

Towing Attachments

Protecting seismic survey cables

Seismic towed arrays undergo significant loading during operation. The towing forces from the vessel combine with drag from the sea and lateral loads from diverter and cross chains. These complex loads need to be correctly controlled to ensure that the seismic array operates correctly.

Trelleborg Offshore designs and manufactures specialist towing attachments. Using our expertise in understanding the difficulties associated with working in demanding conditions, our towing attachments help protect the seismic survey cables from over bending and to increase the local stiffness of cables at the attachment point.

Our product line of towing attachments includes Lead-in Bend Assemblies, Umbilical Tow Point Protectors and Connector Mounted Assemblies.

Lead-in Bend Assembly

The Lead-in Bend Assembly or Umbilical Tow Point Protector is used as an attachment point on seismic survey cables for towing applications. The assembly protects the cable from over bending by increasing the local



Lead-In Bend Assembly



Umbilical Tow Point Protector

stiffness of the cable at the attachment point. A Lead-in Bend Assembly allows for assembly over a pre-terminated cable and is generally used on seismic survey lead-in cables to attachment towing chains, paravane type diverters or flotation.

Advantages of a Lead-in Bend Assembly include:

- Oversized bore bend stiffener with color coded packers to suite numerous cable sizes
- Allows for assembly over pre-terminated cable
- High grip capacity on the lead-in cable
- Ideal attachments for diverter and tether head

Umbilical Tow Point Protector

The Umbilical Tow Point Protector is specifically designed to aid attachment of a tow point to the gun umbilical. Advantages of the Umbilical Tow Point Protector include:

- Helical rods to ensure integrity of the gun umbilical
- Helical rods and olive arrangement ensure that the tow point has significant grip capacity

Connector Mounted Assembly

The Connector Mounted Assembly is designed for mounting onto the Lead-in or Streamer Connector and meets the different protection requirements. Advantages of the Connector Mounted Assembly include:

- Principle application as per lead-in assembly
- Internal clamp profile to suite termination
- Full cable strength attachment point

Information needed to specify towing attachments:

Cable Properties:

- Cable diameter and tolerances
- Minimum bend radius in Static (storage) and Dynamic (deployed) configurations
- Cable bend stiffness
- Drawing of cable cross section if available
- Cable outer jacket material

Duty:

- Maximum axial load
- Deployment scenario with full schematic drawing
- Number and type of attachment points
- Will system be spooled or not

Geometric Constraints:

- Size restrictions



Helical Rod System

Contact Us

Trelleborg Offshore delivers innovative and reliable offshore solutions that maximize business performance to meet your needs. Our dedicated and highly skilled staff are always on hand to provide seamless process support from initial idea, through to delivery and beyond.

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