



# Pullstar Heavy Air Winches

2,250-7,500 kg (4,950-16,530 kg)

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

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

**Rugged cast steel** construction delivers long-life and durability

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

**Free spool clutch** for rapid rope payout

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

**Standard muffler** provides low noise

Ideal for:



Mining



Offshore



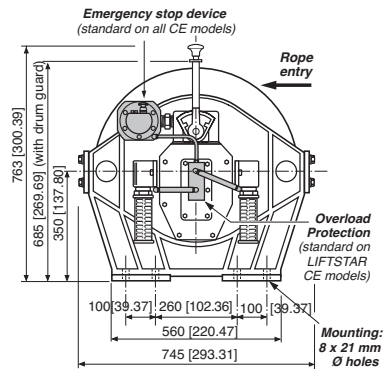
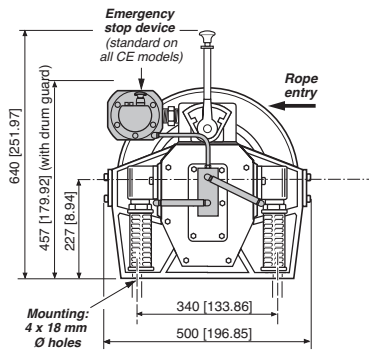
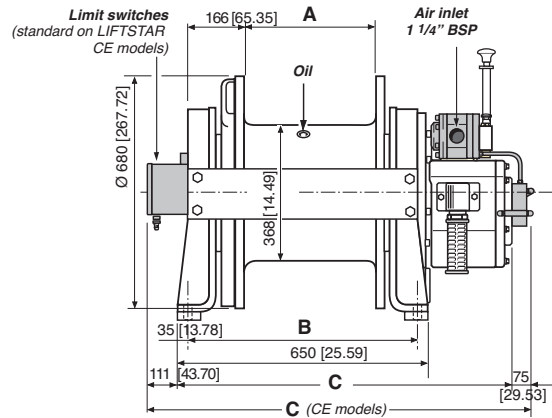
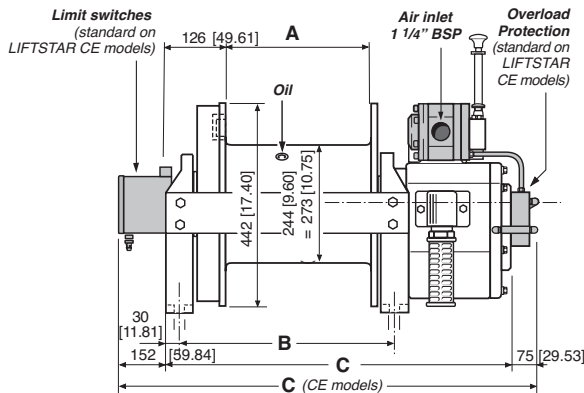
Marine



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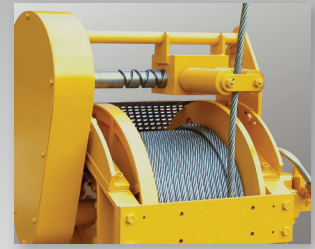
Ingersoll Rand Pullstar heavy winches are designed specifically for pulling applications. They offer a 3.5:1 design factor and come standard with a disengaging clutch to quickly deploy the wire rope. Pullstar heavy winches use a low maintenance, highly reliable gear motor for high torque output and smooth starts and stops. When you combine the gear motor with cast iron and steel construction, Ingersoll Rand Pullstar heavy air winches are one of the most durable pulling winches available.



CE Models	A mm (in)	B mm (in)	C mm (in)
PS4000R-L-E	302 (11.89)	449 (17.68)	794 (31.26)
PS4000RGC-L-E	485 (19.09)	634 (24.96)	979 (38.54)
Non CE Models			
PS4000R-L	302 (11.89)	449 (17.68)	719 (28.31)
PS4000RGC-L	485 (19.09)	634 (24.96)	904 (35.59)

CE Models	A mm (in)	B mm (in)	C mm (in)
PS10000R-L-E	355 (13.98)	580 (22.83)	979 (38.54)
PS10000RGC-L-E	728 (28.66)	953 (37.52)	1,352 (53.23)
Non CE Models			
PS10000R-L	355 (13.98)	580 (22.83)	904 (35.59)
PS10000RGC-L	728 (28.66)	953 (37.52)	1,277 (50.28)

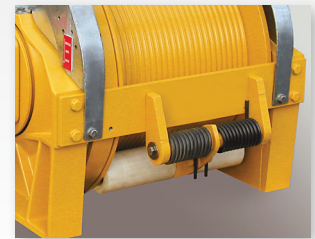
Dimensions shown are mm. Dimensions in Brackets [ ] are inches. Dimensions are subject to change. Contact factory for certified drawings.



Spooling Device



Automatic Drum Brake



Grooved Drum and Press Roller

**General Performance. Performance at 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)
PS4000R-L	4,000 (8,800)	3,250 (7,150)	2,500 (5,500)	4 (14)	5 (18)	7 (23)
PS4000RGC-L <sup>(1)</sup>	3,600 (7,920)	2,925 (6,435)	2,250 (4,950)	4 (15)	6 (20)	8 (25)
PS10000R-L	10,000 (22,000)	8,740 (19,265)	7,500 (16,530)	3 (9)	3 (11)	4 (14)
PS10000RGC-L	10,000 (22,000)	8,740 (19,265)	7,500 (16,530)	3 (9)	3 (11)	4 (14)

**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	Stall	Sound Level as per EN 14492-1	Net Weight
	kW (hp)	m/min (fpm)	m <sup>3</sup> /min (ft <sup>3</sup> /min)	3 m (10 ft)	kg (lb)	dB(A)	kg (lb)
PS4000R-L	10.7 (14.3)	7 (23)	12 (424)	5.1 (184.3)	4,202 (9,265)	95	225 (496)
PS4000RGC-L <sup>(1)</sup>	10.7 (14.3)	8 (25)	12 (424)	4.5 (169.6)	3,776 (8,326)	95	278 (613)
PS10000R-L	10.7 (14.3)	4 (14)	12 (424)	9.0 (302.9)	11,200 (24,695)	87	640 (1,411)
PS10000RGC-L	10.7 (14.3)	4 (14)	12 (424)	9.0 (302.9)	11,200 (24,695)	87	755 (1,664)

**Drum Capacity**

Model	Minimum Rope Breaking Force <sup>(2)</sup> kN (lbs)	Recommended Rope Diameter mm (in)	Drum Capacity per Layer <sup>(3)</sup> m (ft)						Max. Rope Storage Capacity <sup>(4)</sup> m (ft)
			Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	
PS4000R-L	110 (24,750)	13 (1/2)	17 (56)	36 (118)	57 (187)	79 (259)	103 (338)	- (-)	156 (512)
PS4000RGC-L <sup>(1)</sup>	123 (27,500)	13 (1/2)	31 (102)	65 (213)	102 (335)	142 (466)	- (-)	- (-)	230 (755)
PS10000R-L	368 (82,650)	20 (3/4)	21 (69)	44 (144)	69 (226)	96 (315)	125 (410)	156 (512)	224 (735)
PS10000RGC-L	368 (82,650)	20 (3/4)	44 (144)	92 (302)	145 (476)	202 (663)	263 (863)	329 (1,079)	473 (1,552)

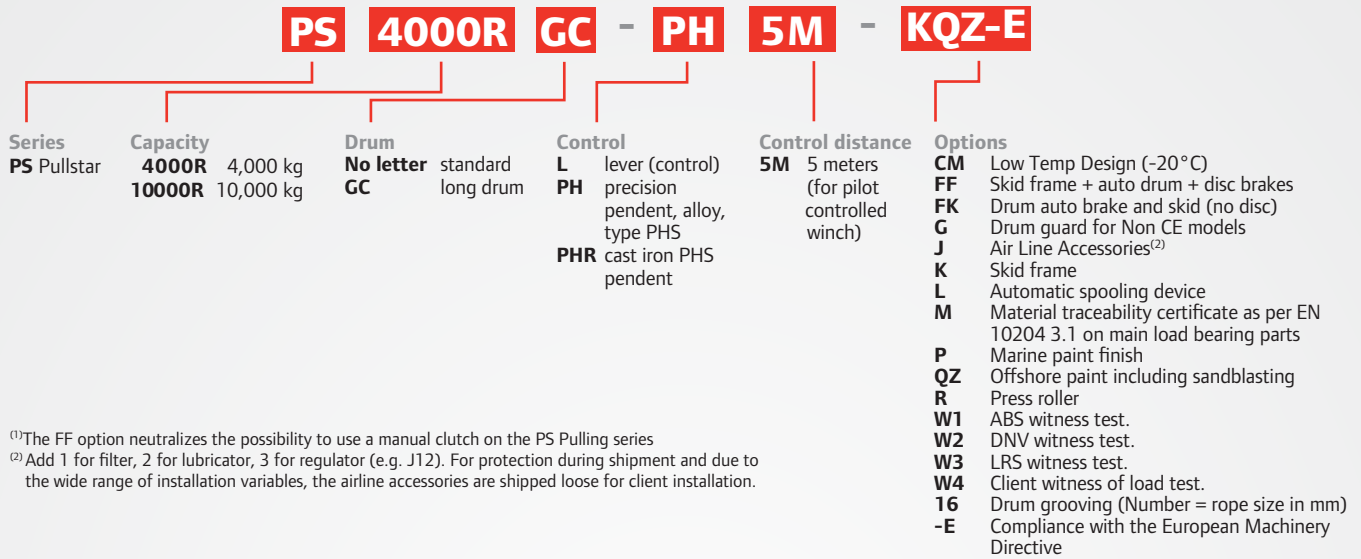
<sup>(1)</sup> For PS4000RGC-L, line pulls are reduced by 10% and line speeds are increased by 10%

<sup>(2)</sup> Recommended minimum breaking force of wire rope based on top layer line pull rating.

<sup>(3)</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>(4)</sup> Max storage capacity is tightly wound with no freeboard.

## How to Order



<sup>(1)</sup>The FF option neutralizes the possibility to use a manual clutch on the PS Pulling series  
<sup>(2)</sup>Add 1 for filter, 2 for lubricator, 3 for regulator (e.g. J12). For protection during shipment and due to the wide range of installation variables, the airline accessories are shipped loose for client installation.

## 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



For More Information [www.ingersollrandproducts.com/lifting](http://www.ingersollrandproducts.com/lifting) [lifting@irco.com](mailto:lifting@irco.com)

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