

Model: NEMA11 Planetary Geared Stepper Motor - JK28HSP (1.8 degree)

General Specification:

Step Accuracy ----- $\pm 5\%$
 Resistance Accuracy ----- $\pm 10\%$
 Inductance Accuracy ----- $\pm 20\%$
 Temperature Rise ----- 80°C MAX.
 Ambient Temperature Range ----- $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$
 Storage Temperature Range ----- $-30^{\circ}\text{C} \sim +60^{\circ}\text{C}$
 Insulation Resistance ----- $100\text{M } \Omega \text{ MIN. } 500\text{V DC}$
 Dielectric Strength ----- $500\text{V AC } 1\text{min}$
 Radial Play ----- $0.02\text{mm MAX. (450g Load)}$
 End Play ----- $0.08\text{mm MAX. (450g Load)}$
 Max. radial force ----- 28N
 Max. axial force ----- 10N

Housing Material: Metal

Backlash at No-Load: $\leq 1^{\circ}$

Bearing at Output: Ball or Sleeve

Permissible Overhung Load: $\leq 2.5\text{kg}$

Permissible Thrust Load: $\leq 0.5\text{kg}$

Max. Radial Play: $\leq 0.05\text{mm}$

Max. Thrust Play: $\leq 0.3\text{mm}$

Gear Box Data (28PA):

Reduction Ratio (X:1)	4	5	13	19	27	51	71	100	139
Exact Reduction Ratio (X:1)	$3\frac{12}{17}$	$5\frac{2}{11}$	$13\frac{212}{289}$	$19\frac{38}{187}$	$26\frac{103}{121}$	$51\frac{43}{49}$	$71\frac{2}{25}$	$99\frac{1044}{2057}$	$139\frac{184}{1221}$
Number of Gear Trains (#)	1	1	2	2	2	3	3	3	3
Max. Permissible Torque (kg.cm)	20	20	30	30	30	40	40	40	40
Moment Permissible Torque (kg.cm)	40	40	50	50	50	60	60	60	60
Gear Box Length (mm)	28	28	36	36	36	44	44	44	44

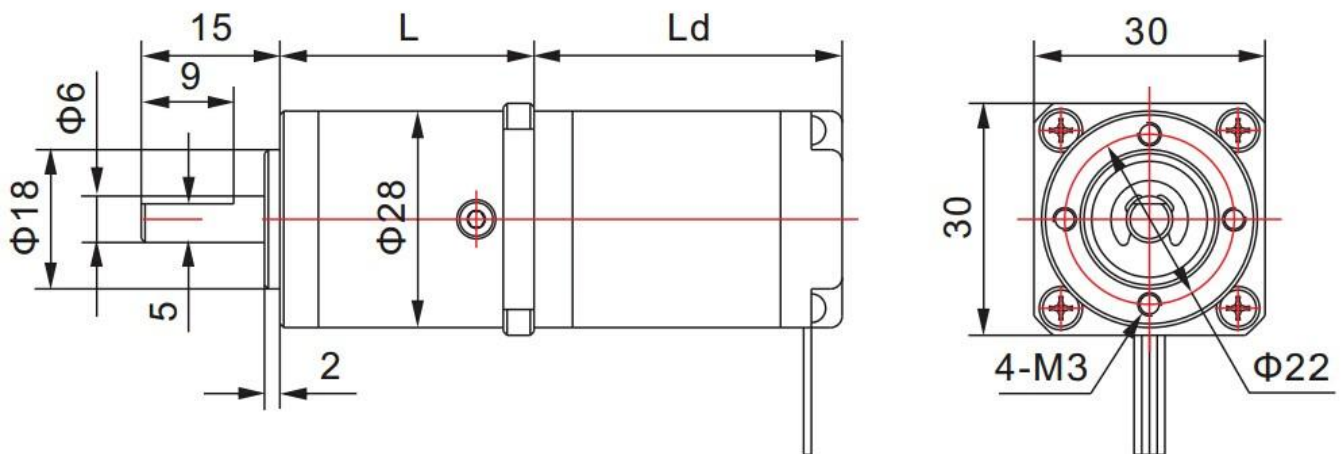
Electrical Specification:

Model No.	Step Angle	Motor Length	Current /Phase	Resistance /Phase	Inductance /Phase	Holding Torque	Lead wires	Rotor Inertia	Motor Weight
	(°)	(L)mm	A	Ω	mH	g.cm	No.	$g.cm^2$	Kg
JK28HSP32-0956	1.8	32	0.95	2.8	0.8	430	6	9	0.11
JK28HSP32-0674	1.8	32	0.67	5.6	3.4	600	4	9	0.11
JK28HSP45-0956	1.8	45	0.95	3.4	1.2	750	6	12	0.14
JK28HSP45-0674	1.8	45	0.67	6.8	4.9	950	4	12	0.14
JK28HSP51-0956	1.8	51	0.95	4.6	1.8	900	6	18	0.2
JK28HSP51-0674	1.8	51	0.67	9.2	7.2	1200	4	18	0.2

***Note:** We can also manufacture products according to customer's requirements.

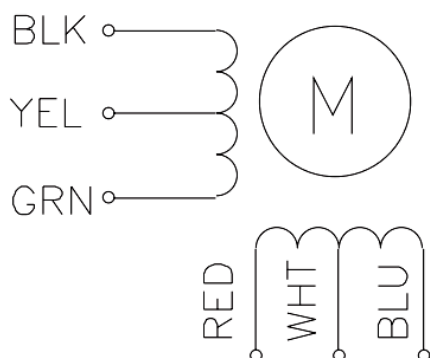
Dimensions:

(Unit=mm)

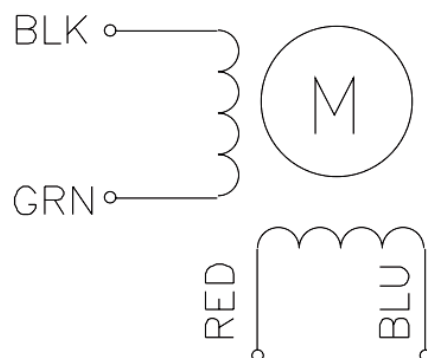


Wiring Diagram:

6 LEADS



4 LEADS



Matched Drivers:

2 Phase Stepper Motor Driver Model: JK0220