

Lankhorst Boltless Bend Restrictor



- **Unique boltless interlocking system**
- **Ultra fast offshore installation**
- **Tested & qualified for high loads**
- **Easy to remove with ROV**
- **Standard sizes**

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Lankhorst Boltless Bend Restrictors



Each cable, umbilical or flexible has a minimum bending radius, below which the cable can be severely damaged and become unusable for operation. If no prevention is taken, overbending will usually happen. In subsea applications this is usually either at the platform or at the seabed.

A bend restrictor assembly is a device which is mounted around the cable and attached to the structure so that bending of the cable will be prevented beyond the designed locking radius of the bend restrictor, thus preventing the cable from overbending.



The Lankhorst Boltless Bend Restrictor does not require bolting along the string, because of its unique interlocking system. It therefore can be easily installed much faster than any other bend restrictor, saving a lot of offshore installation time. Thanks to the innovative design it can be quickly removed using an ROV if necessary.

All Lankhorst Bend Restrictors are proven in the field on many subsea applications and are manufactured from the most suitable heavy duty, tough and damage resistant materials. Every part is interchangeable, keeping installation a simple process.

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References

Lankhorst Bend Restrictors have been delivered to many projects worldwide to protect cables, umbilicals and flexibles from overbending. Examples of recent projects of our Lankhorst Boltless Bend Restrictors are:

- Aasta Hansteen
- Ichthys



Lankhorst Mouldings Offshore

Lankhorst Mouldings Offshore has a proven track record in providing the offshore industry with innovative polymer based technical solutions that stand the test of time. Lankhorst Mouldings has for over 30 years been designing and manufacturing products using their unique thick-walled plastic moulding technology. We can supply high-performance innovatively

engineered products to meet the demands of the offshore industry. Lankhorst Mouldings products utilize field proven technology and experience to provide superior technical solutions. The company's technical solutions are designed not only to meet the customers' requirements, but are also foreseen to be used again and again.



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Design Features

Lankhorst Bend Restrictors can be made for any cable OD, any required locking radius, and any maximum bending moment. We have several design options for interfacing with the fixed structure, such as male or female reaction collars to allow a restrictor string to be attached to an end fitting, or tether clamps to allow the string to be fixed to the cable in case attachment is required away from the end fitting termination.

The unique interlocking design means that no bolting is needed, except for the end piece.

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Testing

Lankhorst has in-house testing equipment, which can be used to qualify the bend restrictor design according to client's specification.

Our bending test rig can be used to determine the resistance against the maximum bending moment and determine the bending radius at the maximum bending moment, or to test the breaking moment of the bend restrictor assembly.

