

Truvia

High purity Tubes and Fitting

Data Sheet



Tubes and fitting For pharma , Biotech and other life science industries

Tubes

Reducer

Return Bend

Elbow

Clamp



BPE





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 6th of October , 29Central Axis,4th District,
Neighborhood1,1st Floor.



Truvia – High quality, Now from MIDEX at competitive prices

Introducing Truvia – A New Piping Line from MIDEX

As the parent company, MIDEX delivers high-quality solutions in water treatment plants and various industrial projects, with strong expertise in the field. Building on this experience and trusted reputation, MIDEX is proud to introduce Truvia, its new premium piping line. Manufactured to the highest standards and in partnership with Ghwa, Truvia is ASME BPE certified and matches the quality and performance of the strongest European brands – offering unmatched durability, reliability, and competitive pricing



Vision

To be the leading provider of innovative and reliable engineering solutions for the pharmaceutical, food and beverage, and cosmetics industries, ensuring the highest standards of quality, safety, and efficiency in purified water generation and hygienic process systems worldwide

Mission

To deliver exceptional turnkey engineering solutions by leveraging our expertise in purified water systems, hygienic process controls, and utility transfer pipelines, while adhering to global standards such as FDA, ISPE, ASME BPE, and EHEDG. We are committed to exceeding our clients' expectations by ensuring their facilities operate at peak efficiency and comply with the most stringent industry regulations

About US



OVERALL MIDEX

MIDEX is a specialized engineering company serving the pharmaceutical, food and beverage, and cosmetics industries. We focus on designing and implementing purified water generation systems, WFI storage distribution systems, and hygienic process controls. Our expertise extends to managing facilities and utility transfer pipelines, ensuring they meet the highest industry standards, including FDA, ISPE, ASME BPE and EHEDG. With a commitment to delivering turnkey projects, we provide our clients with efficient, reliable and compliant solutions that support the safe and effective operation of their critical processes.

History

Midex is a startup specializing in advanced piping systems and integrated solutions for liquid and gas processing, built to the highest sanitary and engineering standards. We deliver complete projects, upgrade existing systems and enhance production lines to ensure efficiency, reliability, and compliance for diverse industries.

We also manufacture and supply premium equipment, components, and spare parts that keep operations running smoothly and without interruption.



Strategic Partnership

Truvia – The New Standard in Piping Excellence

As part of MIDEX's commitment to delivering world-class solutions we are proud to launch Truvia, our new premium piping line

Manufactured in partnership with Ghwa and to the highest standards

TRUVIA pipes are ASME BPE certified and match the quality and performance of the strongest European brands, ensuring unmatched durability and reliability

Now available at competitive prices, Truvia offers you the trusted quality

you expect from global leaders – with the added advantage of local availability and support

Who's GHWA?

Since 2005 it was established in , G HWA has developed a global reputation It is known as a trusted manufacturer of high-quality hygienic stainless steel GHWA's success stems from expert collaboration across all stages of stainless steel manufacturing Their skilled team brings years of experience in product design, production, and quality control This has earned them the trust of long-term customers worldwide



ASME-BPE Certificate Of Authorization



BPE

CERTIFICATE OF AUTHORIZATION

The named company is authorized by The American Society of Mechanical Engineers (ASME) for the scope shown below in accordance with the applicable rules of the ASME BPE Standard on Bioprocessing Equipment. The use of the ASME Single Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any component certified under this authorization shall have been produced, assembled, and tested in accordance with the provisions of the ASME BPE Standard on Bioprocessing Equipment.

COMPANY:

G HWA Industries Co., Ltd.
52 Moo 7 Nongchumpon
Khaoyoi, Phetchaburi 76140
Thailand

SCOPE:

Manufacture of Ferrous Tubing (excluding circumferential welds) and Fittings at the above location only

AUTHORIZED: **January 21, 2021**EXPIRES: **January 20, 2026**CERTIFICATE NUMBER: **BPE-107**

Board Chair, Conformity Assessment

Managing Director, Conformity Assessment

The American Society of Mechanical Engineers





Tubes



Material Grades

- A** = 304/ 304L
- B** = 316/ 316L
- C** = 1.4404
- D** = 1.4435
- H** = 904L
- I** = Hastelloy® C-22®
- J** = Hastelloy® C-276
- L** = AL-6XN®
- E** = EPDM
- S** = Silicone/ VMQ or SS Reinforced Teflon®
- T** = PTFE/ Teflon®
- N** = NBR/ Buna-N/ Nitrile
- V** = FKM/ Viton®
- G** = RTFE(Reinforced Teflon®)
- F** = FRN(Fiberglass Reinforced Nylon)

Surface Finishes

- 0** = Unpolished / Mill Finish
- 1** = 0.8 µm R_a Max./ 180 Grit
- 2** = 0.5 µm R_a Max./ 240 Grit
- 3** = 0.4 µm R_a Max./ 320 Grit
- 6** = Sandblasted
- 9** = Tumble Finish
- P** = Pickling / Passivation
- BA** = Bright Annealed

BPE DT-4-1 (DT-1) Stainless Steel Tube

Normal size		A		SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	0.035	0.89	2201B014089-##	
3/8	9.53	0.035	0.89	2201B038089-##	
1/2	12.70	0.065	1.65	2201B050165-##	
3/4	19.05	0.065	1.65	2201B075165-##	
1	25.40	0.065	1.65	2201B100165-##	
1 1/2	38.10	0.065	1.65	2201B150165-##	
2	50.80	0.065	1.65	2201B200165-##	
2 1/2	63.50	0.065	1.65	2201B250165-##	
3	76.20	0.065	1.65	2201B300165-##	
4	101.60	0.083	2.11	2201B400211-##	
6	152.40	0.109	2.77	2201B600277-##	

ASTM A249/A269/A270 Stainless Steel Tube

Normal size		Tube Wall Thickness		X=ID	Y=OD
Inch	mm	Inch	mm	#=Material Grade	
1/2	12.70	0.065	1.65	2401#050165-XY	
3/4	19.05	0.065	1.65	2401#075165-XY	
1	25.40	0.065	1.65	2401#100165-XY	
1 1/2	38.10	0.065	1.65	2401#150165-XY	
2	50.80	0.065	1.65	2401#200165-XY	
2 1/2	63.50	0.065	1.65	2401#250165-XY	
3	76.20	0.065	1.65	2401#300165-XY	
4	101.60	0.083	2.11	2401#400211-XY	
6	152.40	0.109	2.77	2401#600277-XY	

SMS Stainless Steel Tube

Normal size		Tube Wall Thickness		ID#320	OD#240
DN	mm	Inch	mm	#=Material Grade	
25	25.4	0.047	1.2	3101#100120-32	
25	25.4	0.059	1.5	3101#100150-32	
38	38.1	0.047	1.2	3101#150120-32	
38	38.1	0.059	1.5	3101#150150-32	
51	50.8	0.047	1.2	3101#200120-32	
51	50.8	0.059	1.5	3101#200150-32	
63.5	63.5	0.059	1.5	3101#250150-32	
76.1	76.2	0.063	1.6	3101#300165-32	
101.6	101.6	0.079	2.0	3101#400210-32	



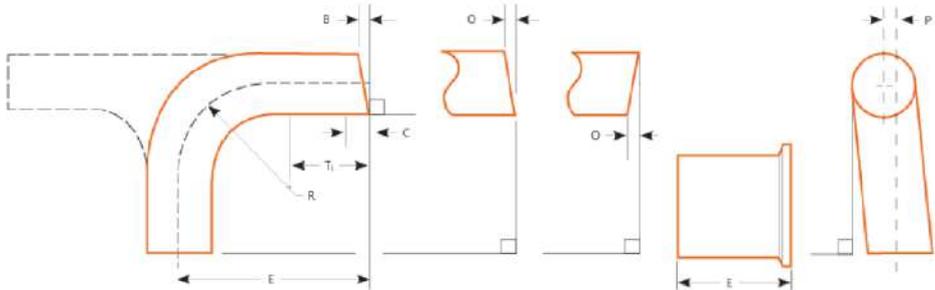
Comparison Table

ASME-BPE			3-A Inch Size			BS 4825			SMS/ISO 2037		DIN 11850				
Nominal	OD	T	Nominal	OD	T	Nominal	OD	T	OD	T	Nominal	Series			T
Inch	mm	mm	Inch	mm	mm	Inch	mm	mm	mm	mm	DN	1	2	3	mm
1/4	6.35	0.89	1/2	12.70	1.65	1/2	12.70	1.6	12	1	10	12			1.0
3/8	9.53	0.89	3/4	19.05	1.65	3/4	19.05	1.6	12.7	1			13		1.5
1/2	12.70	1.65	1	25.40	1.65	1	25.40	1.6	17.2	1				14	2.0
3/4	19.05	1.65	1 1/2	38.10	1.65	1 1/2	38.10	1.6	21.3	1	15	18			1.0
1	25.40	1.65	2	50.80	1.65	2	50.80	1.6	25	1.2/1.6			19		1.5
1 1/2	38.10	1.65	2 1/2	63.50	1.65	2 1/2	63.50	1.6	33.7	1.2/1.6				20	2.0
2	50.80	1.65	3	76.20	1.65	3	76.20	1.6	38	1.2/1.6	20	22			1.0
2 1/2	63.50	1.65	4	101.60	2.11	4	101.60	2.0	40	1.2/1.6			23		1.5
3	76.20	1.65	6	152.40	2.77		114.30	2.0	51	1.2/1.6				24	2.0
4	101.60	2.11	8	203.20	2.77		139.70	2.0	63.5	1.6	25	28			1.0
6	152.40	2.77	8	203.20	3.05				70	1.6			29		1.5
									76.1	1.6				30	2.0
									88.9	2	32	34			1.0
									101.6	2			35		1.5
									104	2				36	2.0
									114.3	2	40	40			1.0
									139.7	2			41		1.5
														42	2.0
											50	52			1.0
													53		1.5
														54	2.0
											65	70			2.0
											80	85			2.0
											100	104			2.0
											125	129			2.0
											150	154			2.0



ASME BPE Table DT-3-1

Final Tolerances For Mechanical polished fitting and process Components, Excluding Tube



Nominal Size, in.	O.D.		Wall Thickness		Squareness Face to Target, B		OFF Angle, O		Equivalent Angle (for O) deg	OFF Plane, P		Centerline RADIUS (CRL), R	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm		Inch	mm	Inch	mm
1/4	±0.005	±0.13	+0.003/-0.004	+0.09/-0.10	0.005	0.13	0.009	0.23	2.1	0.030	0.76	0.563	14.30
3/8	±0.005	±0.13	+0.003/-0.004	+0.09/-0.10	0.005	0.13	0.012	0.30	1.8	0.030	0.76	1.125	28.58
1/2	±0.005	±0.13	+0.005/-0.008	+0.13/-0.20	0.005	0.13	0.014	0.36	1.6	0.030	0.76	1.125	28.58
3/4	±0.005	±0.13	+0.005/-0.008	+0.13/-0.20	0.005	0.13	0.018	0.46	1.4	0.030	0.76	1.125	28.58
1	±0.005	±0.13	+0.005/-0.008	+0.13/-0.20	0.008	0.20	0.025	0.64	1.4	0.030	0.76	1.500	38.10
1 1/2	±0.008	±0.20	+0.005/-0.008	+0.13/-0.20	0.008	0.20	0.034	0.86	1.3	0.050	1.27	2.250	57.15
2	±0.008	±0.20	+0.005/-0.008	+0.13/-0.20	0.008	0.20	0.043	1.09	1.2	0.050	1.27	3.000	76.20
2 1/2	±0.010	±0.25	+0.005/-0.008	+0.13/-0.20	0.010	0.25	0.054	1.37	1.2	0.050	1.27	3.750	95.25
3	+0.010	+0.25	+0.005/-0.008	+0.13/-0.20	0.016	0.41	0.068	1.73	1.3	0.050	1.27	4.500	114.30
4	±0.015	±0.38	+0.008/-0.010	+0.20/-0.25	0.016	0.41	0.086	2.18	1.2	0.060	1.52	6.000	152.40
6	±0.030	±0.76	+0.015/-0.015	+0.38/-0.38	0.030	0.76	0.135	3.43	1.3	0.060	1.52	9.000	228.60

General Notes:

- (a) Tolerance on end-to-end and center-to-end dimension E is $\pm 0.050"$ (1.27 mm)
 (b) Tolerance for centerline radius (CLR) is $\pm 10\%$ of the nominal dimension (R)
 (c) The length of the control portion C is fixed for all sizes at $0.75"$ (19 mm)

Weld End Chemical Compositions (wt. %)

	C	Si	Mn	P	S	Ni	Cr	Mo
Min.	-	-	-	-	0.005	10.000	16.000	2.000
Max.	0.035	1.000	2.000	0.045	0.017	14.000	18.000	3.000



R_a Readings for Metallic Process Contact Surfaces Table SF-2.4.1-1

Surface Designation	Mechanically Polished (Note)	
	R _a Max	
	µin.	µm
SF0	No finish requirement	No finish requirement
SF1	20	0.51
SF2	25	0.64
SF3	30	0.76
Surface Designation	Electropolished	
	R _a Max	
	µin.	µm
SF4	15	0.38
SF5	20	0.51
SF6	25	0.64

Note:

(1) Or any other finishing method that meets the R_a Max

Acceptance Criteria for Metallic Process Contact Surface Finishes Table SF-2.2-1

Anomaly or Indication	Acceptance Criteria
Pits/porosity	If diameter <0.020 in. (0.51 mm) and bottom is shiny [Notes (1) and (2)]. Pits ≥ 0.003 in. (0.08 mm) diameter are relevant whereas pits <0.003 in. (0.08 mm) diameter are irrelevant and acceptable.
Cluster of pits/porosity	No more than 4 relevant pits per 0.5 in. (12.7 mm) x 0.5 in. (12.7 mm) inspection window. The cumulative total diameter of all relevant pits shall not exceed 0.040 in. (1.02 mm).
Dents	None accepted
Finishing marks	If R _a max. is met
Welds	Welds used in the as-welded condition shall meet the requirements of MJ-8. Welds finished after welding shall be flush with the base metal, and concavity and convexity shall meet the requirements of MJ-8. Such finishing shall meet the R _a requirements of Table SF-2.4.1-1.
Nicks	None accepted
Scratches	For tubing, if cumulative length is <12.0 in. (305 mm) per 20 ft (6.1 m) tube length or prorated and if depth is <0.003 in. (0.08 mm) For fittings, valves, and other process components, if cumulative length is <0.25 in. (6.4 mm), depth <0.003 in. (0.08 mm), and R _a max. is met
Surface cracks	None accepted
Surface inclusions	If R _a max. is met
Surface residuals	None accepted, visual inspection
Surface roughness (R _a)	See Table SF-2.4.1-1
Weld slag	For tubing, up to 3 per 20 ft (6.1 m) length or prorated, if <75% of the width of the weld bead For fittings, valves, vessels, and other process components, none accepted (as welded shall meet the requirements of MJ-8 and Table MJ-8.4-1)
Blistering	None accepted

General note: This table covers surface finishes that are mechanically polished or any other finishing method that meets the R_a max.

Notes:

- (1) Black bottom pit of any depth is not acceptable.
- (2) Pits in superaustenitic and nickel alloys may exceed this value. Acceptance criteria for pit size should be established by the owner /user. All other pit criteria remain the same.



Additional Acceptance Criteria for Electropolished Metallic Process Contact Surface Finishes Table SF-2.2-2

Anomaly or Indication	Acceptance criteria
Cloudiness	Acceptable if R_a max. is met
End grain effect	Acceptable if R_a max. is met
Fixture marks	Acceptable if electropolished
Haze	Acceptable if R_a max. is met
Interrupted electropolish	Acceptable if R_a max. is met
Orange peel	Acceptable if R_a max. is met
Stringer indication	Acceptable if R_a max. is met
Weld whitening	Acceptable if R_a max. is met
Variance in luster	Acceptable if R_a max. is met

Reference

- American Society of Mechanical Engineers 'ASME BPE-2022 Bioprocessing Equipment', Part DT Dimensions and Tolerances for Process Components
- ASTM International 'A270/A270M-15 (2019)', Table 1 Chemical Requirements
- American Society of Mechanical Engineers 'ASME BPE-2022 Bioprocessing Equipment', Part SF Process Contact Surface Finishes

Metallic Fittings: Rated Internal Working Pressure Table DT-2-1

Temperature		<3in		3in		4in		6in	
°F	°C	psig	kPa	psig	kPa	psig	kPa	psig	kPa
100	38	200	1379	200	1379	200	1379	150	1034
200	93	200	1379	200	1379	200	1379	150	1034
300	149	188	1293	188	1293	188	1293	141	970
400	204	170	1173	170	1173	170	1173	128	880

General notes:

- (a) These pressure ratings apply to metallic fittings, including butt welded or hygienic clamped connections.

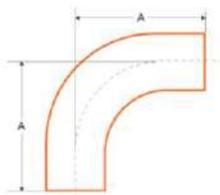


BPE Tube Fittings

DT-7

DT-4.1.1-1

90° Elbow WW

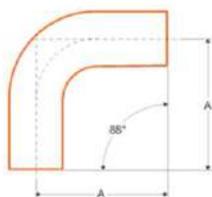


Normal size		A		SF1	SF4
Inch	mm	Inch	mm	## = F1	## = F4
1/4	6.35	2.625	66.68	2207B014-##	
3/8	9.53	2.625	66.68	2207B038-##	
1/2	12.70	3.000	76.20	2207B050-##	
3/4	19.05	3.000	76.20	2207B075-##	
1	25.40	3.000	76.20	2207B100-##	
1 1/2	38.10	3.750	95.25	2207B150-##	
2	50.80	4.750	120.65	2207B200-##	
2 1/2	63.50	5.500	139.70	2207B250-##	
3	76.20	6.250	158.75	2207B300-##	
4	101.60	8.000	203.20	2207B400-##	
6	152.40	11.500	292.10	2207B600-##	

DT-7

DT-4.1.1-9

88° Elbow WW

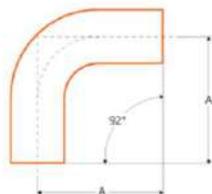


Normal size		A		SF1	SF4
Inch	mm	Inch	mm	## = F1	## = F4
1/4	6.35	2.700	68.58	220788B014-##	
3/8	9.53	2.700	68.58	220788B038-##	
1/2	12.70	3.065	77.85	220788B050-##	
3/4	19.05	3.065	77.85	220788B075-##	
1	25.40	3.050	77.47	220788B100-##	
1 1/2	38.10	3.800	96.52	220788B150-##	
2	50.80	4.810	122.17	220788B200-##	
2 1/2	63.50	5.560	141.22	220788B250-##	
3	76.20	6.310	160.27	220788B300-##	
4	101.60	8.065	204.85	220788B400-##	
6	152.40	11.580	294.13	220788B600-##	

DT-7

DT-4.1.1-10

92° Elbow WW

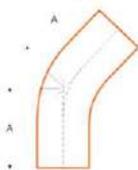


Normal size		A		SF1	SF4
Inch	mm	Inch	mm	## = F1	## = F4
1/4	6.35	2.530	64.26	220792B014-##	
3/8	9.53	2.530	64.26	220792B038-##	
1/2	12.70	2.930	74.42	220792B050-##	
3/4	19.05	2.930	74.42	220792B075-##	
1	25.40	2.950	74.93	220792B100-##	
1 1/2	38.10	3.690	93.73	220792B150-##	
2	50.80	4.690	119.13	220792B200-##	
2 1/2	63.50	5.440	138.18	220792B250-##	
3	76.20	6.190	157.23	220792B300-##	
4	101.60	7.930	201.42	220792B400-##	
6	152.40	11.410	289.81	220792B600-##	

**DT-8**

DT-4.1.1-4

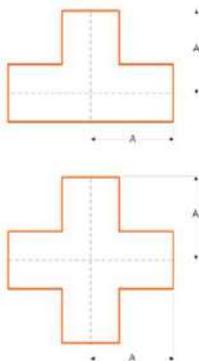
45° Elbow WW



Normal size		A		SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	2.000	50.80	2208B014-##	
3/8	9.53	2.000	50.80	2208B038-##	
1/2	12.70	2.250	57.15	2208B050-##	
3/4	19.05	2.250	57.15	2208B075-##	
1	25.40	2.250	57.15	2208B100-##	
1 1/2	38.10	2.500	63.50	2208B150-##	
2	50.80	3.000	76.20	2208B200-##	
2 1/2	63.50	3.375	85.73	2208B250-##	
3	76.20	3.625	92.08	2208B300-##	
4	101.60	4.500	114.30	2208B400-##	
6	152.40	6.250	158.75	2208B600-##	

DT-9 & DT-9C

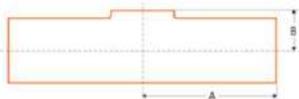
DT-4.1.2-1

Equal Tee WWW
Equal Cross WWWW

Normal size		A		Equal Tee		Equal Cross	
Inch	mm	Inch	mm	SF1	SF4	SF1	SF4
				##=F1	##=F4	##=F1	##=F4
1/4	6.35	1.750	44.45	2209B014-##		2209CB014-##	
3/8	9.53	1.750	44.45	2209B038-##		2209CB038-##	
1/2	12.70	1.875	47.63	2209B050-##		2209CB050-##	
3/4	19.05	2.000	50.80	2209B075-##		2209CB075-##	
1	25.40	2.125	53.98	2209B100-##		2209CB100-##	
1 1/2	38.10	2.375	60.33	2209B150-##		2209CB150-##	
2	50.80	2.875	73.03	2209B200-##		2209CB200-##	
2 1/2	63.50	3.125	79.38	2209B250-##		2209CB250-##	
3	76.20	3.375	85.73	2209B300-##		2209CB300-##	
4	101.60	4.125	104.78	2209B400-##		2209CB400-##	
6	152.40	5.625	142.88	2209B600-##		2209CB600-##	

DT-9T

Short Outlet Equal Tee WWW

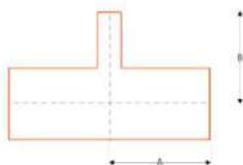


Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/2	12.70	1.874	47.60	0.329	8.35	2209TB050-##	
3/4	19.05	2.000	50.80	0.413	10.48	2209TB075-##	
1	25.40	2.126	54.00	0.543	13.80	2209TB100-##	
1 1/2	38.10	2.374	60.30	0.825	20.95	2209TB150-##	
2	50.80	2.874	73.00	1.087	27.60	2209TB200-##	
2 1/2	63.50	3.126	79.40	1.374	34.90	2209TB250-##	
3	76.20	3.374	85.70	1.626	41.30	2209TB300-##	
4	101.60	4.126	104.80	2.126	54.00	2209TB400-##	
6	152.40	5.626	142.90	3.181	80.80	2209TB600-##	

**DT-10**

DT-4.1.2-6

Reducing Tee WWW

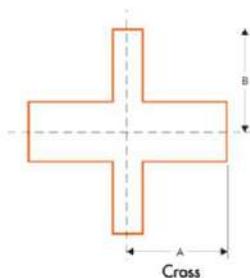


Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	## = F1	## = F4
3/8 x 1/4	9.53 x 6.35	1.750	44.45	1.750	44.45	22108038014-##	
1/2 x 1/4	12.70 x 6.35	1.875	47.63	1.875	47.63	22108050014-##	
1/2 x 3/8	12.70 x 9.53	1.875	47.63	1.875	47.63	22108050038-##	
3/4 x 1/4	19.05 x 6.35	2.000	50.80	2.000	50.80	22108075014-##	
3/4 x 3/8	19.05 x 9.53	2.000	50.80	2.000	50.80	22108075038-##	
3/4 x 1/2	19.05 x 12.70	2.000	50.80	2.000	50.80	22108075050-##	
1 x 1/4	25.40 x 6.35	2.125	53.98	2.125	53.98	22108100014-##	
1 x 3/8	25.40 x 9.53	2.125	53.98	2.125	53.98	22108100038-##	
1 x 1/2	25.40 x 12.70	2.125	53.98	2.125	53.98	22108100050-##	
1 x 3/4	25.40 x 19.05	2.125	53.98	2.125	53.98	22108100075-##	
1 1/2 x 1/2	38.10 x 12.70	2.375	60.33	2.375	60.33	22108150050-##	
1 1/2 x 3/4	38.10 x 19.05	2.375	60.33	2.375	60.33	22108150075-##	
1 1/2 x 1	38.10 x 25.40	2.375	60.33	2.375	60.33	22108150100-##	
2 x 1/2	50.80 x 12.70	2.875	73.03	2.625	66.68	22108200050-##	
2 x 3/4	50.80 x 19.05	2.875	73.03	2.625	66.68	22108200075-##	
2 x 1	50.80 x 25.40	2.875	73.03	2.625	66.68	22108200100-##	
2 x 1 1/2	50.80 x 38.10	2.875	73.03	2.625	66.68	22108200150-##	
2 1/2 x 1/2	63.50 x 12.70	3.125	79.38	2.875	73.03	22108250050-##	
2 1/2 x 3/4	63.50 x 19.05	3.125	79.38	2.875	73.03	22108250075-##	
2 1/2 x 1	63.50 x 25.40	3.125	79.38	2.875	73.03	22108250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	3.125	79.38	2.875	73.03	22108250150-##	
2 1/2 x 2	63.50 x 50.80	3.125	79.38	2.875	73.03	22108250200-##	
3 x 1/2	76.20 x 12.70	3.375	85.73	3.125	79.38	22108300050-##	
3 x 3/4	76.20 x 19.05	3.375	85.73	3.125	79.38	22108300075-##	
3 x 1	76.20 x 25.40	3.375	85.73	3.125	79.38	22108300100-##	
3 x 1 1/2	76.20 x 38.10	3.375	85.73	3.125	79.38	22108300150-##	
3 x 2	76.20 x 50.80	3.375	85.73	3.125	79.38	22108300200-##	
3 x 2 1/2	76.20 x 63.50	3.375	85.73	3.125	79.38	22108300250-##	
4 x 1/2	101.60 x 12.70	4.125	104.78	3.625	92.08	22108400050-##	
4 x 3/4	101.60 x 19.05	4.125	104.78	3.625	92.08	22108400075-##	
4 x 1	101.60 x 25.40	4.125	104.78	3.625	92.08	22108400100-##	
4 x 1 1/2	101.60 x 38.10	4.125	104.78	3.625	92.08	22108400150-##	
4 x 2	101.60 x 50.80	4.125	104.78	3.875	98.43	22108400200-##	
4 x 2 1/2	101.60 x 63.50	4.125	104.78	3.875	98.43	22108400250-##	
4 x 3	101.60 x 76.20	4.125	104.78	3.875	98.43	22108400300-##	
6 x 1/2	152.40 x 12.70	5.625	142.88	4.625	117.48	22108600050-##	
6 x 3/4	152.40 x 19.05	5.625	142.88	4.625	117.48	22108600075-##	
6 x 1	152.40 x 25.40	5.625	142.88	4.625	117.48	22108600100-##	
6 x 1 1/2	152.40 x 38.10	5.625	142.88	4.625	117.48	22108600150-##	
6 x 2	152.40 x 50.80	5.625	142.88	4.875	123.83	22108600200-##	
6 x 2 1/2	152.40 x 63.50	5.625	142.88	4.875	123.83	22108600250-##	
6 x 3	152.40 x 76.20	5.625	142.88	4.875	123.83	22108600300-##	
6 x 4	152.40 x 101.60	5.625	142.88	5.125	130.18	22108600400-##	



DT-10C

Reducing Cross WWWW



Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	## = F1	## = F4
3/8 x 1/4	9.53 x 6.35	1.750	44.45	1.750	44.45	2210CB038014-##	
1/2 x 1/4	12.70 x 6.35	1.875	47.63	1.875	47.63	2210CB050014-##	
1/2 x 3/8	12.70 x 9.53	1.875	47.63	1.875	47.63	2210CB050038-##	
3/4 x 1/4	19.05 x 6.35	2.000	50.80	2.000	50.80	2210CB075014-##	
3/4 x 3/8	19.05 x 9.53	2.000	50.80	2.000	50.80	2210CB075038-##	
3/4 x 1/2	19.05 x 12.70	2.000	50.80	2.000	50.80	2210CB075050-##	
1 x 1/4	25.40 x 6.35	2.125	53.98	2.125	53.98	2210CB100014-##	
1 x 3/8	25.40 x 9.53	2.125	53.98	2.125	53.98	2210CB100038-##	
1 x 1/2	25.40 x 12.70	2.125	53.98	2.125	53.98	2210CB100050-##	
1 x 3/4	25.40 x 19.05	2.125	53.98	2.125	53.98	2210CB100075-##	
1 1/2 x 1/2	38.10 x 12.70	2.375	60.33	2.375	60.33	2210CB150050-##	
1 1/2 x 3/4	38.10 x 19.05	2.375	60.33	2.375	60.33	2210CB150075-##	
1 1/2 x 1	38.10 x 25.40	2.375	60.33	2.375	60.33	2210CB150100-##	
2 x 1/2	50.80 x 12.70	2.875	73.03	2.625	66.68	2210CB200050-##	
2 x 3/4	50.80 x 19.05	2.875	73.03	2.625	66.68	2210CB200075-##	
2 x 1	50.80 x 25.40	2.875	73.03	2.625	66.68	2210CB200100-##	
2 x 1 1/2	50.80 x 38.10	2.875	73.03	2.625	66.68	2210CB200150-##	
2 1/2 x 1/2	63.50 x 12.70	3.125	79.38	2.875	73.03	2210CB250050-##	
2 1/2 x 3/4	63.50 x 19.05	3.125	79.38	2.875	73.03	2210CB250075-##	
2 1/2 x 1	63.50 x 25.40	3.125	79.38	2.875	73.03	2210CB250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	3.125	79.38	2.875	73.03	2210CB250150-##	
2 1/2 x 2	63.50 x 50.80	3.125	79.38	2.875	73.03	2210CB250200-##	
3 x 1/2	76.20 x 12.70	3.375	85.73	3.125	79.38	2210CB300050-##	
3 x 3/4	76.20 x 19.05	3.375	85.73	3.125	79.38	2210CB300075-##	
3 x 1	76.20 x 25.40	3.375	85.73	3.125	79.38	2210CB300100-##	
3 x 1 1/2	76.20 x 38.10	3.375	85.73	3.125	79.38	2210CB300150-##	
3 x 2	76.20 x 50.80	3.375	85.73	3.125	79.38	2210CB300200-##	
3 x 2 1/2	76.20 x 63.50	3.375	85.73	3.125	79.38	2210CB300250-##	
4 x 1/2	101.60 x 12.70	4.125	104.78	3.625	92.08	2210CB400050-##	
4 x 3/4	101.60 x 19.05	4.125	104.78	3.625	92.08	2210CB400075-##	
4 x 1	101.60 x 25.40	4.125	104.78	3.625	92.08	2210CB400100-##	
4 x 1 1/2	101.60 x 38.10	4.125	104.78	3.625	92.08	2210CB400150-##	
4 x 2	101.60 x 50.80	4.125	104.78	3.875	98.43	2210CB400200-##	
4 x 2 1/2	101.60 x 63.50	4.125	104.78	3.875	98.43	2210CB400250-##	
4 x 3	101.60 x 76.20	4.125	104.78	3.875	98.43	2210CB400300-##	
6 x 3	152.40 x 76.20	5.625	142.88	4.875	123.83	2210CB600300-##	
6 x 4	152.40 x 101.60	5.625	142.88	5.125	130.18	2210CB600400-##	

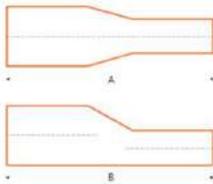


DT-11C(a)

BPE 2012 Concentric Reducer WW

DT-11E(a)

BPE 2012 Eccentric Reducer WW



Normal size		CR				ER			
		A		SF1	SF4	B		SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4	Inch	mm	##=F1	##=F4
1/2 x 3/8	12.70 x 9.53	3.250	82.60	2211CB050038-##		4.000	101.60	2211EB050038-##	
3/4 x 3/8	19.05 x 9.53	3.250	82.60	2211CB075038-##		4.000	101.60	2211EB075038-##	
3/4 x 1/2	19.05 x 12.70	4.000	101.60	2211CB075050-##		4.000	101.60	2211EB075050-##	
1 x 3/8	25.40 x 9.53	4.500	114.30	2211CB100038-##		4.500	114.30	2211EB100038-##	
1 x 1/2	25.40 x 12.70	4.500	114.30	2211CB100050-##		4.500	114.30	2211EB100050-##	
1 x 3/4	25.40 x 19.05	4.000	101.60	2211CB100075-##		4.000	101.60	2211EB100075-##	
1 1/2 x 1/2	38.10 x 12.70	5.500	139.70	2211CB150050-##		5.500	139.70	2211EB150050-##	
1 1/2 x 3/4	38.10 x 19.05	5.000	127.00	2211CB150075-##		5.000	127.00	2211EB150075-##	
1 1/2 x 1	38.10 x 25.40	5.000	127.00	2211CB150100-##		5.000	127.00	2211EB150100-##	
2 x 1/2	50.80 x 12.70	7.750	196.90	2211CB200050-##		7.750	196.90	2211EB200050-##	
2 x 3/4	50.80 x 19.05	7.250	184.20	2211CB200075-##		7.250	184.20	2211EB200075-##	
2 x 1	50.80 x 25.40	7.250	184.20	2211CB200100-##		7.250	184.20	2211EB200100-##	
2 x 1 1/2	50.80 x 38.10	5.250	133.40	2211CB200150-##		5.250	133.40	2211EB200150-##	
2 1/2 x 1/2	63.50 x 12.70	9.750	247.70	2211CB250050-##		9.750	247.70	2211EB250050-##	
2 1/2 x 3/4	63.50 x 19.05	9.250	235.00	2211CB250075-##		9.250	235.00	2211EB250075-##	
2 1/2 x 1	63.50 x 25.40	9.250	235.00	2211CB250100-##		9.250	235.00	2211EB250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	7.250	184.20	2211CB250150-##		7.250	184.20	2211EB250150-##	
2 1/2 x 2	63.50 x 50.80	5.500	139.70	2211CB250200-##		5.500	139.70	2211EB250200-##	
3 x 1	76.20 x 25.40	11.250	285.80	2211CB300100-##		11.250	285.80	2211EB300100-##	
3 x 1 1/2	76.20 x 38.10	9.250	235.00	2211CB300150-##		9.250	235.00	2211EB300150-##	
3 x 2	76.20 x 50.80	7.500	190.50	2211CB300200-##		7.500	190.50	2211EB300200-##	
3 x 2 1/2	76.20 x 63.50	5.500	139.70	2211CB300250-##		5.500	139.70	2211EB300250-##	
4 x 1	101.60 x 25.40	15.500	393.70	2211CB400100-##		15.500	393.70	2211EB400100-##	
4 x 1 1/2	101.60 x 38.10	13.500	342.90	2211CB400150-##		13.500	342.90	2211EB400150-##	
4 x 2	101.60 x 50.80	11.750	298.50	2211CB400200-##		11.750	298.50	2211EB400200-##	
4 x 2 1/2	101.60 x 63.50	9.750	247.70	2211CB400250-##		9.750	247.70	2211EB400250-##	
4 x 3	101.60 x 76.20	7.750	196.90	2211CB400300-##		7.750	196.90	2211EB400300-##	
6 x 3	152.40 x 76.20	10.000	254.00	2211CB600300-##		9.750	247.70	2211EB600300-##	
6 x 4	152.40 x 101.60	10.000	254.00	2211CB600400-##		10.000	254.00	2211EB600400-##	



DT-11C(b)

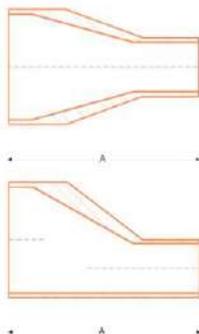
DT-4.1.3-1

Concentric Reducer WW

DT-11C(b)

DT-4.1.3-1

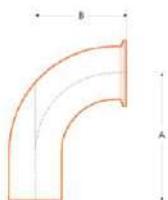
Eccentric Reducer WW



DT-12

DT-4.1.1-2

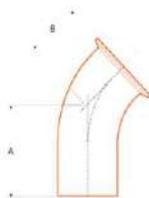
90° Elbow CW



DT-13

DT-4.1.1-5

45° Elbow CW



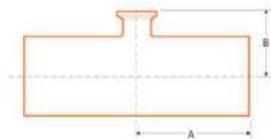
Normal size		A		CR		ER	
Inch	mm	Inch	mm	SF1 ##=F1	SF4 ##=F4	SF1 ##=F1	SF4 ##=F4
3/8 x 1/4	9.53 x 6.35	1.625	41.28	2211CB8038014-##	2211EBB038014-##		
1/2 x 1/4	12.70 x 6.35	1.875	47.63	2211CB8050014-##	2211EBB050014-##		
1/2 x 3/8	12.70 x 9.53	1.875	47.63	2211CB8050038-##	2211EBB050038-##		
3/4 x 3/8	19.05 x 9.53	2.000	50.80	2211CB8075038-##	2211EBB075038-##		
3/4 x 1/2	19.05 x 12.70	2.125	53.98	2211CB8075050-##	2211EBB075050-##		
1 x 1/2	25.40 x 12.70	2.500	63.50	2211CB8100050-##	2211EBB100050-##		
1 x 3/4	25.40 x 19.05	2.125	53.98	2211CB8100075-##	2211EBB100075-##		
1 1/2 x 3/4	38.10 x 19.05	3.000	76.20	2211CB8150075-##	2211EBB150075-##		
1 1/2 x 1	38.10 x 25.40	2.500	63.50	2211CB8150100-##	2211EBB150100-##		
2 x 1	50.80 x 25.40	3.375	85.73	2211CB8200100-##	2211EBB200100-##		
2 x 1 1/2	50.80 x 38.10	2.500	63.50	2211CB8200150-##	2211EBB200150-##		
2 1/2 x 1 1/2	63.50 x 38.10	3.375	85.73	2211CB8250150-##	2211EBB250150-##		
2 1/2 x 2	63.50 x 50.80	2.500	63.50	2211CB8250200-##	2211EBB250200-##		
3 x 1 1/2	76.20 x 38.10	4.250	107.95	2211CB8300150-##	2211EBB300150-##		
3 x 2	76.20 x 50.80	3.375	85.73	2211CB8300200-##	2211EBB300200-##		
3 x 2 1/2	76.20 x 63.50	2.625	66.68	2211CB8300250-##	2211EBB300250-##		
4 x 2	101.60 x 50.80	5.125	130.18	2211CB8400200-##	2211EBB400200-##		
4 x 2 1/2	101.60 x 63.50	4.250	107.95	2211CB8400250-##	2211EBB400250-##		
4 x 3	101.60 x 76.20	3.875	98.43	2211CB8400300-##	2211EBB400300-##		
6 x 3	152.40 x 76.20	7.250	184.15	2211CB8600300-##	2211EBB600300-##		
6 x 4	152.40 x 101.60	5.625	142.88	2211CB8600400-##	2211EBB600400-##		

Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	2.625	66.68	1.625	41.28	2212B014-##	
3/8	9.53	2.625	66.68	1.625	41.28	2212B038-##	
1/2	12.70	3.000	76.20	1.625	41.28	2212B050-##	
3/4	19.05	3.000	76.20	1.625	41.28	2212B075-##	
1	25.40	3.000	76.20	2.000	50.80	2212B100-##	
1 1/2	38.10	3.750	95.25	2.750	69.85	2212B150-##	
2	50.80	4.750	120.65	3.500	88.90	2212B200-##	
2 1/2	63.50	5.500	139.70	4.250	107.95	2212B250-##	
3	76.20	6.250	158.75	5.000	127.00	2212B300-##	
4	101.60	8.000	203.20	6.625	168.28	2212B400-##	
6	152.40	11.500	292.10	10.500	266.70	2212B600-##	

Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	2.000	50.80	1.000	25.40	2213B014-##	
3/8	9.53	2.000	50.80	1.000	25.40	2213B038-##	
1/2	12.70	2.250	57.15	1.000	25.40	2213B050-##	
3/4	19.05	2.250	57.15	1.000	25.40	2213B075-##	
1	25.40	2.250	57.15	1.125	28.58	2213B100-##	
1 1/2	38.10	2.500	63.50	1.438	36.53	2213B150-##	
2	50.80	3.000	76.20	1.750	44.45	2213B200-##	
2 1/2	63.50	3.375	85.73	2.063	52.40	2213B250-##	
3	76.20	3.625	92.08	2.375	60.33	2213B300-##	
4	101.60	4.500	114.30	3.125	79.38	2213B400-##	
6	152.40	6.250	158.75	5.250	133.35	2213B600-##	

**DT-14**

DT-4.1.2-7

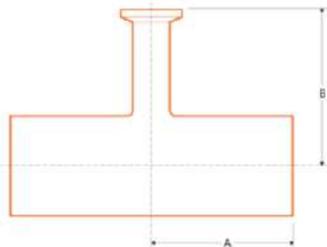
Short Outlet Reducing Tee
WCW

Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
3/8 x 1/4	9.53 x 6.35	1.750	44.45	1.000	25.40	2214B038014-##	
1/2 x 1/4	12.70 x 6.35	1.875	47.63	1.000	25.40	2214B050014-##	
1/2 x 3/8	12.70 x 9.53	1.875	47.63	1.000	25.40	2214B050038-##	
3/4 x 1/4	19.05 x 6.35	2.000	50.80	1.000	25.40	2214B075014-##	
3/4 x 3/8	19.05 x 9.53	2.000	50.80	1.000	25.40	2214B075038-##	
3/4 x 1/2	19.05 x 12.70	2.000	50.80	1.000	25.40	2214B075050-##	
1 x 1/4	25.40 x 6.35	2.125	53.98	1.125	28.58	2214B100014-##	
1 x 3/8	25.40 x 9.53	2.125	53.98	1.125	28.58	2214B100038-##	
1 x 1/2	25.40 x 12.70	2.125	53.98	1.125	28.58	2214B100050-##	
1 x 3/4	25.40 x 19.05	2.125	53.98	1.125	28.58	2214B100075-##	
1 1/2 x 1/2	38.10 x 12.70	2.375	60.33	1.375	34.93	2214B150050-##	
1 1/2 x 3/4	38.10 x 19.05	2.375	60.33	1.375	34.93	2214B150075-##	
1 1/2 x 1	38.10 x 25.40	2.375	60.33	1.375	34.93	2214B150100-##	
2 x 1/2	50.80 x 12.70	2.875	73.03	1.625	41.28	2214B200050-##	
2 x 3/4	50.80 x 19.05	2.875	73.03	1.625	41.28	2214B200075-##	
2 x 1	50.80 x 25.40	2.875	73.03	1.625	41.28	2214B200100-##	
2 x 1 1/2	50.80 x 38.10	2.875	73.03	1.625	41.28	2214B200150-##	
2 1/2 x 1/2	63.50 x 12.70	3.125	79.38	1.875	47.63	2214B250050-##	
2 1/2 x 3/4	63.50 x 19.05	3.125	79.38	1.875	47.63	2214B250075-##	
2 1/2 x 1	63.50 x 25.40	3.125	79.38	1.875	47.63	2214B250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	3.125	79.38	1.875	47.63	2214B250150-##	
2 1/2 x 2	63.50 x 50.80	3.125	79.38	1.875	47.63	2214B250200-##	
3 x 1/2	76.20 x 12.70	3.375	85.73	2.125	53.98	2214B300050-##	
3 x 3/4	76.20 x 19.05	3.375	85.73	2.125	53.98	2214B300075-##	
3 x 1	76.20 x 25.40	3.375	85.73	2.125	53.98	2214B300100-##	
3 x 1 1/2	76.20 x 38.10	3.375	85.73	2.125	53.98	2214B300150-##	
3 x 2	76.20 x 50.80	3.375	85.73	2.125	53.98	2214B300200-##	
3 x 2 1/2	76.20 x 63.50	3.375	85.73	2.125	53.98	2214B300250-##	
4 x 1/2	101.60 x 12.70	4.125	104.78	2.625	66.68	2214B400050-##	
4 x 3/4	101.60 x 19.05	4.125	104.78	2.625	66.68	2214B400075-##	
4 x 1	101.60 x 25.40	4.125	104.78	2.625	66.68	2214B400100-##	
4 x 1 1/2	101.60 x 38.10	4.125	104.78	2.625	66.68	2214B400150-##	
4 x 2	101.60 x 50.80	4.125	104.78	2.625	66.68	2214B400200-##	
4 x 2 1/2	101.60 x 63.50	4.125	104.78	2.625	66.68	2214B400250-##	
4 x 3	101.60 x 76.20	4.125	104.78	2.625	66.68	2214B400300-##	
6 x 1/2	152.40 x 12.70	5.625	142.88	3.625	92.08	2214B600050-##	
6 x 3/4	152.40 x 19.05	5.625	142.88	3.625	92.08	2214B600075-##	
6 x 1	152.40 x 25.40	5.625	142.88	3.625	92.08	2214B600100-##	
6 x 1 1/2	152.40 x 38.10	5.625	142.88	3.625	92.08	2214B600150-##	
6 x 2	152.40 x 50.80	5.625	142.88	3.625	92.08	2214B600200-##	
6 x 2 1/2	152.40 x 63.50	5.625	142.88	3.625	92.08	2214B600250-##	
6 x 3	152.40 x 76.20	5.625	142.88	3.625	92.08	2214B600300-##	
6 x 4	152.40 x 101.60	5.625	142.88	3.750	95.25	2214B600400-##	



DT-14L

DT-4.1.2-13

Long Outlet Reducing Tee
WCW

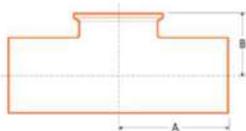
Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
3/8 x 1/4	9.53 x 6.35	1.750	44.45	2.250	57.15	2214LB038014-##	
1/2 x 1/4	12.70 x 6.35	1.875	47.63	2.375	60.33	2214LB050014-##	
1/2 x 3/8	12.70 x 9.53	1.875	47.63	2.375	60.33	2214LB050038-##	
3/4 x 1/4	19.05 x 6.35	2.000	50.80	2.500	63.50	2214LB075014-##	
3/4 x 3/8	19.05 x 9.53	2.000	50.80	2.500	63.50	2214LB075038-##	
3/4 x 1/2	19.05 x 12.70	2.000	50.80	2.500	63.50	2214LB075050-##	
1 x 1/4	25.40 x 6.35	2.125	53.98	2.625	66.68	2214LB100014-##	
1 x 3/8	25.40 x 9.53	2.125	53.98	2.625	66.68	2214LB100038-##	
1 x 1/2	25.40 x 12.70	2.125	53.98	2.625	66.68	2214LB100050-##	
1 x 3/4	25.40 x 19.05	2.125	53.98	2.625	66.68	2214LB100075-##	
1 1/2 x 1/2	38.10 x 12.70	2.375	60.33	2.875	73.03	2214LB150050-##	
1 1/2 x 3/4	38.10 x 19.05	2.375	60.33	2.875	73.03	2214LB150075-##	
1 1/2 x 1	38.10 x 25.40	2.375	60.33	2.875	73.03	2214LB150100-##	
2 x 1/2	50.80 x 12.70	2.875	73.03	3.125	79.38	2214LB200050-##	
2 x 3/4	50.80 x 19.05	2.875	73.03	3.125	79.38	2214LB200075-##	
2 x 1	50.80 x 25.40	2.875	73.03	3.125	79.38	2214LB200100-##	
2 x 1 1/2	50.80 x 38.10	2.875	73.03	3.125	79.38	2214LB200150-##	
2 1/2 x 1/2	63.50 x 12.70	3.125	79.38	3.375	85.73	2214LB250050-##	
2 1/2 x 3/4	63.50 x 19.05	3.125	79.38	3.375	85.73	2214LB250075-##	
2 1/2 x 1	63.50 x 25.40	3.125	79.38	3.375	85.73	2214LB250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	3.125	79.38	3.375	85.73	2214LB250150-##	
2 1/2 x 2	63.50 x 50.80	3.125	79.38	3.375	85.73	2214LB250200-##	
3 x 1/2	76.20 x 12.70	3.375	85.73	3.625	92.08	2214LB300050-##	
3 x 3/4	76.20 x 19.05	3.375	85.73	3.625	92.08	2214LB300075-##	
3 x 1	76.20 x 25.40	3.375	85.73	3.625	92.08	2214LB300100-##	
3 x 1 1/2	76.20 x 38.10	3.375	85.73	3.625	92.08	2214LB300150-##	
3 x 2	76.20 x 50.80	3.375	85.73	3.625	92.08	2214LB300200-##	
3 x 2 1/2	76.20 x 63.50	3.375	85.73	3.625	92.08	2214LB300250-##	
4 x 1/2	101.60 x 12.70	4.125	104.78	4.125	104.78	2214LB400050-##	
4 x 3/4	101.60 x 19.05	4.125	104.78	4.125	104.78	2214LB400075-##	
4 x 1	101.60 x 25.40	4.125	104.78	4.125	104.78	2214LB400100-##	
4 x 1 1/2	101.60 x 38.10	4.125	104.78	4.125	104.78	2214LB400150-##	
4 x 2	101.60 x 50.80	4.125	104.78	4.375	111.13	2214LB400200-##	
4 x 2 1/2	101.60 x 63.50	4.125	104.78	4.375	111.13	2214LB400250-##	
4 x 3	101.60 x 76.20	4.125	104.78	4.375	111.13	2214LB400300-##	
6 x 3	152.40 x 76.20	5.625	142.88	5.375	136.53	2214LB600300-##	
6 x 4	152.40 x 101.60	5.625	142.88	5.750	146.05	2214LB600400-##	



DT-15L

DT-4.1.2-2

Short Outlet Equal Tee WCW

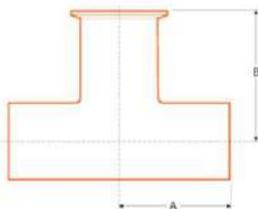


Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	1.750	44.45	1.000	25.40	2215B014-##	
3/8	9.53	1.750	44.45	1.000	25.40	2215B038-##	
1/2	12.70	1.875	47.63	1.000	25.40	2215B050-##	
3/4	19.05	2.000	50.80	1.125	28.58	2215B075-##	
1	25.40	2.125	53.98	1.125	28.58	2215B100-##	
1 1/2	38.10	2.375	60.33	1.375	34.93	2215B150-##	
2	50.80	2.875	73.03	1.625	41.28	2215B200-##	
2 1/2	63.50	3.125	79.38	1.875	47.63	2215B250-##	
3	76.20	3.375	85.73	2.125	53.98	2215B300-##	
4	101.60	4.125	104.78	2.750	69.85	2215B400-##	
6	152.40	5.625	142.88	4.625	117.48	2215B600-##	

DT-15L

DT-4.1.2-12

Long Outlet Equal Tee WCW

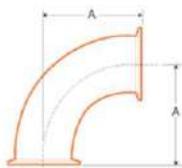


Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	1.750	44.45	2.250	57.15	2215LB014-##	
3/8	9.53	1.750	44.45	2.250	57.15	2215LB038-##	
1/2	12.70	1.875	47.63	2.375	60.33	2215LB050-##	
3/4	19.05	2.000	50.80	2.500	63.50	2215LB075-##	
1	25.40	2.125	53.98	2.625	66.68	2215LB100-##	
1 1/2	38.10	2.375	60.33	2.875	73.03	2215LB150-##	
2	50.80	2.875	73.03	3.375	85.73	2215LB200-##	
2 1/2	63.50	3.125	79.38	3.625	92.08	2215LB250-##	
3	76.20	3.375	85.73	3.875	98.43	2215LB300-##	
4	101.60	4.125	104.78	4.750	120.65	2215LB400-##	
6	152.40	5.625	142.88	7.125	180.98	2215LB600-##	

DT-16

DT-4.1.1-3

90° Clamp Elbow CC



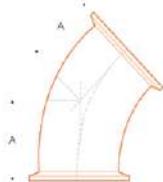
Normal size		A		SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	1.625	41.28	2216B014-##	
3/8	9.53	1.625	41.28	2216B038-##	
1/2	12.70	1.625	41.28	2216B050-##	
3/4	19.05	1.625	41.28	2216B075-##	
1	25.40	2.000	50.80	2216B100-##	
1 1/2	38.10	2.750	69.85	2216B150-##	
2	50.80	3.500	88.90	2216B200-##	
2 1/2	63.50	4.250	107.95	2216B250-##	
3	76.20	5.000	127.00	2216B300-##	
4	101.60	6.625	168.28	2216B400-##	
6	152.40	10.500	266.70	2216B600-##	



DT-17

DT-4.1.1-6

45° Clamp Elbow CC



Normal size		A		SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	1.000	25.40	2217B014-##	
3/8	9.53	1.000	25.40	2217B038-##	
1/2	12.70	1.000	25.40	2217B050-##	
3/4	19.05	1.000	25.40	2217B075-##	
1	25.40	1.125	28.58	2217B100-##	
1 1/2	38.10	1.438	36.53	2217B150-##	
2	50.80	1.750	44.45	2217B200-##	
2 1/2	63.50	2.063	52.40	2217B250-##	
3	76.20	2.375	60.33	2217B300-##	
4	101.60	3.125	79.38	2217B400-##	
6	152.40	5.250	133.35	2217B600-##	

DT-18

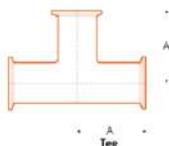
DT-4.1.2-4

Clamp Equal Tee CCC

DT-18C

DT-4.1.2-4

Clamp Equal Cross CCCC



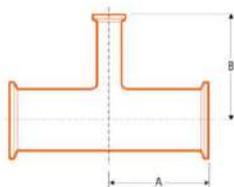
Normal size		A		SF1	SF4	SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4	##=F1	##=F4
1/4	6.35	2.250	57.15	2218B014-##		2218CB014-##	
3/8	9.53	2.250	57.15	2218B038-##		2218CB038-##	
1/2	12.70	2.375	60.33	2218B050-##		2218CB050-##	
3/4	19.05	2.500	63.50	2218B075-##		2218CB075-##	
1	25.40	2.625	66.68	2218B100-##		2218CB100-##	
1 1/2	38.10	2.875	73.03	2218B150-##		2218CB150-##	
2	50.80	3.375	85.73	2218B200-##		2218CB200-##	
2 1/2	63.50	3.625	92.08	2218B250-##		2218CB250-##	
3	76.20	3.875	98.43	2218B300-##		2218CB300-##	
4	101.60	4.750	120.65	2218B400-##		2218CB400-##	
6	152.40	7.125	180.98	2218B600-##		2218CB600-##	



DT-19

DT-4.1.2-8

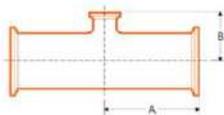
Clamp Reducing Tee CCC



Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
3/8 x 1/4	9.53 x 6.35	2.250	57.15	2.250	57.15	2219B038014-##	
1/2 x 1/4	12.70 x 6.35	2.375	60.33	2.375	60.33	2219B050014-##	
1/2 x 3/8	12.70 x 9.53	2.375	60.33	2.375	60.33	2219B050038-##	
3/4 x 1/4	19.05 x 6.35	2.500	63.50	2.500	63.50	2219B075014-##	
3/4 x 3/8	19.05 x 9.53	2.500	63.50	2.500	63.50	2219B075038-##	
3/4 x 1/2	19.05 x 12.70	2.500	63.50	2.500	63.50	2219B075050-##	
1 x 1/4	25.40 x 6.35	2.625	66.68	2.625	66.68	2219B100014-##	
1 x 3/8	25.40 x 9.53	2.625	66.68	2.625	66.68	2219B100038-##	
1 x 1/2	25.40 x 12.70	2.625	66.68	2.625	66.68	2219B100050-##	
1 x 3/4	25.40 x 19.05	2.625	66.68	2.625	66.68	2219B100075-##	
1 1/2 x 1/2	38.10 x 12.70	2.875	73.03	2.875	73.03	2219B150050-##	
1 1/2 x 3/4	38.10 x 19.05	2.875	73.03	2.875	73.03	2219B150075-##	
1 1/2 x 1	38.10 x 25.40	2.875	73.03	2.875	73.03	2219B150100-##	
2 x 1/2	50.80 x 12.70	3.375	85.73	3.125	79.38	2219B200050-##	
2 x 3/4	50.80 x 19.05	3.375	85.73	3.125	79.38	2219B200075-##	
2 x 1	50.80 x 25.40	3.375	85.73	3.125	79.38	2219B200100-##	
2 x 1 1/2	50.80 x 38.10	3.375	85.73	3.125	79.38	2219B200150-##	
2 1/2 x 1/2	63.50 x 12.70	3.625	92.08	3.375	85.73	2219B250050-##	
2 1/2 x 3/4	63.50 x 19.05	3.625	92.08	3.375	85.73	2219B250075-##	
2 1/2 x 1	63.50 x 25.40	3.625	92.08	3.375	85.73	2219B250100-##	
3 x 1/2	76.20 x 12.70	3.875	98.43	3.625	92.08	2219B300050-##	
3 x 3/4	76.20 x 19.05	3.875	98.43	3.625	92.08	2219B300075-##	
3 x 1	76.20 x 25.40	3.875	98.43	3.625	92.08	2219B300100-##	
3 x 1 1/2	76.20 x 38.10	3.875	98.43	3.625	92.08	2219B300150-##	
3 x 2	76.20 x 50.80	3.875	98.43	3.625	92.08	2219B300200-##	
3 x 2 1/2	76.20 x 63.50	3.875	98.43	3.625	92.08	2219B300250-##	
4 x 1/2	101.60 x 12.70	4.750	120.65	4.125	104.78	2219B400050-##	
4 x 3/4	101.60 x 19.05	4.750	120.65	4.125	104.78	2219B400075-##	
4 x 1	101.60 x 25.40	4.750	120.65	4.125	104.78	2219B400100-##	
4 x 1 1/2	101.60 x 38.10	4.750	120.65	4.125	104.78	2219B400150-##	
4 x 2	101.60 x 50.80	4.750	120.65	4.375	111.13	2219B400200-##	
4 x 2 1/2	101.60 x 63.50	4.750	120.65	4.375	111.13	2219B400250-##	
4 x 3	101.60 x 76.20	4.750	120.65	4.375	111.13	2219B400300-##	
6 x 1/2	152.40 x 12.70	7.125	180.98	5.125	130.18	2219B600050-##	
6 x 3/4	152.40 x 19.05	7.125	180.98	5.125	130.18	2219B600075-##	
6 x 1	152.40 x 25.40	7.125	180.98	5.125	130.18	2219B600100-##	
6 x 1 1/2	152.40 x 38.10	7.125	180.98	5.125	130.18	2219B600150-##	
6 x 2	152.40 x 50.80	7.125	180.98	5.375	136.53	2219B600200-##	
6 x 2 1/2	152.40 x 63.50	7.125	180.98	5.375	136.53	2219B600250-##	
6 x 3	152.40 x 76.20	7.125	180.98	5.375	136.53	2219B600300-##	
6 x 4	152.40 x 101.60	7.125	180.98	5.750	146.05	2219B600400-##	

**DT-20**

DT-4.1.2-9

Short Outlet Reducing Tee
CCC

Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
3/8 x 1/4	9.53 x 6.35	2.250	57.15	1.000	25.40	2220B038014-##	
1/2 x 1/4	12.70 x 6.35	2.375	60.33	1.000	25.40	2220B050014-##	
1/2 x 3/8	12.70 x 9.53	2.375	60.33	1.000	25.40	2220B050038-##	
3/4 x 1/4	19.05 x 6.35	2.500	63.50	1.000	25.40	2220B075014-##	
3/4 x 3/8	19.05 x 9.53	2.500	63.50	1.000	25.40	2220B075038-##	
3/4 x 1/2	19.05 x 12.70	2.500	63.50	1.000	25.40	2220B075050-##	
1 x 1/4	25.40 x 6.35	2.625	66.68	1.125	28.58	2220B100014-##	
1 x 3/8	25.40 x 9.53	2.625	66.68	1.125	28.58	2220B100038-##	
1 x 1/2	25.40 x 12.70	2.625	66.68	1.125	28.58	2220B100050-##	
1 x 3/4	25.40 x 19.05	2.625	66.68	1.125	28.58	2220B100075-##	
1 1/2 x 1/2	38.10 x 12.70	2.875	73.03	1.375	34.93	2220B150050-##	
1 1/2 x 3/4	38.10 x 19.05	2.875	73.03	1.375	34.93	2220B150075-##	
1 1/2 x 1	38.10 x 25.40	2.875	73.03	1.375	34.93	2220B150100-##	
2 x 1/2	50.80 x 12.70	3.375	85.73	1.625	41.28	2220B200050-##	
2 x 3/4	50.80 x 19.05	3.375	85.73	1.625	41.28	2220B200075-##	
2 x 1	50.80 x 25.40	3.375	85.73	1.625	41.28	2220B200100-##	
2 x 1 1/2	50.80 x 38.10	3.375	85.73	1.625	41.28	2220B200150-##	
2 1/2 x 1/2	63.50 x 12.70	3.625	92.08	1.875	47.63	2220B250050-##	
2 1/2 x 3/4	63.50 x 19.05	3.625	92.08	1.875	47.63	2220B250075-##	
2 1/2 x 1	63.50 x 25.40	3.625	92.08	1.875	47.63	2220B250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	3.625	92.08	1.875	47.63	2220B250150-##	
2 1/2 x 2	63.50 x 50.80	3.625	92.08	1.875	47.63	2220B250200-##	
3 x 1/2	76.20 x 12.70	3.875	98.43	2.125	53.98	2220B300050-##	
3 x 3/4	76.20 x 19.05	3.875	98.43	2.125	53.98	2220B300075-##	
3 x 1	76.20 x 25.40	3.875	98.43	2.125	53.98	2220B300100-##	
3 x 1 1/2	76.20 x 38.10	3.875	98.43	2.125	53.98	2220B300150-##	
3 x 2	76.20 x 50.80	3.875	98.43	2.125	53.98	2220B300200-##	
3 x 2 1/2	76.20 x 63.50	3.875	98.43	2.125	53.98	2220B300250-##	
4 x 1/2	101.60 x 12.70	4.750	120.65	2.625	66.68	2220B400050-##	
4 x 3/4	101.60 x 19.05	4.750	120.65	2.625	66.68	2220B400075-##	
4 x 1	101.60 x 25.40	4.750	120.65	2.625	66.68	2220B400100-##	
4 x 1 1/2	101.60 x 38.10	4.750	120.65	2.625	66.68	2220B400150-##	
4 x 2	101.60 x 50.80	4.750	120.65	2.625	66.68	2220B400200-##	
4 x 2 1/2	101.60 x 63.50	4.750	120.65	2.625	66.68	2220B400250-##	
4 x 3	101.60 x 76.20	4.750	120.65	2.625	66.68	2220B400300-##	
6 x 1/2	152.40 x 12.70	7.125	180.98	3.625	92.08	2220B600050-##	
6 x 3/4	152.40 x 19.05	7.125	180.98	3.625	92.08	2220B600075-##	
6 x 1	152.40 x 25.40	7.125	180.98	3.625	92.08	2220B600100-##	
6 x 1 1/2	152.40 x 38.10	7.125	180.98	3.625	92.08	2220B600150-##	
6 x 2	152.40 x 50.80	7.125	180.98	3.625	92.08	2220B600200-##	
6 x 2 1/2	152.40 x 63.50	7.125	180.98	3.625	92.08	2220B600250-##	
6 x 3	152.40 x 76.20	7.125	180.98	3.625	92.08	2220B600300-##	
6 x 4	152.40 x 101.60	7.125	180.98	3.750	95.25	2220B600400-##	

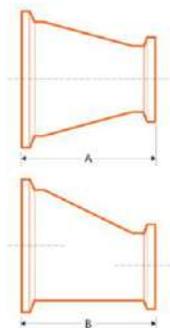


DT-21C(a)

BPE 2012 Concentric Reducer CC

DT-21E(a)

BPE 2012 Eccentric Reducer CC



Normal size		CR				ER			
		A		SF1	SF4	B		SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4	Inch	mm	##=F1	##=F4
3/4 x 1/2	19.05 x 12.70	2.000	50.80	2221CB075050-##		2.000	50.80	2221EB075050-##	
1 x 1/2	25.40 x 12.70	2.500	63.50	2221CB100050-##		2.500	63.50	2221EB100050-##	
1 x 3/4	25.40 x 19.05	2.000	50.80	2221CB100075-##		2.000	50.80	2221EB100075-##	
1 1/2 x 1/2	38.10 x 12.70	3.500	88.90	2221CB150050-##		3.500	88.90	2221EB150050-##	
1 1/2 x 3/4	38.10 x 19.05	3.000	76.20	2221CB150075-##		3.000	76.20	2221EB150075-##	
1 1/2 x 1	38.10 x 25.40	3.000	76.20	2221CB150100-##		3.000	76.20	2221EB150100-##	
2 x 1/2	50.80 x 12.70	5.500	139.70	2221CB200050-##		5.500	139.70	2221EB200050-##	
2 x 3/4	50.80 x 19.05	5.000	127.00	2221CB200075-##		5.000	127.00	2221EB200075-##	
2 x 1	50.80 x 25.40	5.000	127.00	2221CB200100-##		5.000	127.00	2221EB200100-##	
2 x 1 1/2	50.80 x 38.10	3.000	76.20	2221CB200150-##		3.000	76.20	2221EB200150-##	
2 1/2 x 1/2	63.50 x 12.70	7.500	190.50	2221CB250050-##		7.500	190.50	2221EB250050-##	
2 1/2 x 3/4	63.50 x 19.05	7.000	177.80	2221CB250075-##		7.000	177.80	2221EB250075-##	
2 1/2 x 1	63.50 x 25.40	7.000	177.80	2221CB250100-##		7.000	177.80	2221EB250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	5.000	127.00	2221CB250150-##		5.000	127.00	2221EB250150-##	
2 1/2 x 2	63.50 x 50.80	3.000	76.20	2221CB250200-##		3.000	76.20	2221EB250200-##	
3 x 1	76.20 x 25.40	9.000	228.60	2221CB300100-##		9.000	228.60	2221EB300100-##	
3 x 1 1/2	76.20 x 38.10	7.000	177.80	2221CB300150-##		7.000	177.80	2221EB300150-##	
3 x 2	76.20 x 50.80	5.000	127.00	2221CB300200-##		5.000	127.00	2221EB300200-##	
3 x 2 1/2	76.20 x 63.50	3.000	76.20	2221CB300250-##		3.000	76.20	2221EB300250-##	
4 x 1	101.60 x 25.40	13.125	333.40	2221CB400100-##		13.125	333.40	2221EB400100-##	
4 x 1 1/2	101.60 x 38.10	11.125	282.60	2221CB400150-##		11.125	282.60	2221EB400150-##	
4 x 2	101.60 x 50.80	9.125	231.80	2221CB400200-##		9.125	231.80	2221EB400200-##	
4 x 2 1/2	101.60 x 63.50	7.125	181.00	2221CB400250-##		7.125	181.00	2221EB400250-##	
4 x 3	101.60 x 76.20	5.125	130.20	2221CB400300-##		5.125	130.20	2221EB400300-##	
6 x 3	152.40 x 76.20	7.500	190.50	2221CB600300-##		7.625	193.70	2221EB600300-##	
6 x 4	152.40 x 101.60	7.625	193.70	2221CB600400-##		7.625	193.70	2221EB600400-##	



DT-21C(b)

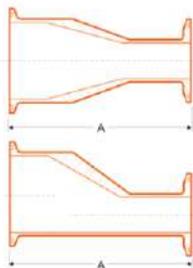
DT-4.1.3-3

Concentric Reducer CC

DT-21E(b)

DT-4.1.3-3

Eccentric Reducer CC



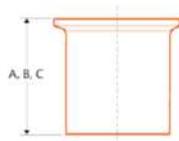
Normal size		A		CR		ER	
Inch	mm	Inch	mm	SF1 ##=F1	SF4 ##=F4	SF1 ##=F1	SF4 ##=F4
3/8 x 1/4	9.53 x 6.35	2.625	66.68	2221CBB038014-##		2221EBB038014-##	
1/2 x 1/4	12.70 x 6.35	2.875	73.03	2221CBB050014-##		2221EBB050014-##	
1/2 x 3/8	12.70 x 9.53	2.875	73.03	2221CBB050038-##		2221EBB050038-##	
3/4 x 3/8	19.05 x 9.53	3.000	76.20	2221CBB075038-##		2221EBB075038-##	
3/4 x 1/2	19.05 x 12.70	3.125	79.38	2221CBB075050-##		2221EBB075050-##	
1 x 1/2	25.40 x 12.70	3.500	88.90	2221CBB100050-##		2221EBB100050-##	
1 x 3/4	25.40 x 19.05	3.125	79.38	2221CBB100075-##		2221EBB100075-##	
1 1/2 x 3/4	38.10 x 19.05	4.000	101.60	2221CBB150075-##		2221EBB150075-##	
1 1/2 x 1	38.10 x 25.40	3.500	88.90	2221CBB150100-##		2221EBB150100-##	
2 x 1	50.80 x 25.40	4.375	111.13	2221CBB200100-##		2221EBB200100-##	
2 x 1 1/2	50.80 x 38.10	3.500	88.90	2221CBB200150-##		2221EBB200150-##	
2 1/2 x 1 1/2	63.50 x 38.10	4.375	111.13	2221CBB250150-##		2221EBB250150-##	
2 1/2 x 2	63.50 x 50.80	3.500	88.90	2221CBB250200-##		2221EBB250200-##	
3 x 1 1/2	76.20 x 38.10	5.250	133.35	2221CBB300150-##		2221EBB300150-##	
3 x 2	76.20 x 50.80	4.375	111.13	2221CBB300200-##		2221EBB300200-##	
3 x 2 1/2	76.20 x 63.50	3.625	92.08	2221CBB300250-##		2221EBB300250-##	
4 x 2	101.60 x 50.80	6.250	158.75	2221CBB400200-##		2221EBB400200-##	
4 x 2 1/2	101.60 x 63.50	5.375	136.53	2221CBB400250-##		2221EBB400250-##	
4 x 3	101.60 x 76.20	5.000	127.00	2221CBB400300-##		2221EBB400300-##	
6 x 3	152.40 x 76.20	8.500	215.90	2221CBB600300-##		2221EBB600300-##	

DT-22A DT-22B DT-22C

DT-4.1.4-1

Ferrule

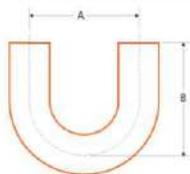
Normal size		A		DT-22A		B		DT-22B		C		DT-22C	
Inch	mm	Inch	mm	SF1 ##=F1	SF4 ##=F4	Inch	mm	SF1 ##=F1	SF4 ##=F4	Inch	mm	SF1 ##=F1	SF4 ##=F4
1/4	6.35	1.750	44.45	2222AB014-##		1.125	28.58	2222BB014-##		0.500	12.70	2222CB014-##	
3/8	9.53	1.750	44.45	2222AB038-##		1.125	28.58	2222BB038-##		0.500	12.70	2222CB038-##	
1/2	12.70	1.750	44.45	2222AB050-##		1.125	28.58	2222BB050-##		0.500	12.70	2222CB050-##	
3/4	19.05	1.750	44.45	2222AB075-##		1.125	28.58	2222BB075-##		0.500	12.70	2222CB075-##	
1	25.40	1.750	44.45	2222AB100-##		1.125	28.58	2222BB100-##		0.500	12.70	2222CB100-##	
1 1/2	38.10	1.750	44.45	2222AB150-##		1.125	28.58	2222BB150-##		0.500	12.70	2222CB150-##	
2	50.80	2.250	57.15	2222AB200-##		1.125	28.58	2222BB200-##		0.500	12.70	2222CB200-##	
2 1/2	63.50	2.250	57.15	2222AB250-##		1.125	28.58	2222BB250-##		0.500	12.70	2222CB250-##	
3	76.20	2.250	57.15	2222AB300-##		1.125	28.58	2222BB300-##		0.500	12.70	2222CB300-##	
4	101.60	2.250	57.15	2222AB400-##		1.125	28.58	2222BB400-##		0.625	15.88	2222CB400-##	
6	152.40	3.000	76.20	2222AB600-##		1.500	38.10	2222BB600-##		0.750	19.05	2222CB600-##	



**DT-23**

DT-4.1.1-7

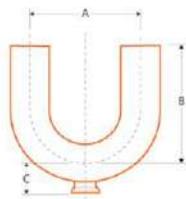
180° Return Bend W/W



Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	4.500	114.30	2.625	66.68	2223B014-##	
3/8	9.53	4.500	114.30	2.625	66.68	2223B038-##	
1/2	12.70	4.500	114.30	3.000	76.20	2223B050-##	
3/4	19.05	4.500	114.30	3.000	76.20	2223B075-##	
1	25.40	3.000	76.20	3.000	76.20	2223B100-##	
1 1/2	38.10	4.500	114.30	4.500	114.30	2223B150-##	
2	50.80	6.000	152.40	5.000	127.00	2223B200-##	
2 1/2	63.50	7.500	190.50	5.750	146.05	2223B250-##	
3	76.20	9.000	228.60	6.500	165.10	2223B300-##	
4	101.60	12.000	304.80	8.500	215.90	2223B400-##	
6	152.40	18.000	457.20	11.500	292.10	2223B600-##	

DT-23T

180° Tee Bottom Outlet WCW

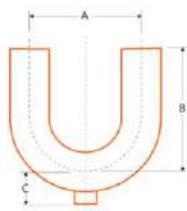


Normal size		A		B		C		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1 x 1/2	25.40 x 12.70	3.000	76.20	3.000	76.20	1.125	28.58	2223TB100050-##	
1 x 3/4	25.40 x 19.05	3.000	76.20	3.000	76.20	1.125	28.58	2223TB100075-##	
1 x 1	25.40 x 25.40	3.000	76.20	3.000	76.20	1.125	28.58	2223TB100100-##	
1 1/2 x 1/2	38.10 x 12.70	4.500	114.30	4.500	114.30	1.375	34.93	2223TB150050-##	
1 1/2 x 3/4	38.10 x 19.05	4.500	114.30	4.500	114.30	1.375	34.93	2223TB150075-##	
1 1/2 x 1	38.10 x 25.40	4.500	114.30	4.500	114.30	1.375	34.93	2223TB150100-##	
1 1/2 x 1 1/2	38.10 x 38.10	4.500	114.30	4.500	114.30	1.375	34.93	2223TB150150-##	
2 x 1/2	50.80 x 12.70	6.000	152.40	5.000	127.00	1.625	41.28	2223TB200050-##	
2 x 3/4	50.80 x 19.05	6.000	152.40	5.000	127.00	1.625	41.28	2223TB200075-##	
2 x 1	50.80 x 25.40	6.000	152.40	5.000	127.00	1.625	41.28	2223TB200100-##	
2 x 1 1/2	50.80 x 38.10	6.000	152.40	5.000	127.00	1.625	41.28	2223TB200150-##	
2 x 2	50.80 x 50.80	6.000	152.40	5.000	127.00	1.625	41.28	2223TB200200-##	
2 1/2 x 1/2	63.50 x 12.70	7.500	190.50	5.750	146.05	1.875	47.63	2223TB250050-##	
2 1/2 x 3/4	63.50 x 19.05	7.500	190.50	5.750	146.05	1.875	47.63	2223TB250075-##	
2 1/2 x 1	63.50 x 25.40	7.500	190.50	5.750	146.05	1.875	47.63	2223TB250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	7.500	190.50	5.750	146.05	1.875	47.63	2223TB250150-##	
2 1/2 x 2	63.50 x 50.80	7.500	190.50	5.750	146.05	1.875	47.63	2223TB250200-##	
2 1/2 x 2 1/2	63.50 x 63.50	7.500	190.50	5.750	146.05	1.875	47.63	2223TB250250-##	
3 x 1/2	76.20 x 12.70	9.000	228.60	6.500	165.10	2.125	53.98	2223TB300050-##	
3 x 3/4	76.20 x 19.05	9.000	228.60	6.500	165.10	2.125	53.98	2223TB300075-##	
3 x 1	76.20 x 25.40	9.000	228.60	6.500	165.10	2.125	53.98	2223TB300100-##	
3 x 1 1/2	76.20 x 38.10	9.000	228.60	6.500	165.10	2.125	53.98	2223TB300150-##	
3 x 2	76.20 x 50.80	9.000	228.60	6.500	165.10	2.125	53.98	2223TB300200-##	
3 x 2 1/2	76.20 x 63.50	9.000	228.60	6.500	165.10	2.125	53.98	2223TB300250-##	
3 x 3	76.20 x 76.20	9.000	228.60	6.500	165.10	2.125	53.98	2223TB300300-##	
4 x 1/2	101.60 x 12.70	12.000	304.80	8.500	215.90	2.625	66.68	2223TB400050-##	
4 x 3/4	101.60 x 19.05	12.000	304.80	8.500	215.90	2.625	66.68	2223TB400075-##	
4 x 1	101.60 x 25.40	12.000	304.80	8.500	215.90	2.625	66.68	2223TB400100-##	
4 x 1 1/2	101.60 x 38.10	12.000	304.80	8.500	215.90	2.625	66.68	2223TB400150-##	
4 x 2	101.60 x 50.80	12.000	304.80	8.500	215.90	2.625	66.68	2223TB400200-##	
4 x 2 1/2	101.60 x 63.50	12.000	304.80	8.500	215.90	2.625	66.68	2223TB400250-##	
4 x 3	101.60 x 76.20	12.000	304.80	8.500	215.90	2.625	66.68	2223TB400300-##	
4 x 4	101.60 x 101.60	12.000	304.80	8.500	215.90	2.625	66.68	2223TB400400-##	



DT-23TW

180° Tee Bottom Outlet WWW

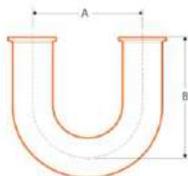


Normal size		A		B		C		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1 x 1/2	25.40 x 12.70	3.000	76.20	3.000	76.20	2.000	50.80	2223TWB100050-##	
1 x 3/4	25.40 x 19.05	3.000	76.20	3.000	76.20	2.000	50.80	2223TWB100075-##	
1 x 1	25.40 x 25.40	3.000	76.20	3.000	76.20	2.000	50.80	2223TWB100100-##	
1 1/2 x 1/2	38.10 x 12.70	4.500	114.30	4.500	114.30	2.250	57.15	2223TWB150050-##	
1 1/2 x 3/4	38.10 x 19.05	4.500	114.30	4.500	114.30	2.250	57.15	2223TWB150075-##	
1 1/2 x 1	38.10 x 25.40	4.500	114.30	4.500	114.30	2.250	57.15	2223TWB150100-##	
1 1/2 x 1 1/2	38.10 x 38.10	4.500	114.30	4.500	114.30	2.250	57.15	2223TWB150150-##	
2 x 1/2	50.80 x 12.70	6.000	152.40	5.000	127.00	2.500	63.50	2223TWB200050-##	
2 x 3/4	50.80 x 19.05	6.000	152.40	5.000	127.00	2.500	63.50	2223TWB200075-##	
2 x 1	50.80 x 25.40	6.000	152.40	5.000	127.00	2.500	63.50	2223TWB200100-##	
2 x 1 1/2	50.80 x 38.10	6.000	152.40	5.000	127.00	2.500	63.50	2223TWB200150-##	
2 x 2	50.80 x 50.80	6.000	152.40	5.000	127.00	2.500	63.50	2223TWB200200-##	
2 1/2 x 1/2	63.50 x 12.70	7.500	190.50	5.750	146.05	2.750	69.85	2223TWB250050-##	
2 1/2 x 3/4	63.50 x 19.05	7.500	190.50	5.750	146.05	2.750	69.85	2223TWB250075-##	
2 1/2 x 1	63.50 x 25.40	7.500	190.50	5.750	146.05	2.750	69.85	2223TWB250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	7.500	190.50	5.750	146.05	2.750	69.85	2223TWB250150-##	
2 1/2 x 2	63.50 x 50.80	7.500	190.50	5.750	146.05	2.750	69.85	2223TWB250200-##	
2 1/2 x 2 1/2	63.50 x 63.50	7.500	190.50	5.750	146.05	2.750	69.85	2223TWB250250-##	
3 x 1/2	76.20 x 12.70	9.000	228.60	6.500	165.10	3.272	83.10	2223TWB300050-##	
3 x 3/4	76.20 x 19.05	9.000	228.60	6.500	165.10	3.272	83.10	2223TWB300075-##	
3 x 1	76.20 x 25.40	9.000	228.60	6.500	165.10	3.272	83.10	2223TWB300100-##	
3 x 1 1/2	76.20 x 38.10	9.000	228.60	6.500	165.10	3.272	83.10	2223TWB300150-##	
3 x 2	76.20 x 50.80	9.000	228.60	6.500	165.10	3.272	83.10	2223TWB300200-##	
3 x 2 1/2	76.20 x 63.50	9.000	228.60	6.500	165.10	3.272	83.10	2223TWB300250-##	
3 x 3	76.20 x 76.20	9.000	228.60	6.500	165.10	3.272	83.10	2223TWB300300-##	
4 x 1/2	101.60 x 12.70	12.000	304.80	8.500	215.90	4.008	101.80	2223TWB400050-##	
4 x 3/4	101.60 x 19.05	12.000	304.80	8.500	215.90	4.008	101.80	2223TWB400075-##	
4 x 1	101.60 x 25.40	12.000	304.80	8.500	215.90	4.008	101.80	2223TWB400100-##	
4 x 1 1/2	101.60 x 38.10	12.000	304.80	8.500	215.90	4.008	101.80	2223TWB400150-##	
4 x 2	101.60 x 50.80	12.000	304.80	8.500	215.90	4.008	101.80	2223TWB400200-##	
4 x 2 1/2	101.60 x 63.50	12.000	304.80	8.500	215.90	4.008	101.80	2223TWB400250-##	
4 x 3	101.60 x 76.20	12.000	304.80	8.500	215.90	4.008	101.80	2223TWB400300-##	
4 x 4	101.60 x 101.60	12.000	304.80	8.500	215.90	4.008	101.80	2223TWB400400-##	

DT-24

DT-4.1.1-8

180° Return Bend CC



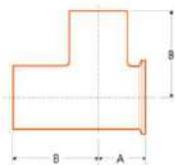
Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	4.500	114.30	3.125	79.38		2224B014-##
3/8	9.53	4.500	114.30	3.125	79.38		2224B038-##
1/2	12.70	4.500	114.30	3.500	88.90		2224B050-##
3/4	19.05	4.500	114.30	3.500	88.90		2224B075-##
1	25.40	3.000	76.20	3.500	88.90		2224B100-##
1 1/2	38.10	4.500	114.30	5.000	127.00		2224B150-##
2	50.80	6.000	152.40	5.500	139.70		2224B200-##
2 1/2	63.50	7.500	190.50	6.250	158.75		2224B250-##
3	76.20	9.000	228.60	7.000	177.80		2224B300-##
4	101.60	12.000	304.80	9.125	231.78		2224B400-##
6	152.40	18.000	457.20	13.000	330.20		2224B600-##



DT-25

DT-4.1.2-3

Short Outlet Run Tee WWC



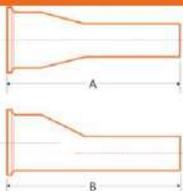
Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	0.875	22.23	1.750	44.45	2225B014-##	
3/8	9.53	0.875	22.23	1.750	44.45	2225B038-##	
1/2	12.70	0.875	22.23	1.875	47.63	2225B050-##	
3/4	19.05	1.000	25.40	2.000	50.80	2225B075-##	
1	25.40	1.125	28.58	2.125	53.98	2225B100-##	
1 1/2	38.10	1.375	34.93	2.375	60.33	2225B150-##	
2	50.80	1.625	41.28	2.875	73.03	2225B200-##	
2 1/2	63.50	1.875	47.63	3.125	79.38	2225B250-##	
3	76.20	2.125	53.98	3.375	85.73	2225B300-##	
4	101.60	2.750	69.85	4.125	104.78	2225B400-##	
6	152.40	4.625	117.48	5.625	142.88	2225B600-##	

DT-26C(a)

BPE 2012 Concentric Reducer CW

DT-26E(a)

BPE 2012 Eccentric Reducer CW



Normal size		CR				ER			
		A		SF1	SF4	B		SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4	Inch	mm	##=F1	##=F4
3/4 x 1/2	19.05 x 12.70	3.000	76.20	2226CB075050-##		3.000	76.20	2226EB075050-##	
1 x 1/2	25.40 x 12.70	3.500	88.90	2226CB100050-##		3.500	88.90	2226EB100050-##	
1 x 3/4	25.40 x 19.05	3.000	76.20	2226CB100075-##		3.000	76.20	2226EB100075-##	
1 1/2 x 1/2	38.10 x 12.70	4.500	114.30	2226CB150050-##		4.500	114.30	2226EB150050-##	
1 1/2 x 3/4	38.10 x 19.05	4.000	101.60	2226CB150075-##		4.000	101.60	2226EB150075-##	
2 x 1/2	50.80 x 12.70	6.500	165.10	2226CB200050-##		6.500	165.10	2226EB200050-##	
2 x 3/4	50.80 x 19.05	6.000	152.40	2226CB200075-##		6.000	152.40	2226EB200075-##	
2 x 1	50.80 x 25.40	6.000	152.40	2226CB200100-##		6.000	152.40	2226EB200100-##	
2 x 1 1/2	50.80 x 38.10	4.000	101.60	2226CB200150-##		4.000	101.60	2226EB200150-##	
2 1/2 x 1/2	63.50 x 12.70	8.500	215.90	2226CB250050-##		8.500	215.90	2226EB250050-##	
2 1/2 x 3/4	63.50 x 19.05	8.000	203.20	2226CB250075-##		8.000	203.20	2226EB250075-##	
2 1/2 x 1	63.50 x 25.40	8.000	203.20	2226CB250100-##		8.000	203.20	2226EB250100-##	
2 1/2 x 1 1/2	63.50 x 38.10	6.000	152.40	2226CB250150-##		6.000	152.40	2226EB250150-##	
2 1/2 x 2	63.50 x 50.80	4.250	108.00	2226CB250200-##		4.250	108.00	2226EB250200-##	
3 x 1	76.20 x 25.40	10.000	254.00	2226CB300100-##		10.000	254.00	2226EB300100-##	
3 x 1 1/2	76.20 x 38.10	8.000	203.20	2226CB300150-##		8.000	203.20	2226EB300150-##	
3 x 2	76.20 x 50.80	6.250	158.80	2226CB300200-##		6.250	158.80	2226EB300200-##	
3 x 2 1/2	76.20 x 63.50	4.250	108.00	2226CB300250-##		4.250	108.00	2226EB300250-##	
4 x 1	101.60 x 25.40	14.125	358.80	2226CB400100-##		14.125	358.80	2226EB400100-##	
4 x 1 1/2	101.60 x 38.10	12.125	308.00	2226CB400150-##		12.125	308.00	2226EB400150-##	
4 x 2	101.60 x 50.80	10.375	263.50	2226CB400200-##		10.375	263.50	2226EB400200-##	
4 x 2 1/2	101.60 x 63.50	8.375	212.70	2226CB400250-##		8.375	212.70	2226EB400250-##	
4 x 3	101.60 x 76.20	6.375	161.90	2226CB400300-##		6.375	161.90	2226EB400300-##	
6 x 3	152.40 x 76.20	9.000	228.60	2226CB600300-##		8.750	222.30	2226EB600300-##	
6 x 4	152.40 x 101.60	9.000	228.60	2226CB600400-##		9.000	228.60	2226EB600400-##	



DT-26C(b)

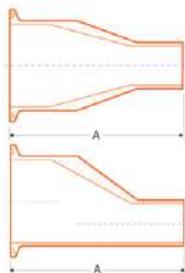
DT-4.1.3-2

Concentric Reducer CW

DT-26E(b)

DT-4.1.3-2

Eccentric Reducer CW

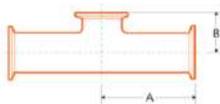


Normal size		A		CR		ER	
				SF1 ##=F1	SF4 ##=F4	SF1 ##=F1	SF4 ##=F4
Inch	mm	Inch	mm				
3/8 x 1/4	9.53 x 6.35	2.125	53.98	2226CBB038014-##	2226EBB038014-##		
1/2 x 1/4	12.70 x 6.35	2.375	60.33	2226CBB050014-##	2226EBB050014-##		
1/2 x 3/8	12.70 x 9.53	2.375	60.33	2226CBB050038-##	2226EBB050038-##		
3/4 x 3/8	19.05 x 9.53	2.500	63.50	2226CBB075038-##	2226EBB075038-##		
3/4 x 1/2	19.05 x 12.70	2.625	66.68	2226CBB075050-##	2226EBB075050-##		
1 x 1/2	25.40 x 12.70	3.000	76.20	2226CBB100050-##	2226EBB100050-##		
1 x 3/4	25.40 x 19.05	2.625	66.68	2226CBB100075-##	2226EBB100075-##		
1 1/2 x 3/4	38.10 x 19.05	3.500	88.90	2226CBB150075-##	2226EBB150075-##		
1 1/2 x 1	38.10 x 25.40	3.000	76.20	2226CBB150100-##	2226EBB150100-##		
2 x 1	50.80 x 25.40	3.875	98.43	2226CBB200100-##	2226EBB200100-##		
2 x 1 1/2	50.80 x 38.10	3.000	76.20	2226CBB200150-##	2226EBB200150-##		
2 1/2 x 1 1/2	63.50 x 38.10	3.875	98.43	2226CBB250150-##	2226EBB250150-##		
2 1/2 x 2	63.50 x 50.80	3.000	76.20	2226CBB250200-##	2226EBB250200-##		
3 x 1 1/2	76.20 x 38.10	4.750	120.65	2226CBB300150-##	2226EBB300150-##		
3 x 2	76.20 x 50.80	3.875	98.43	2226CBB300200-##	2226EBB300200-##		
3 x 2 1/2	76.20 x 63.50	3.125	79.38	2226CBB300250-##	2226EBB300250-##		
4 x 2	101.60 x 50.80	5.750	146.05	2226CBB400200-##	2226EBB400200-##		
4 x 2 1/2	101.60 x 63.50	4.875	123.83	2226CBB400250-##	2226EBB400250-##		
4 x 3	101.60 x 76.20	4.500	114.30	2226CBB400300-##	2226EBB400300-##		
6 x 4	152.40 x 101.60	6.375	161.93	2226CBB600400-##	2226EBB600400-##		

DT-27

DT-4.1.2-5

Short Outlet Tee CCC



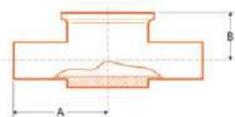
Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/2	12.70	2.375	60.33	1.000	25.40	2227B050-##	
3/4	19.05	2.500	63.50	1.125	28.58	2227B075-##	
1	25.40	2.625	66.68	1.125	28.58	2227B100-##	
1 1/2	38.10	2.875	73.03	1.375	34.93	2227B150-##	
2	50.80	3.375	85.73	1.625	41.28	2227B200-##	
2 1/2	63.50	3.625	92.08	1.875	47.63	2227B250-##	
3	76.20	3.875	98.43	2.125	53.98	2227B300-##	
4	101.60	4.750	120.65	2.750	69.85	2227B400-##	
6	152.40	7.125	180.98	4.625	117.48	2227B600-##	



DT-28

DT-4.1.2-10

Instrument Tee WCW

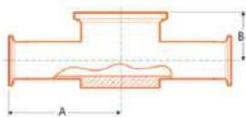


Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/2 x 1 1/2	12.70 x 38.10	2.500	63.50	0.875	22.23	2228B050150-##	
3/4 x 1 1/2	19.05 x 38.10	2.500	63.50	1.000	25.40	2228B075150-##	
1 x 1 1/2	25.40 x 38.10	2.500	63.50	1.125	28.58	2228B100150-##	
1/2 x 2	12.70 x 50.80	2.750	69.85	1.000	25.40	2228B050200-##	
3/4 x 2	19.05 x 50.80	2.750	69.85	1.125	28.58	2228B075200-##	
1 x 2	25.40 x 50.80	2.750	69.85	1.250	31.75	2228B100200-##	
1 1/2 x 2	38.10 x 50.80	2.750	69.85	1.500	38.10	2228B150200-##	

DT-29

DT-4.1.2-11

Instrument Tee CCC

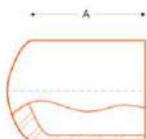


Normal size		A		B		SF1	SF4
Inch	mm	Inch	mm	Inch	mm	##=F1	##=F4
1/2 x 1 1/2	12.70 x 38.10	3.000	76.20	0.875	22.23	2229B050150-##	
3/4 x 1 1/2	19.05 x 38.10	3.000	76.20	1.000	25.40	2229B075150-##	
1 x 1 1/2	25.40 x 38.10	3.000	76.20	1.125	28.58	2229B100150-##	
1/2 x 2	12.70 x 50.80	3.250	82.55	1.000	25.40	2229B050200-##	
3/4 x 2	19.05 x 50.80	3.250	82.55	1.125	28.58	2229B075200-##	
1 x 2	25.40 x 50.80	3.250	82.55	1.250	31.75	2229B100200-##	
1 1/2 x 2	38.10 x 50.80	3.250	82.55	1.500	38.10	2229B150200-##	

DT-30

DT-4.1.5-1

Tube Weld End Cap

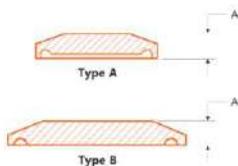


Normal size		A		SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4
1/2	12.70	1.500	38.10	2230B050-##	
3/4	19.05	1.500	38.10	2230B075-##	
1	25.40	1.500	38.10	2230B100-##	
1 1/2	38.10	1.500	38.10	2230B150-##	
2	50.80	1.500	38.10	2230B200-##	
2 1/2	63.50	1.500	38.10	2230B250-##	
3	76.20	1.750	44.45	2230B300-##	
4	101.60	2.000	50.80	2230B400-##	
6	152.40	2.500	63.50	2230B600-##	

DT-31

DT-4.1.5-2

Solid End Cap

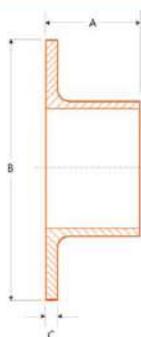


Normal size		A		SF1	SF4
Inch	mm	Inch	mm	##=F1	##=F4
1/4	6.35	A	0.187	4.75	2231B014-##
3/8	9.53	A	0.187	4.75	2231B038-##
1/2 & 3/4	12.70, 19.05	A	0.187	4.75	2231B075-##
1 & 1 1/2	25.40, 38.10	B	0.250	6.35	2231B150-##
2	50.80	B	0.250	6.35	2231B200-##
2 1/2	63.50	B	0.250	6.35	2231B250-##
3	76.20	B	0.250	6.35	2231B300-##
4	101.60	B	0.312	7.92	2231B400-##



14VB

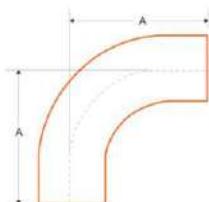
Lap Joint Stub End with Grooves



Normal size	A		B		C		part number
	Inch	mm	Inch	mm	Inch	mm	
1/2	2.00	50.80	1.69	42.92	0.098	2.49	2214VBB050-F1
3/4	2.00	50.80	1.69	42.92	0.098	2.49	2214VBB075-F1
1	2.00	50.80	2.00	50.80	0.130	3.30	2214VBB100-F1
1 1/2	2.00	50.80	2.88	73.15	0.130	3.30	2214VBB150-F1
2	2.50	63.50	3.62	91.94	0.130	3.30	2214VBB200-F1
2 1/2	2.50	63.50	4.12	104.64	0.130	3.30	2214VBB250-F1
3	2.50	63.50	5.00	127.00	0.166	4.21	2214VBB300-F1
4	2.50	63.50	6.19	157.22	0.166	4.21	2214VBB400-F1
6	3.00	76.20	8.50	215.90	0.218	5.53	2214VBB600-F1

2S

90° Long Elbow WW

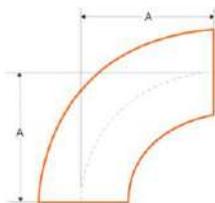


Normal size	Nominal wall	A		part number	
		Inch	mm	304	316L
1/2	1.65	3.000	76.20	242SA050-11	242SB050-11
3/4	1.65	3.000	76.20	242SA075-11	242SB075-11
1	1.65	2.063	52.40	242SA100-11	242SB100-11
1 1/2	1.65	2.938	74.60	242SA150-11	242SB150-11
2	1.65	4.063	103.20	242SA200-11	242SB200-11
2 1/2	1.65	5.188	131.80	242SA250-11	242SB250-11
3	1.65	6.312	160.30	242SA300-11	242SB300-11
4	2.11	8.313	211.20	242SA400-11	242SB400-11
6	2.77	12.460	316.50	242SA600-11	242SB600-11

Different dimensions available upon request

2WCL

90° Short Elbow WW



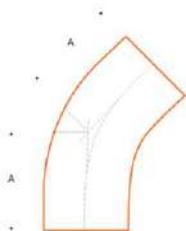
Normal size	Nominal wall	A		part number	
		Inch	mm	304	316L
1/2	1.65	1.125	28.60	242WCLA050-11	242WCLB050-11
3/4	1.65	1.125	28.60	242WCLA075-11	242WCLB075-11
1	1.65	1.500	38.10	242WCLA100-11	242WCLB100-11
1 1/2	1.65	2.250	57.20	242WCLA150-11	242WCLB150-11
2	1.65	3.000	76.20	242WCLA200-11	242WCLB200-11
2 1/2	1.65	3.750	95.25	242WCLA250-11	242WCLB250-11
3	1.65	4.500	114.30	242WCLA300-11	242WCLB300-11
4	2.11	6.000	152.40	242WCLA400-11	242WCLB400-11
6 x 2.11	2.11	9.000	228.60	242WCLA600211-99	242WCLB600211-99
6	2.77	9.000	228.60	242WCLA600-11	242WCLB600-11
8	2.77	12.000	304.80	242WCLA800-11	242WCLB800-11
10	2.77	15.000	381.00	242WCLA1000-11	242WCLB1000-11
12	3.00	18.000	457.20	242WCLA1200-11	242WCLB1200-11

Different dimensions available upon request



2KS

45° Long Elbow WW

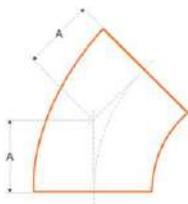


Normal size		Nominal wall mm	A		part number	
Inch	mm		Inch	mm	304	316L
1/2	12.70	1.65	2.250	57.20	242KSA050-11	242KSB050-11
3/4	19.05	1.65	2.250	57.20	242KSA075-11	242KSB075-11
1	25.40	1.65	1.188	30.20	242KSA100-11	242KSB100-11
1 1/2	38.10	1.65	1.625	41.30	242KSA150-11	242KSB150-11
2	50.80	1.65	2.312	58.70	242KSA200-11	242KSB200-11
2 1/2	63.50	1.65	3.000	76.20	242KSA250-11	242KSB250-11
3	76.20	1.65	3.688	93.70	242KSA300-11	242KSB300-11
4	101.60	2.11	4.812	122.20	242KSA400-11	242KSB400-11
6 x 2.11	152.40	2.11	7.330	186.18	242KSA600186-99	242KSB600186-99
6	152.40	2.77	6.252	158.80	242KSA600-11	242KSB600-11

Different dimensions available upon request

2WK

45° Short Elbow WW

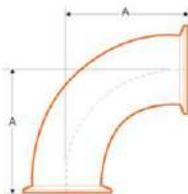


Normal size		Nominal wall mm	A		part number	
Inch	mm		Inch	mm	304	316L
1/2	12.70	1.65	0.466	11.90	242WKA050-11	242WKB050-11
3/4	19.05	1.65	0.466	11.90	242WKA075-11	242WKB075-11
1	25.40	1.65	0.625	15.80	242WKA100-11	242WKB100-11
1 1/2	38.10	1.65	0.937	23.80	242WKA150-11	242WKB150-11
2	50.80	1.65	1.250	31.75	242WKA200-11	242WKB200-11
2 1/2	63.50	1.65	1.562	39.60	242WKA250-11	242WKB250-11
3	76.20	1.65	1.875	47.60	242WKA300-11	242WKB300-11
4	101.60	2.11	2.500	63.50	242WKA400-11	242WKB400-11
6 x 2.11	152.40	2.11	3.750	95.30	242WKA600211-99	242WKB600211-99
6	152.40	2.77	3.750	95.30	242WKA600-11	242WKB600-11
8	203.20	2.77	5.000	127.00	242WKA800-11	242WKB800-11
10	254.00	2.77	6.250	158.75	242WKA1000-11	242WKB1000-11
12	304.80	3.00	7.500	190.50	242WKA1200-11	242WKB1200-11

Different dimensions available upon request

2CMP

90° Clamp Short Elbow CC



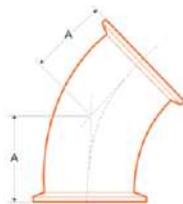
Normal size		A		part number	
Inch	mm	Inch	mm	304	316L
1/2	12.70	1.625	41.30	242CMPA050-11	242CMPB050-11
3/4	19.05	1.625	41.30	242CMPA075-11	242CMPB075-11
1	25.40	2.000	50.80	242CMPA100-11	242CMPB100-11
1 1/2	38.10	2.750	69.90	242CMPA150-11	242CMPB150-11
2	50.80	3.500	88.90	242CMPA200-11	242CMPB200-11
2 1/2	63.50	4.250	107.95	242CMPA250-11	242CMPB250-11
3	76.20	5.000	127.00	242CMPA300-11	242CMPB300-11
4	101.60	6.625	168.20	242CMPA400-11	242CMPB400-11
6	152.40	9.875	250.83	242CMPA600-11	242CMPB600-11
8	203.20	12.875	327.00	242CMPA800-11	242CMPB800-11
10	254.00	15.875	403.20	242CMPA1000-11	242CMPB1000-11
12	304.80	18.875	479.40	242CMPA1200-11	242CMPB1200-11

Different dimensions available upon request



2KMP

45° Clamp Short Elbow CC

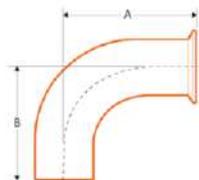


Normal size		A		part number	
Inch	mm	Inch	mm	304	316L
1/2	12.70	0.966	24.60	242KMPA050-11	242KMPB050-11
3/4	19.05	0.966	24.60	242KMPA075-11	242KMPB075-11
1	25.40	1.125	28.50	242KMPA100-11	242KMPB100-11
1 1/2	38.10	1.437	36.50	242KMPA150-11	242KMPB150-11
2	50.80	1.750	44.45	242KMPA200-11	242KMPB200-11
2 1/2	63.50	2.062	52.30	242KMPA250-11	242KMPB250-11
3	76.20	2.375	60.30	242KMPA300-11	242KMPB300-11
4	101.60	3.125	79.30	242KMPA400-11	242KMPB400-11
6	152.40	4.625	117.50	242KMPA600-11	242KMPB600-11
8	203.20	5.875	149.20	242KMPA800-11	242KMPB800-11
10	254.00	7.125	181.00	242KMPA1000-11	242KMPB1000-11
12	304.80	8.375	212.70	242KMPA1200-11	242KMPB1200-11

Different dimensions available upon request

2CM

90° Clamp X Weld Long Elbow CW

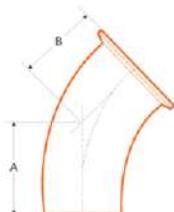


Normal size		A		B		part number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1/2	12.70	3.500	88.90	3.000	76.20	242CMA050-11	242CMB050-11
3/4	19.05	3.500	88.90	3.000	76.20	242CMA075-11	242CMB075-11
1	25.40	2.562	65.10	2.063	52.40	242CMA100-11	242CMB100-11
1 1/2	38.10	3.438	87.30	2.938	74.60	242CMA150-11	242CMB150-11
2	50.80	4.562	115.90	4.063	103.20	242CMA200-11	242CMB200-11
2 1/2	63.50	5.688	144.50	5.188	131.80	242CMA250-11	242CMB250-11
3	76.20	6.812	173.00	6.312	160.30	242CMA300-11	242CMB300-11
4	101.60	8.937	226.90	8.313	211.10	242CMA400-11	242CMB400-11

Different dimensions available upon request

2KM

45° Clamp X Weld Long Elbow CW



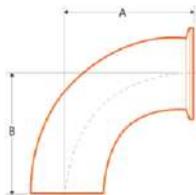
Normal size		A		B		part number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	1.188	30.2	1.688	42.88	242KMA100-11	242KMB100-11
1 1/2	38.10	1.625	41.3	2.125	53.98	242KMA150-11	242KMB150-11
2	50.80	2.312	58.7	2.812	71.42	242KMA200-11	242KMB200-11
2 1/2	63.50	3.000	76.2	3.500	88.90	242KMA250-11	242KMB250-11
3	76.20	3.688	93.7	4.188	106.38	242KMA300-11	242KMB300-11
4	101.60	4.812	122.2	5.437	138.10	242KMA400-11	242KMB400-11

Different dimensions available upon request



2CMS

90° Clamp X Weld Short Elbow CW

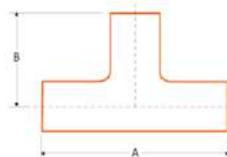


Normal size	A		B		part number		
	Inch	mm	Inch	mm	304	316L	
1/2	12.70	1.625	41.30	1.125	28.60	242CMSA050-11	242CMSB050-11
3/4	19.05	1.625	41.30	1.125	28.60	242CMSA075-11	242CMSB075-11
1	25.40	2.000	50.80	1.500	38.10	242CMSA100-11	242CMSB100-11
1 1/2	38.10	2.750	69.90	2.250	57.20	242CMSA150-11	242CMSB150-11
2	50.80	3.500	88.90	3.000	76.20	242CMSA200-11	242CMSB200-11
2 1/2	63.50	4.250	107.95	3.750	95.25	242CMSA250-11	242CMSB250-11
3	76.20	5.000	127.00	4.500	114.30	242CMSA300-11	242CMSB300-11
4	101.60	6.625	168.28	6.000	152.40	242CMSA400-11	242CMSB400-11
6	152.40	9.875	250.80	9.000	228.60	242CMSA600-11	242CMSB600-11

Different dimensions available upon request

7W

Long Equal Tee

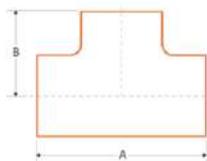


Normal size	A		B		part number		
	Inch	mm	Inch	mm	304	316L	
1/2	12.70	3.750	95.25	1.875	47.63	247WA050-11	247WB050-11
3/4	19.05	4.000	101.60	2.000	50.80	247WA075-11	247WB075-11
1	25.40	3.750	95.25	1.875	47.63	247WA100-11	247WB100-11
1 1/2	38.10	4.500	114.30	2.250	57.20	247WA150-11	247WB150-11
2	50.80	6.000	152.40	3.000	76.20	247WA200-11	247WB200-11
2 1/2	63.50	6.000	152.40	3.000	76.20	247WA250-11	247WB250-11
3	76.20	6.500	165.20	3.250	82.60	247WA300-11	247WB300-11
4	101.60	7.750	196.80	3.875	98.40	247WA400-11	247WB400-11
6	152.40	11.250	285.75	5.625	142.88	247WA600-11	247WB600-11
8	203.20	14.000	355.60	7.000	177.80	247WA800-11	247WB800-11
10	254.00	17.000	431.80	8.500	215.90	247WA1000-11	247WB1000-11
12	304.80	20.000	508.00	10.000	254.00	247WA1200-11	247WB1200-11

Different dimensions available upon request

7WWW

Short Equal Tee



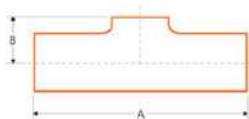
Normal size	A		B		part number		
	Inch	mm	Inch	mm	304	316L	
1	25.40	2.250	57.20	1.125	28.60	247WWWA100-11	247WWWB100-11
1 1/2	38.10	3.312	84.20	1.656	42.10	247WWWA150-11	247WWWB150-11
2	50.80	4.124	104.80	2.062	52.40	247WWWA200-11	247WWWB200-11
2 1/2	63.50	4.688	119.00	2.344	59.50	247WWWA250-11	247WWWB250-11
3	76.20	5.188	131.80	2.594	65.90	247WWWA300-11	247WWWB300-11
4	101.60	6.876	174.60	3.438	87.30	247WWWA400-11	247WWWB400-11

Different dimensions available upon request



7WT

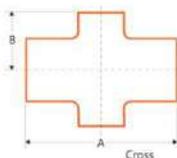
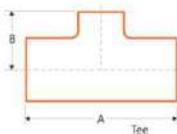
Long Equal Tee w/o



Normal size		A		B		part number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1/2	12.70	3.75	95.25	0.33	8.35	247WTA050-11	247WTB050-11
3/4	19.05	4.00	101.60	0.49	12.53	247WTA075-11	247WTB075-11
1	25.40	3.75	95.20	0.56	14.30	247WTA100-11	247WTB100-11
1 1/2	38.10	4.50	114.40	0.86	21.95	247WTA150-11	247WTB150-11
2	50.80	6.00	152.40	1.14	29.00	247WTA200-11	247WTB200-11
2 1/2	63.50	6.00	152.40	1.38	35.00	247WTA250-11	247WTB250-11
3	76.20	6.50	165.20	1.69	43.00	247WTA300-11	247WTB300-11
4	101.60	7.75	196.80	2.13	54.00	247WTA400-11	247WTB400-11
6	152.40	11.25	285.75	3.18	80.80	247WTA600-11	247WTB600-11

Different dimensions available upon request

7RW&9RW

Long Reducing Tee
Long Reducing Cross

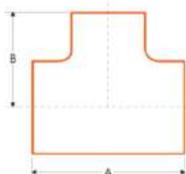
Normal size	A	B	Reducing Tee		Reducing Cross				
			part number	part number	part number	part number			
Inch	mm	Inch	mm	304	316L	304	316L		
3/4 x 1/2	19.05 x 12.70	4.000	101.60	2.000	50.80	247RWA075050-11	247RWB075050-11	249RWA075050-11	249RWB075050-11
1 x 1/2	25.40 x 12.70	4.250	107.96	2.125	53.98	247RWA100050-11	247RWB100050-11	249RWA100050-11	249RWB100050-11
1 x 3/4	25.40 x 19.05	4.250	107.96	2.125	53.98	247RWA100075-11	247RWB100075-11	249RWA100075-11	249RWB100075-11
1 1/2 x 1/2	38.10 x 12.70	4.750	120.66	2.375	60.33	247RWA150050-11	247RWB150050-11	249RWA150050-11	249RWB150050-11
1 1/2 x 3/4	38.10 x 19.05	4.750	120.66	2.375	60.33	247RWA150075-11	247RWB150075-11	249RWA150075-11	249RWB150075-11
1 1/2 x 1	38.10 x 25.40	4.500	114.30	2.125	53.98	247RWA150100-11	247RWB150100-11	249RWA150100-11	249RWB150100-11
2 x 1/2	50.80 x 12.70	5.750	146.06	2.625	66.68	247RWA200050-11	247RWB200050-11	249RWA200050-11	249RWB200050-11
2 x 3/4	50.80 x 19.05	5.750	146.06	2.625	66.68	247RWA200075-11	247RWB200075-11	249RWA200075-11	249RWB200075-11
2 x 1	50.80 x 25.40	6.000	152.40	2.375	60.33	247RWA200100-11	247RWB200100-11	249RWA200100-11	249RWB200100-11
2 x 1 1/2	50.80 x 38.10	6.000	152.40	2.500	63.50	247RWA200150-11	247RWB200150-11	249RWA200150-11	249RWB200150-11
2 1/2 x 1	63.50 x 25.40	6.000	152.40	2.625	66.68	247RWA250100-11	247RWB250100-11	249RWA250100-11	249RWB250100-11
2 1/2 x 1 1/2	63.50 x 38.10	6.000	152.40	2.750	69.85	247RWA250150-11	247RWB250150-11	249RWA250150-11	249RWB250150-11
2 1/2 x 2	63.50 x 50.80	6.000	152.40	3.250	82.55	247RWA250200-11	247RWB250200-11	249RWA250200-11	249RWB250200-11
3 x 1	76.20 x 25.40	6.500	165.10	2.874	73.00	247RWA300100-11	247RWB300100-11	249RWA300100-11	249RWB300100-11
3 x 1 1/2	76.20 x 38.10	6.500	165.10	3.000	76.20	247RWA300150-11	247RWB300150-11	249RWA300150-11	249RWB300150-11
3 x 2	76.20 x 50.80	6.500	165.10	3.500	88.90	247RWA300200-11	247RWB300200-11	249RWA300200-11	249RWB300200-11
3 x 2 1/2	76.20 x 63.50	6.500	165.10	3.250	82.55	247RWA300250-11	247RWB300250-11	249RWA300250-11	249RWB300250-11
4 x 1	101.60 x 25.40	7.750	196.86	3.374	85.70	247RWA400100-11	247RWB400100-11	249RWA400100-11	249RWB400100-11
4 x 1 1/2	101.60 x 38.10	7.750	196.86	3.500	88.90	247RWA400150-11	247RWB400150-11	249RWA400150-11	249RWB400150-11
4 x 2	101.60 x 50.80	7.750	196.86	4.000	101.60	247RWA400200-11	247RWB400200-11	249RWA400200-11	249RWB400200-11
4 x 2 1/2	101.60 x 63.50	7.750	196.86	3.750	95.25	247RWA400250-11	247RWB400250-11	249RWA400250-11	249RWB400250-11
4 x 3	101.60 x 76.20	7.750	196.86	3.750	95.25	247RWA400300-11	247RWB400300-11	249RWA400300-11	249RWB400300-11
6 x 1 1/2	152.40 x 38.10	11.250	285.76	4.500	114.30	247RWA600150-11	247RWB600150-11	249RWA600150-11	249RWB600150-11
6 x 2	152.40 x 50.80	11.250	285.76	4.500	114.30	247RWA600200-11	247RWB600200-11	249RWA600200-11	249RWB600200-11
6 x 3	152.40 x 76.20	11.250	285.76	4.875	123.83	247RWA600300-11	247RWB600300-11	249RWA600300-11	249RWB600300-11
6 x 4	152.40 x 101.60	11.250	285.76	5.125	130.18	247RWA600400-11	247RWB600400-11	249RWA600400-11	249RWB600400-11

Different dimensions available upon request



7RWW

Short Reducing Tee

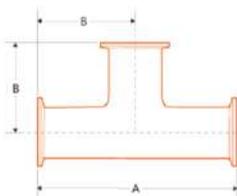


Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
3/4 x 1/2	19.05 x 12.70	3.750	95.25	1.000	25.40	247RWWWA075050-11	247RWWWB075050-11
1 x 1/2	25.40 x 12.70	3.750	95.25	1.500	38.10	247RWWWA100050-11	247RWWWB100050-11
1 x 3/4	25.40 x 19.05	3.750	95.25	2.000	50.80	247RWWWA100075-11	247RWWWB100075-11
1 1/2 x 1/2	38.10 x 12.70	4.500	114.30	2.250	57.15	247RWWWA150050-11	247RWWWB150050-11
1 1/2 x 3/4	38.10 x 19.05	4.500	114.30	2.250	57.15	247RWWWA150075-11	247RWWWB150075-11
1 1/2 x 1	38.10 x 25.40	3.312	84.12	1.375	34.93	247RWWWA150100-11	247RWWWB150100-11
2 x 1/2	50.80 x 12.70	4.124	104.76	1.625	41.28	247RWWWA200050-11	247RWWWB200050-11
2 x 3/4	50.80 x 19.05	4.124	104.76	1.625	41.28	247RWWWA200075-11	247RWWWB200075-11
2 x 1	50.80 x 25.40	4.124	104.76	1.625	41.28	247RWWWA200100-11	247RWWWB200100-11
2 x 1 1/2	50.80 x 38.10	4.124	104.76	1.906	48.41	247RWWWA200150-11	247RWWWB200150-11
2 1/2 x 1	63.50 x 25.40	4.688	119.08	1.875	47.63	247RWWWA250100-11	247RWWWB250100-11
2 1/2 x 1 1/2	63.50 x 38.10	4.688	119.08	2.156	54.76	247RWWWA250150-11	247RWWWB250150-11
2 1/2 x 2	63.50 x 50.80	4.688	119.08	2.312	58.72	247RWWWA250200-11	247RWWWB250200-11
3 x 1	76.20 x 25.40	5.188	131.78	2.126	54.00	247RWWWA300100-11	247RWWWB300100-11
3 x 1 1/2	76.20 x 38.10	5.188	131.78	2.406	61.11	247RWWWA300150-11	247RWWWB300150-11
3 x 2	76.20 x 50.80	5.188	131.78	2.562	65.07	247RWWWA300200-11	247RWWWB300200-11
3 x 2 1/2	76.20 x 63.50	5.188	131.78	2.594	65.89	247RWWWA300250-11	247RWWWB300250-11
4 x 1	101.60 x 25.40	6.876	174.66	2.626	66.70	247RWWWA400100-11	247RWWWB400100-11
4 x 1 1/2	101.60 x 38.10	6.876	174.66	2.906	73.81	247RWWWA400150-11	247RWWWB400150-11
4 x 2	101.60 x 50.80	6.876	174.66	3.062	77.77	247RWWWA400200-11	247RWWWB400200-11
4 x 2 1/2	101.60 x 63.50	6.876	174.66	3.094	78.59	247RWWWA400250-11	247RWWWB400250-11
6 x 1 1/2	152.40 x 38.10	10.000	254.00	4.750	120.65	247RWWWA600150-11	247RWWWB600150-11
6 x 2	152.40 x 50.80	10.000	254.00	4.750	120.65	247RWWWA600200-11	247RWWWB600200-11
6 x 3	152.40 x 76.20	10.000	254.00	4.875	123.83	247RWWWA600300-11	247RWWWB600300-11
6 x 4	152.40 x 101.60	10.000	254.00	4.750	120.65	247RWWWA600400-11	247RWWWB600400-11

Different dimensions available upon request

7MP

clamp long Equal Tee



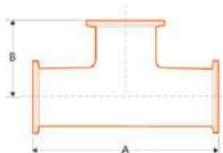
Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1/2	12.70	4.750	120.65	2.375	60.33	247MPA050-11	247MPB050-11
3/4	19.05	5.000	127.00	2.500	63.50	247MPA075-11	247MPB075-11
1	25.40	4.750	120.60	2.375	60.30	247MPA100-11	247MPB100-11
1 1/2	38.10	5.500	139.80	2.750	69.90	247MPA150-11	247MPB150-11
2	50.80	7.000	177.80	3.500	88.90	247MPA200-11	247MPB200-11
2 1/2	63.50	7.000	177.80	3.500	88.90	247MPA250-11	247MPB250-11
3	76.20	7.500	190.60	3.750	95.30	247MPA300-11	247MPB300-11
4	101.60	9.000	228.40	4.500	114.20	247MPA400-11	247MPB400-11
6	152.40	13.000	330.20	6.500	165.10	247MPA600-11	247MPB600-11
8	203.20	15.750	400.05	7.875	200.03	247MPA800-11	247MPB800-11
10	254.00	18.750	476.25	9.735	247.27	247MPA1000-11	247MPB1000-11
12	304.80	21.750	552.45	10.735	272.67	247MPA1200-11	247MPB1200-11

Different dimensions available upon request



7MPS

Clamp Short Equal Tee

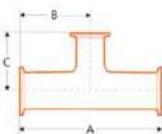


Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	3.250	82.60	1.625	41.30	247MPSA100-11	247MPSB100-11
1 1/2	38.10	4.315	109.60	2.157	54.80	247MPSA150-11	247MPSB150-11
2	50.80	5.125	130.20	2.562	65.10	247MPSA200-11	247MPSB200-11
2 1/2	63.50	5.685	144.40	2.842	72.20	247MPSA250-11	247MPSB250-11
3	76.20	6.188	157.20	3.094	78.60	247MPSA300-11	247MPSB300-11
4	101.60	8.118	206.20	4.059	103.10	247MPSA400-11	247MPSB400-11

Different dimensions available upon request

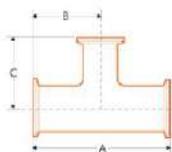
7RMP

Clamp Long Reducing Tee



Normal size		A		B		C		Part Number	
Inch	mm	Inch	mm	Inch	mm	Inch	mm	304	316L
3/4 x 1/2	19.05 x 12.70	5.000	127.00	2.500	63.50	2.500	63.50	247RMPA075050-11	247RMPB075050-11
1 x 1/2	25.40 x 12.70	5.250	133.35	2.625	66.68	2.625	66.68	247RMPA100050-11	247RMPB100050-11
1 x 3/4	25.40 x 19.05	5.250	133.35	2.625	66.68	2.625	66.68	247RMPA100075-11	247RMPB100075-11
1 1/2 x 1/2	38.10 x 12.70	5.750	146.05	2.875	73.03	2.875	73.03	247RMPA150050-11	247RMPB150050-11
1 1/2 x 3/4	38.10 x 19.05	5.750	146.05	2.875	73.03	2.875	73.03	247RMPA150075-11	247RMPB150075-11
1 1/2 x 1	38.10 x 25.40	5.500	139.70	2.750	69.85	2.625	66.68	247RMPA150100-11	247RMPB150100-11
2 x 1/2	50.80 x 12.70	6.750	171.45	3.375	85.73	3.125	79.38	247RMPA200050-11	247RMPB200050-11
2 x 3/4	50.80 x 19.05	6.750	171.45	3.375	85.73	3.125	79.38	247RMPA200075-11	247RMPB200075-11
2 x 1	50.80 x 25.40	7.000	177.80	3.500	88.90	2.875	73.00	247RMPA200100-11	247RMPB200100-11
2 x 1 1/2	50.80 x 38.10	7.000	177.80	3.500	88.90	3.000	76.20	247RMPA200150-11	247RMPB200150-11
2 1/2 x 1 1/2	63.50 x 38.10	7.000	177.80	3.500	88.90	3.250	82.55	247RMPA250150-11	247RMPB250150-11
2 1/2 x 2	63.50 x 50.80	7.000	177.80	3.500	88.90	3.750	95.25	247RMPA250200-11	247RMPB250200-11
3 x 1	76.20 x 25.40	7.500	190.50	3.750	95.25	3.374	85.70	247RMPA300100-11	247RMPB300100-11
3 x 1 1/2	76.20 x 38.10	7.500	190.50	3.750	95.25	3.500	88.90	247RMPA300150-11	247RMPB300150-11
3 x 2	76.20 x 50.80	7.500	190.50	3.750	95.25	4.000	101.60	247RMPA300200-11	247RMPB300200-11
3 x 2 1/2	76.20 x 63.50	7.500	190.50	3.750	95.25	3.750	95.25	247RMPA300250-11	247RMPB300250-11
4 x 1	101.60 x 25.40	8.994	228.46	4.497	114.23	3.874	98.40	247RMPA400100-11	247RMPB400100-11
4 x 1 1/2	101.60 x 38.10	8.994	228.46	4.497	114.23	4.000	101.60	247RMPA400150-11	247RMPB400150-11
4 x 2	101.60 x 50.80	8.994	228.46	4.497	114.23	4.500	114.30	247RMPA400200-11	247RMPB400200-11
4 x 2 1/2	101.60 x 63.50	8.994	228.46	4.497	114.23	4.250	107.95	247RMPA400250-11	247RMPB400250-11
4 x 3	101.60 x 76.20	8.994	228.46	4.497	114.23	4.250	107.95	247RMPA400300-11	247RMPB400300-11
6 x 1 1/2	152.40 x 38.10	13.000	330.20	6.500	165.10	5.000	127.00	247RMPA600150-11	247RMPB600150-11
6 x 2	152.40 x 50.80	13.000	330.20	6.500	165.10	5.000	127.00	247RMPA600200-11	247RMPB600200-11
6 x 3	152.40 x 76.20	13.000	330.20	6.500	165.10	5.375	136.53	247RMPA600300-11	247RMPB600300-11
6 x 4	152.40 x 101.60	13.000	330.20	6.500	165.10	5.747	145.98	247RMPA600400-11	247RMPB600400-11

Different dimensions available upon request

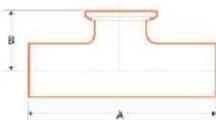
**7RMPS**clamp Short
Reducing Tee

Normal size		A		B		C		Part Number	
Inch	mm	Inch	mm	Inch	mm	Inch	mm	304	316L
3/4 x 1/2	19.05 x 12.70	4.750	120.66	2.375	60.33	1.500	38.10	247RMPSA075050-11	247RMPSB075050-11
1 x 1/2	25.40 x 12.70	4.750	120.66	2.375	60.33	2.000	50.80	247RMPSA100050-11	247RMPSB100050-11
1 x 3/4	25.40 x 19.05	4.750	120.66	2.375	60.33	2.500	63.50	247RMPSA100075-11	247RMPSB100075-11
1 1/2 x 3/4	38.10 x 19.05	5.500	139.70	2.750	69.85	2.750	69.85	247RMPSA150075-11	247RMPSB150075-11
1 1/2 x 1	38.10 x 25.40	4.312	109.52	2.156	54.76	1.880	47.63	247RMPSA150100-11	247RMPSB150100-11
2 x 1	50.80 x 25.40	5.124	130.16	2.562	65.08	2.130	53.98	247RMPSA200100-11	247RMPSB200100-11
2 x 1 1/2	50.80 x 38.10	5.124	130.16	2.562	65.08	2.410	61.11	247RMPSA200150-11	247RMPSB200150-11
2 1/2 x 1 1/2	63.50 x 38.10	5.688	144.48	2.844	72.24	2.660	67.46	247RMPSA250150-11	247RMPSB250150-11
2 1/2 x 2	63.50 x 50.80	5.688	144.48	2.844	72.24	2.810	71.42	247RMPSA250200-11	247RMPSB250200-11
3 x 1	76.20 x 25.40	6.188	157.18	3.094	78.59	2.630	66.70	247RMPSA300100-11	247RMPSB300100-11
3 x 1 1/2	76.20 x 38.10	6.188	157.18	3.094	78.59	2.910	73.81	247RMPSA300150-11	247RMPSB300150-11
3 x 2	76.20 x 50.80	6.188	157.18	3.094	78.59	3.060	77.77	247RMPSA300200-11	247RMPSB300200-11
3 x 2 1/2	76.20 x 63.50	6.188	157.18	3.094	78.59	3.090	78.59	247RMPSA300250-11	247RMPSB300250-11
4 x 1	101.60 x 25.40	8.120	206.26	4.060	103.13	3.130	79.40	247RMPSA400100-11	247RMPSB400100-11
4 x 1 1/2	101.60 x 38.10	8.120	206.26	4.060	103.13	3.410	86.51	247RMPSA400150-11	247RMPSB400150-11
4 x 2	101.60 x 50.80	8.120	206.26	4.060	103.13	3.560	90.47	247RMPSA400200-11	247RMPSB400200-11
4 x 2 1/2	101.60 x 63.50	8.120	206.26	4.060	103.13	3.590	91.29	247RMPSA400250-11	247RMPSB400250-11
4 x 3	101.60 x 76.20	8.120	206.26	4.060	103.13	3.590	91.29	247RMPSA400300-11	247RMPSB400300-11
6 x 2	152.40 x 50.80	11.750	298.44	5.875	149.22	5.250	133.35	247RMPSA600200-11	247RMPSB600200-11
6 x 3	152.40 x 76.20	11.750	298.44	5.875	149.22	5.380	136.53	247RMPSA600300-11	247RMPSB600300-11
6 x 4	152.40 x 101.60	11.750	298.44	5.875	149.22	5.370	136.45	247RMPSA600400-11	247RMPSB600400-11

Different dimensions available upon request

7WMS

Long Equal Tee w/o WCW



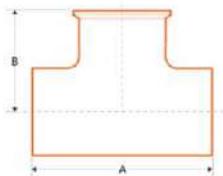
Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1/2	12.70	3.75	95.25	0.83	21.05	247WMSA050-11	247WMSB050-11
3/4	19.05	4.00	101.60	0.99	25.23	247WMSA075-11	247WMSB075-11
1	25.40	3.75	95.20	1.06	27.00	247WMSA100-11	247WMSB100-11
1 1/2	38.10	4.50	114.40	1.36	34.65	247WMSA150-11	247WMSB150-11
2	50.80	6.00	152.40	1.64	41.70	247WMSA200-11	247WMSB200-11
2 1/2	63.50	6.00	152.40	1.88	47.70	247WMSA250-11	247WMSB250-11
3	76.20	6.50	165.20	2.19	55.70	247WMSA300-11	247WMSB300-11
4	101.60	7.75	196.80	2.75	69.80	247WMSA400-11	247WMSB400-11
6	152.40	11.25	285.75	4.06	103.00	247WMSA600-11	247WMSB600-11

Different dimensions available upon request



7WWM

Short Equal Tee WCW

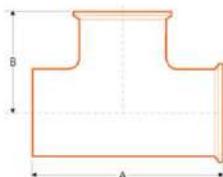


Normal size	A		B		Part Number		
	Inch	mm	Inch	mm	304	316L	
1	25.40	2.250	57.20	1.625	41.30	247WWMMA100-11	247WWMWB100-11
1 1/2	38.10	3.312	84.20	2.156	54.80	247WWMMA150-11	247WWMWB150-11
2	50.80	4.124	104.80	2.562	65.10	247WWMMA200-11	247WWMWB200-11
2 1/2	63.50	4.688	119.00	2.844	72.20	247WWMMA250-11	247WWMWB250-11
3	76.20	5.188	131.80	3.094	78.60	247WWMMA300-11	247WWMWB300-11
4	101.60	6.876	174.60	4.063	103.10	247WWMMA400-11	247WWMWB400-11

Different dimensions available upon request

7WMM

Short Equal Tee WCC

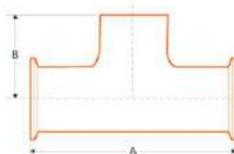


Normal size	A		B		Part Number		
	Inch	mm	Inch	mm	304	316L	
1	25.40	2.750	69.90	1.625	41.30	247WMMMA100-11	247WMMMB100-11
1 1/2	38.10	3.812	96.90	2.156	54.80	247WMMMA150-11	247WMMMB150-11
2	50.80	4.624	117.50	2.562	65.10	247WMMMA200-11	247WMMMB200-11
2 1/2	63.50	5.188	131.70	2.844	72.20	247WMMMA250-11	247WMMMB250-11
3	76.20	5.688	144.50	3.094	78.60	247WMMMA300-11	247WMMMB300-11
4	101.60	7.500	190.40	4.063	103.10	247WMMMA400-11	247WMMMB400-11

Different dimensions available upon request

7WMW

Short Equal Tee CWC

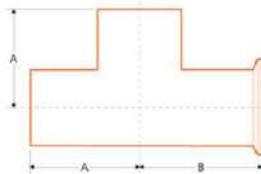


Normal size	A		B		Part Number		
	Inch	mm	Inch	mm	304	316L	
1	25.40	3.250	82.60	1.125	28.60	247MMWA100-11	247MMWB100-11
1 1/2	38.10	4.312	109.60	1.656	42.10	247MMWA150-11	247MMWB150-11
2	50.80	5.124	130.20	2.062	52.40	247MMWA200-11	247MMWB200-11
2 1/2	63.50	5.688	144.40	2.342	59.50	247MMWA250-11	247MMWB250-11
3	76.20	6.188	157.20	2.594	65.90	247MMWA300-11	247MMWB300-11
4	101.60	8.124	206.20	3.438	87.30	247MMWA400-11	247MMWB400-11

Different dimensions available upon request

7WMW

Short Equal Tee WWC

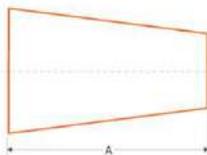


Normal size	A		B		Part Number		
	Inch	mm	Inch	mm	304	316L	
1	25.40	1.125	28.6	1.625	41.30	247WMMWA100-11	247WMMWB100-11
1 1/2	38.10	1.656	42.1	2.156	54.80	247WMMWA150-11	247WMMWB150-11
2	50.80	2.062	52.4	2.562	65.10	247WMMWA200-11	247WMMWB200-11
2 1/2	63.50	2.342	59.5	2.844	72.20	247WMMWA250-11	247WMMWB250-11
3	76.20	2.594	65.9	3.094	78.60	247WMMWA300-11	247WMMWB300-11
4	101.60	3.438	87.3	4.063	103.10	247WMMWA400-11	247WMMWB400-11

Different dimensions available upon request

**31W**

Concentric Reducer WW

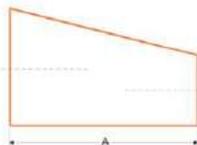


Normal size		A		Part Number	
Inch	mm	Inch	mm	304	316L
3/4 x 1/2	19.05 x 12.70	1.000	25.40	2431WA075050-11	2431WB075050-11
1 x 1/2	25.40 x 12.70	1.000	25.40	2431WA100050-11	2431WB100050-11
1 x 1/2	25.40 x 12.70	2.000	50.80	2431WA100050508-11	2431WB100050508-11
1 x 3/4	25.40 x 19.05	1.000	25.40	2431WA100075-11	2431WB100075-11
1 1/2 x 1/2	38.10 x 12.70	2.500	63.50	2431WA150050-11	2431WB150050-11
1 1/2 x 3/4	38.10 x 19.05	2.000	50.80	2431WA150075-11	2431WB150075-11
1 1/2 x 1	38.10 x 25.40	2.000	50.80	2431WA150100-11	2431WB150100-11
2 x 1/2	50.80 x 12.70	6.000	152.40	2431WA200050-11	2431WB200050-11
2 x 3/4	50.80 x 19.05	5.000	127.00	2431WA200075-11	2431WB200075-11
2 x 1	50.80 x 25.40	4.000	101.60	2431WA200100-11	2431WB200100-11
2 x 1 1/2	50.80 x 38.10	2.000	50.80	2431WA200150-11	2431WB200150-11
2 1/2 x 1 1/2	63.50 x 38.10	4.000	101.60	2431WA250150-11	2431WB250150-11
2 1/2 x 2	63.50 x 50.80	2.000	50.80	2431WA250200-11	2431WB250200-11
3 x 1	76.20 x 25.40	8.000	203.20	2431WA300100-11	2431WB300100-11
3 x 1 1/2	76.20 x 38.10	6.000	152.40	2431WA300150-11	2431WB300150-11
3 x 2	76.20 x 50.80	4.000	101.60	2431WA300200-11	2431WB300200-11
3 x 2 1/2	76.20 x 63.50	2.000	50.80	2431WA300250-11	2431WB300250-11
4 x 1	101.60 x 25.40	12.000	304.80	2431WA400100-11	2431WB400100-11
4 x 1 1/2	101.60 x 38.10	10.000	254.00	2431WA400150-11	2431WB400150-11
4 x 2	101.60 x 50.80	8.000	203.20	2431WA400200-11	2431WB400200-11
4 x 2 1/2	101.60 x 63.50	6.000	152.40	2431WA400250-11	2431WB400250-11
4 x 3	101.60 x 76.20	4.000	101.60	2431WA400300-11	2431WB400300-11
6 x 2	152.40 x 50.80	5.500	139.70	2431WA600200-11	2431WB600200-11
6 x 3	152.40 x 76.20	5.500	139.70	2431WA600300-11	2431WB600300-11
6 x 3	152.40 x 76.20	6.000	152.40	2431WA600300152-11	2431WB600300152-11
6 x 4	152.40 x 101.60	5.500	139.70	2431WA600400-11	2431WB600400-11
6 x 4	152.40 x 101.60	6.000	152.40	2431WA600400152-11	2431WB600400152-11
8 x 3	203.20 x 76.20	6.000	152.40	2431WA800300-11	2431WB800300-11
8 x 4	203.20 x 101.60	6.000	152.40	2431WA800400-11	2431WB800400-11
8 x 6	203.20 x 152.40	6.000	152.40	2431WA800600-11	2431WB800600-11

Different dimensions available upon request

**32W**

Eccentric Reducer WW

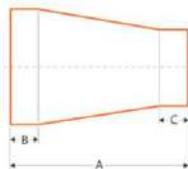


Normal size		A		Part Number	
Inch	mm	Inch	mm	304	316L
3/4 x 1/2	19.05 x 12.70	1.000	25.40	2432WA075050-11	2432WB075050-11
1 x 1/2	25.40 x 12.70	1.000	25.40	2432WA100050-11	2432WB100050-11
1 x 1/2	25.40 x 12.70	2.000	50.80	2432WA100050508-11	2432WB100050508-11
1 x 3/4	25.40 x 19.05	1.000	25.40	2432WA100075-11	2432WB100075-11
1 1/2 x 1/2	38.10 x 12.70	2.500	63.50	2432WA150050-11	2432WB150050-11
1 1/2 x 1/2	38.10 x 12.70	4.000	101.60	2432WA150050101-11	2432WB150050101-11
1 1/2 x 3/4	38.10 x 19.05	2.000	50.80	2432WA150075-11	2432WB150075-11
1 1/2 x 3/4	38.10 x 19.05	3.000	76.20	2432WA150075762-11	2432WB150075762-11
1 1/2 x 1	38.10 x 25.40	2.000	50.80	2432WA150100-11	2432WB150100-11
2 x 1/2	50.80 x 12.70	6.000	152.40	2432WA200050-11	2432WB200050-11
2 x 3/4	50.80 x 19.05	5.000	127.00	2432WA200075-11	2432WB200075-11
2 x 1	50.80 x 25.40	4.000	101.60	2432WA200100-11	2432WB200100-11
2 x 1 1/2	50.80 x 38.10	2.000	50.80	2432WA200150-11	2432WB200150-11
2 1/2 x 1 1/2	63.50 x 38.10	4.000	101.60	2432WA250150-11	2432WB250150-11
2 1/2 x 2	63.50 x 50.80	2.000	50.80	2432WA250200-11	2432WB250200-11
3 x 1	76.20 x 25.40	8.000	203.20	2432WA300100-11	2432WB300100-11
3 x 1 1/2	76.20 x 38.10	6.000	152.40	2432WA300150-11	2432WB300150-11
3 x 2	76.20 x 50.80	4.000	101.60	2432WA300200-11	2432WB300200-11
3 x 2 1/2	76.20 x 63.50	2.000	50.80	2432WA300250-11	2432WB300250-11
4 x 1 1/2	101.60 x 38.10	10.000	254.00	2432WA400150-11	2432WB400150-11
4 x 2	101.60 x 50.80	8.000	203.20	2432WA400200-11	2432WB400200-11
4 x 2 1/2	101.60 x 63.50	6.000	152.40	2432WA400250-11	2432WB400250-11
4 x 3	101.60 x 76.20	4.000	101.60	2432WA400300-11	2432WB400300-11
6 x 3	152.40 x 76.20	5.500	139.70	2432WA600300-11	2432WB600300-11
6 x 4	152.40 x 101.60	5.500	139.70	2432WA600400-11	2432WB600400-11
8 x 4	203.20 x 101.60	6.000	152.40	2432WA800400-11	2432WB800400-11
8 x 6	203.20 x 152.40	6.000	152.40	2432WA800600-11	2432WB800600-11

Different dimensions available upon request



31

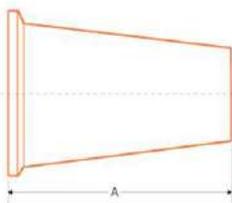
Concentric Reducer
with Tangents

Normal size		A		B		C		Part Number	
Inch	mm	Inch	mm	Inch	mm	Inch	mm	304	316L
1 x 3/4	25.40 x 19.05	2.375	60.33	0.375	9.53	0.375	9.53	2431A100075-11	2431B100075-11
1 1/2 x 3/4	38.10 x 19.05	2.375	60.33	0.375	9.53	0.375	9.53	2431A1500075-11	2431B1500075-11
1 1/2 x 1	38.10 x 25.40	2.375	60.33	0.375	9.53	0.375	9.53	2431A150100-11	2431B150100-11
2 x 1/2	50.80 x 12.70	4.969	126.20	1.000	25.40	1.000	25.40	2431A200050-11	2431B200050-11
2 x 3/4	50.80 x 19.05	7.000	177.80	1.000	25.40	1.000	25.40	2431A200075-11	2431B200075-11
2 x 1	50.80 x 25.40	2.375	60.33	0.375	9.53	0.375	9.53	2431A200100-11	2431B200100-11
2 x 1 1/2	50.80 x 38.10	2.375	60.33	0.375	9.53	0.375	9.53	2431A200150-11	2431B200150-11
2 1/2 x 1 1/2	63.50 x 38.10	2.375	60.33	0.375	9.53	0.375	9.53	2431A250150-11	2431B250150-11
2 1/2 x 2	63.50 x 50.80	2.375	60.33	0.375	9.53	0.375	9.53	2431A250200-11	2431B250200-11
3 x 1 1/2	76.20 x 38.10	3.625	92.08	0.375	9.53	0.375	9.53	2431A300150-11	2431B300150-11
3 x 2	76.20 x 50.80	3.625	92.08	0.375	9.53	0.375	9.53	2431A300200-11	2431B300200-11
3 x 2 1/2	76.20 x 63.50	3.625	92.08	0.375	9.53	0.375	9.53	2431A300250-11	2431B300250-11
4 x 1 1/2	101.60 x 38.10	5.500	139.70	0.375	9.53	0.375	9.53	2431A400150-11	2431B400150-11
4 x 2	101.60 x 50.80	3.625	92.08	0.375	9.53	0.375	9.53	2431A400200-11	2431B400200-11
4 x 2 1/2	101.60 x 63.50	3.625	92.08	0.375	9.53	0.375	9.53	2431A400250-11	2431B400250-11
4 x 3	101.60 x 76.20	3.625	92.08	0.375	9.53	0.375	9.53	2431A400300-11	2431B400300-11
6 x 3	152.40 x 76.20	5.500	139.70	0.375	9.53	0.375	9.53	2431A600300211-11	2431B600300211-11
6 x 3	152.40 x 76.20	9.000	228.60	1.500	38.10	1.500	38.10	2431A600300381-11	2431B600300381-11
6 x 3	152.40 x 76.20	9.000	228.60	1.750	44.45	1.750	44.45	2431A600300-11	2431B600300-11
6 x 4	152.40 x 101.60	5.500	139.70	0.375	9.53	0.375	9.53	2431A600400211-11	2431B600400211-11
6 x 4	152.40 x 101.60	9.000	228.60	1.500	38.10	1.500	38.10	2431A600400381-11	2431B600400381-11
6 x 4	152.40 x 101.60	9.000	228.60	1.750	44.45	1.750	44.45	2431A600400-11	2431B600400-11

Different dimensions available upon request

31M

Concentric Reducer CW



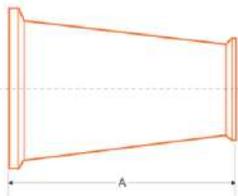
Normal size		A		Part Number	
Inch	mm	Inch	mm	304	316L
3/4 x 1/2	19.05 x 12.70	1.500	38.10	2431MA075050-11	2431MB075050-11
1 x 1/2	25.40 x 12.70	1.500	38.10	2431MA100050-11	2431MB100050-11
1 x 3/4	25.40 x 19.05	1.500	38.10	2431MA100075-11	2431MB100075-11
1 1/2 x 1	38.10 x 25.40	2.500	63.50	2431MA150100-11	2431MB150100-11
2 x 1	50.80 x 25.40	4.500	114.30	2431MA200100-11	2431MB200100-11
2 x 1 1/2	50.80 x 38.10	2.500	63.50	2431MA200150-11	2431MB200150-11
2 1/2 x 1 1/2	63.50 x 38.10	4.500	114.30	2431MA250150-11	2431MB250150-11
2 1/2 x 2	63.50 x 50.80	2.500	63.50	2431MA250200-11	2431MB250200-11
3 x 1 1/2	76.20 x 38.10	6.500	165.10	2431MA300150-11	2431MB300150-11
3 x 2	76.20 x 50.80	4.500	114.30	2431MA300200-11	2431MB300200-11
3 x 2 1/2	76.20 x 63.50	2.500	63.50	2431MA300250-11	2431MB300250-11
4 x 2	101.60 x 50.80	8.625	219.08	2431MA400200-11	2431MB400200-11
4 x 2 1/2	101.60 x 63.50	6.625	168.28	2431MA400250-11	2431MB400250-11
4 x 3	101.60 x 76.20	4.625	117.48	2431MA400300-11	2431MB400300-11

Different dimensions available upon request



31MP

Concentric Reducer CC

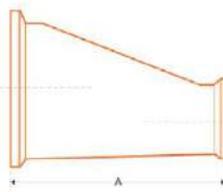


Normal size		A		Part Number	
Inch	mm	Inch	mm	304	316L
3/4 x 1/2	19.05 x 12.70	2.000	50.80	2431MPA075050-11	2431MPB075050-11
1 x 1/2	25.40 x 12.70	2.000	50.80	2431MPA100050-11	2431MPB100050-11
1 x 3/4	25.40 x 19.05	2.000	50.80	2431MPA100075-11	2431MPB100075-11
1 1/2 x 1/2	38.10 x 12.70	3.500	88.90	2431MPA150050-11	2431MPB150050-11
1 1/2 x 3/4	38.10 x 19.05	3.000	76.20	2431MPA150075-11	2431MPB150075-11
1 1/2 x 1	38.10 x 25.40	3.000	76.20	2431MPA150100-11	2431MPB150100-11
2 x 1/2	50.80 x 12.70	7.000	177.80	2431MPA200050-11	2431MPB200050-11
2 x 3/4	50.80 x 19.05	6.000	152.40	2431MPA200075-11	2431MPB200075-11
2 x 1	50.80 x 25.40	5.000	127.00	2431MPA200100-11	2431MPB200100-11
2 x 1 1/2	50.80 x 38.10	3.000	76.20	2431MPA200150-11	2431MPB200150-11
2 1/2 x 1 1/2	63.50 x 38.10	5.000	127.00	2431MPA250150-11	2431MPB250150-11
2 1/2 x 2	63.50 x 50.80	3.000	76.20	2431MPA250200-11	2431MPB250200-11
3 x 1	76.20 x 25.40	9.000	228.60	2431MPA300100-11	2431MPB300100-11
3 x 1 1/2	76.20 x 38.10	7.000	177.80	2431MPA300150-11	2431MPB300150-11
3 x 2	76.20 x 50.80	5.000	127.00	2431MPA300200-11	2431MPB300200-11
3 x 2 1/2	76.20 x 63.50	3.000	76.20	2431MPA300250-11	2431MPB300250-11
4 x 1 1/2	101.60 x 38.10	11.125	282.50	2431MPA400150-11	2431MPB400150-11
4 x 2	101.60 x 50.80	9.125	231.70	2431MPA400200-11	2431MPB400200-11
4 x 2 1/2	101.60 x 63.50	7.125	180.90	2431MPA400250-11	2431MPB400250-11
4 x 3	101.60 x 76.20	5.125	130.10	2431MPA400300-11	2431MPB400300-11
6 x 2	152.40 x 50.80	6.875	174.63	2431MPA600200-11	2431MPB600200-11
6 x 3	152.40 x 76.20	6.875	174.63	2431MPA600300-11	2431MPB600300-11
6 x 4	152.40 x 101.60	7.000	177.80	2431MPA600400-11	2431MPB600400-11
8 x 4	203.20 x 101.60	7.500	190.50	2431MPA800400-11	2431MPB800400-11
8 x 6	203.20 x 152.40	7.750	196.85	2431MPA800600-11	2431MPB800600-11

Different dimensions available upon request

**32MP**

Eccentric Reducer CC

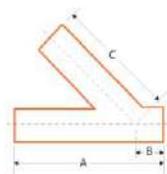


Normal size		A		Part Number	
Inch	mm	Inch	mm	304	316L
3/4 x 1/2	19.05 x 12.70	2.000	50.800	2432MPA075050-11	2432MPB075050-11
1 x 1/2	25.40 x 12.70	2.000	50.800	2432MPA100050-11	2432MPB100050-11
1 x 3/4	25.40 x 19.05	2.000	50.800	2432MPA100075-11	2432MPB100075-11
1 1/2 x 1/2	38.10 x 12.70	3.500	88.900	2432MPA150050-11	2432MPB150050-11
1 1/2 x 3/4	38.10 x 19.05	3.000	76.200	2432MPA150075-11	2432MPB150075-11
1 1/2 x 1	38.10 x 25.40	3.000	76.200	2432MPA150100-11	2432MPB150100-11
2 x 1/2	50.80 x 12.70	7.000	177.800	2432MPA200050-11	2432MPB200050-11
2 x 3/4	50.80 x 19.05	6.000	152.400	2432MPA200075-11	2432MPB200075-11
2 x 1	50.80 x 25.40	5.000	127.000	2432MPA200100-11	2432MPB200100-11
2 x 1 1/2	50.80 x 38.10	3.000	76.200	2432MPA200150-11	2432MPB200150-11
2 1/2 x 1 1/2	63.50 x 38.10	5.000	127.000	2432MPA250150-11	2432MPB250150-11
2 1/2 x 2	63.50 x 50.80	3.000	76.200	2432MPA250200-11	2432MPB250200-11
3 x 1	76.20 x 25.40	9.000	228.600	2432MPA300100-11	2432MPB300100-11
3 x 1 1/2	76.20 x 38.10	7.000	177.800	2432MPA300150-11	2432MPB300150-11
3 x 2	76.20 x 50.80	5.000	127.000	2432MPA300200-11	2432MPB300200-11
3 x 2 1/2	76.20 x 63.50	3.000	76.200	2432MPA300250-11	2432MPB300250-11
4 x 1 1/2	101.60 x 38.10	11.125	282.500	2432MPA400150-11	2432MPB400150-11
4 x 2	101.60 x 50.80	9.125	231.700	2432MPA400200-11	2432MPB400200-11
4 x 2 1/2	101.60 x 63.50	7.125	180.900	2432MPA400250-11	2432MPB400250-11
4 x 3	101.60 x 76.20	5.125	130.100	2432MPA400300-11	2432MPB400300-11
6 x 4	152.40 x 101.60	7.000	177.800	2432MPA600400-11	2432MPB600400-11
8 x 4	203.20 x 101.60	7.500	190.500	2432MPA800400-11	2432MPB800400-11
8 x 6	203.20 x 152.40	7.750	196.850	2432MPA800600-11	2432MPB800600-11

Different dimensions available upon request

28WA

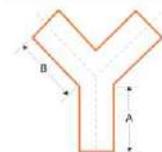
Lateral WWW



Normal size		A		B		C		Part Number	
Inch	mm	Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	6.000	152.40	1.000	25.40	5.000	127.00	2428WAA100-11	2428WAB100-11
1 1/2	38.10	7.375	187.33	1.188	30.18	6.188	157.18	2428WAA150-11	2428WAB150-11
2	50.80	8.750	222.25	1.625	41.28	7.125	180.98	2428WAA200-11	2428WAB200-11
2 1/2	63.50	10.000	254.00	1.500	38.10	8.500	215.90	2428WAA250-11	2428WAB250-11
3	76.20	10.750	273.05	1.875	47.63	8.875	225.43	2428WAA300-11	2428WAB300-11
4	101.60	12.812	325.42	2.015	51.18	10.750	273.05	2428WAA400-11	2428WAB400-11

28WA

True Y WWW

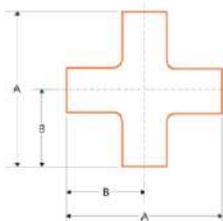


Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	2.000	50.80	2.438	61.93	2428WA100-11	2428WB100-11
1 1/2	38.10	2.000	50.80	2.438	61.93	2428WA150-11	2428WB150-11
2	50.80	2.625	66.68	3.250	82.55	2428WA200-11	2428WB200-11
2 1/2	63.50	3.370	85.60	4.125	104.78	2428WA250-11	2428WB250-11
3	76.20	4.000	101.60	4.875	123.83	2428WA300-11	2428WB300-11
4	101.60	5.375	136.53	5.375	136.53	2428WA400-11	2428WB400-11



9W

Long Equal 4 -Way Cross

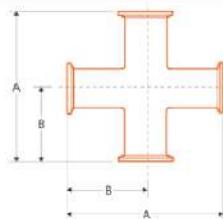


Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	3.75	95.20	1.87	47.60	249WA100-11	249WB100-11
1 1/2	38.10	4.50	114.40	2.25	57.20	249WA150-11	249WB150-11
2	50.80	6.00	152.40	3.00	76.20	249WA200-11	249WB200-11
2 1/2	63.50	6.00	152.40	3.00	76.20	249WA250-11	249WB250-11
3	76.20	6.50	165.20	3.25	82.60	249WA300-11	249WB300-11
4	101.60	7.75	196.80	3.87	98.40	249WA400-11	249WB400-11

Different dimensions available upon request

9MP

Clamp Long Equal 4 -Way Cross

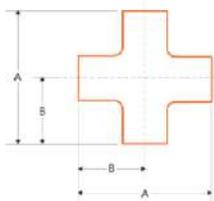


Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	4.750	120.60	2.375	60.30	249MPA100-11	249MPB100-11
1 1/2	38.10	5.500	139.80	2.750	69.90	249MPA150-11	249MPB150-11
2	50.80	7.000	177.80	3.500	88.90	249MPA200-11	249MPB200-11
2 1/2	63.50	7.000	177.80	3.500	88.90	249MPA250-11	249MPB250-11
3	76.20	7.500	190.60	3.750	95.30	249MPA300-11	249MPB300-11
4	101.60	9.000	228.40	4.500	114.20	249MPA400-11	249MPB400-11

Different dimensions available upon request

9WWW

Short Equal 4 -Way Cross

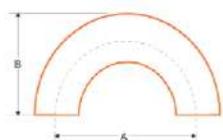


Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	2.250	57.20	1.125	28.60	249WWWWA100-11	249WWWWB100-11
1 1/2	38.10	3.312	84.20	1.656	42.10	249WWWWA150-11	249WWWWB150-11
2	50.80	4.125	104.80	2.062	52.40	249WWWWA200-11	249WWWWB200-11
2 1/2	63.50	4.687	119.00	2.343	59.50	249WWWWA250-11	249WWWWB250-11
3	76.20	5.187	131.80	2.593	65.90	249WWWWA300-11	249WWWWB300-11
4	101.60	6.875	174.60	3.437	87.30	249WWWWA400-11	249WWWWB400-11

Different dimensions available upon request

2WUL

180° Short U Bend WW



Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	3.000	76.20	2.000	50.80	242WULA100-11	242WULB100-11
1 1/2	38.10	4.500	114.30	3.000	76.20	242WULA150-11	242WULB150-11
2	50.80	6.000	152.40	4.000	101.60	242WULA200-11	242WULB200-11
2 1/2	63.50	7.500	190.50	5.000	127.00	242WULA250-11	242WULB250-11
3	76.20	9.000	228.60	6.000	152.40	242WULA300-11	242WULB300-11
4	101.60	12.000	304.80	8.000	203.20	242WULA400-11	242WULB400-11

Different dimensions available upon request



16W

Tube Weld End Cap

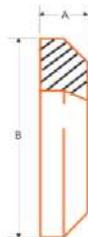


Normal size		A		Part Number	
Inch	mm	Inch	mm	304	316L
1/2	12.70	0.250	6.400	2416WA050-11	2416WB050-11
3/4	19.05	0.312	7.900	2416WA075-11	2416WB075-11
1	25.40	0.375	9.500	2416WA100-11	2416WB100-11
1 1/2	38.10	0.562	14.300	2416WA150-11	2416WB150-11
2	50.80	0.750	19.100	2416WA200-11	2416WB200-11
2 1/2	63.50	1.000	25.400	2416WA250-11	2416WB250-11
3	76.20	1.250	31.800	2416WA300-11	2416WB300-11
4	101.60	1.500	38.100	2416WA400-11	2416WB400-11
6	152.40	2.000	50.800	2416WA600-11	2416WB600-11
8	203.20	2.500	63.500	2416WA800-11	2416WB800-11

Different dimensions available upon request

16AMP

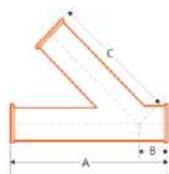
Solid End Cap



Normal size		A	B	Part Number	
Inch	mm	mm	mm	304	316L
1/2 - 3/4	4.75	25.20		2416AMPA07511	2416AMPB07511
1 - 1 1/2	6.40	50.40		2416AMPA15011	2416AMPB15011
2	6.40	63.90		2416AMPA20011	2416AMPB20011
2 1/2	6.40	77.40		2416AMPA25011	2416AMPB25011
3	6.40	90.90		2416AMPA30011	2416AMPB30011
4	7.90	118.90		2416AMPA40011	2416AMPB40011
5	7.90	144.50		2416AMPA50011	2416AMPB50011
6	11.10	166.90		2416AMPA60011	2416AMPB60011
8	11.10	217.70		2416AMPA80011	2416AMPB80011
10	11.10	268.50		2416AMPA100011	2416AMPB100011
12	11.10	319.30		2416AMPA120011	2416AMPB120011

28AMP

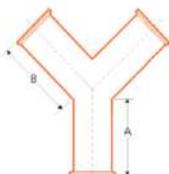
Clamp End Lateral CCC



Normal size		A		B		C		Part Number	
Inch	mm	Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	7.000	177.80	1.500	38.10	5.500	139.70	2428AMPA100-11	2428AMPB100-11
1 1/2	38.10	8.375	212.73	1.688	42.88	6.688	169.88	2428AMPA150-11	2428AMPB150-11
2	50.80	9.750	247.65	2.125	53.98	7.625	193.68	2428AMPA200-11	2428AMPB200-11
2 1/2	63.50	11.000	279.40	2.000	50.80	9.000	228.60	2428AMPA250-11	2428AMPB250-11
3	76.20	11.750	298.45	2.375	60.33	9.375	238.13	2428AMPA300-11	2428AMPB300-11
4	101.60	14.062	357.17	2.640	67.06	11.312	287.32	2428AMPA400-11	2428AMPB400-11

28BMP

Clamp End True Y CCC

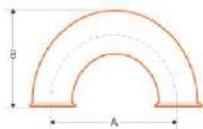


Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	2.500	63.50	2.938	74.63	2428BMPA100-11	2428BMPB100-11
1 1/2	38.10	2.500	63.50	2.938	74.63	2428BMPA150-11	2428BMPB150-11
2	50.80	3.125	79.38	3.750	95.25	2428BMPA200-11	2428BMPB200-11
2 1/2	63.50	3.875	98.43	4.625	117.48	2428BMPA250-11	2428BMPB250-11
3	76.20	4.500	114.30	5.375	136.53	2428BMPA300-11	2428BMPB300-11
4	101.60	6.000	152.40	6.000	152.40	2428BMPA400-11	2428BMPB400-11



2WUMP

180° Ckamp U Bend CC

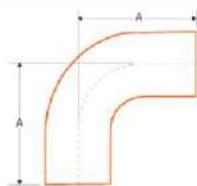


Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1	25.40	3.000	76.20	2.500	63.50	242WUMPA100-11	242WUMPB100-11
1 1/2	38.10	4.500	114.30	3.500	88.90	242WUMPA150-11	242WUMPB150-11
2	50.80	6.000	152.40	4.500	114.30	242WUMPA200-11	242WUMPB200-11
2 1/2	63.50	7.500	190.50	5.500	139.70	242WUMPA250-11	242WUMPB250-11
3	76.20	9.000	228.60	6.500	165.10	242WUMPA300-11	242WUMPB300-11
4	101.60	12.000	304.80	8.625	219.08	242WUMPA400-11	242WUMPB400-11

Different dimensions available upon request

BS

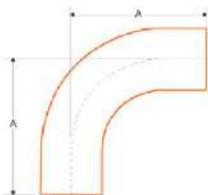
90° Long Tube Bend 1D



Normal size		Nominal Wall	A	Part Number	
Inch	mm	mm	mm	304	316L
1	25.4	1.60	55	2507L1DA100-11	2507L1DB100-11
1 1/2	38.1	1.60	70	2507L1DA150-11	2507L1DB150-11
2	50.8	1.60	82	2507L1DA200-11	2507L1DB200-11
2 1/2	63.5	1.60	105	2507L1DA250-11	2507L1DB250-11
3	76.2	1.60	110	2507L1DA300-11	2507L1DB300-11
4	101.6	2.10	150	2507L1DA400-11	2507L1DB400-11

BS

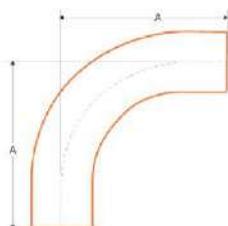
90° Long Tube Bend 1.5D



Normal size		Nominal Wall	A	Part Number	
Inch	mm	mm	mm	304	316L
1/2	12.70	1.60	62	2507LA050-11	2507LB050-11
3/4	19.05	1.60	62	2507LA075-11	2507LB075-11
1	25.40	1.60	65	2507LA100-11	2507LB100-11
1 1/2	38.10	1.60	85	2507LA150-11	2507LB150-11
2	50.80	1.60	110	2507LA200-11	2507LB200-11
2 1/2	63.50	1.60	135	2507LA250-11	2507LB250-11
3	76.20	1.60	155	2507LA300-11	2507LB300-11
4	101.60	2.10	195	2507LA400-11	2507LB400-11

BS

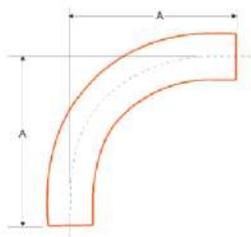
90° Long Tube Bend 2D



Normal size		Nominal Wall	A	Part Number	
Inch	mm	mm	mm	304	316L
1	25.4	1.60	80.0	2507L2DA100-11	2507L2DB100-11
1 1/2	38.1	1.60	105.0	2507L2DA150-11	2507L2DB150-11
2	50.8	1.60	130.0	2507L2DA200-11	2507L2DB200-11
2 1/2	63.5	1.60	160.0	2507L2DA250-11	2507L2DB250-11
3	76.2	1.60	215.0	2507L2DA300-11	2507L2DB300-11
4	101.6	2.10	213.2	2507L2DA400-11	2507L2DB400-11

**BS**

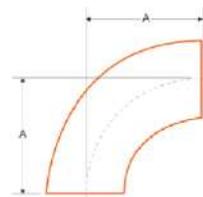
90° Long Tube Bend



Normal size		Nominal Wall mm	A mm	Part Number	
Inch	mm			304	316L
1	25.4	1.60	115.0	2507L3DA100-11	2507L3DB100-11
1 1/2	38.1	1.60	140.0	2507L3DA150-11	2507L3DB150-11
2	50.8	1.60	225.0	2507L3DA200-11	2507L3DB200-11
2 1/2	63.5	1.60	230.0	2507L3DA250-11	2507L3DB250-11
3	76.2	1.60	240.0	2507L3DA300-11	2507L3DB300-11
4	101.6	2.10	365.6	2507L3DA400-11	2507L3DB400-11

BS

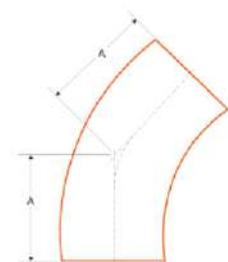
90° Short Tube Bend 1.5D



Normal size		Nominal Wall mm	A mm	Part Number	
Inch	mm			304	316L
1	25.4	1.60	43.5	2507SA100-11	2507SB100-11
1 1/2	38.1	1.60	63.5	2507SA150-11	2507SB150-11
2	50.8	1.60	88.5	2507SA200-11	2507SB200-11
2 1/2	63.5	1.60	113.5	2507SA250-11	2507SB250-11
3	76.2	1.60	133.5	2507SA300-11	2507SB300-11
4	101.6	2.10	173.5	2507SA400-11	2507SB400-11

BS

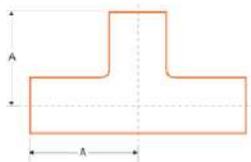
45° Long Tube Bend 1.5D



Normal size		Nominal Wall mm	A mm	Part Number	
Inch	mm			304	316L
1	25.4	1.60	30.2	2508LA100-11	2508LB100-11
1 1/2	38.1	1.60	41.3	2508LA150-11	2508LB150-11
2	50.8	1.60	58.7	2508LA200-11	2508LB200-11
2 1/2	63.5	1.60	76.2	2508LA250-11	2508LB250-11
3	76.2	1.60	93.7	2508LA300-11	2508LB300-11
4	101.6	2.10	122.2	2508LA400-11	2508LB400-11

**BS**

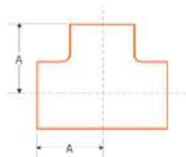
Long Equal Bend



Normal size	Nominal Wall		A	Part Number	
	Inch	mm		304	316L
1	25.4	1.60	130	2509LA100-11	2509LB100-11
1 1/2	38.1	1.60	170	2509LA150-11	2509LB150-11
2	50.8	1.60	220	2509LA200-11	2509LB200-11
2 1/2	63.5	1.60	270	2509LA250-11	2509LB250-11
3	76.2	1.60	310	2509LA300-11	2509LB300-11
4	101.6	2.10	390	2509LA400-11	2509LB400-11

BS

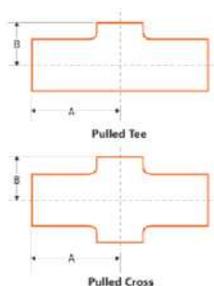
Short Equal Tee



Normal size	Nominal Wall		A	Part Number	
	Inch	mm		304	316L
1	25.4	1.60	44	2509SA100-11	2509SB100-11
1 1/2	38.1	1.60	64	2509SA150-11	2509SB150-11
2	50.8	1.60	89	2509SA200-11	2509SB200-11
2 1/2	63.5	1.60	114	2509SA250-11	2509SB250-11
3	76.2	1.60	134	2509SA300-11	2509SB300-11
4	101.6	2.10	174	2509SA400-11	2509SB400-11

BS

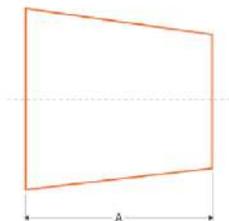
Pulled Tee /Pulled Cross



Normal size	Nominal Wall		A	Part Number	
	Inch	mm		Pulled Tee	Pulled Cross
1	25.4	44	14	2515SB100-11	2515SCB100-11
1 1/2	38.1	64	22	2515SB150-11	2515SCB150-11
2	50.8	89	29	2515SB200-11	2515SCB200-11
2 1/2	63.5	114	35	2515SB250-11	2515SCB250-11
3	76.2	134	41	2515SB300-11	2515SCB300-11
4	101.6	174	54	2515SB400-11	2515SCB400-11

**BS**

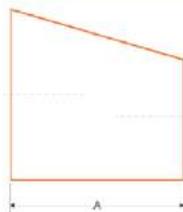
Concentric Reducer



Normal size		A	Part Number	
Inch	mm	mm	304	316L
3/4 x 1/2	19.05 x 12.70	25.4	2511CA075050-11	2511CB075050-11
1 x 1/2	25.40 x 12.70	43.0	2511CA100050-11	2511CB100050-11
1 x 3/4	25.40 x 19.05	30.0	2511CA100075-11	2511CB100075-11
1 1/2 x 3/4	38.10 x 19.05	50.8	2511CA150075-11	2511CB150075-11
1 1/2 x 1	38.10 x 25.40	48.0	2511CA150100-11	2511CB150100-11
2 x 1	50.80 x 25.40	50.0	2511CA200100-11	2511CB200100-11
2 x 1 1/2	50.80 x 38.10	66.0	2511CA200150-11	2511CB200150-11
2 1/2 x 1	63.50 x 25.40	68.0	2511CA250100-11	2511CB250100-11
2 1/2 x 1 1/2	63.50 x 38.10	48.0	2511CA250150-11	2511CB250150-11
2 1/2 x 2	63.50 x 50.80	66.0	2511CA250200-11	2511CB250200-11
3 x 1	76.20 x 25.40	98.0	2511CA300100-11	2511CB300100-11
3 x 1 1/2	76.20 x 38.10	75.0	2511CA300150-11	2511CB300150-11
3 x 2	76.20 x 50.80	70.0	2511CA300200-11	2511CB300200-11
3 x 2 1/2	76.20 x 63.50	72.0	2511CA300250-11	2511CB300250-11
4 x 1	101.60 x 25.40	304.8	2511CA400100-11	2511CB400100-11
4 x 1 1/2	101.60 x 38.10	60.0	2511CA400150-11	2511CB400150-11
4 x 2	101.60 x 50.80	101.0	2511CA400200-11	2511CB400200-11
4 x 2 1/2	101.60 x 63.50	76.0	2511CA400250-11	2511CB400250-11
4 x 3	101.60 x 76.20	50.0	2511CA400300-11	2511CB400300-11

BS

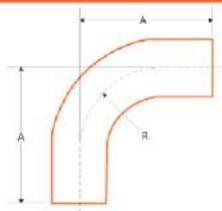
Eccentric Reducer



Normal size		A	Part Number	
Inch	mm	mm	304	316L
3/4 x 1/2	19.05 x 12.70	25.4	2511EA075050-11	2511EB075050-11
1 x 1/2	25.40 x 12.70	38.1	2511EA100050-11	2511EB100050-11
1 x 3/4	25.40 x 19.05	25.4	2511EA100075-11	2511EB100075-11
1 1/2 x 1	38.10 x 25.40	33.0	2511EA150100-11	2511EB150100-11
2 x 1	50.80 x 25.40	66.0	2511EA200100-11	2511EB200100-11
2 x 1 1/2	50.80 x 38.10	33.0	2511EA200150-11	2511EB200150-11
2 1/2 x 1	63.50 x 25.40	73.0	2511EA250100-11	2511EB250100-11
2 1/2 x 1 1/2	63.50 x 38.10	68.0	2511EA250150-11	2511EB250150-11
2 1/2 x 2	63.50 x 50.80	39.0	2511EA250200-11	2511EB250200-11
3 x 1	76.20 x 25.40	95.0	2511EA300100-11	2511EB300100-11
3 x 1 1/2	76.20 x 38.10	70.0	2511EA300150-11	2511EB300150-11
3 x 2	76.20 x 50.80	48.0	2511EA300200-11	2511EB300200-11
3 x 2 1/2	76.20 x 63.50	40.0	2511EA300250-11	2511EB300250-11
4 x 2	101.60 x 50.80	70.0	2511EA400200-11	2511EB400200-11
4 x 2 1/2	101.60 x 63.50	77.0	2511EA400250-11	2511EB400250-11
4 x 3	101.60 x 76.20	152.4	2511EA400300-11	2511EB400300-11

**BS**

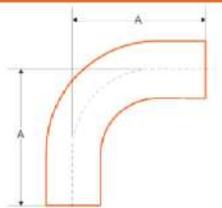
90° Long Tube Bend 1.5D



Normal size DN	Nominal Wall mm	A mm	R mm	Part Number	
				304	316L
25	1.25	55	32	2307L1DA025-11	2307L1DB025-11
38	1.25	70	45	2307L1DA038-11	2307L1DB038-11
51	1.25	82	58	2307L1DA051-11	2307L1DB051-11
63.5	1.50	105	70	2307L1DA635-11	2307L1DB635-11
76.1	1.60	110	76	2307L1DA761-11	2307L1DB761-11
101.6	2.00	150	110	2307L1DA101-11	2307L1DB101-11
104	2.00	150	110	2307L1DA104-11	2307L1DB104-11

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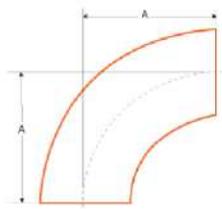
90° Long Tube Bend 1.5D



Normal size DN	Nominal Wall mm	A mm	Part Number	
			304	316L
25	1.25	60.10	2307LA025-11	2307LB025-11
38	1.25	79.20	2307LA038-11	2307LB038-11
51	1.25	101.20	2307LA051-11	2307LB051-11
63.5	1.50	125.25	2307LA635-11	2307LB635-11
76.1	1.60	144.30	2307LA761-11	2307LB761-11
104	2.00	187.40	2307LA104-11	2307LB104-11

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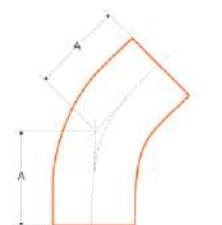
90° Short Tube Bend 1.5D



Normal size DN	Nominal Wall mm	A mm	Part Number	
			304	316L
25	1.25	38	2307SA025-11	2307SB025-11
38	1.25	57	2307SA038-11	2307SB038-11
51	1.25	77	2307SA051-11	2307SB051-11
63.5	1.50	95	2307SA635-11	2307SB635-11
76.1	1.60	114	2307SA761-11	2307SB761-11
101.6	2.10	152	2307SA101-11	2307SB101-11
104	2.00	152	2307SA104-11	2307SB104-11

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45° Long Tube Bend 1D

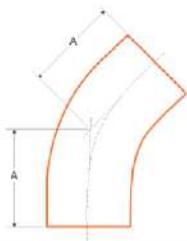


Normal size DN	Nominal Wall mm	A mm	Part Number	
			304	316L
25	1.25	42	2308L1DA025-11	2308L1DB025-11
38	1.25	49	2308L1DA038-11	2308L1DB038-11
51	1.25	58	2308L1DA051-11	2308L1DB051-11
63.5	1.50	75	2308L1DA635-11	2308L1DB635-11
76.1	1.60	79	2308L1DA761-11	2308L1DB761-11
101.6	2.00	86	2308L1DA101-11	2308L1DB101-11
104	2.00	86	2308L1DA104-11	2308L1DB104-11



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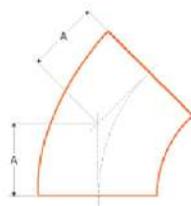
45° Long Tube Bend 1.5D



Normal size DN	Nominal Wall mm	A mm	Part Number	
			304	316L
25	1.25	37.80	2308LA025-11	2308LB025-11
38	1.25	45.70	2308LA038-11	2308LB038-11
51	1.25	51.00	2308LA051-11	2308LB051-11
63.5	1.50	69.50	2308LA635-11	2308LB635-11
76.1	1.60	77.00	2308LA761-11	2308LB761-11
104	2.00	98.20	2308LA104-11	2308LB104-11

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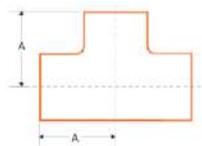
45° Short Tube Bend 1.5D



Normal size DN	Nominal Wall mm	A mm	Part Number	
			304	316L
25	1.25	16	2308SA025-11	2308SB025-11
38	1.25	24	2308SA038-11	2308SB038-11
51	1.25	32	2308SA051-11	2308SB051-11
63.5	1.50	39	2308SA635-11	2308SB635-11
76.1	1.60	47	2308SA761-11	2308SB761-11
101.6	2.10	64	2308SA101-11	2308SB101-11
104	2.00	63	2308SA104-11	2308SB104-11

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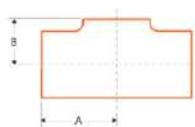
Equal Tee



Normal size DN	Nominal Wall mm	A mm	Part Number	
			304	316L
25	1.25	55	2309A025-11	2309B025-11
38	1.25	70	2309A038-11	2309B038-11
51	1.25	82	2309A051-11	2309B051-11
63.5	1.50	105	2309A635-11	2309B635-11
76.1	1.60	110	2309A761-11	2309B761-11
101.6	2.10	98	2309A101-11	2309B101-11
104	2.00	150	2309A104-11	2309B104-11

SMS

Short Outlet Equal Tee

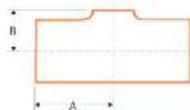


Normal size DN	Nominal Wall mm	A mm	B mm	Part Number	
				304	316L
25	1.25	55	15	2315A025-11	2315B025-11
38	1.25	70	22	2315A038-11	2315B038-11
51	1.25	82	28	2315A051-11	2315B051-11
63.5	1.50	105	36	2315A635-11	2315B635-11
76.1	1.60	110	43	2315A761-11	2315B761-11
101.6	2.10	98	54	2315A101-11	2315B101-11
104	2.00	150	58	2315A104-11	2315B104-11



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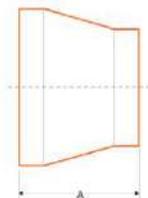
Short Outlet Reducing Tee



Normal size DN	Nominal Wall mm	A mm	B mm	Part Number	
				304	316L
38 x 25	1.25 x 1.25	70	22	2314A038025-11	2314B038025-11
51 x 25	1.25 x 1.25	82	29	2314A051025-11	2314B051025-11
51 x 38	1.25 x 1.25	82	29	2314A051038-11	2314B051038-11
63.5 x 25	1.50 x 1.25	105	35	2314A635025-11	2314B635025-11
63.5 x 38	1.50 x 1.25	105	35	2314A635038-11	2314B635038-11
63.5 x 51	1.50 x 1.25	105	36	2314A635051-11	2314B635051-11
76.1 x 25	1.60 x 1.25	110	42	2314A761025-11	2314B761025-11
76.1 x 38	1.60 x 1.25	110	43	2314A761038-11	2314B761038-11
76.1 x 51	1.60 x 1.25	110	43	2314A761051-11	2314B761051-11
76.1 x 63.5	1.60 x 1.50	110	43	2314A761635-11	2314B761635-11
104 x 25	2.00 x 1.25	150	55	2314A104025-11	2314B104025-11
104 x 38	2.00 x 1.25	150	55	2314A104038-11	2314B104038-11
104 x 51	2.00 x 1.25	150	57	2314A104051-11	2314B104051-11
104 x 63.5	2.00 x 1.50	150	58	2314A104635-11	2314B104635-11
104 x 76.1	2.00 x 1.60	150	58	2314A104761-11	2314B104761-11

SMS

Concentric Reducer with Straight End

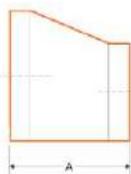


Normal size DN	Nominal Wall mm	A mm	Part Number	
			304	316L
38 x 25	1.25 x 1.25	39	2311CA038025-11	2311CB038025-11
51 x 25	1.25 x 1.25	57	2311CA051025-11	2311CB051025-11
51 x 38	1.25 x 1.25	39	2311CA051038-11	2311CB051038-11
63.5 x 25	1.50 x 1.25	74	2311CA635025-11	2311CB635025-11
63.5 x 38	1.50 x 1.25	57	2311CA635038-11	2311CB635038-11
63.5 x 51	1.50 x 1.25	39	2311CA635051-11	2311CB635051-11
76.1 x 25	1.60 x 1.25	92	2311CA761025-11	2311CB761025-11
76.1 x 38	1.60 x 1.25	74	2311CA761038-11	2311CB761038-11
76.1 x 51	1.60 x 1.25	57	2311CA761051-11	2311CB761051-11
76.1 x 63.5	1.60 x 1.50	39	2311CA761635-11	2311CB761635-11
101.6 x 51	2.10 x 1.25	91	2311CA101051-11	2311CB101051-11
101.6 x 63.5	2.10 x 1.50	74	2311CA101635-11	2311CB101635-11
101.6 x 76.1	2.10 x 1.60	56	2311CA101761-11	2311CB101761-11
104 x 51	2.00 x 1.25	95	2311CA104051-11	2311CB104051-11
104 x 63.5	2.00 x 1.50	78	2311CA104635-11	2311CB104635-11
104 x 76.1	2.00 x 1.60	60	2311CA104761-11	2311CB104761-11



SMS

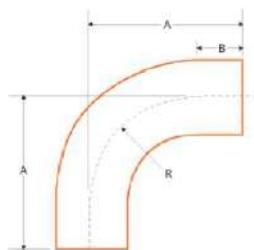
Eccentric Reducer With Straight End



Normal size DN	Nominal Wall mm	A mm	Part Number	
			304	316L
38 x 25	1.25 x 1.25	46	2311EA038025-11	2311EB038025-11
51 x 25	1.25 x 1.25	68	2311EA051025-11	2311EB051025-11
51 x 38	1.25 x 1.25	47	2311EA051038-11	2311EB051038-11
63.5 x 25	1.50 x 1.25	92	2311EA635025-11	2311EB635025-11
63.5 x 38	1.50 x 1.25	70	2311EA635038-11	2311EB635038-11
63.5 x 51	1.50 x 1.25	44	2311EA635051-11	2311EB635051-11
76.1 x 38	1.60 x 1.25	92	2311EA761038-11	2311EB761038-11
76.1 x 51	1.60 x 1.25	68	2311EA761051-11	2311EB761051-11
76.1 x 63.5	1.60 x 1.25	47	2311EA761635-11	2311EB761635-11
104 x 51	2.00 x 1.25	117	2311EA104051-11	2311EB104051-11
104 x 63.5	2.00 x 1.50	94	2311EA104635-11	2311EB104635-11
104 x 76.1	2.00 x 1.60	74	2311EA104761-11	2311EB104761-11

DIN 11865

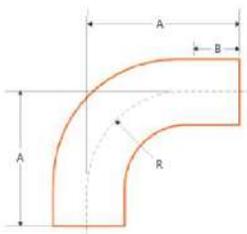
Series A90° long Elbow



Normal size		Nominal Wall mm	A mm	B mm	R mm	Part Number 316L
DN	mm					
10	12	1.0	51	25	26	2707LB012-11
10	13	1.5	51	25	26	2707AB013-11
15	18	1.5	51	25	26	2707LB018-11
15	19	1.5	60	25	35	2707AB019-11
20	23	1.5	65	25	40	2707AB023-11
25	28	1.5	90	40	50	2707LB028-11
25	29	1.5	90	40	50	2707AB029-11
32	35	1.5	95	40	55	2707AB035-11
40	41	1.5	100	40	60	2707AB041-11
50	53	1.5	110	40	70	2707AB053-11
65	70	2.0	120	40	80	2707AB070-11
80	85	2.0	145	55	90	2707AB085-11
100	104	2.0	155	55	100	2707AB104-11

DIN 11852

Series 2 90° long Elbow

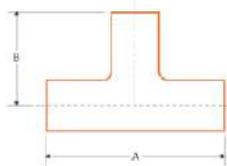


Normal size		Nominal Wall mm	A mm	B mm	R mm	Part Number 316L
DN	mm					
10	13	1.5	51	25	26	2725C013-11
15	19	1.5	60	25	35	2725C019-11
20	23	1.5	65	25	40	2725C023-11
25	29	1.5	90	40	50	2725C029-11
32	35	1.5	95	40	55	2725C035-11
40	41	1.5	100	40	60	2725C041-11
50	53	1.5	110	40	70	2725C053-11
65	70	2.0	120	40	80	2725C070-11
80	85	2.0	145	55	90	2725C085-11



DIN 11852

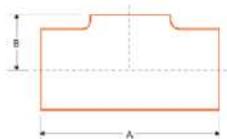
Series 2 Equal Tee



Normal size		Nominal Wall mm	A mm	B mm	Part Number 316L
DN	mm				
15	19	1.5	35	35	277WC019-11
20	23	1.5	40	40	277WC023-11
25	29	1.5	50	50	277WC029-11
32	35	1.5	55	55	277WC035-11
40	41	1.5	60	60	277WC041-11
50	53	1.5	70	70	277WC053-11
65	70	2.0	80	80	277WC070-11
80	85	2.0	90	90	277WC085-11
100	104	2.0	100	100	277WC104-11

DIN 11852

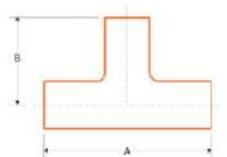
Series 2 Short Outlet Equal Tee



Normal size		Nominal Wall mm	A mm	B mm	Part Number 316L
DN	mm				
15	19	1.5	35	11.0	277WTC019-11
20	23	1.5	40	13.0	277WTC023-11
25	29	1.5	50	16.5	277WTC029-11
32	35	1.5	55	19.0	277WTC035-11
40	41	1.5	60	22.5	277WTC041-11
50	53	1.5	70	29.5	277WTC053-11
65	70	2.0	80	40.0	277WTC070-11
80	85	2.0	90	47.5	277WTC085-11
100	104	2.0	100	58.0	277WTC104-11

AS

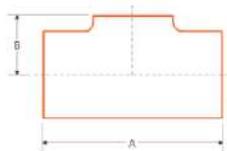
Short Equal Tee



Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1/2	12.70	1.500	38.100	0.75	19.050	2909SA050-11	2909SB050-11
3/4	19.05	2.250	57.200	1.13	28.625	2909SA075-11	2909SB075-11
1	25.40	3.000	76.200	1.50	38.100	2909SA100-11	2909SB100-11
1 1/4	31.80	3.750	95.400	1.88	47.700	2909SA125-11	2909SB125-11
1 1/2	38.10	4.500	114.300	2.25	57.150	2909SA150-11	2909SB150-11
2	50.80	6.000	152.400	3.00	76.200	2909SA200-11	2909SB200-11
2 1/2	63.50	7.500	190.500	3.75	95.250	2909SA250-11	2909SB250-11
3	76.20	9.000	228.600	4.50	114.300	2909SA300-11	2909SB300-11
4	101.60	12.000	304.800	6.00	152.400	2909SA400-11	2909SB400-11

AS

Short Outlet Equal Tee

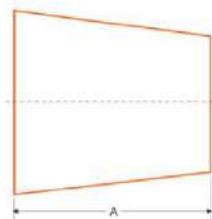


Normal size		A		B		Part Number	
Inch	mm	Inch	mm	Inch	mm	304	316L
1/2	12.70	1.500	38.100	0.37	9.350	2909STA050-11	2909STB050-11
3/4	19.05	2.250	57.200	0.49	12.525	2909STA075-11	2909STB075-11
1	25.40	3.000	76.200	0.62	15.700	2909STA100-11	2909STB100-11
1 1/4	31.80	3.750	95.400	0.74	18.900	2909STA125-11	2909STB125-11
1 1/2	38.10	4.500	114.300	0.87	22.050	2909STA150-11	2909STB150-11
2	50.80	6.000	152.400	1.12	28.400	2909STA200-11	2909STB200-11
2 1/2	63.50	7.500	190.500	1.37	34.750	2909STA250-11	2909STB250-11
3	76.20	9.000	228.600	1.62	41.100	2909STA300-11	2909STB300-11
4	101.60	12.000	304.800	2.20	55.800	2909STA400-11	2909STB400-11



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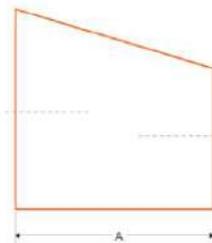
Concentric Reducer WW



Normal size		A		Part Number	
Inch	mm	Inch	mm	304	316L
1 x 1/2	25.40 x 12.70	1.000	25.40	2931A100050-11	2931B100050-11
1 x 3/4	25.40 x 19.05	1.000	25.40	2931A100075-11	2931B100075-11
1 1/2 x 1	38.10 x 25.40	1.500	38.10	2931A150100-11	2931B150100-11
1 1/2 x 1 1/4	38.10 x 31.80	1.500	38.10	2931A150125-11	2931B150125-11
2 x 1	50.80 x 25.40	2.000	50.80	2931A200100-11	2931B200100-11
2 x 1 1/4	50.80 x 31.80	2.000	50.80	2931A200125-11	2931B200125-11
2 x 1 1/2	50.80 x 38.10	2.000	50.80	2931A200150-11	2931B200150-11
2 1/2 x 1	63.50 x 25.40	2.500	63.50	2931A250100-11	2931B250100-11
2 1/2 x 1 1/4	63.50 x 31.80	2.500	63.50	2931A250125-11	2931B250125-11
2 1/2 x 1 1/2	63.50 x 38.10	2.500	63.50	2931A250150-11	2931B250150-11
2 1/2 x 2	63.50 x 50.80	2.500	63.50	2931A250200-11	2931B250200-11
3 x 1	76.20 x 25.40	3.000	76.20	2931A300100-11	2931B300100-11
3 x 1 1/2	76.20 x 38.10	3.000	76.20	2931A300150-11	2931B300150-11
3 x 2	76.20 x 50.80	3.000	76.20	2931A300200-11	2931B300200-11
3 x 2 1/2	76.20 x 63.50	3.000	76.20	2931A300250-11	2931B300250-11
4 x 1 1/2	101.60 x 38.10	4.000	101.60	2931A400150-11	2931B400150-11
4 x 2	101.60 x 50.80	4.000	101.60	2931A400200-11	2931B400200-11
4 x 2 1/2	101.60 x 63.50	4.000	101.60	2931A400250-11	2931B400250-11
4 x 3	101.60 x 76.20	4.000	101.60	2931A400300-11	2931B400300-11
6 x 2	152.40 x 50.80	6.000	152.40	2931A600200-11	2931B600200-11
6 x 3	152.40 x 76.20	6.000	152.40	2931A600300-11	2931B600300-11
6 x 4	152.40 x 101.60	6.000	152.40	2931A600400-11	2931B600400-11

AS

Eccentric Reducer WW

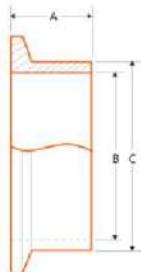


Normal size		A		Part Number	
Inch	mm	Inch	mm	304	316L
1 1/2 x 1	38.10 x 25.40	1.500	38.10	2932A150100-11	2932B150100-11
1 1/2 x 1 1/4	38.10 x 31.80	1.500	38.10	2932A150125-11	2932B150125-11
2 x 1	50.80 x 25.40	2.000	50.80	2932A200100-11	2932B200100-11
2 x 1 1/2	50.80 x 38.10	2.000	50.80	2932A200150-11	2932B200150-11
2 1/2 x 1 1/4	63.50 x 31.80	2.500	63.50	2932A250125-11	2932B250125-11
2 1/2 x 1 1/2	63.50 x 38.10	2.500	63.50	2932A250150-11	2932B250150-11
2 1/2 x 2	63.50 x 50.80	2.500	63.50	2932A250200-11	2932B250200-11
3 x 1 1/2	76.20 x 38.10	3.000	76.20	2932A300150-11	2932B300150-11
3 x 2	76.20 x 50.80	3.000	76.20	2932A300200-11	2932B300200-11
3 x 2 1/2	76.20 x 63.50	3.000	76.20	2932A300250-11	2932B300250-11
4 x 1 1/2	101.60 x 38.10	4.000	101.60	2932A400150-11	2932B400150-11
4 x 2	101.60 x 50.80	4.000	101.60	2932A400200-11	2932B400200-11
4 x 2 1/2	101.60 x 63.50	4.000	101.60	2932A400250-11	2932B400250-11
4 x 3	101.60 x 76.20	4.000	101.60	2932A400300-11	2932B400300-11
6 x 3	152.40 x 76.20	6.000	152.40	2932A600300-11	2932B600300-11
6 x 4	152.40 x 101.60	6.000	152.40	2932A600400-11	2932B600400-11



14WMP

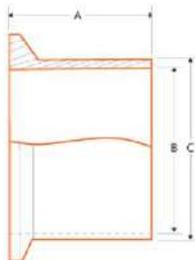
Short Welding Ferrule



Normal size Inch	A mm	B mm	C mm	Part Number	
				304	316L
1/2	12.70	9.40	12.70	2414WMPA05011	2414WMPB05011
3/4	12.70	15.75	19.05	2414WMPA07511	2414WMPB07511
1	12.70	22.10	25.40	2414WMPA10011	2414WMPB10011
1 1/2	12.70	34.80	38.10	2414WMPA15011	2414WMPB15011
2	12.70	47.50	50.80	2414WMPA20011	2414WMPB20011
2 1/2	12.70	60.20	63.50	2414WMPA25011	2414WMPB25011
3	12.70	72.90	76.20	2414WMPA30011	2414WMPB30011
4	15.88	97.38	101.60	2414WMPA40011	2414WMPB40011
6	22.20	146.86	152.40	2414WMPA60011	2414WMPB60011
8	22.20	197.66	203.20	2414WMPA80027711	2414WMPB80027711
8	22.20	197.10	203.20	2414WMPA80011	2414WMPB80011
10	22.20	248.46	254.00	2414WMPA100011	2414WMPB100011
12	22.20	298.70	304.80	2414WMPA120011	2414WMPB120011

14WMP

Medium Welding Ferrule

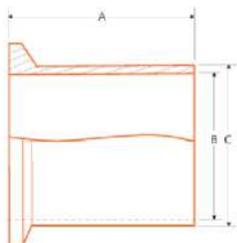


Normal size Inch	A mm	B mm	C mm	Part Number	
				304	316L
1/2	21.50	9.40	12.70	2414MMPA05011	2414MMPB05011
3/4	21.50	15.75	19.05	2414MMPA07511	2414MMPB07511
1	21.50	22.10	25.40	2414MMPA10011	2414MMPB10011
1 1/2	21.50	34.80	38.10	2414MMPA15011	2414MMPB15011
2	21.50	47.50	50.80	2414MMPA20011	2414MMPB20011
2 1/2	21.50	60.20	63.50	2414MMPA25011	2414MMPB25011
3	21.50	72.90	76.20	2414MMPA30011	2414MMPB30011
4	21.50	97.38	101.60	2414MMPA40011	2414MMPB40011
6	21.50	146.86	152.40	2414MMPA60011	2414MMPB60011
8	21.50	197.10	203.20	2414MMPA80011	2414MMPB80011
10	21.50	248.46	254.00	2414MMPA100011	2414MMPB100011
12	21.50	298.70	304.80	2414MMPA120011	2414MMPB120011



14AMP

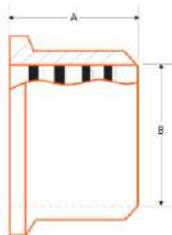
Long Welding Ferrule



Normal size	A	B	C	Part Number	
				304	316L
1/2	28.60	9.40	12.70	2414AMPA05011	2414AMPB05011
3/4	28.60	15.75	19.05	2414AMPA07511	2414AMPB07511
1	28.60	22.10	25.40	2414AMPA10011	2414AMPB10011
1 1/2	28.60	34.80	38.10	2414AMPA15011	2414AMPB15011
2	28.60	47.50	50.80	2414AMPA20011	2414AMPB20011
2 1/2	28.60	60.20	63.50	2414AMPA25011	2414AMPB25011
3	28.60	72.90	76.20	2414AMPA30011	2414AMPB30011
4	28.60	97.38	101.60	2414AMPA40011	2414AMPB40011
6	28.60	146.86	152.40	2414AMPA60028611	2414AMPB60028611
8	28.60	197.10	203.20	2414AMPA80028611	2414AMPB80028611
10	28.60	248.46	254.00	2414AMPA100028611	2414AMPB100028611
12	28.60	298.70	304.80	2414AMPA120028611	2414AMPB120028611
6	38.10	146.86	152.40	2414AMPA60011	2414AMPB60011
8	38.10	197.10	203.20	2414AMPA80011	2414AMPB80011
10	38.10	248.46	254.00	2414AMPA100011	2414AMPB100011
12	38.10	298.70	304.80	2414AMPA120011	2414AMPB120011

14RMP

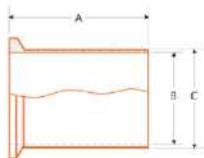
Roll-on Ferrule



Normal size	A	B	Part Number	
			304	316L
1	19.05	25.53	2414RMPA100	2414RMPB100
1 1/2	28.58	38.23	2414RMPA150	2414RMPB150
2	33.32	50.93	2414RMPA200	2414RMPB200
2 1/2	34.93	63.63	2414RMPA250	2414RMPB250
3	36.50	76.33	2414RMPA300	2414RMPB300
4	38.10	101.73	2414RMPA400	2414RMPB400
6	50.80	152.53	2414RMPA600	2414RMPB600

14WLMP

Light Tank Welding ferrule

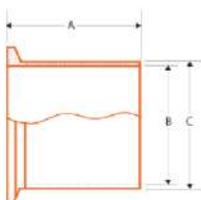


Normal size	A	B	C	Part Number	
				304	316L
1	76.20	22.10	25.40	2414WLMPA100-11	2414WLMPB100-11
1 1/2	76.20	34.80	38.10	2414WLMPA150-11	2414WLMPB150-11
2	76.20	47.50	50.80	2414WLMPA200-11	2414WLMPB200-11
2 1/2	76.20	60.20	63.50	2414WLMPA250-11	2414WLMPB250-11
3	101.60	72.90	76.20	2414WLMPA300-11	2414WLMPB300-11
4	101.60	97.38	101.60	2414WLMPA400-11	2414WLMPB400-11
6	152.40	146.86	152.40	2414WLMPA600-11	2414WLMPB600-11
8	152.40	197.10	203.20	2414WLMPA800-11	2414WLMPB800-11
10	152.40	248.46	254.00	2414WLMPA1000-11	2414WLMPB1000-11
12	152.40	298.70	304.80	2414WLMPA1200-11	2414WLMPB1200-11



14MPW

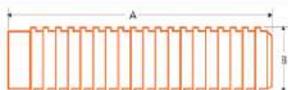
Heavy Tank welding Ferrule



Normal size Inch	A mm	B mm	C mm	Part Number	
				304	316L
1/2	41.28	8.15	12.75	2414MPWA050	2414MPWB050
3/4	41.28	14.58	19.05	2414MPWA075	2414MPWB075
1	41.28	22.10	29.46	2414MPWA100	2414MPWB100
1 1/2	41.28	34.80	42.57	2414MPWA150	2414MPWB150
2	44.45	47.50	55.68	2414MPWA200	2414MPWB200
2 1/2	44.45	60.20	68.78	2414MPWA250	2414MPWB250
3	46.05	72.90	81.89	2414MPWA300	2414MPWB300
4	53.98	97.38	108.10	2414MPWA400	2414MPWB400
6	63.50	146.25	157.28	2414MPWA600	2414MPWB600
8	63.50	197.05	208.08	2414MPWA800	2414MPWB800

14WHRL

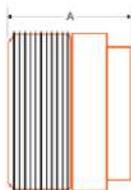
Long weld Hose Adapter



Normal size Inch	Normal Wall mm	A mm	B mm	Part Number
				316L
1	2.95	76.20	26.16	2414WHRLB10011
1 1/2	2.95	114.30	38.86	2414WHRLB15011
2	2.95	114.30	51.56	2414WHRLB20011
2 1/2	2.95	127.00	64.26	2414WHRLB25011
3	2.95	127.00	76.96	2414WHRLB30011
4	2.95	123.83	102.36	2414WHRLB40011

19WB

Male NPT x Weld Adapter



Normal size Inch	Normal Wall mm	A mm	Part Number	
			304	316L
1/2	1.65	41.28	2419WBA050	2419WBB050
3/4	1.65	41.28	2419WBA075	2419WBB075
1	1.65	44.45	2419WBA100	2419WBB100
1 1/2	1.65	44.45	2419WBA150	2419WBB150
2	1.65	46.02	2419WBA200	2419WBB200
2 1/2	1.65	58.72	2419WBA250	2419WBB250
3	1.65	63.50	2419WBA300	2419WBB300
4	2.11	65.07	2419WBA400	2419WBB400

22WB

Female NPT x Weld Adapter

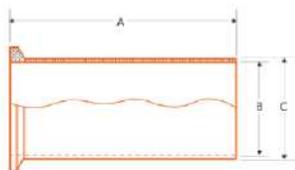


Normal size Inch	Normal Wall mm	A mm	Part Number	
			304	316L
1/2	1.65	31.75	2422WBA050	2422WBB050
3/4	1.65	41.28	2422WBA075	2422WBB075
1	1.65	44.45	2422WBA100	2422WBB100
1 1/2	1.65	44.45	2422WBA150	2422WBB150
2	1.65	46.02	2422WBA200	2422WBB200
2 1/2	1.65	58.72	2422WBA250	2422WBB250
3	1.65	63.50	2422WBA300	2422WBB300
4	2.11	63.50	2422WBA400	2422WBB400



14MPHT

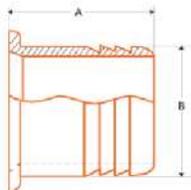
Tygon Hose Adapter



Normal size Inch	A mm	B mm	C mm	Part Number	
				304	316L
1/2	101.60	9.40	12.70	2414MPHTA050	2414MPHTB050
3/4	101.60	15.75	19.05	2414MPHTA075	2414MPHTB075
1	114.30	22.10	25.40	2414MPHTA100	2414MPHTB100
1 1/2	114.30	34.80	38.10	2414MPHTA150	2414MPHTB150
2	114.30	47.50	50.80	2414MPHTA200	2414MPHTB200
2 1/2	114.30	60.20	63.50	2414MPHTA250	2414MPHTB250
3	114.30	72.90	76.20	2414MPHTA300	2414MPHTB300
4	117.48	97.38	101.60	2414MPHTA400	2414MPHTB400
6	152.40	146.86	152.40	2414MPHTA600	2414MPHTB600

14MPHR

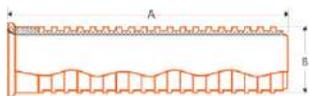
Rubber Hose Adapter



Tube OD Inch	Hose Size Inch	A mm	B mm	Part Number	
				304	316L
1/2	3/8	38.10	10.29	2414MPHRA050038	2414MPHRB050038
1/2	1/2	38.10	12.70	2414MPHRA050	2414MPHRB050
3/4	1/4	38.10	7.92	2414MPHRA075014	2414MPHRB075014
3/4	3/8	38.10	10.29	2414MPHRA075038	2414MPHRB075038
3/4	1/2	38.10	12.70	2414MPHRA075050	2414MPHRB075050
3/4	3/4	38.10	19.05	2414MPHRA075	2414MPHRB075
1	3/8	38.10	10.29	2414MPHRA100038	2414MPHRB100038
1	1/2	38.10	12.70	2414MPHRA100050	2414MPHRB100050
1	3/4	42.88	19.05	2414MPHRA100075	2414MPHRB100075
1	1	42.88	25.40	2414MPHRA100	2414MPHRB100
1 1/2	1/2	38.10	12.70	2414MPHRA150050	2414MPHRB150050
1 1/2	3/4	38.10	19.05	2414MPHRA150075	2414MPHRB150075
1 1/2	1	42.85	25.40	2414MPHRA150100	2414MPHRB150100
1 1/2	1 1/2	42.85	38.10	2414MPHRA150	2414MPHRB150
2	1 1/2	58.72	38.10	2414MPHRA200150	2414MPHRB200150
2	2	58.72	50.80	2414MPHRA200	2414MPHRB200
2 1/2	2 1/2	59.54	63.50	2414MPHRA250	2414MPHRB250
3	3	78.59	76.20	2414MPHRA300	2414MPHRB300
4	4	86.51	101.60	2414MPHRA400	2414MPHRB400
6	6	86.51	152.40	2414MPHRA600	2414MPHRB600
8	8	86.51	203.20	2414MPHRA800	2414MPHRB800

14MPHRL

Brewery Rubber Hose Adapter

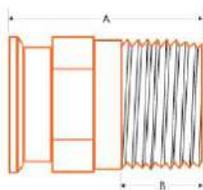


Tube OD Inch	A mm	B mm	Part Number	
			304	316L
1	88.90	26.54	2414MPHRLA100100	2414MPHRLB100100
1 1/2	127.00	39.24	2414MPHRLA150150	2414MPHRLB150150
2	127.00	51.94	2414MPHRLA200200	2414MPHRLB200200
2 1/2	139.70	64.64	2414MPHRLA250250	2414MPHRLB250250
3	139.70	77.34	2414MPHRLA300300	2414MPHRLB300300
4	139.70	102.74	2414MPHRLA400400	2414MPHRLB400400



21MP

Male NPT x Clamp Adapter

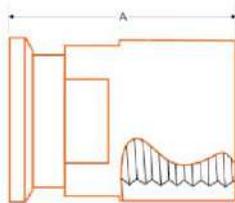


Tube OD	Hose Size	A	B	Part Number	
				304	316L
Inch	Inch	mm	mm		
1/2	3/8	50.80	15.24	2421MPA050038	2421MPB050038
1/2	1/2	41.28	19.86	2421MPA050050	2421MPB050050
1/2	3/4	50.80	20.17	2421MPA050075	2421MPB050075
3/4	1/2	50.80	19.86	2421MPA075050	2421MPB075050
3/4	3/4	45.39	20.17	2421MPA075075	2421MPB075075
3/4	1	57.15	25.02	2421MPA075100	2421MPB075100
1	1/2	55.55	19.86	2421MPA100050	2421MPB100050
1	3/4	55.55	20.17	2421MPA100075	2421MPB100075
1	1	57.15	25.02	2421MPA100100	2421MPB100100
1	1 1/2	61.93	26.04	2421MPA100150	2421MPB100150
1	2	66.68	26.87	2421MPA100200	2421MPB100200
1 1/2	1/2	55.55	19.86	2421MPA150050	2421MPB150050
1 1/2	3/4	55.55	20.17	2421MPA150075	2421MPB150075
1 1/2	1	61.90	25.02	2421MPA150100	2421MPB150100
1 1/2	1 1/4	61.93	25.63	2421MPA150125	2421MPB150125
1 1/2	1 1/2	57.15	26.04	2421MPA150150	2421MPB150150
1 1/2	2	66.68	26.87	2421MPA150200	2421MPB150200
1 1/2	2 1/2	83.34	39.90	2421MPA150250	2421MPB150250
2	1/2	55.58	19.86	2421MPA200050	2421MPB200050
2	3/4	55.58	20.17	2421MPA200075	2421MPB200075
2	1	62.71	25.02	2421MPA200100	2421MPB200100
2	1 1/2	66.68	25.63	2421MPA200150	2421MPB200150
2	2	67.01	26.87	2421MPA200200	2421MPB200200
2	2 1/2	79.38	39.90	2421MPA200250	2421MPB200250
2	3	88.90	41.50	2421MPA200300	2421MPB200300
2	4	88.90	44.04	2421MPA200400	2421MPB200400
2 1/2	1/2	70.64	19.86	2421MPA250050	2421MPB250050
2 1/2	1	70.64	19.86	2421MPA250100	2421MPB250100
2 1/2	1 1/2	70.64	26.04	2421MPA250150	2421MPB250150
2 1/2	2	70.64	26.87	2421MPA250200	2421MPB250200
2 1/2	2 1/2	73.03	39.90	2421MPA250250	2421MPB250250
2 1/2	3	93.73	41.50	2421MPA250300	2421MPB250300
3	1	76.20	25.02	2421MPA300100	2421MPB300100
3	1 1/2	76.20	25.63	2421MPA300150	2421MPB300150
3	2	76.20	26.87	2421MPA300200	2421MPB300200
3	2 1/2	76.20	39.90	2421MPA300250	2421MPB300250
3	3	77.98	41.50	2421MPA300300	2421MPB300300
3	4	88.90	44.04	2421MPA300400	2421MPB300400
4	3	96.85	41.50	2421MPA400300	2421MPB400300
4	4	80.14	44.04	2421MPA400400	2421MPB400400



22MP

Female NPT x Clamp Adapter



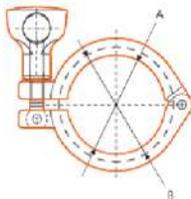
Tube OD Inch	Hose Size Inch	A mm	Part Number	
			304	316L
1/2	3/8	38.10	2422MPA050038	2422MPB050038
1/2	1/2	38.10	2422MPA050050	2422MPB050050
1/2	3/4	38.10	2422MPA050075	2422MPB050075
3/4	1/2	41.28	2422MPA075050	2422MPB075050
3/4	3/4	41.28	2422MPA075075	2422MPB075075
3/4	1	41.28	2422MPA075100	2422MPB075100
1	1/2	41.28	2422MPA100050	2422MPB100050
1	3/4	41.28	2422MPA100075	2422MPB100075
1	1	41.28	2422MPA100100	2422MPB100100
1	1 1/2	41.28	2422MPA100150	2422MPB100150
1	2	63.50	2422MPA100200	2422MPB100200
1 1/2	1/2	41.28	2422MPA150050	2422MPB150050
1 1/2	3/4	41.28	2422MPA150075	2422MPB150075
1 1/2	1	57.15	2422MPA150100	2422MPB150100
1 1/2	1 1/4	57.15	2422MPA150125	2422MPB150125
1 1/2	1 1/2	57.15	2422MPA150150	2422MPB150150
1 1/2	2	63.50	2422MPA150200	2422MPB150200
1 1/2	2 1/2	63.50	2422MPA150250	2422MPB150250
1 1/2	3	63.50	2422MPA150300	2422MPB150300
2	1/2	42.85	2422MPA200050	2422MPB200050
2	3/4	42.85	2422MPA200075	2422MPB200075
2	1	42.85	2422MPA200100	2422MPB200100
2	1 1/2	59.54	2422MPA200150	2422MPB200150
2	2	61.11	2422MPA200200	2422MPB200200
2	2 1/2	61.11	2422MPA200250	2422MPB200250
2	3	61.11	2422MPA200300	2422MPB200300
2	4	61.11	2422MPA200400	2422MPB200400
2 1/2	3/4	33.35	2422MPA250075	2422MPB250075
2 1/2	1	33.35	2422MPA250100	2422MPB250100
2 1/2	1 1/2	42.06	2422MPA250150	2422MPB250150
2 1/2	2	53.16	2422MPA250200	2422MPB250200
2 1/2	2 1/2	55.55	2422MPA250250	2422MPB250250
2 1/2	3	55.55	2422MPA250300	2422MPB250300
3	1	55.55	2422MPA300100	2422MPB300100
3	1 1/2	55.55	2422MPA300150	2422MPB300150
3	2	55.55	2422MPA300200	2422MPB300200
3	2 1/2	55.55	2422MPA300250	2422MPB300250
3	3	55.55	2422MPA300300	2422MPB300300
4	3	55.55	2422MPA400300	2422MPB400300
4	4	92.76	2422MPA400400	2422MPB400400



13GH

Single Pin Heavy
Duty Clamp

#14Wing Nut



Normal Size	A	B	Part Number
Inch	mm	mm	304
1/2 - 3/4	20.00	28.20	2433GHA075W4-99
1 - 1 1/2	44.40	53.60	2433GHA150W4-99
2	57.80	67.00	2433GHA200W4-99
2 1/2	71.40	80.60	2433GHA250W4-99
3	84.00	94.20	2433GHA300W4-99
4	110.00	122.20	2433GHA400W4-99
6	155.40	170.40	2433GHA600W4-99
8	205.00	220.00	2433GHA800W4-99
10	286.00	271.00	2433GHA1000W4-99
12	337.00	322.00	2433GHA1200W4-99

Wing-Nut

For Clamp



Part Number

#11

#12

#13

#14

#15

W1

W2

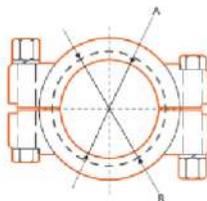
W3

W4

W5

13MHP

High pressure Clamp

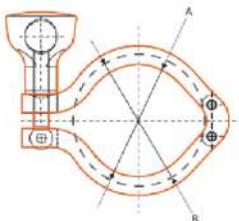


Normal Size	A	B	Part Number
Inch	mm	mm	304
1/2 - 3/4	20.00	28.00	2433MHPA075-99
1 - 1 1/2	43.32	52.00	2433MHPA150-99
2	56.44	65.50	2433MHPA200-99
2 1/2	69.54	79.00	2433MHPA250-99
3	77.56	92.50	2433MHPA300-99
4	108.86	120.50	2433MHPA400-99
6	158.00	170.00	2433MHPA600-99
8	222.50	237.50	2433MHPA800-99
10	258.20	272.80	2433MHPA1000-99
12	309.00	327.60	2433MHPA1200-99

13MHHM

Double Pin Heavy
Duty Clamp

#14Wing Nut



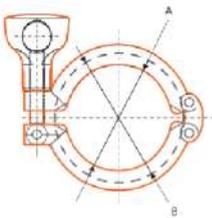
Normal Size	A	B	Part Number
Inch	mm	mm	304
1/2 - 3/4	20.00	28.00	2433DPA075W4-99
1 - 1 1/2	43.60	53.60	2433DPA150W4-99
2	57.00	67.00	2433DPA200W4-99
2 1/2	70.60	80.60	2433DPA250W4-99
3	84.00	94.00	2433DPA300W4-99
4	112.00	122.00	2433DPA400W4-99
6	155.00	170.00	2433DPA600W4-99
8	205.00	220.80	2433DPA800W4-99



13SF

Double Pin Heavy
Duty Clamp

#14Wing Nut

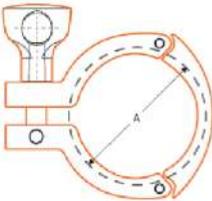


Normal Size	A	B	Part Number
Inch	mm	mm	304
1/2 - 3/4	20.00	28.00	2433SFA075W4-99
1 - 1 1/2	45.00	58.60	2433SFA150W4-99
2	59.00	72.00	2433SFA200W4-99
2 1/2	67.00	84.00	2433SFA250W4-99
3	85.00	98.00	2433SFA300W4-99
4	114.00	127.00	2433SFA400W4-99

13MHHS

Three Segment
Clamp

#14Wing Nut



Normal Size	A	Part Number
Inch	mm	304
1 - 1 1/2	54.00	2433TSA150W4-99
2	67.50	2433TSA200W4-99
2 1/2	80.90	2433TSA250W4-99
3	84.40	2433TSA300W4-99
4	122.40	2433TSA400W4-99

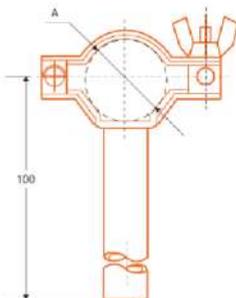
Recommended Max. PSI Service Ratings for Clamps

Normal Size	13 GH		13 MHHM		13 MHHS		13 MHP	
	@20°C	@120°C	@20°C	@120°C	@20°C	@120°C	@20°C	@120°C
1/2- 3/4	1500	1200					1500	1200
1 - 1 1/2	500	300	500	250	600	300	1500	1200
2	450	250	450	250	550	275	1000	800
2 1/2	400	200	400	200	450	225	1000	800
4	200	125	200	125	250	150	800	600
6	150	75					300	200
8	100	50						
10	40	30						
12	30	25						

* All ratings are dependent upon related components in the system and proper installation.

TH-1

Tube Hanger w/ Leg

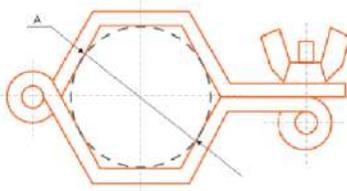


Normal Size	A	Part Number
Inch	mm	304
1	25.4	24TH1A100
1 1/2	38.1	24TH1A150
2	50.8	24TH1A200
2 1/2	63.5	24TH1A250
3	76.2	24TH1A300
4	101.6	24TH1A400



TH-3

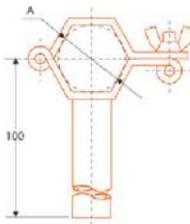
Type A Hex Hanger w/o Leg



Normal Size	A	Part Number
Inch	mm	304
1/2	12.5	24TH3A050
3/4	19.0	24TH3A075
1	25.0	24TH3A100
1 1/2	38.0	24TH3A150
2	51.0	24TH3A200
2 1/2	63.5	24TH3A250
3	76.0	24TH3A300
4	101.6	24TH3A400

TH-3

Type D Hex Hanger w/ Leg



Normal Size	A	Part Number
Inch	mm	304
1/2	12.5	24TH3DA050
3/4	19.0	24TH3DA075
1	25.0	24TH3DA100
1 1/2	38.0	24TH3DA150
2	51.0	24TH3DA200
2 1/2	63.5	24TH3DA250
3	76.0	24TH3DA300
4	101.6	24TH3DA400

TH-4

Hex Tube Hanger
w/ Grommets



Normal Size	Part Number
Inch	304
1/2	24TH4A050G
3/4	24TH4A075G
1	24TH4A100G
1 1/2	24TH4A150G
2	24TH4A200G
2 1/2	24TH4A250G
3	24TH4A300G
4	24TH4A400G
6	24TH4A600G
8	24TH4A800G
10	24TH4A1000G

TH-4

Hex Tube Hanger
w/ PVC Sleeve

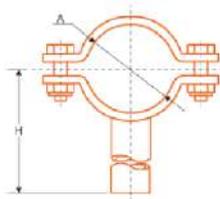


Normal Size	Part Number
Inch	304
1/2	24TH4A050P
3/4	24TH4A075P
1	24TH4A100P
1 1/2	24TH4A150P
2	24TH4A200P
2 1/2	24TH4A250P
3	24TH4A300P
4	24TH4A400P
6	24TH4A600P



TH-5

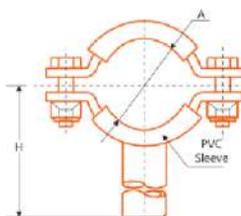
Type A Round Hanger w/ Leg



Normal Size	A	H	Part Number
Inch	mm	mm	304
1/2	12.5	90	24TH5GHA050
3/4	19.0	90	24TH5GHA075
1	25.4	90	24TH5GHA100
1 1/2	38.1	90	24TH5GHA150
2	50.8	90	24TH5GHA200
2 1/2	63.5	90	24TH5GHA250
3	76.2	90	24TH5GHA300
4	101.6	90	24TH5GHA400
6	152.4	130	24TH5A600

TH-6B

Type A Round Hanger w/ Leg



Normal Size	A	H	Part Number
Inch	mm	mm	304
1	25.4	90	24TH6BA100P
1 1/2	38.1	90	24TH6BA150P
2	50.8	90	24TH6BA200P
2 1/2	63.5	90	24TH6BA250P
3	76.2	90	24TH6BA300P
4	101.6	90	24TH6BA400P
6	152.4	130	24TH6A600P

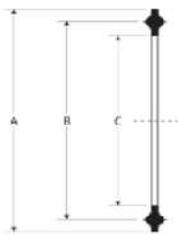
Material	Average Temperature Range	
	Min. °C	Max. °C
PTFE/ FKM TEFLON® / VITON®	-60	180
PTFE TEFLON®	-15	200
VMQ SILICONE	-40	190
FKM VITON®	-20	200
EPDM	-30	120

* Each material has many different grades and variants this is a general overview of the average temperature ranges of each material type.



13PG

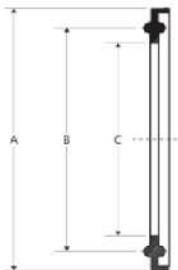
Ferrule Gasket Plain Type



Normal size	A	B	C	Part Number					
				Inch	mm	mm	mm	EPDM (Black/White)	SILICONE (Platinum-Cured)
1/2	21.80	-	9.65		2413PGE050Q	2413PGSPT050Q	2413PGT050Q	2413PGV050QW	2413PGN050Q
3/4	21.80	-	15.75		2413PGE075Q	2413PGSPT075Q	2413PGT075Q	2413PGV075QW	2413PGN075Q
1	50.39	43.64	22.70		2413PGE100Q	2413PGSPT100Q	2413PGT100Q	2413PGV100QW	2413PGN100Q
1 1/2	50.39	43.64	35.56		2413PGE150Q	2413PGSPT150Q	2413PGT150Q	2413PGV150QW	2413PGN150Q
2	63.88	56.34	48.26		2413PGE200Q	2413PGSPT200Q	2413PGT200Q	2413PGV200QW	2413PGN200Q
2 1/2	77.47	70.64	60.96		2413PGE250Q	2413PGSPT250Q	2413PGT250Q	2413PGV250QW	2413PGN250Q
3	90.91	83.34	73.66		2413PGE300Q	2413PGSPT300Q	2413PGT300Q	2413PGV300QW	2413PGN300Q
4	118.92	110.34	98.27		2413PGE400Q	2413PGSPT400Q	2413PGT400Q	2413PGV400QW	2413PGN400Q
6	165.28	156.40	147.75		2413PGE600Q	2413PGSPT600Q	2413PGT600Q	2413PGV600QW	2413PGN600Q
8	216.00	207.20	198.60		2413PGE800Q	2413PGSPT800Q	2413PGT800Q	2413PGV800QW	2413PGN800Q

13FG

Ferrule Gasket Flanged Type

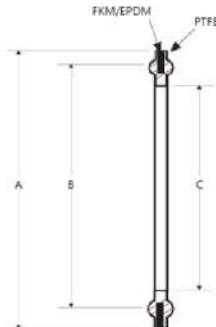


Normal size	A	B	C	Part Number			
				Inch	mm	mm	mm
1	52.70	43.50	22.80		2413FGE100Q	2413FGSPT100Q	2413FGV100QW
1 1/2	52.70	43.50	35.80		2413FGE150Q	2413FGSPT150Q	2413FGV150QW
2	66.20	56.50	48.80		2413FGE200Q	2413FGSPT200Q	2413FGV200QW
2 1/2	79.70	70.50	60.50		2413FGE250Q	2413FGSPT250Q	2413FGV250QW
3	93.20	83.50	73.10		2413FGE300Q	2413FGSPT300Q	2413FGV300QW
4	121.20	110.00	97.80		2413FGE400Q	2413FGSPT400Q	2413FGV400QW
6	169.10	156.40	148.00		2413FGE600Q	2413FGSPT600Q	2413FGV600QW
8	220.10	207.00	198.40		2413FGE800Q	2413FGSPT800Q	2413FGV800QW
10	270.70	258.00	249.00		2413FGE1000Q	2413FGSPT1000Q	2413FGV1000QW
12	321.50	308.80	300.00		2413FGE1200Q	2413FGSPT1200Q	2413FGV1200QW

13PGTE

13PGTV

Envelope Gasket Gasket Plain Type

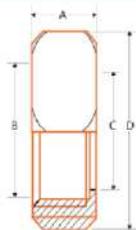


Normal size	A	B	C	Part Number		
				Inch	mm	mm
1/2	21.80	-	9.65		2413PGTE050W	2413PGTV050W
3/4	21.80	-	15.75		2413PGTE075W	2413PGTV075W
1	50.42	43.64	22.86		2413PGTE100W	2413PGTV100W
1 1/2	50.42	43.64	35.56		2413PGTE150W	2413PGTV150W
2	63.50	56.34	48.26		2413PGTE200W	2413PGTV200W
2 1/2	76.84	70.64	60.96		2413PGTE250W	2413PGTV250W
3	90.17	83.34	73.66		2413PGTE300W	2413PGTV300W
4	118.75	110.34	98.27		2413PGTE400W	2413PGTV400W
6	169.37	156.36	147.75		2413PGTE600W	2413PGTV600W
8	220.19	207.26	197.49		2413PGTE800W	2413PGTV800W
10	270.87	257.56	248.18		2413PGTE1000W	2413PGTV1000W
12	321.54	308.48	297.82		2413PGTE1200W	2413PGTV1200W



TH-5

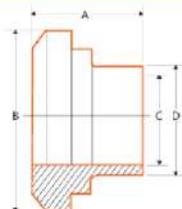
Hexagonal Nut



Normal size	A	B	C	Part Number		
				Inch	mm	304
1	23.0	34.34*8T	30.3	46.0	2434HA100	
1 1/2	24.6	47.86*8T	43.4	61.1	2434HA150	
2	27.0	61.37*8T	56.5	76.2	2434HA200	
2 1/2	30.2	74.88*8T	69.6	91.3	2434HA250	
3	32.5	88.40*8T	82.7	106.4	2434HA300	
4	38.1	115.42*6T	108.9	137.6	2434HA400	

14A

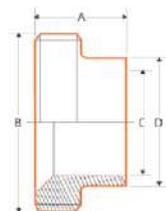
Long Welding Liner



Normal size	A	B	C	D	Part Number	
					Inch	mm
1	34.9	33.3	22.2	25.7	2414AA100	2414AB100
1 1/2	38.1	46.8	34.9	38.4	2414AA150	2414AB150
2	38.1	60.3	47.5	51.1	2414AA200	2414AB200
2 1/2	44.5	73.8	60.2	63.8	2414AA250	2414AB250
3	44.5	87.3	72.9	76.5	2414AA300	2414AB300
4	44.5	114.3	97.4	101.9	2414AA400	2414AB400

15A

Long Welding Male

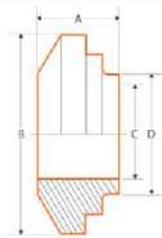


Normal size	A	B	C	D	Part Number	
					Inch	mm
1	34.9	37.13*8T	22.2	25.7	2415AA100	2415AB100
1 1/2	38.1	50.65*8T	34.9	38.4	2415AA150	2415AB150
2	38.1	64.16*8T	47.5	51.1	2415AA200	2415AB200
2 1/2	44.5	77.67*8T	60.2	63.8	2415AA250	2415AB250
3	44.5	91.19*8T	72.9	76.5	2415AA300	2415AB300
4	44.5	119.25*6T	97.4	101.9	2415AA400	2415AB400



14PRF

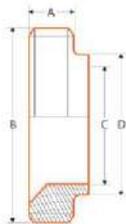
Short Welding Liner



Normal size Inch	A mm	B mm	C mm	D mm	Part Number	
					304	316L
1	18.3	33.3	22.2	25.7	2414PRFA100	2414PRFB100
1 1/2	18.3	46.8	34.9	38.4	2414PRFA150	2414PRFB150
2	19.1	60.3	47.5	51.1	2414PRFA200	2414PRFB200
2 1/2	22.3	73.8	60.2	63.8	2414PRFA250	2414PRFB250
3	23.1	87.3	72.9	76.5	2414PRFA300	2414PRFB300
4	26.2	114.3	97.4	101.9	2414PRFA400	2414PRFB400

15TRF

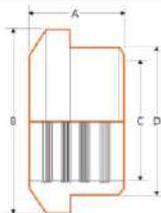
Short Welding Male



Normal size Inch	A mm	B ACME	C mm	D mm	Part Number	
					304	316L
1	18.3	37.13*8T	22.2	25.7	2415TRFA100	2415TRFB100
1 1/2	18.3	50.65*8T	34.9	38.4	2415TRFA150	2415TRFB150
2	19.1	64.16*8T	47.5	51.1	2415TRFA200	2415TRFB200
2 1/2	22.3	77.67*8T	60.2	63.8	2415TRFA250	2415TRFB250
3	23.1	91.19*8T	72.9	76.5	2415TRFA300	2415TRFB300
4	26.2	119.25*6T	97.4	101.9	2415TRFA400	2415TRFB400

14R

Expanding Liner

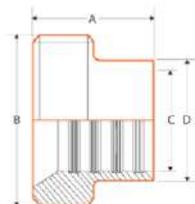


Normal size Inch	A mm	B mm	C mm	D mm	Part Number	
					304	316L
1	19.1	33.3	25.5	29.5	2414RA100	2414RB100
1 1/2	28.6	46.8	38.2	42.6	2414RA150	2414RB150
2	33.3	60.3	50.9	55.7	2414RA200	2414RB200
2 1/2	34.9	73.8	63.6	68.8	2414RA250	2414RB250
3	36.5	87.3	76.3	81.9	2414RA300	2414RB300
4	38.1	114.3	101.7	108.1	2414RA400	2414RB400



15R

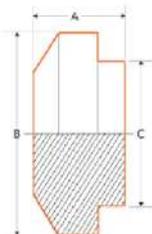
Expanding Male



Normal size	A	B	C	D	Part Number	
	Inch	mm	ACME	mm	mm	304
1	20.6	37.13*8T	25.5	29.5	2415RA100	2415RB100
1 1/2	28.6	50.65*8T	38.2	42.6	2415RA150	2415RB150
2	34.9	64.16*8T	50.9	55.7	2415RA200	2415RB200
2 1/2	38.1	77.67*8T	63.6	68.8	2415RA250	2415RB250
3	41.3	91.19*8T	76.3	81.9	2415RA300	2415RB300
4	41.3	119.25*6T	101.7	108.1	2415RA400	2415RB400

15A

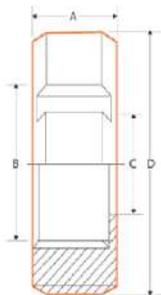
Blank Cap



Normal size	A	B	C	Part Number	
	Inch	mm	mm	mm	304
1	11.9	33.3	29.5	2416AA100	2416AB100
1 1/2	14.3	46.8	42.6	2416AA150	2416AB150
2	15.9	60.3	55.7	2416AA200	2416AB200
2 1/2	16.7	73.8	68.8	2416AA250	2416AB250
3	18.3	87.3	81.9	2416AA300	2416AB300
4	20.6	114.3	108.1	2416AA400	2416AB400

DIN-13R

Round Nut(4Slots)

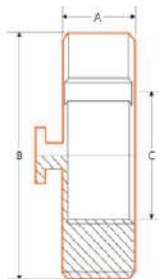


Normal size	A	B	C	D	Part Number	
	Imperial	DN	mm	RD		mm
	10	18	Rd28*1/8	19	38	2734RA010
	15	18	Rd34*1/8	25	44	2734RA015
	20	21	Rd44*1/6	31	54	2734RA020
1	25	21	Rd52*1/6	36	63	2734RA025
	32	21	Rd58*1/6	42	70	2734RA032
1 1/2	40	21	Rd65*1/6	49	78	2734RA040
2	50	22	Rd78*1/6	62	92	2734RA050
2 1/2	65	25	Rd95*1/6	80	112	2734RA065
3	80	30	Rd110*1/4	94	127	2734RA080
	90	30	Rd120*1/4	104	138	2734RA090
4	100	31	Rd130*1/4	115	148	2734RA100
	125	35	Rd160*1/4	138	178	2734RA125
	150	40	Rd190*1/4	164	210	2734RA150



DIN-13RB

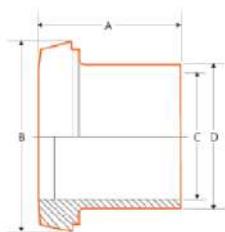
Blank Round Nut(4Slots)



Normal size		A	B	C	Part Number
Imperial	DN	mm	mm	RD	
	10	18	38	Rd28*1/8	2734RBA010
	15	18	44	Rd34*1/8	2734RBA015
	20	21	54	Rd44*1/6	2734RBA020
1	25	21	63	Rd52*1/6	2734RBA025
	32	21	70	Rd58*1/6	2734RBA032
1 1/2	40	21	78	Rd65*1/6	2734RBA040
2	50	22	92	Rd78*1/6	2734RBA050
2 1/2	65	25	112	Rd95*1/6	2734RBA065
3	80	30	127	Rd110*1/4	2734RBA080
	90	30	138	Rd120*1/4	2734RBA090
4	100	31	148	Rd130*1/4	2734RBA100
	125	35	178	Rd160*1/4	2734RBA125
	150	40	210	Rd190*1/4	2734RBA150

DIN-14

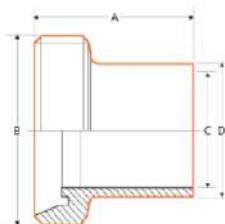
Welding Liner (Imperial)



Normal size		A	B	C	D	Part Number	
Inch	DN	mm	mm	mm	mm	304	316L
1	25	22	44	22.2	25.4	2734LA100I	2734LB100I
1 1/2	40	26	56	34.9	38.1	2734LA150I	2734LB150I
2	50	28	68	47.6	51.0	2734LA200I	2734LB200I
2 1/2	65	32	86	60.3	63.5	2734LA250I	2734LB250I
3	80	37	100	73.0	76.2	2734LA300I	2734LB300I
4	100	44	121	97.6	101.6	2734LA400I	2734LB400I

DIN-15

Welding Male (Imperial)

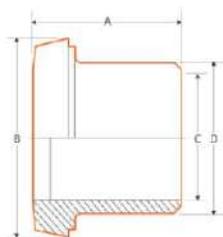


Normal size		A	B	C	D	Part Number	
Inch	DN	mm	RD	mm	mm	304	316L
1	25	29	Rd52*1/6	22.2	25.4	2734MA100I	2734MB100I
1 1/2	40	33	Rd65*1/6	34.9	38.1	2734MA150I	2734MB150I
2	50	35	Rd78*1/6	47.6	51.0	2734MA200I	2734MB200I
2 1/2	65	40	Rd95*1/6	60.3	63.5	2734MA250I	2734MB250I
3	80	45	Rd110*1/4	73.0	76.2	2734MA300I	2734MB300I
4	100	54	Rd130*1/4	97.6	101.6	2734MA400I	2734MB400I



DIN-14

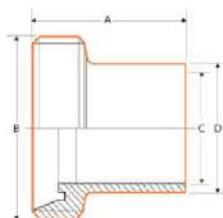
Welding Liner



Normal size DN	A mm	B mm	C mm	D mm	Part Number	
					304	316L
10	17	22	10	15	2734LA010	2734LB010
15	17	28	16	21	2734LA015	2734LB015
20	18	36	20	25	2734LA020	2734LB020
25	22	44	26	31	2734LA025	2734LB025
32	25	50	32	37	2734LA032	2734LB032
40	26	56	38	43	2734LA040	2734LB040
50	28	68	50	55	2734LA050	2734LB050
65	32	86	66	72	2734LA065	2734LB065
80	37	100	81	87	2734LA080	2734LB080
90	35	111	89	95	2734LA090	2734LB090
100	44	120	100	106	2734LA100	2734LB100
125	34	149	125	132	2734LA125	2734LB125
150	37	175	150	157	2734LA150	2734LB150

DIN-14

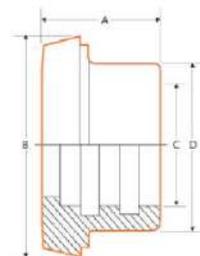
Welding Liner



Normal size DN	A mm	B RD	C mm	D mm	Part Number	
					304	316L
10	21	Rd28*1/8	10	15	2734MA010	2734MB010
15	21	Rd34*1/8	16	21	2734MA015	2734MB015
20	24	Rd44*1/6	20	25	2734MA020	2734MB020
25	29	Rd52*1/6	26	31	2734MA025	2734MB025
32	32	Rd58*1/6	32	37	2734MA032	2734MB032
40	33	Rd65*1/6	38	43	2734MA040	2734MB040
50	35	Rd78*1/6	50	55	2734MA050	2734MB050
65	40	Rd95*1/6	66	72	2734MA065	2734MB065
80	45	Rd110*1/4	81	87	2734MA080	2734MB080
90	45	Rd120*1/4	89	95	2734MA090	2734MB090
100	54	Rd130*1/4	100	106	2734MA100	2734MB100
125	46	Rd160*1/4	125	132	2734MA125	2734MB125
150	50	Rd190*1/4	150	157	2734MA150	2734MB150

DIN-14R

Expanding Liner

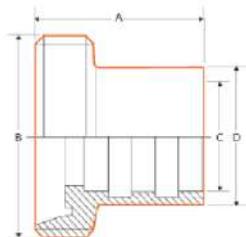


Normal size DN	A mm	B mm	C mm	D mm	Part Number	
					304	316L
10	17	22	12.2	18	2714RA010	2714RB010
15	17	28	18.2	24	2714RA015	2714RB015
20	18	36	22.2	30	2714RA020	2714RB020
25	22	44	28.2	35	2714RA025	2714RB025
32	25	50	34.2	41	2714RA032	2714RB032
40	26	56	40.2	48	2714RA040	2714RB040
50	28	68	52.2	61	2714RA050	2714RB050
65	32	86	70.3	79	2714RA065	2714RB065
80	37	100	85.3	93	2714RA080	2714RB080
100	44	120	104.3	114	2714RA100	2714RB100
125	34	149	129.3	137	2714RA125	2714RB125
150	37	175	154.3	163	2714RA150	2714RB150



DIN-15R

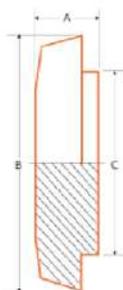
Expanding Liner



Normal size DN	A mm	B RD	C mm	D mm	Part Number	
					304	316L
10	21	Rd28*1/8	12.2	18	2715RA010	2715RB010
15	21	Rd34*1/8	18.2	24	2715RA015	2715RB015
20	24	Rd44*1/6	22.2	30	2715RA020	2715RB020
25	29	Rd52*1/6	28.2	35	2715RA025	2715RB025
32	32	Rd58*1/6	34.2	41	2715RA032	2715RB032
40	33	Rd65*1/6	40.2	48	2715RA040	2715RB040
50	35	Rd78*1/6	52.2	61	2715RA050	2715RB050
65	40	Rd95*1/6	70.3	79	2715RA065	2715RB065
80	45	Rd110*1/4	85.3	93	2715RA080	2715RB080
100	54	Rd130*1/4	104.3	114	2715RA100	2715RB100
125	46	Rd160*1/4	129.3	137	2715RA125	2715RB125
150	50	Rd190*1/4	154.3	163	2715RA150	2715RB150

DIN-14B

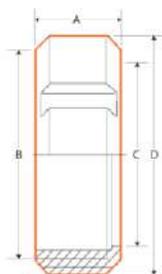
Blank Cap



Normal size Imperial	A DN	B mm	C mm	D mm	Part Number	
					304	316L
	10	11	22	18	2734BA010	2734BB010
	15	17	28	24	2734BA015	2734BB015
	20	21	36	30	2734BA020	2734BB020
1	25	27	44	35	2734BA025	2734BB025
	32	33	50	41	2734BA032	2734BB032
1 1/2	40	39	56	48	2734BA040	2734BB040
2	50	51	68	61	2734BA050	2734BB050
2 1/2	65	67	86	79	2734BA065	2734BB065
3	80	82	100	93	2734BA080	2734BB080
4	100	101	120	114	2734BA100	2734BB100
	125	126	149	137	2734BA125	2734BB125
	150	151	175	163	2734BA150	2734BB150

SMS-13R

Round Nut (6Slots)

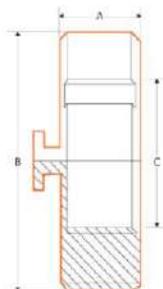


Normal size		A mm	B RD	C mm	D mm	Part Number 304
Inch	DN					
1	25	19	Rd40*1/6	32.5	51	2334RA025
1 1/2	38	23	Rd60*1/6	48.5	74	2334RA038
2	51	24	Rd70*1/6	61.0	84	2334RA051
2 1/2	63.5	28	Rd85*1/6	74.0	100	2334RA063
3	76	30	Rd98*1/6	87.0	114	2334RA076
4	101.5	31	Rd125*1/4	113.0	138	2334RA101



DIN-15R

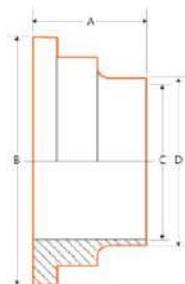
Expanding Liner



Normal size		A	B	C	Part Number
Inch	DN	mm	mm	RD	
1	25	19	51	Rd40°1/6	2334RBA025
1 1/2	38	23	74	Rd60°1/6	2334RBA038
2	51	24	84	Rd70°1/6	2334RBA051
2 1/2	63.5	28	100	Rd85°1/6	2334RBA063
3	76	30	114	Rd98°1/6	2334RBA076
4	101.6	31	138	Rd125°1/4	2334RBA101

SMS-14

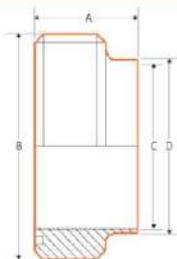
Welding Liner



Normal size		A	B	C	D	Part Number	
Inch	DN	mm	mm	mm	mm	304	316L
1	25	15.5	35.5	22.5	25.0	2334LA025	2334LB025
1 1/2	38	16.0	55.0	35.5	38.0	2334LA038	2334LB038
2	51	17.0	65.0	48.5	51.0	2334LA051	2334LB051
2 1/2	63.5	17.0	80.0	60.5	63.5	2334LA063	2334LB063
3	76	19.0	93.0	72.9	76.1	2334LA076	2334LB076
4	101.6	19.0	118.0	97.6	101.5	2334LA101	2334LB101
	104	19.0	118.0	100.0	104.0	2334LA104	2334LB104

SMS-15

Welding Male

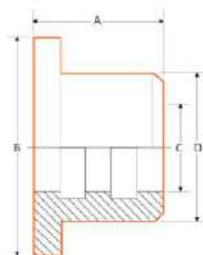


Normal size		A	B	C	D	Part Number	
Inch	DN	mm	RD	mm	mm	304	316L
1	25	19	Rd40°1/6	22.5	25.0	2334MA025	2334MB025
1 1/2	38	23	Rd60°1/6	35.5	38.0	2334MA038	2334MB038
2	51	23	Rd70°1/6	48.5	51.0	2334MA051	2334MB051
2 1/2	63.5	27	Rd85°1/6	60.5	63.5	2334MA063	2334MB063
3	76	27	Rd98°1/6	72.9	76.1	2334MA076	2334MB076
4	101.6	30	Rd125°1/4	97.6	101.6	2334MA101	2334MB101
	104	30	Rd125°1/4	100.0	104.0	2334MA104	2334MB104



SMS-15

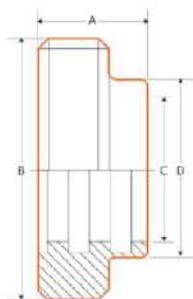
Welding Male



Normal size		A	B	C	D	Part Number	
Inch	DN	mm	mm	mm	mm	304	316L
1	25	17	35.5	25.8	32.0	2314RA025	2314RB025
1 1/2	38	20	55.0	38.8	48.0	2314RA038	2314RB038
2	51	20	65.0	51.8	60.4	2314RA051	2314RB051
2 1/2	63.5	25	80.0	64.3	73.5	2314RA635	2314RB635
3	76	30	93.0	77.0	86.5	2314RA761	2314RB761
4	101.6	27	118.0	102.6	112.5	2314RA101	2314RB101

SMS-15R

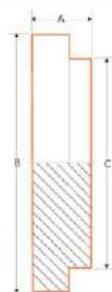
Expanding Male



Normal size		A	B	C	D	Part Number	
Inch	DN	mm	RD	mm	mm	304	316L
1	25	20	Rd40*1/6	25.8	32.0	2315RA025	2315RB025
1 1/2	38	23	Rd60*1/6	38.8	47.9	2315RA038	2315RB038
2	51	25	Rd70*1/6	51.8	50.4	2315RA051	2315RB051
2 1/2	63.5	30	Rd85*1/6	64.3	73.5	2315RA635	2315RB635
3	76	30	Rd98*1/6	77.0	86.5	2315RA761	2315RB761
4	101.6	30	Rd125*1/4	102.6	112.5	2315RA101	2315RB101

SMS-14B

Blank Cap

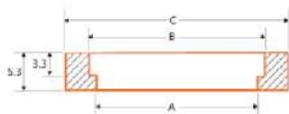


Normal size		A	B	C	Part Number	
Inch	DN	mm	mm	mm	304	316L
1	25	7.5	35.5	32.0	2334BA025	2334BB025
1 1/2	38	8.0	55.0	47.9	2334BA038	2334BB038
2	51	9.0	65.0	60.4	2334BA051	2334BB051
2 1/2	63.5	9.0	80.0	73.5	2334BA635	2334BB635
3	76	11.0	93.0	86.5	2334BA761	2334BB076
4	101.6	11.0	118.0	112.5	2334BA101	2334BB101



SMS

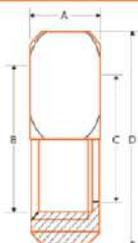
Union Seal



Size DN	A mm	B mm	C mm	Part Number		
				EPDM	SILICONE (Platinum-Cured)	PTFE
25	22.8	25.1	31.8	2334E025	2334SPT025	2334T025
38	35.8	38.1	47.8	2334E038	2334SPT038	2334T038
51	48.8	51.1	60.8	2334E051	2334SPT051	2334T051
63.5	61.0	63.6	73.3	2334E635	2334SPT635	2334T635
76.1	73.4	76.1	85.8	2334E076	2334SPT076	2334T761
101.6	100.5	104.0	115.7	2334E101	2334SPT101	2334T101

RJT-13H

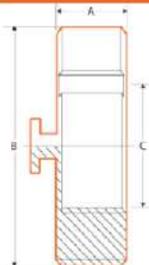
Hexagonal Nut



Normal size Inch	A mm	B WHIT.	C mm	D mm	Part Number 304
1	22.2	42.6*1/8	33.3	50.8	3034HA100
1 1/2	22.2	55.3*1/8	46.0	65.0	3034HA150
2	22.2	68.3*1/6	58.7	79.3	3034HA200
2 1/2	22.2	80.9*1/6	71.4	92.0	3034HA250
3	22.2	93.6*1/6	84.1	104.7	3034HA300
4	22.2	119.1*1/6	109.5	130.0	3034HA400

RJT-13HB

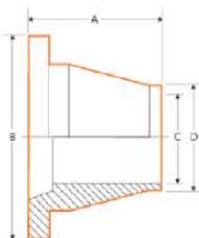
Blank Hexagonal Nut



Normal size Inch	A mm	B mm	C WHIT.	Part Number 304
1	24	50.8	42.6*1/8	3034HBA100
1 1/2	24	65.0	55.3*1/8	3034HBA150
2	25	79.3	68.3*1/6	3034HBA200
2 1/2	26	92.0	80.9*1/6	3034HBA250
3	26	104.7	93.6*1/6	3034HBA300
4	25	130.0	119.1*1/6	3034HBA400

RJT-14

Welding liner

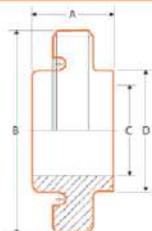


Normal size Inch	A mm	B mm	C mm	D mm	Part Number	
					304	316L
1	19.5	41.3	22.2	25.65	3034LA100	3034LB100
1 1/2	19.5	54.0	34.9	38.35	3034LA150	3034LB150
2	19.5	66.7	47.6	51.05	3034LA200	3034LB200
2 1/2	19.5	79.4	60.3	63.75	3034LA250	3034LB250
3	19.5	92.1	73.0	76.45	3034LA300	3034LB300
4	19.5	117.5	97.6	101.85	3034LA400	3034LB400



RJT-15

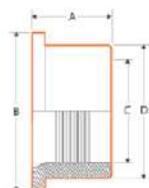
Welding Male



Normal size Inch	A mm	B WHIT. mm	C mm	D mm	Part Number	
					304	316L
1	27	45.72*1/8	22.2	25.65	3034MA100	3034MB100
1 1/2	27	58.42*1/8	34.9	38.35	3034MA150	3034MB150
2	27	72.72*1/6	47.6	51.05	3034MA200	3034MB200
2 1/2	27	85.42*1/6	60.3	63.75	3034MA250	3034MB250
3	27	98.12*1/6	73.0	76.45	3034MA300	3034MB300
4	27	123.52*1/6	97.6	101.85	3034MA400	3034MB400

RJT-14R

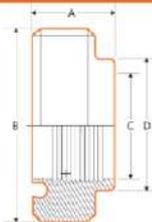
Expanding Liner



Normal size Inch	A mm	B mm	C mm	D mm	Part Number	
					304	316L
1	20	41.3	25.5	32.5	3014RA100	3014RB100
1 1/2	24	54.0	38.2	45.2	3014RA150	3014RB150
2	28	66.7	50.9	57.9	3014RA200	3014RB200
2 1/2	32	79.4	63.6	70.6	3014RA250	3014RB250
3	32	92.1	76.3	83.3	3014RA300	3014RB300
4	32	117.5	101.7	108.7	3014RA400	3014RB400

RJT-15R

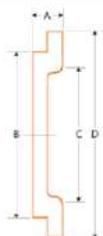
Expanding Male



Normal size Inch	A mm	B WHIT. mm	C mm	D mm	Part Number	
					304	316L
1	20	45.72*1/8	25.5	32.5	3015RA100	3015RB100
1 1/2	24	58.42*1/8	38.2	45.2	3015RA150	3015RB150
2	28	72.72*1/6	50.9	57.9	3015RA200	3015RB200
2 1/2	32	85.42*1/6	63.6	70.6	3015RA250	3015RB250
3	32	98.12*1/6	76.3	83.3	3015RA300	3015RB300
4	32	123.52*1/6	101.7	108.7	3015RA400	3015RB400

RJT-14B

Blank Cap



Normal size Inch	A mm	B mm	C mm	D mm	Part Number	
					304	316L
1	8.2	32.4	27.8	41.3	3034BA100	3034BB100
1 1/2	8.2	45.1	40.5	54.0	3034BA150	3034BB150
2	8.2	57.8	53.2	66.7	3034BA200	3034BB200
2 1/2	8.2	70.5	65.9	79.4	3034BA250	3034BB250
3	8.2	83.1	78.6	92.1	3034BA300	3034BB300
4	8.2	108.6	104.0	117.5	3034BA400	3034BB400