



# Pullstar Portable Air Winches

700 - 1,700 kg (1,540 - 3,755 lb)

**Adjustable drum guard**— optional but recommended for all applications (standard with CE option)

**Lift-to-Shift variable speed lever** provides precise control and built-in safety

**Emergency stop and overload protection** for enhanced safety (standard with CE option)

**Manual clutch** for rapid pay out

**Reliable gear type air motor** designed for even the harshest environments

**High efficiency planetary gear box** and automatic disc brake ensure smooth operation

**Standard internal muffler** reduces noise level

**Strong yet compact design** allows winch to work in tight spaces

**Robust steel construction** built to operate in temperatures down to -20C (2,400kg model only)

Ideal for:



Mining



Offshore



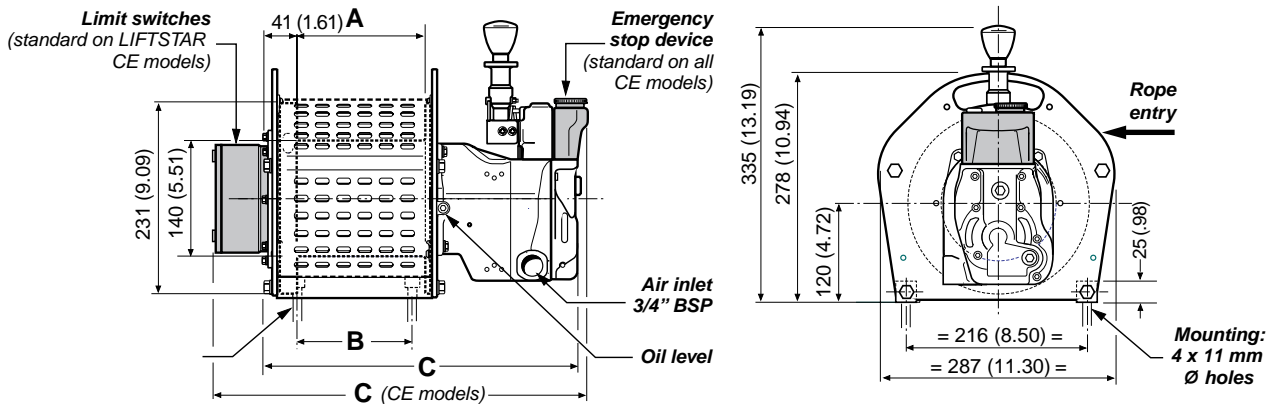
Marine



# Pullstar Portable Air Winches

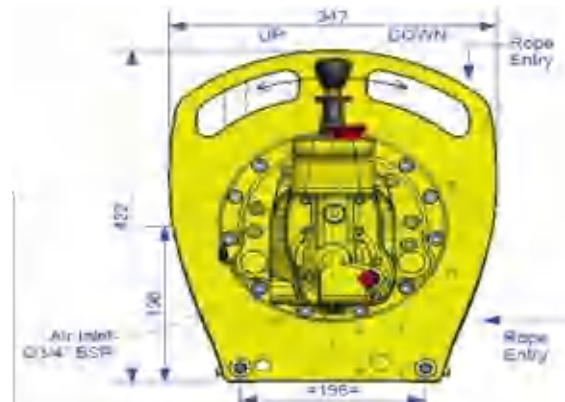
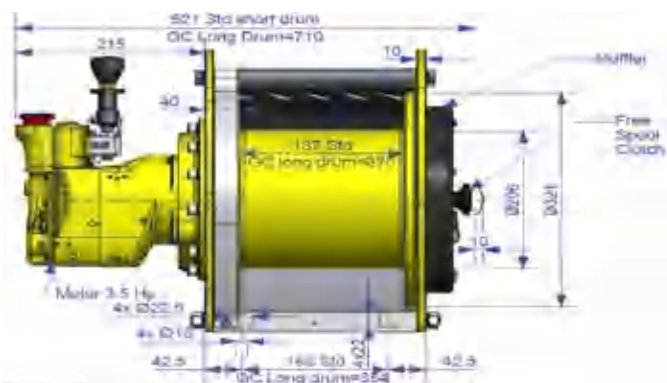
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Ingersoll Rand Pullstar portable winches are built for use on horizontal surfaces with little to no incline. Featuring a rugged, compact design Pullstar portable winches can easily be moved to wherever you need them. Pullstar portable winches include a highly reliable gear motor and a free spooling clutch for rapid manual rope pay out. The PS2-2400R is designed to operate in temperatures down to -20 °C. The CE version of the PS2-2400R is also suitable for ATEX group II (non-mining) category 2 applications and ATEX group I (mining) category M2 applications.



CE Models	A mm (in)	B mm (in)	C mm (in)
PS2-1000R-L-E	155 (6.10)	140 (5.51)	427 (16.81)
PS2-1000RCG-L-E	311 (12.24)	296 (11.65)	583 (22.95)

Non CE Models	A mm (in)	B mm (in)	C mm (in)
PS2-1000R-L	155 (6.10)	140 (5.51)	392 (15.43)
PS2-1000RCG-L	311 (12.24)	296 (11.65)	548 (21.57)



CE Models	A mm (in)	B mm (in)	C mm (in)
PS2-2400R-L-E	187 (7.36)	166 (6.54)	521 (20.51)
PS2-2400RCG-L-E	375 (14.76)	354 (13.94)	710 (27.95)

Non CE Models	A mm (in)	B mm (in)	C mm (in)
PS2-2400R-L	187 (7.36)	166 (6.54)	486 (19.13)
PS2-2400RCG-L	375 (14.76)	354 (13.94)	675 (26.57)

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

# Options and Accessories



Drum Guard



Airline Accessories



Pendant

## General Performance. Performance based on a 3.5:1 design factor

Model	Line Pull Capacity			Line Speed		
	First Layer kg (lb)	Mid Drum kg (lb)	Top Layer kg (lb)	First Layer m/min (fpm)	Mid Drum m/min (fpm)	Top Layer m/min (fpm)
PS2-1000R-L	1,000 (2,200)	850 (1,870)	700 (1,540)	12 (41)	16 (53.5)	20 (66)
PS2-1000RGC-L	1,000 (2,200)	850 (1,870)	700 (1,540)	12 (41)	16 (53.5)	20 (66)
PS2-2400R-L	2,400 (5,280)	2150 (4,730)	2000 (4,400)	5 (17)	5.5 (18)	6 (20)
PS2-2400RGC-L	2,400 (5,280)	2150 (4,730)	2000 (4,400)	5 (17)	5.5 (18)	6 (20)

## General Characteristics. Performance at 6.3 bar (90 psi) air inlet pressure with the motor running

Model	Motor	Lifting Speed at Top Layer	Air Consumption with Rated Load	Air Volume Needed to Move Rated Load at Top Layer	Sound Level as per EN 14492-1	Net Weight
	kW (hp)	m/min d(fpm)	m <sup>3</sup> /min (ft <sup>3</sup> /min)	3 m (10 ft)	dB(A)	kg (lb)
PS2-1000R-L	2.6 (3.5)	20 (66)	4 (141)	0.6 (21.4)	92	38 (84)
PS2-1000RGC-L	2.6 (3.5)	20 (66)	4 (141)	0.6 (21.4)	92	45 (99)
PS2-2400R-L	2.6 (3.5)	6 (20)	4.8 (169)	2.4 (84.8)	90	85 (187)
PS2-2400RGC-L	2.6 (3.5)	6 (20)	4.8 (169)	2.4 (84.8)	90	100 (220)

## Drum capacity

Model	Minimum Rope Breaking Force <sup>(1)</sup> kN (lbs)	Recommended Rope Diameter mm (in)	Drum Capacity per Layer <sup>(2)</sup> m (ft)					Max. Rope Storage Capacity <sup>(3)</sup> m (ft)
			Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	
PS2-1000R-L	34 (7,700)	6.5 (1/4)	9 (30)	20 (66)	32 (105)	45 (148)	58 (190)	89 (292)
PS2-1000RGC-L	34 (7,700)	6.5 (1/4)	19 (62)	42 (138)	66 (217)	93 (305)	121 (397)	183 (600)
PS2-2400R-L	84 (18,880)	11 (7/16)	8 (26)	20 (66)	33 (108)	46 (151)	60 (197)	60 (197)
PS2-2400RGC-L	84 (18,880)	11 (7/16)	20 (66)	43 (141)	70 (230)	98 (322)	127 (417)	127 (417)

<sup>(1)</sup> Recommended minimum breaking force of wire rope based on top layer line pull rating.

<sup>(2)</sup> Drum Capacity is based on tightly wound wire rope and 1/2" freeboard from the top of the flange to the top layer. Recommended drum working capacity is 80% of values shown.

<sup>(3)</sup> Max storage capacity is tightly wound with no freeboard.

## How to Order

<b>PS2</b>		<b>1000R</b>		<b>GC</b>		<b>PH</b>		<b>5M</b>		<b>PJ12-E</b>	
Model Series	Capacity	Drum	Control type	Control length	Options						
<b>PS2</b> Pullstar 2nd Generation	<b>1000R</b> 1000 kg <b>2400R</b> 2400 kg	<b>No letter</b> Standard <b>GC</b> Long drum	<b>L</b> Lever control <b>PH</b> Alloy precision PHS pendant <b>PHR</b> Cast iron precision PHS pendant	<b>5M</b> 5 meters (for pendant controlled winch)	<b>CM</b> Cold weather with material traceability <b>G</b> Drum guard for non-CE models <b>J12</b> Filter + lubricator (shipped loose) <b>J123</b> Filter + lubricator + regulator (shipped loose) <b>JF123</b> Filter + lubricator + regulator (fitted on winch, applies to 2400 kg model only) <b>JF1236</b> Filter + lubricator + regulator + water separator (fitted on winch, applies to 2400 kg model only) <b>M</b> 3.1 material traceability certificates as per EN 10204 on main load bearing parts <b>P</b> Marine paint finish <b>QZ</b> Offshore paint including sandblasting <b>V</b> Press roller (2400 kg model only)	<b>W1</b> ABS witness test <b>W2</b> DNV witness test <b>W3</b> LRS witness test <b>W4</b> Client witness of load test <b>-E</b> For Compliance with the European Machinery Directive for Pullstar pulling models					

## Special Orders



A significant portion of our business is providing customized solutions for specific applications. We recognize that not all jobs are created equal and that the most cost-effective solutions may not be in an off-the-shelf item. We've designed and manufactured winches and hoists for applications as simple as moving bags of lettuce, to as intricate as installing critical payloads on space vehicles, including high capacity loads 100 tons and above.

- Design for custom capacities
- Custom control systems
- Custom product modifications
- Witness testing and complete certification to most global standards
- Full data package with CAD drawings
- Dedicated project management for your project from conception to delivery
- Onsite services available including presale and evaluation



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