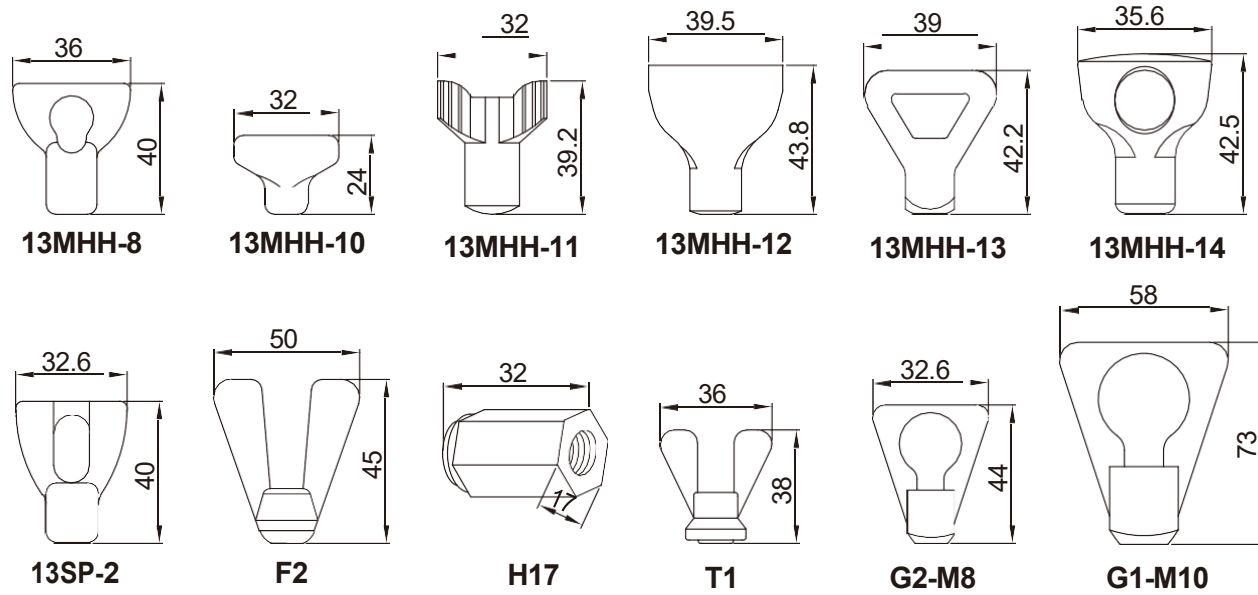


Sanitary Components, Fitting..

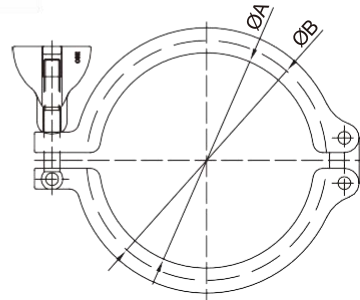


Heavy Duty Clamp-Ring

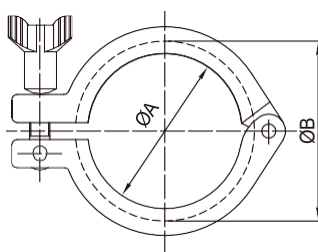
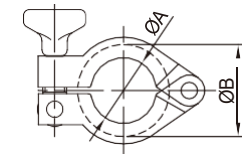


13SC safety clamps

Imperial	ØA	ØB	DN	ØA	ØB
1/2"~3/4"	20.58	28.34	DN10~DN20	27.2	37
1.0"~1.5"	41.02	53.52	DN25~DN40	44.5	54.5
2.0"	54.54	67.04	DN50	57	68
2.5"	68.02	80.52	DN65	84	95
3.0"	81.52	94.02	DN80	99	110
4.0"	109.54	122.04	DN100	112	123
6.0"	157.6	175.1	DN115	123	134
8.0"	207.4	225.9	DN125	144	159
			DN150	172	187
			DN200	222.5	237.5
			DN250	257	272
			DN300	308	323



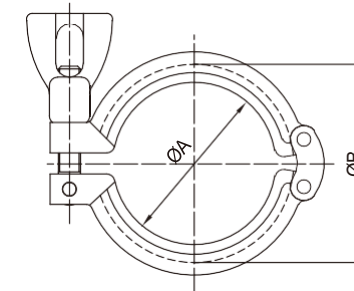
1/2"~3/4"



13MHH HEAVY DUTY SINGLE PIN CLAMP

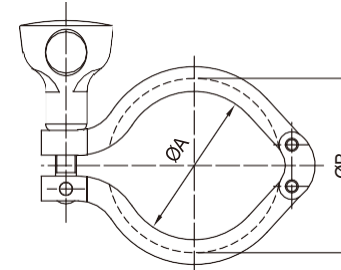
SIZE	ØA	ØB
1/2"~3/4"	21.2	28.2
A37	27.8	37
1"~1.5"	42	53.6
2"	55.4	67
2.5"	69	80.6
3"	82.6	94.2
3.5"	97.6	109.2
4"	110.6	122.2
4.5"	121.6	133.2
6"	156.2	170.4
8"	205.8	220

Heavy Duty Clamp-Ring



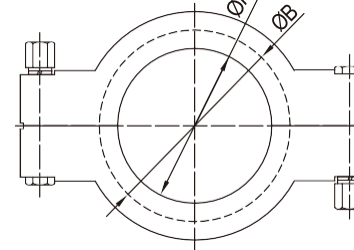
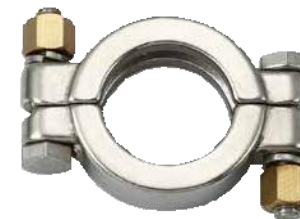
13SF HEAVY DUTY DOUBLE PIN CLAMP

SIZE	ØA	ØB
1/2"~3/4"	20	28
A37	27.5	42.9
1"~1.5"	45	53.6
2"	59	72
2.5"	67	84
3"	85	98
4"	114	127
6"	158	178
8"	210	227
10"	262	278

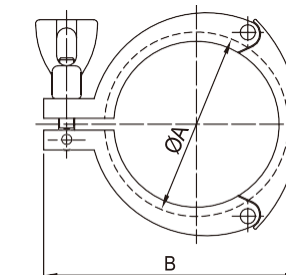


13MHHM DOUBLE PIN CLAMP

SIZE	ØA	ØB
1/2"~3/4"	20	28
A37	28	38
1"~1.5"	43.6	53.6
2"	57	67
2.5"	70.6	80.6
3"	84	94
4"	112	122
6"	155	170
8"	205	220.8

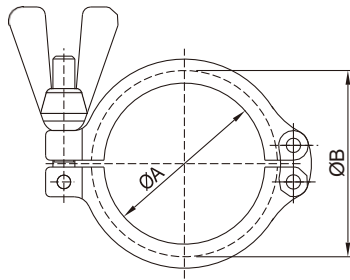
13MHP
HIGH PRESSURE BOLTED CLAMP

SIZE	ØA	ØB
1/2"~3/4"	20	28
1"~1.5"	43.32	52
2"	56.44	65.5
2.5"	69.54	79
3"	77.56	92.5
4"	108.86	120.5
6"	158	170
6.5"	173	186.2
8"	205	220.8
10"	258.2	276.8
12"	309	327.6

13MHHS
3 PIECE CLAMP

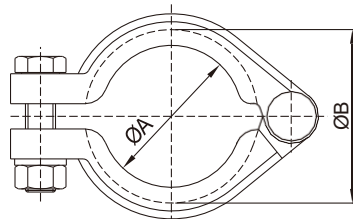
SIZE	ØA	B
1"~1.5"	54	80
2"	67.5	94
2.5"	80.9	109
3"	84.4	126
4"	122.4	154

Heavy Duty Clamp-Ring



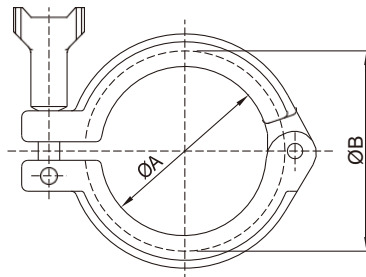
13CS DOUBLE PIN CLAMP

SIZE	ØA	ØB
1/2"~3/4"	20.58	28.34
DN10-20	27.2	37
1.5"	41.02	53.52
DN25-40	44.5	54.5
2.0"	54.54	67.04
DN50	57	68
2.5"	68.02	80.52
3.0"	81.52	94.02
DN65	84	95
DN80	99	110
4.0"	109.54	122.04
DN100	112	123
DN115	123	134
DN125	144	159
6.0"	157.6	175.1
DN150	172	187
8.0"	207.4	225.9
DN200	222.5	237.5
DN250	257	272
DN300	308	323



13IU BOLTED CLAMP

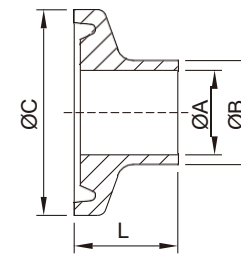
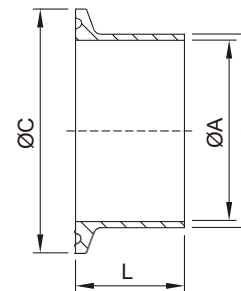
SIZE	ØA	ØB
1"~1.5"	45	55
2.0"	63	73
2.5"	74	89
3.0"	87	102
4.0"	111	128



13IS I-LINE CLAMP

SIZE	ØA	ØB
1.0"~1.5"	44.4	53.4
2.0"	60.14	72.2
2.5"	78.62	88.1
3.0"	93.06	102.4
4.0"	118.6	127.8
6.0"	178.3	195.3

Ferrule Adapter

3A-1/2"~3/4"
SMS-DN15~DN20
DIN-DN6~DN8
DIN(ISO)-DN6~DN103A-1.0"~12"
SMS-DN25~DN100
DIN-DN10~DN100
DIN(ISO)-DN15~DN200

DIN(ISO) Ferrule

SIZE	ØA	ØB	ØC	L
DN6	7	10.2	25	12.7
DN8	10.3	13.5	25	12.7
DN10	14	17.2	25	12.7
DN15	18.1	21.3	50.5	21.5
DN20	23.7	26.9	50.5	21.5
DN25	29.7	33.7	50.5	21.5
DN32	38.4	42.4	64	21.5
DN40	44.3	48.3	64	21.5
DN50	56.3	60.3	77.5	28
DN65	72.1	76.1	91	28
DN80	84.3	88.9	106	28
DN100	109.7	114.3	130	28
DN125	134.5	139.7	155	28
DN150	163.1	168.3	183	28
DN200	213.9	219.1	233.5	28

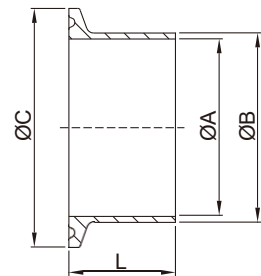
3A/SMS Welding Ferrule

SIZE	14WMP		14MMP		14AMP	
	ØA	ØB	ØC	L	L	L
1/4"	3.9	6.35	25	12.7	21.5	28.6
1/2"	9.4	12.7	25	12.7	21.5	28.6
DN15	9.7	12.7	25.4	12.7	21.5	28.6
3/4"	15.75	19.05	25	12.7	21.5	28.6
DN20	15.95	19.05	25.4	12.7	21.5	28.6
1"	22.1	25.4	50.5	12.7	21.5	28.6
DN25	22.5	25	50.5	12.7	21.5	28.6
1.25"	28.45	31.75	50.5	12.7	21.5	28.6
1.5"	34.8	38.1	50.5	12.7	21.5	28.6
DN38	35.5	38	50.5	12.7	21.5	28.6
2.0"	47.5	50.8	64	12.7	21.5	28.6
DN50	48.5	51	64	12.7	21.5	28.6
2.5"	60.2	63.5	77.5	12.7	21.5	28.6
DN63	60.3	63.5	77.5	12.7	21.5	28.6
DN76	72.9	76.1	91	12.7	21.5	28.6
3.0"	72.9	76.2	91	12.7	21.5	28.6
DN104	100	104	119	15.8	21.5	28.6
4.0"	97.4	101.6	119	15.8	21.5	28.6
6.0"	146.86	152.4	166.87	—	21.5	28.6 or 38.1
8.0"	197.66	203.2	217.67	—	21.5	28.6 or 38.1
10"	247.2	254	268.47	—	21.5	28.6 or 38.1
12"	298	304.8	319.27	—	21.5	28.6 or 38.1

DIN Ferrule (32676)

SIZE	DA		DB		ØC	L
	ØA	ØB	ØA	ØB		
DN6	6	8	—	—	25	12.7
DN8	8	10	—	—	25	12.7
DN10	10	13	9	12	34	18
DN15	16	19	15	18	34	18
DN20	20	23	19	22	34	18
DN25	26	29	25	28	50.5	21.5
DN32	32	35	31	34	50.5	21.5
DN40	38	41	37	40	50.5	21.5
DN50	50	53	49	52	64	21.5
DN65	66	70	66	70	91	28
DN80	81	85	81	85	106	28
DN101.6	—	—	97.6	101.6	119	28
DN100	100	104	100	104	119	28
DN125	125	129	125	129	155	28
DN150	150	154	150	154	183	28
DN200	200	204	200	204	233.5	28

Ferrule Adapter



ISO(REP) Ferrule

SIZE	ØA	ØB	ØC	L
DN8	10.3	13.5	34	28.6
DN10	14	17.2	34	28.6
DN15	18.1	21.3	34	28.6
DN20	23.7	26.9	50.5	28.6
DN25	30.5	33.7	50.5	28.6
DN32	39.2	42.4	50.5	28.6
DN40	45.1	48.3	64	28.6
DN50	56.3	60.3	77.5	28.6
DN65	72.1	76.1	91	28.6
DN80	84.3	88.9	106	28.6
DN100	109.7	114.3	130	28.6
DN125	133.7	139.7	155	28.6
DN150	162.3	168.3	183	28.6
DN200	211.1	219.1	233.5	28.6
DN250	266.3	273.1	286.1	28.6

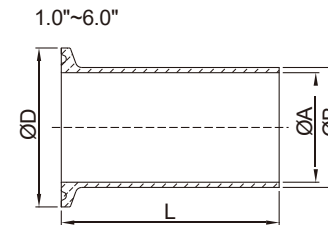
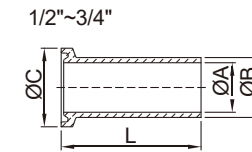
ISO-2852 Ferrule

SIZE	ØA	ØB	ØC	L
25	22.6	25.6	50.5	21.5
33.7	31.3	34.3	50.5	21.5
38	35.6	38.6	50.5	21.5
40	37.6	40.6	64	21.5
51	48.6	51.6	64	21.5
63.5	60.3	64.1	77.5	21.5
70	66.8	70.6	91	21.5
76.1	72.9	76.7	91	21.5
88.9	84.9	89.8	106	21.5
101.6	97.6	102.5	119	21.5
114.3	110.3	115.6	130	28
139.7	135.7	141.2	155	28
168.3	163.1	170	183	28
219.1	213.9	221.2	233.5	28

IDF/JIS Ferrule

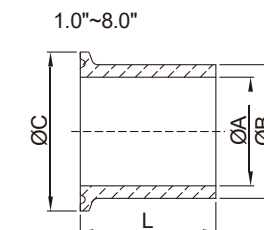
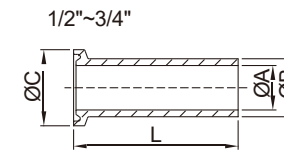
SIZE	ØA	ØB	ØC	L
1.0S	23	25.4	50.5	21.5
1.25S	29.4	31.8	50.5	17
1.5S	35.7	38.1	50.5	21.5
2.0S	47.8	50.8	64	21.5
2.5S	59.5	63.5	77.5	21.5
3.0S	72.3	76.3	91	21.5
3.5S	85.1	89.1	106	21.5
4.0S	97.6	101.6	119	28
4.5S	108.3	114.3	130	28
5.5S	133.8	139.8	165	28
6.5S	159.2	165.2	183	28

Ferrule Adapter



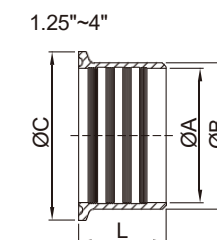
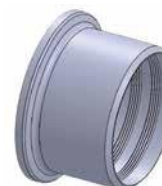
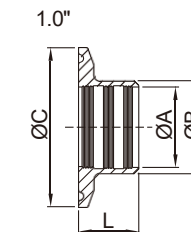
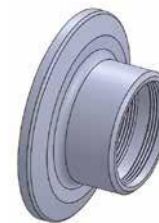
14MPHT

SIZE	ØA	ØB	ØC	L	L
1/2"	9.4	12.7	25	44.45	101.6
3/4"	15.75	19.05	25	44.45	101.6
1.0"	22.1	25.4	50.5	114.3	—
1.5"	34.8	38.1	50.5	114.3	—
2.0"	47.5	50.8	64	114.3	—
2.5"	60.2	63.5	77.5	114.3	—
3.0"	72.9	76.2	91	114.3	—
4.0"	97.4	101.6	119	117.9	—
6.0"	146.86	152.4	166.87	152.4	—



14MPW Heavy Tank Ferrule

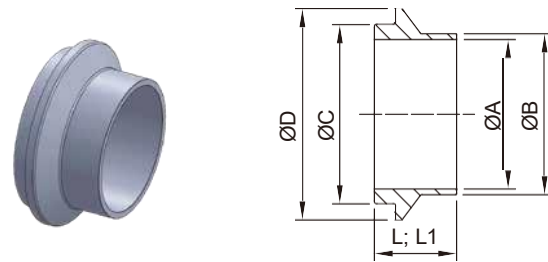
SIZE	ØA	ØB	ØC	L
1/2"	8.15	12.75	25	54
3/4"	14.6	19.05	25	54
1.0"	22.1	29.5	50.5	41.3
1.5"	34.8	42.6	50.5	41.3
2.0"	47.5	55.7	64	44.5
2.5"	60.2	68.8	77.5	44.5
3.0"	72.9	81.9	91	46.1
4.0"	97.4	108.1	119	54
6.0"	146.25	157.3	166.87	63.5
8.0"	197.05	208.1	217.67	63.5



14RMP 3A-Roll-on ferrule

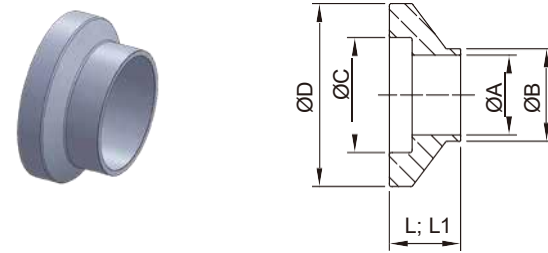
SIZE	ØA	ØB	ØC	L
1.0"	25.4	29.5	50.5	19.1
1.25"	31.75	36.3	50.5	21.5
1.5"	38.1	42.6	50.5	28.6
2.0"	50.8	55.7	64	33.3
2.5"	63.5	68.8	77.5	34.9
3.0"	76.2	81.9	91	36.5
4.0"	101.6	108.1	119	38.1

I-Line Ferrule Adapter



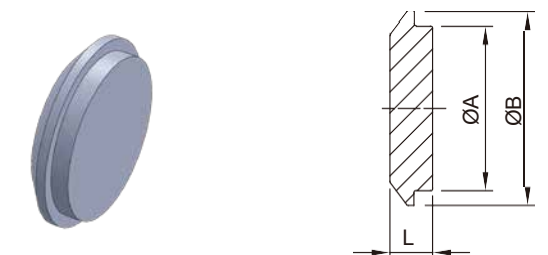
14WI I-Line Ferrule Male

SIZE	ØA	ØB	ØC	ØD	L	L1
1.0"	22.1	25.4	31.5	50.67	19.84	44.65
1.5"	34.8	38.1	44.2	50.67	23.8	51.75
2.0"	47.5	50.8	56.9	67.05	26.19	58.88
2.5"	60.2	63.5	69.6	84	29.36	63.47
3.0"	72.9	76.2	83.82	98.3	30.94	68.17
4.0"	97.4	101.6	109.14	123.7	34.11	76.17
6.0"	146.86	152.4	173.5	190.4	28.58	73.1
8.0"	197.66	203.2	224.3	241.2	28.58	73.1



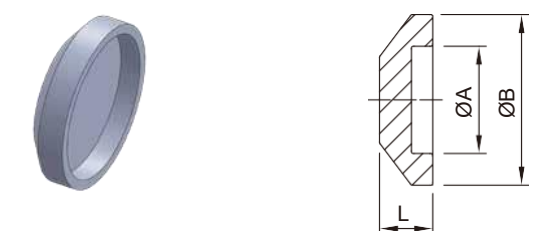
15WI I-Line Ferrule Female

SIZE	ØA	ØB	ØC	ØD	L	L1
1.0"	22.1	25.4	31.88	50.67	19.84	44.5
1.5"	34.8	38.1	44.58	50.67	23.8	51.6
2.0"	47.5	50.8	57.28	67.05	26.19	58.7
2.5"	60.2	63.5	69.98	84	29.36	63.5
3.0"	72.9	76.2	84.2	98.3	30.94	68.3
4.0"	97.4	101.6	109.6	123.7	34.11	76.2
6.0"	146.86	152.4	175.7	190.4	28.58	76.2
8.0"	197.66	203.2	226.5	241.2	28.58	76.2



16AI-14I Male I-Line End Cap

SIZE	ØA	ØB	L
1.0"	31.5	50.67	12.37
1.5"	44.2	50.67	12.37
2.0"	56.9	67.05	14.11
2.5"	69.6	84	18.72
3.0"	83.82	98.3	19.32
4.0"	109.14	123.7	19.32
6.0"	173.5	190.4	18.88
8.0"	224.3	241.2	18.88



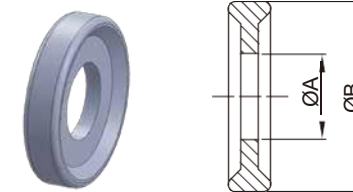
16AI-15I Female I-Line End Cap

SIZE	ØA	ØB	L
1.0"	31.88	50.67	12.75
1.5"	44.58	50.67	12.75
2.0"	57.28	67.05	17.66
2.5"	69.98	84	18.77
3.0"	84.2	98.3	19.37
4.0"	109.6	123.7	19.37
6.0"	175.7	190.4	22
8.0"	226.5	241.2	22

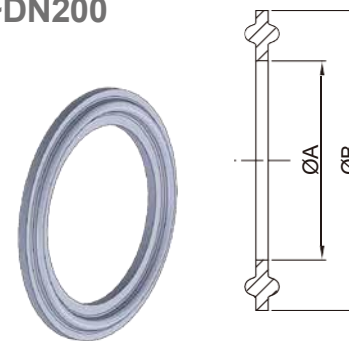
Ferrule Seal

13PG

1/2"-3/4"



1"~8" DN10~DN200



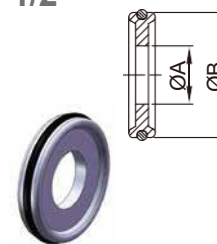
13PG (EPDM, SILICONE, VITON, PTFE)

Imperial	ØA	ØB
1/2"	9.9	21.8
3/4"	16.3	21.8
A37	19	33
1"	22.7	50
1.25"	29.5	50.5
1.5"	35.9	50
2"	48.6	63.5
2.5"	61.3	76.2
3"	74	88.9
3.5"	86	105
4"	98.6	118
4.5"	110.5	129
5"	134.7	153
6"	147.8	165
8"	198.6	216

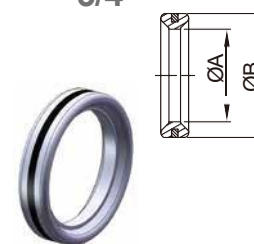
ISO(PTFE)	ØA	ØB	DIN(EPDM)	ØA	ØB
DN8	11.1	33.2	DN10	9.8	33.2
DN12	14.8	33.2	DN15	15.8	33.2
DN15	18.9	33.2	DN20	19.8	33.2
DN20	24.5	49.7	DN28	25.8	49.7
DN25	31.3	49.7	DN34	31.8	49.7
DN32	40	49.7	DN40	37.8	49.7
DN40	45.9	63.2	DN52	49.8	63.2
DN50	57.1	76.7	DN70	66.8	90.2
DN65	72.9	90.2	DN85	81.8	105.2
DN80	85.7	105.2	DN101.6	98.4	118.2
DN100	109.9	129.2	DN104	100.8	118.2
DN125	134.5	154.2	DN125	125.8	154.2
DN150	163.1	182.2	DN150	150.8	182.2
DN200	211.9	232.7	DN200	200.8	232.7

13PG(EP+PT)

1/2"



3/4"



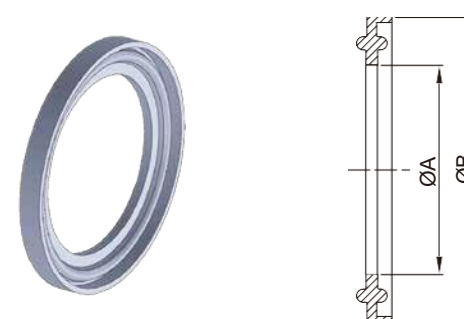
1.0"~4.0"



Imperial 13PG(EP+PT)

SIZE	ØA	ØB
1/2"	10	21.5
3/4"	16.3	21.8
1"	22.5	50.2
1.5"	34.9	50.2
2"	47.6	63.5
2.5"	60.5	77.7
3"	73.2	90.5
4"	97.7	118.4

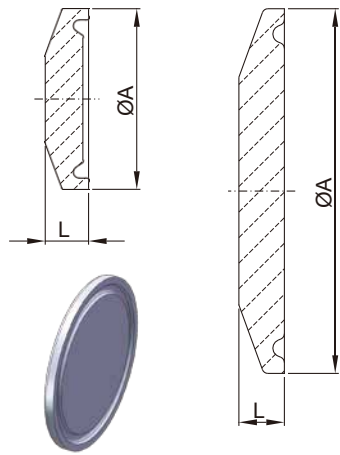
13FG



FLANGE TYPE 13FG

SIZE	ØA	ØB
1"	22.8	52.7
1.5"	35.8	52.7
2"	48.8	66.2
2.5"	60.5	79.7
3"	73.1	93.2
4"	97.8	121.2
6"	148	169.1
8"	217.9	220.1
10"	249	270.7
12"	300	321.5

Ferrule Adapter

1/2"~3/4"
DIN6~DIN8A37~12"
DIN10~DIN200
ISO(REP)

Imperial 16AMP

SIZE	ØA	L
1/2"	25	6
3/4"	25	6
A37	34	6.3
1.0"	50.5	6.3
1.5"	50.5	6.3
2.0"	64	6.3
2.5"	77.5	6.3
3.0"	91	6.3
3.5"	106	6.3
4.0"	119	7.9
6.0"	166.87	11.1
8.0"	217.67	11.1
10"	268.47	11.1
12"	319.27	11.1

DIN 16AMP

SIZE	ØA	L
DN6	25	4.75
DN8	25	4.75
DN10	34	6.35
DN15	34	6.35
DN20	34	6.35
DN25	50.5	6.35
DN32	50.5	6.35
DN40	50.5	6.35
DN50	64	6.35
DN65	91	6.35
DN80	106	6.35
DN100	119	8
DN125	155	8
DN150	183	11.1
DN200	233.5	11.1

ISO(REP) 16AMP

SIZE	ØA	L
DN8	34	6.3
DN12	34	6.3
DN15	34	6.3
DN20	50.5	6.3
DN25	50.5	6.3
DN32	50.5	6.3
DN40	64	6.3
DN50	77.5	6.3
DN65	91	6.3
DN80	106	6.3
DN100	130	7.9
DN125	155	7.9
DN150	183	11.1
DN200	233.5	11.1

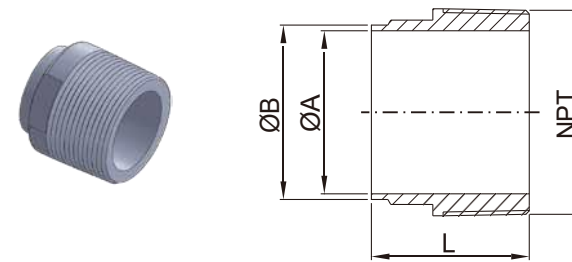
14WHR HOSE ADAPTER

SIZE	ØA	ØB	ØC	L
1/2"	9.5	13.7	25.2	25.3
3/4"	15.8	21.4	25.2	25.3
1.0"	20.6	25.4	50.5	30.3
1.5"	33.2	38.1	50.5	30.3
2.0"	46	50.8	64	46
2.5"	58.7	63.5	77.5	46.8
3.0"	72	76.2	91	65.9
4.0"	97.6	101.6	119	72.8

14MPHR HOSE ADAPTER

SIZE	ØA	ØB	ØC	L
1/2"×1/4"	3.175	7.3	25.2	38
1/2"×3/8"	6.35	10.4	25.2	38
1/2"×1/2"	9.5	13.7	25.2	38
1/2"×5/8"	12.7	16.8	25.2	38
3/4"×1/4"	3.175	7.3	25.2	38
3/4"×3/8"	6.35	10.4	25.2	38
3/4"×1/2"	9.5	13.7	25.2	38
3/4"×5/8"	12.7	16.8	25.2	38
3/4"×3/4"	15.8	21.4	25.2	38
1.0"×1/4"	3.175	7.3	50.5	38
1.0"×3/8"	6.35	10.4	50.5	38
1.0"×1/2"	9.5	13.7	50.5	38
1.0"×5/8"	12.7	16.8	50.5	38
1.0"×3/4"	15.8	21.4	50.5	38
1.0"×1.0"	20.6	25.4	50.5	43
1.5"×3/8"	6.35	10.4	50.5	38
1.5"×1/2"	9.5	13.7	50.5	38
1.5"×5/8"	12.7	16.8	50.5	38
1.5"×3/4"	15.8	21.4	50.5	38
1.5"×1.0"	20.6	25.4	50.5	43
1.5"×1.25"	26.8	31.75	50.5	43
1.5"×1.5"	33.2	38.1	50.5	43
2.0"×1.25"	26.8	31.75	64	43
2.0"×1.5"	33.2	38.1	64	43
2.0"×2.0"	46	50.8	64	58.7
2.5"×2.5"	58.7	63.5	77.5	59.5
3.0"×3.0"	72	76.2	91	78.6
4.0"×4.0"	97.6	101.6	119	85.5

Ferrule Adapter



19W thread male

SIZE	ØA	ØB	NPT	L
1/2"	9.4	12.7	1/2"	41.3
3/4"	15.75	19.05	3/4"	41.3
1.0"	22.1	25.4	1.0"	44.5
1.5"	34.8	38.1	1.5"	44.5
2.0"	47.5	50.8	2.0"	46
2.5"	60.2	63.5	2.5"	58.7
3.0"	72.9	76.2	3.0"	63.5
4.0"	97.4	101.6	4.0"	65.1
6.0"	146.9	152.4	6.0"	76.2

21MP(Plain milling)

SIZE	ØA	ØC	PT	L
1.0"×1.5"×1/4"	8.56	50.5	1/4"	40
1.0"×1.5"×3/8"	12.7	50.5	3/8"	40
1.0"×1.5"×1/2"	15.5	50.5	1/2"	45
1.0"×1.5"×3/4"	21.3	50.5	3/4"	45
1"×1.5"×1.0"	28	50.5	1.0"	50
1.0"×1.5"×1 1/4"	34.8	50.5	1 1/4"	50
2.0"×1.0"	28	64	1.0"	50
2.0"×1 1/4"	35.7	64	1 1/4"	50
2.0"×1.5"	41.8	64	1 1/2"	50
2.0"×2.0"	47.5	64	2.0"	54.7

21MP(Hexagon)

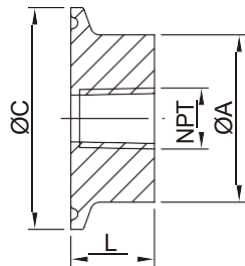
SIZE	ØA	ØC	NPT	L	SW
1/2"×1/2"	9.5	25	1/2"	45	24
3/4"×1/4"	7.95	25	1/4"	45	24
3/4"×1/2"	15.8	25	1/2"	45	24
3/4"×3/4"	15.8	25	3/4"	45	30
1.0"×1.5"×1/4"	3.18	50.5	1/4"	40	17
1.0"×1.5"×3/8"	6.35	50.5	3/8"	40	19
1.0"×1.5"×1/2"	9.5	50.5	1/2"	40	24
1.0"×1.5"×3/4"	15.8	50.5	3/4"	45	32
1"×1.5"×1.0"	22.2	50.5	1.0"	50	35
1.0"×1.5"×1 1/4"	28.6	50.5	1 1/4"	50	50
1.0"×1.5"×1.5"	34.9	50.5	1.5"	50	50
1.0"×1.5"×2.0"	47.6	50.5	2.0"	55	65
2.0"×1/4"	3.18	64	1/4"	40	50
2.0"×3/8"	6.35	64	3/8"	40	50
2.0"×1/2"	9.5	64	1/2"	40	50
2.0"×3/4"	15.8	64	3/4"	50	50
2.0"×1.0"	22.2	64	1.0"	50	50
2.0"×1.5"	34.9	64	1.5"	50	50
2.0"×2.0"	47.6	64	2.0"	55	65
2.0"×2.5"	60.3	64	2.5"	60	65
2.0"×3.0"	73	64	3.0"	70	90
2.0"×4.0"	97.6	64	4.0"	75	115
2.5"×1.0"	22.2	77.5	1.0"	50	75
2.5"×1.5"	34.9	77.5	1.5"	50	75
2.5"×2.0"	47.6	77.5	2.0"	55	75
2.5"×2.5"	60.3	77.5	2.5"	60	75
2.5"×3.0"	73	77.5	3.0"	70	90
2.5"×4.0"	97.6	77.5	4.0"	75	115
3.0"×1.0"	22.2	91	1.0"	55	90
3.0"×1.5"	34.9	91	1.5"	55	90
3.0"×2.0"	47.6	91	2.0"	55	90
3.0"×2.5"	60.3	91	2.5"	60	90
3.0"×3.0"	73	91	3.0"	70	90
3.0"×4.0"	97.6	91	4.0"	75	90
4.0"×1.0"	22.2	119	1.0"	55	115
4.0"×1.5"	34.9	119	1.5"	55	115
4.0"×2.0"	47.6	119	2.0"	55	115
4.0"×2.5"	60.3	119	2.5"	60	115
4.0"×3.0"	73	119	3.0"	70	115
4.0"×4.0"	97.6	119	4.0"	75	115

22W thread female

SIZE	ØA	ØB	NPT	L
1.0"	22.1	25.4	1.0"	34.9
1.5"	34.8	38.1	1.5"	33.4
2.0"	47.5	50.8	2.0"	44.5
2.5"	60.2	63.5	2.5"	46.1
3.0"	72.9	76.2	3.0"	57.2
4.0"	97.4	101.6	4.0"	60.3

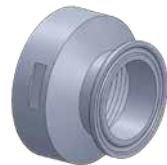
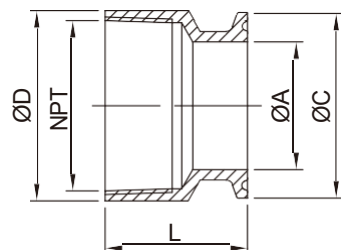
Ferrule Adapter

22MP



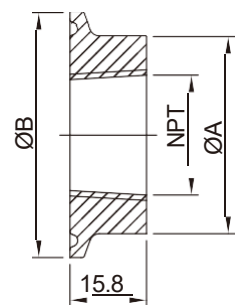
SIZE	ØA	ØC	L	NPT	SIZE	ØA	ØC	L	NPT
1.0"×1.5"×1/4"	38.1	50.5	19	1/4"	2.5"×1.0"	63.5	77.5	35	1.0"
1.0"×1.5"×3/8"	38.1	50.5	19	3/8"	2.5"×1.5"	63.5	77.5	35	1.5"
1.0"×1.5"×1/2"	38.1	50.5	19	1/2"	2.5"×2.0"	65	77.5	35	2.0"
1.0"×1.5"×3/4"	38.1	50.5	19	3/4"	3.0"×1.0"	76.2	91	35	1.0"
1.0"×1.5"×1.0"	40	50.5	19	1.0"	3.0"×1.5"	76.2	91	35	1.5"
2.0"×1/4"	50.8	64	19	1/4"	3.0"×2.0"	76.2	91	35	2.0"
2.0"×3/8"	50.8	64	19	3/8"	4.0"×1.0"	101.6	119	35	1.0"
2.0"×1/2"	50.8	64	19	1/2"	4.0"×1.5"	101.6	119	35	1.5"
2.0"×3/4"	50.8	64	19	3/4"	4.0"×2.0"	101.6	119	35	2.0"
2.0"×1.0"	50.8	64	19	1.0"	4.0"×2.5"	101.6	119	35	2.5"
2.0"×1.5"	53	64	19	1.5"	4.0"×3.0"	101.6	119	35	3.0"

22MP



SIZE	ØA		ØC	ØD	NPT	L
	1.0"	1.5"				
1/2"×1/4"	9.5		25	30	1/4"	33
1/2"×1/2"	9.5		25	30	1/2"	33
3/4"×1/2"	15.75		25	30	1/2"	38.1
3/4"×3/4"	15.8		25	31	3/4"	33
1.0"×1.5"×1.25"	22.2	34.9	50.5	52	1.25"	39
1.0"×1.5"×1.5"	22.2	34.9	50.5	54	1.5"	39
1.0"×1.5"×2.0"	22.2	34.9	50.5	65	2.0"	40
2.0"×2.0"	47.6		64	65	2.0"	40
2.5"×2.5"	60.3		77.5	80	2.5"	50
3.0"×2.5"	73		91	95	2.5"	50
3.0"×3.0"	73		91	95	3.0"	52
4.0"×4.0"	97.6		119	120	4.0"	54

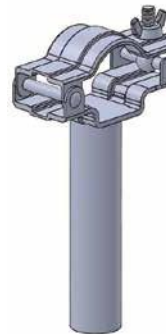
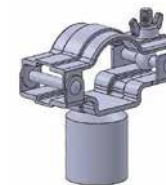
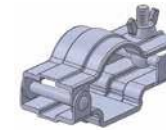
23BMP



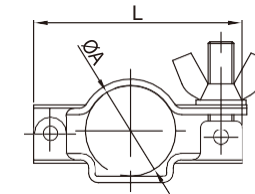
SIZE	ØA	ØB	NPT	SIZE	ØA	ØB	NPT
1.0"×1/8"	25.4	50.5	1/8"	2.5"×1/2"	63.5	77.5	1/2"
1.0"×1/4"	25.4	50.5	1/4"	2.5"×3/4"	63.5	77.5	3/4"
1.0"×3/8"	25.4	50.5	3/8"	2.5"×1.0"	63.5	77.5	1.0"
1.0"×1/2"	25.4	50.5	1/2"	2.5"×1.5"	63.5	77.5	1.5"
1.5"×1/8"	38.1	50.5	1/8"	2.5"×2.0"	63.5	77.5	2.0"
1.5"×1/4"	38.1	50.5	1/4"	3.0"×1/2"	76.2	91	1/2"
1.5"×3/8"	38.1	50.5	3/8"	3.0"×3/4"	76.2	91	3/4"
1.5"×1/2"	38.1	50.5	1/2"	3.0"×1.0"	76.2	91	1.0"
1.5"×3/4"	38.1	50.5	3/4"	3.0"×1.5"	76.2	91	1.5"
1.5"×1.0"	38.1	50.5	1.0"	3.0"×2.0"	76.2	91	2.0"
2.0"×1/2"	50.8	64	1/2"	4.0"×3/4"	101.6	119	3/4"
2.0"×3/4"	50.8	64	3/4"	4.0"×1.0"	101.6	119	1.0"
2.0"×1.0"	50.8	64	1.0"	4.0"×1.5"	101.6	119	1.5"
2.0"×1.5"	50.8	64	1.5"	4.0"×2.0"	101.6	119	2.0"
				4.0"×2.5"	101.6	119	2.5"
				4.0"×3.0"	101.6	119	3.0"

Tubing Hanger

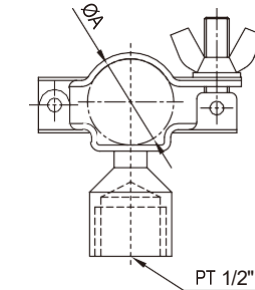
TH-1



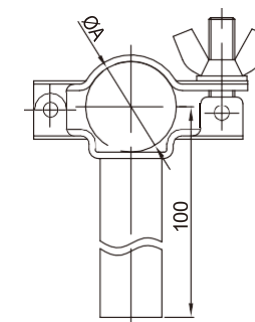
Type A



Type B



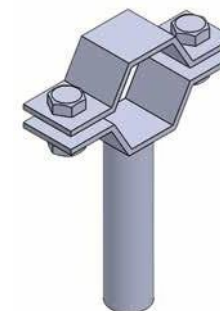
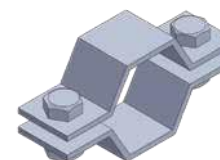
Type C



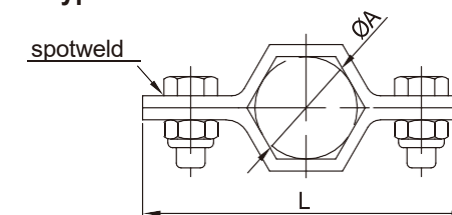
Imperial	ØA	L
1"	25.4	66
1.5"	38.1	76
2"	50.8	90
2.5"	63.5	105
3"	76.2	120
4"	101.6	146

DIN	ØA	L
DN15	18/19	69
DN20	22/23	66
DN25	28/29	64.5
DN32	34/35	78.5
DN40	40/41	80.5
DN50	52/53	94
DN65	70	123.5
DN80	85	130.5
DN100	104	150
DN125	129	175.5
DN150	154	206.5

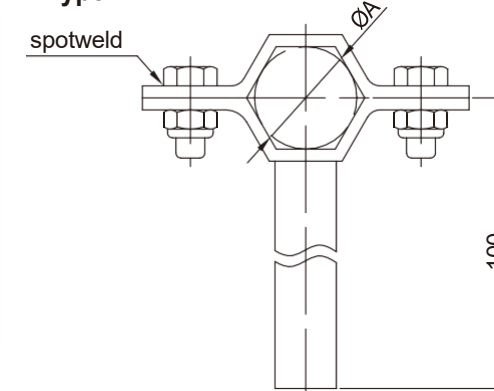
TH-2



Type A



Type C

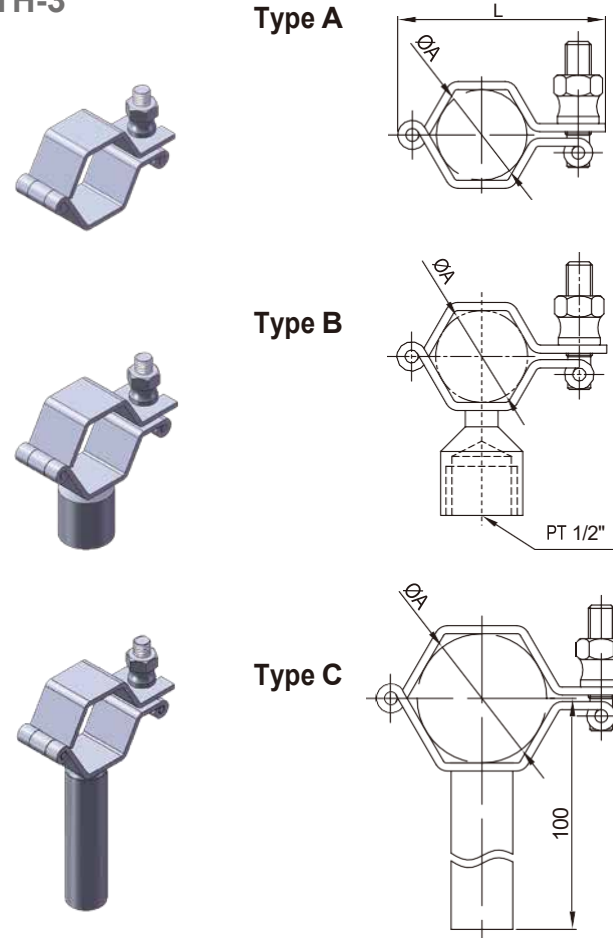


ISO	ØA	L
ISO-21.3	21.3	68
ISO-26.9	26.9	74
ISO-33.7	33.7	82
ISO-42.4	42.4	93
ISO-48.3	48.3	101
ISO-60.3	60.3	114
ISO-88.9	88.9	149
ISO-114.3	114.3	177
ISO-139.7	139.7	221.7
ISO-168.7	168.7	254.8

SMS	ØA	L
DN25	25	74
DN38	38	87
DN50	51	105
DN63	63.5	117
DN76	76.1	133
DN100	104	165
DN125	127	221.7
DN150	152.4	254.8

Tubing Hanger

TH-3



TH-3 (Hexagon)

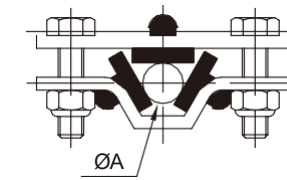
DIN	ØA	L
DN25	28	64
DN32	34	64
DN40	40	78
DN50	52	90
DN65	70	111
DN80	85	129
DN100	101.6	150

SMS	ØA	L
DN25	25	61
DN38	38	76
DN50	51	90
DN63	63.5	106
DN76	76.1	124
DN100	104	154

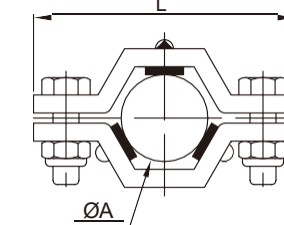
Tubing Hanger

TH-4 (A type)

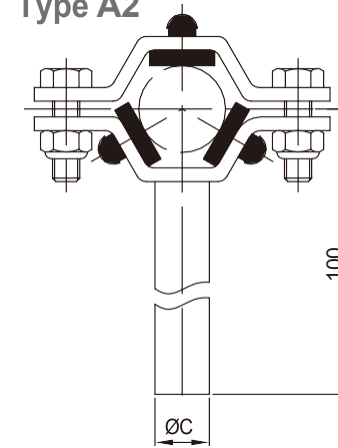
Type A 1/2"



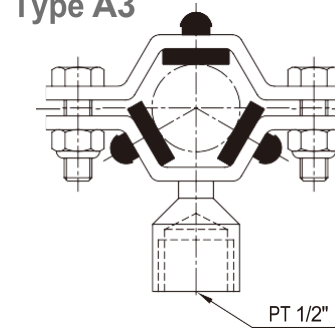
Type A 3/4"~6.0"



Type A2

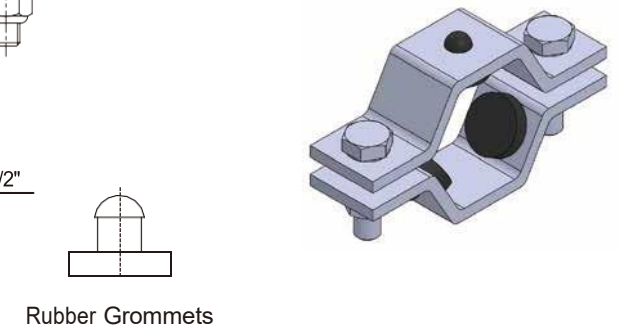


Type A3



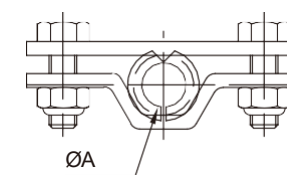
TH-4

SIZE	ØA	ØC	L
1/2"	12.7	12.7	79
3/4"	19.05	12.7	79
1.0"	25.4	15.9	79
1.5"	38.1	19	95
2.0"	50.8	19	117.9
2.5"	63.5	19	120
3.0"	76.2	19	135.1
4.0"	101.6/104	19	168.4
6.0"	152.4	19	225

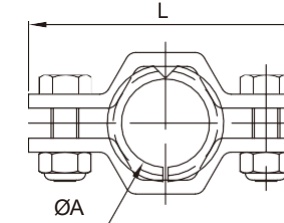


TH-4 (B type)

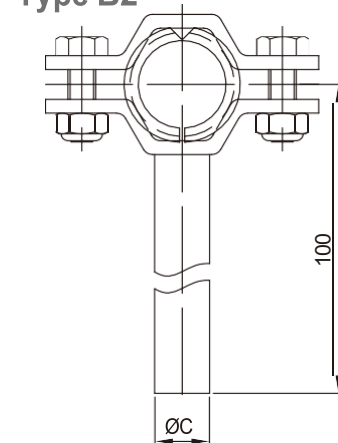
Type B 1/2"



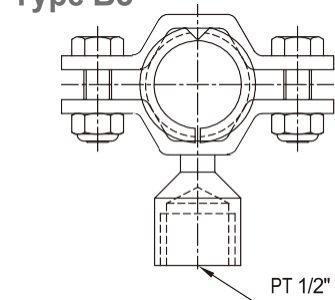
Type B 3/4"~6.0"



Type B2

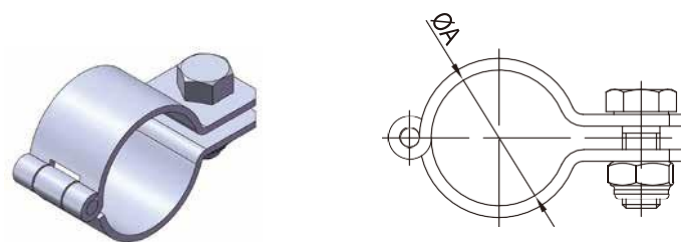
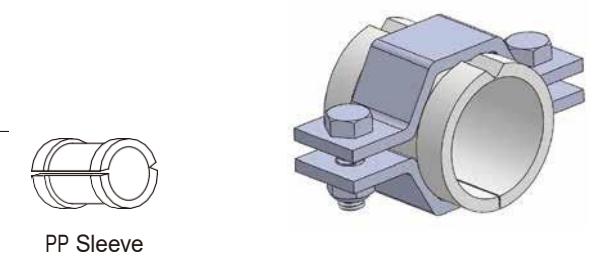


Type B3



TH-4

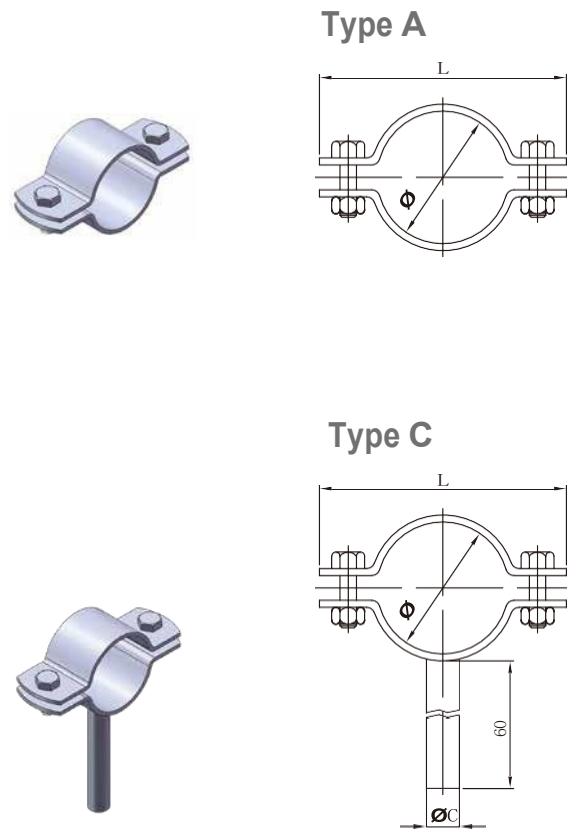
SIZE	ØA	ØC	L
1/2"	12.7	12.7	79
3/4"	19.05	12.7	79
1.0"	25.4	15.9	79
1.5"	38.1	19	95
2.0"	50.8	19	117.9
2.5"	63.5	19	120
3.0"	76.2	19	135.1
4.0"	101.6/104	19	168.4
6.0"	152.4	19	225



Hinged pipe clamp (Round)

DIN	ØA	L
DN20	23	57
DN25	29	63
DN32	35	67
DN40	41	73
DN50	53	91
DN65	70	108
DN80	85	123
DN100	104	142

Tubing Hanger



TH-5

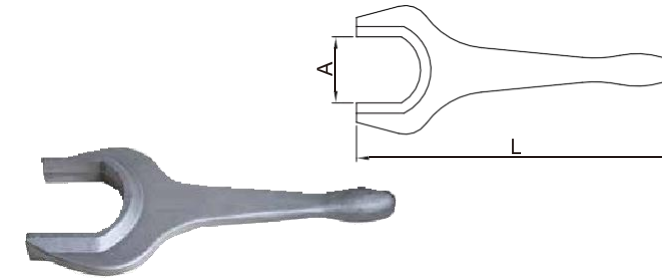
3A	ØA	ØC	L
1/2"	12.7	6	46.5
3/4"	19.05	8	50
1.0"	25.4	8	62.5
1.25"	31.75	10	70.5
1.5"	38.1	10	81.5
2.0"	50.5	12	92
2.5"	63.5	12	123.5
3.0"	76.2	15	141
4.0"	101.6	15	177.5
5.0"	127	18	201
6.0"	152.4	18	231.5
8.0"	203.2	—	279.5

DIN	ØA	L	ØC
DN10	12/13	46.5	6
DN15	18/19	50	8
DN20	22/23	55	8
DN25	28/29	73.5	8
DN32	34/35	70.5	10
DN40	40/41	80.4	10
DN50	52/53	96.5	12
DN65	70	120	12
DN80	85	137	15
DN100	104	182	15
DN125	129	202	18
DN150	154	231	18

TH-6

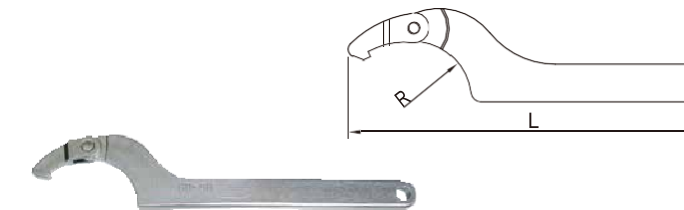
SIZE	ØA	H	L
1/2"	12.7	90	83
3/4"	19.05	90	83
1"	25.4	90	83
1.5"	38.1	90	97.7
2"	50.8	90	111.7
2.5"	63.5	90	124
3"	76.2	90	140.5
4"	101.6	90	162
6"	152.4	145	217

Kinds of Parts



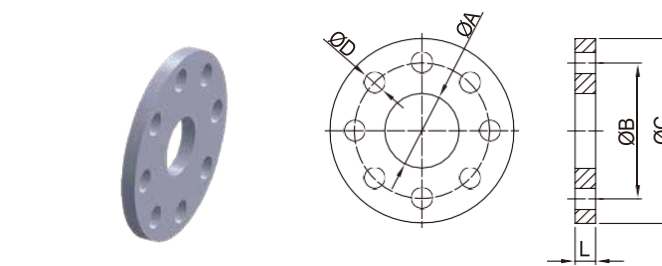
HEXAGONAL SPANNER

SIZE	3A/IDF A	RJT R	L
1.0"	47	51.8	240
1.5"	62.1	66	288
2.0"	77.2	80.4	300
2.5"	92.5	93.2	326
3.0"	107.9	106.3	440
4.0"	139.1	131.5	448



DIN SPANNER

SIZE	R	L
DN10~DN20	22	175
DN25~DN40	31	247
DN50~DN100	49	290
DN125~DN150	82.5	515

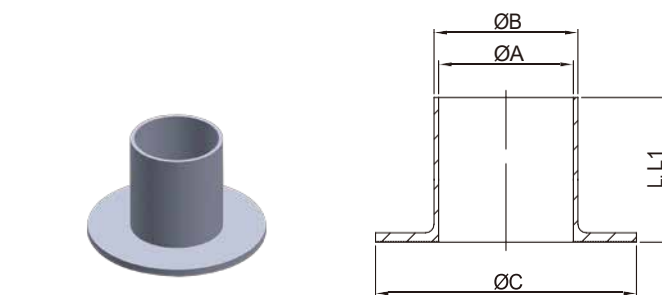


BACK-UP FLANGE

SIZE	ØA	ØB	ØC	ØD	L
1"	27	79.4	108	4-15.9	9.5
1.5"	39.7	98.4	127	4-15.9	9.5
2"	52.4	120.7	152.4	4-19.05	11.1
2.5"	65.1	139.7	177.8	4-19.05	11.1
3"	77.8	152.4	190.5	4-19.05	12.7
4"	103.2	190.5	228.6	8-19.05	12.7
6"	154	241.3	279.4	8-22.2	14.3

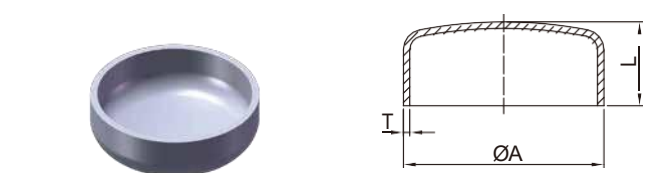
14VB STUB END

SIZE	ØA	ØB	ØC	L	L1
1/2"	9.4	12.7	38.1	6.5	28.6
3/4"	15.75	19.05	38.1	6.5	34.9
1"	22.1	25.4	50.8	6.5	41.3
1.5"	34.8	38.1	73	6.5	44.5
2"	47.5	50.8	92.1	6.5	38.1
2.5"	60.2	63.5	104.8	6.5	50.8
3"	72.9	76.2	127	7.4	57.2
4"	97.4	101.6	157.2	7.4	66.7
6"	146.86	152.4	215.9	8.8	76.2
8"	197.66	203.2	269.9	8.8	76.2
10"	247.6	254	323.85	25.4	88.9
12"	298	304	381	25.4	76.2



16W CAP

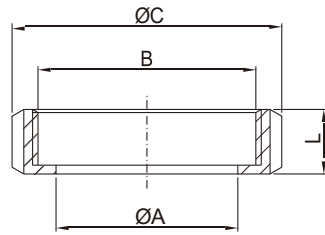
SIZE	ØA	T	L
1/2"	12.7	1.65	6.4
3/4"	19.05	1.65	7.9
1"	25.4	1.65	19.1
1.5"	38.1	1.65	14.2
2"	50.8	1.65	19.1
2.5"	63.5	1.65	25.4
3"	76.2	1.65	31.8
4"	101.6	2.1	38.1
6"	152.4	2.77	57.2



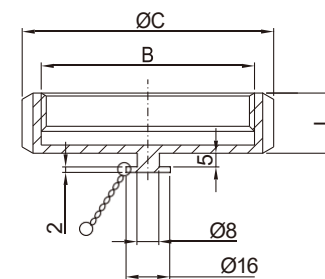
DIN 11851 Unions



DIN-13R



DIN-13RBN



DIN-13 ROUND NUT

SIZE	ØA	B	ØC	L	SLOTS
10	19	RD 28*1/8	38	18	4
15	25	RD 34*1/8	44	18	4
20	31	RD 44*1/6	54	20	4
25	36	RD 52*1/6	63	21	4
32	42	RD 58*1/6	70	21	4
40	49	RD 65*1/6	78	21	4
50	62	RD 78*1/6	92	22	4
60	70	RD 85*1/6	99	22	4
65	80	RD 95*1/6	112	25	6
80	94	RD110*1/4	127	29	6
90	104	RD120*1/4	138	30	6
100	115	RD130*1/4	148	31	6
125	138	RD160*1/4	178	35	6
150	164	RD190*1/4	210	40	6

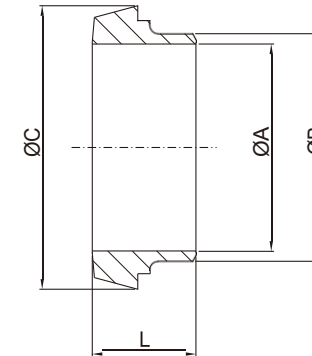
DIN-14DA/DB WELDING LINER

SIZE	DA		DB		ØC	L
	ØA	ØB	ØA	ØB		
10	10	13	9	12	22.5	17
15	16	19	15	18	28.5	17
20	20	23	19	22	36.5	18
25	26	29	25	28	44	22
32	32	35	31	34	50	25
40	38	41	37	40	56	26
50	50	53	49	52	68.5	28
60	57	61	57	61	76	30
65	66	70	66	70	86	32
80	81	85	81	85	100	37
100	100	104	100	104	121	44
125	125	129	125	129	150	34
150	150	154	150	154	176	37

DIN-15DA/DB WELDING MALE

SIZE	DA		DB		C	L
	ØA	ØB	ØA	ØB		
10	10	13	9	12	RD 28*1/8	21
15	16	19	15	18	RD 34*1/8	21
20	20	23	19	22	RD 44*1/6	24
25	26	29	25	28	RD 52*1/6	29
32	32	35	31	34	RD 58*1/6	32
40	38	41	37	40	RD 65*1/6	33
50	50	53	49	52	RD 78*1/6	35
60	57	61	57	61	RD 85*1/6	36
65	66	70	66	70	RD 95*1/6	40
80	81	85	81	85	RD 110*1/4	45
90	89	93	89	93	RD 120*1/4	54
100	100	104	100	104	RD 130*1/4	54
125	125	129	125	129	RD 160*1/4	46
150	150	154	150	154	RD 190*1/4	50

DIN 11851 Unions



DIN-14 WELDING LINER

SIZE	ØA	ØB	ØC	L
10	10	15	22.5	17
15	16	21	28.5	17
20	20	25	36.5	18
25	26	31	44	22
32	32	37	50	25
40	38	43	56	26
50	50	55	68.5	28
60	57	63	76	30
65	66	72	86	32
80	81	87	100	37
100	99	104	121	44
125	125	132	150	34
150	150	157	176	37

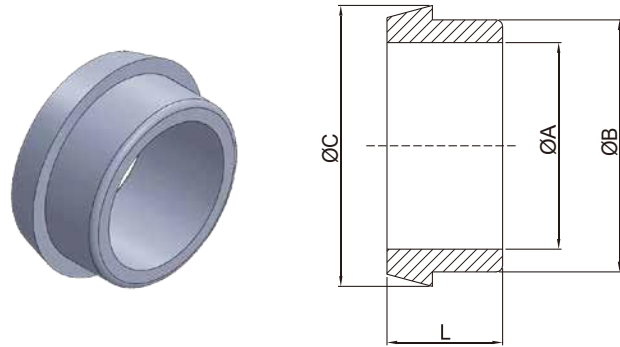
DIN-15 WELDING MALE

SIZE	ØA	ØB	C	L
10	10	15	RD 28*1/8	21
15	16	21	RD 34*1/8	21
20	20	25	RD 44*1/6	24
25	26	31	RD 52*1/6	29
32	32	37	RD 58*1/6	32
40	38	43	RD 65*1/6	33
50	50	55	RD 78*1/6	35
60	57	63	RD 85*1/6	36
65	66	72	RD 95*1/6	40
80	81	87	RD 110*1/4	45
100	99	104	RD 130*1/4	54
125	125	132	RD 160*1/4	46
150	150	157	RD 190*1/4	50

DIN SEAL RING (D Type)
(EPDM, SILICONE, Viton (FKM))

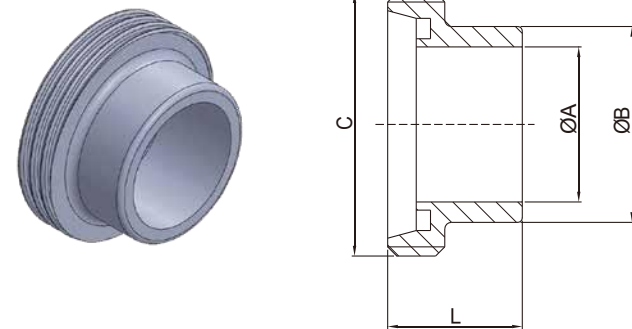
SIZE	ØA	B	L
10	12	4	4.5
15	18	4	4.5
20	23	5	4.5
25	30	5	5
32	36	5	5
40	42	5	5
50	54	5	5
65	71	5	5
80	85	5	5
100	104	5	5
125	130	6	7
150	155	6	7

DIN 11851 Unions



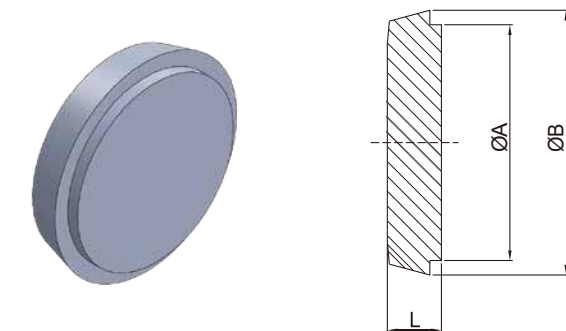
DIN-14T WELDING LINER

SIZE	ØA	ØB	ØC	L
10	10	18	22.5	17
15	16	24	28.5	17
20	20	30	36.5	18
25	26	35	44	22
32	32	41	50	25
40	38	48	56	26
50	50	61	68.5	28
65	66	79	86	32
80	81	93	100	37
100	99	112	121	44
100	100	114	121	44
125	125	137	150	34
150	150	163	176	37



DIN-15T WELDING MALE

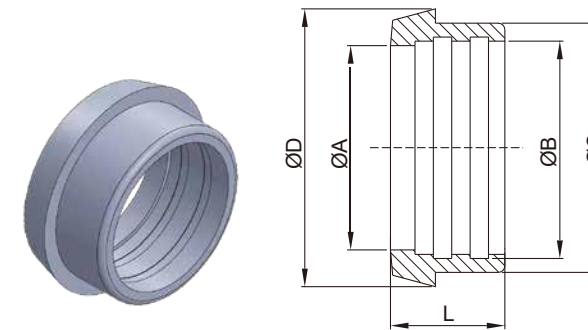
SIZE	ØA	ØB	C	L
10	10	18	RD 28*1/8	21
15	16	24	RD 34*1/8	21
20	20	30	RD 44*1/6	24
25	26	35	RD 52*1/6	29
32	32	41	RD 58*1/6	32
40	38	48	RD 65*1/6	33
50	50	61	RD 78*1/6	35
65	66	79	RD 95*1/6	40
80	81	93	RD 110*1/4	45
100	99	112	RD 130*1/4	54
100	100	114	RD 130*1/4	54
125	125	137	RD 160*1/4	46
150	150	163	RD 190*1/4	50



DIN-14B END CAP

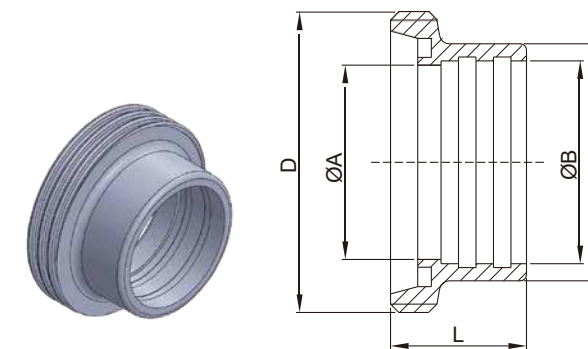
SIZE	ØA	ØB	L
10	18	22.5	9
15	24	28.5	9
20	30	36.5	11
25	35	44	13
32	41	50	13
40	48	56	13
50	61	68.5	14
65	79	86	16
80	93	100	16
90	103	111	19
100	114	121	20
125	137	150	22
150	163	176	24

DIN 11851 Expanding/Imperial Unions



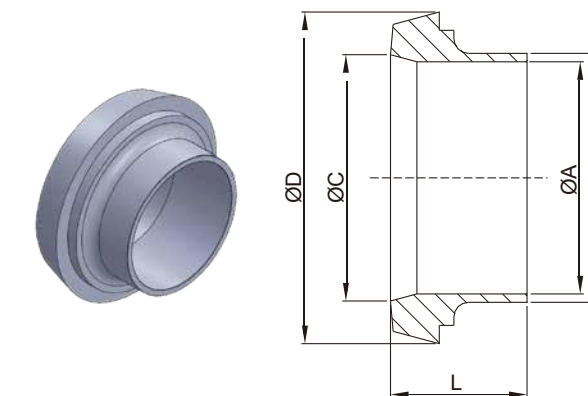
DIN-14R expanding liner

SIZE	ØA	ØB	ØC	ØD	L
10	10	12.2	18	22.5	17
15	16	18.2	24	28.5	17
20	20	22.2	30	36.5	18
25	26	28.2	35	44	22
32	32	34.2	41	50	25
40	38	40.3	48	56	26
50	50	52.3	61	68.5	28
65	66	70.4	79	86	32
80	81	85.4	93	100	37
100	100	105	114	121	44
125	125	129	137	150	34
150	150	154	163	176	37



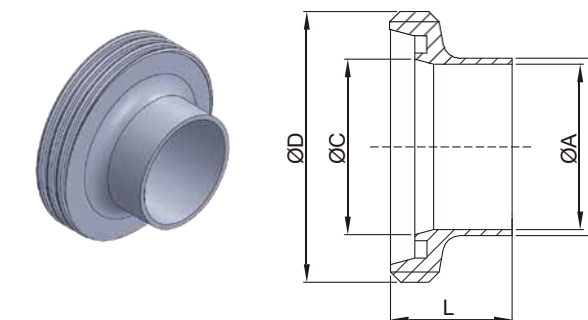
DIN-15R expanding male

SIZE	ØA	ØB	ØC	D	L
10	10	12.2	18	RD 28*1/8	21
15	16	18.2	24	RD 34*1/8	21
20	20	22.2	30	RD 44*1/6	24
25	26	28.2	35	RD 52*1/6	29
32	32	34.2	41	RD 58*1/6	32
40	38	40.3	48	RD 65*1/6	33
50	50	52.3	61	RD 78*1/6	35
65	66	70.4	79	RD 95*1/6	40
80	81	85.4	93	RD 110*1/4	45
100	100	105	114	RD 130*1/4	54
125	125	129	137	RD 160*1/4	46
150	150	154	163	RD 190*1/4	50



DIN-14I imperial welding liner

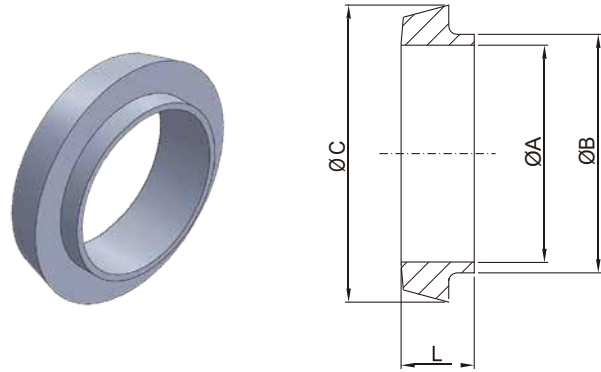
SIZE	ØA	ØB	ØC	ØD	L
1/2"	9.4	12.7	10	22.5	17
3/4"	15.75	19.05	20	36.5	18
1"	22.1	25.4	26	44	22
1.25"	28.45	31.75	32	50	25
1.5"	34.8	38.1	38	56	26
2"	47.5	50.8	50	68.5	28
2.5"	60.2	63.5	66	86	32
3"	72.9	76.2	81	100	37
4"	97.6	101.6	100	121	44



DIN-15I imperial welding male

SIZE	ØA	ØB	ØC	D	L
1/2"	9.4	12.7	10	RD 28*1/8	21
3/4"	15.75	19.05	20	RD 44*1/6	24
1"	22.1	25.4	26	RD 52*1/6	29
1.25"	28.45	31.75	32	RD 58*1/6	32
1.5"	34.8	38.1	38	RD 65*1/6	33
2"	47.5	50.8	50	RD 78*1/6	35
2.5"	60.2	63.5	66	RD 95*1/6	40
3"	72.9	76.2	81	RD 110*1/4	45
4"	97.6	101.6	100	RD 130*1/4	54

DIN 11851 Expanding/Imperial Unions



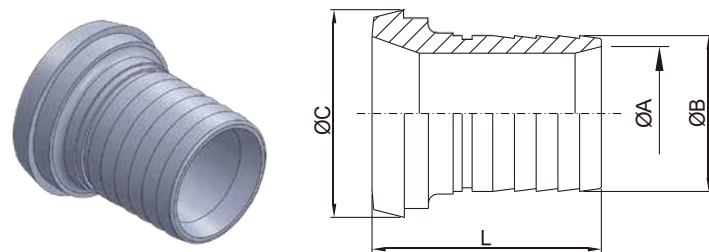
DIN-14E SHORT WELDING LINER

SIZE	DA		DB		ØC	L
	ØA	ØB	ØA	ØB		
10	10	13	9	12	22.5	13
15	16	19	15	18	28.5	13
20	20	23	19	22	36.5	13
25	26	29	25	28	44	15
32	32	35	31	34	50	15
40	38	41	37	40	56	15
50	50	53	49	52	68.5	16
60	57	61	57	61	76	16
65	66	70	66	70	86	17
80	80	85	81	85	100	17
100	100	104	100	104	121	20
125	125	129	125	129	150	23.5
150	150	154	150	154	176	27

DIN-15E SHORT WELDING MALE

SIZE	DA		DB		C	L
	ØA	ØB	ØA	ØB		
10	10	13	9	12	RD 28*1/8	17
15	16	19	15	18	RD 34*1/8	17
20	20	23	19	22	RD 44*1/6	19
25	26	29	25	28	RD 52*1/6	22
32	32	35	31	34	RD 58*1/6	22
40	38	41	37	40	RD 65*1/6	22
50	50	53	49	52	RD 78*1/6	23
60	57	61	57	61	RD 85*1/6	23
65	66	70	66	70	RD 95*1/6	25
80	81	85	81	85	RD 110*1/4	25
90	89	93	89	93	RD 120*1/4	30
100	100	104	100	104	RD 130*1/4	30
125	125	129	125	129	RD 160*1/4	35.5
150	150	154	150	154	RD 190*1/4	40

DIN 11851 HOSE ADAPTER



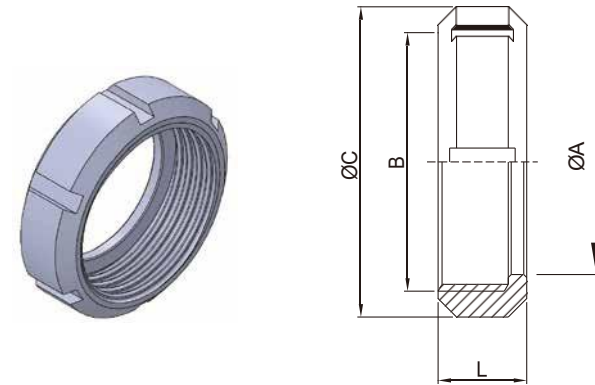
DIN-14AHR HOSE ADAPTER

SIZE	ØA	ØB	ØC	L
25	22.2	25	44	67
32	28.7	32.2	50	71
40	34	38	56	78
50	47	50.5	68	89
65	59	63.2	86	100
80	71.5	75.5	100	108
100	95	100.8	121	120

DIN-15AHR HOSE ADAPTER

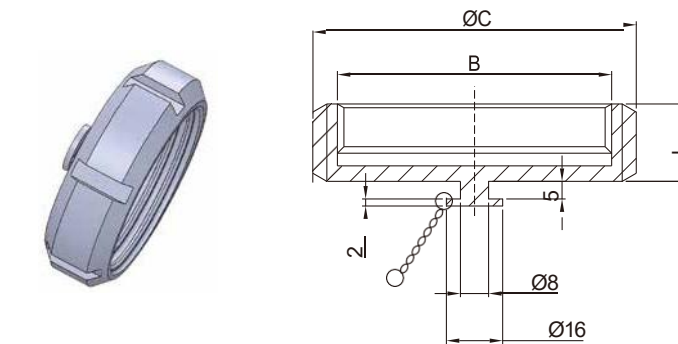
SIZE	ØA	ØB	C	L
25	22.2	25	RD 52*1/6	69
32	28.7	32.2	RD 58*1/6	73
40	34	38	RD 65*1/6	80
50	47	50.5	RD 78*1/6	90
65	59	63.2	RD 95*1/6	108
80	71.5	75.5	RD 110*1/4	116
100	95	100.8	RD 130*1/4	128

SMS Unions



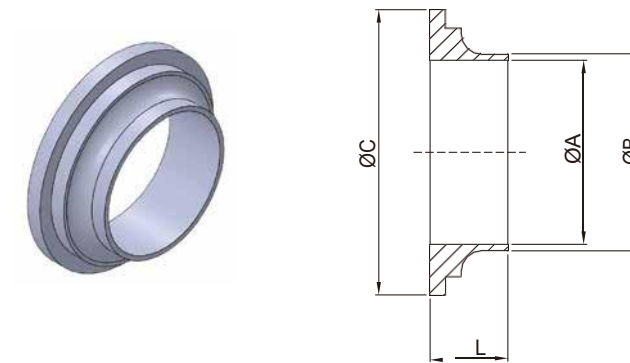
SMS-13R NUT 6 SLOTS

SIZE	ØA	B	ØC	L
25	32.3	RD 40*1/6	51	19
32	40.3	RD 48*1/6	60	22
38	48.5	RD 60*1/6	74	23
50	61	RD 70*1/6	84	24
63	74	RD 85*1/6	100	28
76	87	RD 98*1/6	114	30
101.6	113	RD125*1/4	138	31
104	113	RD125*1/4	138	31
102.5	117	RD132*1/6	150	31



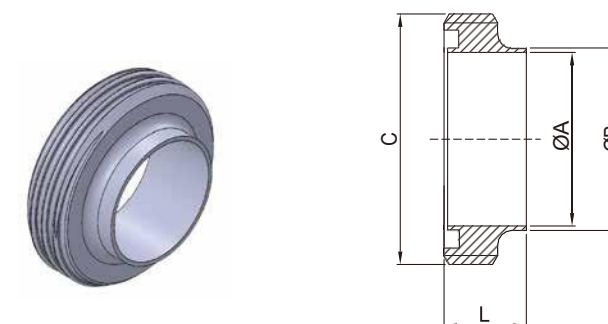
SMS-13RBN ROUND BLANK NUT

SIZE	B	ØC	L
25	RD 40*1/6	51	19
32	RD 48*1/6	60	22
38	RD 60*1/6	74	23
50	RD 70*1/6	84	24
63	RD 85*1/6	100	28
76	RD 98*1/6	114	30
104	RD125*1/4	138	31
102.5	RD132*1/6	150	31



SMS-14 LONG WELDING LINER

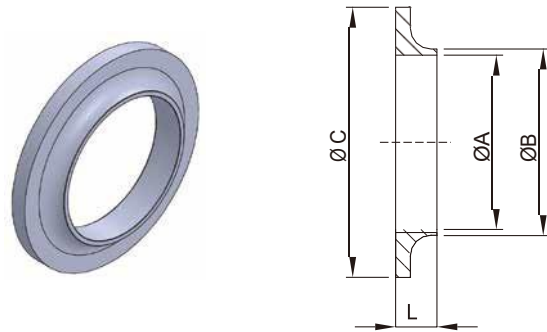
SIZE	ØA	ØB	ØC	L
25	22.5	25	35.5	15.5
38	35.5	38	55	16
50	48.5	51	65	17
63	60.5	63.5	80	17
76	72.9	76.1	93	19
101.6	97.6	101.6	118	19
104	100	104	118	19
102.5	98.5	102.5	127	19



SMS-15 LONG WELDING MALE

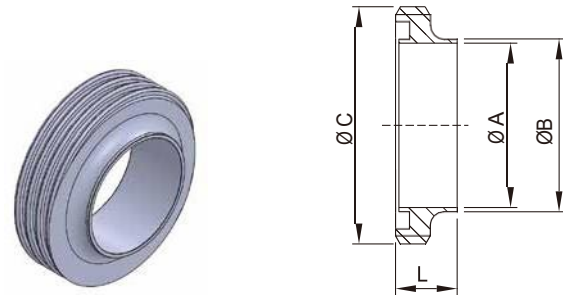
SIZE	ØA	ØB	ØC	L
25	22.5	25	RD 40*1/6	19
38	35.5	38	RD 60*1/6	23
50	48.5	51	RD 70*1/6	23
63	60.5	63.5	RD 85*1/6	27
76	72.9	76.1	RD 98*1/6	27
101.6	97.6	101.6	RD125*1/4	30
104	100	104	RD125*1/4	30
102.5	98.5	102.5	RD132*1/6	35

SMS Unions



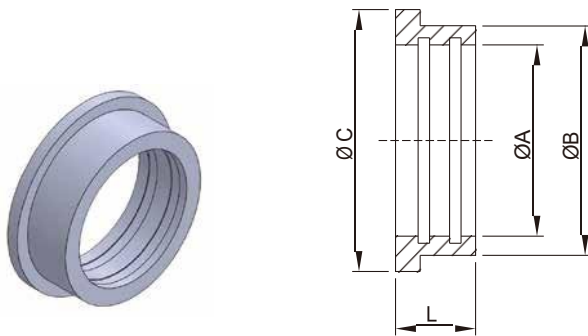
SMS-14S SHORT WELDING LINER

SIZE	ØA	ØB	ØC	L
25	22.5	25	35.5	7.5
38	35.5	38	55	8
50	48.5	51	65	9
63	60.5	63.5	80	9
76	72.9	76.1	93	9
101.6	97.6	101.6	118	10
104	100	104	118	12
102.5	98.5	102.5	127	12



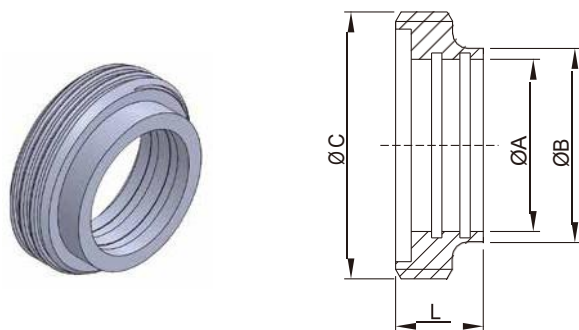
SMS-15S SHORT WELDING MALE

SIZE	ØA	ØB	C	L
25	22.5	25	RD 40*1/6	15
38	35.5	38	RD 60*1/6	20
50	48.5	51	RD 70*1/6	20
63	60.5	63.5	RD 85*1/6	24
76	72.9	76.1	RD 98*1/6	24
101.6	97.6	101.6	RD125*1/4	30
104	100	104	RD125*1/4	30
102.5	98.5	102.5	RD132*1/6	35



SMS-14R EXPANDING LINER

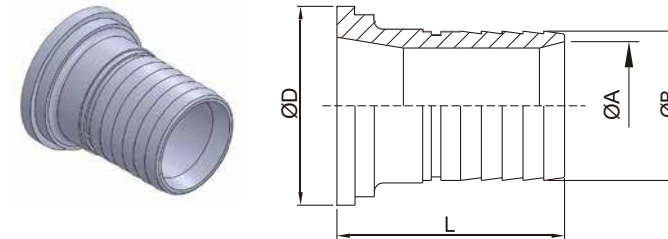
SIZE	ØA	ØB	ØC	L
25	25	32	35.5	17
32	32	40	43.5	17
38	38	47.9	55	20
40	40	48	55	20
50	51	60.4	65	20
63	63.5	73.5	80	25
76	76.1	86.5	93	30
101.6	101.6	112.5	118	27
104	105	112.5	118	27



SMS-15R EXPANDING MALE

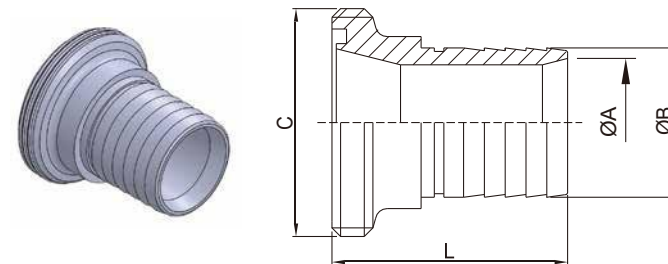
SIZE	ØA	ØB	C	L
25	25	32	RD 40*1/6	20
32	32	40	RD 48*1/6	20
38	38	47.9	RD 60*1/6	23
40	40	48	RD 60*1/6	23
50	51	60.4	RD 70*1/6	25
63	63.5	73.5	RD 85*1/6	30
76	76.1	86.5	RD 98*1/6	35
101.6	101.6	112.5	RD125*1/4	30
104	105	112.5	RD125*1/4	30

SMS Unions Range



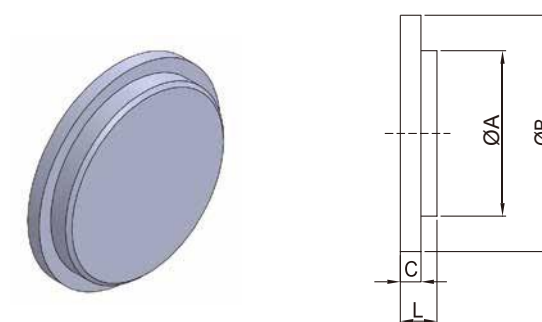
SMS-14AHR HOSE ADAPTER

SIZE	ØA	ØB	ØD	L
25	22.2	25	35.5	60.5
38	34	38	55	72
50	47	50.5	65	82
63	59	63.2	80	95
76	71.5	75.5	93	97
104	95	100.8	118	109



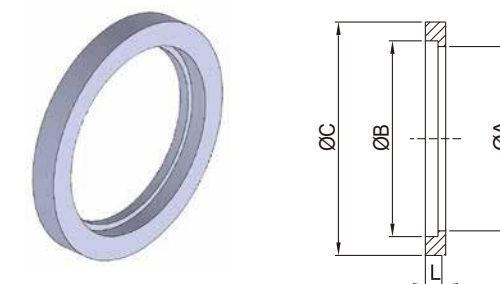
SMS-15AHR HOSE ADAPTER

SIZE	ØA	ØB	C	L
25	22.2	25	RD 40*1/6	64
38	34	38	RD 60*1/6	79
50	47	50.5	RD 70*1/6	89
63	59	63.2	RD 85*1/6	102
76	71.5	75.5	RD 98*1/6	105
104	95	100.8	RD125*1/4	120



SMS-14B BLANK END CAP

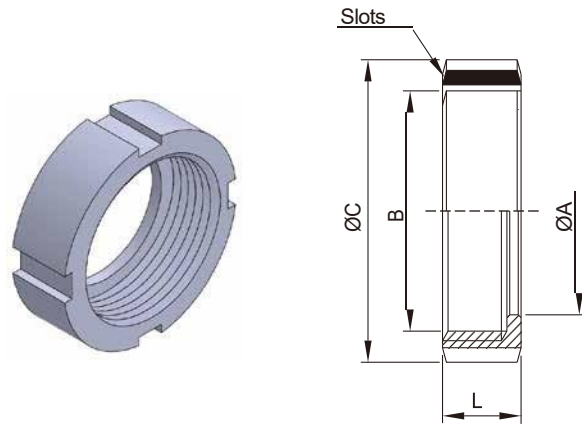
SIZE	ØA	ØB	C	L
25	32	35.5	3.5	7.5
38	48	55	5	9
50	60	65	5	10
63	73.5	80	5	10
76	86	93	5	11
101.6/104	116	118	6	11
102.5	112	128	6	11



SEAL RING L TYPE (EPDM, SILICONE, VITON(FKM))

SIZE	ØA	ØB	C	L
25	22.8	25.1	31.8	5.3
38	35.8	38.1	47.8	5.3
50	48.8	51.1	60.8	5.3
63	61	63.6	73.3	5.3
76	73.4	76.1	85.8	5.3
104/102.5	100.5	104	115.7	5.3

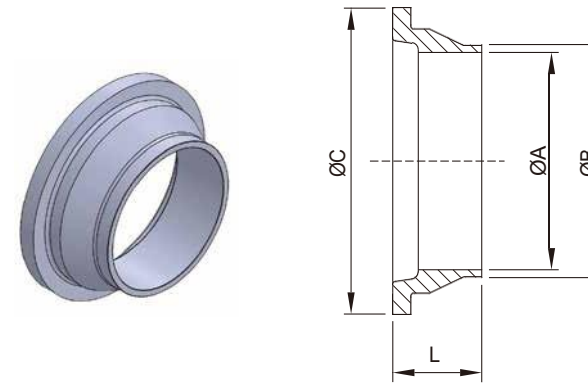
RJT (BS) Unions



RJT-13R Round nut

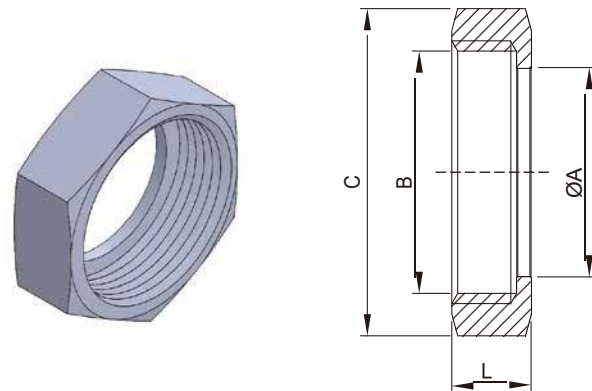
SIZE	ØA	B	ØC	L	S1	S2
1.0"	33.45	42.266x8TPI WHIT	58.5	22.2	4	6
1.5"	46	54.966x8TPI WHIT	74	22.2	4	6
2.0"	58.67	67.92x6TPI WHIT	85.5	22.2	6	8
2.5"	71.4	80.62x6TPI WHIT	98.5	22.2	6	8
3.0"	84.1	93.32x6TPI WHIT	111.6	22.2	8	10
4.0"	109.7	118.72x6TPI WHIT	138	22.2	8	10
6.0"	163	169.52x6TPI WHIT	197	23.5	10	10

RJT (BS) Unions



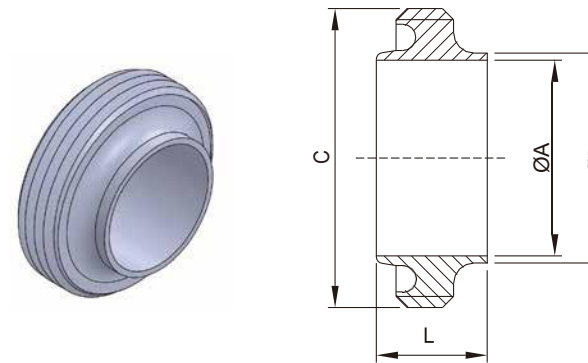
RJT-14 WELDING LINER

SIZE	ØA	ØB	ØC	L
1/2"	9.6	14	18	11.4
3/4"	16	20	23.1	11.4
1.0"	22.1	25.4	41.3	19.5
1.5"	34.8	38.1	54	19.5
2.0"	47.5	50.8	66.7	19.5
2.5"	60.2	63.5	79.4	19.5
3.0"	72.9	76.2	92.1	19.5
4.0"	97.6	101.6	117.5	19.5
6.0"	146.86	152.4	169.1	23.5



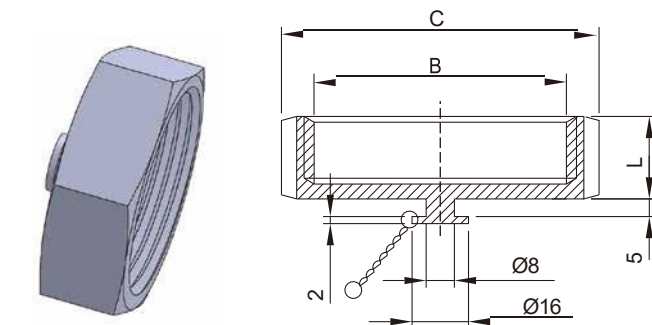
RJT-13H Hex.nut

SIZE	ØA	B	C	L
1/2"	14.5	19.6x10TPI WHIT	28.5	16
3/4"	21	26.2x10TPI WHIT	33	16
1.0"	33.45	42.266x8TPI WHIT	50.8	22.2
1.5"	46	54.966x8TPI WHIT	65	22.2
2.0"	58.67	67.92x6TPI WHIT	79.4	22.2
2.5"	71.4	80.62x6TPI WHIT	92	22.2
3.0"	84.1	93.32x6TPI WHIT	104.8	22.2
4.0"	109.7	118.72x6TPI WHIT	130	22.2
6.0"	163	169.52x6TPI WHIT	184	24



RJT-15 WELDING MALE

SIZE	ØA	ØB	C	L
1/2"	9.6	13.7	21.2 *10TP WHIT	16.5
3/4"	16	20	27.6 *10TP WHIT	16.5
1.0"	22.1	25.4	45.72 *8TP WHIT	27
1.5"	34.8	38.1	58.42 *8TP WHIT	27
2.0"	47.5	50.8	72.72 *6TP WHIT	27
2.5"	60.2	63.5	85.42 *6TP WHIT	27
3.0"	72.9	76.2	98.12 *6TP WHIT	27
4.0"	97.6	101.6	123.52*6TP WHIT	27
104	100	104	123.52*6TP WHIT	27
6.0"	146.86	152.4	174.32*6TP WHIT	24



RJT-13HBN Hex.blank nut

SIZE	B	C	L
1.0"	42.266x8TPI WHIT	50.8	23.5
1.5"	54.966x8TPI WHIT	65	23.5
2.0"	67.92x6TPI WHIT	79.4	23.5
2.5"	80.62x6TPI WHIT	92	23.5
3.0"	93.32x6TPI WHIT	104.8	23.5
4.0"	118.72x6TPI WHIT	130	23.5
6.0"	169.52x6TPI WHIT	184	23.5

O-Ring

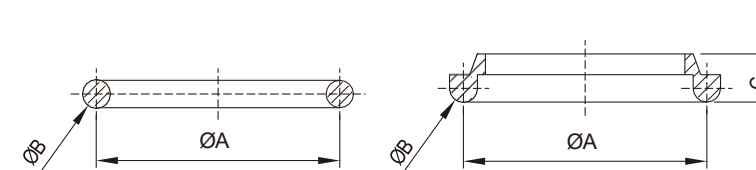


U Type

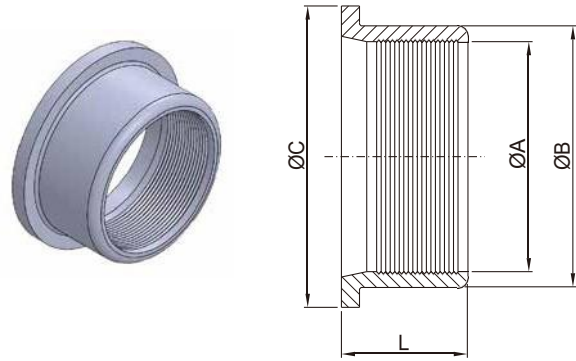


RJT SEAL RING (EPDM, Silicon, Viton)

SIZE	ØA	ØB	C
1"	33.3	6.5	7
1.5"	46	6.5	7
2"	58.7	6.5	7
2.5"	71.4	6.5	7
3"	84.1	6.5	7
4"	109.5	6.5	7
6"	160.3	6.5	7



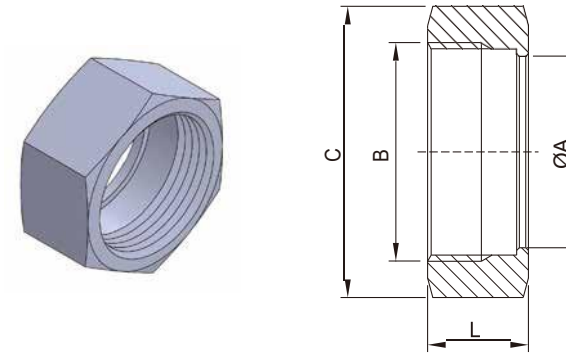
RJT (BS) Unions



RJT-14R EXPANDING LINER

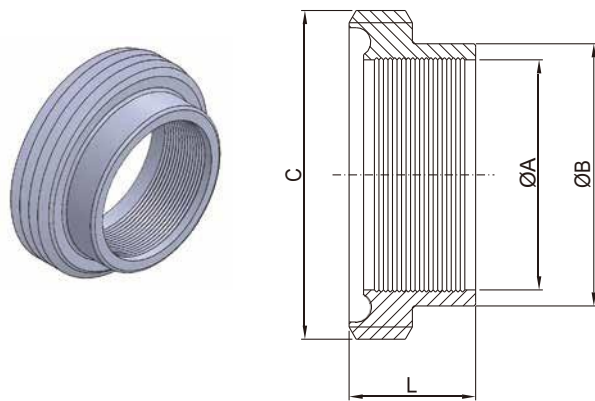
SIZE	ØA	ØB	ØC	L
1"	25.4	32.5	41.3	20
1.5"	38.1	45.2	54	24
2"	50.8	57.9	66.7	28
2.5"	63.5	70.6	79.4	32
3"	76.2	83.3	92.1	32
4"	101.6	108.7	117.5	32

IDF/JIS Unions



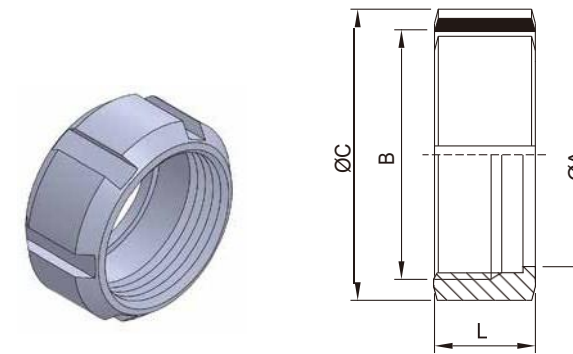
IDF-13H Hex.nut

SIZE	ØA	B	C	L
1.0"	30.5	34.49x8T ACME	46	30
1.5"	43.5	48.01x8T ACME	60	30
2.0"	57	61.52x8T ACME	75	30
2.5"	70.7	75.03x8T ACME	90	30
3.0"	83.3	88.55x8T ACME	105	30
4.0"	112	122.2x6T ACME	133	34.9



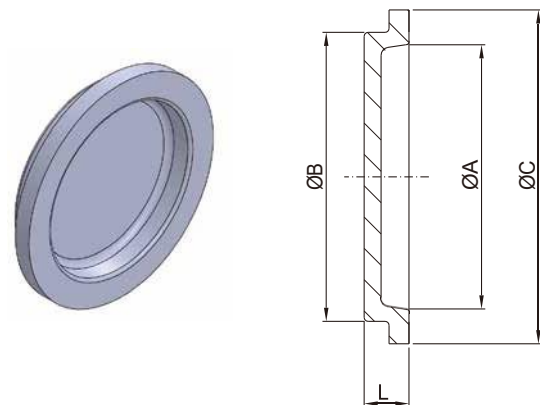
RJT-15R EXPANDING MALE

SIZE	ØA	ØB	C	L
1"	25.4	32.5	45.72 *8TP WHIT	20
1.5"	38.1	45.2	58.42 *8TP WHIT	24
2"	50.8	57.9	72.72 *6TP WHIT	28
2.5"	63.5	70.6	85.42 *6TP WHIT	32
3"	76.2	83.3	98.12 *6TP WHIT	32
4"	101.6	108.7	123.52*6TP WHIT	32



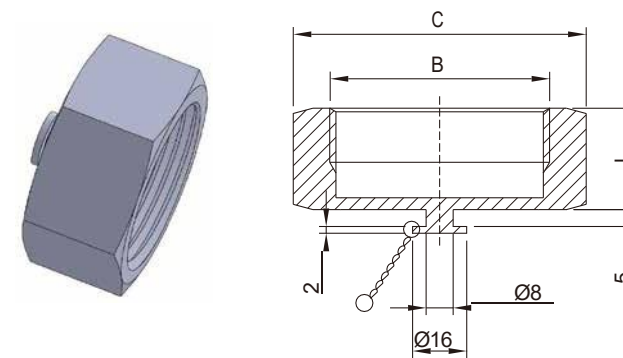
IDF-13R Round nut

SIZE	ØA	B	ØC	L	Slots
1.0"	30.5	34.49x8T ACME	48	30	6
1.5"	43.5	48.01x8T ACME	64	30	6
2.0"	57	61.52x8T ACME	77	30	6
2.5"	70.7	75.03x8T ACME	91	30	6
3.0"	83.3	88.55x8T ACME	106	30	6
4.0"	110	115.56x8T ACME	135	34.9	6



RJT-14B BLANK END CAP

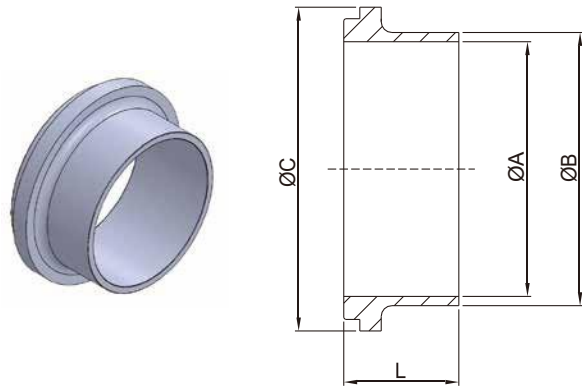
SIZE	ØA	ØB	ØC	L
1"	27.8	32.5	41.3	9
1.5"	40.5	45.2	54	9
2"	53.2	57.9	66.7	9
2.5"	65.9	70.6	79.4	9
3"	78.6	83.3	92.1	9
4"/104	104	108.7	117.5	9



IDF-13HBN Hex.blank nut

SIZE	B	C	L
1.0"	34.49x8T ACME	46	30
1.5"	48.01x8T ACME	60	30
2.0"	61.52x8T ACME	75	30
2.5"	75.03x8T ACME	90	30
3.0"	88.55x8T ACME	105	30
4.0"	122.2x6T ACME	133	34.9

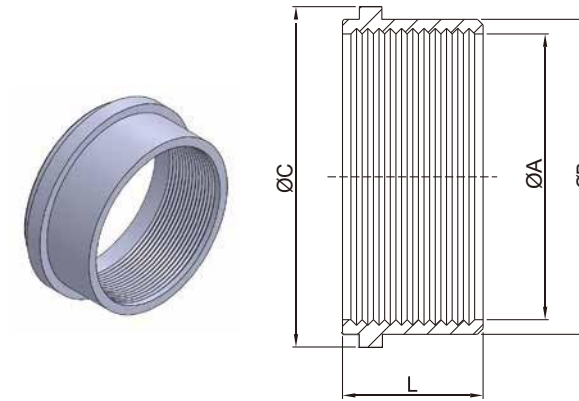
IDF/JIS G3447 Unions



IDF-14 WELDING LINER

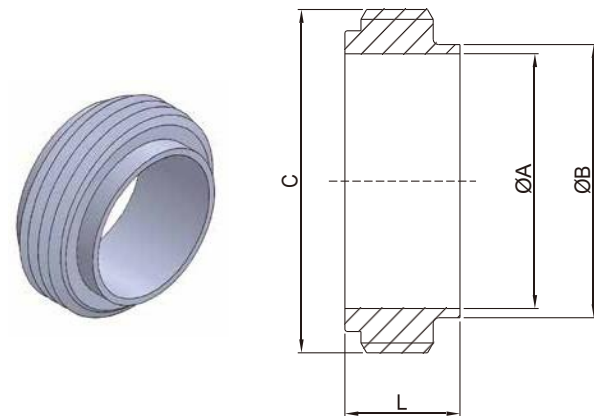
SIZE	IDF		JIS		ØC	L
	ØA	ØB	ØA	ØB		
1"	22.1	25.4	23	25.4	33.8	21.5
1.5"	34.8	38.1	35.7	38.1	47	21.5
2"	47.5	50.8	47.8	50.8	60.5	21.5
2.5"	60.2	63.5	59.5	63.5	74	21.5
3"	72.9	76.2	72.3	76.3	87.5	21.5
R 4"	97.6	101.6	—	—	114	30
H 4"	97.6	101.6	97.6	101.6	120.6	30

IDF/JIS G3447 Unions



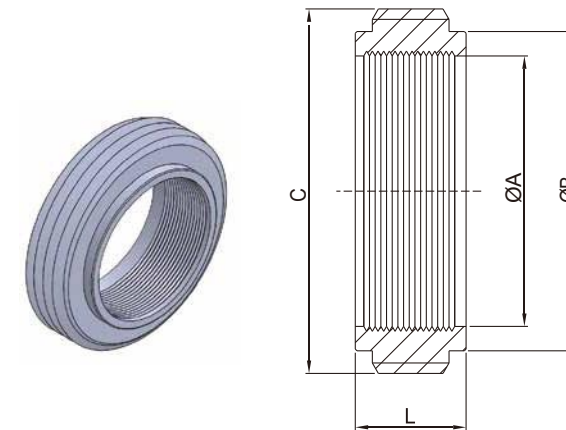
IDF-14R RECESSLESS LINER

SIZE	ØA	ØB	ØC	L
1"	25.4	29.2	33.8	20
1.5"	38.1	42.7	47	20
2"	50.8	56.2	60.5	25
2.5"	63.5	69.9	74	30
3"	76.2	82.6	87.5	30
R 4"	101.6	108.8	114	30
H 4"	101.6	111.1	120.6	30



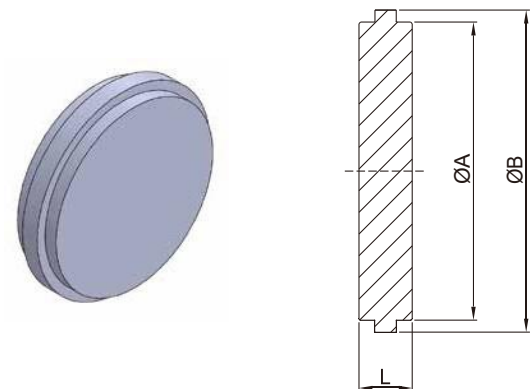
IDF-15 WELDING MALE

SIZE	IDF		JIS		C	L
	ØA	ØB	ØA	ØB		
1"	22.1	25.4	23	25.4	36.97*8T ACME	21.5
1.5"	34.8	38.1	35.7	38.1	50.49*8T ACME	21.5
2"	47.5	50.8	47.8	50.8	64*8T ACME	21.5
2.5"	60.2	63.5	59.5	63.5	77.51*8T ACME	21.5
3"	72.9	76.2	72.3	76.3	91.03*8T ACME	21.5
R 4"	97.6	101.6	—	—	118.04*8T ACME	30
H 4"	97.6	101.6	97.6	101.6	125.69*6T ACME	30



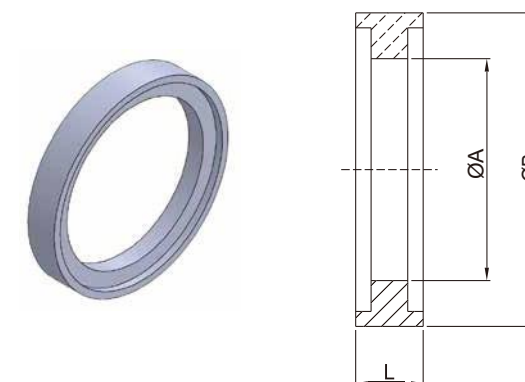
IDF-15R RECESSLESS MALE

SIZE	ØA	ØB	C	L
1"	25.4	29.2	36.97*8T ACME	19.5
1.5"	38.1	42.7	50.49*8T ACME	19.5
2"	50.8	56.2	64*8T ACME	19.5
2.5"	63.5	69.9	77.51*8T ACME	25
3"	76.2	82.6	91.03*8T ACME	30
R 4"	101.6	108.8	118.04*8T ACME	35
H 4"	101.6	111.1	125.69*6T ACME	35



IDF-14B BLANK END CAP

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"	108.8	114.1	12.6
H 4"	111.1	120.6	12.6

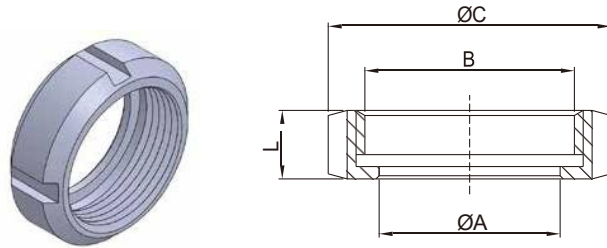


IDF SEAL RING

SIZE	ØA	ØB	L
1"	23	32.5	7
1.5"	36	46	7
2"	49	59.5	7
2.5"	60.7	73.2	7
3"	73.2	86.5	7
R 4"	98	113	7
H 4"	98	119.6	7

Wine Unions

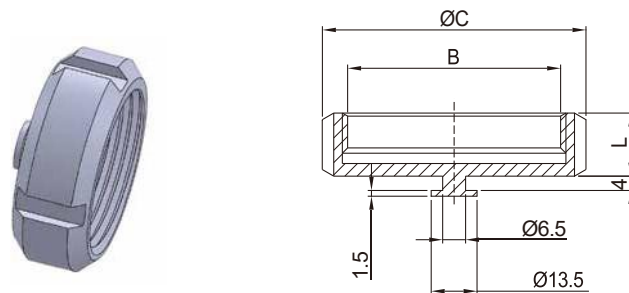
13R



MACON NUT 4 SLOTS M-13R

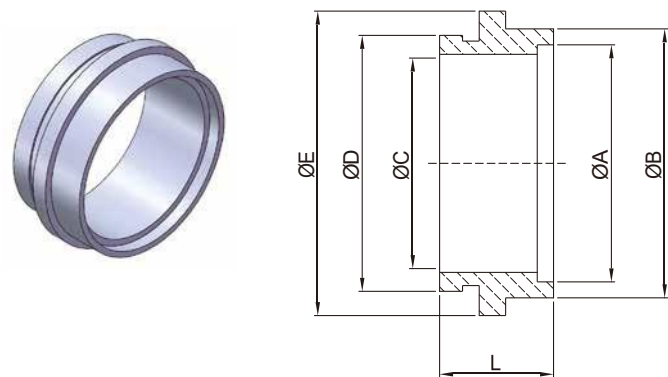
SIZE	ØA	B	ØC	L
DN33	37	39*11TPI WHIT	50	25
DN43	47	M55*P3.0	70	25
DN53	57	M67*P3.0	80	25
DN63	67	M79*P3.5	95	25
DN73	77	M90*P3.5	106	25
DN83	90	M102*P4.0	118	25
DN103	112	M125*P4.0	139	26

13RBN



MACON LINER M-14

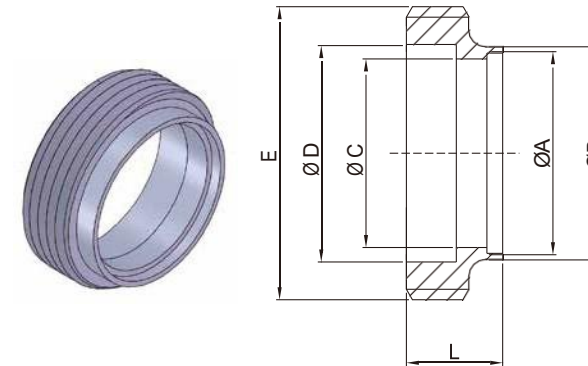
SIZE	ØA	ØB	ØC	ØD	ØE	L
DN33	33.3	36	28	31.5	38	22
DN38	38.2	46	35.9	44.5	50	29
DN40/43	43.3	46.3	40	44.5	50	22
DN51	51.2	56	48.5	54.5	62.5	29
DN50/53	53.3	56.3	50	54.5	62.5	22
DN60/63	63.3	66.3	60	64.5	73.5	22
DN70/73	73.3	76.3	70	74.5	85	22
DN76	72	76	70	74.5	85	22
DN80/83	83.3	86.3	80	84.5	96	22
DN103	104.2	108	100	104.5	119	22



Wine Unions

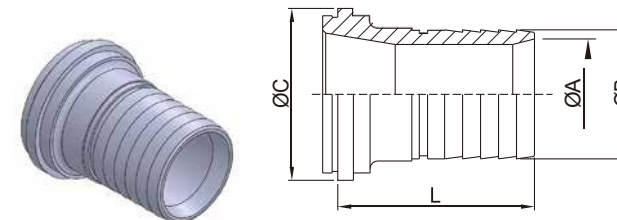
MACON MALE M-15

SIZE	ØA	ØB	ØC	ØD	E	L
DN33	33.3	36.3	30	32	40.5*11TPI WHIT	22
DN38	38.2	46	35.9	45	M55*P3.0	30
DN43	43.3	46.3	40	45	M55*P3.0	22
DN51	51.2	56	48.5	55	M67*P3.0	30
DN53	53.3	56.3	50	55	M67*P3.0	22
DN60/63	63.3	66.3	60	66	M79*P3.5	22
DN70/73	73.3	76.3	70	76	M90*P3.5	22
DN76	72	76	70	76	M90*P3.5	22
DN80/83	83.3	86.3	80	86	M102*P4.0	22
DN103	104.2	108	100	106	M125*P4.0	22



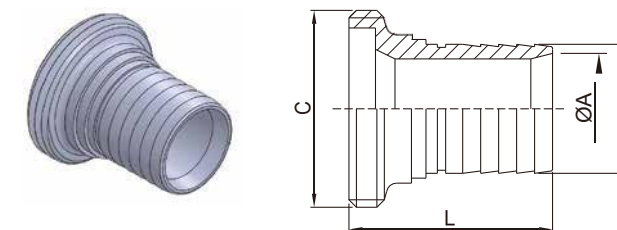
M-14AHR MACON LINER HOSE ADAPTER

SIZE	ØA	ØB	ØC	L
DN40/43	40	43	50.8	79
DN50/53	50	53	63	79
DN60/63	59	53.2	75	102
DN70/73	70	73	85	79
DN80/83	71.5	75.5	97	110

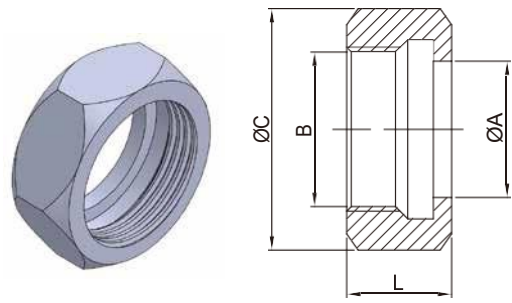


M-15AHR MACON MALE HOSE ADAPTER

SIZE	ØA	ØB	C	L
DN40/43	40	43	M55*P3.0	79
DN50/53	50	53	M67*P3.0	79
DN60/63	59	53.2	M79*P3.5	104
DN70/73	70	73	M90*P3.5	79
DN80/83	71.5	75.5	M102*P4.0	112

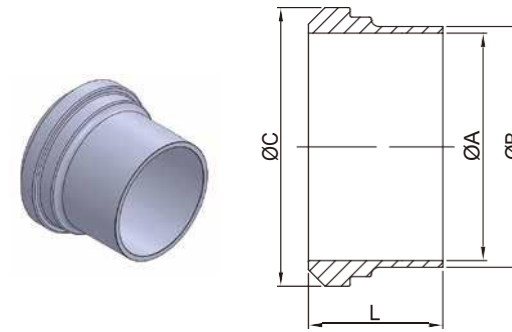


3A Unions



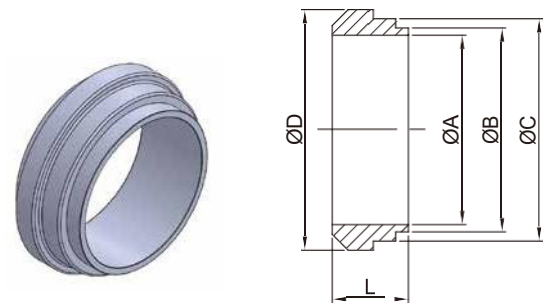
3A-13H HEXAGONAL NUT

SIZE	ØA	B	ØC	L
1"	30.3	38.02 ACME 8TPI	46	23
1.5"	43.4	51.54 ACME 8TPI	61.1	24.6
2"	56.5	65.05 ACME 8TPI	76.2	27
2.5"	69.6	78.56 ACME 8TPI	91.3	29.6
3"	82.7	92.08 ACME 8TPI	106.4	32.5
4"	108.9	120.14 ACME 6TPI	137.6	38.1



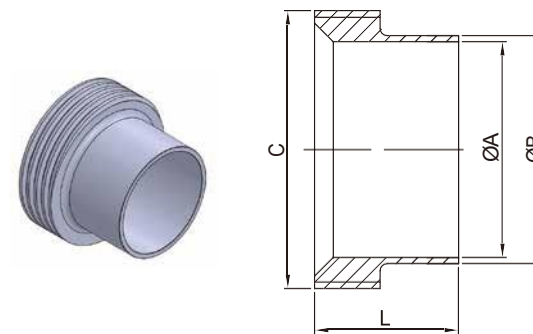
3A-14A LONG WELD LINER

SIZE	ØA	ØB	ØC	L
1"	22.1	25.4	33.3	34.9
1.5"	34.8	38.1	46.8	38.1
2"	47.5	50.8	60.3	38.1
2.5"	60.2	63.5	73.8	44.5
3"	72.9	76.2	87.3	44.5
4"	97.6	101.6	114.3	44.5



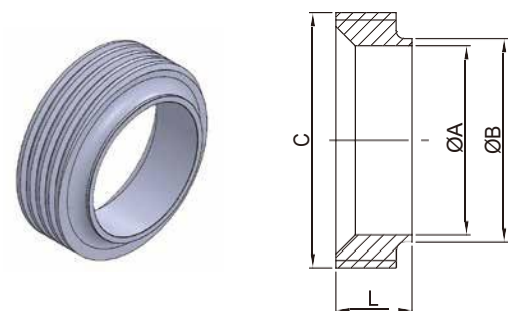
3A-14PRF SHORT BEVEL SEAT WELD LINER

SIZE	ØA	ØB	ØC	ØD	L
1"	22.1	25.4	29.5	33.3	18.3
1.5"	34.8	38.1	42.6	46.8	18.3
2"	47.5	50.8	55.7	60.3	19.1
2.5"	60.2	63.5	68.8	73.8	22.3
3"	72.9	76.2	81.9	87.3	23.1
4"	97.6	101.6	108.1	114.3	26.2



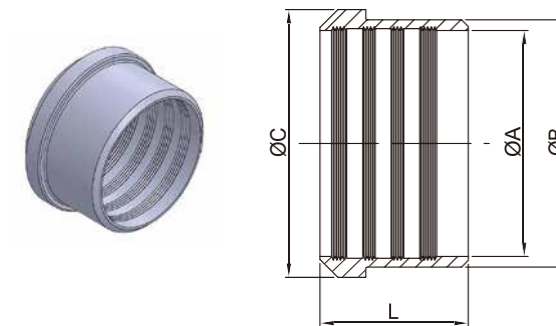
3A-15A LONG WELD MALE

SIZE	ØA	ØB	C	L
1"	22.1	25.4	36.97 ACME 8TPI	34.9
1.5"	34.8	38.1	50.49 ACME 8TPI	38.1
2"	47.5	50.8	64 ACME 8TPI	38.1
2.5"	60.2	63.5	77.51 ACME 8TPI	44.5
3"	72.9	76.2	91.03 ACME 8TPI	44.5
4"	97.6	101.6	119.04 ACME 6TPI	44.5



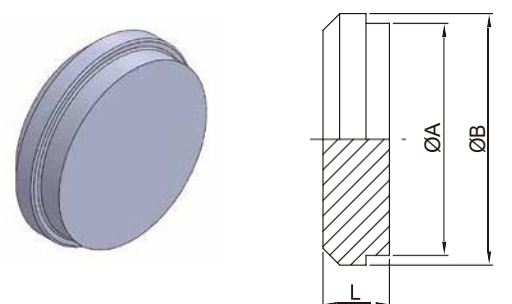
3A-15TRF SHORT BEVEL SEAT WELD MALE

SIZE	ØA	ØB	C	L
1"	22.1	25.4	36.97 ACME 8TPI	18.3
1.5"	34.8	38.1	50.49 ACME 8TPI	18.3
2"	47.5	50.8	64 ACME 8TPI	19.1
2.5"	60.2	63.5	77.51 ACME 8TPI	22.2
3"	72.9	76.2	91.03 ACME 8TPI	23.1
4"	97.6	101.6	119.04 ACME 6TPI	26.2



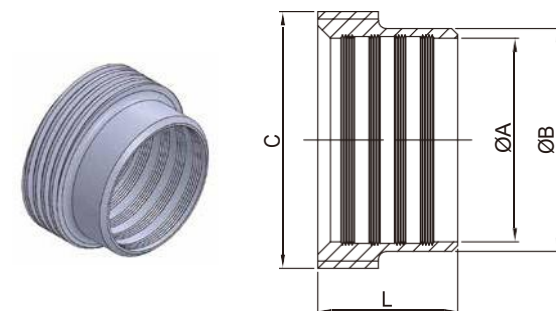
3A-14R RECESSLESS LINER

SIZE	ØA	ØB	ØC	L
1"	25.4	29.5	33.3	19.1
1.5"	38.1	42.6	46.8	28.6
2"	50.8	55.7	60.3	33.3
2.5"	63.5	68.8	73.8	34.9
3"	76.2	81.9	87.3	36.5
4"	101.6	108.1	114.3	38.1



3A-16A BLANK END CAP

SIZE	ØA	ØB	L
1"	29.5	33.3	11.9
1.5"	42.6	46.8	14.3
2"	55.7	60.3	15.9
2.5"	68.8	73.8	16.7
3"	81.9	87.3	18.3
4"	108.1	114.3	20.6



3A-15R RECESSLESS MALE

SIZE	ØA	ØB	C	L
1"	25.4	29.5	36.97 ACME 8TPI	20.6
1.5"	38.1	42.6	50.49 ACME 8TPI	28.6
2"	50.8	55.7	64 ACME 8TPI	34.9
2.5"	63.5	68.8	77.51 ACME 8TPI	38.1
3"	76.2	81.9	91.03 ACME 8TPI	41.3
4"	101.6	108.1	119.04 ACME 6TPI	41.3