

# Product Features and Specifications

FA10i Infinity Series Winch - Capacity: 22,000 lbs (10000 kg)

PFS-FA10i-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

- Auto disc is standard
- Optional manual or auto drum brake 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



FA10i with optional  
-CE package

## 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



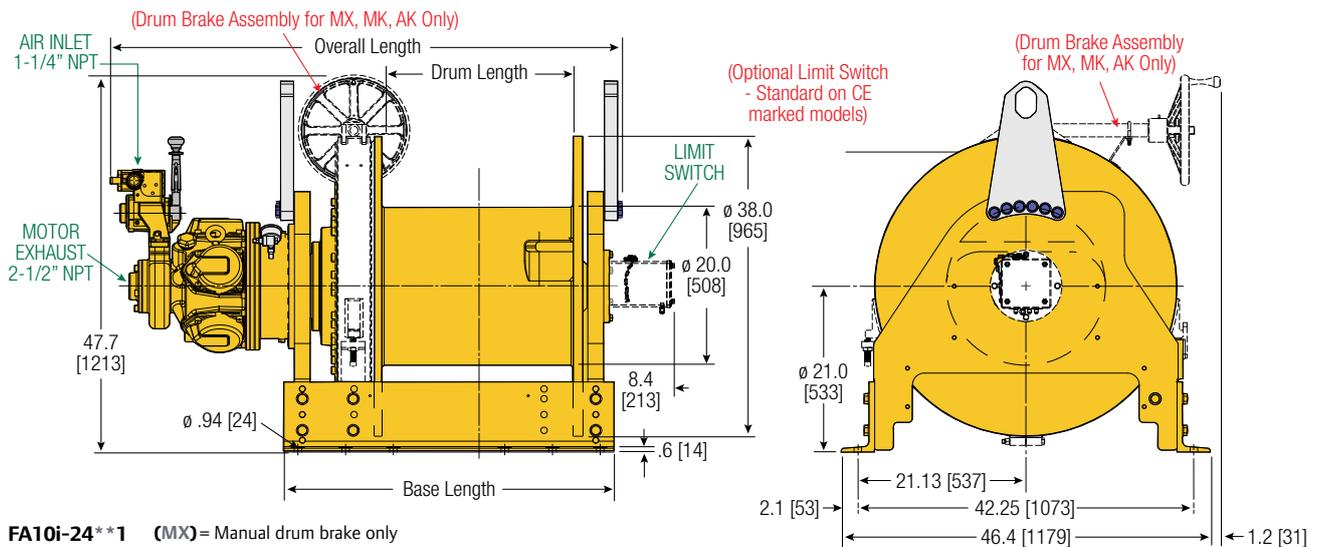
Quality Engineering...  
Safely Today

**IR** Ingersoll Rand  
Industrial Technologies

# Product Features and Specifications

## FA10i Infinity Series Winch - Capacity: 22,000 lbs (10000 kg)

PFS-FA10i-09072010



- FA10i-24\*\*1** (MX) = Manual drum brake only  
**FA10i-40\*\*1** (MK) = Manual drum & auto disc brakes  
 (AK) = Automatic drum & auto disc brake  
 (XK) = Disc brake only

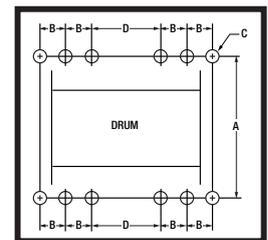
Note: Winches equipped with manual drum brake only are designed only for pulling

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

### Dimensions: FA10i and Bolt Down Pattern

	Drum Length 24" [610 mm]						Drum Length 40" [1016 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	63.8	1621	59.8	1519	63.6	1615	79.8	2027	75.6	1920	79.6	2022
Base Length	41.5	1054	37.5	952	41.5	1054	25.5	648	21.5	546	25.5	648
'A'	42.25	1073	42.25	1073	42.25	1073	42.25	1073	42.25	1073	42.25	1073
'B'	6.0	152	6.0	152	6.0	152	8.0	203	8.0	203	8.0	203
'C'	0.94	24	0.94	24	0.94	24	0.94	24	0.94	24	0.94	24
Total # Holes	12		12		12		12		12		12	

### Bolt Down Pattern



'C' = Bolt Hole Inside Diameter

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

Model #	Top Layer				First Layer				Average Air Consumption <sup>(1)</sup>	Sound Level <sup>(2)</sup>	Inlet Size	Exhaust Size	Net Weight			
	hp	Rated Capacity lbs	kg	Speed ft/min	m/min	Rated Capacity ft/min	m/min	Stall Pull lbs					kg	lbs	kg	
FA10i	26.9	22,000	10000	23	7	35	11	38,619	17517	800	23	101	1-1/4"	2-1/2"	3,200	1455

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

### Drum Wire Rope Storage Capacity - Imperial - Utility

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
FA10i-24	22,000	1-1/8	110,000	112	236	371	518	676	845	1,026	1,218						
FA10i-40	22,000	1-1/8	110,000	191	402	631	880	1,149	1,437	1,744	2,070						

### Drum Wire Rope Storage Capacity - Metric - Utility

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
FA10i-24	10000	28	49895	35	73	116	161	210	262	318	377						
FA10i-40	10000	28	49895	59	125	196	273	356	445	540	641						

\* Note: The Minimum Required Breaking Strength for the wire rope needs to be the Rated Capacity multiplied by the Design Factor.  
 Example: for the FA10i-24 (with a 5:1 Design Factor) 22,000 x 5 = 110,000 lbs.



Quality Engineering...  
 Safety Today

### Fisher Offshore

North Meadows, Oldmeldrum, Aberdeenshire, Scotland AB51 0GQ

Tel: +44 (0) 1651 873932

Fax: +44 (0) 1651 873939

ingersollrand@fisheroffshore.com

fisheroffshore.com

A James Fisher and Sons PLC Company