Cable sizing

4V over 12m with 13A

Enclosed over 4m ?

One Calculation method; AMTECH

Using BS 7671 standard

http://myelectrical.com/tools/cable-sizing-calculator

Result was 50-70mm2 uprated from 2.5mm2 due to Votatge drop , specified as 4%

Cable impedance = 6.88mOhms

Nota 50mm2 > 4mm dia.