

Nortek Technical Bulletin – SubConn Connector Handling Procedures

Background

This service bulletin provides updated guidance on the proper handling, greasing, and mating of SubConn connectors used in Nortek instruments. The recommendations outlined here are based on manufacturer guidance and practical field experience, and are intended to help users prevent damage, maintain sealing integrity, and reduce the risk of connection-related issues.

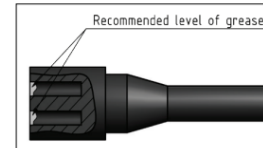
We encourage all users, technicians, and service teams to review these updated best practices and employ them as part of their regular maintenance and deployment routines. Follow these instructions carefully to ensure correct use of your SubConn connectors.

Handling

- **Connectors must be greased with MOLYKOTE® 44 Medium before every mating (including bench testing).**
- Disconnect by pulling straight out, not at an angle.
- Do not pull on the cable and avoid sharp bends at cable entry.
- When using a bulkhead connector, ensure that there are no angular loads.
- SubConn connectors should not be exposed to extended periods of heat or direct sunlight. If a connector becomes very dry, it should be soaked in fresh water before use.
- All current ratings are based on the connector being submerged in water.
- The locking sleeve must be hand-tightened only.

Greasing and Mating

Greasing and mating above water (dry-mate)



Greasing products



Molykote 44 Medium



Molykote 111 Compound for O-rings



- Connectors must be greased with MOLYKOTE® 44 medium before every mating.
- Grease should be applied into the sockets at a minimum depth of 2mm.
- The inner edge of all sockets should be completely covered, and a thin layer of grease left visible on the face of the connector.
- After greasing, fully mate the male and female connector in order to secure optimal distribution of grease on all contacts and in the sockets.
- To confirm that grease has been sufficiently applied, de-mate and check for grease on every male contact. Then re-mate the connector.

Follow this link to MacArtney's website for more details:

<https://www.macartney.com/connectivity/subconn/technical-information/subconn-handling-instructions/>

Cleaning Products



- General cleaning and removal of any accumulated contaminants on a connector should be performed using spray-based Isopropyl alcohol contact cleaner.
- New grease must be applied again prior to mating.

Note: Acetone creates stress-induced cracking in PEEK material and should be avoided.

Connector Mating Force

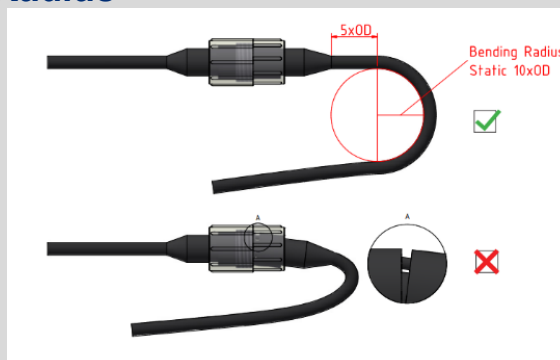
Proper alignment of the connectors is vital to avoid damaging the sealing mechanism on the male connector. If excessive resistance is encountered when mating, stop and de-mate. Inspect for damage to connectors or obstructions in the female connector before attempting to re-mate.

All images taken from MacArtney.com

Connector Compatibility

Ensure only genuine SubConn connectors are used on connecting cables. Nortek does not support the use of third-party connectors as they can cause damage to sealing mechanisms, which can lead to secondary effects that may cause flooding of the instrument.

Inline Recommended Bending Radius



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