

Stand: 04.12.2023

General information

The hose assemblies are designed and manufactured in accordance with the customer's specifications regarding medium, pressure and temperature. All finished hose assemblies are finally tested, including a leak or strength test, in accordance with the relevant regulations or as instructed by the customer.

Before installation, the hose assemblies must be checked for damage and contamination and cleaned if it is necessary.

Damaged hose assemblies must not be used. The hose lines must be protected against corrosive and mechanical external influences.

The operator must organise this inspection at appropriate intervals depending on the operating conditions. It is essential to replace damaged lines.

The relevant accident prevention regulations and the BG Chemical Association's information sheet T002 (BGI 572) apply to the proper use of hose lines.

Assembly

During the installation of the hose lines, the following must be observed:

- The specified bending radii must be observed.
- The hose assemblies must be installed free of tension and torsion and are not allowed to be subjected to tensile stress or compression.
- Before installation, the hose assembly must be checked for damage. Damaged hoses are not permitted to be used.
- It is important to ensure that the hose lines are not exposed to corrosive media or harmful mechanical influences.
- Disconnectable connections must be checked for secure seating before using.

During Operation

During start-up and in operation, the parameters used in the design (e.g. pressure, temperature, bending radii) must be strictly observed.

Suitable protective equipment must be provided against external harmful influences.

The resistance of the media wetted materials is monitored with regard to the specified flow media. A clear statement on the resistance of the hose lines can, however, only be made with absolute certainty based on operational and practical experience

Incrustations in the hose lines as a result of the media passing through them can lead to signs of corrosion and affect the flexibility of the hose line's specified bending radii and can lead to an early failure.

To minimise the risk of getting burnt at high operating temperatures, appropriate protective safety regulations must be followed (contact protection, warning notices, shut-off devices).

Hose assemblies must be secured against swinging around freely if there is a corresponding risk. However, the movement of the hose assemblies must not be restricted, as there is a risk of friction wear or overloading.

If there is a risk of electrostatic charge, appropriate steps must be taken, e.g. by discharging the voltage correctly.

Maintenance

The operator must define inspection periods for hose assemblies in accordance with the applicable regulations. Damaged hose lines must be replaced. Attention must also be taken to any deformation due to kinking of the line or damage to the wires of the braiding. Damaged hose lines are not allowed to be repaired.

Contaminated hoses must be cleaned with suitable substances and replaced if necessary.

Storage Instructions

Please note the following when storing hose assemblies:

- Hose assemblies should be stored in a cool, dry place and, if possible, in a stretched condition.
- When storing in coils, the specified bending radii must not be exceeded.
- Hose assemblies must be stored free of tension, torsion and kinks.
- Hose assemblies must be stored cleaned and dried; to protect the inside from dirt and corrosion, it is recommended to seal the ends with caps.

Connection of hose, braiding and connecting parts

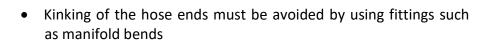
- Welded connections
 - The requirements of DIN EN ISO 10380:2003 apply
- Soldered connections
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- Soldered connections for gas hoses are permitted up to max. MOP 5
 - No cadmium-containing solders are allowed to be used
- Form-fit connections

For threaded connections, the connection can also be made using form-fit connections. Holding rings or equivalent must be non-detachably mounted at the factory

Installation and handling of metal hoses

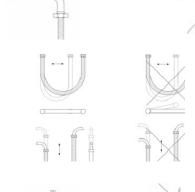
 The bending radius must be observed during installation and the hose length must be sufficient to ensure stress-free installation. This applies both when compensating for lateral misalignment with direct connection of the tube axes and for U-shaped installation and absorption of lifting movements.







Movements may only be performed in the hose axis to ensure that there is no damaging torsion.



In U-shaped installation, the hose must be guided properly, e.g. using a reel or similar, so that it does not have a smaller bending radius.

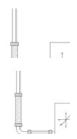


Axial compression of the hose assembly must be avoided in any situation. Movements in the axial direction must be absorbed by installing the line in a U-shape.

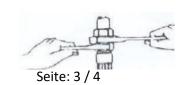




- To absorb vibrations, it is important to ensure that the hose is installed in a right angle to the direction of vibration
- If the vibrations occur in 2 directions, the flexible hose has to be installed in a 90° bend or 2 hose assemblies have to be installed at right angles to each other.



To avoid torsion on the hose, two keys should always be used when installing metal hose lines with screw connections. For this reason, it



is important to ensure that one connection of the hose is rotatable if possible.

 For welding or soldering connections of metal hoses, the hose line must be protected against welding spatters and overheating and cleaned of any flux and other contamination before putting into operation



The Flexotube GmbH team is always available to answer any further questions you may have.

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