

Tough Conditions Demand Tough Air Winches.

BigRed



T THERN

Leave the heavy lifting to us.



TA2.5 shown with auto band brake, drum guard and line guide.

Let Us Raise Your Expectations.

Winches built to last from a brand that's known to perform. The "Big Red" TA series Air winches from Thern fuse a field proven radial piston motor with industrial grade welded steel construction for ultimate dependability. Whether you're dealing with heat, frost, dust, sand or salt, if you're counting on anything less than a Thern Big Red winch, you're counting on trouble.

Much more than reliable, Thern Big Red winches allow you to customize the set up to suit your specific task, giving you the right tool for the job – without paying special mark-ups or facing long lead times. In fact, you'll receive special orders in off-the-shelf time.

You've got a tough job to do, and an even tougher environment to do it in. Luckily, you also have Thern Big Red winches working for you.

QUICK DELIVERY

Order a custom winch and receive it in off-the-shelf time.

RUGGED DESIGN

All Thern air winches are manufactured under strict quality standards to meet industry certifications.

SERVICE

Leading the industry with a two year limited warranty, we're dedicated to providing top-notch customer service.

UTILITY/PERSONNEL

Thern Big Red air winches are available with ABS type approval in utility and personnel rated models.



Tough conditions demand tough winches – like the Big Red air winches from Thern. Few if any other winches can accommodate such a daunting array of challenges. From blistering heat, bitter cold, salty-aired and sand blown environments associated with oil rigs to the damp, saltwater encrusted working conditions of maritime industries, Thern winches are up to the challenge.

Big Red Seeks Black Gold In Oil And Gas

Oil and gas rigs demand one thing above all else from a winch. Reliability. When you're hours from anywhere, failure is not an option. Whether you're setting up the rig, pulling pipe, moving materials, positioning equipment or just putting in an honest day's work, you'll want the Thern ABS type approved Big Red or Big Red Rider at your command for utility and personnel lifting. These are heavy-duty winches, even by heavy-duty standards, with all the power you'll need.



Big Red Digs Deep In Mining

Dust, dirt, grit, grime, moisture and debris come with the territory. Big Red air winches from Thern welcome them all with open arms. Tough as the miners who use them, Big Red Winches are made with heavy-duty welded steel construction. So forge ahead, raise or pull mighty loads with confidence all the livelong day. Big Red will never let you down.

Big Red Meets Deep Blue In Marine

Add water, and suddenly your job gets a lot tougher. This makes working in a shipyard among the most demanding environments imaginable. Moisture makes things slip, corrode and fail, unless you're talking about Thern Big Red air winches. Thern excels in marine operations. Whether it's laying pipe, positioning barges, or lifting and positioning propellers and rudders, you can count on Thern to be in ship shape condition and up to the task.

BigRed



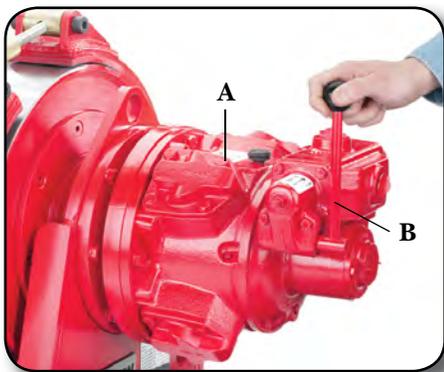
TA5 shown with manual band brake and muffler kit.



TA5P shown with manual band brake and auto disc brake.

Everything You Need, More Than You Expect.

Model	Drum Width (inches)				HP	Winch Load Rating (Full Drum)	Winch Line Speed
	16	24	30	36			
TA2 Series	●	●	-	-	7.1	4,700 lbs	30-46 fpm
TA2H Series	●	●	-	-	7.1	2,400 lbs	61-94 fpm
TA2.5 Series	●	●	-	-	18.3	5,000 lbs	79-114 fpm
TA5 Series	●	●	●	-	17.8	11,500 lbs	30-47 fpm
TA7 Series	-	●	●	●	14.4	15,900 lbs	19-29 fpm



Features and Benefits

Radial Piston Motor (A)

Internally lubricated for reliable power and an exceptionally long service life.

Precise Control Valve (B)

Count on smooth control with variable speed, making it ideal for both precision spotting and long lifts.

Manual Band Brake (C)

The heavy duty, long handled steel band brake requires less force to engage and provides up to 150% holding capacity.



Welded Steel Frame

Captures both drum ends for optimal strength and security.

Planetary Gears

Compact design and high efficiency gearing reduce power loss and heat generation while increasing service life. Gears operate in oil bath. Double lip oil seals keep oil in and contaminants out.

Wire Rope Assemblies

Sold separately. A variety of wire rope assemblies and fittings are available per customer request. Please contact the factory.

Meets ASME 30.7 Requirements

Standard units designed and built to meet this specification.

2-Year Warranty

Leading the industry with our *Move It with Confidence* Two Year Limited Warranty.

BigRed

THERN

www.thern.com

1.800.843.7648

No One Knows What You Need Better Than You.

Every job is different, so we allow you to build the Thern BIG RED TA Series air winches to suit your specific needs using our extensive line of accessories and options. The better suited the winch, the better completed the task.



Options and Accessories

Automatic Disc Brake (D)

Spring engaged, air pressure released and oil cooled for extended duty cycles and long life.



Automatic Band Brake (E)

Spring engaged, air pressure released, with heavy-duty construction that provides up to 150% holding capacity (replaces manual brake).

Mufflers (F)

Attached to the exhaust ports to reduce noise.

Control Options (G)

Winch mounted, full flow remote pendant control valve.



Marine Grade Epoxy

Applied with a zinc primer for ultimate protection in harsh environments.

Drum Guard (H)

Heavy-duty steel mesh helps to protect operators. Adjusts for different rope payout angles.



ABS Type Approvals Available

Please contact factory.

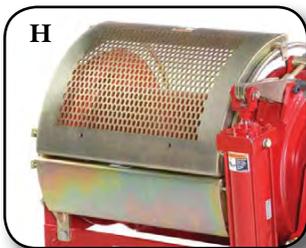


Filter, Regulator and Lubricator (I)

Maintains air quality to the winch. Required for warranty compliance.

Line Guide (J)

Steel construction and hand operated to help wire rope unwind uniformly.



Stackable Construction Winch Cage

Protects motor and winch during operation. Movable with forklift.





BIG RED TA Series UTILITY RATED Air Winch Performance Characteristics

	TA2 Series		TA2H Series		TA2.5 Series		TA5 Series		TA7 Series	
Load Rating 1st Layer	7,200 lb	3,265 kg	3,600 lb	1,632 kg	7,200 lb	3,265 kg	18,000 lb	8,164 kg	23,600 lb	10,704 kg
Load Rating Mid-Drum	5,700 lb	2,585 kg	2,900 lb	1,315 kg	5,900 lb	2,676 kg	14,000 lb	6,350 kg	19,000 lb	8,618 kg
Load Rating Full Drum	4,700 lb	2,131 kg	2,400 lb	1,088 kg	5,000 lb	2,268 kg	11,500 lb	5,216 kg	15,900 lb	7,212 kg
Line Speed 1st Layer*	30 fpm	9.1 m/min	61 fpm	18.6 m/min	79 fpm**	24.1 m/min**	30 fpm**	9.1 m/min**	19 fpm	5.8 m/min
Line Speed Mid-Drum*	38 fpm	11.6 m/min	77 fpm	23.5 m/min	96 fpm**	29.3 m/min**	39 fpm**	11.9 m/min**	24 fpm	7.3 m/min
Line Speed Full Drum*	46 fpm	14.0 m/min	94 fpm	28.7 m/min	114 fpm**	34.7 m/min**	47 fpm**	14.3 m/min**	29 fpm	8.8 m/min
Input HP	7.1 hp	7.1 hp	7.1 hp	7.1 hp	18.3 hp	18.3 hp	17.8 hp	17.8 hp	14.4 hp	14.4 hp
Max. Stall Pull 1st Layer	9,000 lb	4,082 kg	4,500 lb***	2,041kg***	11,000 lb	4,989 kg	33,000 lb	14,968 kg	38,000 lb	17,236 kg
Pressure	90 psi	6.3 kgf/cm2	90 psi	6.3 kgf/cm2	90 psi	6.3 kgf/cm2	90 psi	6.3 kgf/cm2	90 psi	6.3 kgf/cm2
Flow	250 scfm	7.0 m3/min	250 scfm	7.0 m3/min	600 scfm	17.0 m3/min	550 scfm	15.6 m3/min	550 scfm	15.6 m3/min
Pipe Inlet Size	1 in	25.4 mm	1 in	25.4 mm	1.5 in	38.1 mm	1.5 in	38.1 mm	1.5 in	38.1 mm
Hose Size	1.25 in	31.8 mm	1.25 in	31.8 mm	1.5 in	38.1 mm	1.5 in	38.1 mm	1.5 in	38.1 mm
Minimum Design Temp	(-4°)F	(-20°)C	(-4°)F	(-20°)C	(-4°)F	(-20°)C	(-4°)F	(-20°)C	(-4°)F	(-20°)C

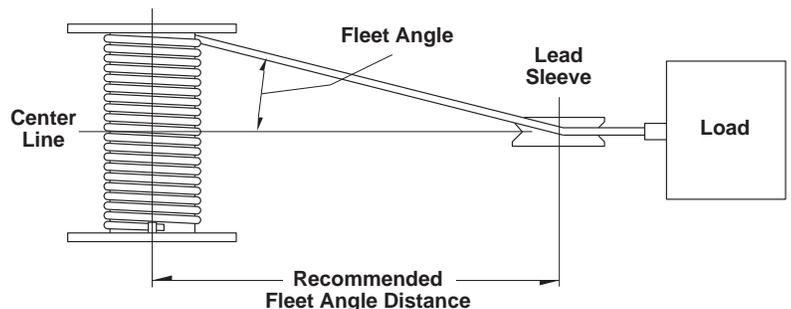
* Line speeds vary based on conditions of air supply. ** ABS certifications may specify slower line speeds than those published due to variances in air flow at time of actual test. *** Estimated Value.

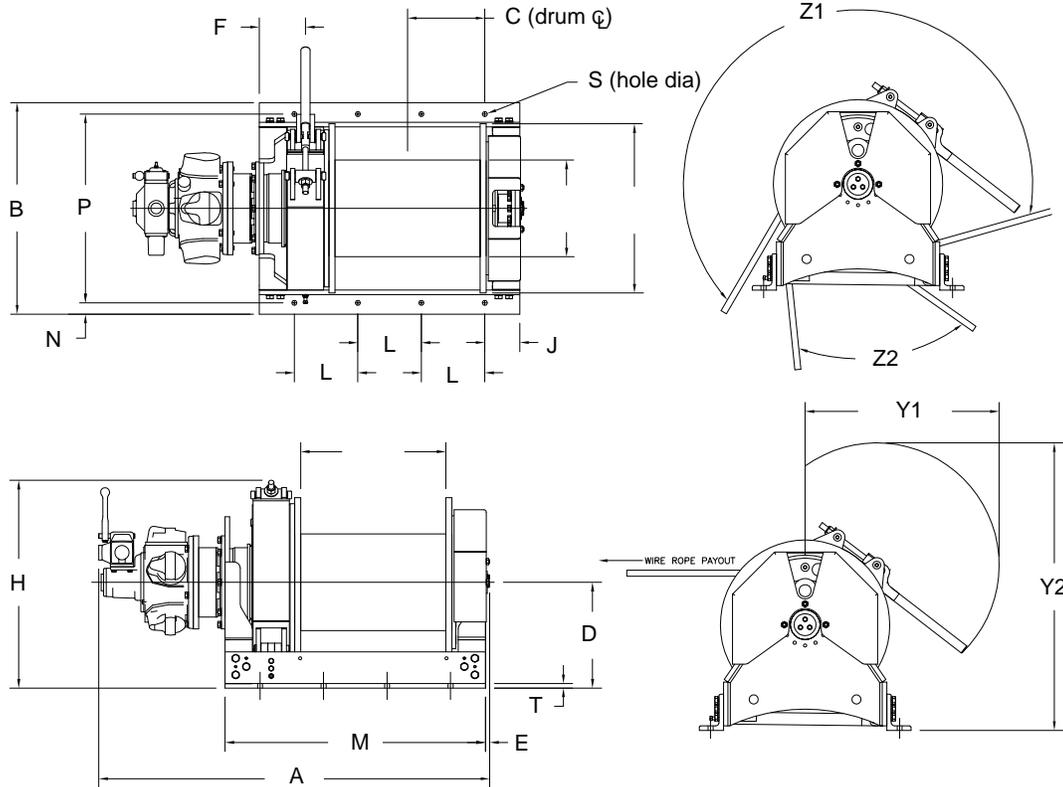
BIG RED TA Series UTILITY RATED Air Winch Drum Capacities*

Drum Width	Rope Diameter		Breaking Strength**		16 in (407 mm)			24 in (610 mm)			30 in (762 mm)			36 in (915 mm)			
					1st Layer	Mid Drum	Full Drum	1st Layer	Mid Drum	Full Drum	1st Layer	Mid Drum	Full Drum	1st Layer	Mid Drum	Full Drum	
	(in)	(mm)	(lb)	(kg)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	
TA2 Series	0.5	12.7	26,600	12,065	83	25	380	115	850	259	130	39	570	173	1,270	387	-
TA2H Series	0.5	12.7	26,600	12,065	83	25	380	115	850	259	130	39	570	173	1,270	387	-
TA2.5 Series	0.63	16.0	41,200	18,688	71	21	260	79	580	176	110	33	390	118	860	262	-
TA5 Series	0.75	19.1	58,800	26,671	72	21	360	109	810	246	120	36	550	167	1,210	368	150
TA7 Series	0.88	22.4	79,600	36,106	-	-	-	-	-	-	120	36	520	158	1,150	350	160

* Drum capacity is based on 0.5 inch flange clearance at top layer per ASME B30.7. ** Values based on 6x37 IWRC EIPS wire rope.

Series	Drum Diameter	Flange Diameter	Drum Width	Fleet Angle Dist.
TA2-16	11.50 292	20.00 508	16.00 406	26 8
TA2-24	11.50 292	20.00 508	24.00 610	39 12
TA2H-16	11.50 292	20.00 508	16.00 406	26 8
TA2H-24	11.50 292	20.00 508	24.00 610	39 12
TA2.5-16	12.75 324	21.00 533	16.00 406	26 8
TA2.5-24	12.75 324	21.00 533	24.00 610	39 12
TA5-16	16.00 406	28.00 711	16.00 406	26 8
TA5-24	16.00 406	28.00 711	24.00 610	39 12
TA5-30	16.00 406	28.00 711	30.00 762	48 15
TA7-24	20.00 508	33.00 838	24.00 610	39 12
TA7-30	20.00 508	33.00 838	30.00 762	48 15
TA7-36	20.00 508	33.00 838	36.00 914	58 18





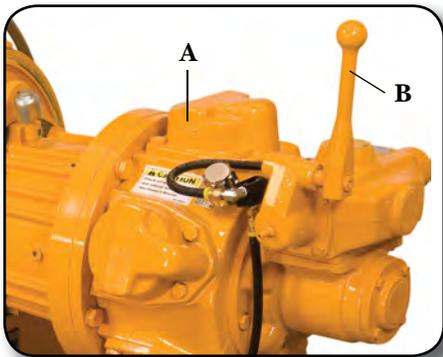
BIG RED TA Series UTILITY RATED Air Winch Dimensions

Series	A		B		C		D		E		F		H		J		L		M		N	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
TA2-16	44.00	1,118	24.00	610	9.06	230	14.00	356	0.54	14	5.25	133	28.50	724	2.88	73	7.50	191	28.50	724	2.00	51
TA2-24	52.00	1,321	24.00	610	12.81	325	14.00	356	0.54	14	5.25	133	28.50	724	3.13	80	10.00	254	36.50	927	2.00	51
TA2H-16	44.00	1,118	24.00	610	9.06	230	14.00	356	0.54	14	5.25	133	28.50	724	2.88	73	7.50	191	28.50	724	2.00	51
TA2H-24	52.00	1,321	24.00	610	12.81	325	14.00	356	0.54	14	5.25	133	28.50	724	3.13	80	10.00	254	36.50	927	2.00	51
TA2.5-16	50.00	1,270	24.00	610	9.00	229	14.00	356	0.73	19	5.25	133	30.00	762	2.88	73	7.50	191	28.50	724	2.00	51
TA2.5-24	58.00	1,473	24.00	610	12.75	324	14.00	356	0.73	19	5.25	133	30.00	762	3.13	80	10.00	254	36.50	927	2.00	51
TA5-16	57.00	1,448	35.00	889	10.53	267	17.50	445	0.68	17	7.75	197	34.50	876	4.03	102	9.00	229	35.50	902	1.88	48
TA5-24	65.00	1,651	35.00	889	12.78	325	17.50	445	0.68	17	7.75	197	34.50	876	5.78	147	10.50	267	43.50	1,105	1.88	48
TA5-30	71.00	1,803	35.00	889	17.03	433	17.50	445	0.68	17	7.75	197	34.50	876	4.53	115	10.00	254	49.50	1,257	1.88	48
TA7-24	69.00	1,753	38.00	965	15.41	391	20.00	508	1.00	25	9.25	235	37.00	940	5.38	137	9.00	229	47.00	1,194	1.88	48
TA7-30	75.00	1,905	38.00	965	17.41	442	20.00	508	1.00	25	9.25	235	37.00	940	6.38	162	10.00	254	53.00	1,346	1.88	48
TA7-36	81.00	2,057	38.00	965	19.41	493	20.00	508	1.00	25	9.25	235	37.00	940	7.38	187	11.00	279	59.00	1,499	1.88	48

Series	P		S (hole diameter)		T		Y1		Y2		Z1	Z2	# Bolts	Bolt Size	Weight	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(Degrees)	(Degrees)	-	-	(lb)	(kg)
TA2-16	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	223	34	8	5 / 8 in - G8	990	450
TA2-24	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	223	34	8	5 / 8 in - G8	1,080	490
TA2H-16	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	223	34	8	5 / 8 in - G8	990	450
TA2H-24	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	223	34	8	5 / 8 in - G8	1,080	490
TA2.5-16	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	228	27	8	5 / 8 in - G8	1,315	597
TA2.5-24	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	228	27	8	5 / 8 in - G8	1,400	636
TA5-16	31.45	794	0.81	21	0.75	19	32.50	826	48.00	1,219	224	50	8	3 / 4 in - G8	2,585	1,173
TA5-24	31.45	794	0.81	21	0.75	19	32.50	826	48.00	1,219	224	50	8	3 / 4 in - G8	2,745	1,246
TA5-30	31.45	794	0.81	21	0.75	19	32.50	826	48.00	1,219	224	50	10	3 / 4 in - G8	2,870	1,302
TA7-24	34.25	870	0.94	24	0.75	19	32.00	813	51.00	1,295	210	39	10	7 / 8 in - G8	3,600	1,633
TA7-30	34.25	870	0.94	24	0.75	19	32.00	813	51.00	1,295	210	39	10	7 / 8 in - G8	3,765	1,708
TA7-36	34.25	870	0.94	24	0.75	19	32.00	813	51.00	1,295	210	39	10	7 / 8 in - G8	3,965	1,799

You Might Call It A Wish List. We Call It A Features List.

Model	Drum Width (inches)			HP		Winch Load Rating		Winch Line Speed	
	16	24	30	Utility	Personnel	Utility (Full Drum)	Personnel (Full Drum)	Utility	Personnel
PERSONNEL TA2P Series	●	●	-	7.1	6.8	4,700 lbs	2,900 lbs	30-46 fpm	46-70 fpm
TA2HP Series	●	●	-	7.1	7.1	2,400 lbs	2,400 lbs	61-94 fpm	61-94 fpm
TA2.5P Series	●	●	-	18.3	16.2	5,000 lbs	3,100 lbs	79-114 fpm	112-162 fpm
TA5P Series	●	●	●	17.8	16.7	11,500 lbs	6,900 lbs	30-47 fpm	47-74 fpm



Features and Benefits

Radial Piston Motor (A)

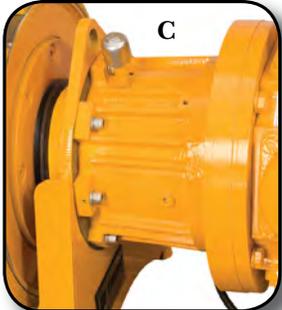
Internally lubricated for reliable power and an exceptionally long service life.

Precise Control Valve (B)

Count on smooth control with variable speed, making it ideal for both precision spotting and long lifts.

Automatic Disc Brake (C)

Spring engaged, air pressure released and oil cooled for extended duty cycles and long life.



Manual Band Brake (D)

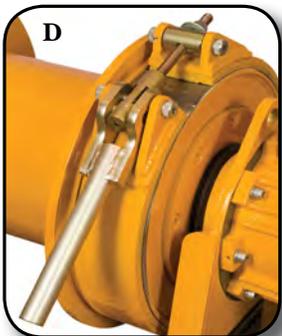
The heavy duty, long handled steel band brake requires less force to engage and provides up to 150% winch capacity.

Welded Steel Frame

Captures both drum ends for optimal strength and security.

Planetary Gears

Compact design and high efficiency gearing reduce power loss and heat generation while increasing service life. Gears operate in oil bath. Double lip oil seals keep oil in and contaminants out.



Marine Grade Epoxy

Applied with a zinc primer for ultimate protection in harsh environments.

Wire Rope Assemblies

Sold separately. A variety of wire rope assemblies and fittings are available per customer request. Please contact the factory.

Meets ASME 30.7 Requirements

Standard units designed and built to meet this specification.

ABS Type Approval

With dual rating for both personnel and utility operation. Designed in accordance with ABS CDS 2006 Guide.



2-Year Warranty

Leading the industry with our *Move It with Confidence* Two Year Limited Warranty.

**BigRed
Rider**

THERN

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Looking For The Perfect Hoist? Build It Your Way.

Every job is different, so we allow you to build Thern BIG RED TA Series air winches to suit your specific needs using our extensive line of accessories and options. The better suited the winch, the better completed the task.



Options and Accessories

Automatic Band Brake (E)

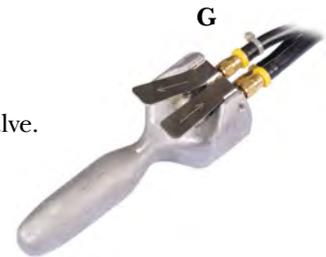
Spring engaged, air pressure released, with heavy-duty construction that provides up to 150% holding capacity (replaces manual brake).

Mufflers (F)

Attached to the exhaust ports to reduce noise.

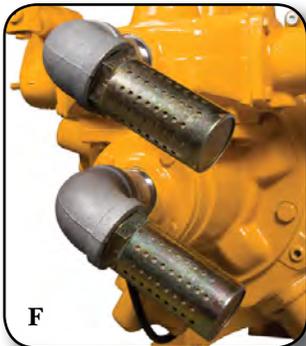
Control Options (G)

Winch mounted, full flow remote pendant control valve.



Drum Guard (H)

Heavy-duty steel mesh helps to protect operators. Adjusts for different rope payout angles.



Filter, Regulator and Lubricator (I)

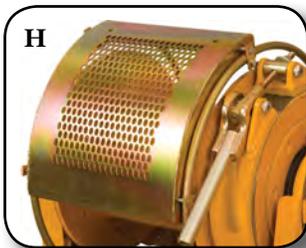
Maintains air quality to the winch. Required for warranty compliance.

Line Guide (J)

Steel construction and hand operated to help wire rope unwind uniformly.

Stackable Construction Winch Cage

Protects motor and winch during operation. Movable with forklift.





BIG RED TA Series PERSONNEL RATED Air Winch Performance Characteristics

	TA2P Series		TA2HP Series		TA2.5P Series		TA5P Series	
	PERSONNEL	UTILITY	PERSONNEL	UTILITY	PERSONNEL	UTILITY	PERSONNEL	UTILITY
Load Rating 1st Layer	4,500 lb 2,041 kg	7,200 lb 3,265 kg	3,600 lb 1,632 kg	3,600 lb 1,632 kg	4,500 lb 2,041 kg	7,200 lb 3,265 kg	10,700 lb 4,853 kg	18,000 lb 8,164 kg
Load Rating Mid-Drum	3,600 lb 1,632 kg	5,700 lb 2,585 kg	2,900 lb 1,315 kg	2,900 lb 1,315 kg	3,700 lb 1,678 kg	5,900 lb 2,676 kg	8,400 lb 3,810 kg	14,000 lb 6,350 kg
Load Rating Full Drum	2,900 lb 1,315 kg	4,700 lb 2,131 kg	2,400 lb 1,088 kg	2,400 lb 1,088 kg	3,100 lb 1,406 kg	5,000 lb 2,268 kg	6,900 lb 3,129 kg	11,500 lb 5,216 kg
Line Speed 1st Layer *	46 fpm 14.0 m/min	30 fpm** 9.1 m/min**	61 fpm 18.6 m/min	61 fpm 18.6 m/min	112 fpm 34.1 m/min	79 fpm** 24.1 m/min**	47 fpm 14.3 m/min	30 fpm** 9.1 m/min**
Line Speed Mid-Drum *	58 fpm 17.7 m/min	38 fpm** 11.6 m/min**	77 fpm 23.5 m/min	77 fpm 23.5 m/min	137 fpm 41.8 m/min	96 fpm** 29.3 m/min**	61 fpm 18.6 m/min	39 fpm** 11.9 m/min**
Line Speed Full Drum *	70 fpm 21.3 m/min	46 fpm** 14.0 m/min**	94 fpm 28.7 m/min	94 fpm 28.7 m/min	162 fpm 49.4 m/min	114 fpm** 34.7 m/min**	74 fpm 22.6 m/min	47 fpm** 14.3 m/min**
Input HP	6.8 hp 6.8 hp	7.1 hp 7.1 hp	7.1 hp 7.1 hp	7.1 hp 7.1 hp	16.2 hp 16.2 hp	18.3 hp 18.3 hp	16.7 hp 16.7 hp	17.8 hp 17.8 hp
Max. Stall Pull 1st Layer	9,000 lb 4,082 kg	9,000 lb 4,082 kg	4,500 lb*** 2,041kg***	4,500 lb*** 2,041kg***	11,000 lb 4,989 kg	11,000 lb 4,989 kg	33,000 lb 14,968 kg	33,000 lb 14,968 kg
Pressure	90 psi 6.3 kgf/cm2	90 psi 6.3 kgf/cm2	90 psi 6.3 kgf/cm2	90 psi 6.3 kgf/cm2	90 psi 6.3 kgf/cm2	90 psi 6.3 kgf/cm2	90 psi 6.3 kgf/cm2	90 psi 6.3 kgf/cm2
Flow	300 scfm 8.5 m3/min	250 scfm 7.0 m3/min	250 scfm 7.0 m3/min	250 scfm 7.0 m3/min	700 scfm 19.8 scfm	600 scfm 17.0 m3/min	700 scfm 19.8 m3/min	550 scfm 15.6 m3/min
Pipe Inlet Size	1 in 25.4 mm	1 in 25.4 mm	1 in 25.4 mm	1 in 25.4 mm	1.5 in 38.1 mm	1.5 in 38.1 mm	1.5 in 38.1 mm	1.5 in 38.1 mm
Hose Size	1.25 in 31.8 mm	1.25 in 31.8 mm	1.25 in 31.8 mm	1.25 in 31.8 mm	1.5 in 38.1 mm	1.5 in 38.1 mm	1.5 in 38.1 mm	1.5 in 38.1 mm
Minimum Design Temp	(32°F) (0°C)	(32°F) (0°C)	(32°F) (0°C)	(32°F) (0°C)	(32°F) (0°C)	(32°F) (0°C)	(32°F) (0°C)	(32°F) (0°C)

* Line speeds vary based on conditions of air supply. ** ABS certifications may specify slower line speeds than those published due to variances in air flow at time of actual test. *** Estimated Value.

BIG RED TA Series PERSONNEL RATED Air Winch Drum Capacities *

Drum Width	Rope Diameter	Breaking Strength**	16 in (407 mm)			24 in (610 mm)			30 in (762 mm)		
			1st Layer	Mid Drum	Full Drum	1st Layer	Mid Drum	Full Drum	1st Layer	Mid Drum	Full Drum
	(in) (mm)	(lb) (kg)	(ft) (m)	(ft) (m)	(ft) (m)	(ft) (m)	(ft) (m)	(ft) (m)	(ft) (m)	(ft) (m)	(ft) (m)
TA2P Series	0.5 12.7	26,600 12,065	83 25	380 115	850 259	130 39	570 173	1,270 387	- -	- -	- -
TA2HP Series	0.5 12.7	26,600 12,065	83 25	380 115	850 259	130 39	570 173	1,270 387	- -	- -	- -
TA2.5P Series	0.63 16.0	41,200 18,688	71 21	260 79	580 176	110 33	390 118	860 262	- -	- -	- -
TA5P Series	0.75 19.1	58,800 26,671	72 21	360 109	810 246	120 36	550 167	1,210 368	150 45	680 207	1,520 463

* Drum capacity is based on 0.5 inch flange clearance at top layer per ASME B30.7. See separate table for full drum capacities based on ABS CDS 2006 guide.

** Values based on 6x37 IWRC EIPS wire rope. Breaking strength of new wire rope must comply with appropriate standards; 5:1 for utility winches, 10:1 for personnel winches, based on the largest load placed on the winch.

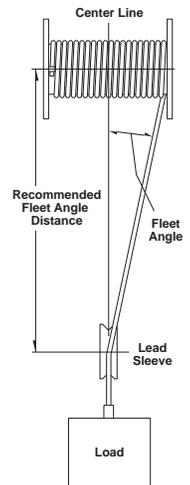
BIG RED TA Series ABS CDS Drum Capacities (Rider)*

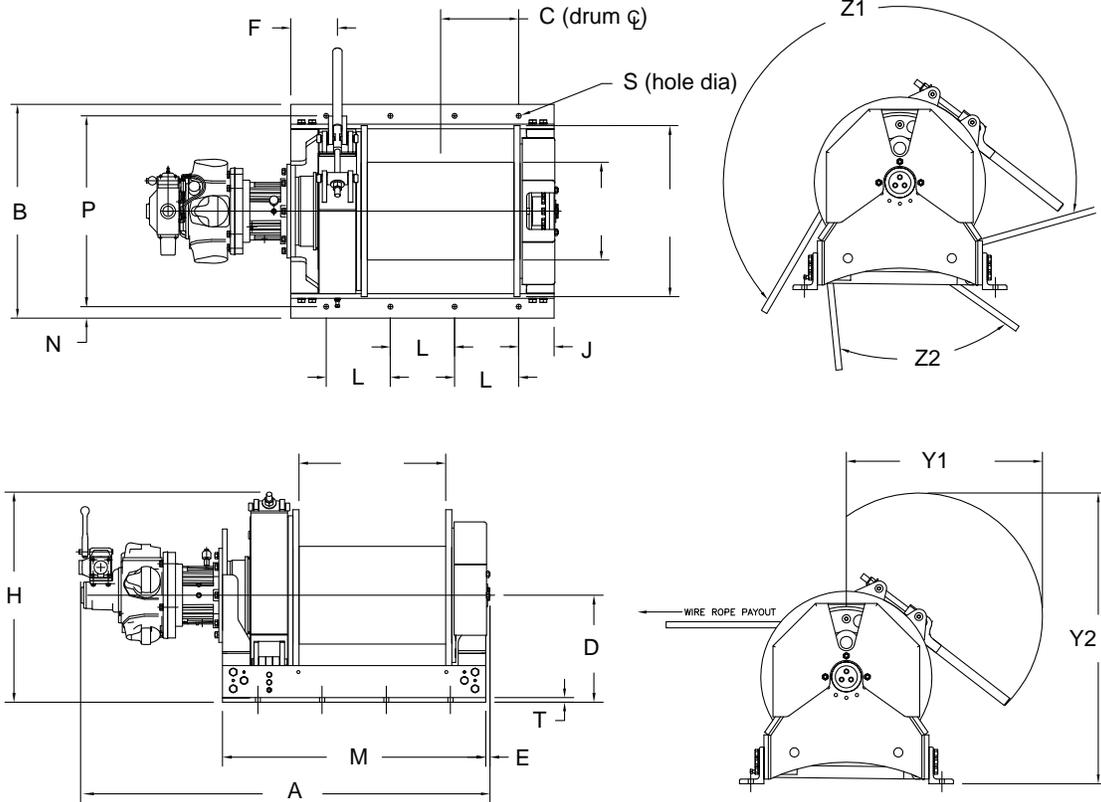
Drum Width	Rope Diameter	Breaking Strength**	16 in (407 mm)	24 in (610 mm)	30 in (762 mm)
			Full Layer	Full Drum	Full Drum
	(in) (mm)	(lb) (kg)	(ft) (m)	(ft) (m)	(ft) (m)
TA2P Series	0.5 12.7	26,600 12,065	710 216	1,060 323	- -
TA2HP Series	0.5 12.7	26,600 12,065	710 216	1,060 323	- -
TA2.5P Series	0.63 16.0	41,200 18,688	440 134	650 198	- -
TA5P Series	0.75 19.1	58,800 26,671	630 192	950 289	1,180 359

* Drum capacity is based on 0.5 inch flange clearance at top layer per ABS CDS 2006 guide.

** Values based on 6x37 IWRC EIPS wire rope. Breaking strength of new wire rope must comply with appropriate standards; 5:1 for utility winches, 10:1 for personnel winches, based on the largest load placed on the winch.

Series	Drum Diameter		Flange Diameter		Drum Width		Fleet Angle Dist.	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft)	(m)
TA2P-16	11.50	292	20.00	508	16.00	406	26	8
TA2P-24	11.50	292	20.00	508	24.00	610	39	12
TA2HP-16	11.50	292	20.00	508	16.00	406	26	8
TA2HP-24	11.50	292	20.00	508	24.00	610	39	12
TA2.5P-16	12.75	324	20.00	508	16.00	406	26	8
TA2.5P-24	12.75	324	20.00	508	24.00	610	39	12
TA5P-16	16.00	406	31.25	794	16.00	406	26	8
TA5P-24	16.00	406	31.25	794	24.00	610	39	12
TA5P-30	16.00	406	31.25	794	30.00	762	48	15





BIG RED TA Series PERSONNEL RATED Air Winch Dimensions

	A		B		C		D		E		F		H		J		L		M		N	
Series	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
TA2P-16	55.00	1,397	24.00	610	9.06	230	14.00	356	0.54	14	5.25	133	28.50	724	2.88	73	7.50	191	28.50	724	2.00	51
TA2P-24	63.00	1,600	24.00	610	12.81	325	14.00	356	0.54	14	5.25	133	28.50	724	3.13	80	10.00	254	36.50	927	2.00	51
TA2HP-16	55.00	1,397	24.00	610	9.06	230	14.00	356	0.54	14	5.25	133	28.50	724	2.88	73	7.50	191	28.50	724	2.00	51
TA2HP-24	63.00	1,600	24.00	610	12.81	325	14.00	356	0.54	14	5.25	133	28.50	724	3.13	80	10.00	254	36.50	927	2.00	51
TA2.5P-16	53.00	1,346	24.00	610	9.00	229	14.00	356	0.73	19	5.25	133	30.00	762	2.88	73	7.50	191	28.50	724	2.00	51
TA2.5P-24	61.00	1,549	24.00	610	12.75	324	14.00	356	0.73	19	5.25	133	30.00	762	3.13	80	10.00	254	36.50	927	2.00	51
TA5P-16	61.00	1,549	35.00	889	10.53	267	17.50	445	0.68	17	7.75	197	34.50	876	4.03	102	9.00	229	35.50	902	1.88	48
TA5P-24	69.00	1,753	35.00	889	12.78	325	17.50	445	0.68	17	7.75	197	34.50	876	5.78	147	10.50	267	43.50	1,105	1.88	48
TA5P-30	75.00	1,905	35.00	889	17.03	433	17.50	445	0.68	17	7.75	197	34.50	876	4.53	115	10.00	254	49.50	1,257	1.88	48

	P		S (hole diameter)		T		Y1		Y2		Z1	Z2	# Bolts	Bolt Size	Weight	
Series	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(Degrees)	(Degrees)	-	-	(lb)	(kg)
TA2P-16	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	223	34	8	5 / 8 in - G8	1,135	515
TA2P-24	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	223	34	8	5 / 8 in - G8	1,225	556
TA2HP-16	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	223	34	8	5 / 8 in - G8	1,135	515
TA2HP-24	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	223	34	8	5 / 8 in - G8	1,225	556
TA2.5P-16	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	228	27	8	5 / 8 in - G8	1,405	638
TA2.5P-24	20.00	508	0.69	18	0.50	13	20.00	508	37.00	940	228	27	8	5 / 8 in - G8	1,490	676
TA5P-16	31.25	794	0.81	21	0.75	19	32.50	826	48.00	1,219	224	50	8	3 / 4 in - G8	2,715	1,232
TA5P-24	31.25	794	0.81	21	0.75	19	32.50	826	48.00	1,219	224	50	8	3 / 4 in - G8	2,880	1,307
TA5P-30	31.25	794	0.81	21	0.75	19	32.50	826	48.00	1,219	224	50	10	3 / 4 in - G8	3,005	1,364

TA10 Air Winches

Load Capacity up to 37,000 lbs



TA10-40MX1 shown with manual band brake for positive load control.

The addition of the TA10 to the TA Series from Thern gives users more options than ever before. Featuring new design elements, including frame design, rotary cable anchor, and lifting eyes, the TA10 adds flexibility and ease of use while retaining all of the rugged features found on our TA Series winches.

Features and Benefits



Drain and fill plug location makes maintenance easy.

High Capacity Radial Piston Motor

Internally lubricated for reliable power and long service life providing high capacity with faster line speeds.

Precise Control Valve

Count on smooth control with variable speed, for precision spotting or long lifts.

Manual Band Brake

Heavy-duty handle allows for manual brake operation and provides 150% load holding capacity. Brake can be modified to operate from either side.

Easy Access Drain and Fill Plug (A)

New configuration provides easier access for maintenance; drain and fill plugs now located outside of drum, eliminating need to remove wire rope for maintenance.

Planetary Gears

Compact design and high efficiency gearing reduce power loss and heat generation while increasing service life. Gears operate in oil bath. Double lip oil seals keep oil in and contaminants out.

Rotary Cable Anchor (B)

Innovative cable anchor design is self adjusting for various cable sizes. Anchor is corrosion resistant for operation in harsh environments.

Welded Steel Frame

Captures both drum ends for strength and security. Frame includes convenient lifting eyes for easy handling.

Meets ASME 30.7 Requirements

Standard units designed and built to meet this specification.

2-Year Warranty

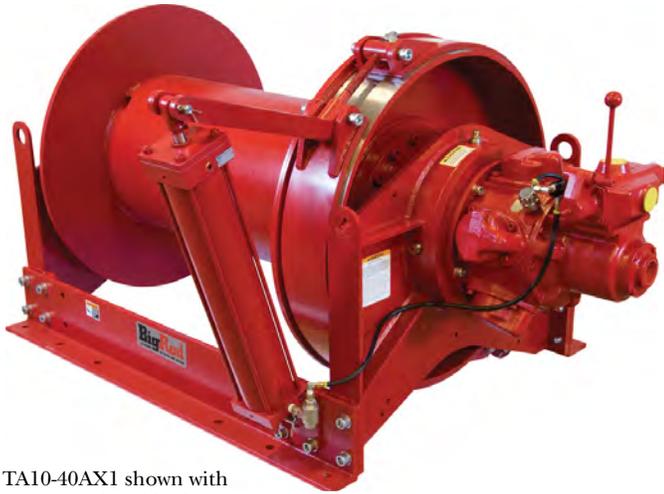
Leading the industry with our *Move It With Confidence* Two-Year Limited Warranty.



Rotary cable anchor for easy installation from either direction.

BigRed

Unmatched Versatility, Customized For Your Job.



TA10-40AX1 shown with automatic band brake.

Every job is different, so we allow you to order Thern BIG RED TA10 air winches to suit your specific needs with a vast array of options and accessories. From automatic brake options to a pendant control, we'll work with you every step of the way to make sure you get exactly what you require.

Options and Accessories



Mufflers help reduce noise during operation.

Automatic Disc Brake

Spring engaged, air pressure released and oil cooled for extended duty cycles and long life.

Automatic Band Brake

Spring engaged, air pressure released, with heavy-duty construction that provides up to 150% holding capacity (replaces manual band brake).

Drum Guard

Heavy-duty steel mesh helps to protect operators. Adjusts for different rope payout angles.

Filter, Regulator and Lubricator (E)

Maintains air quality to the winch. Required for warranty compliance.

Multiple Drum Compartments

Allow for multiple line connections and operation.



Convenience of pendant controls for remote operation.

Mufflers (C)

Attached to exhaust ports to reduce noise.

Control Options (D)

Winch mounted, full flow remote pendant control valve.

Marine Grade Epoxy

Applied with a zinc primer for ultimate protection in harsh environments.

ABS Survey Available

Please contact factory.



Protect motor from contaminants with Filter-Regulator-Lubricator.

BigRed

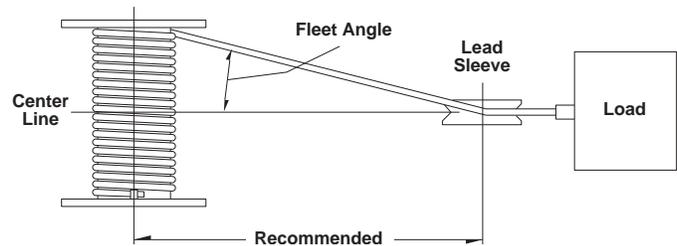
BIG RED TA10 Series Performance Characteristics

	TA10 Series	
Load Rating 1st Layer	37,000 lb	16,783 kg
Load Rating Mid-Drum	27,400 lb	12,428 kg
Load Rating Full Drum	21,800 lb	9,888 kg
Line Speed 1st Layer *	20 fpm	6.1 m/min
Line Speed Mid-Drum *	27 fpm	8.2 m/min
Line Speed Full Drum *	34 fpm	10.4 m/min
Input HP	27 hp	27 hp
Max. Stall Pull 1st Layer	47,000 lb**	21,320 kg
Pressure	90 psi	6.3 kgf/cm2
Flow	900 scfm	25 m3/min
Pipe Inlet Size	1.5 in	38.1 mm
Hose Size	1.5 in	38.1 mm
Minimum Design Temp	(-4°)F	(-20°)C

* Line speeds vary based on conditions of air supply. ** Estimated value.

RED BIG TA10 Series Fleet Angle Requirements

Series	Drum Diameter		Flange Diameter		Drum Width		Fleet Angle Dist.	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft)	(m)
TA10-30	20.00	508	38.00	965	30.00	762	48	15
TA10-40	20.00	508	38.00	965	40.00	1016	64	20
TA10-60	20.00	508	38.00	965	60.00	1524	95	29



BIG RED TA10 Series Air Winch Drum Capacities *

Drum Width	Rope Diameter		Breaking Strength**		30 in (762 mm)			40 in (1016 mm)			60 in (1524 mm)											
					1st Layer	Mid Drum	Full Drum	1st Layer	Mid Drum	Full Drum	1st Layer	Mid Drum	Full Drum									
Series	(in)	(mm)	(lb)	(kg)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)								
TA10	1 1/8	28.7	130,000	58,968	120	36	620	115	1,390	259	160	48	830	252	1,850	563	260	79	1,250	381	2,780	847

* Drum capacity is based on 0.5 inch flange clearance at top layer per ASME B30.7. ** Values based on 6x37 IWRC EIPS wire rope.

BIG RED TA10 Series Air Winch Dimensions

Series	A		B		C		D		E		H1		H2		J		L	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
TA10-30	69.00	1753	45.75	1162	19.50	495	21.00	533	2.25	57	41.50	1054	50.00	1270	2.00	51	8.00	203
TA10-40	79.00	2007	45.75	1162	24.50	622	21.00	533	2.25	57	41.50	1054	50.00	1270	2.00	51	8.00	203
TA10-60	99.00	2515	45.75	1162	34.50	876	21.00	533	2.25	57	41.50	1054	50.00	1270	2.00	51	8.00	203

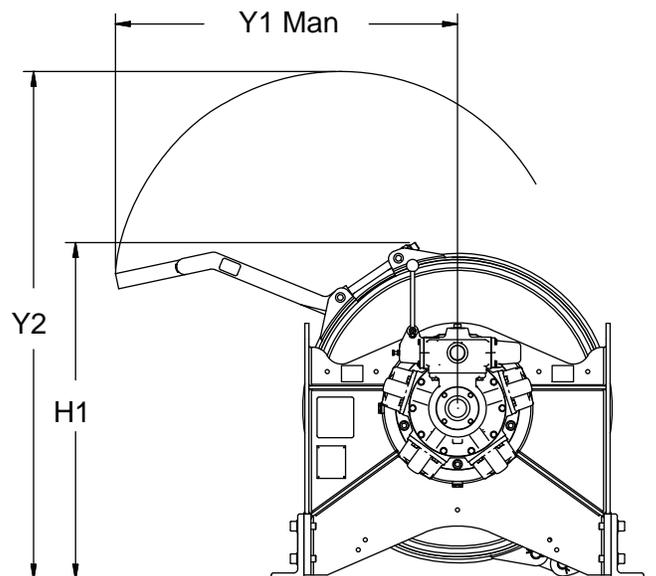
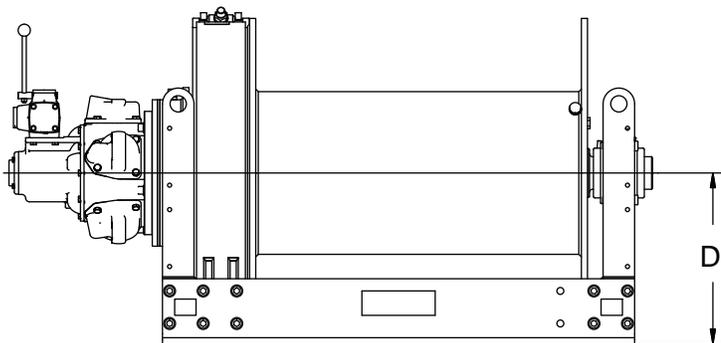
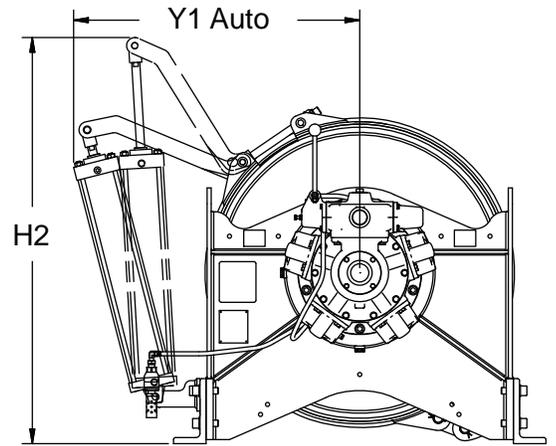
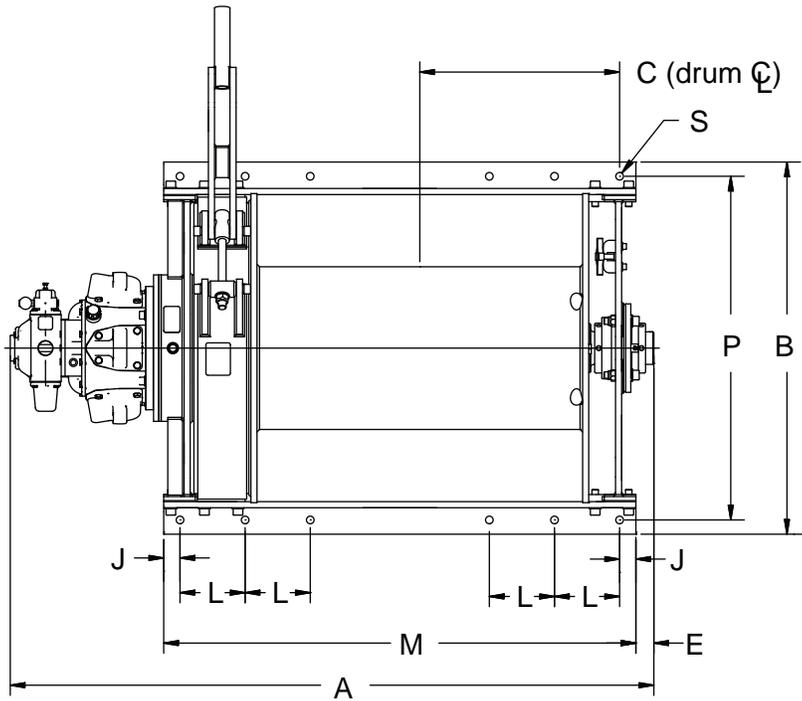
Series	M		P		S (hole diameter)		Y1 (Man)		Y1 (Auto)		Y2		# Bolts	Bolt Size	Weight*	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)			(lb)	(kg)
TA10-30	48.00	1219	42.25	1073	.94	24	42	1067	35.25	895	62.50	1588	12	15 / 16 in - G8	3,220	1,461
TA10-40	58.00	1473	42.25	1073	.94	24	42	1067	35.25	895	62.50	1588	12	15 / 16 in - G8	3,515	1,595
TA10-60	78.00	1981	42.25	1073	.94	24	42	1067	35.25	895	62.50	1588	12	15 / 16 in - G8	4,105	1,863

* Weights based on MX1 configuration. Weights subject to change with configurations.

Dimensions are for reference only and subject to change without notice. Please contact factory for exact dimensions.

IMPORTANT:

It is the owner or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.



A Reputation of Excellence.

By the time he returned from his Air Force duty during World War II, Royal G. Thern, or Roy for short, had already spent his lifetime around large machines and heavy equipment. Settling in to the small town of Winona, Minnesota with his wife Lucille, the two combined their knowledge to create a corn sheller, lever-operated chain hoist, a cordwood saw frame and a differential chain hoist. It was the beginning of a long tradition of lifting and pulling innovation.

Today, Thern continues it's 60-year tradition of excellence by providing standard and customized load handling equipment to leading companies all around the world. The company offers lifting and pulling solutions to a variety of industries, including aerospace, aviation, bulk material processing, construction, manufacturing, transportation, and water/wastewater.



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