



ANSI/ASTM

Worldwide, the installation materials for the industrial application according ANSI / ASTM are the most applied. The original American norm ranges are complementary to each other. The ANSI range specifies the dimensions, while the ASTM range describes the quality. Together they are a complete product specification and that's why they are mentioned together. Within the process industry, the dimensions and sizes are according ANSI 36.19. The thicker materials (ANSI 36.10) SCH80STD and 160STD, SKS did not include in its delivery possibilities. ANSI 36.19 is 1 range for the outside diameter and is divided in 4 wall thickness ranges (Schedules). We distinguish SCH5S, SCH10S, SCH40S and SCH80S. For the light process industry the SCH5S or SCH10S is often good enough, but SCH40S is also applied because it fits the welded side of the flanges and because they often cut thread to fit. The components of the American norm ANSI / ASTM are often used in combination with the sizes according ISO 1127. This is because the dimensions and sizes do match approximately with each other.

Industrial



Range	ANSI 36.19M	ASTM
Tubes	ANSI 31.3	ASTM A-312/312M
Weld fittings	ANSI B16.9	ASTM A-403
	BSP thread fittings	
Connections	ANSI 16.5 Flanges	ASTM A-182 Flanges
	BSP coupling	
Applicable coupling	Various	

Tubes ANSI 36.19M / ASTM A-312/312M

The combination of these 2 norms gives a complete specification for the tubes in this range. Originally this norm is meant for the Petrochemical industry. The execution of these tubes is mostly annealed but doesn't have a beadworked seam. The tubes have to be completely provided of a specialised mark and meet the requirements of traceability. Despite the fact that the tubes according this range are world wide produced mostly, the availability of the tubes isn't optimal. The tubes exist is a welded or seamless execution.

Material according ASTM UNS

Stainless steel sorts; 304, 304L, 316, 316L or 321

Size table and tolerances

According ANSI36.19 / ASTM A312M / A-530

Tolerance code G and L

Size ranges:

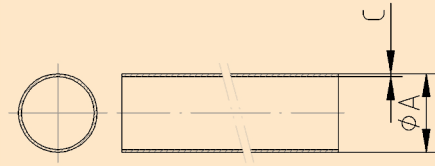
Outside diameter	Diameter tolerance	Wall thickness tolerance
10,3 – 48,3 mm	+0,40/-0,79 mm	-12,5%
(48,3) – 114,3 mm	+0,79/-0,79 mm	-12,5%
(114,3) – 219,1 mm	+1,59/-0,79 mm	-12,5%
(219,1) – 457 mm	+2,38/-0,79 mm	-12,5%
(457) – 660 mm	+3,18/-0,79 mm	-12,5%
(660) – 864 mm	+3,97/-0,79 mm	-12,5%
(864) – 1219 mm	+4,76/-0,79 mm	-12,5%

+ Tolerance of the wall thickness isn't specified.

Size	ASTMA A+312		
	SCH5S	SCH10S	SCH40S
1/4" / DN8	-	13,72 x 1,65	-
3/8" / DN10	-	17,15 x 1,65	-
1/2" / DN15	21,34 x 1,65	21,34 x 2,11	21,34 x 2,77
3/4" / DN20	26,67 x 1,65	26,67 x 2,11	26,67 x 2,87
1" / DN25	33,40 x 1,65	33,40 x 2,77	33,40 x 3,38
1,25" / DN32	42,16 x 1,65	42,16 x 2,77	42,16 x 3,56
1,5" / DN40	48,26 x 1,65	48,26 x 2,77	48,26 x 3,68
2" / DN50	60,33 x 1,65	60,33 x 2,77	60,33 x 3,91
2 1/2" / DN65	73,03 x 2,11	73,03 x 3,05	-
3" / DN80	88,90 x 2,11	88,90 x 3,05	88,90 x 5,49
3,5"	101,60 x 2,11	101,60 x 3,05	101,60 x 5,74
4" / DN100	114,3 x 2,11	114,3 x 3,05	114,3 x 6,02
5" / DN125	141,3 x 2,77	141,3 x 3,4	-
6" / DN150	168,28 x 2,77	168,28 x 3,4	168,28 x 7,11
8" / DN200	219,08 x 2,77	219,08 x 3,76	219,08 x 8,18
10" / DN250	273,08 x 3,40	273,08 x 4,19	273,08 x 9,27
12" / DN300	323,85 x 3,96	323,85 x 4,57	323,85 x 9,53
14" / DN350	355,60 x 3,96	355,60 x 4,78	-
16" / DN400	406,4 x 4,19	406,4 x 4,78	-

Certificates

3.1 certificate according EN 10204 or MTR (Mill Test Report)

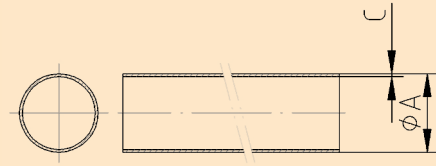


WELDED TUBE ANSI B 36,19 / ASTM A-312 SCHEDULE 5S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/2"	21,34		1,65			0,81	40134055	40138055
3/4"	26,67		1,65			1,03	40134072	40138072
1"	33,40		1,65			1,31	40134089	40138089
1 1/4"	42,16		1,65			1,67	40134106	40138106
1 1/2"	48,26		1,65			1,93	40134123	40138123
2"	60,33		1,65			2,42	40134140	40138140
2 1/2"	73,03		2,11			3,74	40134164	40138164
3"	88,90		2,11			4,59	40134189	40138189
4"	114,30		2,11			5,93	40134238	40138238
5"	141,30		2,77			9,60	40134268	40138268
6"	168,28		2,77			11,48	40134294	40138294
8"	219,08		2,77			15,00	40134324	40138324
10"	273,05		3,40			22,96	40134357	40138357
12"	323,85		3,96			31,72	40134388	40138388

WELDED TUBE ANSI B 36,19 ASTM A-312 SCHEDULE 10S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/8"	10,29		1,24			0,28	40134012	40138012
1/4"	13,72		1,65			0,5	40134027	40138027
3/8"	17,15		1,65			0,64	40134041	40138041
1/2"	21,34		2,11			1,01	40134056	40138056
3/4"	26,67		2,11			1,3	40134073	40138073
1"	33,40		2,77			2,12	40134090	40138090
1 1/4"	42,16		2,77			2,73	40134107	40138107
1 1/2"	48,26		2,77			3,16	40134124	40138124
2"	60,33		2,77			3,99	40134142	40138142
2 1/2"	73,03		3,05			5,34	40134166	40138166
3"	88,90		3,05			6,56	40134191	40138191
3 1/2"	101,6		3,05			7,52	40134216	40138216
4"	114,30		3,05			8,5	40134240	40138240
5"	141,30		3,40			11,7	40134270	40138270
6"	168,28		3,40			14,04	40134296	40138296
8"	219,08		3,76			20,27	40134326	40138326
10"	273,05		4,19			28,21	40134359	40138359
12"	323,85		4,57			36,53	40134391	40138391

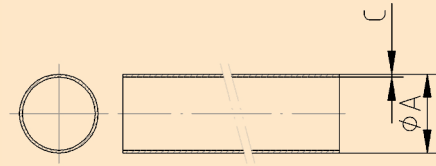


WELDED TUBE ANSI B 36.19 ASTM A-312 SCHEDULE 40S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/8"	10,29		1,73			0,37	40134014	40138014
1/4"	13,72		2,24			0,64	40134028	40138028
3/8"	17,15		2,31			0,86	40134043	40138043
1/2"	21,34		2,77			1,28	40134058	40138058
3/4"	26,67		2,87			1,71	40134075	40138075
1"	33,40		3,38			2,54	40134092	40138092
1 1/4"	42,16		3,56			3,44	40134109	40138109
1 1/2"	48,26		3,68			4,11	40134126	40138126
2"	60,33		3,91			5,52	40134146	40138146
2 1/2"	73,03		5,16			8,75	40134173	40138173
3"	88,90		5,49			11,47	40134198	40138198
4"	114,30		6,02			16,32	40134249	40138249
5"	141,30		6,55			22,10	40134275	40138275
6"	168,28		7,11			28,70	40134304	40138304

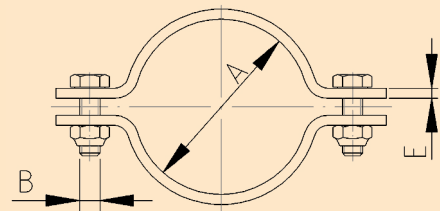
WELDED TUBE ANSI B 36.19 ASTM A-312 SCHEDULE 80S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/8"	10,29		2,41			0,48	40134015	40138015
1/4"	13,72		3,02			0,81	40134029	40138029
3/8"	17,15		3,20			1,12	40134044	40138044
1/2"	21,34		3,73			1,64	40134059	40138059
3/4"	26,67		3,91			2,23	40134076	40138076
1"	33,40		4,55			3,28	40134093	40138093
1 1/4"	42,16		4,85			4,53	40134110	40138110
1 1/2"	48,26		5,08			5,49	40134127	40138127
2"	60,33		5,54			7,59	40134149	40138149



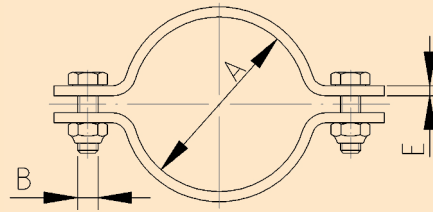
SEAMLESS TUBE ASTM A-530

Inch	A	B	C	D	E	Kg	304(L)	316L
3/8"	17,15		1,65			0,640	43134041	43118041
1/2"	21,34		2,11			1,280	43134058	43118058
1/2"	21,34		3,73			1,640	43134059	43118059
3/4"	26,67		2,87			1,710	43134075	43118075
3/4"	26,67		5,56			2,230	43134077	43118077
1"	33,40		3,38			2,540	43134092	43118092
1 1/4"	42,16		3,56			3,440	43134109	43118109
1 1/2"	48,26		3,68			4,110	43134126	43118126
2"	60,33		3,91			5,520	43134146	43118146
2 1/2"	73,03		3,05			5,340	43134166	43118166
3"	88,90		3,05			6,560	43134191	43118191



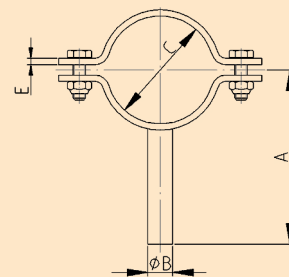
PIPESUPPORT

DN / Inch	A	B	C	D	E	Kg	304	316
20 / 0,75"	26,9	M6 x 20			25x3		90233023MS	90236023MS
25 / 1"	33,7	M6 x 20			25x3		90233028MS	90236028MS
32 / 1,25"	42,4	M6 x 20			25x3		90233034MS	90236034MS
40 / 1,5"	48,3	M6 x 20			25x3		90233043MS	90236043MS
50 / 2"	60,3	M6 x 20			25x3		90233054MS	90236054MS
65 / 2,5"	76,1	M6 x 20			25x3		90233067MS	90236067MS
80 / 3"	88,9	M6 x 20			25x3		90233089MS	90236089MS
100 / 4"	114,3	M6 x 20			25x3		90233104MS	90236104MS
125 / 5"	139,7	M6 x 20			25x3		90233128MS	90236128MS



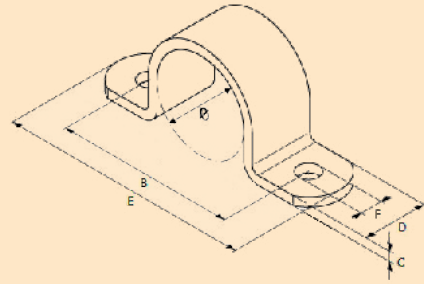
PIPESUPPORT HEAVY

DN / Inch	A	B	C	D	E	Kg	304	316
8 / 0,25"	13,5	M6	20x3		20x3		90233009	90236009
10 / 0,375"	17,2	M6	20x3		20x3		90233012	90236012
15 / 0,5"	21,3	M6	20x3		20x3		90233017	90236017
20 / 0,75"	26,9	M6	20x4		20x4		90233023	90236023
25 / 1"	33,7	M8	20x4		20x4		90233028	90236028
32 / 1,25"	42,4	M8	20x4		20x4		90233034	90236034
40 / 1,5"	48,3	M8	20x4		20x4		90233043	90236043
50 / 2"	60,3	M8	20x4		20x4		90233054	90236054
65 / 2,5"	76,1	M8	20x4		20x4		90233067	90236067
80 / 3"	88,9	M8	25x4		25x4		90233089	90236089
100 / 4"	114,3	M8	25x4		25x4		90233104	90236104
125 / 5"	139,7	M12	40x6		40x6		90233128	90236128
150 / 6"	168,3	M12	40x6		40x6		90233154	90236154
200 / 8"	219,1	M12	40x6		40x6		90233204	90236204



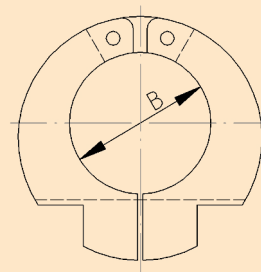
PIPESUPPORT WITH SHAFT

DN / Inch	A	B	C	D	E	Kg	304
20 / 0,75"	71,0	10,0	26,9		25x3		90233323MS
25 / 1"	74,5	10,0	33,7		25x3		90233328MS
32 / 1,25"	79,0	10,0	42,4		25x3		90233334MS
40 / 1,5"	82,0	10,0	48,3		25x3		90233343MS
50 / 2"	88,0	12,0	60,3		25x3		90233354MS
65 / 2,5"	95,5	12,0	76,1		25x3		90233364MS
80 / 3"	102,0	12,0	88,9		25x3		90233389MS
100 / 4"	115,0	12,0	114,3		25x3		90233404MS



PIPECLAMP ISO

DN / Inch	A Ø	B	C	D	E	F	304
15 / 0,5"	21,3	49	3	20	69	9	90133017
20 / 0,75"	26,9	55	4	20	75	9	90133023
25 / 1"	33,7	61	4	20	81	9	90133028
32 / 1,25"	42,4	70	4	20	90	9	90133034
40 / 1,5"	48,3	76	4	20	96	9	90133043
50 / 2"	60,3	88	4	20	108	9	90133054
65 / 2,5"	76,1	104	4	20	124	9	90133067
80 / 3"	88,9	122	4	25	147	9	90133089
100 / 4"	114,3	147	4	25	172	9	90133104



PIPE SAWING TOOL

DN / ISO	A	B	C	D	E	Kg	SKS nr.
1/2"		21,3				0,530	90902776
3/4"		26,9				0,530	90902777
1"		33,7				0,640	90902778
1 1/4"		42,4				0,830	90902779
1 1/2"		48,3				0,830	90902780
2"		60,3				0,980	90902781
2 1/2"		76,1				1,940	90902764
3"		88,9				2,150	90902782
4"		114,3				2,690	90902783

Weld fitting ANSI B16.9 ASTM A-403

In addition to the tube norms, there are also fitting norms for the various weld fittings. In every range there is a direct link between these norms, that is why they complement each other. In practice the various norms are used together, that's why this article group doesn't seem uniform. But a fixed execution of a bend, tee or other weld fitting is also possible. Besides the weld fittings, also thread fittings are often used. This can be with BSP or NPT thread. SKS provides mainly in BSP thread fittings.

Executions

There are 4 executions of fittings which can be indicated with a code

Code	Production method	Non-destructive test
S	Seamless	None
W	Welded	Radiographic or ultrasonic
WX	Welded	Radiographic
WU	Welded	Ultrasonic

- FBBLR45 Bends long radius 45°
- FBBLR90 Bends long radius 90°

- FBBSR Bends short radius 90°
- FBT Tees symmetric
- FBRT Tees reducing
- FBRC Reducers conical
- FBRE Reducers eccentric
- FBEC End caps
- FBSES Collars

Dimension range and material

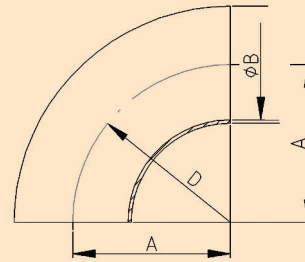
Sizes according table 2, which is mentioned above at the tube dimensions. The available material sorts are 304, 304L and 316L

Tolerances and specifications

According ANSI B16.9, ASTM A-351, A-743 and A-744

Certificates

3.1 certificate according EN 10204 or MTR (Mill Test Report)



WELDING BEND 90° ANSI B 16.9 / A-403 SCHEDULE 5S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/2"	21,34	1,65		38/27,5		0,04	56134055	56138055
3/4"	26,67	1,65		38/28,5		0,04	56134072	56138072
1"	33,40	1,65		38,0		0,08	56134089	56138089
1 1/4"	42,16	1,65		48,0		0,12	56134106	56138106
1 1/2"	48,26	1,65		57,0		0,17	56134123	56138123
2"	60,33	1,65		76,0		0,28	56134140	56138140
2 1/2"	73,03	2,11		95,0		0,55	56134164	56138164
3"	88,90	2,11		114,0		0,80	56134189	56138189
4"	114,30	2,11		152,0		1,33	56134238	56138238
5"	141,30	2,77		190,0		2,95	56134268	56138268
6"	168,28	2,77		229,0		4,05	56134294	56138294
8"	219,08	2,77		305,0		7,00	56134324	56138324



Pre-insulated tube systems

The advantages of the pre-insulated tube systems and our experience and knowledge of process tubes are the best base of your process tubes. The possibilities are unlimited within a range from -200°C up to $+350^{\circ}\text{C}$. Especially in tube bridges you can reduce costs according to the investment costs, installation time but mainly the energy costs.

The Mix of 4 variable components

1. Transport tube: all materials with a diameter up to 800mm.
2. Isolation: Customised materials based on the temperature of the application
3. Jacket: Choice between 5 robust sorts of materials.
4. Options: Divers options possible, like tracing, leak-detection etc.

The combination of the chosen variables is the optimal configuration for your application. The choice depends on the technical and economical input.

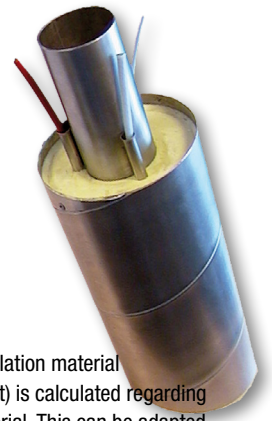
Features

- 100% waterproof
- High mechanical resistance
- Effective corrosion protection of the tube
- Resistant against chemical products and UV
- Tracing of the tube is possible
- Sandwichsystem
- Easy installatio of the products

Advantages



- Well cleanable
- Constant isolation during the lifetime
- Quick payback time
- No source of infection
- Less loss of energy
- Low maintenance costs

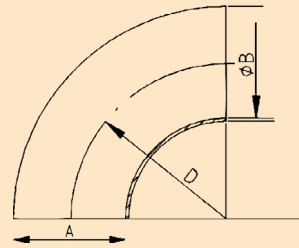


Customised delivery

Every application is different. That is why the isolation material (based on the temperature and the needed result) is calculated regarding to the size and composition of the isolation material. This can be adapted to your specific needs. The system has some little restrictions but they minor to the enormous advantages. Besides the possibility of the standard tube components, SKS can also isolate the short tube installations, skids-fittings or machine parts. We can even produce these products for you if we get a drawing for it.

Why should you isolate afterwards when it can be done much better in an optimal situation forwards.



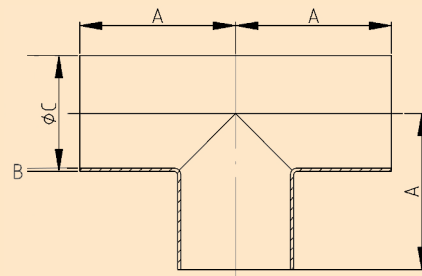


WELDING BEND 90° ANSI B 16.9 / A-403 SCHEDULE 10S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/2"	21,34	17,12		38,0		0,06	56134056	56138056
3/4"	26,67	22,45		38,0		0,06	56134073	56138073
1"	33,40	27,86		38,0		0,13	56134090	56138090
1 1/4"	42,16	36,62		48,0		0,21	56134107	56138107
1 1/2"	48,26	42,72		57,0		0,29	56134124	56138124
2"	60,33	54,79		76,0		0,49	56134142	56138142
2 1/2"	73,03	66,93		95,0		0,80	56134166	56138166
3"	88,90	82,80		114,0		1,20	56134191	56138191
4"	114,30	108,2		152,0		2,10	56134240	56138240
5"	141,30	134,5		190,0		3,63	56134270	56138270
6"	168,28	161,48		229,0		5,20	56134296	56138296
8"	219,08	211,56		305,0		10,10	56134326	56138326

WELDING BEND 90° ANSI B 16.9 / A-403 SCHEDULE 40S

Inch	A	B	C	D	E	Kg	304(L)	316L
3/8"	17,15	12,53		38,0		0,07	56134043	56138043
1/2"	21,34	15,8		38,0		0,08	56134058	56138058
3/4"	26,67	20,93		38,0		0,09	56134075	56138075
1"	33,40	26,64		38,0		0,16	56134092	56138092
1 1/4"	42,16	35,04		48,0		0,25	56134109	56138109
1 1/2"	48,26	40,9		57,0		0,40	56134126	56138126
2"	60,33	52,51		76,0		0,71	56134146	56138146
2 1/2"	73,03	62,71		95,0		1,40	56134173	56138173
3"	88,90	77,92		114,0		2,18	56134198	56138198
4"	114,30	102,26		152,0		4,17	56134249	56138249
5"	141,30	128,2		190,0		6,86	56134275	56138275
6"	168,28	154,06		229,0		10,90	56134304	56138304
8"	219,08	202,72		305,0		21,50	56134334	56138334

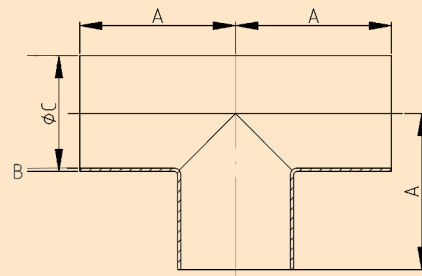


TEE ANSI B 16.9 A-403 SCHEDULE 5S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/2"	25,0	1,65	21,34			0,1	58134055	58138055
3/4"	29,0	1,65	26,67			0,1	58134072	58138072
1"	38,0	1,65	33,40			0,3	58134089	58138089
1 1/4"	48,0	1,65	42,16			0,5	58134106	58138106
1 1/2"	57,0	1,65	48,26			0,6	58134123	58138123
2"	64,0	1,65	60,33			0,8	58134140	58138140
3"	86,0	2,11	88,90			1,8	58134189	58138189
4"	105,0	2,11	114,30			2,5	58134238	58138238
5"	105,0	2,77	141,30			4,6	58134268	58138268
6"	143,0	2,77	168,28			6,3	58134294	58138294
8"	178,0	2,77	219,08			11,4	58134324	58138324

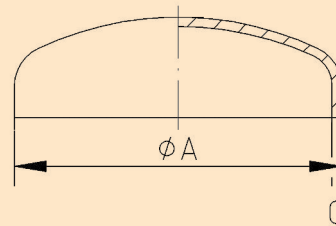
TEE ANSI B 16.9 A-403 SCHEDULE 10S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/2"	25,0	2,11	21,34			0,08	58134056	58138056
3/4"	29,0	2,11	26,67			0,11	58134073	58138073
1"	38,0	2,77	33,40			0,30	58134090	58138090
1 1/4"	48,0	2,77	42,16			0,05	58134107	58138107
1 1/2"	57,0	2,77	48,26			0,70	58134124	58138124
2"	64,0	2,77	60,33			0,80	58134142	58138142
2 1/2"	76,0	3,05	73,03			1,36	58134166	58138166
3"	86,0	3,05	88,90			1,80	58134191	58138191
4"	105,0	3,05	114,30			2,62	58134240	58138240
5"	105,0	3,40	141,30			4,60	58134270	58138270
6"	143,0	3,40	168,28			6,30	58134296	58138296
8"	178,0	3,76	219,08			11,40	58134326	58138326



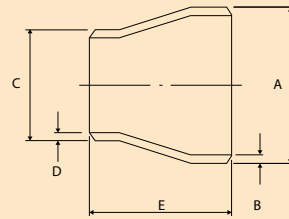
TEE ANSI B 16.9 A-403 SCHEDULE 40S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/2"	25,0	2,77	21,34			0,11	58134058	58138058
3/4"	29,0	2,87	26,67			0,20	58134075	58138075
1"	38,0	3,38	33,40			0,30	58134092	58138092
1 1/4"	48,0	3,56	42,16			0,63	58134109	58138109
1 1/2"	57,0	3,68	48,26			0,90	58134126	58138126
2"	64,0	3,91	60,33			1,20	58134146	58138146
2 1/2"	76,0	5,16	73,03			2,30	58134173	58138173
3"	86,0	5,49	88,90			3,20	58134198	58138198
4"	105,0	6,02	114,30			5,10	58134249	58138249
5"	105,0	6,55	141,30			9,40	58134275	58138275
6"	143,0	7,11	168,28			16,10	58134304	58138304
8"	178,0	8,18	219,08			31,00	58134334	58138334



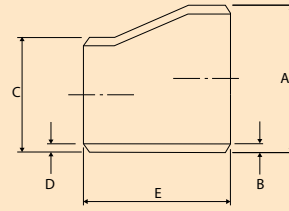
ENDCAP A-403 SCH10S

Inch	A	B	C	D	E	Kg	304(L)	316L
1/2"	21,34		2,11			0,08	60134056	60138056
3/4"	26,67		2,11			0,08	60134073	60138073
1"	33,40		2,77			0,10	60134090	60138090
1 1/4"	42,16		2,77			0,11	60134107	60138107
1 1/2"	48,26		2,77			0,14	60134124	60138124
2"	60,33		2,77			0,17	60134142	60138142
2 1/2"	73,03		3,05			0,25	60134166	60138166
3"	88,90		3,05			0,40	60134191	60138191
4"	114,30		3,05			0,65	60134240	60138240
6"	168,28		3,40			1,36	60134296	60128294



REDUCER CONCENTRIC ANSI B16.9 A-403 SCHEDULE 10S

Inch	A	B	C	D	E	Kg	304(L)	316L
3/4" x 1/2"	26,67	2,11	21,34	2,11	39,3	0,1	57134006	57138006
1" x 1/2"	33,40	2,77	21,34	2,11	50,8	0,12	57134017	57138017
1" x 3/4"	33,40	2,77	26,67	2,11	50,8	0,13	57134025	57138025
1 1/4" x 1/2"	42,16	2,77	21,34	2,11	50,8	0,17	57134036	57138036
1 1/4" x 3/4"	42,16	2,77	26,67	2,11	50,8	0,18	57134044	57138044
1 1/4" x 1"	42,16	2,77	33,40	2,77	50,8	0,18	57134052	57138052
1 1/2" x 1/2"	48,30	2,77	21,34	2,11	63,5	0,31	57134063	57138063
1 1/2" x 3/4"	48,30	2,77	26,67	2,11	63,5	0,2	57134071	57138071
1 1/2" x 1"	48,30	2,77	33,40	2,77	63,5	0,2	57134079	57138079
1 1/2" x 1 1/4"	48,30	2,77	42,16	2,77	63,5	0,21	57134087	57138087
2" x 1/2"	60,30	2,77	21,34	2,11	76,2	0,22	57134098	57138098
2" x 3/4"	60,30	2,77	26,67	2,11	76,2	0,25	57134106	57138106
2" x 1"	60,30	2,77	33,40	2,77	76,2	0,28	57134114	57138114
2" x 1 1/4"	60,30	2,77	42,16	2,77	76,2	0,3	57134122	57138122
2" x 1 1/2"	60,30	2,77	48,30	2,77	76,2	0,31	57134130	57138130
2 1/2" x 1 1/4"	73,00	3,05	42,16	2,77	88,9	0,43	57134157	57138157
2 1/2" x 1 1/2"	73,00	3,05	48,30	2,77	88,9	0,44	57134165	57138165
2 1/2" x 2"	73,00	3,05	60,30	2,77	88,9	0,47	57134173	57138173
3" x 1"	88,90	3,05	33,40	2,77	88,9	0,5	57134184	57138184
3" x 1 1/4"	88,90	3,05	42,16	2,77	88,9	0,51	57134192	57138192
3" x 1 1/2"	88,90	3,05	48,30	2,77	88,9	0,51	57134200	57138200
3" x 2"	88,90	3,05	60,30	2,77	88,9	0,55	57134208	57138208
3" x 2 1/2"	88,90	3,05	73,00	3,05	88,9	0,59	57134216	57138216
4" x 2"	114,30	3,05	60,30	2,77	101,6	0,78	57134273	57138273
4" x 2 1/2"	114,30	3,05	73,00	3,05	101,6	0,83	57134281	57138281
4" x 3"	114,30	3,05	88,90	3,05	101,6	0,87	57134289	57138289
5" x 3"	141,30	3,40	88,90	3,05	127,0	1,45	57134323	57138323
6" x 3"	168,30	3,40	88,90	3,05	139,7	1,45	57134368	57138368
6" x 4"	168,30	3,40	114,30	3,05	139,7	1,95	57134385	57138385



REDUCER ECCENTRIC ANSI B16.9 A-403 SCHEDULE 10S

Inch	A	B	C	D	E	Kg	304(L)	316L
3/4" x 1/2"	26,67	2,11	21,34	2,11	39,3	0,1	57234006	57238006
1" x 1/2"	33,40	2,77	21,34	2,11	50,8	0,12	57234017	57238017
1" x 3/4"	33,40	2,77	26,67	2,11	50,8	0,13	57234025	57238025
1 1/4" x 1/2"	42,16	2,77	21,34	2,11	50,8	0,17	57234036	57238036
1 1/4" x 3/4"	42,16	2,77	26,67	2,11	50,8	0,18	57234044	57238044
1 1/4" x 1"	42,16	2,77	33,40	2,77	50,8	0,18	57234052	57238052
1 1/2" x 1/2"	48,30	2,77	21,34	2,11	63,5	0,31	57234063	57238063
1 1/2" x 3/4"	48,30	2,77	26,67	2,11	63,5	0,2	57234071	57238071
1 1/2" x 1"	48,30	2,77	33,40	2,77	63,5	0,2	57234079	57238079
1 1/2" x 1 1/4"	48,30	2,77	42,16	2,77	63,5	0,21	57234087	57238087
2" x 1/2"	60,30	2,77	21,34	2,11	76,2	0,22	57234098	57238098
2" x 3/4"	60,30	2,77	26,67	2,11	76,2	0,25	57234106	57238106
2" x 1"	60,30	2,77	33,40	2,77	76,2	0,28	57234114	57238114
2" x 1 1/4"	60,30	2,77	42,16	2,77	76,2	0,3	57234122	57238122
2" x 1 1/2"	60,30	2,77	48,30	2,77	76,2	0,31	57234130	57238130
2 1/2" x 1 1/4"	73,00	3,05	42,16	2,77	88,9	0,43	57234157	57238157
2 1/2" x 1 1/2"	73,00	3,05	48,30	2,77	88,9	0,44	57234165	57238165
2 1/2" x 2"	73,00	3,05	60,30	2,77	88,9	0,47	57234173	57238173
3" x 1"	88,90	3,05	33,40	2,77	88,9	0,5	57234184	57238184
3" x 1 1/4"	88,90	3,05	42,16	2,77	88,9	0,51	57234192	57238192
3" x 1 1/2"	88,90	3,05	48,30	2,77	88,9	0,51	57234200	57238200
3" x 2"	88,90	3,05	60,30	2,77	88,9	0,55	57234208	57238208
3" x 2 1/2"	88,90	3,05	73,00	3,05	88,9	0,59	57234216	57238216
4" x 2"	114,30	3,05	60,30	2,77	101,6	0,78	57234273	57238273
4" x 2 1/2"	114,30	3,05	73,00	3,05	101,6	0,83	57234281	57238281
4" x 3"	114,30	3,05	88,90	3,05	101,6	0,87	57234289	57238289
5" x 3"	141,30	3,40	88,90	3,05	127,0	1,45	57234323	57238323
6" x 3"	168,30	3,40	88,90	3,05	139,7	1,45	57234368	57238368
6" x 4"	168,30	3,40	114,30	3,05	139,7	1,95	57234385	57238385

DIN 11851 Coupling

The so-called 'dairy coupling' according DIN 11851 is the most applied screw coupling within the food industry. The round thread and the huge tolerances ensure that the coupling always closes. If necessary with an increased seal. This is a little old fashion, but it shows the usability and the popularity. The coupling is officially standardized with NW dimensions, but there are also versions available with inches and ISO dimensions. A lot of equipment or instruments are provided with a coupling according DIN 11851.

Size ranges and material

According DIN 11851, with exception of the welding connections. This is based on the ISO dimensions. According the norm you need the use forged materials, however there are a lot of cast materials available.

Tolerances and specifications

DIN 405-1 and 2, DIN 11887, DIN ISO 2768-1, ISO 48, FDA and BGA
 Versions and codes :
 Liner D, male thread C, nut F and seal G ; internal Ra value < 1,6µm
 Connection : weld (S), short (SK), expanding male part (W)

Seals

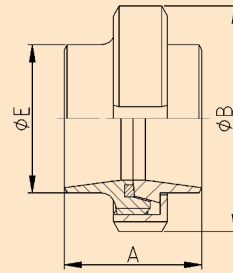
EPDM, FKM (Viton), HNBR, MVQ (silicone), NBR or PTFE (Teflon)

Pressure application (to 140°C)

NW10 – NW40	max. 40 bar
NW50 – NW100	max. 25 bar
NW125 – NW150	max. 16 bar
NW200	max. 10 bar

Peculiarities

EHEGD marked if provided with a SKS seal set.



WELD CONNECTION DIN 11851 ISO

DN / ISO	A	B	C	D	E	Kg	304L / EPDM	316L / EPDM
10 / 17,2	34,0	38,0			17,2	0,130	14734201	14738201
15 / 21,3	34,0	44,0			21,3	0,160	14734202	14738202
20 / 26,9	36,0	54,0			26,9	0,290	14734203	14738203
25 / 33,7	45,0	63,0			33,7	0,400	14734205	14738205
32 / 42,4	51,0	70,0			42,4	0,490	14734207	14738207
40 / 48,3	53,0	78,0			48,3	0,610	14734209	14738209
50 / 60,3	57,0	92,0			60,3	0,860	14734211	14738211
65 / 76,1	65,0	112,0			76,1	1,130	14734213	14738213
80 / 88,9	75,0	127,0			88,9	1,800	14734215	14738215
100 / 114,3	89,0	148,0			114,3	2,460	14734217	14738217
125 / 139,7	70,0	178,0			139,7	1,800	14734219	14738219
150 / 168,3	76,0	210,0			168,3	2,460	14734220	14738220

Thread fittings / couplings (BSP)

The so-called gas thread fittings or BSP fittings are in different versions available. The most current norm for the build-in dimensions of these fittings is the ISO 4144. In this norm the minimal dimensions are mentioned. Every producer is free to produce an own version with a minimal size value. Gas thread fittings can be produced of cast, rolled or forged materials, if the end product meets the needed test values. The thread is made according the ISO 7-1. Outside and inside thread can be conical with a 1:16 proportion. An exception on this is the inside thread of the nut. For this multiple thread norms are possible. The allowed pressure is depending on the operating temperature. The deviation is as follows:

-20° tot 40°C	20 bar
100°C	16.5 bar
150°C	15 bar
200°C	14 bar
220°C	13.5 bar

The standard package of SKS consists of 2 possibilities. These are fittings produced of cast materials or forged materials. Besides a difference in

quality, the forged fittings are deliverable with 3.1 certificates.

Material

Standard the parts are delivered in stainless steel 316 (cast) or 316Ti (forged)

Tolerances and specifications

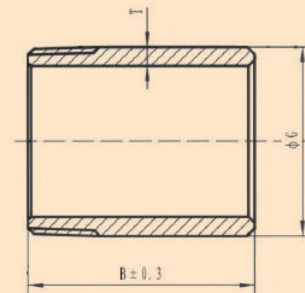
ISO 4144 (Threaded fittings), ISO 7-1 (conical thread), ISO 228-1 (cylindrical thread) and ISO 6708 (tube fittings and dimensions).

Versions

The bends, tees reducers or end pieces can be provided or an inside thread, outside thread, weldable end or with hose connections. The thread can be conical or cylindrical. The couplings are deliverable with a conical sealing, or a flat sealing with a PTFE seal (gasket)

Certificates

3.1 certificate according EN 10204 is only possible on the forged materials



WELDING NIPPLE SCH40 TUBE (CON. DIN 2999)

Inch	B (316)	B (316Ti)	G	T	E	Kg	316	316Ti
1/8"	30,0	30,0	10,0	2,0		0,01	75736246	75736246D
1/4"	30,0	30,0	14,0	2,2		0,02	75736252	75736252D
3/8"	35,0	35,0	17,2	2,3		0,02	75736258	75736258D
1/2"	40,0	40,0	21,4	2,8		0,04	75736264	75736264D
3/4"	40,0	40,0	26,7	2,9		0,05	75736271	75736271D
1"	40,0	40,0	33,4	3,4		0,08	75736277	75736277D
1 1/4"	50,0	50,0	42,2	3,6		0,14	75736283	75736283D
1 1/2"	50,0	50,0	48,3	3,7		0,15	75736289	75736289D
2"	60,0	60,0	60,4	3,9		0,23	75736296	75736296D
2 1/2"	50,0	50,0	76,0	5,2		0,32	75736299	75736299D
3"	70,0	70,0	88,9	5,5		0,46	75736305	75736305D
4"	85,0	80,0	114,3	5,9		0,84	75736309	75736309D



Pipetite®

The hygienic wall boot system

“A new approach to an old problem”

The current solutions for pipe connections through walls are visually and hygienically flawed. They often do not seal properly and are not flexible or uniform.

With the Pipetite® program, S.K.S. offers a true solution to this problem. Pipetite® has been developed based on the above practical shortcomings and can therefore be used in any environment. All models are self-sealing, hygienic and easy to fit.

Pipetite® is simple and effective

- 6 sizes for pipe diameters up to 380 mm
- Hygienic white silicone and 316 stainless steel
- Totally self-sealing and maintenance-free
- Vibration-absorbing
- Waterproof
- Resistant to temperatures up to 260°C (medium pipe)
- Quick and easy installation
- Long lifespan

Pipetite is available for wall connections (Pipetite® and ReBoot®), pipe connections (Pipe n Pipe®) or plate connections (Tube Grommets and Hose grommets).

As an option, the Pipetite® range can be made fireproof by using traditional firestop products.

Pipetite® can be used in many common situations. The connector surrounding the pipe is the same for all models. You trim the boot to size and slide the wall connector over the pipe. ReBoot® models can be easily fitted around the existing situation and are sealed with a clip.

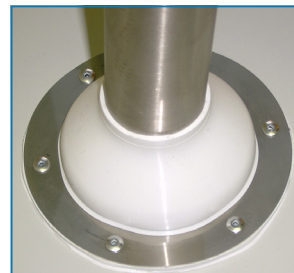
The actual connection with the application for the pipe is different

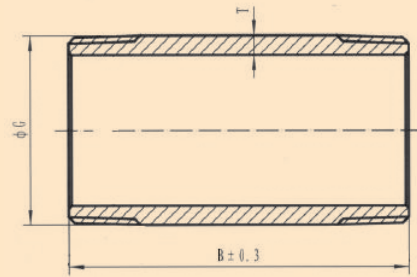


for every model.

- The Pipetite® and ReBoot® can be easily fitted on walls or ceilings.
- The Pipe n Pipe® is made for pipe connections of 4"/NW100 or 6"/NW150.
- Grommets are used for pipe or hose connections through machine walls or stainless steel wall plates up to 3 mm thick. Multi range is available.
- Flat. A flat range for tank or wall boot and cover.

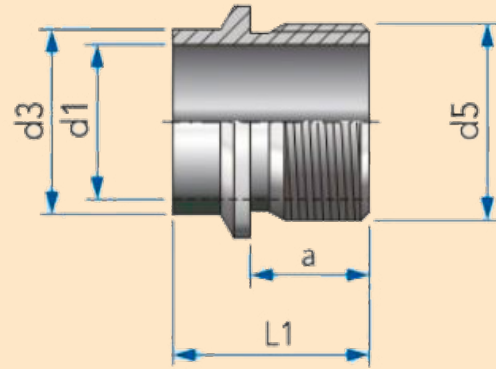
In case you need assistance in choosing the right Pipetite®, please contact us.



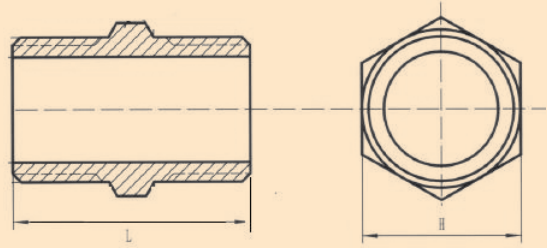


BARREL NIPPLE SCH40 TUBE

Inch	B 316	B 316Ti	G	T	E	Kg	316	316Ti
1/8"	40,0	40,0	10,0	2,00		0,02	75736475	75736475D
1/4"	40,0	40,0	14,0	2,20		0,02	75736481	75736481D
3/8"	40,0	40,0	17,2	2,30		0,03	75736487	75736487D
1/2"	60,0	60,0	21,4	2,77		0,07	75736494	75736494D
3/4"	60,0	60,0	26,7	2,87		0,07	75736500	75736500D
1"	60,0	60,0	33,4	3,38		0,12	75736506	75736506D
1 1/4"	80,0	80,0	42,2	3,56		0,21	75736513	75736513D
1 1/2"	80,0	80,0	48,3	3,68		0,24	75736519	75736519D
2"	100,0	100,0	60,4	3,91		0,42	75736525	75736525D
2 1/2"	100,0	100,0	76,0	5,16		0,53	75736529	75736529D
3"	120,0	120,0	88,9	5,49		0,76	75736535	75736535D
4"	150,0	150,0	114,3	5,87		1,30	75736537	75736537D

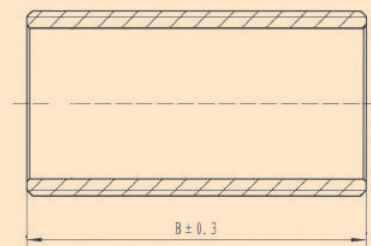
**SHOULDER NIPPLE DIN EN10357**

DN	d1	d3	d5	a	L1	Kg	316
10	10	13	G 3/8	12	25	0,02	75738201
15	16	19	G 1/2	15	28	0,03	75738202
20	20	23	G 3/4	15	28	0,05	75738203
25	26	29	G1	20	33	0,07	75738205
32	32	35	G1 1/4	20	34	0,12	75738207
40	38	41	G1 1/2	20	35	0,16	75738209
50	50	53	G2	22	37	0,21	75738211
65	66	70	G2 1/2	22	37	0,27	75738213
80	81	85	G3	25	40	0,28	75738215
100	100	104	G4	30	46	0,69	75738217



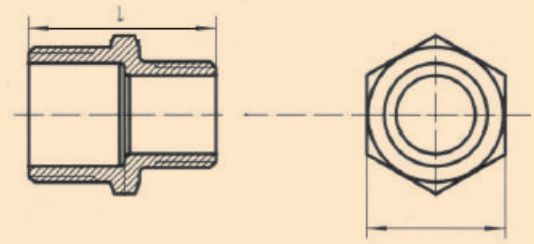
HEXAGON NIPPLE EQUAL ISO 4144 N1

Inch	L casted	L forged	C	D	E	Kg	316L casted	316Ti forged
1/8"	20,0	22,0				0,01	75736230	75736230D
1/4"	25,0	24,0				0,02	75736231	75736231D
3/8"	27,0	28,0				0,03	75736232	75736232D
1/2"	34,0	34,0				0,05	75736233	75736233D
3/4"	36,5	40,0				0,09	75736234	75736234D
1"	42,0	46,0				0,13	75736235	75736235D
1 1/4"	47,5	52,0				0,21	75736236	75736236D
1 1/2"	47,5	54,0				0,26	75736237	75736237D
2"	57,0	62,0				0,43	75736238	75736238D
2 1/2"	61,0	70,0				0,63	75736239	75736239D
3"	67,5	78,0				0,83	75736240	75736240D



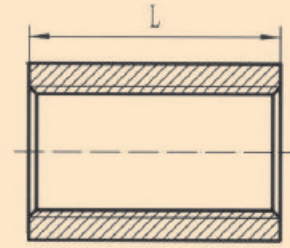
RUNNING NIPPLE (DIN/ISO 228)

Inch	B casted	B forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	16,0	16,0				0,01	75736215	75736215D
1/4"	18,0	18,0				0,01	75736216	75736216D
3/8"	22,0	22,0				0,02	75736217	75736217D
1/2"	25,0	25,0				0,02	75736218	75736218D
3/4"	30,0	30,0				0,03	75736219	75736219D
1"	35,0	35,0				0,06	75736220	75736220D
1 1/4"	38,0	38,0				0,07	75736221	75736221D
1 1/2"	38,0	38,0				0,08	75736222	75736222D
2"	45,0	45,0				0,14	75736223	75736223D
2 1/2"	55,0	55,0				0,24	75736224	75736224D
3"	60,0	60,0				0,30	75736225	75736225D



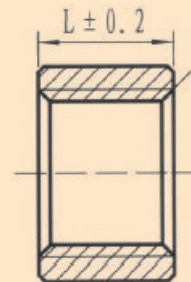
HEXAGON NIPPLE REDUCING ISO 4144 N2

Inch	L casted	L forged	hexagon	octagon	decagon	Kg	316 casted	316Ti forged
1/4" x 1/8"	22,5	25,0	15,0			0,04	75736313	75736313D
3/8" x 1/8"	24,0	25,5	18,0			0,04	75736314	75736314D
3/8" x 1/4"	26,5	29,0	18,0			0,04	75736315	75736315D
1/2" x 1/8"	27,5	30,0	22,0			0,08	75736316	75736316D
1/2" x 1/4"	30,0	33,0	22,0			0,08	75736317	75736317D
1/2" x 3/8"	30,5	33,5	22,0			0,08	75736318	75736318D
3/4" x 1/8"	29,0	35,0		28,0		0,10	75736319	75736319D
3/4" x 1/4"	31,5	35,0		28,0		0,10	75736320	75736320D
3/4" x 3/8"	32,0	37,0		28,0		0,11	75736321	75736321D
3/4" x 1/2"	35,5	40,5		28,0		0,11	75736322	75736322D
1" x 1/4"	34,5	40,0		35,0		0,18	75736324	75736324D
1" x 3/8"	35,00	40,5		35,0		0,18	75736325	75736325D
1" x 1/2"	38,5	44,0		35,0		0,18	75736326	75736326D
1" x 3/4"	39,5	45,5		35,0		0,15	75736327	75736327D
1 1/4" x 1/2"	41,5	48,0		43,5		0,27	75736331	75736331D
1 1/4" x 3/4"	42,5	49,5		43,5		0,27	75736332	75736332D
1 1/4" x 1"	45	52,0		43,5		0,24	75736333	75736333D
1 1/2" x 1/2"	41,5	48,0		49,5		0,38	75736337	75736337D
1 1/2" x 3/4"	42,5	52,0		49,5		0,35	75736338	75736338D
1 1/2" x 1"	45	52,0		49,5		0,31	75736339	75736339D
1 1/2" x 1 1/4"	47,5	54,0		49,5		0,31	75736340	75736340D
2" x 1"	50	59,0		62,0		0,58	75736344	75736344D
2" x 1 1/4"	52,5	62,0		62,0		0,52	75736345	75736345D
2" x 1 1/2"	52,5	62,0		62,0		0,53	75736346	75736346D
2 1/2" x 2"	59	73,0			77,5	0,81	75736352	75736352D
3" x 1 1/2"	64,5	76,0			90,5	1,20	75736357	75736357D
3" x 2"	62,5	78,0			90,5	1,10	75736358	75736358D
3" x 2 1/2"	64,5	82,0			90,5	1,10	75736359	75736359D



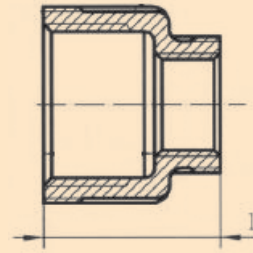
SOCKET ISO 4144 S2

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	16,0	17,0				0,02	75736121	75736121D
1/4"	24,0	25,0				0,03	75736122	75736122D
3/8"	25,0	26,0				0,03	75736123	75736123D
1/2"	34,0	34,0				0,07	75736124	75736124D
3/4"	35,5	36,0				0,09	75736125	75736125D
1"	41,0	43,0				0,14	75736126	75736126D
1 1/4"	47,0	48,0				0,21	75736127	75736127D
1 1/2"	47,0	48,0				0,29	75736128	75736128D
2"	56,0	56,0				0,40	75736129	75736129D
2 1/2"	64,0	65,0				0,68	75736130	75736130D
3"	70,0	71,0				0,97	75736131	75736131D
4"	82,0	83,0				1,80	75736132	75736132D



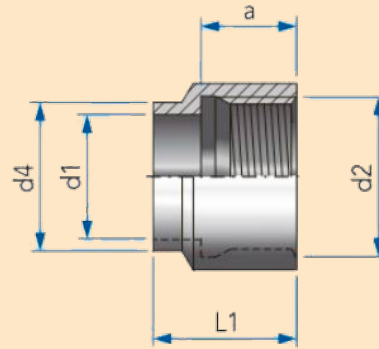
HALF COUPLING ISO 4144 S1

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	8,5	8,0				0,01	75736200	75736200D
1/4"	12,5	11,0				0,01	75736201	75736201D
3/8"	13,0	12,0				0,02	75736202	75736202D
1/2"	15,0	15,0				0,03	75736203	75736203D
3/4"	17,5	16,0				0,04	75736204	75736204D
1"	21,0	20,0				0,06	75736205	75736205D
1 1/4"	23,0	22,0				0,09	75736206	75736206D
1 1/2"	23,0	22,0				0,13	75736207	75736207D
2"	26,0	26,0				0,19	75736208	75736208D
2 1/2"	30,0	30,0				0,30	75736209	75736209D
3"	32,0	33,0				0,45	75736210	75736210D

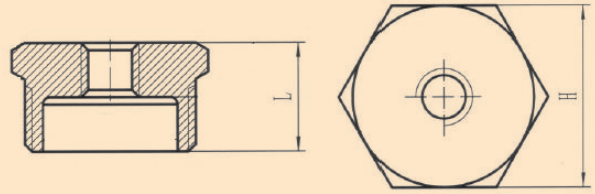


REDUCING SOCKET ISO 4144 S3

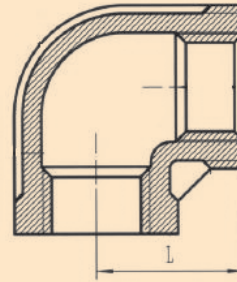
Inch	L casted	L forged	C	D	E	Kg	316 casted	316 forged
1/4" x 1/8"	25,0	26,0				0,04	75736136	75736136D
3/8" x 1/8"	26,0	-				0,04	75736137	-
3/8" x 1/4"	26,0	30,0				0,04	75736138	75736138D
1/2" x 1/8"	34,0	-				0,08	75736139	-
1/2" x 1/4"	34,0	-				0,08	75736140	-
1/2" x 3/8"	34,0	34,0				0,08	75736141	75736141D
3/4" x 1/8"	36,0	-				0,10	75736142	-
3/4" x 1/4"	36,0	-				0,10	75736143	-
3/4" x 3/8"	36,0	38,0				0,11	75736144	75736144D
3/4" x 1/2"	36,0	40,0				0,11	75736145	75736145D
1" x 1/4"	42,0	-				0,18	75736147	-
1" x 3/8"	42,0	44,0				0,18	75736148	75736148D
1" x 1/2"	42,0	44,0				0,18	75736149	75736149D
1" x 3/4"	42,0	44,0				0,15	75736150	75736150D
1 1/4" x 1/2"	48,0	50,0				0,27	75736154	75736154D
1 1/4" x 3/4"	48,0	50,0				0,27	75736155	75736155D
1 1/4" x 1"	48,0	52,0				0,24	75736156	75736156D
1 1/2" x 1/2"	52,0	-				0,38	75736160	-
1 1/2" x 3/4"	52,0	53,0				0,35	75736161	75736161D
1 1/2" x 1"	52,0	53,0				0,31	75736162	75736162D
1 1/2" x 1 1/4"	52,0	53,0				0,31	75736163	75736163D
2" x 1"	58,0	58,0				0,58	75736167	75736167D
2" x 1 1/4"	58,0	58,0				0,52	75736168	75736168D
2" x 1 1/2"	58,0	58,0				0,53	75736169	75736169D
2 1/2" x 2"	65,0	66,0				0,81	75736175	75736175D
3" x 2"	72,0	73,0				1,10	75736181	75736181D
3" x 2 1/2"	72,0	73,0				1,25	75736182	75736182D

**SOCKET DIN EN 10357**

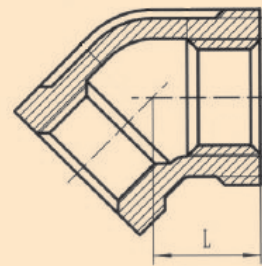
DIN	d1	d2	d4	a	L1	Kg	316
10	10	G3/8	13	12	20	0,02	75738101
15	16	G1/2	19	15	25	0,05	75738102
20	20	G3/4	23	15	25	0,05	75738103
25	26	G1	29	20	30	0,08	75738105
32	32	G1 1/4	35	20	30	0,13	75738107
40	38	G1 1/2	41	20	30	0,19	75738109
50	50	G2	53	22	23	0,23	75738111
65	66	G2 1/2	70	22	32	0,30	75738113
80	81	G3	85	25	37	0,51	75738115
100	100	G4	104	30	45	0,86	75738117

**REDUCING BUSHING ISO 4144 B1**

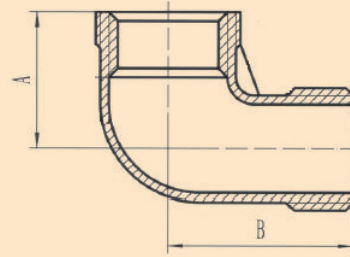
Inch	L forged	L casted	Hexagon	Octagon	D	Kg	316 casted	316Ti forged
1/4" x 1/8"	16,0	17,0	14,0			0,02	75736541	75736541D
3/8" x 1/8"	16,5	17,5	18,0			0,03	75736542	75736542D
3/8" x 1/4"	16,5	17,5	18,0			0,03	75736543	75736543D
1/2" x 1/8"	20,0	21,0	22,0			0,05	75736544	75736544D
1/2" x 1/4"	20,0	21,0	22,0			0,04	75736545	75736545D
1/2" x 3/8"	20,0	21,0	22,0			0,02	75736546	75736546D
3/4" x 1/8"	21,0	24,5	27,5			0,10	75736547	75736547D
3/4" x 1/4"	21,0	24,5	27,5			0,09	75736548	75736548D
3/4" x 3/8"	21,0	24,5	27,5			0,07	75736549	75736549D
3/4" x 1/2"	21,0	24,5	27,5			0,05	75736550	75736550D
1" x 1/4"	24,0	27,0	34,5			0,15	75736552	75736552D
1" x 3/8"	24,0	27,0	34,5			0,15	75736553	75736553D
1" x 1/2"	24,0	27,0	34,5			0,12	75736554	75736554D
1" x 3/4"	24,0	27,0	34,5			0,07	75736555	75736555D
1 1/4" x 1/2"	27,0	32,5	43,0			0,30	75736559	75736559D
1 1/4" x 3/4"	27,0	32,5	43,0			0,19	75736560	75736560D
1 1/4" x 1"	27,0	32,5	43,0			0,12	75736561	75736561D
1 1/2" x 1/2"	28,5	32,5	49,0			0,35	75736565	75736565D
1 1/2" x 3/4"	28,5	32,5	49,0			0,36	75736566	75736566D
1 1/2" x 1"	28,5	32,5	49,0			0,26	75736567	75736567D
1 1/2" x 1 1/4"	28,5	32,5	49,0			0,13	75736568	75736568D
2" x 1/2"	32,0	40,0	61,0			0,75	75736570	75736570D
2" x 3/4"	32,0	40,0	61,0			0,74	75736571	75736571D
2" x 1"	32,0	40,0	61,0			0,68	75736572	75736572D
2" x 1 1/4"	32,0	40,0	61,0			0,52	75736573	75736573D
2" x 1 1/2"	32,0	40,0	61,0			0,40	75736574	75736574D
2 1/2" x 2"	37,0	46,0		76,0		0,54	75736580	75736580D
3" x 2"	40,0	51,5		90,0		1,24	75736586	75736586D
3" x 2 1/2"	40,0	51,5		90,0		0,74	75736587	75736587D

**ELBOW IN/INSIDE THREAD 90° ISO 4144 E1**

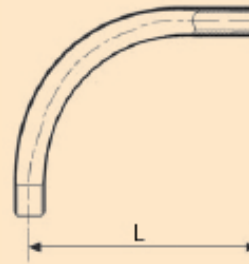
Inch	L casted	L forged	C	D	E	Kg	316 casted	316 forged
1/8"	17,0	20,0				0,03	75736650	75736650D
1/4"	19,0	20,0				0,04	75736651	75736651D
3/8"	23,0	22,5				0,06	75736652	75736652D
1/2"	27,5	28,0				0,11	75736653	75736653D
3/4"	32,0	31,0				0,17	75736654	75736654D
1"	38,0	37,0				0,29	75736655	75736655D
1 1/4"	45,0	44,5				0,46	75736656	75736656D
1 1/2"	48,0	48,0				0,52	75736657	75736657D
2"	57,0	56,0				0,95	75736658	75736658D
2 1/2"	69,0	69,0				1,57	75736659	75736659D
3"	78,0	78,0				2,28	75736660	75736660D

**ELBOW 45° IN/INSIDE THREAD ISO 4144 E3**

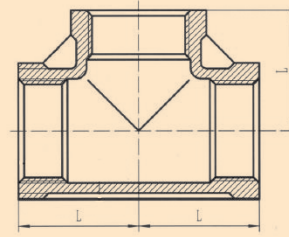
Inch	L casted	L forged	C	D	E	Kg	316 casted	316 forged
1/8"	16,0	-				0,03	75736665	75736665D
1/4"	17,0	19,0				0,04	75736666	75736666D
3/8"	19,0	21,0				0,06	75736667	75736667D
1/2"	21,0	22,0				0,11	75736668	75736668D
3/4"	25,0	25,0				0,17	75736669	75736669D
1"	29,0	29,0				0,29	75736670	75736670D
1 1/4"	33,0	33,0				0,46	75736671	75736671D
1 1/2"	37,0	36,0				0,52	75736672	75736672D
2"	42,0	43,0				0,95	75736673	75736673D
2 1/2"	49,0	-				1,57	75736674	75736674D
3"	54,0	-				2,28	75736675	75736675D
4"	64,0	-				3,68	75736676	75736676D

**ELBOW IN/OUTSIDE THREAD ISO 4144 E4**

Inch	A casted	B casted	A forged	B forged	E	Kg	316 casted	316 forged
1/8"	17,0	26,0	20,0	26,0		0,03	75736680	75736680D
1/4"	19,0	28,0	20,0	30,0		0,04	75736681	75736681D
3/8"	23,0	30,0	24,0	36,0		0,06	75736682	75736682D
1/2"	27,0	36,0	28,0	41,0		0,11	75736683	75736683D
3/4"	32,0	40,0	34,0	48,0		0,17	75736684	75736684D
1"	38,0	47,0	39,0	54,0		0,29	75736685	75736685D
1 1/4"	45,0	55,0	46,0	62,0		0,46	75736686	75736686D
1 1/2"	48,0	57,0	48,0	68,0		0,52	75736687	75736687D
2"	57,0	70,0	57,0	83,0		0,95	75736688	75736688D
2 1/2"	69,0	83,0				1,57	75736689	-
3"	78,0	94,0				2,28	75736690	-

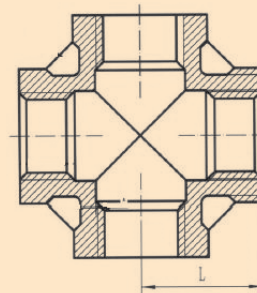
**BEND 90° OUT/OUTSIDE THREAD**

Inch	L 316	L 316Ti	C	D	E	Kg	316	316Ti
1/8"	50,0	50,0				0,05	75736740	75736740D
1/4"	60,0	60,0				0,10	75736741	75736741D
3/8"	70,0	70,0				0,15	75736742	75736742D
1/2"	80,0	80,0				0,23	75736743	75736743D
3/4"	100,0	100,0				0,35	75736744	75736744D
1"	120,0	120,0				0,61	75736745	75736745D
1 1/4"	140,0	140,0				0,93	75736746	75736746D
1 1/2"	160,0	160,0				1,18	75736747	75736747D
2"	190,0	190,0				1,95	75736748	75736748D
2 1/2"	-	240,0					-	75736749D
3"	-	290,0					-	75736750D
4"	-	375,0					-	75736751D



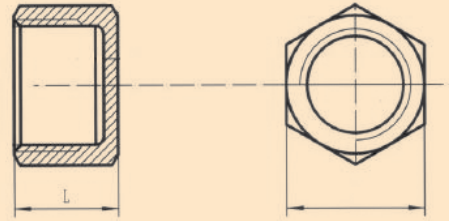
TEE 3X INSIDE THREAD ISO 4144 T1

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	17,0	16,0				0,04	75736635	75736635D
1/4"	19,0	21,0				0,05	75736636	75736636D
3/8"	23,0	25,0				0,08	75736637	75736637D
1/2"	27,5	28,0				0,15	75736638	75736638D
3/4"	32,0	33,0				0,26	75736639	75736639D
1"	38,0	38,0				0,37	75736640	75736640D
1 1/4"	45,0	45,0				0,61	75736641	75736641D
1 1/2"	48,0	50,0				0,91	75736642	75736642D
2"	57,0	58,0				1,18	75736643	75736643D
2 1/2"	69,0	75,0				1,88	75736644	75736644D
3"	78,0	85,0				3,37	75736645	75736645D



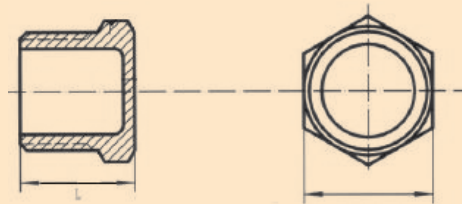
CROSS 4X INSIDE THREAD ISO 4144 X1

Inch	L casted	L forged	C	D	E	Kg	316 casted	316 forged
1/8"	17,0	16,0				0,04	75736695	75736695D
1/4"	19,0	19,8				0,05	75736696	75736696D
3/8"	23,0	24,0				0,08	75736697	75736697D
1/2"	27,5	28,0				0,15	75736698	75736698D
3/4"	32,0	33,0				0,26	75736699	75736699D
1"	38,0	37,5				0,37	75736700	75736700D
1 1/4"	45,0	45,5				0,61	75736701	75736701D
1 1/2"	48,0	49,5				0,91	75736702	75736702D
2"	57,0	57,5				1,18	75736703	75736703D
2 1/2"	69,0	67,0				1,88	75736704	75736704D
3"	78,0	78,0				3,37	75736705	75736705D
4"	96,0	96,0				4,88	75736706	75736706D



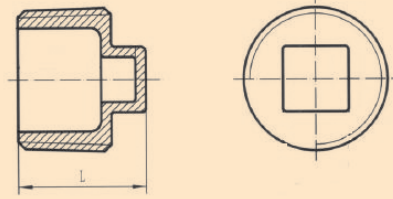
HEXAGON CAP ISO 4144 C1

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	13,5	13,0				0,01	75736785	75736785D
1/4"	17,0	17,0				0,01	75736786	75736786D
3/8"	17,5	18,0				0,03	75736787	75736787D
1/2"	21,0	22,0				0,06	75736788	75736788D
3/4"	22,5	24,0				0,08	75736789	75736789D
1"	26,0	28,0				0,11	75736790	75736790D
1 1/4"	29,0	30,0				0,24	75736791	75736791D
1 1/2"	29,0	31,0				0,25	75736792	75736792D
2"	33,5	35,0				0,52	75736793	75736793D
2 1/2"	38,5	40,0				0,74	75736794	75736794D
3"	42,0	45,0				0,86	75736795	75736795D



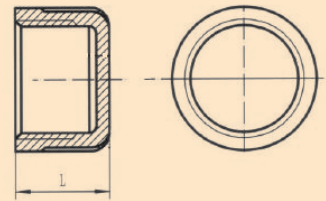
PLUG ISO 4144 P2

Inch	L casted	L forged	hexagon	octagon	decagon	Kg	316 casted	316Ti forged
1/8"	12,0	13,0	11			0,01	75736830	75736830D
1/4"	14,5	17,0	15			0,02	75736831	75736831D
3/8"	16,0	17,0	18			0,03	75736832	75736832D
1/2"	19,5	21,0	22			0,05	75736833	75736833D
3/4"	21,0	24,0		28		0,11	75736834	75736834D
1"	24,0	27,0		35		0,19	75736835	75736835D
1 1/4"	27,0	32,0		43,5		0,36	75736836	75736836D
1 1/2"	27,0	33,0		49,5		0,48	75736837	75736837D
2"	32,0	38,0		62		0,90	75736838	75736838D
2 1/2"	34,0	45,0			77,5	1,64	75736839	75736839D
3"	37,5	48,0			90,5	2,32	75736840	75736840D



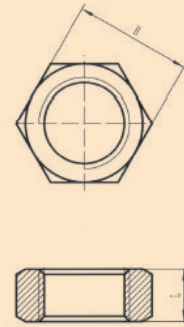
SQUARE PLUG ISO 4144 P1

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	13,0	15,0				0,01	75736875	75736875D
1/4"	15,5	18,0				0,02	75736876	75736876D
3/8"	16,0	20,0				0,03	75736877	75736877D
1/2"	20,5	28,0				0,04	75736878	75736878D
3/4"	21,5	30,0				0,09	75736879	75736879D
1"	25,0	32,0				0,16	75735880	75735880D
1 1/4"	27,5	35,0				0,29	75735881	75735881D
1 1/2"	28,5	37,0				0,39	75735882	75735882D
2"	33,0	42,0				0,69	75735883	75735883D
2 1/2"	37,0	46,0				1,17	75735884	75735884D
3"	42,0	50,0				1,74	75734885	75734885D
4"	48,0	60,0				2,35	75734886	75734886D



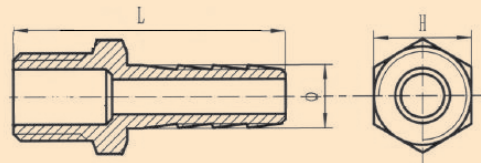
ROUND CAP ISO 4144 P1

Inch	L	B	C	D	E	Kg	316
1/8"	13,5					0,02	75736805
1/4"	17,0					0,03	75736806
3/8"	17,5					0,03	75736807
1/2"	21,0					0,05	75736808
3/4"	22,5					0,09	75736809
1"	26,0					0,14	75736810
1 1/4"	29,0					0,22	75736811
1 1/2"	29,0					0,28	75736812
2"	33,5					0,48	75736813
2 1/2"	38,5					0,75	75736814
3"	42,0					1,13	75736815



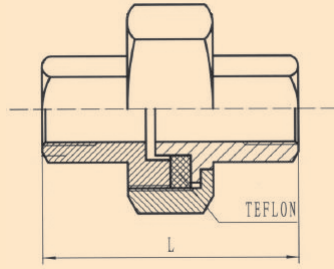
HEX. NUT

Inch	L	Hexagon	Octagon	Decagon	E	Kg	316
1/8"	5,0	15,0				0,01	75736620
1/4"	7,0	18,0				0,02	75736621
3/8"	8,0	22,0				0,03	75736622
1/2"	10,0	27,0				0,04	75736623
3/4"	11,0		32,0			0,05	75736624
1"	10,0		40,0			0,08	75736625
1 1/4"	11,0		48,0			0,13	75736626
1 1/2"	12,0		55,0			0,13	75736627
2"	13,0		68,0			0,22	75736628
2 1/2"	16,0			85,0		0,40	75736629
3"	19,0			100,0		0,48	75736630
4"	20,0			125,0		0,55	75736631



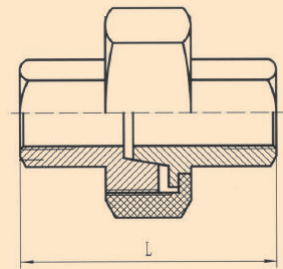
HOSE NIPPLE

Inch	L forged	Ø forged	L casted	Ø casted	hexagon	Kg	316 casted	316Ti forged
1/8"	38,0	6,0	33,0	6,0	11,0	0,02	75736920	75736920D
1/4"	42,5	9,0	46,5	9,0	17,0	0,02	75736921	75736921D
3/8"	49,0	11,0	57,5	11,0	19,5	0,04	75736922	75736922D
1/2"	57,5	13,0	65,5	15,0	22,0	0,06	75736923	75736923D
3/4"	66,0	20,0	71,0	20,0	30,5	0,10	75736924	75736924D
1"	76,0	25,0	75,0	25,0	36,5	0,16	75736925	75736925D
1 1/4"	79,0	33,0	81,0	33,0	46,5	0,35	75736926	75736926D
1 1/2"	83,0	40,0	95,5	40,0	50,5	0,43	75736927	75736927D
2"	92,0	51,5	100,5	51,5	60,5	0,78	75736928	75736928D
2 1/2"	99,0	67,0	102,0	67,0	81,0	1,58	75736929	-



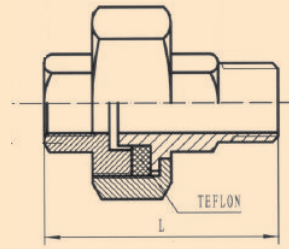
UNION FLAT IN-/INSIDE THREAD ISO 4144 U1

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	30,0	32,0				0,08	75736061	75736061D
1/4"	33,5	38,0				0,07	75736062	75736062D
3/8"	36,5	41,0				0,09	75736063	75736063D
1/2"	39,5	46,0				0,13	75736064	75736064D
3/4"	42,5	50,0				0,21	75736065	75736065D
1"	50,0	56,0				0,30	75736066	75736066D
1 1/4"	54,0	62,0				0,43	75736067	75736067D
1 1/2"	58,0	64,0				0,58	75736068	75736068D
2"	65,0	69,0				1,08	75736069	75736069D
2 1/2"	75,0	75,0				3,40	75736070	75736070D
3"	83,0	83,0				2,45	75736071	75736071D
4"	-	95,0				3,30	-	75736072D



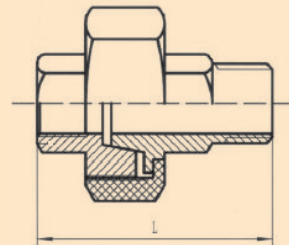
UNION CONICAL IN-/INSIDE THREAD ISO 4144 U4

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	30,0	32,0				0,06	75736001	75736001D
1/4"	33,5	38,0				0,11	75736002	75736002D
3/8"	36,5	41,0				0,18	75736003	75736003D
1/2"	39,5	46,0				0,24	75736004	75736004D
3/4"	42,5	50,0				0,35	75736005	75736005D
1"	50,0	56,0				0,56	75736006	75736006D
1 1/4"	54,0	62,0				0,69	75736007	75736007D
1 1/2"	58,0	64,0				0,86	75736008	75736008D
2"	65,0	69,0				1,21	75736009	75736009D
2 1/2"	75,0	75,0				1,84	75736010	75736010D
3"	83,0	83,0				2,62	75736011	75736011D
4"	-	95,0				3,30	-	75736012D



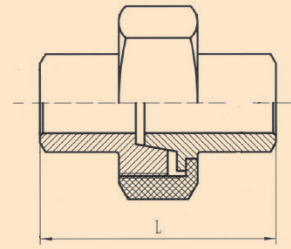
UNION FLAT IN-/OUTSIDE THREAD ISO 4144 U2

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	38,0	38,5				0,09	75736076	75736076D
1/4"	44,0	47,5				0,09	75736077	75736077D
3/8"	47,5	51,5				0,11	75736078	75736078D
1/2"	54,0	58,5				0,17	75736079	75736079D
3/4"	58,0	65,0				0,26	75736080	75736080D
1"	68,0	73,0				0,39	75736081	75736081D
1 1/4"	74,5	83,0				0,59	75736082	75736082D
1 1/2"	78,5	88,0				0,73	75736083	75736083D
2"	90,0	94,5				1,30	75736084	75736084D
2 1/2"	102,0	104,0				3,57	75736085	75736085D
3"	113,0	115,0				2,91	75736086	75736086D
4"	-	135,0				3,45	-	75736087D



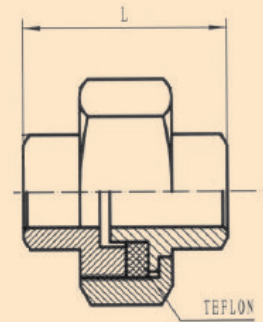
UNION CONICAL IN-/OUTSIDE THREAD ISO 4144 U5

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	38,0	38,5				0,07	75736016	75736016D
1/4"	44,0	47,5				0,12	75736017	75736017D
3/8"	47,5	51,5				0,20	75736018	75736018D
1/2"	54,0	58,5				0,29	75736019	75736019D
3/4"	58,0	65				0,42	75736020	75736020D
1"	68,0	73				0,67	75736021	75736021D
1 1/4"	74,5	83				0,90	75736022	75736022D
1 1/2"	78,5	88				1,09	75736023	75736023D
2"	90,0	94,5				1,53	75736024	75736024D
2 1/2"	102,0	104				2,32	75736025	75736025D
3"	113,0	115				3,42	75736026	75736026D
4"	-	135				4,12	-	75736027D



UNION CONICAL BW/BW

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	26,0	35,0				0,06	75736046	75736046D
1/4"	35,5	35,0				0,08	75736047	75736047D
3/8"	38,0	40,0				0,09	75736048	75736048D
1/2"	44,0	48,0				0,13	75736049	75736049D
3/4"	45,0	55,0				0,21	75736050	75736050D
1"	50,0	62,0				0,30	75736051	75736051D
1 1/4"	55,0	66,0				0,43	75736052	75736052D
1 1/2"	57,0	73,0				0,58	75736053	75736053D
2"	65,0	75,0				1,08	75736054	75736054D
2 1/2"	71,0	90,0				3,40	75736055	75736055D
3"	80,0	100,0				2,45	75736056	75736056D
4"	-	105,0				3,30	-	75736057D



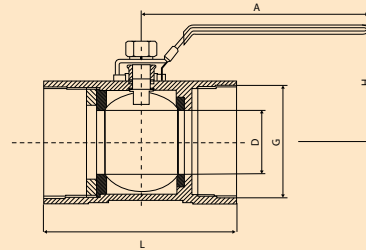
UNION FLAT BW/BW

Inch	L casted	L forged	C	D	E	Kg	316 casted	316Ti forged
1/8"	26,0	35				0,06	75736091	75736091D
1/4"	35,5	35				0,08	75736092	75736092D
3/8"	38,0	40				0,09	75736093	75736093D
1/2"	44,0	48				0,13	75736094	75736094D
3/4"	45,0	55				0,21	75736095	75736095D
1"	50,0	62				0,30	75736096	75736096D
1 1/4"	55,0	66				0,43	75736097	75736097D
1 1/2"	57,0	73				0,58	75736098	75736098D
2"	65,0	75				1,08	75736099	75736099D
2 1/2"	71,0	90				3,40	75736100	75736100D
3"	80,0	100				2,45	75736101	75736101D
4"	-	105				3,20	-	75736102D

Stainless steel ball valves

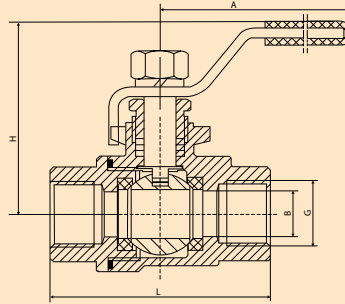
To complete the BSP / gas thread programme SKS has a wide range ball valves. In the reviews below, we show what is deliverable from stock. Besides that SKS has the possibilities for various other models. This can be vary in valves for the higher pressures, special connections or an other sort operating principle (pneumatic or electric). The thread connections have a conical thread according ISO 7-1 and DIN 2999-1 (BSP). The standard ball valves are "blow out proof" and resistance against ca. 69 bar (1000 PSI) at 40° C. For the higher pressures or applications with other demands we refer to the catalogue industrial valves. Off course you can also contact on of our employees.

The standard ball valves are applicable in applications with:
 Max. operating pressure 63 bar / 1000 PSI
 Temperature range of -20° to 132°C



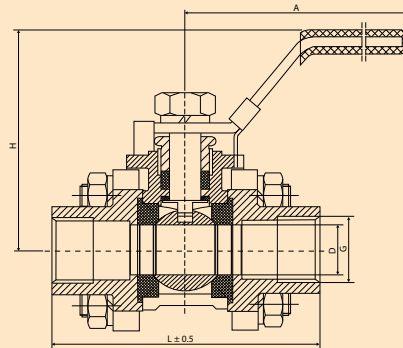
BALL VALVE 1-PIECE INSIDE THREADED REDUCED BORE WP= 63 BAR ISO

Inchb + (G)	D	L	H	A		Kg	316
0,25"	5,0	41,0	29,0	70,0		0,07	80136132
0,375"	7,0	46,0	30,0	70,0		0,10	80136134
0,5"	9,0	56,0	35,0	100,0		0,15	80136136
0,75"	12,5	60,0	37,0	100,0		0,26	80136138
1"	15,0	72,0	44,0	110,0		0,40	80136140
1,25"	20,0	78,0	49,0	110,0		0,65	80136142
1,5"	23,0	85,0	51,0	140,0		0,87	80136144
2"	32,0	100,0	64,0	140,0		1,46	80136146



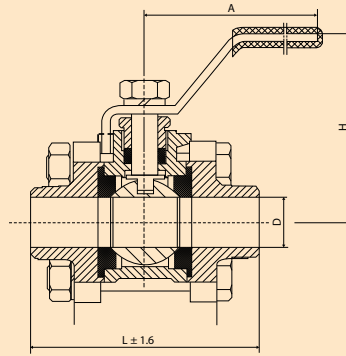
BALL VALVE 2-PIECE INSIDE THREADED, FULL BORE WP= 63 BAR ISO

Inch + (G)	D	L	H	A		Kg	316
0,25"	8,0	50,0	45,0	100,0		0,09	80136002
0,375"	12,0	60,0	53,0	100,0		0,13	80136004
0,5"	15,0	75,0	58,0	110,0		0,20	80136006
0,75"	20,0	80,0	64,0	120,0		0,33	80136008
1"	25,0	90,0	71,0	145,0		0,48	80136010
1,25"	32,0	110,0	76,0	145,0		0,72	80136012
1,5"	40,0	120,0	87,0	160,0		1,05	80136014
2"	50,0	140,0	97,0	170,0		1,62	80136016
2,5"	65,0	185,0	128,0	230,0		2,43	80136018
3"	80,0	205,0	137,0	260,0		3,23	80136020



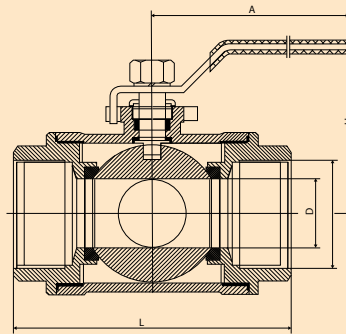
BALL VALVE 3-PIECE INSIDE THREADED FULL BORE ISO TOP, WP= 63 BAR ISO

Inch + (G)	D	L	H	A		Kg	316
0,25"	8,0	60,0	55,0	100,0		0,09	80136602
0,375"	10,0	60,0	55,0	100,0		0,13	80136603
0,5"	15,0	75,0	56,0	100,0		0,20	80136604
0,75"	20,0	80,0	62,0	125,0		0,33	80136605
1"	25,0	90,0	66,0	125,0		0,48	80136606
1,25"	32,0	110,0	77,0	130,0		0,72	80136607
1,5"	38,0	120,0	81,0	166,0		1,05	80136608
2"	50,0	140,0	107,0	190,0		1,62	80136609
2,5"	65,0	185,0	128,0	215,0		2,43	80136610
3"	80,0	205,0	117,0	253,0		3,23	80136611
4"	100,0	240,0	158,0	285,0		6,40	80136612



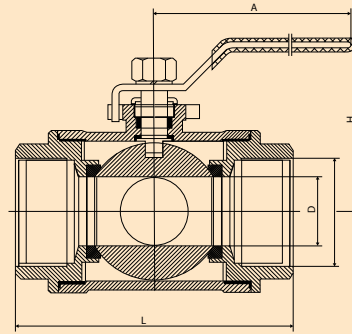
BALL VALVE 3-PIECE BW FULL BORE ISO TOP, WP= 63 BAR ISO

Inch	D	L	H	A		Kg	316 manual
0,25"	8,0	60	55,0	100,0		0,09	80136252
0,375"	10,0	60	55,0	100,0		0,13	80136254
0,5"	15,0	68	58,0	110,0		0,20	80136256
0,75"	20,0	78	64,0	120,0		0,33	80136258
1"	25,0	86	69,0	145,0		0,48	80136260
1,25"	32,0	110	79,0	145,0		0,72	80136262
1,5"	38,0	117	84,0	160,0		1,05	80136264
2"	50,0	140	110,0	170,0		1,62	80136266
2,5"	65,0	164	122,0	230,0		2,43	80136268
3"	80,0	213	145,0	260,0		3,23	80136270
4"	100,0	240	155,0	300,0		6,40	80136272



3-WAY BALL VALVE INSIDE THREADED L-BORE, WP= 63 BAR ISO

Inch	D	L	H	A		Kg	316 manual
0,25"	8,0	60	55,0	100,0		0,09	80136402
0,375"	10,0	60	55,0	100,0		0,13	80136404
0,5"	12,0	73	57,0	110,0		0,20	80136406
0,75"	15,0	80	61,0	120,0		0,33	80136408
1"	18,0	88	67,0	145,0		0,48	80136410
1,25"	25,0	125	81,0	145,0		0,72	80136412
1,5"	32,0	136	97,0	160,0		1,05	80136414
2"	38,0	158	108,0	170,0		1,62	80136416
2,5"	50,0	200	130,0	230,0		2,43	80136418
3"	65,0	240	140,0	260,0		3,23	80136420



3-WAY BALL VALVE INSIDE THREADED T-BORE, WP= 63 BAR ISO

Inch	D	L	H	A		Kg	316 manual
0,25"	8,0	60	55,0	100,0		0,09	80136452
0,375"	10,0	60	55,0	100,0		0,13	80136454
0,5"	12,0	73	57,0	110,0		0,20	80136456
0,75"	15,0	80	61,0	120,0		0,33	80136458
1"	18,0	88	67,0	145,0		0,48	80136460
1,25"	25,0	125	81,0	145,0		0,72	80136462
1,5"	32,0	136	97,0	160,0		1,05	80136464
2"	38,0	158	108,0	170,0		1,62	80136466
2,5"	50,0	200	130,0	230,0		2,43	80136468
3"	65,0	240	140,0	260,0		3,23	80136470



Complementary materials

To complete the “One stop shopping” concept, SKS also provides a range of wastage products. This package is based on the delivery history of the different customers of SKS. With the choice of the materials, SKS gives the opportunity to save some costs by combine your technical purchases. SKS as a logistic partner is an added value, based on reducing the quantity of your suppliers. Besides the broad package of products, we also can adapt out our range to your needs.

For the mounting and assembly of the different tube components, you need the necessary mounting materials.

To complete your orders SKS included the most occurring parts in its package. The possibilities are:

- Tube caps (plastic)
- Nuts and bolts
- Hose clamps
- Hinges

Mounting materials

Description	art.nr. SKS
Scotch brite 100 mm (per role a 10 metre)	90900785
RVS shine (detergent)	98100787
Pickle paste transparent per pot a 2 kg	98100788
Pickle paste white per pot a 2 kg	98100789
Acid-resistant brushes	98300920
PTFE (Teflon) tape with Gastec mark (0,1mm L= 12 metre.) kl.0, 2	90900790
Screw-thread seal Loctite 542	90900791
Blade disk con. 115x22 K60 zirk	90900840
Grinding disk 115x7x22,2 RVS TR5296	98300901
Grinding disk 178x7x22,2 RVS TR5362	98300902
Cutting disk 115x2x22,2 RVS TR2073	98300904
Cutting disk 178x2x22,2 RVS TR3131	98300905
Molybdeen tester (flask)	98300910

Flange connections (ASTM A182/ANSI B16.5)

For industrial tubes, the most applied connection is with flanges. Much equipment is provided with a flange connection, with this they can taken out of the tube or system pressure free. Worldwide, the installation materials for the industrial application according ANSI / ASTM are the most applied. The original American norm ranges are complementary to each other. The ANSI range specifies the dimensions, while the ASTM range describes the quality. Together they are a complete product specification and that's why they are mentioned together. The components of the American norm ANSI / ASTM are often used in combination with the sizes according ISO 1127. This is because the dimensions and sizes do match approximately with each other.

The EN 1092-1 norm is the current European norm for flanges and with this it replaces all DIN and ISO norms. The norm EN 1092-1 is linked directly with EN 10217-7 for the tubes and EN 10253-4 for the weld fittings. So it is also linked directly to the PED. (Pressure Equipment Directive 97/23/EC)

Stainless steel sorts; 304, 304L, 316, 316L or 321

Bolts and nuts (EN 1515-1 and EN 1515-2)

The applied bolts and nuts determine the strength of the connection and have to be chosen based on the applied pressure and material of the flanges.

Gaskets (EN 1514)

There are a lot of different gasket sorts and brand options possible for a flange connection. SKS provides the following gaskets as the standard: CR65 (natural rubber), Uniflon (PTFE base), Novus 34 (heat resistance) and the often applied graphite gaskets.

Certificates

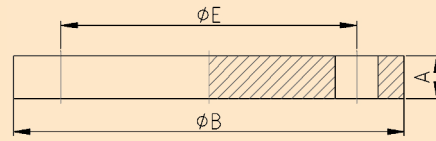
MTR (Mill Test Reports) or 3.1 certificate according EN 10204

Material according ASTM UNS



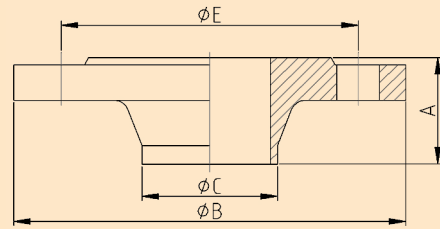
COLLAR WITH ALUMIUM FLANGES (ISO)

DN / MM	A	B	Collar 304	Collar 316	Flange Alu.	Flange Alu. Coated
10 / 17,2	17,2	2	52134111	52138111	62301010	62601010
15 / 21,3	21,3	2	52134159	52138159	62301015	62601015
20 / 26,9	26,9	2,0	52134223	52138223	62301020	62601020
25 / 33,7	33,7	2,0	52134296	52138296	62301025	62601025
32 / 42,4	42,4	2,0	52134383	52138383	62301032	62601032
40 / 48,3	48,3	2,0	52134428	52138428	62301040	62601040
50 / 60,3	60,3	2,0	52134519	52138519	62301050	62601050
65 / 76,1	76,1	2,0	52134594	52138594	62301065	62601065
80 / 88,9	88,9	2,0	52134640	52138640	62301080	62601080
100 / 114,3	114,3	2,0	52134722	52138722	62301100	62601100
125 / 139,7	139,7	2,0	52134774	52138774	62301125	62601125
150 / 168,3	168,3	2,0	52134807	52138807	62301150	62601150
200 / 219,1	219,1	2,0	52134848	52138848	62301200	62601200
300 / 323,9	323,9	3,0	52134917	52138917	62301300	62601300



BLINDFLANGE ALUMINIUM EN 1092-1 TYPE 05

DN	A	B	E	nr. Bolts	holes	Kg	Blank	Epox. Coating
10	12,0	85,0	55	4	14	0,17	63101010	63201010
15	12,0	95,0	65	4	14	0,19	63101015	63201015
20	12,0	105,0	75	4	14	0,22	63101020	63201020
25	12,0	115,0	85	4	14	0,27	63101025	63201025
32	16,0	140,0	100	4	18	0,54	63101032	63201032
40	16,0	150,0	110	4	18	0,61	63101040	63201040
50	16,0	165,0	125	4	18	0,73	63101050	63201050
65	16,0	185,0	145	8	18	0,90	63101065	63201065
80	18,0	200,0	160	8	18	1,05	63101080	63201080
100	18,0	220,0	180	8	18	1,20	63101100	63201100
125	18,0	250,0	210	8	18	1,50	63101125	63201125
150	18,0	285,0	240	8	22	1,90	63101150	63201150
200	20,0	340,0	295	8	22	2,70	63101200	63201200
300	22,0	445,0	400	12	22	4,20	63101300	63201300

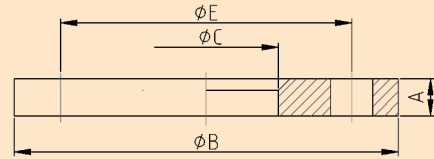


WELD NECK FLANGE ASTM A182 ANSI B16.5 150 LBS FFWN RF

Inch	A	B	C	E	nr. Bolts	Ø holes	Kg	304(L)	316L
1/2"	47,8	88,9	21,3	60,5	4	15,7	0,48	70134058	70138058
3/4"	52,3	98,6	26,7	69,9	4	15,7	0,71	70134075	70138075
1"	55,6	108,0	33,4	79,2	4	15,7	1,01	70134092	70138092
1 1/4"	57,2	117,3	42,2	88,9	4	15,7	1,33	70134109	70138109
1 1/2"	62,0	127,0	48,3	98,6	4	15,7	1,72	70134126	70138126
2"	63,5	152,4	60,3	120,7	4	19,1	2,58	70134146	70138146
2 1/2"	69,9	177,8	73,0	137,7	4	19,1	4,11	70134173	70138173
3"	69,9	190,5	88,9	152,4	4	19,1	4,92	70134198	70138198
4"	76,2	228,6	114,3	190,5	8	19,1	6,84	70134240	70138240
6"	88,9	279,4	168,3	241,3	8	22,4	10,60	70134304	70138304
8"	101,6	342,9	219,1	298,5	8	22,4	17,60	70134400	70138400

WELD NECK FLANGE ASTM A182 ANSI B16.5 300 LBS FFWN RF

Inch	A	B	C	E	nr. Bolts	Ø holes	Kg	304(L)	316L
1/2"	52,3	95,2	21,3	66,5	4	15,7	0,75	70234058	70238058
3/4"	57,1	117,3	26,7	82,5	4	19,0	1,26	70234075	70238075
1"	62,0	123,9	33,5	88,9	4	19,0	1,52	70234092	70238092
1 1/4"	65,0	133,3	42,2	98,5	4	19,0	2,03	70234109	70238109
1 1/2"	68,3	155,4	48,3	114,3	4	22,3	2,89	70234126	70238126
2"	69,8	165,1	60,4	127,0	8	19,0	3,40	70234146	70238146
2 1/2"	76,2	190,5	73,1	149,3	8	22,3	5,17	70234173	70238173
3"	79,2	209,5	88,9	168,1	8	22,3	6,93	70234198	70238198
4"	85,8	254,0	114,3	200,1	8	22,3	11,20	70234240	70238240
6"	98,5	317,5	168,4	269,7	12	22,3	19,10	70234304	70238304
8"	111,2	381,0	219,2	330,2	12	25,4	29,90	70234400	70238400

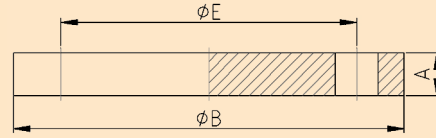


SLIP-ON FLANGE ASTM A182 ANSI B16.5 150 LBS FFSO RF

Inch	A	B	C	E	nr. Bolts	Ø holes	Kg	304(L)	316L
1/2"	15,7	88,9	21,3	60,5	4	15,7	0,48	67314015	67318015
3/4"	15,7	98,6	26,7	69,9	4	15,7	0,71	67314020	67318020
1"	17,5	108,0	33,4	79,2	4	15,7	1,01	67314025	67318025
1 1/4"	20,6	117,3	42,2	88,9	4	15,7	1,33	67314032	67318032
1 1/2"	22,4	127,0	48,3	98,6	4	15,7	1,72	67314040	67318040
2"	25,4	152,4	60,3	120,7	4	19,1	2,58	67314050	67318050
2 1/2"	28,4	177,8	73,0	137,7	4	19,1	4,11	67314065	67318065
3"	30,2	190,5	88,9	152,4	4	19,1	4,92	67314080	67318080
4"	33,3	228,6	114,3	190,5	8	19,1	6,84	67314100	67318100
6"	39,6	279,4	168,3	241,3	8	22,4	10,60	67314150	67318150
8"	44,5	342,9	219,1	298,5	8	22,4	17,60	67314200	67318200

SLIP-ON FLANGE ASTM A182 ANSI B16.5 300 LBS FFSO RF

Inch	A	B	C	E	nr. Bolts	Ø holes	Kg	304(L)	316L
1/2"	22,3	95,2	21,3	66,5	4	15,7	0,64	67414015	67418015
3/4"	25,4	117,3	26,7	82,5	4	19,0	1,12	67414020	67418020
1"	26,9	123,9	33,4	88,9	4	19,0	1,36	67414025	67418025
1 1/4"	27,0	133,3	42,2	98,5	4	19,0	1,80	67414032	67418032
1 1/2"	30,2	155,4	48,3	114,3	4	22,3	2,49	67414040	67418040
2"	33,2	165,1	60,3	127,0	8	19,0	2,87	67414050	67418050
2 1/2"	38,1	190,5	73,0	149,3	8	22,3	4,40	67414065	67418065
3"	42,9	209,5	88,9	168,1	8	22,3	5,85	67414080	67418080
4"	47,7	254,0	114,3	200,1	8	22,3	9,61	67414100	67418100
6"	52,3	317,5	168,3	269,7	12	22,3	15,60	67414150	67418150
8"	61,9	381,0	219,1	330,2	12	25,4	24,20	67414200	67418200

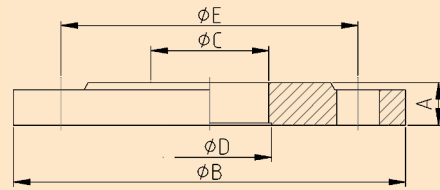


BLIND FLANGE ASTM A182 ANSI B16.5 150 LBS FFB RF

Inch	A	B	E	nr. Bolts	Ø holes	Kg	304(L)	316L
1/2"	11,2	88,9	60,5	4	15,7	0,42	65414015	65418015
3/4"	12,7	98,6	69,9	4	15,7	0,61	65414020	65418020
1"	14,2	108,0	79,2	4	15,7	0,86	65414025	65418025
1 1/4"	15,9	117,3	88,9	4	15,7	1,30	65414032	65418032
1 1/2"	17,5	127,0	98,6	4	15,7	1,53	65414040	65418040
2"	19,1	152,4	120,7	4	19,1	2,42	65414050	65418050
2 1/2"	22,2	177,8	137,7	4	19,1	4,10	65414065	65418065
3"	23,9	190,5	152,4	4	19,1	4,93	65414080	65418080
4"	23,9	228,6	190,5	8	19,1	7,00	65414100	65418100
6"	25,4	279,4	241,3	8	22,4	11,30	65414150	65418150
8"	28,4	342,9	298,5	8	22,4	19,60	65414200	65418200

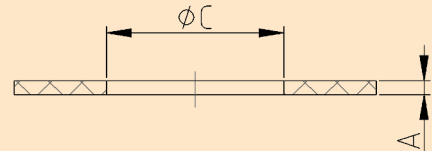
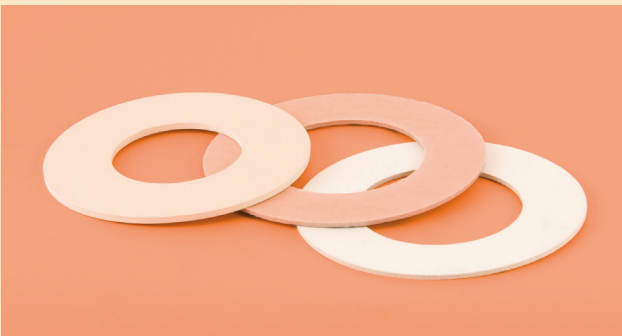
BLIND FLANGE ASTM A182 ANSI B16.5 300 LBS FFB RF

Inch	A	B	E	nr. Bolts	Ø holes	Kg	304(L)	316L
1/2"	22,3	95,2	66,5	4	15,7	0,64	65514015	65518015
3/4"	25,4	117,3	82,5	4	19,0	1,11	65514020	65518020
1"	26,9	123,9	88,9	4	19,0	1,39	65514025	65518025
1 1/4"	27,0	133,3	98,5	4	19,0	2,00	65514032	65518032
1 1/2"	30,2	155,4	114,3	4	22,3	2,66	65514040	65518040
2"	33,2	165,1	127,0	8	19,0	3,18	65514050	65518050
2 1/2"	38,1	190,5	149,3	8	22,3	5,10	65514065	65518065
3"	42,9	209,5	168,1	8	22,3	6,81	65514080	65518080
4"	47,7	254,0	200,1	8	22,3	11,50	65514100	65518100
6"	52,3	317,5	269,7	12	22,3	20,90	65514150	65518150
8"	61,9	381,0	330,2	12	25,4	34,30	65514200	65518200



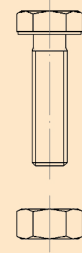
THREADED FLANGE EN 1092-1 TYPE 13 PN10/16

DN	A	B	C	nr. Bolts	D	E	Kg	304(L)	316L
10	20	90	3/8"	4	14	60	0,54	68514013	68518013
15	20	95	1/2"	4	14	65	0,61	68514019	68518019
20	24	105	3/4"	4	14	75	0,91	68514024	68518024
25	24	115	1"	4	14	85	1,10	68514030	68518030
32	26	140	1 1/4"	4	18	100	1,60	68514035	68518035
40	26	150	1 1/2"	4	18	110	1,78	68514045	68518045
50	28	165	2"	4	18	125	2,43	68514057	68518057
65	32	185	2 1/2"	4	18	145	3,18	68514071	68518071
80	34	200	3"	8	18	160	4,12	68514090	68518090
100	38	220	4"	8	18	180	4,47	68514108	68518108



FLANGE GASKET

DN	A	B	C	Kg	Grafiet	Novus	PTFE (Gylon)
10	1,6		17,2	0,001	67600012	67700012	67800012UN
15	1,6		21,3	0,001	67600017	67700017	67800017UN
20	1,6		26,9	0,002	67600023	67700023	67800023UN
25	1,6		33,7	0,003	67600028	67700028	67800028UN
32	1,6		42,4	0,004	67600034	67700034	67800034UN
40	1,6		48,3	0,005	67600043	67700043	67800043UN
50	1,6		60,3	0,006	67600054	67700054	67800054UN
65	1,6		76,1	0,008	67600067	67700067	67800067UN
80	1,6		88,9	0,011	67600082	67700082	67800082UN
100	1,6		114,3	0,012	67600104	67700104	67800104UN
125	1,6		139,7	0,015	67600128	67700128	67800128UN
150	1,6		168,3	0,022	67600154	67700154	67800154UN
200	1,6		219,1	0,034	67600204	67700204	67800204UN
250	1,6		273,0	0,045	67600254	67700254	67800254UN
300	1,6		323,9	0,055	67600304	67700304	67800304UN



BOLTS DIN 933 AISI 304

Length	M5	M6	M8	M10	M12	M14	M16	M20	M24
10	91233202	91233241	91233310						
20	91233205	91233244	91233313	91233361	91233411				
25	91233206	91233245	91233314	91233362	91233412	91233463	91233510		
30	91233207	91233246	91233315	91233363	91233413	91233464	91233511	91233610	
40	91233209	91233248	91233317	91233365	91233415	91233466	91233513	91233612	91233710
50	91233211	91233250	91233319	91233367	91233417	91233468	91233515	91233614	91233712
60		91233252	91233321	91233369	91233419	91233470	91233517	91233616	91233714
70		91233254	91233323	91233371	91233421	91233472	91233519	91233618	91233716
80			91233325	91233373	91233423	91233475	91233521	91233920	91233718

NUTS ETC.

Size	hex nut DIN934	check nut DIN985	flat washer DIN125A	spring washer DIN127B	wing nut	ball nut
M5	92133190	92433190	96533190	96633190	92233190	92333190
M6	92133230	92433230	96533230	96633230	92233230	92333230
M8	92133300	92433300	96533300	96633300	92233300	92333300
M10	92133350	92433350	96533350	96633350	92233350	92333350
M12	92133400	92433400	96533400	96633400	92233400	92333400
M14	92133450	92433450	96533450	96633450	92233450	92333450
M16	92133500	92433500	96533500	96633500	92233500	92333500
M18	92133550	92433550	96533550	96633550	92233550	92333550
M20	92133600	92433600	96533600	96633600	92233600	92333600
M22	92133650	92433650	96533650	96633650	92233650	92333650



Profile Materials

On places where tube components are processed, the use of stainless steel mill products for construction is inevitable. Some examples for this are the tube bridge, the plateau around a tank, or the frame for a skid. S.K.S. provides a range of this kind of profile materials to also fulfill the demand for it. The biggest part of this range is deliverable from stock.

The S.K.S. range of materials :

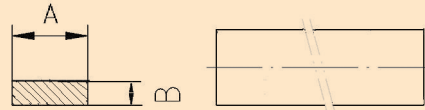
- Flat bar warm rolled (variable lengths between the 3.5 and 5 meter)
- Slit flat bar (lengths of 4 meter)
- Round bar tol H9
- Round bar descaled
- Cold-rolled stainless steel sheet (2000x1000 mm)
- Tears Plate (2000x1000 mm)
- Equal angle material (lengths of 6 meter)
- Warm rolled square bar (lengths between 3.5 and 5 meter)

- Warm rolled hexagonal bar (lengths between 3.5 and 5 meter)

However it is hardly asked, these materials can be delivered with a 3.1 certificate.

For complete review of this product range we refer to the brochures of the industrial installation materials (EN DIN of ANSI ASTM).





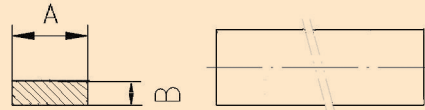
SLITTED FLAT BAR

MM	A	B	C	D	Length	Kg	304(L)	316(L)
15 x 3,0	15	3,0			4 mtr	0,35	89233020	89236020
20 x 3,0	20	3,0			4 mtr	0,47	89233025	89236025
25 x 3,0	25	3,0			4 mtr	0,59	89233030	89236030
30 x 3,0	30	3,0			4 mtr	0,70	89233035	89236035
35 x 3,0	35	3,0			4 mtr	0,83	89233036	89236036
40 x 3,0	40	3,0			4 mtr	0,94	89233040	89236040
50 x 3,0	50	3,0			4 mtr	1,18	89233045	89236045
20 x 4,0	20	4,0			4 mtr	0,63	89233065	89236065
25 x 4,0	25	4,0			4 mtr	0,79	89233070	89236070
30 x 4,0	30	4,0			4 mtr	0,94	89233075	89236075
35 x 4,0	35	4,0			4 mtr	1,10	89233080	89236080
40 x 4,0	40	4,0			4 mtr	1,26	89233085	89236085
50 x 4,0	50	4,0			4 mtr	1,57	89233090	89236090
60 x 4,0	60	4,0			4 mtr	1,88	89233095	89236095
15 x 5,0	15	5,0			4 mtr	0,59	89233110	89236110
20 x 5,0	20	5,0			4 mtr	0,79	89233120	89236120
25 x 5,0	25	5,0			4 mtr	0,98	89233125	89236125
30 x 5,0	30	5,0			4 mtr	1,18	89233130	89236130
35 x 5,0	35	5,0			4 mtr	1,37	89233140	89236140
40 x 5,0	40	5,0			4 mtr	1,57	89233145	89236145
45 x 5,0	45	5,0			4 mtr	1,77	89233150	89236150
50 x 5,0	50	5,0			4 mtr	1,96	89233155	89236155
60 x 5,0	60	5,0			4 mtr	2,36	89233160	89236160
65 x 5,0	65	5,0			4 mtr	2,55	89233162	89236162
70 x 5,0	70	5,0			4 mtr	2,75	89233170	89236170
75 x 5,0	75	5,0			4 mtr	2,94	89233175	89236175
80 x 5,0	80	5,0			4 mtr	3,14	89233180	89236180
100 x 5,0	100	5,0			4 mtr	3,93	89233190	89236190
120 x 5,0	120	5,0			4 mtr	4,71	89233200	89236200
20 x 6,0	20	6,0			4 mtr	0,94	89233210	89236210
25 x 6,0	25	6,0			4 mtr	1,18	89233215	89236215
30 x 6,0	30	6,0			4 mtr	1,41	89233220	89236220
35 x 6,0	35	6,0			4 mtr	1,65	89233230	89236230
40 x 6,0	40	6,0			4 mtr	1,88	89233240	89236240

to be continued on page 51

continuation of page 50

MM	A	B	C	D	Length	Kg	304(L)	316(L)
45 x 6,0	45	6,0			4 mtr	2,12	89233245	89236245
50 x 6,0	50	6,0			4 mtr	2,36	89233250	89236250
60 x 6,0	60	6,0			4 mtr	2,83	89233255	89236255
70 x 6,0	70	6,0			4 mtr	3,30	89233265	89236265
75 x 6,0	75	6,0			4 mtr	3,53	89233270	89236270
80 x 6,0	80	6,0			4 mtr	3,77	89233275	89236275
90 x 6,0	90	6,0			4 mtr	4,24	89233280	89236280
100 x 6,0	100	6,0			4 mtr	4,71	89233285	89236285
120 x 6,0	120	6,0			4 mtr	5,65	89233295	89236295
20 x 8,0	20	8,0			4 mtr	1,26	89233320	89236320
25 x 8,0	25	8,0			4 mtr	1,57	89233325	89236325
30 x 8,0	30	8,0			4 mtr	1,88	89233330	89236330
35 x 8,0	35	8,0			4 mtr	2,20	89233340	89236340
40 x 8,0	40	8,0			4 mtr	2,51	89233345	89236345
45 x 8,0	45	8,0			4 mtr	2,83	89233350	89236350
50 x 8,0	50	8,0			4 mtr	3,14	89233355	89236355
60 x 8,0	60	8,0			4 mtr	3,77	89233360	89236360
70 x 8,0	70	8,0			4 mtr	4,40	89233370	89236370
75 x 8,0	75	8,0			4 mtr	4,71	89233375	89236375
80 x 8,0	80	8,0			4 mtr	5,02	89233380	89236380
90 x 8,0	90	8,0			4 mtr	5,65	89233385	89236385
100 x 8,0	100	8,0			4 mtr	6,28	89233390	89236390
150 x 8,0	150	8,0			4 mtr	9,42	89233395	89236395
20 x 10,0	20	10,0			4 mtr	1,57	89233430	89236430
25 x 10,0	25	10,0			4 mtr	1,96	89233435	89236435
30 x 10,0	30	10,0			4 mtr	2,36	89233440	89236440
35 x 10,0	35	10,0			4 mtr	2,75	89233450	89236450
40 x 10,0	40	10,0			4 mtr	3,14	89233455	89236455
45 x 10,0	45	10,0			4 mtr	3,53	89233460	89236460
50 x 10,0	50	10,0			4 mtr	3,93	89233465	89236465
60 x 10,0	60	10,0			4 mtr	4,71	89233475	89236475
70 x 10,0	70	10,0			4 mtr	5,50	89233485	89236485
75 x 10,0	75	10,0			4 mtr	5,89	89233490	89236490
80 x 10,0	80	10,0			4 mtr	6,28	89233495	89236495
90 x 10,0	90	10,0			4 mtr	7,07	89233500	89236500
100 x 10,0	100	10,0			4 mtr	7,85	89233505	89236505
110 x 10,0	110	10,0			4 mtr	8,64	89233510	89236510
120 x 10,0	120	10,0			4 mtr	9,42	89233515	89236515
150 x 10,0	150	10,0			4 mtr	11,77	89233530	89236530
200 x 10,0	200	10,0			4 mtr	15,70	89233533	89236533



FLAT BAR WARMROLLED

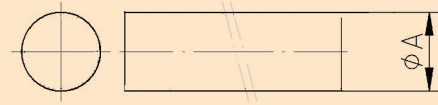
MM	A	B	C	D	Length	Kg	304(L)	316(L)
20 x 4,0	20	4,0			3,5-5 mtr	0,63	89133065	89136065
25 x 4,0	25	4,0			3,5-5 mtr	0,79	89133070	89136070
30 x 4,0	30	4,0			3,5-5 mtr	0,94	89133075	89136075
35 x 4,0	35	4,0			3,5-5 mtr	1,10	89133080	89136080
40 x 4,0	40	4,0			3,5-5 mtr	1,26	89133085	89136085
50 x 4,0	50	4,0			3,5-5 mtr	1,57	89133090	89136090
60 x 4,0	60	4,0			3,5-5 mtr	1,88	89133095	89136095
15 x 5,0	15	5,0			3,5-5 mtr	0,59	89133110	89136110
20 x 5,0	20	5,0			3,5-5 mtr	0,79	89133120	89136120
25 x 5,0	25	5,0			3,5-5 mtr	0,98	89133125	89136125
30 x 5,0	30	5,0			3,5-5 mtr	1,18	89133130	89136130
35 x 5,0	35	5,0			3,5-5 mtr	1,37	89133140	89136140
40 x 5,0	40	5,0			3,5-5 mtr	1,57	89133145	89136145
45 x 5,0	45	5,0			3,5-5 mtr	1,77	89133150	89136150
50 x 5,0	50	5,0			3,5-5 mtr	1,96	89133155	89136155
60 x 5,0	60	5,0			3,5-5 mtr	2,36	89133160	89136160
65 x 5,0	65	5,0			3,5-5 mtr	2,55	89133162	89136162
70 x 5,0	70	5,0			3,5-5 mtr	2,75	89133170	89136170
75 x 5,0	75	5,0			3,5-5 mtr	2,94	89133175	89136175
80 x 5,0	80	5,0			3,5-5 mtr	3,14	89133180	89136180
100 x 5,0	100	5,0			3,5-5 mtr	3,93	89133190	89136190
120 x 5,0	120	5,0			3,5-5 mtr	4,71	89133200	89136200
20 x 6,0	20	6,0			3,5-5 mtr	0,94	89133210	89136210
25 x 6,0	25	6,0			3,5-5 mtr	1,18	89133215	89136215
30 x 6,0	30	6,0			3,5-5 mtr	1,41	89133220	89136220
35 x 6,0	35	6,0			3,5-5 mtr	1,65	89133230	89136230
40 x 6,0	40	6,0			3,5-5 mtr	1,88	89133240	89136240
45 x 6,0	45	6,0			3,5-5 mtr	2,12	89133245	89136245
50 x 6,0	50	6,0			3,5-5 mtr	2,36	89133250	89136250
60 x 6,0	60	6,0			3,5-5 mtr	2,83	89133255	89136255
70 x 6,0	70	6,0			3,5-5 mtr	3,30	89133265	89136265
75 x 6,0	75	6,0			3,5-5 mtr	3,53	89133270	89136270
80 x 6,0	80	6,0			3,5-5 mtr	3,77	89133275	89136275
90 x 6,0	90	6,0			3,5-5 mtr	4,24	89133280	89136280
100 x 6,0	100	6,0			3,5-5 mtr	4,71	89133285	89136285
120 x 6,0	120	6,0			3,5-5 mtr	5,65	89133295	89136295

to be continued on page 53

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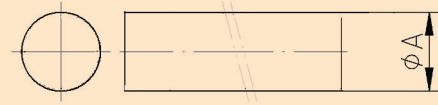
MM	A	B	C	D	Length	Kg	304(L)	316(L)
20 x 8,0	20	8,0			3,5-5 mtr	1,26	89133320	89136320
25 x 8,0	25	8,0			3,5-5 mtr	1,57	89133325	89136325
30 x 8,0	30	8,0			3,5-5 mtr	1,88	89133330	89136330
35 x 8,0	35	8,0			3,5-5 mtr	2,20	89133340	89136340
40 x 8,0	40	8,0			3,5-5 mtr	2,51	89133345	89136345
45 x 8,0	45	8,0			3,5-5 mtr	2,83	89133350	89136350
50 x 8,0	50	8,0			3,5-5 mtr	3,14	89133355	89136355
60 x 8,0	60	8,0			3,5-5 mtr	3,77	89133360	89136360
70 x 8,0	70	8,0			3,5-5 mtr	4,40	89133370	89136370
75 x 8,0	75	8,0			3,5-5 mtr	4,71	89133375	89136375
80 x 8,0	80	8,0			3,5-5 mtr	5,02	89133380	89136380
90 x 8,0	90	8,0			3,5-5 mtr	5,65	89133385	89136385
100 x 8,0	100	8,0			3,5-5 mtr	6,28	89133390	89136390
150 x 8,0	150	8,0			3,5-5 mtr	9,42	89133395	89136395
20 x 10,0	20	10,0			3,5-5 mtr	1,57	89133430	89136430
25 x 10,0	25	10,0			3,5-5 mtr	1,96	89133435	89136435
30 x 10,0	30	10,0			3,5-5 mtr	2,36	89133440	89136440
35 x 10,0	35	10,0			3,5-5 mtr	2,75	89133450	89136450
40 x 10,0	40	10,0			3,5-5 mtr	3,14	89133455	89136455
45 x 10,0	45	10,0			3,5-5 mtr	3,53	89133460	89136460
50 x 10,0	50	10,0			3,5-5 mtr	3,93	89133465	89136465
60 x 10,0	60	10,0			3,5-5 mtr	4,71	89133475	89136475
70 x 10,0	70	10,0			3,5-5 mtr	5,50	89133485	89136485
75 x 10,0	75	10,0			3,5-5 mtr	5,89	89133490	89136490
80 x 10,0	80	10,0			3,5-5 mtr	6,28	89133495	89136495
90 x 10,0	90	10,0			3,5-5 mtr	7,07	89133500	89136500
100 x 10,0	100	10,0			3,5-5 mtr	7,85	89133505	89136505
110 x 10,0	110	10,0			3,5-5 mtr	8,64	89133510	89136510
120 x 10,0	120	10,0			3,5-5 mtr	9,42	89133515	89136515
150 x 10,0	150	10,0			3,5-5 mtr	11,77	89133530	89136530
200 x 10,0	200	10,0			3,5-5 mtr	15,70	89133533	89136533
20 x 12,0	20	12,0			3,5-5 mtr	1,88	89133535	89136535
25 x 12,0	25	12,0			3,5-5 mtr	2,36	89133540	89136540
30 x 12,0	30	12,0			3,5-5 mtr	2,83	89133550	89136550
35 x 12,0	35	12,0			3,5-5 mtr	3,30	89133555	89136555
40 x 12,0	40	12,0			3,5-5 mtr	3,77	89133560	89136560
50 x 12,0	50	12,0			3,5-5 mtr	4,71	89133570	89136570
60 x 12,0	60	12,0			3,5-5 mtr	5,65	89133580	89136580
70 x 12,0	70	12,0			3,5-5 mtr	6,60	89133585	89136585
75 x 12,0	75	12,0			3,5-5 mtr	7,07	89133590	89136590
80 x 12,0	80	12,0			3,5-5 mtr	7,54	89133595	89136595
100 x 12,0	100	12,0			3,5-5 mtr	9,42	89133605	89136605
20 x 15,0	20	15,0			3,5-5 mtr	2,36	89133628	89136628
25 x 15,0	25	15,0			3,5-5 mtr	2,94	89133629	89136629
30 x 15,0	30	15,0			3,5-5 mtr	3,53	89133630	89136630
35 x 15,0	35	15,0			3,5-5 mtr	4,12	89133640	89136640
40 x 15,0	40	15,0			3,5-5 mtr	4,71	89133645	89136645

MM	A	B	C	D	Length	Kg	304(L)	316(L)
50 x 15,0	50	15,0			3,5-5 mtr	5,89	89133660	89136660
60 x 15,0	60	15,0			3,5-5 mtr	7,07	89133670	89136670
70 x 15,0	70	15,0			3,5-5 mtr	8,24	89133675	89136675
75 x 15,0	75	15,0			3,5-5 mtr	8,83	89133680	89136680
80 x 15,0	80	15,0			3,5-5 mtr	9,42	89133685	89136685
100 x 15,0	100	15,0			3,5-5 mtr	11,77	89133695	89136695
120 x 15,0	120	15,0			3,5-5 mtr	14,13	89133700	89136700
150 x 15,0	150	15,0			3,5-5 mtr	17,66	89133707	89136707
25 x 20,0	25	20,0			3,5-5 mtr	3,93	89133710	89136710
30 x 20,0	30	20,0			3,5-5 mtr	4,71	89133715	89136715
40 x 20,0	40	20,0			3,5-5 mtr	6,25	89133725	89136725
50 x 20,0	50	20,0			3,5-5 mtr	7,85	89133735	89136735
60 x 20,0	60	20,0			3,5-5 mtr	9,42	89133745	89136745
70 x 20,0	70	20,0			3,5-5 mtr	10,99	89133750	89136750
80 x 20,0	80	20,0			3,5-5 mtr	12,56	89133760	89136760
100 x 20,0	100	20,0			3,5-5 mtr	15,70	89133770	89136770
30 x 25,0	30	25,0			3,5-5 mtr	5,89	89133790	89133790
40 x 25,0	40	25,0			3,5-5 mtr	7,85	89133795	89133795
50 x 25,0	50	25,0			3,5-5 mtr	9,81	89133805	89133805
60 x 25,0	60	25,0			3,5-5 mtr	11,78	89133810	89133810
70 x 25,0	70	25,0			3,5-5 mtr	13,74	89133815	89133815
80 x 25,0	80	25,0			3,5-5 mtr	15,60	89133825	89133825
100 x 25,0	100	25,0			3,5-5 mtr	19,63	89133835	89133835
150 x 25,0	150	25,0			3,5-5 mtr	29,44	89133837	89133837
40 x 30,0	40	30,0			3,5-5 mtr	9,42	89133840	89136840
50 x 30,0	50	30,0			3,5-5 mtr	11,78	89133850	89136850
60 x 30,0	60	30,0			3,5-5 mtr	14,13	89133860	89136860
80 x 30,0	80	30,0			3,5-5 mtr	18,84	89133865	89136865
100 x 30,0	100	30,0			3,5-5 mtr	23,55	89133875	89136875
100 x 35,0	100	35,0			3,5-5 mtr	27,48	89133889	89136889
100 x 40,0	100	40,0			3,5-5 mtr	31,40	89133899	89136899
100 x 50,0	100	50,0			3,5-5 mtr	39,26	89133950	89136950
100 x 60,0	100	60,0			3,5-5 mtr	47,12	89133960	89136960



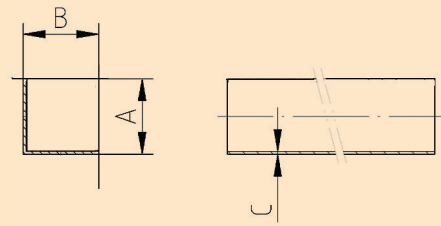
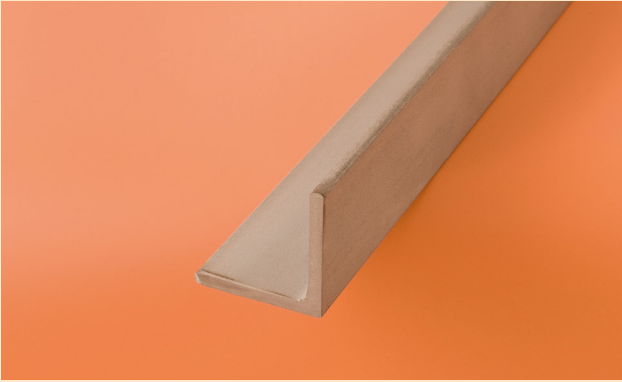
ROUND BAR TOL. H9

MM	A	B	C	D	Length	Kg	304(L)	316(L)
3	3				3 mtr	0,056	89533024	89536024
4	4				3 mtr	0,099	89533032	89536032
5	5				3 mtr	0,154	89533040	89536040
6	6				3 mtr	0,222	89533048	89536048
8	8				3 mtr	0,395	89533064	89536064
9	9				3 mtr	0,499	89533072	89536072
10	10				3 mtr	0,617	89533080	89536080
12	12				3 mtr	0,888	89533096	89536096
13	13				3 mtr	1,042	89533104	89536104
14	14				3 mtr	1,208	89533112	89536112
15	15				3 mtr	1,387	89533120	89536120
16	16				3 mtr	1,578	89533128	89536128
17	17				3 mtr	1,782	89533136	89536136
18	18				3 mtr	1,998	89533144	89536144
19	19				3 mtr	2,226	89533152	89536152
20	20				3 mtr	2,466	89533160	89536160
22	22				3 mtr	2,984	89533168	89536168
25	25				3 mtr	3,853	89533192	89536192
28	28				3 mtr	4,834	89533208	89536208
30	30				3 mtr	5,549	89533216	89536216
32	32				3 mtr	6,313	89533232	89536232
35	35				3 mtr	7,553	89533248	89536248
38	38				3 mtr	8,903	89533265	89536265
40	40				3 mtr	9,865	89533280	89536280
45	45				3 mtr	12,49	89533304	89536304
48	48				3 mtr	14,21	89533314	89536314
50	50				3 mtr	15,41	89533320	89536320
55	55				3 mtr	18,65	89533344	89536344
60	60				3 mtr	22,2	89533368	89536368



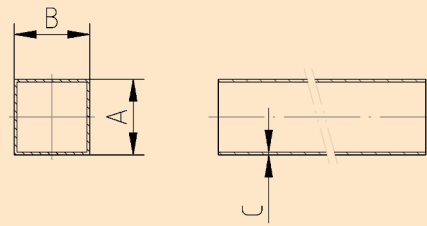
ROUND BAR DESCALED

MM	A	B	C	D	Length	Kg	304(L)	316(L)
50	50				var.	15,41	89433320	89436320
65	65				var.	26,05	89433384	89436384
70	70				var.	30,21	89433400	89436400
75	75				var.	34,68	89433416	89436416
80	80				var.	39,46	89433432	89436432
85	85				var.	44,55	89433448	89436448
90	90				var.	49,94	89433472	89436472
95	95				var.	55,64	89433496	89436496
100	100				var.	61,65	89433512	89436512
105	105				var.	67,97	89433528	89436528
110	110				var.	74,60	89433544	89436544
120	120				var.	88,78	89433560	89436560
125	125				var.	96,33	89433568	89436568
130	130				var.	104,20	89433584	89436584
135	135				var.	112,40	89433590	89436590
140	140				var.	120,80	89433600	89436600
150	150				var.	138,70	89433620	89436620
160	160				var.	157,80	89433650	89436650
180	180				var.	199,80	89433704	89436704
200	200				var.	246,60	89433744	89436744



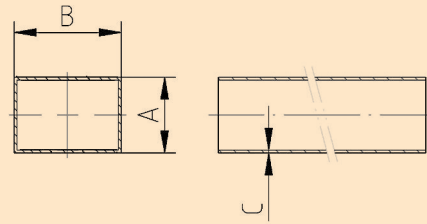
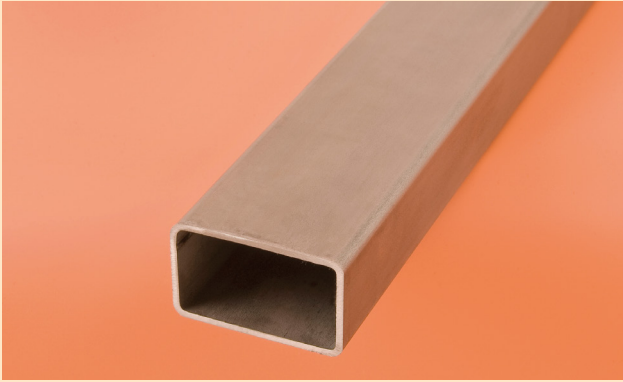
EQUEL ANGLE MATERIAL

Size	A	B	C	D	E	Kg	304(L)	316L
20 x 20	20,0	20,0	3,0			0,880	87133330	87136330
25 x 25	25,0	25,0	3,0			1,120	87133335	87136335
30 x 30	30,0	30,0	3,0			1,360	87133340	87136340
35 x 35	35,0	35,0	4,0			2,100	87133350	87136350
40 x 40	40,0	40,0	4,0			2,420	87133460	87136460
50 x 50	50,0	50,0	5,0			3,770	87133545	87136545
60 x 60	60,0	60,0	6,0			5,420	87133605	87136605
70 x 70	70,0	70,0	7,0			7,380	87133610	87136610
80 x 80	80,0	80,0	8,0			9,660	87133615	87136615
100 x 100	100,0	100,0	10,0			15,100	87133627	87136627



SQUARE TUBE EN 10219-1/2

Size	A	B	C	D	E	Kg	304 mat	316 mat	304 polished	316 polished
10 x 10 x 1,0	10,0	10,0	1,0			0,320	86133011	86136011	86333011	86336011
15 x 15 x 1,5	15,0	15,0	1,5			0,660	86133044	86136044	86333044	86336044
20 x 20 x 1,5	20,0	20,0	1,5			0,883	86133112	86136112	86333112	86336112
20 x 20 x 2,0	20,0	20,0	2,0			1,152	86133114	86136114	86333114	86336114
25 x 25 x 1,2	25,0	25,0	1,2			1,000	86133144	86136144	86333144	86336144
25 x 25 x 1,5	25,0	25,0	1,5			1,146	86133146	86136146	86333146	86336146
25 x 25 x 2,0	25,0	25,0	2,0			1,495	86133148	86136148	86333148	86336148
30 x 30 x 1,5	30,0	30,0	1,5			1,371	86133166	86136166	86333166	86336166
30 x 30 x 2,0	30,0	30,0	2,0			1,840	86133168	86136168	86333168	86336168
30 x 30 x 3,0	30,0	30,0	3,0			2,720	86133172	86136172	86333172	86336172
35 x 35 x 1,5	35,0	35,0	1,5			1,620	86133229	86136229	86333229	86336229
35 x 35 x 2,0	35,0	35,0	2,0			2,150	86133231	86136231	86333231	86336231
40 x 40 x 1,5	40,0	40,0	1,5			1,859	86133275	86136275	86333275	86336275
40 x 40 x 2,0	40,0	40,0	2,0			2,454	86133277	86136277	86333277	86336277
40 x 40 x 3,0	40,0	40,0	3,0			3,756	86133281	86136281	86333281	86336281
40 x 40 x 4,0	40,0	40,0	4,0			4,880	86133283	86136283	86333283	86336283
45 x 45 x 2,0	45,0	45,0	2,0			2,750	86133302	86136302	86333302	86336302
50 x 50 x 1,5	50,0	50,0	1,5			2,329	86133324	86136324	86333324	86336324
50 x 50 x 2,0	50,0	50,0	2,0			3,080	86133327	86136327	86333327	86336327
50 x 50 x 3,0	50,0	50,0	3,0			4,650	86133331	86136331	86333331	86336331
50 x 50 x 4,0	50,0	50,0	4,0			5,997	86133333	86136333	86333333	86336333
50 x 50 x 5,0	50,0	50,0	5,0			7,320	86133335	86136335	86333335	86336335
60 x 60 x 2,0	60,0	60,0	2,0			3,711	86133348	86136348	86333348	86336348
60 x 60 x 3,0	60,0	60,0	3,0			5,491	86133352	86136352	86333352	86336352
60 x 60 x 5,0	60,0	60,0	5,0			8,910	86133356	86136356	86333356	86336356
70 x 70 x 3,0	70,0	70,0	3,0			6,494	86133375	86136375	86333375	86336375
80 x 80 x 2,0	80,0	80,0	2,0			4,988	86133394	86136394	86333394	86336394
80 x 80 x 3,0	80,0	80,0	3,0			7,530	86133398	86136398	86333398	86336398
100 x 100 x 2,0	100,0	100,0	2,0			6,400	86133440	86136440	86333440	86336440
100 x 100 x 3,0	100,0	100,0	3,0			9,530	86133444	86136444	86333444	86336444
100 x 100 x 4,0	100,0	100,0	4,0			12,600	86133446	86136446	86333446	86336446
100 x 100 x 5,0	100,0	100,0	5,0			15,624	86133448	86136448	86333448	86336448
120 x 120 x 3,0	120,0	120,0	3,0			11,415	86133494	86136494	86333494	86336494
120 x 120 x 4,0	120,0	120,0	4,0			15,120	86133496	86136496	86333496	86336496
120 x 120 x 5,0	120,0	120,0	5,0			18,774	86133498	86136498	86333498	86336498
150 x 150 x 3,0	150,0	150,0	3,0			13,820	86133569	86136569	86333569	86336569
150 x 150 x 5,0	150,0	150,0	5,0			22,400	86133573	86136573	86333573	86336573



RECTANGULAR TUBE EN 10219-1/2

Size	A	B	C	D	E	Kg	304 mat	316 mat	304 polished	316 polished
20 x 10 x 1,5	20,0	10,0	1,5			0,660	86233010	86236010	86433010	86436010
20 x 15 x 1,5	20,0	15,0	1,5			0,774	86233016	86236016	86433016	86436016
25 x 15 x 1,5	25,0	15,0	1,5			0,883	86233036	86236036	86433036	86436036
30 x 15 x 1,5	30,0	15,0	1,5			0,995	86233068	86236068	86433068	86436068
30 x 20 x 1,5	30,0	20,0	1,5			1,146	86233080	86236080	86433080	86436080
30 x 20 x 2,0	30,0	20,0	2,0			1,495	86233082	86236082	86433082	86436082
40 x 15 x 1,5	40,0	15,0	1,5			1,260	86233150	86236150	86433150	86436150
40 x 20 x 1,5	40,0	20,0	1,5			1,371	86233164	86236164	86433164	86436164
40 x 20 x 2,0	40,0	20,0	2,0			1,840	86233166	86236166	86433166	86436166
40 x 30 x 1,5	40,0	30,0	1,5			1,620	86233206	86236206	86433206	86436206
40 x 30 x 2,0	40,0	30,0	2,0			2,150	86233208	86236208	86433208	86436208
50 x 20 x 2,0	50,0	20,0	2,0			2,150	86233281	86236281	86433281	86436281
50 x 25 x 1,5	50,0	25,0	1,5			1,758	83233293	83233293	83233293	83233293
50 x 25 x 2,0	50,0	25,0	2,0			2,319	86233295	86236295	86433295	86436295
50 x 30 x 1,5	50,0	30,0	1,5			1,859	86233307	86236307	86433307	86436307
50 x 30 x 2,0	50,0	30,0	2,0			2,454	86233309	86236309	86433309	86436309
50 x 30 x 3,0	50,0	30,0	3,0			3,756	86233311	86236311	86433311	86436311
60 x 30 x 1,5	60,0	30,0	1,5			2,122	86233383	86236383	86433383	86436383
60 x 30 x 2,0	60,0	30,0	2,0			2,804	86233385	86236385	86433385	86436385
60 x 30 x 3,0	60,0	30,0	3,0			4,040	86233387	86236387	86433387	86436387
60 x 40 x 1,5	60,0	40,0	1,5			2,329	86233395	86236395	86433395	86436395
60 x 40 x 2,0	60,0	40,0	2,0			3,080	86233397	86236397	86433397	86436397
60 x 40 x 3,0	60,0	40,0	3,0			4,650	86233399	86236399	86433399	86436399
80 x 40 x 2,0	80,0	40,0	2,0			3,711	86233497	86236497	86433497	86436497
80 x 40 x 3,0	80,0	40,0	3,0			5,491	86233501	86236501	86433501	86436501
80 x 60 x 2,0	80,0	60,0	2,0			4,380	86233524	86236524	86433524	86436524
80 x 60 x 3,0	80,0	60,0	3,0			6,530	86233525	86236525	86433525	86436525
80 x 60 x 4,0	80,0	60,0	4,0			8,557	86233526	86236526	86433526	86436526
100 x 40 x 2,0	100,0	40,0	2,0			4,380	86233559	86236559	86433559	86436559
100 x 40 x 3,0	100,0	40,0	3,0			6,530	86233561	86236561	86433561	86436561
100 x 50 x 2,0	100,0	50,0	2,0			4,680	86233569	86236569	86433569	86436569
100 x 50 x 3,0	100,0	50,0	3,0			6,864	86233573	86236573	86433573	86436573
100 x 50 x 4,0	100,0	50,0	4,0			9,173	86233575	86236575	86433575	86436575
100 x 50 x 5,0	100,0	50,0	5,0			11,270	86233577	86236577	86433577	86436577
100 x 60 x 2,0	100,0	60,0	2,0			4,960	86233585	86236585	86433585	86436585
100 x 60 x 3,0	100,0	60,0	3,0			7,344	86233589	86236589	86433589	86436589

Size	A	B	C	D	E	Kg	304 mat	316 mat	304 polished	316 polished
100 x 60 x 4,0	100,0	60,0	4,0			9,780	86233591	86236591	86433591	86436591
100 x 80 x 3,0	100,0	80,0	3,0			8,304	86233607	86236607	86433607	86436607
100 x 80 x 5,0	100,0	80,0	5,0			13,200	86233609	86236609	86433609	86436609
120 x 40 x 3,0	120,0	40,0	3,0			7,410	86233653	86236653	86433653	86436653
120 x 60 x 2,0	120,0	60,0	2,0			5,659	86233665	86236665	86433665	86436665
120 x 60 x 3,0	120,0	60,0	3,0			8,414	86233669	86236669	86433669	86436669
120 x 60 x 4,0	120,0	60,0	4,0			11,060	86233671	86236671	86433671	86436671
120 x 80 x 3,0	120,0	80,0	3,0			9,525	86233685	86236685	86433685	86436685
120 x 80 x 4,0	120,0	80,0	4,0			12,600	86233687	86236687	86433687	86436687
150 x 50 x 3,0	150,0	50,0	3,0			9,525	86233751	86236751	86433751	86436751
150 x 50 x 5,0	150,0	50,0	5,0			15,270	86233755	86236755	86433755	86436755
150 x 100 x 4,0	150,0	100,0	4,0			15,624	86233765	86236765	86433765	86436765
150 x 100 x 5,0	150,0	100,0	5,0			19,404	86233767	86236767	86433767	86436767
160 x 80 x 3,0	160,0	80,0	3,0			11,180	86233777	86236777	86433777	86436777
200 x 100 x 5,0	200,0	100,0	5,0			23,040	86233837	86236837	86433837	86436837