



WARN Industrial Winch

Model

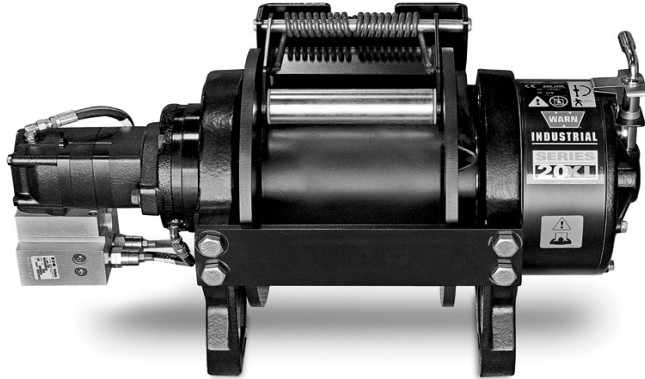
Part Number

Motor Type

Series 20XL-LP Hydraulic Winch Manual Clutch

78980

Hydraulic
11.9 ci



The Warn Series XL product line combines durable cast iron construction, high efficiency hydraulic motor, and a robust 2X rated load braking system with a permanently lubricated and hardened 2-stage planetary gear train for superior intermittent-duty performance for loads up to 30,000 lbs. Winches are also available with manual or air clutches and 2 drum widths. A roller tension plate is standard along with bi-directional operation and a variety of mounting options to fit a variety of applications.

Warn Series XL winches are not suitable for hoisting applications or movement of persons.

Accessories

| Description: | Part Number |
|------------------------------------|-------------|
| Fairlead SRS-XL-STD | 77532 |
| Wire Rope Assembly 9/16"x140' EIPS | 77451 |
| Snatch Block XL-60K LB | 80858 |

Engineering Data

| | | |
|---|---------------------|-----------|
| Rated Pulling Force: | 20000 lbf | 9072 kgf |
| Drum Barrel Diameter: | 5.75 in | 146 mm |
| Drum Flange Diameter: | 12.25 in | 311 mm |
| Distance Between Flanges: | 8 in | 203 mm |
| Recommended Maximum Wire Rope Diameter: | 9/16 in | 14.3 mm |
| Recommended Minimum Wire Rope Breaking Strength: | 33600 lbf | 15241 kgf |
| Approximate Shipping Weight: | 230.0 lb | 104.3 kg |
| Duty Cycle (intermittent per SAE J706 section 6.2): | 2760 ft | 84.1 m |
| Mounting Bolt Torque: | 159 ft*lb | 216 N*m |
| Maximum Layers of Wire Rope: | 4 | |
| Gear Reduction: | 28.5:1 | |
| Brake Type: | Spring Applied Disk | |
| Contactor / Remote Type: | N/A | |

Drum Rotation



Viewed from Motor End

Standards Compliance

1. -SAE J706
2. -CE Machinery Directive 98/37/EC and 2006/42/EC

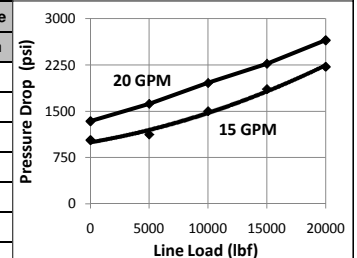
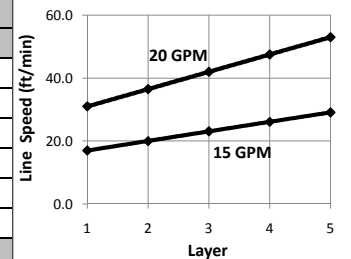
Performance By Layer- 9/16" (14.3 mm) dia. rope

| Drum Layer | Line Load * | | | Line Speed 15 GPM | | Line Speed 20 GPM | | Drum Capacity | |
|------------|-------------|------|------|-------------------|-------|-------------------|-------|---------------|------|
| | lbf | kgf | kN | ft/min | m/min | ft/min | m/min | ft | m |
| 1 | 20000 | 9072 | 89.0 | 17.0 | 5.2 | 31.0 | 9.4 | 21 | 6.4 |
| 2 | 16975 | 7700 | 75.5 | 20.0 | 6.1 | 36.5 | 11.1 | 46 | 14.0 |
| 3 | 14745 | 6688 | 65.6 | 23.1 | 7.0 | 42.0 | 12.8 | 74 | 22.6 |
| 4 | 13032 | 5911 | 58.0 | 26.1 | 8.0 | 47.5 | 14.5 | 106 | 32.3 |
| 5 | 11676 | 5296 | 51.9 | 29.1 | 8.9 | 53.0 | 16.2 | 142 | 43.3 |

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

First Layer Performance

| Line Load | | Pressure Drop at 15 GPM | | Pressure Drop at 20 GPM | | Duty Cycle |
|-----------|------|-------------------------|-------|-------------------------|-------|------------|
| lbf | kgf | psi | BAR | psi | BAR | min/10min |
| 0 | 0 | 1030 | 71.0 | 1340 | 92.4 | N/A |
| 5000 | 2268 | 1120 | 77.2 | 1620 | 111.7 | N/A |
| 10000 | 4536 | 1500 | 103.4 | 1960 | 135.1 | N/A |
| 15000 | 6804 | 1860 | 128.2 | 2270 | 156.5 | N/A |
| 20000 | 9072 | 2220 | 153.1 | 2650 | 182.7 | N/A |



WARN INDUSTRIES, INC
Industrial Products

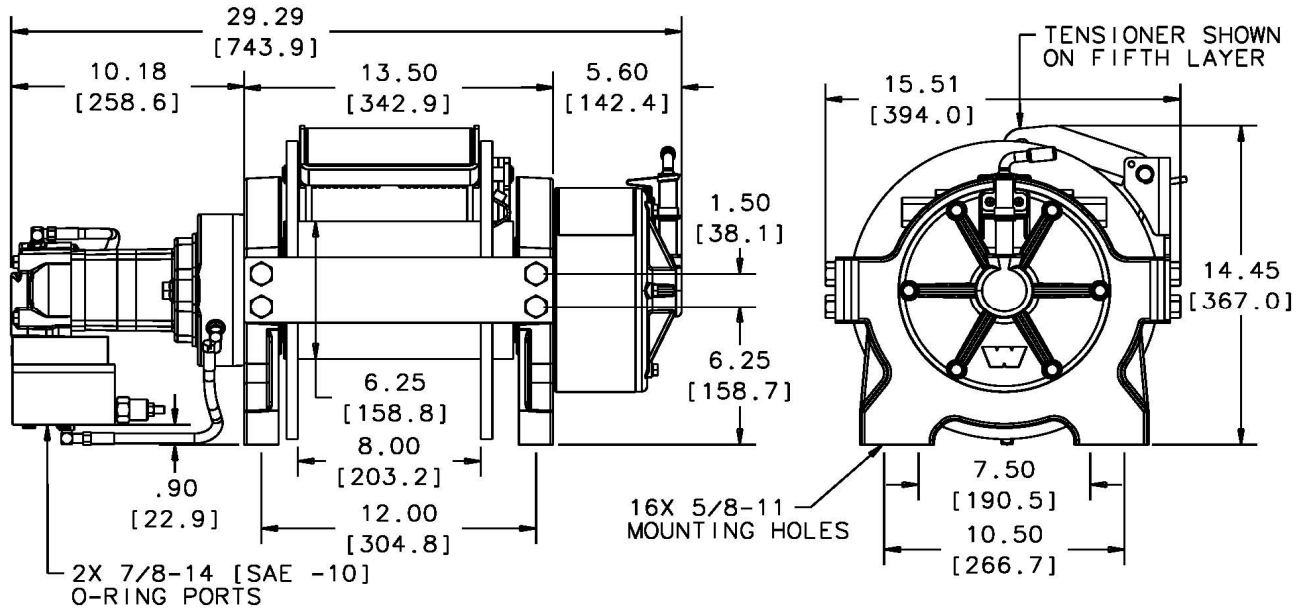
Customer Service (North America): 1.800.543.9276
Customer Service (International): 1.503.722.3008
FAX: 1.503.722.3000 www.warn.com

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



WARN Industrial Winch

| Model | Part Number | Motor Type |
|--|-------------|-------------------|
| Series 20XL-LP Hydraulic Winch Manual Clutch | 78980 | Hydraulic 11.9 ci |



Motor / Contactor may be rotated in 90 degree increments. Clutch housing may be rotated in 60 degree increments.

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

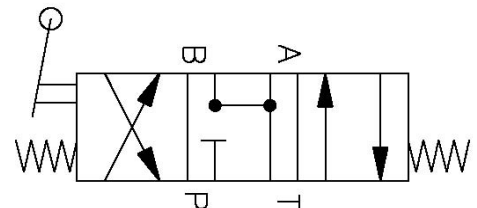
Recommended Mounting- Always Observe Correct Drum Rotation

Hydraulic System Specifications

| | | |
|---|--|---|
| Pull from bottom of winch Feet down | Pull from bottom of winch Feet forward | Pull from top of winch Feet forward |
| Pull from top of winch Feet down without angle brace | Pull from top of winch Feet down with angle brace | Pull from top of winch Angle Braces Only |

| | | |
|------------------------------|---|---------|
| Maximum System Pressure: | 3000 psi | 207 BAR |
| Maximum Motor Pressure Drop: | 3000 psi | 207 BAR |
| Maximum Rated Input Flow: | 20 GPM | 76 LPM |
| Control Valve Type: | 3-position, 4-way, open center, spring return (motor spool) | |

Control Valve Schematic



Notes:

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