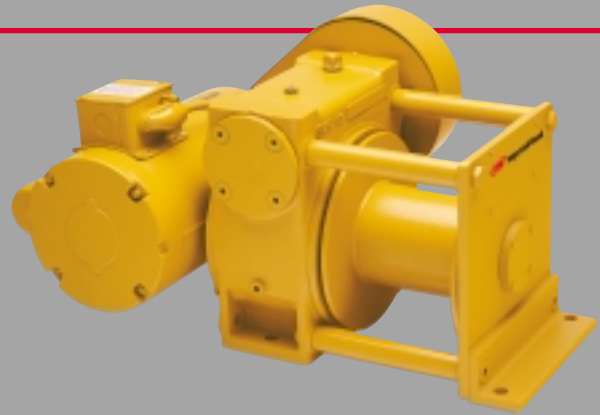


Electric Winches

The IR line of electric winches incorporates over 70 years of experience in solving the most challenging lifting, pulling and positioning applications in the world's toughest industries.

Why choose an IR electric winch?

- The high quality components in an IR electric winch deliver reliable performance and long lasting service.
- IR electric winches are designed to offer maximum environmental resistance.
- Each IR winch is provided with a totally enclosed fan cooled motor.
- The motor design of each IR winch incorporates class "B" electrical insulation with a minimum 1.0 service factor that ensures the motor's ability to deliver 100% of its rated horsepower throughout the duty cycle of that motor.
- The automatic braking system delivers positive load control for lifting and lowering.
- IR electric winches incorporate a flexible design that allows for horizontal, vertical or upside down positioning.



Electric Worm Gear Series

1500 and 2000 lb (682 and 909 kg) capacity



Standard features:

- Fully reversing, totally enclosed, non-ventilated (TENV) motors; 15 minute duty cycle for EBT1500; 10 for EBT2000
- Spring set, electromagnetically released automatic shoe style brake with manual release for emergency operation
- Bronze worm gear provides automatic self-locking for extra safety
- Fully enclosed anti-friction bearings
- Hand crank for emergency manual operation

- Aluminum frame and drum
- Belt driven

Options:

- Control package:
 - NEMA 4, watertight enclosure
 - NEMA 4, magnetic reversing starters
 - NEMA 3R or 4, pushbutton controls
 - NEMA 1 or 4, reversing drum switch
- Single or three phase motors
- 12" (305 mm) drum
- Free spool feature
- Chain drive
- Electronic overload protection



EBT2000B20-5

Specifications

Model no.	Line pull 2nd layer		Line speed 2nd layer		Duty cycle min	hp	Maximum drum storage for rope diameter of								Shipping weight	
	lbs	kg	fpm	m/min			3/16"	1/4"	5/16"	3/8"	ft	m	ft	m	lbs	kg
EBT1500A20-5	1500	682	20	6	15	1 1/2	338	103	200	61	122	37	87	27	129	59
EBT1500A20-12	1500	682	20	6	15	1 1/2	811	247	600	183	292	89	208	63	145	66
EBT2000B20-5	2000	909	20	6	10	1 1/2	338	103	200	61	122	37	87	27	129	59
EBT2000B20-12	2000	909	20	6	10	1 1/2	811	247	600	83	292	89	208	63	145	66

Notes: For three phase, replace "A" (single) in model number with the letter "B". EBT2000 not available in single phase. A=115/230-1-60, B=230/460-3-60, re-connectable dual voltage. Amp draw at 230v: EBT1500A = 10.5 amps; EBT2000B = 5.0 amps

Line pull / lifting capacity at various rope layers

3/16" (5 mm) wire rope; maximum number of layers: 10

Model number	Cap. layer no. 5 (mid-layer)		Cap. layer no. 10	
	lbs	kg	lbs	kg
EBT1500A20-*	1200	545	900	409
EBT2000B20-*	1600	727	1210	550

1/4" (6 mm) wire rope; maximum number of layers: 10

Model number	Cap. layer no. 3 (mid-layer)		Cap. layer no. 6	
	lbs	kg	lbs	kg
EBT1500A20-*	1140	518	810	368
EBT2000B20-*	1520	691	1080	491

5/16" (8 mm) wire rope; maximum number of layers: 6

Model number	Cap. layer no. 3 (mid-layer)		Cap. layer no. 6	
	lbs	kg	lbs	kg
EBT1500A20-*	1330	605	1000	455
EBT2000B20-*	1780	809	1330	605

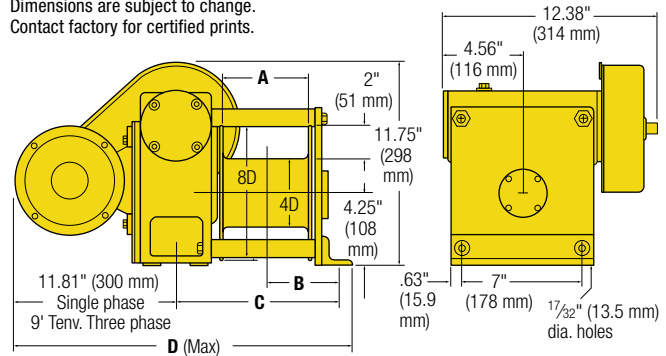
3/8" (10 mm) wire rope; maximum number of layers: 5

Model number	Cap. layer no. 3 (mid-layer)		Cap. layer no. 6	
	lbs	kg	lbs	kg
EBT1500A20-*	1310	595	1040	473
EBT2000B20-*	1740	791	1390	632

Dimensions

Model	Drum length A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
EBT1500A20-5	5	127	4.38	111	9.44	240	13.63	346
EBT1500A20-12	12	305	7.88	200	16.44	418	20.63	524
EBT2000B20-5	5	127	4.25	108	9.44	240	21.75	552
EBT2000B20-12	12	305	7.75	197	16.44	418	28.75	730

Dimensions are subject to change. Contact factory for certified prints.



How to Order:

Complete the model below by adding the appropriate code for the desired voltage. Add option codes as required. Example: EBT1500B20-5-4C

Series	Line pull 2nd layer (lbs)	Model single/three phase	Line speed 2nd layer (fpm)	Drum length (inches)	Voltage	Options (all factory installed)
EBT	1500	B	20	5	4	C
EBT	1500	A = Single phase		5 = 5 inches (127 mm)	1 = 115V	C = Free spool ²
	2000	B = Three phase		12 = 12 inches (305 mm)	2 = 230V	D1 = NEMA 1 drum switch
					3 = 380V	D4 = NEMA 4 drum switch
					4 = 460V	Q = Special paint; please specify
					5 = 575V	R = Chain drive
						S = Rotary limit switch ²
						Y = Electronic overload ¹

Note: Magnetic reversing starter and pushbutton controls are sold separately.
 1 Requires the purchase of a magnetic reversing starter (see control options)
 2 Mutually exclusive-cannot provide both (C & S) options on same winch.

Electric Winches and Car Pullers

200 to 25000 lb (91 to 11364 kg) capacity



IR electric winches and car pullers offer maximum performance and reliability.

n Standard features:

- Totally enclosed fan cooled (TEFC) motors are high torque design, Nema "B" class with an average of 280 percent starting torque. Rated for continuous duty.
- Winches utilize an automatic disc brake rated at 200% motor torque
- Structural steel frames allow flexibility in installation
- Car pullers have a lever operated, jaw clutch that allows for:
 - disengagement of the drum for free spooling of wire rope
 - bi-directional rail car pulling
- Car pullers have an adjustable drag brake to control drum spinning and cable over-run during free spooling operation

n Options:

- Available in single or three phase motors (single phase through 3hp only)
- IEEE 45 marine grade motor (three phase only) and gear box available (specify by adding **M** to model; see **How to Order** information)
 - Three phase marine grade winch motors have a corrosion-resistant coating on motor windings to prevent corrosion due to condensation
 - Marine grade gear-boxes incorporate bronze filters and breather cover caps
- Longer or shorter drum sizes
- Drum divider flange and extra cable anchors
- Grooved drums



6000B20
Electric Winch

- Control packages consisting of:
 - NEMA 4 magnetic reversing starters (single and three phase)
 - NEMA 4 wall-mount pushbutton stations
 - NEMA 3R or NEMA 4 hand-held pushbutton pendants
 - NEMA 1 or NEMA 4 reversing drum switches (through 2hp only)
- Sandblast/carbozinc primer with a Marine 812 finish
- Heaters (in motor windings)
- Limit switch; 2 position; upper and lower; NEMA 4 class enclosure
- Adjustable torque limiting clutch
- Disengaging clutch
- Horizontal Load Reversing (HLR) designs for load movement in two directions. Includes grooved drum, two wire rope anchors and a drum length to spool all wire rope on the first layer
- Explosion-proof components
- Design and manufacturing expertise for special applications

Specifications

Model single/ three phase	Rated capacity at 2nd layer ⁽¹⁾		Appx line spd/min			Starting line pull				Running line pull				Rec'd wire rope in. mm	Drum capacity ⁽²⁾		Shipping weight				
	lbs	kg	ft	m	hp	1st layer lbs	kg	4th layer lbs	kg	1st layer lbs	kg	4th layer lbs	kg		2nd layer ft	m	full drum ft	m	lbs	kg	
200A40/B40	200	91	40	12.2	1/3	550	280	438	199	220	100	175	80	1/4	6	81	25	288	88	160	73
250A40/B40	250	114	20	6.1	1/4	688	313	538	245	275	125	215	98	1/4	6	81	25	288	88	160	73
500A20/B20	500	227	20	6.1	1/2	1375	625	1075	489	550	250	430	195	1/4	6	81	25	288	88	160	72
500A40/B40	500	227	40	12.2	3/4	1375	625	1075	489	550	250	430	195	1/4	6	81	25	288	88	160	72
700A40/B40	700	318	40	12.2	1	1938	881	1525	693	775	352	610	277	1/4	6	81	25	288	88	150	68
800A20/B20	800	364	20	6.1	2	2200	1000	1750	795	880	400	700	318	1/4	6	81	25	288	88	190	86
1300A20*/B20*(3)	1300	591	20	6.1	1	3240	1473	2550	1159	1410	641	1110	505	5/16	8	120	37	605	184	370	168
1400A40*/B40*(3)	1400	636	40	12.2	2	3540	1609	2780	1264	1540	700	1210	550	5/16	8	120	37	605	184	370	168
1600B90	1600	727	90	27.4	5	4400	2000	3350	1523	1760	800	1340	609	3/8	10	105	32	460	140	625	283
2000A20*/B20*(3)	2000	909	20	6.1	1 1/2	4950	2250	3750	1705	2150	977	1675	761	3/8	10	105	32	460	140	375	170
2000A40*/B40*(3)	2000	909	40	12.2	3	4970	2259	3770	1714	2160	982	1675	761	3/8	10	105	32	460	140	445	202
2000B60	2000	909	60	19.3	5	5400	2455	4175	1898	2160	982	1670	759	3/8	10	105	32	460	140	575	261
3000B40*(3)	3000	1364	40	12.2	5	7600	3455	5900	2682	3300	1500	2560	1164	7/16	12	119	36	422	129	575	261
3500B80	3500	1591	80	24.4	12	9450	4295	7450	3386	3780	1718	2980	1355	7/16	12	125	38	875	267	690	313
4000A20*/B20*(3)	4000	1818	20	6.1	3	9700	4409	7270	3305	4220	1918	3160	1436	1/2	13	107	33	309	94	525	239
4500B50*(3)	4500	2045	50	15.2	7 1/2	11200	5091	8450	3841	4840	2200	3680	1673	1/2	13	107	33	309	94	630	286
6000B20*(3)	6000	2727	20	6.1	5	15400	7000	11600	5273	6700	3045	5040	2291	5/8	16	146	45	422	129	930	422
6000B40*(3)	6000	2727	40	12.2	7 1/2	17200	7818	12950	5886	7480	3400	5630	2559	5/8	16	146	45	422	129	950	431
10000B20*	10000	4545	20	6.1	7 1/2	29670	13486	22200	10091	12900	5864	9650	4386	3/4	19	146	45	323	98	1525	692
10000B40*(3)	10000	4545	40	12.2	15	27150	12341	20350	9250	11800	5364	8850	4023	3/4	19	146	45	323	98	1740	789
15000B20*(3)	15000	6818	20	6.1	12	37500	17045	30000	13636	17200	7818	13000	5909	1	25	230	70	600	183	2750	1247
25000B25*(3)	25000	11363	25	7.6	20	62800	28545	48300	21955	27300	12409	21000	9545	1 1/4	32	240	73	860	262	3550	1614

*Chain drive from motor drum. Design factor 6:1 or more on chain at rated line pulls.

(1) Capacities rated at specified voltage with single line on second layer on drum, providing 5:1 design factor. Starting line pulls for reference only.

(2) Drum capacities shown represent tightly spooled wire rope. Recommended drum working capacity is 80% of value shown.

(3) Also available as car puller models. Add **CP** to model number when ordering. Example: **CP1300B20**

Electric Winches and Car Pullers

200 to 25000 lb (91 to 11364 kg) capacity



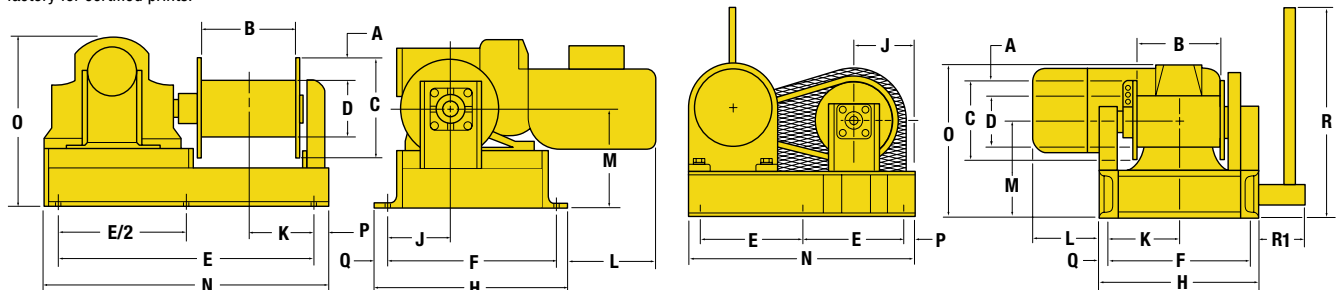
Dimensions

Model Single	Three phase	Dimensions in inches																
		A	B	C	D	E	F	H	J	K	L	M	N	O	P	Q	R	R ₁
200A40	200B40	1.75	8	8	4.50	18	13.50	15.50	6	5.75	7.50	7.50	20	13.63	1	1	-	-
250A20	250B20	1.75	8	8	4.50	8	13.50	15.50	6	5.75	7.50	7.50	20	13.63	1	1	-	-
500A20	500B20	1.75	8	8	4.50	18	13.50	15.50	6	5.75	9.31	7.50	20	14.63	1	1	-	-
500A40	500B40	1.75	8	8	4.50	18	13.50	15.50	6	5.75	9.31	7.50	20	14.63	1	1	-	-
700A40	700B40	1.75	8	8	4.50	18	13.50	15.50	6	5.75	9.31	7.50	20	14.63	1	1	-	-
800A20	800B20	1.75	8	8	4.50	18	13.50	15.50	6	5.75	9.31	7.50	20	14.63	1	1	-	-
1300A20	1300B20	2.69	12	12	6.63	12.63	18.50	20	8	9	5	9.50	27.25	16.75	1	0.75	44	2.50
1400A40	1400B40	2.69	12	12	6.63	12.63	18.50	20	8	9	8	9.50	27.25	16.75	1	0.75	44	2.50
	1600B90	2.69	12	12	6.63	28	18	20	7	8.13	15.81	9.13	30	17.25	1	1	-	-
2000A20	2000B20	2.69	12	12	6.63	12.63	18.50	20	8	9	6.25	9.50	27.25	16.75	1	0.75	44	2.50
2000A40	2000B40	2.69	12	12	6.63	12.63	18.50	20	8	9	6.25	9.50	27.25	16.75	1	0.75	44	2.50
	2000B60	2.69	12	12	6.63	28	18	20	7	8.13	15.81	9.13	30	17.25	1	1	-	-
	3000B40	2.69	12	14	8.63	15.50	20	21.50	9	9.50	9.50	12.50	33	20.25	1	0.75	51	4
	3500B80	4.69	12.75	18	8.63	32	20	22	10	8.19	30.81	13.50	34.50	20.25	1	1	-	-
4000A20	4000B20	2.69	12	14	8.63	15.50	20	21.50	9	9.50	9 1/2	12.50	33	23.81	1	0.75	51	4
	4500B50	2.69	12	14	8.63	15.50	20	21.50	9	9.50	14	12.50	33	21.38	1	0.75	51	4
	6000B20	3.63	16	18	10.75	18	25	27.25	11.50	12	8.50	13.50	38	25.50	1	1.13	58	6
	6000B40	3.63	16	18	10.75	18	25	27.25	11.50	12	11.63	13.50	38	22.75	1	1.13	58	6
	10000B20	3.63	16	20	12.75	22.50	28	31	12.63	13.19	8.88	14.75	47	28.25	1	1.50	58	6
	10000B40	3.63	16	20	12.75	22.50	28	31	12.63	13.19	11	14.75	47	26.25	1	1.50	58	6
	15000B20	6	24	30	18	3 at 18	34	37	19.88	15.06	7.25	20	60.75	39	1.88	1.50	58	6
	25000B25	8	24	40	24	4 at 17	37	40	22	15.50	15.75	26.25	72	48.25	2	1.50	58	6

Dimensions in millimeters

200A40	200B40	1118	203	203	114	457	343	394	152	146	191	191	508	346	635	635	-	-
250A20	250B20	1118	203	203	114	203	343	394	152	146	191	191	508	346	635	635	-	-
500A20	500B20	1118	203	203	114	457	343	394	152	146	237	191	508	371	635	635	-	-
500A40	500B40	1118	203	203	114	457	343	394	152	146	237	191	508	371	635	635	-	-
700A40	700B40	1118	203	203	114	457	343	394	152	146	237	191	508	371	635	635	-	-
800A20	800B20	1118	203	203	114	457	343	394	152	146	237	191	508	371	635	635	-	-
1300A20	1300B20	68	305	305	168	321	470	508	203	229	127	241	692	425	635	19	1118	64
1400A40	1400B40	68	305	305	168	321	470	508	203	229	203	241	692	425	635	19	1118	64
	1600B90	68	305	305	168	711	457	508	178	206	402	232	762	438	635	635	-	-
2000A20	2000B20	68	305	305	168	321	470	508	203	229	159	241	692	425	635	19	1118	64
2000A40	2000B40	68	305	305	168	321	470	508	203	229	159	241	692	425	635	19	1118	64
	2000B60	68	305	305	168	711	457	508	178	206	402	232	762	438	635	635	-	-
	3000B40	68	305	356	219	394	508	546	229	241	241	318	838	514	635	19	1295	102
	3500B80	119	324	457	219	813	508	559	254	208	783	343	876	514	635	635	-	-
4000A20	4000B20	68	305	356	219	394	508	546	229	241	241	318	838	605	635	19	1295	102
	4500B50	68	305	356	219	394	508	546	229	241	356	318	838	543	635	19	1295	102
	6000B20	92	406	457	273	457	635	692	292	305	216	343	965	648	635	29	1473	152
	6000B40	92	406	457	273	457	635	546	292	305	295	343	965	578	635	29	1473	152
	10000B20	92	406	508	324	572	711	787	321	335	225	375	1194	718	635	38	1473	152
	10000B40	92	406	508	324	572	711	787	321	335	279	375	1194	667	635	38	1473	152
	15000B20	152	610	762	457	3 at 457	864	940	505	383	184	508	1543	991	48	38	1473	152
	25000B25	203	610	1016	610	4 at 432	940	1016	559	394	400	667	1829	1226	1295	38	1473	152

Bolt sizes: 200A40 through 800B20: 1/2" (13 mm); 1300A20 through 4500B50: 5/8" (16 mm); 6000B20 through 25000B25: 3/4" (19 mm). Dimensions are subject to change. Contact factory for certified prints.



Direct drive model – for model numbers 200A40/B40, 250A40/B40, 500A20/B20, 500A40/B40, 700A40/B40, 800A40/B40, 1600B90, 2000B60, and 3500B80
Dimensions are subject to change. Contact factory for certified prints

Chain drive from motor drum; design factor 6:1 or more – for model numbers 1300A20/B20, 1400A40/B40, 2000A20/B20, 2000A40/B40, 3000B40, 4000A20/B20, 4500B50, 6000B20, 6000B40, 10000B20, 10000B40, 15000B20, and 25000B25

Electric Winches and Car Pullers

200 to 25000 lb (91 to 11364 kg) capacity



Winch options	Code	Description
Drum divider	D	One steel flange is welded to the center of the drum. Includes second cable anchor. Standard is based on right lay rope for overwound rotation.
Grooved drum	G	Standard drum lengths only. Grooving is left hand spiral for overwind rope take-off. Recommended rope is right lay. Engineering review is required for units specified with longer drums and/or divider flanges.
Heater in motor	H	Recommended for extreme high or low temperature conditions, to eliminate condensation in the motor enclosure.
Marine duty	M	<p>Marine duty motor and gearboxes. Marine duty 3 phase electric winches are designed to meet the Institute of Electrical and Electronic Engineers (IEEE) specification number 45 for shipboard severe duty and washdown environments.</p> <p>To meet the requirements of such harsh operating conditions, all marine duty motors are built with cast iron end shields and special stators constructed of "Silafront-13," an aluminum-silicon alloy resistant to corrosive elements. All motor windings are treated with "Polane," a unique polyurethane coating which prevents corrosion due to condensation. Marine duty winch motors also incorporate class "F" electrical insulation and have a 1.15 service factor capable of delivering, if needed, 115% of the motor's rated horsepower during the entire duty cycle of that motor.</p> <p>Should the user so desire, each marine duty winch motor can be furnished with a 1/8" NPT drain plug rather than the standard 1/8" drain hole to prevent water damage should the motor be submerged. <i>This special option must be requested at the time of order.</i></p> <p>All marine duty 3 phase winches are supplied with gearboxes that incorporate protected breathers to equalize gearbox pressure without the risk of exposure to corrosive elements.</p> <p><i>Marine grade motor features apply to 3 phase motors only. Single phase motor manufacturers' interpretation of marine grade requirements vary. Therefore, motor features may vary. Please advise single phase motor requirements before ordering.</i></p>
Marine 812 finish	P	An excellent corrosion, chemical, and abrasive resistant alkyd enamel finish over a rust inhibitive primer.
Rotary limit switch	S	Rotary switch counts drum revolutions. Different ratios are available depending on actual rope travel. Specify rope travel distance between upper and lower limits so we may select the proper ratio. Please understand that rope spooling and rope stretch must be taken into account and final adjustments will be necessary.
Torque limiter	T	Adjustable clutch acts to limit pull by slipping when load exceeds setting. Mounted on the outboard side of drum.
Sandblast/carbozinc	Z	The best corrosion resistant primer available. Sandblast to "white" metal followed by an inorganic zinc primer. Marine 812 finish (P) recommended. Note: motors are chemically cleaned, not sandblasted.

How to Order Classic Electric Winches and Car Puller Models

Specify complete model code as shown below. Electric winches and car pullers exclude winch control and starter options.

Control options: A control package consists of magnetic reversing starter and controls. Starter and control options may be ordered in two ways:

1. When specified in the model code, starters and controls will be mounted on the winch and tested. Installation charge additional.
2. By specifying part numbers, controls may be ordered separately for customer installation by a qualified electrician. Starter and control option packages consist of the following items:
 - A. Magnetic reversing starter, sized according to winch hp and voltage. Magnetic reversing starters with internal 110 volt control transformer are now standard. These starters are available in single and three phase models and are intended for use with either two motion control stations or pendants used in remote control applications.
 - B. Remote pendant or wall mount pushbutton control (requires the use of a magnetic reversing starter)
 - C. Reversing drum switch to be used when winch power supply is:
 Single phase: 115 volt to 1.5 hp, 230 volt to 2 hp. Three phase: 230/460 volt to 2 hp.

To use a reversing drum switch, a magnetic reversing starter is not required. Drum switches should only be mounted directly to the winch itself. Drum switches when used in this manner have a control voltage equal to the operating voltage of the winch. Drum switches are intended for mounting on the unit itself and must have their enclosures grounded to the electrical system ground.

Example: CP2000B40M2-12-8G-M4P3-50

Series	Line pull ⁽¹⁾ 2nd layer (lbs)	Phase ⁽²⁾	Speed (fpm)	Motor type	Voltage	-	Drum length (in.)	-	Wire rope size	Winch options	-	Starter options	Control options
CP	2000	B	40	M	2	-	12	-	8	G	-	M4	P3-50
CP = Carpuller model prefix		A = Single phase B = Three phase		1 = 115-1-60 2 = 230-1-60 230-3-60 3 = 380-3-50 4 = 460-3-60 5 = 575-3-60 6 = 208-3-60 7 = 415-3-50					Wire rope in sixteenths (e.g. 8/16 = 1/2 inch)	D = Drum divider flange G = Grooved drum H = Heater in motor P = Marine 812 finish Q = Special paint; please specify R = Press roller S = Rotary limit switch T = Torque limiter clutch Y = Electronic overload* Z = Sandblast/carbozinc primer		M4 = Mag. rev. starter NEMA 4	
(-) = Std. Totally Enclosed Fan Cooled												D1 = Drum switch NEMA 1 D4 = Drum switch NEMA 4	
M = Marine (three phase only) grade motor and gearbox												P3-XX = Pushbutton pendant NEMA 3R P4-XX = Pushbutton pendant NEMA 4 W4 ⁽³⁾ = Wall mount pushbutton station NEMA 4 XX = Specify hand held pendent control cord (ft)	

* Requires the purchase of a magnetic reversing starter (see control options)

Drum extensions (see dim. B on previous page)		Drum width in. (mm)								
Model	8 (203)	12 (305)	16 (406)	20 (508)	24 (610)	30 (762)	36 (915)	42 (1067)		
200 - 800	Standard	yes	yes	yes	no	no	no	no		
1300 - 4500	no	Standard	yes	yes	yes	no	no	no		
6000 - 10000	no	no	Standard	yes	yes	yes	no	no		
15000 - 25000	no	no	no	no	Standard	yes	yes	yes		

Drum extensions over standard require engineering approval to confirm design acceptability. For delivery on units with non-standard drum lengths please contact Customer Service.

- (1) Please refer to specification chart for line pull information.
- (2) Please specify voltages when ordering "A" models 115/230-1-60; "B" models 230/460-3-60, and for 380-3-50, 415-3-50 and 575-3-60.
- (3) Wall mount pushbutton controls will be shipped loose for customer installation. The National Electrical Code requires wall mount control stations to be installed with conduit enclosed wiring.

NEW!

Fulcrum Winch Series

5300 to 45600 lb (2409 to 20727 kg) capacity



The new Fulcrum “E” series electric winches are designed to meet or exceed North American ANSI / ASME B30.7 standards while providing optimum performance in a rugged, safe, and versatile package.

IR has combined over 70 years of electric winch manufacturing experience with input from a diverse group of endusers, riggers, and regulatory officials, to determine the design criteria for the new Fulcrum series of winches. Based on industry requirements to maximize safety, versatility, and reliability the Fulcrum “E” series is available in two basic configurations: “EP” for pulling applications, and “EL” for lifting applications. An extensive array of options further enhances the Fulcrum’s flexibility while its 5:1 design factor and **two year warranty** is your assurance of safe, dependable operation for the most demanding applications worldwide.



EP45600 (20 ton Electric Fulcrum Winch)

n Standard features

- Meets or exceeds ANSI / ASME B30.7
- Lifting models with 18:1 D/d ratio (per ANSI / ASME B30.7)
- Pulling models with 15:1 D/d ratio (per ANSI / ASME B30.7)
- 5:1 design factor
- Winch motors are high torque design, rated for continuous duty totally enclosed fan cooled (TEFC)
- All worldwide voltages
- Wide selection of standard gear ratios and line speeds
- Automatic motor disc brake
- Fully enclosed, 95% efficient, planetary gear boxes
- Underwound or overwound cable take-offs
- Variable mounting configurations (inverted, side, etc.)
- **Two year warranty**
- Hydraulic and Man Rider™ models available on request

Specifications:

for pulling winches at 15:1 D/d ratio

Frame	Rope size		Winch 1st layer rated load		Drum diameter		Flange diameter		Std. drum length		No. of layers	Capacity std. drum		Standard min. drum length		Standard max. ¹ drum length	
	in.	mm	lbs	kg	in.	mm	in.	mm	in.	mm		ft	m	in.	mm	in.	mm
3	1/2	13	5300	2409	8.625	219	17	432	18	457	7	768	234	18	457	42	1067 ¹
3	9/16	14	6700	3045	8.625	219	17	432	18	457	6	577	176	18	457	42	1067 ¹
4	5/8	16	8200	3727	10.750	273	22	559	24	610	8	1216	371	18	457	48	1219
4	3/4	19	11700	5318	10.750	273	22	559	24	610	7	896	273	18	457	48	1219
5	7/8	22	15900	7227	14.000	356	28	711	24	610	7	962	293	18	457	48	1219
5	1	25.4	20600	9364	14.000	356	28	711	24	610	6	713	217	18	457	48	1219
6	1 1/8	29	26000	11818	16.000	406	34	864	24	610	7	877	267	18	457	48	1219
7	1 1/4	32	31900	14500	20.000	508	38	965	24	610	7	946	288	18	457	48	1219
7	1 3/8	35	38400	17455	20.000	508	38	965	24	610	6	721	220	18	457	48	1219
8	1 1/2	38	45600	20727	24.000	610	45	1143	30	762	6	974	297	24	610	60	1524

for lifting winches at 18:1 D/d ratio

Frame	Rope size		Winch 1st layer rated load		Drum diameter		Flange diameter		Std. drum length		No. of layers	Capacity std. drum		Standard min. drum length		Standard max. drum length	
	in.	mm	lbs	kg	in.	mm	in.	mm	in.	mm		ft	m	in.	mm	in.	mm
3	1/2	13	5300	2409	8.625	219	17	432	18	457	7	768	234	18	457	42	1067 ¹
3	9/16	14	6000	2722	9.750	248	17	432	18	457	5	505	154	18	457	42	1067 ¹
4	5/8	16	8200	3727	10.750	273	22	559	24	610	8	1216	371	18	457	48	1219
4	3/4	19	9200	4181	14.000	356	22	559	24	610	4	548	167	18	457	48	1219
5	7/8	22	14100	6409	16.000	406	28	711	24	610	6	873	266	18	457	48	1219
5	1	25.4	16400	7455	18.000	457	28	711	24	610	4	526	160	18	457	48	1219
6	1 1/8	29	21300	9682	20.000	508	34	864	24	610	6	845	258	18	457	48	1219
7	1 1/4	32	27000	12273	24.000	610	38	965	24	610	5	715	218	18	457	48	1219
7	1 3/8	35	32600	14818	24.000	610	38	965	24	610	4	505	154	18	457	48	1219
8	1 1/2	38	42400	19273	26.000	660	45	1143	30	762	6	1033	315	24	610	60	1524

¹ For drum layers longer than standard contact Technical Sales

NEW!

Fulcrum Winch

200 to 50000 lb (91 to 22680 kg) capacity



Specifications:

Rope size in. mm	Pulling winches, 1st layer rated load line speed				Lifting winches, 1st layer rated load line speed				
	lbs	kg	fpm	m/min	lbs	kg	fpm	m/min	
Frame 3									
1/2 13	5300	2409	18	5.5	5300	2409	18	5.5	
1/2 13	5300	2409	28	8.5	5300	2409	28	8.5	
1/2 13	5300	2409	39	11.9	5300	2409	39	11.9	
1/2 13	5300	2409	59	18.0	5300	2409	59	18.0	
1/2 13	5300	2409	86	26.2	5300	2409	86	26.2	
1/2 13	5300	2409	101	30.8	5300	2409	101	30.8	
9/16 14	6700	3045	23	7.0	6000	2727	25	7.6	
9/16 14	6700	3045	34	10.4	6000	2727	38	11.6	
9/16 14	6700	3045	48	14.6	6000	2727	53	16.2	
9/16 14	6700	3045	69	21.0	6000	2727	77	23.5	
9/16 14	6700	3045	87	26.5	6000	2727	97	29.6	
9/16 14	6700	3045	102	31.1	6000	2727	114	34.7	
Frame 4									
5/8 16	8200	3727	11	3.4	8200	3727	11	3.4	
5/8 16	8200	3727	19	5.8	8200	3727	19	5.8	
5/8 16	8200	3727	24	7.3	8200	3727	24	7.3	
5/8 16	8200	3727	38	11.6	8200	3727	38	11.6	
5/8 16	8200	3727	54	16.5	8200	3727	54	16.5	
5/8 16	8200	3727	79	24.1	8200	3727	79	24.1	
5/8 16	8200	3727	99	30.2	8200	3727	99	30.2	
5/8 16	8200	3727	117	35.7	8200	3727	117	35.7	
3/4 19	11700	5318	14	4.3	9200	4181	18	5.5	
3/4 19	11700	5318	20	6.1	9200	4181	25	7.6	
3/4 19	11700	5318	25	7.6	9200	4181	31	9.5	
3/4 19	11700	5318	46	14.0	9200	4181	58	17.7	
3/4 19	11700	5318	55	16.8	9200	4181	70	21.3	
3/4 19	11700	5318	64	19.5	9200	4181	81	24.7	
3/4 19	11700	5318	81	24.7	9200	4181	103	31.4	
3/4 19	11700	5318	101	30.8	9200	4181	128	39.0	

Specifications:

Rope size in. mm	Pulling winches, 1st layer rated load line speed				Lifting winches, 1st layer rated load line speed				
	lbs	kg	fpm	m/min	lbs	kg	fpm	m/min	
Frame 5									
7/8 22	15900	7227	21	6.4	14100	6409	23	7.0	
7/8 22	15900	7227	29	8.8	14100	6409	32	10.0	
7/8 22	15900	7227	36	11.0	14100	6409	40	12.2	
7/8 22	15900	7227	82	25.0	14100	6409	92	28.0	
1 25.4	20600	9364	21	6.4	16400	7455	26	7.9	
1 25.4	20600	9364	25	7.6	16400	7455	31	9.5	
1 25.4	20600	9364	29	8.8	16400	7455	36	11.0	
1 25.4	20600	9364	36	11.0	16400	7455	46	14.0	
Frame 6									
1 1/8 29	26000	11818	18	5.5	21300	9682	22	6.7	
1 1/8 29	26000	11818	26	7.9	21300	9682	32	10.0	
1 1/8 29	26000	11818	38	11.6	21300	9682	47	14.3	
1 1/8 29	26000	11818	75	22.9	21300	9682	91	27.7	
1 1/8 29	26000	11818	90	27.4	21300	9682	110	33.5	
Frame 7									
1 1/4 32	31900	14500	21	6.4	27000	12273	24	7.3	
1 1/4 32	31900	14500	26	7.9	27000	12273	31	9.5	
1 1/4 32	31900	14500	34	10.4	27000	12273	40	12.2	
1 1/4 32	31900	14500	43	13.1	27000	12273	51	15.5	
1 1/4 32	31900	14500	50	15.2	27000	12273	59	18.0	
1 3/8 35	38400	17454	22	6.7	32600	14818	25	7.6	
1 3/8 35	38400	17454	25	7.6	32600	14818	29	8.8	
1 3/8 35	38400	17454	35	10.7	32600	14818	41	12.5	
1 3/8 35	38400	17454	43	13.1	32600	14818	51	15.5	
1 3/8 35	38400	17454	51	15.5	32600	14818	60	18.3	
Frame 8									
1 1/2 38	45600	20727	21	6.4	42400	19273	23	7.0	
1 1/2 38	45600	20727	31	9.5	42400	19273	33	10.1	
1 1/2 38	45600	20727	37	11.3	42400	19273	39	11.9	
1 1/2 38	45600	20727	47	14.3	42400	19273	50	15.2	

Drum Lengths

Models		Standard Drum Length		Optional Drum length			
Pulling	Lifting	in.	mm	in.	mm	in.	mm
Frame 3							
EP5300	EL5300	18	457	30	762	42	1069
EP6700	EL6000	18	457	30	762	42	1069
Frame 4							
EP8200	EL8200	24	610	36	914	48	1219
EP11700	EL9200	24	610	36	914	48	1219
Frame 5							
EP15900	EL14100	24	610	36	914	48	1219
EP20600	EL16400	24	610	36	914	48	1219
Frame 6							
EP26000	EL21300	24	610	36	914	48	1219
Frame 7							
EP31900	EL27000	24	610	36	914	48	1219
EP38400	EL32600	24	610	36	914	48	1219
Frame 8							
EP45600	EL42400	30	762	42	1069	54	1372

NEW!

Fulcrum Winch

200 to 50000 lb (91 to 22680 kg) capacity



Dimensions ¹

Pulling

Frame	Model	A		B		C		D		E		F		G		H		J	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
3	EP5300-18-18	18	457	8.63	219	4.19	106	17	432	23.5	597	29.54	737	0.5	13	23	584	15	381
3	EP6700-23-18	18	457	8.63	219	4.19	106	17	432	23.5	597	29.54	737	0.5	13	23	584	15	381
4	EP8200-19-24	24	610	10.75	273	5.63	143	22	559	28.5	711	40.54	1030	0.5	13	27.5	699	17.5	445
4	EP11700-14-24	24	610	10.75	273	5.63	143	22	559	28.5	711	40.54	1030	0.5	13	27.5	699	17.5	445
5	EP15900-21-24	24	610	14	357	7	178	28	711	33.5	851	42.5	1080	0.5	13	34.5	876	22.5	572
5	EP20600-21-24	24	610	14	357	7	178	28	711	33.5	851	42.5	1080	0.5	13	34.5	876	22.5	572
6	EP26000-18-24	24	610	16	406	9	229	34	864	42.5	1080	44.82	1138	0.5	13	38.5	978	25.5	648
7	EP31900-21-24	24	610	20	508	9	229	38	965	-	-	-	-	-	-	-	-	-	
7	EP38400-25-24	24	610	20	508	9	229	38	965	-	-	-	-	-	-	-	-	-	
8	EP45600-21-30	30	762	24	610	10.5	267	45	1143	-	-	-	-	-	-	-	-	-	

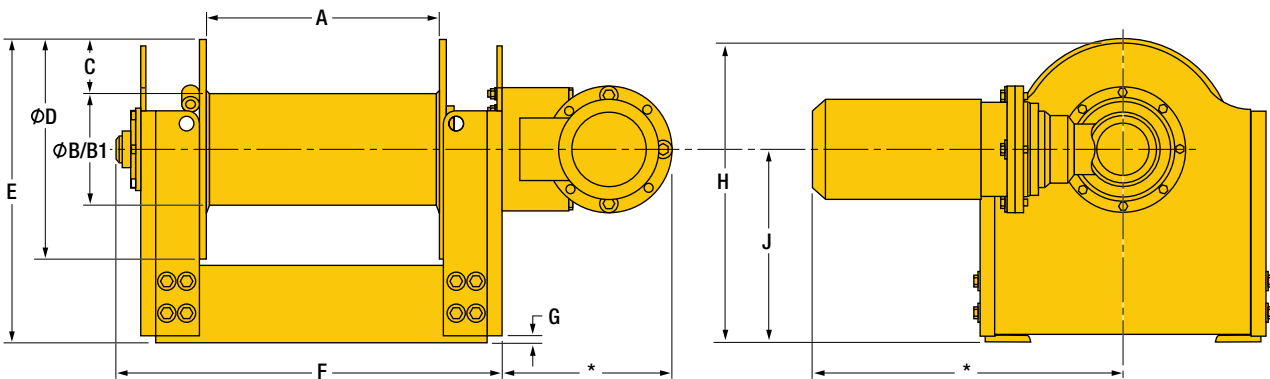
¹ Dimensions are subject to change. Contact technical sales for certified prints.
Dimensions are for standard base models only.

Dimensions ¹

Lifting

Frame	Model	A		B1		C		D		E		F		G		H		J	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
3	EL5300-18-18	18	457	8.63	219	4.19	106	17	432	23.5	597	29.54	737	0.5	13	23	584	15	381
3	EL6700-23-18	18	457	9.75	248	3.63	92	17	432	23.5	597	29.54	737	0.5	13	23	584	15	381
4	EL8200-19-24	24	610	10.75	273	5.63	143	22	559	28.5	711	40.54	1030	0.5	13	27.5	699	17.5	445
4	EL9200-18-24	24	610	14	357	4	102	22	559	28.5	711	40.54	1030	0.5	13	27.5	699	17.5	445
5	EL14100-23-24	24	610	16	406	6	152	28	711	33.5	851	42.5	1080	0.5	13	34.5	876	22.5	572
5	EL16400-26-24	24	610	18	457	5	127	28	711	33.5	851	42.5	1080	0.5	13	34.5	876	22.5	572
6	EL21300-22-24	24	610	20	508	7	179	34	864	42.5	1080	44.82	1138	0.5	13	38.5	978	25.5	648
7	EL27000-24-24	24	610	24	610	7	179	38	965	-	-	-	-	-	-	-	-	-	
7	EL32600-29-24	24	610	24	610	7	179	38	965	-	-	-	-	-	-	-	-	-	
8	EL42400-23-30	30	762	26	660	9.5	241	45	1143	-	-	-	-	-	-	-	-	-	

¹ Dimensions are subject to change. Contact technical sales for certified prints.
Dimensions are for standard base models only.



NEW!

Fulcrum Winch
200 to 50000 lb (91 to 22680 kg) capacity



How to Order:

Specify the complete model as shown. **Example: EL5300-28-18-8G-M4-P4-20** is an electric powered lifting winch with a 5300 lb capacity, a 28 fpm line speed, an 18 inch drum, 460-3-60 volt, with grooved drum, NEMA 4 starter and pushbutton, and 20 feet of control cord.

Series	Application	Capacity	Line speed	Drum length	Voltage	Winch options	Starter/drives	Control station	Cord length (ft)
E	L	5300	28	18	8	G	M4	P4	20
E = Electric H = Hydraulic ³	L = Lifting P = Pulling MR = Electric Manrider ³	(See table below)	(See table below)	(See std. drum width chart below)	1 = 115-1-60 2 = 230-1-60 3 = 208-3-60 4 = 230-3-60 5 = 380-3-50 6 = 400-3-50 7 = 415-3-50 8 = 460-3-60 9 = 575-3-60 0 = Used w/hydraulic and air units	A = Air operated drum brake C = Special motor per customer specs D = Drum divider flange; X = no. of dividers F = Free-spooling clutch G = Grooved drum ⁽³⁾ H = Horizontal load reversing drum ⁽⁴⁾ J = Space heater in motor K = Hand crank for emergency manual operation L = Drum locking pin M = Marine duty, IEEEE45 motor N = Mirror image unit P = Marine 812 finish Q = Special paint; please specify R = Press roller on drum S = NEMA 4 upper & lower, rotary limit switch T = Dual speed motor U = Manual level wind W = Slack rope detector X = Drum guard Y = Electronic overload limiter Z = Sandblast / carbozinc	M4 = NEMA 4 starter M4X = NEMA 4X starter V = Variable frequency drive. Customer to specify control requirements. X = Explosion-proof starter. Customer to specify class, division and group.	D1 = Drum switch NEMA 1 D4 = Drum switch NEMA 4 E = Explosion-proof controller. Customer to specify class, division and group. P4 = Pushbutton NEMA 4 P4X = Pushbutton NEMA 4X W1 = Wall mount pushbutton station, NEMA 1 W4 = Wall mount pushbutton station, NEMA 4	

First layer capacities

Frame	Pulling capacities	Line speeds / fpm ⁽¹⁾	Lifting capacities	Line speeds speeds / fpm ⁽¹⁾	Std. drum width ⁽²⁾
3	EP 5300 lbs / 2409 kg	18, 28, 39, 59, 86, 101	EL 5300 lbs / 2409 kg	18, 28, 39, 59, 86, 101	18 in. / 457 mm
3	EP 6700 lbs / 3045 kg	23, 34, 48, 69, 87, 102	EL 6000 lbs / 2727 kg	25, 38, 53, 77, 97, 114	18 in. / 457 mm
4	EP 8200 lbs / 3727 kg	11, 19, 24, 38, 54, 79, 99, 117	EL 8200 lbs / 3727 kg	11, 19, 24, 38, 54, 79, 99, 117	24 in. / 610 mm
4	EP 11700 lbs / 5318 kg	14, 20, 25, 46, 55, 64, 81, 101	EL 9200 lbs / 4181 kg	18, 25, 31, 58, 70, 81, 103, 128	24 in. / 610 mm
5	EP 15900 lbs / 7227 kg	21, 29, 36, 82	EL 14100 lbs / 6409 kg	23, 32, 40, 92	24 in. / 610 mm
5	EP 20600 lbs / 9364 kg	21, 25, 29, 36	EL 16400 lbs / 7455 kg	26, 31, 36, 46	24 in. / 610 mm
6	EP 26000 lbs / 11818 kg	18, 26, 38, 75, 90	EL 21300 lbs / 9682 kg	22, 32, 47, 91, 110	24 in. / 610 mm
7	EP 31900 lbs / 14500 kg	21, 26, 34, 43, 50	EL 27000 lbs / 12273 kg	24, 31, 40, 51, 59	24 in. / 610 mm
7	EP 38400 lbs / 17455 kg	22, 25, 35, 43, 51	EL 32600 lbs / 14818 kg	25, 29, 41, 51, 60	24 in. / 610 mm
8	EP 45600 lbs / 20727 kg	21, 31, 37, 47	EL 42400 lbs / 19273 kg	23, 33, 39, 50	30 in. / 762 mm

- (1) First layer line speed
- (2) Other drum lengths available
- (3) Grooving is based on left hand spiral for overwind take-off. The size of the grooving is based on the recommended wire rope size specified for each frame and is selected to meet ANSI / ASME B30.7 recommendations. If different size grooving is required it must be specified by enduser at time of order.
- (4) Wire rope size and cable take-offs must be specified at time of an order.