

# PROTOLON(SC) Reeling cables for Shore- Connection systems

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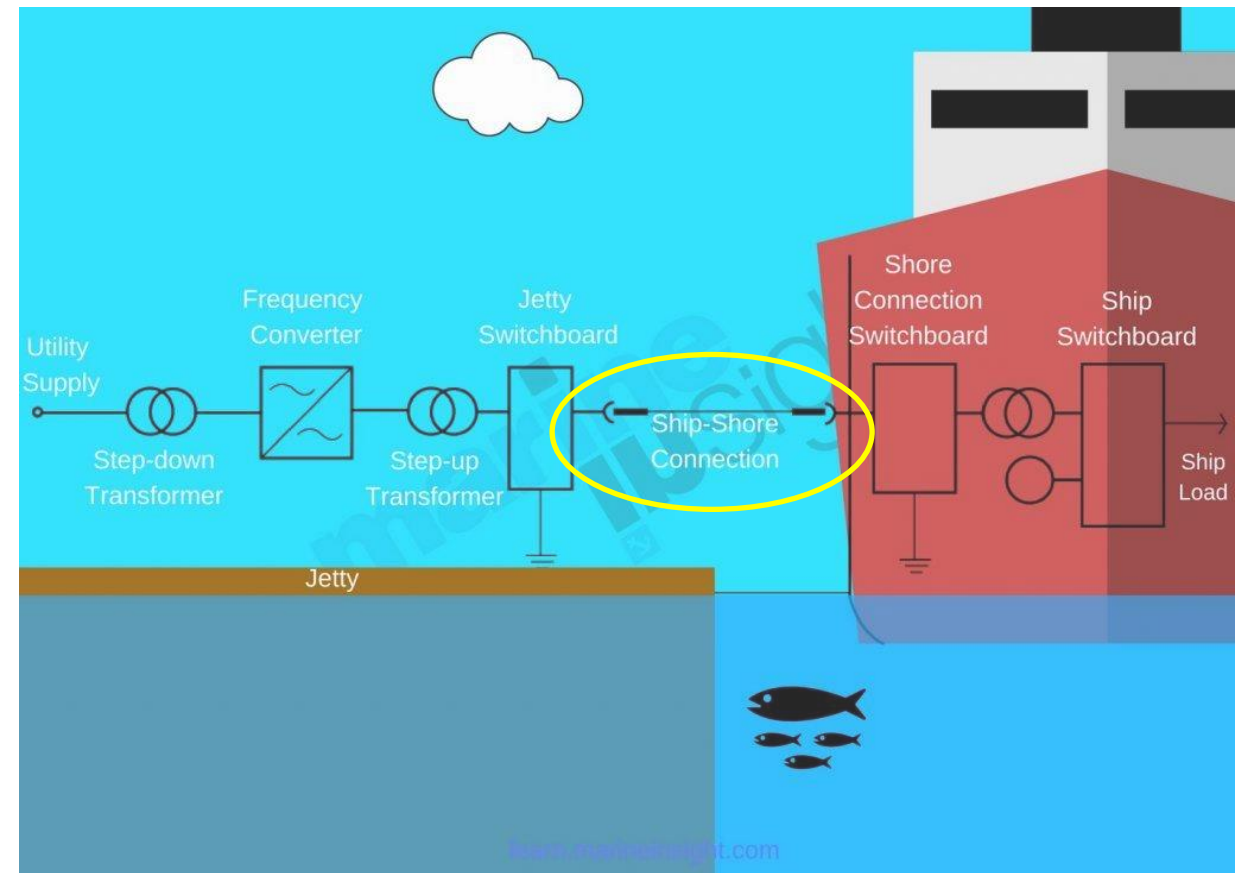
**Prysmian**  
Group

Linking  
the Future

# What is Shore-Connection

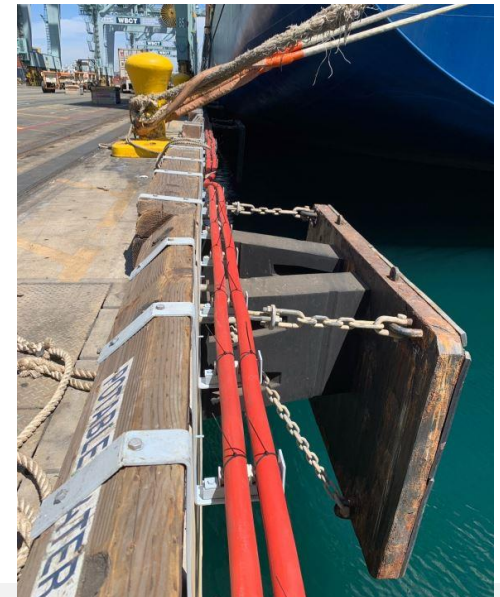
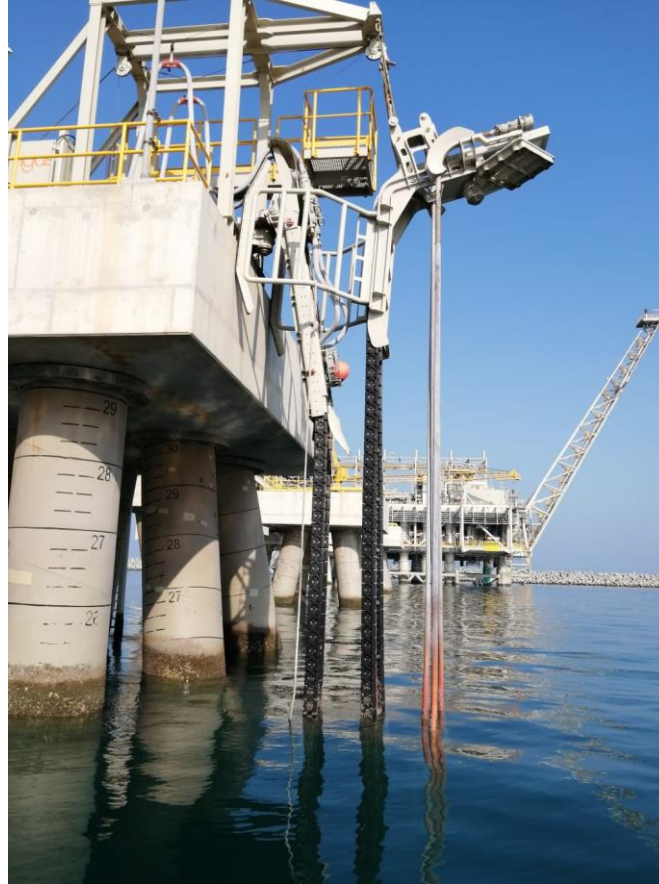
Many different names for the same technology:

- High-Voltage Shore Connection (HVSC)
- Alternative Maritime Power (AMP)
- Cold ironing
- Shore to ship power
- ...

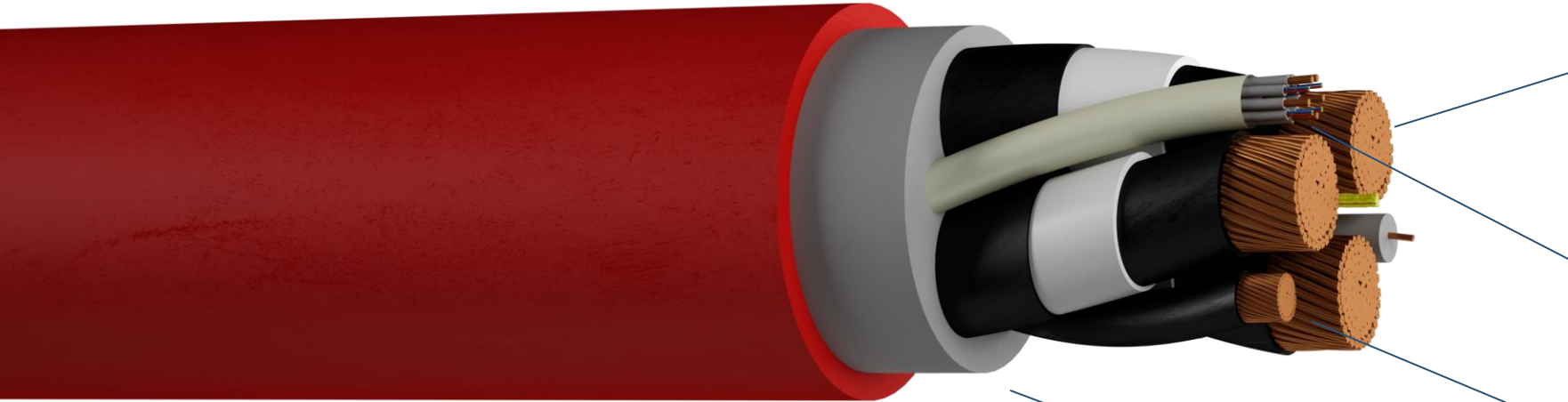


Is a **cable connection** used to plug-in ships to the main grid while berthing, shutting the engine of the ship => hence **reducing carbon emissions, fuel consumption and noise**

# Different technologies – just one cable type



# PROTOLON(SC) – Medium Voltage 6/10 kV – 12/20 kV



**Power cores**, flexible bare CU class 5 with EPR rubber insulation and semi-conductive layers

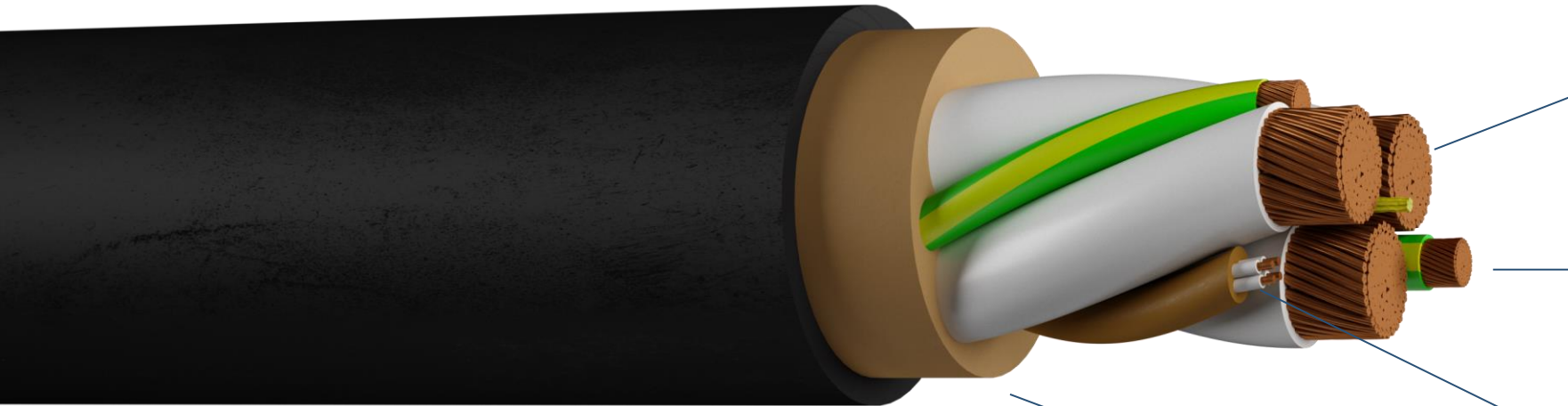
Composite element with **Optical fibers + control cores**

**Ground core**, flexible bare CU class 5 with semi-conductive layer

Inner sheath of water-resistant EPR rubber

Outer sheath of water- and abrasion-resistant CPE rubber

# PROTOLON(SC) – Low Voltage 0,6/1 kV



**Power cores**, flexible bare CU class 5 with EPR rubber insulation

**Ground cores**, flexible bare CU class 5 with green/yellow insulation

**Control cores**, flexible bare CU class 5 with EPR insulation

Inner sheath of water-resistant EPR rubber

Outer sheath of water- and abrasion-resistant CPE rubber

# PROTOLON(SC) - reeling cables for Shore-Connection



Main features:

- Compliant to international standard **IEC/ISO/IEEE 80005** and **Bureau-Veritas certified**
- **Suitable for all vessels' types** (container ships, cruise vessels, RoRo and RoPax vessels, LNG, etc.)
- Designed for **reeling application** and also suitable on **semi-fixed systems**
- Flexible and mechanically robust for **high reliability**
- Resistant to **UV, ozone and moisture**
- The only cable on the market fit for **permanent immersion in water**
- Delivered with **pre-mounted plugs or terminations on request**

# PROTOLON(SC) - Shut off and just float!

PROTOLON(SC) is the perfect choice for MV and LV connection systems to supply the ship with electrical power.

As PROTOLON(SC) is feeding the vessels with electricity and digital data, the diesel engines can be turned off to save on fuel and pollution.

The cable is compliant to IEEE 80005 (BV certified) and suitable for permanent immersion in water.

