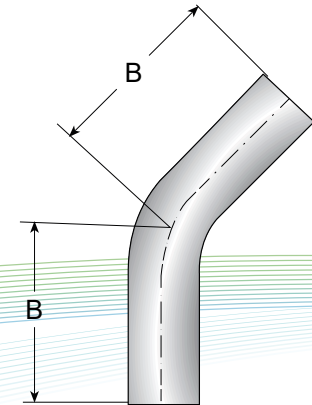


Elbows

45 Degrees

45° Elbow WW DT-4.1.1-4

Nominal Size	Dimensions		Ordering Code
	B in.	B mm.	
1/4"	2.000	50.8	007000-360-P6*
3/8"	2.000	50.8	010000-360-P6*
1/2"	2.250	57.2	015000-360-P6*
3/4"	2.250	57.2	020000-360-P6*
1.0"	2.250	57.2	025000-360-P6*
1½"	2.250	63.5	038000-360-P6*
2.0"	3.000	76.2	051000-360-P6*
2½"	3.375	85.7	063000-360-P6*
3.0"	3.625	92.1	076000-360-P6*
4.0"	4.500	114.3	100000-360-P6*
6.0"	6.250	158.8	150000-360-P6*

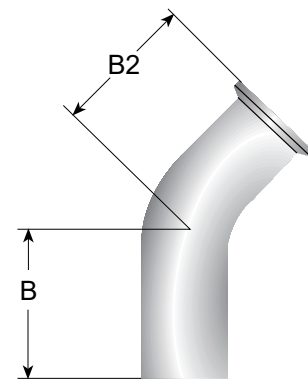


BPE TABLE # DT 4.1.1-4

*The last digit refers to surface quality, according to Table 1

45° Elbow CW DT-4.1.1-5

Nominal Size	Dimensions				Ordering Code
	B in.	B mm.	B2in.	B2mm.	
1/4"	2.000	50.8	1.000	25.4	007000-361-P6*
3/8"	2.000	50.8	1.000	25.4	010000-361-P6*
1/2"	2.250	57.2	1.000	25.4	015000-361-P6*
3/4"	2.250	57.2	1.000	25.4	020000-361-P6*
1.0"	2.250	57.2	1.125	28.6	025000-361-P6*
1½"	2.250	63.5	1.438	36.5	038000-361-P6*
2.0"	3.000	76.2	1.750	44.5	051000-361-P6*
2½"	3.375	85.7	2.063	52.4	063000-361-P6*
3.0"	3.625	92.1	2.375	60.3	076000-361-P6*
4.0"	4.500	114.3	3.125	79.4	100000-361-P6*
6.0"	6.250	158.8	5.250	133.4	150000-361-P6*



BPE TABLE # DT 4.1.1-5

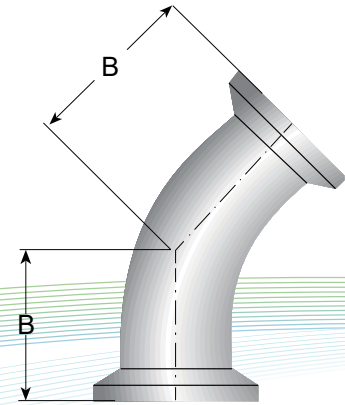
*The last digit refers to surface quality, according to Table 1

Elbows

45 Degrees

45° Clamp Elbow CC DT-4.1.1-6

Nominal Size	Dimensions		Ordering Code
	B in.	B mm.	
1/4"	1.000	25.4	007000-362-P6*
3/8"	1.000	25.4	010000-362-P6*
1/2"	1.000	25.4	015000-362-P6*
3/4"	1.000	25.4	020000-362-P6*
1.0"	1.125	28.6	025000-362-P6*
1½"	1.438	36.5	038000-362-P6*
2.0"	1.750	44.5	051000-362-P6*
2½"	2.063	52.4	063000-362-P6*
3.0"	2.375	60.3	076000-362-P6*
4.0"	3.125	79.4	100000-362-P6*
6.0"	5.250	133.4	150000-362-P6*



BPE TABLE # DT 4.1.1-6

*The last digit refers to surface quality, according to Table 1

TECHNICAL DATA	
Material	316L
Norm	ASME - BPE
BPE Table	DT - 4.1.1-6
Surface finish standard on stock	SF1

Table 1

Inside Surface		Outside Surface	
No finish requirement	No finish requirement		0
SF1 (MP* 20μ-in 0.51 μm)	Mechanically polished to 32RA μ-in		4
SF4 (MP** 15μ-in 0.38 μm)	Mechanically polished to 32RA μ-in		M

*MP: Mechanically Polished

**MPE: Mechanically Polished & Electropolished

Ordering Example

Description	Nominal Size In.	Ordering Code
Type 362	1/4"	007000-362-P64*

*Material and Surface are including to the ordering code

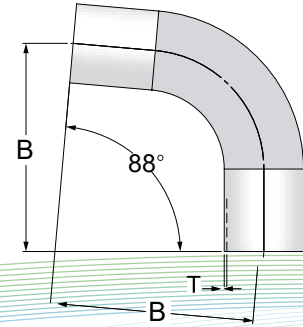
Elbows

88 Degrees

88° Elbow WW

Nominal Size	Dimensions				Ordering Code
	T		$\alpha=88^\circ$		
	T in.	T mm.	B in.	B mm.	
1/2"	0.65	1.65	3.06	77.7	015000-260-P6*
3/4"	0.65	1.65	3.06	77.7	020000-260-P6*
1.0"	0.65	1.65	3.05	77.5	025000-260-P6*
1½"	0.65	1.65	3.80	96.5	038000-260-P6*
2.0"	0.65	1.65	4.81	122.2	051000-260-P6*
2½"	0.65	1.65	5.56	141.2	063000-260-P6*
3.0"	0.65	1.65	6.31	160.3	076000-260-P6*
4.0"	0.83	2.11	8.07	205.0	100000-260-P6*

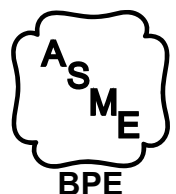
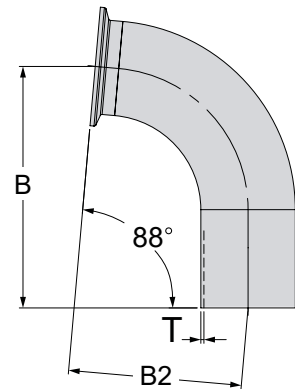
*The last digit refers to surface quality, according to Table 1



88° Elbow CW

Nominal Size In.	Dimensions						Ordering Code
	T		$\alpha=88^\circ$				
	T in.	T mm.	B in.	B mm.	B2in.	B2mm.	
1/2"	0.65	1.65	3.01	76.50	1.71	43.50	015000-261-P64*
3/4"	0.65	1.65	3.01	76.50	1.71	43.50	020000-261-P64*
1.0"	0.65	1.65	3.01	76.50	2.04	51.80	025000-261-P64*
1½"	0.65	1.65	3.76	95.60	2.79	70.75	038000-261-P64*
2.0"	0.65	1.65	4.73	120.10	3.62	92.00	051000-261-P64*
2½"	0.65	1.65	5.51	140.00	4.22	107.25	063000-261-P64*
3.0"	0.65	1.65	6.27	159.20	4.94	125.40	076000-261-P64*
4.0"	0.83	2.11	8.02	203.75	6.42	163.10	100000-261-P64*

*The last digit refers to surface quality, according to Table 1



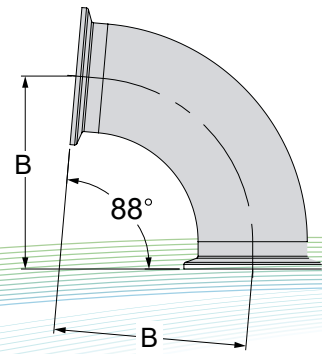
Elbows 88 Degrees

88° Elbow CC

Nominal Size	Dimensions				Ordering Code
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	T		$\alpha=88^\circ$		
	in.	mm.	B in.	B mm.	
1/2"	0.65	1.65	1.63	41.3	015000-262-P6*
3/4"	0.65	1.65	1.63	41.3	020000-262-P6*
1.0"	0.65	1.65	2.01	51.1	025000-262-P6*
1½"	0.65	1.65	2.76	70.2	038000-262-P6*
2.0"	0.65	1.65	3.51	89.2	051000-262-P6*
2½"	0.65	1.65	4.26	108.3	063000-262-P6*
3.0"	0.65	1.65	5.01	127.3	076000-262-P6*
4.0"	0.83	2.11	6.65	168.8	100000-262-P6*

*The last digit refers to surface quality, according to Table 1



TECHNICAL DATA	
Material	316L
Norm	ASME - BPE
BPE Table	DT - 4.1.1-6
Surface finish standard on stock	SF1

Table 1

Inside Surface	Outside Surface	
No finish requirement	No finish requirement	0
SF1 (MP* 20μ-in 0.51 μm)	Mechanically polished to 32RA μ-in	4
SF4 (MP** 15μ-in 0.38 μm)	Mechanically polished to 32RA μ-in	M

*MP: Mechanically Polished

**MPE: Mechanically Polished & Electropolished

Ordering Example

Description	Nominal Size In.	Ordering Code
Type 262	1/2"	015000-262-P64*

*Material and Surface are including to the ordering code

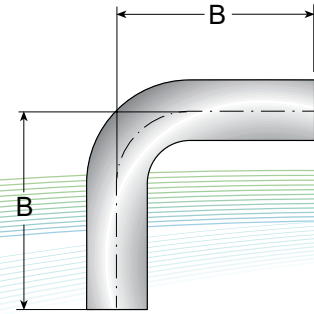
Elbows

90 Degrees

90° Elbow WW DT-4.1.1-1

Nominal Size	Dimensions		Ordering Code
	B in.	B mm.	
1/4"	2.625	66.7	007000-250-P6*
3/8"	2.625	66.7	010000-250-P6*
1/2"	3.000	76.2	015000-250-P6*
3/4"	3.000	76.2	020000-250-P6*
1.0"	3.000	76.2	025000-250-P6*
1½"	3.750	95.3	038000-250-P6*
2.0"	4.750	120.7	051000-250-P6*
2½"	5.500	139.7	063000-250-P6*
3.0"	6.250	158.8	076000-250-P6*
4.0"	8.000	203.2	100000-250-P6*
6.0"	11.500	292.1	150000-250-P6*

*The last digit refers to surface quality, according to Table 1

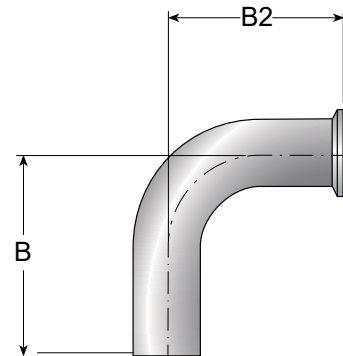


BPE TABLE # DT 4.1.1-1

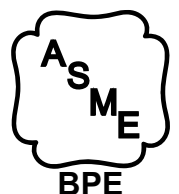
90° Elbow CW DT-4.1.1-2

Nominal Size	Dimensions				Ordering Code
	B in.	B mm.			
1/4"	2.625	66.7	1.625	41.3	007000-251-P6*
3/8"	2.625	66.7	1.625	41.3	010000-251-P6*
1/2"	3.000	76.2	1.625	41.3	015000-251-P6*
3/4"	3.000	76.2	1.625	41.3	020000-251-P6*
1.0"	3.000	76.2	2.000	50.8	025000-251-P6*
1½"	3.750	95.3	2.750	69.9	038000-251-P6*
2.0"	4.750	120.7	3.500	88.9	051000-251-P6*
2½"	5.500	139.7	4.250	108.0	063000-251-P6*
3.0"	6.250	158.8	5.000	127.0	076000-251-P6*
4.0"	8.000	203.2	6.625	168.3	100000-251-P6*
6.0"	11.500	292.1	10.500	266.7	150000-251-P6*

*The last digit refers to surface quality, according to Table 1



BPE TABLE # DT 4.1.1-2

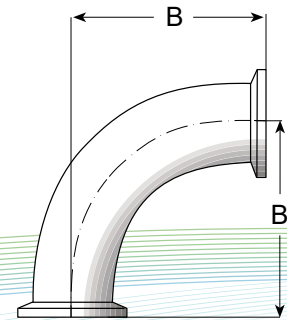


Elbows

90 Degrees

90° Clamp Elbow CC DT-4.1.1-3

Nominal Size	Dimensions		Ordering Code
	B in.	B mm.	
1/4"	1.625	41.3	007000-252-P6*
3/8"	1.625	41.3	010000-252-P6*
1/2"	1.625	41.3	015000-252-P6*
3/4"	1.625	41.3	020000-252-P6*
1.0"	2.000	50.8	025000-252-P6*
1½"	2.750	69.9	038000-252-P6*
2.0"	3.500	88.9	051000-252-P6*
2½"	4.250	108.0	063000-252-P6*
3.0"	5.000	127.0	076000-252-P6*
4.0"	6.625	168.3	100000-252-P6*
6.0"	10.500	266.7	150000-252-P6*



BPE TABLE # DT 4.1.1-3

*The last digit refers to surface quality, according to Table 1

TECHNICAL DATA	
Material	316L
Norm	ASME - BPE
BPE Table	DT - 4.1.1-3
Surface finish standard on stock	SF1

Table 1

Inside Surface		Outside Surface	
No finish requirement	No finish requirement		0
SF1 (MP* 20μ-in 0.51 μm)	Mechanically polished to 32RA μ-in		4
SF4 (MP** 15μ-in 0.38 μm)	Mechanically polished to 32RA μ-in		M

*MP: Mechanically Polished

**MPE: Mechanically Polished & Electropolished

Ordering Example

Description	Nominal Size In.	Ordering Code
Type 252	1/2"	015000-252-P64*

*Material and Surface are including to the ordering code

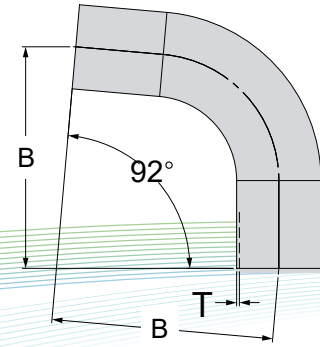
Elbows

92 Degrees

92° Elbow WW

Nominal Size	Dimensions				Ordering Code
	T		$\alpha=88^\circ$		
	in.	mm.	B in.	B mm.	
1/2"	0.65	1.65	2.93	74.4	015000-270-P6*
3/4"	0.65	1.65	2.93	74.4	020000-270-P6*
1.0"	0.65	1.65	2.95	74.9	025000-270-P6*
1½"	0.65	1.65	3.69	93.7	038000-270-P6*
2.0"	0.65	1.65	4.69	119.1	051000-270-P6*
2½"	0.65	1.65	5.44	138.2	063000-270-P6*
3.0"	0.65	1.65	6.19	157.2	076000-270-P6*
4.0"	0.83	2.115	7.93	201.4	100000-270-P6*

*The last digit refers to surface quality, according to Table 1



TECHNICAL DATA	
Material	316L
Norm	ASME - BPE
Surface finish standard on stock	SF1

Table 1

Inside Surface	Outside Surface	
No finish requirement	No finish requirement	0
SF1 (MP* 20 μ -in 0.51 μ m)	Mechanically polished to 32RA μ -in	4
SF4 (MP** 15 μ -in 0.38 μ m)	Mechanically polished to 32RA μ -in	M

*MP: Mechanically Polished

**MPE: Mechanically Polished & Electropolished

Ordering Example

Description	Nominal Size In.	Ordering Code
Type 270	1/2"	015000-270-P64*

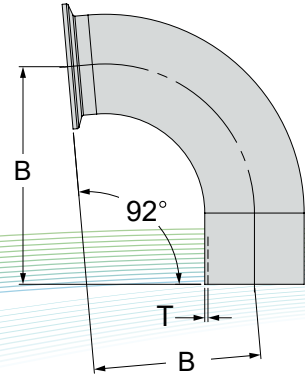
*Material and Surface are including to the ordering code

Elbows 92 Degrees

92° Elbow CW

Nominal Size	Dimensions						Ordering Code
	T		$\alpha=92^\circ$		B in.	B mm.	
	in.	mm.	in.	mm.			
1/2"	0.65	1.650	2.98	75.7	1.66	42.1	015000-271-P6*
3/4"	0.65	1.650	2.98	75.7	1.66	42.1	020000-271-P6*
1.0"	0.65	1.650	2.98	75.7	2.05	52.1	025000-271-P6*
1½"	0.65	1.650	3.73	94.8	2.73	69.3	038000-271-P6*
2.0"	0.65	1.650	4.77	121.2	3.47	88.2	051000-271-P6*
2½"	0.65	1.650	5.43	137.8	4.10	104.2	063000-271-P6*
3.0"	0.65	1.650	6.17	156.8	4.83	122.8	076000-271-P6*
4.0"	0.83	2.115	7.91	200.8	6.42	163.0	100000-271-P6*

*The last digit refers to surface quality, according to Table 1



TECHNICAL DATA	
Material	316L
Norm	ASME - BPE
Surface finish standard on stock	SF1

Table 1

Inside Surface		Outside Surface	
No finish requirement	No finish requirement		0
SF1 (MP* 20 μ -in 0.51 μ m)	Mechanically polished to 32RA μ -in		4
SF4 (MP** 15 μ -in 0.38 μ m)	Mechanically polished to 32RA μ -in		M

*MP: Mechanically Polished

**MPE: Mechanically Polished & Electropolished

Ordering Example

Description	Nominal Size In.	Ordering Code
Type 271	1/2"	015000-271-P64*

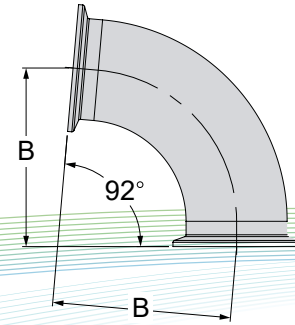
*Material and Surface are including to the ordering code

Elbows 92 Degrees

92° Elbow CC

Nominal Size	Dimensions				Ordering Code
	T		$\alpha=92^\circ$		
	in.	mm.	B in.	B mm.	
1/2"	0.65	1.650	1.61	40.8	015000-272-P6*
3/4"	0.65	1.650	1.61	40.8	020000-272-P6*
1.0"	0.65	1.650	1.99	50.5	025000-272-P6*
1½"	0.65	1.650	2.74	69.6	038000-272-P6*
2.0"	0.65	1.650	3.49	88.6	051000-272-P6*
2½"	0.65	1.650	4.04	102.6	063000-272-P6*
3.0"	0.65	1.650	4.76	120.8	076000-272-P6*
4.0"	0.83	2.115	6.30	160.0	100000-272-P6*

*The last digit refers to surface quality, according to Table 1



TECHNICAL DATA	
Material	316L
Norm	ASME - BPE
Surface finish standard on stock	SF1

Table 1

Inside Surface	Outside Surface	
No finish requirement	No finish requirement	0
SF1 (MP* 20μ-in 0.51 μm)	Mechanically polished to 32RA μ-in	4
SF4 (MP** 15μ-in 0.38 μm)	Mechanically polished to 32RA μ-in	M

*MP: Mechanically Polished

**MPE: Mechanically Polished & Electropolished

Ordering Example

Description	Nominal Size In.	Ordering Code
Type 272	1/2"	015000-272-P64*

*Material and Surface are including to the ordering code