



**D-CKWEILER**  
connecting flow to **purity**

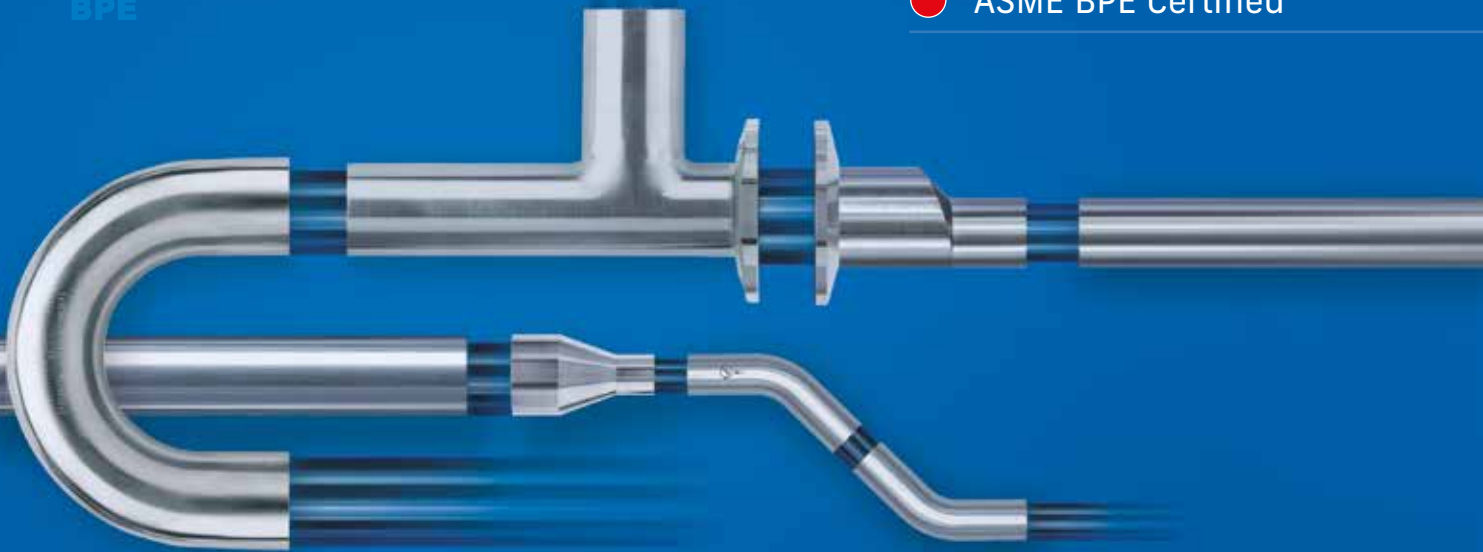
# LIFE SCIENCE

## TUBES, FITTINGS AND CONNECTIONS



FOR PHARMA, BIOTECH AND  
OTHER LIFE SCIENCE INDUSTRIES

 ASME BPE Certified



NORTH AMERICA

ASME BPE Certified  
Tubes and Fittings.  
Highest purity down to Ra 15 µin.



Dockweiler quality  
from raw material to delivery.  
All certificates are available on:  
**www.dockweiler.com**

Consistent 3.1 certificates  
with all important information.  
End-to-end documentation  
and traceability.



Engineered components  
for engineered efficiency.  
Weld seams in perfection and  
ultimate quality.

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For Pharma, Biotech and  
other Life Science Industries

**ASME BPE**

**mp** ASME BPE SF1 / Mechanically polished

**ep** ASME BPE SF4 / Electropolished



**1. SURFACES QUALITIES**

Tubes and fittings:	Inner surface (mp)*
ASME BPE SF0 - on request	No finish requirements
<b>ASME BPE SF1</b>	<b>Ra<sub>max.</sub> ≤ 20 µin (0.51 µm) Dockweiler Standard</b>
ASME BPE SF2 - on request	Ra <sub>max.</sub> ≤ 25 µin (0.64 µm)
ASME BPE SF3 - on request	Ra <sub>max.</sub> ≤ 30 µin (0.76 µm)

Tubes and fittings:	Inner surface (ep)
<b>ASME BPE SF4</b>	<b>Ra<sub>max.</sub> ≤ 15 µin (0.38 µm) Dockweiler Standard</b>
ASME BPE SF5 - on request	Ra <sub>max.</sub> ≤ 20 µin (0.51 µm)
ASME BPE SF6 - on request	Ra <sub>max.</sub> ≤ 25 µin (0.64 µm)

Surface treatment:	<ul style="list-style-type: none"> <li>- Mechanically polished (or any other finishing method that meets the Ra max.): Cleaning and test procedure ASTM A 632, S3</li> <li>- Electropolished: Procedure acc. to Spec. Doc. 8.4-40/3.2/3.3.2</li> <li>- Free of oil and grease acc. to CGA G-4.1-2018 and ASTM G93 – level B (SF4) / level C (SF1)</li> </ul>
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**2. MATERIALS**

<b>ASME BPE</b>	UNS S31603 (316L)* UNS S31603 (316L) / 1.4404* UNS S31603 (316L) / 1.4435* * defined sulphur of 0.005 - 0.017%	UNS N08904 (904L) / 1.4539 UNS N06022 (Alloy 22) / 2.4602 UNS N08367 (AL-6XN)
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Hardness equivalent to:	<ul style="list-style-type: none"> <li>- max. 180 HV* according to DIN EN ISO 6507-1</li> <li>- max. 90 HRB* according to DIN EN ISO 6508-1</li> </ul> * comparable to ASTM E-384 (HV) and ASTM E 18-22 (HRB)
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**3. DIMENSIONS**

Imperial	acc. to ASME BPE, Part DT	
OD x WT:	1/4" to 6" (0.250 x 0.035 inch to 6.000 x 0.109 inch)	6.35 x 0.89 mm to 152.40 x 2.77 mm
Length of tubes:	min. 19.36 ft to max. 19.98 ft (6000 mm -100/+90)	
Manufacturing process:	Seamless tubes ≤ 1" OD (25.40 mm)	Welded tubes ≥ 1 1/2" OD (38.10 mm)

**4. QUALITY AND TEST PROCEDURES**

Verification of basic test certificate	Visual inspection	Endoscopic inspection of bright finished tubes
Verification of dimensions	Roughness measurements	

**5. TECHNICAL TERMS OF DELIVERY**

**Tubes and fittings**

Acc. to ASME BPE-2024, ASTM A 269/270, tubes with a length of 19.35 ft - 19.98 ft (5900 - 6090 mm), max. 10% short lengths of min. 9.84 ft (3000 mm). For electropolished tubes with an outer diameter ≤ 0,0164 ft (5.00 mm), the length is 9,678 ft (2950 mm) +/- 0,164 ft (50 mm).

**Marking always with**

DOCKWEILER / DW-Number / Dimension / Material / Heat Number / ASME Certification Mark, Surface Finish Designation

Tubes, pipes and fittings shall be permanently marked as per ASME BPE-2024, DT-11. The marking must provide all necessary information to trace back the heat number and the material grade.

**6. DOCUMENTATION, PACKAGING AND SHIPPING**

**Documentation**

The documentation result by the Dockweiler Inspection Certificate 3.1 according to DIN EN 10204. Optional online documentation WebCert.

**Packaging**

Mechanically polished tubes and fittings are closed with transparent PE caps and are individually sealed in PE foil. The batch label on the foil contains the information ASME BPE SF1.

Electropolished tubes and fittings are closed with PA/PE squares and yellow PE caps, sleeved and sealed in PE. The batch label on the foil contains the information ASME BPE SF4.

**Shipping**

Delivery in tubular container or wooden crate, fittings in strong cardboard box with shock absorbing filler.

## Dockweiler Order Code System: Easy to select and combine

The Dockweiler Order Code is built up of three elements:

1. **Quality** (Inner Surface SF1 or SF4)
2. **Product Code**
3. **Diameter**
4. **BPE Reference** (last two digits)

Selection for Tubes = Surface Quality + Outer Diameter (1 + 3)

Order Code Sample for ● ASME BPE, SF-1, Tube 1/4 Inch: 1 - 2  
SF1 - 04

**1. QUALITY**

Code Quality	Specification
SF1	ASME BPE 2024
SF4	ASME BPE 2024

**2. BASIC CODE FITTING TYPE**

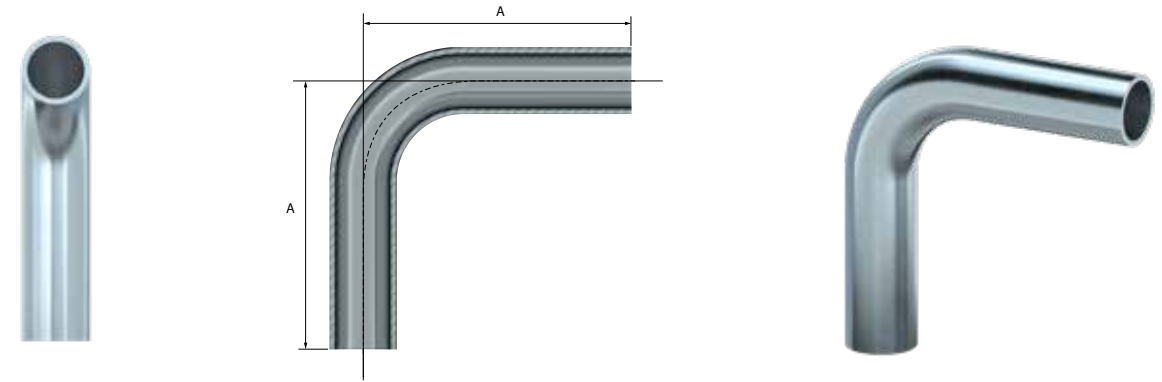
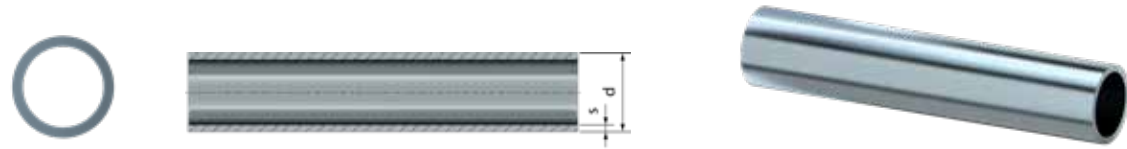
Code Product	Description
E4	45° Elbow
E8	88° Elbow
E2	92° Elbow
E9	90° Elbow
EU	180° Return Bend
TE	Tee Equal
TR	Reducing Tee
CE	Straight Cross
RC	Concentric Reducer
RE	Eccentric Reducer
FA, FB, FC	Ferrule
WC	Weld Cap
FTC	Solid End Cap
CL-SP-WN	Clamp (Single Pin Wing Nut)
TC-GK	Triclamp Gasket

**3. BASIC CODE OUTER DIAMETER**

Code Diameter	Size (Inch)
02	1/8
04	1/4
06	3/8
08	1/2
10	5/8
12	3/4
16	1
24	1 1/2
32	2
40	2 1/2
48	3
64	4
96	6

**4. REFERENCE ACC. TO ASME-BPE**

Code Elbows	Code T-Pieces	Code Reducers	Code Ferrules	Code Caps
1-1	2-1	3-1	4-1	5-1
1-2	2-2	3-2		5-2
1-3	2-3	3-3		
1-4	2-4			
1-5	2-5			
1-6	2-6			
1-7	2-7			
1-8	2-8			
1-9	2-9			
1-10	2-10			
	2-11			



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Nominal Size (d)

Wall Thickness (s)

Diameter<sup>3</sup>

Nominal Size (d)		Wall Thickness (s)		316L			
Inch	mm	Inch	mm	SF1	SF4	-	Diameter <sup>3</sup>
1/4	6.35	0.035	0.89	SF1	SF4	-	04
3/8	9.53	0.035	0.89	SF1	SF4	-	06
1/2	12.70	0.065	1.65	SF1	SF4	-	08
3/4	19.05	0.065	1.65	SF1	SF4	-	12
1	25.40	0.065	1.65	SF1	SF4	-	16
1 1/2	38.10	0.065	1.65	SF1	SF4	-	24
2	50.80	0.065	1.65	SF1	SF4	-	32
2 1/2	63.50	0.065	1.65	SF1	SF4	-	40
3	76.20	0.065	1.65	SF1	SF4	-	48
4	101.60	0.083	2.11	SF1	SF4	-	64
6	152.40	0.109	2.77	SF1	SF4	-	96

For Order Code please combine:  
Quality<sup>1</sup> + Diameter<sup>3</sup>

Further dimensions on request.

Nominal Size (d)

A

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

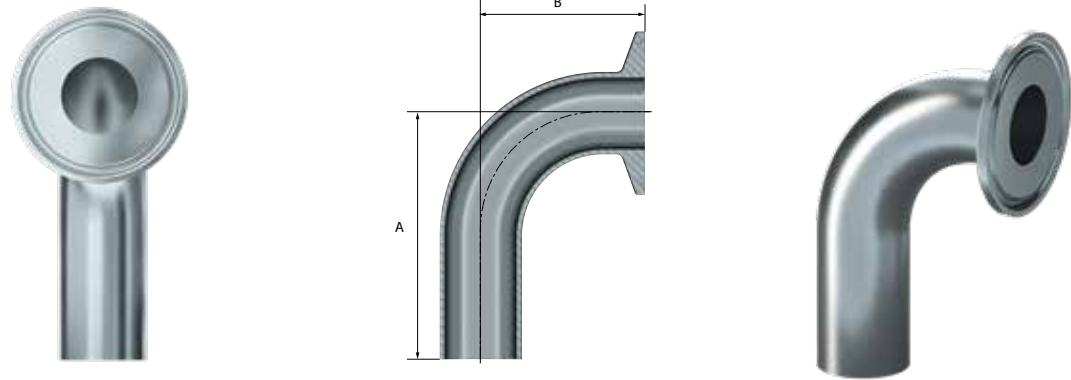
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L				WW
Inch	mm	Inch	mm	SF1	SF4	-	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
1/4	6.35	2.625	66.70	SF1	SF4	-	E9-04	1-1
3/8	9.53	2.625	66.70	SF1	SF4	-	E9-06	1-1
1/2	12.70	3.000	76.20	SF1	SF4	-	E9-08	1-1
3/4	19.05	3.000	76.20	SF1	SF4	-	E9-12	1-1
1	25.40	3.000	76.20	SF1	SF4	-	E9-16	1-1
1 1/2	38.10	3.750	95.30	SF1	SF4	-	E9-24	1-1
2	50.80	4.750	120.70	SF1	SF4	-	E9-32	1-1
2 1/2	63.50	5.500	139.70	SF1	SF4	-	E9-40	1-1
3	76.20	6.250	158.80	SF1	SF4	-	E9-48	1-1
4	101.60	8.000	203.20	SF1	SF4	-	E9-64	1-1
6	152.40	11.500	292.10	SF1	SF4	-	E9-96	1-1

For Order Code please combine:  
Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>

Further dimensions on request.

**DT-4.1.1-2**  
AUTOMATIC TUBE WELD: HYGIENIC CLAMP JOINT, 90° ELBOW

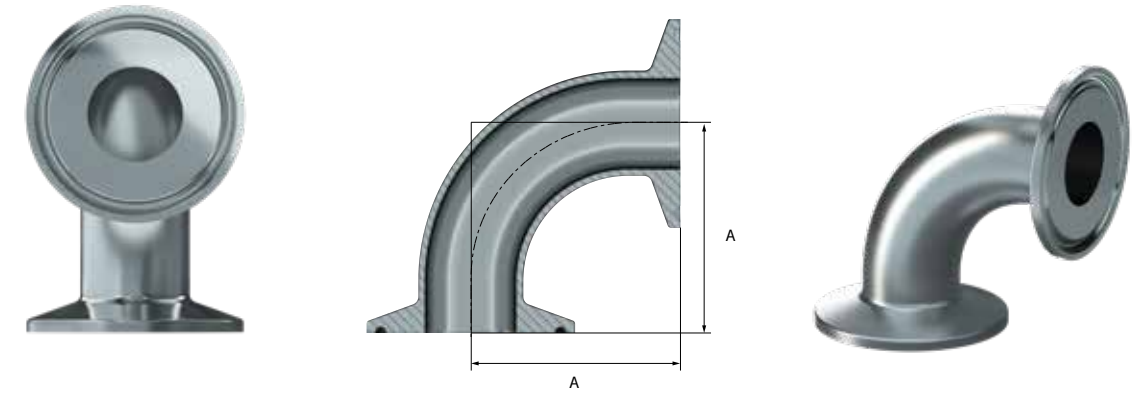


Nominal Size (d)		Weld End (A)		Clamp End (B)		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>	
Inch	mm	Inch	mm	Inch	mm			316L	CW		
1/4	6.35	2.625	66,70	1.625	41,30	SF1	SF4	-	E9-04	-	1-2
3/8	9.53	2.625	66,70	1.625	41,30	SF1	SF4	-	E9-06	-	1-2
1/2	12.70	3.000	76,20	1.625	41,30	SF1	SF4	-	E9-08	-	1-2
3/4	19.05	3.000	76,20	1.625	41,30	SF1	SF4	-	E9-12	-	1-2
1	25.40	3.000	76,20	2.000	50,80	SF1	SF4	-	E9-16	-	1-2
1 1/2	38.10	3.750	95,30	2.750	69,90	SF1	SF4	-	E9-24	-	1-2
2	50.80	4.750	120,70	3.500	88,90	SF1	SF4	-	E9-32	-	1-2
2 1/2	63.50	5.500	139,70	4.250	108,00	SF1	SF4	-	E9-40	-	1-2
3	76.20	6.250	158,80	5.000	127,00	SF1	SF4	-	E9-48	-	1-2
4	101.60	8.000	203,20	6.625	168,20	SF1	SF4	-	E9-64	-	1-2
6	152.40	11.500	292,10	10.500	266,70	SF1	SF4	-	E9-96	-	1-2

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.1-3**  
HYGIENIC CLAMP JOINT: 90° ELBOW

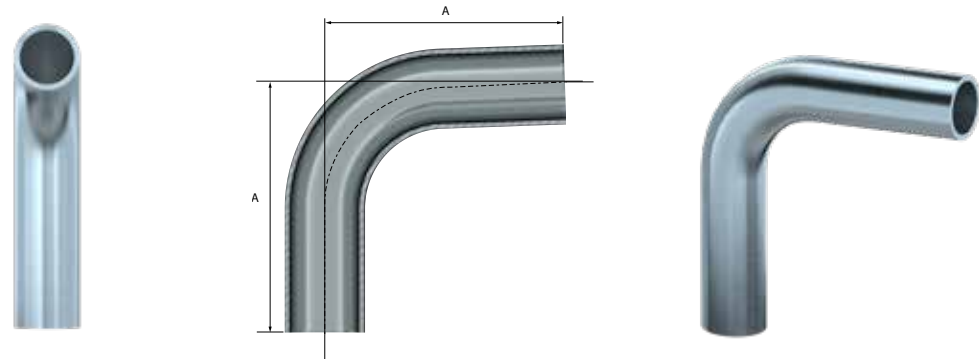


Nominal Size (d)		Clamp End (A)		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>	
Inch	mm	Inch	mm			316L	CC		
1/4	6.35	1.625	41.30	SF1	SF4	-	E9-04	-	1-3
3/8	9.53	1.625	41.30	SF1	SF4	-	E9-06	-	1-3
1/2	12.70	1.625	41.30	SF1	SF4	-	E9-08	-	1-3
3/4	19.05	1.625	41.30	SF1	SF4	-	E9-12	-	1-3
1	25.40	2.000	50.80	SF1	SF4	-	E9-16	-	1-3
1 1/2	38.10	2.750	69.90	SF1	SF4	-	E9-24	-	1-3
2	50.80	3.500	88.90	SF1	SF4	-	E9-32	-	1-3
2 1/2	63.50	4.250	108.00	SF1	SF4	-	E9-40	-	1-3
3	76.20	5.000	127.00	SF1	SF4	-	E9-48	-	1-3
4	101.60	6.625	168.30	SF1	SF4	-	E9-64	-	1-3
6	152.40	10.500	266.70	SF1	SF4	-	E9-96	-	1-3

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.1-9**  
AUTOMATIC TUBE WELD: 88° ELBOW



ASME BPE / SF1  
Mechanically polished<sup>1</sup>

ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

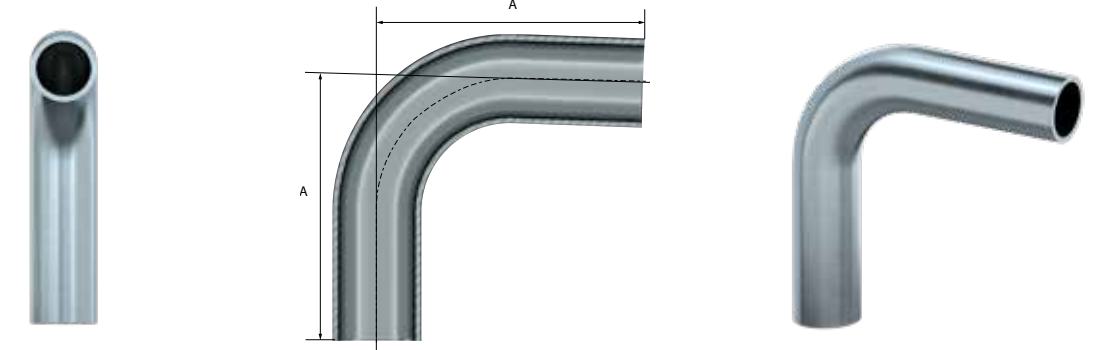
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		WW
1/4	6.35	2.700	68.58	SF1	SF4	-	E8-04	- 1-9
3/8	9.53	2.700	68.58	SF1	SF4	-	E8-06	- 1-9
1/2	12.70	3.065	77.85	SF1	SF4	-	E8-08	- 1-9
3/4	19.05	3.065	77.85	SF1	SF4	-	E8-12	- 1-9
1	25.40	3.050	77.47	SF1	SF4	-	E8-16	- 1-9
1 1/2	38.10	3.800	96.52	SF1	SF4	-	E8-24	- 1-9
2	50.80	4.810	122.17	SF1	SF4	-	E8-32	- 1-9
2 1/2	63.50	5.560	141.22	SF1	SF4	-	E8-40	- 1-9
3	76.20	6.310	160.27	SF1	SF4	-	E8-48	- 1-9
4	101.60	8.065	204.85	SF1	SF4	-	E8-64	- 1-9
6	152.40	11.580	294.13	SF1	SF4	-	E8-96	- 1-9

For Order Code please combine:  
Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>

Further dimensions on request.

**DT-4.1.1-10**  
AUTOMATIC TUBE WELD: 92° ELBOW



ASME BPE / SF1  
Mechanically polished<sup>1</sup>

ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

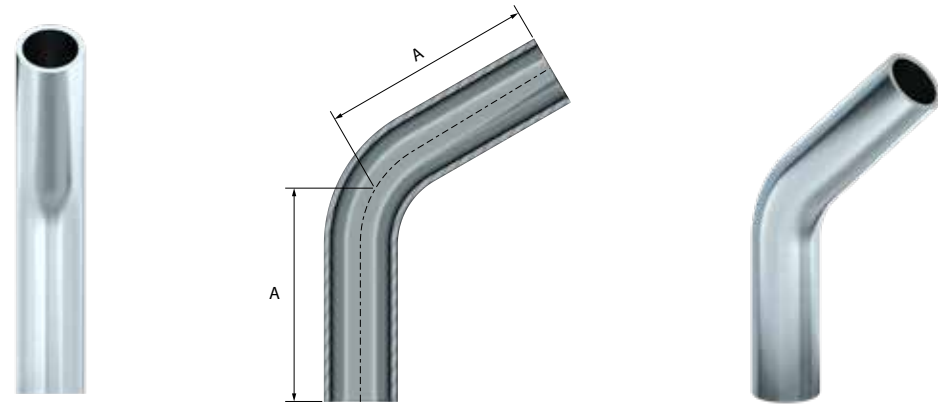
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		WW
1/4	6.35	2.700	68.58	SF1	SF4	-	E2-04	- 1-10
3/8	9.53	2.700	68.58	SF1	SF4	-	E2-06	- 1-10
1/2	12.70	3.065	77.85	SF1	SF4	-	E2-08	- 1-10
3/4	19.05	3.065	77.85	SF1	SF4	-	E2-12	- 1-10
1	25.40	3.050	77.47	SF1	SF4	-	E2-16	- 1-10
1 1/2	38.10	3.800	96.52	SF1	SF4	-	E2-24	- 1-10
2	50.80	4.810	122.17	SF1	SF4	-	E2-32	- 1-10
2 1/2	63.50	5.560	141.22	SF1	SF4	-	E2-40	- 1-10
3	76.20	6.310	160.27	SF1	SF4	-	E2-48	- 1-10
4	101.60	8.065	204.85	SF1	SF4	-	E2-64	- 1-10
6	152.40	11.580	294.13	SF1	SF4	-	E2-96	- 1-10

For Order Code please combine:  
Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>

Further dimensions on request.

**DT-4.1.1-4**  
AUTOMATIC TUBE WELD: 45° ELBOW



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

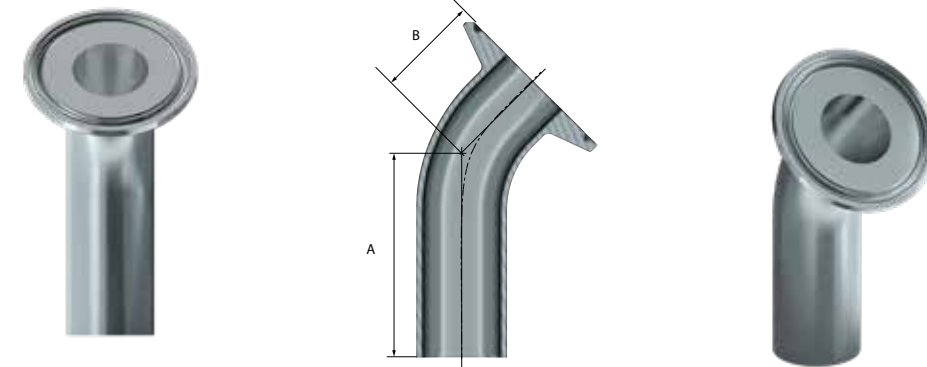
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		WW
1/4	6.35	2.000	50.80	SF1	SF4	-	E4-04	- 1-4
3/8	9.53	2.000	50.80	SF1	SF4	-	E4-06	- 1-4
1/2	12.70	2.250	57.20	SF1	SF4	-	E4-08	- 1-4
3/4	19.05	2.250	57.20	SF1	SF4	-	E4-12	- 1-4
1	25.40	2.250	57.20	SF1	SF4	-	E4-16	- 1-4
1 1/2	38.10	2.500	63.50	SF1	SF4	-	E4-24	- 1-4
2	50.80	3.000	76.20	SF1	SF4	-	E4-32	- 1-4
2 1/2	63.50	3.375	85.70	SF1	SF4	-	E4-40	- 1-4
3	76.20	3.625	92.10	SF1	SF4	-	E4-48	- 1-4
4	101.60	4.500	114.30	SF1	SF4	-	E4-64	- 1-4
6	152.40	6.250	158.80	SF1	SF4	-	E4-96	- 1-4

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.1-5**  
AUTOMATIC TUBE WELD: HYGIENIC CLAMP JOINT, 45° ELBOW



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

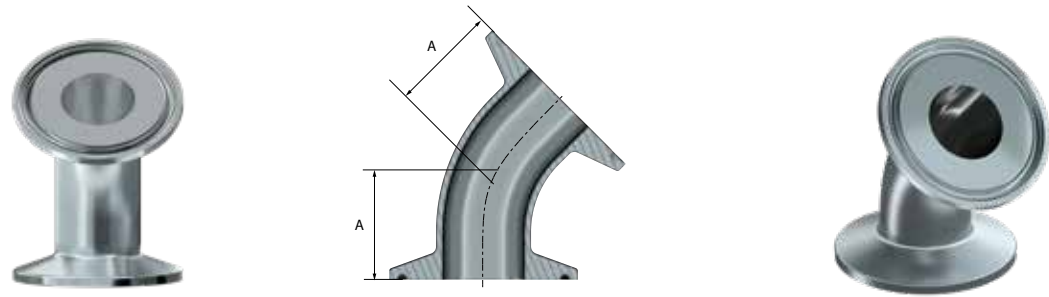
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		Weld End (A)		Clamp End (B)		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm	SF1	SF4	-		CW
1/4	6.35	2.000	50.80	1.000	25.40	SF1	SF4	-	E4-04	- 1-5
3/8	9.53	2.000	50.80	1.000	25.40	SF1	SF4	-	E4-06	- 1-5
1/2	12.70	2.250	57.20	1.000	25.40	SF1	SF4	-	E4-08	- 1-5
3/4	19.05	2.250	57.20	1.000	25.40	SF1	SF4	-	E4-12	- 1-5
1	25.40	2.250	57.20	1.125	28.60	SF1	SF4	-	E4-16	- 1-5
1 1/2	38.10	2.500	63.50	1.438	36.50	SF1	SF4	-	E4-24	- 1-5
2	50.80	3.000	76.20	1.750	44.50	SF1	SF4	-	E4-32	- 1-5
2 1/2	63.50	3.375	85.70	2.063	52.40	SF1	SF4	-	E4-40	- 1-5
3	76.20	3.625	92.10	2.375	60.30	SF1	SF4	-	E4-48	- 1-5
4	101.60	4.500	114.30	3.125	79.40	SF1	SF4	-	E4-64	- 1-5
6	152.40	6.250	158.80	5.250	133.40	SF1	SF4	-	E4-96	- 1-5

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.1-6**  
HYGIENIC CLAMP JOINT: 45° ELBOW



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

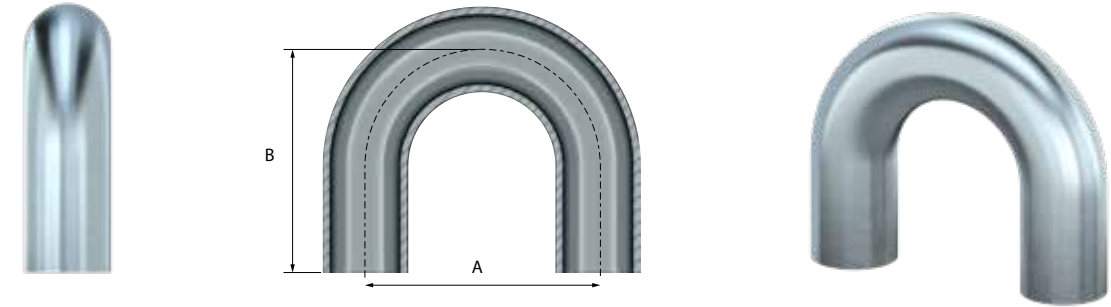
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		Clamp End (A)		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-	E4-XX	CC
1/4	6.35	1.000	25.40	SF1	SF4	-	E4-04	- 1-6
3/8	9.53	1.000	25.40	SF1	SF4	-	E4-06	- 1-6
1/2	12.70	1.000	25.40	SF1	SF4	-	E4-08	- 1-6
3/4	19.05	1.000	25.40	SF1	SF4	-	E4-12	- 1-6
1	25.40	1.125	28.60	SF1	SF4	-	E4-16	- 1-6
1 1/2	38.10	1.438	36.50	SF1	SF4	-	E4-24	- 1-6
2	50.80	1.750	44.50	SF1	SF4	-	E4-32	- 1-6
2 1/2	63.50	2.063	52.40	SF1	SF4	-	E4-40	- 1-6
3	76.20	2.375	60.30	SF1	SF4	-	E4-48	- 1-6
4	101.60	3.125	79.40	SF1	SF4	-	E4-64	- 1-6
6	152.40	5.250	133.40	SF1	SF4	-	E4-96	- 1-6

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.1-7**  
AUTOMATIC TUBE WELD: 180° RETURN BEND



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

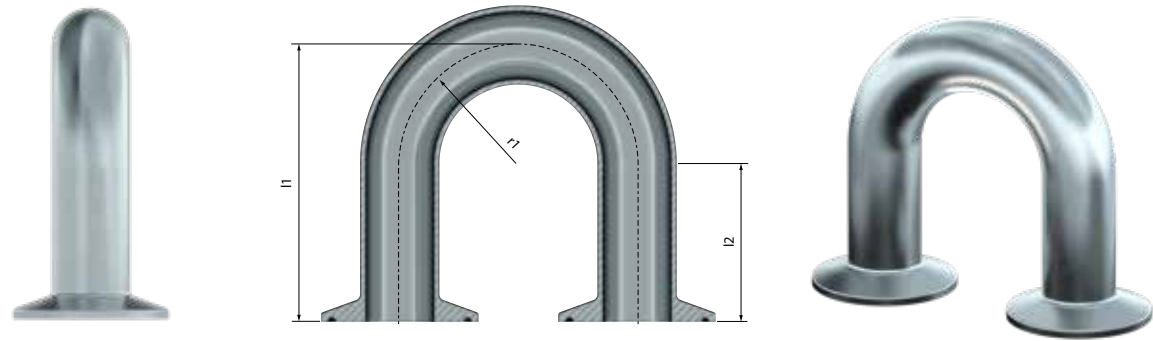
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		B		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm	SF1	SF4	-	EU-XX	WW
1/4	6.35	4.500	114.30	2.625	66.70	SF1	SF4	-	EU-04	- 1-7
3/8	9.53	4.500	114.30	2.625	66.70	SF1	SF4	-	EU-06	- 1-7
1/2	12.70	4.500	114.30	3.000	76.20	SF1	SF4	-	EU-08	- 1-7
3/4	19.05	4.500	114.30	3.000	76.20	SF1	SF4	-	EU-12	- 1-7
1	25.40	3.000	76.20	3.000	76.20	SF1	SF4	-	EU-16	- 1-7
1 1/2	38.10	4.500	114.30	4.500	114.30	SF1	SF4	-	EU-24	- 1-7
2	50.80	6.000	152.40	5.000	127.00	SF1	SF4	-	EU-32	- 1-7
2 1/2	63.50	7.500	190.50	5.750	146.10	SF1	SF4	-	EU-40	- 1-7
3	76.20	9.000	228.60	6.500	165.10	SF1	SF4	-	EU-48	- 1-7
4	101.60	12.000	304.80	8.500	215.90	SF1	SF4	-	EU-64	- 1-7
6	152.40	18.000	457.20	11.500	292.10	SF1	SF4	-	EU-96	- 1-7

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.1-8**  
HYGIENIC CLAMP JOINT: 180° RETURN BEND



● **ASME BPE / SF1**  
Mechanically polished<sup>1</sup>

● **ASME BPE / SF4**  
Electropolished<sup>1</sup>

**Product Code<sup>2</sup>**  
+  
**Diameter<sup>3</sup>**

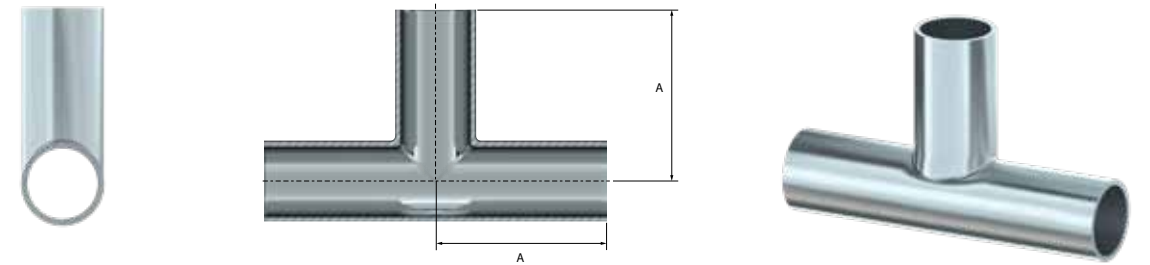
**BPE Ref.<sup>4</sup>**

Nominal Size (d)		A		B		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm	SF1	SF4	-		CC
1/4	6.35	4.500	114.30	3.125	79.40	SF1	SF4	-	EU-04	1-8
3/8	9.53	4.500	114.30	3.125	79.40	SF1	SF4	-	EU-06	1-8
1/2	12.70	4.500	114.30	3.500	88.90	SF1	SF4	-	EU-08	1-8
3/4	19.05	4.500	114.30	3.500	88.90	SF1	SF4	-	EU-12	1-8
1	25.40	3.000	76.20	3.500	88.90	SF1	SF4	-	EU-16	1-8
1 1/2	38.10	4.500	114.30	5.000	127.00	SF1	SF4	-	EU-24	1-8
2	50.80	6.000	152.40	5.500	139.70	SF1	SF4	-	EU-32	1-8
2 1/2	63.50	7.500	190.50	6.250	158.80	SF1	SF4	-	EU-40	1-8
3	76.20	9.000	228.60	7.000	177.80	SF1	SF4	-	EU-48	1-8
4	101.60	12.000	304.80	9.125	231.80	SF1	SF4	-	EU-64	1-8
6	152.40	18.000	457.20	13.000	330.20	SF1	SF4	-	EU-96	1-8

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.2-1**  
AUTOMATIC TUBE WELD: STRAIGHT TEE



● **ASME BPE / SF1**  
Mechanically polished<sup>1</sup>

● **ASME BPE / SF4**  
Electropolished<sup>1</sup>

**Product Code<sup>2</sup>**  
+  
**Diameter<sup>3</sup>**

**BPE Ref.<sup>4</sup>**

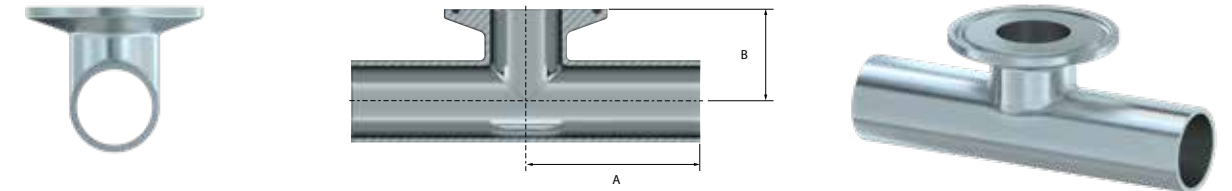
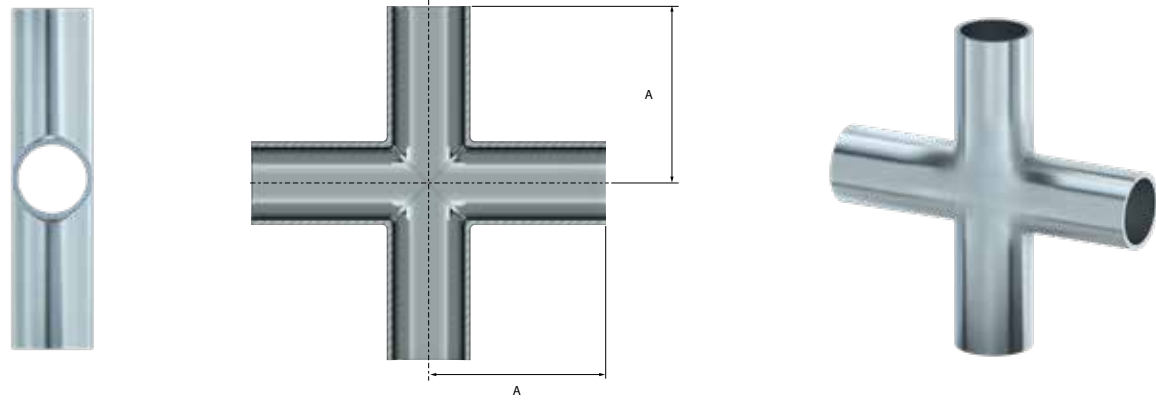
Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		WW
1/4	6.35	1.750	44.50	SF1	SF4	-	TE-04	2-1
3/8	9.53	1.750	44.50	SF1	SF4	-	TE-06	2-1
1/2	12.70	1.875	47.60	SF1	SF4	-	TE-08	2-1
3/4	19.05	2.000	50.80	SF1	SF4	-	TE-12	2-1
1	25.40	2.125	54.00	SF1	SF4	-	TE-16	2-1
1 1/2	38.10	2.375	60.30	SF1	SF4	-	TE-24	2-1
2	50.80	2.875	73.00	SF1	SF4	-	TE-32	2-1
2 1/2	63.50	3.125	79.40	SF1	SF4	-	TE-40	2-1
3	76.20	3.375	85.70	SF1	SF4	-	TE-48	2-1
4	101.60	4.125	104.80	SF1	SF4	-	TE-64	2-1
6	152.40	5.625	142.90	SF1	SF4	-	TE-96	2-1

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.2-1**  
AUTOMATIC TUBE WELD: STRAIGHT CROSS

**DT-4.1.2-2**  
AUTOMATIC TUBE WELD: SHORT OUTLET HYGIENIC CLAMP JOINT TEE



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-	CE-XX	WW
1/4	6.35	1.750	44.50	SF1	SF4	-	CE-04	2-1
3/8	9.53	1.750	44.50	SF1	SF4	-	CE-06	2-1
1/2	12.70	1.875	47.60	SF1	SF4	-	CE-08	2-1
3/4	19.05	2.000	50.80	SF1	SF4	-	CE-12	2-1
1	25.40	2.125	54.00	SF1	SF4	-	CE-16	2-1
1 1/2	38.10	2.375	60.30	SF1	SF4	-	CE-24	2-1
2	50.80	2.875	73.00	SF1	SF4	-	CE-32	2-1
2 1/2	63.50	3.125	79.40	SF1	SF4	-	CE-40	2-1
3	76.20	3.375	85.70	SF1	SF4	-	CE-48	2-1
4	101.60	4.125	104.80	SF1	SF4	-	CE-64	2-1
6	152.40	5.625	142.90	SF1	SF4	-	CE-96	2-1

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Further dimensions on request.

● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

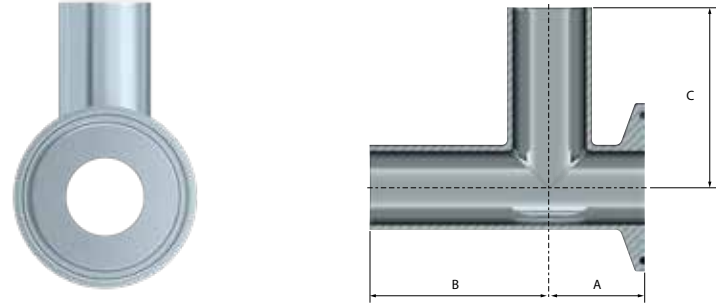
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		B		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm	SF1	SF4	-	TE-XX	WCW
1/4	6.35	1.750	44.50	1.000	25.40	SF1	SF4	-	TE-04	2-2
3/8	9.53	1.750	44.50	1.000	25.40	SF1	SF4	-	TE-06	2-2
1/2	12.70	1.875	47.60	1.000	25.40	SF1	SF4	-	TE-08	2-2
3/4	19.05	2.000	50.80	1.125	28.60	SF1	SF4	-	TE-12	2-2
1	25.40	2.125	54.00	1.125	28.60	SF1	SF4	-	TE-16	2-2
1 1/2	38.10	2.375	60.30	1.375	34.90	SF1	SF4	-	TE-24	2-2
2	50.80	2.875	73.00	1.625	41.30	SF1	SF4	-	TE-32	2-2
2 1/2	63.50	3.125	79.40	1.875	47.60	SF1	SF4	-	TE-40	2-2
3	76.20	3.375	85.70	2.125	54.00	SF1	SF4	-	TE-48	2-2
4	101.60	4.125	104.80	2.750	69.00	SF1	SF4	-	TE-64	2-2
6	152.40	5.625	142.90	4.625	117.50	SF1	SF4	-	TE-96	2-2

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Further dimensions on request.

**DT-4.1.2-3**  
HYGIENIC MECHANICAL JOINT: SHORT OUTLET RUN TEE

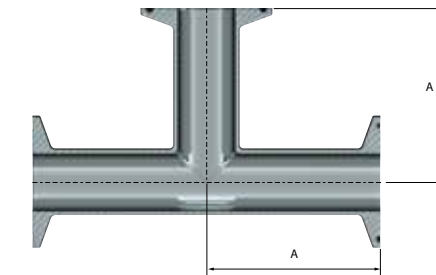


Nominal Size (d)		A		B		C		● ASME BPE / SF1 Mechanically polished <sup>1</sup>	● ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm	Inch	mm				
1/4	6.35	0.875	22.20	1.750	44.50	1.750	44.50	SF1	SF4	- TE-04	- 2-3
3/8	9.53	0.875	22.20	1.750	44.50	1.750	44.50	SF1	SF4	- TE-06	- 2-3
1/2	12.70	0.875	22.20	1.875	47.60	1.875	47.60	SF1	SF4	- TE-08	- 2-3
3/4	19.05	1.000	25.40	2.000	50.80	2.000	50.80	SF1	SF4	- TE-12	- 2-3
1	25.40	1.125	28.60	2.125	54.00	2.125	54.00	SF1	SF4	- TE-16	- 2-3
1 1/2	38.10	1.375	34.90	2.375	60.30	2.375	60.30	SF1	SF4	- TE-24	- 2-3
2	50.80	1.625	41.30	2.875	73.00	2.875	73.00	SF1	SF4	- TE-32	- 2-3
2 1/2	63.50	1.875	47.60	3.125	79.40	3.125	79.40	SF1	SF4	- TE-40	- 2-3
3	76.20	2.125	54.00	3.375	85.70	3.375	85.70	SF1	SF4	- TE-48	- 2-3
4	101.60	2.750	69.90	4.125	104.80	4.125	104.80	SF1	SF4	- TE-64	- 2-3
6	152.40	4.625	117.50	5.625	142.90	5.625	142.90	SF1	SF4	- TE-96	- 2-3

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Further dimensions on request.

**DT-4.1.2-4**  
HYGIENIC CLAMP JOINT: STRAIGHT TEE



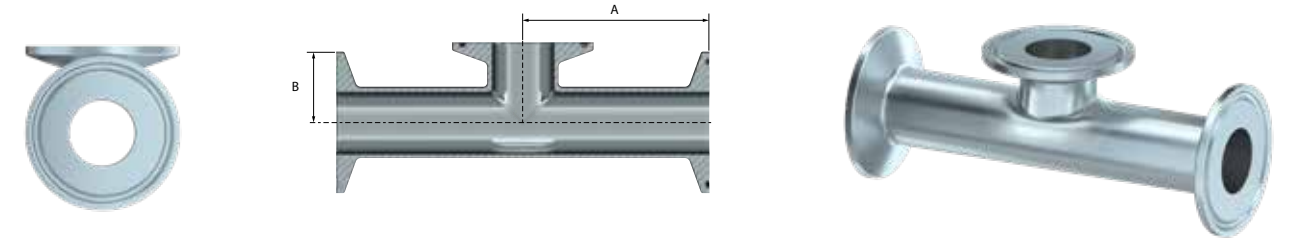
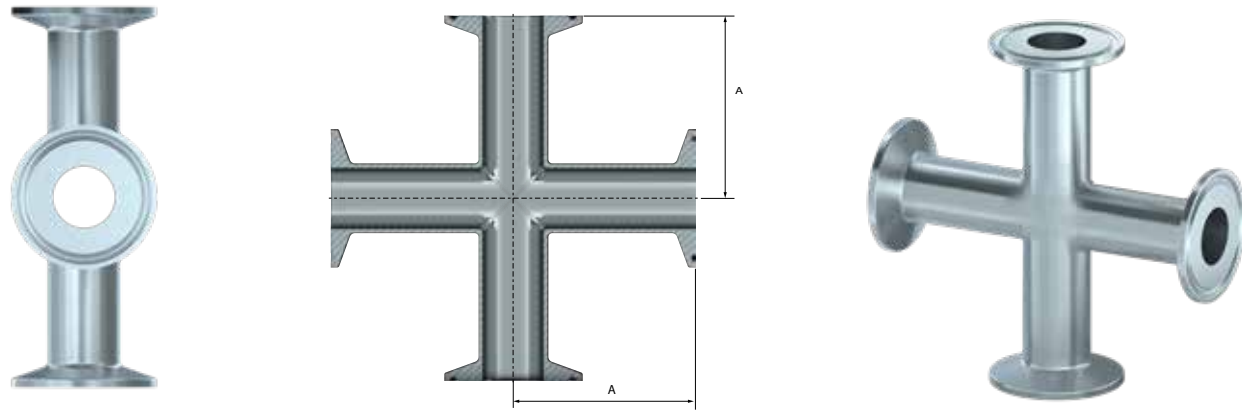
Nominal Size (d)		A (L1)		● ASME BPE / SF1 Mechanically polished <sup>1</sup>	● ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm				
1/4	6.35	2.250	57.20	SF1	SF4	- TE-04	- 2-4
3/8	9.53	2.250	57.20	SF1	SF4	- TE-06	- 2-4
1/2	12.70	2.250	57.20	SF1	SF4	- TE-08	- 2-4
3/4	19.05	2.375	60.30	SF1	SF4	- TE-12	- 2-4
1	25.40	2.625	66.70	SF1	SF4	- TE-16	- 2-4
1 1/2	38.10	2.875	73.00	SF1	SF4	- TE-24	- 2-4
2	50.80	3.375	85.70	SF1	SF4	- TE-32	- 2-4
2 1/2	63.50	3.625	92.10	SF1	SF4	- TE-40	- 2-4
3	76.20	3.875	98.40	SF1	SF4	- TE-48	- 2-4
4	101.60	4.750	120.70	SF1	SF4	- TE-64	- 2-4
6	152.40	7.125	181.00	SF1	SF4	- TE-96	- 2-4

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Further dimensions on request.

**DT-4.1.2-4**  
HYGIENIC CLAMP JOINT: STRAIGHT CROSS

**DT-4.1.2-5**  
HYGIENIC CLAMP JOINT: SHORT OUTLET TEE



Nominal Size (d)		A		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	316L			CCC
1/4	6.35	2.250	57.20	SF1	SF4	- CE-04	- 2-4
3/8	9.53	2.250	57.20	SF1	SF4	- CE-06	- 2-4
1/2	12.70	2.250	57.20	SF1	SF4	- CE-08	- 2-4
3/4	19.05	2.375	60.30	SF1	SF4	- CE-12	- 2-4
1	25.40	2.625	66.70	SF1	SF4	- CE-16	- 2-4
1 1/2	38.10	2.875	73.00	SF1	SF4	- CE-24	- 2-4
2	50.80	3.375	85.70	SF1	SF4	- CE-32	- 2-4
2 1/2	63.50	3.625	92.10	SF1	SF4	- CE-40	- 2-4
3	76.20	3.875	98.40	SF1	SF4	- CE-48	- 2-4
4	101.60	4.750	120.70	SF1	SF4	- CE-64	- 2-4
6	152.40	7.125	181.00	SF1	SF4	- CE-96	- 2-4

Further dimensions on request.

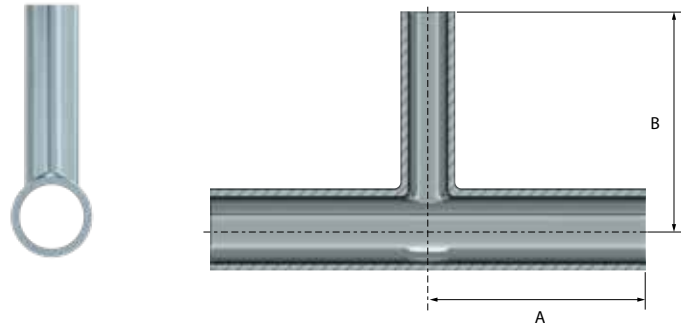
For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Nominal Size (d)		A		B		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm	316L			CCC
1/2	12.70	2.625	66.70	1.125	28.60	SF1	SF4	- TE-08	- 2-5
3/4	19.05	2.875	73.00	1.375	34.90	SF1	SF4	- TE-12	- 2-5
1	25.40	3.375	85.70	1.625	41.30	SF1	SF4	- TE-16	- 2-5
1 1/2	38.10	3.625	92.10	1.875	47.60	SF1	SF4	- TE-24	- 2-5
2	50.80	3.875	98.40	2.125	54.00	SF1	SF4	- TE-32	- 2-5
2 1/2	63.50	4.750	120.70	2.750	69.90	SF1	SF4	- TE-40	- 2-5
3	76.20	7.125	181.00	4.625	117.50	SF1	SF4	- TE-48	- 2-5
4	101.60	4.125	104.80	2.750	69.00	SF1	SF4	- TE-64	- 2-5
6	152.40	5.625	142.90	4.625	117.50	SF1	SF4	- TE-96	- 2-5

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.2-6**  
**AUTOMATIC TUBE WELD: REDUCING TEE**



● ASME BPE / SF1  
 Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
 Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
 +  
 Diameter<sup>3</sup>

BPE  
 Ref.<sup>4</sup>

Nominal Size (d)		A		B		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>	
Inch	mm	Inch	mm	Inch	mm	SF1	SF4	-	TR-XXXX-XX	-	2-6
3/8 x 1/4	9.53 x 6.35	1.750	44.50	1.750	44.50	SF1	SF4	-	TR-06-04	-	2-6
1/2 x 1/4	12.70 x 6.35	1.875	47.60	1.875	47.60	SF1	SF4	-	TR-08-04	-	2-6
1/2 x 3/8	12.70 x 9.53	1.875	47.60	1.875	47.60	SF1	SF4	-	TR-08-06	-	2-6
3/4 x 1/4	19.05 x 6.35	2.000	50.80	2.000	50.80	SF1	SF4	-	TR-12-04	-	2-6
3/4 x 3/8	19.05 x 9.53	2.000	50.80	2.000	50.80	SF1	SF4	-	TR-12-06	-	2-6
3/4 x 1/2	19.05 x 12.70	2.000	50.80	2.000	50.80	SF1	SF4	-	TR-12-08	-	2-6
1 x 1/4	25.40 x 6.35	2.125	54.00	2.125	54.00	SF1	SF4	-	TR-16-04	-	2-6
1 x 3/8	25.40 x 9.53	2.125	54.00	2.125	54.00	SF1	SF4	-	TR-16-06	-	2-6
1 x 1/2	25.40 x 12.70	2.125	54.00	2.125	54.00	SF1	SF4	-	TR-16-08	-	2-6
1 x 3/4	25.40 x 19.05	2.125	54.00	2.125	54.00	SF1	SF4	-	TR-16-12	-	2-6
1 1/2 x 1/2	38.10 x 12.70	2.375	60.30	2.375	60.30	SF1	SF4	-	TR-24-08	-	2-6
1 1/2 x 3/4	38.10 x 19.05	2.375	60.30	2.375	60.30	SF1	SF4	-	TR-24-12	-	2-6
1 1/2 x 1	38.10 x 25.40	2.375	60.30	2.375	60.30	SF1	SF4	-	TR-24-16	-	2-6
2 x 1/2	50.80 x 12.70	2.875	73.00	2.625	66.70	SF1	SF4	-	TR-32-08	-	2-6
2 x 3/4	50.80 x 19.05	2.875	73.00	2.625	66.70	SF1	SF4	-	TR-32-12	-	2-6
2 x 1	50.80 x 25.40	2.875	73.00	2.625	66.70	SF1	SF4	-	TR-32-16	-	2-6
2 x 1 1/2	50.80 x 38.10	2.875	73.00	2.625	66.70	SF1	SF4	-	TR-32-24	-	2-6

Further dimensions on request.

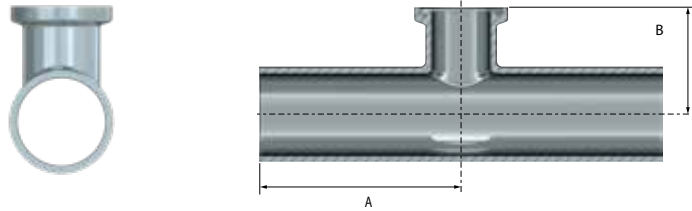
For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Nominal Size (d)		A		B		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>	
Inch	mm	Inch	mm	Inch	mm	SF1	SF4	-	TR-XXXX-XX	-	2-6
2 1/2 x 1/2	63.50 x 12.70	3.125	79.40	2.875	73.00	SF1	SF4	-	TR-40-08	-	2-6
2 1/2 x 3/4	63.50 x 19.05	3.125	79.40	2.875	73.00	SF1	SF4	-	TR-40-12	-	2-6
2 1/2 x 1	63.50 x 25.40	3.125	79.40	2.875	73.00	SF1	SF4	-	TR-40-16	-	2-6
2 1/2 x 1 1/2	63.50 x 38.10	3.125	79.40	2.875	73.00	SF1	SF4	-	TR-40-24	-	2-6
2 1/2 x 2	63.50 x 50.80	3.125	79.40	2.875	73.00	SF1	SF4	-	TR-40-32	-	2-6
3 x 1/2	76.20 x 12.70	3.375	85.70	3.125	79.40	SF1	SF4	-	TR-48-08	-	2-6
3 x 3/4	76.20 x 19.05	3.375	85.70	3.125	79.40	SF1	SF4	-	TR-48-12	-	2-6
3 x 1	76.20 x 25.40	3.375	85.70	3.125	79.40	SF1	SF4	-	TR-48-16	-	2-6
3 x 1 1/2	76.20 x 38.10	3.375	85.70	3.125	79.40	SF1	SF4	-	TR-48-24	-	2-6
3 x 2	76.20 x 50.80	3.375	85.70	3.125	79.40	SF1	SF4	-	TR-48-32	-	2-6
3 x 2 1/2	76.20 x 63.50	3.375	85.70	3.125	79.40	SF1	SF4	-	TR-48-40	-	2-6
4 x 1/2	101.60 x 12.70	4.125	104.80	3.625	92.10	SF1	SF4	-	TR-64-08	-	2-6
4 x 3/4	101.60 x 19.05	4.125	104.80	3.625	92.10	SF1	SF4	-	TR-64-12	-	2-6
4 x 1	101.60 x 25.40	4.125	104.80	3.625	92.10	SF1	SF4	-	TR-64-16	-	2-6
4 x 1 1/2	101.60 x 38.10	4.125	104.80	3.625	92.10	SF1	SF4	-	TR-64-24	-	2-6
4 x 2	101.60 x 50.80	4.125	104.80	3.875	98.40	SF1	SF4	-	TR-64-32	-	2-6
4 x 2 1/2	101.60 x 63.50	4.125	104.80	3.875	98.40	SF1	SF4	-	TR-64-40	-	2-6
4 x 3	101.60 x 76.20	4.125	104.80	3.875	98.40	SF1	SF4	-	TR-64-48	-	2-6
6 x 1/2	152.40 x 12.70	5.625	142.90	4.625	117.48	SF1	SF4	-	TR-96-08	-	2-6
6 x 3/4	152.40 x 19.05	5.625	142.90	4.625	117.48	SF1	SF4	-	TR-96-12	-	2-6
6 x 1	152.40 x 25.40	5.625	142.90	4.625	117.48	SF1	SF4	-	TR-96-16	-	2-6
6 x 1 1/2	152.40 x 38.10	5.625	142.90	4.625	117.48	SF1	SF4	-	TR-96-24	-	2-6
6 x 2	152.40 x 50.80	5.625	142.90	4.625	117.48	SF1	SF4	-	TR-96-32	-	2-6
6 x 2 1/2	152.40 x 63.50	5.625	142.90	4.625	117.48	SF1	SF4	-	TR-96-40	-	2-6
6 x 3	152.40 x 76.20	5.625	142.90	4.875	123.80	SF1	SF4	-	TR-96-48	-	2-6
6 x 4	152.40 x 101.60	5.625	142.90	5.125	130.20	SF1	SF4	-	TR-96-64	-	2-6

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.2-7**  
HYGIENIC CLAMP JOINT: REDUCING TEE



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>      BPE Ref.<sup>4</sup>

Nominal Size (d)		A		B		316L		WCW	
Inch	mm	Inch	mm	Inch	mm	SF1	SF4	-	
3/8 x 1/4	9.53 x 6.35	1.750	44.50	1.000	25.40	SF1	SF4	-	TR-06-04 - 2-7
1/2 x 1/4	12.70 x 6.35	1.875	47.60	1.000	25.40	SF1	SF4	-	TR-08-04 - 2-7
1/2 x 3/8	12.70 x 9.53	1.875	47.60	1.000	25.40	SF1	SF4	-	TR-08-06 - 2-7
3/4 x 1/4	19.05 x 6.35	2.000	50.80	1.000	25.40	SF1	SF4	-	TR-12-04 - 2-7
3/4 x 3/8	19.05 x 9.53	2.000	50.80	1.000	25.40	SF1	SF4	-	TR-12-06 - 2-7
3/4 x 1/2	19.05 x 12.70	2.000	50.80	1.000	25.40	SF1	SF4	-	TR-12-08 - 2-7
1 x 1/4	25.40 x 6.35	2.125	54.00	1.125	28.60	SF1	SF4	-	TR-16-04 - 2-7
1 x 3/8	25.40 x 9.53	2.125	54.00	1.125	28.60	SF1	SF4	-	TR-16-06 - 2-7
1 x 1/2	25.40 x 12.70	2.125	54.00	1.125	28.60	SF1	SF4	-	TR-16-08 - 2-7
1 x 3/4	25.40 x 19.05	2.125	54.00	1.125	28.60	SF1	SF4	-	TR-16-12 - 2-7
1 1/2 x 1/2	38.10 x 12.70	2.375	60.30	1.375	34.90	SF1	SF4	-	TR-24-08 - 2-7
1 1/2 x 3/4	38.10 x 19.05	2.375	60.30	1.375	34.90	SF1	SF4	-	TR-24-12 - 2-7
1 1/2 x 1	38.10 x 25.40	2.375	60.30	1.375	34.90	SF1	SF4	-	TR-24-16 - 2-7
2 x 1/2	50.80 x 12.70	2.875	73.00	1.625	41.30	SF1	SF4	-	TR-32-08 - 2-7
2 x 3/4	50.80 x 19.05	2.875	73.00	1.625	41.30	SF1	SF4	-	TR-32-12 - 2-7
2 x 1	50.80 x 25.40	2.875	73.00	1.625	41.30	SF1	SF4	-	TR-32-16 - 2-7
2 x 1 1/2	50.80 x 38.10	2.875	73.00	1.625	41.30	SF1	SF4	-	TR-32-24 - 2-7

Further dimensions on request.

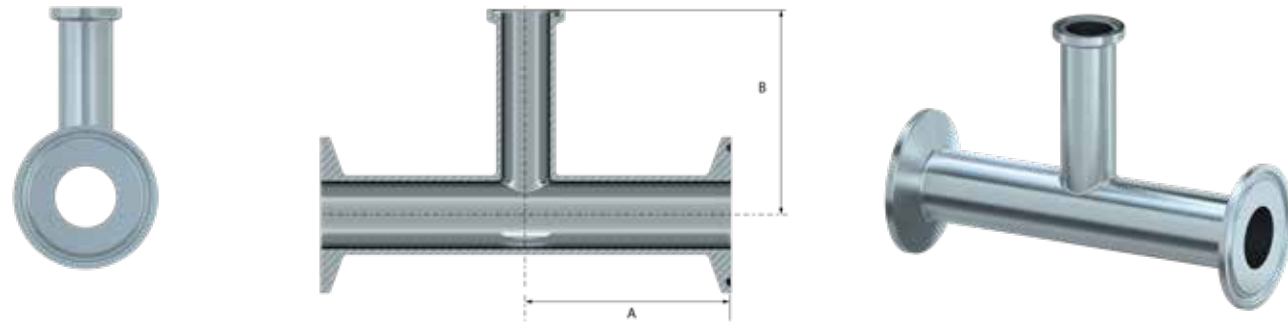
For Order Code please combine:  
Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>

Nominal Size (d)		A		B		316L		WCW	
Inch	mm	Inch	mm	Inch	mm	SF1	SF4	-	
2 1/2 x 1/2	63.50 x 12.70	3.125	79.40	1.875	47.60	SF1	SF4	-	TR-40-08 - 2-7
2 1/2 x 3/4	63.50 x 19.05	3.125	79.40	1.875	47.60	SF1	SF4	-	TR-40-12 - 2-7
2 1/2 x 1	63.50 x 25.40	3.125	79.40	1.875	47.60	SF1	SF4	-	TR-40-16 - 2-7
2 1/2 x 1 1/2	63.50 x 38.10	3.125	79.40	1.875	47.60	SF1	SF4	-	TR-40-24 - 2-7
2 1/2 x 2	63.50 x 50.80	3.125	79.40	1.875	47.60	SF1	SF4	-	TR-40-32 - 2-7
3 x 1/2	76.20 x 12.70	3.375	85.70	2.125	54.00	SF1	SF4	-	TR-48-08 - 2-7
3 x 3/4	76.20 x 19.05	3.375	85.70	2.125	54.00	SF1	SF4	-	TR-48-12 - 2-7
3 x 1	76.20 x 25.40	3.375	85.70	2.125	54.00	SF1	SF4	-	TR-48-16 - 2-7
3 x 1 1/2	76.20 x 38.10	3.375	85.70	2.125	54.00	SF1	SF4	-	TR-48-24 - 2-7
3 x 2	76.20 x 50.80	3.375	85.70	2.125	54.00	SF1	SF4	-	TR-48-32 - 2-7
3 x 2 1/2	76.20 x 63.50	3.375	85.70	2.125	54.00	SF1	SF4	-	TR-48-40 - 2-7
4 x 1/2	101.60 x 12.70	4.125	104.80	2.625	66.70	SF1	SF4	-	TR-64-08 - 2-7
4 x 3/4	101.60 x 19.05	4.125	104.80	2.625	66.70	SF1	SF4	-	TR-64-12 - 2-7
4 x 1	101.60 x 25.40	4.125	104.80	2.625	66.70	SF1	SF4	-	TR-64-16 - 2-7
4 x 1 1/2	101.60 x 38.10	4.125	104.80	2.625	66.70	SF1	SF4	-	TR-64-24 - 2-7
4 x 2	101.60 x 50.80	4.125	104.80	2.625	66.70	SF1	SF4	-	TR-64-32 - 2-7
4 x 2 1/2	101.60 x 63.50	4.125	104.80	2.625	66.70	SF1	SF4	-	TR-64-40 - 2-7
4 x 3	101.60 x 76.20	4.125	104.80	2.625	66.70	SF1	SF4	-	TR-64-48 - 2-7
6 x 1/2	152.40 x 12.70	5.625	142.90	3.625	92.10	SF1	SF4	-	TR-96-48 - 2-7
6 x 3/4	152.40 x 19.05	5.625	142.90	3.625	92.10	SF1	SF4	-	TR-96-08 - 2-7
6 x 1	152.40 x 25.40	5.625	142.90	3.625	92.10	SF1	SF4	-	TR-96-16 - 2-7
6 x 1 1/2	152.40 x 38.10	5.625	142.90	3.625	92.10	SF1	SF4	-	TR-96-24 - 2-7
6 x 2	152.40 x 50.80	5.625	142.90	3.625	92.10	SF1	SF4	-	TR-96-32 - 2-7
6 x 2 1/2	152.40 x 63.50	5.625	142.90	3.625	92.10	SF1	SF4	-	TR-96-40 - 2-7
6 x 3	152.40 x 76.20	5.625	142.90	3.625	92.10	SF1	SF4	-	TR-96-48 - 2-7
6 x 4	152.40 x 101.60	5.625	142.90	3.750	95.30	SF1	SF4	-	TR-96-64 - 2-7

Further dimensions on request.

For Order Code please combine:  
Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>

**DT-4.1.2-8**  
HYGIENIC CLAMP JOINT: REDUCING TEE



Nominal Size (d)		A		B		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm				
						<b>316L</b>		<b>CCC</b>	
3/8 x 1/4	9.53 x 6.35	2.250	57.20	2.250	57.20	SF1	SF4	- TR-06-04	- 2-8
1/2 x 1/4	12.70 x 6.35	2.375	60.30	2.375	60.30	SF1	SF4	- TR-08-04	- 2-8
1/2 x 3/8	12.70 x 9.53	2.375	60.30	2.375	60.30	SF1	SF4	- TR-08-06	- 2-8
3/4 x 1/4	19.05 x 6.35	2.500	63.50	2.500	63.50	SF1	SF4	- TR-12-04	- 2-8
3/4 x 3/8	19.05 x 9.53	2.500	63.50	2.500	63.50	SF1	SF4	- TR-12-06	- 2-8
3/4 x 1/2	19.05 x 12.70	2.500	63.50	2.500	63.50	SF1	SF4	- TR-12-08	- 2-8
1 x 1/4	25.40 x 6.35	2.625	66.70	2.625	66.70	SF1	SF4	- TR-16-04	- 2-8
1 x 3/8	25.40 x 9.53	2.625	66.70	2.625	66.70	SF1	SF4	- TR-16-06	- 2-8
1 x 1/2	25.40 x 12.70	2.625	66.70	2.625	66.70	SF1	SF4	- TR-16-08	- 2-8
1 x 3/4	25.40 x 19.05	2.625	66.70	2.625	66.70	SF1	SF4	- TR-16-12	- 2-8
1 1/2 x 1/2	38.10 x 12.70	2.875	73.00	2.875	73.00	SF1	SF4	- TR-24-08	- 2-8
1 1/2 x 3/4	38.10 x 19.05	2.875	73.00	2.875	73.00	SF1	SF4	- TR-24-12	- 2-8
1 1/2 x 1	38.10 x 25.40	2.875	73.00	2.875	73.00	SF1	SF4	- TR-24-16	- 2-8
2 x 1/2	50.80 x 12.70	3.375	85.70	3.125	79.40	SF1	SF4	- TR-32-08	- 2-8
2 x 3/4	50.80 x 19.05	3.375	85.70	3.125	79.40	SF1	SF4	- TR-32-12	- 2-8
2 x 1	50.80 x 25.40	3.375	85.70	3.125	79.40	SF1	SF4	- TR-32-16	- 2-8
2 x 1 1/2	50.80 x 38.10	3.375	85.70	3.125	79.40	SF1	SF4	- TR-32-24	- 2-8

Further dimensions on request.

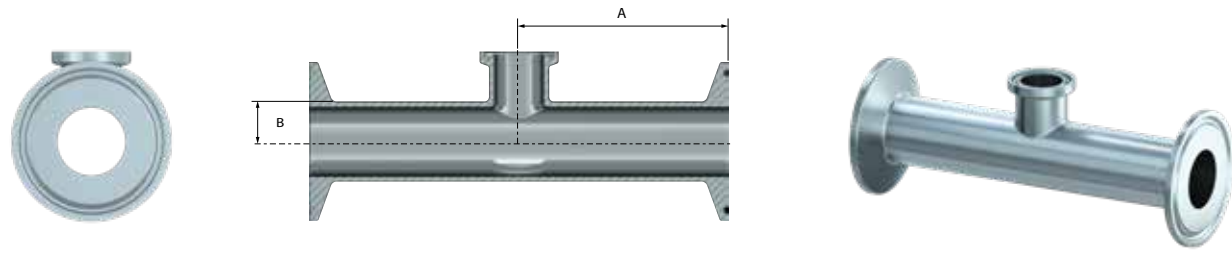
For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Nominal Size (d)		A		B		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm				
						<b>316L</b>		<b>CCC</b>	
2 1/2 x 1/2	63.50 x 12.70	3.625	92.10	3.375	85.70	SF1	SF4	- TR-40-08	- 2-8
2 1/2 x 3/4	63.50 x 19.05	3.625	92.10	3.375	85.70	SF1	SF4	- TR-40-12	- 2-8
2 1/2 x 1	63.50 x 25.40	3.625	92.10	3.375	85.70	SF1	SF4	- TR-40-16	- 2-8
2 1/2 x 1 1/2	63.50 x 38.10	3.625	92.10	3.375	85.70	SF1	SF4	- TR-40-24	- 2-8
2 1/2 x 2	63.50 x 50.80	3.625	92.10	3.375	85.70	SF1	SF4	- TR-40-32	- 2-8
3 x 1/2	76.20 x 12.70	3.875	98.40	3.625	92.10	SF1	SF4	- TR-48-08	- 2-8
3 x 3/4	76.20 x 19.05	3.875	98.40	3.625	92.10	SF1	SF4	- TR-48-12	- 2-8
3 x 1	76.20 x 25.40	3.875	98.40	3.625	92.10	SF1	SF4	- TR-48-16	- 2-8
3 x 1 1/2	76.20 x 38.10	3.875	98.40	3.625	92.10	SF1	SF4	- TR-48-24	- 2-8
3 x 2	76.20 x 50.80	3.875	98.40	3.625	92.10	SF1	SF4	- TR-48-32	- 2-8
3 x 2 1/2	76.20 x 63.50	3.875	98.40	3.625	92.10	SF1	SF4	- TR-48-40	- 2-8
4 x 1/2	101.60 x 12.70	4.750	120.70	4.125	104.80	SF1	SF4	- TR-64-08	- 2-8
4 x 3/4	101.60 x 19.05	4.750	120.70	4.125	104.80	SF1	SF4	- TR-64-12	- 2-8
4 x 1	101.60 x 25.40	4.750	120.70	4.125	104.80	SF1	SF4	- TR-64-16	- 2-8
4 x 1 1/2	101.60 x 38.10	4.750	120.70	4.125	104.80	SF1	SF4	- TR-64-24	- 2-8
4 x 2	101.60 x 50.80	4.750	120.70	4.375	111.10	SF1	SF4	- TR-64-32	- 2-8
4 x 2 1/2	101.60 x 63.50	4.750	120.70	4.375	111.10	SF1	SF4	- TR-64-40	- 2-8
4 x 3	101.60 x 76.20	4.750	120.70	4.375	111.10	SF1	SF4	- TR-64-48	- 2-8
6 x 1/2	152.40 x 12.70	7.125	180.98	5.125	130.18	SF1	SF4	- TR-96-08	- 2-8
6 x 3/4	152.40 x 19.05	7.125	180.98	5.125	130.18	SF1	SF4	- TR-96-12	- 2-8
6 x 1	152.40 x 25.40	7.125	180.98	5.125	130.18	SF1	SF4	- TR-96-16	- 2-8
6 x 1 1/2	152.40 x 38.10	7.125	180.98	5.125	130.18	SF1	SF4	- TR-96-24	- 2-8
6 x 2	152.40 x 50.80	7.125	180.98	5.125	130.18	SF1	SF4	- TR-96-32	- 2-8
6 x 2 1/2	152.40 x 63.50	7.125	180.98	5.125	130.18	SF1	SF4	- TR-96-40	- 2-8
6 x 3	152.40 x 76.20	7.125	181.00	5.375	136.50	SF1	SF4	- TR-96-48	- 2-8
6 x 4	152.40 x 101.60	7.125	181.00	5.750	146.10	SF1	SF4	- TR-96-64	- 2-8

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.2-9**  
HYGIENIC CLAMP JOINT: SHORT OUTLET REDUCING TEE



Nominal Size (d)		A		B		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm				
						<b>316L</b>		<b>CCC</b>	
3/8 x 1/4	9.53 x 6.35	2.250	57.20	1.000	25.40	SF1	SF4	- TR-06-04	- 2-9
1/2 x 1/4	12.70 x 6.35	2.375	60.30	1.000	25.40	SF1	SF4	- TR-08-04	- 2-9
1/2 x 3/8	12.70 x 9.53	2.375	60.30	1.000	25.40	SF1	SF4	- TR-08-06	- 2-9
3/4 x 1/4	19.05 x 6.35	2.500	63.50	1.000	25.40	SF1	SF4	- TR-12-04	- 2-9
3/4 x 3/8	19.05 x 9.53	2.500	63.50	1.000	25.40	SF1	SF4	- TR-12-06	- 2-9
3/4 x 1/2	19.05 x 12.70	2.500	63.50	1.000	25.40	SF1	SF4	- TR-12-08	- 2-9
1 x 1/4	25.40 x 6.35	2.625	66.70	1.125	28.60	SF1	SF4	- TR-16-04	- 2-9
1 x 3/8	25.40 x 9.53	2.625	66.70	1.125	28.60	SF1	SF4	- TR-16-06	- 2-9
1 x 1/2	25.40 x 12.70	2.625	66.70	1.125	28.60	SF1	SF4	- TR-16-08	- 2-9
1 x 3/4	25.40 x 19.05	2.625	66.70	1.125	28.60	SF1	SF4	- TR-16-12	- 2-9
1 1/2 x 1/2	38.10 x 12.70	2.875	73.00	1.375	34.90	SF1	SF4	- TR-24-08	- 2-9
1 1/2 x 3/4	38.10 x 19.05	2.875	73.00	1.375	34.90	SF1	SF4	- TR-24-12	- 2-9
1 1/2 x 1	38.10 x 25.40	2.875	73.00	1.375	34.90	SF1	SF4	- TR-24-16	- 2-9
2 x 1/2	50.80 x 12.70	3.375	85.70	1.625	41.30	SF1	SF4	- TR-32-08	- 2-9
2 x 3/4	50.80 x 19.05	3.375	85.70	1.625	41.30	SF1	SF4	- TR-32-12	- 2-9
2 x 1	50.80 x 25.40	3.375	85.70	1.625	41.30	SF1	SF4	- TR-32-16	- 2-9
2 x 1 1/2	50.80 x 38.10	3.375	85.70	1.625	41.30	SF1	SF4	- TR-32-24	- 2-9

Further dimensions on request.

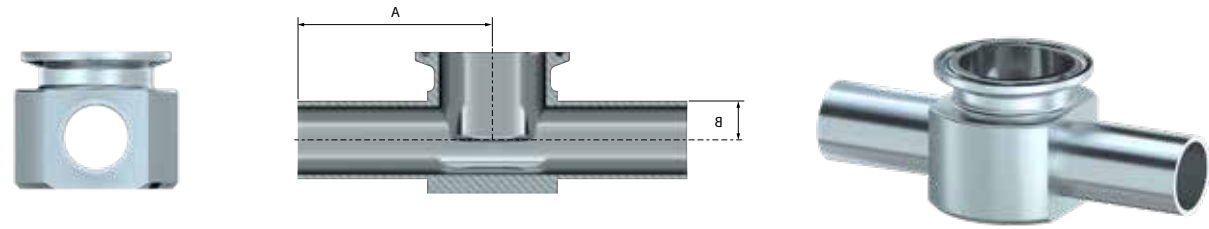
For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Nominal Size (d)		A		B		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm				
						<b>316L</b>		<b>CCC</b>	
2 1/2 x 1/2	63.50 x 12.70	3.625	92.10	1.875	47.60	SF1	SF4	- TR-40-08	- 2-9
2 1/2 x 3/4	63.50 x 19.05	3.625	92.10	1.875	47.60	SF1	SF4	- TR-40-12	- 2-9
2 1/2 x 1	63.50 x 25.40	3.625	92.10	1.875	47.60	SF1	SF4	- TR-40-16	- 2-9
2 1/2 x 1 1/2	63.50 x 38.10	3.625	92.10	1.875	47.60	SF1	SF4	- TR-40-24	- 2-9
2 1/2 x 2	63.50 x 50.80	3.625	92.10	1.875	47.60	SF1	SF4	- TR-40-32	- 2-9
3 x 1/2	76.20 x 12.70	3.875	98.40	2.125	54.00	SF1	SF4	- TR-48-08	- 2-9
3 x 3/4	76.20 x 19.05	3.875	98.40	2.125	54.00	SF1	SF4	- TR-48-12	- 2-9
3 x 1	76.20 x 25.40	3.875	98.40	2.125	54.00	SF1	SF4	- TR-48-16	- 2-9
3 x 1 1/2	76.20 x 38.10	3.875	98.40	2.125	54.00	SF1	SF4	- TR-48-24	- 2-9
3 x 2	76.20 x 50.80	3.875	98.40	2.125	54.00	SF1	SF4	- TR-48-32	- 2-9
3 x 2 1/2	76.20 x 63.50	3.875	98.40	2.125	54.00	SF1	SF4	- TR-48-40	- 2-9
4 x 1/2	101.60 x 12.70	4.750	120.70	2.625	66.70	SF1	SF4	- TR-64-08	- 2-9
4 x 3/4	101.60 x 19.05	4.750	120.70	2.625	66.70	SF1	SF4	- TR-64-12	- 2-9
4 x 1	101.60 x 25.40	4.750	120.70	2.625	66.70	SF1	SF4	- TR-64-16	- 2-9
4 x 1 1/2	101.60 x 38.10	4.750	120.70	2.625	66.70	SF1	SF4	- TR-64-24	- 2-9
4 x 2	101.60 x 50.80	4.750	120.70	2.625	66.70	SF1	SF4	- TR-64-32	- 2-9
4 x 2 1/2	101.60 x 63.50	4.750	120.70	2.625	66.70	SF1	SF4	- TR-64-40	- 2-9
4 x 3	101.60 x 76.20	4.750	120.70	2.625	66.70	SF1	SF4	- TR-64-48	- 2-9
6 x 1/2	152.40 x 12.70	7.125	181.00	3.625	92.10	SF1	SF4	- TR-96-08	- 2-9
6 x 3/4	152.40 x 19.05	7.125	181.00	3.625	92.10	SF1	SF4	- TR-96-12	- 2-9
6 x 1	152.40 x 25.40	7.125	181.00	3.625	92.10	SF1	SF4	- TR-96-16	- 2-9
6 x 1 1/2	152.40 x 38.10	7.125	181.00	3.625	92.10	SF1	SF4	- TR-96-24	- 2-9
6 x 2	152.40 x 50.80	7.125	181.00	3.625	92.10	SF1	SF4	- TR-96-32	- 2-9
6 x 2 1/2	152.40 x 63.50	7.125	181.00	3.625	92.10	SF1	SF4	- TR-96-40	- 2-9
6 x 3	152.40 x 76.20	7.125	181.00	3.625	92.10	SF1	SF4	- TR-96-48	- 2-9
6 x 4	152.40 x 101.60	7.125	181.00	3.750	95.30	SF1	SF4	- TR-96-64	- 2-9

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.2-10**  
AUTOMATIC TUBE WELD: INSTRUMENT TEE

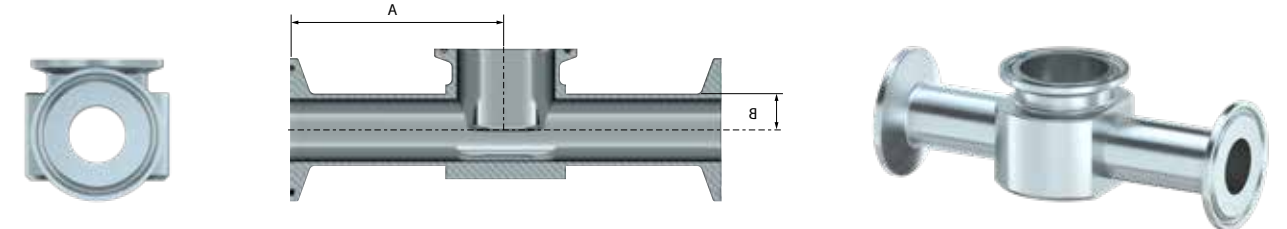


Nominal Size (d)		A		B		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm				
						<b>316L</b>		<b>WCW</b>	
1/2 x 1 1/2	12.70 x 38.10	2.500	63.50	0.875	22.20	SF1	SF4	- TR-08-24	- 2-10
3/4 x 1 1/2	19.05 x 38.10	2.500	63.50	1.000	25.40	SF1	SF4	- TR-12-24	- 2-10
1 x 1 1/2	25.40 x 38.10	2.500	63.50	1.125	28.60	SF1	SF4	- TR-16-24	- 2-10
1/2 x 2	12.70 x 50.80	2.750	69.90	1.000	25.40	SF1	SF4	- TR-08-32	- 2-10
3/4 x 2	19.05 x 50.80	2.750	69.90	1.125	28.60	SF1	SF4	- TR-12-32	- 2-10
1 x 2	25.40 x 50.80	2.750	69.90	1.250	31.80	SF1	SF4	- TR-16-32	- 2-10
1 1/2 x 2	38.10 x 50.80	2.750	69.90	1.500	38.10	SF1	SF4	- TR-24-32	- 2-10

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.2-11**  
HYGIENIC CLAMP JOINT: INSTRUMENT TEE

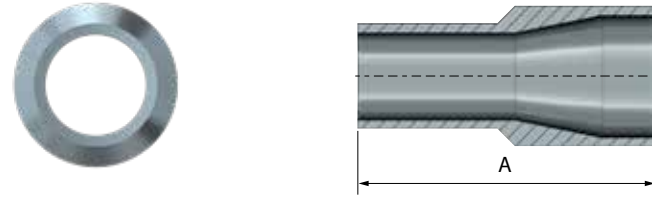


Nominal Size (d)		A		B		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>	BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm				
						<b>316L</b>		<b>WCW</b>	
1/2 x 1 1/2	12.70 x 38.10	3.000	76.20	0.875	22.23	SF1	SF4	- TR-08-24	- 2-11
3/4 x 1 1/2	19.05 x 38.10	3.000	76.20	1.000	25.40	SF1	SF4	- TR-12-24	- 2-11
1 x 1 1/2	25.40 x 38.10	3.000	76.20	1.125	28.58	SF1	SF4	- TR-16-24	- 2-11
1/2 x 2	12.70 x 50.80	3.250	82.55	1.000	25.40	SF1	SF4	- TR-08-32	- 2-11
3/4 x 2	19.05 x 50.80	3.250	82.55	1.125	28.58	SF1	SF4	- TR-12-32	- 2-11
1 x 2	25.40 x 50.80	3.250	82.55	1.250	31.75	SF1	SF4	- TR-16-32	- 2-11
1 1/2 x 2	38.10 x 50.80	3.250	82.55	1.500	38.10	SF1	SF4	- TR-24-32	- 2-11

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.3-1**  
AUTOMATIC TUBE WELD: CONCENTRIC REDUCER



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

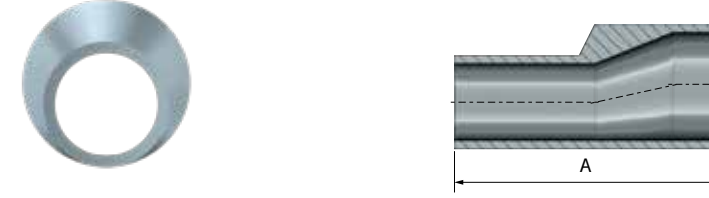
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		WW
3/8 x 1/4	9.53 x 6.35	1.625	41.30	SF1	SF4	-	RC-06-04	3-1
1/2 x 1/4	12.70 x 6.35	1.875	47.60	SF1	SF4	-	RC-08-04	3-1
1/2 x 3/8	12.70 x 9.53	1.875	47.60	SF1	SF4	-	RC-08-06	3-1
3/4 x 3/8	19.05 x 9.53	2.000	50.80	SF1	SF4	-	RC-12-06	3-1
3/4 x 1/2	19.05 x 12.70	2.125	54.00	SF1	SF4	-	RC-12-08	3-1
1 x 1/2	25.40 x 12.70	2.500	63.50	SF1	SF4	-	RC-16-08	3-1
1 x 3/4	25.40 x 19.05	2.125	54.00	SF1	SF4	-	RC-16-12	3-1
1 1/2 x 3/4	38.10 x 19.05	3.000	76.20	SF1	SF4	-	RC-24-12	3-1
1 1/2 x 1	38.10 x 25.40	2.500	63.50	SF1	SF4	-	RC-24-16	3-1
2 x 1	50.80 x 25.40	3.375	85.70	SF1	SF4	-	RC-32-16	3-1
2 x 1 1/2	50.80 x 38.10	2.500	63.50	SF1	SF4	-	RC-32-24	3-1
2 1/2 x 1 1/2	63.50 x 38.10	3.375	85.70	SF1	SF4	-	RC-40-24	3-1
2 1/2 x 2	63.50 x 50.80	2.500	63.50	SF1	SF4	-	RC-40-32	3-1
3 x 1 1/2	76.20 x 38.10	4.250	108.00	SF1	SF4	-	RC-48-24	3-1
3 x 2	76.20 x 50.80	3.375	85.70	SF1	SF4	-	RC-48-32	3-1
3 x 2 1/2	76.20 x 63.50	2.625	66.70	SF1	SF4	-	RC-48-40	3-1
4 x 2	101.60 x 50.80	5.125	130.20	SF1	SF4	-	RC-64-32	3-1
4 x 2 1/2	101.60 x 63.50	4.250	108.00	SF1	SF4	-	RC-64-40	3-1
4 x 3	101.60 x 76.20	3.875	98.40	SF1	SF4	-	RC-64-48	3-1
6 x 3	152.40 x 76.20	7.250	184.20	SF1	SF4	-	RC-96-48	3-1
6 x 4	152.40 x 101.60	5.625	142.90	SF1	SF4	-	RC-96-64	3-1

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.3-1**  
AUTOMATIC TUBE WELD: ECCENTRIC REDUCER



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

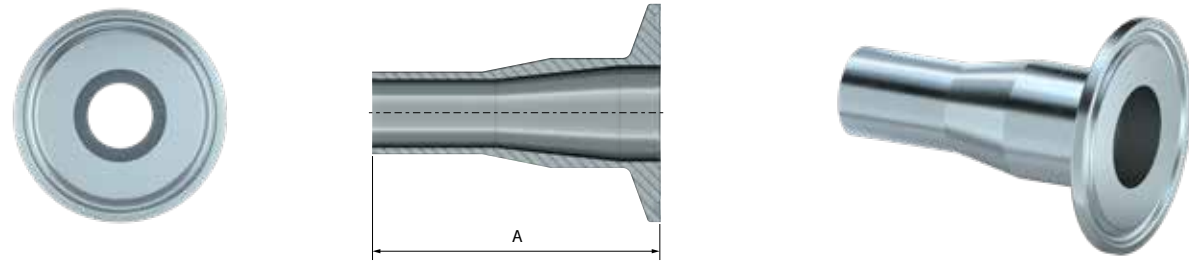
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		WW
3/8 x 1/4	9.53 x 6.35	1.625	41.30	SF1	SF4	-	RE-06-04	3-1
1/2 x 1/4	12.70 x 6.35	1.875	47.60	SF1	SF4	-	RE-08-04	3-1
1/2 x 3/8	12.70 x 9.53	1.875	47.60	SF1	SF4	-	RE-08-06	3-1
3/4 x 3/8	19.05 x 9.53	2.000	50.80	SF1	SF4	-	RE-12-06	3-1
3/4 x 1/2	19.05 x 12.70	2.125	54.00	SF1	SF4	-	RE-12-08	3-1
1 x 1/2	25.40 x 12.70	2.500	63.50	SF1	SF4	-	RE-16-08	3-1
1 x 3/4	25.40 x 19.05	2.125	54.00	SF1	SF4	-	RE-16-12	3-1
1 1/2 x 3/4	38.10 x 19.05	3.000	76.20	SF1	SF4	-	RE-24-12	3-1
1 1/2 x 1	38.10 x 25.40	2.500	63.50	SF1	SF4	-	RE-24-16	3-1
2 x 1	50.80 x 25.40	3.375	85.70	SF1	SF4	-	RE-32-16	3-1
2 x 1 1/2	50.80 x 38.10	2.500	63.50	SF1	SF4	-	RE-32-24	3-1
2 1/2 x 1 1/2	63.50 x 38.10	3.375	85.70	SF1	SF4	-	RE-40-24	3-1
2 1/2 x 2	63.50 x 50.80	2.500	63.50	SF1	SF4	-	RE-40-32	3-1
3 x 1 1/2	76.20 x 38.10	4.250	108.00	SF1	SF4	-	RE-48-24	3-1
3 x 2	76.20 x 50.80	3.375	85.70	SF1	SF4	-	RE-48-32	3-1
3 x 2 1/2	76.20 x 63.50	2.625	66.70	SF1	SF4	-	RE-48-40	3-1
4 x 2	101.60 x 50.80	5.125	130.20	SF1	SF4	-	RE-64-32	3-1
4 x 2 1/2	101.60 x 63.50	4.250	108.00	SF1	SF4	-	RE-64-40	3-1
4 x 3	101.60 x 76.20	3.875	98.40	SF1	SF4	-	RE-64-48	3-1
6 x 3	152.40 x 76.20	7.250	184.20	SF1	SF4	-	RE-96-48	3-1
6 x 4	152.40 x 101.60	5.625	142.90	SF1	SF4	-	RE-96-64	3-1

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.3-2**  
HYGIENIC CLAMP JOINT: TUBE WELD CONCENTRIC REDUCER



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

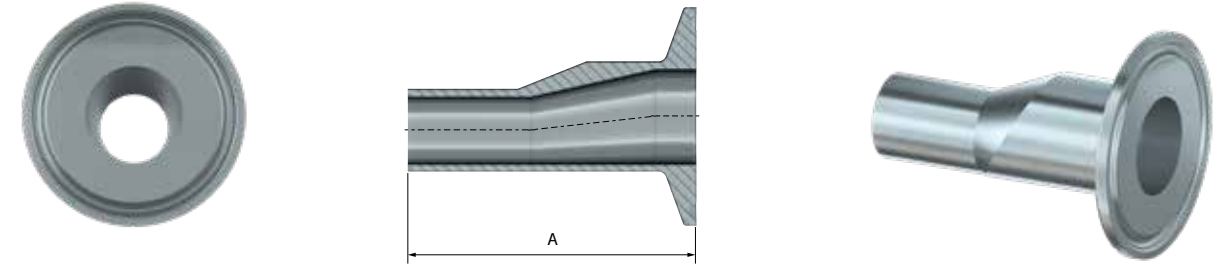
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		
3/8 x 1/4	9.53 x 6.35	2.125	54.00	SF1	SF4	-	RC-06-04	- 3-2
1/2 x 1/4	12.70 x 6.35	2.375	60.30	SF1	SF4	-	RC-08-04	- 3-2
1/2 x 3/8	12.70 x 9.53	2.375	60.30	SF1	SF4	-	RC-08-06	- 3-2
3/4 x 3/8	19.05 x 9.53	2.500	63.50	SF1	SF4	-	RC-12-06	- 3-2
3/4 x 1/2	19.05 x 12.70	2.625	66.70	SF1	SF4	-	RC-12-08	- 3-2
1 x 1/2	25.40 x 12.70	3.000	76.20	SF1	SF4	-	RC-16-08	- 3-2
1 x 3/4	25.40 x 19.05	2.625	66.70	SF1	SF4	-	RC-16-12	- 3-2
1 1/2 x 3/4	38.10 x 19.05	3.500	88.90	SF1	SF4	-	RC-24-12	- 3-2
1 1/2 x 1	38.10 x 25.40	3.000	76.20	SF1	SF4	-	RC-24-16	- 3-2
2 x 1	50.80 x 25.40	3.875	98.40	SF1	SF4	-	RC-32-16	- 3-2
2 x 1 1/2	50.80 x 38.10	3.000	76.20	SF1	SF4	-	RC-32-24	- 3-2
2 1/2 x 1 1/2	63.50 x 38.10	3.875	98.40	SF1	SF4	-	RC-40-24	- 3-2
2 1/2 x 2	63.50 x 50.80	3.000	76.20	SF1	SF4	-	RC-40-32	- 3-2
3 x 1 1/2	76.20 x 38.10	4.750	120.70	SF1	SF4	-	RC-48-24	- 3-2
3 x 2	76.20 x 50.80	3.875	98.40	SF1	SF4	-	RC-48-32	- 3-2
3 x 2 1/2	76.20 x 63.50	3.125	79.40	SF1	SF4	-	RC-48-40	- 3-2
4 x 2	101.60 x 50.80	5.750	146.00	SF1	SF4	-	RC-64-32	- 3-2
4 x 2 1/2	101.60 x 63.50	4.875	123.80	SF1	SF4	-	RC-64-40	- 3-2
4 x 3	101.60 x 76.20	4.500	114.30	SF1	SF4	-	RC-64-48	- 3-2
6 x 3	152.40 x 76.20	8.000	203.20	SF1	SF4	-	RC-96-48	- 3-2
6 x 4	152.40 x 101.60	6.375	161.90	SF1	SF4	-	RC-96-64	- 3-2

Further dimensions on request.

For Order Code please combine:  
Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>

**DT-4.1.3-2**  
HYGIENIC CLAMP JOINT: TUBE WELD ECCENTRIC REDUCER



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

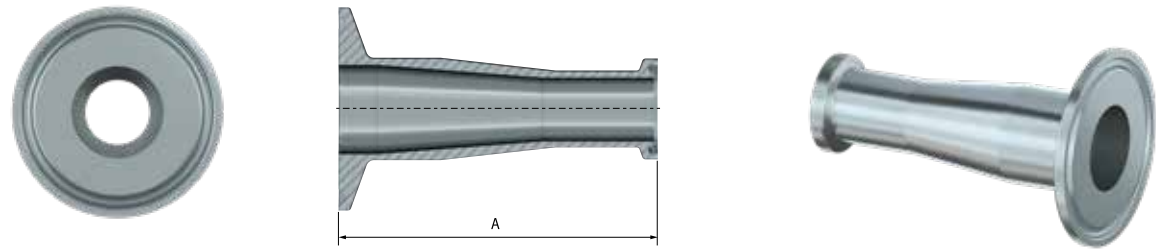
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		
3/8 x 1/4	9.53 x 6.35	2.125	54.00	SF1	SF4	-	RE-06-04	- 3-2
1/2 x 1/4	12.70 x 6.35	2.375	60.30	SF1	SF4	-	RE-08-04	- 3-2
1/2 x 3/8	12.70 x 9.53	2.375	60.30	SF1	SF4	-	RE-08-06	- 3-2
3/4 x 3/8	19.05 x 9.53	2.500	63.50	SF1	SF4	-	RE-12-06	- 3-2
3/4 x 1/2	19.05 x 12.70	2.625	66.70	SF1	SF4	-	RE-12-08	- 3-2
1 x 1/2	25.40 x 12.70	3.000	76.20	SF1	SF4	-	RE-16-08	- 3-2
1 x 3/4	25.40 x 19.05	2.625	66.70	SF1	SF4	-	RE-16-12	- 3-2
1 1/2 x 3/4	38.10 x 19.05	3.500	88.90	SF1	SF4	-	RE-24-12	- 3-2
1 1/2 x 1	38.10 x 25.40	3.000	76.20	SF1	SF4	-	RE-24-16	- 3-2
2 x 1	50.80 x 25.40	3.875	98.40	SF1	SF4	-	RE-32-16	- 3-2
2 x 1 1/2	50.80 x 38.10	3.000	76.20	SF1	SF4	-	RE-32-24	- 3-2
2 1/2 x 1 1/2	63.50 x 38.10	3.875	98.40	SF1	SF4	-	RE-40-24	- 3-2
2 1/2 x 2	63.50 x 50.80	3.000	76.20	SF1	SF4	-	RE-40-32	- 3-2
3 x 1 1/2	76.20 x 38.10	4.750	120.70	SF1	SF4	-	RE-48-24	- 3-2
3 x 2	76.20 x 50.80	3.875	98.40	SF1	SF4	-	RE-48-32	- 3-2
3 x 2 1/2	76.20 x 63.50	3.125	79.40	SF1	SF4	-	RE-48-40	- 3-2
4 x 2	101.60 x 50.80	5.750	146.00	SF1	SF4	-	RE-64-32	- 3-2
4 x 2 1/2	101.60 x 63.50	4.875	123.80	SF1	SF4	-	RE-64-40	- 3-2
4 x 3	101.60 x 76.20	4.500	114.30	SF1	SF4	-	RE-64-48	- 3-2
6 x 3	152.40 x 76.20	8.000	203.20	SF1	SF4	-	RE-96-48	- 3-2
6 x 4	152.40 x 101.60	6.375	161.90	SF1	SF4	-	RE-96-64	- 3-2

Further dimensions on request.

For Order Code please combine:  
Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>

**DT-4.1.3-3**  
HYGIENIC CLAMP JOINT: CONCENTRIC REDUCER



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

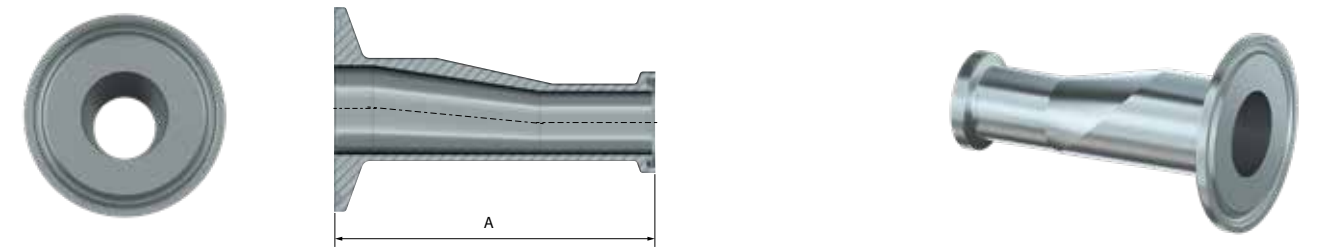
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		CC
3/8 x 1/4	9.53 x 6.35	2.625	66.70	SF1	SF4	-	RC-06-04	- 3-3
1/2 x 1/4	12.70 x 6.35	2.875	73.00	SF1	SF4	-	RC-08-04	- 3-3
1/2 x 3/8	12.70 x 9.53	2.875	73.00	SF1	SF4	-	RC-08-06	- 3-3
3/4 x 3/8	19.05 x 9.53	3.000	76.20	SF1	SF4	-	RC-12-06	- 3-3
3/4 x 1/2	19.05 x 12.70	3.125	79.40	SF1	SF4	-	RC-12-08	- 3-3
1 x 1/2	25.40 x 12.70	3.500	88.90	SF1	SF4	-	RC-16-08	- 3-3
1 x 3/4	25.40 x 19.05	3.125	79.40	SF1	SF4	-	RC-16-12	- 3-3
1 1/2 x 3/4	38.10 x 19.05	4.000	101.60	SF1	SF4	-	RC-24-12	- 3-3
1 1/2 x 1	38.10 x 25.40	3.500	88.90	SF1	SF4	-	RC-24-16	- 3-3
2 x 1	50.80 x 25.40	4.375	111.10	SF1	SF4	-	RC-32-16	- 3-3
2 x 1 1/2	50.80 x 38.10	3.500	88.90	SF1	SF4	-	RC-32-24	- 3-3
2 1/2 x 1 1/2	63.50 x 38.10	4.375	111.10	SF1	SF4	-	RC-40-24	- 3-3
2 1/2 x 2	63.50 x 50.80	3.500	88.90	SF1	SF4	-	RC-40-32	- 3-3
3 x 1 1/2	76.20 x 38.10	5.250	133.40	SF1	SF4	-	RC-48-24	- 3-3
3 x 2	76.20 x 50.80	4.375	111.10	SF1	SF4	-	RC-48-32	- 3-3
3 x 2 1/2	76.20 x 63.50	3.625	92.10	SF1	SF4	-	RC-48-40	- 3-3
4 x 2	101.60 x 50.80	6.250	158.80	SF1	SF4	-	RC-64-32	- 3-3
4 x 2 1/2	101.60 x 63.50	5.375	136.50	SF1	SF4	-	RC-64-40	- 3-3
4 x 3	101.60 x 76.20	5.000	127.00	SF1	SF4	-	RC-64-48	- 3-3
6 x 3	152.40 x 76.20	8.500	215.90	SF1	SF4	-	RC-96-48	- 3-3
6 x 4	152.40 x 101.60	7.000	177.80	SF1	SF4	-	RC-96-64	- 3-3

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.3-3**  
HYGIENIC CLAMP JOINT: ECCENTRIC REDUCER



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

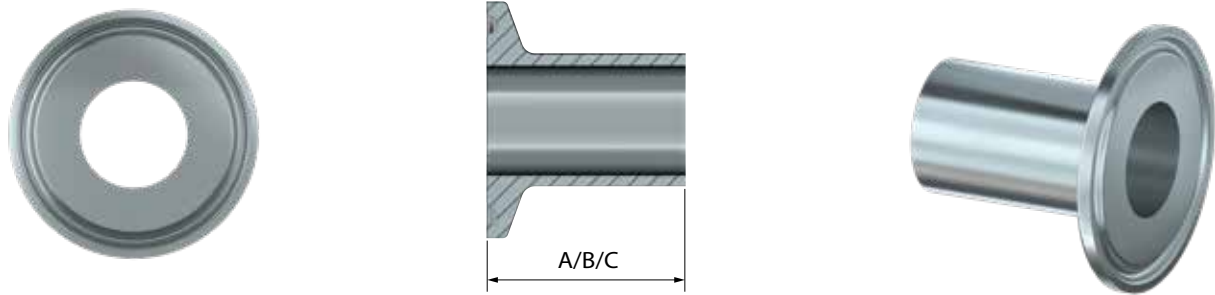
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	SF1	SF4	-		CC
3/8 x 1/4	9.53 x 6.35	2.625	66.70	SF1	SF4	-	RE-06-04	- 3-3
1/2 x 1/4	12.70 x 6.35	2.875	73.00	SF1	SF4	-	RE-08-04	- 3-3
1/2 x 3/8	12.70 x 9.53	2.875	73.00	SF1	SF4	-	RE-08-06	- 3-3
3/4 x 3/8	19.05 x 9.53	3.000	76.20	SF1	SF4	-	RE-12-06	- 3-3
3/4 x 1/2	19.05 x 12.70	3.125	79.40	SF1	SF4	-	RE-12-08	- 3-3
1 x 1/2	25.40 x 12.70	3.500	88.90	SF1	SF4	-	RE-16-08	- 3-3
1 x 3/4	25.40 x 19.05	3.125	79.40	SF1	SF4	-	RE-16-12	- 3-3
1 1/2 x 3/4	38.10 x 19.05	4.000	101.60	SF1	SF4	-	RE-24-12	- 3-3
1 1/2 x 1	38.10 x 25.40	3.500	88.90	SF1	SF4	-	RE-24-16	- 3-3
2 x 1	50.80 x 25.40	4.375	111.10	SF1	SF4	-	RE-32-16	- 3-3
2 x 1 1/2	50.80 x 38.10	3.500	88.90	SF1	SF4	-	RE-32-24	- 3-3
2 1/2 x 1 1/2	63.50 x 38.10	4.375	111.10	SF1	SF4	-	RE-40-24	- 3-3
2 1/2 x 2	63.50 x 50.80	3.500	88.90	SF1	SF4	-	RE-40-32	- 3-3
3 x 1 1/2	76.20 x 38.10	5.250	133.40	SF1	SF4	-	RE-48-24	- 3-3
3 x 2	76.20 x 50.80	4.375	111.10	SF1	SF4	-	RE-48-32	- 3-3
3 x 2 1/2	76.20 x 63.50	3.625	92.10	SF1	SF4	-	RE-48-40	- 3-3
4 x 2	101.60 x 50.80	6.250	158.80	SF1	SF4	-	RE-64-32	- 3-3
4 x 2 1/2	101.60 x 63.50	5.375	136.50	SF1	SF4	-	RE-64-40	- 3-3
4 x 3	101.60 x 76.20	5.000	127.00	SF1	SF4	-	RE-64-48	- 3-3
6 x 3	152.40 x 76.20	8.500	215.90	SF1	SF4	-	RE-96-48	- 3-3
6 x 4	152.40 x 101.60	7.000	177.80	SF1	SF4	-	RE-96-64	- 3-3

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.4-1**  
AUTOMATIC TUBE WELD: FERRULE



Nominal Size (d)		A		Clamp Dimensions		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm	316L			CW	
1/4	6.35	1.750	44.50	0.984	25.00	SF1	SF4	-	FA-04	- 4-1
3/8	9.53	1.750	44.50	0.984	25.00	SF1	SF4	-	FA-06	- 4-1
1/2	12.70	1.750	44.50	0.984	25.00	SF1	SF4	-	FA-08	- 4-1
3/4	19.05	1.750	44.50	0.984	25.00	SF1	SF4	-	FA-12	- 4-1
1	25.40	1.750	44.50	1.984	50.50	SF1	SF4	-	FA-16	- 4-1
1 1/2	38.10	1.750	44.50	1.984	50.50	SF1	SF4	-	FA-24	- 4-1
2	50.80	2.250	57.20	2.516	64.00	SF1	SF4	-	FA-32	- 4-1
2 1/2	63.50	2.250	57.20	3.047	77.50	SF1	SF4	-	FA-40	- 4-1
3	76.20	2.250	57.20	3.579	91.00	SF1	SF4	-	FA-48	- 4-1
4	101.60	2.250	57.20	4.682	119.00	SF1	SF4	-	FA-64	- 4-1
6	152.40	3.000	76.20	6.570	167.00	SF1	SF4	-	FA-96	- 4-1

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Nominal Size (d)		B		Clamp Dimensions		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>4</sup>
Inch	mm	Inch	mm	Inch	mm	316L			CW	
1/4	6.35	1.130	28.58	0.984	25.0	SF1	SF4	-	FB-04	- 4-1
3/8	9.53	1.130	28.58	0.984	25.0	SF1	SF4	-	FB-06	- 4-1
1/2	12.70	1.130	28.58	0.984	25.0	SF1	SF4	-	FB-08	- 4-1
3/4	19.05	1.130	28.58	0.984	25.0	SF1	SF4	-	FB-12	- 4-1
1	25.40	1.130	28.58	1.984	50.5	SF1	SF4	-	FB-16	- 4-1
1 1/2	38.10	1.130	28.58	1.984	50.5	SF1	SF4	-	FB-24	- 4-1
2	50.80	1.130	28.58	2.516	64.0	SF1	SF4	-	FB-32	- 4-1
2 1/2	63.50	1.130	28.58	3.047	77.5	SF1	SF4	-	FB-40	- 4-1
3	76.20	1.130	28.58	3.579	91.0	SF1	SF4	-	FB-48	- 4-1
4	101.60	1.130	28.58	4.682	119.0	SF1	SF4	-	FB-64	- 4-1
6	152.40	1.500	38.1	6.570	167.0	SF1	SF4	-	FB-96	- 4-1

Further dimensions on request.

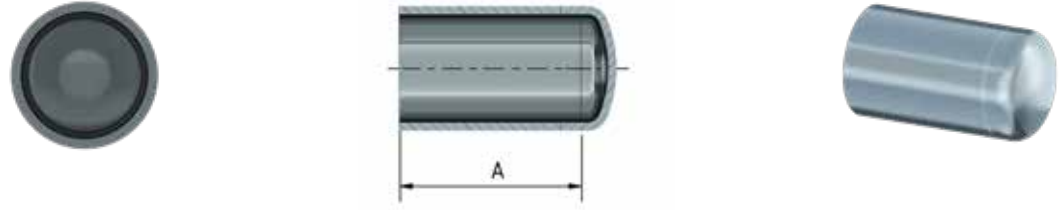
For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

Nominal Size (d)		C		Clamp Dimensions		ASME BPE / SF1 Mechanically polished <sup>1</sup>	ASME BPE / SF4 Electropolished <sup>1</sup>	Product Code <sup>2</sup> + Diameter <sup>3</sup>		BPE Ref. <sup>3</sup>
Inch	mm	Inch	mm	Inch	mm	316L			CW	
1/4	6.35	0.500	12.70	0.984	25.00	SF1	SF4	-	FC-04	- 4-1
3/8	9.53	0.500	12.70	0.984	25.00	SF1	SF4	-	FC-06	- 4-1
1/2	12.70	0.500	12.70	0.984	25.00	SF1	SF4	-	FC-08	- 4-1
3/4	19.05	0.500	12.70	0.984	25.00	SF1	SF4	-	FC-12	- 4-1
1	25.40	0.500	12.70	1.984	50.50	SF1	SF4	-	FC-16	- 4-1
1 1/2	38.10	0.500	12.70	1.984	50.50	SF1	SF4	-	FC-24	- 4-1
2	50.80	0.500	12.70	2.516	64.00	SF1	SF4	-	FC-32	- 4-1
2 1/2	63.50	0.500	12.70	3.047	77.50	SF1	SF4	-	FC-40	- 4-1
3	76.20	0.500	12.70	3.579	91.00	SF1	SF4	-	FC-48	- 4-1
4	101.60	0.625	15.90	4.682	119.00	SF1	SF4	-	FC-64	- 4-1
6	152.40	0.750	19.05	6.570	167.00	SF1	SF4	-	FC-96	- 4-1

Further dimensions on request.

For Order Code please combine:  
**Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>**

**DT-4.1.5-1**  
AUTOMATIC TUBE WELD: CAP / TYPE A



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

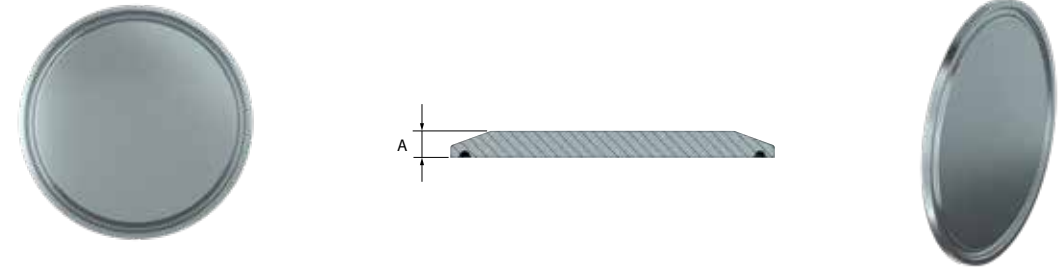
BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		316L		W	
Inch	mm	Inch	mm	SF1	SF4	-	
1/2	12.70	1.555	39.50	SF1	SF4	-	WC-08 - 5-1
3/4	19.05	1.555	39.50	SF1	SF4	-	WC-12 - 5-1
1	25.40	1.555	39.50	SF1	SF4	-	WC-16 - 5-1
1 1/2	38.10	1.555	39.50	SF1	SF4	-	WC-24 - 5-1
2	50.80	1.555	39.50	SF1	SF4	-	WC-32 - 5-1
2 1/2	63.50	1.555	39.50	SF1	SF4	-	WC-40 - 5-1
3	76.20	1.811	46.00	SF1	SF4	-	WC-48 - 5-1
4	101.60	2.067	52.50	SF1	SF4	-	WC-64 - 5-1
6	152.40	2.559	65.00	SF1	SF4	-	WC-96 - 5-1

For Order Code please combine:  
Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>

Further dimensions on request.

**DT-4.1.5-2**  
HYGIENIC CLAMP JOINT: SOLID END CAP



● ASME BPE / SF1  
Mechanically polished<sup>1</sup>

● ASME BPE / SF4  
Electropolished<sup>1</sup>

Product Code<sup>2</sup>  
+  
Diameter<sup>3</sup>

BPE  
Ref.<sup>4</sup>

Nominal Size (d)		A		Clamp Dimensions		316L		C	
Inch	mm	Inch	mm	Inch	mm	SF1	SF4	-	
1/4	6.35	0.187	4.70	0.984	25.00	SF1	SF4	-	FTC-04 - 5-2
3/8	9.53	0.187	4.70	0.984	25.00	SF1	SF4	-	FTC-06 - 5-2
1/2	12.70	0.187	4.70	0.984	25.00	SF1	SF4	-	FTC-08 - 5-2
3/4	19.05	0.187	4.70	0.984	25.00	SF1	SF4	-	FTC-12 - 5-2
1	25.40	0.250	6.40	1.984	50.50	SF1	SF4	-	FTC-16 - 5-2
1 1/2	38.10	0.250	6.40	1.984	50.50	SF1	SF4	-	FTC-24 - 5-2
2	50.80	0.250	6.40	2.516	64.00	SF1	SF4	-	FTC-32 - 5-2
2 1/2	63.50	0.250	6.40	3.047	77.50	SF1	SF4	-	FTC-40 - 5-2
3	76.20	0.250	6.40	3.579	91.00	SF1	SF4	-	FTC-48 - 5-2
4	101.60	0.312	7.90	4.682	119.00	SF1	SF4	-	FTC-64 - 5-2
6	152.40	0.437	11.10	6.570	167.00	SF1	SF4	-	FTC-96 - 5-2

For Order Code please combine:  
Quality<sup>1</sup> + Product Code<sup>2</sup> - Diameter<sup>3</sup> + BPE Ref.<sup>4</sup>

Further dimensions on request.

**CLAMPS**  
STANDARD CLAMP ACC. TO ASME BPE



Nominal Size	Flange Dimensions	Order Code
Inch	Inch	
1/4	0.984	CL-SP-WN-04
3/8	0.984	CL-SP-WN-06
1/2	0.984	CL-SP-WN-08
3/4	0.984	CL-SP-WN-12
1	1.984	CL-SP-WN-16
1 1/2	1.984	CL-SP-WN-24
2	2.516	CL-SP-WN-32
2 1/2	3.047	CL-SP-WN-40
3	3.579	CL-SP-WN-48
4	4.682	CL-SP-WN-64
6	6.570	CL-SP-WN-96

**Special Clamps / optional**



**GASKETS**  
FOR CLAMP CONNECTIONS



Nominal Size	Flange	Product Code <sup>2</sup> + Diameter <sup>3</sup>	PTFE	FKM	PTFE/FKM	EPDM	VMQ	PTFE/316L	PTFE/EPDM
Inch	Inch								
1/4	0.984	TC-GK-04-1	P	F	FP	E	V	P16	PE
3/8	0.984	TC-GK-06-1	P	F	FP	E	V	P16	PE
1/2	0.984	TC-GK-08-1	P	F	FP	E	V	P16	PE
3/4	0.984	TC-GK-12-1	P	F	FP	E	V	P16	PE
1	1.984	TC-GK-16-2	P	F	FP	E	V	P16	PE
1 1/2	1.984	TC-GK-24-2	P	F	FP	E	V	P16	PE
2	2.516	TC-GK-32-3	P	F	FP	E	V	P16	PE
2 1/2	3.047	TC-GK-40-4	P	F	FP	E	V	P16	PE
3	3.579	TC-GK-48-5	P	F	FP	E	V	P16	PE
4	4.682	TC-GK-64-7	P	F	FP	E	V	P16	PE
6	6.570	TC-GK-96-9	P	F	FP	E	V	P16	PE

For Order Code please combine: **Product Code<sup>2</sup> + Diameter<sup>3</sup> + Gasket Material**

**Special Gaskets / optional**



**Screen Gaskets** provide prefiltration for critical membrane filters, coalescence of water vapour from process exhaust lines, particulate removal before fill and finish and more.



The **Smart Gasket** values are proven when validating sterility in high purity pharmaceutical systems.



The **Controlled Compression** Gaskets cannot be overtightened but controls clamp compression to exactly the correct amount, allowing the properly positioned gasket to make a perfect surface I.D. seal with ferrules.



**Orifice Plates** advance your system's performance, adjust flow rates, balance backflow and equalize back pressure during SIP procedures.

All standard sanitary gaskets are moulded from FDA compliant compounds and fulfil USP class VI.

**Total traceability for the complete system**

Dockweiler gaskets are cleaned, dried and permanently marked. Mix-ups after removal from the packaging are eliminated.

**Lasermarking information:** DOCKWEILER / DW-No.

Material	PTFE	FKM	PTFE / FKM	EPDM	VMQ	PTFE / 316L	PTFE / EPDM
Material acc. to ISO 1629 / ASTM D1418	<b>Polytetrafluoroethylene</b>	<b>Perfluorinated rubber</b>	<b>PTFE enveloped FKM</b>	<b>Ethylene propylene diene rubber</b>	<b>Platinum cured silicone rubber</b>	<b>Composite of stainless steel 316L and PTFE</b>	<b>PTFE enveloped EPDM</b>
Trade name	Teflon® Dyneon®	Viton® Fluorel®		Buna® Nordel®	Silopren® Silastic®		
Diameter*	Flange size ≤ 1" Gasket without Lip, Flange size ≥ 1 1/2": Gasket with Lip			Flange size ≤ 1" Gasket without Lip, Flange size ≥ 1 1/2": Gasket with Lip			
<small>*Not all diameters are available in all materials.</small>	Imperial 1/4" – 6"			Imperial 1/4" – 6"			
Temperature variations	-	+	0	+	+	+	+
Continuous steam	+	+	+	+	+	+	+
Non-polar solvents	+	+	+	-	-	+	+
Polar solvents	+	-	+	-	-	+	+
Acid and active oxygen	+	+	+	+	+	+	+
Acid	+	+	+	+	+	+	+
Alkaline	+	+	+	+	-	+	+
Hardness	68 Shore A	82 Shore A	45 Shore A	45 Shore A	65 – 75 Shore A	80 Shore A	70 +/- 5 Shore A
Density	215.3765 lb/ft³	79.90779 lb/ft³	118.613 lb/ft³	131.099 lb /ft³	74.9136 lb/ft³	115.4917 lb/ft³	78.03495 lb/ft³
Compression set	18,5 %	13 %	15 %	10 %	20 %	7 %	5 %
	70 Hour	24 Hour	24 Hour	24 Hour	24 Hour	24 Hour	24 Hour
	392 °F	347 °F	347 °F	302 °F	347 °F	302 °F	347 °F
	5 to 446 °F	-4 to 410 °F	-76 to 356 °F	-40 to 284 °F	-76 to 392 °F	-94 to 500 °F	-94 to 356 °F
	+ = highly suitable	0 = suitable	- = not suitable	+ = highly suitable	0 = suitable	- = not suitable	

## Optimized designs, the purest surfaces, perfected welds

When it comes to implementing complex components and systems Dockweiler is your manufacturing specialist. Maximizing productivity is the primary goal. This requires a highly reliable and efficient solution. The focus here is on low dead space and surface optimization.



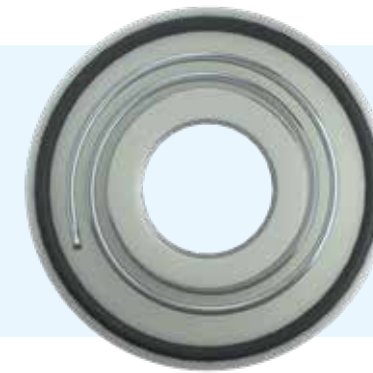
### Customized Fittings

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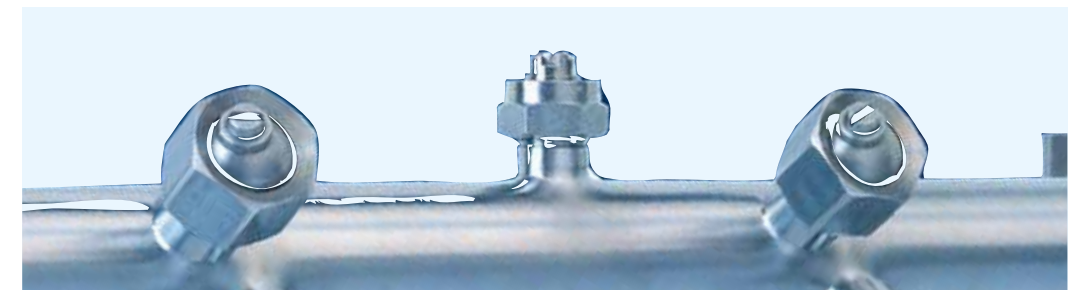
### Cleanshut Wall and Ceiling Feedthroughs

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### Prefabricated Components

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## Customized Fittings

Customized fittings manufactured to your specifications are the tailor-made solution when standard fittings do not meet customer requirements. Our service starts with drafting and extends to 3.1 documentation.

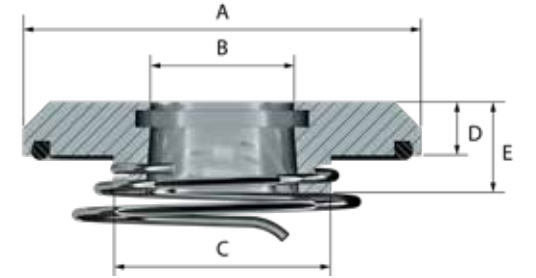


## SPECIAL SOLUTION CLEANSHUT WALL AND CEILING FEEDTHROUGHS

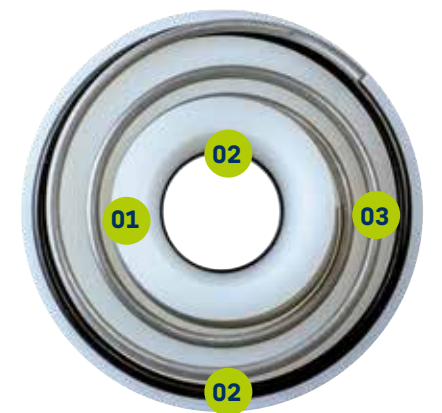
### A perfect finish for wall and ceiling feedthroughs in clean rooms

Assembly without screws – minimizes the risk of damage to the cleanroom wall.

Simple installation within seconds.



Imperial Tube Dimensions	Dimensions					Order Code
	Ø A	Ø B	Ø C	D	E	
Inch	Inch					
1/2	2.520	0.508	1.339	0.394	0.709	WFT - 08 - PV
3/4	2.953	0.758	1.772	0.394	0.709	WFT - 12 - PV
1	2.953	1.008	1.772	0.394	0.709	WFT - 16 - PV
1 1/2	4.134	1.508	2.953	0.394	0.787	WFT - 24 - PV
2	4.134	2.008	2.953	0.394	0.787	WFT - 32 - PV
2 1/2	5.433	2.508	4.252	0.394	0.866	WFT - 40 - PV
3	5.433	3.008	4.252	0.394	0.866	WFT - 48 - PV
4	5.866	4.008	5.000	0.394	0.866	WFT - 64 - PV



Components	Materials
01 Basic Body	PVDF
02 O-rings	EPDM
03 Spring	1.4310

## Prefabricated components for simple and smooth installations

Experience in piping systems for transporting high-purity media is the Dockweiler “plus”: The safety and purity of production processes is the primary objective. In addition, improvements in design can increase productivity and simplify installation – synergies that our customers appreciate.



## Highest Purity



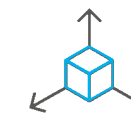
The highest standards of hygiene and cleanliness are essential for numerous manufacturing processes in the pharmaceutical, chemical and semiconductor industries. This is particularly true for the inner surfaces of piping systems that are in contact with sensitive media.

## Hygienic Design



For pharmaceutical products and other highly sensitive substances, protection against contamination is an essential aspect. The question is how quickly and easily a production facility can be cleaned. Hygienic design includes production features that ensure this and guarantee continuous product quality.

## Space Management



Nowadays, capital-intensive production, rising prices (e.g. energy) or shortages of raw materials are forcing companies more and more to put their processes to the test. Space management refers to customer-specific solutions that enable the expansion or optimization of plants in a very limited space.

## Enhancing Efficiency



For many manufacturing companies, increasing efficiency is a particular challenge: Given the high complexity of production systems, companies might come up against personnel or technological limits.



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