

Hybrid Stepping Motor with Encoder (IG series)

► 2-phased hybrid stepping motor with optical rotary encoder.



Lineup

Frame Size 25 mm (A10PM)

Model	Motor Size (mm)	Step Angle (deg)	Drive Sequence	Rated Current (A)	Resistance (Ohms)	Holding Torque (mNm)	Inductance (mH)	Rotor Inertia (g · cm ²)	Detent Torque (mNm)	Mass (g)
A10PMK202B	□ 25×23.5	1.8	BI-POLAR	0.7	3.8	33	2.0	2	2.0	65
A10PMK013B	□ 25×27.5	1.8	BI-POLAR	0.21	47	49	30	3	2.5	80
A10PMK701B	□ 25×33	1.8	BI-POLAR	0.63	5.8	62	5.4	5	3	100
A10PMK106B	□ 25×40.5	1.8	BI-POLAR	1.0	3.0	90	2.5	8	4	120
A10PMK406B	□ 25×51.5	1.8	BI-POLAR	1.0	3.8	120	3.6	12	5.0	160

Frame Size 35 mm (A14PM)

Model	Motor Size (mm)	Step Angle (deg)	Drive Sequence	Rated Current (A)	Resistance (Ohms)	Holding Torque (mNm)	Inductance (mH)	Rotor Inertia (g · cm ²)	Detent Torque (mNm)	Mass (g)
A14PMF647B	□ 35×32	1.8	BI-POLAR	1.5	1.2	130	1.2	15	5.3	160
A14PMF150B	□ 35×36	1.8	BI-POLAR	1.5	1.8	230	2.6	20	8.2	190
A14PMF447B	□ 35×51	1.8	BI-POLAR	1.5	2.2	400	3.7	43	13.7	300

Frame Size 42 mm (A17PM)

Model	Motor Size (mm)	Step Angle (deg)	Drive Sequence	Rated Current (A)	Resistance (Ohms)	Holding Torque (mNm)	Inductance (mH)	Rotor Inertia (g · cm ²)	Detent Torque (mNm)	Mass (g)
A17PMK049U	□ 42×34	1.8	UNI-POLAR	1.0	3.2	200	3.2	37	11.0	210
A17PMK342U	□ 42×38	1.8	UNI-POLAR	1.4	2.0	250	2.5	50	11.3	260
A17PMK142U	□ 42×42	1.8	UNI-POLAR	1.4	2.3	280	3.2	62	11.8	310
A17PMK442U	□ 42×48	1.8	UNI-POLAR	1.4	2.8	400	3.4	75	16.7	360
A17PMK049B	□ 42×34	1.8	BI-POLAR	0.7	6.4	270	12.8	37	11.0	210
A17PMK342B	□ 42×38	1.8	BI-POLAR	0.9	4.0	310	9.9	50	11.3	260
A17PMK142B	□ 42×42	1.8	BI-POLAR	1.0	4.6	380	12.9	62	11.8	310
A17PMK442B	□ 42×48	1.8	BI-POLAR	0.9	5.6	500	13.6	75	16.7	360

Frame Size 56 mm (A23KM)

Model	Motor Size (mm)	Step Angle (deg)	Drive Sequence	Rated Current (A)	Resistance (Ohms)	Holding Torque (mNm)	Inductance (mH)	Rotor Inertia (g · cm ²)	Detent Torque (mNm)	Mass (g)
A23KMK249U	□ 56×42	1.8	UNI-POLAR	2.0	1.3	420	1.9	120	20	480
A23KMK349U	□ 56×50	1.8	UNI-POLAR	2.0	1.5	650	2.9	180	29	600
A23KMK044U	□ 56×54	1.8	UNI-POLAR	3.0	0.85	760	1.8	200	34	690
A23KMK144U	□ 56×67	1.8	UNI-POLAR	3.0	1.0	1050	2.2	290	49	910
A23KMK744U	□ 56×76	1.8	UNI-POLAR	3.0	1.15	1200	2.7	360	50	1060
A23KMK249B	□ 56×42	1.8	BI-POLAR	1.4	2.4	540	7.7	120	20	480
A23KMK349B	□ 56×50	1.8	BI-POLAR	1.4	3.0	800	11.8	180	29	600
A23KMK044B	□ 56×54	1.8	BI-POLAR	2.2	1.7	1000	7.2	200	34	690
A23KMK144B	□ 56×67	1.8	BI-POLAR	2.1	2.0	1250	8.7	290	49	910
A23KMK744B	□ 56×76	1.8	BI-POLAR	2.0	2.3	1500	10.6	360	50	1060

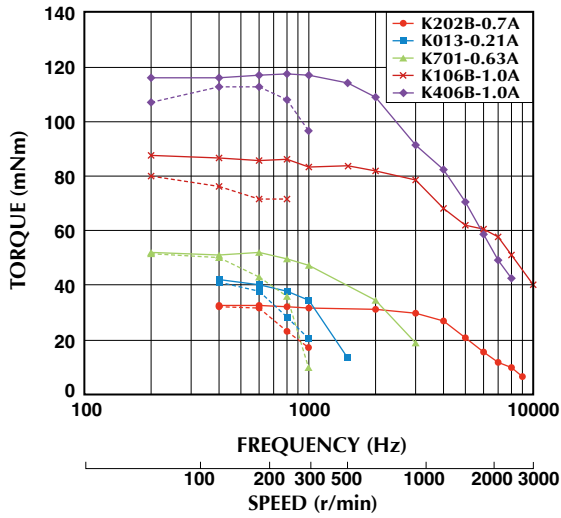
General Specifications

Step Accuracy	± 5%
Temperature Rise	80°C MAX
Ambient Temperature Range	-10°C ~ +50°C
Insulation Resistance	100M Ω MIN. DC 500V
Dielectric Strength	AC 500V 1min

Torque/Speed Characteristics

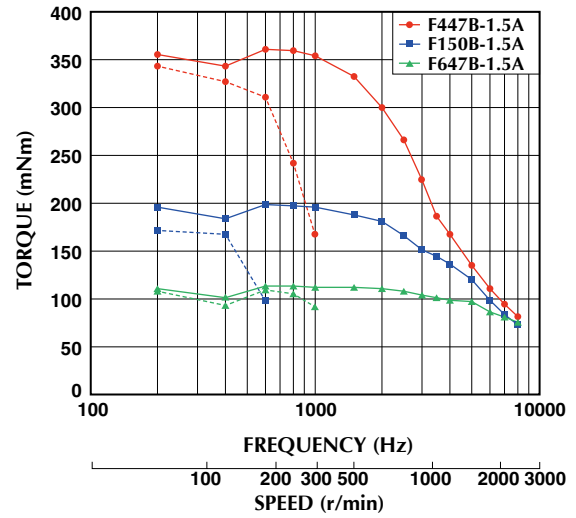
25 mm (A10PM)

Model No: A10PMK202B,013B,K701B,K106B,K406B
 Driver: Chopper Dual
 Supply Voltage: 24.0 (Volt)



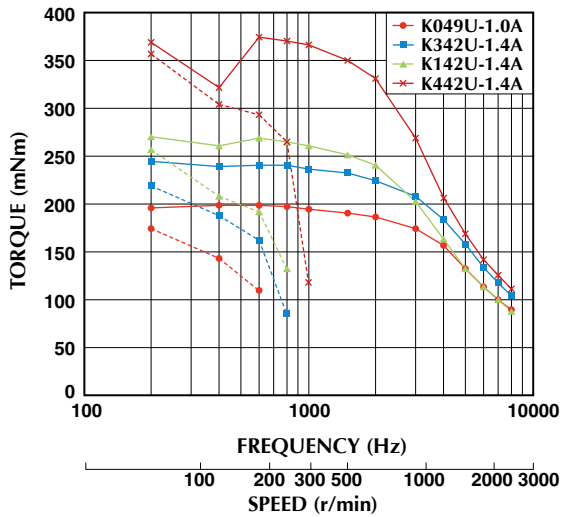
35 mm (A14PM)

Model No: A14PMF447B,F150B,F647B(バイポーラ)
 Driver: SEK682-001-E (2-2φ ON)
 Supply Voltage: 24.0 (Volt)

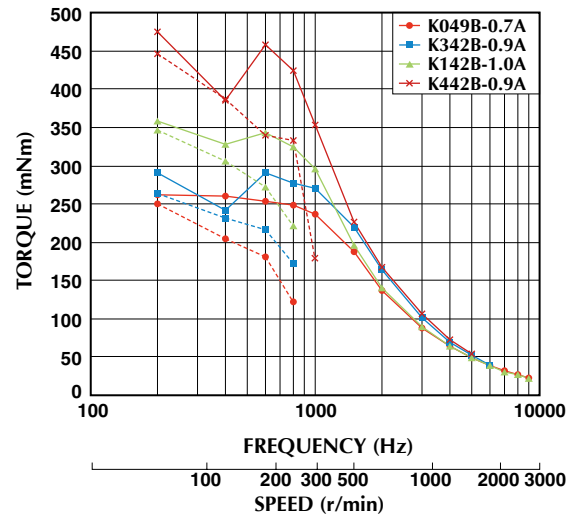


42 mm (A17PM)

Model No: A17PMK049U,K342U,K142U,K442U(ユニポーラ)
 Driver: Chopper Dual
 Supply Voltage: 24.0 (Volt)

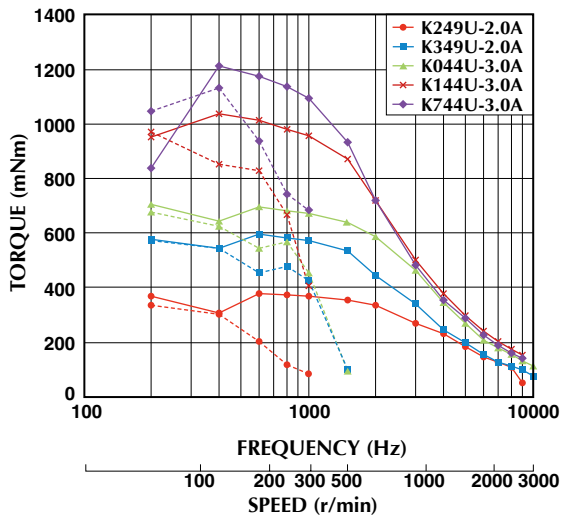


Model No: A17PMK049B,K342B,K142B,K442B(バイポーラ)
 Driver: Chopper Dual
 Supply Voltage: 24.0 (Volt)

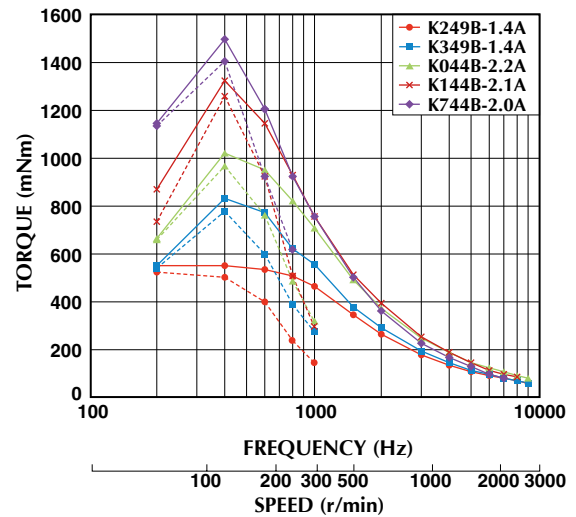


56 mm (A23KM)

Model No: A23KMK249U,K349U,K044U,K144U,K744U(ユニポーラ)
 Driver: Chopper Dual
 Supply Voltage: 24.0 (Volt)

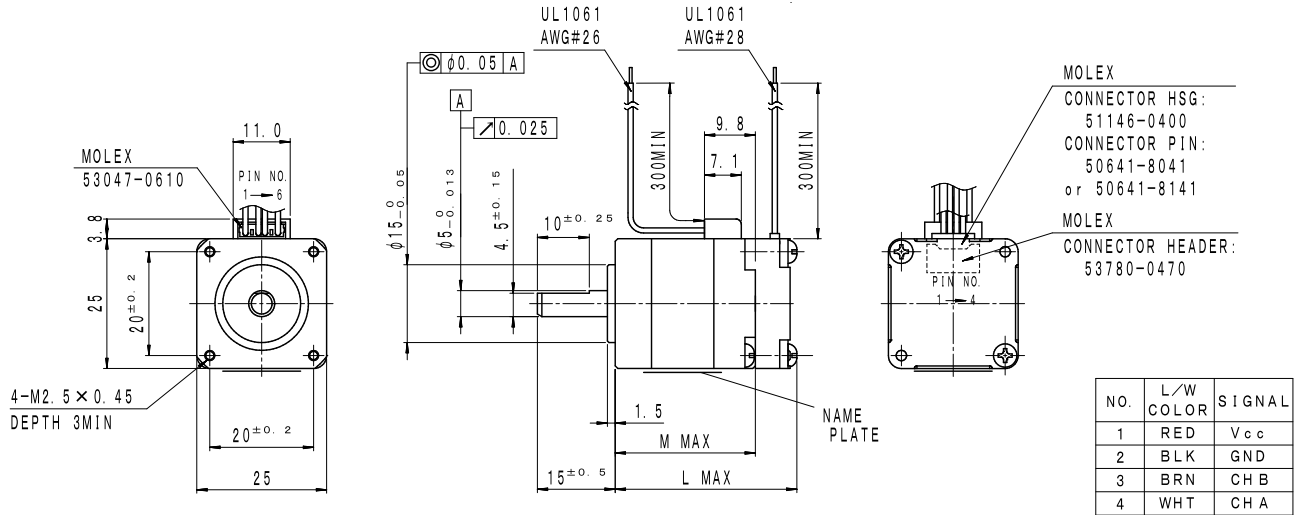


Model No: A23KMK249B,K349B,K044B,K144B,K744B(バイポーラ)
 Driver: Chopper Dual
 Supply Voltage: 24.0 (Volt)

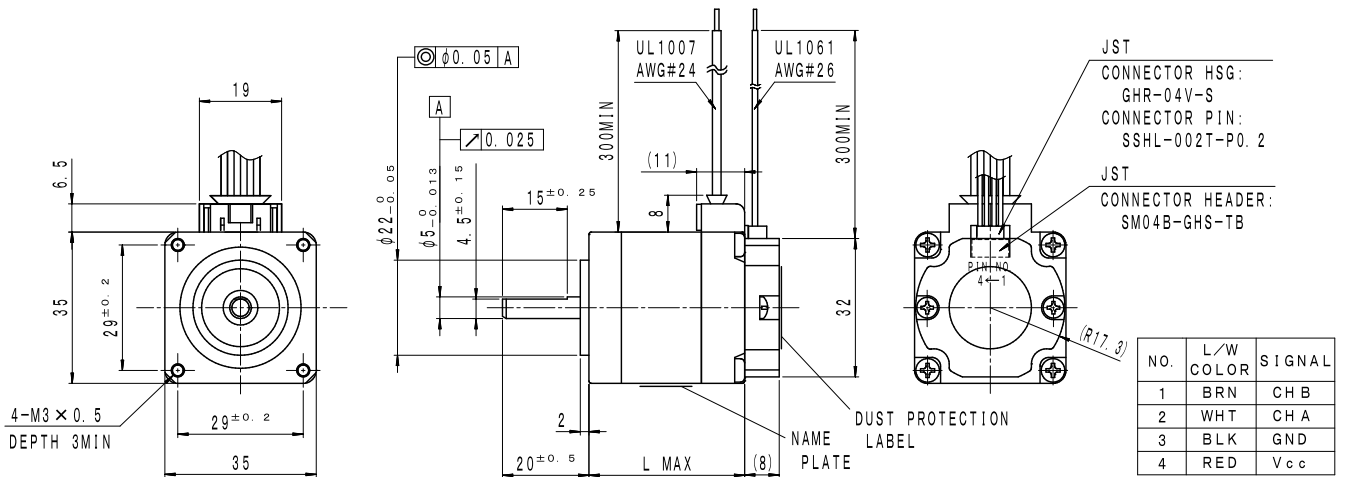


— : PULL OUT
 - - - : PULL IN

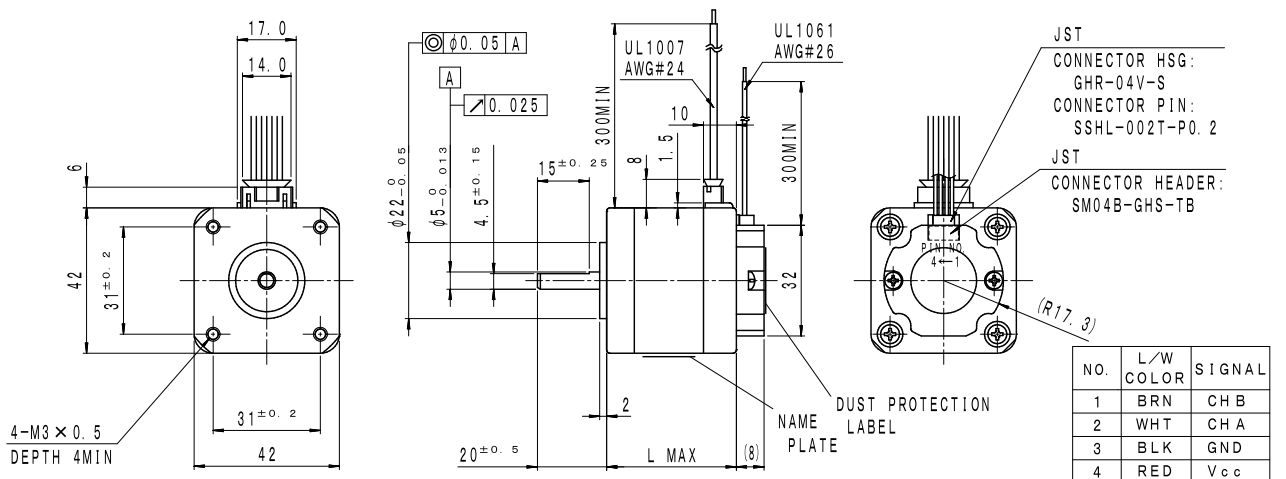
□ 25 mm (A 10PM)



□ 35 mm (A 14PM)

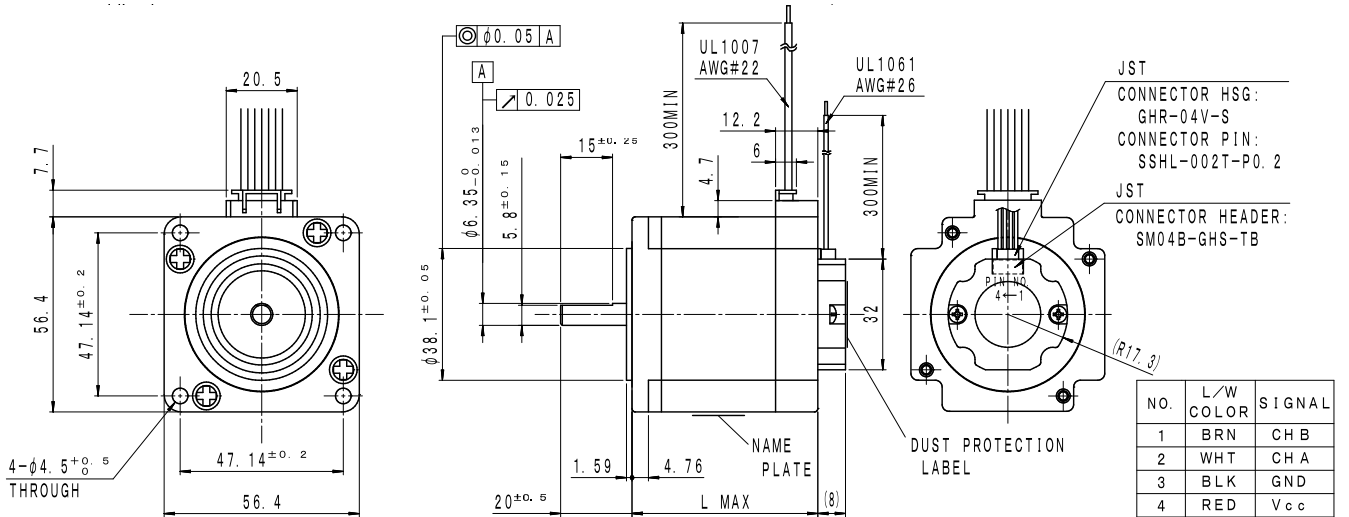


□ 42 mm (A 17PM)

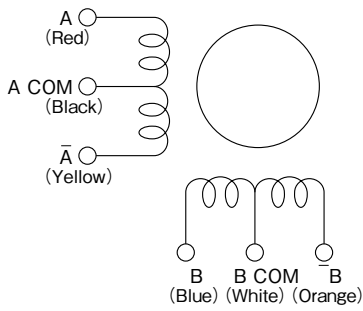


Outline

□ 56 mm (A23KM)



ユニポーラ結線図 UNI POLAR Wiring Connection Diagram



BI POLAR Wiring Connection Diagram

