

## 1.8° Size 20mm High-torque Hybrid Stepper Motor

Item	Specifications
Step Angle	1.8°
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10% (@20°C)
Inductance Accuracy	±20% (1kHz)
Ambient Temperature	-20° C to +50° C
Insulation Class	Class B
Insulation Resistance	100MΩMin. ,500VDC
Dielectric Strength	600VAC for 1 sec.
Shaft Radial Play	0.02mmMax. (450 g-load)
Shaft Axial Play	0.08mmMax. (450 g-load)
Max. radial force	10N (20mm from the flange)
Max. axial force	4N

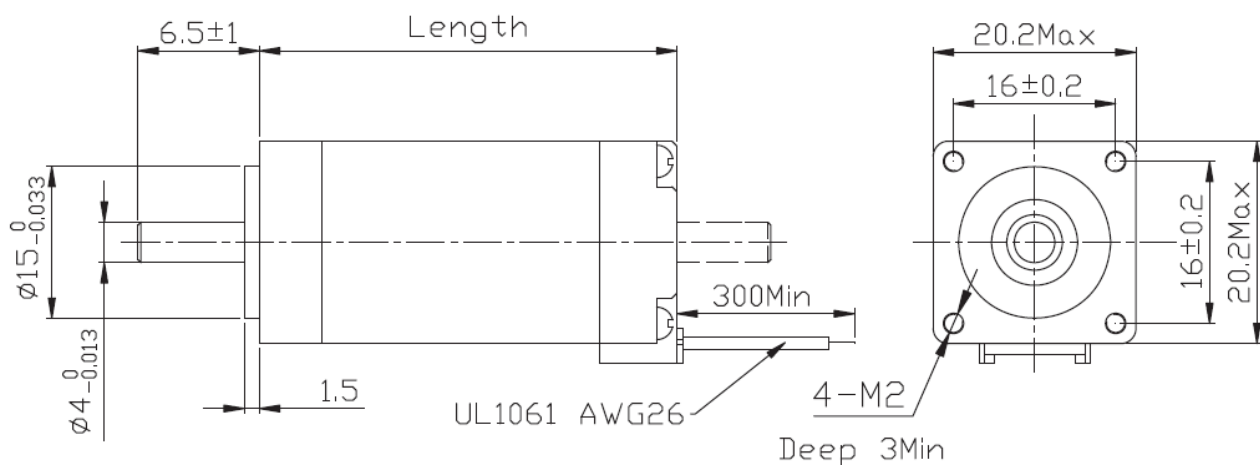


*This motor can be customised upon request*

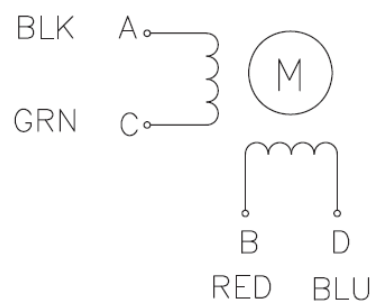
### ● Motor Specifications

Model No. (Single Shaft)	Rated Voltage V	Current /Phase A	Resistance /Phase Ω	Inductance /Phase mH	Holding Torque g.cm	# of Leads	Rotor Inertia g-cm <sup>2</sup>	Weight kg	Length mm
FL20STH30-0604A	3.9	0.6	6.5	1.7	180	4	2.0	0.06	30
FL20STH33-0604A	3.9	0.6	6.5	1.7	180	4	2.0	0.06	33
FL20STH42-0804A	4.32	0.8	5.4	1.5	300	4	3.6	0.08	42

### ● Dimension

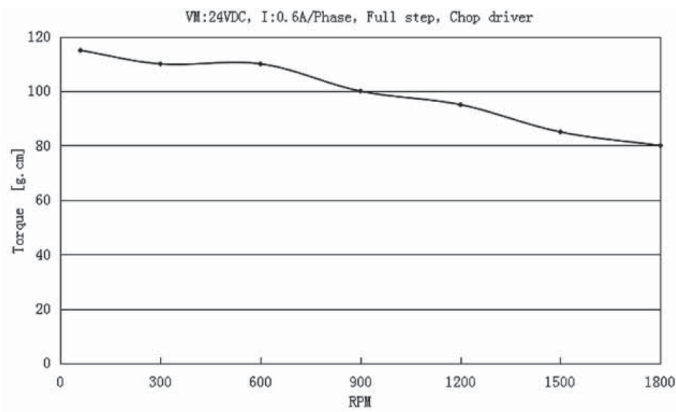


### ● Connection Diagram

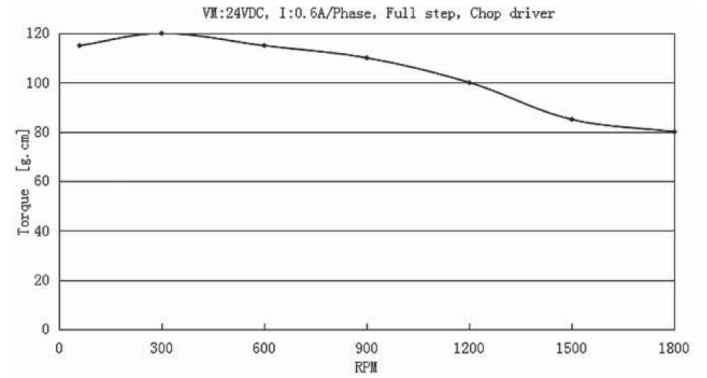


● Pull-out Curve

**FL20STH30-0604A**



**FL20STH33-0604A**



**FL20STH42-0804A**

