



DIXON

SANITARY FLUID HANDLING PRODUCTS

DIXON
SANITARY

DS617



DS61



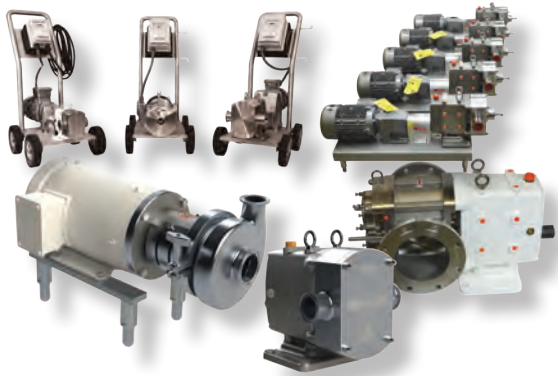
DIXONVALVE.COM

GOODYEAR
RUBBER PRODUCTS, INC.

727-342-5088

You can also email us at
GRP@goodyearrubberproducts.com

Pumps



A

Sanitary Valves



B

Fluid Handling Accessories



E

Fittings



F

Cam and Groove



Industrial Valves



Actuation



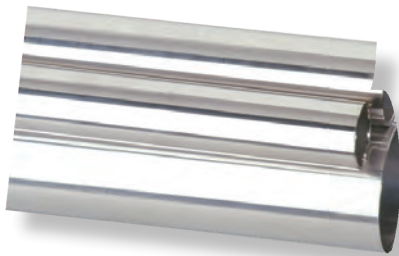
C

Strainers



D

Tubing and Accessories



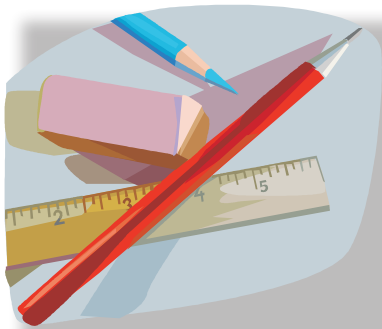
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Instrumentation



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Technical Information



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Dixon Sanitary Quality: maintaining the standards







3-A Sanitary Standards, Inc. (3-A SSI) is a non-profit association representing equipment manufacturers, processors, regulatory sanitarians and other public health professionals. Through many decades of cooperation, these groups have established a comprehensive inventory of 3-A Sanitary Standards and 3-A Accepted Practices now known around the world for dairy and food processing equipment and systems.

Dixon Sanitary has earned its  symbols through the  Third Party Verification (TPV) program, requiring a professional assessment rather than voluntary compliance, making certain each product conforms in all respects to the published standards. The  Standards are accepted by USDA and FDA.

Dixon Sanitary holds the following  certification:

- Dixon Sanitary Fittings including BPE meet  Sanitary Standards for Sanitary Fittings, Number 63-03 (Authorization number 621).
- Dixon Sanitary Check Valves meet  Sanitary Standards for Vacuum Breakers and Check Valves, Number 58-00 (Authorization number 1447).
- Dixon Sanitary Pumps meet  Sanitary Standards for Centrifugal Pumps, Number 02-10 (Authorization number 1537).
- Dixon Sanitary Filter/Strainers meet  Sanitary Standards for Filters Using Single Service Media, Number 10-04 (Authorization number 1446).
- Dixon Sanitary Seat Valves meet  Sanitary Standards for Compression - Type Valves, Number 53-06 (Authorization number 1655)

We carry  material from other suppliers who have also earned their  authorizations through the TPV Program:

- United (Authorization 331) Metal Tubing meets  Sanitary Standards for Metal Tubing, Number 33-02.
- CSE (Authorization 850) Gauges meet  Sanitary Standards for Sensors and Sensor Fittings and Connections, Number 74-03.
- JEC (Authorization 1397) Centrifugal and Positive Rotary Pumps meets  Sanitary Standards for Centrifugal and Positive Rotary Pumps Number 02-11.
- Rieger (Authorization 1631) Double-Seat Mixproof Valves meets  Sanitary Standards for Double-Seat Mixproof Valves, Number 85-03.
- Rieger (Authorization 1547) Compression-Type Valves meets  Sanitary Standards for Compression Type-Valves, Number 53-06.
- SED Flow Control (Authorization 1300) Diaphragm-Type Valves meets  Sanitary Standards for Diaphragm-type Valves, Number 54-02.

Visit dixonvalve.com, to download certificates in PDF format or call Dixon Sanitary at 800.789.1718.

Positive Displacement Pumps A-4 to A-7

- JRZL series A-4 to A-6
- JRZF series A-7
- JRZW series A-7
- JRZA series A-7

Centrifugal Pumps A-8 to A-9

- BC/BP series A-8
- ExD series A-9

Pump services and mounting options A-10

JRZL - Series Rotary Lobe Pumps

Applications:

- food processing, dairy, beverage, pharmaceutical, personal care and industrial markets

Materials:

- product contact: 316L stainless steel
- elastomers: EPDM (standard), Buna and FKM
- stainless steel gear box standard except 400 series - white epoxy painted cast iron

Features:

- front loading seal options:
 - single(standard)and double mechanical seals, TC vs TC (standard)
 - single and double O-ring seals
 - triple lip seal
 - flush option available on all seal types
- rotors:
 - bi-wing (standard)
 - single wing
 - bi-lobe
 - tri-lobe
 - multi-lobe
 - heli-lobe
 - hot clearance for temperatures above **248°F (120°C)**
 - viscosity range: 0 - 1,000,000 cP
- connection: clamp (standard), others available upon request
- repair kits available



Pumps

A

Port Size	Gal / Rev	PSI	Model
1"	0.005	300	JRZL 105
1"	0.01	300	JRZL 110
1½"	0.03	175	JRZL 115
2"	0.06	115	JRZL 120
2"	0.11	175	JRZL220
2½"	0.16	115	JRZL225
3"	0.27	175	JRZL330
4"	0.38	115	JRZL340
4"	0.60	175	JRZL440
5"	0.88	115	JRZL450

Self Contained Flushing System



Features:

- no additional piping needed
- easy maintenance
- available for all JRZL-Series pumps with either glass or acrylic chambers

JRZL - Series Rotary Lobes

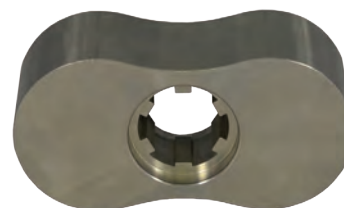
Pumps



Bi-wing



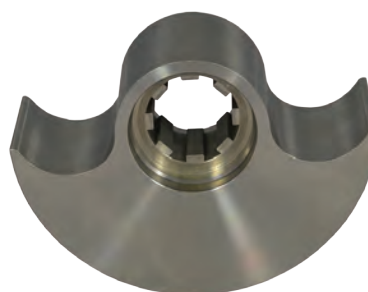
Heli-lobe



Bi-lobe



Tri-lobe



Single-wing

Maximum Speed (RPM)

Model	Bi-wing	Heli-lobe ¹	Bi-lobe	Tri-lobe	Single-wing	Multi-lobe
JRZL105	1000	1600	800	800	100	1000
JRZL110	1000	1600	800	800	100	1000
JRZL115	1000	1600	800	800	100	1000
JRZL120	800	1600	800	800	100	800
JRZL220	700	1400	700	700	100	400
JRZL225	700	1400	700	700	100	400
JRZL330	600	1200	600	600	100	NA
JRZL340	600	1200	600	600	100	NA
JRZL440	500	1000	500	500	100	NA
JRZL450	500	1000	500	500	100	NA

¹ Pulsation free heli-lobe rotors give the pump increased capacity through higher speed limits

JRZL - Series Rotary Lobe Pump Options

**Thermal Jacket Pumps**

Designed for products that require temperature control such as sugars, chocolate, corn syrup and brewer's yeast with easy attachment to pump front cover and/or casing.

**Rectangular Inlet**

Enlarged rectangular inlet allows highly viscous products such as semi-solid pastes or mixtures containing semi-solid pieces to be pumped.

**Pressure Relief Valve**

The pressure relief valve protects the system from pressure peaks or restrictions in the discharge, providing a pressure relief valve loop from discharge to the suction areas up to **145 PSI**.

**Ultra Clean Pumps**

Fully self-draining pump head and external rotor fixing can eliminate any contaminations and internal crevices. Excellent for sterile pharmaceuticals, ultra-hygienic food processing and aseptic manufacturing. Available in all sizes.

**High Pressure Pumps**

High pressure pumps have a front bearing cover to support shafts on front and back position. The well-balanced shaft design can handle pressures up to **435 PSI** without shaft deflection.

**Acculab**

Specially designed for superior metering accuracy with multi-lobe rotors or spur gear rotors which allow minimum pulsation, precise volumetric dosing and packaging, lab and pilot plants or manufacturing applications as well as general fluid transfer.

JRZF 500 - Series Rotary Lobe Pumps

Materials:

- product contact: 316L stainless steel
- elastomers: EPDM (standard) and FKM
- gear box: white epoxy painted cast iron

Features:

- front loading seal options: single (standard) & double mechanical seals, TC vs TC (standard)
- rotor: heli-lobe
- connection: flanged

Port Size	Gal / Rev	PSI	Max. Speed RPM	Model
8"	1.85	435	500	JRZF580
10"	2.64	435	500	JRZF5100
12"	3.17	435	500	JRZF5120



JRZF5100



JRZF580



JRZW 120 Series Rotary Lobe Pump - The Wine Pump

Applications:

- must and lees
- transfer
- bottling

Size:

- 2" clamp

Materials:

- 316L
- heli-lobe rotor: EPDM rubber
- gear box: white epoxy painted cast iron
- elastomers: EPDM (standard) & FKM

Features:

Wine Pump

- flow and pressure: maximum flow: **66 GPM**, maximum working pressure: **87 PSI**
- single mechanical seal (standard) TC vs TC
- double mechanical seal
- triple lip-seal with ceramic coated sleeve

Optional Pump Cart

- pumps can be mounted on a cart with flat free wheels or casters
- Nord adjustable speed gearmotor is standard
- complete range of VFD options available



JRZA Acculab Series Rotary Lobe Pump

Applications:

- designed for superior metering accuracy with minimum pulsation
- precise volumetric dosing and packaging
- lab and pilot plants
- general fluid transfer

Materials:

- 316L stainless steel
- gear box: stainless steel

Features:

- rotor information: multi-lobe rotor
- viscosity range: up to 100,000 cPs
- noise level: 60 ~ 80 dB
- seal options: single mechanical seal (standard) TC vs TC and double mechanical seal
- maximum displacement: 3.5 gpm @ 900 rpm (water at **0 PSI**)



pump shown with integral gear motor

BC/BP Series Sanitary Centrifugal Pump

**Sizes:**

- inlet: 1½" to 6"
- outlet: 1½" to 4"

Materials:

- product contact: 316L stainless steel
- adapter/guard set: 304 stainless steel
- optional leg kit: 304 stainless steel
- rotary seal: carbon and silicon carbide
- 'DG' seal seat material: silicon carbide, ceramic and tungsten carbide
- elastomers: Buna, EPDM, silicone and FKM

Features:

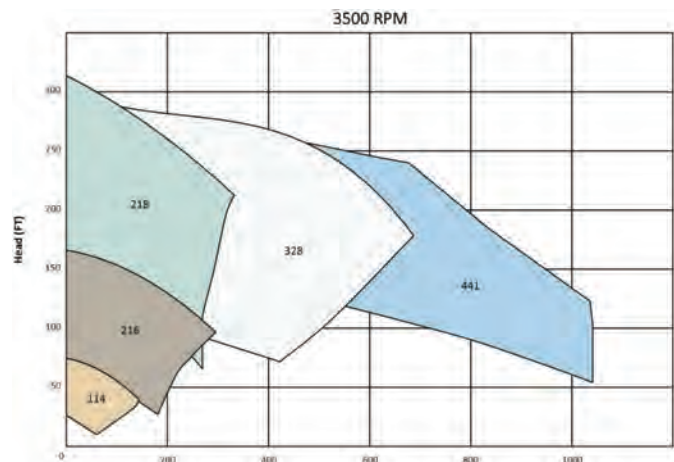
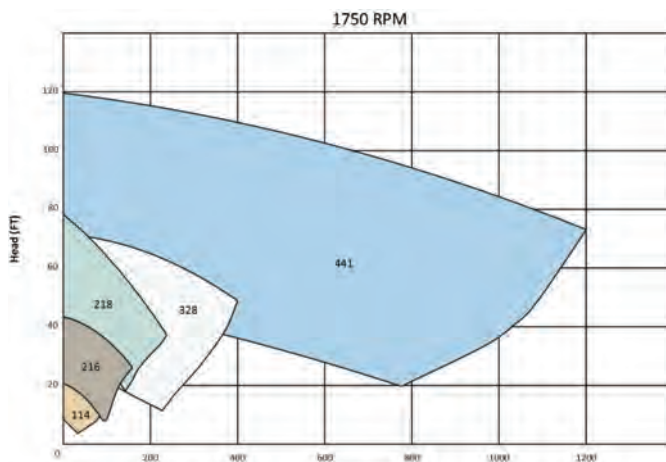
- seal types: externally balanced 'D' and 'DG' with clamped in seat, F flush seal (cascade)
- finish: sanitary polish 32R_a
- optional casing drain
- optional hot oil shaft configuration
- BC-Series features impeller retainer
- BP-Series features threaded impeller nut
- connections: clamp (standard), others available upon request
- nominal capacity: up to 1200 GPM
- nominal speed: up to 3450 RPM – 60 Hz

Specifications:

- temperature: 32°F to 212°F (0°C to 100°C), call Dixon Sanitary 800.789.1718 for other temperatures
- motors: standard C-Face, 1750 and 3450 RPM, TEFC, washdown, foot mounted, additional motor types available upon request
- mounting: wet end mounted to a C-Face motor
- mounting options: adjustable legs, base plate and pump cart

Family of Curves
Specifications:

- based on H₂O at 70°F (21°C)
- frequency: 60HZ



ExD Series Sanitary Centrifugal Pump

Sizes:

- inlet: 1" to 4"
- outlet: 1" to 2½"

Materials:

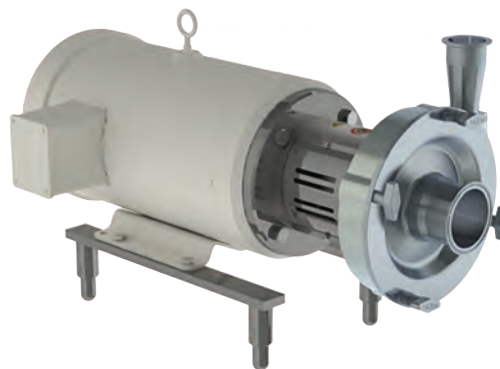
- product contact: 316L stainless steel and fully traceable
- non-product contact: 304 stainless steel
- stationary seal seat material: silicon carbide, ceramic or tungsten carbide
- rotary seal material: carbon or silicon carbide
- elastomers: Buna, EPDM, silicone or FKM
- optional leg kit: 304 stainless steel

Features:

- available in 4 sizes
- pump casing and front cover precision machined from solid bar
- modular 2-piece adapter with interchangeable Nema motor flanges
- slotted adapter allows casing outlet to be rotated from 90° to 180° without disassembly
- modular stub shaft design with interchangeable Nema motor shaft sleeves
- unique stub shaft leak chamber allows for immediate external identification of seal wear
- mechanical seal components interchangeable with BC-series seals
- compact and maintenance friendly adapter guard set
- efficient semi-open impeller design
- seal type: externally balanced single mechanical seal
- finish: sanitary polish 32R_a (other finishes available)
- pump casing machined with external flats for easy casing drain addition
- connections: clamp (standard), others available upon request
- nominal capacity: up to 500 GPM
- maximum head: 225 feet
- nominal speed: up to 3450 RPM – 60 Hz

Specifications:

- temperature: **32°F to 212°F (0°C to 100°C)**, call Dixon Sanitary 800.789.1718 for other temperatures
- motor: standard C-Face, 1750 and 3450 RPM, TEFC, washdown, foot mounted, additional motor types available upon request
- mounting: wet end mounted to a C-Face motor
- mounting options: adjustable legs or pump cart



Dixon Sanitary Pump Services and Mounting Options

*Service**Solutions**Selection*

Pumps

A

In-House Application Engineering Services:

- pump sizing and selection
- troubleshooting support
- CAD drawings and 3D models

In-House Base Mount and Cart Packages:

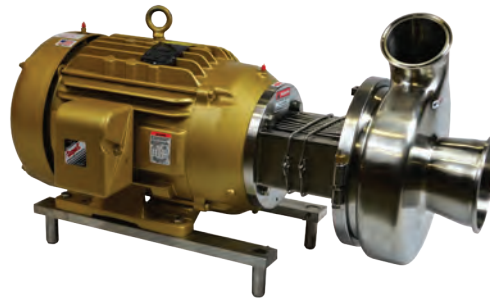
- custom engineered packages
- made and assembled in the USA
- many options available



sanitary pump carts for both positive displacement and centrifugal pumps



JRZL pumps mounted on stainless steel bases with adjustable legs



BC/BP pump with optional adjustable leg kit

SV Series Valves B-2 to B-4

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Aseptic.....	B-4

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Sanitary Valves



SV Series Single Seat Hygienic Valve

The SV series single seat valves offer a true hygienic design to meet your most demanding process applications. The SV series valves are offered in 316L stainless steel with a variety of body configurations, seat and stem seal materials to fit your specific needs. This valve series is designed to shut off or divert the flow in your process either remotely by using air or locally using a manual operating device. The rugged design of the actuator and valve body allow the valve to stand up to the harsh environments often found in the sanitary industry.

Sizes:

- 1" thru 4"

Materials:

- body: 316L stainless steel
- actuator: 304 stainless steel
- manual operating device: 304 stainless steel
- stem seal: Buna, EPDM, FKM
- seat seal: Buna, EPDM, FKM, PTFE

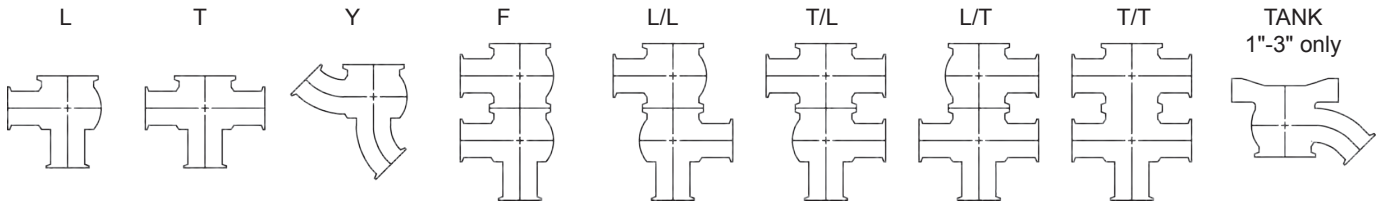
Features:

- options: manual, actuated (spring return, double acting), control tops
- temperature range: **-50°F to 212°F (-45°C to 100°C)**
- surface finish: $<32R_a$ standard
- air pressure: **80 to 120 PSI**
- air connections: 1/8" FNPT



B

Body Configurations



SV Series Long Stroke Valves

**Applications:**

- Used in dairy, beverage and food plants where the product contains particles, has high viscosity, or pressure differential is an issue

Sizes:

- 1" thru 4"

Materials:

- product contact surfaces: 316L, 32R_a, optional surface finishes available
- non product contact: 304, 68R_a
- O-rings: EPDM (FDA) and FKM (others available upon request)

Features:

- valve body from solid bar; no dead space; drainable when mounted in various positions
- high-grade inner surfaces; no dome or sump in product space
- change of seals without special tools
- modular assembly
- O.D.-Tube (DIN 11866 C)

Specifications:

- maximum standard operating temperature: **266°F (130°C)**
- sterilization temperature: **300°F (149°C)**¹
- standard pressure: maximum **87 PSI (6 bar)**
- actuator air pressure: minimum **87 PSI (6 bar)**, maximum **145 PSI (10 bar)**

¹approximately 20 minutes dependent upon operating conditions



SV series long stroke shut off valve



SV series long stroke divert valve



SV Series Aseptic Valves

53-06

Sanitary Valves

**Sizes:**

- 1" thru 4"

Materials:

- product contact surfaces: 316L, 32R_a, optional surface finishes available
- non product contact: 1.4301/AISI304, 68R_a

Features:

- solid housing
- no dead spaces
- fully drainable
- many built-in positions possible
- complete separation from environment
- no dome or sump in product space
- change of seals without special tools
- long life PTFE bellows
- low spare parts costs
- O.D.-Tube (DIN 11866 C)

Specifications:

- maximum standard operating temperature: **250°F (121°C)**
- sterilization temperature: **275°F (135°C)**¹
- closure pressure: max. **87 PSI (6 bar)**
- actuator air pressure: minimum **87 PSI (6 bar)**, maximum. **145 PSI (10 bar)**

¹approximately 20 minutes dependent upon operating conditions

MP Series Mix Proof Valves



RIEGER

Sanitary Valves

B

Applications:

- in food and beverage industries when the need to separate non-compatible liquids is required

Sizes:

- 1" thru 6"

Materials:

- product contact surfaces: 316L, 32R_a, optional surface finishes available
- o-rings: EPDM, others upon request
- non product contact: 304, 68R_a

Features:

- options:
 - Mix Proof Piggable Double Seal Valves
 - Mix Proof PMO (Pasteurized Milk Ordinance) Valves
- vacuum safe
- balanced valve discs
- radial sealing of both valve seats
- no impact between valve disc and body
- no need of impact buffering cylinder
- no soiling behind the O-rings
- waterhammer safe up to **435 PSI (30 bar)**
- change of seals without special tools
- service without danger (spring in cage)
- service possible without compressed air
- lower requirement for controlled air pressure
- valve insert completely removable
- easy cleaning by lifting of both discs
- standard O-rings
- standard-actuator with lift function
- only 4 seals
- K_v-value cleaning 1,4 m³/h
- low pressure loss: **0,8 PSI**

Specifications:

- maximum standard operating temperature: **266°F (130°C)**
- sterilization temperature: **300°F (149°C)**¹
- closure: maximum **145 PSI (10 bar)**
- actuator air pressure: minimum **87 PSI (6 bar)**, maximum **145 PSI (10 bar)**

¹approximately 20 minutes dependent upon operating conditions




RIEGER
A
3
 53-06

FC Series Hygienic Control Valves

Sanitary Valves

B


Applications:

- the process control head is fitted for the controlling of pneumatically operated process valves
- used in dairy, food & beverage, pharmaceutical and chemical industries

Sizes:

- 1" thru 4"

Materials:

- product contact surfaces: 316L, 32R_a, optional surface finishes available
- non product contact: 304, 68R_a
- O-rings and profile washer: EPDM (other materials upon request)

Features:

- valve body from solid bar
- no dead space
- drainable when mounted in various positions
- high-grade inner surfaces
- no dome or sump in product space
- change of seals without special tools
- optimum cleanability
- modular assembly system
- low spare part costs
- O.D.-Tube (DIN 11866 C)

Specifications:

- maximum standard operating temperature: **266°F (130°C)**
- sterilization temperature: **300°F (149°C)**¹
- standard pressure: maximum **87 PSI (6 bar)**
- actuator air pressure: minimum **87 PSI (6 bar)**, maximum **145 PSI (10 bar)**
- controlled air pressure: maximum **145 PSI (10 bar)**

¹approximately 20 minutes dependent upon operating conditions

FC Series Aseptic Control Valves

**Applications:**

- The process control head is fitted for the controlling of pneumatically operated process valves. The design of the valve body eliminates dead space, a prerequisite for sterile process engineering. When working with high sterilization temperatures this valve fulfills demands for operational security and reliable function.

Sizes:

- 1" thru 4"

Materials:

- product contact surfaces: 316L, 32R_a, optional surface finishes available
- non product contact: 304, 68R_a
- bellows: PTFE

Features:

- valve body made from solid bar
- no dead spaces
- drainable when mounted in various positions
- complete separation from environment
- no dome or sump in product space
- change of seals without special tools
- minimum 500,000 strokes
- optimum cleanability
- long life of the PTFE bellows
- low spare part costs
- O.D.-Tube (DIN 11866 C)

Specifications:

- maximum standard operating temperature: **250°F (121°C)**
- sterilization temperature: **275°F (135°C)**¹
- standard pressure: maximum **87 PSI (6 bar)**
- actuator air pressure: minimum **87 PSI (6 bar)**, maximum **145 PSI (10 bar)**



¹approximately 20 minutes dependent upon operating conditions

Characterized V Seat 2-Way Sanitary Stainless Steel Control Valves

Sanitary Valves



Sizes:

- ½" thru 4"

Features:

- compact design for areas with tight space restrictions
- full port design offer high flow capacity
- balanced encapsulated construction minimizes cold-flow of seats
- precise control
- bubble tight shut off
- interchangeable V port characterized seats
- precision stainless steel balls reduce torque and friction losses while extending seat life
- other characterized seats available
- blow-out proof stem
- live-loaded stem packing
- ISO 5211 mounting pad
- lock out, tag out
- ID polish is R_a 32 minimum

Specifications:

- maximum pressure rating: ½" - 2" **1000 PSI WOG**, 2½" - 4" **800 PSI WOG**

B

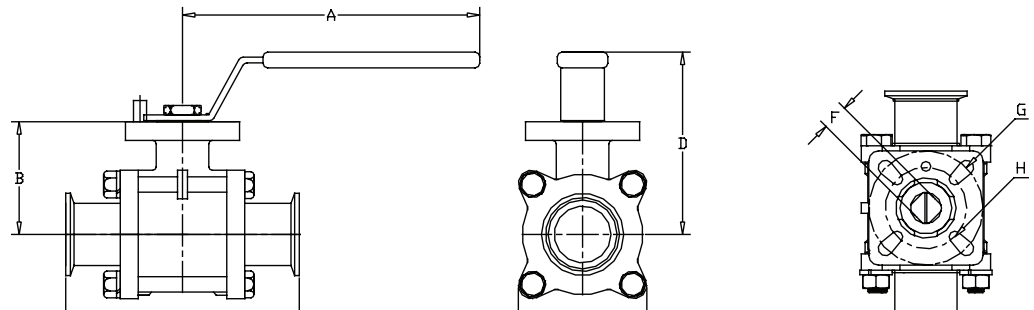


L = 60° V seat



M = 30° V seat

Dimensions



Size	A	B	C	D	E	F (mm)	G	H	Part Number
½"	4.9	1.5	4.3	3.0	1.9	9	F04	F03	<i>BV2"L OR M"-050CC-A</i>
¾"	4.9	1.8	4.7	3.3	2.2	9	F04	F03	<i>BV2"L OR M"-075CC-A</i>
1"	5.6	2.1	4.9	3.6	2.4	11	F05	F04	<i>BV2"L OR M"-100CC-A</i>
1½"	9.5	2.7	5.6	4.4	3.1	14	F07	F05	<i>BV2"L OR M"-150CC-A</i>
2"	9.5	3.1	6.4	4.8	3.7	14	F07	F05	<i>BV2"L OR M"-200CC-A</i>
2½"	18.0	3.8	7.8	5.2	4.8	17	F10	F07	<i>BV2"L OR M"-250CC-A</i>
3"	18.0	4.2	9.0	5.7	5.4	17	F10	F07	<i>BV2"L OR M"-300CC-A</i>
4"	18.0	5.3	9.5	6.8	8.8	22	F12	F10	<i>BV2"L OR M"-400CC-A</i>

Seat Material Codes

Code	Description	Food Grade Material
V	virgin PTFE	yes
G	RTFE	yes
C	25% carbon PTFE	no
S	stainless reinforced PTFE	yes
U	UHMW	yes

Dimensions are approximate. Engineering dimensions are available upon request.

High Purity BioPharm Aseptic Diaphragm Valves

Applications:

- pharmaceutical, bio-processing, cosmetics, food and beverage, fine chemicals and semi-conductor industries where aseptic and hygienic conditions are required
- product offering of standard 2-way valves, innovative custom fabrications and modular block body designs solve the more demanding process problems

Features:

- quick turn around
- 3D models
- application engineering service
- sterility, reduced contact surface and hold up volume, optimized drainability, elimination of cross contamination and customer-specific process designs
- processes: highly sterile media, ultra-pure water, WFI (Water for Injection), ultra-pure chemicals, intermediate and end products in the pharmaceutical and bio-processing industries



Bio Series 1/4" - 1/2"	Fractional 1/2" - 3/4"	Sterile Access and L Pattern Fabrications	Standard 1" - 4"	Zero Static Tees and U Bends	Multi-Port Divert Valves	Multi-Cluster Valve Assemblies

Bodies

Materials:

- 316L – manufactured to ASME BPE Table DT-3
- bodies: standard 316L, forged or machined

Features:

- full material traceability standard
- cast bodies are available when acceptable

Bonnets

Materials:

- stainless steel
- thermoplastic
- combination of both

Features:

- manual and actuated
- three different styles
 - manual hand wheel
 - piston actuator
 - diaphragm actuator



Diaphragms

**Materials:**

- EPDM
- modified PTFE (TFM)/EPDM

Approvals:

- all diaphragms are FDA Compliant and conform to USP Class VI

SPR Series Pressure Relief Valves



Sanitary Valves

Applications:

- suitable for liquids and gas

Materials:

- product contact surfaces: 316L, 32Ra, other surface finishes available
- non product contact: 304
- product contact O-ring: EPDM or FKM

Features:

- valve opens when the set pressure is reached to prevent excess pressure in piping or systems
- valve body made from solid bar
- patented squeeze clamp
- low spare part cost
- various pressure ranges
- standard connections clamp, others on request

Specifications:

- temperatures:
 - maximum standard operating temperature: **266°F (130°C)**
 - sterilization temperature: **300°F (149°C)** maximum 20 min
- pressure ranges: **0-50 PSI, 50-100 PSI, 100-300 PSI**



T body



Size Tube OD	Part Number	Body Style	End	Seat(*)	Spring Set Range PSI	Actuation
1.5"	<i>SPR-TC*1A150</i>	T-Body	Clamp	V = FKM E = EPDM	0-50	Manual
	<i>SPR-TC*2A150</i>				50-100	
	<i>SPR-TC*3A150</i>				100-300	
	<i>SPR-LC*1A150</i>	L-Body			0-50	
	<i>SPR-LC*2A150</i>				50-100	
	<i>SPR-LC*3A150</i>				100-300	
2"	<i>SPR-TC*1A200</i>	T-Body			0-50	
	<i>SPR-TC*2A200</i>				50-100	
	<i>SPR-TC*3A200</i>				100-300	
	<i>SPR-LC*1A200</i>	L-Body			0-50	
	<i>SPR-LC*2A200</i>				50-100	
	<i>SPR-LC*3A200</i>				100-300	



L body



SRV Series Manual Control Valve

**Applications:**

- Safety valve prevents excess pressure of gaseous media in pipelines and vessels. The set pressure is always higher than the operating pressure. As soon as the pressure is reached, the valve opens against the force of the spring. The pressure excess is relieved as soon as the pressure is 10% higher than the set pressure.

Sizes:

- 1" thru 4"

Materials:

- product contact surfaces: 316L, 32R_a, optional surface finishes available
- non product contact: 304, 68R_a
- O-rings: EPDM or FKM

Features:

- valve body made from solid bar
- no dead spaces
- drainable
- high-grade inner surfaces
- no sump, no dome
- change of seals without special tools
- safety: closed spring cap
- optimum cleanability
- modular assembly systems
- connections suitable for orbital welding
- low spare part cost
- adjustable set pressure
- weld ends combined with concentrically reduced inch clamp ferrules

Specifications:

- maximum standard operating temperature: **266°F (130°C)**
- sterilization temperature: **300°F (149°C)**¹
- set pressure: **22 PSI to 116 PSI** resp. **29 PSI to 116 PSI**
- controlled air pressure: minimum **87 PSI**, maximum **145 PSI**
- 3A not available

¹approximately 20 minutes dependent upon operating conditions

SOV Series Manual Control Valve

**Applications:**

- Valve opens when the set pressure is reached to prevent excess pressure in piping or systems. The lever allows lifting by hand for seat cleaning purposes. They are suitable for liquids, steam and gas.

Sizes:

- 1" thru 4"

Materials:

- product contact surfaces: 316L, 32R_a, optional surface finishes available
- non product contact: 304, 68R_a
- O-rings: EPDM or FKM

Features:

- valve body made from solid bar
- no dead spaces
- drainable when mounted in various positions
- high-grade inner surfaces
- no sump, no dome
- clamp union between housing and actuator
- optimum cleanability
- low spare part cost
- O.D.-Tube (DIN 11866 C)

Specifications:

- maximum standard operating temperature: **266°F (130°C)**
- sterilization temperature: **300°F (149°C)**¹
- set pressure: **8 PSI to 87 PSI (0.5 bar to 6 bar)** higher pressures on request
- 3A not available

¹approximately 20 minutes dependent upon operating conditions





SOV Series Pneumatic Control Valve

Sanitary Valves

B

**Applications:**

- Valve opens when the set pressure is reached to prevent excess pressure in piping or systems. They are suitable for liquids, steam and gas.

Sizes:

- 1" thru 3"

Material:

- product contact surfaces: 316L, 32R_a, optional surface finishes available
- non product contact: 340, 68R_a
- hygienic EPDM O-rings
- aseptic PTFE Bellows

Features:

- valve body made from solid bar
- no dead spaces
- drainable when mounted in various positions
- high-grade inner surfaces
- no sump, no dome
- clamp union between valve body and actuator
- modular assembly system – easy change between hygienic and aseptic type
- standards seals
- O.D.-Tube (DIN 11866 C)

Specifications:

- maximum standard operating temperature EPDM: **266°F (130°C)**
- maximum standard operating temperature PTFE: **250°F (121°C)**
- sterilization temperature EPDM: **300°F (149°C)**¹
- sterilization temperature PTFE: **275°F (135°C)**¹
- possible set pressure for O-ring version: **8 PSI to 87 PSI (0.5 bar to 6 bar)**
22 PSI to 87 PSI (1.5 bar to 6 bar)
- PTFE-bellows version pressure range depends on spring control air pressure:
minimum **87 PSI**, maximum **145 PSI** (minimum **6 bar**, maximum **10 bar**)

¹approximately 20 minutes dependent upon operating conditions

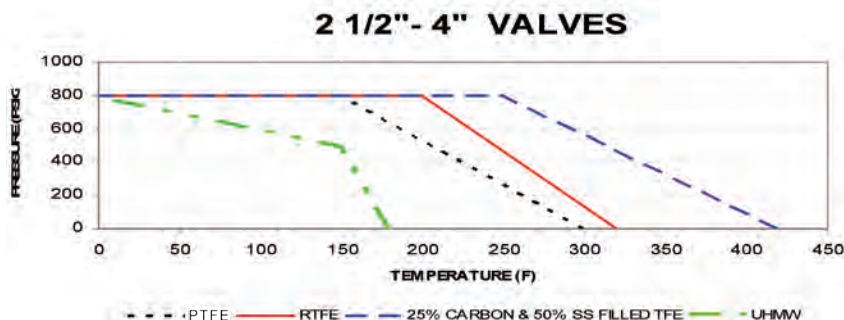
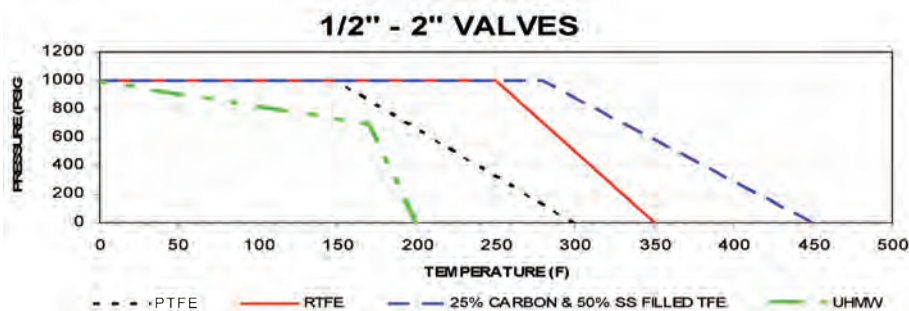
Technical Information

Seal Materials

Code	Designation	Material	Applications
V	Virgin PTFE	Virgin polytetrafluoroethylene	100% PTFE- Our standard seat material. Ideal for most sanitary services. Specified for applications requiring a low co-efficient of friction. Food Grade Material
G	RTFE	15% glass reinforced tetrafluoroethylene	15% glass filled + 85% PTFE - Slightly higher temperature and pressure rating than PTFE. Specified for applications requiring higher cycle life than PTFE. Food Grade Material
C	25% Carbon PTFE	25% carbon reinforced tetrafluoroethylene	25% carbon +75% PTFE - Specified for higher temperature pressure applications. Ideal for steam and thermal fluid applications. Higher cycle life than RTFE.
S	Stainless Steel PTFE	50% stainless steel filled tetrafluoroethylene	50% stainless steel + 50% PTFE - Specified for higher temperature pressure applications in a sanitary process. Food Grade Material
U	UHMW	Ultra-high molecular weight polyethylene	Specified for its low modulus of abrasion and minimal property degradation when exposed to moderate levels of radiation. Ideal for applications where fluorocarbons are not acceptable. Food Grade Material



Pressure Temperature Charts



BV2C Series 2-Way Encapsulated Sanitary
3 Piece Stainless Steel Ball Valves

Sanitary Valves



Sizes:

- ½" thru 4"

Materials:

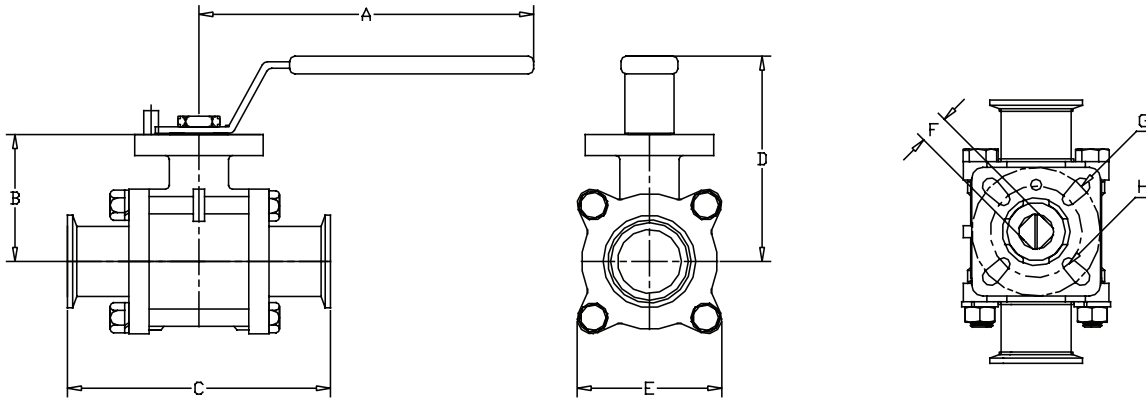
- body, ends and ball: CF8M stainless
- seats: virgin PTFE, 15% glass reinforced RTFE, 25% carbon reinforced PTFE, 50% stainless steel reinforced PTFE or UHMW

Features:

- live-loaded stem packing
- precision stainless steel balls reduce torque and friction losses while extending seat life
- integral ISO 5211 mounting pad
- ID polish is R_a 32 minimum
- lockable handle can prevent accidental actuation
- standard internal entry blow out proof stem design
- full port design matches ball and seat ports to tube ID for lower pressure drop and less turbulent flow
- compact design for areas with tight space restrictions
- fully encapsulated construction produces bubble tight seal
- identification tagging available
- balanced encapsulated construction minimizes cold flow

Specifications:

- maximum pressure rating: ½" - 2" **1000 PSI WOG**, 2½" - 4" **800 PSI WOG**



Size	A	B	C	D	E	F (mm)	G	H
½"	4.9	1.5	4.3	3.0	1.9	9	F04	F03
¾"	4.9	1.8	4.7	3.3	2.2	9	F04	F03
1"	5.5	2.1	4.9	3.6	2.4	11	F05	F04
1½"	9.5	2.7	5.6	4.4	3.2	14	F07	F05
2"	9.5	3.1	6.4	4.8	3.8	14	F07	F05
2½"	17.6	3.8	7.8	5.2	4.9	17	F10	F07
3"	18.0	4.2	9.0	5.7	5.4	17	F10	F07
4"	18.2	5.3	9.6	6.8	8.8	22	F12	F10

Dimensions are approximate. Engineering dimensions are available upon request.
Specifications are subject to change without notice.

Handle Kits

Size	Part Number	Kit contains:
½" - ¾"	BV-23-HA050-075	(1) lock washer
1"	BV-23-HA100	(1) handle
1½" - 2"	BV-23-HA150-200	(1) nut
2½"	BV-23-HA250	

Repair Kits

Kit contains:
(1) O-ring
(1) thrust washer
(3) stem packings
(2) encapsulated seats
(2) body seals

BV2C Series 2-Way Encapsulated Sanitary 3 Piece Stainless Steel Ball Valves

Sanitary Valves

Size	Ball Valve Part Number	Repair Kit Part Number	Break Torque (in-lb)	Code ID	Seat Material
½"	<i>BV2CV-050CC-A</i>	<i>BV-2C-VK050</i>	31	V	Virgin PTFE
¾"	<i>BV2CV-075CC-A</i>	<i>BV-2C-VK075</i>	47		
1"	<i>BV2CV-100CC-A</i>	<i>BV-2C-VK100</i>	105		
1½"	<i>BV2CV-150CC-A</i>	<i>BV-2C-VK150</i>	238		
2"	<i>BV2CV-200CC-A</i>	<i>BV-2C-VK200</i>	256		
2½"	<i>BV2CV-250CC-A</i>	<i>BV-2C-VK250</i>	900		
3"	<i>BV2CV-300CC-A</i>	<i>BV-2C-VK300</i>	1650		
4"	<i>BV2CV-400CC-A</i>	<i>BV-2C-VK400</i>	2027		
½"	<i>BV2CG-050CC-A</i>	<i>BV-2C-GK050</i>	34	G	15% glass reinforced RTFE
¾"	<i>BV2CG-075CC-A</i>	<i>BV-2C-GK075</i>	51		
1"	<i>BV2CG-100CC-A</i>	<i>BV-2C-GK100</i>	116		
1½"	<i>BV2CG-150CC-A</i>	<i>BV-2C-GK150</i>	261		
2"	<i>BV2CG-200CC-A</i>	<i>BV-2C-GK200</i>	281		
2½"	<i>BV2CG-250CC-A</i>	<i>BV-2C-GK250</i>	990		
3"	<i>BV2CG-300CC-A</i>	<i>BV-2C-GK300</i>	1815		
4"	<i>BV2CG-400CC-A</i>	<i>BV-2C-GK400</i>	2229		
½"	<i>BV2CC-050CC-A</i>	<i>BV-2C-CK050</i>	37	C	25% carbon reinforced PTFE
¾"	<i>BV2CC-075CC-A</i>	<i>BV-2C-CK075</i>	57		
1"	<i>BV2CC-100CC-A</i>	<i>BV-2C-CK100</i>	127		
1½"	<i>BV2CC-150CC-A</i>	<i>BV-2C-CK150</i>	287		
2"	<i>BV2CC-200CC-A</i>	<i>BV-2C-CK200</i>	309		
2½"	<i>BV2CC-250CC-A</i>	<i>BV-2C-CK250</i>	1089		
3"	<i>BV2CC-300CC-A</i>	<i>BV-2C-CK300</i>	1997		
4"	<i>BV2CC-400CC-A</i>	<i>BV-2C-CK400</i>	2452		
½"	<i>BV2CS-050CC-A</i>	<i>BV-2C-SK050</i>	41	S	50% stainless steel reinforced PTFE
¾"	<i>BV2CS-075CC-A</i>	<i>BV-2C-SK075</i>	62		
1"	<i>BV2CS-100CC-A</i>	<i>BV-2C-SK100</i>	140		
1½"	<i>BV2CS-150CC-A</i>	<i>BV-2C-SK150</i>	316		
2"	<i>BV2CS-200CC-A</i>	<i>BV-2C-SK200</i>	340		
2½"	<i>BV2CS-250CC-A</i>	<i>BV-2C-SK250</i>	1198		
3"	<i>BV2CS-300CC-A</i>	<i>BV-2C-SK300</i>	2196		
4"	<i>BV2CS-400CC-A</i>	<i>BV-2C-SK400</i>	2698		
½"	<i>BV2CU-050CC-A</i>	<i>BV-2C-UK050</i>	31	U	UHMW
¾"	<i>BV2CU-075CC-A</i>	<i>BV-2C-UK075</i>	47		
1"	<i>BV2CU-100CC-A</i>	<i>BV-2C-UK100</i>	105		
1½"	<i>BV2CU-150CC-A</i>	<i>BV-2C-UK150</i>	238		
2"	<i>BV2CU-200CC-A</i>	<i>BV-2C-UK200</i>	256		
2½"	<i>BV2CU-250CC-A</i>	<i>BV-2C-UK250</i>	900		
3"	<i>BV2CU-300CC-A</i>	<i>BV-2C-UK300</i>	1650		
4"	<i>BV2CU-400CC-A</i>	<i>BV-2C-UK400</i>	2027		

B

BV3/4 Series Multi-port Sanitary Stainless Steel Ball Valves

Sanitary Valves



Sizes:

- ½" thru 4"

Materials:

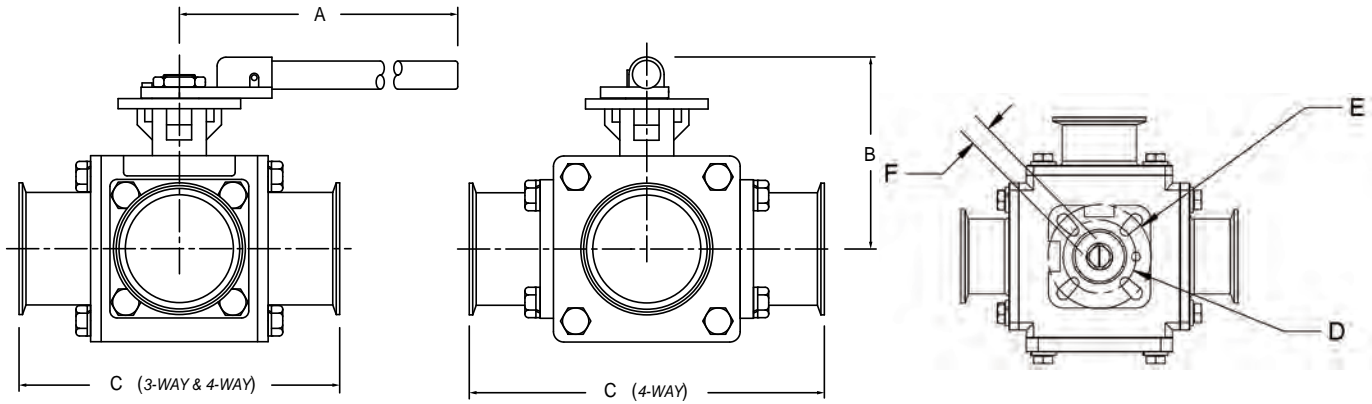
- body, ends and ball: CF8M stainless
- seats: virgin PTFE, 15% glass reinforced RTFE, 25% carbon reinforced PTFE, 50% stainless steel reinforced PTFE or UHMW

Features:

- full port design on ½" thru 3"
- reduced port design on 4"
- blow-out proof stem
- live-loaded stem packing
- ISO 5211 mounting pad
- lock-out, tag out

Specifications:

- maximum pressure rating: ½" - 2" **1000 PSI WOG**, 2½" - 4" **800 PSI WOG**



Size	A (in.)	B (in.)	C (in.)	D	E	F (mm)	Weight (lbs.)
½"	4.9	1.7	4.6	F03	F04	9.0	3.6
¾"	5.0	1.9	5.0	F03	F04	9.0	4.3
1"	5.3	2.3	6.0	F04	F05	11.0	6.8
1½"	9.5	2.9	6.9	F05	F07	14.0	12.6
2"	9.5	3.2	7.5	F05	F07	14.0	21.6
2½"	18.0	3.9	8.4	F07	F10	17.0	33.7
3"	18.3	4.9	9.6	F10	F12	22.0	56.4
4"	18.3	5.4	11.4	F10	F12	22.0	85.4

Dimensions are approximate. Engineering dimensions are available upon request.
Specifications are subject to change without notice.

Handle Kits

Size	Part Number	Kit contains:
½" - ¾"	BV-23-HA050-075	(1) lock washer
1"	BV-23-HA100	(1) handle
1½" - 2"	BV-23-HA150-200	(1) nut
2½"	BV-23-HA250	
3" - 4"	BV-23-HA300-400	

Repair Kits

- Kit contains:
- (2) encapsulated seat small
 - (2) encapsulated seat large
 - (2) body seals
 - (1) thrust washer
 - (1) O-ring
 - (3) stem packings
 - (1) plug (3-way only)

BV3/4 Series Multi-port Sanitary Stainless Steel Ball Valves

Size	"L" port Ball Valve Part Number	"T" port Ball Valve Part Number	Repair Kit Part Number	"L" Port Break Torque (in-lb)	"T" Port Break Torque (in-lb)	Code ID	Seat Material
1/2"	<i>BV3SVLF050C-A</i>	<i>BV3SVTF050C-A</i>	<i>BV-3SVFRK050</i>	65	44	V	Virgin PTFE
3/4"	<i>BV3SVLF075C-A</i>	<i>BV3SVTF075C-A</i>	<i>BV-3SVFRK075</i>	76	76		
1"	<i>BV3SVLF100C-A</i>	<i>BV3SVTF100C-A</i>	<i>BV-3SVFRK100</i>	171	171		
1 1/2"	<i>BV3SVLF150C-A</i>	<i>BV3SVTF150C-A</i>	<i>BV-3SVFRK150</i>	356	297		
2"	<i>BV3SVLF200C-A</i>	<i>BV3SVTF200C-A</i>	<i>BV-3SVFRK200</i>	553	553		
2 1/2"	<i>BV3SVLF250C-A</i>	<i>BV3SVTF250C-A</i>	<i>BV-3SVFRK250</i>	1114	1114		
3"	<i>BV3SVLF300C-A</i>	<i>BV3SVTF300C-A</i>	<i>BV-3SVFRK300</i>	1875	1400		
4"	<i>BV3SVLR400C-A</i>	<i>BV3SVTR400C-A</i>	<i>BV-3SVRRK400</i>	2241	2050		
1/2"	<i>BV3SGLF050C-A</i>	<i>BV3SGTF050C-A</i>	<i>BV-3SGRK050</i>	71	48	G	15% glass reinforced RTFE
3/4"	<i>BV3SGLF075C-A</i>	<i>BV3SGTF075C-A</i>	<i>BV-3SGRK075</i>	83	84		
1"	<i>BV3SGLF100C-A</i>	<i>BV3SGTF100C-A</i>	<i>BV-3SGRK100</i>	188	188		
1 1/2"	<i>BV3SGLF150C-A</i>	<i>BV3SGTF150C-A</i>	<i>BV-3SGRK150</i>	392	327		
2"	<i>BV3SGLF200C-A</i>	<i>BV3SGTF200C-A</i>	<i>BV-3SGRK200</i>	608	608		
2 1/2"	<i>BV3SGLF250C-A</i>	<i>BV3SGTF250C-A</i>	<i>BV-3SGRK250</i>	1226	1225		
3"	<i>BV3SGLF300C-A</i>	<i>BV3SGTF300C-A</i>	<i>BV-3SGRK300</i>	2063	1540		
4"	<i>BV3SGLR400C-A</i>	<i>BV3SGTR400C-A</i>	<i>BV-3SGRK400</i>	2465	2255		
1/2"	<i>BV3SCLF050C-A</i>	<i>BV3SCTF050C-A</i>	<i>BV-3SCRK050</i>	78	53	C	25% carbon reinforced PTFE
3/4"	<i>BV3SCLF075C-A</i>	<i>BV3SCTF075C-A</i>	<i>BV-3SCRK075</i>	91	92		
1"	<i>BV3SCLF100C-A</i>	<i>BV3SCTF100C-A</i>	<i>BV-3SCRK100</i>	207	207		
1 1/2"	<i>BV3SCLF150C-A</i>	<i>BV3SCTF150C-A</i>	<i>BV-3SCRK150</i>	431	359		
2"	<i>BV3SCLF200C-A</i>	<i>BV3SCTF200C-A</i>	<i>BV-3SCRK200</i>	669	669		
2 1/2"	<i>BV3SCLF250C-A</i>	<i>BV3SCTF250C-A</i>	<i>BV-3SCRK250</i>	1348	1348		
3"	<i>BV3SCLF300C-A</i>	<i>BV3SCTF300C-A</i>	<i>BV-3SCRK300</i>	2269	1694		
4"	<i>BV3SCLR400C-A</i>	<i>BV3SCTR400C-A</i>	<i>BV-3SCRK400</i>	2712	2481		
1/2"	<i>BV3SSLF050C-A</i>	<i>BV3SSTF050C-A</i>	<i>BV-3SSRK050</i>	86	59	S	50% stainless steel reinforced PTFE
3/4"	<i>BV3SSLF075C-A</i>	<i>BV3SSTF075C-A</i>	<i>BV-3SSRK075</i>	101	101		
1"	<i>BV3SSLF100C-A</i>	<i>BV3SSTF100C-A</i>	<i>BV-3SSRK100</i>	228	228		
1 1/2"	<i>BV3SSLF150C-A</i>	<i>BV3SSTF150C-A</i>	<i>BV-3SSRK150</i>	474	395		
2"	<i>BV3SSLF200C-A</i>	<i>BV3SSTF200C-A</i>	<i>BV-3SSRK200</i>	736	736		
2 1/2"	<i>BV3SSLF250C-A</i>	<i>BV3SSTF250C-A</i>	<i>BV-3SSRK250</i>	1483	1483		
3"	<i>BV3SSLF300C-A</i>	<i>BV3SSTF300C-A</i>	<i>BV-3SSRK300</i>	2496	1863		
4"	<i>BV3SSLR400C-A</i>	<i>BV3SSTR400C-A</i>	<i>BV-3SSRK400</i>	2983	2729		
1/2"	<i>BV3SULF050C-A</i>	<i>BV3SUTF050C-A</i>	<i>BV-3SURK050</i>	65	44	U	UHMW
3/4"	<i>BV3SULF075C-A</i>	<i>BV3SUTF075C-A</i>	<i>BV-3SURK075</i>	76	76		
1"	<i>BV3SULF100C-A</i>	<i>BV3SUTF100C-A</i>	<i>BV-3SURK100</i>	171	171		
1 1/2"	<i>BV3SULF150C-A</i>	<i>BV3SUTF150C-A</i>	<i>BV-3SURK150</i>	356	297		
2"	<i>BV3SULF200C-A</i>	<i>BV3SUTF200C-A</i>	<i>BV-3SURK200</i>	553	553		
2 1/2"	<i>BV3SULF250C-A</i>	<i>BV3SUTF250C-A</i>	<i>BV-3SURK250</i>	1114	1114		
3"	<i>BV3SULF300C-A</i>	<i>BV3SUTF300C-A</i>	<i>BV-3SURK300</i>	1875	1400		
4"	<i>BV3SULR400C-A</i>	<i>BV3SUTR400C-A</i>	<i>BV-3SURK400</i>	2241	2050		

Sanitary Valves

B

BV3/4 Series Multi-port Sanitary Stainless Steel Ball Valves

Sanitary Valves

Flow Paths

3-way 'L'-port
position A



3-way 'L'-port
position B



3-way 'L'-port
position C



3-way 'T'-port
position A



3-way 'T'-port
position B



3-way 'T'-port
position C



3-way 'T'-port
position D



4-way 'L'-port
position A



4-way 'L'-port
position B



4-way 'L'-port
position C



4-way 'L'-port
position D



4-way 'T'-port
position A



4-way 'T'-port
position B



4-way 'T'-port
position C



4-way 'T'-port
position D



BV2G Non-Encapsulated 2-way 3 Piece Stainless Steel Ball Valves

Sizes:

- ½" thru 4"

Materials:

- body, ends and ball: CF8M stainless
- seats: 15% glass reinforced PTFE

Features:

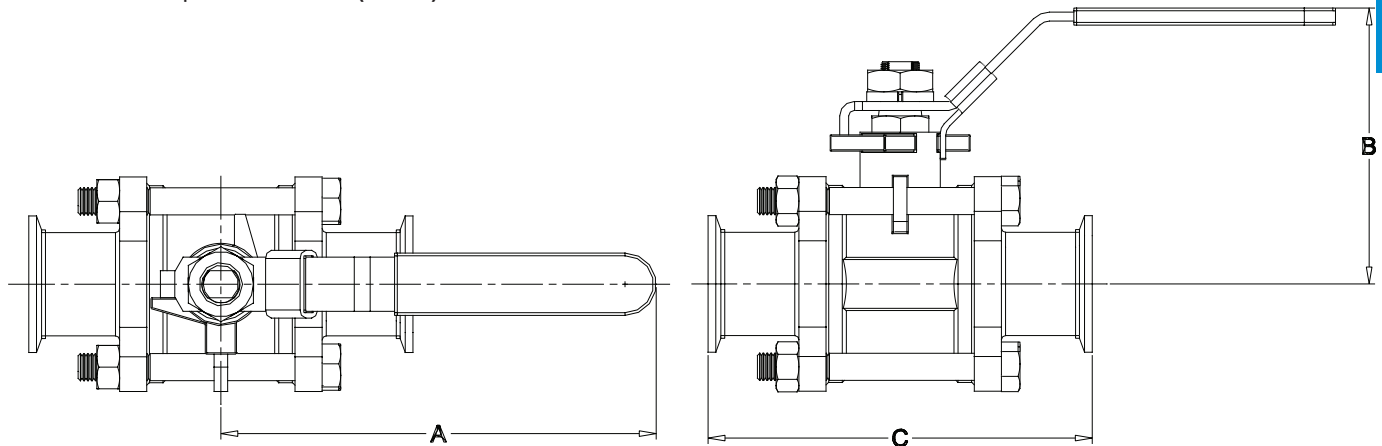
- blow-out proof stem
- live-loaded stem packing
- ID polish is R_a 32
- lockable handle

Specifications:

- maximum pressure rating: ½" - 2" **1000 PSI WOG**, 2½" - 4" **800 PSI WOG**
- maximum temperature: **300°F (149°C)**



Sanitary Valves



Size	A	B	C	316 Stainless Steel Part Number
½"	4.1	2.3	4.6	BV2GG-050CC-A
¾"	4.1	2.5	4.7	BV2GG-075CC-A
1"	5.0	2.8	4.9	BV2GG-100CC-A
1½"	6.1	3.5	5.6	BV2GG-150CC-A
2"	7.6	3.9	6.4	BV2GG-200CC-A
2½"	7.6	4.4	7.8	BV2GG-250CC-A
3"	10.9	4.9	9.0	BV2GG-300CC-A
4"	13.2	6.6	9.6	BV2GG-400CC-A

Dimensions are approximate. Engineering dimensions are available upon request.
Specifications are subject to change without notice.

Repair Kits

Repair kit contains:

- (2) RTFE seats
- (2) RTFE gaskets
- (1) RTFE thrust washer
- (3) RTFE stem packing

Size	Part Number
½"	BV-2G-GK050
¾"	BV-2G-GK075
1"	BV-2G-GK100
1½"	BV-2G-GK150
2"	BV-2G-GK200
2½"	BV-2G-GK250
3"	BV-2G-GK300
4"	BV-2G-GK400

B5101 Series Sanitary **Butterfly Valves**

Sanitary Valves



trigger handle

Sizes:

- ½" thru 8"

Materials:

- body and disc: 316L
- seat: EPDM, FKM, (6" EPDM and silicone, 8" EPDM only)

Features:

- low resistance to flow
- bi-directions flow
- gentle to media
- suitable for low and medium viscosity fluids
- can be serviced in the field
- self-draining
- various manual or automatic operators available
- optional wing nut kit is available for easy assembly and disassembly
- 100% hydraulic tested / 100% inspected

Specifications:

- vacuum rating: 0.4 inches Hg at **68°F (20°C)**
- operating temperature range: **15°F to 200°F (-9°C to 93°C)**



standard handle



infinite handle

B5101 Series Butterfly Valve with Pull Handle**Clamp End**

Size	316L stainless steel with Silicone seats	316L stainless steel with EPDM seats	316L stainless steel with FKM seats
½"	B5101S050CC-A	B5101E050CC-A	B5101V050CC-A
¾"	B5101S075CC-A	B5101E075CC-A	B5101V075CC-A
1"	B5101S100CC-A	B5101E100CC-A	B5101V100CC-A
1½"	B5101S150CC-A	B5101E150CC-A	B5101V150CC-A
2"	B5101S200CC-A	B5101E200CC-A	B5101V200CC-A
2½"	B5101S250CC-A	B5101E250CC-A	B5101V250CC-A
3"	B5101S300CC-A	B5101E300CC-A	B5101V300CC-A
4" ¹	B5101S400CC-A	B5101E400CC-A	B5101V400CC-A
6"	B5101S600CC-A	B5101E600CC-A	---
8"	---	B5107E800CC-A	---

¹ high pressure 4" butterfly is available, call Dixon Sanitary 800.789.1718 for more information

Note: Handle is not assembled when shipped. Please request handle to be assembled on the valve when placing your order.



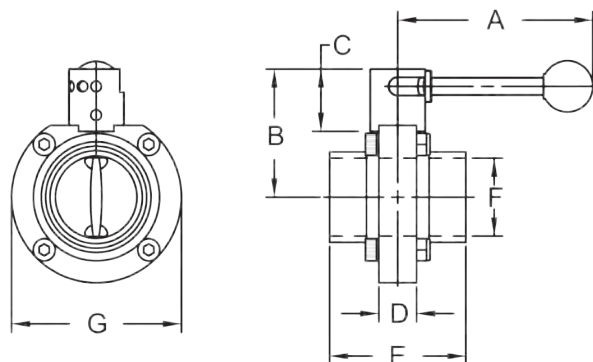
Sanitary Valves

B

Weld End

Size	316L stainless steel with Silicone seats	316L stainless steel with EPDM seats	316L stainless steel with FKM seats
½"	B5101S050BB-A	B5101E050BB-A	B5101V050BB-A
¾"	B5101S075BB-A	B5101E075BB-A	B5101V075BB-A
1"	B5101S100BB-A	B5101E100BB-A	B5101V100BB-A
1½"	B5101S150BB-A	B5101E150BB-A	B5101V150BB-A
2"	B5101S200BB-A	B5101E200BB-A	B5101V200BB-A
2½"	B5101S250BB-A	B5101E250BB-A	B5101V250BB-A
3"	B5101S300BB-A	B5101E300BB-A	B5101V300BB-A
4"	B5101S400BB-A	B5101E400BB-A	B5101V400BB-A
6"	B5101S600BB-A	B5101E600BB-A	---
8"	---	B5107E800BB-A	---

Note: Handle is not assembled when shipped. Please request handle to be assembled on the valve when placing your order.

**Dimensions**

Size	A	B	C	D	E (Clamp)	E (Weld)	F	G
½"	4.4	2.6	1.4	0.9	3.5	1.9	0.37	3.1
¾"	4.4	2.6	1.4	0.9	3.5	1.9	0.62	3.1
1"	4.4	2.6	1.4	0.9	3.5	1.9	0.87	3.1
1½"	4.4	2.6	1.4	0.9	3.5	1.9	1.37	3.1
2"	4.4	3.1	1.4	0.9	3.8	2.0	1.87	3.9
2½"	4.4	3.5	1.4	0.9	3.8	2.1	2.37	4.6
3"	6.2	3.8	1.3	1.2	4.1	2.5	2.87	5.2
4"	6.2	4.5	1.3	1.2	4.8	3.1	3.83	6.7
6"	11.5	5.5	1.3	1.2	5.5	5.5	5.78	8.5
8"	18.0	6.9	1.6	1.2	4.9	4.9	7.76	11.2

All dimensions are approximate. Engineering dimensions are available upon request.

B5101 Series Butterfly Valve with Infinite Handle

Clamp End

Sanitary Valves



Size	316L stainless steel with Silicone seats	316L stainless steel with EPDM seats	316L stainless steel with FKM seats
1/2"	B5101S050CC-B	B5101E050CC-B	B5101V050CC-B
3/4"	B5101S075CC-B	B5101E075CC-B	B5101V075CC-B
1"	B5101S100CC-B	B5101E100CC-B	B5101V100CC-B
1 1/2"	B5101S150CC-B	B5101E150CC-B	B5101V150CC-B
2"	B5101S200CC-B	B5101E200CC-B	B5101V200CC-B
2 1/2"	B5101S250CC-B	B5101E250CC-B	B5101V250CC-B
3"	B5101S300CC-B	B5101E300CC-B	B5101V300CC-B
4"	B5101S400CC-B	B5101E400CC-B	B5101V400CC-B

Note: Handle is not assembled when shipped. Please request handle to be assembled on the valve when placing your order.

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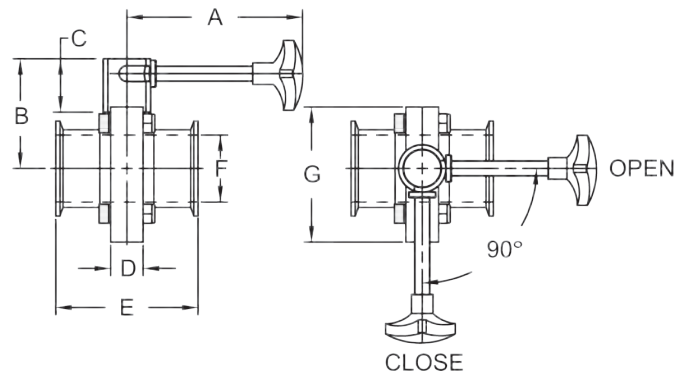
Weld End



Size	316L stainless steel with Silicone seats	316L stainless steel with EPDM seats	316L stainless steel with FKM seats
1/2"	B5101S050BB-B	B5101E050BB-B	B5101V050BB-B
3/4"	B5101S075BB-B	B5101E075BB-B	B5101V075BB-B
1"	B5101S100BB-B	B5101E100BB-B	B5101V100BB-B
1 1/2"	B5101S150BB-B	B5101E150BB-B	B5101V150BB-B
2"	B5101S200BB-B	B5101E200BB-B	B5101V200BB-B
2 1/2"	B5101S250BB-B	B5101E250BB-B	B5101V250BB-B
3"	B5101S300BB-B	B5101E300BB-B	B5101V300BB-B
4"	B5101S400BB-B	B5101E400BB-B	B5101V400BB-B

Note: Handle is not assembled when shipped. Please request handle to be assembled on the valve when placing your order.

Dimensions



Size	A	B	C	D	E (Clamp)	E (Weld)	F	G
1/2"	4.3	2.6	1.3	0.9	3.5	1.9	0.37	3.1
3/4"	4.3	2.6	1.3	0.9	3.5	1.9	0.62	3.1
1"	4.3	2.6	1.3	0.9	3.5	1.9	0.87	3.1
1 1/2"	4.3	2.6	1.3	0.9	3.5	1.9	1.37	3.1
2"	4.3	2.9	1.3	0.9	3.8	2.0	1.87	3.1
2 1/2"	4.3	3.3	1.3	0.9	3.8	2.1	2.37	4.6
3"	6.4	3.6	1.3	1.2	4.1	2.5	2.87	5.2
4"	6.4	4.4	1.3	1.2	4.8	3.1	3.83	6.7

All dimensions are approximate. Engineering dimensions are available upon request.

B5101 Series Butterfly Valve with Trigger Handle**Clamp End****Feature:**

- lockout / tagout handle

Size	316L stainless steel with Silicone seats	316L stainless steel with EPDM seats	316L stainless steel with FKM seats
½"	B5101S050CC-C	B5101E050CC-C	B5101V050CC-C
¾"	B5101S075CC-C	B5101E075CC-C	B5101V075CC-C
1"	B5101S100CC-C	B5101E100CC-C	B5101V100CC-C
1½"	B5101S150CC-C	B5101E150CC-C	B5101V150CC-C
2"	B5101S200CC-C	B5101E200CC-C	B5101V200CC-C
2½"	B5101S250CC-C	B5101E250CC-C	B5101V250CC-C
3"	B5101S300CC-C	B5101E300CC-C	B5101V300CC-C
4"	B5101S400CC-C	B5101E400CC-C	B5101V400CC-C

Note: Handle is not assembled when shipped. Please request handle to be assembled on the valve when placing your order.



Sanitary Valves

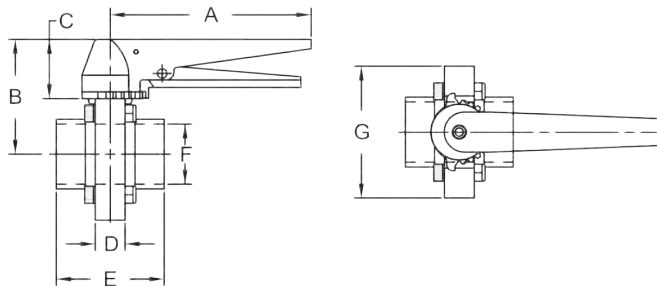
Weld End

Size	316L stainless steel with Silicone seats	316L stainless steel with EPDM seats	316L stainless steel with FKM seats
½"	B5101S050BB-C	B5101E050BB-C	B5101V050BB-C
¾"	B5101S075BB-C	B5101E075BB-C	B5101V075BB-C
1"	B5101S100BB-C	B5101E100BB-C	B5101V100BB-C
1½"	B5101S150BB-C	B5101E150BB-C	B5101V150BB-C
2"	B5101S200BB-C	B5101E200BB-C	B5101V200BB-C
2½"	B5101S250BB-C	B5101E250BB-C	B5101V250BB-C
3"	B5101S300BB-C	B5101E300BB-C	B5101V300BB-C
4"	B5101S400BB-C	B5101E400BB-C	B5101V400BB-C

Note: Handle is not assembled when shipped. Please request handle to be assembled on the valve when placing your order.



B

Dimensions

Size	A	B	C	D	E (Clamp)	E (Weld)	F	G
½"	6.6	3.0	1.7	0.9	3.5	1.9	0.37	3.1
¾"	6.6	3.0	1.7	0.9	3.5	1.9	0.62	3.1
1"	6.6	3.0	1.7	0.9	3.5	1.9	0.9	3.1
1½"	6.6	3.0	1.7	0.9	3.5	1.9	1.4	3.1
2"	6.6	3.5	1.7	0.9	3.8	2.0	1.9	3.1
2½"	6.6	3.7	1.7	0.9	3.8	2.1	2.4	4.6
3"	6.6	3.9	1.7	1.2	4.1	2.5	2.9	5.2
4"	6.6	4.8	1.7	1.2	4.8	3.1	3.8	6.7

All dimensions are approximate. Engineering dimensions are available upon request.

Repair Kit contains:
 (1) seat
 (2) bushings

B5101 Series Butterfly Valve

Repair Kits

Size	Red Silicone	Black EPDM	Brown FKM
½"-1"	B5101-RKS100	B5101-RKE100	B5101-RKV100
1½"	B5101-RKS150	B5101-RKE150	B5101-RKV150
2"	B5101-RKS200	B5101-RKE200	B5101-RKV200
2½"	B5101-RKS250	B5101-RKE250	B5101-RKV250
3"	B5101-RKS300	B5101-RKE300	B5101-RKV300
4"	B5101-RKS400	B5101-RKE400	B5101-RKV400
6"	B5101-RKS600	B5101-RKE600	---
8"	---	B5107-RKE800	---

Butterfly Valve Automation

Butterfly Valve with Stainless Steel Vertical Spring Return Actuation

Sizes:

- ½" thru 4"

Features:

- pneumatic canister style actuator
- silicone and FKM elastomers also available
- other connections are available upon request

Butterfly Valve With EPDM Seats, Vertical Spring Return Normally Closed

Valve Size	Style B5101 Part Number
½"	B5101E050CC-G
¾"	B5101E075CC-G
1"	B5101E100CC-G
1½"	B5101E150CC-G
2"	B5101E200CC-G
2½"	B5101E250CC-G
3"	B5101E300CC-G
4"	B5101E400CC-G

Butterfly Valve With EPDM Seats, Vertical Spring Return Normally Open

Valve Size	Style B5101 Part Number
½"	B5101E050CC-F
¾"	B5101E075CC-F
1"	B5101E100CC-F
1½"	B5101E150CC-F
2"	B5101E200CC-F
2½"	B5101E250CC-F
3"	B5101E300CC-F
4"	B5101E400CC-F

Butterfly Valve With EPDM Seats, Vertical Double Acting

Valve Size	Style B5101 Part Number
½"	B5101E050CC-H
¾"	B5101E075CC-H
1"	B5101E100CC-H
1½"	B5101E150CC-H
2"	B5101E200CC-H
2½"	B5101E250CC-H



B5102 Series Butterfly Valves**Sizes:**

- 1" thru 4"

Materials:

- contact product surfaces: sanitary finish 316L stainless steel
- seat: silicone, EPDM, FKM

Features:

- all sizes use only ¾" of line space
- the grooved clamp housing connects directly to the corresponding sanitary clamp size
- PTFE valve disc bushings reduce friction and increase cycle life
- 3-position reversible handle
- 100% tested / 100% inspected
- can be serviced in field (no special tools required)
- can be modified for lockout / tagout
- various automated options available

Specifications:

- vacuum rating: 0.4 inches Hg @ 68°F (20°C)
- operating temperature range: 15°F to 200°F (-9°C to 93°C)



Size	316L stainless steel with Silicone seats	316L stainless steel with EPDM seats	316L stainless steel with FKM seats
1"	B5102S100-A	B5102E100-A	B5102V100-A
1½"	B5102S150-A	B5102E150-A	B5102V150-A
2"	B5102S200-A	B5102E200-A	B5102V200-A
2½"	B5102S250-A	B5102E250-A	B5102V250-A
3"	B5102S300-A	B5102E300-A	B5102V300-A
4"	B5102S400-A	B5102E400-A	B5102V400-A

Repair Kits

Repair kit contains:

- (1) seat
- (2) bushings

Size	Red Silicone	Black EPDM	Brown FKM
1"	B5102-RKS100	B5102-RKE100	B5102-RKV100
1½"	B5102-RKS150	B5102-RKE150	B5102-RKV150
2"	B5102-RKS200	B5102-RKE200	B5102-RKV200
2½"	B5102-RKS250	B5102-RKE250	B5102-RKV250
3"	B5102-RKS300	B5102-RKE300	B5102-RKV300
4"	B5102-RKS400	B5102-RKE400	B5102-RKV400

B5115 Series - 304 Stainless Steel **Butterfly Valves**
Clamp End with Trigger Handle

Sanitary Valves

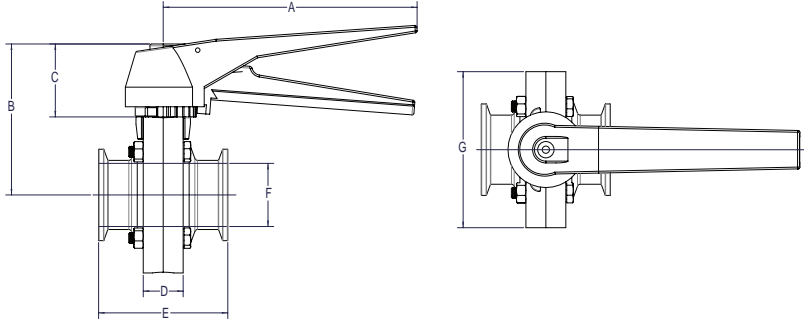
Features:

- 100% tested / 100% inspected
- product contact are sanitary finish to <math><32R_a</math>
- can be serviced in field
- silicone seats
- blue trigger handle
- operating temperature range: 15°F to 200°F (-9°C to 93°C)
- maximum operating pressure: 110 PSI

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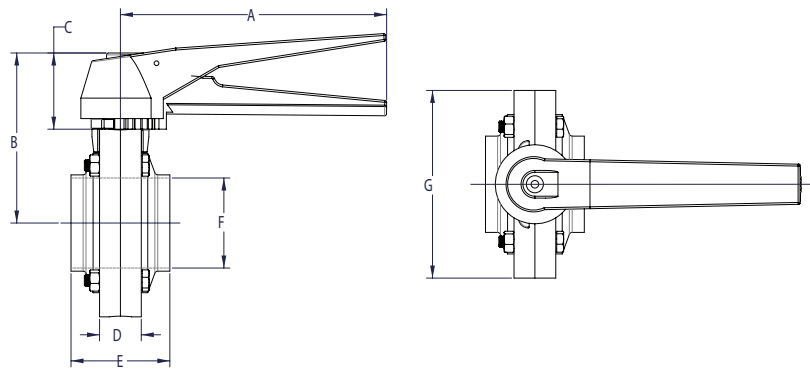


Clamp End



Size	Dimensions							304 Stainless Steel
	A	B	C	D	E	F	G	Part Number
1½"	5.70	3.40	1.60	0.87	2.80	1.40	3.40	B5115S150CC-C
2"	5.70	3.60	1.60	0.87	3.00	1.90	3.90	B5115S200CC-C
3"	5.70	4.20	1.60	0.87	3.30	2.90	5.00	B5115S300CC-C
4"	6.89	5.51	1.60	0.87	3.62	3.83	6.89	B5115S400CC-C

Weld End



Size	Dimensions							304 Stainless Steel
	A	B	C	D	E	F	G	Part Number
1½"	5.70	3.40	1.60	0.87	1.97	1.40	3.40	B5115S150BB-C
2"	5.70	3.60	1.60	0.87	2.05	1.90	3.90	B5115S200BB-C
3"	5.70	4.20	1.60	0.87	2.12	2.90	5.00	B5115S300BB-C
4"	6.89	5.51	1.60	0.87	2.52	3.83	6.89	B5115S400BB-C

Replacement Seats

Size	Part Number
1½"	B5115-RKS150
2"	B5115-RKS200
3"	B5115-RKS300
4"	B5115-RKS400

HSC Series Spring Check Valve



Sanitary Valves

Sizes:

- ½" to 4"

Material:

- product contact: 316L stainless steel

Features:

- single piece upper body spider design
- machined from solid bar
- standard O-ring and gasket seal design
- can be serviced in field (no special tools required)
- finish: sanitary polish 32 R_a
- suitable for low and medium viscosity fluids
- connection: clamp (standard), others available upon request



Size	Pressure Rating	Cracking Pressure (PSI)	Operating Temperature	Part Number
½"	145 PSI	10.0	15°F to 200°F (-9°C to 93°C)	HSC*050
¾"		4.0		HSC*075
1"		2.5		HSC*100
1½"		1.0		HSC*150
2"		1.5		HSC*200
2½"		0.8		HSC*250
3"		0.5		HSC*300
4"		0.4		HSC*400

*V=FKM or E=EPDM

Repair Kits

½"-¾" Repair Kit Contains:

- (1) body gasket
- (1) plunger O-ring
- (1) spider O-ring

1"-4" Repair Kit Contains:

- (1) body gasket
- (1) plunger O-ring

Size	Part Number
½"	HSC-RK*050
¾"	HSC-RK*075
1"	HSC-RK*100
1½"	HSC-RK*150
2"	HSC-RK*200
2½"	HSC-RK*250
3"	HSC-RK*300
4"	HSC-RK*400

*V=FKM or E=EPDM

Dimensions

Size	A (in)
½"	2.7
¾"	2.7
1"	3.3
1½"	3.4
2"	3.4
2½"	3.4
3"	3.4
4"	4.1



All dimensions are approximate. Engineering dimensions are available upon request.

A
3
1447



B45BY Series Y - Ball Check Valve

Applications:

- When liquid flows through the valve, the ball is forced into the branch of the valve allowing full fluid flow. When the liquid stops, equalizing the pressure, the ball drops back into the seat, preventing backflow. Should reverse flow occur, the differential pressure will cause the ball to seal firmly against the seat preventing leakage.

Sizes:

- 1½" thru 3"

Materials:

- ball: PTF
- product contact surfaces: 316L stainless steel

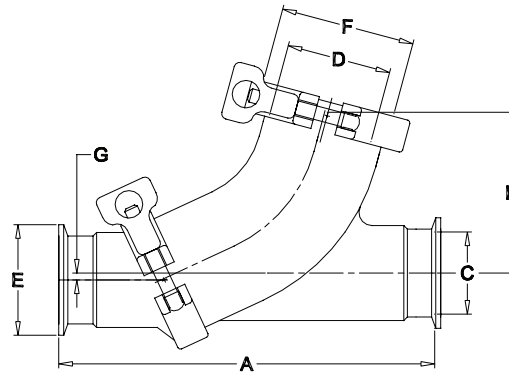
Features:

- two-piece construction
- replaceable seat
- can be serviced in field (no special tools required)

Specifications:

- operating temperature range: 15°F to 200°F (-9°C to 93°C)
- maximum operating pressure: 150 PSI

Dimensions



Valve Size	Clamp & Cap Size	A	B	C	D	E	F	G	Ball Diameter	Weight (lbs)	316L Stainless Steel Part Number
1½"	2"	7.50	3.30	1.36	1.87	1.98	2.51	0.16	1.6	4.9	B45BY-R150
2"	2½"	8.50	3.90	1.86	2.33	2.51	3.04	0.16	2.1	6.6	B45BY-R200
2½"	3"	10.00	4.50	2.37	2.87	3.04	3.57	0.16	2.7	10.5	B45BY-R250
3"	4"	11.50	5.30	2.87	3.83	3.57	4.68	0.16	3.6	17.5	B45BY-R300

All dimensions are approximate. Engineering dimensions are available upon request.
Specifications are subject to change without notice.

Repair and Seal Kits

Repair kit contains:

- (1) EPDM cap gasket
- (1) PTFE ball
- (1) EPDM/CF8M seat

Seal kit contains:

- (1) EPDM cap gasket
- (1) EPDM/CF8M seat

FKM Seal kit contains:

- (1) FKM cap gasket
- (1) FKM /CF8M seat

Size	Repair Kit Part Number	Seal Kit Part Number	FKM Seal Kit Part Number	Replacement Ball Only Part Number
1½"	B45BY-RK150	B45BY-SK150	B45BY-SKV150	B45BY-TB150
2"	B45BY-RK200	B45BY-SK200	B45BY-SKV200	B45BY-TB200
2½"	B45BY-RK250	B45BY-SK250	B45BY-SKV250	B45BY-TB250

B45 Air Blow Check Valves



Sanitary Valves

Sizes:

- 1" thru 4"

Materials:

- 316L stainless steel
- stem seat and gasket: EPDM

Features:

- Conforms to 3A standards for filtration of air entering tanks or pipelines with optional filter disc
- filter discs sold separately in packs of 50

Specifications:

- maximum operating temperature: **212°F (100°C)**
- maximum operating pressure: **145 PSI**



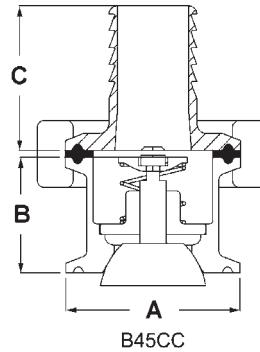
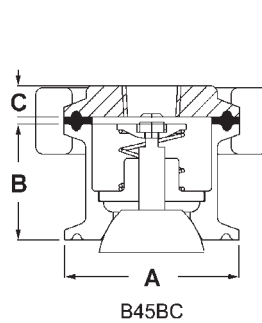
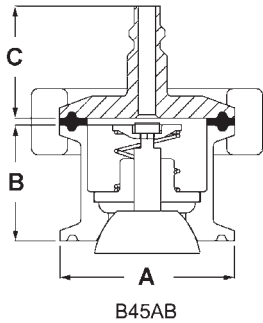
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Can be used on the Dixon® B45BY Series Y-Ball Check Valves



Size	Quick-Connect Plug Part Number	Female NPT Part Number	Hose Barb Part Number
1" - 1½"	B45AB-R100150	B45BC-R100150	B45CC-R100150
2"	B45AB-R200	B45BC-R200	B45CC-R200
2½"	B45AB-R250	B45BC-R250	B45CC-R250
3"	B45AB-R300	B45BC-R300	B45CC-R300
4"	B45AB-R400	B45BC-R400	B45CC-R400

Dimensions



Size	A	B	C Plug	C FNPT	C Hose Barb
1"-1½"	1.984	1.30	1.26	.6	1.7
2"	2.516	1.30	1.26	.6	1.7
2½"	3.047	1.30	1.26	.6	1.7
3"	3.579	1.30	1.26	.6	1.7
4"	4.682	1.30	1.26	.6	1.7

All dimensions are approximate. Engineering dimensions are available upon request. Specifications are subject to change without notice.

Repair Kit

- Repair kit, **B45AB-RK**, contains:
- (1) EPDM / 316L stainless perforated disc
 - (1) 304 stainless spring retainer
 - (1) 304 stainless spring
 - (1) nylon stem guide
 - (1) 316L / EPDM stem and plug

Sizing Chart

When using air blow check valves with ball check valves, refer to the sizing chart below.

Ball Check Valve size	Air Blow Check Valve size
1½"	2"
2"	2½"
2½"	3"



BARV Series Air Relief Valves



Applications:

- Bleeding of a line where an air pocket has formed. This application calls for installation at the top of the line.
- Bleeding of a tube on the suction side of a pump. The suction side is bled automatically, before the pump starts, establishing a vacuum. Binding of air to liquid will be prevented, and so will subsequent cavitation. In this application the valve is mounted in front of the pump, on the top of the inlet tube.
- Air relief valve allows air to be removed from a line or container without the liquid flowing out. Its design does not allow air to enter the line or container, even if subjected to a negative pressure. It is a double-seated valve with a free moving polypropylene ball. The ball, which is lighter than water, closes against the upper or lower seat, depending on the pressure conditions.

Features:

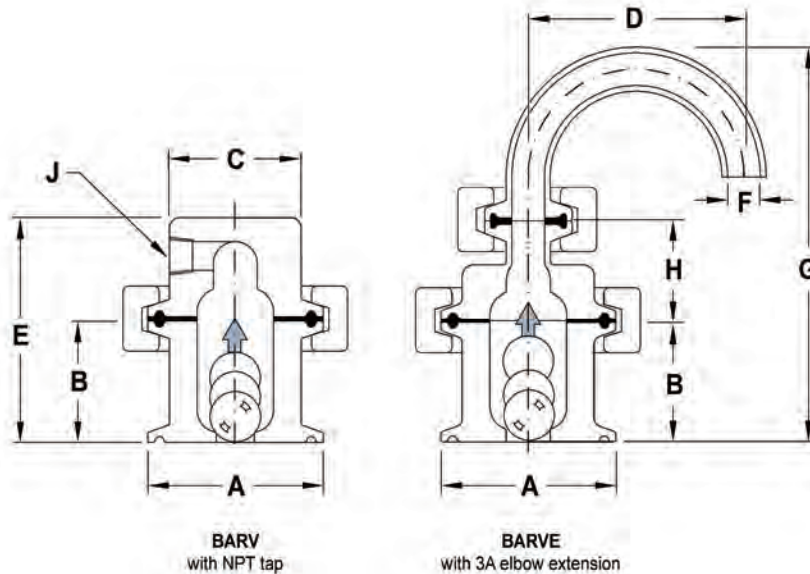
- no special tools required
- ball and gaskets are replaceable
- the valve seals for both pressure and vacuum
- all product contact surfaces have a radius of 1/4" or better
- PTFE valve ball is available
- other gasket materials available

Specifications:

- maximum operating temperature: **212°F (100°C)**
- maximum: **145 PSI**

Approvals:

- 3A Standards 58-00 with elbow extension, check valves and vacuum breakers
- the valve ball is constructed of FDA, 3A approved polypropylene



Description	A	B	C	D	E	F	G	H	J	304 Stainless Steel Part Number
1½" air relief valve with tapped blind end	1.98	1.40	1.50	---	2.60	---	---	---	1/8" NPT	BARV-G150
2" air relief valve with tapped blind end	2.52	1.40	1.50	---	2.60	---	---	---	1/8" NPT	BARV-G200
1½" air relief valve with 180° elbow	1.98	1.40	---	1.50	---	0.37	4.10	1.10	---	BARVE-G150
2" air relief valve with 180° elbow	2.52	1.40	---	1.50	---	0.37	4.10	1.10	---	BARVE-G200

All dimensions are approximate. Engineering dimensions are available upon request.

TVS Series Stainless Steel Air & Vacuum Relief Tank Vent Valve

Applications:

- When product filling or emptying a tank, this valve is used to relieve pressure or vacuum

Sizes:

- 2", 3" or 4" – clamp connection standard

Features:

- Triple Action:
 - valve relieves pressure as the fluid level rises while filling a tank
 - valve relieves vacuum as the fluid level drops while emptying a tank
 - seals under equal pressure
- stainless steel screen surrounds the entire vacuum and pressure flow area
- other sanitary connections optional
- ¼" FNPT connection for gas inlet, plug also supplied
- repair kits available

Materials:

- 304 stainless steel, EPDM elastomer

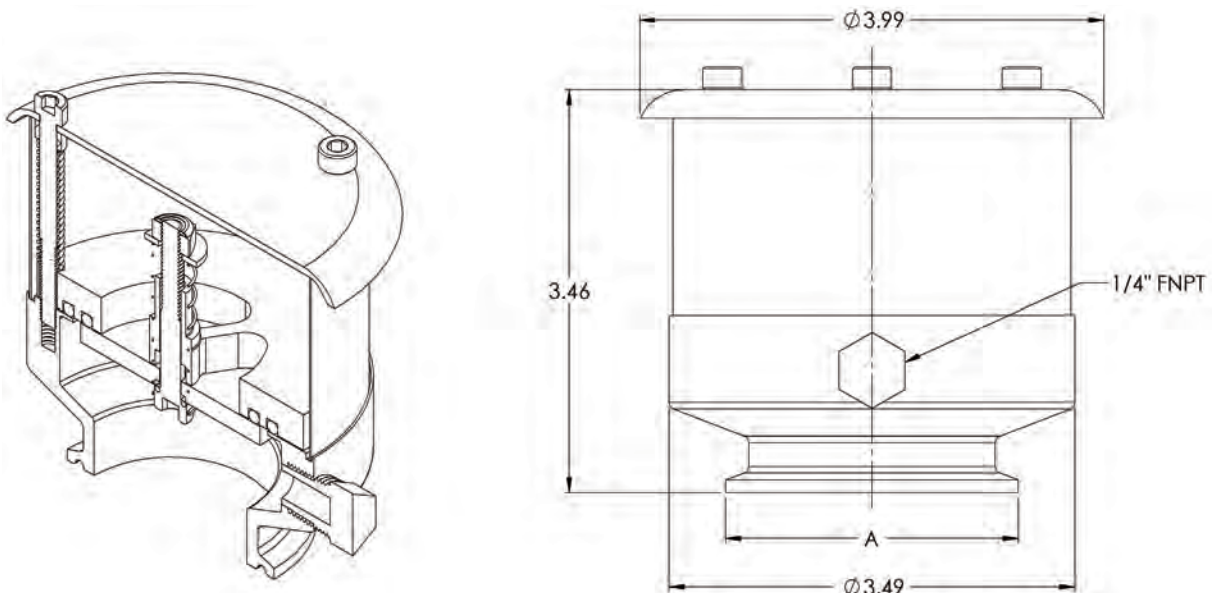
Specifications:

- vacuum break: 2" water column, 0.1 PSI
- pressure relief: 22" water column, 0.8 PSI
- maximum temperature and pressure rating: **3 PSI @ 70°F (21°C)**
- maximum flow rate: 500 GPM



Tube OD	DIM "A"	Part Number
2"	2.52	TVSEC-G200
3"	3.58	TVSEC-G300
4"	4.68	TVSEC-G400

Due to the impossible determination of whether a tank was damaged due to the tank vent or the lack of opening the upper manhole during product transfer, Dixon Sanitary assumes no liability for tank damage or product loss.

**Dimensions**

All dimensions are approximate. Engineering dimensions are available upon request.

TVP Series Air and Vacuum Relief Tank Vent Valve

**Applications:**

- When product filling or emptying a tank, this valve is used to relieve pressure or vacuum

Sizes:

- 2" and 3" clamp connections on the same valve

Material:

- light weight, robust PVC and 304 stainless steel construction

Features:


- dome helps in preventing external contamination
- can use any clamp gasket

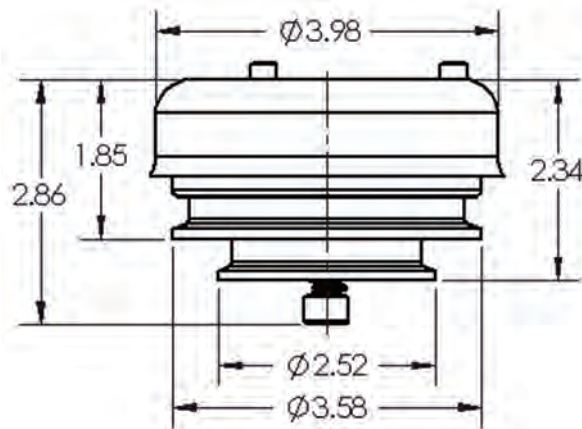
Specifications:

- maximum flow rate: 500 GPM
- vacuum break: 0.1 PSI
- pressure relief: 0.1 PSI

 Part Number

TVPC200-300

 Due to the impossible determination of whether a tank was damaged due to the tank vent or the lack of opening the upper manhole during product transfer, Dixon Sanitary assumes no liability for tank damage or product loss.

Dimensions

All dimensions are approximate. Engineering dimensions are available upon request.
Specifications are subject to change without notice.

BSV Series 3A Sample Valves



1447

Sanitary Valves

Applications:

- The 3A sample valve allows easy and safe sampling of liquids from closed systems such as vessels and pipelines
- These valves are located in the pharmaceutical, bio-pharmaceutical, biochemical, cosmetic, food, dairy and beverage markets

Sizes:

- ½" thru 4"

Materials:

- product contact surfaces: 316L, 32Ra, optional surface finishes available
- non product contact: 304, 68Ra
- product contact seals: PTFE bellows

Features:

- no dead space
- drainable
- connections suitable for orbital welding
- available with single or dual ports
- hermetically sealed against environment
- optimum cleanability
- change of seals without special tools
- long life of the PTFE-bellows
- low spare part costs
- options for pneumatic actuator: no lever, with self-closing lever and with lever for open position
- manual actuator (hand wheel)
- optional pneumatic actuator - call Dixon Sanitary 800.789.1718

Specifications:

- closing tension operating pressure: maximum **116 PSI**
- hand wheel version operating pressure: minimum **87 PSI**, maximum **232 PSI**
- controlled air pressure: maximum **145 PSI**

Clamp Valve Size	Weld Port Size	Single Port Part Number	Dual Port Part Number
½"	¼"	<i>BSVS-HC050B025</i>	<i>BSVD-HC050B025</i>
	⅜"	<i>BSVS-HC050B375</i>	<i>BSVD-HC050B375</i>
	½"	<i>BSVS-HC050B050</i>	<i>BSVD-HC050B050</i>
1"	¼"	<i>BSVS-HC100B025</i>	<i>BSVD-HC100B025</i>
	⅜"	<i>BSVS-HC100B375</i>	<i>BSVD-HC100B375</i>
	½"	<i>BSVS-HC100B050</i>	<i>BSVD-HC100B050</i>
1½"	¼"	<i>BSVS-HC150B025</i>	<i>BSVD-HC150B025</i>
	⅜"	<i>BSVS-HC150B375</i>	<i>BSVD-HC150B375</i>
	½"	<i>BSVS-HC150B050</i>	<i>BSVD-HC150B050</i>
2"	¼"	<i>BSVS-HC200B025</i>	<i>BSVD-HC200B025</i>
	⅜"	<i>BSVS-HC200B375</i>	<i>BSVD-HC200B375</i>
	½"	<i>BSVS-HC200B050</i>	<i>BSVD-HC200B050</i>
2½"	¼"	<i>BSVS-HC250B025</i>	<i>BSVD-HC250B025</i>
	⅜"	<i>BSVS-HC250B375</i>	<i>BSVD-HC250B375</i>
	½"	<i>BSVS-HC250B050</i>	<i>BSVD-HC250B050</i>
3"	¼"	<i>BSVS-HC300B025</i>	<i>BSVD-HC300B025</i>
	⅜"	<i>BSVS-HC300B375</i>	<i>BSVD-HC300B375</i>
	½"	<i>BSVS-HC300B050</i>	<i>BSVD-HC300B050</i>
4"	¼"	<i>BSVS-HC400B025</i>	<i>BSVD-HC400B025</i>
	⅜"	<i>BSVS-HC400B375</i>	<i>BSVD-HC400B375</i>



single port actuated

B



single port



dual port

W Series Sample Valves - BSVW

Sanitary Valves



NPT



clamp



weld

Features:

- silicone or PTFE seat ensures a leak-proof shut-off
- surface finish polished to sanitary standards

Materials:

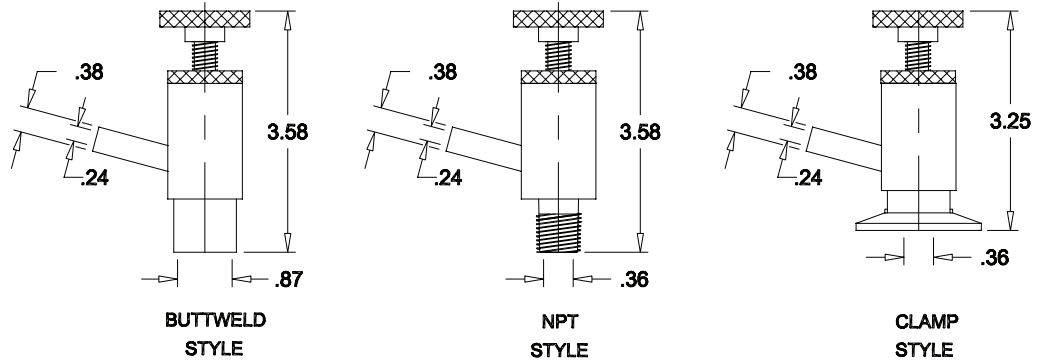
- 304 stainless steel
- o-rings: double silicone

Specifications:

- temperature rating: **300°F (149°C)** at **200 PSI**

Size	Style	Seat Material	Weight (lbs)	304 Stainless Steel Part Number
3/8"	NPT	silicone	0.72	BSVWNS-G375
		PTFE	0.72	BSVWNP-G375
1"	clamp	silicone	0.88	BSVWCS-G100
		PTFE	0.88	BSVWCP-G100
1"	weld	silicone	0.72	BSVWBS-G100
		PTFE	0.72	BSVWBP-G100

Dimensions



ALL VALVES ARE SHOWN FULLY OPEN

All dimensions are approximate. Engineering dimensions are available upon request. Specifications are subject to change without notice.

Repair Kits

BSVW-RKS repair kit contains:
 (2) silicone O-rings
 (1) silicone seat

BSVW-RKP repair kit contains:
 (2) silicone O-rings
 (1) PTFE seat

Rack and pinion actuators .. C-2 to C-5

RP-BS series	C-2
RP-BA series	C-3
RP-MA series.....	C-4
RT-TP series.....	C-5

Vertical canister actuators C-6

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Actuation accessories.....C-22 to C-24

Actuator sleeve inserts	C-22
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Bracket and coupling kit	C-23
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Air fittings.....	C-24

Rack and Pinion Actuators

RP-BS Series Horizontal Rack and Pinion Stainless Steel Actuators

Actuation



RP-BS series rack and pinion actuators can be used on Dixon® butterfly and ball valves.

**Material:**

- 304 stainless steel construction for excellent chemical and corrosion resistance

Features:

- replaceable top and bottom PTFE pinion bearings ensure low friction
- travel stops provide $\pm 4^\circ$ travel adjustment
- precision cast pistons are guided through full face engagement with the pinion and piston
- NAMUR slotted shaft is standard to provide a self-centering positive drive for positioners or a variety of switches
- one-piece drive pinion shaft with precision machined gear teeth for precise control
- ISO 5211 mounting

Specifications:

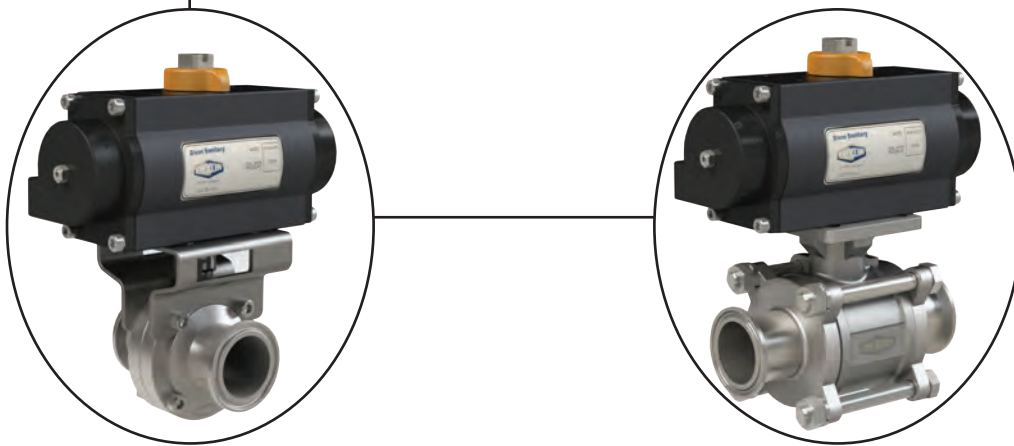
- temperature range: -4° F to 200° F (-20° C to 93° C) with Buna elastomers (standard)
- temperature range: -4° F to 400° F (-20° C to 204° C) with FKM elastomers (optional)
- air to open / air to close (ATO/ATC)
- air to open / spring to close (ATO/STC)
- spring to open / air to close (STO/ATC)

Rack and Pinion Actuators

RP-BA Series Aluminum Rack and Pinion Actuators



RP-BA series rack and pinion actuators can be used on Dixon® butterfly and ball valves.



Materials:

- body: extruded anodized aluminum alloy, provides wear and corrosion resistance and reduced friction
- heavy duty springs: high tensile steel springs with retainer and guide for safe and easy assembly
- pistons: die-cast aluminum alloy fitted with nylon bushing guides and Buna-N seals
- end caps: epoxy-coated die-cast aluminum alloy for maximum resistance to corrosive environments
- pinion: electroless nickel plated carbon steel for maximum corrosion and wear resistance
- indicator: high visibility polyethylene

Features:

- twin rack and pinion design
- rotation adjustment: full $\pm 5^\circ$ travel adjustment in open and closed positions, standard on all sizes
- open / close indication is standard on all models
- tested to one million cycles
- solenoid interface: international NAMUR solenoid mounting interface is standard on all units
- female double square output shaft
- ISO 5211 bolt patterns
- piston and pinion lubrication: Shell Darina R2
- range of rotation adjustment: 80° to 100°
- operating media: dry or lubricated non-corrosive gas
- size range: 40 in. lb. 16,500 in. lb.

Specifications:

- operating pressure: **40 to 120 PSI**
- maximum pressure rating: **150 PSI**
- temperature range: **-4°F to 200°F (-20°C to 93°C)**
- FKM seal maximum temperature **350°F (177°C)**
- air to open / air to close (ATO/ATC)
- air to open / spring to close (ATO/STC)
- spring to open / air to close (STO/ATC)

Rack and Pinion Actuators

RP-MA Series 180° Aluminum Rack and Pinion Actuators

Actuation



RP-MA Series 180° rack and pinion actuator can be used on Dixon® multiport ball valves.

**Material:**

- body: extruded aluminum

Features:

- twin rack and pinion design
- standard angle of rotation is 180°, additional travel rotations of 120°, 135°, 150° are available
- MA016 and larger sizes feature a travel stop with $\pm 10^\circ$ adjustment in both open and close directions (international patent)
- all pinions are supplied with anti-blowout retention in both directions
- body is internally machined and lapped to exact specifications with all internal and external surfaces anodized for corrosion resistance
- actuator can be epoxy coated for additional corrosion resistance
- an external open/closed indicator is standard and available for all rotations
- all units are permanently lubricated at the factory with non-silicone grease
- all units are factory pressure and leak tested
- female double square output shaft
- ISO 5211 bolt patterns
- piston and pinion lubrication: non-silicone grease
- range of rotation adjustment: 170° to 190°
- operating media: dry or lubricated non-corrosive gas
- water, nitrogen and compatible hydraulic fluids may be used to power the actuator

Specifications:

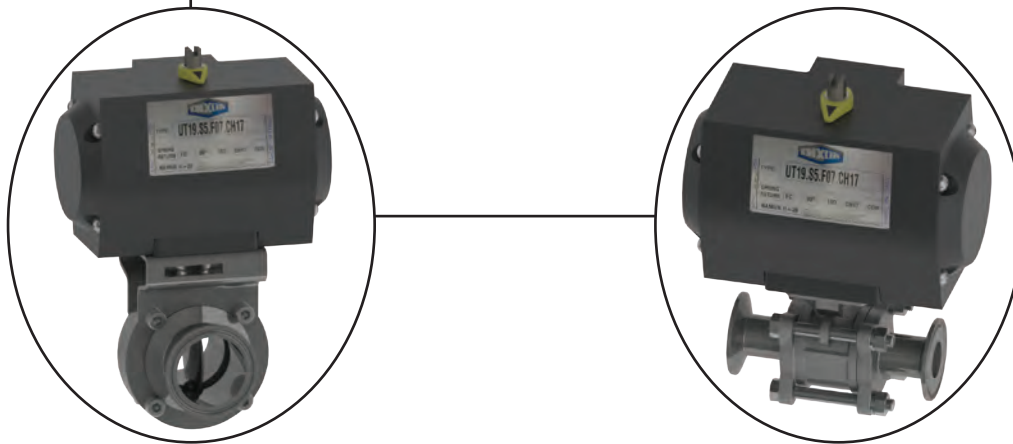
- air pressure operation from **40 to 150 PSI**
- operating pressure: **40 to 120 PSI**
- maximum pressure rating: **150 PSI**
- temperature range: **-40°F to 176°F (-40°C to 80°C)**
- air to open / air to close (ATO/ATC)
- air to open / spring to close (ATO/STC)
- spring to open / air to close (STO/ATC)

Rack and Pinion Actuators

RP-TP Series Technopolymer Actuators



RP-TP series rack and pinion actuators can be used on Dixon® butterfly and ball valves.



Materials:

- housing: polyamide base
- spring cartridges: non-metallic material
- pinions and fasteners: stainless steel

Features:

- design withstands most corrosive environmental environments
- 3 sizes available
- double acting or spring return housings available
- high cycle life spring cartridges
- blow out proof pinions ensure safe and effective operation
- all actuators standard with ISO 5211 female output drive
- all actuators are 100% tested before shipping
- NAMUR mountable solenoid and a limit switch box can be added

Specification:

- working temperature range of -4°F to 176°F (-20°C to 80°C)

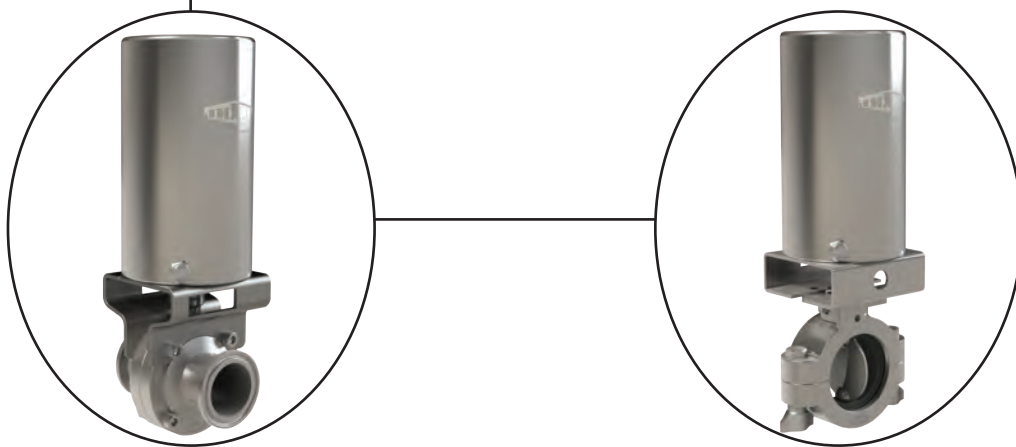
Vertical Canister Actuators

VC Series Pneumatic Vertical Stainless Steel Canister Actuator

Actuation



VC Series pneumatic vertical canister actuators can be used on Dixon® B5101 and B5102 butterfly valves.

**Features:**

- excellent protection and corrosion resistance
- tested to one million cycles
- 100% fully tested
- backed by one year manufacturer's warranty
- can be mounted on all butterfly valves up to 4"
- encapsulated spring set

Specification:

- available in ATO/ATC, ATO/STC, STO/ATC

Specifications

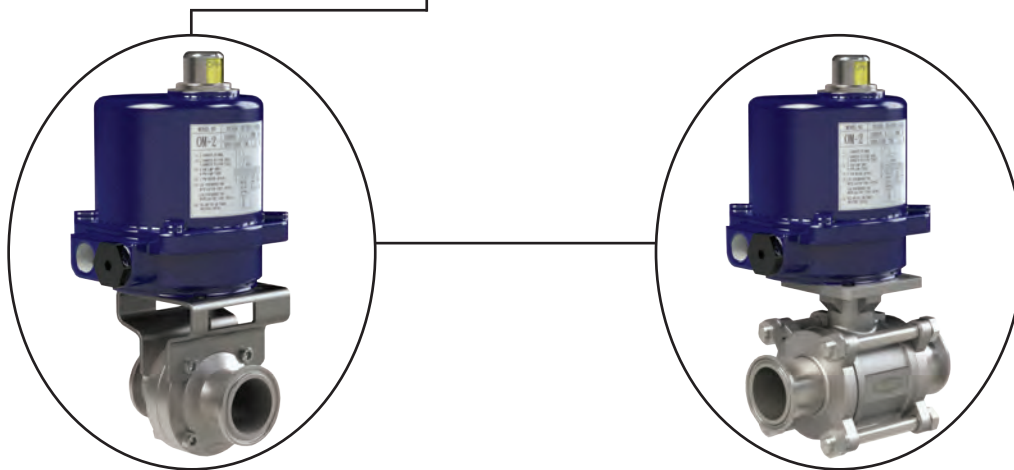
Part Number	Description	Wt. (lbs.)	Air Consumption (in ³)		Max. Temp. Rating	Min. Temp. Rating	Output Torque (in-lb)	Max. Pressure Rating	Supply Pressure Required	Dia.	Ht.	Air Fitting Ports
			down stroke CW	up stroke CCW								
VC-NR-100-DA	double acting	5.1	8.5	20.0	250°F	- 4°F	550	120 PSI	80-100 PSI	3.35"	5.83"	1/8" NPT
VC-NR-100-SR	spring return	6.0	8.5	18.5	250°F	- 4°F	550	120 PSI	80-100 PSI	3.35"	5.83"	1/8" NPT

Electric Actuators

BEO Series Electric Actuation



BEO series electric actuators can be used on Dixon® butterfly and ball valves.



Materials:

- enclosure: lightweight powder coated aluminum alloy with plastic cover (larger model enclosure: aluminum cover)
- gear train: high alloy steel

Features:

- built by an ISO9001 certified manufacturer
- extended duty cycle induction motor
- H-insulation class motor OM-1 and OM-A Class F on OM-2 to OM-4
- built in thermal protection prevents motor burn out
- position indicators on top of unit
- non-clutch design allows manual operation in a power outage
- fail-safe does not allow manual operation when electric motor is operating
- some units feature a hand wheel for manual operation
- gear train provides self-locking function to avoid valve back drive
- factory installed high temperature lubricant, reduces maintenance
- tested to one million cycles
- one year manufacturer's warranty
- OM-1 and larger include heater to reduce condensation

Approvals:

- enclosure is NEMA 4 and 4X waterproof and dust proof
- enclosure is ROHS compliant
- conforms to CSA-C for outdoor use

Electric Actuators

BES Series Heavy Duty Spring Return Electric Actuators

Actuation

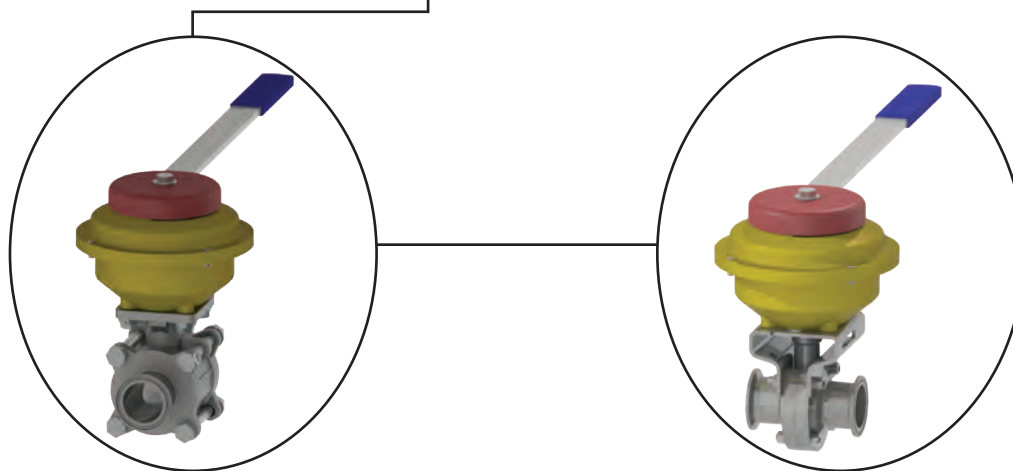
**Features:**

- designed to provide fail-safe positioning of valves upon loss of power; a mechanical spring set positions the valve in either the OPEN or CLOSED position without any external power source
- a mechanical buffer is utilized at the end of the spring stroke to reduce dynamic effects
- designed for load requirements up to 2100 in. lb.
- standard with ISO5211 mounting systems for easy mounting on complying valves
- available with or without a manual over-ride

Manual Operators



Manual fail safe spring return handles can be mounted to Dixon® ball and butterfly valves.

**Materials:**

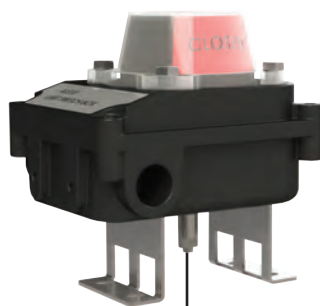
- spring case: die cast zinc alloy with epoxy finish
- shaft: stainless steel
- cover shield: nylon
- lever: stainless steel

Features:

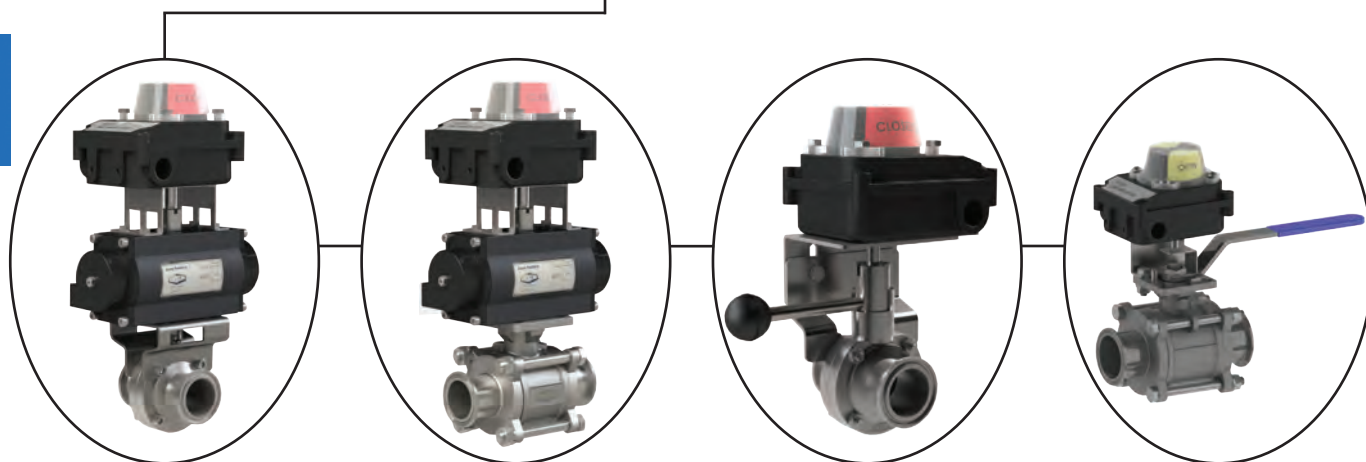
- fail safe handles for ball valves and butterfly valves
- manual unit cannot be left in the wrong position
- reliable low stress clock style springs
- weatherproof sealed spring housing
- clockwise or counter-clockwise rotation available
- tough corrosion resistant epoxy paint
- ISO mount allows for direct mounting

Limit Switches
XLS-B4 Series Limit Switch

Actuation



XLS-B4 series limit switch can be used on Dixon® rack and pinion actuators or manual butterfly and ball valves.



Material:

- bracket: stainless steel

Features:

- compact, cost-efficient, low profile limit switches for both local and remote indication of valve and/or actuator position
- visual position indicator
- quick-set cam
- multipoint terminal strip
- dual wire potting
- captive cover bolts
- enclosure: weatherproof, IP67
- cable entry: 2 x 1/2" NPT
- terminal strip: 8 points
- position indicator: 0 - 90: open - yellow, close - red, L and T flow indication
- painting: black polyester powder coating

Specifications:

- temperature range: -4°F to 185°F (-20°C to 85°C)
- NEMA 4/4X
- standard NAMUR mounting
- switch type: 2 SPDT mechanical switches

Approvals:

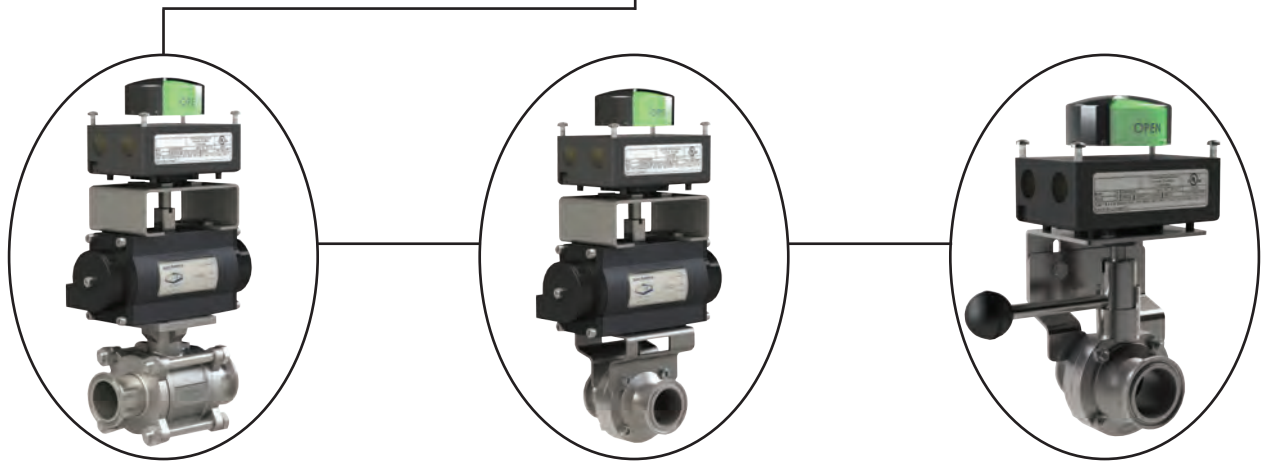
- UL and CENELEC approved

Limit Switches

XLS-C4 Series Limit Switch



XLS-C4 series limit switch can be used on Dixon® rack and pinion actuators or manual ball and butterfly valves.



Materials:

- housing: aluminum, polyester coated or stainless steel
- cover: polycarbonate, aluminum or stainless steel
- shaft: stainless steel
- cam / splines: UV resistant polycarbonate
- 3D rotor: UV resistant polycarbonate
- terminal block: stainless steel screws and PVC housing

Features:

- polyester powder coating inside and outside and stainless steel shaft, make this unit ideal for use in hostile environments
- compact body design is ideal for use on all size actuators including very small units
- multiple switch options include mechanical, proximity and inductive
- visual position indication on 3D rotor provides high visibility confirmation of valve/actuator position
- "easy-set" cams are splined, spring loaded and independently adjustable offering tool-free calibration and positive vibration resistant engagement
- multiple cable entries are standard with two ½" NPT cable entries and an option for a third entry

Specifications:

- temperature range: 32°F to 176°F (0°C to 80°C)
- weight: 1¼ lbs.

Approvals:

- UL and CUL, NEMA 4, 4X also CENELEC IP65 Class I & II Division 2 Groups A, B, C, D, F & G

Limit Switches

XLS-C7 Series Limit Switch for Hazardous Environments

Actuation



XLS-C7 series limit switch can be used on Dixon® rack and pinion actuators or manual butterfly and ball valves.

**Materials:**

- indicator dome: UV resistant and 94-V0 polycarbonate
- shaft: stainless steel
- fasteners: stainless steel

Features:

- provides an effective solution for both visual and remote electrical indication of valve/actuator position
- heavy-duty design and wide variety of options make this the ideal limit switch for use in NEMA 7 and 9 applications
- wide variety of switch options are available
- visual position indicator
- quick-set cam
- multipoint terminal strip
- dual wire potting
- captive cover bolts
- standard NAMUR mounting
- cable entry: 2 x 1/2" NPT
- terminal strip: 8 points
- position indicator: 0 - 90: open - yellow, close - red; 0-180° L and T flow indication
- painting: black polyester powder coating
- options:
 - bracket: stainless steel
 - for NAMUR proximity switches for intrinsically safe applications
 - AS-i digital communication interface card

Specifications:

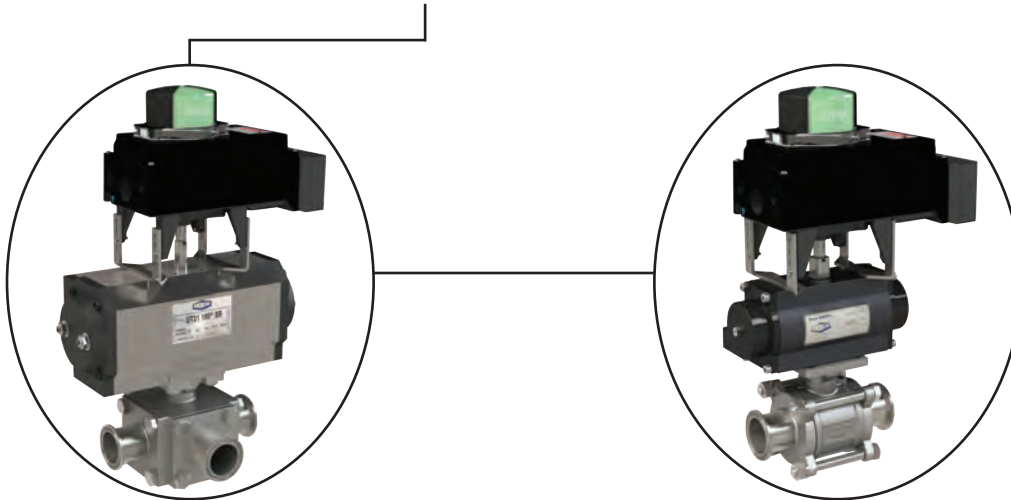
- NEMA 4, 4X, 7 and 9
- operating temperature range DIV1 -13°F to 176°F (-25°C to 80°C), temperature range may vary due to switch range and switch approvals
- operating temperature range DIV2 -40°F to 176°F (-40°C to 80°C)
- electrical: according to switch option
- switch approvals:
 - Class I Division 1 Groups C, D
 - Class I Division 2 Groups A, B, C, D (proximity sensors only)
 - Class II Division 1 Groups E, F, G
 - Class II Division 2 Groups E, G

Limit Switches

XLS-S4 Series Limit Switch with Integral Solenoids



XLS-S4 series limit switch can be used on Dixon® rack and pinion actuators.



Materials:

- body and cover: epoxy coated aluminium
- indicator dome: UV resistant and V0 polycarbonate
- pneumatic connection plate: anodized aluminium
- seals: NBR
- shaft: stainless steel
- fasteners: stainless steel

Features:

- design combines a compact enclosure with limit switches, visual indication and integral solenoids for position indication plus valve actuator control or 3-position control for 3-way ball valves and 180 degree actuators
- NAMUR proximity switch options and EEx ia solenoid valve make the S-series suitable for use in intrinsically safe applications
- integral single and double 5-way solenoid valves
- pneumatic connections are ¼" NPT
- position indicator: 0 – 90°: open – yellow, close – red 0-180° L and T flow indication
- easy-set cams are splined, spring loaded and independently adjustable providing a tool free calibration and positive vibration resistant engagement
- weatherproof IP67 and NEMA 4/4X
- air supply: filtered, lubricated or non lubricated compressed air, also dried to a dew point of -4°F (-20°C)
- electrical: according to switch option

Specifications:

- ambient temperature range
- general purpose execution: 30°F to 122°F (-1°C to 50°C)
- intrinsically safe execution: 0°F to 140°F (-18°C to 60°C)
- operating pressure: minimum 37 PSI, maximum 120 PSI

SV-Series Solenoids

XSO Series NAMUR Mount Solenoid Valves

Actuation



Can be used with Dixon® rack and pinion actuators.



Materials:

- body: powder epoxy coated extruded aluminum
- spool: electroless nickel plated
- spring: stainless steel
- O-ring: Buna-N, FKM optional
- DIN connector: Technopolymer

Features:

- compact IP65 rated NAMUR mount solenoid valve
- lightweight and easy to use
- 4-way standard
- NEMA 4/4X coil
- manual override (locking type)
- ¼" NPT inlet and exhaust ports
- field interchangeable for DA or SR actuators
- DC coil voltage: 12V, 24V
- AC coil voltage 60Hz: 24V, 120V, 220V
- electrical connection: ½" NPT DIN connector
- coil insulation: Class F
- duty cycle = 100%

Specifications:

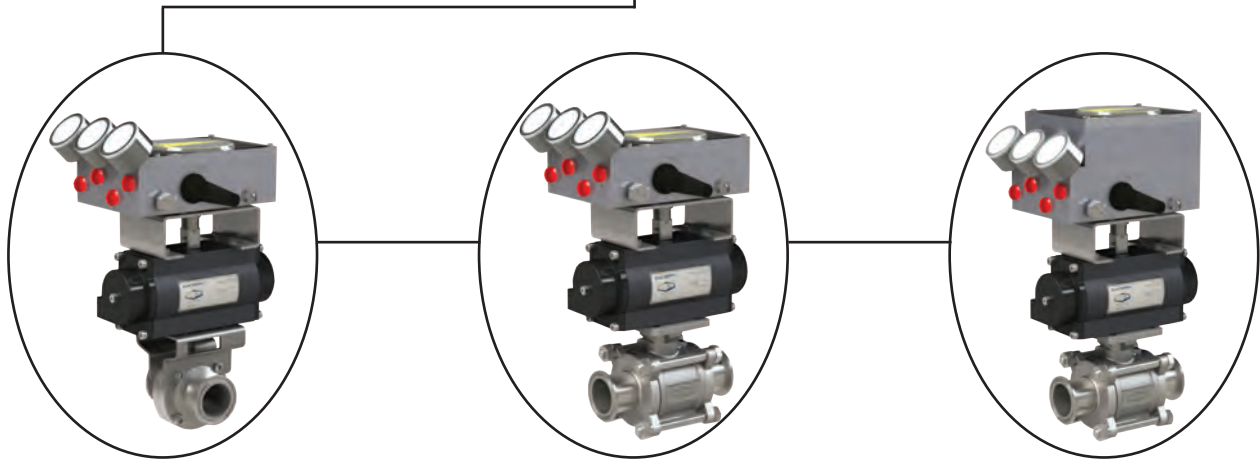
- standard protection class: IP65, NEMA 4 (DIN connector, as shown)
- supply air and environment temperature limits: -4°F to 158°F (-20°C to 70°C)
- FKM seal temperature range: 0°F to 250°F (-18°C to 121°C)
- air supply connection = ¼" NPT
- operating pressure = **30 to 120 PSI**
- weight = 0.80 lb
- flow factor = Kv 10.5
- options:
 - dual coil
 - lighted DIN connector
 - explosion proof
 - intrinsically safe
 - stainless steel body
 - voltages; 220VAC, 120VAC, 24VAC, 24VDC, 12VDC

Positioners

XPO-P4F Series Pneumatic and Electro-Pneumatic



XPO-P4F series positioners can be used on Dixon® rack and pinion actuators.



Materials:

- NEMA 4X housing: cast aluminum with electrostatically applied polyester coating
- coating: powder polyester

Features:

- cam characterized and force balanced
- operates on a standard **3-15 PSI** signal (**12 PSI** span, optional **24 PSI**), 4-20mA signal, 0-10VDC
- pressure gauge blocks built into the unit
- large indicator has scaling to operate in direct and reverse directions
- air connections: ¼" NPT
- gauge port: ⅛" NPT
- ingress and corrosion protection: NEMA 4X and IP66
- options:
 - pneumatic / electro-pneumatic
 - enclosure: Nema 4/4x / Nema 7 / Intrinsically safe / Fail Freeze
 - indicator: flat / raised
 - material: cast aluminum w/polyester coating / Turfram impregnated / nickel plated
 - feedback module

Specifications:

- input range: **3-15 PSI**
- maximum supply pressure: **145 PSI**
- temperature range: **-40°F to 185°F (-40°C to 85°C)**
- weight: 3½ lbs.

Positioners

XPD Series Digital Positioner

Actuation



XPD Series positioners can be used on Dixon® rack and pinion actuators



Material:

- housing: aluminum

Features:

- NEMA 4X IP65 housing enclosure standard
- microprocessor based valve positioner
- user friendly, menu-driven programming with LCD display, multi-lingual
- local push button configuration - no hand held device or PC necessary
- low air consumption and dependable mechanical modular design
- rotation: 25-120 degrees
- options:
 - explosion proof
 - intrinsically safe / non-incendive
 - Hart
 - no communications
 - foundation fieldbus
 - profibus
 - gauge block with gauges
 - micro switches
 - 4-20ma transmitter
 - filter regulator - coalescing
 - fail freeze

Specifications:

- connections: 1/4" NPT air, 1/2" NPT cable
- maximum air supply: **90 PSI**
- air delivery: 6.0 SCFM @ **90 PSI**
- ambient temperature: **-40°F to 185°F (-40°C to 85°C)**
- stroke: .4 to 4" (longer strokes - POA)
- air consumption: .015 SCFM
- characteristic curves: linear, equal %, 1:25, 1:50, 25:1, 50:1 or user configurable with 20 reference points
- characteristic deviation: ≤ 0.5%
- deadband 0.1%, adjustable to 10%
- resolution (A/D conversion): 4000 steps, Hart: 16,000 steps, FF and PA
- vibration influence: ≤ 1% up to 10 G and 80 Hz
- sample rate: 20 msec

Approval:

Positioners

XPB Series Digital Electro-Pneumatic Positioner

**Materials:**

- body: PPS, stainless steel
- cover: PC
- sealing: EPDM

Features:

- compact design
- graphic display with backlight
- easy start-up by automatic X-Tune function
- comprehensive range of additional software functions
- internal control air routing
- enclosure: SS, PPD

Specification:

- Profibus DPV1 or DeviceNet communication (option)

Approvals:

- CE according to EMV 2004/108/EG
- Protection Class, IP65 and IP67 according to EN 60529

Positioners
PS-AE Series Inductive Proximity Sensors

Actuation



Can be used with Dixon® vertical canister actuator and butterfly valve.



Features:

- 20 standard length models available
- compact metal housing
- housing: shielded / un-shielded
- complete overload protection
- LED status indicators are visible 360 degrees around the cylinder

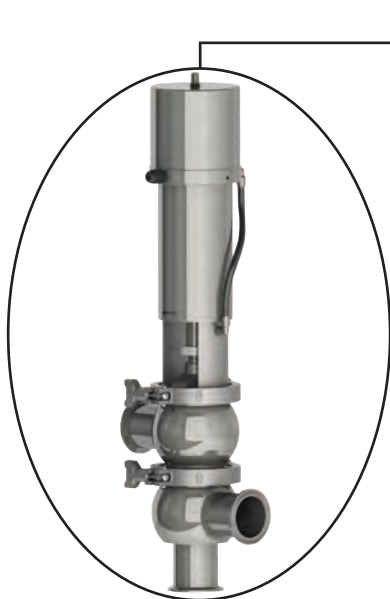
Specifications:

- voltages: 10-30 VDC / 20-253VAC
- logic: NPN / PNP
- axial cable or quick-disconnect models
- IP67 rated

Control Tops CT Series



Can be used on Dixon® SV Series Hygienic Single Seat Valve.

**Materials:**

- enclosure: 304 stainless steel
- cable gland: Poly
- seat materials: NBR

Features:

- Nema 4/4X water proof / dust proof, class IP67 enclosure
- easy maintenance and assembly
- options:
 - 110VAC and 24VDC solenoid options
 - switches; mechanical / proximity
 - Logiec; PNP / NPN

Specifications:

- temperature range: -40°F to 140°F (-40°C to 60°C)
- maximum voltage: 250VAC, 48VDC
- push-in connector (1/4" tube)

Control Tops
BT Series Control Head

Actuation



BT Series Control Heads can be used on Dixon® pneumatically actuated linear valves.



C

Application:

- designed for automation of pneumatic process valves

Features:

- contact-free inductive valve position registration (Teach function)
- colored illuminated status display
- integrated control air routing

Specifications:

- maximum pressure: **101 PSI**
- temperature range: **20°F to 131°F (-7°C to 55°C)**
- protection type: IP65/IP67 according to EN 60529, Type 4X according to NEMA 250 standard
- power supply: 24VDC
- options:
 - communication: without, ASI, Device Net
 - electrical connection: multipol or cable gland

Approval:

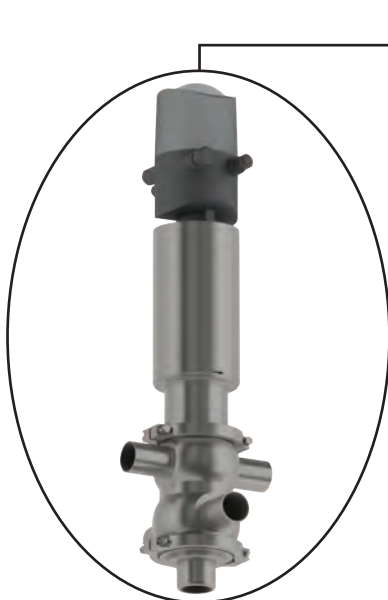
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Control Tops

MT Series Control Head



Can be used on Dixon® / Rieger MP Series Mix proof valves.



Application:

- designed for automation of the Dixon/Rieger MP Series Mix proof valves

Features:

- universal attachment for hygienic process valves
- contactless position measurement system with 3 switching points (Teach-In function)
- color status display
- manual override to be used with closed housing

Specifications:

- maximum pressure: **116 PSI**
- temperature range: **14°F to 131°F (-10°C to 55°C)**
- protection type: IP65/IP67 according to EN 60529
- conformity: Aacc. To CE in compliance with EMV2004/108/EG
- power supply: 24VDC
- options:
 - communication: without, ASI, DeviceNet
 - electrical connection: multipol or cable gland

Actuator Sleeve Inserts

Actuation



square design

Material:

- 304 stainless steel

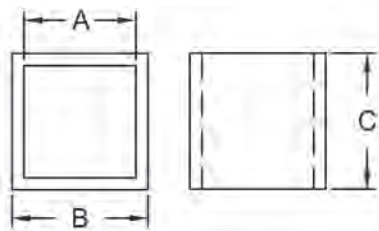
Features:

- fits all pneumatic actuators
- reduces actuator ISO 5211 output drive for direct assembly with smaller square valve stems and couplers
- double square sleeve – high strength iron-based powdered metal
- multiple size reductions possible with one sleeve



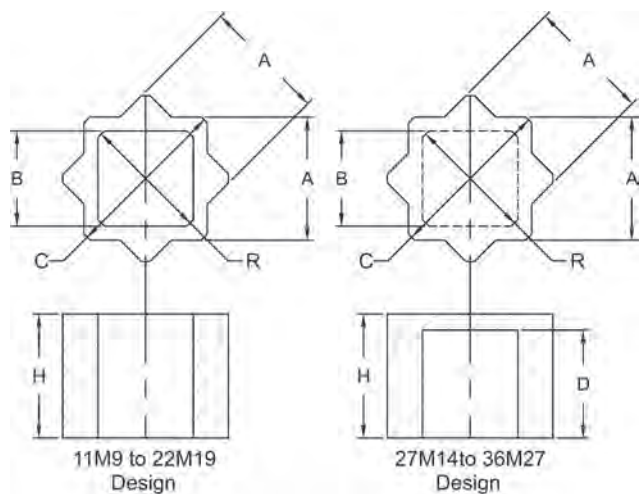
star design

Square Design Dimensions



	XB51-SVA 11/14	XB51-SVB 14/17	XB51-SVC 17/22	XB51-SVD 9/11	XB51-SVE 22/27
A	11	14	17	9	22
B	14	17	22	11	27
C	16	17	22	11	27

Star Design Dimensions



Insert Part Number	36A36	B	C	D	H	R
XB51-STVD	11	9	15.0	N/A	17.0	12.5
XB51-SVH	14	9	19.1	N/A	20.0	12.5
XB51-STVA	14	11	19.1	N/A	20.0	14.5
XB51-SVQ	17	9	23.1	N/A	24.0	12.5
XB51-SV1	17	11	23.1	N/A	24.0	14.5
XB51-STVB	17	14	23.1	N/A	24.0	19.2
XB51-SVJ	22	11	29.6	N/A	30.0	14.5
XB51-SVK	22	14	29.6	N/A	30.0	19.2
XB51-STVC	22	17	29.6	N/A	30.0	23.3
XB51-SVR	22	19	29.6	N/A	30.0	25.8
XB51-SVL	27	14	36.0	27.0	29.0	19.2
XB51-SVM	27	17	36.0	27.0	29.0	23.3
XB51-STVE	27	22	36.0	27.0	29.0	30.0
XB51-STS	36	19	48.0	33.0	35.0	25.8
XB51-SVP	36	27	48.0	33.0	35.0	37.0

Coupler Kit for Rack and Pinion and Electric Actuators

Feature:

- for mounting a rack and pinion or electric actuator to the B5101 series butterfly valve

Coupler Kits

Size	Series	Part Number
1/2" - 1½"	B5101	<i>B5101-ISO100150</i>
2" - 2½"	B5101	<i>B5101-ISO200250</i>
3" - 4"	B5101	<i>B5101-ISO300400</i>
6"	B5101	<i>B5101-ISO600</i>
8"	B5101	<i>B5101-ISO800</i>



Actuation

Butterfly Bracket and Coupling Kit for Vertical Stainless Steel Actuators

Features:

- kit includes everything required to assemble butterfly valve sizes ½" - 4" to the VC series actuator
- convenient for stocking various sizes of butterfly valves for future actuation, or converting a manual valve
- three kits cover valve sizes from ½" to 4"

Size	Series	Part Number
½" - 1½"	B5101	<i>B5101-VC100-150</i>
2" - 2½"	B5101	<i>B5101-VC200-250</i>
3" - 4"	B5101	<i>B5101-VC300-400</i>



Breather Vents

Application:

- used on single acting canister style actuators to prevent dirt and foreign particles from entering ports open to the atmosphere

Materials:

- insert: nickel plated steel
- filter: bronze

Features:

- standard pipe thread connections for quick assembly and removal for cleaning
- 40 micron filter element

Specifications:

- maximum operating pressure: **150 PSI**
- temperature range: **35°F to 300°F (2°C to 149°C)**



NPT Thread	Overall Length	Part Number
½"	7/16"	<i>VC-NR-AF</i>

Air Fittings

Actuation



male elbow



male swivel elbow

Applications:

- Push-to-connect forged fittings are nickel plated and have an FKM seal making them suitable to use with liquids and gaseous fluids.
- Fittings are plated with a high phosphorous FDA nickel plate allowing them to be used in applications where exposure to harsh environments is present.
- applications include: food industry, packaging, robotics, pulp and paper and wash down

Materials:

- body: high phosphorous FDA nickel plated brass
- back-up washer: high phosphorous FDA nickel plated brass
- collet: high phosphorous FDA nickel plated brass
- O-ring: FKM fluoroelastomer conforming to FDA standards
- base: high phosphorous FDA nickel plated brass

Features:

- vacuum capability: 28" HG
- full flow
- excellent resistance to abrasion and corrosion
- silicone free
- available in fractional and metric sizes
- thread sealant is intentionally left off product so the appropriate sealant for the application can be applied

Specifications:

- temperature range: **-4°F to 302°F (-20°C to 150°C)**
- pressure range: up to **435 PSI**

Approval:

- FDA compliant

Tube OD	Male NPT	Part Number	Optional Qty
1/4"	1/8"	32095611	10
1/4"	1/4"	31095614	---

Sanitary Strainers..... D-2 to D-8

Inline strainerD-3 to D-4

Side entry strainerD-5 to D-6

Side-outlet reverse strainerD-7 to D-8

Filters D-9

316 stainless wire cloth mesh over screens D-9

Dual StrainersD-10



Dixon Sanitary Strainers

Strainers



Size:

- 1" - 3" clamp

Material:

- 316L stainless steel

Features:

- Various types:
 - Inline
 - Short
 - Long
 - Long side entry
 - Long side outlet
 - Dual

What Are Strainers Used For?

Strainer Definition:

A strainer is a device used to separate solids from fluids. Here it is used for larger particulate matter from liquid or gas. It uses cleanable media.

Filter Definition:

A filter uses a disposable media to remove finer particulate from the stream. Dixon Sanitary holds Authorization Number 1446 for the 3A Sanitary Standard for Filters using Single Service Filter Media, Number: 10-4. Vertical mounting is necessary to meet 3A 10-04 requirements for minimal product clingage.



Full Flow Coarse Strainers -
 $\frac{1}{4}$ " or $\frac{1}{8}$ " perforations. ($\frac{1}{8}$ " not 3A)

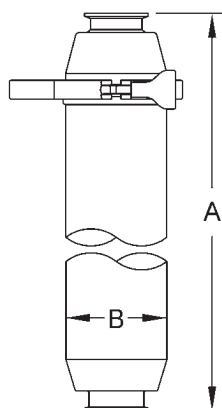


Full Flow Fine/Medium Strainers -
 Can be equipped with a variety of mesh screens for removing finer particles (20 to 100 mesh). See chart on page D-9. (not 3A)



Full Flow Filters -
 Can be equipped with a variety of filtering media, down to 40 microns, media includes polyester, cotton cheesecloth and nylon mesh. See chart on page D-9.

Inline Strainer - BSCCO

**Features:**

- bevel seat, I-line and weld ends available, call Dixon Sanitary 800.789.1718 for information
- Inline units ship standard with the following: spring, distributor cap, clamp gasket, ¼" perforated back-up tube, inlet and outlet bodies and squeeze clamp
- ⅝" perforated back-up tube available, must specify when ordering (not 3A certified)
- must be vertical mount for 3A usage

Size	A short	A long	B	Short 316L Stainless Steel Part Number	Long 316L Stainless Steel Part Number
1"	15.75	--	4.00	BSCCQ1-R100	---
1½"	15.75	35.375	4.00	BSCCQ1-R150	BSCCQ2-R150
2"	15.75	35.375	4.00	BSCCQ1-R200	BSCCQ2-R200
2½"	15.75	--	4.50	BSCCS1-R250	---
3"	15.75	35.375	4.50	BSCCS1-R300	BSCCS2-R300

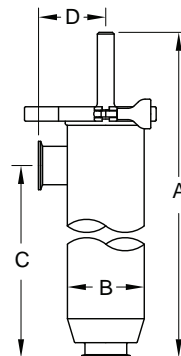
Bill of Materials

Strainers



Item #	Description	Short Part Number	Long Part Number	Material	Qty
1	1" strainer outlet	BS-01-R100	---	316L stainless steel	1
	1½" strainer outlet	BS-01-R150			
	2" strainer outlet	BS-01-R200			
	2½" strainer outlet	BS-01-R250	---		
	3" strainer outlet	BS-01-R300			
2	1" - 2" strainer spring	BS-02-R100-200		316L stainless steel	1
	2½" - 3" strainer spring	BS-02-R250-300			
3	1" - 2" (4") clamp gasket	40MP-U400		Buna	1
	2½" - 3" (4") schedule 5 clamp gasket	40MPV-U400			
4	1" - 2" back-up tube with ⅛" perforations	BS-1418-R100200	BS-2418-R100200	316L stainless steel	1
	2½" - 3" back-up tube with ⅛" perforations	BS-1418-R250300	BS-2418-R250300		
	1" - 2" back-up tube with ¼" perforations	BS-1425-R100200	BS-2425-R100200		
	2½" - 3" back-up tube with ¼" perforations	BS-1425-R250300	BS-2425-R250300		
5	1" - 2" strainer cap	BS-05-R100-200		316L stainless steel	1
	2½" - 3" strainer cap	BS-05-R250-300			
6	1" strainer inlet	BS-16-R100	---	316L stainless steel	1
	1½" strainer inlet	BS-16-R150	BS-26-R150		
	2" strainer inlet	BS-16-R200	BS-26-R200		
	2½" strainer inlet	BS-16-R250	---		
	3" strainer inlet	BS-16-R300	BS-26-R300		
7	1" - 3" various mesh over screens (short/long)	part number on page D-9		316 stainless steel	1
8	1" - 3" various filter bag (short/long)	part number on page D-9		various	1
9	1" - 2" retaining ring used with filter bags	BS-09-U100-200		Buna	2
	2½" - 3" retaining ring used with filter bags	BS-09-U250-300			
10	1" - 2" (4") squeeze clamp	13MHHM-Q400		CF8	1
	2½" - 3" (4") schedule 5 squeeze clamp	13MHHV-Q400			

Side-Entry Strainer - BSCCQ



Strainers

Features:

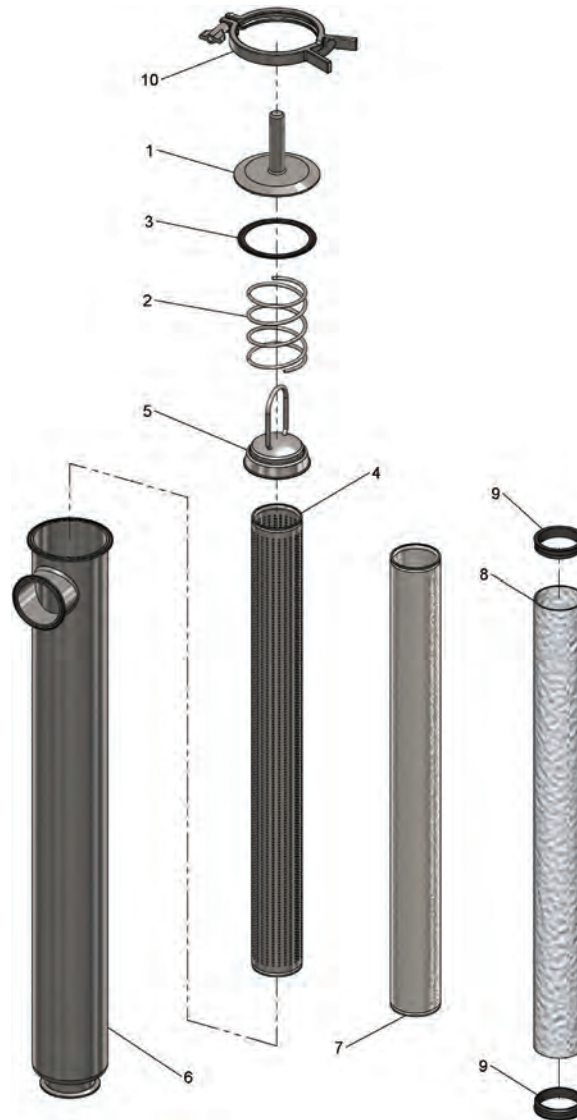
- bevel seat, I-line and weld ends available, call Dixon Sanitary 800.789.1718 for information
- can be serviced in line
- side entry units ship standard with the following: spring, end cap with handle, distributor cap, clamp gasket, 1/4" perforated back-up tube, body and squeeze clamp
- 1/8" perforated back-up tube available, must specify when ordering (not 3A authorized)
- must be vertical mount for 3A usage



Size	A	B	C	D	316L Stainless Steel Part Number
1½"	41.90	4.00	35.00	3.50	BSCCQ3-R150
2"	41.90	4.00	35.00	3.50	BSCCQ3-R200
3"	41.90	4.50	35.00	3.75	BSCCQ3-R300

Bill of Materials

Strainers



Item #	Description	1½" and 2" Part Number	3" Part Number	Material	Qty
1	end cap with handle	BS-31-R100-200	BS-31-R250-300	316L stainless steel	1
2	strainer spring	BS-32-R100-200	BS-32-R250-300	316L stainless steel	1
3	clamp gasket	40MP-U400	40MPV-U400	Buna	1
4	back-up tube with ⅛" perforations back-up tube with ¼" perforations	BS-1418-R100200 BS-1425-R100200	BS-2418-R250300 BS-2425-R250300	316L stainless steel	1
5	distributor cap	BS-35-R100-200	BS-35-R250-300	316L stainless steel	1
6	1½" strainer body 2" strainer body 3" strainer body	BS-36-R150 BS-36-R200 ---	--- --- BS-36-R300	316L stainless steel	1
7	various mesh over screens ¹	part number on page D-9		316 stainless steel	1
8	various filter bag ¹	part number on page D-9		various	1
9	retaining ring used with filter bags ¹	BS-09-U100-200	BS-09-U250-300	Buna	2
10	squeeze clamp for assembly	13MHHM-Q400	13MHHV-Q400	CF8	1

¹Not included, must be ordered separately

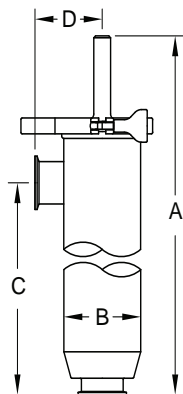
Conversion Kit (to convert side entry to side outlet) - includes item numbers 2, 5, 11 and 12.

BS-Q4KIT-100200, **BS-Q4KIT-250300**

Side-Outlet Reverse Strainer - BSCCO



Strainers

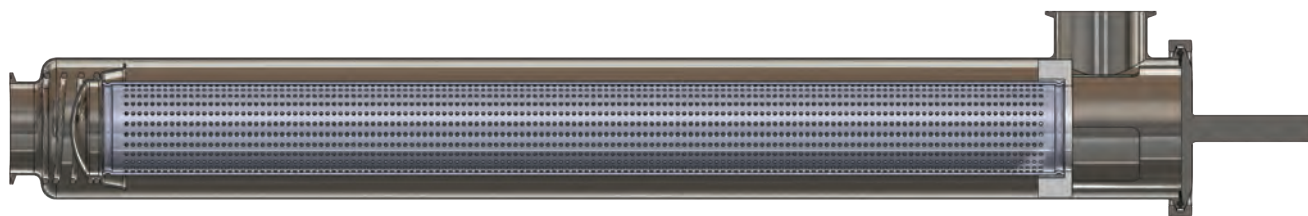


Features:

- bevel seat, I-line and weld ends available, call Dixon Sanitary 800.789.1718 for information
- can be serviced in line
- side outlet reverse units ship standard with the following: spring, end cap with handle, distributor cap, clamp gasket, 1/4" perforated back-up tube, body and squeeze clamp
- 1/8" perforated back-up tube available, must specify when ordering (not 3A authorized)
- must be vertical mount for 3A usage

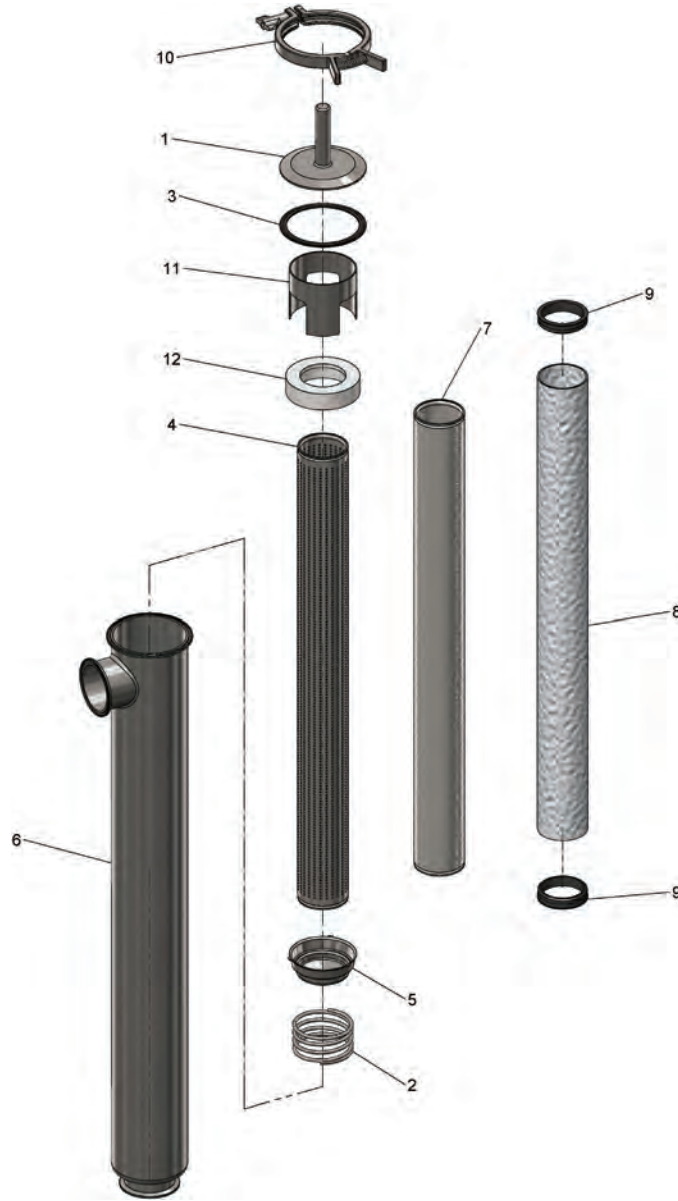


Size	A	B	C	D	316L Stainless Steel Part Number
1 1/2"	41.90	4.00	35.00	3.50	BSCCQ4-R150
2"	41.90	4.00	35.00	3.50	BSCCQ4-R200
3"	41.90	4.50	35.00	3.75	BSCCQ4-R300



Bill of Materials

Strainers



Item #	Description	1½" and 2" Part Number	3" Part Number	Material	Qty
1	end cap with handle	BS-31-R100-200	BS-31-R250-300	316L stainless steel	1
2	strainer spring	BS-02-R100-200	BS-02-R250-300	316L stainless steel	1
3	clamp gasket	40MP-U400	40MPV-U400	Buna	1
4	back-up tube with ⅛" perforations back-up tube with ¼" perforations	BS-1418-R100200 BS-1425-R100200	BS-2418-R250300 BS-2425-R250300	316L stainless steel	1
5	distributor cap	BS-05-R100-200	BS-05-R250-300	316L stainless steel	1
6	1½" strainer body 2" strainer body 3" strainer body	BS-36-R150 BS-36-R200 ---	--- --- BS-36-R300	316L stainless steel	1
7	various mesh over screens ¹	part number on page D-9		316 stainless steel	1
8	various filter bag ¹	part number on page D-9		various	1
9	retaining ring used with filter bags ¹	BS-09-U100-200	BS-09-U250-300	Buna	2
10	squeeze clamp for assembly	13MHHM-Q400	13MHHV-Q400	CF8	1
11	stand off tube	BS-411-R100-200	BS-411-R250-300	316L stainless steel	1
12	retainer ring	BS-412-R100-200	BS-412-R250-300	PTFE	1

¹ Not included, must be ordered separately

Conversion Kit (to convert side entry to side outlet) - includes item numbers 2, 5, 11 and 12

Filters

Features:

- filter medium are special order and minimum quantities apply. (Not included with base unit.)
- filters require retaining ring. See pages D4, D6 and D8 for part numbers.

Size	Micron Rating	Description	Short Part Number	Long/Side Entry/Side Outlet Part Number
1" - 2"	38	nonwoven rayon (glued seam)	BF30A-100-200	---
2½" - 3"	38	nonwoven rayon (glued seam)	BF30A-250-300	---
1" - 2"	513	woven knapped cotton flannel	BF30B-100-200	---
2½" - 3"	513	woven knapped cotton flannel	BF30B-250-300	---
1" - 2"	300	cheese cloth, single thickness cotton	BF30C-100-200	---
2½" - 3"	300	cheese cloth, single thickness cotton	BF30C-250-300	---
1" - 2"	765	nylon, 26/29 mesh, rectangular opening, (.025 x .030)	BF30D-100-200	---
2½" - 3"	765	nylon, 26/29 mesh, rectangular opening, (.025 x .030)	BF30D-250-300	---
1" - 2"	40-42	nonwoven rayon	BF30E-100-200	BF302E-100-200
2½" - 3"	40-42	nonwoven rayon	BF30E-250-300	BF302E-250-300
1" - 2"	40	nonwoven rayon	BF30F-100-200	---
1" - 2"	420	woven nylon, 40 mesh	BF30G-100-200	---
2½" - 3"	420	woven nylon, 40 mesh	BF30G-250-300	BF302G-250-300

Strainers

316 Stainless Wire Cloth Mesh Over Screens

Features:

- not all sizes are stocked, additional sizes are available (5 piece minimum), call Dixon Sanitary 800.789.1718. (Not included with base unit.)
- not 3A compatible

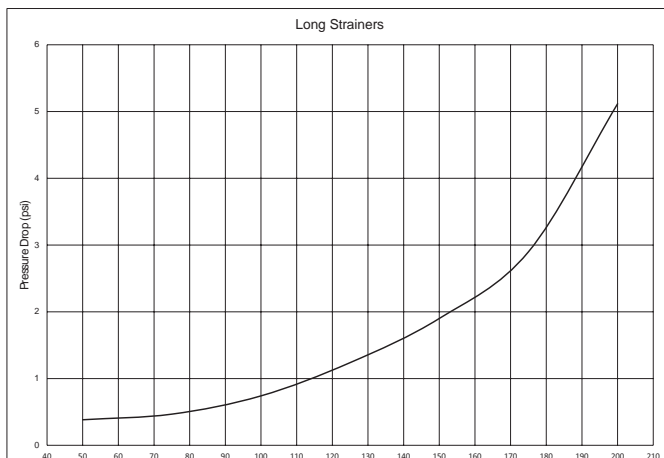
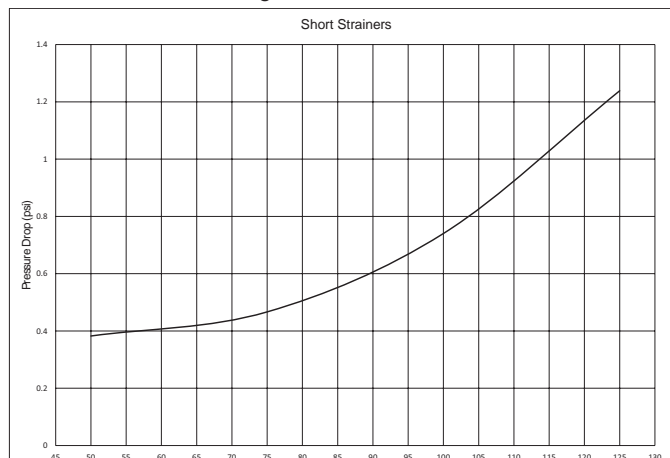
Size	Micron Rating	Square Mesh	Space Between Wires	Percent of Open Area	Short Part Number	Long/Side Entry/Side Outlet Part Number
1" - 2"	864	20	0.034	46.2	BS20-100-200	BS202-100-200
2½" - 3"	864	20	0.034	46.2	BS20-250-300	BS202-250-300
1" - 2"	381	40	0.015	36.0	BS40-100-200	BS402-100-200
2½" - 3"	381	40	0.015	36.0	BS40-250-300	BS402-250-300
1" - 2"	229	60	0.009	30.3	BS60-100-200	BS602-100-200
2½" - 3"	229	60	0.009	30.3	BS60-250-300	BS602-250-300
1" - 2"	178	80	0.007	31.4	BS80-100-200	BS802-100-200
2½" - 3"	178	80	0.007	31.4	BS80-250-300	BS802-250-300
1" - 2"	140	100	0.006	30.3	BS100-100-200	BS1002-100-200
2½" - 3"	140	100	0.006	30.3	BS100-250-300	BS1002-250-300

D

Pressure Drop Curves for Strainer
Water at ambient temperature

Features:

- maximum flow for short units is 125 GPM
- maximum flow for long units is 175 GPM



Dual Strainers

Application:

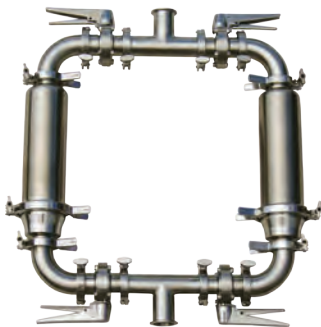
- Use when system needs to be cleaned regularly but product flow needs to be maintained. Short, long, side entry and side outlet dual units are available with manual or actuated valves, contact Dixon Sanitary 800.789.1718 for information.



Design Using 3-way Ball Valves

Description	Part #	Qty
3-way L port ball valves, sizes 1" - 3"	BV3SVLF	2
squeeze clamps, sizes 1" - 3"	13MHMM-Q	4
single pin clamps, sizes 1" to 3"	13MHMM	4
clamp 90° elbow, sizes 1" - 3"	B2CMP-R	4
clamp gaskets in various materials, sizes 1" - 3"	40MP	8

Design Using Butterfly Valves



Description	Part #	Qty
butterfly valve, various handles, actuation and seat materials, sizes 1" - 3"	B5101	4
clamp tee, sizes 1" - 3"	B7MP	2
clamp 90° elbow, sizes 1"- 3"	B2CMP	4
squeeze clamps, sizes 1"- 3"	13MHMM-Q	4
single pin clamps, sizes 1" - 3"	13MHMM	8
clamp gaskets in various materials, sizes 1"- 3"	40MP	12

Sight glasses E-2 to E-3

Inline sight glasses	E-2
Acrylic sight glass end caps	E-2
Compact sight glasses	E-3

Spray balls E-4 to E-5

Rotating spray balls	E-4
Stationary spray balls	E-5

Swivels E-6 to E-7

Straight swivels.....	E-6
Configurations	E-7

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Breakaway couplings.....	E-8
Topping gun	E-8

Maintenance E-9

Jax food grade penetrating oil	E-9
PurGel klear.....	E-9
Food grade anti-seize.....	E-9
Stainless steel cleaner & polish.....	E-9

Custom Fabrication E-10

Inline Sight Glasses

Sizes:

- 1" - 6" OD tube

Materials:

- body: 316L stainless steel
- sight glass: Borosilicate glass or polycarbonate
- gaskets: white Buna or FKM

Features:

- 32R_a sanitary finish, ID and OD



Inline Sight Glass - B54BMP

Features:

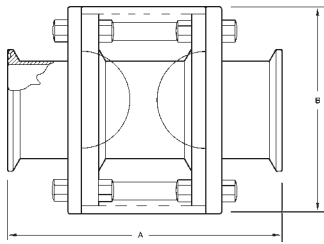
- various end configurations are available: clamp, weld, bevel seat, John Perry, I-Line and Q-Line

Specification:

- maximum temperature: 200°F (93°C)

Tube OD	A	B	Working Pressure (PSI)	316L Stainless Steel Borosilicate Glass Part Number	316 Stainless Steel Polycarbonate Part Number
1"	5.625	3.250	145	B54BMP-R100	B54MP-R100LX
1½"	5.625	4.000	145	B54BMP-R150	B54MP-R150LX
2"	5.625	4.250	145	B54BMP-R200	B54MP-R200LX
2½"	6.125	4.750	120	B54BMP-R250	B54MP-R250LX
3"	7.250	5.500	120	B54BMP-R300	B54MP-R300LX
4"	7.375	6.500	95	B54BMP-R400	B54MP-R400LX
6"	7.625	9.500	80	B54BMP-R600	B54MP-R600LX

Kits and Replacement Parts



Size	Buna Seal Kit Part Number	FKM Seal Kit Part Number	Borosilicate Glass Replacement Part Number	Polycarbonate Replacement Part Number
1"	B54BMP-SK100	B54BMP-VK100	B54G-P100	B54BMP-LX100
1½"	B54BMP-SK150	B54BMP-VK150	B54G-P150	B54BMP-LX150
2"	B54BMP-SK200	B54BMP-VK200	B54G-P200	B54BMP-LX200
2½"	B54BMP-SK250	B54BMP-VK250	B54G-P250	B54BMP-LX250
3"	B54BMP-SK300	B54BMP-VK300	B54G-P300	B54BMP-LX300
4"	B54BMP-SK400	B54BMP-VK400	B54G-P400	B54BMP-LX400
6"	B54BMP-SK600	B54BMP-VK600	B54G-P600	B54BMP-LX600

Seal kit contains: (2) white Buna gaskets

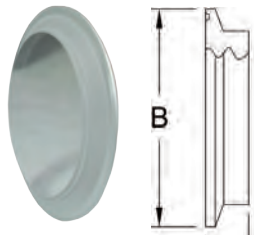
Acrylic Sight Glass End Caps - B5416MP

Feature:

- for use on any line with a clamp and gasket

Specifications:

- maximum temperature: 150°F (66°C)
- maximum operating pressure: 100 PSI



Tube OD	A	B	Acrylic Plastic Part Number
1" - 1½"	.438	1.984	B5416MP-A100150
2"	.438	2.516	B5416MP-A200
2½"	.438	3.047	B5416MP-A250
3"	.438	3.579	B5416MP-A300
4"	.438	4.682	B5416MP-A400

Compact Sight Glasses - B54BMPS

Application:

- used widely in the food, dairy and beverage sanitary processes to view products and fluids

Sizes:

- 1", 1½", 2", 3", 4"

Materials:

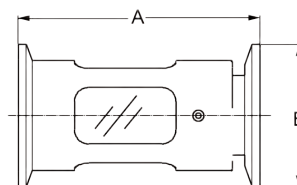
- body: 316L stainless steel
- sight glass: Borosilicate glass or Polycarbonate
- gasket: Buna or FKM

Features:

- design perfect for hoses
- easier to clean than bolted styles
- less cost to repair than bolted styles
- clamp connections standard

Specifications:

- maximum temperature: **200°F (93°C)**
- maximum pressure: **100 PSI**



Tube OD	Dimensions		316L Stainless Steel Borosilicate Glass Part Number	316 Stainless Steel Polycarbonate Part Number
	A	B		
1"	3.375	1.980	B54BMPS-R100	B54BMPS-LX100
1½"	3.640	1.980	B54BMPS-R150	B54BMPS-LX150
2"	3.830	2.516	B54BMPS-R200	B54BMPS-LX200
3"	4.130	3.800	B54BMPS-R300	B54BMPS-LX300
4"	4.340	4.680	B54BMPS-R400	B54BMPS-LX400

Kits and Replacement Parts

Size	Buna Seal Kit Part Number	FKM Seal Kit Part Number	Borosilicate Glass Replacement Part Number	Polycarbonate Replacement Part Number
1"	B54BMPS-SK100	B54BMPS-VK100	B54BMPS-GL100	B54BMPS-LX100
1½"	B54BMPS-SK150	B54BMPS-VK150	B54BMPS-GL150	B54BMPS-LX150
2"	B54BMPS-SK200	B54BMPS-VK200	B54BMPS-GL200	B54BMPS-LX200
3"	B54BMPS-SK300	B54BMPS-VK300	B54BMPS-GL300	B54BMPS-LX300
4"	B54BMPS-SK400	B54BMPS-VK400	B54BMPS-GL400	B54BMPS-LX400

Spray Balls

Sizes:

- ¾" and 1½" NPT
- 1" and 1½" OD tube
- 1½" clamp

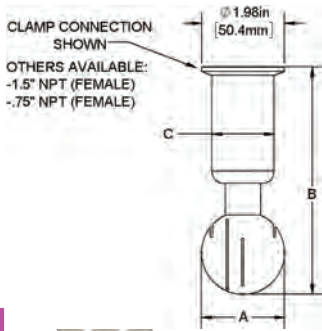
Materials:

- 304 stainless steel
- 316L stainless steel

Feature:

- mirror-like finish OD

Rotating Spray Balls - SRH

**Material:**

- ball bearings: stainless steel

Features:

- ideal for cleaning all types of tanks and vessels
- cleaning solution used to lubricate unit
- mirror-like finish OD
- spray pattern: 360°

Specification:

- connections available: clamp and NPT

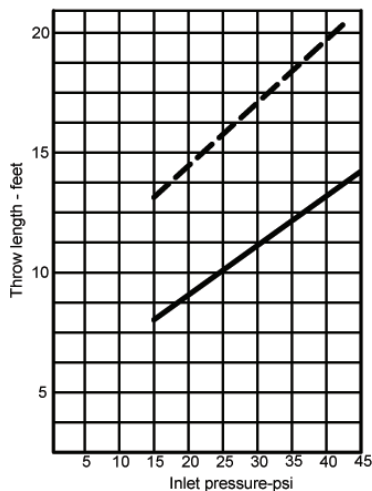
Size	Type	A	B	C	304 Stainless Steel Part Number	316L Stainless Steel Part Number
¾"	NPT	2.08	5.46	1.0	SRH360NPT-G075	---
1½"	NPT	2.54	6.58	1.5	---	SRH360NPT-R150
1½"	Clamp	2.08	5.46	1.0	SRH360CMP-G150	SRH360CMP-R150

Dimensions are approximate. Engineering dimensions are available upon request.
Specifications are subject to change without notice.

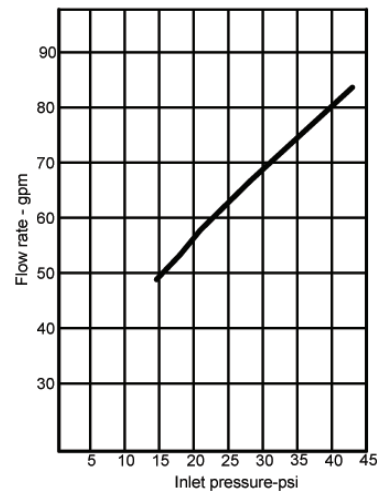


Technical Data

Cleaning Radius



Flow Rate



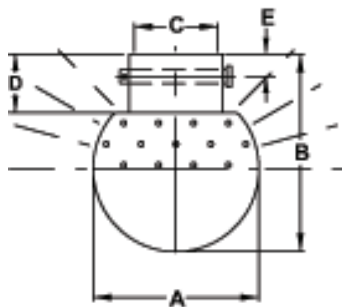
Stationary Spray Balls - STC

Features:

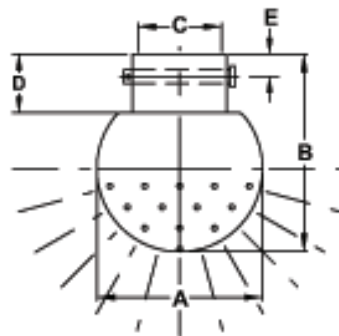
- typically used in food and beverage for cleaning storage tanks
- various spray patterns available (blanks available as special order)
- stationary - designed to be mounted to a tube or pipe
- 2mm spray holes



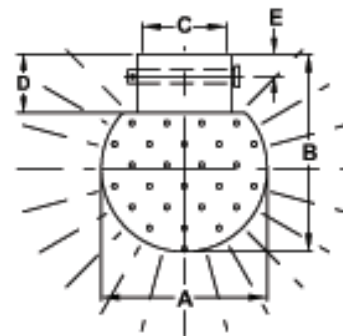
Size	Pin Length	Spray Pattern	A	B	C	D	E	Pin Size	316L Stainless Steel Part Number
1"	1.47	360°	2.50	3.04	1.005	.975	.445	.226	STC-360-R100
1½"	1.95	360°	2.95	3.55	1.505	1.050	.445	.226	STC-360-R150
1"	1.47	180° bottom	3.54	2.95	1.005	.975	.445	.226	STC-180B-R100
1½"	1.95	180° bottom	3.54	2.95	1.505	.975	.445	.226	STC-180B-R150
1"	1.47	180° top	3.54	2.95	1.005	.975	.445	.226	STC-180T-R100
1½"	1.95	180° top	3.54	2.95	1.505	.975	.445	.226	STC-180T-R150



180° Top Pattern



180° Bottom Pattern



360° Pattern

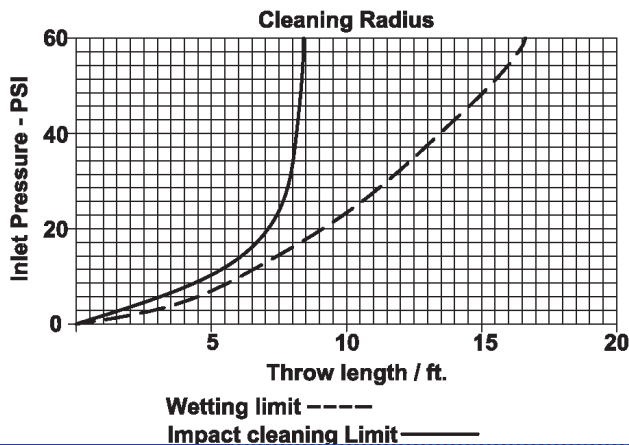
Repair Kits

Size	Part Number
1"	STC-RK100
1½"	STC-RK150

Repair kits contain:

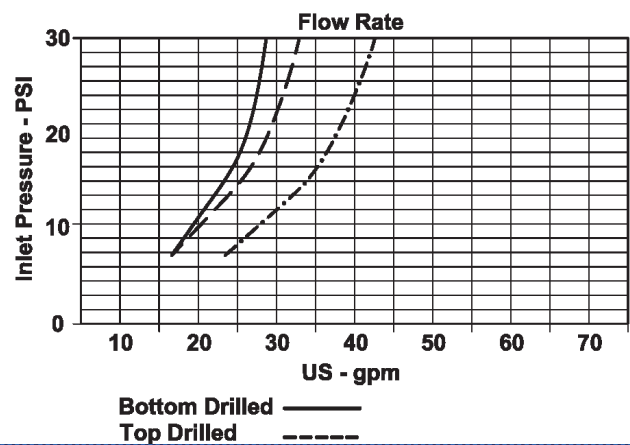
- (1) pin
- (1) R clip

Cleaning Radius



Technical Data

Flow Rate



Swivels

Sizes:

- 1" - 4" tube OD

Materials:

- 316L stainless steel
- seals: PTFE with silicone

Features:

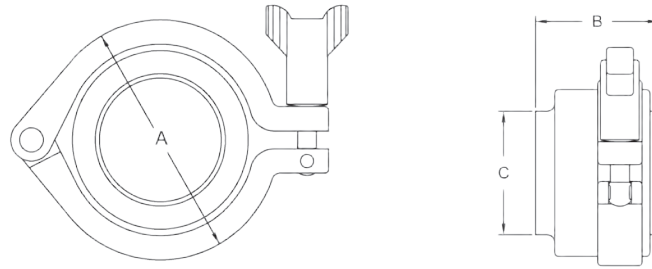
- sanitary finish ID and OD
- optional elastomers available

Specification:

- available in clamp and weld configurations

**Pressure Ratings**

Tube OD	PSI at 70°F (21°C)	PSI at 250°F (121°C)
1"	500	300
1½"	500	300
2"	450	250
2½"	400	200
3"	350	175
4"	300	150

Straight Swivel - SJSS**Straight Clamp Dimensions - Style 20**

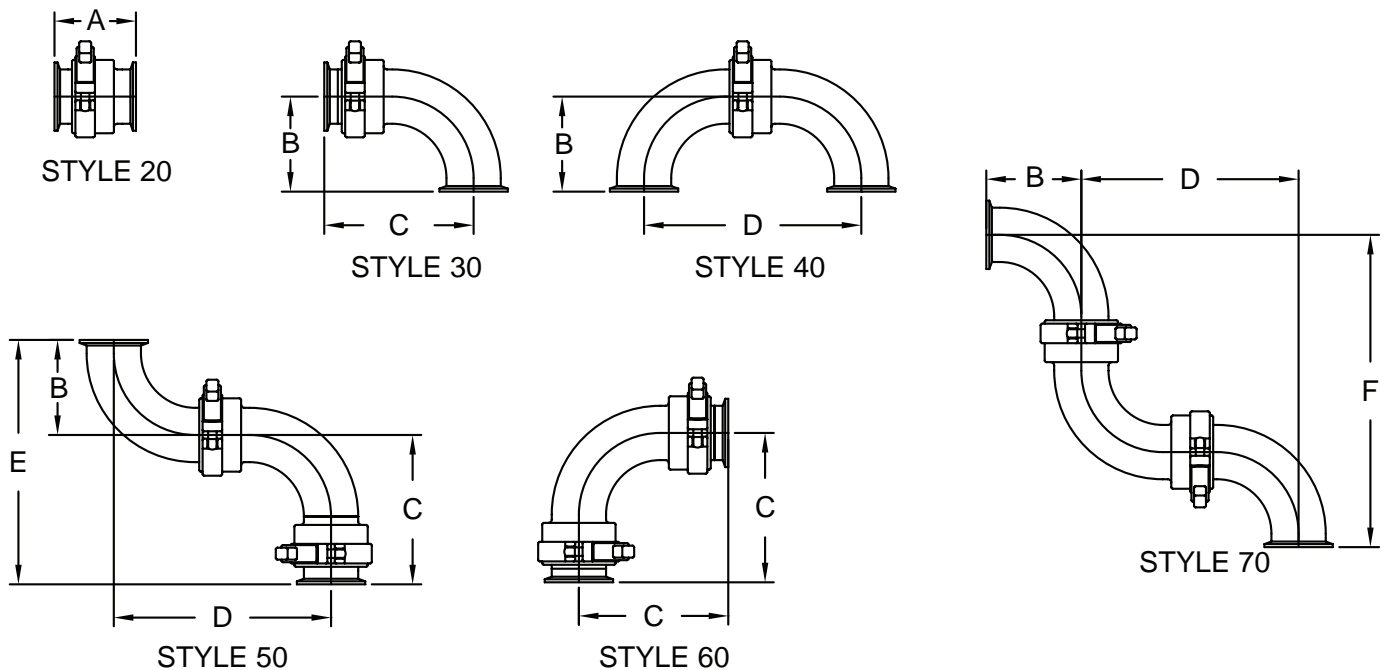
Tube OD	A	B	C	Part Number
1"	2.56	3.00	1.00	<i>SJSS100CC-20</i>
1½"	2.56	3.00	1.50	<i>SJSS150CC-20</i>
2"	3.09	3.00	2.00	<i>SJSS200CC-20</i>
2½"	3.44	3.00	2.50	<i>SJSS250CC-20</i>
3"	3.94	3.00	3.00	<i>SJSS300CC-20</i>
4"	5.08	4.19	4.00	<i>SJSS400CC-20</i>

Straight Weld Connection Dimensions - Style 20

Tube OD	A	B	C	Part Number
1"	2.56	2.00	1.00	<i>SJSS100BB-20</i>
1½"	2.56	2.00	1.50	<i>SJSS150BB-20</i>
2"	3.09	2.00	2.00	<i>SJSS200BB-20</i>
2½"	3.44	2.00	2.50	<i>SJSS250BB-20</i>
3"	3.94	2.00	3.00	<i>SJSS300BB-20</i>
4"	5.08	2.94	4.00	<i>SJSS400BB-20</i>

All dimensions are in inches unless otherwise noted. Engineering dimensions are available upon request.
Specifications are subject to change without notice. Product not returnable and no cancellations.

Configurations



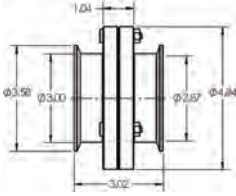
Clamp Joint Dimensions

Size	A	B	C	D	E	F	Part Number
1"	3.00	2.00	4.00	5.00	6.00	7.00	<i>SJSS100CC</i> -*
1½"	3.00	2.75	4.75	6.50	7.50	9.25	<i>SJSS150CC</i> -*
2"	3.00	3.50	5.50	8.00	9.00	11.50	<i>SJSS200CC</i> -*
2½"	3.00	4.25	6.25	9.50	10.50	13.75	<i>SJSS250CC</i> -*
3"	3.00	5.00	7.00	11.00	12.00	16.00	<i>SJSS300CC</i> -*
4"	5.19	6.63	9.63	14.94	15.94	21.56	<i>SJSS400CC</i> -*

* For all other styles, please contact Dixon Sanitary 800.789.1718 for pricing



Sanitary Breakaway Couplings



SBC-E300CC13

Application:

- minimizes spillage and damage associated with pull away and drive away incidents

Materials:

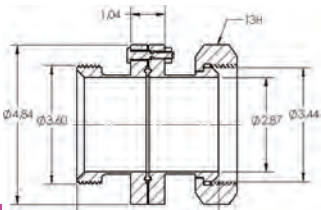
- 316 stainless steel polished to standard $<32R_a$, 3A finish
- clamp gasket: EPDM standard, optional material available

Features:

- designed to be installed between a fixed point and a hose
- 13kN break load bolts standard, other break loads available
- coupling breaks away with an excessive load
- other sizes/connection available

Specification:

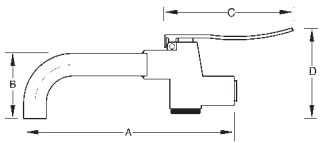
- working pressure: **350 PSI @ 70°F (21°C)**



SBC-E300TP13

Clamp End Part Number	Bevel Seat Part Number
SBC-E300CC13	SBC-E300TP13

Topping Gun - BTG

**Materials:**

- 304 stainless steel
- seals and gaskets: EPDM

Features:

- squeeze handle for easy opening and control
- spring loaded trigger for positive shutoff

Specifications:

- $\frac{1}{2}$ " female NPT inlet
- $\frac{3}{4}$ " OD tube outlet

A	B	C	D	Part Number
8.094	3.375	4.750	4.563	BTG-G50

All dimensions are in inches unless otherwise noted. Engineering dimensions are available upon request. Specifications are subject to change without notice.

Jax Food Grade Penetrating Oil

Features:

- NSF H1 registered for incidental food contact
- colorless, odorless and tasteless
- quickly frees corroded parts
- protects metal from corrosion
- lubricates moving parts

Description	Part Number
16 fl.oz. trigger spray bottle	LUPO-16



PurGel Klear

Features:

- pure white, FDA approved kosher petrolatum for use as a release agent
- use for any assembly, barrier or release applications holding O-rings, gaskets, coating cutting blades or augers

Approval:

- meets FDA 21 CFR Part 172: Food Additive Permitted for direct addition to food for human consumption and Part 178: Indirect Food Additives

Description	Part Number
8 oz. squeeze tube	LUPG-08



Food Grade Anti-Seize

Features:

- non-toxic and non-drying
- lubricates threads
- forms leak-proof seals
- prevents corrosion
- resists water and steam

Approval:

- NSF H1 registered for incidental food contact

Description	Part Number
8 oz. bottle with brush-top cap	LUAS-08



Stainless Steel Cleaner & Polish

Features:

- repels water – beads up like wax
- provides high-gloss protective shield
- dissolves tarnish
- rubs in completely, with no dust or residue

Approval:

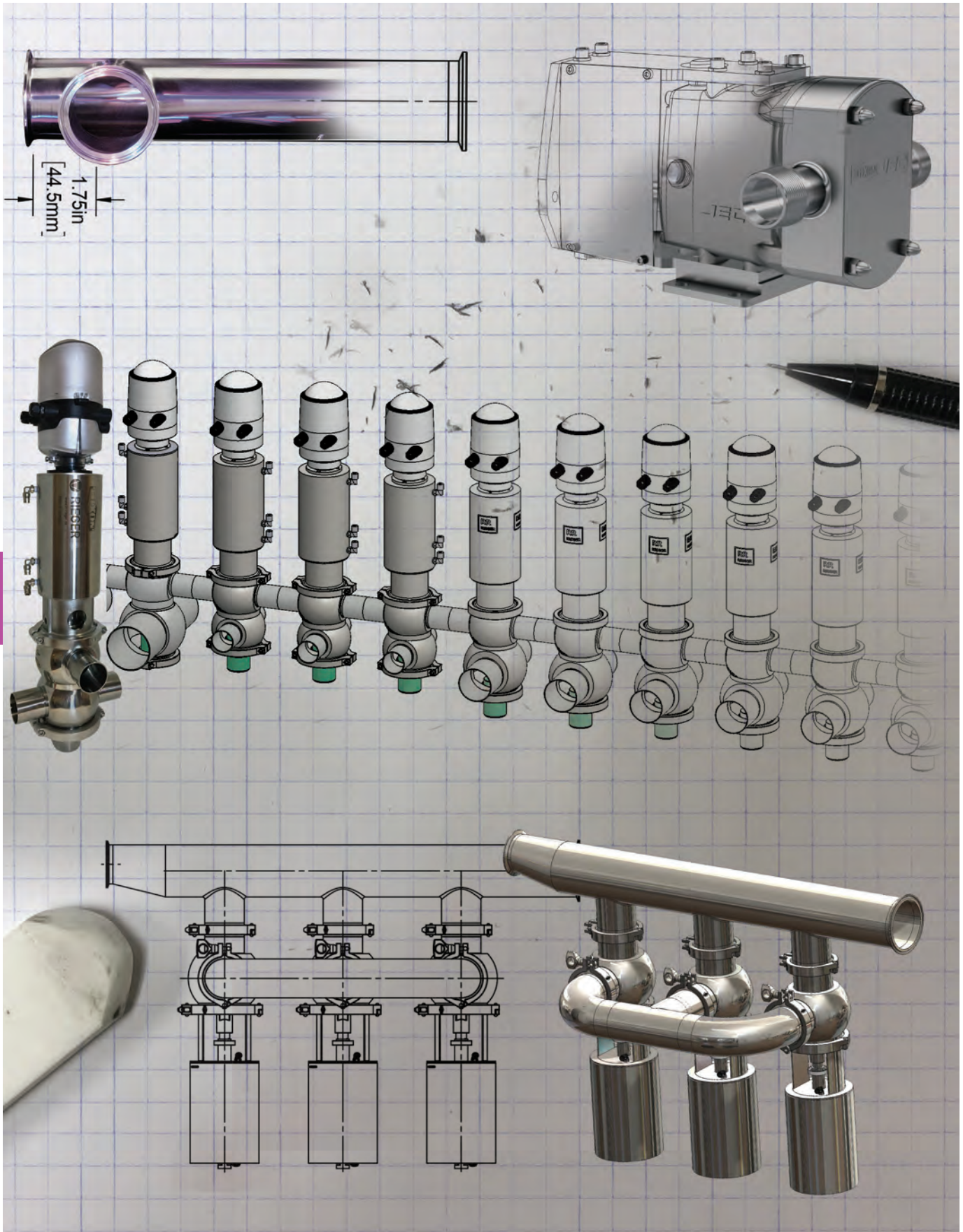
- A7 Registered for use in federally-inspected facilities

Description	Part Number
14 oz. aerosol can	LUCP-14



All products shipped with MSDS (Material Safety Data Sheets)

Fluid Handling
Accessories



GRP

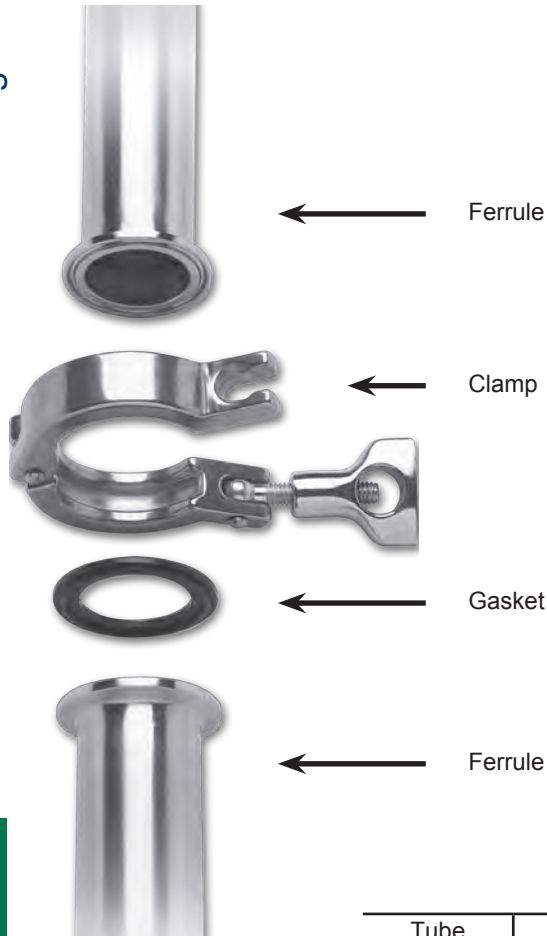
Clamp Fittings.....	F-2 to F-28	Polished Fittings	F-67 to F-76
Single pin squeeze clamps.....	F-3	Weld elbows	F-68 to F-69
Single pin heavy duty clamps with cross hole wing nut.....	F-3	Weld sweep elbows.....	F-70
Single pin heavy duty clamps with serrated wing nut.....	F-3	Weld tees.....	F-71 to F-72
Double pin heavy duty clamps.....	F-3	Weld adapters	F-73
Three segment clamps.....	F-4	Weld reducers	F-73 to F-74
Bolted clamps.....	F-4	Clamp ferrules	F-75
Toggle clamps.....	F-4	Weld miscellaneous.....	F-75 to F-76
T-bolt clamps.....	F-4	Weld end covers.....	F-76
Dairy clamps.....	F-5	Unpolished Fittings.....	F-77 to F-83
Spring loaded nut	F-5	Weld elbows	F-78
Accessories	F-5	Weld end caps.....	F-79
Clamp ferrules	F-6 to F-8	Weld adapters	F-79
Clamp caps.....	F-8	Weld tees.....	F-80
Clamp adapters	F-9 to F-12	Weld reducers	F-81
Clamp elbows.....	F-13 to F-15	Weld miscellaneous.....	F-82
Clamp Tees.....	F-15	Weld end covers.....	F-82
Clamp reducers	F-16 to F-17	Flanges.....	F-83
Miscellaneous clamp configurations.....	F-17 to F-18	Gaskets	F-83
Gaskets	F-19 to F-26	High Purity BioPharm Line	F-84 to F-96
Clamp fitting and gasket sizing guide.....	F-27 to F-28	Elbows	F-85 to F-86
Pipe Fittings.....	F-29 to F-37	Tees.....	F-87 to F-91
Clamps	F-30	Concentric reducers	F-92 to F-93
Ferrules	F-30 to F-31	Eccentric reducers.....	F-93 to F-94
End caps.....	F-31	End caps.....	F-95
Adapters	F-32	Auto weld ferrules.....	F-95
Hangers	F-33 to F-35	Weld caps.....	F-95
Schedule 5S and 10S pipe size clamp gaskets.....	F-35	Adapters	F-96
Pipe gasket sizing guide.....	F-36 to F-37		
Bevel Seat	F-38 to F-47		
Nuts	F-39		
Wrenches	F-39		
Ferrules	F-40 to F-43		
Adapters	F-43		
Elbows.....	F-44		
Concentric reducers	F-45		
Gaskets	F-46 to F-47		
I-Line/Q-Line Fittings.....	F-48 to F-56		
Clamps	F-49 to F-52		
End caps.....	F-52		
Adapters	F-53		
Elbows.....	F-54		
Gaskets	F-55 to F-56		
John Perry Fittings	F-57 to F-61		
Nuts	F-58		
Wrenches	F-58		
Ferrules	F-59		
End caps.....	F-60		
Gaskets	F-60 to F-61		
Euro Fittings	F-62 to F-66		
DIN 11851.....	F-63		
SMS.....	F-64		



Dixon Sanitary Clamp Fittings

A Complete Clamp Connection

Fittings

**Sizes:**

- ½" - 12" OD tube

Materials:

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

Features:

- 3A sanitary finish ID and OD
- other finishes are available

Dimensions of stainless steel tube given in inches


Tube OD	Nominal Wall Thickness (inches)	Gage Number
½"	.065	16
¾"	.065	16
1"	.065	16
1½"	.065	16
2"	.065	16
2½"	.065	16
3"	.065	16
4"	.083	14
5"	.109	12
6"	.109	12
8"	.109	12
10"	.120	10
12"	.120	10

This section contains tube OD materials. Please note in sizes ½" through 12" the pipe is known by its nominal inside diameter, which differs from its actual inside diameter. To distinguish pipe sizes from actual measured diameters as used for tube, the terms iron pipe size (IPS) or nominal pipe size (NPS) are usually used. For all pipe sizes, the outside diameter (OD) remains constant; the variations in wall thickness affect the inside diameter (ID).



Pipe size and Tube OD size materials are not interchangeable

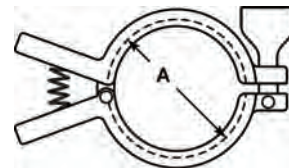
Clamps

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

Single Pin Squeeze Clamps - 13MHHM-Q

Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
½" - ¾"	1500	1200	1.062	13MHHM-Q75
1" - 1½"	500	300	2.122	13MHHM-Q100150
2"	450	250	2.654	13MHHM-Q200
2½"	400	200	3.185	13MHHM-Q250
3"	350	175	3.717	13MHHM-Q300
4"	300	150	4.820	13MHHM-Q400

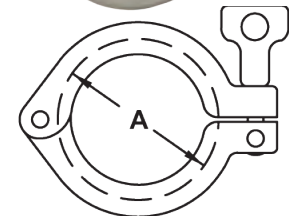
¹ wing nut tightened to 25 in. lb. of torque



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

Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
½" - ¾"	1500	1200	1.062	13MHHM50-75
1" - 1½"	500	300	2.122	13MHHM100-150
2"	450	250	2.654	13MHHM200
2½"	400	200	3.185	13MHHM250
3"	350	175	3.717	13MHHM300
4"	300	150	4.820	13MHHM400
5"	225	100	5.820	13MHHM500
6"	150	75	6.695	13MHHM600
8"	100	50	8.695	13MHHM800

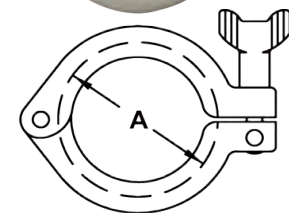
¹ wing nut tightened to 25 in. lb. of torque



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

Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
½" - ¾"	1500	1200	1.062	13MHHM50-75SN
1" - 1½"	500	300	2.122	13MHHM100-150SN
2"	450	250	2.654	13MHHM200SN
2½"	400	200	3.185	13MHHM250SN
3"	350	175	3.717	13MHHM300SN
4"	300	150	4.820	13MHHM400SN
5"	225	100	5.820	13MHHM500SN
6"	150	75	6.695	13MHHM600SN
8"	100	50	8.695	13MHHM800SN

¹ wing nut tightened to 25 in. lb. of torque



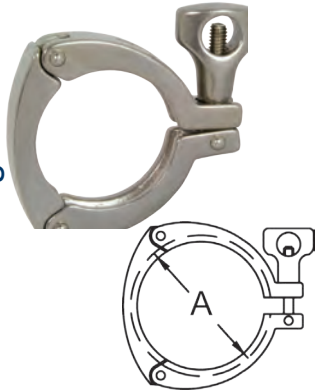
Double Pin Heavy Duty Clamps - 13MHHM-DP

Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
1" - 1½"	500	300	2.122	13MHHM-DP100150
2"	450	250	2.654	13MHHM-DP200
2½"	400	200	3.185	13MHHM-DP250
3"	350	175	3.717	13MHHM-DP300
4"	300	150	4.820	13MHHM-DP400
10"	100	50	10.740	13MHHM-DP1000



Clamps

Fittings

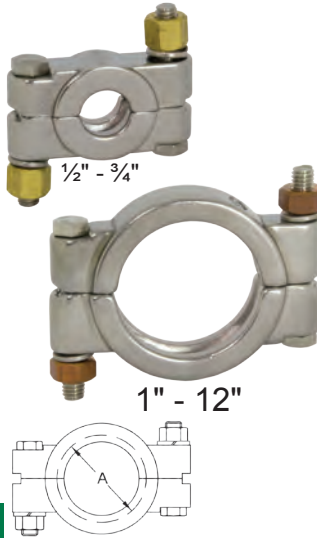


Three Segment Clamps - 13MHHM-3P

Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
1" - 1½"	600	300	2.122	13MHHM-3P100150
2"	550	275	2.654	13MHHM-3P200
2½"	450	225	3.185	13MHHM-3P250
3"	350	175	3.717	13MHHM-3P300
4"	300	150	4.820	13MHHM-3P400
12"	75	50	12.740	13MHHM-3P1200

¹ wing nut tightened to 25 in. lb. of torque

Bolted Clamps - 13MHP



Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
½" - ¾"	1500	1200	1.062	13MHP75
1" - 1½"	1500	1200	2.046	13MHP100-150
2"	1000	800	2.578	13MHP200
2½"	1000	800	3.110	13MHP250
3"	1000	800	3.640	13MHP300
4"	800	600	4.744	13MHP400
6"	300	200	6.632	13MHP600
8"	250	150	8.638	13MHP800
10"	200	125	10.740	13MHP1000
12"	150	100	12.740	13MHP1200

¹ all nuts are tightened to 20 ft. lb. of torque

Toggle Clamps - 13MHLA



Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	304 Stainless Steel Part Number
1" - 1½"	150	125	2.122	13MHLA100-150
2"	150	125	2.654	13MHLA200
2½"	150	125	3.185	13MHLA250
3"	150	125	3.717	13MHLA300
4"	100	75	4.820	13MHLA400

¹ screw tightened to maximum

T-bolt Clamps - 13MO



Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	304 Stainless Steel Part Number
1" - 1½"	500	250	2.080	13MO100-150
2"	350	200	2.610	13MO200
2½"	300	150	3.140	13MO250
3"	200	100	3.670	13MO300
4"	100	75	4.780	13MO400
6"	75	50	6.690	13MO600
8" ²	50	40	8.690	13MO800
10" ²	40	30	10.690	13MO1000
12" ²	30	25	12.690	13MO1200

Clamps

Dairy Clamps - 13WGC

Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	304 Stainless Steel Part Number
1" - 1½"	100	75	2.080	13WGC100-150
2"	100	75	2.610	13WGC200
2½"	100	75	3.140	13WGC250
3"	100	75	3.670	13WGC300
4"	100	75	4.780	13WGC400

¹ finger tight



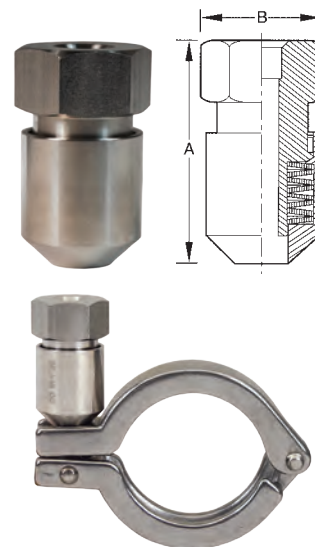
Fittings

Spring Loaded Nut - 13SLN

Features:

- Lines using PTFE gaskets that are subject to large temperature swings can benefit from this special product. As the PTFE is compressed through the cycling of the lines, the spring loaded will help keep the connection from leaking.
- If the lines suffer from vibration and bolted clamps are not an option, refitting single pin clamps with this nut will keep the connections from leaking for a longer time than the standard wing nuts.
- If you transport material in tanks via truck, the vibrations can loosen the standard single pin clamps - spring loaded nuts can add a level of insurance to the shipment.
- note: can be used on all wing nut style clamps.
- torque to 50 in. lb.

Thread	A	B	304 Stainless Steel Part Number
5/16 - 5/18	1.73	.875	13SLN



Accessories

Description	Part Number
cross hole wing nut 5/16"-18	13WNX
mini cross hole wing nut 5/16"-18 for ½" - ¾" clamps	13WNXM
serrated wing nut 5/16"-18	13WNS
hex wing nut 5/16"-18	13WNH
bronze hex nut 3/8"-16 for bolted clamps	13BN
brass 3/8-16 nuts used on ½" - ¾" and 10" & 12" bolted clamps	13BNH
stainless steel hex nut for bolted clamps	13SN
3/8" 304 stainless steel lock washer	13LW
bolt 3/8"-16 x 2¼" for ½" - 1½" bolted clamps	13CB-2.25
bolt 3/8"-16 x 2¾" for 2" and 2½" bolted clamps	13CB-2.75
bolt 3/8"-16 x 3¼" for 3" - 12" bolted clamps	13CB-3.25
rivet pin for ½" - 5" single pin clamps 5/16" x 1"	13RP
rivet pin for 6" and 8" single pin clamps 5/16" x 1-1/8"	13RP6
5/16"-18 x 2" threaded eye bolt for ½" - 5" clamps	13IB
5/16"-18 x 2½" threaded eye bolt for 6" - 12" clamps	13IB6



Clamp Ferrules

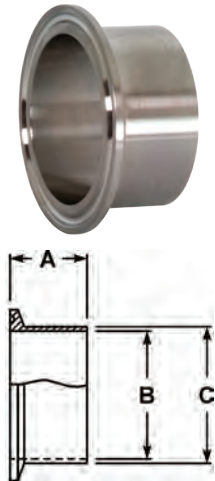
Fittings



3 Short Weld Ferrules - 14WMP

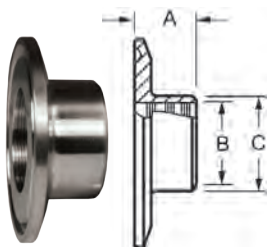
Tube OD	A	B	C	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	.500	.370	.500	14WMP-G50	14WMP-R50
3/4"	.500	.620	.750	14WMP-G75	14WMP-R75
1"	.500	.870	1.000	14WMP-G100	14WMP-R100
1 1/2"	.500	1.370	1.500	14WMP-G150	14WMP-R150
2"	.500	1.870	2.000	14WMP-G200	14WMP-R200
2 1/2"	.500	2.370	2.500	14WMP-G250	14WMP-R250
3"	.500	2.870	3.000	14WMP-G300	14WMP-R300
4"	.625	3.834	4.000	14WMP-G400	14WMP-R400
5"	.750	4.782	5.000	14WMP-G500	14WMP-R500
6"	.875	5.782	6.000	14WMP-G600	14WMP-R600
8"	.875	7.782	8.000	14WMP-G800	14WMP-R800
10"	.875	9.760	10.000	14WMP-G1000	14WMP-R1000
12"	.875	11.760	12.000	14WMP-G1200	14WMP-R1200

3 Long Weld Ferrules - L14AM7



Tube OD	A	B	C	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	1.125	.370	.500	L14AM7-G50	L14AM7-R50
3/4"	1.125	.620	.750	L14AM7-G75	L14AM7-R75
1"	1.125	.870	1.000	L14AM7-G100	L14AM7-R100
1 1/2"	1.125	1.370	1.500	L14AM7-G150	L14AM7-R150
2"	1.125	1.870	2.000	L14AM7-G200	L14AM7-R200
2 1/2"	1.125	2.370	2.500	L14AM7-G250	L14AM7-R250
3"	1.125	2.870	3.000	L14AM7-G300	L14AM7-R300
4"	1.125	3.834	4.000	L14AM7-G400	L14AM7-R400
5"	1.125	4.782	5.000	L14AM7-G500	L14AM7-R500
6"	1.500	5.782	6.000	L14AM7-G600	L14AM7-R600
8"	1.500	7.782	8.000	L14AM7-G800	L14AM7-R800
10"	1.750	9.760	10.000	L14AM7-G1000	L14AM7-R1000
12"	1.750	11.760	12.000	L14AM7-G1200	L14AM7-R1200

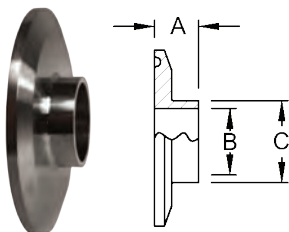
3* Reducing Roll-on Ferrules for Expanding - B31RMP



Clamp End	Tube OD	A	B	C	304 Stainless Steel Part Number
1 1/2"	1"	.750	1.007	1.160	B31RMP-G150100
2"	1"	.750	1.007	1.160	B31RMP-G200100
2"	1 1/2"	1.125	1.507	1.676	B31RMP-G200150

*Meets 3A Standard Number 63-03 when used to modify or repair existing on-site farm milk handling systems.

3 Reducing Ferrules - B31WMP

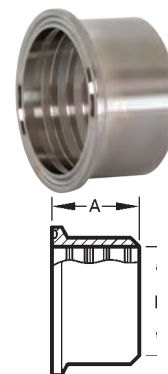


Tube OD	A	B	C	304 Stainless Steel Part Number	316L Stainless Steel Part Number
2" x 1"	.500	.870	1.000	B31WMP-G200100	B31WMP-R200100
2 1/2" x 1 1/2"	.500	1.370	1.500	B31WMP-G250150	B31WMP-R250150
2 1/2" x 2"	.500	1.870	2.000	B31WMP-G250200	B31WMP-R250200
3" x 2"	.500	1.870	2.000	B31WMP-G300200	B31WMP-R300200
3" x 2 1/2"	.500	2.370	2.500	B31WMP-G300250	B31WMP-R300250

Clamp Ferrules

Roll-On Ferrules for Expanding - 14RMP 

Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.750	1.005	14RMP-G100	14RMP-R100
1½"	1.125	1.505	14RMP-G150	14RMP-R150
2"	1.312	2.005	14RMP-G200	14RMP-R200
2½"	1.375	2.505	14RMP-G250	14RMP-R250
3"	1.437	3.005	14RMP-G300	14RMP-R300
4"	1.500	4.005	14RMP-G400	14RMP-R400
6"	2.000	6.005	14RMP-G600	---



Fittings

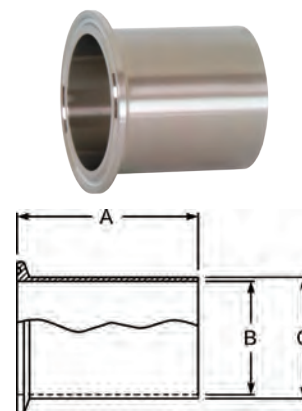
*Meets 3A Standard Number 63-03 when used to modify or repair existing on-site farm milk handling systems.

Automatic Weld Ferrules - TL14AM7 

Approval:

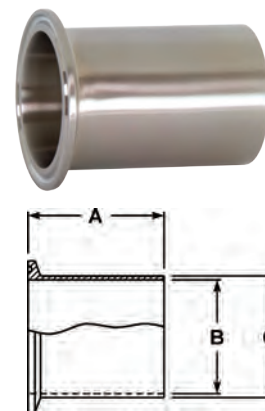
- meets ASME BPE-2012 specifications

Tube OD	A	B	C	316L Stainless Steel Part Number
½"	1.750	.370	.500	TL14AM7-050PL
¾"	1.750	.620	.750	TL14AM7-075PL
1"	1.750	.870	1.000	TL14AM7-100PL
1½"	1.750	1.370	1.500	TL14AM7-150PL
2"	2.250	1.870	2.000	TL14AM7-200PL
2½"	2.250	2.370	2.500	TL14AM7-250PL
3"	2.250	2.870	3.000	TL14AM7-300PL
4"	2.250	3.834	4.000	TL14AM7-400PL
6"	3.000	5.782	6.000	TL14AM7-600PL



Tank Ferrules (light duty) - 14WLMP 

Tube OD	A	B	C	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	3.000	.870	1.000	14WLMP-G100	14WLMP-R100
1½"	3.000	1.370	1.500	14WLMP-G150	14WLMP-R150
2"	3.000	1.870	2.000	14WLMP-G200	14WLMP-R200
2½"	3.000	2.370	2.500	14WLMP-G250	14WLMP-R250
3"	4.000	2.870	3.000	14WLMP-G300	14WLMP-R300
4"	4.000	3.834	4.000	14WLMP-G400	14WLMP-R400
6"	6.000	5.782	6.000	14WLMP-G600	14WLMP-R600
8"	6.000	7.782	8.000	---	14WLMP-R800
10"	6.000	9.760	10.000	---	14WLMP-R1000
12"	6.000	11.760	12.000	---	14WLMP-R1200

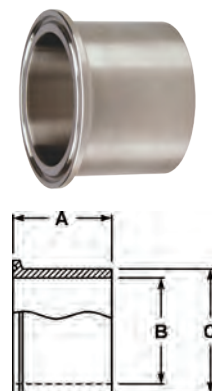


Tank Ferrules (heavy duty) - 14MPW 

Specification:

- certified ASME materials

Tube OD	A	B	C	316L Stainless Steel Part Number
½"	1.625	.321	.502	14MPW-R50
¾"	1.625	.574	.750	14MPW-R75
1"	1.625	.870	1.160	14MPW-R100
1½"	1.625	1.370	1.676	14MPW-R150
2"	1.750	1.870	2.192	14MPW-R200
2½"	1.750	2.370	2.708	14MPW-R250
3"	1.813	2.870	3.224	14MPW-R300
4"	2.125	3.834	4.256	14MPW-R400
6"	2.500	5.782	6.402	14MPW-R600



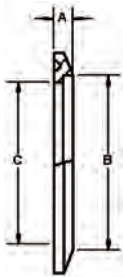
Clamp Ferrules

Quick Weld Ferrules - 14QMP

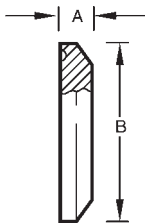
Features:

- 304 stainless construction
- just slip onto sanitary OD tube and weld
- no need to butt weld

Fittings



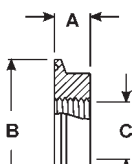
Tube OD	A	B	C	304 Stainless Steel Part Number
1"	.290	1.005	.870	14QMP-G100
1½"	.199	1.505	1.370	14QMP-G150
2"	.205	2.005	1.870	14QMP-G200
2½"	.210	2.505	2.370	14QMP-G250
3"	.257	3.005	2.870	14QMP-G300
4"	.235	4.005	3.834	14QMP-G400
6"	.321	6.005	5.782	14QMP-G600

 Solid End Caps - 16AMP


Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
½" - ¾"	.187	.992	16AMP-G50-75	16AMP-R50-75
1" - 1½"	.250	1.984	16AMP-G100-150	16AMP-R100-150
2"	.250	2.516	16AMP-G200	16AMP-R200
2½"	.250	3.047	16AMP-G250	16AMP-R250
3"	.250	3.579	16AMP-G300	16AMP-R300
4"	.312	4.682	16AMP-G400	16AMP-R400
5"	.312	5.687	16AMP-G500	16AMP-R500
6"	.437	6.570	16AMP-G600	16AMP-R600
8"	.437	8.570	16AMP-G800	16AMP-R800
10"	.437	10.570	16AMP-G1000	16AMP-R1000
12"	.437	12.570	16AMP-G1200	16AMP-R1200

- specify if you are using a piping system or a tubing system when ordering

Thermometer Caps -B23BMP



Tube OD	A	B	C ¹	304 Stainless Steel Part Number	316L Stainless Steel Part Number
½"	.500	.993	¼ NPT	---	B23BMP-R5014
¾"	.500	.993	¼ NPT	---	B23BMP-R7514
1"	.625	1.984	½ NPT	B23BMP-G100	B23BMP-R100
1½"	.625	1.984	¾ NPT	B23BMP-G150	B23BMP-R150
2"	.625	2.516	¾ NPT	B23BMP-G200	B23BMP-R200
2½"	.625	3.047	¾ NPT	B23BMP-G250	B23BMP-R250
3"	.625	3.579	¾ NPT	B23BMP-G300	B23BMP-R300
4"	.625	4.682	¾ NPT	B23BMP-G400	B23BMP-R400

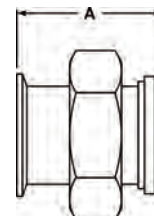
¹ other NPT tap sizes available, call Dixon Sanitary 800.789.1718

Clamp Adapters

Fittings

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

Tube OD	A	304 Stainless Steel Part Number
1"	3.000	17MP-14-G100
1½"	3.000	17MP-14-G150
2"	3.000	17MP-14-G200
2½"	3.500	17MP-14-G250
3"	3.750	17MP-14-G300
4"	4.000	17MP-14-G400



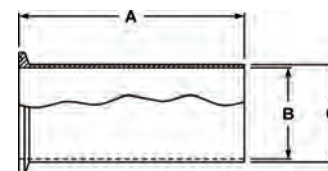
Clamp x Threaded Bevel Seat Adapters - 17MP-15 

Tube OD	A	304 Stainless Steel Part Number
1"	1.843	17MP-15-G100
1½"	1.843	17MP-15-G150
2"	1.875	17MP-15-G200
2½"	2.000	17MP-15-G250
3"	2.031	17MP-15-G300
4"	2.156	17MP-15-G400



Tygon® Hose Adapters - 14MPHT

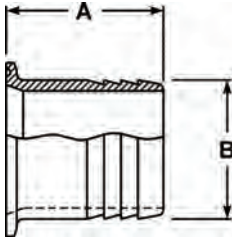
Tube OD	A	B	C	316L Stainless Steel Part Number
½"	4.000	.370	.500	14MPHT-R50
¾"	4.000	.620	.750	14MPHT-R75
1"	4.500	.870	1.000	14MPHT-R100
1½"	4.500	1.370	1.500	14MPHT-R150
2"	4.500	1.870	2.000	14MPHT-R200
2½"	4.500	2.370	2.500	14MPHT-R250
3"	4.500	2.870	3.000	14MPHT-R300
4"	4.625	3.834	4.000	14MPHT-R400
6"	6.000	5.782	6.000	14MPHT-R600



Clamp Adapters

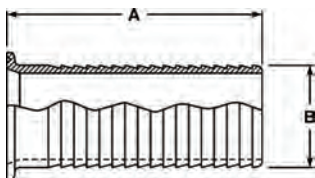
Rubber Hose Adapters - 14MPHR

Fittings



Tube OD	Hose Size	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	1/8"	1.250	.125	---	14MPHR-R50125
	1/4"	1.500	.250	---	14MPHR-R5025
	3/8"	1.500	.375	---	14MPHR-R50375
	1/2"	1.500	.500	---	14MPHR-R50
	3/4"	1.500	.750	---	14MPHR-R5075
3/4"	1/8"	1.500	.125	---	14MPHR-R75125
	1/4"	1.500	.250	---	14MPHR-R7525
	3/8"	1.500	.375	---	14MPHR-R75375
	1/2"	1.500	.500	---	14MPHR-R7550
	3/4"	1.500	.750	---	14MPHR-R75
1"	3/8"	1.500	.375	14MPHR-G100375	14MPHR-R100375
	1/2"	1.500	.500	14MPHR-G10050	14MPHR-R10050
	3/4"	1.688	.750	14MPHR-G10075	14MPHR-R10075
	1"	1.688	1.000	14MPHR-G100	14MPHR-R100
1 1/2"	1/8"	1.500	.125	14MPHR-G150125	14MPHR-R150125
	1/4"	1.500	.250	---	14MPHR-R15025
	3/8"	1.500	.375	14MPHR-G150375	14MPHR-R150375
	1/2"	1.500	.500	14MPHR-G15050	14MPHR-R15050
	5/8"	1.500	.625	14MPHR-G150625	14MPHR-R150625
	3/4"	1.500	.750	14MPHR-G15075	14MPHR-R15075
	1"	1.687	1.000	14MPHR-G150100	14MPHR-R150100
	1 1/4"	1.689	1.250	---	14MPHR-R150-125
2"	1 1/2"	2.312	1.500	14MPHR-G200150	14MPHR-R200150
	2"	2.312	2.000	14MPHR-G200	14MPHR-R200
2 1/2"	2 1/2"	2.344	2.500	14MPHR-G250	14MPHR-R250
3"	3"	3.094	3.000	14MPHR-G300	14MPHR-R300
4"	4"	3.406	4.000	14MPHR-G400	14MPHR-R400
6"	6"	3.406	6.000	14MPHR-G600	14MPHR-R600
8"	8"	3.406	8.000	14MPHR-G800	14MPHR-R800

Brewery Hose Barb Adapters - 14MPHRL



Feature:

- suitable for use with band clamps

Size	A	B	304 Stainless Steel Part Number
1"	3.500	1.045	14MPHRL100
1 1/2"	5.000	1.545	14MPHRL150
2"	5.000	2.045	14MPHRL200
2 1/2"	5.500	2.545	14MPHRL250
3"	5.500	3.045	14MPHRL300
4"	5.500	4.045	14MPHRL400



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

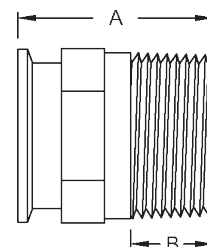
Clamp Adapters

Male NPT Adapters - 21MP

Tube OD	NPT Size	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	1/8"	2.000	.392	---	21MP-R50125
	1/4"	2.000	.595	---	21MP-R5025
	3/8"	2.000	.600	---	21MP-R50375
	1/2"	1.625	.782	---	21MP-R50
	3/4"	2.000	.794	---	21MP-R5075
3/4"	1/4"	2.000	.595	---	21MP-R7525
	3/8"	2.000	.600	---	21MP-R75375
	1/2"	2.000	.782	---	21MP-R7550
	3/4"	1.787	.794	---	21MP-R75
	1"	2.250	.985	---	21MP-R75100
1"	1/8"	2.187	.392	21MP-G100-125	21MP-R100-125
	1/4"	2.161	.595	21MP-G10025	21MP-R10025
	3/8"	2.187	.600	21MP-G100375	21MP-R100375
	1/2"	2.187	.782	21MP-G10050	21MP-R10050
	3/4"	2.187	.794	21MP-G10075	21MP-R10075
	1"	2.250	.985	21MP-G100	21MP-R100
	1 1/4"	2.438	1.009	21MP-G100125	21MP-R100125
	1 1/2"	2.438	1.025	21MP-G100150	21MP-R100150
	2"	2.625	1.058	21MP-G100200	21MP-R100200
1 1/2"	1/8"	2.187	.392	---	21MP-R150-125
	1/4"	2.161	.595	21MP-G15025	21MP-R15025
	3/8"	2.187	.600	21MP-G150375	21MP-R150375
	1/2"	2.187	.782	21MP-G15050	21MP-R15050
	3/4"	2.187	.794	21MP-G15075	21MP-R15075
	1"	2.437	.985	21MP-G150100	21MP-R150100
	1 1/4"	2.438	1.009	21MP-G150125	21MP-R150125
	1 1/2"	2.250	1.025	21MP-G150	21MP-R150
	2"	2.625	1.058	21MP-G150200	21MP-R150200
2 1/2"	3.281	1.571	21MP-G150250	21MP-R150250	
2"	1/4"	2.469	1.009	21MP-G200125	21MP-R200125
	1/2"	2.188	.782	21MP-G20050	21MP-R20050
	3/4"	2.188	.794	21MP-G20075	21MP-R20075
	1"	2.469	.985	21MP-G200100	21MP-R200100
	1 1/2"	2.625	1.009	21MP-G200150	21MP-R200150
	2"	2.638	1.058	21MP-G200	21MP-R200
	2 1/2"	3.125	1.571	21MP-G200250	21MP-R200250
	3"	3.500	1.634	21MP-G200300	21MP-R200300
4"	3.500	1.734	21MP-G200400	21MP-R200400	
2 1/2"	1/2"	2.781	.782	21MP-G25050	---
	1"	2.781	.782	21MP-G250100	21MP-R250100
	1 1/2"	2.781	1.025	21MP-G250150	21MP-R250150
	2"	2.781	1.058	21MP-G250200	21MP-R250200
	2 1/2"	2.875	1.571	21MP-G250	21MP-R250
	3"	3.690	1.634	21MP-G250300	21MP-R250300
3"	1"	3.000	.985	21MP-G300100	21MP-R300100
	1 1/2"	3.000	1.009	21MP-G300150	21MP-R300150
	2"	3.000	1.058	21MP-G300200	21MP-R300200
	2 1/2"	3.000	1.571	21MP-G300250	21MP-R300250
	3"	3.070	1.634	21MP-G300	21MP-R300
	4"	3.500	1.734	21MP-G300400	21MP-R300400
4"	3"	3.813	1.634	21MP-G400300	21MP-R400300
	4"	3.155	1.734	21MP-G400	21MP-R400
6"	6"	4.500	1.946	21MP-G600	21MP-R600



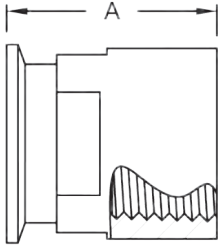
Fittings



Clamp Adapters

Female NPT Adapters - 22MP

Fittings



Tube OD	NPT Size	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	1/8"	1.250	---	22MP-R50-125
	1/4"	1.500	---	22MP-R5025
	3/8"	1.500	---	22MP-R50375
	1/2"	1.500	---	22MP-R50
	3/4"	1.500	---	22MP-R5075
	1"	1.625	---	22MP-R50100
	1 1/2"	2.250	---	22MP-R50150
3/4"	1/8"	1.250	---	22MP-R75125
	1/4"	1.500	---	22MP-R7525
	3/8"	1.500	---	22MP-R75375
	1/2"	1.625	---	22MP-R7550
	3/4"	1.625	---	22MP-R75
	1"	1.625	---	22MP-R75100
1"	1/8"	3.281	22MP-G100-125	22MP-R100-125
	1/4"	1.625	22MP-G10025	22MP-R10025
	3/8"	1.625	22MP-G100375	22MP-R100375
	1/2"	1.625	22MP-G10050	22MP-R10050
	3/4"	1.625	22MP-G10075	22MP-R10075
	1"	1.625	22MP-G100	22MP-R100
	1 1/4"	1.625	22MP-G100125	22MP-R100125
	1 1/2"	1.625	22MP-G100150	22MP-R100150
	2"	2.500	22MP-G100200	22MP-R100200
1 1/2"	1/8"	2.500	22MP-G150-125	22MP-R150-125
	1/4"	1.625	22MP-G15025	22MP-R15025
	3/8"	1.625	22MP-G150375	22MP-R150375
	1/2"	1.625	22MP-G15050	22MP-R15050
	3/4"	1.625	22MP-G15075	22MP-R15075
	1"	2.250	22MP-G150100	22MP-R150100
	1 1/4"	2.250	22MP-G150125	22MP-R150125
	1 1/2"	2.250	22MP-G150	22MP-R150
	2"	2.500	22MP-G150200	22MP-R150200
	2 1/2"	2.500	22MP-G150250	---
2"	3"	2.500	---	22MP-R150300
	1/4"	1.687	22MP-G20025	22MP-R20025
	1/2"	1.687	22MP-G20050	22MP-R20050
	3/4"	1.687	22MP-G20075	22MP-R20075
	1"	1.687	22MP-G200100	22MP-R200100
	1 1/4"	1.656	22MP-G200125	22MP-R200125
	1 1/2"	2.344	22MP-G200150	22MP-R200150
	2"	2.406	22MP-G200	22MP-R200
	2 1/2"	2.406	22MP-G200250	22MP-R200250
2 1/2"	3"	2.406	22MP-G200300	22MP-R200300
	4"	2.406	22MP-G200400	---
	3/4"	1.313	22MP-G25075	22MP-R25075
	1"	1.313	22MP-G250100	22MP-R250100
	1 1/2"	1.656	22MP-G250150	22MP-R250150
	2"	2.093	22MP-G250200	22MP-R250200
3"	2 1/2"	2.187	22MP-G250	22MP-R250
	3"	2.187	22MP-G250300	22MP-R250300
	1"	2.187	22MP-G300100	22MP-R300100
	1 1/2"	2.187	22MP-G300150	22MP-R300150
	2"	2.187	22MP-G300200	22MP-R300200
4"	2 1/2"	2.187	22MP-G300250	---
	3"	2.187	22MP-G300	22MP-R300
	1 1/2"	2.187	22MP-G400150	22MP-R400150
	2"	2.187	22MP-G400200	22MP-R400200
	2 1/2"	2.187	22MP-G400250	22MP-R400250
4"	3"	2.187	22MP-G400300	22MP-R400300
	4"	2.625	22MP-G400	22MP-R400

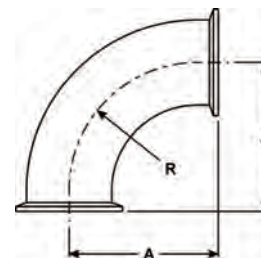
Clamp Elbows

90° Clamp Elbows - B2CMP 

Tube OD	A	R	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	1.625	1.125	---	B2CMP-R50
3/4"	1.625	1.125	---	B2CMP-R75
1/2"	3.500	1.125	---	B2CMPL-R50
3/4"	3.500	1.125	---	B2CMPL-R75
1"	2.000	1.500	B2CMP-G100	B2CMP-R100
1 1/2"	2.750	2.250	B2CMP-G150	B2CMP-R150
2"	3.500	3.000	B2CMP-G200	B2CMP-R200
2 1/2"	4.250	3.750	B2CMP-G250	B2CMP-R250
3"	5.000	4.500	B2CMP-G300	B2CMP-R300
4"	6.625	6.000	B2CMP-G400	B2CMP-R400
6"	9.875	9.000	B2CMP-G600	B2CMP-R600
8"	12.875	12.000	B2CMP-G800	B2CMP-R800
10"	15.875	15.000	B2CMP-G1000	---
12"	18.875	18.000	B2CMP-G1200	---

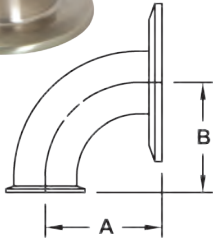


Fittings



Clamp Elbows

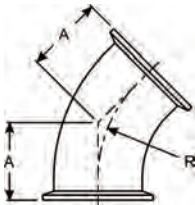
Fittings



3 90° Non-Tapered Reducing Clamp Elbows - B2CM31MP

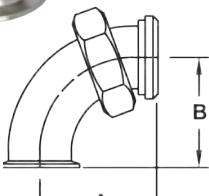
Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
2" x 1½"	2.750	2.750	B2CM31MPG200150	B2CM31MPR200150
2½" x 2"	3.500	3.500	B2CM31MPG250200	B2CM31MPR250200
3" x 2"	3.500	3.500	B2CM31MPG300200	B2CM31MPR300200
3" x 2½"	4.250	4.250	B2CM31MPG300250	B2CM31MPR300250

3 45° Clamp Elbows - B2KMP



Tube OD	A	R	304 Stainless Steel Part Number	316L Stainless Steel Part Number
½"	.966	1.125	---	B2KMP-R50
¾"	.966	1.125	---	B2KMP-R75
1"	1.125	1.500	B2KMP-G100	B2KMP-R100
1½"	1.437	2.250	B2KMP-G150	B2KMP-R150
2"	1.750	3.000	B2KMP-G200	B2KMP-R200
2½"	2.062	3.750	B2KMP-G250	B2KMP-R250
3"	2.375	4.500	B2KMP-G300	B2KMP-R300
4"	3.125	6.000	B2KMP-G400	B2KMP-R400
6"	4.625	9.000	B2KMP-G600	B2KMP-R600
8"	5.875	12.000	B2KMP-G800	B2KMP-R800
10"	7.125	15.000	B2KMP-G1000	---
12"	8.375	18.000	B2KMP-G1200	---

3 90° Clamp by Plain Bevel Seat with Hex Nut Elbows - B2FMP-14

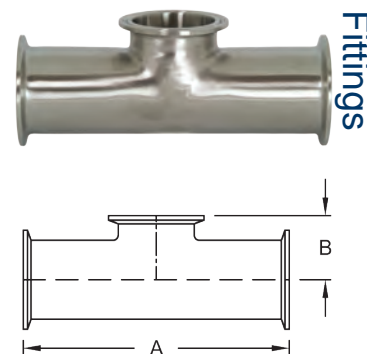


Tube OD	A	B	304 Stainless Steel Part Number
1"	2.218	2.000	B2FMP-14-G100
1½"	2.968	2.750	B2FMP-14-G150
2"	3.750	3.500	B2FMP-14-G200
2½"	4.625	4.250	B2FMP-14-G250
3"	5.406	5.000	B2FMP-14-G300
4"	7.031	6.625	B2FMP-14-G400

Clamp Tees

Short Outlet Tees - B7MPS 

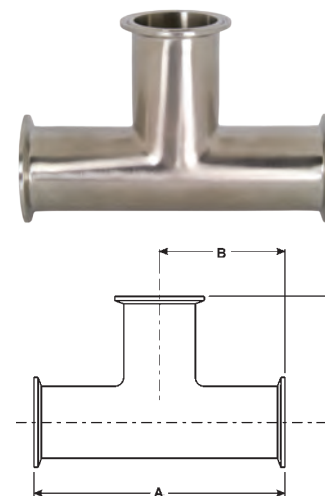
Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	4.750	1.125	B7MPS-G100	B7MPS-R100
1½"	5.500	1.375	B7MPS-G150	B7MPS-R150
2"	7.000	1.625	B7MPS-G200	B7MPS-R200
2½"	7.000	1.875	B7MPS-G250	B7MPS-R250
3"	7.500	2.125	B7MPS-G300	B7MPS-R300
4"	9.000	2.750	B7MPS-G400	B7MPS-R400



Fittings

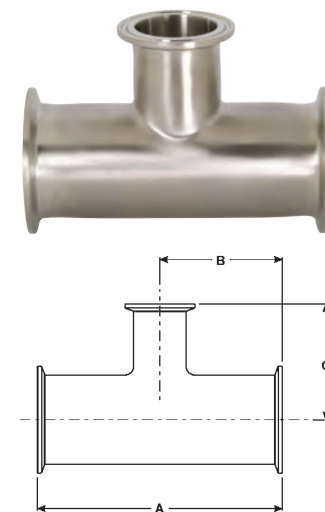
Clamp Tees - B7MP 

Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
½"	4.750	2.375	---	B7MP-R50
¾"	5.000	2.500	---	B7MP-R75
1"	4.750	2.375	B7MP-G100	B7MP-R100
1½"	5.500	2.750	B7MP-G150	B7MP-R150
2"	7.000	3.500	B7MP-G200	B7MP-R200
2½"	7.000	3.500	B7MP-G250	B7MP-R250
3"	7.500	3.750	B7MP-G300	B7MP-R300
4"	9.000	4.500	B7MP-G400	B7MP-R400
6"	13.000	6.500	B7MP-G600	B7MP-R600
8"	15.750	7.875	B7MP-G800	B7MP-R800
10"	18.750	9.735	B7MP-G1000	---
12"	21.750	10.735	B7MP-G1200	---



Clamp Reducing Tees - B7RMP 

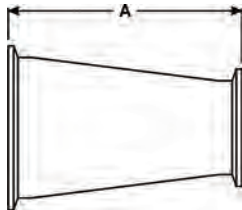
Tube OD	A	B	C	304 Stainless Steel Part Number	316L Stainless Steel Part Number
¾" x ½"	5.000	2.500	2.500	---	B7RMP-R7550
1" x ½"	5.250	2.625	2.625	---	B7RMP-R10050
1" x ¾"	5.250	2.625	2.625	---	B7RMP-R10075
1½" x ½"	5.750	2.875	2.875	---	B7RMP-R15050
1½" x ¾"	5.250	2.875	2.875	---	B7RMP-R15075
1½" x 1"	4.312	2.156	1.875	B7RMP-G150100	B7RMP-R150100
2" x ½"	6.750	3.375	3.125	---	B7RMP-R20050
2" x ¾"	6.750	3.375	3.125	---	B7RMP-R20075
2" x 1"	5.125	2.562	2.125	B7RMP-G200100	B7RMP-R200100
2" x 1½"	5.125	2.562	2.406	B7RMP-G200150	B7RMP-R200150
2½" x 1½"	5.688	2.844	2.656	B7RMP-G250150	B7RMP-R250150
2½" x 2"	5.688	2.844	2.812	B7RMP-G250200	B7RMP-R250200
3" x 1½"	6.188	3.093	2.906	B7RMP-G300150	B7RMP-R300150
3" x 2"	6.188	3.093	3.063	B7RMP-G300200	B7RMP-R300200
3" x 2½"	6.188	3.093	3.093	B7RMP-G300250	B7RMP-R300250
4" x 1½"	8.125	4.063	3.406	B7RMP-G400150	B7RMP-R400150
4" x 2"	8.125	4.063	3.563	B7RMP-G400200	B7RMP-R400200
4" x 2½"	8.125	4.063	3.594	B7RMP-G400250	B7RMP-R400250
4" x 3"	8.125	4.063	3.594	B7RMP-G400300	B7RMP-R400300



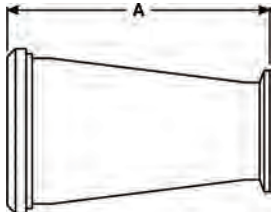
Clamp Reducers



Fittings




Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
3/4" x 1/2"	2.000	---	B3114MP-R7550
1" x 1/2"	3.000	---	B3114MP-R10050
1" x 3/4"	2.000	---	B3114MP-R10075
1 1/2" x 1/2"	5.000	---	B3114MP-R15050
1 1/2" x 3/4"	4.000	---	B3114MP-R15075
1 1/2" x 1"	3.000	B3114MP-G150100	B3114MP-R150100
2" x 1/2"	7.000	---	B3114MP-R20050
2" x 3/4"	6.000	---	B3114MP-R20075
2" x 1"	5.000	B3114MP-G200100	B3114MP-R200100
2" x 1 1/2"	3.000	B3114MP-G200150	B3114MP-R200150
2 1/2" x 1 1/2"	5.000	B3114MP-G250150	B3114MP-R250150
2 1/2" x 2"	3.000	B3114MP-G250200	B3114MP-R250200
3" x 1"	9.000	B3114MP-G300100	B3114MP-R300100
3" x 1 1/2"	7.000	B3114MP-G300150	B3114MP-R300150
3" x 2"	5.000	B3114MP-G300200	B3114MP-R300200
3" x 2 1/2"	3.000	B3114MP-G300250	B3114MP-R300250
4" x 1 1/2"	11.125	B3114MP-G400150	B3114MP-R400150
4" x 2"	9.125	B3114MP-G400200	B3114MP-R400200
4" x 2 1/2"	7.125	B3114MP-G400250	B3114MP-R400250
4" x 3"	5.125	B3114MP-G400300	B3114MP-R400300
6" x 2"	6.875	B3114MP-G600200	B3114MP-R600200
6" x 3"	6.875	B3114MP-G600300	B3114MP-R600300
6" x 4"	7.000	B3114MP-G600400	B3114MP-R600400
8" x 4"	7.500	B3114MP-G800400	B3114MP-R800400
8" x 6"	7.750	B3114MP-G800600	B3114MP-R800600

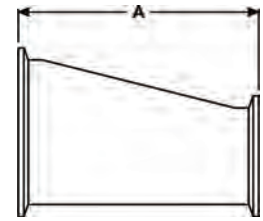
Tube OD	A	304 Stainless Steel Part Number
1 1/2" x 1"	3.218	B14C31-G150100 ¹
2" x 1 1/2"	3.250	B14C31-G200150
2 1/2" x 1 1/2"	5.375	B14C31-G250150
2 1/2" x 2"	3.375	B14C31-G250200
3" x 1 1/2"	7.406	B14C31-G300150
3" x 2"	5.406	B14C31-G300200
3" x 2 1/2"	3.406	B14C31-G300250

¹ comes with 13H-G150, hex nut cannot be assembled on fitting after welding

Clamp Reducers

Clamp Eccentric Reducers - B3214MP 

Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
3/4" x 1/2"	2.000	---	B3214MP-R7550
1" x 1/2"	3.000	---	B3214MP-R10050
1" x 3/4"	2.000	---	B3214MP-R10075
1 1/2" x 1/2"	5.000	---	B3214MP-R15050
1 1/2" x 3/4"	4.000	---	B3214MP-R15075
1 1/2" x 1"	3.000	B3214MP-G150100	B3214MP-R150100
2" x 1 1/2"	7.000	---	B3214MP-R20050
2" x 3/4"	6.000	---	B3214MP-R20075
2" x 1"	5.000	B3214MP-G200100	B3214MP-R200100
2" x 1 1/2"	3.000	B3214MP-G200150	B3214MP-R200150
2 1/2" x 1 1/2"	5.000	B3214MP-G250150	B3214MP-R250150
2 1/2" x 2"	3.000	B3214MP-G250200	B3214MP-R250200
3" x 1"	9.000	B3214MP-G300100	B3214MP-R300100
3" x 1 1/2"	7.000	B3214MP-G300150	B3214MP-R300150
3" x 2"	5.000	B3214MP-G300200	B3214MP-R300200
3" x 2 1/2"	3.000	B3214MP-G300250	B3214MP-R300250
4" x 1 1/2"	11.125	B3214MP-G400150	B3214MP-R400150
4" x 2"	9.125	B3214MP-G400200	B3214MP-R400200
4" x 2 1/2"	7.125	B3214MP-G400250	B3214MP-R400250
4" x 3"	5.125	B3214MP-G400300	B3214MP-R400300
6" x 3"	6.875	B3214MP-G600300	B3214MP-R600300
6" x 4"	7.000	B3214MP-G600400	B3214MP-R600400
8" x 4"	7.500	B3214MP-G800400	B3214MP-R800400
8" x 6"	7.750	B3214MP-G800600	B3214MP-R800600



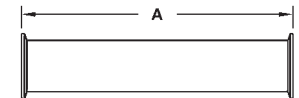
Fittings

Miscellaneous Clamp Configurations

Spool Assembly - SPOOL 

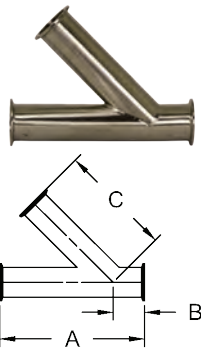
Tube OD	A (minimum length)	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	2.25	SPOOL*-G050	SPOOL*-R050
3/4"	2.25	SPOOL*-G075	SPOOL*-R075
1"	2.25	SPOOL*-G100	SPOOL*-R100
1 1/2"	2.25	SPOOL*-G150	SPOOL*-R150
2"	2.25	SPOOL*-G200	SPOOL*-R200
2 1/2"	2.25	SPOOL*-G250	SPOOL*-R250
3"	2.25	SPOOL*-G300	SPOOL*-R300
4"	2.25	SPOOL*-G400	SPOOL*-R400
6"	3.00	SPOOL*-G600	SPOOL*-R600

* overall length in inches



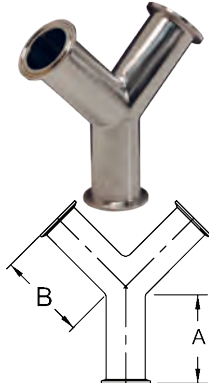
Miscellaneous Clamp Configurations

Fittings



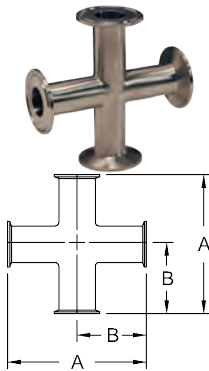
A Clamp Laterals - B28AMP

Tube OD	A	B	C	316L Stainless Steel Part Number
1"	7.000	1.500	5.500	B28AMP-R100
1½"	8.375	1.688	6.688	B28AMP-R150
2"	9.750	2.125	7.625	B28AMP-R200
2½"	11.000	2.000	9.000	B28AMP-R250
3"	11.750	2.375	9.375	B28AMP-R300
4"	14.062	2.640	11.312	B28AMP-R400



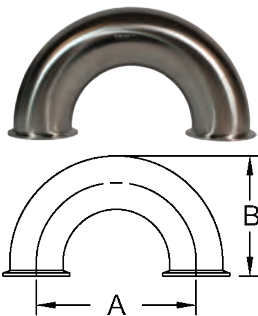
A Clamp True Wyes - B28BMP

Tube OD	A	B	316L Stainless Steel Part Number
1"	2.500	2.938	B28BMP-R100
1½"	2.500	2.938	B28BMP-R150
2"	3.125	3.750	B28BMP-R200
2½"	3.870	4.625	B28BMP-R250
3"	4.500	5.375	B28BMP-R300
4"	6.000	6.000	B28BMP-R400



A Clamp Crosses - B9MP

Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	4.750	2.375	B9MP-G100	B9MP-R100
1½"	5.500	2.750	B9MP-G150	B9MP-R150
2"	7.000	3.500	B9MP-G200	B9MP-R200
2½"	7.000	3.500	B9MP-G250	B9MP-R250
3"	7.500	3.750	B9MP-G300	B9MP-R300
4"	9.000	4.500	B9MP-G400	B9MP-R400



A Clamp 180° Return Bends - B2WUMP

- bends are 1.5 x tube diameter

Tube OD	A	B	316L Stainless Steel Part Number
1"	3.000	2.500	B2WUMP-R100
1½"	4.500	3.500	B2WUMP-R150
2"	6.000	4.500	B2WUMP-R200
2½"	7.500	5.500	B2WUMP-R250
3"	9.000	6.500	B2WUMP-R300
4"	12.000	8.625	B2WUMP-R400

Clamp End Protection Covers - BCC



Material:

- vinyl plastic


Features:

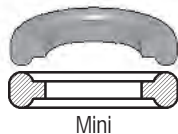
- Use these covers to protect all clamp ends on fittings, valves, filters and pumps.

Size	Part Number
½"	BCC-050
¾"	BCC-075
1"	BCC-100
1½"	BCC-150
2"	BCC-200
2½"	BCC-250
3"	BCC-300
4"	BCC-400

Clamp Gaskets

Feature:

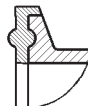
- Gasket material approved by  (3A), USDA and complies with FDA's 21CFR177.2600 and 1550. PSI Service Ratings for the sanitary clamps DO NOT APPLY to connections (1" and above) using any PTFE gaskets, due to the potential for cold flow under normal operating conditions. PTFE gaskets, when used with any clamp, are likely to leak at pressures far below the published service ratings. This restriction does not apply to the fractionally sized 1/2" and 3/4" connections, due to their recessed, fully contained design.



Mini



Standard - type 1



Flanged - type 2

Buna-N Clamp Gaskets - Black

Size	Part Number
1/2"	42MP-U50
3/4"	42MP-U75
1"	40MP-U100
1 1/2"	40MP-U150
2"	40MP-U200
2 1/2"	40MP-U250
3"	40MP-U300
4"	40MP-U400
5"	40MP-U500
6"	40MP-U600
8"	40MP-U800

Feature:

- color code: red dot

Approval:

- meets 21CFR 177.2600



Type 1 - Standard 1" and larger



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

Buna-N Clamp Gaskets - White

Size	Part Number
1/2"	42MP-UW50
3/4"	42MP-UW75
1"	40MP-UW100
1 1/2"	40MP-UW150
2"	40MP-UW200
2 1/2"	40MP-UW250
3"	40MP-UW300
4"	40MP-UW400
6"	40MP-UW600

Feature:

- color code: red dot

Approval:

- meets 21CFR 177.2600



Type 1 - Standard 1" and larger



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



EPDM Clamp Gaskets - Black

Size	Part Number
1/2"	42MP-E50
3/4"	42MP-E75
1"	40MP-E100
1 1/2"	40MP-E150
2"	40MP-E200
2 1/2"	40MP-E250
3"	40MP-E300
4"	40MP-E400
5"	40MP-E500
6"	40MP-E600

Features:

- color code: three green dots
- peroxide cured

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing



Type 1 - Standard 1" and larger



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

Clamp Gaskets

Fittings

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

FKM Clamp Gaskets - Black

Features:

- color code: one white dot and one yellow dot
- peroxide cured

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

Size

Part Number

1/2"

42MP-SFY50

3/4"

42MP-SFY75

1"

40MP-SFY100

1 1/2"

40MP-SFY150

2"

40MP-SFY200

2 1/2"

40MP-SFY250

3"

40MP-SFY300

4"

40MP-SFY400

6"

40MP-SFY600

Silicone Clamp Gaskets - White

Features:

- color code: pink dot
- peroxide cured

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

Size

Part Number

1/2"

42MP-XW50

3/4"

42MP-XW75

1"

40MP-XW100

1 1/2"

40MP-XW150

2"

40MP-XW200

2 1/2"

40MP-XW250

3"

40MP-XW300

4"

40MP-XW400

6"

40MP-XW600

Silicone Clamp Gaskets - Clear

Features:

- color code: no dot
- peroxide cured

Approval:

- meets 21CFR 177.2600

Size

Part Number

1/2"

42MP-XC50

3/4"

42MP-XC75

1"

40MP-XC100

1 1/2"

40MP-XC150

2"

40MP-XC200

2 1/2"

40MP-XC250

3"

40MP-XC300

4"

40MP-XC400

PTFE Clamp Gaskets - White

Features:

- color code: no dot
- not recommended for use with bolted clamps

Approvals:

- meets 21CFR 177.1550
- passed U.S.P. Class VI Cytotoxicity testing

Size

Part Number

1/2"

42MP-G50

3/4"

42MP-G75

1"

40MP-G100

1 1/2"

40MP-G150

2"

40MP-G200

2 1/2"

40MP-G250

3"

40MP-G300

4"

40MP-G400

5"

40MP-G500

6"

40MP-G600

8"

40MP-G800

10"

40MP-G1000

12"

40MP-G1200

PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torque is not maintained. See pages F-27 and F-28 for sizing charts. Refer

Metal Detectable Clamp Gaskets

Materials:

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

Type 1 - Standard
1/2" - 3/4"Type 1 - Standard
1" and larger**Buna-N - Metal Detectable Clamp Gaskets**

Size	Part Number
1"	40MP-UZ100
1½"	40MP-UZ150
2"	40MP-UZ200
2½"	40MP-UZ250
3"	40MP-UZ300
4"	40MP-UZ400

Features:

- good general use where temperature extremes do not exist

Specification:

- minimum temperature **-20°F (-29°C)**
- maximum temperature **212°F (100°C)**

EPDM - Metal Detectable Clamp Gaskets

Size	Part Number
1"	40MP-EZ100
1½"	40MP-EZ150
2"	40MP-EZ200
2½"	40MP-EZ250
3"	40MP-EZ300
4"	40MP-EZ400

Features:

- resistant to steam, water and base solutions

Specification:

- minimum temperature **-70°F (-57°C)**
- maximum temperature **310°F (154°C)**

FKM - Metal Detectable Clamp Gaskets

Size	Part Number
1"	40MP-SFYZ100
1½"	40MP-SFYZ150
2"	40MP-SFYZ200
2½"	40MP-SFYZ250
3"	40MP-SFYZ300
4"	40MP-SFYZ400

Features:

- resistant to steam, heat and high acid solutions

Specification:

- minimum temperature **-20°F (-29°C)**
- maximum temperature **410°F (210°C)**

Note: see pages F-27 and F-28 for sizing charts / refer to pages K-4 to K-6 for compatibility information

Clamp Flanged Gaskets

Buna-N - Flanged Clamp Gaskets - Black

Fittings

Type 2 - Flanged
1" and larger**Features:**

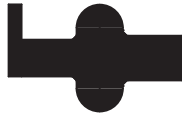
- color code: red dot
- not recommended for use with bolted clamps

Approval:

- meets 21CFR 177.2600

Size	Part Number
1"	40MPF-U100
1½"	40MPF-U150
2"	40MPF-U200
2½"	40MPF-U250
3"	40MPF-U300
4"	40MPF-U400
6"	40MPF-U600
8"	40MPF-U800
10"	40MPF-U1000
12"	40MPF-U1200

Buna-N - Flanged Clamp Gaskets - White

Type 2 - Flanged
1" and larger**Features:**

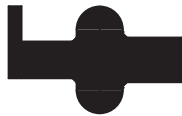
- color code: red dot
- not recommended for use with bolted clamps

Approval:

- meets 21CFR 177.2600

Size	Part Number
1"	40MPF-UW100
1½"	40MPF-UW150
2"	40MPF-UW200
2½"	40MPF-UW250
3"	40MPF-UW300
4"	40MPF-UW400
6"	40MPF-UW600
8"	40MPF-UW800

EPDM - Flanged Clamp Gaskets - Black

Type 2 - Flanged
1" and larger**Features:**

- color code: three green dots
- peroxide cured
- not recommended for use with bolted clamps

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

Size	Part Number
1"	40MPF-E100
1½"	40MPF-E150
2"	40MPF-E200
2½"	40MPF-E250
3"	40MPF-E300
4"	40MPF-E400
6"	40MPF-E600
8"	40MPF-E800
10"	40MPF-E1000
12"	40MPF-E1200

Note: see pages F-27 and F-28 for sizing charts / refer to pages K-4 to K-6 for compatibility information

Clamp Flanged Gaskets

FKM - Flanged Clamp Gaskets - Black

Size	Part Number
1"	40MPF-SFY100
1½"	40MPF-SFY150
2"	40MPF-SFY200
2½"	40MPF-SFY250
3"	40MPF-SFY300
4"	40MPF-SFY400
6"	40MPF-SFY600
8"	40MPF-SFY800
10"	40MPF-SFY1000
12"	40MPF-SFY1200

Features:

- color code: one white dot, one yellow dot
- peroxide cured
- not recommended for use with bolted clamps

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

Type 2 - Flanged
1" and larger

Silicone - Flanged Clamp Gaskets - White

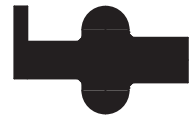
Size	Part Number
1"	40MPF-XW100
1½"	40MPF-XW150
2"	40MPF-XW200
2½"	40MPF-XW250
3"	40MPF-XW300
4"	40MPF-XW400
6"	40MPF-XW600
8"	40MPF-XW800
10"	40MPF-XW1000
12"	40MPF-XW1200

Features:

- color code: pink dot
- peroxide cured
- not recommended for use with bolted clamps

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

Type 2 - Flanged
1" and larger

Silicone - Flanged Clamp Gaskets - Clear

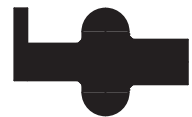
Size	Part Number
1"	40MPF-XC100
1½"	40MPF-XC150
2"	40MPF-XC200
2½"	40MPF-XC250
3"	40MPF-XC300
4"	40MPF-XC400
6"	40MPF-XC600
8"	40MPF-XC800

Features:

- color code: no dot
- peroxide cured
- not recommended for use with bolted clamps

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

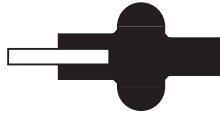
Type 2 - Flanged
1" and larger

Note: see pages F-27 and F-28 for sizing charts / refer to pages K-4 to K-6 for compatibility information

Clamp Screened Gaskets

Buna-N - Mesh Screen Clamp Gaskets, 316

Fittings



Type 3 - Mesh

Material:

- 10 mesh standard, other mesh available, call Dixon Sanitary 800.789.1718

Feature:

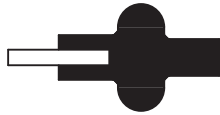
- color code: red dot

Approval:

- meets 21CFR 177.2600

Size	Part Number
1"	40MPS-U100
1½"	40MPS-U150
2"	40MPS-U200
2½"	40MPS-U250
3"	40MPS-U300
4"	40MPS-U400

EPDM - Mesh Screen Clamp Gaskets, 316



Type 3 - Mesh

Material:

- 10 mesh standard, other materials available, call Dixon Sanitary 800.789.1718

Features:

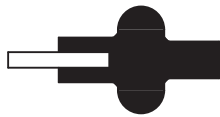
- color code: three green dots
- peroxide cured

Approval:

- meets 21CFR 177.2600

Size	Part Number
1"	40MPS-E100
1½"	40MPS-E150
2"	40MPS-E200
2½"	40MPS-E250
3"	40MPS-E300
4"	40MPS-E400

FKM - Mesh Screen Clamp Gaskets, 316



Type 3 - Mesh

Materials:

- 10 mesh standard, other mesh available, call Dixon Sanitary 800.789.1718

Features:

- color code: one white dot, one yellow dot
- peroxide cured

Approval:

- meets 21CFR 177.2600

Size	Part Number
1"	40MPS-SFY100
1½"	40MPS-SFY150
2"	40MPS-SFY200
2½"	40MPS-SFY250
3"	40MPS-SFY300
4"	40MPS-SFY400

Clamp Perforated Gaskets

Buna-N Perforated Clamp Gaskets - .033" holes

Size	Part Number
1"	<i>40MP-UP100</i>
1½"	<i>40MP-UP150</i>
2"	<i>40MP-UP200</i>
2½"	<i>40MP-UP250</i>
3"	<i>40MP-UP300</i>
4"	<i>40MP-UP400</i>

Material:

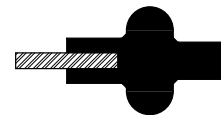
- perforated metal disc 316 stainless steel sheet

Feature:

- color code: red dot

Approval:

- meets 21CFR 177.2600



Type 3 - Perforated

Clamp Orifice Gaskets

Buna-N Orifice Clamp Gaskets - Black, .125" hole

Size	Part Number
1"	<i>A80MP-U100</i>
1½"	<i>A80MP-U150</i>
2"	<i>A80MP-U200</i>
2½"	<i>A80MP-U250</i>
3"	<i>A80MP-U300</i>
4"	<i>A80MP-U400</i>

Material:

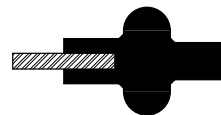
- 316 stainless steel sheet;

Features:

- color code: red dot
- other hole sizes available, call Dixon Sanitary 800.789.1718

Approval:

- meets 21CFR 177.2600



Type 3

FKM Orifice Clamp Gaskets - .125" hole

Size	Part Number
1"	<i>A80MP-SFY100</i>
1½"	<i>A80MP-SFY150</i>
2"	<i>A80MP-SFY200</i>
2½"	<i>A80MP-SFY250</i>
3"	<i>A80MP-SFY300</i>
4"	<i>A80MP-SFY400</i>

Material:

- 316 stainless steel sheet;

Features:

- color code: one white dot, one yellow dot
- peroxide cured
- other hole sizes available, call Dixon Sanitary 800.789.1718

Approval:

- meets 21CFR 177.2600



Type 3

Notes: references F-97 and F-98 for sizing charts. For parts sizes K-4 to K-6 for compatibility information.

Clamp Envelope Gaskets

PTFE envelope clamp gaskets with EPDM filler

Fittings

**Features:**

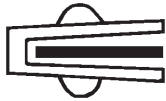
- color code: usually not marked
- peroxide cured EPDM

Approvals:

- meets 21CFR 177.1550
- PTFE passed USP Class VI Cytotoxicity testing

Size	Part Number
½"	42MP-GRE50
¾"	42MP-GRE75
1"	40MP-GRE100
1½"	40MP-GRE150
2"	40MP-GRE200
2½"	40MP-GRE250
3"	40MP-GRE300
4"	40MP-GRE400
6"	40MP-GRE600

PTFE envelope clamp gaskets with FKM filler

**Features:**

- color code: usually not marked
- peroxide cured FKM

Approvals:

- meets 21CFR 177.1550
- PTFE passed USP Class VI Cytotoxicity testing

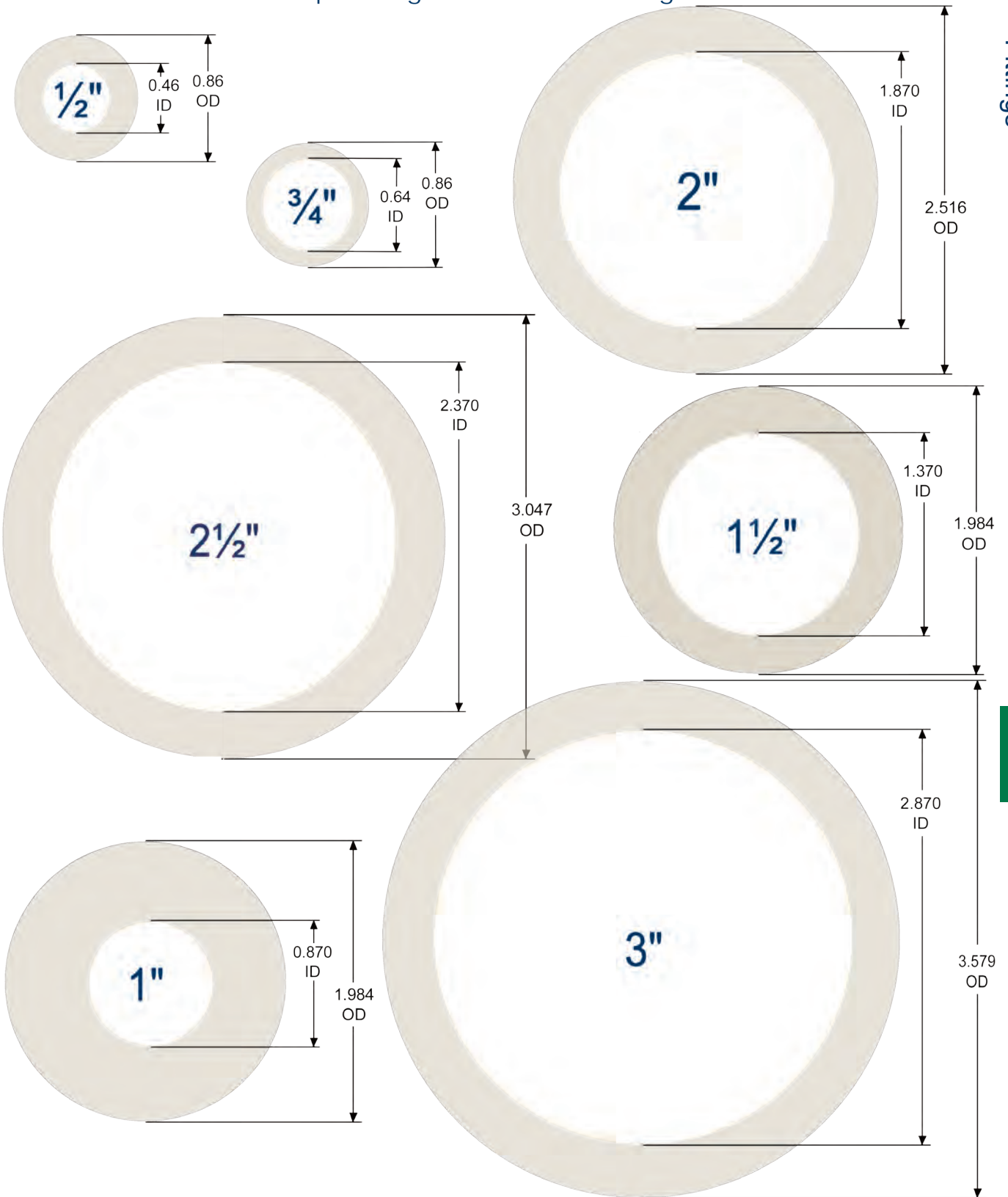
Size	Part Number
½"	42MP-GR50
¾"	42MP-GR75
1"	40MP-GR100
1½"	40MP-GR150
2"	40MP-GR200
2½"	40MP-GR250
3"	40MP-GR300
4"	40MP-GR400
6"	40MP-GR600
8"	40MP-GR800



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

Note: see pages F-27 and F-28 for sizing charts / refer to pages K-4 to K-6 for compatibility information

Clamp Fittings and Gasket Sizing Guide



Fittings

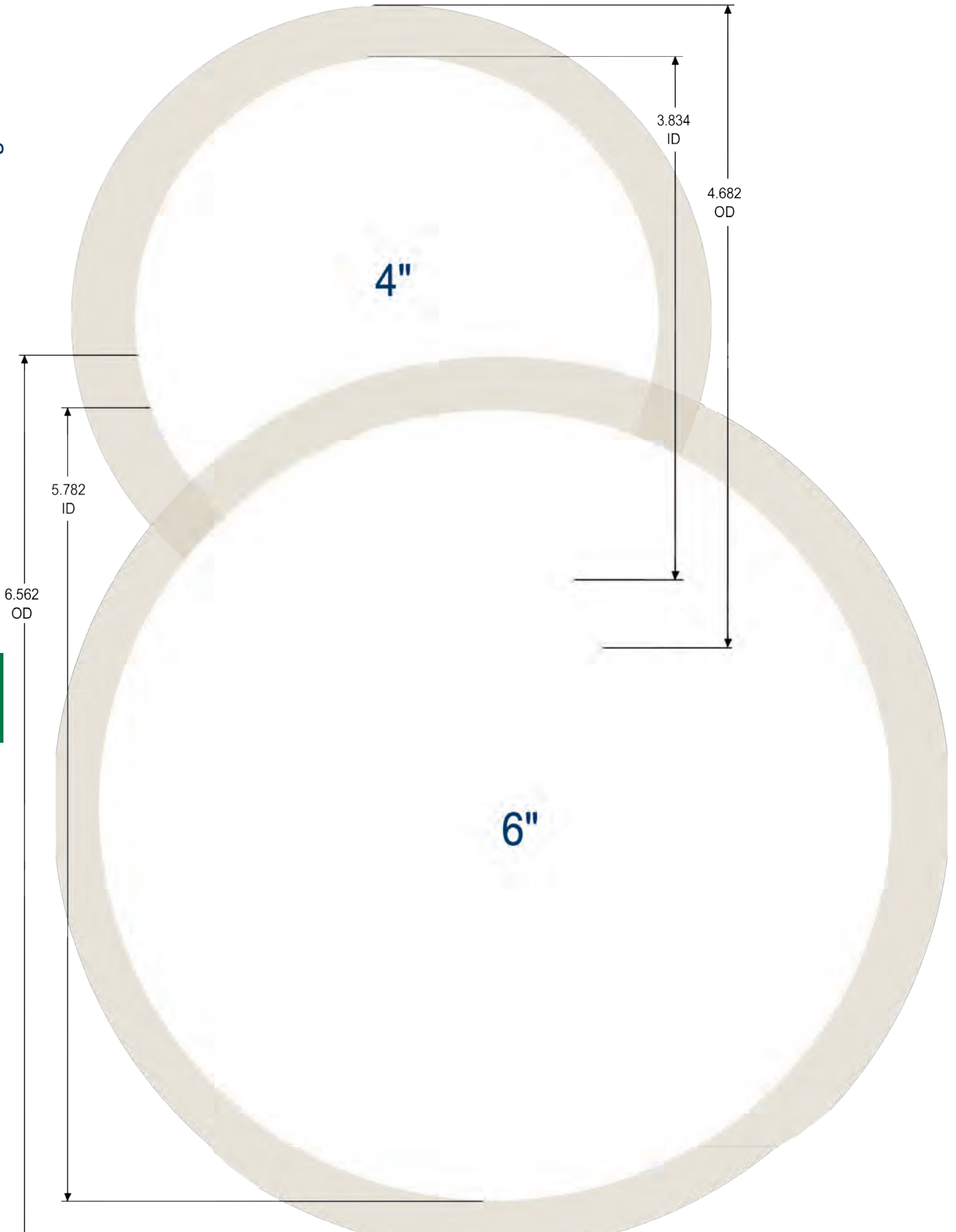
F

Sanitary Size	OD of Clamp End	ID of Fitting
1/2"	0.992	0.370
3/4"	0.992	0.620
1"	1.984	0.870
1 1/2"	1.984	1.370

Sanitary Size	OD of Clamp End	ID of Fitting
3"	3.579	2.870
4"	4.682	3.834
6"	6.562	5.782
8"	8.602	7.782

Clamp Fittings and Gasket Sizing Guide

Fittings



Dixon Sanitary Pipe Fittings



Fittings

A Complete Pipe Clamp Connection

Sizes:

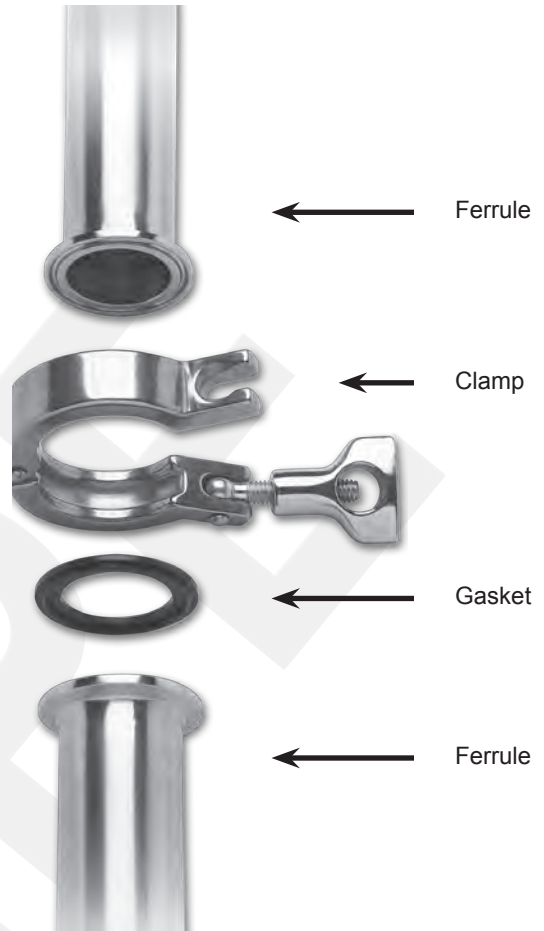
- 1" - 6" nominal pipe

Materials:

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

Feature:

- 3A sanitary finish ID and OD



Dimensions of Stainless Steel Pipe given in inches

Nominal Pipe Size	Outside Diameter	Nominal Wall Thickness (inches)	
		schedule 5S	schedule 10S
1"	1.32	.065	.109
1½"	1.90	.065	.109
2"	2.38	.065	.109
2½"	2.88	.083	.120
3"	3.50	.083	.120
4"	4.50	.083	.120
6"	6.62	.109	.134

This section contains pipe materials. Please note in sizes ½" through 12" pipe is known by its nominal inside diameter, which differs from its actual inside diameter. To distinguish pipe sizes from actual measured diameters as used for tube, the terms iron pipe size (IPS) or nominal pipe size (NPS) are usually used. For all pipe sizes, the outside diameter (OD) remains constant; the variations in wall thickness affect the inside diameter (ID).

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

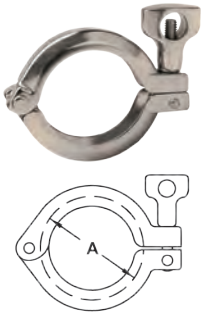
Pipe size and Tube OD size materials are not interchangeable



Pipe Size Clamps

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

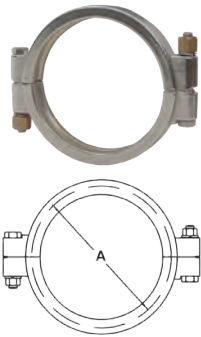
Fittings



Pipe Size	A	Service pressure rating @ 70°F (21°C) ¹	Part Number
1"	2.122	500	13MHHV100
1½"	2.654	450	13MHHV150
2"	3.185	400	13MHHV200
2½"	3.717	350	13MHHV250
3"	4.263	250	13MHHV300
4"	5.263	150	13MHHV400
6"	7.500	100	13MHHV600

¹ wing nut tightened to 25 in. lbs. of torque

Schedule 5S and 10S Bolted Clamps - 13MHPV



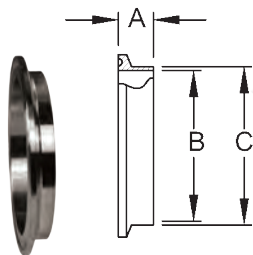
Pipe Size	A	Service pressure rating @ 70°F (21°C) ¹	Part Number
1"	2.046	750	13MHPV100
1½"	2.578	500	13MHPV150
2"	3.110	500	13MHPV200
2½"	3.460	500	13MHPV250
4"	5.188	400	13MHPV400

¹ bronze nuts tightened to 20 ft. lbs. of torque

Note: see page F-29 for pipe size information

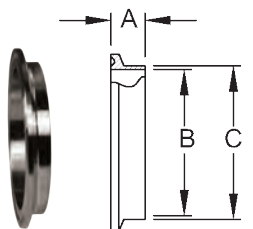
Pipe Size Ferrules

3 Schedule 5S Short Weld Ferrules - 14WMV



Pipe Size	A	B	C	316L Stainless Steel Part Number
1"	.500	1.185	1.315	14WMV-R100
1½"	.500	1.770	1.900	14WMV-R150
2"	.500	2.245	2.375	14WMV-R200
2½"	.500	2.709	2.875	14WMV-R250
3"	.500	3.334	3.500	14WMV-R300
4"	.625	4.334	4.500	14WMV-R400
6"	.875	6.407	6.625	14WMV-R600

3 Schedule 10S Short Weld Ferrules - 14WMX

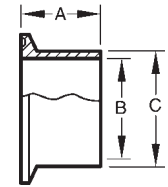


Pipe Size	A	B	C	316L Stainless Steel Part Number
1"	.500	1.097	1.315	14WMX-R100
1½"	.500	1.682	1.900	14WMX-R150
2"	.500	2.157	2.375	14WMX-R200
2½"	.500	2.635	2.875	14WMX-R250
3"	.500	3.260	3.500	14WMX-R300
4"	.625	4.260	4.500	14WMX-R400
6"	.875	6.350	6.625	14WMX-R600

Pipe Size Ferrules

Schedule 5S Long Weld Ferrules - L14AM7V 

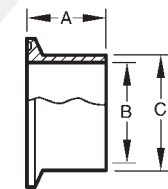
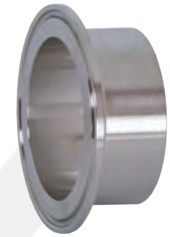
Pipe Size	A	B	C	316L Stainless Steel Part Number
1"	1.125	1.185	1.315	L14AM7V-R100
1½"	1.125	1.770	1.900	L14AM7V-R150
2"	1.125	2.245	2.375	L14AM7V-R200
2½"	1.125	2.709	2.875	L14AM7V-R250
3"	1.125	3.334	3.500	L14AM7V-R300
4"	1.125	4.334	4.500	L14AM7V-R400
6"	1.500	6.407	6.625	L14AM7V-R600



Fittings

Schedule 10S Long Weld Ferrules - L14AM7X 

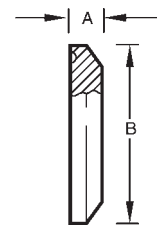
Pipe Size	A	B	C	316L Stainless Steel Part Number
1"	1.125	1.097	1.315	L14AM7X-R100
1½"	1.125	1.682	1.900	L14AM7X-R150
2"	1.125	2.157	2.375	L14AM7X-R200
2½"	1.125	2.635	2.875	L14AM7X-R250
3"	1.125	3.260	3.500	L14AM7X-R300
4"	1.125	4.260	4.500	L14AM7X-R400
6"	1.500	6.350	6.625	L14AM7X-R600



Pipe Size End Caps

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

Pipe Size	A	B	316L Stainless Steel Part Number
1"	.250	1.984	16AMV-R100
1½"	.250	2.516	16AMV-R150
2"	.250	3.047	16AMV-R200
2½"	.250	3.579	16AMV-R250
3"	.312	4.125	16AMV-R300
4"	.312	5.125	16AMV-R400
6"	.437	7.195	16AMV-R600

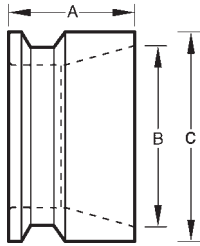


- Specify if you are using a piping system or a tubing system when ordering.

Pipe Size Adapters

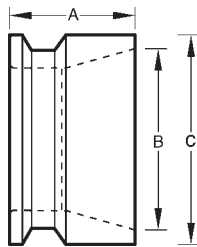
Fittings

3 Clamp x Schedule 5S Weld Adapters - B19MPV



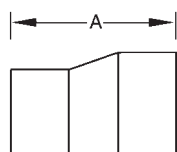
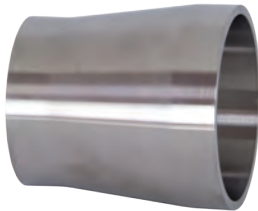
Pipe Size	A	B	C	Pipe Wall Thickness	316L Stainless Steel Part Number
1"	1.125	1.185	1.315	.065	B19MPV-R100
1½"	1.125	1.770	1.900	.065	B19MPV-R150
2"	1.125	2.245	2.375	.065	B19MPV-R200
2½"	1.125	2.709	2.875	.084	B19MPV-R250
3"	1.125	3.334	3.500	.084	B19MPV-R300
4"	1.125	4.334	4.500	.084	B19MPV-R400

3 Clamp x Schedule 10S Weld Adapters - B19MPX



Pipe Size	A	B	C	Pipe Wall Thickness	316L Stainless Steel Part Number
1"	1.125	1.097	1.315	.109	B19MPX-R100
1½"	1.125	1.682	1.900	.109	B19MPX-R150
2"	1.125	2.157	2.375	.109	B19MPX-R200
2½"	1.125	2.635	2.875	.120	B19MPX-R250
3"	1.125	3.260	3.500	.120	B19MPX-R300
4"	1.125	4.260	4.500	.120	B19MPX-R400

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



Pipe Size	A	Tube Wall Thickness	Pipe Wall Thickness	316L Stainless Steel Part Number
1"	2.000	.065	.109	B19WX-R100
1½"	2.500	.065	.109	B19WX-R150
2"	2.500	.065	.109	B19WX-R200
2½"	2.500	.065	.120	B19WX-R250
3"	2.500	.065	.120	B19WX-R300
4"	3.000	.084	.120	B19WX-R400

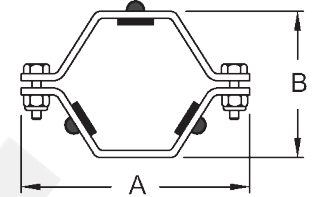
Note: see page F-29 for pipe size information

Pipe Size Hangers

Hex Hanger with Rubber Grommets - B24RV¹

Pipe Size	A	B	304 Stainless Steel Part Number
1"	3.625	2.125	B24RV-G100
1½"	3.625	2.125	B24RV-G150
2"	4.312	2.625	B24RV-G200
2½"	4.875	3.125	B24RV-G250
3"	5.375	3.625	B24RV-G300
4"	6.562	4.750	B24RV-G400
6"	9.000	6.625	B24RV-G600

¹ for coupler option call Dixon Sanitary 800.789.1718

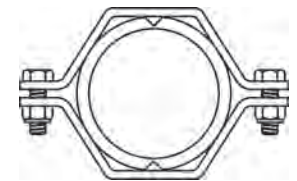


Fittings

Hex Hanger with Polypropylene Sleeves - B24PV¹

Pipe Size	A	B	304 Stainless Steel Part Number
1"	3.625	2.125	B24PV-G100
1½"	4.312	2.625	B24PV-G150
2"	4.875	3.125	B24PV-G200
2½"	4.812	3.125	B24PV-G250
3"	6.000	4.250	B24PV-G300
4"	7.500	5.625	B24PV-G400
6"	9.750	7.375	B24PV-G600

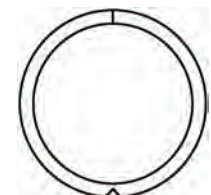
¹ for coupler option call Dixon Sanitary 800.789.1718



F

Sleeves - 13PV

Pipe Size	Polypropylene Part Number
1"	13PV-100
1½"	13PV-150
2"	13PV-200
2½"	13PV-250
3"	13PV-300
4"	13PV-400
6"	13PV-600



Note: see page F-29 for pipe size information

Pipe Size Uni-Hinge Block Hangers

Fittings

**Applications:**

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

Sizes:

- 1" - 4"

Materials:

- silicone insert - 80 durometer; color: blue
- hardware - 304 & 316 stainless steel

Features:

- insulation envelope: reduced OD allows hanger to be buried under the insulation jacket.
- silicone inserts are one piece
- there are no exposed threads or openings in hardware plates

Specification:

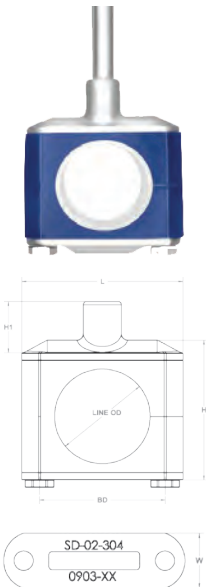
- intermittent temperatures from **-40°F to 320°F (-40°C to 160°C)**

Approvals:

- all plates polished, bolts are cleaned and nuts are lubricated with FDA approved product
- hanger threads match MSS SP-69 rod OD requirements

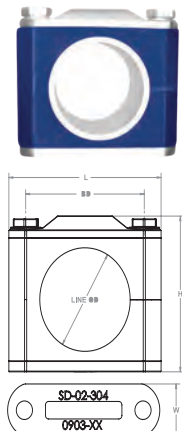
Hang Plate Block Hanger - B24V-TM

Pipe Size	BD	H	H1	L	Line OD	W	Thread	Part Number
1"	1.94	2.19	0.60	2.49	1.315	0.75	3/8"-16	B24V-TM-G100
1½"	2.44	2.69	0.60	2.99	1.900	0.88	3/8"-16	B24V-TM-G150
2"	2.81	3.22	1.21	3.36	2.375	0.88	1/2"-13	B24V-TM-G200
2½"	3.19	3.66	1.21	3.74	2.875	0.88	1/2"-13	B24V-TM-G250
3"	3.92	4.22	1.32	4.48	3.500	1.00	1/2"-13	B24V-TM-G300
4"	4.92	5.45	1.39	5.48	4.500	1.00	5/8"-11	B24V-TM-G400



Weld Plate Block Hanger - B24V-WP

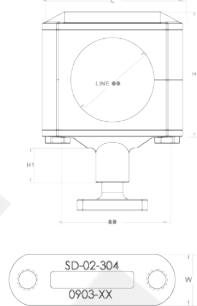
Pipe Size	BD	CL	H	L	Line OD	W	Part Number
1"	1.94	1.03	2.23	2.49	1.315	0.75	B24V-WP-G100
1½"	2.44	1.31	2.75	2.99	1.900	0.88	B24V-WP-G150
2"	2.81	1.55	3.25	3.36	2.375	0.88	B24V-WP-G200
2½"	3.19	1.77	3.68	3.74	2.875	0.88	B24V-WP-G250
3"	3.92	2.06	4.25	4.48	3.500	1.00	B24V-WP-G300
4"	4.92	2.58	5.27	5.48	4.500	1.00	B24V-WP-G400



Pipe Size Uni-Hinge Block Hangers

Base Mount Block Hanger - B24V-BM

Pipe Size	BD	H	H1	L	Line OD	W	Thread	Part Number
1"	1.94	2.19	0.47	2.49	1.315	0.75	3/8"-16	B24V-BM-G100
1½"	2.44	2.69	0.47	2.99	1.900	0.88	3/8"-16	B24V-BM-G150
2"	2.81	3.19	0.59	3.36	2.375	0.88	½"-13	B24V-BM-G200
2½"	3.19	3.63	0.59	3.74	2.875	0.88	½"-13	B24V-BM-G250



Schedule 5S and 10S Pipe Size Clamp Gaskets

Buna-N Pipe Size Clamp Gaskets - Black

Pipe Size	Part Number
1"	40MPV-U100
1½"	40MPV-U150
2"	40MPV-U200
2½"	40MPV-U250
3"	40MPV-U300
4"	40MPV-U400
6"	40MPV-U600

Feature:

- color code: red dot

Approval:

- meets 21CFR 177.2600



PTFE Pipe Size Clamp Gaskets

Pipe Size	Part Number
1"	40MPV-G100
1½"	40MPV-G150
2"	40MPV-G200
2½"	40MPV-G250
3"	40MPV-G300
4"	40MPV-G400

Features:

- color code: no dot
- not recommended for use with bolted clamps

Approvals:

- meets 21CFR 177.1550
- passed U.S.P. Class VI Cytotoxicity testing

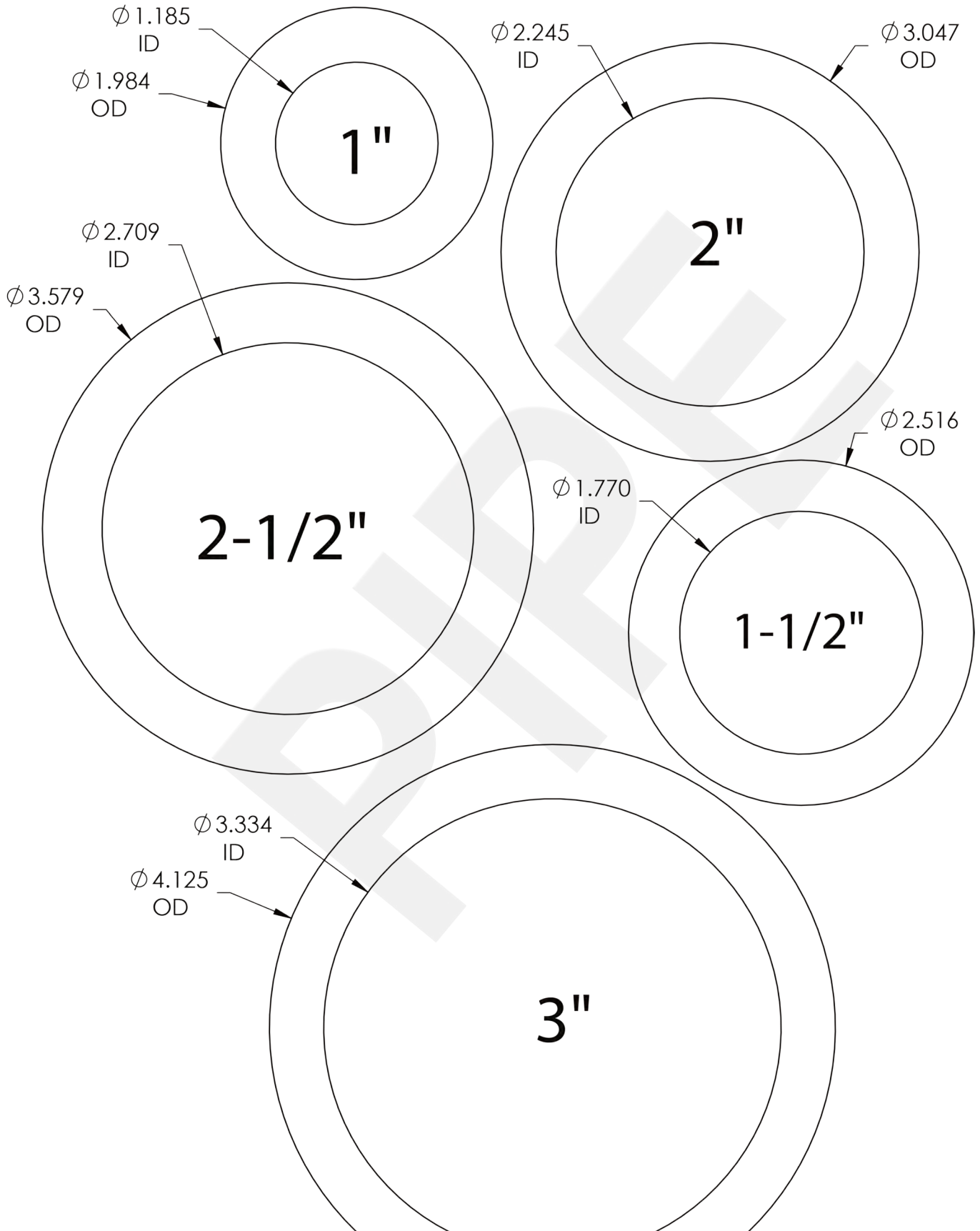


PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained.

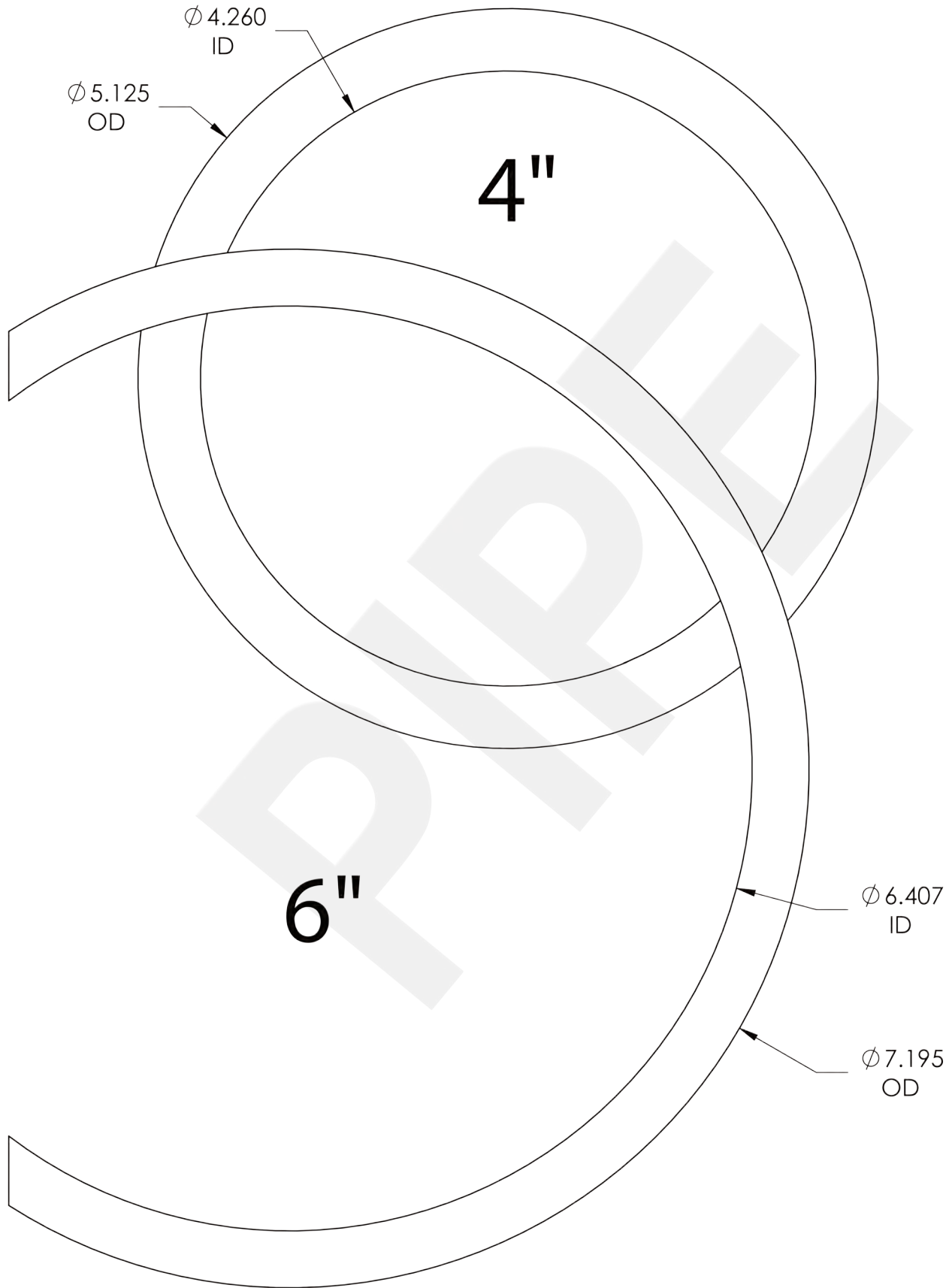


Pipe Gasket Sizing Guide

Fittings



Pipe Gasket Sizing Guide





Dixon Sanitary Bevel Seat Fittings

A Complete Bevel Seat Connection

Fittings



← Threaded Bevel Seat Ferrule

← Gasket (optional)

← Plain Bevel Seat Ferrule

← Hex Nut

Sizes:

- 1" - 4" OD tube

Materials:

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

Feature:

- 3A sanitary finish ID and OD

Dimensions of stainless steel tube given in inches

Tube OD	Nominal Wall Thickness (inches)	Gage Number
1"	.065	16
1½"	.065	16
2"	.065	16
2½"	.065	16
3"	.065	16
4"	.083	14

Bevel Seat Nuts

Union Hex Nuts - 13H

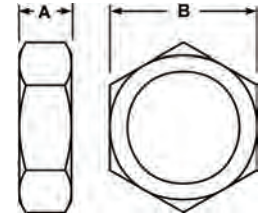
Specification:

- maximum pressure: 400 PSI



Fittings

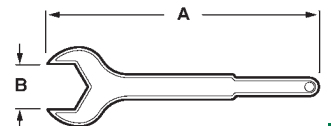
Tube OD	A	B	304 Stainless Steel (CF8) Part Number
1"	.906	1.812	13H-G100
1½"	.968	2.406	13H-G150
2"	1.062	3.000	13H-G200
2½"	1.187	3.594	13H-G250
3"	1.281	4.188	13H-G300
4"	1.500	5.438	13H-G400



Bevel Seat Wrenches

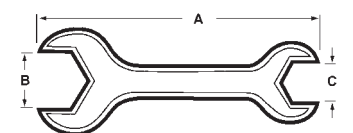
Single Side Hex Wrenches - 25H

Tube OD	A	B	Weight lbs.	Aluminum Part Number
1"	10.500	1.812	.64	25H-100
1½"	12.000	2.406	.86	25H-150
2"	14.000	3.000	1.76	25H-200
2½"	16.250	3.594	2.40	25H-250
3"	18.500	4.188	3.04	25H-300
4"	19.500	5.438	3.62	25H-400



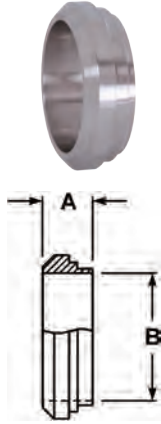
Two Sided Hex Wrenches - 25H

Tube OD	A	B	C	Weight lbs.	Aluminum Part Number
1½" x 1"	12.000	2.406	1.812	1.00	25H-150100
2" x 1½"	14.000	3.000	2.406	1.75	25H-200150
2½" x 2"	16.500	3.594	3.000	2.80	25H-250200
3" x 2"	18.000	4.188	3.000	3.20	25H-300200
3" x 2½"	18.000	4.188	3.594	3.70	25H-300250



Bevel Seat Ferrules

Fittings



3 Short Plain Bevel Seat Weld Ferrules - 14PRF

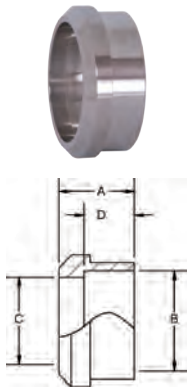
Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.718	.870	14PRF-G100	14PRF-R100
1½"	.718	1.370	14PRF-G150	14PRF-R150
2"	.750	1.870	14PRF-G200	14PRF-R200
2½"	.875	2.370	14PRF-G250	14PRF-R250
3"	.906	2.870	14PRF-G300	14PRF-R300
4"	1.031	3.834	14PRF-G400	14PRF-R400

3 Long Plain Bevel Seat Weld Ferrules - 14A



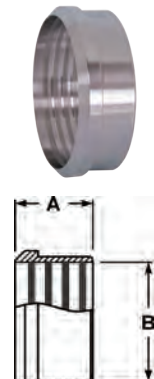
Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.375	.870	14A-G100	14A-R100
1½"	1.500	1.370	14A-G150	14A-R150
2"	1.500	1.870	14A-G200	14A-R200
2½"	1.750	2.370	14A-G250	14A-R250
3"	1.750	2.870	14A-G300	14A-R300
4"	1.750	3.834	14A-G400	14A-R400

Recessed Plain Bevel Seat Weld Ferrules - 14



Tube OD	A	B	C	D	304 Stainless Steel Part Number
1"	.750	1.000	.870	.500	14-G100
1½"	.875	1.500	1.370	.625	14-G150
2"	.969	2.000	1.870	.688	14-G200
2½"	1.062	2.500	2.370	.750	14-G250
3"	1.125	3.000	2.870	.813	14-G300
4"	1.250	4.000	3.834	.938	14-G400

3 Recessless Plain Bevel Seat Ferrules for Expanding - 14R



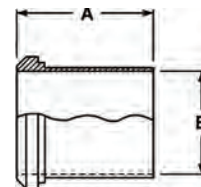
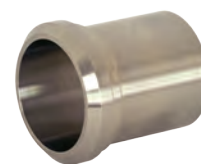
Tube OD	A	B	304 Stainless Steel Part Number
1"	.750	1.000	14R-G100
1½"	1.125	1.500	14R-G150
2"	1.312	2.000	14R-G200
2½"	1.375	2.500	14R-G250
3"	1.437	3.000	14R-G300
4"	1.500	4.000	14R-G400

Meets 3-A Standard Number 63-03 when used to modify or repair existing on-site farm milk

Bevel Seat Ferrules

Light Wall Tank Plain Bevel Seat Ferrules - 14WL 

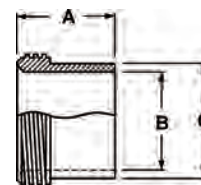
Tube OD	A	B	304 Stainless Steel Part Number
1"	2.000	.870	14WL-G100
1½"	2.250	1.370	14WL-G150
2"	2.500	1.870	14WL-G200
2½"	2.750	2.370	14WL-G250
3"	3.000	2.870	14WL-G300
4"	4.000	3.834	14WL-G400



Fittings

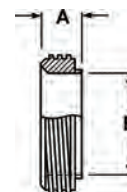
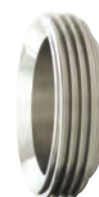
Heavy Wall Tank Plain Bevel Seat Ferrules - 14W 

Tube OD	A	B	C	304 Stainless Steel Part Number
1"	2.375	.870	1.160	14W-G100
1½"	2.531	1.370	1.676	14W-G150
2"	2.781	1.870	2.192	14W-G200
2½"	3.062	2.370	2.708	14W-G250
3"	3.531	2.870	3.224	14W-G300
4"	4.312	3.834	4.256	14W-G400



Short Threaded Bevel Seat Weld Ferrules - 15TRF 

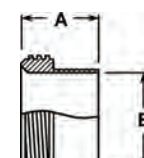
Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.718	.870	15TRF-G100	15TRF-R100
1½"	.718	1.370	15TRF-G150	15TRF-R150
2"	.750	1.870	15TRF-G200	15TRF-R200
2½"	.875	2.370	15TRF-G250	15TRF-R250
3"	.906	2.870	15TRF-G300	15TRF-R300
4"	1.031	3.834	15TRF-G400	15TRF-R400



F

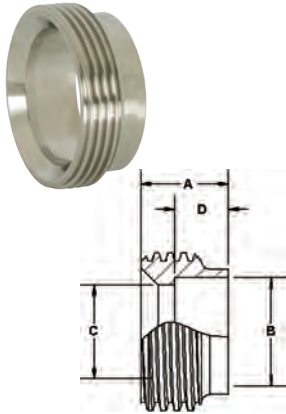
Long Threaded Bevel Seat Weld Ferrules - 15A 

Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.375	.870	15A-G100	15A-R100
1½"	1.500	1.370	15A-G150	15A-R150
2"	1.500	1.870	15A-G200	15A-R200
2½"	1.750	2.370	15A-G250	15A-R250
3"	1.750	2.870	15A-G300	15A-R300
4"	1.750	3.834	15A-G400	15A-R400



Bevel Seat Ferrules

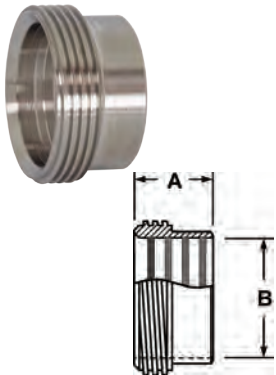
Fittings



Recessed Threaded Bevel Seat Ferrules - 15

Tube OD	A	B	C	D	304 Stainless Steel Part Number
1"	.812	1.000	.870	.500	15-G100
1½"	.875	1.500	1.370	.625	15-G150
2"	1.031	2.000	1.870	.687	15-G200
2½"	1.125	2.500	2.370	.750	15-G250
3"	1.250	3.000	2.870	.812	15-G300
4"	1.375	4.000	3.834	.937	15-G400

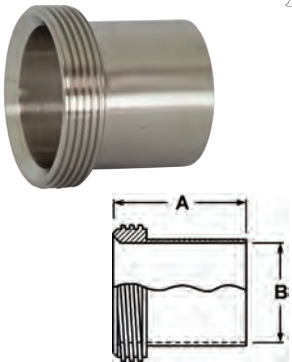
3 Recessless Threaded Bevel Seat Ferrules for Expanding - 15R



Tube OD	A	B	304 Stainless Steel Part Number
1"	.812	1.005	15R-G100
1½"	1.125	1.505	15R-G150
2"	1.375	2.005	15R-G200
2½"	1.500	2.505	15R-G250
3"	1.630	3.005	15R-G300
4"	1.675	4.005	15R-G400

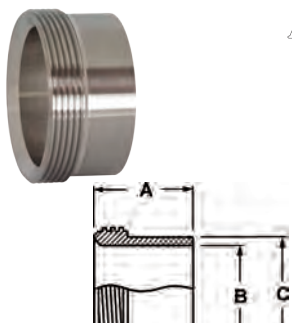
* Meets 3-A Standard Number 63-03 when used to modify or repair existing on-site farm milk handling systems.

3 Light Wall Tank Threaded Bevel Seat Ferrules - 15WL



Tube OD	A	B	304 Stainless Steel Part Number
1"	2.000	.870	15WL-G100
1½"	2.250	1.370	15WL-G150
2"	2.500	1.870	15WL-G200
2½"	2.750	2.370	15WL-G250
3"	3.000	2.870	15WL-G300
4"	4.000	3.834	15WL-G400

3 Heavy Wall Tank Threaded Bevel Seat Ferrules - 15W

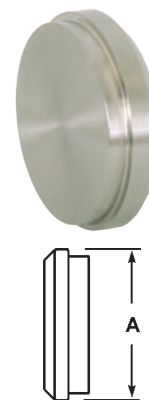


Tube OD	A	B	C	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.500	.870	1.160	15W-G100	15W-R100
1½"	1.625	1.370	1.676	15W-G150	15W-R150
2"	1.750	1.870	2.192	15W-G200	15W-R200
2½"	1.750	2.370	2.708	15W-G250	15W-R250
3"	1.812	2.870	3.224	15W-G300	15W-R300
4"	2.125	3.834	4.256	15W-G400	15W-R400

Bevel Seat Ferrules

Plain Bevel Seat Solid End Caps - 16A 

Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.312	16A-G100	16A-R100
1½"	1.843	16A-G150	16A-R150
2"	2.375	16A-G200	16A-R200
2½"	2.906	16A-G250	16A-R250
3"	3.437	16A-G300	16A-R300
4"	4.500	16A-G400	16A-R400

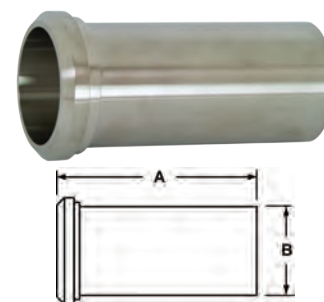


Fittings

Bevel Seat Adapters

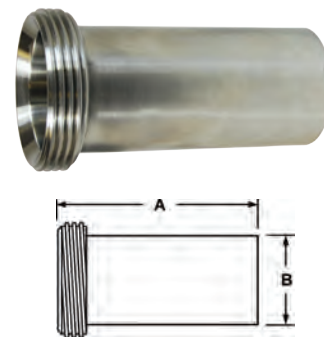
Plain Bevel Seat Tygon® Hose Adapters - 14AHT

Tube OD	A	B	304 Stainless Steel Part Number
1"	4.688	1.000	14AHT-G100
1½"	4.719	1.500	14AHT-G150
2"	4.719	2.000	14AHT-G200
2½"	4.844	2.500	14AHT-G250
3"	4.906	3.000	14AHT-G300
4"	5.218	4.000	14AHT-G400



Threaded Bevel Seat Tygon® Hose Adapters - 15AHT

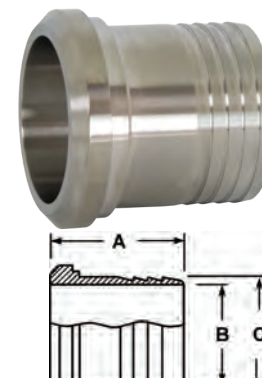
Tube OD	A	B	304 Stainless Steel Part Number
1"	4.500	1.000	15AHT-G100
1½"	4.500	1.500	15AHT-G150
2"	4.500	2.000	15AHT-G200
2½"	4.500	2.500	15AHT-G250
3"	4.500	3.000	15AHT-G300
4"	5.000	4.000	15AHT-G400



F

Plain Bevel Seat Rubber Hose Adapters - 14AHR

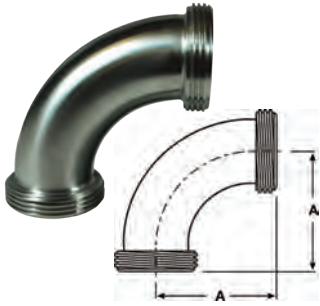
Tube OD	A	B	C	304 Stainless Steel Part Number
1"	1.687	.870	1.000	14AHR-G100
1½"	1.687	1.370	1.500	14AHR-G150
2"	2.312	1.870	2.000	14AHR-G200
2½"	2.343	2.370	2.500	14AHR-G250
3"	3.500	2.870	3.000	14AHR-G300
4"	4.000	3.834	4.000	14AHR-G400



Bevel Seat Elbows

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

Fittings



Tube OD	A	304 Stainless Steel Part Number
1"	2.218	B2C-G100
1½"	2.968	B2C-G150
2"	3.750	B2C-G200
2½"	4.625	B2C-G250
3"	5.406	B2C-G300
4"	7.031	B2C-G400

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


Tube OD	A	304 Stainless Steel Part Number
1"	2.218	B2F-G100
1½"	2.968	B2F-G150
2"	3.750	B2F-G200
2½"	4.625	B2F-G250
3"	5.406	B2F-G300
4"	7.031	B2F-G400

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


Tube OD	A	304 Stainless Steel Part Number
1"	2.218	B2E-G100
1½"	2.968	B2E-G150
2"	3.750	B2E-G200
2½"	4.625	B2E-G250
3"	5.406	B2E-G300
4"	7.031	B2E-G400

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

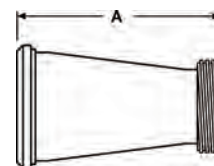

Tube OD	A	304 Stainless Steel Part Number
1"	1.343	B2P-G100
1½"	1.655	B2P-G150
2"	2.000	B2P-G200
2½"	2.437	B2P-G250
3"	2.781	B2P-G300
4"	3.531	B2P-G400

Bevel Seat Concentric Reducers

Fittings

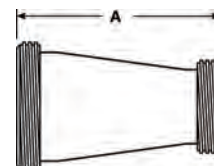
Plain Bevel Seat x Threaded Bevel Seat Concentric Reducers - B3115F 

Tube OD	A	304 Stainless Steel Part Number
1½" x 1"	3.436	B3115F-G150100
2" x 1½"	3.468	B3115F-G200150
2½" x 2"	3.625	B3115F-G250200
3" x 2"	5.656	B3115F-G300200
3" x 2½"	3.781	B3115F-G300250
4" x 3"	5.937	B3115F-G400300



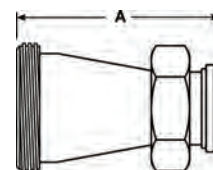
Threaded Bevel Seat x Threaded Bevel Seat Concentric Reducers - B31TT 

Tube OD	A	304 Stainless Steel Part Number
1½" x 1"	3.436	B31TT-G150100
2" x 1½"	3.468	B31TT-G200150
2½" x 2"	3.625	B31TT-G250200
3" x 2"	5.656	B31TT-G300200
3" x 2½"	3.781	B31TT-G300250
4" x 3"	5.937	B31TT-G400300



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

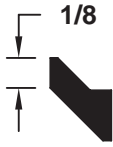
Tube OD	A	304 Stainless Steel Part Number
1½" x 1"	3.436	B31TP-G150100
2" x 1½"	3.468	B31TP-G200150
2½" x 2"	3.625	B31TP-G250200
3" x 2"	5.656	B31TP-G300200
3" x 2½"	3.781	B31TP-G300250
4" x 3"	5.937	B31TP-G400300



Bevel Seat Gaskets

Buna-N Bevel Seat Gaskets - Black

Fittings

**Feature:**

- color code: red dot

Approval:

- meets 21CFR 177.2600

Size	Part Number
1"	40BS-O100
1½"	40BS-O150
2"	40BS-O200
2½"	40BS-O250
3"	40BS-O300
4"	40BS-O400

Buna-N Flat Bevel Seat Gaskets - Black

**Feature:**

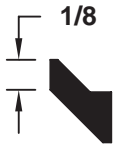
- color code: red dot

Approval:

- meets 21CFR 177.2600

Size	Part Number
1"	40BS-F100
1½"	40BS-F150
2"	40BS-F200
2½"	40BS-F250
3"	40BS-F300
4"	40BS-F400

EPDM Bevel Seat Gaskets - Black

**Features:**

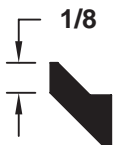
- color code: three green dots
- peroxide cured

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

Size	Part Number
1"	40BS-E100
1½"	40BS-E150
2"	40BS-E200
2½"	40BS-E250
3"	40BS-E300
4"	40BS-E400

FKM Bevel Seat Gaskets - Black

**Features:**

- color code: one white dot and one yellow dot
- peroxide cured

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

Size	Part Number
1"	40BS-Y100
1½"	40BS-Y150
2"	40BS-Y200
2½"	40BS-Y250
3"	40BS-Y300
4"	40BS-Y400

Note: refer to pages K-4 to K-6 for compatibility information

Bevel Seat Gaskets

Silicone Bevel Seat Gaskets - White

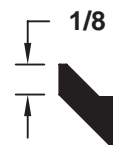
Size	Part Number
1"	40BS-X100
1½"	40BS-X150
2"	40BS-X200
2½"	40BS-X250
3"	40BS-X300
4"	40BS-X400

Features:

- color code: no dot
- peroxide cured

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing



PTFE Bevel Seat Gaskets - White

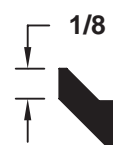
Size	Part Number
1"	40BS-S100
1½"	40BS-S150
2"	40BS-S200
2½"	40BS-S250
3"	40BS-S300
4"	40BS-S400

Feature:

- color code: no dot

Approvals:

- meets 21CFR 177.1550
- passed U.S.P. Class VI Cytotoxicity testing



Heavy PTFE Bevel Seat Gaskets - White

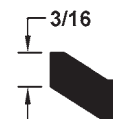
Size	Part Number
1"	40BS-H100
1½"	40BS-H150
2"	40BS-H200
2½"	40BS-H250
3"	40BS-H300
4"	40BS-H400

Feature:

- color code: no dot

Approvals:

- meets 21CFR 177.1550
- passed U.S.P. Class VI Cytotoxicity testing



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



Note: refer to pages K-4 to K-6 for compatibility information

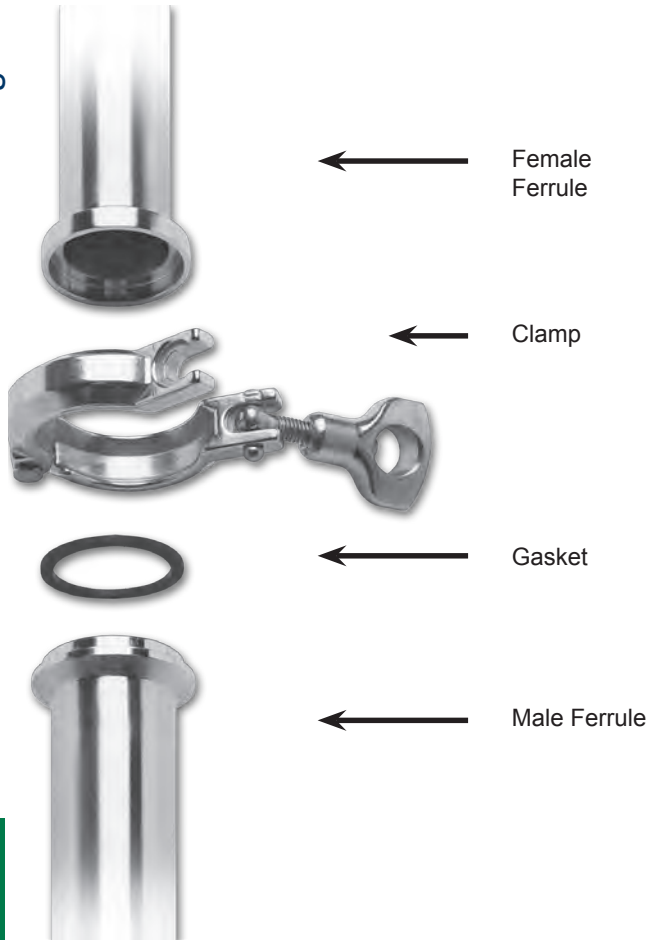




Dixon Sanitary I-Line/Q-Line Fittings

A Complete I-Line Connection

Fittings

**Sizes:**

- 1" - 8" OD tube I-line (stock items to 4", 6" & 8" are special order)
- 1" - 4" OD tube Q-Line

Materials:

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

Feature:

- 3A sanitary finish ID and OD

Dimensions of stainless steel tube given in inches

Tube OD	Nominal Wall Thickness (inches)	Gage Number
1"	.065	16
1½"	.065	16
2"	.065	16
2½"	.065	16
3"	.065	16
4"	.083	14
6"	.109	12
8"	.109	12

I-Line/Q-Line Clamps

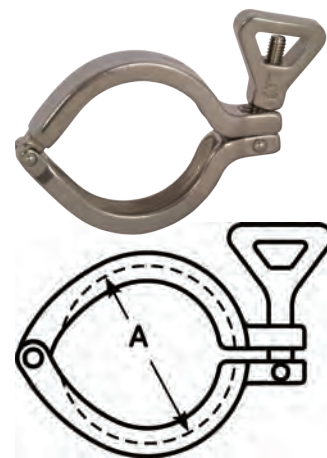
Heavy Duty Clamps - 13ILH

Specification:

- Q-Line service pressure rating for all sizes: **150 PSI @ 70°F (21°C)** and **125 PSI @ 250°F (121°C)**

Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
1"- 1½"	700	250	2.122	13ILH100-150
2"	450	250	2.654	13ILH200
2½"	450	200	3.185	13ILH250
3"	350	150	3.717	13ILH300
4"	200	125	4.820	13ILH400
6"	150	100	7.689	13ILH600
8"	125	75	9.689	13ILH800

¹ wing nut tightened to 25 in. lb. of torque

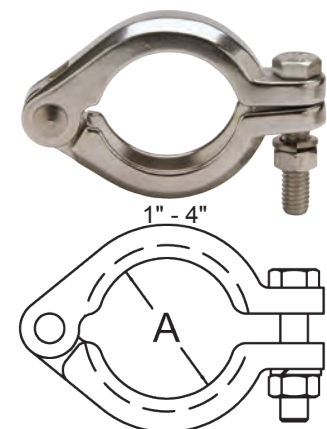


Fittings

Bolted Clamps - 13ILB

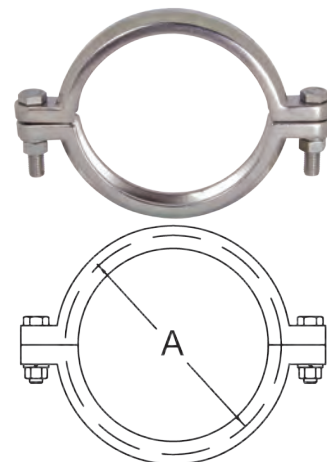
Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
1"- 1½"	1220	1100	2.122	13ILB100-150
2"	900	830	2.654	13ILB200
2½"	720	660	3.185	13ILB250
3"	600	550	3.717	13ILB300
4"	570	525	4.820	13ILB400

¹ nut tightened to 20 ft. lb. of torque



Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
6"	300	200	7.689	13ILB600
8"	250	150	9.689	13ILB800

¹ nut tightened to 20 ft. lb. of torque

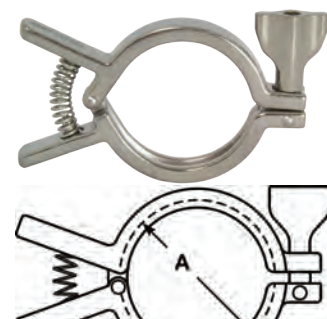


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Squeeze Clamps - 13IL-Q

Tube OD	Service Pressure Rating @ 70°F (21°C) ¹	Service Pressure Rating @ 250°F (121°C) ¹	A	Part Number
1"- 1½"	700	250	2.122	13IL-Q100150
2"	450	250	2.654	13IL-Q200

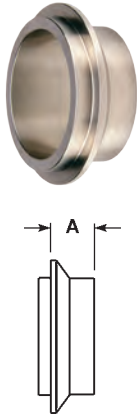
¹ wing nut tightened to 25 in. lb. of torque



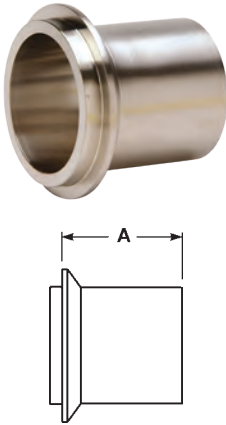
I-Line/Q-Line Clamps

 Male I-Line Short Weld Ferrules - 14WI

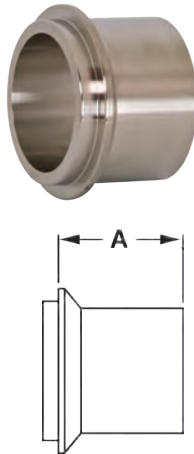
Fittings



Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.600	14WI-G100	14WI-R100
1½"	.765	14WI-G150	14WI-R150
2"	.790	14WI-G200	14WI-R200
2½"	.848	14WI-G250	14WI-R250
3"	.906	14WI-G300	14WI-R300
4"	1.031	14WI-G400	14WI-R400
6"	.940	---	14WI-R600
8"	.940	---	14WI-R800

 Male I-Line Long Weld Ferrules - 14WLI

Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.562	14WLI-G100	14WLI-R100
1½"	1.843	14WLI-G150	14WLI-R150
2"	2.062	14WLI-G200	14WLI-R200
2½"	2.188	14WLI-G250	14WLI-R250
3"	2.375	14WLI-G300	14WLI-R300
4"	2.688	14WLI-G400	14WLI-R400
6"	2.688	---	14WLI-R600

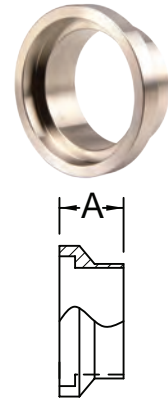
 Male I-Line Heavy Wall Tank Weld Ferrules - 14WHI

Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.312	14WHI-G100	14WHI-R100
1½"	1.457	14WHI-G150	14WHI-R150
2"	1.500	14WHI-G200	14WHI-R200
2½"	1.437	14WHI-G250	14WHI-R250
3"	1.500	14WHI-G300	14WHI-R300
4"	1.812	14WHI-G400	14WHI-R400

I-Line/Q-Line Clamps

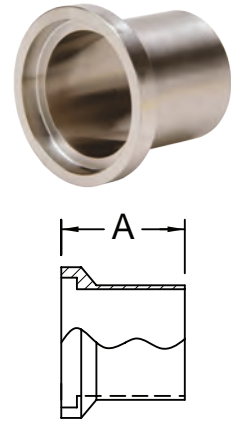
Female I-Line Short Weld Ferrules - 15WI 

Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.785	15WI-G100	15WI-R100
1½"	.950	15WI-G150	15WI-R150
2"	1.040	15WI-G200	15WI-R200
2½"	1.160	15WI-G250	15WI-R250
3"	1.220	15WI-G300	15WI-R300
4"	1.350	15WI-G400	15WI-R400
6"	1.125	---	15WI-R600
8"	1.125	---	15WI-R800



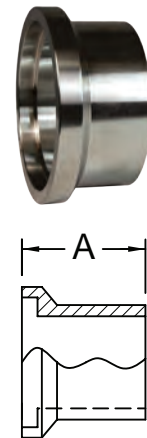
Female I-Line Long Weld Ferrules - 15WLI 

Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.750	15WLI-G100	15WLI-R100
1½"	2.031	15WLI-G150	15WLI-R150
2"	2.312	15WLI-G200	15WLI-R200
2½"	2.500	15WLI-G250	15WLI-R250
3"	2.688	15WLI-G300	15WLI-R300
4"	3.000	15WLI-G400	15WLI-R400
6"	3.000	---	15WLI-R600



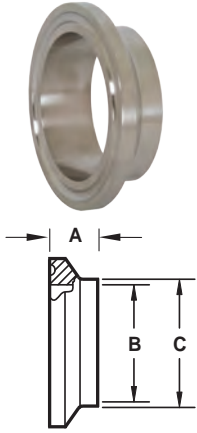
Female I-Line Heavy Wall Tank Weld Ferrules - 15WHI 

Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.500	15WHI-G100	15WHI-R100
1½"	1.625	15WHI-G150	15WHI-R150
2"	1.750	15WHI-G200	15WHI-R200
2½"	1.750	15WHI-G250	15WHI-R250
3"	1.812	15WHI-G300	15WHI-R300
4"	2.125	15WHI-G400	15WHI-R400



I-Line/Q-Line Clamps

Fittings

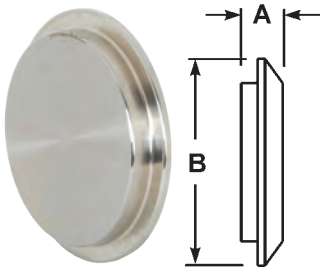


3 Q-Line Weld Ferrules - 14WQ

Tube OD	A	B	C	304 Stainless Steel Part Number
1"	.531	.870	1.000	14WQ-G100
1½"	.563	1.370	1.500	14WQ-G150
2"	.813	1.870	2.000	14WQ-G200
2½"	.938	2.370	2.500	14WQ-G250
3"	.938	2.870	3.000	14WQ-G300
4"	1.000	3.834	4.000	14WQ-G400

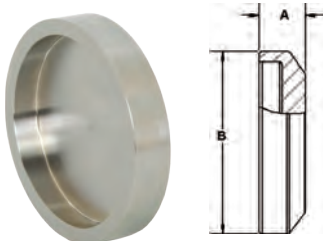
I-line/Q-Line End Caps

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



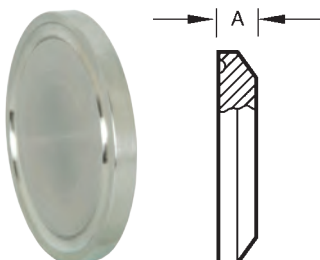
Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.500	1.985	16AI-14I100	16AI-14I100R
1½"	.500	1.985	16AI-14I150	16AI-14I150R
2"	.562	2.640	16AI-14I200	16AI-14I200R
2½"	.750	3.307	16AI-14I250	16AI-14I250R
3"	.750	3.870	16AI-14I300	16AI-14I300R
4"	.750	4.870	16AI-14I400	16AI-14I400R
6"	.750	7.495	16AI-14I600	16AI-14I600R
8"	.880	9.495	---	16AI-14I800R

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



Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.500	1.985	16AI-15I100	16AI-15I100R
1½"	.500	1.985	16AI-15I150	16AI-15I150R
2"	.562	2.640	16AI-15I200	16AI-15I200R
2½"	.750	3.307	16AI-15I250	16AI-15I250R
3"	.750	3.870	16AI-15I300	16AI-15I300R
4"	.750	4.870	16AI-15I400	16AI-15I400R
6"	.750	7.495	16AI-15I600	16AI-15I600R
8"	.880	9.495	---	16AI-15I800R

3 Q-Line Solid End Caps - 16AQ

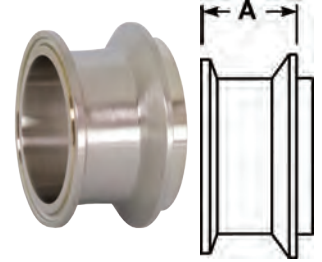


Tube OD	A	304 Stainless Steel Part Number
1"	.313	16AQ-G100
1½"	.313	16AQ-G150
2"	.438	16AQ-G200
2½"	.500	16AQ-G250
3"	.500	16AQ-G300
4"	.625	16AQ-G400

I-Line/Q-Line Adapters

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

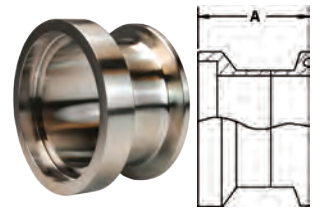
Tube OD	A	304 Stainless Steel Part Number
1"	1.093	17-14I-14MPG100
1½"	1.265	17-14I-14MPG150
2"	1.290	17-14I-14MPG200
2½"	1.312	17-14I-14MPG250
3"	1.406	17-14I-14MPG300
4"	1.656	17-14I-14MPG400



Fittings

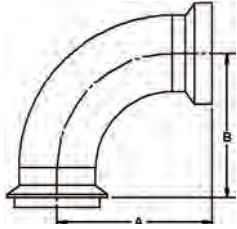
Female I-Line x Clamp Adapters - 17-15I-14MP 

Tube OD	A	304 Stainless Steel Part Number
1"	1.281	17-15I-14MPG100
1½"	1.450	17-15I-14MPG150
2"	1.540	17-15I-14MPG200
2½"	1.625	17-15I-14MPG250
3"	1.718	17-15I-14MPG300
4"	1.968	17-15I-14MPG400



I-Line/Q-Line Elbows

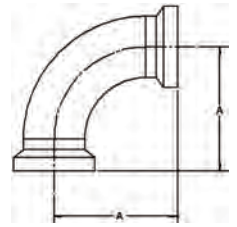
Fittings



3 90° Female I-Line x Male I-Line Elbows - B2FI

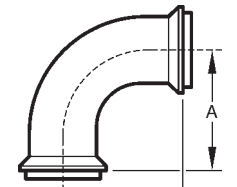
Tube OD	A	B	304 Stainless Steel Part Number
1"	2.281	2.093	B2FI-G100
1½"	3.188	3.000	B2FI-G150
2"	4.031	3.781	B2FI-G200
2½"	4.906	4.593	B2FI-G250
3"	5.718	5.406	B2FI-G300
4"	7.344	7.031	B2FI-G400

3 90° Female I-Line Elbows - B2CI



Tube OD	A	304 Stainless Steel Part Number
1"	2.281	B2CI-G100
1½"	3.188	B2CI-G150
2"	4.031	B2CI-G200
2½"	4.906	B2CI-G250
3"	5.718	B2CI-G300
4"	7.344	B2CI-G400

3 90° Male I-Line Elbows - B2EI



Tube OD	A	304 Stainless Steel Part Number
1"	2.093	B2EI-G100
1½"	3.000	B2EI-G150
2"	3.781	B2EI-G200
2½"	4.593	B2EI-G250
3"	5.406	B2EI-G300
4"	7.031	B2EI-G400

I-Line Gaskets

Buna-N I-Line Gaskets - Black 3/32"

Size	Part Number
1"	40IH100
1½"	40IH150
2"	40IH200
2½"	40IH250
3"	40IH300
4"	40IH400
6"	40IH600
8"	40IH800

Feature:

- color code: red dot

Approval:

- meets 21CFR 177.2600



EPDM I-Line Gaskets - White 3/32"

Size	Part Number
1"	40IE100
1½"	40IE150
2"	40IE200
2½"	40IE250
3"	40IE300
4"	40IE400
6"	40IE600
8"	40IE800

Features:

- color code: three green dots
- peroxide cured

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing



EPDM I-Line Gaskets - White 1/16"

Size	Part Number
1½"	40IE15016
2"	40IE20016
2½"	40IE25016
3"	40IE30016
4"	40IE40016
6"	40IE60016
8"	40IE80016

Features:

- color code: three green dots
- peroxide cured

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing



FKM I-Line Gaskets - 1/16"

Size	Part Number
1"	40IV100
1½"	40IV150
2"	40IV200
2½"	40IV250
3"	40IV300
4"	40IV400
6"	40IV600
8"	40IV800

Features:

- color code: one white dot and one yellow dot
- peroxide cured

Approvals:

- meets 21CFR 177.1550
- passed U.S.P. Class VI Cytotoxicity testing



I-Line Gaskets

PTFE I-Line Gaskets - 1/16"

Fittings

**Feature:**

- color code: no dot

Approvals:

- meets 21CFR 177.1550
- passed U.S.P. Class VI Cytotoxicity testing

Size	Part Number
1"	40IT100
1½"	40IT150
2"	40IT200
2½"	40IT250
3"	40IT300
4"	40IT400
6"	40IT600
8"	40IT800



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

Q-Line Gaskets

Buna-N Q-Line Gaskets - Black

**Feature:**

- color code: red dot

Approval:

- meets 21CFR 177.2600

Size	Part Number
1"	40QH100
1½"	40QH150
2"	40QH200
2½"	40QH250
3"	40QH300
4"	40QH400

F

PTFE Q-Line Gaskets - White

**Feature:**

- color code: no dot

Approvals:

- meets 21CFR 177.1550
- passed U.S.P. Class VI Cytotoxicity testing

Size	Part Number
1"	40QT100
1½"	40QT150
2"	40QT200
2½"	40QT250
3"	40QT300
4"	40QT400



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

Note: refer to pages K-4 to K-6 for compatibility information

Dixon Sanitary John Perry Fittings



F
Fittings

A Complete John Perry Connection

Sizes:

- 1" - 4" OD tube

Materials:

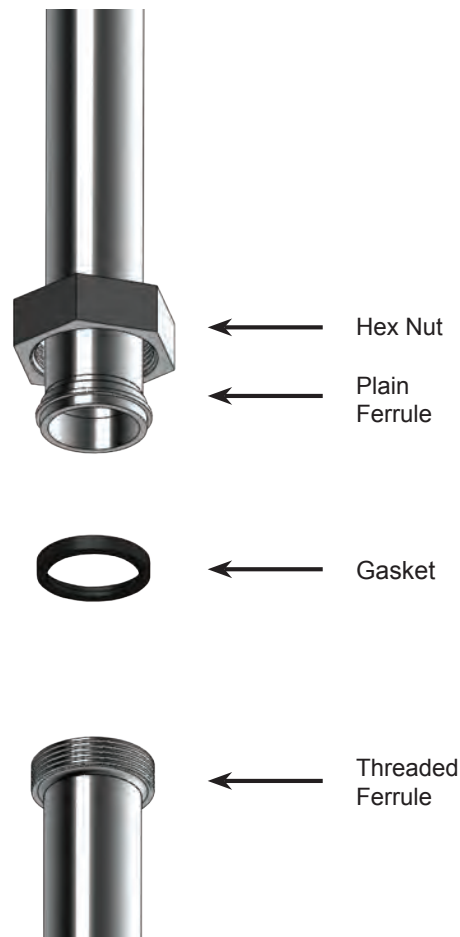
- G = 304 stainless steel
- R = 316L stainless steel
- other alloys are available

Feature:

- 3A sanitary finish ID and OD

Dimensions of stainless steel tube given in inches

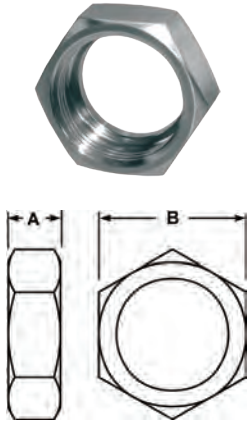
Tube OD	Nominal Wall Thickness (inches)	Gage Number
1"	.065	16
1½"	.065	16
2"	.065	16
2½"	.065	16
3"	.065	16
4"	.083	14



John Perry Nuts

Union Hex Nuts - 13H

Fittings



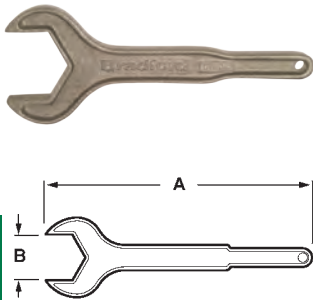
Specification:

- 400 PSI maximum

Tube OD	A	B	304 Stainless Steel (CF8) Part Number
1"	.906	1.812	13H-G100
1½"	.968	2.406	13H-G150
2"	1.062	3.000	13H-G200
2½"	1.187	3.594	13H-G250
3"	1.281	4.188	13H-G300
4"	1.500	5.438	13H-G400

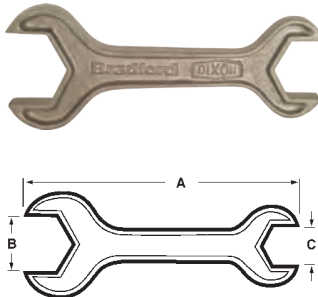
John Perry Wrenches

Single Side Hex Wrenches - 25H



Tube OD	A	B	Weight lbs.	Aluminum Part Number
1"	10.500	1.812	.64	25H-100
1½"	12.000	2.406	.86	25H-150
2"	14.000	3.000	1.76	25H-200
2½"	16.250	3.594	2.40	25H-250
3"	18.500	4.188	3.04	25H-300
4"	19.500	5.438	3.62	25H-400

Two Sided Hex Wrenches - 25H



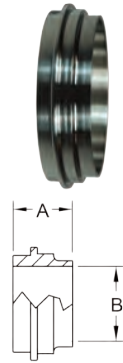
Tube OD	A	B	C	Weight lbs.	Aluminum Part Number
1½" x 1"	12.000	2.406	1.812	1.00	25H-150100
2" x 1½"	14.000	3.000	2.406	1.75	25H-200150
2½" x 2"	16.500	3.594	3.000	2.80	25H-250200
3" x 2"	18.000	4.188	3.000	3.20	25H-300200
3" x 2½"	18.000	4.188	3.594	3.70	25H-300250

John Perry Ferrules

John Perry Short Plain Weld Ferrules - 14PRFJP



Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.719	.870	14PRFJP-G100	14PRFJP-R100
1½"	.719	1.370	14PRFJP-G150	14PRFJP-R150
2"	.750	1.870	14PRFJP-G200	14PRFJP-R200
2½"	.875	2.370	14PRFJP-G250	14PRFJP-R250
3"	.906	2.870	14PRFJP-G300	14PRFJP-R300
4"	1.031	3.834	14PRFJP-G400	14PRFJP-R400

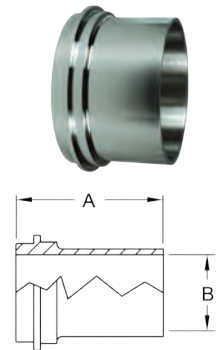


Fittings

John Perry Long Plain Weld Ferrules - L14AJP



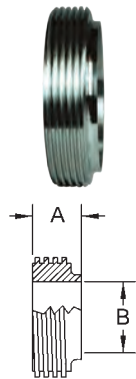
Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.375	.870	L14AJP-G100	L14AJP-R100
1½"	1.500	1.370	L14AJP-G150	L14AJP-R150
2"	1.500	1.870	L14AJP-G200	L14AJP-R200
2½"	1.750	2.370	L14AJP-G250	L14AJP-R250
3"	1.750	2.870	L14AJP-G300	L14AJP-R300
4"	1.750	3.834	L14AJP-G400	L14AJP-R400



John Perry Threaded Short Weld Ferrules - 15TRFJP



Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.719	.870	15TRFJP-G100	15TRFJP-R100
1½"	.719	1.370	15TRFJP-G150	15TRFJP-R150
2"	.750	1.870	15TRFJP-G200	15TRFJP-R200
2½"	.875	2.370	15TRFJP-G250	15TRFJP-R250
3"	.906	2.870	15TRFJP-G300	15TRFJP-R300
4"	1.031	3.834	15TRFJP-G400	15TRFJP-R400

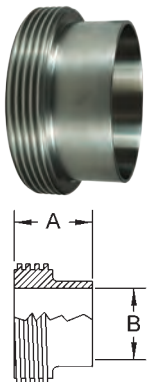


F

John Perry Threaded Long Weld Ferrules - L15AJP



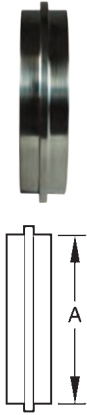
Tube OD	A	B	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.375	.870	L15AJP-G100	L15AJP-R100
1½"	1.500	1.370	L15AJP-G150	L15AJP-R150
2"	1.500	1.870	L15AJP-G200	L15AJP-R200
2½"	1.750	2.370	L15AJP-G250	L15AJP-R250
3"	1.750	2.870	L15AJP-G300	L15AJP-R300
4"	1.750	3.834	L15AJP-G400	L15AJP-R400



John Perry End Caps

 John Perry Solid End Caps - 16AJP

Fittings



Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.125	16AJP-G100	16AJP-R100
1½"	1.656	16AJP-G150	16AJP-R150
2"	2.187	16AJP-G200	16AJP-R200
2½"	2.656	16AJP-G250	16AJP-R250
3"	3.187	16AJP-G300	16AJP-R300
4"	4.187	16AJP-G400	16AJP-R400

John Perry Gaskets

Buna 80 Duro John Perry Gaskets

Feature:

- color code: one red dot

Approval:

- meets 21CFR 177.2600

Size	Part Number
1"	40JP-U100
1½"	40JP-U150
2"	40JP-U200
2½"	40JP-U250
3"	40JP-U300
4"	40JP-U400

EPDM John Perry Gaskets

Features:

- color code: three green dots
- peroxide cured

Approvals:

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

Size	Part Number
1"	40JP-E100
1½"	40JP-E150
2"	40JP-E200
2½"	40JP-E250
3"	40JP-E300
4"	40JP-E400

John Perry Gaskets

FKM John Perry Gaskets

Features:

- color code: one white dot and one yellow dot
- peroxide cured

**Approvals:**

- meets 21CFR 177.2600
- passed U.S.P. Class VI Cytotoxicity testing

Size	Part Number
1"	<i>40JP-SFY100</i>
1½"	<i>40JP-SFY150</i>
2"	<i>40JP-SFY200</i>
2½"	<i>40JP-SFY250</i>
3"	<i>40JP-SFY300</i>
4"	<i>40JP-SFY400</i>

Virgin PTFE John Perry Gaskets

Feature:

- color code: no dot

**Approvals:**

- meets 21CFR 177.1550
- passed U.S.P. Class VI Cytotoxicity testing

Size	Part Number
1"	<i>40JP-G100</i>
1½"	<i>40JP-G150</i>
2"	<i>40JP-G200</i>
2½"	<i>40JP-G250</i>
3"	<i>40JP-G300</i>
4"	<i>40JP-G400</i>

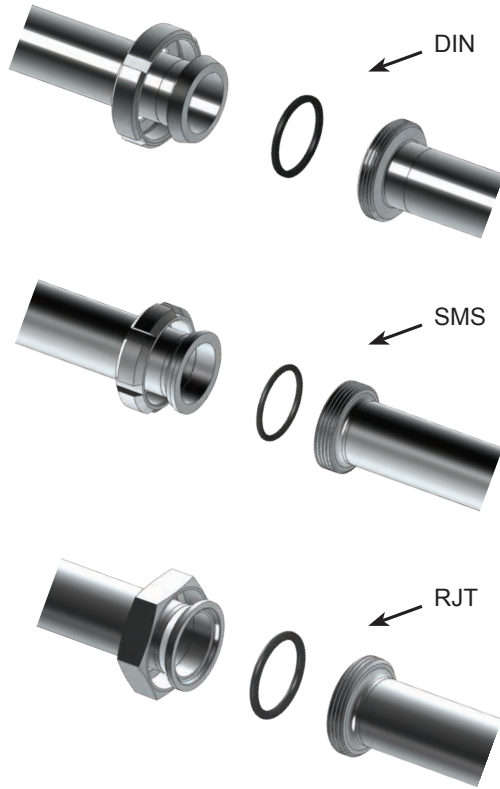
PTFE is a material subject to plastic flow. When cycled through heat and then cooled down in process lines, PTFE gaskets will not return to the original configuration and it will continue to compress as the cycling continues. This plastic flow will allow leakage if clamp torques are not maintained.



Dixon Sanitary Euro Fittings

European Connections

Fittings

**Sizes:**

- 1" - 4" nominal diameter

Materials:

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

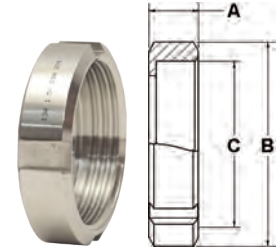
Feature:

- 3A sanitary finish ID and OD

DIN 11851

DIN Round Nuts - 13R

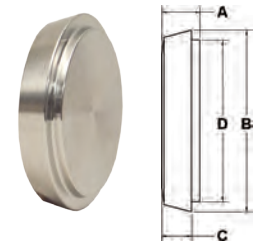
Nominal Size	A (mm)	B (mm)	C (mm)	304 Stainless Steel Part Number
1"	21.0	63.0	52 x 1/6	13R-G100DIN
1½"	21.0	78.0	65 x 1/6	13R-G150DIN
2"	22.0	92.0	78 x 1/6	13R-G200DIN
2½"	25.0	112.0	95 x 1/6	13R-G250DIN
3"	30.0	127.0	110 x 1/4	13R-G300DIN
4"	31.0	148.0	130 x 1/4	13R-G400DIN



Fittings

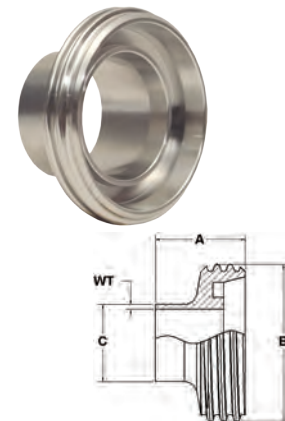
DIN Blank Caps - 16AMP

Nominal Size	A (mm)	B (mm)	C (mm)	D (mm)	316 Stainless Steel Part Number
1"	13.0	44.0	9.9	35.0	16AMP-R100DIN
1½"	13.0	56.0	9.9	48.0	16AMP-R150DIN
2"	14.0	68.0	10.9	61.0	16AMP-R200DIN
2½"	16.0	86.0	11.9	79.0	16AMP-R250DIN
3"	16.0	100.0	11.9	93.0	16AMP-R300DIN
4"	20.1	120.0	15.0	114.0	16AMP-R400DIN



DIN Welding Males - 15A

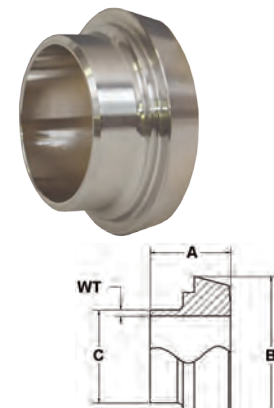
Nominal Size	WT (mm)	A (mm)	B (mm)	C (mm)	316 Stainless Steel Part Number
1"	1.6	29.0	52 x 1/6	25.4	15A-R100DIN
1½"	1.6	33.0	65 x 1/6	38.1	15A-R150DIN
2"	1.7	35.0	78 x 1/6	51.0	15A-R200DIN
2½"	1.6	40.0	95 x 1/6	63.5	15A-R250DIN
3"	1.6	45.0	110 x 1/4	76.2	15A-R300DIN
4"	2.0	54.0	130 x 1/4	101.6	15A-R400DIN



F

DIN Welding Liners - 14A

Nominal Size	WT (mm)	A (mm)	B (mm)	C (mm)	316 Stainless Steel Part Number
1"	1.6	22.0	44.0	25.4	14A-R100DIN
1½"	1.6	26.0	56.0	38.1	14A-R150DIN
2"	1.7	28.0	68.0	51.0	14A-R200DIN
2½"	1.6	32.0	86.0	63.5	14A-R250DIN
3"	1.6	37.0	100.0	76.2	14A-R300DIN
4"	2.0	44.0	121.0	101.6	14A-R400DIN

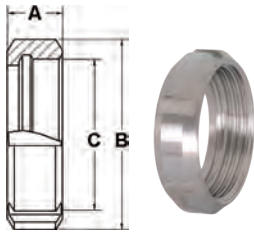


Manufactured in accordance to Imperial DIN 11851

SMS

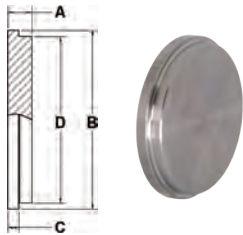
SMS Round Nuts - 13R

Fittings



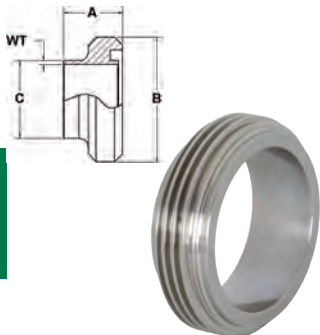
Nominal Size	A (mm)	B (mm)	C (mm)	304 Stainless Steel Part Number
1"	19.0	51.0	40 x 1/6	13R-G100SMS
1½"	23.0	74.0	60 x 1/6	13R-G150SMS
2"	24.0	84.0	70 x 1/6	13R-G200SMS
2½"	28.0	100.0	85 x 1/6	13R-G250SMS
3"	30.0	114.0	98 x 1/6	13R-G300SMS
4"	31.0	138.0	125 x 1/6	13R-G400SMS

SMS Blank Caps - 16AMP



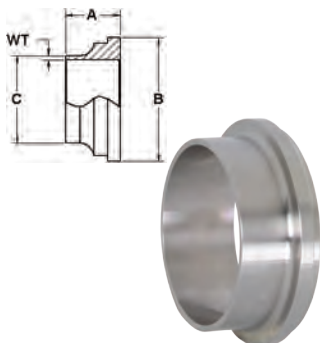
Nominal Size	A (mm)	B (mm)	C (mm)	D (mm)	316 Stainless Steel Part Number
1"	7.5	35.5	3.6	32.0	16AMP-R100SMS
1½"	8.0	55.0	4.1	47.9	16AMP-R150SMS
2"	9.0	65.0	4.1	60.4	16AMP-R200SMS
2½"	9.0	80.0	4.1	73.5	16AMP-R250SMS
3"	11.0	93.0	5.1	86.5	16AMP-R300SMS
4"	11.0	118.0	5.8	112.5	16AMP-R400SMS

SMS Welding Males - 15A



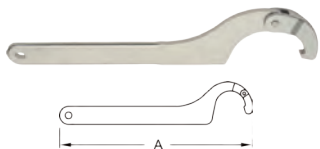
Nominal Size	WT (mm)	A (mm)	B (mm)	C (mm)	316 Stainless Steel Part Number
1"	1.25	19.0	40 x 1/6	25.0	15A-R100SMS
1½"	1.25	23.0	60 x 1/6	38.0	15A-R150SMS
2"	1.25	23.0	70 x 1/6	51.0	15A-R200SMS
2½"	1.50	27.0	85 x 1/6	63.5	15A-R250SMS
3"	1.60	27.0	98 x 1/6	76.1	15A-R300SMS
4"	2.00	30.0	125 x 1/6	101.6	15A-R400SMS

SMS Welding Liners - 14A



Nominal Size	WT (mm)	A (mm)	B (mm)	C (mm)	316 Stainless Steel Part Number
1"	1.25	15.5	35.5	25.0	14A-R100SMS
1½"	1.25	16.0	55.0	38.0	14A-R150SMS
2"	1.25	17.0	65.0	51.0	14A-R200SMS
2½"	1.50	17.0	80.0	63.5	14A-R250SMS
3"	1.60	19.0	93.0	76.1	14A-R300SMS
4"	2.00	19.0	118.0	101.6	14A-R400SMS

DIN and SMS Spanner Wrenches - SP



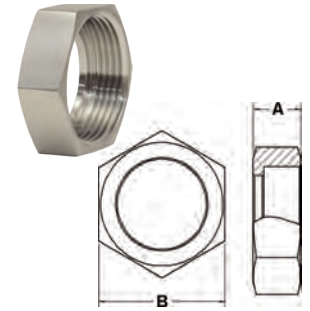
Used On Nominal Size	A (mm)	Nickel Plated Steel Part Number
1" - 1½"	247.7	DIN-SMS-60/90SP
2" - 4"	330.2	DIN-SMS90/155SP

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

RJT BS:4825

RJT Hex Nuts - 13H

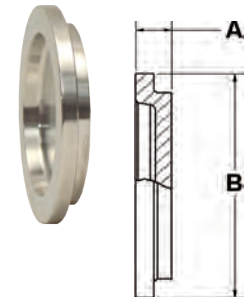
Nominal Size	A (mm)	B (mm)	304 Stainless Steel Part Number
1"	22.2	50.80	13H-G100RJT
1½"	22.2	65.02	13H-G150RJT
2"	22.2	79.25	13H-G200RJT
2½"	22.2	91.95	13H-G250RJT
3"	22.2	104.65	13H-G300RJT
4"	22.2	130.05	13H-G400RJT



Fittings

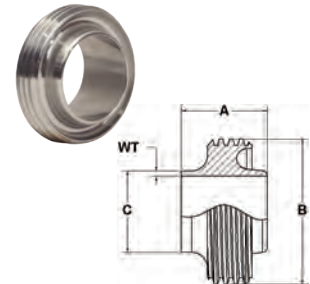
RJT Blank Caps - 13RBN

Nominal Size	A (mm)	B (mm)	304 Stainless Steel Part Number
1"	8.2	41.3	13RBN-G100RJT
1½"	8.2	54.0	13RBN-G150RJT
2"	8.2	66.7	13RBN-G200RJT
2½"	8.2	79.4	13RBN-G250RJT
3"	8.2	92.1	13RBN-G300RJT
4"	8.2	117.5	13RBN-G400RJT



RJT Welding Males - 15A

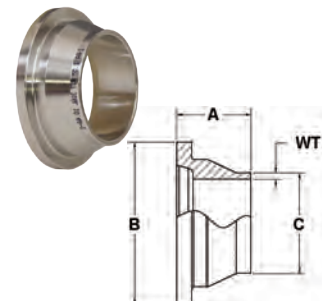
Nominal Size	WT (mm)	A (mm)	B (mm)	C (mm)	316 Stainless Steel Part Number
1"	1.73	27.0	45.72 x 1/8	25.65	15A-R100RJT
1½"	1.73	27.0	58.42 x 1/8	38.35	15A-R150RJT
2"	1.73	27.0	72.72 x 1/6	51.05	15A-R200RJT
2½"	1.73	27.0	85.42 x 1/6	63.75	15A-R250RJT
3"	1.73	27.0	98.12 x 1/6	76.45	15A-R300RJT
4"	2.13	27.0	123.52 x 1/6	101.85	15A-R400RJT



F

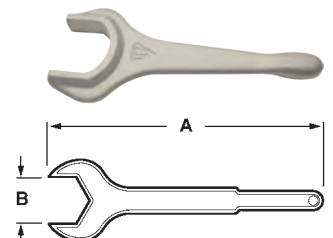
RJT Welding Liners - 14A

Nominal Size	WT (mm)	A (mm)	B (mm)	C (mm)	316 Stainless Steel Part Number
1"	1.73	19.5	41.3	25.65	14A-R100RJT
1½"	1.73	19.5	54.0	38.35	14A-R150RJT
2"	1.73	19.5	66.7	51.05	14A-R200RJT
2½"	1.73	19.5	79.4	63.75	14A-R250RJT
3"	1.73	19.5	92.1	76.45	14A-R300RJT
4"	2.13	19.5	117.5	101.85	14A-R400RJT



RJT Spanner Wrenches - SP

Size	A (mm)	B (mm)	Aluminum Part Number
1"	254.00	50.80	RJT-100SP
1½"	292.10	65.02	RJT-150SP
2"	304.80	79.25	RJT-200SP
2½"	342.80	91.95	RJT-250SP
3"	368.30	104.65	RJT-300SP
4"	444.50	130.05	RJT-400SP



European Gaskets

Fittings



DIN Buna-N Euro Gaskets - Black

Feature:

- color code: red dot

Approval:

- meets 21CFR 177.2600

Nominal Size	ID (mm)	OD (mm)	DIN 11851 Part Number
1"	29.97	39.88	40MP-U100DIN
1½"	41.91	52.07	40MP-U150DIN
2"	54.10	64.01	40MP-U200DIN
2½"	71.12	81.03	40MP-U250DIN
3"	85.09	95.00	40MP-U300DIN
4"	103.89	114.05	40MP-U400DIN

SMS Buna-N Euro Gaskets - Black

Feature:

- color code: red dot

Approval:

- meets 21CFR 177.2600

Nominal Size	ID (mm)	OD (mm)	L Style Part Number
1"	24.89	32.00	40MP-U100SMS
1½"	37.49	48.00	40MP-U150SMS
2"	50.80	61.00	40MP-U200SMS
2½"	63.50	73.40	40MP-U250SMS
3"	75.95	86.10	40MP-U300SMS
4"	103.89	114.00	40MP-U400SMS

RJT Buna-N Euro Gaskets - Black

Feature:

- color code: red dot

Approval:

- meets 21CFR 177.2600

Nominal Size	ID (mm)	OD (mm)	Part Number
1"	26.92	6.35	40MP-U100RJT
1½"	39.62	6.35	40MP-U150RJT
2"	52.32	6.35	40MP-U200RJT
2½"	65.08	6.35	40MP-U250RJT
3"	77.72	6.35	40MP-U300RJT
4"	103.12	6.35	40MP-U400RJT

Note: refer to pages K-4 to K-6 for compatibility information

Dixon Sanitary Polished Weld Fittings



A Complete Weld Connection

Size range:

- ½" - 12" OD tube

Materials:

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

Features:

- 3A sanitary finish ID and OD
- #3, #5 and electropolish finishes are available



← Weld end



← Weld end

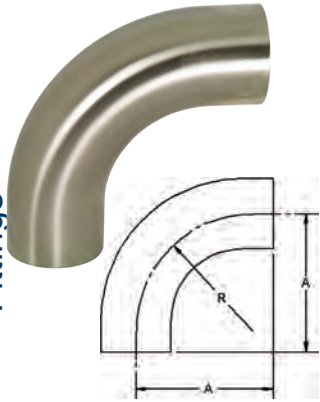


Dimensions of stainless steel tube given in inches

Tube OD	Nominal Wall Thickness (inches)	Gage Number
½"	.065	16
¾"	.065	16
1"	.065	16
1½"	.065	16
2"	.065	16
2½"	.065	16
3"	.065	16
4"	.083	14
6"	.109	12
8"	.109	12
10"	.120	10
12"	.120	10

Weld Elbows

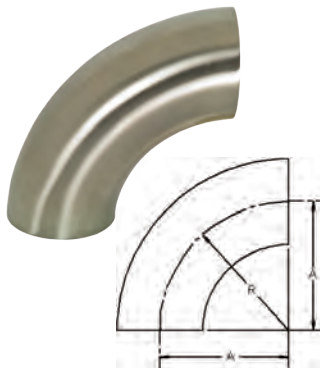
Fittings



3 Polished 90° Weld Elbows with Tangents - B2S

Tube OD	A	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	3.000	1.125	.065	---	B2S-R50P
3/4"	3.000	1.125	.065	---	B2S-R75P
1"	2.062	1.500	.065	B2S-G100P	B2S-R100P
1 1/2"	2.937	2.250	.065	B2S-G150P	B2S-R150P
2"	4.062	3.000	.065	B2S-G200P	B2S-R200P
2 1/2"	5.187	3.750	.065	B2S-G250P	B2S-R250P
3"	6.312	4.500	.065	B2S-G300P	B2S-R300P
4"	8.312	6.000	.083	B2S-G400P	B2S-R400P

3 Polished 90° Weld Elbows - B2WCL



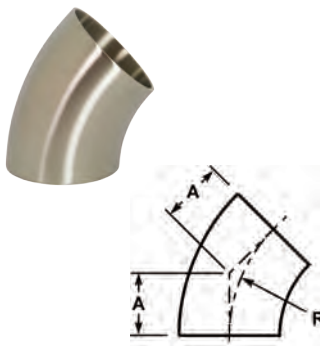
Tube OD	A	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	1.125	1.125	.065	---	B2WCL-R50P
3/4"	1.125	1.125	.065	---	B2WCL-R75P
1"	1.500	1.500	.065	B2WCL-G100P	B2WCL-R100P
1 1/2"	2.250	2.250	.065	B2WCL-G150P	B2WCL-R150P
2"	3.000	3.000	.065	B2WCL-G200P	B2WCL-R200P
2 1/2"	3.750	3.750	.065	B2WCL-G250P	B2WCL-R250P
3"	4.500	4.500	.065	B2WCL-G300P	B2WCL-R300P
4"	6.000	6.000	.083	B2WCL-G400P	B2WCL-R400P
6"	9.000	9.000	.109	B2WCL-G600P	B2WCL-R600P
8"	12.000	12.000	.109	B2WCL-G800P	B2WCL-R800P
10"	15.000	15.000	.120	B2WCL-G1000P	B2WCL-R1000P



3 Polished 45° Weld Elbows with Tangents - B2KS

Tube OD	A	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	2.250	1.125	.065	---	B2KS-R50P
3/4"	2.250	1.125	.065	---	B2KS-R75P
1"	1.188	1.500	.065	B2KS-G100P	B2KS-R100P
1 1/2"	1.625	2.250	.065	B2KS-G150P	B2KS-R150P
2"	2.312	3.000	.065	B2KS-G200P	B2KS-R200P
2 1/2"	3.000	3.750	.065	B2KS-G250P	B2KS-R250P
3"	3.688	4.500	.065	B2KS-G300P	B2KS-R300P
4"	4.812	6.000	.083	B2KS-G400P	B2KS-R400P

3 Polished 45° Weld Elbows - B2WK



Tube OD	A	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	.466	1.125	.065	---	B2WK-R50P
3/4"	.466	1.125	.065	---	B2WK-R75P
1"	.625	1.500	.065	B2WK-G100P	B2WK-R100P
1 1/2"	.937	2.250	.065	B2WK-G150P	B2WK-R150P
2"	1.250	3.000	.065	B2WK-G200P	B2WK-R200P
2 1/2"	1.562	3.750	.065	B2WK-G250P	B2WK-R250P
3"	1.875	4.500	.065	B2WK-G300P	B2WK-R300P
4"	2.500	6.000	.083	B2WK-G400P	B2WK-R400P
6"	3.750	9.000	.109	B2WK-G600P	B2WK-R600P
8"	5.000	12.000	.109	B2WK-G800P	B2WK-R800P
10"	6.250	15.000	.120	B2WK-G1000P	B2WK-R1000P

Weld Elbows

Polished 90° Clamp x Weld Elbows - B2CM 

Tube OD	A	B	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	2.562	2.062	1.500	.065	B2CM-G100	B2CM-R100
1½"	3.438	2.937	2.250	.065	B2CM-G150	B2CM-R150
2"	4.562	4.062	3.000	.065	B2CM-G200	B2CM-R200
2½"	5.688	5.187	3.750	.065	B2CM-G250	B2CM-R250
3"	6.812	6.312	4.500	.065	B2CM-G300	B2CM-R300
4"	8.937	8.312	6.000	.083	B2CM-G400	B2CM-R400



Fittings

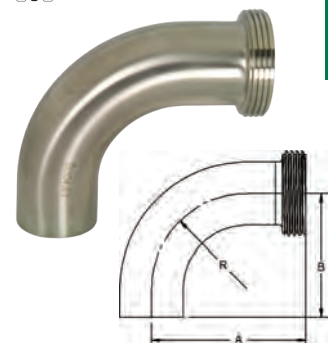
Polished 45° Clamp x Weld Elbows - B2KM 

Tube OD	A	B	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	1.188	1.688	1.500	.065	B2KM-G100	B2KM-R100
1½"	1.625	2.125	2.250	.065	B2KM-G150	B2KM-R150
2"	2.312	2.812	3.000	.065	B2KM-G200	B2KM-R200
2½"	3.000	3.500	3.750	.065	B2KM-G250	B2KM-R250
3"	3.688	4.188	4.500	.065	B2KM-G300	B2KM-R300
4"	4.812	5.437	6.000	.083	B2KM-G400	B2KM-R400



Polished 90° Threaded Bevel Seat x Weld Elbows - B2T 

Tube OD	A	B	R	Nominal Wall	304 Stainless Steel Part Number
1"	2.780	2.062	1.500	.065	B2T-G100
1½"	3.656	2.937	2.250	.065	B2T-G150
2"	4.812	4.062	3.000	.065	B2T-G200
2½"	6.062	5.187	3.750	.065	B2T-G250
3"	7.218	6.312	4.500	.065	B2T-G300
4"	9.343	8.312	6.000	.083	B2T-G400



F

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

Tube OD	A	B	R	Nominal Wall	304 Stainless Steel Part Number
1"	2.780	2.062	1.500	.065	B2FP-G100
1½"	3.656	2.937	2.250	.065	B2FP-G150
2"	4.812	4.062	3.000	.065	B2FP-G200
2½"	6.062	5.187	3.750	.065	B2FP-G250
3"	7.218	6.312	4.500	.065	B2FP-G300
4"	9.343	8.312	6.000	.083	B2FP-G400



Weld Sweep Elbows

- Standard with no tangents. Call Dixon Sanitary 800.789.1718 for tangents, 45° and other radii.


3 Polished 12" 90° Weld Sweep Elbows - B2SXL

Fittings

Tube OD	A	R	316L Stainless Steel Part Number
1½"	12.00	12.00	B2SXL12-R150
2"	12.00	12.00	B2SXL12-R200
3"	12.00	12.00	B2SXL12-R300
4"	12.00	12.00	B2SXL12-R400


3 Polished 18" 90° Weld Sweep Elbows - B2SXL

Tube OD	A	R	316L Stainless Steel Part Number
1½"	18.00	18.00	B2SXL18-R150
2"	18.00	18.00	B2SXL18-R200
2½"	18.00	18.00	B2SXL18-R250
3"	18.00	18.00	B2SXL18-R300


3 Polished 24" 90° Weld Sweep Elbows - B2SXL

Tube OD	A	R	316L Stainless Steel Part Number
1½"	24.00	24.00	B2SXL24-R150
2"	24.00	24.00	B2SXL24-R200
2½"	24.00	24.00	B2SXL24-R250
3"	24.00	24.00	B2SXL24-R300


3 Polished 36" 90° Weld Sweep Elbows - B2SXL

Tube OD	A	R	316L Stainless Steel Part Number
3"	36.00	36.00	B2SXL36-R300
4"	36.00	36.00	B2SXL36-R400

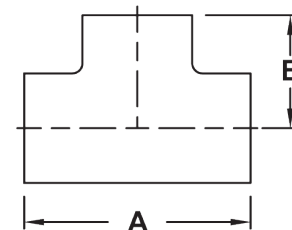
Weld Tees

Polished Short Weld Tees - B7WWW 

Tube OD	A	B	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	2.250	1.125	.065	B7WWW-G100P	B7WWW-R100P
1½"	3.312	1.656	.065	B7WWW-G150P	B7WWW-R150P
2"	4.124	2.062	.065	B7WWW-G200P	B7WWW-R200P
2½"	4.688	2.344	.065	B7WWW-G250P	B7WWW-R250P
3"	5.188	2.594	.065	B7WWW-G300P	B7WWW-R300P
4"	6.876	3.438	.083	B7WWW-G400P	B7WWW-R400P

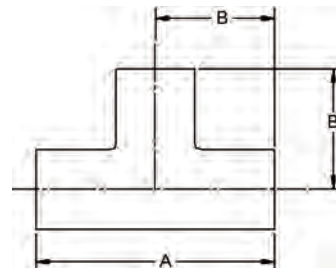
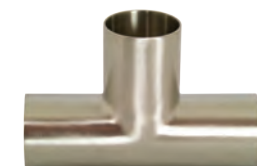


Fittings



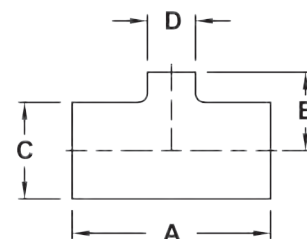
Polished Long Weld Tees - B7W 

Tube OD	A	B	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
½"	3.750	1.875	.065	---	B7W-R50P
¾"	4.000	2.000	.065	---	B7W-R75P
1"	3.750	1.875	.065	B7W-G100P	B7W-R100P
1½"	4.500	2.250	.065	B7W-G150P	B7W-R150P
2"	6.000	3.000	.065	B7W-G200P	B7W-R200P
2½"	6.000	3.000	.065	B7W-G250P	B7W-R250P
3"	6.500	3.250	.065	B7W-G300P	B7W-R300P
4"	7.750	3.875	.083	B7W-G400P	B7W-R400P
6"	11.250	5.625	.109	B7W-G600P	B7W-R600P
8"	14.000	7.000	.109	B7W-G800P	B7W-R800P



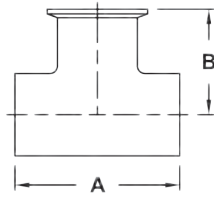
Polished Reducing Weld Tees - B7RWWW 

Tube OD	A	B	C	D	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
¾" x ½"	4.000	2.000	.750	.500	.065	---	B7RWWW-R7550P
1" x ½"	4.250	2.125	1.000	.500	.065	---	B7RWWW-R10050P
1" x ¾"	4.250	2.125	1.000	.750	.065	---	B7RWWW-R10075P
1½" x ½"	4.750	2.375	1.500	.500	.065	---	B7RWWW-R15050P
1½" x ¾"	4.750	2.375	1.500	.750	.065	---	B7RWWW-R15075P
1½" x 1"	3.312	1.375	1.500	1.000	.065	B7RWWW-G150100P	B7RWWW-R150100P
2" x ½"	5.750	2.625	2.000	.500	.065	---	B7RWWW-R20050P
2" x ¾"	5.750	2.625	2.000	.750	.065	---	B7RWWW-R20075P
2" x 1"	4.124	1.625	2.000	1.000	.065	B7RWWW-G200100P	B7RWWW-R200100P
2" x 1½"	4.124	1.906	2.000	1.500	.065	B7RWWW-G200150P	B7RWWW-R200150P
2½" x 1½"	4.688	2.156	2.500	1.500	.065	B7RWWW-G250150P	B7RWWW-R250150P
2½" x 2"	4.688	2.312	2.500	2.000	.065	B7RWWW-G250200P	B7RWWW-R250200P
3" x 1½"	5.188	2.406	3.000	1.500	.065	B7RWWW-G300150P	B7RWWW-R300150P
3" x 2"	5.188	2.562	3.000	2.000	.065	B7RWWW-G300200P	B7RWWW-R300200P
3" x 2½"	5.188	2.594	3.000	2.500	.083	B7RWWW-G300250P	B7RWWW-R300250P
4" x 1½"	6.876	2.906	4.000	1.500	.083	B7RWWW-G400150P	B7RWWW-R400150P
4" x 2"	6.876	3.062	4.000	2.000	.083	B7RWWW-G400200P	B7RWWW-R400200P
4" x 2½"	6.876	3.094	4.000	2.500	.083	B7RWWW-G400250P	B7RWWW-R400250P
4" x 3"	6.876	3.094	4.000	3.000	.083	B7RWWW-G400300P	B7RWWW-R400300P
6" x 2"	11.250	4.500	6.000	2.000	.109	B7RWWW-G600200P	B7RWWW-R600200P
6" x 3"	11.250	4.875	6.000	3.000	.109	B7RWWW-G600300P	B7RWWW-R600300P



Weld Tees

Fittings

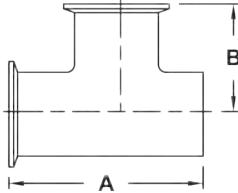


Polished Weld Run x Clamp Branch Tees - B7WWM

Tube OD	A	B	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	2.250	1.625	.065	B7WWM-G100	B7WWM-R100
1½"	3.312	2.156	.065	B7WWM-G150	B7WWM-R150
2"	4.124	2.562	.065	B7WWM-G200	B7WWM-R200
2½"	4.688	2.844	.065	B7WWM-G250	B7WWM-R250
3"	5.188	3.094	.065	B7WWM-G300	B7WWM-R300
4"	6.876	4.063	.083	B7WWM-G400	B7WWM-R400



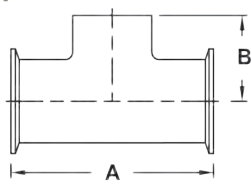
Polished Weld x Clamp Run x Clamp Branch Tees - B7WMM



Tube OD	A	B	Nominal Wall	304 Stainless Steel Part Number
1"	2.750	1.625	.065	B7WMM-G100
1½"	3.812	2.156	.065	B7WMM-G150
2"	4.624	2.562	.065	B7WMM-G200
2½"	5.188	2.844	.065	B7WMM-G250
3"	5.688	3.094	.065	B7WMM-G300
4"	7.500	4.063	.083	B7WMM-G400



Polished Clamp Run x Weld Branch Tees - B7MMW



Tube OD	A	B	Nominal Wall	304 Stainless Steel Part Number
1"	3.250	1.125	.065	B7MMW-G100
1½"	4.312	1.656	.065	B7MMW-G150
2"	5.124	2.062	.065	B7MMW-G200
2½"	5.688	2.062	.065	B7MMW-G250
3"	6.188	2.594	.065	B7MMW-G300
4"	8.124	3.438	.083	B7MMW-G400

Weld Adapters

Long Weld Hose Adapters - 14WHRL

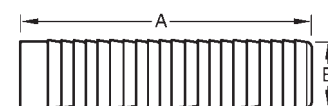
Feature:

- suitable for use with band clamps

Tube OD	A	B	Nominal Wall	316L Stainless Steel Part Number
1"	3.000	1.030	.116	14WHRL-R100
1½"	4.500	1.530	.116	14WHRL-R150
2"	4.500	2.030	.116	14WHRL-R200
2½"	5.000	2.530	.116	14WHRL-R250
3"	5.000	3.030	.116	14WHRL-R300
4"	4.875	4.030	.116	14WHRL-R400



Fittings

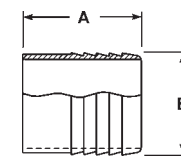


Use of PVC tubing requires special techniques to prevent leakage. All assembly work must be done with heated tube. Cold durometer is 90 as opposed to rubber hose at 65 to 70 durometer. Banding buckles must be at 180° from one another.



Weld Hose Adapters - 14WHR

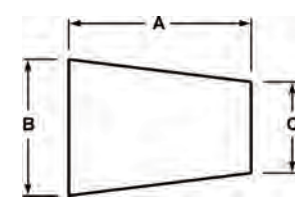
Tube OD	A	B	Nominal Wall	316L Stainless Steel Part Number
½"	1.500	.500	.065	14WHR-R50
¾"	1.500	.750	.065	14WHR-R75
1"	1.688	1.000	.065	14WHR-R100
1½"	1.688	1.500	.065	14WHR-R150
2"	2.312	2.000	.065	14WHR-R200
2½"	2.000	2.500	.065	14WHR-R250
3"	3.093	3.000	.065	14WHR-R300
4"	3.406	4.000	.083	14WHR-R400



Weld Reducers

Polished Concentric Weld Reducers - B31W

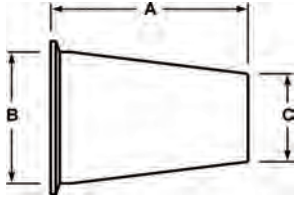
Tube OD	A	B	C	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
¾" x ½"	1.000	.750	.500	.065	---	B31W-R7550P
1" x ½"	2.000	1.000	.500	.065	---	B31W-R10050P
1" x ¾"	1.000	1.000	.750	.065	---	B31W-R10075P
1½" x ½"	4.000	1.500	.500	.065	---	B31W-R15050P
1½" x ¾"	3.000	1.500	.750	.065	---	B31W-R15075P
1½" x 1"	2.000	1.500	1.000	.065	B31W-G150100P	B31W-R150100P
2" x ½"	6.000	2.000	.500	.065	---	B31W-R20050P
2" x ¾"	5.000	2.000	.750	.065	---	B31W-R20075P
2" x 1"	4.000	2.000	1.000	.065	B31W-G200100P	B31W-R200100P
2" x 1½"	2.000	2.000	1.500	.065	B31W-G200150P	B31W-R200150P
2½" x 1½"	4.000	2.500	1.500	.065	B31W-G250150P	B31W-R250150P
2½" x 2"	2.000	2.500	2.000	.065	B31W-G250200P	B31W-R250200P
3" x 1"	8.000	3.000	1.000	.065	B31W-G300100P	B31W-R300100P
3" x 1½"	6.000	3.000	1.500	.065	B31W-G300150P	B31W-R300150P
3" x 2"	4.000	3.000	2.000	.065	B31W-G300200P	B31W-R300200P
3" x 2½"	2.000	3.000	2.500	.065	B31W-G300250P	B31W-R300250P
4" x 1½"	10.000	4.000	1.500	.083	B31W-G400150P	B31W-R400150P
4" x 2"	8.000	4.000	2.000	.083	B31W-G400200P	B31W-R400200P
4" x 2½"	6.000	4.000	2.500	.083	B31W-G400250P	B31W-R400250P
4" x 3"	4.000	4.000	3.000	.083	B31W-G400300P	B31W-R400300P
6" x 2"	5.500	6.000	2.000	.109	B31W-G600200P	B31W-R600200P
6" x 3"	5.500	6.000	3.000	.109	B31W-G600300P	B31W-R600300P
6" x 4"	5.500	6.000	4.000	.109	B31W-G600400P	B31W-R600400P
8" x 4"	6.000	8.000	4.000	.109	B31W-G800400P	B31W-R800400P



Weld Reducers

3 Polished Concentric Clamp x Weld Reducers - B31M

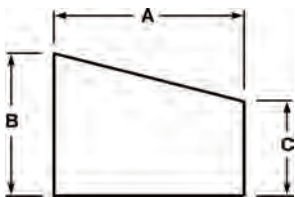
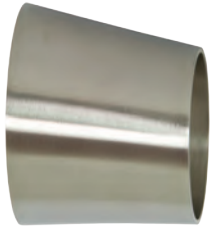
Fittings



Tube OD	A	B	C	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
3/4" x 1/2"	1.500	.750	.500	.065	---	B31M-R7550
1" x 1/2"	2.500	1.000	.500	.065	---	B31M-R10050
1" x 3/4"	1.500	1.000	.750	.065	---	B31M-R10075
1 1/2" x 1/2"	4.500	1.500	.500	.065	---	B31M-R15050
1 1/2" x 3/4"	3.500	1.000	.750	.065	---	B31M-R15075
1 1/2" x 1"	2.500	1.500	1.000	.065	B31M-G150100	B31M-R150100
2" x 1"	4.500	2.000	1.000	.065	B31M-G200100	B31M-R200100
2" x 1 1/2"	2.500	2.000	1.500	.065	B31M-G200150	B31M-R200150
2 1/2" x 1 1/2"	4.500	2.500	1.500	.065	B31M-G250150	B31M-R250150
2 1/2" x 2"	2.500	2.500	2.000	.065	B31M-G250200	B31M-R250200
3" x 1 1/2"	6.500	3.000	1.500	.065	B31M-G300150	B31M-R300150
3" x 2"	4.500	3.000	2.000	.065	B31M-G300200	B31M-R300200
3" x 2 1/2"	2.500	3.000	2.500	.065	B31M-G300250	B31M-R300250
4" x 2"	8.625	4.000	2.000	.083	B31M-G400200	B31M-R400200
4" x 2 1/2"	6.625	4.000	2.500	.083	B31M-G400250	B31M-R400250
4" x 3"	4.625	4.000	3.000	.083	B31M-G400300	B31M-R400300

3 Polished Eccentric Weld Reducers - B32W

F



Tube OD	A	B	C	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
3/4" x 1/2"	1.000	.750	.500	.065	---	B32W-R7550P
1" x 1/2"	2.000	1.000	.500	.065	---	B32W-R10050P
1" x 3/4"	1.000	1.000	.750	.065	---	B32W-R10075P
1 1/2" x 1/2"	4.000	1.500	.500	.065	---	B32W-R15050P
1 1/2" x 3/4"	3.000	1.500	.750	.065	---	B32W-R15075P
1 1/2" x 1"	2.000	1.500	1.000	.065	B32W-G150100P	B32W-R150100P
2" x 1/2"	6.000	2.000	.500	.065	---	B32W-R20050P
2" x 3/4"	5.000	2.000	.750	.065	---	B32W-R20075P
2" x 1"	4.000	2.000	1.000	.065	B32W-G200100P	B32W-R200100P
2" x 1 1/2"	2.000	2.000	1.500	.065	B32W-G200150P	B32W-R200150P
2 1/2" x 1 1/2"	4.000	2.500	1.500	.065	B32W-G250150P	B32W-R250150P
2 1/2" x 2"	2.000	2.500	2.000	.065	B32W-G250200P	B32W-R250200P
3" x 1"	8.000	3.000	1.000	.065	B32W-G300100P	B32W-R300100P
3" x 1 1/2"	6.000	3.000	1.500	.065	B32W-G300150P	B32W-R300150P
3" x 2"	4.000	3.000	2.000	.065	B32W-G300200P	B32W-R300200P
3" x 2 1/2"	2.000	3.000	2.500	.065	B32W-G300250P	B32W-R300250P
4" x 1 1/2"	10.000	4.000	1.500	.083	B32W-G400150P	B32W-R400150P
4" x 2"	8.000	4.000	2.000	.083	B32W-G400200P	B32W-R400200P
4" x 2 1/2"	6.000	4.000	2.500	.083	B32W-G400250P	B32W-R400250P
4" x 3"	4.000	4.000	3.000	.083	B32W-G400300P	B32W-R400300P
6" x 3"	5.500	6.000	3.000	.109	B32W-G600300P	B32W-R600300P
6" x 4"	5.500	6.000	4.000	.109	B32W-G600400P	B32W-R600400P
8" x 4"	6.000	8.000	4.000	.109	B32W-G800400P	B32W-R800400P
8" x 6"	6.000	8.000	6.000	.109	B32W-G800600P	B32W-R800600P

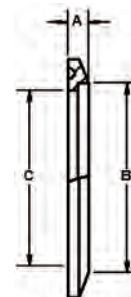
Clamp Ferrules

Quick Weld Ferrules- 14QMP

Features:

- 304 stainless steel
- just slip onto sanitary OD tube and weld
- no need to butt weld

Tube OD	A	B	C	304 Stainless Steel Part Number
1"	.290	1.005	.870	14QMP-G100
1½"	.199	1.505	1.370	14QMP-G150
2"	.205	2.005	1.870	14QMP-G200
2½"	.210	2.505	2.370	14QMP-G250
3"	.257	3.005	2.870	14QMP-G300
4"	.235	4.005	3.834	14QMP-G400
6"	.321	6.005	5.782	14QMP-G600

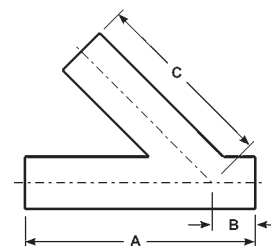
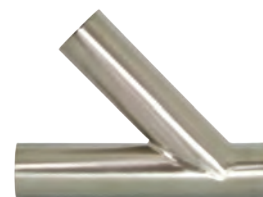


Fittings

Miscellaneous Weld Configurations

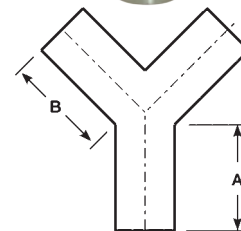
Polished Weld Laterals - B28WA 

Tube OD	A	B	C	Nominal Wall	316L Stainless Steel Part Number
1"	6.000	1.000	5.000	.065	B28WA-R100P
1½"	7.375	1.188	6.188	.065	B28WA-R150P
2"	8.750	1.625	7.125	.065	B28WA-R200P
2½"	10.000	1.500	8.500	.065	B28WA-R250P
3"	10.750	1.875	8.875	.065	B28WA-R300P
4"	12.812	2.015	10.750	.083	B28WA-R400P
6"	18.000	3.500	14.500	.109	B28WA-R600P



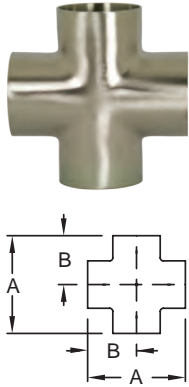
Polished Weld True Wyes - B28W 

Tube OD	A	B	Nominal Wall	316L Stainless Steel Part Number
1"	2.000	2.438	.065	B28W-R100P
1½"	2.000	2.438	.065	B28W-R150P
2"	2.625	3.250	.065	B28W-R200P
2½"	3.370	4.125	.065	B28W-R250P
3"	4.000	4.875	.065	B28W-R300P
4"	5.375	5.375	.083	B28W-R400P



Miscellaneous Weld Configurations

Fittings



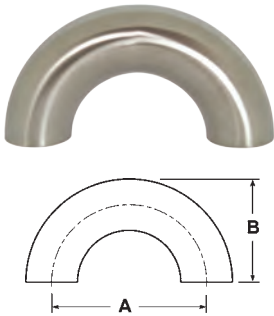
3 Polished Weld Crosses - B9WWWW

Tube OD	A	B	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	2.250	1.125	.065	B9WWWW-G100P	B9WWWW-R100P
1½"	3.312	1.656	.065	B9WWWW-G150P	B9WWWW-R150P
2"	4.125	2.062	.065	B9WWWW-G200P	B9WWWW-R200P
2½"	4.687	2.343	.065	B9WWWW-G250P	B9WWWW-R250P
3"	5.187	2.593	.065	B9WWWW-G300P	B9WWWW-R300P
4"	6.875	3.437	.083	B9WWWW-G400P	B9WWWW-R400P

3 Polished Weld 180° Return Bends - B2WUL

Feature:

- bends are standard 1.5 x tube diameter



Tube OD	A	B	316L Stainless Steel Part Number
1"	3.000	2.000	B2WUL-R100P
1½"	4.500	3.000	B2WUL-R150P
2"	6.000	4.000	B2WUL-R200P
2½"	7.500	5.000	B2WUL-R250P
3"	9.000	6.000	B2WUL-R300P
4"	12.000	8.000	B2WUL-R400P

Weld End Blue Protection Covers - BCW

Material:

- vinyl plastic

Feature:

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



Size	Part Number
½"	BCW-050
¾"	BCW-075
1"	BCW-100
1½"	BCW-150
2"	BCW-200
2½"	BCW-250
3"	BCW-300
4"	BCW-400
6"	BCW-600
8"	BCW-800

Dixon Sanitary Unpolished Weld Fittings

Sizes:

- ½" - 12" OD tube

Materials:

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

Feature:

- unpolished

A Complete Weld Connection



← Weld end



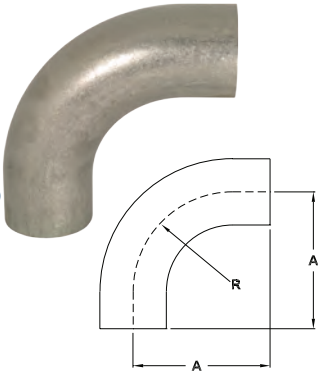
← Weld end

Dimensions of stainless steel tube given in inches

Tube OD	Nominal Wall Thickness (inches)	Gage Number
½"	.065	16
¾"	.065	16
1"	.065	16
1½"	.065	16
2"	.065	16
2½"	.065	16
3"	.065	16
4"	.083	14
6"	.109	12
8"	.109	12
10"	.120	10
12"	.120	10

Unpolished Elbows

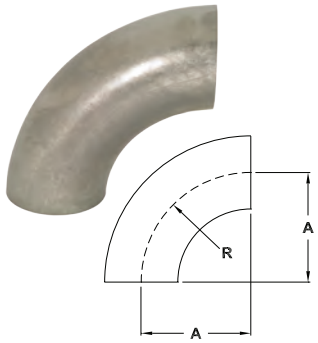
Fittings



Unpolished 90° Weld Elbows with Tangents - B2S

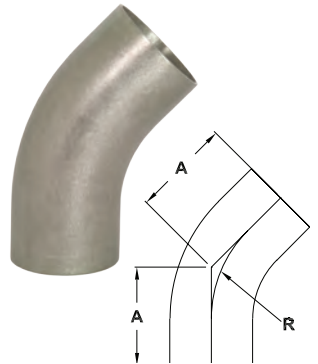
Tube OD	A	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	3.000	1.125	.065	---	B2S-R50U
3/4"	3.000	1.125	.065	---	B2S-R75U
1"	2.062	1.500	.065	B2S-G100U	B2S-R100U
1 1/2"	2.937	2.250	.065	B2S-G150U	B2S-R150U
2"	4.062	3.000	.065	B2S-G200U	B2S-R200U
2 1/2"	5.187	3.750	.065	B2S-G250U	B2S-R250U
3"	6.312	4.500	.065	B2S-G300U	B2S-R300U
4"	8.312	6.000	.083	B2S-G400U	B2S-R400U

Unpolished 90° Weld Elbows - B2WCL



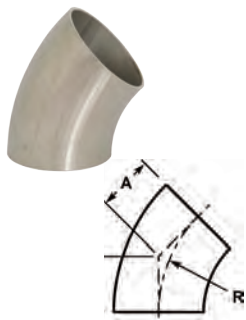
Tube OD	A	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	1.125	1.125	.065	---	B2WCL-R50U
3/4"	1.125	1.125	.065	---	B2WCL-R75U
1"	1.500	1.500	.065	B2WCL-G100U	B2WCL-R100U
1 1/2"	2.250	2.250	.065	B2WCL-G150U	B2WCL-R150U
2"	3.000	3.000	.065	B2WCL-G200U	B2WCL-R200U
2 1/2"	3.750	3.750	.065	B2WCL-G250U	B2WCL-R250U
3"	4.500	4.500	.065	B2WCL-G300U	B2WCL-R300U
4"	6.000	6.000	.083	B2WCL-G400U	B2WCL-R400U
6"	9.000	9.000	.109	B2WCL-G600U	B2WCL-R600U
8"	12.000	12.000	.109	B2WCL-G800U	B2WCL-R800U
10"	15.000	15.000	.120	B2WCL-G1000U	B2WCL-R1000U
12"	18.000	18.000	.120	B2WCL-G1200U	B2WCL-R1200U

Unpolished 45° Weld Elbows with Tangents - B2KS



Tube OD	A	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	2.250	1.125	.065	---	B2KS-R50U
3/4"	2.250	1.125	.065	---	B2KS-R75U
1"	1.188	1.500	.065	B2KS-G100U	B2KS-R100U
1 1/2"	1.625	2.250	.065	B2KS-G150U	B2KS-R150U
2"	2.312	3.000	.065	B2KS-G200U	B2KS-R200U
2 1/2"	3.000	3.750	.065	B2KS-G250U	B2KS-R250U
3"	3.688	4.500	.065	B2KS-G300U	B2KS-R300U
4"	4.812	6.000	.083	B2KS-G400U	B2KS-R400U

Unpolished 45° Weld Elbows - B2WK

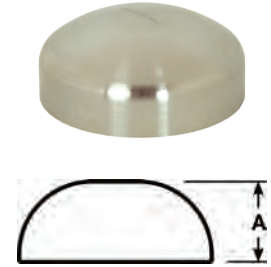


Tube OD	A	R	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	.466	1.125	.065	---	B2WK-R50U
3/4"	.466	1.125	.065	---	B2WK-R75U
1"	.625	1.500	.065	B2WK-G100U	B2WK-R100U
1 1/2"	.937	2.250	.065	B2WK-G150U	B2WK-R150U
2"	1.250	3.000	.065	B2WK-G200U	B2WK-R200U
2 1/2"	1.562	3.750	.065	B2WK-G250U	B2WK-R250U
3"	1.875	4.500	.065	B2WK-G300U	B2WK-R300U
4"	2.500	6.000	.083	B2WK-G400U	B2WK-R400U
6"	3.750	9.000	.109	B2WK-G600U	B2WK-R600U
8"	5.000	12.000	.109	B2WK-G800U	B2WK-R800U
10"	6.250	15.000	.120	B2WK-G1000U	B2WK-R1000U

Unpolished End Caps

Unpolished End Caps - B16W

Tube OD	A	304 Stainless Steel Part Number	316L Stainless Steel Part Number
½"	.250	---	B16W-R50
¾"	.312	---	B16W-R75
1"	.375	B16W-G100	B16W-R100
1½"	.562	B16W-G150	B16W-R150
2"	.750	B16W-G200	B16W-R200
2½"	1.000	B16W-G250	B16W-R250
3"	1.250	B16W-G300	B16W-R300
4"	1.500	B16W-G400	B16W-R400
6"	1.875	B16W-G600	B16W-R600
8"	2.500	B16W-G800	B16W-R800



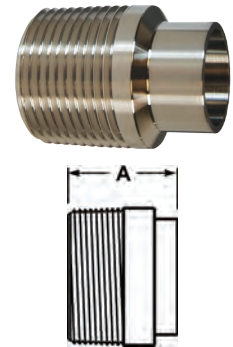
Unpolished Adapters

Feature:

- 32R_a finish ID

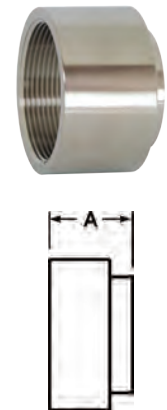
Male NPT x Weld End Adapters - B19WB

Tube OD	A	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
½"	1.625	.065	---	B19WB-R50
¾"	1.625	.065	---	B19WB-R75
1"	1.750	.065	B19WB-G100	B19WB-R100
1½"	1.750	.065	B19WB-G150	B19WB-R150
2"	1.812	.065	B19WB-G200	B19WB-R200
2½"	2.312	.065	B19WB-G250	B19WB-R250
3"	2.500	.065	B19WB-G300	B19WB-R300
4"	2.562	.083	B19WB-G400	B19WB-R400



Female NPT x Weld End Adapters - B22WB

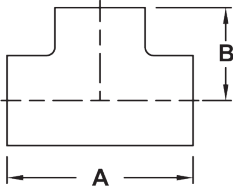
Tube OD	A	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
½"	1.250	.065	---	B22WB-R50
¾"	1.625	.065	---	B22WB-R75
1"	1.750	.065	B22WB-G100	B22WB-R100
1½"	1.750	.065	B22WB-G150	B22WB-R150
2"	1.812	.065	B22WB-G200	B22WB-R200
2½"	2.312	.065	B22WB-G250	B22WB-R250
3"	2.500	.065	B22WB-G300	B22WB-R300
4"	2.500	.083	B22WB-G400	B22WB-R400



Unpolished Tees

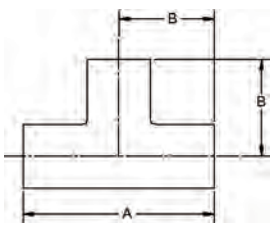
Unpolished Short Weld Tees - B7WWW

Fittings



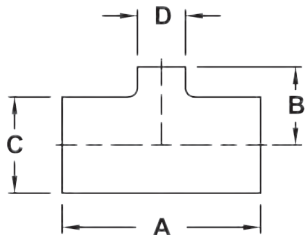
Tube OD	A	B	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	2.250	1.125	.065	B7WWW-G100U	B7WWW-R100U
1½"	3.312	1.656	.065	B7WWW-G150U	B7WWW-R150U
2"	4.124	2.062	.065	B7WWW-G200U	B7WWW-R200U
2½"	4.688	2.344	.065	B7WWW-G250U	B7WWW-R250U
3"	5.188	2.594	.065	B7WWW-G300U	B7WWW-R300U
4"	6.876	3.438	.083	B7WWW-G400U	B7WWW-R400U

Unpolished Long Weld Tees - B7W



Tube OD	A	B	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
½"	3.750	1.875	.065	---	B7W-R50U
¾"	4.000	2.000	.065	---	B7W-R75U
1"	3.750	1.875	.065	B7W-G100U	B7W-R100U
1½"	4.500	2.250	.065	B7W-G150U	B7W-R150U
2"	6.000	3.000	.065	B7W-G200U	B7W-R200U
2½"	6.000	3.000	.065	B7W-G250U	B7W-R250U
3"	6.500	3.250	.065	B7W-G300U	B7W-R300U
4"	7.750	3.875	.083	B7W-G400U	B7W-R400U
6"	11.250	5.625	.109	B7W-G600U	B7W-R600U
8"	14.000	7.000	.109	B7W-G800U	B7W-R800U

Unpolished Reducing Weld Tees - B7RWWW

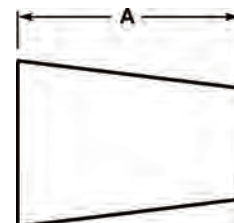


Tube OD	A	B	C	D	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1½" x ¾"	4.750	2.375	1.50	.75	.065	---	B7RWWW-R15075U
1½" x 1"	3.312	1.375	1.50	1.00	.065	B7RWWW-G150100U	B7RWWW-R150100U
2" x ½"	5.750	2.625	2.00	.50	.065	---	B7RWWW-R20050U
2" x ¾"	5.750	2.625	2.00	.75	.065	---	B7RWWW-R20075U
2" x 1"	4.124	1.625	2.00	1.00	.065	B7RWWW-G200100U	B7RWWW-R200100U
2" x 1½"	4.124	1.906	2.00	1.50	.065	B7RWWW-G200150U	B7RWWW-R200150U
2½" x 1½"	4.688	2.156	2.50	1.50	.065	B7RWWW-G250150U	B7RWWW-R250150U
2½" x 2"	4.688	2.312	2.50	2.00	.065	B7RWWW-G250200U	B7RWWW-R250200U
3" x 1½"	5.188	2.406	3.00	1.50	.065	B7RWWW-G300150U	B7RWWW-R300150U
3" x 2"	5.188	2.562	3.00	2.00	.065	B7RWWW-G300200U	B7RWWW-R300200U
3" x 2½"	5.188	2.594	3.00	2.50	.065	B7RWWW-G300250U	B7RWWW-R300250U
4" x 1½"	6.876	2.906	4.00	1.50	.083	B7RWWW-G400150U	B7RWWW-R400150U
4" x 2"	6.876	3.062	4.00	2.00	.083	B7RWWW-G400200U	B7RWWW-R400200U
4" x 2½"	6.876	3.094	4.00	2.50	.083	B7RWWW-G400250U	B7RWWW-R400250U
4" x 3"	6.876	3.094	4.00	3.00	.083	B7RWWW-G400300U	B7RWWW-R400300U

Unpolished Reducers

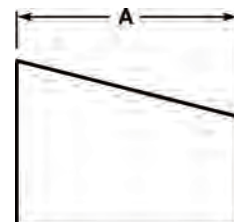
Unpolished Concentric Weld Reducers - B31W

Tube OD	A	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
3/4" x 1/2"	1.000	.065	---	B31W-R7550U
1" x 1/2"	2.000	.065	---	B31W-R10050U
1" x 3/4"	1.000	.065	---	B31W-R10075U
1 1/2" x 1/2"	4.000	.065	---	B31W-R15050U
1 1/2" x 3/4"	3.000	.065	---	B31W-R15075U
1 1/2" x 1"	2.000	.065	B31W-G150100U	B31W-R150100U
2" x 3/4"	5.000	.065	---	B31W-R20075U
2" x 1"	4.000	.065	B31W-G200100U	B31W-R200100U
2" x 1 1/2"	2.000	.065	B31W-G200150U	B31W-R200150U
2 1/2" x 1 1/2"	4.000	.065	B31W-G250150U	B31W-R250150U
2 1/2" x 2"	2.000	.065	B31W-G250200U	B31W-R250200U
3" x 1"	8.000	.109	B31W-G300100U	B31W-R300100U
3" x 1 1/2"	6.000	.065	B31W-G300150U	B31W-R300150U
3" x 2"	4.000	.065	B31W-G300200U	B31W-R300200U
3" x 2 1/2"	2.000	.065	B31W-G300250U	B31W-R300250U
4" x 1 1/2"	10.000	.083	B31W-G400150U	B31W-R400150U
4" x 2"	8.000	.109	B31W-G400200U	B31W-R400200U
4" x 2 1/2"	6.000	.083	B31W-G400250U	B31W-R400250U
4" x 3"	4.000	.083	B31W-G400300U	B31W-R400300U
6" x 3"	5.500	.109	B31W-G600300U	B31W-R600300U
6" x 4"	5.500	.109	B31W-G600400U	B31W-R600400U
8" x 4"	6.000	.109	B31W-G800400U	B31W-R800400U
8" x 6"	6.000	.109	B31W-G800600U	B31W-R800600U



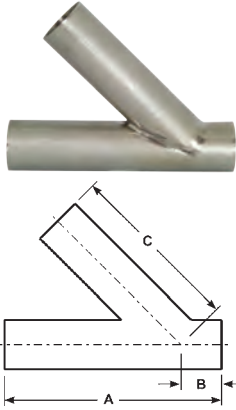
Unpolished Eccentric Weld Reducers - B32W

Tube OD	A	Nominal Wall	304 Stainless Steel Part Number	316L Stainless Steel Part Number
3/4" x 1/2"	1.000	.065	---	B32W-R7550U
1" x 1/2"	2.000	.065	---	B32W-R10050U
1" x 3/4"	1.000	.065	---	B32W-R10075U
1 1/2" x 1/2"	4.000	.065	---	B32W-R15050U
1 1/2" x 3/4"	3.000	.065	---	B32W-R15075U
1 1/2" x 1"	2.000	.065	B32W-G150100U	B32W-R150100U
2" x 3/4"	5.000	.065	---	B32W-R20075U
2" x 1"	4.000	.065	B32W-G200100U	B32W-R200100U
2" x 1 1/2"	2.000	.065	B32W-G200150U	B32W-R200150U
2 1/2" x 2"	2.000	.065	B32W-G250200U	B32W-R250200U
3" x 1 1/2"	6.000	.065	B32W-G300150U	B32W-R300150U
3" x 2"	4.000	.065	B32W-G300200U	B32W-R300200U
3" x 2 1/2"	2.000	.065	B32W-G300250U	B32W-R300250U
4" x 1 1/2"	10.000	.083	B32W-G400150U	B32W-R400150U
4" x 2"	8.000	.109	B32W-G400200U	B32W-R400200U
4" x 3"	4.000	.083	B32W-G400300U	B32W-R400300U
6" x 4"	5.500	.109	B32W-G600400U	B32W-R600400U
8" x 6"	6.000	.109	B32W-G800600U	B32W-R800600U



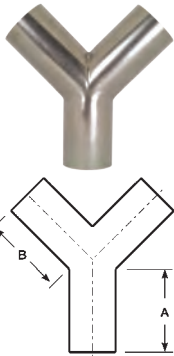
Miscellaneous Unpolished Configurations

Fittings



Unpolished Weld Laterals - B28WA

Tube OD	A	B	C	Nominal Wall	316L Stainless Steel Part Number
1"	6.000	1.000	5.000	.065	B28WA-R100U
1½"	7.375	1.188	6.188	.065	B28WA-R150U
2"	8.750	1.625	7.125	.065	B28WA-R200U
2½"	10.000	1.500	8.500	.065	B28WA-R250U
3"	10.750	1.875	8.875	.065	B28WA-R300U
4"	12.812	2.015	10.750	.083	B28WA-R400U
6"	18.000	3.000	14.500	.109	B28WA-R600U



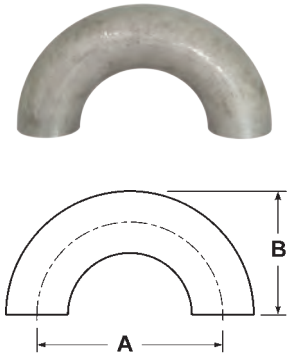
Unpolished Weld True Wyes - B28W

Tube OD	A	B	Nominal Wall	316L Stainless Steel Part Number
1"	2.000	2.438	.065	B28W-R100U
1½"	2.000	2.438	.065	B28W-R150U
2"	2.625	3.250	.065	B28W-R200U
2½"	3.370	4.125	.065	B28W-R250U
3"	4.000	4.875	.065	B28W-R300U
4"	5.375	5.375	.083	B28W-R400U

Unpolished Weld 180° Return Bends - B2WUL

Feature:

- bends are standard 1.5 x tube diameter



Tube OD	A	B	Nominal Wall	316L Stainless Steel Part Number
1"	3.000	2.000	.065	B2WUL-R100U
1½"	4.500	3.000	.065	B2WUL-R150U
2"	6.000	4.000	.065	B2WUL-R200U
2½"	7.500	5.000	.065	B2WUL-R250U
3"	9.000	6.000	.065	B2WUL-R300U
4"	12.000	8.000	.083	B2WUL-R400U

Weld End Blue Protection Covers - BCW

Material:

- vinyl plastic

Feature:

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

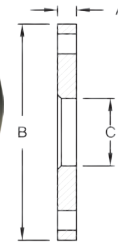


Size	Part Number
½"	BCW-050
¾"	BCW-075
1"	BCW-100
1½"	BCW-150
2"	BCW-200
2½"	BCW-250
3"	BCW-300
4"	BCW-400
6"	BCW-600

Unpolished Flanges

Unpolished Slip-On 150# Flanges - B38SL

Tube OD	A	B	C	Number & Diameter Bolt Holes	Bolt Circle	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1"	.375	4.250	1.063	4/.625	3.125	B38SL-G100	B38SL-R100
1½"	.375	5.000	1.563	4/.625	3.875	B38SL-G150	B38SL-R150
2"	.437	6.000	2.063	4/.750	4.750	B38SL-G200	B38SL-R200
2½"	.437	7.000	2.563	4/.750	5.500	B38SL-G250	B38SL-R250
3"	.500	7.500	3.063	4/.750	6.000	B38SL-G300	B38SL-R300
4"	.562	9.000	4.063	8/.750	7.500	B38SL-G400	B38SL-R400
6"	.562	11.000	6.063	8/.875	9.500	B38SL-G600	B38SL-R600
8"	.687	13.500	8.063	8/.875	11.750	B38SL-G800	B38SL-R800
10"	.687	16.000	10.063	12/1.000	14.250	B38SL-G1000	B38SL-R1000

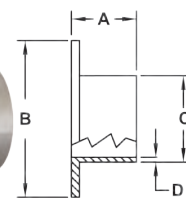


Fittings

Unpolished Type A Stub Ends - 14VB

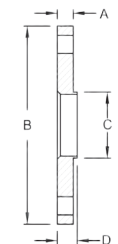
- typically used with B38SL flanges

Tube OD	A	B	C	D	316L Stainless Steel Part Number
1"	1.625	2.000	1.000	.065	14VB-R100
1½"	1.750	2.875	1.500	.065	14VB-R150
2"	1.500	3.625	2.000	.065	14VB-R200
2½"	2.000	4.125	2.500	.065	14VB-R250
3"	2.250	5.000	3.000	.065	14VB-R300
4"	2.625	6.187	4.000	.084	14VB-R400
6"	3.000	8.500	6.000	.109	14VB-R600
8"	3.000	10.625	8.000	.120	14VB-R800
10"	3.500	12.450	10.000	.109	14VB-R1000



Unpolished Weld Neck Flanges - B38W

Tube OD	A	B	C	D	Number & Diameter Bolt Holes	Bolt Circle	316L Stainless Steel Part Number
1"	.375	4.250	1.000	.500	4/.625	3.125	B38W-R100
1½"	.375	5.000	1.500	.500	4/.625	3.875	B38W-R150
2"	.500	6.000	2.000	.625	4/.750	4.750	B38W-R200
2½"	.500	7.000	2.500	.625	4/.750	5.500	B38W-R250
3"	.500	7.500	3.000	.625	4/.750	6.000	B38W-R300
4"	.500	9.000	4.000	.625	8/.750	7.500	B38W-R400
6"	.500	11.000	6.000	.625	8/.875	9.500	B38W-R600
8"	.500	13.500	8.000	.625	8/.875	11.750	B38W-R800
10"	.500	16.000	10.000	.625	12/1.000	14.250	B38W-R1000



Flange Gaskets

Size	Part Number
1"	NG10
1¼"	NG15
1½"	NG20
2"	NG25
2½"	NG30
3"	NG35
4"	NG40
5"	NG50

Material:

- neoprene

Feature:

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



BioPharm Line

Fittings

**Sizes:**

- ½" - 6" OD tube

Material:

- 316L stainless steel

Feature:

- PL finish - SF1
- PM finish - SF4

Dimensions of stainless steel tube given in inches

Tube OD	Nominal Wall Thickness (inches)	Gage Number
½"	.065	16
¾"	.065	16
1"	.065	16
1½"	.065	16
2"	.065	16
2½"	.065	16
3"	.065	16
4"	.083	14
6"	.109	12

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

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

Note: Not all sizes and finishes are stocked

High Purity BioPharm Line



90° Weld Elbows - T2S

Tube OD	A	PL Finish - SF1	PM Finish - SF4
1/2"	3.000	<i>T2S-050PL</i>	<i>T2S-050PM</i>
3/4"	3.000	<i>T2S-075PL</i>	<i>T2S-075PM</i>
1"	3.000	<i>T2S-100PL</i>	<i>T2S-100PM</i>
1 1/2"	3.750	<i>T2S-150PL</i>	<i>T2S-150PM</i>
2"	4.750	<i>T2S-200PL</i>	<i>T2S-200PM</i>
2 1/2"	5.500	<i>T2S-250PL</i>	<i>T2S-250PM</i>
3"	6.250	<i>T2S-300PL</i>	<i>T2S-300PM</i>
4"	8.000	<i>T2S-400PL</i>	<i>T2S-400PM</i>
6"	11.500	<i>T2S-600PL</i>	<i>T2S-600PM</i>



BPE Table DT-4.1.1-1

90° Clamp x Weld Elbows - T2CM

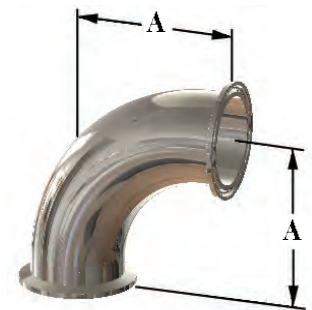
Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
1/2"	3.000	1.625	<i>T2CM-050PL</i>	<i>T2CM-050PM</i>
3/4"	3.000	1.625	<i>T2CM-075PL</i>	<i>T2CM-075PM</i>
1"	3.000	2.000	<i>T2CM-100PL</i>	<i>T2CM-100PM</i>
1 1/2"	3.750	2.750	<i>T2CM-150PL</i>	<i>T2CM-150PM</i>
2"	4.750	3.500	<i>T2CM-200PL</i>	<i>T2CM-200PM</i>
2 1/2"	5.500	4.250	<i>T2CM-250PL</i>	<i>T2CM-250PM</i>
3"	6.250	5.000	<i>T2CM-300PL</i>	<i>T2CM-300PM</i>
4"	8.000	6.625	<i>T2CM-400PL</i>	<i>T2CM-400PM</i>
6"	11.500	10.500	<i>T2CM-600PL</i>	<i>T2CM-600PM</i>



BPE Table DT-4.1.1-2

90° Clamp x Clamp Elbows - T2CMP

Tube OD	A	PL Finish - SF1	PM Finish - SF4
1/2"	1.625	<i>T2CMP-050PL</i>	<i>T2CMP-050PM</i>
3/4"	1.625	<i>T2CMP-075PL</i>	<i>T2CMP-075PM</i>
1"	2.000	<i>T2CMP-100PL</i>	<i>T2CMP-100PM</i>
1 1/2"	2.750	<i>T2CMP-150PL</i>	<i>T2CMP-150PM</i>
2"	3.500	<i>T2CMP-200PL</i>	<i>T2CMP-200PM</i>
2 1/2"	4.250	<i>T2CMP-250PL</i>	<i>T2CMP-250PM</i>
3"	5.000	<i>T2CMP-300PL</i>	<i>T2CMP-300PM</i>
4"	6.625	<i>T2CMP-400PL</i>	<i>T2CMP-400PM</i>
6"	10.500	<i>T2CMP-600PL</i>	<i>T2CMP-600PM</i>

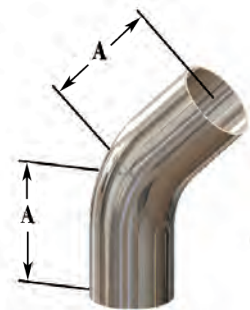


BPE Table DT-4.1.1-3



45° Weld Elbows - T2KS

Tube OD	A	PL Finish - SF1	PM Finish - SF4
1/2"	2.250	<i>T2KS-050PL</i>	<i>T2KS-050PM</i>
3/4"	2.250	<i>T2KS-075PL</i>	<i>T2KS-075PM</i>
1"	2.250	<i>T2KS-100PL</i>	<i>T2KS-100PM</i>
1 1/2"	2.500	<i>T2KS-150PL</i>	<i>T2KS-150PM</i>
2"	3.000	<i>T2KS-200PL</i>	<i>T2KS-200PM</i>
2 1/2"	3.375	<i>T2KS-250PL</i>	<i>T2KS-250PM</i>
3"	3.625	<i>T2KS-300PL</i>	<i>T2KS-300PM</i>
4"	4.500	<i>T2KS-400PL</i>	<i>T2KS-400PM</i>
6"	6.250	<i>T2KS-600PL</i>	<i>T2KS-600PM</i>



BPE Table DT-4.1.1-4

PL Finish – SF1

OD = 32R_a Mechanically Polished

ID = 20R_a Mechanically Polished

PM Finish – SF4

OD = 32R_a Mechanically Polished

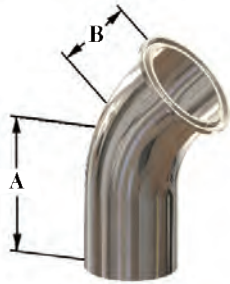
ID = 15R_a Mechanically Polished and Electropolished

A
3

High Purity BioPharm Line

45° Clamp x Weld Elbows - T2KM

Fittings



BPE Table DT-4.1.1-5

Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
1/2"	2.250	1.000	<i>T2KM-050PL</i>	<i>T2KM-050PM</i>
3/4"	2.250	1.000	<i>T2KM-075PL</i>	<i>T2KM-075PM</i>
1"	2.250	1.125	<i>T2KM-100PL</i>	<i>T2KM-100PM</i>
1 1/2"	2.500	1.438	<i>T2KM-150PL</i>	<i>T2KM-150PM</i>
2"	3.000	1.750	<i>T2KM-200PL</i>	<i>T2KM-200PM</i>
2 1/2"	3.375	2.063	<i>T2KM-250PL</i>	<i>T2KM-250PM</i>
3"	3.625	2.380	<i>T2KM-300PL</i>	<i>T2KM-300PM</i>
4"	4.500	3.125	<i>T2KM-400PL</i>	<i>T2KM-400PM</i>
6"	6.250	5.250	<i>T2KM-600PL</i>	<i>T2KM-600PM</i>

45° Clamp x Clamp Elbows - T2KMP



BPE Table DT-4.1.1-6

Tube OD	A	PL Finish - SF1	PM Finish - SF4
1/2"	1.000	<i>T2KMP-050PL</i>	<i>T2KMP-050PM</i>
3/4"	1.000	<i>T2KMP-075PL</i>	<i>T2KMP-075PM</i>
1"	1.125	<i>T2KMP-100PL</i>	<i>T2KMP-100PM</i>
1 1/2"	1.438	<i>T2KMP-150PL</i>	<i>T2KMP-150PM</i>
2"	1.750	<i>T2KMP-200PL</i>	<i>T2KMP-200PM</i>
2 1/2"	2.063	<i>T2KMP-250PL</i>	<i>T2KMP-250PM</i>
3"	2.375	<i>T2KMP-300PL</i>	<i>T2KMP-300PM</i>
4"	3.125	<i>T2KMP-400PL</i>	<i>T2KMP-400PM</i>
6"	5.250	<i>T2KMP-600PL</i>	<i>T2KMP-600PM</i>

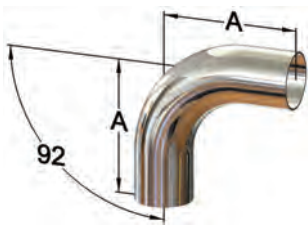
88° Weld Elbows - T2S88



BPE Table DT-4.1.1-1

Tube OD	A	PL Finish - SF1	PM Finish - SF4
1/2"	3.065	<i>T2S88-050PL</i>	<i>T2S88-050PM</i>
3/4"	3.065	<i>T2S88-075PL</i>	<i>T2S88-075PM</i>
1"	3.050	<i>T2S88-100PL</i>	<i>T2S88-100PM</i>
1 1/2"	3.800	<i>T2S88-150PL</i>	<i>T2S88-150PM</i>
2"	4.810	<i>T2S88-200PL</i>	<i>T2S88-200PM</i>
2 1/2"	5.560	<i>T2S88-250PL</i>	<i>T2S88-250PM</i>
3"	6.310	<i>T2S88-300PL</i>	<i>T2S88-300PM</i>
4"	8.070	<i>T2S88-400PL</i>	<i>T2S88-400PM</i>
6"	11.580	<i>T2S88-600PL</i>	<i>T2S88-600PM</i>

92° Weld Elbows - T2S92



BPE Table DT-4.1.1-1

Tube OD	A	PL Finish - SF1	PM Finish - SF4
1/2"	2.930	<i>T2S92-050PL</i>	<i>T2S92-050PM</i>
3/4"	2.930	<i>T2S92-075PL</i>	<i>T2S92-075PM</i>
1"	2.950	<i>T2S92-100PL</i>	<i>T2S92-100PM</i>
1 1/2"	3.700	<i>T2S92-150PL</i>	<i>T2S92-150PM</i>
2"	4.690	<i>T2S92-200PL</i>	<i>T2S92-200PM</i>
2 1/2"	5.440	<i>T2S92-250PL</i>	<i>T2S92-250PM</i>
3"	6.190	<i>T2S92-300PL</i>	<i>T2S92-300PM</i>
4"	7.930	<i>T2S92-400PL</i>	<i>T2S92-400PM</i>
6"	11.410	<i>T2S92-600PL</i>	<i>T2S92-600PM</i>

PL Finish – SF1

OD = 32R_a Mechanically PolishedID = 20R_a Mechanically Polished

PM Finish – SF4

OD = 32R_a Mechanically PolishedID = 15R_a Mechanically Polished and Electropolished

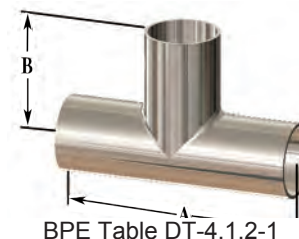
High Purity BioPharm Line



Fittings

Weld x Weld x Weld Tees - T7WWW

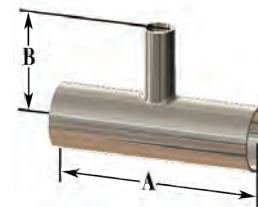
Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
½"	3.750	1.875	<i>T7WWW-050PL</i>	<i>T7WWW-050PM</i>
¾"	4.000	2.000	<i>T7WWW-075PL</i>	<i>T7WWW-075PM</i>
1"	4.250	2.125	<i>T7WWW-100PL</i>	<i>T7WWW-100PM</i>
1½"	4.750	2.375	<i>T7WWW-150PL</i>	<i>T7WWW-150PM</i>
2"	5.750	2.875	<i>T7WWW-200PL</i>	<i>T7WWW-200PM</i>
2½"	6.250	3.125	<i>T7WWW-250PL</i>	<i>T7WWW-250PM</i>
3"	6.750	3.375	<i>T7WWW-300PL</i>	<i>T7WWW-300PM</i>
4"	8.250	4.125	<i>T7WWW-400PL</i>	<i>T7WWW-400PM</i>
6"	11.250	5.625	<i>T7WWW-600PL</i>	<i>T7WWW-600PM</i>



BPE Table DT-4.1.2-1

Weld x Weld x Weld Reducing Tees - T7RWWW

Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
¾" x ½"	4.000	2.000	<i>T7RWWW-075050PL</i>	<i>T7RWWW-075050PM</i>
1" x ½"	4.250	2.125	<i>T7RWWW-100050PL</i>	<i>T7RWWW-100050PM</i>
1" x ¾"	4.250	2.125	<i>T7RWWW-100075PL</i>	<i>T7RWWW-100075PM</i>
1½" x ½"	4.750	2.375	<i>T7RWWW-150050PL</i>	<i>T7RWWW-150050PM</i>
1½" x ¾"	4.750	2.375	<i>T7RWWW-150075PL</i>	<i>T7RWWW-150075PM</i>
1½" x 1"	4.750	2.375	<i>T7RWWW-150100PL</i>	<i>T7RWWW-150100PM</i>
2" x ½"	5.750	2.625	<i>T7RWWW-200050PL</i>	<i>T7RWWW-200050PM</i>
2" x ¾"	5.750	2.625	<i>T7RWWW-200075PL</i>	<i>T7RWWW-200075PM</i>
2" x 1"	5.750	2.625	<i>T7RWWW-200100PL</i>	<i>T7RWWW-200100PM</i>
2" x 1½"	5.750	2.625	<i>T7RWWW-200150PL</i>	<i>T7RWWW-200150PM</i>
2½" x ¾"	6.250	2.875	<i>T7RWWW-250075PL</i>	<i>T7RWWW-250075PM</i>
2½" x 1"	6.250	2.875	<i>T7RWWW-250100PL</i>	<i>T7RWWW-250100PM</i>
2½" x 1½"	6.250	2.875	<i>T7RWWW-250150PL</i>	<i>T7RWWW-250150PM</i>
2½" x 2"	6.250	2.875	<i>T7RWWW-250200PL</i>	<i>T7RWWW-250200PM</i>
3" x ½"	6.750	3.125	<i>T7RWWW-300050PL</i>	<i>T7RWWW-300050PM</i>
3" x ¾"	6.750	3.125	<i>T7RWWW-300075PL</i>	<i>T7RWWW-300075PM</i>
3" x 1"	6.750	3.125	<i>T7RWWW-300100PL</i>	<i>T7RWWW-300100PM</i>
3" x 1½"	6.750	3.125	<i>T7RWWW-300150PL</i>	<i>T7RWWW-300150PM</i>
3" x 2"	6.750	3.125	<i>T7RWWW-300200PL</i>	<i>T7RWWW-300200PM</i>
3" x 2½"	6.750	3.125	<i>T7RWWW-300250PL</i>	<i>T7RWWW-300250PM</i>
4" x ½"	8.250	3.625	<i>T7RWWW-400050PL</i>	<i>T7RWWW-400050PM</i>
4" x ¾"	8.250	3.625	<i>T7RWWW-400075PL</i>	<i>T7RWWW-400075PM</i>
4" x 1"	8.250	3.625	<i>T7RWWW-400100PL</i>	<i>T7RWWW-400100PM</i>
4" x 1½"	8.250	3.625	<i>T7RWWW-400150PL</i>	<i>T7RWWW-400150PM</i>
4" x 2"	8.250	3.875	<i>T7RWWW-400200PL</i>	<i>T7RWWW-400200PM</i>
4" x 2½"	8.250	3.875	<i>T7RWWW-400250PL</i>	<i>T7RWWW-400250PM</i>
4" x 3"	8.250	3.875	<i>T7RWWW-400300PL</i>	<i>T7RWWW-400300PM</i>
6" x 3"	11.250	4.875	<i>T7RWWW-600300PL</i>	<i>T7RWWW-600300PM</i>
6" x 4"	11.250	5.125	<i>T7RWWW-600400PL</i>	<i>T7RWWW-600400PM</i>



BPE Table DT-4.1.2-6



PL Finish – SF1
 OD = 32R_a Mechanically Polished
 ID = 20R_a Mechanically Polished

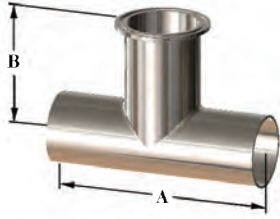
PM Finish – SF4
 OD = 32R_a Mechanically Polished
 ID = 15R_a Mechanically Polished and Electropolished



High Purity BioPharm Line

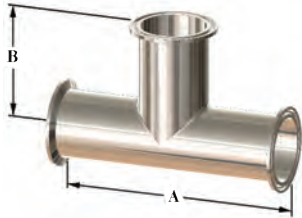
Weld x Weld x Clamp Tees - T7WWM

Fittings



Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
1/2"	3.750	2.250	<i>T7WWM-050PL</i>	<i>T7WWM-050PM</i>
3/4"	4.000	2.375	<i>T7WWM-075PL</i>	<i>T7WWM-075PM</i>
1"	4.250	2.625	<i>T7WWM-100PL</i>	<i>T7WWM-100PM</i>
1 1/2"	4.750	2.875	<i>T7WWM-150PL</i>	<i>T7WWM-150PM</i>
2"	5.750	3.375	<i>T7WWM-200PL</i>	<i>T7WWM-200PM</i>
2 1/2"	6.250	3.625	<i>T7WWM-250PL</i>	<i>T7WWM-250PM</i>
3"	6.750	3.875	<i>T7WWM-300PL</i>	<i>T7WWM-300PM</i>
4"	8.250	4.750	<i>T7WWM-400PL</i>	<i>T7WWM-400PM</i>
6"	11.250	7.125	<i>T7WWM-600PL</i>	<i>T7WWM-600PM</i>

Clamp x Clamp x Clamp Tees - T7MP



BPE Table DT-4.1.2-4

Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
1/2"	4.500	2.250	<i>T7MP-050PL</i>	<i>T7MP-050PM</i>
3/4"	4.750	2.375	<i>T7MP-075PL</i>	<i>T7MP-075PM</i>
1"	5.250	2.625	<i>T7MP-100PL</i>	<i>T7MP-100PM</i>
1 1/2"	5.750	2.875	<i>T7MP-150PL</i>	<i>T7MP-150PM</i>
2"	6.750	3.375	<i>T7MP-200PL</i>	<i>T7MP-200PM</i>
2 1/2"	7.250	3.625	<i>T7MP-250PL</i>	<i>T7MP-250PM</i>
3"	7.750	3.875	<i>T7MP-300PL</i>	<i>T7MP-300PM</i>
4"	9.500	4.750	<i>T7MP-400PL</i>	<i>T7MP-400PM</i>
6"	14.250	7.125	<i>T7MP-600PL</i>	<i>T7MP-600PM</i>

PL Finish – SF1

OD = 32R_a Mechanically Polished
ID = 20R_a Mechanically Polished

PM Finish – SF4

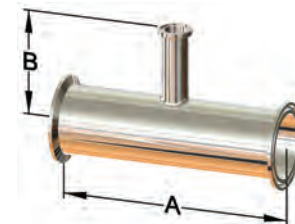
OD = 32R_a Mechanically Polished
ID = 15R_a Mechanically Polished and Electropolished

High Purity BioPharm Line



Clamp x Clamp x Clamp Reducing Tees - T7RMP

Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	5.000	2.500	<i>T7RMP-075050PL</i>	<i>T7RMP-075050PM</i>
1" x 1/2"	5.250	2.625	<i>T7RMP-100050PL</i>	<i>T7RMP-100050PM</i>
1" x 3/4"	5.250	2.625	<i>T7RMP-100075PL</i>	<i>T7RMP-100075PM</i>
1 1/2" x 1/2"	5.750	2.875	<i>T7RMP-150050PL</i>	<i>T7RMP-150050PM</i>
1 1/2" x 3/4"	5.750	2.875	<i>T7RMP-150075PL</i>	<i>T7RMP-150075PM</i>
1 1/2" x 1"	5.750	2.875	<i>T7RMP-150100PL</i>	<i>T7RMP-150100PM</i>
2" x 1/2"	6.750	3.125	<i>T7RMP-200050PL</i>	<i>T7RMP-200050PM</i>
2" x 3/4"	6.750	3.125	<i>T7RMP-200075PL</i>	<i>T7RMP-200075PM</i>
2" x 1"	6.750	3.125	<i>T7RMP-200100PL</i>	<i>T7RMP-200100PM</i>
2" x 1 1/2"	6.750	3.125	<i>T7RMP-200150PL</i>	<i>T7RMP-200150PM</i>
2 1/2" x 1/2"	7.250	3.375	<i>T7RMP-250050PL</i>	<i>T7RMP-250050PM</i>
2 1/2" x 3/4"	7.250	3.375	<i>T7RMP-250075PL</i>	<i>T7RMP-250075PM</i>
2 1/2" x 1"	7.250	3.375	<i>T7RMP-250100PL</i>	<i>T7RMP-250100PM</i>
2 1/2" x 1 1/2"	7.250	3.375	<i>T7RMP-250150PL</i>	<i>T7RMP-250150PM</i>
2 1/2" x 2"	7.250	3.375	<i>T7RMP-250200PL</i>	<i>T7RMP-250200PM</i>
3" x 1/2"	7.750	3.625	<i>T7RMP-300050PL</i>	<i>T7RMP-300050PM</i>
3" x 3/4"	7.750	3.625	<i>T7RMP-300075PL</i>	<i>T7RMP-300075PM</i>
3" x 1"	7.750	3.625	<i>T7RMP-300100PL</i>	<i>T7RMP-300100PM</i>
3" x 1 1/2"	7.750	3.625	<i>T7RMP-300150PL</i>	<i>T7RMP-300150PM</i>
3" x 2"	7.750	3.625	<i>T7RMP-300200PL</i>	<i>T7RMP-300200PM</i>
3" x 2 1/2"	7.750	3.625	<i>T7RMP-300250PL</i>	<i>T7RMP-300250PM</i>
4" x 1/2"	9.500	4.125	<i>T7RMP-400050PL</i>	<i>T7RMP-400050PM</i>
4" x 3/4"	9.500	4.125	<i>T7RMP-400075PL</i>	<i>T7RMP-400075PM</i>
4" x 1"	9.500	4.125	<i>T7RMP-400100PL</i>	<i>T7RMP-400100PM</i>
4" x 1 1/2"	9.500	4.125	<i>T7RMP-400150PL</i>	<i>T7RMP-400150PM</i>
4" x 2"	9.500	4.125	<i>T7RMP-400200PL</i>	<i>T7RMP-400200PM</i>
4" x 2 1/2"	9.500	4.125	<i>T7RMP-400250PL</i>	<i>T7RMP-400250PM</i>
4" x 3"	9.500	4.125	<i>T7RMP-400300PL</i>	<i>T7RMP-400300PM</i>
6" x 3"	14.250	5.375	<i>T7RMP-600300PL</i>	<i>T7RMP-600300PM</i>
6" x 4"	14.250	5.750	<i>T7RMP-600400PL</i>	<i>T7RMP-600400PM</i>

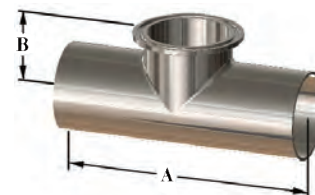


BPE Table DT-4.1.2-8



Weld x Weld x Clamp Short Outlet Tees - T7WWMS

Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
1/2"	3.750	1.000	<i>T7WWMS-050PL</i>	<i>T7WWMS-050PM</i>
3/4"	4.000	1.125	<i>T7WWMS-075PL</i>	<i>T7WWMS-075PM</i>
1"	4.250	1.125	<i>T7WWMS-100PL</i>	<i>T7WWMS-100PM</i>
1 1/2"	4.750	1.375	<i>T7WWMS-150PL</i>	<i>T7WWMS-150PM</i>
2"	5.750	1.625	<i>T7WWMS-200PL</i>	<i>T7WWMS-200PM</i>
2 1/2"	6.250	1.875	<i>T7WWMS-250PL</i>	<i>T7WWMS-250PM</i>
3"	6.750	2.125	<i>T7WWMS-300PL</i>	<i>T7WWMS-300PM</i>
4"	8.250	2.750	<i>T7WWMS-400PL</i>	<i>T7WWMS-400PM</i>
6"	11.250	4.625	<i>T7WWMS-600PL</i>	<i>T7WWMS-600PM</i>



BPE Table DT-4.1.2-2

PL Finish – SF1
 OD = 32R_a Mechanically Polished
 ID = 20R_a Mechanically Polished

PM Finish – SF4
 OD = 32R_a Mechanically Polished
 ID = 15R_a Mechanically Polished and Electropolished

Weld x Weld x Clamp Short Outlet Reducing Tees - T7RWWMS

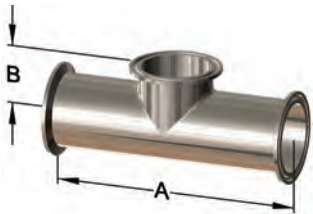
Fittings



BPE Table DT-4.1.2-7

Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	4.000	1.000	<i>T7RWWMS075050PL</i>	<i>T7RWWMS075050PM</i>
1" x 1/2"	4.250	1.125	<i>T7RWWMS100050PL</i>	<i>T7RWWMS100050PM</i>
1" x 3/4"	4.250	1.125	<i>T7RWWMS100075PL</i>	<i>T7RWWMS100075PM</i>
1 1/2" x 1/2"	4.750	1.375	<i>T7RWWMS150050PL</i>	<i>T7RWWMS150050PM</i>
1 1/2" x 3/4"	4.750	1.375	<i>T7RWWMS150075PL</i>	<i>T7RWWMS150075PM</i>
1 1/2" x 1"	4.750	1.375	<i>T7RWWMS150100PL</i>	<i>T7RWWMS150100PM</i>
2" x 1/2"	5.750	1.625	<i>T7RWWMS200050PL</i>	<i>T7RWWMS200050PM</i>
2" x 3/4"	5.750	1.625	<i>T7RWWMS200075PL</i>	<i>T7RWWMS200075PM</i>
2" x 1"	5.750	1.625	<i>T7RWWMS200100PL</i>	<i>T7RWWMS200100PM</i>
2" x 1 1/2"	5.750	1.625	<i>T7RWWMS200150PL</i>	<i>T7RWWMS200150PM</i>
2 1/2" x 1/2"	6.250	1.875	<i>T7RWWMS250050PL</i>	<i>T7RWWMS250050PM</i>
2 1/2" x 3/4"	6.250	1.875	<i>T7RWWMS250075PL</i>	<i>T7RWWMS250075PM</i>
2 1/2" x 1"	6.250	1.875	<i>T7RWWMS250100PL</i>	<i>T7RWWMS250100PM</i>
2 1/2" x 1 1/2"	6.250	1.875	<i>T7RWWMS250150PL</i>	<i>T7RWWMS250150PM</i>
2 1/2" x 2"	6.250	1.875	<i>T7RWWMS250200PL</i>	<i>T7RWWMS250200PM</i>
3" x 1/2"	6.750	2.125	<i>T7RWWMS300050PL</i>	<i>T7RWWMS300050PM</i>
3" x 3/4"	6.750	2.125	<i>T7RWWMS300075PL</i>	<i>T7RWWMS300075PM</i>
3" x 1"	6.750	2.125	<i>T7RWWMS300100PL</i>	<i>T7RWWMS300100PM</i>
3" x 1 1/2"	6.750	2.125	<i>T7RWWMS300150PL</i>	<i>T7RWWMS300150PM</i>
3" x 2"	6.750	2.125	<i>T7RWWMS300200PL</i>	<i>T7RWWMS300200PM</i>
3" x 2 1/2"	6.750	2.125	<i>T7RWWMS300250PL</i>	<i>T7RWWMS300250PM</i>
4" x 1/2"	8.250	2.625	<i>T7RWWMS400050PL</i>	<i>T7RWWMS400050PM</i>
4" x 3/4"	8.250	2.625	<i>T7RWWMS400075PL</i>	<i>T7RWWMS400075PM</i>
4" x 1"	8.250	2.625	<i>T7RWWMS400100PL</i>	<i>T7RWWMS400100PM</i>
4" x 1 1/2"	8.250	2.625	<i>T7RWWMS400150PL</i>	<i>T7RWWMS400150PM</i>
4" x 2"	8.250	2.625	<i>T7RWWMS400200PL</i>	<i>T7RWWMS400200PM</i>
4" x 2 1/2"	8.250	2.625	<i>T7RWWMS400250PL</i>	<i>T7RWWMS400250PM</i>
4" x 3"	8.250	2.625	<i>T7RWWMS400300PL</i>	<i>T7RWWMS400300PM</i>
6" x 3"	11.250	3.625	<i>T7RWWMS600300PL</i>	<i>T7RWWMS600300PM</i>
6" x 4"	11.250	3.750	<i>T7RWWMS600400PL</i>	<i>T7RWWMS600400PM</i>

Clamp x Clamp x Clamp Short Outlet Tees - T7MPS



BPE Table DT-4.1.2-5

Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
1/2"	4.500	1.000	<i>T7MPS-050PL</i>	<i>T7MPS-050PM</i>
3/4"	4.750	1.125	<i>T7MPS-075PL</i>	<i>T7MPS-075PM</i>
1"	5.250	1.125	<i>T7MPS-100PL</i>	<i>T7MPS-100PM</i>
1 1/2"	5.750	1.375	<i>T7MPS-150PL</i>	<i>T7MPS-150PM</i>
2"	6.750	1.625	<i>T7MPS-200PL</i>	<i>T7MPS-200PM</i>
2 1/2"	7.250	1.875	<i>T7MPS-250PL</i>	<i>T7MPS-250PM</i>
3"	7.750	2.125	<i>T7MPS-300PL</i>	<i>T7MPS-300PM</i>
4"	9.500	2.750	<i>T7MPS-400PL</i>	<i>T7MPS-400PM</i>
6"	14.250	4.625	<i>T7MPS-600PL</i>	<i>T7MPS-600PM</i>

PL Finish – SF1

OD = 32R_a Mechanically Polished
ID = 20R_a Mechanically Polished

PM Finish – SF4

OD = 32R_a Mechanically Polished
ID = 15R_a Mechanically Polished and Electropolished

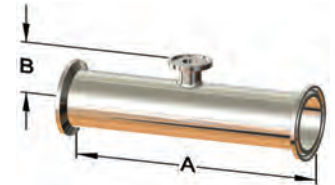


High Purity BioPharm Line

Clamp x Clamp x Clamp Short Outlet Reducing Tees - T7RMPS

Fittings

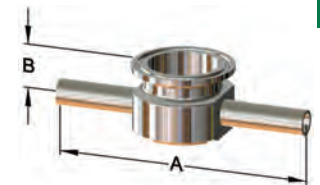
Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	5.000	1.000	T7RMPS-075050PL	T7RMPS-075050PM
1" x 1/2"	5.125	1.125	T7RMPS-100050PL	T7RMPS-100050PM
1" x 3/4"	5.125	1.125	T7RMPS-100075PL	T7RMPS-100075PM
1 1/2" x 1/2"	5.750	1.375	T7RMPS-150050PL	T7RMPS-150050PM
1 1/2" x 3/4"	5.750	1.375	T7RMPS-150075PL	T7RMPS-150075PM
1 1/2" x 1"	5.750	1.375	T7RMPS-150100PL	T7RMPS-150100PM
2" x 1/2"	6.750	1.625	T7RMPS-200050PL	T7RMPS-200050PM
2" x 3/4"	6.750	1.625	T7RMPS-200075PL	T7RMPS-200075PM
2" x 1"	6.750	1.625	T7RMPS-200100PL	T7RMPS-200100PM
2" x 1 1/2"	6.750	1.625	T7RMPS-200150PL	T7RMPS-200150PM
2 1/2" x 1/2"	7.250	1.875	T7RMPS-250050PL	T7RMPS-250050PM
2 1/2" x 3/4"	7.250	1.875	T7RMPS-250075PL	T7RMPS-250075PM
2 1/2" x 1"	7.250	1.875	T7RMPS-250100PL	T7RMPS-250100PM
2 1/2" x 1 1/2"	7.250	1.875	T7RMPS-250150PL	T7RMPS-250150PM
2 1/2" x 2"	7.250	1.875	T7RMPS-250200PL	T7RMPS-250200PM
3" x 1/2"	7.750	2.125	T7RMPS-300050PL	T7RMPS-300050PM
3" x 3/4"	7.750	2.125	T7RMPS-300075PL	T7RMPS-300075PM
3" x 1"	7.750	2.125	T7RMPS-300100PL	T7RMPS-300100PM
3" x 1 1/2"	7.750	2.125	T7RMPS-300150PL	T7RMPS-300150PM
3" x 2"	7.750	2.125	T7RMPS-300200PL	T7RMPS-300200PM
3" x 2 1/2"	7.750	2.125	T7RMPS-300250PL	T7RMPS-300250PM
4" x 1/2"	9.500	2.625	T7RMPS-400050PL	T7RMPS-400050PM
4" x 3/4"	9.500	2.625	T7RMPS-400075PL	T7RMPS-400075PM
4" x 1"	9.500	2.625	T7RMPS-400100PL	T7RMPS-400100PM
4" x 1 1/2"	9.500	2.625	T7RMPS-400150PL	T7RMPS-400150PM
4" x 2"	9.500	2.625	T7RMPS-400200PL	T7RMPS-400200PM
4" x 2 1/2"	9.500	2.625	T7RMPS-400250PL	T7RMPS-400250PM
4" x 3"	9.500	2.625	T7RMPS-400300PL	T7RMPS-400300PM
6" x 3"	14.250	3.625	T7RMPS-600300PL	T7RMPS-600300PM
6" x 4"	14.250	3.750	T7RMPS-600400PL	T7RMPS-600400PM



BPE Table DT-4.1.2-9

Weld x Weld x Clamp Instrument Tees - T7IWWMS

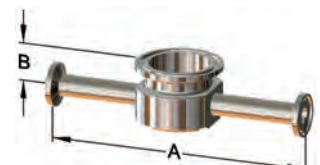
Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
1/2" x 1/2"	5.000	.875	T7IWWMS050150PL	T7IWWMS050150PM
3/4" x 1/2"	5.000	1.000	T7IWWMS075150PL	T7IWWMS075150PM
1" x 1/2"	5.000	1.125	T7IWWMS100150PL	T7IWWMS100150PM
1/2" x 2"	5.500	1.000	T7IWWMS050200PL	T7IWWMS050200PM
3/4" x 2"	5.500	1.125	T7IWWMS075200PL	T7IWWMS075200PM
1" x 2"	5.500	1.250	T7IWWMS100200PL	T7IWWMS100200PM
1 1/2" x 2"	5.500	1.500	T7IWWMS150200PL	T7IWWMS150200PM



BPE Table DT-4.1.2-10

Clamp x Clamp x Clamp Instrument Tees - T7IMPS

Tube OD	A	B	PL Finish - SF1	PM Finish - SF4
1/2" x 1/2"	6.000	.875	T7IMPS-050150PL	T7IMPS-050150PM
3/4" x 1/2"	6.000	1.000	T7IMPS-075150PL	T7IMPS-075150PM
1" x 1/2"	6.000	1.125	T7IMPS-100150PL	T7IMPS-100150PM
1/2" x 2"	6.500	1.000	T7IMPS-050200PL	T7IMPS-050200PM
3/4" x 2"	6.500	1.125	T7IMPS-075200PL	T7IMPS-075200PM
1" x 2"	6.500	1.250	T7IMPS-100200PL	T7IMPS-100200PM
1 1/2" x 2"	6.500	1.500	T7IMPS150200PL	T7IMPS150200PM



BPE Table DT-4.1.2-11

PL Finish – SF1
OD = 32R_a Mechanically Polished

PM Finish – SF4
OD = 32R_a Mechanically Polished



High Purity BioPharm Line

Weld x Weld Concentric Reducers - T31W

Fittings



BPE Table DT-4.1.3-1(a)

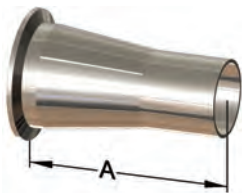
Tube OD	A	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	4.00	T31W-075050PL	T31W-075050PM
1" x 1/2"	4.50	T31W-100050PL	T31W-100050PM
1" x 3/4"	4.00	T31W-100075PL	T31W-100075PM
1 1/2" x 1/2"	5.50	T31W-150050PL	T31W-150050PM
1 1/2" x 3/4"	5.00	T31W-150075PL	T31W-150075PM
1 1/2" x 1"	5.00	T31W-150100PL	T31W-150100PM
2" x 1/2"	7.75	T31W-200050PL	T31W-200050PM
2" x 3/4"	7.25	T31W-200075PL	T31W-200075PM
2" x 1"	7.25	T31W-200100PL	T31W-200100PM
2" x 1 1/2"	5.25	T31W-200150PL	T31W-200150PM
2 1/2" x 1/2"	9.750	T31W-250050PL	T31W-250050PM
2 1/2" x 3/4"	9.250	T31W-250075PL	T31W-250075PM
2 1/2" x 1"	9.250	T31W-250100PL	T31W-250100PM
2 1/2" x 1 1/2"	7.250	T31W-250150PL	T31W-250150PM
2 1/2" x 2"	5.500	T31W-250200PL	T31W-250200PM
3" x 1"	11.250	T31W-300100PL	T31W-300100PM
3" x 1 1/2"	9.250	T31W-300150PL	T31W-300150PM
3" x 2"	7.500	T31W-300200PL	T31W-300200PM
3" x 2 1/2"	5.500	T31W-300250PL	T31W-300250PM
4" x 1"	15.500	T31W-400100PL	T31W-400100PM
4" x 1 1/2"	13.500	T31W-400150PL	T31W-400150PM
4" x 2"	11.750	T31W-400200PL	T31W-400200PM
4" x 2 1/2"	9.750	T31W-400250PL	T31W-400250PM
4" x 3"	7.750	T31W-400300PL	T31W-400300PM
6" x 3"	10.000	T31W-600300PL	T31W-600300PM
6" x 4"	10.000	T31W-600400PL	T31W-600400PM

Clamp x Weld Concentric Reducers - T31M

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

PL Finish – SF1

PM Finish – SF4

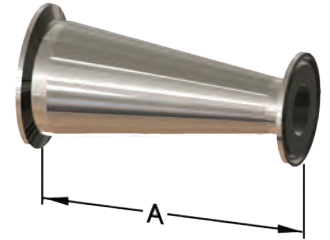


BPE Table DT-4.1.3-2(a)



High Purity BioPharm Line
Clamp x Clamp Concentric Reducers - T3114MP

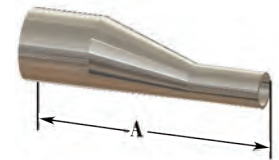
Tube OD	A	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	2.000	T3114MP075050PL	T3114MP075050PM
1" x 1/2"	2.500	T3114MP100050PL	T3114MP100050PM
1" x 3/4"	2.000	T3114MP100075PL	T3114MP100075PM
1 1/2" x 1/2"	3.500	T3114MP150050PL	T3114MP150050PM
1 1/2" x 3/4"	3.000	T3114MP150075PL	T3114MP150075PM
1 1/2" x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



BPE Table DT-4.1.3-3(a)

Weld x Weld Eccentric Reducers - T32W

Tube OD	A	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	4.000	T32W-075050PL	T32W-075050PM
1" x 1/2"	4.500	T32W-100050PL	T32W-100050PM
1" x 3/4"	4.000	T32W-100075PL	T32W-100075PM
1 1/2" x 1/2"	5.500	T32W-150050PL	T32W-150050PM
1 1/2" x 3/4"	5.000	T32W-150075PL	T32W-150075PM
1 1/2" x 1"	5.000	T32W-150100PL	T32W-150100PM
2" x 1/2"	7.750	T32W-200050PL	T32W-200050PM
2" x 3/4"	7.250	T32W-200075PL	T32W-200075PM
2" x 1"	7.250	T32W-200100PL	T32W-200100PM
2" x 1 1/2"	5.250	T32W-200150PL	T32W-200150PM
2 1/2" x 1/2"	9.750	T32W-250050PL	T32W-250050PM
2 1/2" x 3/4"	9.250	T32W-250075PL	T32W-250075PM
2 1/2" x 1"	9.250	T32W-250100PL	T32W-250100PM
2 1/2" x 1 1/2"	7.250	T32W-250150PL	T32W-250150PM
2 1/2" x 2"	5.500	T32W-250200PL	T32W-250200PM
3" x 1"	11.250	T32W-300100PL	T32W-300100PM
3" x 1 1/2"	9.250	T32W-300150PL	T32W-300150PM
3" x 2"	7.500	T32W-300200PL	T32W-300200PM
3" x 2 1/2"	5.500	T32W-300250PL	T32W-300250PM
4" x 1"	15.500	T32W-400100PL	T32W-400100PM
4" x 1 1/2"	13.500	T32W-400150PL	T32W-400150PM
4" x 2"	11.750	T32W-400200PL	T32W-400200PM
4" x 2 1/2"	9.750	T32W-400250PL	T32W-400250PM
4" x 3"	7.750	T32W-400300PL	T32W-400300PM
6" x 3"	9.750	T32W-600300PL	T32W-600300PM
6" x 4"	10.000	T32W-600400PL	T32W-600400PM



BPE Table DT-4.1.3-1(a)

PL Finish – SF1

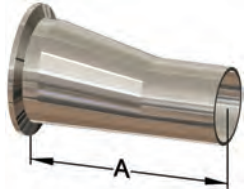
PM Finish – SF4



High Purity BioPharm Line

Clamp x Weld Eccentric Reducers - T32M

Fittings

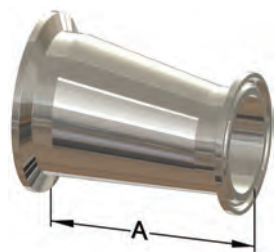


BPE Table DT-4.1.3-2(a)

Tube OD	A	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	3.000	T32M-075050PL	T32M-075050PM
1" x 1/2"	3.500	T32M-100050PL	T32M-100050PM
1" x 3/4"	3.000	T32M-100075PL	T32M-100075PM
1 1/2" x 1/2"	4.500	T32M-150050PL	T32M-150050PM
1 1/2" x 3/4"	4.000	T32M-150075PL	T32M-150075PM
1 1/2" x 1"	4.000	T32M-150100PL	T32M-150100PM
2" x 1/2"	6.500	T32M-200050PL	T32M-200050PM
2" x 3/4"	6.000	T32M-200075PL	T32M-200075PM
2" x 1"	6.000	T32M-200100PL	T32M-200100PM
2" x 1 1/2"	4.000	T32M-200150PL	T32M-200150PM
2 1/2" x 1/2"	8.500	T32M-250050PL	T32M-250050PM
2 1/2" x 3/4"	8.000	T32M-250075PL	T32M-250075PM
2 1/2" x 1"	8.000	T32M-250100PL	T32M-250100PM
2 1/2" x 1 1/2"	6.000	T32M-250150PL	T32M-250150PM
2 1/2" x 2"	4.250	T32M-250200PL	T32M-250200PM
3" x 1"	10.000	T32M-300100PL	T32M-300100PM
3" x 1 1/2"	8.000	T32M-300150PL	T32M-300150PM
3" x 2"	6.250	T32M-300200PL	T32M-300200PM
3" x 2 1/2"	4.250	T32M-300250PL	T32M-300250PM
4" x 1"	14.125	T32M-400100PL	T32M-400100PM
4" x 1 1/2"	12.125	T32M-400150PL	T32M-400150PM
4" x 2"	10.375	T32M-400200PL	T32M-400200PM
4" x 2 1/2"	8.375	T32M-400250PL	T32M-400250PM
4" x 3"	6.375	T32M-400300PL	T32M-400300PM
6" x 3"	8.750	T32M-600300PL	T32M-600300PM
6" x 4"	9.000	T32M-600400PL	T32M-600400PM

Clamp x Clamp Eccentric Reducers - T3214MP

Tube OD	A	PL Finish - SF1	PM Finish - SF4
3/4" x 1/2"	2.000	T3214MP075050PL	T3214MP075050PM
1" x 1/2"	2.500	T3214MP100050PL	T3214MP100050PM
1" x 3/4"	2.000	T3214MP100075PL	T3214MP100075PM
1 1/2" x 1/2"	3.500	T3214MP150050PL	T3214MP150050PM
1 1/2" x 3/4"	3.000	T3214MP150075PL	T3214MP150075PM
1 1/2" x 1"	3.000	T3214MP150100PL	T3214MP150100PM
2" x 1/2"	5.500	T3214MP200050PL	T3214MP200050PM
2" x 3/4"	5.000	T3214MP200075PL	T3214MP200075PM
2" x 1"	5.000	T3214MP200100PL	T3214MP200100PM
2" x 1 1/2"	3.000	T3214MP200150PL	T3214MP200150PM
2 1/2" x 1/2"	7.500	T3214MP250050PL	T3214MP250050PM
2 1/2" x 3/4"	7.000	T3214MP250075PL	T3214MP250075PM
2 1/2" x 1"	7.000	T3214MP250100PL	T3214MP250100PM
2 1/2" x 1 1/2"	5.000	T3214MP250150PL	T3214MP250150PM
2 1/2" x 2"	3.000	T3214MP250200PL	T3214MP250200PM
3" x 1"	9.000	T3214MP300100PL	T3214MP300100PM
3" x 1 1/2"	7.000	T3214MP300150PL	T3214MP300150PM
3" x 2"	5.000	T3214MP300200PL	T3214MP300200PM
3" x 2 1/2"	3.000	T3214MP300250PL	T3214MP300250PM
4" x 1"	13.125	T3214MP400100PL	T3214MP400100PM
4" x 1 1/2"	11.125	T3214MP400150PL	T3214MP400150PM
4" x 2"	9.125	T3214MP400200PL	T3214MP400200PM
4" x 2 1/2"	7.125	T3214MP400250PL	T3214MP400250PM
4" x 3"	5.125	T3214MP400300PL	T3214MP400300PM
6" x 3"	7.500	T3214MP600300PL	T3214MP600300PM
6" x 4"	7.625	T3214MP600400PL	T3214MP600400PM



BPE Table DT-4.1.3-3(a)

PL Finish – SF1

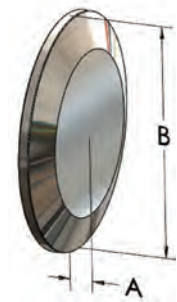
PM Finish – SF4

High Purity BioPharm Line



Solid End Caps - T16AMP

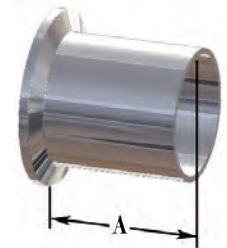
Tube OD	B	PL Finish - SF1	PM Finish - SF4
0.190	1.000	<i>T16AMP-050075PL</i>	<i>T16AMP-050075PM</i>
0.250	1.990	<i>T16AMP-100150PL</i>	<i>T16AMP-100150PM</i>
0.250	2.520	<i>T16AMP-200PL</i>	<i>T16AMP-200PM</i>
0.250	3.050	<i>T16AMP-250PL</i>	<i>T16AMP-250PM</i>
0.250	3.580	<i>T16AMP-300PL</i>	<i>T16AMP-300PM</i>
0.310	4.690	<i>T16AMP-400PL</i>	<i>T16AMP-400PM</i>
0.440	6.560	<i>T16AMP-600PL</i>	<i>T16AMP-600PM</i>



BPE Table DT-4.1.5-2

Auto Weld Ferrules - TL14AM7

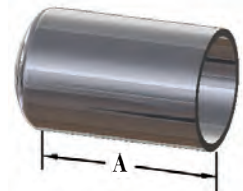
Tube OD	A	PL Finish - SF1	PM Finish - SF4
1/2"	1.750	<i>TL14AM7-050PL</i>	<i>TL14AM7-050PM</i>
3/4"	1.750	<i>TL14AM7-075PL</i>	<i>TL14AM7-075PM</i>
1"	1.750	<i>TL14AM7-100PL</i>	<i>TL14AM7-100PM</i>
1 1/2"	1.750	<i>TL14AM7-150PL</i>	<i>TL14AM7-150PM</i>
2"	2.250	<i>TL14AM7-200PL</i>	<i>TL14AM7-200PM</i>
2 1/2"	2.250	<i>TL14AM7-250PL</i>	<i>TL14AM7-250PM</i>
3"	2.250	<i>TL14AM7-300PL</i>	<i>TL14AM7-300PM</i>
4"	2.250	<i>TL14AM7-400PL</i>	<i>TL14AM7-400PM</i>
6"	3.000	<i>TL14AM7-600PL</i>	<i>TL14AM7-600PM</i>



BPE Table DT-4.1.4-1

Weld Caps - T16W

Tube OD	A	PL Finish - SF1	PM Finish - SF4
1/2"	1.500	<i>T16W-050PL</i>	<i>T16W-050PM</i>
3/4"	1.500	<i>T16W-075PL</i>	<i>T16W-075PM</i>
1"	1.500	<i>T16W-100PL</i>	<i>T16W-100PM</i>
1 1/2"	1.500	<i>T16W-150PL</i>	<i>T16W-150PM</i>
2"	1.500	<i>T16W-200PL</i>	<i>T16W-200PM</i>
2 1/2"	1.500	<i>T16W-250PL</i>	<i>T16W-250PM</i>
3"	1.500	<i>T16W-300PL</i>	<i>T16W-300PM</i>
4"	2.000	<i>T16W-400PL</i>	<i>T16W-400PM</i>
6"	2.500	<i>T16W-600PL</i>	<i>T16W-600PM</i>



BPE Table DT-4.1.5-1

PL Finish – SF1
 OD = 32R_a Mechanically Polished
 ID = 20R_a Mechanically Polished

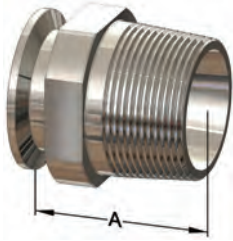
PM Finish – SF4
 OD = 32R_a Mechanically Polished
 ID = 15R_a Mechanically Polished and Electropolished



High Purity BioPharm Line

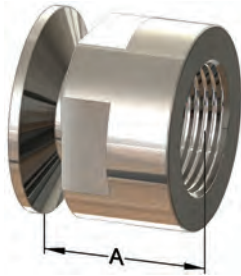
Clamp Adapter x Male NPT - T21MP

Fittings



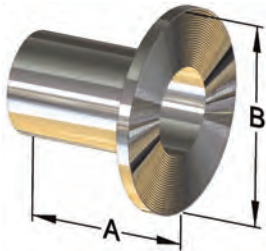
Tube OD	A	PL Finish - SF1
1/2" x 1/4"	2.000	T21MP-050025PL
1/2" x 3/8"	2.000	T21MP-050375PL
1/2"	1.625	T21MP-050PL
1/2" x 3/4"	2.000	T21MP-050075PL
3/4" x 1/4"	2.000	T21MP-075025PL
3/4" x 3/8"	2.000	T21MP-075375PL
3/4" x 1/2"	2.000	T21MP-075050PL
3/4"	2.250	T21MP-075PL
1"	2.250	T21MP-100PL
1 1/2"	2.250	T21MP-150PL
2"	2.638	T21MP-200PL
2 1/2"	2.875	T21MP-250PL
3"	3.070	T21MP-300PL
4"	3.155	T21MP-400PL

Clamp Adapter x Female NPT - T22MP



Tube OD	A	PL Finish - SF1
1/2" x 1/8"	1.250	T22MP-050125PL
1/2" x 1/4"	1.500	T22MP-050025PL
1/2" x 3/8"	1.500	T22MP-050375PL
1/2"	1.500	T22MP-050PL
1/2" x 3/4"	1.500	T22MP-050075PL
3/4" x 1/4"	1.500	T22MP-075025PL
3/4" x 3/8"	1.500	T22MP-075375PL
3/4" x 1/2"	1.625	T22MP-075050PL
3/4"	1.625	T22MP-075PL
1"	1.625	T22MP-100PL
1 1/2"	2.250	T22MP-150PL
2"	2.406	T22MP-200PL
2 1/2"	2.187	T22MP-250PL
3"	2.187	T22MP-300PL
4"	2.625	T22MP-400PL

Stub Adapters - T14VB



Tube OD	A	B	PL Finish - SF1
1/2"	2.000	1.625	T14VB-050PL
3/4"	2.000	1.687	T14VB-075PL
1"	2.000	2.000	T14VB-100PL
1 1/2"	2.000	2.875	T14VB-150PL
2"	2.500	2.625	T14VB-200PL
2 1/2"	2.500	4.125	T14VB-250PL
3"	2.500	5.000	T14VB-300PL
4"	2.500	6.187	T14VB-400PL
6"	3.000	8.500	T14VB-600PL

PL Finish – SF1

OD = 32R_a Mechanically Polished
ID = 20R_a Mechanically Polished

PM Finish – SF4

OD = 32R_a Mechanically Polished
ID = 15R_a Mechanically Polished and Electropolished



Tubing G-2 to G-3

ASTM-270 polished G-3

ASTM-269 unpolished G-3

Tube Hangers G-4 to G-10

Tube hex hangers G-5 to G-8

Tube uni-hinge block G-10

Wall Flanges G-10





Dixon Sanitary Tubing

**Size:**

- ½" - 6" OD tube

Materials:

- G = 304 stainless steel
- R = 316L stainless steel
- 3A sanitary finish ID and OD; Typical 20Ra ID, 32Ra OD
- unpolished
- BPE finishes are available

Tube OD	Nominal Wall Thickness (inches)	Gage Number	Wt. Pounds per Ft.
½"	.065	16	0.31
¾"	.065	16	0.49
1"	.065	16	0.67
1½"	.065	16	1.02
2"	.065	16	1.36
2½"	.065	16	1.71
3"	.065	16	2.06
4"	.083	14	3.45
6"	.109	12	6.92

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

Operating Pressures

304 Stainless Steel Tube

Tube OD	Nominal Wall Thickness (inches)	Pressure (PSI)		
		working	yield	burst
½"	.065	4,870	7,800	19,500
¾"	.065	3,250	5,200	13,000
1"	.065	2,440	3,900	9,800
1½"	.065	1,630	2,600	6,500
2"	.065	1,220	2,000	4,900
2½"	.065	980	1,600	3,900
3"	.065	810	1,300	3,300
4"	.083	780	1,200	3,100
6"	.109	680	1,090	2,720

316L Stainless Steel Tube

Tube OD	Nominal Wall Thickness (inches)	Pressure (PSI)		
		working	yield	burst
½"	.065	3,250	6,500	19,500
¾"	.065	2,167	4,330	13,000
1"	.065	2,280	3,300	9,100
1½"	.065	1,520	2,200	6,100
2"	.065	1,140	1,600	4,600
2½"	.065	910	1,300	3,600
3"	.065	760	1,100	3,000
4"	.083	730	1,000	2,900
6"	.109	635	900	2,540

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

- material: 304 stainless steel
- yield strength (PSI): **30,000**
- tensile strength (PSI): **75,000**

Working Pressure = ¼ of Burst Pressure, these calculate from -20°F to 100°F (-29°C to 38°C).

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

- material: 316L stainless steel
- yield strength (PSI): **25,000**
- tensile strength (PSI): **70,000**

Working Pressure = ¼ of Burst Pressure, these calculate from -20°F to 100°F (-29°C to 38°C).



Pipe size and Tube OD size materials are not interchangeable

ASTM-A270 Polished ID and OD Tubing



Feature:

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

Size	Packaged	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	100'	---	A270-R50P
3/4"	100'	---	A270-R75P
1"	280'	A270-G100P	A270-R100P
1 1/2"	340'	A270-G150P	A270-R150P
2"	340'	A270-G200P	A270-R200P
2 1/2"	220'	A270-G250P	A270-R250P
3"	220'	A270-G300P	A270-R300P
4"	100'	A270-G400P	A270-R400P
6"	40'	A270-G600P	A270-R600P



Tolerances for Welded Tubing - ASTM-A270

Tube OD	Nominal Wall Thickness (inches)	OD Tolerance	Wall Thickness Tolerance	Ovality Allowance
1/2"	.065	+ .002 / - .008	± .008	± .010
3/4"	.065	+ .002 / - .008	± .008	± .010
1"	.065	+ .002 / - .008	± .008	± .010
1 1/2"	.065	+ .002 / - .008	± .008	± .020
2"	.065	+ .002 / - .011	± .008	± .020
2 1/2"	.065	+ .002 / - .011	± .008	± .020
3"	.065	+ .003 / - .012	± .008	± .020
4"	.083	+ .003 / - .015	± .010	± .020
6"	.109	+ .030 / - .030	± .014	± .030

ASTM-A269 Unpolished ID and OD Tubing

Unpolished ID and OD - ASTM-A269

Feature:

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

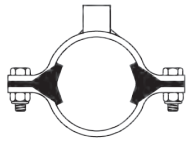
Size	Packaged	304 Stainless Steel Part Number	316 Stainless Steel Part Number
1"	280'	A269-G100U	A269-R100U
1 1/2"	340'	A269-G150U	A269-R150U
2"	340'	A269-G200U	A269-R200U
2 1/2"	220'	A269-G250U	A269-R250U
3"	220'	A269-G300U	A269-R300U
4"	100'	A269-G400U	A269-R400U
6"	40'	A269-G600U	A269-R600U



Tolerances for Welded Tubing - ASTM-A269

Tube OD	Nominal Wall Thickness (inches)	OD Tolerance	Wall Thickness Tolerance	Ovality Allowance
1"	.065	± .005	± .006	± .010
1 1/2"	.065	± .010	± .006	± .020
2"	.065	± .010	± .006	± .020
2 1/2"	.065	± .010	± .006	± .020
3"	.065	± .010	± .006	± .020
4"	.083	± .015	± .008	± .030
6"	.109	+ .030	+ .010	+ .030

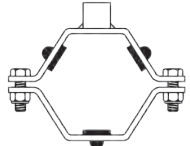
Dixon Sanitary Tube Hangers



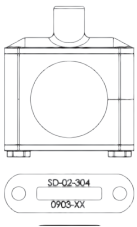
← round hanger
with coupler



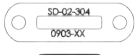
← hex hanger



← hex hanger
with coupler



← block hanger



← hex hanger
with sleeve

Sizes:

- ½" - 12" OD tube

Materials:

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

Tube OD	Nominal Wall Thickness (inches)	Gage Number
½"	.065	16
¾"	.065	16
1"	.065	16
1½"	.065	16
2"	.065	16
2½"	.065	16
3"	.065	16
4"	.083	14
5"	.109	12
6"	.109	12
8"	.120	12
10"	.109	10
12"	.120	10

Support Recommendations

Lines are not to be rigidly anchored to equipment. Lines must be allowed to float. Temperatures cause expansion and contraction and if mounted incorrectly will cause distortion and possibly leakage.

Proper Installation:

- straight sections need support every 10 feet
- each side of every valve (as close as possible to the connection) needs support
- support each change of directions

Tube Hex Hangers

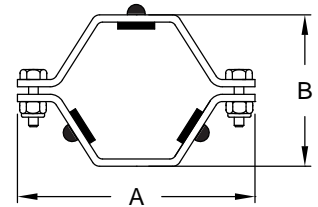
Hex Hanger with Nitrile Grommets - B24RG

Features:

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

Specification:

- nitrile grommets maximum temperature: 230°F (110°C)



Tube OD	A	B	304 Stainless Steel Part Number
1/2" - 3/4"	3.425	1.450	B24RG-G75
1"	3.425	1.450	B24RG-G100
1 1/2"	4.000	2.125	B24RG-G150
2"	4.500	2.500	B24RG-G200
2 1/2"	4.950	3.125	B24RG-G250
3"	5.500	3.750	B24RG-G300
4"	6.950	4.750	B24RG-G400
5"	8.000	5.625	B24RG-G500
6"	9.250	6.625	B24RG-G600
8"	11.500	8.625	B24RG-G800
10"	14.500	10.500	B24RG-G1000
12"	16.750	12.625	B24RG-G1200

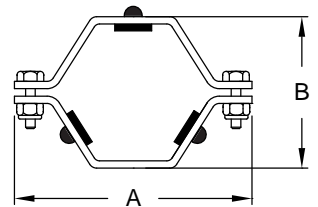
Hex Hanger with FKM Grommets - B24RGSFY

Features:

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

Specification:

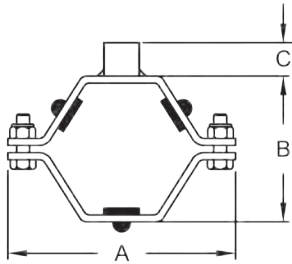
- FKM grommets maximum temperature: 392°F (200°C)



Tube OD	A	B	304 Stainless Steel Part Number
1/2"	3.625	2.125	B24RGSFY-G50
3/4"	3.625	2.125	B24RGSFY-G75
1"	3.625	2.125	B24RGSFY-G100
1 1/2"	3.625	2.125	B24RGSFY-G150
2"	4.313	2.625	B24RGSFY-G200
2 1/2"	4.875	3.125	B24RGSFY-G250
3"	5.375	3.625	B24RGSFY-G300
4"	6.563	4.750	B24RGSFY-G400
6"	9.000	6.625	B24RGSFY-G600
8"	11.250	8.750	B24RGSFY-G800
10"	14.500	10.500	B24RGSFY-G1000
12"	16.750	12.625	B24RGSFY-G1200



Tube Hex Hangers

Hex Hanger with Nitrile Grommets and All Thread Coupler - **B24RGC16****Feature:**

- coupler is all thread $\frac{3}{8}$ -16

Specification:

- nitrile grommets maximum temperature: **230°F (110°C)**

Tube OD	A	B	C	304 Stainless Steel Part Number
$\frac{1}{2}$ " - $\frac{3}{4}$ "	3.425	1.450	.750	B24RGC16-G75
1"	3.425	1.450	.750	B24RGC16-G100
1½"	4.000	2.125	.750	B24RGC16-G150
2"	4.500	2.500	.750	B24RGC16-G200
2½"	4.750	3.125	.750	B24RGC16-G250
3"	5.500	3.750	.750	B24RGC16-G300
4"	6.750	4.750	.750	B24RGC16-G400
6"	9.250	6.625	.750	B24RGC16-G600
8"	11.500	8.625	.750	B24RGC16-G800

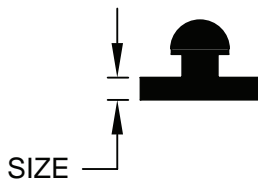
Nuts and Bolts - **13NHN****Features:**

- all sizes hex hangers with grommets and round hangers 1" to 4" use **13NHN-G100-600** fastener sets
- $\frac{1}{2}$ " and $\frac{3}{4}$ " round and sleeved hangers use **13NHN-G75** fastener sets
- 2 nuts and bolts supplied to a set

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

Grommets - **13RG****Specifications:**

- nitrile grommets maximum temperature: **230°F (110°C)**
- FKM grommets maximum temperature: **392°F (200°C)**



Size	Nitrile Part Number	FKM Part Number
$\frac{1}{8}$ " ¹	13RG18	13RGV18
$\frac{1}{4}$ "	13RG14	13RGV14
$\frac{1}{2}$ "	13RG12	13RGV12
$\frac{3}{8}$ " ²	13RG3/8	13RGV38
$\frac{5}{8}$ "	13RG58	13RGV58

¹ for 1" hangers and larger

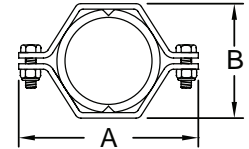
² for $\frac{1}{2}$ " and $\frac{3}{4}$ " hangers

Tube Hex Hangers
Hex Hanger with ABS Sleeve - B24PS

Specification:

- ABS sleeve maximum temperature: **230°F (110°C)**

Tube OD	A	B	304 Stainless Steel Part Number
1/2"	2.800	1.150	B24PS-G50
3/4"	2.800	1.150	B24PS-G75
1"	3.425	1.450	B24PS-G100
1 1/2"	4.000	2.125	B24PS-G150
2"	4.500	2.500	B24PS-G200
2 1/2"	4.950	3.125	B24PS-G250
3"	5.500	3.750	B24PS-G300
4"	6.950	4.750	B24PS-G400
5"	8.063	5.625	B24PS-G500
6"	9.250	6.625	B24PS-G600
8"	11.500	8.625	B24PS-G800
10"	14.500	10.500	B24PS-G1000
12"	16.625	13.000	B24PS-G1200

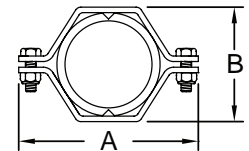


Hex Hanger with High Temperature Polysulfone Sleeve - B24HS

Specification:

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

Tube OD	A	B	304 Stainless Steel Part Number
1/2"	2.375	1.062	B24HS-G50
3/4"	2.625	1.188	B24HS-G75
1"	2.688	1.563	B24HS-G100
1 1/2"	3.625	2.125	B24HS-G150
2"	4.625	2.625	B24HS-G200
2 1/2"	4.813	3.125	B24HS-G250
3"	5.375	3.625	B24HS-G300
4"	6.625	4.625	B24HS-G400
6"	9.000	6.625	B24HS-G600



Tube Hex Hangers

Sleeves - 13*S

Specifications:

- ABS sleeve maximum temperature: 230°F (110°C)
- high temperature sleeve maximum temperature: 325°F (163°C)



Size	ABS Part Number	High Temperature Part Number
1/2"	13PS-50	13HS-50
3/4"	13PS-75	13HS-75
1"	13PS-100	13HS-100
1 1/2"	13PS-150	13HS-150
2"	13PS-200	13HS-200
2 1/2"	13PS-250	13HS-250
3"	13PS-300	13HS-300
4"	13PS-400	13HS-400
5"	13PS-500	---
6"	13PS-600	13HS-600
8"	13PS-800	---
10"	13PS-1000	---
12"	13PS-1200	---

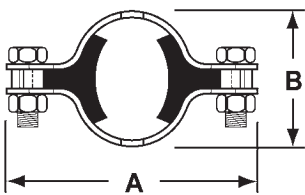
Round Hanger with Nitrile Inserts - B24RPH


Features:

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

Specification:

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



Tube OD	A	B	304 Stainless Steel Part Number
1/2"	2.750	1.125	B24RPH-G50
3/4"	2.750	1.125	B24RPH-G75
1"	3.310	1.500	B24RPH-G100
1 1/2"	3.810	2.000	B24RPH-G150
2"	4.250	2.562	B24RPH-G200
2 1/2"	5.000	3.000	B24RPH-G250
3"	5.500	3.562	B24RPH-G300
4"	6.500	4.688	B24RPH-G400

Tube Uni-Hinge Block Hangers

Applications:

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

Sizes:

- support range: 1/2" - 4", optional 6" - contact Dixon Sanitary 800.789.1718

Materials:

- silicone insert - 80 durometer; color: blue
- hardware - 304 & 316 stainless steel

Features:

- insulation envelope: reduced OD allows hanger to be buried under the insulation jacket.
- silicone inserts are one piece
- there are no exposed threads or openings in hardware plates

Specification:

- intermittent temperatures from -40°F to 320°F (-40°C to 160°C)

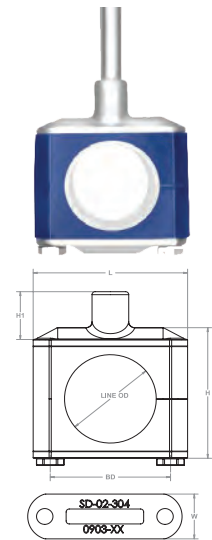
Approvals:

- all plates polished, bolts are cleaned and nuts are lubricated with FDA approved product
- hanger threads match MSS SP-69 rod OD requirements



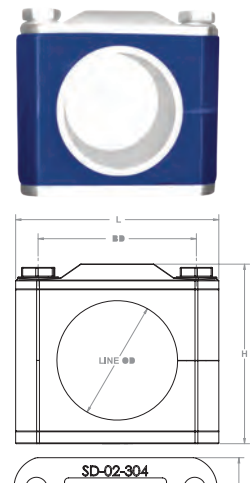
Hang Plate Block Hanger - B24-HP

Tube OD	BD	H	H1	L	Line OD	W	Thread	Part Number
1/2"	1.44	1.69	0.60	1.93	0.50	0.75	3/8"-16	B24-HP-G050
3/4"	1.44	1.69	0.60	1.93	0.75	0.75	3/8"-16	B24-HP-G075
1"	1.44	1.69	0.60	1.93	1.00	0.75	3/8"-16	B24-HP-G100
1 1/2"	1.94	2.19	0.60	2.49	1.50	0.75	3/8"-16	B24-HP-G150
2"	2.44	2.69	0.60	2.99	2.00	0.88	1/2"-13	B24-HP-G200
2 1/2"	2.81	3.22	1.21	3.36	2.50	0.88	1/2"-13	B24-HP-G250
3"	3.44	3.97	1.21	3.99	3.00	0.88	1/2"-13	B24-HP-G300
4"	4.55	4.85	1.39	5.10	4.00	1.00	5/8"-11	B24-HP-G400

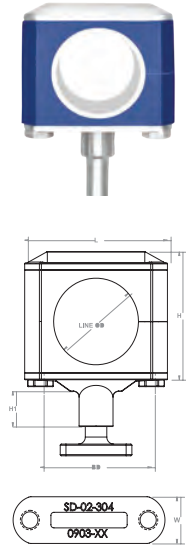


Weld Plate Block Hanger - B24-WP

Tube OD	BD	CL	H	L	Line OD	W	Part Number
1/2"	1.44	0.79	1.73	1.93	0.50	0.75	B24-WP-G050
3/4"	1.44	0.79	1.73	1.93	0.75	0.75	B24-WP-G075
1"	1.44	0.79	1.73	1.93	1.00	0.75	B24-WP-G100
1 1/2"	1.94	1.03	2.23	2.49	1.50	0.75	B24-WP-G150
2"	2.44	1.31	2.75	2.99	2.00	0.88	B24-WP-G200
2 1/2"	2.81	1.55	3.25	3.36	2.50	0.88	B24-WP-G250
3"	3.44	1.93	3.68	3.99	3.00	0.88	B24-WP-G300
4"	4.55	2.39	4.87	5.10	4.00	1.00	B24-WP-G400

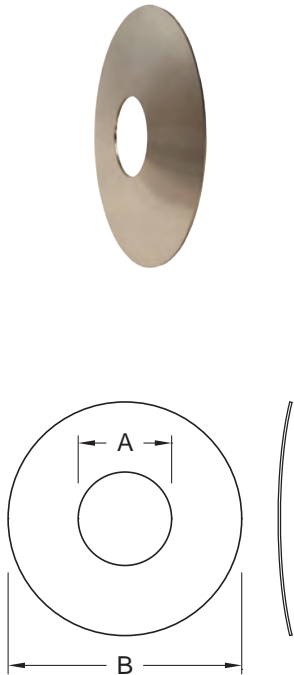


Tube Uni-Hinge Block Hangers

Base Mount Block Hanger - *B24-BM*Tubing and
Accessories

Tube OD	BD	H	H1	L	Line OD	W	Thread	Part Number
1/2"	1.44	1.70	0.47	1.93	0.50	0.75	3/8"-16	<i>B24-BM-G050</i>
3/4"	1.44	1.70	0.47	1.93	0.75	0.75	3/8"-16	<i>B24-BM-G075</i>
1"	1.44	1.70	0.47	1.93	1.00	0.75	3/8"-16	<i>B24-BM-G100</i>
1 1/2"	1.94	2.19	0.47	2.49	1.50	0.75	3/8"-16	<i>B24-BM-G150</i>
2"	2.44	2.69	0.47	2.99	2.00	0.88	1/2"-13	<i>B24-BM-G200</i>
2 1/2"	2.81	3.19	0.59	3.36	2.50	0.88	1/2"-13	<i>B24-BM-G250</i>
3"	3.44	3.97	0.59	3.99	3.00	0.88	1/2"-13	<i>B24-BM-G300</i>

Wall Flanges

Flanges - *B25*

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

¹ square wall flanges are also available, call Dixon Sanitary 800.789.1718 for information

Pressure gauges H-2 to H-7

Sanitary pressure gauges.....H-2 to H-4

Pharmaceutical pressure gauges H-5

Homogenizer pressure gaugesH-6 to H-7

Temperature gauges..... H-8 to H-10

Sanitary digital thermometers..... H-8

Sanitary RTDs and temperature transmittersH-9 to H-10



Dixon Sanitary Gauges

Model Number Breakdown

**Sizes:**

- 1½", 2", 2½" or 3"

Material:

- 316L stainless steel

Features:

- finishes: 3A sanitary
- finishes: pharmaceutical

Ordering Information
Series

- 3S**.....3½" Sanitary pressure gauge
5S.....5" Sanitary pressure gauge
3P.....3½" Pharmaceutical pressure gauge
5P.....5" Pharmaceutical pressure gauge

Pressure Range ¹

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

Fitting Type ²

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

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

² specify size then type, i.e. 1½" = 15

Filled Case

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

Mount type

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

Diaphragm Material

- SS**.....stainless steel

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

Sanitary Pressure Gauges

Sizes:

- dial size: 3½" or 5" diameter

Materials:

- case: 304 stainless steel
- lens: polycarbonate

Features:

- accuracy: $\pm 1.5\%$ of full scale
- over range capacity: 30%
- product contact: 316L stainless steel
- surface finishes (product contact): R_a max = 25 microinches
- standard fill: food grade glycerin
- rezero feature: standard on pointer
- shipping weight: approximately 3 lbs. (1.3 kg)

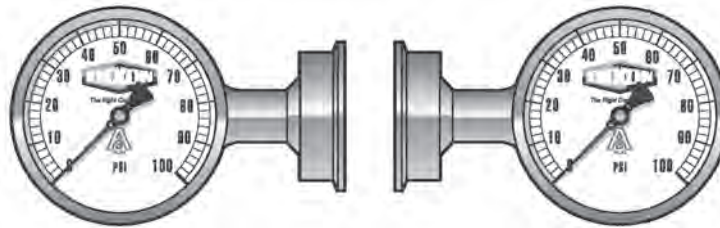
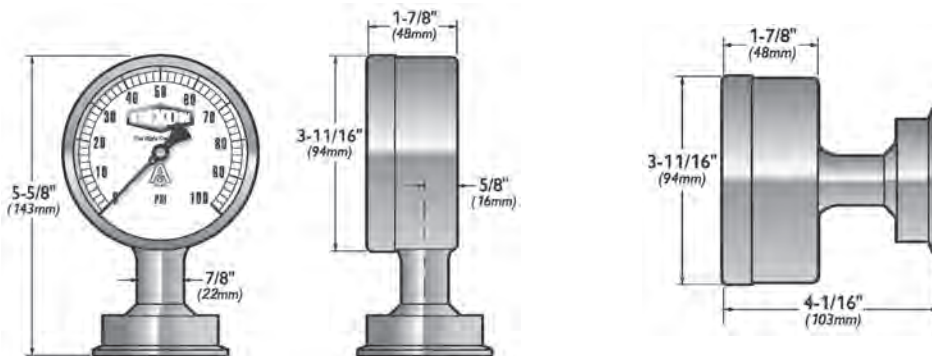
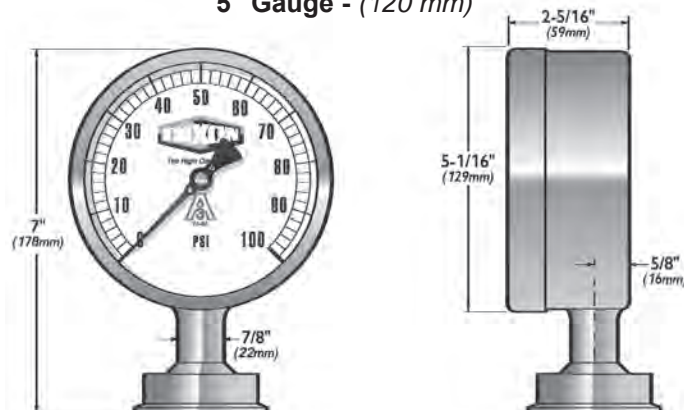
Specifications:

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



3S-EB-2U-GFBTSS

Instrumentation

3½" Gauge - (90 mm)**5" Gauge - (120 mm)**

shown with 2" clamp

H

Sanitary Pressure Gauges



Part Number	Dial Size	Pressure Range (PSI)	Clamp Size	Mount	
3S-B-15U-GFBTSS	3.5"	0-30	1½"	bottom	
3S-C-15U-GFBTSS		0-60			
3S-D-15U-GFBTSS		0-100			
3S-E-15U-GFBTSS		0-160			
3S-F-15U-GFBTSS		0-200			
3S-G-15U-GFBTSS		0-300			
3S-B-15U-GFBKSS		0-30	back		
3S-C-15U-GFBKSS		0-60			
3S-D-15U-GFBKSS		0-100			
3S-E-15U-GFBKSS		0-160			
3S-F-15U-GFBKSS		0-200			
3S-G-15U-GFBKSS		0-300			
3S-B-2U-GFBTSS		3.5"	0-30	2"	bottom
3S-C-2U-GFBTSS			0-60		
3S-D-2U-GFBTSS	0-100				
3S-E-2U-GFBTSS	0-160				
3S-F-2U-GFBTSS	0-200				
3S-G-2U-GFBTSS	0-300				
3S-B-2U-GFBKSS	0-30		back		
3S-C-2U-GFBKSS	0-60				
3S-D-2U-GFBKSS	0-100				
3S-E-2U-GFBKSS	0-160				
3S-F-2U-GFBKSS	0-200				
3S-G-2U-GFBKSS	0-300				

Pharmaceutical Pressure Gauges

Sizes:

- dial size: 3½" or 5" diameter
- dial size: 3½" diameter

Materials:

- lens: polycarbonate
- case: 304 stainless steel

Features:

- accuracy: $\pm 0.75\%$ of full scale
- over range capacity: 30%
- product contact: 316L stainless steel
- surface finishes (product contact): R_a max = 8 microinches
- standard fill: food grade glycerin
- rezero feature: standard on pointer
- shipping weight: approximately 3 lbs. (1.3 kg)

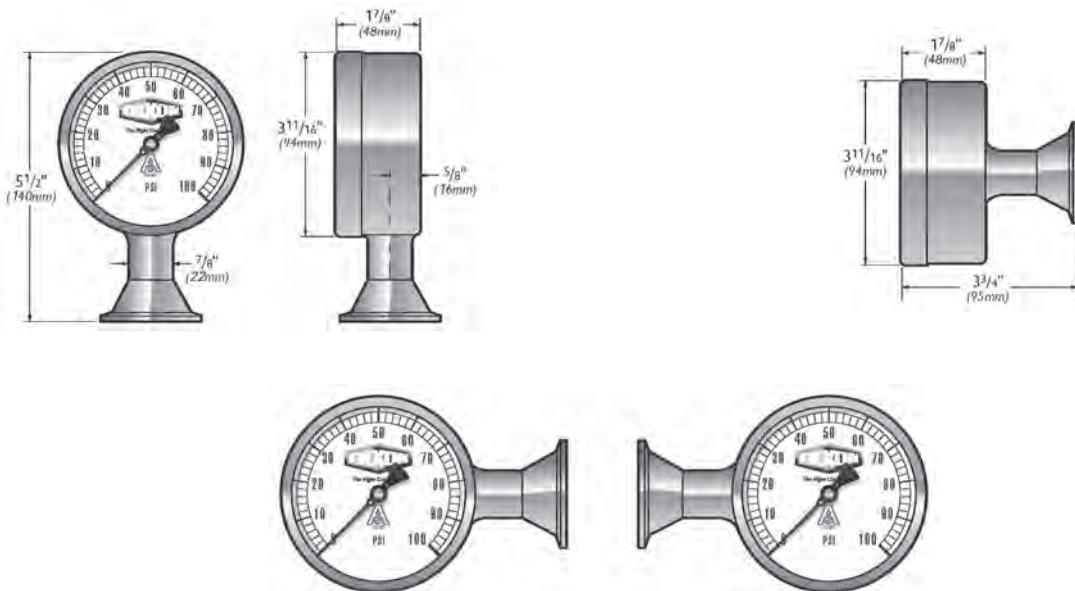
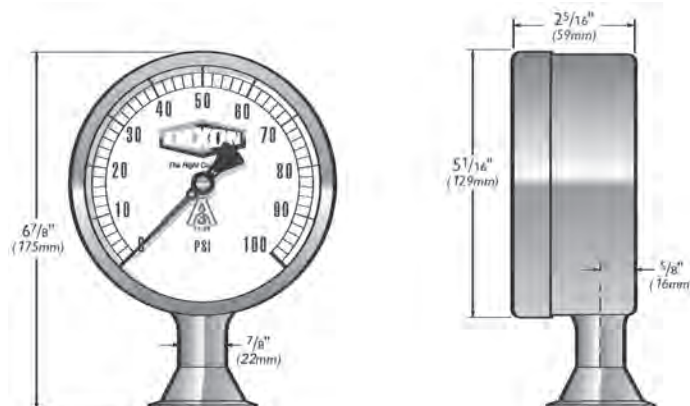
Specifications:

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



3P-D-15U-GFBT

Instrumentation

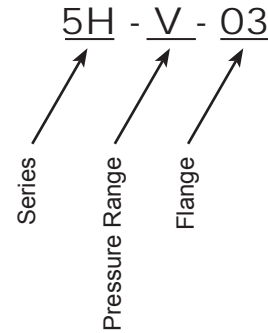
3½" Gauge - (90 mm)**5" Gauge - (120 mm)**

H

Homogenizer Pressure Gauges



Model Number Breakdown



Ordering Information

Series

5H.....5" Sani-Flow Homogenizer Pressure Gauge

Pressure Range ¹

K.....0 to 1,000 PSI (70 BAR)

T.....0 to 2,500 PSI (170 BAR)

U.....0 to 3,000 PSI (205 BAR)

V.....0 to 5,000 PSI (350 BAR)

Y.....0 to 7,500 PSI (520 BAR)

W.....0 to 10,000 PSI (700 BAR)

X.....0 to 15,000 PSI (1000 BAR)

Flange

01no flange

027/8" thick 2 bolt flange

031 1/8" thick 2 bolt flange

04Waukesha 1/2" thick 4 bolt flange

05Waukesha 3/4" thick 4 bolt flange

091.66" thick laboratory homogenizer flange

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

Examples

5H-V-03 - describes a 5" sani-flow homogenizer pressure gauge, 0 to 5,000 PSI, a 1-1/8" thick flange, and a glycerine filled case

5H-WB-01 - describes a 5" sani-flow homogenizer pressure gauge, dual scale 0 to 10,000 PSI/0 to 700 BAR, no flange, and a glycerine filled case

Homogenizer Pressure Gauges

Size:

- dial size: 5"

Materials:

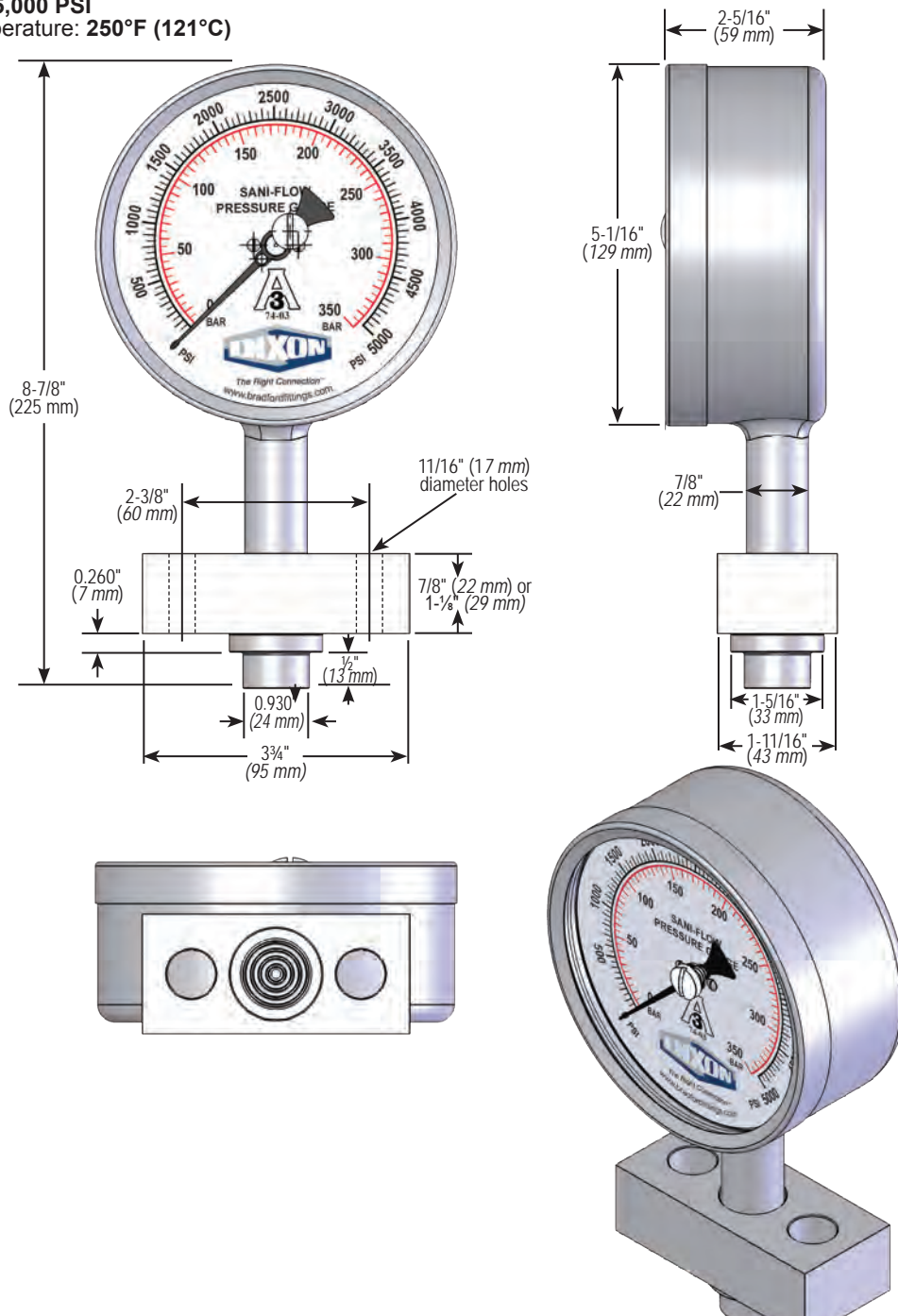
- product contact: 316L stainless steel
- case: 304 stainless steel
- lens: Lexan®

Features:

- Lexan® lens virtually impervious to cracks and breakage
- unique pulsation dampening system insulates the gauge movement from the punishing pulsations of a homogenizer
- glycerine fill standard
- waterproof construction
- CIP-able
- true zero with re-zero standard

Specifications:

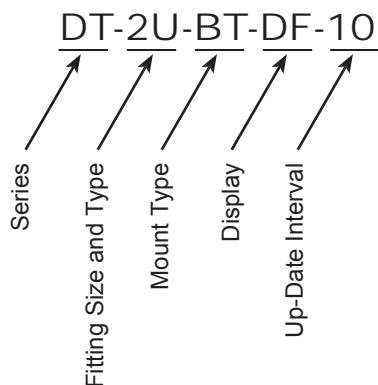
- ranges up to **15,000 PSI**
- maximum temperature: **250°F (121°C)**



Sanitary Digital Thermometers

Instrumentation

Model Number Breakdown



Sizes:

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

Materials:

- product contact: 316L stainless steel
- case: 304 stainless steel
- lens: 1/4" polycarbonate

Features:

- accuracy: ±1°
- surface finish: R_a max. is 8 microinches
- battery size / life: standard AAA/3 years
- shipping weight: approximately 3 lbs.

Specifications:

- temperature limits: -58°F to 302°F (-50°C to 150°C)
- ambient operating limits: -4°F to 140°F (-20°C to 60°C)
- resolution: 0.1° (-58° thru 199.9°)

Ordering Information



Series

DT.....Sanitary digital thermometer

Fitting Type ¹

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

I.....male I-Line

T.....#13H captive nut and #14 bevel seat

U.....clamp

¹ specify size then type, i.e. 1 1/2" = 15U

Mount type

BT.....bottom

RT.....right side

LF.....left side

TP.....top

BK.....back

BTR.....remote fitting

Display

DF.....F (Fahrenheit) *standard*

DC.....C (Celsius)

Up-Date Interval

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

10.....ten second (3 year battery life)

Dimensions

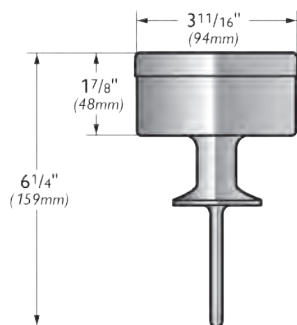
LEFT SIDE MOUNT



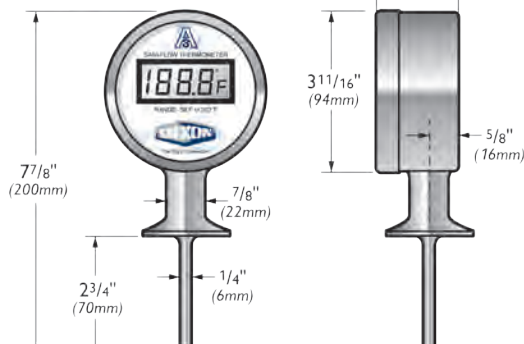
RIGHT SIDE MOUNT



BACK MOUNT



BOTTOM MOUNT



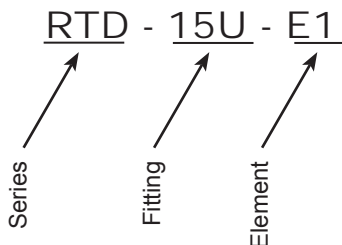
Ordering code shown with clamp configuration "U". See ordering information for other types available.

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

² custom probe lengths are available

Sanitary RTDs and Temperature Transmitters

Model Number Breakdown



Ordering Information

Series

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

Sanitary Fittings

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

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

- Specify size, then adapter type such as 15U for 1½" Tri-clamp® adapter
- For special probes add SP and the required probe length at the end of the part number; such as SP2.75 for a 2¾" long probe.

Other Fittings

Specify probe length

- A**.....air space
M.....umbrella fittings
NPT.....¼", ⅜", ½", ⅝" or ¾" pipe thread
PW.....projectile well with 1¼"-18 UNEF male thread
SP.....split ferrule
VP.....VAT well fitting with #13H captive nut
OF.....no fitting

Element ¹

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

¹ available for RTD only

Sanitary RTDs & Temperature Transmitters

Instrumentation



sanitary RTD



temperature transmitter

Materials:

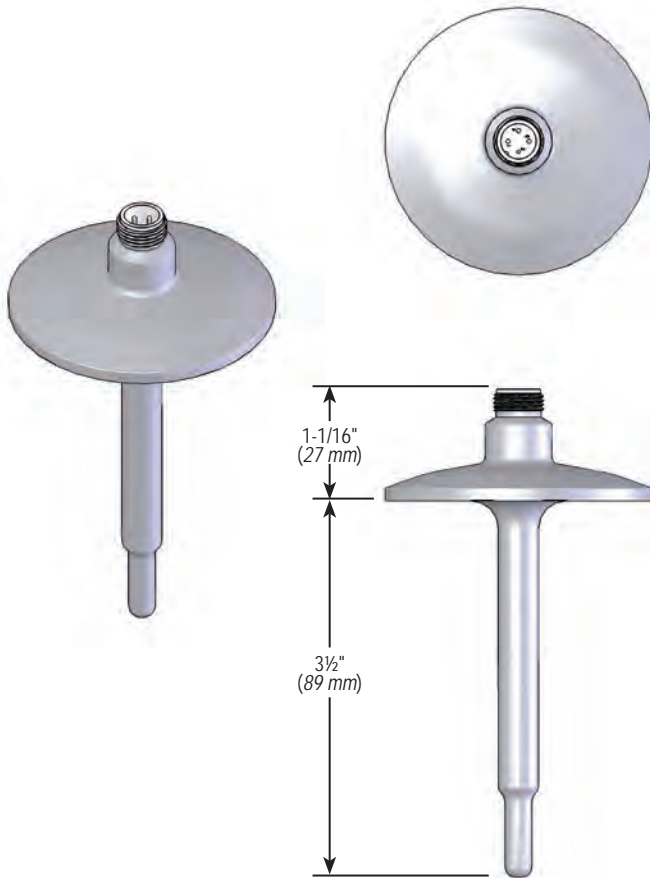
- product contact: 316L stainless
- exterior surfaces 316L with a near mirror finish

Features:

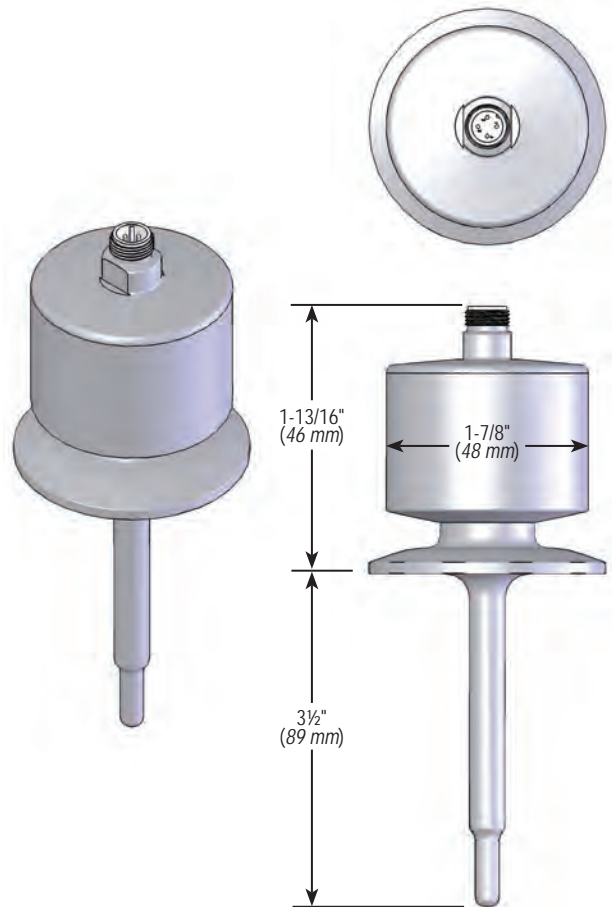
- standard 12mm industrial connector with gold plated contacts for maximum corrosion resistance and cleanability
- sensor elements are accurate up to +/-0.1C

Specifications:

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



RTD-20GI-38



TT-20-G1

• Note: custom lengths are available



Adapters..... I-2 to I-4

Cam and GrooveI-2 to I-3
 Coupler x clamp end RC..... I-4
 Adapter x clamp end REI-4
 Dixon® weld to tubeI-4
 Boss-Lock™ coupler x weld to tube end..... I-4
 Adapter x weld to tube endI-4

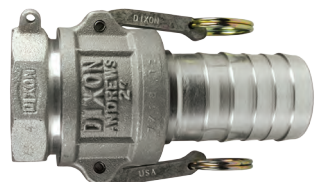
Global Type I-5 to I-7

Global type A adaptersI-5
 Global type E adaptersI-5
 Global type F adaptersI-5
 Global type DP dust plugsI-6
 Global type B couplersI-6
 Global type C couplersI-6
 Global type D couplersI-6
 Global type dust capsI-7

Gaskets I-7 to I-8

Dixon® Cam and Groove

Cam and Groove



Sizes:

- 1" - 4"

Materials:

- 316L stainless steel
- (316) CF8M

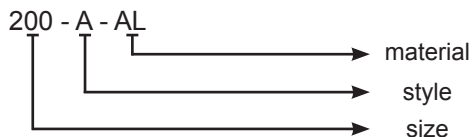
Features:

- precision machined to rigid tolerances
- durable stainless steel cam arm pins will not rust or bind, for greater strength and safety
- recess holds gasket firmly in place - ensures proper placement
- long shank design allows proper banding, thus eliminating the major cause of hose damage

Specifications:

- Dixon® cam and groove couplers and adapters are produced to interchange with all product produced to Commercial Item Description A-A-59326B.
- no standard exists for the ½" and 8" fittings, and generally these sizes do not interchange with other manufacturers.
- dust caps and dust plugs are not to be used in pressure applications for safety and environmental reasons.
- designed for use with liquids, consult Dixon® for specific recommendations.

Ordering System



Size represents the coupler or adapter and hose or pipe end. (i.e. 200 = 2") If the coupling is a reducing size, the coupler or adapter is the first size. (i.e. 4030-C is 4" coupler to 3" hose shank).

Operation of Cam and Groove

1. To make connection, simply slide the adapter into the coupler and with normal hand pressure, press the cam levers down.
2. Uncoupling is as quick and simple as coupling. Just lift the cam arms and remove the adapter.

Pressure Ratings:



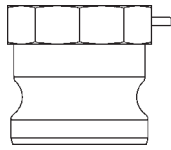
Recommendations based on the use of mating Dixon® fittings at ambient temperature **70°F (21°C)** with standard Buna-N Seal installed. For use at elevated temperature or other unusual operating conditions, consult the factory. Dixon®, Boss-Lock and EZ Boss-Lock couplers and adapters maximum working pressure are as follows:

Size	½"	¾" thru 2"	2½"	3"	4"	5" and 6"	8"
PSI	150	250	150	125	100	75	50
PSI (working pressure with King Crimp™ ferrule system)	150	250	150	150	150	75	50

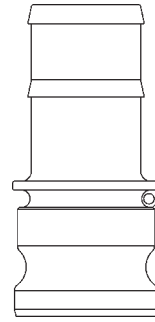
All dimensions are in inches unless otherwise noted. Engineering dimensions are available upon request. Specifications are subject to change without notice.

Cam and Groove Line Drawings

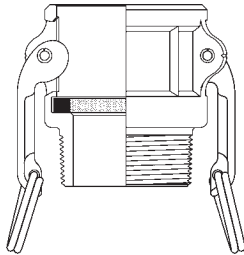
Line drawings are representative of the Dixon® line of cam and groove.



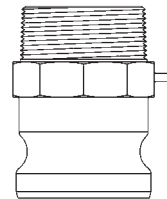
Type A
female NPT x male adapter



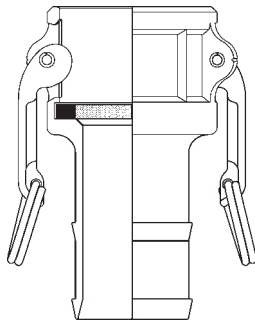
Type E
hose shank x male adapter



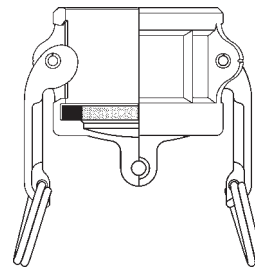
Type B
female coupler x male NPT



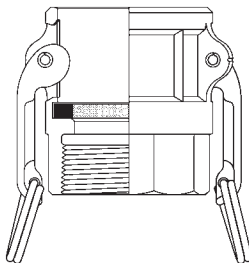
Type F
male NPT x male adapter



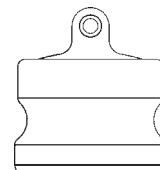
Type C
female coupler x hose shank



Type DC
dust cap



Type D
female coupler x female NPT



Type DP
dust plug

Dust caps and dust plugs are not to be used in pressure applications for safety and environmental reasons.

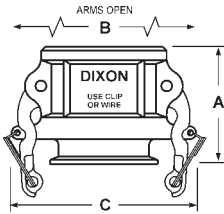


Under no circumstances should cam and groove couplings be used for compressed air or steam service!



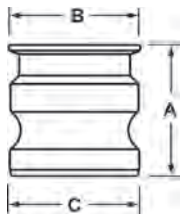
Cam and Groove Adapters

Cam and Groove



Coupler x Clamp End - RC

Tube OD	A	B	C	316 Stainless Steel Part Number
1½"	2.687	7.875	3.937	RC150SE
2"	2.812	8.250	4.312	RC200SE
3"	3.000	10.000	5.625	RC300SE



Adapter x Clamp End - RE

Tube OD	A	B	C	316 Stainless Steel Part Number
1½"	2.281	2.000	2.093	RE150SE
2"	2.593	2.500	2.468	RE200SE
3"	2.750	3.562	3.593	RE300SE

Dixon® Weld to Tube Cam and Groove

Material:

- 316 stainless steel investment casting

Feature:

- designed to be welded to standard sanitary tubing

Boss-Lock™ Coupler x Weld to Tube End



Size	316 Stainless Steel Part Number
1"	RC100BT
1½"	RC150BT
2"	RC200BT
3"	RC300BT

Adapter x Weld to Tube End



Size	316 Stainless Steel Part Number
1"	RE100BT
1½"	RE150BT
2"	RE200BT
3"	RE300BT

Global Type A Adapters

Size	316 Investment Cast Stainless Steel Part Number
1/2"	---
3/4"	G75-A-SS
1"	G100-A-SS
1 1/4"	G125-A-SS
1 1/2"	G150-A-SS
2"	G200-A-SS
2 1/2"	G250-A-SS
3"	G300-A-SS
4"	G400-A-SS



Global Type E Adapters

Size	316 Investment Cast Stainless Steel Part Number
1/2"	---
3/4"	G75-E-SS
1"	G100-E-SS
1 1/4"	G125-E-SS
1 1/2"	G150-E-SS
2"	G200-E-SS
2 1/2"	G250-E-SS
3"	G300-E-SS
4"	G400-E-SS



Global Type F Adapters

Size	316 Investment Cast Stainless Steel Part Number
1/2"	---
3/4"	G75-F-SS
1"	G100-F-SS
1 1/4"	G125-F-SS
1 1/2"	G150-F-SS
2"	G200-F-SS
2 1/2"	G250-F-SS
3"	G300-F-SS
4"	G400-F-SS



Cam and Groove

Cam and Groove



Global Type DP Dust Plugs

Size	316 Investment Cast Stainless Steel Part Number
1/2"	---
3/4"	G75-DP-SS
1"	G100-DP-SS
1 1/4"	G125-DP-SS
1 1/2"	G150-DP-SS
2"	G200-DP-SS
2 1/2"	G250-DP-SS
3"	G300-DP-SS
4"	G400-DP-SS

Global Type B Couplers



Size	316 Investment Cast Stainless Steel Part Number
1/2"	---
3/4"	G75-B-SS
1"	G100-B-SS
1 1/4"	G125-B-SS
1 1/2"	G150-B-SS
2"	G200-B-SS
2 1/2"	G250-B-SS
3"	G300-B-SS
4"	G400-B-SS

Global Type C Couplers



Size	316 Investment Cast Stainless Steel Part Number
1/2"	---
3/4"	G75-C-SS
1"	G100-C-SS
1 1/4"	G125-C-SS
1 1/2"	G150-C-SS
2"	G200-C-SS
2 1/2"	G250-C-SS
3"	G300-C-SS
4"	G400-C-SS

Global Type D Couplers



Size	316 Investment Cast Stainless Steel Part Number
1/2"	---
3/4"	G75-D-SS
1"	G100-D-SS
1 1/4"	G125-D-SS
1 1/2"	G150-D-SS
2"	G200-D-SS
2 1/2"	G250-D-SS
3"	G300-D-SS
4"	G400-D-SS

Global Type DC Dust Caps

Size	316 Investment Cast Stainless Steel Part Number
½"	---
¾"	G75-DC-SS
1"	G100-DC-SS
1¼"	G125-DC-SS
1½"	G150-DC-SS
2"	G200-DC-SS
2½"	G250-DC-SS
3"	G300-DC-SS
4"	G400-DC-SS



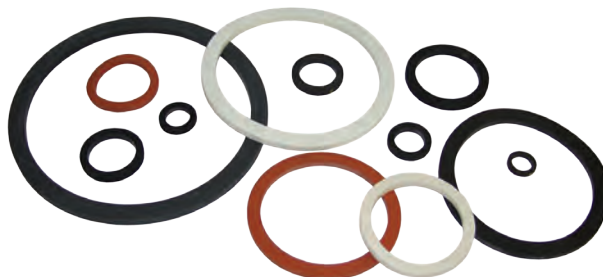
¹ does not interchange in the ½" size with Dixon or Boss-Lock style cam and groove

² come with stainless steel handles

Cam and Groove Gaskets

Feature:

- White neoprene and white Buna-N gaskets all contain FDA approved materials

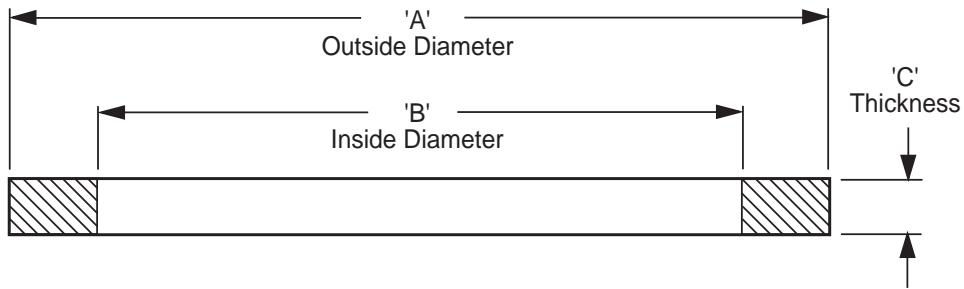


Size	Buna-N Part Number	FKM Part Number	Neoprene Part Number	white Neoprene Part Number	white Buna-N Part Number	Silicone Part Number
½"	50-G-BU	50-G-VI	---	---	---	---
¾"	75-G-BU	75-G-VI	75-G-NE	---	---	---
1"	100-G-BU	100-G-VI	100-G-NE	---	---	---
1¼"	125-G-BU	125-G-VI	125-G-NE	---	---	---
1½"	150-G-BU	150-G-VI	150-G-NE	150-G-WNE	---	150-G-SIL
2"	200-G-BU	200-G-VI	200-G-NE	200-G-WNE	---	200-G-SIL
2½"	250-G-BU	250-G-VI	250-G-NE	---	---	---
3"	300-G-BU	300-G-VI	300-G-NE	300-G-WNE	300-G-WB	300-G-SIL
4"	400-G-BU	400-G-VI	400-G-NE	400-G-WNE	400-G-WB	400-G-SIL

Cam and Groove Gaskets

Cam and Groove

Dixon® Cam and Groove Gasket Dimensions



Specifications:

- the following are the nominal dimensions for Dixon®'s elastomeric cam and groove gaskets
- the ID's of the PTFE envelope gaskets and the PTFE accordion gaskets are 1/16" smaller than the ID's for the elastomeric gaskets shown below
- thickness of PTFE accordion gaskets may vary from chart below

Size	Part Number	'A'	'B'	'C'
1/2"	50-G¹	1 ¹ / ₃₂ "	1 ¹ / ₁₆ "	³⁹ / ₂₅₀ "
3/4"	75-G	1 ³ / ₈ "	7/8"	¹⁰⁹ / ₅₀₀ "
1"	100-G	1 ⁹ / ₁₆ "	1 ¹ / ₁₆ "	1/4"
1 1/4"	125-G	1 ¹⁵ / ₁₆ "	1 ²³ / ₆₄ "	1/4"
1 1/2"	150-G	2 ³ / ₁₆ "	1 ⁵ / ₈ "	1/4"
2"	200-G	2 ⁵ / ₈ "	2"	1/4"
2 1/2"	250-G	3 ¹ / ₈ "	2 ³ / ₈ "	1/4"
3"	300-G	3 ²³ / ₃₂ "	3"	1/4"
4"	400-G	4 ⁷ / ₈ "	4"	1/4"

! ¹ No interchange standard exists for the 1/2" fittings. Generally, these sizes do not interchange with other manufacturer's products. As such, the gaskets in these sizes are not suitable for use in other manufacturers' couplings.

Dixon® Cam and Groove Gasket Color Codes

Gasket Code	Gasket Material	Material Color	Color code stripes (appear on the OD of the gasket or filler)
-BU	Buna-N (standard in all metal fittings)	black	1 blue
-VI	FKM	black	1 yellow
-NE	Neoprene	black	1 red
-WNE	White Neoprene, FDA approved material	white	none
-WB	White Buna N, FDA approved material	white	blue
-SIL	Silicone	red	none

! Since other manufacturer's coding systems vary, this chart should not be used as a reference in identifying gaskets of unknown origin.

Ball Valves J-2 to J-9

Technical Information J-2
BV2I series 3-piece stainless steel J-3
BV2H series 2-piece stainless steel J-4
BV2IC series stainless steel wafer J-5
BV31 series 3-way stainless steel J-6
SSBV series full port stainless steel J-7
BV2B series 2-piece brass J-8
BV3B series 3-way brass J-9

Butterfly Valves J-10 to J-12

B51 series butterfly J-10 to J-12

Industrial Ball Valves

Industrial Valves

**Sizes:**

- 1/2" - 4" OD tube
- 1/4" - 4" nominal pipe

Materials:

- CF8M stainless steel
- brass

BV2I Series 3-Piece Industrial Stainless Steel Ball Valves

Materials:

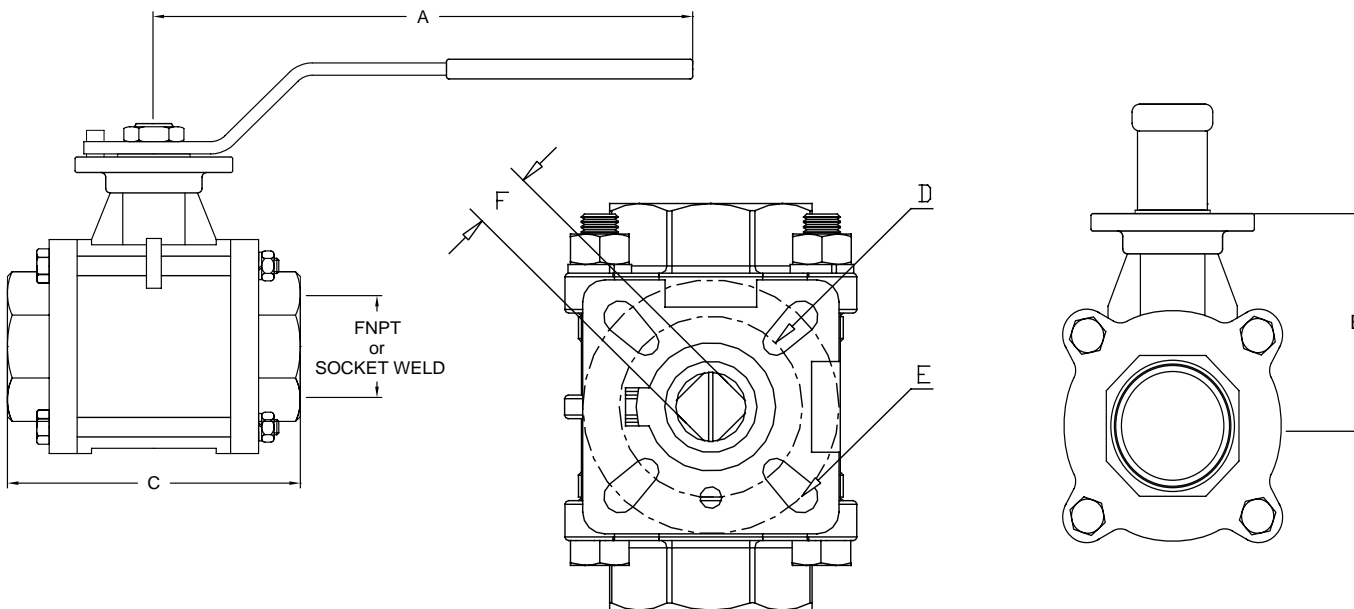
- body and ball: CF8M stainless steel
- stem: 316 stainless steel
- seat: RTFE or 25% carbon PTFE

Features:

- full port ball valves with FNPT ends or socket weld
- blow-out proof stem
- live-loaded stem packing
- swing out design for easy maintenance
- ISO 5211 mounting pad

Specifications:

- maximum pressure: 1/4" - 2" **1,000 PSI** WOG at 65°F, 2 1/2" - 3" **800 PSI** WOG at 65°F, 4" **600 PSI** WOG at 65°F
- maximum temperature: **400°F (204°C)**



Size	A	B	C	D	E	F	FNPT	Socket Weld	FNPT Part Number	Socket Weld Part Number
1/4"	4.72	1.52	2.51	F03	F04	9	0.25	n/a	BV2I*N02511-A	BV2I*N02533-A
3/8"	4.72	1.52	2.51	F03	F04	9	0.38	0.71	BV2I*N03811-A	BV2I*N03833-A
1/2"	4.72	1.67	2.84	F03	F04	9	0.50	0.88	BV2I*N05011-A	BV2I*N05033-A
3/4"	4.72	1.91	3.11	F03	F04	9	0.75	1.09	BV2I*N07511-A	BV2I*N07533-A
1"	5.35	2.17	3.29	F04	F05	11	1.00	1.35	BV2I*N10011-A	BV2I*N10033-A
1 1/4"	5.35	2.35	4.14	F04	F05	11	1.25	1.70	BV2I*N12511-A	BV2I*N12533-A
1 1/2"	9.17	2.77	4.41	F05	F07	14	1.50	1.94	BV2I*N15011-A	BV2I*N15033-A
2"	9.17	3.38	5.13	F05	F07	14	2.00	2.44	BV2I*N20011-A	BV2I*N20033-A
2 1/2"	17.32	4.29	6.64	F07	F10	17	2.50	3.01	BV2I*N25011-A	BV2I*N25033-A
3"	17.32	4.67	7.34	F07	F10	17	3.00	3.52	BV2I*N30011-A	BV2I*N30033-A
4"	17.32	4.54	8.88	F07	F10	17	4.00	4.52	BV2I*N40011-A	BV2I*N40033-A

* Use G or C; G = RTFE, C = 25% Carbon PTFE

Dimensions are approximate. Engineering dimensions are available upon request.
 Specifications are subject to change without notice.



BV2H Series 2-Piece Industrial Stainless Steel Ball Valves

Industrial Valves



Materials:

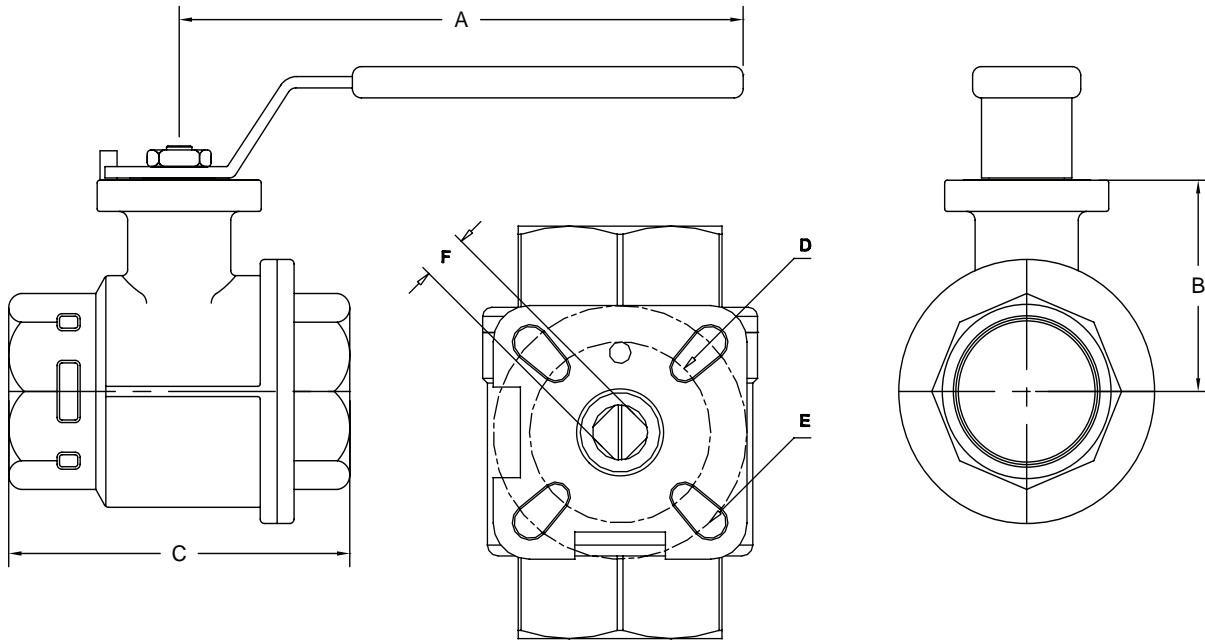
- body, ends and ball: CF8M stainless
- seats: RTFE
- seals: PTFE

Features:

- full port stainless steel ball valves with FNPT ends
- blow-out proof stem
- ISO 5211 mounting pad

Specifications:

- maximum pressure: 1/4" - 2" **1,000 PSI WOG**, 2 1/2" - 3" **800 PSI WOG**
- maximum temperature: **350°F (177°C)**



Size	A	B	C	D	E	F (mm)	Weight (lbs.)	Stainless Steel Part Number
1/4"	n/a	1.06	2.17	F03	F04	9	0.53	BV2HG-02511-A
3/8"	n/a	1.06	2.17	F03	F04	9	0.53	BV2HG-03811-A
1/2"	n/a	1.18	2.41	F03	F04	9	0.66	BV2HG-05011-A
3/4"	n/a	1.29	2.99	F03	F04	9	1.12	BV2HG-07511-A
1"	n/a	1.72	3.43	F04	F05	9	1.87	BV2HG-10011-A
1 1/4"	5.35	1.86	3.93	F04	F05	9	2.76	BV2HG-12511-A
1 1/2"	9.17	2.34	4.48	F05	F07	11	4.45	BV2HG-15011-A
2"	9.17	2.74	5.21	F05	F07	11	6.30	BV2HG-20011-A
2 1/2"	17.32	3.29	6.33	F07	F10	14	11.62	BV2HG-25011-A
3"	17.32	4.67	7.34	F07	F10	17	24.69	BV2HG-30011-A

Dimensions are approximate. Engineering dimensions are available upon request.
Specifications are subject to change without notice.

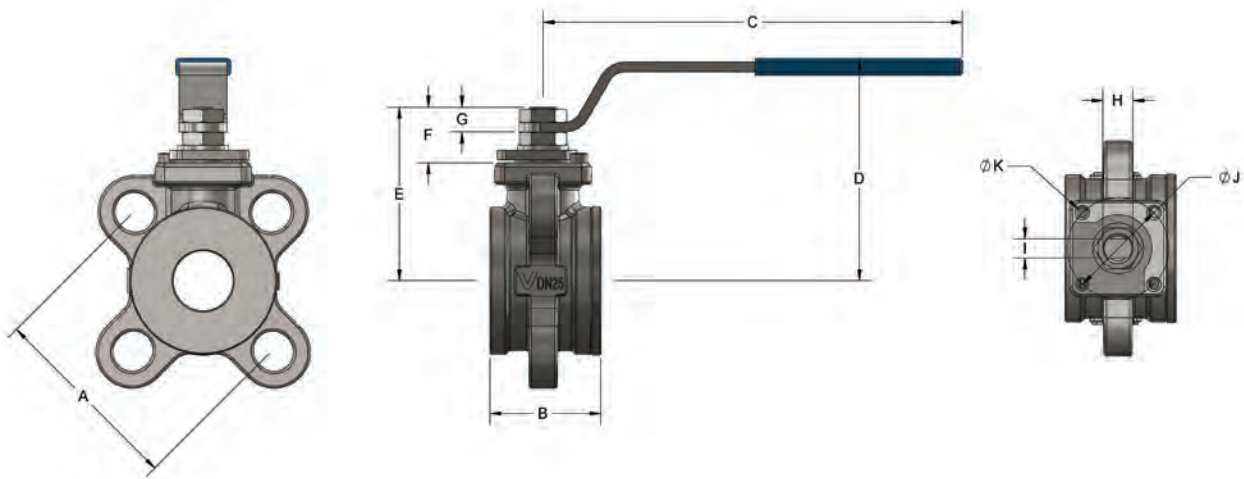
BV2IC Series Industrial Stainless Steel Wafer Ball Valve

Materials:

- body: CF8M
- ball and end connection: 316 stainless steel
- elastomers: FKM
- stem seal: PTFE - optional RTFE

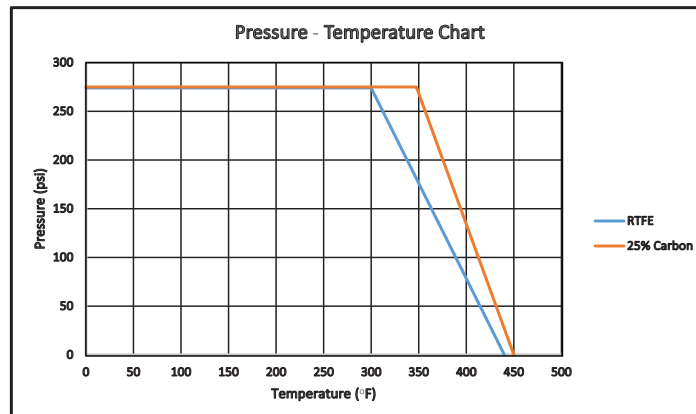
Features:

- ANSI Class 150 wafer style ball valve
- full port, sizes 1" to 4"
- blow out proof stem
- ideal option to high performance butterfly valves
- space saving design
- antistatic stem design
- locking plate included



Size	A	B	C	D	E	F	G	H	I	J	K	Part Number
1"	ANSI 150	1.81	6.85	3.58	2.81	0.90	0.41	M12	0.31	F04	4xM5	BV2IC-100WW-A
1 1/4"	ANSI 150	2.12	6.85	3.74	2.95	0.90	0.41	M12	0.31	F04	4xM5	BV2IC-125WW-A
1 1/2"	ANSI 150	2.50	9.84	4.33	3.34	1.10	0.59	M16	0.39	F05	4xM6	BV2IC-150WW-A
2"	ANSI 150	3.23	9.84	4.68	3.68	1.10	0.59	M16	0.39	F05	4xM6	BV2IC-200WW-A
2 1/2"	ANSI 150	4.05	12.63	5.70	4.78	1.31	0.70	M20	0.55	F07	4xM8	BV2IC-250WW-A
3"	ANSI 150	4.80	12.63	6.06	5.15	1.31	0.70	M20	0.55	F07	4xM8	BV2IC-300WW-A
4"	ANSI 150	5.60	12.53	6.57	5.67	1.31	0.70	M20	0.55	F10	4xM8	BV2IC-400WW-A

Note: also option for RTFE (BV2IG)



Dimensions are approximate. Engineering dimensions are available upon request.

BV3I Series 3-Way Industrial Stainless Steel Ball Valves

Industrial Valves



Materials:

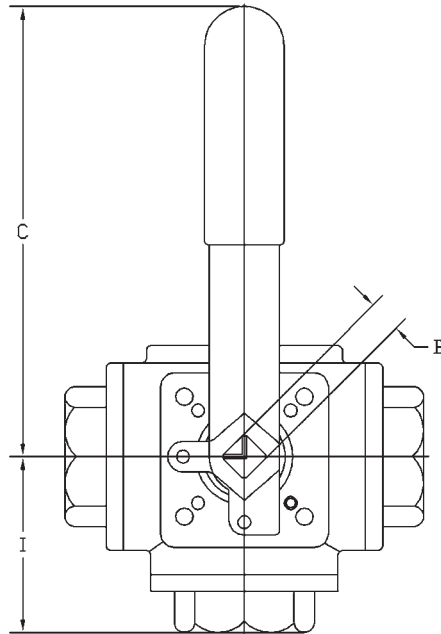
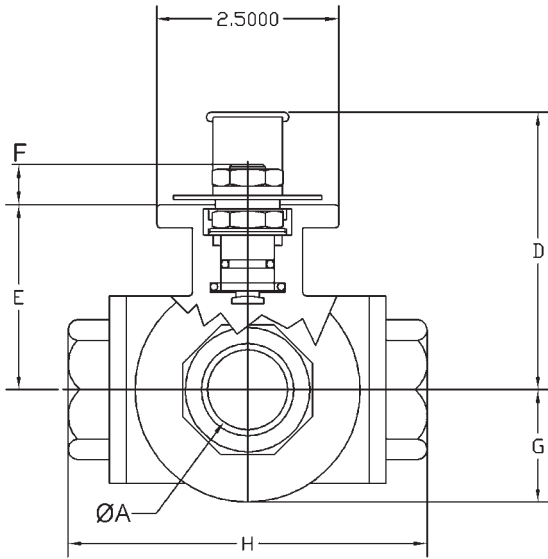
- body and ball: CF8M stainless steel
- seats and seals: RTFE

Features:

- full port ball valves with FNPT ends
- blow-out proof stem
- ISO 5211 mounting pad
- live-loaded stem packing
- for flow options see page B-20

Specifications:

- maximum pressure: ¼" - 1" **1,000 PSI WOG**,
1¼" - 2" **800 PSI WOG**
- maximum temperature: **350°F (177°C)**



Size	A	B (mm)	C	D	E	F	G	H	I	Stainless Steel 'L' port Part Number	Stainless Steel 'T' port Part Number
¼"	.43	9	5.12	2.44	1.45	.40	.78	2.83	1.41	BV3IGLF-0251-A	BV3IGTF-0251-A
⅜"	.47	9	5.12	2.44	1.45	.40	.78	2.83	1.41	BV3IGLF-0381-A	BV3IGTF-0381-A
½"	.59	9	5.12	2.51	1.65	.45	.91	3.26	1.63	BV3IGLF-0501-A	BV3IGTF-0501-A
¾"	.78	11	6.49	3.22	1.65	.59	1.10	3.89	1.94	BV3IGLF-0751-A	BV3IGTF-0751-A
1"	.98	11	6.49	3.50	2.18	.55	1.33	4.40	2.20	BV3IGLF-1001-A	BV3IGTF-1001-A
1¼"	1.25	14	8.07	3.85	2.48	.64	1.53	4.92	2.46	BV3IGLF-1251-A	BV3IGTF-1251-A
1½"	1.50	14	8.07	4.25	2.88	.62	1.88	5.86	2.93	BV3IGLF-1501-A	BV3IGTF-1501-A
2"	2.00	17	12.79	5.51	3.63	.88	2.36	6.85	3.42	BV3IGLF-2001-A	BV3IGTF-2001-A

Dimensions are approximate. Engineering dimensions are available upon request.
Specifications are subject to change without notice.

SSBV Series Full Port Stainless Steel Ball Valves

Material:

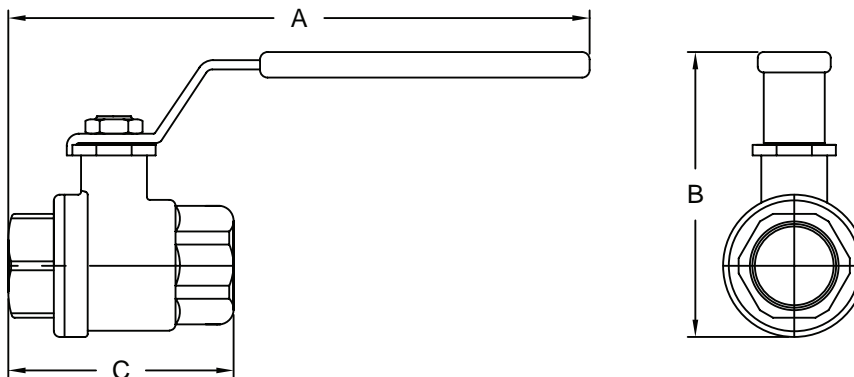
- body, ball and stem: 316 stainless steel

Features:

- full port
- blow-out proof stem design

Specifications:

- maximum pressure 1/4" - 2" rated to **1000 PSI WOG (CWP)**, 2 1/2" - 3" rated to **800 PSI WOG (CWP)**, **100 PSI** saturated steam
- temperature range: **-20°F to 300°F (-29°C to 149°C)**



Size	A	B	C	316 Stainless Steel Part Number
1/4"	5.25	2.75	1.25	SSBV25
3/8"	5.25	3.00	2.25	SSBV38
1/2"	6.50	3.25	2.75	SSBV50
3/4"	6.75	3.50	3.00	SSBV75
1"	8.25	4.00	3.50	SSBV100
1 1/4"	8.75	4.50	4.00	SSBV125
1 1/2"	9.75	5.00	4.50	SSBV150
2"	10.00	5.75	5.00	SSBV200
2 1/2"	13.50	7.75	6.50	SSBV250
3"	14.00	8.50	7.00	SSBV300



Dimensions are approximate. Engineering dimensions are available upon request. Specifications are subject to change without notice.

BV2B Series 2-Piece Industrial Brass Ball Valves

Industrial Valves



1/4" - 2"



2 1/2" - 4"

Materials:

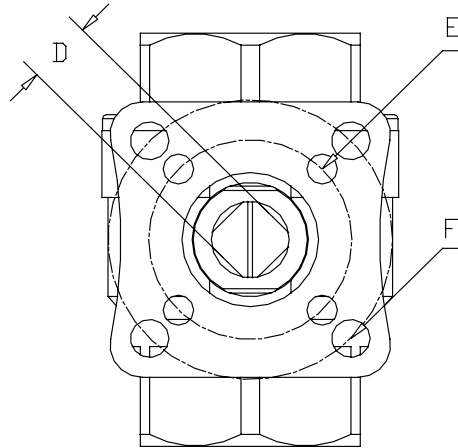
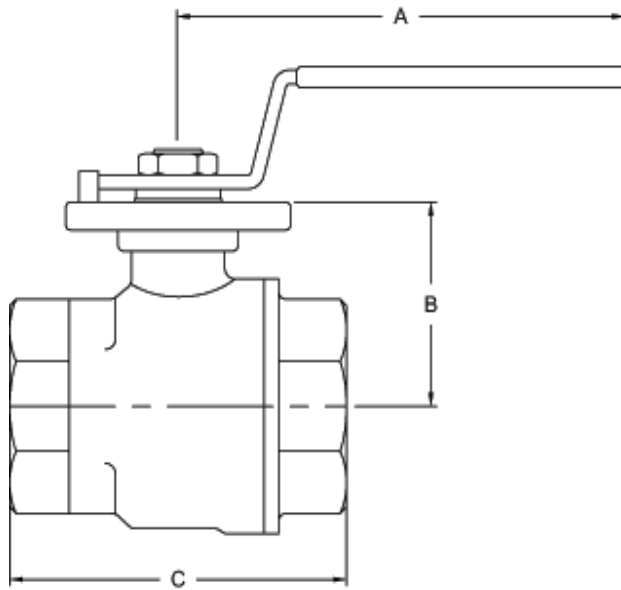
- body: 1/4" to 2" brass, 2 1/2" - 4" bronze
- seats: PTFE
- ends: FNPT

Features:

- blow-out proof stem
- ISO 5211 mounting pad

Specifications:

- maximum pressure: **600 PSI WOG**
- maximum temperature: **300°F (149°C)**



Size	A	B	C	D (mm)	E	F	Weight (lbs.)	Brass Part Number
1/4"	n/a	1.28	2.64	n/a	n/a	n/a	0.82	BV2BV-02511 *
3/8"	n/a	1.28	2.64	n/a	n/a	n/a	0.79	BV2BV-03811 *
1/2"	4.40	1.51	2.16	9	F04	n/a	0.86	BV2BV-05011-A
3/4"	4.40	1.63	2.80	11	F04	F05	0.91	BV2BV-07511-A
1"	5.40	1.76	3.23	11	n/a	F05	1.55	BV2BV-10011-A
1 1/4"	7.30	2.13	3.58	11	F05	F07	2.14	BV2BV-12511-A
1 1/2"	7.80	2.32	4.06	14	F05	F07	3.71	BV2BV-15011-A
2"	7.80	2.65	4.76	14	F05	F07	5.52	BV2BV-20011-A
2 1/2"	10.40	3.84	6.22	17	n/a	F07	8.83	BV2BV-25011-A
3"	10.40	4.17	7.40	17	n/a	F07	13.29	BV2BV-30011-A
4"	12.80	4.76	8.74	17	n/a	F07	18.32	BV2BV-40011-A

*Actuated only

Dimensions are approximate. Engineering dimensions are available upon request. Specifications are subject to change without notice.

BV3B Series 3-Way Industrial Brass Ball Valves

Industrial Butterfly Valves Pages J-10 and J-11

Materials:

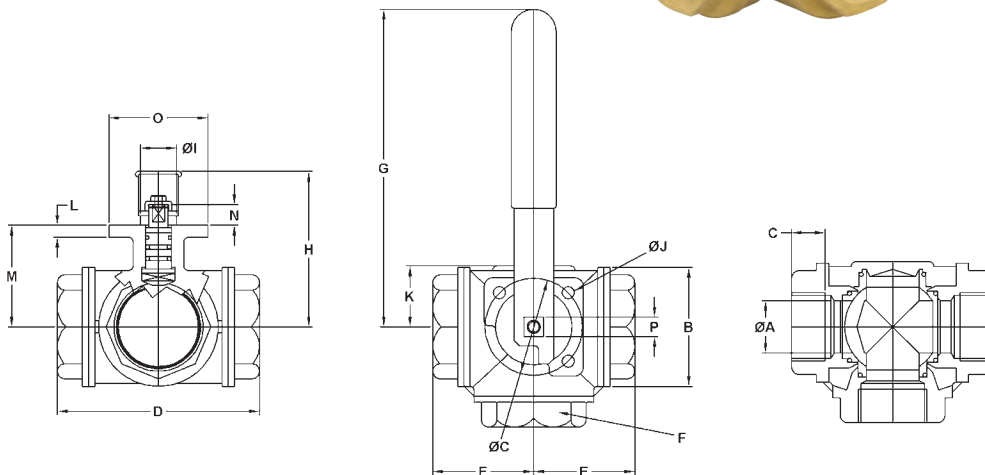
- body: brass
- seats: PTFE with O-ring backing

Features:

- reduced port brass ball valves with FNPT ends
- blow-out proof stem
- ISO 5211 mounting pad
- double O-ring stem packing
- for flow options see page B-20

Specifications:

- maximum pressure: **400 PSI WOG**
- maximum temperature: **300°F (149°C)**



Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P (mm)
¼"	4.8	2.4	2.6	2.64	1.32	.86	4.72	2.44	.87	.23	.77	.20	1.20	.35	1.49	9
⅜"	4.8	2.4	2.6	2.64	1.32	.86	4.72	2.44	.87	.23	.77	.20	1.20	.35	1.49	9
½"	4.8	2.4	2.9	2.87	1.44	1.06	4.72	2.44	.87	.23	.77	.20	1.20	.35	1.49	9
¾"	4.8	2.5	3.2	3.19	1.60	1.25	4.72	2.52	.87	.23	.87	.20	1.29	.35	1.49	9
1"	6.7	3.0	3.7	3.74	1.87	1.61	6.69	2.95	.94	.27	1.00	.28	1.63	.43	1.97	11
1¼"	6.7	3.2	4.4	4.39	2.20	1.96	6.69	3.17	.94	.27	1.22	.28	1.85	.43	1.97	11
1½"	6.7	3.7	4.9	4.86	2.43	2.16	6.69	3.66	1.26	.27	1.79	.28	2.34	.43	1.97	11
2"	9.1	4.4	5.7	5.73	2.87	2.75	9.05	4.43	1.46	.35	1.75	.32	2.90	.59	2.75	14
2½"	9.1	4.9	6.9	6.93	3.47	3.34	9.05	4.86	1.46	.35	2.20	.32	3.35	.59	2.75	14
3"	9.1	4.9	7.1	7.08	3.54	4.13	9.05	4.86	1.46	.35	2.20	.32	3.35	.59	2.75	14

Size	Weight (lbs.)	Brass 'L' port Part Number	Brass 'T' port Part Number
¼"	1.22	BV3BVLR-0251-A	BV3BVTR-0251-A
⅜"	1.16	BV3BVLR-0381-A	BV3BVTR-0381-A
½"	1.21	BV3BVLR-0501-A	BV3BVTR-0501-A
¾"	1.44	BV3BVLR-0751-A	BV3BVTR-0751-A
1"	2.64	BV3BVLR-1001-A	BV3BVTR-1001-A
1¼"	4.15	BV3BVLR-1251-A	BV3BVTR-1251-A
1½"	6.02	BV3BVLR-1501-A	BV3BVTR-1501-A
2"	9.08	BV3BVLR-2001-A	BV3BVTR-2001-A
2½"	16.33	BV3BVLR-2501-A	BV3BVTR-2501-A
3"	19.55	BV3BVLR-3001-A	BV3BVTR-3001-A

Dimensions are approximate. Engineering dimensions are available upon request.

B51 Series **Industrial Butterfly Valves**

Lug Butterfly Valve



Wafer Butterfly Valve

Materials:

- body/extended neck: cast iron
- disc: nickel plated ductile iron
- seat: EPDM
- wide variety of seat, disc and body materials available

Features:

- wafer and lug type body
- seat backing ring ensures blow-out proof service
- installed between Standard ANSI Class 150# flanges
- no taper pins
- can be serviced in field
- undercut available
- additional sizes available
- various manual or automatic operators available

Specifications:

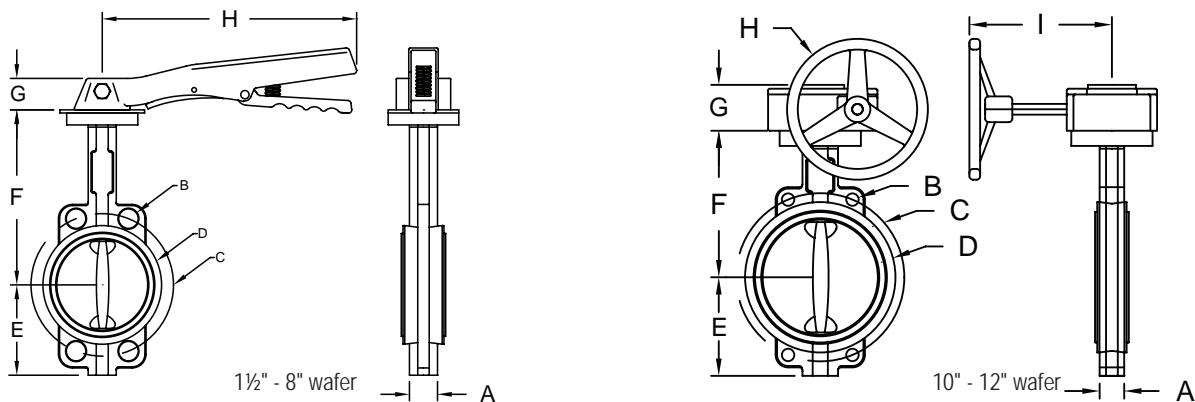
- maximum pressure: **200 PSI** (bi-directional)
- temperature range: **-20°F to 250°F (-29°C to 121°C)**, (depending upon seat material)

Approvals:

- conforms to MSS SP-67 MSS SP-25, API-609

B51 Series **Industrial Butterfly Valves**

Dimensions (wafer)



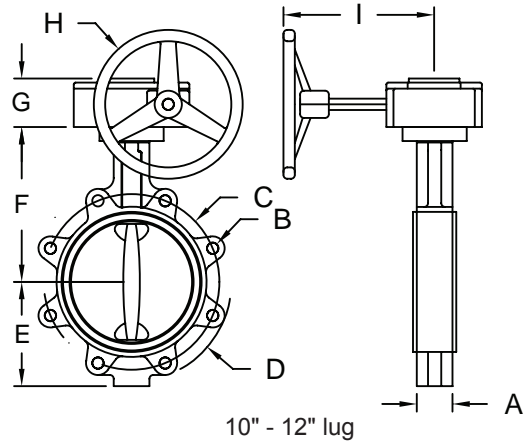
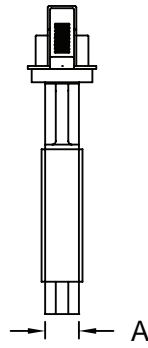
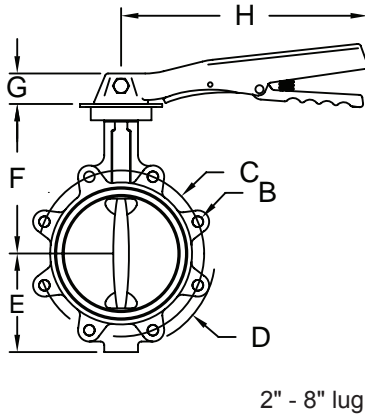
Size	A	B	C	D	E	F	G	H	I	Part Number
1½"	1.30	4-18	3.88	3.74	2.56	5.75	0.88	8.00	n/a	B5121E150W-C
2"	1.69	4-18	4.75	3.82	3.15	5.94	0.88	8.00	n/a	B5121E200W-C
2½"	1.81	4-18	5.50	4.45	3.62	6.89	0.88	8.00	n/a	B5121E250W-C
3"	1.81	4-18	6.00	4.92	3.74	7.13	0.88	8.00	n/a	B5121E300W-C
4"	2.50	4-22	7.50	6.14	4.49	7.87	1.00	10.60	n/a	B5121E400W-C
5"	2.20	4-22	8.50	7.36	5.00	8.39	1.00	10.60	n/a	B5121E500W-C
6"	2.20	4-22	9.50	8.46	5.47	8.90	1.00	10.60	n/a	B5121E600W-C
8"	2.36	4-22	11.75	10.51	6.59	10.24	1.25	12.60	n/a	B5121E800W-C
10"	2.68	4-26	14.25	13.00	8.00	11.50	3.21	9.84	8.86	B5121E1000W-G
12"	3.07	4-26	17.00	14.96	9.53	13.27	3.21	11.80	8.86	B5121E1200W-G

All dimensions are in inches, unless noted. Dimensions are approximate.
 Engineering dimensions are available upon request. Specifications are subject to change without notice.

B51 Series **Industrial Butterfly Valves**

Dimensions (lug)

Industrial Valves



Size	A	B	C	D	E	F	G	H	I	Part Number
2"	1.69	4-5/18-11 UNC	4.75	5.95	3.15	5.94	0.88	8.00	n/a	B5121E200L-C
2½"	1.81	4-5/18-11 UNC	5.50	6.97	3.62	6.89	0.88	8.00	n/a	B5121E250L-C
3"	1.81	4-5/18-11 UNC	6.00	7.56	3.74	7.13	0.88	8.00	n/a	B5121E300L-C
4"	2.05	8-5/8-11 UNC	7.50	8.35	4.49	7.87	1.00	10.60	n/a	B5121E400L-C
5"	2.20	8-5/8-11 UNC	8.50	9.53	5.00	8.39	1.00	10.60	n/a	B5121E500L-C
6"	2.20	8-5/8-11 UNC	9.50	11.02	5.47	8.90	1.00	10.60	n/a	B5121E600L-C
8"	2.36	8-5/8-11 UNC	11.75	13.19	6.89	10.24	1.25	12.60	n/a	B5121E800L-C
10"	2.68	12-7/8-9 UNC	14.25	15.94	8.00	11.50	3.21	9.84	8.86	B5121E1000L-G
12"	3.07	12-7/8-9 UNC	17.00	19.09	9.53	13.27	3.21	11.80	8.86	B5121E1200L-G

All dimensions are in inches, unless noted. Dimensions are approximate.
Engineering dimensions are available upon request. Specifications are subject to change without notice.

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Sanitary Gaskets

Technical Information



Materials:

- Nitrile (Buna N)
- Silicone (peroxide cured)
- EPDM
- FKM
- PTFE

Approvals:

- US Pharmacopoeia Class VI Cytotoxicity Criteria
- Title 21CFR177.2600 & .1550
- USDA and 3A Sanitary Standards

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

Color Coding - Identification of Gasket Materials

Elastomer	Part Number Identifier	Color Code	Temperature	
			Farenheit	Celsius
Buna-N	U	1 red dot	-25°F to 225°F	-32°C to 107°C
White Buna-N	UW	1 red dot	-25°F to 225°F	-32°C to 107°C
EPDM peroxide cured	E	3 green dots	-40°F to 275°F	-40°C to 135°C
FKM	SFY	1 white dot & 1 yellow dot	-15°F to 375°F	-26°C to 191°C
Silicone peroxide cured	XW	1 pink dot	-50°F to 400°F	-45°C to 204°C
Silicone peroxide cured	XC	none	-50°F to 400°F	-45°C to 204°C
PTFE	G	none	-10°F to 300°F	-23°C to 149°C
PTFE w/50% 316 particles	GTS	none	-20°F to 450°F	-29°C to 232°C
Metal Detectable Buna	UZ	2 blue dots & 1 red dot	-30°F to 200°F	-34°C to 93°C
Metal Detectable EPDM	EZ	2 blue dots & 3 green dots	-20°F to 300°F	-29°C to 149°C
Metal Detectable Silicone	SFYZ	2 blue dots	-40°F to 450°F	-40°C to 232°C

Packaging and Storing Information

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

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

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

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

Particulate Reference Chart

316 Square Mesh Wire Cloth Information

- special order parts, minimum order quantities required

Mesh	Micron Equivalent	Opening Width	Wire Diameter	Openings per Square Inch
4	5400	.215	.035	16
6	3221	.132	.035	36
8	2441	.097	.028	64
9	2089	.083	.025	81
10	1887	¹ .075	.023	100
12	1510	.050	.023	144
14	1283	² .051	.020	196
16	1082	.0455	.016	256
20	855	.034	.016	400
30	427	.017	.016	900
35	422	.0168	.0118	1275
40	377	.015	.010	1600
50	276	.011	.009	2500
60	226	.009	.0075	3600
80	176	.007	.0055	6400
100	151	³ .006	.0045	10,000
120	120	³ .0048	.0035	14,400
150	103	³ .0041	.0026	22,500
200	73	³ .0029	.0021	40,000



Technical Information

- ¹ standard size for clamp style gaskets
- ² standard size for bevel seat size gaskets
- ³ available in only 1", 1½" and 2" sizes

Perforated 316 Disc Information

- 1 micron = .00003973 inches
- special order - minimums apply

Hole Diameter	Micron Equivalent	Open Area
.020"	503	30%
.033" ¹	803	28%
.063"	1573	23%
.100"	2517	33%
.125"	3146	40%
.250"	6350	58%

- ¹ standard size for clamp style



A Guideline for Compound Selection for Use with Various Fluids and Chemicals

Note: The information contained in these tables was derived from several sources and is to be used as a general guide only. Compounds suitable for any specific application rests solely by the end user. Dixon Sanitary assumes no responsibility. All effect ratings assume static conditions at ambient temperatures.

A - satisfactory

B - fair

C - severe effect; except for some static applications

D - unsatisfactory

E - insufficient information

**Technical
Information**

fluid	material				
	Buna	EPDM	FKM	PTFE	Silicone
Acetaldehyde	D	A	D	A	B
Acetamide	A	A	B	A	B
Acetic Acid, 30%	B	A	B	A	A
Acetone	D	A	D	A	C
Acetophenone	D	A	D	A	D
Acetyl Chloride	D	D	A	A	C
Acetylene	A	A	A	A	B
Acrylonitrile	D	D	C	A	D
Adipic Acid	A	A	E	E	E
Ammonia Gas (cold)	A	A	D	A	A
Ammonium Chloride (aq)	A	A	A	A	E
Ammonium Hydroxide (conc.)	D	A	B	A	A
Ammonium Nitrate (aq)	A	A	E	A	E
Ammonium Nitrite (aq)	A	A	E	E	B
Ammonium Phosphate (aq)	A	A	E	A	A
Ammonium Sulfate (aq)	A	A	D	A	E
Amyl Acetate (Banana Oil)	D	A	D	A	D
Amyl Alcohol	B	A	B	A	D
Amyl Borate	A	D	A	A	E
Arsenic Acid	A	A	A	E	A
Arsenic Trichloride (aq)	A	C	E	E	E
Barium Chloride (aq)	A	A	A	A	A
Barium Hydroxide (aq)	A	A	A	A	A
Barium Sulfate (aq)	A	A	A	A	A
Barium Sulfide (aq)	A	A	A	A	A
Benzaldehyde	D	A	D	A	B
Benzene	D	D	A	A	D
Benzoic Acid	C	C	A	A	C
Benzoyl Chloride	D	D	A	A	E
Benzyl Alcohol	D	A	A	A	B
Benzyl Chloride	D	D	A	A	D
Boric Acid	A	A	A	A	A
Brine	A	A	A	A	A
Bromine, Anhydrous	D	D	A	E	D
Bromine Water	D	B	A	E	D
Butadiene	D	C	A	A	D
Butane	A	D	A	A	D
Butyl Acetate	D	C	D	E	D

fluid	material				
	Buna	EPDM	FKM	PTFE	Silicone
Butyl Acetyl Ricinoleate	C	A	A	E	E
Butyl Alcohol	A	B	A	A	B
Butyl Amine	C	B	D	E	D
Butyl Benzoate	D	B	A	E	E
Butyl Carbitol	D	A	A	A	D
Butyl Cellosolve	D	A	D	A	E
Butyl Oleate	D	B	A	E	E
Butyl Stearate	B	C	A	E	E
Butylene	B	D	A	E	D
Butyraldehyde	D	B	D	E	D
Carbolic Acid (Phenol)	D	B	A	A	D
Carbon Bisulfide	C	D	A	E	D
Carbon Dioxide	A	B	A	E	B
Carbonic Acid	B	A	A	E	A
Carbon Monoxide	A	A	A	A	A
Carbon Tetrachloride	C	D	A	A	D
Castor Oil	A	B	A	A	A
Cellosolve Acetate	D	B	D	A	D
China Wood Oil (Tung Oil)	A	C	A	A	D
Chlorine (wet)	D	C	A	A	D
Chlorine Dioxide	D	C	A	A	E
Chloroacetic Acid	D	A	D	A	E
Chloroacetone	D	A	D	E	D
Chlorobenzene	D	D	A	E	D
Chlorobromomethane	D	B	A	E	D
Chloroform	D	D	A	A	D
Chlorotoluene	D	D	A	E	D
Chrome Plating Solutions	D	C	A	A	C
Chromic Acid	D	B	A	A	B
Cod Liver Oil	A	A	A	A	B
Copper Acetate (aq)	B	A	D	E	D
Copper Chloride (aq)	A	A	A	A	A
Copper Cyanide (aq)	A	A	A	A	A
Copper Sulfate (aq)	A	A	A	A	A
Creosote (coal tar)	A	D	A	A	D
Cresylic Acid	D	D	A	E	D
Cyclohexane	A	D	A	A	D
Cyclohexanol	C	C	A	E	D

fluid	material				
	Buna	EPDM	FKM	PTFE	Silicone
Cyclohexanone	D	B	D	E	D
Denatured Alcohol	A	A	A	A	A
Detergent Solutions	A	A	A	A	A
Diacetone Alcohol	D	A	D	A	B
Dibenzyl Ether	D	B	D	A	E
Dibenzyl Sebecate	D	B	B	E	C
Dibromoethyl Benzene (Alkazene)	D	D	B	E	D
Dibutyl Amine	D	C	D	E	C
Dibutyl Ether	D	C	C	E	D
Dibutyl Phthalate	D	B	C	A	B
Dibutyl Sebecate	D	B	B	E	B
O-Dichlorobenzene	D	D	A	E	D
Dichloro-Isopropyl Ether	D	C	C	E	D
Diethylamine	B	B	D	A	B
Diethyl Benzene	D	D	A	E	D
Diethyl Ether	D	D	D	E	D
Diethylene Glycol	A	A	A	E	B
Diethyl Sebecate	B	B	B	E	B
Diisobutylene	B	D	A	E	D
Diisopropyl Benzene	D	D	A	E	E
Diisopropyl Ketone	D	A	D	E	D
Diisopropylidene Acetone	D	C	D	E	D
Dimethyl Aniline (Xylidine)	C	B	D	E	D
Dimethyl Ether (Methyl Ether)	A	D	A	E	A
Dimethyl Formamide	B	B	D	E	B
Dimethyl Phthalate	D	B	B	E	E
Dinitrotoluene	D	D	D	E	D
Diocetyl Phthalate	C	B	B	E	C
Diocetyl Sebecate	D	B	B	E	C
Dioxane	D	B	D	E	D
Dioxolane	D	B	D	E	D
Dipentene	A	D	A	E	D
Diphenyl (Phenylbenzene)	D	D	A	E	D
Diphenyl Oxides	D	D	A	E	C
Dowtherm Oil	D	D	A	A	C
Ethane	A	D	A	A	D
Ethanolamine	B	B	D	E	B
Ethyl Acetate	D	B	D	E	B
Ethyl Acetoacetate	D	B	D	E	B
Ethyl Acrylate	D	B	D	E	B
Ethyl Alcohol	A	A	C	A	A
Ethyl Benzene	D	D	A	A	D
Ethyl Benzoate	D	A	A	A	D
Ethyl Cellosolve	D	B	D	E	D
Ethyl Cellulose	B	B	D	A	C
Ethyl Chloride	A	C	A	A	D

fluid	material				
	Buna	EPDM	FKM	PTFE	Silicone
Ethyl Chlorocarbonate	D	B	A	A	D
Ethyl Chloroformate	D	B	D	E	D
Ethyl Ether	C	C	D	A	D
Ethyl Pentachlorobenzene	D	D	A	A	D
Ethylene	A	B	A	A	E
Ethylene Chloride	D	C	B	E	D
Ethylene Diamine	A	A	D	E	A
Ethylene Dichloride	D	C	A	A	D
Ethylene Glycol	A	A	A	A	A
Fluoroboric Acid	A	A	E	E	E
Freon 11	B	D	A	A	D
Freon 12	A	B	B	A	D
Freon 22	D	A	D	A	D
Fumaric Acid	A	B	A	E	B
Gallic Acid	B	B	A	A	E
Gasoline	B	D	A	A	D
Glucose	A	A	A	A	A
Glycerin	A	A	A	A	A
Hexane	A	D	A	A	D
Hexyl Alcohol	A	C	A	A	B
Hydrazine	B	A	D	A	C
Hydrobromic Acid	D	A	A	E	D
Hydrocyanic Acid	B	A	A	A	C
Hydrofluoric Acid (conc.) cold	D	C	A	A	D
Hydrofluosilicic Acid	B	B	A	E	D
Hydrogen Gas	A	A	A	A	C
Hydrogen Peroxide (90%)	D	B	B	E	B
Hydrogen Sulfide (wet) cold	D	A	D	E	C
Hydroquinone	C	B	B	A	E
Iodoform	E	D	E	E	E
Isobutyl Alcohol	B	A	A	A	A
Isooctane	A	D	A	E	D
Isopropyl Acetate	D	B	D	A	D
Isopropyl Alcohol	B	A	A	A	A
Isopropyl Chloride	D	D	A	A	D
Isopropyl Ether	B	D	D	A	D
Kerosene	A	D	A	A	D
Lacquers	D	D	D	A	D
Lactic Acid (cold)	A	A	A	A	A
Lead Acetate (aq)	B	A	D	E	D
Lead Nitrite (aq)	A	A	E	E	B
Lime Bleach	A	A	A	E	B
Linoleic Acid	B	D	B	A	B
Maleic Acid	D	B	A	A	E
Malic Acid	A	B	A	E	B
Methane	A	D	B	A	D
Methyl Acetate	D	A	D	A	D



fluid	material				
	Buna	EPDM	FKM	PTFE	Silicone
Methyl Acrylate	D	B	D	A	D
Methylacrylic Acid	D	B	D	E	D
Methyl Alcohol	A	A	D	A	A
Methyl Bromide	B	D	A	A	E
Methyl Butyl Ketone	D	A	D	A	C
Methyl Cellosioive	C	B	D	A	D
Methyl Chloride	D	C	B	A	D
Methyl Cyclopentane	D	D	B	E	D
Methylene Chloride	D	C	B	E	D
Methyl Ether	A	D	A	A	A
Methyl Ethyl Ketone	D	A	D	A	D
Methyl Isobutyl Ketone	D	B	D	A	D
Methyl Methacrylate	D	C	D	A	D
Milk	A	A	A	A	A
Mineral Oil	A	C	A	C	B
Monoethanol Amine	D	A	D	E	B
Monomethyl Ether	A	D	A	E	A
Monovinyl Acetylene	A	A	A	A	B
Mustard Gas	E	A	E	E	A
Naphthalenic Acid	B	D	A	A	D
Natural Gas	A	D	A	A	A
Nickel Acetate (aq)	B	A	D	E	D
Nickel Chloride (aq)	A	A	A	A	A
Nickel Sulfate (aq)	A	A	A	A	A
Nitric Acid (dilute)	D	B	A	A	B
Nitrobenzene (Ligroin)	A	D	A	A	D
Nitroethane	D	B	D	A	D
Nitrogen Tetroxide	D	C	D	A	D
Octachlorotoluene	D	D	A	E	D
Octadecane	A	D	A	E	D
N-Octane	B	D	A	A	D
Octyl Alcohol	B	C	A	A	B
Oleic Acid	C	D	B	A	D
Oxalic Acid	B	A	A	E	B
Oxonia	D	A	A	E	A
Oxygen - Cold	B	A	A	A	A
Ozone	D	A	A	E	A
Palmitic Acid	A	B	A	E	D
Perchloric Acid	D	B	A	E	D
Phenyl Ethyl Ether	D	D	D	E	D
Phosphoric Acid - 20%	B	A	A	E	B
Phosphorus Trichloride	D	A	A	A	E
Piperidine	D	A	D	E	D
Polyvinyl Acetate Emulsion	E	A	E	E	E
Potassium Acetate (aq)	B	A	D	E	D
Potassium Chloride (aq)	A	A	A	A	A
Potassium Cyanide (aq)	A	A	A	A	A

fluid	material				
	Buna	EPDM	FKM	PTFE	Silicone
Potassium Nitrate (aq)	A	A	A	A	A
i-Propyl Acetate	D	B	D	E	D
Propyl Nitrate	D	B	D	E	D
Propylene	D	D	A	A	D
Pyridine	D	B	D	E	D
Salicylic Acid	B	A	A	E	E
Silicone Oils	A	A	A	A	C
Soap Solutions	A	A	A	A	A
Sodium Acetate (aq)	B	A	D	E	D
Sodium Bicarbonate (aq)	A	A	A	A	A
Sodium Borate (aq)	A	A	A	A	A
Sodium Chloride (aq)	A	A	A	A	A
Sodium Hydroxide (aq)	B	A	B	A	B
Sodium Nitrate (aq)	B	A	E	E	D
Sodium Peroxide (aq)	B	A	A	E	D
Soybean Oil	A	C	A	A	A
Steam, under 300°F	D	A	D	A	C
Stearic Acid	B	B	E	A	B
Stoddard Solvent	A	D	A	A	D
Sulfur Chloride (aq)	C	D	A	B	C
Sulfuric Acid (dilute)	C	B	A	E	D
Sulfurous Acid	B	B	A	A	D
Tannic Acid	A	A	A	A	B
Tartaric Acid	A	B	A	A	A
Tetrachloroethylene	D	D	A	A	D
Toluene	D	D	A	A	D
Triethanol Amine	B	A	D	A	E
Trioctyl Phosphate	D	A	B	E	C
Tung Oil (China Wood Oil)	A	C	A	A	D
Turpentine	A	D	A	A	D
Vegetable Oils	A	C	A	A	B
Vinegar	B	A	A	A	A
Whiskey, Wines	A	A	A	A	A
White Pine Oil	B	D	A	E	D
Zinc Chloride (aq)	A	A	A	A	A

Fraction - Decimal Conversion Chart

	<u>Inches</u>	<u>Millimeters</u>		<u>Inches</u>	<u>Millimeters</u>
$\frac{1}{32}$	$\frac{1}{64}$.015625	.3969	$\frac{17}{32}$	$\frac{33}{64}$.515625	13.0969
$\frac{1}{16}$	$\frac{3}{64}$.046875	1.1906	$\frac{9}{16}$	$\frac{35}{64}$.546875	13.8907
$\frac{3}{32}$	$\frac{5}{64}$.078125	1.9844	$\frac{19}{32}$	$\frac{37}{64}$.578125	14.6844
$\frac{1}{8}$	$\frac{7}{64}$.109375	2.7781	$\frac{5}{8}$	$\frac{39}{64}$.609375	15.4782
$\frac{5}{32}$	$\frac{9}{64}$.140625	3.5719	$\frac{21}{32}$	$\frac{41}{64}$.640625	16.2719
$\frac{3}{16}$	$\frac{11}{64}$.171875	4.3656	$\frac{11}{16}$	$\frac{43}{64}$.671875	17.0657
$\frac{7}{32}$	$\frac{13}{64}$.203125	5.1594	$\frac{23}{32}$	$\frac{45}{64}$.703125	17.8594
$\frac{1}{4}$	$\frac{15}{64}$.234375	5.9531	$\frac{3}{4}$	$\frac{47}{64}$.734375	18.6532
$\frac{9}{32}$	$\frac{17}{64}$.265625	6.7469	$\frac{25}{32}$	$\frac{49}{64}$.765625	19.4470
$\frac{5}{16}$	$\frac{19}{64}$.296875	7.5406	$\frac{13}{16}$	$\frac{51}{64}$.796875	20.2407
$\frac{11}{32}$	$\frac{21}{64}$.328125	8.3344	$\frac{27}{32}$	$\frac{53}{64}$.828125	21.0345
$\frac{3}{8}$	$\frac{23}{64}$.359375	9.1282	$\frac{7}{8}$	$\frac{55}{64}$.859375	21.8282
$\frac{13}{32}$	$\frac{25}{64}$.390625	9.9219	$\frac{29}{32}$	$\frac{57}{64}$.890625	22.6220
$\frac{7}{16}$	$\frac{27}{64}$.421875	10.7157	$\frac{15}{16}$	$\frac{59}{64}$.921875	23.4157
$\frac{15}{32}$	$\frac{29}{64}$.453125	11.5094	$\frac{31}{32}$	$\frac{61}{64}$.953125	24.2095
$\frac{1}{2}$	$\frac{31}{64}$.484375	12.3032	$\frac{1}{2}$	$\frac{63}{64}$.984375	25.0032

Technical Information

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Temperature Conversions

Look up reading in middle column (shaded). If in degrees Centigrade, read Fahrenheit equivalent in right-hand column; if in degrees Fahrenheit, read Centigrade equivalent in left-hand column.

Technical Information

°C	°F	°C	°F
-73	-100	-148	
-68	-90	-130	
-62	-80	-112	
-57	-70	-94	
-51	-60	-76	
-46	-50	-58	
-40	-40	-40	
-34	-30	-22	
-29	-20	-4	
-23	-10	14	
-17.8	0	32	
-17.2	1	33.8	
-16.7	2	35.6	
-16.1	3	37.4	
-15.6	4	39.2	
-15.0	5	41.0	
-14.4	6	42.8	
-13.9	7	44.6	
-13.3	8	46.4	
-12.8	9	48.2	
-12.2	10	50.0	
-11.7	11	51.8	
-11.1	12	53.6	
-10.6	13	55.4	
-10.0	14	57.2	
-9.4	15	59.0	
-8.9	16	60.8	
-8.3	17	62.6	
-7.8	18	64.4	
-7.2	19	66.2	
-6.7	20	68.0	
-6.1	21	69.8	
-5.6	22	71.6	
-5.0	23	73.4	
-4.4	24	75.2	
-3.9	25	77.0	
-3.3	26	78.8	
-2.8	27	80.6	
-2.2	28	82.4	
-1.7	29	84.2	
-1.1	30	86.0	
-.6	31	87.8	
0	32	89.6	
.6	33	91.4	
1.1	34	93.2	
1.7	35	95.0	
2.2	36	96.8	
2.8	37	98.6	
3.3	38	100.4	
3.9	39	102.2	
4.4	40	104.0	

°C	°F	°C	°F
5.0	41	105.8	
5.6	42	107.6	
6.1	43	109.4	
6.7	44	111.2	
7.2	45	113.0	
7.8	46	114.8	
8.3	47	116.6	
8.9	48	118.4	
9.4	49	120.2	
10.0	50	122.0	
10.6	51	123.8	
11.1	52	125.6	
11.7	53	127.4	
12.2	54	129.2	
12.8	55	131.0	
13.3	56	132.8	
13.9	57	134.6	
14.4	58	136.4	
15.0	59	138.2	
15.6	60	140.0	
16.1	61	141.8	
16.7	62	143.6	
17.2	63	145.4	
17.8	64	147.2	
18.3	65	149.0	
18.9	66	150.8	
19.4	67	152.6	
20.0	68	154.4	
20.6	69	156.2	
21.1	70	158.0	
21.7	71	159.8	
22.2	72	161.6	
22.8	73	163.4	
23.3	74	165.2	
23.9	75	167.0	
24.4	76	168.8	
25.0	77	170.6	
25.6	78	172.4	
26.1	79	174.2	
26.7	80	176.0	
27.2	81	177.8	
27.8	82	179.6	
28.3	83	181.4	
28.9	84	183.2	
29.4	85	185.0	
30.0	86	186.8	
30.6	87	188.6	
31.1	88	190.4	
31.7	89	192.2	
32.2	90	194.0	
32.8	91	195.8	

°C	°F	°C	°F
33.3	92	197.6	
33.9	93	199.4	
34.4	94	201.2	
35.0	95	203.0	
35.6	96	204.8	
36.1	97	206.6	
36.7	98	208.4	
37.2	99	210.2	
37.8	100	212.0	
43	110	230	
49	120	248	
54	130	266	
60	140	284	
66	150	302	
71	160	320	
77	170	338	
82	180	356	
88	190	374	
93	200	392	
99	210	410	
100	212	413.6	
104	220	428	
110	230	446	
116	240	464	
121	250	482	
127	260	500	
132	270	518	
138	280	536	
143	290	554	
149	300	572	
154	310	590	
160	320	608	
166	320	626	
170	338	640	
171	340	644	
177	350	662	
182	360	680	
186	366	691	
188	370	698	
193	380	716	
198	388	730	
199	390	734	
204	400	752	
208	406	763	
210	410	770	
216	420	788	
221	430	806	
227	440	824	
232	450	842	



Water Data and Formulas

1 gallon water = 231 cubic inches = 8.333 pounds

1 pound of water = 27.7 cubic inches

1 cubic foot water = 7.5 gallons = 62.5 pounds (salt water weighs approximately 64.3 pounds per cubic foot)

Pounds per square inch at bottom of a column of water = height of column in feet x .434

Horsepower to Raise Water

If pumping liquid other than water, multiply the gallons per minute below by the liquids specific gravity

$$\text{Horsepower} = \frac{\text{gallons per minute} \times \text{total head in feet}}{3960}$$

Gallons Per Minute through a Pipe

GPM = .0408 x pipe diameter inches² x feet/minute water velocity

Weight of Water in a Pipe

Pounds water = pipe length feet x pipe diameter inches² x .34

(no losses included)

Water Level (inches)	Gallons per Minute Discharge for a Given Nominal Pipe Diameter (inches)				
	5	6	8	10	12
5	163	---	---	---	---
6	195	285	---	---	---
7	228	334	580	---	---
8	260	380	665	1060	---
9	293	430	750	1190	1660
10	326	476	830	1330	1850
11	360	525	915	1460	2020
12	390	570	1000	1600	2220
13	425	620	1080	1730	2400
14	456	670	1160	1860	2590
15	490	710	1250	2000	2780
16	520	760	1330	2120	2960
17	550	810	1410	2260	3140
18	590	860	1500	2390	3330
19	620	910	1580	2520	3500
20	650	950	1660	2660	3700
21	685	1000	1750	2800	3890
22	720	1050	1830	2920	4060
23	750	1100	1910	3060	4250
24	---	1140	2000	3200	4440

Technical Information

Measurement Information

Measures of Pressure

1 Pound Per Square Inch = 144 Pounds Per Square Foot = 0.068 Atmosphere = 2.042 Inches of Mercury at 62°F (17°C) = 27.7 Inches of Water at 62°F (17°C) = 2.31 Feet of Water at 62°F (17°C).

1 Atmosphere = 30 Inches of Mercury at 62°F (17°C) = 14.7 Pounds Per Square Inch = 2116.3 Pounds Per Square Foot = 33.95 Feet of Water at 62°F (17°C).

1 Foot of Water at 62°F (17°C) = 62.355 Pounds Per Square Foot = 0.433 Pounds Per Square Inch.

1 Inch of Mercury at 62°F (17°C) = 1.132 Feet of Water = 13.58 Inches of Water = 0.491 Pounds Per Square Inch.

Column of Water 12 Inches High, 1 Inch in Diameter = .341 Pounds

Length Conversion Constants

Millimeters x .039370 = Inches

Meters x 39.370 = Inches

Meters x 3.2808 = Feet

Meters x 1.09361 = Yards

Kilometers x 3,280.8 = Feet

Kilometers x .62137 = Statute Mile

Kilometers x .53959 = Nautical Miles

Inches x 25.4001 = Millimeters

Inches x .0254 = Meters

Feet x .30480 = Meters

Yards x .91440 = Meters

Feet x .0003048 = Kilometers

Statute Miles x 1.60935 = Kilometers

Nautical Miles x 1.85325 = Kilometers

Weight Conversion Constants

Grams x .03527 = Ounces (Avd.)

Grams x .033818 = Fluid Ounces (Water)

Kilograms x 35.27 = Ounces (Avd.)

Kilograms x 2.20462 = Pounds (Avd.)

Ounces (Avd.) x 28.35 = Grams

Fluid Ounces (Water) x 29.57 = Grams

Ounces (Avd.) x .02835 = Kilograms

Pounds (Avd.) x .45359 = Kilograms

Identifying Threads

It is important to identify the threads required before ordering couplings.

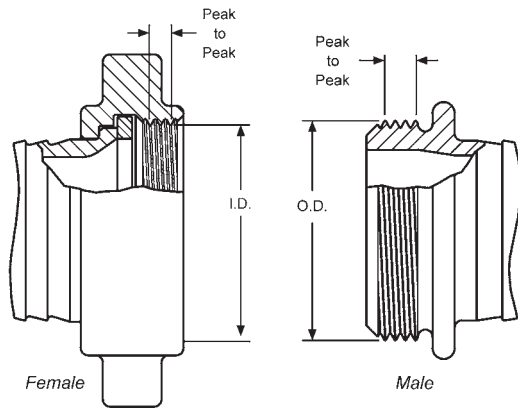
Identifying threads can sometimes be the most difficult and frustrating part of coupling selection. However, without the right combination of threads, you may not provide a functional or safe connection.

The diameters, threads per inch (TPI) and thread pitch, etc. are necessary to completely identify a thread. Ring, Plug and GO/NOGO gauges are required to accurately gauge or identify threads. In the field, in the absence of these gauges, thread leaf gauges can be used to identify the Threads Per Inch (TPI) and the thread pitch. On threads you have determined to be straight threads, a caliper can be used to measure the Outside Diameter of the Male (ODM) or the Inside Diameter of the Female (IDF). A caliper can also be used to take measurements of tapered thread diameters. However, these are more difficult to define because of the taper. Fortunately, there are few tapered threads to deal with and these can usually be identified from the nominal ODM and the TPI.

However, identifying the thread may not fully identify what is needed in a mating fitting. The application is the primary *limiting factor on the thread type used*. Dixon® offers products with a wide variety of threads used with hose, pipe and hydraulics.

When attempting to choose a fitting, it is always advisable to first identify the thread to which it must connect. This may entail checking with a fitting or equipment manufacturer.

Straight Thread



When it is not possible to identify the thread:

- 1) Determine the number of threads per inch by measuring the distance from peak of thread to peak of thread across the largest number of whole threads. Then divide the number of threads by the measurement
(This will provide the TPI).

- 2) Check to see if the thread is straight or tapered or flat thread.

a) Straight Threads

Measure the Outside Diameter of the Male (ODM) or the Inside Diameter of the Female (IDF), from peak of thread to peak of thread.

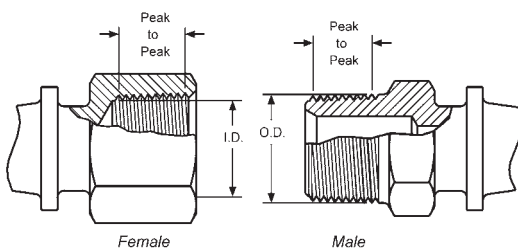
b) Tapered Threads

Measure the Outside Diameter of the Male (ODM) at the large end and the small end, or the Inside Diameter of the Female (IDF) at the large end and the small end, from peak of thread to peak of thread. Then measure the Outside Diameter (OD) of the unthreaded pipe.

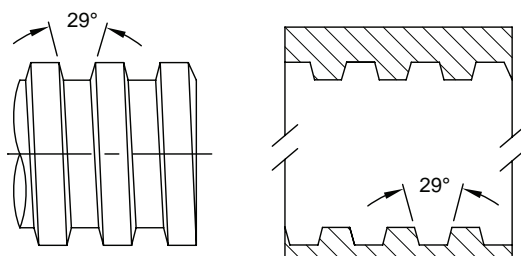
c) Flat (ACME) Threads

Acme threads are used for bevel seat and John Perry fittings in sanitary installations. Sizes 1" to 3" (tube size) have 8 threads per (TPI) and the 4" has 6 TPI. There is not a sharp point on this thread and it is a straight thread. The tops of the threads are flat and there is typically a 29° included angle between the threads. Measure the outside diameter of the male (OD) or inside diameter of the female (ID)

Tapered Thread



ACME Thread



Once the application and these two pieces of information have been determined, the thread can generally be determined. When in doubt, contact Dixon® 800.355.1991.

Identifying Threads

Thread Dimensions

Size	Pipe OD	Tapered Threads		Straight Threads		
		NPT	BSPT _r	Acme 3A		
		TPI	TPI	TPI	ODM (max)	IDF (min)
1/8"	0.405	27	28			
1/4"	0.504	18	19			
3/8"	0.675	18	19			
1/2"	0.840	14	14			
3/4"	1.050	14	14			
1"	1.315	11.5	11	8	1.462	1.352
1 1/4"	1.660	11.5	11			
1 1/2"	1.900	11.5	11	8	1.994	1.884
2"	2.375	11.5	11	8	2.526	2.416
2 1/2"	2.875	8	11	8	3.058	2.948
3"	3.500	8	11	8	3.590	3.480
4"	4.500	8	11	6	4.695	4.544
5"	5.563	8	11			
6"	6.625	8	11			
8"	8.625	8				
10"	10.750	8				
12"	12.750	8				

ODM -- Outside Diameter of the Male

IDF -- Inside Diameter of the Female

TPI -- Threads Per Inch

GHT (3/4") -- 1.0625 ODM
1 1/2 TPI

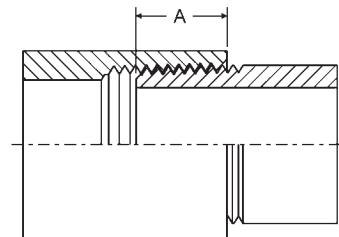
NPT = National Pipe Taper

BS = British Standard

Technical Information

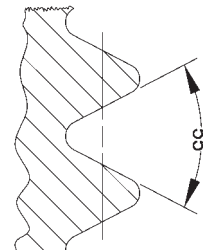
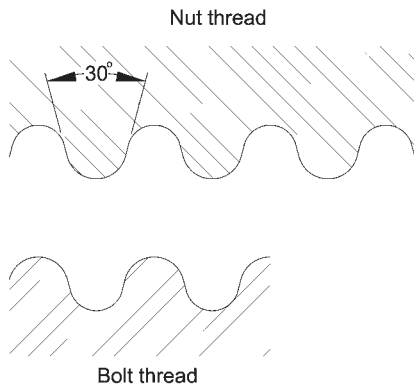
Normal Engagement Length of NPT Thread in Inches (A) *

Pipe Size	A	Pipe Size	A
1/8"	1/4"	2"	3/4"
1/4"	3/8"	2 1/2"	15/16"
3/8"	3/8"	3"	1"
1/2"	1/2"	4"	1 1/8"
3/4"	9/16"	5"	1 1/4"
1"	11/16"	6"	1 5/16"
1 1/4"	1 1/16"	8"	1 7/16"
1 1/2"	1 1/16"	10"	1 5/8"
		12"	1 3/4"



* Dimensions given do not allow for variations in tapping or threading.

DIN and RJT Threads



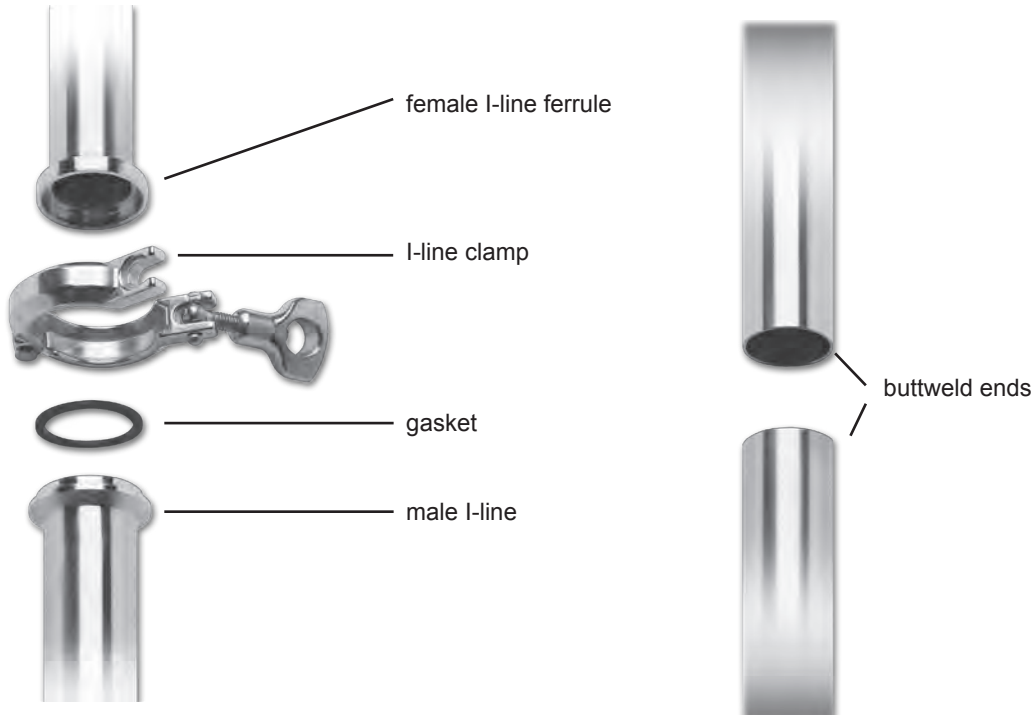
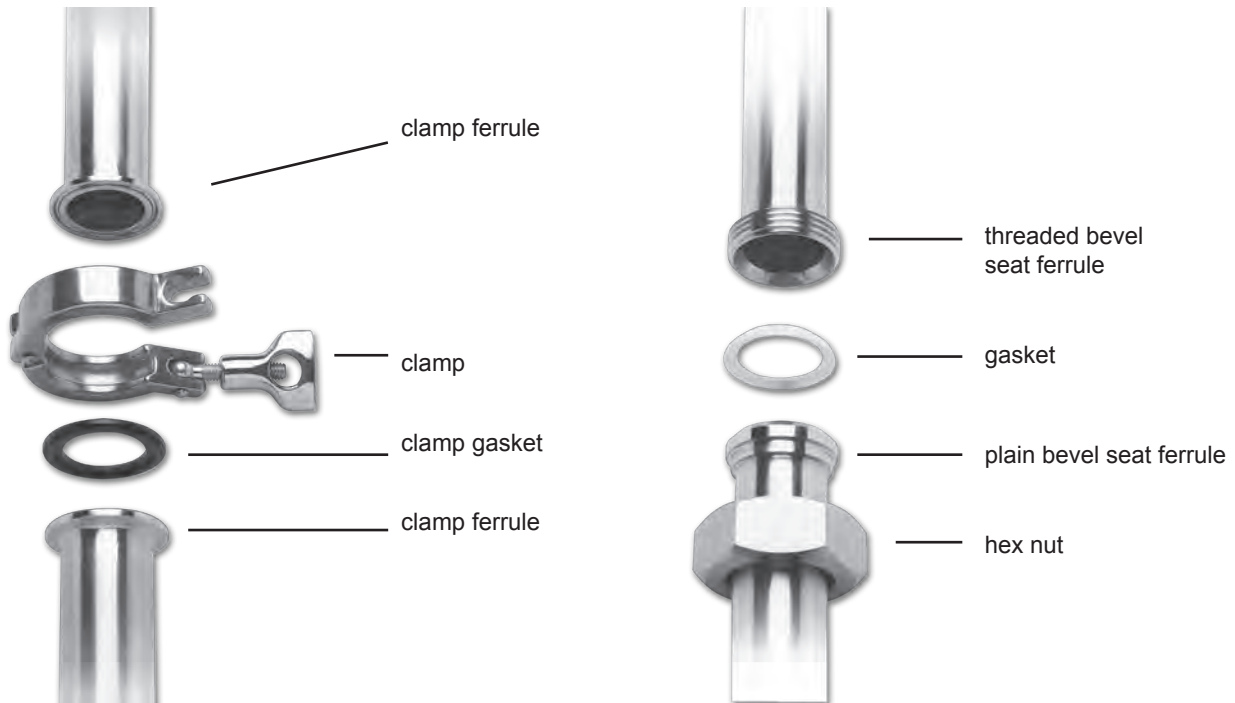
DIN knuckle threads for sanitary applications have a unique round shape making them easy to identify. There is a 30° included angle between the threads. There are 6 to 8 threads per inch for sanitary fittings. Measuring the ID of the round nut or the OD of the threads on the weld liner will help with identification. As Dixon Sanitary will be offering inch sizes, the

The threads for RJT fittings are British Standard Whitworth. These look similar to straight threads but have a 55° angle and small radii on the tips rather than the flat tips and 60° angle found on U.S. standard straight threads. There are 6 to 8 threads per inch for the sanitary fittings.



Identifying Fittings

Technical Information



NOTE: Clamp type connections are the most popular and are sometimes referred to as Tri-Clamp connections. All connections are Tube OD 1/2" to 12" Materials are available in 304 and 316L stainless steel, (other alloys can be special order)

Part Number Descriptions

- 2 = Elbow (unpolished, polished, clamp, 90°, 45°, U-bend, sweep, etc.)
- 7 = Tee (unpolished, polished, clamp, reducing, etc.)
- 9 = Cross (unpolished, polished, clamp, reducing, etc.)
- 13 = Clamp (single pin, squeeze, double pin, 3 segment, bolted, I-line, lightweight, etc.)
- 14 = Ferrule (short, long, auto weld, tank, roll on, hose adapter, male I-line, plain bevel seat/ John Perry)
- 15 = Ferrule (bevel seat threaded or I-line female)
- 16 = End Cap (clamp, weld, I-line, bevel, etc.)
- 17 = Adapter ((bevel to clamp, I-line to clamp, etc.)
- 19 = Adapter (tube O.D. to national pipe thread)
- 21 = Male Adapter (bevel, clamp, I-line to male pipe thread)
- 22 = Female Adapter (bevel, clamp, I-line to female pipe thread)
- 23 = Thermometer (bevel, clamp, I-line, etc.)
- 24 = Hanger (hex, round, etc.)
- 28 = Y or lateral (unpolished, polished, clamp, reducing, etc.)
- 31 = Concentric Reducer (unpolished, polished, clamp, etc.)
- 32 = Eccentric Reducer (unpolished, polished, clamp, etc.)
- 38 = Flange
- 40 = Gaskets (1" and above)
- 42 = Gaskets (½" and ¾")
- 45 = Check Valve (spring, ball, air blow)
- 51 = Butterfly Valve
- 54 = Sight Glass
- RG = Hex tube hanger with rubber grommets
- RGC = Hex tube hanger with rubber grommets and coupler
- PS = Hex tube hanger with ABS sleeves
- PSC = Hex tube hanger with ABS sleeves and coupler
- RPH = Round tube hanger with Buna inserts
- RPHC= Round tube hanger with Buna inserts and coupler

Technical Information

Fittings Ordering Information

Material Designation:

- G - 304
- R - 316L

Sizes:

- | | |
|-----------|------------|
| ½" = 050 | 3" = 300 |
| ¾" = 075 | 4" = 400 |
| 1" = 100 | 6" = 600 |
| 1½" = 150 | 8" = 800 |
| 2" = 200 | 10" = 1000 |
| 2½" = 250 | 12" = 1200 |

Ordering Example:

B 3 1 1 4 M P - G 1 5 0 1 0 0

Description:

Concentric reducer with clamp ends in 304 material 1½" by 1"

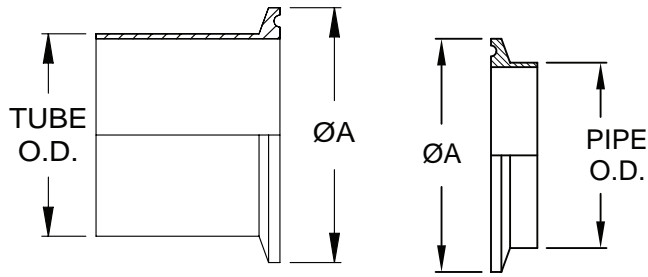


Identifying Fittings

Clamp Ferrules

Technical Information Specifications:

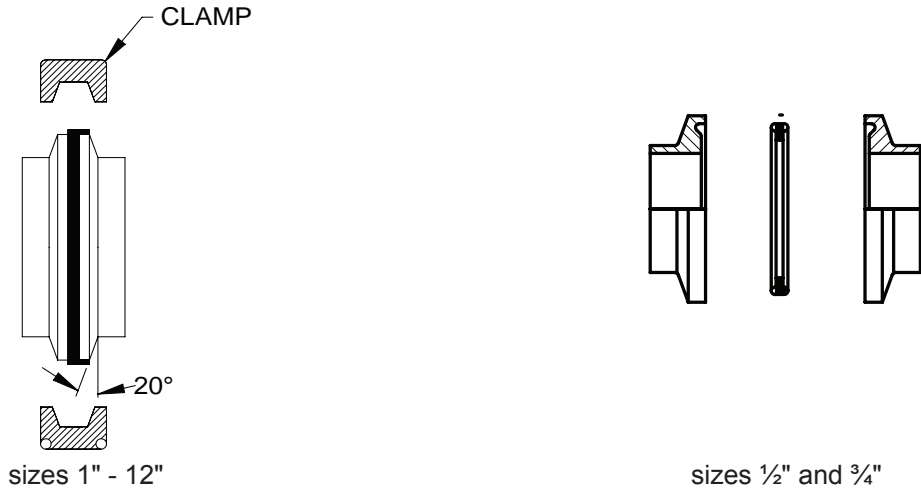
- ASME BPE
- BS 4825
- ISO 2852
- DIN 32676



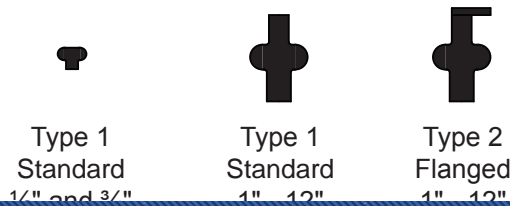
Note: flanges are symmetrical

Tube		Pipe		
Tube OD (inches)	ØA	Pipe Size (inches)	Pipe OD (inches)	ØA
1/2	0.992	1	1.315	1.984
3/4	0.992	1 1/4	1.660	2.516
1	1.988	1 1/2	1.900	2.516
1 1/2	1.988	2	2.375	3.047
2	2.520	2 1/2	2.875	3.579
2 1/2	3.051	3	3.500	4.125
3	3.583	4	4.500	5.125
4	4.685	6	6.625	7.195
5	5.687	8	8.625	9.200
6	6.570			
8	8.602			
10	10.570			
12	12.570			

Clamp Connection

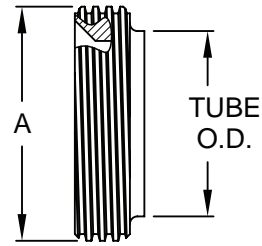
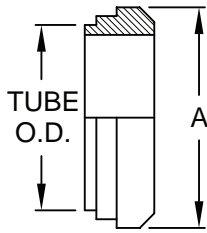


Gaskets



Identifying Fittings

Bevel Seat Ferrules



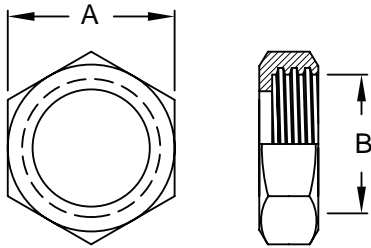
Plain

Threaded

Tube OD (inches)	ØA
1	1.312
1½	1.848
2	2.380
2½	2.912
3	3.444
4	4.508

Tube OD (inches)	ØA
1	1.462
1½	1.994
2	2.526
2½	3.058
3	3.590
4	4.695

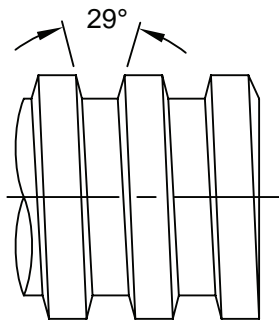
13H Hex Nuts



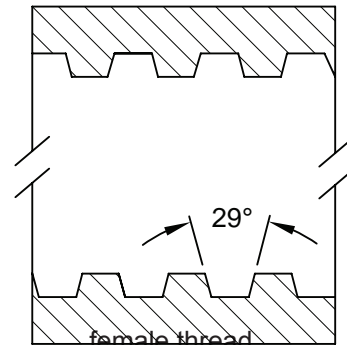
Nut

Tube OD (inches)	A Across Flats	B Thread ID	Threads per inch
1	1.812	1.362	8
1½	2.406	1.894	8
2	3.000	2.426	8
2½	3.594	2.958	8
3	4.188	3.490	8
4	5.438	4.554	6

Acme Thread Form



male thread



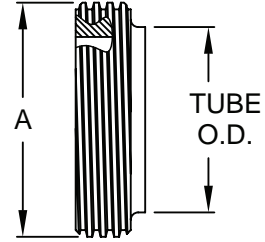
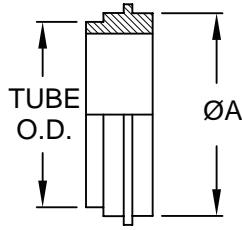
female thread

Gasket

Identifying Fittings

John Perry Ferrules

Technical Information



Plain

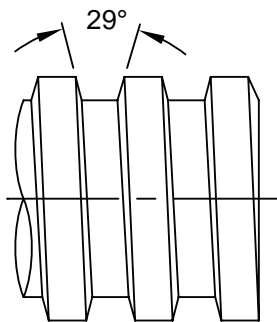
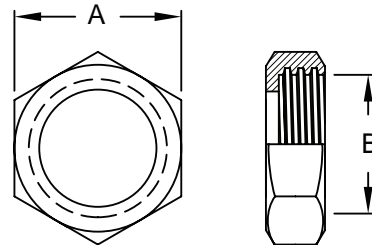
Tube OD (inches)	ØA
1	1.125
1½	1.656
2	2.187
2½	2.656
3	3.187
4	4.187

Threaded

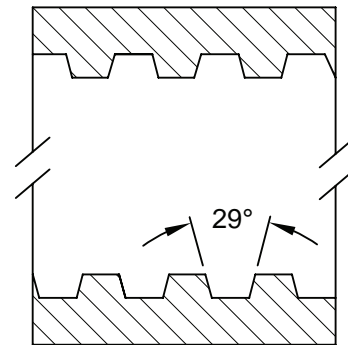
Tube OD (inches)	ØA
1	1.462
1½	1.994
2	2.526
2½	3.058
3	3.590
4	4.695

13H Hex Nuts

Tube OD (inches)	A Across Flats	B Thread ID	B Thread ID
1	1.812	1.362	8
1½	2.406	1.894	8
2	3.000	2.426	8
2½	3.594	2.958	8
3	4.188	3.490	8
4	5.438	4.554	6



male thread

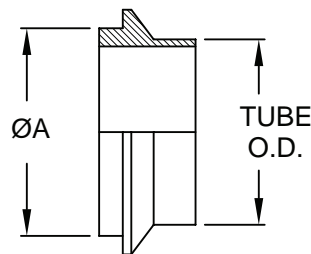
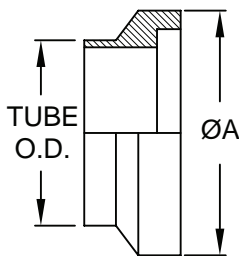


female thread

Gasket

Identifying Fittings

I-line Ferrules



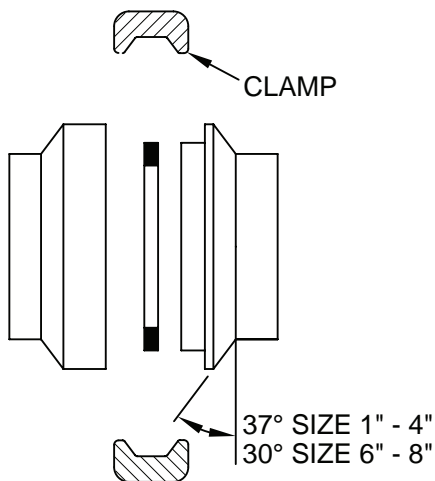
Female

Tube OD (inches)	ØA
1	1.985
1½	1.985
2	2.640
2½	3.307
3	3.870
4	4.870
6	7.495
8	9.945

Male

Tube OD (inches)	ØA
1	1.250
1½	1.740
2	2.240
2½	2.740
3	3.300
4	4.297
6	6.830
8	8.830

Clamp Connection



Gasket

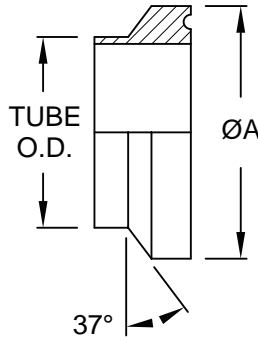


Identifying Fittings

Q-line Ferrules

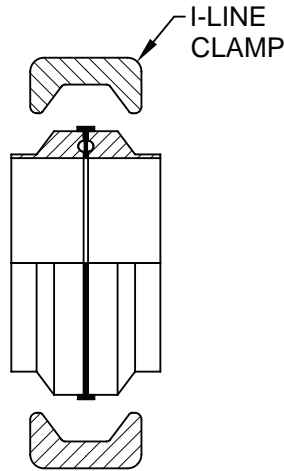
both halves of a jointed connection are symmetrical

Technical Information



Tube OD (inches)	ØA
1	1.985
1½	1.985
2	2.640
2½	3.307
3	3.870
4	4.870

Clamp Connection



Gasket



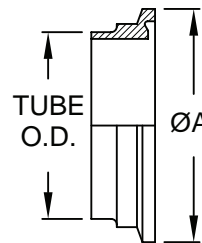
Identifying Fittings

APC Clamped Ferrules

both halves of a jointed connection are symmetrical

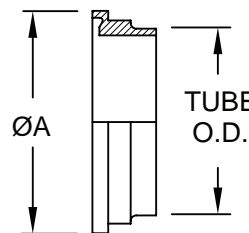
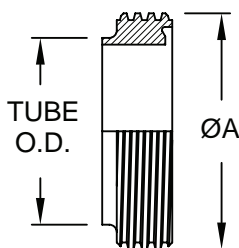
clamp ferrule

Tube OD (inches)	ØA
1	1.98
1½	1.98
2	2.52
2½	3.05
3	3.58
4	4.68



Technical Information

APC Threaded Ferrules



threaded ferrule

Tube OD (inches)	ØA
1	1.462
1½	1.994
2	2.526
2½	3.058
3	3.590
4	4.695

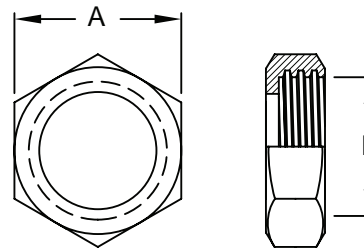
plain ferrule

Tube OD (inches)	ØA
1	1.312
1½	1.848
2	2.380
2½	2.912
3	3.444
4	4.508

13H Hex Nuts

Nut

Tube OD (inches)	A Across Flats	B Thread ID	Threads per inch
1	1.812	1.362	8
1½	2.406	1.894	8
2	3.000	2.426	8
2½	3.594	2.958	8
3	4.188	3.490	8
4	5.438	4.554	6



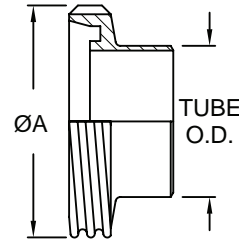
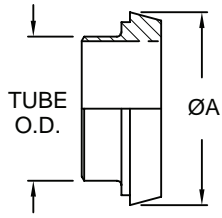
Gasket



Identifying Fittings

Technical Information

DIN 11851 Ferrules



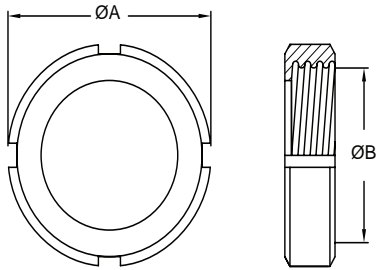
Liners

Tube OD (inches)	ØA
1	1.73
1½	2.20
2	2.68
2½	3.39
3	3.94
4	4.76

Males

Tube OD (inches)	ØA
1	2.04
1½	2.56
2	3.07
2½	3.74
3	4.31
4	5.10

DIN Round Nuts

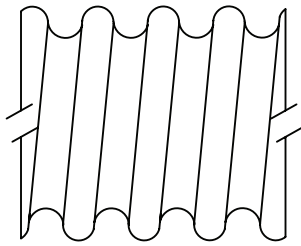


Nut

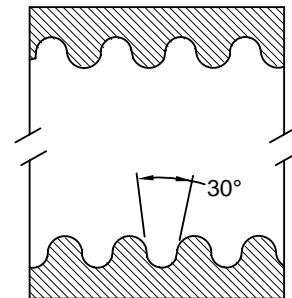
Tube OD (inches)	DN	ØA	B Thread ID	Threads per inch
1	25	2.48	1.88	6
1½	40	3.07	2.39	6
2	50	3.62	2.90	6
2½	65	4.41	3.49	6
3	80	5.00	4.14	4
4	100	5.83	4.94	4

Note: nuts 3" and larger will have 6 slots

DIN Thread Form



male thread



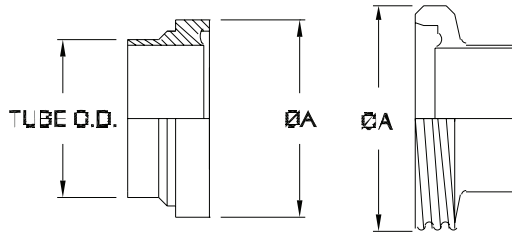
female thread

Gasket



Identifying Fittings

DIN 11864-1 Ferrules



Weld Liner

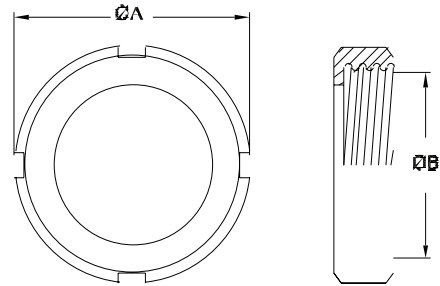
Tube OD (inches)	ØA
1	1.69
1½	2.18
2	2.63
2½	3.34
3	3.68
4	4.88

Weld Males

Tube OD (inches)	ØA
1	2.04
1½	2.56
2	3.07
2½	3.74
3	4.33
4	5.12

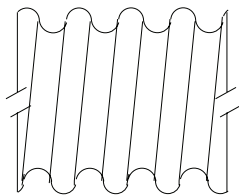
DIN Round Nuts

Nut				
Tube OD (inches)	DN	ØA	B Thread ID	Threads per inch
1	25	2.48	1.88	6
1½	40	3.07	2.39	6
2	50	3.62	2.90	6
2½	65	4.41	3.49	6
3	80	5.00	4.14	4
4	100	5.83	4.94	4

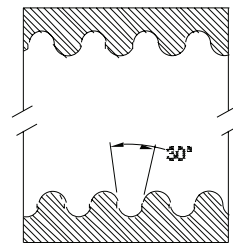


Note: nuts 3" and larger will have 6 slots

DIN 405/1 Thread Form



male thread



female thread

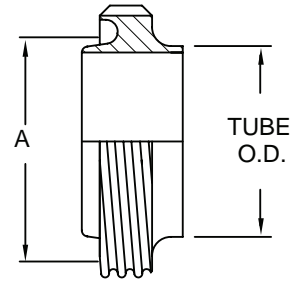
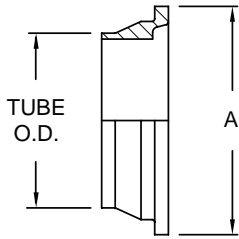
Gasket



Identifying Fittings

Technical Information

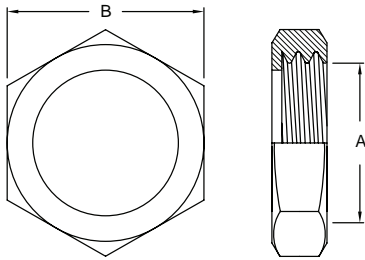
RJT Ferrules



Tube OD (inches)	ØA
1	1.63
1½	2.13
2	2.63
2½	3.13
3	3.63
4	4.63

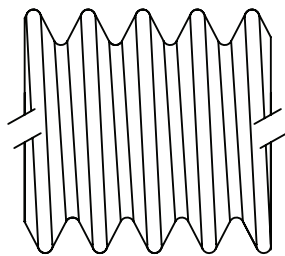
Tube OD (inches)	ØA
1	1.80
1½	2.30
2	2.86
2½	3.36
3	3.86
4	4.86

RJT Hex Nuts

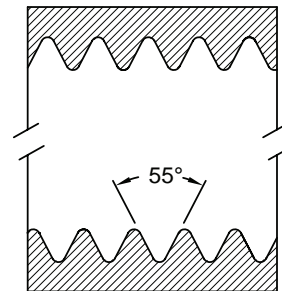


Tube OD (inches)	Nut		
	ØA Thread ID	B Across flats	Threads per inch
1	1.68	2.00	8
1½	2.18	2.56	8
2	2.69	3.12	6
2½	3.19	3.62	6
3	3.69	4.12	6
4	4.69	5.12	6

RJT Thread Form (British Standard Whitworth)



male thread



female thread

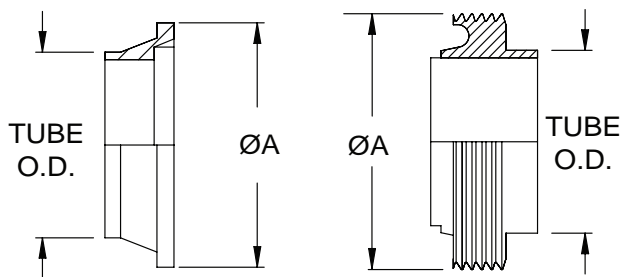
Gasket



Also known as BSM (British Standard Milk) in Australia modified into Australian CIP Union

Identifying Fittings

Australian CIP Ferrules



Weld Liners

Tube OD (inches)	ØA
1	1.63
1½	2.13
2	2.63
2½	3.13
3	3.63
4	4.63

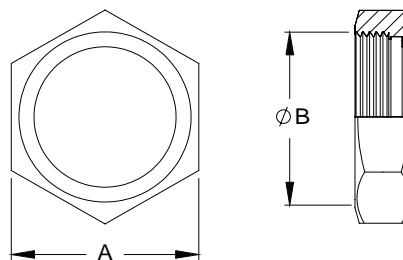
Weld Male

Tube OD (inches)	ØA
1	1.80
1½	2.30
2	2.86
2½	3.36
3	3.86
4	4.86

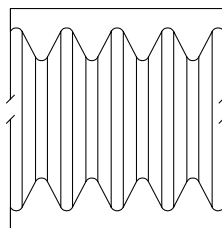
Hex Nut

Nut

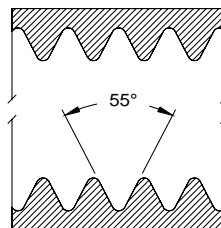
Tube OD (inches)	DN	ØA	B Thread ID	Threads per inch
1	25	2.00	1.68	8
1½	40	2.56	2.18	8
2	50	3.12	2.69	6
2½	65	3.62	3.19	6
3	80	4.12	3.69	6
4	100	5.12	4.69	6



RJT Thread Form (British Standard Witworth)



male thread



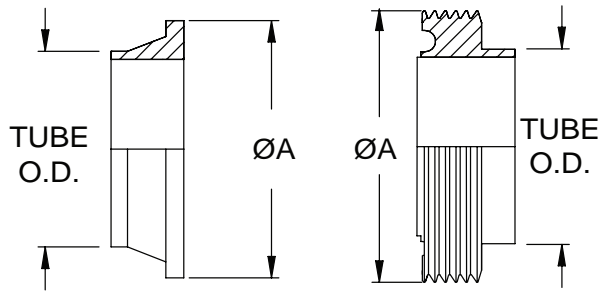
female thread

Gasket

Identifying Fittings

Technical Information

Australian CIP Flat Face Ferrules



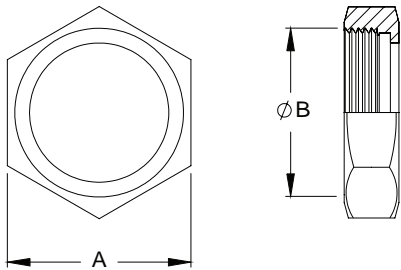
Weld Liners

Weld Male

Tube OD (inches)	ØA
1	1.63
1½	2.13
2	2.63
2½	3.13
3	3.63
4	4.63

Tube OD (inches)	ØA
1	1.80
1½	2.30
2	2.86
2½	3.36
3	3.86
4	4.86

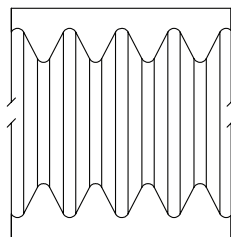
Hex Nut



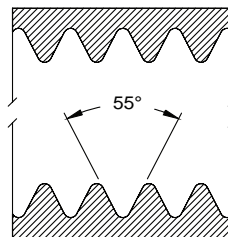
Nut

Tube OD (inches)	DN	A	B Thread ID	Threads per inch
1	25	2.00	1.68	8
1½	40	2.56	2.18	8
2	50	3.12	2.69	6
2½	65	3.62	3.19	6
3	80	4.12	3.69	6
4	100	5.12	4.69	6

RJT Thread Form (British Standard Witworth)



male thread



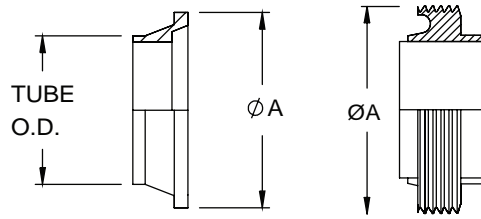
female thread

Gasket



Identifying Fittings

New Zealand CIP Ferrules



Weld Liners

Tube OD (inches)	ØA
1	1.63
1½	2.13
2	2.63
2½	3.13
3	3.63
4	4.63

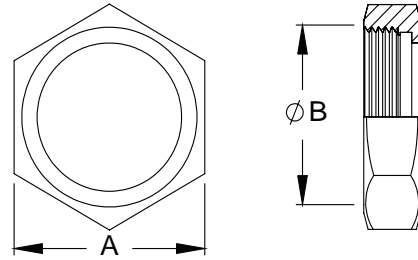
Weld Male

Tube OD (inches)	ØA
1	1.80
1½	2.30
2	2.86
2½	3.36
3	3.86
4	4.86

Hex Nut

Nut

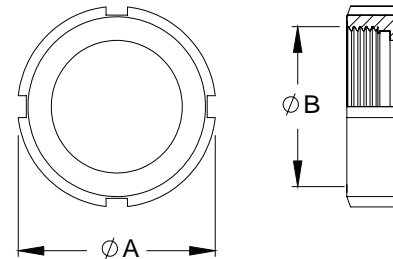
Tube OD (inches)	DN	ØA	B Thread ID	Threads per inch
1	25	2.00	1.68	8
1½	40	2.56	2.18	8
2	50	3.12	2.69	6
2½	65	3.62	3.19	6
3	80	4.12	3.69	6
4	100	5.12	4.69	6



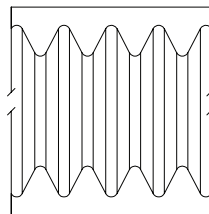
Round Nut

Nut

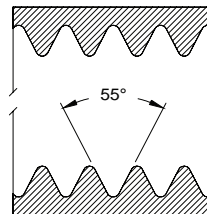
Tube OD (inches)	DN	ØA	B Thread ID	Threads per inch
1	25	2.00	1.68	8
1½	40	2.56	2.18	8
2	50	3.12	2.69	6
2½	65	3.62	3.19	6
3	80	4.12	3.69	6
4	100	5.12	4.69	6



RJT Thread Form (British Standard Witworth)



male thread



female thread

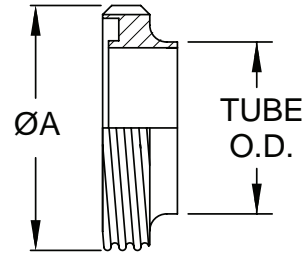
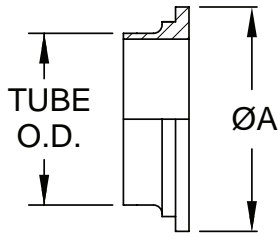
Gasket



Identifying Fittings

SMS Ferrules

Technical Information



Weld Liner

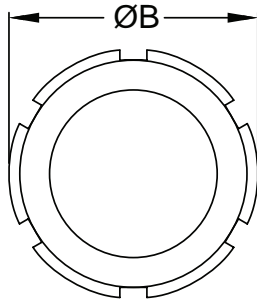
Males

Tube OD (inches)	ØA
1	1.40
1½	2.17
2	2.56
2½	3.15
3	3.66
4	4.65

Tube OD (inches)	ØA
1	1.55
1½	2.34
2	2.74
2½	3.33
3	3.84
4	4.90

Round Nut

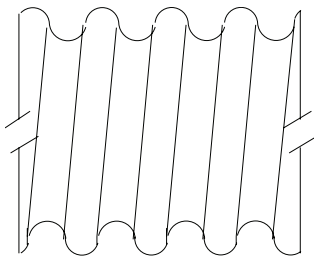
All nuts have 6 slots



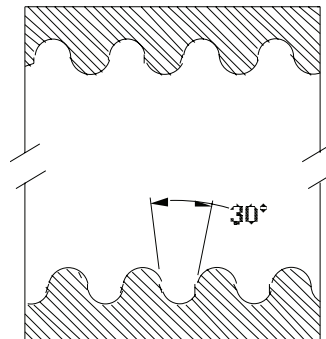
Nut

Tube OD (inches)	ØA Thread ID	ØB	Threads per inch
1	1.44	2.01	6
1½	2.22	2.91	6
2	2.62	3.31	6
2½	3.21	3.94	6
3	3.72	4.49	6
4	4.72	5.43	4

SMS Thread Form (DIN 405/1)



male thread



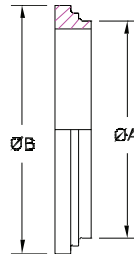
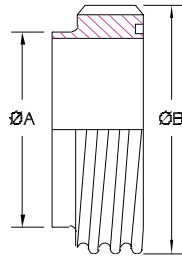
female thread

Gasket



Identifying Fittings

Danish Standard Ferrules



Weld Male

Weld Liners

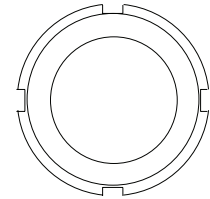
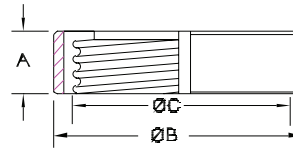
Size (inches)	ØA	ØB
1	1.000	1.732
1½	1.511	2.283
2	2.024	2.835
2½	2.516	3.386
3	3.008	3.937
4	4.018	5.118

Tube OD (inches)	ØA	ØB
1	1.457	1.496
1½	1.850	1.969
2	2.244	1.969
2½	2.638	2.461
3	3.031	2.461
4	3.543	2.461

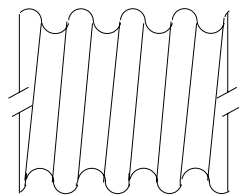
Round Nut

Nut

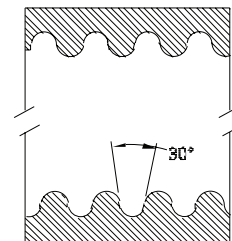
Size (inches)	A	ØB	ØC	Threads per inch
1	0.787	2.244	1.732	6
1½	0.787	2.795	2.283	6
2	0.787	3.386	2.835	6
2½	0.945	4.055	3.386	6
3	0.984	4.528	3.937	6
4	1.102	5.906	5.118	6



DS Thread Form (DIN 405/1)



male thread



female thread

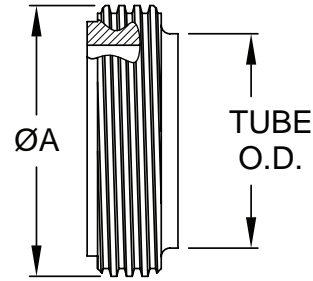
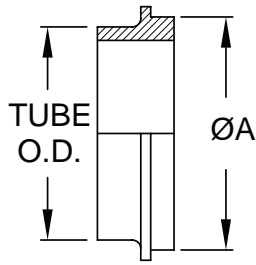
Gasket



Identifying Fittings

Technical Information

IDF/ISO Couplings



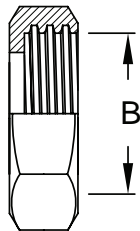
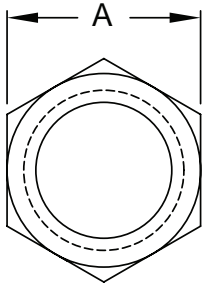
Liners

Males

Tube OD (inches)	ØA
1	1.33
1½	1.85
2	2.38
2½	2.91
3	3.44
4	4.75

Tube OD (inches)	ØA
1	1.46
1½	1.99
2	2.53
2½	3.06
3	3.59
4	4.96

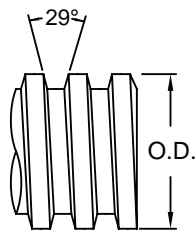
IDF Hex Nuts



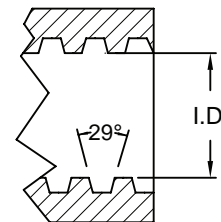
Nut

Tube OD (inches)	ØA Thread ID	B Across flats	Threads per inch
1	1.81	1.35	8
1½	2.36	1.88	8
2	2.95	2.42	8
2½	3.54	2.95	8
3	4.13	3.48	8
4	5.24	4.81	6

IDF Thread Form (same as Acme thread form)



male thread



female thread

Gaskets

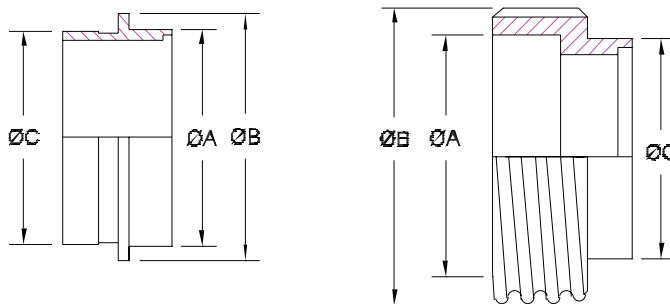


EG-1005

100

Identifying Fittings

Wine Macon Ferrules



Weld Liner

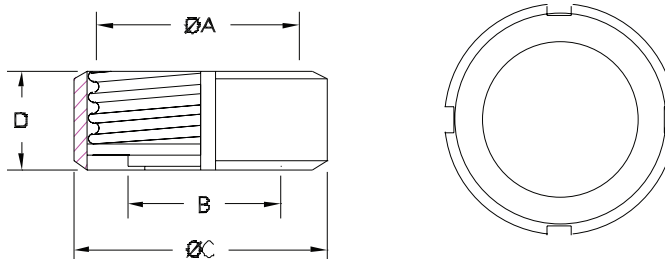
Size	ØA	ØB	ØC
DN 43	1.823	1.969	1.752
DN 53	2.217	2.461	2.146
DN 63	2.610	2.894	2.539
DN 73	3.004	3.346	2.933
DN 83	3.398	3.780	3.327
DN 103	4.252	4.685	4.114

Weld Male

Size	ØA	ØB	ØC
DN 43	1.772	M55	1.823
DN 53	2.165	M67	2.228
DN 63	2.598	M79	2.610
DN 73	2.992	M90	3.004
DN 83	3.386	M102	3.280
DN 103	4.173	M125	4.102

Nuts 4-Slots

Size	ØA	ØB	ØC	ØD	Thread per Inch
DN 43	M55	1.850	2.756	0.984	3"
DN 53	M67	2.244	3.150	0.984	3"
DN 63	M79	2.630	3.740	0.984	3½"
DN 73	M90	3.031	4.173	0.984	3½"
DN 83	M102	3.543	4.646	0.984	4"
DN 103	M125	4.409	5.472	1.024	4"



Gasket

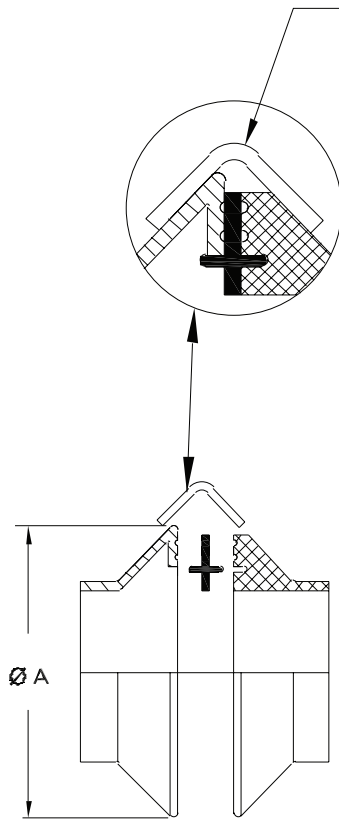


Identifying Fittings

Technical Information

Garolla Fitting

USES STAMPED CLAMP

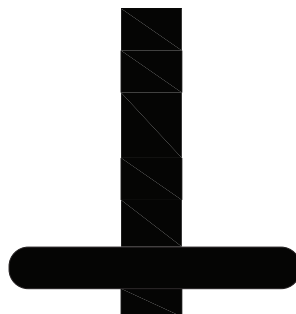


STAMPED

MACHINED

DIN	$\varnothing A$
40	2.64
50	3.07
60	3.46
70	3.86
80	4.25
100	5.00
120	6.22
150	7.40

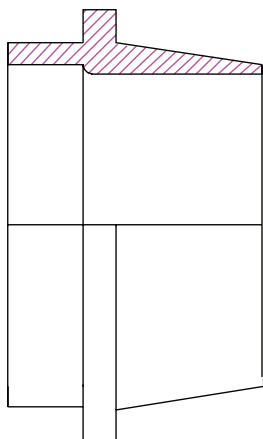
Gasket



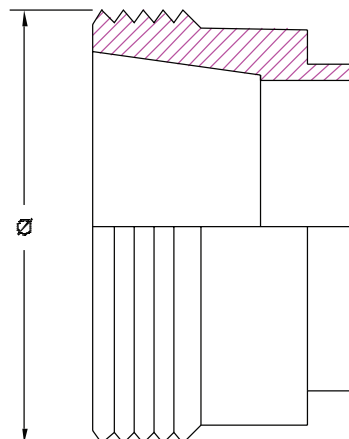
Identifying Fittings

Oenological Threaded Fittings

Technical Information



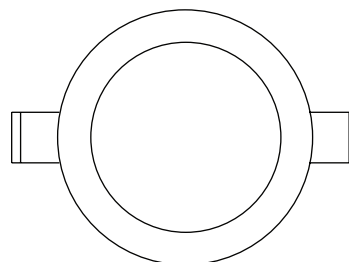
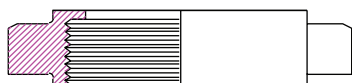
Male End



Female End

DIN	Ø
25	1.311
30	1.504
35	1.705
40	2.098
50	2.016

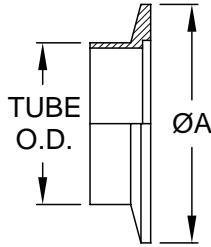
Nut



Identifying Fittings

Vacuum Flanges

both halves of a jointed connection are symmetrical

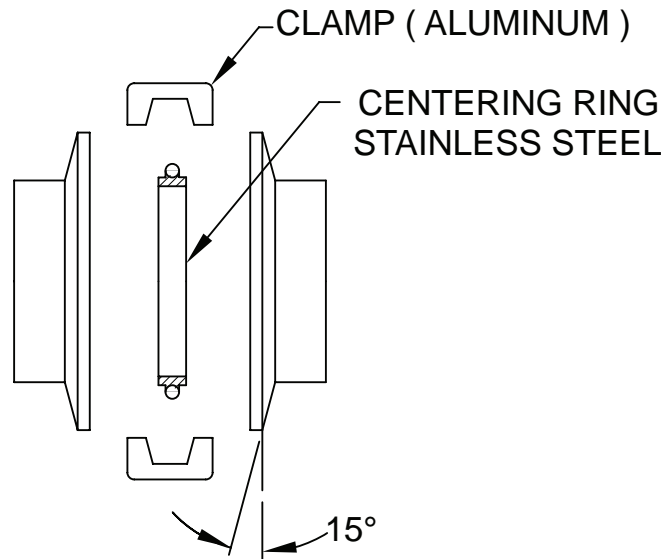


clamp ferrule

Tube OD (inches)	ØA
1/2	1.18
3/4	1.18
1	1.57
1 1/2	2.16
2	2.95

Technical Information

Clamp Connection



Gasket



Austenitic Stainless Steel Chemistry

Element	C	Mn	P	S	Si	Cr	Ni	Mo
304 ¹	0.08	2.00	0.045	0.030	1.00	18.0-20.0	8.0-10.0	
316L ¹	0.03	2.00	0.045	0.030	1.00	16.0-18.0	10.0-14.0	2.0-3.0
316L	0.03	2.00	0.045	0.05 - 0.17	1.00	16.0-18.0	10.0-14.0	2.0-3.0
BPE ²								
CF-8 ³	0.08	1.50	0.04	0.04	2.00	18.0-21.0	8.0-11.0	
CF-8M ³	0.08	1.50	0.04	0.04	2.00	18.0-21.0	9.0-12.0	2.0-3.0

Technical Information

¹ AISI specifications for wrought material

² ASME BPE 2012

³ ASTM A743

- Percentages are maximums unless a range is specified

Finish Information

BPE Surface Finish Requirements (Table SF-2.4-1)

Surface designation	Mechanically Polished ID and OD R _a Maximum		Dixon Sanitary High Purity code
	ID μ-in.	OD μ-in.	
SF0	no finish requirement	no finish requirement	PL
SF1	20	32	
SF2	25	32	
SF3	30	32	
Surface designation	Mechanically Polished OD and Electropolished ID R _a Maximum		
	ID μ-in.	OD μ-in.	
SF4	15	32	PM
SF5	20	32	
SF6	25	32	

Finish Designations for Tubing and Fittings

Finish Number	Finish Conditions
1	Mill Finish (bright annealed, pickled, sand blast or tumbled)
3	Polished 32R _a inside diameter (ID) only
5	Polished 150 grit outside diameter (OD) only
7	Polished 32R _a outside/inside diameter (OD/ID)
3A	Polished 150 grit outside (OD), 32R _a inside diameter (ID)

Glossary of Terms

#3 finish Used on stainless steel tubing, only the ID is polished to sanitary standards. The OD is unpolished.

#4 dairy finish Used on any surface, stainless steel is polished to sanitary standards, with 180 grit abrasives.

#5 finish Used on stainless steel tubing, only the OD is polished. The ID is unpolished.

#7 finish Used on stainless steel tubing polished to sanitary standards inside and outside.

3A Symbol Introduced in 1956, the 3A Symbol is a registered trademark used to identify equipment that meets 3A Sanitary Standards for design and fabrication. The 3A Symbol on dairy and food equipment serves three important purposes:

1. assures processors that equipment conforms to sanitary standards
2. provides accepted criteria to equipment manufacturers for sanitary design
3. establishes guidelines for uniform evaluation and compliance by sanitarians

3A Finish Product surface finish equivalent to 150 grit or better OD, and 180 grit or better ID. A maximum of R_a 32 microinch (0.8 micron) is indicated.

ABS (Acrylonitrile-butadiene-styrene) a thermoplastic resin with an excellent resistance to acids, bases, salts and some solvents. It is heat resistant to 230°F.

ANSI American National Standards Institute, Inc.

ASME American Society of Mechanical Engineers

ASTM American Society for Testing and Materials

Acme Thread A flat grooved helical ridge on a nut or bolt. This typically has a 29° included angle. Used on bevel seat and John Perry fittings

Anneal Stress relief of stainless steel, a heat treatment to remove the stresses generated in forming and welding operations. This heat treatment is best done under controlled atmosphere or vacuum to maintain the mill finish. The fittings are not quenched, as in solution annealing; this would reintroduce residual stresses. Done correctly, parts are processed to provide minimum residual stresses and full corrosion resistance.

Bevel Seat Ferrules A set of plain (male) and externally threaded (female) bushings with matching bevel angles that produce a leak-proof seal when connected with a hex union nut. The threads used are Acme form.

Bright Anneal Annealing in a protective medium to prevent discoloration of the surface.

Bright Annealed Finish A silvery satin surface, approximately the mill finish of stainless steel.

Glossary of Terms

Buna Synthetic rubber, a copolymer of acrylonitrile and butadiene

Burst Pressure The pressure at which rupture occurs.

Clamp A device used to join mechanical parts, fittings, ensuring a quick leak-proof connection and enabling easy take down.

Cold Flow Continued deformation or movement of rubber or PTFE under stress. The new set is not reversible.

Compression Set The deformation that remains in rubber or PTFE after it has been subjected to and released from stress such as a clamp. The longer the stress is maintained the more definitive the deformation.

Durometer An instrument for measuring the hardness of rubber by resistance to penetration

Durometer Hardness A numerical value which indicates the resistance to indentation of the blunt indenter of the durometer.

EPDM Ethylene propylene diene monome, a synthetic rubber

Elastomer Any of various elastic substances resembling rubber.

Electropolishing A controlled electrochemical process utilizing acid electrolyte, DC current, anode and cathode to smooth the surface by removal of metal.

Encapsulation The enclosing of material by an encapsulant for protective purposes. In a ball valve the ball is encased in PTFE, preventing the material flowing through the valve from getting behind the ball causing contamination problems.

Flow Coefficient (C_v) C_v the flow rate in U.S. gallons of water (at 60°F) that will pass through the valve in one minute with a differential pressure across the valve of 1 PSI.

Ferrule A bushing used to secure a tube joint. A special bushing designed for welding to the end of tubing. Two ferrules and a gasket make a leak-proof connection when used with the complimentary clamps.

Fitting A small part of an apparatus (may be detachable).

Fluorocarbon Synthetic rubber and fluoropolymer elastomer known as FKM.

Friction Loss The part of the total loss that occurs as the fluid flows through straight pipe.

Hex Union Nut An internally acme-threaded six-sided connector used to assemble bevel seat fittings.

Glossary of Terms

ISO5211 International standard for actuator and valve interface

Internal Expansion (IX) A plug (or bullet) is pulled through a stem or a set of blades (fingers) increase the stem ID to the plug OD or a predetermined setting when using expansion blades (fingers). This forces the stem serrations into the hose tube and the hose cover into the serrations of the ferrule.

Laminar Flow The smooth flow of a viscous liquid through a tube or pipe. In that case, the velocity of flow varies from zero at the walls to a maximum along the centerline of the vessel.

Maximum-Shut-Off Pressure The pressure of the media flowing into the valve against which the valve will have to close.

Media The material flowing through the valve.

Modulating Service Proportional positioning of a valve between the open and closed position. Used for flow control processes.

MTR Material Test Report

Neoprene Synthetic rubber, chemically and structurally similar to natural rubber

Nominal Size A dimensional value assigned for the purpose of convenient designation. Used for pipe sizes.

On-Off Service When the valve is being used to start or stop flow by being cycled to the full open or full closed position.

Operating Pressure The pressure at which system functions. Also known as working pressure.

Polish To make smooth and shiny by rubbing. Fittings may be machine polished to 180 grit finish. Polish is ID, OD, or both per customer request.

Polypropylene A lightweight synthetic plastic

Pressure The force per unit area applied on a surface in a direction perpendicular to that surface.

PSI Pounds per square inch

PSIG Pounds per square inch gauge

PTFE Tetrafluoroethylene is a high performance thermo plastic polymer that has excellent dielectric strength, chemical and temperature resistance.

Glossary of Terms

Santoprene A thermoplastic elastomer, a rubber-like material that complies to FDA requirements

Service Temperature The maximum and minimum temperature of the media in a system.

Silicone Dimethyl silicone, a synthetic rubber

Sintering Heat process in which powdered metal particles are heated to near melting point, fusing the metal granules together.

Stem Torque The force required at the valve stem to open or close the valve against system pressure and service conditions.

Supply Pressure The plant air supply pressure available to operate a pneumatic actuator. (plant air)

Surge Also known as water hammer. A rapid rise or decrease of internal pressure. Surge conditions occur for various reasons, typically, but not limited to: start and stop sequences.

Torque A twisting or turning force. Usually measured in inch pounds (in-lbs) or foot pounds (ft-lbs)/(force through a distance).

Tube A hollow cylinder especially one that conveys a fluid. For sanitary applications a thin wall is implied.

Tube Fitting A length of tubing formed into a usable shape either welded to an apparatus or welded to ferrules for use in an apparatus.

Tubing A piece or length of tube.

Tumble Polish Surface A uniform finish applied by vibratory equipment to stainless steel, varying from matte grey to bright, depending on media used. This process may cause work hardening on the surfaces of stainless steel.

Turbulent Flow Irregular flow that is characterized by tiny whirlpool regions. The velocity of this fluid is definitely not constant at every point.

Velocity Head (h_v) The energy of a liquid as a result of its motion at some velocity V. It is the equivalent head in feet through which the water would have to fall to acquire the same velocity, or in other words, the head necessary to accelerate the water. Velocity head can be calculated from the following formula:

$$h_v = \frac{V^2}{2g}$$

Where $g = 32.3 \text{ ft/second}$
 $V = \text{liquid velocity in feet per second}$

The velocity head is usually insignificant and can be ignored in most high head systems. However, it can be a large factor and must be considered in low head systems.



WOG Water, Oil, Gas. Pressure rating for valves handling these products. This does not include steam.

Welding Join two (or more) pieces of material by applying heat to produce a localized union through fusion across the interface. For sanitary fittings, a ferrule is attached to the ends of a tube fitting by TIG welding without the addition of filler metal.

Work (Strain) Hardening An increase in hardness and strength caused by plastic deformation at temperatures below the annealing ranges.

Trademarks

Tygon® is a registered trademark of Saint-Gobain Corporation.

Santoprene™ is a trademark of Exxon Mobil Chemical

Tuf-Steel® is a registered trademark of RubberFab Technologies Group

In the following index, a (*) is used to represent a variable. Therefore, to find AD075EZ or AD400EZ, look for: **AD***EZ**

100-G-**I-7
 100-G-***I-8
 125-G-**I-7
 125-G-***I-8
 150-G-**I-7
 150-G-***I-7
 13**F-5
 13***F-5
 13****F-5
 13CB-*,**F-5
 13H-G***F-39, F-58
 13H-G***RJTF-65
 13HS-**G-8
 13HS-***G-8
 13ILB**F-49
 13ILB100-150F-49
 13ILH**F-49
 13ILH100-150F-49
 13IL-Q200F-49
 13IL-Q100150F-49
 13MHHM**F-3
 13MHHM-3P***F-4
 13MHHM-3P1200F-4
 13MHHM-3P100150F-4
 13MHHM50-75F-3
 13MHHM50-75SN ...F-3
 13MHHM100-150F-3
 13MHHM100-150SN F-3
 13MHHM-DP***F-3
 13MHHM-DP1000 ...F-3
 13MHHM-DP100150 F-3
 13MHHM-Q***F-3
 13MHHM-Q75F-3
 13MHHM-Q400 D-4, D-6

13MHHM***SNF-3
 13MHHV***F-30
 13MHHV-Q400 D-4, D-6
 13MHLA***F-4
 13MHLA100-150F-4
 13MHP***F-4
 13MHP***F-4
 13MHP75F-4
 13MHP100-150F-4
 13MHPV***F-30
 13MO***F-4
 13MO****F-4
 13MO100-150F-4
 13NHN-G75G-6
 13NHN-G100-600 ...G-6
 13PS-**G-8
 13PS-***G-8
 13PS-****G-8
 13PV-***F-33
 13RBN-G***RJTF-65
 13RG**G-6
 13RG3/8G-6
 13R-G***DINF-63
 13R-G***SMSF-64
 13RGV**G-6
 13WGC***F-5
 13WGC100-150F-5
 14A-G***F-40
 14AHR-G***F-43
 14AHT-G***F-43
 14A-R***F-40
 14A-R***DINF-63
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 14MPW-R***F-7
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 14PRFJP-G***F-59
 14PRFJP-R***F-59
 14PRF-R***F-40
 14QMP-G*** ...F-8, F-75
 14R-G***F-40
 14RMP-G***F-7
 14RMP-R***F-7
 14VB-R***F-83
 14VB-R****F-83
 14W-G***F-41
 14WHI-G***F-50
 14WHI-R***F-50
 14WHRL-R***F-73
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Limited Warranty

DIXON VALVE AND COUPLING COMPANY (herein called "Dixon") warrants the products described herein, and manufactured by Dixon to be free from defects in material and workmanship for a period of one (1) year from date of shipment by Dixon under normal use and service. Its sole obligation under this warranty being limited to repairing or replacing, as hereinafter provided, at its option any product found to Dixon's satisfaction to be defective upon examination by it, provided that such product shall be returned for inspection to Dixon's factory within three (3) months after discovery of the defect. The repair or replacement of defective products will be made without charge for parts or labor. This warranty shall not apply to: (a) parts or products not manufactured by Dixon, the warranty of such items being limited to the actual warranty extended to Dixon by its supplier; (b) any product that has been subject to abuse, negligence, accident, or misapplication; (c) any product altered or repaired by others than Dixon; and (d) to normal maintenance services and the replacement of service items (such as washers, gaskets and lubricants) made in connection with such services. To the extent permitted by law, this limited warranty shall extend only to the buyer and any other person reasonably expected to use or consume the goods who is injured in person by any breach of the warranty. No action may be brought against Dixon for an alleged breach of warranty unless such action is instituted within one (1) year from the date the cause of action accrues. This limited warranty shall be construed and enforced to the fullest extent allowable by applicable law.

Other than the obligation of Dixon set forth herein, Dixon disclaims all warranties, express or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose, and any other obligation or liability. The foregoing constitutes Dixon's sole obligation with respect to damages, whether direct, incidental or consequential, resulting from the use or performance of the product.

Some products and sizes may be discontinued when stock is depleted, or may require a minimum quantity for ordering.

Limits of Liability

This catalog is intended as a product offering. It is not intended to be a user or technical manual. Information in this catalog is subject to change without notice. All users and distributors of products sold through this catalog should contact Dixon® with questions of use, compatibilities, coupling procedures and life of product. Our full-time engineering and test staff is always available to recommend uses and to assist distributors and users with any questions.



Safety



Safety logos, which appear throughout our catalog, are used as a reminder that the user should carefully review for the appropriateness of the product for the media, application and environment in which it will be used.

NOTE: Because of the health hazards associated with contamination and lead content in drinking water systems, Dixon™ couplings, unless otherwise specifically approved, are not recommended for potable water service and should not be used in applications where drinking water will contact the wetted surfaces of the coupling.

Warning: Dixon™ products may contain chemicals known to the State of California to cause cancer, birth defects, or other reproduction harm.

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