

# Winch Specifications

The winch shall meet the following specifications —

a **Motor**

The winch shall be fitted with a single starter motor, out of a series production, having an internal resistance of at least **23 milli-ohms**. The resistance may be attained by adding an external resistor, but the design must disable any change of the total resistance (for instance by overbridging the resistor). The resistance of any control device may not be included in the measurement. An ideal starter motor is the Bosch 900/693/013.

b **Drum**

The drum must have a fixed diameter, and the width between the flanges shall not be less than 75mm.

c **Battery**

The power source shall be a 12 volt lead/acid battery having a maximum cold-crank ampere capability of

- 300 Amp max according to DIN 43539-02 (30s/9V at -18 deg C)
- 355 Amp max according to IEC/CEI 95-1 (60s/8,4V at -18 dec C)
- 500 Amp max according to SAE J537, 30s test (30s/7,2V at 0 deg F)
- 495 Amp max according to EN 60095-1 (10s/7,5V at -18 deg C)

d The motor may not be cooled, and the battery may not be heated.

e With the exception of the single winch battery, line stretch, and the energy in the rotating motor and winch drum, no energy storage devices shall be allowed.

f The flywheel like properties of the winch drum shall not be exploited.

g The winch shall be fitted with an automatic device to prevent the line from being paid out during launch.