

1.8°

2-Phase Hybrid Stepping Motor

KH56 series

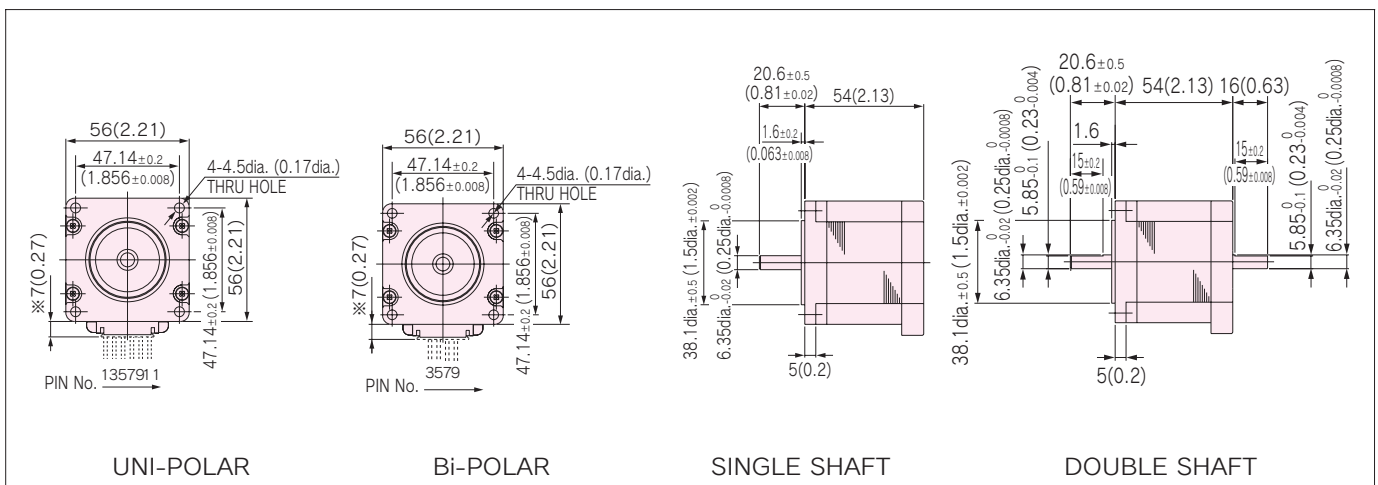
Rare earth magnet models		Non-rare earth magnet models
KH56KM2-901	⇕	KH56KM2-906
KH56KM2-902	⇕	KH56KM2-907
KH56KM2-903	⇕	KH56KM2-908
KH56KM2-911	⇕	KH56KM2-916
KH56KM2-912	⇕	KH56KM2-917
KH56KM2-913	⇕	KH56KM2-918
KH56KM2-951	⇕	KH56KM2-956
KH56KM2-961	⇕	KH56KM2-966

* For red-lines product,
Please contact us from our website .
HP : <http://www.nidec.com/en/nidec-servo>

■ STANDARD SPECIFICATIONS

M O D E L		KH56KM2			
	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	2.3	3.6	6.71	2.4
CURRENT	A/PHASE	3.0	2.0	1.0	2.0
WINDING RESISTANCE	Ω/PHASE	0.77	1.79	6.71	1.32
INDUCTANCE	mH/PHASE	1.04	3.0	9.36	3.19
HOLDING TORQUE	mN · m	834	834	834	932
	oz · in	118	118	118	132
DETENT TORQUE	mN · m	37	37	37	37
	oz · in	5.2	5.2	5.2	5.2
ROTOR INERTIA	g · cm ²	188	188	188	188
	oz · in ²	1.0	1.0	1.0	1.0
WEIGHTS	g	650	650	650	650
	lb	1.4	1.4	1.4	1.4
INSULATION RESISTANCE	———	500VDC 100MΩmin.			
DIELECTRIC STRENGTH	———	500VAC 50HZ 1min.			
OPERATING TEMP. RANGE	℃	0 to 50			
ALLOWABLE TEMP. RISE	K	70			

■ DIMENSIONS unit = mm (inch)





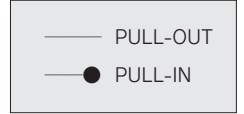
Features

- 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 increasing stiffness of body construction (lowered by 10% than our previous model)
- Improved Efficiency (1.1 times of our previous model, with high grade materials)

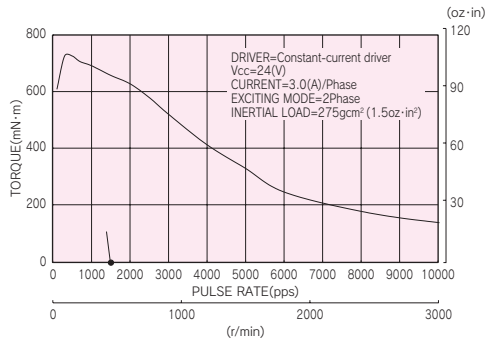
TORQUE CHARACTERISTICS vs. PULSE RATE

UNI-POLAR

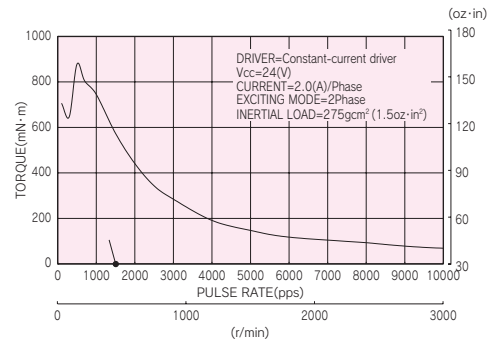
BI-POLAR



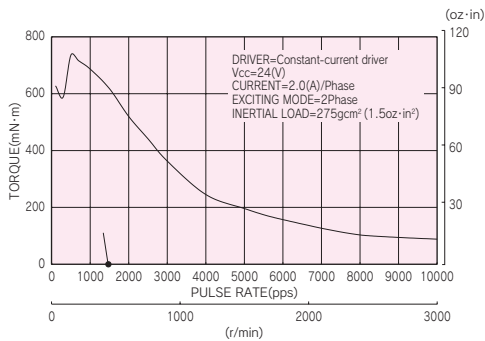
KH56KM2-901, 911



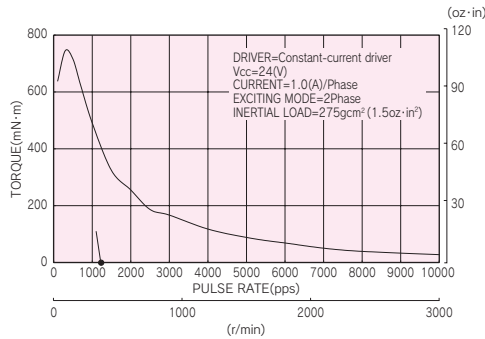
~~KH56KM2-951~~, 961



KH56KM2-902, 912

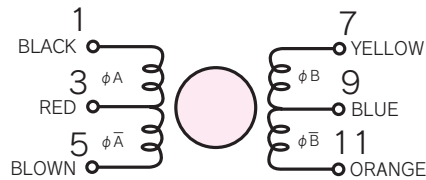


KH56KM2-903, 913



CONNECTION DIAGRAMS

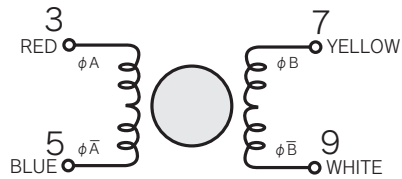
UNI-POLAR



EXCITATION SEQUENCE

STEP	1	2	3	4
BLACK	-	-	-	-
YELLOW	-	-	-	-
BROWN	-	-	-	-
ORANGE	-	-	-	-
RED	+	+	+	+
BLUE	+	+	+	+

BI-POLAR

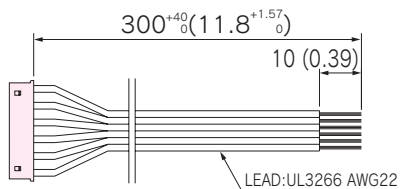


EXCITATION SEQUENCE

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

CONNECTION CABLE TO MOTOR unit = mm (inch)

UNI-POLAR



BI-POLAR

