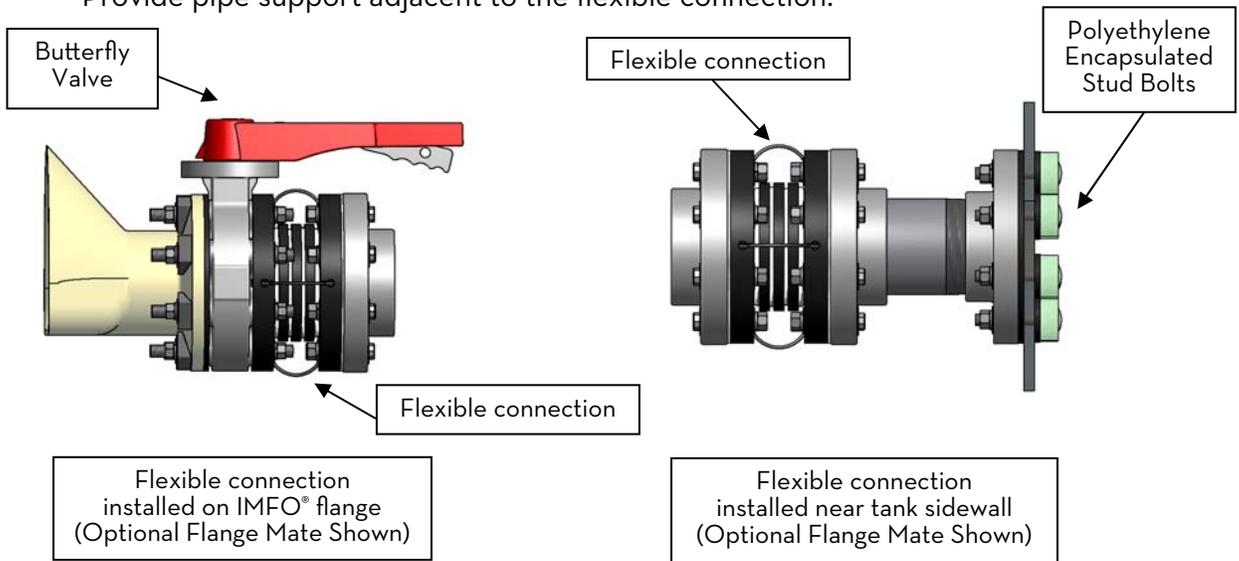


# FLEXIBLE CONNECTIONS

Flexible connections are required on fittings installed on the lower 1/3 of the tank sidewall to allow the tank to expand and contract and to protect the tank from pump vibrations.

- Install flexible connection in accordance with the specific manufacturer's installation guidelines:
  - The "breach opening" in the piping for the flexible connection should be within 1/8-in of the relaxed length of the flexible connection.
  - Flexible connections are not to be used for correcting piping misalignment. The flexible connection and mating flanges must be installed in a centered and neutral position.
  - Attach only FULL FACE flanges to the flexible connection. They are not designed to attach directly to tank wall.
  - Ensure adequate clearance between bolt ends for full use of flexible connections.
  - Torque to 20 ft. lbs using crisscross tightening pattern.
  - Provide pipe support adjacent to the flexible connection.



- Flexible Connection Minimum Specifications:
  - Axial Compression  $\geq 1.5''$
  - Axial Extension  $\geq 0.625''$
  - Lateral Deflection  $\geq 0.750''$
  - Angular Deflection  $\geq 14^\circ$
  - Torsional Rotation  $\geq 4^\circ$



- Installation of flexible hose connections:
  - Use thread sealant for pipe thread preparation.
  - Support hose adequately but do not restrict its ability to move in horizontal directions.

# **FLEXIBLE CONNECTIONS**

## **PROPER INSTALLATION OF PIPE SUPPORTS**

Pipe supports positioned **CORRECTLY**: pipe support must be placed after the flexible connection to allow the tank to properly expand and contract.



Pipe supports positioned **INCORRECTLY**: pipe support incorrectly placed before the flexible connection does not allow the tank to properly expand and contract, which can cause the piping or tank to crack over time.



# **FLEXIBLE CONNECTIONS**

## **PROPER INSTALLATION OF FLEXIJOINTS**

Flexible connections aligned **CORRECTLY**: pipe system with the Flexijoint is aligned in a straight manner, which allows for proper expansion and contraction of the two connecting tanks.



Flexible connections aligned **INCORRECTLY**: the Flexijoint should not be used to accommodate misaligned piping. This will limit the ability of the Flexijoint to function correctly and possibly damage the joint itself.

