



**SHORT, LONG
FOR WELDING, THREADED ENDS ...
DIN / SMS / ISO / ASME / CLAMP ...**



On demand:

other materials / dimensions / with
CLAMP ends ...

Inner surface on demand:

E-polished

Ra ≤ 0,8/1,6 μm

Ra ≤ 0,8/0,8 μm

Ra ≤ 0,6 μm

Ra ≤ 0,5 μm

Ra ≤ 0,4 μm

Ra ≤ 0,25 μm

Outer surface on demand:

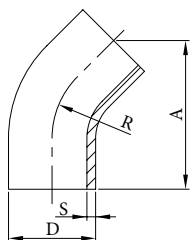
standard

grinded

polished

Elbow 45° long* DIN row 1
for orbital welding
AISI 304/L, AISI 316/L

300L-1

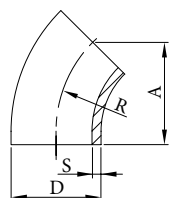


DN	D	S	A	R	kg
10	12,0	1,5	45,0	26,0	0,04
15	18,0	1,5	60,0	35,0	0,05
20	22,0	1,5	65,0	40,0	0,06
25	28,0	1,5	73,0	50,0	0,06
32	34,0	1,5	83,0	55,0	0,08
40	40,0	1,5	89,0	60,0	0,12
50	52,0	1,5	103,0	70,0	0,19
65	70,0	2,0	108,0	80,0	0,39
80	85,0	2,0	120,0	90,0	0,47
100	104,0	2,0	137,0	100,0	0,93

* short version on demand

Elbow 45° short* DIN row 1
for welding
AISI 304/L, AISI 316/L

300L-2

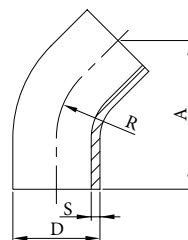


DN	D	S	A	R	kg
10	13,0	1,5	17,0	26,0	0,01
15	19,0	1,5	23,0	35,0	0,01
20	23,0	1,5	27,0	40,0	0,02
25	29,0	1,5	34,0	50,0	0,03
32	35,0	1,5	37,0	55,0	0,04
40	41,0	1,5	41,0	60,0	0,05
50	53,0	1,5	48,0	70,0	0,09
65	70,0	2,0	55,0	80,0	0,19
80	85,0	2,0	62,0	90,0	0,26
100	104,0	2,0	69,0	100,0	0,58
125	129,0	2,0	131,0	187,5	0,99
150	154,0	2,0	157,0	225,0	1,36
200	204,0	2,0	300,0	300,0	2,38

* long version on demand

Elbow 45° long* SMS
for orbital welding
AISI 304/L, AISI 316/L

300S

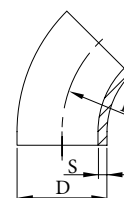


DN	D	S	A	R	kg
25	25,4	1,5	77,0	38,0	0,07
38	38,1	1,5	85,5	57,0	0,12
51	50,8	1,5	109,0	76,0	0,22
63	63,5	1,5	111,5	95,0	0,35
76	76,2	1,65	120,0	114,0	0,51
101	101,6	2,0	137,0	110,0	0,93

* short version on demand

Elbow 45° short ISO
for welding
AISI 304/L, AISI 316/L

300I



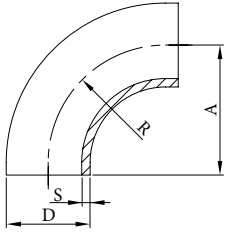
DN	D	S	R	kg
15	21,3	1,6 (2)	28,0	0,02
20	26,9	1,6 (2)	29,0	0,02
25	33,7	2,0	38,0	0,04
32	42,4	2,0	48,0	0,07
40	48,3	2,0	57,0	0,10
50	60,3	2,0	76,0	0,16
65	76,1	2,0	95,0	0,26
80	88,9	2,0	114,0	0,39
100	114,3	2,0	152,0	0,65
125	139,7	2,0	190,0	0,99
150	168,3	2,0	229,0	1,46

ELBOWS 90°

str. H35

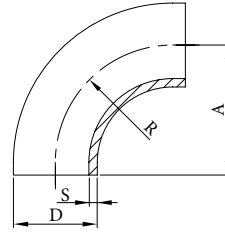
Elbow 90° DIN row 1
for welding
AISI 304/L, AISI 316/L

310D-1



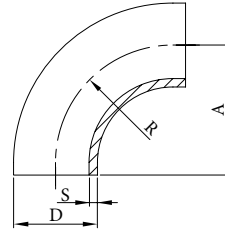
Elbow 90° DIN row 2
for welding
AISI 304/L, AISI 316/L

310D-2



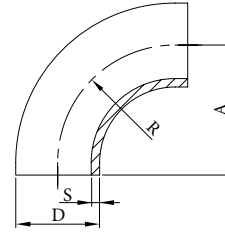
Elbow 90° SMS
for welding
AISI 304/L, AISI 316/L

310S



Elbow 90° ISO
for welding
AISI 304/L, AISI 316/L

310I



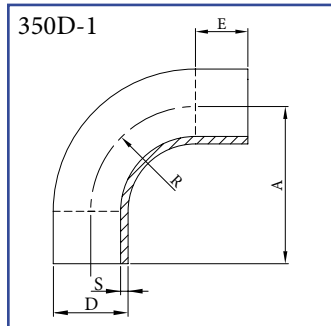
DN	D	S	A	R	kg
10	12,0	1,5	26,0	26,0	0,01
15	18,0	1,5	35,0	35,0	0,02
20	22,0	1,5	40,0	40,0	0,04
25	28,0	1,5	50,0	50,0	0,05
32	34,0	1,5	55,0	55,0	0,08
40	40,0	1,5	60,0	60,0	0,10
50	52,0	1,5	70,0	70,0	0,17
65	70,0	2,0	80,0	80,0	0,39
80	85,0	2,0	90,0	90,0	0,57
104	104,0	2,0	100,0	100,0	1,17
125	129,0	2,0	188,0	188,0	1,90
150	154,0	2,0	225,0	225,0	2,72
200	204,0	2,0	300,0	300,0	4,75

DN	D	S	A	R	kg
10	13,0	1,5	26,0	26,0	0,01
15	19,0	1,5	35,0	35,0	0,02
20	23,0	1,5	40,0	40,0	0,04
25	29,0	1,5	50,0	50,0	0,05
32	35,0	1,5	55,0	55,0	0,08
40	41,0	1,5	60,0	60,0	0,10
50	53,0	1,5	70,0	70,0	0,17

DN	D	S	A	R	kg
25	25,4	1,5	38,0	38,0	0,05
38	38,1	1,5	57,0	57,0	0,12
51	50,8	1,5	76,0	76,0	0,20
63	63,5	1,5	95,0	95,0	0,32
76	76,2	1,65	114,0	114,0	0,51
101	101,6	2,0	110,0	110,0	0,81

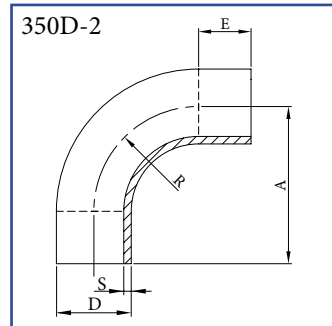
DN	D	S	A	R	kg
10	17,2	1,6 (2)	27,5	27,5	0,03
15	21,3	1,6 (2)	28,0	28,0	0,03
20	26,9	1,6 (2)	29,0	29,0	0,04
25	33,7	2,0	38,0	38,0	0,08
32	42,4	2,0	48,0	48,0	0,12
40	48,3	2,0	57,0	57,0	0,20
50	60,3	2,0	76,0	76,0	0,33
65	76,1	2,0	95,0	95,0	0,52
80	88,9	2,0	114,0	114,0	0,77
100	114,3	2,0	152,0	152,0	1,29
125	139,7	2,0	190,0	190,0	1,97
150	168,3	2,0	229,0	229,0	2,93
200	219,1	2,0	305,0	305,0	4,87

Elbow 90° DIN row 1
for orbital welding
AISI 304/L, AISI 316/L



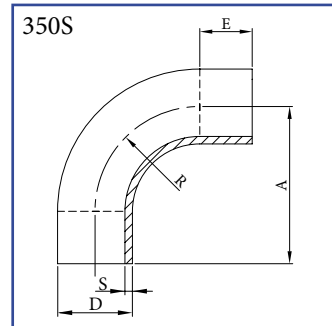
DN	D	S	A	E	R	kg
10	12,0	1,5	38,0	12,0	26,0	0,03
15	18,0	1,5	47,0	12,0	35,0	0,06
20	22,0	1,5	52,0	12,0	40,0	0,06
25	28,0	1,5	70,0	20,0	55,0	0,11
32	34,0	1,5	78,0	23,0	56,0	0,16
40	40,0	1,5	85,0	25,0	60,0	0,22
50	52,0	1,5	97,0	27,0	70,0	0,30
65	70,0	2,0	110,0	30,0	80,0	0,57
80	85,0	2,0	123,0	33,0	90,0	0,78
100	104,0	2,0	140,0	40,0	100,0	1,20
125	129,0	2,0	245,0	57,5	187,5	1,90

Elbow 90° DIN row 2
for orbital welding
AISI 304/L, AISI 316/L



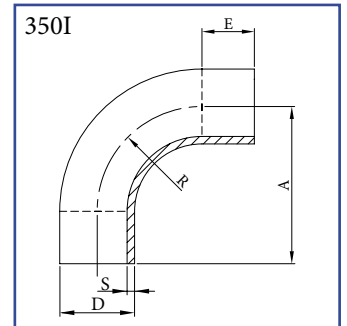
DN	D	S	A	E	R	kg
10	13,0	1,5	51,0	25,0	26,0	0,03
15	19,0	1,5	60,0	25,0	35,0	0,06
20	23,0	1,5	65,0	25,0	40,0	0,06
25	29,0	1,5	90,0	40,0	50,0	0,11
32	35,0	1,5	95,0	40,0	55,0	0,16
40	41,0	1,5	100,0	40,0	60,0	0,22
50	53,0	1,5	110,0	40,0	70,0	0,30

Elbow 90° SMS
for orbital welding
AISI 304/L, AISI 316/L



DN	D	S	A	E	R	kg
25	25,4	1,25	55,0	30,0	25,0	0,09
38	38,1	1,25	70,0	32,0	38,0	0,18
51	50,8	1,5	82,0	31,0	51,0	0,30
63	63,5	1,5	105,0	41,0	64,0	0,49
76	76,2	1,65	110,0	34,0	76,0	0,90
101	101,6	2,0	150,0	40,0	110,0	1,20

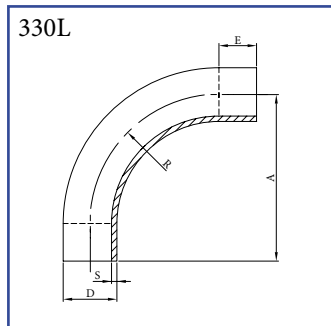
Elbow 90° ISO
for orbital welding
AISI 304/L, AISI 316/L



DN	D	S	A	E	kg
15	21,3	1,6 (2)			
20	26,9	1,6 (2)			
25	33,7	2,0			
32	42,4	2,0			
40	48,3	2,0			
50	60,3	2,0			
65	76,1	2,0			
80	88,9	2,0			
100	114,3	2,0			

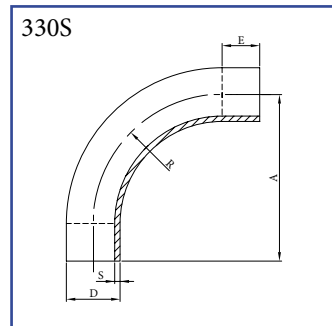
on demand

Elbow 90° r=3D - DIN
for welding
AISI 304/L, AISI 316/L



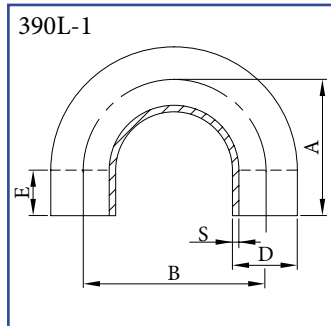
DN	D	S	A	E	R	kg
25	28,0	1,5	134,0	50,0	84,0	0,22
32	34,0	1,5	152,0	50,0	102,0	0,31
40	40,0	1,5	170,0	50,0	120,0	0,41
50	52,0	1,5	206,0	50,0	156,0	0,65
65	70,0	2,0	260,0	50,0	210,0	1,40
80	85,0	2,0	305,0	50,0	255,0	2,00

Elbow 90° r=3D - SMS
for welding
AISI 304/L, AISI 316/L



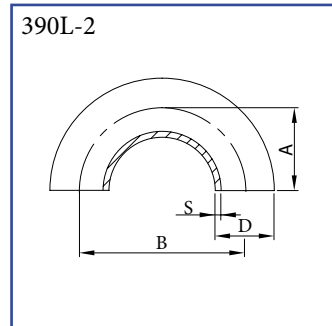
DN	D	S	A	E	R	kg
25	25,4	1,5	125,0	50,0	75,0	0,19
38	38,1	1,5	132,0	50,0	82,0	0,30
51	50,8	1,5	200,0	50,0	150,0	0,63
63	63,5	1,5	230,0	50,0	180,0	0,87
76	76,2	1,65	278,0	50,0	228,0	1,60

Elbow* 180° DIN row 1
for orbital welding
AISI 304/L, AISI 316/L



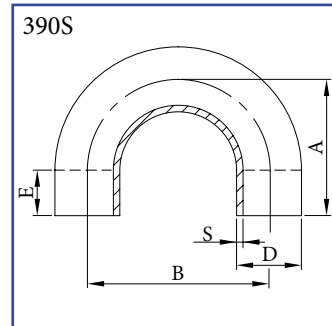
DN	D	S	A	E	B	kg
10	12,0	1,5	38,0	50,0	52,0	0,06
15	18,0	1,5	47,0	50,0	70,0	0,11
20	22,0	1,5	52,0	50,0	80,0	0,12
25	28,0	1,5	100,0	50,0	100,0	0,19
32	34,0	1,5	105,0	50,0	110,0	0,24
40	40,0	1,5	110,0	50,0	120,0	0,35
50	52,0	1,5	120,0	50,0	140,0	0,41
65	70,0	2,0	130,0	50,0	170,0	0,97
80	85,0	2,0	140,0	50,0	180,0	1,50
100	104,0	2,0	140,0	50,0	220,0	2,40

Elbow 180° DIN row 2
for welding
AISI 304/L, AISI 316/L



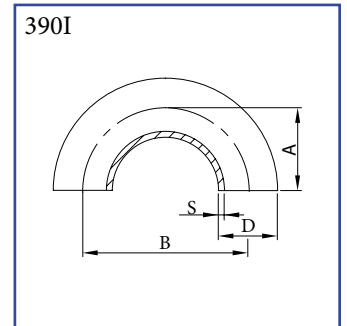
DN	D	S	A	B	kg
10	13,0	1,5	26,0	52,0	0,01
15	19,0	1,5	35,0	70,0	0,03
20	23,0	1,5	40,0	80,0	0,06
25	29,0	1,5	50,0	100,0	0,10
32	35,0	1,5	55,0	110,0	0,16
40	41,0	1,5	60,0	120,0	0,23
50	53,0	1,5	70,0	140,0	0,24
65	70,0	2,0	80,0	160,0	0,97
80	85,0	2,0	90,0	180,0	1,13
100	104,0	2,0	100,0	200,0	2,34
125	129,0	2,0	187,5	375,0	3,80
150	154,0	2,0	225,0	450,0	5,44

Elbow 180° SMS
for orbital welding
AISI 304/L, AISI 316/L



DN	D	S	A	E	B	kg
25	25,4	1,5	86,5	50,0	73,0	0,17
38	38,1	1,5	102,0	50,0	104,0	0,25
51	50,8	1,5	125,5	50,0	151,0	0,45
63	63,5	1,5	140,0	50,0	180,0	0,70
76	76,2	1,65	147,0	50,0	194,0	1,18
101	101,6	2,0	150,0	50,0	220,0	2,40

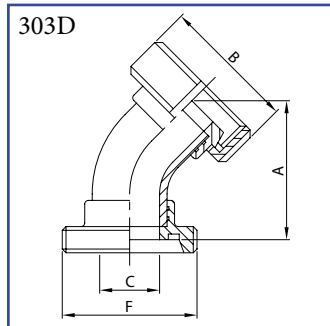
Elbow 180° ISO
for welding
AISI 304/L, AISI 316/L



DN	D	S	A	B	kg
15	21,3	1,6 (2)			
20	26,9	1,6 (2)			
25	33,7	2,0			
32	42,4	2,0			
40	48,3	2,0			
50	60,3	2,0			
65	76,1	2,0			
80	88,9	2,0			
100	114,3	2,0			

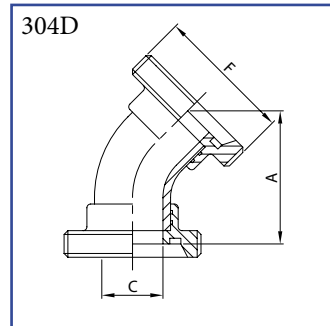
on demand

Elbow 45° DIN
male end / taper part with nut
AISI 304/L, AISI 316/L



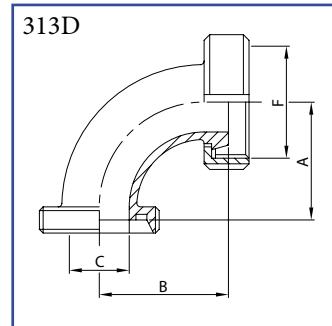
DN	A	B	C	F	kg
25	91,0	63,5	25,0	52-6	0,44
32	100,3	70,0	31,0	58-6	0,56
40	104,5	78,0	37,0	65-6	0,71
50	118,5	92,0	49,0	78-6	0,99
65	124,5	112,0	66,0	95-6	1,61
80	140,7	127,0	81,0	110-4	2,22
100	173,7	148,0	100,0	130-4	3,70

Elbow 45° DIN
male ends
AISI 304/L, AISI 316/L



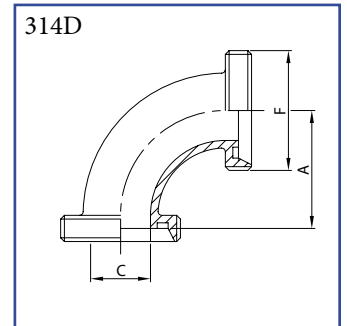
DN	A	C	F	kg
25	96,0	25,0	52-6	0,33
32	105,6	31,0	58-6	0,43
40	110,0	37,0	65-6	0,54
50	124,0	49,0	78-6	0,75
65	130,5	66,0	95-6	1,15
80	146,0	81,0	110-4	1,67
100	180,0	100,0	130-4	2,93

Elbow 90° DIN
male end / taper part with nut
AISI 304/L, AISI 316/L



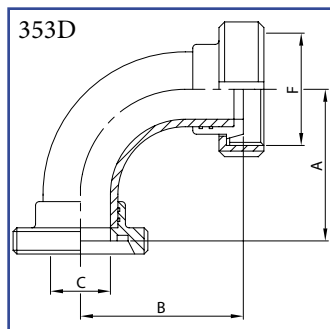
DN	A	B	C	F	kg
25	77,0	77,0	25,0	52-6	0,465
32	85,0	85,0	31,0	58-6	0,615
40	92,0	92,0	37,0	65-6	0,790
50	103,0	103,0	49,0	78-6	1,096
65	117,0	117,0	66,0	95-6	1,730
80	132,0	132,0	81,0	110-4	2,470
100	149,0	149,0	100,0	130-4	3,950

Elbow 90° DIN
male ends
AISI 304/L, AISI 316/L



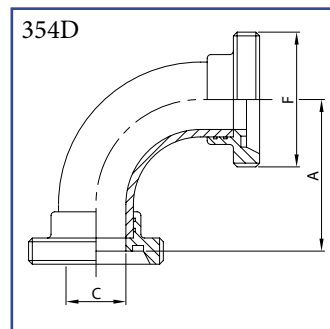
DN	A	C	F	kg
25	77,0	25,0	52-6	0,35
32	85,0	31,0	58-6	0,46
40	92,0	37,0	65-6	0,63
50	103,0	49,0	78-6	0,91
65	117,0	66,0	95-6	1,25
80	132,0	81,0	110-4	1,87
100	149,0	100,0	130-4	3,29

Elbow 90° long DIN
male end / taper part with nut
AISI 304/L, AISI 316/L



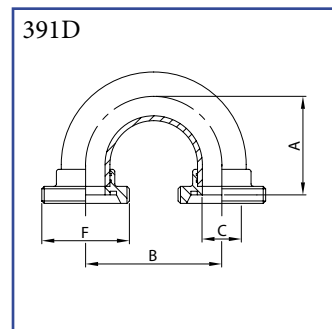
DN	A	B	C	F	kg
25	77,0	77,0	25,0	52-6	0,49
32	85,0	85,0	31,0	58-6	0,63
40	91,0	91,0	37,0	65-6	0,80
50	103,0	103,0	49,0	78-6	1,10
65	117,0	117,0	66,0	95-6	1,785
80	132,0	132,0	81,0	110-4	2,53
100	149,0	149,0	100,0	130-4	3,97

Elbow 90° long DIN
male ends
AISI 304/L, AISI 316/L



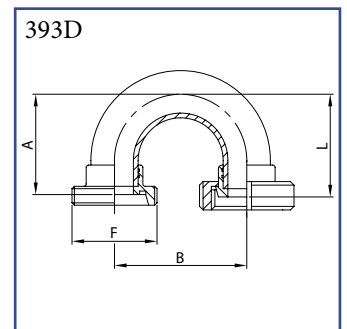
DN	A	C	F	kg
25	77,0	25,0	52-6	0,38
32	85,0	31,0	58-6	0,50
40	91,0	37,0	65-6	0,63
50	103,0	49,0	78-6	0,86
65	117,0	66,0	95-6	1,33
80	132,0	81,0	110-4	1,98
100	149,0	100,0	130-4	3,20

Elbow 180° DIN
male ends
AISI 304/L, AISI 316/L



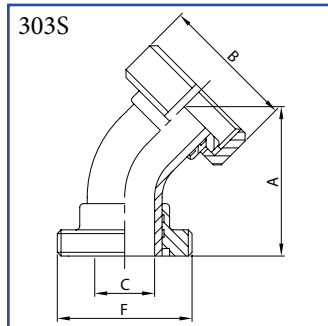
DN	A	B	C	F	kg
25	77,0	100,0	25,0	52-6	0,45
32	85,0	110,0	31,0	58-6	0,58
40	91,0	120,0	37,0	65-6	0,77
50	103,0	140,0	49,0	78-6	0,97
65	117,0	160,0	66,0	95-6	1,73
80	132,0	180,0	81,0	110-4	2,70
100	149,0	220,0	100,0	130-4	4,40

Elbow 180° DIN
male end / taper part with nut
AISI 304/L, AISI 316/L



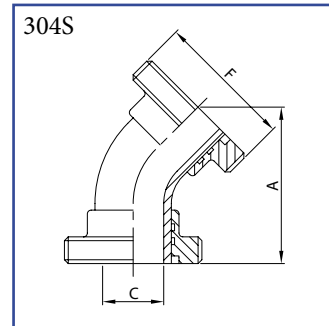
DN	A	B	F	L	kg
25	77,0	100,0	52-6	77,0	0,56
32	85,0	110,0	58-6	85,0	0,71
40	91,0	120,0	65-6	91,0	1,00
50	103,0	140,0	78-6	103,0	1,21
65	117,0	160,0	95-6	117,0	2,19
80	132,0	180,0	110-4	132,0	3,25
100	149,0	220,0	130-4	149,0	5,17

Elbow 45° SMS
male end / liner part with nut
AISI 304/L, AISI 316/L



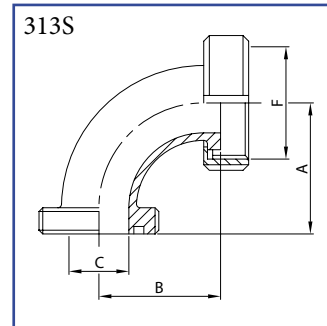
DN	A	B	C	F	kg
25	80,0	51,0	22,4	40-6	0,30
38	105,0	74,0	35,1	60-6	0,71
51	103,0	84,0	47,8	70-6	0,88
63	115,0	100,0	60,5	85-6	1,45
76	135,0	114,0	72,9	98-6	1,96
101	151,0	151,0	97,6	132-6	3,79

Elbow 45° SMS
male ends
AISI 304/L, AISI 316/L



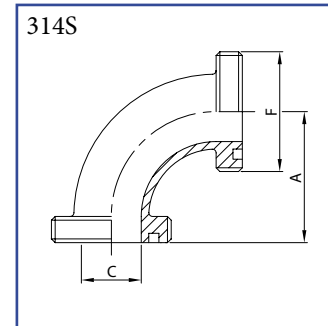
DN	A	C	F	kg
25	80,0	22,4	40-6	0,21
38	105,0	35,1	60-6	0,52
51	103,0	47,8	70-6	0,67
63	115,0	60,5	85-6	1,13
76	135,0	72,9	98-6	1,51
101	151,0	97,6	132-6	3,21

Elbow 90° SMS
male end / liner part with nut
AISI 304/L, AISI 316/L



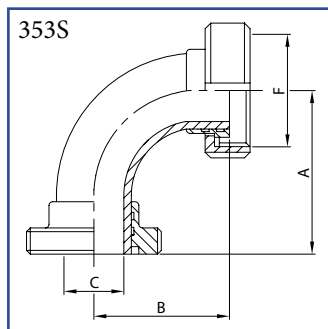
DN	A	B	C	F	kg
25	55,0	55,0	22,4	40-6	0,250
38	70,0	70,0	35,1	60-6	0,650
51	82,0	82,0	47,8	70-6	0,780
63	105,0	105,0	60,5	85-6	1,265
76	110,0	110,0	72,9	98-6	1,775
101	150,0	150,0	97,6	132-6	3,080

Elbow 90° SMS
male ends
AISI 304/L, AISI 316/L



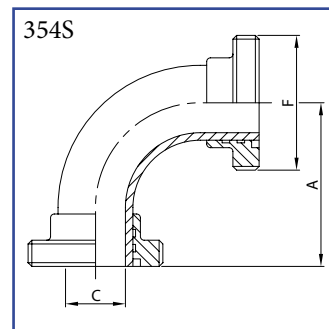
DN	A	C	F	kg
25	55,0	22,4	40-6	0,18
38	70,0	35,1	60-6	0,50
51	82,0	47,8	70-6	0,60
63	105,0	60,5	85-6	1,06
76	110,0	72,9	98-6	1,47
101	150,0	97,6	132-6	2,81

Elbow 90° long SMS
male end / liner part with nut
AISI 304/L, AISI 316/L



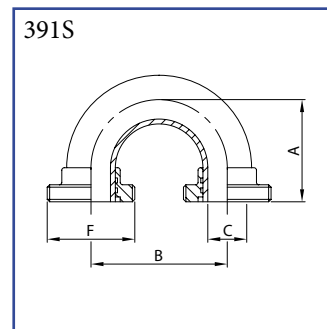
DN	A	B	C	F	kg
25	55,0	55,0	22,9	40-6	0,32
38	70,0	70,0	35,6	60-6	0,77
51	82,0	82,0	47,8	70-6	0,96
63	105,0	105,0	60,5	85-6	1,59
76	110,0	110,0	72,9	98-6	2,53
101	150,0	150,0	97,6	132-6	4,11

Elbow 90° long SMS
male ends
AISI 304/L, AISI 316/L



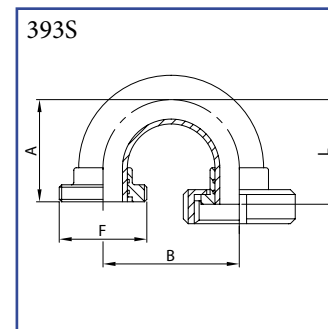
DN	A	C	F	kg
25	55,0	22,9	40-6	0,23
38	70,0	35,6	60-6	0,58
51	82,0	47,8	70-6	0,75
63	105,0	60,5	85-6	1,27
76	110,0	72,9	98-6	1,90
101	150,0	97,6	132-6	3,53

Elbow 180° SMS
male ends
AISI 304/L, AISI 316/L



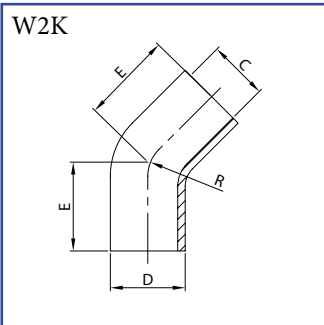
DN	A	B	C	F	kg
25	75,0	81,0	22,4	40-6	0,31
38	90,0	104,0	35,1	60-6	0,65
51	100,0	143,0	47,8	70-6	0,93
63	115,0	168,0	60,5	85-6	1,48
76	130,0	171,0	72,9	98-6	2,18
101	150,0	220,0	97,6	132-6	4,68

Elbow 180° SMS
male end / liner part with nut
AISI 304/L, AISI 316/L



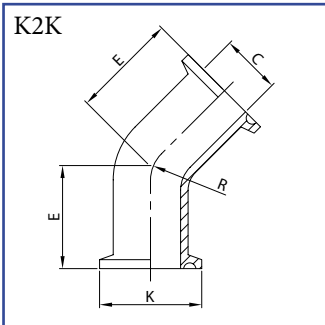
DN	A	B	F	L	kg
25	75,0	81,0	40-6	75,0	0,39
38	90,0	104,0	60-6	90,0	0,84
51	100,0	143,0	70-6	100,0	1,14
63	115,0	168,0	85-6	115,0	1,80
76	130,0	171,0	98-6	130,0	2,63
101	150,0	220,0	132-6	150,0	5,26

Elbow 45°
for welding
AISI 316L LS, AISI 316L LL



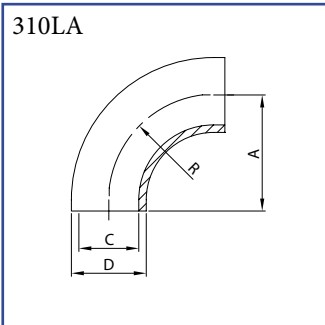
DN	C	D	E	R	kg	
1/2"	12	9,4	12,7	57,1	44,4	0,04
3/4"	19	15,7	19,0	57,1	66,5	0,08
1"	25	22,1	25,4	30,2	38,1	0,05
1 1/2"	38	34,8	38,1	41,3	57,2	0,10
2"	51	47,5	50,8	58,7	76,2	0,18
2 1/2"	63	60,2	63,5	76,2	95,3	0,20
3"	76	72,9	76,2	93,7	114,3	0,50
4"	101	97,4	101,6	122,3	152,4	0,80

Elbow 45°
with CLAMP ends
AISI 316L LS, AISI 316L LL



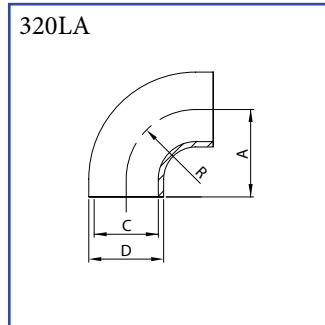
DN	C	E	K	R	kg	
1/2"	12	9,4	69,8	25,0	44,4	0,07
3/4"	19	15,7	69,8	25,0	66,5	0,10
1"	25	22,1	28,6	50,5	38,1	0,12
1 1/2"	38	34,8	36,5	50,5	57,2	0,14
2"	51	47,5	44,5	64,0	76,2	0,23
2 1/2"	63	60,2	52,4	77,5	95,3	0,26
3"	76	72,9	60,3	91,0	114,3	0,54
4"	101	97,4	79,4	119,0	152,4	1,02

Elbow 90°
for welding
AISI 316L LS, AISI 316L LL



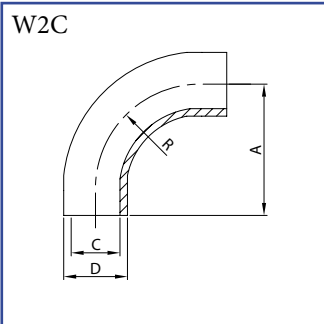
DN	A	C	D	R	kg	
1"	25	38,0	22,1	25,4	38,0	0,05
1 1/2"	38	57,0	34,8	38,1	57,0	0,12
2"	51	76,0	47,5	50,8	76,0	0,21
2 1/2"	63	95,0	60,2	63,5	95,0	0,33
3"	76	114,0	72,9	76,2	114,0	0,52
4"	101	152,0	97,4	101,6	152,0	0,82

Elbow 90°
for welding
AISI 316L LS, AISI 316L LL



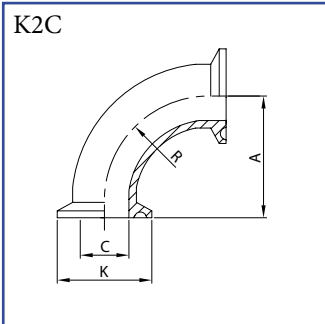
DN	A	C	D	R	kg	
1"	25	25,0	22,1	25,4	25,0	0,04
1 1/2"	38	38,0	34,8	38,1	38,0	0,10
2"	51	51,0	47,5	50,8	51,0	0,18
2 1/2"	63	64,0	60,2	63,5	64,0	0,29
3"	76	76,0	72,9	76,2	76,0	0,48
4"	101	101,0	97,4	101,6	101,0	0,77

Elbow 90°
for welding
AISI 316L LS, AISI 316L LL



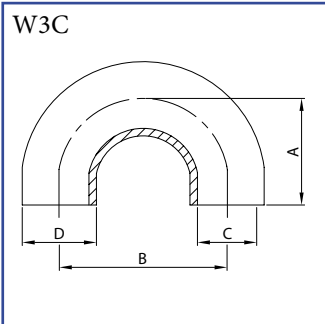
DN	A	C	D	R	kg	
1/2"	12	76,2	9,4	12,7	44,4	0,06
3/4"	19	76,2	15,7	19,0	66,5	0,10
1"	25	52,4	22,1	25,4	38,1	0,16
1 1/2"	38	74,6	34,8	38,1	57,2	0,18
2"	51	103,2	47,5	50,8	76,2	0,34
2 1/2"	63	131,8	60,2	63,5	95,3	0,46
3"	76	160,3	72,9	76,2	114,3	0,70
4"	101	211,1	97,4	101,6	152,4	1,30

Elbow 90°
with CLAMP ends
AISI 316L LS, AISI 316L LL



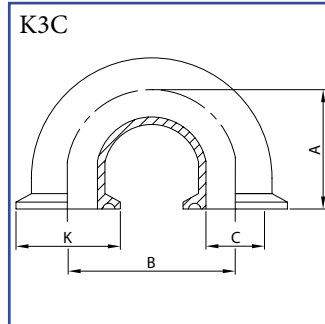
DN	A	C	K	R	kg	
1/2"	12	88,8	9,4	25,0	44,4	0,09
3/4"	19	88,8	15,7	25,0	66,5	0,12
1"	25	50,8	22,1	50,5	38,1	0,17
1 1/2"	38	69,9	34,8	50,5	57,2	0,20
2"	51	88,9	47,5	64,0	76,2	0,37
2 1/2"	63	108,0	60,2	77,5	95,3	0,50
3"	76	127,0	72,9	91,0	114,3	0,91
4"	101	168,3	97,4	119,0	152,4	1,66

Elbow 180°
for welding
AISI 316L LS



DN	A	B	C	D	kg	
1"	25	86,5	73,0	22,1	25,4	0,17
1 1/2"	38	102,0	104,0	34,8	38,1	0,32
2"	51	125,5	151,0	47,5	50,8	0,50
2 1/2"	63	140,0	180,0	60,2	63,5	0,74
3"	76	147,0	194,0	72,9	76,2	1,18
4"	101	150,0	220,0	97,4	101,6	1,98

Elbow 180°
with CLAMP ends
AISI 316L LS



DN	A	B	C	K	kg	
1"	25	99,2	73,0	22,1	50,5	0,34
1 1/2"	38	114,7	104,0	34,8	50,5	0,40
2"	51	138,2	151,0	47,5	64,0	0,74
2 1/2"	63	152,7	180,0	60,2	77,5	1,00
3"	76	159,7	194,0	72,9	91,0	1,82
4"	101	165,8	220,0	97,4	119,0	3,32



On demand:

other materials, dimensions ...

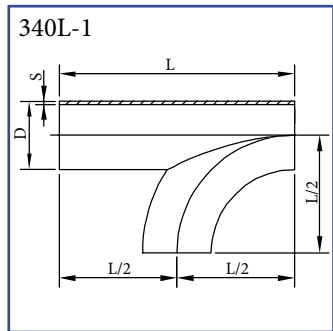
Surface:

type LS: outside polished and inside glazed

type LL: inside and outside polished

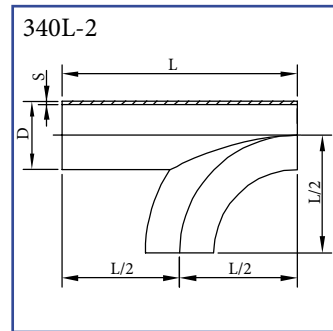
for more informations see „Clamp connection“

T-elbow
for welding
AISI 304L, AISI 316L



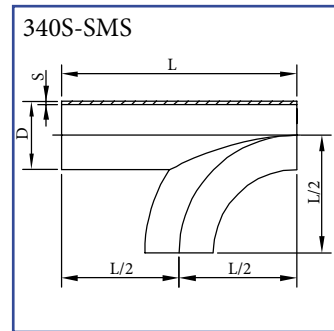
DN	D	S	L	L/2	kg
25	28,0	1,5	100,0	50,0	0,10
32	34,0	1,5	110,0	55,0	0,13
40	40,0	1,5	120,0	60,0	0,21
50	52,0	1,5	140,0	70,0	0,29
65	70,0	2,0	160	80	0,62
80	85,0	2,0	180	90	0,85
100	104,0	2,0	200	100	1,62

T-elbow
for welding
AISI 304L, AISI 316L



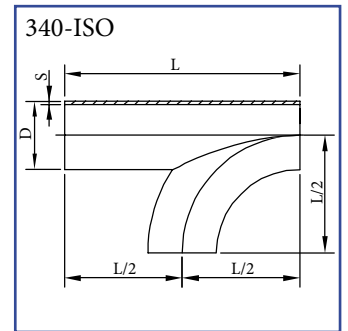
DN	D	S	L	L/2	kg
25	29,0	1,5	100	50	0,10
32	35,0	1,5	110	55	0,13
40	41,0	1,5	120	60	0,21
50	53,0	1,5	140	70	0,29

T-elbow
for welding
AISI 304L, AISI 316L



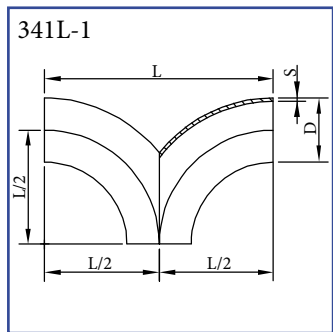
DN	D	S	L	L/2	kg
25	25,4				
38	38,1				
51	50,8				
63	63,5				
76	76,2				
101	101,6				

T-elbow
for welding
AISI 304L, AISI 316L



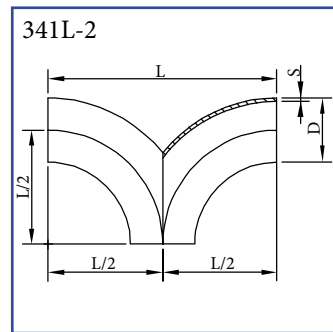
DN	D	S	L	L/2	kg
20	26,9				
25	33,7				
32	42,4				
40	48,3				
50	60,3				
65	76,1				
80	88,9				
100	114,3				
125	139,7				
150	168,3				

Double tee elbow
for welding
AISI 304L, AISI 316L



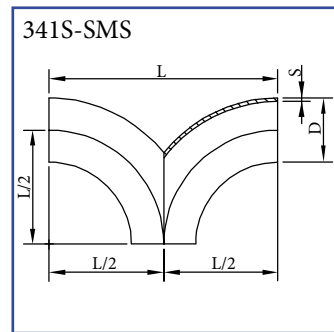
DN	D	S	L	L/2	kg
25	28,0	1,5	100,0	50,0	0,10
32	34,0	1,5	110,0	55,0	0,13
40	40,0	1,5	120,0	60,0	0,21
50	52,0	1,5	140,0	70,0	0,29
65	70,0	2,0	160,0	80,0	0,62
80	85,0	2,0	180,0	90,0	0,85
100	104,0	2,0	200,0	100,0	1,62

Double tee elbow
for welding
AISI 304L, AISI 316L



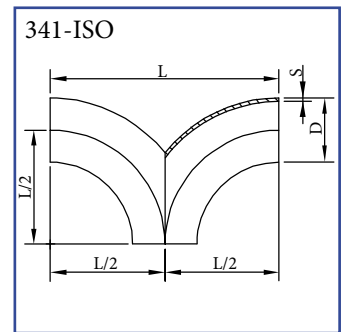
DN	D	S	L	L/2	kg
25	29,0	1,5	100,0	50,0	0,01
32	35,0	1,5	110,0	55,0	0,13
40	41,0	1,5	120,0	60,0	0,21
50	53,0	1,5	140,0	70,0	0,29

Double tee elbow
for welding
AISI 304L, AISI 316L



DN	D	S	L	L/2	kg
25	25,4				
38	38,1				
51	50,8				
63	63,5				
76	76,2				
101	101,6				

Double tee elbow
for welding
AISI 304L, AISI 316L



DN	D	S	L	L/2	kg
20	26,9				
25	33,7				
32	42,4				
40	48,3				
50	60,3				
65	76,1				
80	88,9				
100	114,3				
125	139,7				
150	168,3				

Cod. 310

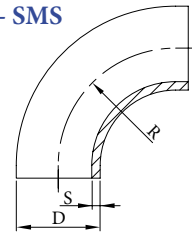
dimensions acc. to: DIN 11852 - DIN 2605 (2S, 3S, 5S) - ASTM A 403 - D+100 - ISO 1,5d / 3d / 5d - SMS

Materials:

AISI 304	(DIN 1.4301/7)
AISI 316L	(DIN 1.4401/4)
AISI 321	(DIN 1.4541)
AISI 316Ti	(DIN 1.4571)

Surface:

without adjustment
 outside surface brushed
For selected dimensions (on request):
 outside surface polished
 outside surface polished / inside surface brushed
 inside surface e-polished Ra 0,25 - 0,8 µm



Ø D x S	SCH	weight (kg/ks)	radius (R)	type	Ø D x S	SCH	weight (kg/ks)	radius (R)	type
10,2 x 2,0		0,01	15,0	3S	28,0 x 1,5		0,05	50,0	11852
12,0 x 1,5		0,01	26,0	11852	28,0 x 1,5		0,10	65,0	5S
12,0 x 2,0		0,02	15,0	3S	28,0 x 1,5		0,12	75,0	3d
13,0 x 1,5		0,01	26,0	11852	28,0 x 2,0		0,07	32,5	3S
13,5 x 1,6		0,02	20,5	1,5d (3S)	28,0 x 2,0		0,07	42,0	1,5d
13,5 x 2,3		0,02	17,5	3S	29,0 x 1,5		0,05	50,0	11852
15,0 x 1,5		0,02	27,5	3S	30,0 x 1,5		0,05	33,5	3S
15,0 x 2,0		0,02	20,0	3S	30,0 x 1,5		0,05	45,0	1,5d
17,2 x 1,6		0,02	28,5	1,5d (3S)	30,0 x 2,0		0,07	33,5	3S
17,2 x 1,6		0,03	30,0	5d	30,0 x 2,0		0,07	45,0	1,5d
17,2 x 2,3		0,03	22,5	3S	30,0 x 2,0		0,12	69,0	5S
18,0 x 1,5		0,02	35,0	11852	32,0 x 1,5		0,05	48,0	1,5d
18,0 x 1,5		0,02	22,5	3S	32,0 x 2,0		0,08	35,0	3S
18,0 x 1,5		0,05	49,0	5S	32,0 x 2,0		0,07	48,0	1,5d
19,0 x 1,5		0,02	35,0	11852	33,0 x 1,5		0,14	49,5	1,5d (3S)
20,0 x 1,5		0,03	24,0	3S	33,0 x 1,5		0,28	90,0	3d
20,0 x 1,5		0,03	30,0	1,5d	33,4 x 1,65	1" SCH 5S	0,07	38,1	LR
20,0 x 1,5		0,06	50,0	5S	33,4 x 2,77	1" SCH 10S	0,11	25,4	SR
20,0 x 2,0		0,03	24,0	3S	33,4 x 2,77	1" SCH 10S	0,14	38,1	LR
20,0 x 2,0		0,03	30,0	1,5d	33,4 x 3,38	1" SCH 40S	0,13	25,4	SR
21,3 x 1,6		0,03	28,0	3S	33,4 x 3,38	1" SCH 40S	0,15	38,1	LR
21,3 x 1,6		0,03	38,1	1,5d	33,4 x 4,55	1" SCH 80S	0,19	38,1	LR
21,3 x 1,6		0,06	42,5	5S	33,4 x 5,56	1" SCH 160	0,23	38,1	LR
21,3 x 2,0		0,04	26,0	3S	33,7 x 1,6		0,08	38,0	1,5d (3S)
21,3 x 2,0		0,04	38,1	1,5d	33,7 x 2,0		0,10	38,0	1,5d (3S)
21,3 x 2,0		0,06	42,4	5S	33,7 x 2,0		0,20	72,5	5d (5S)
21,3 x 2,0		0,06	45,0	5d	33,7 x 2,6		0,14	38,0	1,5d (3S)
21,3 x 2,6		0,06	26,0	3S	33,7 x 3,2		0,14	38,0	1,5d (3S)
21,3 x 2,6		0,06	38,1	1,5d	33,7 x 3,2		0,28	72,5	5S
21,3 x 2,6		0,07	42,5	5S	34,0 x 1,5		0,08	55,0	11852
21,34 x 1,65	1/2" SCH 5S	0,03	38,1	LR	35,0 x 1,5		0,08	45,0	3S
21,34 x 2,11	1/2" SCH 10S	0,11	38,1	LR	35,0 x 1,5		0,10	55,0	11852
21,34 x 2,77	1/2" SCH 40S	0,14	38,1	LR	35,0 x 2,0		0,11	45,0	3S
21,34 x 3,73	1/2" SCH 80S	0,18	38,1	LR	35,0 x 2,0		0,19	57,0	5S
21,34 x 4,78	1/2" SCH 160	0,23	38,1	LR	38,0 x 1,5		0,09	45,0	3S
22,0 x 1,5		0,04	40,0	11852	38,0 x 1,5		0,12	57,0	1,5d
23,0 x 1,5		0,03	25,0	3S	38,0 x 2,0		0,13	57,0	1,5d (3S)
23,0 x 1,5		0,04	34,5	1,5d	38,0 x 2,0		0,24	82,5	5S
23,0 x 1,5		0,04	40,0	11852	38,0 x 2,6		0,16	45,0	3S
23,0 x 1,5		0,08	60,0	3d	38,1 x 1,5		0,12	57,0	SMS
25,0 x 1,5		0,04	27,5	3S	40,0 x 1,5		0,10	45,0	3S
25,0 x 1,5		0,04	38,0	1,5d	40,0 x 1,5		0,10	60,0	11852
25,0 x 1,5		0,08	55,0	5S	40,0 x 2,0		0,13	45,0	3S
25,0 x 2,0		0,05	27,5	3S	40,0 x 2,0		0,16	60,0	1,5d
25,0 x 2,0		0,05	38,0	1,5d	40,0 x 2,0		0,27	95,0	5S
25,4 x 1,5		0,05	38,0	SMS	41,0 x 1,5		0,10	60,0	11852
26,67 x 1,65	3/4" SCH 5S	0,06	38,1	LR	42,16 x 1,65	1 1/4" SCH 5S	0,12	47,6	LR
26,67 x 2,11	3/4" SCH 10S	0,07	38,1	LR	42,16 x 2,77	1 1/4" SCH 10S	0,16	31,8	SR
26,67 x 2,87	3/4" SCH 40S	0,08	38,1	LR	42,16 x 2,77	1 1/4" SCH 10S	0,23	47,6	LR
26,67 x 3,91	3/4" SCH 80S	0,10	38,1	LR	42,16 x 3,56	1 1/4" SCH 40S	0,21	31,8	SR
26,67 x 5,56	3/4" SCH 160	0,14	38,1	LR	42,16 x 3,56	1 1/4" SCH 40S	0,26	47,6	LR
26,9 x 1,6		0,05	28,5	1,5d (3S)	42,16 x 4,85	1 1/4" SCH 80S	0,35	47,6	LR
26,9 x 1,6		0,09	57,5	5S	42,16 x 6,35	1 1/4" SCH 160	0,46	47,6	LR
26,9 x 2,0		0,06	28,5	1,5d (3S)	42,4 x 1,6		0,14	47,6	1,5d (3S)
26,9 x 2,0		0,18	57,5	5d (5S)	42,4 x 2,0		0,15	47,6	1,5d (3S)
26,9 x 2,6		0,08	28,5	1,5d (3S)	42,4 x 2,0		0,30	92,5	5d (5S)
26,9 x 2,6		0,15	57,5	5S	42,4 x 2,6		0,19	47,6	1,5d (3S)
28,0 x 1,5		0,05	32,5	3S	42,4 x 2,6		0,37	92,5	5S
28,0 x 1,5		0,06	42,0	1,5d	42,4 x 3,2		0,23	47,6	1,5d (3S)

Cod. 310

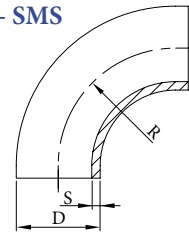
dimensions acc. to: DIN 11852 - DIN 2605 (2S, 3S, 5S) - ASTM A 403 - D+100 - ISO 1,5d / 3d / 5d - SMS

Materials:

AISI 304	(DIN 1.4301/7)
AISI 316L	(DIN 1.4401/4)
AISI 321	(DIN 1.4541)
AISI 316Ti	(DIN 1.4571)

Surface:

without adjustment
 outside surface brushed
For selected dimensions (on request):
 outside surface polished
 outside surface polished / inside surface brushed
 inside surface e-polished Ra 0,25 - 0,8 µm



Ø D x S	SCH	weight (kg/ks)	radius (R)	type	Ø D x S	SCH	weight (kg/ks)	radius (R)	type
42,4 x 3,2		0,45	92,5	5S	63,5 x 1,5		0,34	94,5	SMS
43,0 x 1,5		0,15	47,5	3S	63,5 x 2,0		0,39	82,5	3S
43,0 x 1,5		0,16	64,5	1,5d	64,0 x 2,0		0,42	90,0	1,5d
43,0 x 1,5		0,30	120,0	3d	69,0 x 2,0		0,87	165,0	d+100
44,0 x 2,0		0,46	140,0	d+100	70,0 x 2,0		0,39	80,0	11852
44,5 x 2,0		0,16	51,0	3S	70,0 x 2,0		0,50	92,0	1,5d (3S)
44,5 x 2,0		0,17	66,0	1,5d	70,0 x 2,0		0,77	160,0	5S
44,5 x 2,0		0,31	100,0	5S	70,0 x 3,0		0,72	92,0	1,5d
44,5 x 2,6		0,21	51,0	3S	73,03 x 2,11	2 1/2" SCH 5S	0,54	95,0	LR
48,26 x 1,65	1 1/2" SCH 5S	0,17	57,2	LR	73,03 x 3,05	2 1/2" SCH 10S	0,52	63,5	SR
48,26 x 2,77	1 1/2" SCH 10S	0,22	38,1	SR	73,03 x 3,05	2 1/2" SCH 10S	0,79	95,0	LR
48,26 x 2,77	1 1/2" SCH 10S	0,30	57,2	LR	73,03 x 5,16	2 1/2" SCH 40S	0,92	63,5	SR
48,26 x 3,68	1 1/2" SCH 40S	0,28	38,1	SR	73,03 x 5,16	2 1/2" SCH 40S	1,29	95,0	LR
48,26 x 3,68	1 1/2" SCH 40S	0,40	57,2	LR	73,03 x 7,01	2 1/2" SCH 80S	1,70	95,0	LR
48,26 x 5,08	1 1/2" SCH 80S	0,49	57,2	LR	76,1 x 1,5		0,50	96,0	1,5d (3S)
48,26 x 7,14	1 1/2" SCH 160	0,65	57,2	LR	76,1 x 2,0		0,62	96,0	1,5d (3S)
48,3 x 1,6		0,19	57,1	1,5d (3S)	76,1 x 2,0		0,87	175,0	5d (5S)
48,3 x 2,0		0,22	57,1	1,5d (3S)	76,1 x 2,3		0,60	95,0	3S
48,3 x 2,0		0,39	107,5	5S	76,1 x 2,3		1,165	175,0	5S
48,3 x 2,0		0,44	109,5	5d	76,1 x 2,6		0,67	95,0	3S
48,3 x 2,3		0,23	57,1	3S	76,1 x 2,6		1,20	175,0	5S
48,3 x 2,6		0,26	57,1	1,5d (3S)	76,1 x 2,9		0,73	95,0	3S
48,3 x 3,2		0,32	57,1	1,5d (3S)	76,1 x 3,0		0,88	96,0	1,5d
48,3 x 3,2		0,63	107,5	5S	76,1 x 3,6		1,08	96,0	1,5d (3S)
50,0 x 1,5		0,22	75,0	1,5d	76,2 x 1,65		0,51	114,0	SMS
50,0 x 2,0		0,31	75,0	1,5d	84,0 x 2,0		0,65	105,0	3S
50,8 x 1,5		0,22	75,0	SMS	84,0 x 2,0		0,77	120,0	1,5d
50,8 x 2,0		0,31	75,0	1,5d	84,0 x 2,0		1,17	180,0	d+100
50,8 x 2,5		0,35	75,0	1,5d	84,0 x 2,0		0,77	200,0	5S
51,0 x 1,5		0,19	67,5	3S	85,0 x 2,0		0,57	90,0	11852
51,0 x 2,0		0,25	67,5	3S	88,9 x 2,0		0,79	114,5	1,5d (3S)
51,0 x 2,6		0,34	67,5	3S	88,9 x 2,0		1,35	205,0	5S
52,0 x 1,5		0,17	70,0	11852	88,9 x 2,0		1,42	207,5	5d
53,0 x 1,5		0,17	70,0	11852	88,9 x 2,3		0,88	114,0	3S
53,0 x 1,5		0,26	79,5	1,5d	88,9 x 2,3		1,46	205,0	5S
53,0 x 1,5		0,52	150,0	3d	88,9 x 2,6		0,98	114,0	3S
54,0 x 2,0		0,28	70,0	3S	88,9 x 2,6		1,75	205,0	5S
54,0 x 2,0		0,30	75,0	1,5d	88,9 x 2,9		1,09	114,0	3S
54,0 x 2,0		0,46	122,0	5S	88,9 x 3,0		1,17	114,5	1,5d (3S)
54,0 x 2,0		0,62	150,0	d+100	88,9 x 3,2		1,21	114,0	3S
57,0 x 2,0		0,34	72,0	3S	88,9 x 4,0		1,65	114,5	1,5d (3S)
57,0 x 3,0		0,48	72,0	3S	88,9 x 2,11	3" SCH 5S	0,81	114,3	LR
60,3 x 1,6		0,29	76,2	1,5d (3S)	88,9 x 3,05	3" SCH 10S	0,84	101,6	SR
60,3 x 2,0		0,34	76,2	1,5d (3S)	88,9 x 3,05	3" SCH 10S	1,18	114,3	LR
60,3 x 2,0		0,61	135,0	5S	88,9 x 5,49	3" SCH 40S	1,49	101,6	SR
60,3 x 2,0		0,68	137,5	5d	88,9 x 5,49	3" SCH 40S	2,14	114,3	LR
60,3 x 2,6		0,44	76,2	1,5d (3S)	88,9 x 7,62	3" SCH 80S	2,74	114,3	LR
60,3 x 2,6		0,78	135,0	5S	88,9 x 11,14	3" SCH 160	3,83	114,3	LR
60,3 x 2,9		0,47	76,0	3S	101,6 x 1,5		0,95	133,5	1,5d
60,3 x 3,6		0,62	76,2	1,5d (3S)	101,6 x 2,0		0,81	110,0	SMS
60,3 x 3,6		1,08	135,0	5S	101,6 x 2,0		1,20	133,5	1,5d (3S)
60,33 x 1,65	2" SCH 5S	0,28	76,2	LR	101,6 x 3,0		1,50	133,5	1,5d
60,33 x 2,77	2" SCH 10S	0,48	50,8	SR	104,0 x 2,0		1,17	100,0	11852
60,33 x 2,77	2" SCH 10S	0,50	76,2	LR	104,0 x 2,0		1,20	150,0	1,5d (3S)
60,33 x 3,91	2" SCH 40S	0,36	50,8	SR	104,0 x 2,0		1,61	200,0	d+100
60,33 x 3,91	2" SCH 40S	0,70	76,2	LR	104,0 x 2,0		1,90	250,0	5S
60,33 x 5,54	2" SCH 80S	0,89	76,2	LR	108,0 x 2,0		1,10	142,5	1,5d (3S)
60,33 x 8,74	2" SCH 160	1,33	76,2	LR	108,0 x 3,0		1,85	142,5	1,5d (3S)
63,5 x 1,5		0,34	82,5	3S	108,0 x 4,0		2,20	142,5	3S

Cod. 310

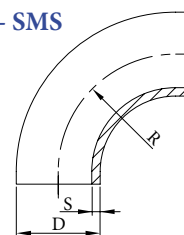
dimensions acc. to: DIN 11852 - DIN 2605 (2S, 3S, 5S) - ASTM A 403 - D+100 - ISO 1,5d / 3d / 5d - SMS

Materials:

AISI 304	(DIN 1.4301/7)
AISI 316L	(DIN 1.4401/4)
AISI 321	(DIN 1.4541)
AISI 316Ti	(DIN 1.4571)

Surface:

without adjustment
 outside surface brushed
For selected dimensions (on request):
 outside surface polished
 outside surface polished / inside surface brushed
 inside surface e-polished Ra 0,25 - 0,8 µm



Ø D x S	SCH	weight (kg/ks)	radius (R)	type	Ø D x S	SCH	weight (kg/ks)	radius (R)	type
114,3 x 2,0		1,35	152,5	1,5d (3S)	219,08 x 3,76	8" SCH 10S	6,57	203,2	SR
114,3 x 2,0		2,39	270,0	5d (5S)	219,08 x 3,76	8" SCH 10S	9,73	304,8	LR
114,3 x 2,6		1,81	152,0	3S	219,08 x 8,18	8" SCH 40S	14,00	203,2	SR
114,3 x 2,6		2,90	270,0	5S	219,08 x 8,18	8" SCH 40S	21,50	304,8	LR
114,3 x 2,9		1,85	152,0	3S	219,08 x 12,7	8" SCH 80S	30,90	304,8	LR
114,3 x 3,0		2,01	152,5	1,5d (3S)	219,1 x 2,0		5,23	305,0	1,5d (3S)
114,3 x 3,6		2,30	152,0	3S	219,1 x 2,5/2,6		6,29	305,0	3S
114,3 x 4,0		2,67	152,5	1,5d	219,1 x 3,0		5,20	203,0	2S
114,3 x 4,5		3,10	152,0	3S	219,1 x 3,0		7,80	305,0	1,5d (3S)
114,3 x 2,11	4" SCH 5S	1,41	152,4	LR	219,1 x 3,0		12,82	510,0	5S
114,3 x 3,05	4" SCH 10S	1,38	101,6	SR	219,1 x 4,0		10,40	305,0	1,5d
114,3 x 3,05	4" SCH 10S	2,03	152,4	LR	254,0 x 2,0		6,97	350,0	d+100
114,3 x 6,02	4" SCH 40S	2,65	101,6	SR	254,0 x 2,0		7,42	375,0	1,5d (3S)
114,3 x 6,02	4" SCH 40S	4,03	152,4	LR	255,0 x 2,5		6,00	250,0	2S
114,3 x 8,56	4" SCH 80S	5,34	152,4	LR	255,0 x 2,5		9,08	375,0	3S
114,3 x 13,49	4" SCH 160	8,02	152,4	LR	256,0 x 3,0		10,50	350,0	d+100
129,0 x 2,0		1,18	125,0	2S	256,0 x 3,0		11,92	375,0	3S
129,0 x 2,0		1,90	188,0	11852	273,0 x 2,0		8,25	381,0	1,5d
129,0 x 2,0		2,26	225,0	d+100	273,0 x 3,0		8,10	254,0	2S
129,0 x 2,0		2,79	312,5	5S	273,0 x 3,0		10,20	381,0	1,5d (3S)
133,0 x 3,0		2,75	181,0	3S	273,0 x 4,0		16,20	381,0	1,5d
139,7 x 2,0		2,07	190,5	1,5d (3S)	273,05 x 3,4	10" SCH 5S	13,80	381,0	LR
139,7 x 2,5		1,18	125,0	2S	273,05 x 4,19	10" SCH 10S	16,90	381,0	LR
139,7 x 2,6		2,53	190,0	3S	273,05 x 9,27	10" SCH 40S	38,60	381,0	LR
139,7 x 2,6		4,43	330,0	5S	304,0 x 2,0		10,20	450,0	1,5d (3S)
139,7 x 2,9/3,0		3,08	190,5	1,5d (3S)	305,0 x 2,5		8,70	300,0	2S
139,7 x 4,0		4,10	190,5	1,5d (3S)	306,0 x 2,0		14,40	400,0	d+100
141,3 x 2,77	5" SCH 5S	2,95	190,5	LR	306,0 x 3,0		16,84	450,0	3S
141,3 x 3,40	5" SCH 10S	2,37	127,0	SR	323,85 x 3,96	12" SCH 5S	22,80	457,0	LR
141,3 x 3,40	5" SCH 10S	3,46	190,5	LR	323,85 x 4,57	12" SCH 10S	26,30	457,0	LR
141,3 x 6,55	5" SCH 40S	4,32	127,0	SR	323,85 x 9,53	12" SCH 40S	59,40	457,0	LR
141,3 x 6,55	5" SCH 40S	6,51	190,5	LR	323,9 x 2,0		11,70	457,0	1,5d (3S)
141,3 x 9,53	5" SCH 80S	9,25	190,5	LR	323,9 x 3,0		11,60	305,0	2S
154,0 x 2,0		1,80	150,0	2S	323,9 x 3,0		17,40	457,0	1,5d
154,0 x 2,0		2,72	225,0	11852	355,6 x 3,0		14,80	356,0	2S
154,0 x 2,0		3,00	250,0	d+100	355,6 x 3,0		22,30	533,5	1,5d (3S)
154,0 x 2,0		4,50	375,0	5S	355,6 x 4,78	14" SCH 10S	35,10	533,5	LR
155,0 x 2,5		2,10	150,0	2S	355,6 x 9,53	14" SCH 40S	70,30	533,5	LR
156,0 x 3,0		4,06	225,0	1,5d (3S)	356,0 x 3,0		18,80	450,0	d+100
159,0 x 3,0		3,90	216,0	3S	406,0 x 3,0		19,30	406,0	2S
159,0 x 4,0		5,15	216,0	3S	406,0 x 3,0		23,90	500,0	d+100
168,28 x 2,77	6" SCH 5S	4,12	228,6	LR	406,0 x 3,0		28,58	610,0	3S
168,28 x 3,40	6" SCH 10S	3,36	152,4	SR	406,4 x 3,0		29,10	602,5	1,5d
168,28 x 3,40	6" SCH 10S	5,03	228,6	LR	406,4 x 4,78	16" SCH 10S	46,00	609,5	LR
168,28 x 7,11	6" SCH 40S	6,87	152,4	SR	406,4 x 9,53	16" SCH 40S	91,60	609,5	LR
168,28 x 7,11	6" SCH 40S	10,9	228,6	LR	457,0 x 3,0		24,50	457,0	2S
168,28 x 10,97	6" SCH 80S	15,3	228,6	LR	457,2 x 3,0		36,70	686,0	1,5d
168,3 x 2,0		3,00	228,5	1,5d (3S)	457,2 x 4,78	18" SCH 10S	57,30	686,0	LR
168,3 x 2,5/2,6		4,04	229,0	3S	457,2 x 9,53	18" SCH 40S	113,00	686,0	LR
168,3 x 2,6		6,33	390,0	5S	506,0 x 3,0		35,70	600,0	d+100
168,3 x 2,9/3,0		4,56	228,5	1,5d (3S)	506,0 x 3,0		57,00	762,0	3S
168,3 x 3,0		2,50	152,0	2S	508,0 x 3,0		30,80	508,0	2S
168,3 x 4,0		6,07	228,5	1,5d (3S)	508,0 x 5,54	20" SCH 10S	82,00	762,0	LR
204,0 x 2,0		4,75	300,0	11852	508,0 x 9,52	20" SCH 40S	140,00	762,0	LR
204,0 x 2,0		7,90	500,0	5S	606,0 x 3,0		50,00	700,0	d+100
205,0 x 2,5		4,00	200,0	2S	609,6 x 6,35	24" SCH 10S	138,00	914,4	LR
205,0 x 2,5		6,76	300,0	3S	609,6 x 9,52	24" SCH 40S	207,80	914,4	LR
206,0 x 3,0		7,21	300,0	d+100 (3S)					
219,08 x 2,77	8" SCH 5S	7,20	304,8	LR					