

# Product Features and Specifications

**FA7i Infinity Series Winch - Capacity: 15,400 lbs (7000 kg)**

PFS-FA7i-09072010

## Rugged Compact and Versatile Design

- Meets ANSI / ASME B30.7
- 5:1 design factor at rated load
- Top layer rated line pull
- "Lift to shift" winch mounted lever throttle
- Minimum 18:1 drum diameter to wire rope diameter ratio
- Compact gearbox-in-drum design
- Standard design temperature range is 0°C through 60°C
- Group of mechanism as per FEM: 5m
- Pre-certified lifting lugs

## Suitable for Hazardous Explosion Proof Environments

- Flameproof by design. Air motors (unlike electric motors) are inherently spark resistant.
- ATEX classification (as per directive EC 94/9/EEC). CE compliant models marked EX II 2 GD c 200°C X

## Powerful Radial Piston Air Motor

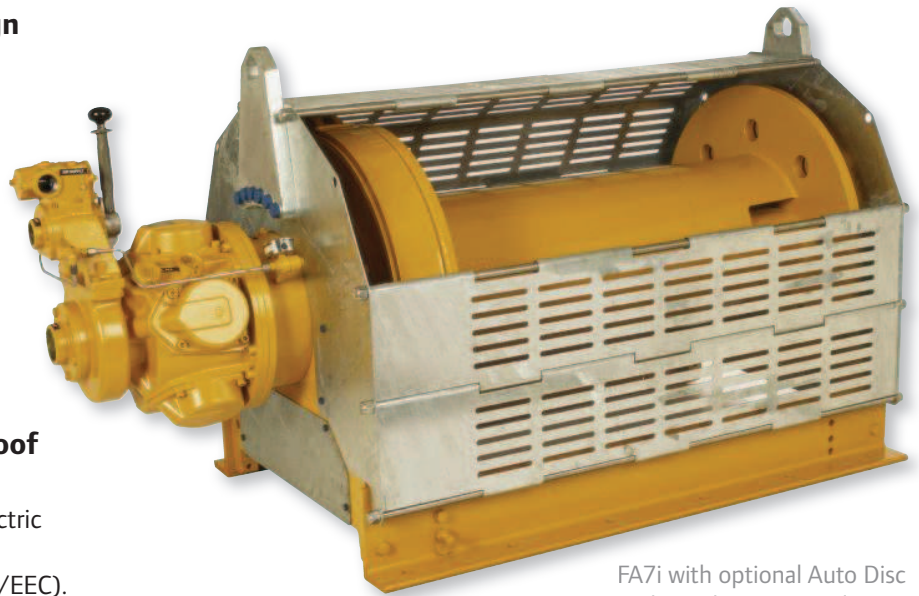
- Positive starting torque
- Infinitely variable speeds with precision spotting control
- Superior reliability in harsh environments

## Brake Systems

- Manual drum brake standard
- Optional auto drum brake and /or auto disc available
- Fully enclosed automatic oil bath "wet" disc brake sealed against moisture and contaminants
- **Ingersoll Rand recommends the use of automatic brakes whenever a winch is used for lifting**

## CE compliant versions provided with:

- Drum guard
- Overload protection (preset regulator)
- Emergency stop
- Muffler
- Automatic brake
- Limit switches
- CE documentation



FA7i with optional Auto Disc Brake and Drum Guard

## Options and Accessories

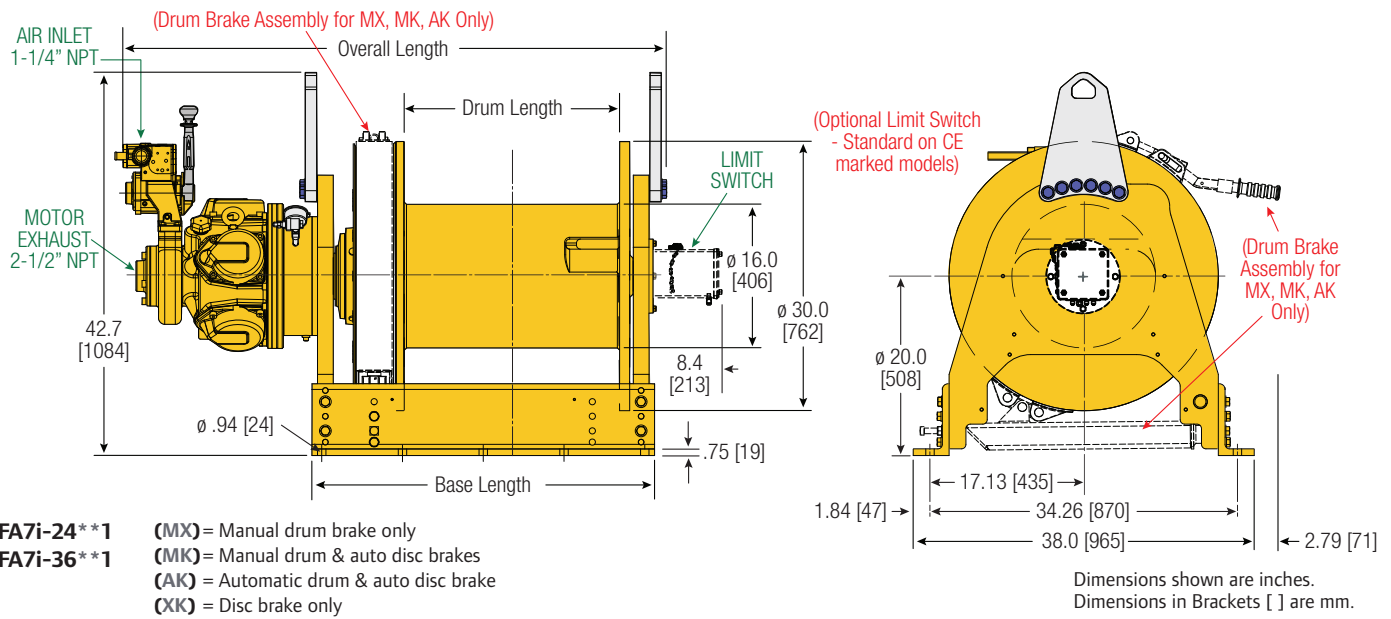
- DNV & ABS Type Approved models available
- Low temperature versions
- Overload and E-stop control system
- Remote controls
- Limit switches
- Tensioning manifold
- Drum guards\*
- Grooved drums
- Drum divider flanges
- Drum locks
- Spooling devices
- Marine paint systems
- Air line accessories

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

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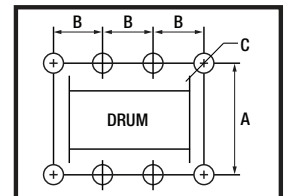
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### Dimensions: FA7i and Bolt Down Pattern

	Drum Length 24" [610 mm]						Drum Length 36" [914 mm]					
	Drum & Disc Brakes (MK & AK)		Disc Brake Only (XK)		Drum Brake Only (MX)		Drum & Disc Brakes (MK & AK)		Disc Brake Only (XK)		Drum Brake Only (MX)	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
Overall Length	60.8	1544	57.4	1458	57.8	1468	72.8	1849	69.4	1763	69.8	1773
Base Length	38.19	970	34.63	880	38.19	970	50.19	1275	46.63	1184	50.19	1275
'A'	34.25	870	34.25	870	34.25	870	34.25	870	34.25	870	34.25	870
'B'	9.0	229	8.0	203	9.0	229	11.0	279	8.5	216	11.0	279
'C'	0.94	24	0.94	24	0.94	24	0.94	24	0.94	24	0.94	24
Total # Holes	10		10		10		10		12		10	

### Bolt Down Pattern



'C' = Bolt Hole Inside Diameter

Model #	Lift Ratings at 5:1 Design Factor (Performance at 6.3 Bar - 90 PSI at air inlet when winch is operating)															
	Top Layer				First Layer				Average Air Consumption <sup>(1)</sup>	Sound Level <sup>(2)</sup>	Inlet Size	Exhaust Size	Net Weight			
	Rated Capacity	Speed	Rated Capacity	Speed at	Stall Pull	Average Air Consumption <sup>(1)</sup>	Sound Level <sup>(2)</sup>	Inlet Size						Exhaust Size	Net Weight	
hp	lbs	kg	ft/min	m/min	ft/min	m/min	lbs	kg	f <sup>3</sup> /min	m <sup>3</sup> /min	db(A)	NPT	NPT	lbs	kg	
FA7i	25.2	15,400	7000	40	12	35	11	35,946	16305	750	21	97	1-1/4"	2-1/2"	2,205	1000

(1) Average Air Consumption is at rated load and speed at top layer (2) With optional muffler

Series	Rated capacity lbs	Rope Diameter in	Min Req Break Strength* lbs	Accumulated rope capacity in feet / number of layers													
				1	2	3	4	5	6	7	8	9	10	11	12	13	14
FA7i-24	15,400	3/4	77,000	136	283	442	613	795	989	1,194	1,411	1,640					
		7/8	77,000	117	245	385	536	699	873	1,059	1,256						
FA7i-36	15,400	3/4	77,000	206	430	671	930	1,206	1,500	1,811	2,140	2,486					
		7/8	77,000	177	372	584	814	1,061	1,326	1,608	1,908						

Series	Rated capacity kg	Rope Diameter mm	Min Req Break Strength* kg	Accumulated rope capacity in meters / number of layers													
				1	2	3	4	5	6	7	8	9	10	11	12	13	14
FA7i-24	7000	22	34927	35	74	116	162	211	263	320	379						
		25	34927	31	66	104	146	191	240	292							
FA7i-36	7000	22	34927	53	112	176	246	320	400	486	576						
		25	34927	48	100	158	222	290	365	444							

\* Note: The Minimum Required Breaking Strength for the wire rope needs to be the Rated Capacity multiplied by the Design Factor.  
 Example: for the FA7i-24 (with a 5:1 Design Factor) 15,400 x 5 = 77,000 lbs.