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Trusted supply house of sanitary processing equipment, parts and supplies for the dairy and food, brewery, beverage and pharmaceutical industries.

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These products are distributed to dairy, food, beverage processing facilities as well as the pharmaceutical, brewing, and fisheries industries throughout North America.

Many of our products are customized in design due to strict sanitary and hygienic standards, and all are built to stand up to the demands of high production environments. Resourcefulness and quick delivery are important to you, and Harco always provides both.

Check out our large collection of equipment, parts and supplies, including our line of color-coded products available.

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Unions, Clamp Fittings and Flanges

In order to sustain high quality, it is important that the products are uniform. Therefore, tolerances and finishes are carefully controlled. Our suppliers' follow developments in the area of standards.

Flanges and clamp fittings are suitable for flexible and easy maintenance. Flanges and clamp fittings with finger nuts are especially suited for processes where the load on seals is extra high, where easy control and replacement of seals is necessary and where optimal cleaning is required.



Unions are available in a number of standards, including SMS, ISO, BS, IDF, DS, DIN and clamps.

Bends, Tees And Reducers

Our suppliers' constantly focuses on producing installation material with long durability, problem-free welding and assembly, and highest possible strength. Key criteria in the manufacturing process include tight tolerances, a variety of finishes and uniform wall thickness.

Welding

Our suppliers' are aware of the constantly increasing demands for the quality of welding. In accordance with these demands, all our weld end fittings meet the highest of standards. The reducers have welding ends and are available for all tube combinations, ensuring you the right diameter and wall thickness for your process.

Tolerances

Our suppliers' ensure that all the angles are exact and that all the tube, bend and tee connections are uniform. It is very important that you do not have to compensate for any welding irregularities.

Finishes

In order to ensure that you are able to select a finish that exactly matches your process, Our suppliers' offer a wide range of finishes, including matt, raw, bright and polished.

The Right Part For Your Application

Our suppliers' provide many different standards of tubes and fittings. This means you can always find the part most suitable for your specific application, with exactly the process quality you need.

Sanitary Range Tubes and Fittings

This product range provides a wide range of tubes and fittings with internal surface finishes that have a Roughness average (Ra) of $<0.8\text{--}1.6\text{ }\mu\text{m}$. Tubes and fittings in the Sanitary range comply with DIN 11850, ISO 2037, BS 4825, JIS G 3447 and ASME dimension standards.

Biopharm Range Tubes and Fittings

The Tri-Clover BioPharm product range includes a comprehensive selection of tubes and fittings with internal surface finishes with a Roughness average (Ra) of $<0.4\text{--}0.8\text{ }\mu\text{m}$, either electro polished or mechanically polished.

Tubes and fittings in this range comply with DIN 11850, ISO 1127 and ASME BPE dimension standards.



Our suppliers' program of bends, tees and reducers are available in diameters from 1" to 4" and from DN10 to DN150.

Tubing & Tri-Clover BioPharm Packages

Tri-Clover BioPharm tubes

Our suppliers' tubes are the perfect choice for ultra-clean processes within the demanding pharmaceutical, biotech and light chemical industries.

The tubes are produced in compliance with the DIN 11866, ASME BPE, ISO 2037 and BS 4825, with extremely high demands on materials, hygiene and manufacturing accuracy.

Tri-Clover BioPharm Packages

Our suppliers' are a complete source for specialized tubing and fittings required in biotech and pharmaceutical process applications. The quality and surface finish of the Tri-Clover BioPharm products match the exact requirements of the industry. So regardless of your installation material needs, we are able to supply you with the right product – making sure that your process quality is never compromised.

Tri-Clover BioPharm Tubes and Fittings

Tubes and fittings in the BioPharm range are manufactured in accordance with extra-strict quality assurance procedures.

All cold-formed BioPharm tubular products feature consistent wall thicknesses as a result of the use of fabrication-grade tubing. Once cold forming has been completed, these tubular products are resized to ensure that their ovality always falls within the prescribed tolerances.

A machined square-cut method is used to provide properly finished end facings, ensuring the most accurate, consistent orbital welds. All fittings are inspected visually, while ovality and squareness tolerances are inspected with calibrated equipment. All surface finishes are inspected with a calibrated profilometer to measure the Roughness average (Ra).



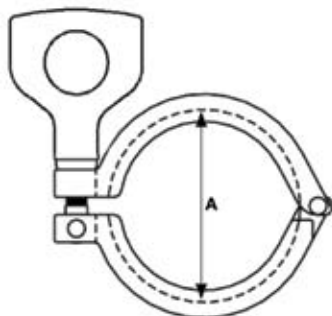
Tri-Clover BioPharm.



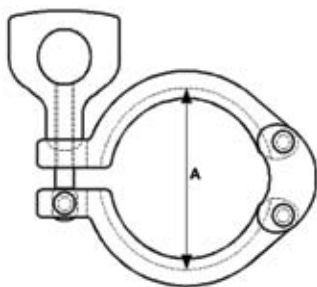
The quality and surface finish of the Tri-Clover BioPharm products are determined to match the exact requirements of the industry.

Sanitary CLAMPS

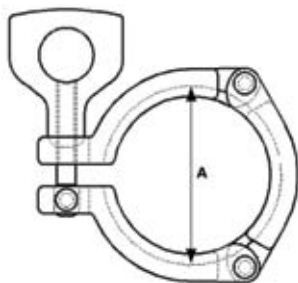
R13HC



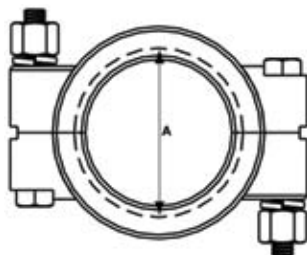
R13HCD



R13HC-3S



R13HP



TRI CLAMP CLAMPS

Heavy Duty Tri Clamps

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
R13HC	1/2" & 3/4"	R13HC-.5	1.06
	1"	R13HC-1	2.12
	1.5"	R13HC-1.5	2.12
	2"	R13HC-2	2.65
	2.5"	R13HC-2.5	3.19
	3"	R13HC-3	3.72
	4"	R13HC-4	4.82
	5"	R13HC-5	5.82
	6"	R13HC-6	6.69
	8"	R13HC-8	8.695
	10"	R13HC-10	10.695
	12"	R13HC-12	12.695

Heavy Duty Double Pin Tri Clamps

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
R13HCD	1" & 1.5"	R13HCD-1.5	2.12
	2"	R13HCD-2	2.65
	2.5"	R13HCD-2.5	3.19
	3"	R13HCD--3	3.72
	4"	R13HCD-4	4.82

Heavy Duty Three-Segment Tri Clamps

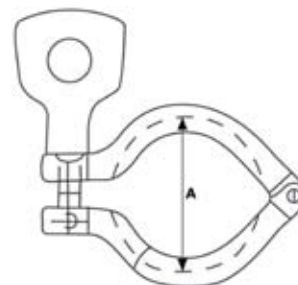
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
R13HC -3S	1" & 1.5"	R13HC-3S-1.5	2.12
	2"	R13HC-3S-2	2.65
	2.5"	R13HC-3S-2.5	3.19
	3"	R13HC-3S-3	3.72
	4"	R13HC-3S-4	4.82

Two Piece High Pressure Tri Clamps

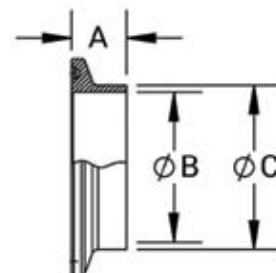
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
R13HP	1/2" & 3/4"	R13HP-.5	1.06
	1"	R13HP-1	2.05
	1.5"	R13HP-1.5	2.58
	2"	R13HP-2	3.11
	2.5"	R13HP-2.5	3.64
	3"	R13HP-3	4.74
	4"	R13HP-4	5.76
	6"	R13HP-6	6.63

I-LINE CLAMPS**I-Line Heavy Duty Clamps**

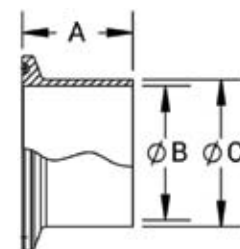
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
13IH	1"	13IH-1	2.12
	1.5"	13IH-1.5	2.12
	2"	13IH-2	2.65
	2.5"	13IH-2.5	3.19
	3"	13IH-3	3.72
	4"	13IH-4	4.82

13IH**Sanitary FERRULES****TRI CLAMP FERRULES****Tri Clamp Short Weld Ferrules**

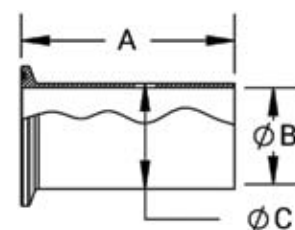
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	C (in.)
R14SW	1/2" & 3/4"	R14SW-.5	R14SW-.5-316	0.50	0.37/0.62	0.5/0.75
	1"	R14SW-1	R14SW-1-316	0.50	0.87	1.00
	1.5"	R14SW-1.5	R14SW-1.5-316	0.50	1.37	1.50
	2"	R14SW-2	R14SW-2-316	0.50	1.87	2.00
	2.5"	R14SW-2.5	R14SW-2.5-316	0.50	2.37	2.50
	3"	R14SW-3	R14SW-3-316	0.50	2.87	3.00
	4"	R14SW-4	R14SW-4-316	0.62	3.83	4.00
	6"	R14SW-6	R14SW-6-316	0.88	5.78	6.00

R14SW**Tri Clamp Medium Weld Ferrules**

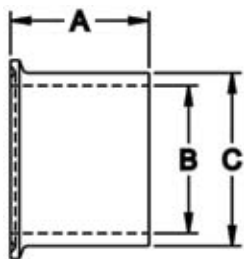
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	C (in.)
R14A	1/2" & 3/4"	R14A-.5	R14A-.5-316	1.13	0.37/0.62	0.50/0.75
	1"	R14A-1	R14A-1-316	1.13	0.87	1.00
	1.5"	R14A-1.5	R14A-1.5-316	1.13	1.37	1.50
	2"	R14A-2	R14A-2-316	1.13	1.87	2.00
	2.5"	R14A-2.5	R14A-2.5-316	1.13	2.37	2.50
	3"	R14A-3	R14A-3-316	1.13	2.87	3.00
	4"	R14A-4	R14A-4-316	1.13	3.83	4.00
	6"	R14A-6	R14A-6-316	1.5	5.78	6.00

R14A**Tri Clamp Long Weld Ferrules**

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	C (in.)
R14WL	1"	R14WL-1	R14WL-1-316	3	0.87	1.00
	1.5"	R14WL-1.5	R14WL-1.5-316	3	1.37	1.50
	2"	R14WL-2	R14WL-2-316	3	1.87	2.00
	2.5"	R14WL-2.5	R14WL-2.5-316	3	2.37	2.50
	3"	R14WL-3	R14WL-3-316	4	2.87	3.00
	4"	R14WL-4	R14WL-4-316	4	3.83	4.00
	6"	R14WL-6	R14WL-6-316	6	5.78	6.00

R14WL

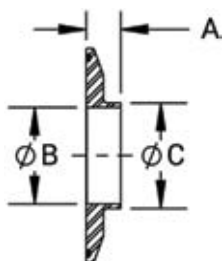
R14W



Tri Clamp Heavy Duty Tank Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)
R14W	1"	R14W-1	1.63	0.87	1.16
	1.5"	R14W-1.5	1.63	1.37	1.68
	2"	R14W-2	1.75	1.87	2.19
	2.5"	R14W-2.5	1.75	2.37	2.71
	3"	R14W-3	1.81	2.87	3.22
	4"	R14W-4	2.13	3.83	4.26

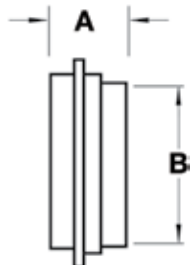
R14SWR



Tri Clamp Reducing Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	C (in.)
R14SWR	2" x 1"	R14SWR-2 X 1	R14SWR-2 X 1-316	0.50	0.87	1
	2.5" x 1.5"	R14SWR-2.5 X 1.5	R14SWR-2.5 X 1.5-316	0.50	1.37	1.5
	2.5" x 2"	R14SWR-2.5 X 2	R14SWR-2.5 X 2-316	0.50	1.87	2
	3" x 2"	R14SWR-3 X 2	R14SWR-3 X 2-316	0.50	1.87	2
	3" x 2.5"	R14SWR-3 X 2.5	R14SWR-3 X 2.5-316	0.50	2.37	2.5
	4" x 3"	R14SWR-4 X 3	R14SWR-4 X 3-316	0.63	2.87	3

JP14PS

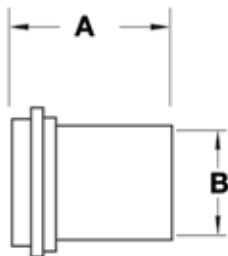


JOHN PERRY FERRULES

John Perry Short Plain Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
JP14PS	1"	JP14PS-1	JP14PS-1-316	0.69	0.87
	1.5"	JP14PS-1.5	JP14PS-1.5-316	0.72	1.37
	2"	JP14PS-2	JP14PS-2-316	0.72	1.87
	2.5"	JP14PS-2.5	JP14PS-2.5-316	0.84	2.37
	3"	JP14PS-3	JP14PS-3-316	0.91	2.87
	4"	JP14PS-4	JP14PS-4-316	1.22	3.83

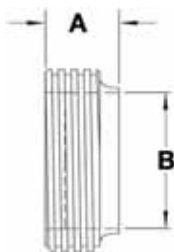
JP14A



John Perry Long Plain Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
JP14A	1"	JP14A-1	JP14A-1-316	1.38	0.87
	1.5"	JP14A-1.5	JP14A-1.5-316	1.50	1.37
	2"	JP14A-2	JP14A-2-316	1.50	1.87
	2.5"	JP14A-2.5	JP14A-2.5-316	1.75	2.37
	3"	JP14A-3	JP14A-3-316	1.75	2.87
	4"	JP14A-4	JP14A-4-316	1.75	3.83

JP15TS



John Perry Threaded Short Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
JP15TS	1"	JP15TS-1	JP15TS-1-316	0.69	0.87
	1.5"	JP15TS-1.5	JP15TS-1.5-316	0.72	1.37
	2"	JP15TS-2	JP15TS-2-316	0.72	1.87
	2.5"	JP15TS-2.5	JP15TS-2.5-316	0.84	2.37
	3"	JP15TS-3	JP15TS-3-316	0.91	2.87
	4"	JP15TS-4	JP15TS-4-316	1.22	3.83

John Perry Threaded Long Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
JP15A	1"	JP15A-1	JP15A-1-316	1.38	0.87
	1.5"	JP15A-1.5	JP15A-1.5-316	1.50	1.37
	2"	JP15A-2	JP15A-2-316	1.50	1.87
	2.5"	JP15A-2.5	JP15A-2.5-316	1.75	2.37
	3"	JP15A-3	JP15A-316	1.75	2.87
	4"	JP15A-4	JP15A-4-316	1.75	3.83

JP15A



BEVEL SEAT FERRULES

Bevel Seat Short Plain Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
14PS-1	1"	14PS-1	14PS-1-316	0.72	0.87
	1.5"	14PS-1.5	14PS-1.5-316	0.72	1.37
	2"	14PS-2	14PS-2-316	0.75	1.87
	2.5"	14PS-2.5	14PS-2.5-316	0.88	2.37
	3"	14PS-3	14PS-3-316	0.91	2.87
	4"	14PS-4	14PS-4-316	1.03	3.83

R14PS



Bevel Seat Long Plain Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
14A	1"	14A-1	14A-1-316	1.38	0.87
	1.5"	14A-1.5	14A-1.5-316	1.50	1.37
	2"	14A-2	14A-2-316	1.50	1.87
	2.5"	14A-2.5	14A-2.5-316	1.75	2.37
	3"	14A-3	14A-3-316	1.75	2.87
	4"	14A-4	14A-4-316	1.75	3.83

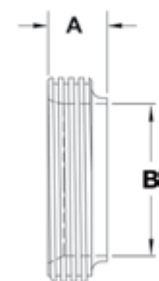
14A



Bevel Seat Threaded Short Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
15TS	1"	15TS-1	15TS-1-316	0.72	0.87
	1.5"	15TS-1.5	15TS-1.5-316	0.72	1.37
	2"	15TS-2	15TS-2-316	0.75	1.87
	2.5"	15TS-2.5	15TS-2.5-316	0.88	2.37
	3"	15TS-3	15TS-316	0.91	2.87
	4"	15TS-4	15TS-4-316	1.03	3.83

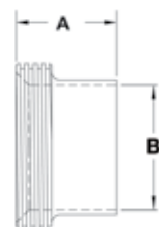
15TS

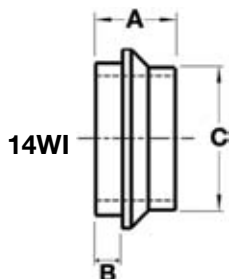


Bevel Seat Threaded Long Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
15A	1"	15A-1	15A-1-316	1.38	0.87
	1.5"	15A-1.5	15A-1.5-316	1.50	1.37
	2"	15A-2	15A-2-316	1.50	1.87
	2.5"	15A-2.5	15A-2.5-316	1.75	2.37
	3"	15A-3	15A-316	1.75	2.87
	4"	15A-4	15A-4-316	1.75	3.83

15A



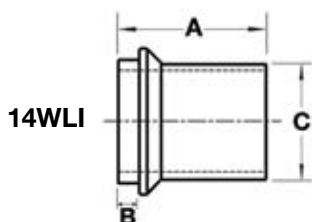


14WI

I-LINE FERRULES

Male I-Line Short Weld Ferrules

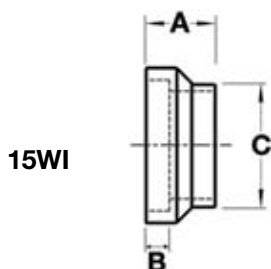
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	C (in.)
14WI	1"	14WI-1	14WI-1-316	0.79	0.19	1.00
	1.5"	14WI-1.5	14WI-1.5-316	0.95	0.20	1.50
	2"	14WI-2	14WI-2-316	1.04	0.26	2.00
	2.5"	14WI-2.5	14WI-2.5-316	1.16	0.31	2.50
	3"	14WI-3	14WI-3-316	1.22	0.31	3.00
	4"	14WI-4	14WI-4-316	1.35	0.31	4.00



14WLI

Male I-Line Long Weld Ferrules

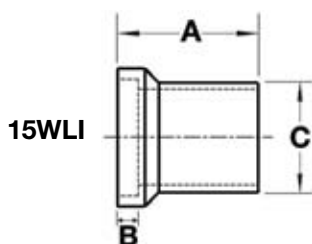
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	C (in.)
14WLI	1"	14WLI-1	14WLI-1-316	1.75	0.19	1.00
	1.5"	14WLI-1.5	14WLI-1.5-316	2.04	0.20	1.50
	2"	14WLI-2	14WLI-2-316	2.32	0.26	2.00
	2.5"	14WLI-2.5	14WLI-2.5-316	2.50	0.31	2.50
	3"	14WLI-3	14WLI-3-316	2.68	0.31	3.00
	4"	14WLI-4	14WLI-4-316	3.00	0.31	4.00



15WI

Female I-Line Short Weld Ferrules

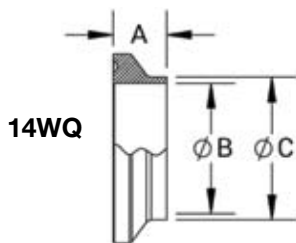
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	C (in.)
15WI	1"	15WI-1	15WI-1-316	0.79	0.25	1.00
	1.5"	15WI-1.5	15WI-1.5-316	0.95	0.25	1.50
	2"	15WI-2	15WI-2-316	1.04	0.31	2.00
	2.5"	15WI-2.5	15WI-2.5-316	1.16	0.36	2.50
	3"	15WI-3	15WI-3-316	1.22	0.36	3.00
	4"	15WI-4	15WI-4-316	1.35	0.36	4.00



15WLI

Female I-Line Long Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	C (in.)
15WLI	1"	15WLI-1	15WLI-1-316	1.75	0.25	1.00
	1.5"	15WLI-1.5	15WLI-1.5-316	2.03	0.25	1.50
	2"	15WLI-2	15WLI-2-316	2.31	0.31	2.00
	2.5"	15WLI-2.5	15WLI-2.5-316	2.50	0.36	2.50
	3"	15WLI-3	15WLI-3-316	2.69	0.36	3.00
	4"	15WLI-4	15WLI-4-316	3.00	0.36	4.00



14WQ

Q-LINE FERRULES

Q-Line Short Weld Ferrules

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)
14WQ	1"	14WQ-1	0.53	0.87	1.00
	1.5"	14WQ-1.5	0.56	1.37	1.50
	2"	14WQ-2	0.81	1.87	2.00
	2.5"	14WQ-2.5	0.94	2.37	2.50
	3"	14WQ-3	0.94	2.87	3.00
	4"	14WQ-4	1.00	3.83	4.00

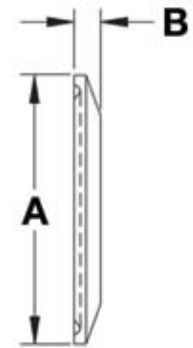
Sanitary END CAPS

TRI CLAMP END CAPS

Tri Clamp Solid End Caps

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R16A	1/2" & 3/4"	R16A-.5	R16A-.5-316	0.99	0.25
	1"	R16A-1	R16A-1-316	1.98	0.25
	1.5"	R16A-1.5	R16A-1.5-316	2.52	0.25
	2"	R16A-2	R16A-2-316	3.05	0.25
	2.5"	R16A-2.5	R16A-2.5-316	3.58	0.25
	3"	R16A-3	R16A-3-316	4.68	0.25
	4"	R16A-4	R16A-4-316	5.69	0.31
	6"	R16A-6	R16A-6-316	6.56	0.44

R16A



BEVEL SEAT END CAPS

Plain Bevel Seat Solid End Caps

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
16A	1"	16A-1	16A-1-316	1.16
	1.5"	16A-1.5	16A-1.5-316	1.67
	2"	16A-2	16A-2-316	2.19
	2.5"	16A-2.5	16A-2.5-316	2.71
	3"	16A-3	16A-3-316	3.22
	4"	16A-4	16A-4-316	4.26

16A

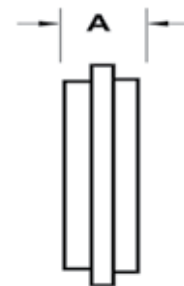


JOHN PERRY END CAPS

John Perry Solid End Caps

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
JP16A	1"	JP16A-1	JP16A-1-316	0.47
	1.5"	JP16A-1.5	JP16A-1.5-316	0.48
	2"	JP16A-2	JP16A-2-316	0.53
	2.5"	JP16A-2.5	JP16A-2.5-316	0.55
	3"	JP16A-3	JP16A-3-316	0.61
	4"	JP16A-4	JP16A-4-316	0.69

JP16A



I-LINE END CAPS

I-Line Male Solid End Caps

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
16AI-14I	1"	16AI-14I-1	16AI-14I-1-316	1.25
	1.5"	16AI-14I-1.5	16AI-14I-1.5-316	1.74
	2"	16AI-14I-2	16AI-14I-2-316	2.24
	2.5"	16AI-14I-2.5	16AI-14I-2.5-316	2.74
	3"	16AI-14I-3	16AI-14I-3-316	3.30
	4"	16AI-14I-4	16AI-14I-4-316	4.30
	6"	16AI-14I-6	16AI-14I-6-316	6.83

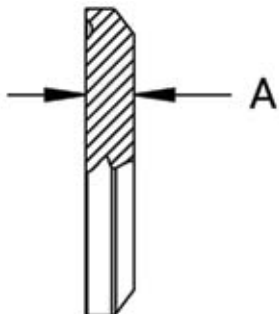
16AI-14I



16AI-15I



14WQ



I-Line Female Solid End Caps

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
16AI-15I	1"	16AI-15I-1	16AI-15I-1-316	1.27
	1.5"	16AI-15I-1.5	16AI-15I-1.5-316	1.76
	2"	16AI-15I-2	16AI-15I-2-316	2.26
	2.5"	16AI-15I-2.5	16AI-15I-2.5-316	2.76
	3"	16AI-15I-3	16AI-15I-3-316	3.32
	4"	16AI-15I-4	16AI-15I-4-316	4.32
	6"	16AI-15I-6	16AI-15I-6-316	6.92

Q-LINE END CAPS

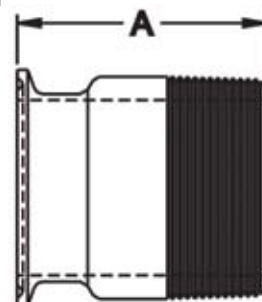
Q-Line Solid End Caps

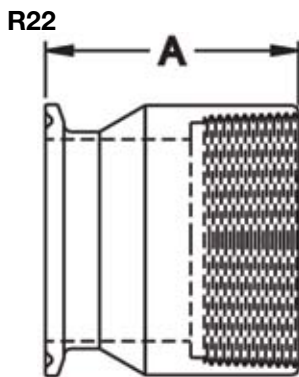
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
14WQ	1"	14WQ-1	0.19
	1.5"	14WQ-1.5	0.19
	2"	14WQ-2	0.25
	2.5"	14WQ-2.5	0.26
	3"	14WQ-3	0.26
	4"	14WQ-4	0.25

Sanitary ADAPTERS

TRI CLAMP X NPT					
Tri Clamp X MNPT					
PRODUCT CODE	TRI CLAMP SIZE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
R21	1/2"	1/2" x 1/4"	N/A	R21-1/2 X 1/4-316	2.00
	1/2"	1/2" x 1/2"	N/A	R21-1/2 X 1/2-316	1.63
	1/2"	1/2" x 3/4"	N/A	R21-1/2 X 3/4-316	2.00
R21	3/4"	3/4" x 1/4"	N/A	R21-3/4 X 1/4-316	2.00
	3/4"	3/4" x 3/8"	N/A	R21-3/4 X 3/8-316	2.00
	3/4"	3/4" x 1/2"	N/A	R21-3/4 X 1/2-316	2.00
	3/4"	3/4" x 3/4"	N/A	R21-3/4 X 3/4-316	1.79
	3/4"	3/4" x 1"	N/A	R21-3/4 X 1-316	2.25
R21	1"	1" x 1/4"	R21-1 X 1/4	R21-1 X 1/4-316	2.16
	1"	1" x 3/8"	R21-1 X 3/8	R21-1 X 3/8-316	2.16
	1"	1" x 1/2"	R21-1 X 1/2	R21-1 X 1/2-316	2.19
	1"	1" x 3/4"	R21-1 X 3/4	R21-1 X 3/4-316	2.19
	1"	1" x 1"	R21-1 X 1	R21-1 X 1-316	2.25
	1"	1" x 1.5"	R21-1 X 1.5	R21-1 X 1.5-316	2.44
	1"	1" x 2"	R21-1 X 2	R21-1 X 2-316	2.44
	1.5"	1.5" x 1/4"	R21-1.5 X 1/4	R21-1.5 X 1/4-316	2.16
R21	1.5"	1.5" x 1/2"	R21-1.5 X 1/2	R21-1.5 X 1/2-316	2.19
	1.5"	1.5" x 3/4"	R21-1.5 X 3/4	R21-1.5 X 3/4-316	2.19
	1.5"	1.5" x 1"	R21-1.5 X 1	R21-1.5 X 1-316	2.44
	1.5"	1.5" x 1.5"	R21-1.5 X 1.5	R21-1.5 X 1.5-316	2.44
	1.5"	1.5" x 2"	R21-1.5 X 2	R21-1.5 X 2-316	2.25
	1.5"	1.5" x 2.5"	R21-1.5 X 2.5	R21-1.5 X 2.5-316	2.63
	2"	2" x 1/2"	R21-2 X 1/2	R21-2 X 1/2-316	2.19
	2"	2" x 3/4"	R21-2 X 3/4	R21-2 X 3/4-316	2.19
R21	2"	2" x 1"	R21-2 X 1	R21-2 X 1-316	2.47
	2"	2" x 1.5"	R21-2 X 1.5	R21-2 X 1.5-316	2.63
	2"	2" x 2"	R21-2 X 2	R21-2 X 2-316	2.64
	2"	2" x 2.5"	R21-2 X 2.5	R21-2 X 2.5-316	3.13
	2"	2" x 3"	R21-2 X 3	R21-2 X 3-316	3.50
	2"	2" x 4"	R21-2 X 4	R21-2 X 4-316	3.50
	2.5"	2.5" x 1"	R21-2.5 X 1	R21-2.5 X 1-316	2.78
	2.5"	2.5" x 1.5"	R21-2.5 X 1.5	R21-2.5 X 1.5-316	2.78
R21	2.5"	2.5" x 2"	R21-2.5 X 2	R21-2.5 X 2-316	2.78
	2.5"	2.5" x 2.5"	R21-2.5 X 2.5	R21-2.5 X 2.5-316	2.88
	2.5"	2.5" x 3"	R21-2.5 X 3	R21-2.5 X 3-316	3.69
	3"	3" x 1.5"	R21-3 X 1.5	R21-3 X 1.5-316	3.00
	3"	3" x 2"	R21-3 X 2	R21-3 X 2-316	3.00
R21	3"	3" x 2.5"	R21-3 X 2.5	R21-3 X 2.5-316	3.00
	3"	3" x 3"	R21-3 X 3	R21-3 X 3-316	3.07
	3"	3" x 4"	R21-3 X 4	R21-3 X 4-316	3.50
	4"	4" x 3"	R21-4 X 3	R21-4 X 3-316	3.81
R21	4"	4" x 4"	R21-4 X 4	R21-4 X 4-316	3.16

R21

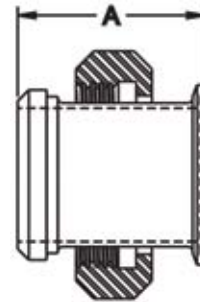




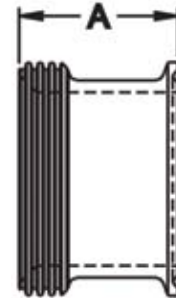
Tri Clamp X FNPT					
PRODUCT CODE	TRI CLAMP SIZE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
R22	1/2"	1/2" x 1/4"	N/A	R22-1/2 X 1/4-316	1.50
	1/2"	1/2" x 1/2"	N/A	R22-1/2 X 1/2-316	1.50
	1/2"	1/2" x 3/4"	N/A	R22-1/2 X 3/4-316	1.63
	1/2"	1/2" x 1"	N/A	R22-1/2 X 3/4-316	1.63
	1/2"	1/2" x 1.5"	N/A	R22-1/2 X 3/4-316	2.25
R22	3/4"	3/4" x 1/4"	N/A	R22-3/4 X 1/4-316	1.50
	3/4"	3/4" x 1/2"	N/A	R22-3/4 X 1/2-316	1.50
	3/4"	3/4" x 3/4"	N/A	R22-3/4 X 3/4-316	1.63
	3/4"	3/4" x 1"	N/A	R22-3/4 X 1-316	1.63
R22	1"	1" x 1/4"	R22-1 X 1/4	R22-1 X 1/4-316	1.63
	1"	1" x 1/2"	R22-1 X 1/2	R22-1 X 1/2-316	1.63
	1"	1" x 3/4"	R22-1 X 3/4	R22-1 X 3/4-316	1.63
	1"	1" x 1"	R22-1 X 1	R22-1 X 1-316	1.63
	1"	1" x 1.5"	R22-1 X 1.5	R22-1 X 1.5-316	1.63
	1"	1" x 2"	R22-1 X 2	R22-1 X 2-316	1.63
R22	1.5"	1.5" x 1/2"	R22-1.5 X 1/2	R22-1.5 X 1/2-316	1.63
	1.5"	1.5" x 3/4"	R22-1.5 X 3/4	R22-1.5 X 3/4-316	1.63
	1.5"	1.5" x 1"	R22-1.5 X 1	R22-1.5 X 1-316	1.63
	1.5"	1.5" x 1.5"	R22-1.5 X 1.5	R22-1.5 X 1.5-316	2.25
	1.5"	1.5" x 2"	R22-1.5 X 2	R22-1.5 X 2-316	2.25
	1.5"	1.5" x 2.5"	R22-1.5 X 2.5	R22-1.5 X 2.5-316	2.50
	1.5"	1.5" x 3"	N/A	R22-1.5 X 3-316	2.50
R22	2"	2" x 1/2"	R22-2 X 1/2	R22-2 X 1/2-316	1.69
	2"	2" x 3/4"	R22-2 X 3/4	R22-2 X 3/4-316	1.69
	2"	2" x 1"	R22-2 X 1	R22-2 X 1-316	1.69
	2"	2" x 1.25"	R22-2 X 1.25	R22-2 X 1.25-316	1.69
	2"	2" x 1.5"	R22-2 X 1.5	R22-2 X 1.5-316	1.66
	2"	2" x 2"	R22-2 X 2	R22-2 X 2-316	2.34
	2"	2" x 2.5"	R22-2 X 2.5	R22-2 X 2.5-316	2.41
	2"	2" x 3"	R22-2 X 3	R22-2 X 3-316	2.41
	2"	2" x 4"	R22-2 X 4	N/A	2.91
R22	2.5"	2.5" x 1"	R22-2.5 X 1	R22-2.5 X 1-316	1.31
	2.5"	2.5" x 1.5"	R22-2.5 X 1.5	R22-2.5 X 1.5-316	1.66
	2.5"	2.5" x 2"	R22-2.5 X 2	R22-2.5 X 2-316	1.72
	2.5"	2.5" x 2.5"	R22-2.5 X 2.5	R22-2.5 X 2.5-316	2.09
	2.5"	2.5" x 3"	R22-2.5 X 3	R22-2.5 X 3-316	2.19
R22	3"	3" x 1.5"	R22-3 X 1.5	R22-3 X 1.5-316	2.19
	3"	3" x 2"	R22-3 X 2	R22-3 X 2-316	2.19
	3"	3" x 2.5"	R22-3 X 2.5	N/A	2.19
	3"	3" x 3"	R22-3 X 3	R22-3 X 3-316	2.19
R22	4"	4" x 2"	R22-4 X 2	R22-4 X 2-316	2.19
	4"	4" x 2.5"	R22-4 X 2.5	R22-4 X 2.5-316	2.19
	4"	4" x 3"	R22-4 X 3	R22-4 X 3-316	2.19
	4"	4" x 6"	R22-4 X 4	R22-4 X 4-316	3.25

TRI CLAMP X BEVEL SEAT**Tri Clamp X Bevel Seat plain end with nut**

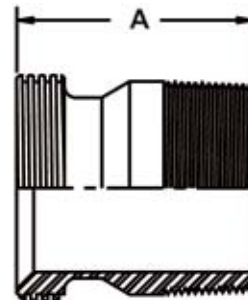
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
R17PC	1"	R17PC-1	3.00
	1.5"	R17PC-1.5	3.00
	2"	R17PC-2	3.00
	2.5"	R17PC-2.5	3.50
	3"	R17PC-3	3.75
	4"	R17PC-4	4.00

R17PC**Tri Clamp X Bevel Seat Threaded**

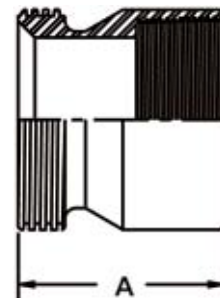
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
R17TC	1"	R17TC-1	1.84
	1.5"	R17TC-1.5	1.84
	2"	R17TC-2	1.88
	2.5"	R17TC-2.5	2.00
	3"	R17TC-3	2.03
	4"	R17TC-4	2.16

R17TC**BEVEL SEAT X NPT****Bevel Seat Threaded X MNPT**

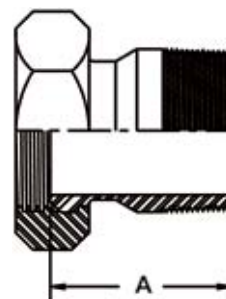
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
21	1"	21-1	3.125
	1.5"	21-1.5	3.25
	2"	21-2	3.312
	2.5"	21-2.5	4.063
	3"	21-3	4.25
	4"	21-4	4.412

21**Bevel Seat Threaded X FNPT**

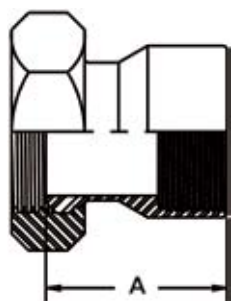
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
22	1"	22-1	3.125
	1.5"	22-1.5	3.25
	2"	22-2	3.312
	2.5"	22-2.5	4.00
	3"	22-3	4.35
	4"	22-4	4.412

22**Bevel Seat Plain with NUT X MNPT**

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
21F	1"	21F-1	3.125
	1.5"	21F-1.5	3.25
	2"	21F-2	3.312
	2.5"	21F-2.5	4.063
	3"	21F-3	4.25
	4"	21F-4	4.412

21F

22F

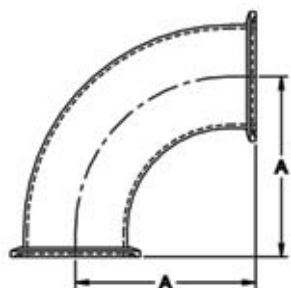


Bevel Seat Plain with NUT X FNPT

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
22F	1"	22F-1	3.125
	1.5"	22F-1.5	3.25
	2"	22F-2	3.312
	2.5"	22F-2.5	4.063
	3"	22F-3	4.25
	4"	22F-4	4.412

Sanitary ELBOWS

R2C

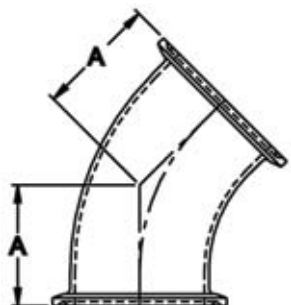


TRI CLAMP ELBOWS

90 Deg Tri Clamp Elbow

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
R2C	1/2"	N/A	R2C-.50	1.63
	3/4"	N/A	R2C-.75	1.63
	1"	R2C-1	R2C-1-316	2.00
	1.5"	R2C-1.5	R2C-1.5-316	2.75
	2"	R2C-2	R2C-2-316	3.50
	2.5"	R2C-2.5	R2C-2.5-316	4.25
	3"	R2C-3	R2C-3-316	5.00
	4"	R2C-4	R2C-4-316	6.63
	6"	R2C-6	R2C-6-316	9.88

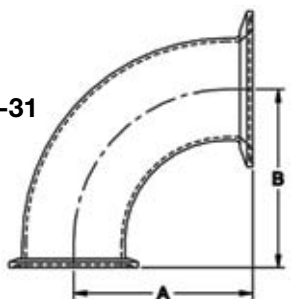
R2K



45 Deg Tri Clamp Elbow

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
R2K	1/2"	N/A	R2K-.50	0.97
	3/4"	N/A	R2K-.75	0.97
	1"	R2K-1	R2K-1-316	1.12
	1.5"	R2K-1.5	R2K-1.5-316	1.44
	2"	R2K-2	R2K-2-316	1.75
	2.5"	R2K-2.5	R2K-2.5-316	2.06
	3"	R2K-3	R2K-3-316	2.37
	4"	R2K-4	R2K-4-316	3.13
	6"	R2K-6	R2K-6-316	4.63

R2C-31

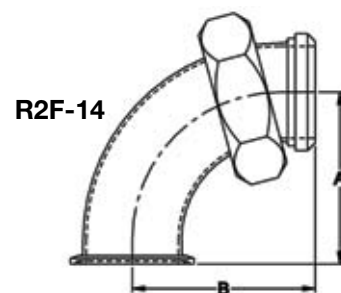


90 Deg Tri Clamp Reducing Elbow

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R2C31	2" x 1.5"	R2C31-2 X 1.5	R2C31-2 X 1.5-316	2.75	2.25
	2.5" x 2"	R2C31-2.5 X 2	R2C31-2.5 X 2-316	3.50	3.00
	3" x 2"	R2C31-3 X 2	R2C31-3 X 2-316	3.50	3.00
	3" x 2.5"	R2C31-3 X 2.5	R2C31-3 X 2.5-316	4.25	3.75

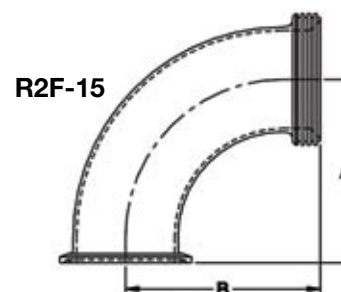
90 Deg Elbow- Tri Clamp X Plain Bevel Seat & Nut

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R2F-14	1"	R2F14-1	R2F14-1-316	2.22	2.00
	1.5"	R2F14-1.5	R2F14-1.5-316	2.97	2.75
	2"	R2F14-2	R2F14-2-316	3.75	3.50
	2.5"	R2F14-2.5	R2F14-2.5-316	4.63	4.25
	3"	R2F14-3	R2F14-3-316	5.41	5.00
	4"	R2F14-4	R2F14-4-316	7.03	6.63



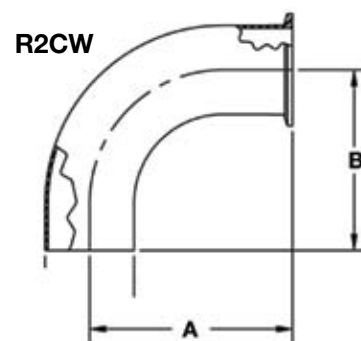
90 Deg Elbow- Tri Clamp X Male Bevel Seat Thread

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R2F-15	1.5"	R2F15-1.5	R2F15-1.5-316	2.75	2.969
	2"	R2F15-2	R2F15-2-316	3.50	3.750
	2.5"	R2F15-2.5	R2F15-2.5-316	4.25	4.594
	3"	R2F15-3	R2F15-3-316	5.00	5.438
	4"	R2F15-4	R2F15-4-316	6.625	7.219



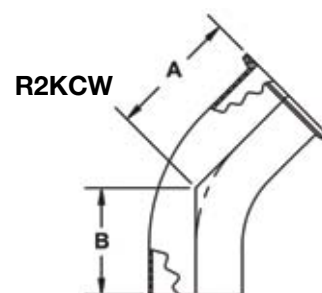
90 Deg Tri Clamp X Weld Elbow

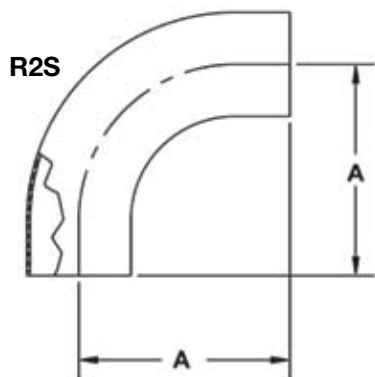
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R2CW	1/2"	N/A	R2CW-.50	3.50	3.00
	3/4"	N/A	R2CW-.75	3.50	3.00
	1"	R2CW-1	R2CW-1-316	2.56	2.06
	1.5"	R2CW-1.5	R2CW-1.5-316	3.44	2.94
	2"	R2CW-2	R2CW-2-316	4.56	4.06
	2.5"	R2CW-2.5	R2CW-2.5-316	5.69	5.19
	3"	R2CW-3	R2CW-3-316	6.81	6.31
	4"	R2CW-4	R2CW-4-316	8.94	8.31
	6"	R2CW-6	R2CW-6-316	13.24	12.46



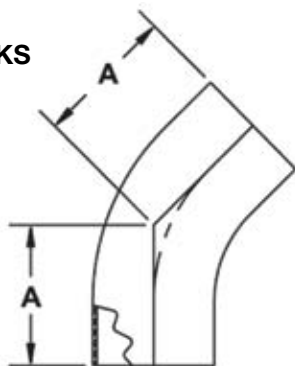
45 Deg Tri Clamp X Weld Elbow

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R2KCW	1"	R2KCW-1	R2KCW-1-316	1.69	1.19
	1.5"	R2KCW-1.5	R2KCW-1.5-316	2.13	1.63
	2"	R2KCW-2	R2KCW-2-316	2.81	2.31
	2.5"	R2KCW-2.5	R2KCW-2.5-316	3.50	3.00
	3"	R2KCW-3	R2KCW-3-316	4.19	3.69
	4"	R2KCW-4	R2KCW-4-316	5.44	4.81

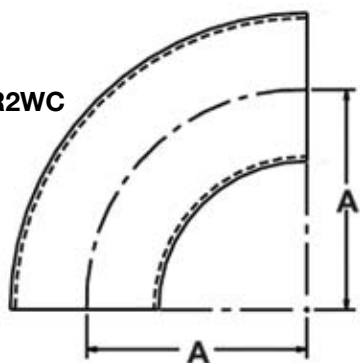




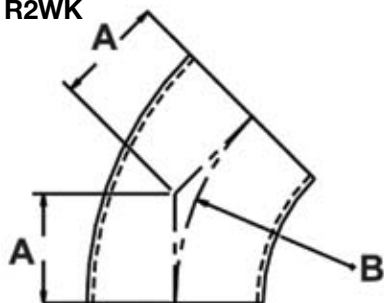
R2KS



R2WC



R2WK



WELD ELBOWS

90 Deg Weld Elbow with Tangents

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	Nominal Wall (in)
R2S	1/2"	N/A	R2S-.50	3.00	0.065
	3/4"	N/A	R2S-.75	3.00	0.065
	1"	R2S-1	R2S-1-316	2.06	0.065
	1.5"	R2S-1.5	R2S-1.5-316	2.94	0.065
	2"	R2S-2	R2S-2-316	4.06	0.065
	2.5"	R2S-2.5	R2S-2.5-316	5.19	0.065
	3"	R2S-3	R2S-3-316	6.31	0.065
	4"	R2S-4	R2S-4-316	8.31	0.083
	6"	R2S-6	R2S-6-316	12.46	0.109

45 Deg Weld Elbow with Tangents

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	Nominal Wall (in)
R2KS	1/2"	N/A	R2KS-.50	2.25	0.065
	3/4"	N/A	R2KS-.75	2.25	0.065
	1"	R2KS-1	R2KS-1-316	1.19	0.065
	1.5"	R2KS-1.5	R2KS-1.5-316	1.63	0.065
	2"	R2KS-2	R2KS-2-316	2.31	0.065
	2.5"	R2KS-2.5	R2KS-2.5-316	3.00	0.065
	3"	R2KS-3	R2KS-3-316	3.69	0.065
	4"	R2KS-4	R2KS-4-316	4.81	0.083

90 Deg Weld Elbow

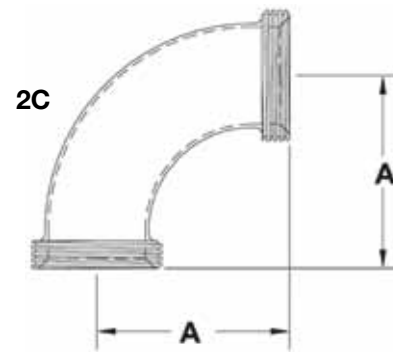
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	Nominal Wall (in)
R2WC	1/2"	N/A	R2WC-.50	1.13	0.065
	3/4"	N/A	R2WC-.75	1.13	0.065
	1"	R2WC-1	R2WC-1-316	1.50	0.065
	1.5"	R2WC-1.5	R2WC-1.5-316	2.25	0.065
	2"	R2WC-2	R2WC-2-316	3.00	0.065
	2.5"	R2WC-2.5	R2WC-2.5-316	3.75	0.065
	3"	R2WC-3	R2WC-3-316	4.50	0.065
	4"	R2WC-4	R2WC-4-316	6.00	0.083
	6"	R2WC-6	R2WC-6-316	9.00	0.109

45 Deg Weld Elbow

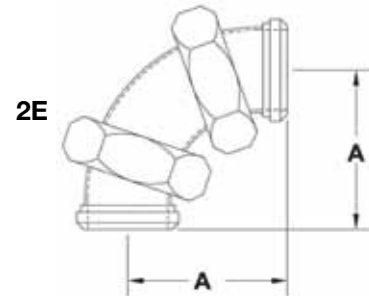
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	Nominal Wall (in)
R2WK	1/2"	N/A	R2WK-.50	0.47	1.13	0.065
	3/4"	N/A	R2WK-.75	0.47	1.13	0.065
	1"	R2WK-1	R2WK-1-316	0.62	1.50	0.065
	1.5"	R2WK-1.5	R2WK-1.5-316	0.94	2.25	0.065
	2"	R2WK-2	R2WK-2-316	1.25	3.00	0.065
	2.5"	R2WK-2.5	R2WK-2.5-316	1.56	3.75	0.065
	3"	R2WK-3	R2WK-3-316	1.87	4.50	0.065
	4"	R2WK-4	R2WK-4-316	2.50	6.00	0.083
	6"	R2WK-6	R2WK-6-316	3.75	9.00	0.109

BEVEL SEAT ELBOWS**90 Deg Both Ends Threaded Bevel Seat**

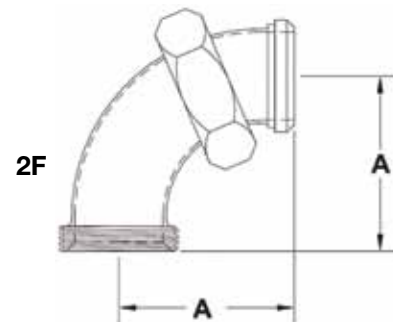
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
2C	1"	2C-1	2.22
	1.5"	2C-1.5	2.97
	2"	2C-2	3.75
	2.5"	2C-2.5	4.63
	3"	2C-3	5.41
	4"	2C-4	7.03

**90 Deg Both Ends Plain Bevel Seat with Nut**

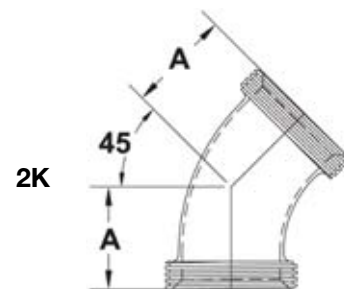
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
2E	1"	2E-1	2.22
	1.5"	2E-1.5	2.97
	2"	2E-2	3.75
	2.5"	2E-2.5	4.63
	3"	2E-3	5.41
	4"	2E-4	7.03

**90 Deg Male Threaded Bevel seat
X Plain Bevel Seat with Nut**

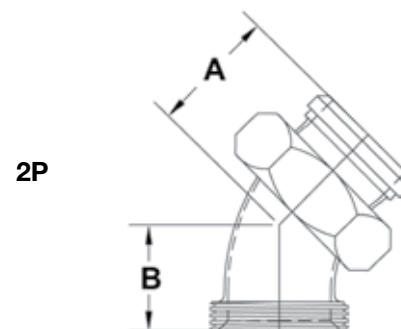
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
2F	1"	2F-1	2.22
	1.5"	2F-1.5	2.97
	2"	2F-2	3.75
	2.5"	2F-2.5	4.63
	3"	2F-3	5.41
	4"	2F-4	7.03

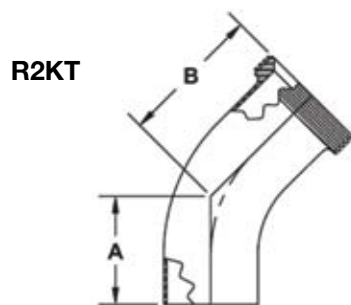
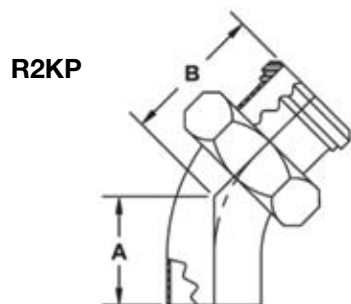
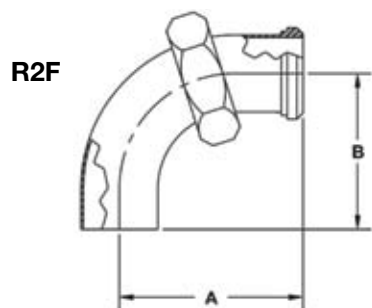
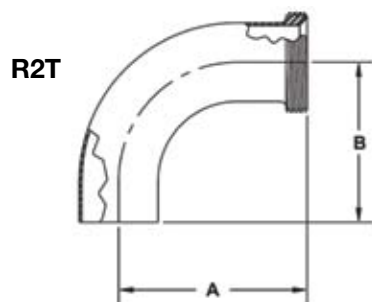
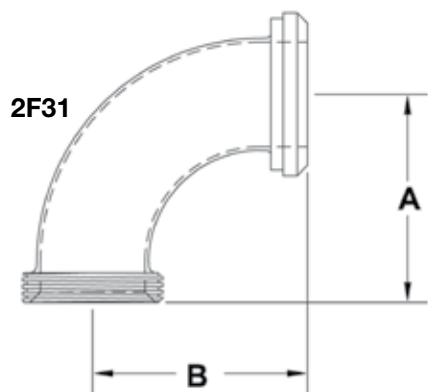
**45 Deg Both Ends Threaded Male Bevel Seat**

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
2K	1"	2K-1	1.31
	1.5"	2K-1.5	1.65
	2"	2K-2	2.00
	2.5"	2K-2.5	2.40
	3"	2K-3	2.82
	4"	2K-4	3.79

**45 Deg Male Threaded Bevel seat
X Plain Bevel Seat with Nut**

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
2P	1"	2P-1	1.34	1.34
	1.5"	2P-1.5	1.66	1.66
	2"	2P-2	2.00	2.00
	2.5"	2P-2.5	2.44	2.44
	3"	2P-3	2.78	2.81
	4"	2P-4	3.53	3.72





90 Deg Reducing Elbow Plain Bevel Seat X Male Threaded Bevel seat

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
2F31	1.5" x 1"	2F31-1.5 X 1	2.75	2.063
	2" x 1"	2F31-2 X 1	2.75	2.063
	2" x 1.5"	2F31-2 X 1.5	3.656	2.938
	2.5" x 1.5"	2F31-2.5 X 1.5	3.656	2.938
	3" x 1.5"	2F31-3 X 1.5	3.656	2.938
	3" x 2"	2F31-3 X 2	4.813	4.063
	3" x 2.5"	2F31-3 X 2.5	6.031	5.188
	4" x 2.5"	2F31-4 X 2.5	6.031	5.188
	4" x 3"	2F31-4 X 3	7.25	6.313

90 Deg Bevel Seat Threaded X Weld End

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
R2T	1"	R2T-1	2.78	2.06
	1.5"	R2T-1.5	3.66	2.94
	2"	R2T-2	4.81	4.06
	2.5"	R2T-2.5	6.06	5.19
	3"	R2T-3	7.22	6.31
	4"	R2T-4	9.34	8.31

90 Deg Bevel Plain With Nut X Weld End

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
R2F	1"	R2F-1	2.78	2.06
	1.5"	R2F-1.5	3.66	2.94
	2"	R2F-2	4.81	4.06
	2.5"	R2F-2.5	6.06	5.19
	3"	R2F-3	7.22	6.31
	4"	R2F-4	9.34	8.31

45 Deg Bevel Plain With Nut X Weld End

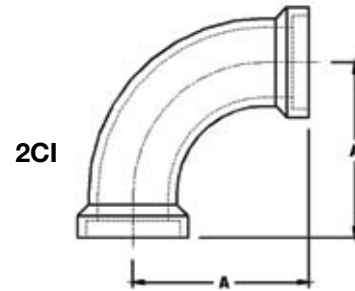
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
R2KP	1"	R2KP-1	1.18	1.87
	1.5"	R2KP-1.5	1.62	2.34
	2"	R2KP-2	2.31	3.06
	2.5"	R2KP-2.5	3.00	3.84
	3"	R2KP-3	3.68	4.62
	4"	R2KP-4	4.81	6.03

45 Deg Bevel Seat Threaded X Weld End

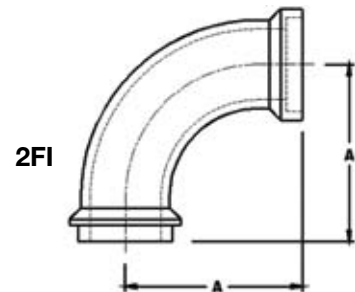
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
R2KT	1"	R2KT-1	1.18	1.87
	1.5"	R2KT-1.5	1.62	2.34
	2"	R2KT-2	2.31	3.06
	2.5"	R2KT-2.5	3.00	3.84
	3"	R2KT-3	3.68	4.62
	4"	R2KT-4	4.81	6.03

I-LINE ELBOWS**I-Line 90 Deg Elbow Female Ends**

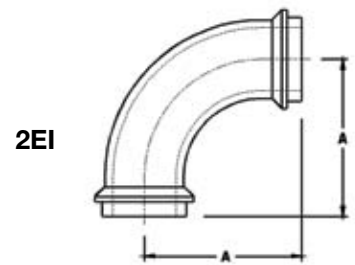
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
2CI	1"	2CI-1	2.29
	1.5"	2CI-1.5	3.20
	2"	2CI-2	4.04
	2.5"	2CI-2.5	4.91
	3"	2CI-3	5.72
	4"	2CI-4	7.35

**I-Line 90 Deg Elbow Female X Male Ends**

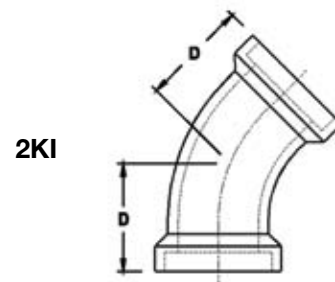
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
2FI	1"	2FI-1	2.29
	1.5"	2FI-1.5	3.20
	2"	2FI-2	4.04
	2.5"	2FI-2.5	4.91
	3"	2FI-3	5.72
	4"	2FI-4	7.35

**I-Line 90 Deg Elbow Male Ends**

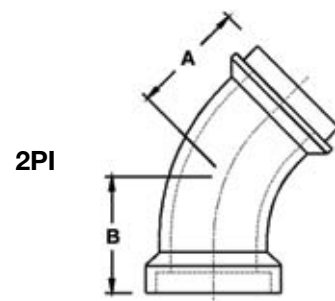
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
2EI	1"	2EI-1	2.29
	1.5"	2EI-1.5	3.20
	2"	2EI-2	4.04
	2.5"	2EI-2.5	4.91
	3"	2EI-3	5.72
	4"	2EI-4	7.35

**I-Line 45 Deg Elbow Female Ends**

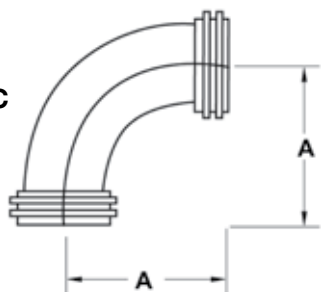
PRODUCT CODE	SIZE (in.)	304 S.S.	D (in.)
2KI	1"	2KI-1	1.411
	1.5"	2KI-1.5	1.88
	2"	2KI-2	2.286
	2.5"	2KI-2.5	2.724
	3"	2KI-3	3.098
	4"	2KI-4	3.848

**I-Line 45 Deg Elbow Female X Male Ends**

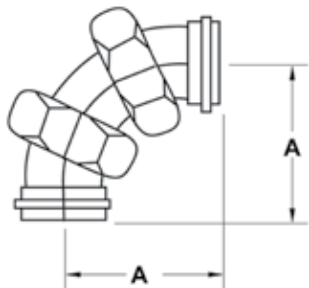
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
2PI	1"	2PI-1	1.214	1.411
	1.5"	2PI-1.5	1.526	1.88
	2"	2PI-2	2.03	2.286
	2.5"	2PI-2.5	2.413	2.724
	3"	2PI-3	2.787	3.098
	4"	2PI-4	3.537	3.848



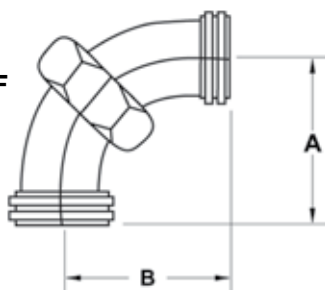
JP2C



JP2E



JP2F



JOHN PERRY ELBOWS

90 Deg Both Ends Threaded John Perry

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
JP2C	1"	JP2C-1	2.188
	1.5"	JP2C-1.5	2.969
	2"	JP2C-2	3.75
	2.5"	JP2C-2.5	4.594
	3"	JP2C-3	5.438
	4"	JP2C-4	7.219

90 Deg Both Ends Plain with NUT John Perry

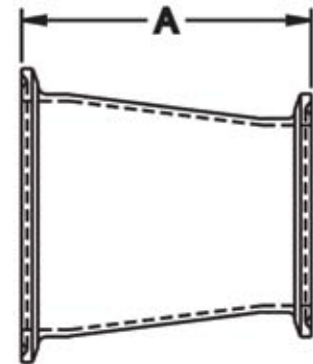
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
JP2E	1"	JP2E-1	2.188
	1.5"	JP2E-1.5	2.969
	2"	JP2E-2	3.719
	2.5"	JP2E-2.5	4.594
	3"	JP2E-3	5.406
	4"	JP2E-4	7.219

90 Deg Both Plain with NUT X threaded John Perry

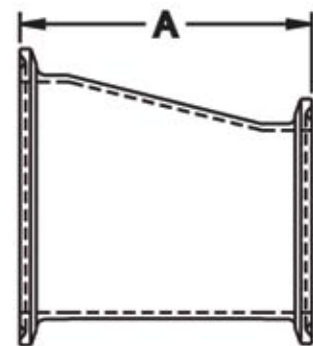
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
JP2F	1"	JP2F-1	2.188	2.188
	1.5"	JP2F-1.5	2.969	2.969
	2"	JP2F-2	3.719	3.75
	2.5"	JP2F-2.5	4.594	4.594
	3"	JP2F-3	5.406	5.438
	4"	JP2F-4	7.219	7.219

TRI CLAMP REDUCERS**Tri Clamp Concentric Reducers**

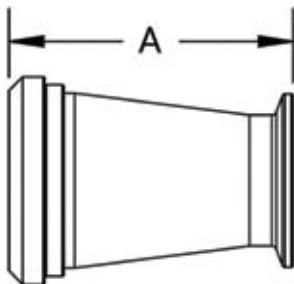
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
R31CC	3/4" x 1/2"	N/A	R31CC-3/4 X 1/2-316	2.00
	1" x 1/2"	N/A	R31CC-1 X 1/2-316	3.00
	1" x 3/4"	N/A	R31CC-1 X 3/4-316	2.00
	1.5" x 1/2"	R31CC-1.5 X 1/2	R31CC-1.5 X 1/2-316	5.00
	1.5" x 3/4"	N/A	R31CC-1.5 X 3/4-316	4.00
	1.5" x 1"	R31CC-1.5 X 1	R31CC-1.5 X 1-316	3.00
	2" x 1/2"	N/A	R31CC-2 X 1/2-316	7.00
	2" x 3/4"	N/A	R31CC-2 X 3/4-316	6.00
	2" x 1"	R31CC-2 X 1	R31CC-2 X 1-316	5.00
	2" x 1.5"	R31CC-2 X 1.5	R31CC-2 X 1.5-316	3.00
	2.5" x 1.5"	R31CC-2.5 X 1.5	R31CC-2.5 X 1.5-316	5.00
	2.5" x 2"	R31CC-2.5 X 2	R31CC-2.5 X 2-316	3.00
	3" x 1"	R31CC-3 X 1	R31CC-3 X 1-316	9.00
	3" x 1.5"	R31CC-3 X 1.5	R31CC-3 X 1.5-316	7.00
	3" x 2"	R31CC-3 X 2	R31CC-3 X 2-316	5.00
	3" x 2.5"	R31CC-3 X 2.5	R31CC-3 X 2.5-316	3.00
	4" x 1.5"	R31CC-4 X 1.5	R31CC-4 X 1.5-316	11.13
	4" x 2"	R31CC-4 X 2	R31CC-4 X 2-316	9.13
	4" x 2.5"	R31CC-4 X 2.5	R31CC-4 X 2.5-316	7.13
	4" x 3"	R31CC-4 X 3	R31CC-4 X 3-316	5.13

Sanitary REDUCERS**R31CC****Tri Clamp Eccentric Reducers**

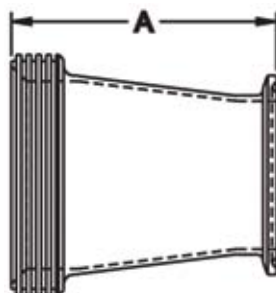
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)
R32CC	3/4" x 1/2"	N/A	R32CC-3/4 X 1/2-316	2.00
	1" x 1/2"	N/A	R32CC-1 X 1/2-316	3.00
	1" x 3/4"	N/A	R32CC-1 X 3/4-316	2.00
	1.5" x 1/2"	N/A	R32CC-1.5 X 1/2-316	5.00
	1.5" x 3/4"	N/A	R32CC-1.5 X 3/4-316	4.00
	1.5" x 1"	R32CC-1.5 X 1	R32CC-1.5 X 1-316	3.00
	2" x 1/2"	N/A	R32CC-2 X 1/2-316	7.00
	2" x 3/4"	N/A	R32CC-2 X 3/4-316	6.00
	2" x 1"	R32CC-2 X 1	R32CC-2 X 1-316	5.00
	2" x 1.5"	R32CC-2 X 1.5	R32CC-2 X 1.5-316	3.00
	2.5" x 1.5"	R32CC-2.5 X 1.5	R32CC-2.5 X 1.5-316	5.00
	2.5" x 2"	R32CC-2.5 X 2	R32CC-2.5 X 2-316	3.00
	3" x 1"	R32CC-3 X 1	R32CC-3 X 1-316	9.00
	3" x 1.5"	R32CC-3 X 1.5	R32CC-3 X 1.5-316	7.00
	3" x 2"	R32CC-3 X 2	R32CC-3 X 2-316	5.00
	3" x 2.5"	R32CC-3 X 2.5	R32CC-3 X 2.5-316	3.00
	4" x 1.5"	R32CC-4 X 1.5	R32CC-4 X 1.5-316	11.13
	4" x 2"	R32CC-4 X 2	R32CC-4 X 2-316	9.13
	4" x 2.5"	R32CC-4 X 2.5	R32CC-4 X 2.5-316	7.13

**R32CC**

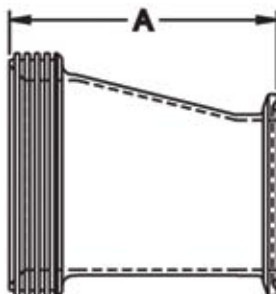
14-31TC



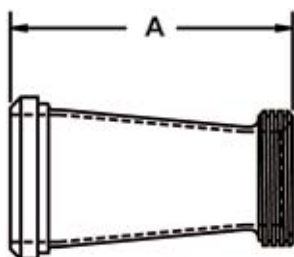
R31TC



R32TC



31-15F

**BEVEL SEAT X TRI CLAMP REDUCERS****Plain Bevel Seat x Clamp Concentric Reducers**

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
14-31TC	1.5" x 1"	14-31TC-1.5 X 1	3.22
	2" x 1.5"	14-31TC-2 X 1.5	3.25
	2.5" x 1.5"	14-31TC-2.5 X 1.5	5.38
	2.5" x 2"	14-31TC-2.5 X 2	3.38
	3" x 1.5"	14-31TC-3 X 1.5	7.41
	3" x 2"	14-31TC-3 X 2	5.41
	3" x 2.5"	14-31TC-3 X 2.5	3.41

Threaded Bevel Seat x Clamp Concentric Reducers

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
R31TC	1.5" x 1"	R31TC-1.5 X 1	3.219
	2" x 1"	R31TC-2 X 1	5.25
	2" x 1.5"	R31TC-2 X 1.5	3.25
	2.5" x 1.5"	R31TC-2.5 X 1.5	5.344
	2.5" x 2"	R31TC-2.5 X 2	3.344
	3" x 2"	R31TC-3 X 2	5.438
	3" x 2.5"	R31TC-3 X 2.5	3.438
	4" x 2.5"	R31TC-4 X 2.5	7.719
	4" x 3"	R31TC-4 X 3	5.719

Threaded Bevel Seat x Clamp Eccentric Reducers

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
R32TC	1.5" x 1"	R32TC-1.5 X 1	3.219
	2" x 1"	R32TC-2 X 1	5.25
	2" x 1.5"	R32TC-2 X 1.5	3.25
	2.5" x 1.5"	R32TC-2.5 X 1.5	5.344
	2.5" x 2"	R32TC-2.5 X 2	3.344
	3" x 2"	R32TC-3 X 2	5.438
	3" x 2.5"	R32TC-3 X 2.5	3.438
	4" x 2.5"	R32TC-4 X 2.5	7.719
	4" x 3"	R32TC-4 X 3	5.719

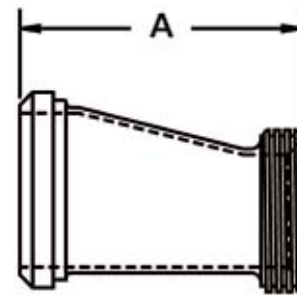
BEVEL SEAT REDUCERS**Plain Bevel Seat x Threaded Bevel Seat Concentric Reducers**

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
31-15F	1.5" x 1"	31-15F-1.5 X 1	3.44
	2" x 1.5"	31-15F-2 X 1.5	3.47
	2.5" x 2"	31-15F-2.5 X 2	3.63
	3" x 2"	31-15F-3 X 2	5.66
	3" x 2.5"	31-15F-3 X 2.5	3.78
	4" x 3"	31-15F-4 X 3	5.94

Plain Bevel Seat x Threaded Bevel Seat Eccentric Reducers

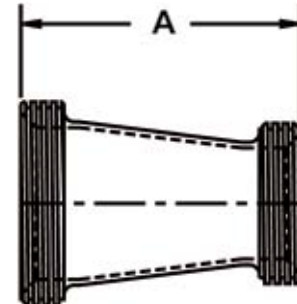
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
32-15F	1.5" x 1"	32-15F-1.5 X 1	3.406
	2" x 1.5"	32-15F-2 X 1.5	3.438
	2.5" x 2"	32-15F-2.5 X 2	3.594
	3" x 2"	32-15F-3 X 2	5.656
	3" x 2.5"	32-15F-3 X 2.5	3.75
	4" x 3"	32-15F-4 X 3	5.938

32-15F

**Threaded Bevel Seat Concentric Reducers**

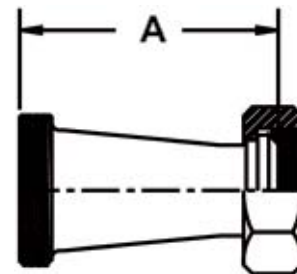
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
31TT	1.5" x 1"	31TT-1.5 X 1	3.44
	2" x 1.5"	31TT-2 X 1.5	3.47
	2.5" x 2"	31TT-2.5 X 2	3.63
	3" x 2"	31TT-3 X 2	5.66
	3" x 2.5"	31TT-3 X 2.5	3.78
	4" x 3"	31TT-4 X 3	5.94

31TT

**Threaded Bevel Seat x Plain Bevel Seat with Hex Nut Concentric Reducers**

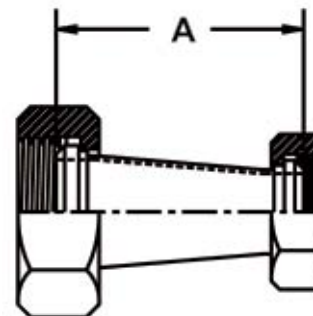
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
31TP	1.5" x 1"	31TP-1.5 X 1	3.44
	2" x 1.5"	31TP-2 X 1.5	3.47
	2.5" x 2"	31TP-2.5 X 2	3.63
	3" x 2"	31TP-3 X 2	5.66
	3" x 2.5"	31TP-3 X 2.5	3.78
	4" x 3"	31TP-4 X 3	5.94

31TP

**Plain Bevel Seat and Nut Each End Concentric Reducers**

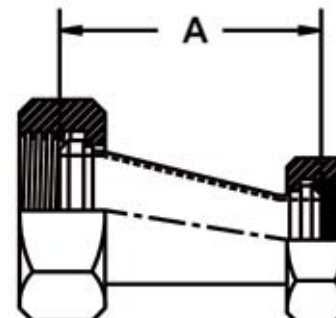
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
31-14F	1.5" x 1"	31-14F-1.5 X 1	3.44
	2" x 1"	31-14F-2 X 1	5.406
	2" x 1.5"	31-14F-2 X 1.5	3.47
	2.5" x 2"	31-14F-2.5 X 2	3.63
	3" x 2"	31-14F-3 X 2	5.66
	3" x 2.5"	31-14F-3 X 2.5	3.78
	4" x 3"	31-14F-4 X 3	5.94

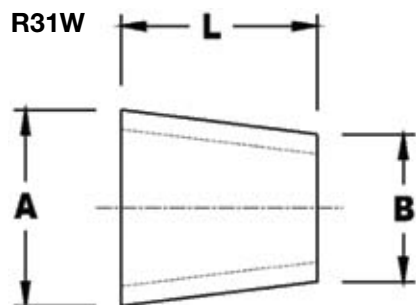
31-14F

**Plain Bevel Seat and Nut Each End Concentric Reducers**

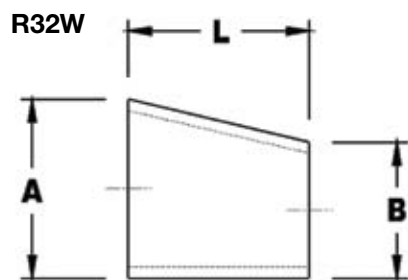
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
32-14F	1.5" x 1"	32-14F-1.5 X 1	3.44
	2" x 1"	32-14F-2 X 1	5.406
	2" x 1.5"	32-14F-2 X 1.5	3.47
	2.5" x 2"	32-14F-2.5 X 2	3.63
	3" x 2"	32-14F-3 X 2	5.66
	3" x 2.5"	32-14F-3 X 2.5	3.78
	4" x 3"	32-14F-4 X 3	5.94

32-14F



**WELD REDUCERS****Weld Concentric Reducers**

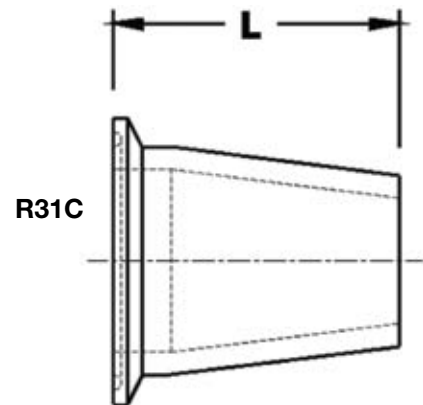
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	L (in.)
R31W	3/4" x 1/2"	N/A	R31W-3/4 X 1/2-316	0.750	0.500	1.00
	1" x 1/2"	N/A	R31W-1 X 1/2-316	1.000	0.500	2.00
	1" x 3/4"	N/A	R31W-1 X 3/4-316	1.000	0.750	1.00
	1.5" x 1/2"	N/A	R31W-1.5 X 1/2-316	1.500	0.500	4.00
	1.5" x 3/4"	N/A	R31W-1.5 X 3/4-316	1.500	0.750	3.00
	1.5" x 1"	R31W-1.5 X 1	R31W-1.5 X 1-316	1.500	1.000	2.00
	2" x 1/2"	N/A	R31W-2 X 1/2-316	2.000	0.500	6.00
	2" x 3/4"	N/A	R31W-2 X 3/4-316	2.000	1.000	5.00
	2" x 1"	R31W-2 X 1	R31W-2 X 1-316	2.000	1.500	4.00
	2" x 1.5"	R31W-2 X 1.5	R31W-2 X 1.5-316	2.500	1.000	2.00
	2.5" x 1"	R31W-2.5 X 1	R31W-2.5 X 1-316	2.500	1.500	6.00
	2.5" x 1.5"	R31W-2.5 X 1.5	R31W-2.5 X 1.5-316	2.500	2.000	4.00
	2.5" x 2"	R31W-2.5 X 2	R31W-2.5 X 2-316	3.000	1.000	2.00
	3" x 1"	R31W-3 X 1	R31W-3 X 1-316	3.000	1.500	8.00
	3" x 1.5"	R31W-3 X 1.5	R31W-3 X 1.5-316	3.000	2.000	6.00
	3" x 2"	R31W-3 X 2	R31W-3 X 2-316	3.000	2.500	4.00
	3" x 2.5"	R31W-3 X 2.5	R31W-3 X 2.5-316	4.000	1.000	2.00
	4" x 1.5"	R31W-4 X 1.5	R31W-4 X 1.5-316	4.000	1.500	10.00
	4" x 2"	R31W-4 X 2	R31W-4 X 2-316	4.000	2.000	8.00
	4" x 2.5"	R31W-4 X 2.5	R31W-4 X 2.5-316	4.000	2.500	6.00
	4" x 3"	R31W-4 X 3	R31W-4 X 3-316	4.000	3.000	4.00

**Weld Eccentric Reducers**

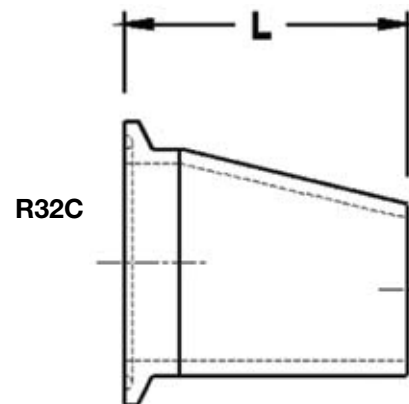
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	L (in.)
R32W	3/4" x 1/2"	N/A	R32W-3/4 X 1/2-316	0.750	0.500	1.00
	1" x 1/2"	N/A	R32W-1 X 1/2-316	1.000	0.500	2.00
	1" x 3/4"	N/A	R32W-1 X 3/4-316	1.000	0.750	1.00
	1.5" x 1/2"	N/A	R32W-1.5 X 1/2-316	1.500	0.500	4.00
	1.5" x 3/4"	N/A	R32W-1.5 X 3/4-316	1.500	0.750	3.00
	1.5" x 1"	R32W-1.5 X 1	R32W-1.5 X 1-316	1.500	1.000	2.000
	2" x 1"	R32W-2 X 1	R32W-2 X 1-316	2.000	1.000	4.000
	2" x 1.5"	R32W-2 X 1.5	R32W-2 X 1.5-316	2.000	1.500	2.000
	2.5" x 1.5"	R32W-2.5 X 1.5	R32W-2.5 X 1.5-316	2.500	1.500	4.000
	2.5" x 2"	R32W-2.5 X 2	R32W-2.5 X 2-316	2.500	2.000	2.000
	3" x 1"	R32W-3 X 1	R32W-3 X 1-316	3.000	1.000	8.000
	3" x 1.5"	R32W-3 X 1.5	R32W-3 X 1.5-316	3.000	1.500	6.000
	3" x 2"	R32W-3 X 2	R32W-3 X 2-316	3.000	2.000	4.000
	3" x 2.5"	R32W-3 X 2.5	R32W-3 X 2.5-316	3.000	2.500	2.000
	4" x 1.5"	R32W-4 X 1.5	R32W-4 X 1.5-316	4.000	1.000	12.000
	4" x 2"	R32W-4 X 2	R32W-4 X 2-316	4.000	1.500	10.000
	4" x 2.5"	R32W-4 X 2.5	R32W-4 X 2.5-316	4.000	2.000	8.000
	4" x 3"	R32W-4 X 3	R32W-4 X 3-316	4.000	2.500	6.000
	6" x 4"	R32W-6 X 4	R32W-6 X 4-316	4.000	3.000	4.000

TRI CLAMP X WELD REDUCERS**Tri clamp x Weld Concentric Reducer**

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	L (in.)
R31C	3/4" x 1/2"	N/A	R31C-3/4 X 1/2-316	1.50
	1" x 1/2"	N/A	R31C-1 X 1/2-316	2.50
	1" x 3/4"	N/A	R31C-1 X 3/4-316	1.50
	1.5" x 1/2"	N/A	R31C-1.5 X 1/2-316	4.50
	1.5" x 3/4"	N/A	R31C-1.5 X 3/4-316	3.50
	1.5" x 1"	R31C-1.5 X 1	R31C-1.5 X 1-316	2.50
	2" x 1"	R31C-2 X 1	R31C-2 X 1-316	4.50
	2" x 1.5"	R31C-2 X 1.5	R31C-2 X 1.5-316	2.50
	2.5" x 1"	N/A	R31C-2.5 X 1-316	7.00
	2.5" x 1.5"	R31C-2.5 X 1.5	R31C-2.5 X 1.5-316	4.50
	2.5" x 2"	R31C-2.5 X 2	R31C-2.5 X 2-316	2.50
	3" x 1.5"	R31C-3 X 1.5	R31C-3 X 1.5-316	6.50
	3" x 2"	R31C-3 X 2	R31C-3 X 2-316	4.50
	3" x 2-.5"	R31C-3 X 2.5	R31C-3 X 2.5-316	2.50
	4" x 2"	R31C-4 X 2	R31C-4 X 2-316	8.66
	4" x 2.5"	R31C-4 X 2.5	R31C-4 X 2.5-316	6.66
	4" x 3"	R31C-4 X 3	R31C-4 X 3-316	4.66

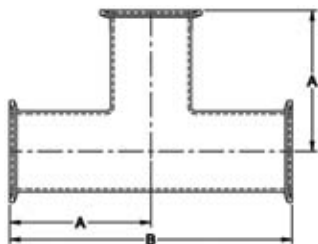
**Tri clamp x Weld Eccentric Reducer**

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	L (in.)
R32C	1.5" x 1"	R32C-1.5 X 1	R32C-1.5 X 1-316	2.50
	2" x 1"	R32C-2 X 1	R32C-2 X 1-316	4.50
	2" x 1.5"	R32C-2 X 1.5	R32C-2 X 1.5-316	2.50
	2.5" x 1.5"	R32C-2.5 X 1.5	R32C-2.5 X 1.5-316	4.50
	2.5" x 2"	R32C-2.5 X 2	R32C-2.5 X 2-316	2.50
	3" x 1.5"	R32C-3 X 1.5	R32C-3 X 1.5-316	6.50
	3" x 2"	R32C-3 X 2	R32C-3 X 2-316	4.50
	3" x 2-.5"	R32C-3 X 2.5	R32C-3 X 2.5-316	2.50
	4" x 1.5"	R32C-4 X 1.5	R32C-4 X 1.5-316	10.625
	4" x 2"	R32C-4 X 2	R32C-4 X 2-316	8.625
	4" x 2.5"	R32C-4 X 2.5	R32C-4 X 2.5-316	6.625
	4" x 3"	R32C-4 X 3	R32C-4 X 3-316	4.625



Sanitary TEES

R7



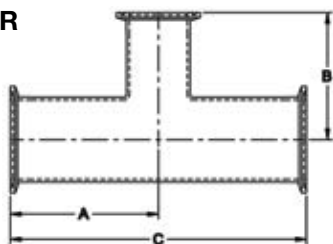
TRI CLAMP TEES

Tri Clamp Tees					
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R7	1/2"	NA	R7-1/2-316	2.38	4.76
	3/4"	NA	R7-3/4-316	2.50	5.00
	1"	R7-1	R7-1-316	2.38	4.75
	1.5"	R7-1.5	R7-1.5-316	2.75	5.50
	2"	R7-2	R7-2-316	3.50	7.00
	2.5"	R7-2.5	R7-2.5-316	3.50	7.00
	3"	R7-3	R7-3-316	3.75	7.50
	4"	R7-4	R7-4-316	4.50	9.00
	6"	R7-6	R7-6-316	6.50	13.00

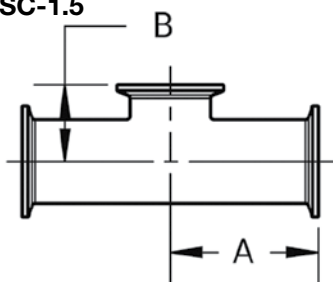
Tri Clamp Reducing Tees

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R7R	3/4" x 1/2"	N/A	R7R-3/4 X 1/2-316	2.50	2.50
	1" x 1/2"	N/A	R7R-1 X 1/2-316	2.63	2.63
	1" x 3/4"	N/A	R7R-1 X 3/4-316	2.63	2.63
	1.5" x 1/2"	N/A	R7R-1.5 X 1/2-316	2.88	2.88
	1.5" x 3/4"	N/A	R7R-1.5 X 3/4-316	2.88	2.88
	1.5" x 1"	R7R-1.5 X 1	R7R-1.5 X 1-316	2.16	1.88
	2" x 1/2"	N/A	R7R-2 X 1/2-316	3.38	3.13
	2" x 3/4"	N/A	R7R-2 X 3/4-316	3.38	3.13
	2" x 1"	R7R-2 X 1	R7R-2 X 1-316	2.56	2.13
	2" x 1.5"	R7R-2 X 1.5	R7R-2 X 1.5-316	2.56	2.41
	2.5" x 1.5"	R7R-2.5 X 1.5	R7R-2.5 X 1.5-316	2.84	2.66
	2.5" x 2"	R7R-2.5 X 2	R7R-2.5 X 2-316	2.84	2.81
	3" x 1.5"	R7R-3 X 1.5	R7R-3 X 1.5-316	3.09	2.91
	3" x 2"	R7R-3 X 2	R7R-3 X 2-316	3.09	3.06
	3" x 2.5"	R7R-3 X 2.5	R7R-3 X 2.5-316	3.09	3.09
	4" x 1.5"	R7R-4 X 1.5	R7R-4 X 1.5-316	4.06	3.41
	4" x 2"	R7R-4 X 2	R7R-4 X 2-316	4.06	3.56
	4" x 2.5"	R7R-4 X 2.5	R7R-4 X 2.5-316	4.06	3.59
	4" x 3"	R7R-4 X 3	R7R-4 X 3-316	4.06	3.59

R7R



R7SC-1.5

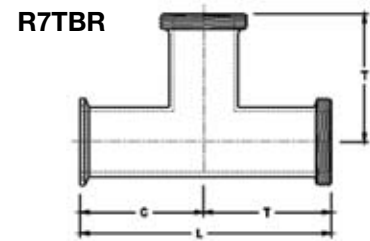


Tri Clamp Short Outlet Tees

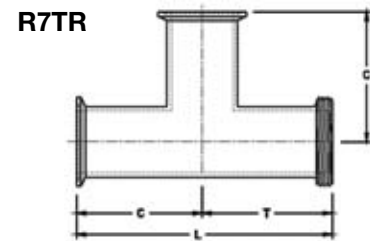
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R7SC-1.5	1"	R7SC-1	R7SC-1-316	2.38	1.13
	1.5"	R7SC-1.5	R7SC-1.5-316	2.75	1.38
	2"	R7SC-2	R7SC-2-316	3.50	1.63
	2.5"	R7SC-2.5	R7SC-2.5-316	3.50	1.88
	3"	R7SC-3	R7SC-3-316	3.75	2.13
	4"	R7SC-4	R7SC-4-316	4.50	2.75

TRI CLAMP X BEVEL SEAT TEES**Tri Clamp Run X Bevel Seat Threaded Branch & Outlet Tees**

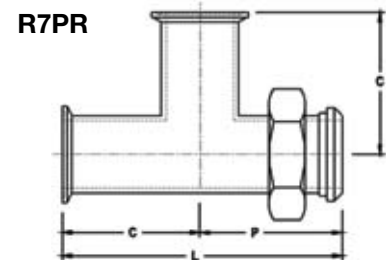
PRODUCT CODE	SIZE (in.)	304 S.S.	C (in.)	T (in.)	L (in.)
R7TBR	1.5"	R7TBR-1.5	2.75	2.969	5.719
	2"	R7TBR-2	3.50	3.75	7.25

**Tri Clamp Run & Branch X Bevel Seat Threaded Branch Outlet Tees**

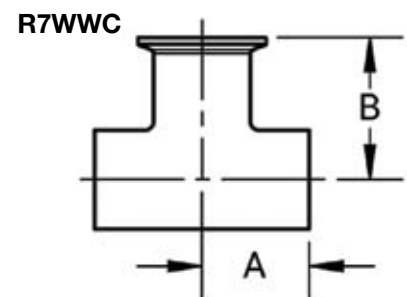
PRODUCT CODE	SIZE (in.)	304 S.S.	C (in.)	T (in.)	L (in.)
R7TR	1.5"	R7TR-1.5	2.75	2.969	5.719
	2"	R7TR-2	3.50	3.75	7.25

**Tri Clamp Run & Branch X Plain Bevel Seat with Nut Run Tees**

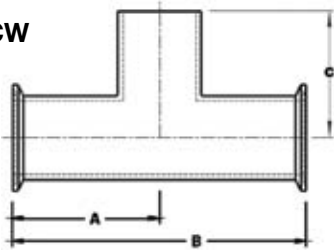
PRODUCT CODE	SIZE (in.)	304 S.S.	C (in.)	P (in.)	L (in.)
R7PR	1.5"	R7PR-1.5	2.75	2.969	5.719
	2"	R7PR-2	3.50	3.719	7.219

**TRI CLAMP X WELD TEES****Tri Clamp Branch X Weld RUN**

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R7WWC	1/2"	NA	R7WWC-1/2-316	1.88	2.38
	3/4"	NA	R7WWC-3/4-316	2.00	2.50
	1"	R7WWC-1	R7WWC-1-316	1.13	1.63
	1.5"	R7WWC-1.5	R7WWC-1.5-316	1.66	2.16
	2"	R7WWC-2	R7WWC-2-316	2.06	2.56
	2.5"	R7WWC-2.5	R7WWC-2.5-316	2.34	2.84
	3"	R7WWC-3	R7WWC-3-316	2.59	3.09
	4"	R7WWC-4	R7WWC-4-316	3.44	4.06



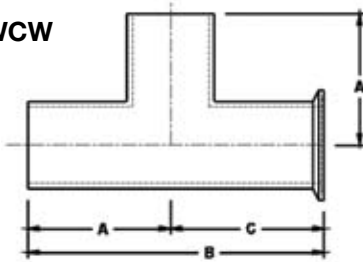
R7CCW



Tri Clamp RUN X Weld Branch

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)
R7CCW	1"	R7CCW-1	2.375	4.75	1.875
	1.5"	R7CCW-1.5	2.75	5.50	2.250
	2"	R7CCW-2	3.50	7.00	3.00
	2.5"	R7CCW-2.5	3.50	7.00	3.00
	3"	R7CCW-3	3.75	7.50	3.25
	4"	R7CCW-4	4.50	9.00	3.875

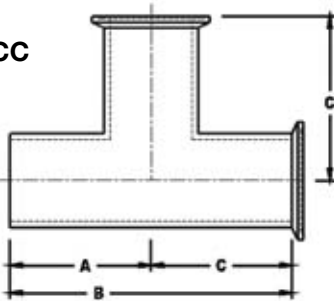
R7WCW



Tri Clamp 1 RUN X Weld Branch and RUN

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)
R7WCW	1"	R7WCW-1	1.875	4.25	2.375
	1.5"	R7WCW-1.5	2.25	5.00	2.75
	2"	R7WCW-2	3.00	6.50	3.50
	2.5"	R7WCW-2.5	3.00	6.50	3.50
	3"	R7WCW-3	3.25	7.00	3.75
	4"	R7WCW-4	3.875	8.375	4.50

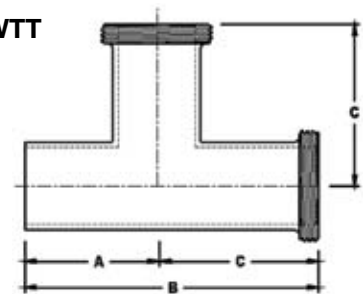
R7WCC



Tri Clamp 1 RUN and Branch X Weld Run

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)
R7WCC	1"	R7WCC-1	1.875	4.25	2.375
	1.5"	R7WCC-1.5	2.25	5.00	2.75
	2"	R7WCC-2	3.00	6.50	3.50
	2.5"	R7WCC-2.5	3.00	6.50	3.50
	3"	R7WCC-3	3.25	7.00	3.75
	4"	R7WCC-4	3.875	8.375	4.50

R7WTT

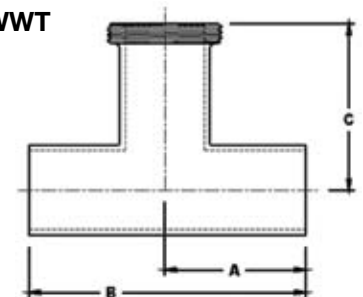


BEVEL SEAT X WELD TEES

One RUN And Branch Bevel Seat X 1 End Weld

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)
R7WTT	1"	R7WTT-1	1.875	4.438	2.563
	1.5"	R7WTT-1.5	2.25	5.219	2.969
	2"	R7WTT-2	3.00	6.75	3.75
	2.5"	R7WTT-2.5	3.00	6.844	3.844
	3"	R7WTT-3	3.25	7.438	4.188
	4"	R7WTT-4	3.875	8.969	5.094

R7WWT

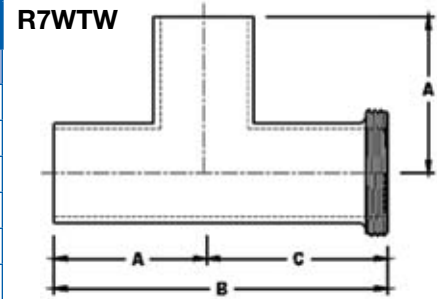


Both RUN Weld AND Bevel Seat Threaded Branch

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)
R7WWT	1"	R7WWT-1	1.875	3.75	2.563
	1.5"	R7WWT-1.5	2.25	4.50	2.969
	2"	R7WWT-2	3.00	6.00	3.75
	2.5"	R7WWT-2.5	3.00	6.00	3.844
	3"	R7WWT-3	3.25	6.50	4.188
	4"	R7WWT-4	3.875	7.75	5.094

1 RUN AND Branch Weld X Threaded Bevel Seat

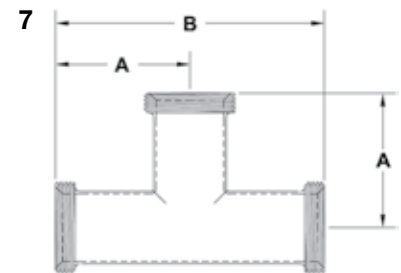
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)
R7WTW	1"	R7WTW-1	1.875	4.438	2.563
	1.5"	R7WTW-1.5	2.25	5.219	2.969
	2"	R7WTW-2	3.00	6.75	3.75
	2.5"	R7WTW-2.5	3.00	6.844	3.844
	3"	R7WTW-3	3.25	7.438	4.188
	4"	R7WTW-4	3.875	8.969	5.094



BEVEL SEAT TEES

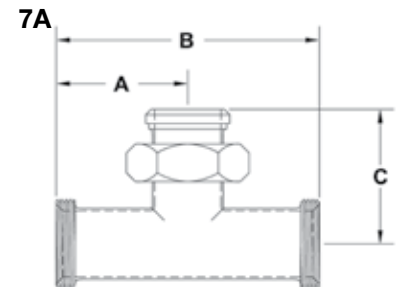
All Ends Male Bevel Seat Thread

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
7	1"	7-1	2.563	5.125
	1.5"	7-1.5	2.969	5.938
	2"	7-2	3.750	7.500
	2.5"	7-2.5	3.844	7.688
	3"	7-3	4.188	8.375
	4"	7-4	5.094	10.188



Both Runs Threaded Male Bevel Seat and Outlet Plain Bevel Seat with Nut

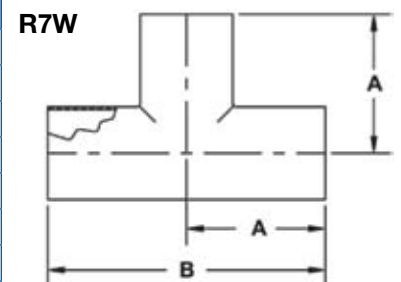
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)
7A	1"	7A-1	2.563	5.125	2.563
	1.5"	7A-1.5	2.969	5.938	2.969
	2"	7A-2	3.750	7.500	3.719
	2.5"	7A-2.5	3.844	7.688	3.844
	3"	7A-3	4.188	8.375	4.156
	4"	7A-4	5.094	10.188	4.875

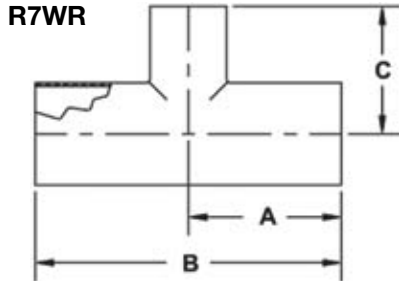


WELD TEES

Long Weld Ends Tees

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R7W	1/2"	N/A	R7W-1/2-316	1.88	3.71
	3/4"	N/A	R7W-3/4-316	2.00	4.00
	1"	R7W-1	R7W-1-316	1.88	3.75
	1.5"	R7W-1.5	R7W-1.5-316	2.25	4.50
	2"	R7W-2	R7W-2-316	3.00	6.00
	2.5"	R7W-2.5	R7W-2.5-316	3.00	6.00
	3"	R7W-3	R7W-3-316	3.25	6.50
	4"	R7W-4	R7W-4-316	3.88	7.75
	6"	R7W-6	R7W-6-316	5.63	11.20





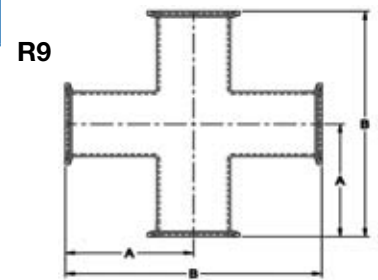
Weld Ends Reducing Tees						
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)	C (in.)
R7WR	3/4" x 1/2"	NA	R7WR-3/4 X 1/2-316	2.00	4.00	2.00
	1" X 1/2"	NA	R7WR-1 X 1/2-316	2.13	4.26	2.13
	1" X 3/4"	N/A	R7WR-1 X 3/4-316	2.13	4.26	2.13
	1.5" x 1/2"	N/A	R7WR-1.5 X 1/2-316	2.38	4.76	2.38
	1.5" x 3/4"	N/A	R7WR-1.5 X 3/4-316	2.38	4.76	2.38
	1.5" x 1"	R7WR-1.5 X 1	R7WR-1.5 X 1-316	1.66	3.04	1.38
	2" x 1"	R7WR-2 X 1	R7WR-2 X 1-316	2.06	3.69	1.63
	2" X 1.5"	R7WR-2 X 1.5	R7WR-2 X 1.5-316	2.06	3.97	1.91
	2.5" x 1.5"	R7WR-2.5 X 1.5	R7WR-2.5 X 1.5-316	2.34	4.50	2.16
	2.5"x 2"	R7WR-2.5 X 2	R7WR-2.5 X 2-316	2.34	4.65	2.31
	3" X 1.5"	R7WR-3 X 1.5	R7WR-3 X 1.5-316	2.59	5.00	2.41
	3" X 2"	R7WR-3 X 2.5	R7WR-3 X 2-316	2.59	5.15	2.56
	3" X 2.5"	R7WR-3 X 2.5	R7WR-3 X 2.5-316	2.59	5.18	2.59
	4" X 1.5"	R7WR-4 X 1.5	R7WR-4 X 1.5-316	3.44	6.35	2.91
	4" X 2"	R7WR-4 X 2	R7WR-4 X 2-316	3.44	6.50	3.06
	4" X 2.5"	R7WR-4 X 2.5	R7WR-4 X 2.5-316	3.44	6.53	3.09
	4" X 3"	R7WR-4 X 3	R7WR-4 X 3-316	3.44	6.53	3.09

Sanitary 4-WAY CROSSES

TRI CLAMP CROSSES

4 Way Tri Clamp Crosses

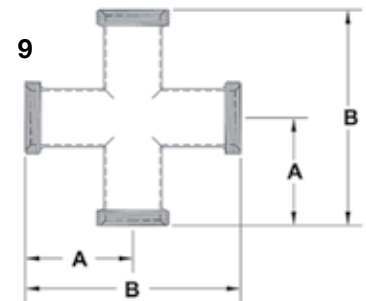
PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R9	1"	R9-1	R9-1-316	2.38	4.75
	1.5"	R9-1.5	R9-1.5-316	2.75	5.5
	2"	R9-2	R9-2-316	3.50	7.00
	2.5"	R9-2.5	R9-2.5-316	3.50	7.00
	3"	R9-3	R9-3-316	3.75	7.50
	4"	R9-4	R9-4-316	4.50	9.00



BEVEL SEAT CROSSES

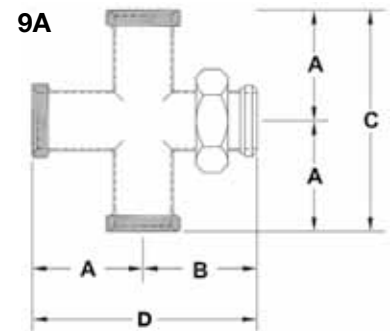
4 Way Male Bevel Seat Threaded Crosses

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
9	1"	9-1	2.563	5.125
	1.5"	9-1.5	2.969	5.938
	2"	9-2	3.750	7.500
	2.5"	9-2.5	3.844	7.688
	3"	9-3	4.188	8.375
	4"	9-4	5.094	10.188



4 Way Bevel Seat Cross 3 ports Male Threaded, 1 Plain Bevel Seat With Nut

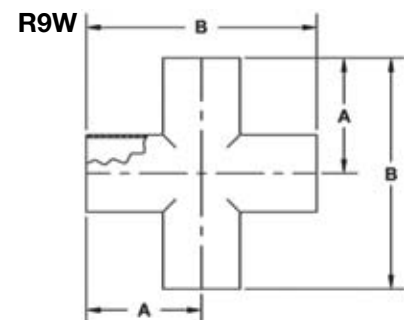
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)	C (in.)	D (in.)
9A	1"	9A-1	2.563	2.563	5.125	5.125
	1.5"	9A-1.5	2.969	2.969	5.938	5.938
	2"	9A-2	3.750	3.719	7.500	7.469
	2.5"	9A-2.5	3.844	3.844	7.688	7.688
	3"	9A-3	4.188	4.156	8.375	8.344
	4"	9A-4	5.094	4.875	10.188	9.969



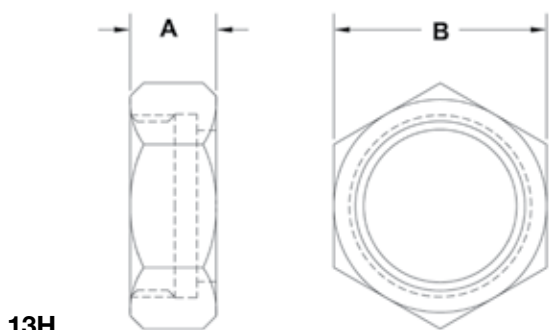
WELD CROSSES

4 Way Weld Crosses

PRODUCT CODE	SIZE (in.)	304 S.S.	316 S.S.	A (in.)	B (in.)
R9W	1"	R9W-1	R9W-1-316	1.13	2.25
	1.5"	R9W-1.5	R9W-1.5-316	1.66	3.31
	2"	R9W-2	R9W-2-316	2.06	4.13
	2.5"	R9W-2.5	R9W-2.5-316	2.34	4.69
	3"	R9W-3	R9W-3-316	2.59	5.19
	4"	R9W-4	R9W-4-316	3.44	6.88



Sanitary NUTS



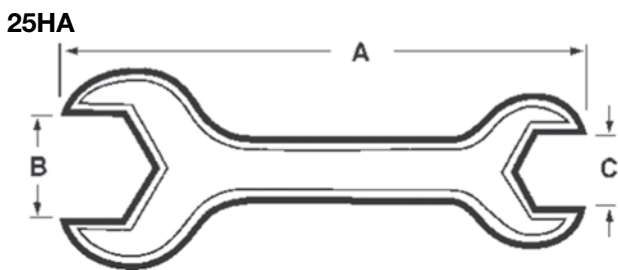
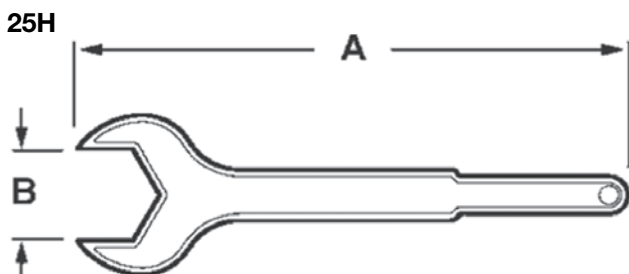
13H

BEVEL SEAT NUTS

Union Hex Nuts

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
13H	1"	13H-1	0.91	1.81
	1.5"	13H-1.5	0.97	2.41
	2"	13H-2	1.06	3.00
	2.5"	13H-2.5	1.19	3.59
	3"	13H-3	1.28	4.19
	4"	13H-4	1.50	5.44

Sanitary WRENCHES



BEVEL SEAT WRENCHES

Single Side Hex Wrenches

PRODUCT CODE	SIZE (in.)	ALUMINUM	A (in.)	B (in.)
25H	1"	25H-1	10.50	1.81
	1.5"	25H-1.5	12.00	2.41
	2"	25H-2	14.00	3.00
	2.5"	25H-2.5	16.25	3.59
	3"	25H-3	18.50	4.19
	4"	25H-4	19.50	5.44

Two Sided Hex Wrenches

PRODUCT CODE	SIZE (in.)	ALUMINUM	A (in)	B (in)	C (in)
25HA	1.5"x 1"	25HA-1.5" X 1	12.00	2.41	1.81
	2"x 1.5"	25HA-2" X 1.5"	14.00	3.00	2.41
	2.5"x 2"	25HA-2.5" X 2	16.50	3.59	3.00
	3"x 2"	25HA-3 X 2	18.00	4.19	3.00
	3"x 2.5"	25HA- 3 X 2.5	18.00	4.19	3.59

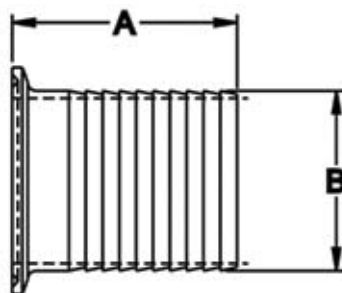
Sanitary HOSE ADAPTERS

TRI CLAMP HOSE ADAPTERS

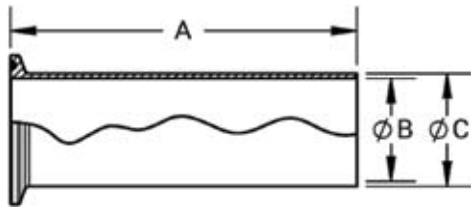
Tri Clamp Rubber Hose Adapters

PRODUCT CODE	TRI CLAMP SIZE (in.)	HOSE ID	304 S.S.	316 S.S.	A (in.)	B (in.)
R14AHR	1/2"	1/4"	N/A	R14AHR- 1/2 X 1/4-316	1.50	0.29
	1/2"	1/2"	N/A	R14AHR- 1/2 X 1/2-316	1.50	0.54
	1/2"	3/4"	N/A	R14AHR- 1/2 X 3/4-316	1.50	0.79
R14AHR	3/4"	1/4"	N/A	R14AHR- 3/4 X 1/4-316	1.50	0.29
	3/4"	3/8"	N/A	R14AHR- 3/4 X 3/8-316	1.50	0.42
	3/4"	1/2"	N/A	R14AHR- 3/4 X 1/2-316	1.50	0.54
	3/4"	3/4"	N/A	R14AHR- 3/4 X 3/4-316	1.50	0.79
	3/4"	5/8"	N/A	R14AHR- 3/4 X 5/8-316	1.50	0.67
R14AHR	1"	1/4"	N/A	R14AHR- 1 X 1/4-316	1.69	0.29
	1"	3/8"	R14AHR- 1 X 3/8	R14AHR- 1 X 3/8-316	1.50	0.42
	1"	1/2"	R14AHR- 1 X 1/2	R14AHR- 1 X 1/2-316	1.50	0.54
	1"	3/4"	R14AHR- 1 X 3/4	R14AHR- 1 X 3/4-316	1.69	0.79
	1"	1"	R14AHR- 1 X 1	R14AHR- 1 X 1-316	1.69	1.04
R14AHR	1.5"	1/4"	N/A	R14AHR- 1.5 X 1/4-316	1.50	0.29
	1.5"	3/8"	R14AHR- 1.5 X 3/8	R14AHR- 1.5 X 3/8-316	1.50	0.42
	1.5"	1/2"	R14AHR- 1.5 X 1/2	R14AHR- 1.5 X 1/2-316	1.50	0.54
	1.5"	5/8"	R14AHR- 1.5 X 5/8	R14AHR- 1.5 X 5/8-316	1.50	0.79
	1.5"	3/4"	R14AHR- 1.5 X 3/4	R14AHR- 1.5 X 3/4-316	1.50	0.67
	1.5"	1"	N/A	R14AHR- 1.5 X 1-316	1.69	1.29
	1.5"	1.25"	R14AHR- 1.5 X 1.25	R14AHR- 1.5 X 1.25-316	1.69	1.04
	1.5"	1.5"	R14AHR- 1.5 X 1.5	R14AHR- 1.5 X 1.5-316	1.69	1.54
R14AHR	2"	1/2"	R14AHR- 2 X 1/2	R14AHR- 2 X 1/2-316	2.31	0.54
	2"	5/8"	R14AHR- 2 X 5/8	R14AHR- 2 X 5/8-316	2.31	0.67
	2"	3/4"	R14AHR- 2 X 3/4	R14AHR- 2 X 3/4-316	2.31	0.79
	2"	1"	R14AHR- 2 X 1	N/A	2.31	1.04
	2"	1.5"	R14AHR- 2 X 1.5	R14AHR- 2 X 1.5-316	2.31	1.54
	2"	2"	R14AHR- 2 X 2	R14AHR- 2 X 2-316	2.31	2.04
R14AHR	2.5"	1"	R14AHR- 2 X 1	N/A	2.34	1.04
	2.5"	2.5"	R14AHR- 2.5 X 2.5	R14AHR- 2.5 X 2.5-316	2.34	2.54
R14AHR	3"	3"	R14AHR- 3 X 3	R14AHR- 3 X 3-316	3.09	3.04
R14AHR	4"	3"	N/A	R14AHR- 4 X 3-316	3.41	3.04
	4"	4"	R14AHR- 4 X 4	R14AHR- 4 X 4-316	3.41	4.04

R14AHR



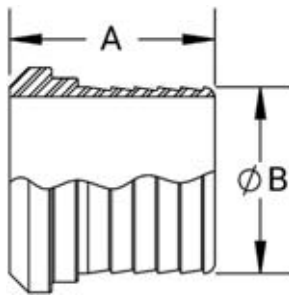
R14AHT



Tri Clamp Tygon Hose Adapters

PRODUCT CODE	TRI CLAMP SIZE (in.)	HOSE ID	304 S.S.	A (in.)	B (in.)	C (in.)
R14AHT	1/2"	1/2"	R14AHR- 1/2 X 1/2	4.00	0.37	0.50
	3/4"	3/4"	R14AHR- 3/4 X 3/4	4.00	0.62	0.75
	1"	1"	R14AHR- 1 X 1	4.50	0.87	1.00
	1.5"	1.5"	R14AHR- 1.5 X 1.5	4.50	1.37	1.50
	2"	2"	R14AHR- 2 X 2	4.50	1.87	2.00
	2.5"	2.5"	R14AHR- 2.5 X 2.5	4.50	2.37	2.50
	3"	3"	R14AHR- 3 X 3	4.50	2.87	3.00
	4"	4"	R14AHR- 4 X 4	4.63	3.83	4.00
	6"	6"	R14AHR- 6 X 6	6.00	5.88	6.00

14AHR

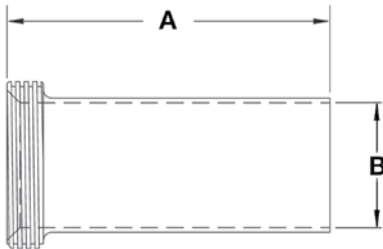


BEVEL SEAT HOSE ADAPTERS

Bevel Seat Plain Rubber Hose Adapters

PRODUCT CODE	BEVEL SEAT SIZE (in.)	HOSE ID	304 S.S.	A (in.)	B (in.)
14AHR	1"	1"	14AHR- 1 X 1	1.69	1.03
	1.5"	1.5"	14AHR- 1.5 X 1.5	1.69	1.53
	2"	2"	14AHR- 2 X 2	2.31	2.03
	2.5"	2.5"	14AHR- 2.5 X 2.5	2.67	2.53
	3"	3"	14AHR- 3 X 3	3.10	3.03
	4"	4"	14AHR- 4 X 4	4.00	4.06

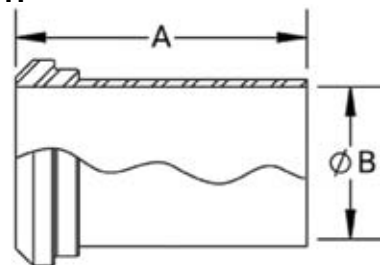
15AHT



Threaded Bevel Seat Tygon Hose Adapters

PRODUCT CODE	BEVEL SEAT SIZE (in.)	HOSE ID	304 S.S.	A (in.)	B (in.)
15AHT	1"	1"	15AHT- 1 X 1	4.50	0.87
	1.5"	1.5"	15AHT- 1.5 X 1.5	4.50	1.37
	2"	2"	15AHT- 2 X 2	4.50	1.87
	2.5"	2.5"	15AHT- 2.5 X 2.5	4.50	2.37
	3"	3"	15AHT- 3 X 3	4.50	2.87
	4"	4"	15AHT- 4 X 4	5.00	3.83

14AHT



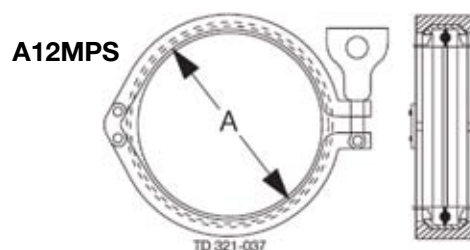
Plain Bevel Seat Tygon Hose Adapters

PRODUCT CODE	BEVEL SEAT SIZE (in.)	HOSE ID	304 S.S.	A (in.)	B (in.)
14AHT	1"	1"	14AHT- 1 X 1	4.69	0.87
	1.5"	1.5"	14AHT- 1.5 X 1.5	4.72	1.37
	2"	2"	14AHT- 2 X 2	4.72	1.87
	2.5"	2.5"	14AHT- 2.5 X 2.5	4.84	2.37
	3"	3"	14AHT- 3 X 3	4.91	2.87
	4"	4"	14AHT- 4 X 4	5.22	3.83

Sanitary SWIVEL JOINTS

SWIVEL JOINT CLAMP ASSEMBLY

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)
A12MPS	1.5"	A12MPS-1.5S	1.98
	2"	A12MPS-2S	2.52
	2.5"	A12MPS-2.5S	3.05
	3"	A12MPS-3S	3.58
	4"	A12MPS-4S	4.69

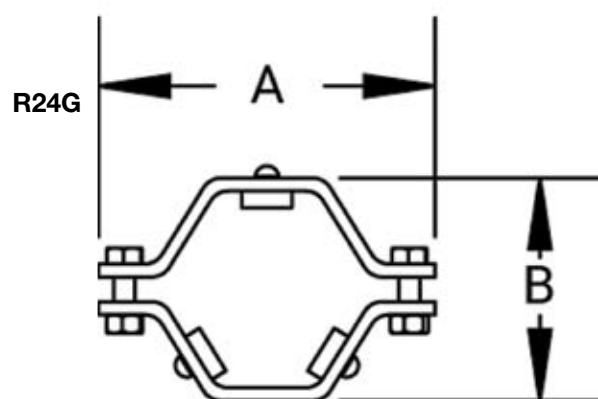


HANGERS

PIPE HANGERS

Hanger with Rubber Grommets

PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
R24G	1/2"	R24G-1/2	3.38	2.25
	3/4"	R24G-3/4	3.38	2.19
	1"	R24G-1	3.70	2.20
	1.5"	R24G-1.5	4.40	2.80
	2"	R24G-2	5.00	3.30
	2.5"	R24G-2.5	5.60	3.70
	3"	R24G-3	6.10	4.30
	4"	R24G-4	7.60	5.00
	6"	R24G-6	9.80	7.20



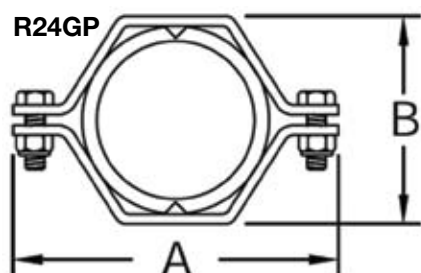
TUBE HEX HANGERS

Hanger with Polypropylene Sleeves

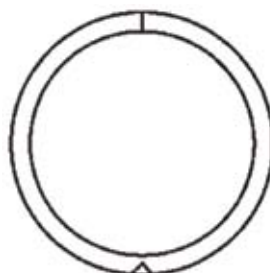
PRODUCT CODE	SIZE (in.)	304 S.S.	A (in.)	B (in.)
R24GP	1/2"	R24GP-1/2	2.80	1.15
	3/4"	R24GP-3/4	2.80	1.15
	1"	R24GP-1	3.43	1.45
	1.5"	R24GP-1.5	4.00	2.13
	2"	R24GP-2	4.50	2.50
	2.5"	R24GP-2.5	4.95	3.13
	3"	R24GP-3	5.50	3.75
	4"	R24GP-4	6.95	4.75
	6"	R24GP-6	9.25	6.63

Polypropylene Sleeves

PRODUCT CODE	SIZE (in.)	304 S.S.
13PS	1/2"	13PS-50
	3/4"	13PS-75
	1"	13PS-100
	1.5"	13PS-150
	2"	13PS-200
	2.5"	13PS-250
	3"	13PS-300
	4"	13PS-400
	6"	13PS-600

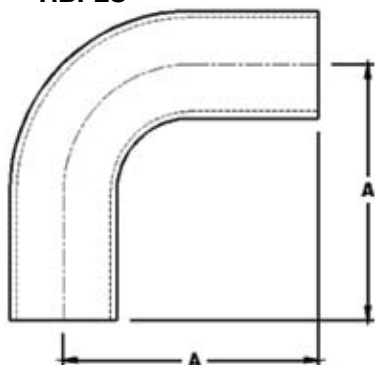


13PS

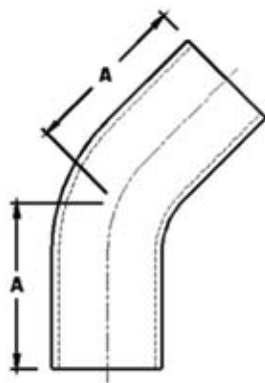


Biopharmaceutical ELBOWS

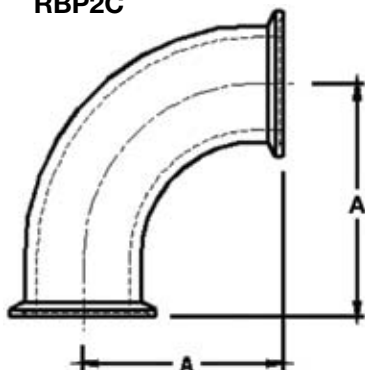
RBP2S



RBP2KS



RBP2C



WELD ELBOWS

90 Deg Weld Elbow

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)
RBP2C	1/2"	RBP2S-.50	3.00
	3/4"	RBP2S-.75	3.00
	1"	RBP2S-1	3.00
	1.5"	RBP2S-1.5	3.75
	2"	RBP2S-2	4.75
	2.5"	RBP2S-2.5	5.50
	3"	RBP2S-3	6.25
	4"	RBP2S-4	8.00
	6"	RBP2S-6	11.50

Also available in SF4.

45 Deg Weld Elbow

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)
RBP2KS	1/2"	RBP2KS-.50	2.25
	3/4"	RBP2KS-.75	2.25
	1"	RBP2KS-1	2.25
	1.5"	RBP2KS-1.5	2.50
	2"	RBP2KS-2	3.00
	2.5"	RBP2KS-2.5	3.38
	3"	RBP2KS-3	3.63
	4"	RBP2KS-4	4.50
	6"	RBP2KS-6	6.25

Also available in SF4.

TRI CLAMP ELBOWS

90 Deg Tri Clamp Elbow

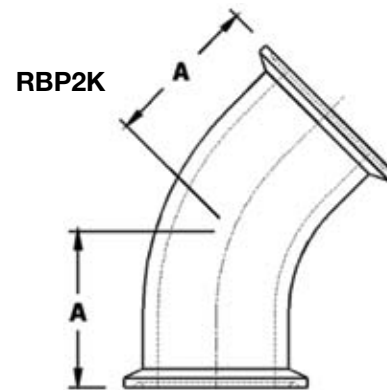
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)
RBP2C	1/2"	RBP2C-.50	1.63
	3/4"	RBP2C-.75	1.63
	1"	RBP2C-1	2.00
	1.5"	RBP2C-1.5	2.75
	2"	RBP2C-2	3.50
	2.5"	RBP2C-2.5	4.25
	3"	RBP2C-3	5.00
	4"	RBP2C-4	6.63
	6"	RBP2C-6	10.50

Also available in SF4.

45 Deg Tri Clamp Elbow

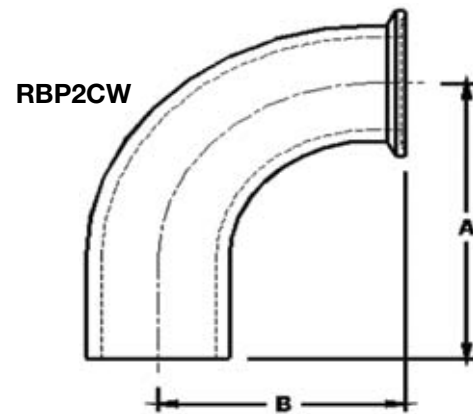
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)
RBP2K	1/2"	RBP2K-.50	1.00
	3/4"	RBP2K-.75	1.00
	1"	RBP2K-1	1.13
	1.5"	RBP2K-1.5	1.44
	2"	RBP2K-2	1.75
	2.5"	RBP2K-2.5	2.06
	3"	RBP2K-3	2.38
	4"	RBP2K-4	3.13
	6"	RBP2K-6	5.25

Also available in SF4.

**90 Deg Tri Clamp One End Elbow**

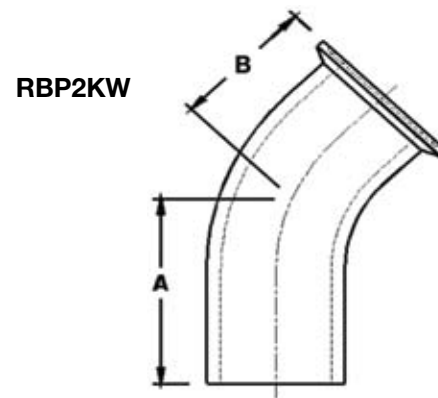
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP2CW	1/2"	RBP2CW-.50	3.000	1.625
	3/4"	RBP2CW-.75	3.000	1.625
	1"	RBP2CW-1	3.000	2.000
	1.5"	RBP2CW-1.5	3.750	2.750
	2"	RBP2CW-2	4.750	3.500
	2.5"	RBP2CW-2.5	5.500	4.250
	3"	RBP2CW-3	6.250	5.000
	4"	RBP2CW-4	8.000	6.625
	6"	RBP2CW-6	11.50	10.50

Also available in SF4.

**45 Deg Tri Clamp One End Elbow**

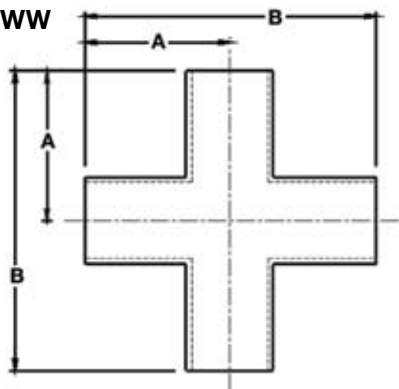
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP2KW	1/2"	RBP2KW-.50	2.25	1.00
	3/4"	RBP2KW-.75	2.25	1.00
	1"	RBP2KW-1	2.25	1.13
	1.5"	RBP2KW-1.5	2.50	1.44
	2"	RBP2KW-2	3.00	1.75
	2.5"	RBP2KW-2.5	3.38	2.06
	3"	RBP2KW-3	3.63	2.38
	4"	RBP2KW-4	4.50	3.13
	6"	RBP2KW-6	6.25	5.25

Also available in SF4.

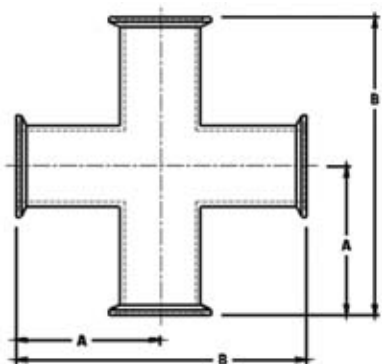


Biopharmaceutical CROSSES

RBP9WWW



RBP9



WELD CROSSES

Weld Cross All Ends Butt Weld

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP9W	1/2"	RBP9W-.50	1.875	3.750
	3/4"	RBP9W-.75	2.000	4.000
	1"	RBP9W-1	2.125	4.250
	1.5"	RBP9W-1.5	2.375	4.750
	2"	RBP9W-2	2.875	5.750
	2.5"	RBP9W-2.5	3.125	6.250
	3"	RBP9W-3	3.375	6.750
	4"	RBP9W-4	4.125	8.250

Also available in SF4.

TRI CLAMP CROSSES

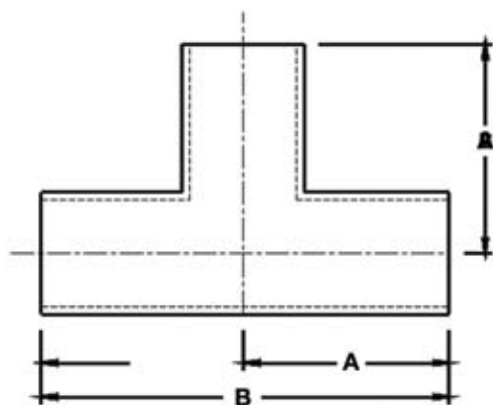
Tri Clamp Cross

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP9	1/2"	RBP9-.50	2.250	4.500
	3/4"	RBP9-.75	2.375	4.750
	1"	RBP9-1	2.625	5.250
	1.5"	RBP9-1.5	2.875	5.750
	2"	RBP9-2	3.375	6.750
	2.5"	RBP9-2.5	3.625	7.250
	3"	RBP9-3	3.875	7.750
	4"	RBP9-4	4.750	9.500

Also available in SF4.

Biopharmaceutical TEES

RBP7W



WELD & TRI CLAMP TEES

Weld Tee All Ends Butt Weld

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7W	1/2"	RBP7W-.50	1.875	3.750
	3/4"	RBP7W-.75	2.000	4.000
	1"	RBP7W-1	2.125	4.250
	1.5"	RBP7W-1.5	2.375	4.750
	2"	RBP7W-2	2.875	5.750
	2.5"	RBP7W-2.5	3.125	6.250
	3"	RBP7W-3	3.375	6.750
	4"	RBP7W-4	4.125	8.250
	6"	RBP7W-6	5.625	11.25

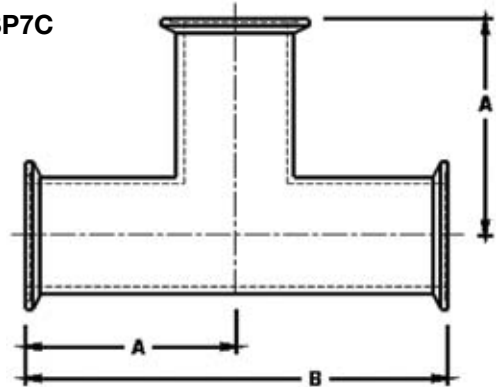
Also available in SF4.

Tri Clamp Tee All Ends Clamp

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7C	1/2"	RBP7C-.50	2.375	4.500
	3/4"	RBP7C-.75	2.250	4.750
	1"	RBP7C-1	2.625	5.250
	1.5"	RBP7C-1.5	2.875	5.750
	2"	RBP7C-2	3.375	6.750
	2.5"	RBP7C-2.5	3.625	7.250
	3"	RBP7C-3	3.875	7.750
	4"	RBP7C-4	4.750	9.500
	6"	RBP7C-6	7.125	14.25

Also available in SF4.

RBP7C

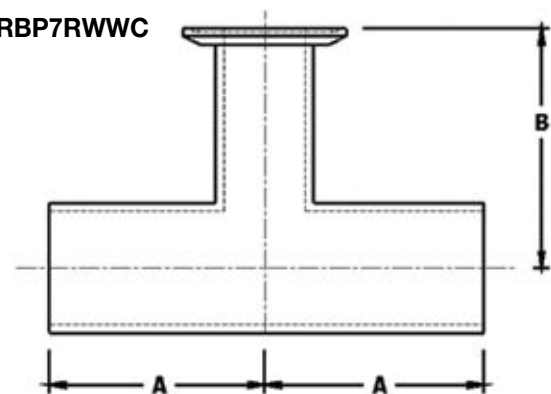


Reducing Tee RUN Ends Butt Weld Branch Clamp

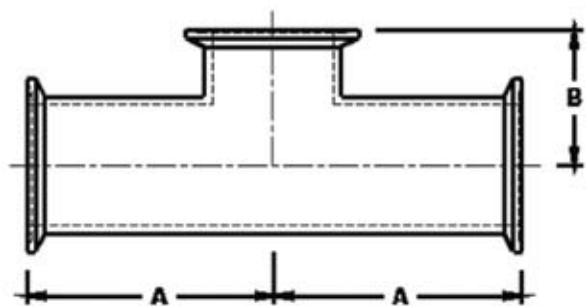
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7RWWC	3/4" x 1/2"	RBP7RWWC-3/4 X 1/2	2.000	2.500
	1" x 1/2"	RBP7RWWC-1 X 1/2	2.125	2.625
	1" x 3/4"	RBP7RWWC-1 X 3/4	2.125	2.625
	1.5" x 1/2"	RBP7RWWC-1.5 X 1/2	2.375	2.875
	1.5" x 3/4"	RBP7RWWC-1.5 X 3/4	2.375	2.875
	1.5" x 1"	RBP7RWWC-1.5 X 1	2.375	2.875
	2" x 1/2"	RBP7RWWC-2 X 1/2	2.875	3.125
	2" x 3/4"	RBP7RWWC-2 X 3/4	2.875	3.125
	2" x 1"	RBP7RWWC-2 X 1	2.875	3.125
	2" x 1.5"	RBP7RWWC-2 X 1.5	2.875	3.125
	2.5" x 1/2"	RBP7RWWC-2.5 X 0.5	3.125	3.375
	2.5" x 3/4"	RBP7RWWC-2.5 X 0.75	3.125	3.375
	2.5" x 1"	RBP7RWWC-2.5 X 1	3.125	3.375
	2.5" x 1.5"	RBP7RWWC-2.5 X 1.5	3.125	3.375
	2.5" x 2"	RBP7RWWC-2.5 X 2	3.125	3.375
	3" x 1/2"	RBP7RWWC-3 X 0.5	3.375	3.625
	3" x 3/4"	RBP7RWWC-3 X 0.75	3.375	3.625
	3" x 1"	RBP7RWWC-3 X 1	3.375	3.625
	3" x 1.5"	RBP7RWWC-3 X 1.5	3.375	3.625
	3" x 2"	RBP7RWWC-3 X 2	3.375	3.625
	3" x 2.5"	RBP7RWWC-3 X 2.5	3.375	3.625
	4" x 1/2"	RBP7RWWC-4 X 0.5	4.125	4.125
	4" x 3/4"	RBP7RWWC-4 X 0.75	4.125	4.125
	4" x 1"	RBP7RWWC-4 X 1.0	4.125	4.125
	4" x 1.5"	RBP7RWWC-4 X 1.5	4.125	4.125
	4" x 2"	RBP7RWWC-4 X 2	4.125	4.375
	4" x 2.5"	RBP7RWWC-4 X 2.5	4.125	4.375
	4" x 3"	RBP7RWWC-4 X 3	4.125	4.375
	6" x 3"	RBP7RWWC-6 X 3	7.13	5.38
	6" x 4"	RBP7RWWC-6 X 4	7.13	5.75

Also available in SF4.

RBP7RWWC



RBP7SC

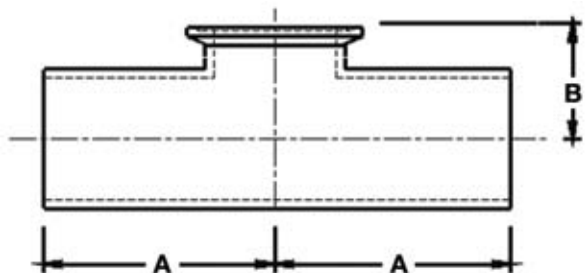


Tee RUN Ends Clamp Branch Short Clamp

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7SC	1/2"	RBP7SC-.50	2.375	1.000
	3/4"	RBP7SC-.75	2.250	1.125
	1"	RBP7SC-1	2.625	1.125
	1.5"	RBP7SC-1.5	2.875	1.375
	2"	RBP7SC-2	3.375	1.625
	2.5"	RBP7SC-2.5	3.625	1.875
	3"	RBP7SC-3	3.875	2.125
	4"	RBP7SC-4	4.750	2.750
	6"	RBP7SC-6	7.125	4.625

Also available in SF4.

RBP7WWSC

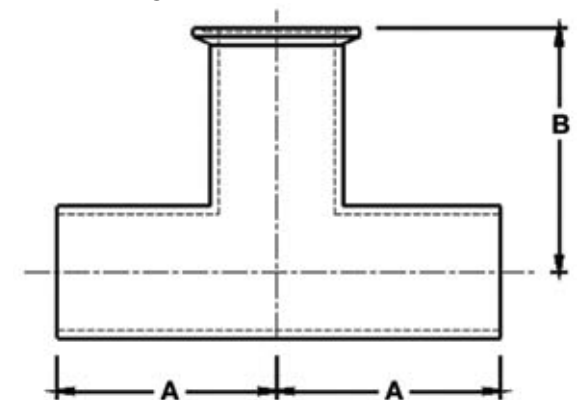


Tee RUN Ends Butt Weld Branch Short Clamp

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7WWSC	1/2"	RBP7WWSC-.50	1.875	1.000
	3/4"	RBP7WWSC-.75	2.000	1.125
	1"	RBP7WWSC-1	2.125	1.125
	1.5"	RBP7WWSC-1.5	2.375	1.375
	2"	RBP7WWSC-2	2.875	1.625
	2.5"	RBP7WWSC-2.5	3.125	1.875
	3"	RBP7WWSC-3	3.375	2.125
	4"	RBP7WWSC-4	4.125	2.750
	6"	RBP7WWSC-6	5.625	4.625

Also available in SF4.

RBP7WWC



Tee RUN Ends Butt Weld Branch Clamp

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7WWC	1/2"	RBP7WWC-.50	1.875	2.250
	3/4"	RBP7WWC-.75	2.000	2.375
	1"	RBP7WWC-1	2.125	2.625
	1.5"	RBP7WWC-1.5	2.375	2.875
	2"	RBP7WWC-2	2.875	3.375
	2.5"	RBP7WWC-2.5	3.125	3.625
	3"	RBP7WWC-3	3.375	3.875
	4"	RBP7WWC-4	4.125	4.750
	6"	RBP7WWC-6	5.625	7.125

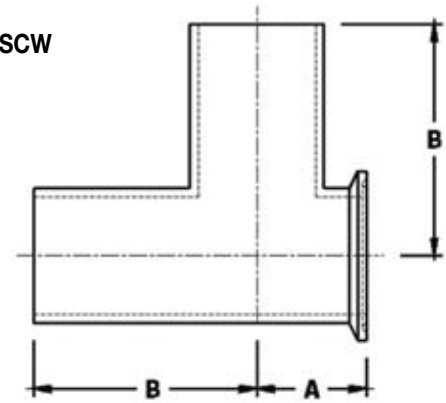
Also available in SF4.

Tee RUN End Butt Weld X Short Clamp Branch Butt Weld

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7WSCW	1/2"	RBP7WSCW-.50	0.875	1.875
	3/4"	RBP7WSCW-.75	1.000	2.000
	1"	RBP7WSCW-1	1.125	2.125
	1.5"	RBP7WSCW-1.5	1.375	2.375
	2"	RBP7WSCW-2	1.625	2.875
	2.5"	RBP7WSCW-2.5	1.875	3.125
	3"	RBP7WSCW-3	2.125	3.375
	4"	RBP7WSCW-4	2.750	4.125

Also available in SF4.

RBP7WSCW

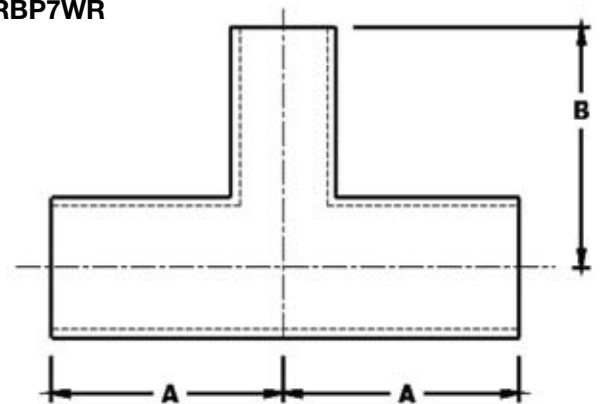


Reducing Tee All Ends Butt Weld

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7WR	3/4" x 1/2"	RBP7WR-3/4 X 1/2	2.000	2.000
	1" x 1/2"	RBP7WR-1 X 1/2	2.125	2.125
	1" x 3/4"	RBP7WR-1 X 3/4	2.125	2.125
	1.5" x 1/2"	RBP7WR-1.5 X 1/2	2.375	2.375
	1.5" x 3/4"	RBP7WR-1.5 X 3/4	2.375	2.375
	1.5" x 1"	RBP7WR-1.5 X 1	2.375	2.375
	2" x 1/2"	RBP7WR-2 X 1/2	2.875	2.625
	2" x 3/4"	RBP7WR-2 X 3/4	2.875	2.625
	2" x 1"	RBP7WR-2 X 1	2.875	2.625
	2" x 1.5"	RBP7WR-2 X 1.5	2.875	2.625
	2.5" x 1/2"	RBP7WR-2.5 X 0.5	3.125	2.875
	2.5" x 3/4"	RBP7WR-2.5 X 0.75	3.125	2.875
	2.5" x 1"	RBP7WR-2.5 X 1	3.125	2.875
	2.5" x 1.5"	RBP7WR-2.5 X 1.5	3.125	2.875
	2.5" x 2"	RBP7WR-2.5 X 2	3.125	2.875
	3" x 1/2"	RBP7WR-3 X 0.5	3.375	3.125
	3" x 3/4"	RBP7WR-3 X 0.75	3.375	3.125
	3" x 1"	RBP7WR-3 X 1	3.375	3.125
	3" x 1.5"	RBP7WR-3 X 1.5	3.375	3.125
	3" x 2"	RBP7WR-3 X 2	3.375	3.125
	3" x 2.5"	RBP7WR-3 X 2.5	3.375	3.125
	4" x 1/2"	RBP7WR-4 X 0.5	4.125	3.625
	4" x 3/4"	RBP7WR-4 X 0.75	4.125	3.625
	4" x 1"	RBP7WR-4 X 1.0	4.125	3.625
	4" x 1.5"	RBP7WR-4 X 1.5	4.125	3.625
	4" x 2"	RBP7WR-4 X 2	4.125	3.875
	4" x 2.5"	RBP7WR-4 X 2.5	4.125	3.875
	4" x 3"	RBP7WR-4 X 3	4.125	3.875
	6" x 3"	RBP7WR-6 X 3	5.63	4.88
	6" x 4"	RBP7WR-6 X 4	5.63	5.13

Also available in SF4.

RBP7WR



Reducing Tee X Run Ends Clamp X Branch Short Clamp

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7RSC	3/4" x 1/2"	RBP7RSC-3/4 X 1/2	2.500	1.000
	1" x 1/2"	RBP7RSC-1 X 1/2	2.625	1.125
	1" x 3/4"	RBP7RSC-1 X 3/4	2.625	1.125
	1.5" x 1/2"	RBP7RSC-1.5 X 1/2	2.875	1.375
	1.5" x 3/4"	RBP7RSC-1.5 X 3/4	2.875	1.375
	1.5" x 1"	RBP7RSC-1.5 X 1	2.875	1.375
	2" x 1/2"	RBP7RSC-2 X 1/2	3.375	1.625
	2" x 3/4"	RBP7RSC-2 X 3/4	3.375	1.625
	2" x 1"	RBP7RSC-2 X 1	3.375	1.625
	2" x 1.5"	RBP7RSC-2 X 1.5	3.375	1.625
	2.5" x 1/2"	RBP7RSC-2.5 X 0.5	3.625	1.875
	2.5" x 3/4"	RBP7RSC-2.5 X 0.75	3.625	1.875
	2.5" x 1"	RBP7RSC-2.5 X 1	3.625	1.875
	2.5" x 1.5"	RBP7RSC-2.5 X 1.5	3.625	1.875
	2.5" x 2"	RBP7RSC-2.5 X 2	3.625	1.875
	3" x 1/2"	RBP7RSC-3 X 0.5	3.875	2.125
	3" x 3/4"	RBP7RSC-3 X 0.75	3.875	2.125
	3" x 1"	RBP7RSC-3 X 1	3.875	2.125
	3" x 1.5"	RBP7RSC-3 X 1.5	3.875	2.125
	3" x 2"	RBP7RSC-3 X 2	3.875	2.125
	3" x 2.5"	RBP7RSC-3 X 2.5	3.875	2.125
	4" x 1/2"	RBP7RSC-4 X 0.5	4.750	2.625
	4" x 3/4"	RBP7RSC-4 X 0.75	4.750	2.625
	4" x 1"	RBP7RSC-4 X 1.0	4.750	2.625
	4" x 1.5"	RBP7RSC-4 X 1.5	4.750	2.625
	4" x 2"	RBP7RSC-4 X 2	4.750	2.625
	4" x 2.5"	RBP7RSC-4 X 2.5	4.750	2.625
	4" x 3"	RBP7RSC-4 X 3	4.750	2.625
	6" x 3"	RBP7RSC-6 X 3	7.125	3.625
	6" x 4"	RBP7RSC-6 X 4	7.125	3.75

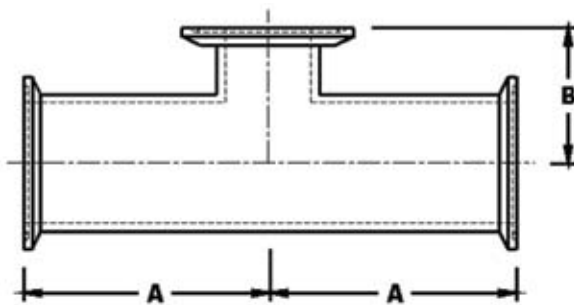
Also available in SF4.

Reducing Tee x All Ends Clamp

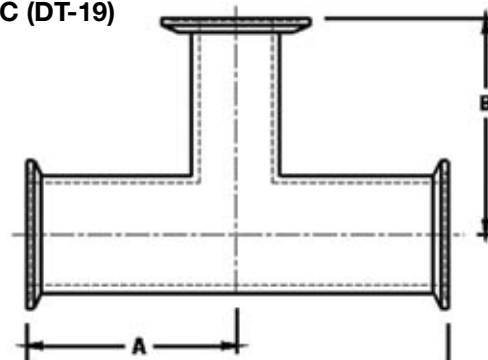
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7RC	3/4" x 1/2"	RBP7RC-3/4 X 1/2	2.500	2.500
	1" x 1/2"	RBP7RC-1 X 1/2	2.625	2.625
	1" x 3/4"	RBP7RC-1 X 3/4	2.625	2.625
	1.5" x 1/2"	RBP7RC-1.5 X 1/2	2.875	2.875
	1.5" x 3/4"	RBP7RC-1.5 X 3/4	2.875	2.875
	1.5" x 1"	RBP7RC-1.5 X 1	2.875	2.875
	2" x 1/2"	RBP7RC-2 X 1/2	3.375	3.125
	2" x 3/4"	RBP7RC-2 X 3/4	3.375	3.125
	2" x 1"	RBP7RC-2 X 1	3.375	3.125
	2" x 1.5"	RBP7RC-2 X 1.5	3.375	3.125
	2.5" x 1/2"	RBP7RC-2.5 X 0.5	3.625	3.375
	2.5" x 3/4"	RBP7RC-2.5 X 0.75	3.625	3.375
	2.5" x 1"	RBP7RC-2.5 X 1	3.625	3.375
	2.5" x 1.5"	RBP7RC-2.5 X 1.5	3.625	3.375
	2.5" x 2"	RBP7RC-2.5 X 2	3.625	3.375
	3" x 1/2"	RBP7RC-3 X 0.5	3.875	3.625
	3" x 3/4"	RBP7RC-3 X 0.75	3.875	3.625
	3" x 1"	RBP7RC-3 X 1	3.875	3.625
	3" x 1.5"	RBP7RC-3 X 1.5	3.875	3.625
	3" x 2"	RBP7RC-3 X 2	3.875	3.625
	3" x 2.5"	RBP7RC-3 X 2.5	3.875	3.625
	4" x 1/2"	RBP7RC-4 X 0.5	4.750	4.125
	4" x 3/4"	RBP7RC-4 X 0.75	4.750	4.125
	4" x 1"	RBP7RC-4 X 1.0	4.750	4.125
	4" x 1.5"	RBP7RC-4 X 1.5	4.750	4.125
	4" x 2"	RBP7RC-4 X 2	4.750	4.375
	4" x 2.5"	RBP7RC-4 X 2.5	4.750	4.375
	4" x 3"	RBP7RC-4 X 3	4.750	4.375
	6" x 3"	RBP7RC-6 X 3	7.13	5.38
	6" x 4"	RBP7RC-6 X 4	7.13	5.75

Also available in SF4.

RBP7RSC (DT-20)

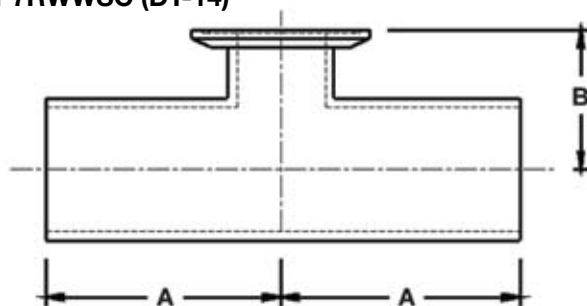


RBP7RC (DT-19)



Reducing Tee X Run Ends Butt Weld X Branch Short Clamp				
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7RWWSC	3/4" x 1/2"	RBP7RWWSC-3/4 X 1/2	2.000	1.000
	1" x 1/2"	RBP7RWWSC-1 X 1/2	2.125	1.125
	1" x 3/4"	RBP7RWWSC-1 X 3/4	2.125	1.125
	1.5" x 1/2"	RBP7RWWSC-1.5 X 1/2	2.375	1.375
	1.5" x 3/4"	RBP7RWWSC-1.5 X 3/4	2.375	1.375
	1.5" x 1"	RBP7RWWSC-1.5 X 1	2.375	1.375
	2" x 1/2"	RBP7RWWSC-2 X 1/2	2.875	1.625
	2" x 3/4"	RBP7RWWSC-2 X 3/4	2.875	1.625
	2" x 1"	RBP7RWWSC-2 X 1	2.875	1.625
	2" x 1.5"	RBP7RWWSC-2 X 1.5	2.875	1.625
	2.5" x 1/2"	RBP7RWWSC-2.5 X 0.5	3.125	1.875
	2.5" x 3/4"	RBP7RWWSC-2.5 X 0.75	3.125	1.875
	2.5" x 1"	RBP7RWWSC-2.5 X 1	3.125	1.875
	2.5" x 1.5"	RBP7RWWSC-2.5 X 1.5	3.125	1.875
	2.5" x 2"	RBP7RWWSC-2.5 X 2	3.125	1.875
	3" x 1/2"	RBP7RWWSC-3 X 0.5	3.375	2.125
	3" x 3/4"	RBP7RWWSC-3 X 0.75	3.375	2.125
	3" x 1"	RBP7RWWSC-3 X 1	3.375	2.125
	3" x 1.5"	RBP7RWWSC-3 X 1.5	3.375	2.125
	3" x 2"	RBP7RWWSC-3 X 2	3.375	2.125
	3" x 2.5"	RBP7RWWSC-3 X 2.5	3.375	2.125
	4" x 1/2"	RBP7RWWSC-4 X 0.5	4.125	2.625
	4" x 3/4"	RBP7RWWSC-4 X 0.75	4.125	2.625
	4" x 1"	RBP7RWWSC-4 X 1.0	4.125	2.625
	4" x 1.5"	RBP7RWWSC-4 X 1.5	4.125	2.625
	4" x 2"	RBP7RWWSC-4 X 2	4.125	2.625
	4" x 2.5"	RBP7RWWSC-4 X 2.5	4.125	2.625
	4" x 3"	RBP7RWWSC-4 X 3	4.125	2.625
	6" x 3"	RBP7RWWSC-6 X 3	5.625	3.625
	6" x 4"	RBP7RWWSC-6 X 4	5.625	3.75

Also available in SF4.

RBP7RWWSC (DT-14)

Biopharmaceutical REDUCERS

Concentric Reducer X RUN Ends Butt Weld with Tangents

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)	C (in.)
RBP31E	3/4" x 1/2"	RBP31E-3/4 X 1/2	0.750	0.500	4.000
	1" x 1/2"	RBP31E-1 X 1/2	1.000	0.500	4.500
	1" x 3/4"	RBP31E-1 X 3/4	1.000	0.750	4.000
	1.5" x 1/2"	RBP31E-1.5 X 1/2	1.500	0.500	5.500
	1.5" x 3/4"	RBP31E-1.5 X 3/4	1.500	0.750	5.000
	1.5" x 1"	RBP31E-1.5 X 1	1.500	1.000	5.000
	2" x 1/2"	RBP31E-2 X 1/2	2.000	0.500	7.750
	2" x 3/4"	RBP31E-2 X 3/4	2.000	0.750	7.250
	2" x 1"	RBP31E-2 X 1	2.000	1.000	7.250
	2" x 1.5"	RBP31E-2 X 1.5	2.000	1.500	5.250
	2.5" x 1/2"	RBP31E-2.5 X 0.5	2.500	0.500	9.750
	2.5" x 3/4"	RBP31E-2.5 X 0.75	2.500	0.750	9.250
	2.5" x 1"	RBP31E-2.5 X 1	2.500	1.000	9.250
	2.5" x 1.5"	RBP31E-2.5 X 1.5	2.500	1.500	7.250
	2.5" x 2"	RBP31E-2.5 X 2	2.500	2.000	5.500
	3" x 1"	RBP31E-3 X 1	3.000	1.000	11.250
	3" x 1.5"	RBP31E-3 X 1.5	3.000	1.500	9.250
	3" x 2"	RBP31E-3 X 2	3.000	2.000	7.500
	3" x 2.5"	RBP31E-3 X 2.5	3.000	2.500	5.500
	4" x 1"	RBP31E-4 X 1.0	4.000	1.000	15.500
	4" x 1.5"	RBP31E-4 X 1.5	4.000	1.500	13.500
	4" x 2"	RBP31E-4 X 2	4.000	2.000	11.750
	4" x 2.5"	RBP31E-4 X 2.5	4.000	2.500	9.750
	4" x 3"	RBP31E-4 X 3	4.000	3.000	7.750

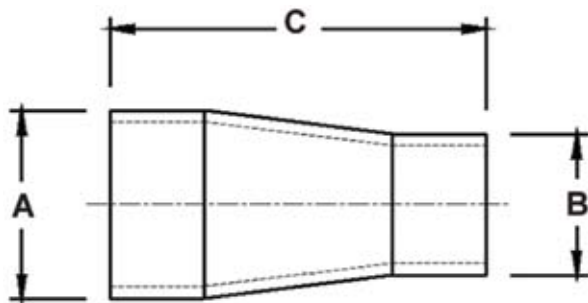
Also available in SF4.

Eccentric Reducer X RUN Ends Butt Weld with Tangents

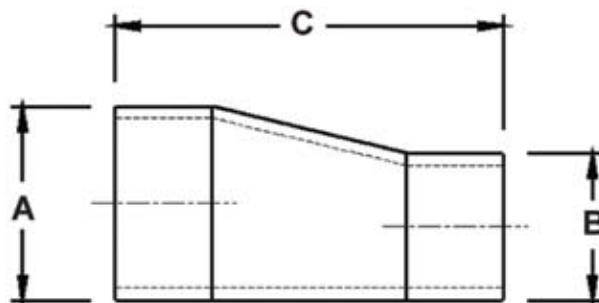
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)	C (in.)
RBP32E	3/4" x 1/2"	RBP32E-3/4 X 1/2	0.750	0.500	4.000
	1" x 1/2"	RBP32E-1 X 1/2	1.000	0.500	4.500
	1" x 3/4"	RBP32E-1 X 3/4	1.000	0.750	4.000
	1.5" x 1/2"	RBP32E-1.5 X 1/2	1.500	0.500	5.500
	1.5" x 3/4"	RBP32E-1.5 X 3/4	1.500	0.750	5.000
	1.5" x 1"	RBP32E-1.5 X 1	1.500	1.000	5.000
	2" x 1/2"	RBP32E-2 X 1/2	2.000	0.500	7.750
	2" x 3/4"	RBP32E-2 X 3/4	2.000	0.750	7.250
	2" x 1"	RBP32E-2 X 1	2.000	1.000	7.250
	2" x 1.5"	RBP32E-2 X 1.5	2.000	1.500	5.250
	2.5" x 1/2"	RBP32E-2.5 X 0.5	2.500	0.500	9.750
	2.5" x 3/4"	RBP32E-2.5 X 0.75	2.500	0.750	9.250
	2.5" x 1"	RBP32E-2.5 X 1	2.500	1.000	9.250
	2.5" x 1.5"	RBP32E-2.5 X 1.5	2.500	1.500	7.250
	2.5" x 2"	RBP32E-2.5 X 2	2.500	2.000	5.500
	3" x 1"	RBP32E-3 X 1	3.000	1.000	11.250
	3" x 1.5"	RBP32E-3 X 1.5	3.000	1.500	9.250
	3" x 2"	RBP32E-3 X 2	3.000	2.000	7.500
	3" x 2.5"	RBP32E-3 X 2.5	3.000	2.500	5.500
	4" x 1"	RBP32E-4 X 1.0	4.000	1.000	15.500
	4" x 1.5"	RBP32E-4 X 1.5	4.000	1.500	13.500
	4" x 2"	RBP32E-4 X 2	4.000	2.000	11.750
	4" x 2.5"	RBP32E-4 X 2.5	4.000	2.500	9.750
	4" x 3"	RBP32E-4 X 3	4.000	3.000	7.750

Also available in SF4.

RBP31E (DT-11)



RBP32E (DT-11)



Concentric Reducer Both Ends Clamp

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)	C (in.)
RBP31CC	3/4" x 1/2"	RBP31CC-3/4 X 1/2	0.750	0.500	2.000
	1" x 1/2"	RBP31CC-1 X 1/2	1.000	0.500	2.500
	1" x 3/4"	RBP31CC-1 X 3/4	1.000	0.750	2.000
	1.5" x 1/2"	RBP31CC-1.5 X 1/2	1.500	0.500	3.500
	1.5" x 3/4"	RBP31CC-1.5 X 3/4	1.500	0.750	3.000
	1.5" x 1"	RBP31CC-1.5 X 1	1.500	1.000	3.000
	2" x 1/2"	RBP31CC-2 X 1/2	2.000	0.500	5.500
	2" x 3/4"	RBP31CC-2 X 3/4	2.000	0.750	5.000
	2" x 1"	RBP31CC-2 X 1	2.000	1.000	5.000
	2" x 1.5"	RBP31CC-2 X 1.5	2.000	1.500	3.000
	2.5" x 1/2"	RBP31CC-2.5 X 0.5	2.500	0.500	7.500
	2.5" x 3/4"	RBP31CC-2.5 X 0.75	2.500	0.750	7.000
	2.5" x 1"	RBP31CC-2.5 X 1	2.500	1.000	7.000
	2.5" x 1.5"	RBP31CC-2.5 X 1.5	2.500	1.500	5.000
	2.5" x 2"	RBP31CC-2.5 X 2	2.500	2.000	3.000
	3" x 1"	RBP31CC-3 X 1	3.000	1.000	9.000
	3" x 1.5"	RBP31CC-3 X 1.5	3.000	1.500	7.000
	3" x 2"	RBP31CC-3 X 2	3.000	2.000	5.000
	3" x 2.5"	RBP31CC-3 X 2.5	3.000	2.500	3.000
	4" x 1"	RBP31CC-4 X 1.0	4.000	1.000	13.125
	4" x 1.5"	RBP31CC-4 X 1.5	4.000	1.500	11.125
	4" x 2"	RBP31CC-4 X 2	4.000	2.000	9.125
	4" x 2.5"	RBP31CC-4 X 2.5	4.000	2.500	7.125
	4" x 3"	RBP31CC-4 X 3	4.000	3.000	5.125

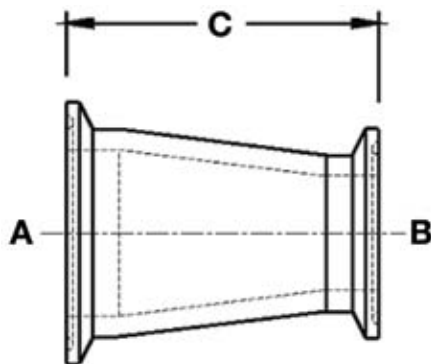
Also available in SF4.

Eccentric Reducer Both Ends Clamp

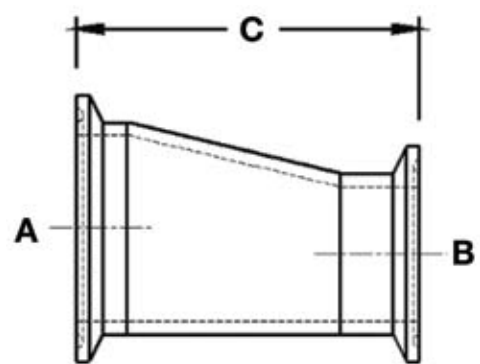
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)	C (in.)
RBP32CC	3/4" x 1/2"	RBP32CC-3/4 X 1/2	0.750	0.500	2.000
	1" x 1/2"	RBP32CC-1 X 1/2	1.000	0.500	2.500
	1" x 3/4"	RBP32CC-1 X 3/4	1.000	0.750	2.000
	1.5" x 1/2"	RBP32CC-1.5 X 1/2	1.500	0.500	3.500
	1.5" x 3/4"	RBP32CC-1.5 X 3/4	1.500	0.750	3.000
	1.5" x 1"	RBP32CC-1.5 X 1	1.500	1.000	3.000
	2" x 1/2"	RBP32CC-2 X 1/2	2.000	0.500	5.500
	2" x 3/4"	RBP32CC-2 X 3/4	2.000	0.750	5.000
	2" x 1"	RBP32CC-2 X 1	2.000	1.000	5.000
	2" x 1.5"	RBP32CC-2 X 1.5	2.000	1.500	3.000
	2.5" x 1/2"	RBP32CC-2.5 X 0.5	2.500	0.500	7.500
	2.5" x 3/4"	RBP32CC-2.5 X 0.75	2.500	0.750	7.000
	2.5" x 1"	RBP32CC-2.5 X 1	2.500	1.000	7.000
	2.5" x 1.5"	RBP32CC-2.5 X 1.5	2.500	1.500	5.000
	2.5" x 2"	RBP32CC-2.5 X 2	2.500	2.000	3.000
	3" x 1"	RBP32CC-3 X 1	3.000	1.000	9.000
	3" x 1.5"	RBP32CC-3 X 1.5	3.000	1.500	7.000
	3" x 2"	RBP32CC-3 X 2	3.000	2.000	5.000
	3" x 2.5"	RBP32CC-3 X 2.5	3.000	2.500	3.000
	4" x 1"	RBP32CC-4 X 1.0	4.000	1.000	13.125
	4" x 1.5"	RBP32CC-4 X 1.5	4.000	1.500	11.125
	4" x 2"	RBP32CC-4 X 2	4.000	2.000	9.125
	4" x 2.5"	RBP32CC-4 X 2.5	4.000	2.500	7.125
	4" x 3"	RBP32CC-4 X 3	4.000	3.000	5.125

Also available in SF4.

RBP31CC (DT-21)



RBP32CC (DT-21)



Concentric Reducer Large End Clamp Small End
Butt Weld with Tangent

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)	C (in.)
RBP31CE	3/4" x 1/2"	RBP31CE-3/4 X 1/2	0.750	0.500	3.000
	1" x 1/2"	RBP31CE-1 X 1/2	1.000	0.500	3.500
	1" x 3/4"	RBP31CE-1 X 3/4	1.000	0.750	3.000
	1.5" x 1/2"	RBP31CE-1.5 X 1/2	1.500	0.500	4.500
	1.5" x 3/4"	RBP31CE-1.5 X 3/4	1.500	0.750	4.000
	1.5" x 1"	RBP31CE-1.5 X 1	1.500	1.000	4.000
	2" x 1/2"	RBP31CE-2 X 1/2	2.000	0.500	6.500
	2" x 3/4"	RBP31CE-2 X 3/4	2.000	0.750	6.000
	2" x 1"	RBP31CE-2 X 1	2.000	1.000	6.000
	2" x 1.5"	RBP31CE-2 X 1.5	2.000	1.500	4.000
	2.5" x 1/2"	RBP31CE-2.5 X 0.5	2.500	0.500	8.500
	2.5" x 3/4"	RBP31CE-2.5 X 0.75	2.500	0.750	8.000
	2.5" x 1"	RBP31CE-2.5 X 1	2.500	1.000	8.000
	2.5" x 1.5"	RBP31CE-2.5 X 1.5	2.500	1.500	6.000
	2.5" x 2"	RBP31CE-2.5 X 2	2.500	2.000	4.250
	3" x 1"	RBP31CE-3 X 1	3.000	1.000	10.000
	3" x 1.5"	RBP31CE-3 X 1.5	3.000	1.500	8.000
	3" x 2"	RBP31CE-3 X 2	3.000	2.000	6.250
	3" x 2.5"	RBP31CE-3 X 2.5	3.000	2.500	4.250
	4" x 1"	RBP31CE-4 X 1.0	4.000	1.000	14.125
	4" x 1.5"	RBP31CE-4 X 1.5	4.000	1.500	12.125
	4" x 2"	RBP31CE-4 X 2	4.000	2.000	10.375
	4" x 2.5"	RBP31CE-4 X 2.5	4.000	2.500	8.375
	4" x 3"	RBP31CE-4 X 3	4.000	3.000	6.375

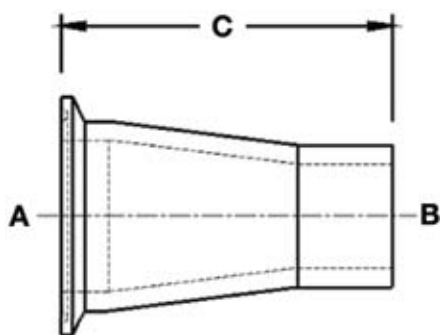
Also available in SF4.

Eccentric Reducer Large End Clamp Small End
Butt Weld with Tangent

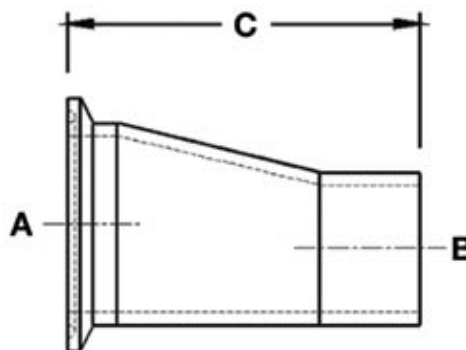
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)	C (in.)
RBP32CE	3/4" x 1/2"	RBP32CE-3/4 X 1/2	0.750	0.500	3.000
	1" x 1/2"	RBP32CE-1 X 1/2	1.000	0.500	3.500
	1" x 3/4"	RBP32CE-1 X 3/4	1.000	0.750	3.000
	1.5" x 1/2"	RBP32CE-1.5 X 1/2	1.500	0.500	4.500
	1.5" x 3/4"	RBP32CE-1.5 X 3/4	1.500	0.750	4.000
	1.5" x 1"	RBP32CE-1.5 X 1	1.500	1.000	4.000
	2" x 1/2"	RBP32CE-2 X 1/2	2.000	0.500	6.500
	2" x 3/4"	RBP32CE-2 X 3/4	2.000	0.750	6.000
	2" x 1"	RBP32CE-2 X 1	2.000	1.000	6.000
	2" x 1.5"	RBP32CE-2 X 1.5	2.000	1.500	4.000
	2.5" x 1/2"	RBP32CE-2.5 X 0.5	2.500	0.500	8.500
	2.5" x 3/4"	RBP32CE-2.5 X 0.75	2.500	0.750	8.000
	2.5" x 1"	RBP32CE-2.5 X 1	2.500	1.000	8.000
	2.5" x 1.5"	RBP32CE-2.5 X 1.5	2.500	1.500	6.000
	2.5" x 2"	RBP32CE-2.5 X 2	2.500	2.000	4.250
	3" x 1"	RBP32CE-3 X 1	3.000	1.000	10.000
	3" x 1.5"	RBP32CE-3 X 1.5	3.000	1.500	8.000
	3" x 2"	RBP32CE-3 X 2	3.000	2.000	6.250
	3" x 2.5"	RBP32CE-3 X 2.5	3.000	2.500	4.250
	4" x 1"	RBP32CE-4 X 1.0	4.000	1.000	14.125
	4" x 1.5"	RBP32CE-4 X 1.5	4.000	1.500	12.125
	4" x 2"	RBP32CE-4 X 2	4.000	2.000	10.375
	4" x 2.5"	RBP32CE-4 X 2.5	4.000	2.500	8.375
	4" x 3"	RBP32CE-4 X 3	4.000	3.000	6.375

Also available in SF4.

RBP31CE (DT-26)



RBP32CE (DT-26)



Biopharmaceutical CAPS

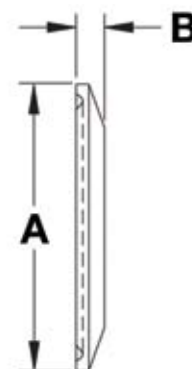
SOLID END CAPS

Solid End Cap

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP16A	1/2"	RBP16A-.50	0.993	0.187
	3/4"	RBP16A-.75	0.993	0.187
	1"	RBP16A-1	1.984	0.250
	1.5"	RBP16A-1.5	1.984	0.250
	2"	RBP16A-2	2.516	0.250
	2.5"	RBP16A-2.5	3.047	0.250
	3"	RBP16A-3	3.579	0.250
	4"	RBP16A-4	4.682	0.312

Also available in SF4.

RBP16A



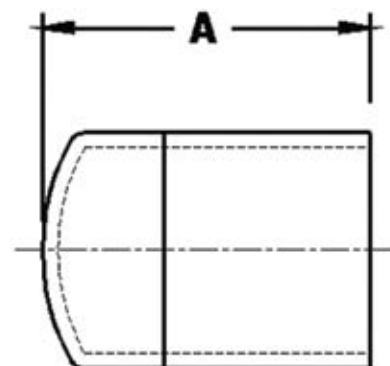
WELD CAPS

WELD Cap

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)
RBP16W	1/2"	RBP16W-.50	1.500
	3/4"	RBP16W-.75	1.500
	1"	RBP16W-1	1.500
	1.5"	RBP16W-1.5	1.500
	2"	RBP16W-2	1.500
	2.5"	RBP16W-2.5	1.500
	3"	RBP16W-3	1.750
	4"	RBP16W-4	2.000

Also available in SF4.

RBP16W (DT-30)



Biopharmaceutical ADAPTERS

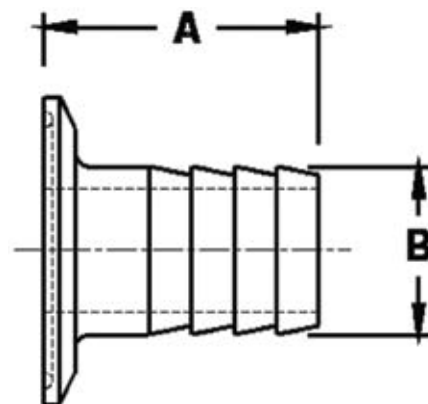
HOSE ADAPTERS

Clamp X Rubber Hose Adapter

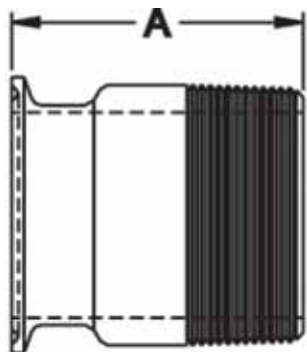
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)	B (in.)
RBP7W	1/2"	RBP14AHR-.50	1.500	0.500
	3/4"	RBP14AHR-.75	1.500	0.750
	1"	RBP14AHR-1	2.500	1.000
	1.5"	RBP14AHR-1.5	2.500	1.500
	2"	RBP14AHR-2	2.500	2.000
	2.5"	RBP14AHR-2.5	2.500	2.500
	3"	RBP14AHR-3	2.500	3.000
	4"	RBP14AHR-4	2.625	4.000

Also available in SF4.

RBP14AHR



RBP21

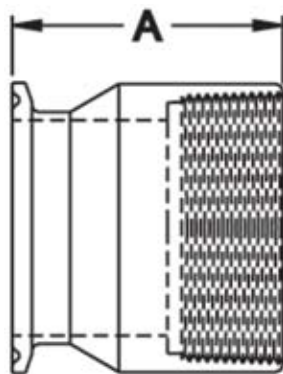


Clamp to Male NPT Adapter

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)
RBP21	1/2" x 1/8"	RBP21-1/2 X 1/8	2.000
	1/2" x 1/4"	RBP21-1/2 X 1/4	2.000
	1/2" x 3/8"	RBP21-1/2 X 3/8	2.000
	1/2" x 1/2"	RBP21-1/2 X 1/2	2.000
	1/2" x 3/4"	RBP21-1/2 X 3/4	2.000
	3/4" x 1/8"	RBP21- 3/4 X 1/8	2.000
	3/4" x 1/4"	RBP21- 3/4 X 1/4	2.000
	3/4" x 3/8"	RBP21- 3/4 X 3/8	2.000
	3/4" x 1/2"	RBP21- 3/4 X 1/2	2.000
	3/4" x 3/4"	RBP21- 3/4 X 3/4	2.000
	1" x 1"	RBP21-1 X 1	2.250
	1/2" x 1.5"	RBP21-1/2 X 1.5	2.438
	2" x 2"	RBP21-2 X 2	2.656
	1/2" x 2.5"	RBP21-1/2 X 2.5	3.281
	3" x 3" *	RBP21- 3 X 3	3.500
	4" x 4" *	RBP21-4 X 4	3.813

Also available in SF4. *No Wrench Flats

RBP22



Clamp to Female NPT Adapter

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)
RBP22	1/2" x 1/8"	RBP22-1/2 X 1/8	1.250
	1/2" x 1/4"	RBP22-1/2 X 1/4	1.500
	1/2" x 3/8"	RBP22-1/2 X 3/8	1.500
	1/2" x 1/2"	RBP22-1/2 X 1/2	1.500
	1/2" x 3/4"	RBP22-1/2 X 3/4	1.625
	3/4" x 1/8"	RBP22- 3/4 X 1/8	1.250
	3/4" x 1/4"	RBP22- 3/4 X 1/4	1.500
	3/4" x 3/8"	RBP22- 3/4 X 3/8	1.500
	3/4" x 1/2"	RBP22- 3/4 X 1/2	1.500
	3/4" x 3/4"	RBP22- 3/4 X 3/4	1.625
	1" x 1"	RBP22-1 X 1	1.625
	1/2" x 1.5"	RBP22-1/2 X 1.5	2.250
	2" x 2"	RBP22-2 X 2	1.687
	1/2" x 2.5"	RBP22-1/2 X 2.5	2.094
	3" x 3" *	RBP22- 3 X 3	2.187
	4" x 4" *	RBP22-4 X 4	2.625

Also available in SF4. *No Wrench Flats

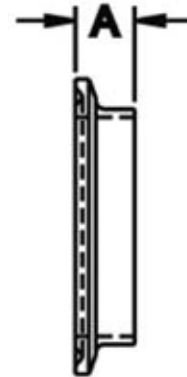
Biopharmaceutical FERRULES

WELD CLAMP FERRULES

Short Weld Ferrule X One End Clamp X One End Butt Weld

PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)
RBP14SW	1/2"	RBP14SW-.50	0.500
	3/4"	RBP14SW-.75	0.500
	1"	RBP14SW-1	0.500
	1.5"	RBP14SW-1.5	0.500
	2"	RBP14SW-2	0.500
	2.5"	RBP14SW-2.5	0.500
	3"	RBP14SW-3	0.500
	4"	RBP14SW-4	0.625
Also available in SF4.			

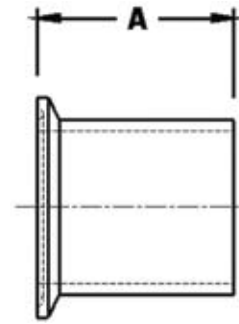
RBP14SW



Long Weld Ferrule X One End Clamp x One End Butt Weld

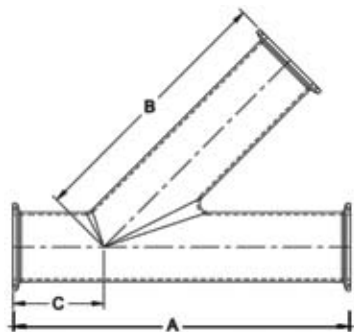
PRODUCT CODE	SIZE (in.)	PL Finish - SF1	A (in.)
RBP14A	1"	RBP14A-1	1.125
	1.5"	RBP14A-1.5	1.125
	2"	RBP14A-2	1.125
	2.5"	RBP14A-2.5	1.125
	3"	RBP14A-3	1.125
	4"	RBP14A-4	1.125
Also available in SF4.			

RBP14A

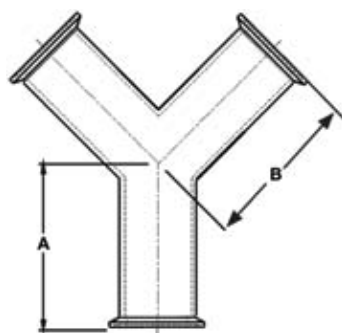


Sanitary Y's

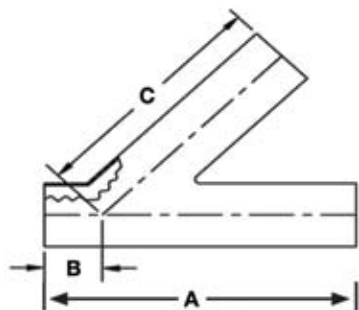
R28A



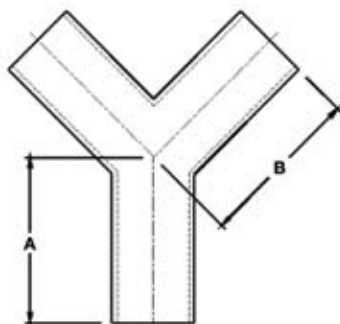
R28T



R28W



R28TW



TRI CLAMP Y's

Tri Clamp Lateral "Y"

PRODUCT CODE	SIZE (in.)	316 S.S.	A (in.)	B (in.)	C (in.)
R28A	1"	R28A-1	7.00	5.50	1.50
	1.5"	R28A-1.5	8.38	6.69	1.69
	2"	R28A-2	9.75	7.63	2.13
	2.5"	R28A-2.5	11.00	9.00	2.00
	3"	R28A-3	11.75	9.38	2.38
	4"	R28A-4	14.06	11.31	2.64
	6"	R28A-6	19.75	15.38	4.38

Tri Clamp True "Y"

PRODUCT CODE	SIZE (in.)	316 S.S.	A (in.)	B (in.)
R28T	1"	R28T-1	2.50	2.94
	1.5"	R28T-1.5	2.50	2.94
	2"	R28T-2	3.13	3.75
	2.5"	R28T-2.5	3.87	4.63
	3"	R28T-3	4.50	5.38
	4"	R28T-4	6.00	6.00
	6"	R28T-6	3.12	7.62
	8"	R28T-8	3.70	8.20

WELD Y's

Weld Lateral "Y"

PRODUCT CODE	SIZE (in.)	316 S.S.	A (in.)	B (in.)	C (in.)
R28W	1"	R28W-1	6.00	1.00	5.00
	1.5"	R28W-1.5	7.38	1.19	6.19
	2"	R28W-2	8.75	1.63	7.13
	2.5"	R28W-2.5	10.00	1.50	8.50
	3"	R28W-3	10.75	1.88	8.88
	4"	R28W-4	12.81	2.02	10.75
	6"	R28W-6	18.00	3.50	14.50

Weld clamp True "Y"

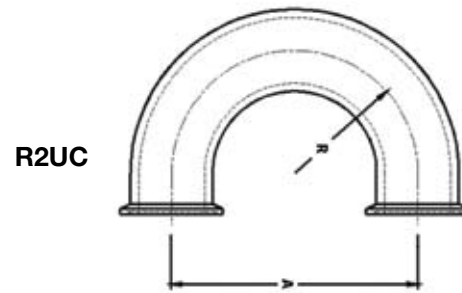
PRODUCT CODE	SIZE (in.)	316 S.S.	A (in.)	B (in.)
R28TW	1"	R28TW-1	2.21	2.65
	1.5"	R28TW-1.5	2.31	2.75
	2"	R28TW-2	3.04	3.66
	2.5"	R28TW-2.5	3.89	4.64
	3"	R28TW-3	4.62	5.50
	4"	R28TW-4	6.20	6.40
	6"	R28TW-6	3.50	8.00

Sanitary U BENDS

TRI CLAMP U BENDS

Tri Clamp 180° Return Bends

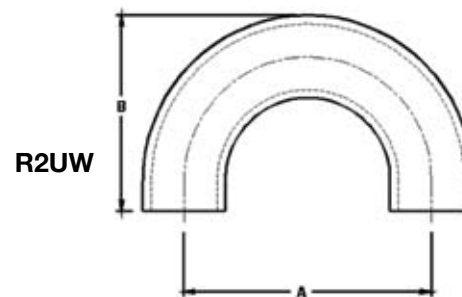
PRODUCT CODE	SIZE (in.)	316 S.S.	A (in.)	R (in.)
R2UC	1"	R2UC-1	3.00	1.50
	1.5"	R2UC-1.5	4.50	2.25
	2"	R2UC-2	6.00	3.00
	2.5"	R2UC-2.5	7.50	3.75
	3"	R2UC-3	9.00	4.50
	4"	R2UC-4	12.00	6.00



WELD U BENDS

Weld 180° Return Bends

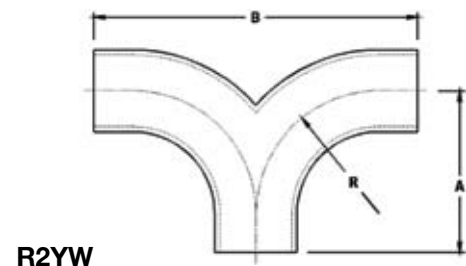
PRODUCT CODE	SIZE (in.)	316 S.S.	A (in.)	B (in.)
R2UW	1"	R2UW-1	3.00	2.563
	1.5"	R2UW-1.5	4.50	3.688
	2"	R2UW-2	6.00	5.063
	2.5"	R2UW-2.5	7.50	6.438
	3"	R2UW-3	9.00	7.813
	4"	R2UW-4	12.00	10.313



Sanitary LINE SPLITTERS

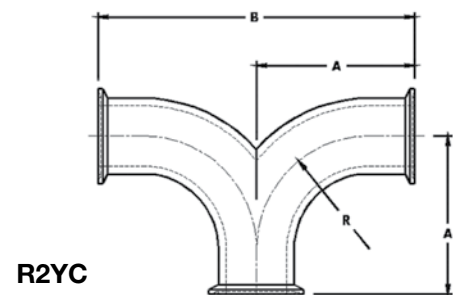
WELD LINE SPLITTERS

PRODUCT CODE	SIZE (in.)	316 S.S.	A (in.)	B (in.)	R (in.)
R2YW	1"	R2YW-1	1.938	3.875	1.50
	1.5"	R2YW-1.5	2.813	5.625	2.25
	2"	R2YW-2	3.938	7.875	3.00
	2.5"	R2YW-2.5	5.063	10.125	3.75
	3"	R2YW-3	6.188	12.375	4.50
	4"	R2YW-4	8.188	16.375	6.00

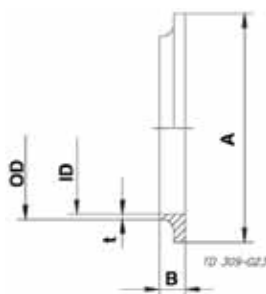
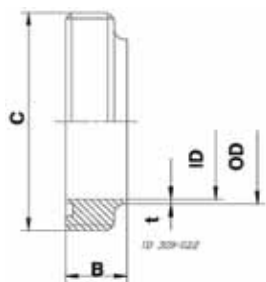
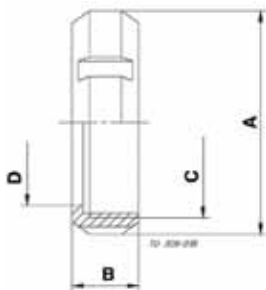
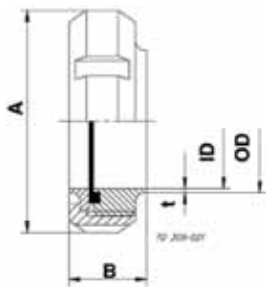


TRI CLAMP LINE SPLITTERS

PRODUCT CODE	SIZE (in.)	316 S.S.	A (in.)	B (in.)	R (in.)
R2YC	1"	R2YC-1	2.438	4.875	1.50
	1.5"	R2YC-1.5	3.313	6.625	2.25
	2"	R2YC-2	4.438	8.875	3.00
	2.5"	R2YC-2.5	5.563	11.125	3.75
	3"	R2YC-3	6.688	13.375	4.50
	4"	R2YC-4	8.813	17.625	6.00



Sanitary SMS/DIN



SMS

SMS Union

SIZE (in.)	304 S.S.	316 S.S.	A (mm)	B (mm)
1"	9611300382	9611330382	51	23.5
1.5"	9611300383	9611330383	74	30
2"	9611300384	9611330384	84	30
2.5"	9611300385	9611330385	100	33
3"	9611300386	9611330386	114	35
4"	9611300387	9611330387	154	48

SMS NUT

SIZE (in.)	304 S.S.	A (mm)	B (mm)	C (mm)	D (mm)
1"	190613	51	20	40 x 1/6	32
1.5"	190615	74	25	60 x 1/6	48
2"	190616	84	26	70 x 1/6	60.5
2.5"	190617	100	30	85 x 1/6	74
3"	190618	114	32	98 x 1/6	87
4"	3131708841	154	45	132 x 1/6	113

SMS Male Part

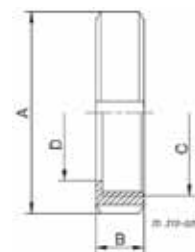
SIZE (in.)	304 S.S.	316 S.S.	A (mm)	B (mm)
1"	190711	191001	15	40 x 1/6
1.5"	190713	191003	20	60 x 1/6
2"	190714	191004	20	70 x 1/6
2.5"	190715	191005	24	85 x 1/6
3"	190716	191006	24	98 x 1/6
4"	3131708171	3131708173	35	132 x 1/6

SMS Liner

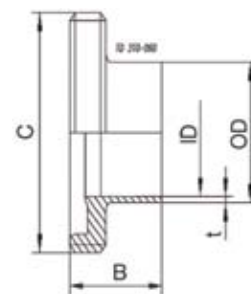
SIZE (in.)	304 S.S.	316 S.S.	A (mm)	B (mm)
1"	190704	190994	35.5	7.50
1.5"	190706	190996	55	9.00
2"	190707	190997	65	9.00
2.5"	190708	190998	80	9.00
3"	190709	190999	93	10.00
4"	3131708851	3131708852	127	12.00

DIN**DIN NUT**

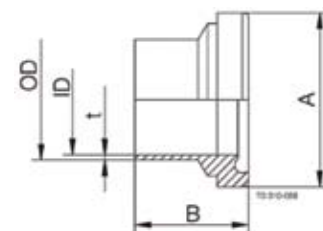
SIZE (mm)	304 S.S.	316 S.S.	A (mm)	B (mm)	C (mm)	D (mm)
25	3131800141	N/A	63	21	52.00 x 1/6	36
32	3131800142	N/A	70	21	58.00 x 1/6	42
40	3131800143	N/A	78	21	65.00 x 1/6	49
50	3131800144	N/A	92	22	78.00 x 1/6	62
65	3131800145	N/A	112	25	95.00 x 1/6	80
75	9611306440	N/A	120	26	104.00 x 1/6	87
80	3131800146	N/A	127	30	110.00 x 1/4	94

**DIN Male Part**

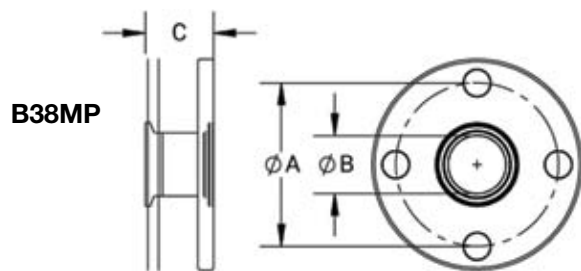
SIZE (mm)	304 S.S.	316 S.S.	A (mm)	B (mm)	C (mm)
25	9612157901	9612157917	25.40/22.90 x 1.25	29	52.00 x 1/6
40	9612157903	9612157919	38.10/35.10 x 1.50	33	65.00 x 1/6
50	9612157904	9612157920	50.80/47.80 x 1.50	35	78.00 x 1/6
65	9612157905	9612157921	63.50/60.50 x 1.50	40	95.00 x 1/6
75	9612157906	9612157922	76.10/73.10 x 1.50	40	104 x 1/6
80	9612157907	9612157923	76.10/72.10 x 2.00	45	110.00 x 1/4

**DIN Liner**

SIZE (mm)	304 S.S.	316 S.S.	A (mm)	B (mm)	C (mm)
25	9612158001	9612158017	25.40/22.90 x 1.25	44	22
40	9612158003	9612158019	38.10/35.10 x 1.50	56	26
50	9612158004	9612158020	50.80/47.80 x 1.50	68.5	28
65	9612158005	9612158021	63.50/60.50 x 1.50	86	32
75	9612158006	9612158022	76.10/73.10 x 1.50	93.7	32
80	9612158007	9612158023	76.10/72.10 x 2.00	100	37

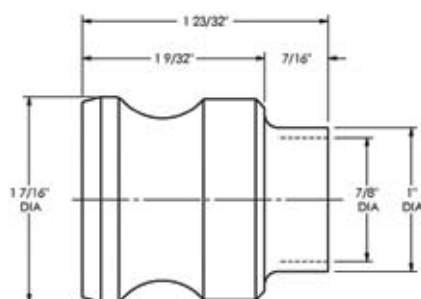


Cam and Groove



Clamp x 150# Flange Adapters

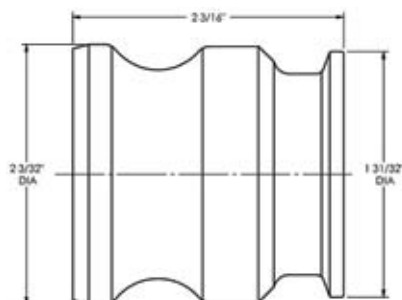
SIZE (in.)	316 S.S.	A (in)	B (in)	C (in)	No. & Dia. Bolt Holes
1"	B38MP-R100	3.13	0.87	1.63	4/.625
1.5"	B38MP-R150	3.88	1.37	1.63	4/.625
2"	B38MP-R200	4.75	1.87	1.75	4/.750
2.5"	B38MP-R250	5.50	2.37	1.75	4/.750
3"	B38MP-R300	6.00	2.87	1.75	4/.750
4"	B38MP-R400	7.50	3.83	1.75	8/.750
6"	B38MP-R600	9.50	5.78	2.13	8/.750



Cam and Groove Transition Fittings

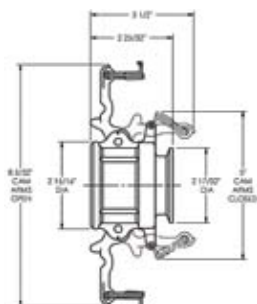
Cam & Groove/Camlock Adapter x Butt Weld to Tube End

SIZE (in.)	316 S.S.			
1"	RE100BT			
1.5"	RE150BT			
2"	RE200BT			
2.5"	N/A			
3"	RE300BT			
4"	N/A			



Cam & Groove/Camlock Adapter x Tri Clamp

SIZE (in.)	316 S.S.			
1"	N/A			
1.5"	RE150SE			
2"	RE200SE			
2.5"	N/A			
3"	RE300SE			
4"	N/A			



Cam & Groove/Camlock Coupler x Tri Clamp

SIZE (in.)	316 S.S.			
1"	N/A			
1.5"	RC150SE			
2"	RC200SE			
2.5"	N/A			
3"	RC300SE			
4"	N/A			

ABOUT SANITARY FITTINGS

JOHN PERRY FITTINGS

John Perry fittings which are similar to the bevel seat provide a secure, leak-tight connection using external Acme threads. Designed to work with a metal-to-metal seat, a gasket may be used for additional security.

BEVEL SEAT FITTINGS

Bevel Seat Fittings are used on process equipment and piping to ensure rigidity of the system.

Bevel Seat Union Fitting is made up of a hexagonal union nut, a thread ferrule, a plain ferrule and a gasket. It is very popular for the process system because it's easy assembling and safe fast cleaning of pipelines.

Q-LINE FITTINGS

Q-Line connections are primarily used across all sanitary processing applications. This interlocking, metal-to-metal design eliminates over compression by the clamp not allowing the gasket to be extruded into the product zone.

I-LINE FITTINGS

I-Line fittings are used in line processing equipment to join separate runs of tubing. You'll typically find this type of equipment across all sanitary industries. In order to make a leak-resistant connection, I-Line fittings require interlocking male and female ferrules, gaskets and clamps.

TRI-CLAMP® FITTINGS

Tri-Clamp® fittings are connections for pieces of pipe, which facilitate easy disassembly and cleaning.

How does a Tri-Clamp work?

Tri-Clamp® is a tubing connection system that allows making sanitary interconnections in stainless steel fluid transport systems. A connection is made using a hinged clamp to connect two lipped flanges, with a gasket between them to make the seal.

How are Tri-Clamp measured?

A Tri-Clamp® fitting consists of 2 ferrules fastened together by a clamp with a gasket. The Tri-Clamp® size is identified by measuring the outside diameter of the pipe. To add to the confusion a 1/2" and 3/4" use the same size ferrule and clamp and the same is true for 1" and 1.5" tri-clamps.

BUTT-WELD FITTINGS

A butt-weld fitting is a weldable pipe fitting that allows for change of direction of flow, to branch off, reduce pipe size or attach auxiliary equipment to match a wide variety of equipment.

SMS

SMS union is the Swedish standard hygienic fitting. Probably the most widely used hygienic fitting worldwide, there is always a small crevice between the face of the male spigot and the liner. Therefore, it facilitates the removal of sections of pipe work without the need of to disturb adjacent sections.

DIN

DIN fittings are most commonly used in industrial, oil & gas and construction equipment in hydraulic and pneumatic applications. This ensures the interchangeability with leading brands of fittings.



Product Line Card

Supply House to the Processing Industries Since 1964

Harco partners with leading manufacturers in the industry to bring you an innovative range of sanitary and hygienic processing equipment and supplies. With experience in design, manufacturing and support, our partners are selected for their quality, reliability, and advanced products.

