

"Third Generation" Air Winch Series

FA2B 4000 lb (1818 kg) capacity



How do you improve on a great idea? With four significant changes over the FA2A, the FA2B takes a good idea and makes it even better.

■ Four changes for improved performance and reliability

- **NEW MP150** piston motor maintains the progressive scotch yoke and adds more horsepower (16 hp). Oil free design with fewer parts and reduced vibration means easier and less frequent service. Two other piston motor options are available.
- New self-cleaning K5C2 control valve improves flow and performance. It has a primary bushing for reduced maintenance cost, more stainless steel and polymer corrosion resistant parts for smoother, more responsive control and is totally interchangeable with previous designs. 100% natural gas/sour gas compatible.
- Modified gearbox design improves efficiency and durability.
- Redesigned disc brake lowers required release pressure to 25 psig for smoother performance and no drag when air supplies are borderline.

■ What else is new....

- Lifting lugs
- One size fastener on the entire motor.
- Slide lift column on throttle prevents accidental movement.

■ Options:

- Band brakes – manual and automatic
- Drum guards
- Remote full flow and pilot controls
- Free spool clutches
- CE packages
- Grooved drums
- Divider flanges

-E = Compliance with the European Machinery Directive. Includes as standard on utility rated winches:

- 1 Main air supply shutoff
- 2 Overload device
- 3 Drum guard
- 4 Muffler
- 5 CE documentation



FA2B-SXK1R

- Tensioning manifolds
- Natural gas compatible; Option **R**
- HU40A (11 hp) or AMP94A (9.4 hp) motor/valve combinations
- Construction cages and open frame configurations
- Material Traceability and Type Approval Certification
- Low temperature versions
- FE2B electric and FH2B hydraulic units

■ Why the FA2B is such good value...

- Corrosion resistant marine grade coating system: Sandblast to white metal finish and carbozinc primer with a Marine 812 finish.
- Meets ANSI / ASME B30.16, B30.7 and has been design reviewed and approved by Det Norske Veritas. Meets European CE standards.
- Internal disc brake is oil cooled. They run and last longer. Band brakes use the latest Scanpac brake material.
- Wedge type, self tightening rope anchor provides 80% of rope breaking strength
- It is designed and built to survive some of the harshest conditions on the planet — the offshore drilling environment.

Specifications: performance is based on 90 psi (6.3 bar) air inlet pressure with motor running

Model number	Lift rating ⁽¹⁾			Pull rating ⁽¹⁾			Stall lbs	Stall kg	Average air cons	Recom. Ingersoll Comp.	Mtr hp	Pipe size NPT in.	Rec'd rope size in. ⁽¹⁾
	per ANSI / ASME B30.16 at 5:1 first	mid	top	ANSI / ASME B30.7 at 3.5:1 first	mid	top							
FA2B Air Powered													
Capacity lbs (kg)	5000 (2268)	4000 (1818)	3200 (1451)	5000 (2313)	4000 (1818)	3200 (1451)	6800	3084	350	P185-P375	16	1 1/4	1/2
Speed fpm (mpm)	79 (24)	96 (29)	122 (37)	79 (24)	96 (29)	122 (37)							
HU40A Air Powered													
Capacity lbs (kg)	5000 (2273)	4000 (1818)	3260 (1482)	7140 (3245)	5700 (2585)	4600 (2091)	11600	5273	270	P185-P375	11	1	1/2
Speed fpm (mpm)	54 (16.4)	70 (21.3)	86 (26.2)	40 (12)	49 (14.9)	60 (18.3)							
AM94A Air Powered													
Capacity lbs (kg)	5000 (2273)	4000 (1818)	3260 (1482)	5000 (2273)	4000 (1818)	3260 (1482)	5500	2500	320	P185-P250	9.4	1	1/2
Speed fpm (mpm)	36 (10.0)	46 (14.0)	56 (17.1)	15 (4.6)	19 (5.8)	24 (7.3)							
FH2B Hydraulic Powered⁽²⁾													
Capacity lbs (kg)	5000 (2273)	4000 (1818)	3260 (1482)	7140 (3245)	5700 (2585)	4600 (2091)	9560	4345	gpm ⁽³⁾	psig ⁽⁴⁾	17	(7)	1/2
Speed fpm (mpm)	93 (28.3)	112 (34.1)	138 (42.1)	93 (28.3)	112 (34.1)	138 (42.1)							
FE2B Electric Powered													
Capacity lbs (kg)	5000 (2273)	4000 (1818)	3260 (1482)	5000 (2273)	4000 (1818)	3260 (1482)	11000	5000	amps ⁽⁵⁾	amps ⁽⁶⁾	15	NA	1/2
Speed fpm (mpm)	77 (23.5)	100 (30.5)	123 (37.5)	77 (23.5)	100 (30.5)	123 (37.5)							

(1) IR rates to both ANSI / ASME B30.16 (overhead hoists) and ANSI / ASME B30.7 (base mounted drum hoists). Always refer to these (or applicable) standards for details. We recommend 1/2 inch (13 mm) dia. 6 x 19 Extra Improved Plow Steel IWRC wire rope.

(2) Hydraulic winch performance is directly proportional to pressure and flow. An increase/decrease in pressure

(psig) and flow (gpm) results in an increase/decrease in capacity and speed. FH2B performance has been set within ANSI / ASME B30.16/B30.7 design criteria. This rating may be different from other hydraulic winch manufacturers. Please contact technical sales with application/performance requirements.

(3) Flow (25 gpm).

(4) Pressure (psig), 1850 lifting, 2350 pulling.

(5) Full load current, 19 amps @ 460V.

(6) Max current draw (locked rotor), 110 amps @ 460V.

(7) SAE-12 JIC

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Rope storage capacities ⁽¹⁾ (all versions)

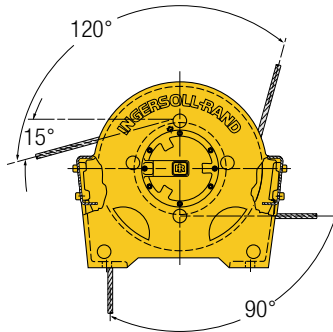
Drum capacities represent tightly spooled wire rope. Recommended drum working capacity is 80% of values shown.

Drum length in. mm	Full drum less 1/2" (13 mm) ⁽²⁾ Wire rope diameter								Full drum storage Wire rope diameter							
	3/8" (10 mm)		7/16" (11 mm)		1/2" (13 mm)		5/8" (16 mm)		3/8" (10 mm)		7/16" (11 mm)		1/2" (13 mm)		5/8" (16 mm)	
ft m	ft m	ft m	ft m	ft m	ft m	ft m	ft m	ft m	ft m	ft m	ft m	ft m	ft m	ft m	ft m	
7 178	519 158	396 120	300 91	164 50	593 180	460 140	356 108	206 62								
13 1/2 343	1029 314	788 240	600 183	330 100	1176 358	915 279	712 217	416 126								
20 508	1538 468	1180 360	900 274	497 151	1758 535	1371 417	1068 325	625 190								
24 610	1852 564	1421 433	1085 331	600 183	2116 645	1651 503	1287 392	754 230								

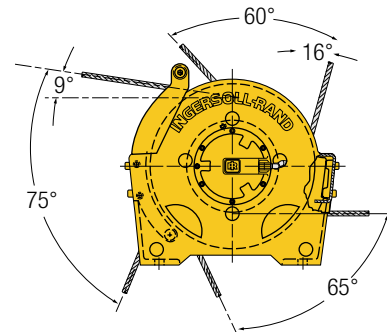
(1) For allowable rope takeoff angles. See illustrations below.

(2) Per ANSI / ASME B30.7

Typical allowable wire rope takeoff angle: Shaded areas represent the allowable angle of rope takeoff without interference with the winch's structural supports.



Standard Configuration

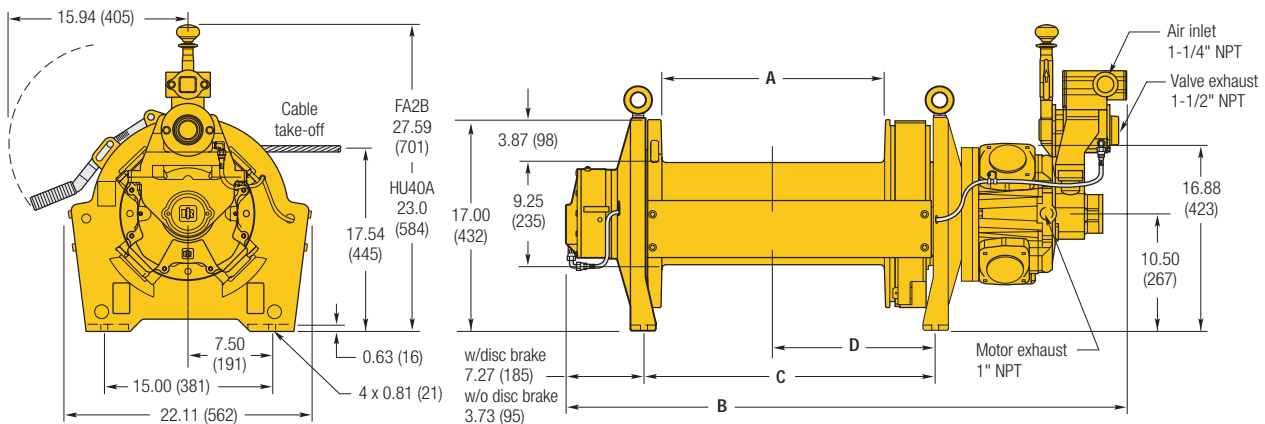


Open Front Configuration (Option H)

Dimensions

Model number	Type of drum brk.	Auto disc brk.	A		FA2B only B		HU40A only B		C		D	
			in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
FA2B- / HU40A- SXX1	None	Yes	7.0	178	34.7	881	33.8	859	9.6	244	4.8	122
FA2B- / HU40A- MXK1	None	Yes	13.5	343	41.2	1046	40.3	1024	16.1	409	8.0	203
FA2B- / HU40A- LXX1	None	Yes	20.0	508	47.7	1212	46.8	1189	22.6	574	11.3	287
FA2B- / HU40A- RXK1	None	Yes	24.0	610	51.7	1313	50.8	1290	26.6	676	13.3	338
FA2B- / HU40A- SMK1 (SAK1)	Manual (automatic)	Yes	7.0	178	37.4	950	36.5	927	12.3	312	7.5	191
FA2B- / HU40A- MMK1 (MAK1)	Manual (automatic)	Yes	13.5	343	43.9	1115	43.0	1092	18.8	478	10.8	274
FA2B- / HU40A- LMK1 (LAK1)	Manual (automatic)	Yes	20.0	508	50.4	1280	59.5	1257	25.3	643	14.0	356
FA2B- / HU40A- RMK1 (RAK1)	Manual (automatic)	Yes	24.0	610	54.4	1382	53.5	1359	29.3	744	16.0	406
FA2B- / HU40A- SMX1 (SAX1)	Manual (automatic)	No	7.0	178	34.1	866	33.2	843	12.3	312	7.5	191
FA2B- / HU40A- MMX1 (MAX1)	Manual (automatic)	No	13.5	343	40.6	1031	39.7	1008	18.8	478	10.8	274
FA2B- / HU40A- LMX1 (LAX1)	Manual (automatic)	No	20.0	508	47.1	1196	46.2	1173	25.3	643	14.0	356
FA2B- / HU40A- RMX1 (RAX1)	Manual (automatic)	No	24.0	610	51.1	1298	50.2	1275	29.3	744	16.0	406

FA2B / HU40A in inches (mm)



Dimensions are subject to change. Contact factory for certified prints

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How to Order:

Specify by complete model code as illustrated. **Example: FA2B-LXK1G** = 4000 lb (1818 kg) capacity, long drum, auto disc brake, winch mounted lever control, and drum guard.

Series	Capacity	Generation	-	Drum length	Drum brake	Disc brake	Control	Options
FA	2	B	-	L	X	K	1	G
	2 = 2 ton (4000 lbs)	B = Third generation		S = Short M = Medium L = Long R = Extra long Note: See drum length matrix below	A = Auto drum brake M = Manual drum brake X = No drum brake	X = No auto disc brake K = Auto disc brake		7 = Drum grooving (specify rope size in sixteenths, e.g. 7 = 7/16") B = Press roller (specify takeoff angles) C = Low temperature; please specify in text: -10° C or -20° C D = Drum divider flange and additional cable anchor E = Construction cage F = Free spool clutch ⁽²⁾ G = Drum guard H = Open frame for horizontal pulling M1 = Per DIN 50049/En10204 Para 2.2 "Typicals" ⁽³⁾ M2 = Per DIN 50049/En10204 Para 3.1b actual per product as purchased ⁽³⁾ M3 = Per DIN 50049/En10204 Para 3.1b actual per product as delivered in final condition ⁽³⁾ N = Type approval; please specify in text DNV, ABS or Lloyds P = Marine 812 finish Q = Special paint; please specify R = Suitable for operation with natural gas with up to 4 percent sulphur content T = Tension manifold U = Underwound (available only with auto disc brake XK) W = Witness; please specify X = Testing; please specify Z = Sandblast and carbozinc primer only -E = Compliance w/European Machinery Directive
<p>FA = Air powered HU40A* AMP94A* * = Substitute for FA2B FE = Electric powered FH = Hydraulic powered</p>								
<p>(1) With remote pilot control option, line speeds will decrease. (2) Only available with manual drum brake. (3) Documentation, witness testing and material traceability available; must be requested at time of order. Specify options or contact factory or your nearest Ingersoll-Rand distributor for information.</p> <p>M1 Material traceability certificates according to EN 10204 (Ex DIN 50049) 2.2 on load bearing parts. This conformity document affirms (by the manufacturer) that parts are in compliance with the requirements of the order based on non-specific inspection and testing (i.e. results are typical material properties for these parts.) M2 Material traceability certificates according to EN 10204 (Ex DIN 50049) 3.1b on load bearing parts. These documents affirm (by a department independent of the manufacturing department) that the actual parts used in the product are in compliance with the order based on specific inspection and testing (i.e. results are actual material properties for those parts.) M3 Material traceability certificates according to EN 10204 (Ex DIN 50049) 3.1b on load bearing parts. These documents affirm (by a department independent of the manufacturing department) that the actual parts used in the product are in compliance with the order based on specific inspection and testing (i.e. results are actual material properties for those parts in a finished, as delivered condition.)</p>								
<p>1 = Standard winch mounted throttle 2XX = Remote full flow lever throttle (max 20 ft/6 m) 3XX = Remote pilot pendent throttle (std = 6 ft/1.8 m; max 66 ft/20 m) ⁽¹⁾ 4XX = Remote pilot lever throttle (max 66 ft/20 m) ⁽¹⁾ 5XX = Remote electric over air throttle XX = Specify hose length or pendent cord in feet</p>								