

2-Phase Hybrid Stepping Motor

1.8°

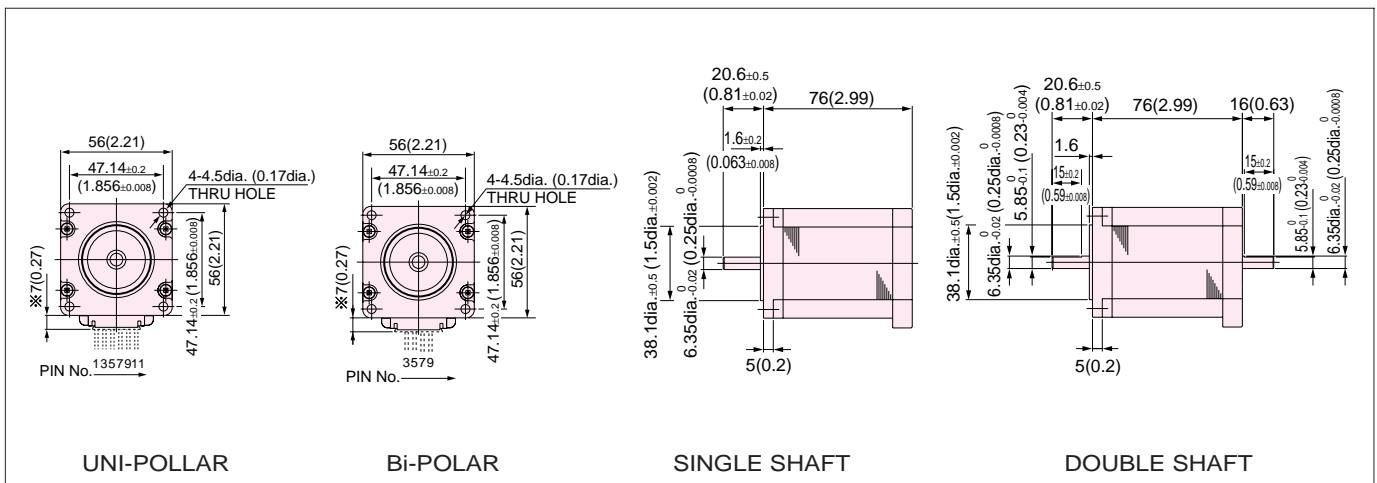
KH56 series 900 type

HIGH TORQUE, LOW VIBRATION AND LOW NOISE

STANDARD SPECIFICATIONS

MODEL		KH56QM2			
		-901	-902	-903	-951
	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	3.54	5.46	9.9	4.0
CURRENT	A/PHASE	3.0	2.0	1.0	2.0
WINDING RESISTANCE	Ω/PHASE	1.18	2.73	9.9	2.0
INDUCTANCE	mH/PHASE	2.4	5.4	21.6	7.35
HOLDING TORQUE	mN • m	1324	1324	1324	1373
	oz • in	187	187	187	194
DETENT TORQUE	mN • m	69	69	69	69
	oz • in	9.8	9.8	9.8	9.8
ROTOR INERTIA	g • cm ²	269	269	269	269
	oz • in ²	1.47	1.47	1.47	1.47
WEIGHTS	kg	1.0	1.0	1.0	1.0
	lb	2.2	2.2	2.2	2.2
INSULATION CLASS	————	JIS Class E (120°C 248°F) (UL VALUE : CLASS B 130°C 266°F)			
INSULATION RESISTANCE	————	500VDC 100MΩmin.			
DIELECTRIC STRENGTH	————	500VAC 50HZ 1min.			
OPERATING TEMP. RANGE	°C	0 to 50			
ALLOWABLE TEMP. RISE	deg.	70			

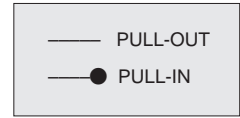
DIMENSIONS unit = mm (inch)





Features

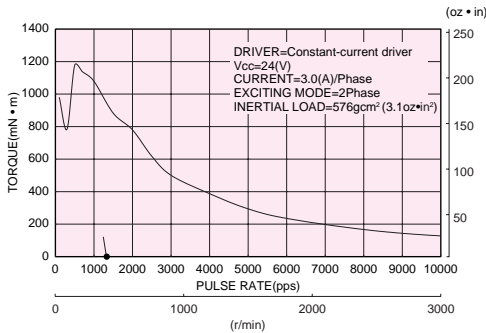
- Stronger torque generated in higher speed zone (KH56KM2-901 generates 1.2 times torque of our previous model at 1200 r/min. speed)
- Lowered Vibration by increased stiffness of body construction (lowered by 10% than our previous model)
- Improved Efficiency (1.1 times of our previous model, by high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



TORQUE CHARACTERISTICS vs. PULSE RATE

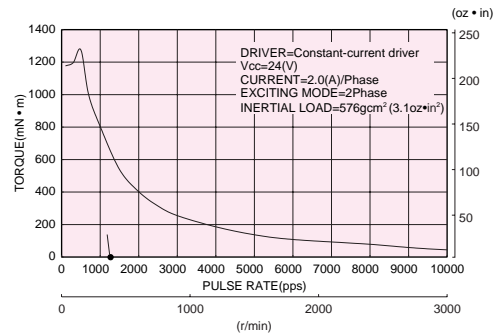
UNI-POLAR

KH56QM2-901, 911

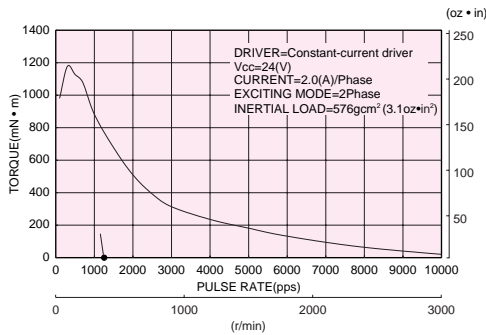


BI-POLAR

KH56QM2-951, 961

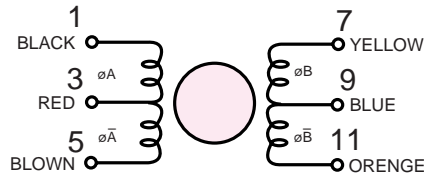


KH56QM2-902, 912



CONNECTION DIAGRAMS

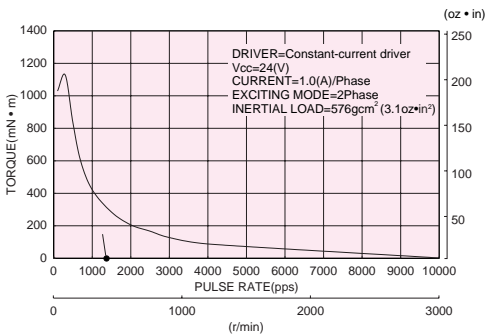
UNI-POLAR



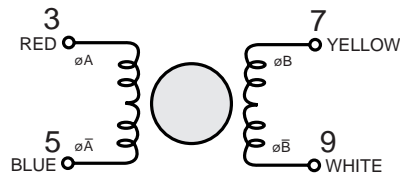
EXCITATION SEQUENCE

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

KH56QM2-903, 913



BI-POLAR

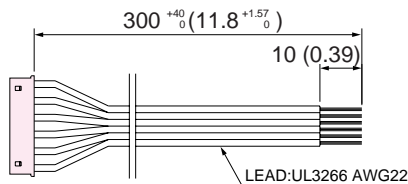


EXCITATION SEQUENCE

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

CONNECTION CABLE TO MOTOR unit = mm (inch)

UNI-POLAR



BI-POLAR

