

FITTINGS

SANITARY FITTINGS

Standard material utilized in the manufacture of sanitary hose fittings is Type 316L stainless steel.

To assure aseptic integrity and guarantee sterility of all hose assemblies, Flexible Component's sanitary fittings are machined internally to a surface finish with a maximum roughness average (Ra) of 32 micro-inch (32 micro-inch=220 grit=N6 (ISO designation)=0.800 micrometers). The internal surface is also chamfered preventing material build-up or entrapment at the end-point where the fitting stem touches the Chemfluor® fluoropolymer tube. For applications requiring even smoother material surfaces, fittings can be supplied electropolished to 8 Ra.

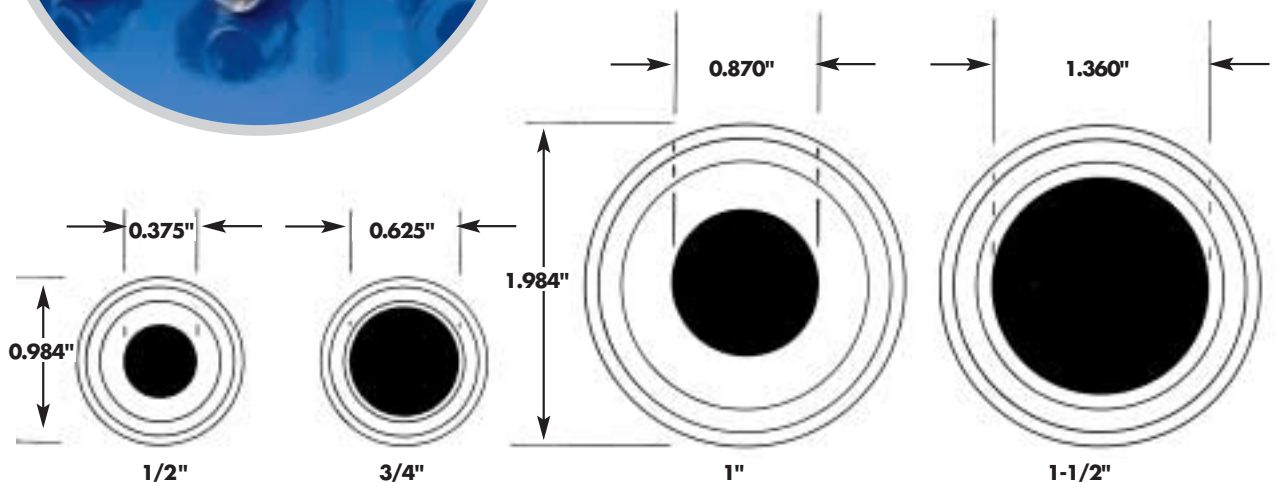
Electropolishing

- Smooths surface roughness lowering the coefficient of friction and minimizing the area exposed to microbial growth or corrosive attack.
- Passivates surface providing additional chemical resistance.
- Removes any contamination from the fitting surface.
- Is an inspection aid; electropolishing exposes any potential defects in the surface that may have been camouflaged by mechanical polishing.

Flexible Components stocks a number of popular fitting styles and sizes, electro-polished, for immediate shipment.

Sizing

Schematics are designed to eliminate sizing errors when specifying sanitary fittings. The fitting outside diameter is the same for 1/2" and 3/4" ID 'mini' styles. This is also true for the 1" ID and 1-1/2" ID sizes. Note the inside diameters (ID) to properly mate with existing equipment/gaskets. Diagram not drawn to scale.

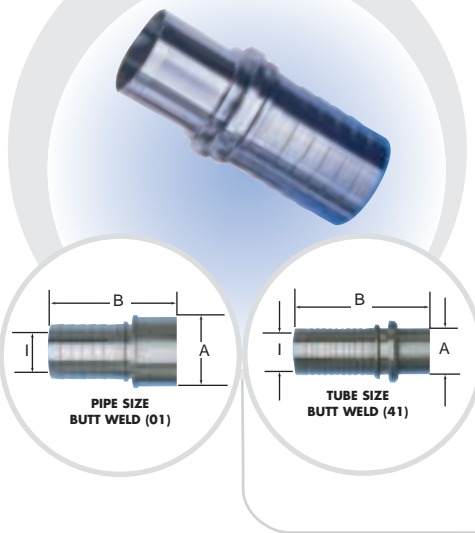


SANITARY FITTINGS

Butt Weld Fittings

Both pipe and tube butt weld fittings are available for welding to your existing systems. CARE should be exercised so that weld heat is not conducted to the Chemfluor® fluoropolymer tube. Available in **pipe sizes (01)** and **sanitary tube OD sizes (41)**.

Pipe and Tube Size Butt Weld Fittings Styles 01 and 41



Pipe Size Butt Weld Fittings Style 01

Hose Size ID (in.)	Part Number	Butt Weld OD 'A' (in.)	OAL 'B' (in.)	Butt Weld Length 'C' (in.)
1/2	160801LSKO	.840	1.915	0.50
3/4	381201SKO	1.050	2.225	0.75
1	381601SKO	1.315	2.670	0.75
1-1/2	382401SKO	1.90	3.359	0.75
2	383201SKO	2.375	4.295	1.00
2-1/2	384001SKO	2.875	3.710	0.50
3	384801SKO	3.50	4.16	0.60
4	386401SKO	4.50	4.283	0.25

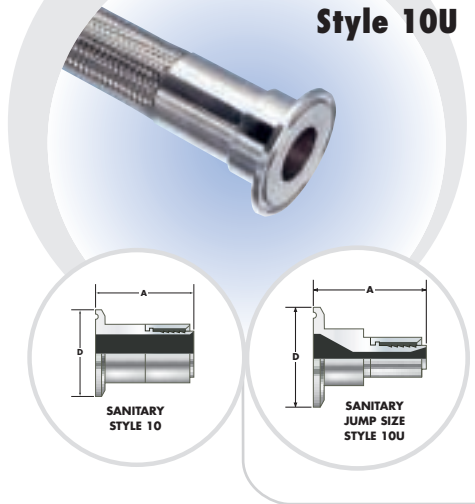
Schedule 40 Standard; other schedules available by special order; C/F
All fittings are manufactured from 316L SS material.
C/F for availability of alternative materials.

Tube Sized Butt Weld Specifications Style 41

Hose Size ID (in.)	Fitting Part No. (Stainless Steel)	Butt Weld OD 'A' (in.)	OAL 'B' (in.)	ID Thru Fitting (in.)
1/4	160432SKO*	0.250	1.70	0.19
3/8	160632SKO*	0.375	2.00	0.28
1/2	160841SKO	0.500	1.865	0.39
3/4	381241SKO	0.750	2.225	0.63
1	381641SKO	1.000	2.67	0.85
1-1/2	382441SKO	1.500	2.26	1.37
2	383241SKO	2.000	4.165	1.75
2-1/2	384041SKO	2.500	4.335	2.20
3	384841SKO	3.000	5.810	2.76

*1/4" and 3/8" used compression tube adapter

Sanitary, Sanitary Jump Size Style 10 Style 10U



Description

Step-up styles are designed with 'blended' internal surfaces to prevent material build-up or entrapment. Gasket face dimensions are standard to industry specifications.

Temperature Rating

Pressure and temperature ratings of Flexible Component's sanitary assemblies are dependent upon clamp pressure ratings and gasket material temperature ratings. Generally, clamps are pressure rated as follows:

Sanitary Specifications Style 10 and 10U

Hose Size ID (in.)	Part Number	Description	ID (in.)	Flange Diameter 'D' (in.)	Overall Length 'A' (in.)
1/4	160410SKO	1/4" x 1"	0.19	1.98	1.46
3/8	160610SKO	3/8" x 1"	0.30	1.98	1.85
1/2	160810SKO	1/2" x 1"	0.40	1.98	2.19
1/2	160810USK	1/2" x 1-1/2"	0.40	1.98	2.22
3/4	380210SKO	3/4" x 1"	0.65	1.98	2.39
3/4	380210USK	3/4" x 1-1/2"	0.65	1.98	2.39
1	381610SKO	1" x 1"	0.87	1.98	2.39
1	381610USK	1" x 1/2"	0.87	1.98	2.45
1-1/2	382410SKO	1-1/2" x 1-1/2"	1.37	1.98	2.30
1-1/2	382410USK	1-1/2" x 2"	1.37	2.490	2.40
2	383210SKO	2" x 2"	1.75	2.490	3.980
2-1/2	384010SKO	2-1/2" x 2-1/2"	2.20	3.050	4.200
3	384810SKO	3" x 3"	2.76	3.580	4.400
4	386410SKO	4" x 4"	3.75	4.675	5.000

Standard Weight Style

150PSIG@70°F
125PSIG@250°F

Heavy Weight Style

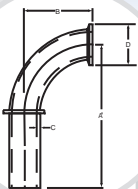
500PSIG@70°F
250PSIG@250°F

High Pressure Bolt Style

1500 PSIG @ 70°F;
1200 PSIG @ 250°F
Above 250°F (121°C) PTFE, Viton or silicone gaskets are recommended

90° Elbow Style Sanitary Fittings

Style 10L & 11L



90° Elbow Style Sanitary Specifications Styles 10L and 11L

Hose Size ID (in.)	Part Number	Centerline to fitting End 'A' (in.)	Centerline to Face 'B' (in.)	Wall Thickness 'C' (in.)	Fitting OD 'D' (in.)
1/2	160811LSK	4.465	1.625	.065	0.98
3/4	161211LSK	4.725	1.625	.065	0.98
1	381610LSK	4.895	2.000	.065	1.98
1-1/2	382410LSK	6.360	2.750	.065	1.98
2	383210LSK	8.015	3.500	.065	2.49
2-1/2	384010LSK*	n/a	4.250	.065	3.05
3	384810LSK*	10.159	5.000	.065	3.58
4	386410LSK*	12.608	6.625	.083	4.675

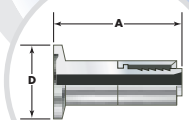
Length measured from centerline of sealing face to end of fitting.
*C/F for availability

Description

- 316L Stainless Steel
- Eliminates entrapment, reduces connection points
- Reduces chances of bacteria growth
- Surface finish of 15 Ra
- Reduces strain on hose by eliminating 90° hose configuration.
- Smaller installed dimensional envelope

Mini Sanitary

Style 11



MINI SANITARY STYLE 11

Description

Mini/Fractional style sanitary.

Specifications

To industry standards. Interchangeable with all standard manufacturers' designs.

Materials

Standard Type 316L wetted surface crimp. Ferrule is Type 304 stainless steel. Flexible Components has manufactured

Mini Sanitary Specifications Style 11

Hose Size ID (in.)	Part Number	Description	ID (in.)	Flange Diameter 'D' (in.)	Overall Length 'A' (in.)
1/4	160411SKO	1/4" x 1/2"	0.19	0.98	1.30
3/8	160611SKO	3/8" x 1/2"	0.30	0.98	1.65
1/2	160811SKO	1/2" x 1/2"	0.40	0.98	1.96
3/4	381211SKO	3/4" x 3/4"	0.65	0.98	2.08

Certain jump sizes may be available. Example: 1/2" hose to 3/4" mini.
1/2" x 1/2" and 3/4" x 3/4" available electropolished from stock.

these items in Titanium or PVDF (Kynar®) materials. Consult factory for optional materials.

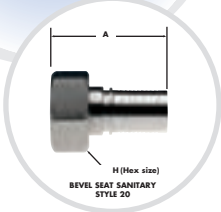
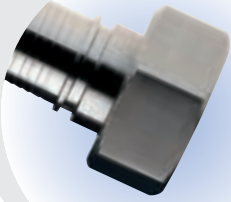
Size Range

1/2" and 3/4"; 1/2" for 1/4" hose and 1/2" for 3/8" hose also standard. C/F for "Jump" sizes

Alternatives

Standard in 90° elbow configurations. Electropolished version also standard.

Sanitary Bevel Seat Style 20



Bevel Seat Sanitary Specifications Style 20

Hose Size ID (in.)	Part Number	ID Description	ID (in.)	Length (in.)	Overall Length 'A' (in.)
1	381620SKN	1" x 1" Acme	0.87	1.800	2.900
1-1/2	382420SKN	1-1/2" x 1-1/2" Acme	1.37	2.375	3.850

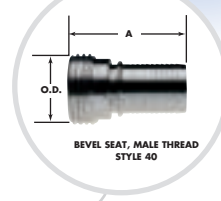
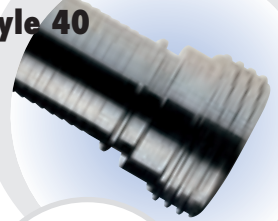
Insert Material 316L SS
ACME NUT Material 304 SS
C/F for availability of other sizes

Bevel Seat (Male Thread) Specifications Style 40

Hose Size ID (in.)	Part Number	Description	ID (in.)	Thread OD (in.)	Overall Length 'A' (in.)
1	38160SKO	1" x 1" Acme	0.87	1.460	2.375
1-1/2	38244SKO	1" x 1-1/2" Acme	1.37	1.990	3.400

C/F For Availability of other sizes

Sanitary Bevel Seat, Male Thread Style 40



Male-'I'-Line® Sanitary Style 50

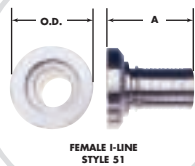


Male-'I'-Line® Sanitary Specifications Style 50

Hose Size ID (in.)	Part Number	Overall Length (in.)	Fitting OD (in.)	Fitting ID (in.)
1	381650SKO	2.210	2.000	0.85
1-1/2	382450SKO	3.190	2.000	1.37
2	383250SKO	3.930	2.690	1.75
2-1/2	384050SKO	4.320	3.320	2.20
3	384850SKO	C.F.	C.F.	2.70

"I-Line" is a Registered Trademark of Cherry Burrell

Female-'I'-Line® Sanitary Style 51



Female-'I'-Line® Specifications Style 51

Hose Size ID (in.)	Part Number	Overall Length	Fitting OD	Fitting ID
1	381651SKO	2.210	2.000	0.85
1-1/2	382451SKO	3.150	2.000	1.37
2	383251SKO	3.930	2.650	1.75
2-1/2	384051SKO	4.320	3.320	2.20
3	384851SKO	C.F.	C.F.	2.76

All fittings are manufactured from 316L SS.
C/F for availability of alternative materials.
I-Line is a registered trademark of Cherry Burrell