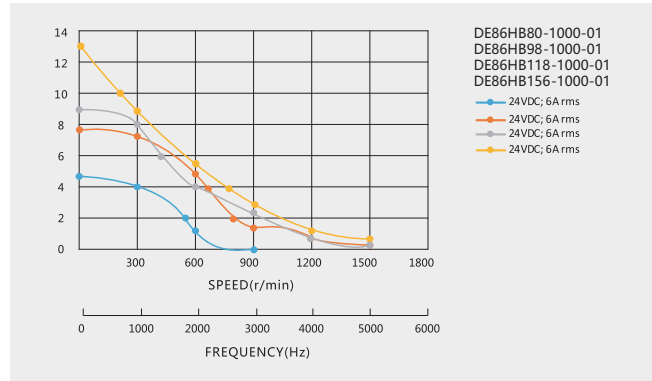
Encoder Specifications

Resolution	1000cpr/4000ppr
Output method	Incremental
Output circuit	Differential output
Output signal	A+A-; B+B-
Input voltage	5VDC±5%

Brake Specifications

Brake type	Power off brake
Voltage	24VDC±5%
Brake power	5W
Braking torque	2N.m
Brake operation release time	50ms

Frequency-torque Characteristics



MOTOR AND DRIVER ADAPTATION TABLE

Two-phase closed-loop stepper adaptation table

Motor				Driver		Matching wire	
Machine base	Standard	Brake type	Torque (N.m)	Pulse type	Bus type	Encoder extension cable	Power extension cord
42mm	DE42HB47-1000-01	DE42HB47-1000-B-01	0.48	DE2205C	DE2205E	E200DE-XX-G-HL-8PA	P200DE-XX-G-HL-4PA
	DE42HB60-1000-01	DE42HB60-1000-B-01	0.72				
57mm	DE57HB56-1000-01	DE57HB56-1000-B-01	0.9	DE2405C	DE2405E		
	DE57HB76-1000-01	DE57HB76-1000-B-01	2.2				
	DE57HB84-1000-01	DE57HB84-1000-B-01	2.4				
	DE57HB100-1000-01	DE57HB100-1000-B-01	2.8				
	DE57HB112-1000-01	DE57HB112-1000-B-01	3.0				
60mm	DE60HB68-1000-01	DE60HB68-1000-B-01	2.4	DE2608C	DE2608E		
	DE60HB84-1000-01	DE60HB84-1000-B-01	3.0				
86mm	DE86HB80-1000-01	DE86HB80-1000-B-01	4.5				
	DE86HB98-1000-01	DE86HB98-1000-B-01	7.5				
	DE86HB118-1000-01	DE86HB118-1000-B-01	8.5				
	DE86HB156-1000-01	DE86HB156-1000-B-01	12.2				

Two-phase open loop stepper adaptation table

Stepper motor								Driver	
	Model	Step angle(°)	Motor length(mm)	Current(A)	Resistance (Ω)	Holding torque(N.m)	Rotor inertia(g.cm²)	Pulse type	Bus type
42mm	DV42HB34-01	1.8	34	1.2	2.3	0.21	35	DV422	DV2205E
	DV42HB40-01	1.8	40	1.2	1.67	0.3	54		
	DV42HB47-01	1.8	47	1.2	1.69	0.4	68		
	DV42HB60-01	1.8	60	1.2	2.75	0.6	102		
57mm	DV57HB56-01	1.8	56	4.0	0.44	0.9	300	DV556C	DV2405E
	DV57HB76-01	1.8	76	4.0	0.33	2.2	480		
	DV57HB84-01	1.8	84	4.0	0.69	2.4	520		
	DV57HB100-01	1.8	100	4.5	1.13	2.8	680		
	DV57HB112-01	1.8	112	4.5	0.65	3.0	780		
60mm	DV60HB68-01	1.8	68	4.0	0.41	2.4	560	DV860C	DV2608E
	DV60HB84-01	1.8	84	4.0	0.5	3.0	900		
86mm	DV86HB80-01	1.8	80	6.0	0.41	4.5	1400		
	DV86HB98-01	1.8	98	6.0	0.4	7.5	2100		
	DV86HB118-01	1.8	118	6.0	0.49	8.5	2700		
	DV86HB156-01	1.8	156	6.0	0.76	12.2	4000		

MOTOR AND DRIVER ADAPTATION TABLE

Three-phase open-loop stepper adaptation table

Stepper motor									Driver	
	Model	Step angle(°)	Motor length(mm)	Current (A)	Resistance (Ω)	Holding torque(N.m)	Rotor inertia(g.cm²)	Weight (kg)	Pulse type	Bus type
86mm	DV397H-01	1.2	69	1.75	3.77	2.0	1320	1.8	DV3522C	DV3422E
	DV3910H-01	1.2	97	2	4.65	4.0	2400	2.8		
	DV3913H-01	1.2	125	3.0	2.0	6.0	3480	3.8		
	DV3915H-01	1.2	145	3.2	2.6	8.5	4560	4.7		
110mm	DV31112H-01	1.2	127	2.5	1.04	8.0	6000	5.0	DV3722C	DV3722E
	DV31115H-01	1.2	151	3.5	0.6	12	9720	6.3		
	DV31118H-01	1.2	185	3.75	0.7	16	13560	8.5		
	DV31122H-01	1.2	219	4	0.57	20	17400	10.7		
130mm	DV31315H-01	1.2	161	6.9	0.55	15	20000	11		
	DV31318H-01	1.2	190	6.9	0.72	20	26700	14.1		
	DV31322H-01	1.2	222	6.9	0.95	28	33970	17.2		
	DV31325H-01	1.2	254	6.9	1.1	35	41240	19.8		
	DV31332H-01	1.2	318	6.9	1.4	50	55780	26		

Supply chain assurance



- ◆ Global first-class brand raw material supplier
- ◆ Perfect supply chain system
- ◆ Qualifications of suppliers: select world-class raw material suppliers to ensure the high quality of products. Assessment of suppliers: It has a complete assessment system and comprehensive assessment in many aspects.