

Product Features and Specifications

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

PFS-FA7i-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

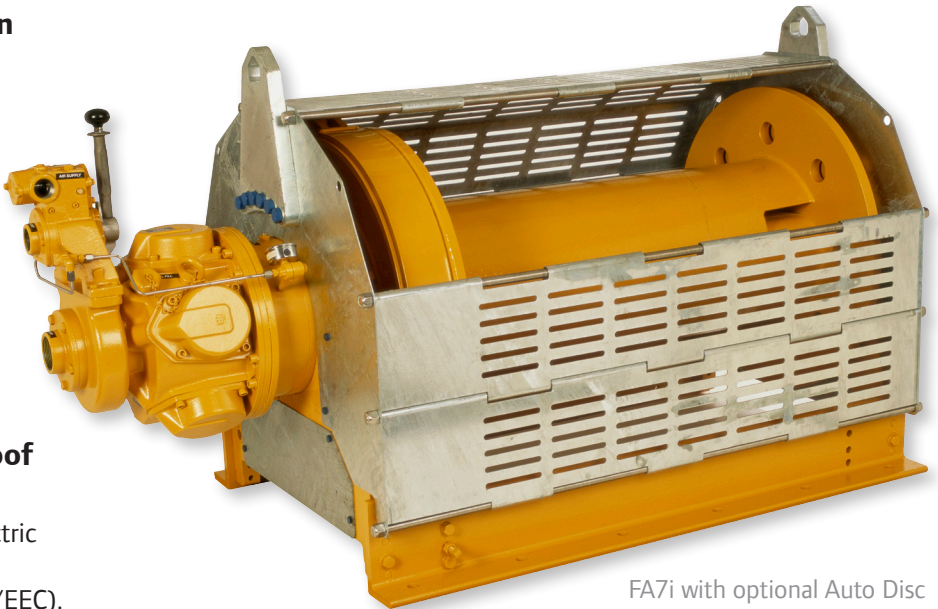
- Positive starting torque
- Infinitely variable speeds with precision spotting control
- Superior reliability in harsh environments

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



FA7i with optional Auto Disc Brake and Drum Guard

Options and Accessories

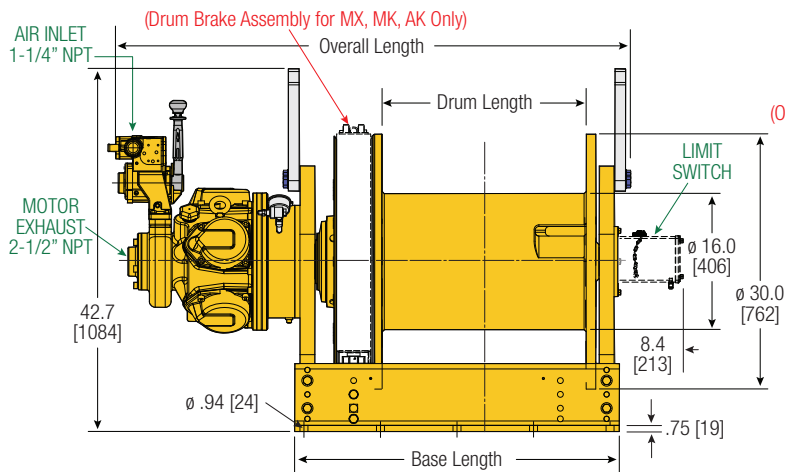
- DNV & ABS Type Approved models available
- Low temperature versions
- Overload and E-stop control system
- Remote controls
- Limit switches
- Tensioning manifold
- Drum guards*
- Grooved drums
- Drum divider flanges
- Drum locks
- Spooling devices
- Marine paint systems
- Air line accessories

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

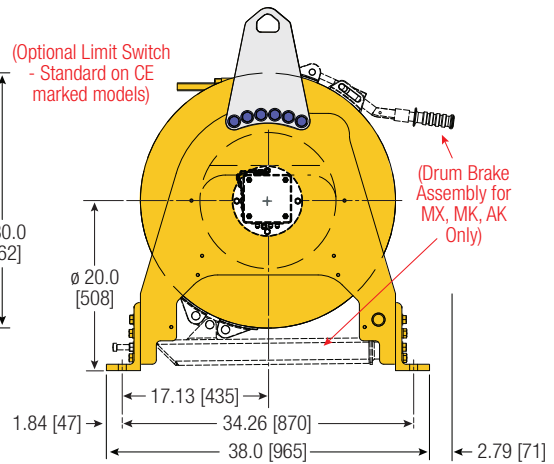
Product Features and Specifications

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

PFS-FA7i-08222011



FA7i-241** (MX) = Manual drum brake only
FA7i-361** (MK) = Manual drum & auto disc brakes
 (AK) = Automatic drum & auto disc brake
 (XK) = Disc brake only



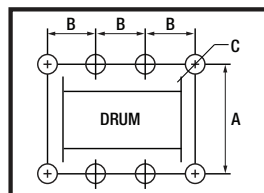
Dimensions shown are inches. Dimensions in Brackets [] are mm. Dimensions are subject to change. Contact factory for certified drawings.

Dimensions: FA7i 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
20	508	53.8	1367	53.4	1356	56.8	1443	30.63	778	34.19	868	9.0	229	8.0	203
24	610	57.8	1468	57.4	1458	60.8	1544	34.63	880	38.19	970	8.0	203	9.0	229
30	762	63.8	1621	63.4	1610	66.8	1697	40.63	1032	44.19	1122	9.5	241	10.0	254
36	914	69.8	1773	69.4	1763	72.8	1849	46.63	1184	50.19	1275	8.5	216	11.0	279
42	1067	75.8	1925	75.4	1915	78.8	2002	52.63	1337	56.19	1427	10.0	254	10.0	254

Bolt Down Pattern

"A" = 34.25" [870mm]
 "B" = See above chart
 "C" = 0.94" [24mm]
 Bolt Hole Inside Diameter



Drum Length	Total Number of Holes	
	Disc Brake Only (XK)	Drum Only (MX) & Both Brakes (MK)
20	8	10
24	10	10
30	10	10
36	12	10
42	12	12

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 ⁽¹⁾	Sound Level ⁽²⁾	Inlet Size	Exhaust Size	Net Weight						
		Rated Capacity	Speed	Speed @ Rated Cap	Stall Pull											
		lbs	kg	ft/min	m/min	ft/min	m/min	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

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
FA7i-24	15,400	7/8	77,000	117	245	385	536	699	873	1,059	1,256
		1	77,000	102	216	341	478	626	786	957	
FA7i-30	15,400	7/8	77,000	147	309	485	675	880	1,100	1,333	1,582
		1	77,000	129	273	430	603	790	991	1,206	
FA7i-36	15,400	7/8	77,000	177	372	584	814	1,061	1,326	1,608	1,908
		1	77,000	156	329	520	727	953	1,196	1,456	
FA7i-42	15,400	7/8	77,000	208	436	684	953	1,243	1,553	1,883	2,234
		1	77,000	182	385	609	852	1,116	1,401	1,705	

Metric Series	kgs	mm	kgs	Accumulated rope capacity in meters / number of layers							
				1	2	3	4	5	6	7	8
FA7i-24	7000	22	35000	35	74	116	162	211	263	320	379
		25	35000	31	66	104	146	191	240	292	
FA7i-30	7000	22	35000	44	93	146	204	265	332	403	478
		25	35000	39	83	131	184	241	302	368	
FA7i-36	7000	22	35000	53	112	176	246	320	400	486	576
		25	35000	48	100	158	222	290	365	444	
FA7i-42	7000	22	35000	62	131	206	287	375	468	568	675
		25	35000	55	117	186	260	340	427	520	

*** 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 (with a 5:1 Design Factor) 15,400 x 5 = 77,000 lbs.