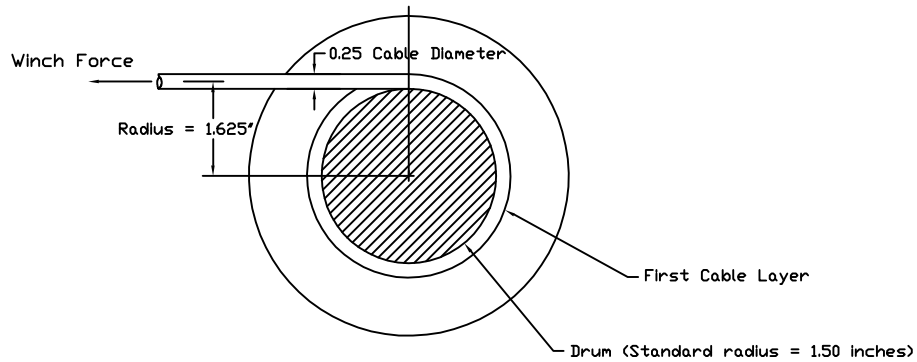


WHEN OPERATING ON THE FIRST CABLE LAYER:

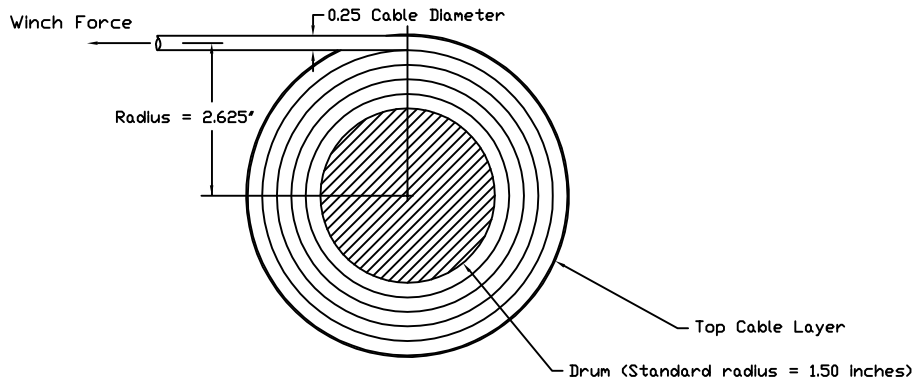


The winch torque capacity is 1950 in-lbs for the 1200 series gears.

$$\text{Torque} = \text{Winch Force} \times \text{Radius to cable centerline}$$

So for the above case, where the winch is operating on the first layer of cable and using $\frac{1}{4}$ inch cable, the available winch force = $1950/1.625 = 1200$ lbs.

WHEN OPERATING ON THE TOP CABLE LAYER:



The winch torque capacity is 1950 in-lbs for the 1200 series gears.

$$\text{Torque} = \text{Winch Force} \times \text{Radius to cable centerline}$$

So for the above case, where the winch is operating on the top layer of cable and using $\frac{1}{4}$ inch cable, the available winch force = $1950/2.625 = 742$ lbs (or approximately 700 lbs).