



# Infinity FA7i Air Winches

7,000 kg (15,400 lb)

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

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

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

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

**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



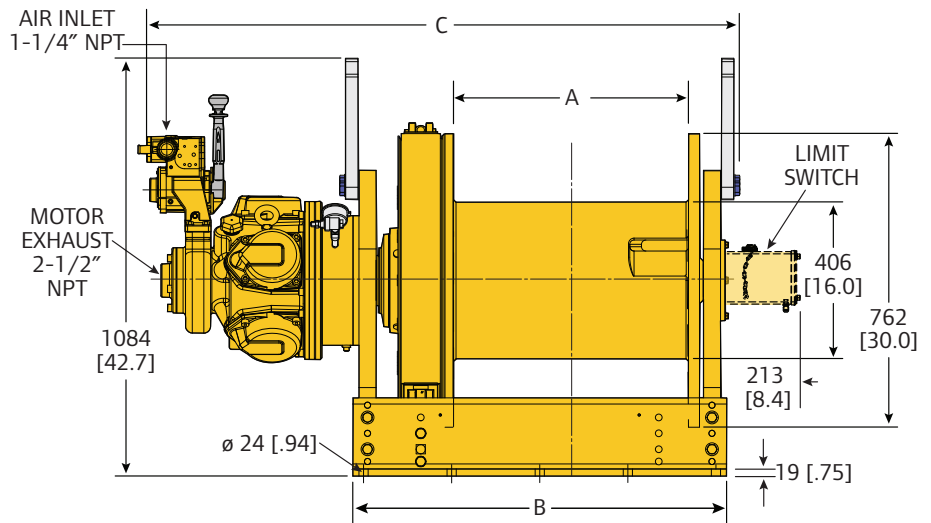
Marine



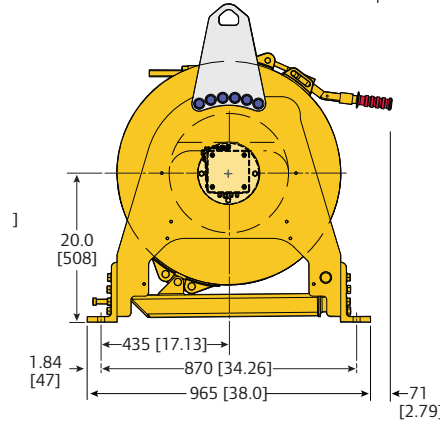
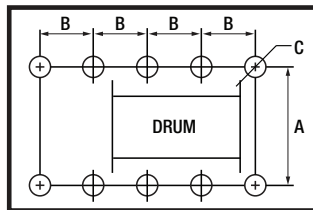
# Infinity FA7i Air Winches

7,000 kg (15,400 lb)

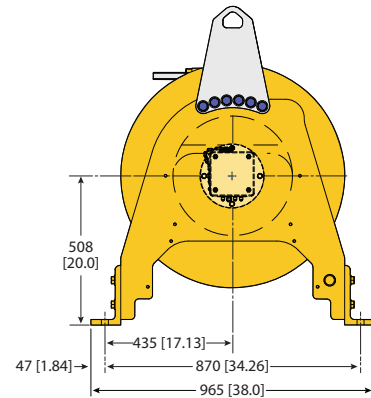
Designed to work in difficult environments, Infinity FA7i winches feature a high power radial piston air motor and the capacity to move up to 7,000 kg (15,400 lbs). Their rugged design makes them ready to take on your most challenging applications.



### Bolt Pattern



MX, MK and AK Option

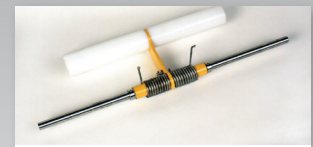
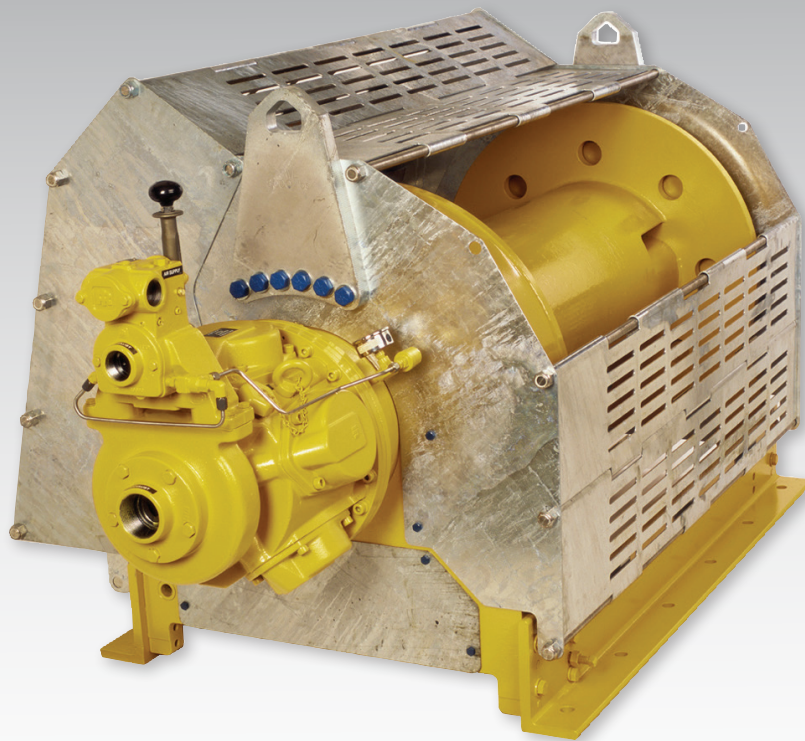


XK Option

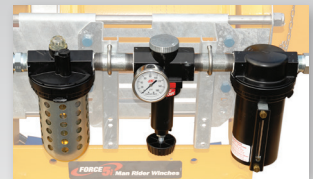
Dimensions shown are mm. Dimensions in Brackets [ ] are inches. Dimensions are subject to change. Contact factory for certified drawings.

Model	A		B		C			Bolt Pattern D			
	MX, XK, MK, AK mm (in)		MX, MK, AK mm (in)		MX mm (in)	XK mm (in)	MK, AK mm (in)	# of Bolt Holes		MX, MK, AK mm (in)	XK mm (in)
								MX, MK, AK	XK		
FA7i-20**1	508 (20.0)	868 (34.2)	778 (30.6)	778 (30.6)	1,367 (53.8)	1,356 (53.4)	1,443 (56.8)	10	8	203 (8.0)	229 (9.0)
FA7i-24**1	610 (24.0)	970 (38.2)	880 (34.6)	880 (34.6)	1,468 (57.8)	1,458 (57.4)	1,544 (60.8)	10	10	229 (9.0)	203 (8.0)
FA7i-30**1	762 (30.0)	1,122 (44.2)	1,032 (40.6)	1,032 (40.6)	1,621 (63.8)	1,610 (63.4)	1,697 (66.8)	10	10	254 (10.0)	241 (9.5)
FA7i-36**1	914 (36.0)	1,275 (50.2)	1,184 (46.6)	1,184 (46.6)	1,773 (69.8)	1,763 (69.4)	1,849 (72.8)	10	12	279 (11.0)	216 (8.5)
FA7i-42**1	1,067 (42.0)	1,427 (56.2)	1,337 (52.6)	1,337 (52.6)	1,925 (75.8)	1,915 (75.4)	2,002 (78.8)	12	12	254 (10.0)	254 (10.0)

\*\* 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



Lubricator, Regulator, Filter



Optional limit switch - standard on -CE units

**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)
FA7i-20**1	11,100 (24,500)	9,050 (19,950)	7,000 (15,400)	11 (35)	11 (37)	12 (40)
FA7i-24**1	11,100 (24,500)	9,050 (19,950)	7,000 (15,400)	11 (35)	11 (37)	12 (40)
FA7i-30**1	11,100 (24,500)	9,050 (19,950)	7,000 (15,400)	11 (35)	11 (37)	12 (40)
FA7i-36**1	11,100 (24,500)	9,050 (19,950)	7,000 (15,400)	11 (35)	11 (37)	12 (40)
FA7i-42**1	11,100 (24,500)	9,050 (19,950)	7,000 (15,400)	11 (35)	11 (37)	12 (40)

**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)
FA7i-20**1	18.8 (25.2)	12 (40)	21 (750)	5.3 (187.5)	16,305 (35,946)	97	1,000 (2,205)
FA7i-24**1	18.8 (25.2)	12 (40)	21 (750)	5.3 (187.5)	16,305 (35,946)	97	1,000 (2,205)
FA7i-30**1	18.8 (25.2)	12 (40)	21 (750)	5.3 (187.5)	16,305 (35,946)	97	1,000 (2,205)
FA7i-36**1	18.8 (25.2)	12 (40)	21 (750)	5.3 (187.5)	16,305 (35,946)	97	1,000 (2,205)
FA7i-42**1	18.8 (25.2)	12 (40)	21 (750)	5.3 (187.5)	16,305 (35,946)	97	1,000 (2,205)

**Drum Capacity**

Model	Minimum Rope Breaking Force <sup>(1)</sup> kN (lbs)	Recom- mended 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	
FA7i-20**1	343 (77,000)	22 (7/8)	29 (96)	62 (202)	97 (318)	136 (443)	177 (577)	221 (722)	269 (875)	319 (1,038)	319 (1,038)
FA7i-24**1	343 (77,000)	22 (7/8)	35 (116)	75 (245)	118 (384)	164 (536)	214 (698)	268 (873)	325 (1,058)	385 (1,256)	385 (1,256)
FA7i-30**1	343 (77,000)	22 (7/8)	45 (147)	94 (308)	149 (484)	207 (675)	270 (880)	337 (1,099)	409 (1,333)	485 (1,581)	485 (1,581)
FA7i-36**1	343 (77,000)	22 (7/8)	54 (177)	114 (372)	179 (584)	250 (814)	326 (1,061)	407 (1,326)	493 (1,608)	585 (1,907)	585 (1,907)
FA7i-42**1	343 (77,000)	22 (7/8)	63 (207)	134 (435)	210 (684)	293 (953)	381 (1,242)	477 (1,552)	578 (1,882)	685 (2,233)	685 (2,233)

<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. 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>7i</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>
FA Air powered	7i 15,400 lb	20 24 std 30 36 42	X No drum brake M Manual drum brake A Auto drum brake	X No auto disc brake K Disc brake	1 Std. throttle lever 2xx Remote full flow lever throttle 3xx Remote pilot pendant throttle 4xx Remote pilot lever throttle 5xx Electric over air control  xx Specify hose/elec. cord length in ft			14 Drum grooving (specify rope size in sixteenths; e.g., 14 = 14/16" or 7/8") B Extended warranty C1M3 -20° C ABS design temperature C2M3 -20° C DNV design temperature D Drum divider flange & additional cable anchor E Construction cage G Drum guard J <sup>(1)</sup> Air Line Accessories L Drum Locking Pin M1 <sup>(2)</sup> Material Traceability per DIN 50049/EN10204 Para 2.2 "Typicals" M2 <sup>(2)</sup> Material Traceability per DIN 50049/EN10204 Para 3.1b actuals per product as purchased M3 <sup>(2)</sup> Material Traceability per DIN 50049/EN10204 Para 3.1b actuals per product as delivered in final condition N4 Manufactured under ABS survey N5 Manufactured under DNV survey P Marine 812 finish paint P1 Marine 812-X paint system P2 Marine 812-X paint system - isocyanate free Q Adjustable Accu-Spool™ S Rotary limit switch (upper and lower) U Underwound wire rope takeoff W1 ABS witness test W2 DNV witness test W3 LRS witness test W4 Client witness of load test Y Overload protector with E-Stop provided on lever throttle  -CE <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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