TAC SERIES

Air Winches

5500 lb, 11000 lb and 22000 lb Capacity

- Welded Steel Frame
- Removable Lifting Eyes
- Radial Piston Motor
- Automatic Disc Brake
- E-Stop as Standard
- Planetary Gears
- Neutral Lock Control Valve
- NORD-LOCK Washers
- Dual Direction Cable Anchor
- Meets ASME B30.7 Requirements
- Overload Protection
- Excellent Corrosion Resistance
- Industry-Leading 2-Year Limited Warranty
- DNV Type Approval and Certifications Available
- CE Packages Available



WINCHES - HAND / POWER / HYDRAULIC / AIR • DAVIT CRANES
5712 Industrial Park Road, Winona, MN 55987 | www.thern.com



Thern's C-Series Air Winches feature new innovations that make them faster, lighter, safer, more versatile, and more corrosion-

resistant than ever before. The new winches are designed in accordance with DNV standards, and DNV Type Approval and

Certifications are available across the new range.

TAC SERIES OPTIONS

■ OPTIONS & ACCESSORIES

DNV TYPE APPROVAL PACKAGE

Compliant with DNV OS-E101 drilling plant. Individual product certification (available as an option). Includes: 3.1 Material traceability, -20°C (-4°F) design and a choice of emergency lowering devices.

CE PACKAGE

Compliance with European machinery directive 2006/42/EC. Includes: single muffler, drum quard and travel limits.

ATEX CLASSIFICATION

Specially rated for use in explosive settings. This custom option is available upon request.

ADJUSTABLE DRUM GUARD

Protects operators yet allows visibility of wire rope winding. Fasteners and drum guard are coated with Magni 567 or are stainless steel for corrosion protection.

DRUM LOCK

Locks out the drum securely in desired position when winch is not in use.

EMERGENCY LOWERING OPTIONS

Load lowering capability in case of power failure. Options include power diversion and emergency brake release.

LINE GUIDE

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

MUFFLERS

Reduce operation noise. Single or double available.

Suitable to perform in harsh













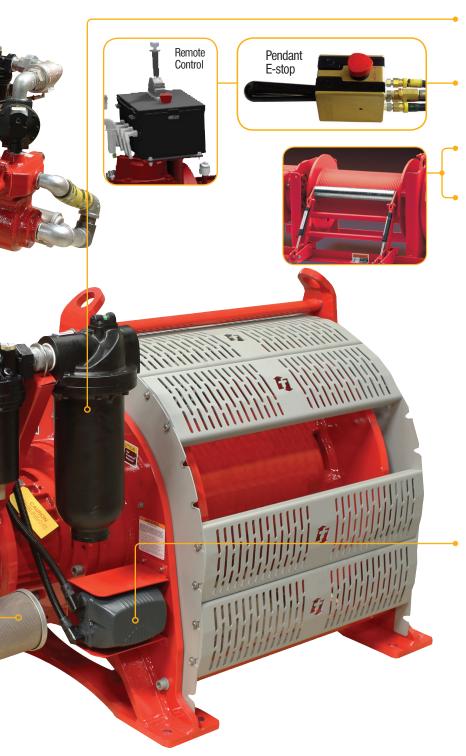






TAC SERIES OPTIONS

■ OPTIONS & ACCESSORIES



FILTER and LUBRICATOR

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

PENDANT or REMOTE CONTROL

Pendant or Remote control configurations are hold-to-run and come standard with E-stop.

PRESSURE ROLLER BAR

Maintains uniform winding of wire rope.

GROOVED DRUM

For more uniform wire rope winding. A custom option available upon request.

ELECTRIC-OVER-AIR CONTROLS

Electric proportional control. This option not available on standard DNV type approved winches.

HEAT GUARD FOR BRAKE

Prevents unintended contact with brake.

CONSTRUCTION CAGE

Protects motor and winch during operation. Movable with forklift.

MOUNTING PATTERN ADAPTER PLATE

Match requested existing bolt patterns for convenient winch installation.

TRAVEL LIMITS

Pneumatic rotary travel limits with quick response time, limits travel in both directions.

WIRE ROPE ASSEMBLIES

Sold separately. A wide variety of assemblies and fittings are available per customer request.







TA2.5C PERFORMANCE

■ PERFORMANCE CHARACTERISTICS



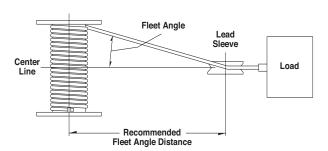
TA2.5C Load Rating

Load Rating 1st Layer	5,500 lb	2500 kg
Load Rating Mid-Drum	5,500 lb	2500 kg
Load Rating Full Drum	5,500 lb	2500 kg
Line Speed 1st Layer*	115 fpm	35.1 m/min
Line Speed Mid Drum*	121 fpm	36.9 m/min
Line Speed Full Drum*	130 fpm	39.6 m/min
Input HP	23.0 hp	17.2 kw
Max. Stall Pull 1st Layer	10,800 lbs	4,899 kg
Pressure	83 psi	5.7 bar
Flow	700 scfm	19.8 m3/min
Pipe Inlet Size	1.5 NPT	-
Hose Size	1.5	38.1 mm
Minimum Design Temp	-4°F	-20℃

^{*} Line speeds are estimated values based on testing and may vary based on conditions of air supply. Speeds shown are at max line pull.

TA2.5C Minimum Fleet Angle Distances

	Dru Diam	um neter		nge neter		um dth		eet Dist.
Series	(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft)	(m)
TA2.5C-12	12.75 323.9		21	533.4	12	304.8	20	6
TA2.5C-16	12.75 323.9		21	533.4	16	406.4	26	8
TA2.5C-24	12.75 323.9		21	533.4	24	609.6	39	12



TA2.5C Drum Capacities*

	Drui	n Width			12	in (30)5 mr	n)			16	in (4	06 mi	m)			24	in (6	10 mr	n)	
Rope Diameter			king igth**		st yer		id um		ull um		st yer	M Dr	id um	Fı Drı	ull um	1s La	st yer	M Dru		Fı Drı	
(in)	(mm)	(lb)	(kg)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)
5/8	16	41,200	18,688	50	50 16 15		45	340	102	71	21	200	60	450	137	110	32	300	91	670	205

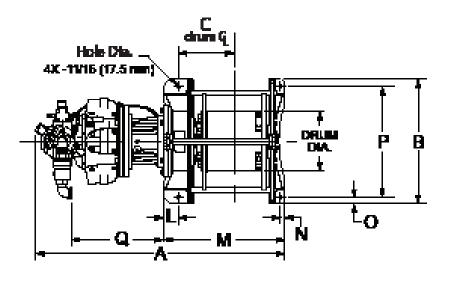
^{*} Drum capacity is based on a flange clearance of at least 1.5 times the wire rope diameter with the rope at top layer. ** Values based on 6x37 WRC EIPS wire rope.

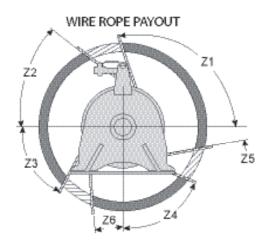


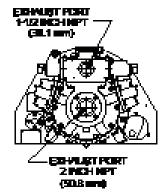
These products are not for lifting people or things over people.



TA2.5C WINCH DIMENSIONS

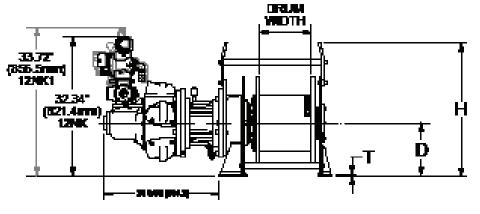






	#Bolts	Bolt	Size	Wei	ght ¹
Series	-	(inch)	(metric)	(lb)	(kg)
TA2.5C-12	4	.625	M16	1166	528.9
TA2.5C-16	4	.625	M16	1199	543.9
TA2.5C-24	4	.625	M16	1267	574.7

¹ NK1 Models are 2 - 3 lbs less (0.9 - 1.4 kg)



	(Mode	4 el NK)	(Mode	A el NK1)	E	3	()	ŀ	1	L		N	И	1	١	C	þ
Series	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
TA2.5C-12	53.72	1364.5	54.06	1373.0	27.00	685.8	12.03	305.6	12.25	311.2	30.84	783.3	3.25	82.6	26.125	663.6	.875	22.2	1.5	38.1
TA2.5C-16	57.72	1466.1	58.06	1474.8	27.00	685.8	14.03	356.4	12.25	311.2	30.84	783.3	3.25	82.6	30.125	765.2	.875	22.2	1.5	38.1
TA2.5C-24	65.72	1669.3	66.06	1678.0	27.00	685.8	18.03	458.0	12.25	311.2	30.84	783.3	3.25	82.6	38.125	968.4	.875	22.2	1.5	38.1

	ı	Р	C	2	(hole d	S iameter)			Z 1	Z2	Z3	Z4	Z5	Z6
Series	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)
TA2.5C-12	24	609.6	19.84	504.0	.69	17.5	.5	12.7	114°	39°	66°	70°	6°	2°
TA2.5C-16	24	609.6	19.84	504.0	.69	17.5	.5	12.7	114°	39°	66°	70°	6°	2°
TA2.5C-24	24	609.6	19.84	504.0	.69	17.5	.5	12.7	114°	39°	66°	70°	6°	2°

TA5C PERFORMANCE

■ PERFORMANCE CHARACTERISTICS



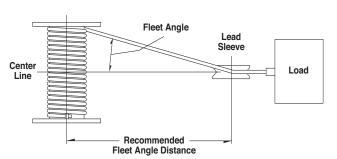
TA5C Load Rating

Load Rating 1st Layer	11,000 lb	4,989 kg
Load Rating Mid-Drum	11,000 lb	4,989 kg
Load Rating Full Drum	11,000 lb	4,989 kg
Line Speed 1st Layer*	48 fpm	14.6 m/min
Line Speed Mid Drum*	54 fpm	16.4 m/min
Line Speed Full Drum*	59 fpm	17.9 m/min
Input HP	21.3 hp	15.88 kw
Max. Stall Pull 1st Layer	27,100 lb	12,292 kg
Pressure	75 psi	5.2 bar
Flow	700 scfm	19.8 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 are estimated values based on testing and may vary based on conditions of air supply. Speeds shown are at max line pull.

TA5C Minimum Fleet Angle Distances

	Dr Dian	um neter	Flai Diam	nge neter	Dru Wid			eet Dist.
Series	(in) (mm)		(in)	(mm)	(in)	(mm)	(ft)	(m)
TA5C-16	16.00			711	16.00	407	26	8
TA5C-24	16.00 407		28.00	711	24.00	610	39	12
TA5C-30	16.00	407	28.00	711	30.00	762	48	15



TA5C Drum Capacities*

	Drui	m Width			16	in (40)7 mr	n)			24	in (6	10 mi	m)			30) in (7	62 mi	n)	
	ope neter		king igth**		st yer		id um		ull um	1: La	st yer	M Dri		Fı Drı		1s Lay		M Dri		Fı Drı	
(in)	(mm)	(lb)	(kg)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)
3/4	19.1	58,800	26,671	72	21	310	94	690	210	120	36	470	143	1,040	317	150	45	590	180	1,300	396

^{*} Drum capacity is based on a flange clearance of at least 1.5 times the wire rope diameter with the rope at top layer. ** Values based on 6x37 IWRC EIPS wire rope.





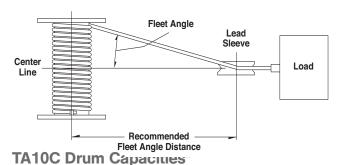
TA10C PERFORMANCE

■ PERFORMANCE CHARACTERISTICS



TA10C Minimum Fleet Angle Distances

		um neter		nge neter	Dr Wie	um dth		eet Dist.
Series	(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft)	(m)
TA5C-18	20.00	508	38.00	965	18.00	457	29	9
TA5C-24	20.00	508	38.00	965	24.00	610	39	12
TA5C-30	20.00	508	38.00	965	30.00	762	48	15
TA5C-40	20.00	508	38.00	965	40.00	1016	64	20



TA10C Load Rating

_		
Load Rating 1st Layer	22,000 lb	9,979 kg
Load Rating Mid-Drum	22,000 lb	9,979 kg
Load Rating Full Drum	22,000 lb	9,979 kg
Line Speed 1st Layer*	24 fpm	7.3 m/min
Line Speed Mid Drum*	28 fpm	8.5 m/min
Line Speed Full Drum*	32 fpm	9.8 m/min
Input HP	25.84 hp	19.27 kw
Max. Stall Pull 1st Layer (estimate)	58,000 lb	26,308 kg
Pressure	85 psi	5.9 bar
Flow	900 scfm	25.5 m3/min
Pipe Inlet Size	1.5 in	38.1 mm
Hose Size	2.0 in	50.8 mm
Minimum Design Temp	- 4° F	- 20° C

^{*} Line speeds are estimated values based on testing and may vary based on conditions of air supply. Speeds shown are at max line pull.

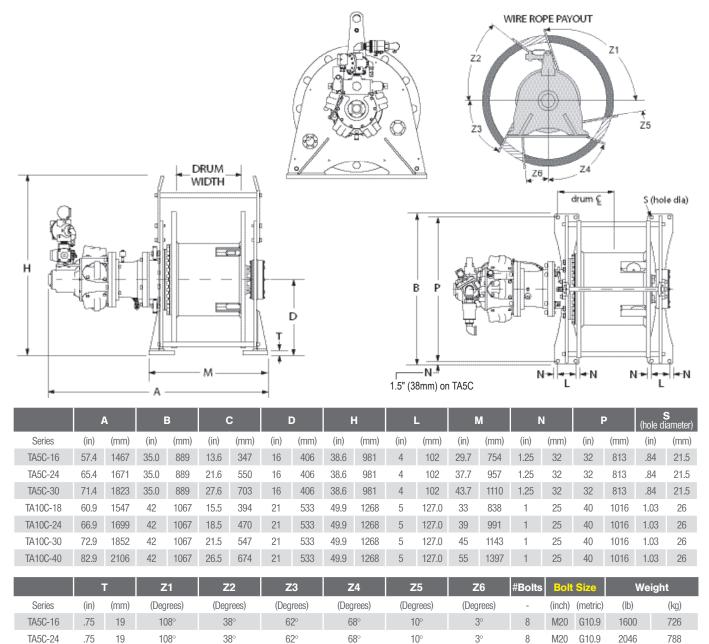
	Drum	Widt	h		18	in (4	58 m	m)			24	in (6	10 m	m)			30	in (7	62 m	m)			40	in (10	016 n	nm)	
			ıking ıgth**		st yer		lid um	Fı Dri	ull um	_	st yer		id um		ull um		st yer	M Dr		Fı Drı			st yer	M Dr	lid um		ull um
(in)	(mm)	(lb)	(kg)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)	(ft)	(m)
1-1/8	28.6	58,800	26,671	62	19	310	94	680	207	91	28	410	125	910	277	120	37	510	155	1,140	348	170	52	680	207	1,520	463

^{*} Drum capacity is based on a flange clearance of at least 1.5 times the wire rope diameter with the rope at top layer. ** Values based on 6x37 IWRC EIPS wire rope.





TA5C AND TA10C DIMENSIONS



Qualified Service Centers World Wide

68°

64°

64°

64°

64°

10°

5°

5°

5°

3°

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Thern, Incorporated

TA5C-30

TA10C-18

TA10C-24

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