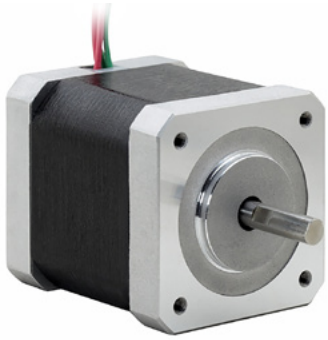
ElectroCraft®
powering innovation™

TPP17
ElectroCraft TorquePower™ Plus
STEPPER MOTOR

Precise. Compact.

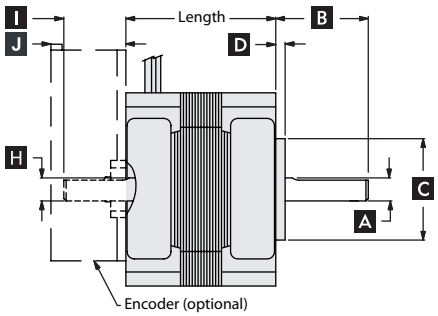
This 1.8 degree NEMA size 17 hybrid DC stepping motor is totally enclosed with permanently lubricated ball bearings. The TPP17 is bi-directional and has holding torque up to 58 oz-in with a step angle accuracy of ±5%.

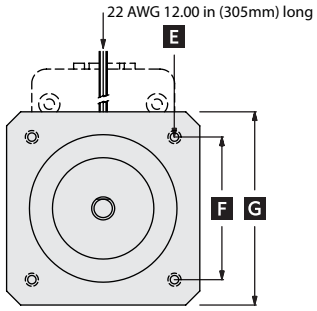
This motor is also available in Metric configuration.



TPP17 STEPPER MOTOR	
Size	Nema 17, 1.8°
Holding Torque	up to 58 oz-in or 41 Ncm
Speed	up to 80 RPS

Bipolar Model	Unipolar Model	MAX Length	A Front Shaft Diameter	B Front Shaft Length	C Pilot Diameter	D Pilot Length (Ref)	E Mount Hole Callout (Ref)	F Mount Hole Spacing (Ref)	G Flange External Dimension (Ref)	H Rear Shaft Diameter	I Rear Shaft Length	J Encoder Length (max)
TPP17–29	TPP17–22	1.28 in ±0.03	0.1968 in 0.1963 in	0.79 in ±0.03	0.8660 in 0.8648 in	0.08 in	(4) 4-40 UNC-2B 0.17 in Deep Min	1.22 in	1.65 in	0.1968 in 0.1963 in	0.53 in ±0.04	0.70 in
TPP17–47	TPP17–36	1.52 in ±0.03										
TPP17–58	TPP17–44	1.85 in ±0.03										
TPP17M–21	TPP17M–16	32.5 mm ±0.8	4.999 mm 4.986 mm	20 mm ±0.8	22.00 mm 21.97 mm	2.0 mm	(4) M3 x 0.5-6H 4.31 mm Deep min	30.9 mm	41.9 mm	4.999 mm 4.986 mm	13.5 mm ±1.02	17.8 mm
TPP17M–33	TPP17M–25	38.6 mm ±0.8										
TPP17M–41	TPP17M–31	47.0 mm ±0.8										





TPP17 Model Number

1 - Frame Size
(Imperial or Metric)

2 - Torque

3 -Winding

4 -Features

T P P 1 7 – 2 9 A 1 0 – 1 1 0 0 – X

Product Name | Frame Size | Holding Torque (oz-in) | Bipolar | Current (Amps x 10) | Step Angle | Front Shaft | Rear Shaft | Termination | Feedback

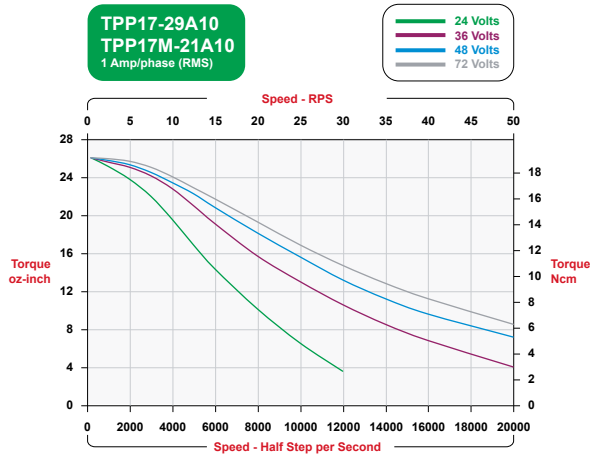
T P P 1 7 M – 2 1 V 4 0 – 1 1 0 0 – X

Product Name | Frame Size | Optional Metric | Holding Torque (Ncm) | Unipolor | Voltage (Volts x 10) | Step Angle | Front Shaft | Rear Shaft | Termination | Feedback

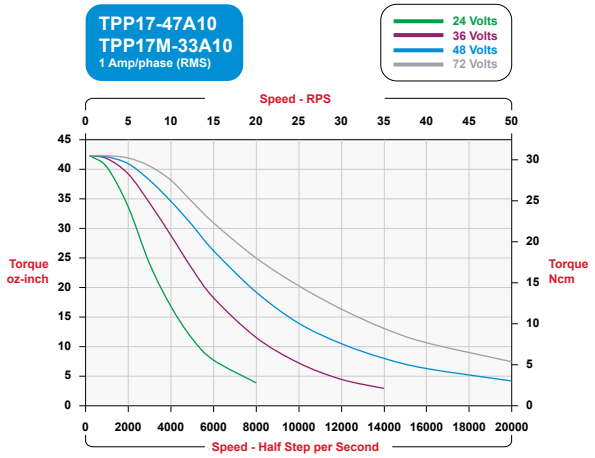
072117

TPP17 - Bipolar Performance

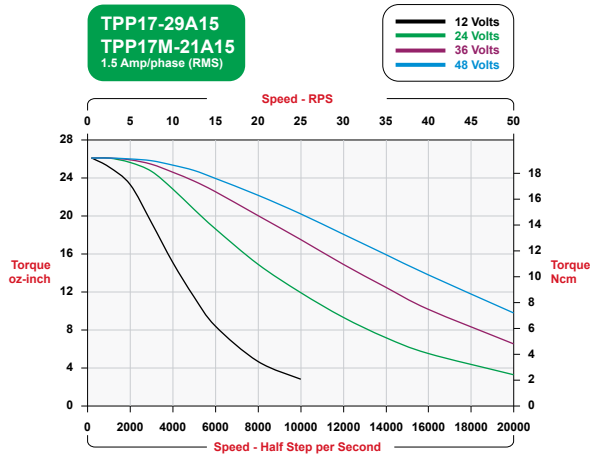
TPP17-29A10
TPP17M-21A10
1 Amp/phase (RMS)



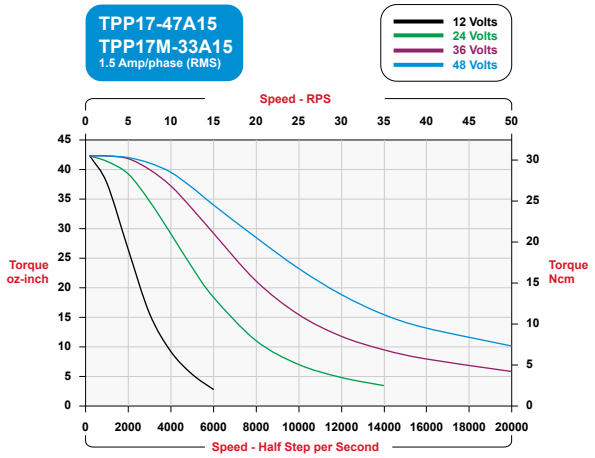
TPP17-47A10
TPP17M-33A10
1 Amp/phase (RMS)



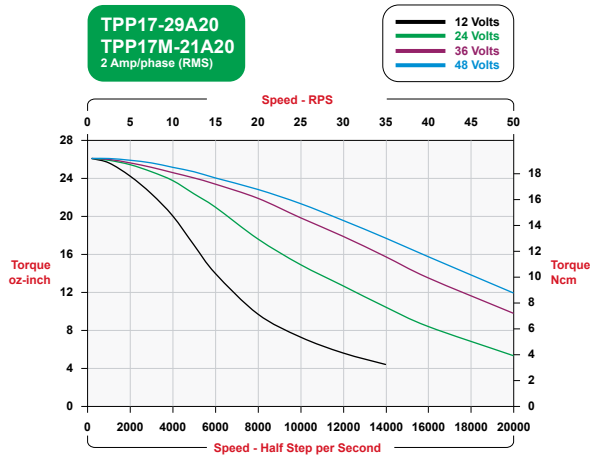
TPP17-29A15
TPP17M-21A15
1.5 Amp/phase (RMS)



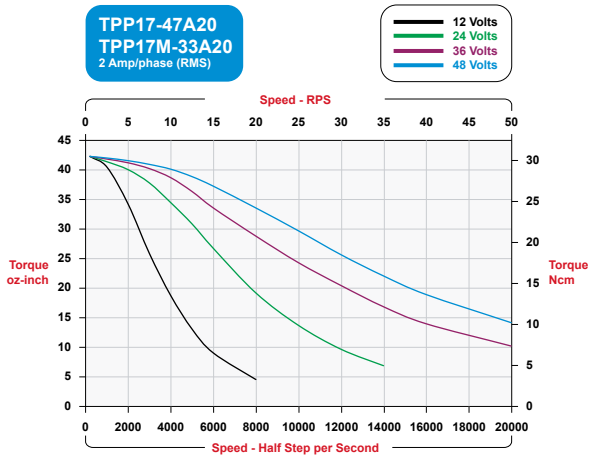
TPP17-47A15
TPP17M-33A15
1.5 Amp/phase (RMS)



TPP17-29A20
TPP17M-21A20
2 Amp/phase (RMS)



TPP17-47A20
TPP17M-33A20
2 Amp/phase (RMS)



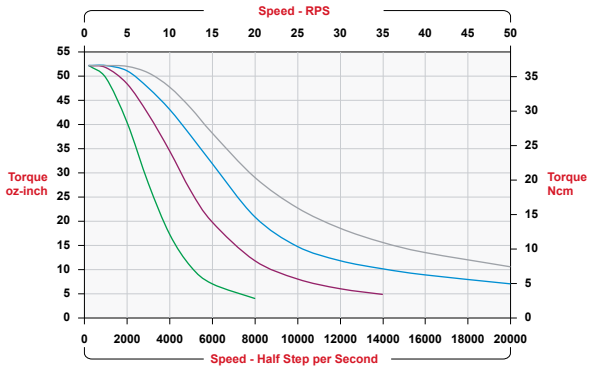
ElectroCraft, Inc.
250 McCormick Road,
Gallipolis, Ohio 45631

Tel: (844) 338-8114
Fax: (812) 385-3013

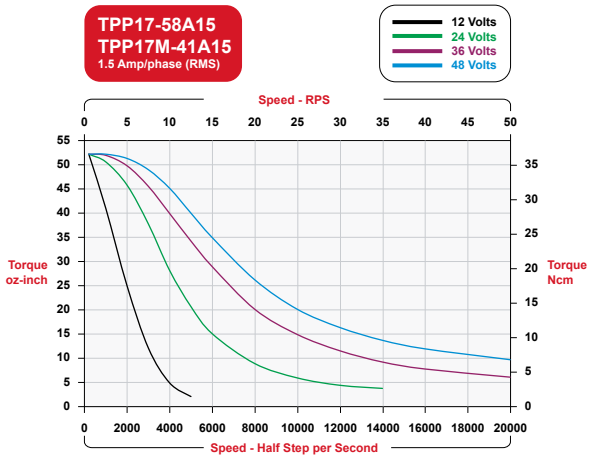
Email: sales@electrocraft.com
www.electrocraft.com

TPP17 - Bipolar Performance

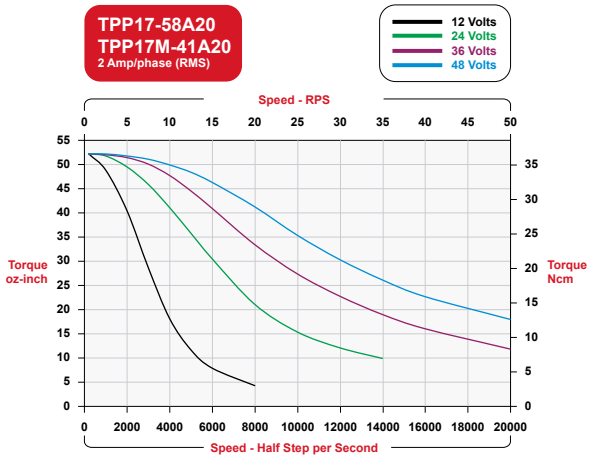
TPP17-58A10
TPP17M-41A10
1 Amp/phase (RMS)



TPP17-58A15
TPP17M-41A15
1.5 Amp/phase (RMS)

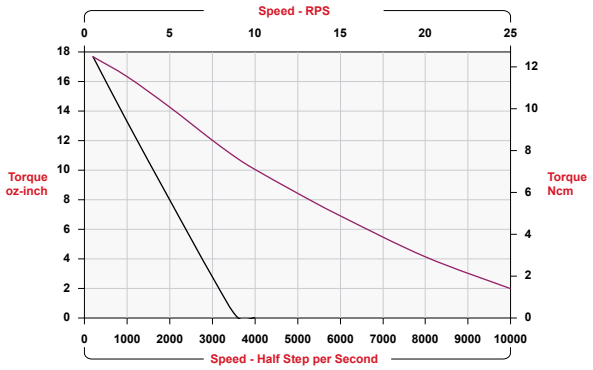


TPP17-58A20
TPP17M-41A20
2 Amp/phase (RMS)

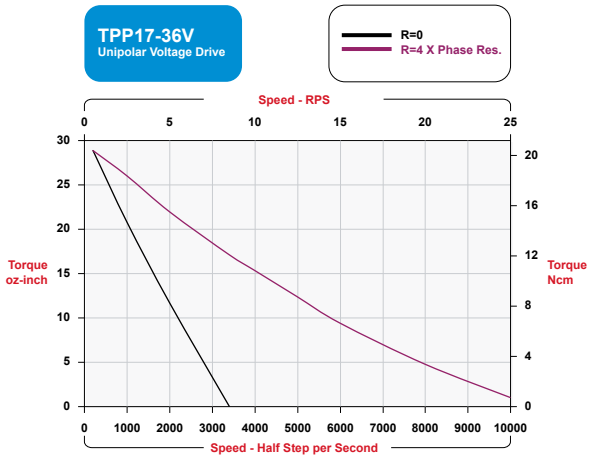


TPP17 - Unipolar Performance

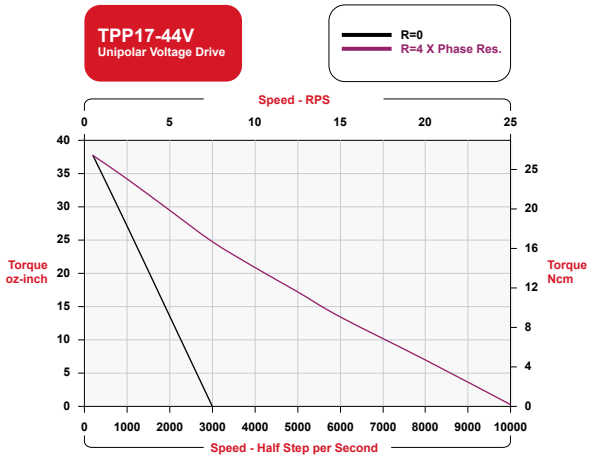
TPP17-22V
Unipolar Voltage Drive



TPP17-36V
Unipolar Voltage Drive



TPP17-44V
Unipolar Voltage Drive



ElectroCraft, Inc.
250 McCormick Road,
Gallipolis, Ohio 45631

Tel: (844) 338-8114
Fax: (812) 385-3013

Email: sales@electrocraft.com
www.electrocraft.com

TPP17 Mechanical / Winding Data

TPP17 Bi-Polar Stack Size

Imperial Models	TPP17-29	TPP17-47	TPP17-58
Metric Models	TPP17M-21	TPP17M-33	TPP17M-41
Holding Torque (oz-in)	29.0	47.0	58.0
Holding Torque (Ncm)	21	33	41
Length (inches)	1.28	1.52	1.85
Length (cm)	3.3	3.9	4.7
Width (inches)	1.6	1.6	1.6
Width (cm)	4.1	4.1	4.1
Weight (oz)	7.0	9.0	11.8
Weight (Kg)	0.20	0.26	0.33
Step Angle (°/step)	1.8	1.8	1.8
Number Leads	4	4	4

TPP17 Uni-Polar Stack Size

Imperial Models	TPP17-22	TPP17-36	TPP17-44
Metric Models	TPP17M-16	TPP17M-25	TPP17M-31
Holding Torque (oz-in)	22.2	36.1	44.4
Holding Torque (Ncm)	16	25	31
Length (inches)	1.28	1.52	1.85
Length (cm)	3.3	3.9	4.7
Width (inches)	1.6	1.6	1.6
Width (cm)	4.1	4.1	4.1
Weight (oz)	7.0	9.0	11.8
Weight (Kg)	0.20	0.26	0.33
Step Angle (°/step)	1.8	1.8	1.8
Number Leads	6	6	6

TPP17 Bi-Polar Windings

Imperial Models	29A10	29A15	29A20	47A10	47A15	47A20	58A10	58A15	58A20
Metric Models	21A10	21A15	21A20	33A10	33A15	33A20	41A10	41A15	41A20
Current (A/Phase)	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0
Voltage (V/Phase)	3.8	2.9	2.0	4.7	3.6	2.4	5.2	3.7	2.4
Resistance (R/Phase)	3.8	1.9	1.0	4.7	2.4	1.2	5.2	2.5	1.2
Inductance (mH)	4.8	2.3	1.2	9.1	4.7	2.3	8.4	4.3	2.2

TPP17 Uni-Polar Windings

Imperial Models	22V40	22V60	22V96	22V120	36V40	36V60	36V120	36V240	44V40	44V60	44V120	44V240
Metric Models	16V40	16V60	16V96	16V120	25V40	25V60	25V120	25V240	31V40	31V60	31V120	31V240
Current Uni-Polar (A/Phase)	1.0	0.6	0.4	0.3	1.2	0.8	0.4	0.2	1.2	0.8	0.4	0.2
Voltage Uni-Polar (V/Phase)	4.0	6.0	9.6	12.0	4.0	6.0	12.0	24.0	4.0	6.0	12.0	24.0
Resistance Uni-Polar (R/Phase)	4.2	9.6	24.0	38.5	3.3	7.5	30.0	120.0	3.3	7.5	30.0	120.0
Inductance Uni-Polar (mH)	2.5	5.8	15.0	23.0	3.2	7.0	28.0	112.0	2.8	7.0	28.0	112.0
Current Bi-Polar (A/Phase)	0.7	0.4	0.3	0.2	0.9	0.6	0.3	0.1	0.9	0.6	0.3	0.1
Voltage Bi-Polar (V/Phase)	5.6	8.5	13.6	17.0	5.6	8.5	17.0	33.9	0.6	8.5	17.0	33.9
Resistance Bi-Polar (R/Phase)	8.4	19.2	48.0	77.0	6.6	15.0	60.0	240.0	6.6	15.0	60.0	240.0
Inductance Bi-Polar (mH)	10.0	23.2	60.0	92.0	12.8	28.0	112.0	448.0	11.2	28.0	112.0	448.0

ElectroCraft, Inc.
250 McCormick Road,
Gallipolis, Ohio 45631

Tel: (844) 338-8114
Fax: (812) 385-3013

Email: sales@electrocraft.com
www.electrocraft.com