

Article Overview

An optical cable reel outer sealing plate protects fiber optic cables from moisture, dust, and mechanical damage during storage and installation.

Function and Purpose

The outer sealing plate on an optical cable reel serves as a protective barrier for the cable ends and the reel itself. It prevents moisture intrusion, dust, and contaminants from entering the cable, which is critical for maintaining signal integrity and preventing damage to the delicate optical fibers during storage, transport, or installation . Sealing plates also help maintain the cable's bend radius and prevent twisting or tangling when the cable is being unrolled .

Design and Materials

Sealing plates are typically made from durable plastics or composite materials that can withstand environmental stress and mechanical handling. They may include features such as:

- o Grommet or port seals: These allow the cable to pass through while maintaining a tight seal around the cable diameter .
- o Multi-layer or peel-and-seal systems: These can accommodate a range of cable diameters and provide multiple layers of protection without requiring additional tapes or adhesives .
- o Cold-applied oval or circular port seals: Used in closures where cables enter or exit the reel, providing strain relief and preventing movement of sealing material .

Installation and Handling Considerations

When using a sealing plate on a cable reel:

- o Keep the protective material in place until installation to prevent damage .
- o Avoid sharp bends, twists, or pulling over edges to maintain cable integrity .
- o Ensure the reel is stored upright and on solid ground to prevent flange deformation .
- o Use grommet systems that allow for easy addition or removal of cables without compromising the seal .

Benefits

- o Environmental protection: Shields cables from moisture, dust, and contaminants.
- o Mechanical protection: Reduces risk of kinks, twists, or crushing during handling.
- o Flexibility: Multi-layer or adjustable grommets accommodate different cable sizes and pre-terminated cables

Optical Cable Reel Sealing Plate

- o Ease of installation: Reduces the need for additional sealing materials or modifications on-site.

In summary, the optical cable reel outer sealing plate is a critical component for ensuring the longevity and performance of fiber optic cables, providing both environmental and mechanical protection while facilitating safe handling and installation.

3~FLANGE Reels are the clear cut choice for applications where testing continuity is critical, such as fiber

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

Product Tags PCR Plate Optical Adhesive Sealing Film Description : Adhesive Sealing Films for all thermal

OCC's Modular Advanced Reel System (MARS ®), the industry's first lightweight cable deployment reel

Check the inside of the reel flanges for objects that could damage the cable as it pays off. Changes in temperature and humidity can

Validated for real-time PCR on iCycler iQ and other systems, and melt-curve analysis on the LightScanner

During real-time PCR, there is no risk of sample mixture evaporating due to strong adhesion. The sealing film is distinguishable on

Choose Microseal "B" Adhesive Sealing Films for all thermal cycling, including real-time PCR and next generation sequencing (NGS)

The OCC MARS ® reel can be used with simple deployable axials ("broom sticks") or with integrated A

Use the Optical Film Sealing Kit for sealing 96-well plates when using the DNA Engine Opticon 2 and Chromo4 Real-Time PCR

BOENMED manufactures Sealing Film. Optical Adhesive Sealing Film is designed to reduce well-to-well contamination and sample

For real-time PCR, DNA and RNA extraction, and other sensitive optical assays, our Optical Adhesive Sealing Films are best in



Optical Cable Reel Sealing Plate

To accompany all OCC fiber optic enclosures, Optical Cable Corporation developed snap-in fiber adapter plates that are versatile

Microplate sealing films and tape protect well contents from leakage, contamination, and evaporation during assay processing,

Use Microseal C Optical Adhesive Sealing Films for all thermal cycling, including real-time PCR, including plates with raised rims.

This reel keeps optical fibers safe. The 250° buffer protects each strand. It prevents kinks exceeding the 30mm minimum bend

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