



# Infinity FA5Ti Air Winches

3,810 kg (8,400 lb)

**Lift-to-Shift variable speed lever** provides precise control and built-in safety

**Adjustable drum guard**—optional but recommended for all applications (standard with -CE option)

**Lifting lugs** designed for lifting weight of winch plus full drum of wire rope

**Radial piston air motor** provides reliable power with adjustable speed for any use

**Gearbox-in-drum design** reduces size and helps the winch fit in compact applications

**Fabricated steel frame** provides maximum durability

**Tall flange** for increase wire rope capacity

**Minimum 18:1** drum diameter to wire rope diameter

Ideal for:



Onshore



Offshore



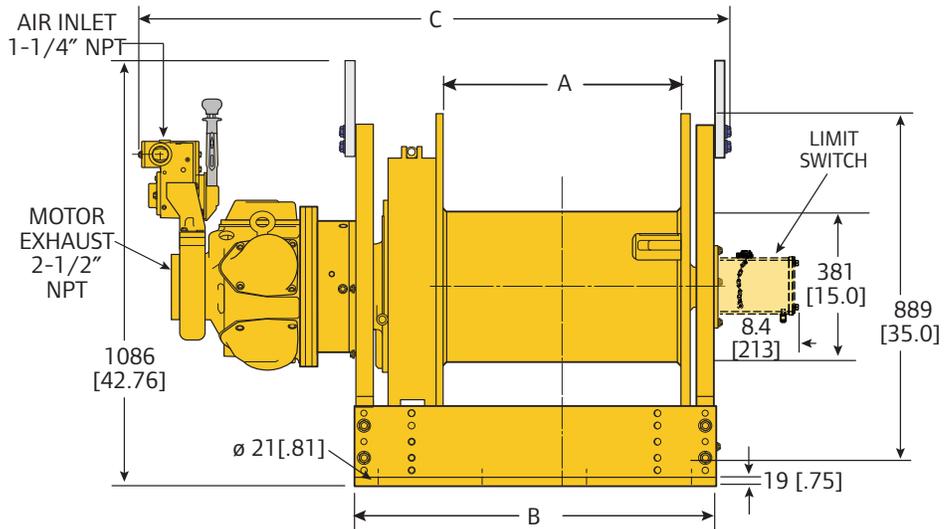
Marine



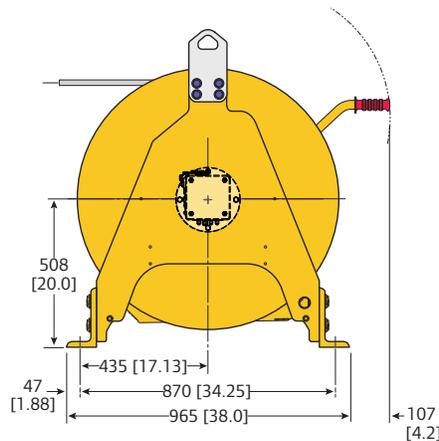
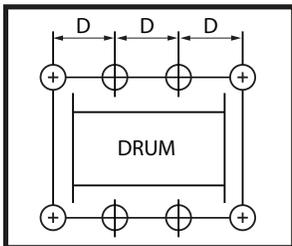
# Infinity FA5Ti Air Winches

3,810 kg (8,400 lb)

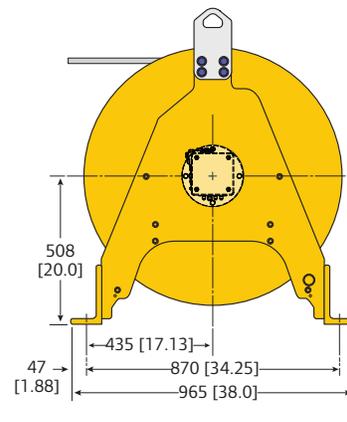
Infinity FA5Ti winches have the same powerful radial piston motor, but they feature taller flanges to increase wire rope capacity. Their rugged design and 3,810 kg (8,400 lb) lifting capacity make them ready to take on your most challenging applications.



### Bolt Pattern



MX, MK and AK Option

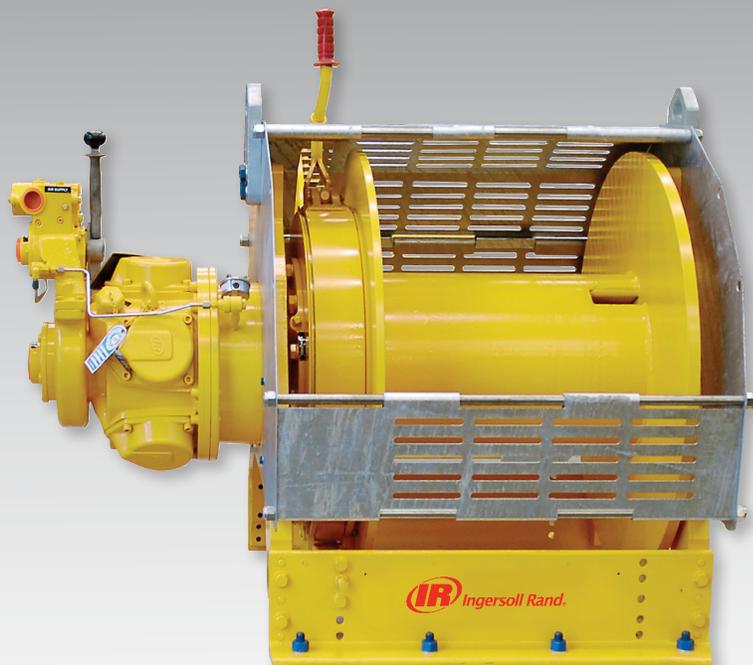


XK Option

Dimensions shown are mm. Dimensions in Brackets [ ] are inches. Dimensions are subject to change. Contact factory for certified drawings.

Model	A		B		C			Bolt Pattern D			
	MX, XK, MK, AK mm (in)	MX, MK, AK mm (in)	XK mm (in)	MX mm (in)	XK mm (in)	MK, AK mm (in)	# of Bolt Holes MX, MK, AK	XK	MX, MK, AK mm (in)	XK mm (in)	
FA5Ti-16**1	406 (16.0)	720 (28.3)	605 (23.8)	1,234 (48.6)	1,204 (47.4)	1,311 (51.6)	6	6	229 (9.0)	159 (6.3)	
FA5Ti-20**1	508 (20.0)	821 (32.3)	707 (27.8)	1,336 (52.6)	1,306 (51.4)	1,412 (55.6)	8	8	254 (10.0)	216 (8.5)	
FA5Ti-24**1	610 (24.0)	923 (36.3)	809 (31.8)	1,438 (56.6)	1,407 (55.4)	1,514 (59.6)	8	8	267 (10.5)	229 (9.0)	
FA5Ti-30**1	762 (30.0)	1,075 (42.3)	961 (37.8)	1,590 (62.6)	1,560 (61.4)	1,666 (65.6)	10	8	254 (10.0)	305 (12.0)	
FA5Ti-36**1	914 (36.0)	1,228 (48.3)	1,114 (43.8)	1,742 (68.6)	1,712 (67.4)	1,819 (71.6)	10	8	279 (11.0)	356 (14.0)	

\*\* Indicated brake configuration. **MX**: Manual drum, no auto disc; **XK**: No manual drum, auto disc; **MK**: Manual drum, auto disc; **AK**: Auto drum, auto disc. Dimensions subject to change. Contact factory for certified prints. **NOTE**: Limit switches standard on -CE versions only.



Press Roller



Optional limit switch - standard on -CE units

**General Performance. Performance based on a 5:1 design factor**

Model	First Layer kg (lb)	Line Pull Capacity		First Layer m/min (fpm)	Line Speed Mid Drum m/min (fpm)	Top Layer m/min (fpm)
		Mid Drum kg (lb)	Top Layer kg (lb)			
FA5Ti-16**1	7,620 (16,800)	5,710 (12,600)	3,810 (8,400)	10 (35)	17 (53)	21 (70)
FA5Ti-20**1	7,620 (16,800)	5,710 (12,600)	3,810 (8,400)	10 (35)	17 (53)	21 (70)
FA5Ti-24**1	7,620 (16,800)	5,710 (12,600)	3,810 (8,400)	10 (35)	17 (53)	21 (70)
FA5Ti-30**1	7,620 (16,800)	5,710 (12,600)	3,810 (8,400)	10 (35)	17 (53)	21 (70)
FA5Ti-36**1	7,620 (16,800)	5,710 (12,600)	3,810 (8,400)	10 (35)	17 (53)	21 (70)

**General Characteristics. Performance at 6.3 bar (90 psi) air inlet pressure with the motor running**

Model	Motor	Lifting Speed at Top Layer	Air Consumption with Rated Load	Air Volume Needed to Move Rated Load at Top Layer	Stall	Sound Level as per EN 14492-1	Net Weight
	kW (hp)	m/min (fpm)	m <sup>3</sup> /min (ft <sup>3</sup> /min)	3 m (10 ft)	kg (lb)	dB(A)	kg (lb)
FA5Ti-16**1	18.8 (25.2)	21 (70)	20 (700)	2.9 (100.0)	10,725 (23,594)	97	977 (2,153)
FA5Ti-20**1	18.8 (25.2)	21 (70)	20 (700)	2.9 (100.0)	10,725 (23,594)	97	977 (2,153)
FA5Ti-24**1	18.8 (25.2)	21 (70)	20 (700)	2.9 (100.0)	10,725 (23,594)	97	977 (2,153)
FA5Ti-30**1	18.8 (25.2)	21 (70)	20 (700)	2.9 (100.0)	10,725 (23,594)	97	977 (2,153)
FA5Ti-36**1	18.8 (25.2)	21 (70)	20 (700)	2.9 (100.0)	10,725 (23,594)	97	977 (2,153)

**Drum Capacity**

Model	Minimum Rope Breaking Force <sup>(1)</sup> kN (lbs)	Recommended Rope Diameter mm (in)	Drum Capacity per Layer <sup>(2)</sup> m (ft)						Max. Rope Storage Capacity <sup>(3)</sup> m (ft)
			Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	
FA5Ti-16**1	187 (42,000)	20 (3/4)	24 (83)	50 (175)	79 (274)	111 (380)	144 (495)	180 (616)	
FA5Ti-20**1	187 (42,000)	20 (3/4)	30 (105)	64 (221)	100 (346)	140 (480)	182 (624)	228 (778)	
FA5Ti-24**1	187 (42,000)	20 (3/4)	37 (127)	77 (267)	121 (418)	169 (580)	220 (754)	275 (940)	
FA5Ti-30**1	187 (42,000)	20 (3/4)	46 (160)	97 (336)	153 (526)	213 (730)	277 (949)	346 (1,183)	
FA5Ti-36**1	187 (42,000)	20 (3/4)	56 (193)	118 (405)	185 (634)	257 (880)	335 (1,144)	418 (1,425)	
Model	Layer 7	Layer 8	Layer 9	Layer 10	Layer 11	Layer 12	Layer 13		
FA5Ti-16**1	218 (746)	259 (883)	302 (1,027)	347 (1,179)	394 (1,339)	444 (1,506)	496 (1,681)	496 (1,863)	
FA5Ti-20**1	276 (941)	327 (1,114)	381 (1,297)	438 (1,489)	498 (1,690)	561 (1,901)	626 (2,122)	626 (2,352)	
FA5Ti-24**1	333 (1,137)	395 (1,346)	460 (1,566)	529 (1,798)	602 (2,041)	677 (2,297)	757 (2,563)	757 (2,841)	
FA5Ti-30**1	420 (1,431)	497 (1,693)	580 (1,970)	666 (2,262)	757 (2,568)	853 (2,889)	952 (3,225)	952 (3,575)	
FA5Ti-36**1	506 (1,724)	600 (2,041)	699 (2,375)	803 (2,726)	913 (3,095)	1028 (3,482)	1,148 (3,886)	1,148 (4,308)	

<sup>(1)</sup> Recommended minimum breaking force of wire rope based on top layer line pull rating.

<sup>(2)</sup> Drum Capacity is based on tightly wound wire rope. Recommended drum working capacity is 80% of values shown.

<sup>(3)</sup> Max storage capacity is tightly wound with no freeboard.

## How to Order

	<b>FA</b>	<b>5Ti</b>	<b>- 24</b>	<b>X</b>	<b>K</b>	<b>220</b>	<b>- 14GP1</b>	
<b>Series</b>	<b>Capacity</b>	<b>Drum Length (inches)</b>	<b>Drum Brake</b>	<b>Disc Brake</b>	<b>Control</b>			<b>Options</b>
<b>FA</b> Air powered	<b>5Ti</b> 8,400 lb	<b>16</b> <b>20</b> <b>24</b> std <b>30</b> <b>36</b>	<b>X</b> No drum brake <b>M</b> Manual drum brake <b>A</b> Auto drum brake	<b>X</b> No disc brake <b>K</b> Disc brake	<b>1</b> Std. throttle lever <b>2xx</b> Remote full flow lever throttle <b>3xx</b> Remote pilot pendant throttle <b>4xx</b> Remote pilot lever throttle <b>5xx</b> Electric over air control <b>xx</b> Specify hose/elec. cord length in ft			<b>14</b> Drum grooving (specify rope size in sixteenths; e.g., 14 = 14/16" or 7/8") <b>B</b> Extended warranty <b>C1M3</b> -20° C ABS design temperature <b>C2M3</b> -20° C DNV design temperature <b>D</b> Drum divider flange & additional cable anchor <b>E</b> Construction cage <b>G</b> Drum guard <b>J<sup>(1)</sup></b> Air Line Accessories <b>L</b> Drum Locking Pin <b>M1<sup>(2)</sup></b> Material Traceability per DIN 50049/EN10204 Para 2.2 "Typicals" <b>M2<sup>(2)</sup></b> Material Traceability per DIN 50049/EN10204 Para 3.1b actuals per product as purchased <b>M3<sup>(2)</sup></b> Material Traceability per DIN 50049/EN10204 Para 3.1b actuals per product as delivered in final condition <b>N4</b> Manufactured under ABS survey <b>N5</b> Manufactured under DNV survey <b>P</b> Marine 812 finish paint <b>P1</b> Marine 812-X paint system <b>P2</b> Marine 812-X paint system - isocyanate free <b>Q</b> Adjustable Accu-Spool™ <b>S</b> Rotary limit switch (upper and lower) <b>T</b> Tensioning manifold <b>U</b> Underwound wire rope takeoff <b>V</b> Press Roller <b>W1</b> ABS witness test <b>W2</b> DNV witness test <b>W3</b> LRS witness test <b>W4</b> Client witness of load test <b>Y</b> Overload protector with E-Stop provided on lever throttle <b>-CE</b> <b>Compliance with the European Machinery Directive and EN14492-1 for power driven winches</b>

### NOTE:

- <sup>(1)</sup> Add 1 for filter, 2 for lubricator, 3 for regulator (e.g. J12). For protection during shipment and due to the wide range of installation variables, the airline accessories are shipped loose for client installation.
- <sup>(2)</sup> **M1** – Material traceability certificates according to EN 10204 (Ex DIN 50049) 2.2 on load bearing parts. This conformity document affirms (by the manufacturer) that parts are in compliance with the requirements of the order based on non-specific inspection and testing (i.e., results are typical material properties for these parts).
- M2** – Material traceability certificates according to EN 10204 (Ex DIN 50049) 3.1b on load bearing parts. These documents affirm (by a department independent of the manufacturing department) that the actual parts used in the product are in compliance with the order based on specific inspection and testing (i.e., results are actual material properties for those parts).
- M3** – Material traceability certificates according to EN 10204 (Ex DIN 50049) 3.1b on load bearing parts. These documents affirm (by a department independent of the manufacturing department) that the actual parts used in the product are in compliance with the order based on specific inspection and testing (i.e., results are actual material properties for those parts in a finished, as delivered condition).

Ingersoll Rand strongly recommends using Drum Guards with all winches to prevent inadvertent contact with winch moving parts.

## Special Orders



Ingersoll Rand can provide customized solutions for your application. Whether you need to move specialized or high capacity loads or have custom control requirements, we can build the right solution for you. Ingersoll Rand's global account management team, dedicated project managers and engineering teams are focused exclusively on high capacity hoists and winches. From evaluation to installation and beyond, contact us to build your custom solution today.

- Design for custom capacities
- Custom control systems
- Custom product modifications
- Witness testing and complete certification to most global standards
- Full engineering capabilities including data packages and CAD drawings
- Global Account Management and dedicated project management teams
- Onsite services available including presale evaluation, installation and maintenance



For More Information [www.ingersollrandproducts.com/lifting](http://www.ingersollrandproducts.com/lifting) [lifting@irco.com](mailto:lifting@irco.com)

Ingersoll Rand, IR, the IR logo and Impactool are trademarks of Ingersoll Rand, its subsidiaries and/or affiliates. All other trademarks are the property of their respective owners. Nothing contained on these pages is intended to extend any warranty or representation, expressed or implied, regarding the product described herein. Any such warranties or other terms and conditions of sale of products shall be in accordance with Ingersoll Rand's standard terms and conditions of sale for such products, which are available upon request. Product improvement is a continuing goal at Ingersoll Rand. Designs and specifications are subject to change without notice or obligation. Unless otherwise noted this equipment is not designed for transporting people or lifting loads over people. It is the user's responsibility to determine the suitability of this product for any particular use and to check compliance with applicable regulations. Before installation, see maintenance and operations manual for additional warnings and precautions.