





















# Hygienic Fittings Table of Contents

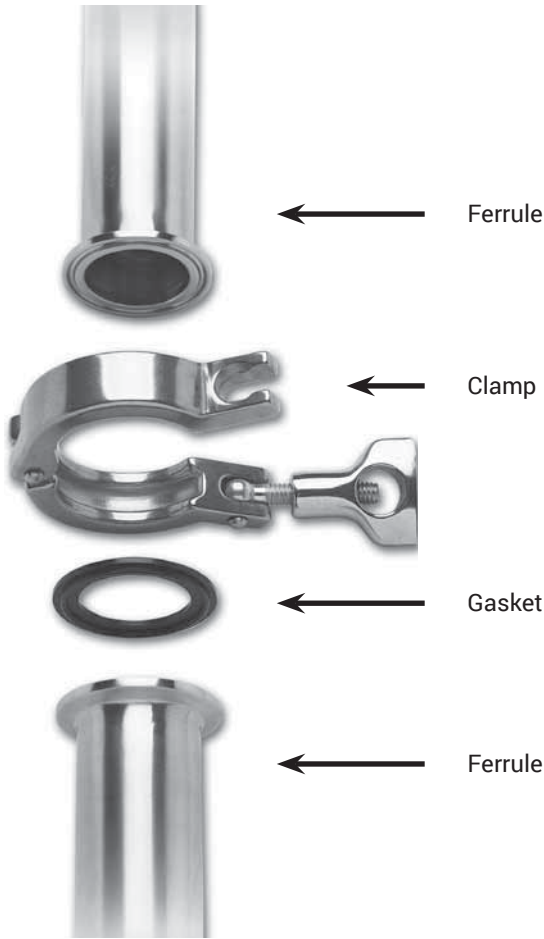
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## Dixon Sanitary Clamp Fittings

### A Complete Clamp Connection



**Sizes**

- 1/2" - 12" O.D. tube

**Materials**

- G = 304 stainless steel
- R = 316L stainless steel
- Other alloys are available

**Features**

- 3A sanitary finish I.D. and O.D.

**Primary Markets**

- Found in the food processing, beverage, dairy, personal care, pet products, wineries and breweries, oil extraction, and industrial markets
- Other finishes are available

### Dimensions of stainless steel tube

Tube O.D.	Nominal Wall Thickness (in)
1/2"	.065
3/4"	.065
1"	.065
1-1/2"	.065
2"	.065
2-1/2"	.065
3"	.065
4"	.083
5"	.109
6"	.109
8"	.109
10"	.120
12"	.120



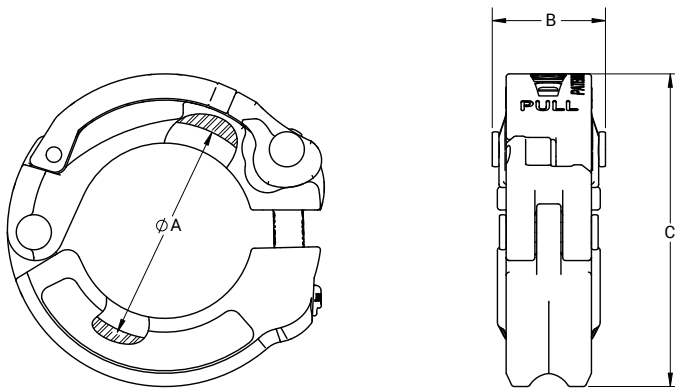
Pipe size and Tube O.D. size materials are not interchangeable

## Clever Clamp®


### Features

- Consistent compression of the gasket with every use - no concern for damage to gasket or creation of internal bacterial traps from improper compression
- Adjustable for both rubber and PTFE gasket styles
- Fast installation, no torquing tools required
- Threadless design, eliminates risk of damaged threads leading to improper tightening of the wingnut
- Lockout ready design
- Self-locking lever and color-coding options available

### Dimensions



Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	B (in)	C (in)	304 Stainless Steel Part #	Clever Clamp with self locking pin 304 Stainless Steel Part #
1-1/2"	500	300	2.14	1.10	3.04	13SCC-100150	13SCC-100150L
2"	450	250	2.65	1.10	3.53	13SCC-200	13SCC-200L
3"	350	175	3.72	1.10	4.59	13SCC-300	13SCC-300L
4"	300	150	4.82	1.10	5.62	13SCC-400	13SCC-400L


<sup>1</sup> Service ratings are based on hydrostatic tests using standard-molded nitrile rubber, EPDM, FKM, and silicone material gaskets, with proper installation of ferrules, assembly of joints and absence of shock pressure or water hammer. Contact Dixon® for service of other type and material gaskets. All ratings shown are dependent upon related components within the systems and proper installation of those components. For temperatures above 250°F, we cannot provide service ratings. Before installation, testing must be done under the specific conditions of your application. Verify specific gasket material temperature ratings. This information is only applicable if Dixon clamps, ferrules, and gaskets are used. Dixon cannot guarantee the quality or integrity of other manufacturers components. 

### Food Grade Silicone Color I.D. Bands - 25pcs/pack

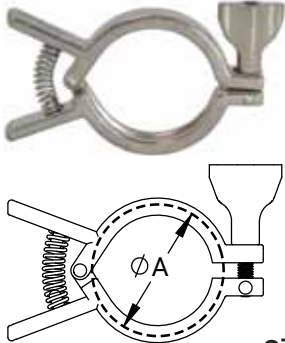
Color	Part #
Red	13SCC-CB-R
Green	13SCC-CB-G
Blue	13SCC-CB-B
Yellow	13SCC-CB-Y



Clamps

Service pressure ratings are based on the following parameters: matching elastomer gaskets and weld ferrules properly aligned and assembled with the clamps tightened to the required torques. Tests are done hydrostatically with no water hammer or shock loads. Please note the pressure ratings of the described unions may be above the recommended pipe line operating pressures. 

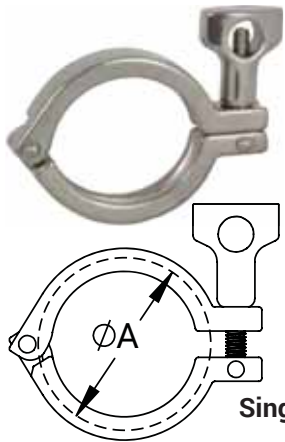
Single Pin Squeeze Clamps - 13MHHM-Q



Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1/2" - 3/4"	1500	1200	1.06	13MHHM-Q75
1" - 1-1/2"	500	300	2.12	13MHHM-Q100150
2"	450	250	2.65	13MHHM-Q200
2-1/2"	400	200	3.18	13MHHM-Q250
3"	350	175	3.72	13MHHM-Q300
4"	300	150	4.82	13MHHM-Q400

<sup>1</sup>Wing nut tightened to 25 in-lb of torque

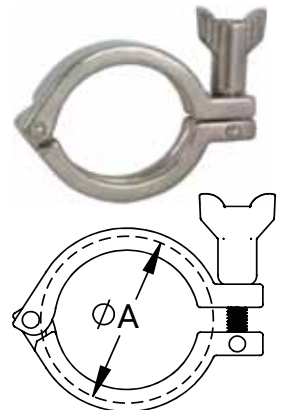
Single Pin Heavy Duty Clamps with Cross Hole Wing Nut - 13MHHM



Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1/2" - 3/4"	1500	1200	1.06	13MHHM50-75
1" - 1-1/2"	500	300	2.12	13MHHM100-150
2"	450	250	2.65	13MHHM200
2-1/2"	400	200	3.19	13MHHM250
3"	350	175	3.72	13MHHM300
4"	300	150	4.82	13MHHM400
5"	225	100	5.82	13MHHM500
6"	150	75	6.69	13MHHM600
8"	100	50	8.69	13MHHM800

<sup>1</sup>Wing nut tightened to 25 in-lbs of torque

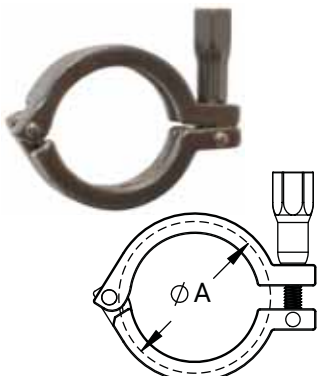
Single Pin Heavy Duty Clamps with Serrated Wing Nut - 13MHHM\*\*\*SN



Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1/2" - 3/4"	1500	1200	1.06	13MHHM50-75SN
1" - 1-1/2"	500	300	2.12	13MHHM100-150SN
2"	450	250	2.65	13MHHM200SN
2-1/2"	400	200	3.19	13MHHM250SN
3"	350	175	3.72	13MHHM300SN
4"	300	150	4.82	13MHHM400SN
5"	225	100	5.82	13MHHM500SN
6"	150	75	6.70	13MHHM600SN
8"	100	50	8.70	13MHHM800SN

<sup>1</sup>Wing nut tightened to 25 in-lb of torque

Single Pin Heavy Duty Clamps with Hex Nut - 13MHHM\*\*\*WNH



Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1/2" - 3/4"	1500	1200	1.06	13MHHM50-75WNH
1" - 1-1/2"	500	300	2.12	13MHHM100150WNH
2"	450	250	2.65	13MHHM200WNH
2-1/2"	400	200	3.19	13MHHM250WNH
3"	350	175	3.72	13MHHM300WNH
4"	300	150	4.82	13MHHM400WNH
5"	225	100	5.82	13MHHM500WNH
6"	150	75	6.70	13MHHM600WNH
8"	100	50	8.70	13MHHM800WNH

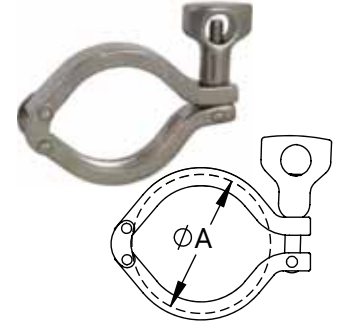
<sup>1</sup>Hex nut tightened to 25 in-lb of torque

## Clamps

### Double Pin Heavy Duty Clamps - 13MHHM-DP

Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1" - 1-1/2"	500	300	2.12	13MHHM-DP100150
2"	450	250	2.65	13MHHM-DP200
2-1/2"	400	200	3.19	13MHHM-DP250
3"	350	175	3.72	13MHHM-DP300
4"	300	150	4.82	13MHHM-DP400
10"	100	50	10.74	13MHHM-DP1000

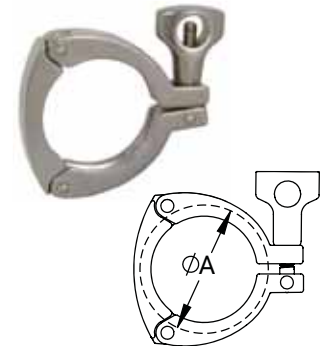
<sup>1</sup>Wing nut tightened to 25 in-lb of torque



### Three Segment Clamps - 13MHHM-3P

Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1" - 1-1/2"	600	300	2.12	13MHHM-3P100150
2"	550	275	2.65	13MHHM-3P200
2-1/2"	450	225	3.19	13MHHM-3P250
3"	350	175	3.72	13MHHM-3P300
4"	300	150	4.82	13MHHM-3P400
12"	75	50	12.74	13MHHM-3P1200

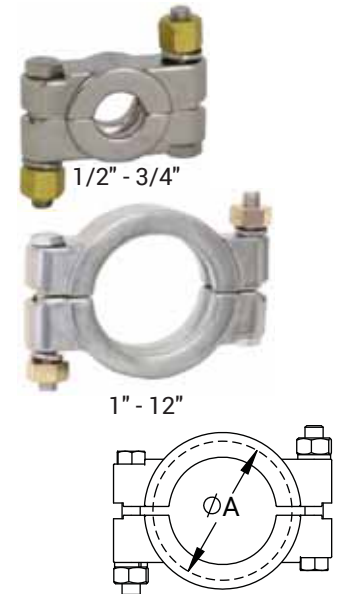
<sup>1</sup>Wing nut tightened to 25 in-lb of torque



### Bolted Clamps - 13MHP

Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1/2" - 3/4"	1500	1200	1.06	13MHP75
1" - 1-1/2"	1500	1200	2.05	13MHP100-150
2"	1000	800	2.58	13MHP200
2-1/2"	1000	800	3.11	13MHP250
3"	1000	800	3.64	13MHP300
4"	800	600	4.74	13MHP400
5"	300	200	5.76	13MHP500
6"	300	200	6.63	13MHP600
8"	250	150	8.64	13MHP800
10"	200	125	10.74	13MHP1000
12"	150	100	12.74	13MHP1200

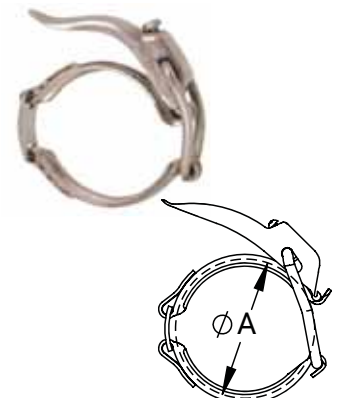
<sup>1</sup>All nuts are tightened to 20 ft-lb of torque



### Toggle Clamps - 13MHLA

Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1" - 1-1/2"	150	125	2.12	13MHLA100-150
2"	150	125	2.65	13MHLA200
2-1/2"	150	125	3.19	13MHLA250
3"	150	125	3.72	13MHLA300
4"	100	75	4.82	13MHLA400

<sup>1</sup>Screw tightened to maximum



Clamps

T-bolt Clamps - 13MO



Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1" - 1-1/2"	500	250	2.08	13MO100-150
2"	350	200	2.61	13MO200
2-1/2"	300	150	3.14	13MO250
3"	200	100	3.67	13MO300
4"	100	75	4.78	13MO400
6"	75	50	6.69	13MO600
8" <sup>2</sup>	50	40	8.69	13MO800
10" <sup>2</sup>	40	30	10.69	13MO1000
12" <sup>2</sup>	30	25	12.69	13MO1200

<sup>1</sup> 1" - 3" nuts tightened to 20 in-lb, 4" to 30 in-lb, 6" to 40 in-lb, and 8" - 12" 50 in-lb of torque.

<sup>2</sup> 2-bolt configuration

Dairy Clamps - 13WGC



Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	304 Stainless Steel Part #
1" - 1-1/2"	100	75	2.08	13WGC100-150
2"	100	75	2.61	13WGC200
2-1/2"	100	75	3.14	13WGC250
3"	100	75	3.67	13WGC300
4"	100	75	4.78	13WGC400

<sup>1</sup> Finger tight

Spring Loaded Nut - 13SLN

Applications

- Lines using PTFE gaskets that are subject to large temperature swings can benefit from this special product, as the PTFE is compressed through the cycling of the lines, the spring loaded nut will help keep the connection from leaking
- Ideal for use in high vibration applications where standard wing nuts can loosen and where bolted clamps are not an option

Specification

- Torque to 50 in-lb



Thread	A (in)	304 Stainless Steel Part #
5/16" - 18	1.73	13SLN

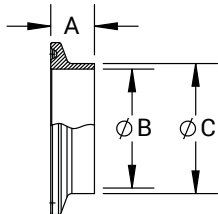
NOTE: Can be used on all wing nut style clamps.

Accessories

Description	304 Stainless Steel Part #
cross hole wing nut 5/16"-18 for use with single-pin and double-pin clamps	13WNX
Description	304 Stainless Steel Part #
mini cross hole wing nut 5/16"-18 for 1/2" - 3/4" clamps	13WNXM
Description	304 Stainless Steel Part #
serrated wing nut 5/16"-18 for use with single-pin and double-pin clamps	13WNS
Description	304 Stainless Steel Part #
wing nut 5/16"-18, 304 for Dixon brand squeeze clamps	13WNQ
Description	304 Stainless Steel Part #
hex nut 5/16"-18 for use with single-pin and double-pin clamps	13WNH
Description	Brass Part #
3/8"-16 nuts used on bolted clamps	13BNH
Description	304 Stainless Steel Part #
hex nut for bolted clamps	13SN
Description	304 Stainless Steel Part #
3/8" lock washer	13LW
Description	304 Stainless Steel Part #
bolt 3/8"-16 x 2-1/4" for 1/2" - 1-1/2" bolted clamps	13CB-2.25
bolt 3/8"-16 x 2-3/4" for 2" and 2-1/2" bolted clamps	13CB-2.75
bolt 3/8"-16 x 3-1/4" for 3" - 12" bolted clamps	13CB-3.25
Description	304 Stainless Steel Part #
rivet pin for 1/2" - 5" single pin clamps 5/16" x 1"	13RP
rivet pin for 6" and 8" single pin clamps 5/16" x 1-1/8"	13RP6
Description	304 Stainless Steel Part #
5/16"-18 x 2" threaded eye bolt for 1/2" - 5" clamps	13IB
5/16"-18 x 2-1/2" threaded eye bolt for 6" - 12" clamps	13IB6



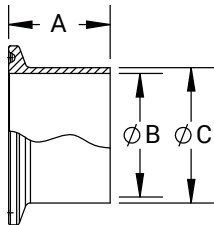
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**Clamp Fittings - Ferrules**  
**Short Weld Ferrules - 14WMP**

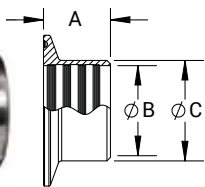
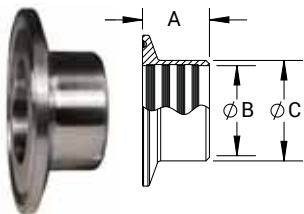
Tube O.D.	A (in)	B (in)	C (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	.50	.37	.50	14WMP-G50	14WMP-R50
3/4"	.50	.62	.75	14WMP-G75	14WMP-R75
1"	.50	.87	1.00	14WMP-G100	14WMP-R100
1-1/2"	.50	1.37	1.50	14WMP-G150	14WMP-R150
2"	.50	1.87	2.00	14WMP-G200	14WMP-R200
2-1/2"	.50	2.37	2.50	14WMP-G250	14WMP-R250
3"	.50	2.87	3.00	14WMP-G300	14WMP-R300
4"	.62	3.83	4.00	14WMP-G400	14WMP-R400
5"	.75	4.78	5.00	14WMP-G500	14WMP-R500
6"	.88	5.78	6.00	14WMP-G600	14WMP-R600
8"	.88	7.78	8.00	14WMP-G800	14WMP-R800
10"	.88	9.76	10.00	14WMP-G1000	14WMP-R1000
12"	.88	11.76	12.00	14WMP-G1200	14WMP-R1200

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3  
63-04



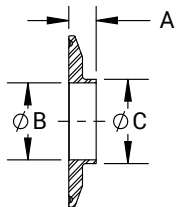
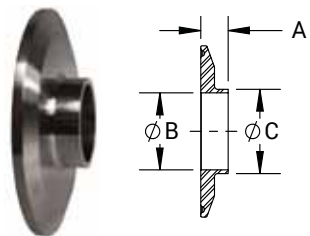
**Long Weld Ferrules - L14AM7**

Tube O.D.	A (in)	B (in)	C (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1.13	.37	.50	L14AM7-G50	L14AM7-R50
3/4"	1.13	.62	.75	L14AM7-G75	L14AM7-R75
1"	1.13	.87	1.00	L14AM7-G100	L14AM7-R100
1-1/2"	1.13	1.37	1.50	L14AM7-G150	L14AM7-R150
2"	1.13	1.87	2.00	L14AM7-G200	L14AM7-R200
2-1/2"	1.13	2.37	2.50	L14AM7-G250	L14AM7-R250
3"	1.13	2.87	3.00	L14AM7-G300	L14AM7-R300
4"	1.13	3.83	4.00	L14AM7-G400	L14AM7-R400
5"	1.13	4.78	5.00	L14AM7-G500	L14AM7-R500
6"	1.50	5.78	6.00	L14AM7-G600	L14AM7-R600
8"	1.50	7.78	8.00	L14AM7-G800	L14AM7-R800
10"	1.75	9.76	10.00	L14AM7-G1000	L14AM7-R1000
12"	1.75	11.76	12.00	L14AM7-G1200	L14AM7-R1200



**Reducing Roll-on Ferrules for Expanding - B31RMP**

Clamp End	Tube O.D.	A (in)	B (in)	C (in)	304 Stainless Steel Part #
2"	1"	.75	1.00	1.16	B31RMP-G200100
2"	1-1/2"	1.13	1.50	1.68	B31RMP-G200150



**Reducing Ferrules - B31WMP**

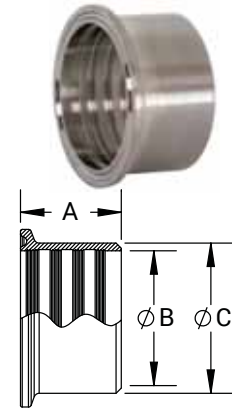
Tube O.D.	A (in)	B (in)	C (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
2" x 1"	.50	.87	1.00	B31WMP-G200100	B31WMP-R200100
2" x 1-1/2"	.50	1.37	1.50	B31WMP-G200150	B31WMP-R200150
2-1/2" x 1-1/2"	.50	1.37	1.50	B31WMP-G250150	B31WMP-R250150
2-1/2" x 2"	.50	1.87	2.00	B31WMP-G250200	B31WMP-R250200
3" x 2"	.50	1.87	2.00	B31WMP-G300200	B31WMP-R300200
3" x 2-1/2"	.50	2.37	2.50	B31WMP-G300250	B31WMP-R300250
4" x 2"	.63	1.87	2.00	B31WMP-G400200	B31WMP-R400200
4" x 2-1/2"	.63	2.37	2.50	B31WMP-G400250	B31WMP-R400250
4" x 3"	.63	2.87	3.00	B31WMP-G400300	B31WMP-R400300

NOTE: Additional sizes available.

## Clamp Fittings - Ferrules

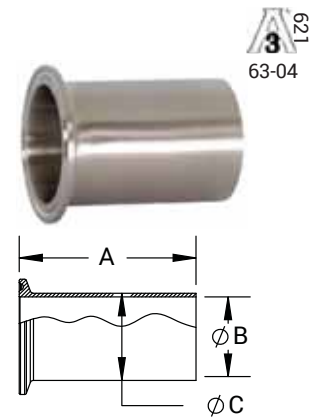
### Roll-On Ferrules for Expanding - 14RMP

Tube O.D.	A (in)	B (in)	C (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	.75	1.01	1.16	14RMP-G100	14RMP-R100
1-1/2"	1.13	1.51	1.68	14RMP-G150	14RMP-R150
2"	1.31	2.01	2.19	14RMP-G200	14RMP-R200
2-1/2"	1.38	2.51	2.71	14RMP-G250	14RMP-R250
3"	1.44	3.01	3.22	14RMP-G300	14RMP-R300
4"	1.50	4.01	4.26	14RMP-G400	14RMP-R400
6"	2.00	6.01	6.26	14RMP-G600	--



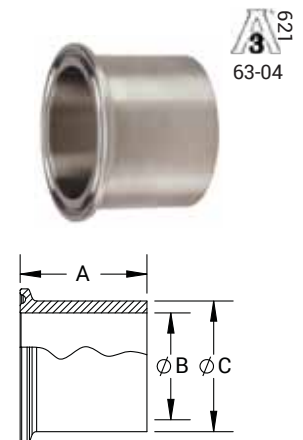
### Tank Ferrules (light duty) - 14WLMP

Tube O.D.	A (in)	B (in)	C (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	3.00	.87	1.00	14WLMP-G100	14WLMP-R100
1-1/2"	3.00	1.37	1.50	14WLMP-G150	14WLMP-R150
2"	3.00	1.87	2.00	14WLMP-G200	14WLMP-R200
2-1/2"	3.00	2.37	2.50	14WLMP-G250	14WLMP-R250
3"	4.00	2.87	3.00	14WLMP-G300	14WLMP-R300
4"	4.00	3.83	4.00	14WLMP-G400	14WLMP-R400
6"	6.00	5.78	6.00	14WLMP-G600	14WLMP-R600
8"	6.00	7.78	8.00	14WLMP-G800	14WLMP-R800
10"	6.00	9.76	10.00	--	14WLMP-R1000
12"	6.00	11.76	12.00	--	14WLMP-R1200



### Tank Ferrules (heavy duty) - 14MPW

Tube O.D.	A (in)	B (in)	C (in)	316L Stainless Steel Part #
1/2"	1.63	.32	.50	14MPW-R50
3/4"	1.63	.57	.75	14MPW-R75
1"	1.63	.87	1.16	14MPW-R100
1-1/2"	1.63	1.37	1.68	14MPW-R150
2"	1.75	1.87	2.19	14MPW-R200
2-1/2"	1.75	2.37	2.71	14MPW-R250
3"	1.81	2.87	3.22	14MPW-R300
4"	2.13	3.83	4.26	14MPW-R400
6"	2.50	5.76	6.19	14MPW-R600
8"	2.50	7.76	8.19	14MPW-R800



Clamp Fittings - Elbows

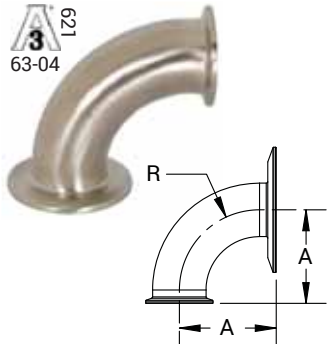
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90° Clamp Elbows - B2CMP

Tube O.D.	A (in)	R (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1.63	1.13	---	B2CMP-R50
3/4"	1.63	1.13	---	B2CMP-R75
1/2"	3.50	1.13	---	B2CMPL-R50
3/4"	3.50	1.13	---	B2CMPL-R75
1"	2.00	1.50	B2CMP-G100	B2CMP-R100
1-1/2"	2.75	2.25	B2CMP-G150	B2CMP-R150
2"	3.50	3.00	B2CMP-G200	B2CMP-R200
2-1/2"	4.25	3.75	B2CMP-G250	B2CMP-R250
3"	5.00	4.50	B2CMP-G300	B2CMP-R300
4"	6.63	6.00	B2CMP-G400	B2CMP-R400
6"	9.88	9.00	B2CMP-G600	B2CMP-R600
8"	12.88	12.00	B2CMP-G800	B2CMP-R800
10"	15.88	15.00	B2CMP-G1000	---
12"	18.88	18.00	B2CMP-G1200	---

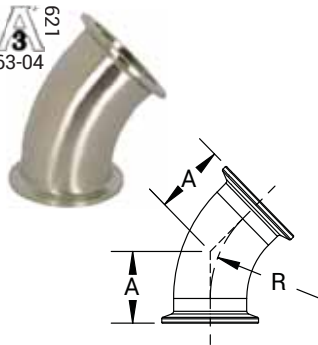
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90° Non-Tapered Reducing Clamp Elbows - B2CM31MP

Tube O.D.	A (in)	R (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
2" x 1-1/2"	2.75	2.25	B2CM31MPG200150	B2CM31MPR200150
2-1/2" x 2"	3.50	3.00	B2CM31MPG250200	B2CM31MPR250200
3" x 2"	3.50	3.00	B2CM31MPG300200	B2CM31MPR300200
3" x 2-1/2"	4.25	3.75	B2CM31MPG300250	B2CM31MPR300250

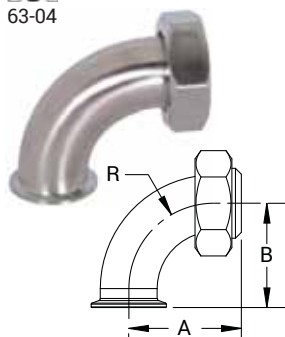
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45° Clamp Elbows - B2KMP

Tube O.D.	A (in)	R (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	.97	1.13	---	B2KMP-R50
3/4"	.97	1.13	---	B2KMP-R75
1"	1.12	1.50	B2KMP-G100	B2KMP-R100
1-1/2"	1.44	2.25	B2KMP-G150	B2KMP-R150
2"	1.75	3.00	B2KMP-G200	B2KMP-R200
2-1/2"	2.06	3.75	B2KMP-G250	B2KMP-R250
3"	2.37	4.50	B2KMP-G300	B2KMP-R300
4"	3.13	6.00	B2KMP-G400	B2KMP-R400
6"	4.63	9.00	B2KMP-G600	B2KMP-R600
8"	5.85	12.00	B2KMP-G800	B2KMP-R800
10"	7.13	15.00	B2KMP-G1000	---
12"	8.38	18.00	B2KMP-G1200	---

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90° Clamp x Plain Bevel Seat with Hex Nut Elbows - B2FMP-14

Tube O.D.	A (in)	B (in)	R (in)	304 Stainless Steel Part #
1"	2.22	2.00	1.50	B2FMP-14-G100
1-1/2"	2.97	2.75	2.25	B2FMP-14-G150
2"	3.75	3.50	3.00	B2FMP-14-G200
2-1/2"	4.63	4.25	3.75	B2FMP-14-G250
3"	5.41	5.00	4.50	B2FMP-14-G300
4"	7.03	6.63	6.00	B2FMP-14-G400

## Clamp Sweep Elbows

**Feature**

- Standard comes without tangents; for tangents or 45° options, call Dixon Sanitary 800.789.1718

### 12" 90° Clamp Sweep Elbows - B2SXLMP



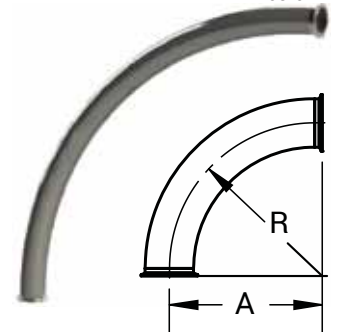
Tube O.D.	A (in)	R (in)	316L Stainless Steel Part #
1-1/2"	12.00	12.00	B2SXLMP12-R150
2"			B2SXLMP12-R200
2-1/2"			B2SXLMP12-R250
3"			B2SXLMP12-R300
4"			B2SXLMP12-R400



### 18" 90° Clamp Sweep Elbows - B2SXLMP



Tube O.D.	A (in)	R (in)	316L Stainless Steel Part #
1-1/2"	18.00	18.00	B2SXLMP18-R150
2"			B2SXLMP18-R200
2-1/2"			B2SXLMP18-R250
3"			B2SXLMP18-R300
4"			B2SXLMP18-R400



### 24" 90° Clamp Sweep Elbows - B2SXLMP



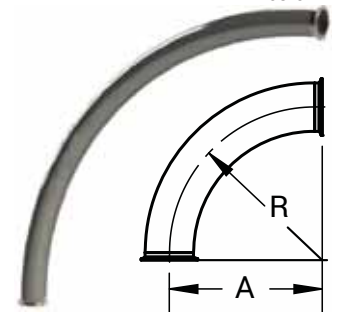
Tube O.D.	A (in)	R (in)	316L Stainless Steel Part #
1-1/2"	24.00	24.00	B2SXLMP24-R150
2"			B2SXLMP24-R200
2-1/2"			B2SXLMP24-R250
3"			B2SXLMP24-R300
4"			B2SXLMP24-R400

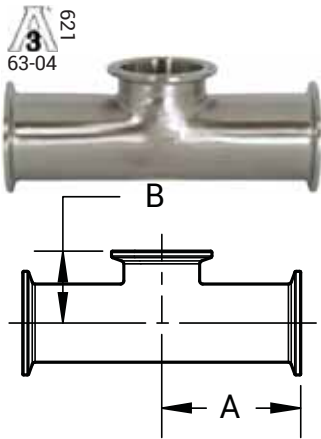


### 36" 90° Clamp Sweep Elbows - B2SXLMP



Tube O.D.	A (in)	R (in)	316L Stainless Steel Part #
3"	36.00	36.00	B2SXLMP36-R300
4"			B2SXLMP36-R400
6"			B2SXLMP36-R600

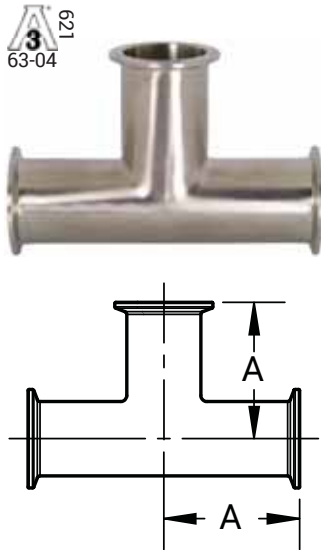




Clamp Fittings - Tees

Short Outlet Tees - B7MPS

Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	2.38	1.13	B7MPS-G100	B7MPS-R100
1-1/2"	2.75	1.38	B7MPS-G150	B7MPS-R150
2"	3.50	1.63	B7MPS-G200	B7MPS-R200
2-1/2"	3.50	1.88	B7MPS-G250	B7MPS-R250
3"	3.75	2.13	B7MPS-G300	B7MPS-R300
4"	4.50	2.75	B7MPS-G400	B7MPS-R400



Clamp Tees - B7MP

Tube O.D.	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	2.38	---	B7MP-R50
3/4"	2.50	---	B7MP-R75
1"	2.38	B7MP-G100	B7MP-R100
1-1/2"	2.75	B7MP-G150	B7MP-R150
2"	3.50	B7MP-G200	B7MP-R200
2-1/2"	3.50	B7MP-G250	B7MP-R250
3"	3.75	B7MP-G300	B7MP-R300
4"	4.50	B7MP-G400	B7MP-R400
6"	6.50	B7MP-G600	B7MP-R600
8"	7.88	B7MP-G800	B7MP-R800
10"	9.38	B7MP-G1000	---
12"	10.88	B7MP-G1200	---



Clamp Reducing Tees - B7RMP

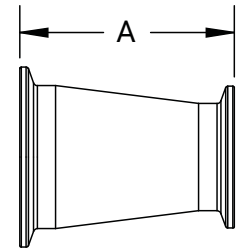
Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
3/4" x 1/2"	2.50	2.50	---	B7RMP-R7550
1" x 1/2"	2.63	2.63	---	B7RMP-R10050
1" x 3/4"	2.63	2.63	---	B7RMP-R10075
1-1/2" x 1/2"	2.88	2.88	---	B7RMP-R15050
1-1/2" x 3/4"	2.88	2.88	---	B7RMP-R15075
1-1/2" x 1"	2.16	1.88	B7RMP-G150100	B7RMP-R150100
2" x 1/2"	3.38	3.13	---	B7RMP-R20050
2" x 3/4"	3.38	3.13	---	B7RMP-R20075
2" x 1"	2.56	2.13	B7RMP-G200100	B7RMP-R200100
2" x 1-1/2"	2.56	2.41	B7RMP-G200150	B7RMP-R200150
2-1/2" x 1-1/2"	2.84	2.66	B7RMP-G250150	B7RMP-R250150
2-1/2" x 2"	2.84	2.81	B7RMP-G250200	B7RMP-R250200
3" x 1-1/2"	3.09	2.91	B7RMP-G300150	B7RMP-R300150
3" x 2"	3.09	3.06	B7RMP-G300200	B7RMP-R300200
3" x 2-1/2"	3.09	3.09	B7RMP-G300250	B7RMP-R300250
4" x 1-1/2"	4.06	3.41	B7RMP-G400150	B7RMP-R400150
4" x 2"	4.06	3.56	B7RMP-G400200	B7RMP-R400200
4" x 2-1/2"	4.06	3.59	B7RMP-G400250	B7RMP-R400250
4" x 3"	4.06	3.59	B7RMP-G400300	B7RMP-R400300

### Clamp Reducers

#### Clamp Concentric Reducers - B3114MP

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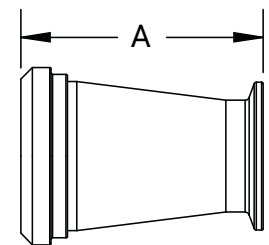
Tube O.D.	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
3/4" x 1/2"	2.00	---	B3114MP-R7550
1" x 1/2"	3.00	---	B3114MP-R10050
1" x 3/4"	2.00	---	B3114MP-R10075
1-1/2" x 1/2"	5.00	---	B3114MP-R15050
1-1/2" x 3/4"	4.00	---	B3114MP-R15075
1-1/2" x 1"	3.00	B3114MP-G150100	B3114MP-R150100
2" x 1/2"	7.00	---	B3114MP-R20050
2" x 3/4"	6.00	---	B3114MP-R20075
2" x 1"	5.00	B3114MP-G200100	B3114MP-R200100
2" x 1-1/2"	3.00	B3114MP-G200150	B3114MP-R200150
2-1/2" x 1-1/2"	5.00	B3114MP-G250150	B3114MP-R250150
2-1/2" x 2"	3.00	B3114MP-G250200	B3114MP-R250200
3" x 1"	9.00	B3114MP-G300100	B3114MP-R300100
3" x 1-1/2"	7.00	B3114MP-G300150	B3114MP-R300150
3" x 2"	5.00	B3114MP-G300200	B3114MP-R300200
3" x 2-1/2"	3.00	B3114MP-G300250	B3114MP-R300250
4" x 1-1/2"	11.13	B3114MP-G400150	B3114MP-R400150
4" x 2"	9.13	B3114MP-G400200	B3114MP-R400200
4" x 2-1/2"	7.13	B3114MP-G400250	B3114MP-R400250
4" x 3"	5.13	B3114MP-G400300	B3114MP-R400300
6" x 2"	6.88	B3114MP-G600200	B3114MP-R600200
6" x 3"	6.88	B3114MP-G600300	B3114MP-R600300
6" x 4"	7.00	B3114MP-G600400	B3114MP-R600400
8" x 4"	7.50	B3114MP-G800400	B3114MP-R800400
8" x 6"	7.75	B3114MP-G800600	B3114MP-R800600



#### Plain Bevel Seat x Clamp Concentric Reducers - B14C31

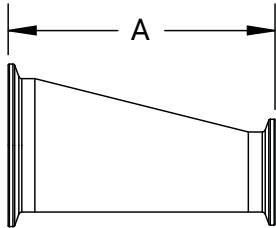
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Tube O.D.	A (in)	304 Stainless Steel Part #
1-1/2" x 1"	3.22	B14C31-G150100 <sup>1</sup>
2" x 1-1/2"	3.25	B14C31-G200150
2-1/2" x 1-1/2"	5.38	B14C31-G250150
2-1/2" x 2"	3.38	B14C31-G250200
3" x 1-1/2"	7.41	B14C31-G300150
3" x 2"	5.41	B14C31-G300200
3" x 2-1/2"	3.41	B14C31-G300250



<sup>1</sup> Comes with 13H-G150 hex nut

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### Clamp Reducers

#### Clamp Eccentric Reducers - B3214MP

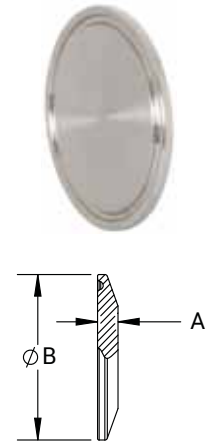
Tube O.D.	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
3/4" x 1/2"	2.00	---	B3214MP-R7550
1" x 1/2"	3.00	---	B3214MP-R10050
1" x 3/4"	2.00	---	B3214MP-R10075
1-1/2" x 1/2"	5.00	---	B3214MP-R15050
1-1/2" x 3/4"	4.00	---	B3214MP-R15075
1-1/2" x 1"	3.00	B3214MP-G150100	B3214MP-R150100
2" x 1/2"	7.00	---	B3214MP-R20050
2" X 3/4"	6.00	---	B3214MP-R20075
2" x 1"	5.00	B3214MP-G200100	B3214MP-R200100
2" x 1-1/2"	3.00	B3214MP-G200150	B3214MP-R200150
2-1/2" x 1-1/2"	5.00	B3214MP-G250150	B3214MP-R250150
2-1/2" x 2"	3.00	B3214MP-G250200	B3214MP-R250200
3" x 1"	9.00	B3214MP-G300100	B3214MP-R300100
3" x 1-1/2"	7.00	B3214MP-G300150	B3214MP-R300150
3" x 2"	5.00	B3214MP-G300200	B3214MP-R300200
3" x 2-1/2"	3.00	B3214MP-G300250	B3214MP-R300250
4" x 1-1/2"	11.13	B3214MP-G400150	B3214MP-R400150
4" x 2"	9.13	B3214MP-G400200	B3214MP-R400200
4" x 2-1/2"	7.13	B3214MP-G400250	B3214MP-R400250
4" x 3"	5.13	B3214MP-G400300	B3214MP-R400300
6" x 3"	6.88	B3214MP-G600300	B3214MP-R600300
6" x 4"	7.00	B3214MP-G600400	B3214MP-R600400
8" x 4"	7.50	B3214MP-G800400	B3214MP-R800400
8" x 6"	7.75	B3214MP-G800600	B3214MP-R800600

## Clamp Fittings - Caps

### Solid End Caps - 16AMP

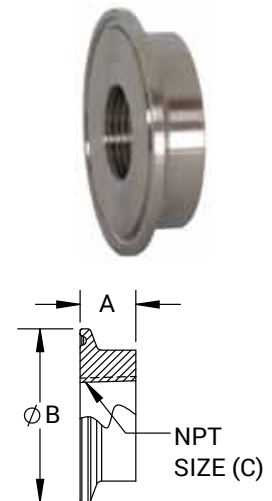
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Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2" - 3/4"	.25	.99	16AMP-G50-75	16AMP-R50-75
1" - 1-1/2"	.25	1.98	16AMP-G100-150	16AMP-R100-150
2"	.25	2.52	16AMP-G200	16AMP-R200
2-1/2"	.25	3.05	16AMP-G250	16AMP-R250
3"	.25	3.58	16AMP-G300	16AMP-R300
4"	.31	4.68	16AMP-G400	16AMP-R400
5"	.38	5.69	16AMP-G500	16AMP-R500
6"	.44	6.56	16AMP-G600	16AMP-R600
8"	.44	8.60	16AMP-G800	16AMP-R800
10"	.44	1.57	16AMP-G1000	16AMP-R1000
12"	.44	12.57	16AMP-G1200	16AMP-R1200



### Thermometer Caps - B23BMP

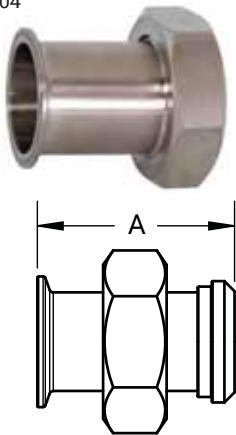
Tube O.D.	A (in)	B (in)	C <sup>1</sup> (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	.50	.99	1/4"	--	B23BMP-R5014
3/4"	.50	.99	1/4"	--	B23BMP-R7514
1"	.63	1.98	1/2"	B23BMP-G100	B23BMP-R100
1-1/2"	.63	1.98	1/4"	--	B23BMP-R15025
	.63	1.98	1/2"	B23BMP-G15050	B23BMP-R15050
	.63	1.98	3/4"	B23BMP-G150	B23BMP-R150
2"	.63	2.52	1/4"	--	B23BMP-R20025
	.63	2.52	1/2"	B23BMP-G20050	B23BMP-R20050
	.63	2.52	3/4"	B23BMP-G200	B23BMP-R200
	.63	2.52	1"	--	B23BMP-R200100
2-1/2"	.63	2.52	1-1/2"	--	B23BMP-R200150
	.63	3.05	3/4"	B23BMP-G250	B23BMP-R250
	.63	3.58	1/4"	B23BMP-G30025	B23BMP-R30025
3"	.63	3.58	1/2"	B23BMP-G30050	B23BMP-R30050
	.63	3.58	3/4"	B23BMP-G300	B23BMP-R300
	.63	3.58	1"	B23BMP-G300100	B23BMP-R300100
	.63	3.58	2"	B23BMP-G300200	B23BMP-R300200
4"	.63	4.68	3/4"	B23BMP-G400	B23BMP-R400



<sup>1</sup>Other NPT tap sizes available; call Dixon Sanitary at 800.789.1718.

Clamp Adapters

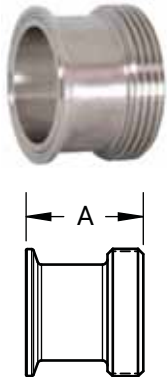
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Clamp x Plain Bevel Seat Adapters with Hex Nut - 17MP-14

Tube O.D.	A (in)	304 Stainless Steel Part #
1"	3.00	17MP-14-G100
1-1/2"	3.00	17MP-14-G150
2"	3.00	17MP-14-G200
2-1/2"	3.50	17MP-14-G250
3"	3.75	17MP-14-G300
4"	4.00	17MP-14-G400

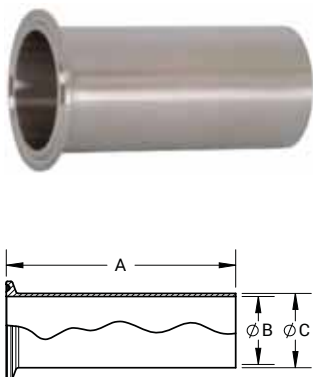
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Clamp x Threaded Bevel Seat Adapters - 17MP-15

Tube O.D.	A (in)	304 Stainless Steel Part #
1"	1.84	17MP-15-G100
1-1/2"	1.84	17MP-15-G150
2"	1.88	17MP-15-G200
2-1/2"	2.00	17MP-15-G250
3"	2.03	17MP-15-G300
4"	2.16	17MP-15-G400

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Tygon® Hose Adapters - 14MPHT

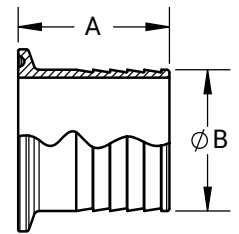
Tube O.D.	A (in)	B (in)	C (in)	316L Stainless Steel Part #
1/2"	4.00	.37	.50	14MPHT-R50
3/4"	4.00	.62	.75	14MPHT-R75
1"	4.50	.87	1.00	14MPHT-R100
1-1/2"	4.50	1.37	1.50	14MPHT-R150
2"	4.50	1.87	2.00	14MPHT-R200
2-1/2"	4.50	2.37	2.50	14MPHT-R250
3"	4.50	2.87	3.00	14MPHT-R300
4"	4.63	3.83	4.00	14MPHT-R400
6"	6.00	5.88	6.00	14MPHT-R600

1. Make sure the I.D. of the hose is slightly bigger than the O.D. of the fitting.
2. Insert 14MPHT fitting into the I.D. of the hose, so that the hose is 1/2" away from the clamp connection.
3. Use a band clamp to secure the hose to the adapter.

NOTE: 3A certification is for fitting alone. The fitting attached to a hose does not retain the 3A certification nor does it make the hose assembly 3A certified.

**Clamp Fittings - Adapters**  
**Rubber Hose Adapters - 14MPHR**

Tube O.D.	Hose Size	A (in)	B (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1/8"	1.25	.15	--	14MPHR-R50125
	1/4"	1.50	.29	--	14MPHR-R5025
	3/8"	1.50	.42	--	14MPHR-R50375
	1/2"	1.50	.54	--	14MPHR-R50
	3/4"	1.50	.79	--	14MPHR-R5075
3/4"	1/8"	1.50	.15	--	14MPHR-R75125
	1/4"	1.50	.29	--	14MPHR-R7525
	3/8"	1.50	.42	--	14MPHR-R75375
	1/2"	1.50	.54	--	14MPHR-R7550
	3/4"	1.50	.79	--	14MPHR-R75
	5/8"	1.50	.67	--	14MPHR-R75625
1"	1/4"	1.69	.29	--	14MPHR-R10025
	3/8"	1.50	.42	14MPHR-G100375	14MPHR-R100375
	1/2"	1.50	.54	14MPHR-G10050	14MPHR-R10050
	3/4"	1.69	.79	14MPHR-G10075	14MPHR-R10075
	1"	1.69	1.04	14MPHR-G100	14MPHR-R100
1-1/2"	1/8"	1.50	.17	14MPHR-G150125	14MPHR-R150125
	1/4"	1.50	.29	--	14MPHR-R15025
	3/8"	1.50	.42	14MPHR-G150375	14MPHR-R150375
	1/2"	1.50	.54	14MPHR-G15050	14MPHR-R15050
	5/8"	1.50	.79	14MPHR-G150625	14MPHR-R150625
	3/4"	1.50	.67	14MPHR-G15075	14MPHR-R15075
	1"	1.69	1.04	14MPHR-G150100	14MPHR-R150100
	1-1/4"	1.69	1.29	--	14MPHR-R150-125
	1-1/2"	1.69	1.54	14MPHR-G150	14MPHR-R150
2"	1/8"	2.31	.17	14MPHR-G200125	14MPHR-R200125
	1/2"	2.31	.54	--	14MPHR-R20050
	5/8"	2.31	.67	14MPHR-G200625	--
	3/4"	2.31	.79	14MPHR-G20075	14MPHR-R20075
	1"	2.31	1.04	14MPHR-G200100	--
	1-1/2"	2.31	1.54	14MPHR-G200150	14MPHR-R200150
2-1/2"	2"	2.31	2.04	14MPHR-G200	14MPHR-R200
	1"	2.34	1.04	14MPHR-G250100	--
	2-1/2"	2.34	2.54	14MPHR-G250	14MPHR-R250
3"	3"	3.09	3.04	14MPHR-G300	14MPHR-R300
4"	3"	3.41	3.04	--	14MPHR-R400300
	4"	3.41	4.04	14MPHR-G400	14MPHR-R400
6"	6"	3.41	6.04	14MPHR-G600	14MPHR-R600
8"	8"	3.41	8.04	14MPHR-G800	14MPHR-R800
10"	10"	3.40	1.04	14MPHR-G1000	--



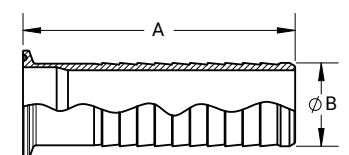
1. Make sure the I.D. of the hose is slightly bigger than the O.D. of the fitting.
2. Insert 14MPHR fitting into the I.D. of the hose, so that the hose is 1/2" away from the clamp connection.
3. Use a band clamp to secure the hose to the adapter.

**Brewery Hose Barb Adapters - 14MPHRL**

**Application**

- Suitable for use with band clamps

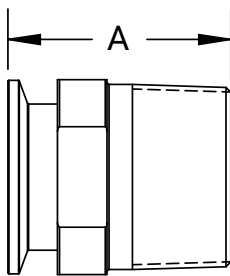
Size	A (in)	B (in)	304 Stainless Steel Part #
1/2"	3.35	.53	14MPHRL50
3/4"	3.35	.81	14MPHRL75
1"	3.50	1.05	14MPHRL100
1-1/2"	5.00	1.55	14MPHRL150
2"	5.00	2.05	14MPHRL200
2-1/2"	5.50	2.55	14MPHRL250
3"	5.50	3.05	14MPHRL300
4"	5.50	4.05	14MPHRL400
6"	5.50	6.05	14MPHRL600



NOTE: Use of PVC tubing requires special techniques to prevent leakage. All assembly work must be completed with heated tube. Cold durometer is 90 as opposed to rubber hose at 65 to 70 durometer. Banding buckles must be at 180° from one another.



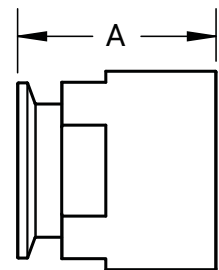
**Clamp Fittings - Adapters**  
**Male NPT Adapters - 21MP**



Tube O.D.	NPT Size	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1/8"	2.00	--	21MP-R50125
	1/4"	2.00	--	21MP-R5025
	3/8"	2.00	--	21MP-R50375
	1/2"	1.63	--	21MP-R50
	3/4"	2.00	--	21MP-R5075
3/4"	1/4"	2.00	--	21MP-R7525
	3/8"	2.00	--	21MP-R75375
	1/2"	2.00	--	21MP-R7550
	3/4"	1.79	--	21MP-R75
1"	1"	2.25	--	21MP-R75100
	1/8"	2.19	21MP-G100-125	21MP-R100-125
	1/4"	2.16	21MP-G10025	21MP-R10025
	3/8"	2.16	21MP-G100375	21MP-R100375
	1/2"	2.19	21MP-G10050	21MP-R10050
	3/4"	2.19	21MP-G10075	21MP-R10075
	1"	2.25	21MP-G100	21MP-R100
	1-1/4"	2.44	21MP-G100125	21MP-R100125
	1-1/2"	2.44	21MP-G100150	21MP-R100150
1-1/2"	2"	2.63	21MP-G100200	21MP-R100200
	1/4"	2.16	21MP-G15025	21MP-R15025
	3/8"	2.16	21MP-G150375	21MP-R150375
	1/2"	2.19	21MP-G15050	21MP-R15050
	3/4"	2.19	21MP-G15075	21MP-R15075
	1"	2.44	21MP-G150100	21MP-R150100
	1-1/4"	2.44	21MP-G150125	21MP-R150125
	1-1/2"	2.25	21MP-G150	21MP-R150
	2"	2.63	21MP-G150200	21MP-R150200
2"	2-1/2"	3.28	21MP-G150250	21MP-R150250
	1/4"	2.47	--	21MP-R20025
	1/2"	2.19	21MP-G20050	21MP-R20050
	3/4"	2.19	21MP-G20075	21MP-R20075
	1"	2.47	21MP-G200100	21MP-R200100
	1-1/4"	2.47	21MP-G200125	21MP-R200125
	1-1/2"	2.63	21MP-G200150	21MP-R200150
	2"	2.64	21MP-G200	21MP-R200
	2-1/2"	3.13	21MP-G200250	21MP-R200250
2-1/2"	3"	3.50	21MP-G200300	21MP-R200300
	4"	3.50	21MP-G200400	21MP-R200400
	1/2"	2.78	21MP-G25050	21MP-R25050
	1"	2.78	21MP-G250100	21MP-R250100
	1-1/2"	2.78	21MP-G250150	21MP-R250150
	2"	2.78	21MP-G250200	21MP-R250200
3"	2-1/2"	2.88	21MP-G250	21MP-R250
	3"	3.69	21MP-G250300	21MP-R250300
	1"	3.00	21MP-G300100	21MP-R300100
	1-1/2"	3.00	21MP-G300150	21MP-R300150
	2"	3.00	21MP-G300200	21MP-R300200
4"	2-1/2"	3.00	21MP-G300250	21MP-R300250
	3"	3.07	21MP-G300	21MP-R300
	4"	3.50	21MP-G300400	21MP-R300400
6"	3"	3.81	21MP-G400300	21MP-R400300
	4"	3.16	21MP-G400	21MP-R400
8"	6"	4.50	21MP-G600	21MP-R600
	8"	3.75	21MP-G800	--

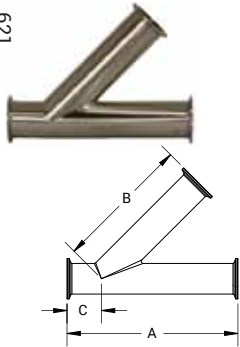
**Clamp Fittings - Adapters**  
**Female NPT Adapters - 22MP**

Tube O.D.	NPT Size	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1/8"	1.25	--	22MP-R50-125
	1/4"	1.50	--	22MP-R5025
	3/8"	1.50	--	22MP-R50375
	1/2"	1.50	--	22MP-R50
	3/4"	1.63	--	22MP-R5075
	1"	1.63	--	22MP-R50100
	1-1/2"	2.25	--	22MP-R50150
3/4"	2"	2.25	--	22MP-R50200
	1/8"	1.25	--	22MP-R75125
	1/4"	1.50	--	22MP-R7525
	3/8"	1.50	--	22MP-R75375
	1/2"	1.50	--	22MP-R7550
	3/4"	1.63	--	22MP-R75
1"	1"	1.63	--	22MP-R75100
	1/8"	1.63	22MP-G100-125	22MP-R100-125
	1/4"	1.63	22MP-G10025	22MP-R10025
	3/8"	1.63	22MP-G100375	22MP-R100375
	1/2"	1.63	22MP-G10050	22MP-R10050
	3/4"	1.63	22MP-G10075	22MP-R10075
	1"	1.63	22MP-G100	22MP-R100
	1-1/4"	1.63	22MP-G100125	22MP-R100125
	1-1/2"	1.63	22MP-G100150	22MP-R100150
	2"	1.63	22MP-G100200	22MP-R100200
1-1/2"	1/8"	1.63	22MP-G150125	22MP-R150-125
	1/4"	1.63	22MP-G15025	22MP-R15025
	3/8"	1.63	22MP-G150375	22MP-R150375
	1/2"	1.63	22MP-G15050	22MP-R15050
	3/4"	1.63	22MP-G15075	22MP-R15075
	1"	1.63	22MP-G150100	22MP-R150100
	1-1/4"	2.25	22MP-G150125	22MP-R150125
	1-1/2"	2.25	22MP-G150	22MP-R150
	2"	2.25	22MP-G150200	22MP-R150200
	2-1/2"	2.50	22MP-G150250	--
2"	3"	2.50	--	22MP-R150300
	1/4"	1.69	22MP-G20025	22MP-R20025
	1/2"	1.69	22MP-G20050	22MP-R20050
	3/4"	1.69	22MP-G20075	22MP-R20075
	1"	1.69	22MP-G200100	22MP-R200100
	1-1/4"	1.69	22MP-G200125	22MP-R200125
	1-1/2"	1.66	22MP-G200150	22MP-R200150
	2"	2.34	22MP-G200	22MP-R200
	2-1/2"	2.41	22MP-G200250	22MP-R200250
	3"	2.41	22MP-G200300	22MP-R200300
2-1/2"	4"	2.91	22MP-G200400	--
	3/4"	1.31	22MP-G25075	22MP-R25075
	1"	1.31	22MP-G250100	22MP-R250100
	1-1/2"	1.66	22MP-G250150	22MP-R250150
	2"	1.72	22MP-G250200	22MP-R250200
	2-1/2"	2.09	22MP-G250	22MP-R250
3"	3"	2.19	22MP-G250300	22MP-R250300
	1"	2.19	22MP-G300100	22MP-R300100
	1-1/2"	2.19	22MP-G300150	22MP-R300150
	2"	2.19	22MP-G300200	22MP-R300200
	2-1/2"	2.19	22MP-G300250	--
4"	3"	2.19	22MP-G300	22MP-R300
	1-1/2"	2.19	22MP-G400150	22MP-R400150
	2"	2.19	22MP-G400200	22MP-R400200
	2-1/2"	2.19	22MP-G400250	22MP-R400250
	3"	2.19	22MP-G400300	22MP-R400300
	4"	2.63	22MP-G400	22MP-R400
	6"	3.25	22MP-G400600	22MP-R400600



Laterals, Wyes, Crosses, Bends, and Flanges

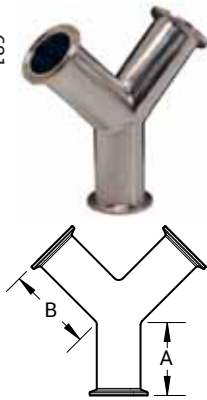
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Clamp Laterals - B28AMP

Tube O.D.	A (in)	B (in)	C (in)	316L Stainless Steel Part #
1"	7.00	5.50	1.50	B28AMP-R100
1-1/2"	8.38	6.69	1.69	B28AMP-R150
2"	9.75	7.63	2.13	B28AMP-R200
2-1/2"	11.00	9.00	2.00	B28AMP-R250
3"	11.75	9.38	2.38	B28AMP-R300
4"	14.06	11.31	2.64	B28AMP-R400
6"	19.75	15.38	4.38	B28AMP-R600

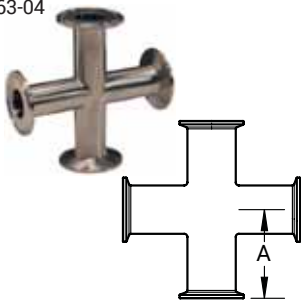
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Clamp True Wyes - B28BMP

Tube O.D.	A (in)	B (in)	316L Stainless Steel Part #
1"	2.50	2.94	B28BMP-R100
1-1/2"	2.50	2.94	B28BMP-R150
2"	3.13	3.75	B28BMP-R200
2-1/2"	3.87	4.63	B28BMP-R250
3"	4.50	5.38	B28BMP-R300
4"	6.00	6.00	B28BMP-R400
6"	3.12	7.62	B28BMP-R600
8"	3.70	8.20	B28BMP-R800

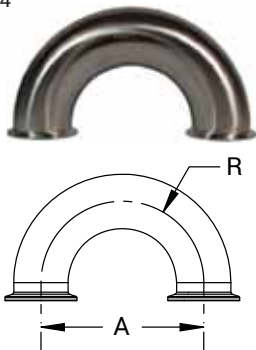
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Clamp Crosses - B9MP

Tube O.D.	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	2.38	B9MP-G100	B9MP-R100
1-1/2"	2.75	B9MP-G150	B9MP-R150
2"	3.50	B9MP-G200	B9MP-R200
2-1/2"	3.50	B9MP-G250	B9MP-R250
3"	3.75	B9MP-G300	B9MP-R300
4"	4.50	B9MP-G400	B9MP-R400

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Clamp 180° Return Bends - B2WUMP

Tube O.D.	A (in)	R (in)	316L Stainless Steel Part #
1"	3.00	1.50	B2WUMP-R100
1-1/2"	4.50	2.25	B2WUMP-R150
2"	6.00	3.00	B2WUMP-R200
2-1/2"	7.50	3.75	B2WUMP-R250
3"	9.00	4.50	B2WUMP-R300
4"	12.00	6.00	B2WUMP-R400

Laterals, Wyes, Crosses, Bends, and Flanges

Clamp x 150# Flange Adapters - B38MP

Tube O.D.	A (in)	B (in)	C (in)	Number & Diameter Bolt Holes	316L Stainless Steel Part #
1"	3.13	.87	1.63	4/.625	B38MP-R100
1-1/2"	3.88	1.37	1.63	4/.625	B38MP-R150
2"	4.75	1.87	1.75	4/.750	B38MP-R200
2-1/2"	5.50	2.37	1.75	4/.750	B38MP-R250
3"	6.00	2.87	1.75	4/.750	B38MP-R300
4"	7.50	3.83	1.75	8/.750	B38MP-R400
6"	9.50	5.78	2.13	8/.750	B38MP-R600



Clamp End Protection Covers - BCC

Application

- Use these covers to protect all clamp ends on fittings, valves, filters, and pumps

Size	Vinyl Plastic Blue Part #	Vinyl Plastic Red Part #
1/2"	BCC-050	BCCR-050
3/4"	BCC-075	BCCR-075
1"	BCC-100	BCCR-100
1-1/2"	BCC-150	BCCR-150
2"	BCC-200	BCCR-200
2-1/2"	BCC-250	BCCR-250
3"	BCC-300	BCCR-300
4"	BCC-400	BCCR-400
6"	BCC-600	BCCR-600
8"	BCC-800	--





## Sanitary Spools

Sanitary spools are pre-fabricated lengths of stainless steel tubing with sanitary fittings welded to the ends.

### Applications

- Sanitary process lines can be built without having to use on-site fabrication or welding
- OEM skid packages that have predetermined spool specifications: Tube O.D. and length, end connections, and finish

### Sizes

- 1/2" - 8" tube O.D.

### Features

- Clamp connection, standard
- Will fabricate to customer drawings
- Customer part number/logo can be laser etched on each spool

### Materials

- 304 or 316L stainless steel
- Surface finish: Internal product contact surface finish ≤ 32Ra



Clamp End



Weld End

Size	Material	12" Part #	18" Part #	24" Part #	36" Part #	48" Part #
1-1/2"	304 stainless steel	S15CC012.000GC	S15CC018.000GC	S15CC024.000GC	S15CC036.000GC	S15CC048.000GC
2"		S20CC012.000GC	S20CC018.000GC	S20CC024.000GC	S20CC036.000GC	S20CC048.000GC
2-1/2"		S25CC012.000GC	S25CC018.000GC	S25CC024.000GC	S25CC036.000GC	S25CC048.000GC
3"		S30CC012.000GC	S30CC018.000GC	S30CC024.000GC	S30CC036.000GC	S30CC048.000GC
4"		S40CC012.000GC	S40CC018.000GC	S40CC024.000GC	S40CC036.000GC	S40CC048.000GC
1-1/2"	316L stainless steel	S15CC012.000RC	S15CC018.000RC	S15CC024.000RC	S15CC036.000RC	S15CC048.000RC
2"		S20CC012.000RC	S20CC018.000RC	S20CC024.000RC	S20CC036.000RC	S20CC048.000RC
2-1/2"		S25CC012.000RC	S25CC018.000RC	S25CC024.000RC	S25CC036.000RC	S25CC048.000RC
3"		S30CC012.000RC	S30CC018.000RC	S30CC024.000RC	S30CC036.000RC	S30CC048.000RC
4"		S40CC012.000RC	S40CC018.000RC	S40CC024.000RC	S40CC036.000RC	S40CC048.000RC

For additional sizes and configurations, contact Dixon Sanitary 800.789.1718.

## Standard Sanitary Surface Finish Options

### Option M (most economical)

- Polished 32 Ra I.D.
- Exterior weld chemically treated but not ground flush
- Compliant to 00-01 standard

### Option C

- Polished 32 Ra I.D./O.D.
- Exterior weld ground flush
- Compliant to 00-01 standard



NOTE: if you would like to request a different surface finish, please contact Dixon Sanitary at 800.789.1718 or email [sanitariesales@dixonvalve.com](mailto:sanitariesales@dixonvalve.com).

### Sanitary Spool Part Number Key

Dixon Spool Fabrication Part Number Key		Series	Size	Connections		Overall Length					Material	Surface Finish	
		S	10	C	B	1	0	0	.	1	2	5	R
<b>Series</b>	<b>Code</b>												
Spool	S	←											
<b>Size</b>	<b>Code</b>												
1/2"	50												
3/4"	75												
1"	10	←											
1-1/2"	15												
2"	20												
2-1/2"	25												
3"	30												
4"	40												
<b>Connections</b>	<b>Code</b>												
KF Flange	A												
Clamp	C	←											
Weld	B	←											
Female I-line	F												
Male I-line	M												
Threaded bevel	T												
Plain bevel	P												
Q-line	Q												
John Perry plain	J												
John Perry threaded	H												
Female NPT <sup>1</sup>	1												
Male NPT <sup>1</sup>	2												
<b>Overall Length</b>	<b>Code</b>												
Hundredths place (given in inches)	0-9	←											
Tenths place (given in inches)	0-9	←											
Ones place (given in inches)	0-9	←											
Decimal divider	.	←											
Tenths place (given in inches)	0-9	←											
Hundredths place (given in inches)	0-9	←											
Thousandths place (given in inches)	0-9	←											
<b>Material</b>	<b>Code</b>												
304 stainless steel	G												
316L stainless steel	R	←											
<b>Surface Finish</b>	<b>Code</b>												
#7 polished 32Ra ID/OD	C	←											
SF1 mechanically polished 20Ra I.D. and 32Ra O.D.	F												
SF2 mechanically polished 25Ra I.D. and 32Ra O.D.	G												
SF3 mechanically polished 30Ra I.D. and 32Ra O.D.	H												
SF4 electropolished 15Ra I.D. and mechanically polished 32Ra O.D.	J												
SF5 electropolished 20Ra ID and mechanically polished 32Ra O.D.	K												
SF6 electropolished 25Ra ID and mechanically polished 32Ra O.D.	L												
Polished 32 Ra I.D./O.D. with welds unground <sup>1</sup>	M												

<sup>1</sup> These end connections do not meet 3A standards.



## Dixon Sanitary Weld Fittings

### A Complete Weld Connection



← Weld end



← Weld end

#### Size

- 1/2" - 12" O.D. tube

#### Materials

- G = 304 stainless steel
- R = 316L stainless steel
- Other alloys are available

#### Features

- 3A sanitary finish I.D. and O.D.
- #3, #5, and electropolish finishes are available

#### Primary Markets

- Found in the food processing, beverage, dairy, personal care, pet products, wineries and breweries, oil extraction, and industrial markets

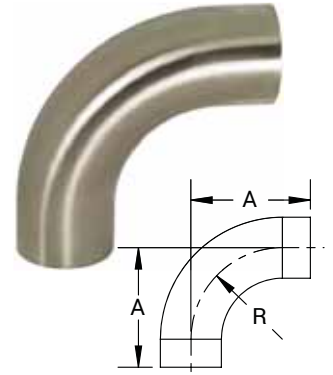
#### Dimensions of stainless steel tube

Tube O.D.	Nominal Wall Thickness (in)
1/2"	.065
3/4"	.065
1"	.065
1-1/2"	.065
2"	.065
2-1/2"	.065
3"	.065
4"	.083
6"	.109
8"	.109
10"	.120
12"	.120

**Weld Elbows**  
**90° Weld Elbows with Tangents - B2S**

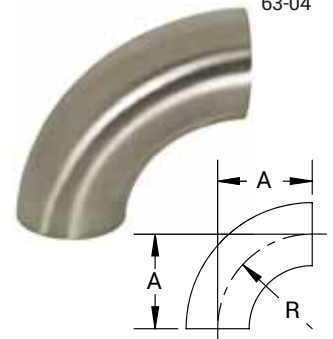


Tube O.D.	A (in)	R (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	3.00	1.13	.065	B2S-G50P	B2S-R50P
3/4"	3.00	1.13	.065	B2S-G75P	B2S-R75P
1"	2.06	1.50	.065	B2S-G100P	B2S-R100P
1-1/2"	2.94	2.25	.065	B2S-G150P	B2S-R150P
2"	4.06	3.00	.065	B2S-G200P	B2S-R200P
2-1/2"	5.19	3.75	.065	B2S-G250P	B2S-R250P
3"	6.31	4.50	.065	B2S-G300P	B2S-R300P
4"	8.31	6.00	.083	B2S-G400P	B2S-R400P
6"	12.46	9.00	.109	B2S-G600P	B2S-R600P



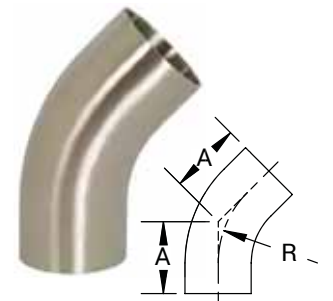
**90° Weld Elbows - B2WCL**

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1.13	1.13	.065	---	B2WCL-R50P
3/4"	1.13	1.13	.065	---	B2WCL-R75P
1"	1.50	1.50	.065	B2WCL-G100P	B2WCL-R100P
1-1/2"	2.25	2.25	.065	B2WCL-G150P	B2WCL-R150P
2"	3.00	3.00	.065	B2WCL-G200P	B2WCL-R200P
2-1/2"	3.75	3.75	.065	B2WCL-G250P	B2WCL-R250P
3"	4.50	4.50	.065	B2WCL-G300P	B2WCL-R300P
4"	6.00	6.00	.083	B2WCL-G400P	B2WCL-R400P
6"	9.00	9.00	.109	B2WCL-G600P	B2WCL-R600P
8"	12.00	12.00	.109	B2WCL-G800P	B2WCL-R800P
10"	15.00	15.00	.120	B2WCL-G1000P	B2WCL-R1000P
12"	18.00	18.00	.120	---	B2WCL-R1200P



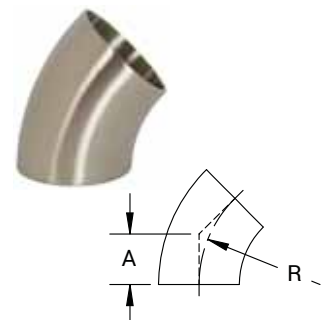
**45° Weld Elbows with Tangents - B2KS**

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	2.25	1.13	.065	---	B2KS-R50P
3/4"	2.25	1.13	.065	---	B2KS-R75P
1"	1.19	1.50	.065	B2KS-G100P	B2KS-R100P
1-1/2"	1.63	2.25	.065	B2KS-G150P	B2KS-R150P
2"	2.31	3.00	.065	B2KS-G200P	B2KS-R200P
2-1/2"	3.00	3.75	.065	B2KS-G250P	B2KS-R250P
3"	3.69	4.50	.065	B2KS-G300P	B2KS-R300P
4"	4.81	6.00	.083	B2KS-G400P	B2KS-R400P



**45° Weld Elbows - B2WK**

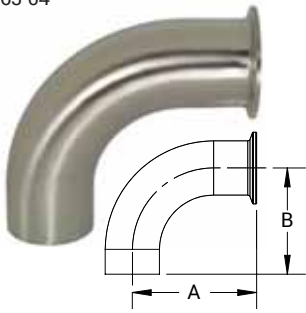
Tube O.D.	A (in)	R (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	0.47	1.13	.065	---	B2WK-R50P
3/4"	0.47	1.13	.065	---	B2WK-R75P
1"	0.62	1.50	.065	B2WK-G100P	B2WK-R100P
1-1/2"	0.94	2.25	.065	B2WK-G150P	B2WK-R150P
2"	1.25	3.00	.065	B2WK-G200P	B2WK-R200P
2-1/2"	1.56	3.75	.065	B2WK-G250P	B2WK-R250P
3"	1.87	4.50	.065	B2WK-G300P	B2WK-R300P
4"	2.50	6.00	.083	B2WK-G400P	B2WK-R400P
6"	3.75	9.00	.109	B2WK-G600P	B2WK-R600P
8"	4.97	12.00	.109	B2WK-G800P	B2WK-R800P
10"	6.25	15.00	.120	B2WK-G1000P	B2WK-R1000P
12"	7.50	18.00	.120	B2WK-G1200P	B2WK-R1200P



Weld Elbows

90° Clamp x Weld Elbows - B2CM

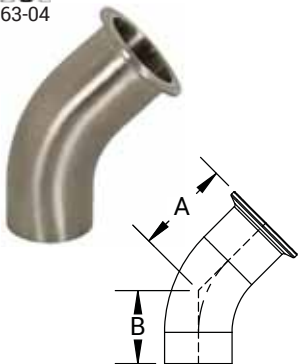
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3  
63-04



Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	3.50	3.00	.065	--	B2CM-R50
3/4"	3.50	3.00	.065	--	B2CM-R75
1"	2.56	2.06	.065	B2CM-G100	B2CM-R100
1-1/2"	3.44	2.94	.065	B2CM-G150	B2CM-R150
2"	4.56	4.06	.065	B2CM-G200	B2CM-R200
2-1/2"	5.69	5.19	.065	B2CM-G250	B2CM-R250
3"	6.81	6.31	.065	B2CM-G300	B2CM-R300
4"	8.94	8.31	.083	B2CM-G400	B2CM-R400
6"	13.34	12.46	.109	--	B2CM-R600
8"	12.88	12.00	.109	--	B2CM-R800

45° Clamp x Weld Elbows - B2KM

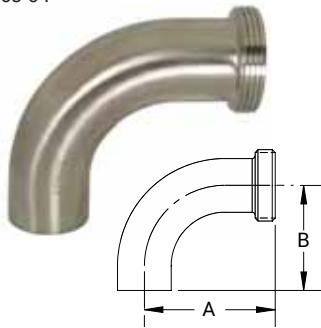
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Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.69	1.19	.065	B2KM-G100	B2KM-R100
1-1/2"	2.13	1.63	.065	B2KM-G150	B2KM-R150
2"	2.81	2.31	.065	B2KM-G200	B2KM-R200
2-1/2"	3.50	3.00	.065	B2KM-G250	B2KM-R250
3"	4.19	3.69	.065	B2KM-G300	B2KM-R300
4"	5.44	4.81	.083	B2KM-G400	B2KM-R400

90° Threaded Bevel Seat x Weld Elbows - B2T

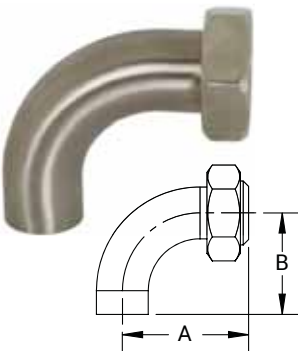
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Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #
1"	2.78	2.06	.065	B2T-G100
1-1/2"	3.66	2.94	.065	B2T-G150
2"	4.81	4.06	.065	B2T-G200
2-1/2"	6.06	5.19	.065	B2T-G250
3"	7.22	6.31	.065	B2T-G300
4"	9.34	8.31	.083	B2T-G400

90° Plain Bevel Seat with Hex Nut x Weld Elbows - B2FP

621  
3  
63-04



Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #
1"	2.78	2.06	.065	B2FP-G100
1-1/2"	3.66	2.94	.065	B2FP-G150
2"	4.81	4.06	.065	B2FP-G200
2-1/2"	6.06	5.19	.065	B2FP-G250
3"	7.22	6.31	.065	B2FP-G300
4"	9.34	8.31	.083	B2FP-G400

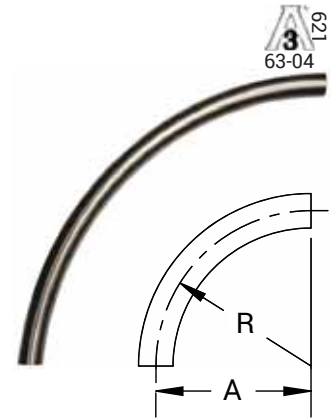
## Weld Sweep Elbows

**Feature**

- Standard comes without tangents; for tangents or 45° options, call Dixon Sanitary 800.789.1718

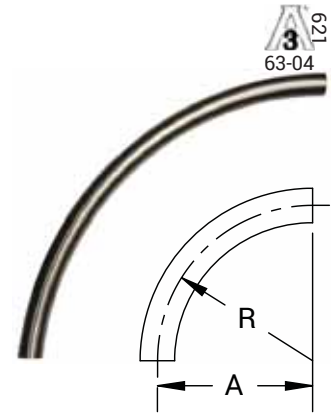
### 12" 90° Weld Sweep Elbows - B2SXL

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	316L Stainless Steel Part #
1"	12.00	12.00	.065	B2SXL12-R100
1-1/2"	12.00	12.00	.065	B2SXL12-R150
2"	12.00	12.00	.065	B2SXL12-R200
2-1/2"	12.00	12.00	.065	B2SXL12-R250
3"	12.00	12.00	.065	B2SXL12-R300
4"	12.00	12.00	.083	B2SXL12-R400



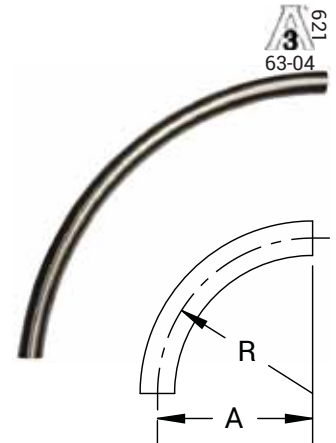
### 18" 90° Weld Sweep Elbows - B2SXL

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	316L Stainless Steel Part #
1"	18.00	18.00	.065	B2SXL18-R100
1-1/2"	18.00	18.00	.065	B2SXL18-R150
2"	18.00	18.00	.065	B2SXL18-R200
2-1/2"	18.00	18.00	.065	B2SXL18-R250
3"	18.00	18.00	.065	B2SXL18-R300
4"	18.00	18.00	.083	B2SXL18-R400



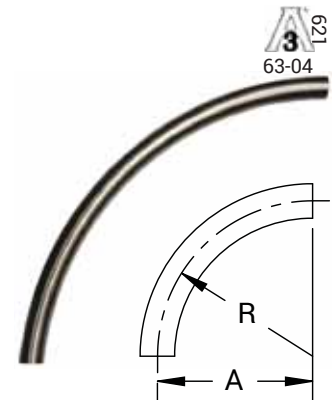
### 24" 90° Weld Sweep Elbows - B2SXL

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	316L Stainless Steel Part #
1-1/2"	24.00	24.00	.065	B2SXL24-R150
2"	24.00	24.00	.065	B2SXL24-R200
2-1/2"	24.00	24.00	.065	B2SXL24-R250
3"	24.00	24.00	.065	B2SXL24-R300
4"	24.00	24.00	.083	B2SXL24-R400
6"	24.00	24.00	.109	B2SXL24-R600

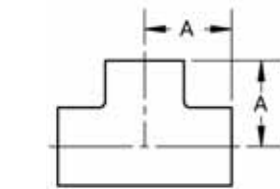


### 36" 90° Weld Sweep Elbows - B2SXL

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	316L Stainless Steel Part #
1-1/2"	36.00	36.00	.065	B2SXL36-R150
2"	36.00	36.00	.065	B2SXL36-R200
2-1/2"	36.00	36.00	.065	B2SXL36-R250
3"	36.00	36.00	.065	B2SXL36-R300
4"	36.00	36.00	.083	B2SXL36-R400
6"	36.00	36.00	.109	B2SXL36-R600

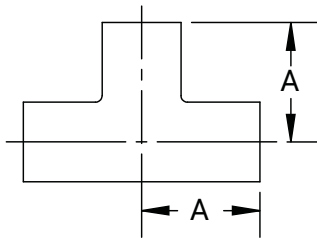


Weld Tees



Short Weld Tees - B7WWW

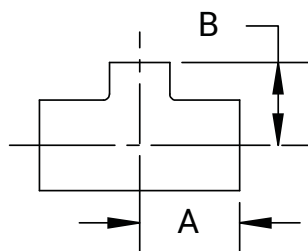
Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.13	.065	B7WWW-G100P	B7WWW-R100P
1-1/2"	1.66	.065	B7WWW-G150P	B7WWW-R150P
2"	2.06	.065	B7WWW-G200P	B7WWW-R200P
2-1/2"	2.34	.065	B7WWW-G250P	B7WWW-R250P
3"	2.59	.065	B7WWW-G300P	B7WWW-R300P
4"	3.44	.083	B7WWW-G400P	B7WWW-R400P
6"	5.63	.109	B7WWW-G600P	B7WWW-R600P
8"	7.00	.109	B7WWW-G800P	B7WWW-R800P



Long Weld Tees - B7W

Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1.88	.065	---	B7W-R50P
3/4"	2.00	.065	---	B7W-R75P
1"	1.88	.065	B7W-G100P	B7W-R100P
1-1/2"	2.25	.065	B7W-G150P	B7W-R150P
2"	3.00	.065	B7W-G200P	B7W-R200P
2-1/2"	3.00	.065	B7W-G250P	B7W-R250P
3"	3.25	.065	B7W-G300P	B7W-R300P
4"	3.88	.083	B7W-G400P	B7W-R400P

Reducing Weld Tees - B7RWWW

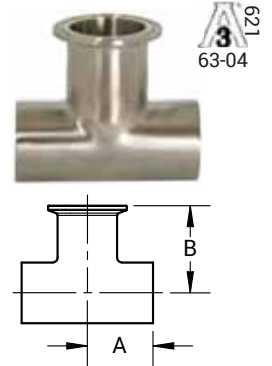


Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
3/4" x 1/2"	2.00	2.00	.065	---	B7RWWW-R7550P
1" x 1/2"	2.13	2.13	.065	---	B7RWWW-R10050P
1" x 3/4"	2.13	2.13	.065	---	B7RWWW-R10075P
1-1/2" x 1/2"	2.38	2.38	.065	---	B7RWWW-R15050P
1-1/2" x 3/4"	2.38	2.38	.065	---	B7RWWW-R15075P
1-1/2" x 1"	1.66	1.38	.065	B7RWWW-G150100P	B7RWWW-R150100P
2" x 1"	2.06	1.63	.065	B7RWWW-G200100P	B7RWWW-R200100P
2" x 1-1/2"	2.06	1.91	.065	B7RWWW-G200150P	B7RWWW-R200150P
2-1/2" x 1-1/2"	2.34	2.16	.065	B7RWWW-G250150P	B7RWWW-R250150P
2-1/2" x 2"	2.34	2.31	.065	B7RWWW-G250200P	B7RWWW-R250200P
3" x 1-1/2"	2.59	2.41	.065	B7RWWW-G300150P	B7RWWW-R300150P
3" x 2"	2.59	2.56	.065	B7RWWW-G300200P	B7RWWW-R300200P
3" x 2-1/2"	2.59	2.59	.065	B7RWWW-G300250P	B7RWWW-R300250P
4" x 1-1/2"	3.44	2.91	.083	B7RWWW-G400150P	B7RWWW-R400150P
4" x 2"	3.44	3.06	.083	B7RWWW-G400200P	B7RWWW-R400200P
4" x 2-1/2"	3.44	3.09	.083	B7RWWW-G400250P	B7RWWW-R400250P
4" x 3"	3.44	3.09	.083	B7RWWW-G400300P	B7RWWW-R400300P
6" x 2"	5.63	4.50	.109	B7RWWW-G600200P	B7RWWW-R600200P
6" x 3"	5.63	4.88	.109	B7RWWW-G600300P	B7RWWW-R600300P
6" x 4"	5.63	5.13	.109	B7RWWW-G600400P	B7RWWW-R600400P

## Weld Tees

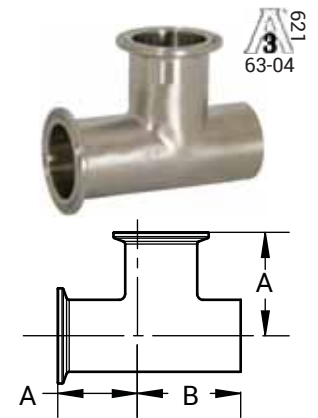
### Weld Run x Clamp Branch Tees - B7WWM

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1.88	2.38	.065	--	B7WWM-R50
3/4"	2.00	2.50	.065	--	B7WWM-R75
1"	1.13	1.63	.065	B7WWM-G100	B7WWM-R100
1-1/2"	1.66	2.16	.065	B7WWM-G150	B7WWM-R150
2"	2.06	2.56	.065	B7WWM-G200	B7WWM-R200
2-1/2"	2.34	2.84	.065	B7WWM-G250	B7WWM-R250
3"	2.59	3.09	.065	B7WWM-G300	B7WWM-R300
4"	3.44	4.06	.083	B7WWM-G400	B7WWM-R400



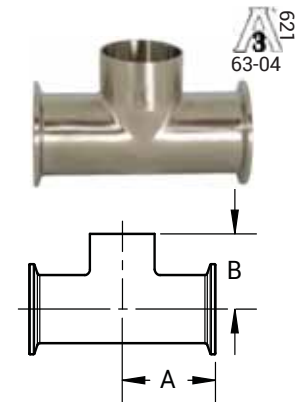
### Weld x Clamp Run x Clamp Branch Tees - B7WMM

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #
1"	1.63	1.13	.065	B7WMM-G100
1-1/2"	2.16	1.66	.065	B7WMM-G150
2"	2.56	2.06	.065	B7WMM-G200
2-1/2"	2.84	2.34	.065	B7WMM-G250
3"	3.09	2.59	.065	B7WMM-G300
4"	4.06	3.44	.083	B7WMM-G400



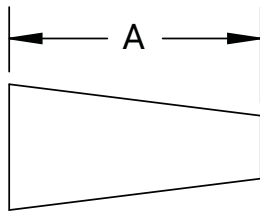
### Clamp Run x Weld Branch Tees - B7MMW

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #
1"	1.63	1.13	.065	B7MMW-G100
1-1/2"	2.16	1.66	.065	B7MMW-G150
2"	2.56	2.06	.065	B7MMW-G200
2-1/2"	2.84	2.34	.065	B7MMW-G250
3"	3.09	2.59	.065	B7MMW-G300
4"	4.06	3.44	.083	B7MMW-G400

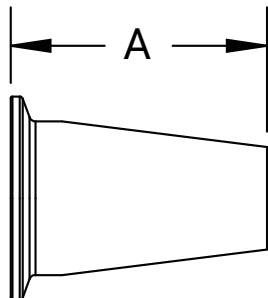


Weld Reducers

Concentric Weld Reducers - B31W



Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
3/4" x 1/2"	1.00	.065	--	B31W-R7550P
1" x 1/2"	2.00	.065	--	B31W-R10050P
1" x 3/4"	1.00	.065	--	B31W-R10075P
1-1/2" x 1/2"	4.00	.065	--	B31W-R15050P
1-1/2" x 3/4"	3.00	.065	--	B31W-R15075P
1-1/2" x 1"	2.00	.065	B31W-G150100P	B31W-R150100P
2" x 1/2"	6.00	.065	--	B31W-R20050P
2" x 3/4"	5.00	.065	--	B31W-R20075P
2" x 1"	4.00	.065	B31W-G200100P	B31W-R200100P
2" x 1-1/2"	2.00	.065	B31W-G200150P	B31W-R200150P
2-1/2" x 1"	6.00	.065	B31W-G250100P	B31W-R250100P
2-1/2" x 1-1/2"	4.00	.065	B31W-G250150P	B31W-R250150P
2-1/2" x 2"	2.00	.065	B31W-G250200P	B31W-R250200P
3" x 1"	8.00	.065	B31W-G300100P	B31W-R300100P
3" x 1-1/2"	6.00	.065	B31W-G300150P	B31W-R300150P
3" x 2"	4.00	.065	B31W-G300200P	B31W-R300200P
3" x 2-1/2"	2.00	.065	B31W-G300250P	B31W-R300250P
4" x 1-1/2"	10.00	.083	B31W-G400150P	B31W-R400150P
4" x 2"	8.00	.083	B31W-G400200P	B31W-R400200P
4" x 2-1/2"	6.00	.083	B31W-G400250P	B31W-R400250P
4" x 3"	4.00	.083	B31W-G400300P	B31W-R400300P
6" x 2"	5.50	.109	B31W-G600200P	B31W-R600200P
6" x 3"	5.50	.109	B31W-G600300P	B31W-R600300P
6" x 4"	5.50	.109	B31W-G600400P	B31W-R600400P
8" x 4"	6.00	.109	B31W-G800400P	B31W-R800400P
8" x 6"	6.00	.120	B31W-G800600P	B31W-R800600P
10" x 8"	7.00	.120	B31W-G1000800P	B31W-R1000800P



Concentric Clamp x Weld Reducers - B31M

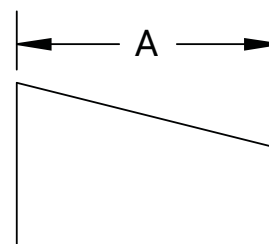
Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
3/4" x 1/2"	1.50	.065	---	B31M-R7550
1" x 1/2"	2.50	.065	---	B31M-R10050
1" x 3/4"	1.50	.065	---	B31M-R10075
1-1/2" x 1/2"	4.50	.065	---	B31M-R15050
1-1/2" x 3/4"	3.50	.065	---	B31M-R15075
1-1/2" x 1"	2.50	.065	B31M-G150100	B31M-R150100
2" x 1"	4.50	.065	B31M-G200100	B31M-R200100
2" x 1-1/2"	2.50	.065	B31M-G200150	B31M-R200150
2-1/2" x 1-1/2"	4.50	.065	B31M-G250150	B31M-R250150
2-1/2" x 2"	2.50	.065	B31M-G250200	B31M-R250200
3" x 1-1/2"	6.50	.065	B31M-G300150	B31M-R300150
3" x 2"	4.50	.065	B31M-G300200	B31M-R300200
3" x 2-1/2"	2.50	.065	B31M-G300250	B31M-R300250
4" x 2"	8.63	.083	B31M-G400200	B31M-R400200
4" x 2-1/2"	6.63	.083	B31M-G400250	B31M-R400250
4" x 3"	4.63	.083	B31M-G400300	B31M-R400300

## Weld Reducers

### Eccentric Weld Reducers - B32W

621  
3  
63-04

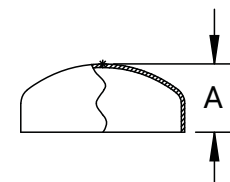
Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
3/4" x 1/2"	1.00	.065	---	B32W-R7550P
1" x 1/2"	2.00	.065	---	B32W-R10050P
1" x 3/4"	1.00	.065	---	B32W-R10075P
1-1/2" x 1/2"	4.00	.065	---	B32W-R15050P
1-1/2" x 3/4"	3.00	.065	---	B32W-R15075P
1-1/2" x 1"	2.00	.065	B32W-G150100P	B32W-R150100P
2" x 1/2"	6.00	.065	---	B32W-R20050P
2" x 3/4"	5.00	.065	---	B32W-R20075P
2" x 1"	4.00	.065	B32W-G200100P	B32W-R200100P
2" x 1-1/2"	2.00	.065	B32W-G200150P	B32W-R200150P
2-1/2" x 1-1/2"	4.00	.065	B32W-G250150P	B32W-R250150P
2-1/2" x 2"	2.00	.065	B32W-G250200P	B32W-R250200P
3" x 1"	8.00	.065	B32W-G300100P	B32W-R300100P
3" x 1-1/2"	6.00	.065	B32W-G300150P	B32W-R300150P
3" x 2"	4.00	.065	B32W-G300200P	B32W-R300200P
3" x 2-1/2"	2.00	.065	B32W-G300250P	B32W-R300250P
4" x 1-1/2"	10.00	.083	B32W-G400150P	B32W-R400150P
4" x 2"	8.00	.083	B32W-G400200P	B32W-R400200P
4" x 2-1/2"	6.00	.083	B32W-G400250P	B32W-R400250P
4" x 3"	4.00	.083	B32W-G400300P	B32W-R400300P
6" x 3"	5.50	.109	B32W-G600300P	B32W-R600300P
6" x 4"	5.50	.109	B32W-G600400P	B32W-R600400P
8" x 4"	6.00	.109	B32W-G800400P	B32W-R800400P
8" x 6"	6.00	.109	B32W-G800600P	B32W-R800600P



## Weld End Caps

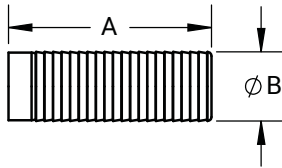
### Weld End Caps - B16W

Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	.25	.065	---	B16W-R50
3/4"	.31	.065	---	B16W-R75
1"	.38	.065	B16W-G100	B16W-R100
1-1/2"	.56	.065	B16W-G150	B16W-R150
2"	.75	.065	B16W-G200	B16W-R200
2-1/2"	1.00	.065	B16W-G250	B16W-R250
3"	1.25	.065	B16W-G300	B16W-R300
4"	1.50	.083	B16W-G400	B16W-R400
6"	2.00	.109	B16W-G600	B16W-R600
8"	2.50	.109	B16W-G800	B16W-R800



## Weld Adapters

### Long Weld Hose Adapters - 14WHRL



**Feature**

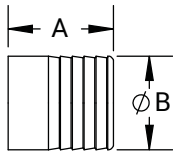
- Suitable for use with band clamps

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	316L Stainless Steel Part #
1"	3.00	1.03	.065	14WHRL-R100
1-1/2"	4.50	1.53	.065	14WHRL-R150
2"	4.50	2.03	.065	14WHRL-R200
2-1/2"	5.00	2.53	.065	14WHRL-R250
3"	5.00	3.03	.065	14WHRL-R300
4"	4.88	4.03	.083	14WHRL-R400

NOTE: Use of PVC tubing requires special techniques to prevent leakage. All assembly work must be done with heated tube. Cold durometer is 90 as opposed to rubber hose at 65 to 70 durometer. Banding buckles must be at 180° from one another.

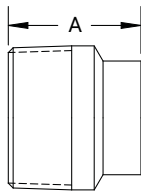


### Weld Hose Adapters - 14WHR



Tube O.D.	A (in)	B (in)	Nominal Wall (in)	316L Stainless Steel Part #
1/2"	1.50	.50	.065	14WHR-R50
3/4"	1.50	.75	.065	14WHR-R75
1"	1.69	1.00	.065	14WHR-R100
1-1/2"	1.69	1.50	.065	14WHR-R150
2"	2.31	2.00	.065	14WHR-R200
2-1/2"	2.00	2.50	.065	14WHR-R250
3"	3.09	3.00	.065	14WHR-R300
4"	3.41	4.00	.083	14WHR-R400

### Male NPT x Weld End Adapters - B19WB

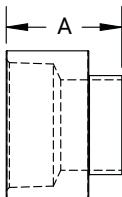


**Feature**

- 32Ra finish I.D. only

Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1.63	.065	---	B19WB-R50
3/4"	1.63	.065	---	B19WB-R75
1"	1.75	.065	B19WB-G100	B19WB-R100
1-1/2"	1.75	.065	B19WB-G150	B19WB-R150
2"	1.81	.065	B19WB-G200	B19WB-R200
2-1/2"	2.31	.065	B19WB-G250	B19WB-R250
3"	2.50	.065	B19WB-G300	B19WB-R300
4"	2.56	.083	B19WB-G400	B19WB-R400
6"	3.40	.109	---	B19WB-R600

### Female NPT x Weld End Adapters - B22WB



**Feature**

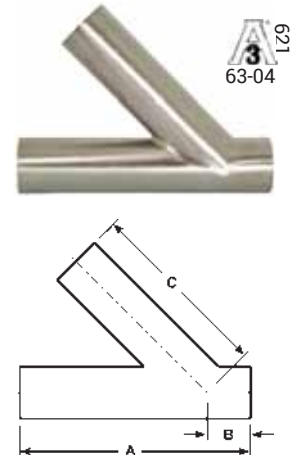
- 32Ra finish I.D. only

Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1.25	.065	---	B22WB-R50
3/4"	1.63	.065	---	B22WB-R75
1"	1.75	.065	B22WB-G100	B22WB-R100
1-1/2"	1.75	.065	B22WB-G150	B22WB-R150
2"	1.81	.065	B22WB-G200	B22WB-R200
2-1/2"	2.31	.065	B22WB-G250	B22WB-R250
3"	2.50	.065	B22WB-G300	B22WB-R300
4"	2.50	.083	B22WB-G400	B22WB-R400

Laterals, Wyes, Crosses, Bends, and Flanges

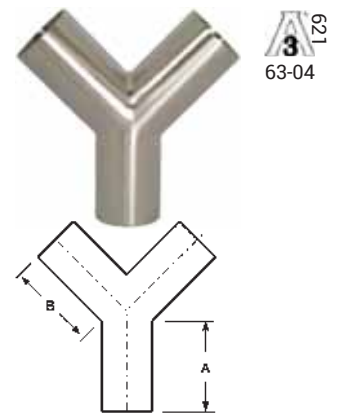
Weld Laterals - B28WA

Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	316L Stainless Steel Part #
1"	6.00	1.00	5.00	.065	B28WA-R100P
1-1/2"	7.38	1.19	6.19	.065	B28WA-R150P
2"	8.75	1.63	7.13	.065	B28WA-R200P
2-1/2"	10.00	1.50	8.50	.065	B28WA-R250P
3"	10.75	1.88	8.88	.065	B28WA-R300P
4"	12.81	2.02	10.75	.083	B28WA-R400P
6"	18.00	3.50	14.50	.109	B28WA-R600P
8"	22.00	5.00	17.00	.109	B28WA-R800P



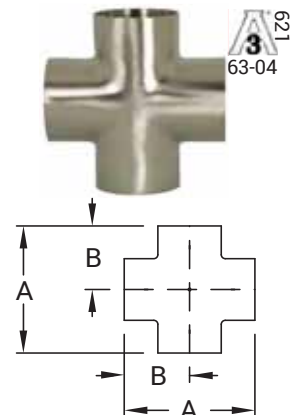
Weld True Wyes - B28W

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	316L Stainless Steel Part #
1"	2.21	2.65	.065	B28W-R100P
1-1/2"	2.31	2.75	.065	B28W-R150P
2"	3.04	3.66	.065	B28W-R200P
2-1/2"	3.89	4.64	.065	B28W-R250P
3"	4.62	5.50	.065	B28W-R300P
4"	6.20	6.40	.083	B28W-R400P
6"	3.50	8.00	.109	B28W-R600P



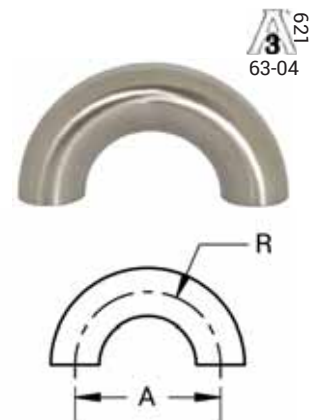
Weld Crosses - B9WWWW

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	2.25	1.13	.065	B9WWWW-G100P	B9WWWW-R100P
1-1/2"	3.31	1.66	.065	B9WWWW-G150P	B9WWWW-R150P
2"	4.13	2.06	.065	B9WWWW-G200P	B9WWWW-R200P
2-1/2"	4.69	2.34	.065	B9WWWW-G250P	B9WWWW-R250P
3"	5.19	2.59	.065	B9WWWW-G300P	B9WWWW-R300P
4"	6.88	3.44	.083	B9WWWW-G400P	B9WWWW-R400P



Weld 180° Return Bends - B2WUL

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	316L Stainless Steel Part #
1"	3.00	1.50	.065	B2WUL-R100P
1-1/2"	4.50	2.25	.065	B2WUL-R150P
2"	6.00	3.00	.065	B2WUL-R200P
2-1/2"	7.50	3.75	.065	B2WUL-R250P
3"	9.00	4.50	.065	B2WUL-R300P
4"	12.00	6.00	.083	B2WUL-R400P



**Laterals, Wyes, Crosses, Bends, and Flanges**  
**Weld End Blue Protection Covers - BCW**

**Application**

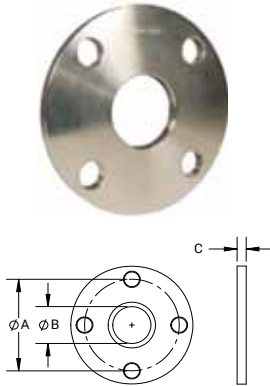
- Use these covers to protect all weld ends on fittings, valves, and pumps



Size	Vinyl Plastic Part #
1/2"	BCW-050
3/4"	BCW-075
1"	BCW-100
1-1/2"	BCW-150
2"	BCW-200
2-1/2"	BCW-250
3"	BCW-300
4"	BCW-400
6"	BCW-600
8"	BCW-800

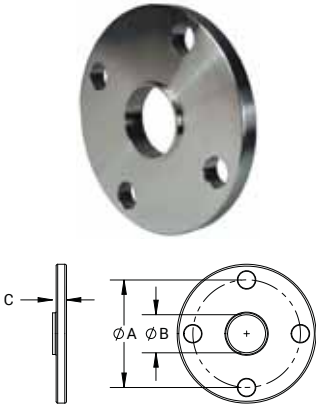
**Weld Flanges**

**Slip-On 150# Flanges - B38SL**



Tube O.D.	A (in)	B (in)	C (in)	Number & Diameter Bolt Holes (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	3.13	1.06	0.38	4/.63	B38SL-G100	B38SL-R100
1-1/2"	3.88	1.56	0.38	4/.63	B38SL-G150	B38SL-R150
2"	4.75	2.06	0.44	4/.75	B38SL-G200	B38SL-R200
2-1/2"	5.50	2.56	0.44	4/.75	B38SL-G250	B38SL-R250
3"	6.00	3.06	0.50	4/.75	B38SL-G300	B38SL-R300
4"	7.50	4.06	0.56	8/.75	B38SL-G400	B38SL-R400
6"	9.50	6.06	0.56	8/.88	B38SL-G600	B38SL-R600
8"	11.75	8.06	0.69	8/.88	B38SL-G800	B38SL-R800
10"	14.25	10.06	0.69	12/1.00	B38SL-G1000	B38SL-R1000

**Weld Neck Flanges - B38W**



Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	Number & Diameter Bolt Holes (in)	316L Stainless Steel Part #
1"	3.13	0.87	0.50	.065	4/.63	B38W-R100
1-1/2"	3.88	1.37	0.50	.065	4/.63	B38W-R150
2"	4.75	1.87	0.63	.065	4/.75	B38W-R200
2-1/2"	5.50	2.37	0.63	.065	4/.75	B38W-R250
3"	6.00	2.87	0.63	.065	4/.75	B38W-R300
4"	7.50	3.83	0.63	.083	8/.75	B38W-R400
6"	9.50	5.78	0.63	.109	8/.88	B38W-R600
8"	11.75	7.78	0.63	.109	8/.88	B38W-R800
10"	14.25	9.76	0.81	.120	12/1.00	B38W-R1000

NOTE: For flange dimensions, diagrams, and additional information, please reference [dixonvalve.com](http://dixonvalve.com).

**Flange Gaskets**

**Size**

- Standard drop-ring type all 1/16" thick



Size	Neoprene Part #
1"	NG10
1-1/4"	NG15
1-1/2"	NG20
2"	NG25
2-1/2"	NG30
3"	NG35
4"	NG40
5"	NG50
6"	NG60
8"	NG80

## Dixon Sanitary Unpolished Weld Fittings

### A Complete Weld Connection

**Sizes**

- 1/2" - 12" O.D. tube

**Materials**

- G = 304 stainless steel
- R = 316L stainless steel
- Other alloys are available

**Feature**

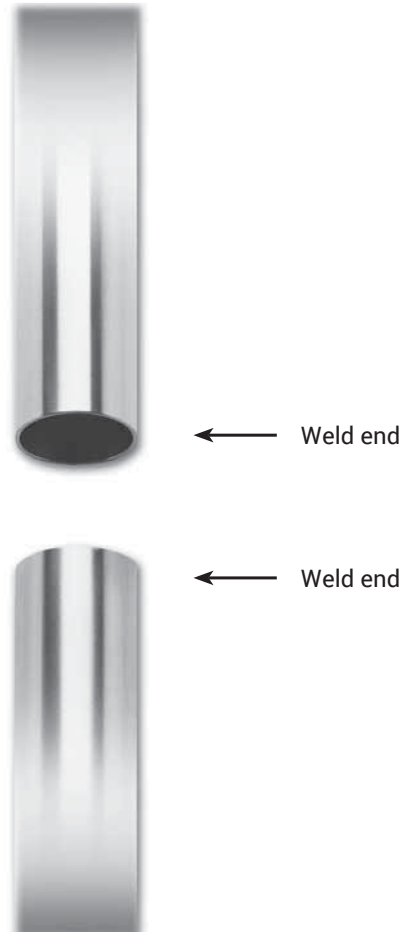
- Unpolished

**Primary Markets**

- Found in the food processing, beverage, pet products, wineries and breweries, oil extraction, and industrial markets in non-sanitary process lines

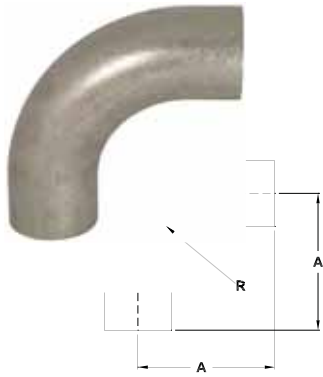
**Dimensions of stainless steel tube**

Tube O.D.	Nominal Wall Thickness (in)
1/2"	.065
3/4"	.065
1"	.065
1-1/2"	.065
2"	.065
2-1/2"	.065
3"	.065
4"	.083
6"	.109
8"	.109
10"	.120
12"	.120



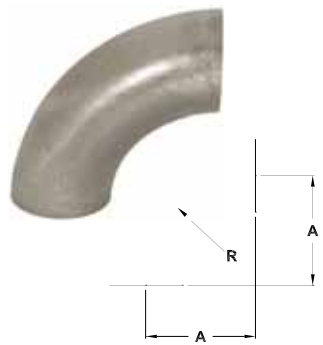
Unpolished Elbows

Unpolished 90° Weld Elbows with Tangents - B2S



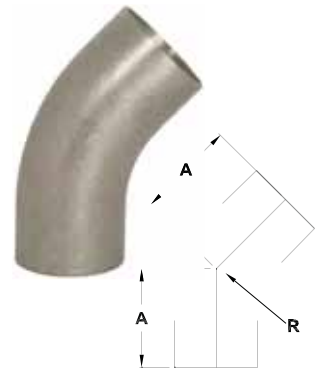
Tube O.D.	A (in)	R (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	3.00	1.12	.065	---	B2S-R50U
3/4"	3.00	1.12	.065	---	B2S-R75U
1"	2.06	1.50	.065	B2S-G100U	B2S-R100U
1-1/2"	2.93	2.25	.065	B2S-G150U	B2S-R150U
2"	4.06	3.00	.065	B2S-G200U	B2S-R200U
2-1/2"	5.18	3.75	.065	B2S-G250U	B2S-R250U
3"	6.31	4.50	.065	B2S-G300U	B2S-R300U
4"	8.31	6.00	.083	B2S-G400U	B2S-R400U

Unpolished 90° Weld Elbows - B2WCL



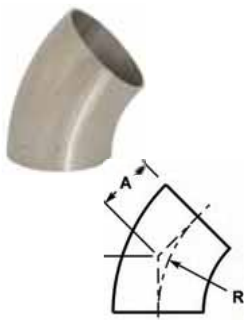
Tube O.D.	A (in)	R (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1.13	1.13	.065	---	B2WCL-R50U
3/4"	1.13	1.13	.065	---	B2WCL-R75U
1"	1.50	1.50	.065	B2WCL-G100U	B2WCL-R100U
1-1/2"	2.25	2.25	.065	B2WCL-G150U	B2WCL-R150U
2"	3.00	3.00	.065	B2WCL-G200U	B2WCL-R200U
2-1/2"	3.75	3.75	.065	B2WCL-G250U	B2WCL-R250U
3"	4.50	4.50	.065	B2WCL-G300U	B2WCL-R300U
4"	6.00	6.00	.083	B2WCL-G400U	B2WCL-R400U
6"	9.00	9.00	.109	B2WCL-G600U	B2WCL-R600U
8"	12.00	12.00	.109	B2WCL-G800U	B2WCL-R800U
10"	15.00	15.00	.120	B2WCL-G1000U	B2WCL-R1000U
12"	18.00	18.00	.120	B2WCL-G1200U	B2WCL-R1200U

Unpolished 45° Weld Elbows with Tangents - B2KS



Tube O.D.	A (in)	R (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	2.25	1.13	.065	---	B2KS-R50U
3/4"	2.25	1.13	.065	---	B2KS-R75U
1"	1.19	1.50	.065	B2KS-G100U	B2KS-R100U
1-1/2"	1.63	2.25	.065	B2KS-G150U	B2KS-R150U
2"	2.31	3.00	.065	B2KS-G200U	B2KS-R200U
2-1/2"	3.00	3.75	.065	B2KS-G250U	B2KS-R250U
3"	3.69	4.50	.065	B2KS-G300U	B2KS-R300U
4"	4.81	6.00	.083	B2KS-G400U	B2KS-R400U

Unpolished 45° Weld Elbows - B2WK

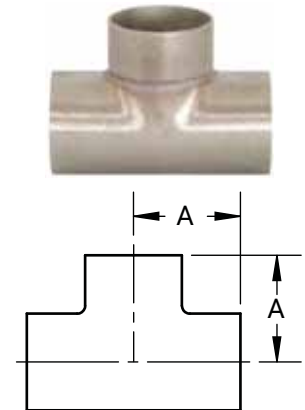


Tube O.D.	A (in)	R (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	.47	1.13	.065	---	B2WK-R50U
3/4"	.47	1.13	.065	---	B2WK-R75U
1"	.63	1.50	.065	B2WK-G100U	B2WK-R100U
1-1/2"	.94	2.25	.065	B2WK-G150U	B2WK-R150U
2"	1.25	3.00	.065	B2WK-G200U	B2WK-R200U
2-1/2"	1.56	3.75	.065	B2WK-G250U	B2WK-R250U
3"	1.88	4.50	.065	B2WK-G300U	B2WK-R300U
4"	2.50	6.00	.083	B2WK-G400U	B2WK-R400U
6"	3.75	9.00	.109	B2WK-G600U	B2WK-R600U
8"	5.00	12.00	.109	B2WK-G800U	B2WK-R800U
10"	6.25	15.00	.120	B2WK-G1000U	B2WK-R1000U
12"	7.50	18.00	.120	B2WK-G1200U	B2WK-R1200U

## Unpolished Tees

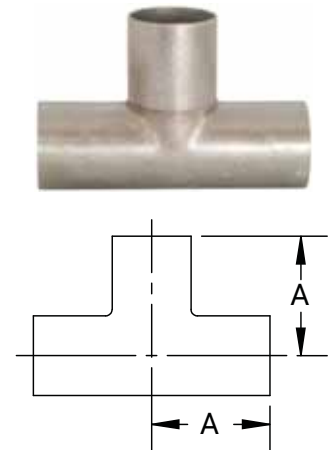
### Unpolished Short Weld Tees - B7WWW

Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.13	.065	B7WWW-G100U	B7WWW-R100U
1-1/2"	1.66	.065	B7WWW-G150U	B7WWW-R150U
2"	2.06	.065	B7WWW-G200U	B7WWW-R200U
2-1/2"	2.34	.065	B7WWW-G250U	B7WWW-R250U
3"	2.59	.065	B7WWW-G300U	B7WWW-R300U
4"	3.44	.083	B7WWW-G400U	B7WWW-R400U
6"	5.63	.109	B7WWW-G600U	B7WWW-R600U
8"	7.00	.109	B7WWW-G800U	B7WWW-R800U



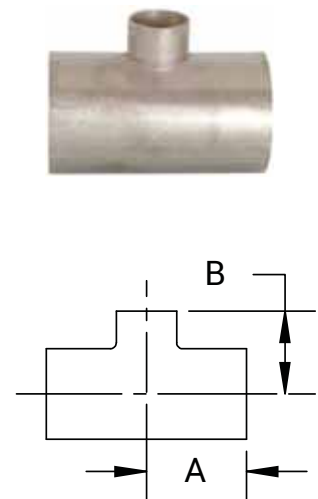
### Unpolished Long Weld Tees - B7W

Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1/2"	1.88	.065	---	B7W-R50U
3/4"	2.00	.065	---	B7W-R75U
1"	1.88	.065	B7W-G100U	B7W-R100U
1-1/2"	2.25	.065	B7W-G150U	B7W-R150U
2"	3.00	.065	B7W-G200U	B7W-R200U
2-1/2"	3.00	.065	B7W-G250U	B7W-R250U
3"	3.25	.065	B7W-G300U	B7W-R300U
4"	3.88	.083	B7W-G400U	B7W-R400U



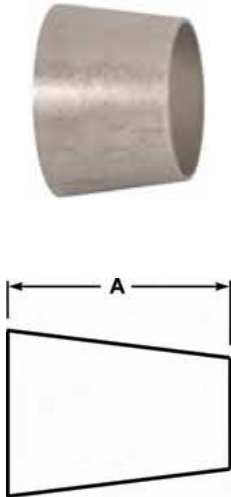
### Unpolished Reducing Weld Tees - B7RWWW

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1-1/2" x 3/4"	2.13	2.13	.065	---	B7RWWW-R15075U
1-1/2" x 1"	2.38	2.38	.065	B7RWWW-G150100U	B7RWWW-R150100U
2" x 1/2"	2.38	2.38	.065	---	B7RWWW-R20050U
2" x 3/4"	1.66	1.38	.065	---	B7RWWW-R20075U
2" x 1"	2.06	1.63	.065	B7RWWW-G200100U	B7RWWW-R200100U
2" x 1-1/2"	2.06	1.91	.065	B7RWWW-G200150U	B7RWWW-R200150U
2-1/2" x 1-1/2"	2.34	2.16	.065	B7RWWW-G250150U	B7RWWW-R250150U
2-1/2" x 2"	2.34	2.31	.065	B7RWWW-G250200U	B7RWWW-R250200U
3" x 1-1/2"	2.59	2.41	.065	B7RWWW-G300150U	B7RWWW-R300150U
3" x 2"	2.59	2.56	.065	B7RWWW-G300200U	B7RWWW-R300200U
3" x 2-1/2"	2.59	2.59	.065	B7RWWW-G300250U	B7RWWW-R300250U
4" x 1-1/2"	3.44	2.91	.083	B7RWWW-G400150U	B7RWWW-R400150U
4" x 2"	3.44	3.06	.083	B7RWWW-G400200U	B7RWWW-R400200U
4" x 2-1/2"	3.44	3.09	.083	B7RWWW-G400250U	B7RWWW-R400250U
4" x 3"	3.44	3.09	.083	B7RWWW-G400300U	B7RWWW-R400300U



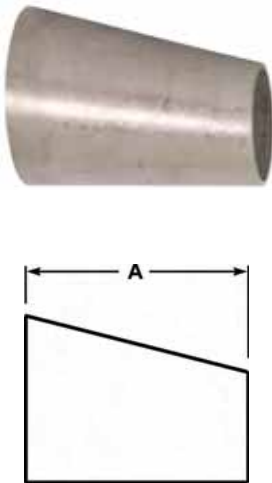
Unpolished Reducers

Unpolished Concentric Weld Reducers - B31W



Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
3/4" x 1/2"	1.00	.065	---	B31W-R7550U
1" x 1/2"	2.00	.065	---	B31W-R10050U
1" x 3/4"	1.00	.065	---	B31W-R10075U
1-1/2" x 1/2"	4.00	.065	---	B31W-R15050U
1-1/2" x 3/4"	3.00	.065	---	B31W-R15075U
1-1/2" x 1"	2.00	.065	B31W-G150100U	B31W-R150100U
2" x 3/4"	5.00	.065	---	B31W-R20075U
2" x 1"	4.00	.065	B31W-G200100U	B31W-R200100U
2" x 1-1/2"	2.00	.065	B31W-G200150U	B31W-R200150U
2-1/2" x 1-1/2"	4.00	.065	B31W-G250150U	B31W-R250150U
2-1/2" x 2"	2.00	.065	B31W-G250200U	B31W-R250200U
3" x 1"	8.00	.065	B31W-G300100U	B31W-R300100U
3" x 1-1/2"	6.00	.065	B31W-G300150U	B31W-R300150U
3" x 2"	4.00	.065	B31W-G300200U	B31W-R300200U
3" x 2-1/2"	2.00	.065	B31W-G300250U	B31W-R300250U
4" x 1-1/2"	10.00	.083	B31W-G400150U	B31W-R400150U
4" x 2"	8.00	.083	B31W-G400200U	B31W-R400200U
4" x 2-1/2"	6.00	.083	B31W-G400250U	B31W-R400250U
4" x 3"	4.00	.083	B31W-G400300U	B31W-R400300U
6" x 3"	5.50	.109	B31W-G600300U	B31W-R600300U
6" x 4"	5.50	.109	B31W-G600400U	B31W-R600400U
8" x 4"	6.00	.109	B31W-G800400U	B31W-R800400U
8" x 6"	6.00	.109	B31W-G800600U	B31W-R800600U

Unpolished Eccentric Weld Reducers - B32W

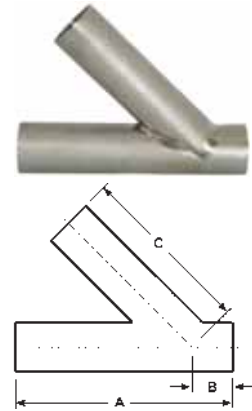


Tube O.D.	A (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
3/4" x 1/2"	1.00	.065	---	B32W-R7550U
1" x 1/2"	2.00	.065	---	B32W-R10050U
1" x 3/4"	1.00	.065	---	B32W-R10075U
1-1/2" x 1/2"	4.00	.065	---	B32W-R15050U
1-1/2" x 3/4"	3.00	.065	---	B32W-R15075U
1-1/2" x 1"	2.00	.065	B32W-G150100U	B32W-R150100U
2" x 3/4"	5.00	.065	---	B32W-R20075U
2" x 1"	4.00	.065	B32W-G200100U	B32W-R200100U
2" x 1-1/2"	2.00	.065	B32W-G200150U	B32W-R200150U
2-1/2" x 2"	2.00	.065	B32W-G250200U	B32W-R250200U
3" x 1-1/2"	6.00	.065	B32W-G300150U	B32W-R300150U
3" x 2"	4.00	.065	B32W-G300200U	B32W-R300200U
3" x 2-1/2"	2.00	.065	B32W-G300250U	B32W-R300250U
4" x 1-1/2"	10.00	.083	B32W-G400150U	B32W-R400150U
4" x 2"	8.00	.083	B32W-G400200U	B32W-R400200U
4" x 3"	4.00	.083	B32W-G400300U	B32W-R400300U
6" x 4"	5.50	.109	B32W-G600400U	B32W-R600400U
8" x 6"	6.00	.109	B32W-G800600U	B32W-R800600U

Laterals, Wyes, Bends, and Flanges

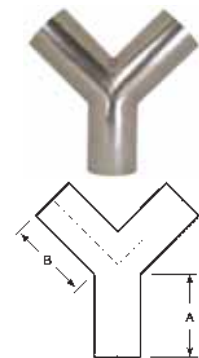
Unpolished Weld Laterals - B28WA

Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	316L Stainless Steel Part #
1"	6.00	1.00	5.00	.065	B28WA-R100U
1-1/2"	7.38	1.19	6.19	.065	B28WA-R150U
2"	8.75	1.63	7.13	.065	B28WA-R200U
2-1/2"	10.00	1.50	8.50	.065	B28WA-R250U
3"	10.75	1.88	8.88	.065	B28WA-R300U
4"	12.81	2.02	10.75	.083	B28WA-R400U
6"	18.00	3.00	14.50	.109	B28WA-R600U



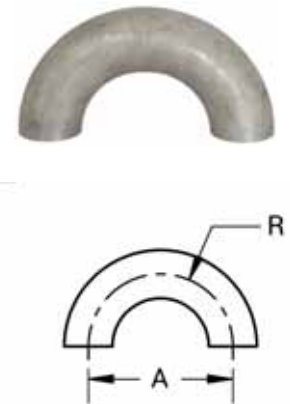
Unpolished Weld True Wyes - B28W

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	316L Stainless Steel Part #
1"	2.00	2.44	.065	B28W-R100U
1-1/2"	2.00	2.44	.065	B28W-R150U
2"	2.63	3.25	.065	B28W-R200U
2-1/2"	3.37	4.13	.065	B28W-R250U
3"	4.00	4.88	.065	B28W-R300U
4"	5.38	5.38	.083	B28W-R400U
6"	8.00	8.00	.109	B28W-R600U



Unpolished Weld 180° Return Bends - B2WUL

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	316L Stainless Steel Part #
1"	3.00	1.50	.065	B2WUL-R100U
1-1/2"	4.50	2.25	.065	B2WUL-R150U
2"	6.00	3.00	.065	B2WUL-R200U
2-1/2"	7.50	3.75	.065	B2WUL-R250U
3"	9.00	4.50	.065	B2WUL-R300U
4"	12.00	6.00	.083	B2WUL-R400U



Weld End Blue Protection Covers - BCW

Application

- Use these covers to protect all weld ends on fittings, valves, and pumps

Size	Vinyl Plastic Part #
1/2"	BCW-050
3/4"	BCW-075
1"	BCW-100
1-1/2"	BCW-150
2"	BCW-200
2-1/2"	BCW-250
3"	BCW-300
4"	BCW-400
6"	BCW-600
8"	BCW-800

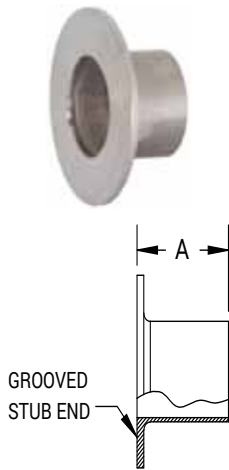


Laterals, Wyes, Bends, and Flanges

Unpolished Type A Stub Ends - 14VB

Application

- Typically used with B38SL flanges



Tube O.D.	A (in)	Nominal Wall (in)	316L Stainless Steel Part #
1/2"	1.38	.065	14VB-R50
3/4"	1.38	.065	14VB-R75
1"	1.63	.065	14VB-R100
1-1/2"	1.75	.065	14VB-R150
2"	1.50	.065	14VB-R200
2-1/2"	2.00	.065	14VB-R250
3"	2.25	.065	14VB-R300
4"	2.63	.083	14VB-R400
6"	3.00	.109	14VB-R600
8"	3.00	.109	14VB-R800
10"	3.50	.120	14VB-R1000

Flange Gaskets

Size

- Standard drop-ring type all 1/16" thick



Size	Neoprene Part #
1"	NG10
1-1/4"	NG15
1-1/2"	NG20
2"	NG25
2-1/2"	NG30
3"	NG35
4"	NG40
5"	NG50
6"	NG60
8"	NG80



## Dixon Sanitary Bevel Seat Fittings

### A Complete Bevel Seat Connection

**Sizes**

- 1" - 4" O.D. tube

**Materials**

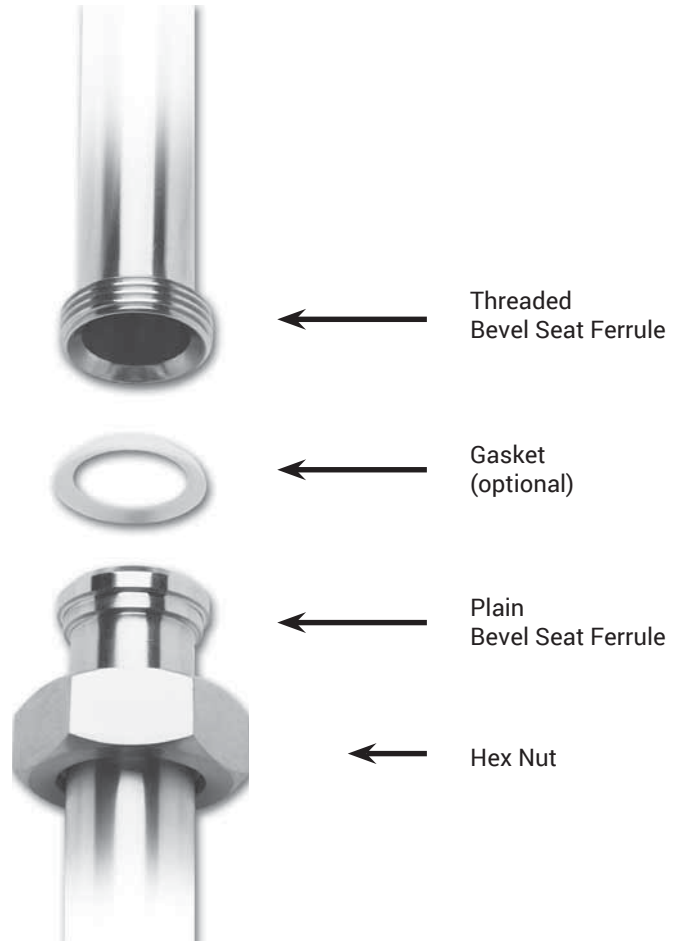
- G = 304 stainless steel
- R = 316L stainless steel
- Other alloys are available

**Feature**

- 3A sanitary finish I.D. and O.D.

**Primary Markets**

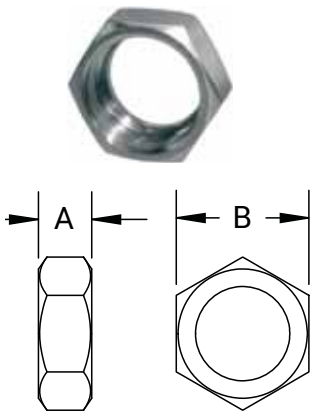
- Found in the food processing, beverage, and dairy markets



### Dimensions of stainless steel tube

Tube O.D.	Nominal Wall Thickness (in)
1"	.065
1-1/2"	.065
2"	.065
2-1/2"	.065
3"	.065
4"	.083

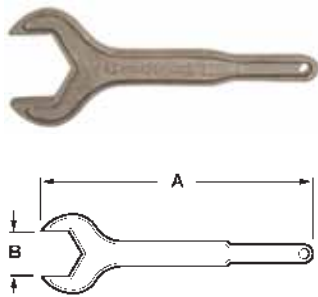
Bevel Seat Nuts



Union Hex Nuts - 13H

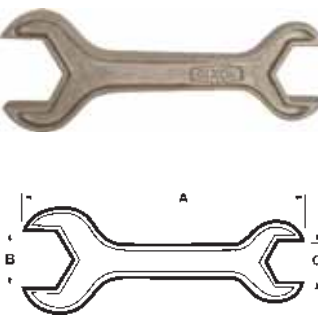
Tube O.D.	A (in)	B (in)	304 Stainless Steel (CF8) Part #
1"	.91	1.81	13H-G100
1-1/2"	.97	2.41	13H-G150
2"	1.06	3.00	13H-G200
2-1/2"	1.19	3.59	13H-G250
3"	1.28	4.19	13H-G300
4"	1.50	5.44	13H-G400

Bevel Seat Wrenches



Single Side Hex Wrenches - 25H

Tube O.D.	A (in)	B (in)	Weight lbs.	Aluminum Part #
1"	10.50	1.81	.64	25H-100
1-1/2"	12.00	2.41	.86	25H-150
2"	14.00	3.00	1.76	25H-200
2-1/2"	16.25	3.59	2.40	25H-250
3"	18.50	4.19	3.04	25H-300
4"	19.50	5.44	3.62	25H-400



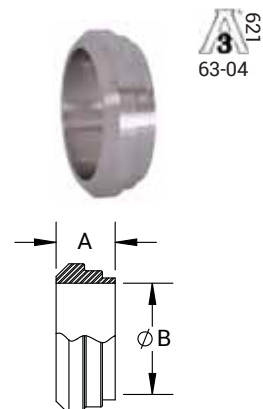
Two Sided Hex Wrenches - 25H

Tube O.D.	A (in)	B (in)	C (in)	Weight lbs.	Aluminum Part #
1-1/2" x 1"	12.00	2.41	1.81	1.00	25H-150100
2" x 1-1/2"	14.00	3.00	2.41	1.75	25H-200150
2-1/2" x 2"	16.50	3.59	3.00	2.80	25H-250200
3" x 2"	18.00	4.19	3.00	3.20	25H-300200
3" x 2-1/2"	18.00	4.19	3.59	3.70	25H-300250

### Bevel Seat Ferrules

#### Short Plain Bevel Seat Weld Ferrules - 14PRF

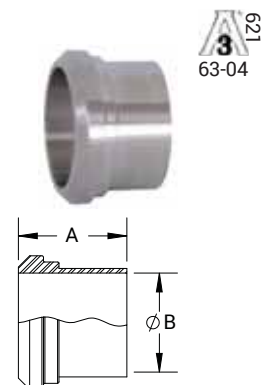
Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	.72	.87	.065	14PRF-G100	14PRF-R100
1-1/2"	.72	1.37	.065	14PRF-G150	14PRF-R150
2"	.75	1.87	.065	14PRF-G200	14PRF-R200
2-1/2"	.88	2.37	.065	14PRF-G250	14PRF-R250
3"	.91	2.87	.065	14PRF-G300	14PRF-R300
4"	1.03	3.83	.083	14PRF-G400	14PRF-R400



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63-04

#### Long Plain Bevel Seat Weld Ferrules - 14A

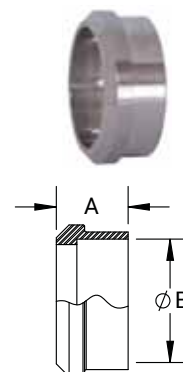
Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.38	.87	.065	14A-G100	14A-R100
1-1/2"	1.50	1.37	.065	14A-G150	14A-R150
2"	1.50	1.87	.065	14A-G200	14A-R200
2-1/2"	1.75	2.37	.065	14A-G250	14A-R250
3"	1.75	2.87	.065	14A-G300	14A-R300
4"	1.75	3.83	.083	14A-G400	14A-R400



621  
3  
63-04

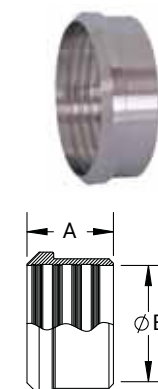
#### Recessed Plain Bevel Seat Weld Ferrules - 14

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #
1"	.75	1.01	.065	14-G100
1-1/2"	.88	1.51	.065	14-G150
2"	.97	2.01	.065	14-G200
2-1/2"	1.06	2.51	.065	14-G250
3"	1.13	3.01	.065	14-G300
4"	1.25	4.01	.083	14-G400



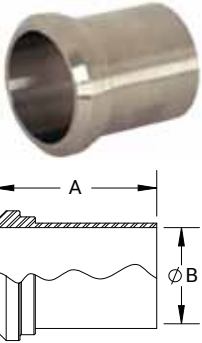
#### Recessless Plain Bevel Seat Ferrules for Expanding - 14R

Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1"	.75	1.00	14R-G100
1-1/2"	1.12	1.50	14R-G150
2"	1.31	2.00	14R-G200
2-1/2"	1.38	2.50	14R-G250
3"	1.44	3.00	14R-G300
4"	1.50	4.00	14R-G400



Bevel Seat Ferrules

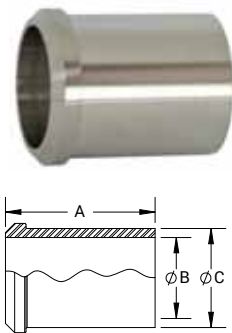
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63-04



Light Wall Tank Plain Bevel Seat Ferrules - 14WL

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #
1"	2.00	.87	.065	14WL-G100
1-1/2"	2.25	1.37	.065	14WL-G150
2"	2.50	1.87	.065	14WL-G200
2-1/2"	2.75	2.37	.065	14WL-G250
3"	3.00	2.87	.065	14WL-G300
4"	4.00	3.83	.083	14WL-G400

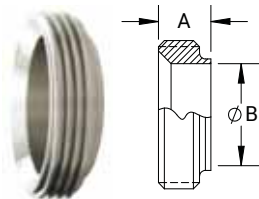
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63-04



Heavy Wall Tank Plain Bevel Seat Ferrules - 14W

Size	A (in)	B (in)	C (in)	304 Stainless Steel Part #
1"	2.38	.87	1.16	14W-G100
1-1/2"	2.53	1.37	1.68	14W-G150
2"	2.78	1.87	2.19	14W-G200
2-1/2"	3.06	2.37	2.71	14W-G250
3"	3.53	2.87	3.22	14W-G300
4"	4.31	3.83	4.26	14W-G400

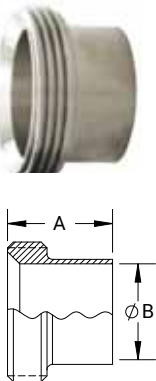
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63-04



Short Threaded Bevel Seat Weld Ferrules - 15TRF

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	.72	.87	.065	15TRF-G100	15TRF-R100
1-1/2"	.72	1.37	.065	15TRF-G150	15TRF-R150
2"	.75	1.87	.065	15TRF-G200	15TRF-R200
2-1/2"	.88	2.37	.065	15TRF-G250	15TRF-R250
3"	.91	2.87	.065	15TRF-G300	15TRF-R300
4"	1.03	3.83	.083	15TRF-G400	15TRF-R400

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63-04



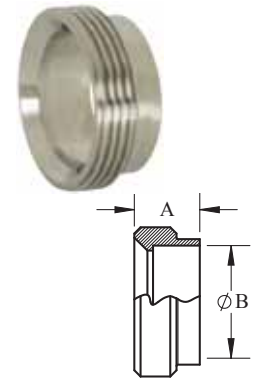
Long Threaded Bevel Seat Weld Ferrules - 15A

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.38	.87	.065	15A-G100	15A-R100
1-1/2"	1.50	1.37	.065	15A-G150	15A-R150
2"	1.50	1.87	.065	15A-G200	15A-R200
2-1/2"	1.75	2.37	.065	15A-G250	15A-R250
3"	1.75	2.87	.065	15A-G300	15A-R300
4"	1.75	3.83	.083	15A-G400	15A-R400

## Bevel Seat Ferrules

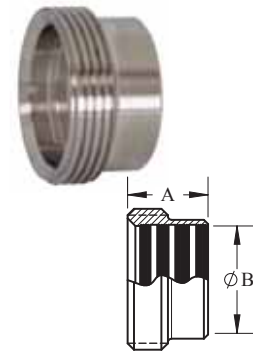
### Recessed Threaded Bevel Seat Ferrules - 15

Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1"	0.81	1.01	15-G100
1-1/2"	0.88	1.51	15-G150
2"	1.03	2.01	15-G200
2-1/2"	1.13	2.51	15-G250
3"	1.25	3.01	15-G300
4"	1.38	4.01	15-G400



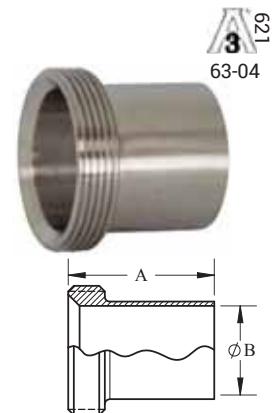
### Recessless Threaded Bevel Seat Ferrules for Expanding - 15R

Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1"	.81	1.01	15R-G100
1-1/2"	1.13	1.51	15R-G150
2"	1.38	2.01	15R-G200
2-1/2"	1.50	2.51	15R-G250
3"	1.63	3.01	15R-G300
4"	1.68	4.01	15R-G400



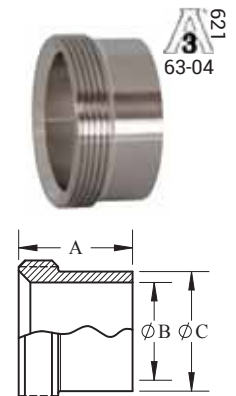
### Light Wall Tank Threaded Bevel Seat Ferrules - 15WL

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #
1"	2.00	.87	.065	15WL-G100
1-1/2"	2.25	1.37	.065	15WL-G150
2"	2.50	1.87	.065	15WL-G200
2-1/2"	2.75	2.37	.065	15WL-G250
3"	3.00	2.87	.065	15WL-G300
4"	4.00	3.83	.083	15WL-G400



### Heavy Wall Tank Threaded Bevel Seat Ferrules - 15W

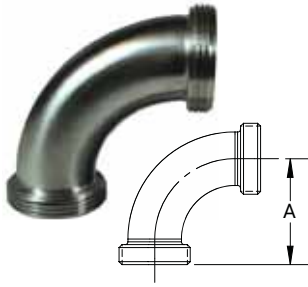
Size	A (in)	B (in)	C (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.50	.87	1.16	15W-G100	15W-R100
1-1/2"	1.63	1.37	1.68	15W-G150	15W-R150
2"	1.75	1.87	2.19	15W-G200	15W-R200
2-1/2"	1.75	2.37	2.71	15W-G250	15W-R250
3"	1.81	2.87	3.22	15W-G300	15W-R300
4"	2.13	3.83	4.26	15W-G400	15W-R400



Bevel Seat Elbows

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63-04

Threaded Bevel Seat x Threaded Bevel Seat 90° Elbows - B2C



Tube O.D.	A (in)	304 Stainless Steel Part #
1"	2.22	B2C-G100
1-1/2"	2.97	B2C-G150
2"	3.75	B2C-G200
2-1/2"	4.63	B2C-G250
3"	5.41	B2C-G300
4"	7.03	B2C-G400

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Threaded Bevel Seat x Plain Bevel Seat with Hex Nut 90° Elbows - B2F



Tube O.D.	A (in)	304 Stainless Steel Part #
1"	2.22	B2F-G100
1-1/2"	2.97	B2F-G150
2"	3.75	B2F-G200
2-1/2"	4.63	B2F-G250
3"	5.41	B2F-G300
4"	7.03	B2F-G400

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63-04

Plain Bevel Seat x Plain Bevel Seat with Hex Nut 90° Elbows - B2E



Tube O.D.	A (in)	304 Stainless Steel Part #
1"	2.22	B2E-G100
1-1/2"	2.97	B2E-G150
2"	3.75	B2E-G200
2-1/2"	4.63	B2E-G250
3"	5.41	B2E-G300
4"	7.03	B2E-G400

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63-04

Threaded Bevel Seat x Plain Bevel Seat with Hex Nut 45° Elbows - B2P



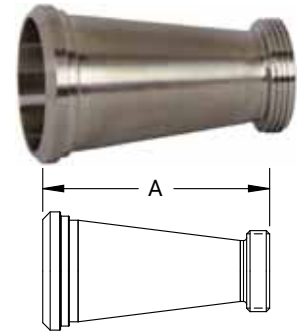
Tube O.D.	A (in)	304 Stainless Steel Part #
1"	1.34	B2P-G100
1-1/2"	1.66	B2P-G150
2"	2.00	B2P-G200
2-1/2"	2.44	B2P-G250
3"	2.78	B2P-G300
4"	3.53	B2P-G400

## Bevel Seat Concentric Reducers

### Plain Bevel Seat x Threaded Bevel Seat Concentric Reducers - B3115F

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63-04

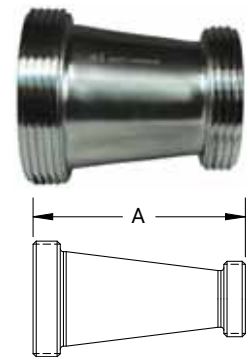
Tube O.D.	A (in)	304 Stainless Steel Part #
1-1/2" x 1"	3.44	B3115F-G150100
2" x 1-1/2"	3.47	B3115F-G200150
2-1/2" x 2"	3.63	B3115F-G250200
3" x 2"	5.66	B3115F-G300200
3" x 2-1/2"	3.78	B3115F-G300250
4" x 3"	5.94	B3115F-G400300



### Threaded Bevel Seat x Threaded Bevel Seat Concentric Reducers - B31TT

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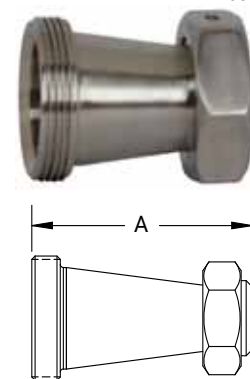
Tube O.D.	A (in)	304 Stainless Steel Part #
1-1/2" x 1"	3.44	B31TT-G150100
2" x 1-1/2"	3.47	B31TT-G200150
2-1/2" x 2"	3.63	B31TT-G250200
3" x 2"	5.66	B31TT-G300200
3" x 2-1/2"	3.78	B31TT-G300250
4" x 3"	5.94	B31TT-G400300



### Threaded Bevel Seat x Plain Bevel Seat with Hex Nut Concentric Reducers - B31TP

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63-04

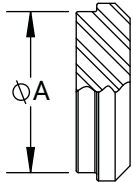
Tube O.D.	A (in)	304 Stainless Steel Part #
1-1/2" x 1"	3.44	B31TP-G150100
2" x 1-1/2"	3.47	B31TP-G200150
2-1/2" x 2"	3.63	B31TP-G250200
3" x 2"	5.66	B31TP-G300200
3" x 2-1/2"	3.78	B31TP-G300250
4" x 3"	5.94	B31TP-G400300



### Bevel Seat End Caps

#### Plain Bevel Seat Solid End Caps - 16A

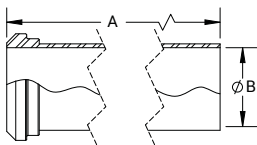
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Size	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.16	16A-G100	16A-R100
1-1/2"	1.67	16A-G150	16A-R150
2"	2.19	16A-G200	16A-R200
2-1/2"	2.71	16A-G250	16A-R250
3"	3.22	16A-G300	16A-R300
4"	4.26	16A-G400	16A-R400

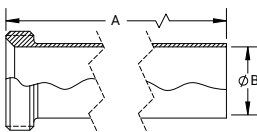
### Bevel Seat Adapters

#### Plain Bevel Seat Tygon® Hose Adapters - 14AHT



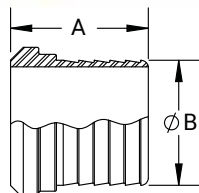
Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1"	4.69	.87	14AHT-G100
1-1/2"	4.72	1.37	14AHT-G150
2"	4.72	1.87	14AHT-G200
2-1/2"	4.84	2.37	14AHT-G250
3"	4.91	2.87	14AHT-G300
4"	5.22	3.83	14AHT-G400

#### Threaded Bevel Seat Tygon® Hose Adapters - 15AHT



Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1"	4.50	.87	15AHT-G100
1-1/2"	4.50	1.37	15AHT-G150
2"	4.50	1.87	15AHT-G200
2-1/2"	4.50	2.37	15AHT-G250
3"	4.50	2.87	15AHT-G300
4"	5.00	3.83	15AHT-G400

#### Plain Bevel Seat Rubber Hose Adapters - 14AHR



Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1"	1.69	1.03	14AHR-G100
1-1/2"	1.69	1.53	14AHR-G150
2"	2.31	2.03	14AHR-G200
2-1/2"	2.67	2.53	14AHR-G250
3"	3.10	3.03	14AHR-G300
4"	4.00	4.06	14AHR-G400



## Dixon Sanitary I-Line/Q-Line Fittings

### A Complete I-Line Connection

**Sizes**

- 1" - 8" O.D. tube I-line (1" - 3" stocked, 4" - 8" special order)
- 1" - 4" O.D. tube Q-Line

**Materials**

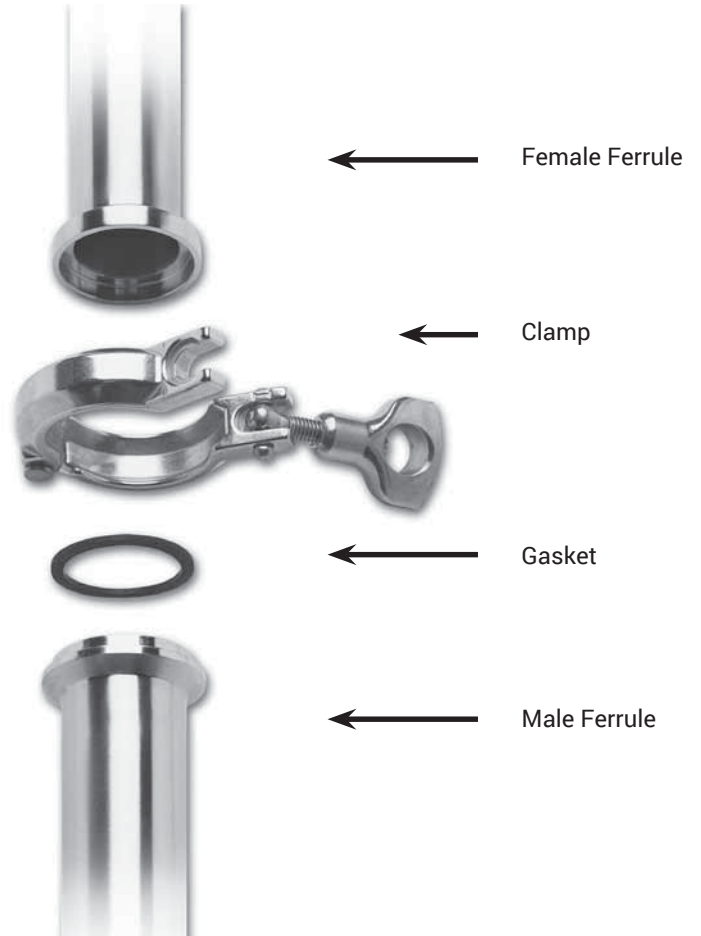
- G = 304 stainless steel
- R = 316L stainless steel
- Other alloys are available

**Feature**

- 3A sanitary finish I.D. and O.D.

**Primary Markets**

- Found in the food processing, beverage, dairy, personal care, and winery markets



**Dimensions of stainless steel tube**

Tube O.D.	Nominal Wall Thickness (in)
1"	.065
1-1/2"	.065
2"	.065
2-1/2"	.065
3"	.065
4"	.083
6"	.109
8"	.109

I-line / Q-line Clamps

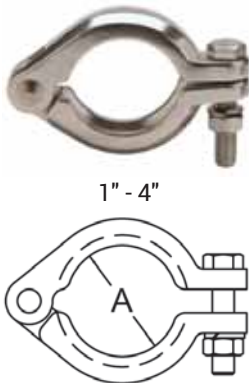
Heavy Duty Clamps - 13ILH



Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	Part #
1"- 1-1/2"	700	250	2.12	13ILH100-150
2"	450	250	2.65	13ILH200
2-1/2"	450	200	3.19	13ILH250
3"	350	150	3.72	13ILH300
4"	200	125	4.82	13ILH400
6"	150	100	7.69	13ILH600
8"	125	75	9.69	13ILH800

<sup>1</sup> Wing nut tightened to 25 in-lb of torque

Bolted Clamps - 13ILB

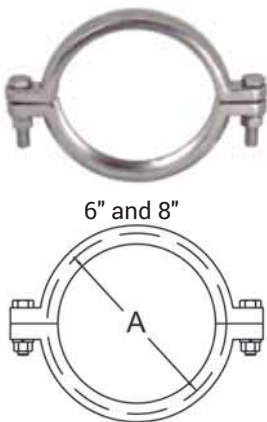


1" - 4"

Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	Part #
1"- 1-1/2"	1220	1100	2.12	13ILB100-150
2"	900	830	2.65	13ILB200
2-1/2"	720	660	3.19	13ILB250
3"	600	550	3.72	13ILB300
4"	570	525	4.82	13ILB400

<sup>1</sup> Nut tightened to 20 ft-lb of torque

Bolted I-Line Clamps - 13ILB

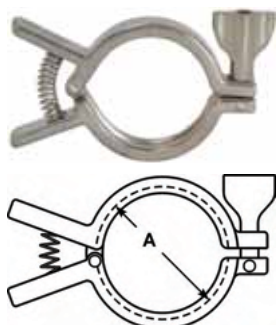


6" and 8"

Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	Part #
6"	300	200	7.69	13ILB600
8"	250	150	9.69	13ILB800

<sup>1</sup> Nut tightened to 20 ft-lb of torque

Squeeze Clamps - 13IL-Q



Tube O.D.	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Service Pressure Rating PSI @ 250°F (121°C) <sup>1</sup>	A (in)	Part #
1"- 1-1/2"	700	250	2.12	13IL-Q100150
2"	450	250	2.65	13IL-Q200

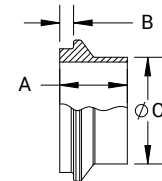
<sup>1</sup> Wing nut tightened to 25 in-lb of torque

### I-Line/Q-Line - Ferrules

#### Male I-Line Short Weld Ferrules - 14WI



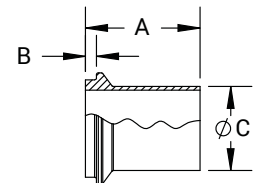
Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	.79	.19	1.00	.065	14WI-G100	14WI-R100
1-1/2"	.95	.20	1.50	.065	14WI-G150	14WI-R150
2"	1.04	.26	2.00	.065	14WI-G200	14WI-R200
2-1/2"	1.16	.31	2.50	.065	14WI-G250	14WI-R250
3"	1.22	.31	3.00	.065	14WI-G300	14WI-R300
4"	1.35	.31	4.00	.083	14WI-G400	14WI-R400
6"	1.13	.19	6.00	.109	---	14WI-R600
8"	1.13	.19	8.00	.109	---	14WI-R800



#### Male I-Line Long Weld Ferrules - 14WLI



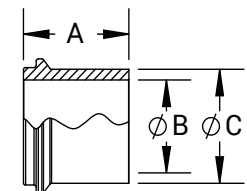
Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.75	0.19	1.00	.065	14WLI-G100	14WLI-R100
1-1/2"	2.04	0.20	1.50	.065	14WLI-G150	14WLI-R150
2"	2.32	0.26	2.00	.065	14WLI-G200	14WLI-R200
2-1/2"	2.50	0.31	2.50	.065	14WLI-G250	14WLI-R250
3"	2.68	0.31	3.00	.065	14WLI-G300	14WLI-R300
4"	3.00	0.31	4.00	.083	14WLI-G400	14WLI-R400
6"	2.88	0.19	6.00	.109	14WLI-G600	14WLI-R600



#### Male I-Line Heavy Wall Tank Weld Ferrules - 14WHI

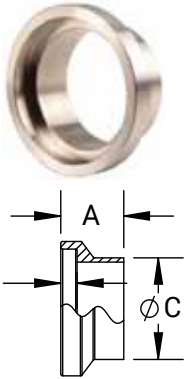


Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.50	.87	1.25	.065	14WHI-G100	14WHI-R100
1-1/2"	1.63	1.37	1.69	.065	14WHI-G150	14WHI-R150
2"	1.75	1.87	2.25	.065	14WHI-G200	14WHI-R200
2-1/2"	1.75	2.37	2.75	.065	14WHI-G250	14WHI-R250
3"	1.81	2.87	3.31	.065	14WHI-G300	14WHI-R300
4"	2.13	3.83	4.25	.083	14WHI-G400	14WHI-R400
6"	3.00	5.78	6.88	.109	---	14WHI-R600



I-Line/Q-Line - Ferrules

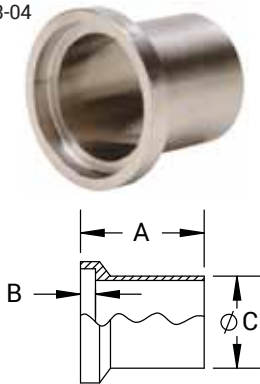
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Female I-Line Short Weld Ferrules - 15WI

Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	.79	.25	1.00	.065	15WI-G100	15WI-R100
1-1/2"	.95	.25	1.50	.065	15WI-G150	15WI-R150
2"	1.04	.31	2.00	.065	15WI-G200	15WI-R200
2-1/2"	1.16	.36	2.50	.065	15WI-G250	15WI-R250
3"	1.22	.36	3.00	.065	15WI-G300	15WI-R300
4"	1.35	.36	4.00	.083	15WI-G400	15WI-R400
6"	1.13	.24	6.00	.109	---	15WI-R600
8"	1.13	.24	8.00	.109	---	15WI-R800

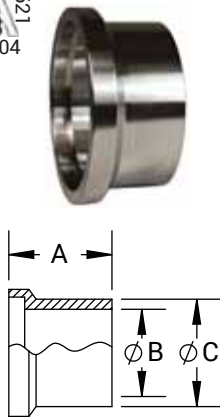
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63-04



Female I-Line Long Weld Ferrules - 15WLI

Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.75	.25	1.00	.065	15WLI-G100	15WLI-R100
1-1/2"	2.03	.25	1.50	.065	15WLI-G150	15WLI-R150
2"	2.31	.31	2.00	.065	15WLI-G200	15WLI-R200
2-1/2"	2.50	.36	2.50	.065	15WLI-G250	15WLI-R250
3"	2.69	.36	3.00	.065	15WLI-G300	15WLI-R300
4"	3.00	.36	4.00	.083	15WLI-G400	15WLI-R400
6"	3.00	.24	6.00	.109	---	15WLI-R600

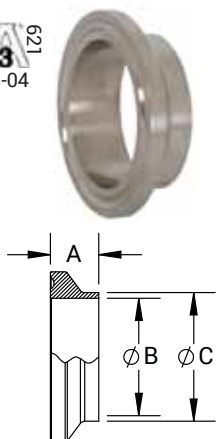
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Female I-Line Heavy Wall Tank Weld Ferrules - 15WHI

Size	A (in)	B (in)	C (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.50	.87	1.25	15WHI-G100	15WHI-R100
1-1/2"	1.63	1.37	1.69	15WHI-G150	15WHI-R150
2"	1.75	1.87	2.25	15WHI-G200	15WHI-R200
2-1/2"	1.75	2.37	2.75	15WHI-G250	15WHI-R250
3"	1.81	2.87	3.31	15WHI-G300	15WHI-R300
4"	2.13	3.83	4.25	15WHI-G400	15WHI-R400

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63-04



Q-Line Weld Ferrules - 14WQ

Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	304 Stainless Steel Part #
1"	.53	.87	1.00	.065	14WQ-G100
1-1/2"	.56	1.37	1.50	.065	14WQ-G150
2"	.81	1.87	2.00	.065	14WQ-G200
2-1/2"	.94	2.37	2.50	.065	14WQ-G250
3"	.94	2.87	3.00	.065	14WQ-G300
4"	1.00	3.83	4.00	.083	14WQ-G400

I-Line/Q-Line - Elbows

90° Female I-Line x Male I-Line Elbows - B2FI

Tube O.D.	A (in)	304 Stainless Steel Part #
1"	2.29	B2FI-G100
1-1/2"	3.20	B2FI-G150
2"	4.04	B2FI-G200
2-1/2"	4.91	B2FI-G250
3"	5.72	B2FI-G300
4"	7.35	B2FI-G400



90° Female I-Line Elbows - B2CI

Tube O.D.	A (in)	304 Stainless Steel Part #
1"	2.29	B2CI-G100
1-1/2"	3.20	B2CI-G150
2"	4.04	B2CI-G200
2-1/2"	4.91	B2CI-G250
3"	5.72	B2CI-G300
4"	7.35	B2CI-G400

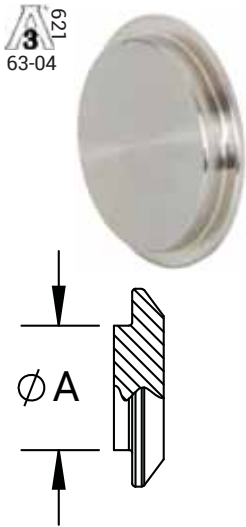


90° Male I-Line Elbows - B2EI

Tube O.D.	A (in)	304 Stainless Steel Part #
1"	2.29	B2EI-G100
1-1/2"	3.20	B2EI-G150
2"	4.04	B2EI-G200
2-1/2"	4.91	B2EI-G250
3"	5.72	B2EI-G300
4"	7.35	B2EI-G400

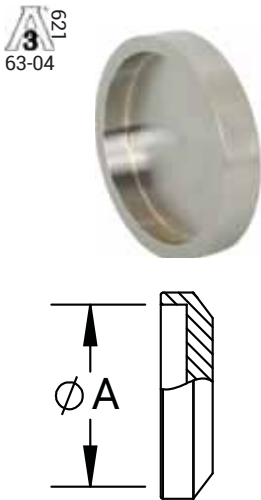


I-Line / Q-Line - End Caps



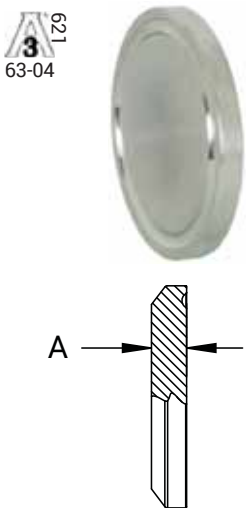
Male I-Line Solid End Caps - 16AI-14I

Size	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.25	16AI-14I100	16AI-14I100R
1-1/2"	1.74	16AI-14I150	16AI-14I150R
2"	2.24	16AI-14I200	16AI-14I200R
2-1/2"	2.74	16AI-14I250	16AI-14I250R
3"	3.30	16AI-14I300	16AI-14I300R
4"	4.30	16AI-14I400	16AI-14I400R
6"	6.83	16AI-14I600	16AI-14I600R
8"	8.83	---	16AI-14I800R



Female I-Line Solid End Caps - 16AI-15I

Size	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.27	16AI-15I100	16AI-15I100R
1-1/2"	1.76	16AI-15I150	16AI-15I150R
2"	2.26	16AI-15I200	16AI-15I200R
2-1/2"	2.76	16AI-15I250	16AI-15I250R
3"	3.32	16AI-15I300	16AI-15I300R
4"	4.32	16AI-15I400	16AI-15I400R
6"	6.92	16AI-15I600	16AI-15I600R
8"	8.92	---	16AI-15I800R



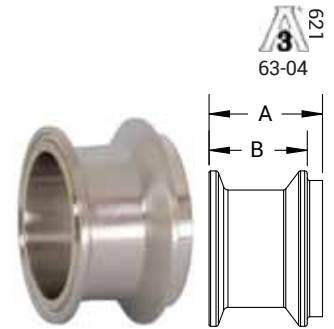
Q-Line Solid End Caps - 16AQ

Size	A (in)	304 Stainless Steel Part #
1"	0.19	16AQ-G100
1-1/2"	0.19	16AQ-G150
2"	0.25	16AQ-G200
2-1/2"	0.26	16AQ-G250
3"	0.26	16AQ-G300
4"	0.25	16AQ-G400

## I-Line/Q-Line Adapters

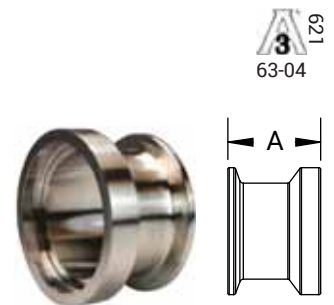
### Male I-Line x Clamp Adapters - 17-14I-14MP

Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1"	1.29	1.10	17-14I-14MPG100
1-1/2"	1.45	1.26	17-14I-14MPG150
2"	1.54	1.29	17-14I-14MPG200
2-1/2"	1.66	1.35	17-14I-14MPG250
3"	1.72	1.41	17-14I-14MPG300
4"	1.98	1.67	17-14I-14MPG400



### Female I-Line x Clamp Adapters - 17-15I-14MP

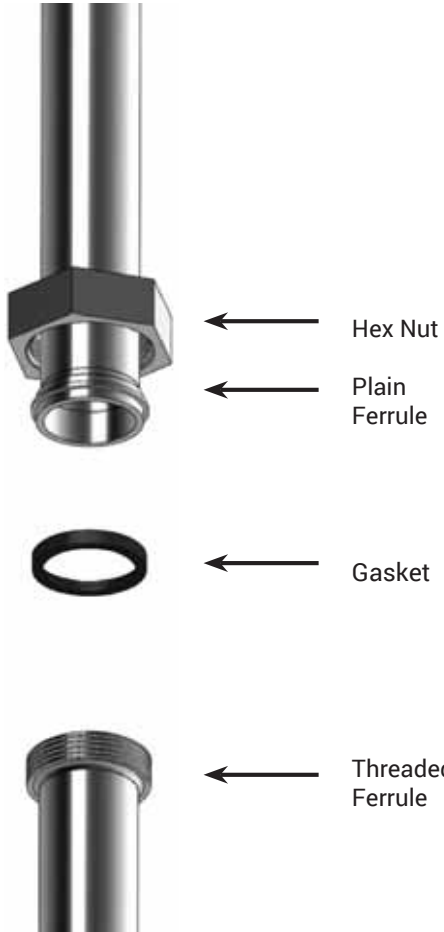
Tube O.D.	A (in)	304 Stainless Steel Part #
1"	1.28	17-15I-14MPG100
1-1/2"	1.45	17-15I-14MPG150
2"	1.54	17-15I-14MPG200
2-1/2"	1.63	17-15I-14MPG250
3"	1.72	17-15I-14MPG300
4"	1.97	17-15I-14MPG400





## Dixon Sanitary John Perry Fittings

### A Complete John Perry Connection



Hex Nut

Plain  
Ferrule

Gasket

Threaded  
Ferrule

#### Sizes

- 1" - 4" O.D. tube

#### Materials

- G = 304 stainless steel
- R = 316L stainless steel
- Other alloys are available

#### Feature

- 3A sanitary finish I.D. and O.D.

#### Primary Markets

- Found in the beverage and dairy markets

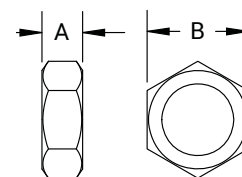
#### Dimensions of stainless steel tube

Tube OD	Nominal Wall Thickness (in)
1"	.065
1-1/2"	.065
2"	.065
2-1/2"	.065
3"	.065
4"	.083

## John Perry Nuts

### Union Hex Nuts - 13H

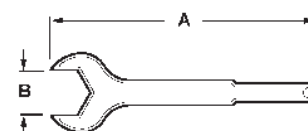
Tube O.D.	A (in)	B (in)	304 Stainless Steel (CF8) Part #
1"	.91	1.81	13H-G100
1-1/2"	.97	2.41	13H-G150
2"	1.06	3.00	13H-G200
2-1/2"	1.19	3.59	13H-G250
3"	1.28	4.19	13H-G300
4"	1.50	5.44	13H-G400



## John Perry Wrenches

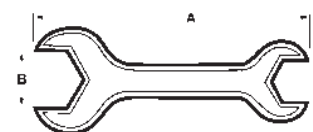
### Single-Side Hex Wrenches - 25H

Tube O.D.	A (in)	B (in)	Weight lbs.	Aluminum Part #
1"	10.50	1.81	.64	25H-100
1-1/2"	12.00	2.41	.86	25H-150
2"	14.00	3.00	1.76	25H-200
2-1/2"	16.25	3.59	2.40	25H-250
3"	18.50	4.19	3.04	25H-300
4"	19.50	5.44	3.62	25H-400



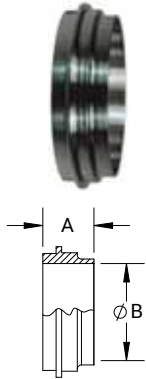
### Two-Sided Hex Wrenches - 25H

Tube O.D.	A (in)	B (in)	C (in)	Weight lbs.	Aluminum Part #
1-1/2" x 1"	12.00	2.41	1.81	1.00	25H-150100
2" x 1-1/2"	14.00	3.00	2.41	1.75	25H-200150
2-1/2" x 2"	16.50	3.59	3.00	2.80	25H-250200
3" x 2"	18.00	4.19	3.00	3.20	25H-300200
3" x 2-1/2"	18.00	4.19	3.59	3.70	25H-300250



## John Perry Ferrules

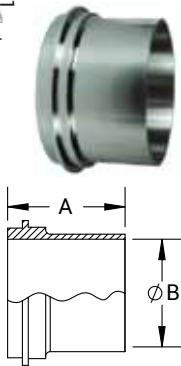
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63-04



John Perry Short Plain Weld Ferrules - 14PRFJP

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	.69	.87	.065	14PRFJP-G100	14PRFJP-R100
1-1/2"	.72	1.37	.065	14PRFJP-G150	14PRFJP-R150
2"	.72	1.87	.065	14PRFJP-G200	14PRFJP-R200
2-1/2"	.84	2.37	.065	14PRFJP-G250	14PRFJP-R250
3"	.91	2.87	.065	14PRFJP-G300	14PRFJP-R300
4"	1.22	3.83	.083	14PRFJP-G400	14PRFJP-R400

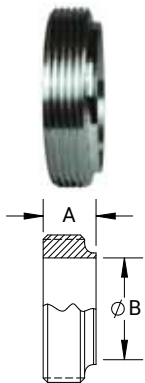
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John Perry Long Plain Weld Ferrules - L14AJP

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.38	.87	.065	L14AJP-G100	L14AJP-R100
1-1/2"	1.50	1.37	.065	L14AJP-G150	L14AJP-R150
2"	1.50	1.87	.065	L14AJP-G200	L14AJP-R200
2-1/2"	1.75	2.37	.065	L14AJP-G250	L14AJP-R250
3"	1.75	2.87	.065	L14AJP-G300	L14AJP-R300
4"	1.75	3.83	.083	L14AJP-G400	L14AJP-R400

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63-04



John Perry Threaded Short Weld Ferrules - 15TRFJP

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	.69	.87	.065	15TRFJP-G100	15TRFJP-R100
1-1/2"	.72	1.37	.065	15TRFJP-G150	15TRFJP-R150
2"	.72	1.87	.065	15TRFJP-G200	15TRFJP-R200
2-1/2"	.84	2.37	.065	15TRFJP-G250	15TRFJP-R250
3"	.91	2.87	.065	15TRFJP-G300	15TRFJP-R300
4"	1.22	3.83	.083	15TRFJP-G400	15TRFJP-R400

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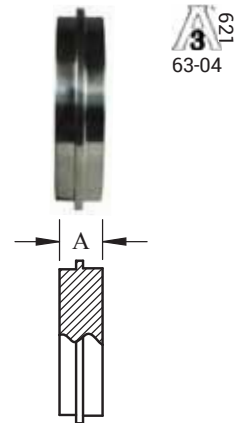
John Perry Threaded Long Weld Ferrules - L15AJP

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	1.38	.87	.065	L15AJP-G100	L15AJP-R100
1-1/2"	1.50	1.37	.065	L15AJP-G150	L15AJP-R150
2"	1.50	1.87	.065	L15AJP-G200	L15AJP-R200
2-1/2"	1.75	2.37	.065	L15AJP-G250	L15AJP-R250
3"	1.75	2.87	.065	L15AJP-G300	L15AJP-R300
4"	1.75	3.83	.083	L15AJP-G400	L15AJP-R400

## John Perry End Caps

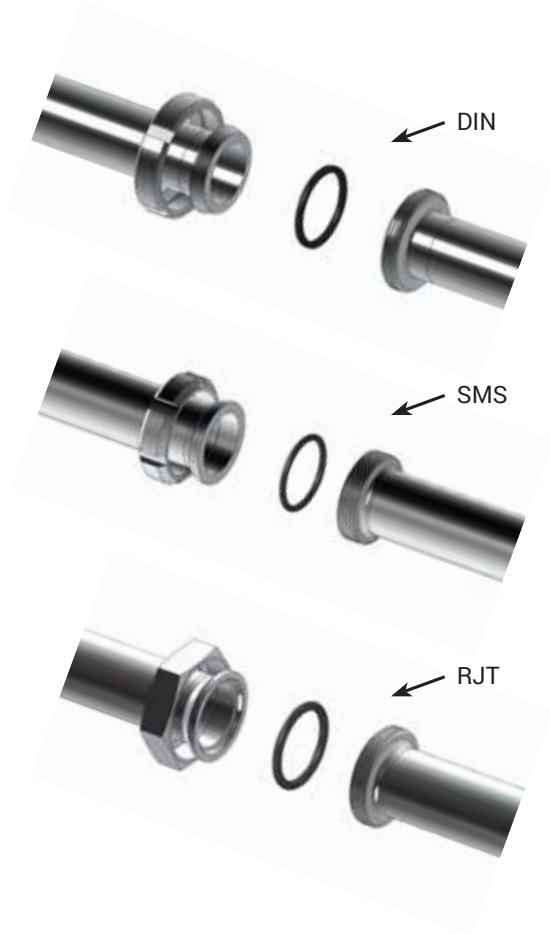
### John Perry Solid End Caps - 16AJP

Size	A (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	.47	16AJP-G100	16AJP-R100
1-1/2"	.48	16AJP-G150	16AJP-R150
2"	.53	16AJP-G200	16AJP-R200
2-1/2"	.55	16AJP-G250	16AJP-R250
3"	.61	16AJP-G300	16AJP-R300
4"	.69	16AJP-G400	16AJP-R400



## Dixon Sanitary Euro Fittings

### European Connections



**Sizes**

- 1" - 4" nominal diameter

**Materials**

- G = 304 stainless steel
- R = 316 stainless steel

**Feature**

- 3A sanitary finish I.D. and O.D.

**Primary Markets**

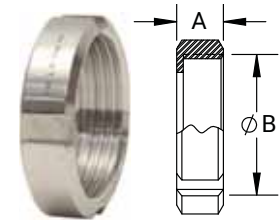
- Found in the food processing, beverage, and brewery markets

NOTE: For Dixon Euro fittings, the weld side of the fitting is manufactured to Imperial Tube dimensions.

European Fittings - DIN

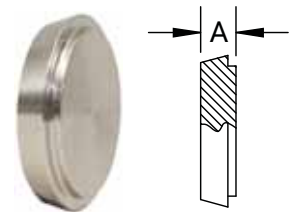
DIN Round Nuts - 13R

Size	DN Size	A (mm)	B (mm)	304 Stainless Steel Part #
1"	25	21.0	Rd 52 x 1/6"	13R-G100DIN
1-1/2"	40	21.0	Rd 65 x 1/6"	13R-G150DIN
2"	50	22.0	Rd 78 x 1/6"	13R-G200DIN
2-1/2"	65	25.0	Rd 95 x 1/6"	13R-G250DIN
3"	80	29.0	Rd 110 x 1/4"	13R-G300DIN
4"	100	31.0	Rd 130 x 1/4"	13R-G400DIN



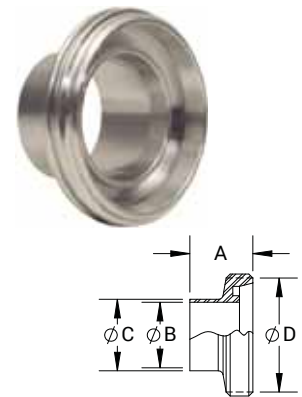
DIN Blank Caps - 16AMP

Size	DN Size	A (mm)	316 Stainless Steel Part #
1"	25	13.0	16AMP-R100DIN
1-1/2"	40	13.0	16AMP-R150DIN
2"	50	14.0	16AMP-R200DIN
2-1/2"	65	16.0	16AMP-R250DIN
3"	80	16.0	16AMP-R300DIN
4"	100	20.0	16AMP-R400DIN



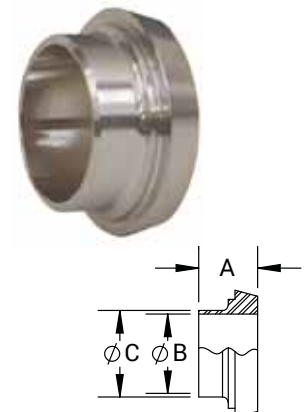
DIN x Tube O.D. Welding Male Adapters - 15A

Tube O.D.	DN Size	A (mm)	B (mm)	C (mm)	D (mm)	316 Stainless Steel Part #
1"	25	29.0	22.1	25.4	Rd 52 x 1/6"	15A-R100DIN
1-1/2"	40	33.0	34.8	38.1	Rd 65 x 1/6"	15A-R150DIN
2"	50	35.0	47.5	50.8	Rd 78 x 1/6"	15A-R200DIN
2-1/2"	65	40.0	60.2	63.5	Rd 95 x 1/6"	15A-R250DIN
3"	80	45.0	72.9	76.2	Rd 110 x 1/4"	15A-R300DIN
4"	100	54.0	97.4	101.6	Rd 130 x 1/4"	15A-R400DIN



DIN x Tube O.D. Welding Liner Adapters - 14A

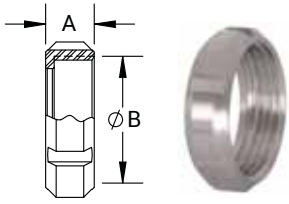
Tube O.D.	DN Size	A (mm)	B (mm)	C (mm)	316 Stainless Steel Part #
1"	25	22.0	22.1	25.4	14A-R100DIN
1-1/2"	40	26.0	34.8	38.1	14A-R150DIN
2"	50	28.0	47.5	50.8	14A-R200DIN
2-1/2"	65	32.0	60.2	63.5	14A-R250DIN
3"	80	37.0	72.9	76.2	14A-R300DIN
4"	100	44.0	97.4	101.6	14A-R400DIN



NOTE: Manufactured in accordance to Imperial DIN 11851

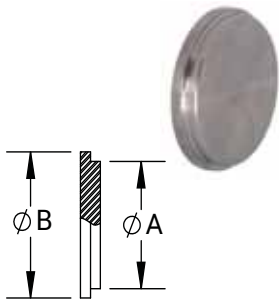
SMS

SMS Round Nuts - 13R



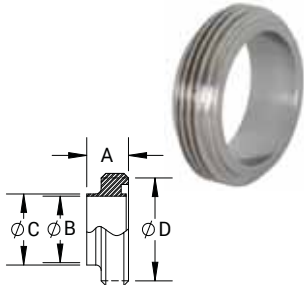
Size	DN Size	A (mm)	B (mm)	304 Stainless Steel Part #
1"	25	19.0	Rd 40 x 1/6"	13R-G100SMS
1-1/2"	38	23.0	Rd 60 x 1/6"	13R-G150SMS
2"	51	24.0	Rd 70 x 1/6"	13R-G200SMS
2-1/2"	63.5	28.0	Rd 85 x 1/6"	13R-G250SMS
3"	76	30.0	Rd 98 x 1/6"	13R-G300SMS
4"	101.6	31.0	Rd 125 x 1/4"	13R-G400SMS

SMS Blank Caps - 16AMP



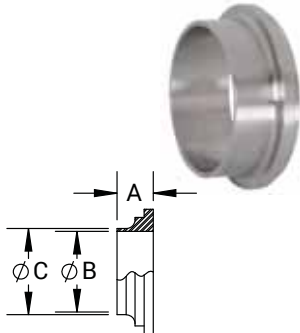
Size	DN Size	A (mm)	B (mm)	316 Stainless Steel Part #
1"	25	32.0	35.5	16AMP-R100SMS
1-1/2"	38	47.9	55.0	16AMP-R150SMS
2"	51	60.4	65.0	16AMP-R200SMS
2-1/2"	63.5	73.5	80.0	16AMP-R250SMS
3"	76	86.5	93.0	16AMP-R300SMS
4"	101.6	112.5	118.0	16AMP-R400SMS

SMS x Tube O.D. Adapters - 15A



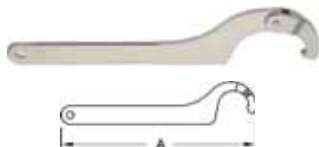
Tube O.D.	DN Size	A (mm)	B (mm)	C (mm)	D (mm)	316 Stainless Steel Part #
1"	25	19.0	22.1	25.4	Rd 40 x 1/6"	15A-R100SMS
1-1/2"	38	23.0	34.8	38.1	Rd 60 x 1/6"	15A-R150SMS
2"	51	23.0	47.5	50.8	Rd 70 x 1/6"	15A-R200SMS
2-1/2"	63.5	27.0	60.2	63.5	Rd 85 x 1/6"	15A-R250SMS
3"	76	27.0	72.9	76.2	Rd 98 x 1/6"	15A-R300SMS
4"	101.6	30.0	97.4	101.6	Rd 125 x 1/4"	15A-R400SMS

SMS x Tube O.D. Welding Liners - 14A



Tube O.D.	DN Size	A (mm)	B (mm)	C (mm)	316 Stainless Steel Part #
1"	25	15.5	22.1	25.4	14A-R100SMS
1-1/2"	38	16.0	34.8	38.1	14A-R150SMS
2"	51	17.0	47.5	50.8	14A-R200SMS
2-1/2"	63.5	17.0	60.2	63.5	14A-R250SMS
3"	76	19.0	72.9	76.2	14A-R300SMS
4"	101.6	19.0	97.4	101.6	14A-R400SMS

DIN and SMS Spanner Wrenches - SP

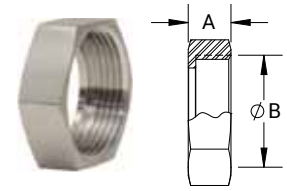


Used On Size	DN Size	A (mm)	Nickel Plated Steel Part #
1" - 1-1/2"	25 - 40	247.7	DIN-SMS-60/90SP
2" - 4"	50 - 101.6	330.2	DIN-SMS90/155SP

NOTE: Manufactured in accordance to Swedish Milk Standard ISO 2037 and ISO 2851

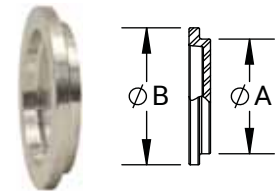
**European Fittings - RJT BS: 4825**  
**RJT Hex Nuts - 13H**

Size	A (mm)	B (mm)	304 Stainless Steel Part #
1"	22.2	42.3 x 8TPI WHIT	13H-G100RJT
1-1/2"	22.2	55.0 x 8TPI WHIT	13H-G150RJT
2"	22.2	67.9 x 6TPI WHIT	13H-G200RJT
2-1/2"	22.2	80.6 x 6TPI WHIT	13H-G250RJT
3"	22.2	93.3 x 6TPI WHIT	13H-G300RJT
4"	22.2	118.7 x 6TPI WHIT	13H-G400RJT



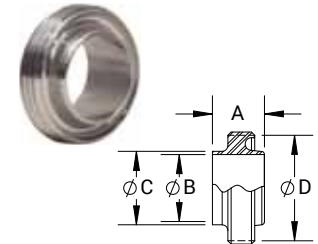
**RJT Blank Caps - 13RBN**

Size	A (mm)	B (mm)	304 Stainless Steel Part #
1"	32.5	41.3	13RBN-G100RJT
1-1/2"	45.2	54.0	13RBN-G150RJT
2"	57.9	66.7	13RBN-G200RJT
2-1/2"	70.6	79.4	13RBN-G250RJT
3"	83.3	92.1	13RBN-G300RJT
4"	108.7	117.5	13RBN-G400RJT



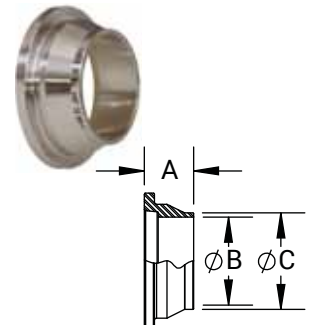
**RJT x Tube O.D. Adapters - 15A**

Tube O.D.	A (mm)	B (mm)	C (mm)	D (mm)	316 Stainless Steel Part #
1"	27.0	22.1	25.4	45.7 x 8T	15A-R100RJT
1-1/2"	27.0	34.8	38.1	58.4 x 8T	15A-R150RJT
2"	27.0	47.5	50.8	72.7 x 6T	15A-R200RJT
2-1/2"	27.0	60.2	63.5	85.4 x 6T	15A-R250RJT
3"	27.0	72.9	76.2	98.1 x 6T	15A-R300RJT
4"	27.0	97.4	101.6	123.5 x 6T	15A-R400RJT



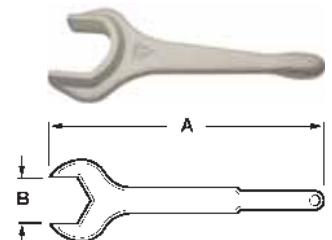
**RJT x Tube O.D. Welding Liners - 14A**

Tube O.D.	A (mm)	B (mm)	C (mm)	316 Stainless Steel Part #
1"	19.5	22.1	25.4	14A-R100RJT
1-1/2"	19.5	34.8	38.1	14A-R150RJT
2"	19.5	47.5	50.8	14A-R200RJT
2-1/2"	19.5	60.2	63.5	14A-R250RJT
3"	19.5	72.9	76.2	14A-R300RJT
4"	19.5	97.4	101.6	14A-R400RJT



**RJT Spanner Wrenches - SP**

Size	A (mm)	B (mm)	Aluminum Part #
1"	254.00	50.80	RJT-100SP
1-1/2"	292.10	65.02	RJT-150SP
2"	304.80	79.25	RJT-200SP
2-1/2"	342.80	91.95	RJT-250SP
3"	368.30	104.65	RJT-300SP
4"	444.50	130.05	RJT-400SP



NOTE: Manufactured in accordance to BS 4825



## High Purity BioPharm Fittings

### BioPharm Fittings



**Sizes**

- 1/2" - 6" O.D. tube

**Features**

- PL finish - SF1
- PM finish - SF4

**Material**

- 316L stainless steel

**Primary Markets**

- Found in the bio-pharmaceutical and personal care markets when ASME BPE standards must be met. They are also found in the food processing, beverage, brewery, and oil extraction markets when using orbital welding.

### Dimensions of stainless steel tube

Tube O.D.	Nominal Wall Thickness (in)
1/2"	.065
3/4"	.065
1"	.065
1-1/2"	.065
2"	.065
2-1/2"	.065
3"	.065
4"	.083
6"	.109

All fittings are manufactured to meet the latest edition of the ASME BPE International Standard, Bioprocessing Equipment, unless otherwise specified.

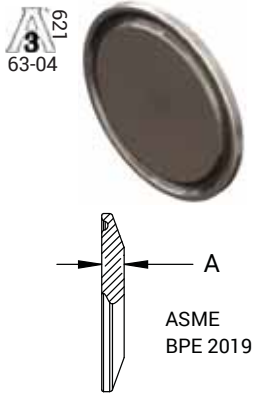
316L stainless steel material and dimensions meet all orbital welding specifications with controlled sulphur.

NOTE: Not all sizes and finishes are stocked

## BPE DT Table Reference Call Out

Part Description	2016 DT ASME-BPE 2016	2019 DT ASME-BPE 2019
T2S - 90° Elbow	DT-4.1.1-1	DT-4.1.1-1
T2CM - 90° Elbow, Clamp One End	DT-4.1.1-2	DT-4.1.1-2
T2CMP - 90° Elbow, Clamped	DT-4.1.1-3	DT-4.1.1-3
T2KS - 45° Elbow	DT-4.1.1-4	DT-4.1.1-4
T2KM - 45° Elbow, Clamp One End	DT-4.1.1-5	DT-4.1.1-5
T2KMP - 45° Elbow, Clamped	DT-4.1.1-6	DT-4.1.1-6
T7WWW - Equal Tee	DT-4.1.2-1	DT-4.1.2-1
T7WWMS - Short Outlet Tee	DT-4.1.2-2	DT-4.1.2-2
T7MP - Equal Tee, Clamped	DT-4.1.2-4	DT-4.1.2-4
T7MPS - Short Outlet Tee, Clamped	DT-4.1.2-5	DT-4.1.2-5
T7RWWW - Reducing Tee	DT-4.1.2-6	DT-4.1.2-6
T7RWWMS - Short Outlet Reducing Tee	DT-4.1.2-7	DT-4.1.2-7
T7RMP - Reducing Tee, Clamped	DT-4.1.2-8	DT-4.1.2-8
T7RMPS - Short Outlet Reducing Tee, Clamped	DT-4.1.2-9	DT-4.1.2-9
T7IWWMS - Instrument Tee	DT-4.1.2-10	DT-4.1.2-10
T7IMPS - Instrument Tee, Clamped	DT-4.1.2-11	DT-4.1.2-11
T31W - Long Concentric Reducer	DT-4.1.3-1	N/A
T32W - Long Eccentric Reducer	DT-4.1.3-1	N/A
2211C - Short Concentric Reducer	DT-4.1.3-1	DT-4.1.3-1
2211E - Short Eccentric Reducer	DT-4.1.3-1	DT-4.1.3-1
T31M - Long Concentric Reducer, Clamp Big End	DT-4.1.3-2	N/A
T32M - Long Eccentric Reducer, Clamp Big End	DT-4.1.3-2	N/A
2226C - Short Concentric Reducer, Clamp Big End	DT-4.1.3-2	DT-4.1.3-2
2226E - Short Eccentric Reducer, Clamp Big End	DT-4.1.3-2	DT-4.1.3-2
T3114MP - Long Concentric Reducer, Clamped	DT-4.1.3-3	N/A
T3214MP - Long Eccentric Reducer, Clamped	DT-4.1.3-3	N/A
2221C - Short Concentric Reducer, Clamped	DT-4.1.3-3	DT-4.1.3-3
2221E - Short Eccentric Reducer, Clamped	DT-4.1.3-3	DT-4.1.3-3
TL14AM7 - Long Weld Clamp Ferrule	DT-4.1.4-1	DT-4.1.4-1
T14WMP - Short Weld Clamp Ferrule	DT-4.1.4-1	DT-4.1.4-1
T16W - Weld Cap	DT-4.1.5-1	DT-4.1.5-1
T16AMP - End Cap, Clamped	DT-4.1.5-2	DT-4.1.5-2

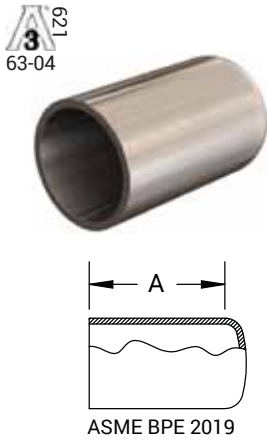
High Purity BioPharm Fittings



Solid End Caps - T16AMP

Tube O.D.	A (in)	PL Finish - SF1	PM Finish - SF4
1/2" - 3/4"	0.187	T16AMP-050075PL	T16AMP-050075PM
1" - 1-1/2"	0.250	T16AMP-100150PL	T16AMP-100150PM
2"	0.250	T16AMP-200PL	T16AMP-200PM
2-1/2"	0.250	T16AMP-250PL	T16AMP-250PM
3"	0.250	T16AMP-300PL	T16AMP-300PM
4"	0.312	T16AMP-400PL	T16AMP-400PM
6"	0.437	T16AMP-600PL	T16AMP-600PM

BPE Table DT-4.1.5-2



Weld Caps - T16W

Tube O.D.	A (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	1.500	0.065	T16W-050PL	T16W-050PM
3/4"	1.500	0.065	T16W-075PL	T16W-075PM
1"	1.500	0.065	T16W-100PL	T16W-100PM
1-1/2"	1.500	0.065	T16W-150PL	T16W-150PM
2"	1.500	0.065	T16W-200PL	T16W-200PM
2-1/2"	1.500	0.065	T16W-250PL	T16W-250PM
3"	1.500	0.065	T16W-300PL	T16W-300PM
4"	2.000	0.083	T16W-400PL	T16W-400PM
6"	2.500	0.109	T16W-600PL	T16W-600PM

BPE Table DT-4.1.5-1

NOTE: BPE 2019 Specifications

PL Finish – SF1

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

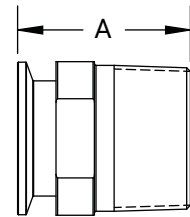
PM Finish – SF4

O.D. = 32Ra Mechanically polished

I.D. = 15Ra Mechanically polished and electropolished

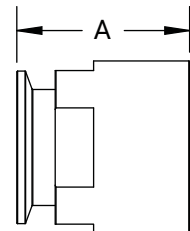
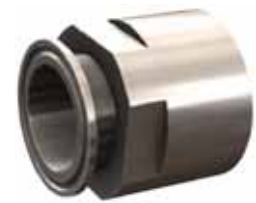
**High Purity BioPharm Line**  
**Clamp Adapter x Male NPT - T21MP**

Clamp Size	NPT Thread Size	A (in)	PL Finish - SF1
1/2"	1/4"	2.00	T21MP-050025PL
	3/8"	2.00	T21MP-050375PL
	1/2"	1.63	T21MP-050PL
	3/4"	2.00	T21MP-050075PL
3/4"	1/4"	2.00	T21MP-075025PL
	3/8"	2.00	T21MP-075375PL
	1/2"	2.00	T21MP-075050PL
	3/4"	1.79	T21MP-075PL
1"	1/2"	2.19	T21MP-100050PL
	1"	2.25	T21MP-100PL
1-1/2"	1-1/2"	2.25	T21MP-150PL
2"	2"	2.64	T21MP-200PL
2-1/2"	2-1/2"	2.88	T21MP-250PL
3"	3"	3.07	T21MP-300PL
4"	4"	3.16	T21MP-400PL



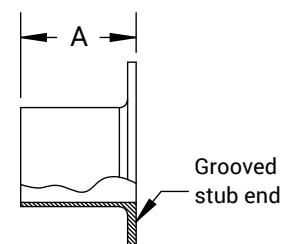
**Clamp Adapter x Female NPT - T22MP**

Clamp Size	NPT Thread Size	A (in)	PL Finish - SF1
1/2"	1/8"	1.25	T22MP-050125PL
	1/4"	1.50	T22MP-050025PL
	3/8"	1.50	T22MP-050375PL
	1/2"	1.50	T22MP-050PL
	3/4"	1.63	T22MP-050075PL
3/4"	1/4"	1.50	T22MP-075025PL
	3/8"	1.50	T22MP-075375PL
	1/2"	1.50	T22MP-075050PL
	3/4"	1.63	T22MP-075PL
1"	1"	1.63	T22MP-100PL
1-1/2"	1-1/2"	2.25	T22MP-150PL
2"	2"	2.34	T22MP-200PL
2-1/2"	2-1/2"	2.09	T22MP-250PL
3"	3"	2.19	T22MP-300PL
4"	4"	2.63	T22MP-400PL



**Stub Adapters - T14VB**

Tube O.D.	A (in)	PL Finish - SF1
1/2"	2.00	T14VB-050PL
3/4"	2.00	T14VB-075PL
1"	2.00	T14VB-100PL
1-1/2"	2.00	T14VB-150PL
2"	2.50	T14VB-200PL
2-1/2"	2.50	T14VB-250PL
3"	2.50	T14VB-300PL
4"	2.50	T14VB-400PL
6"	3.00	T14VB-600PL

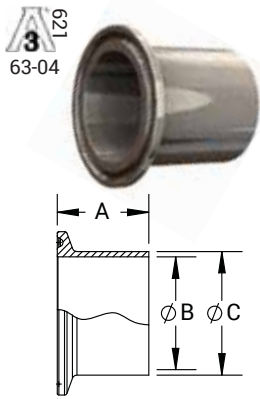


PL Finish – SF1  
 O.D. = 32Ra Mechanically polished  
 I.D. = 20Ra Mechanically polished

PM Finish – SF4  
 O.D. = 32Ra Mechanically polished  
 I.D. = 15Ra Mechanically polished and electropolished

High Purity BioPharm Fittings

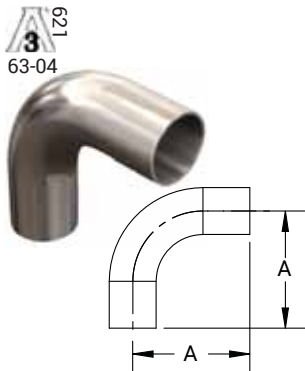
Automatic Weld Ferrules - TL14AM7



BPE Table DT-4.1.4-1  
ASME BPE 2019

Tube O.D.	A (in)	B (in)	C (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	1.750	0.375	0.500	0.065	TL14AM7-050PL	TL14AM7-050PM
3/4"	1.750	0.625	0.750	0.065	TL14AM7-075PL	TL14AM7-075PM
1"	1.750	0.875	1.000	0.065	TL14AM7-100PL	TL14AM7-100PM
1-1/2"	1.750	1.375	1.500	0.065	TL14AM7-150PL	TL14AM7-150PM
2"	2.250	1.875	2.000	0.065	TL14AM7-200PL	TL14AM7-200PM
2-1/2"	2.250	2.375	2.500	0.065	TL14AM7-250PL	TL14AM7-250PM
3"	2.250	2.875	3.000	0.065	TL14AM7-300PL	TL14AM7-300PM
4"	2.250	3.834	4.000	0.083	TL14AM7-400PL	TL14AM7-400PM
6"	3.000	5.782	6.000	0.109	TL14AM7-600PL	TL14AM7-600PM

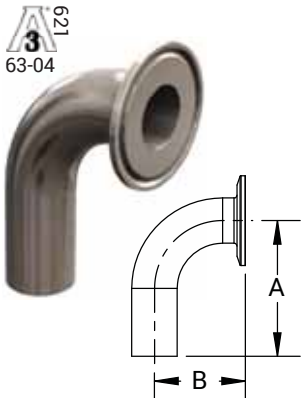
90° Weld Elbows - T2S



BPE Table DT-4.1.1-1  
ASME BPE 2019

Tube O.D.	A (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	3.000	0.065	T2S-050PL	T2S-050PM
3/4"	3.000	0.065	T2S-075PL	T2S-075PM
1"	3.000	0.065	T2S-100PL	T2S-100PM
1-1/2"	3.750	0.065	T2S-150PL	T2S-150PM
2"	4.750	0.065	T2S-200PL	T2S-200PM
2-1/2"	5.500	0.065	T2S-250PL	T2S-250PM
3"	6.250	0.065	T2S-300PL	T2S-300PM
4"	8.000	0.083	T2S-400PL	T2S-400PM
6"	11.500	0.109	T2S-600PL	T2S-600PM

90° Clamp x Weld Elbows - T2CM



BPE Table DT-4.1.1-2  
ASME BPE 2019

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	3.000	1.625	0.065	T2CM-050PL	T2CM-050PM
3/4"	3.000	1.625	0.065	T2CM-075PL	T2CM-075PM
1"	3.000	2.000	0.065	T2CM-100PL	T2CM-100PM
1-1/2"	3.750	2.750	0.065	T2CM-150PL	T2CM-150PM
2"	4.750	3.500	0.065	T2CM-200PL	T2CM-200PM
2-1/2"	5.500	4.250	0.065	T2CM-250PL	T2CM-250PM
3"	6.250	5.000	0.065	T2CM-300PL	T2CM-300PM
4"	8.000	6.625	0.083	T2CM-400PL	T2CM-400PM
6"	11.500	10.500	0.109	T2CM-600PL	T2CM-600PM

90° Clamp x Clamp Elbows - T2CMP



BPE Table DT-4.1.1-3  
ASME BPE 2019

Tube O.D.	A (in)	PL Finish - SF1	PM Finish - SF4
1/2"	1.625	T2CMP-050PL	T2CMP-050PM
3/4"	1.625	T2CMP-075PL	T2CMP-075PM
1"	2.000	T2CMP-100PL	T2CMP-100PM
1-1/2"	2.750	T2CMP-150PL	T2CMP-150PM
2"	3.500	T2CMP-200PL	T2CMP-200PM
2-1/2"	4.250	T2CMP-250PL	T2CMP-250PM
3"	5.000	T2CMP-300PL	T2CMP-300PM
4"	6.625	T2CMP-400PL	T2CMP-400PM
6"	10.500	T2CMP-600PL	T2CMP-600PM

NOTE: BPE 2019 Specifications

PL Finish – SF1

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

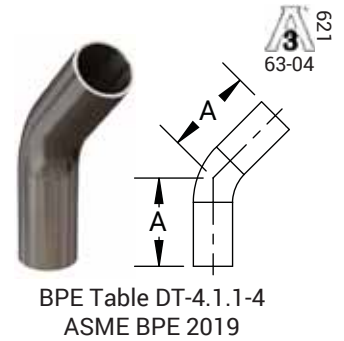
PM Finish – SF4

O.D. = 32Ra Mechanically polished

I.D. = 15Ra Mechanically polished and electropolished

### High Purity BioPharm Fittings 45° Weld Elbows - T2KS

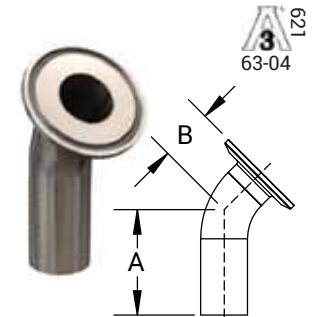
Tube O.D.	A (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	2.250	0.065	T2KS-050PL	T2KS-050PM
3/4"	2.250	0.065	T2KS-075PL	T2KS-075PM
1"	2.250	0.065	T2KS-100PL	T2KS-100PM
1-1/2"	2.500	0.065	T2KS-150PL	T2KS-150PM
2"	3.000	0.065	T2KS-200PL	T2KS-200PM
2-1/2"	3.375	0.065	T2KS-250PL	T2KS-250PM
3"	3.625	0.065	T2KS-300PL	T2KS-300PM
4"	4.500	0.083	T2KS-400PL	T2KS-400PM
6"	6.250	0.109	T2KS-600PL	T2KS-600PM



BPE Table DT-4.1.1-4  
ASME BPE 2019

### 45° Clamp x Weld Elbows - T2KM

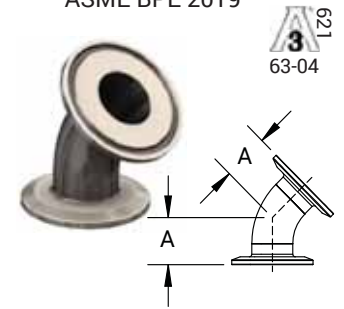
Tube O.D.	A (in)	B (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	2.250	1.000	0.065	T2KM-050PL	T2KM-050PM
3/4"	2.250	1.000	0.065	T2KM-075PL	T2KM-075PM
1"	2.250	1.125	0.065	T2KM-100PL	T2KM-100PM
1-1/2"	2.500	1.438	0.065	T2KM-150PL	T2KM-150PM
2"	3.000	1.750	0.065	T2KM-200PL	T2KM-200PM
2-1/2"	3.375	2.063	0.065	T2KM-250PL	T2KM-250PM
3"	3.625	2.375	0.065	T2KM-300PL	T2KM-300PM
4"	4.500	3.125	0.083	T2KM-400PL	T2KM-400PM
6"	6.250	5.250	0.109	T2KM-600PL	T2KM-600PM



BPE Table DT-4.1.1-5  
ASME BPE 2019

### 45° Clamp x Clamp Elbows - T2KMP

Tube O.D.	A (in)	PL Finish - SF1	PM Finish - SF4
1/2"	1.000	T2KMP-050PL	T2KMP-050PM
3/4"	1.000	T2KMP-075PL	T2KMP-075PM
1"	1.125	T2KMP-100PL	T2KMP-100PM
1-1/2"	1.438	T2KMP-150PL	T2KMP-150PM
2"	1.750	T2KMP-200PL	T2KMP-200PM
2-1/2"	2.063	T2KMP-250PL	T2KMP-250PM
3"	2.375	T2KMP-300PL	T2KMP-300PM
4"	3.125	T2KMP-400PL	T2KMP-400PM
6"	5.250	T2KMP-600PL	T2KMP-600PM



BPE Table DT-4.1.1-6  
ASME BPE 2019

### 88° Weld Elbows - T2S88

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	1.94	1.06	0.065	T2S88-050PL	T2S88-050PM
3/4"	1.98	1.02	0.065	T2S88-075PL	T2S88-075PM
1"	1.50	1.50	0.065	T2S88-100PL	T2S88-100PM
1-1/2"	1.50	2.25	0.065	T2S88-150PL	T2S88-150PM
2"	1.75	3.00	0.065	T2S88-200PL	T2S88-200PM
2-1/2"	1.75	3.75	0.065	T2S88-250PL	T2S88-250PM
3"	1.75	4.50	0.065	T2S88-300PL	T2S88-300PM
4"	2.00	6.00	0.083	T2S88-400PL	T2S88-400PM
6"	2.50	9.00	0.109	T2S88-600PL	T2S88-600PM



### 92° Weld Elbows - T2S92

Tube O.D.	A (in)	R (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	1.94	1.06	0.065	T2S92-050PL	T2S92-050PM
3/4"	1.98	1.02	0.065	T2S92-075PL	T2S92-075PM
1"	1.50	1.50	0.065	T2S92-100PL	T2S92-100PM
1-1/2"	1.50	2.25	0.065	T2S92-150PL	T2S92-150PM
2"	1.75	3.00	0.065	T2S92-200PL	T2S92-200PM
2-1/2"	1.75	3.75	0.065	T2S92-250PL	T2S92-250PM
3"	1.75	4.50	0.065	T2S92-300PL	T2S92-300PM
4"	2.00	6.00	0.083	T2S92-400PL	T2S92-400PM
6"	2.50	9.00	0.109	T2S92-600PL	T2S92-600PM



NOTE: BPE 2019 Specifications  
PL Finish – SF1

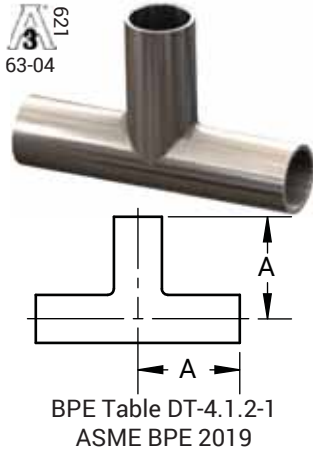
O.D. = 32Ra Mechanically polished  
I.D. = 20Ra Mechanically polished

PM Finish – SF4

O.D. = 32Ra Mechanically polished  
I.D. = 15Ra Mechanically polished and electropolished

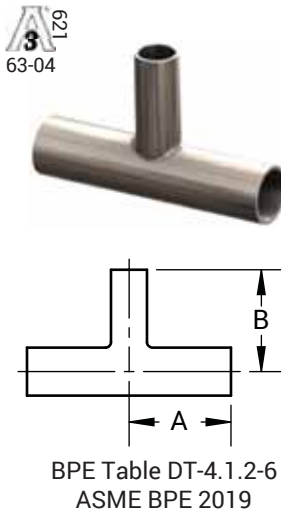
### High Purity BioPharm Fittings

#### Weld x Weld x Weld Tees - T7WWW



Tube O.D.	A (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	1.875	0.065	T7WWW-050PL	T7WWW-050PM
3/4"	2.000	0.065	T7WWW-075PL	T7WWW-075PM
1"	2.125	0.065	T7WWW-100PL	T7WWW-100PM
1-1/2"	2.375	0.065	T7WWW-150PL	T7WWW-150PM
2"	2.875	0.065	T7WWW-200PL	T7WWW-200PM
2-1/2"	3.125	0.065	T7WWW-250PL	T7WWW-250PM
3"	3.375	0.065	T7WWW-300PL	T7WWW-300PM
4"	4.125	0.083	T7WWW-400PL	T7WWW-400PM
6"	5.625	0.109	T7WWW-600PL	T7WWW-600PM

#### Weld x Weld x Weld Reducing Tees - T7RWWW



Tube O.D.	A (in)	B (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	2.000	2.000	0.065 x 0.065	T7RWWW-075050PL	T7RWWW-075050PM
1" X 1/2"	2.125	2.125	0.065 x 0.065	T7RWWW-100050PL	T7RWWW-100050PM
1" X 3/4"	2.125	2.125	0.065 x 0.065	T7RWWW-100075PL	T7RWWW-100075PM
1-1/2" X 1/2"	2.375	2.375	0.065 x 0.065	T7RWWW-150050PL	T7RWWW-150050PM
1-1/2" X 3/4"	2.375	2.375	0.065 x 0.065	T7RWWW-150075PL	T7RWWW-150075PM
1-1/2" X 1"	2.375	2.375	0.065 x 0.065	T7RWWW-150100PL	T7RWWW-150100PM
2 X 1/2"	2.875	2.625	0.065 x 0.065	T7RWWW-200050PL	T7RWWW-200050PM
2" X 3/4"	2.875	2.625	0.065 x 0.065	T7RWWW-200075PL	T7RWWW-200075PM
2" X 1"	2.875	2.625	0.065 x 0.065	T7RWWW-200100PL	T7RWWW-200100PM
2" X 1-1/2"	2.875	2.625	0.065 x 0.065	T7RWWW-200150PL	T7RWWW-200150PM
2-1/2" X 1/2"	3.125	2.875	0.065 x 0.065	T7RWWW-250050PL	T7RWWW-250050PM
2-1/2" X 3/4"	3.125	2.875	0.065 x 0.065	T7RWWW-250075PL	T7RWWW-250075PM
2-1/2" X 1"	3.125	2.875	0.065 x 0.065	T7RWWW-250100PL	T7RWWW-250100PM
2-1/2" X 1-1/2"	3.125	2.875	0.065 x 0.065	T7RWWW-250150PL	T7RWWW-250150PM
2-1/2" X 2"	3.125	2.875	0.065 x 0.065	T7RWWW-250200PL	T7RWWW-250200PM
3" X 1/2"	3.375	3.125	0.065 x 0.065	T7RWWW-300050PL	T7RWWW-300050PM
3" X 3/4"	3.375	3.125	0.065 x 0.065	T7RWWW-300075PL	T7RWWW-300075PM
3" X 1"	3.375	3.125	0.065 x 0.065	T7RWWW-300100PL	T7RWWW-300100PM
3" X 1-1/2"	3.375	3.125	0.065 x 0.065	T7RWWW-300150PL	T7RWWW-300150PM
3" X 2"	3.375	3.125	0.065 x 0.065	T7RWWW-300200PL	T7RWWW-300200PM
3" X 2-1/2"	3.375	3.125	0.065 x 0.065	T7RWWW-300250PL	T7RWWW-300250PM
4" X 1/2"	4.125	3.625	0.083 x 0.065	T7RWWW-400050PL	T7RWWW-400050PM
4" X 3/4"	4.125	3.625	0.083 x 0.065	T7RWWW-400075PL	T7RWWW-400075PM
4" X 1"	4.125	3.625	0.083 x 0.065	T7RWWW-400100PL	T7RWWW-400100PM
4" X 1-1/2"	4.125	3.625	0.083 x 0.065	T7RWWW-400150PL	T7RWWW-400150PM
4" X 2"	4.125	3.875	0.083 x 0.065	T7RWWW-400200PL	T7RWWW-400200PM
4" X 2-1/2"	4.125	3.875	0.083 x 0.065	T7RWWW-400250PL	T7RWWW-400250PM
4" X 3"	4.125	3.875	0.083 x 0.065	T7RWWW-400300PL	T7RWWW-400300PM
6" X 3"	5.625	4.875	0.109 x 0.065	T7RWWW-600300PL	T7RWWW-600300PM
6" X 4"	5.625	5.125	0.109 x 0.083	T7RWWW-600400PL	T7RWWW-600400PM

NOTE: BPE 2019 Specifications

PL Finish – SF1

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

PM Finish – SF4

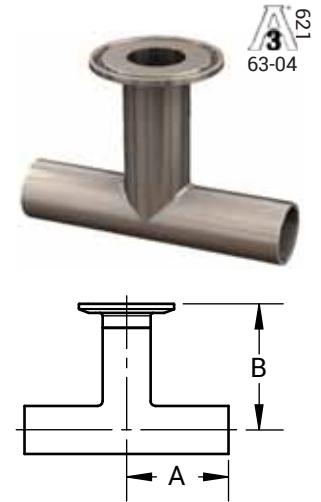
O.D. = 32Ra Mechanically polished

I.D. = 15Ra Mechanically polished and electropolished

### High Purity BioPharm Fittings

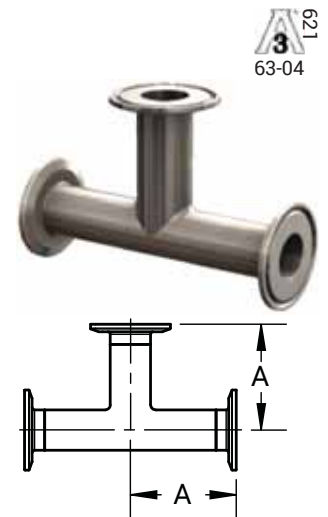
#### Weld x Weld x Clamp Tees - T7WWM

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	1.88	2.25	0.065	T7WWM-050PL	T7WWM-050PM
3/4"	2.00	2.38	0.065	T7WWM-075PL	T7WWM-075PM
1"	2.13	2.63	0.065	T7WWM-100PL	T7WWM-100PM
1-1/2"	2.38	2.88	0.065	T7WWM-150PL	T7WWM-150PM
2"	2.88	3.38	0.065	T7WWM-200PL	T7WWM-200PM
2-1/2"	3.13	3.63	0.065	T7WWM-250PL	T7WWM-250PM
3"	3.38	3.88	0.065	T7WWM-300PL	T7WWM-300PM
4"	4.13	4.75	0.083	T7WWM-400PL	T7WWM-400PM
6"	5.63	7.13	0.109	T7WWM-600PL	T7WWM-600PM



#### Clamp x Clamp x Clamp Tees - T7MP

Tube O.D.	A (in)	PL Finish - SF1	PM Finish - SF4
1/2"	2.375	T7MP-050PL	T7MP-050PM
3/4"	2.500	T7MP-075PL	T7MP-075PM
1"	2.625	T7MP-100PL	T7MP-100PM
1-1/2"	2.875	T7MP-150PL	T7MP-150PM
2"	3.375	T7MP-200PL	T7MP-200PM
2-1/2"	3.625	T7MP-250PL	T7MP-250PM
3"	3.875	T7MP-300PL	T7MP-300PM
4"	4.750	T7MP-400PL	T7MP-400PM
6"	7.125	T7MP-600PL	T7MP-600PM



BPE Table DT-4.1.2-4  
ASME BPE 2019

NOTE: BPE 2019 Specifications

PL Finish – SF1

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

PM Finish – SF4

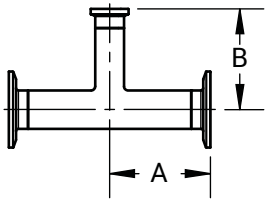
O.D. = 32Ra Mechanically polished

I.D. = 15Ra Mechanically polished and electropolished



High Purity BioPharm Fittings

Clamp x Clamp x Clamp Reducing Tees - T7RMP

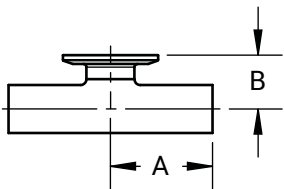


BPE Table DT-4.1.2-8  
ASME BPE 2019

Tube O.D.	A (in)	B (in)	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	2.500	2.500	T7RMP-075050PL	T7RMP-075050PM
1" x 1/2"	2.625	2.625	T7RMP-100050PL	T7RMP-100050PM
1" x 3/4"	2.625	2.625	T7RMP-100075PL	T7RMP-100075PM
1-1/2" x 1/2"	2.875	2.875	T7RMP-150050PL	T7RMP-150050PM
1-1/2" x 3/4"	2.875	2.875	T7RMP-150075PL	T7RMP-150075PM
1-1/2" x 1"	2.875	2.875	T7RMP-150100PL	T7RMP-150100PM
2" x 1/2"	3.375	3.125	T7RMP-200050PL	T7RMP-200050PM
2" x 3/4"	3.375	3.125	T7RMP-200075PL	T7RMP-200075PM
2" x 1"	3.375	3.125	T7RMP-200100PL	T7RMP-200100PM
2" x 1-1/2"	3.375	3.125	T7RMP-200150PL	T7RMP-200150PM
2-1/2" x 1/2"	3.625	3.375	T7RMP-250050PL	T7RMP-250050PM
2-1/2" x 3/4"	3.625	3.375	T7RMP-250075PL	T7RMP-250075PM
2-1/2" x 1"	3.625	3.375	T7RMP-250100PL	T7RMP-250100PM
2-1/2" x 1-1/2"	3.625	3.375	T7RMP-250150PL	T7RMP-250150PM
2-1/2" x 2"	3.625	3.375	T7RMP-250200PL	T7RMP-250200PM
3" x 1/2"	3.875	3.625	T7RMP-300050PL	T7RMP-300050PM
3" x 3/4"	3.875	3.625	T7RMP-300075PL	T7RMP-300075PM
3" x 1"	3.875	3.625	T7RMP-300100PL	T7RMP-300100PM
3" x 1-1/2"	3.875	3.625	T7RMP-300150PL	T7RMP-300150PM
3" x 2"	3.875	3.625	T7RMP-300200PL	T7RMP-300200PM
3" x 2-1/2"	3.875	3.625	T7RMP-300250PL	T7RMP-300250PM
4" x 1/2"	4.750	4.125	T7RMP-400050PL	T7RMP-400050PM
4" x 3/4"	4.750	4.125	T7RMP-400075PL	T7RMP-400075PM
4" x 1"	4.750	4.125	T7RMP-400100PL	T7RMP-400100PM
4" x 1-1/2"	4.750	4.125	T7RMP-400150PL	T7RMP-400150PM
4" x 2"	4.750	4.375	T7RMP-400200PL	T7RMP-400200PM
4" x 2-1/2"	4.750	4.375	T7RMP-400250PL	T7RMP-400250PM
4" x 3"	4.750	4.375	T7RMP-400300PL	T7RMP-400300PM
6" x 3"	7.125	5.375	T7RMP-600300PL	T7RMP-600300PM
6" x 4"	7.125	5.750	T7RMP-600400PL	T7RMP-600400PM



Weld x Weld x Clamp Short Outlet Tees - T7WWMS



BPE Table DT-4.1.2-2  
ASME BPE 2019

Tube O.D.	A (in)	B (in)	Nominal wall (in)	PL Finish - SF1	PM Finish - SF4
1/2"	1.875	1.000	0.065	T7WWMS-050PL	T7WWMS-050PM
3/4"	2.000	1.125	0.065	T7WWMS-075PL	T7WWMS-075PM
1"	2.125	1.125	0.065	T7WWMS-100PL	T7WWMS-100PM
1-1/2"	2.375	1.375	0.065	T7WWMS-150PL	T7WWMS-150PM
2"	2.875	1.625	0.065	T7WWMS-200PL	T7WWMS-200PM
2-1/2"	3.125	1.875	0.065	T7WWMS-250PL	T7WWMS-250PM
3"	3.375	2.125	0.065	T7WWMS-300PL	T7WWMS-300PM
4"	4.125	2.750	0.083	T7WWMS-400PL	T7WWMS-400PM
6"	5.625	4.625	0.109	T7WWMS-600PL	T7WWMS-600PM

NOTE: BPE 2019 Specifications

PL Finish – SF1

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

PM Finish – SF4

O.D. = 32Ra Mechanically polished

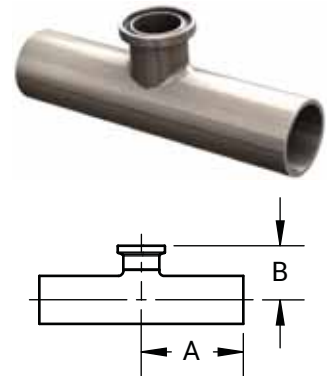
I.D. = 15Ra Mechanically polished and electropolished

High Purity BioPharm Line

Weld x Weld x Clamp Short Outlet Reducing Tees - T7RWWMS

621  
3  
63-04

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	2.000	1.000	0.065	T7RWWMS075050PL	T7RWWMS075050PM
1" x 1/2"	2.125	1.125	0.065	T7RWWMS100050PL	T7RWWMS100050PM
1" x 3/4"	2.125	1.125	0.065	T7RWWMS100075PL	T7RWWMS100075PM
1-1/2" x 1/2"	2.375	1.375	0.065	T7RWWMS150050PL	T7RWWMS150050PM
1-1/2" x 3/4"	2.375	1.375	0.065	T7RWWMS150075PL	T7RWWMS150075PM
1-1/2" x 1"	2.375	1.375	0.065	T7RWWMS150100PL	T7RWWMS150100PM
2" x 1/2"	2.875	1.625	0.065	T7RWWMS200050PL	T7RWWMS200050PM
2" x 3/4"	2.875	1.625	0.065	T7RWWMS200075PL	T7RWWMS200075PM
2" x 1"	2.875	1.625	0.065	T7RWWMS200100PL	T7RWWMS200100PM
2" x 1-1/2"	2.875	1.625	0.065	T7RWWMS200150PL	T7RWWMS200150PM
2-1/2" x 1/2"	3.125	1.875	0.065	T7RWWMS250050PL	T7RWWMS250050PM
2-1/2" x 3/4"	3.125	1.875	0.065	T7RWWMS250075PL	T7RWWMS250075PM
2-1/2" x 1"	3.125	1.875	0.065	T7RWWMS250100PL	T7RWWMS250100PM
2-1/2" x 1-1/2"	3.125	1.875	0.065	T7RWWMS250150PL	T7RWWMS250150PM
2-1/2" x 2"	3.125	1.875	0.065	T7RWWMS250200PL	T7RWWMS250200PM
3" x 1/2"	3.375	2.125	0.065	T7RWWMS300050PL	T7RWWMS300050PM
3" x 3/4"	3.375	2.125	0.065	T7RWWMS300075PL	T7RWWMS300075PM
3" x 1"	3.375	2.125	0.065	T7RWWMS300100PL	T7RWWMS300100PM
3" x 1-1/2"	3.375	2.125	0.065	T7RWWMS300150PL	T7RWWMS300150PM
3" x 2"	3.375	2.125	0.065	T7RWWMS300200PL	T7RWWMS300200PM
3" x 2-1/2"	3.375	2.125	0.065	T7RWWMS300250PL	T7RWWMS300250PM
4" x 1/2"	4.125	2.625	0.083	T7RWWMS400050PL	T7RWWMS400050PM
4" x 3/4"	4.125	2.625	0.083	T7RWWMS400075PL	T7RWWMS400075PM
4" x 1"	4.125	2.625	0.083	T7RWWMS400100PL	T7RWWMS400100PM
4" x 1-1/2"	4.125	2.625	0.083	T7RWWMS400150PL	T7RWWMS400150PM
4" x 2"	4.125	2.625	0.083	T7RWWMS400200PL	T7RWWMS400200PM
4" x 2-1/2"	4.125	2.625	0.083	T7RWWMS400250PL	T7RWWMS400250PM
4" x 3"	4.125	2.625	0.083	T7RWWMS400300PL	T7RWWMS400300PM
6" x 3"	5.625	3.625	0.109	T7RWWMS600300PL	T7RWWMS600300PM
6" x 4"	5.625	3.750	0.109	T7RWWMS600400PL	T7RWWMS600400PM

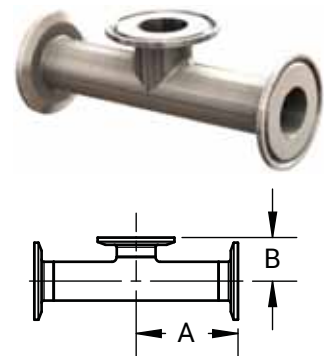


BPE Table DT-4.1.2-7  
ASME BPE 2019

Clamp x Clamp x Clamp Short Outlet Tees - T7MPS

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3  
63-04

Tube O.D.	A (in)	B (in)	PL Finish - SF1	PM Finish - SF4
1/2"	2.375	1.000	T7MPS-050PL	T7MPS-050PM
3/4"	2.500	1.125	T7MPS-075PL	T7MPS-075PM
1"	2.625	1.125	T7MPS-100PL	T7MPS-100PM
1-1/2"	2.875	1.375	T7MPS-150PL	T7MPS-150PM
2"	3.375	1.625	T7MPS-200PL	T7MPS-200PM
2-1/2"	3.625	1.875	T7MPS-250PL	T7MPS-250PM
3"	3.875	2.125	T7MPS-300PL	T7MPS-300PM
4"	4.750	2.750	T7MPS-400PL	T7MPS-400PM
6"	7.125	4.625	T7MPS-600PL	T7MPS-600PM



BPE Table DT-4.1.2-5  
ASME BPE 2019

NOTE: BPE 2019 Specifications

PL Finish – SF1

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

PM Finish – SF4

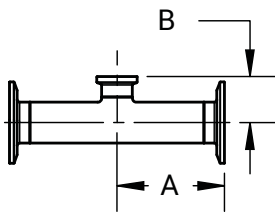
O.D. = 32Ra Mechanically polished

I.D. = 15Ra Mechanically polished and electropolished

High Purity BioPharm Line

Clamp x Clamp x Clamp Short Outlet Reducing Tees - T7RMPS

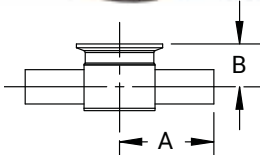
621  
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63-04



BPE Table DT-4.1.2-9  
ASME BPE 2019

Tube O.D.	A (in)	B (in)	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	2.500	1.000	T7RMPS-075050PL	T7RMPS-075050PM
1" x 1/2"	2.625	1.125	T7RMPS-100050PL	T7RMPS-100050PM
1" x 3/4"	2.625	1.125	T7RMPS-100075PL	T7RMPS-100075PM
1-1/2" x 1/2"	2.875	1.375	T7RMPS-150050PL	T7RMPS-150050PM
1-1/2" x 3/4"	2.875	1.375	T7RMPS-150075PL	T7RMPS-150075PM
1-1/2" x 1"	2.875	1.375	T7RMPS-150100PL	T7RMPS-150100PM
2" x 1/2"	3.375	1.625	T7RMPS-200050PL	T7RMPS-200050PM
2" x 3/4"	3.375	1.625	T7RMPS-200075PL	T7RMPS-200075PM
2" x 1"	3.375	1.625	T7RMPS-200100PL	T7RMPS-200100PM
2" x 1-1/2"	3.375	1.625	T7RMPS-200150PL	T7RMPS-200150PM
2-1/2" x 1/2"	3.625	1.875	T7RMPS-250050PL	T7RMPS-250050PM
2-1/2" x 3/4"	3.625	1.875	T7RMPS-250075PL	T7RMPS-250075PM
2-1/2" x 1"	3.625	1.875	T7RMPS-250100PL	T7RMPS-250100PM
2-1/2" x 1-1/2"	3.625	1.875	T7RMPS-250150PL	T7RMPS-250150PM
2-1/2" x 2"	3.625	1.875	T7RMPS-250200PL	T7RMPS-250200PM
3" x 1/2"	3.875	2.125	T7RMPS-300050PL	T7RMPS-300050PM
3" x 3/4"	3.875	2.125	T7RMPS-300075PL	T7RMPS-300075PM
3" x 1"	3.875	2.125	T7RMPS-300100PL	T7RMPS-300100PM
3" x 1-1/2"	3.875	2.125	T7RMPS-300150PL	T7RMPS-300150PM
3" x 2"	3.875	2.125	T7RMPS-300200PL	T7RMPS-300200PM
3" x 2-1/2"	3.875	2.125	T7RMPS-300250PL	T7RMPS-300250PM
4" x 1/2"	4.750	2.625	T7RMPS-400050PL	T7RMPS-400050PM
4" x 3/4"	4.750	2.625	T7RMPS-400075PL	T7RMPS-400075PM
4" x 1"	4.750	2.625	T7RMPS-400100PL	T7RMPS-400100PM
4" x 1-1/2"	4.750	2.625	T7RMPS-400150PL	T7RMPS-400150PM
4" x 2"	4.750	2.625	T7RMPS-400200PL	T7RMPS-400200PM
4" x 2-1/2"	4.750	2.625	T7RMPS-400250PL	T7RMPS-400250PM
4" x 3"	4.750	2.625	T7RMPS-400300PL	T7RMPS-400300PM
6" x 3"	7.125	3.625	T7RMPS-600300PL	T7RMPS-600300PM
6" x 4"	7.125	3.750	T7RMPS-600400PL	T7RMPS-600400PM

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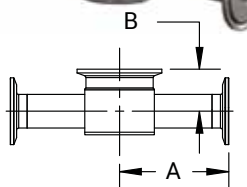


BPE Table DT-4.1.2-10  
ASME BPE 2019

Weld x Weld x Clamp Instrument Tees - T7IWWMS

Tube O.D.	A (in)	B (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
1/2" x 1-1/2"	2.500	0.875	0.065	T7IWWMS050150PL	T7IWWMS050150PM
3/4" x 1-1/2"	2.500	1.000	0.065	T7IWWMS075150PL	T7IWWMS075150PM
1" x 1-1/2"	2.500	1.125	0.065	T7IWWMS100150PL	T7IWWMS100150PM
1/2" x 2"	2.750	1.000	0.065	T7IWWMS050200PL	T7IWWMS050200PM
3/4" x 2"	2.750	1.125	0.065	T7IWWMS075200PL	T7IWWMS075200PM
1" X 2"	2.750	1.250	0.065	T7IWWMS100200PL	T7IWWMS100200PM
1-1/2" X 2"	2.750	1.500	0.065	T7IWWMS150200PL	T7IWWMS150200PM

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BPE Table DT-4.1.2-11  
ASME BPE 2019

Clamp x Clamp x Clamp Instrument Tees - T7IMPS

Tube O.D.	A (in)	B (in)	PL Finish - SF1	PM Finish - SF4
1/2" x 1-1/2"	3.000	0.875	T7IMPS-050150PL	T7IMPS-050150PM
3/4" x 1-1/2"	3.000	1.000	T7IMPS-075150PL	T7IMPS-075150PM
1" x 1-1/2"	3.000	1.125	T7IMPS-100150PL	T7IMPS-100150PM
1/2" x 2"	3.250	1.000	T7IMPS-050200PL	T7IMPS-050200PM
3/4" x 2"	3.250	1.125	T7IMPS-075200PL	T7IMPS-075200PM
1" X 2"	3.250	1.250	T7IMPS-100200PL	T7IMPS-100200PM
1-1/2" X 2"	3.250	1.500	T7IMPS150200PL	T7IMPS150200PM

NOTE: BPE 2019 Specifications

PL Finish – SF1

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

PM Finish – SF4

O.D. = 32Ra Mechanically polished

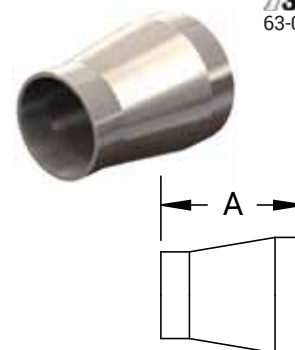
I.D. = 15Ra Mechanically polished and electropolished

### High Purity BioPharm Fittings

#### Weld x Weld Concentric Reducers – 2211C



Size	A (in)	Nominal Wall (in)	PL finish - SF1	PM finish - SF4
3/4" x 1/2"	2.125	0.065 x 0.065	2211CBB075050F1	2211CBB075050F4
1" x 1/2"	2.500	0.065 x 0.065	2211CBB100050F1	2211CBB100050F4
1" x 3/4"	2.125	0.065 x 0.065	2211CBB100075F1	2211CBB100075F4
1-1/2" x 3/4"	3.000	0.065 x 0.065	2211CBB150075F1	2211CBB150075F4
1-1/2" x 1"	2.500	0.065 x 0.065	2211CBB150100F1	2211CBB150100F4
2" x 1"	3.375	0.065 x 0.065	2211CBB200100F1	2211CBB200100F4
2" x 1-1/2"	2.500	0.065 x 0.065	2211CBB200150F1	2211CBB200150F4
2-1/2" x 1-1/2"	3.375	0.065 x 0.065	2211CBB250150F1	2211CBB250150F4
2-1/2" x 2"	2.500	0.065 x 0.065	2211CBB250200F1	2211CBB250200F4
3" x 1-1/2"	4.250	0.065 x 0.065	2211CBB300150F1	2211CBB300150F4
3" x 2"	3.375	0.065 x 0.065	2211CBB300200F1	2211CBB300200F4
3" x 2-1/2"	2.625	0.065 x 0.065	2211CBB300250F1	2211CBB300250F4
4" x 2"	5.125	0.083 x 0.065	2211CBB400200F1	2211CBB400200F4
4" x 2-1/2"	4.250	0.083 x 0.065	2211CBB400250F1	2211CBB400250F4
4" x 3"	3.875	0.083 x 0.065	2211CBB400300F1	2211CBB400300F4
6" x 3"	7.250	0.109 x 0.065	2211CBB600300F1	2211CBB600300F4
6" x 4"	5.625	0.109 x 0.083	2211CBB600400F1	2211CBB600400F4



BPE Table DT-4.1.3-1  
ASME BPE 2019

#### Clamp x Clamp Concentric Reducers – 2221C



Size	A (in)	PL finish - SF1	PM finish - SF4
3/4" x 1/2"	3.125	2221CBB075050F1	2221CBB075050F4
1" x 1/2"	3.500	2221CBB100050F1	2221CBB100050F4
1" x 3/4"	3.125	2221CBB100075F1	2221CBB100075F4
1-1/2" x 3/4"	4.000	2221CBB150075F1	2221CBB150075F4
1-1/2" x 1"	3.500	2221CBB150100F1	2221CBB150100F4
2" x 1"	4.375	2221CBB200100F1	2221CBB200100F4
2" x 1-1/2"	3.500	2221CBB200150F1	2221CBB200150F4
2-1/2" x 1-1/2"	4.375	2221CBB250150F1	2221CBB250150F4
2-1/2" x 2"	3.500	2221CBB250200F1	2221CBB250200F4
3" x 1-1/2"	5.250	2221CBB300150F1	2221CBB300150F4
3" x 2"	4.375	2221CBB300200F1	2221CBB300200F4
3" x 2-1/2"	3.625	2221CBB300250F1	2221CBB300250F4
4" x 2"	6.250	2221CBB400200F1	2221CBB400200F4
4" x 2-1/2"	5.375	2221CBB400250F1	2221CBB400250F4
4" x 3"	5.000	2221CBB400300F1	2221CBB400300F4
6" x 3"	8.500	2221CBB600300F1	2221CBB600300F4
6" x 4"	7.000	2221CBB600400F1	2221CBB600400F4



BPE Table DT-4.1.3-3  
ASME BPE 2019

NOTE: BPE 2019 Specifications

PL Finish – SF1

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

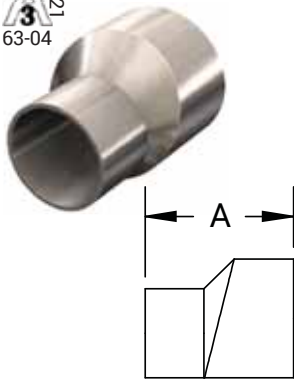
PM Finish – SF4

O.D. = 32Ra Mechanically polished

I.D. = 15Ra Mechanically polished and electropolished

High Purity BioPharm Fittings

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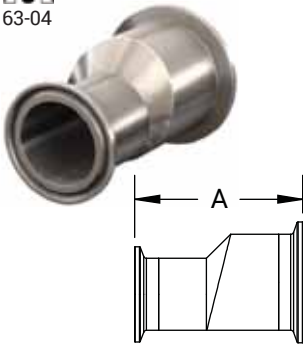


BPE Table DT-4.1.3-1  
ASME BPE 2019

Weld x Weld Eccentric Reducers – 2211E

Size	A (in)	Nominal Wall (in)	PL finish - SF1	PM finish - SF4
3/4" x 1/2"	2.125	0.065 x 0.065	2211EBB075050F1	2211EBB075050F4
1" x 1/2"	2.500	0.065 x 0.065	2211EBB100050F1	2211EBB100050F4
1" x 3/4"	2.125	0.065 x 0.065	2211EBB100075F1	2211EBB100075F4
1-1/2" x 3/4"	3.000	0.065 x 0.065	2211EBB150075F1	2211EBB150075F4
1-1/2" x 1"	2.500	0.065 x 0.065	2211EBB150100F1	2211EBB150100F4
2" x 1"	3.375	0.065 x 0.065	2211EBB200100F1	2211EBB200100F4
2" x 1-1/2"	2.500	0.065 x 0.065	2211EBB200150F1	2211EBB200150F4
2-1/2" x 1-1/2"	3.375	0.065 x 0.065	2211EBB250150F1	2211EBB250150F4
2-1/2" x 2"	2.500	0.065 x 0.065	2211EBB250200F1	2211EBB250200F4
3" x 1-1/2"	4.250	0.065 x 0.065	2211EBB300150F1	2211EBB300150F4
3" x 2"	3.375	0.065 x 0.065	2211EBB300200F1	2211EBB300200F4
3" x 2-1/2"	2.625	0.065 x 0.065	2211EBB300250F1	2211EBB300250F4
4" x 2"	5.125	0.083 x 0.065	2211EBB400200F1	2211EBB400200F4
4" x 2-1/2"	4.250	0.083 x 0.065	2211EBB400250F1	2211EBB400250F4
4" x 3"	3.875	0.083 x 0.065	2211EBB400300F1	2211EBB400300F4
6" x 3"	7.250	0.109 x 0.065	2211EBB600300F1	2211EBB600300F4
6" x 4"	5.625	0.109 x 0.083	2211EBB600400F1	2211EBB600400F4

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BPE Table DT-4.1.3-3  
ASME BPE 2019

Clamp x Clamp Eccentric Reducers – 2221E

Size	A (in)	PL finish - SF1	PM finish - SF4
3/4" x 1/2"	3.125	2221EBB075050F1	2221EBB075050F4
1" x 1/2"	3.500	2221EBB100050F1	2221EBB100050F4
1" x 3/4"	3.125	2221EBB100075F1	2221EBB100075F4
1-1/2" x 3/4"	4.000	2221EBB150075F1	2221EBB150075F4
1-1/2" x 1"	3.500	2221EBB150100F1	2221EBB150100F4
2" x 1"	4.375	2221EBB200100F1	2221EBB200100F4
2" x 1-1/2"	3.500	2221EBB200150F1	2221EBB200150F4
2-1/2" x 1-1/2"	4.375	2221EBB250150F1	2221EBB250150F4
2-1/2" x 2"	3.500	2221EBB250200F1	2221EBB250200F4
3" x 1-1/2"	5.250	2221EBB300150F1	2221EBB300150F4
3" x 2"	4.375	2221EBB300200F1	2221EBB300200F4
3" x 2-1/2"	3.625	2221EBB300250F1	2221EBB300250F4
4" x 2"	6.250	2221EBB400200F1	2221EBB400200F4
4" x 2-1/2"	5.375	2221EBB400250F1	2221EBB400250F4
4" x 3"	5.000	2221EBB400300F1	2221EBB400300F4
6" x 3"	8.500	2221EBB600300F1	2221EBB600300F4
6" x 4"	7.000	2221EBB600400F1	2221EBB600400F4

NOTE: BPE 2019 Specifications

PL Finish – SF1

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

PM Finish – SF4

O.D. = 32Ra Mechanically polished

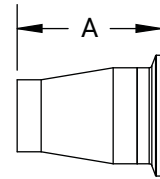
I.D. = 15Ra Mechanically polished and electropolished

### High Purity BioPharm Fittings

#### Clamp X Weld Concentric Reducers - 2226C

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Tube O.D.	A (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	2.625	0.065	2226CBB075050F1	2226CBB075050F4
1" x 1/2"	3.000	0.065	2226CBB100050F1	2226CBB100050F4
1" x 3/4"	2.625	0.065	2226CBB100075F1	2226CBB100075F4
1-1/2" x 3/4"	3.500	0.065	2226CBB150075F1	2226CBB150075F4
1-1/2" x 1"	3.000	0.065	2226CBB150100F1	2226CBB150100F4
2" x 1"	3.875	0.065	2226CBB200100F1	2226CBB200100F4
2" x 1-1/2"	3.000	0.065	2226CBB200150F1	2226CBB200150F4
2-1/2" x 1-1/2"	3.875	0.065	2226CBB250150F1	2226CBB250150F4
2-1/2" x 2"	3.000	0.065	2226CBB250200F1	2226CBB250200F4
3" x 1-1/2"	4.750	0.065	2226CBB300150F1	2226CBB300150F4
3" x 2"	3.875	0.065	2226CBB300200F1	2226CBB300200F4
3" x 2-1/2"	3.125	0.065	2226CBB300250F1	2226CBB300250F4
4" x 2"	5.750	0.065	2226CBB400200F1	2226CBB400200F4
4" x 2-1/2"	4.875	0.065	2226CBB400250F1	2226CBB400250F4
4" x 3"	4.500	0.065	2226CBB400300F1	2226CBB400300F4

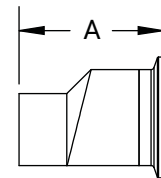


ASME BPE 2019

#### Clamp X Weld Eccentric Reducers - 2226E

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Tube O.D.	A (in)	Nominal Wall (in)	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	2.625	0.065	2226EBB075050F1	2226EBB075050F4
1" x 1/2"	3.000	0.065	2226EBB100050F1	2226EBB100050F4
1" x 3/4"	2.625	0.065	2226EBB100075F1	2226EBB100075F4
1-1/2" x 3/4"	3.500	0.065	2226EBB150075F1	2226EBB150075F4
1-1/2" x 1"	3.000	0.065	2226EBB150100F1	2226EBB150100F4
2" x 1"	3.875	0.065	2226EBB200100F1	2226EBB200100F4
2" x 1-1/2"	3.000	0.065	2226EBB200150F1	2226EBB200150F4
2-1/2" x 1-1/2"	3.875	0.065	2226EBB250150F1	2226EBB250150F4
2-1/2" x 2"	3.000	0.065	2226EBB250200F1	2226EBB250200F4
3" x 1-1/2"	4.750	0.065	2226EBB300150F1	2226EBB300150F4
3" x 2"	3.875	0.065	2226EBB300200F1	2226EBB300200F4
3" x 2-1/2"	3.125	0.065	2226EBB300250F1	2226EBB300250F4
4" x 2"	5.750	0.065	2226EBB400200F1	2226EBB400200F4
4" x 2-1/2"	4.875	0.065	2226EBB400250F1	2226EBB400250F4
4" x 3"	4.500	0.065	2226EBB400300F1	2226EBB400300F4



ASME BPE 2019

NOTE: BPE 2019 Specifications

PL Finish – SF1

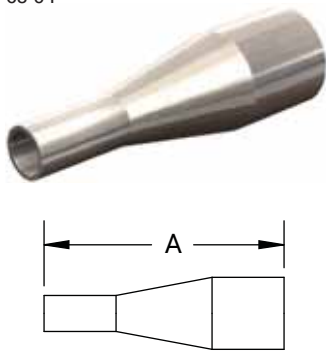
O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

PM Finish – SF4

O.D. = 32Ra Mechanically polished

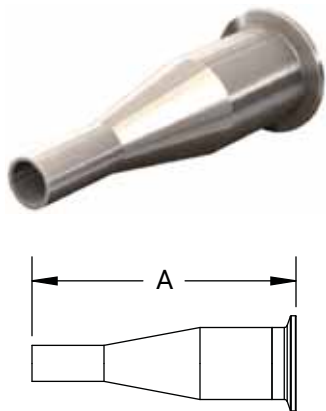
I.D. = 15Ra Mechanically polished and electropolished



**High Purity BioPharm Fittings**  
**Weld x Weld Concentric Reducers - T31W**

Tube O.D.	A (in)	Nominal Wall (in)	2007 BPE	2012 BPE	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	4.000	.065 x .065		x	T31W-075050PL	T31W-075050PM
1" x 1/2"	4.500	.065 x .065		x	T31W-100050PL	T31W-100050PM
1" x 3/4"	4.000	.065 x .065		x	T31W-100075PL	T31W-100075PM
1-1/2" x 1/2"	5.500	.065 x .065	x		T31W-150050PL	T31W-150050PM
1-1/2" x 3/4"	5.000	.065 x .065		x	T31W-150075PL	T31W-150075PM
1-1/2" x 1"	5.000	.065 x .065		x	T31W-150100PL	T31W-150100PM
2" x 1/2"	7.750	.065 x .065	x		T31W-200050PL	T31W-200050PM
2" x 3/4"	7.250	.065 x .065	x		T31W-200075PL	T31W-200075PM
2" x 1"	7.250	.065 x .065		x	T31W-200100PL	T31W-200100PM
2" x 1-1/2"	5.250	.065 x .065		x	T31W-200150PL	T31W-200150PM
2-1/2" x 1/2"	9.750	.065 x .065	x		T31W-250050PL	T31W-250050PM
2-1/2" x 3/4"	9.250	.065 x .065	x		T31W-250075PL	T31W-250075PM
2-1/2" x 1"	9.250	.065 x .065	x		T31W-250100PL	T31W-250100PM
2-1/2" x 1-1/2"	7.250	.065 x .065		x	T31W-250150PL	T31W-250150PM
2-1/2" x 2"	5.500	.065 x .065		x	T31W-250200PL	T31W-250200PM
3" x 1"	11.250	.065 x .065	x		T31W-300100PL	T31W-300100PM
3" x 1-1/2"	9.250	.065 x .065		x	T31W-300150PL	T31W-300150PM
3" x 2"	7.500	.065 x .065		x	T31W-300200PL	T31W-300200PM
3" x 2-1/2"	5.500	.065 x .065		x	T31W-300250PL	T31W-300250PM
4" x 1"	15.500	.083 x .065	x		T31W-400100PL	T31W-400100PM
4" x 1-1/2"	13.500	.083 x .065	x		T31W-400150PL	T31W-400150PM
4" x 2"	11.750	.083 x .065		x	T31W-400200PL	T31W-400200PM
4" x 2-1/2"	9.750	.083 x .065		x	T31W-400250PL	T31W-400250PM
4" x 3"	7.750	.083 x .065		x	T31W-400300PL	T31W-400300PM
6" x 3"	10.000	.109 x .065		x	T31W-600300PL	T31W-600300PM
6" x 4"	10.000	.109 x .083		x	T31W-600400PL	T31W-600400PM

**Clamp x Weld Concentric Reducers - T31M**



Tube O.D.	A (in)	Nominal Wall (in)	2007 BPE	2012 BPE	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	3.000	0.065		x	T31M-075050PL	T31M-075050PM
1" x 1/2"	3.500	0.065		x	T31M-100050PL	T31M-100050PM
1" x 3/4"	3.000	0.065		x	T31M-100075PL	T31M-100075PM
1-1/2" x 1/2"	4.500	0.065	x		T31M-150050PL	T31M-150050PM
1-1/2" x 3/4"	4.000	0.065		x	T31M-150075PL	T31M-150075PM
1-1/2" x 1"	4.000	0.065		x	T31M-150100PL	T31M-150100PM
2" x 1/2"	6.500	0.065	x		T31M-200050PL	T31M-200050PM
2" x 3/4"	6.000	0.065	x		T31M-200075PL	T31M-200075PM
2" x 1"	6.000	0.065		x	T31M-200100PL	T31M-200100PM
2" x 1-1/2"	4.000	0.065		x	T31M-200150PL	T31M-200150PM
2-1/2" x 1/2"	8.500	0.065	x		T31M-250050PL	T31M-250050PM
2-1/2" x 3/4"	8.000	0.065	x		T31M-250075PL	T31M-250075PM
2-1/2" x 1"	8.000	0.065	x		T31M-250100PL	T31M-250100PM
2-1/2" x 1-1/2"	6.000	0.065		x	T31M-250150PL	T31M-250150PM
2-1/2" x 2"	4.250	0.065		x	T31M-250200PL	T31M-250200PM
3" x 1"	10.000	0.065	x		T31M-300100PL	T31M-300100PM
3" x 1-1/2"	8.000	0.065		x	T31M-300150PL	T31M-300150PM
3" x 2"	6.250	0.065		x	T31M-300200PL	T31M-300200PM
3" x 2-1/2"	4.250	0.065		x	T31M-300250PL	T31M-300250PM
4" x 1"	14.125	0.065	x		T31M-400100PL	T31M-400100PM
4" x 1-1/2"	12.125	0.065	x		T31M-400150PL	T31M-400150PM
4" x 2"	10.375	0.065		x	T31M-400200PL	T31M-400200PM
4" x 2-1/2"	8.375	0.065		x	T31M-400250PL	T31M-400250PM
4" x 3"	6.375	0.065		x	T31M-400300PL	T31M-400300PM
6" x 3"	9.000	0.065		x	T31M-600300PL	T31M-600300PM
6" x 4"	9.000	0.083		x	T31M-600400PL	T31M-600400PM

NOTE: BPE 2007 or 2012 Specifications as indicated

PL Finish – SF1

PM Finish – SF4

O.D. = 32Ra Mechanically polished

O.D. = 32Ra Mechanically polished

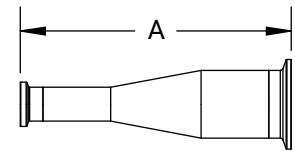
I.D. = 20Ra Mechanically polished

I.D. = 15Ra Mechanically polished and electropolished

**High Purity BioPharm Fittings**  
**Clamp x Clamp Concentric Reducers - T3114MP**

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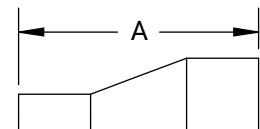
Tube O.D.	A (in)	2007 BPE	2012 BPE	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	2.000		x	T3114MP075050PL	T3114MP075050PM
1" x 1/2"	2.500		x	T3114MP100050PL	T3114MP100050PM
1" x 3/4"	2.000		x	T3114MP100075PL	T3114MP100075PM
1-1/2" x 1/2"	3.500	x		T3114MP150050PL	T3114MP150050PM
1-1/2" x 3/4"	3.000		x	T3114MP150075PL	T3114MP150075PM
1-1/2" x 1"	3.000		x	T3114MP150100PL	T3114MP150100PM
2" x 1/2"	5.500	x		T3114MP200050PL	T3114MP200050PM
2" x 3/4"	5.000	x		T3114MP200075PL	T3114MP200075PM
2" x 1"	5.000		x	T3114MP200100PL	T3114MP200100PM
2" x 1-1/2"	3.000		x	T3114MP200150PL	T3114MP200150PM
2-1/2" x 1/2"	7.500	x		T3114MP250050PL	T3114MP250050PM
2-1/2" x 3/4"	7.000	x		T3114MP250075PL	T3114MP250075PM
2-1/2" x 1"	7.000	x		T3114MP250100PL	T3114MP250100PM
2-1/2" x 1-1/2"	5.000		x	T3114MP250150PL	T3114MP250150PM
2-1/2" x 2"	3.000		x	T3114MP250200PL	T3114MP250200PM
3" x 1"	9.000	x		T3114MP300100PL	T3114MP300100PM
3" x 1-1/2"	7.000		x	T3114MP300150PL	T3114MP300150PM
3" x 2"	5.000		x	T3114MP300200PL	T3114MP300200PM
3" x 2-1/2"	3.000		x	T3114MP300250PL	T3114MP300250PM
4" x 1"	13.125	x		T3114MP400100PL	T3114MP400100PM
4" x 1-1/2"	11.125	x		T3114MP400150PL	T3114MP400150PM
4" x 2"	9.125		x	T3114MP400200PL	T3114MP400200PM
4" x 2-1/2"	7.125		x	T3114MP400250PL	T3114MP400250PM
4" x 3"	5.125		x	T3114MP400300PL	T3114MP400300PM
6" x 3"	7.500		x	T3114MP600300PL	T3114MP600300PM
6" x 4"	7.625		x	T3114MP600400PL	T3114MP600400PM



**Weld x Weld Eccentric Reducers - T32W**

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Tube O.D.	A (in)	Nominal Wall (in)	2007 BPE	2012 BPE	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	4.000	0.065 x 0.065		x	T32W-075050PL	T32W-075050PM
1" x 1/2"	4.500	0.065 x 0.065		x	T32W-100050PL	T32W-100050PM
1" x 3/4"	4.000	0.065 x 0.065		x	T32W-100075PL	T32W-100075PM
1-1/2" x 1/2"	5.500	0.065 x 0.065	x		T32W-150050PL	T32W-150050PM
1-1/2" x 3/4"	5.000	0.065 x 0.065		x	T32W-150075PL	T32W-150075PM
1-1/2" x 1"	5.000	0.065 x 0.065		x	T32W-150100PL	T32W-150100PM
2" x 1/2"	7.750	0.065 x 0.065	x		T32W-200050PL	T32W-200050PM
2" x 3/4"	7.250	0.065 x 0.065	x		T32W-200075PL	T32W-200075PM
2" x 1"	7.250	0.065 x 0.065		x	T32W-200100PL	T32W-200100PM
2" x 1-1/2"	5.250	0.065 x 0.065		x	T32W-200150PL	T32W-200150PM
2-1/2" x 1/2"	9.750	0.065 x 0.065	x		T32W-250050PL	T32W-250050PM
2-1/2" x 3/4"	9.250	0.065 x 0.065	x		T32W-250075PL	T32W-250075PM
2-1/2" x 1"	9.250	0.065 x 0.065	x		T32W-250100PL	T32W-250100PM
2-1/2" x 1-1/2"	7.250	0.065 x 0.065		x	T32W-250150PL	T32W-250150PM
2-1/2" x 2"	5.500	0.065 x 0.065		x	T32W-250200PL	T32W-250200PM
3" x 1"	11.250	0.065 x 0.065	x		T32W-300100PL	T32W-300100PM
3" x 1-1/2"	9.250	0.065 x 0.065		x	T32W-300150PL	T32W-300150PM
3" x 2"	7.500	0.065 x 0.065		x	T32W-300200PL	T32W-300200PM
3" x 2-1/2"	5.500	0.065 x 0.065		x	T32W-300250PL	T32W-300250PM
4" x 1"	15.500	0.083 x 0.065	x		T32W-400100PL	T32W-400100PM
4" x 1-1/2"	13.500	0.083 x 0.065	x		T32W-400150PL	T32W-400150PM
4" x 2"	11.750	0.083 x 0.065		x	T32W-400200PL	T32W-400200PM
4" x 2-1/2"	9.750	0.083 x 0.065		x	T32W-400250PL	T32W-400250PM
4" x 3"	7.750	0.083 x 0.065		x	T32W-400300PL	T32W-400300PM
6" x 3"	9.750	0.109 x 0.065		x	T32W-600300PL	T32W-600300PM
6" x 4"	10.000	0.109 x 0.083		x	T32W-600400PL	T32W-600400PM



NOTE: BPE 2007 or 2012 Specifications as indicated

PL Finish – SF1

PM Finish – SF4

O.D. = 32Ra Mechanically polished

O.D. = 32Ra Mechanically polished

I.D. = 20Ra Mechanically polished

I.D. = 15Ra Mechanically polished and electropolished



## Dixon Sanitary Pipe Fittings



### A Complete Pipe Clamp Connection

**Sizes**

- 1" - 6" nominal pipe

**Materials**

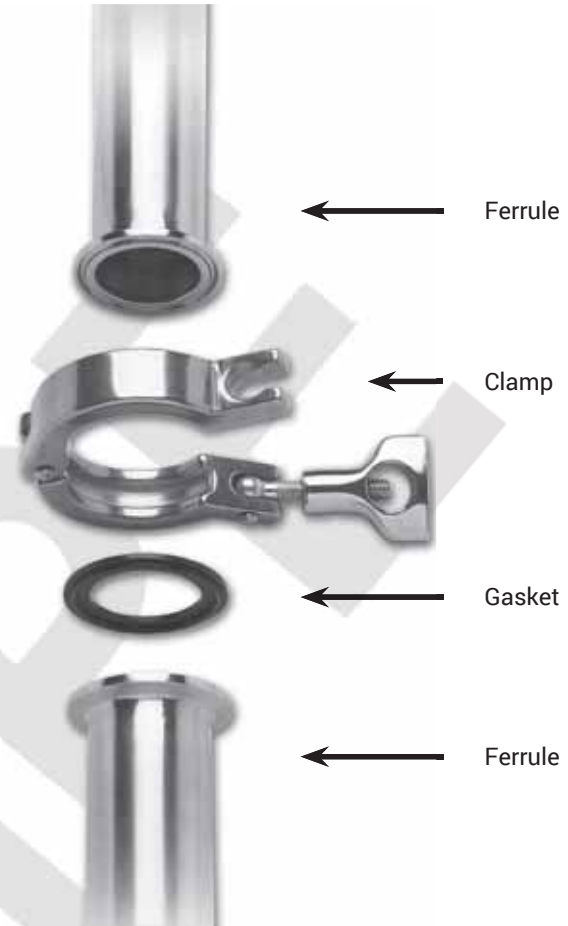
- G = 304 stainless steel
- R = 316L stainless steel
- Other alloys are available

**Feature**

- 3A sanitary finish I.D. and O.D.

**Primary Markets**

- Found in the food processing, beverage, pet products, wineries and breweries, oil extraction, and industrial markets



**Dimensions of Stainless Steel Pipe**

Nominal Pipe Size	Outside Diameter (in)	Nominal Wall Thickness (in)	
		schedule 5S	schedule 10S
1"	1.32	.065	.109
1-1/2"	1.90	.065	.109
2"	2.38	.065	.109
2-1/2"	2.88	.083	.120
3"	3.50	.083	.120
4"	4.50	.083	.120
6"	6.62	.109	.134

Stainless steel schedule numbers from schedule 5S through schedule 80S are published in ANSI B36.19 for sizes through 12". The addition of the letter "S" after the schedule number identifies it as pertaining to stainless steel.

Pipe size and Tube O.D. size materials are not interchangeable



Pipe Size Clamps

Schedule 5S and 10S Single Pin Heavy Duty Clamps - 13MHHV



Pipe Size	A (in)	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Part #
1"	2.12	500	13MHHV100
1-1/2"	2.65	450	13MHHV150
2"	3.18	400	13MHHV200
2-1/2"	3.72	350	13MHHV250
3"	4.26	250	13MHHV300
4"	5.26	150	13MHHV400
6"	7.50	100	13MHHV600
8"	9.32	75	13MHHV800
10"	11.45	75	13MHHV1000

<sup>1</sup> Wing nut tightened to 25 in-lb of torque

Schedule 5S and 10S Bolted Clamps - 13MHPV

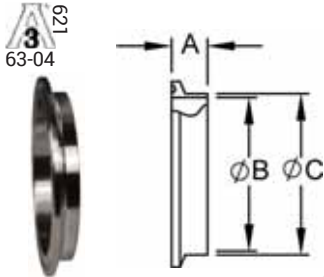


Pipe Size	A (in)	Service Pressure Rating PSI @ 70°F (21°C) <sup>1</sup>	Part #
1"	2.05	750	13MHPV100
1-1/2"	2.58	500	13MHPV150
2"	3.11	500	13MHPV200
2-1/2"	3.46	500	13MHPV250
3"	4.31	400	13MHPV300
4"	5.19	400	13MHPV400
6"	7.20	350	13MHPV600
8"	9.17	350	13MHPV800

<sup>1</sup> Nuts tightened to 20 ft-lb of torque

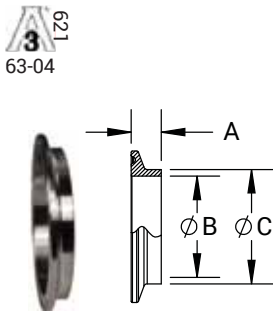
Pipe Size Ferrules

Schedule 5S Short Weld Ferrules - 14WMV



Pipe Size	A (in)	B (in)	C (in)	316L Stainless Steel Part #
1"	.50	1.19	1.32	14WMV-R100
1-1/2"	.50	1.77	1.90	14WMV-R150
2"	.50	2.25	2.38	14WMV-R200
2-1/2"	.50	2.71	2.88	14WMV-R250
3"	.50	3.33	3.50	14WMV-R300
4"	.63	4.33	4.50	14WMV-R400
6"	.88	6.41	6.63	14WMV-R600

Schedule 10S Short Weld Ferrules - 14WMX



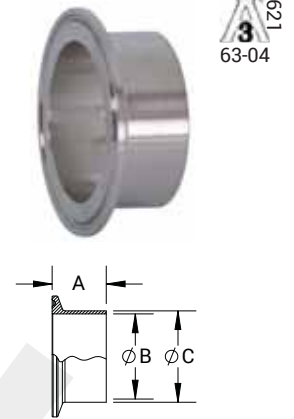
Pipe Size	A (in)	B (in)	C (in)	316L Stainless Steel Part #
1"	.50	1.10	1.32	14WMX-R100
1-1/2"	.50	1.68	1.90	14WMX-R150
2"	.50	2.16	2.38	14WMX-R200
2-1/2"	.50	2.64	2.88	14WMX-R250
3"	.50	3.26	3.50	14WMX-R300
4"	.63	4.26	4.50	14WMX-R400
6"	.88	6.36	6.63	14WMX-R600

NOTE: For additional information on pipe dimensions please reference [dixonvalve.com](http://dixonvalve.com)

### Pipe Size Ferrules

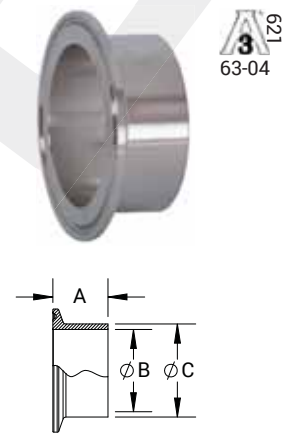
#### Schedule 5S Long Weld Ferrules - L14AM7V

Pipe Size	A (in)	B (in)	C (in)	316L Stainless Steel Part #
1"	1.13	1.19	1.32	L14AM7V-R100
1-1/2"	1.13	1.77	1.90	L14AM7V-R150
2"	1.13	2.25	2.38	L14AM7V-R200
2-1/2"	1.13	2.71	2.88	L14AM7V-R250
3"	1.13	3.33	3.50	L14AM7V-R300
4"	1.13	4.33	4.50	L14AM7V-R400
6"	1.50	6.41	6.63	L14AM7V-R600



#### Schedule 10S Long Weld Ferrules - L14AM7X

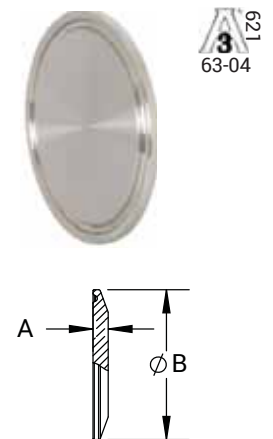
Pipe Size	A (in)	B (in)	C (in)	316L Stainless Steel Part #
1"	1.13	1.10	1.32	L14AM7X-R100
1-1/2"	1.13	1.68	1.90	L14AM7X-R150
2"	1.13	2.16	2.38	L14AM7X-R200
2-1/2"	1.13	2.64	2.88	L14AM7X-R250
3"	1.13	3.26	3.50	L14AM7X-R300
4"	1.13	4.26	4.50	L14AM7X-R400
6"	1.50	6.36	6.63	L14AM7X-R600



### Pipe Size End Caps

#### Schedule 5S and 10S Solid End Caps - 16AMV

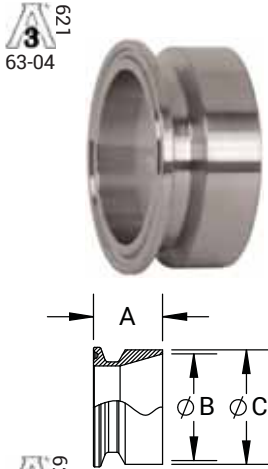
Pipe Size	A (in)	B (in)	304 Stainless Steel Part #	316L Stainless Steel Part #
1"	.25	1.98	16AMV-G100	16AMV-R100
1-1/2"	.25	2.52	16AMV-G150	16AMV-R150
2"	.25	3.05	16AMV-G200	16AMV-R200
2-1/2"	.25	3.60	16AMV-G250	16AMV-R250
3"	.31	4.13	16AMV-G300	16AMV-R300
4"	.31	5.13	16AMV-G400	16AMV-R400
6"	.44	7.20	16AMV-G600	16AMV-R600



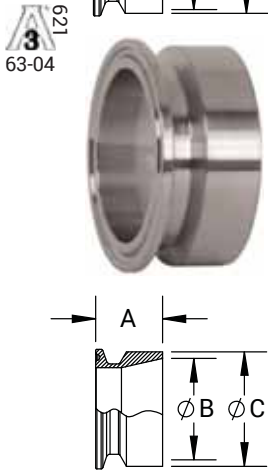
NOTE: For additional information on pipe dimensions please reference [dixonvalve.com](http://dixonvalve.com)

Pipe Size Adapters

Tube O.D. Clamp x Schedule 5S Weld Adapters - B19MPV

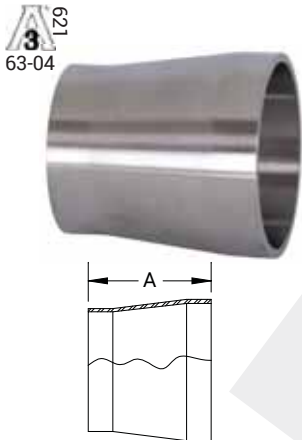


Pipe Size	A (in)	B (in)	C (in)	Pipe Wall Thickness (in)	316L Stainless Steel Part #
1"	1.13	1.19	1.32	.065	B19MPV-R100
1-1/2"	1.13	1.77	1.90	.065	B19MPV-R150
2"	1.13	2.25	2.38	.065	B19MPV-R200
2-1/2"	1.13	2.71	2.88	.083	B19MPV-R250
3"	1.13	3.33	3.50	.083	B19MPV-R300
4"	1.13	4.33	4.50	.083	B19MPV-R400



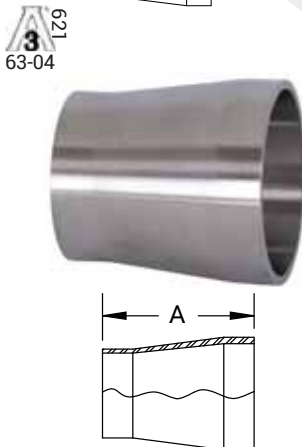
Tube O.D. Clamp x Schedule 10S Weld Adapters - B19MPX

Pipe Size	A (in)	B (in)	C (in)	Pipe Wall Thickness (in)	316L Stainless Steel Part #
1"	1.13	1.10	1.32	.109	B19MPX-R100
1-1/2"	1.13	1.68	1.90	.109	B19MPX-R150
2"	1.13	2.16	2.38	.109	B19MPX-R200
2-1/2"	1.13	2.64	2.88	.120	B19MPX-R250
3"	1.13	3.26	3.50	.120	B19MPX-R300
4"	1.13	4.26	4.50	.120	B19MPX-R400



Tube O.D. Weld x Schedule 5S Weld Adapters - B19WV

Pipe Size	A (in)	Tube Wall Thickness (in)	Pipe Wall Thickness (in)	316L Stainless Steel Part #
1"	2.00	.065	.065	B19WV-R100
1-1/2"	2.50	.065	.065	B19WV-R150
2"	2.50	.065	.065	B19WV-R200
2-1/2"	2.50	.065	.083	B19WV-R250
3"	2.50	.065	.083	B19WV-R300
4"	3.00	.083	.083	B19WV-R400



Tube O.D. Weld x Schedule 10S Weld Adapters - B19WX

Pipe Size	A (in)	Tube Wall Thickness (in)	Pipe Wall Thickness (in)	316L Stainless Steel Part #
1"	2.00	.065	.109	B19WX-R100
1-1/2"	2.50	.065	.109	B19WX-R150
2"	2.50	.065	.109	B19WX-R200
2-1/2"	2.50	.065	.120	B19WX-R250
3"	2.50	.065	.120	B19WX-R300
4"	3.00	.083	.120	B19WX-R400

## Dixon Sanitary Pipe Hangers

**Sizes**

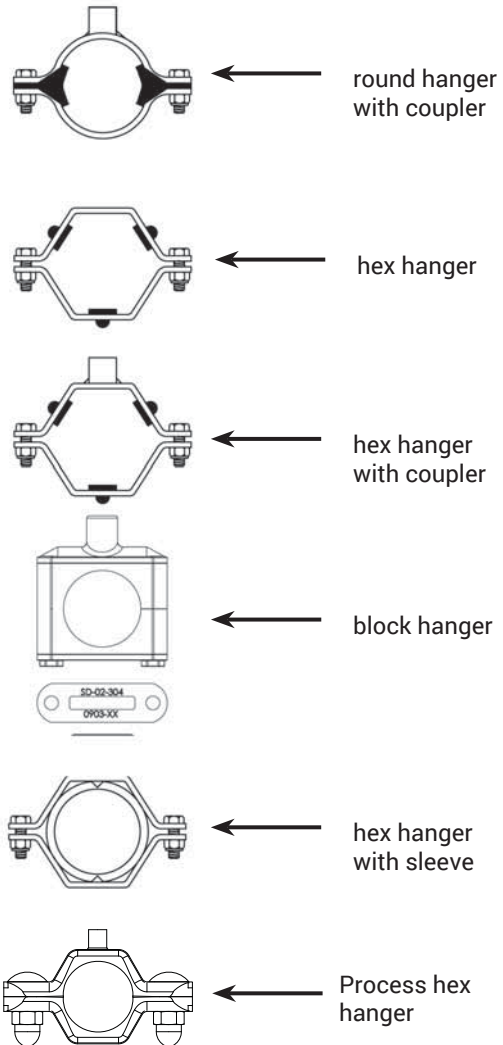
- 1/2" - 8" O.D. nominal pipe

**Materials**

- Hanger base: 304 stainless steel
- Hanger inserts:
  - Rubber rated to **230°F (110°C)**
  - ABS (sleeve) rated to **230°F (110°C)**
  - FKM rated to **400°F (204°C)**
  - Polypropylene rated to **212°F (100°C)**
  - Polysulfone rated to **325°F (163°C)**
  - Silicone rated to **320°F (160°C)**

**Primary Markets**

- Found in the food processing, beverage, dairy, personal care, pet products, wineries and breweries, oil extraction, semi-conductor, and industrial markets



**Support Recommendations**

Hangers and/or supports should be spaced as far apart as economically possible, with consideration to assure that the sag of the pipe between supports is within limits that will permit drainage and also avoid excessive bending stresses from concentrated loads such as valves and in-line equipment.

Each side of valves or heavy equipment should have supports as close as possible.

Spacing indicated below may differ from that listed in ANSI/MSS SP-69 & SP-58. Additional hangers may be necessary to adequately support concentrated loads such as valves, flanges, or instruments.

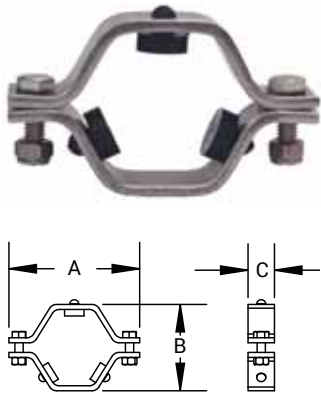
Please note that these are just estimates and it is the responsibility of the installer to determine what is sufficient to support the line loads. These are only estimates based on industry information.

**Schedule 10 Pipe Hanger Spacing**

Pipe Size	Maximum Spacing (ft)
3/8" - 3/4"	6
1" - 1-1/4"	8
1-1/2" - 3"	10
4" - 8"	12

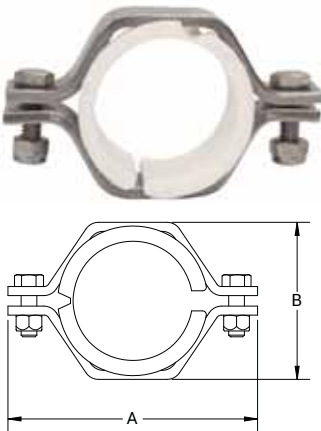
Pipe Size Hangers

Hex Hanger with Rubber Grommets - B24RV



Pipe Size	A (in)	B (in)	C (in)	Grommet Qty	304 Stainless Steel Part #
1/2"	3.38	2.25	1.00	3	B24RV-G50
3/4"	3.38	2.19	1.00	3	B24RV-G75
1"	3.70	2.20	1.00	3	B24RV-G100
1-1/2"	4.40	2.80	1.00	3	B24RV-G150
2"	5.00	3.30	1.00	3	B24RV-G200
2-1/2"	5.60	3.70	1.00	3	B24RV-G250
3"	6.10	4.30	1.00	4	B24RV-G300
4"	7.60	5.00	1.00	4	B24RV-G400
6"	9.80	7.20	1.50	5	B24RV-G600
8"	12.25	9.38	1.50	5	B24RV-G800

Hex Hanger with Polypropylene Sleeves - B24PV



Pipe Size	A (in)	B (in)	304 Stainless Steel Part #
1/2"	3.38	1.63	B24PV-G50
3/4"	3.38	1.63	B24PV-G75
1"	3.63	2.13	B24PV-G100
1-1/2"	4.31	2.63	B24PV-G150
2"	4.88	3.13	B24PV-G200
2-1/2"	4.88	3.13	B24PV-G250
3"	6.00	4.25	B24PV-G300
4"	7.50	5.63	B24PV-G400
5"	8.50	6.38	B24PV-G500
6"	9.75	7.38	B24PV-G600
8"	11.38	9.38	B24PV-G800

Sleeves - 13PV



Pipe Size	Polypropylene Part #
3/4"	13PV-75
1"	13PV-100
1-1/2"	13PV-150
2"	13PV-200
2-1/2"	13PV-250
3"	13PV-300
4"	13PV-400
6"	13PV-600

## Pipe Size Block Hangers

### Applications

- Clean rooms and mechanical areas; not limited to: biotech, pharmaceutical, food processing, beverage, dairy, cosmetic, chemical, water treatment, and semi-conductor industries
- Low-flow and low-pressure systems with moderate vibration: WFI, SIP, CIP, process, utility, and instrument lines

### Sizes

- 1" - 4" standard; other sizes may be available upon request

### Features

- Insulation envelope: reduced O.D. allows hanger to be buried under the insulation jacket
- ZERO PUDDLE Silicone inserts raised geometry facilitates drainage of liquids on vertical/riser lines
- There are no exposed threads or openings in hardware plates

### Materials

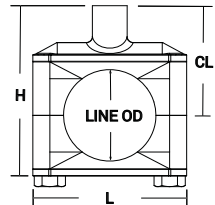
- Silicone insert - 80 durometer; color - blue
- ZERO PUDDLE silicone rubber insert are available with FDA and UL ratings
- 304 stainless steel as standard; 316 available upon request

### Specifications

- Intermittent temperatures from -40°F to 320°F (-40°C to 160°C)
- Continuous temperatures from -20°F to 285°F (-29°C to 140°C)

### Approvals

- All plates polished, bolts are cleaned, and nuts are lubricated with FDA-approved product
- Hanger threads match MSS SP-69 rod O.D. requirements

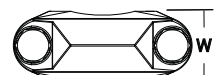
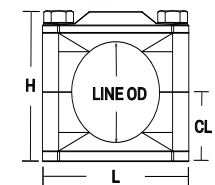


### Hang Plate Block Hangers - B24V-HP

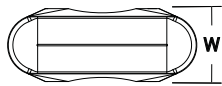
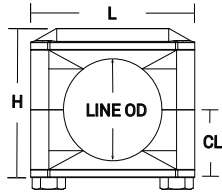
Pipe Size	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	Thread	304 Stainless Steel Part #
1"	1.32	2.79	2.49	0.75	0.97	3/8"-16	B24V-HP-G100
1-1/2"	1.90	3.29	2.99	0.88	1.25	3/8"-16	B24V-HP-G150
2"	2.38	5.59	3.36	0.88	1.47	1/2"-13	B24V-HP-G200
2-1/2"	2.88	6.02	3.74	0.88	1.66	1/2"-13	B24V-HP-G250
3"	3.50	6.68	4.48	1.00	2.03	1/2"-13	B24V-HP-G300
4"	4.50	6.24	5.10	1.00	2.50	5/8"-11	B24V-HP-G400

### Weld Plate Block Hangers - B24V-WP

Pipe Size	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	304 Stainless Steel Part #
1"	1.32	2.23	2.49	0.75	1.03	B24V-WP-G100
1-1/2"	1.90	2.75	2.99	0.88	1.31	B24V-WP-G150
2"	2.38	3.25	3.36	0.88	1.55	B24V-WP-G200
2-1/2"	2.88	3.68	3.74	0.88	1.70	B24V-WP-G250
3"	3.50	4.15	4.48	1.00	2.06	B24V-WP-G300
4"	4.50	5.27	5.10	1.00	2.58	B24V-WP-G400

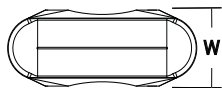
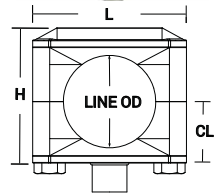


Pipe Size Uni-Hinge Block Hangers



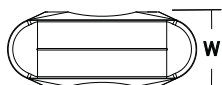
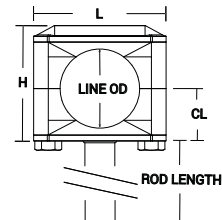
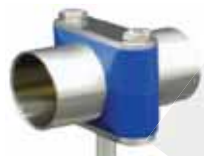
Base Mount Block Hangers - B24V-BM

Pipe Size	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	Round Coupling		304 Stainless Steel Part #
						Height (in)	Thread	
1"	1.312	2.19	2.49	.75	.97	.47	3/8"-16	B24V-BM-G100
1-1/2"	1.90	2.69	2.99	.88	1.25	.47	3/8"-16	B24V-BM-G150
2"	2.38	3.19	3.36	.88	1.49	.59	1/2"-13	B24V-BM-G200
2-1/2"	2.88	3.63	3.74	.88	1.71	.59	1/2"-13	B24V-BM-G250



Base Mount Block Hanger Threaded Couplings - B24V-BMTC

Pipe Size	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	Round Coupling		304 Stainless Steel Part #
						Height (in)	Thread	
1"	1.312	2.19	2.49	.75	1.94	.47	3/8"-16	B24V-BM-G100
1-1/2"	1.90	2.69	2.99	.88	2.44	.47	3/8"-16	B24V-BM-G150
2"	2.38	3.19	3.36	.88	2.81	.59	1/2"-13	B24V-BM-G200
2-1/2"	2.88	3.63	3.74	.88	3.19	.59	1/2"-13	B24V-BM-G250



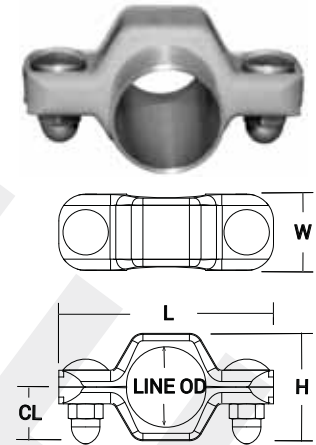
Base Mount Block Hanger Rod Mounts - B24V-BMR6

Pipe Size	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	Rod (stock length)		304 Stainless Steel Part #
						Length (in)	O.D.	
1"	1.32	2.19	2.49	.75	1.94	6.00	.38	B24V-BMR6-G100
1-1/2"	1.90	2.69	2.99	.88	2.44	6.00	.38	B24V-BMR6-G150
2"	2.38	3.19	3.36	.88	2.81	6.00	.50	B24V-BMR6-G200
2-1/2"	2.88	3.63	3.74	.88	3.19	6.00	.50	B24V-BMR6-G250

## Pipe Size Uni-Hinge Block Hangers

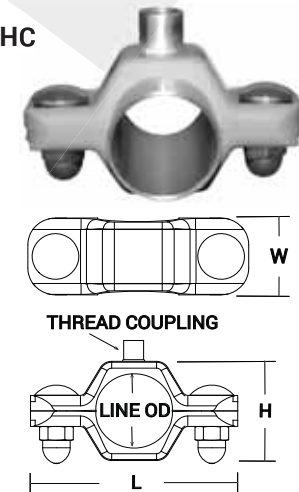
### Process Hex Hanger Weld Mounts - B24V-PH

Pipe Size	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	304 Stainless Steel With Acorn Nut Part #	304 Stainless Steel With Lock Nut Part #
1"	1.32	1.96	4.00	1.42	0.98	B24V-PH-G100	B24V-PHL-G100
1-1/2"	1.90	2.50	4.60	1.42	1.25	B24V-PH-G150	B24V-PHL-G150
2"	2.38	3.00	5.10	1.42	1.50	B24V-PH-G200	B24V-PHL-G200
2-1/2"	2.88	3.50	5.60	1.42	1.75	B24V-PH-G250	B24V-PHL-G250
3"	3.50	4.13	6.33	1.42	2.06	B24V-PH-G300	B24V-PHL-G300
4"	4.50	5.12	7.52	1.42	2.65	B24V-PH-G400	B24V-PHL-G400



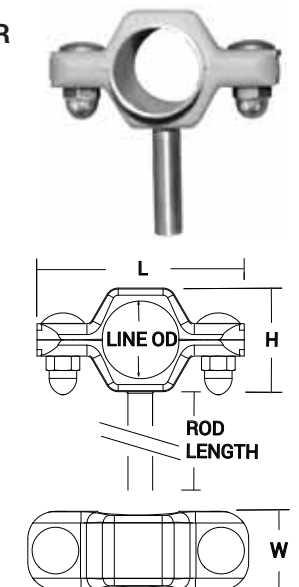
### Process Hex Hanger Weld Mount Threaded Couplings - B24V-PHC

Pipe Size	Line O.D. (in)	H (in)	L (in)	W (in)	Height (in)	Thread (in)	304 Stainless Steel With Acorn Nut Part #	304 Stainless Steel With Lock Nut Part #
1"	1.32	1.96	4.00	1.42	0.47	3/8"-16	B24V-PHC-G100	B24V-PHCL-G100
1-1/2"	1.90	2.50	4.60	1.42	0.47	3/8"-16	B24V-PHC-G150	B24V-PHCL-G150
2"	2.38	3.00	5.10	1.42	0.59	1/2"-13	B24V-PHC-G200	B24V-PHCL-G200
2-1/2"	2.88	3.50	5.60	1.42	0.59	1/2"-13	B24V-PHC-G250	B24V-PHCL-G250
3"	3.50	4.13	6.33	1.42	0.59	1/2"-13	B24V-PHC-G300	B24V-PHCL-G300
4"	4.50	5.12	7.52	1.42	0.59	1/2"-13	B24V-PHC-G400	B24V-PHCL-G400



### Process Hex Hanger Weld Mounts Rod Attached - B24V-PH6R

Pipe Size	Line O.D. (in)	H (in)	L (in)	W (in)	Length (in)	O.D. (in)	304 Stainless Steel With Acorn Nut Part #	304 Stainless Steel With Lock Nut Part #
1"	1.32	1.96	4.00	1.42	6.00	0.38	B24V-PH6R-G100	B24V-PH6RL-G100
1-1/2"	1.90	2.50	4.60	1.42	6.00	0.38	B24V-PH6R-G150	B24V-PH6RL-G150
2"	2.38	3.00	5.10	1.42	6.00	0.50	B24V-PH6R-G200	B24V-PH6RL-G200
2-1/2"	2.88	3.50	5.60	1.42	6.00	0.50	B24V-PH6R-G250	B24V-PH6RL-G250
3"	3.50	4.13	6.33	1.42	6.00	0.50	B24V-PH6R-G300	B24V-PH6RL-G300
4"	4.50	5.12	7.52	1.42	6.00	0.63	B24V-PH6R-G400	B24V-PH6RL-G400



Schedule 5S and 10S Pipe Gaskets

Nitrile Rubber - 40MPV-U, Black

Feature

- Color code: red dot

Approval


- Meets 21CFR 177.2600



Size	Nitrile Rubber Part #
1"	40MPV-U100
1-1/2"	40MPV-U150
2"	40MPV-U200
2-1/2"	40MPV-U250
3"	40MPV-U300
4"	40MPV-U400
6"	40MPV-U600

PTFE - 40MPV-G, White

Features


- Color code: no dot
- Not recommended for use with bolted clamps 

Approvals

- Meets 21CFR 177.1550
- Passed U.S.P. Class VI Cytotoxicity testing



Size	PTFE Part #
1"	40MPV-G100
1-1/2"	40MPV-G150
2"	40MPV-G200
2-1/2"	40MPV-G250
3"	40MPV-G300
4"	40MPV-G400
6"	40MPV-G600

PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration, and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained. 

Visit [dixonvalve.com](http://dixonvalve.com) for sizing charts

Schedule 5S and 10S Pipe Gaskets

EPDM - 40MPV-E, Black

Feature

- Color code: 3 green dots

Approvals

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	EPDM Part #
1"	40MPV-E100
1-1/2"	40MPV-E150
2"	40MPV-E200
2-1/2"	40MPV-E250
3"	40MPV-E300
4"	40MPV-E400
6"	40MPV-E600



FKM - 40MPV-SFY, Black

Feature

- Color code: 1 white dot, 1 yellow dot

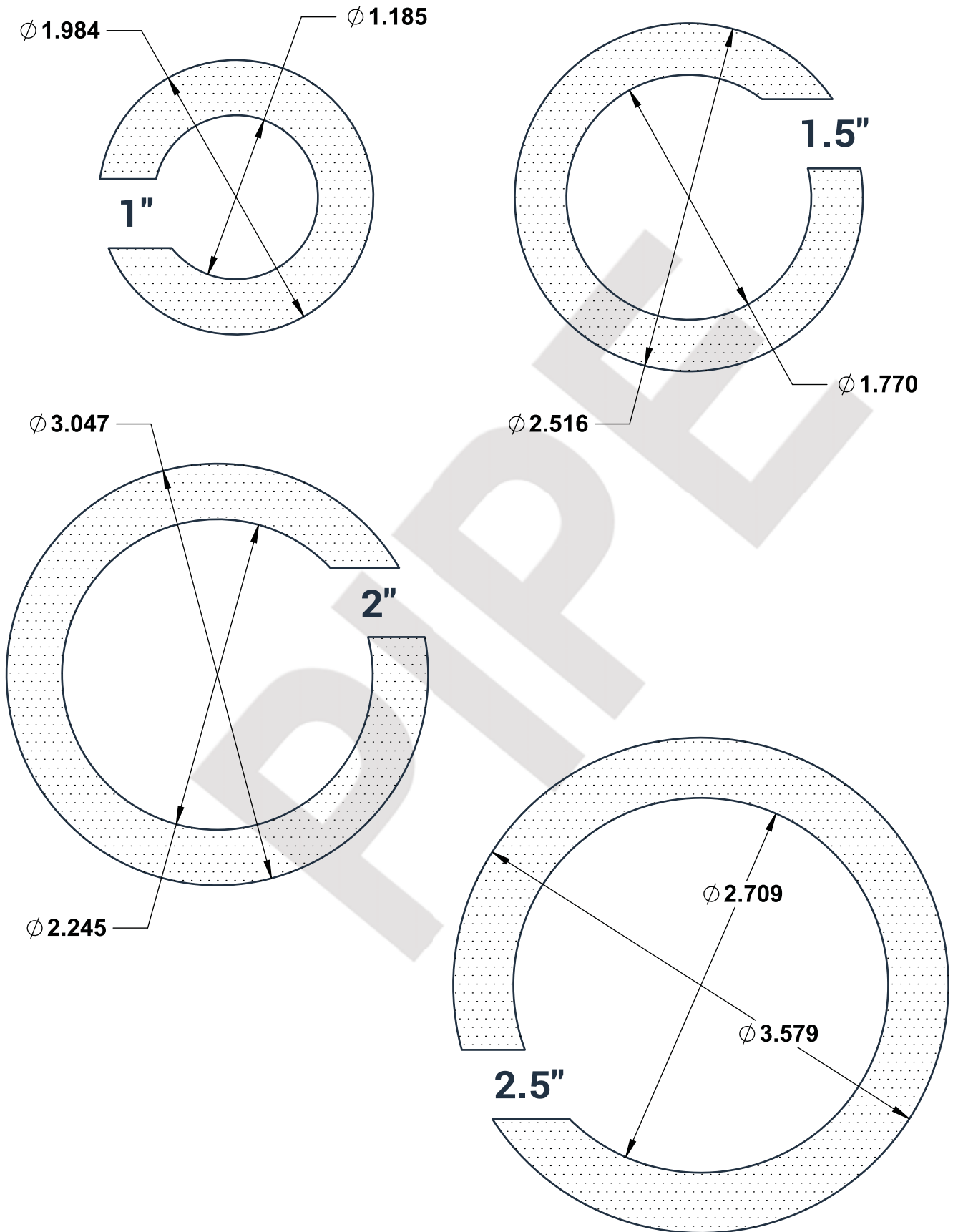
Approvals

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

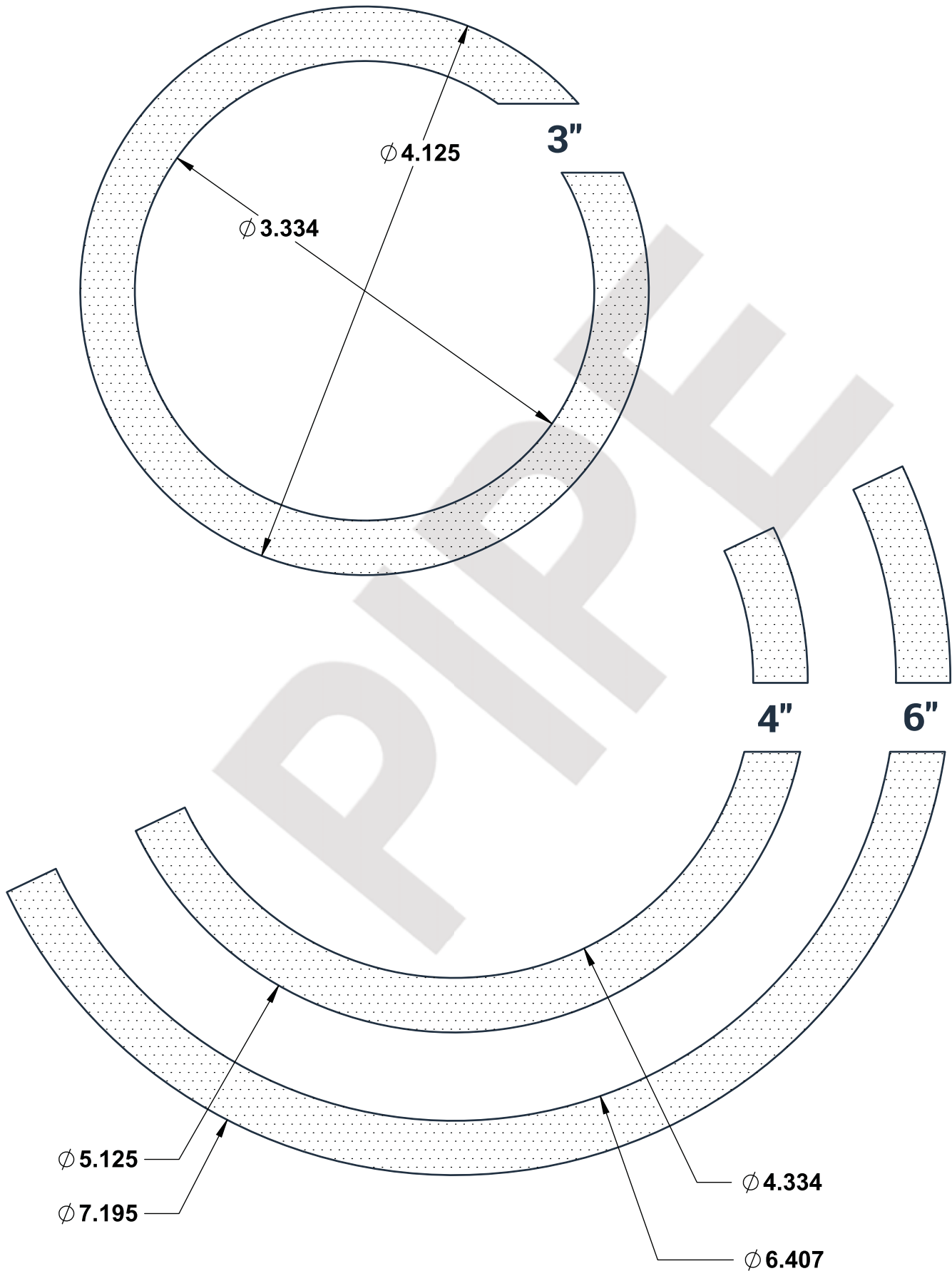
Size	FKM Part #
1"	40MPV-SFY100
1-1/2"	40MPV-SFY150
2"	40MPV-SFY200
2-1/2"	40MPV-SFY250
3"	40MPV-SFY300
4"	40MPV-SFY400
6"	40MPV-SFY600



Pipe Gasket Sizing Guide



### Pipe Gasket Sizing Guide



## Sanitary Gaskets



<b>Types</b>	<b>Pages</b>
• Clamp .....	96-103
• Bevel seat .....	104-105
• I-line / Q-line.....	106-107
• John Perry.....	108-109
• Euro .....	110-111
• Clamp gasket sizing chart .....	112-114

- Materials**
- Nitrile rubber
  - Silicone (peroxide cured)
  - Silicone (platinum cured)
  - EPDM
  - FKM
  - PTFE

- Approvals**
- U.S. Pharmacopoeia Class VI Cytotoxicity Criteria
  - Title 21CFR177.2600 & .1550
  - USDA and 3A Sanitary Standards

All elastomeric gaskets require periodic replacement. Gasket life is influenced by the gasket material, product application, temperature, cleaning procedures, etc. After monitoring gasket conditions in a process system, a schedule should be developed for replacement of gaskets.

### Color Coding - Identification of Gasket Materials

Elastomer	Part # Identifier	Color Code	Temperature	
			Fahrenheit	Celsius
Nitrile rubber	U	1 red dot	-30°F to 200°F	-34°C to 93°C
White nitrile rubber	UW	1 red dot	-30°F to 200°F	-34°C to 93°C
EPDM peroxide cured	E	3 green dots	-30°F to 300°F	-34°C to 149°C
FKM	SFY	1 white dot and 1 yellow dot	-30°F to 400°F	-34°C to 204°C
Silicone peroxide cured (white)	XW	1 pink dot	-40°F to 450°F	-40°C to 232°C
Silicone platinum cured (clear)	XCPL	none	-40°F to 450°F	-40°C to 232°C
PTFE	G	none	-100°F to 500°F	-73°C to 260°C
Metal detectable PTFE	GZ	none	-320°F to 550°F	-195°C to 288°C
Metal detectable nitrile rubber	UZ	2 blue dots and 1 red dot	-30°F to 200°F	-34°C to 93°C
Metal detectable EPDM	EZ	2 blue dots and 3 green dots	-30°F to 300°F	-34°C to 149°C
Metal detectable FKM	SFYZ	2 blue dots and 1 white dot and 1 yellow dot	-30°F to 400°F	-34°C to 204°C
Metal detectable Silicone	XZ	2 blue dots and 1 pink dot	-40°F to 450°F	-40°C to 232°C

### Packaging and Storing Information

The shelf life of rubber gaskets is the maximum period from cure date to the date the product is installed. During the shelf life time, the rubber product is expected to retain its characteristics under the following conditions:

- Stored in original packaging in a clean, dry warehouse
- Not exposed to direct sunlight
- Stored no closer than 6 feet from electric motors
- Temperature between **65°F to 85°F (18°C to 29°C)**

A guideline for shelf life of rubber gaskets manufactured from the following components should have the following shelf life not to exceed:

- Nitrile rubber ..... 10 years
- EPDM..... 10 years
- FKM ..... 10 years
- Silicone..... 5 years
- PTFE ..... 20 years
- Nitrile rubber, EPDM, and Silicone Metal Detectable Gaskets.... 10 years

## Particulate Reference Chart

### 316 Square Mesh Wire Gasket Information

Mesh	Micron Equivalent	Opening Width	Wire Diameter	Openings per Square Inch
4	5410	.215	.035	16
6	3220	.132	.035	36
8	2460	.097	.028	64
10	1910	.075 <sup>1</sup>	.025	81
12	1520	.060	.023	100
14	1310	.051 <sup>2</sup>	.020	196
16	1130	.046	.018	256
20	860	.034	.016	400
30	540	.017	.011	900
40	377	.015	.010	1600
50	276	.011	.009	2500
60	226	.009 <sup>3</sup>	.008	3600
80	176	.007 <sup>3</sup>	.006	6400
100	151	.006 <sup>3</sup>	.005	10,000
120	120	.005 <sup>3</sup>	.004	14,400
150	103	.004	.003	22,500
200	73	.003	.002	40,000



<sup>1</sup> Standard size for clamp style gaskets

<sup>2</sup> Standard size for bevel seat size gaskets

<sup>3</sup> Available in only 1", 1-1/2" and 2" sizes

NOTE: Special order parts, minimum order quantities required

### Perforated 316 Disc Information

Hole Diameter	Micron Equivalent	Open Area
.033" <sup>1</sup>	803	28%
.063"	1573	23%
.100"	2517	33%
.125"	3148	40%
.250"	6350	58%



<sup>1</sup> Standard size for clamp style

NOTE: 1 micron = .00003973 inches

Special order - minimums apply

## Clamp Gaskets

### Specifications

- PSI Service Ratings for the sanitary clamps DO NOT APPLY to connections (1" and above) using any PTFE gaskets, due to the potential for cold flow under normal operating conditions. PTFE gaskets, when used with any clamp, are likely to leak at pressures far below the published service ratings. This restriction does not apply to the fractionally sized 1/2" and 3/4" connections, due to their recessed, fully contained design.

### Approval

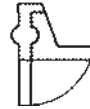
- Gasket material approved by  (3A), USDA and complies with FDA's 21CFR177.2600 and 1550



Mini



Standard - type 1



Flanged - type 2

### Clamp Gaskets - Nitrile Rubber



Type 1 - Standard  
1" and larger



Type 1 - Standard  
1/2" - 3/4"

#### Features

- Sulfur cured
- Color code: one red dot

#### Approval

- Meets 21CFR 177.2600

Size	Black Part #	White Part #	Red Part #	Blue Part #
1/2"	42MP-U50	42MP-UW50	42MP-U50RD	42MP-U50BL
3/4"	42MP-U75	42MP-UW75	42MP-U75RD	42MP-U75BL
1"	40MP-U100	40MP-UW100	40MP-U100RD	40MP-U100BL
1-1/2"	40MP-U150	40MP-UW150	40MP-U150RD	40MP-U150BL
2"	40MP-U200	40MP-UW200	40MP-U200RD	40MP-U200BL
2-1/2"	40MP-U250	40MP-UW250	40MP-U250RD	40MP-U250BL
3"	40MP-U300	40MP-UW300	40MP-U300RD	40MP-U300BL
4"	40MP-U400	40MP-UW400	40MP-U400RD	40MP-U400BL
5"	40MP-U500	40MP-UW500	40MP-U500RD	40MP-U500BL
6"	40MP-U600	40MP-UW600	40MP-U600RD	40MP-U600BL
8"	40MP-U800	40MP-UW800	40MP-U800RD	40MP-U800BL

NOTE: Also available in green, yellow, pink, orange, and purple

### Clamp Gaskets - EPDM



Type 1 - Standard  
1" and larger



Type 1 - Standard  
1/2" - 3/4"

#### Features

- Color code: three green dots
- Peroxide cured

#### Approvals

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	Black Part #	White Part #	Red Part #	Blue Part #	Green Part #	Yellow Part #
1/2"	42MP-E50	42MP-E50WH	42MP-E50RD	42MP-E50BL	42MP-E50GN	42MP-E50YL
3/4"	42MP-E75	42MP-E75WH	42MP-E75RD	42MP-E75BL	42MP-E75GN	42MP-E75YL
1"	40MP-E100	40MP-E100WH	40MP-E100RD	40MP-E100BL	40MP-E100GN	40MP-E100YL
1-1/2"	40MP-E150	40MP-E150WH	40MP-E150RD	40MP-E150BL	40MP-E150GN	40MP-E150YL
2"	40MP-E200	40MP-E200WH	40MP-E200RD	40MP-E200BL	40MP-E200GN	40MP-E200YL
2-1/2"	40MP-E250	40MP-E250WH	40MP-E250RD	40MP-E250BL	40MP-E250GN	40MP-E250YL
3"	40MP-E300	40MP-E300WH	40MP-E300RD	40MP-E300BL	40MP-E300GN	40MP-E300YL
4"	40MP-E400	40MP-E400WH	40MP-E400RD	40MP-E400BL	40MP-E400GN	40MP-E400YL
5"	40MP-E500	40MP-E500WH	40MP-E500RD	40MP-E500BL	40MP-E500GN	40MP-E500YL
6"	40MP-E600	40MP-E600WH	40MP-E600RD	40MP-E600BL	40MP-E600GN	40MP-E600YL

Visit [dixonvalve.com](http://dixonvalve.com) for sizing charts.

**Clamp Gaskets**  
Clamp Gaskets - FKM

Size	Black Part #
1/2"	42MP-SFY50
3/4"	42MP-SFY75
1"	40MP-SFY100
1-1/2"	40MP-SFY150
2"	40MP-SFY200
2-1/2"	40MP-SFY250
3"	40MP-SFY300
4"	40MP-SFY400
5"	40MP-SFY500
6"	40MP-SFY600
8"	40MP-SFY800

NOTE: Also available in blue, green, purple, pink, red, and yellow

**Feature**

- Color code: one white dot and one yellow dot

**Approvals**

- Meets 21 CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing



Type 1 - Standard  
1/2" - 3/4"



Type 1 - Standard  
1" and larger

**Clamp Gaskets - Silicone**

Size	White Part #
1/2"	42MP-XW50
3/4"	42MP-XW75
1"	40MP-XW100
1-1/2"	40MP-XW150
2"	40MP-XW200
2-1/2"	40MP-XW250
3"	40MP-XW300
4"	40MP-XW400
6"	40MP-XW600

**Features**

- Color code: one pink dot
- Peroxide cured

**Approvals**

- Meets 21 CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing



Type 1 - Standard  
1/2" - 3/4"



Type 1 - Standard  
1" and larger

**Clamp Gaskets - Silicone**

Size	Clear Part #
1/2"	42MP-XCPL50
3/4"	42MP-XCPL75
1"	40MP-XCPL100
1-1/2"	40MP-XCPL150
2"	40MP-XCPL200
2-1/2"	40MP-XCPL250
3"	40MP-XCPL300
4"	40MP-XCPL400
5"	40MP-XCPL500
6"	40MP-XCPL600
8"	40MP-XCPL800

**Features**

- Color code: no dot
- Platinum cured

**Approvals**

- Meets 21 CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing



Type 1 - Standard  
1/2" - 3/4"



Type 1 - Standard  
1" and larger

**Clamp Gaskets - PTFE**

Size	White Part #
1/2"	42MP-G50
3/4"	42MP-G75
1"	40MP-G100
1-1/2"	40MP-G150
2"	40MP-G200
2-1/2"	40MP-G250
3"	40MP-G300
4"	40MP-G400
5"	40MP-G500
6"	40MP-G600
8"	40MP-G800
10"	40MP-G1000
12"	40MP-G1200

**Features**

- Color code: no dot
- Not recommended for use with bolted clamps

**Approvals**

- Meets 21 CFR 177.1550
- Passed U.S.P. Class VI Cytotoxicity testing



Type 1 - Standard  
1/2" - 3/4"



Type 1 - Standard  
1" and larger



NOTE: PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration, and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained. Visit [dixonvalve.com](http://dixonvalve.com) for sizing charts.

**Metal and X-ray Detectable Clamp Gaskets**



Type 1 - Standard  
1/2" - 3/4"



Type 1 - Standard  
1" and larger

**Materials**

- Metal detectable gaskets are impregnated with stainless steel particles, the addition of stainless steel allows a gasket or gasket pieces to be found with metal detection equipment

**Nitrile Rubber - Metal and X-ray Detectable Clamp Gaskets**

**Feature**

- Color code: two blue dots and one red dot

**Approval**

- Meets 21CFR 177.2600

NOTE: Also available in red, yellow, green, and purple

Size	Black Part #	Blue Part #
1/2"	42MP-UZ50	42MP-UZ50BL
3/4"	42MP-UZ75	42MP-UZ75BL
1"	40MP-UZ100	40MP-UZ100BL
1-1/2"	40MP-UZ150	40MP-UZ150BL
2"	40MP-UZ200	40MP-UZ200BL
2-1/2"	40MP-UZ250	40MP-UZ250BL
3"	40MP-UZ300	40MP-UZ300BL
4"	40MP-UZ400	40MP-UZ400BL
5"	40MP-UZ500	40MP-UZ500BL
6"	40MP-UZ600	40MP-UZ600BL
8"	40MP-UZ800	40MP-UZ800BL
10"	40MP-UZ1000	40MP-UZ1000BL
12"	40MP-UZ1200	40MP-UZ1200BL

**EPDM - Metal and X-ray Detectable Clamp Gaskets**

**Feature**

- Color code: two blue dots and three green dots

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P Class VI Cytotoxicity testing

NOTE: Also available in red, yellow, and green

Size	Black Part #	Blue Part #
1/2"	42MP-EZ50	42MP-EZ50BL
3/4"	42MP-EZ75	42MP-EZ75BL
1"	40MP-EZ100	40MP-EZ100BL
1-1/2"	40MP-EZ150	40MP-EZ150BL
2"	40MP-EZ200	40MP-EZ200BL
2-1/2"	40MP-EZ250	40MP-EZ250BL
3"	40MP-EZ300	40MP-EZ300BL
4"	40MP-EZ400	40MP-EZ400BL
6"	40MP-EZ600	40MP-EZ600BL
8"	40MP-EZ800	40MP-EZ800BL
10"	40MP-EZ1000	40MP-EZ1000BL

**FKM - Metal and X-ray Detectable Clamp Gaskets**

**Feature**

- Color code: two blue dots, one white dot, and one yellow dot

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P Class VI Cytotoxicity testing

NOTE: Also available in red, and blue

Size	Black Part #
1/2"	42MP-SFYZ50
3/4"	42MP-SFYZ75
1"	40MP-SFYZ100
1-1/2"	40MP-SFYZ150
2"	40MP-SFYZ200
2-1/2"	40MP-SFYZ250
3"	40MP-SFYZ300
4"	40MP-SFYZ400
6"	40MP-SFYZ600

**Silicone - Metal and X-ray Detectable Clamp Gaskets**

**Feature**

- Color code: two blue dots and one pink dot

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P Class VI Cytotoxicity testing

Size	Blue Part #	Red Part #
1/2"	42MP-XZ50BL	42MP-XZ50RD
3/4"	42MP-XZ75BL	42MP-XZ75RD
1"	40MP-XZ100BL	40MP-XZ100RD
1-1/2"	40MP-XZ150BL	40MP-XZ150RD
2"	40MP-XZ200BL	40MP-XZ200RD
2-1/2"	40MP-XZ250BL	40MP-XZ250RD
3"	40MP-XZ300BL	40MP-XZ300RD
4"	40MP-XZ400BL	40MP-XZ400RD
6"	40MP-XZ600BL	40MP-XZ800RD
8"	40MP-XZ800BL	40MP-XZ1000RD

Visit [dixonvalve.com](http://dixonvalve.com) for sizing charts.

## Flanged Clamp Gaskets

### Flanged Clamp Gaskets - Black

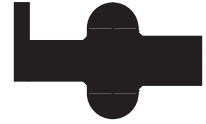
Size	Nitrile Rubber Part #
1"	40MPF-U100
1-1/2"	40MPF-U150
2"	40MPF-U200
2-1/2"	40MPF-U250
3"	40MPF-U300
4"	40MPF-U400
6"	40MPF-U600
8"	40MPF-U800
10"	40MPF-U1000
12"	40MPF-U1200

**Feature**

- Color code: one red dot

**Approval**

- Meets 21CFR 177.2600



Type 2 - Flanged  
1" and larger

### Flanged Clamp Gaskets - White

Size	Nitrile Rubber Part #
1"	40MPF-UW100
1-1/2"	40MPF-UW150
2"	40MPF-UW200
2-1/2"	40MPF-UW250
3"	40MPF-UW300
4"	40MPF-UW400
6"	40MPF-UW600
8"	40MPF-UW800
10"	40MPF-UW1000
12"	40MPF-UW1200

**Features**

- Color code: one red dot
- Peroxide cured

**Approval**

- Meets 21CFR 177.2600



Type 2 - Flanged  
1" and larger

### Flanged Clamp Gaskets - Black

Size	EPDM Part #
1"	40MPF-E100
1-1/2"	40MPF-E150
2"	40MPF-E200
2-1/2"	40MPF-E250
3"	40MPF-E300
4"	40MPF-E400
6"	40MPF-E600
8"	40MPF-E800
10"	40MPF-E1000
12"	40MPF-E1200

**Features**

- Color code: three green dots
- Peroxide cured

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

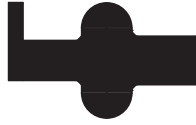


Type 2 - Flanged  
1" and larger

Visit [dixonvalve.com](http://dixonvalve.com) for sizing charts.

## Clamp Flanged Gaskets

### Flanged Clamp Gaskets - Black



Type 2 - Flanged  
1" and larger

**Features**

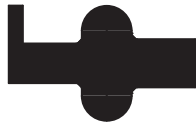
- Color code: one white dot, one yellow dot
- Not recommended for use with bolted clamps

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	FKM Part #
1"	40MPF-SFY100
1-1/2"	40MPF-SFY150
2"	40MPF-SFY200
2-1/2"	40MPF-SFY250
3"	40MPF-SFY300
4"	40MPF-SFY400
6"	40MPF-SFY600
8"	40MPF-SFY800
10"	40MPF-SFY1000
12"	40MPF-SFY1200

### Flanged Clamp Gaskets - White



Type 2 - Flanged  
1" and larger

**Features**

- Color code: one pink dot
- Peroxide cured
- Not recommended for use with bolted clamps

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	Silicone Part #
1"	40MPF-XW100
1-1/2"	40MPF-XW150
2"	40MPF-XW200
2-1/2"	40MPF-XW250
3"	40MPF-XW300
4"	40MPF-XW400
6"	40MPF-XW600
8"	40MPF-XW800
10"	40MPF-XW1000
12"	40MPF-XW1200

### Flanged Clamp Gaskets - Clear



Type 2 - Flanged  
1" and larger

**Features**

- Color code: no dot
- Platinum cured
- Not recommended for use with bolted clamps

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	Silicone Part #
1"	40MPF-XCPL100
1-1/2"	40MPF-XCPL150
2"	40MPF-XCPL200
2-1/2"	40MPF-XCPL250
3"	40MPF-XCPL300
4"	40MPF-XCPL400
6"	40MPF-XCPL600
8"	40MPF-XCPL800
10"	40MPF-XCPL1000

Visit [dixonvalve.com](http://dixonvalve.com) for sizing charts

## Clamp Mesh Screened Gaskets

### Mesh Screen Clamp Gaskets -316 screen

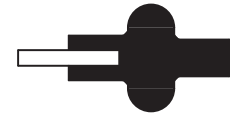
Size	Nitrile Rubber Part #
1"	40MPS-U100
1-1/2"	40MPS-U150
2"	40MPS-U200
2-1/2"	40MPS-U250
3"	40MPS-U300
4"	40MPS-U400

**Feature**

- Color code: one red dot

**Approval**

- Meets 21CFR 177.2600



Type 3 - Mesh

### Mesh Screen Clamp Gaskets - 316 screen

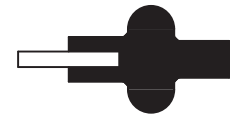
Size	EPDM Part #
1"	40MPS-E100
1-1/2"	40MPS-E150
2"	40MPS-E200
2-1/2"	40MPS-E250
3"	40MPS-E300
4"	40MPS-E400

**Feature**

- Color code: three green dot
- Peroxide cured

**Approval**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing



Type 3 - Mesh

### Mesh Screen Clamp Gaskets - 316 screen

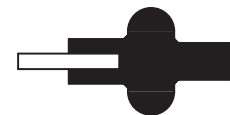
Size	FKM Part #
1"	40MPS-SFY100
1-1/2"	40MPS-SFY150
2"	40MPS-SFY200
2-1/2"	40MPS-SFY250
3"	40MPS-SFY300
4"	40MPS-SFY400

**Feature**

- Color code: one white dot

**Approval**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing



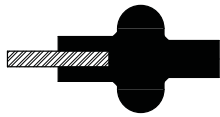
Type 3 - Mesh

NOTE: For other sizes and configurations, contact Dixon Sanitary at 800.789.1718

Visit [dixonvalve.com](http://dixonvalve.com) for sizing charts

## Perforated Clamp Gaskets

### Perforated Clamp Gaskets - .033" holes



Type 3 - Perforated

**Feature**

- Color code: one red dot

**Material**

- Perforated metal disc 316 stainless steel sheet

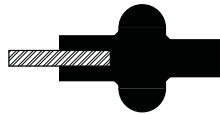
**Approval**

- Meets 21CFR 177.2600

Size	Nitrile Rubber Part #
1"	40MP-UP100
1-1/2"	40MP-UP150
2"	40MP-UP200
2-1/2"	40MP-UP250
3"	40MP-UP300
4"	40MP-UP400

## Orifice Clamp Gaskets

### Orifice Clamp Gaskets - .125" hole



Type 3

**Feature**

- Color code: one red dot

**Material**

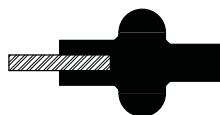
- 316 stainless steel sheet

**Approval**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	Nitrile Rubber Part #
1"	A80MP-U100
1-1/2"	A80MP-U150
2"	A80MP-U200
2-1/2"	A80MP-U250
3"	A80MP-U300
4"	A80MP-U400

### Orifice Clamp Gaskets - .125" hole



Type 3

**Feature**

- Color code: one white dot

**Material**

- 316 stainless steel sheet

**Approval**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	FKM Part #
1"	A80MP-SFY100
1-1/2"	A80MP-SFY150
2"	A80MP-SFY200
2-1/2"	A80MP-SFY250
3"	A80MP-SFY300
4"	A80MP-SFY400

NOTE: For other sizes and configurations, contact Dixon Sanitary at 800.789.1718

## Envelope Clamp Gaskets

### Envelope Clamp Gaskets with EPDM Filler

Size	PTFE Part #
1/2"	42MP-GRE50
3/4"	42MP-GRE75
1"	40MP-GRE100
1-1/2"	40MP-GRE150
2"	40MP-GRE200
2-1/2"	40MP-GRE250
3"	40MP-GRE300
4"	40MP-GRE400
6"	40MP-GRE600
8"	40MP-GRE800

#### Features

- Color code: usually not marked
- Peroxide cured EPDM

#### Approvals

- Meets 21CFR 177.1550



### Envelope Clamp Gaskets with FKM Filler

Size	PTFE Part #
1/2"	42MP-GR50
3/4"	42MP-GR75
1"	40MP-GR100
1-1/2"	40MP-GR150
2"	40MP-GR200
2-1/2"	40MP-GR250
3"	40MP-GR300
4"	40MP-GR400
6"	40MP-GR600
8"	40MP-GR800

#### Features

- Color code: usually not marked
- Bisphenol AF cured FKM

#### Approvals

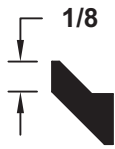
- Meets 21CFR 177.1550
- PTFE Passed U.S.P. Class VI Cytotoxicity testing



NOTE: PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration, and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained.

## Bevel Seat Gaskets

### Bevel Seat Gaskets - Black



**Feature**

- Color code: one red dot

**Approval**

- Meets 21CFR 177.2600

Size	Nitrile Rubber Part #
1"	40BS-O100
1-1/2"	40BS-O150
2"	40BS-O200
2-1/2"	40BS-O250
3"	40BS-O300
4"	40BS-O400

### Flat Bevel Seat Gaskets - Black



**Feature**

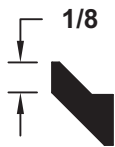
- Color code: one red dot

**Approval**

- Meets 21CFR 177.2600

Size	Nitrile Rubber Part #
1"	40BS-F100
1-1/2"	40BS-F150
2"	40BS-F200
2-1/2"	40BS-F250
3"	40BS-F300
4"	40BS-F400

### Bevel Seat Gaskets - Black



**Features**

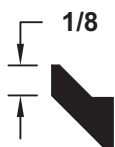
- Color code: three green dots
- Peroxide cured

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	EPDM Part #
1"	40BS-E100
1-1/2"	40BS-E150
2"	40BS-E200
2-1/2"	40BS-E250
3"	40BS-E300
4"	40BS-E400

### Bevel Seat Gaskets - Black



**Feature**

- Color code: one white dot and one yellow dot

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	FKM Part #
1"	40BS-Y100
1-1/2"	40BS-Y150
2"	40BS-Y200
2-1/2"	40BS-Y250
3"	40BS-Y300
4"	40BS-Y400

NOTE: PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained.



Visit [dixonvalve.com](http://dixonvalve.com) for sizing charts

## Bevel Seat Gaskets

### Bevel Seat Gaskets - White

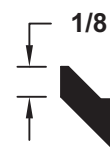
Size	Silicone Part #
1"	40BS-X100
1-1/2"	40BS-X150
2"	40BS-X200
2-1/2"	40BS-X250
3"	40BS-X300
4"	40BS-X400

#### Features

- Color code: no dot
- Peroxide cured

#### Approvals

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing



### Bevel Seat Gaskets - White

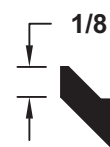
Size	PTFE Part #
1"	40BS-S100
1-1/2"	40BS-S150
2"	40BS-S200
2-1/2"	40BS-S250
3"	40BS-S300
4"	40BS-S400

#### Feature

- Color code: no dot

#### Approvals

- Meets 21CFR 177.1550
- Passed U.S.P. Class VI Cytotoxicity testing



### Bevel Seat Gaskets - White

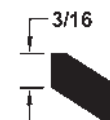
Size	Heavy PTFE Part #
1"	40BS-H100
1-1/2"	40BS-H150
2"	40BS-H200
2-1/2"	40BS-H250
3"	40BS-H300
4"	40BS-H400

#### Feature

- Color code: no dot

#### Approvals

- Meets 21CFR 177.1550
- Passed U.S.P. Class VI Cytotoxicity testing



PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration, and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained.



## I-Line Gaskets

### I-Line Gaskets - Black 3/32"



**Feature**

- Color code: one red dot

**Approval**

- Meets 21CFR 177.2600

Size	Nitrile Rubber Part #
1"	40IH100
1-1/2"	40IH150
2"	40IH200
2-1/2"	40IH250
3"	40IH300
4"	40IH400
6"	40IH600
8"	40IH800

### I-Line Gaskets - White 3/32"



**Features**

- Color code: three green dots
- Peroxide cured

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	EPDM Part #
1"	40IE100
1-1/2"	40IE150
2"	40IE200
2-1/2"	40IE250
3"	40IE300
4"	40IE400
6"	40IE600
8"	40IE800

### I-Line Gaskets - White 1/16"



**Features**

- Color code: three green dots
- Peroxide cured

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	EPDM Part #
1-1/2"	40IE15016
2"	40IE20016
2-1/2"	40IE25016
3"	40IE30016
4"	40IE40016
6"	40IE60016
8"	40IE80016

### I-Line Gaskets - 1/16"



**Features**

- Color code: one white dot and one yellow dot
- Peroxide cured

**Approvals**

- Meets 21CFR 177.1550
- Passed U.S.P. Class VI Cytotoxicity testing

Size	FKM Part #
1"	40IV10016
1-1/2"	40IV15016
2"	40IV20016
2-1/2"	40IV25016
3"	40IV30016
4"	40IV40016
6"	40IV60016
8"	40IV80016

### I-Line Gaskets - 3/32"



**Feature**

- Color code: one white dot and one yellow dot

**Approvals**

- Meets 21CFR 177.1550
- Passed U.S.P. Class VI Cytotoxicity testing

Size	FKM Part #
1"	40IV100
1-1/2"	40IV150
2"	40IV200
2-1/2"	40IV250
3"	40IV300
4"	40IV400
6"	40IV600
8"	40IV800

## I-Line Gaskets

### I-Line Gaskets - 1/16"

Size	PTFE Part #
1"	40IT100
1-1/2"	40IT150
2"	40IT200
2-1/2"	40IT250
3"	40IT300
4"	40IT400
6"	40IT600
8"	40IT800

**Feature**

- Color code: no dot

**Approvals**

- Meets 21CFR 177.1550
- Passed U.S.P. Class VI Cytotoxicity testing



PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained.



## Q-Line Gaskets

### Q-Line Gaskets - Black

Size	Nitrile Rubber Part #
1"	40QH100
1-1/2"	40QH150
2"	40QH200
2-1/2"	40QH250
3"	40QH300
4"	40QH400

**Feature**

- Color code: one red dot

**Approval**

- Meets 21CFR 177.2600



### Q-Line Gaskets - White

Size	PTFE Part #
1"	40QT100
1-1/2"	40QT150
2"	40QT200
2-1/2"	40QT250
3"	40QT300
4"	40QT400

**Feature**

- Color code: no dot

**Approvals**

- Meets 21CFR 177.1550
- Passed U.S.P. Class VI Cytotoxicity testing



PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration, and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained.



John Perry Gaskets

John Perry Gaskets

**Feature**

- Color code: one red dot

**Approval**

- Meets 21CFR 177.2600



Size	Nitrile Rubber 80 Duro Part #
1"	40JP-U100
1-1/2"	40JP-U150
2"	40JP-U200
2-1/2"	40JP-U250
3"	40JP-U300
4"	40JP-U400

John Perry Gaskets

**Features**

- Color code: three green dots
- Peroxide cured

**Approvals**

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing



Size	EPDM Part #
1"	40JP-E100
1-1/2"	40JP-E150
2"	40JP-E200
2-1/2"	40JP-E250
3"	40JP-E300
4"	40JP-E400

## John Perry Gaskets

### John Perry Gaskets

#### Features

- Color code: one white dot and one yellow dot
- Peroxide cured



#### Approvals

- Meets 21CFR 177.2600
- Passed U.S.P. Class VI Cytotoxicity testing

Size	FKM Part #
1"	40JP-SFY100
1-1/2"	40JP-SFY150
2"	40JP-SFY200
2-1/2"	40JP-SFY250
3"	40JP-SFY300
4"	40JP-SFY400

### John Perry Gaskets

#### Feature

- Color code: no dot



#### Approvals

- Meets 21CFR 177.1550
- Passed U.S.P. Class VI Cytotoxicity testing

Size	Virgin PTFE Part #
1"	40JP-G100
1-1/2"	40JP-G150
2"	40JP-G200
2-1/2"	40JP-G250
3"	40JP-G300
4"	40JP-G400

PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained.



European Fittings - Gaskets

DIN Euro Gaskets - Black

Feature

- Color code: one red dot

Specification

- DIN 11851

Approval

- Meets 21CFR 177.2600

Nominal Size	I.D. (mm)	O.D. (mm)	Nitrile Rubber Part #
1"	29.97	39.88	40MP-U100DIN
1-1/2"	41.91	52.07	40MP-U150DIN
2"	54.10	64.01	40MP-U200DIN
2-1/2"	71.12	81.03	40MP-U250DIN
3"	85.09	95.00	40MP-U300DIN
4"	103.89	114.05	40MP-U400DIN

SMS Euro Gaskets - Black

Features

- Color code: one red dot
- L-style

Approval

- Meets 21CFR 177.2600

Nominal Size	I.D. (mm)	O.D. (mm)	Nitrile Rubber Part #
1"	24.89	32.00	40MP-U100SMS
1-1/2"	37.49	48.00	40MP-U150SMS
2"	50.80	61.00	40MP-U200SMS
2-1/2"	63.50	73.40	40MP-U250SMS
3"	75.95	86.10	40MP-U300SMS
4"	103.89	114.00	40MP-U400SMS

**European Gaskets**  
**DIN Euro Gaskets - Black**

**Feature**

- Color code: three green dots

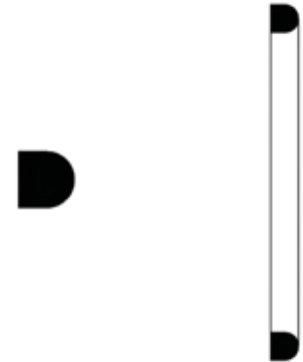
**Specification**

- DIN 11851

**Approval**

- Meets 21CFR 177.2600

Nominal Size	I.D. (mm)	O.D. (mm)	EPDM Part #
1"	29.97	39.88	40MP-E100DIN
1-1/2"	41.91	52.07	40MP-E150DIN
2"	54.10	64.01	40MP-E200DIN
2-1/2"	71.12	81.03	40MP-E250DIN
3"	85.09	95.00	40MP-E300DIN
4"	103.89	114.05	40MP-E400DIN



**SMS Euro Gaskets - Black**

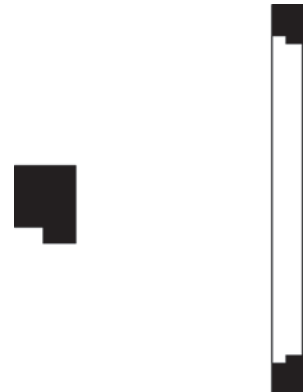
**Features**

- Color code: three green dots
- L-style

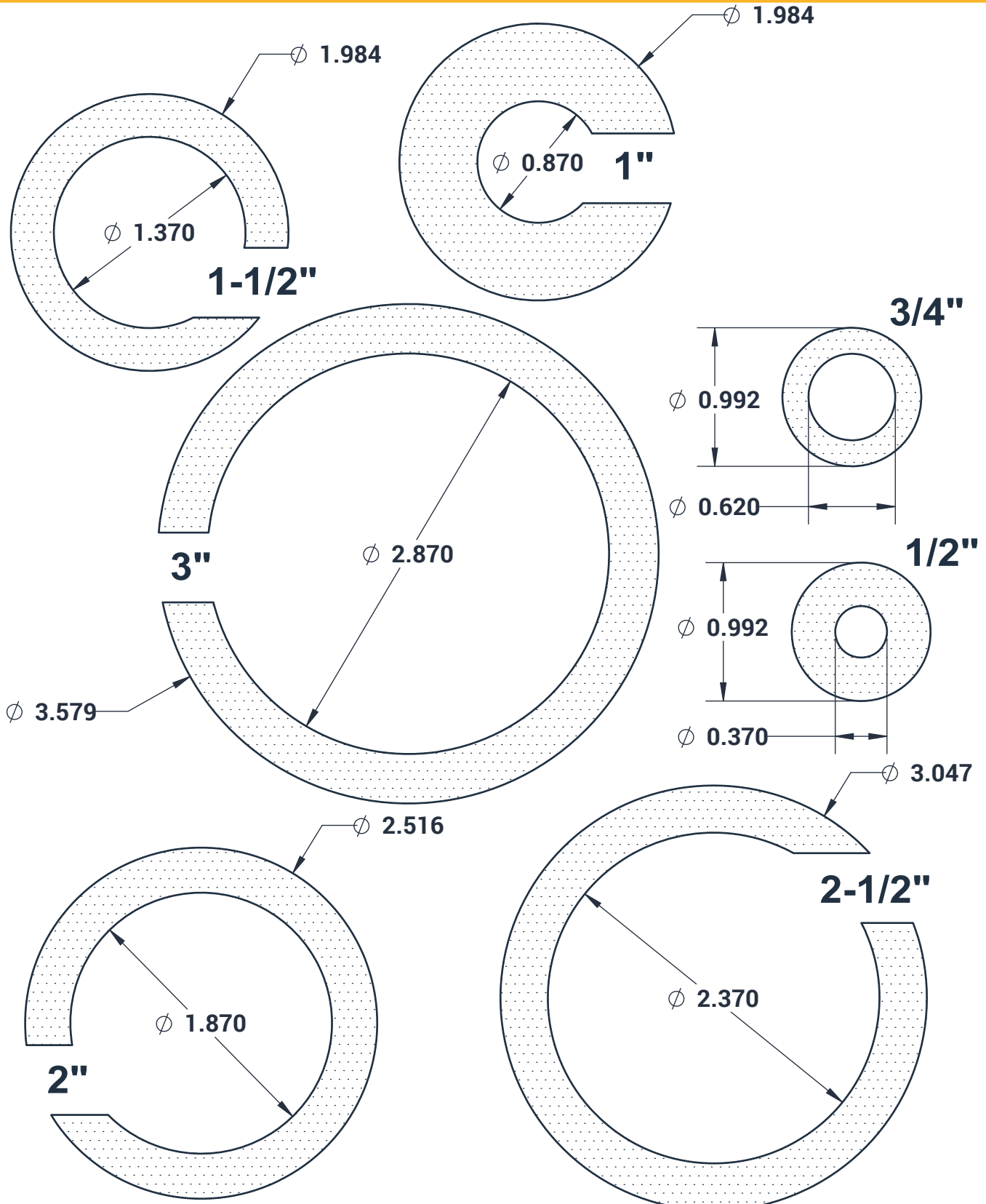
**Approval**

- Meets 21CFR 177.2600

Nominal Size	I.D. (mm)	O.D. (mm)	EPDM Part #
1"	24.89	32.00	40MP-E100SMS
1-1/2"	37.49	48.00	40MP-E150SMS
2"	50.80	61.00	40MP-E200SMS
2-1/2"	63.50	73.40	40MP-E250SMS
3"	75.95	86.10	40MP-E300SMS
4"	103.89	114.00	40MP-E400SMS



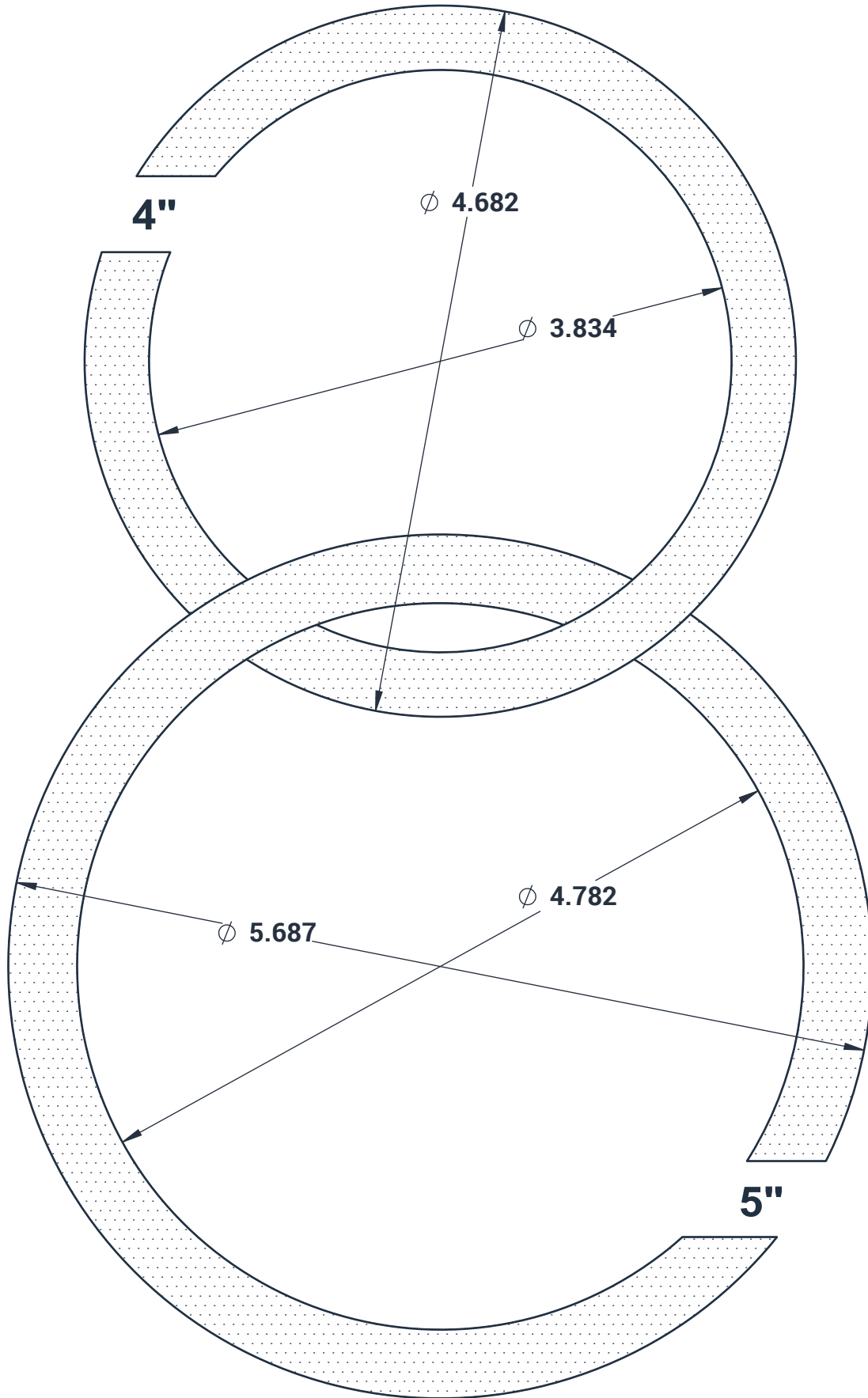
Clamp Fittings and Gasket Sizing Guide



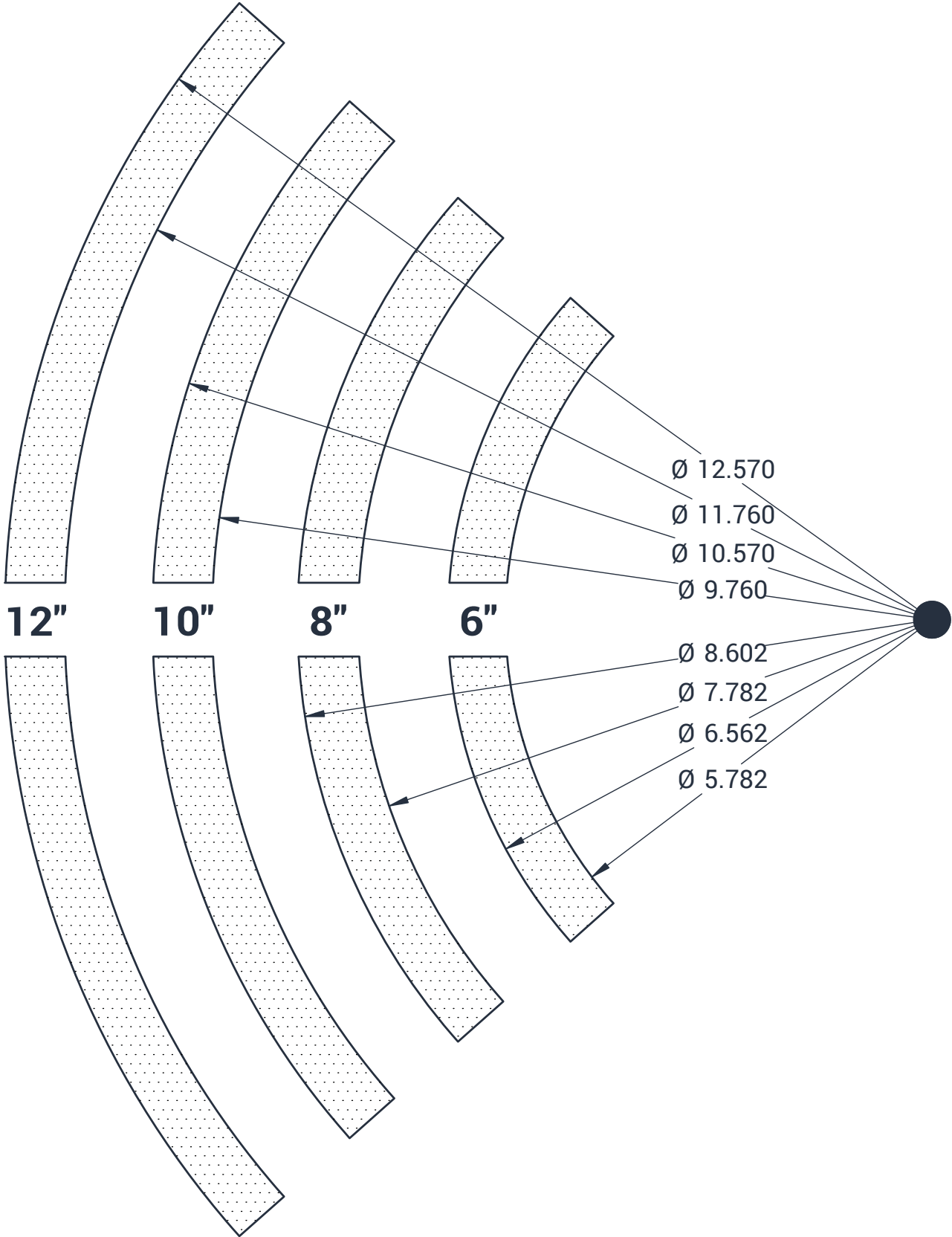
Sanitary Size	O.D. of Clamp End (in)	I.D. of Fitting (in)
1/2"	0.992	0.370
3/4"	0.992	0.620
1"	1.984	0.870
1-1/2"	1.984	1.370
2"	2.516	1.870
2-1/2"	3.047	2.370

Sanitary Size	O.D. of Clamp End (in)	I.D. of Fitting (in)
3"	3.579	2.870
4"	4.682	3.834
6"	6.562	5.782
8"	8.602	7.782
10"	10.570	9.782
12"	12.570	11.760

### Clamp Fittings and Gasket Sizing Guide



Clamp Fittings and Gasket Sizing Guide



## Dixon Sanitary Tubing



Tube O.D.	Nominal Wall Thickness (in)	Wt. Pounds per Ft.
1/2"	.065	0.31
3/4"	.065	0.49
1"	.065	0.67
1-1/2"	.065	1.02
2"	.065	1.36
2-1/2"	.065	1.71
3"	.065	2.06
4"	.083	3.45
6"	.109	6.92

**Size**

- 1/2" - 6" O.D. tube

**Features**

- Surcharges change MONTHLY
- Tubing available in 20' lengths only
- Broken box charges apply
- Tubing only ships via truck
- Tubing is NOT returnable
- Call Dixon Sanitary at 800.789.1718 for pricing, full freight allowance, and other available sizes

**Materials**

- G = 304 stainless steel
- R = 316L stainless steel
- 3A sanitary finish I.D. and O.D.; Typical 32Ra
- Unpolished
- BPE finishes:
  - SF1: 20Ra I.D., 32Ra O.D.
  - SF4: 15Ra I.D., 32Ra O.D.

### Operating Pressures

304 Stainless Steel Tube

Tube O.D.	Nominal Wall Thickness (in)	Pressure (PSI)		
		Working	Yield	Burst
1/2"	.065	4,870	7,800	19,500
3/4"	.065	3,250	5,200	13,000
1"	.065	2,440	3,900	9,800
1-1/2"	.065	1,630	2,600	6,500
2"	.065	1,220	2,000	4,900
2-1/2"	.065	980	1,600	3,900
3"	.065	810	1,300	3,300
4"	.083	780	1,200	3,100
6"	.109	680	1,090	2,720

316L Stainless Steel Tube

Tube O.D.	Nominal Wall Thickness (in)	Pressure (PSI)		
		Working	Yield	Burst
1/2"	.065	3,250	6,500	19,500
3/4"	.065	2,167	4,330	13,000
1"	.065	2,280	3,300	9,100
1-1/2"	.065	1,520	2,200	6,100
2"	.065	1,140	1,600	4,600
2-1/2"	.065	910	1,300	3,600
3"	.065	760	1,100	3,000
4"	.083	730	1,000	2,900
6"	.109	635	900	2,540

The pressures shown in the table above are calculated using Barlow's Formula and the following properties:

- Material: 304 stainless steel
- Yield strength (PSI): 30,000
- Tensile strength (PSI): 75,000

Working Pressure = 1/4 of Burst Pressure, these calculate from -20°F to 100°F (-29°C to 38°C).

The pressures shown in the table above are calculated using Barlow's Formula and the following properties:

- Material: 316L stainless steel
- Yield strength (PSI): 25,000
- Tensile strength (PSI): 70,000

Working Pressure = 1/4 of Burst Pressure, these calculate from -20°F to 100°F (-29°C to 38°C).



Pipe size and tube O.D. size materials are not interchangeable



### ASTM-A270 Polished I.D. and O.D. Tubing

**Feature**

- ASTM-A270-02 welded austenitic stainless steel sanitary tubing



Size	Nominal Wall Thickness (in)	Box Quantity/ Sticks	Tubing Type	316L Stainless Steel Part #	304L Stainless Steel Part #
1/2"	0.065	100' / 5	Seamless	A270-R50P	--
3/4"	0.065	100' / 5	Seamless	A270-R75P	--
1"	0.065	280' / 14	Laser Weld	A270-R100P	A270-G100P
1-1/2"	0.065	340' / 17	Laser Weld	A270-R150P	A270-G150P
2"	0.065	340' / 17	Laser Weld	A270-R200P	A270-G200P
2-1/2"	0.065	220' / 11	Laser Weld	A270-R250P	A270-G250P
3"	0.065	220' / 11	Laser Weld	A270-R300P	A270-G300P
4"	0.065	100' / 5	Laser Weld	--	A270.065-G400P
4"	0.083	100' / 5	Laser Weld	A270.083-R400P	A270.083-G400P
5"	0.083	40' / 2	Passivated Laser Weld	--	A270.083-G500P
6"	0.083	40' / 2	Passivated Laser Weld	--	A270.083-G600P
6"	0.109	40' / 2	Passivated Laser Weld	A270.109-R600P	A270.109-G600P
8"	0.109	40' / 2	Passivated Laser Weld	A270-R800P	A270-G800P

### ASTM-A269 Unpolished I.D. and O.D. Tubing

**Feature**

- ASTM-A269-02 welded austenitic stainless steel sanitary tubing for general service



Size	Nominal Wall Thickness (in)	Box Quantity/ Sticks	Tubing Type	316L Stainless Steel Part #	304L Stainless Steel Part #
1"	0.065	280' / 14	Laser Weld	A269-R100U	A269-G100U
1-1/2"	0.065	340' / 17	Laser Weld	A269-R150U	A269-G150U
2"	0.065	340' / 17	Laser Weld	A269-R200U	A269-G200U
2-1/2"	0.065	220' / 11	Laser Weld	A269-R250U	A269-G250U
3"	0.065	220' / 11	Laser Weld	A269-R300U	A269-G300U
4"	0.065	100' / 5	Laser Weld	--	A269.065-G400U
4"	0.083	100' / 5	Laser Weld	A269.083-R400U	A269.083-G400U
5"	0.083	40' / 2	Passivated Laser Weld	--	A269.083-G500U
6"	0.083	40' / 2	Passivated Laser Weld	--	A269.083-G600U
6"	0.109	40' / 2	Passivated Laser Weld	A269.109-R600U	A269.109-G600U
8"	0.109	40' / 2	Passivated Laser Weld	A269-R800U	A269-G800U

## ASTM-A270 BPE Polished I.D. and O.D. Polished Tubing

**Feature**

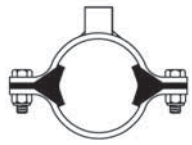
- ASTM-A270-S2 laser welded tubing

Size	Nominal Wall Thickness (in)	Box Quantity/ Sticks	Tubing Type	Surface Finish	
				SF1	SF4
1/2"	0.065	100' / 5	Seamless	A270-R050PL	A270-050PM
3/4"	0.065	100' / 5	Seamless	A270-R075PL	A270-075PM
1"	0.065	280' / 14	Laser Weld	A270-R100PL	A270-100PM
1-1/2"	0.065	340' / 17	Laser Weld	A270-R150PL	A270-150PM
2"	0.065	340' / 17	Laser Weld	A270-R200PL	A270-200PM
2-1/2"	0.065	220' / 11	Laser Weld	A270-R250PL	A270-250PM
3"	0.065	220' / 11	Laser Weld	A270-R300PL	A270-300PM
4"	0.083	100' / 5	Laser Weld	A270-R400PL	A270-400PM
6"	0.109	40' / 2	Passivated Laser Weld	A270-R600PL	A270-600PM

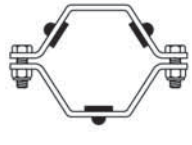


PM Finish - Mechanical polish - 20Ra maximum I.D., 32Ra maximum O.D.  
 PL Finish- Electropolish - 15Ra maximum I.D., 32Ra maximum O.D.

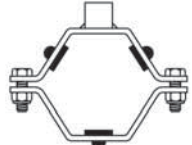
## Dixon Sanitary Tube Hangers



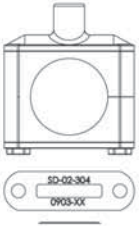
round hanger with coupler



hex hanger



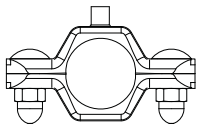
hex hanger with coupler



block hanger



hex hanger with sleeve



Process hex hanger

### Sizes

- 1/2" - 12" O.D. tube

### Materials

- Hanger base: 304 stainless steel
- Hanger inserts:
  - Rubber rated to 230°F (110°C)
  - ABS (sleeve) rated to 230°F (110°C)
  - FKM rated to 400°F (204°C)
  - Polypropylene rated to 212°F (100°C)
  - Polysulfone rated to 325°F (163°C)
  - Silicone rated to 320°F (160°C)

### Primary Markets

- Found in the food processing, beverage, dairy, personal care, pet products, wineries and breweries, oil extraction, semi-conductor, and industrial markets

### Support Recommendations

Hangers and/or supports should be spaced as far apart as economically possible, with consideration to assure that the sag of the pipe between supports is within limits that will permit drainage and also avoid excessive bending stresses from concentrated loads such as valves and in-line equipment.

Each side of valves or heavy equipment should have supports as close as possible.

Spacing indicated below may differ from that listed in ANSI/MSS SP-69 & SP-58. Additional hangers may be necessary to adequately support concentrated loads such as valves, flanges, or instruments.

Please note that these are just estimates and it is the responsibility of the installer to determine what is sufficient to support the line loads. These are only estimates based on industry information.

### Tube Hanger Spacing

Tube Size	Maximum Spacing (ft)
1/2" - 3/4"	6
1" - 1-1/2"	8
2" - 3"	10
4" - 12"	12

## Tube Hex Hangers 24TH-Series Threadless Hanger



The 24TH-series threadless hanger from Dixon introduces a new level of efficiency and hygienic design to the hanger market by incorporating a snap-secure latch system, making installation 10x faster while eliminating the standard thread design.

**Features**

- Partial open position allows for adjustment of tubing prior to final lock in
- Save time on installation with no tools needed
- Threadless design and bacteria-resistant architecture
- The snap-in insert assembly makes this hanger easy to assemble
  - Optionally compatible with our standard sleeves (inserts removed)
- Meets MSS SP-58 load ratings

**Specifications**

- Materials of construction
  - Top and bottom halves and latch: 304 stainless steel
  - Hook: 304 stainless steel spring wire
  - Plastic inserts (qty 4): polypropylene
  - Plastic sleeve (qty 1): polypropylene

NOTE: The polypropylene inserts and sleeve are not to be used together



Size	Inserts and Hanger Part #	Sleeve and Hanger Part #	Only Insert Part #	Only Sleeve Part #
1"	24TH-P10	24TH-S10	24TH-PC	24TH-PS-100
1-1/2"	24TH-P15	24TH-S15		24TH-PS-150
2"	24TH-P20	24TH-S20		24TH-PS-200
3"	24TH-P30	24TH-S30		24TH-PS-300
4"	24TH-P40	24TH-S30		24TH-PS-400

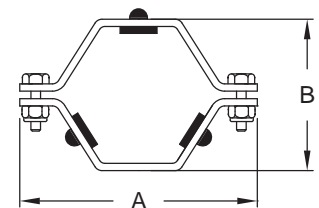
### Hex Hanger with Rubber Grommets - B24RG

**Specifications**

- All hex and round style hangers can be equipped with the following coupler options:
  - 3/8" NPT
  - all thread: 3/8"-16 or 1/2"-13
- Rubber grommets maximum temperature: **257°F (125°C)**



Tube O.D.	A (in)	B (in)	Grommet Qty	304 Stainless Steel Part #
1/2"	3.38	2.13	3	B24RG-G50
3/4"	3.38	2.13	3	B24RG-G75
1"	3.38	2.13	3	B24RG-G100
1-1/2"	3.75	2.13	3	B24RG-G150
2"	4.44	2.63	3	B24RG-G200
2-1/2"	4.94	3.13	3	B24RG-G250
3"	5.56	3.63	3	B24RG-G300
4"	6.63	4.50	4	B24RG-G400
5"	8.13	5.63	4	B24RG-G500
6"	9.19	6.63	5	B24RG-G600
8"	11.38	8.75	5	B24RG-G800
10"	14.50	10.50	6	B24RG-G1000
12"	16.63	12.63	6	B24RG-G1200



Tube Hex Hangers

Hex Hanger with Rubber Grommets - B24RGC

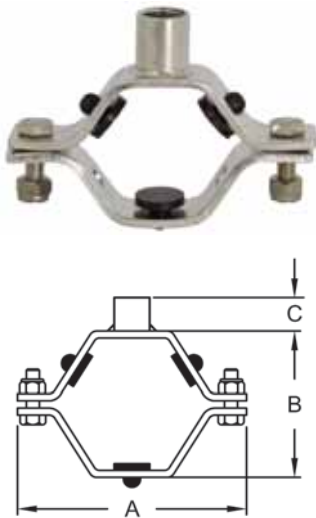
Features

- Coupler is all thread 3/8"-16
- Optional: 1/2"-13 all thread or 3/8" - 16 all thread

Specification

- Rubber grommets maximum temperature: 257°F (125°C)

3/8" NPT



Tube O.D.	A (in)	B (in)	C (in)	Grommet Qty	304 Stainless Steel Part #
1/2" - 3/4"	3.43	1.45	0.75	3	B24RGC-G75
1"	3.43	1.45	0.75	3	B24RGC-G100
1-1/2"	4.00	2.13	0.75	3	B24RGC-G150
2"	4.50	2.50	0.75	3	B24RGC-G200
2-1/2"	4.75	1.13	0.75	3	B24RGC-G250
3"	5.50	3.75	0.75	3	B24RGC-G300
4"	6.75	4.75	0.75	4	B24RGC-G400
6"	9.25	6.63	0.75	5	B24RGC-G600
8"	11.50	8.63	0.75	5	B24RGC-G800

3/8" - 16

Tube O.D.	A (in)	B (in)	C (in)	Grommet Qty	304 Stainless Steel Part #
1/2" - 3/4"	3.43	1.45	0.75	3	B24RGC16-G75
1"	3.43	1.45	0.75	3	B24RGC16-G100
1-1/2"	4.00	2.13	0.75	3	B24RGC16-G150
2"	4.50	2.50	0.75	3	B24RGC16-G200
2-1/2"	4.75	1.13	0.75	3	B24RGC16-G250
3"	5.50	3.75	0.75	3	B24RGC16-G300
4"	6.75	4.75	0.75	4	B24RGC16-G400
6"	9.25	6.63	0.75	5	B24RGC16-G600
8"	11.50	8.63	0.75	5	B24RGC16-G800

1/2"-13

Tube O.D.	A (in)	B (in)	C (in)	Grommet Qty	304 Stainless Steel Part #
1/2" - 3/4"	3.43	1.45	0.75	3	B24RGC13-G75
1"	3.43	1.45	0.75	3	B24RGC13-G100
1-1/2"	4.00	2.13	0.75	3	B24RGC13-G150
2"	4.50	2.50	0.75	3	B24RGC13-G200
2-1/2"	4.75	1.13	0.75	3	B24RGC13-G250
3"	5.50	3.75	0.75	3	B24RGC13-G300
4"	6.75	4.75	0.75	4	B24RGC13-G400
6"	9.25	6.63	0.75	5	B24RGC13-G600
8"	11.50	8.63	0.75	5	B24RGC13-G800

## Tube Hex Hangers

### Hex Hanger with FKM Grommets - B24RGSFY

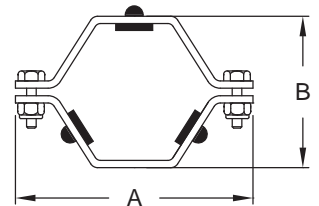
**Features**

- All hex and round style hangers can be equipped with the following coupler options:
  - 3/8" NPT
  - all thread: 3/8"-16 or 1/2"-13

**Specification**

- FKM grommets maximum temperature: **392°F (200°C)**

Tube O.D.	A (in)	B (in)	Grommet Qty	304 Stainless Steel Part #
1/2"	3.38	2.13	3	B24RGSFY-G50
3/4"	3.38	2.13	3	B24RGSFY-G75
1"	3.38	2.13	3	B24RGSFY-G100
1-1/2"	3.75	2.13	3	B24RGSFY-G150
2"	4.44	2.63	3	B24RGSFY-G200
2-1/2"	4.94	3.13	3	B24RGSFY-G250
3"	5.56	3.63	3	B24RGSFY-G300
4"	6.63	4.50	3	B24RGSFY-G400
6"	9.19	6.63	3	B24RGSFY-G600
8"	11.38	8.75	4	B24RGSFY-G800
10"	14.50	10.50	5	B24RGSFY-G1000
12"	16.63	12.63	5	B24RGSFY-G1200



### Nuts and Bolts - 13NHN

**Features**

- All sizes hex hangers with grommets and round hangers 1" to 4" use 13NHN-G100-600 fastener sets
- 1/2" and 3/4" round and sleeved hangers use 13NHN-G75 fastener sets
- (2) nuts and bolts supplied to a set

Size	Description	304 Stainless Steel Part #
1/2" - 3/4"	1/4"-20 x 3/4" bolt with nylock nut	13NHN-G75
1" - 12"	5/16"-18 x 1" bolt with nylock nut	13NHN-G100-600

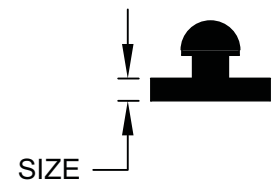


### Grommets - 13RG

**Specifications**

- Rubber grommets maximum temperature: **257°F (125°C)**
- High-temperature rubber grommets maximum temperature: **392°F (200°C)**

Size	Rubber Part #	High-Temp Rubber Part #
1/8" <sup>1</sup>	13RG18	13RGV18
1/4"	13RG14	13RGV14
1/2"	13RG12	13RGV12
3/8" <sup>2</sup>	13RG3/8	13RGV38
5/8"	13RG58	13RGV58



<sup>1</sup> For 1" hangers and larger

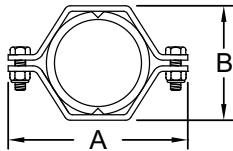
<sup>2</sup> For 1/2" and 3/4" hangers

## Tube Hex Hangers

### Hex Hanger with Polypropylene Sleeve - B24PS

**Specification**

- Polypropylene sleeve maximum temperature: 225°F (107°C)



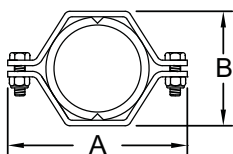
Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1/2"	2.80	1.15	B24PS-G50
3/4"	2.80	1.15	B24PS-G75
1"	3.43	1.45	B24PS-G100
1-1/2"	4.00	2.13	B24PS-G150
2"	4.50	2.50	B24PS-G200
2-1/2"	4.95	3.13	B24PS-G250
3"	5.50	3.75	B24PS-G300
4"	6.95	4.75	B24PS-G400
5"	8.06	5.63	B24PS-G500
6"	9.25	6.63	B24PS-G600
8"	11.50	8.63	B24PS-G800
10"	14.50	10.50	B24PS-G1000
12"	16.63	13.00	B24PS-G1200

NOTE: Metal detectable options available upon request

### Hex Hanger with High Temperature Polysulfone Sleeve - B24HS

**Specification**

- High temperature sleeve maximum temperature: 325°F (163°C)



Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1/2"	2.38	1.06	B24HS-G50
3/4"	2.63	1.19	B24HS-G75
1"	2.69	1.56	B24HS-G100
1-1/2"	3.63	2.13	B24HS-G150
2"	4.63	2.63	B24HS-G200
2-1/2"	4.81	3.13	B24HS-G250
3"	5.38	3.63	B24HS-G300
4"	6.63	4.63	B24HS-G400
6"	9.00	6.63	B24HS-G600

NOTE: Sleeve must be removed before welding

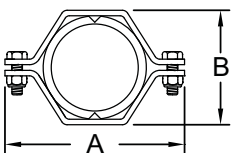
### Hex Hanger with Metal Detectable Sleeve - B24MS

**Specification**

- Deflection temperature @66 PSI: 215°F (101°C)

**Material**

- Sleeve: polypropylene



Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1/2"	2.25	1.06	B24MS-G50
3/4"	2.63	1.19	B24MS-G75
1"	3.38	1.56	B24MS-G100
1-1/2"	3.75	2.13	B24MS-G150
2"	4.44	2.63	B24MS-G200
2-1/2"	4.94	3.13	B24MS-G250
3"	5.56	3.63	B24MS-G300
4"	6.63	4.63	B24MS-G400
6"	9.19	6.63	B24MS-G600

## Tube Hex Hangers

### Sleeves - 13PS

**Specifications**

- Polypropylene sleeve maximum temperature: 225°F (107°C)
- High-temperature sleeve maximum temperature: 325°F (163°C)

Size	Polypropylene Part #	High-Temperature Part #
1/2"	13PS-50	13HS-50
3/4"	13PS-75	13HS-75
1"	13PS-100	13HS-100
1-1/2"	13PS-150	13HS-150
2"	13PS-200	13HS-200
2-1/2"	13PS-250	13HS-250
3"	13PS-300	13HS-300
4"	13PS-400	13HS-400
5"	13PS-500	---
6"	13PS-600	13HS-600
8"	13PS-800	---

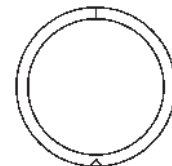
NOTE: Metal detectable options available upon request



Polypropylene



High Temperature



### Metal Detectable Sleeve - 13MS

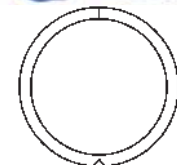
**Specification**

- Deflection temperature at 66 PSI: 215°F (101°C)

**Material**

- Sleeve: polypropylene

Size	Metal Detectable Sleeve Part #
1/2"	13MS-50
3/4"	13MS-75
1"	13MS-100
1-1/2"	13MS-150
2"	13MS-200
2-1/2"	13MS-250
3"	13MS-300
4"	13MS-400
6"	13MS-600



### Round Hanger with Nitrile Inserts - B24RPH

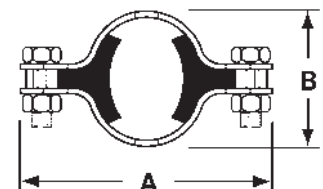
**Features**

- All hex and round style hangers can be equipped with the following coupler options: 3/8" NPT or all thread; 3/8"-16 or 1/2"-13 available upon request

**Specification**

- Nitrile inserts maximum temperature: 230°F (110°C)

Tube O.D.	A (in)	B (in)	304 Stainless Steel Part #
1/2"	2.75	1.13	B24RPH-G50
3/4"	2.75	1.13	B24RPH-G75
1"	3.31	1.50	B24RPH-G100
1-1/2"	3.81	2.00	B24RPH-G150
2"	4.25	2.56	B24RPH-G200
2-1/2"	5.00	3.00	B24RPH-G250
3"	5.50	3.56	B24RPH-G300
4"	6.50	4.69	B24RPH-G400



## Tube Block Hangers

### Applications

- Clean rooms and mechanical areas; not limited to: biotech, pharmaceutical, and food processing
- Low flow and low pressure systems with moderate vibration: WFI, SIP, CIP, process, utility, and instrument lines



### Sizes

- Support range: 1/2" - 4"; optional 6" - contact Dixon Sanitary at 800.789.1718

### Features

- Insulation envelope: reduced O.D. allows hanger to be buried under the insulation jacket
- ZERO PUDDLE silicone inserts raised geometry facilitates drainage of liquids on vertical/riser lines
- There are no exposed threads or openings in hardware plates

### Materials

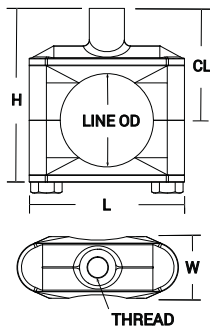
- ZERO PUDDLE silicone rubber insert are available with FDA and UL ratings
- Hardware: 304 standard option and 316 stainless steel available upon request

### Specifications

- Intermittent temperatures from -40°F to 320°F (-40°C to 160°C)
- Continuous temperatures from -20° to 285°F (-29°C to 140°C)

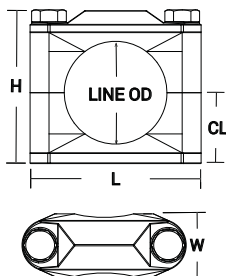
### Approvals

- All plates polished; bolts are cleaned and nuts are lubricated with FDA approved product
- Hanger threads match MSS SP-69 rod O.D. requirements



### Hang Plate Block Hangers - B24-HP

Tube O.D.	Line O.D.(in)	H (in)	L (in)	W (in)	CL (in)	Thread	304 Stainless Steel Part #
1/2"	.50	2.29	1.93	.75	.63	3/8"-16	B24-HP-G050
3/4"	.75	2.29	1.93	.75	.63	3/8"-16	B24-HP-G075
1"	1.00	2.29	1.96	.75	.63	3/8"-16	B24-HP-G100
1-1/2"	1.50	2.79	2.49	.75	.97	3/8"-16	B24-HP-G150
2"	2.00	3.29	2.99	.88	1.25	1/2"-13	B24-HP-G200
2-1/2"	2.50	4.43	3.36	.88	1.47	1/2"-13	B24-HP-G250
3"	3.00	5.18	3.99	.88	1.81	1/2"-13	B24-HP-G300
4"	4.00	6.24	5.10	1.00	2.28	5/8"-11	B24-HP-G400



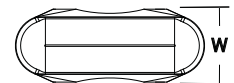
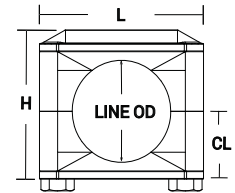
### Weld Plate Block Hangers - B24-WP

Tube O.D.	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	304 Stainless Steel Part #
1/2"	.50	1.73	1.93	.75	.79	B24-WP-G050
3/4"	.75	1.73	1.93	.75	.79	B24-WP-G075
1"	1.00	1.73	1.96	.75	.79	B24-WP-G100
1-1/2"	1.50	2.23	2.49	.75	1.03	B24-WP-G150
2"	2.00	2.75	2.99	.88	1.31	B24-WP-G200
2-1/2"	2.50	3.25	3.36	.88	1.55	B24-WP-G250
3"	3.00	3.97	3.99	.88	1.94	B24-WP-G300
4"	4.00	4.87	5.10	1.00	2.39	B24-WP-G400

## Tube Uni-Hinge Block Hangers

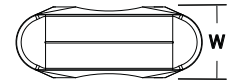
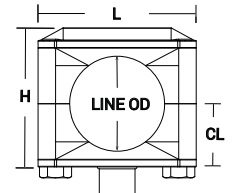
### Base Mount Block Hangers - B24-BM

Tube O.D.	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	304 Stainless Steel Part #
1/2"	.50	1.70	1.93	.75	.73	B24-BM-G050
3/4"	.75	1.70	1.93	.75	.73	B24-BM-G075
1"	1.00	1.70	1.93	.75	.73	B24-BM-G100
1-1/2"	1.50	2.19	2.49	.75	.97	B24-BM-G150
2"	2.00	2.69	2.99	.88	1.25	B24-BM-G200
2-1/2"	2.50	3.19	3.36	.88	1.49	B24-BM-G250
3"	3.00	3.97	3.99	.88	1.85	B24-BM-G300



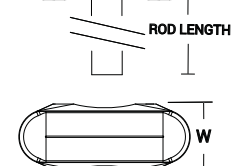
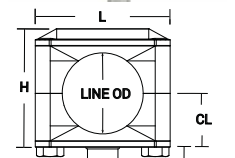
### Base Mount Block Hanger Threaded Couplings - B24-BMTC

Tube Size	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	Round Coupling		304 Stainless Steel Part #
						Height (in)	Thread	
1/2"	.50	1.70	1.93	.75	.73	.47	3/8"-16	B24-BMTC-G050
3/4"	.75	1.70	1.93	.75	.73	.47	3/8"-16	B24-BMTC-G075
1"	1.00	1.70	1.93	.75	.73	.47	3/8"-16	B24-BMTC-G100
1-1/2"	1.50	2.19	2.49	.75	.97	.47	3/8"-16	B24-BMTC-G150
2"	2.00	2.69	2.99	.88	1.25	.47	3/8"-16	B24-BMTC-G200
2-1/2"	2.50	3.19	3.36	.88	1.49	.59	1/2"-13	B24-BMTC-G250
3"	3.00	3.97	3.99	.88	1.85	.59	1/2"-13	B24-BMTC-G300

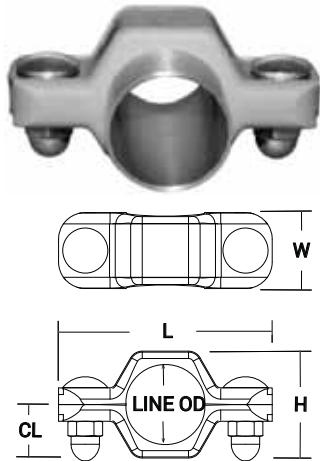


### Base Mount Block Hanger Rod Mounts - B24-BMR6

Tube Size	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	Rod (stock length)		304 Stainless Steel Part #
						Length (in)	O.D.(in)	
1/2"	.50	1.70	1.93	.75	.73	6.00	.38	B24-BMR6-G050
3/4"	.75	1.70	1.93	.75	.73	6.00	.38	B24-BMR6-G075
1"	1.00	1.70	1.93	.75	.73	6.00	.38	B24-BMR6-G100
1-1/2"	1.50	2.19	2.49	.75	.97	6.00	.38	B24-BMR6-G150
2"	2.00	2.69	2.99	.88	1.25	6.00	.38	B24-BMR6-G200
2-1/2"	2.50	3.19	3.36	.88	1.49	6.00	.50	B24-BMR6-G250
3"	3.00	3.97	3.99	.88	1.85	6.00	.50	B24-BMR6-G300

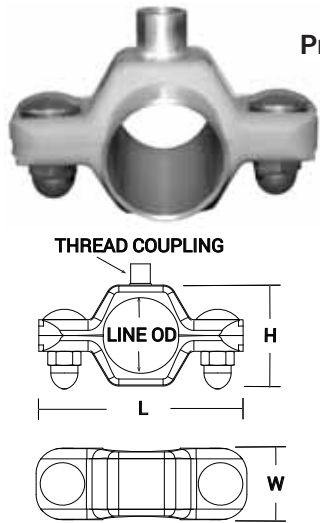


Tube Process Hex Hangers



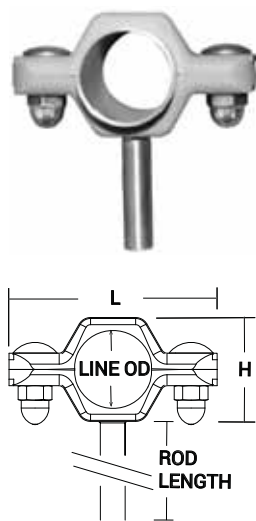
Process Hex Hanger Weld Mount - B24V-PH

Tube O.D.	Line O.D. (in)	H (in)	L (in)	W (in)	CL (in)	304 Stainless Steel With Acorn Nut Part #	304 Stainless Steel With Lock Nut Part #
1/2"	0.50	1.15	2.80	1.10	0.58	B24-PH-G050	B24-PHL-G050
3/4"	0.75	1.15	2.80	1.10	0.58	B24-PH-G075	B24-PHL-G075
1"	1.00	1.45	3.00	1.10	0.73	B24-PH-G100	B24-PHL-G100
1-1/2"	1.50	1.93	4.00	1.42	0.98	B24-PH-G150	B24-PHL-G150
2"	2.00	2.50	4.60	1.42	1.25	B24-PH-G200	B24-PHL-G200
2-1/2"	2.50	4.00	5.10	1.42	4.00	B24-PH-G250	B24-PHL-G250
3"	3.00	3.50	5.60	1.42	1.75	B24-PH-G300	B24-PHL-G300
4"	4.00	4.55	6.75	1.42	2.28	B24-PH-G400	B24-PHL-G400



Process Hex Hanger Weld Mount Threaded Coupling - B24V-PHC

Tube O.D.	Line O.D. (in)	H (in)	L (in)	W (in)	Rod (stock length)		304 Stainless Steel With Acorn Nut Part #	304 Stainless Steel With Lock Nut Part #
					Height (in)	Thread		
1/2"	0.50	1.15	2.80	1.10	0.47	3/8"-16	B24-PHC-G050	B24-PHCL-G050
3/4"	0.75	1.15	2.80	1.10	0.47	3/8"-16	B24-PHC-G075	B24-PHCL-G075
1"	1.00	1.45	3.00	1.10	0.47	3/8"-16	B24-PHC-G100	B24-PHCL-G100
1-1/2"	1.50	1.93	4.00	1.42	0.47	3/8"-16	B24-PHC-G150	B24-PHCL-G150
2"	2.00	2.50	4.60	1.42	0.59	1/2"-13	B24-PHC-G200	B24-PHCL-G200
2-1/2"	2.50	4.00	5.10	1.42	0.59	1/2"-13	B24-PHC-G250	B24-PHCL-G250
3"	3.00	3.50	5.60	1.42	0.59	1/2"-13	B24-PHC-G300	B24-PHCL-G300
4"	4.00	4.55	6.75	1.42	0.59	1/2"-13	B24-PHC-G400	B24-PHCL-G400



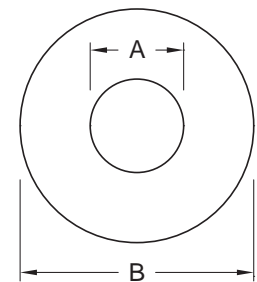
Process Hex Hanger Weld Mount Rod Attached - B24V-PHR6

Tube O.D.	Line O.D. (in)	H (in)	L (in)	W (in)	Rod (stock length)		304 Stainless Steel With Acorn Nut Part #	304 Stainless Steel With Lock Nut Part #
					Length (in)	O.D. (in)		
1/2"	0.50	1.15	2.80	1.10	6	0.38	B24-PHR6-G050	B24-PHR6L-G050
3/4"	0.75	1.15	2.80	1.10	6	0.38	B24-PHR6-G075	B24-PHR6L-G075
1"	1.00	1.45	3.00	1.10	6	0.38	B24-PHR6-G100	B24-PHR6L-G100
1-1/2"	1.50	1.93	4.00	1.42	6	0.38	B24-PHR6-G150	B24-PHR6L-G150
2"	2.00	2.50	4.60	1.42	6	0.50	B24-PHR6-G200	B24-PHR6L-G200
2-1/2"	2.50	4.00	5.10	1.42	6	0.50	B24-PHR6-G250	B24-PHR6L-G250
3"	3.00	3.50	5.60	1.42	6	0.50	B24-PHR6-G300	B24-PHR6L-G300
4"	4.00	4.55	6.75	1.42	6	0.63	B24-PHR6-G400	B24-PHR6L-G400

## Wall Flanges

### Flanges - B25

Tube O.D.	A (in)	B (in)	Nominal Wall Thickness (in)	304 Stainless Steel Part #
1/2"	.50	3.00	.065	B25-G050300
	.50	5.00		B25-G050500
3/4"	.75	3.00		B25-G075300
	.75	5.00		B25-G075500
1"	1.00	3.00		B25-G100300
	1.00	5.00		B25-G100500
1-1/2"	1.50	5.00		B25-G150500
2"	2.00	5.00		B25-G200500
2-1/2"	2.50	5.00		B25-G250500
3"	3.00	6.00		B25-G300600
4"	4.00	7.00		B25-G400700
5"	5.00	8.00		B25-G500800
6"	6.00	10.00		B25-G6001000
8"	8.00	12.00		B25-G8001200
10"	10.00	14.00		B25-G10001400
12"	12.00	16.00		B25-G12001600



**Instrumentation Table of Contents**



**Sanitary Pressure Gauges**  
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**Pharmaceutical Pressure Gauges**  
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**Homogenizer Pressure Gauges**  
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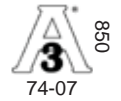
**Sanitary Digital Thermometers**  
pg. 134



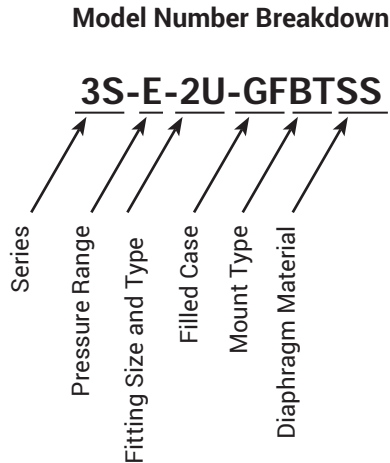
**Sanitary RTDs and Temperature Transmitters**  
pg. 135

NOTE: The following part numbers need to be added at time of order if any of the below items are needed. Additional charges will incur. These apply to any gauge and sanitary digital thermometers.

- DS-GAUGE-GCC – General calibration certificate
- DS-GAUGE-DCC – Detailed calibration certificate
- DS-GAUGE-MTR – Material test report
- DS-GAUGE-COC – Certificate of conformity



## Dixon Sanitary Gauges



### Sizes

- 1-1/2", 2", 2-1/2" or 3"

### Features

- Finishes: 3A sanitary
- Finishes: pharmaceutical

### Material

- 316L stainless steel

## Ordering Information

### Series

- 3S**..... 3-1/2" Sanitary pressure gauge
- 5S**..... 5" Sanitary pressure gauge
- 3P**..... 3-1/2" Pharmaceutical pressure gauge
- 5P**..... 5" Pharmaceutical pressure gauge

### Pressure Range<sup>1</sup>

- B**..... 0 to 30 PSI (2 BAR)
- C**..... 0 to 60 PSI (4 BAR)
- D**..... 0 to 100 PSI (7 BAR)
- E**..... 0 to 160 PSI (11 BAR)
- F**..... 0 to 200 PSI (14 BAR)
- G**..... 0 to 300 PSI (21 BAR)
- H**..... 0 to 400 PSI (28 BAR)
- I**..... 0 to 600 PSI (41 BAR)
- K**..... 0 to 1,000 PSI (70 BAR)

<sup>1</sup> Standard scales are in PSI only. For dual scales, add the letter B for PSI/BAR after the pressure range letter.

### Fitting Type<sup>2</sup>

Specify size in inches: 15, 2, 25, or 3

- I**..... male I-Line
- J**..... female I-Line
- R**..... RJT
- S**..... #15 Bevel Seat sanitary male thread
- T**..... #13H captive nut and #14 Bevel Seat
- U**..... clamp
- DIN**..... DIN according to DIN 11851 (specify DIN40 or DIN50)
- SMS**..... SMS (specify SMS38 or SMS51)

<sup>2</sup> Specify size then type, i.e. 1-1/2" - 15

### Filled Case

- GF**..... glycerine filled
- NF**..... no fill (dry)

### Mount type

- BT**..... bottom
- RT**..... right side
- LF**..... left side
- TP**..... top
- BK**..... back

### Diaphragm Material

- SS**..... stainless steel



## Sanitary Pressure Gauges



3S-EB-2U-GFBTSS

### Sizes

- Dial size: 3-1/2" or 5" diameter

### Features

- Accuracy:  $\pm 1.5\%$  of full scale
- Over range capacity: 30%
- Product contact: 316L stainless steel
- Surface finishes (product contact):  
Ra maximum = 25 microinches
- Standard fill: food grade glycerin
- Rezero feature: standard on pointer
- Shipping weight: approximately 3 lbs. (1.3 kg)

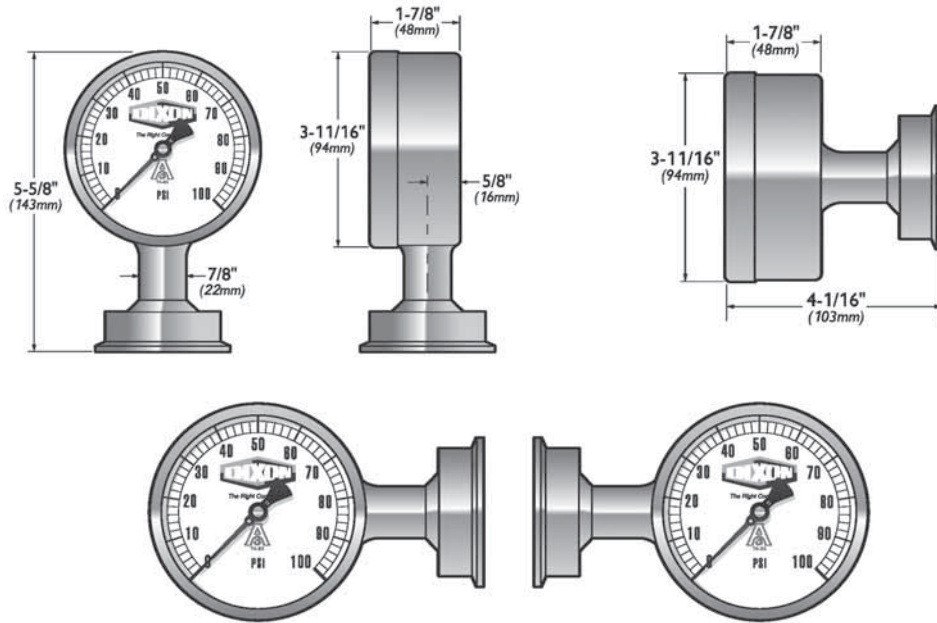
### Materials

- Case: 304 stainless steel
- Lens: polycarbonate

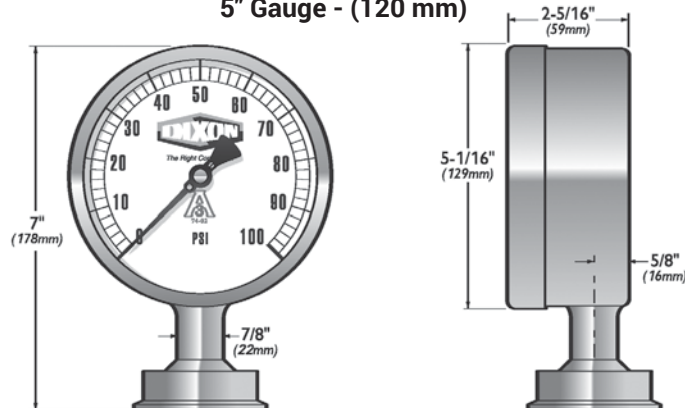
### Specification

- Temperature limits: 0°F to 250°F (-18°C to 121°C)

### 3-1/2" Gauge - (90 mm)

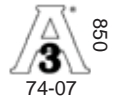


### 5" Gauge - (120 mm)



Shown with 2" clamp  
Product not returnable and no cancellations.

Sanitary Pressure Gauges



Part #	Dial Size	Pressure Range (PSI)	Clamp Size	Mount	
3S-B-15U-GFBTSS	3-1/2"	0-30	1-1/2"	bottom	
3S-C-15U-GFBTSS		0-60			
3S-D-15U-GFBTSS		0-100			
3S-E-15U-GFBTSS		0-160			
3S-F-15U-GFBTSS		0-200			
3S-G-15U-GFBTSS		0-300			
3S-B-15U-GFBKSS		0-30			back
3S-C-15U-GFBKSS		0-60			
3S-D-15U-GFBKSS		0-100			
3S-E-15U-GFBKSS		0-160			
3S-F-15U-GFBKSS		0-200			
3S-G-15U-GFBKSS		0-300			
3S-B-2U-GFBTSS		3-1/2"	0-30	2"	
3S-C-2U-GFBTSS			0-60		
3S-D-2U-GFBTSS	0-100				
3S-E-2U-GFBTSS	0-160				
3S-F-2U-GFBTSS	0-200				
3S-G-2U-GFBTSS	0-300				
3S-B-2U-GFBKSS	0-30		back		
3S-C-2U-GFBKSS	0-60				
3S-D-2U-GFBKSS	0-100				
3S-E-2U-GFBKSS	0-160				
3S-F-2U-GFBKSS	0-200				
3S-G-2U-GFBKSS	0-300				

Product not returnable and no cancellations.



## Pharmaceutical Pressure Gauges



3P-D-15U-GBFT

### Size

- Dial size: 3-1/2" or 5" diameter

### Features

- Accuracy:  $\pm 0.75\%$  of full scale
- Over range capacity: 30%
- Product contact: 316L stainless steel
- Surface finishes (product contact): Ra maximum = 8 microinches
- Standard fill: food grade glycerin
- Rezero feature: standard on pointer
- Shipping weight: approximately 3 lbs. (1.3 kg)

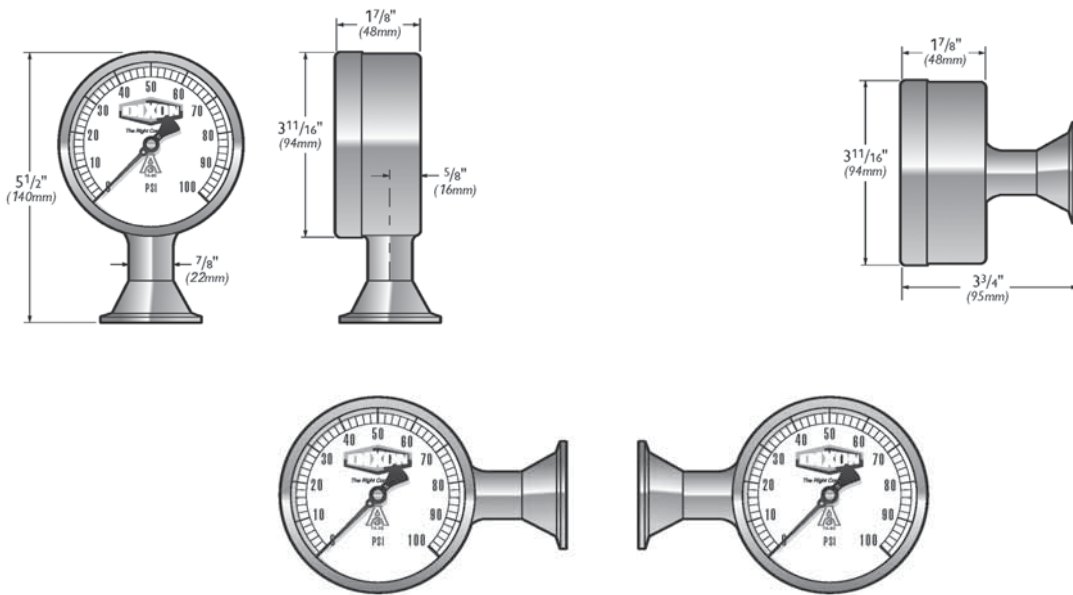
### Materials

- Lens: polycarbonate
- Case: 304 stainless steel

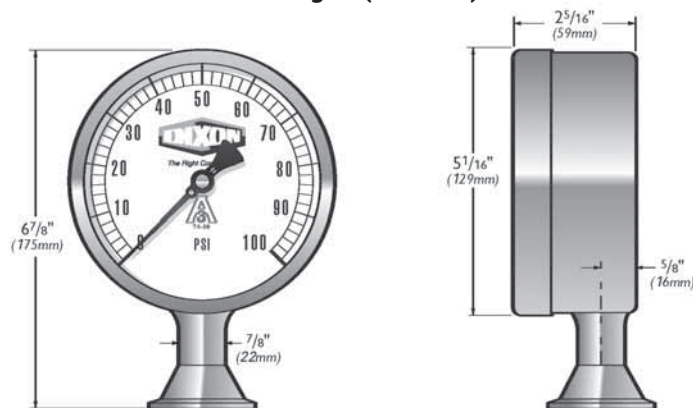
### Specification

- Temperature limits: 0°F to 250°F (-18°C to 121°C)

### 3-1/2" Gauge - (90 mm)



### 5" Gauge - (120 mm)



Product not returnable and no cancellations.

## Homogenizer Pressure Gauges

**Size**

- Dial size: 5"

**Features**

- Lexan® lens virtually impervious to cracks and breakage
- Unique pulsation dampening system insulates the gauge movement from the punishing pulsations of a homogenizer
- Glycerine fill standard
- Waterproof construction
- CIP certified
- True zero with re-zero standard

**Materials**

- Product contact: 316L stainless steel
- Case: 304 stainless steel
- Lens: Lexan®

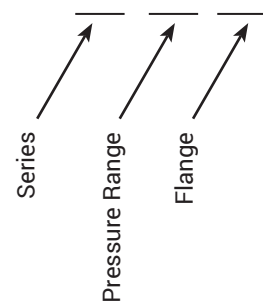
**Specifications**

- Ranges up to **15,000 PSI**
- Maximum temperature: **250°F (121°C)**



**Model Number Breakdown**

**5H - V - 03**



**Ordering Information**

**Series**

5H ..... 5" Sani-Flow homogenizer pressure gauge

**Pressure Range<sup>1</sup>**

- K ..... 0 to 1,000 PSI (70 BAR)
- T ..... 0 to 2,500 PSI (170 BAR)
- U ..... 0 to 3,000 PSI (205 BAR)
- V ..... 0 to 5,000 PSI (350 BAR)
- Y ..... 0 to 7,500 PSI (520 BAR)
- W ..... 0 to 10,000 PSI (700 BAR)
- X ..... 0 to 15,000 PSI (1000 BAR)

<sup>1</sup> Standard scales are in PSI only. For dual scales, after the pressure range add the letter B for PSI/BAR, K for PSI/Kg/cm3, P for PSI/KPa (see examples below).

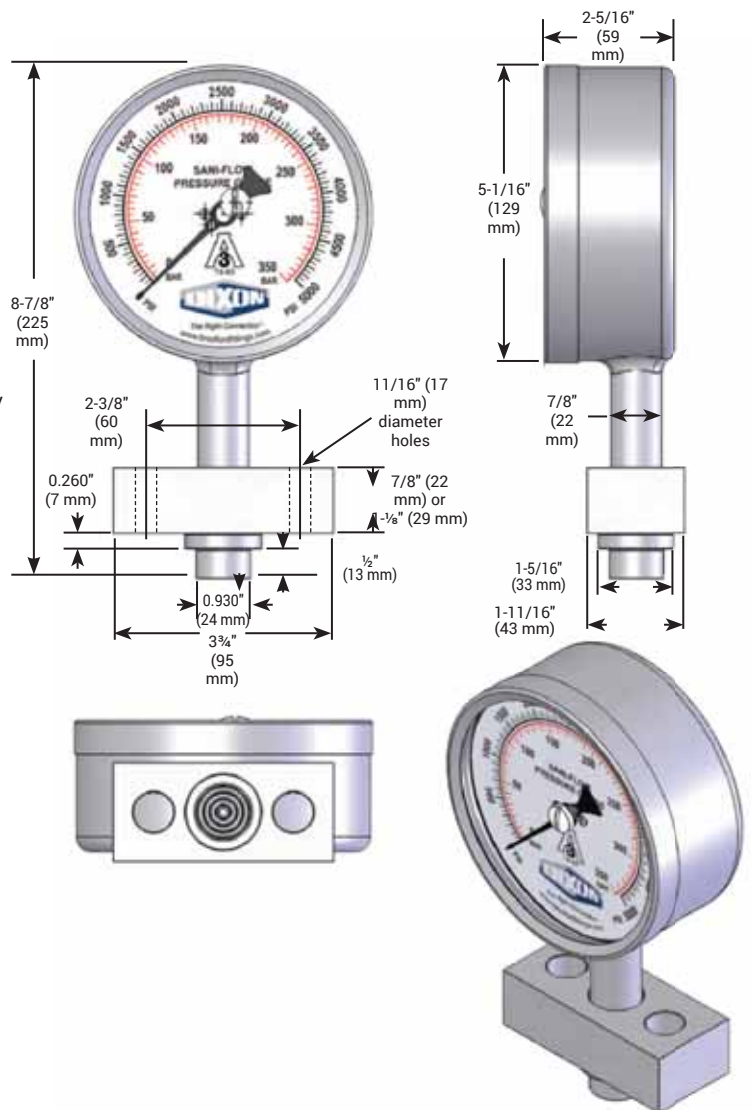
**Examples**

**5H-V-03** - Describes a 5" Sani-Flow homogenizer pressure gauge, **0 to 5,000 PSI**, a 1-1/8" thick flange, and a glycerine filled case

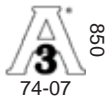
**5H-WB-01** - Describes a 5" Sani-Flow homogenizer pressure gauge, dual scale **0 to 10,000 PSI/0 to 700 BAR**, no flange, and a glycerine filled case

**Flange**

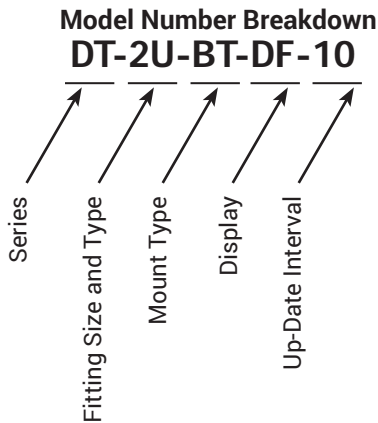
- 01 ..... no flange
- 02 ..... 7/8" thick 2 bolt flange
- 03 ..... 1-1/8" thick 2 bolt flange
- 04 ..... 1/2" thick 4 bolt flange
- 05 ..... 3/4" thick 4 bolt flange
- 09 ..... 1.66" thick laboratory homogenizer flange



Product not returnable and no cancellations.



## Sanitary Digital Thermometers



### Sizes

- Dial size: 3-1/2" diameter
- LCD display: 0.6"

### Features

- Accuracy: ±1°
- Surface finish: Ra maximum is 8 microinches
- Battery size / life: standard AAA/3 years
- Shipping weight: approximately 3 lbs.

### Materials

- Product contact: 316L stainless steel
- Case: 304 stainless steel
- Lens: 1/4" polycarbonate

### Specifications

- Temperature limits: -58°F to 302°F (-50°C to 150°C)
- Ambient operating limits: -4°F to 140°F (-20°C to 60°C)
- Resolution: 0.1° (-58° thru 199.9°)

### Ordering Information

#### Series

DT ..... Sanitary digital thermometer

#### Fitting Type<sup>1</sup>

Sizes available: 75, 15, 2, 25, 3, and 4

- I ..... male I-Line
- T ..... #13H captive nut and #14 bevel seat
- U ..... clamp

<sup>1</sup> Specify size then type, i.e. 1-1/2" = 15U

#### Mount type

- BT ..... bottom
- RT ..... right side
- LF ..... left side
- TP ..... top
- BK ..... back
- BTR ..... remote fitting

#### Display

- DF ..... F (Fahrenheit) *standard*
- DC ..... C (Celsius)

#### Update Interval

- 1 ..... one second (*1 year battery life*)



### Dimensions

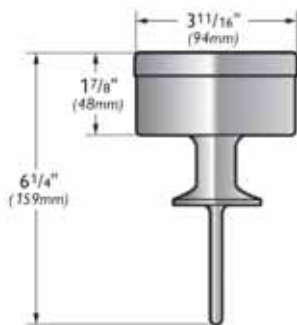
#### LEFT SIDE MOUNT



#### RIGHT SIDE MOUNT



#### BACK MOUNT



#### BOTTOM MOUNT



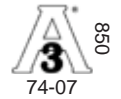
Ordering code shown with clamp configuration "U". See ordering information for other types available.

Size	Probe Length <sup>1</sup>	Code
3/4"	2-3/8"	75U
1"	2-5/5"	1U
1-1/2"	2-3/4"	15U
2"	3-1/2"	2U
2-1/2"	3-1/2"	25U
3"	3-3/4"	3U
4"	4-1/2"	4U

<sup>1</sup> Custom probe lengths are available

Product not returnable and no cancellations.

## Sanitary RTDs and Temperature Transmitters



### Materials

- Product contact: 316L stainless
- Exterior surfaces 316L with a near mirror finish

### Features

- Standard 12mm industrial connector with gold-plated contacts for maximum corrosion resistance and cleanability
- Sensor elements are accurate up to +/-0.1C

### Specifications

- RTD – temperature range: -58°F to 392°F (-50°C to 200°C)
- TT – temperature range: -22°F to 302°F (-30°C to 150°C)

### Ordering Information

#### Series

- RTD ..... Sani-Flow resistive temperature device
- TT ..... Sani-Flow temperature transmitter

### Sanitary Fittings

Fittings available in 5, 75, 15, 20, 25, 30, and 40

- H ..... G & H 'H' line male
- I ..... Male I-line
- K ..... APC 'K' clamp
- Q ..... Q-line
- T ..... #13H captive nut and #14 bevel seat
- U ..... Tri-clamp®

- Specify size, then adapter type such as 15U for 1-1/2" Tri-clamp® adapter
- For special probes, add SP and the required probe length at the end of the part number, such as SP2.75 for a 2-3/4" long probe

### Other Fittings

Specify probe length

- A ..... air space
- M ..... umbrella fittings
- NPT ..... 1/4", 3/8", 1/2", 5/8", or 3/4" pipe thread
- PW ..... projectile well with 1-1/4"-18 UNEF male thread
- SP ..... split ferrule
- VP ..... VAT well fitting with #13H captive nut
- OF ..... no fitting

### Element<sup>1</sup>

- E1 ..... single element
- E2 ..... dual element

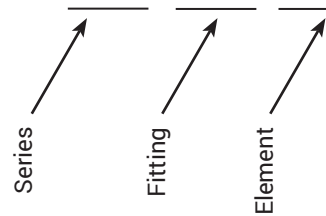
<sup>1</sup> Available for RTD only



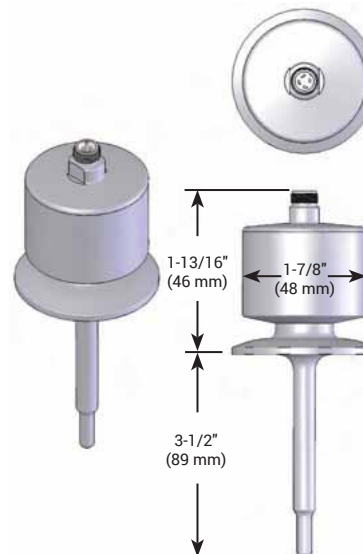
Sanitary RTD

Temperature transmitter

### Model Number Breakdown RTD - 15U - E1



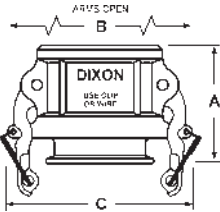
RTD-20GI-38



TT-20-G1

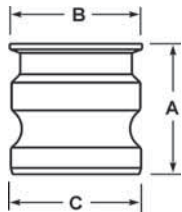
Product not returnable and no cancellations.

Sanitary Tube O.D. x Cam and Groove Adapters



Boss-Lock Coupler x Clamp End - RC

Tube O.D.	A (in)	B (in)	C (in)	316 Stainless Steel Part #
1-1/2"	2.69	7.88	3.94	RC150SE
2"	2.81	8.25	4.31	RC200SE
3"	3.00	10.00	5.63	RC300SE



Adapter x Clamp End - RE

Tube O.D.	A (in)	B (in)	C (in)	316 Stainless Steel Part #
1-1/2"	2.28	2.00	2.09	RE150SE
2"	2.59	2.50	2.47	RE200SE
3"	2.75	3.56	3.59	RE300SE

Dixon® Weld to Tube Cam and Groove

Feature

- Designed to be welded to standard sanitary tubing

Material

- 316 stainless steel investment casting

Boss-Lock Coupler x Weld to Tube End



Size	316 Stainless Steel Part #
1"	RC100BT
1-1/2"	RC150BT
2"	RC200BT
3"	RC300BT

Adapter x Weld to Tube End



Size	316 Stainless Steel Part #
1"	RE100BT
1-1/2"	RE150BT
2"	RE200BT
3"	RE300BT

## Dixon Sanitary King Crimp® Stem Clamp End x Hose Shank

**Features**

- To be used with King Crimp™ sleeves and / or ferrules see pages 138-141
- Product contact surfaces" I.D. polish is 32 Ra maximum

### Tri-Clover Stems

Size	316 Stainless Steel Part #
1"	CSSR100CS
1-1/2"	CSSR150CS
2"	CSSR200CS
3"	CSSR300CS
4"	CSSR400CS



### Female I-line

Size	316 Stainless Steel Part #
1"	CILR100CS
1-1/2"	CILR150CS
2"	CILR200CS
3"	CILR300CS
4"	CILR400CS





### King Crimp Style Sleeves

- Only use the crimp style shanks with the crimp style sleeves and ferrules. Due to differences in dimensions and tolerances for safety reasons, do not interchange other manufacturers' products with Dixon® products.
- For liquid service only
- Not intended for steam service



Hose I.D.	Hose O.D.		Work. Pressure (PSI)		Sleeve I.D.	Sleeve Wall Thick.	Sleeve Overall Length	Carbon Steel Part #	304 Stainless Steel Part #	Aluminum Part #
	From	To	cam & groove <sup>1</sup>	King Crimp nipple <sup>2</sup>						
1"	1-13/64"	1-16/64"	*	*	1.313"	.060"	2-1/2"	CS100-1CS	CS100-1SS	---
	1-17/64"	1-20/64"	*	*	1.375"	.060"	2-1/2"	CS100-2CS	CS100-2SS	CS100-2AL
	1-21/64"	1-24/64"	*	*	1.438"	.060"	2-1/2"	CS100-3CS	CS100-3SS	---
	1-25/64"	1-28/64"	*	*	1.500"	.060"	2-1/2"	CS100-4CS	CS100-4SS	CS100-4AL
	1-29/64"	1-32/64"	*	*	1.563"	.060"	2-1/2"	CS100-5CS	CS100-5SS	---
	1-33/64"	1-36/64"	*	*	1.625"	.060"	2-1/2"	CS100-6CS	CS100-6SS	CS100-6AL
	1-37/64"	1-40/64"	*	*	1.688"	.060"	2-1/2"	CS100-7CS	CS100-7SS	---
	1-41-64"	1-44/64"	*	*	1.750"	.060"	2-1/2"	CS100-8CS	CS100-8SS	---
	1-45/64"	1-48/64"	*	*	1.813"	.060"	2-1/2"	CS100-9CS	CS100-9SS	---
	1-49/64"	1-52/64"	*	*	1.875"	.060"	2-1/2"	CS100-10CS	CS100-10SS	---
1-1/4"	1-41/64"	1-44/64"	250	300	1.750"	.060"	2-1/2"	CS125-3CS	CS125-3SS	---
	1-45/64"	1-48/64"	250	300	1.813"	.060"	2-1/2"	CS125-4CS	CS125-4SS	---
	1-49/64"	1-52/64"	250	300	1.875"	.060"	2-1/2"	CS125-5CS	CS125-5SS	---
	1-53/64"	1-56/64"	250	300	1.938"	.060"	2-1/2"	CS125-6CS	CS125-6SS	---
1-1/2"	1-41/64"	1-44/64"	250	300	1.750"	.060"	2-1/2"	CS150-1CS	CS150-1SS	---
	1-45/64"	1-48/64"	250	300	1.813"	.060"	2-1/2"	CS150-2CS	CS150-2SS	---
	1-49/64"	1-52/64"	250	300	1.875"	.060"	2-1/2"	CS150-3CS	CS150-3SS	CS150-3AL
	1-53/64"	1-56/64"	250	300	1.938"	.060"	2-1/2"	CS150-4CS	CS150-4SS	---
	1-57/64"	1-60/64"	250	300	2.000"	.060"	2-1/2"	CS150-5CS	CS150-5SS	---
	1-61/64"	2"	250	300	2.063"	.060"	2-1/2"	CS150-6CS	CS150-6SS	---
	2-1/64"	2-4/64"	250	300	2.125"	.060"	2-1/2"	CS150-7CS	CS150-7SS	CS150-7AL
	2-5/64"	2-8/64"	250	300	2.188"	.060"	2-1/2"	CS150-8CS	CS150-8SS	---
	2-9/64"	2-12/64"	250	300	2.250"	.060"	2-1/2"	CS150-9CS	CS150-9SS	---
	2-13/64"	2-16/64"	250	300	2.313"	.060"	2-1/2"	CS150-10CS	CS150-10SS	---
2-17/64"	2-20/64"	250	300	2.375"	.060"	2-1/2"	CS150-11CS	CS150-11SS	---	
2-21/64"	2-24/64"	250	300	2.438"	.060"	2-1/2"	CS150-12CS	CS150-12SS	---	
2"	2-13/64"	2-16/64"	250	250	2.313"	.060"	2-7/8"	CS200-1CS	CS200-1SS	---
	2-17/64"	2-20/64"	250	250	2.375"	.060"	2-7/8"	CS200-2CS	CS200-2SS	---
	2-21/64"	2-24/64"	250	250	2.438"	.060"	2-7/8"	CS200-3CS	CS200-3SS	---
	2-25/64"	2-28/64"	250	250	2.500"	.060"	2-7/8"	CS200-4CS	CS200-4SS	CS200-4AL
	2-29/64"	2-32/64"	250	250	2.563"	.060"	2-7/8"	CS200-5CS	CS200-5SS	CS200-5AL
	2-33/64"	2-36/64"	250	250	2.625"	.060"	2-7/8"	CS200-6CS	CS200-6SS	CS200-6AL
	2-37/64"	2-40/64"	250	250	2.688"	.060"	2-7/8"	CS200-7CS	CS200-7SS	---
	2-41/64"	2-44/64"	250	250	2.750"	.060"	2-7/8"	CS200-8CS	CS200-8SS	---
	2-45/64"	2-48/64"	250	250	2.813"	.060"	2-7/8"	CS200-9CS	CS200-9SS	---
	2-49/64"	2-52/64"	250	250	2.875"	.060"	2-7/8"	CS200-10CS	CS200-10SS	CS200-10AL
	2-53/64"	2-56/64"	250	250	2.938"	.060"	2-7/8"	CS200-11CS	CS200-11SS	CS200-11AL
	2-57/64"	2-60/64"	250	250	3.000"	.060"	2-7/8"	CS200-12CS	CS200-12SS	CS200-12AL
2-1/2"	2-57/64"	2-60/64"	---	*	3.000"	.060"	3-1/4"	CS250-5CS	---	---
	2-61/64"	3"	---	*	3.063"	.060"	3-1/4"	CS250-6CS	---	---
	3-1/64"	3-4/64"	---	*	3.125"	.060"	3-1/4"	CS250-7CS	---	---
	3-5/64"	3-8/64"	---	*	3.188"	.060"	3-1/4"	CS250-8CS	---	---

\* Consult Dixon at [engineering@dixonvalve.com](mailto:engineering@dixonvalve.com) for pressure rating

<sup>1</sup> Based on using crimp cam and groove shanks

<sup>2</sup> Based on using King Crimp nipples

### King Crimp Style Sleeves

- Only use the crimp style shanks with the crimp style sleeves and ferrules. Due to differences in dimensions and tolerances for safety reasons, do not interchange other manufacturers' products with Dixon® products.
- For liquid service only
- Not intended for steam service



Hose I.D.	Hose O.D.		Work. Pressure (PSI)		Sleeve I.D.	Sleeve Wall Thick.	Sleeve Overall Length	Carbon Steel Part #	304 Stainless Steel Part #	Aluminum Part #
	From	To	cam & groove <sup>1</sup>	King Crimp nipple <sup>2</sup>						
3"	3-13/64"	3-16/64"	125	200	3.313"	.090"	3-3/4"	CS300-1CS	CS300-1SS	---
	3-17/64"	3-20/64"	125	200	3.375"	.090"	3-3/4"	CS300-2CS	CS300-2SS	---
	3-21/64"	3-24/64"	125	200	3.438"	.090"	3-3/4"	CS300-3CS	CS300-3SS	---
	3-25/64"	3-28/64"	125	200	3.500"	.090"	3-3/4"	CS300-4CS	CS300-4SS	---
	3-29/64"	3-32/64"	125	200	3.563"	.090"	3-3/4"	CS300-5CS	CS300-5SS	CS300-5AL
	3-33/64"	3-36/64"	125	200	3.625"	.090"	3-3/4"	CS300-6CS	CS300-6SS	---
	3-37/64"	3-40/64"	125	200	3.688"	.090"	3-3/4"	CS300-7CS	CS300-7SS	CS300-7AL
	3-41/64"	3-44/64"	125	200	3.750"	.090"	3-3/4"	CS300-8CS	CS300-8SS	CS300-8AL
	3-45/64"	3-48/64"	125	200	3.813"	.090"	3-3/4"	CS300-9CS	CS300-9SS	---
	3-49/64"	3-52/64"	125	200	3.875"	.090"	3-3/4"	CS300-10CS	CS300-10SS	CS300-10AL
	3-53/64"	3-56/64"	125	200	3.938"	.090"	3-3/4"	CS300-11CS	CS300-11SS	---
	3-57/64"	3-60/64"	125	200	4.000"	.090"	3-3/4"	CS300-12CS	CS300-12SS	CS300-12AL
	3-61/64"	4"	125	200	4.063"	.090"	3-3/4"	CS300-13CS	CS300-13SS	---
	4-1/64"	4-4/64"	125	200	4.125"	.090"	3-3/4"	CS300-14CS	CS300-14SS	---
	4-5/64"	4-8/64"	125	200	4.188"	.090"	3-3/4"	CS300-15CS	CS300-15SS	---
	4-9/64"	4-12/64"	125	200	4.250"	.090"	3-3/4"	CS300-16CS	CS300-16SS	---
4"	4-13/64"	4-16/64"	110	175	4.313"	.090"	3-3/4"	CS400-1CS	CS400-1SS	---
	4-17/64"	4-20/64"	110	175	4.375"	.090"	3-3/4"	CS400-2CS	CS400-2SS	---
	4-21/64"	4-24/64"	110	175	4.438"	.090"	3-3/4"	CS400-3CS	CS400-3SS	---
	4-25/64"	4-28/64"	110	175	4.500"	.090"	3-3/4"	CS400-4CS	CS400-4SS	---
	4-29/64"	4-32/64"	110	175	4.563"	.090"	3-3/4"	CS400-5CS	CS400-5SS	---
	4-33/64"	4-36/64"	110	175	4.625"	.090"	3-3/4"	CS400-6CS	CS400-6SS	---
	4-37/64"	4-40/64"	110	175	4.688"	.090"	3-3/4"	CS400-7CS	CS400-7SS	---
	4-41/64"	4-44/64"	110	175	4.750"	.090"	3-3/4"	CS400-8CS	CS400-8SS	---
	4-45/64"	4-48/64"	110	175	4.813"	.090"	3-3/4"	CS400-9CS	CS400-9SS	---
	4-49/64"	4-52/64"	110	175	4.875"	.090"	3-3/4"	CS400-10CS	CS400-10SS	CS400-10AL
	4-53/64"	4-56/64"	110	175	4.938"	.090"	3-3/4"	CS400-11CS	CS400-11SS	CS400-11AL
	4-57/64"	4-60/64"	110	175	5.000"	.090"	3-3/4"	CS400-12CS	CS400-12SS	CS400-12AL
	4-61/64"	5"	110	175	5.063"	.090"	3-3/4"	CS400-13CS	CS400-13SS	---
	5-1/64"	5-4/64"	110	175	5.125"	.090"	3-3/4"	CS400-14CS	CS400-14SS	---
	5-5/64"	5-8/64"	110	175	5.188"	.090"	3-3/4"	CS400-15CS	CS400-15SS	---
	5-9/64"	5-12/64"	110	175	5.250"	.090"	3-3/4"	CS400-16CS	CS400-16SS	---
6"	6-21/64"	6-28/64"	*	*	6.500"	.120"	5-1/2"	CS600-1CS	CS600-1SS	---
	6-29/64"	6-36/64"	*	*	6.625"	.120"	5-1/2"	CS600-2CS	CS600-2SS	---
	6-37/64"	6-44/64"	*	*	6.750"	.120"	5-1/2"	CS600-3CS	CS600-3SS	---
	6-45/64"	6-52/64"	*	*	6.875"	.120"	5-1/2"	CS600-4CS	CS600-4SS	---
	6-53/64"	6-60/64"	*	*	7.000"	.120"	5-1/2"	CS600-5CS	CS600-5SS	---
	6-61/64"	7-4/64"	*	*	7.125"	.120"	5-1/2"	CS600-6CS	CS600-6SS	---
	7-5/64"	7-12/64"	*	*	7.250"	.120"	5-1/2"	CS600-7CS	CS600-7SS	---
	7-13/64"	7-20/64"	*	*	7.375"	.120"	5-1/2"	CS600-8CS	CS600-8SS	---
	7-21/64"	7-28/64"	*	*	7.500"	.120"	5-1/2"	CS600-9CS	CS600-9SS	---

\* Consult Dixon at [engineering@dixonvalve.com](mailto:engineering@dixonvalve.com) for pressure rating

<sup>1</sup> Based on using crimp cam and groove shanks

<sup>2</sup> Based on using King Crimp nipples



### King Crimp Style Ferrules

Only use the crimp style shanks with the crimp style sleeves and ferrules. Due to differences in dimensions and tolerances for safety reasons, do not interchange other manufacturers' products with Dixon® products.



Hose I.D.	Hose O.D.		Work. Pressure (PSI)		Ferrule I.D.	Ferrule Wall Thickness	Ferrule Overall Length	Carbon Steel Part #	304 Stainless Steel Part #
	From	To	cam & groove <sup>1</sup>	King Crimp nipple <sup>2</sup>					
1"	1-13/64"	1-16/64"	*	*	1.313"	.060"	2-13/16"	CF100-1CS	CF100-1SS
	1-17/64"	1-20/64"	*	*	1.375"	.060"	2-13/16"	CF100-2CS	CF100-2SS
	1-21/64"	1-24/64"	*	*	1.438"	.060"	2-13/16"	CF100-3CS	CF100-3SS
	1-25/64"	1-28/64"	*	*	1.500"	.060"	2-13/16"	CF100-4CS	CF100-4SS
	1-29/64"	1-32/64"	*	*	1.563"	.060"	2-13/16"	CF100-5CS	CF100-5SS
	1-33/64"	1-36/64"	*	*	1.625"	.060"	2-13/16"	CF100-6CS	CF100-6SS
	1-37/64"	1-40/64"	*	*	1.688"	.060"	2-13/16"	CF100-7CS	CF100-7SS
	1-41/64"	1-44/64"	*	*	1.750"	.060"	2-13/16"	CF100-8CS	CF100-8SS
	1-45/64"	1-48/64"	*	*	1.813"	.060"	2-13/16"	CF100-9CS	CF100-9SS
	1-49/64"	1-52/64"	*	*	1.875"	.060"	2-13/16"	CF100-10CS	CF100-10SS
1-1/4"	1-41/64"	1-44/64"	250	350	1.750"	.060"	2-13/16"	CF125-3CS	CF125-3SS
	1-45/64"	1-48/64"	250	350	1.813"	.060"	2-13/16"	CF125-4CS	CF125-4SS
	1-49/64"	1-52/64"	250	350	1.875"	.060"	2-13/16"	CF125-5CS	CF125-5SS
	1-53/64"	1-56/64"	250	350	1.938"	.060"	2-13/16"	CF125-6CS	CF125-6SS
1-1/2"	1-41/64"	1-44/64"	250	350	1.750"	.062"	2-13/16"	CF150-1CS	CF150-1SS
	1-45/64"	1-48/64"	250	350	1.813"	.060"	2-13/16"	CF150-2CS	CF150-2SS
	1-49/64"	1-52/64"	250	350	1.875"	.060"	2-13/16"	CF150-3CS	CF150-3SS
	1-53/64"	1-56/64"	250	350	1.938"	.060"	2-13/16"	CF150-4CS	CF150-4SS
	1-57/64"	1-60/64"	250	350	2.000"	.060"	2-13/16"	CF150-5CS	CF150-5SS
	1-61/64"	2"	250	350	2.063"	.060"	2-13/16"	CF150-6CS	CF150-6SS
	2-1/64"	2-4/64"	250	350	2.125"	.060"	2-13/16"	CF150-7CS	CF150-7SS
	2-5/64"	2-8/64"	250	350	2.188"	.060"	2-13/16"	CF150-8CS	CF150-8SS
	2-9/64"	2-12/64"	250	350	2.250"	.060"	2-13/16"	CF150-9CS	CF150-9SS
	2-13/64"	2-16/64"	250	350	2.313"	.060"	2-13/16"	CF150-10CS	CF150-10SS
2-17/64"	2-20/64"	250	350	2.375"	.060"	2-13/16"	CF150-11CS	CF150-11SS	
2-21/64"	2-24/64"	250	350	2.438"	.060"	2-13/16"	CF150-12CS	CF150-12SS	
2"	2-13/64"	2-16/64"	250	300	2.313"	.060"	3-1/8"	CF200-1CS	CF200-1SS
	2-17/64"	2-20/64"	250	300	2.375"	.060"	3-1/8"	CF200-2CS	CF200-2SS
	2-21/64"	2-24/64"	250	300	2.438"	.060"	3-1/8"	CF200-3CS	CF200-3SS
	2-25/64"	2-28/64"	250	300	2.500"	.060"	3-1/8"	CF200-4CS	CF200-4SS
	2-29/64"	2-32/64"	250	300	2.563"	.060"	3-1/8"	CF200-5CS	CF200-5SS
	2-33/64"	2-36/64"	250	300	2.625"	.060"	3-1/8"	CF200-6CS	CF200-6SS
	2-37/64"	2-40/64"	250	300	2.688"	.060"	3-1/8"	CF200-7CS	CF200-7SS
	2-41/64"	2-44/64"	250	300	2.750"	.060"	3-1/8"	CF200-8CS	CF200-8SS
	2-45/64"	2-48/64"	250	300	2.813"	.060"	3-1/8"	CF200-9CS	CF200-9SS
	2-49/64"	2-52/64"	250	300	2.875"	.060"	3-1/8"	CF200-10CS	CF200-10SS
	2-53/64"	2-56/64"	250	300	2.938"	.060"	3-1/8"	CF200-11CS	CF200-11SS
	2-57/64"	2-60/64"	250	300	3.000"	.060"	3-1/8"	CF200-12CS	CF200-12SS
2-1/2"	2-57/64"	2-60/64"	---	300	3.000"	.060"	3-1/2"	CF250-5CS	---
	2-61/64"	3"	---	300	3.063"	.060"	3-1/2"	CF250-6CS	---
	3-1/64"	3-4/64"	---	300	3.125"	.060"	3-1/2"	CF250-7CS	---
	3-5/64"	3-8/64"	---	300	3.188"	.060"	3-1/2"	CF250-8CS	---

\* Consult Dixon at [engineering@dixonvalve.com](mailto:engineering@dixonvalve.com) for pressure rating

<sup>1</sup> Based on using crimp cam and groove shanks

<sup>2</sup> Based on using King Crimp nipples

### King Crimp Style Ferrules

Only use the crimp style shanks with the crimp style sleeves and ferrules. Due to differences in dimensions and tolerances for safety reasons, do not interchange other manufacturers' products with Dixon® products.



Hose I.D.	Hose O.D.		Work. Pressure (PSI)		Ferrule I.D.	Ferrule Wall Thickness	Ferrule Overall Length	Carbon Steel Part #	304 Stainless Steel Part #
	From	To	cam & groove <sup>1</sup>	King Crimp nipple <sup>2</sup>					
3"	3-13/64"	3-16/64"	150	300	3.313"	.090"	4"	CF300-1CS	CF300-1SS
	3-17/64"	3-20/64"	150	300	3.375"	.090"	4"	CF300-2CS	CF300-2SS
	3-21/64"	3-24/64"	150	300	3.438"	.090"	4"	CF300-3CS	CF300-3SS
	3-25/64"	3-28/64"	150	300	3.500"	.090"	4"	CF300-4CS	CF300-4SS
	3-29/64"	3-32/64"	150	300	3.563"	.090"	4"	CF300-5CS	CF300-5SS
	3-33/64"	3-36/64"	150	300	3.625"	.090"	4"	CF300-6CS	CF300-6SS
	3-37/64"	3-40/64"	150	300	3.688"	.090"	4"	CF300-7CS	CF300-7SS
	3-41/64"	3-44/64"	150	300	3.750"	.090"	4"	CF300-8CS	CF300-8SS
	3-45/64"	3-48/64"	150	300	3.813"	.090"	4"	CF300-9CS	CF300-9SS
	3-49/64"	3-52/64"	150	300	3.875"	.090"	4"	CF300-10CS	CF300-10SS
	3-53/64"	3-56/64"	150	300	3.938"	.090"	4"	CF300-11CS	CF300-11SS
	3-57/64"	3-60/64"	150	300	4.000"	.090"	4"	CF300-12CS	CF300-12SS
	3-61/64"	4"	150	300	4.063"	.090"	4"	CF300-13CS	CF300-13SS
	4-1/64"	4-4/64"	150	300	4.125"	.090"	4"	CF300-14CS	CF300-14SS
4-5/64"	4-8/64"	150	300	4.188"	.090"	4"	CF300-15CS	CF300-15SS	
4-9/64"	4-12/64"	150	300	4.250"	.090"	4"	CF300-16CS	CF300-16SS	
4"	4-13/64"	4-16/64"	150	300	4.313"	.090"	4"	CF400-1CS	CF400-1SS
	4-17/64"	4-20/64"	150	300	4.375"	.090"	4"	CF400-2CS	CF400-2SS
	4-21/64"	4-24/64"	150	300	4.438"	.090"	4"	CF400-3CS	CF400-3SS
	4-25/64"	4-28/64"	150	300	4.500"	.090"	4"	CF400-4CS	CF400-4SS
	4-29/64"	4-32/64"	150	300	4.563"	.090"	4"	CF400-5CS	CF400-5SS
	4-33/64"	4-36/64"	150	300	4.625"	.090"	4"	CF400-6CS	CF400-6SS
	4-37/64"	4-40/64"	150	300	4.688"	.090"	4"	CF400-7CS	CF400-7SS
	4-41/64"	4-44/64"	150	300	4.750"	.090"	4"	CF400-8CS	CF400-8SS
	4-45/64"	4-48/64"	150	300	4.813"	.090"	4"	CF400-9CS	CF400-9SS
	4-49/64"	4-52/64"	150	300	4.875"	.090"	4"	CF400-10CS	CF400-10SS
	4-53/64"	4-56/64"	150	300	4.938"	.090"	4"	CF400-11CS	CF400-11SS
	4-57/64"	4-60/64"	150	300	5.000"	.090"	4"	CF400-12CS	CF400-12SS
	4-61/64"	5"	150	300	5.063"	.090"	4"	CF400-13CS	CF400-13SS
	5-1/64"	5-4/64"	150	300	5.125"	.090"	4"	CF400-14CS	CF400-14SS
5-5/64"	5-8/64"	150	300	5.188"	.090"	4"	CF400-15CS	CF400-15SS	
5-9/64"	5-12/64"	150	300	5.250"	.090"	4"	CF400-16CS	CF400-16SS	
6"	6-21/64"	6-28/64"	*	*	6.500"	.120"	5-7/8"	CF600-1CS	CF600-1SS
	6-29/64"	6-36/64"	*	*	6.625"	.120"	5-7/8"	CF600-2CS	CF600-2SS
	6-37/64"	6-44/64"	*	*	6.750"	.120"	5-7/8"	CF600-3CS	CF600-3SS
	6-45/64"	6-52/64"	*	*	6.875"	.120"	5-7/8"	CF600-4CS	CF600-4SS
	6-53/64"	6-60/64"	*	*	7.000"	.120"	5-7/8"	CF600-5CS	CF600-5SS
	6-61/64"	7-4/64"	*	*	7.125"	.120"	5-7/8"	CF600-6CS	CF600-6SS
	7-5/64"	7-12/64"	*	*	7.250"	.120"	5-7/8"	CF600-7CS	CF600-7SS
	7-13/64"	7-20/64"	*	*	7.375"	.120"	5-7/8"	CF600-8CS	CF600-8SS
	7-21/64"	7-28/64"	*	*	7.500"	.120"	5-7/8"	CF600-9CS	CF600-9SS

\* Consult Dixon at [engineering@dixonvalve.com](mailto:engineering@dixonvalve.com) for pressure rating

<sup>1</sup> Based on using crimp cam and groove shanks

<sup>2</sup> Based on using King Crimp nipples



### 14-SHB-Series Sanitary Hose Bumper

**Applications**

- Constructed of durable polypropylene, this hose bumper protects the hose ferrule and prevents forced detachment from the crimp stem when dropped or dragged
- For use in the food, beverage, dairy, winery, brewery, and pharmaceutical markets

**Sizes**

- 1", 1-1/2", 2", 3"

**Features**

- No special tools or fasteners needed for installation
- Patent-pending two position design provides complete protection to sanitary tri-clamp ferrule
- Cannot be forced off crimp stem like most traditional rubber bumpers when dragged on the ground
- Open design maintains clearance between the crimp stem and the bumper allowing for access to clean and drain all surfaces of the stainless steel fitting
- One bumper size works with any hose diameter within a given tri-clamp ferrule size
- Bumper and sanitary crimp stem were designed as a system to ensure optimal performance

**Specifications**

- Bumper: polypropylene with an antimicrobial additive (FDA approved)
- Latch: EPDM (FDA approved)
- Crimp stem: AISI 316L



Bumper Position - Extended



Bumper Position - Retracted

Size	Stem Material (Finish)	Stem Process Connection	Stem Shank Type	Bumper Color	Bumper Material	Bumper System Part #	Item(s) Included
1"	316L (32 Ra)	clamp	3A 62-02 conforming shank	blue (standard)	Polypropylene (standard)	14BA-R10CX	(1) hose bumper (1) latch (1) crimp stem
1-1/2"						14BA-R15CX	
2"						14BA-R20CX	
3"						14BA-R30CX	

NOTE: This bumper system is to be used with a crimp ferrule (not included). See page 144 for crimp ferrule part numbers.

## Dixon Sanitary Style Crimp Stems

### Clamp End x Hose Shank

#### Features

- Sanitary style end
- Dixon® sanitary crimp stems are only to be used with Dixon® sanitary stainless steel crimp ferrules on page 144
- Reference [dixonvalve.com](http://dixonvalve.com) for crimp recommendations
- Product contact surfaces: I.D. polish is 32 Ra maximum

Size	316 Stainless Steel Part #
1"	CSSR100-3A
1-1/2"	CSSR150-3A
2"	CSSR200-3A
2-1/2"	CSSR250
3"	CSSR300-3A
4"	CSSR400



### Bevel Seat End x Hose Shank

#### Feature

- To be used with Sanitary ferrules on page 144

Size	Nut Used	316 Stainless Steel Part #
1"	13H-G100	CBSR100
1-1/2"	IXAN24	CBSR150
2"	IXAN32	CBSR200
3"	IXAN300	CBSR300
4"	IXAN64	CBSR400



### Tube Weld End x Hose Shank

#### Feature

- To be used with Sanitary ferrules on page 144

Size	316 Stainless Steel Part #
1-1/2"	CTER150
2"	CTER200
3"	CTER300
4"	CTER400



**Dixon® Sanitary Style  
Crimp Ferrules**

**Features**

- AISI 304 stainless steel
- Ferrules have a surface finish of 63 Ra or better



Size	Hose O.D.		304 Stainless Steel Part #
	From	To	
1"	1-26/64"	1-28/64"	F16G-1453
	1-29/64"	1-31/64"	F16G-1500
	1-32/64"	1-34/64"	F16G-1547
	1-35/64"	1-37/64"	F16G-1594
	1-38/64"	1-40/64"	F16G-1641
	1-41/64"	1-43/64"	F16G-1687
	1-44/64"	1-46/64"	F16G-1734
	1-47/64"	1-49/64"	F16G-1781
1-1/2"	1-58/64"	1-61/64"	F24G-1969
	1-62/64"	2-1/64"	F24G-2031
	2-2/64"	2-5/64"	F24G-2094
	2-6/64"	2-9/64"	F24G-2156
	2-10/64"	2-13/64"	F24G-2219
	2-14/64"	2-17/64"	F24G-2281
	2-18/64"	2-21/64"	F24G-2344
	2-22/64"	2-25/64"	F24G-2406
2"	2-30/64"	2-33/64"	F32G-2531
	2-34/64"	2-37/64"	F32G-2594
	2-38/64"	2-41/64"	F32G-2656
	2-42/64"	2-45/64"	F32G-2719
	2-46/64"	2-48/64"	F32G-2766
	2-49/64"	2-51/64"	F32G-2815
	2-52/64"	2-55/64"	F32G-2875
	2-56/64"	2-59/64"	F32G-2938
	2-60/64"	2-63/64"	F32G-3000
	3"	3-3/64"	F32G-3063
2-1/2"	3-4/64"	3-7/64"	F32G-3125
	3"	3-3/64"	F40G-3063
	3-4/64"	3-7/64"	F40G-3125
	3-8/64"	3-11/64"	F40G-3188
	3-12/64"	3-15/64"	F40G-3250
	3-16/64"	3-19/64"	F40G-3313
	3-20/64"	3-23/64"	F40G-3375
	3-24/64"	3-26/64"	F40G-3437
3"	3-36/64"	3-39/64"	F48G-3625
	3-40/64"	3-43/64"	F48G-3688
	3-44/64"	3-47/64"	F48G-3750
	3-48/64"	3-51/64"	F48G-3813
	3-52/64"	3-55/64"	F48G-3875
	3-56/64"	3-59/64"	F48G-3938
	3-61/64"	4"	F48G-4016
4"	4-40/64"	4-43/64"	F64G-4688
	4-44/64"	4-47/64"	F64G-4750
	4-48/64"	4-51/64"	F64G-4813
	4-52/64"	4-55/64"	F64G-4875
	4-56/64"	4-59/64"	F64G-4938
	5-5/64"	5-8/64"	F64G-5141

## Vacuum Fittings KF Flanges and Fittings

**Application**

- Vacuum sealing for 1/2" - 2" O.D.

**Size**

- KF10 - KF50

**Features**

- Each assembly contains two identical flanges and a centering ring assembly and is clamped together with a thumbscrew clamp
- Coupling features prevent O-ring collapse and keep the assembly aligned
- KF flanges are compatible with other ISO-KF-QF vacuum flange manufacturers' components
- MTRs available

**Materials**

- Fittings: 304 stainless steel standard (316L stainless steel optional)
- Clamps: aluminum
- O-ring: FKM

**Specifications**

- Maximum temperature: 302°F (150°C)
- Helium leakage testing to 1x10<sup>-8</sup> Torr
- Standards followed: ISO2681



**Part Number Key**  
Example: **DVF - A 10 G A**

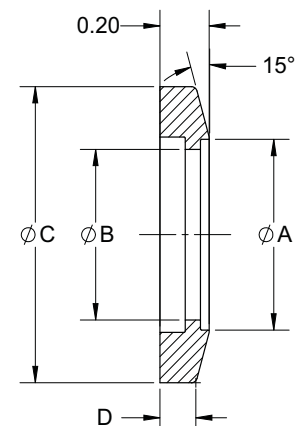
(KF10, 304 stainless steel bored flange)

Product Line	-	Series	Size	Material	Type
DVF		A - KF B - ISO C - Fitting	10 - KF10 16 - KF16 25 - KF25 40 - KF40 50 - KF50	G - 304 stainless steel R - 316L stainless steel <sup>1</sup> L - Aluminum (clamp only)	A - KF bored flange
					B - KF blank flange
					C - KF short weld flange
					D - KF long weld flange
					E - KF centering ring assembly
					F - KF overpressure ring
					G - KF flex bellow
					H - KF clamp

<sup>1</sup> Minimum quantity requirements apply.

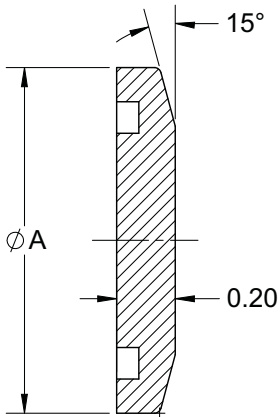
**KF Bored Flanges**

Flange Size	A (in)	B (in)	C (in)	D (in)	304 Stainless Steel Part #
KF10	0.51	0.45	1.18	0.12	DVF-A10GA
KF16	0.76	0.68	1.18	0.11	DVF-A16GA
KF25	1.01	0.94	1.58	0.13	DVF-A25GA
KF40	1.51	1.43	2.17	0.12	DVF-A40GA
KF50	2.01	1.94	2.95	0.12	DVF-A50GA



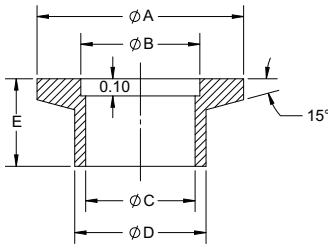
Vacuum Fittings

KF Blank Flanges



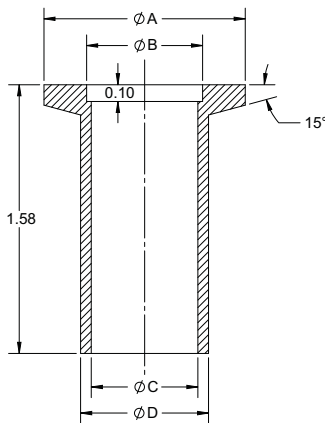
Flange Size	A (in)	304 Stainless Steel Part #
KF10	1.18	DVF-A10GB
KF16	1.18	DVF-A16GB
KF25	1.58	DVF-A25GB
KF40	2.17	DVF-A40GB
KF50	2.95	DVF-A50GB

KF Short Weld Flanges



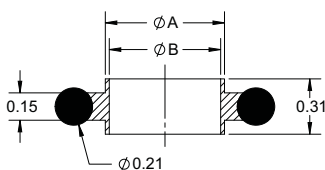
Flange Size	A (in)	B (in)	C (in)	D (in)	E (in)	304 Stainless Steel Part #
KF10	1.18	0.48	0.37	0.50	0.50	DVF-A10GC
KF16	1.18	0.67	0.62	0.75	0.50	DVF-A16GC
KF25	1.58	1.03	0.87	1.00	0.50	DVF-A25GC
KF40	2.17	1.62	1.37	1.50	0.75	DVF-A40GC
KF50	2.95	2.05	1.87	2.00	0.75	DVF-A50GC

KF Long Weld Flanges



Flange Size	A (in)	B (in)	C (in)	D (in)	304 Stainless Steel Part #
KF10	1.18	0.48	0.37	0.50	DVF-A10GD
KF16	1.18	0.67	0.62	0.75	DVF-A16GD
KF25	1.58	1.03	0.87	1.00	DVF-A25GD
KF40	2.17	1.62	1.37	1.50	DVF-A40GD
KF50	2.95	2.05	1.87	2.00	DVF-A50GD

KF Centering Ring Assemblies

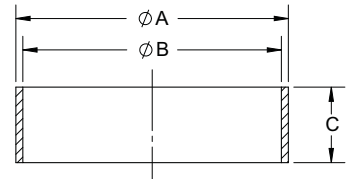


Flange Size	A (in)	B (in)	304 Stainless Steel with FKM O-ring Part #
KF10	0.48	0.44	DVF-A10GE
KF16	0.67	0.63	DVF-A16GE
KF25	1.02	0.98	DVF-A25GE
KF40	1.61	1.57	DVF-A40GE
KF50	2.05	1.97	DVF-A50GE

Vacuum Fittings

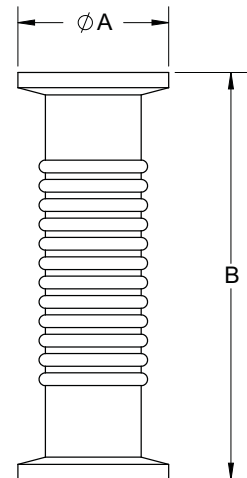
KF Overpressure Rings

Flange Size	A (in)	B (in)	C (in)	Max PSIG	304 Stainless Steel Part #
KF10	1.25	1.19	0.35	100	DVF-A1016GF
KF16	1.25	1.19	0.35	100	DVF-A1016GF
KF25	1.66	1.58	0.35	100	DVF-A25GF
KF40	2.26	2.18	0.35	75	DVF-A40GF
KF50	2.77	2.64	0.15	50	DVF-A50GF



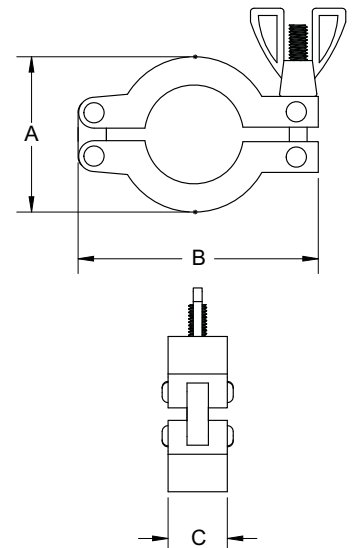
KF Flex Bellows (Formed)

Flange Size	A (in)	B (in)	304 Stainless Steel Part #
KF10	1.18	3.20	DVF-A10GG
KF16	1.18	3.20	DVF-A16GG
KF25	1.58	4.20	DVF-A25GG
KF40	2.17	4.20	DVF-A40GG
KF50	2.95	4.20	DVF-A50GG



KF Clamps

Flange Size	A (in)	B (in)	C (in)	Aluminum Part #
KF10	1.69	2.39	0.63	DVF-A1016LH
KF16	1.69	2.39	0.63	DVF-A1016LH
KF25	2.14	2.80	0.63	DVF-A25LH
KF40	2.75	3.44	0.63	DVF-A40LH
KF50	3.50	4.25	0.71	DVF-A50LH



## Vacuum Fittings

### ISO Flanges and Fittings



**Application**

- Vacuum sealing for 2-1/2" - 10" O.D. tubing

**Sizes**

- ISO63 - ISO250

**Features**

- Each assembly contains two identical flanges and a centering ring assembly and is joined together by clamps
- Centering ring keeps the flanges in line and prevents the O-ring from being pushed in by atmospheric pressure
- Multiple clamps must be used to ensure a sturdy connection
- ISO fittings are compatible with other manufacturers' ISO-KF-QF vacuum flanges
- MTRs available

**Materials**

- Fittings: 304 stainless steel standard (316L stainless steel optional)
- Clamps: aluminum
- O-ring: FKM

**Specifications**

- Maximum temperature: 302°F (150°C)
- Helium leakage testing to 1x10<sup>-8</sup> Torr
- Standards followed: ISO2861

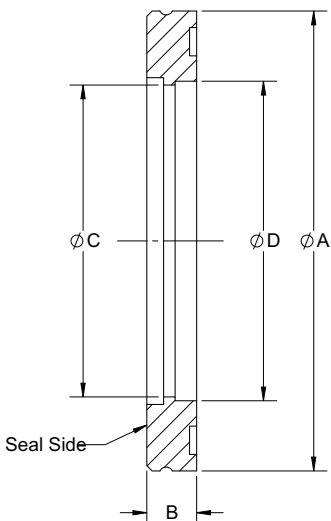
**Part Number Breakdown**

**Example: DVF - B 63 G A**

(ISO63, 304 stainless steel bored flange)

Product Line	-	Series	Size	Material	Type
DVF		A - KF B - ISO C - Fitting	63 - ISO63 80 - ISO80 100 - ISO100 160 - ISO160 200 - ISO200 250 - ISO250	G - 304 stainless steel R - 316L stainless steel <sup>1</sup> L - Aluminum (clamp only)	A - ISO bored flange B - ISO blank flange E - ISO centering ring assembly G - ISO flexible bellow H - ISO double claw clamp

<sup>1</sup> Minimum quantity requirements apply.



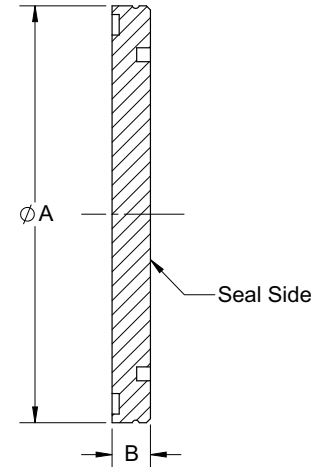
### ISO Bored Flanges

Flange Size	A (in)	B (in)	C (in)	D (in)	304 Stainless Steel Part #
ISO63	3.74	0.47	2.44	2.51	DVF-B63GA
ISO80	4.33	0.47	2.94	3.01	DVF-B80GA
ISO100	5.12	0.47	3.91	4.02	DVF-B100GA
ISO160	7.09	0.47	5.87	6.03	DVF-B160GA
ISO200	9.45	0.47	7.87	8.03	DVF-B200GA
ISO250	11.42	0.47	9.88	10.02	DVF-B250GA

### Vacuum Fittings

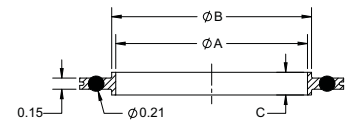
#### ISO Blank Flanges

Flange Size	A (in)	B (in)	304 Stainless Steel Part #
ISO63	3.74	0.47	DVF-B63GB
ISO80	4.33	0.47	DVF-B80GB
ISO100	5.12	0.47	DVF-B100GB
ISO160	7.09	0.47	DVF-B160GB
ISO200	9.45	0.47	DVF-B200GB
ISO250	11.42	0.47	DVF-B250GB



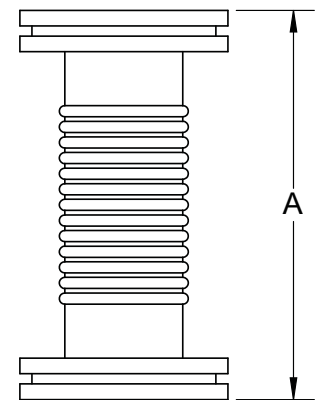
#### ISO Centering Rings Assemblies

Flange Size	A (in)	B (in)	C (in)	304 Stainless Steel Centering Ring FKM O-ring Aluminum Spacer Ring Part #
ISO63	2.63	2.74	0.31	DVF-B63GE
ISO80	3.14	3.25	0.31	DVF-B80GE
ISO100	3.89	4.00	0.31	DVF-B100GE
ISO160	5.90	6.01	0.31	DVF-B160GE
ISO200	8.26	8.37	0.31	DVF-B200GE



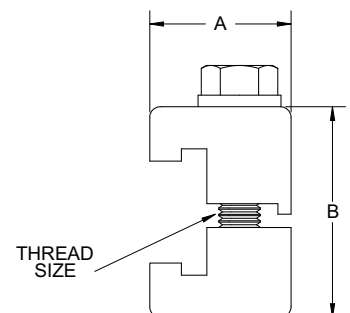
#### ISO Flexible Bellow (Formed)

Flange Size	A (in)	Compressed Length (in)	304 Stainless Steel Part #
ISO63	7.00	6.00	DVF-B63GG
ISO80	7.00	6.00	DVF-B80GG
ISO100	7.00	6.00	DVF-B100GG
ISO160	7.00	6.00	DVF-B160GG
ISO200	7.00	6.00	DVF-B200GG
ISO250	13.50	10.50	DVF-B250GG



#### ISO Double Claw Clamps

Flange Size	A (in)	B (in)	Thread Size	Qty. of Clamps Required	Aluminum Part #
ISO63	0.94	1.96	5/16"-18	3 - 4	DVF-B63100LH
ISO80	0.94	1.96	5/16"-18	4 - 8	DVF-B63100LH
ISO100	0.94	1.96	5/16"-18	4 - 8	DVF-B63100LH
ISO160	1.10	1.96	5/16"-18	4 - 8	DVF-B160250LH
ISO200	1.10	1.96	5/16"-18	6 - 12	DVF-B160250LH
ISO250	1.10	1.96	5/16"-18	6 - 12	DVF-B160250LH



NOTE: ISO clamps are sold in multiples of 4.

## Vacuum Weld Fittings

Each part is crafted with precision to ensure a leak-free fit.



**Application**

- Vacuum sealing weld fittings used in the semiconductor industry

**Sizes**

- 1/2" - 6"

**Feature**

- Material Test Reports (MTRs) available

**Material**

- Fittings: 304 stainless steel standard (316L stainless steel optional)

**Specifications**

- Helium leakage testing to 1x10<sup>-8</sup> Torr
- Maximum temperature: **302°F (150°C)**
- Standards followed: ASTM A270, ASTM A269, and ASME SA270

**Part Number Key**

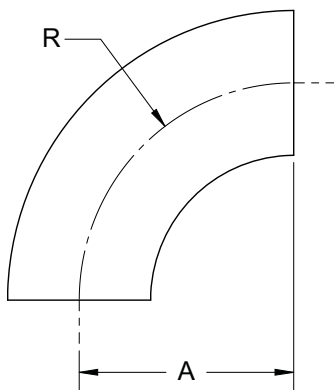
**Example: DVF - C 050 G 1 Q**

(1/2" 90° elbow, polished weld fitting, 304 stainless steel)

Product Line	-	Series	Size	Material	Finish	Type
DVF		A - KF B - ISO C - Fitting	050 - 1/2" 075 - 3/4" 100 - 1" 150 - 1-1/2" 200 - 2" 250 - 2-1/2" 300 - 3" 400 - 4" 600 - 6"	G - 304 stainless steel R - 316L stainless steel <sup>1</sup>	1 - polished 2 - bead blast <sup>1</sup>	Q - 90° elbow R - 90° elbow with tangents S - 45° elbow T - 45° elbow with tangents U - concentric reducer V - tee W - reducing tee

<sup>1</sup> Minimum quantity requirements apply.

**Weld 90° Elbows**

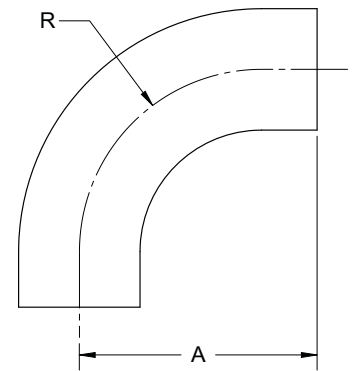


O.D.	A (in)	R (in)	304 Stainless Steel Part #
1/2"	0.75	0.75	DVF-C050G1Q
3/4"	1.00	1.00	DVF-C075G1Q
1"	1.50	1.50	DVF-C100G1Q
1-1/2"	2.25	2.25	DVF-C150G1Q
2"	3.00	3.00	DVF-C200G1Q
2-1/2"	3.75	3.75	DVF-C250G1Q
3"	4.50	4.50	DVF-C300G1Q
4"	6.00	6.00	DVF-C400G1Q
6"	9.00	9.00	DVF-C600G1Q

### Vacuum Fittings

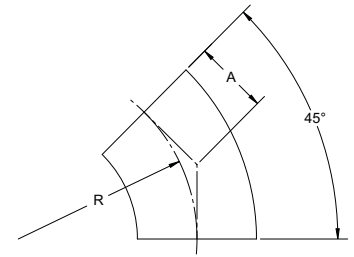
#### Weld 90° Elbows with Tangents

O.D.	A (in)	R (in)	304 Stainless Steel Part #
3/4"	1.42	1.00	DVF-C075G1R
1"	1.82	1.50	DVF-C100G1R
1-1/2"	2.94	2.25	DVF-C150G1R
2"	4.06	3.00	DVF-C200G1R
2-1/2"	5.19	3.75	DVF-C250G1R
3"	6.31	4.50	DVF-C300G1R
4"	8.31	6.00	DVF-C400G1R
6"	11.50	9.00	DVF-C600G1R



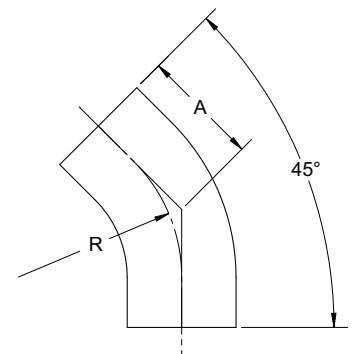
#### Weld 45° Elbows

O.D.	A (in)	R (in)	304 Stainless Steel Part #
1/2"	0.31	0.75	DVF-C050G1S
3/4"	0.41	1.00	DVF-C075G1S
1"	0.62	1.50	DVF-C100G1S
1-1/2"	0.93	2.25	DVF-C150G1S
2"	1.25	3.00	DVF-C200G1S
2-1/2"	1.53	3.75	DVF-C250G1S
3"	1.84	4.50	DVF-C300G1S
4"	2.50	6.00	DVF-C400G1S
6"	3.73	9.00	DVF-C600G1S



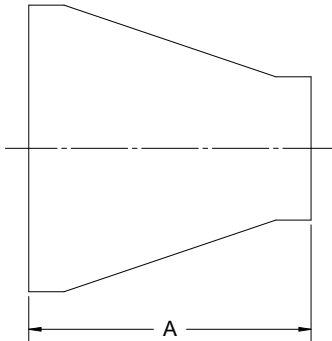
#### Weld 45° Elbows with Tangents

O.D.	A (in)	R (in)	304 Stainless Steel Part #
3/4"	0.76	1.00	DVF-C075G1T
1"	1.19	1.50	DVF-C100G1T
1-1/2"	1.63	2.25	DVF-C150G1T
2"	2.31	3.00	DVF-C200G1T
2-1/2"	3.00	3.75	DVF-C250G1T
3"	3.68	4.50	DVF-C300G1T
4"	4.81	6.00	DVF-C400G1T
6"	7.33	9.00	DVF-C600G1T



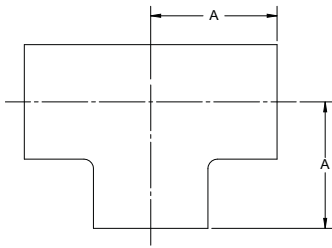
Vacuum Fittings

Concentric Reducers with Tangents



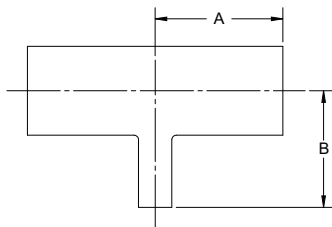
O.D.	A (in)	304 Stainless Steel Part #
1" x 3/4"	1.38	DVF-C100075G1U
1-1/2" x 3/4"	2.38	DVF-C150075G1U
1-1/2" x 1"	2.38	DVF-C150100G1U
2" x 1"	2.38	DVF-C200100G1U
2" x 1-1/2"	2.38	DVF-C200150G1U
2-1/2" x 1-1/2"	2.38	DVF-C250150G1U
2-1/2" x 2"	2.38	DVF-C250200G1U
3" x 1-1/2"	3.63	DVF-C300150G1U
3" x 2"	3.63	DVF-C300200G1U
3" x 2-1/2"	3.63	DVF-C300250G1U
4" x 2"	3.63	DVF-C400200G1U
4" x 2-1/2"	3.63	DVF-C400250G1U
4" x 3"	3.63	DVF-C400300G1U

Weld Tees



O.D.	A (in)	304 Stainless Steel Part #
1/2"	.75	DVF-C050G1V
3/4"	1.00	DVF-C075G1V
1"	1.88	DVF-C100G1V
1-1/2"	2.25	DVF-C150G1V
2"	3.00	DVF-C200G1V
2-1/2"	3.00	DVF-C250G1V
3"	3.25	DVF-C300G1V
4"	3.88	DVF-C400G1V
6"	5.00	DVF-C600G1V

Weld Reducing Tees



O.D.	A (in)	B (in)	304 Stainless Steel Part #
1" x 3/4"	1.88	2.13	DVF-C100075G1W
1-1/2" x 3/4"	2.25	2.25	DVF-C150075G1W
1-1/2" x 1"	2.25	2.38	DVF-C150100G1W
2" x 1"	3.00	2.38	DVF-C200100G1W
2" x 1-1/2"	3.00	2.38	DVF-C200150G1W
2-1/2" x 1-1/2"	3.00	2.50	DVF-C250150G1W
2-1/2" x 2"	3.00	2.75	DVF-C250200G1W
3" x 1-1/2"	3.25	3.25	DVF-C300150G1W
3" x 2"	3.25	3.00	DVF-C300200G1W
3" x 2-1/2"	3.25	3.25	DVF-C300250G1W
4" x 1-1/2"	3.88	3.50	DVF-C400150G1W
4" x 2"	3.88	4.00	DVF-C400200G1W
4" x 2-1/2"	3.88	3.75	DVF-C400250G1W
4" x 3"	3.88	3.75	DVF-C400300G1W
6" x 3"	5.00	4.75	DVF-C600300G1W
6" x 4"	5.00	4.88	DVF-C600400G1W

## Vacuum Fittings

### MTR - Material Test Reports

An MTR is a report that contains information about the raw materials, chemical properties, and mechanical properties of a part. Dixon Sanitary provides material test reports upon request. Here's how you can access them:

#### Each MTR will contain:

- Part number and part description
- Material and material standards
- Heat number
- Chemical properties
- Mechanical properties
- Job number



#### To retrieve an MTR by QR code:

1. Scan the QR code on the product packaging
2. Enter the job number (found on the product's packaging bag)
3. Review the MTR

#### To retrieve an MTR at [dixonvalve.com](https://dixonvalve.com):

1. Go to [dixonvalve.com/en/knowledge-center/interactive-tools/mtr](https://dixonvalve.com/en/knowledge-center/interactive-tools/mtr)
2. Enter the job number (found on the product's packaging bag)
3. Review the MTR





### Breakaway Couplings - Clamp

**Application**

- Minimizes damage associated with pull-away and drive-away incidents

**Features**

- Designed to be installed between a fixed point and a hose
- 13kN break load bolts standard; other break loads available
- Coupling breaks away with an excessive load
- Other sizes/connection available
- 3A certified for CIP

**Materials**

- 316 stainless steel polished to standard <32Ra, 3A finish
- Clamp gasket: EPDM standard, optional material available

**Specification**

- Working pressure: **350 PSI @ 70°F (21°C)**



Size	316 Stainless Steel Part #
2"	SBC-E200CC13
3"	SBC-E300CC13



### Breakaway Couplings - Bevel Seat

**Application**

- Minimizes damage associated with pull-away and drive-away incidents

**Features**

- Designed to be installed between a fixed point and a hose
- 13kN break load bolts standard; other break loads available
- Coupling breaks away with an excessive load
- Other sizes / connections available
- 3A certified for COP

**Materials**

- 316 stainless steel polished to standard <32Ra, 3A finish
- Clamp gasket: EPDM standard; optional material available

**Specification**

- Working pressure: **350 PSI @ 70°F (21°C)**



Size	316 Stainless Steel Part #
2"	SBC-E200TP13
3"	SBC-E300TP13

## Spray Balls

### Rotating - SRH

**Application**

- Ideal for cleaning all types of tanks and vessels

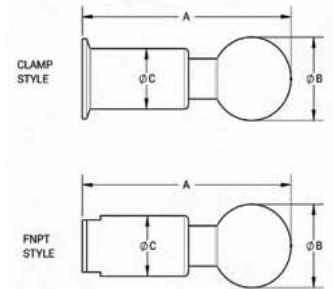
**Features**

- Stainless steel ball bearings
- Cleaning solution lubricates unit
- Mirror-like finish (O.D.)
- Spray pattern: 360°

**Specification**

- Available connections: clamp and NPT

Size	Type	Dimensions			304 Stainless Steel Part #	316L Stainless Steel Part #
		A (in)	B (in)	C (in)		
3/4"	NPT	5.47	2.07	1.50	SRH360NPT-G075	---
1-1/2"	NPT	6.60	2.55	2.00	---	SRH360NPT-R150
	clamp	5.47	2.07	1.50	SRH360CMP-G150	SRH360CMP-R150



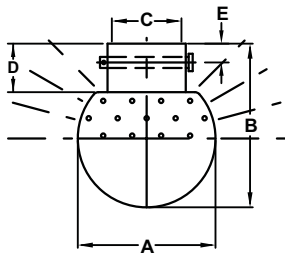
### Stationary - STC

**Application**

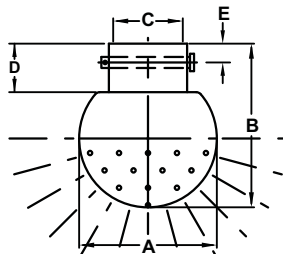
- Typically used in food and beverage industries for cleaning storage tanks

**Features**

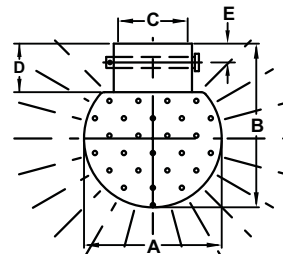
- Heavy duty 316L stainless steel construction
- Stationary - designed to be mounted to a tube or pipe
- 2 mm spray holes
- Various spray patterns available (blanks available as special order)



180° Top Pattern



180° Bottom Pattern



360° Pattern



Size	Pin Length	Spray Pattern	Dimensions					Pin Diameter (in)	316L Stainless Steel Part #
			A (in)	B (in)	C (in)	D (in)	E (in)		
1"	1.47"	360°	2.50	3.04	1.005	.975	.445	.226	STC-360-R100
1-1/2"	1.95"	360°	2.95	3.55	1.505	1.050	.445	.226	STC-360-R150
1"	1.47"	180° bottom	3.54	2.95	1.005	.975	.445	.226	STC-180B-R100
1-1/2"	1.95"	180° bottom	3.54	2.95	1.505	.975	.445	.226	STC-180B-R150
1"	1.47"	180° top	3.54	2.95	1.005	.975	.445	.226	STC-180T-R100
1-1/2"	1.95"	180° top	3.54	2.95	1.505	.975	.445	.226	STC-180T-R150

### Repair Kits

**Feature**

- Repair kit contains  
(1) pin  
(1) R clip

Size	Part #
1"	STC-RK100
1-1/2"	STC-RK150

## A Guideline for Compound Selection for Use with Various Fluids and Chemicals

Note: The information contained in these tables was derived from several sources and is to be used as a general guide only. Compounds suitable for any specific application rests solely by the end user. Dixon Sanitary assumes no responsibility. All effect ratings assume static conditions at ambient temperatures.

A - satisfactory

B - fair

C - severe effect; except for some static applications

D - unsatisfactory

E - insufficient information

Fluid	Material								
	Nitrile Rubber	EPDM	FKM	PTFE	Silicone	304 Stainless Steel	316/L Stainless Steel	Brass	Bronze
Acetaldehyde	D	A	D	A	B	A	A	A	A
Acetamide	A	A	B	A	B	B	A	E	D
Acetic Acid, 20%	B	A	C	A	B	B	A	D	C
Acetic Acid, 80%	B	A	D	A	B	D	B	D	C
Acetone	D	A	D	A	C	A	A	A	A
Acetophenone	D	B	D	A	D	A	B	C	C
Acetyl Chloride (Dry)	D	D	A	A	C	A	A	D	E
Acetylene	B	A	A	A	B	A	A	B	C
Acrylonitrile	D	D	C	A	D	A	A	A	E
Adipic Acid	C	A	A	A	E	A	A	E	E
Alcohols: Amyl	C	A	A	A	E	A	A	E	E
Alcohols: Benzyl	D	B	A	A	E	B	B	E	A
Alcohols: Butyl	C	A	A	A	B	A	A	A	A
Alcohols: Diacetone	D	A	D	A	A	A	A	A	A
Alcohols: Ethyl	C	A	A	A	B	A	A	A	A
Alcohols: Hexyl	A	C	B	A	B	A	A	E	A
Alcohols: Isobutyl	B	A	A	A	A	A	A	E	A
Alcohols: Methyl	A	A	C	A	A	A	A	A	A
Alcohols: Octyl	B	A	B	E	B	A	A	E	A
Alcohols: Propyl	A	A	A	A	A	A	A	A	A
Ammonia 10%	A	A	D	A	E	A	A	E	D
Ammonia Gas (cold)	A	A	D	A	A	E	E	D	D
Ammonium Chloride (aq)	B	A	A	A	C	C	B	D	D
Ammonium Hydroxide (conc.)	D	A	B	A	A	A	A	D	D
Ammonium Nitrate (aq)	A	A	E	A	C	A	A	D	D
Ammonium Nitrite (aq)	A	A	B	A	C	A	A	D	D
Ammonium Phosphate (aq)	A	A	A	A	A	A	A	E	D
Ammonium Sulfate (aq)	A	A	D	A	A	B	B	D	D
Amyl Acetate (Banana Oil)	D	A	D	A	D	A	A	A	A
Amyl Borate	A	D	A	A	E	E	E	E	E
Antifreeze	A	A	A	E	C	E	A	E	A
Arsenic Acid	A	A	A	A	A	A	A	D	B
Arsenic Trichloride (aq)	C	D	D	A	E	D	D	E	E
Barium Chloride (aq)	A	A	A	A	A	A	A	B	B
Barium Hydroxide (aq)	A	A	A	A	A	B	B	D	D
Barium Sulfate (aq)	A	A	A	A	A	B	B	B	C
Barium Sulfide (aq)	A	A	A	A	A	B	B	D	D
Benzaldehyde	D	A	D	A	D	B	B	E	A
Benzene	D	D	D	A	D	B	B	E	A
Benzoic Acid	D	D	A	A	B	B	B	E	B
Benzyl Chloride	D	D	A	E	D	C	B	E	D
Boric Acid	A	A	A	A	A	B	A	E	B

Fluid	Material								
	Nitrile Rubber	EPDM	FKM	PTFE	Silicone	304 Stainless Steel	316/L Stainless Steel	Brass	Bronze
Brine - Calcium Chloride	A	A	A	A	A	A	E	A	E
Brine - Sodium Chloride	A	A	E	A	A	A	E	A	E
Bromine, Anhydrous	D	D	A	A	D	D	D	E	D
Bromine Water	E	E	A	A	D	E	B	E	D
Butadiene	D	C	B	A	D	A	A	E	C
Butane	A	D	A	A	D	A	A	E	C
Butyl Acetate	D	D	D	A	D	B	C	D	D
Butyl Acetyl Ricinoleate	C	C	A	A	E	A	A	E	E
Butyl Amine	E	E	D	A	B	E	A	E	B
Butyl Benzoate	E	B	A	A	E	B	B	E	E
Butyl Carbitol	A	A	C	A	D	E	E	E	E
Butyl Cellosolve	B	A	D	A	D	E	E	A	A
Butyl Oleate	E	C	A	A	E	E	E	E	E
Butyl Stearate	A	D	A	A	E	B	B	A	A
Butylene	A	D	A	A	D	A	A	E	D
Butyraldehyde	D	C	D	A	E	A	E	E	E
Carbolic Acid (Phenol)	D	C	A	A	D	B	B	D	B
Carbon Bisulfide	C	D	A	E	E	A	B	E	A
Carbon Dioxide	A	B	B	A	B	A	A	E	A
Carbonic Acid	D	B	A	A	A	A	A	D	B
Carbon Monoxide	A	A	A	A	A	A	A	E	A
Carbon Tetrachloride	D	D	A	A	D	B	B	E	A
Castor Oil	B	B	A	A	A	A	A	A	E
Catsup (Ketchup)	A	A	A	A	E	B	B	E	E
Cellosolve Acetate	D	B	D	A	D	E	B	E	B
Chlorine (wet)	D	B	C	A	D	C	C	D	D
Chlorine Dioxide	D	C	B	A	C	D	D	E	E
Chloroacetic Acid	D	B	A	A	D	B	A	D	C
Chloroacetone	D	D	B	A	D	B	B	E	E
Chlorobenzene	D	D	A	B	D	A	B	B	C
Chlorobromomethane	D	B	A	A	D	E	E	E	E
Chloroform	D	D	B	A	D	A	A	B	B
Chlorotoluene	D	D	A	A	D	B	B	E	E
Chocolate Syrup	A	A	A	A	E	A	A	E	E
Chrome Plating Solutions	D	E	A	A	B	E	D	E	E
Chromic Acid 5%	D	A	A	A	C	B	A	D	B
Chromic Acid 10%	D	C	A	A	C	B	B	D	D
Chromic Acid 30%	D	B	A	A	C	B	B	D	D
Chromic Acid 50%	D	B	A	A	C	C	B	D	D
Cod Liver Oil	A	A	A	A	B	A	A	E	E
Copper Acetate (aq)	B	A	D	A	D	C	C	C	C
Copper Chloride (aq)	A	A	A	A	A	D	D	E	D
Copper Cyanide (aq)	A	A	A	A	A	B	B	D	D
Copper Sulfate >5%	A	A	A	A	A	B	B	D	D
Copper Sulfate 5%	A	A	A	A	A	B	B	D	B
Creosols	E	D	A	A	D	A	E	E	A
Creosote, Coal Tar	E	D	A	A	D	B	E	E	E
Cresylic Acid	D	D	B	A	D	A	A	E	D
Cyclohexane	B	D	A	A	D	A	A	A	B
Cyclohexanol	C	D	A	A	D	B	B	E	E
Cyclohexanone	D	B	D	A	D	A	A	E	B

## Hygienic Fittings

Fluid	Material								
	Nitrile Rubber	EPDM	FKM	PTFE	Silicone	304 Stainless Steel	316/L Stainless Steel	Brass	Bronze
Denatured Alcohol	A	A	B	A	A	A	A	E	E
Detergent Solutions	A	A	A	A	A	A	A	E	B
Dibenzyl Ether	D	C	C	A	E	B	B	E	E
Dibenzyl Sebacate	D	C	B	A	C	E	E	E	E
Dibromoethyl Benzene	E	D	A	A	D	E	E	E	E
Dibutyl Amine	C	D	B	A	E	A	E	E	E
Dibutyl Ether	B	C	C	A	D	E	B	E	E
Dibutyl Phthalate	D	B	C	A	B	A	A	A	A
Dibutyl Sebacate	D	C	B	A	B	A	A	E	E
Dichlorobenzene	D	D	E	A	D	E	B	E	B
Dichloro Isopropyl Ether	D	D	C	A	D	E	E	E	E
Diethylamine	C	B	D	D	B	A	A	A	A
Diethyl Benzene	D	D	A	A	E	E	E	E	E
Diethyl Ether	D	D	D	A	D	B	B	B	A
Diethylene Glycol	A	A	A	A	B	A	A	E	E
Diethyl Sebacate	D	C	A	A	B	A	A	E	E
Diisobutylene	B	D	A	A	D	B	B	E	E
Diisopropyl Benzene	D	D	A	A	E	E	E	E	E
Diisopropyl Ketone	D	A	D	A	D	A	E	E	E
Dimethyl Aniline (Xylidine)	D	B	D	A	D	B	B	E	E
Dimethyl Ether (Methyl Ether)	A	E	E	A	E	B	E	E	E
Dimethyl Formamide	D	B	D	A	C	A	B	E	E
Dimethyl Phthalate	D	C	C	A	E	A	B	E	E
Dinitrotoluene	D	D	B	A	E	A	E	E	E
Diocetyl Phthalate	D	B	B	A	C	A	A	A	A
Diocetyl Sebacate	D	C	B	A	C	A	E	E	E
Dioxane	D	E	D	A	D	E	A	A	A
Dioxolane	D	B	B	A	D	E	E	E	E
Dipentene	C	D	A	A	D	A	A	E	E
Diphenyl (Phenylbenzene)	D	D	A	A	D	B	B	B	B
Diphenyl Oxide	A	D	A	A	C	B	A	E	E
Dowtherm Oil	D	D	A	A	C	A	A	A	A
Ethane	A	D	A	A	D	A	A	E	E
Ethanolamine	B	B	D	A	B	A	A	E	B
Ethyl Acetate	D	B	D	A	B	B	B	B	A
Ethyl Acetoacetate	D	C	D	A	C	A	E	E	A
Ethyl Acrylate	D	C	D	A	B	A	A	B	A
Ethyl Benzene	D	D	A	A	D	B	B	E	B
Ethyl Benzoate	D	E	A	A	D	E	E	E	E
Ethyl Cellosolve	C	B	B	A	D	E	E	E	E
Ethyl Cellulose	B	B	D	A	C	B	B	E	E
Ethyl Chloride	A	A	A	A	D	A	A	A	A
Ethyl Chlorocarbonate	D	B	A	A	D	E	E	E	E
Ethyl Chloroformate	E	D	A	A	D	E	E	E	E
Ethyl Ether	D	D	D	A	D	B	B	B	A
Ethyl Pentachlorobenzene	D	D	A	A	D	E	E	E	E
Ethylene	B	D	A	A	E	A	A	E	E
Ethylene Chloride	D	D	B	A	D	B	B	E	A

Fluid	Material								
	Nitrile Rubber	EPDM	FKM	PTFE	Silicone	304 Stainless Steel	316/L Stainless Steel	Brass	Bronze
Ethylene Diamine	A	A	D	A	A	B	B	D	B
Ethylene Dichloride	D	C	B	A	D	B	B	B	C
Ethylene Glycol	A	A	A	A	A	B	B	B	A
Fluoroboric Acid	A	A	A	A	E	B	B	E	B
Freon 11	B	D	D	A	D	A	A	E	E
Freon 12	A	A	C	A	D	B	B	B	B
Freon 22	D	A	D	A	D	A	A	A	E
Freon TF	A	D	B	A	D	A	A	E	E
Fruit Juice	A	A	A	A	E	A	A	D	E
Fumaric Acid	C	B	A	A	B	E	E	E	E
Gallic Acid	B	B	A	B	D	A	B	E	B
Gasoline, Unleaded	A	D	A	A	D	A	A	E	A
Glucose	A	A	A	A	A	A	A	A	E
Glycerin	A	A	A	A	A	A	A	B	A
Hexane	A	D	A	A	D	A	A	A	A
Hydrazine	B	A	D	A	B	A	A	E	E
Hydrobromic Acid 20%	E	A	A	E	D	D	D	D	D
Hydrobromic Acid 100%	D	A	A	A	D	D	D	D	E
Hydrochloric Acid 20%	E	A	A	A	D	D	D	E	D
Hydrochloric Acid 37%	B	C	A	A	B	D	D	E	D
Hydrochloric Acids 100%	D	D	B	A	D	D	D	D	D
Hydrocyanic Acid	B	B	A	A	C	B	A	D	A
Hydrofluoric Acid 20%	D	D	A	A	D	D	D	E	B
Hydrofluoric Acid 50%	D	D	A	A	D	D	D	E	B
Hydrofluoric Acid 75%	D	C	B	A	D	D	D	E	B
Hydrofluoric Acid 100%	D	D	B	A	D	B	B	E	B
Hydrofluosilicic Acid 20%	A	A	A	A	D	C	B	E	B
Hydrofluosilicic Acid 100%	B	A	A	A	D	D	D	E	B
Hydrogen Gas	A	A	A	A	C	A	A	E	A
Hydrogen Peroxide 10%	D	A	A	A	A	B	B	E	B
Hydrogen Peroxide 30%	D	B	A	A	B	B	B	E	B
Hydrogen Peroxide 50%	D	B	A	A	B	B	A	E	B
Hydrogen Peroxide 100%	D	D	A	A	B	B	A	D	B
Hydrogen Sulfide (wet) cold	D	B	D	A	C	C	A	E	A
Hydroquinone	D	D	B	A	E	B	B	E	E
Iodoform	D	A	E	C	E	A	A	E	E
Isooctane	A	D	A	A	D	A	A	A	A
Isopropyl Acetate	D	B	D	A	D	C	A	E	A
Isopropyl Chloride	D	D	B	A	D	A	A	E	E
Isopropyl Ether	B	D	D	A	D	A	A	A	A
Kerosene	A	D	A	A	D	A	A	A	A
Lacquers	D	D	D	A	D	A	A	E	A
Lactic Acid	A	A	A	A	A	B	B	D	B
Lead Acetate	B	A	A	A	A	B	B	E	B
Lead Nitrate	A	A	A	A	B	B	B	E	B
Lime	A	D	A	A	E	A	A	E	E
Linoleic Acid	B	D	B	A	B	B	A	E	E

## Hygienic Fittings

Fluid	Material								
	Nitrile Rubber	EPDM	FKM	PTFE	Silicone	304 Stainless Steel	316/L Stainless Steel	Brass	Bronze
Maleic Acid	D	D	A	A	E	A	B	E	B
Malic Acid	A	D	A	A	B	A	A	B	B
Malt Beverages	A	A	A	A	A	A	A	E	E
Mayonnaise	C	E	A	A	E	C	A	E	E
Methane	A	D	A	A	D	A	A	E	A
Methyl Acetate	D	B	D	A	D	A	B	E	A
Methyl Acrylate	D	B	D	E	D	A	E	E	E
Methyl Acrylic Acid	E	C	C	A	D	E	E	E	E
Methyl Bromide	B	D	A	A	E	A	A	E	E
Methyl Butyl Ketone	D	A	D	E	D	A	A	E	E
Methyl Cellosolve	D	C	D	E	D	A	A	E	E
Methyl Chloride	D	D	A	A	D	A	A	A	B
Methyl Cyclopentane	B	D	A	A	E	A	E	E	E
Methylene Chloride	D	C	B	A	E	B	B	A	B
Methyl Ether	E	A	A	A	D	E	E	E	E
Methyl Ethyl Ketone	D	A	D	A	D	A	A	A	A
Methyl Isobutyl Ketone	D	B	D	A	D	B	B	E	A
Methyl Methacrylate	D	D	D	E	C	B	B	E	E
Milk	A	A	A	A	A	A	A	D	A
Mineral Oil	A	D	A	A	C	A	A	A	A
Mineral Spirits	A	D	A	A	D	A	A	E	A
Molasses	A	A	A	A	E	A	A	B	A
Monoethanolamine	A	D	A	A	C	A	A	A	A
Monomethylether	A	A	A	A	E	E	E	E	E
Monovinyl Acetylene	A	E	A	A	B	E	E	E	E
Motor Oil	A	D	A	A	E	A	A	E	A
Mustard	B	A	A	A	E	A	A	E	A
Naphthalenic Acid	B	D	A	A	E	A	A	E	E
Natural Gas	A	D	A	A	A	A	A	E	A
Nickel Acetate (aq)	B	A	D	A	D	A	C	E	E
Nickel Chloride (aq)	A	A	A	A	A	D	C	D	B
Nickel Sulfate (aq)	A	A	A	A	A	B	B	D	B
Nitric Acid 5%-10%	D	A	A	A	C	A	A	D	A
Nitric Acid 20%	D	A	A	A	D	A	A	D	A
Nitric Acid 50%	D	D	A	A	D	A	A	D	A
Nitric Acid Concentrated	D	D	A	A	D	A	A	D	A
Nitrobenzene (Ligroin)	D	B	A	A	D	B	B	E	A
Nitroethane	D	C	D	A	D	A	E	E	E
Nitrogen Tetroxide	D	D	D	A	D	A	E	E	E
Octachlorotoluene	D	D	A	A	D	E	E	E	E
Octadecane	A	D	A	A	D	E	E	E	E
N-Octane	E	E	E	E	D	E	E	E	E
Oleic Acid	C	D	B	A	D	A	A	D	B
Oils: Aniline	D	B	C	A	D	A	A	D	A
Oils: Anise	E	E	E	E	E	E	E	E	A
Oils: Bay	E	E	A	E	E	E	A	E	A
Oils: Bone	A	E	A	A	E	E	A	E	A
Oils: Castor	B	B	A	A	A	A	A	A	E

Fluid	Material								
	Nitrile Rubber	EPDM	FKM	PTFE	Silicone	304 Stainless Steel	316/L Stainless Steel	Brass	Bronze
Oils: Cinnamon	E	E	E	A	E	A	A	E	E
Oils: Citric	D	B	A	A	E	A	A	B	E
Oils: Clove	A	E	E	A	E	A	A	E	E
Oils: Coconut	A	D	A	A	A	A	A	E	E
Oils: Cod Liver	A	A	A	A	B	A	A	E	E
Oils: Corn	D	C	A	A	A	A	A	E	E
Oils: Cottonseed	A	D	A	A	A	A	A	A	E
Oils: Creosote	D	D	A	A	D	B	B	E	A
Oils: Diesel Fuel - 20, 30, 40, 50	A	D	A	A	D	A	A	E	A
Oils: Fuel - 1, 2, 3, 5A, 5B, 6	B	D	A	A	C	A	A	B	A
Oils: Ginger	A	A	E	A	E	D	D	E	D
Oils: Hydraulic - Petro	A	D	A	A	B	A	A	A	A
Oils: Hydraulic - Synthetic	D	A	E	A	B	A	A	A	A
Oils: Lemon	E	D	A	A	E	A	A	E	A
Oils: Linseed	A	D	A	A	A	A	A	B	A
Oils: Mineral	A	D	A	A	C	A	A	A	A
Oils: Olive	D	D	A	A	D	A	A	E	A
Oils: Orange	A	E	A	E	D	A	A	E	A
Oils: Palm	A	A	A	A	E	A	A	E	A
Oils: Peanut	A	D	A	A	A	A	A	E	A
Oils; Peppermint	D	E	A	A	E	A	A	E	A
Oils: Pine	D	D	A	A	D	A	A	E	A
Oils: Rapeseed	D	A	A	A	D	A	A	E	A
Oils: Rosin	A	E	A	A	E	A	A	E	B
Oils: Sesame Seed	A	E	A	A	E	A	A	E	A
Oils: Silicone	A	A	A	A	C	A	A	E	A
Oils: Soybean	A	C	A	A	A	A	A	E	A
Oils: Sperm (Whale)	A	E	E	A	E	A	A	E	A
Oils: Tanning	A	E	A	E	E	A	A	E	A
Oils: Transformer	A	D	A	A	B	A	A	E	E
Oils: Turbine	B	A	A	A	D	A	A	E	A
Oxalic Acid	B	B	A	A	B	A	A	D	B
Oxygen - Cold	C	A	A	A	A	A	A	E	E
Ozone	D	A	A	A	A	B	A	E	D
Palmitic Acid	A	B	A	A	D	B	A	D	A
Perchloric Acid	D	B	A	A	D	C	C	E	B
Phenyl Ethyl Ether	D	D	C	A	D	E	E	E	E
Phosphoric Acid - 20%	B	A	A	E	E	D	C	D	B
Phosphorus Trichloride	D	A	A	A	E	A	A	E	E
Piperidine	D	D	D	A	D	E	E	E	E
Polyvinyl Acetate Emulsion	E	A	D	A	E	E	E	E	B
Potassium Acetate (aq)	B	A	D	A	D	B	B	E	E
Potassium Chloride (aq)	A	A	A	A	A	B	A	D	B
Potassium Cyanide Solution	A	A	A	A	A	B	B	D	D
Potassium Nitrate (aq)	A	A	A	A	A	B	B	B	B
Propyl Acetate	D	B	D	A	D	A	A	A	E
Propyl Nitrate	E	B	D	A	D	A	E	E	E
Propylene	D	D	A	A	D	B	A	E	E

## Hygienic Fittings

Fluid	Material								
	Nitrile Rubber	EPDM	FKM	PTFE	Silicone	304 Stainless Steel	316/L Stainless Steel	Brass	Bronze
Pyridine	D	B	D	A	D	A	A	B	B
Salicylic Acid	B	A	A	A	E	B	B	E	A
Silicone Oils	A	A	A	A	C	A	A	E	A
Soap Solutions	A	A	A	A	A	A	A	B	B
Sodium Acetate (aq)	B	A	D	A	D	B	B	B	B
Sodium Bicarbonate (aq)	A	A	A	A	A	A	A	D	A
Sodium Borate (aq)	A	A	A	A	A	B	B	E	A
Sodium Chloride (aq)	A	A	A	A	A	B	B	D	B
Sodium Hydroxide 20%	A	B	D	A	A	B	B	B	B
Sodium Hydroxide 50%	A	B	D	A	A	B	B	D	C
Sodium Hydroxide 80%	D	B	D	A	A	C	B	D	C
Sodium Nitrate (aq)	A	A	A	A	D	B	B	E	B
Sodium Peroxide (aq)	B	A	A	A	D	A	A	D	A
Soybean Oil	A	A	A	A	A	A	A	E	A
Steam 220°F-300°F	D	E	D	D	C	E	A	A	A
Steam to 200°F	C	E	D	D	C	E	A	A	A
Stearic Acid	B	B	A	A	B	B	A	D	B
Stoddard Solvent	A	D	A	A	D	A	A	E	A
Sulfur Chloride (aq)	D	D	A	A	C	D	D	D	B
Sulfuric Acid <10%	A	A	A	A	C	D	B	E	B
Sulfuric Acid 10% - 75%	B	B	A	A	D	D	D	E	B
Sulfuric Acid 76% - 100%	C	B	A	A	D	C	D	E	B
Sulfuric Acid Cold Concentrated	D	C	A	A	D	C	B	E	B
Sulfuric Acid Hot Concentrated	D	D	D	A	D	D	C	E	B
Sulfurous Acid	B	B	A	A	D	B	B	E	B
Tannic Acid	A	A	B	A	B	B	A	B	B
Tartaric Acid	A	B	A	A	A	C	C	D	B
Tetrachloroethylene	D	D	D	A	D	B	B	E	B
Toluene	D	D	A	A	D	A	A	A	A
Triethanol Amine	D	B	D	A	D	A	A	E	E
Trioctyl Phosphate	D	A	B	A	C	E	E	E	E
Tung Oil (China Wood Oil)	A	C	A	A	D	E	E	E	E
Turpentine	E	D	A	A	D	A	A	D	A
Uric Acid	E	E	E	A	E	B	B	E	B
Vanilla Extract	A	E	D	A	E	A	A	E	E
Vegetable Juice	A	A	A	D	B	A	A	A	A
Vegetable Oils	B	D	A	A	A	A	A	E	E
Vinegar	B	A	A	A	A	A	A	D	A
Whiskey & Wines	A	A	A	A	A	A	A	B	A
Zinc Chloride (aq)	A	A	A	A	B	B	B	D	B

## Identifying Threads

**It is important to identify the threads required before ordering couplings.**

Identifying threads can sometimes be the most difficult and frustrating part of coupling selection. However, without the right combination of threads, you may not provide a functional or safe connection.

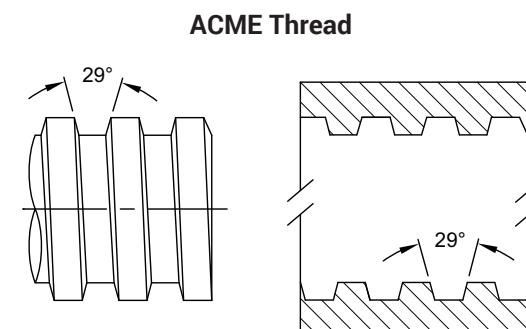
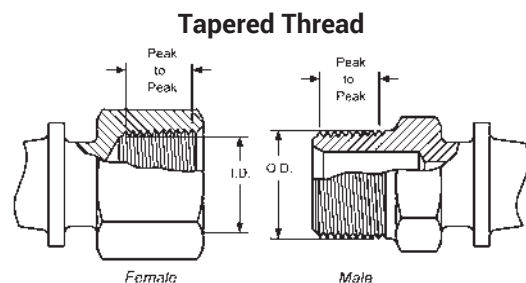
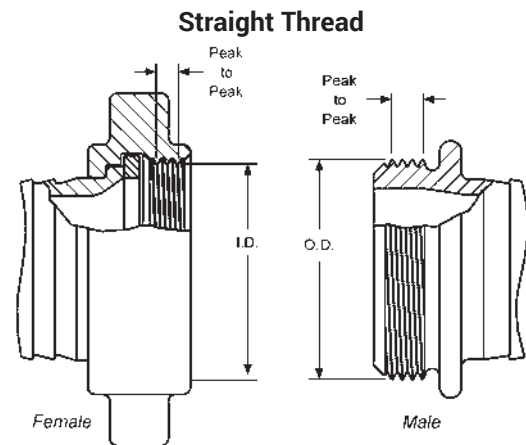
The diameters, threads per inch (TPI) and thread pitch, etc. are necessary to completely identify a thread. Ring, Plug and GO/NOGO gauges are required to accurately gauge or identify threads. In the field, in the absence of these gauges, thread leaf gauges can be used to identify the Threads Per Inch (TPI) and the thread pitch. On threads you have determined to be straight threads, a caliper can be used to measure the Outside Diameter of the Male (O.D.M.) or the Inside Diameter of the Female (I.D.F.). A caliper can also be used to take measurements of tapered thread diameters. However, these are more difficult to define because of the taper. Fortunately, there are few tapered threads to deal with and these can usually be identified from the nominal ODM and the TPI.

However, identifying the thread may not fully identify what is needed in a mating fitting. The application is the primary *limiting factor on the thread type used*. Dixon® offers products with a wide variety of threads used with hose, pipe and hydraulics.

When attempting to choose a fitting, it is always advisable to first identify the thread to which it must connect. This may entail checking with a fitting or equipment manufacturer.

When it is not possible to identify the thread:

- 1) Determine the number of threads per inch by measuring the distance from peak of thread to peak of thread across the largest number of whole threads. Then divide the number of threads by the measurement (This will provide the TPI).
- 2) Check to see if the thread is straight or tapered or flat thread.
  - a) Straight Threads  
Measure the Outside Diameter of the Male (O.D.M.) or the Inside Diameter of the Female (I.D.F.), from peak of thread to peak of thread.
  - b) Tapered Threads  
Measure the Outside Diameter of the Male (O.D.M.) at the large end and the small end, or the Inside Diameter of the Female (I.D.F.) at the large end and the small end, from peak of thread to peak of thread. Then measure the Outside Diameter (O.D.) of the unthreaded pipe.
  - c) Flat (ACME) Threads  
Acme threads are used for bevel seat and John Perry fittings in sanitary installations. Sizes 1" to 3" (tube size) have 8 threads per (TPI) and the 4" has 6 TPI. There is not a sharp point on this thread and it is a straight thread. The tops of the threads are flat and there is typically a 29° included angle between the threads. Measure the outside diameter of the male (O.D.) or inside diameter of the female (I.D.)



Once the application and these two pieces of information have been determined, the thread can generally be determined. When in doubt, contact Dixon® 800.355.1991.

## Identifying Threads

### Thread Dimensions

O.D.M. -- Outside Diameter of the Male

I.D.F. -- Inside Diameter of the Female

TPI -- Threads Per Inch

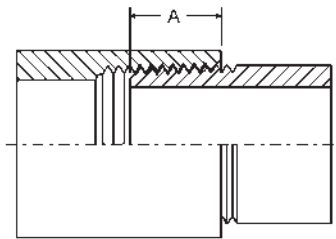
GHT (3/4") -- 1.0625 ODM  
11-1/2 TPI

NPT = National Pipe Taper

BS = British Standard

Size	Pipe O.D.	Tapered Threads		Straight Threads		
		NPT	BSPT <sub>r</sub>	ACME 3A		
		TPI	TPI	TPI	O.D.M. (max)	I.D.F (min)
1/8"	0.405	27	28			
1/4"	0.504	18	19			
3/8"	0.675	18	19			
1/2"	0.840	14	14			
3/4"	1.050	14	14			
1"	1.315	11.5	11	8	1.462	1.352
1-1/4"	1.660	11.5	11			
1-1/2"	1.900	11.5	11	8	1.994	1.884
2"	2.375	11.5	11	8	2.526	2.416
2-1/2"	2.875	8	11	8	3.058	2.948
3"	3.500	8	11	8	3.590	3.480
4"	4.500	8	11	6	4.695	4.544
5"	5.563	8	11			
6"	6.625	8	11			
8"	8.625	8				
10"	10.750	8				
12"	12.750	8				

### Normal Engagement Length of NPT Thread in Inches (A) \*

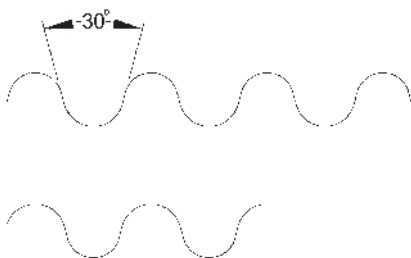


\* Dimensions given do not allow for variations in tapping or threading.

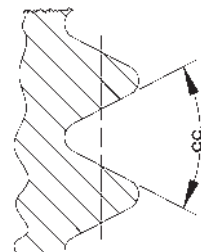
Pipe Size	A	Pipe Size	A
1/8"	1/4"	2"	3/4"
1/4"	3/8"	2-1/2"	15/16"
3/8"	3/8"	3"	1"
1/2"	1/2"	4"	1-1/8"
3/4"	9/16"	5"	1-1/4"
1"	11/16"	6"	1-5/16"
1-1/4"	11/16"	8"	1-7/16"
1-1/2"	11/16"	10"	1-5/8"
		12"	1-3/4"

### DIN and RJT Threads

Nut thread



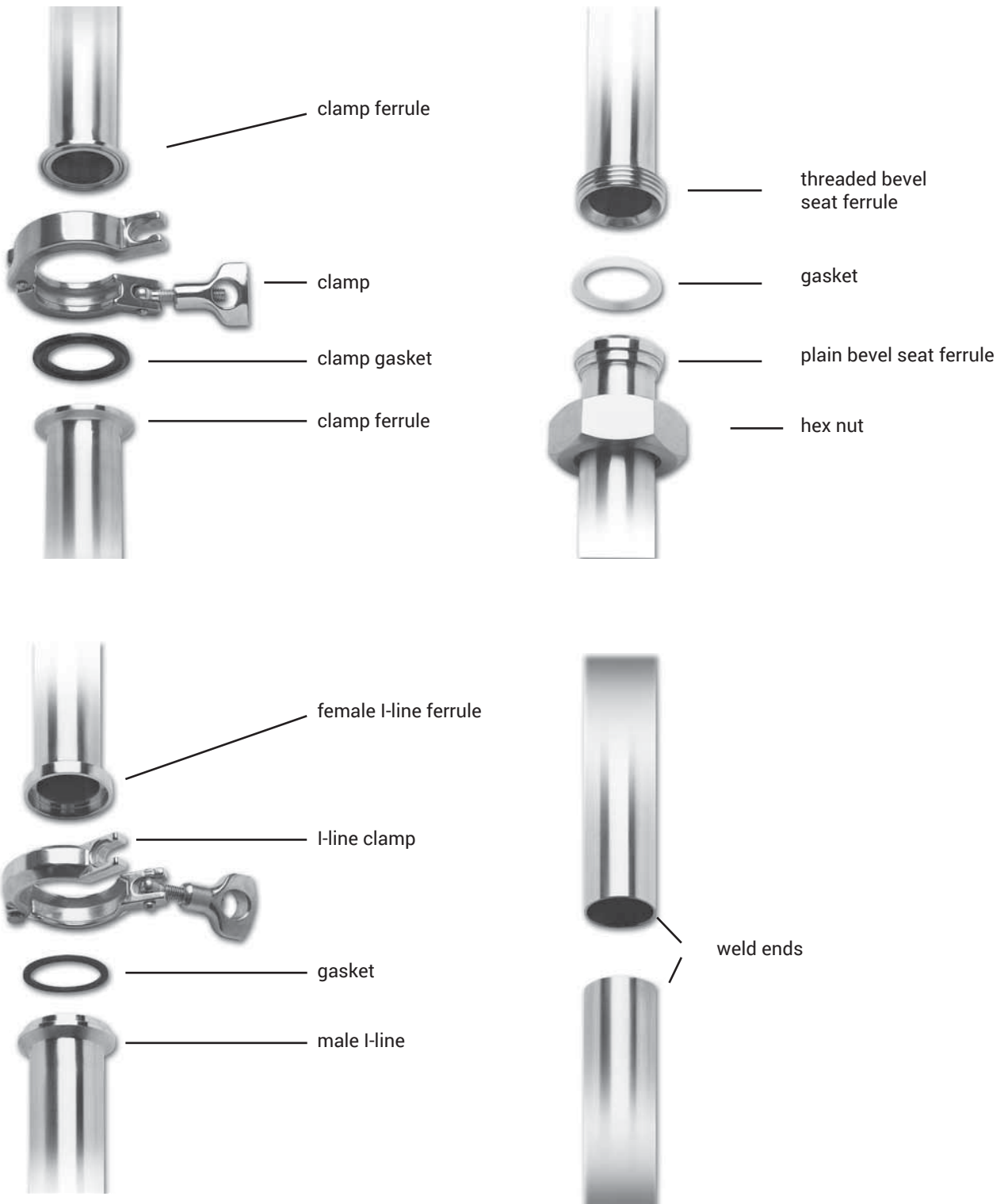
Bolt thread



DIN knuckle threads for sanitary applications have a unique round shape making them easy to identify. There is a 30° included angle between the threads. There are 6 to 8 threads per inch for sanitary fittings. Measuring the I.D. of the round nut or the O.D. of the threads on the weld liner will help with identification. As Dixon Sanitary will be offering inch sizes, the best size identification is the O.D. of the tube.

The threads for RJT fittings are British Standard Whitworth. These look similar to straight threads but have a 55° angle and small radii on the tips rather than the flat tips and 60° angle found on U.S. standard straight threads. There are 6 to 8 threads per inch for the sanitary fittings.

Identifying Fittings



NOTE: Clamp type connections are the most popular and are sometimes referred to as Tri-Clamp connections.  
 All connections are Tube O.D. 1/2" to 12"  
 Materials are available in 304 and 316L stainless steel, (other alloys can be special ordered)

Austenitic Stainless Steel Chemistry

Element	C	Mn	P	S	Si	Cr	Ni	Mo
304 <sup>1</sup>	0.08	2.00	0.045	0.030	1.00	18.0-20.0	8.0-11.0	
316L <sup>1</sup>	0.03	2.00	0.045	0.030	1.00	16.0-18.0	10.0-14.0	2.0-3.0
316L BPE <sup>2</sup>	0.03	2.00	0.045	0.05 - 0.17	1.00	16.0-18.0	10.0-14.0	2.0-3.0
CF-8 <sup>3</sup>	0.08	1.50	0.04	0.04	2.00	18.0-21.0	8.0-11.0	
CF-8M <sup>3</sup>	0.08	1.50	0.04	0.04	2.00	18.0-21.0	9.0-12.0	2.0-3.0

<sup>1</sup> ASTM specifications for wrought material

<sup>2</sup> ASME BPE 2019

<sup>3</sup> ASTM A743

NOTE: Percentages are maximums unless a range is specified

Finish Information

BPE Surface Finish Requirements (Table SF-2.4-1)

Surface designation	Mechanically Polished I.D. and O.D.		Dixon Sanitary Part number identifier
	Ra Maximum		
	I.D. $\mu$ -in.	O.D. $\mu$ -in	
SF0	no finish requirement	no finish requirement	
SF1	20	32	PL
SF2	25	32	
SF3	30	32	
Surface designation	Mechanically Polished O.D. and Electropolished I.D.		
	Ra Maximum		
	I.D. $\mu$ -in.	O.D. $\mu$ -in	
SF4	15	32	PM
SF5	20	32	
SF6	25	32	

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## Glossary of Terms

**#1 Finish** - Mill Finish (bright annealed, pickled, sand blast or tumbled).

**#3 Finish** - Used on stainless steel tubing, only the I.D. is polished to sanitary standards with an Ra range of 36-58. The O.D. is unpolished.

**#3A Finish** - Used on stainless steel tubing, the I.D. is polished to sanitary standards with an Ra range of 16-23 and the O.D. is polished to sanitary standards with an Ra range of 27-32.

**#4A Dairy finish** - Used on any surface, stainless steel is polished to sanitary standards with an Ra range of 18-31. I.D. and O.D. are both polished.

**#5 Finish** - Used on stainless steel tubing, only the O.D. is polished to sanitary standards  $\leq$  Ra32. The I.D. is unpolished.

**#7 Finish** - Used on stainless steel tubing and both the I.D. and O.D. are polished to sanitary standards  $\leq$  Ra32.

**3A Symbol** - A registered trademark used to identify equipment that meets 3A Sanitary Standards for design and fabrication.

The 3A Symbol on dairy and food equipment serves three important purposes:

1. assures processors that equipment conforms to sanitary standards
2. provides accepted criteria to equipment manufacturers for sanitary design
3. establishes guidelines for uniform evaluation and compliance by sanitarians. For more information visit [www.3-a.org](http://www.3-a.org).

**ABS** - (Acrylonitrile-butadiene-styrene) a thermoplastic resin with an excellent resistance to acids, bases, salts and some solvents.

**Absolute Pressure** - Atmospheric pressure added to gauge pressure.

**Absolute Viscosity** - Measure of a fluid's flow resistance between two layers of fluid in motion.

**ACME Thread** - A flat grooved helical ridge on a female or male union. This typically has a 29° included angle. Used on Bevel Seat and John Perry fittings.

**Ambient Temperature** - The temperature at a point or area expressed as an average of the surrounding areas or materials.

Ambient surface temperature is generally given to be 70°F to 80°F (21°C to 26°C) - an average of daily and seasonal variations.

**Anneal** - Stress relief of stainless steel, a heat treatment to remove the stresses generated in forming and welding operations.

This heat treatment is best done under controlled atmosphere or vacuum to maintain the mill finish. The fittings are not quenched, as in solution annealing; this would reintroduce residual stresses. Done correctly, parts are processed to provide minimum residual stresses and full corrosion resistance.

**ANSI** - American National Standards Institute, Inc.

**Aseptic** - Free from contamination caused by harmful bacteria, viruses, or other microorganisms.

**ASME** - American Society of Mechanical Engineers

**ASTM** - American Society for Testing and Materials

**Atmospheric Pressure** - Force per unit area exerted against a surface by the weight of the air above that surface. At sea level, atmospheric pressure is 14.7 PSI or 1 bar.

**Automatic Welding** - Welding with equipment that performs the welding operation without adjustment of the controls by a welding operator. The equipment may or may not perform the loading and unloading of the work (see also machine welding).

**Bevel Seat Ferrules** - A set of plain (male) and externally threaded (female) ferrules with matching bevel angles that produce a leak-proof seal when connected with a hex union nut. The thread is an ACME thread.

**Bioprocessing** - The use of complete living cells or their components (e.g. bacteria, enzymes, chloroplasts) to obtain desired products.

### Glossary of Terms

**Bioprocessing Equipment** - Equipment, systems or facilities used in the creation of products utilizing living organisms.

**Bright Anneal** - Annealing in a protective medium to prevent scaling and discoloration of the surface.

**Bright Annealed Finish** - A silvery satin surface, approximating the mill finish of stainless steel.

**Burst Pressure** - The pressure at which rupture occurs.

**Capacity** - Flow rate normally measured in gallons per minute (GPM).

**Centipoise** - Metric unit of viscosity.

**Centistoke** - The kinematic unit of viscosity. Viscosity in centipoise divided by the liquid density at the same temperature gives kinematic viscosity in centistokes.

**CF8M** - Cast austenitic material for pressure containing parts and is slightly magnetic compared to 316 stainless steel that is not magnetic.

**Clamp** - A device used to mechanically connect parts/fittings, ensuring a quick leak-proof connection and enabling easy disassembly.

**Clean-In-Place (CIP)** - Internally cleaning a piece of equipment without disassembly. The equipment is cleaned but not necessarily sterilized. The cleaning is normally done by acid, caustic or a combination of both with water-for-injection (WFI) rinse.

**Cold Flow** - The distortion of a solid under sustained pressure especially with an accompanying inability to return to its original dimensions when the pressure is removed.

**Compression Set** - The deformation that remains in a solid after it has been subjected to and released from stress such as a clamp. The longer the stress is maintained the more definitive the deformation.

**Concentric** - Denoting circles, arcs, or other shapes which share the same center, the larger often completely surrounding the smaller.

**Controlled Sulfur** - The content in 316L materials, used as in BPE installations, must be between .005% and .017% to ensure better orbital welding.

**Density** - Fluid's mass per unit of volume.

**Dilatant Fluid** - Viscosity increases with shear.

**DIN** - Deutsches Institut für Normung - meaning German Institute for Standardization.

**Durometer** - An instrument for measuring the hardness of rubber by resistance to penetration.

**Durometer Hardness** - A numerical value which indicates the resistance to indentation of the blunt indenter of the durometer.

**Eccentric** - Not placed centrally or not having its axis or other part placed centrally.

**Elastomer** - A natural or synthetic polymer having elastic properties, e.g. rubber.

**Elastomeric Material** - A material that can be stretched or compressed repeatedly and, upon immediate release of stress, will return to its approximate original size.

**Electropolishing** - A controlled electrochemical process utilizing acid electrolyte, DC current, anode and cathode to smooth the surface by removal of metal.

**EPDM** - Ethylene propylene diene monomer, a synthetic rubber.

**Ferrule** - A special fitting designed for welding to the end of tubing. Two ferrules and a gasket make a leak-proof connection when used with the complimentary clamp or nut.

**Fitting** - A small part of an apparatus (may be detachable).

**FKM (fluorocarbon)** - A family of fluoroelastomer materials defined by the ASTM International standard D1418.

**Fluorocarbon** - Synthetic rubber and fluoropolymer elastomer known as FKM.

**Fluoropolymer** - Polymer material having a carbon chain either partially or completely bonded to fluorine atoms. (FKM and PTFE are examples of this material type).

## Glossary of Terms

- Gas Tungsten-Arc Welding (GTAW)** - An arc welding process that produces coalescence of metals by heating them with an arc between a tungsten (non-consumable) electrode and the work. Shielding is obtained from a gas or gas mixture. (This process is sometimes call TIG welding, a non-preferred term.) GTAW may be performed by adding filler material to the weld or by a fusion process in which no filler is added.
- Gasket** - Static seal made from deformable material compressed between two mating surfaces.
- Gauge Pressure** - Pressure within a gauge that exceeds the surrounding atmospheric pressure, using atmospheric pressure as a zero reference.
- GPM** - The measure of flow in Gallons per Minute
- Heat Number** - A unique identifying code on a piece of metal to provide information about its origin.
- Heat-Affected Zone** - That portion of the base metal that has not been melted, but whose microstructure of mechanical properties have been altered by the heat of welding or cutting.
- Hex Union Nut** - An internally ACME-threaded six-sided connector used to assemble some fittings.
- Hygienic** - Clean and sanitary.
- Hygienic Clamp Joint** - A union consisting of two symmetrical ferrules having flat faces with a concentric groove and mating gasket that is secured with a clamp, providing a non-protruding, recessless product contact surface.
- Internal Expansion (IX)** - A method using a stem and a ferrule to assemble ends on a hose. Upon assembly of the parts, a plug, sometimes knows as a bullet, or a set of blades (fingers) is used to expand the stem diameter to a new larger size where the serrations of the stem are forced into the hose and this, in turn, forces the hose cover into the serrations of the ferrule. This provides a permanent assembly.
- ISO 5211** - International standard for actuator and valve interface. It defines the actuator mounting dimensions and drive size.
- Laminar Flow** - The smooth flow of a viscous liquid through a tube or pipe. In that case, the velocity of flow varies from zero at the walls to a maximum along the centerline of the vessel.
- Lubricant** - Any fluid that will maintain a film thickness of one micron or more at its operating temperature and load.
- Machine Welding** - Welding with equipment that performs the welding operation under the constant observation and control of a welding operator. The equipment may or may not perform the loading and unloading of the works. (see also automatic welding)
- Manual Welding** - Welding in which the entire welding operation is performed and controlled by hand.
- Meandering** - Of or pertaining to a weld bead that deviates from side to side across the weld joint rather than tracking the joint precisely. Note the control sulfur content in BPE weld material.
- Media** - The material flowing through a system.
- MTR** - (Material Test Report) is a certifiable document that communicates critical data for raw materials, such as steel and other metal alloys. The document certifies the material's compliance with contract and regulatory standards required for an application.
- NEMA Rating** - National electrical code ratings for electrical component enclosures.
- Neoprene** - Synthetic rubber, chemically and structurally similar to natural rubber.
- Newtonian** - A fluid that flows like water - its shear stress is linearly proportional to the velocity gradient in the direction perpendicular to the plane of shear
- Nick** - A surface void anomaly caused by material removal or compression from the surface, whose bottom surface is usually irregular.
- Nitrile Rubber** - An oil-resistant copolymer of acrylonitrile and butadiene, used especially for disposable gloves, gaskets, seals, and tubing.

### Glossary of Terms

**Nominal Size** - A dimensional value assigned for the purpose of convenient designation.

**Non-Product Wetted** - Metallic and elastomeric components not in contact with the media.

**NPT** - National Pipe Thread (tapered)

**ODP** - Open Drip Proof motor enclosure

**O.D.** - Outside diameter

**On-Off Service** - When the valve is being used to start or stop flow by being cycled to the full open or full closed position

**Operating Pressure** - The pressure at which system functions. Also known as working pressure.

**Orbital Welding** - Automatic or machine welding of tubes or pipe in-place with the electrode rotation (or orbiting) around the work. Orbital welding can be done with the addition of filler material or as a fusion process without the addition of filler.

**Passivation** - Removal of exogenous iron or iron from the surface of stainless steels and higher alloys by means of a chemical dissolution, most typically by a treatment with an acid solution that removes the surface contamination and enhances the formation of the passive layer.

**Pipe** - Pipe is a hollow cylinder used to move liquids, oils or gases. Pipe is measured by the Inner Diameter and schedule

**Pit** - A small surface void resulting from a localized loss of base material.

**Polish** - To make smooth and shiny by rubbing. Fittings may be machine polished to 15 Ra finish. Polish is I.D., O.D., or both per customer request.

**Polypropylene** - A lightweight synthetic plastic.

**Polysulfone** - A family of thermoplastic polymers. These polymers are known for their toughness and stability at high temperatures.

**Pressure** - The force per unit area applied on a surface in a direction perpendicular to that surface.

**Pressure Rating** - Maximum pressure at which a system is designed to operate.

**Pressure Shock** - Result of change in fluid velocity.

**Profilometer** - An instrument for the measurement of the degree of surface roughness.

**Pseudoplastic** - Fluid viscosity decreases as shear rate increases.

**PSI** - Pounds per square inch

**PSIG** - Pounds per square inch gauge

**PTFE** - Polytetrafluorethylene is a synthetic fluoropolymer of tetrafluoroethylene that has numerous applications.

**Ra** - Calculated as the roughness average of a surfaces measured microscopic peaks and valleys

**Reynolds Number (Re)** - Ratio of inertia forces to viscous forces giving a value to determine type of flow characteristic.

**Rheology** - Science of fluid flow.

**Rheomalactic** - Fluid viscosity decreases with time under shear conditions but does not recover.

**RJT** - Ring Joint Type

**RTD** - Resistance Temperature Detector is a device with a significant temperature coefficient (that is, its resistance varies with temperature). It is used as a temperature measurement device, usually by passing a low-level current through it and measuring the voltage drop.

**Sanitary (hygienic) Weld** - generally considered to be a groove weld in a square butt joint made by the GTAW (or plasma) process as a fusion weld without the addition of filler material. A sanitary weld must be completely penetrated on the weld I.D., with little or no discoloration due to oxidation and be otherwise without defects that would interfere with maintenance in a clean and sterile condition.

**Santoprene** - A thermoplastic elastomer, a rubber-like material that complies to FDA requirements.

**Schedule** - Dimensional standard for pipe as defined by ASTM.

## Glossary of Terms

**Service Temperature** - The maximum and minimum temperature of the media.

**Silicon Carbide** - Synthetic mineral of silicon and carbide. It is used in abrasives, refractories, ceramics and numerous high performance applications.

**Silicone** - Dimethyl silicone, a synthetic rubber.

**Sintering** - Heat process in which powdered metal particles are heated to near melting point, fusing the metal granules together.

**SIP** - Steam or Sterilization In Place - ability to steam clean or sterilize pump system without dismantling pump and system.

**SMS** - Swedish Milk Standard

**Specific Gravity** - A measure of the weight of a liquid in relation to that of water. If the liquid in question will float on water than the specific gravity will be less than one and if the liquid will sink when mixed with water the specific gravity will be greater than one.

**Specific Weight** - Fluid weight per unit volume.

**Static Head** - The pressure at any point in a liquid can be thought of as being caused by a vertical column of the liquid which, due to its weight, exerts a pressure equal to the pressure at the point in question. The height of this column is called the "static head" and is expressed in terms of feet of liquid.

**STP** - Standard conditions for temperature and pressure. In physical sciences, STP, are standard set of conditions for experimental measurements, to allow comparisons to be made between different sets of data. National Institute of Standard and Technology's (NIST) version is a temperature of 20°C, (293.15 K, 68°F) and an absolute pressure of 101.325 kPa (14.696 PSI, 1 atm).

**Surface Finish** - All surfaces as defined by Part SF of the current ASME BPE Standards and/or the owner/user or manufacturer and referred in  $R_a$ ,  $\mu\text{in}$ . Or  $\mu\text{m}$ .

**Surge** - Also known as water hammer. A rapid rise or decrease of internal pressure. Surge conditions occur for various reasons, typically, but not limited to: start and stop sequences.

**Transitional Flow** - Flow characteristic combining both laminar and turbulent flow tendencies.

**Transmitter** - A set of equipment used to generate and transmit electromagnetic waves carrying messages or signals.

**Tube** - A hollow cylinder especially one that conveys a fluid. For sanitary applications tube is measured in O.D. (Outside Diameter).

**Tube Fittings** - Connect runs of tubing (for in-line, offset, multi-port, and mounting configurations) to other tubing sections, pipe, hose, or other components. Systems are typically configured with straight sections connected by fittings or specially formed connections and joints.

**Tumble Polish Surface** - A uniform finish applied by vibratory equipment to stainless steel, varying from matte to bright grey depending on media used. This process may cause work hardening on the surfaces of stainless steel.

**Turbulent Flow** - Flow in which fluid undergoes irregular fluctuations, or mixing. The speed of the fluid at a point is continuously undergoing changes in both magnitude and direction.

**Vacuum** - Pressure in a pumping system below normal atmospheric pressure.

**Vapor Pressure** - Pressure at which a fluid will change to a vapor, at a given temperature

**Vaporize** - The fluid passes from a liquid to a gaseous state.

**Velocity** - Distance a fluid moves per unit of time

**Viscosity** - Measure of how resistant a fluid is to flow.

**Viscous Power** - Power loss due to viscous fluid friction within the pump.

**Volumetric Efficiency** - Ratio of actual capacity against theoretical capacity.

### Glossary of Terms

**Water Hammer** - See surge

**Waviness** - Undulations or rippling of the surfaces.

**Welding** - Join two (or more) pieces of material by applying heat to produce a localized union through fusion across the interface. For sanitary fittings, a ferrule is attached to the ends of a tube fitting by TIG welding without the addition of filler metal. Tube fittings can then be joined with clamps and gaskets to form parts of a system.

**WOG** - Water, Oil Gas. Pressure rating for valves handling this products. This does not include steam.

### Cross Reference Chart Clamp Fittings

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
Single Pin Squeeze Clamp	13MHHM-Q	-	-	13MHHMQ	-
Single Pin Heavy Duty Clamp	13MHHM	13MHHM	13MHHM	13MHHM	13MHHM
Double Pin Heavy Duty Clamp	13MHHM-DP	-	13MHHMD	13MHHM-DP	13MHHM
Three Segment Clamp	13MHHM-3P	13MHHS	13MHHS	13MHHS	13MHHM3P
Bolted Clamp	13MHP	13MHP	13MHP	13MHP	13MHP
Toggle Clamp	13MHLA	13MHLA	EG13	-	-
T-Bolt Clamp	13MO	A13MO	-	-	-
Spring Loaded Nut	13SLN	-	-	13WNLL	-
Cross Hole Wing Nut 5/16"-18	13WNX	-	-	-	13WNX
Serrated Wing nut 5/16"-18	13WNS	-	-	-	13WNS
Short Weld Ferrule	14WMP	14WMPS	EG2CS	14WMP	14WMP
Long Weld Ferrule	L14AM7	L14AM	EG14AM7	L14AM7	14AM7
Reducing Roll-on Ferrule for Expanding	B31RMP	-	-	31RMP	31RMP
Reducing Ferrule	B31WMP	-	EG2CS31D	31WMP	31WMP
Roll-on Ferrule for Expanding	14RMP	14RMP	EG14RT	14RMP	14RMP
Tank Ferrule (Light Duty)	14WLMP	14WLMP	EG14WL	14WLMP	14WLMP
Tank Ferrule (Heavy Duty)	14MPW	14MPW	EG14W	14MPW	14MPW
90° Clamp Elbow	B2CMP	B2CMP	EG2C	2CMP	2CMP
90° Non-Tapered Reducing Clamp Elbow	B2CM31MP	2CMP-31MP	EG2C31CC	2CMP-31MP	2CMP-31MP
45° Clamp Elbow	B2KMP	B2KMP	EG2K	2KMP	2KMP
90° Clamp x Plain Bevel Seat with Hex Nut Elbow	B2FMP-14	2FMP-14	EG2FPR	2FMP-14	2FMP-14
Clamp Sweep Elbow	B2SXLMP	-	-	-	-
Short Outlet Tee	B7MPS	B7MPS	-	7MPS	7MPS
Clamp Tee	B7MP	B7MP	EG7	7MP	7MP
Clamp Reducing Tee	B7RMP	B7RMP	EG7R	7RMP	7RMP
Clamp Concentric Reducer	B3114MP	B31-14MP	EG31CC	31-14MP	31-14MP
Plain Bevel Seat x Clamp Concentric Reducer	B14C31	-	EG31PC	31MPP	-
Clamp Eccentric Reducer	B3214MP	B32-14MP	EG32CC	32-14MP	32-14MP
Solid End Cap	16AMP	16AMP	EG16A	16AMP	16AMP
Thermometer Cap	B23BMP	23BMP	EG23B-6L	23BMP	23BMP
Clamp x Plain Bevel Seat Adapter	17MP-14	17MP-14	EG17PR	17MP-14	17MP-14
Clamp x Threaded Bevel Seat Adapter	17MP-15	17MP-15	EG17TR	17MP-15	W17MP-15
Tygon® Hose Adapter	14MPHT	14MPHT	EG14HT	14MPHT	14MPHT
Rubber Hose Adapter	14MPHR	14MPHR	EG14RT	14MPHR	14MPHR
Brewery Hose Barb Adapter	14MPHRL	-	-	14MPHRL	14MPHRL
Male NPT Adapter	21MP	21MP	EG21	21MP	21MP
Female NPT Adapter	22MP	22MP	EG22	22MP	22MP
Clamp Lateral	B28AMP	-	EG28A	28AMP	28AMP
Clamp True Wye	B28BMP	-	EG28B	28BMP	28BMP
Clamp Crosses	B9MP	B9MP	EG9	9MP	9MP
Clamp 180° Return Bend	B2WUMP	-	EG2WU	2UMP	2UMP
Clamp x 150# Flange Adapter	B38MP	-	-	-	38MP

**Cross Reference Chart  
Weld Fittings - Polished**

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
<b>Polished</b>					
90° Weld Elbow with Tangent	B2S	B2S	E2S	L2S	L2S
90° Weld Elbow	B2WCL	2WCL	2WCL	2WCL	2WCL
45° Weld Elbow with Tangent	B2KS	B2KS	E2KS	L2KS	L2KS
45° Weld Elbow	B2WK	2WK	E2WK	2WK	2WK
90° Clamp x Weld Elbows	B2CM	L2CM	E2C	L2CM	L2CM
45° Clamp x Weld Elbows	B2KM	L2KMW	E2KC	L2KM	L2KM
90° Threaded Bevel Seat x Weld Elbows	B2T	-	E2T	L2C	2T
90° Plain Bevel Seat with Hex Nut x Weld Elbows	B2FP	L2F	E2F	L2F	L2F
Weld Sweep Elbows	B2SXL	-	-	2SXL	2SXL
Short Weld Tee	B7WWW	B7WWW	E7WWW	7WWW	7WWW
Long Weld Tee	B7W	L7WWW	E7W	7W	7W
Reducing Weld Tee	B7RWWW	B7RWWW	E7RWWW	7RWWW	7RWWW
Weld Run x Clamp Branch Tee	B7WWM	B7WWM	E7WWC	7WWM	7WWMMS
Weld x Clamp Run x Clamp Branch Tee	B7WMM	-	E7WCC	-	-
Clamp Run x Weld Branch Tee	B7MMW	-	E7CCW	7MMW	-
Concentric Weld Reducers	B31W	L31	E31WW	31W	31W
Concentric Clamp x Weld Reducer	B31M	-	E31CW	-	-
Eccentric Weld Reducer	B32W	L32	E32WW	32W	32W
Weld End Cap	B16W	16W	E16W	16W	16W
Long Weld Hose Adapter	14WHRL	-	-	-	-
Weld Hose Adapter	14WHR	-	-	14WHR	14WHR
Male NPT x Weld End Adapter	B19WB	19WB	19WB	19WB	19WB
Female NPT x Weld End Adapter	B22WB	-	22WB	22WB	22WB
Weld Laterals	B28WA	-	E28WA	28WA	28WA
Weld True Wyes	B28W	-	E28WB	28WB	28WB
Weld Crosses	B9WWWW	B9WWWW	E9WWWW	9WWWW	9WWWW
Weld 180° Return Bends	B2WUL	2WUL	E2WU	2WU	2WU
Slip-on 150# Flanges	B38SL	38SL	E38SL	38SL	38SL
Weld Neck Flanges	B38W	-	-	38W	38W
<b>Unpolished</b>					
Unpolished 90° Weld Elbow with Tangents	B2S	-	V2S	-	L2S
Unpolished 90° Weld Elbow	B2WCL	-	V2WC	-	2WCL
Unpolished 45° Weld Elbow with Tangents	B2KS	-	V2KS	-	L2KS
Unpolished 45° Weld Elbow	B2WK	-	V2WK	-	2WK
Unpolished Short Weld Tee	B7WWW	-	V7WWW	-	7WWW
Unpolished Long Weld Tee	B7W	-	V7W	-	7W
Unpolished Reducing Weld Tee	B7RWWW	-	V7WR	-	7RWWW
Unpolished Concentric Weld Reducer	B31W	-	V31W	-	31W
Unpolished Eccentric Weld Reducer	B32W	-	V32W	-	32W
Unpolished Weld Lateral	B28WA	-	V28WA	-	28WA
Unpolished Weld True Wye	B28W	-	V28WB	-	28WB
Unpolished Weld 180° Return Bend	B2WUL	-	V2WU	-	2WU
Unpolished Type A Stub Ends	14VB	-	V14WA	14VB	14VB

### Cross Reference Chart Bevel Seat Fittings

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
Union Hex Nut	13H	13H	13H	13H	13H
Single Side Hex Wrench	25H	25H	-	25H	-
Two-Sided Hex Wrench	25H	25HA	-	-	-
Short Plain Bevel Seat Weld Ferrule	14PRF	14PRFS	14PR	14PRF	14PRF
Long Plain Bevel Seat Weld Ferrule	14A	L14A	14A	L14A7	14A
Recessed Plain Bevel Seat Weld Ferrule	14	14	14	14	-
Recessless Plain Bevel Seat Ferrule for Expanding	14R	14R	14R	14R	-
Light Wall Tank Plain Bevel Seat Ferrule	14WL	14WL	14WL	14WL	-
Heavy Wall Tank Plain Bevel Seat Ferrule	14W	14W	14W	14W	-
Short Threaded Bevel Seat Weld Ferrule	15TRF	15TRFS	15TR	15TRF	15TRF
Long Threaded Bevel Seat Weld Ferrule	15A	L15A	15A	L15A7	15A
Recessed Threaded Bevel Seat Ferrule	15	15	15	15	-
Recessless Threaded Bevel Seat Ferrule for Expanding	15R	15R	15R	15R	-
Light Wall Tank Threaded Bevel Seat Ferrule for Expanding	15WL	15WL	15WL	15WL	-
Heavy Wall Tank Threaded Bevel Seat Ferrule	15W	15W	15W	15W	-
Threaded Bevel Seat x Threaded Bevel Seat 90° Elbow	B2C	-	2C	2C	2C
Threaded Bevel Seat x Plain Bevel Seat with Hex Nut 90° Elbow	B2F	-	2F	2F	2F
Plain Bevel Seat x Plain Bevel Seat with Hex Nut 90° Elbows	B2E	-	2E	2E	2E
Threaded Bevel Seat x Plain Bevel Seat with Hex Nut 45° Elbows	B2P	-	2P	2P	2P
Plain Bevel Seat x Threaded Bevel Seat Concentric Reducers	B3115F	-	31-15F	-	-
Threaded Bevel Seat x Threaded Bevel Seat Concentric Reducers	B31TT	-	31TT	31TT	31TT
Threaded Bevel Seat x Plain Bevel Seat with Hex Nut Concentric Reducers	B31TP	-	31TP	31TP	31TP
Plain Bevel Seat Solid End Cap	16A	16A	16A	16A	16A
Plain Bevel Seat Tygon® Hose Adapter	14AHT	14AHT	14AHT	14AHT	-
Threaded Bevel Seat Tygon® Hose Adapter	15AHT	15AHT	15AHT	15AHT	-
Plain Bevel Seat Rubber Hose Adapter	14AHR	14AHR	14AHR	14AHR	-

### DIN Fittings

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
DIN Round Nuts	13R	-	-	DN13R	13R-DIN
DIN Blank Caps	16AMP	16AMP	-	-	16AMP-DIN
DIN x Tube O.D. Welding Male Adapter	15A	-	-	DN15SC	15A-DIN
DIN x Tube O.D. Welding Liner Adapter	14A	-	-	DN14SD	14A-DIN

**Cross Reference Chart  
SMS Fittings**

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
SMS Round Nut	13R	-	-	-	13R-SMS
SMS Blank Cap	16AMP	-	-	-	16AMP-SMS
SMS x Tube O.D. Adapter	15A	-	-	-	15A-SMS
SMS x Tube O.D. Welding Liner	14A	-	-	-	14A-SMS
DIN and SMS Spanner Wrench	SP	-	-	25HD	SP

**John Perry Fittings**

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
Union Hex Nut	13H	-	13H	13H	13H
Single-Sided Hex Wrench	25H	25H	-	25H	-
Two-Sided Hex Wrench	25H	25HA	-	-	-
John Perry Short Plain Weld Ferrule	14PRFJP	14PRFJP	14PRJP	14PRFJP	14PRFJP
John Perry Long Plain Weld Ferrule	L14AJP	L14AJP	14AJP	L14AJP	-
John Perry Threaded Short Weld Ferrule	15TRFJP	15TRFJP	15TRJP	15TRFJP	15TRFJP
John Perry Threaded Long Weld Ferrule	L15AJP	L15AJP	15AJP	L15AJP	-
John Perry Solid End Cap	16AJP	16AJP	16AJP	16AJP	16AJP

**I-Line/Q-Line Fittings**

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
Heavy Duty Clamp	13ILH	HDI-13-UD	E13IS	13IS	13IS
Bolted Clamp	13ILB	HDI-13I	E13IU	13I	13I
Squeeze Clamp	13IL-Q	-	-	-	-
Male I-Line Short Weld Ferrule	14WI	HDI-14WI	E14WI	14WI	14WI
Male I-Line Long Weld Ferrule	14WLI	HDI-14WLI	E14WLI	14WLI	14WLI
Male I-Line Heavy Wall Tank Weld Ferrule	14WHI	-	E14WHI	14WHI	-
Female I-Line Short Weld Ferrule	15WI	HDI-15WI	E15WI	15WI	15WI
Female I-Line Long Weld Ferrule	15WLI	HDI-15WLI	E15WLI	15WLI	15WLI
Female I-Line Heavy Wall Tank Weld Ferrule	15WHI	-	E15WHI	15WHI	-
Q-Line Weld Ferrule	14WQ	-	E16AQ-14Q	14WQ	14WQ
90° Female I-Line x Male I-Line Elbow	B2FI	-	E2FI	2FI	2FI
90° Female I-Line Elbow	B2CI	-	E2CI	2CI	2CI
90° Male I-Line Elbow	B2EI	-	E2EI	2EI	2EI
Male I-Line Solid End Cap	16AI-14I	HDI-16AI-14I	E16AI-14I	16AI-14I	16AI-14I
Female I-Line Solid End Cap	16AI-15I	HDI-16AI-15I	E16AI-15I	16AI-15I	16AI-15I
Q-Line Solid End Cap	16AQ	-	E16AQ-14Q	16AQ-14Q	16AQ
Male I-Line x Clamp Adapter	17-14I-14MP	HDI-17-14I-14MP	E17-14I-14MP	17-14I-14MP	17-14I-14MP
Female I-Line x Clamp Adapter	17-15I-14MP	HDI-17-15I-14MP	E17-15I-14MP	17-15I-14MP	17-15I-14MP

### Cross Reference Chart Bio-Pharmaceutical Fittings (BPE) Fittings

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
Solid End Cap	T16AMP	16AMP	TEG16A	S16AMP	-
Weld Cap	T16W	B16W	TE16W	S16W	-
Clamp Adapter x Male NPT	T21MP	21MP	TEG21	-	-
Clamp Adapter x Female NPT	T22MP	22MP	TEG22	-	-
Stub Adapter	T14VB	-	TE14WA	S14WA	-
Automatic Weld Ferrule	TL14AM7	L14AM	TEG14AM7	STL14AM7	-
90° Weld Elbow	T2S	B2S	TE2S	S2S	-
90° Clamp x Weld Elbow	T2CM	B2CMW	TE2C	S2CKW	-
90° Clamp x Clamp Elbow	T2CMP	B2CMP	TEG2C	S2CMP	-
45° Weld Elbow	T2KS	B2KS	TE2KS	S2KS	-
45° Clamp x Weld Elbow	T2KM	B2KMW	TE2KC	S2KKW	-
45° Clamp x Clamp Elbow	T2KMP	B2KMP	TEG2K	S2KMP	-
88° Weld Elbow	T2S88	B2S-88	TE2S88	S2S88	-
92° Weld Elbow	T2S92	B2S-92	TE2S92	S2S92	-
Weld x Weld x Weld Tee	T7WWW	B7WWW	TE7WWW	S7WWW	-
Weld x Weld x Weld Reducing Tee	T7RWWW	B7RWWW	TE7RWWW	S7RWWW	-
Weld x Weld x Clamp Tee	T7WWM	B7WWM	TE7WWC	S7WWK	-
Clamp x Clamp x Clamp Tee	T7MP	B7MP	TEG7	S7MP	-
Clamp x Clamp x Clamp Reducing Tee	T7RMP	B7RMP	TEG7R	S7RMP	-
Weld x Weld x Clamp Short Outlet Tee	T7WWMS	B7WWMS	TE7WWCS	S7SWWK	-
Weld x Weld x Clamp Short Outlet Reducing Tee	T7RWWMS	B7RWWMS	TE7RWWCS	S7RSWWK	-
Clamp x Clamp x Clamp Short Outlet Tee	T7MPS	B7MPS	TEG7S	S7MPS	-
Clamp x Clamp x Clamp Short Outlet Reducing Tee	T7RMPS	B7RMPS	TEG7RS	S7RMPS	-
Weld x Weld x Clamp Instrument Tee	T7IWWMS	B7IWWMS	TE7IWWCS	S7IWWKS	-
Clamp x Clamp x Clamp Instrument Tee	T7IMPS	B7IMPS	TEG7IS	S7IMPS	-
Weld x Weld Concentric Reducer	2211C	B31S	TE31SWW	S31S	-
Clamp x Clamp Concentric Reducer	2221C	B31-14MP	TEG31SCC	S31S-14MP	-
Weld x Weld Eccentric Reducer	2211E	B32S	TE32SWW	S32S	-
Clamp x Clamp Eccentric Reducer	2221E	B32-14MP	TEG32SCC	S32S-14MP	-
Clamp x Weld Concentric Reducer	2226C	B31MS	TE31SCW	S31SK	-
Clamp x Weld Eccentric Reducer	2226E	B32MS	TE32SCW	S32SK	-
Weld x Weld Concentric Reducer	T31W	B31W	TE31WW	S31	-
Clamp x Weld Concentric Reducer	T31M	B31M	TE31CW	S31K	-
Clamp x Clamp Concentric Reducer	T3114MP	B31S-14MP	-	S31-14MP	-
Weld x Weld Eccentric Reducer	T32W	B32	TE32WW	S32	-
Clamp x Weld Eccentric Reducer	T32M	B32M	TE32CW	S32K	-
Clamp x Clamp Eccentric Reducer	T3214MP	B32S-14MP	TEG32CC	S32-14MP	-

### Cross Reference Chart Pipe Fittings

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
Schedule 5S and 10S Single Pin Heavy Duty Clamp	13MHHV	13MHHVM**	13MHHM-5	13MHHV	13MHV
Schedule 5S and 10S Bolted Clamp	13MHPV	13MPHV**	-	-	13MHPV
Schedule 5S Short Weld Ferrule	14WMV	14WMV**	EG2CS-5-6L	14WMV	14WMV
Schedule 10S Short Weld Ferrule	14WMX	-	EG2CS-10-6L	14WMX	14WMX
Schedule 5S Long Weld Ferrule	L14AM7V	-	EG14AM7-5-6L	L14AMV	14AM7V
Schedule 10S Long Weld Ferrule	L14AM7X	-	EG14AM7-10-6L	L14AMX	14AM7X
Schedule 5S and 10S Solid End Cap	16AMV	16AMV**	EG16A-5-6L	16AMV	16AMV
Tube O.D. Clamp x Schedule 5S Weld Adapter	B19MPV	-	-	19MPV	19MPV
Tube O.D. Clamp x Schedule 10S Weld Adapter	B19MPX	-	-	19MPX	19MPX
Tube O.D. Weld x Schedule 5S Weld Adapter	B19WV	-	E17WW-6L	19WV	-
Tube O.D. Weld x Schedule 10S Weld Adapter	B19WX	-	E17WW-6L	19WX	19WX

## Cross Reference Chart Gaskets

Product Description	Dixon Sanitary	Alfa Laval	VNE	Steel and O'Brien	Wayland
<b>Clamp Gaskets</b>					
Clamp Gasket Nitrile Rubber	40MP-U	40MP-U	EG40	40MP	40MPU
Clamp Gasket EPDM	40MP-E	40MP-E	EG40E	40MP	40MPE
Clamp Gasket FKM	40MP-SFY	40MP-SFY	EG40V	40MP	40MPSFY
Clamp Gasket Silicone	40MP-X	40MP-X	EG40S	40MP	40MPX
Clamp Gasket PTFE	40MP-G	40MP-G	EG40T	40MP	40MPG
Metal Detectable Nitrile Rubber Clamp Gasket	40MP-UZ	-	-	-	40MPU
Metal Detectable EPDM Clamp Gasket	40MP-EZ	-	-	-	40MPE
Metal Detectable FKM Clamp Gasket	40MP-SFYZ	-	-	-	40MPSFY
Metal Detectable Silicone Clamp Gasket	40MP-XZ	-	-	-	40MPX
Flanged Clamp Gasket Nitrile Rubber	40MPF-U	40MPF-U	EG40F	-	40MPFU
Flanged Clamp Gasket EPDM	40MPF-E	40MPF-E	EG40FE	-	40MPFE
Flanged Clamp Gasket FKM	40MPF-SFY	40MPF-SFY	EG40FV	-	40MPFSFY
Flanged Clamp Gasket Silicone	40MPF-XW	40MPF-X	EG40FS	-	40MPFX
<b>Bevel Seat Gaskets</b>					
Bevel Seat Gasket Nitrile Rubber	40BS-O	40BS-B	40BSB	40BS	40BS-B
Bevel Seat Gasket EPDM	40BS-E	-	40BSE	40BS	40BS-E
Bevel Seat Gasket FKM	40BS-Y	-	40BSV	40BS	40BS-V
Bevel Seat Gasket Silicone	40BS-X	-	-	40BS	40BS-X
Bevel Seat Gasket PTFE	40BS-S	40BS-T	40BST	40BS	40BS-T
<b>I-Line/Q-Line Gaskets</b>					
I-Line Gasket Nitrile Rubber	40IH	HDI-40	E40IH	40I	40IU
I-Line Gasket EPDM	40IE	40IE	E40IE	40I	40IE
I-Line Gasket FKM	40IV	40IV	E40IV	40I	40IV
I-Line Gasket PTFE	40IT	40IT	E40IT	40I	40IT
Q-Line Gasket Nitrile Rubber	40QH	-	-	40Q	40QH
Q-Line Gasket PTFE	40QT	-	-	40Q	40QT
<b>John Perry Gaskets</b>					
John Perry Nitrile Rubber	40JP-U	40JPU	-	40JP	40JPU
John Perry EPDM	40JP-E	40JPE	-	40JP	40JPE
John Perry FKM	40JP-SFY	40JPSFY	-	40JP	40JPSFY
John Perry PTFE	40JP-G	40JPG	-	40JP	40JPG
<b>European Fittings - DIN and SMS</b>					
DIN Gasket Nitrile Rubber	40MP-U	-	-	DIN11851	40MPU
DIN Gasket EPDM	40MP-E	-	-	DIN11852	-
SMS Gasket Nitrile Rubber	40MP-U	-	-	-	40MPU
SMS Gasket EPDM	40MP-E	-	-	-	-
<b>Pipe Size Gaskets</b>					
Pipe Gasket Nitrile Rubber	40MPV-U	40MVU	EG40-5	40MPV	40MVU
Pipe Gasket PTFE	40MPV-G	40MVG	EG40T-5	40MPV	40MVG
Pipe Gasket EPDM	40MPV-E	-	EG40E-5	40MPV	-
Pipe Gasket FKM	40MPV-SFY	-	EG40V-5	40MPV	-











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