Flexible Connectors
Installation

The FLEX-ING line of Franklin Fueling Systems flexible connectors offer ease and speed of installation and years of service if installed properly. Flex connectors must be used in a liquid-tight sump with operational leak detection. Below are some guidelines for installing flexible connectors.

Note: Take care that brine, saltwater or chlorine do not come in contact with the flex-connectors.

Note: Installation Instruction Tags are an integral part of the flex connector. If you receive a flexible connector without an installation tag, contact Franklin Fueling Systems. The instruction tag must stay with the connector.

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**Do Not Compress or Extend Axially**
Corrugated metal hose installed in-line with the longitudinal axis of the piping should not have any axial movement.

**Correct**
- Pipe hanger
- Motion
- Braid relaxed

**Wrong**
- Pipe not supported
- Axial compression

**Do Not Allow Movement In Multiple Planes.**
Flexing a metal hose in two separate planes of movement will torque the hose assembly. Always install the metal hose assembly so that flexing occurs in one plane only, the plane in which bending occurs.

**Correct**
- Motion

**Wrong**
- Out of plane flexing

**Avoid Sharp Bends**
Use elbows to avoid sharp bends near the end of the metal hose assembly.

**Correct**
- Motion

**Wrong**
- Out of plane flexing
**Provide Support.**
When installing the assembly in a horizontal loop, provide support for the arms to prevent the hose from sagging.

![Correct Support](image1)

![Wrong Supports](image2)

**Maintain Minimum Center-line Bend Radius.**
The hose assemblies must not be forced to a bend radius less than specified.

![Correct Bend](image3)

![Wrong Bend](image4)

### Minimum Bend Radius from Center-line of Hose

<table>
<thead>
<tr>
<th>Hose Size</th>
<th>Minimum Bend Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>¾&quot;, 1&quot;, 1.5&quot;, 2&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>3&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>4&quot;</td>
<td>13&quot;</td>
</tr>
</tbody>
</table>

**Do Not Torque During Installation.**
Metal hose assemblies should not be used to compensate for bolt hole misalignment. Floating flanges will help to minimize twisting of the metal hose.

Pipe unions will help to reduce twisting during connection to the piping. Use two wrenches to help to keep the hose from twisting when tightening the pipe union.

![Correct Flexing](image5)

![Wrong Flexing](image6)

If you have questions about installing Franklin Fueling Systems flexible connectors, contact FFS Technical Support at 800-984-6266.