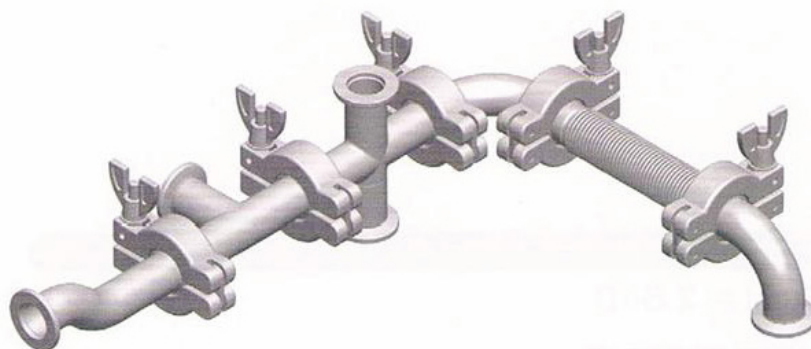
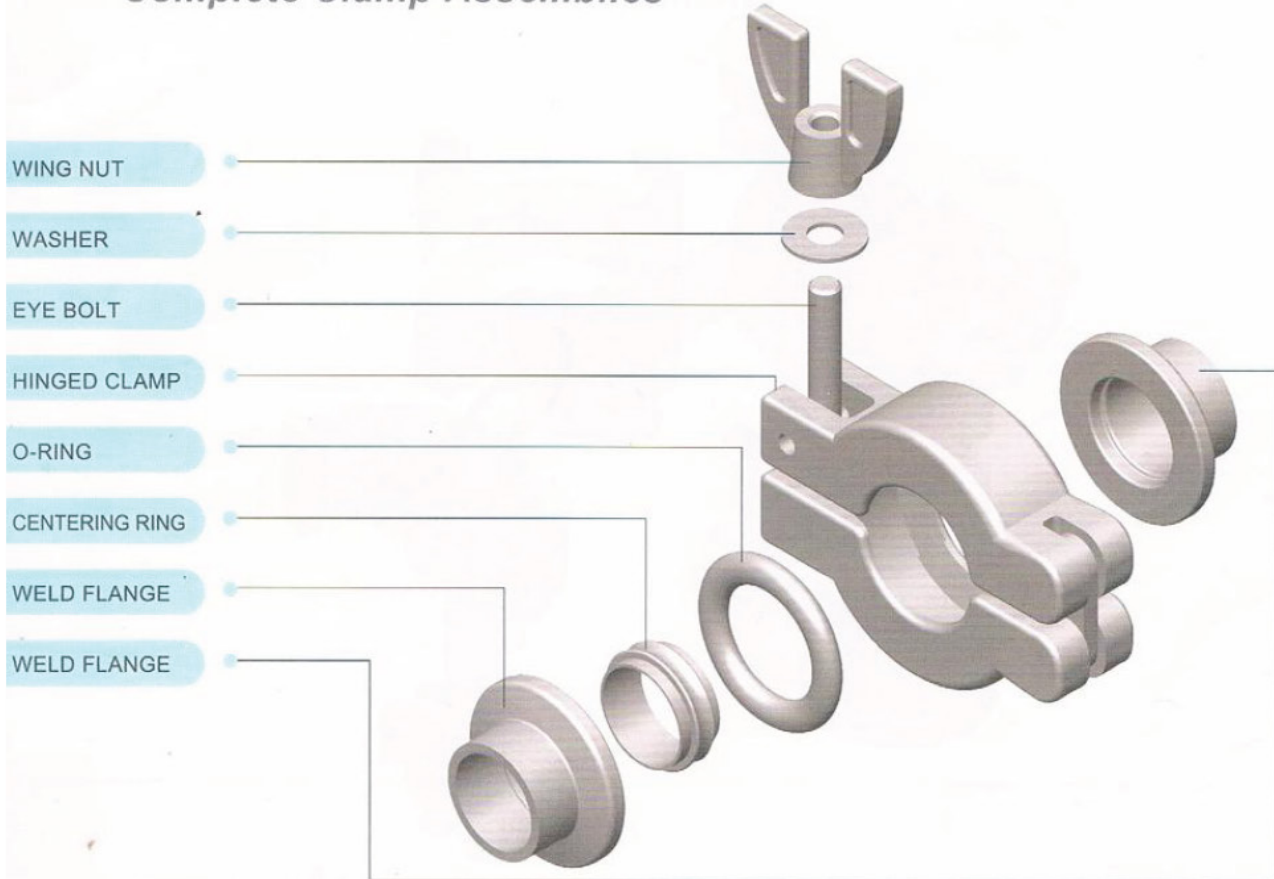


## Connections of KF-series Fittings

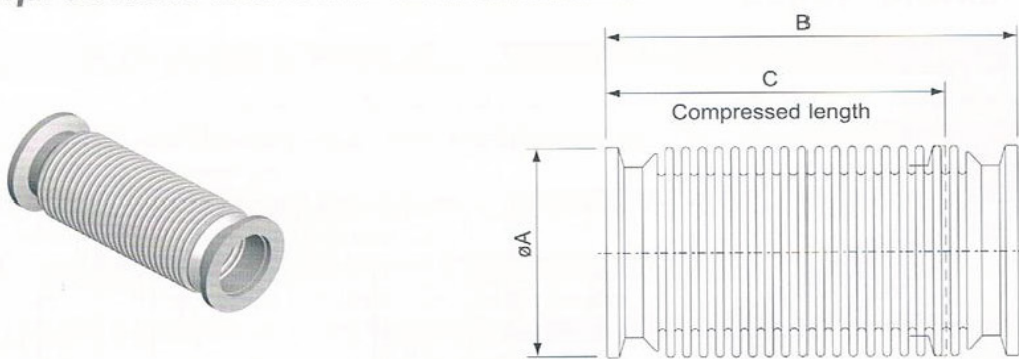


## Complete Clamp Assemblies



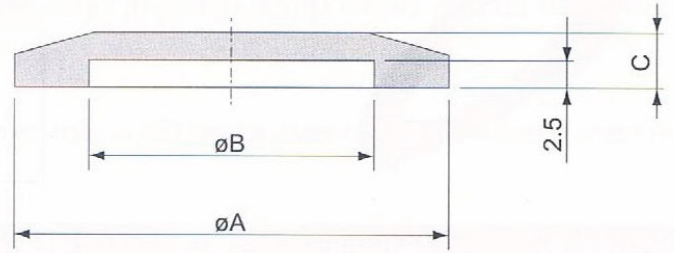
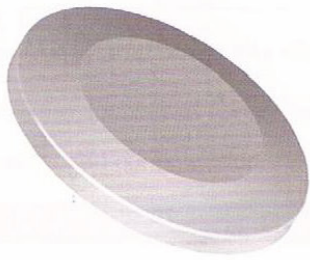
- Hinged Clamp assemblies, detailed above, are the most commonly used method for making KF-Flange vacuum seal connections. Assembly is simplified by the 360° rotatable flanges and self-centering feature of the centering ring.

## KF Compressible Bellows Connections



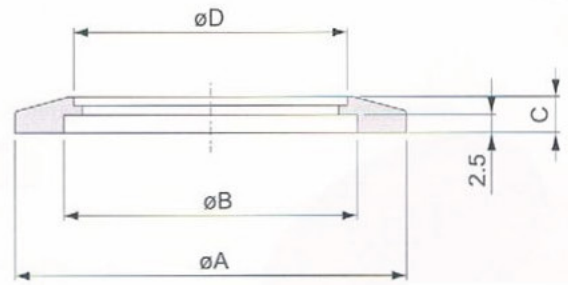
Model No.	Material	A	B	C
Excluding Bellows				
KF10FXC100	304 S.S.	30	100	80
KF16FXC100	304 S.S.	30	100	80
KF25FXC100	304 S.S.	40	100	80
KF40FXC100	304 S.S.	55	100	80
KF50FXC100	304 S.S.	75	100	80

# Blank



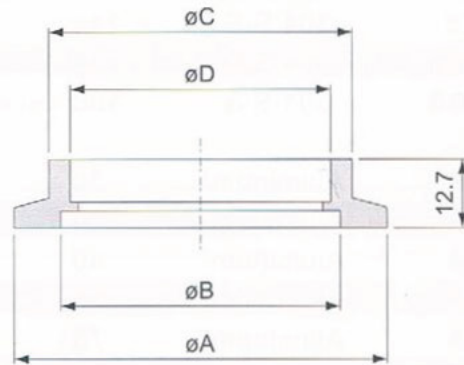
Model No.	Material	A	B	C
KF10BS	304 S.S.	30	12.2	5
KF16BS	304 S.S.	30	17.2	5
KF25BS	304 S.S.	40	26.2	5
KF40BS	304 S.S.	55	41.2	5
KF50BS	304 S.S.	75	52.2	5
KF63BS	304 S.S.	87	70	5
KF80BS	304 S.S.	114	83	12
KF100BS	304 S.S.	134	102	12
KF160BS	304 S.S.	190	153	12
KF10BA	Aluminum	30	12.2	5
KF16BA	Aluminum	30	17.2	5
KF25BA	Aluminum	40	26.2	5
KF40BA	Aluminum	55	41.2	5
KF50BA	Aluminum	75	52.2	5
KF63BA	Aluminum	87	70	5
KF80BA	Aluminum	114	83	12
KF100BA	Aluminum	134	102	12
KF160BA	Aluminum	190	153	12

## Bored Blank



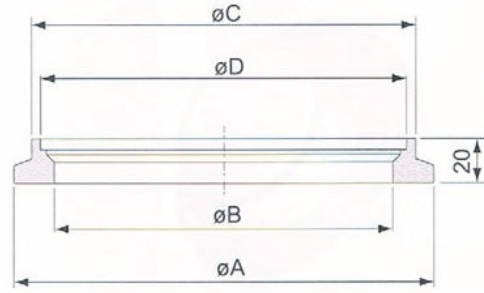
Model No.	Material	A	B	C	D
KF10B12	304 S.S.	30	12.2	5	12.9
KF16B19	304 S.S.	30	17.2	5	19.3
KF25B25	304 S.S.	40	26.2	5	25.7
KF40B38	304 S.S.	55	41.2	5	38.4
KF50B51	304 S.S.	75	52.2	5	51
KF63B63	304 S.S.	87	70	5	63.7
KF80B76	304 S.S.	114	83	12	76.4
KF100B102	304 S.S.	134	102	12	101.8
KF160B153	304 S.S.	190	153	12	152.9

## Socket Weld Flange



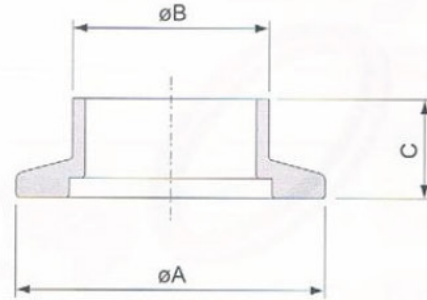
Model No.	Material	A	B	C	D
KF10WS	304 S.S.	30	12.2	16.5	13
KF16WS	304 S.S.	30	17.2	20.5	19.3
KF25WS	304 S.S.	40	26.2	29	25.7
KF40WS	304 S.S.	55	41.2	44.7	38.4
KF50WS	304 S.S.	75	52.2	57.4	51
KF63WS	304 S.S.	87	70	67.5	63.7

## Socket Weld Flange



Model No.	Material	A	B	C	D
KF80WS	304 S.S.	114	83	98	89.5
KF100WS	304 S.S.	134	102	118	114.5
KF160WS	304 S.S.	190	153	174	165.5

## Half Nipple (Short)



Model No.	Available Area	Material	A	B	C
KF10SHNSA	U.S.A	304 S.S.	30	12.7	12.7
KF16SHNSA	U.S.A	304 S.S.	30	19.05	12.7
KF25SHNSA	U.S.A	304 S.S.	40	25.4	12.7
KF40SHNSA	U.S.A	304 S.S.	55	38.1	19.1
KF50SHNSA	U.S.A	304 S.S.	75	50.8	19.1

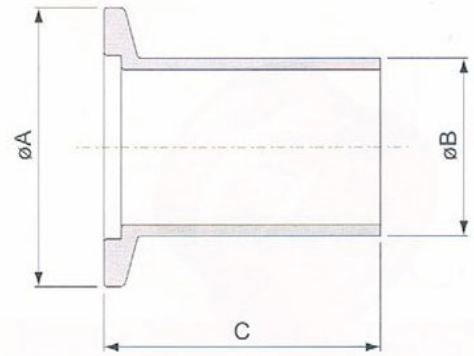
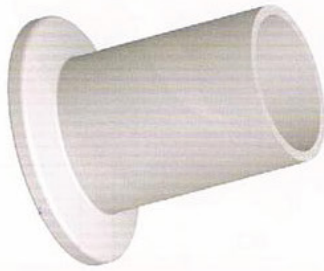
### Special Sizes Available Upon Request

KF10SHNSE	Europe	304 S.S.	30	14	30
KF16SHNSE	Europe	304 S.S.	30	20	30
KF25SHNSE	Europe	304 S.S.	40	28	30
KF40SHNSE	Europe	304 S.S.	55	45	30
KF50SHNSE	Europe	304 S.S.	75	57	30

### Special Sizes Available Upon Request

KF25SHNSJ27	Japan	304 S.S.	40	27.2	20
KF40SHNSJ42	Japan	304 S.S.	55	42.7	20
KF50SHNSJ60	Japan	304 S.S.	75	60.5	20

## Half Nipple (Long)

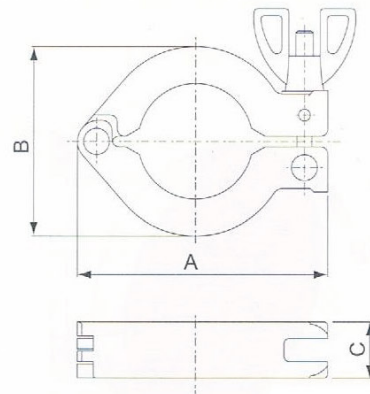
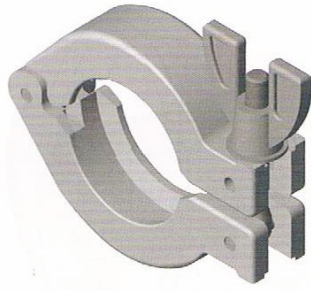


Model No.	Available Area	Material	A	B	C
KF10LHNSA	U.S.A	304 S.S.	30	12.7	40
KF16LHNSA	U.S.A	304 S.S.	30	19.05	40
KF25LHNSA	U.S.A	304 S.S.	40	25.4	40
KF40LHNSA	U.S.A	304 S.S.	55	38.1	40
KF50LHNSA	U.S.A	304 S.S.	75	50.8	40
KF10LHNAA	U.S.A	Aluminum	30	12.7	40
KF16LHNAA	U.S.A	Aluminum	30	19.05	40
KF25LHNAA	U.S.A	Aluminum	40	25.4	40
KF40LHNAA	U.S.A	Aluminum	55	38.1	40
KF50LHNAA	U.S.A	Aluminum	75	50.8	40

### Special Sizes Available Upon Request

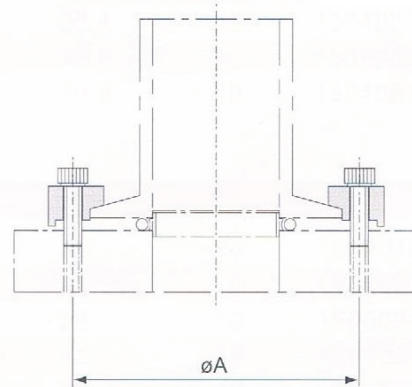
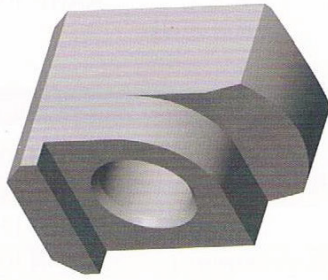
KF10LHNSE	Europe	304 S.S.	30	14	70
KF16LHNSE	Europe	304 S.S.	30	20	70
KF25LHNSE	Europe	304 S.S.	40	28	70
KF40LHNSE	Europe	304 S.S.	55	45	70
KF50LHNSE	Europe	304 S.S.	75	57	70
KF50LHNSJ	Japan	304 S.S.	75	60.5	40

## Clamp



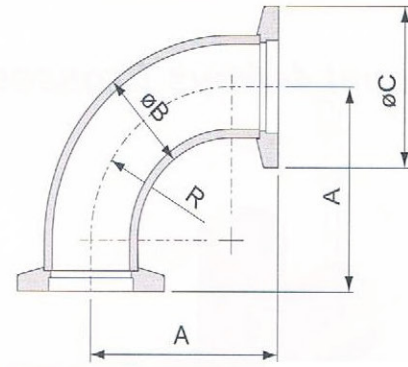
Model No.	Surface Treatment	Material	A	B	C
KF16CLA		Aluminum	63	42.5	16
KF25CLA		Aluminum	72	54	16
KF40CLA		Aluminum	90	70	16
KF50CLA		Aluminum	114	90	20
KF16CLA-NP	Nickel Plating	Aluminum	63	42.5	16
KF25CLA-NP	Nickel Plating	Aluminum	72	54	16
KF40CLA-NP	Nickel Plating	Aluminum	90	70	16
KF50CLA-NP	Nickel Plating	Aluminum	114	90	20

## Nail Clamp



Model No.	Material	Fits Size	Bolt	Quantity	A
KF-NCA	Aluminum	KF10	M6*20	3	43
KF-NCA	Aluminum	KF16	M6*20	3	43
KF-NCA	Aluminum	KF25	M6*20	4	53
KF-NCA	Aluminum	KF40	M6*20	4	68
KF-NCA	Aluminum	KF50	M6*20	6	88

## KF 90° Elbows

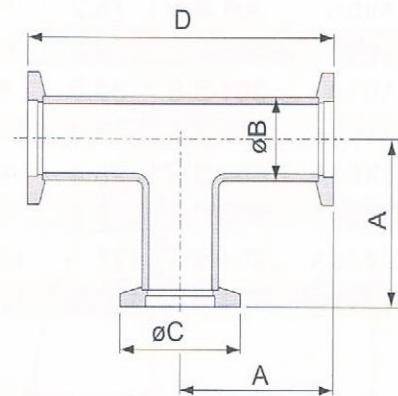


Model No.	Available Area	Material	A	B	C	R
KF16EL90A	USA	304 S.S.	38.3	19.05	30	28.6
KF25EL90A	USA	304 S.S.	56.2	25.4	40	38.1
KF40EL90A	USA	304 S.S.	78.4	38.1	55	57.2
KF50EL90A	USA	304 S.S.	107	50.8	75	76.2

Model No.	Available Area	Material	A	B	C	R
KF16EL90E	Europe	304 S.S.	40	19.05	30	28.6
KF25EL90E	Europe	304 S.S.	50.8	25.4	40	38.1
KF40EL90E	Europe	304 S.S.	65	38.1	55	57.2
KF50EL90E	Europe	304 S.S.	80	50.8	75	76.2

Special Size Available Upon Request

## KF Tees

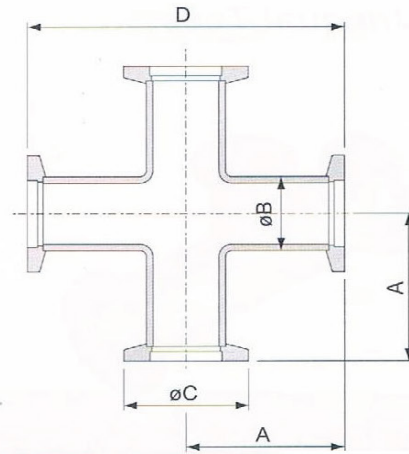
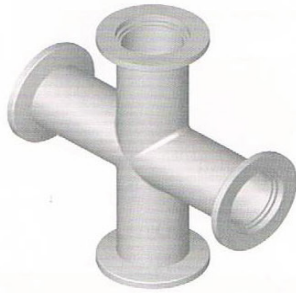


Model No.	Available Area	Material	A	B	C	D
KF16TA	USA	304 S.S.	38.3	19.05	30	76.6
KF25TA	USA	304 S.S.	51.4	25.4	40	102.8
KF40TA	USA	304 S.S.	61	38.1	55	122
KF50TA	USA	304 S.S.	80	50.8	75	160

Model No.	Available Area	Material	A	B	C	D
KF16TE	Europe	304 S.S.	40	19.05	30	80
KF25TE	Europe	304 S.S.	50	25.4	40	100
KF40TE	Europe	304 S.S.	65	38.1	55	130



## KF 4-Way Crosses

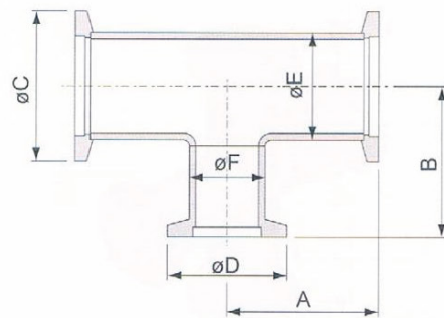
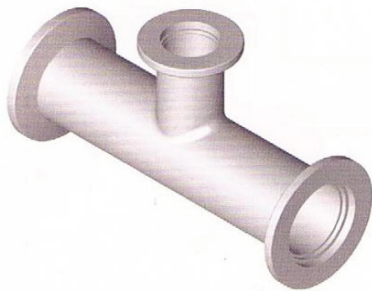


Model No.	Available Area	Material	A	B	C	D
KF16XA	USA	304 S.S.	38.3	19.05	30	76.6
KF25XA	USA	304 S.S.	51.4	25.4	40	102.8
KF40XA	USA	304 S.S.	61	38.1	55	122
KF50XA	USA	304 S.S.	80	50.8	75	160

Model No.	Available Area	Material	A	B	C	D
KF16XE	Europe	304 S.S.	40	19.05	30	80
KF25XE	Europe	304 S.S.	50	25.4	40	100
KF40XE	Europe	304 S.S.	65	38.1	55	130
KF50XE	Europe	304 S.S.	70	50.8	75	140

Special Size Available Upon Request

## KF Unequal Tees

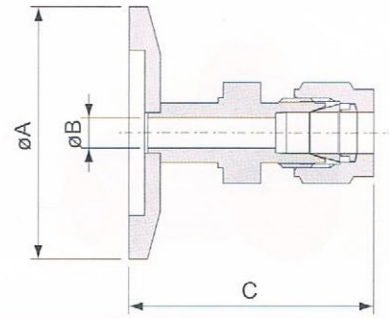
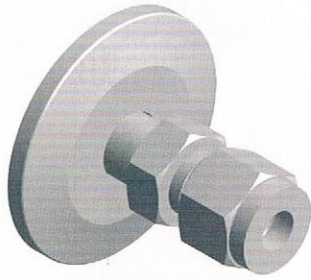


Model No.	Available Area	Material	A	B	C	D	E	F
KF25UT16A	USA	304 S.S.	52	37.5	40	30	25.4	19.05
KF40UT16A	USA	304 S.S.	61	52	55	30	38.1	19.05
KF40UT25A	USA	304 S.S.	61	57.8	55	40	38.1	25.4
KF50UT16A	USA	304 S.S.	80	58.2	75	30	50.8	19.05
KF50UT25A	USA	304 S.S.	80	64.1	75	40	50.8	25.4
KF50UT40A	USA	304 S.S.	80	67.3	75	55	50.8	38.1

Model No.	Available Area	Material	A	B	C	D	E	F
KF25UT16E	Europe	304 S.S.	50	40	40	30	25.4	19.05
KF40UT16E	Europe	304 S.S.	65	40	55	30	38.1	19.05
KF40UT25E	Europe	304 S.S.	65	50	55	40	38.1	25.4
KF50UT16E	Europe	304 S.S.	70	50	75	30	50.8	19.05
KF50UT25E	Europe	304 S.S.	70	65	75	40	50.8	25.4
KF50UT40E	Europe	304 S.S.	70	65	75	55	50.8	38.1

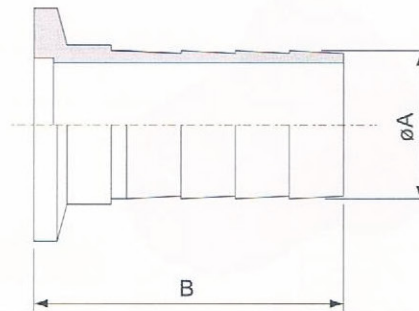
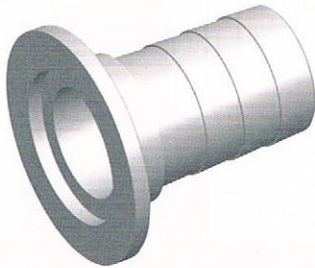
Special Size Available Upon Request

## KF-Swagelok Adaptor



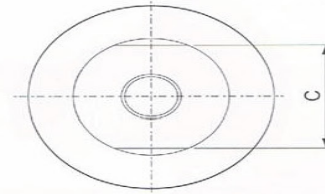
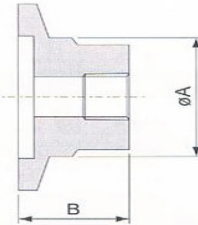
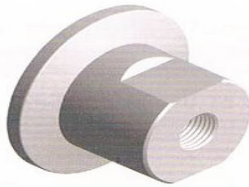
Model No.	Material	A	B	C	Swagelok
KF16SWA6	304 S.S.	30	4.8	36.6	1/4"
KF16SWA13	304 S.S.	30	10.8	45	1/2"
KF25SWA6	304 S.S.	40	4.8	36.6	1/4"
KF25SWA13	304 S.S.	40	10.8	54.3	1/2"
KF40SWA6	304 S.S.	55	4.8	36.6	1/4"
KF40SWA13	304 S.S.	55	10.8	54.3	1/2"
KF50SWA6	304 S.S.	75	4.8	36.6	1/4"
KF50SWA13	304 S.S.	75	10.8	54.3	1/2"

## KF Rubber Hose Adaptor



Model No.	Material	A	B	Hose Size
KF10RHA	304 S.S.	16	40	5/8"
KF16RHA	304 S.S.	19.1	40	3/4"
KF25RHA	304 S.S.	22.2	40	7/8"
KF40RHA	304 S.S.	41.3	40	1 5/8"
KF50RHA	304 S.S.	47.7	40	1 7/8"

## KF-Female Pipe Adaptor



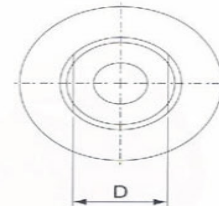
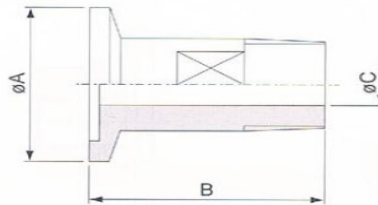
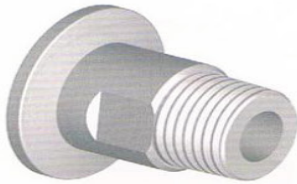
### Thread Type: PT

Model No.	Material	A	B	C	Tread
KF16FPT3	304 S.S.	19.05	25	17	1/8"PT
KF25FPT3	304 S.S.	25.4	25	19	1/8"PT
KF40FPT3	304 S.S.	38.1	25	32	1/8"PT
KF50FPT3	304 S.S.	50.8	25	46	1/8"PT
KF16FPT6	304 S.S.	19.05	25	17	1/4"PT
KF25FPT6	304 S.S.	25.4	25	19	1/4"PT
KF40FPT6	304 S.S.	38.1	25	32	1/4"PT
KF50FPT6	304 S.S.	50.8	25	46	1/4"PT

### Thread Type: NPT

Model No.	Material	A	B	C	Tread
KF16FNPT3	304 S.S.	19.05	25	17	1/8"NPT
KF25FNPT3	304 S.S.	25.4	25	19	1/8"NPT
KF40FNPT3	304 S.S.	38.1	25	32	1/8"NPT
KF50FNPT3	304 S.S.	50.8	25	46	1/8"NPT
KF16FNPT6	304 S.S.	19.05	25	17	1/4"NPT
KF25FNPT6	304 S.S.	25.4	25	19	1/4"NPT
KF40FNPT6	304 S.S.	38.1	25	32	1/4"NPT
KF50FNPT6	304 S.S.	50.8	25	46	1/4"NPT

## KF Male Pipe Adaptor



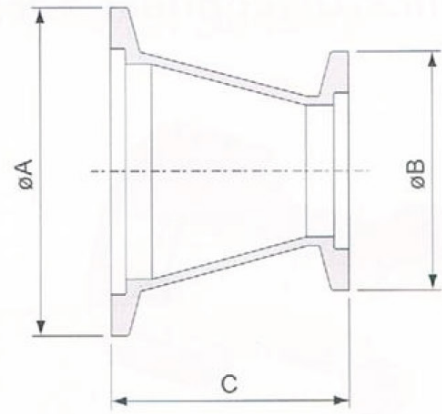
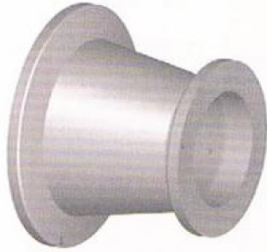
### Thread Type: PT

Model No.	Material	A	B	C	D	Tread
KF16MPT3	304 S.S.	30	35	4.7	10	1/8"PT
KF16MPT6	304 S.S.	30	35	7.1	14	1/4"PT
KF25MPT3	304 S.S.	40	35	4.7	10	1/8"PT
KF25MPT6	304 S.S.	40	35	7.1	14	1/4"PT
KF25MPT13	304 S.S.	40	40	11.9	22	1/2"PT
KF25MPT19	304 S.S.	40	40	15.9	27	3/4"PT
KF40MPT6	304 S.S.	55	35	7.1	14	1/4"PT
KF40MPT13	304 S.S.	55	40	11.9	22	1/2"PT
KF40MPT19	304 S.S.	55	40	15.9	27	3/4"PT
KF40MPT25	304 S.S.	55	45	22.2	36	1"PT
KF50MPT6	304 S.S.	75	35	7.1	14	1/4"PT
KF50MPT13	304 S.S.	75	40	11.9	22	1/2"PT
KF50MPT19	304 S.S.	75	40	15.9	27	3/4"PT
KF50MPT25	304 S.S.	75	45	22.2	36	1"PT

### Thread Type: NPT

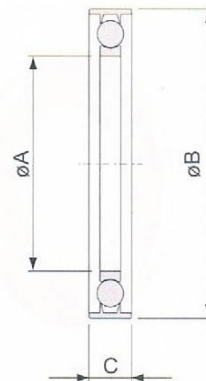
Model No.	Material	A	B	C	D	Tread
KF16MNPT3	304 S.S.	30	35	4.7	10	1/8"NPT
KF16MNPT6	304 S.S.	30	35	7.1	14	1/4"NPT
KF25MNPT3	304 S.S.	40	35	4.7	10	1/8"NPT
KF25MNPT6	304 S.S.	40	35	7.1	14	1/4"NPT
KF25MNPT13	304 S.S.	40	40	11.9	22	1/2"NPT
KF25MNPT19	304 S.S.	40	40	15.9	27	3/4"NPT
KF40MNPT6	304 S.S.	55	35	7.1	14	1/4"NPT
KF40MNPT13	304 S.S.	55	40	11.9	22	1/2"NPT
KF40MNPT19	304 S.S.	55	40	15.9	27	3/4"NPT
KF40MNPT25	304 S.S.	55	45	22.2	36	1"NPT
KF50MNPT6	304 S.S.	75	35	7.1	14	1/4"NPT
KF50MNPT13	304 S.S.	75	40	11.9	22	1/2"NPT
KF50MNPT19	304 S.S.	75	40	15.9	27	3/4"NPT

## KF-KF Conical Reducing Adaptor



Model No.	Material	A	B	C
KF25RA16	304 S.S.	40	30	40
KF40RA16	304 S.S.	55	30	40
KF40RA25	304 S.S.	55	40	40
KF50RA16	304 S.S.	75	30	40
KF50RA25	304 S.S.	75	40	40
KF50RA40	304 S.S.	75	55	40

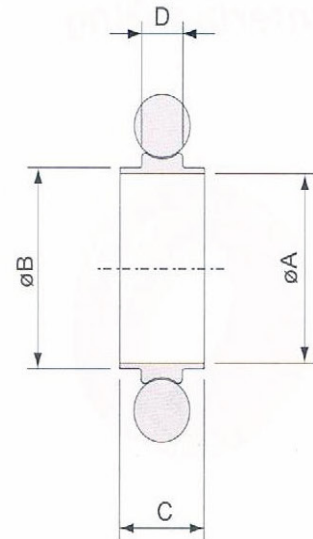
## KF Centering Ring, with Outer Ring & O'Ring



Model No.	Material		O'Ring	O'Ring	A	B	C
	O/R	C/R					
KF16OCRVS	Al	304 S.S.	Vilton	5018	16	32.5	8
KF25OCRVS	Al	304 S.S.	Vilton	5028	25	42.5	8
KF40OCRVS	Al	304 S.S.	Vilton	5042	40	57.5	8
KF50OCRVS	Al	304 S.S.	Vilton	AS-330	50	77.5	8
KF16OCRVS-316	Al	316 S.S.	Vilton	5018	16	32.5	8
KF25OCRVS-316	Al	316 S.S.	Vilton	5028	25	42.5	8
KF40OCRVS-316	Al	316 S.S.	Vilton	5042	40	57.5	8
KF50OCRVS-316	Al	316 S.S.	Vilton	AS-330	50	77.5	8

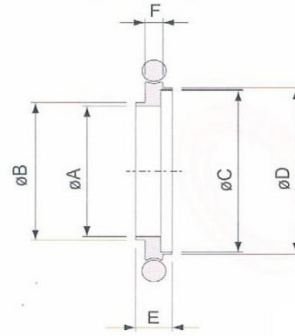
O'Ring's color is brown, black is available upon request

## KF Centering Ring with O'Ring



Model No.	Material	O'Ring	A	B	C	D	
	C/R	O'Ring	Size				
KF10CRVS	304 S.S.	Vilton	AS-311	10	12	8	3.9
KF16CRVS	304 S.S.	Vilton	AS-314	16	17	8	3.9
KF25CRVS	304 S.S.	Vilton	AS-320	25	26	8	3.9
KF40CRVS	304 S.S.	Vilton	AS-326	40	41	8	3.9
KF50CRVS	304 S.S.	Vilton	AS-330	50	52	8	3.9
KF10CRVA	Al	Vilton	AS-311	10	12	8	3.9
KF16CRVA	Al	Vilton	AS-314	16	17	8	3.9
KF25CRVA	Al	Vilton	AS-320	25	26	8	3.9
KF40CRVA	Al	Vilton	AS-326	40	41	8	3.9
KF50CRVA	Al	Vilton	AS-330	50	52	8	3.9
KF10CRNS	304 S.S.	NBR	AS-311	10	12	8	3.9
KF16CRNS	304 S.S.	NBR	AS-314	16	17	8	3.9
KF25CRNS	304 S.S.	NBR	AS-320	25	26	8	3.9
KF40CRNS	304 S.S.	NBR	AS-326	40	41	8	3.9
KF50CRNS	304 S.S.	NBR	AS-330	50	52	8	3.9
KF10CRNA	Al	NBR	AS-311	10	12	8	3.9
KF16CRNA	Al	NBR	AS-314	16	17	8	3.9
KF25CRNA	Al	NBR	AS-320	25	26	8	3.9
KF40CRNA	Al	NBR	AS-326	40	41	8	3.9
KF50CRNA	Al	NBR	AS-330	50	52	8	3.9

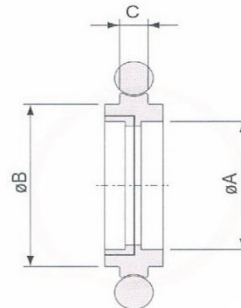
## KF Centering Ring Adaptor, O'Ring



Model No.	Material	O'Ring	A	B	C	D	E	F
C/R	O'Ring	Size						
KF10CR16VS	304 S.S.	<b>Vilton</b> AS-314	10	12	16	17	8	3.9
KF20CR25VS	304 S.S.	<b>Vilton</b> AS-320	20	22	25	26	8	3.9
KF32CR40VS	304 S.S.	<b>Vilton</b> AS-326	32	34	40	41	8	3.9
KF10CR16VA	Al	<b>Vilton</b> AS-314	10	12	16	17	8	3.9
KF20CR25VA	Al	<b>Vilton</b> AS-320	20	22	25	26	8	3.9
KF32CR40VA	Al	<b>Vilton</b> AS-326	32	34	40	41	8	3.9
KF10CR16NS	304 S.S.	NBR AS-314	10	12	16	17	8	3.9
KF20CR25NS	304 S.S.	NBR AS-320	20	22	25	26	8	3.9
KF32CR40NS	304 S.S.	NBR AS-326	32	34	40	41	8	3.9
KF10CR16NA	Al	NBR AS-314	10	12	16	17	8	3.9
KF20CR25NA	Al	NBR AS-320	20	22	25	26	8	3.9
KF32CR40NA	Al	NBR AS-326	32	34	40	41	8	3.9

O'Ring color for NBR material is black, brown is available upon request  
O'Ring color for Viton material is brown, black is available upon request

## KF Meshed Centering Ring



Model No.	Material	O'Ring	Mesh/In <sup>2</sup>	A	B	C
C/R	O'Ring	Size				
KF16M3CRVS	304 S.S.	<b>Vilton</b> AS-314	900	12	17	3.9
KF25M3CRVS	304 S.S.	<b>Vilton</b> AS-320	900	20.5	26	3.9
KF40M3CRVS	304 S.S.	<b>Vilton</b> AS-326	900	35.8	41	3.9
KF50M3CRVS	304 S.S.	<b>Vilton</b> AS-330	900	46.3	52	3.9
KF63M3CRVS	304 S.S.	<b>Vilton</b> AS-337	900	60.5	69.6	3.9
KF80M3CRVS	304 S.S.	<b>Vilton</b> AS-341	900	73.6	82.6	3.9
KF100M3CRVS	304 S.S.	<b>Vilton</b> AS-347	900	91.8	101.6	3.9
KF160M3CRVS	304 S.S.	<b>Vilton</b> AS-362	900	143.5	152.6	3.9
KF16M3CRNS	304 S.S.	NBR AS-314	900	12	17	3.9
KF25M3CRNS	304 S.S.	NBR AS-320	900	20.5	26	3.9
KF40M3CRNS	304 S.S.	NBR AS-326	900	35.8	41	3.9
KF50M3CRNS	304 S.S.	NBR AS-330	900	46.3	52	3.9
KF63M3CRNS	304 S.S.	NBR AS-337	900	60.5	69.6	3.9
KF80M3CRNS	304 S.S.	NBR AS-341	900	73.6	82.6	3.9
KF100M3CRNS	304 S.S.	NBR AS-347	900	91.8	101.6	3.9
KF160M3CRNS	304 S.S.	NBR AS-362	900	143.5	152.6	3.9

O'Ring color for NBR material is black, brown is available upon request  
O'Ring color for Viton material is brown, black is available upon request