



WARN Industrial Hoist

Model

DC1600

Part Number

33503

Motor Type

DC Electric
12 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-12V | 40709 |
| Contactors Only-12V (Standard bracket) | 34440 |
| Contactors Only-12V (w/ bracket for cover) | 34973 |
| Contactors Cover (with remote plug) | 36648 |
| Contactors Cover (no plug) | 35169 |
| Remote Control Only | 88528 |

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



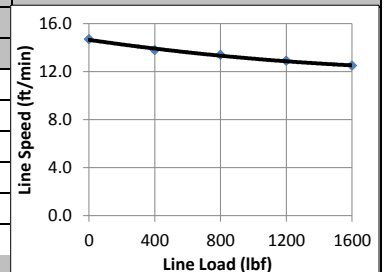
Viewed from Motor End

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

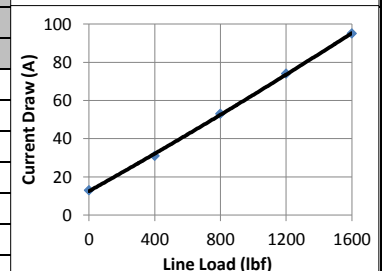
| Drum Layer | Line Load * | | | No Load Line Speed | | Drum Capacity | |
|------------|-------------|-----|-----|--------------------|-------|---------------|------|
| | lbf | kgf | kN | ft/min | m/min | ft | m |
| 1 | 1600 | 726 | 7.1 | 14.7 | 4.5 | 16 | 4.9 |
| 2 | 1440 | 653 | 6.4 | 16.3 | 5.0 | 34 | 10.4 |
| 3 | 1312 | 595 | 5.8 | 18.0 | 5.5 | 53 | 16.2 |
| 4 | 1200 | 544 | 5.3 | 19.6 | 6.0 | 74 | 22.6 |
| 5 | 1104 | 501 | 4.9 | 21.2 | 6.5 | 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 | 13 | 14.7 | 4.5 | Continuous |
| 400 | 181 | 31 | 13.8 | 4.2 | Continuous |
| 800 | 363 | 53 | 13.4 | 4.1 | 5.8 |
| 1200 | 544 | 74 | 12.9 | 3.9 | 3.6 |
| 1600 | 726 | 95 | 12.5 | 3.8 | 2.6 |



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



WARN Industrial Hoist

Model

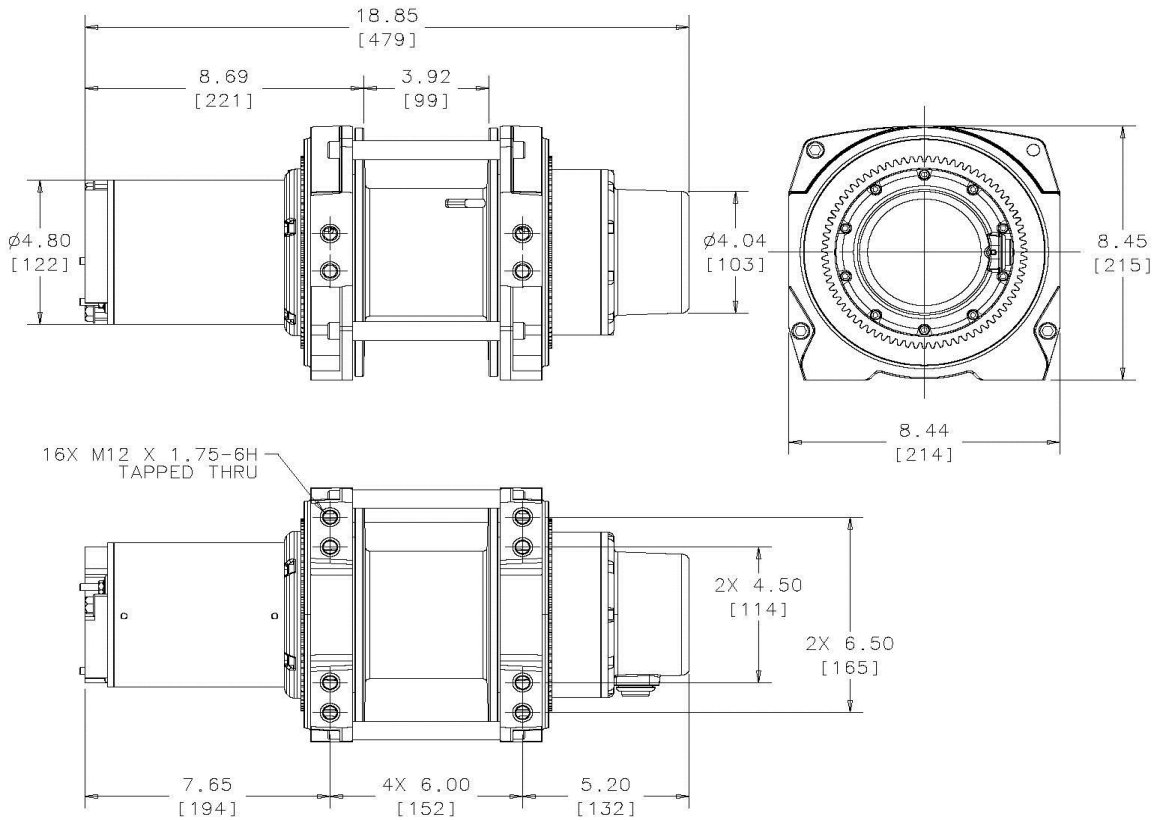
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Units are given in inches [millimeters], unless otherwise specified

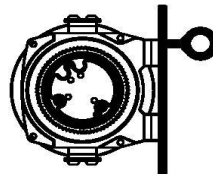
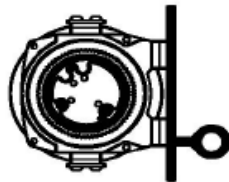
Recommended Mounting (Always Observe Correct Drum Rotation)

Electrical System Specifications

Pull from bottom of hoist

Pull from bottom of hoist

Pull from top of hoist



Feet down

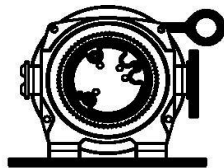
Feet forward

Feet forward

Pull from top of hoist

Pull from top of hoist

Pull from top of hoist



Feet down without angle brace

Feet down with angle brace

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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