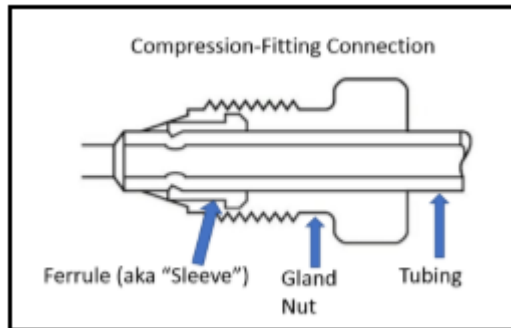


Tubing Connections for VP-3k, 6k, and 12k Pumps

AE SpeedBite Compression Fitting



The compression-fitting used in the Fluid-In and Fluid-Out connections on the VP-3k, 6k, and 12k model pumps is compatible with Autoclave Engineers SpeedBite fittings. These fittings have a MAWP (Maximum Allowable Working Pressure) of 15,000 psi at room temperature. Given the high fluid pressures capabilities of VP-Series pumps, it is very important to ensure that these compression-fitting connections are properly assembled.

Failure to sufficiently tighten the connection can result in the tubing being ejected from the connection at high pressure, which can lead to damage or injury. On the other hand, over-tightening the gland nut can permanently damage the connection seat. As such, please follow the directions below carefully:

1. Cut tubing to length (add 0.50" for extra engagement allowance for 1/8" tubing and 0.75" per connection for 1/4" tubing size).
2. Deburr and clean the cut end of tubing by placing it in a vice. Use a reamer to deburr the ID and a file for the OD of the tubing-end. Be sure not to scratch the tubing OD when filing.
3. Place the gland nut and ferrule over the end of the tubing, as shown in the drawing above. Ensure that the ferrule is correctly orientated (larger end next to the threaded gland nut) and that the end of the sleeve is in contact with the interior of the gland.
4. **First, hand-tighten the gland nut. Then, using a wrench on the gland nut, tighten an additional 1 to 1-1/4 turn to complete the seal. When correctly sealed, the sleeve will still rotate on the tubing, but the tubing cannot be pulled out of the connection by hand.**
5. **For reassembly of this type of connection, tighten the gland nut onto the female threads hand-tight, then use a wrench to tighten an additional 1/8-3/8 turn for a gas-tight seal.**