



# Infinity FA5i Air Winches

5,000 kg (11,000 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

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

**Self-cleaning K5C2 control valve** improves flow and performance

**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

Ideal for:



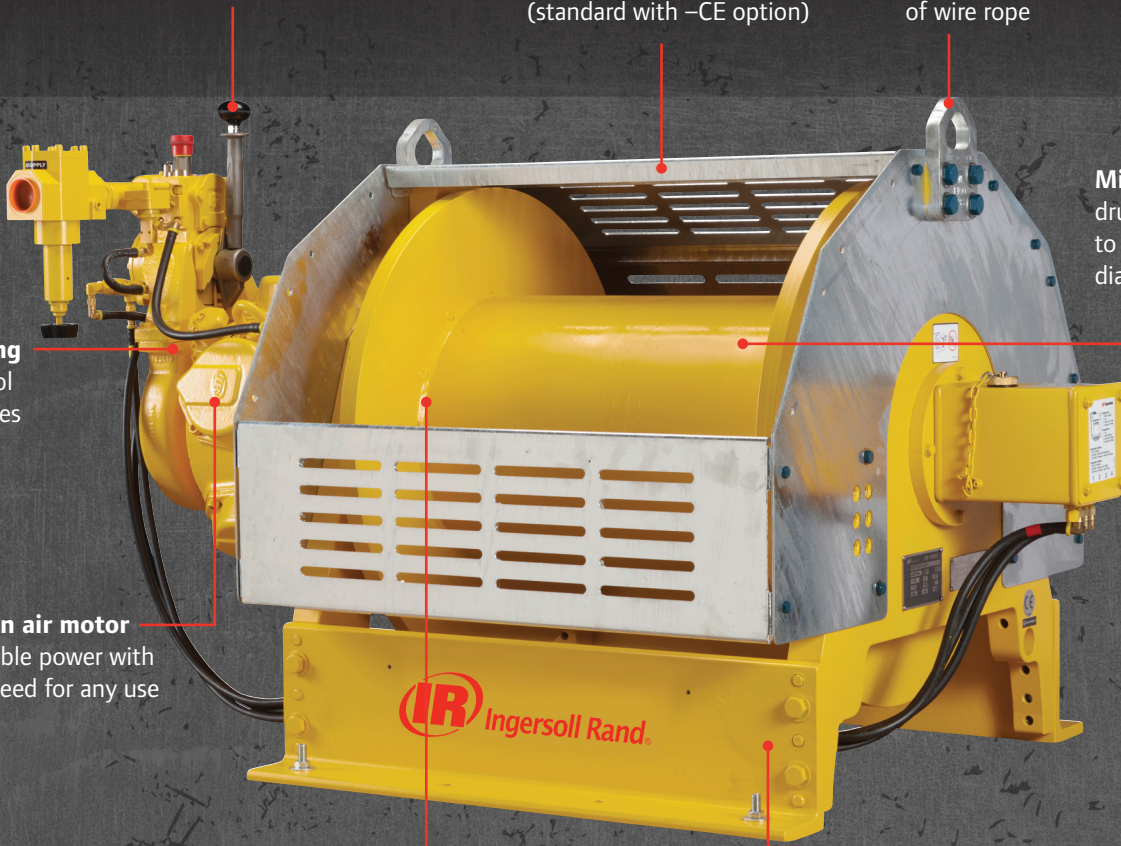
Onshore



Offshore



Marine

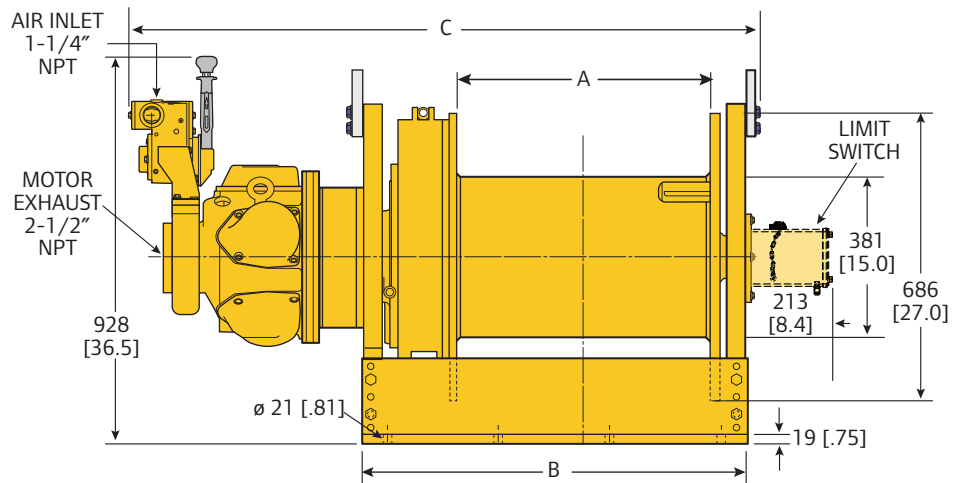




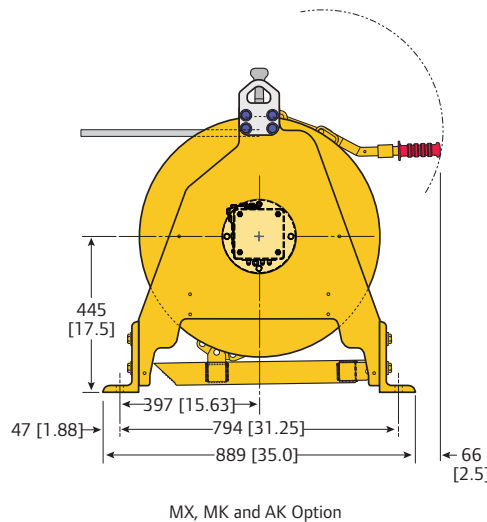
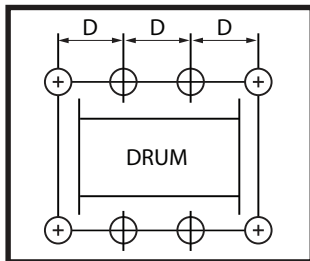
# Infinity FA5i Air Winches

5,000 kg (11,000 lb)

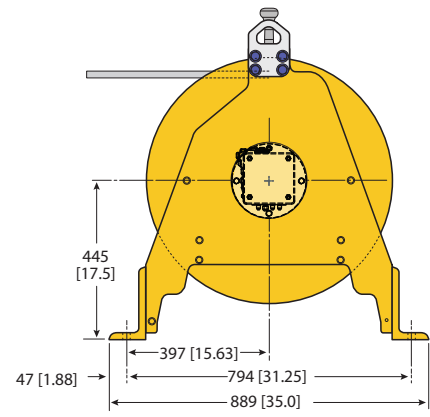
Ingersoll Rand Infinity FA5i winches include the features you need for extreme durability in harsh conditions. With an all steel frame and powerful piston air motor the Infinity FA5i winch can lift up to 5,000 kg (11,000 lbs) no matter where that power is needed.



### 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)	
FA5i-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 (5.2)	
FA5i-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)	
FA5i-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)	
FA5i-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)	
FA5i-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)	

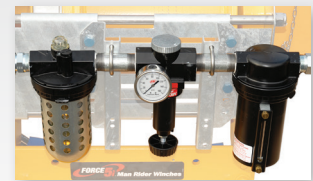
\*\* Indicated brake configuration. **MX**: Manual drum, no auto disc; **XK**: No manual drum, auto disc; **MK**: Manual drum, auto disc; **AK**: Auto drum, auto disc. Dimensions subject to change. Contact factory for certified prints. **NOTE**: Limit switches standard on -CE versions only.



Construction cage



Press Roller



Lubricator, Regulator, Filter

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

Model	Line Pull Capacity			Line Speed		
	First Layer kg (lb)	Mid Drum kg (lb)	Top Layer kg (lb)	First Layer m/min (fpm)	Mid Drum m/min (fpm)	Top Layer m/min (fpm)
FA5i-16**1	7,620 (16,800)	6,310 (13,900)	5,000 (11,000)	10 (35)	13 (44)	16 (54)
FA5i-20**1	7,620 (16,800)	6,310 (13,900)	5,000 (11,000)	10 (35)	13 (44)	16 (54)
FA5i-24**1	7,620 (16,800)	6,310 (13,900)	5,000 (11,000)	10 (35)	13 (44)	16 (54)
FA5i-30**1	7,620 (16,800)	6,310 (13,900)	5,000 (11,000)	10 (35)	13 (44)	16 (54)
FA5i-36**1	7,620 (16,800)	6,310 (13,900)	5,000 (11,000)	10 (35)	13 (44)	16 (54)

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

Model	Motor		Lifting Speed at Top Layer m/min (fpm)	Air Consumption with Rated Load m <sup>3</sup> /min (ft <sup>3</sup> /min)	Air Volume Needed to Move Rated Load at Top Layer 3 m (10 ft)	Stall kg (lb)	Sound Level as per EN 14492-1 dB(A)	Net Weight kg (lb)
	kW (hp)	m/min (fpm)						
FA5i-16**1	18.8 (25.2)	16 (54)	20 (700)	3.8 (129.6)	10,725 (23,594)	97	849 (1,872)	
FA5i-20**1	18.8 (25.2)	16 (54)	20 (700)	3.8 (129.6)	10,725 (23,594)	97	849 (1,872)	
FA5i-24**1	18.8 (25.2)	16 (54)	20 (700)	3.8 (129.6)	10,725 (23,594)	97	849 (1,872)	
FA5i-30**1	18.8 (25.2)	16 (54)	20 (700)	3.8 (129.6)	10,725 (23,594)	97	849 (1,872)	
FA5i-36**1	18.8 (25.2)	16 (54)	20 (700)	3.8 (129.6)	10,725 (23,594)	97	849 (1,872)	

**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	Layer 7	Layer 8	
FA5i-16**1	245 (55,000)	20 (3/4)	24 (83)	50 (175)	79 (274)	111 (380)	144 (495)	180 (616)	218 (746)	259 (883)	259 (883)
FA5i-20**1	245 (55,000)	20 (3/4)	30 (105)	64 (221)	100 (346)	140 (480)	182 (624)	228 (778)	276 (941)	327 (1,114)	327 (1,114)
FA5i-24**1	245 (55,000)	20 (3/4)	37 (127)	77 (267)	121 (418)	169 (580)	220 (754)	275 (940)	333 (1,137)	395 (1,346)	395 (1,346)
FA5i-30**1	245 (55,000)	20 (3/4)	46 (160)	97 (336)	153 (526)	213 (730)	277 (949)	346 (1,183)	420 (1,431)	497 (1,693)	497 (1,693)
FA5i-36**1	245 (55,000)	20 (3/4)	56 (193)	118 (405)	185 (633)	257 (880)	335 (1,144)	418 (1,425)	506 (1,724)	600 (2,041)	600 (2,041)

<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>5i</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>5i</b> 11,000 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 auto 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>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



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