

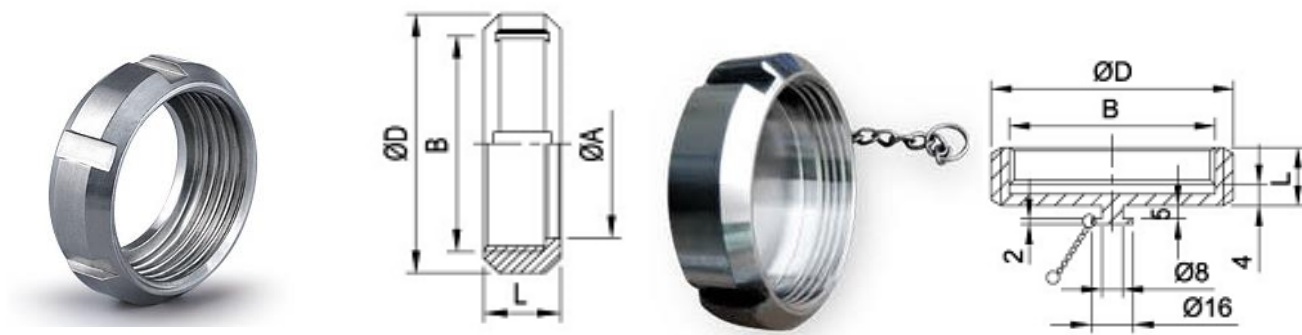
Unions

SMS Union (Swedish Metric Standard)

The SMS Union is comprised of a round slotted nut, male part, a liner, and a gasket.

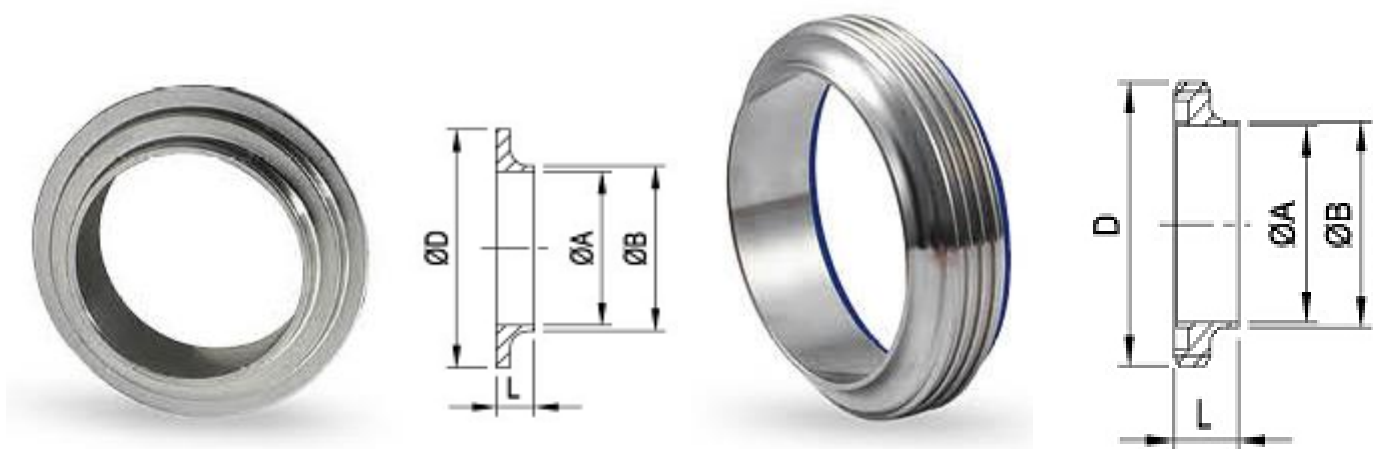
The male part and liner that comes in contact with the product come in SS 304 and SS 316L while the round nut is SS 304.

The gaskets comes in Teflon, BUNA, EPDM, Silicone, and Viton.



SMS Nut 6 Slots SMS-13R				
Size	ØA	B	ØD	L
DN25	32	RD40x1/6	51	19
DN32	40	RD48x1/4	60	22
DN38	48	RD60x1/6	74	23
DN51	60.5	RD70x1/6	84	24
DN63.5	74	RD85x1/6	100	28
DN76	87	RD98x1/6	114	30
DN101.6	113	RD125x1/4	138	31
DN104	113	RD125x1/4	138	31
DN104-B	117	RD132x1/6	150	31

SMS Blank Nut 13 RBN			
Size	B	ØD	L
DN25	RD40x1/6	51	19
DN32	RD48x1/4	60	22
DN38	RD60x1/6	74	23
DN51	RD70x1/6	84	24
DN63.5	RD85x1/6	100	28
DN76	RD98x1/6	114	30
DN104	RD125x1/4	138	31



Short Welding Liner SMS-14S

Size	ØA	ØB	ØD	L
DN25	22.5	25	35.5	11
DN38	35.5	38	55	16
DN51	48.5	51	65	17
DN63.5	60.5	63.5	80	17
DN76	72	76	93	19
DN101.6	97.6	101.6	118	19
DN104	100	104	118	19
DN104-B	98.5	102.5	127	19

Short Welding Male SMS-15S

Size	ØA	ØB	D	L
DN25	22.5	25	RD40x1/6	18
DN38	35.5	38	RD60x1/6	21
DN51	48.5	51	RD70x1/6	21
DN63.5	60.5	63.5	RD85x1/6	23
DN76	72	76	RD98x1/6	23
DN101.6	97.6	101.6	RD125x1/4	26
DN104	100	104	RD125x1/4	26
DN104-B	98.5	102.5	RD132x1/6	26



SMS-14B Blanks

Size	ØA	ØB	ØC	L
DN25	32	35.5	3.5	7.5
DN38	48	55	5	9
DN51	60	65	5	10
DN63.5	73.5	80	5	10
DN76	86	93	5	11
DN104	112	118	6	11
DN104-B	116	128	6	11



**Seal Ring L Shape
(EPDM, Silicon, Viton)**

Size	ØA	ØB	ØC
DN25	22.8	25.1	38.1
DN38	35.8	38.1	47.8
DN51	48.8	51.1	60.8
DN63.5	61	63.6	73.3
DN76	73.4	76.1	85.8
DN104	100.5	104	115.7

Clamp Union

The Clamp Union is comprised of a Clamp Ring, two ferrules, and a gasket. They come in 3A and DIN Standard.

The ferrules that come in contact with the product come in SS 304 and SS 316L while the clamp ring is only available in SS 304.

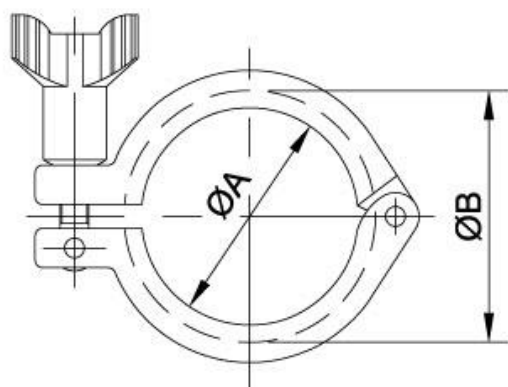
The gaskets come in Teflon, BUNA, EPDM, Silicone, and Viton.

The easiest way to identify a Clamp Union is by its **+ Shape Gasket**.



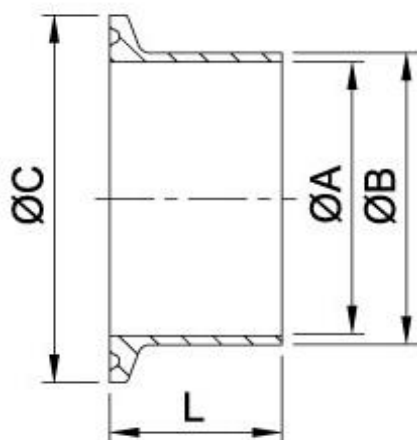
3A / SMS Clamp Ring		
Size	øA	øB
0.5" - 0.75"	20.0	28.0
1" - 1.5"	44.4	53.6
2"	57.8	67
2.5"	71.4	80.6
3"	84.0	94.2
4"	110.0	122.2
6"	155.4	170.4
8"	205.0	220.0
10"	257.0	272.0
12"	308.0	323.0

DIN Clamp Ring		
Size	øA	øB
DN 10	-	37.0
DN 15	-	-
DN 20	-	-
DN 25	44.4	53.6
DN 32	-	-
DN 40	-	-
DN 50	57.8	67.0
DN 65	84	94.2
DN 80	-	109.0
DN 100	110	122.2
DN 125	-	159.0
DN 150	-	187.0
DN 200	-	237.0
DN 250	257.0	272.0
DN 300	308.0	323.0

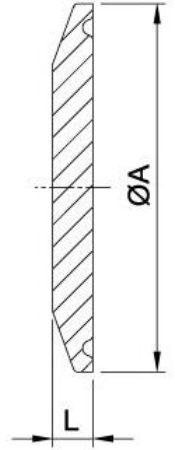




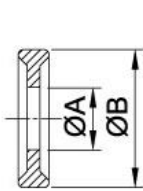
3A / SMS Welding Ferrule					
				Short	Long
Size	øA	øB	øC	L	L
0.5"	9.4	12.7	25	12.7	28.6
0.75"	15.75	19.05	25	12.7	28.6
1"	22.1	25.4	50.5	12.7	28.6
1.25	28.4	31.75	50.5	12.7	28.6
1.5"	34.8	38.1	50.5	12.7	28.6
2"	47.5	50.8	64	12.7	28.6
2.5"	60.2	63.5	77.5	12.7	28.6
3"	72.9	76.1	91	-	28.6
4"	97.4	101.6	119	15.8	28.6
5"	123	127	144.5	-	28.6 or 38.1
6"	146.86	152.5	166.87	-	28.6 or 38.1
8"	197.66	203.3	217.67	-	28.6 or 38.1
10"	247.2	254	268.47	-	28.6 or 38.1
12"	298	304.8	319.27	-	28.6 or 38.1



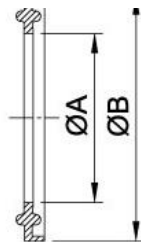
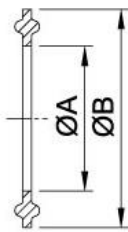
DIN Welding Ferrule				
Size	øA	øB	øC	L
DN 10	10	13	34	21.5
DN 15	16	19	34	21.5
DN 20	20	23	34	21.5
DN 25	26	29	50.5	21.5
DN 32	32	35	50.5	21.5
DN 40	38	41	50.5	21.5
DN 50	50	53	64	21.5
DN 65	66	70	91	21.5
DN 80	81	85	106	21.5
DN 100	100	104	119	28.6
DN 125	125	129	155	28.6
DN 150	150	154	183	28.6
DN 200	200	204	233.5	28.6
DN 250	250	254	268.5	28.6
DN 300	300	306	319.3	28.6



0.5" – 0.75" 1" – 12"



13PG



13FG

Ferrule Gasket (EPDM, Silicon, Viton, PTFE)					
Plain Type 13 PG			Flange Type 13 FG		
Size	øA	øB	Size	øA	øB
0.5"	9.9	21.8	1"	22.8	52.7
0.75"	16.3	21.8	1.5"	35.8	52.7
1"	22.7	50	2"	48.8	66.2
1.2"	29.5	50.5	2.5"	60.5	79.7
1.5"	35.9	50	3"	73.1	93.2
2"	48.6	63.5	4"	97.8	121.2
2.5"	61.3	76.2	6"	148	169.1
3"	74	88.9	10"	249	270.7
4"	98.6	118	12"	300	321.5
6"	147.8	165	-	-	-
8"	196.6	216	-	-	-

Ferrule Blank			
3A	DIN	øA	L
0.5"-0.75"	-	25	6
-	DN10	34	6.3
-	DN15	34	6.3
-	DN20	34	6.3
1"	DN28	50.5	6.3
1.5"	DN34	50.5	6.3
-	DN40	50.5	6.3
2"	DN52	64	6.3
2.5"	DN70	77.5	6.3
3"	DN80	91	6.3
-	DN100	106	6.3
4"	DN100	119	7.9
-	-	130	7.9
-	DN125	155	7.9
6"	-	166.8	11.1
-	DN150	183	11.1
8"	-	217.7	11.1
-	DN200	233.5	11.1
10"	-	268.5	11.1
12"	-	319.3	11.1

DIN Union

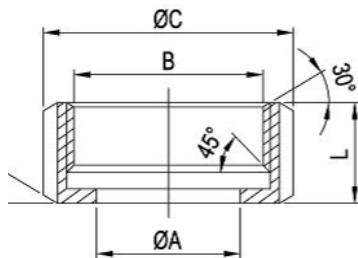
The **DIN** (Deutsches Institut für Normung / German Institute for Standardization) Union is comprised of a round slotted nut, male part, a liner, and a gasket.

The male part and liner that comes in contact with the product come in SS 304 and SS 316L while the round nut is SS 304.

The gaskets comes in Teflon, BUNA, EPDM, Silicone, and Viton.



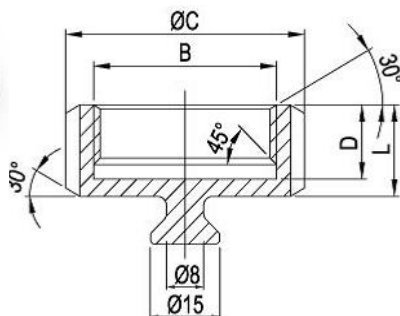
N-13R

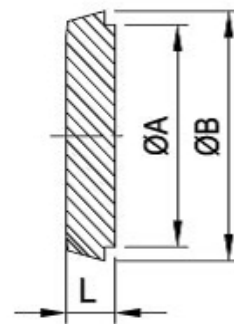
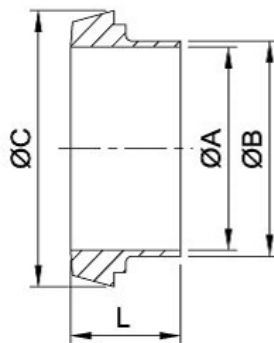


DIN-13 Round Nut

DIN	øA	B	øC	D	L	Slots
10	19	RD28x1/8	38	15	18	4
15	25	RD34x1/8	44	15	18	4
20	31	RD44x1/6	54	17	21	4
25	36	RD52x1/6	63	18	21	4
32	42	RD58x1/6	70	18	21	4
40	49	RD65x1/6	78	18	21	4
50	62	RD78x1/6	92	19	22	4
65	80	RD95x1/6	112	21	25	6
80	94	RD110x1/4	127	25	30	6
90	104	RD120x1/4	138	26	30	6
100	115	RD130x1/4	148	26	31	6
125	138	RD160x1/4	178	30	35	6
150	164	RD190x1/4	210	34	40	6

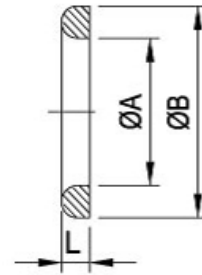
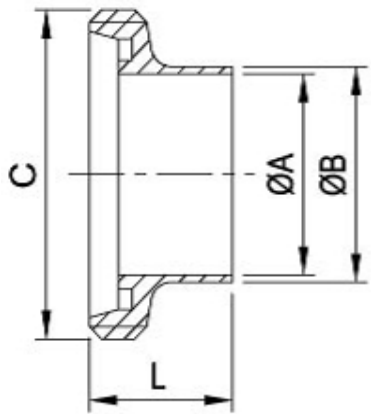
DIN-13RBN





DIN	DIN Welding Liner			
	øA	øB	øC	L
10	10	13	22.5	17
15	16	19	28.5	17
20	20	23	36.5	18
25	26	29	44	22
32	32	35	50	25
40	38	41	56	26
50	50	53	68.5	28
60	57	61	76	30
65	66	70	86	32
80	81	85	100	37
100	100	104	121	44
125	125	129	150	34
150	150	154	176	37

DIN-14B Blank			
Size	øA	øB	L
10	18	22	9
15	24	28	9
20	30	36	11
25	35	44	13
32	41	50	13
40	48	56	13
50	61	68	14
65	79	86	16
80	93	100	16
100	114	121	20
125	137	150	22
150	163	176	24



DIN	DIN Welding Male Part			
	$\varnothing A$	$\varnothing B$	C	L
10	10	13	RD28x1/8	21
15	16	19	RD34x1/8	21
20	20	23	RD44x1/6	24
25	26	29	RD52x1/6	29
32	32	35	RD58x1/6	32
40	38	41	RD65x1/6	33
50	50	53	RD78x1/6	35
60	57	61	RD85x1/6	36
65	66	70	RD95x1/6	40
80	81	85	RD110x1/4	45
90	89	93	RD120x1/4	54
100	100	104	RD130x1/4	54
125	125	129	RD160x1/4	46
150	150	154	RD190x1/4	50

DIN Seal Ring D Shape (EPDM, Silicon, Viton)			
Size	$\varnothing A$	$\varnothing B$	L
10	12	20	4.5
15	18	26	4.5
20	23	33	4.5
25	30	40	5
32	36	46	5
40	42	52	5
50	54	64	5
65	71	81	5
80	85	95	5
100	104	114	5
125	130	142	7
150	155	167	7

RJT Union (BS)

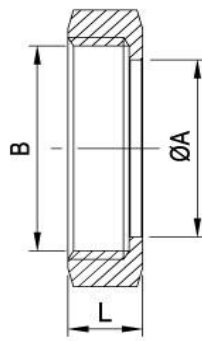
The RJT (Ring Joint Type) Union is comprised of a round slotted nut, male part, a liner, and a gasket.

The male part and liner that comes in contact with the product come in SS 304 and SS 316L while the round nut is SS 304.

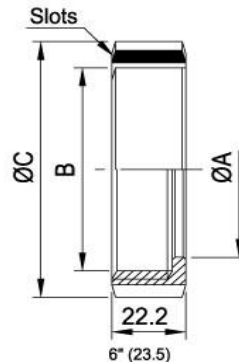
The gaskets comes in Teflon, BUNA, EPDM, Silicone, and Viton.



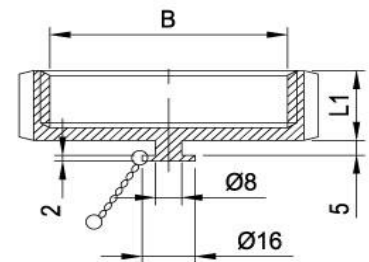
RJT-13H



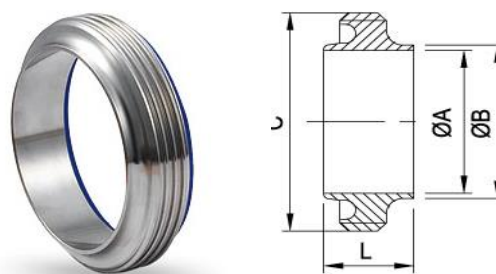
RJT-13R



RJT-13HBN



RJT-13 Nut						
Size	ØA	B	ØC	L	L1	Slots
0.5"	14.5	19.6x10 TPI WHIT	-	16	-	-
0.75"	21	26.2x10 TPI WHIT	-	16	-	-
1"	33.45	42.266x8 TPI WHIT	58.5	22.2	23.5	4
1.5"	46	54.966x8 TPI WHIT	74	22.2	23.5	4
2"	58.67	67.92x6 TPI WHIT	85.5	22.2	23.2	6
2.5"	71.4	80.62x6 TPI WHIT	98.5	22.2	23.5	6
3"	84.1	93.32x6 TI WHIT	111.6	22.2	23.5	8
4"	109.7	118.72x6 TPI WHIT	138	22.2	23.5	8
6"	163	169.52x6 TPI WHIT	197	24	-	10

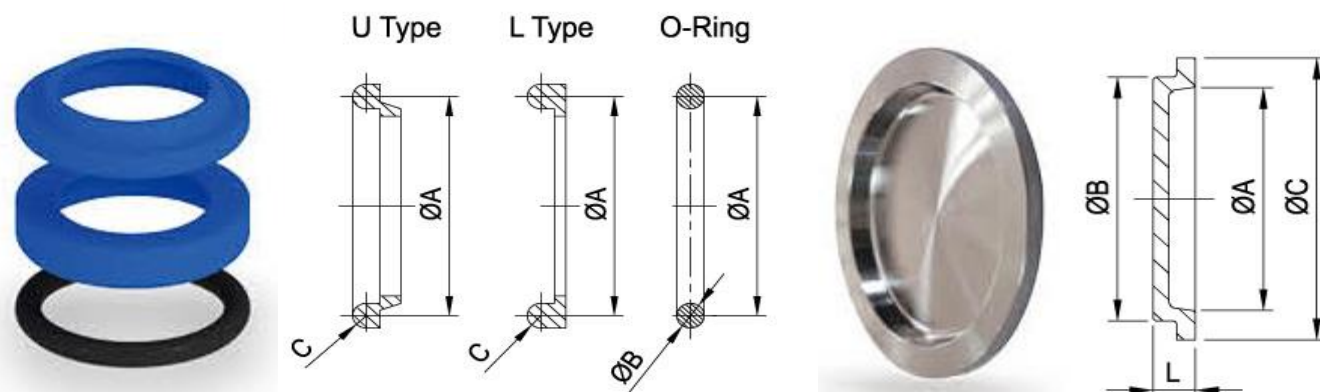


RJT Welding Liner RJT-14

Size	ØA	ØB	ØC	L
0.5"	9.6	14	18	11.4
0.75"	16	20	23.1	11.4
1"	22.2	25.4	41.3	19.5
1.5"	34.8	38.1	54	19.5
2"	47.5	50.8	66.7	19.5
2.5"	60.2	63.5	79.4	19.5
3"	72.9	76.2	92.1	19.5
4"	97.6	101.6	117.5	19.5
6"	148	152.4	169.1	23.5

RJT Welding Male RJT-15

Size	ØA	ØB	C	L
0.5"	9.6	13.7	21.2x10T WHIT	16.5
0.75"	16	20	27.6x10T WHIT	16.5
1"	22.1	25.4	45.72x8T WHIT	27
1.5"	34.8	38.1	58.42x8T WHIT	27
2"	47.5	50.8	72.72x6T WHIT	27
2.5"	60.2	63.5	85.42x6T WHIT	27
3"	72.9	76.2	98.12x6T WHIT	27
4"	97.6	101.6	123.52x6T WHIT	27
104	100	104	123.52x6T WHIT	27
6"	148	152.4	174.32x6T WHIT	24



**RJT Seal Ring
(EPDM, Silicon, Viton)**

Size	ØA	ØB	C
1"	33.3	6.6	3.2
1.5"	46	6.6	3.2
2"	58.7	6.6	3.2
2.5"	71.4	6.6	3.2
3"	84.1	6.6	3.2
4"	109.5	6.6	3.2
6"	162.6	6.6	3.2

RJT-14B Blanks

Size	ØA	ØB	ØC	L
1"	37.8	32.5	41.3	9
1.5"	40.5	45.2	54	9
2"	53.2	57.9	66.7	9
2.5"	65.9	70.6	79.4	9
3"	78.2	83.3	92.1	9
4"	104	108.7	117.5	9
104	104	108.7	117.5	9

IDF Union

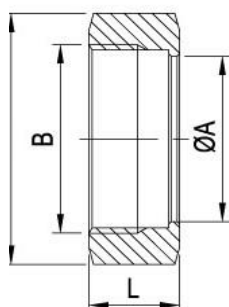
The IDF (International Dairy Federation) Union is comprised of nut, male part, a liner, and a gasket.

The male part and liner that comes in contact with the product come in SS 304 and SS 316L while the round nut is SS 304.

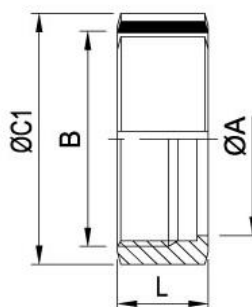
The gaskets comes in Teflon, BUNA, EPDM, Silicone, and Viton.



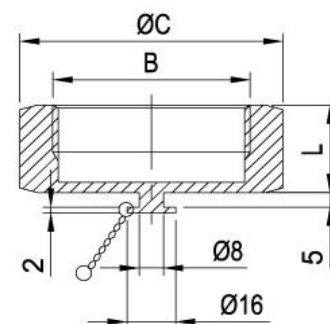
IDF-13H



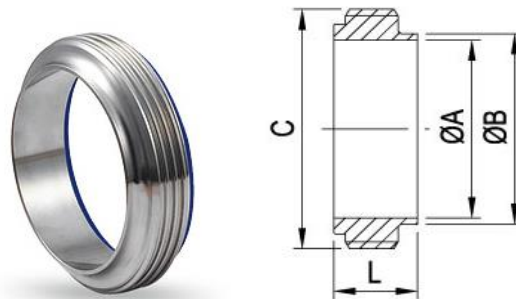
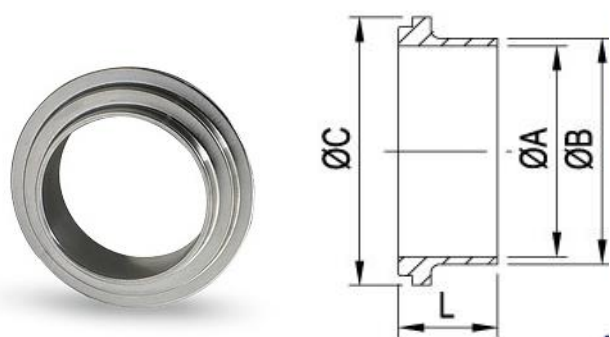
IDF-13R



IDF-13HBN

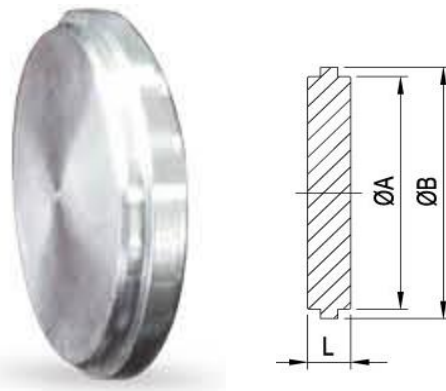


IDF-13 Nut					
Size	ØA	B	ØC	ØC1	L
1"	30.5	34.34x8T ACME	46	48	30
1.5"	43.5	47.86x8T ACME	60	64	30
2"	57	61.37x8T ACME	75	77	30
2.5"	70.7	74.88x8T ACME	90	91	30
R 3"	83.3	88.4x8T ACME	106	106	30
H 3"	83.3	88.4x8T ACME	105	105	30
R 4"	112	115.41x8T ACME	135	135	34.9
H 4"	112	122.05x6T ACME	133	133	34.9



IDF Welding Liner IDF-14						
Size	IDF		JIS		øC	L
	øA	øB	øA	øB		
1"	22.6	25.6	23	25.4	33.8	21.5
1.5"	35.6	38.6	35.7	38.1	47	21.5
2"	48.6	51.6	47.8	50.8	60.5	21.5
2.5"	60.3	61.1	59.5	63.5	74	21.5
3"	72.9	76.7	72.3	76.3	87.5	21.5
R 4"	97.6	101.6	-	-	120.6	30
H 4"	97.6	102.5	97.6	101.6	114.1	21.5

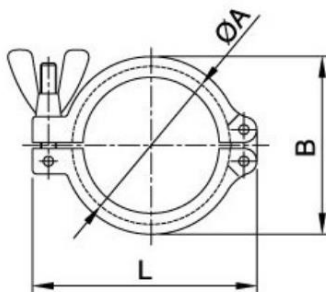
IDF Welding Male IDF-15						
Size	IDF		JIS		øC	L
	øA	øB	øA	øB		
1"	22.1	25.4	23	25.4	37.13x8T ACME	21.5
1.5"	34.8	38	35.7	38.1	50.65x8T ACME	21.5
2"	47.5	51	47.8	50.8	64.16x8T ACME	21.5
2.5"	60.2	63.5	59.5	63.5	77.76x8T ACME	21.5
3"	72.9	76.2	72.3	76.3	91.19x8T ACME	21.5
R 4"	97.6	101.6	-	-	118.2x8T ACME	30
H 4"	97.6	102.5	97.6	101.6	125.9x6T ACME	21.5



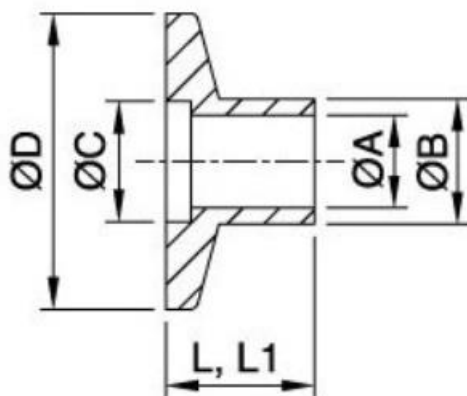
IDF Seal Ring		
Size	øA	øB
1"	23	32.5
1.5"	36	46
2"	49	59.5
2.5"	60.7	73.2
3"	73.2	86.5
4"	98	113
6"	98	119.6

IDF-14B Blanks			
Size	øA	øB	L
1"	29.2	33.8	10.5
1.5"	42.7	47	10.5
2"	56.2	60.5	10.5
2.5"	69.9	74	10.5
3"	82.6	87.5	10.5
R 4"	111.1	114.1	12.6
H 4"	111.1	120.6	12.6

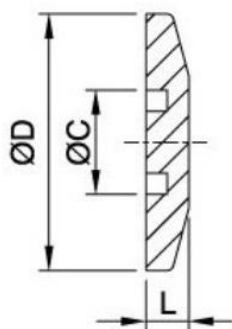
Vacuum KF Union



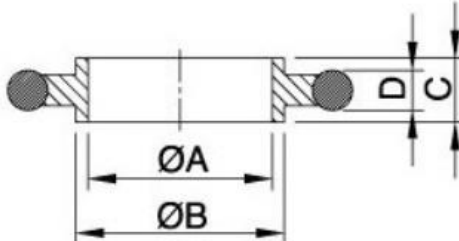
KF Clamp			
SIZE	ØA	ØB	L
KF10/16	35	45	62
KF25	45	55	73
KF40	60	70	86.1
KF50	80	96	123



KF Weld Flange					
SIZE	ØA	ØB	ØC	ØD	L
KF10	9.4 (10)	12.7 (14)	12.2	30	30
KF16	15.7 (16)	19.06 (20)	17.3	30	30
KF25	22.1 (25)	25.4 (28)	26.2	40	30
KF40	33.8 (40)	38.1 (44.5)	41.1	55	30
KF50	46.5 (50)	50.8 (54)	52.3	75	30



KF Blank			
SIZE	ØC	ØD	L
KF10	12.2	30	5.1
KF16	17.3	30	5.1
KF25	26.2	40	5.1
KF40	41.1	55	5.1
KF50	52.3	75	5.1



KF Centering Ring with Seal				
SIZE	ØA	ØB	C	D
KF10	10	12	8	3.9
KF16	16	17	8	3.9
KF25	25	26	8	3.9
KF40	40	41	8	3.9
KF50	50	52	8	3.9