

14HY SERIES 1.8°

Key Features

- Low Inertia
- Small Size
- High Acceleration



General Specifications

Bi-polar

Model Number	Resistance per Phase	Inductance per Phase	Rated Current	Holding Torque		Detent Torque		Rotor Inertia	
	ohm	mH	A	mNm	oz-in	mNm	oz-in	g.cm ²	oz-in ²
14HY5010	9	8	0.4	60	8.50	10	1.42	12	0.07
14HY8002	5.5	5	0.85	100	14.16	15	2.12	20	0.11

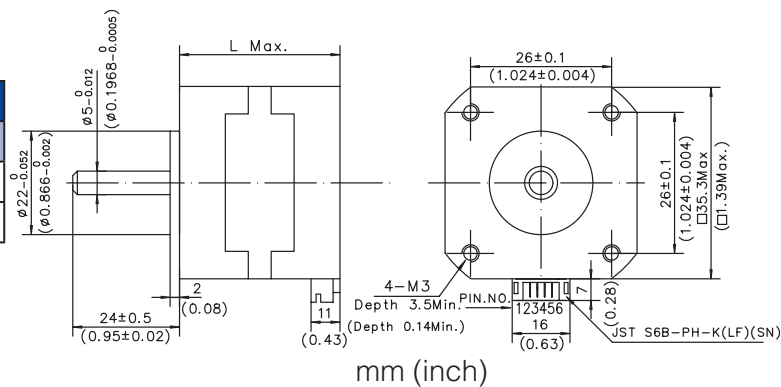
Uni-polar

Model Number	Resistance per Phase	Inductance per Phase	Rated Current	Holding Torque		Detent Torque		Rotor Inertia	
	ohm	mH	A	mNm	oz-in	mNm	oz-in	g.cm ²	oz-in ²
14HY5011	9	4.2	0.4	45	6.37	10	1.42	12	0.07
14HY8001	2.7	1.4	1.2	80	11.33	15	2.12	20	0.11

Motor Wiring Diagram —> Page A-8

Mechanical Dimension

Model Number	L	Mass
	mm (in.)	kg (lb.)
14HY5**	26 (1.01)	0.15 (0.33)
14HY8**	37 (1.44)	0.21 (0.46)



0.9°

1.8°

2-PHASE

3.6°

3.75°

HB MOTOR

1.2°

3-PHASE

DIGITAL LINEAR ACTUATOR

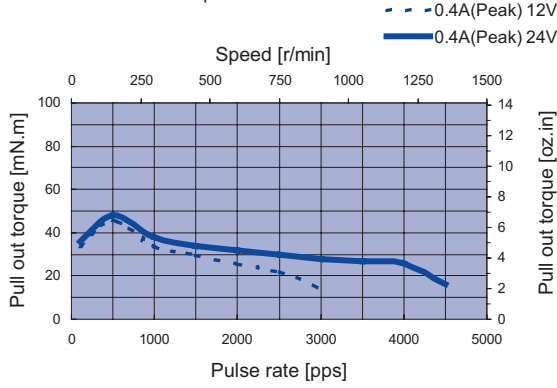
INTEGRATED STEPPING MOTOR

MOTOR DRIVER

Dynamic Torque Curves

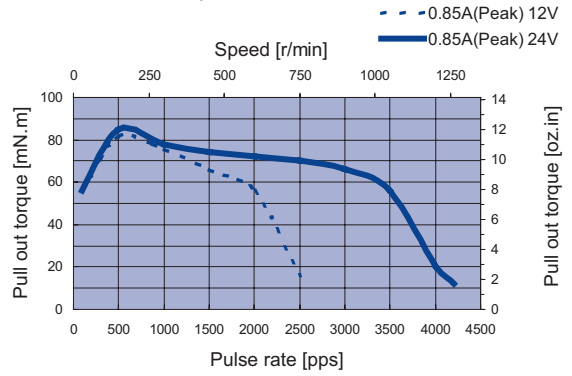
14HY5010

Conditions: Bi-polar Constant Current Driver
 IC: AMA MS3540M
 Mode: Full Step



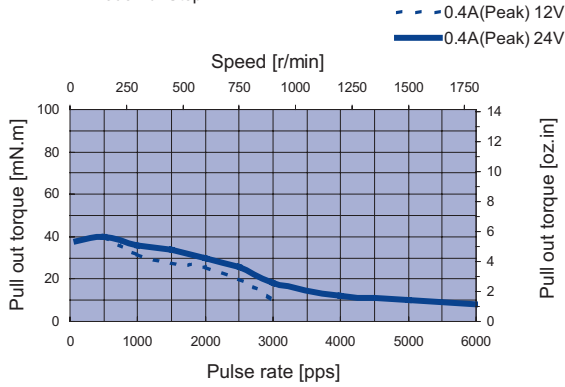
14HY8002

Conditions: Bi-polar Constant Current Driver
 IC: AMA MS3540M
 Mode: Full Step



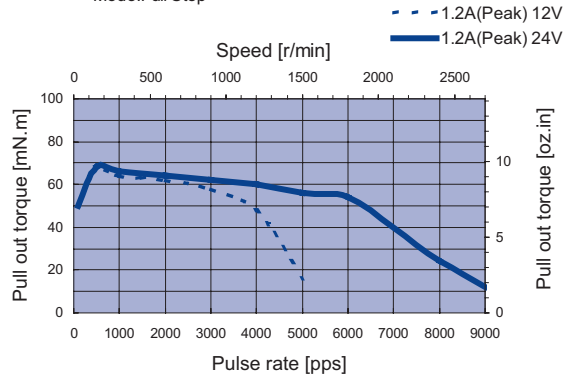
14HY5011

Conditions: Uni-polar Constant Current Driver
 IC: AMA MSU3040M
 Mode: Full Step



14HY8001

Conditions: Uni-polar Constant Current Driver
 IC: AMA MSU3040M
 Mode: Full Step



0.39in.
(10mm)

1.10in.
(28mm)

1.38in.
(35mm)

1.53in.
(39mm)

1.65in.
(42mm)

2.22in.
(56.4mm)

Ø2.25in.
(Ø57.2mm)

2.36in.
(60mm)

3.35in.
(85mm)

Ø3.39in.
(Ø86mm)