

How to lay out a reel of optical cable

Article Overview

Proper deployment of an optical cable reel requires careful handling, controlled unspooling, and using a figure-8 pattern to prevent twisting, kinking, and mechanical damage.

Preparing the Reel

- **Inspect the Reel and Cable:** Before deployment, check the reel and cable for any visible damage. Ensure flange bolts are tight and the reel structure is intact to prevent uneven payout or cable squirting during installation .
- **Position the Reel Correctly:** Place the reel on a stable, upright surface using a cable reel stand or jack. Never lay the reel on its side or pull the cable over the flange, as this introduces twists and torsional stress that can damage the fibers .
- **Secure the Reel:** If using a mechanical reel, bolt it to a solid surface or trailer to prevent movement during payout. Ensure the reel can rotate freely along its axis .

Unspooling the Cable

- **Follow the Roll Direction:** Look for arrows on the reel flange indicating the correct unspooling direction. Pulling against this direction can cause kinks and uneven tension .
- **Maintain Controlled Tension:** Use a capstan or puller with calibrated tension. For outside plant cables, limit tension to manufacturer specifications (e.g., 600 lbs for standard cables) to avoid stretching or damaging the fiber .
- **Use a Figure-8 Pattern for Long Pulls:** Lay the cable on the ground in a figure-8 configuration to prevent twisting. Each loop should be slightly offset from the previous one, with a typical loop size of 2-4 meters depending on cable stiffness

Article Content

Nov 25, 2025

Fiber Optic Cable Reel User Manual

About the Reel The FCR-1000 series cable reels are designed to fit Princetel's standard FORJs and slip rings. The rotary joints are

Sep 03, 2025

Cable Placing Checklist and Handling: Squirting, Tangling ...

This Applications Engineering Note (AE Note) addresses common issues regarding cable pay-off during outside plant installations

Aug 29, 2025

Fiber Optic Cable Reels

Our fiber optic cable reels are the best in the industry. They're made out of an impact modified polymer.

Jun 29, 2026

A Guide to Fiber Optic Network Planning and Design

Strategies for decreasing CapEx in optical network design and planning
Comprehensive tools and fiber optic

Dec 16, 2025

Understand proper Cable Spooling and Unspooling

Let's dive into the best practices for handling fiber optic cable spools! Getting this right from the start prevents a world of headaches,

May 10, 2026

GENERAL FIBRE OPTIC CABLE INSTALLATION INSTRUCTIONS

In the first place, the cable reel should be mounted on a reel carrier off a cable trailer or aerial line truck. Next, the reel carrier should

Oct 03, 2025

GENERAL INFORMATION

Fiber optic cable can be installed in conduits either by pulling the cable by hand or by using a capstan. When using a capstan to pull

Apr 14, 2026

OPGW Fiber Optic Cable Installation Guide

This document provides installation procedures for OPGW fiber optic cables. It describes preparing the site by

Dec 07, 2025

Optical Fiber Cable

All Fiber Optic Cable reels should be stored upright Laying the reel on its side may cause damage to the reel flange and/or cause the

Apr 23, 2026

OPTICAL FIBRE CABLES INSTALLATION GUIDE

The objective of this document is to be an optical fibre cable installation and laying guide, addressed to new installers, also being

Jul 20, 2026

Handbook Optical fibres, cables and systems

The simultaneous availability of compact sources and of low-loss optical fibres led to a worldwide effort for developing optical fibre

Feb 04, 2026

OPGW Installation Manual

The bending radius of optical cable during laying process should be effectively guaranteed to avoid "gold hooks" and avoid too much

Feb 23, 2026

The FOA Reference For Fiber Optics

Most FTTH networks are based on a PON network. The drawing below defines the network: a "feeder" cable extends from the OLT

Sep 09, 2025

Installation of Optical Fiber Cable by Blowing/Jetting

Standard optical fiber cables (like uni-tube, multi-tube, unarmored & armored), microduct cables, and micro-ducts can be installed by

Jun 02, 2026

CableTransportationAndHandling Issue2 Aug 2023

Stop deployment when necessary and cut the cable "tail" when excessive length of the cable has been squirted out. If

Mar 04, 2026

Fiber Optical Cable Installation and Construction

The optical cable crossing the river is left on the adjacent pole of the first pole on the

Dec 23, 2025

The FOA Reference For Fiber Optics-Installing Fiber

Roll the cable off the spool instead of spinning it off the spool end to prevent putting a twist in the cable for

May 19, 2026

Fiber Optic Cable Reels – Fiber Savvy

Fiber Cable Reels Fiber Savvy supplies only the best Fiber Optic Cable Reels available on the market.

Jan 08, 2026

Procedure for Cutting and Respooling Fiber Optic Cable

Select a take-up reel with sufficient drum size to maintain cable minimum bend radius. The drum diameter should be a minimum of 8

Apr 23, 2026

Cable Reels: Principles and Applications | IQS Directory

Cable reels are used for on-site installations, vehicle winching, fiber optic cable transport, storage of wires, monofilaments, threads,

Oct 05, 2025

Fiber Optic Cable Reel User Manual

Connect the cable to be wound on the reel to the connectors or pigtail in the drum exit port as required. Align the fibers/wires with the

Aug 13, 2025

Underground Cable Installation

The cable must be laid out in a large figure-eight configuration close to the manhole opening. Keep the cable as clean of debris as

Aug 04, 2025

Modular Advanced Reel System (MARS®) Reel

The MARS reel, itself, incorporates options for fiber optic cleaning kits, flip-out handle, 30-ft. built-in divider,

May 02, 2026

Underground Fiber Optic Cable Installation: Comprehensive Guide

Explore the process and benefits of underground fiber optic cable installation. Learn how this infrastructure

Mar 04, 2026

Fiber Optic Installation Requirements: Complete Guide

Learn the different fiber optic cable installation requirements with our expert guide to ensure optimal performance and

Dec 29, 2025

FOA Standard For Installing Fiber Optic Cable Plants

Fiber optic cables may contain multimode optical fibers, singlemode fibers or a combination of the two, in which case it is generally

Dec 19, 2025

CableTransportationAndHandling Issue2 Aug 2023

Minimize the distance a cable reel is rolled, use a forklift or cable trailer for longer distances. Rolling the reels for

Sep 12, 2025

Fiber Optic Cable Installation: How To Properly Install It

A comprehensive guide to fiber optic installation - everything you need to know about fiber

Nov 19, 2025

The FOA Reference For Fiber Optics -Outside Plant Construction ...

The following items are key considerations in preparation for installing the fiber optic cable when the construction is ready for cable

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.iiss.co.za>

Email: sales@iiss.co.za

Phone: +27 63 174 2895

Address: Unit 8, Innovation Park, 15 Rivonia Road, Sandton, Johannesburg,
2196, South Africa

This document is for informational purposes only. Specifications subject to
change without notice.

