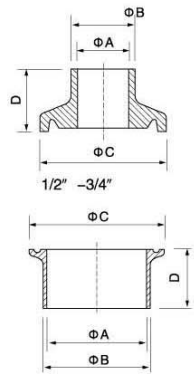


SANITATION-GRADE PIPE FITTINGS SERIES

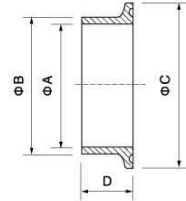
Sanitary ferrule

DIN 11851 unions(mm)



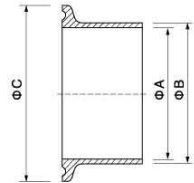
3A Welding Ferrule

SIZE	A	B	C	D	D	D
1/2"	9.45	12.75	25.2	12.7	21.5	28.6
3/4"	15.75	19.05	25.2	12.7	21.5	28.6
1.0"	22.2	25.4	50.5	12.7	21.5	28.6
1.5"	34.9	38.1	50.5	12.7	21.5	28.6
2.0"	47.6	50.8	64.0	12.7	21.5	28.6
2.5"	60.3	63.5	77.5	12.7	21.5	28.6
3.0"	73.0	76.2	91.0	12.7	21.5	28.6
4.0"	97.6	101.6	119.0	15.8	21.5	28.6
6.0"	146.8	152.5	166.8		21.5	28.6 or 38.1
8.0"	197.6	203.3	217.7		21.5	28.6 or 38.1
10"	247.2	254.1	268.5		21.5	28.6 or 38.1
12"	298	304.9	319.3		21.5	28.6 or 38.1



SMS Welding Ferrule

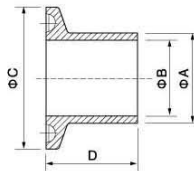
DN	A	B	C	D	D
25	22.5	25	50.5	21.5	28.6
38	35.5	38	50.5	21.5	28.6
51	48.5	51	64.0	21.5	28.6
63.5	60.5	63.5	77.5	21.5	28.6
76	72.9	76.1	91.0	21.5	28.6
104	97.6	101.6	119.0	21.5	28.6



DIN Ferrule

DN	A	B	C	L1	L2	L3
10	9	12	34	12.7	21.5	28.6
15	15	18	34	12.7	21.5	28.6
20	19	22	34	12.7	21.5	28.6
25	25	28	50.5	12.7	21.5	28.6
32	31	34	50.5	12.7	21.5	28.6
40	37	40	50.5	12.7	21.5	28.6
50	49	52	64.0	12.7	21.5	28.6

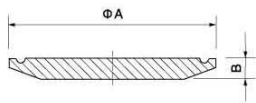
DN	A	B	C	L1	L2	L3
65	66	70	91.0	12.7	21.5	28.6
80	81	85	106.0	15.8	21.5	28.6
101.6	97.6	101.6	119.0	15.8	21.5	28.6
100	100	104	119.0	15.8	21.5	28.6
125	125	129	155	15.8	21.5	28.6
150	150	154	183	15.8	21.5	28.6
200	200	204	233.5			28.6



ISO Ferrule

DN	A	B	C	D
8	13.5	10.3	34.0	28.6
12	17.5	14.0	34.0	28.6
15	21.6	18.1	34.0	28.6
20	26.9	23.7	50.5	28.6
25	33.7	30.5	50.5	28.6
32	42.4	39.2	50.5	28.6
40	48.3	45.1	64.0	28.6

DN	A	B	C	D
50	60.3	56.3	77.5	28.6
65	76.1	72.1	91.0	28.6
80	88.9	84.9	106.0	28.6
100	114.3	109.1	130.0	28.6
125	139.7	133.7	155.0	28.6
150	168.3	162.3	183.0	28.6
200	219.1	211.1	233.5	28.6



Blank DIN-16Amp

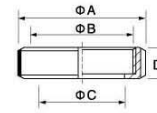
DN	A	B
1/2"	25.2	6.4
3/4"	25.2	6.4
1.0"	50.5	6.4
1.5"	50.5	6.4
2.0"	64	6.4
2.5"	77.5	6.4
3.0"	91	6.4
4.0"	119	7.9
10	34	6.4
20	34	6.4
80	106	6.4

Blank 3A-16Amp

DN	A	B
1/2"-3/4"	25.2	5
1"-1.5"	50.5	6.3
2.0"	64.0	6.3
2.5"	77.5	6.3
3.0"	91.0	6.3
4.0"	119.0	7.9
6.0"	166.8	11.1
8.0"	217.7	11.1
10"	268.5	11.1
12"	319.3	11.1

Blank ISO-16Amp

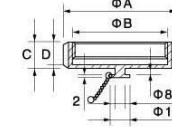
DN	A	B
20	50.5	6.3
25	50.5	6.3
32	50.5	6.3
40	64.0	6.3
50	77.5	6.3
65	91	6.3
80	106	6.3
100	130	7.9
125	155	7.9
125	183	11.1
200	233.5	11.1



DIN Round Nut

DN	A	B	C	D	Slots
10	38	RD 28 x 1/8	19		
15	44	RD 34 x 1/8	25	18	4
20	54	RD 44 x 1/6	31	21	4
25	63	RD 52 x 1/6	38	21	4
32	70	RD 58 x 1/6	42	21	4
40	78	RD 65 x 1/6	49	21	4
50	92	RD 78 x 1/6	62	22	4
65	112	RD 95 x 1/6	80	25	6
80	127	RD 110 x 1/4	94	29	6
90	138	RD 120 x 1/4	104	30	6
100	148	RD 130 x 1/4	115	31	6
125	178	RD 160 x 1/4	138	35	6
150	210	RD 190 x 1/4	164	40	6

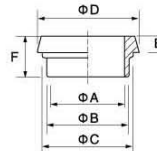
DIN-13



DIN Blank Nut

DN	A	B	C	D
10	38	RD 28 x 1/8	18	15
15	44	RD 34 x 1/8	18	15
20	54	RD 44 x 1/6	21	18
25	63	RD 52 x 1/6	21	18
32	70	RD 58 x 1/6	21	18
40	78	RD 65 x 1/6	21	18
50	92	RD 78 x 1/6	22	19
65	112	RD 95 x 1/6	25	21
80	127	RD 110 x 1/4	30	26
90	138	RD 120 x 1/4	30	2
100	148	RD 130 x 1/4	31	26
125	178	RD 160 x 1/4	35	30
150	210	RD 190 x 1/4	40	34

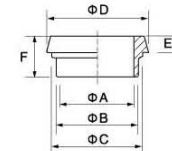
DIN-13RBN



DIN Welding Liner

DN	A	B	C	D	E	F
10	10	15	18	22.5	6	17
15	16	21	24	28.5	6	17
20	20	25	30	36.5	8	18
25	26	31	35	44	10	22
32	32	37	41	50	10	25
40	38	43	48	56	10	26
50	50	55	61	68.5	11	28
65	66	72	79	86	12	32
80	81	87	93	100	12	37
100	100	106	114	121	15	44
125	125	132	137	150	17	34
150	150	157	163	176	18	37

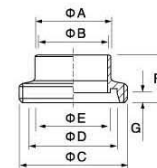
DIN-14



DIN Welding Liner

DN	A	B	C	D	E	F
10	10	13	18	22.5	6	17
15	16	19	24	28.5	6	17
20	20	23	30	36.5	8	18
25	26	29	35	44	10	22
32	32	35	41	50	10	25
40	38	41	48	56	10	26
50	50	53	61	68.5	11	28
65	66	70	79	86	12	32
80	81	85	93	100	12	37
100	100	104	114	121	15	44
125	125	129	137	150	17	34
150	150	154	163	176	18	37

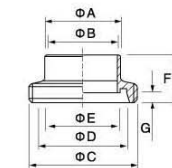
DIN-14H



DIN Welding Male

DN	A	B	C	D	E	F	G
10	15	10	RD 28 x 1/8	20	12	21	4
15	21	16	RD 34 x 1/8	26	18	21	4
20	25	20	RD 44 x 1/6	33	23	24	6
25	31	26	RD 52 x 1/6	40	30	29	7
32	37	32	RD 58 x 1/6	46	36	32	7
40	43	38	RD 65 x 1/6	52	42	33	7
50	53	50	RD 78 x 1/6	64	54	35	7
65	72	66	RD 95 x 1/6	81	71	40	8
80	87	81	RD 110 x 1/4	95	85	45	8
100	106	100	RD 130 x 1/4	114	104	54	10
125	132	125	RD 160 x 1/4	142	130	46	12
150	157	150	RD 190 x 1/4	167	155	50	13

DIN-15



DIN Welding Male

DN	A	B	C	D	E	F	G
10	13	10	RD 28 x 1/8	20	12	21	4
15	19	16	RD 34 x 1/8	26	18	21	4
20	23	20	RD 44 x 1/6	33	23	24	6
25	29	26	RD 52 x 1/6	40	30	29	7
32	35	32	RD 58 x 1/6	46	36	32	7
40	41	38	RD 65 x 1/6	52	42	33	7
50	53	50	RD 78 x 1/6	64	54	35	7
65	70	66	RD 95 x 1/6	81	71	40	8
80	85	81	RD 110 x 1/4	95	85	45	8
100	104	100	RD 130 x 1/4	114	104	54	10
125	129	125	RD 160 x 1/4	142	130	46	12
150	154	150	RD 190 x 1/4	167	155	50	13

DIN-15H

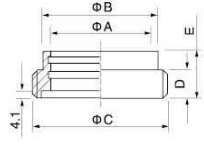
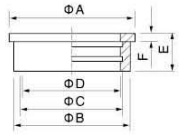
SANITATION-GRADE PIPE FITTINGS SERIES

SMS unions(mm)

3A unions(mm)

SMS Expanding Male 15R

SIZE	A	B	C	D	E	F
25	35.5	32.0	25.8	25.2	17	3.5
32	43.5	40.0	33.0	32.2	17	3.5
38	55.0	47.9	38.8	38.2	20	4.0
40	55.0	48.0	41.2	40.2	20	4.0
51	65.0	60.4	51.8	51.2	20	4.0
63	80.0	73.5	64.3	63.7	25	4.0
76	93.0	86.5	77.0	76.2	30	5.0
101.6	118.0	112.5	102.6	101.8	27	6.0
104	118.0	112.5	105.0	104.2	27	6.0

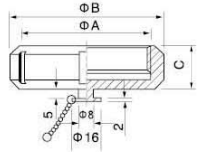
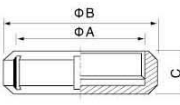


SMS Expanding Liner 14R

SIZE	A	B	C	D	E
25	25.5	32.0	RD40 x 1/6	11	20
32	32.2	40.0	RD48 x 1/6	13	20
38	38.2	47.9	RD60 x 1/6	15	23
40	40.2	48.0	RD60 x 1/6	15	23
51	51.2	60.4	RD70 x 1/6	15	25
63	53.7	73.5	RD85 x 1/6	19	30
76	76.2	86.5	RD98 x 1/6	19	35
101.6	101.8	112.5	RD125 x 1/4	20	30
104	104.2	112.5	RD125 x 1/4	20	30

SMS Blank Nut 13RB

SIZE	A	B	C	D
25	RD40 x 1/6	51	19	4
32	RD48 x 1/6	60	22	4
38	RD60 x 1/6	74	23	4
51	RD70 x 1/6	84	24	5
63	RD85 x 1/6	100	28	5
76	RD98 x 1/6	114	30	6
104	RD125 x 1/4	138	31	5

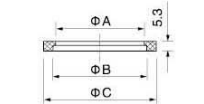
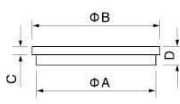


SMS Blank Nut 13RBN

SIZE	A	B	C	D
25	RD40 x 1/6	51	19	4
32	RD48 x 1/6	60	22	4
38	RD60 x 1/6	74	23	4
51	RD70 x 1/6	84	24	5
63	RD85 x 1/6	100	28	5
76	RD98 x 1/6	114	30	6
104	RD125 x 1/4	138	31	5

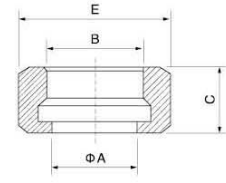
SMS Blanks

SIZE	A	B	C	D
25	32.0	35.5	3.5	7.5
38	48.0	55.0	5.0	9.0
51	60.0	65.0	5.0	10.0
63	73.5	80	5.0	10.0
76	86.0	93.0	5.0	11.0
101.6	112.0	118.0	6.0	11.0
104	112.0	118.0	6.0	11.0



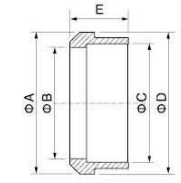
Seal Ring (EPDM, silicon, viton)

SIZE	A	B	C
25	22.8	25.1	31.8
38	35.8	38.1	47.8
51	48.8	51.1	60.8
63.5	61.0	63.6	73.3
76	73.4	76.1	85.8
104	100.5	104.0	115.7



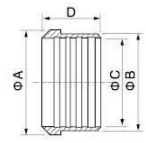
3A Hexagonal Nut

SIZE	ΦA	B	C	E
1.0"	30.3	38.02 ACME 8TPI	23	46
1.5"	43.4	51.54 ACME 8TPI	24.6	61.1
2.0"	56.5	65.05 ACME 8TPI	27	76.2
2.5"	69.6	78.56 ACME 8TPI	29.6	91.3
3.0"	82.7	92.08 ACME 8TPI	32.5	106.4
4.0"	108.9	120.14 ACME 8TPI	38.1	137.6



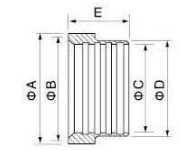
3A Reccessless liner

SIZE	ΦA	ΦD	ΦC	ΦB	E
1.0"	33.3	29.5	25.5	22.2	19.1
1.5"	46.8	42.6	38.2	34.9	22.2
2.0"	60.3	55.7	50.9	47.6	24.6
2.5"	73.8	68.8	63.6	60.3	27
3.0"	87.3	81.9	76.3	73	28.6
4.0"	114.3	108.1	101.7	97.6	31.8



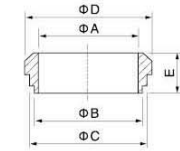
3A Reccessless liner

SIZE	ΦA	ΦD	ΦC	D
1.0"	33.3	29.5	25.5	19.1
1.5"	46.8	42.6	38.2	28.6
2.0"	60.3	55.7	50.9	33.3
2.5"	73.8	68.8	63.6	34.9
3.0"	87.3	81.9	76.3	36.5
4.0"	114.3	108.1	101.7	38.1



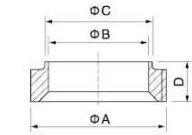
3A Reccessless Male

SIZE	ΦA	ΦB	ΦD	ΦC	E
1.0"	37.13 ACME 8TPI	33.45	29.5	25.5	20.6
1.5"	50.65 ACME 8TPI	46.96	42.6	38.2	28.3
2.0"	64.17 ACME 8TPI	60.48	55.7	50.9	34.9
2.5"	77.67 ACME 8TPI	73.99	68.8	63.6	38.1
3.0"	91.19 ACME 8TPI	87.5	81.9	76.3	41.3
4.0"	119.25 ACME 8TPI	114.53	108.1	101.7	41.3



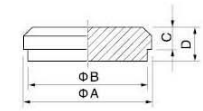
3A Short Bevel Seat Weld Liner

SIZE	A	B	C	D	E
1.0"	22.1	25.4	29.5	33.3	18.3
1.5"	34.8	38.1	42.6	46.8	18.3
2.0"	47.5	50.8	55.7	60.3	19.1
2.5"	60.2	63.5	68.8	73.8	22.3
3.0"	72.9	76.2	81.9	87.3	23.1
4.0"	97.6	101.6	108.1	114.3	26.2



3A Short Bevel Seat Weld Male

SIZE	A	B	C	D
1.0"	37.13 ACME 8TPI	22.1	25.4	18.3
1.5"	50.65 ACME 8TPI	34.8	38.1	18.3
2.0"	64.17 ACME 8TPI	47.5	50.8	19.1
2.5"	77.67 ACME 8TPI	60.2	63.5	22.2
3.0"	91.19 ACME 8TPI	72.9	76.2	23.1
4.0"	119.25 ACME 8TPI	97.6	101.6	26.2



3A Blanks

SIZE	A	B	C	D
1.0"	33.3	29.5	7.9	11.9
1.5"	46.8	42.6	8.7	14.3
2.0"	60.3	55.7	10.3	15.9
2.5"	73.8	68.8	11.1	16.7
3.0"	87.3	81.9	11.9	18.3
4.0"	114.3	108.1	14.3	20.6