

# 2-Phase Hybrid Stepping Motor

1.8°

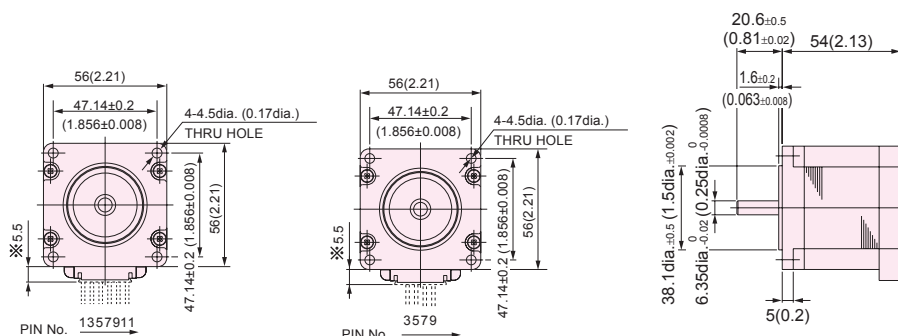
## KH56 series 800 type

HIGH TORQUE, LOW VIBRATION AND LOW NOISE

### STANDARD SPECIFICATIONS

MODEL		KH56KM2			
		-801	-802	-803	-851
DRIVE METHOD	————	UNI-POLAR			BI-POLAR
NUMBER OF PHASES	————	2			2
STEP ANGLE	deg./step	1.8			1.8
VOLTAGE	V	2.4	3.7	6.8	4.35
CURRENT	A/PHASE	3.0	2.0	1.0	1.5
WINDING RESISTANCE	Ω/PHASE	0.8	1.85	6.8	2.9
INDUCTANCE	mH/PHASE	1.1	3.3	13.5	10.7
HOLDING TORQUE	mN • m	833	833	833	981
	oz • in	118	118	118	132
DETENT TORQUE	mN • m	37	37	37	37
	oz • in	5.6	5.6	5.6	5.6
ROTOR INERTIA	g • cm <sup>2</sup>	270	270	270	270
	oz • in <sup>2</sup>	1.48	1.48	1.48	1.48
WEIGHTS	g	650	650	650	650
	lb	1.4	1.4	1.4	1.4
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			

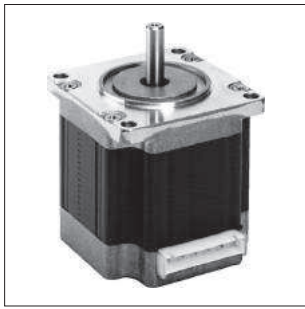
### DIMENSIONS unit = mm (inch)



UNI-POLLAR

Bi-POLAR

SINGLE SHAFT



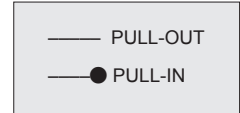
### Features

- Stronger torque generated in higher speed zone
- Lowered Vibration by increased stiffness of body construction
- Improved Efficiency

### LOAD OF SHAFT:

30N THRUST LOAD

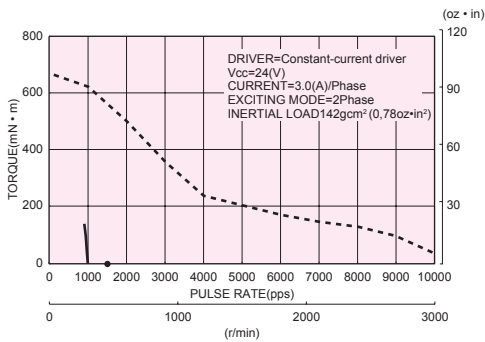
40N RADIAL LOAD 20mm FROM FRONTPLATE



### TORQUE CHARACTERISTICS vs. PULSE RATE

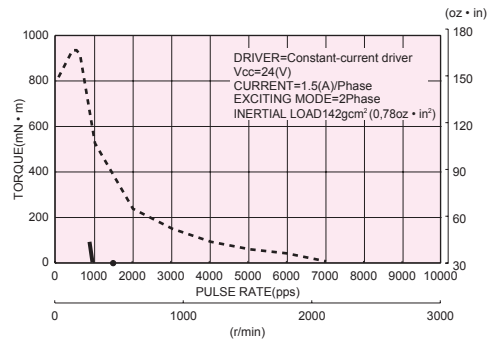
#### UNI-POLAR

KH56KM2-801

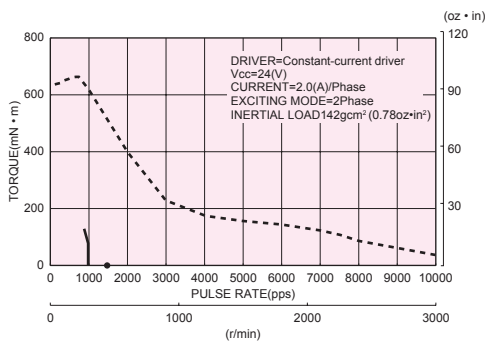


#### BI-POLAR

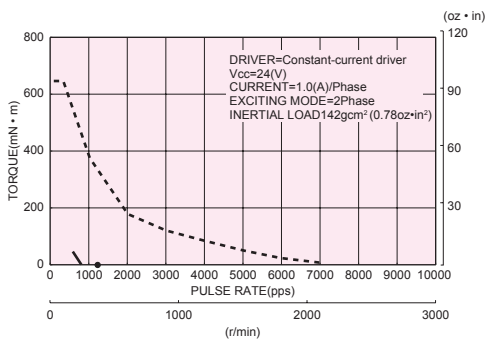
KH56KM2-851



KH56KM2-802,

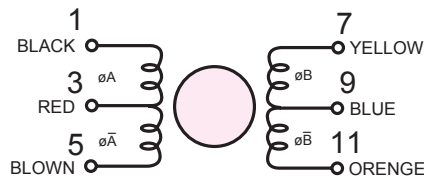


KH56KM2-803



### CONNECTION DIAGRAMS

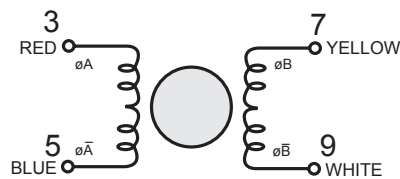
#### UNI-POLAR



#### EXCITATION SEQUENCE

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

#### BI-POLAR

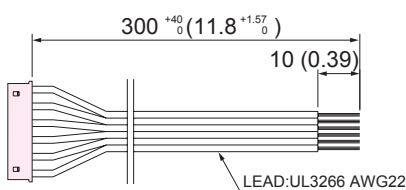


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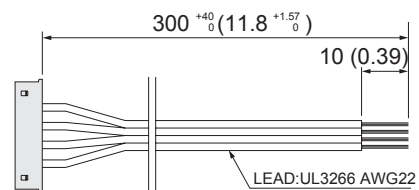
STEP	1	2	3	4
RED	+	+	-	-
YELLOW	-	+	+	-
BLUE	-	-	+	+
WHITE	+	-	-	+

### CONNECTION CABLE TO MOTOR unit = mm (inch)

#### UNI-POLAR



#### BI-POLAR



JST XHP-11