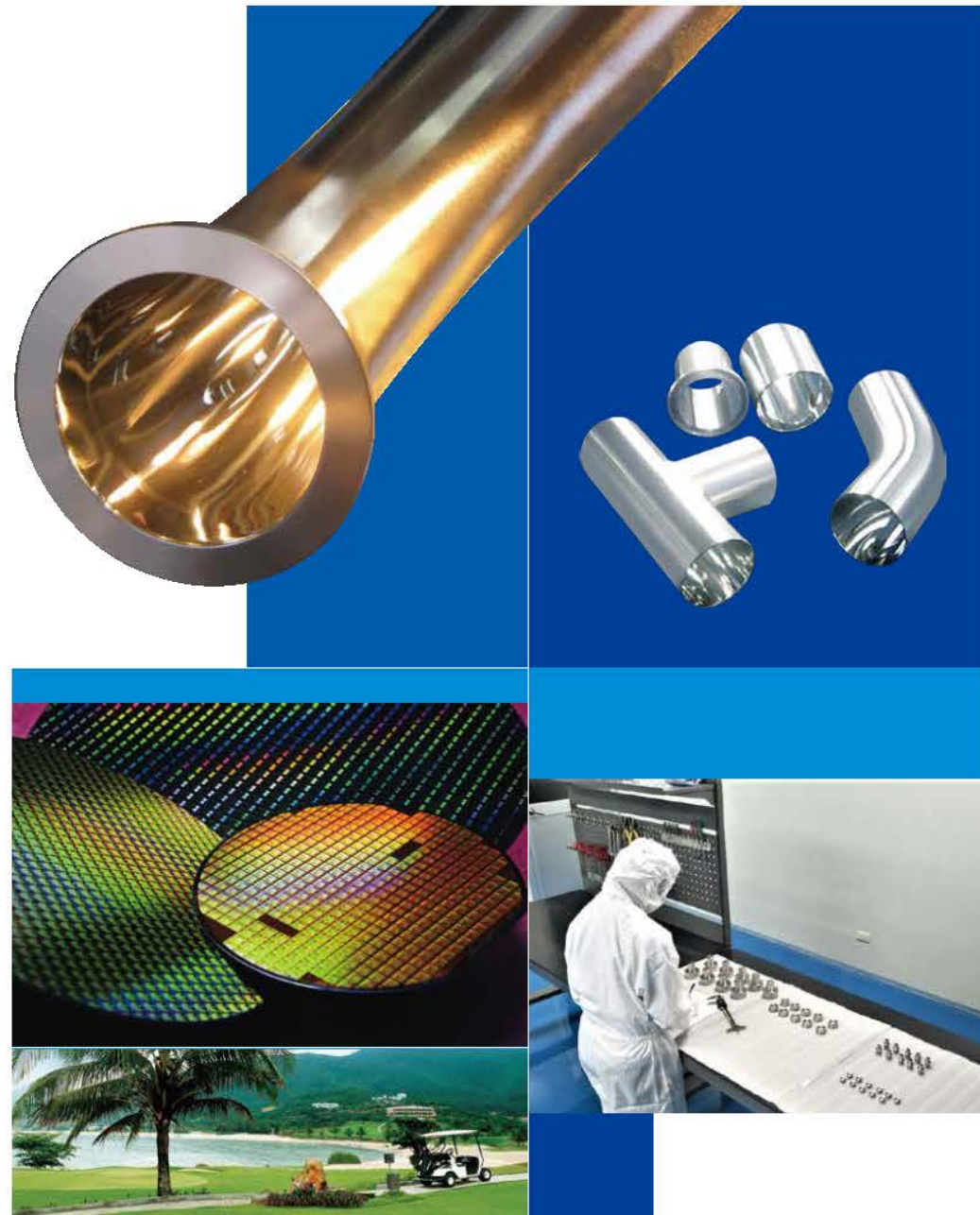


# Semi-conductor Fitty Tube



## CSE SEMI-CONDUCTOR/MICRO-ELECTRONICS

CSE developed our semiconductor, vacuum pipe fitting and components step by step by means of good produce techniques experience of sanitary pipe fitting and valve.

Our Vacuum and semiconductor fitting include:

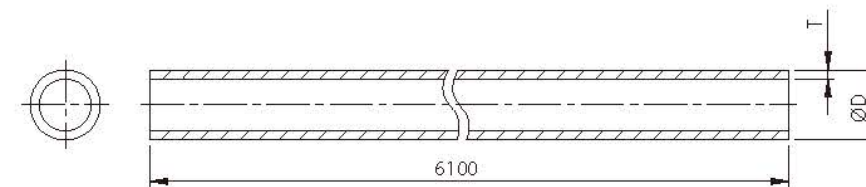
Clamp-Aluminum and Stainless steel and claw clamp are available. Flange-KF, ISO specification.

Reducer-Blank flange and all of Elbow, Tee, Reducer.  $Ra \leq 0.4\mu m$  by machine and polished can be provided on requested. We also can offer Electro-polished and blasted surfaces.

So far our products have been successful promoted to Germany, U.K, Japan and local building projects base on our flexible produce ability and strict control.

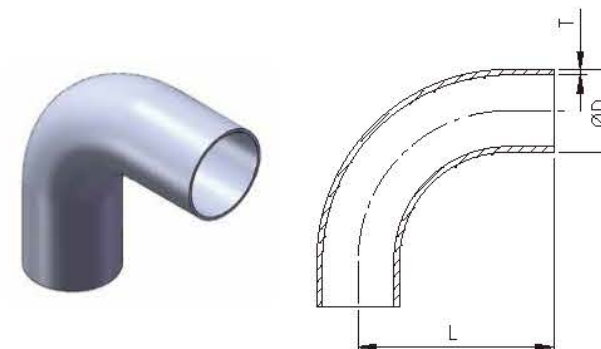


### Vacuum Components (A size)



SIZE	ØD	T
6A	1/8"	10.5
8A	1/4"	13.8
10A	3/8"	17.3
15A	1/2"	21.7
20A	3/4"	27.2
25A	1.0"	34
32A	1.25"	42.7
40A	1.5"	48.6
50A	2.0"	60.5
65A	2.5"	76.3
80A	3.0"	89.1
90A	3.5"	101.6
100A	4.0"	114.3

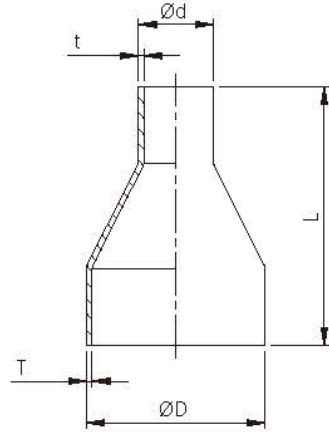
### SCF 90° ELBOW



SIZE	ØD	L	T
10A	17.3	60	1.2
15A	21.7	65	1.65
20A	27.2	70	1.65
25A	34	75	1.65
32A	42.7	90	1.65
40A	48.6	104	1.65
50A	60.5	123	1.65
65A	76.3	115	2.1
80A	89.1	128	2.1
100A	114.3	153	2.1



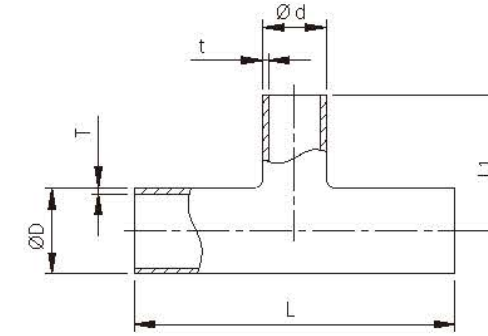
## Vacuum Components (A size)



### SCF CONCENTRIC REDUCER

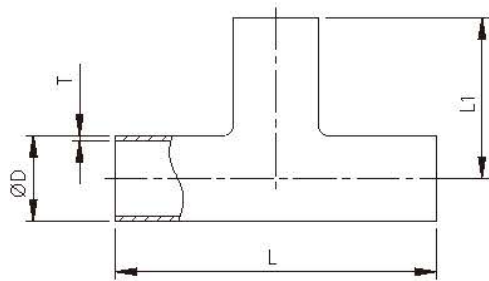
SIZE	ØD	Ød	L	T	t
20A*15A	27.2	21.7	120	1.65	1.65
25A*15A	34	21.7	125	1.65	1.65
25A*20A	34	27.2	125	1.65	1.65
32A*15A	42.7	21.7	139	1.65	1.65
32A*20A	42.7	27.2	139	1.65	1.65
32A*25A	42.7	34	139	1.65	1.65
40A*20A	48.6	27.2	152	1.65	1.65
40A*25A	48.6	34	152	1.65	1.65
40A*32A	48.6	42.7	162	1.65	1.65
50A*20A	60.5	27.2	164	1.65	1.65
50A*25A	60.5	34	164	1.65	1.65
50A*32A	60.5	42.7	174	1.65	1.65
50A*40A	60.5	48.6	174	1.65	1.65
65A*32A	76.3	42.7	192	2.1	1.65
65A*40A	76.3	48.6	192	2.1	1.65
65A*50A	76.3	60.5	192	2.1	1.65
80A*32A	89.1	42.7	192	2.1	1.65
80A*40A	89.1	48.6	192	2.1	1.65
80A*50A	89.1	60.5	192	2.1	1.65
80A*65A	89.1	76.3	197	2.1	2.1
100A*40A	114.3	48.6	205	2.1	1.65
100A*50A	114.3	60.5	205	2.1	1.65
100A*65A	114.3	76.3	210	2.1	2.1
100A*80A	114.3	89.1	210	2.1	2.1

## Vacuum Components (A size)



### SCF REDUCING TEE

SIZE	ØD	Ød	L	L1	T	t
20A*15A	27.2	21.7	110	55	1.65	1.65
25A*15A	34	21.7	120	60	1.65	1.65
25A*20A	34	27.2	120	60	1.65	1.65
32A*15A	42.7	21.7	140	70	1.65	1.65
32A*20A	42.7	27.2	140	70	1.65	1.65
32A*25A	42.7	34	140	70	1.65	1.65
40A*15A	48.6	21.7	140	70	1.65	1.65
40A*20A	48.6	27.2	140	70	1.65	1.65
40A*25A	48.6	34	140	70	1.65	1.65
40A*32A	48.6	42.7	160	80	1.65	1.65
50A*15A	60.5	21.7	140	75	1.65	1.65
50A*20A	60.5	27.2	140	75	1.65	1.65
50A*25A	60.5	34	140	75	1.65	1.65
50A*32A	60.5	42.7	160	85	1.65	1.65
50A*40A	60.5	48.6	160	85	1.65	1.65
65A*15A	76.3	21.7	150	85	2.1	1.65
65A*20A	76.3	27.2	150	85	2.1	1.65
65A*25A	76.3	34	150	85	2.1	1.65
65A*32A	76.3	42.7	180	95	2.1	1.65
65A*40A	76.3	48.6	180	95	2.1	1.65
65A*50A	76.3	60.5	180	95	2.1	1.65
80A*15A	89.1	21.7	150	90	2.1	1.65
80A*20A	89.1	27.2	150	90	2.1	1.65
80A*25A	89.1	34	150	90	2.1	1.65
80A*32A	89.1	42.7	180	100	2.1	1.65
80A*40A	89.1	48.6	180	100	2.1	1.65
80A*50A	89.1	60.5	180	100	2.1	1.65
80A*65A	89.1	76.3	200	105	2.1	2.1
100A*15A	114.3	21.7	150	100	2.1	1.65
100A*20A	114.3	27.2	150	100	2.1	1.65
100A*25A	114.3	34	150	100	2.1	1.65
100A*32A	114.3	42.7	180	110	2.1	1.65
100A*40A	114.3	48.6	180	110	2.1	1.65
100A*50A	114.3	60.5	180	110	2.1	1.65
100A*65A	114.3	76.3	210	120	2.1	2.1
100A*80A	114.3	89.1	210	120	2.1	2.1



### SCF EQUAL WELD TEE

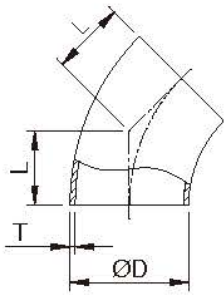
SIZE	ØD	L	L1	T
10A	17.3	100	50	1.2
15A	21.7	110	55	1.65
20A	27.2	110	55	1.65
25A	34	120	60	1.65
32A	42.7	150	75	1.65
40A	48.6	160	80	1.65
50A	60.5	170	85	1.65
65A	76.3	200	100	2.1
80A	89.1	210	105	2.1
100A	114.3	240	120	2.1





## Vacuum Components (USA type)

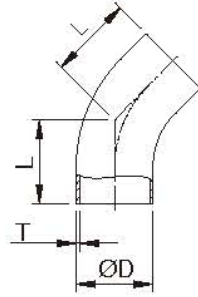
45° Short Elbow



45° Elbow

SIZE	ØD	L	T
1.0"	25.4	15.8	1.65
1.5"	38.1	23.8	1.65
2.0"	50.8	31.75	1.65
2.5"	63.5	39.6	1.65
3.0"	76.2	47.6	1.65
4.0"	101.6	63.5	2.1

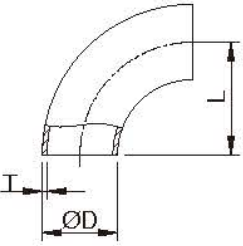
45° Long Elbow



45° Elbow

SIZE	ØD	L	T
1.0"	25.4	30.2	1.65
1.5"	38.1	41.3	1.65
2.0"	50.8	58.7	1.65
2.5"	63.5	76.2	1.65
3.0"	76.2	93.7	1.65
4.0"	101.6	122.2	2.1

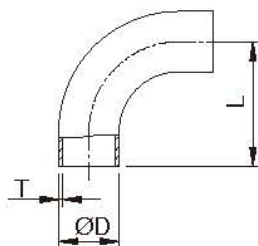
90° Short Elbow



90° Bend

SIZE	ØD	L	T
1.0"	25.4	38.1	1.65
1.5"	38.1	57.2	1.65
2.0"	50.8	76.2	1.65
2.5"	63.5	95.25	1.65
3.0"	76.2	114.3	1.65
4.0"	101.6	152.4	2.1

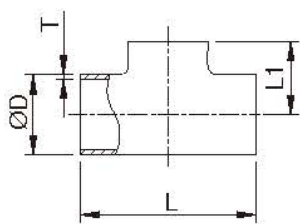
90° Long Elbow



90° Bend

SIZE	ØD	L	T
1.0"	25.4	52.4	1.65
1.5"	38.1	74.6	1.65
2.0"	50.8	103.2	1.65
2.5"	63.5	131.8	1.65
3.0"	76.2	160.3	1.65
4.0"	101.6	211.1	2.1

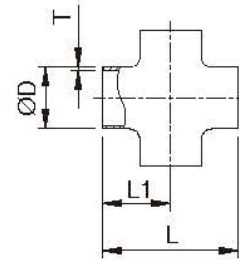
Welding Tee



Tee

SIZE	ØD	L	L1	T
1.0"	25.4	95.2	47.6	1.65
1.5"	38.1	114.4	57.2	1.65
2.0"	50.8	152.4	76.2	1.65
2.5"	63.5	152.4	76.2	1.65
3.0"	76.2	165.2	82.6	1.65
4.0"	101.6	196.8	98.4	2.1

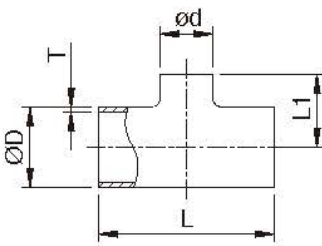
Cross



Cross

SIZE	ØD	L	L1	T
1.0"	25.4	95.2	47.6	1.65
1.5"	38.1	114.4	57.2	1.65
2.0"	50.8	152.4	76.2	1.65
2.5"	63.5	152.4	76.2	1.65
3.0"	76.2	165.2	82.6	1.65
4.0"	101.6	196.8	98.4	2.1

Reducing Tee

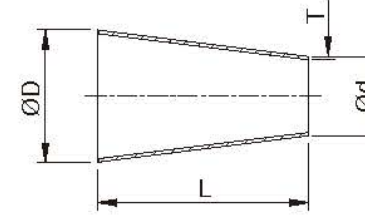


Reducing Tee

SIZE	ØD	Ød	L	L1	T
1.5"x1.0"	38.1	25.4	114.3	53.98	1.65
2.0"x1.0"	50.8	25.4	152.4	60.3	1.65
2.0"x1.5"	50.8	38.1	152.4	63.5	1.65
2.5"x1.5"	63.5	38.1	152.4	69.85	1.65
2.5"x2.0"	63.5	50.8	152.4	82.55	1.65
3.0"x1.5"	76.2	38.1	165.1	76.2	1.65
3.0"x2.0"	76.2	50.8	165.1	88.90	1.65
3.0"x2.5"	76.2	63.5	165.1	82.55	1.65
4.0"x2.0"	101.6	50.8	196.8	101.6	2.1
4.0"x2.5"	101.6	63.5	196.8	95.25	2.1
4.0"x3.0"	101.6	76.2	196.8	95.25	2.1

## Vacuum Components (USA type)

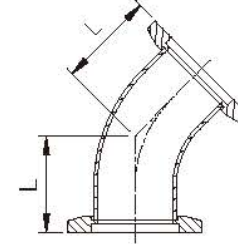
Concentric Reducer



Concentric Reducer

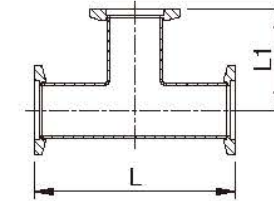
SIZE	ØD	Ød	L	T
1.5"x1.0"	38.1	25.4	50.8	1.65
2.0"x1.5"	50.8	38.1	50.8	1.65
2.5"x1.5"	63.5	38.1	101.6	1.65
2.5"x2.0"	63.5	50.8	50.8	1.65
3.0"x1.5"	76.2	38.1	152.4	1.65
3.0"x2.0"	76.2	50.8	101.6	1.65
3.0"x2.5"	76.2	63.5	50.8	1.65
4.0"x1.5"	101.6	38.1	254	2.1
4.0"x2.0"	101.6	50.8	203.2	2.1
4.0"x2.5"	101.6	63.5	152.4	2.1
4.0"x3.0"	101.6	76.2	101.6	2.1

45° Elbow Flange



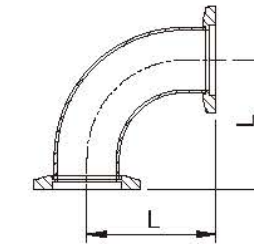
SIZE	O.D	L
KF25	1.0"	28.44
KF40	1.5"	42.67
KF50	2.0"	50.54

Tee Flange



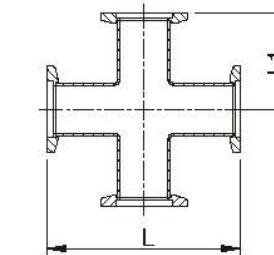
SIZE	O.D	L	L1
KF25	1.0"	100.07	50.03
KF40	1.5"	130.04	65.02
KF50	2.0"	139.95	70.01

90° Elbow Flange



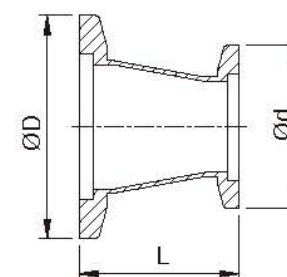
SIZE	O.D	L
KF25	1.0"	51.6
KF40	1.5"	61.0
KF50	2.0"	80.0

4-Way Cross Flange



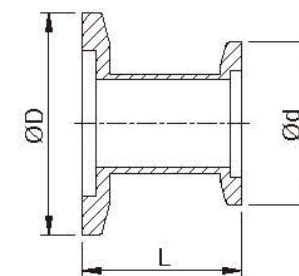
SIZE	O.D	L	L1
KF25	1.0"	103.2	51.6
KF40	1.5"	122.0	61.0
KF50	2.0"	160.0	80.0

Conical Reducer



ØD	Ød	L
KF25	KF16	39.9
KF40	KF16	39.9
KF40	KF25	39.9
KF50	KF16	39.9
KF50	KF25	39.9
KF50	KF40	39.9

Straight Reducer

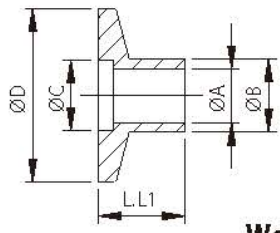


ØD	Ød	L
KF25	KF16	39.9
KF40	KF16	39.9
KF40	KF25	39.9
KF50	KF16	39.9
KF50	KF25	39.9
KF50	KF40	39.9



## Vacuum Components (USA type)

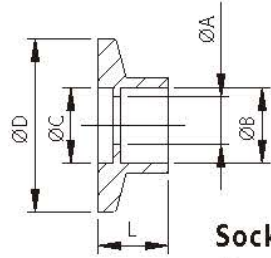
### Weld Flange



### Weld Flange

SIZE	ØA	ØB	ØC	ØD	L	L1
KF-10	9.4	12.7	12.19	29.97	12.7	40.01
KF-16	15.75	19.05	17.27	29.97	12.7	40.01
KF-25	22.1	25.4	26.19	40.01	12.7	40.01
KF-40	34.8	38.1	41.15	54.86	19.05	40.01
KF-50	47.5	50.8	52.32	74.93	19.05	40.01

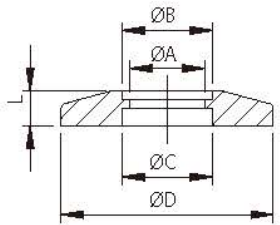
### Socket Weld Flange



### Socket Weld Flange

SIZE	ØA	ØB	ØC	ØD	L
KF-10	12.19	13.0	12.19	29.97	12.7
KF-16	17.27	19.3	17.27	29.97	12.7
KF-25	22.86	25.65	26.19	40.01	12.7
KF-40	35.56	38.35	41.15	54.86	12.7
KF-50	48.26	51.05	52.32	74.93	12.7

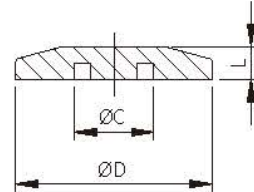
### Bored Flange



### Bored Flange

SIZE	ØA	ØB	ØC	ØD	L
KF-25	22.86	25.91	26.16	40.01	5.08
KF-40	35.56	38.61	41.15	54.86	5.08
KF-50	48.26	51.31	52.32	74.93	5.08

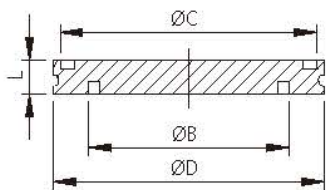
### Blank Flange



### Blank Flange

SIZE	ØC	ØD	L
KF-10	12.19	29.97	5.08
KF-16	17.27	29.97	5.08
KF-25	26.19	40.01	5.08
KF-40	41.15	54.86	5.08
KF-50	52.32	74.93	5.08

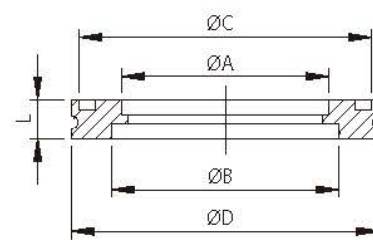
### ISO-Blank Flange



### Blank Flange

SIZE	ØB	ØC	ØD	L
ISO-63	70	90.02	95	11.94
ISO-80	80.01	105.03	110.01	11.94
ISO-100	102.01	125.02	130	11.94
ISO-160	153.01	175.03	180.01	11.94
ISO-200	203.71	235.02	240	11.94

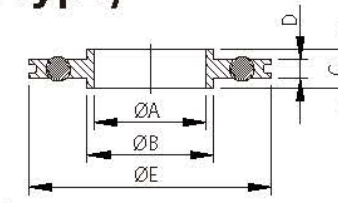
### ISO-Bored Flange



### Weld Flange

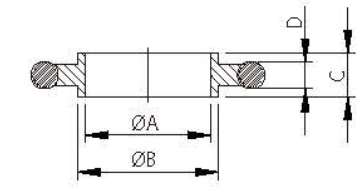
SIZE	ØA	ØB	ØC	ØD	L
ISO-63	64.01	70	90.02	95	11.94
ISO-80	76.71	83.01	105.03	110.01	11.94
ISO-100	102.11	102.01	125.02	130	11.94
ISO-160	152.91	153.01	175.03	180.01	11.94
ISO-200	203.71	203.71	235.02	240	11.94

## Centreing Ring (SS304 & Alu Material) with O-Ring (VITON (FKM)) (USA type)



### ISO-Type

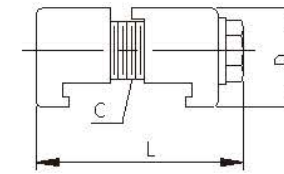
SIZE	ØA	ØB	C	D	ØE
ISO-63-V-U	66.8	69.6	8	3.81	91
ISO-80-V-U	79.75	82.6	8	3.81	104
ISO-100-V-U	98.8	101.6	8	3.81	123
ISO-160-V-U	149.86	152.6	8	3.81	170
ISO-200-V-U	207.8	212.6	8	3.81	234
ISO-250-V-U	257.5	260.4	8	3.81	285
ISO-320-V-U	312	317.3	12	5.58	340
ISO-400-V-U	394	399.2	12	5.58	416
ISO-500-V-U	494	500.2	12	5.6	555



### KF-Type

SIZE	ØA	ØB	C	D
KF-10	10	12	8	3.9
KF-16	16	17	8	3.9
KF-25	25	26	8	3.9
KF-40	40	41	8	3.9
KF-50	50	52	8	3.9

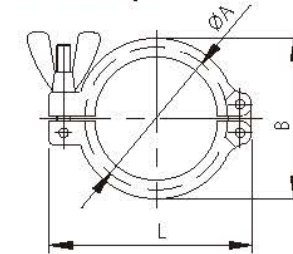
### ISO-Double Claw Clamp



### Double Claw Clamp

SIZE	C	D	L
ISO-63	M8	24.1	50.3
ISO-80	M8	24.1	50.3
ISO-100	M8	24.1	50.3
ISO-160	M10	27.9	50

### KF-Clamps



### KF-Clamps

SIZE	ØA	ØB	L
10/16	35	45	62
20/25	45	55	73
32/40	60	70	86.1
50	80	96	123

### NW FLEXIBLE HOSES

SIZE	ØA	B	SIZE	ØA	ØB
KF-16-250	30	250	KF-40-250	55	250
KF-16-500	30	500	KF-40-500	55	500
KF-16-750	30	750	KF-40-750	55	750
KF-16-1000	30	1000	KF-40-1000	55	1000
KF-25-250	40	250	KF-50-250	75	250
KF-25-500	40	500	KF-50-500	75	500
KF-25-750	40	750	KF-50-750	75	750
KF-25-1000	40	1000	KF-50-1000	75	1000

### ISO FLEXIBLE HOSES

SIZE	ØA	ØB	SIZE	ØA	ØB
ISO-63-250	95	250	ISO-80-750	110	750
ISO-63-500	95	500	ISO-80-1000	110	1000
ISO-63-750	95	750	ISO-100-250	130	250
ISO-63-1000	95	1000	ISO-100-500	130	500
ISO-80-250	110	250	ISO-100-750	130	750
ISO-80-500	110	500	ISO-100-1000	130	1000

