

Choosing the correct Runva Winch

There are a few factors to consider when choosing the correct winch for your application. The most important thing to check is the **Line Pull Capacity** or rating of the winch model you are looking at.

The Line Pull Capacity or rating on a winch is measured based on the pull capacity of the 1st layer of rope/steel cable on the drum. (This is the layer which feeds onto the drum first - this layer is the strongest). Most winches come with around 4 layers of rope/steel cable on the drum. The 4th layer or last layer of rope/steel cable on the drum is the weakest layer. (Some winches can have up to 5 layers, which would make that your weakest layer). If you buy a winch that is not big enough for the weight you are pulling with it the winch could potentially fail when you need it most.

So what size is big enough for my application? Below we will show you what to look for:

Example 1

You have a Ford Ranger 2016 4X4 model. For this example we say that the **Gross Vehicle Weight** is 2,100kg.

You are looking for a winch that has the line pull capacity of 2,100kg or more on the weakest layer. The 11XP is rated to 2,827kg on the weakest layer making this the perfect selection. You also need to consider other factors which will increase the weight of the pull like deep mud or sand so it is always a good idea to get a winch with a line pull capacity larger than the weight of the vehicle.

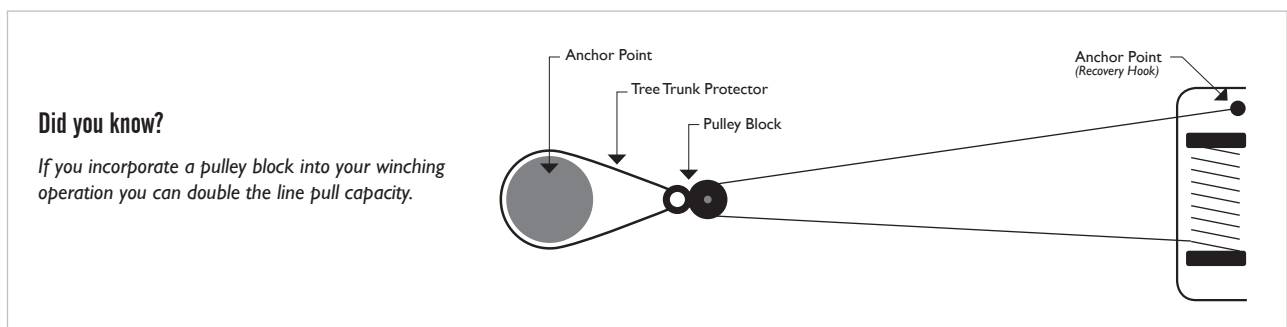
11XP LINE PULL CAPACITY SPECIFICATIONS		
Layer	Rated line pull lbs (kgs)	Total rope on the drum ft (m)
1	11000 (4990)	17.4 (5.3)
2	8766 (3976)	39.4 (12.0)
3	7286 (3305)	65 (19.8)
4	6233 (2827)	85.3 (26.0)

Example 2

You need a winch for your boat trailer. For this example we say that the **Gross Weight** of the boat is 600kg.

We need to look at a winch with a Line Pull Capacity of 600kg or more on the weakest layer. The Runva 3.5P Super Deluxe is rated to 786kg on layer 5, which would make this the ideal winch for our application.

3.5P LINE PULL CAPACITY SPECIFICATIONS		
Layer	Rated line pull lbs (kgs)	Total rope on the drum ft (m)
1	3500 (1588)	5.9 (1.8)
2	2789 (1265)	13.5 (4.1)
3	2319 (1052)	22 (6.7)
4	1984 (900)	31.2 (9.5)
5	1733 (786)	42 (12.8)



* **Curb Weight:** The curb weight of a vehicle is the weight of the car with all the standard equipment and accessories, but without any passengers, cargo or any other separately loaded items in it. This is generally the standard weight that the manufacturer assigns to the car.

* **Gross Vehicle Weight:** The gross vehicle weight is the combined weight of the vehicle and all passengers, additional accessories, cargo, and trailer weight. (If towing).

Our most popular model 4X4 Electric Series Winches are the 11XP and 11XP Premium (11,000lb) and is suitable for 80% of 4X4 vehicle applications.

The above examples are just some rough guidelines to help you understand how the different layers work and choosing a winch.

If you would like some advice on a suitable model for your application, please contact our friendly team directly: info@runvawinch.com.au