

Product Features and Specifications

FA7Ti Infinity Series Winch - Capacity: 12,600 lbs (5727 kg)

PFS-FA7Ti-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



FA7Ti with optional Drum Guard, Tensioning Manifold and Drum Lock

Options and Accessories

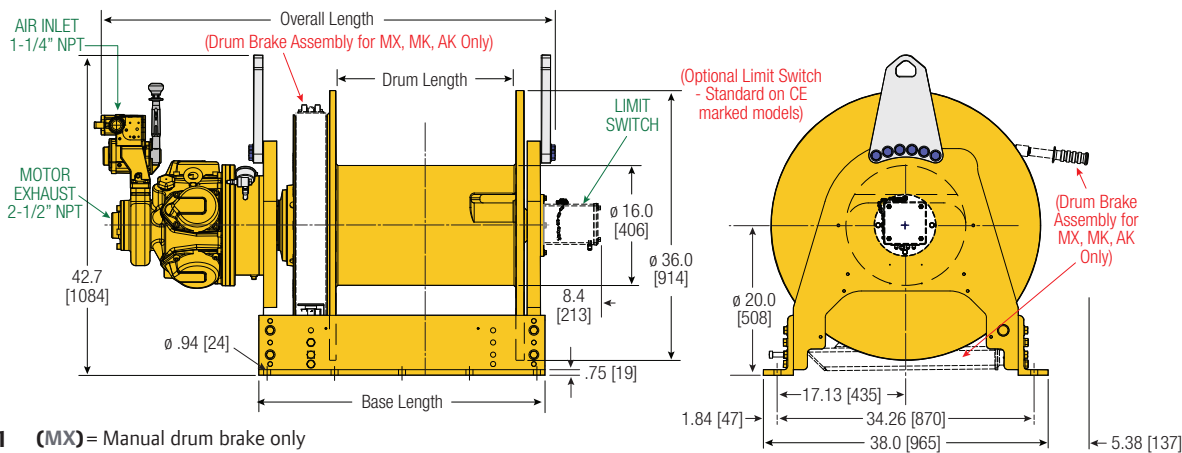
- DNV & ABS Type Approved models available
- Low temperature versions
- Overload and E-stop control system
- Remote controls
- Limit switches
- Tensioning manifold
- Drum guards*
- Grooved drums
- Drum divider flanges
- Drum locks
- Spooling devices
- Marine paint systems
- Air line accessories

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

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FA7Ti-24**1 (MX) = Manual drum brake only
 FA7Ti-36**1 (MK) = Manual drum & auto disc brakes
 (AK) = Automatic drum & auto disc brake
 (XK) = Disc brake only

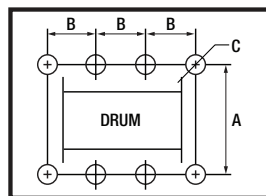
Dimensions shown are inches.
 Dimensions in Brackets [] are mm.
 Dimensions are subject to change.
 Contact factory for certified drawings.

Dimensions: FA7Ti 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)
in	mm		
20	508	8	10
24	610	10	10
30	762	10	10
36	914	12	10
42	1067	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⁾ db(A)	Inlet Size NPT	Exhaust Size NPT	Net Weight	
		Rated Capacity lbs	kg	Speed ft/min	m/min	Speed @ Rated Cap ft/min	Rated Cap m/min	Stall Pull lbs	kg	f ³ /min	m ³ /min				lbs	kg
FA7Ti	25.2	12,600	5727	48	15	38	12	35,946	16305	750	21	97	1-1/4"	2-1/2"	2,335	1059

(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	9	10	11	12
FA7Ti-24	12,600	7/8	63,000	117	245	385	536	699	873	1,059	1,256	1,465	1,685	1,917	2,160
				102	216	341	478	626	786	957	1,139	1,333	1,538		
FA7Ti-30	12,600	7/8	63,000	147	309	485	675	880	1,100	1,333	1,582	1,845	2,122	2,414	2,721
				129	273	430	603	730	991	1,206	1,436	1,681	1,940		
FA7Ti-36	12,600	7/8	63,000	177	372	584	814	1,061	1,326	1,608	1,908	2,225	2,560	2,912	3,281
				156	329	520	727	953	1,196	1,456	1,734	2,029	2,341		
FA7Ti-42	12,600	7/8	63,000	208	436	684	953	1,243	1,553	1,883	2,234	2,605	2,997	3,409	3,842
				182	385	609	852	1,116	1,401	1,705	2,031	2,376	2,742		

Metric Series	kgs	mm	kgs	Accumulated rope capacity in meters / number of layers											
				1	2	3	4	5	6	7	8	9	10	11	12
FA7Ti-24	5727	22	28635	35	74	116	162	211	263	320	379	443	509	579	
				31	66	104	146	191	240	292	347	406	469		
FA7Ti-30	5727	22	28635	44	93	146	204	265	332	403	478	557	641	730	
				39	83	131	184	223	302	368	438	512	591		
FA7Ti-36	5727	22	28635	53	112	176	246	320	400	486	576	672	774	880	
				48	100	158	222	290	365	444	529	618	714		
FA7Ti-42	5727	22	28635	62	131	206	287	375	468	568	675	787	906	1031	
				55	117	186	260	340	427	520	619	724	836		

* NOTE: The Minimum Required Breaking Strength for the wire rope needs to be the Rated Capacity multiplied by the Design Factor.
 Example: for the FA7Ti-24 (with a 5:1 Design Factor) 12,600 x 5 = 63,000 lbs.