Warrior Winch
Technical Information
HIGH LOAD, HIGH PERFORMANCE HYDRAULIC WINCHES

Warrior Winch
The ‘Warrior Winch System’ is the entry level twin speed system designed to meet the needs of the serious off-road events or situations the casual user may encounter. Its power and twin speed ability will remain constant throughout the winching process. The second high speed pulling gear gives an added dimension to your winching experience.

Product Overview
This winch is part of a group of winches that have undergone extensive military testing and are now fitted to various military vehicles. These winches are now available on the commercial market and as such offer someone a unique opportunity to own a versatile workhorse. The end user can now enjoy a professional highly engineered high performance twin speed winch. Unlike many other winches on the market it is extremely capable of pulling in both gears due to the double planetary gear system. Both gears have impressive pulling capacities now available within a small compact size.
Warrior Technical Drawings

Hydraulics
The winch is driven via a 160cc hydraulic motor supplied with 2 x ½" BSP ports ‘A’ & ‘B’. A solenoid valve can be supplied to control this winch. Various products can be supplied to control the solenoid valve remotely. From a dash mounted switch to a wireless remote, please ask for details.

Drive System
The winch drum is unpainted on the core to support the capstan effect performed on the drum by the rope tightening under load. During trials this has been shown to give a much better long lasting grip onto the drum. A minimum of eight (8) wraps of the drum must be seen on the first layer before winching under load.

Drum Capacity and Pulling Material
Maximum length of 30m (90ft) of 12mm diameter synthetic rope. All rope variants can be supplied, please ask for details. Wire rope can also be supplied, please ask for details. Roller Fairlead also available

Gearbox
Twin speed planetary gearing with two fully usable rated pulling gears. The ratio of the gears: Low Gear – 6:1, High Gear – 2.25:1. The high gear is used for recovering the line but can also be used as a high speed pulling gear. Some winches available have a second gear but is normally a 1:1 ratio and is not part of a robust gearbox system and has little use as a practical pulling gear. The Red Winch high speed gear is driven through a gearbox for power, reliability and durability.

Performance Data
High Speed Line Pull Selection
At 200 Bar Hydraulic Pressure at 20 L/min:
Assumed engine speed of 1000rpm

1st WRAP - 4500Kg
1st WRAP – LINE SPEED: 7m/min (21ft/min)
4th WRAP - 2500Kg
4th WRAP – LINE SPEED: 10m/min (30ft/min)

HIGH GEAR - 200 Bar Hydraulic Pressure at 20 L/min

1st WRAP - HIGH GEAR 2250Kg
1st WRAP – LINE SPEED: 16m/min (48ft/min)
4th WRAP - 1800Kg
4th WRAP – LINE SPEED: 24m/min (72ft/min)

Braked Data
The winch can have a braked unit fitted, adding even more control.

Please ask for details

www.red-winches.com