

CABLE DESIGN LIFE

Prysmian Group cables will meet or exceed their design life when correctly selected and installed in accordance with appropriate regulations. The design life of Prysmian Group cables is in excess of 25 years.

This design life has been assessed on a maximum loading, which is the cable running at the maximum conductor temperature (70 or 90°C, depending on insulation grade) for 24 hours a day and 365 days a year.

If a cable is not fully loaded all of the time then it will be expected to exceed the design life of 25 years. As the loading on any cable is likely to be variable then the cable life will similarly be variable. For example if the cable was only loaded for 8 hours in a day then the life expectancy could be in excess of 40 years. Conversely if the cable operates at 15°C higher than its stated maximum operating temperature then its life expectancy could be less than 5 years.

Unfortunately there is no definitive or simple calculation method that can be used to determine the actual life of a fixed wiring cable. Many factors are involved including:

- Presence of other circuits or heat sources and whether the cable has been derated appropriately.
- Mechanical damage.
- Presence of water.
- Chemical contamination.
- Solar or infra-red radiation.
- Number of overloads.
- Number of short circuits.
- Effects of harmonics.
- Temperature at terminations.
- Temperature of the cable.
- Installed internally or externally.
- Service life load.

Please note that any warranty that applies will be as per the agreed terms and conditions of sale between the cable purchaser and Prysmian.