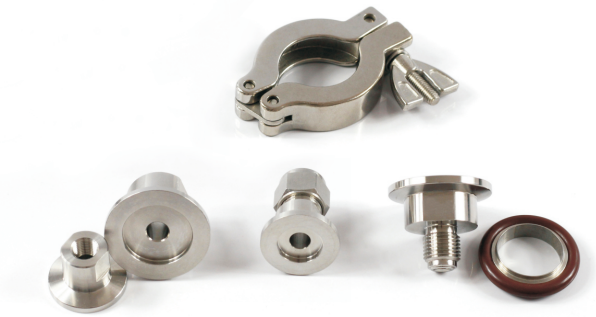
Vacuum Adaper Fittings

KF and CF Series

Features

- Adapter Vacuum products are generally used on vacuum chamber ports to connect vacuum flanges to various fittings



Vacuum Range

- Copper Seal: ≥10 Torr
- Elastomeric Seal: ≥10 Torr

Working Temperature

- Copper Seal: -325℉ to 842℉ (-200℃ to 450℃)
- Elastomeric Seal: -4℉ to 302℉ (-20℃ to 150℃)

Materials Standards

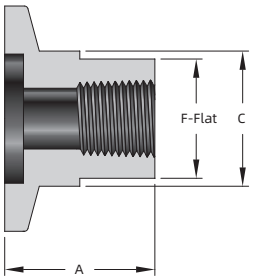
Material	Bar Stock	Forging
316 stainless steel	ASTM A276 ASTM SA479,EN 1.4401	ASTM A182 ASTM SA182,EN 1.4401
316L stainless steel		

Flanges Standards

- KF Flanges: ISO 2861
- CF Flanges: ISO 3669

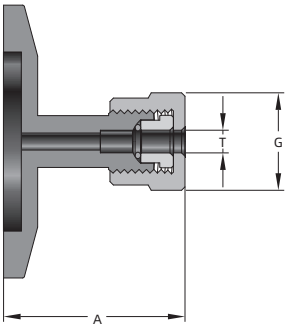
Dimensions

KF Series



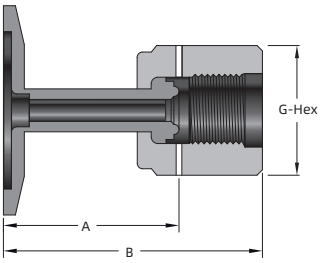
KF to Female NPT

NPT O.D. in.	Flange Size	Basic Ordering Number	Dimension, in. (mm)		
			A	C	F
1/8	KF10	KF10-KA-FNPT2-	0.75(19.1)	0.75(19.1)	0.63(16.0)
	KF16	KF16-KA-FNPT2-	0.75(19.1)	0.75(19.1)	0.63(16.0)
	KF25	KF25-KA-FNPT2-	0.75(19.1)	1.00(25.4)	0.87(22.0)
	KF40	KF40-KA-FNPT2-	1.00(25.4)	1.50(38.1)	1.26(32.0)
	KF50	KF50-KA-FNPT2-	1.00(25.4)	2.00(50.8)	1.73(44.0)
1/4	KF10	KF10-KA-FNPT4-	0.75(19.1)	0.75(19.1)	0.63(16.0)
	KF16	KF16-KA-FNPT4-	0.75(19.1)	0.75(19.1)	0.63(16.0)
	KF25	KF25-KA-FNPT4-	0.75(19.1)	1.00(25.4)	0.87(22.0)
	KF40	KF40-KA-FNPT4-	1.00(25.4)	1.50(38.1)	1.26(32.0)
	KF50	KF50-KA-FNPT4-	1.00(25.4)	2.00(50.8)	1.73(44.0)
1/2	KF25	KF25-KA-FNPT8-	1.00(25.4)	1.10(27.8)	0.94(24.0)
	KF40	KF40-KA-FNPT8-	1.00(25.4)	1.50(38.1)	1.26(32.0)
	KF50	KF50-KA-FNPT8-	1.00(25.4)	2.00(50.8)	1.73(44.0)
3/4	KF40	KF40-KA-FNPT12-	1.00(25.4)	1.63(41.3)	1.34(34.0)
	KF50	KF50-KA-FNPT12-	1.00(25.4)	2.00(50.8)	1.73(44.0)



KF to Vacuum Fitting

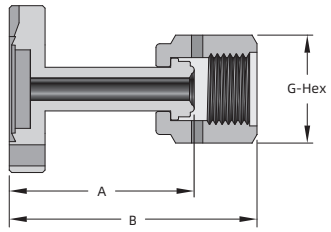
T-Tube O.D. in.	Flange Size	Basic Ordering Number	Dimension, in. (mm)	
			A	G
1/4	KF10	KF10-KA-VF4-	1.48(37.6)	11/16(17.5)
	KF16	KF16-KA-VF4-		
	KF25	KF25-KA-VF4-		
	KF40	KF40-KA-VF4-		
	KF50	KF50-KA-VF4-		
3/8	KF10	KF10-KA-VF6-	1.62(41.1)	13/16(20.6)
	KF16	KF16-KA-VF6-		
	KF25	KF25-KA-VF6-		
	KF40	KF40-KA-VF6-		
	KF50	KF50-KA-VF6-		
1/2	KF16	KF16-KA-VF8-	1.79(45.5)	15/16(23.8)
	KF25	KF25-KA-VF8-		
	KF40	KF40-KA-VF8-		
	KF50	KF50-KA-VF8-		
3/4	KF25	KF25-KA-VF12-	1.93(49.0)	1 1/4(31.8)
	KF40	KF40-KA-VF12-		
	KF50	KF50-KA-VF12-		
1	KF40	KF40-KA-VF16-	1.95(49.5)	1 9/16(39.7)
	KF50	KF50-KA-VF16-		



KF to Female Metal Gasket Face Seal Fitting

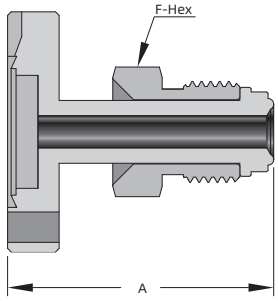
GFS Size in.	Flange Size	Basic Ordering Number	Dimension, in. (mm)		
			A	B	G
1/4	KF10	KF10-KA-FGFS4-	1.46(37.1)	1.96(49.8)	3/4(19.1)
	KF16	KF16-KA-FGFS4-			
	KF25	KF25-KA-FGFS4-			
	KF40	KF40-KA-FGFS4-			
	KF50	KF50-KA-FGFS4-			
1/2	KF16	KF16-KA-FGFS8-	1.65(41.9)	2.21(56.1)	1 1/16(27.0)
	KF25	KF25-KA-FGFS8-			
	KF40	KF40-KA-FGFS8-			
	KF50	KF50-KA-FGFS8-			

CF Series



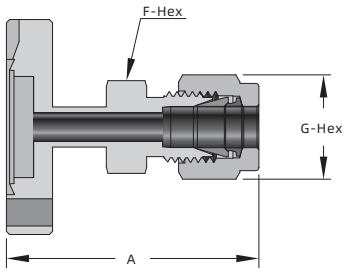
CF to Female GFS Metal Gasket Face Seal Fitting

GFS Size in.	Flange Size	Basic Ordering Number	Dimension, in. (mm)		
			A	B	G
1/4	133CF	133CF-KA-FGFS4-	1.48(37.7)	1.98(50.4)	3/4(19.1)
1/2	133CF	133CF-KA-FGFS8-	1.68(42.6)	2.34(56.8)	1 1/16(27.0)
1/4	275CF	275CF-KA-FGFS4-	1.52(38.6)	2.02(51.3)	3/4(19.1)
1/2	275CF	275CF-KA-FGFS8-	1.71(43.4)	2.27(57.6)	1 1/16(27.0)



CF to Rotatable Male GFS Metal Gasket Face Seal Fitting

GFS Size in.	Flange Size	Basic Ordering Number	Dimension, in. (mm)	
			A	F
1/4	133CF	133CF-KA-RGFS4-	1.48(37.7)	5/8(15.9)
1/2	133CF	133CF-KA-RGFS8-	1.68(42.6)	15/16(23.8)
1/4	275CF	275CF-KA-RGFS4-	1.52(38.6)	5/8(15.9)
1/2	275CF	275CF-KA-RGFS8-	1.71(43.4)	15/16(23.8)



CF to Tube Fitting

Tube O.D. in.	Flange Size	Basic Ordering Number	Dimension, in. (mm)		
			A	F	G
1/4	133CF	133CF-KA-F4-	1.50(38.0)	1/2(12.7)	9/16(14.3)
3/8	133CF	133CF-KA-F6-	1.66(42.0)	5/8(15.9)	11/16(17.5)
1/2	133CF	133CF-KA-F8-	1.80(45.6)	13/16(20.6)	7/8(22.2)
1/4	275CF	275CF-KA-F4-	1.53(38.9)	1/2(12.7)	9/16(14.3)
3/8	275CF	275CF-KA-F6-	1.69(42.9)	5/8(15.9)	11/16(17.5)
1/2	275CF	275CF-KA-F8-	1.83(46.5)	13/16(20.6)	7/8(22.2)

How to Order

133CF — KA — FNPT4 — 316

Port 1 Size	Port 1 Type	Configuration Designator	Port 2 Type	Port 2 Size	Material
133 1.33 in. **275** 2.75 in.	**CF** CF Flanges	**KA** Vacuum Adapter Fittings	**F** Fractional Ferrule **RGFS** Rotatable Male Metal Gasket Face Seal Fitting **FGFS** Female Metal Gasket Face Seal Fitting	**4** 1/4 in. **6** 3/8 in. **8** 1/2 in.	**316** 316 S.S. **316L** 316L S.S.