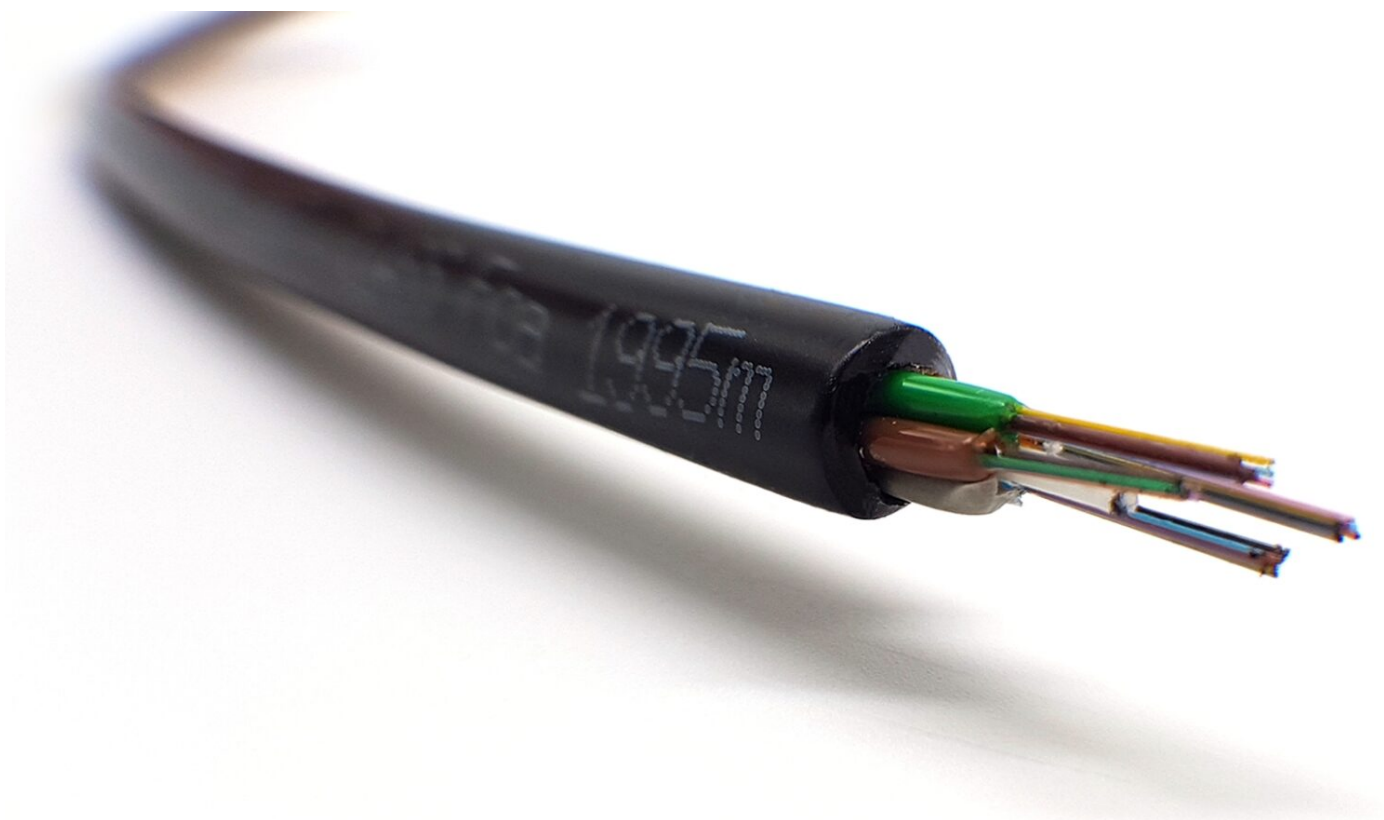


# GUIDE TO SELECT THE RIGHT FIBER CABLE

*Posted on 13-09-2021 by Rute Araújo*



Category: [Fiber Optic](#)

## Do I need Multimode or Monomode?

Multimode fiber is suited to use in local area network (LAN) for short transmission distances. In this kind of fiber light rays are carried simultaneously through the waveguide. The bit rate can reach 10 Gbit/s for a transmission distance of 550 meters in OM4 fiber, for example.

Single-mode fiber is suited to use in wide area network (WAN) and metropolitan area network (MAN) for longer transmission distances. In this kind of fiber a single ray of light travels through the waveguide. The bit rate can exceed 10 Gbit/s.

## What's the number of fiber that I need?

Check previously the number of fibers that you need, it's always the best practice if you leave some fibers for backup.

**What's the maximum diameter of cable?**

This factor is important when you are running the cable in the installation. You should check it in the product datasheet.

**Do I need flexibility and/or make direct connections?**

In this case, the Tight Buffer is recommended.

**The environment is harsh or less demanding?**

If you face a harsh environment, you should consider Loose Tube Cables.

**It's for Indoor, Outdoor or both?**

If you are making one installation that cable leave the building and run a short distance in the outdoor you should choose LSZH cable, Indoor/Outdoor

**Do I need an higher Tensile Strength?**

Be aware of this topic and always check this information in [datasheets](#).

**Do I need a cable free of metal or it can have metal?**

This topic is important because metal conducts electricity, although it is better to prevent rodents.

Check our [fiber optic cables](#) for you to select.