

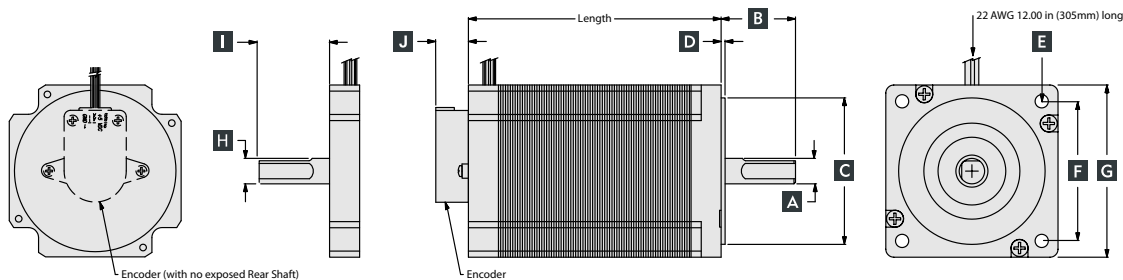
### Compact. Force.

This bi-directional, 1.8° size 34 hybrid DC stepping motor provides a lot of torque in a relatively small size. The TPP34 has holding torque up to 1190 oz-in with a step angle accuracy of ±3%.



TPP34 STEPPER MOTOR	
Size	Nema 34, 1.8°
Holding Torque	up to 1190 oz-in or 840 Ncm
Speed	up to 35 RPS

Bipolar Model	Unipolar Model	MAX Length	A	B	C	D	E	F	G	H	I	J
			Front Shaft Diameter	Front Shaft Length	Pilot Diameter	Pilot Length (Ref)	Mount Hole Callout (Ref)	Mount Hole Spacing (Ref)	Flange External Dimension (Ref)	Rear Shaft Diameter	Rear Shaft Length	Encoder Length (max)
TPP34-396	TPP34-305	2.60 in ±0.04	0.5000 in 0.4995 in	1.46 in ±0.04	2.876 in 2.874 in	0.08 in	(4) 0.260 in ±0.01 Through	2.74 in	3.38 in	0.5000 in 0.4995 in	1.34 in ±0.04	0.70 in
TPP34-793	TPP34-610	3.78 in ±0.04										
TPP34-1190	TPP34-916	4.96 in ±0.04										
TPP34M-280	TPP23M-50	66.0 mm ±1.0	14.000 mm 13.988 mm	37 mm ±1.0	73.05 mm 73.00 mm	2.0 mm	(4) 6.60 mm ±0.25 Through	69.6 mm	85.8 mm	14.000 mm 13.988 mm	34.0 mm ±1.0	17.8 mm
TPP34M-560	TPP34M-430	96.0 mm ±1.0										
TPP34M-840	TPP34M-646	126.0 mm ±1.0										



### TPP23 Model Number

1 - Frame Size  
(Imperial or Metric)

**T P P 3 4**  
Product Name      Frame Size

**T P P 3 4 M**  
Product Name      Frame Size      Optional Metric

2 - Torque

**3 9 6**  
Holding Torque (oz-in) Bipolar

**2 8 0**  
Holding Torque (Ncm) Bipolar

3 - Winding

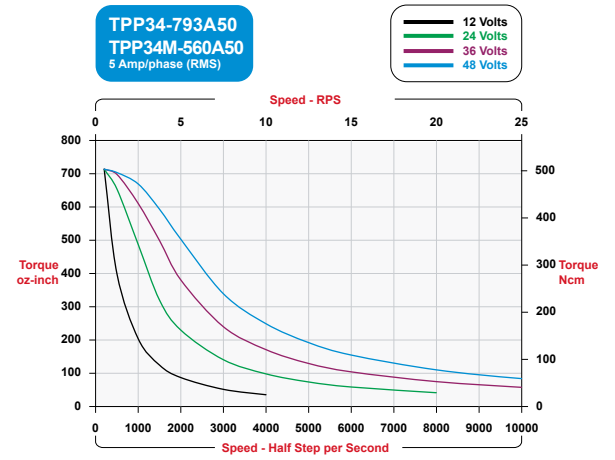
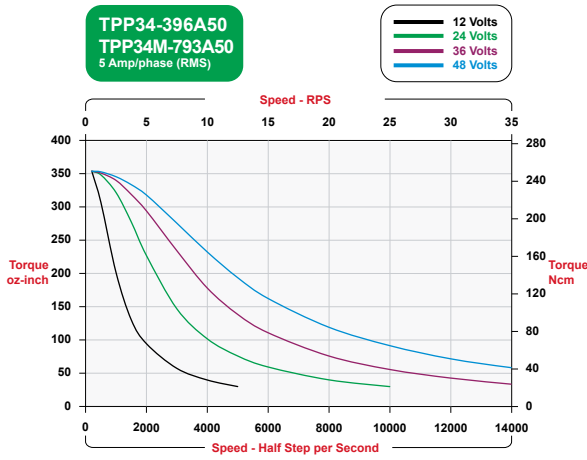
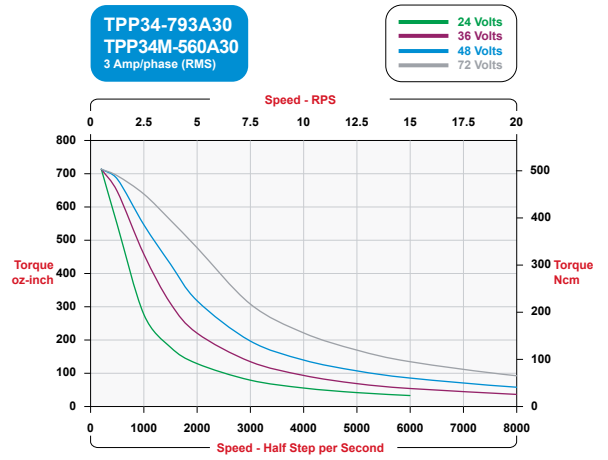
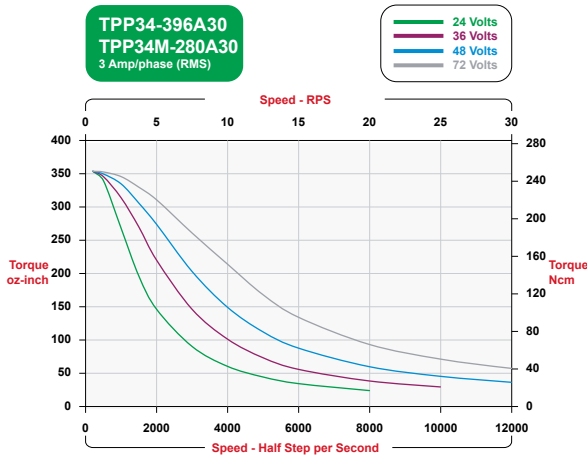
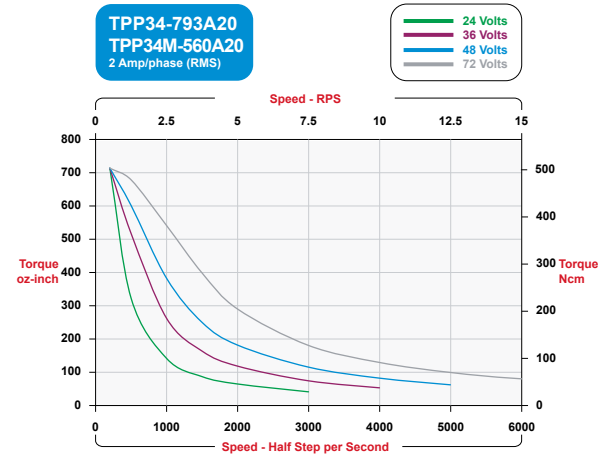
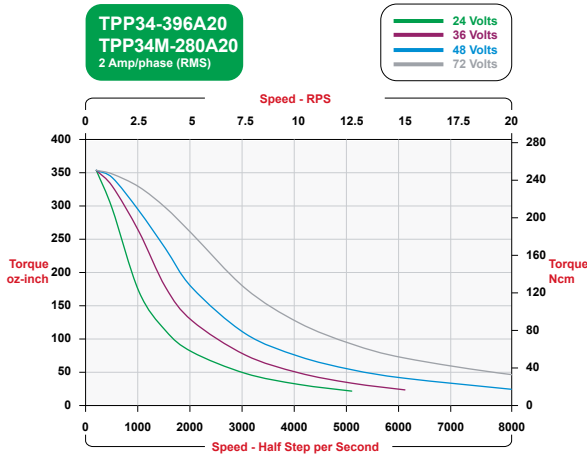
**A 3 0**  
Bipolar      Current (Amps x 10)

**V 3 0**  
Unipolar      Voltage (Volts x 10)

4 - Features

**1 1 0 0 - X**  
Step Angle      Front Shaft      Rear Shaft      Termination      Feedback

# TPP34 - Bipolar Performance



Your Genius. Our Drive.

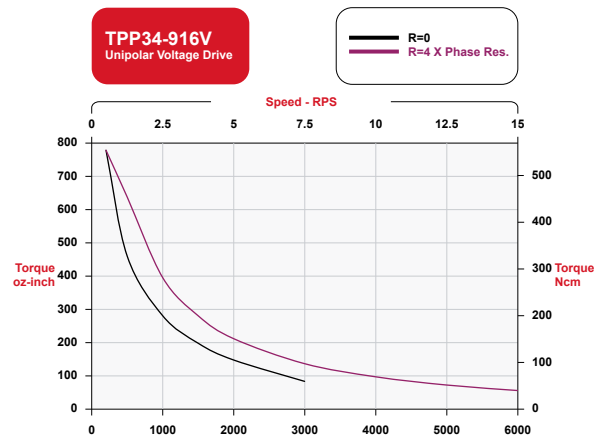
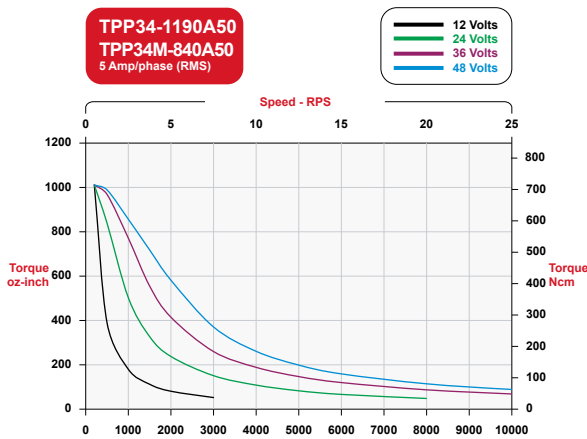
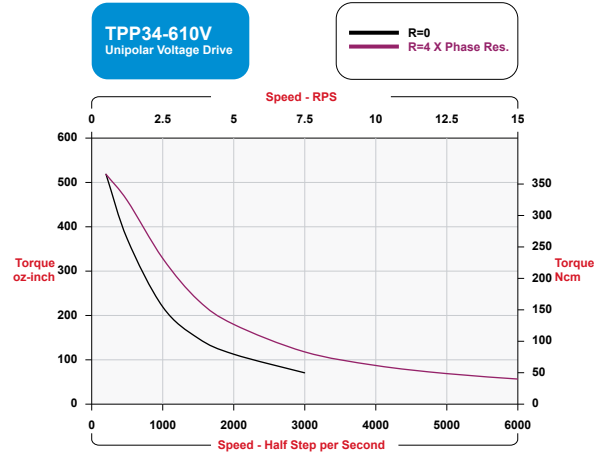
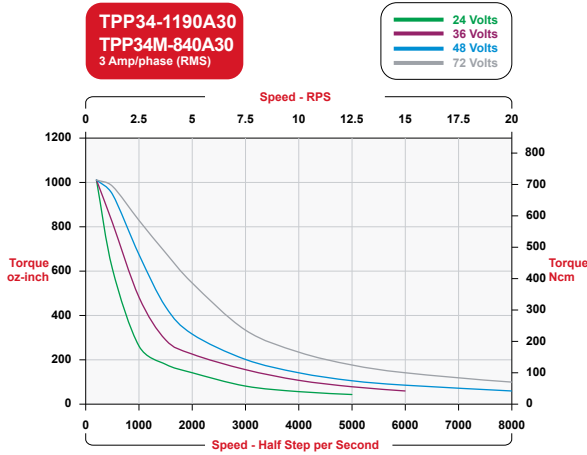
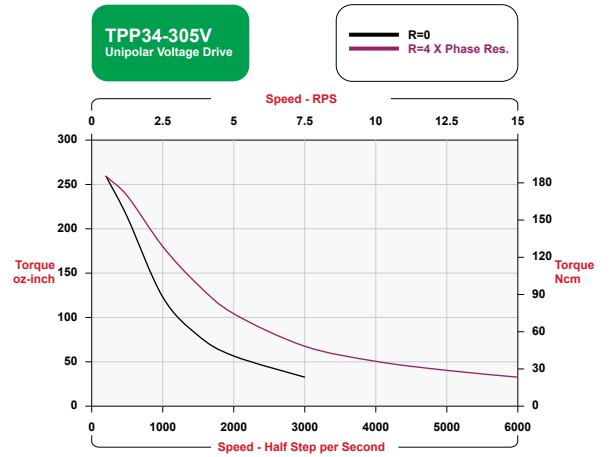
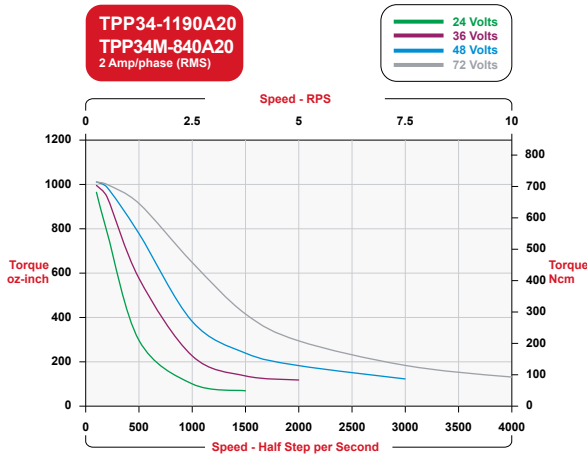
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TPP34 - Bipolar Performance

TPP34 - Unipolar Performance



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## TPP34 Mechanical / Winding Data

### TPP34 Bi-Polar Stack Size

Imperial Models	TPP34-396	TPP34-793	TPP34-1190
Metric Models	TPP34M-280	TPP34M-560	TPP34M-840
Holding Torque (oz-in)	396.0	793.0	1190.0
Holding Torque (Ncm)	280	560	840
Length (inches)	2.60	3.78	4.96
Length (cm)	6.6	9.6	12.6
Width (inches)	3.4	3.4	3.4
Width (cm)	8.6	8.6	8.6
Weight (oz)	61.7	98.8	138.6
Weight (Kg)	1.7	2.8	3.9
Step Angle (°/step)	1.8	1.8	1.8
Number Leads	4	4	4

### TPP34 Uni-Polar Stack Size

Imperial Models	TPP34-305	TPP34-610	TPP34-916
Metric Models	TPP34-215	TPP34-430	TPP34-646
Holding Torque (oz-in)	305.0	610.0	916.0
Holding Torque (Ncm)	215	431	647
Length (inches)	2.60	3.78	4.96
Length (cm)	6.6	9.6	12.6
Width (inches)	3.4	3.4	3.4
Width (cm)	8.6	8.6	8.6
Weight (oz)	61.7	98.8	138.6
Weight (Kg)	1.7	2.8	3.9
Step Angle (°/step)	1.8	1.8	1.8
Number Leads	6	6	6

### TPP34 Bi-Polar Windings

Imperial Models	396A20	396A30	396A50	793A20	793A30	793A50	1190A20	1190A30	1190A50
Metric Models	280A20	280A30	280A50	560A20	560A30	560A50	840A20	840A30	840A50
Current (A/Phase)	2.0	3.0	5.0	2.0	3.0	5.0	2.0	3.0	5.0
Voltage (V/Phase)	5.0	3.0	2.0	7.9	4.7	3.1	8.7	5.2	3.4
Resistance (R/Phase)	2.5	1.0	0.4	34.3	1.6	0.6	4.3	1.7	0.7
Inductance (mH)	21.9	8.7	3.4	793.0	13.6	5.4	44.3	17.6	7.0

### TPP34 Uni-Polar Windings

Imperial Models	305V23	305V30	305V50	610V35	610V47	610V79	916V39	916V52	916V87
Metric Models	215V23	215V30	215V50	430V35	430V47	430V79	646V39	646V52	646V87
Current Uni-Polar (A/Phase)	4.5	3.0	2.0	4.5	3.0	2.0	4.5	3.0	2.0
Voltage Uni-Polar (V/Phase)	2.3	3.0	5.0	3.5	4.7	7.9	3.9	5.2	8.7
Resistance Uni-Polar (R/Phase)	0.5	1.0	2.5	0.8	1.6	3.9	0.9	1.7	4.3
Inductance Uni-Polar (mH)	2.2	4.3	10.9	3.4	6.8	17.1	4.4	8.6	22.2
Current Bi-Polar (A/Phase)	3.0	2.1	1.4	3.2	2.1	1.4	3.2	2.1	1.4
Voltage Bi-Polar (V/Phase)	3.2	4.2	7.1	4.7	6.6	11.1	5.2	7.3	12.2
Resistance Bi-Polar (R/Phase)	1.0	2.0	5.0	13.6	27.2	68.5	1.7	3.4	8.7
Inductance Bi-Polar (mH)	8.7	17.4	43.7	793.0	793.0	793.0	17.6	35.2	88.7

