

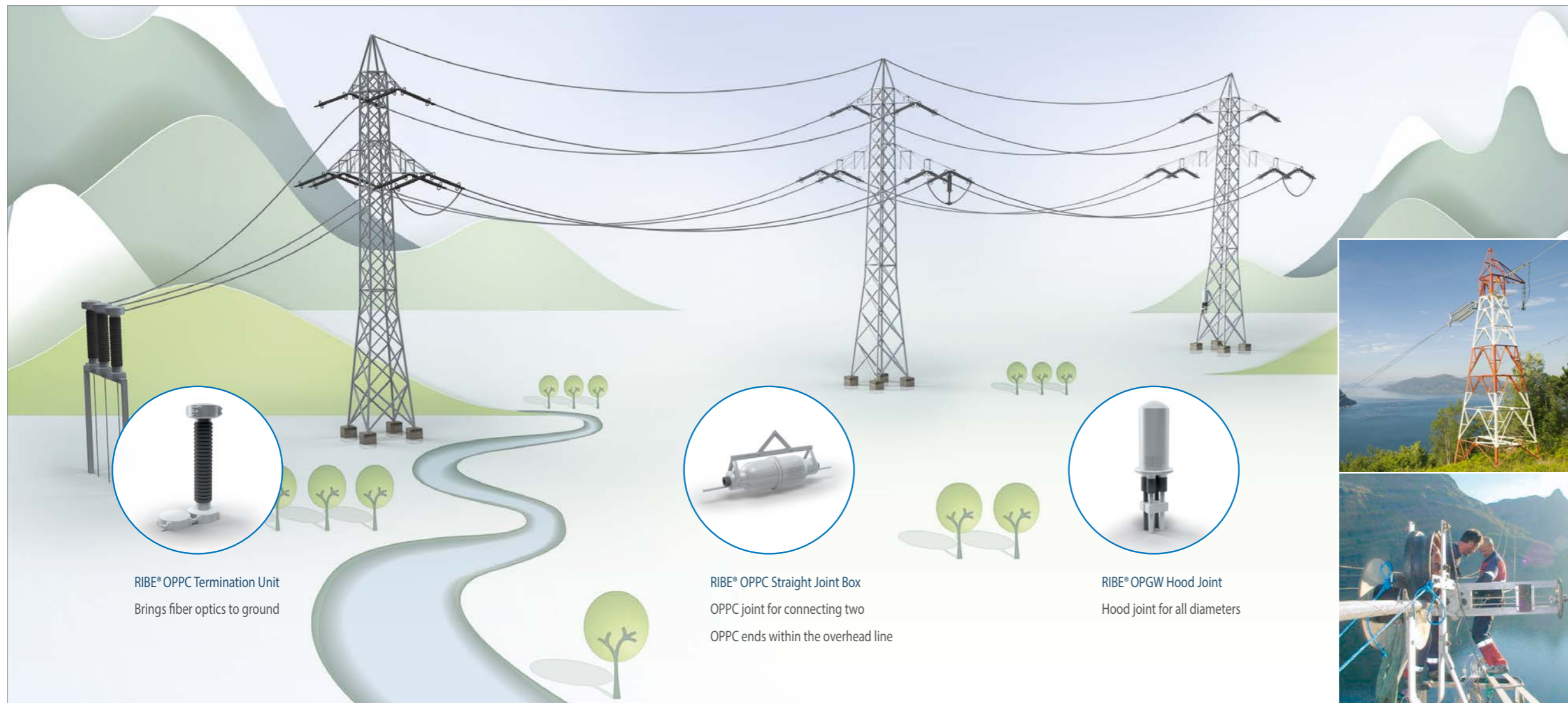


RIBE® Electrical Fittings – OPTOFIT® OPGW/OPPC Accessories

OVERHEAD

CABLE CONNECTIONS

RIBE[®]
ELECTRICAL FITTINGS



- ◀ RIBE® OPGW/OPPC Applications
- Integration of OPGW and OPPC cables into new overhead lines
 - Replacement of overhead ground wires with OPGW cables
 - Replacement of phase conductors with OPPC cables

- ◀ Reference projects (excerpt):
- Fjord crossing in Norway
 - Sunnalsfjord: 3 line sections, max. 3,670 m line section length (436 kN RTS)

RIBE® OPPC Termination Unit
Brings fiber optics to ground

RIBE® OPPC Straight Joint Box
OPPC joint for connecting two
OPPC ends within the overhead line

RIBE® OPGW Hood Joint
Hood joint for all diameters

RIBE® Electrical Fittings – OPTOFIT® OPGW/OPPC Accessories

DEVELOPED FOR MAXIMUM RESISTANCE FOR YOUR CONNECTIONS

Fiber optic (FO) overhead cables are used in a growing number of overhead line applications for the transmission of information. Depending on design, OPGW (optical ground wire) or OPPC (optical phase conductor) cables are the most commonly used types.

Our RIBE-OPTOFIT® accessories offer the ideal solution for connecting fiber optic overhead cables and terminating the optical signal, and perfectly complement proven RIBE-OPTOFIT® fittings.

OVER 35 YEARS OF EXPERIENCE

RIBE-OPTOFIT® fittings and accessories are specifically designed for the special requirements of fiber optic overhead cables. We have been developing fittings for fiber optic overhead cables ever since they first appeared in the late 1970s.

SECURE CONNECTIONS

Optical connections of fiber optic cables require special solutions since data transmission in such cables takes place via modulated light pulses. Light pulses are transmitted inside the cables via optical fibers with a total diameter of about 300 microns. Straight joint boxes and termination units at the end points of the cable must ensure perfect transfer of the optical signal to guarantee that the line is stable and secure.

Our RIBE-OPTOFIT® range offers complete solutions for mounting and connecting fiber optic cables – all from a single source.

MAXIMUM SECURITY FOR YOUR FIBER OPTIC CONNECTIONS

Our fiber optic joints are designed for maximum resistance to all external influences. RIBE® fiber optic joint boxes perfectly protect optical fibers from water and humidity by providing an extremely high tightness class: IP 67. Aluminum cast housings provide maximum mechanical protection in such applications, where protecting sensitive fiber optic connections is an absolute necessity.

› OPGW HOOD JOINTS

The universal hood joint 180 offers great flexibility for connecting OPGW cables since it covers all diameters from 9 mm to 28.6 mm with a single product. The hood joint installation set includes all of the parts and adapters needed to install all types of OPGW cables. This ensures fast, effective and cost-efficient on-site installation. Together with the optimized housing and connectors with variable inlet diameters, fewer single parts are needed for installation making the joint a flexible all-rounder.

All of our hood joints feature excellent properties such as high density and extremely high mechanical resistance – for connections that meet your demands.



Type	Universal Hood Joint Type 180	Hood Joint Type 250	Hood Joint Type 290
Max. number of cable entries	4	4	6
Max. number of splices			
- with crimp splice protection	48	144	576
- with shrink tube protection	48	96	384
Protection class (IP code)	IP 67	IP 67	IP 67
Fiber management	-	-	FIST Mark II

FIST IS A TRADEMARK OF TYCO ELECTRONICS

› UNIVERSAL HOOD JOINT TYPE 180

Our hood joint for all diameters:

- Needed to connect two OPGW ends
- Quick and easy installation
- Low installation costs
- Reduced number of single components
- Easy to order
- No risk of missing components

› OPPC TERMINATION UNITS

When using OPPCs, the optical fibers are integrated in the phase conductor and must therefore be separated from the electrical field with special OPPC termination units at both ends of the line.

RIBE® termination units come in different versions and cover a voltage range up to 420 kV, making them suitable for nearly all cable types.



Maximum voltage U_m [kV]	36	72,5	145	245	420
Minimum creepage distance [mm]	1154	2407	5038	7693	12118
Arcing distance [mm]	395	730	1426	2146	3370
Pollution Severity Level	IV	IV	IV	IV	IV
Max. number of splices					
- with crimp splice protection	96	96	96	96	96
- with shrink tube protection	64	64	64	64	64

› OPPC STRAIGHT JOINT BOX

OPPC straight joint boxes are necessary to connect two OPPC ends.



› OPGW/OPPC TUBE CUTTER

Tool to securely cut the stainless steel tube.





RIBE® Electrical Fittings – OPTOFIT® OPGW/OPPC Accessories

HIGHEST QUALITY AND FIRST-CLASS SERVICE FROM A SINGLE SOURCE

Perfect solutions are the driving force behind all that we do. So you can rest assured that RIBE-OPTOFIT® products easily meet your high demands. Like all solutions from RIBE®, they are of the highest quality and designed for long service life. RIBE® offers the perfect combination of development, production, sales and sound market knowledge to guarantee many years of service and secure the ROI of your transmission lines.

OVER 100 YEARS OF DEVELOPMENT AND EXPERIENCE

Our service commitment starts with advising our customers and extends all the way to installation training seminars for your technicians. Our calculations, our experience and the development of custom fittings provide the basis for creating the best solutions for your requirements.

Since the founding of our company over 100 years ago, it has been a part of our philosophy to not only develop and optimize new fittings in our own test laboratories and facilities but also to solve technical problems with our expertise. We have an indoor vibration test bed with three test line sections (2 x 40 m, 1 x 30 m) where a competent team of engineers performs vibration tests according to international standards and customer specifications. Our laboratory facilities are equipped with state-of-the-art measurement technology to flexibly ensure that the customer-specific properties are met. This has enabled us to implement numerous projects worldwide in recent years with the RIBE-OPTOFIT® range of products.

Worldwide references (excerpt)

Bosporus:	1.757 m line section length (393 kN RTS)
Lake Maracaibo:	2 x 15 x 1.500 m line section length (234 kN RTS)
Suez Canal:	700 m line section length (205 kN RTS)

Training

We train your technicians how to install our OPGW and OPPC fittings and accessories – for stable connections.

COMPETENCE CONNECTS



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