

# Product Features and Specifications

**FA5i Infinity Series Winch - Capacity: 11,000 lbs (5 000 kg)**

PFS-FA5i-08222011

## 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



FA5i with optional Drum Guard, Limit Switch, Drum Lock, Filter, Regulator, Lubricator and Muffler

## Options and Accessories

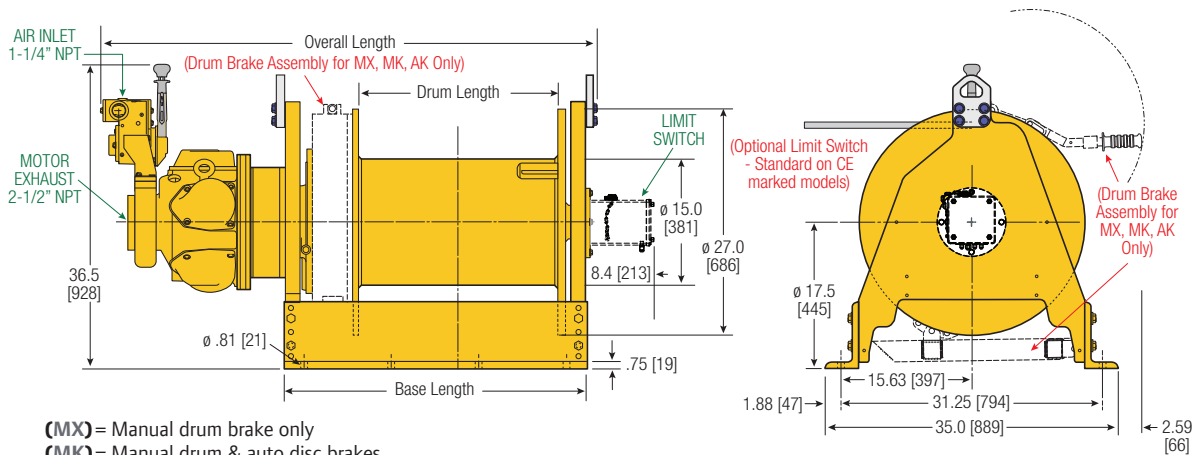
- DNV & ABS Type Approved models available
- Low temperature versions
- Overload and E-stop control system
- Remote controls
- Limit switches
- Tensioning manifold
- Drum guards\*
- Grooved drums
- Drum divider flanges
- Drum locks
- Spooling devices
- Marine paint systems
- Air line accessories

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

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FA5i-16\*\*1 (MX) = Manual drum brake only  
 FA5i-24\*\*1 (MK) = Manual drum & auto disc brakes  
 (AK) = Automatic drum & auto disc brake  
 (XK) = Disc brake only

Dimensions shown are inches.  
 Dimensions in Brackets [ ] are mm.

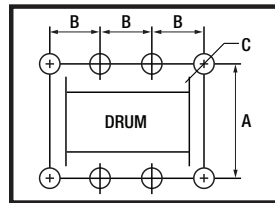
Dimensions are subject to change.  
 Contact factory for certified drawings.

### Dimensions: FA5i and Bolt Down Pattern

Drum Length		Overall Length						Base Length				Bolt Down "B" Dimension			
		Drum Brake Only (MX)		Disc Brake Only (XK)		Both Brakes (MK)		Disc Brake Only (XK)		Drum Only (MX) & Both Brakes (MK)		Disc Brake Only (XK)		Drum Only (MX) & Both Brakes (MK)	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
16	406	48.6	1234	47.4	1204	51.6	1311	23.84	605	28.34	720	6.25	159	9.0	229
20	508	52.6	1336	51.4	1306	55.6	1412	27.84	707	32.34	821	8.5	216	10.0	254
24	610	56.6	1438	55.4	1407	59.6	1514	31.84	809	36.34	923	9.0	229	10.5	267
30	762	62.6	1590	61.4	1560	65.6	1666	37.84	961	42.34	1075	12.0	305	10.0	254
36	914	68.6	1742	67.4	1712	71.6	1819	43.84	1114	48.34	1228	14.0	356	11.0	279

### Bolt Down Pattern

"A" = 31.25" [794mm]  
 "B" = See above chart  
 "C" = 0.81" [21mm]  
 Bolt Hole Inside Diameter



Drum Length		Total Number of Holes	
in	mm	Disc Brake Only (XK)	Drum Only (MX) & Both Brakes (MK)
16	406	6	6
20	508	8	8
24	610	8	8
30	762	8	10
36	914	8	10

### Lift Ratings at 5:1 Design Factor (Performance at 6.3 Bar - 90 PSI at air inlet when winch is operating)

Model #	hp	Top Layer				First Layer				Average Air Consumption <sup>(1)</sup>	Sound Level <sup>(2)</sup>	Inlet Size	Exhaust Size	Net Weight		
		Rated Capacity	Speed	Speed @ Rated Cap	Stall Pull	lbs	kg	lbs	kg							
FA5i	25.2	11,000	5000	54	16	51	16	23,594	10725	700	20	97	1-1/4"	2-1/2"	1,872	849

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

### Drum Wire Rope Storage Capacity

Imperial Series	Rated capacity lbs	Rope Diameter in	Min Break* Strength lbs	Accumulated rope capacity in feet / number of layers							
				1	2	3	4	5	6	7	8
FA5i-16	11,000	3/4	55,000	84	175	274	381	495	617	746	883
		7/8	55,000	72	151	238	332	434	544	661	
FA5i-24	11,000	3/4	55,000	128	267	418	581	755	940	1,138	1,346
		7/8	55,000	110	231	364	508	664	832	1,010	
FA5i-30	11,000	3/4	55,000	161	336	526	730	949	1,183	1,431	1,694
		7/8	55,000	138	291	458	640	836	1,047	1,273	
FA5i-36	11,000	3/4	55,000	194	405	634	880	1,144	1,426	1,725	2,041
		7/8	55,000	167	351	553	772	1,009	1,263	1,535	

Metric Series	kgs	mm	kgs	Accumulated rope capacity in meters / number of layers							
				1	2	3	4	5	6	7	8
FA5i-16	5000	19	25000	26	53	84	116	151	188	227	269
		22	25000	22	45	72	100	131	164	199	
FA5i-24	5000	19	25000	39	81	127	177	230	287	347	410
		22	25000	33	69	110	153	200	251	305	
FA5i-30	5000	19	25000	49	102	160	223	289	361	436	516
		22	25000	42	88	138	193	252	316	384	
FA5i-36	5000	19	25000	59	123	193	268	349	435	526	622
		22	25000	50	106	167	233	304	381	463	

\* NOTE:

The Minimum Required Breaking Strength for the wire rope needs to be the Rated Capacity multiplied by the Design Factor. Example: for the FA5i (with a 5:1 Design Factor) 11,000 x 5 = 55,000 lbs.