2-Phase Hybrid Stepping Motor 1.8°

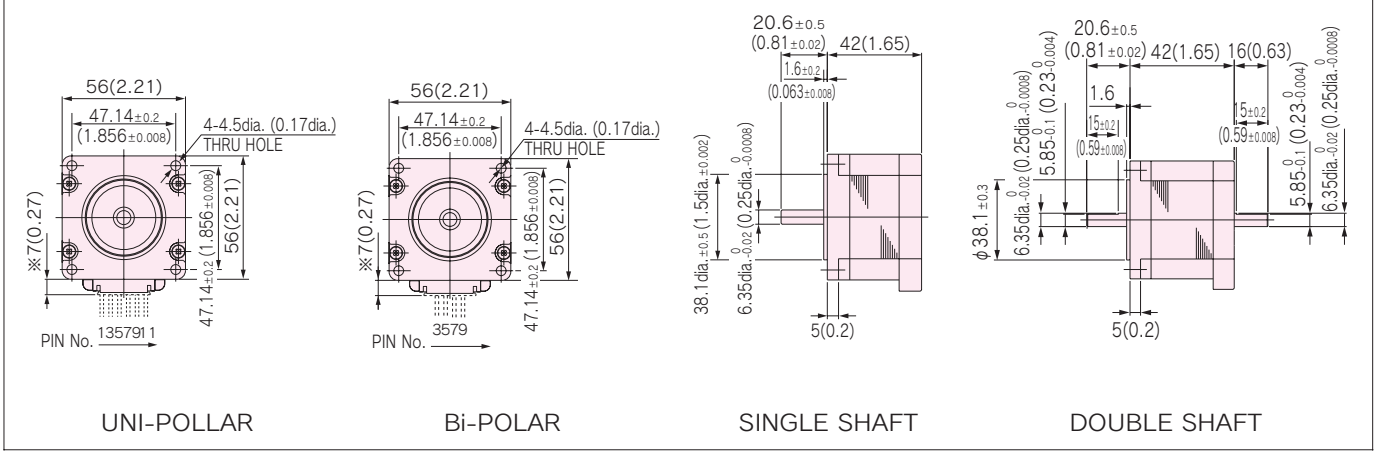
KH56 series

HIGH TORQUE, LOW VIBRATION AND LOW NOISE

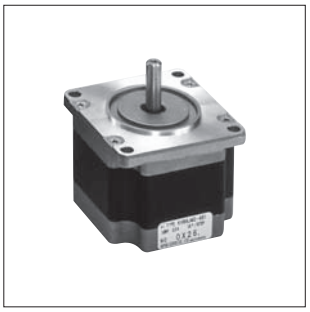
■ STANDARD SPECIFICATIONS

MODEL		KH56JM2			
	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	1.68	2.78	4.9	1.96
CURRENT	A/PHASE	3.0	2.0	1.0	2.0
WINDING RESISTANCE	Ω/PHASE	0.58	1.39	4.9	0.98
INDUCTANCE	mH/PHASE	0.61	1.8	6.68	2.27
HOLDING TORQUE	mN · m	422	422	422	490
	oz · in	60	60	60	69
DETENT TORQUE	mN · m	25	25	25	25
	oz · in	3.5	3.5	3.5	3.5
ROTOR INERTIA	g · cm²	115	115	115	115
	oz · in²	0.62	0.62	0.62	0.62
WEIGHTS	g	400	400	400	400
	lb	0.88	0.88	0.88	0.88
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

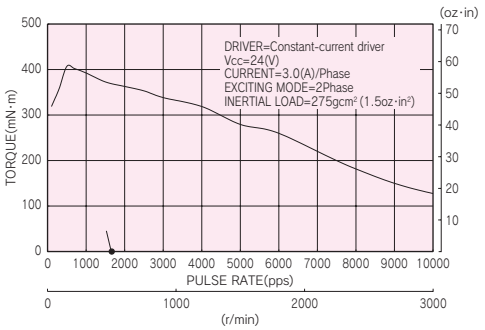
- Stronger torque generated in higher speed zone (KH56KM2-901 generates 1.2 times torque of our previous model at 1200 r/min. speed)
- Lowered Vibration by increased stiffness of body construction (lowered by 10% than our previous model)
- Improved Efficiency (1.1 times of our previous model, by high grade materials)

■ TORQUE CHARACTERISTICS vs. PULSE RATE

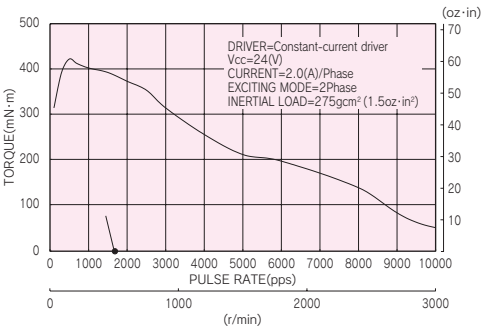
PULL-OUT
PULL-IN

UNI-POLAR

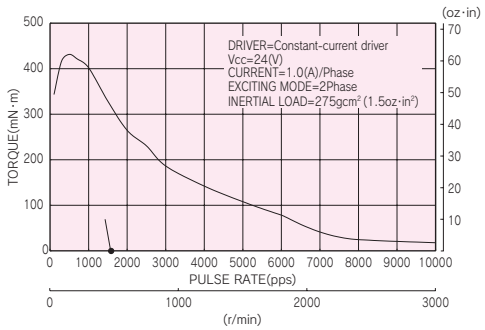
KH56JM2-901, 911



KH56JM2-902, 912

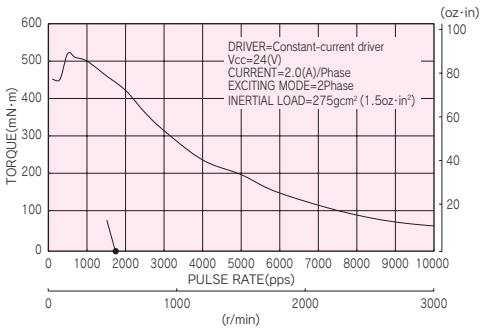


KH56JM2-903, 913



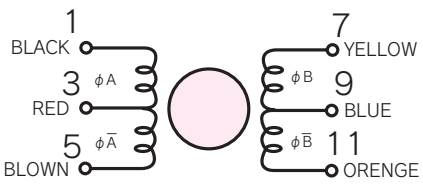
BI-POLAR

KH56JM2-951, 961



■ CONNECTION DIAGRAMS

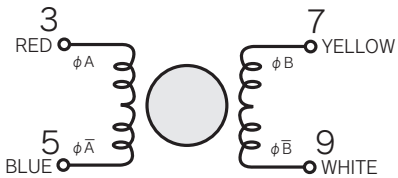
UNI-POLAR



EXCITATION SEQUENCE

STEP	1	2	3	4
BLACK	–			–
YELLOW	–	–		
BLOWN		–	–	
ORENGE			–	–
RED	+	+	+	+
BLUE	+	+	+	+

BI-POLAR

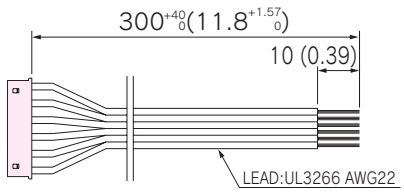


EXCITATION SEQUENCE

STEP	1	2	3	4
RED	+	+	–	–
YELLOW	–	+	+	–
BLUE	–	–	+	+
WHITE	+	–	–	+

■ CONNECTION CABLE TO MOTOR unit = mm (inch)

UNI-POLAR



BI-POLAR