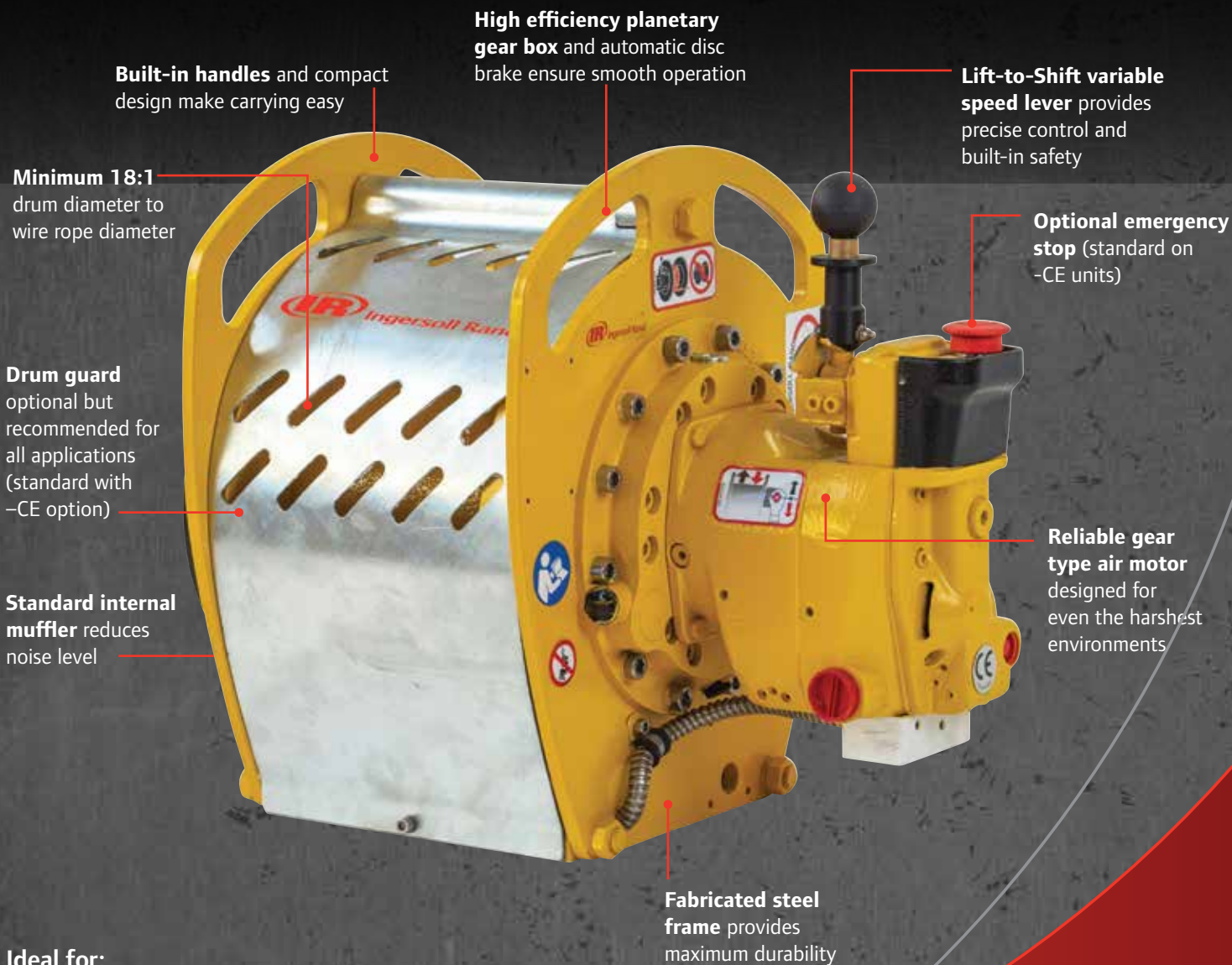




# Liftstar Portable Air Winches

300 – 1,500 kg (660 – 3,300 lb)



Ideal for:



Mining



Offshore

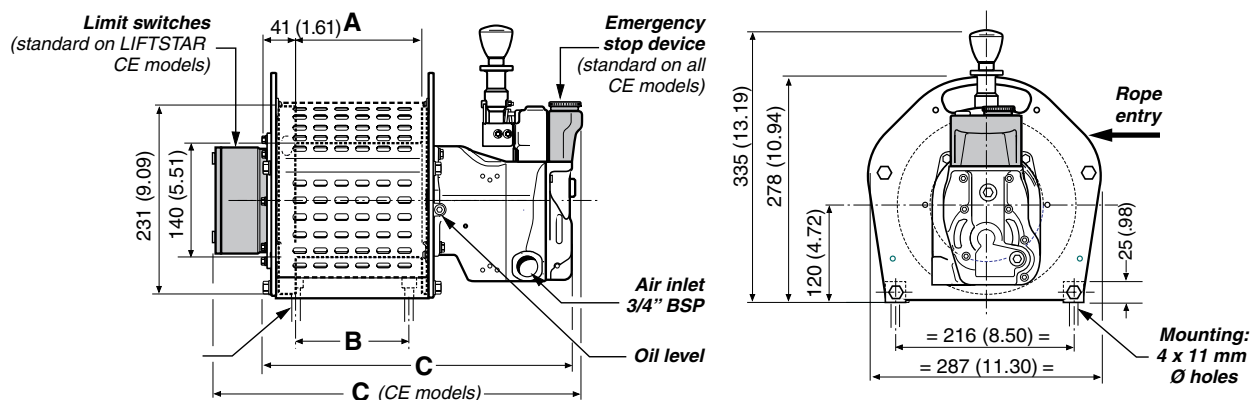


Marine

# Liftstar Portable Air Winches

300 – 1,500 kg (660 – 3,300 lb)

With a tough, yet compact design, Ingersoll Rand Liftstar portable winches are easy to carry. Their rugged gear motors have only two moving parts which makes them virtually maintenance free even after being stored. They are easy to transport wherever you need them and rugged enough to give you the lifting power you need no matter how harsh the conditions. The LS2-1500R is designed to operate in temperatures down to -20 °C. The CE version of the LS2-1500R is also suitable for ATEX group II (non-mining) category 2 applications and ATEX group I (mining) category M2 applications.

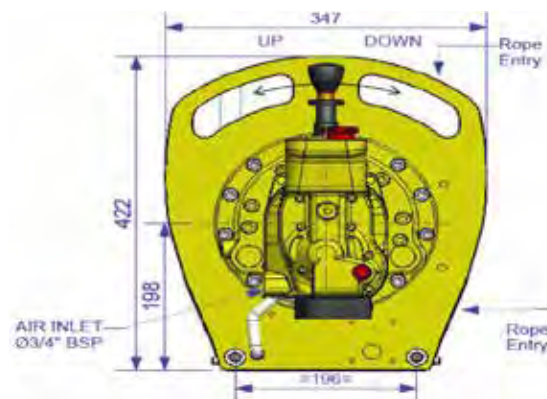


CE Models	A mm (in)	B mm (in)	C mm (in)
LS2-300R-CE	155 (6.10)	140 (5.51)	461 (18.15)
LS2-600R-CE	155 (6.10)	140 (5.51)	461 (18.15)
LS2-300RGC-CE	311 (12.24)	296 (11.65)	617 (24.29)
LS2- 600RGC-CE	311 (12.24)	296 (11.65)	617 (24.29)

Non CE Models	A mm (in)	B mm (in)	C mm (in)
LS2-300R-CE	155 (6.10)	140 (5.51)	360 (14.17)
LS2-600R-CE	155 (6.10)	140 (5.51)	360 (14.17)
LS2-300RGC-CE	311 (12.24)	296 (11.65)	516 (20.31)
LS2-600RGC-CE	311 (12.24)	296 (11.65)	516 (20.31)



CE Models	A mm (in)	B mm (in)	C mm (in)
LS2-1500R-L-CE	187 (7.36)	166 (6.54)	500 (19.69)
LS2-1500RGC-L-CE	375 (14.76)	354 (13.94)	687 (27.05)



Non CE Models	A mm (in)	B mm (in)	C mm (in)
LS2-1500R-L	187 (7.36)	166 (6.54)	465 (18.31)
LS2-1500RGC-L	375 (14.76)	354 (13.94)	652 (25.67)

## Options and Accessories



Cast Iron Control Pendant



Drum Guard



Marine Grade Paint



Airline Accessories

### General Performance. Performance based on a 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)
LS2-300R-L	300 (660)	300 (660)	300 (660)	40 (131)	40 (131)	40 (131)
LS2-300RGC-L	300 (660)	300 (660)	300 (660)	40 (131)	40 (131)	40 (131)
LS2-600R-L	600 (1,320)	600 (1,320)	600 (1,320)	20 (66)	20 (66)	20 (66)
LS2-600RGC-L	600 (1,320)	600 (1,320)	600 (1,320)	20 (66)	20 (66)	20 (66)
LS2-1500R-L	1,500 (3,300)	1,500 (3,300)	1,500 (3,300)	9.5 (31)	9.5 (31)	9.5 (31)
LS2-1500RGC-L	1,500 (3,300)	1,500 (3,300)	1,500 (3,300)	9.5 (31)	9.5 (31)	9.5 (31)

### 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 (fpm)	m <sup>3</sup> /min (ft <sup>3</sup> /min)	3 m (10 ft)	dB(A)	kg (lb)
LS2-300R-L	2.6 (3.5)	40 (131)	4 (141)	0.3 (10.8)	92	42 (93)
LS2-300RGC-L	2.6 (3.5)	40 (131)	4 (141)	0.3 (10.8)	92	49 (108)
LS2-600R-L	2.6 (3.5)	20 (66)	4 (141)	0.6 (21.4)	92	42 (93)
LS2-600RGC-L	2.6 (3.5)	20 (66)	4 (141)	0.6 (21.4)	92	49 (108)
LS2-1500R-L	2.6 (3.5)	9.5 (31)	4.8 (169)	1.5 (53.0)	90	85 (187)
LS2-1500RGC-L	2.6 (3.5)	9.5 (31)	4.8 (169)	1.5 (53.0)	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	Layer 6	Layer 7	
LS2-300R-L	15 (3,370)	5 (3/16)	12 (39)	26 (85)	41 (135)	57 (187)	74 (243)	92 (302)	110 (361)	150 (492)
LS2-300RGC-L	15 (3,370)	5 (3/16)	26 (85)	54 (177)	85 (279)	117 (384)	152 (499)	188 (617)	226 (741)	307 (1,007)
LS2-600R-L	30 (6,800)	6.5 (1/4)	9 (30)	20 (66)	32 (105)	45 (148)	58 (190)	- (-)	- (-)	89 (292)
LS2-600RGC-L	30 (6,800)	6.5 (1/4)	19 (62)	42 (138)	66 (217)	93 (305)	121 (397)	- (-)	- (-)	183 (600)
LS2-1500R-L	75 (16,900)	11 (7/16)	8 (26)	20 (66)	33 (108)	- (-)	- (-)	- (-)	- (-)	61 (200)
LS2-1500RGC-L	75 (16,900)	11 (7/16)	20 (66)	43 (141)	70 (230)	- (-)	- (-)	- (-)	- (-)	128 (420)

<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>LS2 - 1500R GC - PH 5M - PJ12-CE</b>									
Model Series	Capacity	Drum	Control type	Control length	Options				
<b>LS2</b> Liftstar	<b>300R</b> 300 kg	<b>No letter</b> Standard	<b>L</b> Lever control	<b>5M</b> 5 meters	<b>CM</b> Cold weather with material traceability	<b>W1</b> ABS witness test			
2nd	<b>600R</b> 600 kg	<b>GC</b> Long drum	<b>PH</b> Alloy precision PHS pendant	(for pendant controlled winch)	<b>G</b> Drum guard for non-CE models	<b>W2</b> DNV witness test			
Generation	<b>1500R</b> 1500 kg		<b>PHR</b> Cast iron precision PHS pendant		<b>J12</b> Filter + lubricator (shipped loose)	<b>W3</b> LRS witness test			
					<b>J123</b> Filter + lubricator + regulator (shipped loose)	<b>W4</b> Client witness of load test			
					<b>JF123</b> Filter + lubricator + regulator (fitted on winch, applies to 1500 kg model only)	<b>-CE</b> For Compliance with the European Machinery Directive for Pullstar pulling models			
					<b>JF1236</b> Filter + lubricator + regulator + water separator (fitted on winch, applies to 1500 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 (1500 kg model only)				

## Special Orders



Ingersoll Rand can provide customized solutions for your application. Whether you need to move specialized or high capacity loads or have custom control requirements, we can build the right solution for you. Ingersoll Rand's global account management team, dedicated project managers and engineering teams are focused exclusively on high capacity hoists and winches. From evaluation to installation and beyond, contact us to build your custom solution today.

- Design for custom capacities
- Custom control systems
- Custom product modifications
- Witness testing and complete certification to most global standards
- Full engineering capabilities including data packages and CAD drawings
- Global Account Management and dedicated project management teams
- Onsite services available including presale evaluation, installation and maintenance



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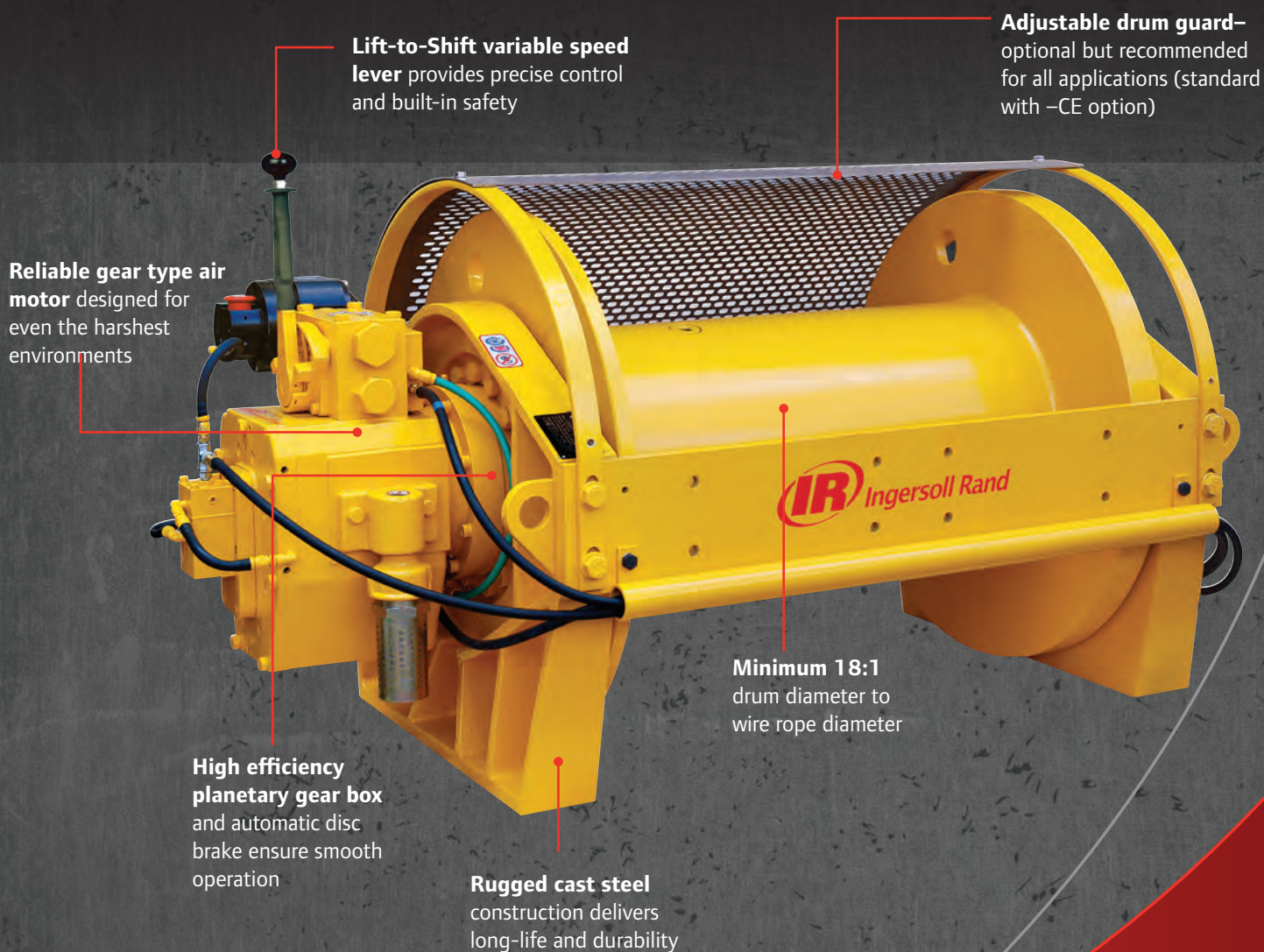
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# Liftstar Heavy Air Winches

2,000 - 5,000 kg (4,400 - 11,000 lb)



Ideal for:



Onshore



Offshore



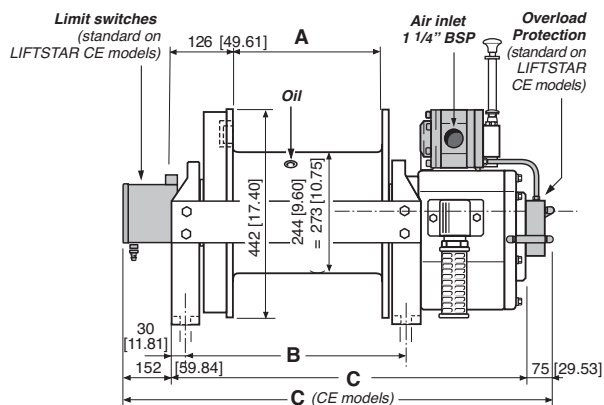
Marine



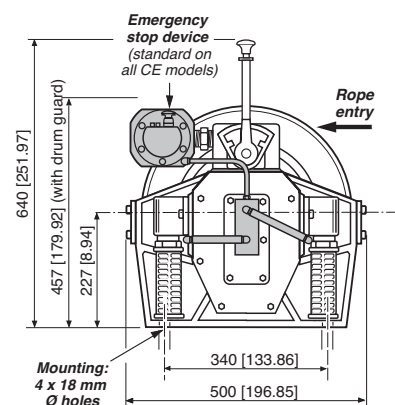
# Liftstar Heavy Air Winches

2,000 - 5,000 kg (4,400 - 11,000 lb)

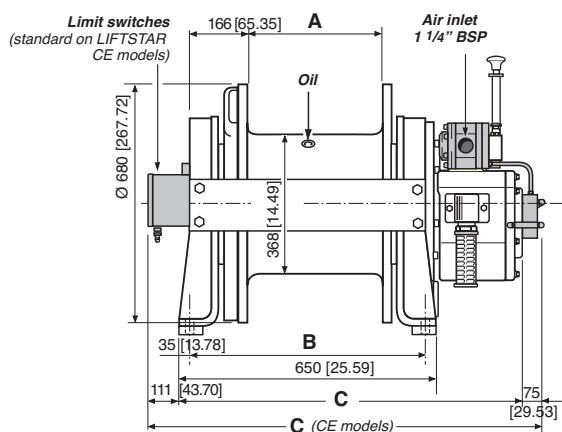
Ingersoll Rand Liftstar heavy winches incorporate a cast iron and steel design with a rugged gear motor for ultimate durability. They are available with options to suit any need no matter where in the world you operate. Reliable and simple to maintain, Liftstar winches are specifically built for the types of environments where lesser winches would fail.



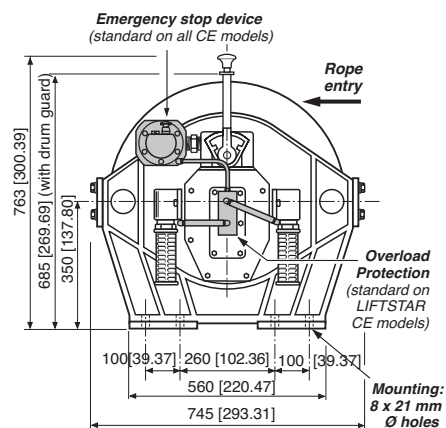
CE Models	A mm (in)	B mm (in)	C mm (in)
LS2000R-L-CE	302 (11.89)	449 (17.68)	952 (37.48)
LS2000RGC-L-CE	485 (19.09)	634 (24.96)	1,137 (44.76)



Non CE Models	A mm (in)	B mm (in)	C mm (in)
LS2000R-L	302 (11.89)	449 (17.68)	794 (31.26)
LS2000RGC-L	485 (19.09)	634 (24.96)	904 (35.59)



CE Models	A mm (in)	B mm (in)	C mm (in)
LS5000R-L-CE	355 (13.98)	580 (22.83)	1,090 (42.91)
LS5000RGC-L-CE	728 (28.66)	953 (37.52)	1,463 (57.6)



Non CE Models	A mm (in)	B mm (in)	C mm (in)
LS5000R-L	355 (13.98)	580 (22.83)	904 (35.59)
LS5000RGC-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."





Automatic spooling device



Grooved Drum



Rope press roller assembly

**General Performance. Performance based on a 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)
LS2000R-L	2,800 (6,170)	2,400 (5,290)	2,000 (4,400)	20 (66)	20 (66)	20 (66)
LS2000RGC-L	2,800 (6,170)	2,400 (5,290)	2,000 (4,400)	20 (66)	20 (66)	20 (66)
LS5000R-L	6,500 (14,330)	5,750 (12,670)	5,000 (11,000)	10 (33)	10 (33)	10 (33)
LS5000RGC-L	6,500 (14,330)	5,750 (12,670)	5,000 (11,000)	10 (33)	10 (33)	10 (33)

**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
	kg (lb)	m/min (fpm)	m <sup>3</sup> /min (ft <sup>3</sup> /min)	3 m (10 ft)	kg (lb)	dB(A)	kg (lb)
LS2000R-L	10.7 (14.3)	20 (66)	5 (177)	10 (353)	3,953 (8,716)	95	230 (507)
LS2000RGC-L	10.7 (14.3)	20 (66)	5 (177)	10 (353)	3,953 (8,716)	95	283 (624)
LS5000R-L	10.7 (14.3)	10 (33)	10 (353)	3.0 (107.0)	11,968 (26,386)	87	645 (1,422)
LS5000RGC-L	10.7 (14.3)	10 (33)	10 (353)	3.0 (107.0)	11,968 (26,386)	87	760 (1,676)

**Drum capacity**

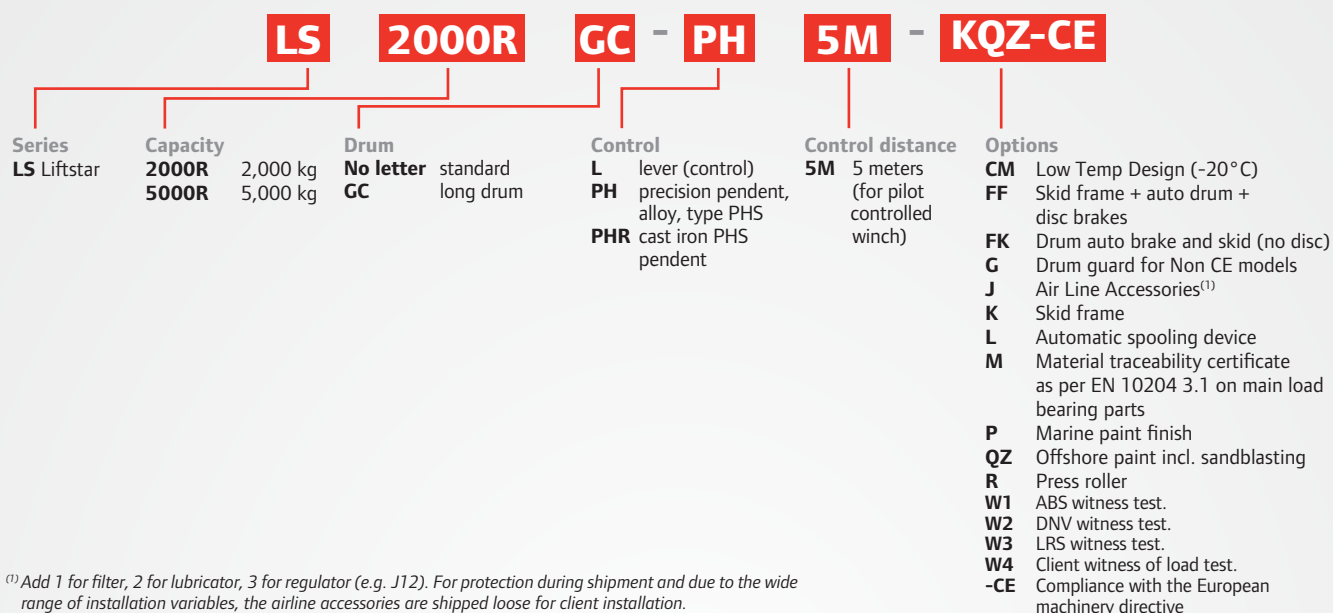
Model	Minimum Rope Breaking Force <sup>(1)</sup>	Recommended Rope Diameter	Drum Capacity per Layer <sup>(2)</sup>						Max. Rope Storage Capacity <sup>(3)</sup>
	kN (lbs)	mm (in)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	m (ft)
LS2000R-L	98 (22,000)	13 (1/2)	17 (56)	36 (118)	57 (187)	79 (259)	103 (338)	- (-)	156 (512)
LS2000RGC-L	98 (22,000)	13 (1/2)	31 (102)	65 (213)	102 (335)	142 (466)	- (-)	- (-)	230 (755)
LS5000R-L	244 (55,000)	20 (3/4)	20 (65)	42 (137)	66 (216)	92 (301)	120 (393)	150 (492)	182 (597)
LS5000RGC-L	244 (55,000)	20 (3/4)	41 (134)	88 (288)	138 (452)	193 (633)	252 (826)	316 (1,036)	384 (1,259)

<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





## 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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# 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



## 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>	Recommended Rope Diameter	Drum Capacity per Layer <sup>(2)</sup>					Max. Rope Storage Capacity <sup>(3)</sup>
	kN (lbs)	mm (in)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	m (ft)
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

PS2 - 1000R GC - PH 5M - PJ12-E					
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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# 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

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

**Free spool clutch** for rapid rope payout

**Standard muffler** provides low noise

Ideal for:



Mining



Offshore



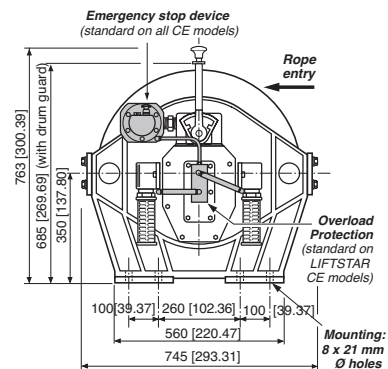
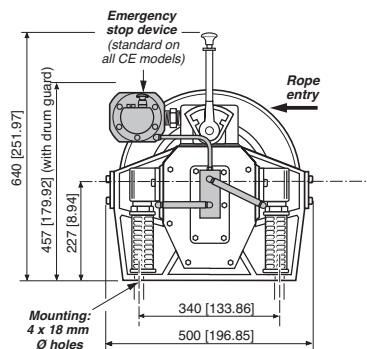
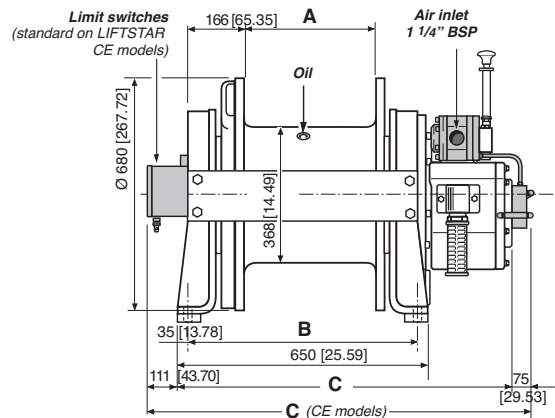
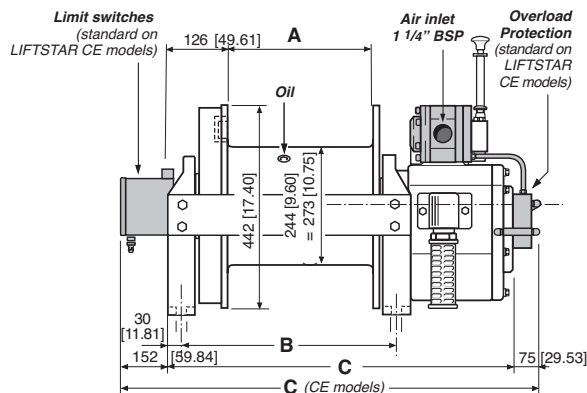
Marine



# Pullstar Heavy Air Winches

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

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>	Recommended Rope Diameter	Drum Capacity per Layer <sup>(3)</sup>						Max. Rope Storage Capacity <sup>(4)</sup>
	kN (lbs)	mm (in)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	m (ft)
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)

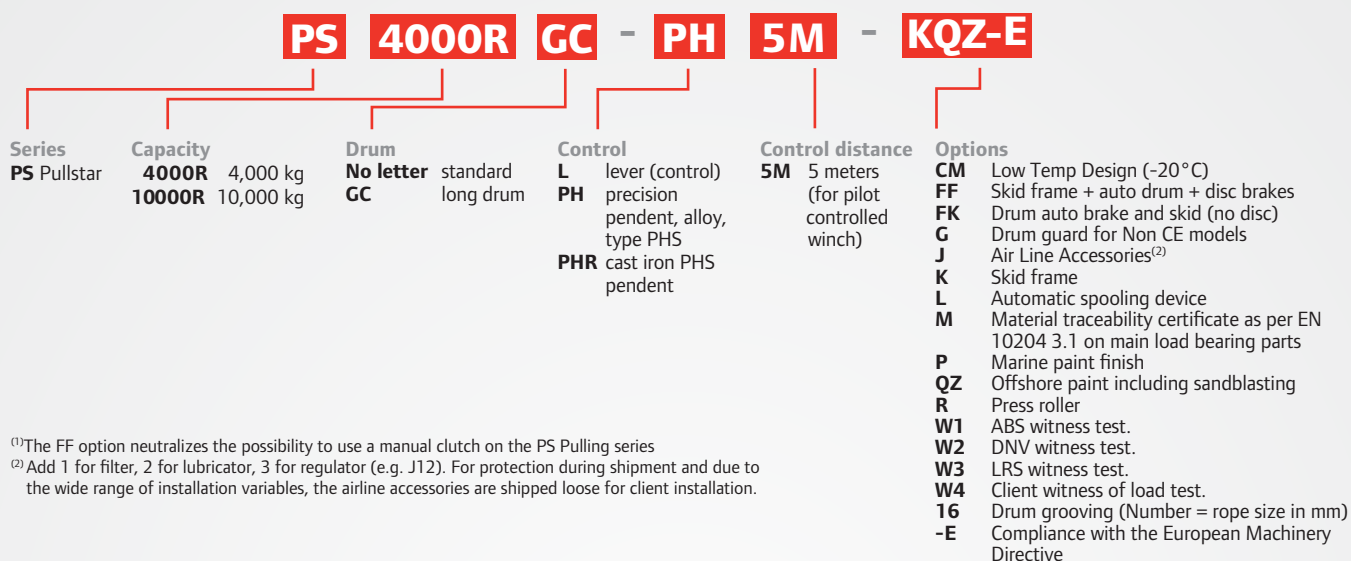
<sup>(1)</sup> For PS4000RGC-L, line pulls are reduced by 10% and line speeds are increased by 10%

<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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