



# WARN Industrial Hoist

**Model**

**DC1600**

**Part Number**

**85159**

**Motor Type**

DC Electric  
24 Volt  
Permanent  
Magnet



The DC1600 hoist combines a powerful permanent magnet DC motor with robust sealing and our proven 3-stage all metal geartrain. Permanent grease lubrication means years of trouble free service. All WARN hoists incorporate an automatic mechanical brake that holds full rated load. The durable powder coated finish stands up to the elements and looks great. The DC1600 hoist is built on WARN's robust large frame design with a cast aluminum drum to provide plenty of wire rope capacity. Controls and accessories available separately.

### Accessories

Description:	Part Number
Control Pack-24V	63752
Contactors Only-24V (Standard bracket)	34968
Contactors Only-24V (w/ bracket for cover)	34974
Contactors Cover (with remote plug)	36648
Contactors Cover (no plug)	35169
Remote Control Only	88528

\*12 volt model shown in photo

### Engineering Data

Rated Capacity:	1600 lbf	726 kgf
Drum Barrel Diameter:	4.25 in	108 mm
Drum Flange Diameter:	8.25 in	210 mm
Distance Between Flanges:	3.79 in	96 mm
Recommended Maximum Wire Rope Diameter:	1/4 in	6.4 mm
Recommended Minimum Wire Rope Breaking Strength:	7000 lbf	3175 kgf
Approximate Shipping Weight:	50.0 lb	22.7 kg
Duty Cycle (intermittent per SAE J706 section 6.2):	N/A ft	N/A m
Mounting Bolt Torque:	35 - 40 ft*lbf	47 - 54 N*m
Maximum Layers of Wire Rope:	5	
Gear Reduction:	261	
Brake Type:	Automatic Cone	
Contactors/Remote Type:	Not Included	

### Drum Rotation



Viewed from Motor End

### Standards Compliance

1. - CE Machinery Directive 98/37/EC and 2006/42/EC
2. - CE Electromagnetic Compatibility 2004/108/EC
3. - ASME B30.5

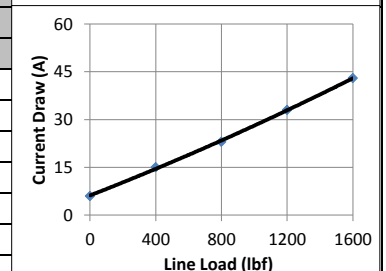
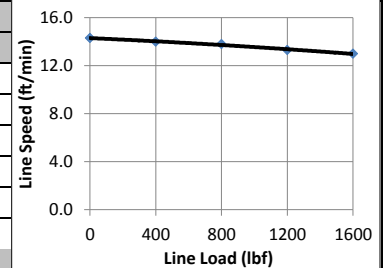
### Performance By Layer

Drum Layer	Line Load *			No Load Line Speed		Drum Capacity	
	lbf	kgf	kN	ft/min	m/min	ft	m
1	1600	726	7.1	14.3	4.4	16	4.9
2	1440	653	6.4	15.9	4.8	34	10.4
3	1312	595	5.8	17.5	5.3	53	16.2
4	1200	544	5.3	19.1	5.8	74	22.6
5	1104	501	4.9	20.6	6.3	97	29.6

\* Never exceed the Rated Capacity. Installation of a Rated Capacity Limiter is recommended.

### First Layer Performance

Line Load		Current Draw	Line Speed		Duty Cycle
lbf	kgf	Amps	ft/min	m/min	min/10min
0	0	6	14.3	4.4	Continuous
400	181	15	14.0	4.3	Continuous
800	363	23	13.8	4.2	Continuous
1200	544	33	13.3	4.1	6.8
1600	726	43	13.0	4.0	4.6



**WARN INDUSTRIES, INC**  
Industrial Products

Customer Service (North America): 1.800.543.9276  
Customer Service (International): 1.503.722.3008  
FAX: 1.503.722.3000 www.warn.com

12900 S.E. Capps Road,  
Clackamas, OR USA 97015



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**Model**

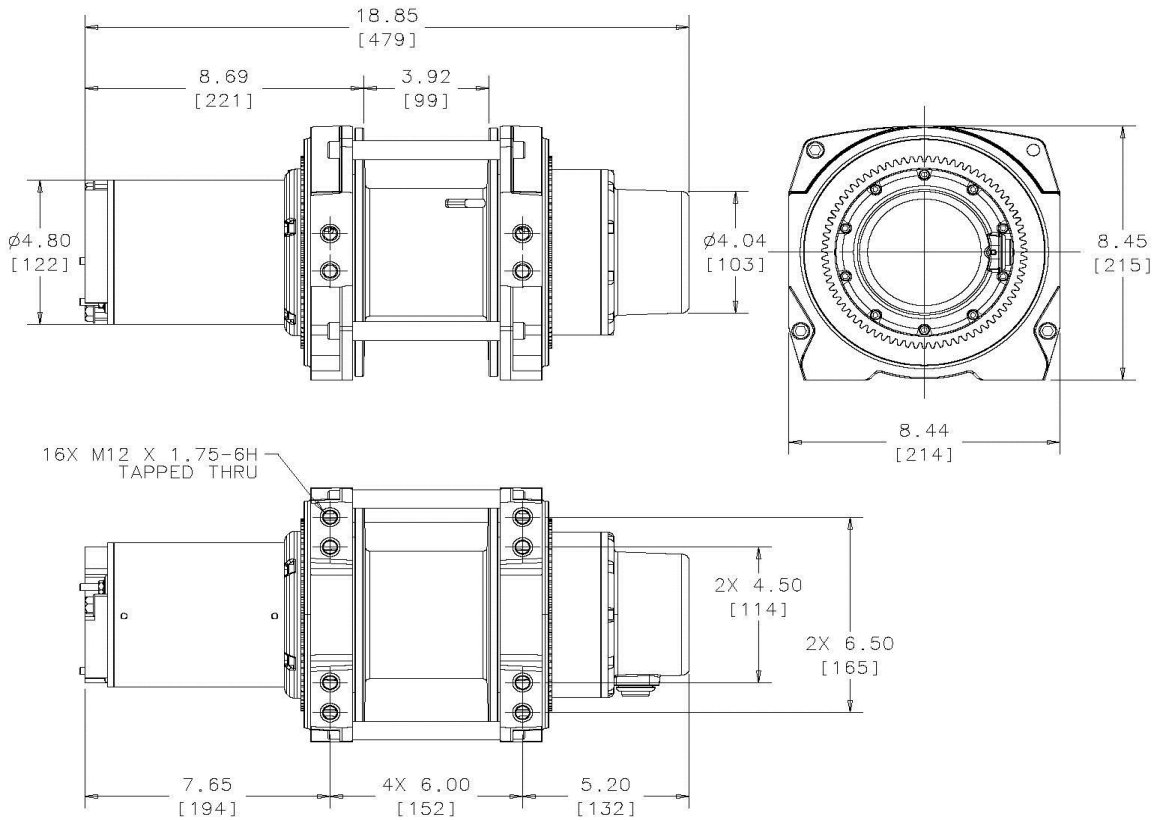
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Units are given in inches [millimeters], unless otherwise specified

### Recommended Mounting (Always Observe Correct Drum Rotation)

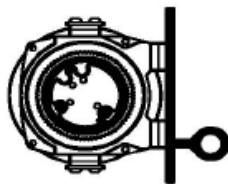
### Electrical System Specifications

Pull from bottom of hoist



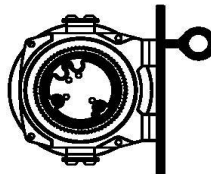
Feet down

Pull from bottom of hoist



Feet forward

Pull from top of hoist



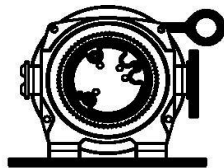
Feet forward

Pull from top of hoist



Feet down without angle brace

Pull from top of hoist



Feet down with angle brace

Pull from top of hoist



Angle Braces Only

See Electrical Cable Gauge Size Chart for cable sizing

All electrical connections must be clean and tight

### Electrical System Wiring Schematic

Hoist provided without electrical controls. See accessories on front page for control kits.

Power IN (Hoisting)- Connect motor terminal #2 to positive. Connect motor terminal #1 to negative (Ground).

Power OUT (Lowering)- Connect motor terminal #1 to positive. Connect motor terminal #2 to negative (Ground).

Notes:

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