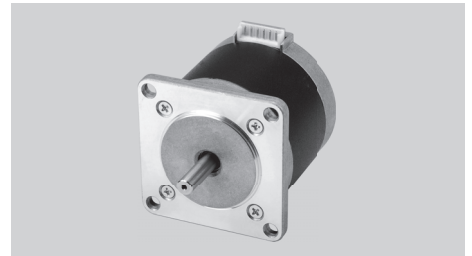


# 23HY SERIES 1.8°

## Key Features

- High Acceleration
- High Accuracy
- Very Low Inertia



## General Specifications

- Bi-polar

Series & Length	Model Number	Holding Torque		Rated Current	Resistance per Phase	Inductance per Phase	Detent Torque		Rotor Inertia	
		mNm	oz-in	A	ohm	mH	mNm	oz-in	g.cm <sup>2</sup>	oz-in <sup>2</sup>
23HY0 39 mm (1.54 in.)	23HY0001N	380	53.85	1.5	1.8	3.2	18	2.55	55	0.30
	23HY0002N	380	53.85	1	3.7	7.2				
23HY1 50.5 mm (1.99 in.)	23HY1001N	690	97.79	1.5	2.7	7.2	35	4.96	120	0.66
	23HY1002N	690	97.79	1	4.5	11.6				
23HY2 54.5 mm (2.15 in.)	23HY2001N	730	103.5	1.5	2.5	6.9	42	5.95	145	0.80
	23HY2002N	730	103.5	1	7	15				

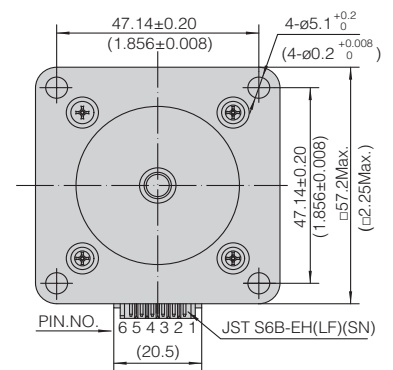
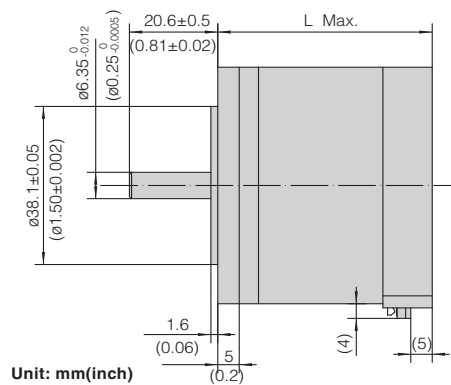
- Uni-polar

Series & Length	Model Number	Holding Torque		Rated Current	Resistance per Phase	Inductance per Phase	Detent Torque		Rotor Inertia	
		mNm	oz-in	A	ohm	mH	mNm	oz-in	g.cm <sup>2</sup>	oz-in <sup>2</sup>
23HY0 39 mm (1.54 in.)	23HY0001-01N	320	45.35	1.5	1.8	1.5	18	2.55	55	0.30
	23HY0002-01N	320	45.35	1	3.6	3.6				
23HY1 50.5 mm (1.99 in.)	23HY1001-01N	530	75.11	1.5	3	3.5	35	4.96	120	0.66
	23HY1002-01N	530	75.11	1	5.4	7.5				
23HY2 54.5 mm (2.15 in.)	23HY2001-01N	640	90.70	1.5	2.8	3.3	42	5.95	145	0.80
	23HY2001-02N	640	90.70	1	7	8.7				

- Wiring Connection, Lead Wires, Schematic Diagrams & Stepping Sequence.....Page 62 - 64

## Mechanical Dimension

Series	L	Mass
	mm	kg
23HY0	39 (1.54)	0.36 (0.79)
23HY1	50.5 (1.99)	0.52 (1.14)
23HY2	54.5 (2.15)	0.60 (1.32)

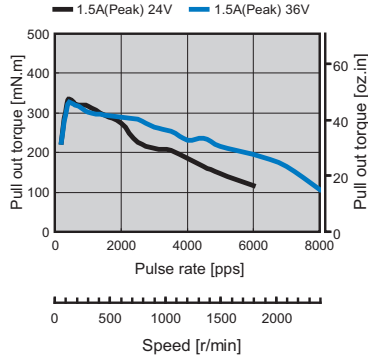


# Dynamic Torque Curves

- Bi-polar

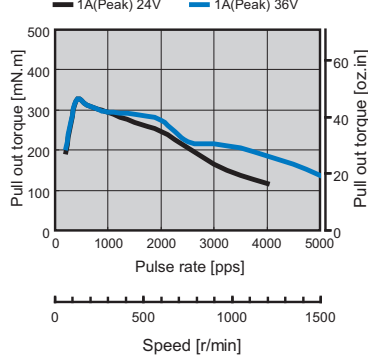
## 23HY0001N

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



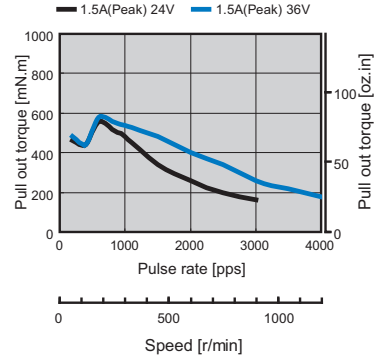
## 23HY0002N

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



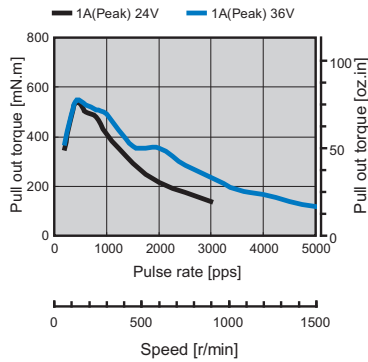
## 23HY1001N

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



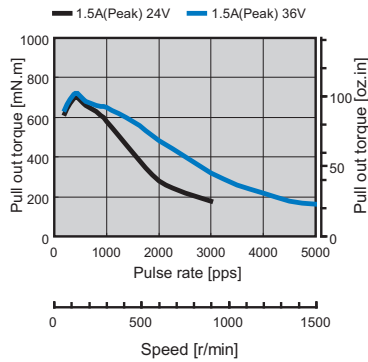
## 23HY1002N

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



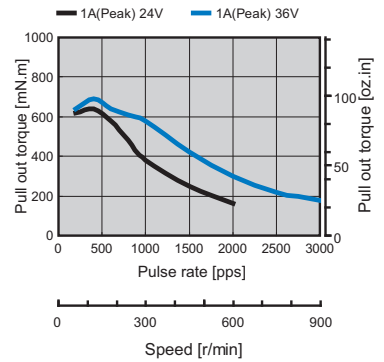
## 23HY2001N

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



## 23HY2002N

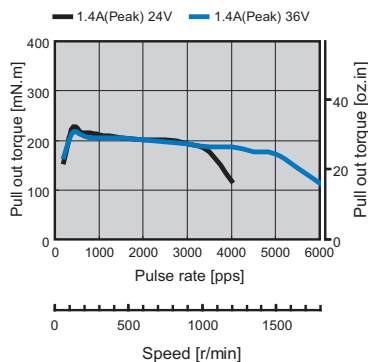
Conditions: Bi-polar Constant Current Driver  
 Driver: AMA MS3540M  
 Mode: Full Step



- Uni-polar

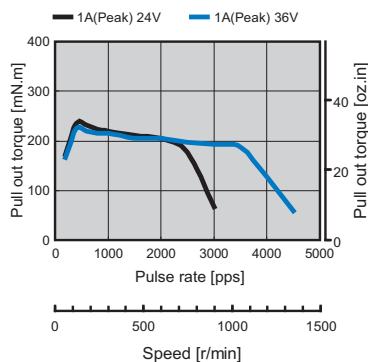
## 23HY0001-01N

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



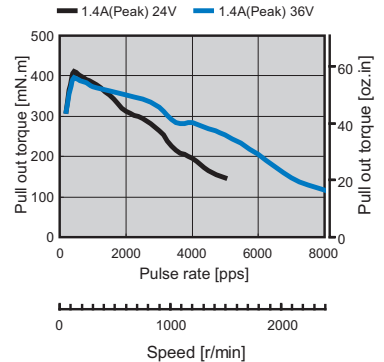
## 23HY0002-01N

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



## 23HY1001-01N

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

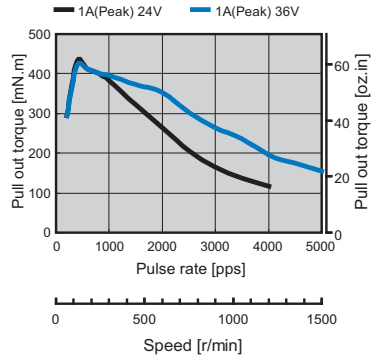


## Dynamic Torque Curves

- Uni-polar

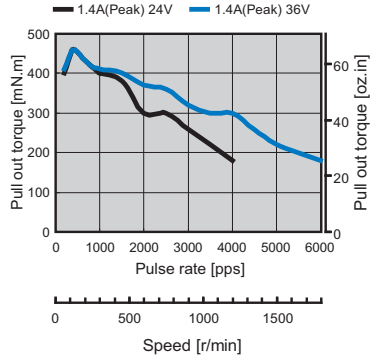
### 23HY1002-01N

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



### 23HY2001-01N

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



### 23HY2001-02N

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

