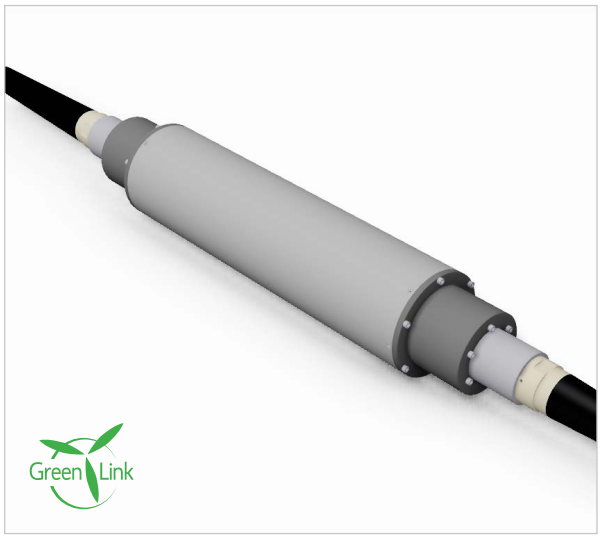
GreenLink Inline Splice

Fast and flexible grid connectivity solution



The GreenLink inline splice has been designed to facilitate offshore termination jobs where a connector solution is not required. The inline splice kit accommodates a need for a rugged, simple and reliable splice kit applicable offshore for cable repair and jointing.

The splice kit forms part of the GreenLink connectivity solutions used to connect dynamic cables from offshore renewable wind, tidal and wave energy converters to static export cables or for medium-voltage cable extensions. Moreover, they can be used as part of the system to interconnect subsea units or to substitute a connector solution.

The cables being high-tension electricity cables, the jointing is mechanical and can be carried out on site in case of an emergency repair, in the event of a cable damage or where a cable extension is required.

It also provides mechanical stress transfer between the cables and offers extra protection with bend stiffeners or bend limiters (optional). Moreover, GreenLink inline splices come with external O-ring test ports on their housing. These can be used for testing the O-ring seal on the fully assembled termination prior to system deployment.

GreenLink inline splice kits are adapted to suit the requirement of each project and combine the benefits of custom engineering, trusted technology and industry standard electrical components. Finally, GreenLink inline splices can also be used in semi-flooded or dry applications, if required.

Highlighted specifications

- Standard working voltage: up to 66 kV
- Conductor range: 35-630 mm^2
- Working depth: 100 m
  (other working depths available upon request)
- Housing material: Stainless steel AISI 316L
  (other materials available upon request)
- Design life: 25 years (with 5 year maintenance periods)
- O-ring test ports on termination housing
- Supplied with bend stiffeners as standard

Applications

- Connecting dynamic cables to export cables or as part of a cable extension
- Connecting cables from wind, tidal and wave energy converter units to land cables or interconnecting cables
- Interconnecting marine renewable energy converter units and applications

Options

- Connection of auxiliary conductors
- Fibre optic connectivity
- The termination can be dry or nitrogen filled
- Field installation and offshore support
- Purpose designed installation skid
- Bend restrictors
- GreenLink inline terminations

Mechanical specifications

Standard termination pipe size:	12”, 14”, 16” or 28” (other pipe sizes available upon request)
Working depth:	100 m (other working depths available upon request)
Housing material:	AISI 316L (other materials available upon request)
Design life:	25 years (with 5 year maintenance intervals)
Zinc anode design life:	5 years (with 2.5 year inspection intervals)
Straight line pull SWL:	Matches cable specifications and working depth (verified case by case)
Pull out/lift SWL:	Matches cable specifications and working depth (verified case by case)
O-ring test ports:	All flange connectivity interfaces are fitted with test ports for pressure testing prior to system deployment
Third party qualification/approval:	Available on request - to be verified case by case
Field installation and offshore support:	Performed by experienced and fully certified MacArtney technicians

Electrical specifications

MacArtney GreenLink inline splices are available in three different standard set-ups:

Size 1 (12” pipe size)
Size 2 (14“ pipe size)
Size 3 (16” pipe size) (other sizes on request)

Beyond the overall physical size of the inline splice, the sizes also reflect the voltage rating and current capacity of the systems.

Voltage rating

Rated voltage: 1-66 kV
Higher voltage rating on request

Current rating

According to cable specifications

Short-circuit levels

According to cable specifications

Cable cross sections

According to cable specifications

Operational environment

GreenLink inline terminations are suited for deployment in seawater.

Temperature range: To be verified case by case

Standards

Please note: As there are no specific EN or IEC standards applicable for this product, testing will be according to customer specification.

Testing procedures are arranged upon order of hardware.