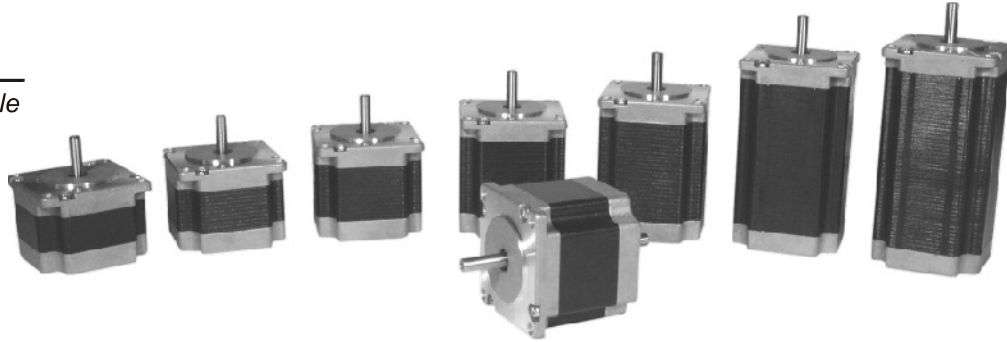


# Nema 23

2 phase 1.8° step angle  
 hybrid stepping motor



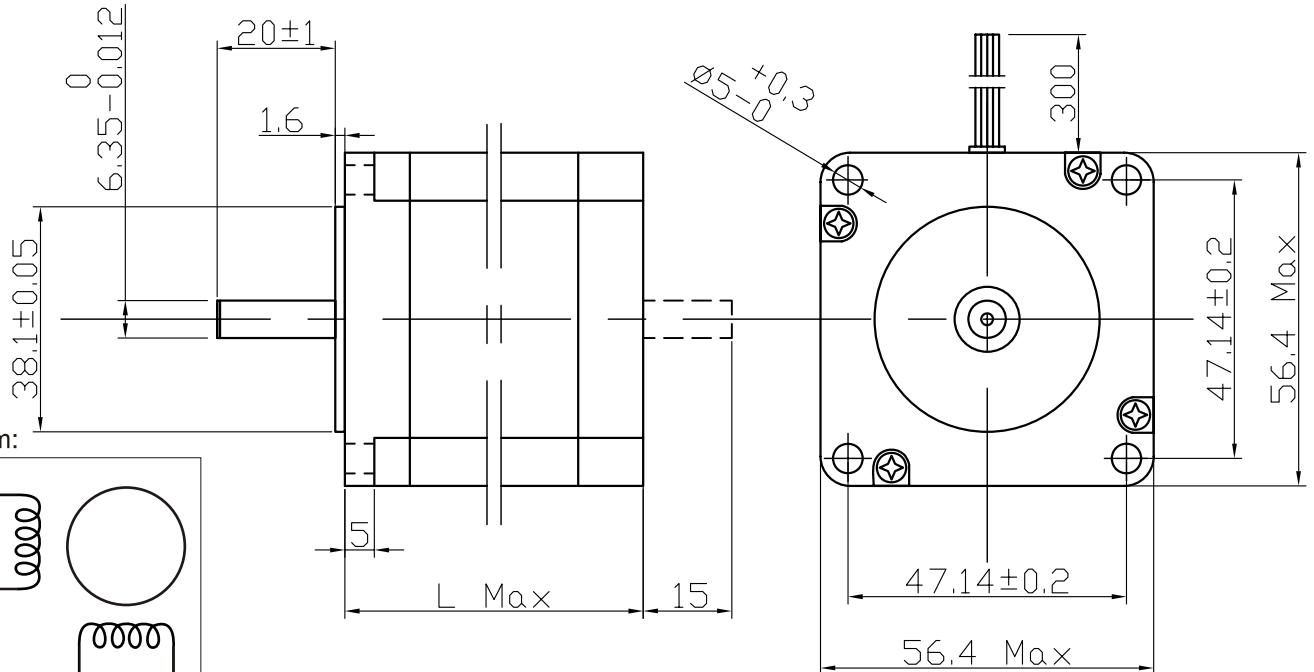
Specifications:

Model	Holding Torque (Nm)	Phase current (A)	Rotor Inertia (g/cm <sup>2</sup> )	Motor Length L max (mm)	Detent Torque (Nm)	Phase Resistance (ohm)	Phase Inductance (mH)	Lead Wire (No)	Motor Weight (Kg)	Note
<b>M1233011</b>	0.55	0.62	150	41	0.025	13	34	4	0.47	
<b>M1233012</b>	0.55	2.0	150	41	0.025	1.2	3.20	4	0.47	
<b>M1233021</b>	0.80	0.62	190	45	0.028	12	29	4	0.52	
<b>M1233022</b>	0.80	2.5	190	45	0.028	1.0	2.2	4	0.52	
<b>M1233031</b>	1.00	0.62	190	51	0.028	13.4	33	4	0.62	
<b>M1233032</b>	1.10	2.5	190	51	0.028	1.15	3.3	4	0.62	
<b>M1233041</b>	1.10	4.2	280	56	0.035	0.4	1.2	4	0.68	8 mm shaft available
<b>M1233051</b>	1.40	3.0	380	64	0.05	0.8	2.4	4	0.85	
<b>M1233061</b>	1.80	3.0	440	76	0.06	1.0	3.54	4	1.05	
<b>M1233062</b>	1.80	4.2	440	76	0.06	0.55	1.8	4	1.05	
<b>M1233064</b>	1.80	6.0	440	76	0.06	0.3	1	4	1.05	
<b>M1233070</b>	3.00	4.2	680	100	0.1	0.8	3.0	4	1.5	
<b>M1233071</b>	3.00	6.0	680	100	0.1	0.4	1.5	4	1.5	
<b>M1233081</b>	3.40	6.0	800	112	0.12	0.44	1.9	4	1.7	

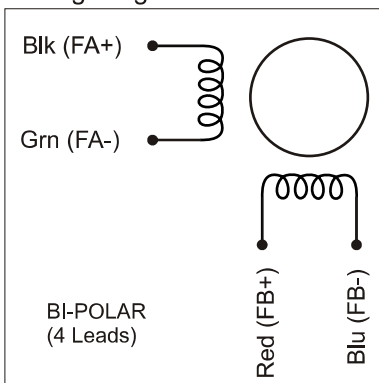
Double shaft and custom windings available

Mechanical Dimensions:

Unit: mm



Wiring Diagram:



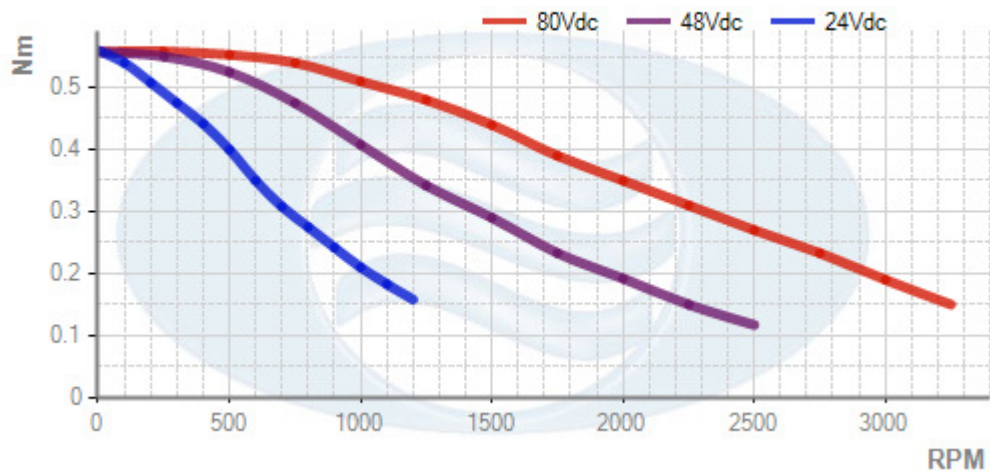
# M1233012

NEMA23 Stepper Motor 0.55Nm (77oz-in) 2Arms L=41mm (1.61in)

## Technical Data

Bipolar Holding Torque	0.55Nm (77oz-in)
Bipolar Phase Current	2Arms
Rotor Inertia	150g-cm <sup>2</sup> (0.82oz-in <sup>2</sup> )
Length	41mm (1.61inches)
Weight	470g (16.58oz)
Flange	NEMA 23 56.4x56.4mm (2.22x2.22inches)
Leads Number	4
Full step angle	1.8°

## Torque curve



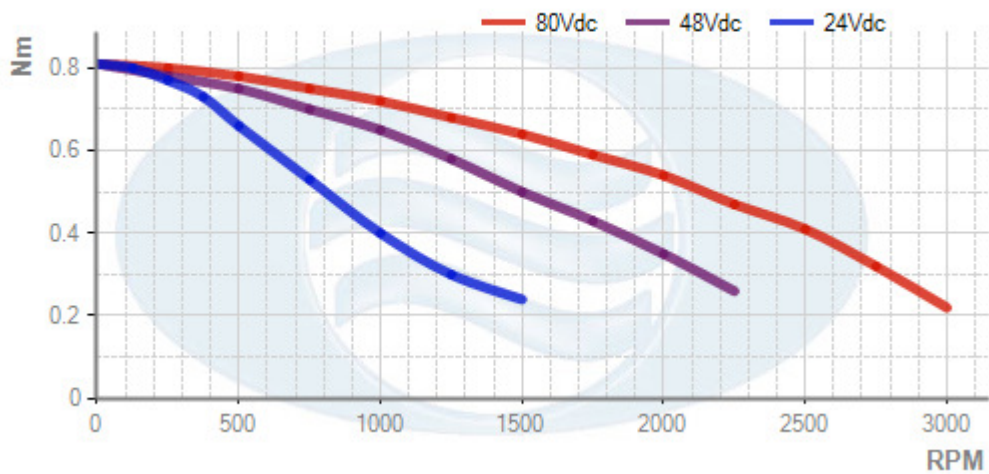
# M1233022

NEMA23 Stepper Motor 0.8Nm (113oz-in) 2.5Arms L=45mm (1.77in)

## Technical Data

Bipolar Holding Torque	0.8Nm (113oz-in)
Bipolar Phase Current	2.5Arms
Rotor Inertia	190g-cm <sup>2</sup> (1.04oz-in <sup>2</sup> )
Length	45mm (1.77inches)
Weight	520g (18.34oz)
Flange	NEMA 23 56.4x56.4mm (2.22x2.22inches)
Leads Number	4
Full step angle	1.8°

## Torque curve



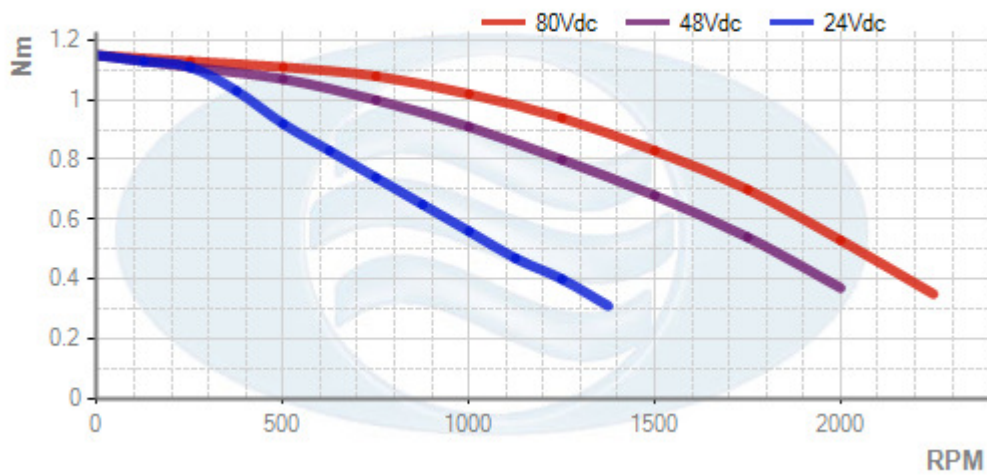
# M1233041

NEMA23 Stepper Motor 1.1Nm (156oz-in) 4.2Arms L=56mm (2.21in)

## Technical Data

Bipolar Holding Torque	1.1Nm (156oz-in)
Bipolar Phase Current	4.2Arms
Rotor Inertia	280g-cm <sup>2</sup> (1.53oz-in <sup>2</sup> )
Length	56mm (2.21inches)
Weight	680g (23.98oz)
Flange	NEMA 23 56.4x56.4mm (2.22x2.22inches)
Leads Number	4
Full step angle	1.8°

## Torque curve



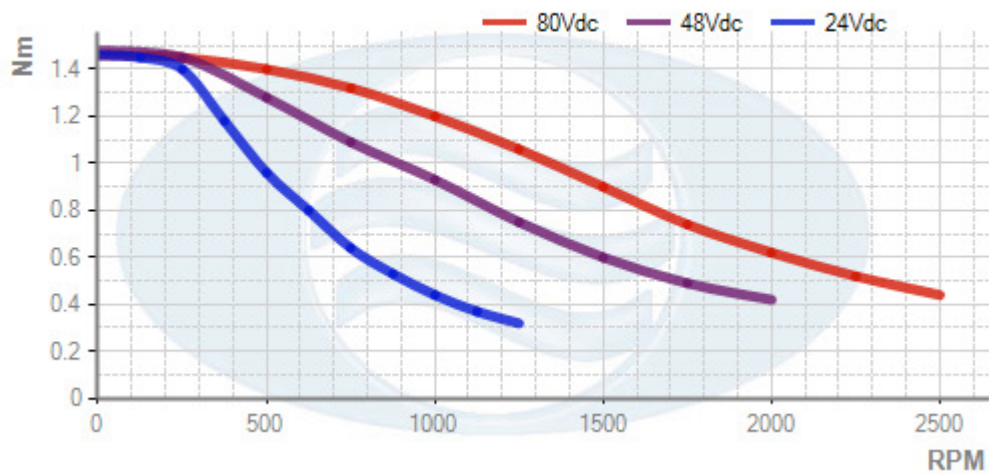
# M1233051

NEMA23 Stepper Motor 1.4Nm (198oz-in) 3Arms L=64mm (2.52in)

## Technical Data

Bipolar Holding Torque	1.4Nm (198oz-in)
Bipolar Phase Current	3Arms
Rotor Inertia	380g-cm <sup>2</sup> (2.07oz-in <sup>2</sup> )
Length	64mm (2.52inches)
Weight	850g (29.98oz)
Flange	NEMA 23 56.4x56.4mm (2.22x2.22inches)
Leads Number	4
Full step angle	1.8°

## Torque curve



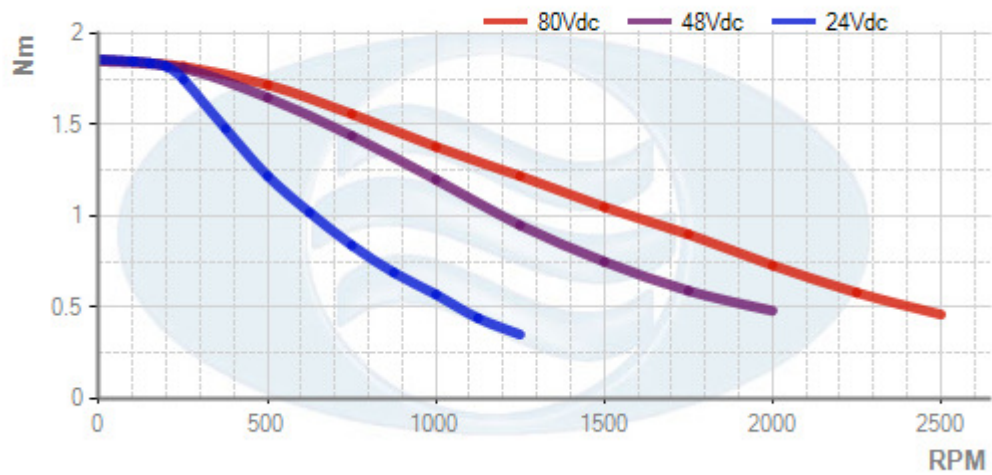
# M1233062

NEMA23 Stepper Motor 1.8Nm (255oz-in) 4.2Arms L=76mm (2.99in)

## Technical Data

Bipolar Holding Torque	1.8Nm (255oz-in)
Bipolar Phase Current	4.2Arms
Rotor Inertia	440g-cm <sup>2</sup> (2.4oz-in <sup>2</sup> )
Length	76mm (2.99inches)
Weight	1050g (37.03oz)
Flange	NEMA 23 56.4x56.4mm (2.22x2.22inches)
Leads Number	4
Full step angle	1.8°

## Torque curve



# M1233070

NEMA23 Stepper Motor 3Nm (425oz-in) 4.2Arms L=100mm (3.94in)

## Technical Data

Bipolar Holding Torque	3Nm (425oz-in)
Bipolar Phase Current	4.2Arms
Rotor Inertia	680g-cm <sup>2</sup> (3.71oz-in <sup>2</sup> )
Length	100mm (3.94inches)
Weight	1500g (52.91oz)
Flange	NEMA 23 56.4x56.4mm (2.22x2.22inches)
Leads Number	4
Full step angle	1.8°

## Torque curve

