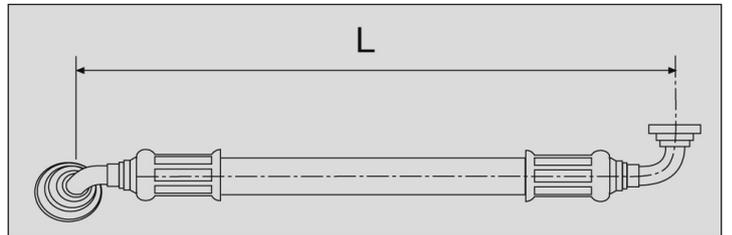
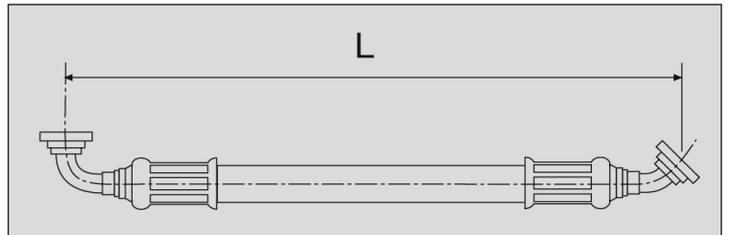
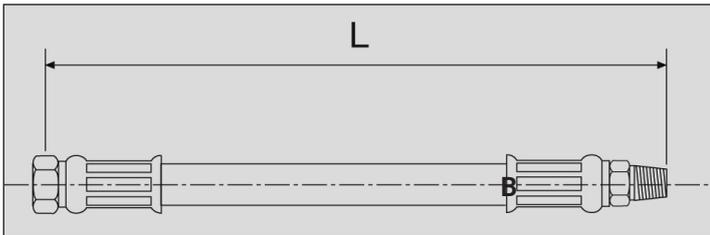
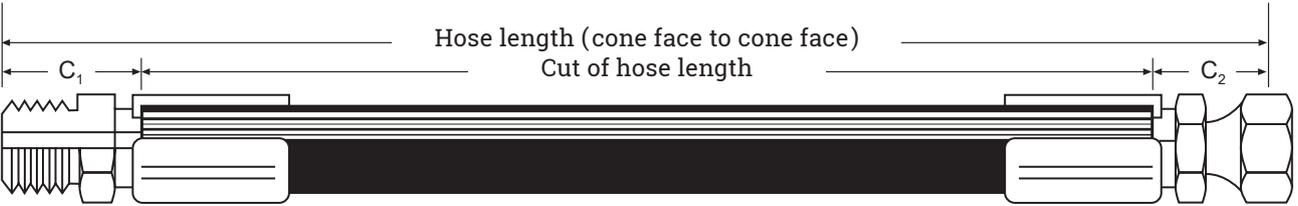


CALCULATING THE HOSE ASSEMBLY LENGTH

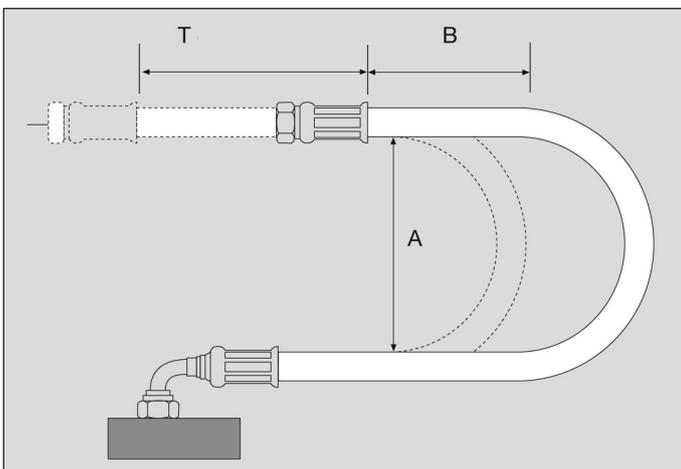


Hose assemblies are made according to overall length i.e. cone face to cone face, or where elbow couplings are used, to the centre line of the cone face.



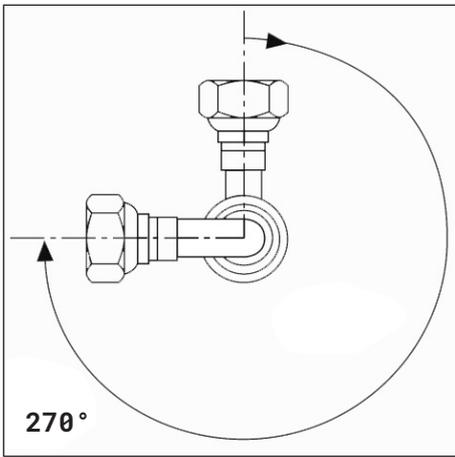
When determining the length of hose assemblies, provide sufficient length to prevent bending strain from localising at the back of the coupling. In the figure below dimension **B** allows for a strain section of hose beyond the coupling to prevent concentration of bending strain. **T** designates the amount of travel.

A indicates the smallest diameter to which the hose should be bent (2 x minimum bend radius).



ATTENTION !

- 1] Dimension **A** must not be less than 2 times the hose minimum bend radius.
- 2] Dimension **B**, the minimum free length at each coupling, taking into account **T** the full actuation travel, must not be less than 2 times hose outside diameter.



Fitting orientation is necessary when a hose assembly requires two angled couplings that are not in line when viewed from one end of a hose.

Fittings must be orientated to each other to ensure proper installation with minimal stress on the hose from twisting.

Fitting orientation is measured from the centerline of the first coupling held in a vertical position and looking at the assembly from the second end by measuring in a clockwise direction.

HOSE ASSEMBLY ROUTING TIPS

Proper hose installation is essential for satisfactory performance. As we have seen, if hose length is excessive, the appearance of the installation will be unsatisfactory and unnecessary cost of equipment will be involved. If hose assemblies are too short to permit adequate flexing and changes in length due to expansion or contraction, hose service life will be reduced.

The following diagrams show proper hose installations which provide maximum performance and cost savings. Consider these examples in determining the length of a specific assembly.

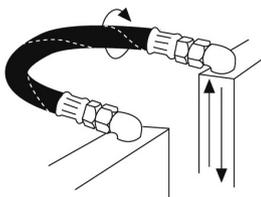


WRONG

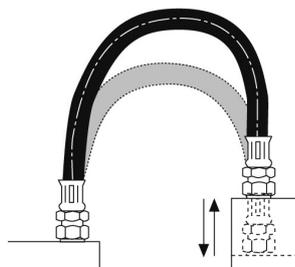
When hose installation is straight, allow enough slack in hose line to provide for length changes which will occur when pressure is applied.



RIGHT

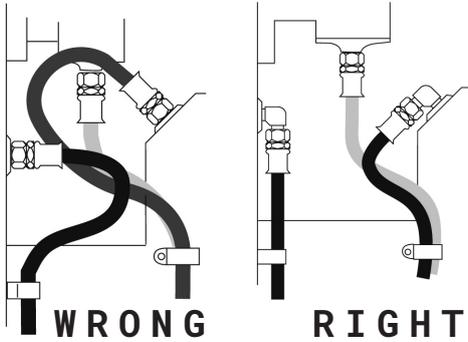


WRONG

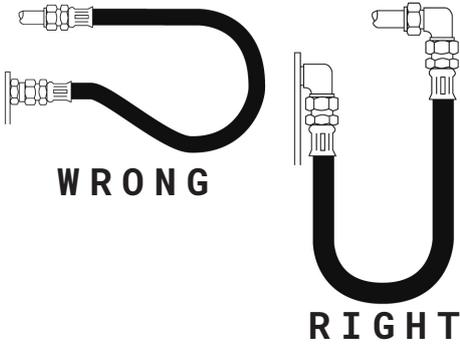


RIGHT

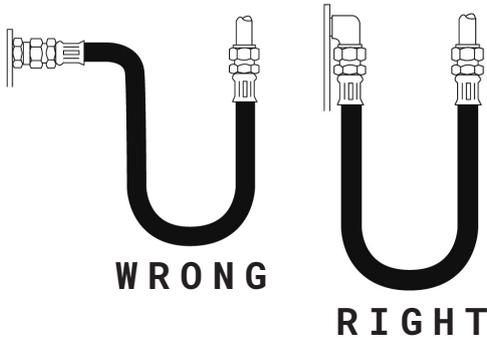
Prevent twisting and distortion by bending hose in same plane as the motion of the boss to which hose is connected.



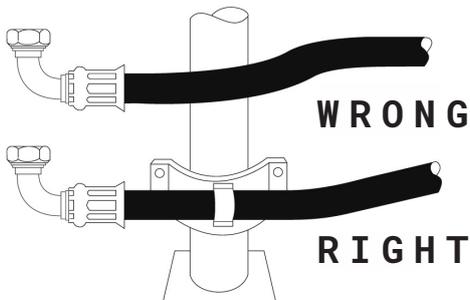
Route hose directly by using 45° and/or 90° adaptors and fittings. Avoid excessive hose length to improve appearance.



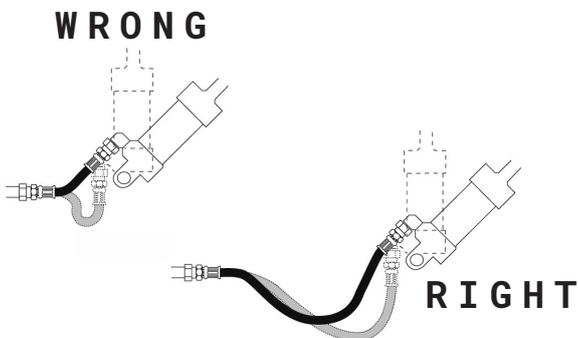
When radius is below the required minimum, use an angle adaptor to avoid sharp bends.



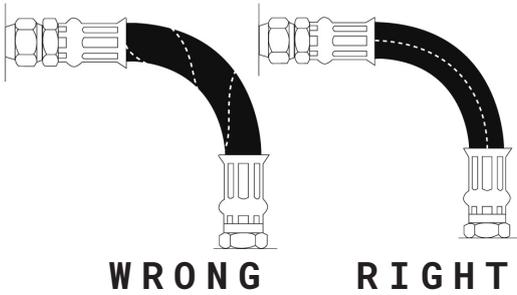
Use proper angle adaptors to avoid sharp twist or bend in hose.



High ambient temperatures shorten hose life. Make sure hose is kept away from hot parts. If this is not possible, insulate the hose.

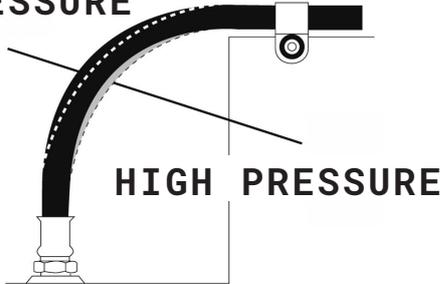


Adequate hose length is necessary to distribute movement on flexing applications and to avoid abrasion.

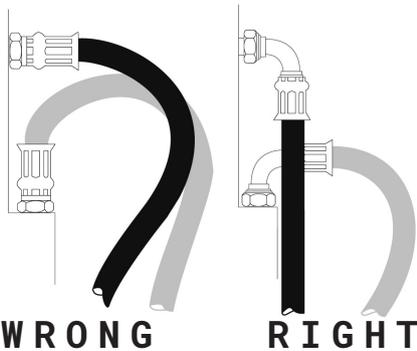


Vær sikker på at slangen ikke vrides ved montage. Påføres tryk på en vredet slange, kan det resultere i slangefejl eller at omløbere løsnes.

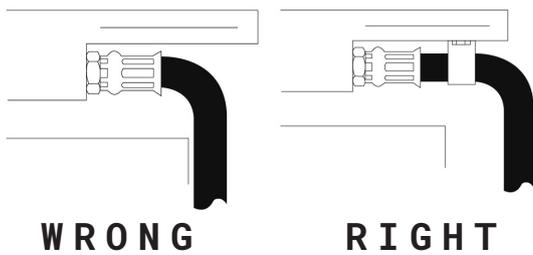
NO PRESSURE



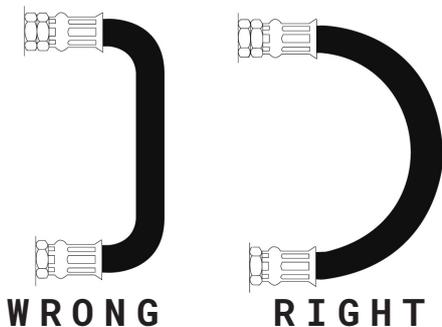
Run hose in the installation so that it avoids rubbing and abrasion. Often, clamps are required to support long hose runs or to keep hose away from moving parts. Use clamps of the correct size. Too large a clamp allows hose to move inside the clamp and causes abrasion.



Elbows and adaptors should be used to relieve strain on the assembly, and to provide neater installations which will be more accessible for inspection and maintenance.



Run hose in the installation so that it avoids rubbing and abrasion. Often, clamps are required to support long hose runs or to keep hose away from moving parts. Use clamps of the correct size. Too large a clamp allows hose to move inside the clamp and causes abrasion.



To avoid hose collapse and flow restriction, keep hose bend radii as large as possible. Refer to hose specification tables for minimum bend radii.