

23HY SERIES 1.8°

Key Features

- High Accuracy
- Low Inertia
- 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
23HY0407-01	1.5	2.5	1.5	350	49.58	18	2.55	55	0.30
23HY0414	3.5	6.4	1	350	49.58	18	2.55	55	0.30
23HY1411	4.5	12.2	1	630	89.24	35	4.96	120	0.66
23HY1413-01	2.5	5.4	1.4	630	89.24	35	4.96	120	0.66
23HY2416	7	14.5	1	730	103.40	42	5.95	145	0.80
23HY2417	3	6.4	1.5	730	103.40	42	5.95	145	0.80

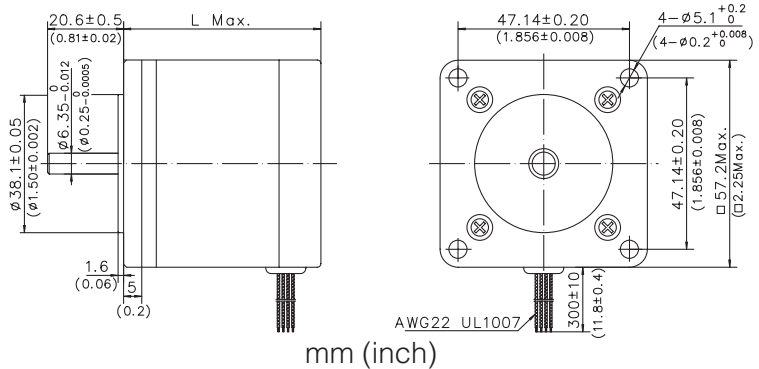
Uni-polar

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
23HY0601	1.5	1.5	1.5	300	42.49	18	2.55	55	0.30
23HY0602	3.6	3.6	1	300	42.29	18	2.55	55	0.30
23HY1602	2.5	3.5	1.4	500	70.82	35	4.96	120	0.66
23HY1615-08	5	6.5	1	500	70.82	35	4.96	120	0.66
23HY2602	2.5	3	1.6	600	84.99	42	5.95	145	0.80
23HY2609	7	8.5	1	600	84.99	42	5.95	145	0.80

Motor Wiring Diagram → Page A-8

Mechanical Dimension

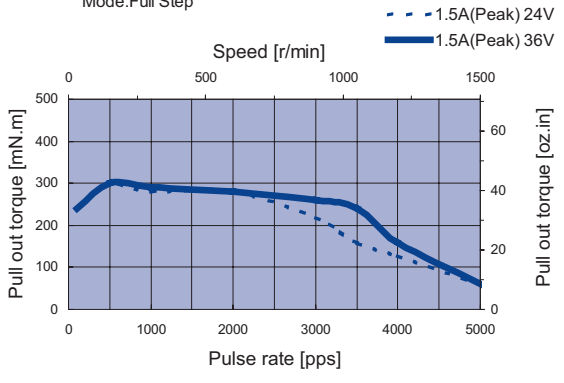
Model Number	L	Mass
	mm (in.)	kg (lb.)
23HY0**	40 (1.56)	0.36 (0.79)
23HY1**	51 (1.99)	0.52 (1.14)
23HY2**	55 (2.15)	0.60 (1.32)



Dynamic Torque Curves

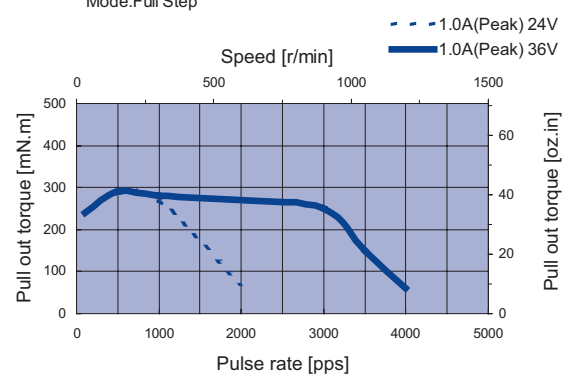
23HY0407-01

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



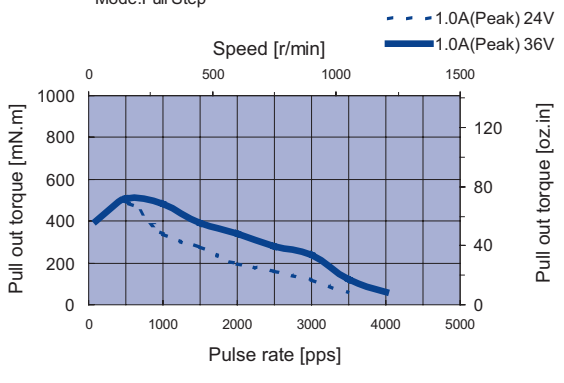
23HY0414

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



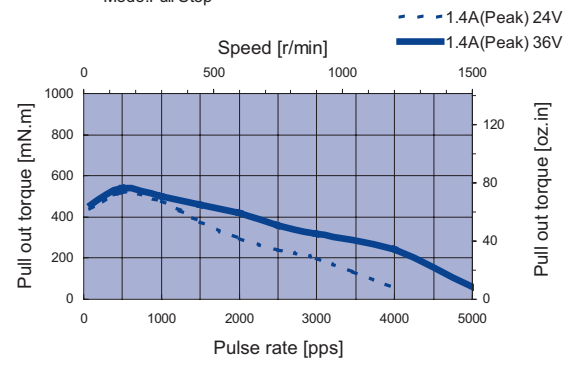
23HY1411

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



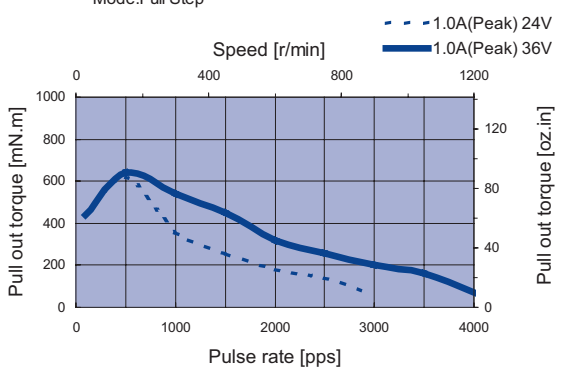
23HY1413-01

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



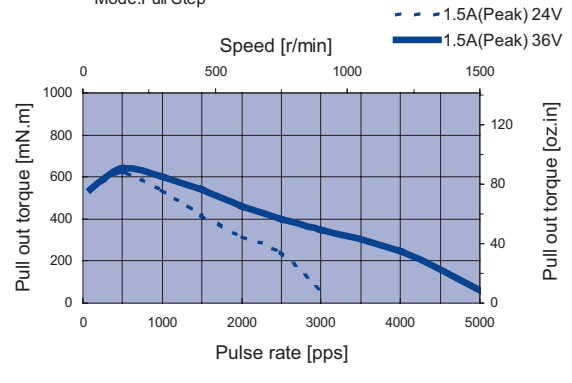
23HY2416

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



23HY2417

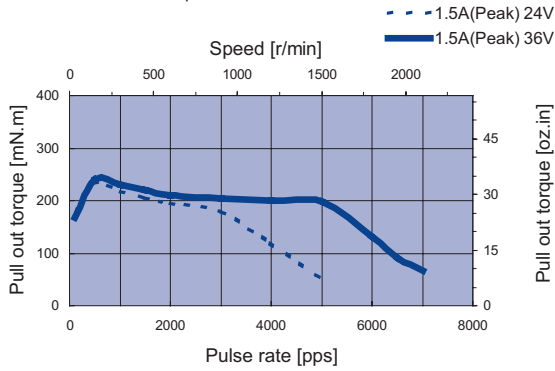
Conditions: Bi-polar Constant Current Driver
IC: AMA MS3540M
Mode: Full Step



Dynamic Torque Curves

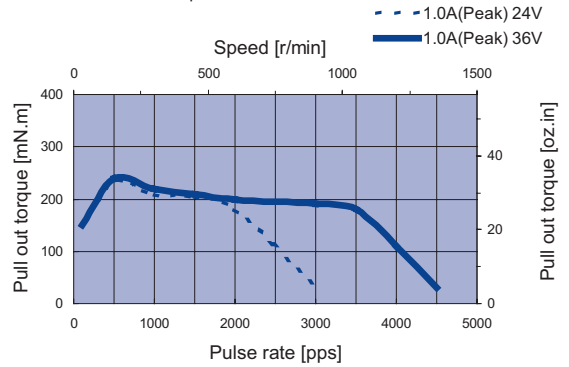
23HY0601

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



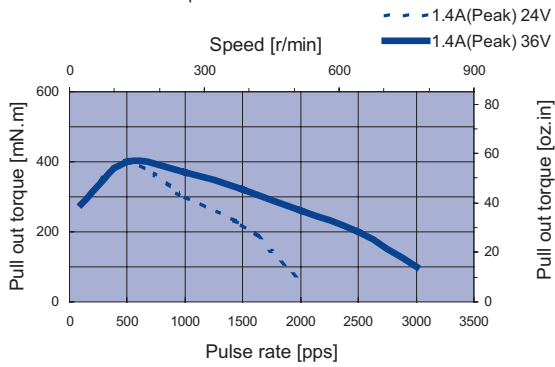
23HY0602

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



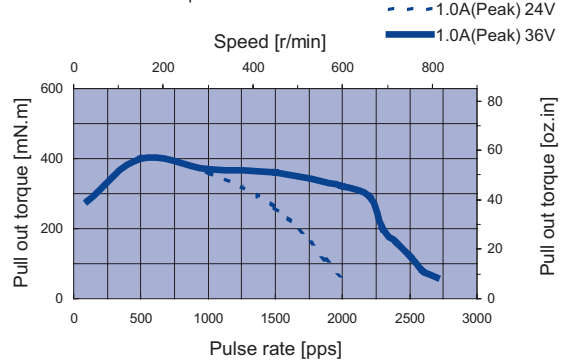
23HY1602

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



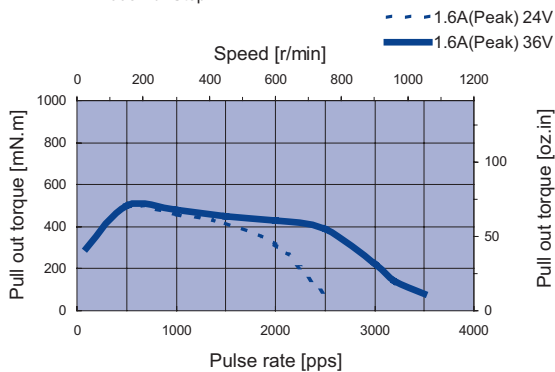
23HY1615-08

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



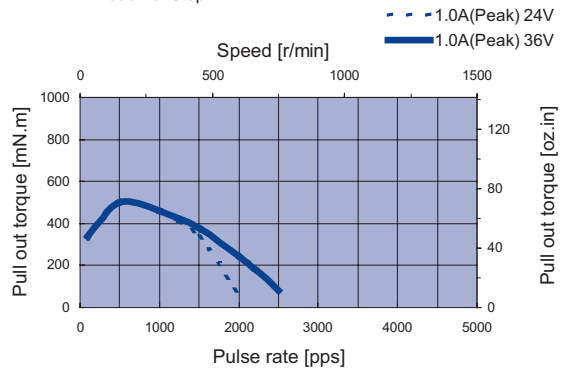
23HY2602

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



23HY2609

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.
(Ø 57.2mm)

2.36in.
(□ 60mm)

3.35in.
(□ 85mm)

Ø3.39in.
(Ø 86mm)