

# Product Features and Specifications

FA2.5i Infinity Series Winch - Capacity: 5,000 lbs (2273 kg)

PFS-FA2.5i-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



FA2.5i with optional Auto Disc Brake, Grooved Drum 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



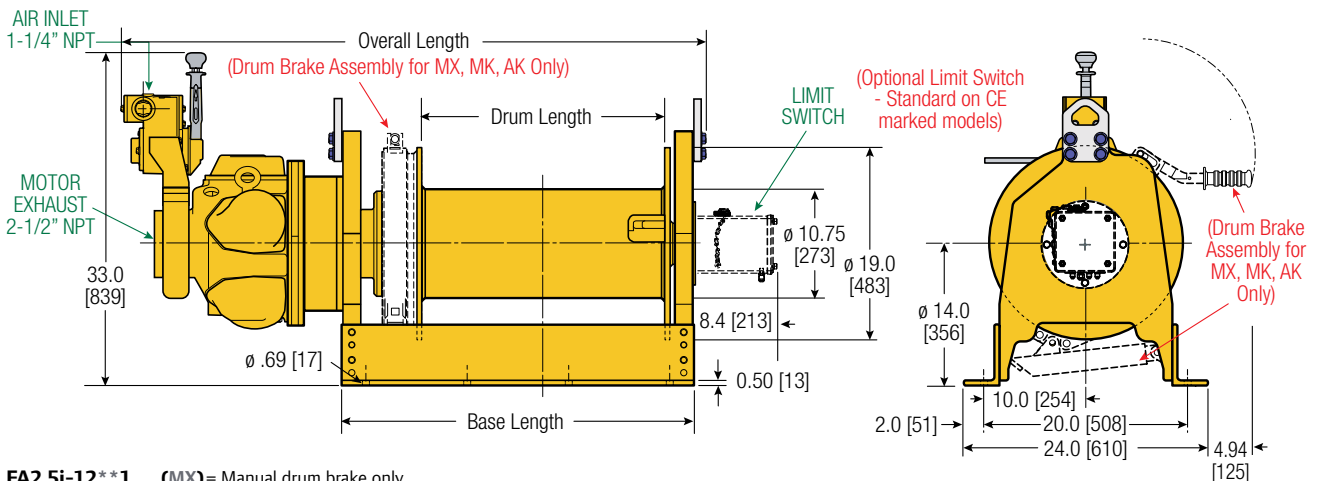
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Industrial Technologies

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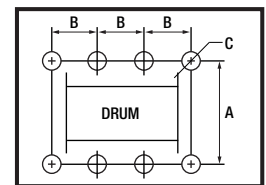
FA2.5i-12\*\*1 (MX) = Manual drum brake only  
 FA2.5i-24\*\*1 (MK) = Manual drum & auto disc brakes  
 (AK) = Automatic drum & auto disc brake  
 (XK) = Disc brake only

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

## Dimensions: FA2.5i and Bolt Down Pattern

	Drum Length 12" [305 mm]						Drum Length 24" [610 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	45.8	1163	43.2	1097	42.8	1087	58.0	1473	55.2	1402	54.8	1392
Base Length	22.8	579	20.11	511	22.8	579	34.8	884	32.11	816	34.8	884
'A'	20.0	508	20.0	508	20.0	508	20.0	508	20.0	508	20.0	508
'B'	9.0	229	8.0	203	9.0	229	10.0	254	9.0	229	10.0	254
'C'	0.69	18	0.69	18	0.69	18	0.69	18	0.69	18	0.69	18
Total # Holes	6		6		6		8		8		8	

### 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 NPT	Exhaust Size NPT	Net Weight			
	Rated Capacity		Speed		Speed at Rated Capacity		Stall Pull		ft/min	m/min					lbs	kg	lbs	kg
	hp	lbs	kg	ft/min	m/min	ft/min	m/min	lbs										
FA2.5i	25.2	5,000	2273	132	40	128	39	10,277	4671	700	20	97	1-1/4"	2-1/2"	1,061	481		

(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
				FA2.5i-12	5,000	5/8	25,000	54	114	180	251	328	410				
FA2.5i-24	5,000	5/8	25,000	111	234	369	515	673	843								

## 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
				FA2.5i-12	2273	16	11340	16	34	54	76	99	124				
FA2.5i-24	2273	16	11340	34	71	112	156	204	255								

\* Note: The Minimum Required Breaking Strength for the wire rope needs to be the Rated Capacity multiplied by the Design Factor.  
 Example: for the FA2.5i-12 (with a 5:1 Design Factor) 5,500 x 5 = 25,000 lbs.



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