



SuperSeal™ Faceseal (VCR-Type) Gaskets

Precision Machined Gaskets for UHP Mechanical Connections

SPECIFICATIONS:

- Electropolished Non-Plated Nickel and 316 Stainless Steel
- Retaining Clip Available for Easy Installation
- Bulk Labeled with Lot Traceability
- 5 Ra Avg. (10 Ra Max) Surface Roughness
- Hot DI Cleaned and Hot N2 HEPA Dried
- 5 Mil Nylon Double Bagged for Moisture Protection



PART NO.	MATERIAL	SIZE	WIDTH	BORE	RETAINER
CNI-4-EP	Nickel 200	1/4"	0.28" (0.7mm)	0.22" (5.6mm)	No
CNI-8-EP	Nickel 200	1/2"	0.28" (0.7mm)	0.44" (11.2mm)	No
CSS-4-EPR	Ag Plated 316 SS	1/4"	0.28" (0.7mm)	0.22" (5.6mm)	Yes

For hard to reach areas, or for ease of installation, *SuperSeal* VCR-type gaskets are offered with *Integral Retainer Clips*. This patented 1-piece design enables easy placement, while assuring a perfect alignment on the face of the fitting. The Retainer Clips are fully corrosion and heat resistant for the most stringent application.



Using the finest quality materials, most advanced manufacturing practices, and ultrapure packaging processes, Critical Systems offers the premier gaskets for microelectronics industries.

Since 2000, Critical Systems, Inc. (CSI) has been supporting the breakthrough technologies of our customers with practical, innovative solutions that “surround” the process tool.

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SuperSeal™ Faceseal (VCR-Type) Gaskets Usage & Handling Guidelines

Always inspect the toroids on the face of each gland prior to assembling a new connection, as nicks and scratches may cause the connection to leak.

A new gasket should be used with each new compression. Used gaskets could cause damage to toroid beads.

Hand tightening is not as straightforward when there is a strong tension between the tube assemblies. Some small bending or twisting may assist to get a good hand-tight fit up.

For a stainless or nickel gasket, an additional 1/8 turn to 1/4 turn from finger tight is sufficient enough to prevent any leak.

A manual faceseal connection, based on a stainless steel gasket, applies the following compression to the gasket:

Thread pitch of the fitting is 1.16mm;
Thickness of a 1/4" gasket is 0.7 mm

1/8 turn means the gasket is compressed in by:
 $(1.16 \text{ mm} / 8) \div 0.7 \text{ mm} = 21\%^*$

1/4 turn means the gasket is compressed in by:
 $(1.16 \text{ mm} / 4) \div 0.7 \text{ mm} = 42\%^*$

1/2 turn means the gasket is compressed in by:
 $(1.16 \text{ mm} / 2) \div 0.7 \text{ mm} = 84\%$

*CSI recommends 1/8 to 1/4 turn from finger tight