2-Phase Hybrid Stepping Motor 1.8°

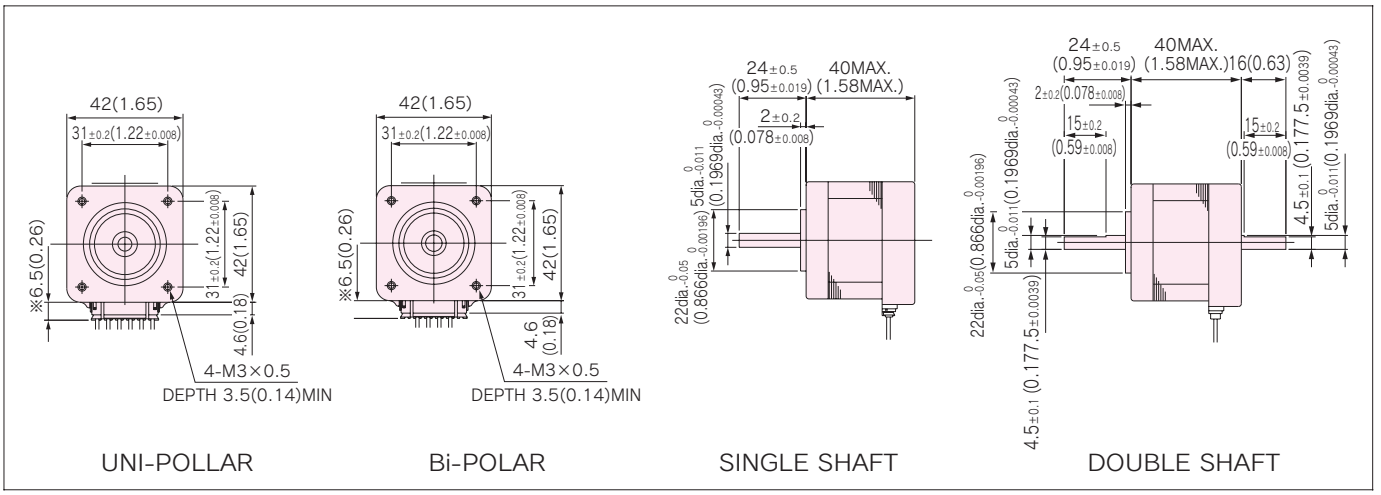
KH42 series

HIGH TORQUE, LOW VIBRATION AND LOW NOISE

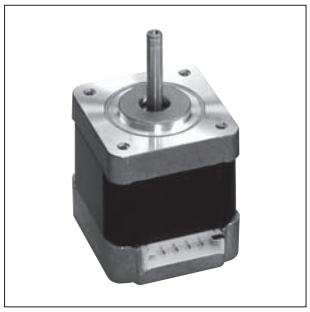
■ STANDARD SPECIFICATIONS

MODEL		KH42JM2			
	SINGLE SHAFT	-901	-902	-903	-951
	DOUBLE SHAFT	-911	-912	-913	-961
DRIVE METHOD	————	UNI-POLAR			BI-POLAR
NUMBER OF PHASES	————	2			2
STEP ANGLE	deg./step	1.8			1.8
VOLTAGE	V	3.42	4.4	9.25	4.59
CURRENT	A/PHASE	1.2	0.88	0.5	0.85
WINDING RESISTANCE	Ω/PHASE	2.85	5.5	18.5	5.4
INDUCTANCE	mH/PHASE	2.5	5.1	16.3	9.3
HOLDING TORQUE	mN · m	236	236	236	314
	oz · in	33	33	33	44
DETENT TORQUE	mN · m	14.7	14.7	14.7	14.7
	oz · in	2.1	2.1	2.1	2.1
ROTOR INERTIA	g · cm²	56	56	56	56
	oz · in²	0.3	0.3	0.3	0.3
WEIGHTS	g	260	260	260	260
	lb	0.57	0.57	0.57	0.57
INSULATION RESISTANCE	————	500VDC 100MΩmin.			
DIELECTRIC STRENGTH	————	500VAC 50HZ 1min.			
OPERATING TEMP. RANGE	℃	0 to 50			
ALLOWABLE TEMP. RISE	K	70			

■ DIMENSIONS unit = mm (inch)



UNI-POLLAR Bi-POLAR SINGLE SHAFT DOUBLE SHAFT



Features

- Improved Dynamic Torque
  (1.2 times torque of our previous model is generated at 300 r/min, on model : KH42JM2-901)
- Lowered Vibration & Noise Level
  (by increased stiffness of body construction)
- Improved Efficiency
  (1.1 times of our previous model, by high grade materials.)

■ TORQUE CHARACTERISTICS vs. PULSE RATE

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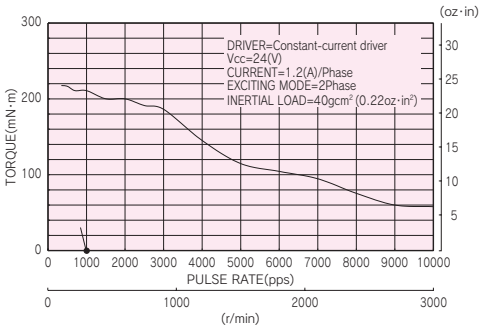
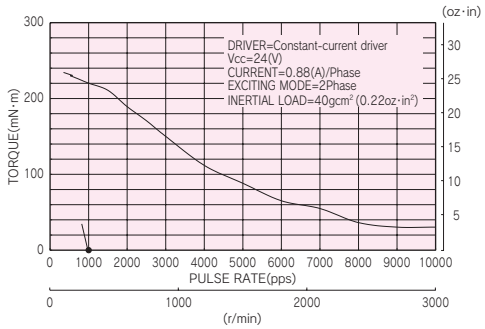
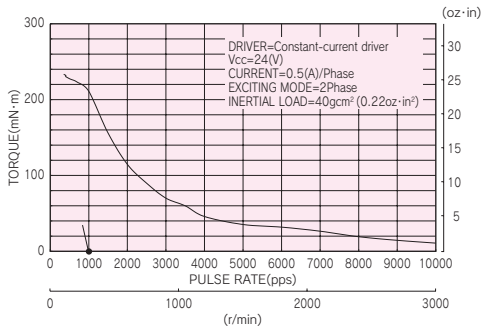
KH42JM2-901, 911



KH42JM2-902, 912

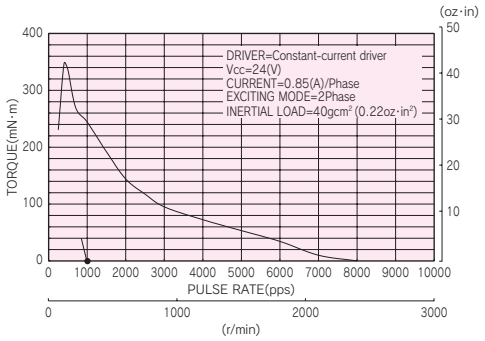


KH42JM2-903, 913



BI-POLAR

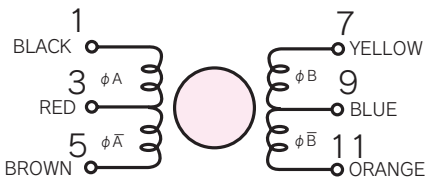
KH42JM2-951, 961



PULL-OUT
PULL-IN

■ CONNECTION DIAGRAMS

UNI-POLAR



EXCITATION SEQUENCE

STEP	1	2	3	4
BLACK(1)	−			−
YELLOW(7)	−	−		
BROWN(5)		−	−	
ORANGE(11)			−	−
RED(3)	+	+	+	+
BLUE(9)	+	+	+	+

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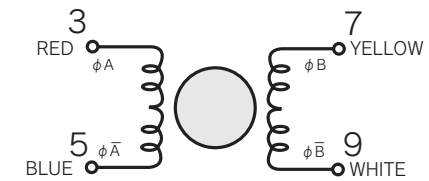

EXCITATION SEQUENCE

STEP	1	2	3	4
RED(3)	+	−	−	+
YELLOW(7)	+	+	−	−
BLUE(5)	−	+	+	−
WHITE(9)	−	−	+	+

■ CONNECTION CABLE TO MOTOR unit = mm (inch)

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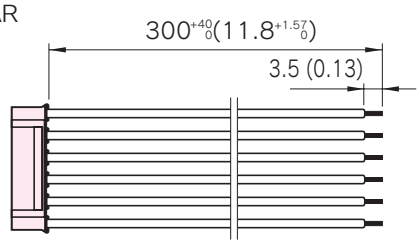

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