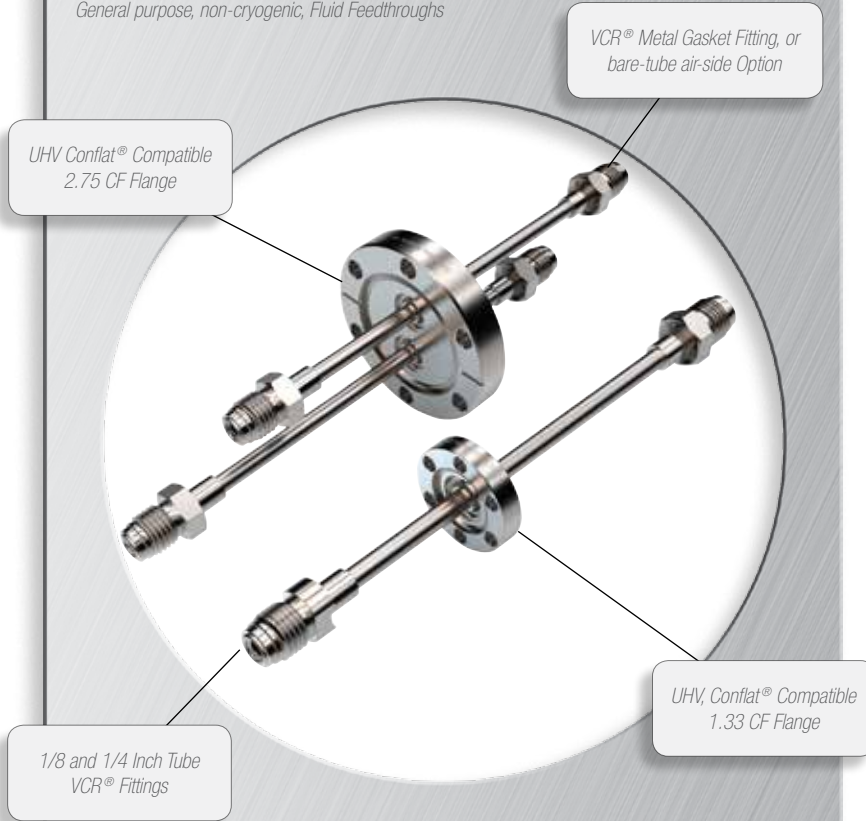




VCR® Metal Gasket Fittings

General purpose, non-cryogenic, Fluid Feedthroughs



Features

- VCR® Metal Gasket Fittings
- 1/8 and 1/4 Inch tube sizes
- General purpose, non-cryogenic fluid use
- High temperature rated to 450°C
- Custom Solutions on Request

Specifications

Material¹

CF Flange / Tubes, Stainless Steel	304
VCR® Fittings, Stainless Steel ¹	316

Vacuum Range

UHV, Ultrahigh vacuum	1x10 ⁻¹³ Torr
HV, High vacuum	1x10 ⁻⁸ Torr

Temperature Range^{1,2,3}

CF Flange Mount	450°C
ISO KF Flange Mount	150°C
VCR® Fitting	450°C
VCR® SS, 316L Gasket	450°C
VCR® Cu, Copper Gasket	204°C
VCR® Ni, Nickel Gasket	315°C

Notes

1. VCR® fittings are designed for use with high-quality, annealed (Type 304, 304/304L, 316, 316/316L) seamless stainless steel tubing. Consult Swagelok® for proper VCR® fitting installation and use.
 2. Overall assembly ratings must be adjusted to that of its lowest rated component.
 3. This is a system bakeout temperature rating, without any fluid circulating in feedthrough tubes /lines. Consult Swagelok® for more information on VCR® high temperature and pressure ratings.
- § Unless specified otherwise, dimensional units in all sections of this catalog are expressed in inches.

VCR® Metal Gasket Fitting Feedthroughs

Accu-Glass metal-gasket tube fitting feedthroughs are terminated with VCR® metal gasket face seal fittings. VCR® fittings are zero-clearance, demountable UHV compatible mechanical joints produced by crushing a deformable metal gasket between two mating and polished fitting gland faces. Fitting gland finish, and metal-gasket temper are critical parameters for making reliable, gas and ultrahigh vacuum seals. Please consult Swagelok's VCR® specifications and installation guidelines for best results.

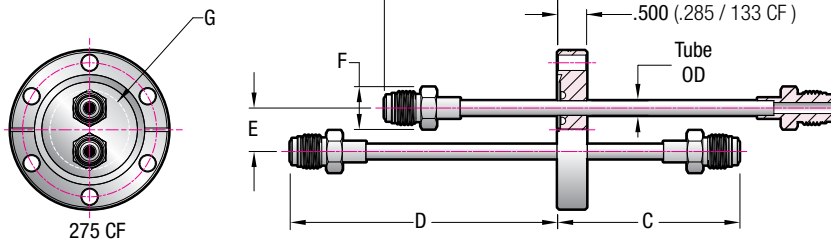
These are general purpose, non-cryogenic, tube feedthroughs used for gas and/or fluid coolant delivery into high and ultrahigh vacuum systems.

Accu-Glass Products fluid feedthroughs are available in single or dual tube configurations, with 1/8 or 1/4 inch tube diameters. Standard feedthroughs are offered with fittings TIG welded on both tube ends. However, an air-side bare-tube option is also available. This option can be ordered by appending a '.80' suffix to the end of any standard part number (note that price remains the same). Bare-tube terminations are often required when there is no space for a fitting joint — or a demountable joint is just not allowed, and where direct welding to stainless steel supply-lines is the preferred solution.

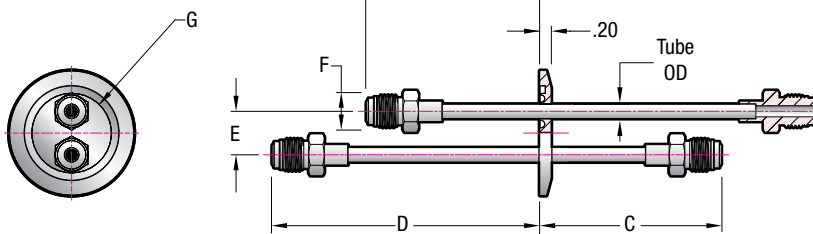
Can't find what you need? Contact Accu-Glass Products to discuss other configuration options or solutions customized to your specific requirements.



CF Flange — 2.75 Shown



ISO KF Flange — NW40 KF Shown



113021 / UHV Single, 1/4 Inch Tube Fluid Feedthrough on 1.33 CF



113025 / UHV Dual, 1/4 Inch Tube Fluid Feedthrough on 2.75 CF



113026 / HV Single, 1/8 Inch Tube Fluid Feedthrough on ISO KF16



113032 / HV Dual, 1/8 Inch Tube Fluid Feedthrough on ISO KF40

VCR® Metal Gasket Fittings¹ — Feedthroughs for gas, water or non-cryogenic fluids

Flange Type	Number of Tubes	Tube OD	A	B	C	D	E	F	G	Part Number	Unit Price \$
-------------	-----------------	---------	---	---	---	---	---	---	---	-------------	---------------

CF Flange — 450°C² / UHV to 1x10⁻¹⁰ Torr

133 CF	1	1/8	4.75	3.00	—	—	—	.430	—	113020	138
133 CF	1	1/4	4.75	3.00	—	—	—	.630	—	113021	138
275 CF	1	1/8	4.75	3.00	—	—	—	.430	—	113022	152
275 CF	1	1/4	4.75	3.00	—	—	—	.720	—	113023	152
275 CF	2	1/8	4.75	3.00	3.13	4.63	.750	.430	1.18	113024	215
275 CF	2	1/4	4.75	3.00	3.13	4.63	.750	.720	1.47	113025	255

ISO KF Flange — 150°C² / HV to 1x10⁻⁸ Torr

NW16 KF	1	1/8	4.75	3.00	—	—	—	.430	—	113026	128
NW16 KF	1	1/4	4.75	3.00	—	—	—	.630	—	113027	128
NW25 KF	1	1/8	4.75	3.00	—	—	—	.430	—	113028	136
NW25 KF	1	1/4	4.75	3.00	—	—	—	.720	—	113029	136
NW40 KF	1	1/8	4.75	3.00	—	—	—	.430	—	113030	145
NW40 KF	1	1/4	4.75	3.00	—	—	—	.720	—	113031	145
NW40 KF	2	1/8	4.75	3.00	3.13	4.63	.750	.430	1.18	113032	205
NW40 KF	2	1/4	4.75	3.00	3.13	4.63	.750	.720	1.47	113033	205
NW50 KF	1	1/8	4.75	3.00	—	—	—	.430	—	113034	150
NW50 KF	1	1/4	4.75	3.00	—	—	—	.720	—	113035	150
NW50 KF	2	1/8	4.75	3.00	3.13	4.63	.750	.430	1.18	113036	210
NW50 KF	2	1/4	4.75	3.00	3.13	4.63	.750	.720	1.47	113037	210

1. For "bare tube(s)" on air-side, append ".80" to desired part number... price is the same with this option.
 2. This is a bakeout temperature rating, without fluid in feedthrough tubes / lines.