



PORTABLE DAVIT CRANE

# ENSIGN<sup>®</sup> 1000 SERIES



thern.com  
(507) 454-2996

# ENSIGN® 5PA10

PORTABLE DAVIT CRANE



## PORTABLE LIFTING POWER for the Tallest Jobs

The 5PA10 Ensign 1000 portable davit crane (up to 1,200 pounds) is designed to lift and smoothly rotate heavier, taller loads, 360 degrees, with minimal boom adjustment. A longer mast and boom provide the extra hook height (up to 120 inches with pedestal base) required to clear safety gates, rails, and other obstacles. An ergonomic design, winch options, quick-disconnect feature, and boom adjustment knob make it extremely user-friendly. Included on all standard models, roller-ball bearings and rotation lock enhances unloading. Easy disassembly and reassembly with quick-release hardware and pins maximize portability for storage or use with other bases. Ideal for water/wastewater applications.



### 360° Rotation & Flexible Operation

- Specially designed roller bearing at top of base comes standard to enhance smooth, 360-degree rotation under load for precise load placement. Stainless-steel rotation lock comes standard and facilitates unloading ease
- Rotation handle design does not interfere with boom angle adjustment for easier operation
- Adjustable boom angles and four sheave assembly positions along boom are easily changed (without tools) to accommodate a variety of applications. Boom adjustment knob allows for easy, one-hand adjustment when not under load
- Choose from manual, drill-drive, or powered winch (electric, pneumatic, or hydraulic motors) operation to accommodate a variety of speeds and power needs. DC motors and various voltage AC motors available

### Durable Construction & Finish

- Heavy-duty, welded structural steel pipe and tubing limit deflection and meet/exceed ASTM standards
- Corrosion-resistant, powder-coated frame, mast cap, and stainless-steel fasteners resist the elements and for long service life
- Galvanized, epoxy, and 304 or 316 stainless-steel and epoxy finishes are available for corrosive environments

Product Shown:  
5PA10-M1

## STANDARD CONFIGURATIONS

Series	IMPERIAL/METRIC	
	Description	Up To Capacity
5PA10-M1	Powder-coat crane with M4312PB-K spur gear hand winch	1,200 lbs / 544 kg
5PA10G-M1	Galvanized crane with M4312PB-K spur gear hand winch	1,200 lbs / 544 kg
5PA10-M2	Powder-coat crane with 4WM2V-K worm gear hand winch	1,200 lbs / 544 kg
5PA10G-M2	Galvanized crane with 4WM2V-K worm gear hand winch	1,200 lbs / 544 kg
5PA10S-M3	Stainless-steel crane with M4312PBSS-K spur gear hand winch	1,200 lbs / 544 kg
5PA10X-E2X	Epoxy-gray crane with epoxy-gray 4WP2VEGRA-K electric winch	1,200 lbs / 544 kg

### Enhanced Portability

- Disassembles and reassembles easily, using quick-release hardware and pins for quick transport to storage or bases at other work sites—no tools required
- Move your crane to another location while keeping the wire rope attached to the load using the quick-disconnect feature. Insert the swaged-ball end of the wire rope into the keyhole slot on the tab of the pedestal base or into an optional wire rope keeper or cable spool

### Flexible Configurations

- A variety of base mounting options, including pedestal, flush, and wall-mount, help meet numerous lifting needs
- A quick-mount winch bracket is standard (no tools required) and accommodates several Thern winches. Fits any three convenient/ergonomic positions on the mast via quick-connect pins

NOTICE: These products are not for lifting people or things over people.

Refer to technical pages for detailed performance information.

# TECHNICAL DRAWINGS & SPECIFICATIONS

## ENSIGN® 1000

### PORTABLE DAVIT CRANE

#### CONFIGURATIONS

Model	Description	Approx. Ship Wt.	
		(lb)	(kg)
<b>Popular Configurations</b>			
5PA10-M1	up to 1,200 lb capacity with M4312PB-K spur gear hand winch—powder-coat crane	160	73
5PA10G-M1	up to 1,200 lb capacity with M4312PB-K spur gear hand winch—galvanized crane	160	73
5PA10-M2	up to 1,200 lb capacity with 4WM2V-K worm gear hand winch—powder-coat crane	185	84
5PA10G-M2	up to 1,200 lb capacity with 4WM2V-K worm gear hand winch—galvanized crane	185	84
5PA10S-M3	up to 1,200 lb capacity with M4312PBSS-K spur gear hand winch—stainless-steel crane	167	76
5PA10-E2	up to 1,200 lb capacity with 4WP2V-K electric winch—powder-coat crane	228	103
<b>Crane Only</b>			
5PA10	up to 1,200 lb capacity—base model—powder-coat finish	143	65
5PA10G	up to 1,200 lb capacity—base model—galvanized finish	143	65
5PA10S	up to 1,200 lb capacity—base model—304 stainless-steel finish	143	65
5PA10S316	up to 1,200 lb capacity—base model—316 stainless-steel finish	143	65
5PA10X	up to 1,200 lb capacity—base model—epoxy-gray finish	143	65
<b>Winch Only</b>			
M1	M4312PB-K—spur gear hand winch only—zinc plated	17	8
M2	4WM2V-K—worm gear hand winch only—powder coat	42	19
M2X	4WM2VEGRA-K—worm gear hand winch only—epoxy gray	42	19
M3	M4312PBSS-K—spur gear hand winch only—stainless steel	24	11
E2	4WP2V-K electric winch—115/1/60 VAC with 6 ft pendant control—enamel	85	39
E2X	4WP2VEGRA-K electric winch—115/1/60 VAC with 6 ft pendant control—epoxy gray	85	39
E4	4777-K electric winch—115/1/60 VAC with 6 ft pendant control—enamel	110	50
E4X	4777EGRA-K electric winch—115/1/60 VAC with 6 ft pendant control—epoxy gray	110	50
E4DC	4777DC-K electric winch—12 volt DC with 10 ft pendant control—enamel	105	48
E4DCX	4777DCEGRA-K electric winch—12 volt DC with 10 ft pendant control—epoxy gray	105	48

#### Independent Bases—sold separately Wire Rope Assemblies—sold separately

Pedestal, socket (flush-mount), or wall-mount style.

**IMPORTANT:** Base installation is the purchaser's responsibility. Thern recommends consulting a civil engineer or other qualified professional. Contact Thern for installation guidelines.

**Galvanized or stainless steel** wire rope assemblies with swaged-ball fitting to work with the quick-disconnect anchor on the winch. See wire rope page for stainless steel and additional wire rope options.

Finishes	MODELS			Wire Rope Length	Galvanized Aircraft Cable			304 Stainless Steel Wire Rope		
	Pedestal	Flush	Wall		3/16" Dia. (4.8 mm)	1/4" Dia. (6.4 mm)	5/16" Dia. (8.0 mm)	3/16" Dia. (4.8 mm)	1/4" Dia. (6.4 mm)	5/16" Dia. (8.0 mm)
Powder Coat Paint	5BP10	5BF10	5BW10	(ft) (m)	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
Galvanized	5BP10G	5BF10G	5BW10G	20 6.0	—	—	WA31-20DS	—	—	WS31-20DS
304 Stainless Steel	5BP10S	5BF10S	5BW10S	28 8.5	WA19-28NS	WA25-28NS	WA31-28DS	WS19-28NS	WS25-28NS	WS31-28DS
316 Stainless Steel	5BP10S316	5BF10S316	5BW10S316	36 10.9	WA19-36NS	WA25-36NS	WA31-36DS	WS19-36NS	WS25-36NS	WS31-36DS
Epoxy Paint	5BP10X	5BF10X	5BW10X	45 13.7	WA19-45NS	WA25-45NS	WA31-45DS	WS19-45NS	WS25-45NS	WS31-45DS
Approximate Ship Weight	52 lbs (24 kg)	44 lbs (20 kg)	48 lbs (22 kg)	60 18.2	WA19-60NS	WA25-60NS	WA31-60DS	WS19-60NS	WS25-60NS	WS31-60DS
				75 22.8	WA19-75NS	—	WA31-75DS	WS19-75NS	—	WS31-75DS
				90 27.4	WA19-90NS	—	—	WS19-90NS	—	—



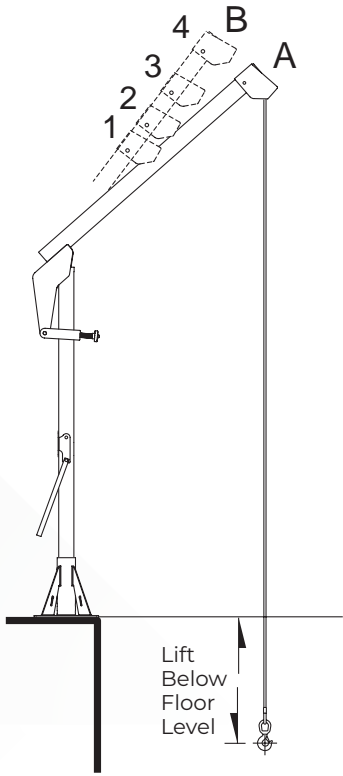
#### PERFORMANCE

#### Ensign 1000 5PA10 Series Lift Below Floor<sup>1</sup> Level

Lift Below Floor <sup>2</sup>		Wire Rope Diameter		Wire Rope Length		Winch Configurations Maximum Winch Rating											
Minimum (B4)	Maximum (B1)	(ft)	(m)	(in)	(mm)	(ft)	(m)	M1		M2		M3		E2		E4	
(ft)	(m)	(ft)	(m)	(in)	(mm)	(ft)	(m)	(lbs)	(kg)	(lbs)	(kg)	(lbs)	(kg)	(lbs)	(kg)	(lbs)	(kg)
-3	-0.9	1	0.3	3/16"	5	20	6.0	1,200	544	—	—	1,200	544	—	—	1,200	544
5	1.5	9	2.7	3/16"	5	28	8.5	1,200	544	—	—	1,200	544	—	—	1,200	544
13	3.9	17	5.1	3/16"	5	36	10.9	1,200	544	—	—	1,200	544	—	—	1,200	544
22	6.7	26	7.9	3/16"	5	45	13.7	1,200	544	—	—	1,200	544	—	—	1,200	544
37	11.2	41	12.4	3/16"	5	60	18.2	1,200	544	—	—	1,200	544	—	—	1,200	544
52	15.8	56	17.0	3/16"	5	75	22.8	1,200	544	—	—	1,200	544	—	—	1,200	544
67	20.4	71	21.6	3/16"	5	90	27.4	1,200	544	—	—	1,200	544	—	—	1,200	544
97	29.5	101	30.7	3/16"	5	120	36.5	—	—	—	—	—	—	—	—	1,200	544
-3	-0.9	1	0.3	1/4"	6	20	6.0	1,200	544	1,200	544	1,200	544	1,200	544	1,200	544
5	1.5	9	2.7	1/4"	6	28	8.5	1,200	544	1,200	544	1,200	544	1,200	544	1,200	544
13	3.9	17	5.1	1/4"	6	36	10.9	1,200	544	1,200	544	1,200	544	1,200	544	1,200	544
22	6.7	26	7.9	1/4"	6	45	13.7	1,200	544	1,200	544	1,200	544	1,200	544	1,200	544
37	11.2	41	12.4	1/4"	6	60	18.2	1,200	544	1,200	544	1,200	544	1,200	544	1,200	544
52	15.8	56	17.0	1/4"	6	75	22.8	—	—	1,200	544	—	—	1,200	544	1,200	544
67	20.4	71	21.6	1/4"	6	90	27.4	—	—	—	—	—	—	—	—	1,200	544
-3	-0.9	1	0.3	5/16"	8	20	6.0	1,200	544	1,200	544	1,200	544	1,200	544	1,200	544
5	1.5	9	2.7	5/16"	8	28	8.5	1,200	544	1,200	544	1,200	544	1,200	544	1,200	544
13	3.9	17	5.1	5/16"	8	36	10.9	1,200	544	1,200	544	1,200	544	1,200	544	1,200	544
22	6.7	26	7.9	5/16"	8	45	13.7	1,200	544	1,200	544	1,200	544	1,200	544	1,200	544
37	11.2	41	12.4	5/16"	8	60	18.2	—	—	—	—	—	—	—	—	1,200	544
52	15.8	56	17.0	5/16"	8	75	22.8	—	—	—	—	—	—	—	—	—	—
67	20.4	71	21.6	5/16"	8	90	27.4	—	—	—	—	—	—	—	—	—	—
97	29.5	101	30.7	5/16"	8	120	36.5	—	—	—	—	—	—	—	—	—	—

<sup>1</sup> Performance characteristics are for standard products. Non-standard products may vary from the original design. Contact Thern, Inc. for this information.

<sup>2</sup> Lift below floor level varies depending on boom position and base configuration. For longer lifts, please contact factory.



Winch Configurations



## Ensign 1000 Performance Ratings with Pedestal Base<sup>1</sup>

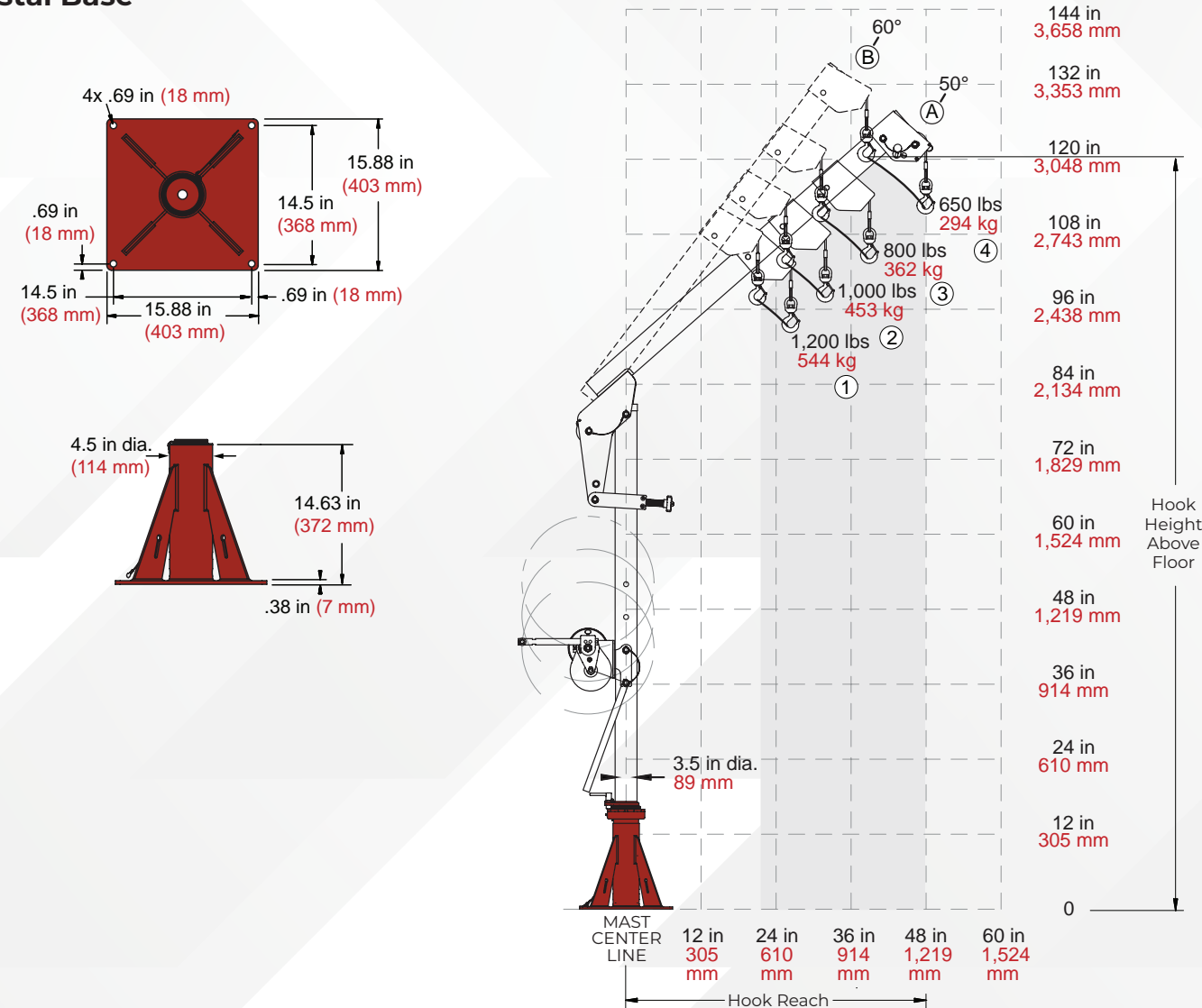
Boom Position	Load Rating		Hook Reach		Hook Height	
	(lb)	(kg)	(in)	(mm)	(in)	(mm)
A-1	1,200	544	26	660	93	2,362
A-2	1,000	453	32	812	98	2,489
A-3	800	362	39	990	104	2,641
A-4	650	294	48	1,219	112	2,844
B-1	1,200	544	22	558	97	2,463
B-2	1,000	453	26	660	103	2,616
B-3	800	362	32	812	110	2,794
B-4	650	294	39	990	120	3,048

<sup>1</sup> Performance characteristics are for standard products. Non-standard products may vary from the original design. Contact Thern, Inc. for this information.  
Dimensions are for reference only and subject to change without notice.

## Ensign 1000 Pedestal Base

5BP10 5BP10S 5BP10X  
5BP10G 5BP10S316

## Pedestal Base



## Ensign 1000 Performance Ratings with Flush- or Wall-Mount Bases<sup>1</sup>

Boom Position	Load Rating		Hook Reach		Hook Height	
	(lb)	(kg)	(in)	(mm)	(in)	(mm)
A-1	1,200	544	26	660	79	2,007
A-2	1,000	453	32	812	84	2,134
A-3	800	362	39	990	90	2,286
A-4	650	294	48	1,219	98	2,489
B-1	1,200	544	22	558	83	2,108
B-2	1,000	453	26	660	89	2,261
B-3	800	362	32	812	96	2,438
B-4	650	294	39	990	106	2,692

<sup>1</sup> Performance characteristics are for standard products. Non-standard products may vary from the original design. Contact Thern, Inc. for this information.  
Dimensions are for reference only and subject to change without notice.

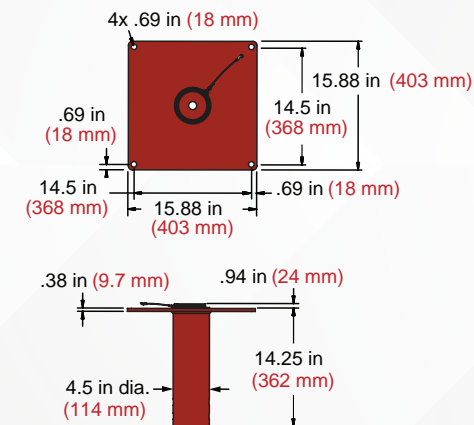
## Ensign 1000 Flush-Mount Base

5BF10 5BF10S 5BF10X  
5BF10G 5BF10S316

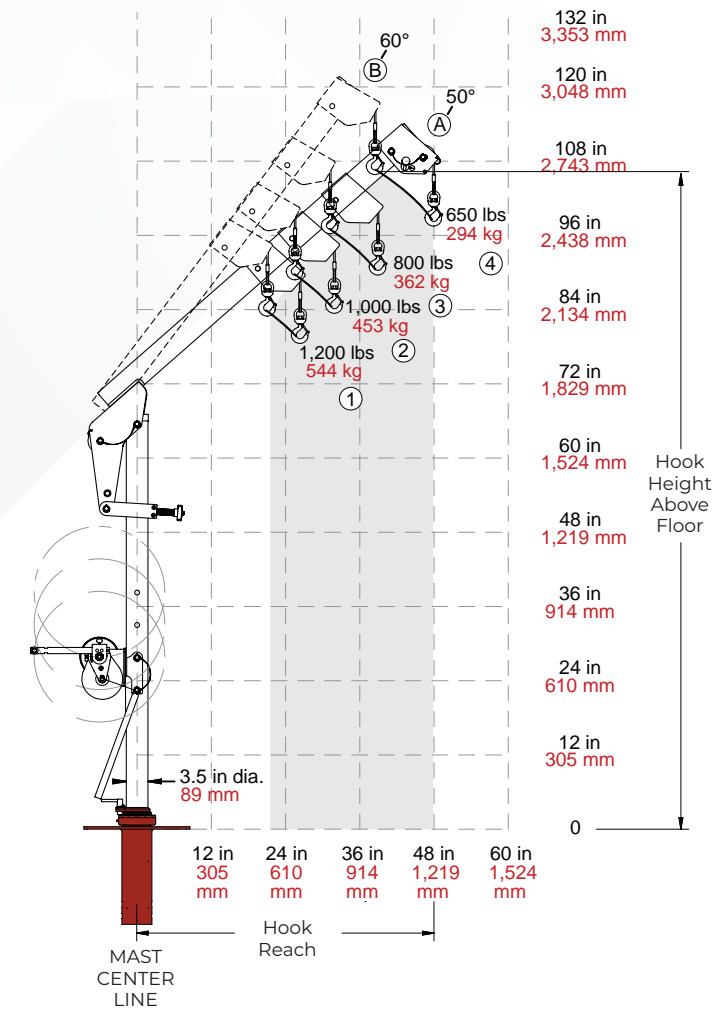
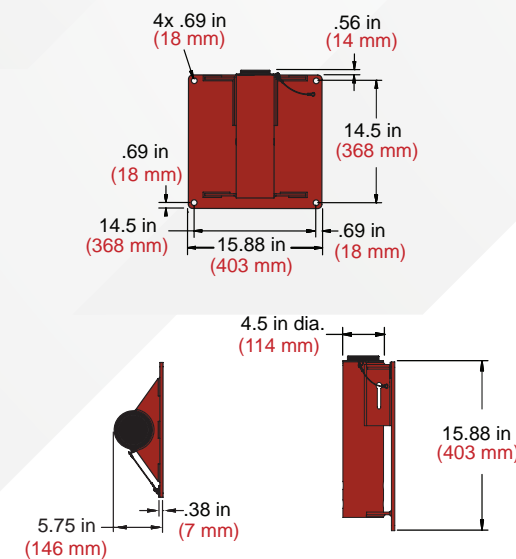
## Ensign 1000 Wall-Mount Base

5BW10 5BW10S 5BW10X  
5BW10G 5BW10S316

## Flush-Mount Base



## Wall-Mount Base



# CRANE

## OPTIONS & ACCESSORIES



Base Anchor Kit	
Model	Description
AN50A-5	(4) Hilti® zinc-plated steel fasteners 1/2" X 5.50" STL (5PA5, 5PF5, and 5PT5 cranes)
AN50A-5S	(4) Hilti® 304 stainless-steel fasteners 1/2" X 5.50" SST304 (5PA5, 5PF5, and 5PT5 cranes)
AN50A-5S316	(4) Hilti® 316 stainless-steel fasteners 1/2" X 5.50" SST316 (5PA5, 5PF5, and 5PT5 cranes)
AN62A-6	(4) Hilti® zinc-plated steel fasteners 5/8" X 6.00" STL (5PA10, 5PT10, 5PT20, and 5FT20 cranes)
AN62A-6S	(4) Hilti® 304 stainless-steel fasteners 5/8" X 6.00" SST304 (5PA10, 5PT10, 5PT20, and 5FT20 cranes)
AN62A-6S316	(4) Hilti® 316 stainless-steel fasteners 5/8" X 6.00" SST316 (5PA10, 5PT10, 5PT20, and 5FT20 cranes)

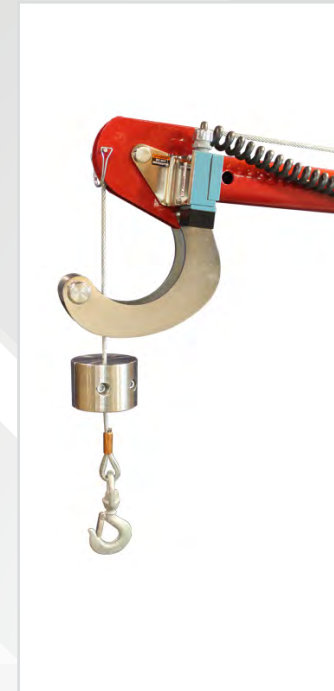
Rotational Lock	
Model	Description
5P5LCK	For pedestal, wall, and flush-mount bases, 316 stainless steel—available for use 5PA5, 5PF5, and 5PT5

Cable Spooler	
Model	Description
RW50	316 stainless-steel reel winds up wire rope when detached from crane

Wire Rope Keeper	
Model	Description
RK19-25S	304 Stainless-steel bracket holds free end of the wire rope when detached from the crane
RK19-25S316	316 Stainless-steel bracket holds free end of the wire rope when detached from the crane

Roller Ball Bearing for 5PT10 Series Crane	
Model	Description
5PT10BRG	Red electrostatic, powder-coat paint finish
5PT10BRG-S	304 stainless-steel, electro-polished finish for added protection against corrosion
5PT10BRG-S316	Stainless-steel, electro-polished finish for maximum protection against corrosion
5PT10BRG-SS	304 stainless steel, for use with stainless-steel base only
5PT10BRG-SS316	316 stainless steel, for use with stainless-steel base only

Roller Ball Bearing for 5PT20 Series Crane	
Model	Description
5PT20BRG	Red electrostatic, powder-coat paint finish
5PT20BRG-S	304 stainless-steel, electro-polished finish for added protection against corrosion
5PT20BRG-S316	Stainless-steel, electro-polished finish for maximum protection against corrosion
5PT20BRG-SS	304 stainless steel, for use with stainless-steel base only
5PT20BRG-SS316	316 stainless steel, for use with stainless-steel base only



Limit Switch Ready Winch Options	
Model	Description
NOTE: Limit switch winch option requires purchase of Limit Switch and Headache Ball (sold separately)	
<b>For 5PF5, 5PA5, 5PA10, 5PT5, 5PT10, 5PT20 Series Cranes (sold separately)</b>	
E2L (5PA5, 5PA10)	4WP2V-KL electric winch – 115/1/60 VAC with 6 ft pendant control – enamel
E2LX (5PA5, 5PA10)	4WP2VEGRA-KL electric winch – 115/1/60 VAC with 6 ft pendant control – epoxy gray
E4L	4777-KL electric winch – 115/1/60 VAC with 6 ft pendant control – enamel
E4LX	4777EGRA-KL electric winch – 115/1/60 VAC with 6 ft pendant control – epoxy gray
E4DCL	4777DC-KL electric winch – 12 volt DC with 10 ft pendant control – enamel
E4DCLX	4777DCEGRA-KL electric winch – 12 volt DC with 10 ft pendant control – epoxy gray

<b>For 5FT20 Series Crane Only (sold separately)</b>	
E2L	4WP2-KL electric winch – 115/1/60 VAC with 6 ft pendant control – enamel
E2LX	4WP2EGRA-KL electric winch – 115/1/60 VAC with 6 ft pendant control – epoxy gray
E4L	4771-KL electric winch – 115/1/60 VAC with 6 ft pendant control – enamel finish
E4LX	4771EGRA-KL electric winch – 115/1/60 VAC with 6 ft pendant control – gray-epoxy finish
E4DCL	E4DCL 4771DC-KL electric winch – 12 volt DC with 10 ft pendant control – enamel finish
E4DCLX	4771DCEGRA-KL electric winch – 12 volt DC with 10 ft pendant control – gray-epoxy finish

<b>For 5PT30, 5FT25, 5FT40 Series Crane Only (sold separately)</b>	
E2L	3WG4B-KL electric winch - 115/1/160 VAC with 6 ft pendant control – enamel finish
E2LX	3WG4BEGRA-KL electric winch - 115/1/160 VAC with 6 ft pendant control – epoxy gray finish
E2TL	3WG4BMT-K electric winch - 115/1/160 VAC with 6 ft pendant control – enamel finish (Unavailable for use with 5FT40)
E2TLX	3WG4MTX-KL electric winch - 115/1/160 VAC with 6 ft pendant control – epoxy gray finish

Drill Drive Kit	
Model	Description
ED330-DW11	120 VAC, 11-amp, 330 rpm drill motor to power drive the hand winch. Only available for cranes configured with the M2 winch option. Includes 1-1/8" hex drive socket
ED300-DW06	Cordless drill kit, 60 V brushless motor, 300 rpm drill motor to power drive the M2 hand winch option. Includes 1-1/8" hex drive socket
ED400-DW09	Heavy-duty cordless drill kit, 60 V brushless motor, 400 rpm drill motor to power drive the M2 hand winch option. Includes 1-1/8" hex drive socket

Headache Ball	
Model	Description
HB10-12-25	Red enamel painted 10 lb fits 1/8" to 1/4" rope
HB10-25-38	Red enamel painted 10 lb fits 1/4" to 3/8" rope
HB10S-12-25	Stainless-steel 10 lb fits 1/8" to 1/4" rope
HB10S-25-38	Stainless-steel 10 lb fits 1/4" to 3/8" rope
HB10S-44-50	Stainless-steel 10 lb fits 7/16" to 1/2" rope

Base Extension	
Model	Description
5BE5-15	Available on 5PF5, 5PT5, 5PT10, and 5PT20 with powder-coat, galvanized, 304 & 316 stainless-steel, and epoxy finishes
5BE10-15	
5BE20-15	





**MADE IN USA** 

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