

ASSEMBLY INSTRUCTION

for hoses
Installation method



MA-HOS
05.2025 Rev. 1

Focus in details®

schwer
fittings



Safety Instructions

- **Observing these points will ensure the functionality and longevity of the hose system.**
- **Hoses should be checked regularly for signs of wear or damage to ensure that they can handle any requirements that may arise.**
- **The hose line should be installed in such a way that the natural position does not restrict movement in any operating condition.**



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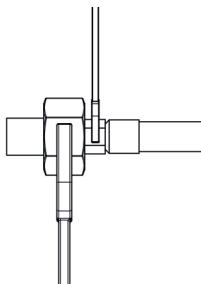
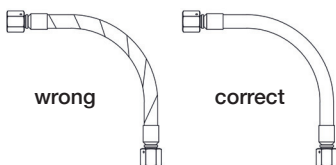
Assembly Instruction

1. No torsion

Under no conditions should a hose be installed under torsion (twisting). If a hose is installed under torsion, the service life will be significantly reduced. The material can weaken and lead to cracks or breaks and consequently to leaks. The flow capacity can also be impaired, which can lead to functional faults.

When installing the screw connection with union nuts, it is essential to ensure that the installation is torsion-free; we recommend using a second spanner or a pipe spanner to hold it in place.

When installing with an elbow fitting, ensure that this is always installed first and can only be positioned correctly afterwards.

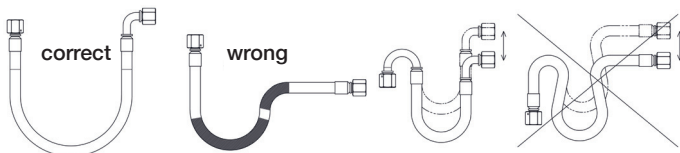




Assembly Instruction

2. Observe the minimum bending radius

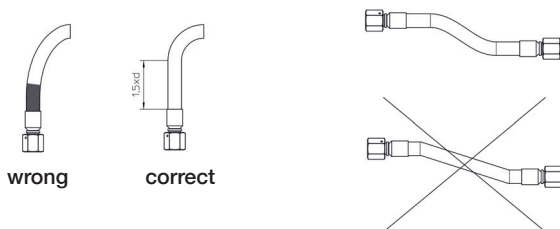
If possible, hose lines should be installed following their natural hose curvature without exceeding the smallest possible allowable bending radius.



If the minimum bending radius is not reached, the hose can bend and narrow or even flatten in the cross-section, which can otherwise lead to premature material fatigue or even leakage.

To prevent bending stress and excessive bending directly behind the connection fittings, the hose line should be bent using pipe bends.

The installation of curved hose lengths should be designed in such a way that the intended bending of the hose only begins after a length of 1.5 times the outer diameter ($1.5 \times d$).





Assembly Instruction

3. Hose addition

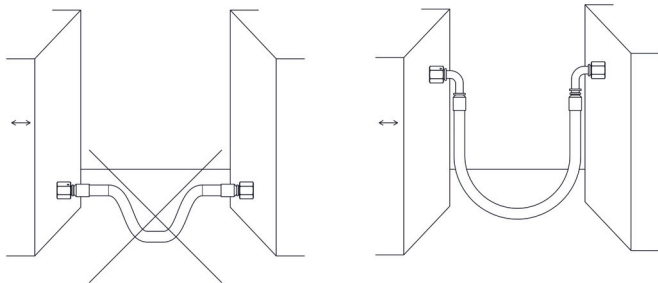
The hose length must be sufficient to ensure a tension-free installation. A hose that is too short can be under tension, which can lead to premature wear or even failure.

Excessive stress must also be minimised.

A correctly dimensioned hose helps to ensure the overall safety of the system by being able to compensate for sudden pressure peaks and vibrations.

4. Kinking, abrasion or chafe marks

The hose used must be protected from external damage. Damage such as abrasion caused by chafing or mechanical cuts can lead to problems. This can lead to premature failure of the hose.





Assembly Instruction

Installation tools or hose guides can prevent rubbing or kinking. However, they should be avoided where the natural movement of the hose line is impeded. Supports should be installed on straight sections wherever possible.

■ 5. Pressure pulses

Pressure pulses can lead to material failure and premature wear, which in the worst-case scenario, can cause the hose to burst.

To minimise the risk of whipping hose lines, they should be laid and fastened securely.

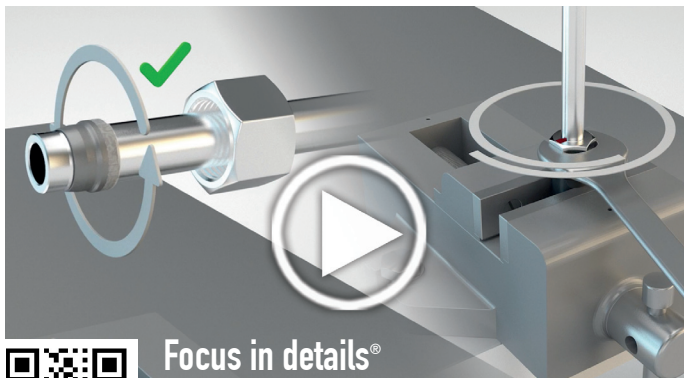


Installation Videos

■ Installation Videos

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Focus in details®
eShop

schwer
fittings

Schwer Fittings GmbH
Hans-Schwer-Platz 1
D-78588 Denkingen

Tel.: +49 (0) 74 24 / 98 25-0
info@schwer.com
www.schwer.com