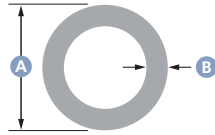


Aluminium



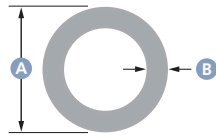
2	Seamless Pipes
3	Seamless Pipes
4	Seamless Elbows
5	Seamless Elbows
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7	Extruded Pipes
8	Elbows
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12	End Caps
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15	Casted Lap Joint Flanges
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16	Slip-on Collars
17	Stub Ends
18	Threaded Couplings
18	Socket Weld Couplings
19	Threaded Nipples
19	Threaded Sockets

Seamless Pipes



NB SIZE	SCHEDULE	SIZE IN MM A X B	KG/MTR	5083-0	6061 T6	1050 / 1060
1/4"	10s	13,72 x 1,65	0,17	●		
	40s	13,72 x 2,24	0,22	●		
	80s	13,72 x 3,02	0,28	●		
3/8"	10s	17,15 x 1,65	0,22	●		
	40s	17,15 x 2,31	0,29	●		
	80s	17,15 x 3,2	0,38	●		
1/2"	10s	21,34 x 2,11	0,35	●		
	40s	21,34 x 2,77	0,44	●		
	80s	21,34 x 3,73	0,56	●		
3/4"	10s	26,67 x 2,11	0,44	●	●	
	40s	26,67 x 2,87	0,58	●	●	
	80s	26,67 x 3,91	0,76	●		●
		26,67 x 4,0	0,78			●
1"	10s	33,4 x 2,77	0,73	●	●	
	40s	33,4 x 3,38	0,87	●	●	
	80s	33,4 x 4,55	1,12	●		●
		33,4 x 5,0	1,22			●
1 1/4"	10s	42,16 x 2,77	0,93	●	●	
	40s	42,16 x 3,56	1,18	●	●	
	80s	42,16 x 4,85	1,55	●		
1 1/2"	10s	48,26 x 2,77	1,08	●	●	
	40s	48,26 x 3,68	1,41	●	●	
		48,26 x 5,0	1,85			●
	80s	48,26 x 5,08	1,89	●		●
2"	160	48,3 x 7,14	2,52	●		
	XXS	48,3 x 10,16	3,32	●		
	10s	60,33 x 2,77	1,36	●	●	
	40s	60,33 x 3,91	1,89	●	●	
		60,33 x 5,0	2,37			●
80s	60,33 x 5,54	2,60	●		●	
2 1/2"	160	60,3 x 8,74	3,86	●		
	10s	73,03 x 3,05	1,83	●	●	
	40s	73,03 x 5,16	3,00	●	●	
	80s	73,03 x 7,01	4,00	●		
3"	160	73,03 x 9,53	5,18	●		
	10s	88,9 x 3,05	2,24	●	●	
	40s	88,9 x 5,0	3,61			●
		88,9 x 5,49	3,94	●	●	
80s	88,9 x 7,62	5,35	●		●	
3 1/2"	10s	101,6 x 3,05	2,56	●		
	40s	101,6 x 5,74	4,68	●		
	80s	101,6 x 8,08	6,43	●		
4"	10s	114,3 x 3,05	2,93	●	●	
	40s	114,3 x 5,0	4,68			●
		114,3 x 6,02	5,65	●	●	

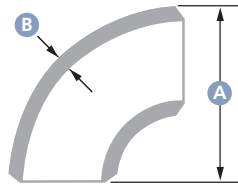
Seamless Pipes



NB SIZE	SCHEDULE	SIZE IN MM A X B	KG/MTR	5083-0	6061 T6	1050 / 1060
4"	80s	114,3 x 8,56	7,78	●		●
	120	114,3 x 11,13	9,83	●		
	160	114,3 x 13,49	11,57	●		
5"	10s	141,3 x 3,4	4,03	●	●	
	40s	141,3 x 6,55	7,65	●	●	
	80s	141,3 x 9,53	10,78	●		
	120	141,3 x 12,7	13,98	●		
6"	10s	168,3 x 3,4	4,82	●	●	
	20	168,3 x 5,5	7,69	●		
	40s	168,3 x 7,11	9,84	●	●	
	80s	168,3 x 10,97	14,83	●		
	120	168,3 x 14,28	18,83	●		
8"		219,1 x 3,0	5,55	●		
	10s	219,1 x 3,76	6,93	●	●	
	20	219,1 x 6,35	11,50	●		
	40s	219,1 x 8,18	14,85	●	●	
	80s	219,1 x 12,7	22,43	●		
10"	100	219,1 x 15,09	26,35	●		
	10s	273,05 x 4,19	9,64		●	
	20	273,05 x 6,35	14,41	●		
	40s	273,05 x 9,27	20,91	●	●	
		273,05 x 11,6	25,96	●		
	80s	273,05 x 12,7	28,31	●		
	80	273,05 x 15,09	33,32	●		
	100	273,05 x 18,26	39,59	●		
12"	140	273,05 x 25,4	53,53	●		
	10s	323,9 x 4,57	12,53		●	
	40s/40	323,9 x 10	26,71	●		
	80s	323,9 x 12,7	33,86	●		
	80	323,9 x 17,48	45,80	●		
	100	323,9 x 21,44	54,13	●		
14"		323,9 x 26,9	67,99	●		
	40/STD	355,6 x 10	29,41	●		
	100	355,6 x 23,82	67,26	●		
	120	355,6 x 27,79	77,53	●		
16"		406,4 x 10,0	33,93	●		
		406,4 x 26,19	84,74	●		
		406,4 x 28,20	90,76	●		
		406,4 x 33,2	105,44	●		
18"		460 x 30	109,78	●		
		460 x 35	126,59	●		
20"		510 x 25	103,55	●		
		510 x 30	122,54	●		
		510 x 40	159,99	●		

Seamless Elbows

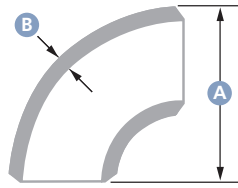
Alloys: 5083-0
6061 T6



NB SIZE	SCHEDULE	SIZE IN MM A X B	R = D (SR)		R = 1,5D (LR)	
			5083-0	6061 T6	5083-0	6061 T6
1/2"	10s	21,34 x 2,11	●	●	●	●
	40s	21,34 x 2,77	●	●	●	●
	80s	21,34 x 3,73	●	●	●	●
3/4"	10s	26,67 x 2,11	●	●	●	●
	40s	26,67 x 2,87	●	●	●	●
	80s	26,67 x 3,91	●	●	●	●
1"	10s	33,4 x 2,77	●	●	●	●
	40s	33,4 x 3,38	●	●	●	●
	80s	33,4 x 4,55	●	●	●	●
1 1/4"	10s	42,16 x 2,77	●	●	●	●
	40s	42,16 x 3,56	●	●	●	●
	80s	42,16 x 4,85	●	●	●	●
1 1/2"	10s	48,26 x 2,77	●	●	●	●
	40s	48,26 x 3,68	●	●	●	●
	80s	48,26 x 5,08	●	●	●	●
2"	10s	60,33 x 2,77	●	●	●	●
	40s	60,33 x 3,91	●	●	●	●
	80s	60,33 x 5,54	●	●	●	●
2 1/2"	10s	73,03 x 3,05	●	●	●	●
	40s	73,03 x 5,16	●	●	●	●
	80s	73,03 x 7,01	●	●	●	●
3"	10s	88,9 x 3,05	●	●	●	●
	40s	88,9 x 5,49	●	●	●	●
	80s	88,9 x 7,62	●	●	●	●
3 1/2"	10s	101,6 x 3,05	●	●	●	●
	40s	101,6 x 5,74	●	●	●	●
	80s	101,6 x 8,08	●	●	●	●
4"	10s	114,3 x 3,05	●	●	●	●
	40s	114,3 x 6,02	●	●	●	●
	80s	114,3 x 8,56	●	●	●	●
5"	10s	141,3 x 3,4	●	●	●	●
	40s	141,3 x 6,55	●	●	●	●
	80s	141,3 x 9,53	●	●	●	●
6"	10s	168,3 x 3,4	●	●	●	●
	40s	168,3 x 7,11	●	●	●	●
	80s	168,3 x 10,97	●	●	●	●
8"	10s	219,1 x 3,76	●	●	●	●
	20	219,1 x 6,35	●	●	●	●
	40s	219,1 x 8,18	●	●	●	●
	80s	219,1 x 12,7	●	●	●	●

Seamless Elbows

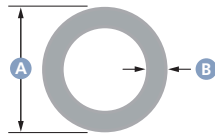
Alloys: 5083-0
6061 T6



NB SIZE	SCHEDULE	SIZE IN MM A X B	R = D (SR)		R = 1,5D (LR)	
			5083-0	6061 T6	5083-0	6061 T6
10"	10s	273,05 x 4,19	●	●	●	●
	20	273,05 x 6,35	●			
	40s	273,05 x 9,27	●	●	●	●
	80s	273,05 x 12,7		●		●
	80	273,05 x 15,09	●			
12"	10s	323,9 x 4,57	●	●	●	●
	20	323,9 x 6,35	●			
	40s	323,9 x 9,53		●		●
	40	323,9 x 10,31			●	
80s	323,9 x 12,7		●		●	
14"	10	355,6 x 6,35	●		●	
16"	10s	406,4 x 4,77	●			
	10	406,4 x 6,35			●	
20"	10s	508,0 x 5,54	●			

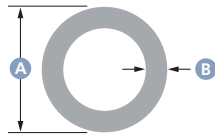
Other sizes and schedules are available to order as welded fittings with 100% X-ray

Extruded Pipes



SIZE IN MM A X B	KG/MTR	6060 T6	6082 T6	SIZE IN MM A X B	KG/MTR	6060 T6	6082 T6
20 x 3	0,44	●	●	76 x 4	2,47		●
20 x 5	0,64	●		76,2 x 12,7	6,90		●
25 x 2,5	0,48	●		80 x 5	3,21	●	●
25 x 3	0,56	●	●	80 x 6	3,80		●
25 x 5	0,86	●		80 x 8	4,93	●	
26 x 3	0,59		●	80 x 10	6,00	●	●
30 x 2,5	0,59	●		85 x 5	3,42	●	
30 x 3	0,69	●	●	88,9 x 2,5	1,86	●	
30 x 5	1,07	●	●	88,9 x 6,35	4,49		●
32 x 3,5	0,85		●	88,9 x 7,62	5,35		●
35 x 2,5	0,70	●		90 x 3	2,24	●	●
35 x 5	1,28	●	●	90 x 5	3,64	●	
40 x 2,5	0,80	●		90 x 10	6,88		●
40 x 3	0,95	●		100 x 3	2,49	●	
40 x 4	1,23	●	●	100 x 5	4,07	●	●
40 x 5	1,50	●	●	100 x 6	4,83		●
40 x 6	1,75		●	100 x 8	6,30		●
40 x 10	2,57	●	●	100 x 10	7,74		●
42 x 3	1,01	●		110 x 3	2,75	●	
45 x 2,5	0,91	●		110 x 5	4,50	●	●
45 x 5	1,71	●		110 x 10	8,56		●
48 x 3	1,16	●		114 x 3	2,86	●	
50 x 2,5	1,02	●		120 x 5	4,92	●	
50 x 3	1,21	●		120 x 8	7,67		●
50 x 5	1,93	●	●	120 x 10	9,42	●	●
50 x 10	3,42	●	●	120 x 12,5	11,5		●
60 x 2,5	1,23	●		120 x 30	23,11		●
60 x 3	1,46	●		125 x 4	4,14	●	
60 x 4	1,92		●	125 x 5	5,14	●	
60 x 5	2,35	●	●	128 x 4	4,25	●	
60 x 6	2,77		●	130 x 5	5,35	●	●
60 x 10	4,28	●	●	130 x 10	10,27		●
60 x 20	6,85		●	140 x 4	4,66	●	●
65 x 10	4,70		●	140 x 5	5,78	●	●
70 x 3	1,72	●	●	140 x 10	11,13	●	
70 x 5	2,78	●	●	140 x 15	16,50		●
70 x 7	3,77		●	150 x 5	6,21	●	
70 x 10	5,16		●	150 x 8	9,72		●
75 x 5	3,00	●		150 x 10	12,04		●
76 x 3	1,88	●		150 x 25	27,50		●

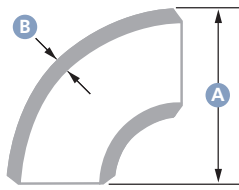
Extruded Pipes



SIZE IN MM A X B	KG/MTR	6060 T6	6082 T6	SIZE IN MM A X B	KG/MTR	6060 T6	6082 T6
160 x 5	6,64	●		220 x 15	27,06		●
160 x 10	13,20		●	220 x 20	35,20		●
168 x 4	5,78	●		228,6 x 6,35	12,42		●
170 x 10	14,08		●	230 x 20	36,95		●
177,8 x 25,4	34,06		●	230 x 25	45,10		●
180 x 10	14,96		●	238 x 4	8,24	●	
180 x 20	28,16		●	240 x 20	38,72		●
190 x 10	15,40		●	250 x 6	12,88		●
200 x 4	6,90		●	250 x 10	21,12		●
200 x 5	8,58		●	250 x 15	31,02		●
200 x 6	10,24		●	250 x 20	40,48		●
200 x 10	16,26		●	258 x 4	8,94	●	
200 x 15	24,42		●	280 x 15	34,98		●
200 x 20	31,68		●	280 x 20	45,76		●
200 x 25	38,50		●	300 x 10	25,52	●	●
215 x 40	61,60		●	300 x 25	60,50		●
219 x 4	8,13	●		300 x 30	71,28		●
220 x 10	18,48		●	330 x 20	54,56		●

Elbows

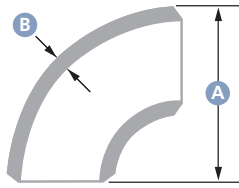
Alloys: 5083
6060



SIZE IN MM A X B	R = D (SR)	R = 1,5D (LR)	R = 2,5D	SIZE IN MM A X B	R = D (SR)	R = 1,5D (LR)	R = 2,5D
20 x 2		●		48 x 5		●	
20 x 3		●		50 x 2		●	●
21 x 3		●	●	50 x 3	●	●	●
22 x 2		●		50 x 3		●	
25 x 2		●	●	50 x 3		●	
25 x 3		●	●	50 x 4		●	
26 x 3		●		50 x 5	●	●	●
28 x 2		●		50 x 6		●	
30 x 2		●	●	50 x 10		●	
30 x 3		●	●	54 x 2		●	●
30 x 3		●		55 x 5	●	●	
30 x 4		●		56 x 3	●	●	
30 x 5		●	●	58 x 3	●	●	
31 x 3		●		58 x 4	●	●	
31 x 3		●		60 x 2	●	●	
32 x 2		●		60 x 3	●	●	●
32 x 2	●	●		60 x 4	●	●	
32 x 3		●	●	60 x 5		●	
32 x 5		●		60 x 5	●	●	
35 x 2		●		60 x 8		●	
35 x 3		●		60,3 x 5,8		●	
35 x 5		●		63,5 x 2		●	
36 x 4		●		63,5 x 4		●	
38 x 2		●		63,5 x 5	●	●	
38 x 3		●		65 x 2		●	
38 x 5		●		65 x 4		●	
40 x 2		●		65 x 10		●	
40 x 2		●	●	66 x 3		●	
40 x 3		●	●	70 x 2	●	●	
40 x 3		●		70 x 3	●	●	●
40 x 4		●		70 x 4		●	
40 x 5	●	●	●	70 x 5	●	●	●
40 x 10		●		70 x 10		●	
42 x 2	●	●		71 x 3		●	
42 x 3		●		73 x 3		●	
42 x 4		●		73 x 5	●	●	
42 x 5		●		75 x 3		●	
45 x 2		●		75 x 5		●	
45 x 3		●	●	76 x 2	●	●	
45 x 4		●		76 x 3	●	●	●
45 x 5		●		76 x 5	●	●	
46 x 3		●		80 x 2	●	●	
48 x 3		●	●	80 x 3		●	
48 x 4		●	●	80 x 4	●	●	

Elbows

Alloys: 5083
6060



SIZE IN MM A X B	R = D (SR)	R = 1,5D (LR)	R = 2,5D	SIZE IN MM A X B	R = D (SR)	R = 1,5D (LR)	R = 2,5D
80 x 5	●	●		125 x 4		●	
80 x 5		●	●	125 x 5	●	●	
80 x 10		●		127 x 3		●	
81 x 3		●		130 x 5		●	
82 x 6		●		130 x 10		●	
86 x 3		●		131 x 3		●	
88,9 x 5,5		●		133 x 4		●	
89 x 3	●	●		135 x 5	●		
89 x 4	●	●		140 x 4		●	
89 x 5	●	●		140 x 5	●	●	
90 x 2		●		140 x 10		●	●
90 x 3	●	●	●	150 x 3		●	
90 x 5	●	●		150 x 5		●	●
90 x 6	●	●		150 x 10		●	●
100 x 2		●		156 x 3		●	
100 x 3	●	●		160 x 5	●	●	
100 x 5	●	●	●	160 x 10		●	
100 x 6		●		165 x 5		●	
100 x 10		●		168 x 3		●	
101,6 x 3	●			168 x 4		●	
106 x 3		●		170 x 4		●	
108 x 3	●	●		170 x 5		●	
108 x 4		●	●	200 x 3		●	●
110 x 3		●		200 x 4		●	
110 x 5	●	●	●	200 x 5		●	
110 x 10		●		206 x 3		●	
114 x 3	●	●		208 x 4		●	
114 x 4		●		208 x 5		●	
114 x 5	●	●		210 x 5		●	
120 x 3		●		219 x 3		●	
120 x 5		●		219 x 4		●	
120 x 10		●		219 x 8	●		
125 x 3		●					

Other sizes and schedules are available to order as welded fittings with 100% X-ray

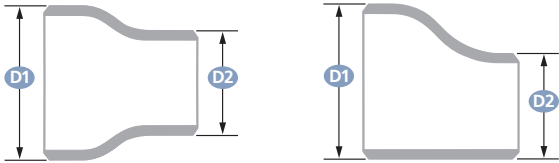
Seamless Reducers

Alloys: 5083-0
6061 T6

Type: concentric / eccentric

Sizes (NB): see table below

Schedule: 10s - 40s - 80s



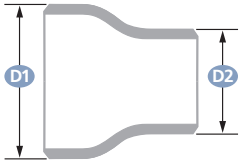
NOTE: Schedule 10s taper or parallel bored from Schedule 40s

D1 (NB)	D2 (NB)														
	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"	6"	8"
1/2"															
3/4"		•	•												
1"		•	•	•											
1 1/4"			•	•	•										
1 1/2"			•	•	•	•									
2"				•	•	•	•								
2 1/2"					•	•	•	•							
3"					•	•	•	•	•						
3 1/2"						•	•	•	•	•					
4"							•	•	•	•	•				
5"								•	•	•	•	•			
6"									•	•	•	•	•		
8"											•	•	•	•	
10"												•		•	•

Alloys: 6060

Type: concentric

Sizes: see table below



D1 (MM)	D2 (MM)													
	31 x 3,0	33 x 4,0	46 x 3,0	48 x 3,0	60 x 3,0	60 x 5,0	75 x 5,0	76 x 3,0	76 x 4,0	89 x 3,0	89 x 4,0	114 x 3,0	168 x 4,0	
46 x 3,0	•													
60 x 3,0		•		•										
60 x 4,0														
76 x 3,0			•	•	•									
89 x 3,0					•			•						
90 x 5,0						•	•							
108 x 4,0									•		•			
114 x 3,0					•			•		•				
168 x 3,0													•	
219 x 4,0														•

Other sizes and schedules are available to order as welded fittings with 100% X-ray

Seamless Tees

Seamless Equal Tees

Alloys: 5083-0
6061 T6

Sizes (NB): 1/2" - 8"
Schedule: 10s - 40s - 80s



NOTE: Schedule 10s taper or parallel bored from Schedule 40s

Alloy: 6060

60 x 5,0 mm
89 x 4,0 mm
108 x 4,0 mm

Seamless Reducing Tees

Alloys: 5083-0
6061 T6

Runs sizes (NB): 1/2" - 8"
Outlet: see table below
Schedule: 10s - 40s - 80s



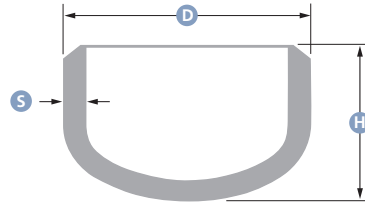
NOTE: Schedule 10s taper or parallel bored from Schedule 40s

RUN SIZE (NB)	OUTLET (NB)													
	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"	6"
1/2"	●	●												
3/4"		●	●											
1"		●	●	●										
1 1/4"			●	●	●									
1 1/2"			●	●	●	●								
2"			●	●	●	●	●							
2 1/2"					●	●	●	●						
3"					●	●	●	●	●					
3 1/2"							●	●	●	●				
4"					●		●	●	●	●	●			
5"								●	●	●	●	●		
6"								●		●	●	●	●	
8"										●	●	●	●	●

Other sizes and schedules are available to order as welded fittings with 100% X-ray

End Caps

Standard: ASME B16.9
 Alloys: 6061 T6
 5083-0

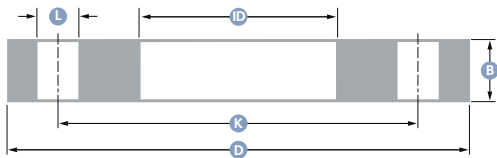


NB	D	H	S (MAX) FOR H
1/2"	21,3	25	4,57
3/4"	26,7	25	3,81
1"	33,4	38	4,57
1 1/4"	42,2	38	4,83
1 1/2"	48,3	38	5,08
2"	60,3	38	5,59
2 1/2"	73,0	38	7,11
3"	88,9	51	7,62
3 1/2"	101,6	64	8,13
4"	114,3	64	8,64
5"	141,3	76	9,65
6"	168,3	89	10,92
8"	219,1	102	12,70
10"	273,0	127	12,70
12"	323,8	152	12,70
14"	355,6	165	12,70
16"	406,4	178	12,70
18"	457,0	203	12,70
20"	508,0	229	12,70
22"	559,0	254	12,70
24"	610,0	267	12,70

Welding Flanges

Standard: EN 1092-1 TYPE 01 (DIN 2576)

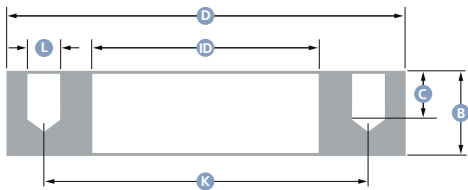
Alloy: 5083



DN	D	ID	B	K	L
15	95	22	15	65	4 x 14
20	105	27	15	75	4 x 14
25	115	32	15	85	4 x 14
32	140	43	15	100	4 x 18
40	150	52	15	110	4 x 18
50	165	62	20	125	4 x 18
65	185	77	20	145	4 x 18
80	200	92	20	160	8 x 18
100	220	116	20	180	8 x 18
125	250	142	20	210	8 x 18
150	285	162	20	240	8 x 22
200	340	221	25	295	8 x 22
250	395	276	25	350	12 x 22

Bulkhead Flanges (single)

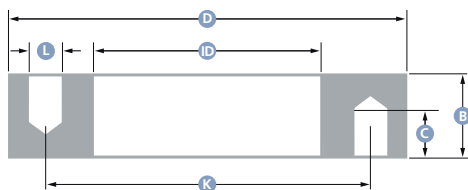
Alloy: 5083



DN	D	ID	B	C	K	L
15	95	18	30	15	65	4 x M12
20	105	26	30	15	75	4 x M12
25	115	34	30	15	85	4 x M12
32	140	43	35	20	100	4 x M16
40	150	49	35	20	110	4 x M16
50	165	61	35	20	125	4 x M16
65	185	77	35	20	145	4 x M16
80	200	90	35	20	160	8 x M16
100	220	115	35	20	180	8 x M16
125	250	141	35	20	210	8 x M16
150	285	170	40	25	240	8 x M20
200	340	221	40	25	295	8 x M20

Bulkhead Flanges (double)

Alloy: 5083



DN	D	ID	B	C	K	L
15	95	17	30	15	65	4 x M12
20	105	22	30	15	75	4 x M12
25	115	27	30	15	85	4 x M12
32	140	36	35	20	100	4 x M16
40	150	42	35	20	110	4 x M16
50	165	54	35	20	125	4 x M16
65	185	70	35	20	145	4 x M16
80	200	82	35	20	160	8 x M16
100	220	107	35	20	180	8 x M16
125	250	130	35	20	210	8 x M16
150	285	160	40	25	240	8 x M20
200	340	205	40	25	295	8 x M20

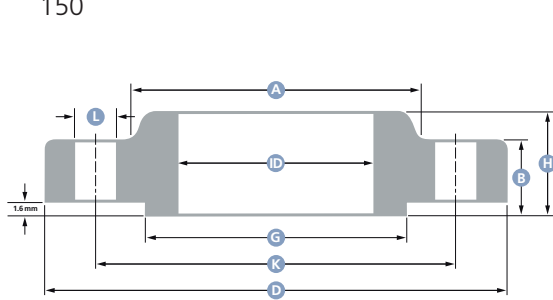
ANSI (ASME) Flanges

Standard: ASME B16.5

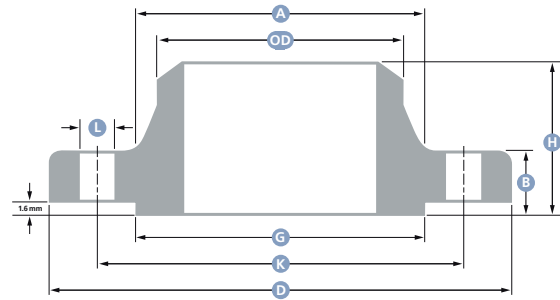
Alloys: 5083 H112

6061 T6

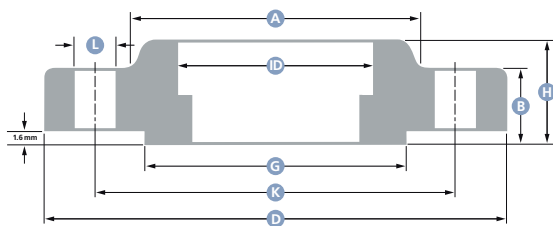
Class: 150



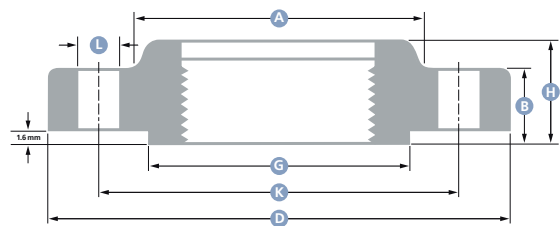
Slip on (SO)



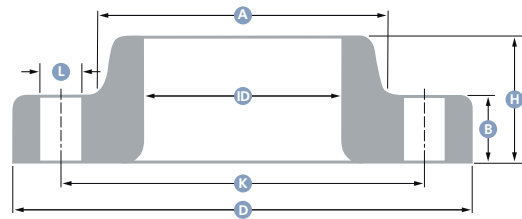
Welding neck (WN)



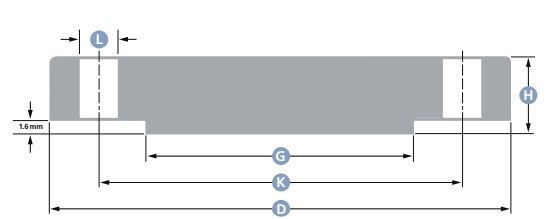
Socket weld (SW)



Threaded (THR)



Lap joint (LJ)

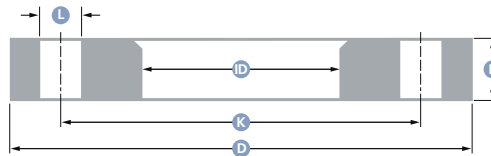


Blind (BL)

NB	A	D	ID		B	G	K	H				L
			SO / SW	LJ				SO / SW / THR	WN	LJ	BL	
1/2"	30	88,9	22,4	22,9	11,2	35,1	60,5	15,7	47,8	15,7	11,2	4 x 15,7
3/4"	38	98,6	27,7	28,2	12,7	42,9	69,9	15,7	52,3	15,7	12,7	4 x 15,7
1"	49,2	108,0	34,5	35,1	14,2	50,8	79,2	17,5	55,6	17,5	14,2	4 x 15,7
1 1/4"	59	117,3	43,2	43,7	15,7	63,5	88,9	20,6	57,2	20,6	15,7	4 x 15,7
1 1/2"	65	127,0	49,5	50,0	17,5	73,2	98,6	22,4	62,0	22,4	17,5	4 x 15,7
2"	78	152,4	62,0	62,5	19,1	91,9	120,7	25,4	63,5	25,4	19,1	4 x 19,1
2 1/2"	90	177,8	74,7	75,4	22,4	104,6	139,7	28,4	69,9	28,4	22,4	4 x 19,1
3"	108	190,5	90,7	91,4	23,9	127,0	152,4	30,2	69,9	30,2	23,9	4 x 19,1
3 1/2"	122	215,9	103,4	104,1	23,9	139,7	177,8	31,8	71,4	31,8	23,9	8 x 19,1
4"	135	228,6	116,1	116,8	23,9	157,2	190,5	33,3	76,2	33,3	23,9	8 x 19,1
5"	164	254,0	143,8	144,5	23,9	185,7	215,9	36,6	88,9	36,6	23,9	8 x 22,4
6"	192	279,4	170,7	171,5	25,4	215,9	241,3	39,6	88,9	39,6	25,4	8 x 22,4
8"	246	342,9	221,5	222,3	28,4	269,7	298,5	44,5	101,6	44,5	28,4	8 x 22,4
10"	305	406,4	276,4	277,4	30,2	323,9	362,0	49,3	101,6	49,3	30,2	12 x 25,4
12"	365	482,6	327,2	328,2	31,8	381,0	431,8	55,6	114,3	55,6	31,8	12 x 25,4
14"	400	533,4	359,2	360,2	35,1	412,8	476,3	57,2	127,0	79,2	35,1	12 x 28,4
16"	457	596,9	410,5	411,2	36,6	469,9	539,8	63,5	127,0	87,4	36,6	16 x 28,4
18"	505	635,0	461,8	462,3	39,6	533,4	577,9	68,3	139,7	96,8	39,6	16 x 31,8
20"	560	698,5	513,1	514,4	42,9	584,2	635,0	73,2	144,5	103,1	42,9	20 x 31,8
24"	663	812,8	616,0	616,0	47,8	692,2	749,3	82,6	152,4	111,3	47,8	20 x 35,1

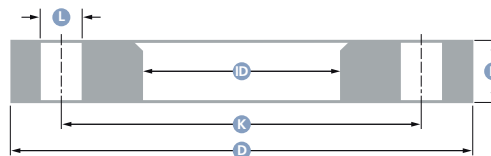
Casted Lap Joint Flanges

Standard: EN 1092-1
Alloy: EN AC-ALSi12(Cu)



DN	D	ID		B	K	L
		TYPE A	TYPE C (ISO)			
10	90	19	19	12	60	4 x 14
15	95	24	24	12	65	4 x 14
20	105	30	30	12	75	4 x 14
25	115	34	36	12	85	4 x 14
32	140	40	46	16	100	4 x 18
40	150	48	54	16	110	4 x 18
50	165	58	65	16	125	4 x 18
65	185	73	81	16	145	4 x 18
80	200	90	94	18	160	8 x 18
100	220	110	119	18	180	8 x 18
125	250	135	144	18	210	8 x 18
150	285	160	173	18	240	8 x 22
200	340	212	225	20	295	8 x 22
250	395	262	279	22	350	12 x 22
300	445	312	329	22	400	12 x 22

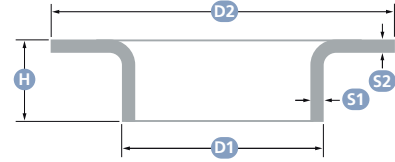
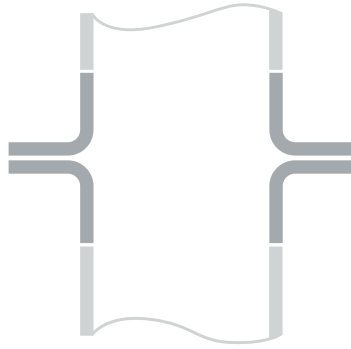
Standard: ANSI 150 LB
Alloy: EN AC-ALSi12(Cu)



NB	D	ID	B	K	L
1 1/2"	127,0	54	18	98,4	4 x 16
2"	152,4	65	18	120,6	4 x 19
2 1/2"	177,8	81	20	139,7	4 x 19
3"	190,5	94	20	152,4	4 x 19
4"	228,6	119	20	190,5	8 x 19
5"	254,0	144	22	215,9	8 x 22
6"	279,4	173	22	241,3	8 x 22
8"	342,9	225	25	298,4	8 x 22
10"	406,4	279	25	361,9	12 x 25
12"	482,6	329	25	431,8	12 x 25

Welding Collars

Standard: DIN 2642
Alloy: 5754

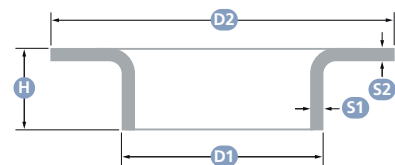
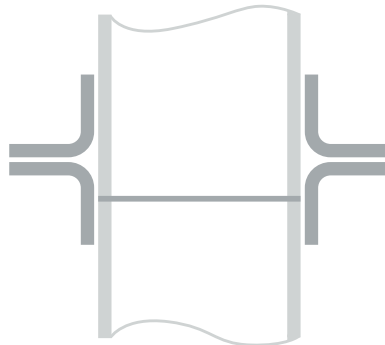


DN	D1 X S1	D2	S2	H
15	21,0 x 3	45	4	9
20	25,0 x 3	58	4	12
25	31,0 x 3	68	4	14
25	33,7 x 3	68	4	14
32	38,0 x 3	78	4	14
32	42,4 x 3	78	4	15
40	46,0 x 3	88	4	15
40	48,3 x 4	88	5	15
50	56,0 x 3	102	4	19
50	60,3 x 3	102	4	20
50	60,3 x 5	102	6	20
65	71,0 x 3	122	4	21
65	76,1 x 3	122	4	23
80	86,0 x 3	138	4	23
80	88,9 x 3	138	4	23
80	88,9 x 4	138	5	23
80	90,0 x 5	138	6	23

DN	D1 X S1	D2	S2	H
100	106,0 x 3	160	4	25
100	108,0 x 4	160	5	25
100	114,3 x 3	160	4	28
100	114,3 x 4	160	5	28
125	131,0 x 3	188	4	28
125	133,0 x 4	188	5	28
125	139,7 x 4	188	5	28
125	139,7 x 5	188	6	28
150	156,0 x 3	212	4	28
150	159,0 x 4	212	5	28
150	160,0 x 5	212	6	28
150	168,3 x 4	212	5	28
200	208,0 x 4	270	5	30
200	219,1 x 4	270	5	30
250	258,0 x 4	324	5	30
250	273,0 x 4	324	5	30
300	323,9 x 4	370	5	35

Slip-on Collars

Standard: DIN 2642
Alloy: 5754



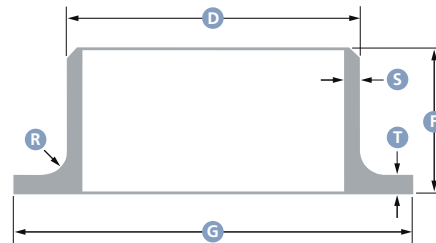
DN	PIPE OD	D1 X S1	D2	S2	H
50	60,3	65,8 x 2,5	102	3	23
65	76,1	81,6 x 2,5	122	3	23
80	88,9	94,4 x 2,5	138	3	23
100	108,0	113,5 x 2,5	160	3	28
100	114,3	119,8 x 2,5	160	3	26
125	133,0	138,3 x 2,5	188	3	30
125	139,7	145,5 x 2,5	188	3	26
125	139,7	147,5 x 3,5	188	4	26

DN	PIPE OD	D1 X S1	D2	S2	H
150	159,0	168,0 x 3,5	212	4	24
150	168,3	174,1 x 2,5	212	3	30
150	168,3	176,1 x 3,5	212	4	30
200	208,0	217,0 x 4,0	270	5	30
200	219,1	225,1 x 2,5	270	3	26
200	219,1	227,1 x 3,5	270	4	28
250	258,0	266,0 x 3,5	324	4	30
250	273,0	281,0 x 3,5	324	4	30
350	355,6	367,0 x 5,0	430	6	33

Stub Ends

Standard: MSS SP-43 type A
ASME B16.9

Alloys: 5083
6061 T6



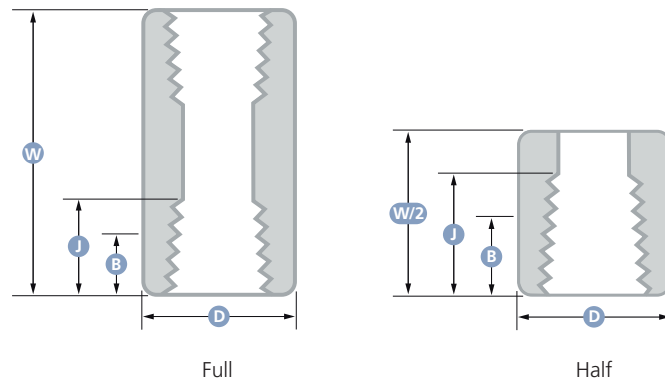
NB	D	F	R	G
1/2"	21,3	51	3	35
3/4"	26,7	51	3	43
1"	33,4	51	3	51
1 1/4"	42,2	51	5	64
1 1/2"	48,3	51	6	73
2"	60,3	64	8	92
2 1/2"	73	64	8	105
3"	88,9	64	10	127
3 1/2"	101,6	76	10	140
4"	114,3	76	11	157
5"	141,3	76	11	186
6"	168,3	89	13	216
8"	219,1	102	13	270
10"	273,0	127	13	324
12"	323,8	152	13	381
14"	355,6	152	13	413
16"	406,4	152	13	470
18"	457,0	152	13	533
20"	508,0	152	13	584
22"	559,0	152	13	641
24"	610,0	152	13	692

Wall thickness (S) shall not be less than pipe wall thickness

Lap thickness (T) shall not be less than wall thickness (S)

Threaded Couplings

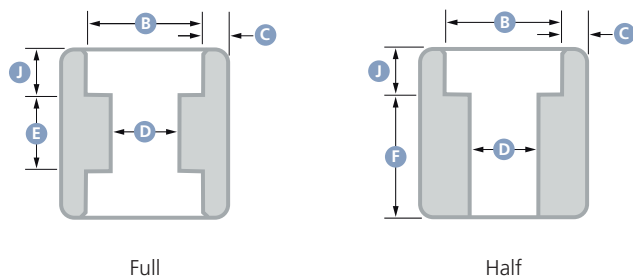
Standard: ASME B16.11
 Class: 3000
 Alloys: 5083
 6061 T6



NB	W	W/2	B	J	D
1/2"	48	24,0	10,9	13,6	28
3/4"	51	25,5	12,7	13,9	35
1"	60	30,0	14,7	17,3	44
1 1/4"	67	33,5	17,0	18,0	57
1 1/2"	79	39,5	17,8	18,4	64
2"	86	43,0	19,0	19,2	76
2 1/2"	92	46,0	23,6	28,9	92
3"	108	54,0	25,9	30,5	108
4"	121	60,5	27,7	33,0	140

Socket Weld Couplings

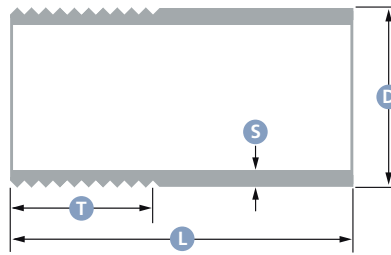
Standard: ASME B16.11
 Class: 3000
 Alloys: 5083
 6061 T6



NB	B (MIN-MAX)	J	D (MIN-MAX)	C (MINIMUM)	C (AVERAGE)	E	F
1/2"	21,8 - 22,2	9,5	15,0 - 16,6	4,09	4,67	9,5	22,5
3/4"	27,2 - 27,6	12,5	20,2 - 21,7	4,27	4,90	9,5	24
1"	33,9 - 34,3	12,5	25,9 - 27,4	4,98	5,69	12,5	28,5
1 1/4"	42,7 - 43,1	12,5	34,3 - 35,8	5,28	6,07	12,5	30
1 1/2"	48,8 - 49,2	12,5	40,1 - 41,6	5,54	6,35	12,5	32
2"	61,2 - 61,7	16	51,7 - 53,3	6,04	6,93	19	41
2 1/2"	73,9 - 74,4	16	61,2 - 64,2	7,67	8,76	19	43
3"	89,8 - 90,3	16	76,4 - 79,4	8,30	9,52	19	44,5
4"	115,2 - 115,7	19	100,7 - 103,8	9,35	10,69	19	48

Threaded Nipples

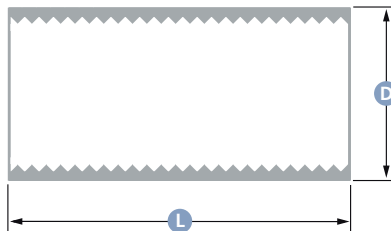
Thread: BSP
Alloy: 5083



	D	S	L	T
1/4"	13,7	3,0	50	20
3/8"	17,1	3,2	50	20
1/2"	21,3	3,7	50	20
3/4"	26,7	3,9	50	20
1"	33,4	4,5	60	25
1 1/4"	42,2	4,8	65	25
1 1/2"	48,3	5,1	75	30
2"	60,3	5,5	75	30
2 1/2"	73,0	5,2	90	35
3"	88,9	5,5	100	35
4"	114,3	6,0	100	45

Threaded Sockets

Thread: BSP
Alloy: 5083



	D	D (XS)	L
1/8"	13,7		20
1/4"	17,2		25
3/8"	21,3		30
1/2"	26,7	40	35
3/4"	33,4	45	40
1"	40,0	50	45
1 1/4"	48,3	60	50
1 1/2"	60,0	70	55
2"	73,0	80	60
2 1/2"	89,0		70
3"	100,0		75
4"	125,0		90