

# 1.8° Size 86mm High Torque Hybrid Stepping Motor

## ● General Specification for High Torque Hybrid Stepping Motor

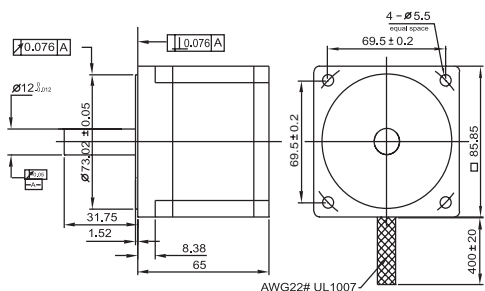
Item	Specifications
Step Angle	1.8°
Step Angle Accuracy	± 5% (full step, no load)
Resistance Accuracy	± 10%
Inductance Accuracy	± 20%
Temperature Rise	80°C Max. (rated current, 2 phase on)
Ambient Temperature	-20°C ~ +50°C
Insulation Resistance	100M Ω Min., 500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02 Max. (450 g-load)
Shaft Axial Play	0.08 Max. (450 g-load)
Max. radial force	220N (20mm from the flange)
Max. axial force	60N
Rotation	CW ( See from Front Flange)

## ● Size 86mm High Torque Hybrid Stepping Motor Specifications

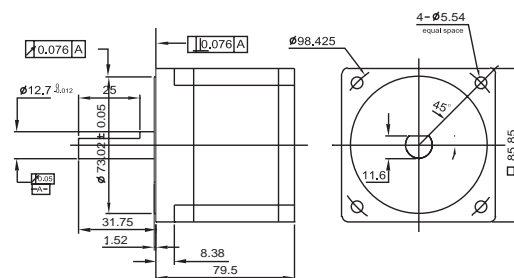
Model No.		Rated Voltage	Current /Phase	Resistance /Phase	Inductance /Phase	Holding Torque	# of Leads	Rotor Inertia	Weight	Detent Torque	Length
Single Shaft	Double Shaft	V	A	Ω	mH	Kg.cm		g-cm <sup>2</sup>	kg	kg-cm	mm
FL86STH65-5904A	FL86STH65-5904B	1.652	5.9	0.28	1.7	34	4 parallel	1000	1.7	0.8	65
FL86STH65-3004A	FL86STH65-3004B	4.2	3	1.14	6.8	34	4 series				
FL86STH65-4206A	FL86STH65-4206B	2.394	4.2	0.57	1.7	26	6 unipolar				
FL86STH80-5504A	FL86STH80-5504B	2.3	5.5	0.42	3.5	46	4	1400	2.3	1.2	80
FL86STH118-6004A	FL86STH118-6004B	2.7	6	0.45	5.1	87	4	2700	3.8	2.4	118
FL86STH156-6204A	FL86STH156-6204B	3.5	6.2	0.56	6.4	128	4	4000	5.4	3.6	156
FL86STH195-8504A	FL86STH195-8504B	2.8	8.5	0.33	4.7	153	4	5300	6.9	4	195

## ● Dimension

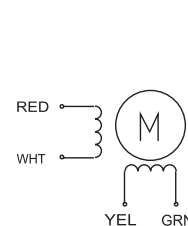
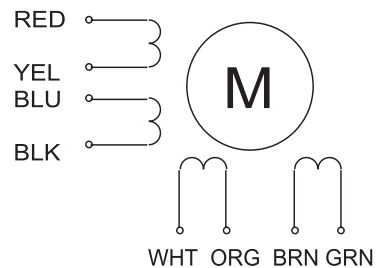
FL86STH65-5904, FL86STH65-3004, FL86STH65-4206



FL86STH80-5504A

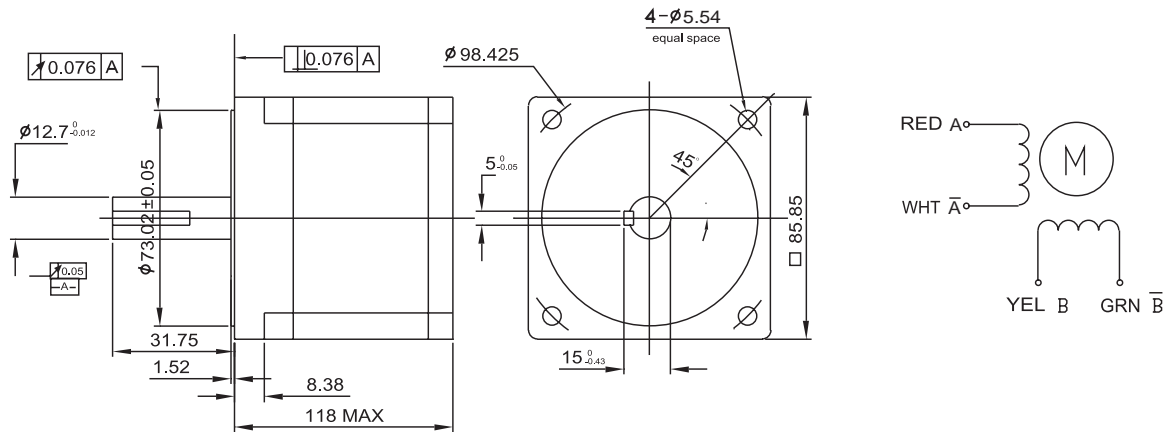


## Wiring Diagram

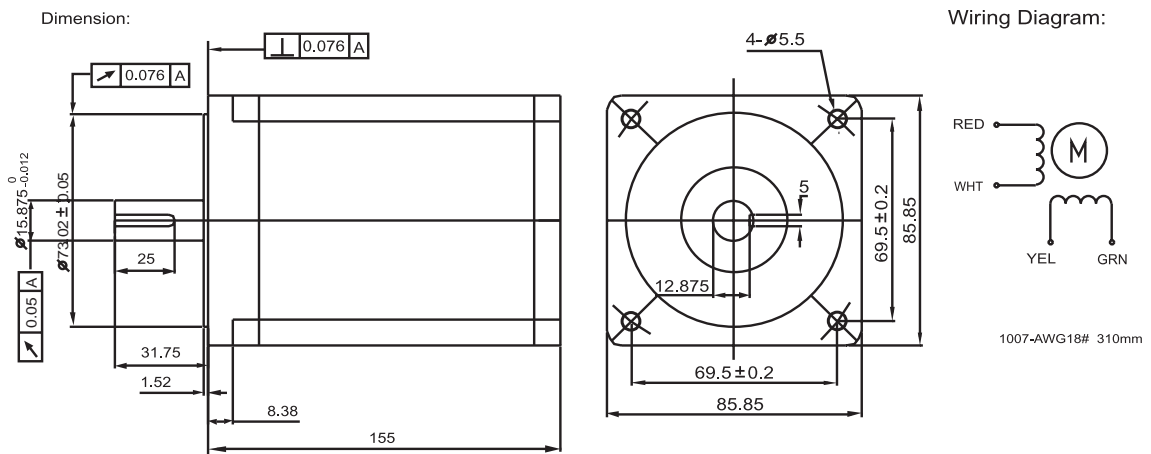


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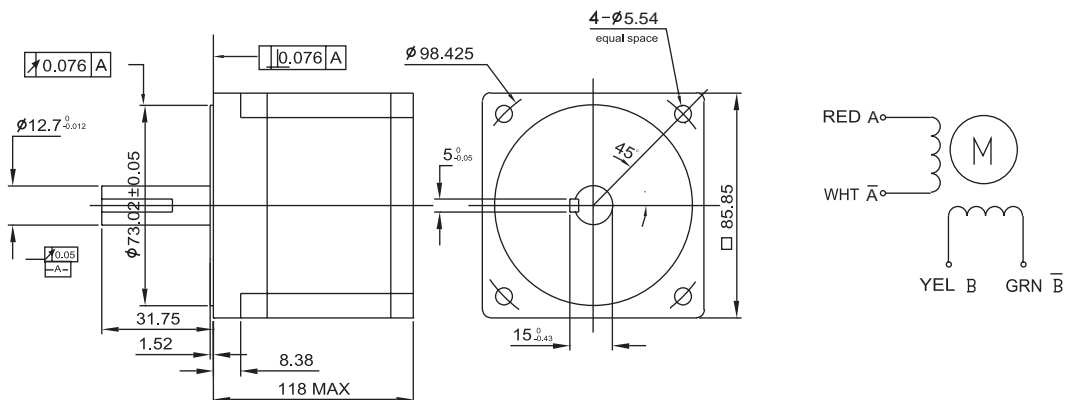
FL86STH118-6004A



FL86STH156-6204A



FL86STH195-8504A



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## ● Pull out Torque Curve

