Selecting a Wire

Option 1 – Diameter & Resistance/m, see details below
Option 2 – Voltage, Length and Resistance or Current required

The higher the Gauge number, the smaller the diameter, the thinner the wire and the higher the resistance.
At Cynebar, we use B&S numbers in our descriptions there may be other numbers used in wire specifications, the most common are:
B&S – Brown and Sharpe.
AWG – American Wire Gauge.
SWG – Imperial Standard Wire Gauge – (British Legal Standard).

Because of less electrical resistance a thick wire will carry more current with less voltage drop than a thin wire. For a long distance it may be necessary to increase the wire diameter – reducing the gauge – to limit the voltage drop.

$Watts = V^2/R$
$V = I \times R$

V = Volts
R = Resistance
I = Current in Amps

You can purchase wire in 3 ways:

1. Wire Price per 20 meter Spool
2. Wire Price per kg, usually 1 to 4 kg at any one time per spool, for a specific weight there would be a cutting fee of $30 + GST.
3. Price per meter.