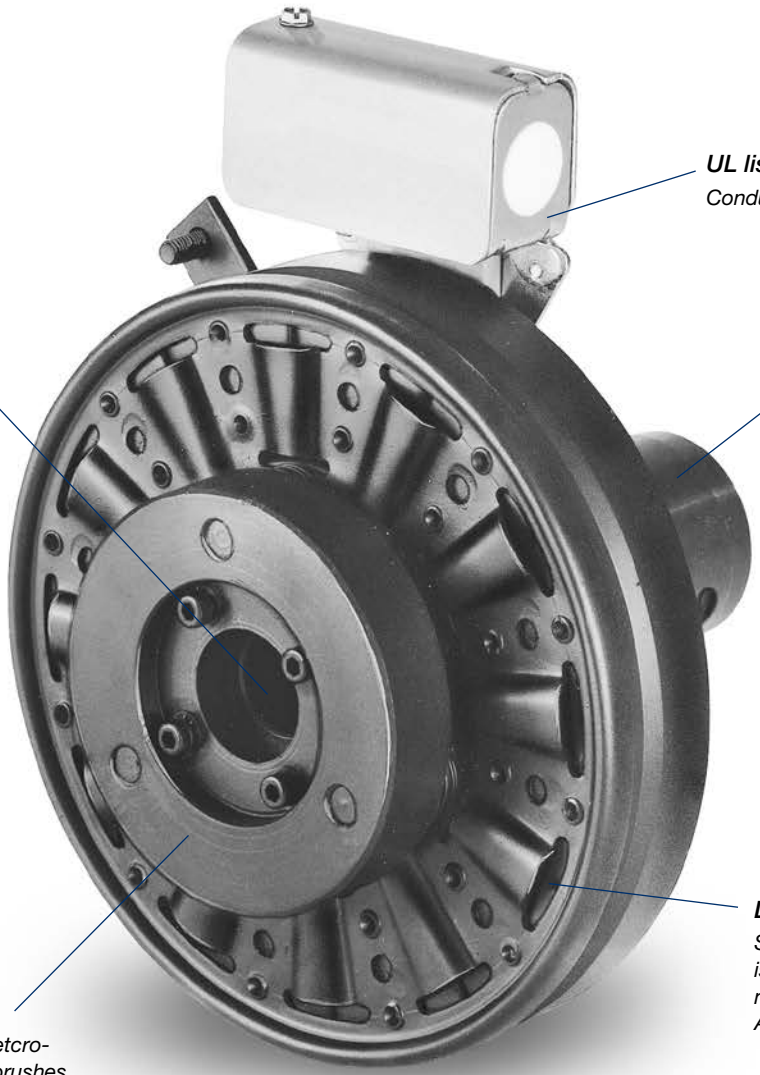
Shaft Mounted Clutches



UL listed
Conduit box meets industry standards.

Mounting flexibility
Standard Electro Clutches are offered in a wide variety of bore sizes.

Simple installation
Easy-to-install a pulley, sprocket, sheave or gear on the Electro Clutch shaft extension.

Long life – no maintenance
Specially designed armature disc is segmented and fluted to provide maximum cooling of friction surfaces. Automatically adjusts to wear.

No brushes to wear out
Warner Electric designed eletcro-magnetic circuit eliminates brushes.

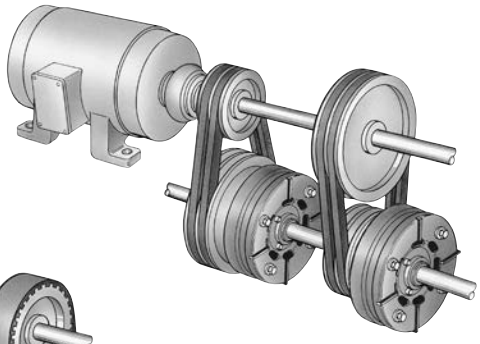
Packaged Performance

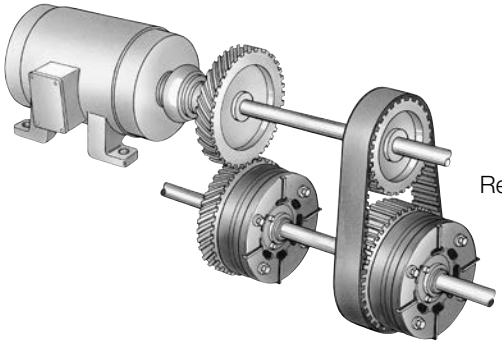
The engineering is built-in. Warner Electric Packaged Performance products are factory aligned and pre-assembled. They have been designed to mate easily with industry standard motors, reducers and other power transmission components. “Bolt-it-down and wire-it-up”. . . they’re ready to go.

- Hubs mate to standard sheaves, sprockets, gears and pulleys
- Wide torque range from 16 to 465 lb. ft.
- Handle 1 to 20 HP at 1800 RPM

Typical Applications

Electro Clutches used for speed changing in a two speed drive.





Reversing with Electro Clutches.

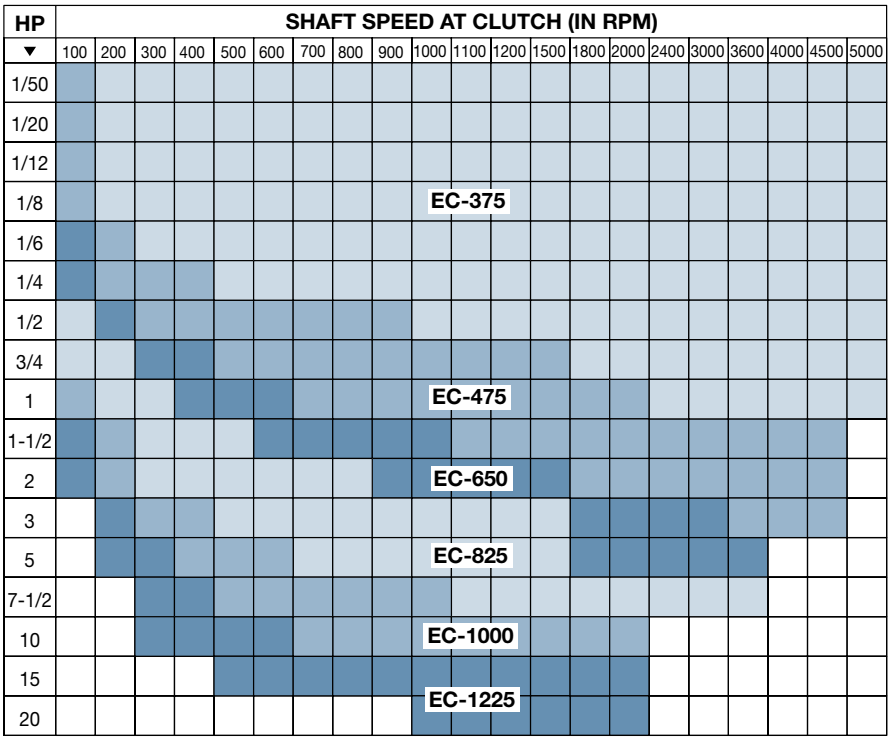
Selection/Ordering Information

Selection Procedure

1. Determine the motor horsepower and r.p.m. at the clutch location.
2. Use the Horsepower vs. Shaft Speed chart to determine the right size Electro Clutch.
3. When ordering, specify bore size and voltage.
4. To get maximum performance from your Electro Clutch, use a Warner Electric Control. See the Controls Section starting on page CTL-1.

Note:
Electro Clutches require extended length motor shafts for motor mounting.

Horsepower vs. Shaft Speed



*For applications with speeds below 100RPM, please contact Warner Electric Application Support.

Specifications

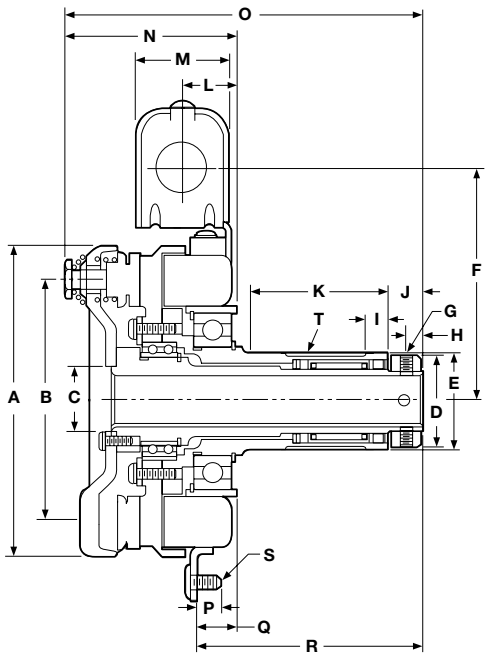
Electro Clutch Size	Static Torque lb. ft.	Max. RPM	Voltage DC	Total Wt. lbs.
EC-375	16	5000	6, 24 or 90	4
EC-475	30	4500	6, 24 or 90	8
EC-650	95	3600	6, 24 or 90	18
EC-825	125	3600	6, 24 or 90	28
EC-1000	240	2000	6, 24 or 90	41
EC-1225	465	2000	6, 24 or 90	85

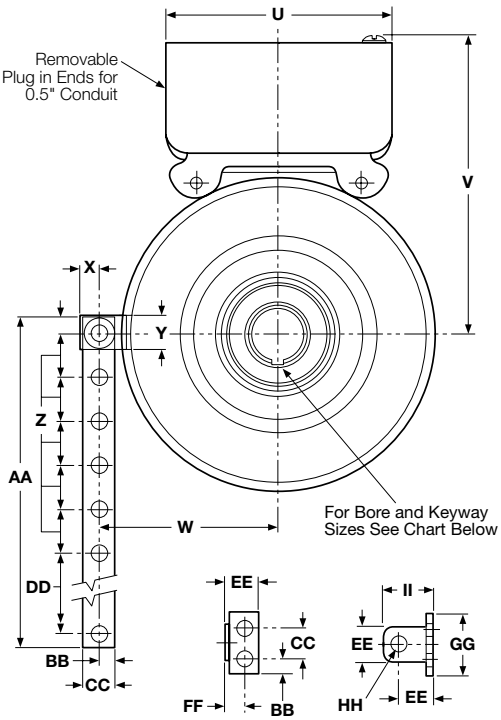
Part Numbers

Model Size	Bore Size	Voltage DC	Part No.
EC-375	1/2"	6	5180-271-006
		24	5180-271-004
		90	5180-271-009
	5/8"	6	5180-271-002
		24	5180-271-008
		90	5180-271-005
EC-475	5/8"	6	5181-271-033
		24	5181-271-037
		90	5181-271-036
	3/4"	6	5181-271-032
		24	5181-271-038
		90	5181-271-034
	7/8"	6	5181-271-031
		24	5181-271-039
		90	5181-271-035
EC-650	1"	6	5281-271-004
		24	5281-271-018
		90	5281-271-007
	1-1/8"	6	5281-271-002
		24	5281-271-019
		90	5281-271-005
	1-1/4"	6	5281-271-009
		24	5281-271-020
		90	5281-271-008
	1-3/8"	6	5281-271-003
		24	5281-271-016
		90	5281-271-006
EC-825	1-1/8"	6	5282-271-002
		24	5282-271-008
		90	5282-271-011
	1-1/4"	6	5282-271-003
		24	5282-271-009
		90	5282-271-012
	1-3/8"	6	5282-271-004
		24	5282-271-010
		90	5282-271-013
EC-1000	1-3/8"	6	5283-271-002
		24	5283-271-010
		90	5283-271-003
	1-1/2"	24	5283-271-012
		90	5283-271-013
	1-5/8"	6	5283-271-004
		24	5283-271-011
		90	5283-271-005
EC-1225	1-5/8"	6	5284-271-008
		24	5284-271-013
		90	5284-271-010
	1-7/8"	6	5284-271-002
		24	5284-271-014
		90	5284-271-003
	2-1/8"	6	5284-271-004
		24	5284-271-015
		90	5284-271-005

Note: Metric bores available in some sizes, consult factory.

EC-375, EC-475, EC-650





Dimensions

All dimensions are nominal, unless otherwise noted.

Size	A Max.	B Dia.	C Min.	D Dia.	E Dia.	F	G	H	I	J	K Max.	L	M
375	4.078	3.125	.7505	1.313	1.375 / 1.374	3.344	10-24 UNC-3A x 5/15	.188	.375	.344	2.047	.781	1.547
475	5.172	4.000	1.0625	1.563	1.625 / 1.624	3.922	1/4-20 UNC-3A x 7/16	.281	.375	.578	2.359	.875	1.547
650	6.578	5.125	1.625	2.375	2.5000 / 2.4985	4.625	1/4-20 UNC -3A x 1/2	.281	.188	.563	3.047	.953	1.547

Bore Sizes and Keyways

Size	Bore Dia.	Keyway
375	.625	*3/16 x 1/16
	.500	1/8 x 1/16
475	.750	3/16 x 3/32
	.875	*3/16 x 1/16
	.625	3/16 x 3/32
650	1.125	*1/4 x 1/8
	1.375	*5/16 x 3/32
	1.000	1/4 x 1/8
	1.250	1/4 x 1/8

*Key Furnished

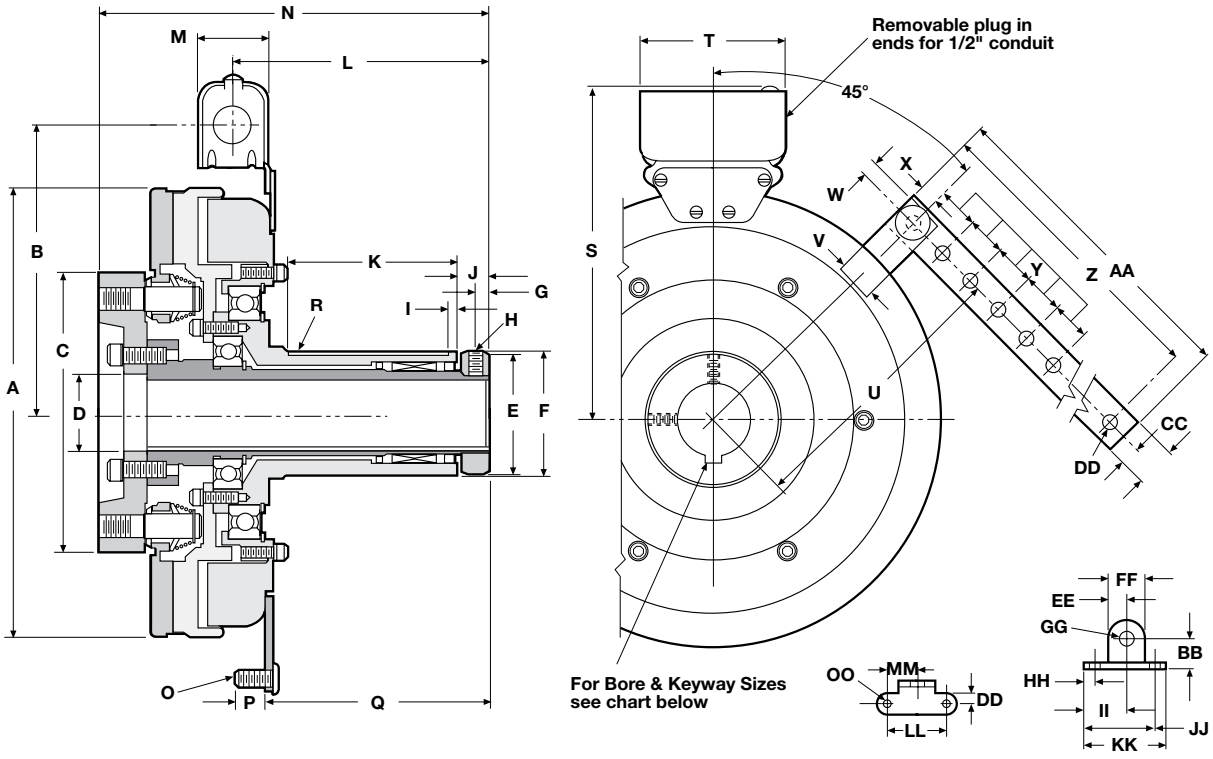
Size	N Max.	O Max.	P	Q Max.	R Min.	S	T	U	V Max.	W	X
375	2.484	4.984	.438	.609	3.000	1/4-20 UNC-2A	5/16 x 3/32	3.750	4.438	2.438	.313
475	3.219	6.266	.422	.658	3.641	1/4-20 UNC-2A	3/8 x 3/32	3.750	4.984	2.984	.313
650	3.547	7.141	.422	.722	4.359	1/4-20 UNC-2A	5/8 x 3/32	3.750	5.750	3.750	.313

Size	Y	Z	AA	BB	CC	DD	EE Dia.	FF	GG	HH Dia.	II
375	.563	.750	5.000	.250	.500	.750	.563	.313	1.000	.270 / .260	.828
475	.578	.750	5.000	.250	.500	.750	.563	.313	1.000	.270 / .260	.828
650	.563	.750	10.000	.250	.500	5.750	.563	.313	1.000	.270 / .260	.828

Specifications

	Average Wt.–lbs.				Inertia–WR² (lb.ft.²)			
Size	Arm. & Carrier.	Rotor	Outer Sleeve	Inner Sleeve	Arm. & Carrier	Rotor	Outer Sleeve	Inner Sleeve
EC-375	.60	.55	.49	.60	.010	.018	.001	.001
EC-475	1.13	1.12	.78	1.22	.072	.033	.006	.002
EC-650	2.3	2.5	1.6	2.37	.106	.202	.010	.013

EC-825



Dimensions

All dimensions are nominal, unless otherwise noted.

Size	A Max.	B Dia.	C	D Min.	E Dia.	F Dia.	G	H	I	J
825	8.656	5.656	4.625	1.437	2.375	2.5000 2.4985	.281	1/4-20 UNC -3A x 3/8	.188	.563

Size	K Max.	L	M	N Max.	O	P	Q Max.	R*	S	T
825	3.047	5.219	1.547	8.000	5/16-18 UNC-2A	1.547	4.468	5/8 x 3/32	6.813	3.750

Size	U	V	W	X	Y	Z	AA	BB	CC	DD Dia.
825	5.063	.875	—	.375	.750	16.625	17	.750	.375	.330 .321

Size	EE	FF	GG Dia.	HH	II	JJ	KK	LL	MM	NN	OO
825	.438	.875	.313	.250	1.000	1.750	2.000	1.500	.750	.250	.270 .260

* Key supplied

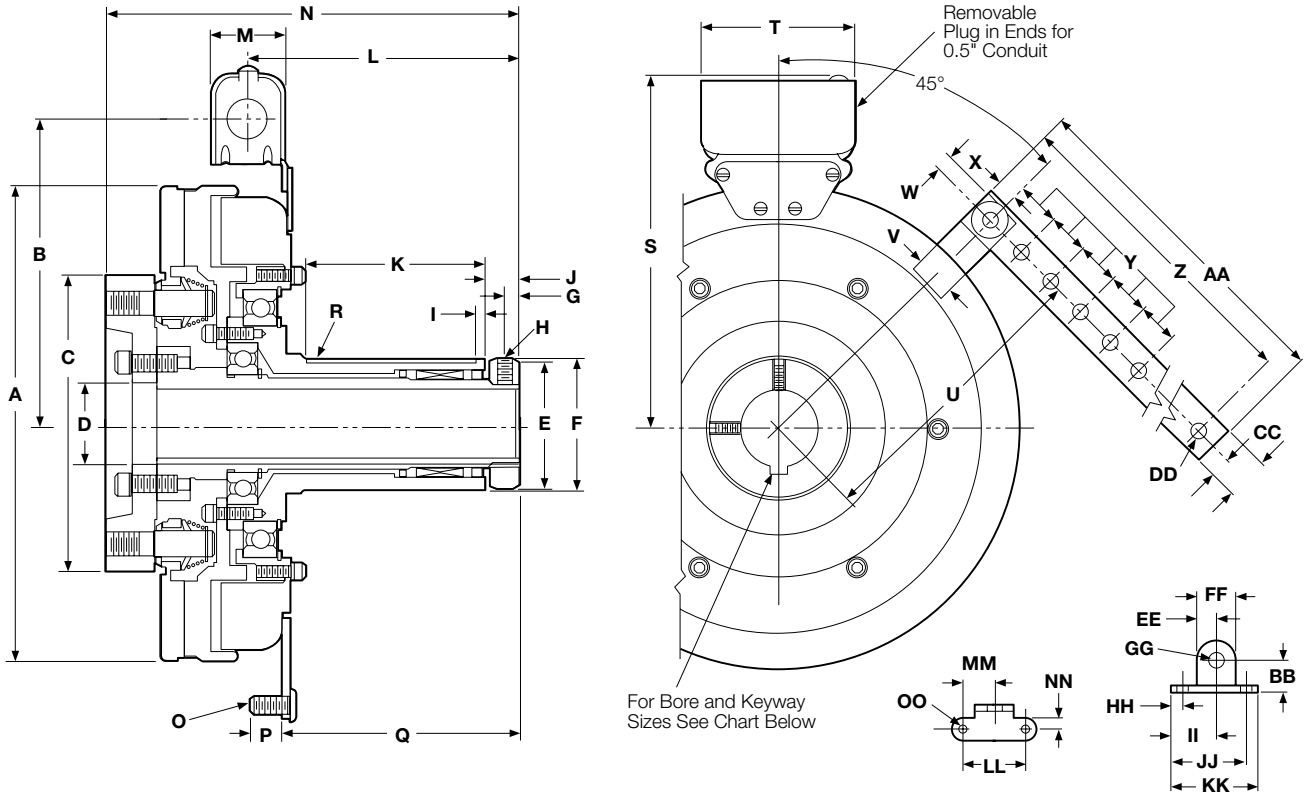
Specifications

Model Size	Voltage DC	Inertia–WR² (lb. ft²) Armature, Hub & Inner Sleeve	Inertia–WR² (lb. ft²) Rotor & Outer Sleeve	Total Weight lbs.	Average Weight–lbs. Armature, Hub& Inner Sleeve	Average Weight–lbs. Rotor & Outer Sleeve
EC-825	6	.35	.87	28	6.0	18.5
	24	.35	.87	28	6.0	18.5
	90	.35	.87	28	6.0	18.5

Bore Sizes and Keyways

Size	Bore Dia.	Keyway
825	1.125	1/4 x 1/8
	1.250	1/4 x 1/8
	1.375	5/16 x 3/32

EC-1000, EC-1225



Specifications

Model Size	Voltage DC	Static Torque (lb. ft.)	Max. Speed RPM	Inertia–WR² (lb. ft²)			Inner Sleeve	Total Weight lbs.
				Arm. & Hub	Rotor	Outer Sleeve		
EC-1000	6	240 lb. ft.	2000	.720	.894	.129	.036	41
	24	240 lb. ft.	2000	.720	.894	.129	.036	41
	90	240 lb. ft.	2000	.720	.894	.129	.036	41
EC-1225	6	465 lb. ft.	2000	1.8	2.4	.129	.061	85
	24	465 lb. ft.	2000	1.8	2.4	.129	.061	85
	90	465 lb. ft.	2000	1.8	2.4	.129	.061	85

EC-1000, EC-1225

Dimensions

All dimensions are nominal, unless otherwise noted.

Size	A Max.	B Dia.	C	D Min.	E Dia.	F Dia.	G	H	I	J	K Max.	L	M
1000	10.328	6.531	6.344	1.750	2.875	2.9375 2.9365	.344	5/16-18 UNC -3A x 3/8	.188	.750	3.969	6.000	1.547
1225	12.672	7.531	6.969	2.234	3.625	3.750 3.749	.406	5/81-16 UNC -3A x 3/4	.375	.859	5.219	7.781	1.547

Size	N Max.	O	P	Q Max.	R*	S	T	U	V	W	X	Y
1000	9.031	5/16-18 UNC-2A	1.547	5.281	3/4 x 1/8	7.688	3.750	6.125	.875	.344	.375	.750
1225	11.016	5/16-18 UNC-2A	1.547	7.047	7/8 x /8	8.688	3.750	7.000	.875	.344	.375	.750

Size	Z	AA	BB	CC	DD Dia.	EE	FF	GG Dia.	HH	II	JJ	KK	LL	MM	NN	OO
1000	16.625	17	.750	.375	.330 .321	.438	.875	.313	.250	1.000	1.750	2.000	1.500	.750	.250	.270 .260
1225	16.625	17	.750	.375	.330 .321	.438	.875	.313	.250	1.000	1.750	2.000	1.500	.750	.250	.270 .260

* Key supplied

Bore Sizes and Keyway

Size	Bore Dia.	Keyway
1000	1.375	*5/16 x 5/32
	1.500	*3/8 x 11/64
	1.625	*3/8 x 1/8
1225	1.625	*3/8 x 5/32
	1.875	*1/2 x 1/4
	2.125	*1/2 x 3/16

*Key Furnished