

1.8° Size 42mm High Torque Hybrid Stepping Motor

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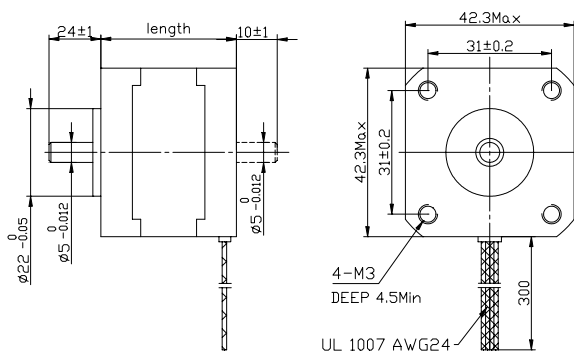
● General Specification for High Torque Hybrid Stepping Motor

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•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	28N (20mm from the flange)
Max. axial force	10N
Rotation	CW(See from Front Flange)

● Size 42mm High Torque Hybrid Stepping Motor Specifications

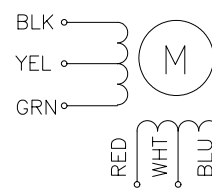
Model No.		Rated Voltage	Current /Phase	Resistance /Phase	Inductance /Phase	Holding Torque	# of Leads	Rotor Inertia	Weight	Detent Torque	Length
Single Shaft	Double Shaft	V	A	•	mH	Kg-cm		g-cm ²	kg	g-cm	mm
FL42STH33-0956A	FL42STH33-0956B	4	0.95	4.2	2.5	1.6	6	35	0.22	120	34
FL42STH33-0406A	FL42STH33-0406B	9.6	0.4	24	15	1.6	6				
FL42STH33-0316A	FL42STH33-0316B	12	0.31	38.5	21	1.6	6				
FL42STH33-1334A	FL42STH33-1334B	2.8	1.33	2.1	2.5	2.2	4				
FL42STH38-1206A	FL42STH38-1206B	4	1.2	3.3	3.2	2.6	6	54	0.28	150	40
FL42STH38-0806A	FL42STH38-0806B	6	0.8	7.5	6.7	2.6	6				
FL42STH38-0406A	FL42STH38-0406B	12	0.4	30	30	2.6	6				
FL42STH38-1684A	FL42STH38-1684B	2.8	1.68	1.65	3.2	3.6	4				
FL42STH47-1206A	FL42STH47-1206B	4	1.2	3.3	2.8	3.17	6	68	0.35	200	48
FL42STH47-0806A	FL42STH47-0806B	6	0.8	7.5	6.3	3.17	6				
FL42STH47-0406A	FL42STH47-0406B	12	0.4	30	25	3.17	6				
FL42STH47-1684A	FL42STH47-1684B	2.8	1.68	1.65	2.8	4.4	4				

Dimension

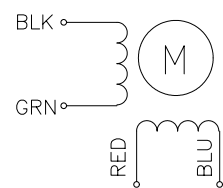


Wiring Diagram

6 LEADS



4 LEADS



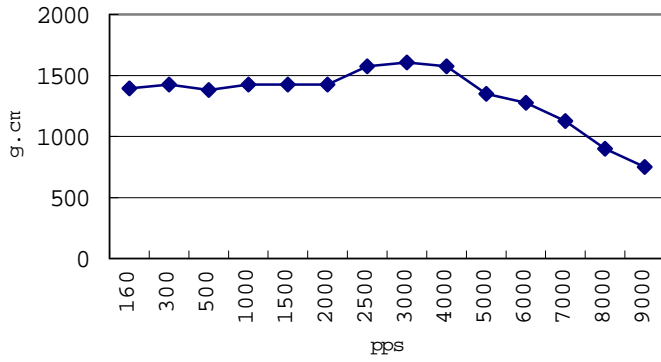
● Pull
A14

out

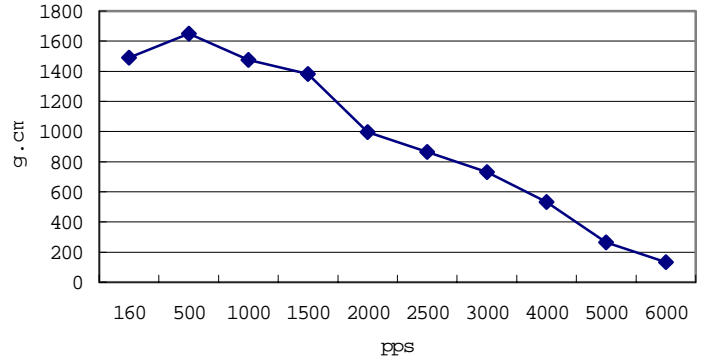
Torque

Curve

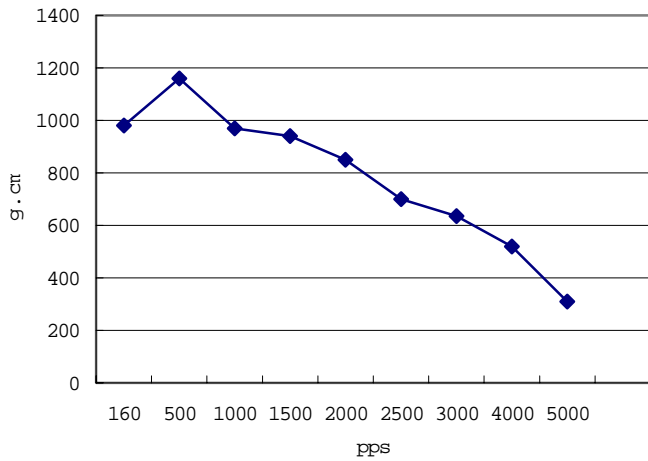
FL42STH33-0956A PULL OUT TORQUE CURVE
VOLTAGE: 24VDC, CONSTANT CURRENT: 0.95A, HALF STEP



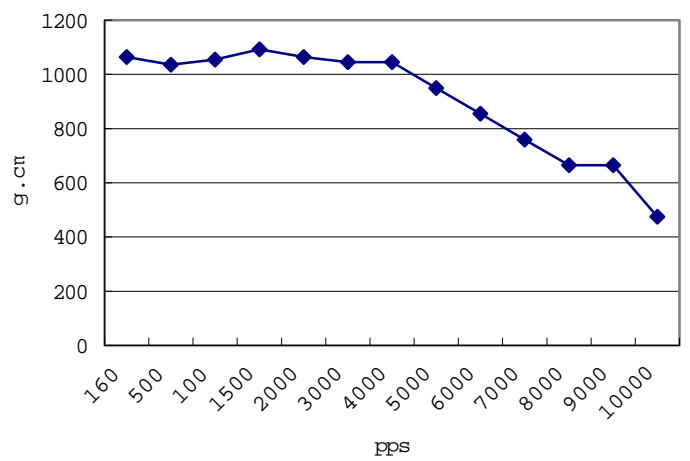
FL42STH33-0406A PULL OUT TORQUE CURVE
VOLTAGE: 24VDC, CONSTANT CURRENT: 0.4A, HALF STEP



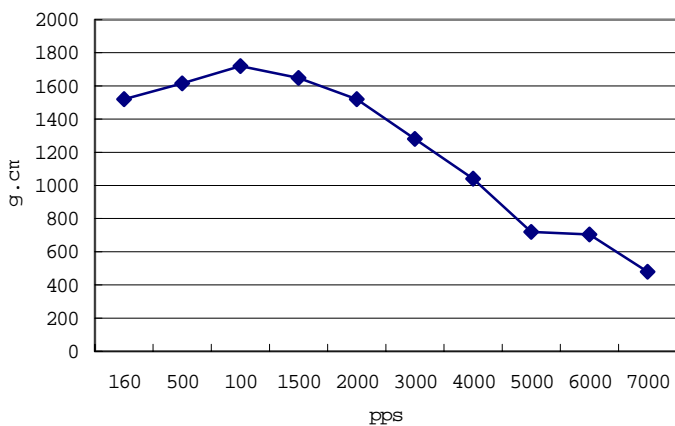
FL42STH33-0316A PULL OUT TORQUE CURVE
VOLTAGE: 24V, CONSTANT CURRENT: 0.31A, HALF STEP



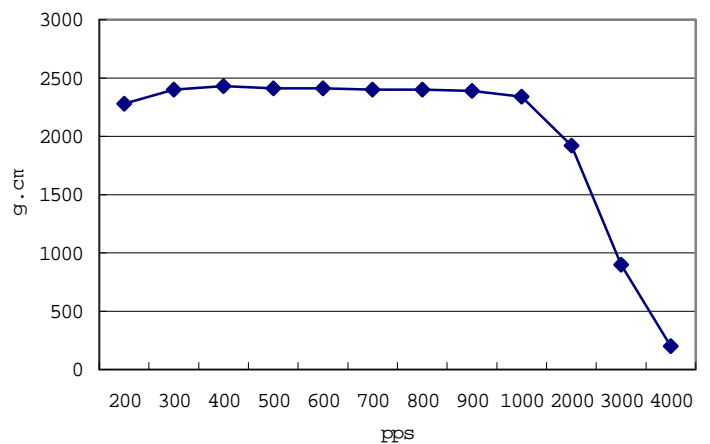
FL42STH33-1334A PULL OUT TORQUE CURVE
VOLTAGE: 24VDC, CONSTANT CURRENT: 1.33A, HALF STEP



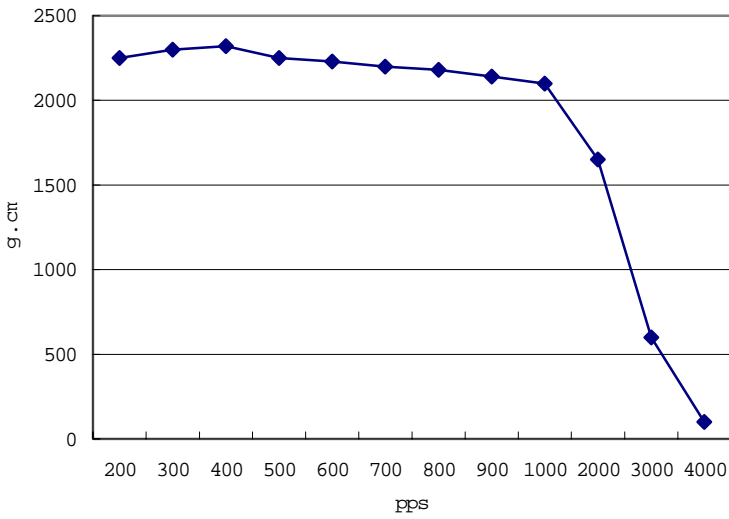
FL42STH38-1206A PULL OUT TORQUE CURVE
VOLTAGE: 24VDC, CONSTANT CURRENT: 1.2A, HALF STEP



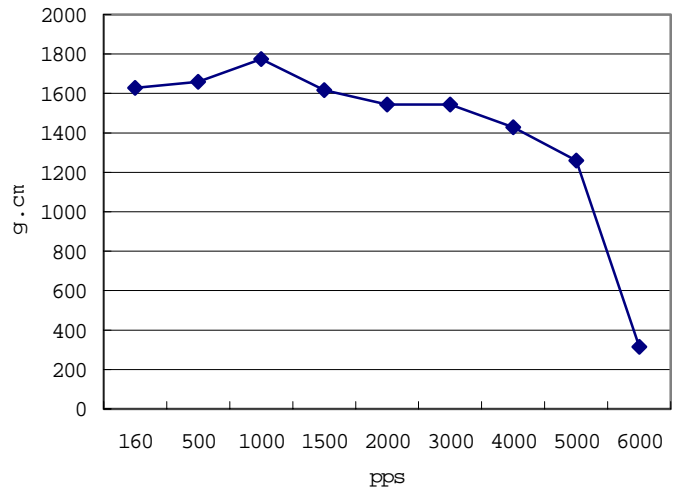
FL42STH38-0806A PULL OUT TORQUE CURVE
VOLTAGE: 24VDC, CONSTANT CURRENT: 0.8A, FULL STEP



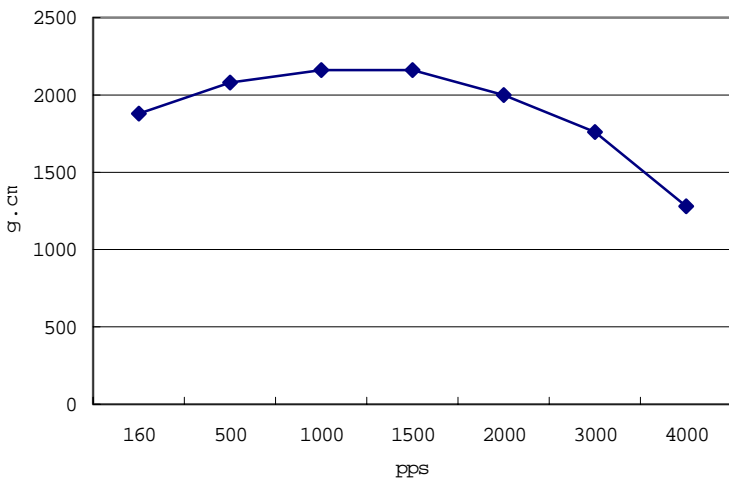
FL42STH38-0406A PULL OUT TORQUE CURVE
 VOLTAGE:24VDC ,CONSTANT CURRENT:0.4A ,FULL STEP



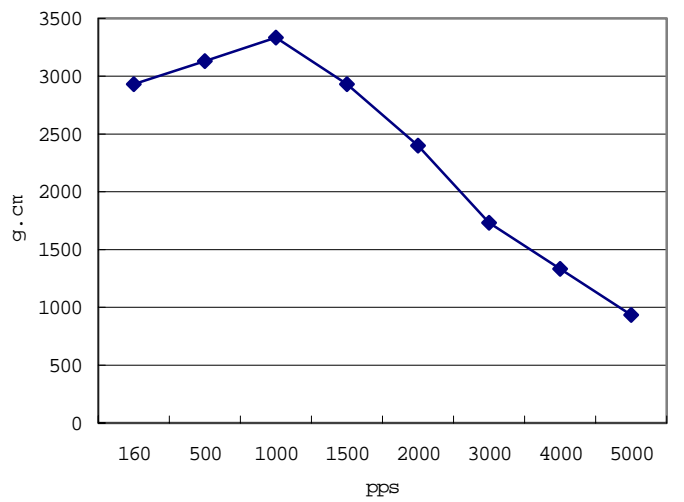
FL42STH38-1684A PULL OUT TORQUE CURVE
 VOLTAGE:24VDC,CONSTANT CURRENT:1.68A,HALF STEP



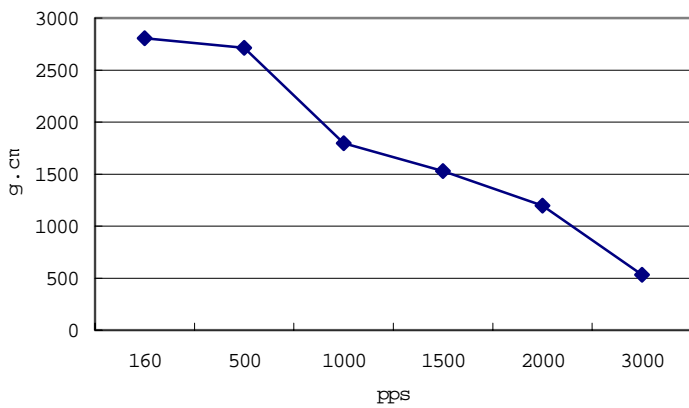
FL42STH47-1206A PULL OUT TORQUE CURVE
 VOLTAGE:24VDC,CONSTANT CURRENT:1.2A,HALF STEP



FL42STH47-0806A PULL OUT TORQUE CURVE
 VOLTAGE:24VDC,CONSTANT CURRENT:0.8A,HALF STEP



FL42STH47-0406A PULL OUT TORQUE CURVE
 VOLTAGE:24VDC,CONSTANT CURRENT:0.4A,HALF STEP



FL42STH47-1684A PULL OUT TORQUE CURVE
 VOLTAGE:24VDC,CONSTANT CURRENT:1.68A,HALF STEP

