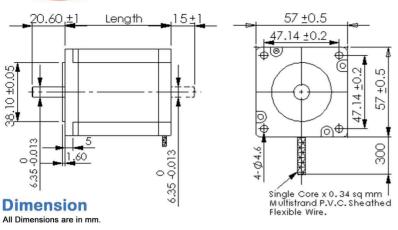


### 1.8° HIGH TORQUE HYBRID STEPPER MOTOR

**■ SIZE NEMA 23 (57MM)** 





# **Motor Specifications**

No. of										-			
Single Shaft   Double Shaft   V   A   Ω   mH   Nm   Kg-cm   g-cm²   Kg   Kg-cm   mm	Model No			Current							Weight		Length
578H41 - 1006A         578H41 - 1006B         5.7         1         5.7         3.9         0.39         3.9         6         1         578H41 - 2006B         2.8         2         1.4         1.4         0.39         3.9         6         120         0.45         0.21         41         41         0.39         3.9         6         120         0.45         0.21         41         41         0.39         3.9         6         120         0.45         0.21         41         41         0.39         3.9         6         120         0.45         0.21         41         41         0.39         3.9         6         120         0.45         0.21         41         0.66         0.39         3.9         6         0.21         41         0.66         0.39         3.9         6         0.45         0.21         41         0.66         0.77         0.72         7.2         6         0.75         0.75         0.72         7.2         6         0.75         0.75         0.72         7.2         6         0.75         0.75         0.72         7.2         6         0.75         0.75         1.1         0.9         9         6         0.75         0.75         1				/Phase	/Phase	/Phase	Torque	Torque	Leads	Inertia	110.9	Torque	
57SH41 - 2006A         57SH41 - 2006B         2.8         2         1.4         1.4         0.39         3.9         6         120         0.45         0.21         41           57SH41 - 3006A         57SH41 - 2804B         1.9         3         0.63         0.6         0.39         3.9         6         120         0.45         0.21         41           57SH51 - 2804A         57SH51 - 2804B         2         2.8         0.7         1.4         0.55         5.5         4         4         57SH51 - 1006A         57SH51 - 1006B         6.6         1         6.6         7.7         0.72         7.2         6         7.2         6         57SH51 - 2006A         57SH51 - 2006B         3.3         2         1.65         2.2         0.72         7.2         6         275         0.65         0.36         51         57SH51 - 2006A         57SH51 - 2804B         2.3         2.8         0.83         1.8         1.01         10.1         4         4         57SH56 - 1006B         7.4         1         7.4         10         0.9         9         6         300         0.7         0.4         56         57SH56 - 2006A         57SH56 - 2006B         3.6         2         1.8         2.5         <	Single Shaft	Double Shaft	V	Α	Ω	mH	Nm	Kg-cm		g-cm <sup>2</sup>	Kg	Kg-cm	mm
57SH41 - 3006A         57SH41 - 3006B         1.9         3         0.63         0.6         0.39         3.9         6         120         0.45         0.21         41           57SH41 - 2804A         57SH41 - 2804B         2         2.8         0.7         1.4         0.55         5.5         4         57SH51 - 1006A         57SH51 - 1006B         6.6         1         6.6         7.7         0.72         7.2         6         7.2	57SH41 - 1006A	57SH41 - 1006B	5.7	1	5.7	3.9	0.39	3.9	6		0.45	0.21	41
57SH41 - 3006A         57SH41 - 3006B         1.9         3         0.63         0.6         0.39         3.9         6           57SH41 - 2804A         57SH41 - 2804B         2         2.8         0.7         1.4         0.55         5.5         4           57SH51 - 1006A         57SH51 - 1006B         6.6         1         6.6         7.7         0.72         7.2         6           57SH51 - 2006A         57SH51 - 2006B         3.3         2         1.65         2.2         0.72         7.2         6           57SH51 - 3006A         57SH51 - 2804B         2.3         2.8         0.83         1.8         1.01         10.1         4           57SH56 - 1006A         57SH56 - 1006B         7.4         1         7.4         10         0.9         9         6           57SH56 - 2006A         57SH56 - 2006B         3.6         2         1.8         2.5         0.9         9         6           57SH56 - 2804A         57SH56 - 2804B         2.5         2.8         0.9         2.5         1.26         4           57SH76 - 1006A         57SH76 - 1006B         8.6         1         8.6         14         1.35         13.5         6	57SH41 - 2006A	57SH41 - 2006B	2.8	2	1.4	1.4	0.39	3.9	6				
57SH51 - 1006A         57SH51 - 1006B         6.6         1         6.6         7.7         0.72         7.2         6           57SH51 - 2006A         57SH51 - 2006B         3.3         2         1.65         2.2         0.72         7.2         6           57SH51 - 3006A         57SH51 - 3006B         2.2         3         0.74         0.9         0.72         7.2         6           57SH51 - 2804A         57SH51 - 2804B         2.3         2.8         0.83         1.8         1.01         10.1         4           57SH56 - 1006A         57SH56 - 1006B         7.4         1         7.4         10         0.9         9         6           57SH56 - 2006A         57SH56 - 2006B         3.6         2         1.8         2.5         0.9         9         6           57SH56 - 3006A         57SH56 - 3006B         2.3         3         0.75         1.1         0.9         9         6           57SH76 - 2804A         57SH76 - 1006B         8.6         1         8.6         14         1.35         13.5         6           57SH76 - 2006A         57SH76 - 2006B         4.5         2         2.25         3.6         1.35         13.5         6	57SH41 - 3006A	57SH41 - 3006B	1.9	3	0.63	0.6	0.39	3.9	6	120			
57SH51 - 2006A         57SH51 - 2006B         3.3         2         1.65         2.2         0.72         7.2         6         275         0.65         0.36         51           57SH51 - 3006A         57SH51 - 2804B         2.3         2.8         0.83         1.8         1.01         10.1         4         4         57SH56 - 1006B         7.4         1         7.4         10         0.9         9         6         6         6         57SH56 - 2006B         3.6         2         1.8         2.5         0.9         9         6         300         0.7         0.4         56         57SH56 - 2006B         3.6         2         1.8         2.5         0.9         9         6         300         0.7         0.4         56         57SH56 - 2006B         3.6         2         1.8         2.5         0.9         9         6         300         0.7         0.4         56         57SH56 - 3006B         2.3         3         0.75         1.1         0.9         9         6         300         0.7         0.4         56         57SH56 - 2804B         2.5         2.8         0.9         2.5         1.26         4         4         57SH76 - 2006B         4.5         2	57SH41 - 2804A	57SH41 - 2804B	2	2.8	0.7	1.4	0.55	5.5	4				
57SH51 - 3006A         57SH51 - 3006B         2.2         3         0.74         0.9         0.72         7.2         6         275         0.65         0.36         51           57SH51 - 2804A         57SH51 - 2804B         2.3         2.8         0.83         1.8         1.01         10.1         4         4         57SH56 - 1006B         7.4         1         7.4         10         0.9         9         6         6         6         57SH56 - 2006B         3.6         2         1.8         2.5         0.9         9         6         300         0.7         0.4         56         57SH56 - 3006B         2.3         3         0.75         1.1         0.9         9         6         300         0.7         0.4         56         57SH56 - 2804B         2.5         2.8         0.9         2.5         1.26         12.6         4         4         57SH76 - 1006B         8.6         1         8.6         14         1.35         13.5         6         480         1         0.68         76           57SH76 - 2006A         57SH76 - 3006B         3         3         1         1.6         1.35         13.5         6         480         1         0.68         76 </td <td>57SH51 - 1006A</td> <td>57SH51 - 1006B</td> <td>6.6</td> <td>1</td> <td>6.6</td> <td>7.7</td> <td>0.72</td> <td>7.2</td> <td>6</td> <td></td> <td rowspan="4">0.65</td> <td rowspan="4">0.36</td> <td rowspan="4">51</td>	57SH51 - 1006A	57SH51 - 1006B	6.6	1	6.6	7.7	0.72	7.2	6		0.65	0.36	51
578H51 - 3006A       578H51 - 3006B       2.2       3       0.74       0.9       0.72       7.2       6         578H51 - 2804A       578H51 - 2804B       2.3       2.8       0.83       1.8       1.01       10.1       4         578H56 - 1006A       578H56 - 1006B       7.4       1       7.4       10       0.9       9       6         578H56 - 2006A       578H56 - 2006B       3.6       2       1.8       2.5       0.9       9       6         578H56 - 3006A       578H56 - 3006B       2.3       3       0.75       1.1       0.9       9       6         578H56 - 2804A       578H56 - 2804B       2.5       2.8       0.9       2.5       1.26       12.6       4         578H76 - 1006A       578H76 - 1006B       8.6       1       8.6       14       1.35       13.5       6         578H76 - 2006A       578H76 - 2006B       4.5       2       2.25       3.6       1.35       13.5       6         578H76 - 3006A       578H76 - 3006B       3       3       1       1.6       1.35       13.5       6         578H76 - 2804A       578H76 - 2804B       2.5       2.8       1.13       3.6 <td< td=""><td>57SH51 - 2006A</td><td>57SH51 - 2006B</td><td>3.3</td><td>2</td><td>1.65</td><td>2.2</td><td>0.72</td><td>7.2</td><td>6</td><td>275</td></td<>	57SH51 - 2006A	57SH51 - 2006B	3.3	2	1.65	2.2	0.72	7.2	6	275			
578H56 - 1006A         578H56 - 1006B         7.4         1         7.4         10         0.9         9         6           578H56 - 2006A         578H56 - 2006B         3.6         2         1.8         2.5         0.9         9         6           578H56 - 3006A         578H56 - 3006B         2.3         3         0.75         1.1         0.9         9         6           578H56 - 2804A         578H56 - 2804B         2.5         2.8         0.9         2.5         1.26         12.6         4           578H76 - 1006A         578H76 - 1006B         8.6         1         8.6         14         1.35         13.5         6           578H76 - 2006A         578H76 - 2006B         4.5         2         2.25         3.6         1.35         13.5         6           578H76 - 3006A         578H76 - 3006B         3         3         1         1.6         1.35         13.5         6           578H76 - 2804A         578H76 - 2804B         2.5         2.8         1.13         3.6         1.89         18.9         4           578H76 - 2804A         578H76 - 2804B         2.5         2.8         1.13         3.6         1.89         18.9         4	57SH51 - 3006A	57SH51 - 3006B	2.2	3	0.74	0.9	0.72	7.2	6	210			
57SH56 - 2006A         57SH56 - 2006B         3.6         2         1.8         2.5         0.9         9         6         300         0.7         0.4         56           57SH56 - 3006A         57SH56 - 3006B         2.3         3         0.75         1.1         0.9         9         6         300         0.7         0.4         56           57SH56 - 2804A         57SH56 - 2804B         2.5         2.8         0.9         2.5         1.26         12.6         4           57SH76 - 1006A         57SH76 - 1006B         8.6         1         8.6         14         1.35         13.5         6           57SH76 - 2006A         57SH76 - 2006B         4.5         2         2.25         3.6         1.35         13.5         6           57SH76 - 3006A         57SH76 - 3006B         3         3         1         1.6         1.35         13.5         6           57SH76 - 2804A         57SH76 - 2804B         2.5         2.8         1.13         3.6         1.89         18.9         4           57SH81 - 2804A         57SH81 - 2804B         3.6         2.8         1.2         4.9         2.2         22         4         500         1.2         0.72	57SH51 - 2804A	57SH51 - 2804B	2.3	2.8	0.83	1.8	1.01	10.1	4	_			
57SH56 - 3006A         57SH56 - 3006B         2.3         3         0.75         1.1         0.9         9         6           57SH56 - 2804A         57SH56 - 2804B         2.5         2.8         0.9         2.5         1.26         12.6         4           57SH76 - 1006A         57SH76 - 1006B         8.6         1         8.6         14         1.35         13.5         6           57SH76 - 2006A         57SH76 - 2006B         4.5         2         2.25         3.6         1.35         13.5         6           57SH76 - 3006A         57SH76 - 3006B         3         3         1         1.6         1.35         13.5         6           57SH76 - 2804A         57SH76 - 2804B         2.5         2.8         1.13         3.6         1.89         18.9         4           57SH81 - 2804A         57SH81 - 2804B         3.6         2.8         1.2         4.9         2.2         22         4         500         1.2         0.72         81	57SH56 - 1006A	57SH56 - 1006B	7.4	1	7.4	10	0.9	9	6		0.7	0.4	56
578H56 - 3006A       578H56 - 3006B       2.3       3       0.75       1.1       0.9       9       6         578H56 - 2804A       578H56 - 2804B       2.5       2.8       0.9       2.5       1.26       12.6       4         578H76 - 1006A       578H76 - 1006B       8.6       1       8.6       14       1.35       13.5       6         578H76 - 2006A       578H76 - 2006B       4.5       2       2.25       3.6       1.35       13.5       6         578H76 - 3006A       578H76 - 3006B       3       3       1       1.6       1.35       13.5       6         578H76 - 2804A       578H76 - 2804B       2.5       2.8       1.13       3.6       1.89       18.9       4         578H81 - 2804A       578H81 - 2804B       3.6       2.8       1.2       4.9       2.2       22       4       500       1.2       0.72       81	57SH56 - 2006A	57SH56 - 2006B	3.6	2	1.8	2.5	0.9	9	6	200			
57SH76 - 1006A         57SH76 - 1006B         8.6         1         8.6         14         1.35         13.5         6           57SH76 - 2006A         57SH76 - 2006B         4.5         2         2.25         3.6         1.35         13.5         6           57SH76 - 3006A         57SH76 - 3006B         3         3         1         1.6         1.35         13.5         6           57SH76 - 2804A         57SH76 - 2804B         2.5         2.8         1.13         3.6         1.89         18.9         4           57SH81 - 2804A         57SH81 - 2804B         3.6         2.8         1.2         4.9         2.2         22         4         500         1.2         0.72         81	57SH56 - 3006A	57SH56 - 3006B	2.3	3	0.75	1.1	0.9	9	6	300			
57SH76 - 2006A         57SH76 - 2006B         4.5         2         2.25         3.6         1.35         13.5         6         480         1         0.68         76           57SH76 - 3006A         57SH76 - 3006B         3         3         1         1.6         1.35         13.5         6           57SH76 - 2804A         57SH76 - 2804B         2.5         2.8         1.13         3.6         1.89         18.9         4           57SH81 - 2804A         57SH81 - 2804B         3.6         2.8         1.2         4.9         2.2         22         4         500         1.2         0.72         81	57SH56 - 2804A	57SH56 - 2804B	2.5	2.8	0.9	2.5	1.26	12.6	4				
57SH76 - 3006A         57SH76 - 3006B         3         3         1         1.6         1.35         13.5         6           57SH76 - 2804A         57SH76 - 2804B         2.5         2.8         1.13         3.6         1.89         18.9         4           57SH81 - 2804A         57SH81 - 2804B         3.6         2.8         1.2         4.9         2.2         22         4         500         1.2         0.72         81	57SH76 - 1006A	57SH76 - 1006B	8.6	1	8.6	14	1.35	13.5	6		1	0.68	76
57SH76 - 3006A     57SH76 - 3006B     3     3     1     1.6     1.35     13.5     6       57SH76 - 2804A     57SH76 - 2804B     2.5     2.8     1.13     3.6     1.89     18.9     4       57SH81 - 2804A     57SH81 - 2804B     3.6     2.8     1.2     4.9     2.2     22     4     500     1.2     0.72     81	57SH76 - 2006A	57SH76 - 2006B	4.5	2	2.25	3.6	1.35	13.5	6	400			
57SH81 - 2804A 57SH81 - 2804B 3.6 2.8 1.2 4.9 2.2 22 4 500 1.2 0.72 81	57SH76 - 3006A	57SH76 - 3006B	3	3	1	1.6	1.35	13.5	6	400			
100 1 100 1	57SH76 - 2804A	57SH76 - 2804B	2.5	2.8	1.13	3.6	1.89	18.9	4				
57SH100 - 3004A 57SH100 - 3004B 3.9 3 1.3 4.5 2.5 25 4 600 1.5 0.8 100	57SH81 - 2804A	57SH81 - 2804B	3.6	2.8	1.2	4.9	2.2	22	4	500	1.2	0.72	81
	57SH100 - 3004A	57SH100 - 3004B	3.9	3	1.3	4.5	2.5	25	4	600	1.5	0.8	100

### **General Specifications**

Item	Specifications
Step Angle	1.8 <sup>0</sup>
Step Angle Accuracy	±5% (full Step , no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80 <sup>0</sup> Max.(rated current,2 phase on)
Ambient Temperature	-20 <sup>0</sup> C~+50 <sup>0</sup> C
Insulation Resistance	100M Ω Min. ,500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max.(450 g-load)
Shaft Axial Play	0.08Max.(450 g-load)
Max.radial force	75 N (20mm from the flange)
Max.axial force	15N

## Connection

Lead No.	Color	Gauge	Function
1	Black		Phase A+
2	Yellow	Single Core X 0.34	Common
3	Green	Sq.mm Multistrand	Phase A -
4	Red	PVC Sheathed	Phase B+
5	White	flexible wire.	Common
6	Blue		Phase B -
Black		Black	
Green	$\mathcal{N}$	Yellow Green	M
4 LEAD	Red	6 LEAD	White Blue

### **Bholanath Precision Engineering Pvt.Ltd.**

#### **CONTACT US**

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