

1.8° Size 57mm High Torque Hybrid Stepping Motor

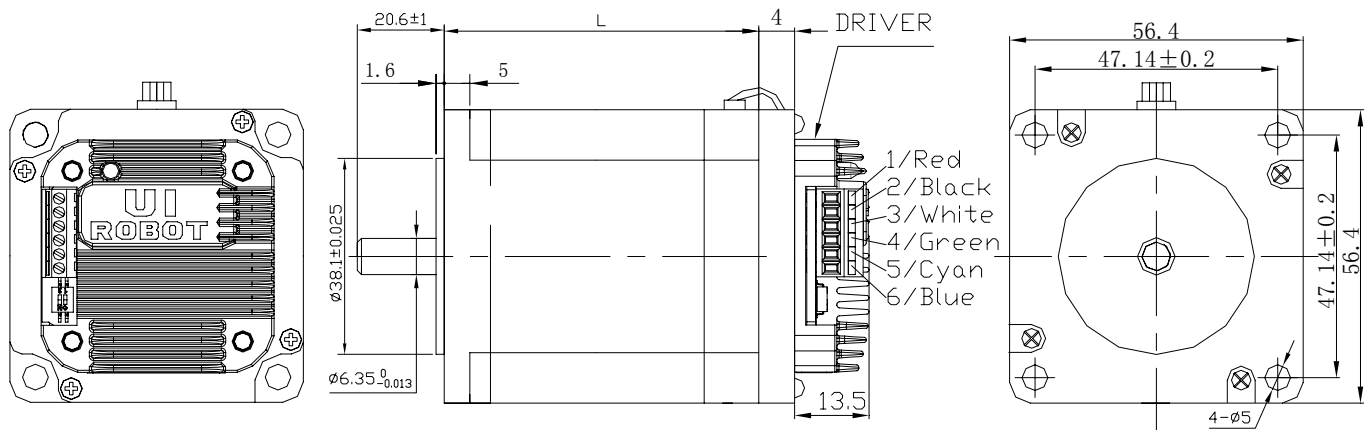
Item	Specifications
Step Angle	1.8°
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10% (20°C)
Inductance Accuracy	±20% (1KHz)
Temperature Rise	80° C Max. (rated current, 2 phase on)
Ambient Temperature	-20° C ~ +50° C
Insulation Resistance	100M Ω Min. , 500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max. (450 g-load)
Shaft Axial Play	0.08Max. (450 g-load)
Max. radial force	75N (20mm from the flange)
Max. axial force	15N
Rotation	CW (See from Front Flange)



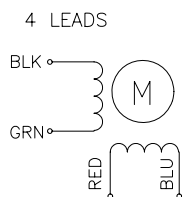
● Size 57mm High Torque Hybrid Stepping Motor Specifications

Model No.	Rated Voltage	Current /Phase	Resistance /Phase	Inductance /Phase	Holding Torque	# of Leads	Rotor Inertia	Weight	Detent Torque	Length
Single Shaft	V	A	Ω	mH	Kg-cm		g-cm ²	kg	kg-cm	mm
FL57STH51-2804A-IE4	2.3	2.8	0.83	2.3	10.1	4	275	0.65	0.36	51
FL57STH56-2804A-IE4	2.5	2.8	0.9	2.5	12.6	4	300	0.7	0.40	56
FL57STH76-2804A-IE4	3.2	2.8	1.13	3.6	18.9	4	480	1.0	0.68	76

Dimension



Wiring Diagram

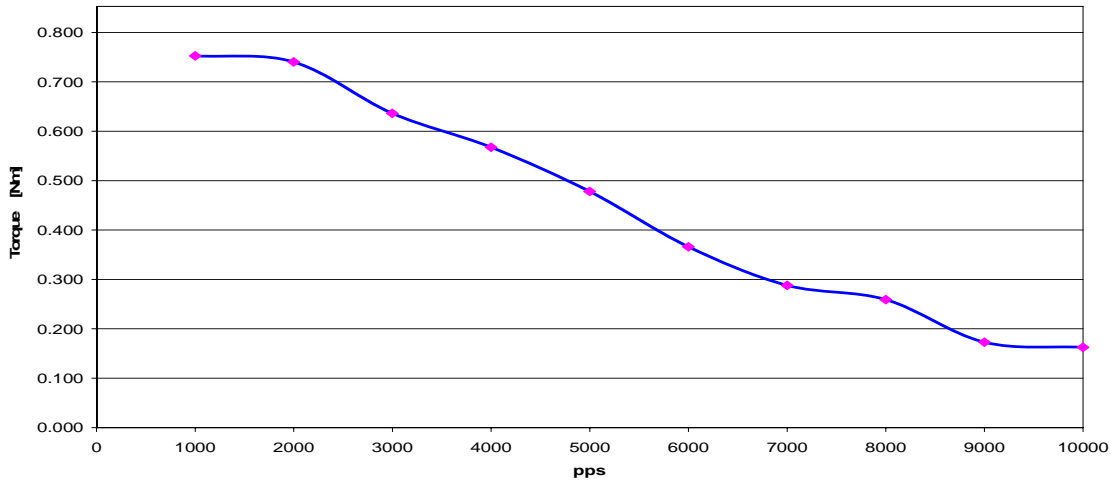


Description of Screw Terminals

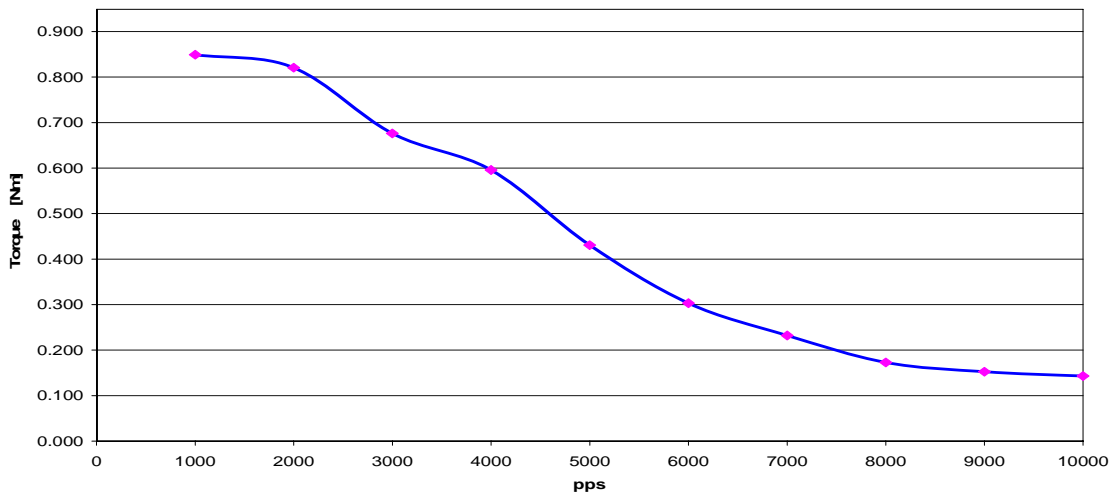
Terminal No. / Color	Description		Input			
			MIN	NOM	MAX	UNIT
1 / Red	V+	Supply voltage	UIM24004-8	12	40	VDC
			UIM24002	10	35	
2 / Black	GND	Supply voltage ground		0		VDC
3 / White	Vcc	Opto-coupler common anode		5 ⁽¹⁾		VDC
4 / Green	DIR	Direction input ⁽²⁾		GND	Vcc	VDC
5 / Cyan	STEP	Stepping pulse input ⁽³⁾		GND	Vcc	VDC
6 / Blue	EN	Enable the controller ⁽⁴⁾		GND	Vcc	VDC

● Pull out Torque Curve

FL57STH51-2804A-IE4
VM: 30V; 2.8A /Phase () Driver: UIM24004, half step, bipolar



FL57STH56-2804A-IE4
VM: 30V; 2.8A /Phase () Driver: UIM24004, half step, bipolar



FL57STH76-2804A-IE4
VM: 30V; 2.8A /Phase () Driver: UIM24004, half step, bipolar