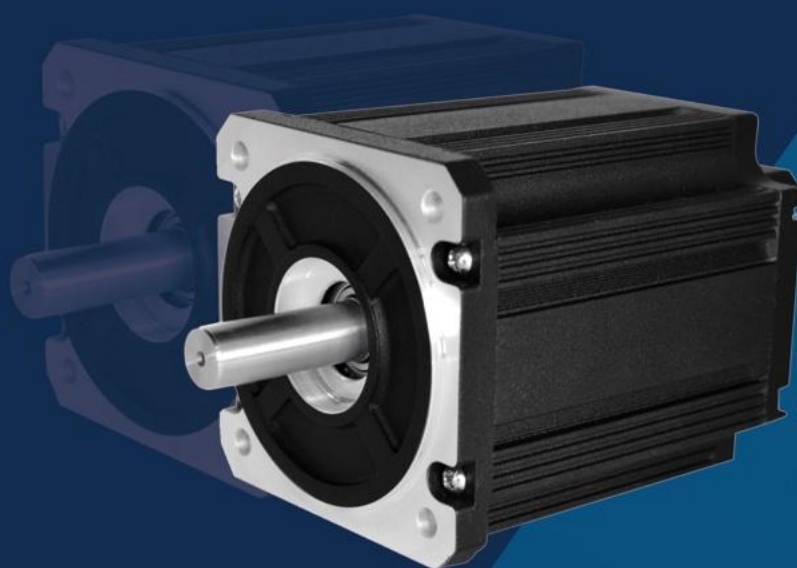


# 无刷直流电机

## BLDC Motor





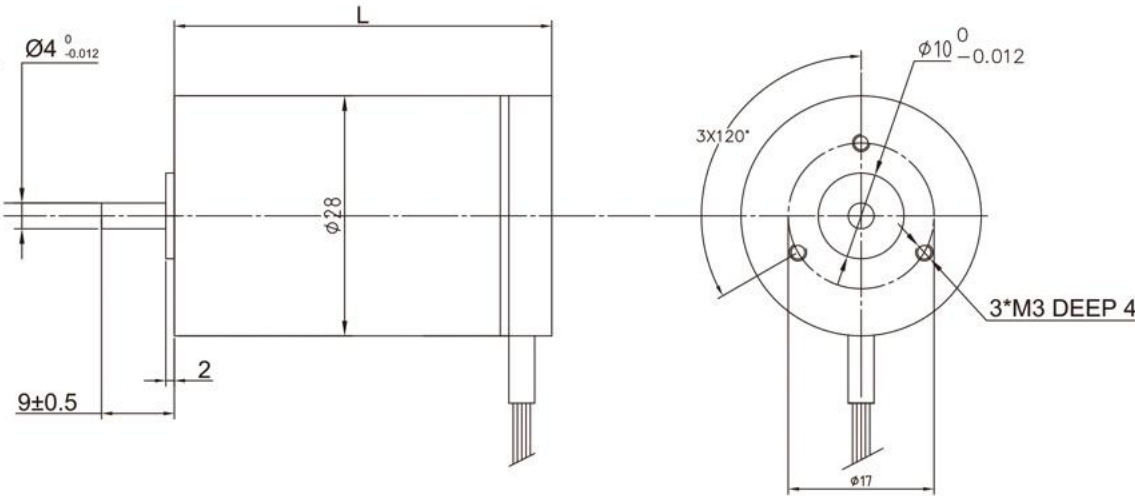
**General Specification**

Winding type 绕组连接方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /450g
End play 轴向间隙	0.08mm /450g
Max. radial force 径向最大承受力	15N(10mm from the flange)
Max. axial force 轴向最大承受力	10N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute,5mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

**Performance Data**

Model 型号	Units	28BYA026A080X-01	28BYA038B031X-01	28BYA077B031X-01
Number of poles 极数			4	
Number of phase 相数			3	
Rated voltage 额定电压	VDC	15	24	24
Rated speed 额定转速	RPM	8000	3100	3100
Continuous stall torque 持续堵转转矩	mN.m	8.4	19.2	60.00
Rated torque 额定转矩	mN.m	7	16	50.00
Rated power 额定功率	W	6	5.2	16
Peak torque 峰值转矩	mN.m	21	48	150.00
Peak current 峰值电流	A	1.53	0.87	2.66
Torque constant 转矩常数	Nm/A	0.014	0.055	0.057
Back E.M.F 反电势	V/KRPM	1.5	5.1	5.10
Rotor inertia 转动惯量	g.cm <sup>2</sup>	1.23	2.12	5.98
Body length 电机长度	mm	26	38	77
Voltage range 电压范围	VDC		12~36	
Speed Range 转速范围	rpm		3000~8000	
Weight 重量	Kg	0.06	0.08	0.280

**Dimensions in mm**





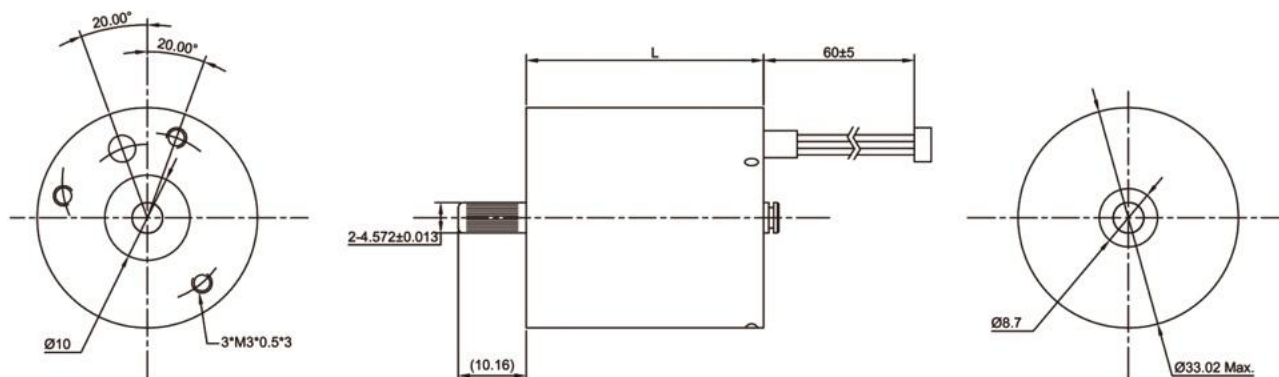
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /450g
End play 轴向间隙	0.08mm /450g
Max. radial force 径向最大承受力	15N (10mm from the flange)
Max. axial force 轴向最大承受力	10N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute, 5mA
Insulation resistance 绝缘电阻	50M $\Omega$ min., 500VDC

## Performance Data

Model 型号	Units	33BYA036B150X-01	33BYA036B200X-01	33BYA036A200X-01
Number of poles 极数			4	
Number of phase 相数			3	
Rated voltage 额定电压	VDC	24	24	12
Rated speed 额定转速	RPM	15000	20000	20000
Continuous stall torque 持续堵转转矩	mN.m	14.16	14.16	14.16
Rated torque 额定转矩	mN.m	11.8	11.8	11.8
Rated power 额定功率	W	18.5	25	25
Peak torque 峰值扭矩	N.m	35.4	35.4	35.4
Peak current 峰值电流	A	3	4.05	8.1
Torque constant 转矩常数	Nm/A	$11.8 \times 10^{-3}$	$9 \times 10^{-3}$	$4.5 \times 10^{-3}$
Back E.M.F 反电势	V/KRPM	1.5	1.09	0.54
Rotor inertia 转动惯量	g.cm <sup>2</sup>	2.33	2.33	2.33
Body length 电机长度	mm		36	
Voltage range 电压范围	VDC		12~24	
Speed Range 转速范围	RPM		4000~22000	
Weight 重量	Kg	0.1	0.1	0.1

## Dimensions in mm





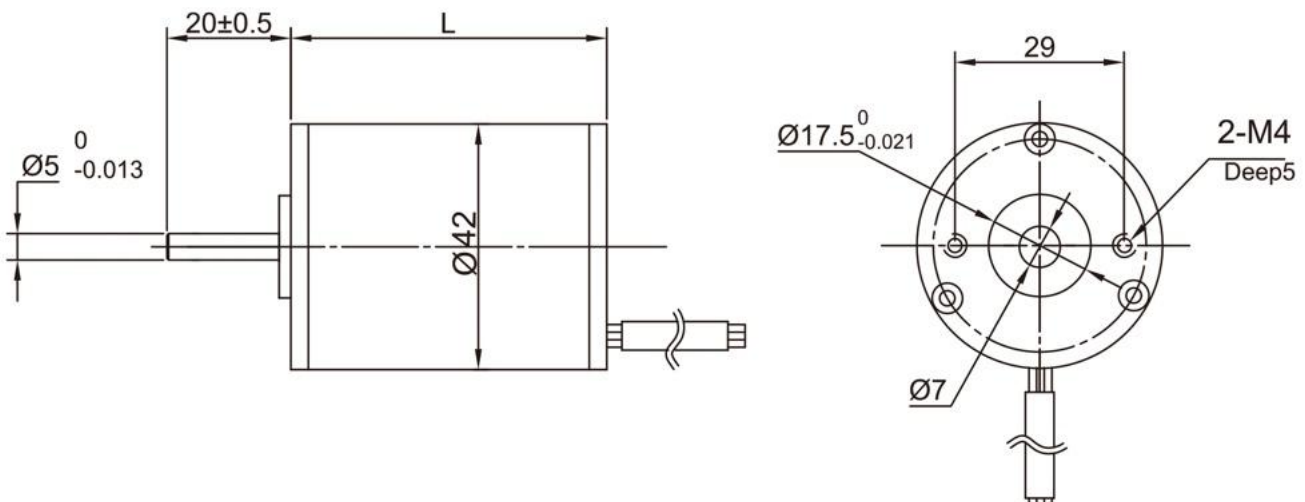
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.02mm /400g
Max. radial force 径向最大承受力	15N(10mm from the flange)
Max. axial force 轴向最大承受力	10N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute,5mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

## Performance Data

Model 型号	Units	42BYA045B 020X-01	42BYA054B 020X-01	42BYA045B 060X-01	42BYA054B 020X-01	42BYA054B 040X-01	42BYA054B 060X-01	42BYA075B 020X-01	42BYA075B 040X-01
Number of poles 极数						4			
Number of phase 相数						3			
Rated voltage 额定电压	VDC					24			
Rated speed 额定转速	RPM	2000	4000	6000	2000	4000	6000	2000	4000
Continuous stall torque 持续堵转转矩	N.m	0.048	0.048	0.048	0.096	0.096	0.096	0.192	0.192
Rated torque 额定转矩	N.m	0.04	0.04	0.04	0.08	0.08	0.08	0.16	0.16
Rated power 额定功率	W	8.4	16.75	25	21	42	63	33.5	100
Peak torque 峰值扭矩	N.m	0.12	0.12	0.12	0.25	0.25	0.25	0.45	0.45
Peak current 峰值电流	A	1.34	2.68	4	3.7	7	10.5	5.6	16.8
Torque constant 转矩常数	Nm/A	0.075	0.04	0.028	0.075	0.043	0.029	0.075	0.029
Back E.M.F 反电势	V/KRPM	8	4.6	3	8	4.6	3	8	3
Rotor inertia 转动惯量	g.cm <sup>2</sup>	14.6	14.6	14.6	20.3	20.3	20.3	38	38
Body length 电机长度	mm	43	43	43	54	54	54	73	73
Voltage range 电压范围	VDC					24~48			
Speed Range 转速范围	RPM					2000~15000			
Weight 重量	Kg	0.37	0.37	0.37	0.46	0.46	0.46	0.63	0.63

## Dimensions in mm







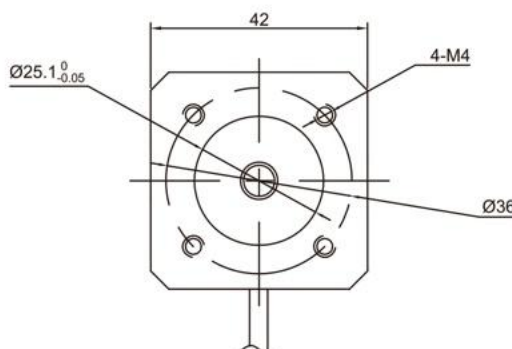
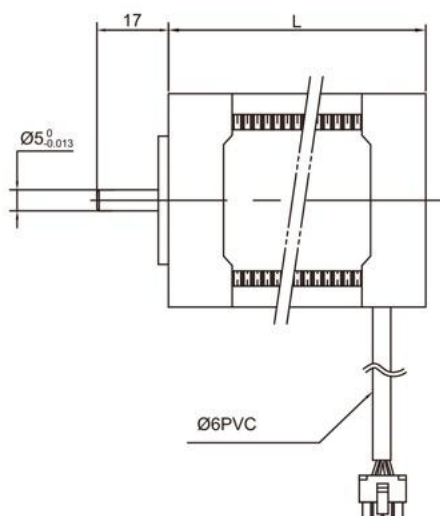
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.02mm /400g
Max. radial force 径向最大承受力	15N (10mm from the flange)
Max. axial force 轴向最大承受力	10N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute, 5mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

## Performance Data

Model 型号	Units	42BSA045B 010X-01	42BSA045B 030X-01	42BSA060B 010X-01	42BSA060B 030X-01	42BSA075B 010X-01	42BSA075B 030X-01
Number of poles 极数					8		
Number of phase 相数					3		
Rated voltage 额定电压	VDC				24		
Rated speed 额定转速	RPM	1000	3000	1000	3000	1000	3000
Continuous stall torque 持续堵转转矩	N.m	0.096	0.096	0.19	0.19	0.28	0.28
Rated torque 额定转矩	N.m	0.08	0.08	0.16	0.16	0.24	0.24
Rated power 额定功率	W	8.3	25	16.6	50	75	100
Peak torque 峰值扭矩	N.m	0.24	0.24	0.57	0.57	0.72	0.72
Peak current 峰值电流	A	1.3	3.9	2.6	7.8	11.72	15.63
Torque constant 转矩常数	Nm/A	0.162	0.06	0.162	0.06	0.03	0.045
Back E.M.F 反电势	V/KRPM	17.1	6.3	17.1	6.3	6.3	4.8
Rotor inertia 转动惯量	g.cm <sup>2</sup>	24	24	48	48	72	72
Body length 电机长度	mm	46	46	62	62	78	78
Voltage range 电压范围	VDC				12~48		
Speed Range 转速范围	RPM				1000~4000		
Weight 重量	Kg	0.3	0.3	0.44	0.44	0.56	0.56

## Dimensions in mm





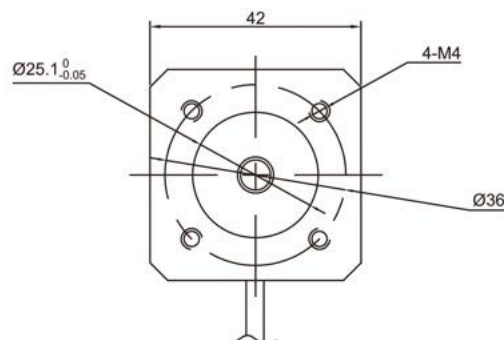
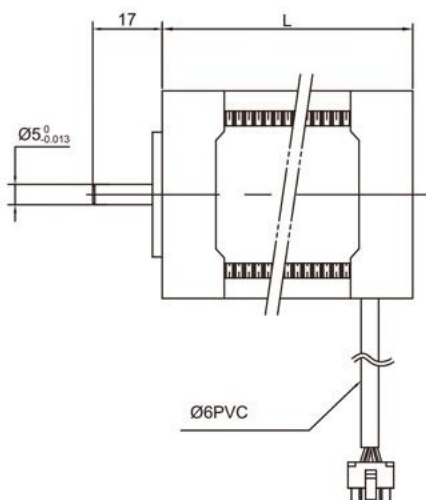
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.025mm /400g
End play 轴向间隙	0.025mm /400g
Max. radial force 径向最大承受力	15N (10mm from the flange)
Max. axial force 轴向最大承受力	10N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute, 5mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

## Performance Data

Model 型号	Units	42BSB041B 020X-01	42BSB041B 040X-01	42BSB041B 080X-01	42BSB061B 020X-01	42BSB061B 040X-01	42BSB061B 080X-01	42BSB081B 020X-01	42BSB081B 040X-01	42BSB101B 020X-01	42BSB101B 040X-01
Number of poles 极数		8									
Number of phase 相数		3									
Rated voltage 额定电压	VDC	24									
Rated speed 额定转速	RPM	2000	4000	8000	2000	4000	8000	2000	8000	2000	4000
Continuous stall torque 持续堵转转矩	N.m	0.072	0.072	0.072	0.144	0.144	0.144	0.225	0.225	0.300	0.300
Rated torque 额定转矩	N.m	0.063	0.063	0.063	0.125	0.125	0.125	0.19	0.19	0.250	0.250
Rated power 额定功率	W	13	26	52	26	52	104	39.5	79	52.5	105.0
Peak torque 峰值扭矩	N.m	0.19	0.19	0.19	0.375	0.375	0.375	0.57	0.57	0.75	0.750
Peak current 峰值电流	A	2.7	5.4	10.8	5.3	10.6	10.6	7.25	14.5	10	20.00
Torque constant 转矩常数	Nm/A	0.074	0.035	0.02	0.074	0.035	0.035	0.074	0.035	0.074	0.035
Back E.M.F 反电势	V/KRPM	7.82	3.66	2.1	7.82	3.66	3.66	7.82	3.66	7.82	3.66
Rotor inertia 转动惯量	g.cm <sup>2</sup>	24	24	24	48	48	48	72	72	96.00	96.00
Body length 电机长度	mm	41	41	41	61	61	61	81	81	101	101
Voltage range 电压范围	VDC	12~48									
Speed Range 转速范围	RPM	2000~8000									
Weight 重量	Kg	0.3	0.3	0.3	0.45	0.45	0.45	0.6	0.6	0.80	0.80

## Dimensions in mm





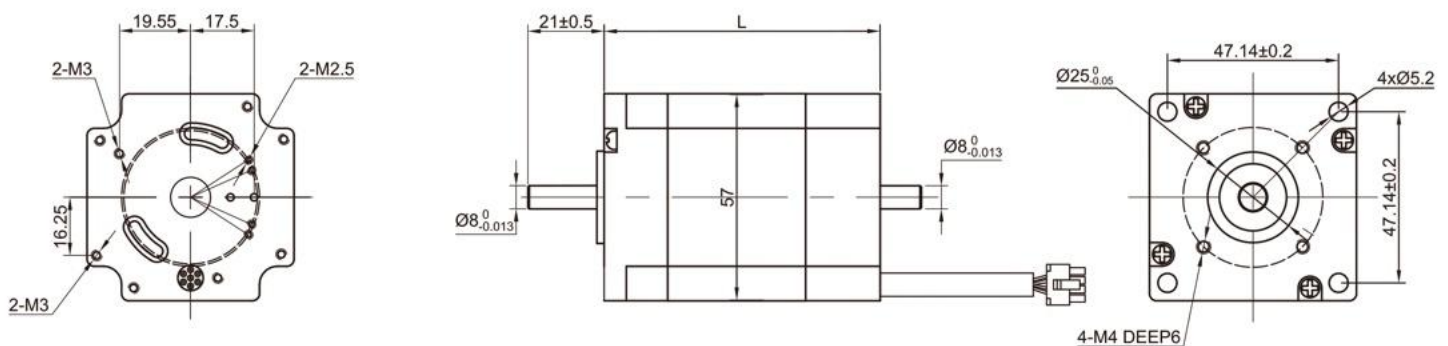
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.02mm /400g
Max. radial force 径向最大承受力	15N(10mm from the flange)
Max. axial force 轴向最大承受力	10N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute, 5mA
Insulation resistance 绝缘电阻	50M $\Omega$ min., 500VDC

## Performance Data

Model 型号	Units	57BSA060B 010X-01	57BSA060B 030X-01	57BSA080B 010X-01	57BSA080B 030X-01	57BSA100B 010X-01	57BSA100B 030X-01
Number of poles 极数					8		
Number of phase 相数					3		
Rated voltage 额定电压	VDC				24		
Rated speed 额定转速	RPM	1000	3000	1000	3000	1000	3000
Continuous stall torque 持续堵转转矩	N.m	0.24	0.24	0.48	0.48	0.72	0.72
Rated torque 额定转矩	N.m	0.2	0.2	0.4	0.4	0.6	0.6
Rated power 额定功率	W	21	63	42	125	62	188
Peak torque 峰值转矩	N.m	0.6	0.6	1.2	1.2	1.8	1.8
Peak current 峰值电流	A	3.28	9.84	3.28	9.84	3.28	9.84
Torque constant 转矩常数	Nm/A	0.227	0.058	0.227	0.058	0.227	0.058
Back E.M.F 反电势	V/KRPM	24	6.1	24	6.1	24	6.1
Rotor inertia 转动惯量	g.cm <sup>2</sup>	145	145	286	286	420	420
Body length 电机长度	mm	59	59	80	80	101	101
Voltage range 电压范围	VDC				12~80		
Speed Range 转速范围	RPM				1000~3000		
Weight 重量	Kg	0.6	0.6	1	1	1.5	1.5

## Dimensions in mm







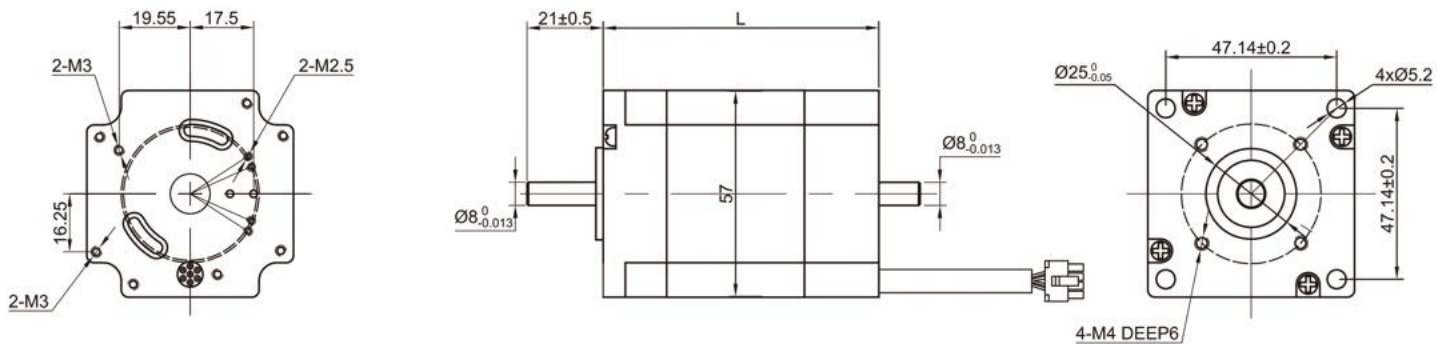
**General Specification**

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.025mm /460g
End play 轴向间隙	0.025mm /400g
Max. radial force 径向最大承受力	75N(20mm from the flange)
Max. axial force 轴向最大承受力	15N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute,5mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

**Performance Data**

Model 型号	Units	57BSB076B 010X-01	57BSB076B 030X-01	57BSB096B 010X-01	57BSB096B 030X-01	57BSB116B 010X-01	57BSB116B 030X-01
Number of poles 极数		8					
Number of phase 相数		3					
Rated voltage 额定电压	VDC	24					
Rated speed 额定转速	RPM	1000	3000	1000	3000	1000	3000
Continuous stall torque 持续堵转转矩	N.m	0.36	0.36	0.54	0.54	0.72	0.72
Rated torque 额定转矩	N.m	0.3	0.3	0.45	0.45	0.6	0.6
Rated power 额定功率	W	31.5	94.5	47	141	63	188
Peak torque 峰值转矩	N.m	0.9	0.9	1.35	1.35	1.8	1.8
Peak current 峰值电流	A	5.6	16.8	8.4	25.2	11.25	33.5
Torque constant 转矩常数	Nm/A	0.16	0.053	0.16	0.053	0.16	0.053
Back E.M.F 反电势	V/KRPM	13	6	13	6	13	6
Rotor inertia 转动惯量	g.cm <sup>2</sup>	100	100	150	150	200	200
Body length 电机长度	mm	76	76	96	96	116	116
Voltage range 电压范围	VDC	12~80					
Speed Range 转速范围	RPM	1000~3000					
Weight 重量	Kg	0.65	0.65	0.95	0.95	1.25	1.25

**Dimensions in mm**







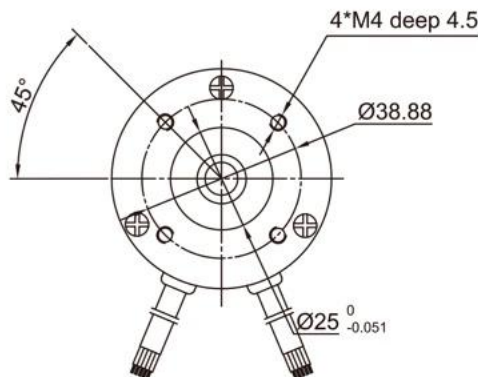
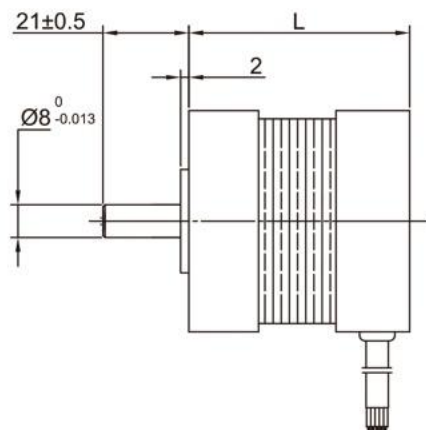
## General Specification

Winding type 绕组连续方式	Delta
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.025mm /460g
End play 轴向间隙	0.025mm /400g
Max. radial force 径向最大承受力	75N(20mm from the flange)
Max. axial force 轴向最大承受力	15N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute,5mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

## Performance Data

Model 型号	Units	57BYA044B 040X-01	57BYA044B 060X-01	57BYA054B 020X-01	57BYA054B 040X-01	57BYA054B 060X-01	57BYA074B 020X-01	57BYA074B 040X-01	57BYA094B 020X-01	57BYA094B 040X-01	57BYA114B 020X-01	57BYA114B 040X-01	
Number of poles 极数		4											
Number of phase 相数		3											
Rated voltage 额定电压	VDC	24											
Rated speed 额定转速	RPM	4000	6000	2000	4000	6000	2000	4000	2000	4000	2000	4000	
Continuous stall torque 持续堵转转矩	N.m	0.096	0.096	0.19	0.19	0.19	0.384	0.384	0.54	0.54	0.72	0.72	
Rated torque 额定转矩	N.m	0.08	0.08	0.16	0.16	0.16	0.32	0.32	0.45	0.45	0.6	0.6	
Rated power 额定功率	W	33.5	50	33.5	67	100.5	67	134	94	188	125	251	
Peak torque 峰值扭矩	N.m	0.24	0.24	0.48	0.48	0.48	0.96	0.96	1.35	1.35	1.8	1.8	
Peak current 峰值电流	A	6	9	5.58	11.1	16.7	11.1	22.2	15.6	31.2	20.8	41.6	
Torque constant 转矩常数	Nm/A	0.04	0.026	0.081	0.045	0.028	0.081	0.045	0.081	0.045	0.081	0.045	
Back E.M.F 反电势	V/KRPM	4.8	3	8.57	4.8	3	8.57	4.8	8.57	4.8	8.57	4.8	
Rotor inertia 转动惯量	g.cm <sup>2</sup>	31	31	60.5	60.5	60.5	113	113	181.5	181.5	242	242	
Body length 电机长度	mm	44	44	54	54	54	74	74	94	94	114	114	
Voltage range 电压范围	VDC	12~80											
Speed Range 转速范围	RPM	2000~6000											
Weight 重量	Kg	0.25	0.25	0.5	0.5	0.5	0.75	0.75	1	1	1.25	1.25	

## Dimensions in mm





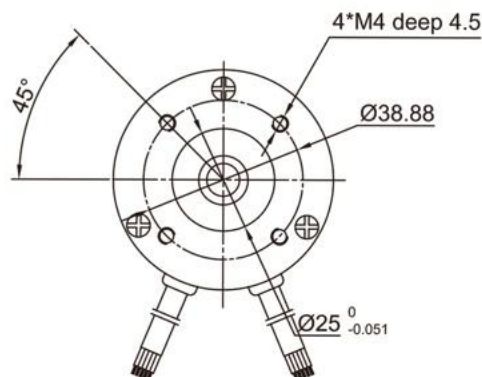
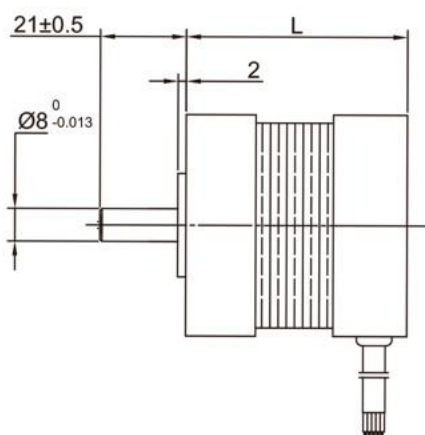
## General Specification

Winding type 绕组连续方式	Delta
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.025mm /460g
End play 轴向间隙	0.025mm /4000g
Max. radial force 径向最大承受力	75N(20mm from the flange)
Max. axial force 轴向最大承受力	15N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute,5mA
Insulation resistance 绝缘电阻	50M $\Omega$ min., 500VDC

## Performance Data

Model 型号	Units	57BYB054B 020X-01	57BYB054B 040X-01	57BYB074B 020X-01	57BYB074B 040X-01	57BYB094B 020X-01	57BYB094B 040X-01	57BYB114B 020X-01	57BYB114B 040X-01
Number of poles 极数		4							
Number of phase 相数		3							
Rated voltage 额定电压	VDC	24							
Rated speed 额定转速	RPM	2000	4000	2000	4000	2000	4000	2000	4000
Continuous stall torque 持续堵转转矩	N.m	0.192	0.192	0.348	0.348	0.492	0.492	0.684	0.684
Rated torque 额定转矩	N.m	0.16	0.16	0.29	0.29	0.41	0.41	0.57	0.57
Rated power 额定功率	W	33.5	67	60	121	86	172	119	238
Peak torque 峰值扭矩	N.m	0.48	0.48	0.87	0.87	1.23	1.23	1.71	1.71
Peak current 峰值电流	A	6	12	10.7	21.6	15.3	30.7	21.2	42.5
Torque constant 转矩常数	Nm/A	0.08	0.07	0.08	0.04	0.08	0.04	0.08	0.04
Back E.M.F 反电势	V/KRPM	8.57	4.8	8.57	4.8	8.57	4.8	8.57	4.8
Rotor inertia 转动惯量	g.cm <sup>2</sup>	75	75	119	119	173	173	230	230
Body length 电机长度	mm	82.5	82.5	102.5	102.5	122.5	122.5	142.5	142.5
Voltage range 电压范围	VDC	12~80							
Speed Range 转速范围	RPM	2000~4000							
Weight 重量	Kg	0.4	0.4	0.8	0.8	1.1	1.1	1.3	1.3

## Dimensions in mm





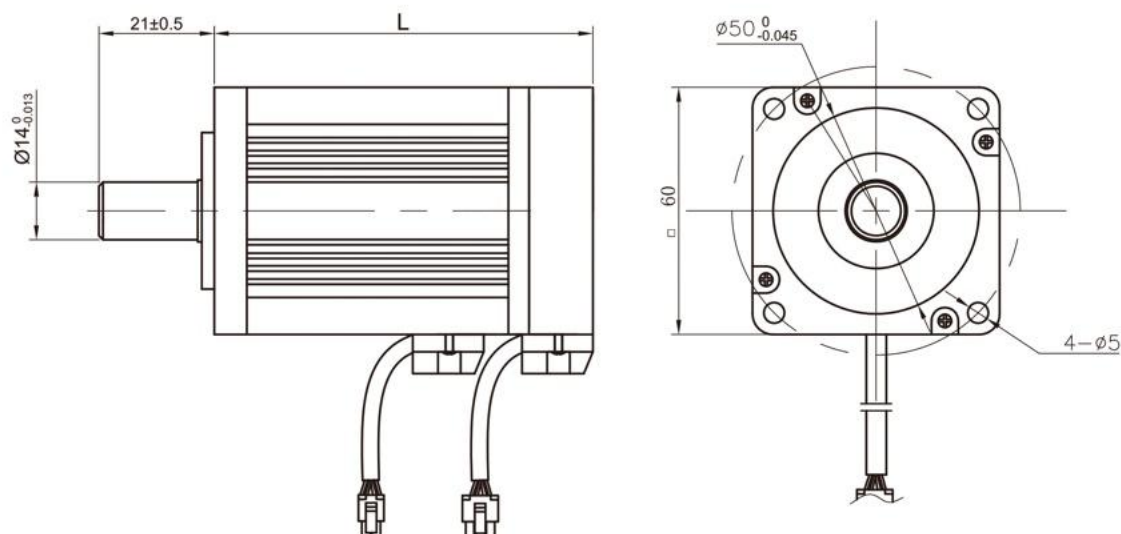
## General Specification

Winding type 绕组连续方式	Delta
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.025mm /460g
End play 轴向间隙	0.025mm /400g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute,5mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

## Performance Data

Model 型号	Units	60BSA072B 010X-01	60BSA072B 030X-01	60BSA092B 010X-01	60BSA092B 030X-01	60BSA114B 010X-01	60BSA114B 030X-01	60BSA134B 010X-01	60BSA134B 030X-01
Number of poles 极数						8			
Number of phase 相数						3			
Rated voltage 额定电压	VDC					24			
Rated speed 额定转速	RPM	1000	3000	1000	3000	1000	3000	1000	3000
Continuous stall torque 持续堵转转矩	N.m	0.38	0.38	0.78	0.78	1.2	1.2	1.56	1.56
Rated torque 额定转矩	N.m	0.32	0.32	0.65	0.65	1	1	1.3	1.3
Rated power 额定功率	W	33.5	100	68	204	105	314	136	408
Peak torque 峰值转矩	N.m	0.96	0.96	1.95	1.95	3	3	3.9	3.9
Peak current 峰值电流	A	6	17.9	12.2	36.5	18.8	56	24.3	73
Torque constant 转矩常数	Nm/A	0.16	0.054	0.16	0.054	0.16	0.054	0.16	0.054
Back E.M.F 反电势	V/KRPM	17.14	6	17.14	6	17.14	6	17.14	6
Rotor inertia 转动惯量	g.cm <sup>2</sup>	70	70	140	140	210	210	280	280
Body length 电机长度	mm	72	72	92	92	114	114	134	134
Voltage range 电压范围	VDC					12~310			
Speed Range 转速范围	RPM					1000~3000			
Weight 重量	Kg	0.55	0.55	0.95	0.95	1.35	1.35	1.75	1.75

## Dimensions in mm







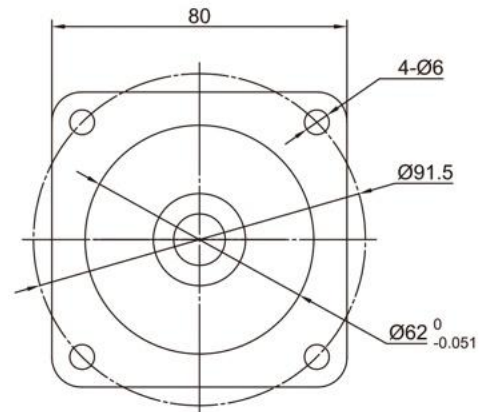
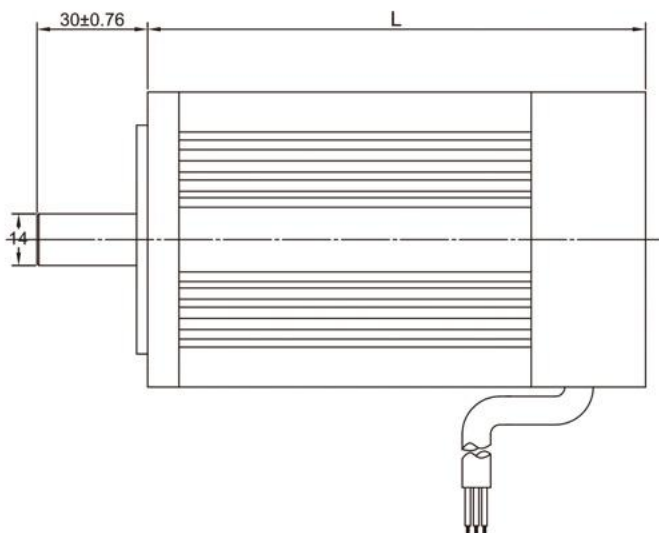
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.025mm /460g
End play 轴向间隙	0.025mm /400g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	1000VAC for one minute,10mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

## Performance Data

Model 型号	Units	80BSA098D025X-01	80BSA122D030X-01	80BSA150I020X-01	80BSA160I025X-01
Number of poles 极数				8	
Number of phase 相数				3	
Rated voltage 额定电压	VDC	48	48	310	310
Rated speed 额定转速	RPM	2500	3000	2000	2500
Continuous stall torque 持续堵转转矩	N.m	1.56	2.9	4.2	4.8
Rated torque 额定转矩	N.m	1.3	2.4	3.5	4
Rated power 额定功率	W	340	754	733	1047
Peak torque 峰值转矩	N.m	3.8	7.1	10.5	12
Peak current 峰值电流	A	28.3	62.8	9.5	13.5
Torque constant 转矩常数	Nm/A	0.121	0.068	0.042	0.121
Back E.M.F 反电势	V/KRPM	10	8.8	77.5	65.7
Rotor inertia 转动惯量	Kg.cm <sup>2</sup>	1.05	1.82	2.63	2.97
Body length 电机长度	mm	98	122	150	160
Voltage range 电压范围	VDC			12~310	
Speed Range 转速范围	RPM			1000~3000	
Weight 重量	Kg	3	3.5	4.1	4.3

## Dimensions in mm







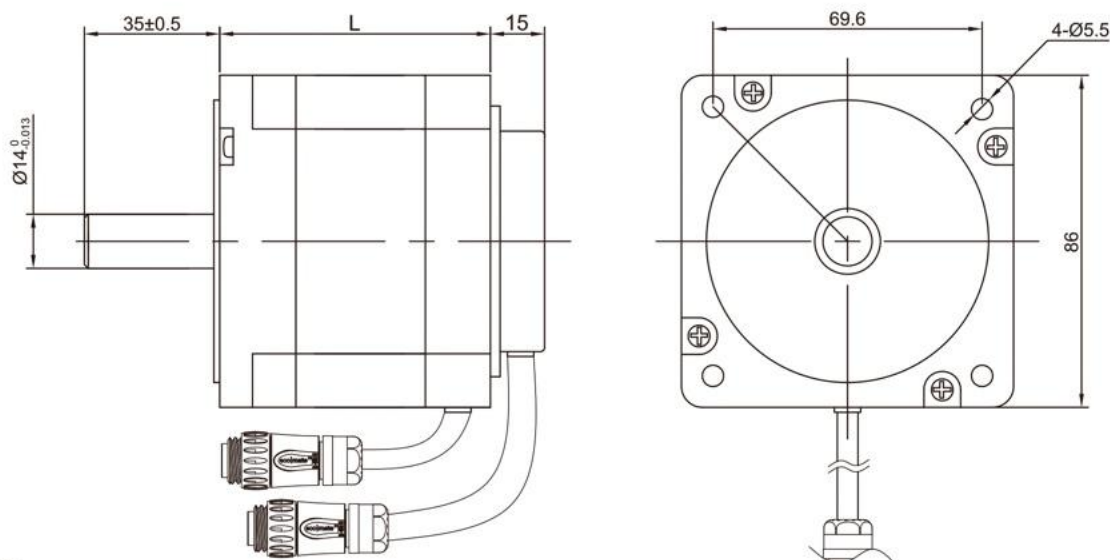
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.08mm /400g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	1000VAC for one minute, 10mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

## Performance Data

Model 型号	Units	86BSA058D 010X-01	86BSA058D 010X-01	86BSA071D 010X-01	86BSA071D 030X-01	86BSA098D 010X-01	86BSA098D 030X-01	86BSA125D 010X-01	86BSA125D 030X-01
Number of poles 极数						8			
Number of phase 相数						3			
Rated voltage 额定电压	VDC					48			
Rated speed 额定转速	RPM	1000	3000	1000	3000	1000	3000	3000	3000
Continuous stall torque 持续堵转转矩	N.m	0.42	0.42	0.84	0.84	1.68	1.68	2.2	2.2
Rated torque 额定转矩	N.m	0.35	0.35	0.7	0.7	1.4	1.4	2.1	2.1
Rated power 额定功率	W	24.3	110	73	220	147	440	220	660
Peak torque 峰值扭矩	N.m	1.05	1.05	2.1	2.1	4.2	4.2	6.3	6.3
Peak current 峰值电流	A	2.86	8.6	5.7	17.1	11.4	34.3	17.2	51.5
Torque constant 转矩常数	Nm/A	0.324	0.12	0.324	0.12	0.324	0.12	0.324	0.12
Back E.M.F 反电势	V/KRPM	34.28	12.63	34.28	12.63	34.28	12.63	34.28	12.63
Rotor inertia 转动惯量	Kg.cm <sup>2</sup>	0.4	0.4	0.8	0.8	1.6	1.6	2.4	2.4
Body length 电机长度	mm	58	58	71	71	98	98	125	125
Voltage range 电压范围	VDC					12~310			
Speed Range 转速范围	RPM					1000~3000			
Weight 重量	Kg	1.5	1.5	1.9	1.9	2.6	2.6	4	4

## Dimensions in mm



# 86BSD Series (4Poles 4 极电机 )



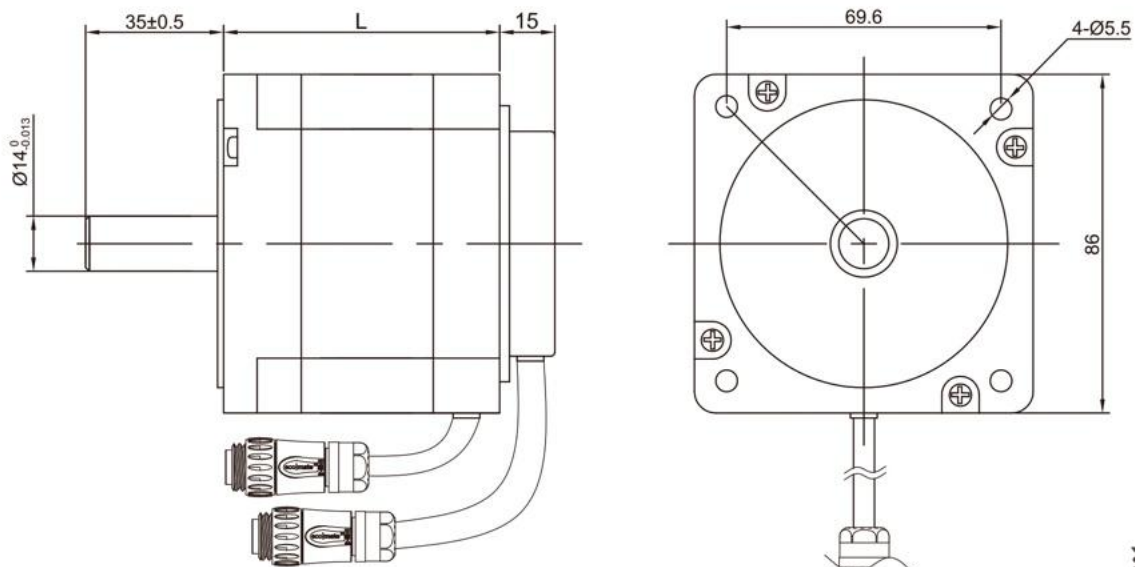
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.08mm /400g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute,5mA
Insulation resistance 绝缘电阻	100M $\Omega$ min., 500VDC

## Performance Data

Model 型号	Units	86BSD071B 020X-01	86BSD071D 040X-01	86BSD098D 020X-01	86BSD098I 060X-01	86BSD125D 020X-01	86BSD125I 060X-01
Number of poles 极数		8					
Number of phase 相数		3					
Rated voltage 额定电压	VDC	24	48	48	310	48	310
Rated speed 额定转速	RPM	2000	4000	2000	6000	2000	6000
Continuous stall torque 持续堵转转矩	N.m	0.84	0.84	1.68	1.68	2.52	2.2
Rated torque 额定转矩	N.m	0.7	0.7	1.4	1.4	2.1	2
Rated power 额定功率	W	147	293	293	879	440	1256
Peak torque 峰值扭矩	N.m	2.1	2.1	4.2	4.2	6.3	6
Peak current 峰值电流	A	25	25	24.7	10.8	36	15.4
Torque constant 转矩常数	Nm/A	0.084	0.084	0.17	0.39	0.175	0.39
Back E.M.F 反电势	V/KRPM	8.9	8.9	18	41.3	18.5	41.3
Rotor inertia 转动惯量	Kg.cm <sup>2</sup>	0.7	0.7	1.4	1.4	2.1	2.1
Body length 电机长度	mm	71	71	98	98	125	125
Voltage range 电压范围	VDC	12~310					
Speed Range 转速范围	RPM	2000~6000					
Weight 重量	Kg	1.9	1.9	2.6	2.6	4	4

## Dimensions in mm





90BSA Series (8Poles 8 极电机 )



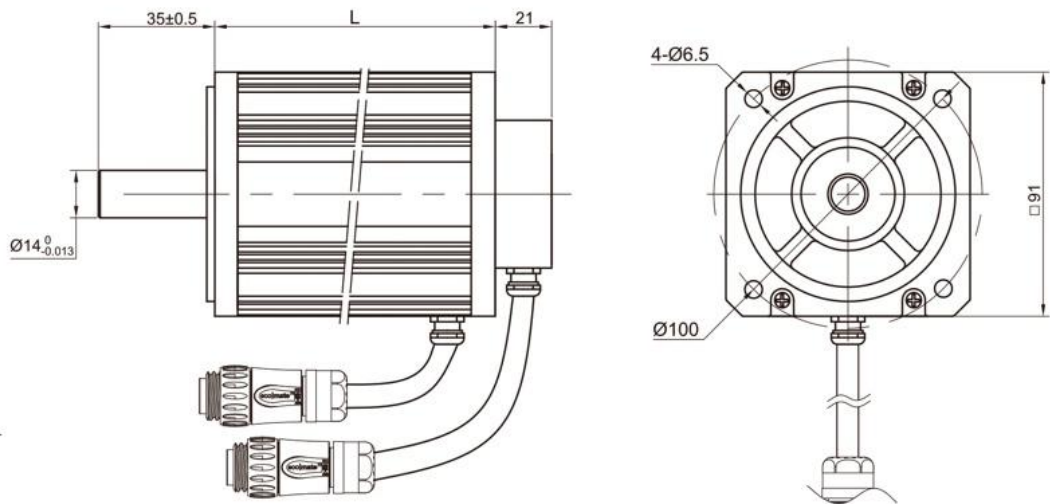
General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.08mm /450g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute,5mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

Performance Data

Model 型号	Units	90BSA068A 030X-01	90BSA075B 030X-01	90BSA088D 010X-01	90BSA088D 030X-01	90BSA108D 010X-01	90BSA108D 030X-01	90BSA136I 010X-01	90BSA136I 030X-01
Number of poles 极数		8							
Number of phase 相数		3							
Rated voltage 额定电压	VDC	12	24	48	48	48	48	310	310
Rated speed 额定转速	RPM	3000	3000	1000	3000	1000	3000	1000	3000
Continuous stall torque 持续堵转转矩	N.m	0.6	0.8	1	1	1.9	1.9	3	3
Rated torque 额定转矩	N.m	0.5	0.7	0.85	0.85	1.7	1.7	2.5	2.5
Rated power 额定功率	W	157	220	89	267	178	534	262	785
Peak torque 峰值转矩	N.m	1.5	2.1	2.55	2.55	5.1	5.1	7.5	7.5
Peak current 峰值电流	A	50.4	70.5	7.9	21.4	16.9	42.8	4	9.7
Torque constant 转矩常数	Nm/A	0.03	0.03	0.324	0.119	0.302	0.119	1.89	0.77
Back E.M.F 反电势	V/KRPM	3.15	3.15	34.3	12.6	32	12.6	200	81.5
Rotor inertia 转动惯量	Kg.cm <sup>2</sup>	0.6	0.8	1.2	1.2	1.8	1.8	2.65	2.65
Body length 电机长度	mm	68	75	88	88	108	108	136	136
Voltage range 电压范围	VDC	12~80				48~310			
Speed Range 转速范围	RPM	1000~3000							
Weight 重量	Kg	1.4	1.7	2.1	2.1	2.6	2.6	4.1	4.1

Dimensions in mm



90BSB Series (4Poles 4 极电机 )



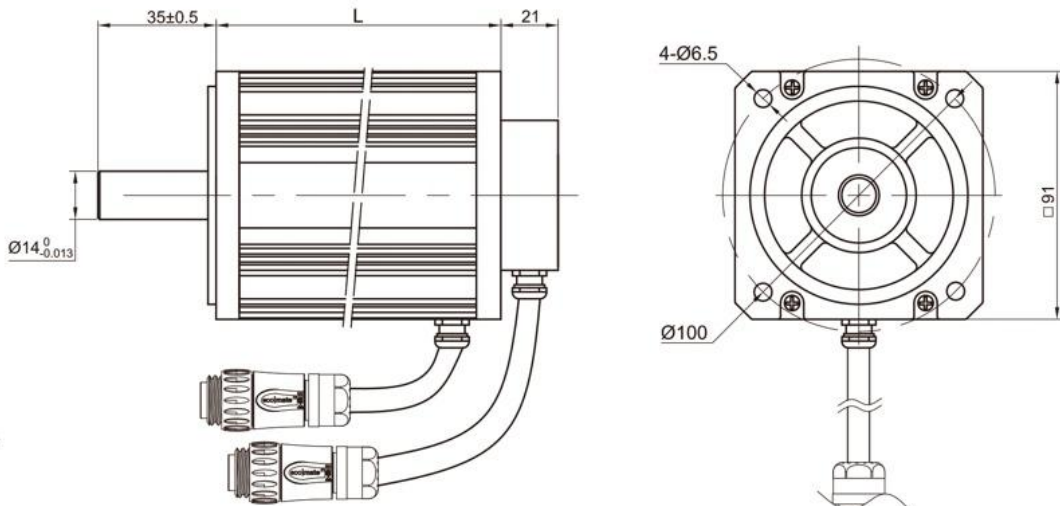
General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.08mm /450g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	1000VAC for one minute,10mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

Performance Data

Model 型号	Units	90BSB068B 040X-01	90BSB075D 040X-01	90BSB088D 020X-01	90BSB088D 060X-01	90BSB108D 020X-01	90BSB108D 040X-01	90BSB136I 020X-01	90BSB136I 060X-01
Number of poles 极数		4							
Number of phase 相数		3							
Rated voltage 额定电压	VDC	24	48	48	48	48	48	310	310
Rated speed 额定转速	RPM	4000	4000	2000	6000	2000	4000	2000	6000
Continuous stall torque 持续堵转转矩	N.m	0.6	0.8	1.2	1.2	1.7	1.7	2.2	2.2
Rated torque 额定转矩	N.m	0.5	0.7	1	1	1.6	1.6	2	2
Rated power 额定功率	W	209	293	209	628	335	628	524	1256
Peak torque 峰值转矩	N.m	1.5	2.1	3	3	4.8	4.5	7.5	6
Peak current 峰值电流	A	17.3	24.2	17.4	35	27.8	51.8	6.6	14.7
Torque constant 转矩常数	Nm/A	0.087	0.087	0.172	0.086	0.172	0.087	1.137	0.409
Back E.M.F 反电势	V/KRPM	9.2	9.2	18.24	9.06	18.24	9.2	120.3	43.3
Rotor inertia 转动惯量	kg.cm <sup>2</sup>	0.45	0.6	0.9	0.9	2.1	2.1	2.95	2.95
Body length 电机长度	mm	68	75	88	88	108	108	136	136
Voltage range 电压范围	VDC	12~80				48~310			
Speed Range 转速范围	RPM	2000~6000							
Weight 重量	Kg	1.4	1.7	2.1	2.1	2.6	2.6	4.1	4.1

Dimensions in mm





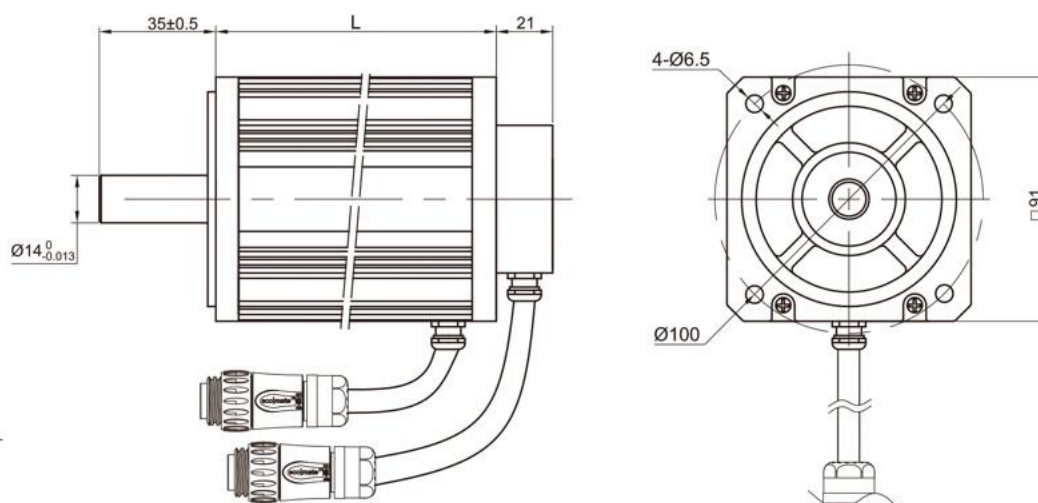
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.08mm /450g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	500VAC for one minute, 5mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

## Performance Data

Model 型号	Units	90BSA068A 030X-01	90BSA075B 030X-01	90BSA088D 010X-01	90BSA088D 030X-01	90BSA108D 010X-01	90BSA108D 030X-01	90BSA136I 010X-01	90BSA136I 030X-01
Number of poles 极数					8				
Number of phase 相数					3				
Rated voltage 额定电压	VDC	12	24	48	48	48	48	310	310
Rated speed 额定转速	RPM	3000	3000	1000	3000	1000	3000	1000	3000
Continuous stall torque 持续堵转转矩	N.m	0.6	0.8	1	1	1.9	1.9	3	3
Rated torque 额定转矩	N.m	0.5	0.7	0.85	0.85	1.7	1.7	2.5	2.5
Rated power 额定功率	W	157	220	89	267	178	534	262	785
Peak torque 峰值扭矩	N.m	1.5	2.1	2.55	2.55	5.1	5.1	7.5	7.5
Peak current 峰值电流	A	50.4	70.5	7.9	21.4	16.9	42.8	4	9.7
Torque constant 转矩常数	Nm/A	0.03	0.03	0.324	0.119	0.302	0.119	1.89	0.77
Back E.M.F 反电势	V/KRPM	3.15	3.15	34.3	12.6	32	12.6	200	81.5
Rotor inertia 转动惯量	Kg.cm <sup>2</sup>	0.6	0.8	1.2	1.2	1.8	1.8	2.65	2.65
Body length 电机长度	mm	68	75	88	88	108	108	136	136
Voltage range 电压范围	VDC		12~80				48~310		
Speed Range 转速范围	RPM				1000~3000				
Weight 重量	Kg	1.4	1.7	2.1	2.1	2.6	2.6	4.1	4.1

## Dimensions in mm





# 90BSB Series (4Poles 4 极电机)



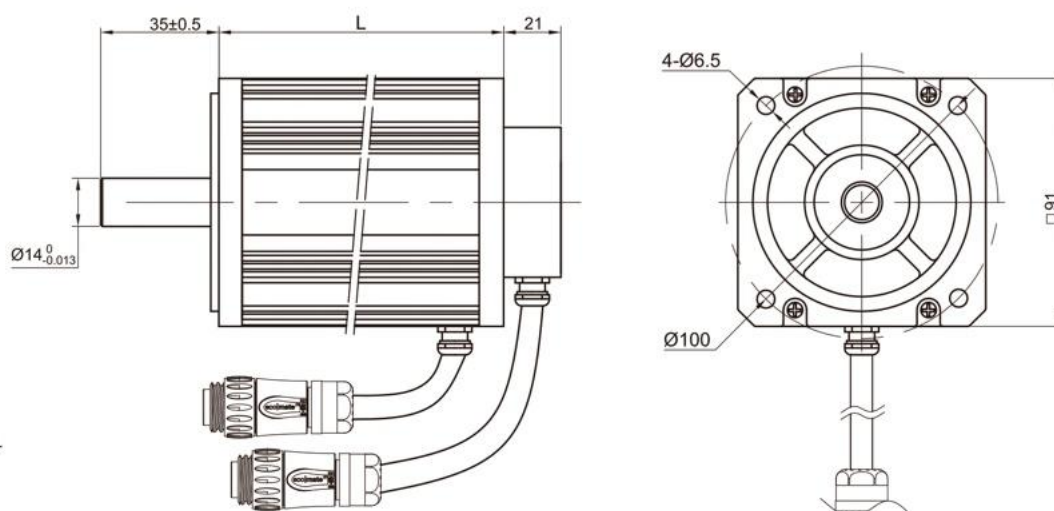
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.08mm /450g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	1000VAC for one minute,10mA
Insulation resistance 绝缘电阻	50MΩ min., 500VDC

## Performance Data

Model 型号	Units	90BSB068B 040X-01	90BSB075D 040X-01	90BSB088D 020X-01	90BSB088D 060X-01	90BSB108D 020X-01	90BSB108D 040X-01	90BSB136I 020X-01	90BSB136I 060X-01
Number of poles 极数						4			
Number of phase 相数						3			
Rated voltage 额定电压	VDC	24	48	48	48	48	48	310	310
Rated speed 额定转速	RPM	4000	4000	2000	6000	2000	4000	2000	6000
Continuous stall torque 持续堵转转矩	N.m	0.6	0.8	1.2	1.2	1.7	1.7	2.2	2.2
Rated torque 额定转矩	N.m	0.5	0.7	1	1	1.6	1.6	2	2
Rated power 额定功率	W	209	293	209	628	335	628	524	1256
Peak torque 峰值转矩	N.m	1.5	2.1	3	3	4.8	4.5	7.5	6
Peak current 峰值电流	A	17.3	24.2	17.4	35	27.8	51.8	6.6	14.7
Torque constant 转矩常数	Nm/A	0.087	0.087	0.172	0.086	0.172	0.087	1.137	0.409
Back E.M.F 反电势	V/KRPM	9.2	9.2	18.24	9.06	18.24	9.2	120.3	43.3
Rotor inertia 转动惯量	kg.cm <sup>2</sup>	0.45	0.6	0.9	0.9	2.1	2.1	2.95	2.95
Body length 电机长度	mm	68	75	88	88	108	108	136	136
Voltage range 电压范围	VDC	12~80				48~310			
Speed Range 转速范围	RPM	2000~6000							
Weight 重量	Kg	1.4	1.7	2.1	2.1	2.6	2.6	4.1	4.1

## Dimensions in mm





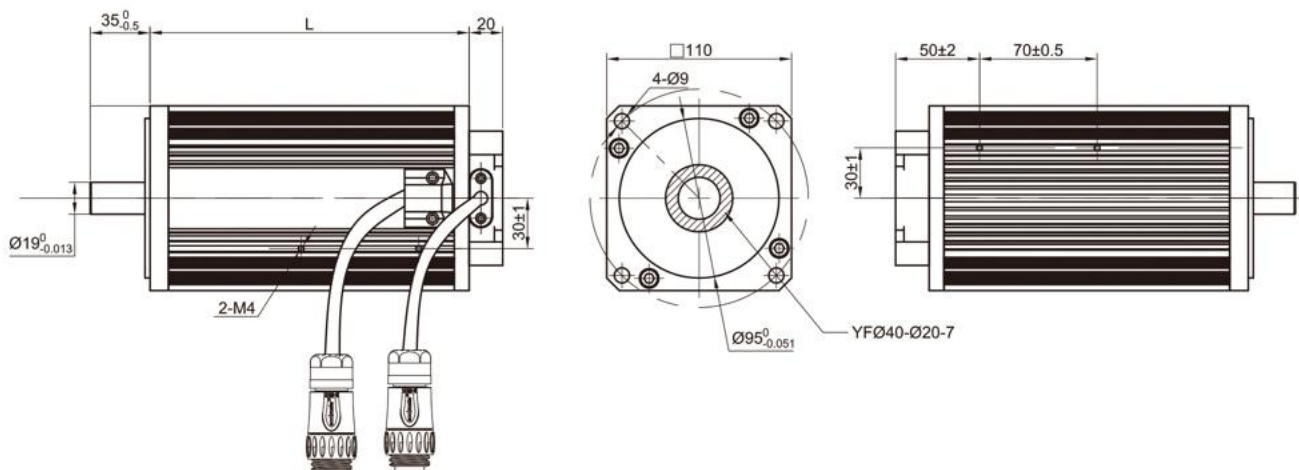
## General Specification

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm /460g
End play 轴向间隙	0.08mm /450g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	1800VAC for one minute, 20mA
Insulation resistance 绝缘电阻	50M $\Omega$ min., 1000VDC

## Performance Data

Model 型号	Units	110BSA125I030X-01	110BSA155I030X-01	110BSA185I030X-01	110BSA210I030X-01
Number of poles 极数				8	
Number of phase 相数				3	
Rated voltage 额定电压	VDC	310	310	310	310
Rated speed 额定转速	RPM	3000	3000	3000	3000
Continuous stall torque 持续堵转转矩	N.m	2.2	4.8	7.164	8.592
Rated torque 额定转矩	N.m	2	4	6	7.16
Rated power 额定功率	W	625	1250	1885	2249
Peak torque 峰值转矩	N.m	6	12	17.91	21.48
Peak current 峰值电流	A	8	14.7	26	31
Torque constant 转矩常数	Nm/A	0.77	0.77	0.689	0.689
Back E.M.F 反电势	V/KRPM	54.8	54.8	54.8	54.8
Rotor inertia 转动惯量	g.cm <sup>2</sup>	1.9	3.3	5	5.9
Body length 电机长度	mm	125	155	185	210
Voltage range 电压范围	VDC			48~310	
Speed Range 转速范围	RPM			1000~3000	
Weight 重量	Kg	4.8	5.2	5.5	6

## Dimensions in mm





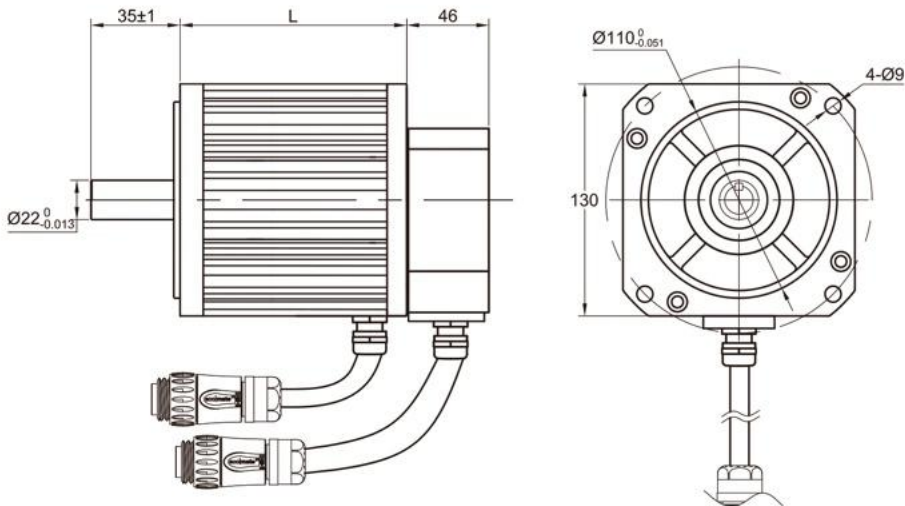
**General Specification**

Winding type 绕组连续方式	YWE
Hall effect angle 霍尔分布角度	120 Deg. Electrical angle
Radial play 径向间隙	0.02mm @460g
End play 轴向间隙	0.08mm @450g
Max. radial force 径向最大承受力	220N(20mm from the flange)
Max. axial force 轴向最大承受力	60N
Insulation class 绝缘等级	B
Dielectric strength 介电强度	1800VAC for one minute,20mA
Insulation resistance 绝缘电阻	50MΩ min., 1000VDC

**Performance Data**

Model 型号	Units	130BSA120D030X-01	130BSA155I030X-01
Number of poles 极数			4
Number of phase 相数			3
Rated voltage 额定电压	VDC	48	310
Rated speed 额定转速	RPM	3000	3000
Continuous stall torque 持续堵转转矩	N.m	2.8	5.5
Rated torque 额定转矩	N.m	2.5	5
Rated power 额定功率	W	785	1570
Peak torque 峰值转矩	N.m	7.5	15
Peak current 峰值电流	A	70	21.7
Torque constant 转矩常数	Nm/A	0.012	0.077
Back E.M.F 反电势	V/KRPM	8.93	8.93
Rotor inertia 转动惯量	g.cm <sup>2</sup>	2.4	4.8
Body length 电机长度	mm	120	155
Voltage range 电压范围	VDC		48~310
Speed Range 转速范围	RPM		1000~3000
Weight 重量	Kg	5	7

**Dimensions in mm**



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