



RODEM®

PROCESS EQUIPMENT

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The industry standard for quality

Product data for Sanitary and Biopharm Fittings



The industry standard

For over 80 years, you've relied on Tri-Clover® fittings, including the proven Tri-Clamp® and Tri-Weld®. Whether your application is in the Food, Beverage, Brewery, Dairy or Biopharm industry, the fittings you've come to know and trust meet today's strict sanitary and quality standards and ensure increased productivity and controlled costs.



Since 1919, Tri-Clover has been North America's leading source of sanitary fluid handling equipment.



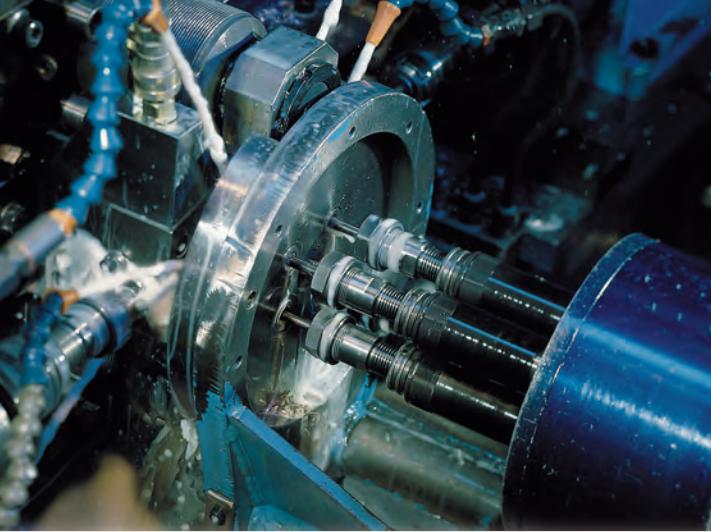
Tri-Clover fittings
catalog circa 1947.

1. Fittings

Alfa Laval constantly focuses on producing installation material with long durability, problem-free welding and assembly, and highest possible strength.



Product Presentation	1.0
Sanitary Fittings	1.1
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Everything you need, everywhere you need it

Alfa Laval is a world-leading supplier of fittings for a wide range of sanitary applications within the food, dairy, beverage, bio-pharm and personal care industries. Our products are developed not only to meet your exacting demands for safety, reliability, efficiency and hygiene, but also to ensure the careful handling of your products.

One of the features that distinguishes us from our competitors is our breadth of application. We can supply components for all stages of your process – besides fittings, our sanitary range includes pumps, valves, tank equipment and heat exchangers. As a world wide supplier, Alfa Laval can accommodate your ISO, SMS, SWG, DS, BS, DIN and JIS international Fittings standards (upon request).

This brochure includes the following Alfa Laval line of high-quality sanitary fittings:

- Unions, Tri-Clamp™ Fittings & Flanges
- Bends, Tees & Reducers
- Tubing
- Butterfly Valves

For more detailed technical information and specifications of our products, please refer to the relevant product sheet provided by your local Alfa Laval supplier, or to our website, www.alfalaval.us

Connection Types

Clamp Fittings

A Connection is made up of a plain ferrule, a clamp, and a gasket. Tees, elbows and reducers are available with Tri-Clamp connections. All three styles are in compliance with 3A standards for Clean In Place (CIP). The three types of clamp fittings are designed for use in food, dairy, pharmaceutical and chemical Industries.

- Tri-Clamp connections are the industry standard, having nuter-style ferrules to simplify design and installation.
- H-Line and HDI-Line male/female ferrules self-align during tightening so joints are quick and easy to assemble or take apart.
- H-Line uses the same series of clamps as the Tri-Clamp.

Threaded Fittings

A connection is made up of a plain ferrules, a threaded ferrule, a nut and a gasket. The faces on Bevel Seat fittings are angled to create a metal to metal sealing surface. A John Perry fitting consistses of a flat-faced threaded ferrule, a flat-faced plain ferrule and a profiled gasket. These joints are particularly useful with swing connections and flow diverter panels. A DC fitting utilizes the Bevel Seat plain ferrule and a threaded ferrule with a grooved face to retain a gasket. The three types of threaded fittings are designed for use in the food, dairy, and beverage processing industries. Bevel Seat Joints are in compliance with 3A standards for manual cleaning. Both John Perry and DC fittings are in compliance with 3A standards for CIP.



Tri-Clamp - The industry standard.

Alfa Laval's program of bends, tees and reducers are available in diameters from 1" to 6" in size.



Bends, Tees & Reducers

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

Welding

Alfa Laval is aware of the constantly increasing demands placed upon the quality of welding. In accordance with these demands, all our reducers meet the highest of standards.

The reducers have cylindrical welding ends and are available for all tube combinations, ensuring that you will always get the right diameter and wall thickness for your process.

Tolerances

Alfa Laval ensures that all the angles are exact and that all the tube, bend and tee connections are uniform. It is very important that our customers do not have to compensate for any welding irregularities.

Finishes

Alfa Laval offers a range of mechanical polish as well as electropolishing finishes. Mechanical polishing is achieved by using a progressive series of abrasives, from low to high grit. This allows a consistent internal finish and both optimal and economical cleaning. Electropolishing is a further process that promotes a chromium-enriched surface layer that maximizes corrosion resistance as well as minimizing bacterial buildup on surface cavities.

In order to ensure that you are able to select a finish that exactly matches your needs, Alfa Laval offers a wide range of surface finishes.

The Right Part for Your Application

Alfa Laval offers installation material in different standards so you can always find the right part, with the process quality you need, for your specific application.

Sanitary

Manufactured to the 3A sanitary standard, all product surfaces are polished to 32 microinch Ra or better. Tri-Clover's number 3 and 7 finishes also meet 3A standards.

Bio-Pharmaceutical

Bio-Pharmaceutical products are manufactured to the BPE standard. Available in four finishes, PC and PL have a contact surface finish of 20 microinch Ra. PD and PM are electropolished finishes with a contact surface finish of 15 microinch Ra.

Tubing

Alfa Laval offers a variety of tubing for all sanitary applications. It is available in a full line of sizes and finishes and is manufactured to stringent specifications for perfect matching with Tri-Weld fittings.

- Common source for fittings raw material and finishes tubing
- Compliant with ASME, BPE, ASTM A269/A270 and 3A, where applicable
- Sizes are available from stock are 1/2 inch to 6 inch



Whatever your sanitary application,
Alfa Laval is able to supply the right tube.



The industry standard for quality.

Bio-Pharmaceutical Fittings

Alfa Laval is proud to present their line of fittings designed for use in the pharmaceutical and bio-technologies industries. This line consists of parts with either Tri-Weld ends suitable for use with orbital welding equipment or self-aligning Tri-Clamp end connections. Alfa Laval offers a full line of bio-pharm fittings that are manufactured in compliance with the ASME BPE standards.

Metallurgy

Incoming raw material goes through a stringent inspection process to ensure its chemistry will be ideal for both welding and electropolishing.

Quality Control Methods

Our manufacturing facilities operate under an ISO 9001 approved quality standard. Wall thickness integrity is maintained through the use of fabrication grade minimum wall tubing for all cold-formed tubular products. Our BPE fittings are designed for use with all current orbital welding equipment. After cold forming, our tube product is resized to ensure that the ovality falls within the prescribed BPE tolerances. End facing is provided with a machined square-cut method.

This allows for the most accurate and consistent orbital weld result. All fittings are put through 100% visual inspection and ovality and squareness tolerances are inspected with calibrated equipment. Surface finish is inspected with a calibrated profilometer to ensure the Roughness average (R_a) maximum is not exceeded.

Material Test Reports

Every new bio-pharmaceutical Tri-Clover fitting will include a Material Test Report (MTR). As a new Alfa Laval standard, BPE fittings will be shipped with an MTR in the bag. This new MTR has a five letter Reference ID that takes traceability and validation to a new level. The Reference ID is stenciled on all fittings and together the heat numbers, part number, description, manufacturing reference number, and date manufactured. This information along with the chemistry, mechanical properties, and raw material specification will be listed on the MTR's.

As another key benefit, the Reference ID can be used to look up fitting information on the internet. This new MTR web application will give 24/7 access to distributors and customers via www.alfalaval.us

In all forms and shapes

Fittings from Alfa Laval - Tri-Clover

Application

Alfa Laval is your complete source for specialized fittings and tubing required in food, dairy, beverage, personal care, biotechnology and pharmaceutical process applications. Smooth, crevice-free interiors and secure, self-aligning joints are characteristic of Alfa Laval Fittings. Each offers superior corrosion resistance and unmatched service life. Alfa Laval fittings are designed and manufactured to ensure dimensional accuracy and structural integrity, making them easy to install. Tri-Clover Tri-Clamp® and Tri-Weld® Fittings are part of Alfa Laval's product line. Tubing is manufactured to Alfa Laval's stringent specifications, making it a perfect match for the Weld Fittings. Choose from a complete range of tube sizes, surface finishes and connection options. All BPE items are individually capped and bagged in clear 6 mil. Poly bags. All product is labeled with a bar code, product information and manufacturing date. This provides the optimum identification and ensures that the product arrives to the job site in a clean orbital weld condition.

BioPharm Fittings

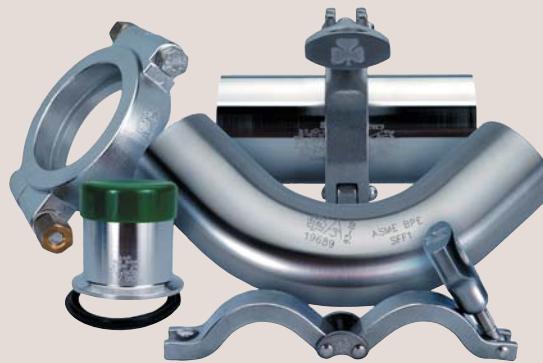
Alfa Laval is proud to present their line of Fittings designed for use in the Pharmaceutical and Bio-Technologies Industries. This line consists of Tri-Clover parts with either Tri-Weld® ends suitable for use with Orbital Welding Equipment or self-aligning Tri-Clamp® end connections. Alfa Laval offers a full line of BioPharm Fittings that are manufactured in compliance with the current ASME BPE Standard.

All BPE items are individually capped and bagged in clear 6 mil. Poly bags. All product is labeled with a bar code, product information and manufacturing date. This provides the optimum identification and ensures that the product arrives to the job site in a clean orbital weld condition.

Technical Data

Wide Range of Surface Finish offering - Alfa Laval offers a range of Mechanical Polish as well as Electropolish finishes. Mechanical polishing is achieved by using a progressive series of abrasives, from low to high grit. This allows a consistent internal finish and both optimal and economical cleaning. Electropolishing is a further process that promotes a chromium-enriched surface layer that maximizes corrosion resistance as well as minimizing bacterial buildup on surface cavities.

Metallurgy - Incoming raw material goes through a stringent inspection process to ensure its chemistry will be ideal for both weldability and electropolishing



Quality Control Methods - Our manufacturing facilities operate under an approved ISO 9001 quality standard. Wall thickness integrity is maintained through the use of fabrication grade minimum wall tubing for all cold-formed tubular products. Our BPE fittings are designed for use with all current orbital welding equipment. After cold forming, our tube product is resized to ensure that the ovality falls within the prescribed BPE tolerances. End facing is provided with a machined square-cut method. This allows for the most accurate and consistent orbital weld result. All fittings are put through 100% visual inspection and ovality and squareness tolerances are inspected with calibrated equipment. Surface finish is inspected with a calibrated profilometer to ensure the Roughness average (R_a) maximum is not exceeded.

Sanitary fittings identified with this symbol on the following pages are accepted as meeting the 3A sanitary standards by the appropriate committees of the International Association of Milk, Food and Environmental Sanitarians, U.S. Public Health Service, and Dairy Industry Committee.

Finish code	ID or Product Contact Surface				Polishing Method	OD or Product Non-contact Surface		
	Maximum Surface Roughness (Ra)			Finish Code				
	Microinches (μ -inch)	Micrometers (μ m)	ASME BPE					
#1				Unpolished	Unpolished			
#3	32	0.8	-----	Mechanical polished	Unpolished			
#7	32	0.8	-----	Mechanical polished	Polished to Ra, 32 μ -inch/0.8 μ m			
PC	20	0.5	SFF1	Mechanical polished	Unpolished			
PD	15	0.4	SFF4	Mechanical polished and electropolished	Unpolished			
PL	20	0.5	SFF1	Mechanical polished	Polished to Ra, 32 μ -inch/0.8 μ m			
PM	15	0.4	SFF4	Mechanical polished and electropolished	Polished to Ra, 32 μ -inch/0.8 μ m			

Service Rating of Tri-Clamp® Connections

Service Ratings* (PSI)							
Size Tube OD	1/2 & 3/4 inch	1 & 1 1/2 inch	2 inch	2 1/2 inch	3 inch	4 inch	6 inch
13MHLA (Screw tightened to maximum)							
at 70°F	--	150	150	150	150	100	--
at 250°F	--	125	125	125	125	75	--
13MHMH (Wing nut tightened to 25 in. lb. of torque)							
at 70°F	--	500	450	400	350	300	150
at 250°F	--	300	300	200	195	150	75
13MHHS (Wing nut tightened to 25 in. lb. of torque)							
at 70°F	2200	600	550	450	350	300	--
at 250°F	1200	300	275	225	175	150	--
13MHP (Bolts tightened to 20 ft. lb. of torque)							
at 70°F	--	1500	1000	1000	1000	800	300
at 250°F	--	1200	800	800	800	600	200
A13MO (1-3" nuts tightened to 20 in. lb., 4" to 30 in. lb.)							
at 70°F	--	500	350	300	200	100	75
at 250°F	--	250	200	150	100	100	50
A13MHM (Wing nut tightened to 25 in. lb. of torque)							
at 70°F	--	500	450	400	350	300	150
at 250°F	--	300	250	200	175	150	75

* Service ratings are based on hydrostatic tests using standard-molded Buna-N material gaskets, with proper installation of ferrules, assembly of joints and absence of shock pressure. Contact Tri-Clover for service of other type and material gaskets, and for ratings at higher temperatures.

All ratings shown are dependent upon related components within the systems and proper installation. For temperatures above 250° F, we recommend using only 13MHP clamps. This information is only valid if Tri-Clover clamps, ferrules, and gaskets are used.

Tri-Clamp® Gasket Materials

Characteristic	Buna-N (U)	EPDM (E)	Fluoro- elastomer (SFY)	Silicone (X)	PTFE (G)
Original Physical Properties					
Hardness, Shore A	70	70	70	70	---
Tensile Strength, psi	1875	1650	1212	1340	---
Elongation, %	340	317	272	260	---
Temperature Range					
	-65 to 200° F	-60 to 300° F	-20 to 350° F	-40 to 400° F	-40 to 200° F *
Resistance					
Acid Resistance	Good	Good to Excel.	Good to Excel.	Poor to Good	Good to Excel.
Alkali Resistance	Fair to Good	Good to Excel.	Poor to Good	Poor to Fair	Excellent
Resistance to Fats/Oils	Good to Excel.	Poor	Good to Excel.	Poor to Good	Excellent
Abrasion Resistance	Excellent	Good	Good to Excel.	Poor	Fair
Compression Set Resistance	Good	Fair	Good to Excel.	Good to Excel.	Cold Flows

* Note: PTFE materials tendency to "cold flow" and incompressibility, limit its max. temperature to 200° F due to possible leaking problems.

Basic Dimensions of Tri-Clamp®

Connection for Sanitary OD-Tubing			
OD Outer Diameter (Inches)	ID Inner Diameter (Inches)	Wall Thickness (Inches/Gauge)	A Ferrule Face (Inches)
1/2	0.37	0.065 / 16 ga.	0.984
3/4	0.62	0.065 / 16 ga.	0.984
1	0.87	0.065 / 16 ga.	1.984
1 1/2	1.37	0.065 / 16 ga.	1.984
2	1.87	0.065 / 16 ga.	2.516
2 1/2	2.37	0.065 / 16 ga.	3.047
3	2.87	0.065 / 16 ga.	3.579
4	3.87	0.083 / 14 ga.	4.682

Sanitary Tube Information

Tube OD	Tube ID	Wall Thickness	Volume	Weight Dry	Weight with Water	Flow (GPM) at a Mean Velocity		
						Inches	Inches	5 fps
1/2	0.37	0.065	0.56	30.6	35.3	1.7	2.3	3.4
3/4	0.62	0.065	1.57	48.2	61.3	4.7	6.6	9.4
1	0.87	0.065	3.09	65.8	91.5	9.3	13	19
1 1/2	1.37	0.065	7.66	100.9	164.8	23	32	46
2	1.87	0.065	14.27	136.1	255.1	43	60	86
2 1/2	2.37	0.065	22.92	171.2	362.4	69	96	138
3	2.87	0.065	33.6	206.4	486.7	101	141	202
4	3.834	0.083	59.97	351.8	851.9	180	252	360
6	5.782	0.109	136.39	694.7	1832.2	409	573	818
8	7.782	0.109	247.07	930.6	2991.1	741	1038	1482

Technical Information**Pipe Schedule and Chemical Composition**

Schedule 5 Pipe			
Size	OD Inches	ID Inches	Wall Thickness
1/8	0.405	0.335	0.035
1/4	0.540	0.442	0.049
3/8	0.675	0.577	0.049
1/2	0.840	0.710	0.065
3/4	1.500	0.920	0.065
1	1.315	1.185	0.065
1 1/4	1.660	1.530	0.065
1 1/2	1.900	1.770	0.065
2	2.375	2.245	0.065
2 1/2	2.875	2.790	0.083
3	3.500	3.334	0.083
3 1/2	4.000	3.834	0.083
4	4.500	4.334	0.083
5	5.563	5.345	0.109
6	6.625	6.407	0.109
8	8.625	8.407	0.109

Chemical Composition %		
	304	316L
C	0.080	0.030
MN	2.000	2.000
P	0.045	0.045
S	0.030	0.030*
Si	1.000	1.000
Cr	18.0-20.0	16.0-18.0
Ni	8.0-13.0	10.0-14.0
Mo	-	2.0-3.0

* The sulfur content for 316L ASME BPE fittings is 0.005-0.017% for all weld ends.

Material Test Reports (MTRs)

Easy Online Access to Comprehensive Fittings Information



A 5-alpha character serial ID is stenciled on to each new 316SS fitting

As one of the most comprehensive and technologically advanced reports in the market, our new Material Test Reports (MTRs) provide detailed information that takes traceability and validation to a new level. Alfa Laval has established a new standard as all MTRs are available 24 hours a day, 7 days a week online at www.alfalaval.us.

Simply type a 5-alpha character code (e.g. AAABC) called the serial ID, which you can find stenciled on each new 316SS fitting, to access the following information:

- All heat certification numbers used to manufacture the fitting
- Date the fitting was manufactured
- The fitting's part number and description
- View and print any MTR and the above information

This web site will even allow you to print the MTR or original heat certification from the raw material supplier. If you do not know the actual number, MTRs can be searched by either MTR serial ID or heat certification number.

Go to www.alfalaval.us and follow these simple steps to access MTRs:

Step 1. Once at our website, click on the MTR link

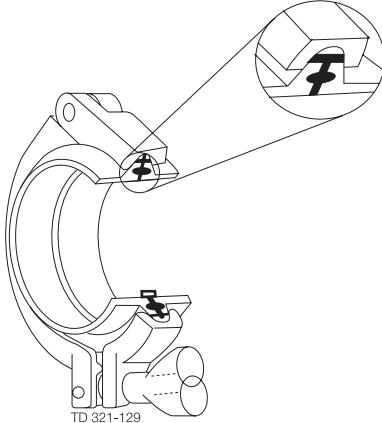
Step 2. On the MTR page, click "View Material Test Reports"

Step 3. Enter or search for the Serial ID

Connection Types

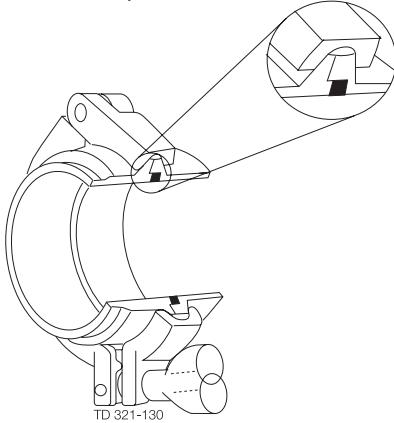
Clamp Fittings

 Authorized to carry the 3A symbol



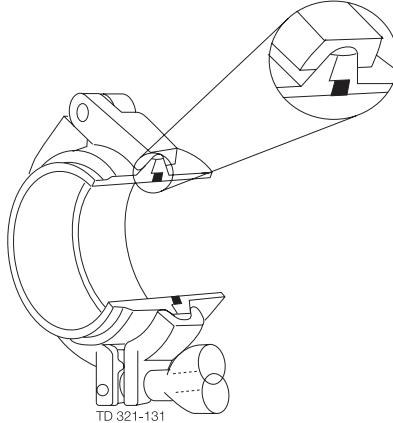
Tri-Clamp

 Authorized to carry the 3A symbol



HDI-Line

 Authorized to carry the 3A symbol



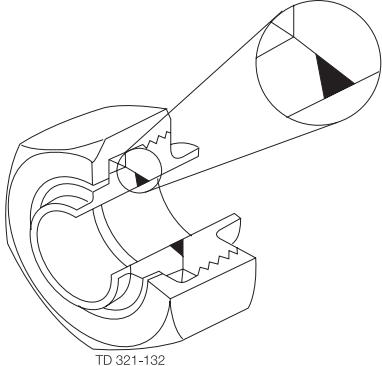
H-Line

A connection is made up of a plain ferrule, a clamp, and a gasket. Tees, elbows and reducers are available with Tri-Clamp connections. All three styles are in compliance with 3A standards for C.I.P. (clean in place). The three types of clamp fittings are designed for use in Food, Dairy, Pharmaceutical and Chemical Industries.

- Tri-Clamp connections are the industry standard, having nueter-style ferrules to simplify design and installation.
- H-Line and HDI-Line male/female ferrules self-align during tightening so joints are quick and easy to assemble or take apart.
- H-Line uses the same series of clamps as the Tri-Clamp.

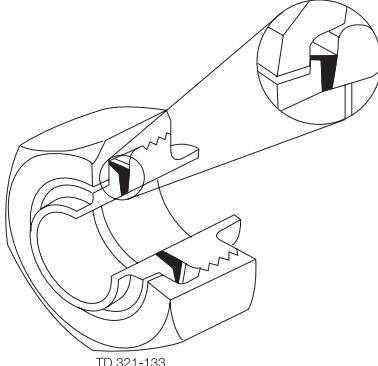
Threaded Fittings

 Authorized to carry the 3A symbol



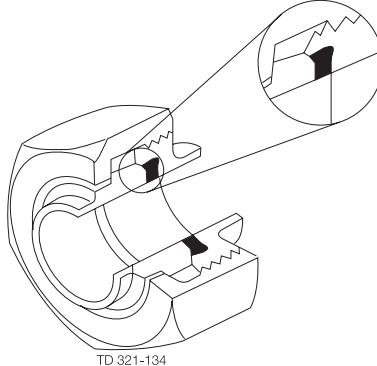
Bevel Seat

 Authorized to carry the 3A symbol



John Perry

 Authorized to carry the 3A symbol



DC

A connection is made up of a plain ferrules, a threaded ferrule, a nut and a gasket. The faces on Bevel Seat fittings are angled to create a metal to metal sealing surface. A John Perry fitting consists of a flat-faced threaded ferrule, a flat-faced plain ferrule and a profiled gasket. These joints are particularly useful with swing connections and flow diverter panels. A DC fitting utilizes the Bevel Seat plain ferrule and a threaded ferrule with a grooved face to retain a gasket. The three types of threaded fittings are designed for use in the Food, Dairy, and Beverage processing industries. Bevel Seat Joints are in compliance with 3A standards for manual cleaning. Both John Perry and DC fittings are in compliance with 3A standards for C.I.P. (clean-in-place).

- Bevel Seat
- John Perry
- DC

Loss of head pressure due to friction. Loss is shown in feet of head. Loss through tubing is for 1ft.of tube

Capacity in U.S. G.P.M.	O.D. I.D. Tubing			1"			O.D. I.D. Tubing			1½"			O.D. I.D. Tubing			2"			O.D. I.D. Tubing			2½"			O.D. I.D. Tubing			3"			O.D. I.D. Tubing			4"																																																																																																																													
	2	0.01	0.01	0.1	4	0.025	0.02	0.2	5	0.035	0.025	0.25	10	0.12	0.06	0.4	15	0.25	0.1	0.8	20	0.43	0.22	1.5	25	0.66	0.4	2.3	30	0.93	0.7	3.3	35	1.22	1.25	5.2	40				45				50				60				80				100				120				140				160				180				200				220				240				260				280				300				350				400				450				500				550				600				650				700				750				800				850				900				950				1000				1100		
2	0.01	0.01	0.1																																																																																																																																																												
4	0.025	0.02	0.2																																																																																																																																																												
5	0.035	0.025	0.25																																																																																																																																																												
10	0.12	0.06	0.4	0.02	0.01	0.15	0.005	0.015	0.1																																																																																																																																																						
15	0.25	0.1	0.8	0.04	0.02	0.25	0.013	0.02	0.15																																																																																																																																																						
20	0.43	0.22	1.5	0.06	0.03	0.3	0.02	0.025	0.2	0.005	0.02	0.1	0.003	0.02	0.06																																																																																																																																																
25	0.66	0.4	2.3	0.08	0.04	0.4	0.025	0.03	0.25	0.006	0.03	0.15	0.004	0.03	0.08																																																																																																																																																
30	0.93	0.7	3.3	0.105	0.06	0.55	0.035	0.05	0.3	0.008	0.05	0.2	0.005	0.04	0.1																																																																																																																																																
35	1.22	1.25	5.2	0.135	0.09	0.8	0.04	0.06	0.4	0.011	0.06	0.25	0.006	0.05	0.13																																																																																																																																																
40				0.17	0.11	1.0	0.05	0.08	0.5	0.015	0.07	0.3	0.007	0.06	0.15																																																																																																																																																
45				0.21	0.16	1.3	0.063	0.1	0.6	0.02	0.09	0.35	0.008	0.065	0.18																																																																																																																																																
50				0.25	0.2	1.6	0.073	0.12	0.7	0.022	0.1	0.4	0.01	0.07	0.2																																																																																																																																																
60				0.34	0.35	2.2	0.1	0.18	0.9	0.03	0.12	0.45	0.015	0.08	0.25																																																																																																																																																
80				0.57	0.76	3.7	0.16	0.3	1.5	0.05	0.15	0.55	0.02	0.1	0.4																																																																																																																																																
100				0.85	1.35	5.8	0.23	0.44	2.3	0.075	0.18	0.6	0.03	0.11	0.5	0.008	0.04	0.1																																																																																																																																													
120				1.18	2.05	9.1	0.32	0.64	3.3	0.105	0.21	1.0	0.04	0.13	0.6	0.01	0.05	0.15																																																																																																																																													
140							0.42	0.85	4.5	0.14	0.23	1.25	0.05	0.16	0.8	0.013	0.06	0.2																																																																																																																																													
160							0.54	1.13	5.8	0.17	0.28	1.6	0.07	0.2	1.1	0.015	0.07	0.25																																																																																																																																													
180							0.67	1.45	7.4	0.205	0.31	2.0	0.08	0.21	1.3	0.02	0.08	0.3																																																																																																																																													
200							0.81	1.82	9.0	0.245	0.35	2.5	0.1	0.26	1.6	0.025	0.09	0.4																																																																																																																																													
220							0.95	2.22	11.0	0.29	0.41	3.0	0.12	0.3	1.9	0.028	0.1	0.5																																																																																																																																													
240							1.10	2.63	13.5	0.34	0.48	3.7	0.14	0.33	2.2	0.035	0.11	0.55																																																																																																																																													
260										0.39	0.53	4.5	0.165	0.39	2.5	0.04	0.115	0.6																																																																																																																																													
280										0.45	0.61	5.3	0.19	0.42	2.8	0.045	0.12	0.65																																																																																																																																													
300										0.515	0.7	6.2	0.22	0.5	3.1	0.05	0.13	0.7																																																																																																																																													
350										0.68	1.05	8.5	0.28	0.67	4.1	0.07	0.15	0.9																																																																																																																																													
400										0.86	1.55	11.0	0.36	0.88	5.2	0.085	0.18	1.2																																																																																																																																													
450													1.05	2.25	13.5	0.44	1.1	6.6	0.105	0.2	1.5																																																																																																																																										
500																0.54	1.4	8.0	0.13	0.23	1.75																																																																																																																																										
550																	0.64	1.7	9.5	0.15	0.27	2.1																																																																																																																																									
600																			0.75	2.05	10.2	0.175	0.3	2.5																																																																																																																																							
650																			0.87	2.41	13.0	0.2	0.34	2.8																																																																																																																																							
700																				1.0	2.8	15.0	0.23	0.4	3.4																																																																																																																																						
750																																0.26	0.43	3.8																																																																																																																													
800																																0.3	0.5	4.4																																																																																																																													
850																																0.33	0.56	5.0																																																																																																																													
900																																0.37	0.62	5.7																																																																																																																													
950																																0.41	0.7	6.3																																																																																																																													
1000																																0.45	0.8	7.0																																																																																																																													
1100																																0.53	1.06	8.6																																																																																																																													

NOTES: 1. For elbows - R/D=1.5

2. Flow thru tees

Flow A to B

3. Test medium - water at 70° F

Port C capped off

Prepared by members of the sanitary pump subgroup
of the natl. asso. of dairy equipment manufacturers.

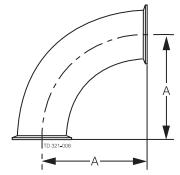
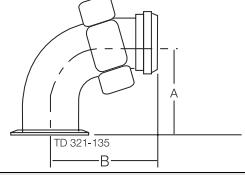
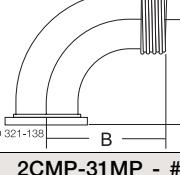
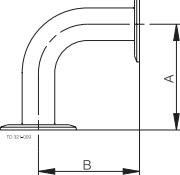
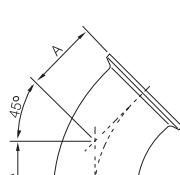
1.1 Sanitary Fittings

The Tri-Clover sanitary installation material in this section is with dimensions according to ASME BPE.



Price Sheets

Sanitary Tri-Clamp Elbows	1.1.14
Sanitary Tri-Clamp Tees	1.1.15
Sanitary Tri-Clamp Reducing Tees	1.1.16
Sanitary Tri-Clamp Crosses	1.1.17
Sanitary Tri-Clamp Clamp Ferrule	1.1.18
Sanitary Tri-Clamps	1.1.20
Sanitary Tri-Clamp Gaskets	1.1.22
Sanitary Tri-Clamp Adapters	1.1.25
Sanitary Tri-Clamp Thermometer Caps and Solid End Caps	1.1.28
Sanitary Tri-Clamp Reducers	1.1.29
Sanitary Tri-Weld Bends	1.1.30
Sanitary Tri-Weld Tees	1.1.33
Sanitary Tri-Weld Reducing Tees and Crosses	1.1.34
Sanitary Tri-Weld Adapters and End Caps	1.1.36
Sanitary Tri-Weld Reducers	1.1.37

Material Item No. 304	Material Item No. 316L	Size		Dimension				
		Inch	mm	Inch	mm	Inch	mm	
Product Code: 5010								
9634-002915	9634-002936	1	25.4	2.00	50.8			
9634-002916	9634-002937	1½	38.1	2.75	69.9			
9634-002917	9634-002938	2	50.8	3.50	88.9			
9634-002918	9634-002939	2½	63.5	4.25	108.0			
9634-002919	9634-002940	3	76.2	5.00	127.0			
9634-002920	9634-002941	4	101.6	6.63	168.3			
Not available	9634-050009	6	152.4	10.50	266.7			
Product Code: 5018								
2FMP-14 Plain Bevel Seat 90° Elbow- #7 (3A)								
213071	Not available	1	25.4	2.00	50.8	2.19	55.6	
210079	Not available	1½	38.1	2.75	69.9	2.97	75.4	
210080	Not available	2	50.8	3.5	88.9	3.72	94.5	
210081	Not available	2½	63.5	4.25	108.0	4.59	116.7	
213081	Not available	3	76.2	5.0	127.0	5.41	137.3	
212001	Not available	4	101.6	6.63	168.3	7.22	183.4	
Product Code: 5018								
2FMP-15 Threaded Bevel Seat 90° Elbow - #7 (3A)								
213077	Not available	1	25.4	2.00	50.8	2.19	55.6	
210103	Not available	1½	38.1	2.75	69.9	2.97	75.4	
210083	Not available	2	50.8	3.50	88.9	3.72	94.5	
210084	Not available	2½	63.5	4.25	108.0	5.38	136.7	
210102	Not available	3	76.2	5.00	127.0	5.41	137.3	
211533	Not available	4	101.6	6.63	168.3	7.22	183.4	
Product Code: 5018								
2CMP-31MP - #7 (3A)								
211088	Not available	2 x 1	50.8 x 25.4	2.00	50.8	2.00	50.8	
210007	Not available	2 x 1½	50.8 x 38.1	2.75	69.9	2.75	69.9	
210008	Not available	2½ x 2	63.5 x 50.8	3.50	88.9	3.50	88.9	
210033	Not available	3 x 2	76.2 x 50.8	3.50	88.9	3.50	88.9	
210058	Not available	3 x 2½	76.2 x 63.5	4.25	108.0	4.25	108.0	
210061	Not available	4 x 3	101.6 x 76.2	5.00	127.0	5.13	130.2	
Product Code: 5010								
B2KMP - #7 (3A)								
Not available	Not available	½	12.7	1.00	25.4			
Not available	Not available	¾	19.0	1.00	25.4			
9634-003115	9634-003136	1	25.4	1.13	28.6			
9634-003116	9634-003137	1½	38.1	1.44	36.5			
9634-003117	9634-003138	2	50.8	1.75	44.5			
9634-003118	9634-003139	2½	63.5	2.06	52.4			
9634-003119	9634-003140	3	76.2	2.38	60.3			
9634-003120	9634-003141	4	101.6	3.13	79.4			
Not available	9634-003142	6	152.4	5.25	133.4			

* Not Available

Note: 3A approved for finish #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Size DN/OD		Dimension A		B7MP - #7 (3A)
		Inch	mm	Inch	mm	
304	316L					
9634-003315	9634-003336	1	25.4	2.63	66.7	
9634-003316	9634-003337	1½	38.1	2.88	73.0	
9634-003317	9634-003338	2	50.8	3.38	85.7	
9634-003318	9634-003339	2½	63.5	3.63	92.1	
9634-003319	9634-003340	3	76.2	3.88	98.4	
9634-003320	9634-003341	4	101.6	7.13	181.0	
Not available	9634-003342	6	152.4	7.13	181.0	

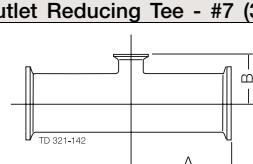
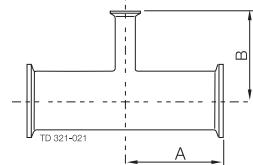
Note: 3A approved for finish #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Size		Dimension				
		DN/OD	Inch	mm	Inch	mm	A	
304	316L							B7RMP - #7 (3A)
9634-003834	9634-003882	2 x 1	50.8 x 25.4	3.38	85.7	3.13	79.4	
9634-003835	9634-003883	2 x 1½	50.8 x 38.1	3.38	85.7	3.13	79.4	
9634-003838	9634-003886	2½ x 2	63.5 x 50.8	3.63	92.1	3.38	85.7	
9634-003841	9634-003889	3 x 2	76.2 x 50.8	3.88	98.4	3.63	98.4	
9634-003842	9634-003890	3 x 2½	76.2 x 63.5	3.88	98.4	3.63	98.4	
9634-003843	9634-003891	4 x 1	101.6 x 25.4	4.75	120.7	4.13	104.8	
9634-003844	9634-003892	4 x 1½	101.6 x 38.1	4.75	120.7	4.13	104.8	
9634-003845	9634-003893	4 x 2	101.6 x 50.8	4.75	120.7	4.38	111.1	
9634-003846	9634-003894	4 x 2½	101.6 x 63.5	4.75	120.7	4.38	111.1	
9634-003847	9634-003895	4 x 3	101.6 x 76.2	4.75	120.7	4.38	111.1	
B7RMPS Short Outlet Reducing Tee - #7 (3A)								
	9634050040	6 x 1	152.4 x 25.4	7.13	181.0	3.75	95.3	
	9634050043	6 x 1½	152.4 x 38.1	7.13	181.0	3.75	95.3	
	9634050046	6 x 2	152.4 x 50.8	7.13	181.0	3.75	95.3	
	9634050049	6 x 2½	152.4 x 63.5	7.13	181.0	3.75	95.3	
	9634050052	6 x 3	152.4 x 76.2	7.13	181.0	3.75	95.3	
	9634050055	6 x 4	152.4 x 101.6	7.13	181.0	3.75	95.3	

Note: 3A approved for finish #7

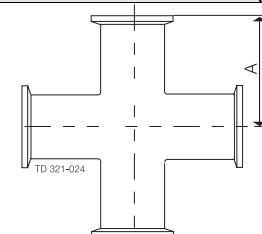
Fittings part number starting with "B" are produced according to ASME BPE dimensions.



Material Item No.	Material Item No.	Size DN/OD		Dimension A		B9MP - #7 (3A)
		Inch	mm	Inch	mm	
304	316L					
9634-003515	9634-003536	1	25.4	2.63	66.7	
9634-003516	9634-003537	1½	38.1	2.88	73.0	
9634-003517	9634-003538	2	50.8	3.38	85.7	
9634-003518	9634-003539	2½	63.5	3.63	92.1	
9634-003519	9634-003540	3	76.2	3.88	98.4	
9634-003520	9634-003541	4	101.6	4.75	120.7	

Note: 3A approved for finish #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

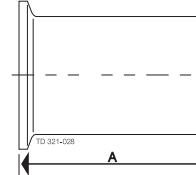


Material Item No. 304	Material Item No. 316L	Size		Dimension				L14AM - #7 (3A)	
		DN/OD		A		B			
		Inch	mm	Inch	mm	Inch	mm		
240606	240644	1	25.4	1.13	28.6				
241605	240028	1½	38.1	1.13	28.6				
242605	240027	2	50.8	1.13	28.6				
243605	246226	2½	63.5	1.13	28.6				
244606	240124	3	76.2	1.13	28.6				
245596	246200	4	101.6	1.13	28.6				
14WMPS - #7 (3A)									
Not available	610205	½	12.7	0.98	24.9	0.50	12.7		
Not available	610238	¾	19.0	0.98	24.9	0.50	12.7		
610854	610365	1	25.4	1.98	50.4	0.50	12.7		
610855	610367	1½	38.1	1.98	50.4	0.50	12.7		
610856	610368	2	50.8	2.52	63.9	0.50	12.7		
610857	610369	2½	63.5	3.05	77.4	0.50	12.7		
610858	610370	3	76.2	3.58	90.0	0.50	12.7		
610859	610373	4	101.6	4.69	119.1	0.63	15.9		
88123417	88214659	6	152.4	6.58	167.1	0.75	19.0		
660016	9634-049938	6	152.4	6.58	167.1	1.50	38.1		
14WMO - #1									
664630	660001	6	152.4			1.50	38.1		
664634	660025	8	203.2			1.50	38.1		
664638	660026	10	254.0			1.75	38.1		
664642	660027	12	304.8			1.75	44.5		
14WLMP - #7 (3A)									
210908	210348	1	25.4	3.00	76.2				
210491	210374	1½	38.1	3.00	76.2				
212101	210375	2	50.8	3.00	76.2				
212108	210376	2½	63.5	3.00	76.2				
211209	210377	3	76.2	4.00	101.6				
210492	210378	4	101.6	4.00	101.6				

Note: 3A approved for finish #7

¹ = 3A approved for modifying or repairing existing on-site farm milk handling equipment.

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Size		Dimension				14WLMO - #7 (3A)	
		DN/OD		A		B			
		Inch	mm	Inch	mm	Inch	mm		
304	316L	6	152.4	6.00	152.4				
261218	260235								
14WLMO - #1									
260469	260004	6	152.4	6.00	152.4				
260494	260223	8	203.2	6.00	152.4				
Not Available	260296	10	254.0	6.00	152.4				
260519	263495	12	304.8	6.00	152.4				
14RMP - #7 (3A)¹									
210447	213447	1	25.4	0.75	19.1	1.00	25.4		
210449	213449	1½	38.1	1.13	28.6	1.50	38.1		
210450	213450	2	50.8	1.31	33.3	2.00	50.8		
210451	213451	2½	63.5	1.38	34.9	2.50	63.5		
210452	213452	3	76.2	1.44	36.5	3.00	76.2		
210454	213454	4	101.6	1.50	38.1	4.00	101.6		
14MPW - #7 (3A)									
210519	210525	1	25.4	1.63	41.3	0.88	22.2	1.16	29.4
210465	210526	1½	38.1	1.63	41.3	1.38	34.9	1.67	42.5
210466	210527	2	50.8	1.75	44.5	1.88	47.6	2.19	55.6
210467	210528	2½	63.5	1.75	44.5	2.38	60.3	2.70	68.7
210468	210529	3	76.2	1.81	46.0	2.88	73.0	3.22	81.8
210469	210530	4	101.6	2.13	54.0	3.83	97.2	4.25	108.0

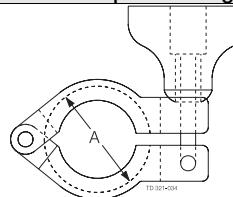
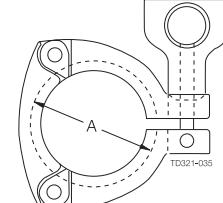
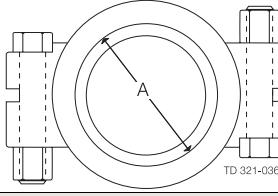
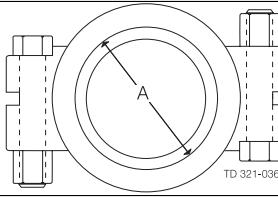
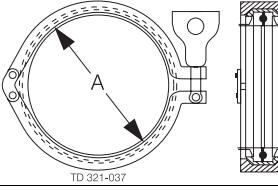
Note: 3A approved for finish #7

¹ = 3A approved for modifying or repairing existing on-site farm milk handling equipment.

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No. 304	Size DN/OD		Dimension		
	Inch	mm	Inch	mm	
A13MO Light Duty Tri-Clamp with T-Bolt					
260408	1½	38.1	2.08	52.8	
260409	2	50.8	2.61	66.3	
260411	2½	63.5	3.14	79.8	
260412	3	76.2	3.67	93.3	
260410	4	101.6	4.78	121.4	
261203	6	152.4	6.69	169.9	
261190	8	203.2	8.69	220.7	
261191	10	254.0	10.69	271.5	
261192	12	304.8	12.69	322.3	
13MHHM					
212195	1½	38.1	2.13	54.0	
212196	2	50.8	2.66	67.5	
212197	2½	63.5	3.19	81.0	
212198	3	76.2	3.72	94.5	
212199	4	101.6	4.83	122.6	
210129	6	152.4	6.69	169.9	
210290	8	203.2	8.69	220.7	
A13MHM					
211053	1½	38.1	2.13	54.0	
211054	2	50.8	2.64	67.1	
211055	2½	63.5	3.19	81.0	
211056	3	76.2	3.72	94.5	
211057	4	101.6	4.83	122.2	
211058	6	152.4	6.69	169.9	

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Size DN/OD		Dimension A		
	Inch	mm	Inch	mm	
13MHHS - Fractional Tri-Clamp with Wing Nut					
211290	3/4	12.7 - 19.0	1.13	28.6	 TD 321-034
13MHHS - 3-segment heavy duty Tri-Clamp with Wing Nut					
211283	1 1/2	38.1	2.13	54.0	 TD 321-035
211284	2	50.8	2.66	67.5	
211286	2 1/2	63.5	3.19	81.0	
211287	3	76.2	3.72	94.5	
211289	4	101.6	4.83	122.6	
A13MHP					
210180	1 1/2	38.1	2.05	52.0	 TD 321-036
210040	2	50.8	2.58	65.5	
210213	2 1/2	63.5	3.11	79.0	
210248	3	76.2	3.64	92.5	
210042	4	101.6	4.73	120.3	
9634-048982	6	152.4	6.63	168.4	
13MHP					
211278	1 1/2	38.1	2.05	52.0	 TD 321-036
211279	2	50.8	2.58	65.5	
211280	2 1/2	63.5	3.11	79.0	
211281	3	76.2	3.64	92.5	
211617	4	101.6	4.73	120.3	
260234	6	152.4	6.63	168.4	
A12MPS - Swivel joint					
210135	1 1/2	38.1	1.98	50.4	 TD 321-037
210136	2	50.8	2.52	63.9	
210137	2 1/2	63.5	3.05	77.4	
210138	3	76.2	3.58	90.9	
210140	4	101.6	4.69	119.1	

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Material Item No.	Material Item No.	Size	
42MP-E	42MP-G	42MP-U	42MP-SFY	Inch	42MP
290273	290270	290272	290274	1/2	
290265	290271	290264	290266	3/4	
42MP-X					42MP
290090				1/2	
290099				3/4	
40MP-E	40MP-N	40MP-U	40MP-SFY		40MP/40MO
290141	298428	298451	290009	1	
290044	298427	298452	290022	1 1/2	
290043	298425	298453	290030	2	
290048	298505	298454	290040	2 1/2	
290036	298506	298455	290049	3	
290018	298426	298456	290053	4	
40MO-E	40MO-N	40MO-U	40MO-SFY		
Not available	Not available	298360	290093	5	
290234	Not available	290112	290220	6	
40MP-G	40MP-X	40MP-UW	40MP-SFYW		40MP/40MO
298224	298512	298501	290071	1	
298227	298507	298495	290070	1 1/2	
298228	298508	298496	290062	2	
298223	298509	298499	290057	2 1/2	
298225	298510	298497	290055	3	
298226	298511	298498	290086	4	
40MO-G	40MO-X	40MO-UW	40MO-SFYW		
Not available	Not available	Not available	Not available	5	
298235	Not available	290195	Not available	6	
298236	Not available	Not available	Not available	8	
298237	Not available	Not available	Not available	10	
290168	Not available	Not available	Not available	12	

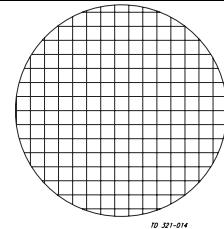
Code Letter	Material	Code Letter	Material	Material Descriptions
E	EPDM	SFYW		White Steam Resistant Fluoroelastomer
G	PTFE	X		Silicone (Q)
N	Polyethylene	UW		White Buna N
SFY	Steam Resistant Fluoroelastomer	U		Buna N

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Material Item No.	Size	
40MPF-E	40MPF-U	40MPF-SFY	Inch	40MPF/40MOF
290031	298346	290097	1	
290038	298347	290115	1½	
290017	298376	290117	2	
290035	298348	290118	2½	
290138	298375	290119	3	
290025	298349	9630290172	4	
40MOF-E	40MOF-U	40MOF-SFY		
290131	298220	290182	6	
290114	298221	290202	8	
290226	298222	290237	10	
290088	298409	290024	12	
40MPF-X	40MPF-UW			40MPF/40MOF
298411	298308		1	
298412	298431		1½	
298413	298417		2	
298414	290069		2½	
298415	298432		3	
298416	298433		4	
40MOF-X	40MOF-UW			
298605	290236		6	
298606	290250		8	
298607	290252		10	
298608	Not available		12	
40MHP-E	40MHP-SFY			40MHP
290029	290028		1	
A40MP-GR	A40MO-GR	A40MP/A40MO. PTFE Envelope Gasket with SFY		
290072			1	
290073			1½	
290074			2	
290075			2½	
290076			3	
290077			4	
	290085		6	

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Material Item No.	Size DN/OD		40MPS, 10 - Mesh Screen Gasket*
			Inch	mm	
40MPS-U					40MPS, 10 - Mesh Screen Gasket*
298488			1½	38.1	
298434			2	50.8	
298436			2½	63.5	
290034			3	76.2	
298438			4	101.6	
A80MP-E	A80MP-SFY	A80MP-U	Inch	mm	A80MP, Orifice Plate - 316L
290248	290207	290216	1½	38.1	
290255	290001	290221	2	50.8	
290314	290002	290222	2½	63.5	
290275	290180	290223	3	76.2	
		88127976	4	101.6	



ID 321-014



OD 316L

Material Descriptions

Code Letter	Material	Code Letter	Material
E	EPDM	SFY	Steam Resistant Fluoroelastomer
GR	PTFE with Fluroelastomer Insert	U	Buna N

* Wire diameter = 0.025 inch (0.64 mm)

Holes = 0.075 inch (1.9 mm) square

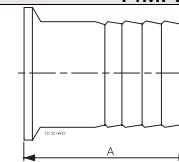
Open area = 56.3%

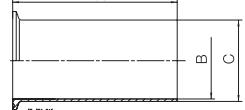
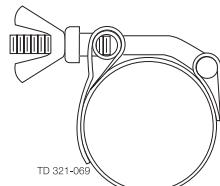
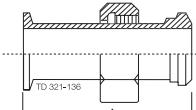
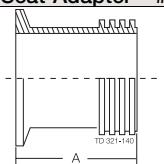
Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Size		Dimension		14MPHR - #7
		DN/OD		A		
Inch	mm	Inch	mm			
304	316L					
211469	213384	1 x 1	25.4 x 25.4	1.69	42.9	
211393	213382	1½ x 1½	38.1 x 38.1	1.69	42.9	
211387	213383	2 x 2	50.8 x 50.8	2.31	58.7	
211480	210722	2½ x 2½	63.5 x 63.5	2.00	50.8	
211481	211534	3 x 3	76.2 x 76.2	3.11	79.0	
211482	211535	4 x 4	101.6 x 101.6	3.41	86.5	

Note: 3A approved for finish #7

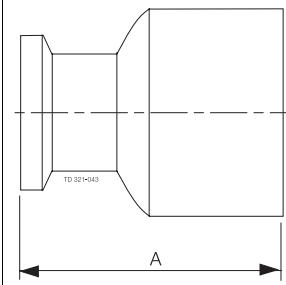
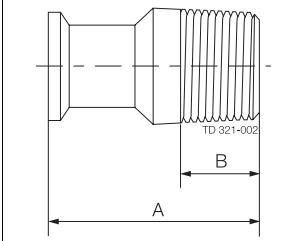
Fittings part number starting with "B" are produced according to ASME BPE dimensions.



Material Item No.	Material Item No.	Size		Dimension						
		DN/OD		A		B		C		
304	316L	Inch	mm	Inch	mm	Inch	mm	Inch	mm	
Product Code: 5046										14MPHT - #7
211399	211526	1	25.4	4.50	114.3	0.88	22.2	1.00	25.4	
211396	211527	1½	38.1	4.50	114.3	1.38	34.9	1.50	38.1	
211398	211793	2	50.8	4.50	114.3	1.88	47.6	2.00	50.8	
211394	212039	2½	63.5	4.50	114.3	2.38	60.3	2.50	63.5	
211392	213468	3	76.2	4.50	114.3	2.88	73.0	3.00	76.2	
211402	213493	4	101.6	4.63	117.5	3.83	97.2	4.00	101.6	
Product Code: 5049										A14MHC Sanitary Hose Clamp for Tygon Hose Adapter
210218		1.125	28.6							
210219		1.250	31.8							
210220		1.375	34.9							
210221		1.500	38.1							
210223		1.750	44.5							
210224		1.875	47.6							
210225		2.000	50.8							
210226		2.125	54.0							
210227		2.250	57.2							
210228		2.375	60.3							
210229		2.500	63.5							
210230		2.625	66.7							
210231		2.750	69.9							
210232		3.000	76.2							
210233		3.250	82.6							
210234		3.500	88.9							
210235		3.750	95.3							
210236		4.000	101.6							
210237		4.250	108.0							
210240		4.500	114.3							
210238		5.000	127.0							
Product Code: 5046										17MP-14 - #7 (3A)
211942		1	25.4	3.00	76.2					
210571		1½	38.1	3.00	76.2					
211250		2	50.8	3.00	76.2					
210825		2½	63.5	3.50	88.9					
210729		3	76.2	3.75	95.3					
211252		4	101.6	4.00	101.6					
Product Code: 5046										17MP-15 Threaded Bevel Seat Adapter - #7 (3A)
211288		1	25.4	1.69	42.9					
211230		1½	38.1	1.72	43.7					
211231		2	50.8	1.72	43.7					
211232		2½	63.5	1.84	46.8					
211233		3	76.2	1.91	48.4					
211234		4	101.6	2.34	59.5					

Note: 3A approved for finish #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

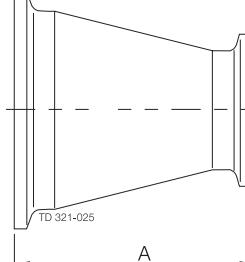
Material Item No.	Material Item No.	Size		Dimension						
		DN/OD		A		B				
		Inch	mm	Inch	mm	Inch	mm			
304	316L	22MP (N.P.T. Pipe Thread - Non 3A) - #7								
211378	210984	1 x 3/4	25.4 x 19.0	1.63	41.3					
211331	213625	1 x 1	25.4 x 25.4	1.63	41.3					
211334	213913	1 1/2 x 1 1/4	38.1 x 31.8	2.25	57.2					
211335	213733	1 1/2 x 1 1/2	38.1 x 38.1	2.25	57.2					
211434	213821	1 1/2 x 3/4	38.1 x 19.0	1.63	41.3					
211336	211736	1 1/2 x 1	38.1 x 25.4	1.63	41.3					
211362	213914	2 x 1 1/2	50.8 x 38.1	2.34	59.5					
211337	213623	2 x 2	50.8 x 50.8	1.69	42.9					
211539	210249	2 1/2 x 2	63.5 x 50.8	2.093	35.7					
211332	210318	2 1/2 x 2 1/2	63.5 x 63.5	2.09	53.2					
211340	213649	3 x 3	76.2 x 76.2	2.19	55.6					
211339	210737	4 x 4	101.6 x 101.6	3.65	92.7					
21MP (N.P.T. Pipe Thread - Non 3A) - #7										
211371	213650	1 x 3/4	25.4 x 19.0	2.19	55.6	0.98	25.0			
211299	213598	1 x 1	25.4 x 25.4	2.25	57.2	0.69	17.5			
211363	213741	1 1/2 x 1 1/4	38.1 x 31.8	2.44	61.9	0.70	17.9			
211300	213626	1 1/2 x 1 1/2	38.1 x 38.1	2.44	61.9	0.72	18.3			
211421	212034	1 1/2 x 3/4	38.1 x 19.0	2.19	55.6	0.55	13.9			
211306	213740	1 1/2 x 1	38.1 x 25.4	2.31	58.7	0.72	18.3			
211305	210821	1 1/2 x 2	38.1 x 50.8	2.63	66.7	0.72	18.3			
211354	214198	2 x 1 1/2	50.8 x 38.1	2.47	62.7	0.75	19.1			
211301	213624	2 x 2	50.8 x 50.8	2.66	67.5	0.75	19.1			
211369	214009	2 1/2 x 2	63.5 x 50.8	3.13	79.4	1.14	29.0			
211302	213918	2 1/2 x 2 1/2	63.5 x 63.5	3.28	83.3	1.38	34.9			
211303	213597	3 x 3	76.2 x 76.2	3.50	88.9	1.20	30.6			
211304	213596	4 x 4	101.6 x 101.6	3.81	96.8	1.30	32.9			

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Size		Dimension				23BMP - No tapped hole - #7
		DN/OD	Inch	mm	Inch	mm	A	
304	316L	Inch	mm	Inch	mm	Inch	mm	23BMP - No tapped hole - #7
615959	615966	1 & 1½	38.1	1.98	50.4	0.63	15.9	
615958	615967	2	50.8	2.52	63.9	0.63	15.9	
615960	Contact AL	2½	63.5	3.05	77.4	0.63	15.9	
615961	615969	3	76.2	3.58	90.9	0.63	15.9	
Contact AL	615971	4	101.6	4.69	119.1	0.63	15.9	
23BMP - Tapped with NPT threads- #7								
210623	214206	1½ x ½	25.4 x 12.7	1.98	50.3	0.63	15.9	
210596	211677	1½ x ¾	38.1 x 19.0	1.98	50.3	0.63	15.9	
210626	213599	2 x ¾	50.8 x 19.0	2.52	64.0	0.63	15.9	
211448	610723	2½ x ¾	63.5 x 19.0	3.05	77.5	0.63	15.9	
211555	610724	3 x ¾	76.2 x 19.0	3.58	90.9	0.63	15.9	
211439	610726	4 x ¾	101.6 x 19.0	4.69	119.1	0.63	15.9	
16AMP - #7 (3A)								
Not available	210518	¾	19.0	0.19	4.80	0.98	24.9	
210501	210854	1½	38.1	0.25	6.40	1.98	50.4	
210502	210855	2	50.8	0.25	6.40	2.52	63.9	
210503	210856	2½	63.5	0.25	6.40	3.05	77.4	
210504	210857	3	76.2	0.25	6.40	3.58	90.0	
210506	210858	4	101.6	0.31	7.90	4.69	119.1	
261220	260237	6	152.4	0.44	11.10	6.58	167.1	
16AMO - #1								
260509	263509	8	217.9	0.44	11.10	8.58	162.4	
260510	260297	10	268.5	0.44	11.10	10.57	217.9	
260511	263511	12	304.8	0.56	14.30	12.58	319.5	

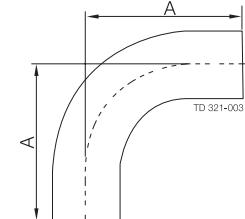
Note: 16AMP is 3A approved

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Size DN/OD		Dimension A		
		Inch	mm	Inch	mm	
304	316L					B31 - 14MP - #7 (3A)
9634054258	9634-039716	1½ x 1	38.1 x 25.4	3.00	76.2	
9634054259	9634-039717	2 x 1	50.8 x 25.4	5.00	127.0	
9634054260	9634-039718	2 x 1½	50.8 x 38.1	3.00	76.2	
9634069011	9634-039720	2½ x 1½	63.5 x 38.1	5.00	127.0	
9634054262	9634-039721	2½ x 2	63.5 x 50.8	3.00	76.2	
9634600003	9634-039724	3 x 2	76.2 x 50.8	5.00	127.0	
9634600002	9634-039725	3 x 2½	76.2 x 63.5	3.00	76.2	
9634600006	9634-039730	4 x 3	101.6 x 76.2	5.13	130.2	
Not available	9634-050022	6 x 3	152.4 x 76.2	7.63	193.7	
Not available	9634-050025	6 x 4	152.4 x 101.6	7.63	193.7	
B32 - 14MP - #7 (3A)						
9634600007	9634-039816	1½ x 1	38.1 x 25.4	3.00	76.2	
Not available	9634-039817	2 x 1	50.8 x 25.4	5.00	127.0	
9634600010	9634-039818	2 x 1½	50.8 x 38.1	3.00	76.2	
9634600008	9634-039820	2½ x 1½	63.5 x 38.1	5.00	127.0	
9634600009	9634-039821	2½ x 2	63.5 x 50.8	3.00	76.2	
9634600013	9634-039824	3 x 2	76.2 x 50.8	5.00	127.0	
9634600012	9634-039825	3 x 2½	76.2 x 63.5	3.00	76.2	
9634600016	9634-039830	4 x 3	101.6 x 76.2	5.13	130.2	
Not available	9634600026	6 x 3	152.4 x 76.2	7.63	193.7	
Not available	9634-050021	6 x 4	152.4 x 101.6	7.63	193.7	

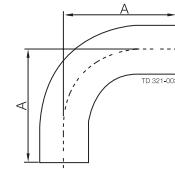
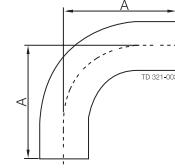
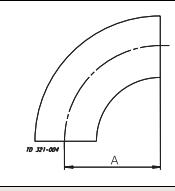
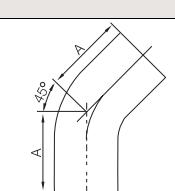
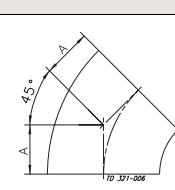
Note: 3A approved for finish #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

#1	#7 (3A)	Size DN/OD		Dimension A		
		Inch	mm	Inch	mm	
304	304					B2S
9634000301	9634000308	1	25.4	3.00	76.2	
9634000302	9634000309	1½	38.1	3.75	95.3	
9634000303	9634000310	2	50.8	4.75	120.7	
9634000304	9634000311	2½	63.5	5.50	139.7	
9634000305	9634000312	3	76.2	6.25	158.8	
9634000306	9634000313	4	101.6	8.00	203.2	
Not available	Not available	6	152.4	11.50	292.1	
	(3A)					L2S
240400	240403	1	25.4	2.06	52.4	
241400	241403	1½	38.1	2.94	74.6	
242400	242403	2	50.8	4.06	103.2	
243400	243403	2½	63.5	5.19	131.8	
244400	244403	3	76.2	6.31	160.3	
Not available	Not available	4	101.6	8.31	211.1	
	(3A)					2WCL
060011	060487	1	25.4	1.50	38.1	
060013	060084	1½	38.1	2.25	57.2	
060014	060033	2	50.8	3.00	76.2	
060015	060185	2½	63.5	3.75	95.3	
060016	060488	3	76.2	4.50	114.3	
060017	060275	4	101.6	6.00	152.4	
060019	060293	6	152.4	9.00	228.6	
	(3A)					B2KS
9634000501	9634000508	1	25.4	2.25	57.2	
9634000502	9634000509	1½	38.1	2.50	63.5	
9634000503	9634000510	2	50.8	3.00	76.2	
9634000504	9634000511	2½	63.5	3.38	85.7	
9634000505	9634000512	3	76.2	3.63	92.1	
9634000506	9634000513	4	101.6	4.50	114.3	
Not available	9634048643	6	152.4	6.25	158.8	

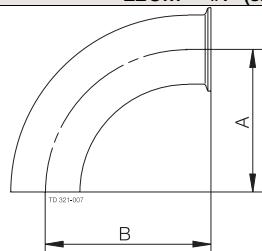
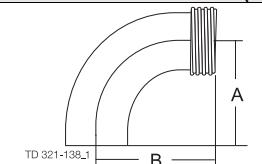
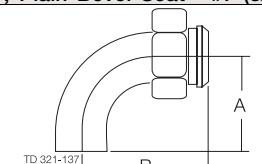
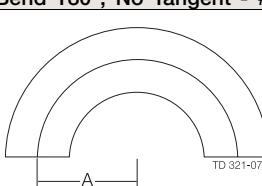
Note: 3A approved for finish #3 and #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

#1	#3 (3A)	#7 (3A)	Size DN/OD		Dimension A		
316L		316L	Inch	mm	Inch	mm	B2S
9634000315	9634000329	9634000322	1	25.4	3.00	76.2	
9634000316	9634000330	9634000323	1½	38.1	3.75	95.3	
9634000317	9634000331	9634000324	2	50.8	4.75	120.7	
9634000318	9634000332	9634000325	2½	63.5	5.50	139.7	
9634000319	9634000333	9634000326	3	76.2	6.25	158.8	
9634000320	9634000334	9634000327	4	101.6	8.00	203.2	
Not available	Not available	9634048644	6	152.4	11.50	292.1	
	(3A)	(3A)					L2S
245847	245918	245904	1	25.4	2.06	52.4	
245851	245922	240015	1½	38.1	2.94	74.6	
245853	245916	240034	2	50.8	4.06	103.2	
245854	245923	245966	2½	63.5	5.19	131.8	
245855	245924	240012	3	76.2	6.31	160.3	
Not available	Not available	Not available	4	101.6	8.31	211.1	
	(3A)						2WCL
062011	Not available	060589	1	25.4	1.50	38.1	
062013	Not available	060590	1½	38.1	2.25	57.2	
062014	Not available	060421	2	50.8	3.00	76.2	
062015	Not available	060025	2½	63.5	3.75	95.3	
062016	Not available	060281	3	76.2	4.50	114.3	
062017	Not available	060591	4	101.6	6.00	152.4	
062019	Not available	060268	6	152.4	9.00	228.6	
	(3A)						B2KS
9634000515		9634000522	1	25.4	2.25	57.2	
9634000516		9634000523	1½	38.1	2.50	63.5	
9634000517		9634000524	2	50.8	3.00	76.2	
9634000518		9634000525	2½	63.5	3.38	85.7	
9634000519		9634000526	3	76.2	3.63	92.1	
9634000520		9634000527	4	101.6	4.50	114.3	
Not available	Not available	9634048643	6	152.4	6.25	158.8	
	(3A)						2WK
062048	Not available	060728	1	25.4	0.63	15.9	
062050	Not available	060729	1½	38.1	0.94	23.8	
062051	Not available	060730	2	50.8	1.25	31.8	
062052	Not available	060731	2½	63.5	1.56	39.7	
062053	Not available	060283	3	76.2	1.88	47.6	
062054	Not available	060732	4	101.6	2.50	63.5	
061101	Not available	9634050000	6	152.4	3.75	95.3	

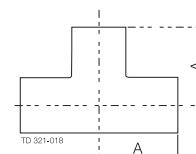
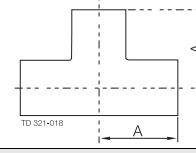
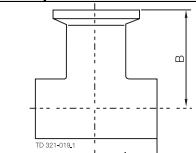
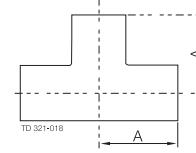
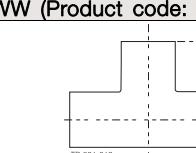
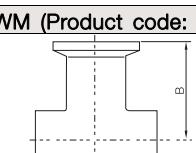
Note: 3A approved for finish #3 and #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

Material Item No.	Material Item No.	Size		Dimension				
		DN/OD		A	B			
304	316L	Inch	mm	Inch	mm	Inch	mm	
Product Code: 5009								L2CM - #7 (3A)
240226	246076	1	25.4	2.06	52.4	2.56	65.1	
241229	246038	1½	38.1	2.94	74.6	3.44	87.3	
242227	245920	2	50.8	4.06	103.2	4.56	115.9	
243229	246100	2½	63.5	5.19	131.8	5.69	144.5	
244229	246096	3	76.2	6.31	160.3	6.81	173.0	
245210	242068	4	101.6	8.31	211.1	8.94	227.0	
Product Code: 5018								L2C Bend 90°, Threaded Bevel Seat - #7 (3A)
240203		1	25.4	2.06	52.4	2.75	69.9	
241203		1½	38.1	2.94	74.6	3.66	92.9	
242203		2	50.8	4.06	103.2	4.78	121.4	
243204		2½	63.5	5.19	131.8	6.03	153.2	
244203		3	76.2	6.31	160.3	7.22	183.4	
240332		4	101.6	8.31	211.1	9.53	242.1	
Product Code: 5018								L2F Bend 90°, Plain Bevel Seat - #7 (3A)
240253		1	25.4	2.06	52.4	2.75	69.9	
241253		1½	38.1	2.94	74.6	3.66	92.9	
242253		2	50.8	4.06	103.2	4.78	121.4	
243253		2½	63.5	5.19	131.8	6.03	153.2	
244253		3	76.2	6.31	160.3	7.22	183.4	
245253		4	101.6	8.31	211.1	9.53	242.1	
Product Code: 5009								2WUL Bend 180°, No Tangent - #1
060071		1	25.4	1.50	38.1			
060073		1½	38.1	2.25	57.2			
060074		2	50.8	3.00	76.2			
060003		2½	63.5	3.75	95.3			
060076		3	76.2	4.50	114.3			
061100		4	101.6	6.00	152.4			

Note: 3A approved for finish #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

#1 Item No.	#3 (3A) Item No.	#7 (3A) Item No.	Size DN/OD		Dimension A		Dimension B		
304		304	Inch	mm	Inch	mm	Inch	mm	B7WWW (Product code: 5029)
9634000701	Not available	9634000708	1	25.4	2.13	54.0			
9634000702	Not available	9634000709	1½	38.1	2.38	60.3			
9634000703	Not available	9634000710	2	50.8	2.88	73.0			
9634000704	Not available	9634000711	2½	63.5	3.13	79.4			
9634000705	Not available	9634000712	3	76.2	3.38	85.7			
9634000706	Not available	9634000713	4	101.6	4.13	104.8			
Not available	Not available	Not available	6	152.4	5.63	142.9			
304L		304L					L7WWW (Product code: 5036)		
9613-4666-01		9613-4666-07	1	25.4	1.13	28.6			
9613-4666-02		9613-4666-08	1½	38.1	1.66	42.1			
9613-4666-03		9613-4666-09	2	50.8	2.06	52.4			
9613-4666-04		9613-4666-10	2½	63.5	2.34	59.5			
9613-4666-05		9613-4666-11	3	76.2	2.59	65.9			
9613-4666-06		9613-4666-12	4	101.6	3.44	87.3			
		(3A)					B7WWM (Product code: 5029)		
		9634002715	1	25.4	2.13	54.0	2.63	66.7	
		9634002716	1½	38.1	2.38	60.3	2.88	73.0	
		9634002717	2	50.8	2.88	73.0	3.38	85.7	
		9634002718	2½	63.5	3.13	79.4	3.63	92.1	
		9634002719	3	76.2	3.38	85.7	3.88	98.4	
		9634002720	4	101.6	4.13	104.8	4.75	120.7	
316L	316L	316L					B7WWW (Product code: 5029)		
9634000715	9634000736	9634000722	1	25.4	2.13	54.0			
9634000716	9634000737	9634000723	1½	38.1	2.38	60.3			
9634000717	9634000738	9634000724	2	50.8	2.88	73.0			
9634000718	9634000739	9634000725	2½	63.5	3.13	79.4			
9634000719	9634000740	9634000726	3	76.2	3.38	85.7			
9634000720	9634000741	9634000727	4	101.6	4.13	104.8			
9634000721	Not available	9634000728	6	152.4	5.63	142.9			
316L		316L					L7WWW (Product code: 5036)		
9613-4666-13		9613-4666-19	1	25.4	1.13	28.6			
9613-4666-14		9613-4666-20	1½	38.1	1.66	42.1			
9613-4666-15		9613-4666-21	2	50.8	2.06	52.4			
9613-4666-16		9613-4666-22	2½	63.5	2.34	59.5			
9613-4666-17		9613-4666-23	3	76.2	2.59	65.9			
9613-4666-18		9613-4666-24	4	101.6	3.44	87.3			
							B7WWM (Product code: 5029)		
Not available	Not available	9634002736	1	25.4	2.13	54.0	2.63	66.7	
Not available	Not available	9634002737	1½	38.1	2.38	60.3	2.88	73.0	
Not available	Not available	9634002738	2	50.8	2.88	73.0	3.38	85.7	
Not available	Not available	9634002739	2½	63.5	3.13	79.4	3.63	92.1	
Not available	Not available	9634002740	3	76.2	3.38	85.7	3.88	98.4	
Not available	Not available	9634002741	4	101.6	4.13	104.8	4.75	120.7	

* = Contact Alfa Laval

Note: 3A approved for finish #3 and #7. Fittings part number starting with "B" are produced according to ASME BPE dimensions.

#1 Item No.	#7 (3A) Item No.	Size DN/OD		Dimension A		Dimension B		
		Inch	mm	Inch	mm	Inch	mm	
304	304							B7RWWW
9634001201	9634001217	1½ x 1	38.1 x 25.4	2.38	60.3	2.38	60.3	
9634001202	9634001218	2 x 1	50.8 x 25.4	2.88	73.0	2.63	66.7	
9634001203	9634001219	2 x 1½	50.8 x 38.1	2.88	73.0	2.63	66.7	
9634001204	9634001220	2½ x 1	63.5 x 25.4	3.13	79.4	2.88	73.0	
9634001205	9634001221	2½ x 1½	63.5 x 38.1	3.13	79.4	2.88	73.0	
9634001206	9634001222	2½ x 2	63.5 x 50.8	3.13	79.4	2.88	73.0	
9634001207	9634001223	3 x 1	76.2 x 25.4	3.38	85.7	2.88	79.4	
9634001208	9634001224	3 x 1½	76.2 x 38.1	3.38	85.7	3.13	79.4	
9634001209	9634001225	3 x 2	76.2 x 50.8	3.38	85.7	3.13	79.4	
9634001210	9634001226	3 x 2½	76.2 x 63.5	3.38	85.7	3.13	79.4	
9634001211	9634001227	4 x 1	101.6 x 25.4	4.13	104.8	3.13	92.1	
9634001212	9634001228	4 x 1½	101.6 x 38.1	4.13	104.8	3.63	92.1	
9634001213	9634001229	4 x 2	101.6 x 50.8	4.13	104.8	3.88	98.4	
9634001214	9634001230	4 x 2½	101.6 x 63.5	4.13	104.8	3.88	98.4	
9634001215	9634001231	4 x 3	101.6 x 76.2	4.13	104.8	3.88	98.4	

N/A = Not available

Note: 3A approved for finish #3 and #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

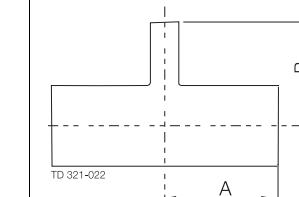
#1 Item No.	#3 (3A) Item No.	Size DN/OD		Dimension A		Dimension B		
		Inch	mm	Inch	mm	Inch	mm	
316L	316L							B7RWWW
9634001233	9634001265	1½ x 1	38.1 x 25.4	2.38	60.3	2.38	60.3	
9634001234	9634001266	2 x 1	50.8 x 25.4	2.88	73.0	2.63	66.7	
9634001235	9634001267	2 x 1½	50.8 x 38.1	2.88	73.0	2.63	66.7	
9634001236	9634001268	2½ x 1	63.5 x 25.4	3.13	79.4	2.88	73.0	
9634001237	9634001269	2½ x 1½	63.5 x 38.1	3.13	79.4	2.88	73.0	
9634001238	9634001270	2½ x 2	63.5 x 50.8	3.13	79.4	2.88	73.0	
9634001239	9634001271	3 x 1	76.2 x 25.4	3.38	85.7	2.88	79.4	
9634001240	9634001272	3 x 1½	76.2 x 38.1	3.38	85.7	3.13	79.4	
9634001241	9634001273	3 x 2	76.2 x 50.8	3.38	85.7	3.13	79.4	
9634001242	9634001274	3 x 2½	76.2 x 63.5	3.38	85.7	3.13	79.4	
9634001243	9634001275	4 x 1	101.6 x 25.4	4.13	104.8	3.13	92.1	
9634001244	9634001276	4 x 1½	101.6 x 38.1	4.13	104.8	3.63	92.1	
9634001245	9634001277	4 x 2	101.6 x 50.8	4.13	104.8	3.88	98.4	
9634001246	9634001278	4 x 2½	101.6 x 63.5	4.13	104.8	3.88	98.4	
9634001247	9634001279	4 x 3	101.6 x 76.2	4.13	104.8	3.88	98.4	

#7 (3A) Item No.	Size DN/OD		Dimension A		Dimension B		
	Inch	mm	Inch	mm	Inch	mm	
316L							B7RWWW
9634001249	1½ x 1	38.1 x 25.4	2.38	60.3	2.38	60.3	
9634001250	2 x 1	50.8 x 25.4	2.88	73.0	2.63	66.7	
9634001251	2 x 1½	50.8 x 38.1	2.88	73.0	2.63	66.7	
9634001252	2½ x 1	63.5 x 25.4	3.13	79.4	2.88	73.0	
9634001253	2½ x 1½	63.5 x 38.1	3.13	79.4	2.88	73.0	
9634001254	2½ x 2	63.5 x 50.8	3.13	79.4	2.88	73.0	
9634001255	3 x 1	76.2 x 25.4	3.38	85.7	2.88	79.4	
9634001256	3 x 1½	76.2 x 38.1	3.38	85.7	3.13	79.4	
9634001257	3 x 2	76.2 x 50.8	3.38	85.7	3.13	79.4	
9634001258	3 x 2½	76.2 x 63.5	3.38	85.7	3.13	79.4	
9634001259	4 x 1	101.6 x 25.4	4.13	104.8	3.13	92.1	
9634001260	4 x 1½	101.6 x 38.1	4.13	104.8	3.63	92.1	
9634001261	4 x 2	101.6 x 50.8	4.13	104.8	3.88	98.4	
9634001262	4 x 2½	101.6 x 63.5	4.13	104.8	3.88	98.4	
9634001263	4 x 3	101.6 x 76.2	4.13	104.8	3.88	98.4	
Not available	6 x ½	152.4 x 12.7	5.63	142.9	5.13	130.2	
Not available	6 x ¾	152.4 x 19.0	5.63	142.9	5.13	130.2	
9634048303	6 x 1	152.4 x 25.4	5.63	142.9	5.13	130.2	
9634048304	6 x 1½	152.4 x 38.1	5.63	142.9	5.13	130.2	
9634048305	6 x 2	152.4 x 50.8	5.63	142.9	5.13	130.2	
9634048306	6 x 2½	152.4 x 63.5	5.63	142.9	5.13	130.2	
9634048307	6 x 3	152.4 x 76.2	5.63	142.9	5.13	130.2	
9634001264	6 x 4	152.4 x 101.6	5.63	142.9	5.13	130.2	

N/A = Not available

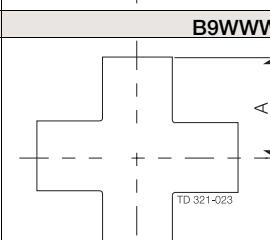
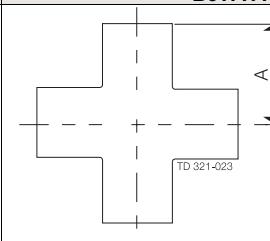
Note: 3A approved for finish #3 and #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.



#1	#7 (3A)	Size DN/OD		Dimension A		
304	304	Inch	mm	Inch	mm	
9634000901	9634000908	1	25.4	2.13	54.0	
9634000902	9634000909	1½	38.1	2.38	60.3	
9634000903	9634000910	2	50.8	2.88	73.0	
9634000904	9634000911	2½	63.5	3.13	79.4	
9634000905	9634000912	3	76.2	3.38	85.7	
9634000906	9634000913	4	101.6	4.13	104.8	

316L	316L	Inch	mm	Inch	mm	
9634000915	9634000922	1	25.4	2.13	54.0	
9634000916	9634000923	1½	38.1	2.38	60.3	
9634000917	9634000924	2	50.8	2.88	73.0	
9634000918	9634000925	2½	63.5	3.13	79.4	
9634000919	9634000926	3	76.2	3.38	85.7	
9634000920	9634000927	4	101.6	4.13	104.8	



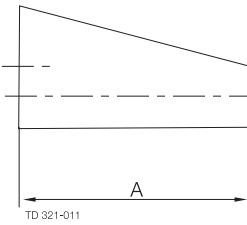
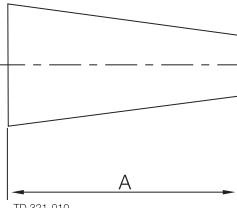
Material Item No.	Material Item No.	Size DN/OD		Dimension A		19WB Male NPT Adapter - #1
		Inch	mm	Inch	mm	
304	316L					
060196	060064	1/2	12.7	1.31	33.3	
060448	062448	3/4	19.0	1.63	41.3	
060449	062449	1	25.4	1.75	44.5	
060451	062451	1 1/2	38.1	1.75	44.5	
060452	062452	2	50.8	1.81	46.0	
060453	062453	2 1/2	63.5	2.31	58.7	
060454	062454	3	76.2	2.5	63.5	
060733	062455	4	101.6	2.56	65.1	
16W - End Cap - #1						
060426	060120	1	25.4	0.38	9.5	
060428	060122	1 1/2	38.1	0.56	14.3	
060429	062430	2	50.8	0.75	19.1	
060430	060177	2 1/2	63.5	1.00	25.4	
060431	060037	3	76.2	1.25	31.8	
060432	060259	4	101.6	1.50	38.1	
060434	060335	6	152.4	2.25	57.2	
	060029	8	203.2	2.63	66.7	

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

#1 Item No.	#7 (3A) Item No.	Size DN/OD		Dimension A		
		Inch	mm	Inch	mm	
304	304					L31
241815	241818	1½ x 1	38.1 x 25.4	2.00	50.8	
Not available	242725	2 x 1	50.8 x 25.4	4.00	101.6	
242740	242743	2 x 1½	50.8 x 38.1	2.00	50.8	
243821	243777	2½ x 1½	63.5 x 38.1	4.75	120.7	
243817	243781	2½ x 2	63.5 x 50.8	2.00	50.8	
244857	244787	3 x 1½	76.2 x 38.1	6.00	152.4	
244861	244874	3 x 2	76.2 x 50.8	4.00	101.6	
244865	244795	3 x 2½	76.2 x 63.5	2.00	50.8	
245754	245784	4 x 2	101.6 x 50.8	8.00	203.2	
245758	245785	4 x 2½	101.6 x 63.5	6.00	152.4	
245762	245786	4 x 3	101.6 x 76.2	4.00	101.6	
9634600017	9634600018	6 x 3	152.4 x 76.2	5.50	139.7	
9634600019	9634600020	6 x 4	152.4 x 101.6	5.50	139.7	
	(3A)					L32
241820	241834	1½ x 1	38.1 x 25.4	2.00	50.8	
9634600021	240977	2 x 1	50.8 x 25.4	4.00	101.6	
242841	242844	2 x 1½	50.8 x 38.1	2.00	50.8	
243844	243847	2½ x 1½	63.5 x 38.1	4.00	101.6	
243848	243851	2½ x 2	63.5 x 50.8	2.00	50.8	
244889	244880	3 x 2	76.2 x 50.8	4.00	101.6	
244893	244894	3 x 2½	76.2 x 63.5	2.00	50.8	
245841	Not available	4 x 2	101.6 x 50.8	8.00	203.2	
245845	245836	4 x 2½	101.6 x 63.5	6.00	152.4	
245849	245848	4 x 3	101.6 x 76.2	4.00	101.6	
9634600022	9634600023	6 x 3	152.4 x 76.2	5.50	139.7	
9634600024	9634600025	6 x 4	152.4 x 101.6	5.50	139.7	

Note: 3A approved for finish #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.



#1 Item No.	#7 (3A) Item No.	Size DN/OD		Dimension A		
		Inch	mm	Inch	mm	
316L	316L					L31
246212	246214	1½ x 1	38.1 x 25.4	2.00	50.8	
9634047933	9634047934	2 x 1	50.8 x 25.4	4.00	101.6	
245941	240030	2 x 1½	50.8 x 38.1	2.00	50.8	
241092	240962	2½ x 1½	63.5 x 38.1	4.75	120.7	
245939	246005	2½ x 2	63.5 x 50.8	2.00	50.8	
246127	246129	3 x 1½	76.2 x 38.1	6.00	152.4	
246149	240029	3 x 2	76.2 x 50.8	4.00	101.6	
246006	246036	3 x 2½	76.2 x 63.5	2.00	50.8	
242069	240963	4 x 2	101.6 x 50.8	8.00	203.2	
241093	240964	4 x 2½	101.6 x 63.5	6.00	152.4	
245938	246067	4 x 3	101.6 x 76.2	4.00	101.6	
9634050005	9634049355	6 x 3	152.4 x 76.2	5.50	139.7	
9634050007	9634049356	6 x 4	152.4 x 101.6	5.50	139.7	
	(3A)					L32
241103	240976	1½ x 1	38.1 x 25.4	2.00	50.8	
9634047935	240977	2 x 1	50.8 x 25.4	4.00	101.6	
242836	240978	2 x 1½	50.8 x 38.1	2.00	50.8	
242070	240979	2½ x 1½	63.5 x 38.1	4.00	101.6	
243858	240980	2½ x 2	63.5 x 50.8	2.00	50.8	
242071	240982	3 x 2	76.2 x 50.8	4.00	101.6	
242164	240983	3 x 2½	76.2 x 63.5	2.00	50.8	
242072	240984	4 x 2	101.6 x 50.8	8.00	203.2	
242073	240985	4 x 2½	101.6 x 63.5	6.00	152.4	
242074	240986	4 x 3	101.6 x 76.2	4.00	101.6	
9634050001	9634050002	6 x 3	152.4 x 76.2	5.50	139.7	
9634050003	9634049354	6 x 4	152.4 x 101.6	5.50	139.7	

Note: 3A approved for finish #7

Fittings part number starting with "B" are produced according to ASME BPE dimensions.

1.2 BioPharm Fittings

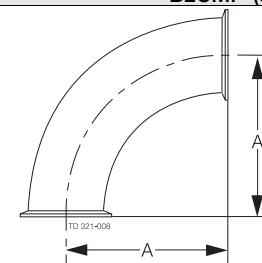
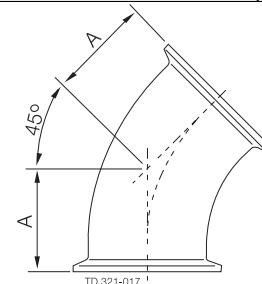
Tri-Clover® Pharma fittings with either Tri-Weld® ends suitable for use with orbital welding equipment or self-aligning Tri-Clamp® end connections. Our full line are manufactured in compliance with the current revision of the ASME BPE Standards.

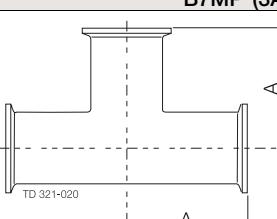
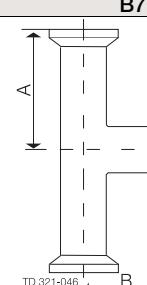


Price Sheets

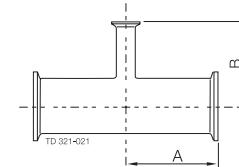
BioPharm Tri-Clamps Elbows	1.2.40
BioPharm Tri-Clamps Tees	1.2.41
BioPharm Tri-Clamps Reducing Tees	1.2.42
BioPharm Tri-Clamps Instrument Tees	1.2.44
BioPharm Tri-Clamps Crosses	1.2.45
BioPharm Tri-Clamps Ferrules	1.2.46
BioPharm Tri-Clamps	1.2.47
BioPharm Tri-Clamps Gaskets	1.2.49
BioPharm Tri-Clamps Solid End Caps	1.2.51
BioPharm Tri-Clamps Adapters	1.2.52
BioPharm Tri-Clamps Reducers	1.2.53
BioPharm Tri-Weld Bends	1.2.54
BioPharm Tri-Weld Use-Point Fittings	1.2.56
BioPharm Tri-Weld Tees	1.2.59
BioPharm Tri-Weld Reducing Tees	1.2.60
BioPharm Tri-Weld Instrument Tees	1.2.63
BioPharm Tri-Weld Crosses	1.2.64
BioPharm Tri-Weld Reducing Crosses	1.2.65
BioPharm Tri-Weld End Caps	1.2.66
BioPharm Tri-Weld Reducers	1.2.67

Finish Item No.	Finish Item No.	Size DN/OD		Dimension		
		Inch	mm	Inch	mm	
PL	PM					B2CMP (3A)
9634-002819	9634-002828	1/2	12.7	1.63	41.3	
9634-002820	9634-002829	3/4	19.0	1.63	41.3	
9634-002821	9634-002830	1	25.4	2.00	50.8	
9634-002822	9634-002831	1 1/2	38.1	2.75	69.9	
9634-002823	9634-002832	2	50.8	3.50	88.9	
9634-002824	9634-002833	2 1/2	63.5	4.25	108.0	
9634-002825	9634-002834	3	76.2	5.00	127.0	
9634-002826	9634-002835	4	101.6	6.63	168.3	
9634-002827	9634-002836	6	152.4	10.50	266.7	
B2KMP (3A)						
9634-003019	9634-003028	1/2	12.7	1.00	25.4	
9634-003020	9634-003029	3/4	19.0	1.00	25.4	
9634-003021	9634-003030	1	25.4	1.13	28.6	
9634-003022	9634-003031	1 1/2	38.1	1.44	36.5	
9634-003023	9634-003032	2	50.8	1.75	44.5	
9634-003024	9634-003033	2 1/2	63.5	2.06	52.4	
9634-003025	9634-003034	3	76.2	2.38	60.3	
9634-003026	9634-003035	4	101.6	3.13	79.4	
9634-003027	9634-003036	6	152.4	5.25	133.4	

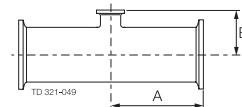
**B2KMP (3A)**

Finish Item No.	Finish Item No.	Size DN/OD		Dimension				
		Inch	mm	Inch	mm	Inch	mm	
PL	PM							B7MP (3A)
9634-003219	9634-003228	1/2	12.7	2.25	57.2			
9634-003220	9634-003229	3/4	19.0	2.38	60.3			
9634-003221	9634-003230	1	25.4	2.63	66.7			
9634-003222	9634-003231	1 1/2	38.1	2.88	73.0			
9634-003223	9634-003232	2	50.8	3.38	85.7			
9634-003224	9634-003233	2 1/2	63.5	3.63	92.1			
9634-003225	9634-003234	3	76.2	3.88	98.4			
9634-003226	9634-003235	4	101.6	4.75	181.0			
9634-003227	9634-003236	6	152.4	7.13	181.0			
B7MPS (3A)								
9634-043017	9634-043025	1/2	12.7	2.25	57.2	1.00	25.4	
9634-043018	9634-043026	3/4	19.0	2.38	60.3	1.13	28.6	
9634-043019	9634-043027	1	25.4	2.63	66.7	1.13	26.9	
9634-043020	9634-043028	1 1/2	38.1	2.88	73.0	1.38	34.9	
9634-043021	9634-043029	2	50.8	3.38	85.7	1.63	41.3	
9634-043022	9634-043030	2 1/2	63.5	3.63	92.1	1.88	47.6	
9634-043023	9634-043031	3	76.2	3.88	98.4	2.13	54.0	
9634-043024	9634-043032	4	101.6	4.75	120.7	2.75	69.8	
9634050011	9634050012	6	152.4	7.13	181.0	4.63	117.5	

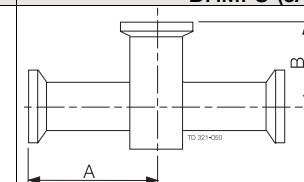
Finish Item No.	Finish Item No.	Size DN/OD		Dimension				B7RMP (3A)
		Inch	mm	Inch	mm	Inch	mm	
PL	PM							
9634-003643	9634-003664	3/4 x 1/2	19.0 x 12.7	2.50	63.5	2.50	63.5	
9634-003644	9634-003665	1 x 1/2	25.4 x 12.7	2.63	66.7	2.63	66.7	
9634-003645	9634-003666	1 x 3/4	25.4 x 19.0	2.63	66.7	2.63	66.7	
9634-003646	9634-003667	1 1/2 x 1/2	38.1 x 12.7	2.88	73.0	2.88	73.0	
9634-003647	9634-003668	1 1/2 x 3/4	38.1 x 19.0	2.88	73.0	2.88	73.0	
9634-003648	9634-003669	1 1/2 x 1	38.1 x 25.4	2.88	73.0	2.88	73.0	
9634-003649	9634-003670	2 x 1/2	50.8 x 12.7	3.38	85.7	3.13	79.4	
9634-003650	9634-003671	2 x 3/4	50.8 x 19.0	3.38	85.7	3.13	79.4	
9634-003651	9634-003672	2 x 1	50.8 x 25.4	3.38	85.7	3.13	79.4	
9634-003652	9634-003673	2 x 1 1/2	50.8 x 38.1	3.38	85.7	3.13	79.4	
9634-003653	9634-003674	2 1/2 x 1/2	63.5 x 12.7	3.63	92.1	3.38	85.7	
9634-003654	9634-003675	2 1/2 x 3/4	63.5 x 19.0	3.63	92.1	3.38	85.7	
9634-003655	9634-003676	2 1/2 x 1	63.5 x 25.4	3.63	92.1	3.38	85.7	
9634-003656	9634-003677	2 1/2 x 1 1/2	63.5 x 38.1	3.63	92.1	3.38	85.7	
9634-003657	9634-003678	2 1/2 x 2	63.5 x 50.8	3.63	92.1	3.38	85.7	
9634-003658	9634-003679	3 x 1/2	76.2 x 12.7	3.88	98.4	3.63	92.1	
9634-003659	9634-003680	3 x 3/4	76.2 x 19.0	3.88	98.4	3.63	92.1	
9634-003660	9634-003681	3 x 1	76.2 x 25.4	3.88	98.4	3.63	92.1	
9634-003661	9634-003682	3 x 1 1/2	76.2 x 38.1	3.88	98.4	3.63	92.1	
9634-003662	9634-003683	3 x 2	76.2 x 50.8	3.88	98.4	3.88	98.4	
9634-003663	9634-003684	3 x 2 1/2	76.2 x 63.5	3.88	98.4	3.88	98.4	
9634-003717	9634-003725	4 x 1/2	101.6 x 12.7	4.75	120.7	4.13	104.8	
9634-003718	9634-003726	4 x 3/4	101.6 x 19.0	4.75	120.7	4.13	104.8	
9634-003719	9634-003727	4 x 1	101.6 x 25.4	4.75	120.7	4.13	104.8	
9634-003720	9634-003728	4 x 1 1/2	101.6 x 38.1	4.75	120.7	4.13	104.8	
9634-003721	9634-003729	4 x 2	101.6 x 50.8	4.75	120.7	4.38	111.1	
9634-003722	9634-003730	4 x 2 1/2	101.6 x 63.5	4.75	120.7	4.38	111.1	
9634-003723	9634-003731	4 x 3	101.6 x 76.2	4.75	120.7	4.38	111.1	

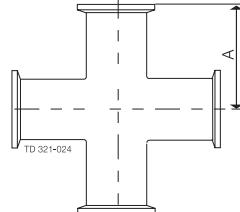


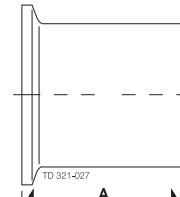
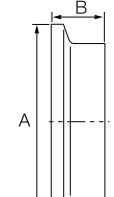
Finish Item No.	Finish Item No.	Size DN/OD		Dimension				
				A		B		
		PL	PM	Inch	mm	Inch	mm	
9634-003943	9634-003964	3/4 x 1/2		19.0 x 12.7	2.50	63.5	1.00	25.4
9634-003944	9634-003965	1 x 1/2		25.4 x 12.7	2.63	66.7	1.13	28.6
9634-003945	9634-003966	1 x 3/4		25.4 x 19.0	2.63	66.7	1.13	28.6
9634-003946	9634-003967	1 1/2 x 1/2		38.1 x 12.7	2.88	73.0	1.38	34.9
9634-003947	9634-003968	1 1/2 x 3/4		38.1 x 19.0	2.88	73.0	1.38	34.9
9634-003948	9634-003969	1 1/2 x 1		38.1 x 25.4	2.88	73.0	1.38	34.9
9634-003949	9634-003970	2 x 1/2		50.8 x 12.7	3.38	85.7	1.63	41.3
9634-003950	9634-003971	2 x 3/4		50.8 x 19.0	3.38	85.7	1.63	41.3
9634-003951	9634-003972	2 x 1		50.8 x 25.4	3.38	85.7	1.63	41.3
9634-003952	9634-003973	2 x 1 1/2		50.8 x 38.1	3.38	85.7	1.63	41.3
9634-003953	9634-003974	2 1/2 x 1/2		63.5 x 12.7	3.63	92.1	1.88	47.6
9634-003954	9634-003975	2 1/2 x 3/4		63.5 x 19.0	3.63	92.1	1.88	47.6
9634-003955	9634-003976	2 1/2 x 1		63.5 x 25.4	3.63	92.1	1.88	47.6
9634-003956	9634-003977	2 1/2 x 1 1/2		63.5 x 38.1	3.63	92.1	1.88	47.6
9634-003957	9634-003978	2 1/2 x 2		63.5 x 50.8	3.63	92.1	1.88	47.6
9634-003958	9634-003979	3 x 1/2		76.2 x 12.7	3.88	98.4	2.13	54.0
9634-003959	9634-003980	3 x 3/4		76.2 x 19.0	3.88	98.4	2.13	54.0
9634-003960	9634-003981	3 x 1		76.2 x 25.4	3.88	98.4	2.13	54.0
9634-003961	9634-003982	3 x 1 1/2		76.2 x 38.1	3.88	98.4	2.13	54.0
9634-003962	9634-003983	3 x 2		76.2 x 50.8	3.88	98.4	2.13	54.0
9634-003963	9634-003984	3 x 2 1/2		76.2 x 63.5	3.88	98.4	2.13	54.0
9634-004017	9634-004025	4 x 1/2		101.6 x 12.7	4.75	120.7	2.63	66.7
9634-004018	9634-004026	4 x 3/4		101.6 x 19.0	4.75	120.7	2.63	66.7
9634-004019	9634-004027	4 x 1		101.6 x 25.4	4.75	120.7	2.63	66.7
9634-004020	9634-004028	4 x 1 1/2		101.6 x 38.1	4.75	120.7	2.63	66.7
9634-004021	9634-004029	4 x 2		101.6 x 50.8	4.75	120.7	2.63	66.7
9634-004022	9634-004030	4 x 2 1/2		101.6 x 63.5	4.75	120.7	2.63	66.7
9634-004023	9634-004031	4 x 3		101.6 x 76.2	4.75	120.7	2.63	66.7
9634-050035	9634-050036	6 x 1/2		152.4 x 12.7	7.13	181.0	3.75	95.3
9634-050038	9634-050039	6 x 3/4		152.4 x 19.0	7.13	181.0	3.75	95.3
9634-050041	9634-050042	6 x 1		152.4 x 25.4	7.13	181.0	3.75	95.3
9634-050044	9634-050045	6 x 1 1/2		152.4 x 38.1	7.13	181.0	3.75	95.3
9634-050047	9634-050048	6 x 2		152.4 x 50.8	7.13	181.0	3.75	95.3
9634-050050	9634-050051	6 x 2 1/2		152.4 x 63.5	7.13	181.0	3.75	95.3
9634-050053	9634-050054	6 x 3		152.4 x 76.2	7.13	181.0	3.75	95.3
9634-004024	9634-004032	6 x 4		152.4 x 101.6	7.13	181.0	3.75	95.3

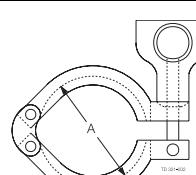
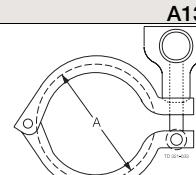
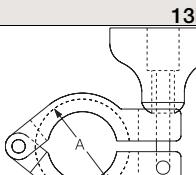
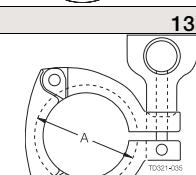


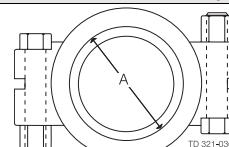
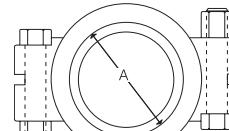
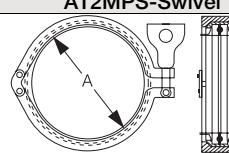
Finish Item No.	Finish Item No.	Size		Dimension				B7IMPS (3A)
		DN/OD		Inch	mm	Inch	mm	
PL	PM	Inch	mm	Inch	mm	Inch	mm	
211171	211169	½ x 1½	12.7 x 38.1	3.00	76.2	0.88	22.2	
211543	211544	½ x 2	12.7 x 50.8	3.25	82.5	1.00	25.4	
211170	211377	¾ x 1½	19.0 x 38.1	3.00	76.2	1.00	25.4	
211545	211546	¾ x 2	19.0 x 50.8	3.25	82.5	1.13	28.6	
211173	211158	1 x 1½	25.4 x 38.1	3.00	76.2	1.13	28.6	
211547	211616	1 x 2	25.4 x 50.8	3.25	82.5	1.25	31.7	
211172	211187	1½ x 2	38.1 x 50.8	3.25	82.5	1.50	38.1	



Finish Item No. PL	Finish Item No. PM	Size DN/OD		Dimension A		B9MP (3A) 
		Inch	mm	Inch	mm	
9634-003419	9634-003428	1/2	12.7	2.25	57.2	
9634-003420	9634-003429	3/4	19.0	2.38	60.3	
9634-003421	9634-003430	1	25.4	2.63	66.7	
9634-003422	9634-003431	1 1/2	38.1	2.88	73.0	
9634-003423	9634-003432	2	50.8	3.38	85.7	
9634-003424	9634-003433	2 1/2	63.5	3.63	92.1	
9634-003425	9634-003434	3	76.2	3.88	98.4	
9634-003426	9634-003435	4	101.6	4.75	120.7	

Finish Item No.	Finish Item No.	Size DN/OD		Dimension				
				A		B		
		Inch	mm	Inch	mm	Inch	mm	
PL	PM							BS14AM (3A)
9634-004801	9634-004810	1/2	12.7	1.75	44.5			
9634-004802	9634-004811	3/4	19.0	1.75	44.5			
9634-004803	9634-004812	1	25.4	1.75	44.5			
9614-000603	9614-000606	1	25.4	1.75	44.5			
9634-004804	9634-004813	1 1/2	38.1	1.75	44.5			
9634-004805	9634-004814	2	50.8	2.25	57.2			
9634-004806	9634-004815	2 1/2	63.5	2.25	57.2			
9634-004807	9634-004816	3	76.2	2.25	57.2			
9634-004808	9634-004817	4	101.6	2.25	57.2			
9634-004809	9634-004818	6	152.4	3.00	76.2			
14WMPS (3A)								
610264	610265	1/2	12.7	0.98	24.9	0.50	12.7	
610269	610270	3/4	19.0	0.98	24.9	0.50	12.7	
610274	610275	1	25.4	1.98	50.4	0.50	12.7	
610276	610812	1 1/2	38.1	1.98	50.4	0.50	12.7	
610790	610277	2	50.8	2.52	63.9	0.50	12.7	
610278	610279	2 1/2	63.5	3.05	77.4	0.50	12.7	
610280	610281	3	76.2	3.58	90.9	0.50	12.7	
610282	610283	4	101.6	4.69	119.1	0.63	15.9	
660028	Contact AL	6	152.4	6.58	167.1	1.50	38.1	

Material Item No.	Size DN/OD		Dimension A			
1.4301 (304)	Inch	mm	Inch	mm		13MHM
9613410301	1	25.4	1.50	38.0	Type A	
212195	1	25.4	2.13	54.0		
212195	1½	38.1	2.13	54.0		
212196	2	50.8	2.66	67.5		
212197	2½	63.5	3.19	81.0		
212198	3	76.2	3.72	94.5		
212199	4	101.6	4.83	122.6		
210129	6	152.4	6.69	169.9		
A13MHM						
211053	1 x 1½	25.4 x 38.1	2.13	54.0		
211054	2	50.8	2.66	67.1		
211055	2½	63.5	3.19	81.0		
211056	3	76.2	3.72	94.5		
211057	4	101.6	4.83	122.2		
211058	6	152.4	6.69	169.9		
13MHHS						
211290	½ - ¾	12.7 - 19.0	1.13	28.6		
13MHHS						
211283	1-1½	25.4 - 38.1	2.13	54.0		
211284	2	50.8	2.66	67.5		
211286	2½	63.5	3.19	81.0		
211287	3	76.2	3.72	94.5		
211289	4	101.6	4.83	122.6		

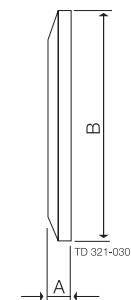
Material Item No.	Size DN/OD		Dimension A		
	Inch	mm	Inch	mm	
1.4301 (304)					A13MHP
210180	1-1½	25.4 - 38.1	2.05	52.0	
210040	2	50.8	2.58	65.5	
210213	2½	63.5	3.11	79.0	
210248	3	76.2	3.64	92.5	
210042	4	101.6	4.73	120.3	
9634-048982	6	152.4	6.63	168.4	
13MHP					
211278	1½	38.1	2.05	52.0	
211279	2	50.8	2.58	65.5	
211280	2½	63.5	3.11	79.0	
211281	3	76.2	3.64	92.5	
211617	4	101.6	4.73	120.3	
260234	6	152.4	6.63	168.4	
A12MPS-Swivel joint					
210135	1½	38.1	1.98	50.4	
210136	2	50.8	2.52	63.9	
210137	2½	63.5	3.05	77.4	
210138	3	76.2	3.58	90.9	
210140	4	101.6	4.69	119.1	

Material Item No.	Material Item No.	Material Item No.	Material Item No.	Size	
42MP-E	42MP-G	42MP-U	42MP-SFY	Inch	42MP
290273	290270	290272	290274	½	
290265	290271	290264	290266	¾	
42MP-X				Inch	42MP
290090				½	
290099				¾	
40MP-E	40MP-N	40MP-U	40MP-SFY	Inch	40MP/40MO
290141	298428	298451	290009	1	
290044	298427	298452	290022	1½	
290043	298425	298453	290030	2	
290048	298505	298454	290040	2½	
290036	298506	298455	290049	3	
290018	298426	298456	290053	4	
40MO-E	40MO-N	40MO-U	40MO-SFY		
Not available	Not available	298360	290093	5	
290234	Not available	290112	290220	6	
40MP-G	40MP-X	40MP-UW	40MP-SFYW	Inch	40MP/40MO
298224	298512	298501	290071	1	
298227	298507	298495	290070	1½	
298228	298508	298496	290062	2	
298223	298509	298499	290057	2½	
298225	298510	298497	290055	3	
298226	298511	298498	290086	4	
40MO-G	40MO-X	40MO-UW	40MO-SFYW		
Not available	Not available	Not available	Not available	5	
298235	Not available	290195	Not available	6	
298236	Not available	Not available	Not available	8	
298237	Not available	Not available	Not available	10	
290168	Not available	Not available	Not available	12	

Code Letter	Material	Code Letter	Material	Material Descriptions	
				Material Descriptions	
E	EPDM	SFYW		White Steam Resistant Fluoroelastomer	
G	PTFE	X		Silicone (Q)	
N	Polyethylene	UW		White Buna N	
SFY	Steam Resistant Fluoroelastomer	U		Buna N	

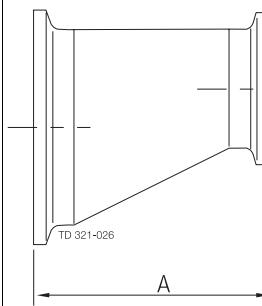
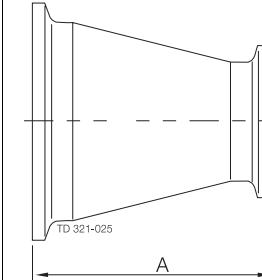
Material Item No.	Material Item No.	Material Item No.	Size	
40MPF-E	40MPF-U	40MPF-SFY	Inch	40MPF/40MOF
290031	298346	290097	1	
290038	298347	290115	1½	
290017	298376	290117	2	
290035	298348	290118	2½	
290138	298375	290119	3	
290025	298349	9630290172	4	
40MOF-E	40MOF-U	40MOF-SFY		
290131	298220	290182	6	
290114	298221	290202	8	
290226	298222	290237	10	
290088	298409	290024	12	
40MPF-X	40MPF-UW			40MPF/40MOF
298411	298308		1	
298412	298431		1½	
298413	298417		2	
298414	290069		2½	
298415	298432		3	
298416	298433		4	
40MOF-X	40MOF-UW			
298605	290236		6	
298606	290250		8	
298607	290252		10	
298608	Not available		12	
40MHP-E	40MHP-SFY			40MHP
290029	290028		1	
A40MP-GR	A40M0-GR	PTFE Envelope Gasket with SFY		
290072			1	
290073			1½	
290074			2	
290075			2½	
290076			3	
290077	290085		4	
			6	

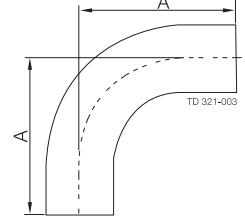
Finish Item No.	Finish Item No.	Size DN/OD		Dimension				
		Inch	mm	Inch	mm	Inch	mm	
PL 219123 9614-003601	PM 210009 9614-003602	1/2 - 3/4 1	19.0 25.4	0.19 0.25	4.8 6.35	0.98 1.34	24.9 34.0	
210273	210162	1-1½	38.1	0.25	6.4	1.98	50.4	
210831	210891	2	50.8	0.25	6.4	2.52	63.9	
219124	210349	2½	63.5	0.25	6.4	3.05	77.4	
210770	210894	3	76.2	0.25	6.4	3.58	90.9	
210783	210121	4	101.6	0.25	6.4	4.69	119.1	
260214	260213	6	152.4	0.44	11.1	6.58	167.1	

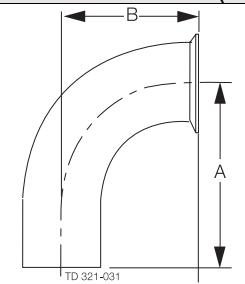


Finish Item No.	Finish Item No.	Size DN/OD		Dimension				14MPHR
				A		B		
		PL	PM	Inch	mm	Inch	mm	
210493	210954	1/2 x 1/4	12.7 x 6.4	1.50	38.1			
210494	210667	1/2 x 3/8	12.7 x 9.7	1.50	38.1			
210495	210321	1/2 x 1/2	12.7 x 12.7	1.50	38.1			
210603	Not Available	3/4 x 1/4	19.0 x 6.4	1.50	38.1			
210604	Not Available	3/4 x 3/8	19.0 x 9.7	1.50	38.1			
210541	Not Available	3/4 x 1/2	19.0 x 12.7	1.50	38.1			
210539	210019	3/4 x 3/4	19.0 x 19.0	1.50	38.1			
210924	210365	1 x 1	25.4 x 25.4	1.69	42.9			
210369	210370	1 1/2 x 1 1/2	38.1 x 38.1	1.69	42.9			
210373	210382	2 x 2	50.8 x 50.8	2.31	58.7			
210386	210387	2 1/2 x 2 1/2	63.5 x 63.5	2.00	50.8			
210390	210391	3 x 3	76.2 x 76.2	3.11	79.0			
211618	210416	4 x 4	101.6 x 101.6	3.41	86.5			
21MP (N.P.T. Pipe Thread - Non 3A)								
210577	210579	1/2 x 1/8	12.7 x 3.2	2.00	50.8	0.40	10.2	
210545	210581	1/2 x 1/4	12.7 x 6.4	2.00	50.8	0.59	15.0	
210582	210584	1/2 x 3/8	12.7 x 9.5	2.00	50.8	0.60	15.2	
210537	210586	1/2 x 1/2	12.7 x 12.7	2.00	50.8	0.78	19.8	
210551	210588	1/2 x 3/4	12.7 x 19.0	2.00	50.8	0.79	20.1	
210589	211551	3/4 x 1/8	19.0 x 3.2	2.00	50.8	0.40	10.2	
210592	210993	3/4 x 1/4	19.0 x 6.4	2.00	50.8	0.59	15.0	
210548	210738	3/4 x 3/8	19.0 x 9.5	2.00	50.8	0.60	15.2	
210538	210593	3/4 x 1/2	19.0 x 12.7	2.00	50.8	0.78	19.8	
210542	210601	3/4 x 3/4	19.0 x 19.0	2.00	50.8	0.79	20.1	
219125	210840	1 x 1	25.4 x 25.4	2.25	57.2	0.69	17.5	
219126	210841	1 1/2 x 1 1/2	38.1 x 38.1	2.44	61.9	0.72	18.3	
219131	211552	2 x 2	50.8 x 50.8	2.66	67.5	0.75	19.1	
211549	211553	2 1/2 x 2 1/2	63.5 x 63.5	3.28	83.3	1.38	34.9	
210591	211554	3 x 3	76.2 x 76.2	3.50	88.9	1.20	30.6	
211550	211557	4 x 4	101.6 x 101.6	3.81	96.8	1.30	32.9	
22MP								
210686	211559	1/2 x 1/8	12.7 x 3.2	1.25	31.8			
210367	210878	1/2 x 1/4	12.7 x 6.4	1.50	38.1			
210420	211562	1/2 x 3/8	12.7 x 9.7	1.50	38.1			
210550	210055	1/2 x 1/2	12.7 x 12.7	1.50	38.1			
210543	211145	1/2 x 3/4	12.7 x 19.0	1.62	41.1			
210554	211564	3/4 x 1/8	19.0 x 3.2	1.25	31.8			
210557	211566	3/4 x 1/4	19.0 x 6.4	1.50	38.1			
210560	211567	3/4 x 3/8	19.0 x 9.5	1.50	38.1			
210563	211144	3/4 x 1/2	19.0 x 12.7	1.50	38.1			
210536	210567	3/4 x 3/4	19.0 x 19.0	1.62	41.1			
219129	211570	1 x 1	25.4 x 25.4	1.63	41.3			
210460	210897	1 1/2 x 1 1/2	38.1 x 38.1	2.25	57.2			
210459	210769	2 x 2	50.8 x 50.8	2.34	59.2			
211558	211571	2 1/2 x 2 1/2	63.5 x 63.5	2.09	53.2			
210915	211572	3 x 3	76.2 x 76.2	2.19	55.6			
211560	211575	4 x 4	101.6 x 101.6	2.66	67.5			

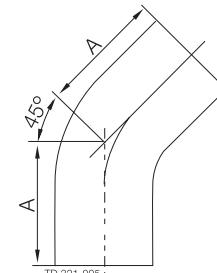
Finish Item No.	Finish Item No.	Size DN/OD		Dimension A		
		Inch	mm	Inch	mm	
PL	PM					B31 - 14MP (3A)
9634-004301	9634-004326	3/4 x 1/2	19.0 x 12.7	2.00	50.8	
9634-004302	9634-004327	1 x 1/2	25.4 x 12.7	2.50	63.5	
9634-004303	9634-004328	1 x 3/4	25.4 x 19.0	2.00	50.8	
9634-004304	9634-004329	1 1/2 x 1/2	38.1 x 12.7	3.50	88.9	
9634-004305	9634-004330	1 1/2 x 3/4	38.1 x 19.0	3.00	76.2	
9634-004306	9634-004331	1 1/2 x 1	38.1 x 25.4	3.00	76.2	
9634-004308	9634-004333	2 x 3/4	50.8 x 19.0	5.00	127.0	
9634-004309	9634-004334	2 x 1	50.8 x 25.4	5.00	127.0	
9634-004310	9634-004335	2 x 1 1/2	50.8 x 38.1	3.00	76.2	
9634-004314	9634-004339	2 1/2 x 1 1/2	63.5 x 38.1	5.00	127.0	
9634-004315	9634-004340	2 1/2 x 2	63.5 x 50.8	3.00	76.2	
9634-004317	9634-004342	3 x 1 1/2	76.2 x 38.1	7.00	177.8	
9634-004318	9634-004343	3 x 2	76.2 x 50.8	5.00	127.0	
9634-004319	9634-004344	3 x 2 1/2	76.2 x 63.5	3.00	76.2	
9634-004322	9634-004347	4 x 2	101.6 x 50.8	9.13	231.8	
9634-004323	9634-004348	4 x 2 1/2	101.6 x 63.5	9.13	231.8	
9634-004324	9634-004349	4 x 3	101.6 x 76.2	5.13	130.2	
9634-050023	9634-050024	6 x 3	152.4 x 76.2	7.50	190.5	
9634-004325	9634-004350	6 x 4	152.4 x 101.6	7.63	193.7	
B32 - 14MP (3A)						
9634-039201	9634-039226	3/4 x 1/2	19.0 x 12.7	2.00	50.8	
9634-039202	9634-039227	1 x 1/2	25.4 x 12.7	2.50	63.5	
9634-039203	9634-039228	1 x 3/4	25.4 x 19.0	2.00	50.8	
9634-039204	9634-039229	1 1/2 x 1/2	38.1 x 12.7	3.50	88.9	
9634-039205	9634-039230	1 1/2 x 3/4	38.1 x 19.0	3.00	76.2	
9634-039206	9634-039231	1 1/2 x 1	38.1 x 25.4	3.00	76.2	
9634-039209	9634-039234	2 x 1	50.8 x 25.4	5.00	127.0	
9634-039210	9634-039235	2 x 1 1/2	50.8 x 38.1	3.00	76.2	
9634-039214	9634-039239	2 1/2 x 1 1/2	63.5 x 38.1	5.00	127.0	
9634-039215	9634-039240	2 1/2 x 2	63.5 x 50.8	3.00	76.2	
9634-039217	9634-039242	3 x 1 1/2	76.2 x 38.1	7.00	177.8	
9634-039218	9634-039243	3 x 2	76.2 x 50.8	5.00	127.0	
9634-039219	9634-039244	3 x 2 1/2	76.2 x 63.5	3.00	76.2	
9634-039222	9634-039247	4 x 2	101.6 x 50.8	9.13	231.8	
9634-039223	9634-039248	4 x 2 1/2	101.6 x 63.5	7.13	181.0	
9634-039224	9634-039249	4 x 3	101.6 x 76.2	5.13	130.2	
9634-039251	9634-039252	6 x 3	152.4 x 72.2	7.63	193.7	
9634-039225	9634-039250	6 x 4	152.4 x 101.6	7.63	193.7	



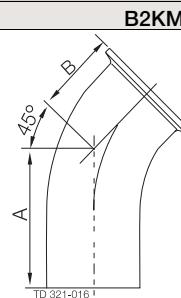
Finish Item No.	Finish Item No.	Size DN/OD		Dimension A		
		Inch	mm	Inch	mm	
PL	PM					B2S (3A)
9634-000219	9634-000228	1/2	12.7	3.00	76.2	
9634-000220	9634-000229	3/4	19.0	3.00	76.2	
9634-000221	9634-000230	1	25.4	3.00	76.2	
9634-000222	9634-000231	1 1/2	38.1	3.75	95.3	
9634-000223	9634-000232	2	50.8	4.75	120.7	
9634-000224	9634-000233	2 1/2	63.5	5.50	139.7	
9634-000225	9634-000234	3	76.2	6.25	158.8	
9634-000226	9634-000235	4	101.6	8.00	203.2	
9634-000227	9634-000236	6	152.4	11.50	292.1	
PC	PD	Inch	mm	Inch	mm	B2S (3A)
9634-000201	9634000210	1/2	12.7	3.00	76.2	
9634-000202	9634000211	3/4	19.0	3.00	76.2	
9634-000203	9634000212	1	25.4	3.00	76.2	
9634-000204	9634000213	1 1/2	38.1	3.75	95.3	
9634-000205	9634000214	2	50.8	4.75	120.7	
9634-000206	9634000215	2 1/2	63.5	5.50	139.7	
9634-000207	9634000216	3	76.2	6.25	158.8	
9634-000208	9634000217	4	101.6	8.00	203.2	
	Not available	6	152.4	11.50	292.1	

Finish Item No.	Finish Item No.	Size DN/OD		Dimension				
		Inch	mm	Inch	mm	Inch	mm	
PL	PM							B2CMW (3A)
9634-001919	9634-001928	1/2	12.7	3.00	76.2	1.63	41.3	
9634-001920	9634-001929	3/4	19.0	3.00	76.2	1.63	41.3	
9634-001921	9634-001930	1	25.4	3.00	76.2	2.00	50.8	
9634-001922	9634-001931	1 1/2	38.1	3.75	95.3	2.75	69.9	
9634-001923	9634-001932	2	50.8	4.75	120.7	3.50	88.9	
9634-001924	9634-001933	2 1/2	63.5	5.50	139.7	4.25	108.0	
9634-001925	9634-001934	3	76.2	6.25	158.8	5.00	127.0	
9634-001926	9634-001935	4	101.6	8.00	203.2	6.63	168.2	
9635000184	9635000183	6	152.4	11.5	292.1	10.50	266.7	

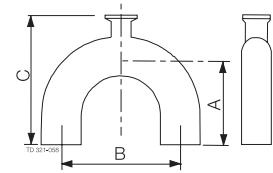
Finish Item No.	Finish Item No.	Size DN/OD		Dimension A		B2KS (3A)
		Inch	mm	Inch	mm	
PL	PM					
9634-000419	9634-000428	1/2	12.7	2.25	57.2	
9634-000420	9634-000429	3/4	19.0	2.25	57.2	
9634-000421	9634-000430	1	25.4	2.25	57.2	
9634-000422	9634-000431	1 1/2	38.1	2.50	63.5	
9634-000423	9634-000432	2	50.8	3.00	76.2	
9634-000424	9634-000433	2 1/2	63.5	3.38	85.7	
9634-000425	9634-000434	3	76.2	3.63	92.1	
9634-000426	9634-000435	4	101.6	4.50	114.3	
9634-000427	9634-000436	6	152.4	6.25	158.8	
PC	PD					
9634-000401	9634000410	1/2	12.7	2.25	57.2	
9634-000402	9634000411	3/4	19.0	2.25	57.2	
9634-000403	9634000412	1	25.4	2.25	57.2	
9634-000404	9634000413	1 1/2	38.1	2.50	63.5	
9634-000405	9634000414	2	50.8	3.00	76.2	
9634-000406	9634000415	2 1/2	63.5	3.38	85.7	
9634-000407	9634000416	3	76.2	3.63	92.1	
9634-000408	9634000417	4	101.6	4.50	114.3	
Not available		6	152.4	6.25	158.8	



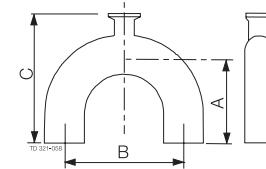
Finish Item No.	Finish Item No.	Size DN/OD		Dimension				B2KMW (3A)
		Inch	mm	Inch	mm	Inch	mm	
PL	PM							
9634-002119	9634-002128	1/2	12.7	2.25	57.2	1.0	25.4	
9634-002120	9634-002129	3/4	19.0	2.25	57.2	1.0	25.4	
9634-002121	9634-002130	1	25.4	2.25	57.2	1.1	28.6	
9634-002122	9634-002131	1 1/2	38.1	2.50	63.5	1.4	36.5	
9634-002123	9634-002132	2	50.8	3.00	76.2	1.8	44.5	
9634-002124	9634-002133	2 1/2	63.5	3.38	85.7	2.1	52.4	
9634-002125	9634-002134	3	76.2	3.63	92.1	2.3	60.3	
9634-002126	9634-002135	4	101.6	4.50	114.3	3.1	79.4	

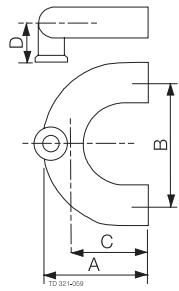
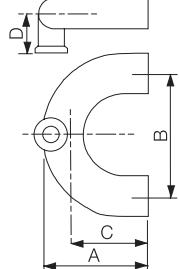
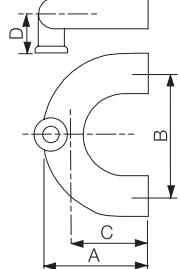


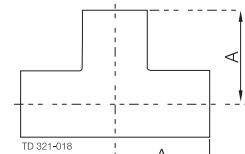
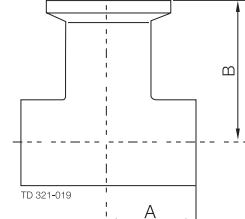
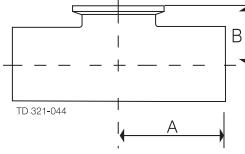
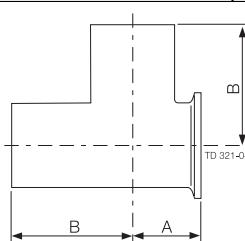
Finish Item No.	Size DN/OD		Dimension						
			A		B		C		
	PL	Inch	mm	Inch	mm	Inch	mm	Inch	mm
9634-037401	1 x 1/2	25.4 x 12.7	3.00	76.2	3.00	76.2	4.13	104.8	
9634-037402	1 x 3/4	25.4 x 19.0	3.00	76.2	3.00	76.2	4.13	104.8	
9634-037403	1 1/2 x 1/2	38.1 x 12.7	4.50	114.3	4.50	114.3	5.88	149.2	
9634-037404	1 1/2 x 3/4	38.1 x 19.0	4.50	114.3	4.50	114.3	5.88	149.2	
9634-037405	1 1/2 x 1	38.1 x 25.4	4.50	114.3	4.50	114.3	5.88	149.2	
9634-037406	2 x 1/2	50.8 x 12.7	5.00	127.0	6.00	152.4	6.63	168.3	
9634-037407	2 x 3/4	50.8 x 19.0	5.00	127.0	6.00	152.4	6.63	168.3	
9634-037408	2 x 1	50.8 x 25.4	5.00	127.0	6.00	152.4	6.63	168.3	
9634-037409	2 x 1 1/2	50.8 x 38.1	5.00	127.0	6.00	152.4	6.63	168.3	
9634-037410	2 1/2 x 1/2	63.5 x 12.7	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037411	2 1/2 x 3/4	63.5 x 19.0	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037412	2 1/2 x 1	63.5 x 25.4	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037413	2 1/2 x 1 1/2	63.5 x 38.1	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037414	2 1/2 x 2	63.5 x 50.8	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037415	3 x 1/2	76.2 x 12.7	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037416	3 x 3/4	76.2 x 19.0	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037417	3 x 1	76.2 x 25.4	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037418	3 x 1 1/2	76.2 x 38.1	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037419	3 x 2	76.2 x 50.8	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037420	3 x 2 1/2	76.2 x 63.5	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037421	4 x 1/2	101.6 x 12.7	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037422	4 x 3/4	101.6 x 19.0	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037423	4 x 1	101.6 x 25.4	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037424	4 x 1 1/2	101.6 x 38.1	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037425	4 x 2	101.6 x 50.8	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037426	4 x 2 1/2	101.6 x 63.5	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037427	4 x 3	101.6 x 76.2	8.50	215.9	12.00	304.8	11.13	282.6	



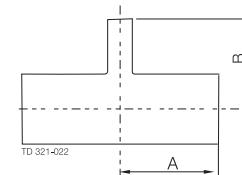
Finish Item No.	Size DN/OD		Dimension						
			A		B		C		
PM	Inch	mm	Inch	mm	Inch	mm	Inch	mm	B2UMPBOA (3A)
9634-037428	1 x 1/2	25.4 x 12.7	3.00	76.2	3.00	76.2	4.13	104.8	
9634-037429	1 x 3/4	25.4 x 19.0	3.00	76.2	3.00	76.2	4.13	104.8	
9634-037430	1 1/2 x 1/2	38.1 x 12.7	4.50	114.3	4.50	114.3	5.88	149.2	
9634-037431	1 1/2 x 3/4	38.1 x 19.0	4.50	114.3	4.50	114.3	5.88	149.2	
9634-037432	1 1/2 x 1	38.1 x 25.4	4.50	114.3	4.50	114.3	5.88	149.2	
9634-037433	2 x 1/2	50.8 x 12.7	5.00	127.0	6.00	152.4	6.63	168.3	
9634-037434	2 x 3/4	50.8 x 19.0	5.00	127.0	6.00	152.4	6.63	168.3	
9634-037435	2 x 1	50.8 x 25.4	5.00	127.0	6.00	152.4	6.63	168.3	
9634-037436	2 x 1 1/2	50.8 x 38.1	5.00	127.0	6.00	152.4	6.63	168.3	
9634-037437	2 1/2 x 1/2	63.5 x 12.7	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037438	2 1/2 x 3/4	63.5 x 19.0	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037439	2 1/2 x 1	63.5 x 25.4	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037440	2 1/2 x 1 1/2	63.5 x 38.1	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037441	2 1/2 x 2	63.5 x 50.8	5.75	146.1	7.50	190.5	7.63	193.7	
9634-037442	3 x 1/2	76.2 x 12.7	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037443	3 x 3/4	76.2 x 19.0	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037444	3 x 1	76.2 x 25.4	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037445	3 x 1 1/2	76.2 x 38.1	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037446	3 x 2	76.2 x 50.8	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037447	3 x 2 1/2	76.2 x 63.5	6.50	165.1	9.00	228.6	8.63	219.1	
9634-037448	4 x 1/2	101.6 x 12.7	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037449	4 x 3/4	101.6 x 19.0	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037450	4 x 1	101.6 x 25.4	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037451	4 x 1 1/2	101.6 x 38.1	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037452	4 x 2	101.6 x 50.8	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037453	4 x 2 1/2	101.6 x 63.5	8.50	215.9	12.00	304.8	11.13	282.6	
9634-037454	4 x 3	101.6 x 76.2	8.50	215.9	12.00	304.8	11.13	282.6	



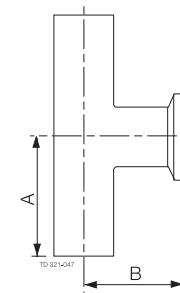
Finish Item No.	Size DN/OD		Dimension								
			A		B		C		D		
PL	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	B2UMPSSOA (3A)
9634-037602	1 x 3/4	25.4 x 19.0	3.00	76.2	3.00	76.2	3.13	79.4	1.13	28.6	
9634-037604	1 1/2 x 3/4	38.1 x 19.0	4.50	114.3	4.50	114.3	4.88	123.8	1.38	34.9	
9634-037605	1 1/2 x 1	38.1 x 25.4	4.50	114.3	4.50	114.3	4.75	120.7	1.38	34.9	
9634-037607	2 x 3/4	50.8 x 19.0	5.00	127.0	6.00	152.4	5.63	142.9	1.63	43.3	
9634-037608	2 x 1	50.8 x 25.4	5.00	127.0	6.00	152.4	5.50	139.7	1.63	43.3	
9634-037609	2 x 1 1/2	50.8 x 38.1	5.00	127.0	6.00	152.4	5.25	133.4	1.63	43.3	
9634-037612	2 1/2 x 1	63.5 x 25.4	5.75	146.1	7.50	190.5	6.50	165.1	1.88	47.6	
9634-037613	2 1/2 x 1 1/2	63.5 x 38.1	5.75	146.1	7.50	190.5	6.25	158.8	1.88	47.6	
9634-037614	2 1/2 x 2	63.5 x 50.8	5.75	146.1	7.50	190.5	6.00	152.4	1.88	47.6	
9634-037617	3 x 1	76.2 x 25.4	6.50	165.1	9.00	228.6	7.50	190.5	2.13	54.0	
9634-037618	3 x 1 1/2	76.2 x 38.1	6.50	165.1	9.00	228.6	7.25	184.2	2.13	54.0	
9634-037619	3 x 2	76.2 x 50.8	6.50	165.1	9.00	228.6	7.00	177.8	2.13	54.0	
9634-037620	3 x 2 1/2	76.2 x 63.5	6.50	165.1	9.00	228.6	6.75	171.5	2.13	54.0	
9634-037623	4 x 1	101.6 x 25.4	8.50	215.9	12.00	304.8	10.00	254.0	2.63	66.7	
9634-037624	4 x 1 1/2	101.6 x 38.1	8.50	215.9	12.00	304.8	9.75	247.7	2.63	66.7	
9634-037625	4 x 2	101.6 x 50.8	8.50	215.9	12.00	304.8	9.50	241.3	2.63	66.7	
9634-037626	4 x 2 1/2	101.6 x 63.5	8.50	215.9	12.00	304.8	9.25	235.0	2.63	66.7	
9634-037627	4 x 3	101.6 x 76.2	8.50	215.9	12.00	304.8	9.00	228.6	2.63	66.7	
PM											
9634-037629	1 x 3/4	25.4 x 19.0	3.00	76.2	3.00	76.2	3.13	79.4	1.13	28.6	
9634-037631	1 1/2 x 3/4	38.1 x 19.0	4.50	114.3	4.50	114.3	4.88	123.8	1.38	34.9	
9634-037632	1 1/2 x 1	38.1 x 25.4	4.50	114.3	4.50	114.3	4.75	120.7	1.38	34.9	
9634-037634	2 x 3/4	50.8 x 19.0	5.00	127.0	6.00	152.4	5.63	142.9	1.63	43.3	
9634-037635	2 x 1	50.8 x 25.4	5.00	127.0	6.00	152.4	5.50	139.7	1.63	43.3	
9634-037636	2 x 1 1/2	50.8 x 38.1	5.00	127.0	6.00	152.4	5.25	133.4	1.63	43.3	
9634-037639	2 1/2 x 1	63.5 x 25.4	5.75	146.1	7.50	190.5	6.50	165.1	1.88	47.6	
9634-037640	2 1/2 x 1 1/2	63.5 x 38.1	5.75	146.1	7.50	190.5	6.25	158.8	1.88	47.6	
9634-037641	2 1/2 x 2	63.5 x 50.8	5.75	146.1	7.50	190.5	6.00	152.4	1.88	47.6	
9634-037644	3 x 1	76.2 x 25.4	6.50	165.1	9.00	228.6	7.50	190.5	2.13	54.0	
9634-037645	3 x 1 1/2	76.2 x 38.1	6.50	165.1	9.00	228.6	7.25	184.2	2.13	54.0	
9634-037646	3 x 2	76.2 x 50.8	6.50	165.1	9.00	228.6	7.00	177.8	2.13	54.0	
9634-037647	3 x 2 1/2	76.2 x 63.5	6.50	165.1	9.00	228.6	6.75	171.5	2.13	54.0	
9634-037650	4 x 1	101.6 x 25.4	8.50	215.9	12.00	304.8	10.00	254.0	2.63	66.7	
9634-037651	4 x 1 1/2	101.6 x 38.1	8.50	215.9	12.00	304.8	9.75	247.7	2.63	66.7	
9634-037652	4 x 2	101.6 x 50.8	8.50	215.9	12.00	304.8	9.50	241.3	2.63	66.7	
9634-037653	4 x 2 1/2	101.6 x 63.5	8.50	215.9	12.00	304.8	9.25	235.0	2.63	66.7	
9634-037654	4 x 3	101.6 x 76.2	8.50	215.9	12.00	304.8	9.00	228.6	2.63	66.7	

Finish Item No.	Finish Item No.	Size DN/OD		Dimension				
		Inch	mm	Inch	mm	Inch	mm	
PL	PM	Inch	mm	Inch	mm	Inch	mm	B7WWW (3A)
9634-000619	9634-000628	1/2	12.7	1.88	47.6			
9634-000620	9634-000629	3/4	19.0	2.00	50.8			
9634-000621	9634-000630	1	25.4	2.13	54.0			
9634-000622	9634-000631	1 1/2	38.1	2.38	60.3			
9634-000623	9634-000632	2	50.8	2.88	73.0			
9634-000624	9634-000633	2 1/2	63.5	3.13	79.4			
9634-000625	9634-000634	3	76.2	3.38	85.7			
9634-000626	9634-000635	4	101.6	4.13	104.8			
9634-000627	9634-000636	6	152.4	5.63	142.9			
PL	PM	Inch	mm	Inch	mm	Inch	mm	B7WWM (3A)
9634-039519	9634-039528	1/2	12.7	1.88	47.6	2.38	60.3	
9634-039520	9634-039529	3/4	19.0	2.00	50.8	2.50	63.5	
9634-039521	9634-039530	1	25.4	2.13	54.0	2.63	66.7	
9634-039522	9634-039531	1 1/2	38.1	2.38	60.3	2.88	73.0	
9634-039523	9634-039532	2	50.8	2.88	73.0	3.38	85.7	
9634-039524	9634-039533	2 1/2	63.5	3.13	79.4	3.63	92.1	
9634-039525	9634-039534	3	76.2	3.38	85.7	3.88	98.4	
9634-039526	9634-039535	4	101.6	4.13	104.8	4.75	120.7	
PL	PM	Inch	mm	Inch	mm	Inch	mm	B7WWMS (3A)
9634-002619	9634-002628	1/2	12.7	1.88	47.6	1.00	25.4	
9634-002620	9634-002629	3/4	19.0	2.00	50.8	1.13	28.6	
9634-002621	9634-002630	1	25.4	2.13	54.0	1.13	28.6	
9634-002622	9634-002631	1 1/2	38.1	2.38	60.3	1.38	34.9	
9634-002623	9634-002632	2	50.8	2.88	73.0	1.63	41.3	
9634-002624	9634-002633	2 1/2	63.5	3.13	79.4	1.88	47.6	
9634-002625	9634-002634	3	76.2	3.38	85.7	2.13	54.0	
9634-002626	9634-002635	4	101.6	4.13	104.8	2.75	69.9	
9634-002627	9634-002636	6	152.4	5.63	142.9	3.75	95.3	
PL	PM	Inch	mm	Inch	mm	Inch	mm	B7WMSW (3A)
9634-037719	9634-037728	1/2	12.7	0.88	22.4	1.88	47.6	
9634-037720	9634-037729	3/4	19.0	1.00	25.4	2.00	50.8	
9634-037721	9634-037730	1	25.4	1.13	28.5	2.13	54.0	
9634-037722	9634-037731	1 1/2	38.1	1.38	35.1	2.38	60.3	
9634-037723	9634-037732	2	50.8	1.63	41.2	2.88	73.0	
9634-037724	9634-037733	2 1/2	63.5	1.88	47.8	3.13	79.4	
9634-037725	9634-037734	3	76.2	2.13	53.9	3.38	85.7	
9634-037726	9634-037735	4	101.6	2.75	69.9	4.13	104.8	

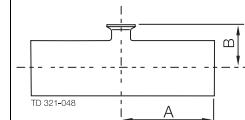
Finish Item No.	Finish Item No.	Size		Dimension				B7RWWW (3A)
		DN/OD	mm	Inch	mm	Inch	mm	
PL	PM	Inch	mm	Inch	mm	Inch	mm	
9634-001043	9634-001064	3/4 x 1/2	19.0 x 12.7	2.00	50.8	2.00	50.8	
9634-001044	9634-001065	1 x 1/2	25.4 x 12.7	2.13	54.0	2.13	54.0	
9634-001045	9634-001066	1 x 3/4	25.4 x 19.0	2.13	54.0	2.13	54.0	
9634-001046	9634-001067	1 1/2 x 1/2	38.1 x 12.7	2.38	60.3	2.38	60.3	
9634-001047	9634-001068	1 1/2 x 3/4	38.1 x 19.0	2.38	60.3	2.38	60.3	
9634-001048	9634-001069	1 1/2 x 1	38.1 x 25.4	2.38	60.3	2.38	60.3	
9634-001049	9634-001070	2 x 1/2	50.8 x 12.7	2.88	73.0	2.63	66.7	
9634-001050	9634-001071	2 x 3/4	50.8 x 19.0	2.88	73.0	2.63	66.7	
9634-001051	9634-001072	2 x 1	50.8 x 25.4	2.88	73.0	2.63	66.7	
9634-001052	9634-001073	2 x 1 1/2	50.8 x 38.1	2.88	73.0	2.63	66.7	
9634-001053	9634-001074	2 1/2 x 1/2	63.5 x 12.7	3.13	79.4	2.88	73.0	
9634-001054	9634-001075	2 1/2 x 3/4	63.5 x 19.0	3.13	79.4	2.88	73.0	
9634-001055	9634-001076	2 1/2 x 1	63.5 x 25.4	3.13	79.4	2.88	73.0	
9634-001056	9634-001077	2 1/2 x 1 1/2	63.5 x 38.1	3.13	79.4	2.88	73.0	
9634-001057	9634-001078	2 1/2 x 2	63.5 x 50.8	3.13	79.4	2.88	73.0	
9634-001058	9634-001079	3 x 1/2	76.2 x 12.7	3.38	85.7	3.13	79.4	
9634-001059	9634-001080	3 x 3/4	76.2 x 19.0	3.38	85.7	3.13	79.4	
9634-001060	9634-001081	3 x 1	76.2 x 25.4	3.38	85.7	3.13	79.4	
9634-001061	9634-001082	3 x 1 1/2	76.2 x 38.1	3.38	85.7	3.13	79.4	
9634-001062	9634-001083	3 x 2	76.2 x 50.8	3.38	85.7	3.13	79.4	
9634-001063	9634-001084	3 x 2 1/2	76.2 x 63.5	3.38	85.7	3.13	79.4	
9634-001117	9634-001125	4 x 1/2	101.6 x 12.7	4.13	104.8	3.63	92.1	
9634-001118	9634-001126	4 x 3/4	101.6 x 19.0	4.13	104.8	3.63	92.1	
9634-001119	9634-001127	4 x 1	101.6 x 25.4	4.13	104.8	3.63	92.1	
9634-001120	9634-001128	4 x 1 1/2	101.6 x 38.1	4.13	104.8	3.63	92.1	
9634-001121	9634-001129	4 x 2	101.6 x 50.8	4.13	104.8	3.88	98.4	
9634-001122	9634-001130	4 x 2 1/2	101.6 x 63.5	4.13	104.8	3.88	98.4	
9634-001123	9634-001131	4 x 3	101.6 x 76.2	4.13	104.8	3.88	98.4	
9613600783	9634048317	6 x 1	152.4 x 25.4	5.63	142.9	5.13	130.2	
9613-600784	9634-048318	6 x 1 1/2	152.4 x 38.1	5.63	142.9	5.13	130.2	
9634-048312	9634-048319	6 x 2	152.4 x 50.8	5.63	142.9	5.13	130.2	
9635000170	9634048320	6 x 2 1/2	152.4 x 63.5	5.63	142.9	5.13	130.2	
9613600785	9634-048321	6 x 3	152.4 x 76.2	5.63	142.9	5.13	130.2	
9634-001124	9634-001132	6 x 4	152.4 x 101.6	5.63	142.9	5.13	130.2	



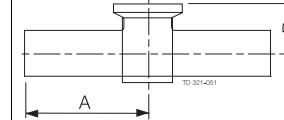
Finish Item No.	Finish Item No.	Size DN/OD		Dimension				
		Inch	mm	Inch	mm	Inch	mm	
PL	PM							B7RWWM (3A)
9634-039943	9634-039964	¾ x ½	19.0 x 12.7	2.00	50.8	2.50	63.5	
9634-039944	9634-039965	1 x ½	25.4 x 12.7	2.13	54.0	2.63	66.7	
9634-039945	9634-039966	1 x ¾	25.4 x 19.0	2.13	54.0	2.63	66.7	
9634-039946	9634-039967	1½ x ½	38.1 x 12.7	2.38	60.3	2.88	73.0	
9634-039947	9634-039968	1½ x ¾	38.1 x 19.0	2.38	60.3	2.88	73.0	
9634-039948	9634-039969	1½ x 1	38.1 x 25.4	2.38	60.3	2.88	73.0	
9634-039949	9634-039970	2 x ½	50.8 x 12.7	2.88	73.0	3.13	79.4	
9634-039950	9634-039971	2 x ¾	50.8 x 19.0	2.88	73.0	3.13	79.4	
9634-039951	9634-039972	2 x 1	50.8 x 25.4	2.88	73.0	3.13	79.4	
9634-039952	9634-039973	2 x 1½	50.8 x 38.1	2.88	73.0	3.13	79.4	
9634-039955	9634-039976	2½ x 1	63.5 x 25.4	3.13	79.4	3.38	85.7	
9634-039956	9634-039977	2½ x 1½	63.5 x 38.1	3.13	79.4	3.38	85.7	
9634-039957	9634-039978	2½ x 2	63.5 x 50.8	3.13	79.4	3.38	85.7	
9634-039960	9634-039981	3 x 1	76.2 x 25.4	3.38	85.7	3.63	92.1	
9634-039961	9634-039982	3 x 1½	76.2 x 38.1	3.38	85.7	3.63	92.1	
9634-039962	9634-039983	3 x 2	76.2 x 50.8	3.38	85.7	3.63	92.1	
9634-039963	9634-039984	3 x 2½	76.2 x 63.5	3.38	85.7	3.63	92.1	
9634-040019	9634-040027	4 x 1	101.6 x 25.4	4.13	104.8	4.13	104.8	
9634-040020	9634-040028	4 x 1½	101.6 x 38.1	4.13	104.8	4.13	104.8	
9634-040021	9634-040029	4 x 2	101.6 x 50.8	4.13	104.8	4.38	111.1	
9634-040022	9634-040030	4 x 2½	101.6 x 63.5	4.13	104.8	4.38	111.1	
9634-040023	9634-040031	4 x 3	101.6 x 76.2	4.13	104.8	4.38	111.1	



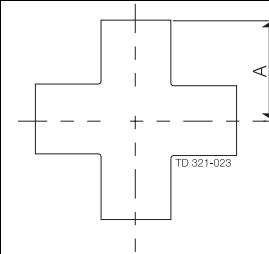
Finish Item No.	Finish Item No.	Size DN/OD		Dimension				B7RWWMS (3A)
		Inch	mm	Inch	mm	Inch	mm	
PL	PM							
9634-002343	9634-002364	3/4 x 1/2	19.0 x 12.7	2.00	50.8	1.00	25.4	
9634-002344	9634-002365	1 x 1/2	25.4 x 12.7	2.13	54.0	1.13	28.6	
9634-002345	9634-002366	1 x 3/4	25.4 x 19.0	2.13	54.0	1.13	28.6	
9634-002346	9634-002367	1 1/2 x 1/2	38.1 x 12.7	2.38	60.3	1.38	34.9	
9634-002347	9634-002368	1 1/2 x 3/4	38.1 x 19.0	2.38	60.3	1.38	34.9	
9634-002348	9634-002369	1 1/2 x 1	38.1 x 25.4	2.38	60.3	1.38	34.9	
9634-002349	9634-002370	2 x 1/2	50.8 x 12.7	2.88	73.0	1.63	41.3	
9634-002350	9634-002371	2 x 3/4	50.8 x 19.0	2.88	73.0	1.63	41.3	
9634-002351	9634-002372	2 x 1	50.8 x 25.4	2.88	73.0	1.63	41.3	
9634-002352	9634-002373	2 x 1 1/2	50.8 x 38.1	2.88	73.0	1.63	41.3	
9634-002353	9634-002374	2 1/2 x 1/2	63.5 x 12.7	3.13	79.4	1.88	47.6	
9634-002354	9634-002375	2 1/2 x 3/4	63.5 x 19.0	3.13	79.4	1.88	47.6	
9634-002355	9634-002376	2 1/2 x 1	63.5 x 25.4	3.13	79.4	1.88	47.6	
9634-002356	9634-002377	2 1/2 x 1 1/2	63.5 x 38.1	3.13	79.4	1.88	47.6	
9634-002357	9634-002378	2 1/2 x 2	63.5 x 50.8	3.13	79.4	1.88	47.6	
9634-002358	9634-002379	3 x 1/2	76.2 x 12.7	3.38	85.7	2.13	54.0	
9634-002359	9634-002380	3 x 3/4	76.2 x 19.0	3.38	85.7	2.13	54.0	
9634-002360	9634-002381	3 x 1	76.2 x 25.4	3.38	85.7	2.13	54.0	
9634-002361	9634-002382	3 x 1 1/2	76.2 x 38.1	3.38	85.7	2.13	54.0	
9634-002362	9634-002383	3 x 2	76.2 x 50.8	3.38	85.7	2.13	54.0	
9634-002363	9634-002384	3 x 2 1/2	76.2 x 63.5	3.38	85.7	2.13	54.0	
9634-002417	9634-002425	4 x 1/2	101.6 x 12.7	4.13	104.8	2.63	66.7	
9634-002418	9634-002426	4 x 3/4	101.6 x 19.0	4.13	104.8	2.63	66.7	
9634-002419	9634-002427	4 x 1	101.6 x 25.4	4.13	104.8	2.63	66.7	
9634-002420	9634-002428	4 x 1 1/2	101.6 x 38.1	4.13	104.8	2.63	66.7	
9634-002421	9634-002429	4 x 2	101.6 x 50.8	4.13	104.8	2.63	66.7	
9634-002422	9634-002430	4 x 2 1/2	101.6 x 63.5	4.13	104.8	2.63	66.7	
9634-002423	9634-002431	4 x 3	101.6 x 76.2	4.13	104.8	2.63	66.7	
9634048710	9634048717	6 x 1	152.4 x 25.4	5.63	142.9	3.75	95.3	
9634048711	9634048718	6 x 1 1/2	152.4 x 38.1	5.63	142.9	3.75	95.3	
9634048712	9634048719	6 x 2	152.4 x 50.8	5.63	142.9	3.75	95.3	
9635000169	9634048720	6 x 2 1/2	152.4 x 63.5	5.63	142.9	3.75	95.3	
9634048714	9634048721	6 x 3	152.4 x 76.2	5.63	142.9	3.75	95.3	
9634002424	9634002432	6 x 4	152.4 x 101.6	5.63	142.9	3.75	95.3	



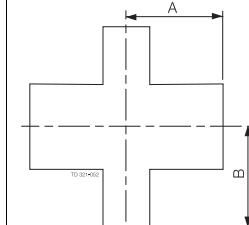
Finish Item No.	Finish Item No.	Size DN/OD		Dimension				
				A		B		
PL	PM	Inch	mm	Inch	mm	Inch	mm	B7IWMS (3A)
241737	241751	1/2 x 1 1/2	12.7 x 38.1	2.50	63.5	0.88	22.2	
241738	242082	1/2 x 2	12.7 x 50.8	2.75	69.8	1.00	25.4	
241739	241870	3/4 x 1 1/2	19.0 x 38.1	2.50	63.5	1.00	25.4	
241740	242083	3/4 x 2	19.0 x 50.8	2.75	69.8	1.13	28.6	
241741	241753	1 x 1 1/2	25.4 x 38.1	2.50	63.5	1.13	28.6	
241742	241898	1 x 2	25.4 x 50.8	2.75	69.8	1.25	31.7	
241743	241869	1 1/2 x 2	38.1 x 50.8	2.75	69.8	1.50	38.1	



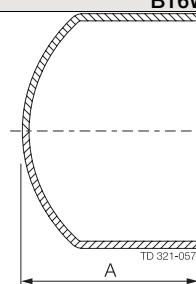
Finish Item No. PL	Finish Item No. PM	Size DN/OD		Dimension A		B9WWWW (3A)
		Inch	mm	Inch	mm	
9634-000819	9634-000828	1/2	12.7	1.88	47.6	
9634-000820	9634-000829	3/4	19.0	2.00	50.8	
9634-000821	9634-000830	1	25.4	2.13	54.0	
9634-000822	9634-000831	1 1/2	38.1	2.38	60.3	
9634-000823	9634-000832	2	50.8	2.88	73.0	
9634-000824	9634-000833	2 1/2	63.5	3.13	79.4	
9634-000825	9634-000834	3	76.2	3.38	85.7	
9634-000826	9634-000835	4	101.6	4.13	104.8	



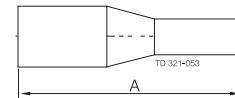
Finish Item No. PL	Finish Item No. PM	Size DN/OD		Dimension				B9RWWWW (3A)	
		Inch	mm	A		B			
				Inch	mm	Inch	mm		
9634-040143	9634-040164	3/4 x 1/2	19.0 x 12.7	2.00	50.8	2.00	50.8		
9634-040144	9634-040165	1 x 1/2	25.4 x 12.7	2.13	54.0	2.13	54.0		
9634-040145	9634-040166	1 x 3/4	25.4 x 19.0	2.13	54.0	2.13	54.0		
9634-040146	9634-040167	1 1/2 x 1/2	38.1 x 12.7	2.38	60.3	2.38	60.3		
9634-040147	9634-040168	1 1/2 x 3/4	38.1 x 19.0	2.38	60.3	2.38	60.3		
9634-040148	9634-040169	1 1/2 x 1	38.1 x 25.4	2.38	60.3	2.38	60.3		
9634-040149	9634-040170	2 x 1/2	50.8 x 12.7	2.88	73.0	2.63	66.7		
9634-040150	9634-040171	2 x 3/4	50.8 x 19.0	2.88	73.0	2.63	66.7		
9634-040151	9634-040172	2 x 1	50.8 x 25.4	2.88	73.0	2.63	66.7		
9634-040152	9634-040173	2 x 1 1/2	50.8 x 38.1	2.88	73.0	2.63	66.7		
9634-040155	9634-040176	2 1/2 x 1	63.5 x 25.4	3.13	79.4	2.88	73.0		
9634-040156	9634-040177	2 1/2 x 1 1/2	63.5 x 38.1	3.13	79.4	2.88	73.0		
9634-040157	9634-040178	2 1/2 x 2	63.5 x 50.8	3.13	79.4	2.88	73.0		
9634-040160	9634-040181	3 x 1	76.2 x 25.4	3.38	85.7	3.13	79.4		
9634-040161	9634-040182	3 x 1 1/2	76.2 x 38.1	3.38	85.7	3.13	79.4		
9634-040162	9634-040183	3 x 2	76.2 x 50.8	3.38	85.7	3.13	79.4		
9634-040163	9634-040184	3 x 2 1/2	76.2 x 63.5	3.38	85.7	3.13	79.4		
9634-040219	9634-040227	4 x 1	101.6 x 25.4	4.13	104.8	3.63	92.1		
9634-040220	9634-040228	4 x 1 1/2	101.6 x 38.1	4.13	104.8	3.63	92.1		
9634-040221	9634-040229	4 x 2	101.6 x 50.8	4.13	104.8	3.88	98.4		
9634-040222	9634-040230	4 x 2 1/2	101.6 x 63.5	4.13	104.8	3.88	98.4		
9634-040223	9634-040231	4 x 3	101.6 x 76.2	4.13	104.8	3.88	98.4		



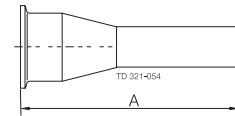
Finish Item No.	Finish Item No.	Size DN/OD		Dimension		B16W (3A)
		Inch	mm	Inch	mm	
PL	PM					
Not available	247020	1/2	12.7	1.69	42.9	
Not available	247024	3/4	19.0	1.69	42.9	
241546	242099	1	25.4	1.69	42.9	
241678	242100	1 1/2	38.1	1.92	48.8	
241681	242101	2	50.8	2.04	51.8	
242104	242102	2 1/2	63.5	2.02	51.3	
241683	242105	3	76.2	2.50	63.5	
241221	242103	4	101.6	3.70	94.0	
9635000195	Contact AL	6	152.4	4.02	102.1	



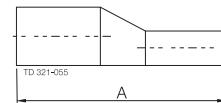
Finish Item No.	Finish Item No.	Size DN/OD		Dimension A		B31 (3A)
		Inch	mm	Inch	mm	
PL	PM					
9634-001701	9634-001726	3/4 x 1/2	19.0 x 12.7	4.00	101.6	
9634-001702	9634-001727	1 x 1/2	25.4 x 12.7	4.50	114.3	
9634-001703	9634-001728	1 x 3/4	25.4 x 19.0	4.00	101.6	
9634-001704	9634-001729	1 1/2 x 1/2	38.1 x 12.7	5.50	139.7	
9634-001705	9634-001730	1 1/2 x 3/4	38.1 x 19.0	5.00	127.0	
9634-001706	9634-001731	1 1/2 x 1	38.1 x 25.4	5.00	127.0	
9634-001708	9634-001733	2 x 3/4	50.8 x 19.0	7.25	184.2	
9634-001709	9634-001734	2 x 1	50.8 x 25.4	7.25	184.2	
9634-001710	9634-001735	2 x 1 1/2	50.8 x 38.1	5.25	133.4	
9634-001714	9634-001739	2 1/2 x 1 1/2	63.5 x 38.1	7.50	184.2	
9634-001715	9634-001740	2 1/2 x 2	63.5 x 50.8	5.50	139.7	
9634-001717	9634-001742	3 x 1 1/2	76.2 x 38.1	9.25	235.0	
9634-001718	9634-001743	3 x 2	76.2 x 50.8	7.50	190.5	
9634-001719	9634-001744	3 x 2 1/2	76.2 x 63.5	5.50	139.7	
9634-001722	9634-001747	4 x 2	101.6 x 50.8	11.75	298.4	
9634-001723	9634-001748	4 x 2 1/2	101.6 x 63.5	9.75	247.7	
9634-001724	9634-001749	4 x 3	101.6 x 76.2	7.75	196.9	
9634-050058	9634-050059	6 x 3	152.4 x 76.2	10.00	254.0	
9634-001725	9634-001750	6 x 4	152.4 x 101.6	10.00	254.0	



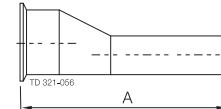
Finish Item No.	Finish Item No.	Size DN/OD		Dimension A		B31M (3A)
		Inch	mm	Inch	mm	
PL 9634-038701	PM 9634-038726	3/4 x 1/2	19.0 x 12.7	3.00	76.2	
9634-038702	9634-038727	1 x 1/2	25.4 x 12.7	3.50	88.9	
9634-038703	9634-038728	1 x 3/4	25.4 x 19.0	3.00	76.2	
9634-038704	9634-038729	1 1/2 x 1/2	38.1 x 12.7	4.50	114.3	
9634-038705	9634-038730	1 1/2 x 3/4	38.1 x 19.0	4.00	101.6	
9634-038706	9634-038731	1 1/2 x 1	38.1 x 25.4	4.00	101.6	
9634-038709	9634-038734	2 x 1	50.8 x 25.4	6.00	152.4	
9634-038710	9634-038735	2 x 1 1/2	50.8 x 38.1	4.00	101.6	
9634-038714	9634-038739	2 1/2 x 1 1/2	63.5 x 38.1	6.00	152.4	
9634-038715	9634-038740	2 1/2 x 2	63.5 x 50.8	4.25	108.0	
9634-038717	9634-038742	3 x 1 1/2	76.2 x 38.1	8.00	203.2	
9634-038718	9634-038743	3 x 2	76.2 x 50.8	6.25	158.8	
9634-038719	9634-038744	3 x 2 1/2	76.2 x 63.5	4.25	108.0	
9634-038722	9634-038747	4 x 2	101.6 x 50.8	10.38	263.5	
9634-038723	9634-038748	4 x 2 1/2	101.6 x 63.5	8.38	212.7	
9634-038724	9634-038749	4 x 3	101.6 x 76.2	6.38	161.9	



Finish Item No.	Finish Item No.	Size DN/OD		Dimension A		B32 (3A)
		Inch	mm	Inch	mm	
PL	PM					
9634-039401	9634-039426	3/4 x 1/2	19.0 x 12.7	4.00	101.6	
9634-039402	9634-039427	1 x 1/2	25.4 x 12.7	4.50	114.3	
9634-039403	9634-039428	1 x 3/4	25.4 x 19.0	4.00	101.6	
9634-039404	9634-039429	1 1/2 x 1/2	38.1 x 12.7	5.50	139.7	
9634-039405	9634-039430	1 1/2 x 3/4	38.1 x 19.0	5.00	127.0	
9634-039406	9634-039431	1 1/2 x 1	38.1 x 25.4	5.00	127.0	
9634-039409	9634-039434	2 x 1	50.8 x 25.4	7.25	184.2	
9634-039410	9634-039435	2 x 1 1/2	50.8 x 38.1	5.25	133.4	
9634-039414	9634-039439	2 1/2 x 1 1/2	63.5 x 38.1	7.25	184.2	
9634-039415	9634-039440	2 1/2 x 2	63.5 x 50.8	5.50	139.7	
9634-039417	9634-039442	3 x 1 1/2	76.2 x 38.1	9.25	235.0	
9634-039418	9634-039443	3 x 2	76.2 x 50.8	7.50	190.5	
9634-039419	9634-039444	3 x 2 1/2	76.2 x 63.5	5.50	139.7	
9634-039422	9634-039447	4 x 2	101.6 x 50.8	11.75	298.4	
9634-039423	9634-039448	4 x 2 1/2	101.6 x 63.5	9.75	247.7	
9634-039424	9634-039449	4 x 3	101.6 x 76.2	7.75	196.9	
9635-000182	9634-039452	6 x 3	152.4 x 76.2	10.00	254.0	
9634-039425	9634-039450	6 x 4	152.4 x 101.6	10.00	254.0	



Finish Item No.	Finish Item No.	Size		Dimension		
		DN/OD	Inch	mm	Inch	
PL	PM	Inch	mm	Inch	mm	B32M (3A)
9634-039001	9634-039026	3/4 x 1/2	19.0 x 12.7	3.00	76.2	
9634-039002	9634-039027	1 x 1/2	25.4 x 12.7	3.50	88.9	
9634-039003	9634-039028	1 x 3/4	25.4 x 19.0	3.00	76.2	
9634-039004	9634-039029	1 1/2 x 1/2	38.1 x 12.7	4.50	114.3	
9634-039005	9634-039030	1 1/2 x 3/4	38.1 x 19.0	4.00	101.6	
9634-039006	9634-039031	1 1/2 x 1	38.1 x 25.4	4.00	101.6	
9634-039009	9634-039034	2 x 1	50.8 x 25.4	6.00	152.4	
9634-039010	9634-039035	2 x 1 1/2	50.8 x 38.1	4.00	101.6	
9634-039014	9634-039039	2 1/2 x 1 1/2	63.5 x 38.1	6.00	152.4	
9634-039015	9634-039040	2 1/2 x 2	63.5 x 50.8	4.25	108.0	
9634-039017	9634-039042	3 x 1 1/2	76.2 x 38.1	8.00	203.2	
9634-039018	9634-039043	3 x 2	76.2 x 50.8	6.25	158.8	
9634-039019	9634-039044	3 x 2 1/2	76.2 x 63.5	4.25	108.0	
9634-039022	9634-039047	4 x 2	101.6 x 50.8	10.38	263.5	
9634-039023	9634-039048	4 x 2 1/2	101.6 x 63.5	8.38	212.7	
9634-039024	9634-039049	4 x 3	101.6 x 76.2	6.38	161.9	

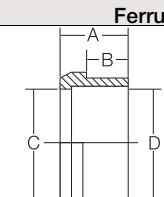
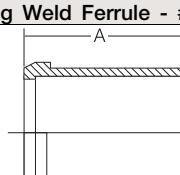
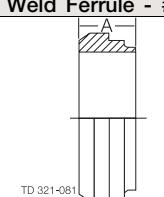
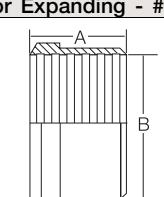


1.3 Bevel Seat Fittings



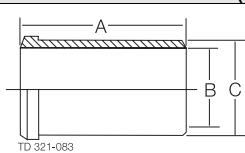
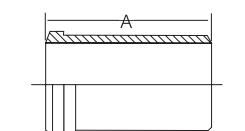
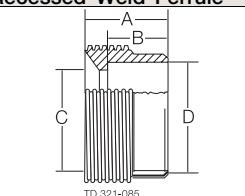
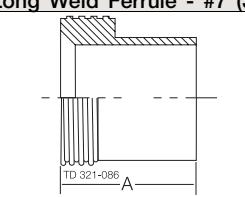
Price Sheets

Ferrules	1.3.72
Nuts, Gaskets and Solid End Caps	1.3.75
Adapters	1.3.76

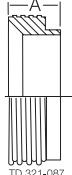
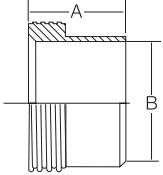
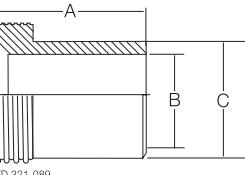
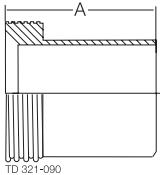
Item No.	Item No.	Size		Dimension								14 Plain Recessed Weld Ferrule - #7	
				A		B		C		D			
304	316L	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	14 Plain Recessed Weld Ferrule - #7	
010233	Not available	1		0.75	19.0	0.50	12.7	0.88	22.2	1.00	25.4		
011266	Not available	1½		0.88	22.0	0.63	15.9	1.38	34.9	1.50	38.1		
012370	Not available	2		0.97	24.6	0.69	17.5	1.88	47.6	2.00	50.8		
013253	Not available	2½		1.06	27.0	0.75	19.0	2.38	60.3	2.50	63.5		
014291	Not available	3		1.13	28.6	0.81	20.6	2.88	73.0	3.00	76.2		
015365	Not available	4		1.25	31.8	0.94	23.8	3.83	97.2	4.00	101.6		
L14A Plain Long Weld Ferrule - #7 (3A)													
240603	246051	1	25.4	1.38	34.9								
241603	246107	1½	38.1	1.50	38.1								
242603	246086	2	50.8	1.50	38.1								
243603	246035	2½	63.5	1.75	44.5								
244603	246062	3	76.2	1.75	44.5								
245603	241090	4	101.6	1.75	44.5								
14PRFS Plain Short Weld Ferrule - #7 (3A)													
610866	610758	1	25.4	0.69	17.5								
610867	610762	1½	38.1	0.72	18.3								
610868	610784	2	50.8	0.72	18.3								
610869	610789	2½	63.5	0.84	21.4								
610870	610811	3	76.2	0.91	23.0								
610871	610847	4	101.6	1.031	31.0								
14R Plain Ferrule for Expanding - #7 (3A)¹													
010254		1	25.4	0.75	19.0	1.00	25.4						
011290		1½	38.1	1.125	28.6	1.50	38.1						
012395		2	50.8	1.312	33.3	2.00	50.8						
013280		2½	63.5	1.375	34.9	2.50	63.5						
014320		3	76.2	1.437	36.5	3.00	76.2						
015400		4	101.6	1.50	38.1	4.00	101.6						

Note: L14A, 14PRFS and 14R are 3A approved

¹ = 3A approved for modifying or repairing existing on-site farm milk handling equipment

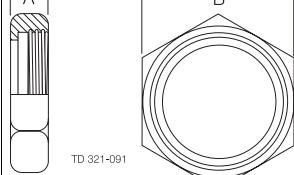
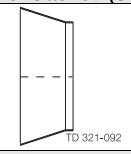
Item No.	Item No.	Size		Dimension								
				A		B		C		D		
304	316L	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	14W Plain Tank Weld Ferrule - #7 (3A)
010066	Not available	1	25.4	2.38	60.3	0.88	22.2	1.16	29.4			 TD 321-083
011298	Not available	1½	38.1	2.53	64.3	1.38	34.9	1.67	42.5			
012405	Not available	2	50.8	2.78	70.6	1.88	47.6	2.19	55.6			
013287	Not available	2½	63.5	3.06	77.8	2.38	60.3	2.70	68.6			
014329	Not available	3	76.2	3.53	89.7	2.88	73.0	3.22	81.8			
015407	Not available	4	101.6	4.31	109.5	3.83	97.2	1.25	108.0			
14WL Plain Light Tank Weld Ferrule - #7 (3A)												
010268		1	25.4	2.00	50.8							 TD 321-084
011306		1½	38.1	2.25	57.2							
012414		2	50.8	2.50	63.5							
013295		2½	63.5	2.75	69.9							
014335		3	76.2	3.00	76.2							
015415		4	101.6	4.00	101.6							
15 Threaded Recessed Weld Ferrule - #7												
010276		1	25.4	0.81	20.6	0.50	12.7	0.88	22.2	1.00	25.4	 TD 321-085
011315		1½	38.1	0.88	22.2	0.63	15.9	1.38	34.9	1.50	38.1	
012425		2	50.8	1.03	26.2	0.69	17.5	1.88	14.6	2.00	50.8	
013303		2½	63.5	1.13	28.6	0.75	19.0	2.38	60.3	2.50	63.5	
014346		3	76.2	1.25	31.8	0.81	20.6	2.88	73.0	3.00	76.2	
015425		4	101.6	1.38	34.9	0.94	23.8	3.83	97.2	4.00	101.6	
L15A Threaded Long Weld Ferrule - #7 (3A)												
240618	246082	1	25.4	1.38	34.9							 TD 321-086
241618	241089	1½	38.1	1.50	38.1							
242618	246370	2	50.8	1.50	38.1							
243618	246063	2½	63.5	1.75	44.5							
244618	246084	3	76.2	1.75	44.5							
245618	241091	4	101.6	1.75	44.5							

Note: 14W, 14WL and L15A are 3A approved

Item No.	Item No.	Size		Dimension						15TRFS Threaded Short Weld Ferrule - #7 (3A)		
				A	B	C	inch	mm	inch	mm		
304	316L	inch	mm	inch	mm	inch	mm	inch	mm	15TRFS Threaded Short Weld Ferrule - #7 (3A)		
610878	610895	1	25.4	0.69	17.5					 TD 321-087		
610879	610922	1½	38.1	0.72	18.3							
610880	610924	2	50.8	0.72	18.3							
610881	610926	2½	63.5	0.84	21.4							
610882	610928	3	76.2	0.91	23.0							
610883	610930	4	101.6	1.031	13.5							
15R Threaded Ferrule for Expanding - #7 (3A) ¹												
010291		1	25.4	0.81	20.6	1.00	25.4			 TD 321-088		
011331		1½	38.1	1.13	28.6	1.50	38.1					
012445		2	50.8	1.38	34.9	2.00	50.8					
013317		2½	63.5	1.50	38.1	2.50	63.5					
014360		3	76.2	1.63	41.3	3.00	76.2					
015439		4	101.6	1.63	41.3	4.00	101.6					
15W Threaded Tank Weld Ferrule - #7 (3A)												
010307		1	25.4	1.50	38.1	0.88	22.2	1.25	31.8	 TD 321-089		
011350		1½	38.1	1.63	41.3	1.38	34.9	1.75	44.5			
012465		2	50.8	1.75	44.5	1.88	47.6	2.31	58.7			
013335		2½	63.5	1.75	44.5	2.38	60.3	2.88	73.0			
014375		3	76.2	1.81	46.0	2.88	73.0	3.38	85.7			
015453		4	101.6	2.13	54.0	3.83	97.2	4.25	108.0			
15WL Threaded Light Tank Weld Ferrule - #7 (3A)												
010315		1	25.4	2.00	50.8					 TD 321-090		
011357		1½	38.1	2.25	57.2							
012476		2	50.8	2.50	63.5							
013343		2½	63.5	2.75	69.9							
014384		3	76.2	3.00	76.2							
015460		4	101.6	4.00	101.6							

Note: 3A approved for finish #7

1 = 3A approved for modifying or repairing existing on-site farm milk handling equipment

Item No.	Size		Dimension				
			A	B	inch	mm	
304	inch	mm					13H Bevel Seat Nut
010221	1	25.4	0.91	23.0	1.81	46.0	 TD 321-091
011250	1½	38.1	0.97	24.6	2.41	61.1	
012350	2	50.8	1.06	27.0	3.00	76.2	
013236	2½	63.5	1.19	30.2	3.59	91.3	
014265	3	76.2	1.28	32.5	4.19	106.4	
015340	4	101.6	1.50	38.1	5.44	138.1	
NEO							ST40 Gasket (Snap Tite)
88110111	1	25.4					 TD 321-092
88110112	1½	38.1					
88110113	2	50.8					
88110114	2½	63.5					
88110115	3	76.2					
304							16A Plain Solid End Cap - #7 (3A)
010323	1	25.4	1.31	33.3			 TD 321-093
011365	1½	38.1	1.84	46.8			
012485	2	50.8	2.38	60.3			
013350	2½	63.5	2.91	73.8			
014394	3	76.2	3.44	87.3			
015467	4	101.6	4.50	114.3			

Note: 3A approved for finish #7

Item No.	Size		Dimension				14AHR Plain x Rubber Hose Adapter - #7
			A	B	inch	mm	
304	inch	mm			inch	mm	14AHR Plain x Rubber Hose Adapter - #7
011848	1½	38.1	1.687	176.2	1.50	38.1	
012913	2	50.8	2.31	58.7	2.00	50.8	
013269	2½	63.5	2.34	59.5	2.50	63.5	
014891	3	76.2	3.50	88.9	3.00	76.2	
Not available	4	101.6	4.00	101.6	4.00	101.6	
14AHT Plain x Tygon Hose Adapter - #7							
010747	1	25.4	4.69	119.1	1.00	25.4	
011867	1½	38.1	4.72	119.9	1.50	38.1	
012959	2	50.8	4.72	119.9	2.00	50.8	
013267	2½	63.5	4.84	123.0	2.50	63.5	
014296	3	76.2	4.91	124.6	3.00	76.2	
015380	4	101.6	5.22	132.6	4.00	101.6	
15AHT Threaded x Tygon Hose Adapter - #7							
010286	1	25.4	4.50	119.1	1.00	25.4	
011327	1½	38.1	4.50	119.9	1.50	38.1	
012432	2	50.8	4.50	119.9	2.00	50.8	
013322	2½	63.5	4.50	123.0	2.50	63.5	
014966	3	76.2	4.50	124.6	3.00	76.2	
015438	4	101.6	5.00	132.6	4.00	101.6	
21 Threaded x Male NPT Adapter - #7							
010389	1 x 1	25.4 x 25.4	2.25	57.2	0.66	16.7	
011450	1½ x 1½	38.1 x 38.1	2.44	61.9	0.72	18.3	
012575	2 x 2	50.8 x 50.8	2.66	67.5	0.75	19.1	
013415	2½ x 2½	63.5 x 63.5	3.28	83.3	1.14	29.0	
014465	3 x 3	76.2 x 76.2	3.50	88.9	1.20	30.6	
22 Threaded x Female NPT Adapter - #7							
010404	1 x 1	25.4 x 25.4	2.17	55.0	0.60	15.2	
011470	1½ x 1½	38.1 x 38.1	2.25	57.2	0.55	13.9	
012593	2 x 2	50.8 x 50.8	2.34	59.5	0.55	13.9	
013429	2½ x 2½	63.5 x 63.5	2.09	53.2	0.67	17.1	
014483	3 x 3	76.2 x 76.2	2.19	55.6	0.75	19.1	

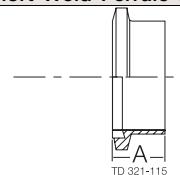
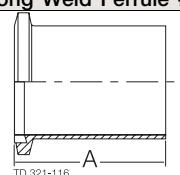
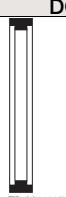
1.4 Other Fittings



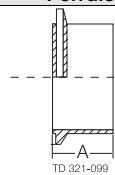
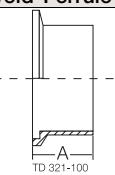
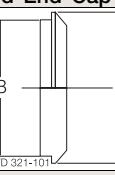
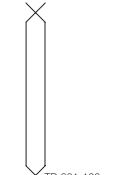
Price Sheets

DC Fittings	1.4.78
H-Line Fittings	1.4.79
HDI Fittings	1.4.80
HDI Fittings	1.4.81
John Perry Fittings	1.4.82
IPS Schedule 5 Fittings	1.4.84
ISO-DIN Union Parts	1.4.87

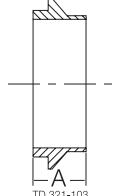
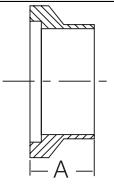
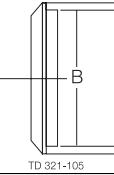
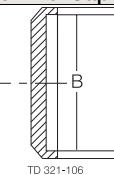
1.4

Item No.	Item No.	Size		Dimension A		
		inch	mm	inch	mm	
304	316L					
Product code: 5050						15TRFDC Threaded Short Weld Ferrule #7 (3A)
9611344622	9611344623	1½	38.1	0.72	18.3	 TD 321-115
9611344602	9611344603	2	50.8	0.75	19.1	
9611344632	9611344633	2½	63.5	0.88	22.2	
9611344642	9611344643	3	76.2	0.91	23.0	
9611344652	9611344653	4	101.6	1.03	26.2	
Product code: 5058						L15ADC Threaded Long Weld Ferrule #7 (3A)
9611344982	9611344992	1½	38.1	1.50	38.1	 TD 321-116
9611344983	9611344993	2	50.8	1.50	38.1	
9611344984	241885	2½	63.5	1.75	44.5	
9611344985	9611344995	3	76.2	1.75	44.5	
9611344986	Not available	4	101.6	1.75	44.5	
U - Buna N						
Product code: 5086						DC40 Gasket
8811045		1½	38.1			 TD 321-117
8811046		2	50.8			
8811047		2½	63.5			
8811048		3	76.2			
88121294		4	101.6			

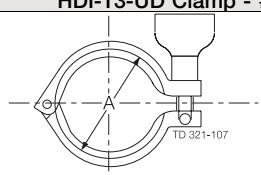
Note: 3A approved for finish #7

Item No.	Item No.	Size		Dimension				
				A		B		
304	316L	inch	mm	inch	mm	inch	mm	H-14W Male Short Weld Ferrule - #7 (3A)
Not available 9611342140 9611342141 9611342142 Not available 9611342144	88243040 9611342150 9611342151 9611342152 9611342153 9611342154	1 1½ 2 2½ 3 4	25.4 38.1 50.8 63.5 76.2 101.6	1.00 1.00 1.00 1.00 1.00 1.00	25.4 25.4 25.4 25.4 25.4 25.4			 TD 321-099
H-15W Female Short Weld Ferrule - #7 (3A)								
Not available 9611342040 9611342041 9611342042 9611342043 9611342044	88243031 9611342050 9611342051 9611342052 9611342053 9611342054	1 1½ 2 2½ 3 4	25.4 38.1 50.8 63.5 76.2 101.6	1.00 1.00 1.00 1.00 1.00 1.00	25.4 25.4 25.4 25.4 25.4 25.4			 TD 321-100
H-16A-14 Male Solid End Cap - #7 (3A)								
9611341980 9611341981 Contact AL 9611341983 9611341984	9611341990 9611341991 9611341992 9611341993 9611341994	1½ 2 2½ 3 4	38.1 50.8 63.5 76.2 101.6	2.00 2.50 3.03 3.56 4.69	50.8 63.5 77.0 90.5 119.1	1.63 2.13 2.63 3.13 4.09	41.3 54.0 66.7 79.4 104.0	 TD 321-101
X - Silicone	U - Buna N							H40 Gasket
88117112 88117113 88117114 88117115 9635117116	Not available 88133583 88143695 88138865 88136333	1½ 2 2½ 3 4	38.1 50.8 63.5 76.2 101.6					 TD 321-102

Note: 3A approved for finish #7

Item No.	Item No.	Size		Dimension				HDI-14W Male Short Ferrule - #7 (3A)	
				A	mm	B	mm		
304	316L	inch	mm	inch	mm	inch	mm	HDI-14W Male Short Ferrule - #7 (3A)	
9612016601	9612016701	1	25.4	0.78	19.8				
9612016602	9612016702	1½	38.1	0.94	23.8				
9612016603	9612016703	2	50.8	1.03	26.2				
9612016604	9612016704	2½	63.5	1.16	29.4				
9612016605	9612016705	3	76.2	1.22	31.0				
9612016606	9612016706	4	101.6	1.34	34.1				
HDI-15W Female Short Ferrule - #7 (3A)									
9612017401	9612017501	1	25.4	0.78	19.8				
9612017402	9612017502	1½	38.1	0.94	23.8				
9612017403	9612017503	2	50.8	1.03	26.2				
9612017404	9612017504	2½	63.5	1.16	29.4				
9612017405	9612017505	3	76.2	1.22	31.0				
9612017406	9612017506	4	101.6	1.34	34.1				
HDI-16A-14 Male Solid End Cap - #7 (3A)									
9612021602	9612021702	1½	38.1	2.00	50.8	1.75	44.5		
9612021603	9612021703	2	50.8	2.66	67.5	2.25	57.2		
9612021604	9612021704	2½	63.5	3.31	84.1	2.75	69.9		
9612021605	9612021705	3	76.2	3.88	98.4	3.31	84.1		
9612021606	9612021706	4	101.6	4.88	123.8	4.31	109.5		
HDI-16A-15 Female Solid End Cap - #7 (3A)									
9612021802	9612021902	1½	38.1	2.00	50.8	1.75	44.5		
9612021803	9612021903	2	50.8	2.66	67.5	2.25	57.2		
9612021804	9612021904	2½	63.5	3.31	84.1	2.75	69.9		
9612021805	9612021905	3	76.2	3.88	98.4	3.31	84.1		
9612021806	9612021906	4	101.6	4.88	123.8	4.31	109.5		

Note: 3A approved for finish #7

Item No.	Item No.	Size		Dimension A		
		inch	mm	inch	mm	
304						HDI-13-UD Clamp - #7
9612022102		1½	38.1	2.22	56.4	
9612022103		2	50.8	2.97	75.4	
9612022104		2½	63.5	3.59	91.3	
9612022105		3	76.2	4.16	105.6	
9612022106		4	101.6	5.13	130.2	
E - EPDM	U - Buna N					HDI-40 Gasket
88139829	9612022301	1	25.4			
88139762	9612022302	1½	38.1			
88139763	9612022303	2	50.8			
88143538	9612022304	2½	63.5			
88139851	9612022305	3	76.2			
88139764	9612022306	4	101.6			
G - PTFE (Solid)	SFY - Fluoroelastomer					HDI-40 Gasket
9612022201	9612022401	1	25.4			
9612022202	9612022402	1½	38.1			
9612022203	9612022403	2	50.8			
9612022204	9612022404	2½	63.5			
9612022205	9612022405	3	76.2			
9612022206	9612022406	4	101.6			

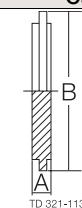
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Item No.	Item No.	Size		Dimension A		14PRFJP Plain Short Weld Ferrule - #7 (3A)
		inch	mm	inch	mm	
304	316L					14PRFJP Plain Short Weld Ferrule - #7 (3A)
610229	Not available	1	25.4	0.687	15.9	
618214	610454	1½	38.1	0.719	16.6	
617919	610226	2	50.8	0.719	16.6	
618210	610227	2½	63.5	0.844	19.8	
617918	610414	3	76.2	0.906	20.6	
617914	Contact AL	4	101.6	1.218	23.0	
15TRFJP Threaded Short Weld Ferrule - #7 (3A)						
618220	Not available	1	25.4	0.69	17.5	
610190	618221	1½	38.1	0.69	17.5	
610216	618228	2	50.8	0.75	19.1	
618229	610228	2½	63.5	0.84	21.4	
610399	618230	3	76.2	0.88	22.2	
618232	610222	4	101.6	1.218	26.2	
L14AJP Plain Long Weld Ferrule - #7 (3A)						
241609		1½	38.1	1.50	38.1	
242593		2	50.8	1.50	38.1	
243569		2½	63.5	1.75	44.5	
244584		3	76.2	1.75	44.5	
240040		4	101.6	1.75	44.5	
L15AJP Threaded Long Weld Ferrule - #7 (3A)						
241632		1½	38.1	1.50	34.9	
242621		2	50.8	1.50	38.1	
243626		2½	63.5	1.75	38.1	
240629		3	76.2	1.75	44.5	
245625		4	101.6	1.75	44.5	

Note: 3A approved for finish #7

Item No.	Item No.	Size		Dimension				16AJP Plain Solid End Cap - #7 (3A)
		inch	mm	inch	mm	inch	mm	
304	316L							
010302		1	25.4	0.44	11.1	1.31	33.3	
011372		1½	38.1	0.50	12.7	1.84	72.2	
012454		2	50.8	0.53	13.5	2.38	60.3	
013346		2½	63.5	0.56	14.3	2.91	73.8	
014391		3	76.2	0.63	15.9	3.44	87.3	
015473		4	101.6	0.69	17.5	4.50	114.3	
E - EPDM	U - Buna N							40JP Gasket
290227	298188	1	25.4					
290212	298190	1½	38.1					
290211	298192	2	50.8					
Not available	298194	2½	63.5					
Not available	298196	3	76.2					
Not available	298198	4	101.6					
G - PTFE	SFY - Steam Resistant Fluoroelastomer							40JP Gasket
290245	290193	1	25.4					
290215	290194	1½	38.1					
290123	290092	2	50.8					
290249	290208	2½	63.5					
290244	290209	3	76.2					
290246	290210	4	101.6					

Note: 3A approved for finish #7



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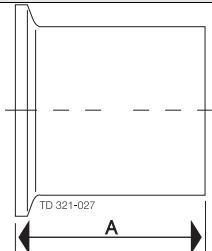
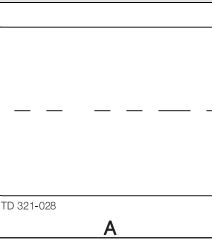
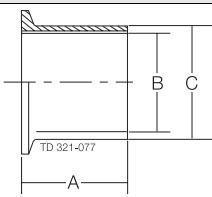
40JP Gasket

TD 321-114

40JP Gasket

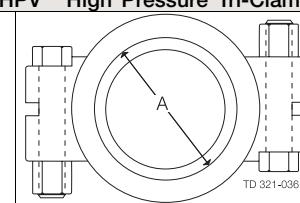
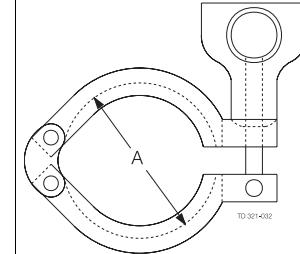
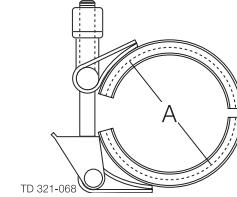
TD 321-114

1.4

Item No.	Item No.	IPS Nominal Size in inches	Dimension						14WMV** Tri-Clamp Short Weld Ferrule - #7 (3A)	
			A		B		C			
304	316L		inch	mm	inch	mm	inch	mm		
654019	654041	1	0.50	12.7						
654020	654042	1½	0.50	12.7						
654021	654043	2	0.50	12.7						
654022	654044	2½	0.50	12.7						
654023	654045	3	0.50	12.7						
650032	654047	4	0.63	15.9						
654029	650002	6	0.875	22.2						
654031	650024	8	1.50	38.1						
14WLMV** Tri-Clamp Light Tank Weld Ferrule - #1										
270526	273526	1	3.00	76.2						
270528	273528	1½	3.00	76.2						
270529	273529	2	3.00	76.2						
270530	273530	2½	3.00	76.2						
270531	273531	3	4.00	101.6						
270533	273533	4	4.00	101.6						
270535	273535	6	6.00	152.4						
270536	270067	8	6.00	152.4						
14MVW** Tri-Clamp Tank Weld Ferrule - #7 (3A)										
273443	270033	1	1.63	41.3	1.19	30.1	1.53	38.9		
270465	273439	1½	1.63	41.3	1.77	45.0	2.11	53.6		
270378	273440	2	1.75	44.5	2.25	57.0	2.59	65.9		
273442	270002	2½	1.75	44.5	2.71	68.7	3.11	79.0		
270382	273441	3	1.81	46.0	3.33	84.7	3.56	90.5		
270276	273445	4	2.13	54.0	4.33	110.1	4.56	115.9		

Note: 3A approved for finish #7

Item No.	IPS Nominal Size in inches	Dimension A		A13MV** Light Duty Tri-Clamp with T-Bolt
		inch	mm	
304				
270414	3	4.22	107.2	
270416	4	5.22	132.6	
271914	6	7.32	185.9	
271917	8	9.32	236.7	
271939	10	11.44	290.6	
271941	12	13.44	341.4	
13MHHVM** Heavy Duty Tri-Clamp with Wing Nut				
270266	3	4.26	108.2	
270267	4	5.26	133.6	
270060	6	7.32	185.9	
13MHPV** High Pressure Tri-Clamp				
270100	3	4.18	106.2	
270001	4	5.18	131.6	

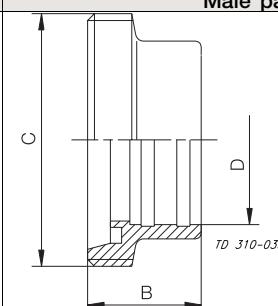
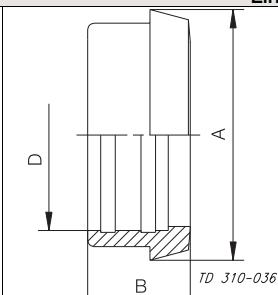
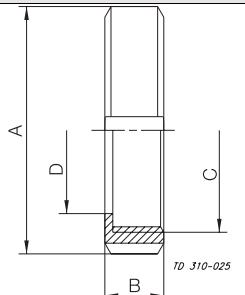


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Item No.	Item No.	IPS Nominal Size in inches		Dimension				16AMV** Tri-Clamp Solid End Cap - #7 (3A)
		inch	mm	inch	mm	inch	mm	
304	316L							
270504	273504	3		0.31	7.9	4.13	104.9	
270506	273506	4		0.38	9.7	5.13	130.3	
270508	273508	6		0.44	11.2	7.20	182.9	
270509	270084	8		0.44	11.2	9.20	233.7	
U - Buna N	G - PTFE (Solid)							40MV Tri-Clamp Gasket
298570	298528	1	25.4					
298572	298530	1½	38.1					
298573	298531	2	50.8					
298574	298532	2½	63.5					
298575	298533	3	76.2					
298577	298535	4	101.6					
Not available	298537	6	152.4					
Not available	298538	8	203.2					
Not available	298539	10	254.0					
Not available	290104	12	304.8					
U - Buna N	X - Silicone							40MVF Tri-Clamp Flanged Gasket
298519	Not available	2	50.8					
298503	Not available	3	76.2					
298504	290164	4	101.6					
298558	298600	6	152.4					
298559	298601	8	203.2					
298687	298602	10	254.0					
298688	298603	12	304.8					
GR - PTFE with Fluoroelastomer Insert								A40MV-GR Tri-Clamp Teflon Envelope Gasket
290078		1	25.4					
290079		1½	38.1					
290080		2	50.8					
290081		2½	63.5					
290082		3	76.2					
290083		4	101.6					
290084		6	152.4					

Note: 3A approved for finish #7

Finish: Semi bright
 Thread: Round type
 Product code: 5044

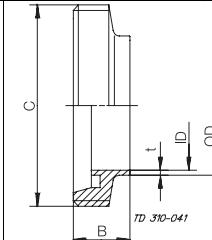
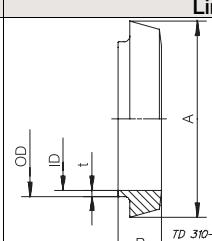
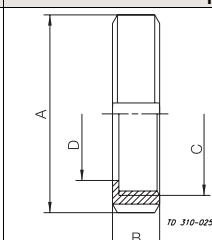
Material Item No.	Size	Dimension (mm)				
1.4301 (304)	Inch	A	B	C	D	Male part
9611-30-0977	25		29.0	52 x 1/6	25.2	
9611-30-6320	32		32.0	58 x 1/6	32.2	
9611-30-0978	40		33.0	65 x 1/6	38.2	
9611-30-0979	50		35.0	78 x 1/6	51.2	
9611-30-0980	65		40.0	95 x 1/6	63.8	
9611-30-633-0	75		40.0	104 x 1/6	76.3	
9611-30-0981	80		45.0	110 x 1/4	76.3	
9611-30-0983	100		54.0	130 x 1/4	101.9	
Liner						
9611-30-0984	25	44.0	22.0		25.2	
9611-30-638-0	32	50.0	25.0		32.2	
9611-30-0985	40	56.0	26.0		38.2	
9611-30-0986	50	68.0	28.0		51.2	
9611-30-0987	65	86.0	32.0		63.8	
9611-30-639-0	75	95.0	32.0		76.3	
9611-30-0988	80	100.0	37.0		76.3	
9611-30-0990	100	121.0	44.0		101.9	
Nut						
31318-0014-1	25	63.0	21.0	52 x 1/6	36.0	
31318-0014-2	32	70.0	21.0	58 x 1/6	42.0	
31318-0014-3	40	78.0	21.0	65 x 1/6	49.0	
31318-0014-4	50	92.0	22.0	78 x 1/6	62.0	
31318-0014-5	65	112.0	25.0	95 x 1/6	80.0	
9611-30-644-0	75	120.0	26.0	104 x 1/6	87.0	
31318-0014-6	80	127.0	30.0	110 x 1/4	94.0	
31318-0014-8	100	148.0	31.0	130 x 1/4	115.0	

Finish: Semi bright
 Thread: Round type
 Product code: 5044

1.4

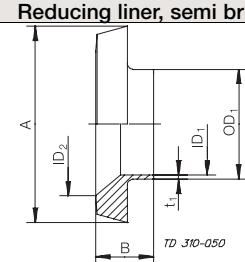
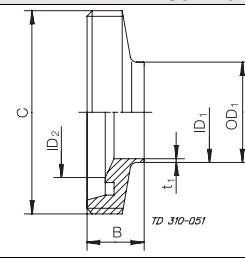
Material Item No.	Material Item No.	Size	Dimension (mm)			
1.4307 (304L)	1.4404 (316L)	Inch	OD/ID x t	B	C	Male part
9612-1579-01	9612-1579-17	25	25.4/22.9 x 1.25	29.0	52 x 1/6	
9612-1579-02	9612-1579-18	32	31.8/29.3 x 1.25	32.0	58 x 1/6	
9612-1579-03	9612-1579-19	40	38.1/35.1 x 1.5	33.0	65 x 1/6	
9612-1579-04	9612-1579-20	50	50.8/47.8 x 1.5	35.0	78 x 1/6	
9612-1579-05	9612-1579-21	65	63.5/60.5 x 1.5	40.0	95 x 1/6	
9612-1579-06	9612-1579-22	75	76.1/73.1 x 1.5	40.0	104 x 1/6	
9612-1579-07	9612-1579-23	80	76.1/72.1 x 2.0	45.0	110 x 1/4	
9612-1579-08	9612-1579-24	100	101.6/97.6 x 2.0	54.0	130 x 1/4	
1.4307 (304L)	1.4404 (316L)	Inch	OD/ID x t	A	B	Liner
9612-1580-01	9612-1580-17	25	25.4/22.9 x 1.25	44.0	22.0	
9612-1580-02	9612-1580-18	32	31.8/29.3 x 1.25	50.0	25.0	
9612-1580-03	9612-1580-19	40	38.1/35.1 x 1.5	56.0	26.0	
9612-1580-04	9612-1580-20	50	50.8/47.8 x 1.5	68.5	28.0	
9612-1580-05	9612-1580-21	65	63.5/60.5 x 1.5	86.0	32.0	
9612-1580-06	9612-1580-22	75	76.1/73.1 x 1.5	93.7	32.0	
9612-1580-07	9612-1580-23	80	76.1/72.1 x 2.0	100.0	37.0	
9612-1580-08	9612-1580-24	100	101.6/97.6 x 2.0	121.0	44.0	
1.4307 (304L)		Inch	OD/ID x t	A	B	Nut
31318-0014-1		25	52 x 1/6	63.0	21.0	
31318-0014-2		32	58 x 1/6	70.0	21.0	
31318-0014-3		40	65 x 1/6	78.0	21.0	
31318-0014-4		50	78 x 1/6	92.0	22.0	
31318-0014-5		65	95 x 1/6	112.0	25.0	
9611-30-644-0		75	104 x 1/6	120.0	26.0	
31318-0014-6		80	110 x 1/4	127.0	30.0	
31318-0014-8		100	130 x 1/4	148.0	31.0	

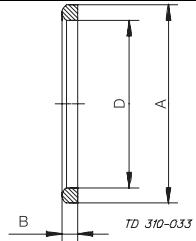
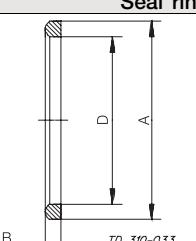
Finish: Semi bright
 Thread: Round type
 Product code: 5044

Material Item No.	Material Item No.	Size	Dimension (mm)			
1.4307 (304L)	1.4404 (316L)	Inch	OD/ID x t	B	C	Male part
31318-0007-2	31318-0007-1	25	25.0/22.6 x 1.25	22.0	52 x 1/6	
31318-0008-2	31318-0008-1	32	31.8/29.3 x 1.25	22.0	58 x 1/6	
31318-0009-2	31318-0009-1	40	38.1/35.1 x 1.5	22.0	65 x 1/6	
31318-0010-2	31318-0010-1	50	50.8/47.8 x 1.5	22.0	78 x 1/6	
31318-0011-2	31318-0011-1	65	63.5/60.3 x 1.5	25.0	95 x 1/6	
9611-30-602-0	9611-30-602-1	75	76.1/73.1 x 1.5	30.0	104 x 1/6	
31318-0012-2	31318-0012-1	80	76.1/72.1 x 2.0	30.0	110 x 1/4	
31318-0034-2	31318-0034-1	100	101.6/97.6 x 2.0	30.0	130 x 1/4	
1.4307 (304L)	1.4404 (316L)	Inch	OD/ID x t	A	B	Liner
31318-0018-2	31318-0018-1	25	25.0/22.6 x 1.25	44.0	18.0	
9611-30-0721	9611-33-0721	32	31.8/29.3 x 1.25	50.0	15.0	
31318-0019-2	31318-0019-1	40	38.1/35.1 x 1.5	56.0	18.0	
31318-0020-2	31318-0020-1	50	50.8/47.8 x 1.5	68.0	20.0	
31318-0021-2	31318-0021-1	65	63.5/60.3 x 1.5	86.0	20.0	
9611-30-607-0	9611-30-607-1	75	76.1/73.1 x 1.5	95.0	20.0	
31318-0022-2	31318-0022-1	80	76.1/72.1 x 2.0	100.0	20.0	
31318-0023-2	31318-0023-1	100	101.6/97.6 x 2.0	121.0	23.0	
1.4307 (304L)		Inch	A	B	C	Nut
31318-0014-1		25	63.0	21.0	52 x 1/6	
31318-0014-2		32	70.0	21.0	58 x 1/6	
31318-0014-3		40	78.0	21.0	65 x 1/6	
31318-0014-4		50	92.0	22.0	78 x 1/6	
31318-0014-5		65	112.0	25.0	95 x 1/6	
9611-30-644-0		75	120.0	26.0	104 x 1/6	
31318-0014-6		80	127.0	30.0	110 x 1/4	
31318-0014-8		100	148.0	31.0	130 x 1/4	

Finish: See below
 Thread: Round type
 Product code: 5044

1.4

Material Item No.	Size	Dimension (mm)				
1.4404 (316L)	Inch	OD ₁ /ID ₁ x t ₁	A	B	ID ₂	Reducing liner, semi bright
9611-30-735-0	32/25	25.0/22.6 x 1.2	50.0	18.0	32.0	
9611-30-735-1	40/25	25.0/22.6 x 1.2	56.0	18.0	38.0	
9611-30-735-2	40/32	33.7/31.3 x 1.2	56.0	18.0	38.0	
9611-30-735-3	50/38	38.0/35.6 x 1.2	68.0	20.0	50.0	
9611-30-735-4	65/51	51.0/48.6 x 1.2	86.0	20.0	66.0	
9611-30-735-5	80/51	51.0/48.6 x 1.2	100.0	20.0	81.0	
9611-30-735-6	80/63.5	63.5/60.3 x 1.6	100.0	20.0	81.0	
9611-30-735-7	100/76.1	76.1/72.9 x 1.6	121.0	23.0	100.0	
1.4404 (316L)	Inch	OD ₁ /ID ₁ x t ₁	B	C	ID ₂	Reducing male part, Semi bright
9611-30-734-0	32/25	25.0/22.6 x 1.2	22.0	58 x 1/6	32.0	
9611-30-734-1	40/25	25.0/22.6 x 1.2	22.0	65 x 1/6	38.0	
9611-30-734-2	40/32	33.7/31.3 x 1.2	22.0	65 x 1/6	38.0	
9611-30-734-3	50/38	38.0/35.6 x 1.2	22.0	78 x 1/6	50.0	
9611-30-734-4	65/51	51.0/48.6 x 1.2	27.0	95 x 1/6	66.0	
9611-30-734-5	80/51	51.0/48.6 x 1.2	32.0	110 x 1/4	81.0	
9611-30-734-6	80/63.5	63.5/60.3 x 1.6	32.0	110 x 1/4	81.0	
9611-30-734-7	100/76.1	76.1/72.9 x 1.6	33.0	130 x 1/4	100.0	

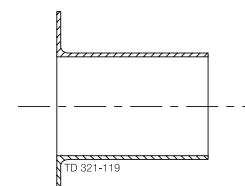
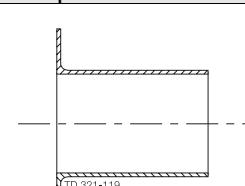
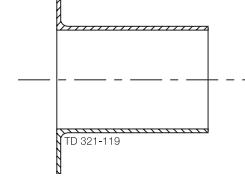
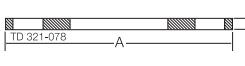
Item No.	Item No.	Item No.	Size	Dimension (mm)			
				Inch	A	B	
NBR	EPDM	FPM					
527346-04	9611-99-1269	9611-99-1864	25	40.0	5.0	30.0	
527346-05	9611-99-1270	9611-99-1865	32	46.0	5.0	36.0	
527346-06	9611-99-1271	9611-99-1866	40	52.0	5.0	42.0	
527346-07	9611-99-1272	9611-99-1867	50	64.0	5.0	54.0	
527346-08	9611-99-1273	9611-99-1868	65	81.0	5.0	71.0	
9611-99-1264	9611-99-1274	9611-99-1869	75	88.0	5.0	78.0	
527346-09	9611-99-1275	9611-99-1128	80	95.0	5.0	85.0	
527346-11	9611-99-1276	9611-99-1870	100	114.0	6.0	104.0	
Silicone (Q)	PTFE						
9611-99-1920	9611-99-1876		25	40.0	5.0	30.0	
9611-99-1921	9611-99-1877		32	46.0	5.0	36.0	
9611-99-1922	9611-99-1878		40	52.0	5.0	42.0	
9611-99-1923	9611-99-1879		50	64.0	5.0	54.0	
9611-99-1924	9611-99-1880		65	81.0	5.0	71.0	
9611-99-1925	9611-99-1881		75	88.0	5.0	78.0	
9611-99-1926	9611-99-1882		80	95.0	5.0	85.0	
9611-99-1927	9611-99-1883		100	114.0	6.0	104.0	

1.5 Accessories

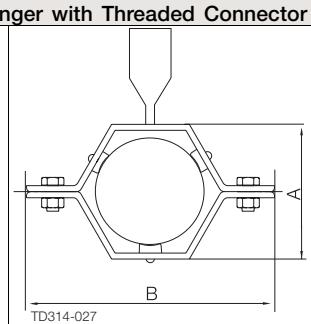
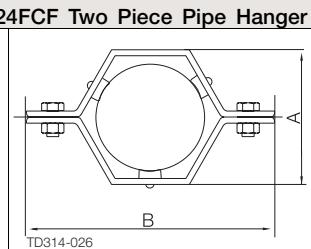
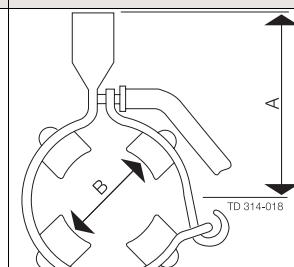
Price Sheets

Lap Joints and Flanges	1.5.94
Pipe Hangers and Wall Plates	1.5.95
Wrenches	1.5.97
Tube OD Sanitary and Industrial	1.5.98

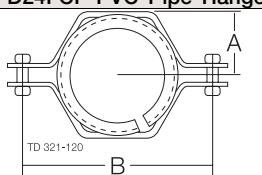
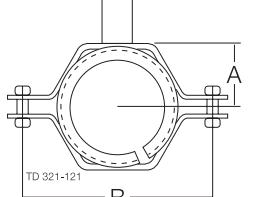
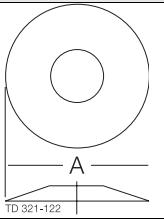
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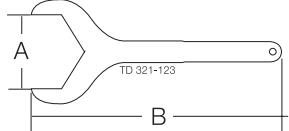
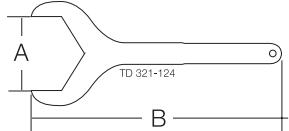
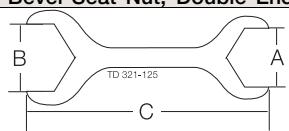
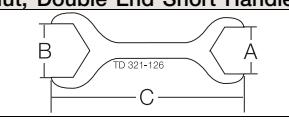
Item No.	Item No.	Size		Dimension						
				A	B	inch	mm			
304	316L	inch	mm	inch	mm	inch	mm			
Product Code: 5086										
Not available	9634052714	1/2	12.7	2.00	50.8	1.69	42.9	 TD 321-119		
Not available	9634052717	3/4	19.0	2.00	50.8	1.69	42.9			
9634052720	9634052721	1	25.4	2.00	50.8	2.00	50.8			
9634052724	9634052725	1 1/2	38.1	2.00	50.8	2.88	73.2			
9634052728	9634052729	2	50.8	2.50	63.5	3.63	92.2			
9634052732	9634052733	2 1/2	63.5	2.50	63.5	4.13	104.9			
9634052736	9634052737	3	76.2	2.50	63.5	5.00	127.0			
9634052740	9634052741	4	101.6	2.50	63.5	6.19	157.2			
Contact AL	Contact AL	6	152.4	3.50	88.9	8.63	219.2			
Product Code: 5086										
14VB-A Lap Joint Stub End - #1										
Not available	9634052714	1/2	12.7	2.00	50.8	1.69	42.9	 TD 321-119		
Not available	9634052717	3/4	19.0	2.00	50.8	1.69	42.9			
Contact AL	Contact AL	1	25.4	2.00	50.8	2.00	50.8			
Contact AL	Contact AL	1 1/2	38.1	2.00	50.8	2.88	73.2			
Contact AL	Contact AL	2	50.8	2.50	63.5	3.63	92.2			
Contact AL	Contact AL	2 1/2	63.5	2.50	63.5	4.13	104.9			
Contact AL	Contact AL	3	76.2	2.50	63.5	5.00	127.0			
Contact AL	Contact AL	4	101.6	2.50	63.5	6.19	157.2			
Not available	Not available	6	152.4	3.50	88.9	8.63	219.2			
Product Code: 5086										
14VB-A Lap Joint Stub End - #7										
Not available	Contact AL	1/2	12.7	2.00	50.8	1.69	42.9	 TD 321-119		
Not available	Contact AL	3/4	19.0	2.00	50.8	1.69	42.9			
Contact AL	Contact AL	1	25.4	2.00	50.8	2.00	50.8			
Contact AL	Contact AL	1 1/2	38.1	2.00	50.8	2.88	73.2			
Contact AL	Contact AL	2	50.8	2.50	63.5	3.63	92.2			
Contact AL	Contact AL	2 1/2	63.5	2.50	63.5	4.13	104.9			
Contact AL	Contact AL	3	76.2	2.50	63.5	5.00	127.0			
Contact AL	Contact AL	4	101.6	2.50	63.5	6.19	157.2			
Not available	Not available	6	152.4	3.50	88.9	8.63	219.2			
Product Code: 5086										
304 Carbon Steel										
Product Code: 5086										
38SL Slip-on Flange - #1										
9634048220	Not available	1/2	12.7	3.50	88.9	0.38	9.7	 TD 321-078		
060398	Not available	3/4	19.0	3.87	98.3	0.38	9.7			
060400	060401	1	25.4	4.25	108.0	0.38	9.5			
060402	060403	1 1/2	38.1	5.00	127.0	0.38	9.5			
060404	060405	2	50.8	6.00	152.4	0.44	11.1			
060406	060407	2 1/2	63.5	7.00	177.8	0.44	11.1			
060408	060409	3	76.2	7.50	190.5	0.50	12.7			
060410	060411	4	101.6	9.00	228.6	0.50	12.7			
060413	Not available	6	152.4	11.00	279.4	0.56	14.3			
Product Code: 5086										

Item No.	Item No.	Size		Dimension				A24FCF Hinged Pipe Hanger
		inch	mm	inch	mm	inch	mm	
SFY - Fluoroelastomer	U - Buna N							A24FCF Hinged Pipe Hanger
010379	010148	1	25.4	4.00	101.6	1.00	25.4	
010380	011539	1½	38.1	4.00	101.6	1.50	38.1	
010381	013195	2	50.8	4.00	101.6	2.00	50.8	
010403	013502	2½	63.5	4.56	115.9	2.50	63.5	
010383	014559	3	76.2	4.56	115.9	3.00	76.2	
010384	015612	4	101.6	5.69	144.5	4.00	101.6	
Not available	010168	6	152.4	7.59	192.8	6.00	152.4	
B24FCF Two Piece Pipe Hanger								
010376	010370	½	12.7	2½	54.0	3½	92.1	
010378	010375	¾	19.0	2½	54.0	3½	92.1	
010385	010248	1	25.4	2½	54.0	3½	92.1	
010390	010252	1½	38.1	2½	54.0	3½	92.1	
010393	010256	2	50.8	2½	66.7	4 5/16	109.5	
010396	010260	2½	63.5	3½	79.4	4 7/8	123.8	
010398	010264	3	76.2	3½	92.1	5 3/8	136.5	
010401	010266	4	101.6	4¾	120.7	6 9/16	166.7	
C24FCF Two-Piece Pipe Hanger with Threaded Connector								
010004	010002	½	12.7	2½	54.0	3½	92.1	
010008	010025	¾	19.0	2½	54.0	3½	92.1	
010005	010249	1	25.4	2½	54.0	3½	92.1	
010006	010253	1½	38.1	2½	54.0	3½	92.1	
010015	010259	2	50.8	2½	66.7	4 5/16	109.5	
010010	010262	2½	63.5	3½	79.4	4 7/8	123.8	
010040	010265	3	76.2	3½	92.1	5 3/8	136.5	
010044	010269	4	101.6	4¾	120.7	6 9/16	166.7	



1.5

Item No.	Size		Dimension				
			A		B		
304	inch	mm	inch	mm	inch	mm	
Product Code: 5082							D24FCF PVC Pipe Hanger
88123701	1	25.4	1.06	27.0	2.81	71.4	
88122672	1½	38.1	1.06	27.0	2.81	71.4	
88122673	2	50.8	1.31	33.3	3.56	90.5	
88122674	2½	63.5	1.56	39.7	3.94	100.0	
88122675	3	76.2	1.81	46.0	4.56	115.9	
88122676	4	101.6	2.31	58.7	5.56	141.3	
Product Code: 5082							E24FCF PVC Pipe Hanger with Threaded Connection
88123676	1	25.4	1.06	27.0	2.81	71.4	
88123929	1½	38.1	1.06	27.0	2.81	71.4	
88122541	2	50.8	1.31	33.3	3.56	90.5	
88122542	2½	63.5	1.56	39.7	3.94	100.0	
88122543	3	76.2	1.81	46.0	4.56	115.9	
88122544	4	101.6	2.31	58.7	5.56	141.3	
Product Code: 5086							29 Wall Plate
881514	1	25.4	5.00	127.0			
881515	1½	38.1	5.00	127.0			
881516	2	50.8	5.00	127.0			
8815170	2½	63.5	5.00	127.0			
8815180	3	76.2	6.00	152.4			
8815190	4	101.6	7.00	177.8			

Item No.	Size		Dimension							
			A		B		C			
AI (Aluminum)	inch	mm	inch	mm	inch	mm	inch	mm	25H Wrench for Bevel Seat Nut, Single End	
285025	1	25.4	1.86	47.2	11.00	279.4				
285026	1½	38.1	2.47	62.7	12.75	323.9				
285027	2	50.8	3.06	77.8	15.00	381.0				
285028	2½	63.5	3.66	92.9	17.50	444.5				
285029	3	76.2	4.25	108.0	21.00	533.4				
285031	4	101.6	5.48	139.3	23.25	590.6				
H25H Wrench for Bevel Seat Nut, Single End Short Handle										
285090	1	25.4	1.86	47.2	6.88	174.8				
285091	1½	38.1	2.47	62.7	8.5	215.9				
285093	2	50.8	3.06	77.7	9.00	228.6				
285094	2½	63.5	4.25	108.0	9.94	252.5				
285096	3	76.2	-	-	11.12	282.4				
25HA Wrench for Bevel Seat Nut, Double End										
285036	1½ x 1	38.1 x 25.4	1.86	47.2	2.47	62.7	12.38	315.5		
285038	2 x 1½	50.8 x 38.1	2.47	62.7	3.06	77.8	14.00	355.6		
285039	2½ x 2	63.5 x 50.8	3.06	77.8	3.66	92.9	18.00	457.2		
H25HA Wrench for Bevel Seat Nut, Double End Short Handle										
285097	2 x 1½	50.8 x 38.1	2.47	60.5	3.06	77.7	11.81	300.0		

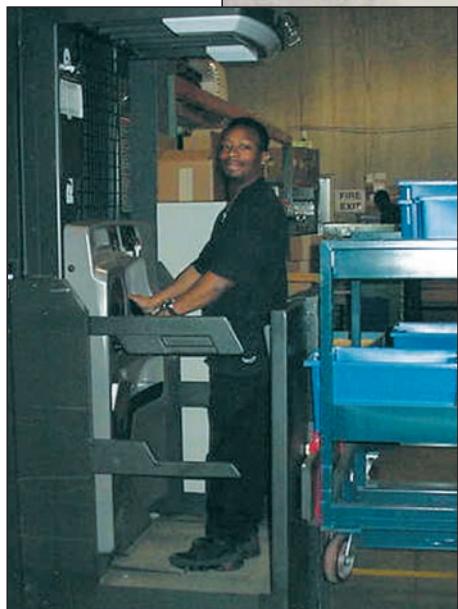
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Saw Vice*	Expanding Block	Expanders*	Size		Tube OD Sanitary and Industrial (Individual Tool Price)
Item No.	Item No.	Item No.	in	mm	
283526	284377	283567	1	25.4	
283528	284378	283568	1½	38.1	
283529	284379	283569	2	50.8	
283530	284380	283570	2½	63.5	
283531	284381	283571	3	76.2	
283532	284382	283572	4	101.6	

* = Tools also used for bevel seat.

Item No.	Size		Additional Tools for Bevel Seat
	in	mm	
284185	1 & 1½	25.4 & 38.1	
284186	1½ & 2	38.1 & 50.8	
284187	1½ - 3	38.1 - 76.2	
284188	4	101.6	

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Our Inside Sales Department is comprised of talented individuals with years of expertise. They will handle your needs quickly and efficiently.

Alfa Laval in brief.

Alfa Laval is a leading global provider of specialized products and engineered solutions.

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We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuff, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

Our USA-based sanitary group offers Alfa Laval and Tri-Clover® fluid handling and heat transfer equipment.

Since 1919, Tri-Clover has been the leading supplier of processing equipment to the sanitary flow industry in North America.

How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.us to access the information directly.