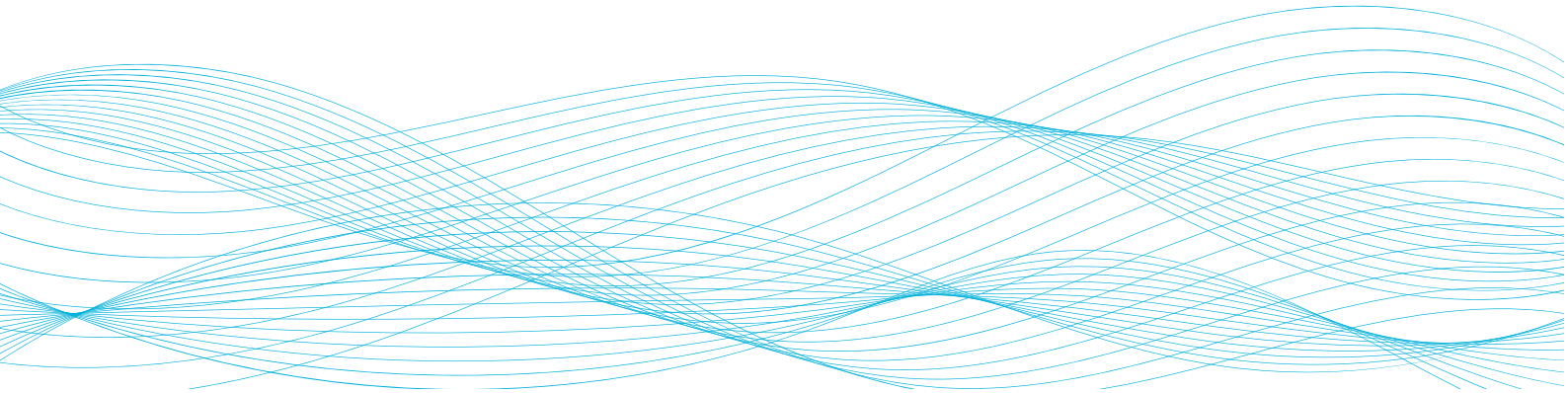


TUBES AND FERRULES



Contents

TUBES AND FERRULES **1**

Sanitary Tubes 3A *4*

Short Weld Ferrule *5*

Long Weld Ferrule *6*

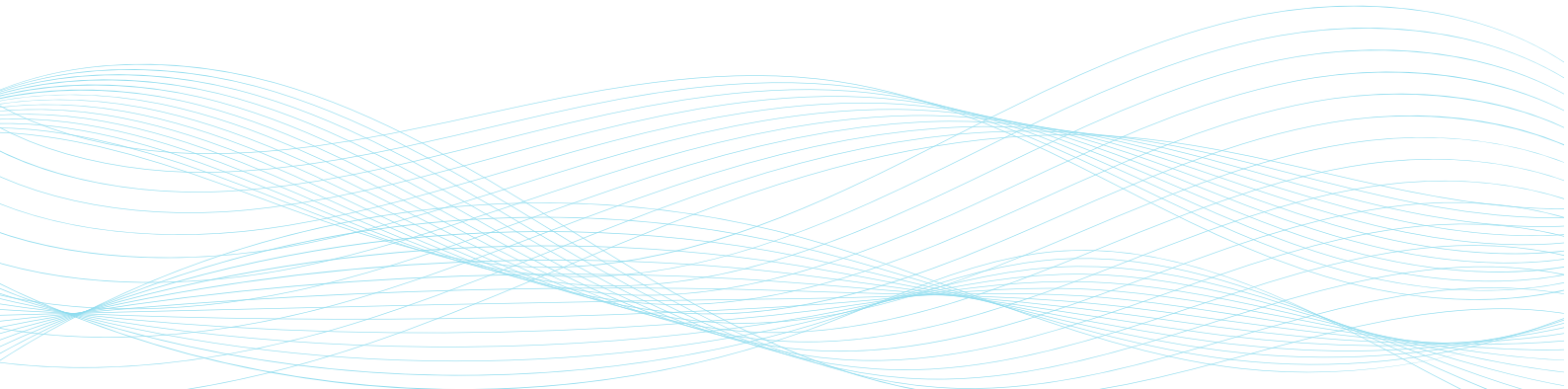
Weld Ferrule *7*

Roll-On Ferrule *8*

Light Wall Tank Weld Ferrule *9*

Heavy Wall Tank Weld Ferrule *10*

Reducing Ferrule *11*



Complete Line of tubes & fittings

Tubes

Stainless Steel tubes and pipes for use in the high purity and ultra high purity industries 316L (1.4404). Tubes are manufactured in accordance with the standard, food tubes ASTM A270 lengths of +/- 6 meters, although specific lengths from 3000mm to 12000mm can be manufactured upon request. And all tubes and pipes can be supplied with a certificate according to EN10204.

Comparable Materials

Material Number	Material according Below Standards	C	Mn ≤	P MAX.	S ≤	N ≤	Cr	Mo	Ni
1.4301	DIN EN 10217-71	0.07-1.00	2.00	0.045	0.015	0.11	7.0-19.5	/	8.0-10.5
1.4307	DIN EN 10217-7	0.03-1.00	2.00	0.045	0.015	0.11	17.0-19.5	/	8.0-10.0
1.4404	DIN EN 10217-7	0.03-1.00	2.00	0.045	0.015	0.11	16.5-18.5	2.0-2.5	10.0-13.0
T304	ASTM A269/A270	0.08-0.75	2.00	0.045	0.030	0.10	18.0-20.0	/	8.0-10.5
T304L	ASTM A269/A270	0.03-0.75	2.00	0.045	0.030	0.10	18.0-20.0	/	8.0-12.0
T316L	ASTM A269/A270	0.03-0.75	2.00	0.045	0.030	0.10	18.0-20.0	2.0-3.0	10.0-14.0

Bends, Tees, Reducers, Clamp Unions & Unions

Sanitary range fittings

Sanitary fluid handing products, Sanitary range tubes and fittings, this product range provides a wide range of fittings with internal surface finishes that have a roughness overage (Ra) of $\leq 0.4-1.6\mu\text{m}$. Tubes and fittings in the sanitary range comply with ASME dimension.

Welding

Sealing Systems is aware of the constantly increasing demands for quality of welding. In accordance with these demands, all our weld end fittings meet the highest of standards. The reducers have cylindrical welding ends and are available in all tube combinations, assuring you of the right diameter and wall thickness for your need.

Tolerances

All the angles are exact and that all the tube, bend and tee connections are uniform, it is very important that you do not have to compensate for any welding irregularities.

Finishes

In order to ensure that you are able to select a finish that exactly matches your process. They have a wide range of finishes, including matt (semi bright), raw, bright and unpolished.



TUBES

Sanitary Tubes 3A

Nominal Size ODT		Tolerances OD		Wall Thickness		Tolerances on wall thickness	Tolerances on Length		Weight Kg/M	Ordering Code
in.	mm	in.	mm	in.	mm		in.	mm		
1/2"	12.7	+/-0.005"	0.13	0.065"/0.049"	1.65	+/-10.0%	+1/8"	3.18	0.4571	015000-010-A* **
3/4"	19.1	+/-0.005"	0.13	0.065"/0.049"	1.65	+/-10.0%	+1/8"	3.18	0.7218	020000-010-A* **
1.0"	25.4	+/-0.008"	0.13	0.065"/0.049"	1.65	+/-10.0%	+1/8"	3.18	0.9824	025000-010-A* **
1 1/4"	31.8	+/-0.008"	0.20	0.065"	1.65	+/-10.0%	+1/8"	3.18	1.241	025000-010-A* **
1 1/2"	38.1	+/-0.008"	0.20	0.065"/0.049"	1.65	+/-10.0%	+1/8"	3.18	1.5078	038000-010-A* **
2.0"	50.8	+/-0.0010"	0.20	0.065"/0.049"	1.65	+/-10.0%	+1/8"	3.18	2.0331	051000-010-A* **
2 1/2"	63.5	+/-0.0010"	0.25	0.065"	1.65	+/-10.0%	+1/8"	3.18	2.5585	063000-010-A* **
3.0"	76.2	+/-0.0015"	0.25	0.065"	1.65	+/-10.0%	+1/8"	3.18	3.0797	076000-010-A* **
4.0"	101.6	+/-0.0030"	0.38	0.065"/0.083"	2.11	+/-10.0%	+1/8"	3.18	5.2628	100000-010-A* **
6.0"	152.4	+/-0.0030"	0.76	0.083"	2.11	+/-10.0%	+1.0"	25.4/0	7.9116	150000-010-A* **
6.0"	152.4	+/-0.0061"	1.55	0.0109"	2.77	+/-10.0%	+1.0"	25.4/0	10.3909	150000-010-A* **
8.0"	203.2	-0.0310"	0.79	0.0109"	2.77	+/-10.0%	+1.0"	25.4/0	13.9166	200000-010-A* **

* The first digit refers to material guide, according to Table 1

** The last digit refers to surface quality, according to Table 2

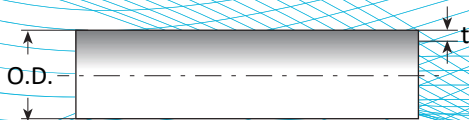


Table 1

304 (1.4301)	304L (1.4307)	316L (1.4404)
1	2	5

Table 2

Inside Surface	Outside Surface	Ordering Code
No finish requirement	Unpolished/Mill Finish	0
180 grid/0.8 µm Ra/30 µ-in	180 grid/0.8 µm Ra/30 µ-in	1
240 grid/0.51 µm Ra/20 µ-in	180 grid/0.8 µm Ra/30 µ-in	4
320 grid/0.4 µm/12 µ-in	180 grid/0.8 µm Ra/30 µ-in	7
400 grid/0.25 µm Ra/10 µ-in	180 grid/0.8 µm Ra/30 µ-in	8
Mirror Polished	Mirror Polished	9

*Mechanically Polished

Ordering Example

Description	Nominal Size In.	Ordering Code
Type 010	1/2"	015000-010-A54*

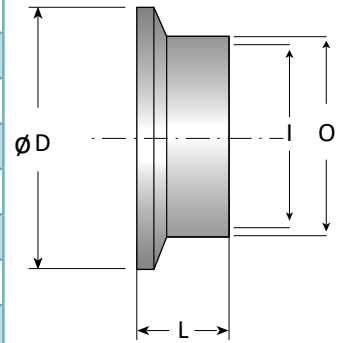
*Material and Surface are including to the ordering code



FERRULES

Short Weld Ferrule

Nominal Size In.	Type	L		O		I		D		Ordering Code
		in.	mm	in.	mm	in.	mm	in.	mm	
1/2"	A	0.500"	12.7	0.500"	12.7	0.370"	9.4	0.992"	25.2	015000-110-A* **
3/4"	A	0.500"	12.7	0.750"	19.05	0.620"	15.7	0.992"	25.2	020000-110-A* **
1.0"	A	0.500"	12.7	1.000"	25.4	0.874"	22.2	1.988"	50.5	025000-110-A* **
1½"	B	0.500"	12.7	1.500"	38.1	1.370"	34.8	1.988"	50.5	038000-110-A* **
2.0"	B	0.500"	12.7	2.000"	50.8	1.870"	47.5	2.520"	64.0	051000-110-A* **
2½"	B	0.500"	12.7	2.500"	63.5	2.370"	60.2	3.051"	77.5	063000-110-A* **
3.0"	B	0.500"	12.7	3.000"	76.2	2.870"	72.9	3.583"	91.0	076000-110-A* **
4.0"	B	0.625"	15.8	4.000"	101.6	3.384"	97.4	4.685"	119.0	100000-110-A* **



* The first digit refers to material guide, according to Table 1

** The last digit refers to surface quality, according to Table 2

Table 1

304 (1.4301)	304L (1.4307)	316L (1.4404)
1	2	5

Table 2

Inside Surface	Outside Surface	Ordering Code
No finish requirement	Unpolished/Mill Finish	0
180 grid/0.8 µm Ra/30 µ-in	180 grid/0.8 µm Ra/30 µ-in	1
240 grid/0.51 µm Ra/20 µ-in	180 grid/0.8 µm Ra/30 µ-in	4
320 grid/0.4 µm/12 µ-in	180 grid/0.8 µm Ra/30 µ-in	7
400 grid/0.25 µm Ra/10 µ-in	180 grid/0.8 µm Ra/30 µ-in	8
Mirror Polished	Mirror Polished	9

*Mechanically Polished

Ordering Example

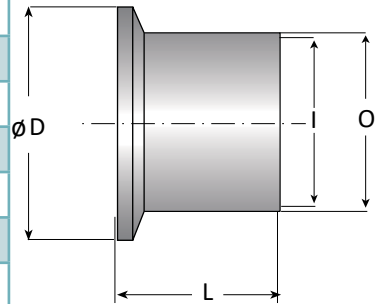
Description	Nominal Size In.	Type	Ordering Code
Type 110	1/2"	A	015000-110-A54*

*Material and Surface are including to the ordering code



FERRULES Long Weld Ferrule

Nominal Size In.	Type	L		O		I		D		Ordering Code
		in.	mm	in.	mm	in.	mm	in.	mm	
1/2"	A	1.126"	28.6	0.500"	12.70	0.370"	9.4	0.992"	25.2	015000-111-A* **
3/4"	A	1.126"	28.6	0.750"	19.05	0.620"	15.7	0.992"	25.2	020000-111-A* **
1.0"	B	1.126"	28.6	1.000"	25.40	0.874"	22.2	1.988"	50.5	025000-111-A* **
1.5"	B	1.126"	28.6	1.500"	38.10	1.370"	34.8	1.988"	50.5	038000-111-A* **
2.0"	B	1.126"	28.6	2.000"	50.80	1.870"	47.5	2.520"	64.0	051000-111-A* **
2.5"	B	1.126"	28.6	2.500"	63.50	2.370"	60.2	3.051"	77.5	063000-111-A* **
3.0"	B	1.126"	28.6	3.000"	76.20	2.870"	72.9	3.583"	91.0	076000-111-A* **
4.0"	B	1.126"	28.6	4.000"	101.6	3.384"	97.4	4.685"	119.0	100000-111-A* **
6.0"	B	1.126"	38.1	6.000"	152.4	5.782"	146.9	6.567"	166.8	150000-111-A* **
8.0"	B	1.126"	38.1	8.000"	203.2	7.780"	197.7	8.571"	217.7	200000-111-A* **
10.0"	B	1.126"	38.1	10.000"	254.0	9.732"	247.2	10.571"	268.5	250000-111-A* **
12.0"	B	1.126"	44.4	12.000"	304.8	11.732"	298.0	12.571"	319.3	300000-111-A* **



* The first digit refers to material guide, according to Table 1

** The last digit refers to surface quality, according to Table 2

Table 1

304 (1.4301)	304L (1.4307)	316L (1.4404)
1	2	5

Table 2

Inside Surface	Outside Surface	Ordering Code
No finish requirement	Unpolished/Mill Finish	0
180 grid/0.8 μm Ra/30 μ-in	180 grid/0.8 μm Ra/30 μ-in	1
240 grid/0.51 μm Ra/20 μ-in	180 grid/0.8 μm Ra/30 μ-in	4
320 grid/0.4 μm/12 μ-in	180 grid/0.8 μm Ra/30 μ-in	7
400 grid/0.25 μm Ra/10 μ-in	180 grid/0.8 μm Ra/30 μ-in	8
Mirror Polished	Mirror Polished	9

*Mechanically Polished

Ordering Example

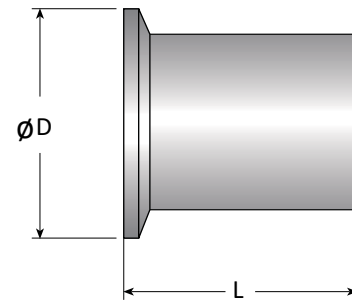
Description	Nominal Size In.	Type	Ordering Code
Type 111	1/2"	A	015000-111-A54*

*Material and Surface are including to the ordering code



FERRULES Weld Ferrule

Nominal Size In.	Type	L		D		Ordering Code
		in.	mm	in.	mm	
1/4"	A	1.750"	44.5	0.984"	24.9	007000-112-A* **
3/8"	A	1.750"	44.5	0.984"	24.9	010000-112-A* **
1/2"	A	1.750"	44.5	0.984"	24.9	015000-112-A* **
3/4"	A	1.750"	44.5	0.984"	24.9	020000-112-A* **
1.0"	A	1.750"	44.5	1.339"	34.0	024000-112-A* **
1.0"	B	1.750"	44.5	1.984"	50.3	025000-112-A* **
1½"	B	1.750"	44.5	1.984"	50.3	038000-112-A* **
2.0"	B	2.250"	57.2	2.516"	63.9	051000-112-A* **
2½"	B	2.250"	57.2	3.047"	77.3	063000-112-A* **
3.0"	B	2.250"	57.2	3.579"	90.9	076000-112-A* **
4.0"	B	2.250"	57.2	4.682"	118.9	100000-112-A* **
6.0"	B	3.000"	76.2	6.570"	166.8	150000-112-A* **



* The first digit refers to material guide, according to Table 1

** The last digit refers to surface quality, according to Table 2

Table 1

304 (1.4301)	304L (1.4307)	316L (1.4404)
1	2	5

Table 2

Inside Surface	Outside Surface	Ordering Code
No finish requirement	Unpolished/Mill Finish	0
180 grid/0.8 µm Ra/30 µ-in	180 grid/0.8 µm Ra/30 µ-in	1
240 grid/0.51 µm Ra/20 µ-in	180 grid/0.8 µm Ra/30 µ-in	4
320 grid/0.4 µm/12 µ-in	180 grid/0.8 µm Ra/30 µ-in	7
400 grid/0.25 µm Ra/10 µ-in	180 grid/0.8 µm Ra/30 µ-in	8
Mirror Polished	Mirror Polished	9

*Mechanically Polished

Ordering Example

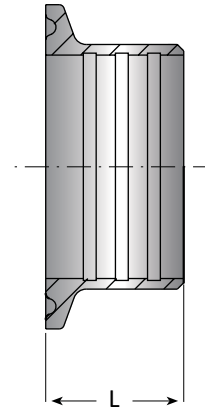
Description	Nominal Size In.	Type	Ordering Code
Type 112	1/2"	A	015000-112-A54*

*Material and Surface are including to the ordering code



FERRULES Roll-On Ferrule

Nominal Size In.	L		Ordering Code
	in.	mm	
1.0"	0.750"	19.0	025000-108-A* **
1½"	1.125"	28.6	038000-108-A* **
2.0"	1.313"	33.4	051000-108-A* **
2½"	1.375"	34.9	063000-108-A* **
3.0"	1.438"	36.5	076000-108-A* **
4.0"	1.500"	38.1	100000-108-A* **



* The first digit refers to material guide, according to Table 1
 ** The last digit refers to surface quality, according to Table 2

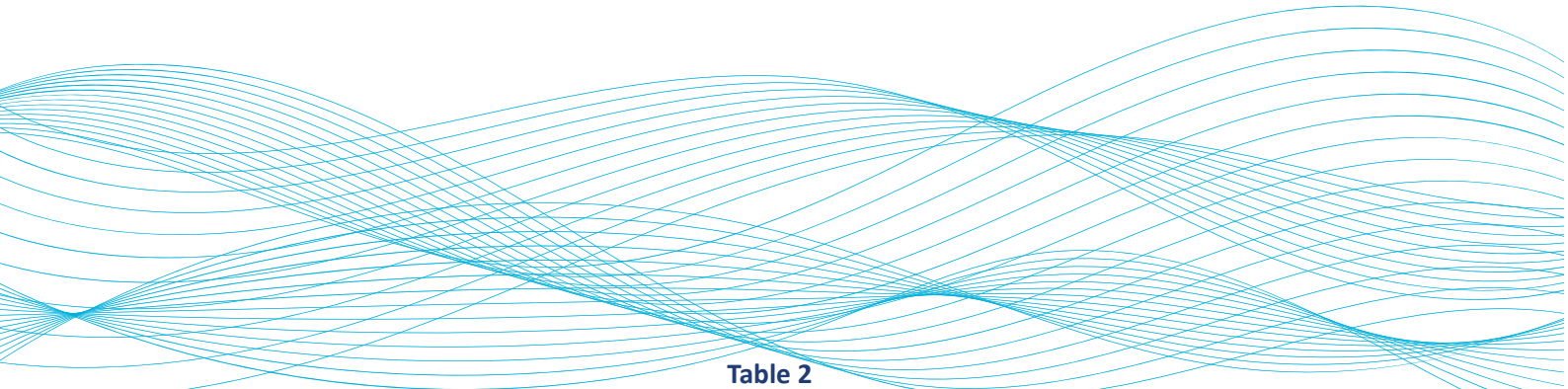


Table 1

304 (1.4301)	304L (1.4307)	316L (1.4404)
1	2	5

Table 2

Inside Surface	Outside Surface	Ordering Code
No finish requirement	Unpolished/Mill Finish	0
180 grid/0.8 μm Ra/30 μ-in	180 grid/0.8 μm Ra/30 μ-in	1
240 grid/0.51 μm Ra/20 μ-in	180 grid/0.8 μm Ra/30 μ-in	4
320 grid/0.4 μm/12 μ-in	180 grid/0.8 μm Ra/30 μ-in	7
400 grid/0.25 μm Ra/10 μ-in	180 grid/0.8 μm Ra/30 μ-in	8
Mirror Polished	Mirror Polished	9

*Mechanically Polished



Ordering Example

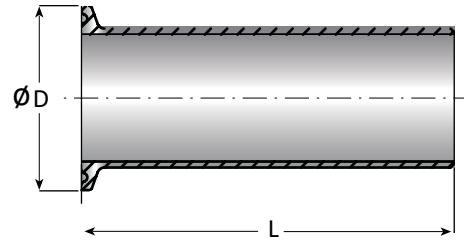
Description	Nominal Size In.	Ordering Code
Type 108	1.0"	025000-108-A54*

*Material and Surface are including to the ordering code

FERRULES

Light Wall Tank Weld Ferrule

Nominal Size In.	Type	L		D		Ordering Code
		in.	mm	in.	mm	
1/2"	A	3.0"	76.2	0.984"	24.9	015000-107-A* **
3/4"	A	3.0"	76.2	0.984"	24.9	020000-107-A* **
1.0"	B	3.0"	76.2	1.984"	50.3	025000-107-A* **
1½"	B	3.0"	76.2	1.984"	50.3	038000-107-A* **
2.0"	B	3.0"	76.2	2.516"	63.9	051000-107-A* **
2½"	B	3.0"	76.2	3.047"	77.3	063000-107-A* **
3.0"	B	4.0"	101.6	3.579"	118.9	076000-107-A* **
4.0"	B	4.0"	101.6	4.682"	166.8	100000-107-A* **
6.0"	B	6.0"	152.4	6.570"	166.8	150000-107-A* **



* The first digit refers to material guide, according to Table 1

** The last digit refers to surface quality, according to Table 2

Table 2

Inside Surface	Outside Surface	Ordering Code
No finish requirement	Unpolished/Mill Finish	0
180 grid/0.8 µm Ra/30 µ-in	180 grid/0.8 µm Ra/30 µ-in	1
240 grid/0.51 µm Ra/20 µ-in	180 grid/0.8 µm Ra/30 µ-in	4
320 grid/0.4 µm/12 µ-in	180 grid/0.8 µm Ra/30 µ-in	7
400 grid/0.25 µm Ra/10 µ-in	180 grid/0.8 µm Ra/30 µ-in	8
Mirror Polished	Mirror Polished	9

*Mechanically Polished

Table 1

304 (1.4301)	304L (1.4307)	316L (1.4404)
1	2	5

Ordering Example

Description	Nominal Size In.	Type	Ordering Code
Type 107	1/2"	A	015000-107-A54*

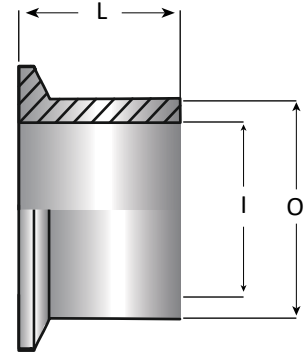
*Material and Surface are including to the ordering code



FERRULES

Heavy Wall Tank Weld Ferrule

Nominal Size In.	Type	L		O		I		Ordering Code
		in.	mm	in.	mm	in.	mm	
1/2"	A	1.625"	41.3	0.502"	12.7	0.321"	8.1	015000-109-A***
3/4"	A	1.625"	41.3	0.750"	19.0	0.574"	14.6	020000-109-A***
1.0"	B	1.625"	41.3	1.160"	29.4	0.870"	22.1	025000-109-A***
1½"	B	1.625"	41.3	1.676"	42.6	1.370"	34.8	038000-109-A***
2.0"	B	1.750"	44.4	2.192"	55.7	1.870"	47.5	051000-109-A***
2½"	B	1.750"	44.4	2.708"	68.8	2.370"	60.2	063000-109-A***
3.0"	B	1.813"	46.0	3.224"	81.9	2.870"	72.9	076000-109-A***
4.0"	B	2.125"	54.0	4.256"	108.1	3.834"	97.4	100000-109-A***
6.0"	B	2.500"	63.5	6.192"	157.3	5.758"	146.2	150000-109-A***
8.0"	B	2.500"	63.5	8.192"	208.1	7.758"	197.0	200000-109-A***



* The first digit refers to material guide, according to Table 1
 ** The last digit refers to surface quality, according to Table 2

Table 1

304 (1.4301)	304L (1.4307)	316L (1.4404)
1	2	5

Table 2

Inside Surface	Outside Surface	Ordering Code
No finish requirement	Unpolished/Mill Finish	0
180 grid/0.8 µm Ra/30 µ-in	180 grid/0.8 µm Ra/30 µ-in	1
240 grid/0.51 µm Ra/20 µ-in	180 grid/0.8 µm Ra/30 µ-in	4
320 grid/0.4 µm/12 µ-in	180 grid/0.8 µm Ra/30 µ-in	7
400 grid/0.25 µm Ra/10 µ-in	180 grid/0.8 µm Ra/30 µ-in	8
Mirror Polished	Mirror Polished	9

*Mechanically Polished

Ordering Example

Description	Nominal Size In.	Type	Ordering Code
Type 109	1/2"	A	015000-109-A54*

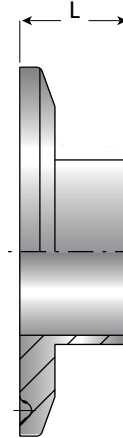
*Material and Surface are including to the ordering code



FERRULES

Reducing Ferrule

Nominal Size In.	L		Ordering Code
	in.	mm	
3/4" x 1/2"	0.500"	12.7	020015-113-A* **
1.0" x 1/2"	0.500"	12.7	024015-113-A* **
1.0" x 3/4"	0.500"	12.7	024020-113-A* **
1.0" x 1/2"	0.500"	12.7	025015-113-A* **
1.0" x 3/4"	0.500"	12.7	025020-113-A* **
1½" x 1/2"	0.500"	12.7	038015-113-A* **
1½" x 3/4"	0.500"	12.7	038020-113-A* **
1½" x 1.0"	0.500"	12.7	038025-113-A* **
2.0" x 1.0"	0.500"	12.7	051025-113-A* **
2.0" x 1½"	0.500"	12.7	051038-113-A* **
2½" x 2.0"	0.500"	12.7	063051-113-A* **
3.0" x 2.0"	0.500"	12.7	076051-113-A* **
4.0" x 3.0"	0.625"	15.9	100076-113-A* **



* The first digit refers to material guide, according to Table 1
 ** The last digit refers to surface quality, according to Table 2

Table 1

304 (1.4301)	304L (1.4307)	316L (1.4404)
1	2	5

Table 2

Inside Surface	Outside Surface	Ordering Code
No finish requirement	Unpolished/Mill Finish	0
180 grid/0.8 µm Ra/30 µ-in	180 grid/0.8 µm Ra/30 µ-in	1
240 grid/0.51 µm Ra/20 µ-in	180 grid/0.8 µm Ra/30 µ-in	4
320 grid/0.4 µm/12 µ-in	180 grid/0.8 µm Ra/30 µ-in	7
400 grid/0.25 µm Ra/10 µ-in	180 grid/0.8 µm Ra/30 µ-in	8
Mirror Polished	Mirror Polished	9

*Mechanically Polished

Ordering Example

Description	Nominal Size In.	Ordering Code
Type 113	3/4" x 1/2"	020015-113-A54*

*Material and Surface are including to the ordering code

