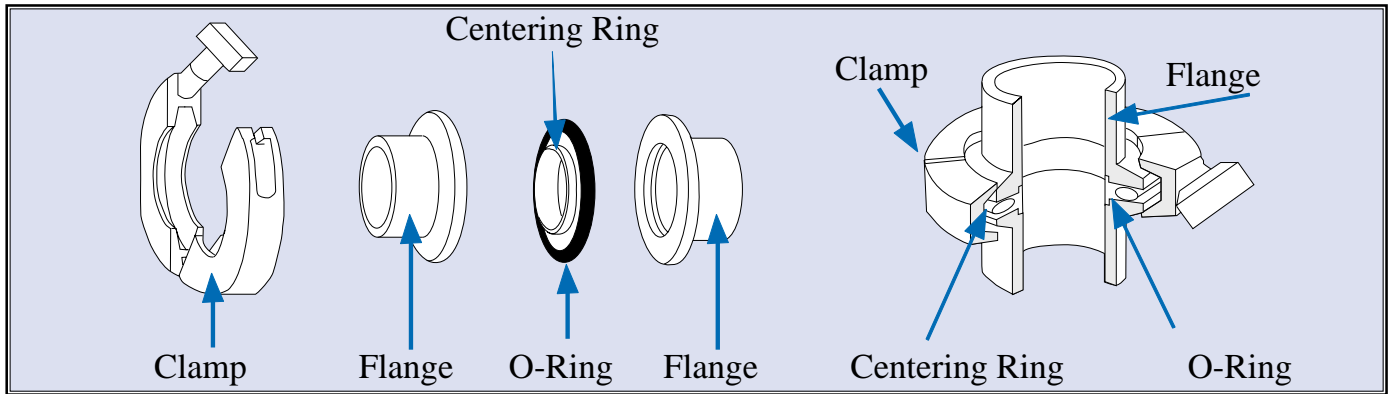


F58 NW Vacuum Fittings*



Quick Flange Vacuum Connection System for Rapid Assembly and Disassembly

These vacuum fittings and assemblies are an economical system of reusable stainless steel connectors for 1/2", 3/4", 1", 1 1/2", and 2" O.D. tubing. Assemblies are usable to 10⁻⁸ torr and to a maximum temperature of 150°C. They are ideal for vacuum systems such as mass spectrometers and scanning electron microscopes which require rapid and frequent assembly and disassembly. The quick flange vacuum fittings adapt to most vacuum pumps such as Alcatel, BOC Edwards, etc.

Each vacuum seal is made by compression of an O-ring between mating flanges. The seal is made in seconds by finger closure of a wing-nut on a metal clamp. These modular, building block components include all of the commonly used standard fittings, feedthroughs, and accessories. They are available in aluminum, brass, and stainless steel.

Quick flange assembly is simplified by the 360° rotatable flanges and the self-centering feature of the centering ring. Pressure is applied uniformly around the 15° outer flange surface by finger tightening the clamp wing-nut until the first metal-to-metal contact is made between the inner surfaces of the flanges and the spacing lips of the centering ring. This compresses the O-ring between the mating flanges and makes the vacuum seal.

Features of ISO-QF Components

- Flanges are sexless, infinitely rotatable, self centering, and most important available in a multitude of configurations offering the user the choice of either butt welding or internal welding.

- Components are interchangeable with all assemblies made to standard ISO measurements.
- Centering rings are available in 304 stainless steel, brass or aluminum with viton or buna "O" rings.
- QF components are made to exacting standards on computer controlled turning lathes. Tolerances and surface finishes are unsurpassed in the industry. Each component is individually inspected to insure that no scratch or other defect exists. Every component is then completely cleaned and shipped ready for use in any application.
- Every welded assembly is helium leak checked and certified to have a leak rate of less than 1 x 10⁻⁹ std cc/sec.
- QF Aluminum & Stainless Clamps are machined from solid aluminum bars on computer controlled lathes. Tensile strength is much stronger and more rigid, durable clamps are the result. They are also more symmetrical and easier to use in constricted applications. An integral locking device is also machined into the clamp which prevents accidental opening of the clamp on flange assemblies when in a tightened state.

Dimensions

S.I.S.™ offers all of our ISO configurations in the following sizes; QF10, 16, 25, 40 and 50. The QF10 and 16 sizes are used typically with 1/2" and 3/4" tubing and both utilize the same size clamp. The QF25 is normally used with 1" O.D. tubing, the QF40 with 1 1/2" O.D. tubing and QF50 with 2" O.D. tubing. Our numbering system reflects this situation. Where obsolete 20 and 32 size flanges are encountered, our adaptive centering rings will enable the user to interface with these sizes.

If you do not see the fitting you need, S.I.S. can custom manufacture a fitting to your requirements

* Fittings manufactured by A&N

