



D-ECKWEILER
connecting flow to **purity**

LIFE SCIENCE

TUBES, FITTINGS AND CONNECTIONS

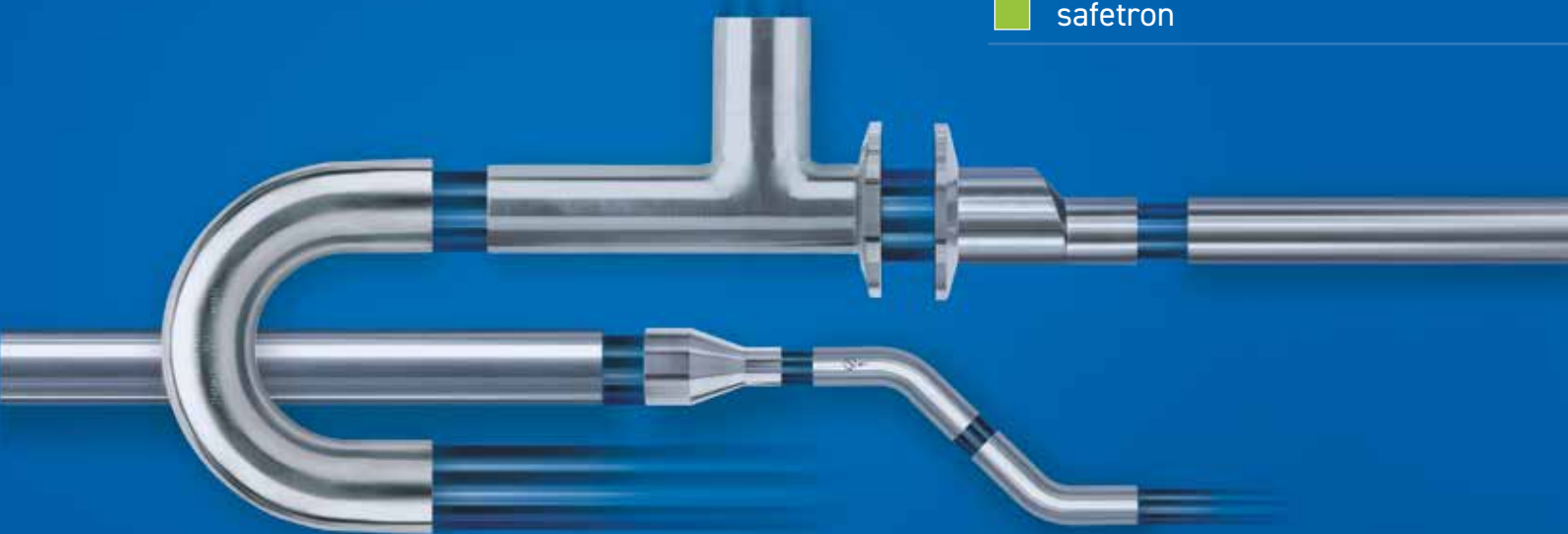


FOR PHARMA, BIOTECH AND
OTHER LIFE SCIENCE INDUSTRIES

 ASME BPE Certified

 weldtron

 safetron



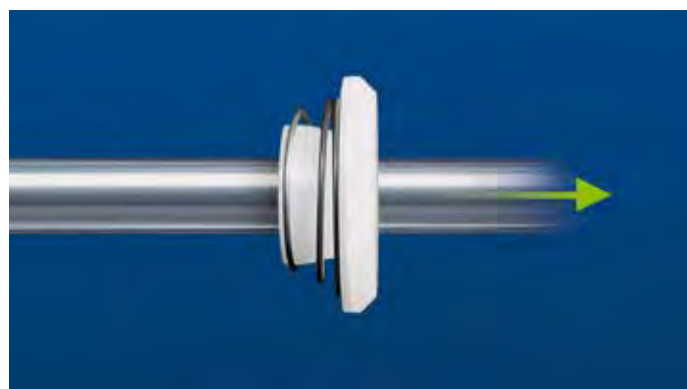
EMEA



Tubes, Fittings and Components for Life Science Applications

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How-to order Dockweiler Order Code System

Order Code for ASME BPE products:

- Quality:** Inner surface (SF1 or SF4) combined with the material
- Product-Code:** Type of product in combination with the respective diameter
- DT-Annex:** Reference to ASME BPE standard / the last two digits

Qualities highlighted in **blue colour** are stock products.
Others articles are non-stock products.



Sample for **ASME BPE, SF-4, 90° Elbow, 1 Inch**

ASME BPE / DT-4.1.1-1

Size		A		316L		Code	DT
Inch	mm	Inch	mm	SF1	SF4		
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	- E9-10	- 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

Order Code: **SF4-E9-16-1-1**

Order Code for DIN products:

- Quality:** Inner surface (weldtron or safetron in bf or ep) in combination with the material
- Product-Code:** Type of product in combination with the respective diameter

Qualities highlighted in **blue colour** are stock products.

As this article is not highlighted in blue colour, it is a non-stock product.



Sample for **safetron ep, Reducer Eccentric, 1 1/2 x 1/2 Inch**

IMPERIAL / DIN 11865

Size	d1 x d2		s1	s2	l1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
	Inch	mm				mm	1.4435 / 316L			
1/2 x 1/4	12,70	x 6,35	1,65	0,89	47,63	W	WE	S	SE	-RE-08-04
1/2 x 3/8	12,70	x 9,53	1,65	0,89	47,63	W	WE	S	SE	-RE-08-06
3/4 x 3/8	19,05	x 9,53	1,65	0,89	50,80	W	WE	S	SE	-RE-12-06
3/4 x 1/2	19,05	x 12,70	1,65	1,65	53,98	W	WE	S	SE	-RE-12-08
1 x 1/2	25,40	x 12,70	1,65	1,65	63,50	W	WE	S	SE	-RE-12-08
1 x 3/4	25,40	x 19,05	1,65	1,65	53,98	W	WE	S	SE	-RE-12-12
1 1/2 x 1/2	38,10	x 12,70	1,65	1,65	80,00	W	WE	S	SE	-RE-24-08
1 1/2 x 3/4	38,10	x 19,05	1,65	1,65	76,20	W	WE	S	SE	-RE-24-12
1 1/2 x 1	38,10	x 25,40	1,65	1,65	63,50	W	WE	S	SE	-RE-24-16
2 x 1	50,80	x 25,40	1,65	1,65	85,73	W	WE	S	SE	-RE-24-16
2 x 1 1/2	50,80	x 38,10	1,65	1,65	63,50	W	WE	S	SE	-RE-24-16
2 1/2 x 1	63,50	x 25,40	1,65	1,65	100,00	W	WE	S	SE	-RE-40-16
2 1/2 x 1 1/2	63,50	x 38,10	1,65	1,65	85,73	W	WE	S	SE	-RE-40-24
2 1/2 x 2	63,50	x 50,80	1,65	1,65	63,50	W	WE	S	SE	-RE-40-32
3 x 1 1/2	76,20	x 38,10	1,65	1,65	107,95	W	WE	S	SE	-RE-48-24
3 x 2	76,20	x 50,80	1,65	1,65	85,73	W	WE	S	SE	-RE-48-32
3 x 2 1/2	76,20	x 63,50	1,65	1,65	66,68	W	WE	S	SE	-RE-48-40
4 x 2	101,60	x 50,80	2,11	1,65	130,18	W	WE	S	SE	-RE-64-32
4 x 2 1/2	101,60	x 63,50	2,11	1,65	107,95	W	WE	S	SE	-RE-64-40
4 x 3	101,60	x 76,20	2,11	1,65	98,43	W	WE	S	SE	-RE-64-48
6 x 3	152,40	x 76,20	2,77	1,65	184,15	W	WE	S	SE	-RE-96-64
6 x 4	152,40	x 101,60	2,77	2,11	142,88	W	WE	S	SE	-RE-96-48






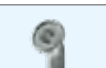











Order Code: **SE-RE-24-08**

Sample for **weldtron bf, Reducer Eccentric, 4 x 2 Inch**

Order Code: **W-RE-64-32**

If you require stainless steel grade **1.4435 / UNS S31603**, please add **-35** at the end of the order code.

ASME BPE Tubes, Fittings and Connections

■ ASME BPE		Technical Specifications	8
Products	Code	Designations according to ASME BPE	Page
	DT-4-1	Tube	10
	DT-4.1.1-1	Automatic Tube Weld: 90° Elbow	12
	DT-4.1.1-2	Automatic Tube Weld: Hygienic Clamp Joint, 90° Elbow	13
	DT-4.1.1-3	Hygienic Clamp Joint: 90° Elbow	14
	DT-4.1.1-4	Automatic Tube Weld: 45° Elbow	15
	DT-4.1.1-5	Automatic Tube Weld: Hygienic Clamp Joint, 45° Elbow	16
	DT-4.1.1-6	Hygienic Clamp Joint: 45° Elbow	17
	DT-4.1.1-7	Automatic Tube Weld: 180° Return Bend	18
	DT-4.1.1-8	Hygienic Clamp Joint: 180° Return Bend	19
	DT-4.1.1-9	Automatic Tube Weld: 88° Elbow	20
	DT-4.1.1-10	Automatic Tube Weld: 92° Elbow	21
	DT-4.1.2-1	Automatic Tube Weld: Straight Tee	22
	DT-4.1.2-1	Automatic Tube Weld: Straight Cross	23
	DT-4.1.2-2	Automatic Tube Weld: Short Outlet Hygienic Clamp Joint Tee	24
	DT-4.1.2-3	Hygienic Mechanical Joint: Short Outlet Run Tee	25
	DT-4.1.2-4	Hygienic Clamp Joint: Straight Tee	26
	DT-4.1.2-4	Hygienic Clamp Joint: Straight Cross	27

Products	Code	Designations according to ASME BPE	Page
	DT-4.1.2-5	Hygienic Clamp Joint: Short Outlet Tee	28
	DT-4.1.2-6	Automatic Tube Weld: Reducing Tee	30
	DT-4.1.2-7	Automatic Tube Weld: Short Outlet Hygienic Clamp, Joint Reducing Tee	32
	DT-4.1.2-8	Hygienic Clamp Joint: Reducing Tee	34
	DT-4.1.2-9	Hygienic Clamp Joint: Short Outlet Reducing Tee	36
	DT-4.1.2-10	Automatic Tube Weld: Instrument Tee	38
	DT-4.1.2-11	Hygienic Clamp Joint: Instrument Tee	39
	DT-4.1.3-1	Automatic Tube Weld: Concentric Reducer	40
	DT-4.1.3-1	Automatic Tube Weld: Eccentric Reducer	41
	DT-4.1.3-2	Hygienic Clamp Joint: Tube Weld Concentric Reducer	42
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	DT-4.1.3-3	Hygienic Clamp Joint: Concentric Reducer	44
	DT-4.1.3-3	Hygienic Clamp Joint: Eccentric Reducer	45
	DT-4.1.4-1	Automatic Tube Weld: Ferrule	46
	DT-4.1.5-2	Hygienic Clamp Joint: Solid End Cap	49
		Clamps	50
		Gaskets	51

Specification
ASME BPE

For pharma, biotech and other life science industries

ASME BPE

 **ASME BPE SF1 / mechanically polished**

 **ASME BPE SF4 / electropolished**



1. SURFACE QUALITIES

Tubes and fittings: Inner surface (mechanically polished)*

ASME BPE SF0 - on request	No finish requirements
ASME BPE SF1	Ra_{max.} ≤ 0,51 µm / 20 µin (Dockweiler Standard)
ASME BPE SF2 - on request	Ra _{max.} ≤ 0,64 µm / 25 µin
ASME BPE SF3 - on request	Ra _{max.} ≤ 0,76 µm / 30 µin

Tubes and fittings: Inner surface (electropolished)

ASME BPE SF4	Ra_{max.} ≤ 0,38 µm / 15 µin (Dockweiler Standard)
ASME BPE SF5 - on request	Ra _{max.} ≤ 0,51 µm / 20 µin
ASME BPE SF6 - on request	Ra _{max.} ≤ 0,64 µm / 25 µin

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

ASME BPE	UNS S31603 (316L)*, UNS S31603 (316L), 1.4404, 1.4435*
	* defined sulphur of 0.005 - 0.017%

Hardness equivalent to:	<ul style="list-style-type: none"> - max. 180 HV* according to DIN EN ISO 6507-1 - max. 90 HRB* according to DIN EN ISO 6508-1
	* comparable to ASTM E-384 (HV) and ASTM E 18-22 (HRB)

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
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Manufacturing process: Welded or seamless tubes

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 5900 - 6090 mm (19.35 ft - 19.98 ft), max. 10% short lengths of min. 3000 mm (9.84 ft)

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

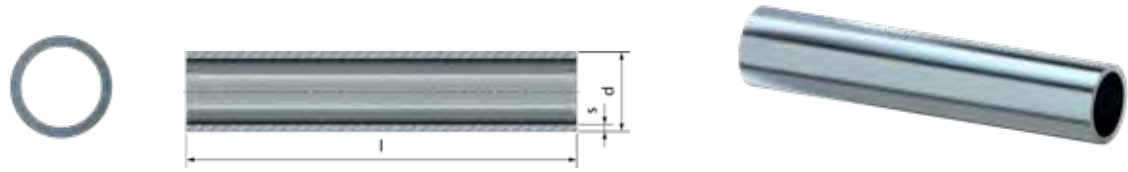
Mechanically polished tubes and fittings are closed with transparent PE caps and are individually sealed in PE foil. The batch label on the foil contains the information ASME BPE SF1.

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.

DT-4-1
Tube

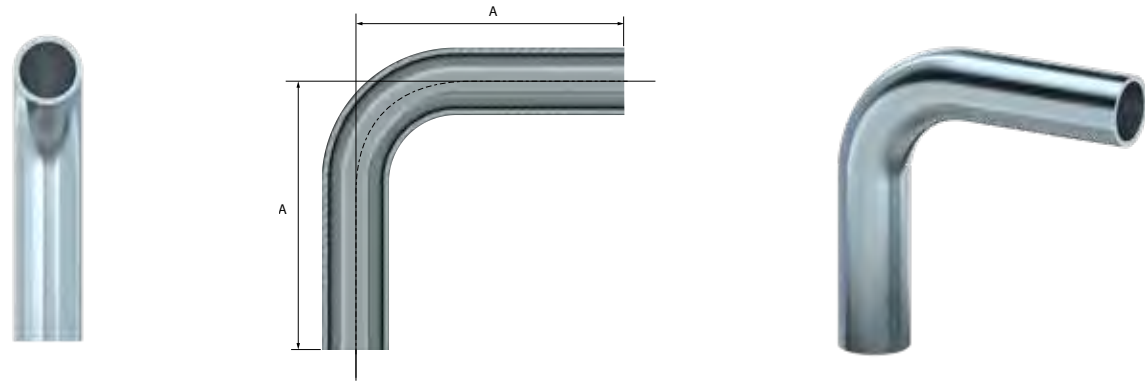


ASME BPE / DT-4-1

Size	d x s		Weight		ASME BPE SF1		ASME BPE SF4	
	Inch	mm	Inch	kg / m	lbs / Inch	316L		Code
1/4	6,35 x 0,89	0.250 x 0.035	0,1241	0,2736	SF1	SF4	-	04
3/8	9,53 x 0,89	0.375 x 0.035	0,1966	0,4334	SF1	SF4	-	06
1/2	12,70 x 1,65	0.500 x 0.065	0,4571	1,0077	SF1	SF4	-	08
3/4	19,05 x 1,65	0.750 x 0.065	0,7198	1,5869	SF1	SF4	-	12
1	25,40 x 1,65	1.000 x 0.065	0,9824	2,1658	SF1	SF4	-	16
1 1/2	38,10 x 1,65	1.500 x 0.065	1,5077	3,3239	SF1	SF4	-	24
2	50,80 x 1,65	2.000 x 0.065	2,0331	4,4822	SF1	SF4	-	32
2 1/2	63,50 x 1,65	2.500 x 0.065	2,5585	5,6405	SF1	SF4	-	40
3	76,20 x 1,65	3.000 x 0.065	3,0838	6,7986	SF1	SF4	-	48
4	101,60 x 2,11	4.000 x 0.083	5,2627	11,6023	SF1	SF4	-	64
6	152,40 x 2,77	6.000 x 0.109	10,3909	22,9080	SF1	SF4	-	96

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-1
Automatic Tube Weld: 90° Elbow

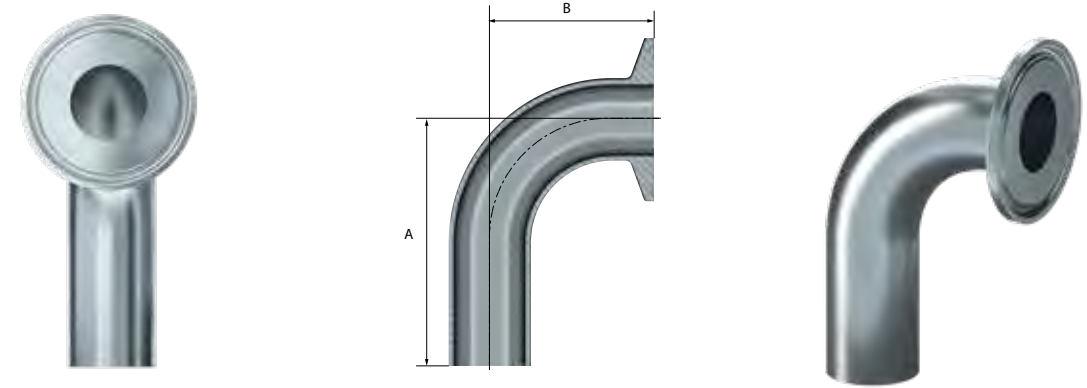


ASME BPE / DT-4.1.1-1

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	316L	Code	DT	
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-2
Automatic Tube Weld: Hygienic Clamp Joint, 90° Elbow

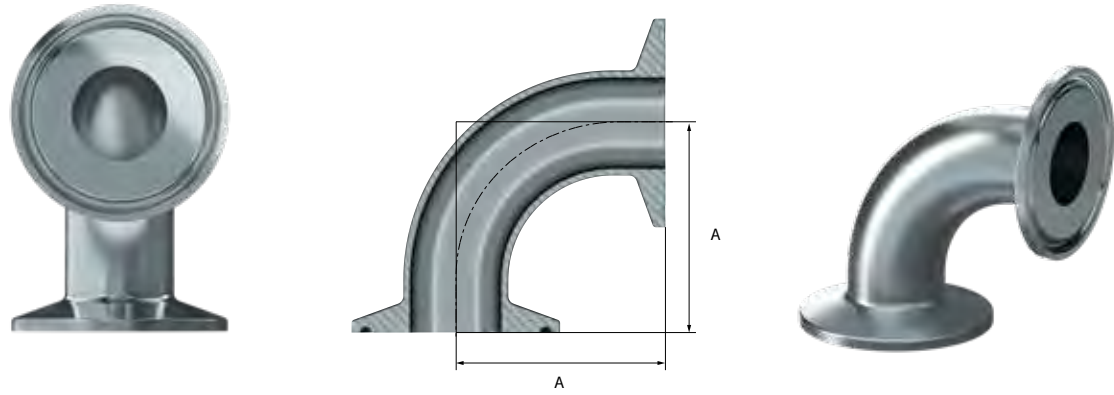


ASME BPE / DT-4.1.1-2

Size		A		B		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT	
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-3
Hygienic Clamp Joint: 90° Elbow

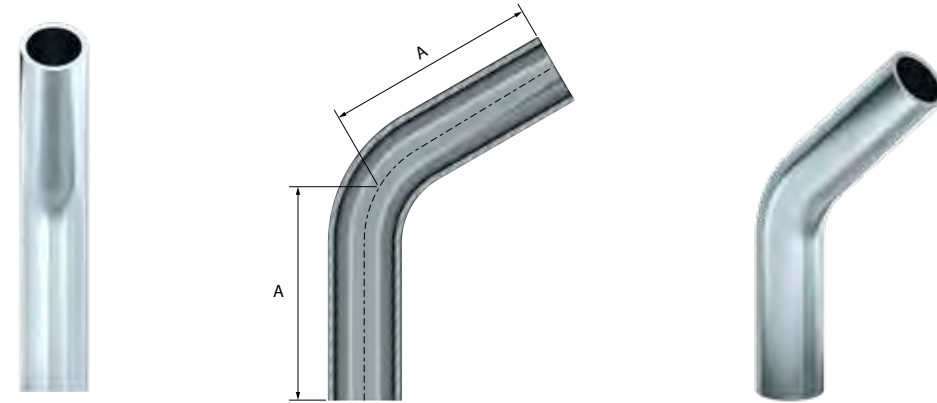


ASME BPE / DT-4.1.1-3

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE		
Inch	mm	Inch	mm	■	■	316L	Code	DT
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	168,20	SF1	SF4	-	E9-64	- 1-3
6	152,40	10.500	266,70	SF1	SF4	-	E9-96	- 1-3

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-4
Automatic Tube Weld: 45° Elbow

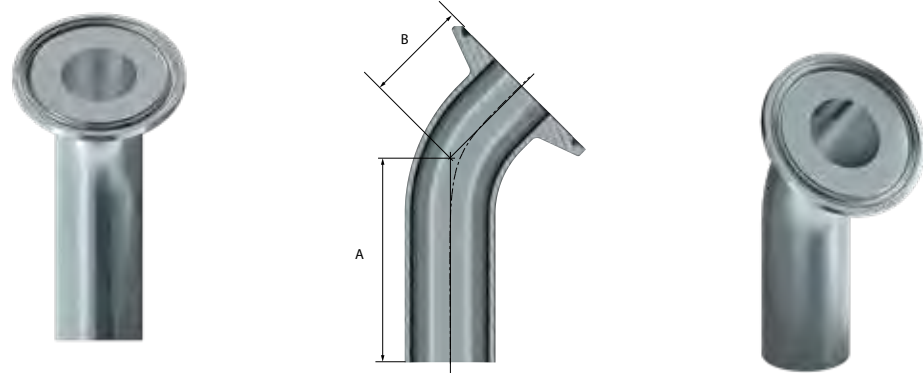


ASME BPE / DT-4.1.1-4

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE		
Inch	mm	Inch	mm	■	■	316L	Code	DT
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-5
Automatic Tube Weld: Hygienic Clamp Joint, 45° Elbow

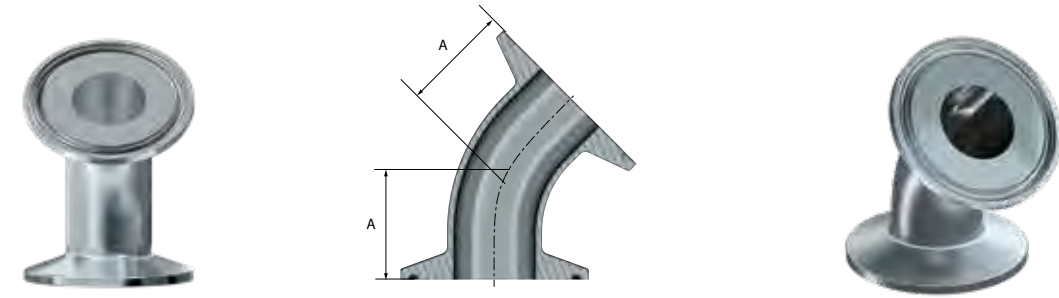


ASME BPE / DT-4.1.1-5

Size		A		B		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE		
Inch	mm	Inch	mm	Inch	mm	■	■	316L	Code	DT
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-6
Hygienic Clamp Joint: 45° Elbow

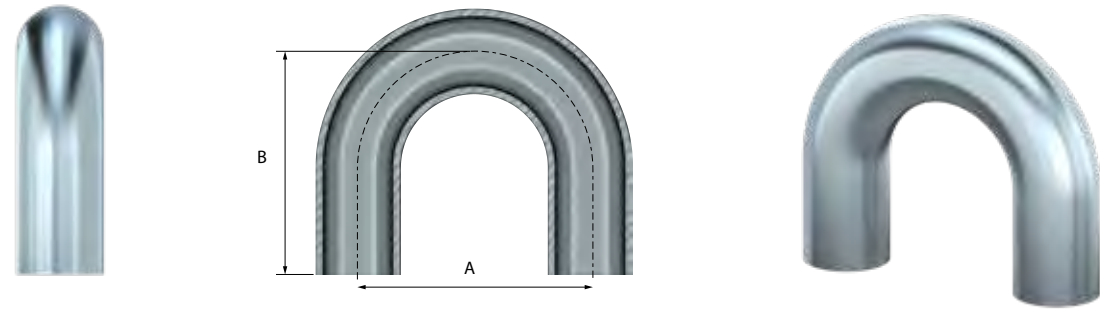


ASME BPE / DT-4.1.1-6

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE		
Inch	mm	Inch	mm	■	■	316L	Code	DT
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-7
Automatic Tube Weld: 180° Return Bend

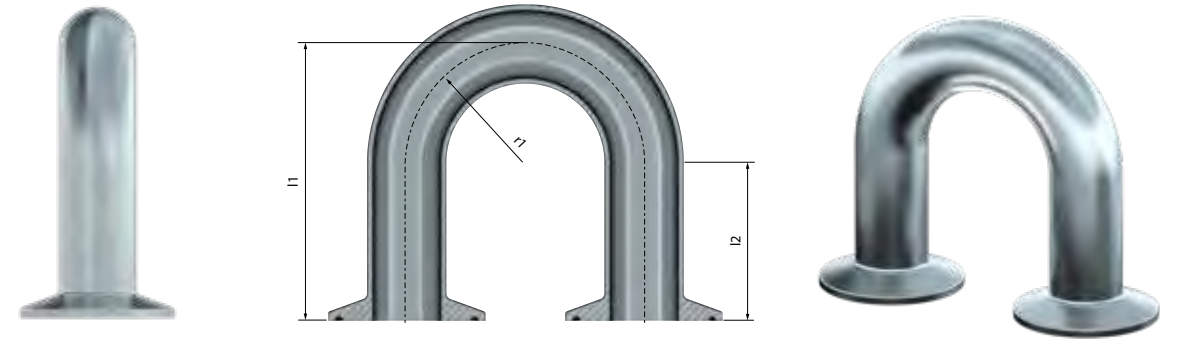


ASME BPE / DT-4.1.1-7

Size		A		B		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT	
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-8
Hygienic Clamp Joint: 180° Return Bend

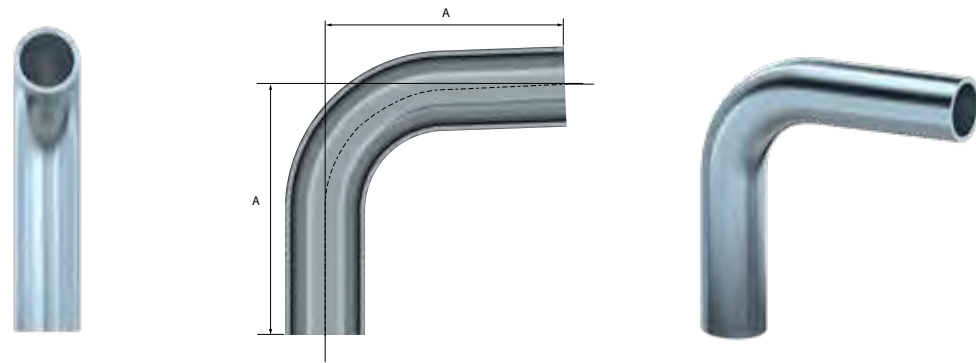


ASME BPE / DT-4.1.1-8

Size		A		B		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT	
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-9
Automatic Tube Weld: 88° Elbow

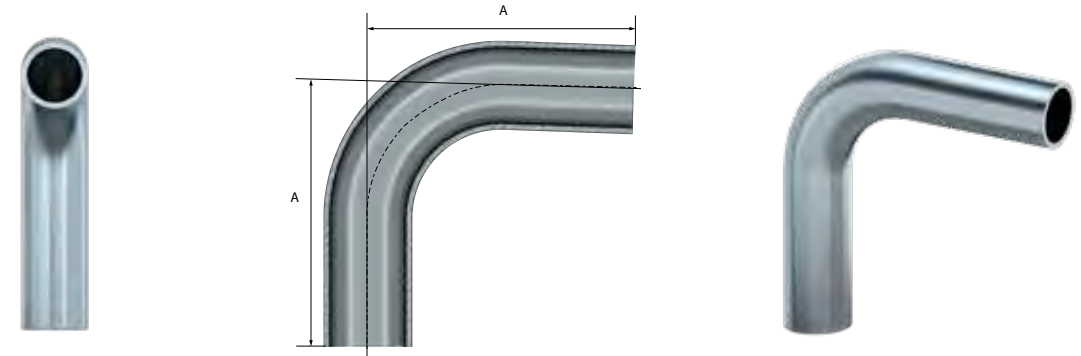


ASME BPE / DT-4.1.1-9

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	316L	Code	DT	
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.1-10
Automatic Tube Weld: 92° Elbow

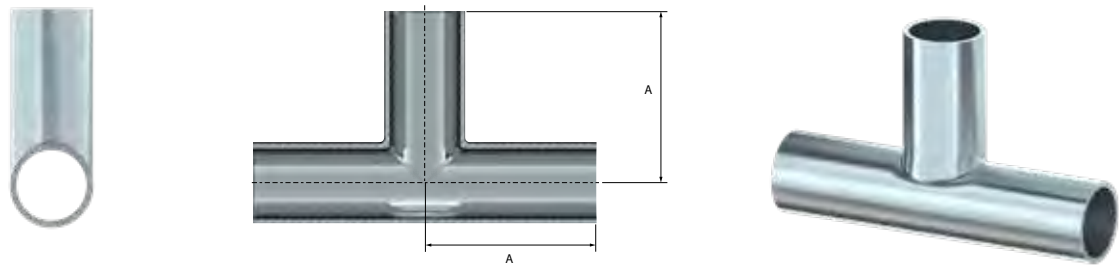


ASME BPE / DT-4.1.1-10

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	316L	Code	DT	
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-1
Automatic Tube Weld: Straight Tee

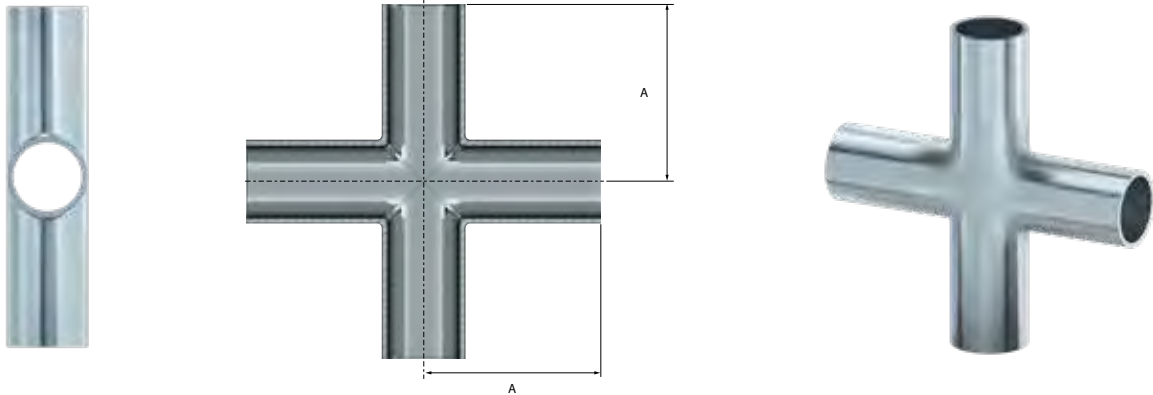


ASME BPE / DT-4.1.2-1

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	316L	Code	DT	
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-1
Automatic Tube Weld: Straight Cross

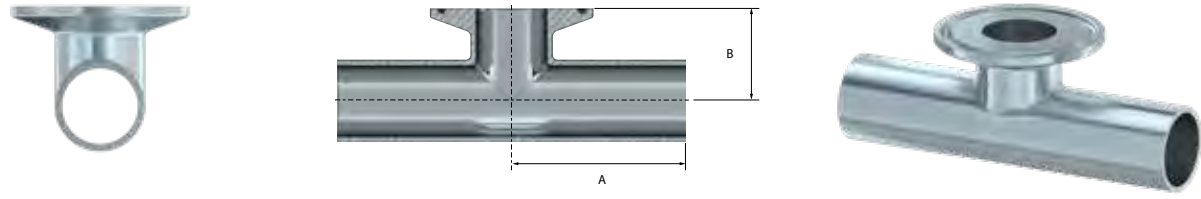


ASME BPE / DT-4.1.2-1

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	316L	Code	DT	
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-2
Automatic Tube Weld: Short Outlet Hygienic Clamp Joint Tee

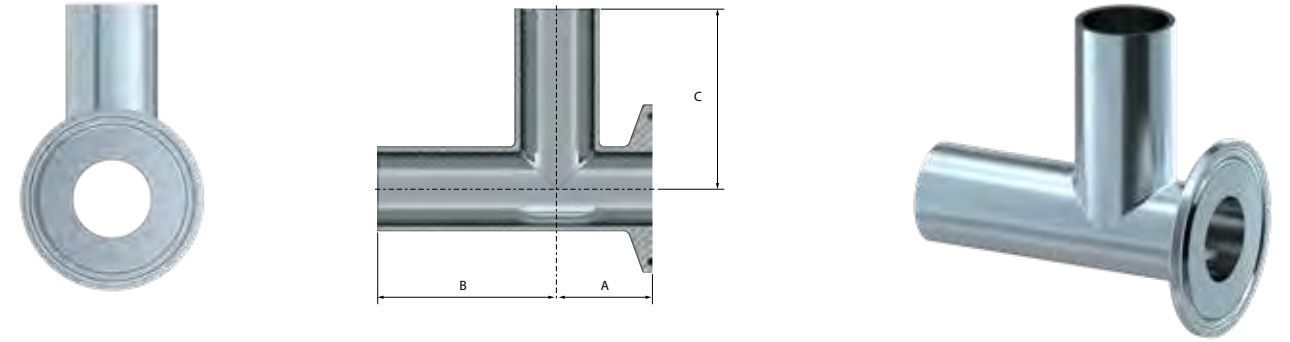


ASME BPE / DT-4.1.2-2

Size		A		B		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE		
Inch	mm	Inch	mm	Inch	mm	■	■	316L	Code	DT
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-3
Hygienic Mechanical Joint: Short Outlet Run Tee

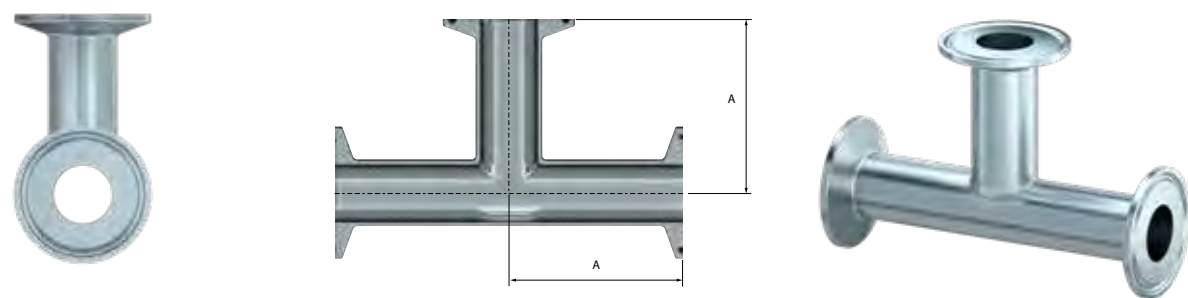


ASME BPE / DT-4.1.2-3

Size		A		B		C		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE		
Inch	mm	Inch	mm	Inch	mm	Inch	mm	■	■	316L	Code	DT
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-4
Hygienic Clamp Joint: Straight Tee

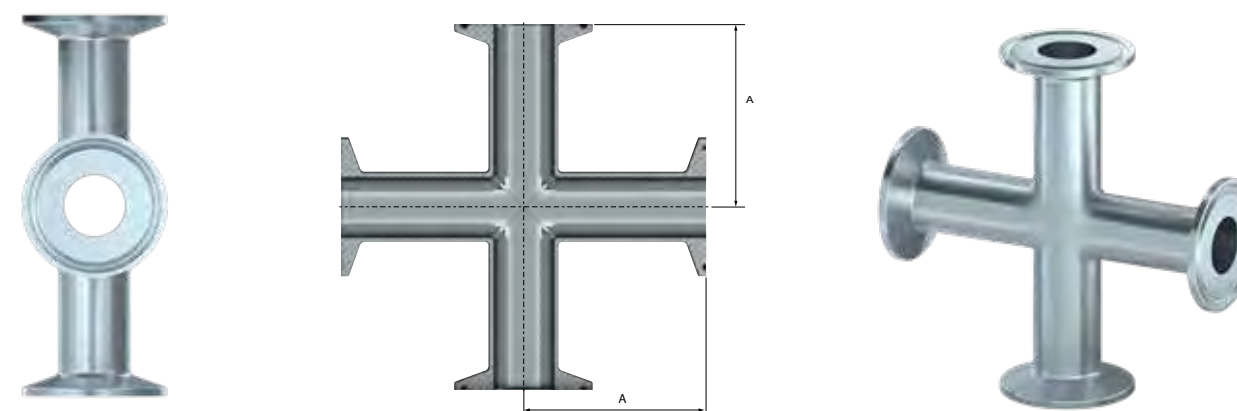


ASME BPE / DT-4.1.2-4

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	316L	Code	DT	
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-4
Hygienic Clamp Joint: Straight Cross

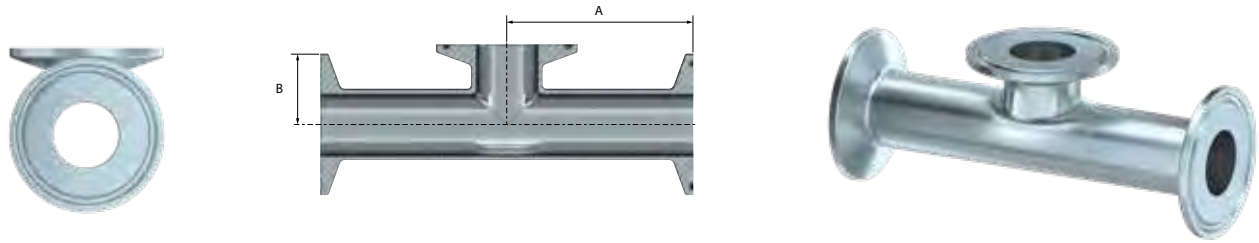


ASME BPE / DT-4.1.2-4

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	316L	Code	DT	
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-5
Hygienic Clamp Joint: Short Outlet Tee

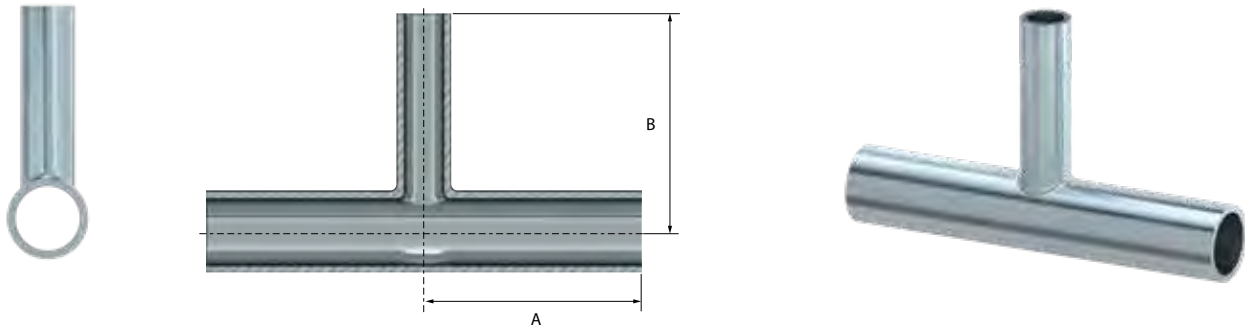


ASME BPE / DT-4.1.2-5

Size		A		B		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT	
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 - 2-2	
6	152,40	5.625	142,90	4.625	117,50	SF1	SF4	TE-96 - 2-2	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-6
Automatic Tube Weld: Reducing Tee



ASME BPE / DT-4.1.2-6

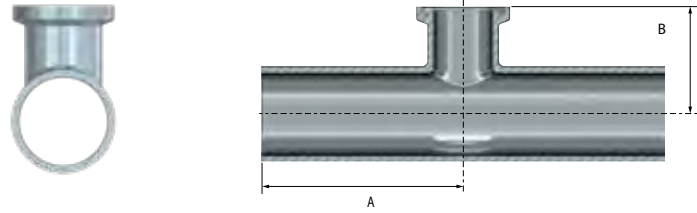
Size		A		B		ASME BPE SF1		ASME BPE SF4		Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT			
3/8 x 1/4	9,53 x 6,35	1.750	44,50	1.750	44,50	SF1	SF4	-	TR-06-04	-	2-6
1/2 x 1/4	12,70 x 6,35	1.875	47,60	1.875	47,60	SF1	SF4	-	TR-08-04	-	2-6
1/2 x 3/8	12,70 x 9,53	1.875	47,60	1.875	47,60	SF1	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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Size		A		B		ASME BPE SF1		ASME BPE SF4		Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT			
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-7
Hygienic Clamp Joint: Reducing Tee



ASME BPE / DT-4.1.2-7

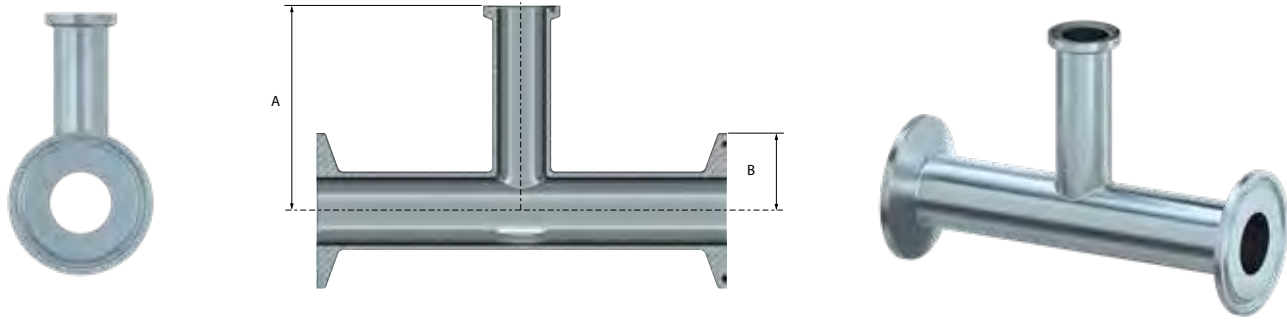
Size		A		B		ASME BPE SF1		ASME BPE SF4		Ref. According to ASME BPE
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT		
3/8 x 1/4	9,53 x 6,35	1.750	44,50	1.000	25,40	SF1	SF4 -	TR-06-04 -	2-7	
1/2 x 1/4	12,70 x 6,35	1.875	47,60	1.000	25,40	SF1	SF4 -	TR-08-04 -	2-7	
1/2 x 3/8	12,70 x 9,53	1.875	47,60	1.000	25,40	SF1	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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Size		A		B		ASME BPE SF1		ASME BPE SF4		Ref. According to ASME BPE
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT		
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-96-08 -	2-7	
6 x 3/4	152,40 x 19,05	5.625	142,90	3.625	92,10	SF1	SF4 -	TR-96-12 -	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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-8
Hygienic Clamp Joint: Reducing Tee



ASME BPE / DT-4.1.2-8

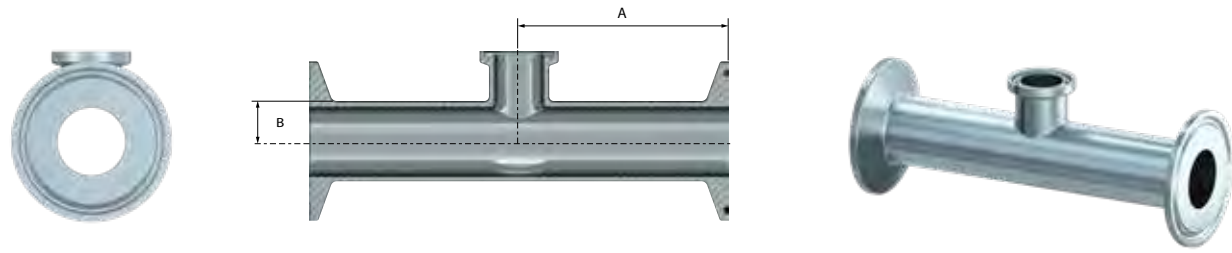
Size		A		B		ASME BPE SF1		ASME BPE SF4		Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT			
3/8 x 1/4	9,53 x 6,35	2.250	57,20	2.250	57,20	SF1	SF4	-	TR-06-04	-	2-8
1/2 x 1/4	12,70 x 6,35	2.375	60,30	2.375	60,30	SF1	SF4	-	TR-08-04	-	2-8
1/2 x 3/8	12,70 x 9,53	2.375	60,30	2.375	60,30	SF1	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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Size		A		B		ASME BPE SF1		ASME BPE SF4		Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT			
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-9
Hygienic Clamp Joint: Short Outlet Reducing Tee



ASME BPE / DT-4.1.2-9

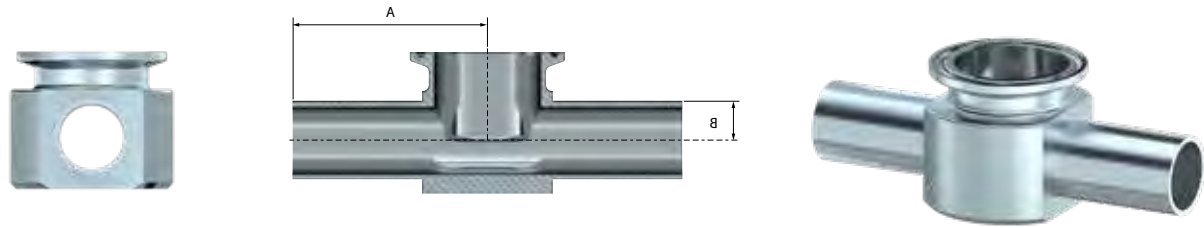
Size		A		B		ASME BPE SF1		ASME BPE SF4		Ref. According to ASME BPE
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT		
3/8 x 1/4	9,53 x 6,35	2.250	57,20	1.000	25,40	SF1	SF4 -	TR-06-04 -	2-9	
1/2 x 1/4	12,70 x 6,35	2.375	60,30	1.000	25,40	SF1	SF4 -	TR-08-04 -	2-9	
1/2 x 3/8	12,70 x 9,53	2.375	60,30	1.000	25,40	SF1	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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Size		A		B		ASME BPE SF1		ASME BPE SF4		Ref. According to ASME BPE
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT		
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-10
Automatic Tube Weld: Instrument Tee

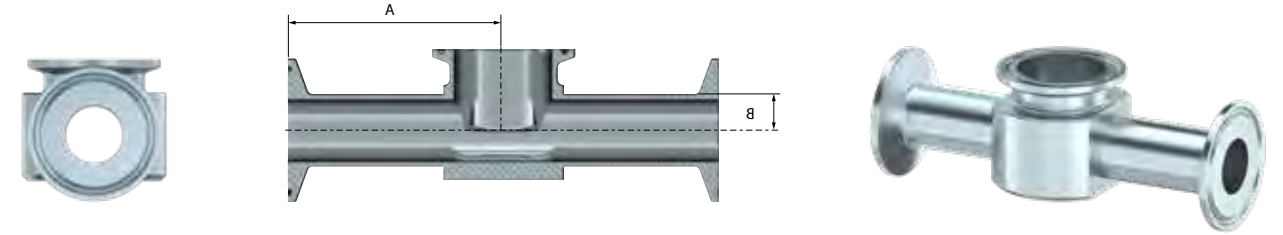


ASME BPE / DT-4.1.2-10

Size		A		B		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE			
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT			
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.2-11
Hygienic Clamp Joint: Instrument Tee

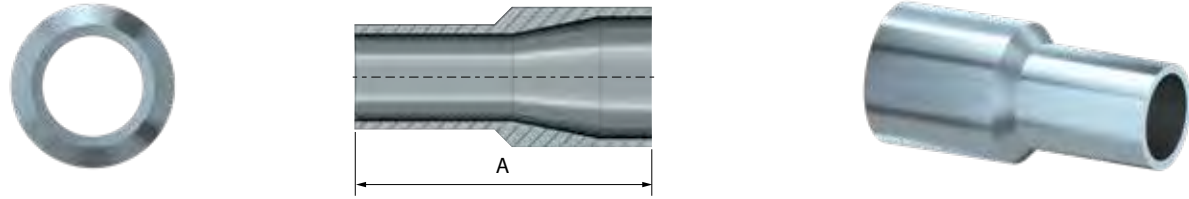


ASME BPE / DT-4.1.2-11

Size		A		B		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE			
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT			
1/2 x 1 1/2	12,70 x 38,10	2.500	63,50	0.875	22,20	SF1	SF4	-	TR-08-24	-	2-11
3/4 x 1 1/2	19,05 x 38,10	2.500	63,50	1.000	25,40	SF1	SF4	-	TR-12-24	-	2-11
1 x 1 1/2	25,40 x 38,10	2.500	63,50	1.125	28,60	SF1	SF4	-	TR-16-24	-	2-11
1/2 x 2	12,70 x 50,80	2.750	69,90	1.000	25,40	SF1	SF4	-	TR-08-32	-	2-11
3/4 x 2	19,05 x 50,80	2.750	69,90	1.125	28,60	SF1	SF4	-	TR-12-32	-	2-11
1 x 2	25,40 x 50,80	2.750	69,90	1.250	31,80	SF1	SF4	-	TR-16-32	-	2-11
1 1/2 x 2	38,10 x 50,80	2.750	69,90	1.500	38,10	SF1	SF4	-	TR-24-32	-	2-11

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.3-1
Automatic Tube Weld: Concentric Reducer

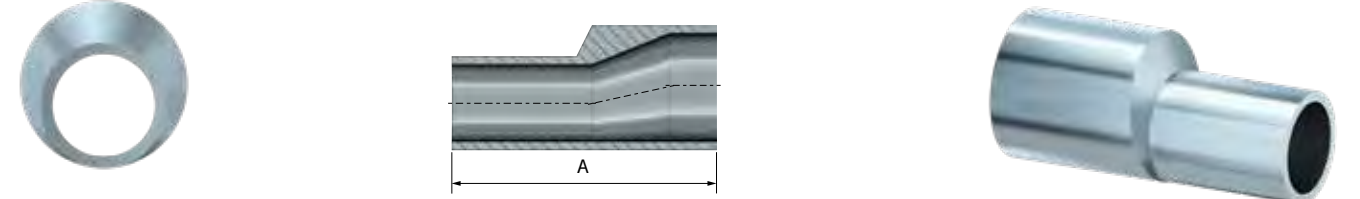


ASME BPE / DT-4.1.3-1

Size				A	ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE
Inch	mm	Inch	mm				
3/8 x 1/4	9,53 x 6,35	1.625	41,30				
1/2 x 1/4	12,70 x 6,35	1.875	47,60				
1/2 x 3/8	12,70 x 9,53	1.875	47,60				
3/4 x 3/8	19,05 x 9,53	2.000	50,80				
3/4 x 1/2	19,05 x 12,70	2.125	54,00				
1 x 1/2	25,40 x 12,70	2.500	63,50				
1 x 3/4	25,40 x 19,05	2.125	54,00				
1 1/2 x 3/4	38,10 x 19,05	3.000	76,20				
1 1/2 x 1	38,10 x 25,40	2.500	63,50				
2 x 1	50,80 x 25,40	3.375	85,70				
2 x 1 1/2	50,80 x 38,10	2.500	63,50				
2 1/2 x 1 1/2	63,50 x 38,10	3.375	85,70				
2 1/2 x 2	63,50 x 50,80	2.500	63,50				
3 x 1 1/2	76,20 x 38,10	4.250	108,00				
3 x 2	76,20 x 50,80	3.375	85,70				
3 x 2 1/2	76,20 x 63,50	2.625	66,70				
4 x 2	101,60 x 50,80	5.125	130,20				
4 x 2 1/2	101,60 x 63,50	4.250	108,00				
4 x 3	101,60 x 76,20	3.875	98,40				
6 x 3	152,40 x 76,20	7.250	184,20				
6 x 4	152,40 x 101,60	5.625	142,90				

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.3-1
Automatic Tube Weld: Eccentric Reducer

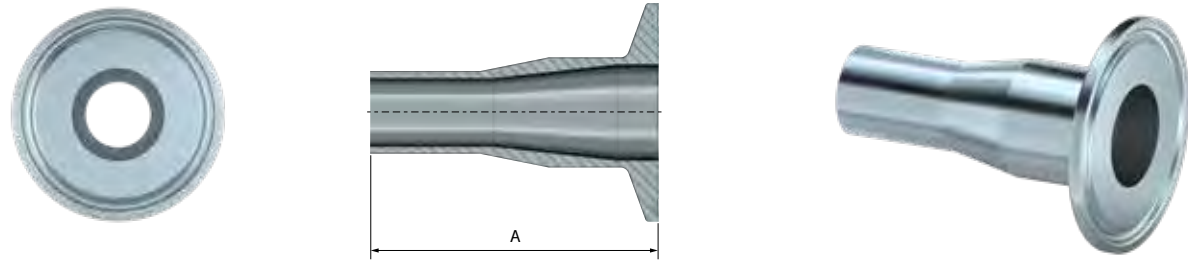


ASME BPE / DT-4.1.3-1

Size				A	ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE
Inch	mm	Inch	mm				
3/8 x 1/4	9,53 x 6,35	1.625	41,30				
1/2 x 1/4	12,70 x 6,35	1.875	47,60				
1/2 x 3/8	12,70 x 9,53	1.875	47,60				
3/4 x 3/8	19,05 x 9,53	2.000	50,80				
3/4 x 1/2	19,05 x 12,70	2.125	54,00				
1 x 1/2	25,40 x 12,70	2.500	63,50				
1 x 3/4	25,40 x 19,05	2.125	54,00				
1 1/2 x 3/4	38,10 x 19,05	3.000	76,20				
1 1/2 x 1	38,10 x 25,40	2.500	63,50				
2 x 1	50,80 x 25,40	3.375	85,70				
2 x 1 1/2	50,80 x 38,10	2.500	63,50				
2 1/2 x 1 1/2	63,50 x 38,10	3.375	85,70				
2 1/2 x 2	63,50 x 50,80	2.500	63,50				
3 x 1 1/2	76,20 x 38,10	4.250	108,00				
3 x 2	76,20 x 50,80	3.375	85,70				
3 x 2 1/2	76,20 x 63,50	2.625	66,70				
4 x 2	101,60 x 50,80	5.125	130,20				
4 x 2 1/2	101,60 x 63,50	4.250	108,00				
4 x 3	101,60 x 76,20	3.875	98,40				
6 x 3	152,40 x 76,20	7.250	184,20				
6 x 4	152,40 x 101,60	5.625	142,90				

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.3-2
Automatic Tube Weld: Concentric Reducer

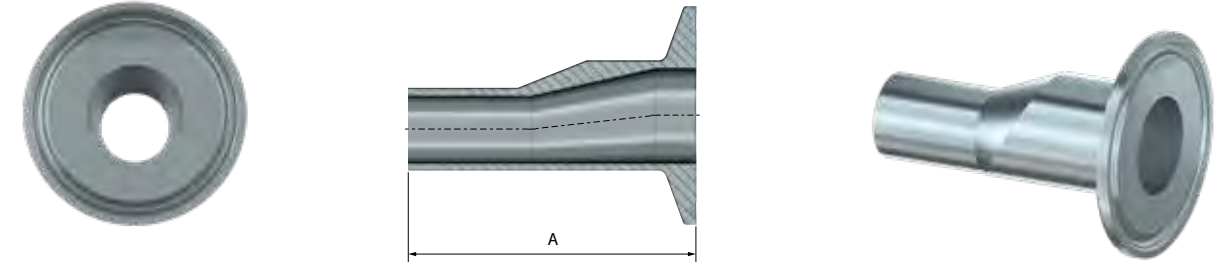


ASME BPE / DT-4.1.3-2

Size				A	ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE			
Inch	mm	Inch	mm		316L	Code	DT			
3/8 x 1/4	9,53 x 6,35	2.125	53,98		SF1	SF4 - RC-06-04	- 3-2			
1/2 x 1/4	12,70 x 6,35	2.375	60,33		SF1	SF4 - RC-08-04	- 3-2			
1/2 x 3/8	12,70 x 9,53	2.375	60,33		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	66,68		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	66,68		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	98,43		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	98,43		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	120,65		SF1	SF4 - RC-48-24	- 3-2			
3 x 2	76,20 x 50,80	3.875	98,43		SF1	SF4 - RC-48-32	- 3-2			
3 x 2 1/2	76,20 x 63,50	3.125	79,38		SF1	SF4 - RC-48-40	- 3-2			
4 x 2	101,60 x 50,80	5.750	146,05		SF1	SF4 - RC-64-32	- 3-2			
4 x 2 1/2	101,60 x 63,50	4.875	123,83		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	161,93		SF1	SF4 - RC-96-64	- 3-2			

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.3-2
Automatic Tube Weld: Eccentric Reducer

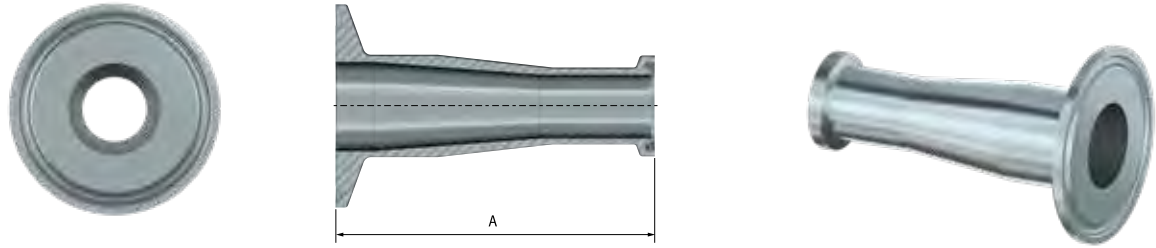


ASME BPE / DT-4.1.3-2

Size				A	ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE			
Inch	mm	Inch	mm		316L	Code	DT			
3/8 x 1/4	9,53 x 6,35	2.125	53,98		SF1	SF4 - RE-06-04	- 3-2			
1/2 x 1/4	12,70 x 6,35	2.375	60,33		SF1	SF4 - RE-08-04	- 3-2			
1/2 x 3/8	12,70 x 9,53	2.375	60,33		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	66,68		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	66,68		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	98,43		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	98,43		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	120,65		SF1	SF4 - RE-48-24	- 3-2			
3 x 2	76,20 x 50,80	3.875	98,43		SF1	SF4 - RE-48-32	- 3-2			
3 x 2 1/2	76,20 x 63,50	3.125	79,38		SF1	SF4 - RE-48-40	- 3-2			
4 x 2	101,60 x 50,80	5.750	146,05		SF1	SF4 - RE-64-32	- 3-2			
4 x 2 1/2	101,60 x 63,50	4.875	123,83		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	161,93		SF1	SF4 - RE-96-64	- 3-2			

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.3-3
Hygienic Clamp Joint: Concentric Reducer

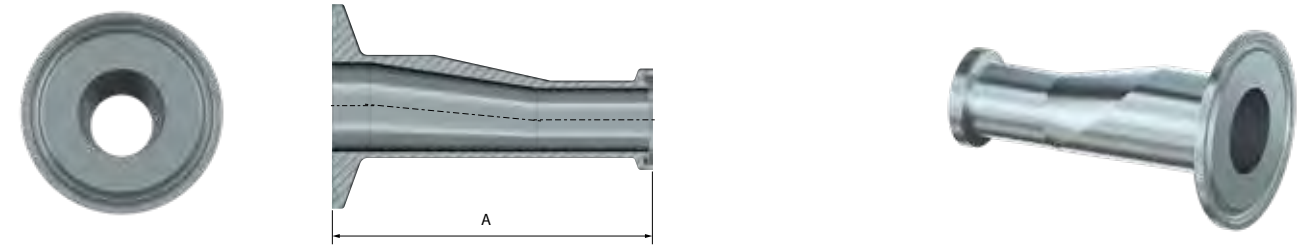


ASME BPE / DT-4.1.3-3

Size				A	ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE			
Inch	mm	Inch	mm		316L	Code	DT			
3/8 x 1/4	9,53 x 6,35	2.625	66,68		SF1	SF4 - RC-06-04	- 3-3			
1/2 x 1/4	12,70 x 6,35	2.875	73,03		SF1	SF4 - RC-08-04	- 3-3			
1/2 x 3/8	12,70 x 9,53	2.875	73,03		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	79,38		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	79,38		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	111,13		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	111,13		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	133,35		SF1	SF4 - RC-48-24	- 3-3			
3 x 2	76,20 x 50,80	4.375	111,13		SF1	SF4 - RC-48-32	- 3-3			
3 x 2 1/2	76,20 x 63,50	3.625	92,08		SF1	SF4 - RC-48-40	- 3-3			
4 x 2	101,60 x 50,80	6.250	158,75		SF1	SF4 - RC-64-32	- 3-3			
4 x 2 1/2	101,60 x 63,50	5.375	136,53		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	214,90		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			

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.3-3
Hygienic Clamp Joint: Eccentric Reducer

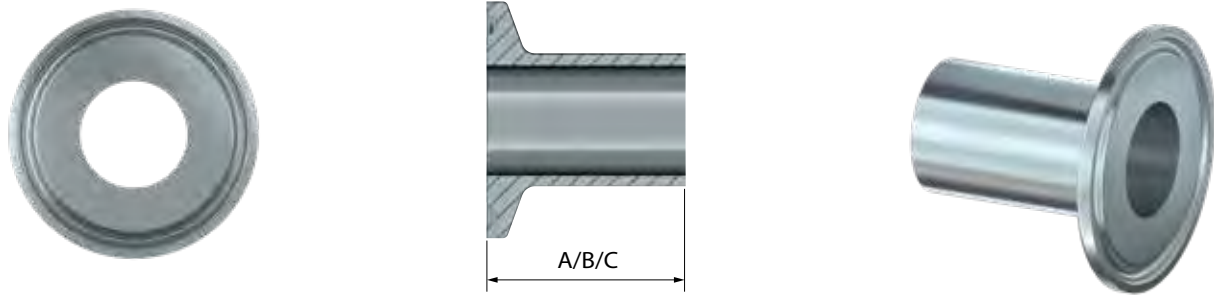


ASME BPE / DT-4.1.3-3

Size				A	ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE			
Inch	mm	Inch	mm		316L	Code	DT			
3/8 x 1/4	9,53 x 6,35	2.625	66,68		SF1	SF4 - RE-06-04	- 3-3			
1/2 x 1/4	12,70 x 6,35	2.875	73,03		SF1	SF4 - RE-08-04	- 3-3			
1/2 x 3/8	12,70 x 9,53	2.875	73,03		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	79,38		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	79,38		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	111,13		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	111,13		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	133,35		SF1	SF4 - RE-48-24	- 3-3			
3 x 2	76,20 x 50,80	4.375	111,13		SF1	SF4 - RE-48-32	- 3-3			
3 x 2 1/2	76,20 x 63,50	3.625	92,08		SF1	SF4 - RE-48-40	- 3-3			
4 x 2	101,60 x 50,80	6.250	158,75		SF1	SF4 - RE-64-32	- 3-3			
4 x 2 1/2	101,60 x 63,50	5.375	136,53		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	214,90		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			

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.4-1
Automatic Tube Weld: Ferrule



ASME BPE / DT-4.1.4-1 / FERRULE A

Size		A		Clamp Dimensions		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT	
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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

ASME BPE / DT-4.1.4-1 / FERRULE B

Size		B		Clamp Dimensions		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT	
1/4	6,35	1.130	28,58	0.984	25,00	SF1 SF4	FB-04	4-1	
3/8	9,53	1.130	28,58	0.984	25,00	SF1 SF4	FB-06	4-1	
1/2	12,70	1.130	28,58	0.984	25,00	SF1 SF4	FB-08	4-1	
3/4	19,05	1.130	28,58	0.984	25,00	SF1 SF4	FB-12	4-1	
1	25,40	1.130	28,58	1.984	50,50	SF1 SF4	FB-16	4-1	
1 1/2	38,10	1.130	28,58	1.984	50,50	SF1 SF4	FB-24	4-1	
2	50,80	1.130	28,58	2.516	64,00	SF1 SF4	FB-32	4-1	
2 1/2	63,50	1.130	28,58	3.047	77,50	SF1 SF4	FB-40	4-1	
3	76,20	1.130	28,58	3.579	91,00	SF1 SF4	FB-48	4-1	
4	101,60	1.130	28,58	4.682	119,00	SF1 SF4	FB-64	4-1	
6	152,40	1.500	38,10	6.570	167,00	SF1 SF4	FB-96	4-1	

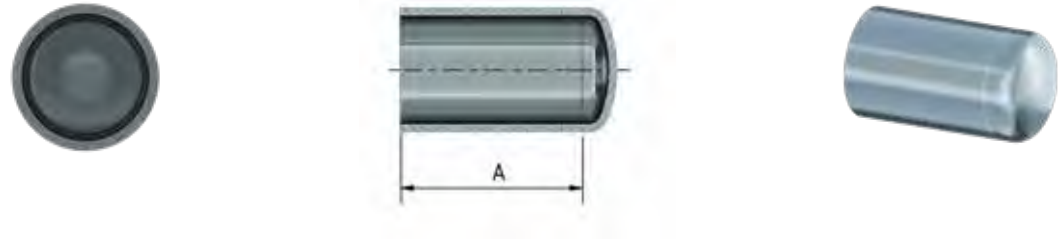
Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

ASME BPE / DT-4.1.4-1 / FERRULE C

Size		C		Clamp Dimensions		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE	
Inch	mm	Inch	mm	Inch	mm	316L	Code	DT	
1/4	6,35	0.500	12,70	0.984	25,00	SF1 SF4	FC-08	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	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.5-1
Automatic Tube Weld: Cap Type A

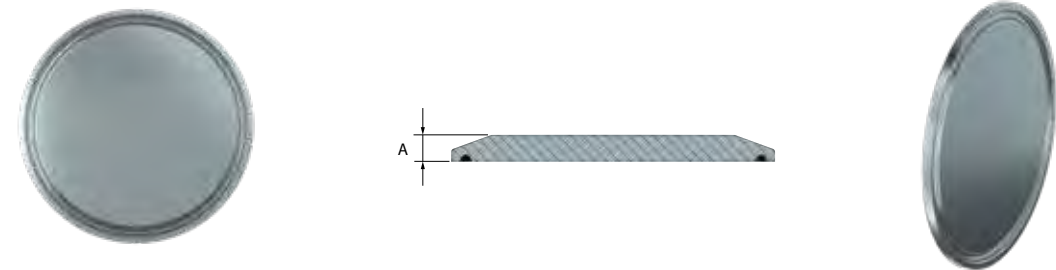


ASME BPE / DT-4.1.5-1 / CAP TYPE A

Size		A		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE		
Inch	mm	Inch	mm	■	■	316L	Code	DT
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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

DT-4.1.5-2
Hygienic Clamp Joint: Solid End Cap



ASME BPE / 4.1.5-2 / SOLID END CAP

Size		A		Flange Dimensions		ASME BPE SF1	ASME BPE SF4	Ref. According to ASME BPE		
Inch	mm	Inch	mm	Inch	mm	■	■	316L	Code	DT
1/4	6,35	0.187	4,70	0.984	25,00	SF1	SF4	-	FTC-04-12	- 5-2
3/8	9,53	0.187	4,70	0.984	25,00	SF1	SF4	-	FTC-04-12	- 5-2
1/2	12,70	0.187	4,70	0.984	25,00	SF1	SF4	-	FTC-04-12	- 5-2
3/4	19,05	0.187	4,70	0.984	25,00	SF1	SF4	-	FTC-04-12	- 5-2
1	25,40	0.250	6,40	1.984	50,50	SF1	SF4	-	FTC-16-24	- 5-2
1 1/2	38,10	0.250	6,40	1.984	50,50	SF1	SF4	-	FTC-16-24	- 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

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Clamps

Standard Clamp acc. to ASME BPE

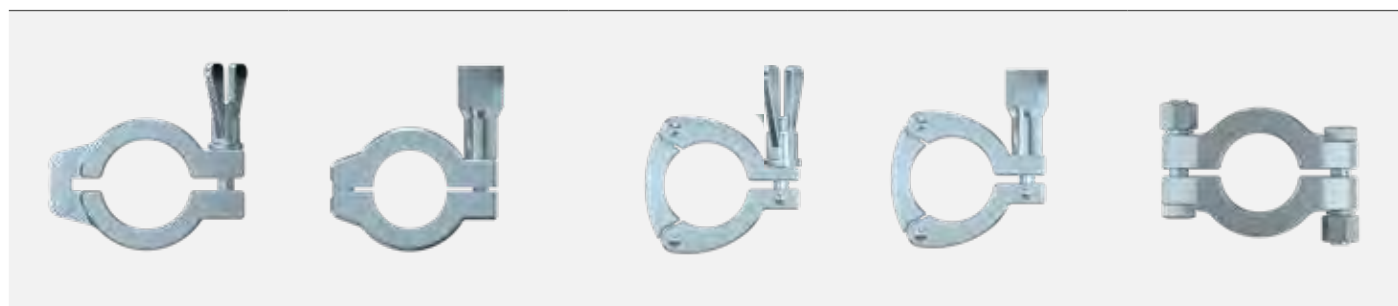


CLAMP / ASME BPE					
Nominal Size		Flange Dimensions		Clamp	Single Pinned Wing Nut
Inch	Inch	mm	Size		Code
1/4	0.984	25,00	1		CL-SP-WN-1
3/8	0.984	25,00	1		CL-SP-WN-1
1/2	0.984	25,00	1		CL-SP-WN-1
3/4	0.984	25,00	1		CL-SP-WN-1
1	1.984	50,50	2		CL-SP-WN-2
1 1/2	1.984	50,50	2		CL-SP-WN-2
2	2.516	64,00	3		CL-SP-WN-3
2 1/2	3.047	77,50	4		CL-SP-WN-4
3	3.579	91,00	5		CL-SP-WN-5
4	4.682	119,00	7		CL-SP-WN-7
6	6.570	167,00	9		CL-SP-WN-9

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Special Clamps / optional

Safety Clamp Clamp with Hexagon 3-Segment-Clamp 3-Segment-Clamp with Hexagon High Pressure Clamp



Gaskets

Materials Overview



GASKETS / Imperial

Inch	Size mm	Code	PTFE	FKM	FKM/PTFE	EPDM	MVQ	PTFE/316	PTFE/EPDM
1/4	6,35	TC-GK-04-1-	P	F	FP	E	M	P16	PTE
3/8	9,53	TC-GK-06-1-	P	F	FP	E	M	P16	PTE
1/2	12,70	TC-GK-08-1-	P	F	FP	E	M	P16	PTE
3/4	19,05	TC-GK-12-1-	P	F	FP	E	M	P16	PTE
1	25,40	TC-GK-16-2-	P	F	FP	E	M	P16	PTE
1 1/2	38,10	TC-GK-24-2-	P	F	FP	E	M	P16	PTE
2	50,80	TC-GK-32-3-	P	F	FP	E	M	P16	PTE
2 1/2	63,50	TC-GK-40-4-	P	F	FP	E	M	P16	PTE
3	76,20	TC-GK-48-5-	P	F	FP	E	M	P16	PTE
4	101,60	TC-GK-64-7-	P	F	FP	E	M	P16	PTE
6	152,40	TC-GK-96-9-	P	F	FP	E	M	P16	PTE

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.



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** valves 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.

Gaskets
Technical Specifications

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	FKM / PTFE	EPDM	MVQ	PTFE / 316L	PTFE / EPDM
Material acc. to ISO 1629 / ASTM D1418	Polytetrafluoroethylene	Perfluorinated rubber	PTFE enveloped FKM	Ethylene propylene diene rubber	Platinum cured silicone rubber	Composite of stainless steel 316L and PTFE	PTFE enveloped EPDM
Trade name	Teflon® Dyneon®	Viton® Fluorel®		Buna® Nordel®	Silopren® Silastic®	TufSteel	TufFlex
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			
* Not all diameters are available in all materials	Imperial 1/4" – 6"			Imperial 1/4" – 6"			
Temperature variations	-	+	○	+	+	+	+
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	3,45 g/cm³	1,28 g/cm³	1,9 g/cm³	2,1 g/cm³	1,2 g/cm³	1,85 g/cm³	1,25 g/cm³
Compression set	18,5 %	13 %	15 %	10 %	20 %	7 %	5 %
	70 Hour	24 Hour	24 Hour	24 Hour	24 Hour	24 Hour	24 Hour
	200 °C / 392 °F	175 °C / 347 °F	175 °C / 347 °F	150 °C / 302 °F	175 °C / 347 °F	150 °C / 302 °F	175 °C / 347 °F
Temperature range	-15 to 230 °C 5 to 446 °F	-20 to 210 °C -4 to 410 °F	-60 to 180 °C -76 to 356 °F	-40 to 140 °C -40 to 284 °F	-60 to 200 °C -76 to 392 °F	-70 to 260 °C -94 to 500 °F	-70 to 180 °C -94 to 356 °F

+ = highly suitable

○ = suitable

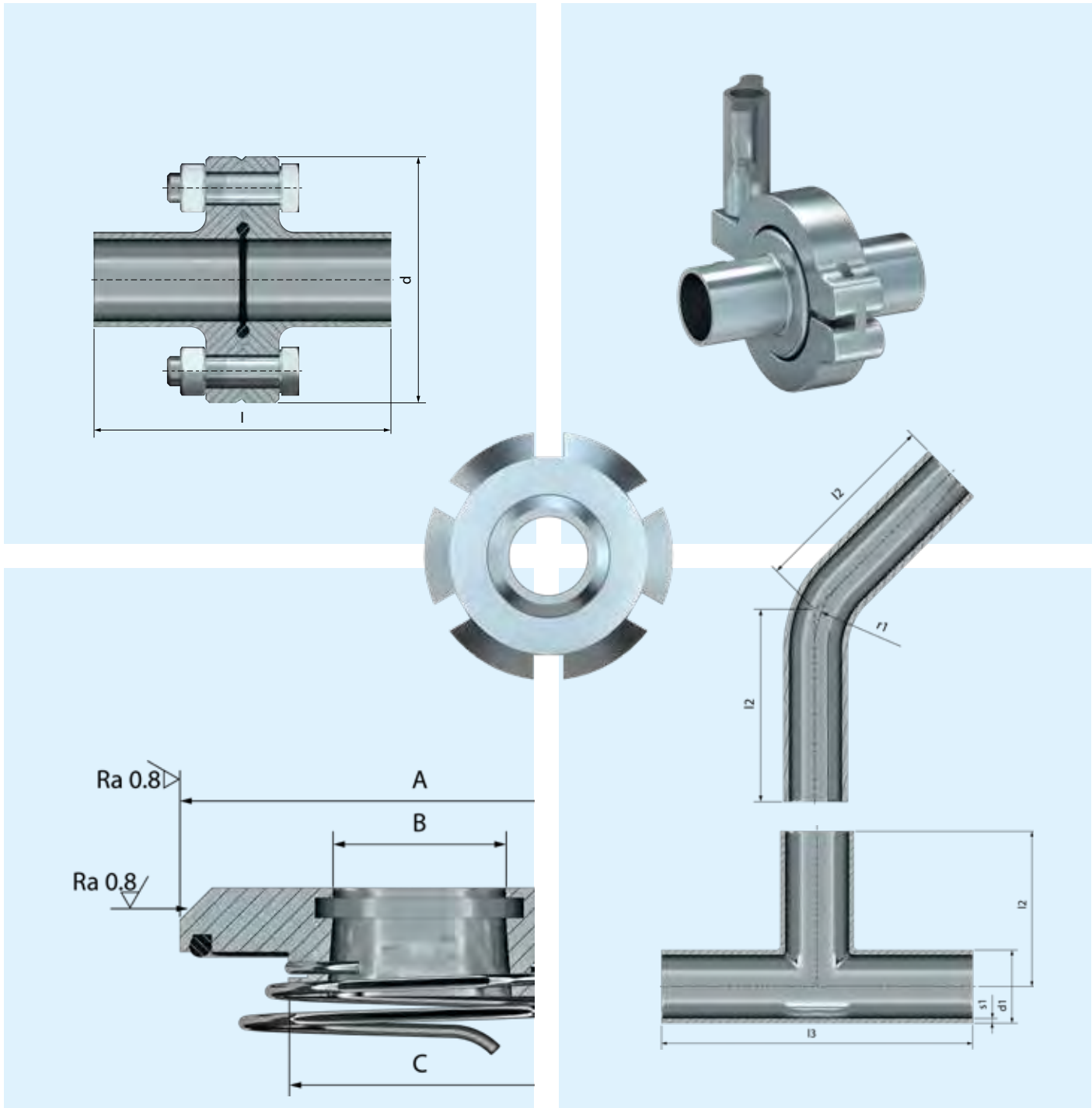
- = not suitable

+ = highly suitable

○ = suitable

- = not suitable

DIN Tubes, Fittings and Connections



■ weldtron	Specification	56
■ safetron	Specification	58
	Products	Page
	Tube	60
	90° Elbow	62
	45° Elbow	64
	88° Elbow	66
	92° Elbow	67
	T-Pieces Short Branch	68
	T-Pieces	72
	Reducer Concentric	76
	Reducer Eccentric	80
	Ferrules, Clamps, Gaskets and Caps acc. to DIN 32676	84
	Screw Connection acc. to DIN 11864-1	90
	Flange Connection acc. to DIN 11864-2	96
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	CleanShut - Wall and Ceiling Feedthroughs	108
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Specification
weldtron

For biotech and the pharma industry
and for sensitive sectors of cosmetics and food industries



1. SURFACE QUALITIES

Tubes and fittings: Inner surface (bright finished)

weldtron H3o	Ra_{avg.} ≤ 0,80 µm / 32 µin
Surface treatment:	<ul style="list-style-type: none"> - Bright finished (bf) / H3o according to DIN 11866 / 11865 / 11864 / DIN 32676 - Ra value for circumferential weld seam of fittings not defined - T-pieces according to DIN 11865, option "u". - Circular weld seams ground with specified Ra value on request - Cleaning and testing methods ASTM A 632, S3

Tubes and fittings: Inner surface (electropolished)

weldtron HE3o	Ra_{avg.} ≤ 0.60 µm / 24 µin
Surface treatment:	<ul style="list-style-type: none"> - Electropolished (ep) / HE3o according to DIN 11866 / 11865 / 11864 / DIN 32676 - Ra value for circumferential weld seam of formed parts not defined - T-pieces according to DIN 11865, option "u". - Circular weld seams ground with specified Ra value on request. - Cleaning and testing procedures according to Spec. doc. 8.4-40/3.2/3.3.2 - Oil and grease-free in accordance with CGA G-4.1-2018 and ASTM G93 – level B

2. MATERIALS

Austenitic stainless steel tubes and fittings (seamless or welded / depending on diameter) in:

weldtron	1.4435 / UNS S31603 (316L) acc. to Basler Norm 2 (BN2) 1.4404 / UNS S31603 (316L)
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Hardness equivalent to:	<ul style="list-style-type: none"> - max. 180 HV* according to DIN EN ISO 6507-1 - max. 90 HRB* according to DIN EN ISO 6508-1 <p>* comparable to ASTM E-384 (HV) and ASTM E 18-22 (HRB)</p>
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3. DIMENSIONS

Imperial: acc. to ASTM A269 / A270 / A632, ASME BPE and DIN 11866 Serie C

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

ISO: acc. to DIN EN ISO 1127 and DIN 11866 Serie B

OD x WT 13,50 x 1,60 mm to 219,10 x 2,60 mm

Metric: acc. to DIN 11866 Series A

OD x WT 6,00 x 1,00 mm to 154,00 x 2,00 mm

Manufacturing process: Welded or seamless tubes

4. QUALITY AND TEST PROCEDURES

Verification of basic test certificate	Visual inspection	Endoscopic inspection of bright finished tubes
Verification of dimensions	Roughness measurements	Delta ferrite measurement 1.4435 BN2 / 316L

5. TECHNICAL TERMS OF DELIVERY

Tubes and fittings are prepared for orbital welding:

Tubes

Acc. to 11866, ASTM A 269 / A 270, DIN EN 10217-7 / 10216-5 with a length of 5900 - 6090 mm (max. 10% short lengths of min. 3000 mm possible).

For electropolished tubes with outer diameter < 5.00 mm, the length is 2950 ± 50 mm.

Fittings

Acc. to DIN 11865, DIN 32676, DIN 11864

Marking always with

DOCKWEILER / DW-Number / Dimension / Material / Heat number / Standards and Hygiene Class

Tubes, pipes and fittings shall be permanently marked as per Dockweiler guideline AA 7.5.3-80. 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

Bright finished tubes and fittings are sealed with transparent PE caps and individually packaged in PE foil. The batch label on the foil packaging contains the information weldtron.

Electropolished tubes and fittings are sealed with PA/PE squares and yellow PE caps, sleeved and sealed in PE. The batch label on the foil packaging contains the information weldtron ep.

Shipping

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

Specification
safetron

For sensitive media in pharma and biotech:
WFI, serums and parenterals



bf bright finished
ep electropolished



1. SURFACE QUALITIES

Tubes and fittings:	Inner surface (bf)
safetron H4o	Ra_{avg.} ≤ 0,40 µm / 16 µin
Surface treatment:	<ul style="list-style-type: none"> - Bright finished (bf) / H4o Hygienic Class according to DIN 11866 / 11865 / 11864 / DIN 32676 - Ra value for circumferential weld seam of fittings not defined - T-pieces according to DIN 11865, option "u". - Circular weld seams ground with specified Ra value on request - Cleaning and testing methods ASTM A 632, S3 - Weld ends of tubes and fittings are prepared for orbital welding (square cut and faced).

Tubes and fittings:	Inner surface (ep)
safetron HE5o	Ra_{avg.} ≤ 0,25 µm / 10µin
Surface treatment:	<ul style="list-style-type: none"> - Electropolished (ep) / HE5o Hygienic Class according to DIN 11866 / 11865 / 11864 / DIN 32676 - Ra value for circumferential weld seam of formed parts not defined - T-pieces according to DIN 11865, option "u". - Circular weld seams ground with specified Ra value on request. - Cleaning and testing procedures according to Spec. doc. 8.4-40/3.2/3.3.2 - Oil and grease-free in accordance with CGA G-4.1-2018 and ASTM G93 – level B - Weld ends of tubes and fittings are prepared for orbital welding (square cut and faced).

2. MATERIALS

	Austenitic stainless steel tubes and fittings (seamless or welded / depending on diameter) in:
safetron	1.4435 / UNS S31603 (316L) acc. to Basler Norm 2 (BN2) 1.4404 / UNS S31603 (316L)

Hardness equivalent to:	<ul style="list-style-type: none"> - max. 180 HV* according to DIN EN ISO 6507-1 - max. 90 HRB* according to DIN EN ISO 6508-1 <p>* comparable to ASTM E-384 (HV) and ASTM E 18-22 (HRB)</p>
-------------------------	--

3. DIMENSIONS

Imperial	acc. to ASTM A269 / A270 / A632, ASME BPE and DIN 11866 Serie C
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
ISO	acc. to DIN EN ISO 1127 und DIN 11866 Serie B
OD x WT:	13,50 x 1,60 mm to 219,10 x 2,60 mm
Metric	acc. to DIN 11866 Series A
	on request
Manufacturing process:	Welded or seamless tubes

4. QUALITY AND TEST PROCEDURES

	Verification of basic test certificate		Visual inspection		Endoscopic inspection of bright finished tubes
	Verification of dimensions		Roughness measurements		Delta ferrite measurement 1.4435 BN2 / 316L

5. TECHNICAL TERMS OF DELIVERY

Tubes and fittings are prepared for orbital welding:

Tubes

According to 11866, ASTM A 269 / A 270, DIN EN 10217-7 / 10216-5 with a length of 5900 - 6090 mm (max. 10% short lengths of min. 3000 mm possible).

For electropolished tubes with outer diameter < 5.00 mm, the length is 2950 ± 50 mm.

Fittings

According to DIN 11865, DIN 32676, DIN 11864

Marking always with

DOCKWEILER / DW-Number / Dimension / Material / Heat number / Standards and Hygiene Class

Tube and fittings shall be permanently marked as per Dockweiler guideline AA 8.5.2-80. 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

Bright finished tubes and fittings are sealed with transparent PE caps and individually packaged in PE foil. The batch label on the foil packaging contains the information safetron.

Electropolished tubes and fittings are sealed with PA/PE squares and yellow PE caps, sleeved and sealed in PE. The batch label on the foil packaging contains the information safetron ep.

Shipping

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

Tube



METRIC / DIN 11866 LINE A

Size	d x s	Weight	weldtron bf	weldtron ep	1.4435 / 316L	Size	1.4404/ 316L	Code
DN	mm	kg/m						
4*	6,00 x 1,00	0,13	W	WE	-	04M	W	- 04M-04
6	8,00 x 1,00	0,18	W	WE	-	06M	W	- 06M-04
8	10,00 x 1,00	0,23	W	WE	-	08M	W	- 08M-04
10	13,00 x 1,50	0,43	W	WE	-	10M	W	- 10M-04
15	19,00 x 1,50	0,66	W	WE	-	15M	W	- 15M-04
20	23,00 x 1,50	0,81	W	WE	-	20M	W	- 20M-04
25	29,00 x 1,50	1,03	W	WE	-	25M	W	- 25M-04
32	35,00 x 1,50	1,26	W	WE	-	32M	W	- 32M-04
40	41,00 x 1,50	1,49	W	WE	-	40M	W	- 40M-04
50	53,00 x 1,50	1,94	W	WE	-	50M	W	- 50M-04
65	70,00 x 2,00	3,41	W	WE	-	65M	W	- 65M-04
80	85,00 x 2,00	4,16	W	WE	-	80M	W	- 80M-04
100	104,00 x 2,00	5,11	W	WE	-	100M	W	- 100M-04
150	154,00 x 2,00	7,62	W	WE	-	150M	W	- 150M-04

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.
* Does not apply to DIN 11866

ISO / DIN 11865 LINE B

Size	d x s	Weight	weldtron bf	weldtron ep	safetron bf	safetron ep	1.4435 / 316L	Size	1.4404/ 316L	Code
DN	mm	kg/m								
8	13,50 x 1,60	0,48	W	WE	S	SE	-	08I	W	- 08I-04
10	17,20 x 1,60	0,63	W	WE	S	SE	-	10I	W	- 10I-04
15	21,30 x 1,60	0,79	W	WE	S	SE	-	15I	W	- 15I-04
20	26,90 x 1,60	1,01	W	WE	S	SE	-	20I	W	- 20I-04
25	33,70 x 2,00	1,59	W	WE	S	SE	-	25I	W	- 25I-04
32	42,40 x 2,00	2,03	W	WE	S	SE	-	32I	W	- 32I-04
40	48,30 x 2,00	2,32	W	WE	S	SE	-	40I	W	- 40I-04
50	60,30 x 2,00	2,92	W	WE	S	SE	-	50I	W	- 50I-04
65	76,10 x 2,00	3,72	W	WE	S	SE	-	65I	W	- 65I-04
80	88,90 x 2,30	4,99	W	WE	S	SE	-	80I	W	- 80I-04
100	114,30 x 2,30	6,46	W	WE	S	SE	-	100I	W	- 100I-04
150	168,30 x 2,60	10,80	W	WE	S	SE	-	150I	W	- 150I-04
200	219,10 x 2,60	14,11	W	WE	S	SE	-	200I	W	- 200I-04

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

IMPERIAL / DIN 11865 LINE C

Size	d x s	Weight	weldtron bf	weldtron ep	safetron bf	safetron ep	1.4435 / 316L	Size	1.4404/ 316L	Code
DN	mm	kg/m								
1/4	6,35 x 0,89	0,12	W	WE	S	SE	-	04	W	- 04-04
3/8	9,53 x 0,89	0,20	W	WE	S	SE	-	06	W	- 06-04
1/2	12,70 x 1,65	0,46	W	WE	S	SE	-	08	W	- 08-04
3/4	19,05 x 1,65	0,72	W	WE	S	SE	-	12	W	- 12-04
1	25,40 x 1,65	0,98	W	WE	S	SE	-	16	W	- 16-04
1 1/2	38,10 x 1,65	1,51	W	WE	S	SE	-	24	W	- 24-04
2	50,80 x 1,65	2,03	W	WE	S	SE	-	32	W	- 32-04
2 1/2	63,50 x 1,65	2,56	W	WE	S	SE	-	40	W	- 40-04
3	76,20 x 1,65	3,08	W	WE	S	SE	-	48	W	- 48-04
4	101,60 x 2,11	5,26	W	WE	S	SE	-	64	W	- 64-04
6	152,40 x 2,77	10,39	W	WE	S	SE	-	96	W	- 96-04

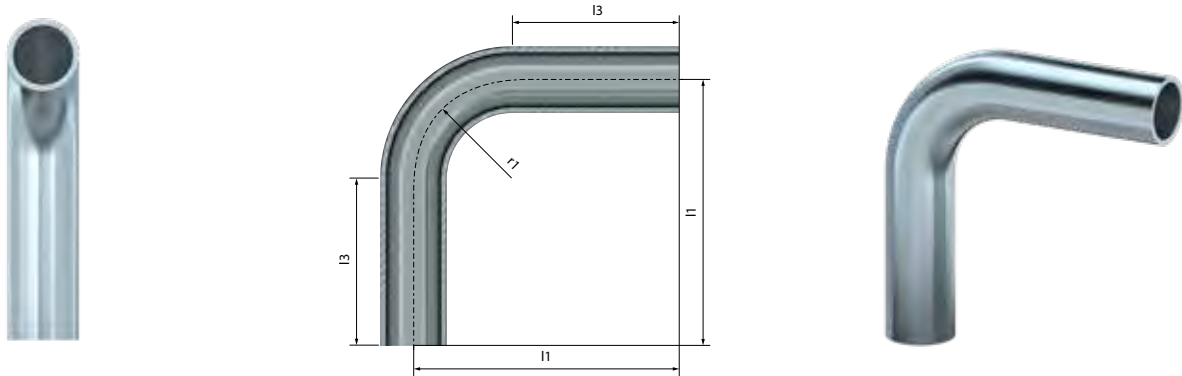
Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Instrument Tubings

Size	Weight	Size	Weight
d x s mm	kg/m	d x s mm	kg/m
0,30 x 0,06	0,0004	5,00 x 1,00	0,1002
0,80 x 0,20	0,0030	6,00 x 0,50	0,0689
1,20 x 0,10	0,0028	6,00 x 1,00	0,1252
1,20 x 0,20	0,0050	6,00 x 1,50	0,1690
1,59 x 0,25	0,0084	6,35 x 0,89	0,1240
1,59 x 0,30	0,0097	7,00 x 0,50	0,0814
1,59 x 0,40	0,0119	8,00 x 0,50	0,0939
1,59 x 0,45	0,0128	8,00 x 1,00	0,1753
1,59 x 0,59	0,0148	8,00 x 1,50	0,2441
2,00 x 0,20	0,0090	9,53 x 0,89	0,1925
2,00 x 0,40	0,0160	9,53 x 1,65	0,3256
2,00 x 0,50	0,0188	10,00 x 0,50	0,1189
3,18 x 0,56	0,0367	10,00 x 1,00	0,2254
3,18 x 0,71	0,0432	12,00 x 0,20	0,0591
4,00 x 0,50	0,0438	12,00 x 2,00	0,5008
4,00 x 1,00	0,0751		

Further dimensions and materials on request. Subject to alteration.
These dimensions are only a selection of instrumentation and capillary tubes and not all are available from stock.

Elbows 90°
Imperial / ISO / Metric



ISO / DIN 11865 LINE B

Size	d1	s1	l1	l3	r1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
						■	■	■	■	
DN	mm					1.4435 / 316L				
8	13,50	1,60	45,00	25,00	20,00	W	WE	S	SE	E9-08I
10	17,20	1,60	53,00	25,00	28,00	W	WE	S	SE	E9-10I
15	21,30	1,60	55,00	25,00	30,00	W	WE	S	SE	E9-15I
20	26,90	1,60	68,50	40,00	28,50	W	WE	S	SE	E9-20I
25	33,70	2,00	78,00	40,00	38,00	W	WE	S	SE	E9-25I
32	42,40	2,00	87,50	40,00	47,50	W	WE	S	SE	E9-32I
40	48,30	2,00	97,00	40,00	57,00	W	WE	S	SE	E9-40I
50	60,30	2,00	116,00	40,00	76,00	W	WE	S	SE	E9-50I
65	76,10	2,00	150,00	55,00	95,00	W	WE	S	SE	E9-65I
80	88,90	2,30	169,50	55,00	114,50	W	WE	S	SE	E9-80I
100	114,30	2,30	207,50	55,00	152,50	W	WE	S	SE	E9-100I

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

METRIC / DIN 11865 LINE A

Size	d1	s1	l1	l3	r1	weldtron bf	weldtron ep	Code
						■	■	
DN	mm					1.4435 / 316L		
4*	6,00	1,00	40,00	24,00	16,00	W	WE	E9-04M
6	8,00	1,00	45,00	25,00	20,00	W	WE	E9-06M
8	10,00	1,00	50,00	25,00	25,00	W	WE	E9-08M
10	13,00	1,50	51,00	25,00	26,00	W	WE	E9-10M
15	19,00	1,50	60,00	25,00	35,00	W	WE	E9-15M
20	23,00	1,50	65,00	25,00	40,00	W	WE	E9-20M
25	29,00	1,50	90,00	40,00	50,00	W	WE	E9-25M
32	35,00	1,50	95,00	40,00	55,00	W	WE	E9-32M
40	41,00	1,50	100,00	40,00	60,00	W	WE	E9-40M
50	53,00	1,50	110,00	40,00	70,00	W	WE	E9-50M
65	70,00	2,00	120,00	40,00	80,00	W	WE	E9-65M
80	85,00	2,00	145,00	55,00	90,00	W	WE	E9-80M
100	104,00	2,00	155,00	55,00	100,00	W	WE	E9-100M
150	154,00	2,00	325,00	100,00	225,00	W	WE	E9-150M

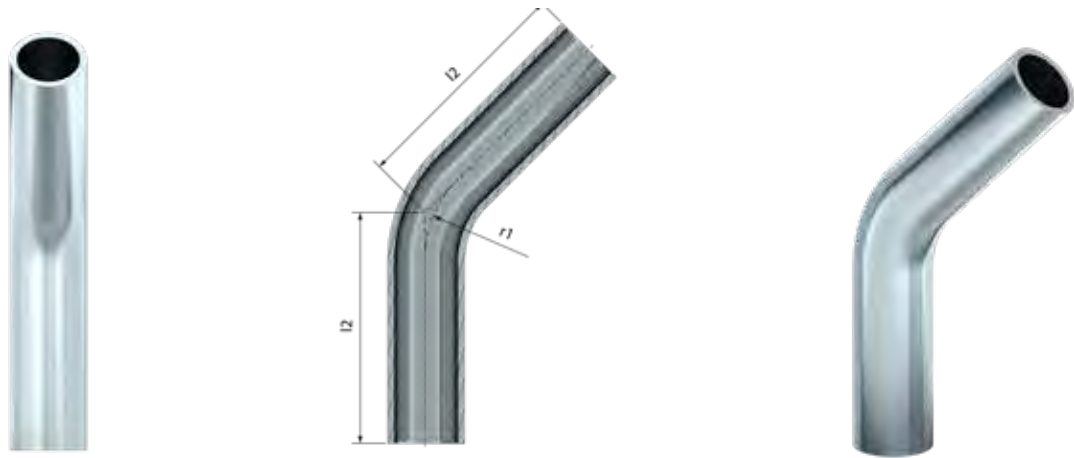
Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.
* Does not apply to DIN 11865

IMPERIAL / DIN 11865 LINE C

Size	d1	s1	l1	l3	r1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
						■	■	■	■	
Inch	mm					1.4435 / 316L				
1/4	6,35	0,89	66,68	52,40	14,30	W	WE	S	SE	E9-04
3/8	9,53	0,89	66,68	38,10	28,60	W	WE	S	SE	E9-06
1/2	12,70	1,65	76,20	47,60	28,60	W	WE	S	SE	E9-08
3/4	19,05	1,65	76,20	47,60	28,60	W	WE	S	SE	E9-12
1	25,40	1,65	76,20	38,10	38,10	W	WE	S	SE	E9-16
1 1/2	38,10	1,65	95,30	38,10	57,20	W	WE	S	SE	E9-24
2	50,80	1,65	120,70	44,50	76,20	W	WE	S	SE	E9-32
2 1/2	63,50	1,65	139,70	44,40	95,30	W	WE	S	SE	E9-40
3	76,20	1,65	158,80	44,50	114,30	W	WE	S	SE	E9-48
4	101,60	2,11	203,20	50,80	152,40	W	WE	S	SE	E9-64
6	152,40	2,77	292,10	63,50	228,60	W	WE	S	SE	E9-96

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Elbows 45°
Imperial / ISO / Metric



ISO / DIN 11865 LINE B

Size	d1	s1	l2	r1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
					■	■	■	■	
Inch	mm				1.4435 / 316L				
13,50	13,50	1,60	33,30	20,00	W	WE	S	SE	E4-08I
17,20	17,20	1,60	36,60	28,00	W	WE	S	SE	E4-10I
21,30	21,30	1,60	37,40	30,00	W	WE	S	SE	E4-15I
26,90	26,90	1,60	51,80	28,50	W	WE	S	SE	E4-20I
33,70	33,70	2,00	55,70	38,00	W	WE	S	SE	E4-25I
42,40	42,40	2,00	59,70	47,50	W	WE	S	SE	E4-32I
48,30	48,30	2,00	63,60	57,00	W	WE	S	SE	E4-40I
60,30	60,30	2,00	71,50	76,00	W	WE	S	SE	E4-50I
76,10	76,10	2,00	94,40	95,00	W	WE	S	SE	E4-65I
88,90	88,90	2,30	102,40	114,50	W	WE	S	SE	E4-80I
114,30	114,30	2,30	118,20	152,50	W	WE	S	SE	E4-100I
168,30	168,30	2,60	94,70	228,50	W	WE	S	SE	E4-150I

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

METRIC / DIN 11865 LINE A

Size	d1	s1	l2	r1	weldtron bf	weldtron ep	Code
					■	■	
DN	mm				1.4435 / 316L		
4*	6,00	1,00	32,10	16,00	W	WE	E4-04M
6	8,00	1,00	32,10	24,00	W	WE	E4-06M
8	10,00	1,00	33,30	24,00	W	WE	E4-08M
10	13,00	1,50	35,80	26,00	W	WE	E4-10M
15	19,00	1,50	39,50	35,00	W	WE	E4-15M
20	23,00	1,50	41,60	40,00	W	WE	E4-20M
25	29,00	1,50	60,70	50,00	W	WE	E4-25M
32	35,00	1,50	62,80	55,00	W	WE	E4-32M
40	41,00	1,50	64,90	60,00	W	WE	E4-40M
50	53,00	1,50	69,00	70,00	W	WE	E4-50M
65	70,00	2,00	73,10	80,00	W	WE	E4-65M
80	85,00	2,00	92,30	90,00	W	WE	E4-80M
100	104,00	2,00	96,40	100,00	W	WE	E4-100M
150	154,00	2,00	193,20	225,00	W	WE	E4-150M

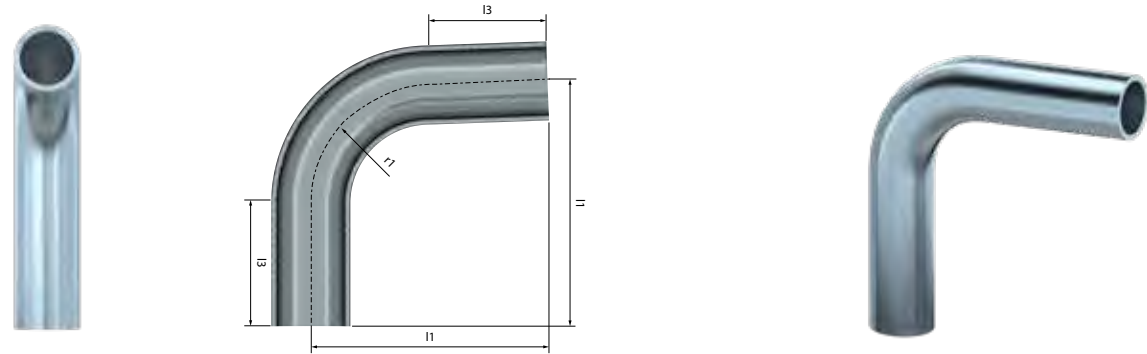
Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.
* Does not apply to DIN 11865

IMPERIAL / DIN 11865 LINE C

Size	d1	s1	l2	r1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
					■	■	■	■	
Inch	mm				1.4435 / 316L				
1/4	6,35	0,89	50,80	14,30	W	WE	S	SE	E4-04
3/8	9,53	0,89	50,80	28,60	W	WE	S	SE	E4-06
1/2	12,70	1,65	57,20	28,60	W	WE	S	SE	E4-08
3/4	19,05	1,65	57,20	28,60	W	WE	S	SE	E4-12
1	25,40	1,65	57,20	38,10	W	WE	S	SE	E4-16
1 1/2	38,10	1,65	63,50	57,20	W	WE	S	SE	E4-24
2	50,80	1,65	76,20	76,20	W	WE	S	SE	E4-32
2 1/2	63,50	1,65	85,70	95,30	W	WE	S	SE	E4-40
3	76,20	1,65	92,10	114,30	W	WE	S	SE	E4-48
4	101,60	2,11	114,30	152,40	W	WE	S	SE	E4-64
6	152,40	2,77	158,80	228,60	W	WE	S	SE	E4-96

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Elbows 88°
ISO

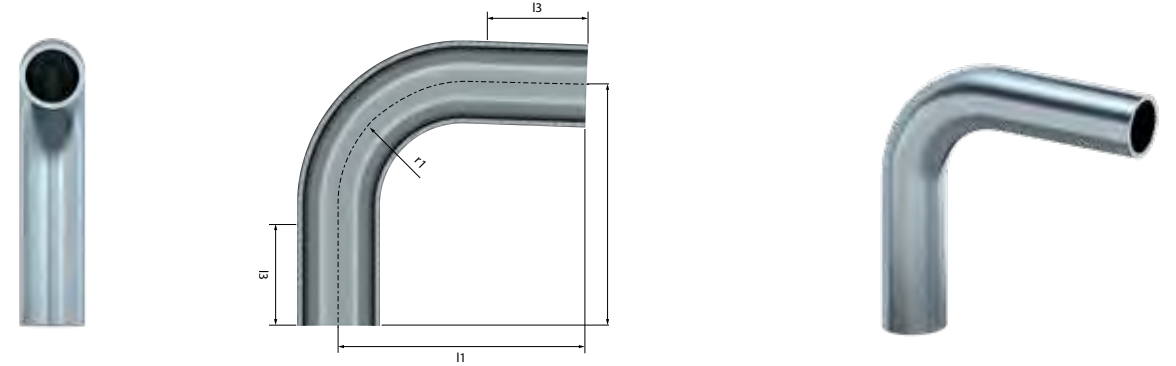


ISO / DIN 11865 LINE B

Size	d1	s1	l1	l3	r1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
DN	mm					1.4435 / 316L				
8	13,50	1,60	45,00	25,00	20,00	W	WE	S	SE	- E8-08I
10	17,20	1,60	53,00	25,00	28,00	W	WE	S	SE	- E8-10I
15	21,30	1,60	55,00	25,00	30,00	W	WE	S	SE	- E8-15I
20	26,90	1,60	68,50	40,00	28,50	W	WE	S	SE	- E8-20I
25	33,70	2,00	78,00	40,00	38,00	W	WE	S	SE	- E8-25I
32	42,40	2,00	87,50	40,00	47,50	W	WE	S	SE	- E8-32I
40	48,30	2,00	97,00	40,00	57,00	W	WE	S	SE	- E8-40I
50	60,30	2,00	116,00	40,00	76,00	W	WE	S	SE	- E8-50I

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Elbows 92°
ISO

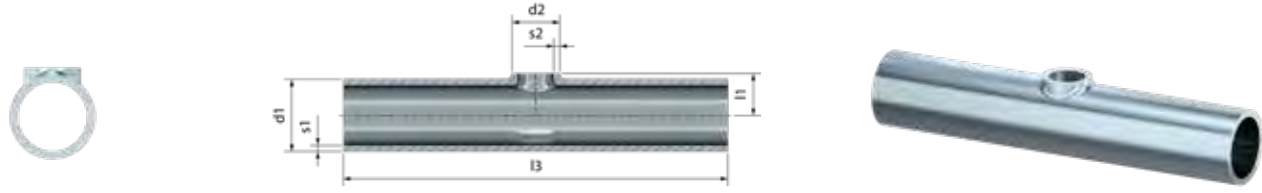


ISO / DIN 11865 LINE B

Size	d1	s1	l1	l3	r1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
DN	mm					1.4435 / 316L				
8	13,50	1,60	45,00	25,00	20,00	W	WE	S	SE	- E2-08I
10	17,20	1,60	53,00	25,00	28,00	W	WE	S	SE	- E2-10I
15	21,30	1,60	55,00	25,00	30,00	W	WE	S	SE	- E2-15I
20	26,90	1,60	68,50	40,00	28,50	W	WE	S	SE	- E2-20I
25	33,70	2,00	78,00	40,00	38,00	W	WE	S	SE	- E2-25I
32	42,40	2,00	87,50	40,00	47,50	W	WE	S	SE	- E2-32I
40	48,30	2,00	97,00	40,00	57,00	W	WE	S	SE	- E2-40I
50	60,30	2,00	116,00	40,00	76,00	W	WE	S	SE	- E2-50I

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

T-Pieces Short Branch
Equal and Reduced / Imperial



IMPERIAL / DIN 11865 LINE C

Size	d1 x d 2	s1	s2	l3	l1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
Inch	mm	mm				1.4435 / 316L				
1/2 x 1/2	12,70 x 12,70	1,65	1,65	95,20	11,35	W	WE	S	SE	TES-08
3/4 x 1/2	19,05 x 12,70	1,65	1,65	101,60	11,03	W	WE	S	SE	TRS-12-08
3/4 x 3/4	19,05 x 19,05	1,65	1,65	101,60	11,03	W	WE	S	SE	TES-12
1 x 1/2	25,40 x 12,70	1,65	1,65	108,00	14,20	W	WE	S	SE	TRS-16-08
1 x 3/4	25,40 x 19,05	1,65	1,65	108,00	14,20	W	WE	S	SE	TRS-16-12
1 x 1	25,40 x 25,40	1,65	1,65	108,00	14,20	W	WE	S	SE	TES-16
1 1/2 x 3/4	38,10 x 19,05	1,65	1,65	120,60	20,55	W	WE	S	SE	TRS-24-12
1 1/2 x 1	38,10 x 25,40	1,65	1,65	120,60	20,55	W	WE	S	SE	TRS-24-16
1 1/2 x 1 1/2	38,10 x 38,10	1,65	1,65	120,60	21,05	W	WE	S	SE	TES-24
2 x 1	50,80 x 25,40	1,65	1,65	146,00	26,90	W	WE	S	SE	TRS-32-16
2 x 1 1/2	50,80 x 38,10	1,65	1,65	146,00	27,40	W	WE	S	SE	TRS-32-24
2 x 2	50,80 x 50,80	1,65	1,65	146,00	28,90	W	WE	S	SE	TES-32
2 1/2 x 1 1/2	63,50 x 38,10	1,65	1,65	158,80	33,75	W	WE	S	SE	TRS-40-24
2 1/2 x 2	63,50 x 50,80	1,65	1,65	158,80	35,25	W	WE	S	SE	TRS-40-32
2 1/2 x 2 1/2	63,50 x 63,50	1,65	1,65	158,80	35,25	W	WE	S	SE	TES-40
3 x 1	76,20 x 25,40	1,65	1,65	171,50	40,60	W	WE	S	SE	TRS-48-16
3 x 1 1/2	76,20 x 38,10	1,65	1,65	171,50	40,10	W	WE	S	SE	TRS-48-24
3 x 2	76,20 x 50,80	1,65	1,65	171,50	41,60	W	WE	S	SE	TRS-48-32
3 x 2 1/2	76,20 x 63,50	1,65	1,65	171,50	41,60	W	WE	S	SE	TRS-48-40
3 x 3	76,20 x 76,20	1,65	1,65	171,40	43,10	W	WE	S	SE	TES-48
4 x 1 1/2	101,60 x 38,10	2,11	1,65	209,60	53,80	W	WE	S	SE	TRS-64-24
4 x 2	101,60 x 50,80	2,11	1,65	209,60	54,30	W	WE	S	SE	TRS-64-32
4 x 2 1/2	101,60 x 63,50	2,11	1,65	209,60	54,30	W	WE	S	SE	TRS-64-40
4 x 3	101,60 x 76,20	2,11	1,65	209,60	55,80	W	WE	S	SE	TRS-64-48
4 x 4	101,60 x 101,60	2,11	1,65	209,60	56,80	W	WE	S	SE	TES-64

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

T-Pieces Short Branch
Equal and Reduced / ISO

ISO / DIN 11865 LINE B

Size	d1 x d 2	s1	s2	l3	l1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
Inch	mm					1.4435 / 316L				
8 x 8	13,50 x 13,50	1,60	1,60	64,00	11,75	W	WE	S	SE	TES-08I
10 x 8	17,20 x 13,50	1,60	1,60	68,00	10,10	W	WE	S	SE	TRS-10I-08I
10 x 10	17,20 x 17,20	1,60	1,60	68,00	10,10	W	WE	S	SE	TES-10I
15 x 8	21,30 x 13,50	1,60	1,60	72,00	12,15	W	WE	S	SE	TRS-15I-08I
15 x 10	21,30 x 17,20	1,60	1,60	72,00	12,15	W	WE	S	SE	TRS-15I-10I
15 x 15	21,30 x 21,30	1,60	1,60	72,00	12,15	W	WE	S	SE	TES-15I
20 x 10	26,90 x 17,20	1,60	1,60	110,00	14,95	W	WE	S	SE	TRS-20I-10I
20 x 15	26,90 x 21,30	1,60	1,60	110,00	14,95	W	WE	S	SE	TRS-20I-15I
20 x 20	26,90 x 26,90	1,60	1,60	110,00	14,95	W	WE	S	SE	TES-20I
25 x 15	33,70 x 21,30	2,00	1,60	120,00	18,35	W	WE	S	SE	TRS-25I-15I
25 x 20	33,70 x 26,90	2,00	1,60	120,00	18,35	W	WE	S	SE	TRS-25I-20I
25 x 25	33,70 x 33,70	2,00	2,00	120,00	18,35	W	WE	S	SE	TES-25I
32 x 15	42,40 x 21,30	2,00	1,60	130,00	22,70	W	WE	S	SE	TRS-32I-15I
32 x 20	42,40 x 26,90	2,00	1,60	130,00	22,70	W	WE	S	SE	TRS-32I-20I
32 x 25	42,40 x 33,70	2,00	2,00	130,00	22,70	W	WE	S	SE	TRS-32I-25I
32 x 32	42,40 x 42,40	2,00	2,00	130,00	23,20	W	WE	S	SE	TES-32I
40 x 15	48,30 x 21,30	2,00	1,60	130,00	25,65	W	WE	S	SE	TRS-40I-15I
40 x 20	48,30 x 26,90	2,00	1,60	130,00	25,65	W	WE	S	SE	TRS-40I-20I
40 x 25	48,30 x 33,70	2,00	2,00	130,00	25,65	W	WE	S	SE	TRS-40I-25I
40 x 32	48,30 x 42,40	2,00	2,00	130,00	26,15	W	WE	S	SE	TRS-40I-32I
40 x 40	48,30 x 48,30	2,00	2,00	130,00	26,65	W	WE	S	SE	TES-40I
50 x 20	60,30 x 26,90	2,00	1,60	180,00	32,65	W	WE	S	SE	TRS-50I-20I
50 x 25	60,30 x 33,70	2,00	2,00	180,00	31,65	W	WE	S	SE	TRS-50I-25I
50 x 32	60,30 x 42,40	2,00	2,00	180,00	32,15	W	WE	S	SE	TRS-50I-32I
50 x 40	60,30 x 48,30	2,00	2,00	180,00	32,65	W	WE	S	SE	TRS-50I-40I
50 x 50	60,30 x 60,30	2,00	2,00	180,00	33,65	W	WE	S	SE	TES-50I
65 x 25	76,10 x 33,70	2,00	2,00	220,00	40,55	W	WE	S	SE	TRS-65I-25I
65 x 32	76,10 x 42,40	2,00	2,00	220,00	40,05	W	WE	S	SE	TRS-65I-32I
65 x 40	76,10 x 48,30	2,00	2,00	220,00	40,55	W	WE	S	SE	TRS-65I-40I
65 x 50	76,10 x 60,30	2,00	2,00	220,00	41,55	W	WE	S	SE	TRS-65I-50I
65 x 65	76,10 x 76,10	2,00	2,00	220,00	43,05	W	WE	S	SE	TES-65I
80 x 32	88,90 x 42,40	2,30	2,00	260,00	46,95	W	WE	S	SE	TRS-80I-32I
80 x 40	88,90 x 48,30	2,30	2,00	260,00	46,95	W	WE	S	SE	TRS-80I-40I
80 x 50	88,90 x 60,30	2,30	2,00	260,00	47,95	W	WE	S	SE	TRS-80I-50I
80 x 65	88,90 x 76,10	2,30	2,00	260,00	49,45	W	WE	S	SE	TRS-80I-65I
80 x 80	88,90 x 88,90	2,30	2,30	260,00	49,45	W	WE	S	SE	TES-80I
100 x 50	114,30 x 60,30	2,30	2,00	320,00	60,65	W	WE	S	SE	TRS-100I-50I
100 x 65	114,30 x 76,10	2,30	2,00	320,00	62,15	W	WE	S	SE	TRS-100I-65I
100 x 80	114,30 x 88,90	2,30	2,30	320,00	62,15	W	WE	S	SE	TRS-100I-80I
100 x 100	114,30 x 114,30	2,30	2,30	320,00	63,15	W	WE	S	SE	TES-100I

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

T-Pieces Short Branch
Equal and Reduced / Metric

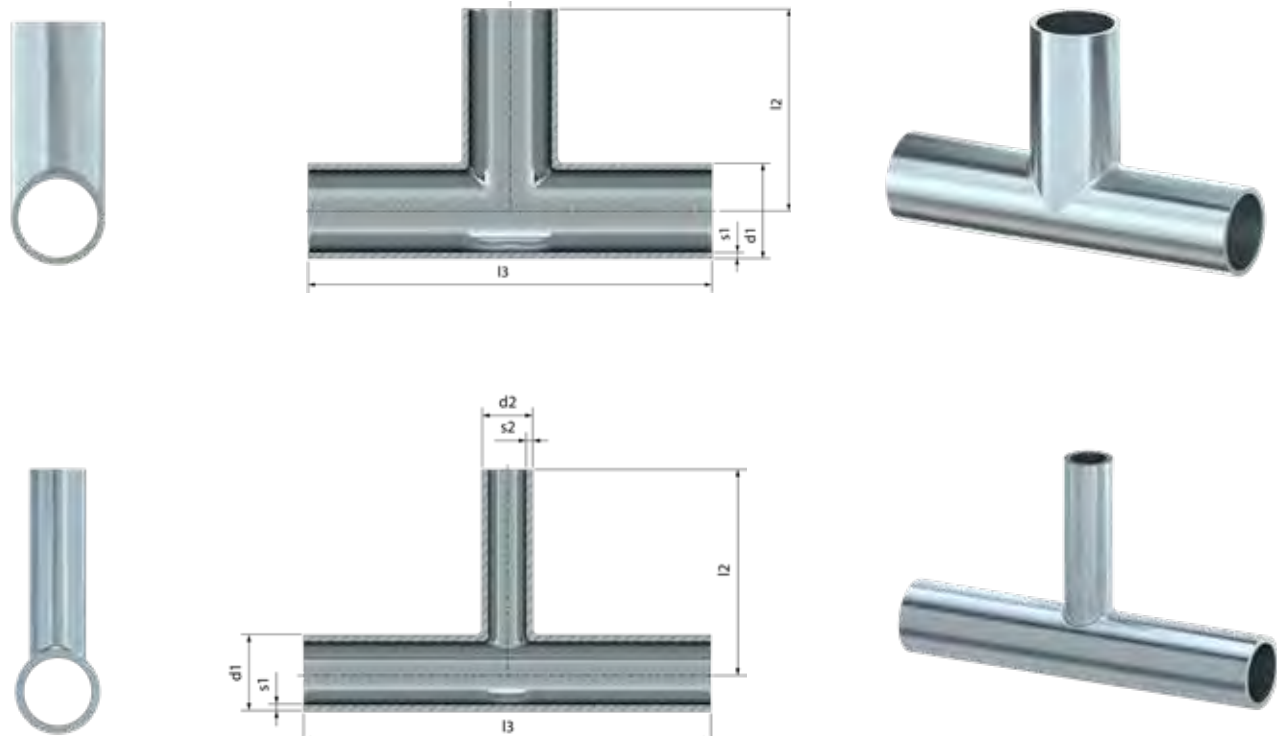
METRIC / DIN 11865 LINE A

Size	d1 x d 2	s1	s2	l3	l1	weldtron bf	weldtron ep		
								1.4435 / 316L	Code
Inch	mm	mm							
10 x 10	13,00 x 13,00	1,50	1,50	70,00	11,50	W	WE	-	TES-10M
15 x 10	19,00 x 13,00	1,50	1,50	70,00	11,00	W	WE	-	TRS-15M-10M
15 x 15	19,00 x 19,00	1,50	1,50	70,00	11,00	W	WE	-	TES-15M
20 x 10	23,00 x 13,00	1,50	1,50	80,00	13,00	W	WE	-	TRS-20M-10M
20 x 15	23,00 x 19,00	1,50	1,50	80,00	13,00	W	WE	-	TRS-20M-15M
20 x 20	23,00 x 23,00	1,50	1,50	80,00	13,00	W	WE	-	TES-20M
25 x 10	29,00 x 13,00	1,50	1,50	100,00	16,00	W	WE	-	TRS-25M-10M
25 x 15	29,00 x 19,00	1,50	1,50	100,00	16,00	W	WE	-	TRS-25M-15M
25 x 20	29,00 x 23,00	1,50	1,50	100,00	16,00	W	WE	-	TRS-25M-20M
25 x 25	29,00 x 29,00	1,50	1,50	100,00	16,00	W	WE	-	TES-25M
32 x 15	35,00 x 19,00	1,50	1,50	110,00	19,00	W	WE	-	TRS-32M-15M
32 x 20	35,00 x 23,00	1,50	1,50	110,00	19,00	W	WE	-	TRS-32M-20M
32 x 25	35,00 x 29,00	1,50	1,50	110,00	19,00	W	WE	-	TRS-32M-25M
32 x 32	35,00 x 35,00	1,50	1,50	110,00	19,50	W	WE	-	TES-32M
40 x 20	41,00 x 23,00	1,50	1,50	120,00	22,00	W	WE	-	TRS-40M-20M
40 x 25	41,00 x 29,00	1,50	1,50	120,00	22,00	W	WE	-	TRS-40M-25M
40 x 32	41,00 x 35,00	1,50	1,50	120,00	22,50	W	WE	-	TRS-40M-32M
40 x 40	41,00 x 41,00	1,50	1,50	120,00	23,00	W	WE	-	TES-40M
50 x 25	53,00 x 29,00	1,50	1,50	160,00	28,00	W	WE	-	TRS-50M-25M
50 x 32	53,00 x 35,00	1,50	1,50	160,00	28,50	W	WE	-	TRS-50M-32M
50 x 40	53,00 x 41,00	1,50	1,50	160,00	29,00	W	WE	-	TRS-50M-40M
50 x 50	53,00 x 53,00	1,50	1,50	160,00	30,00	W	WE	-	TES-50M
65 x 32	70,00 x 35,00	2,00	1,50	210,00	37,00	W	WE	-	TRS-65M-32M
65 x 40	70,00 x 41,00	2,00	1,50	210,00	37,50	W	WE	-	TRS-65M-40M
65 x 50	70,00 x 53,00	2,00	1,50	210,00	38,50	W	WE	-	TRS-65M-50M
65 x 65	70,00 x 70,00	2,00	2,00	210,00	40,00	W	WE	-	TES-65M
80 x 40	85,00 x 41,00	2,00	1,50	260,00	45,00	W	WE	-	TRS-80M-40M
80 x 50	85,00 x 53,00	2,00	1,50	260,00	46,00	W	WE	-	TRS-80M-50M
80 x 65	85,00 x 70,00	2,00	2,00	260,00	47,50	W	WE	-	TRS-80M-65M
80 x 80	85,00 x 85,00	2,00	2,00	260,00	47,50	W	WE	-	TES-80M
100 x 65	104,00 x 70,00	2,00	2,00	310,00	57,00	W	WE	-	TRS-100M-65M
100 x 80	104,00 x 85,00	2,00	2,00	310,00	57,00	W	WE	-	TRS-100M-80M
100 x 100	104,00 x 104,00	2,00	2,00	310,00	58,00	W	WE	-	TES-100M

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

T-Pieces

Equal and Reduced / Imperial



IMPERIAL LINE C

Size	d1 x d 2	s1	s2	l3	l1	weldtron bf	weldtron ep	safetron bf	safetron ep	1.4435 / 316L	Code
Inch	mm	mm									
1/4 x 1/4	6,35 x 6,35	0,89	0,89	89,00	44,50	W	WE	S	SE	-	TE-04
3/8 x 1/4	9,53 x 6,35	0,89	0,89	89,00	44,50	W	WE	S	SE	-	TR-06-04
3/8 x 3/8	9,53 x 9,53	0,89	0,89	89,00	44,50	W	WE	S	SE	-	TE-06
1/2 x 1/4	12,70 x 6,35	1,65	0,89	101,60	47,60	W	WE	S	SE	-	TR-08-04
1/2 x 3/8	12,70 x 9,53	1,65	0,89	101,60	47,60	W	WE	S	SE	-	TR-08-06
1/2 x 1/2	12,70 x 12,70	1,65	1,65	101,60	47,60	W	WE	S	SE	-	TE-08
3/4 x 1/4	19,05 x 6,35	1,65	0,89	108,00	50,80	W	WE	S	SE	-	TR-12-04
3/4 x 3/8	19,05 x 9,53	1,65	0,89	108,00	50,80	W	WE	S	SE	-	TR-12-06
3/4 x 1/2	19,05 x 12,70	1,65	1,65	108,00	50,80	W	WE	S	SE	-	TR-12-08
3/4 x 3/4	19,05 x 19,05	1,65	1,65	108,00	50,80	W	WE	S	SE	-	TE-12

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration

T-Pieces

Equal and Reduced / Imperial

IMPERIAL LINE C

Size	d1 x d 2	s1	s2	l3	l1	weldtron bf	weldtron ep	safetron bf	safetron ep	1.4435 / 316L	Code
Inch	mm	mm									
1 x 1/4	25,40 x 6,35	1,65	0,89	108,00	54,00	W	WE	S	SE	-	TR-16-04
1 x 3/8	25,40 x 9,53	1,65	0,89	108,00	54,00	W	WE	S	SE	-	TR-16-06
1 x 1/2	25,40 x 12,70	1,65	1,65	108,00	54,00	W	WE	S	SE	-	TR-16-08
1 x 3/4	25,40 x 19,05	1,65	1,65	108,00	54,00	W	WE	S	SE	-	TR-16-12
1 x 1	25,40 x 25,40	1,65	1,65	108,00	54,00	W	WE	S	SE	-	TE-16
1 1/2 x 1/2	38,10 x 12,70	1,65	1,65	120,60	60,30	W	WE	S	SE	-	TR-24-08
1 1/2 x 3/4	38,10 x 19,05	1,65	1,65	120,60	60,30	W	WE	S	SE	-	TR-24-12
1 1/2 x 1	38,10 x 25,40	1,65	1,65	120,60	60,30	W	WE	S	SE	-	TR-24-16
1 1/2 x 1 1/2	38,10 x 38,10	1,65	1,65	120,60	60,30	W	WE	S	SE	-	TE-24
2 x 1/2	50,80 x 12,70	1,65	1,65	146,00	66,70	W	WE	S	SE	-	TR-32-08
2 x 3/4	50,80 x 19,05	1,65	1,65	146,00	66,70	W	WE	S	SE	-	TR-32-12
2 x 1	50,80 x 25,40	1,65	1,65	146,00	66,70	W	WE	S	SE	-	TR-32-16
2 x 1 1/2	50,80 x 38,10	1,65	1,65	146,00	66,70	W	WE	S	SE	-	TR-32-24
2 x 2	50,80 x 50,80	1,65	1,65	146,00	73,00	W	WE	S	SE	-	TE-32
2 1/2 x 3/4	63,50 x 19,05	1,65	1,65	158,80	73,00	W	WE	S	SE	-	TR-40-12
2 1/2 x 1	63,50 x 25,40	1,65	1,65	158,80	73,00	W	WE	S	SE	-	TR-40-16
2 1/2 x 1 1/2	63,50 x 38,10	1,65	1,65	158,80	73,00	W	WE	S	SE	-	TR-40-24
2 1/2 x 2	63,50 x 50,80	1,65	1,65	158,80	73,00	W	WE	S	SE	-	TR-40-32
2 1/2 x 2 1/2	63,50 x 63,50	1,65	1,65	158,80	79,40	W	WE	S	SE	-	TE-40
3 x 1/2	76,20 x 12,70	1,65	1,65	171,50	79,40	W	WE	S	SE	-	TR-48-08
3 x 3/4	76,20 x 19,05	1,65	1,65	171,50	79,40	W	WE	S	SE	-	TR-48-12
3 x 1	76,20 x 25,40	1,65	1,65	171,50	79,40	W	WE	S	SE	-	TR-48-16
3 x 1 1/2	76,20 x 38,10	1,65	1,65	171,50	79,40	W	WE	S	SE	-	TR-48-24
3 x 2	76,20 x 50,80	1,65	1,65	171,50	79,40	W	WE	S	SE	-	TR-48-32
3 x 2 1/2	76,20 x 63,50	1,65	1,65	171,50	79,40	W	WE	S	SE	-	TR-48-40
3 x 3	76,20 x 76,20	1,65	1,65	171,40	85,70	W	WE	S	SE	-	TE-48
4 x 1/2	101,60 x 12,70	2,11	1,65	209,60	92,10	W	WE	S	SE	-	TR-64-08
4 x 3/4	101,60 x 19,05	2,11	1,65	209,60	92,10	W	WE	S	SE	-	TR-64-12
4 x 1	101,60 x 25,40	2,11	1,65	209,60	92,10	W	WE	S	SE	-	TR-64-16
4 x 1 1/2	101,60 x 38,10	2,11	1,65	209,60	92,10	W	WE	S	SE	-	TR-64-24
4 x 2	101,60 x 50,80	2,11	1,65	209,60	98,40	W	WE	S	SE	-	TR-64-32
4 x 2 1/2	101,60 x 63,50	2,11	1,65	209,60	98,40	W	WE	S	SE	-	TR-64-40
4 x 3	101,60 x 76,20	2,11	1,65	209,60	98,40	W	WE	S	SE	-	TR-64-48
4 x 4	101,60 x 101,60	2,11	2,11	209,60	104,80	W	WE	S	SE	-	TE-64
6 x 3	152,40 x 76,20	2,77	1,65	285,80	130,20	W	WE	S	SE	-	TR-96-48
6 x 4	152,40 x 101,60	2,77	2,11	285,80	130,20	W	WE	S	SE	-	TR-96-64

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration

T-Pieces
Equal and Reduced / ISO

ISO / DIN 11865 LINE B

Size	d1 x d 2	s1	s2	l3	l1	1.4435 / 316L				Code	
						weldtron bf	weldtron ep	safetron bf	safetron ep		
Inch	mm	mm									
8 x 8	13,50 x 13,50	1,60	1,60	64,00	32,00	W	WE	S	SE	-	TE-08I
10 x 8	17,20 x 13,50	1,60	1,60	68,00	34,00	W	WE	S	SE	-	RT-10I-08I
10 x 10	17,20 x 17,20	1,60	1,60	68,00	34,00	W	WE	S	SE	-	TE-10I
15 x 8	21,30 x 13,50	1,60	1,60	72,00	36,00	W	WE	S	SE	-	RT-15I-08I
15 x 10	21,30 x 17,20	1,60	1,60	72,00	36,00	W	WE	S	SE	-	RT-15I-10I
15 x 15	21,30 x 21,30	1,60	1,60	72,00	36,00	W	WE	S	SE	-	TE-15I
20 x 8	26,90 x 13,50	1,60	1,60	110,00	55,00	W	WE	S	SE	-	RT-20I-08I
20 x 10	26,90 x 17,20	1,60	1,60	110,00	55,00	W	WE	S	SE	-	RT-20I-10I
20 x 15	26,90 x 21,30	1,60	1,60	110,00	55,00	W	WE	S	SE	-	RT-20I-15I
20 x 20	26,90 x 26,90	1,60	1,60	110,00	55,00	W	WE	S	SE	-	TE-20I
25 x 10	33,70 x 17,20	2,00	1,60	120,00	60,00	W	WE	S	SE	-	RT-25I-10I
25 x 15	33,70 x 21,30	2,00	1,60	120,00	60,00	W	WE	S	SE	-	RT-25I-15I
25 x 20	33,70 x 26,90	2,00	1,60	120,00	60,00	W	WE	S	SE	-	RT-25I-20I
25 x 25	33,70 x 33,70	2,00	2,00	120,00	60,00	W	WE	S	SE	-	TE-25I
32 x 15	42,40 x 21,30	2,00	1,60	130,00	65,00	W	WE	S	SE	-	RT-32I-15I
32 x 20	42,40 x 26,90	2,00	1,60	130,00	65,00	W	WE	S	SE	-	RT-32I-20I
32 x 25	42,40 x 33,70	2,00	2,00	130,00	65,00	W	WE	S	SE	-	RT-32I-25I
32 x 32	42,40 x 42,40	2,00	2,00	130,00	65,00	W	WE	S	SE	-	TE-32I
40 x 15	48,30 x 21,30	2,00	1,60	130,00	65,00	W	WE	S	SE	-	RT-40I-15I
40 x 20	48,30 x 26,90	2,00	1,60	130,00	65,00	W	WE	S	SE	-	RT-40I-20I
40 x 25	48,30 x 33,70	2,00	2,00	130,00	65,00	W	WE	S	SE	-	RT-40I-25I
40 x 32	48,30 x 42,40	2,00	2,00	130,00	65,00	W	WE	S	SE	-	RT-40I-32I
40 x 40	48,30 x 48,30	2,00	2,00	130,00	65,00	W	WE	S	SE	-	TE-40I
50 x 20	60,30 x 26,90	2,00	1,60	180,00	90,00	W	WE	S	SE	-	RT-50I-20I
50 x 25	60,30 x 33,70	2,00	2,00	180,00	90,00	W	WE	S	SE	-	RT-50I-25I
50 x 32	60,30 x 42,40	2,00	2,00	180,00	90,00	W	WE	S	SE	-	RT-50I-32I
50 x 40	60,30 x 48,30	2,00	2,00	180,00	90,00	W	WE	S	SE	-	RT-50I-40I
50 x 50	60,30 x 60,30	2,00	2,00	180,00	90,00	W	WE	S	SE	-	TE-50I
65 x 25	76,10 x 33,70	2,00	2,00	220,00	90,00	W	WE	S	SE	-	RT-65I-25I
65 x 32	76,10 x 42,40	2,00	2,00	220,00	90,00	W	WE	S	SE	-	RT-65I-32I
65 x 40	76,10 x 48,30	2,00	2,00	220,00	90,00	W	WE	S	SE	-	RT-65I-40I
65 x 50	76,10 x 60,30	2,00	2,00	220,00	90,00	W	WE	S	SE	-	RT-65I-50I
65 x 65	76,10 x 76,10	2,00	2,00	220,00	110,00	W	WE	S	SE	-	TE-65I
80 x 32	88,90 x 42,40	2,30	2,00	260,00	110,00	W	WE	S	SE	-	RT-80I-32I
80 x 40	88,90 x 48,30	2,30	2,00	260,00	110,00	W	WE	S	SE	-	RT-80I-40I
80 x 50	88,90 x 60,30	2,30	2,00	260,00	110,00	W	WE	S	SE	-	RT-80I-50I
80 x 65	88,90 x 76,10	2,30	2,00	260,00	110,00	W	WE	S	SE	-	RT-80I-65I
80 x 80	88,90 x 88,90	2,30	2,30	260,00	130,00	W	WE	S	SE	-	TE-80I
100 x 50	114,30 x 60,30	2,30	2,00	320,00	130,00	W	WE	S	SE	-	RT-100I-50I
100 x 65	114,30 x 76,10	2,30	2,00	320,00	130,00	W	WE	S	SE	-	RT-100I-65I
100 x 80	114,30 x 88,90	2,30	2,30	320,00	130,00	W	WE	S	SE	-	RT-100I-80I
100 x 100	114,30 x 114,30	2,30	2,30	320,00	160,00	W	WE	S	SE	-	TE-100I

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration

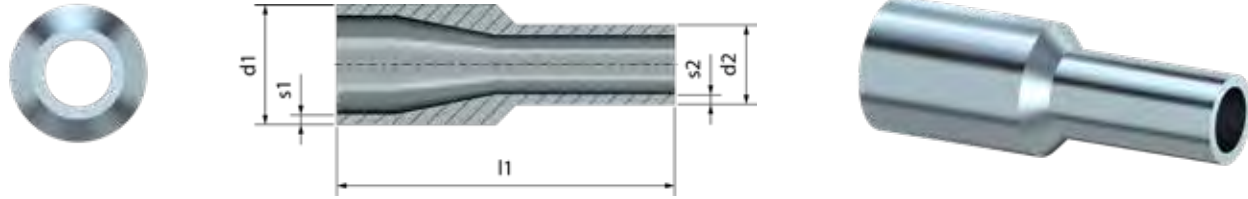
T-Pieces
Equal and Reduced / Metric

METRIC / DIN 11865 LINE A

Size	d1 x d 2	s1	s2	l3	l1	1.4435 / 316L		Code	
						weldtron bf	weldtron ep		
Inch	mm	mm							
6 x 4*	8,00 x 6,00	1,00	1,00	60,00	30,00	W	WE	-	TR-06M-04M
6 x 6	8,00 x 8,00	1,00	1,00	60,00	30,00	W	WE	-	TE-06M
8 x 6	10,00 x 8,00	1,00	1,00	60,00	30,00	W	WE	-	TR-08M-06M
8 x 8	10,00 x 10,00	1,00	1,00	60,00	30,00	W	WE	-	TE-08M
10 x 6	13,00 x 8,00	1,50	1,00	60,00	35,00	W	WE	-	TR-10M-06M
10 x 8	13,00 x 10,00	1,50	1,00	60,00	30,00	W	WE	-	TR-10M-08M
10 x 10	13,00 x 13,00	1,50	1,50	70,00	35,00	W	WE	-	TE-10M
15 x 8	19,00 x 10,00	1,50	1,00	70,00	35,00	W	WE	-	TR-15M-06M
15 x 10	19,00 x 13,00	1,50	1,50	70,00	35,00	W	WE	-	TR-15M-10M
15 x 15	19,00 x 19,00	1,50	1,50	70,00	35,00	W	WE	-	TE-15M
20 x 10	23,00 x 13,00	1,50	1,50	80,00	40,00	W	WE	-	TR-20M-10M
20 x 15	23,00 x 19,00	1,50	1,50	80,00	40,00	W	WE	-	TR-20M-15M
20 x 20	23,00 x 23,00	1,50	1,50	80,00	40,00	W	WE	-	TE-20M
25 x 10	29,00 x 13,00	1,50	1,50	100,00	50,00	W	WE	-	TR-25M-10M
25 x 15	29,00 x 19,00	1,50	1,50	100,00	50,00	W	WE	-	TR-25M-15M
25 x 20	29,00 x 23,00	1,50	1,50	100,00	50,00	W	WE	-	TR-25M-20M
25 x 25	29,00 x 29,00	1,50	1,50	100,00	50,00	W	WE	-	TE-25M
32 x 15	35,00 x 19,00	1,50	1,50	110,00	55,00	W	WE	-	TR-32M-15M
32 x 20	35,00 x 23,00	1,50	1,50	110,00	55,00	W	WE	-	TR-32M-20M
32 x 25	35,00 x 29,00	1,50	1,50	110,00	55,00	W	WE	-	TR-32M-25M
32 x 32	35,00 x 35,00	1,50	1,50	110,00	55,00	W	WE	-	TE-32M
40 x 20	41,00 x 23,00	1,50	1,50	120,00	60,00	W	WE	-	RT-40M-20M
40 x 25	41,00 x 29,00	1,50	1,50	120,00	60,00	W	WE	-	RT-40M-25M
40 x 32	41,00 x 35,00	1,50	1,50	120,00	60,00	W	WE	-	RT-40M-32M
40 x 40	41,00 x 41,00	1,50	1,50	120,00	60,00	W	WE	-	TE-40M
50 x 25	53,00 x 29,00	1,50	1,50	160,00	80,00	W	WE	-	RT-50M-25M
50 x 32	53,00 x 35,00	1,50	1,50	160,00	80,00	W	WE	-	RT-50M-32M
50 x 40	53,00 x 41,00	1,50	1,50	160,00	80,00	W	WE	-	RT-50M-40M
50 x 50	53,00 x 53,00	1,50	1,50	160,00	80,00	W	WE	-	TE-50M
65 x 32	70,00 x 35,00	2,00	1,50	210,00	80,00	W	WE	-	RT-65M-32M
65 x 40	70,00 x 41,00	2,00	1,50	210,00	80,00	W	WE	-	RT-65M-40M
65 x 50	70,00 x 53,00	2,00	1,50	210,00	80,00	W	WE	-	RT-65M-50M
65 x 65	70,00 x 70,00	2,00	2,00	210,00	105,00	W	WE	-	TE-65M
80 x 40	85,00 x 41,00	2,00	1,50	260,00	105,00	W	WE	-	RT-80M-40M
80 x 50	85,00 x 53,00	2,00	1,50	260,00	105,00	W	WE	-	RT-80M-50M
80 x 65	85,00 x 70,00	2,00	2,00	260,00	105,00	W	WE	-	RT-80M-65M
80 x 80	85,00 x 85,00	2,00	2,00	260,00	130,00	W	WE	-	TE-80M
100 x 50	104,00 x 53,00	2,00	2,00	310,00	130,00	W	WE	-	RT-100M-50M
100 x 65	104,00 x 70,00	2,00	2,00	310,00	130,00	W	WE	-	RT-100M-65M
100 x 80	104,00 x 85,00	2,00	2,00	310,00	130,00	W	WE	-	RT-100M-80M
100 x 100	104,00 x 104,00	2,00	2,00	310,00	155,00	W	WE	-	TE-100M

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration
* Does not apply to DIN 11865

Reducers
Concentric / Metric



METRIC / DIN 11865 LINE A

Size	d1 x d 2	s1	s2	l1	weldtron bf	weldtron ep	1.4435 / 316L	Code
DN	mm	mm	mm	mm				
6 x 4*	8,00 x 6,00	1,00	1,00	38,00	W	WE	-	RC-06M-04M
8 x 4*	10,00 x 6,00	1,00	1,00	38,00	W	WE	-	RC-08M-04M
8 x 6	10,00 x 8,00	1,00	1,00	38,00	W	WE	-	RC-08M-06M
10 x 6	13,00 x 8,00	1,50	1,00	38,00	W	WE	-	RC-10M-06M
10 x 8	13,00 x 10,00	1,50	1,00	38,00	W	WE	-	-RC-10M-08M
15 x 8	19,00 x 10,00	1,50	1,00	60,00	W	WE	-	RC-15M-08M
15 x 10	19,00 x 13,00	1,50	1,50	60,00	W	WE	-	RC-15M-10M
20 x 10	23,00 x 13,00	1,50	1,50	60,00	W	WE	-	RC-20M-10M
20 x 15	23,00 x 19,00	1,50	1,50	60,00	W	WE	-	RC-20M-15M
25 x 15	29,00 x 19,00	1,50	1,50	70,00	W	WE	-	RC-25M-15M
25 x 20	29,00 x 23,00	1,50	1,50	70,00	W	WE	-	RC-25M-20M
32 x 15	35,00 x 19,00	1,50	1,50	80,00	W	WE	-	RC-32M-15M
32 x 20	35,00 x 23,00	1,50	1,50	80,00	W	WE	-	RC-32M-20M
32 x 25	35,00 x 29,00	1,50	1,50	80,00	W	WE	-	RC-32M-25M
40 x 20	41,00 x 23,00	1,50	1,50	90,00	W	WE	-	RC-40M-20M
40 x 25	41,00 x 29,00	1,50	1,50	90,00	W	WE	-	RC-40M-25M
40 x 32	41,00 x 35,00	1,50	1,50	90,00	W	WE	-	RC-40M-32M
50 x 25	53,00 x 29,00	1,50	1,50	90,00	W	WE	-	RC-50M-25M
50 x 32	53,00 x 35,00	1,50	1,50	90,00	W	WE	-	RC-50M-32M
50 x 40	53,00 x 41,00	1,50	1,50	90,00	W	WE	-	RC-50M-40M
65 x 40	70,00 x 41,00	2,00	1,50	110,00	W	WE	-	RC-65M-40M
65 x 50	70,00 x 53,00	2,00	1,50	110,00	W	WE	-	RC-65M-50M
80 x 50	85,00 x 53,00	2,00	1,50	110,00	W	WE	-	RC-80M-50M
80 x 65	85,00 x 70,00	2,00	2,00	110,00	W	WE	-	RC-80M-65M
100 x 65	104,00 x 70,00	2,00	2,00	135,00	W	WE	-	RC-100M-65M
100 x 80	104,00 x 85,00	2,00	2,00	135,00	W	WE	-	RC-100M-80M
150 x 80	154,00 x 85,00	2,00	2,00	170,00	W	WE	-	RC-150M-80M
150 x 100	154,00 x 104,00	2,00	2,00	170,00	W	WE	-	RC-150M-100M

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.
* Does not apply to DIN 11865

Reducers
Concentric / ISO

ISO / DIN 11865 LINE B

Size	d1 x d 2	s1	s2	l1	weldtron bf	weldtron ep	safetron bf	safetron ep	1.4435 / 316L	Code
DN	mm	mm	mm	mm						
10 x 8	17,20 x 13,50	1,60	1,60	60,00	W	WE	S	SE	-	RC-10I-08I
15 x 8	21,30 x 13,50	1,60	1,60	60,00	W	WE	S	SE	-	RC-15I-08I
15 x 10	21,30 x 17,20	1,60	1,60	60,00	W	WE	S	SE	-	RC-15I-10I
20 x 8	26,90 x 13,50	1,60	1,60	60,00	W	WE	S	SE	-	RC-20I-08I
20 x 10	26,90 x 17,20	1,60	1,60	60,00	W	WE	S	SE	-	RC-20I-10I
20 x 15	26,90 x 21,30	1,60	1,60	60,00	W	WE	S	SE	-	RC-20I-15I
25 x 15	33,70 x 21,30	2,00	1,60	70,00	W	WE	S	SE	-	RC-25I-15I
25 x 20	33,70 x 26,90	2,00	1,60	70,00	W	WE	S	SE	-	RC-25I-20I
32 x 15	42,40 x 21,30	2,00	1,60	80,00	W	WE	S	SE	-	RC-32I-15I
32 x 20	42,40 x 26,90	2,00	1,60	80,00	W	WE	S	SE	-	RC-32I-20I
32 x 25	42,40 x 33,70	2,00	2,00	80,00	W	WE	S	SE	-	RC-32I-25I
40 x 15	48,30 x 21,30	2,00	1,60	90,00	W	WE	S	SE	-	RC-40I-15I
40 x 20	48,30 x 26,90	2,00	1,60	90,00	W	WE	S	SE	-	RC-40I-20I
40 x 25	48,30 x 33,70	2,00	2,00	90,00	W	WE	S	SE	-	RC-40I-25I
40 x 32	48,30 x 42,40	2,00	2,00	90,00	W	WE	S	SE	-	RC-40I-32I
50 x 20	60,30 x 26,90	2,00	1,60	100,00	W	WE	S	SE	-	RC-50I-20I
50 x 25	60,30 x 33,70	2,00	2,00	100,00	W	WE	S	SE	-	RC-50I-25I
50 x 32	60,30 x 42,40	2,00	2,00	100,00	W	WE	S	SE	-	RC-50I-32I
50 x 40	60,30 x 48,30	2,00	2,00	100,00	W	WE	S	SE	-	RC-50I-40I
65 x 25	76,10 x 33,70	2,00	2,00	110,00	W	WE	S	SE	-	RC-65I-25I
65 x 32	76,10 x 42,40	2,00	2,00	110,00	W	WE	S	SE	-	RC-65I-32I
65 x 40	76,10 x 48,30	2,00	2,00	110,00	W	WE	S	SE	-	RC-65I-40I
65 x 50	76,10 x 60,30	2,00	2,00	110,00	W	WE	S	SE	-	RC-65I-50I
80 x 50	88,90 x 60,30	2,30	2,00	110,00	W	WE	S	SE	-	RC-80I-50I
80 x 65	88,90 x 76,10	2,30	2,00	110,00	W	WE	S	SE	-	RC-80I-65I
100 x 65	114,30 x 76,10	2,30	2,00	135,00	W	WE	S	SE	-	RC-100I-65I
100 x 80	114,30 x 88,90	2,30	2,30	135,00	W	WE	S	SE	-	RC-100I-80I

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

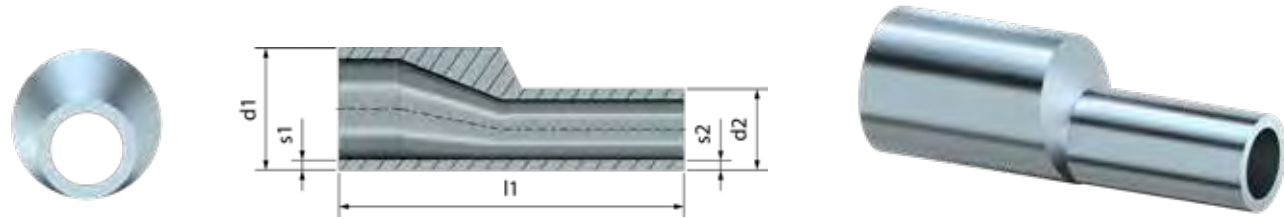
Reducers
Concentric / Imperial

IMPERIAL / DIN 11865 LINE C

Size	d1 x d 2	s1	s2	l1	weldtron bf	weldtron ep	safetron bf	safetron ep	1.4435 / 316L		Code
									W	WE	
Inch	mm	mm	mm	mm							
3/8 x 1/4	9,53 x 6,35	0,89	0,89	41,28	W	WE	S	SE	-	RC-06-04	
1/2 x 1/4	12,70 x 6,35	1,65	0,89	47,63	W	WE	S	SE	-	RC-08-04	
1/2 x 3/8	12,70 x 9,53	1,65	0,89	47,63	W	WE	S	SE	-	RC-08-06	
3/4 x 1/4	19,05 x 6,35	1,65	0,89	38,00	W	WE	S	SE	-	RC-12-04	
3/4 x 3/8	19,05 x 9,53	1,65	0,89	50,80	W	WE	S	SE	-	RC-12-06	
3/4 x 1/2	19,05 x 12,70	1,65	1,65	53,98	W	WE	S	SE	-	RC-12-08	
1 x 1/2	25,40 x 12,70	1,65	1,65	63,50	W	WE	S	SE	-	RC-16-08	
1 x 3/4	25,40 x 19,05	1,65	1,65	53,98	W	WE	S	SE	-	RC-16-12	
1 1/2 x 1/2	38,10 x 12,70	1,65	1,65	80,00	W	WE	S	SE	-	RC-24-08	
1 1/2 x 3/4	38,10 x 19,05	1,65	1,65	76,20	W	WE	S	SE	-	RC-24-12	
1 1/2 x 1	38,10 x 25,40	1,65	1,65	63,50	W	WE	S	SE	-	RC-24-16	
2 x 1	50,80 x 25,40	1,65	1,65	85,73	W	WE	S	SE	-	RC-32-16	
2 x 1 1/2	50,80 x 38,10	1,65	1,65	63,50	W	WE	S	SE	-	RC-32-24	
2 1/2 x 1	63,50 x 25,40	1,65	1,65	100,00	W	WE	S	SE	-	RC-40-16	
2 1/2 x 1 1/2	63,50 x 38,10	1,65	1,65	85,73	W	WE	S	SE	-	RC-40-24	
2 1/2 x 2	63,50 x 50,80	1,65	1,65	63,50	W	WE	S	SE	-	RC-40-32	
3 x 1 1/2	76,20 x 38,10	1,65	1,65	107,95	W	WE	S	SE	-	RC-48-24	
3 x 2	76,20 x 50,80	1,65	1,65	85,73	W	WE	S	SE	-	RC-48-32	
3 x 2 1/2	76,20 x 63,50	1,65	1,65	66,68	W	WE	S	SE	-	RC-48-40	
4 x 2	101,60 x 50,80	2,11	1,65	130,18	W	WE	S	SE	-	RC-64-32	
4 x 2 1/2	101,60 x 63,50	2,11	1,65	107,95	W	WE	S	SE	-	RC-64-40	
4 x 3	101,60 x 76,20	2,11	1,65	98,43	W	WE	S	SE	-	RC-64-48	
6 x 3	152,40 x 76,20	2,77	1,65	184,15	W	WE	S	SE	-	RC-96-64	
6 x 4	152,40 x 101,60	2,77	2,11	142,88	W	WE	S	SE	-	RC-96-48	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Reducers
Eccentric / Metric



METRIC / DIN 11865 LINE A

Size	d1 x d 2	s1	s2	l1	weldtron bf	weldtron ep	Code
DN	mm	mm	mm		1.4435 / 316L		
8 x 6	10,00 x 8,00	1,00	1,00	38,00	W	WE	RE-08M-06M
10 x 6	13,00 x 8,00	1,50	1,00	38,00	W	WE	RE-10M-06M
10 x 8	13,00 x 10,00	1,50	1,00	38,00	W	WE	RE-10M-08M
15 x 8	19,00 x 10,00	1,50	1,00	60,00	W	WE	RE-15M-08M
15 x 10	19,00 x 13,00	1,50	1,50	60,00	W	WE	RE-15M-10M
20 x 10	23,00 x 13,00	1,50	1,50	60,00	W	WE	RE-20M-10M
20 x 15	23,00 x 19,00	1,50	1,50	60,00	W	WE	RE-20M-15M
25 x 15	29,00 x 19,00	1,50	1,50	70,00	W	WE	RE-25M-15M
25 x 20	29,00 x 23,00	1,50	1,50	70,00	W	WE	RE-25M-20M
32 x 15	35,00 x 19,00	1,50	1,50	80,00	W	WE	RE-32M-15M
32 x 20	35,00 x 23,00	1,50	1,50	80,00	W	WE	RE-32M-20M
32 x 25	35,00 x 29,00	1,50	1,50	80,00	W	WE	RE-32M-25M
40 x 20	41,00 x 23,00	1,50	1,50	90,00	W	WE	RE-40M-20M
40 x 25	41,00 x 29,00	1,50	1,50	90,00	W	WE	RE-40M-25M
40 x 32	41,00 x 35,00	1,50	1,50	90,00	W	WE	RE-40M-32M
50 x 25	53,00 x 29,00	1,50	1,50	90,00	W	WE	RE-50M-25M
50 x 32	53,00 x 35,00	1,50	1,50	90,00	W	WE	RE-50M-32M
50 x 40	53,00 x 41,00	1,50	1,50	90,00	W	WE	RE-50M-40M
65 x 40	70,00 x 41,00	2,00	1,50	110,00	W	WE	RE-65M-40M
65 x 50	70,00 x 53,00	2,00	1,50	110,00	W	WE	RE-65M-50M
80 x 50	85,00 x 53,00	2,00	1,50	110,00	W	WE	RE-80M-50M
80 x 65	85,00 x 70,00	2,00	2,00	110,00	W	WE	RE-80M-65M
100 x 65	104,00 x 70,00	2,00	2,00	135,00	W	WE	RE-100M-65M
100 x 80	104,00 x 85,00	2,00	2,00	135,00	W	WE	RE-100M-80M
150 x 80	154,00 x 85,00	2,00	2,00	170,00	W	WE	RE-150M-80M
150 x 100	154,00 x 104,00	2,00	2,00	170,00	W	WE	RE-150M-100M

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Reducers
Eccentric / ISO

ISO / DIN 11865 LINE B

Size	d1 x d 2	s1	s2	l1	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
DN	mm	mm	mm		1.4435 / 316L				
10 x 8	17,20 x 13,50	1,60	1,60	60,00	W	WE	S	SE	RE-10I-08I
15 x 8	21,30 x 13,50	1,60	1,60	60,00	W	WE	S	SE	RE-15I-08I
15 x 10	21,30 x 17,20	1,60	1,60	60,00	W	WE	S	SE	RE-15I-10I
20 x 8	26,90 x 13,50	1,60	1,60	60,00	W	WE	S	SE	RE-20I-08I
20 x 10	26,90 x 17,20	1,60	1,60	60,00	W	WE	S	SE	RE-20I-10I
20 x 15	26,90 x 21,30	1,60	1,60	60,00	W	WE	S	SE	RE-20I-15I
25 x 15	33,70 x 21,30	2,00	1,60	70,00	W	WE	S	SE	RE-25I-15I
25 x 20	33,70 x 26,90	2,00	1,60	70,00	W	WE	S	SE	RE-25I-20I
32 x 15	42,40 x 21,30	2,00	1,60	80,00	W	WE	S	SE	RE-32I-15I
32 x 20	42,40 x 26,90	2,00	1,60	80,00	W	WE	S	SE	RE-32I-20I
32 x 25	42,40 x 33,70	2,00	2,00	80,00	W	WE	S	SE	RE-32I-25I
40 x 15	48,30 x 21,30	2,00	1,60	90,00	W	WE	S	SE	RE-40I-15I
40 x 20	48,30 x 26,90	2,00	1,60	90,00	W	WE	S	SE	RE-40I-20I
40 x 25	48,30 x 33,70	2,00	2,00	90,00	W	WE	S	SE	RE-40I-25I
40 x 32	48,30 x 42,40	2,00	2,00	90,00	W	WE	S	SE	RE-40I-32I
50 x 20	60,30 x 26,90	2,00	1,60	100,00	W	WE	S	SE	RE-50I-20I
50 x 25	60,30 x 33,70	2,00	2,00	100,00	W	WE	S	SE	RE-50I-25I
50 x 32	60,30 x 42,40	2,00	2,00	100,00	W	WE	S	SE	RE-50I-32I
50 x 40	60,30 x 48,30	2,00	2,00	100,00	W	WE	S	SE	RE-50I-40I
65 x 25	76,10 x 33,70	2,00	2,00	110,00	W	WE	S	SE	RE-65I-25I
65 x 32	76,10 x 42,40	2,00	2,00	110,00	W	WE	S	SE	RE-65I-32I
65 x 40	76,10 x 48,30	2,00	2,00	110,00	W	WE	S	SE	RE-65I-40I
65 x 50	76,10 x 60,30	2,00	2,00	110,00	W	WE	S	SE	RE-65I-50I
80 x 50	88,90 x 60,30	2,30	2,00	110,00	W	WE	S	SE	RE-80I-50I
80 x 65	88,90 x 76,10	2,30	2,00	110,00	W	WE	S	SE	RE-80I-65I
100 x 65	114,30 x 76,10	2,30	2,00	135,00	W	WE	S	SE	RE-100I-65I
100 x 80	114,30 x 88,90	2,30	2,30	135,00	W	WE	S	SE	RE-100I-80I
150 x 100	168,30 x 114,30	2,60	2,30	170,00	W	WE	S	SE	RE-150I-100I

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

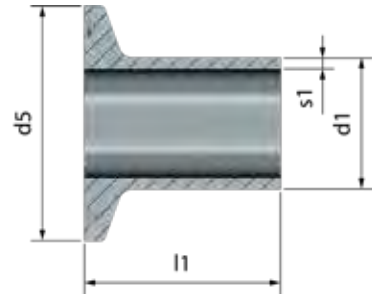
Reducers
Eccentric / Imperial

IMPERIAL / DIN 11865 LINE C

Size	d1 x d 2	s1	s2	l1	weldtron bf	weldtron ep	safetron bf	safetron ep	1.4435 / 316L		Code
									W	WE	
Inch	mm	mm	mm	mm							
1/2 x 1/4	12,70 x 6,35	1,65	0,89	47,63	W	WE	S	SE	-	RE-08-04	
1/2 x 3/8	12,70 x 9,53	1,65	0,89	47,63	W	WE	S	SE	-	RE-08-06	
3/4 x 3/8	19,05 x 9,53	1,65	0,89	50,80	W	WE	S	SE	-	RE-12-06	
3/4 x 1/2	19,05 x 12,70	1,65	1,65	53,98	W	WE	S	SE	-	RE-12-08	
1 x 1/2	25,40 x 12,70	1,65	1,65	63,50	W	WE	S	SE	-	RE-16-08	
1 x 3/4	25,40 x 19,05	1,65	1,65	53,98	W	WE	S	SE	-	RE-16-12	
1 1/2 x 1/2	38,10 x 12,70	1,65	1,65	80,00	W	WE	S	SE	-	RE-24-08	
1 1/2 x 3/4	38,10 x 19,05	1,65	1,65	76,20	W	WE	S	SE	-	RE-24-12	
1 1/2 x 1	38,10 x 25,40	1,65	1,65	63,50	W	WE	S	SE	-	RE-24-16	
2 x 1	50,80 x 25,40	1,65	1,65	85,73	W	WE	S	SE	-	RE-32-16	
2 x 1 1/2	50,80 x 38,10	1,65	1,65	63,50	W	WE	S	SE	-	RE-32-24	
2 1/2 x 1	63,50 x 25,40	1,65	1,65	100,00	W	WE	S	SE	-	RE-40-16	
2 1/2 x 1 1/2	63,50 x 38,10	1,65	1,65	85,73	W	WE	S	SE	-	RE-40-24	
2 1/2 x 2	63,50 x 50,80	1,65	1,65	63,50	W	WE	S	SE	-	RE-40-32	
3 x 1 1/2	76,20 x 38,10	1,65	1,65	107,95	W	WE	S	SE	-	RE-48-24	
3 x 2	76,20 x 50,80	1,65	1,65	85,73	W	WE	S	SE	-	RE-48-32	
3 x 2 1/2	76,20 x 63,50	1,65	1,65	66,68	W	WE	S	SE	-	RE-48-40	
4 x 2	101,60 x 50,80	2,11	1,65	130,18	W	WE	S	SE	-	RE-64-32	
4 x 2 1/2	101,60 x 63,50	2,11	1,65	107,95	W	WE	S	SE	-	RE-64-40	
4 x 3	101,60 x 76,20	2,11	1,65	98,43	W	WE	S	SE	-	RE-64-48	
6 x 3	152,40 x 76,20	2,77	1,65	184,15	W	WE	S	SE	-	RE-96-64	
6 x 4	152,40 x 101,60	2,77	2,11	142,88	W	WE	S	SE	-	RE-96-48	

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

Ferrules, Clamps, Gaskets and Caps acc. to DIN 32676 and ASME BPE Imperial



COMPLETE CONNECTION

Imperial	Size	Length		Pressure
Inch	d x s / mm	min. / mm	max. / mm	max. bar / psig
1/4	6,35 x 0,89	25,40	89,00	40 / 580
3/8	9,53 x 0,89	25,40	89,00	40 / 580
1/2	12,70 x 1,65	25,40	89,00	40 / 580
3/4	19,05 x 1,65	27,10	90,70	40 / 580
1	25,40 x 1,65	27,10	90,70	40 / 580
1 1/2	38,10 x 1,65	27,10	90,70	40 / 580
2	50,80 x 1,65	27,10	116,10	40 / 580
2 1/2	63,50 x 1,65	27,10	116,10	25 / 362
3	76,20 x 1,65	27,70	116,1	25 / 362
4	101,60 x 2,11	33,50	154,1	16 / 232
6	152,40 x 2,77	39,80	154,1	16 / 232

FERRULES

d1	s1	d5
mm		
6,35	0,89	25,00
9,53	0,89	25,00
12,70	1,65	25,00
19,05	1,65	25,00
25,40	1,65	50,50
38,10	1,65	50,50
50,80	1,65	64,00
63,50	1,65	77,50
76,20	1,65	91,00
101,60	2,11	119,00
152,40	2,77	167,00

A*	weldtron bf	weldtron ep	safetron bf	safetron ep	l1	1.4435 / 316L	Code
44,50	W	WE	S	SE	mm		FA-04
44,50	W	WE	S	SE	mm		FA-06
44,50	W	WE	S	SE	mm		FA-08
44,50	W	WE	S	SE	mm		FA-12
44,50	W	WE	S	SE	mm		FA-16
44,50	W	WE	S	SE	mm		FA-24
57,20	W	WE	S	SE	mm		FA-32
57,20	W	WE	S	SE	mm		FA-40
57,20	W	WE	S	SE	mm		FA-48
57,20	W	WE	S	SE	mm		FA-64
76,20	W	WE	S	SE	mm		FA-96

B*	weldtron bf	weldtron ep	safetron bf	safetron ep	l1	1.4435 / 316L	Code
28,58	W	WE	S	SE	mm		FB-04
28,58	W	WE	S	SE	mm		FB-06
28,58	W	WE	S	SE	mm		FB-08
28,58	W	WE	S	SE	mm		FB-12
28,58	W	WE	S	SE	mm		FB-16
28,58	W	WE	S	SE	mm		FB-24
28,58	W	WE	S	SE	mm		FB-32
28,58	W	WE	S	SE	mm		FB-40
28,58	W	WE	S	SE	mm		FB-48
28,58	W	WE	S	SE	mm		FB-64
38,10	W	WE	S	SE	mm		FB-96

C*	weldtron bf	weldtron ep	safetron bf	safetron ep	l1	1.4435 / 316L	Code
12,70	W	WE	S	SE	mm		FC-04
12,70	W	WE	S	SE	mm		FC-06
12,70	W	WE	S	SE	mm		FC-08
12,70	W	WE	S	SE	mm		FC-12
12,70	W	WE	S	SE	mm		FC-16
12,70	W	WE	S	SE	mm		FC-24
12,70	W	WE	S	SE	mm		FC-32
12,70	W	WE	S	SE	mm		FC-40
12,70	W	WE	S	SE	mm		FC-48
15,88	W	WE	S	SE	mm		FC-64
19,05	W	WE	S	SE	mm		FC-96

*Dimensions acc. to ASME BPE. Ferrules acc. to DIN 32676 on request.

CLAMPS

d5	Single Pinned Wing Nut	Double Pinned Wing Nut	Double Pinned Hex Nut	Double Bolted High Pressure	3-Segment Clamp	Safety Clamp Wing Nut
Size	mm	Codes				
1	25,00	CL-SP-WN-1	CL-DP-WN-1	CL-DP-HN-1	CL-DB-HP-1	CL-S-WN-1
0	34,00	CL-SP-WN-0	CL-DP-WN-0	CL-DP-HN-0	CL-DB-HP-0	CL-S-WN-0
2	50,50	CL-SP-WN-2	CL-DP-WN-2	CL-DP-HN-2	CL-DB-HP-2	CL-S3-2
3	64,00	CL-SP-WN-3	CL-DP-WN-3	CL-DP-HN-3	CL-DB-HP-3	CL-S3-3
4	77,50	CL-SP-WN-4	CL-DP-WN-4	CL-DP-HN-4	CL-DB-HP-4	CL-S3-4
5	91,00	CL-SP-WN-5	CL-DP-WN-5	CL-DP-HN-5	CL-DB-HP-5	CL-S3-5
6	106,00	CL-SP-WN-6	CL-DP-WN-6	CL-DP-HN-6	CL-DB-HP-6	CL-S3-6
7	119,00	CL-SP-WN-7	CL-DP-WN-7	CL-DP-HN-7	CL-DB-HP-7	CL-S3-7
8	130,00	CL-SP-WN-8	CL-DP-WN-8	CL-DP-HN-8	CL-DB-HP-8	CL-S3-8
9	167,00	CL-SP-WN-9	CL-DP-WN-9	CL-DP-HN-9	CL-DB-HP-9	CL-S3-9
10	183,00		CL-DP-WN-10	CL-DP-HN-10	CL-DB-HP-10	CL-S3-10

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

GASKETS

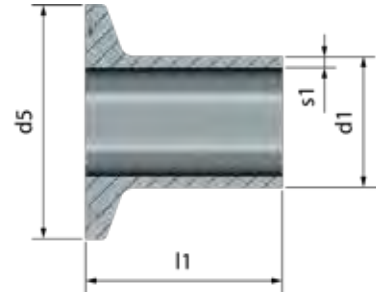
d1	PTFE	FKM	PTFE/FKM	EPDM	VMQ	PTFE/316	PTFE/EPDM	PTFE/EPDM	
mm	Code	Material							
6,35	TC-GK-04-1-	P	F	FP	E	M	P16	EP	PTE
9,53	TC-GK-06-1-	P	F	FP	E	M	P16	EP	PTE
12,70	TC-GK-08-1-	P	F	FP	E	M	P16	EP	PTE
19,05	TC-GK-12-1-	P	F	FP	E	M	P16	EP	PTE
25,40	TC-GK-16-2-	P	F	FP	E	M	P16	EP	PTE
38,10	TC-GK-24-2-	P	F	FP	E	M	P16	EP	PTE
50,80	TC-GK-32-3-	P	F	FP	E	M	P16	EP	PTE
63,50	TC-GK-40-4-	P	F	FP	E	M	P16	EP	PTE
76,20	TC-GK-48-5-	P	F	FP	E	M	P16	EP	PTE
101,60	TC-GK-72-7-	P	F	FP	E	M	P16	EP	PTE
152,40	TC-GK-96-9-	P	F	FP	E	M	P16	EP	PTE

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

CAP 32676

d5	A	weldtron bf	weldtron ep	safetron bf	safetron ep	l1	1.4435 / 316L	Code
25,00	4,75	W	WE	S	SE	mm		FTC-1
25,00	4,75	W	WE	S	SE	mm		FTC-1
25,00	4,75	W	WE	S	SE	mm		FTC-1
25,00	4,75	W	WE	S	SE	mm		FTC-1
50,50	6,35	W	WE	S	SE	mm		FTC-2
50,50	6,35	W	WE	S	SE	mm		FTC-2
64,00	6,35	W	WE	S	SE	mm		FTC-3
77,50	6,35	W	WE	S	SE	mm		FTC-4
91,00	6,35	W	WE	S	SE	mm		FTC-5
119,00	8,00	W	WE	S	SE	mm		FTC-7
167,00	14,00	W	WE	S	SE	mm		FTC-9

**Ferrules, Clamps, Gaskets and Caps acc. to DIN 32676
ISO**



COMPLETE CONNECTION

Metric	Size	Length		Pressure
DN	d x s / mm	min. / mm	max. / mm	max. bar / psig
8	13,50 x 1,60	25,40	57,20	40 / 580
10	17,20 x 1,60	25,40	57,2	40 / 580
15	21,30 x 1,60	44,70	73,70	40 / 580
20	26,90 x 1,60	44,70	73,70	40 / 580
25	33,70 x 2,00	44,70	73,70	40 / 580
32	42,40 x 2,00	44,70	73,70	40 / 580
40	48,30 x 2,00	44,70	73,70	40 / 580
50	60,30 x 2,00	57,70	73,70	25 / 362
65	76,10 x 2,00	57,70	97,70	25 / 362
80	88,90 x 2,30	57,7	97,70	16 / 232
100	114,30 x 2,30	57,70	97,70	16 / 232

FERRULES

d1	s1	d5
mm		
13,50	1,60	25,00
17,20	1,60	25,00
21,30	1,60	50,50
26,90	1,60	50,50
33,70	2,00	50,50
42,40	2,00	64,00
48,30	2,00	64,00
60,30	2,00	77,50
76,10	2,00	91,00
88,90	2,30	106,00
114,30	2,30	130,00

B	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
l1	1.4435 / 316L				
28,60	W	WE	S	SE	FB-08I
28,60	W	WE	S	SE	FB-10I
36,00	W	WE	S	SE	FB-15I
36,00	W	WE	S	SE	FB-20I
36,00	W	WE	S	SE	FB-25I
36,00	W	WE	S	SE	FB-32I
36,00	W	WE	S	SE	FB-40I
36,00	W	WE	S	SE	FB-50I
48,00	W	WE	S	SE	FB-65I
48,00	W	WE	S	SE	FB-80I
48,00	W	WE	S	SE	FB-100I

C	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
l1	1.4435 / 316L				
12,70	W	WE	S	SE	FC-08I
12,70	W	WE	S	SE	FC-10I
21,50	W	WE	S	SE	FC-15I
21,50	W	WE	S	SE	FC-20I
21,50	W	WE	S	SE	FC-25I
21,50	W	WE	S	SE	FC-32I
21,50	W	WE	S	SE	FC-40I
28,00	W	WE	S	SE	FC-50I
28,00	W	WE	S	SE	FC-65I
28,00	W	WE	S	SE	FC-80I
28,00	W	WE	S	SE	FC-100I

CLAMPS

d5	Single Pinned Wing Nut	Double Pinned Wing Nut	Double Pinned Hex Nut	Double Bolted High Pressure	3-Segment Clamp	Safety Clamp Wing Nut
Size	mm	Codes				
1	25,00	CL-SP-WN-1	CL-DP-WN-1	CL-DP-HN-1	CL-DB-HP-1	CL-S-WN-1
0	34,00	CL-SP-WN-0	CL-DP-WN-0	CL-DP-HN-0	CL-DB-HP-0	CL-S-WN-0
2	50,50	CL-SP-WN-2	CL-DP-WN-2	CL-DP-HN-2	CL-DB-HP-2	CL-S3-2
3	64,00	CL-SP-WN-3	CL-DP-WN-3	CL-DP-HN-3	CL-DB-HP-3	CL-S3-3
4	77,50	CL-SP-WN-4	CL-DP-WN-4	CL-DP-HN-4	CL-DB-HP-4	CL-S3-4
5	91,00	CL-SP-WN-5	CL-DP-WN-5	CL-DP-HN-5	CL-DB-HP-5	CL-S3-5
6	106,00	CL-SP-WN-6	CL-DP-WN-6	CL-DP-HN-6	CL-DB-HP-6	CL-S3-6
7	119,00	CL-SP-WN-7	CL-DP-WN-7	CL-DP-HN-7	CL-DB-HP-7	CL-S3-7
8	130,00	CL-SP-WN-8	CL-DP-WN-8	CL-DP-HN-8	CL-DB-HP-8	CL-S3-8
9	167,00	CL-SP-WN-9	CL-DP-WN-9	CL-DP-HN-9	CL-DB-HP-9	CL-S3-9
10	183,00		CL-DP-WN-10	CL-DP-HN-10	CL-DB-HP-10	CL-S3-10

GASKETS

d1	PTFE	FKM	PTFE/FKM	EPDM	VMQ
mm	Code				
13,50	TC-GK-08I-1-	P	F	FP	E M
17,20	TC-GK-10I-1-	P	F	FP	E M
21,30	TC-GK-15I-2-	P	F	FP	E M
26,90	TC-GK-20I-2-	P	F	FP	E M
33,70	TC-GK-25I-2-	P	F	FP	E M
42,40	TC-GK-32I-3-	P	F	FP	E M
48,30	TC-GK-40I-3-	P	F	FP	E M
60,30	TC-GK-50I-4-	P	F	FP	E M
76,10	TC-GK-65I-5-	P	F	FP	E M
88,90	TC-GK-80I-6-	P	F	FP	E M
114,30	TC-GK-100I-8-	P	F	FP	E M

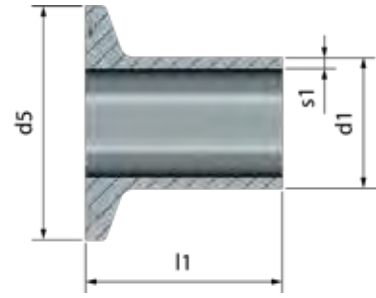
CAP 32676

d5	A	weldtron bf	weldtron ep	safetron bf	safetron ep	Code
mm		1.4435 / 316L				
25,00	4,75	W	WE	S	SE	FTC-1
25,00	4,75	W	WE	S	SE	FTC-1
50,50	6,35	W	WE	S	SE	FTC-2
50,50	6,35	W	WE	S	SE	FTC-2
50,50	6,35	W	WE	S	SE	FTC-2
64,00	6,35	W	WE	S	SE	FTC-3
64,00	6,35	W	WE	S	SE	FTC-3
77,50	6,35	W	WE	S	SE	FTC-4
91,00	6,35	W	WE	S	SE	FTC-5
106,00	6,35	W	WE	S	SE	FTC-6
130,00	8,00	W	WE	S	SE	FTC-8

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

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Further dimensions and materials on request. Subject to alteration.

Ferrules, Clamps, Gaskets and Caps acc. to DIN 32676
Metric



COMPLETE CONNECTION				
Metric	Size	Length		Pressure
DN	d x s / mm	min. / mm	max. / mm	max. bar / psig
6	8,00 x 1,00	25,4	57,2	40 / 580
8	10,00 x 1,00	25,4	57,2	40 / 580
10	13,00 x 1,50	37,7	58,9	40 / 580
15	19,00 x 1,50	37,7	58,9	40 / 580
20	23,00 x 1,50	37,7	58,9	40 / 580
25	29,00 x 1,50	44,7	73,7	40 / 580
32	35,00 x 1,50	44,7	73,7	40 / 580
40	41,00 x 1,50	44,7	73,7	25 / 362
50	53,00 x 1,50	44,7	73,7	25 / 362
65	70,00 x 2,00	57,7	97,7	16 / 232
80	85,00 x 2,00	57,7	97,7	16 / 232
100	104,00 x 2,00	57,7	97,7	16 / 232
150	154,00 x 2,00	57,7	133,7	16 / 232

FERRULES		
d1	s1	d5
mm		
8,00	1,00	25,00
10,00	1,00	25,00
13,00	1,50	34,00
19,00	1,50	34,00
23,00	1,50	34,00
29,00	1,50	50,50
35,00	1,50	50,50
41,00	1,50	50,50
53,00	1,50	64,00
70,00	2,00	91,00
85,00	2,00	106,00
104,00	2,00	119,00
154,00	2,00	183,00

FERRULE B	weldtron bf	weldtron ep	Code
l1	1.4435 / 316L		
mm			
28,60	W	WE	FB-06M
28,60	W	WE	FB-08M
28,60	W	WE	FB-10M
28,60	W	WE	FB-15M
28,60	W	WE	FB-20M
36,00	W	WE	FB-25M
36,00	W	WE	FB-32M
36,00	W	WE	FB-40M
36,00	W	WE	FB-50M
48,00	W	WE	FB-65M
48,00	W	WE	FB-80M
48,00	W	WE	FB-100M
66,00	W	WE	FB-150M

FERRULE C	weldtron bf	weldtron ep	Code
l1	1.4435 / 316L		
mm			
12,70	W	WE	FC-06M
12,70	W	WE	FC-08M
18,00	W	WE	FC-10M
18,00	W	WE	FC-15M
18,00	W	WE	FC-20M
21,50	W	WE	FC-25M
21,50	W	WE	FC-32M
21,50	W	WE	FC-40M
21,50	W	WE	FC-50M
28,00	W	WE	FC-65M
28,00	W	WE	FC-80M
28,00	W	WE	FC-100M
28,00	W	WE	FC-150M

CLAMPS							
d5	Single Pinned Wing Nut	Double Pinned Wing Nut	Double Pinned Hex Nut	Double Bolted High Pressure	3-Segment Clamp	Safety Clamp Wing Nut	
Size	mm	Codes					
1	25,00	CL-SP-WN-1	CL-DP-WN-1	CL-DP-HN-1	CL-DB-HP-1		CL-S-WN-1
0	34,00	CL-SP-WN-0	CL-DP-WN-0	CL-DP-HN-0	CL-DB-HP-0		CL-S-WN-0
2	50,50	CL-SP-WN-2	CL-DP-WN-2	CL-DP-HN-2	CL-DB-HP-2	CL-S3-2	CL-S-WN-2
3	64,00	CL-SP-WN-3	CL-DP-WN-3	CL-DP-HN-3	CL-DB-HP-3	CL-S3-3	CL-S-WN-3
4	77,50	CL-SP-WN-4	CL-DP-WN-4	CL-DP-HN-4	CL-DB-HP-4	CL-S3-4	CL-S-WN-4
5	91,00	CL-SP-WN-5	CL-DP-WN-5	CL-DP-HN-5	CL-DB-HP-5	CL-S3-5	CL-S-WN-5
6	106,00	CL-SP-WN-6	CL-DP-WN-6	CL-DP-HN-6	CL-DB-HP-6		CL-S-WN-6
7	119,00	CL-SP-WN-7	CL-DP-WN-7	CL-DP-HN-7	CL-DB-HP-7	CL-S3-7	CL-S-WN-7
8	130,00	CL-SP-WN-8	CL-DP-WN-8	CL-DP-HN-8	CL-DB-HP-8		
9	167,00	CL-SP-WN-9	CL-DP-WN-9	CL-DP-HN-9	CL-DB-HP-9		
10	183,00		CL-DP-WN-10	CL-DP-HN-10	CL-DB-HP-10		

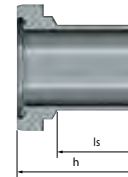
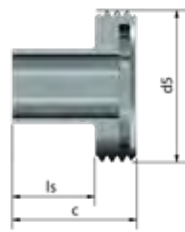
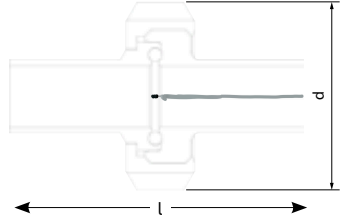
GASKETS						
d1	PTFE	FKM	PTFE/FKM	EPDM	VMQ	Code
mm						
8,00	P	F	FP	E	M	TC-GK-06M-1-
10,00	P	F	FP	E	M	TC-GK-08M-1-
13,00	P	F	FP	E	M	TC-GK-10M-0-
19,00	P	F	FP	E	M	TC-GK-15M-0-
23,00	P	F	FP	E	M	TC-GK-20M-0-
29,00	P	F	FP	E	M	TC-GK-25M-2-
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104,00	P	F	FP	E	M	TC-GK-122M-7-
154,00	P	F	FP	E	M	TC-GK-152M-10-

CAP				
d5	A	weldtron bf	weldtron ep	Code
mm				
25,00	4,75	W	WE	FTC-1
25,00	4,75	W	WE	FTC-1
34,00	6,35	W	WE	FTC-0
34,00	6,35	W	WE	FTC-0
34,00	6,35	W	WE	FTC-0
50,50	6,35	W	WE	FTC-2
50,50	6,35	W	WE	FTC-2
50,50	6,35	W	WE	FTC-2
64,00	6,35	W	WE	FTC-3
91,00	6,35	W	WE	FTC-5
106,00	6,35	W	WE	FTC-6
119,00	8,00	W	WE	FTC-7
183,00	14,00	W	WE	FTC-10

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

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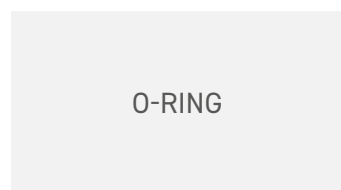
Screw Connection acc. to DIN 11864-1
Line A / Metric



Metric				TUBE DIN 11866				COMPLETE CONNECTION				THREADED STUB (MALE)				GROOVE NUT				WELD STUB (LINER)			
				d x s		l	d	d5		ls	c	weldtron bf	weldtron ep	safetron bf	safetron ep	d	l4	ls	h	weldtron bf	weldtron ep	safetron bf	safetron ep
DN	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	1.4435/316L				mm	mm	mm	mm	1.4435/316L				Size
10	13,00 x 1,50	76,00	38,00	28 x 1/8"	27,00	41,00	W	WE	S	SE	-	SC-TS-10M	38,00	18,00	SC-GN-10	27,00	39,00	W	WE	S	SE	-	SC-WS-10M
15	19,00 x 1,50	76,00	44,00	34 x 1/8"	27,00	41,00	W	WE	S	SE	-	SC-TS-15M	44,00	18,00	SC-GN-15	27,00	39,00	W	WE	S	SE	-	SC-WS-15M
20	23,00 x 1,50	76,00	54,00	44 x 1/6"	26,00	43,00	W	WE	S	SE	-	SC-TS-20M	54,00	20,00	SC-GN-20	26,00	38,00	W	WE	S	SE	-	SC-WS-20M
25	29,00 x 1,50	77,00	63,00	52 x 1/6"	26,00	43,00	W	WE	S	SE	-	SC-TS-25M	63,00	21,00	SC-GN-25	26,00	40,00	W	WE	S	SE	-	SC-WS-25M
32	35,00 x 1,50	88,00	70,00	58 x 1/6"	32,00	48,00	W	WE	S	SE	-	SC-TS-32M	70,00	21,00	SC-GN-32	32,00	47,00	W	WE	S	SE	-	SC-WS-32M
40	41,00 x 1,50	88,00	78,00	65 x 1/6"	31,00	48,00	W	WE	S	SE	-	SC-TS-40M	78,00	21,00	SC-GN-40	31,00	47,00	W	WE	S	SE	-	SC-WS-40M
50	53,00 x 1,50	89,00	92,00	78 x 1/6"	30,00	48,00	W	WE	S	SE	-	SC-TS-50M	92,00	22,00	SC-GN-50	30,00	48,00	W	WE	S	SE	-	SC-WS-50M
65	70,00 x 2,00	113,00	112,00	95 x 1/6"	40,00	60,00	W	WE	S	SE	-	SC-TS-65M	112,00	25,00	SC-GN-65	40,00	61,00	W	WE	S	SE	-	SC-WS-65M
80	85,00 x 2,00	117,00	127,00	110 x 1/4"	40,00	64,00	W	WE	S	SE	-	SC-TS-80M	127,00	29,00	SC-GN-80	40,00	61,00	W	WE	S	SE	-	SC-WS-80M
100	104,00 x 2,00	120,00	148,00	130 x 1/4"	40,00	64,00	W	WE	S	SE	-	SC-TS-100M	148,00	31,00	SC-GN-100	40,00	66,00	W	WE	S	SE	-	SC-WS-100M

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

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O-RING			EPDM	FPM/FEP*
DN	mm	Code		
10	12,00 x 3,50	SC-GK-10M-0-	E	FF
15	18,00 x 3,50	SC-GK-15M-0-	E	FF
20	22,00 x 3,50	SC-GK-20M-0-	E	FF
25	28,00 x 3,50	SC-GK-25M-2-	E	FF
32	34,00 x 5,00	SC-GK-32M-2-	E	FF
40	40,00 x 5,00	SC-GK-42M-2-	E	FF
50	52,00 x 5,00	SC-GK-52M-3-	E	FF
65	68,00 x 5,00	SC-GK-65M-5-	E	FF
80	83,00 x 5,00	SC-GK-82M-6-	E	FF
100	102,00 x 5,00	SC-GK-122M-7-	E	FF

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.
*Material is not part of the DIN 11864



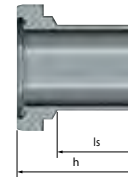
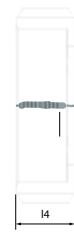
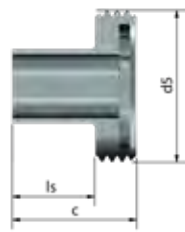
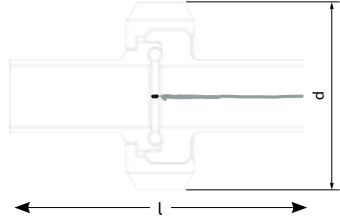
BLIND WELD STUB (LINER)			safetron bf	safetron ep
d1	h	Code		
18,00	9,00	S SE - SC-BWS-10M		
24,00	9,00	S SE - SC-BWS-15M		
30,00	10,00	S SE - SC-BWS-20M		
35,00	12,00	S SE - SC-BWS-25M		
41,00	13,00	S SE - SC-BWS-32M		
48,00	13,00	S SE - SC-BWS-40M		
61,00	14,00	S SE - SC-BWS-50M		
79,00	16,00	S SE - SC-BWS-65M		
93,00	16,00	S SE - SC-BWS-80M		
114,00	20,00	S SE - SC-BWS-100M		

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.



BLIND THREADED STUB (MALE)			safetron bf	safetron ep
SW	c	Code		
SW 19	24,00	S SE - SC-BTS-10M		
SW 24	24,00	S SE - SC-BTS-15M		
SW 30	24,00	S SE - SC-BTS-20M		
SW 41	24,00	S SE - SC-BTS-25M		
SW 46	24,00	S SE - SC-BTS-32M		
SW 50	24,00	S SE - SC-BTS-40M		
SW 65	24,00	S SE - SC-BTS-50M		
SW 80	28,00	S SE - SC-BTS-65M		
SW 95	28,00	S SE - SC-BTS-80M		
SW 115	30,00	S SE - SC-BTS-100M		

Screw Connection acc. to DIN 11864-1
Line B / ISO



ISO	TUBE DIN 11866		COMPLETE CONNECTION	
	d x s	l	d	
DN	mm	mm		
8	13,50 x 1,60	76,00	38,00	
10	17,20 x 1,60	76,00	44,00	
15	21,30 x 1,60	78,00	54,00	
20	26,90 x 1,60	78,00	63,00	
25	33,70 x 2,00	88,00	70,00	
32	42,40 x 2,00	88,00	78,00	
40	48,30 x 2,00	90,00	92,00	
50	60,30 x 2,00	114,00	112,00	
65	76,10 x 2,00	117,00	127,00	
80	88,90 x 2,30	122,00	148,00	

THREADED STUB (MALE)			weldtron bf	weldtron ep	safetron bf	safetron ep		
d5	ls	c						
mm			1.4435/316L				Code	
28 x 1/8"	27,00	41,00	W	WE	S	SE	-	SC-TS-08I
34 x 1/8"	27,00	41,00	W	WE	S	SE	-	SC-TS-10I
44 x 1/6"	26,00	43,00	W	WE	S	SE	-	SC-TS-15I
52 x 1/6"	26,00	43,00	W	WE	S	SE	-	SC-TS-20I
58 x 1/6"	32,00	48,00	W	WE	S	SE	-	SC-TS-25I
65 x 1/6"	31,00	48,00	W	WE	S	SE	-	SC-TS-32I
78 x 1/6"	30,00	48,00	W	WE	S	SE	-	SC-TS-40I
95 x 1/6"	40,00	60,00	W	WE	S	SE	-	SC-TS-50I
110 x 1/4"	40,00	64,00	W	WE	S	SE	-	SC-TS-65I
130 x 1/4"	40,00	64,00	W	WE	S	SE	-	SC-TS-80I

GROOVE NUT		
d	l4	Code
mm		
38,0	18,00	SC-GN-10
44,0	18,00	SC-GN-15
54,0	20,00	SC-GN-20
63,0	21,00	SC-GN-25
70,0	21,00	SC-GN-32
78,0	21,00	SC-GN-40
92,0	22,00	SC-GN-50
112,0	25,00	SC-GN-65
127,0	29,00	SC-GN-80
148,0	31,00	SC-GN-100

WELD STUB (LINER)		weldtron bf	weldtron ep	safetron bf	safetron ep		
ls	h						
mm		1.4435/316L				Size	
27,00	39,00	W	WE	S	SE	-	SC-WS-08I
27,00	39,00	W	WE	S	SE	-	SC-WS-10I
27,00	40,00	W	WE	S	SE	-	SC-WS-15I
27,00	41,00	W	WE	S	SE	-	SC-WS-20I
32,00	47,00	W	WE	S	SE	-	SC-WS-25I
32,00	47,00	W	WE	S	SE	-	SC-WS-32I
31,00	48,00	W	WE	S	SE	-	SC-WS-40I
40,00	62,00	W	WE	S	SE	-	SC-WS-50I
40,00	61,00	W	WE	S	SE	-	SC-WS-65I
40,00	68,00	W	WE	S	SE	-	SC-WS-80I

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.



O-RING				EPDM	FPM/FEP*	MVQ/PFA*
d	s					
mm				Code		
8	12,00 x 3,50	SC-GK-08I-1-	E	FF	MP	
10	16,00 x 3,50	SC-GK-10I-1-	E	FF	MP	
15	20,00 x 3,50	SC-GK-15I-2-	E	FF	MP	
20	26,00 x 3,50	SC-GK-20I-2-	E	FF	MP	
25	32,00 x 5,00	SC-GK-25I-2-	E	FF	MP	
32	40,50 x 5,00	SC-GK-32I-3-	E	FF	MP	
40	46,50 x 5,00	SC-GK-40I-3-	E	FF	MP	
50	58,50 x 5,00	SC-GK-50I-4-	E	FF	MP	
65	73,50 x 5,00	SC-GK-65I-5-	E	FF	MP	
80	86,50 x 5,00	SC-GK-80I-6-	E	FF	MP	

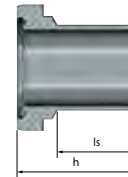
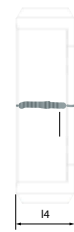
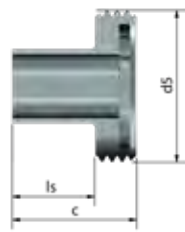
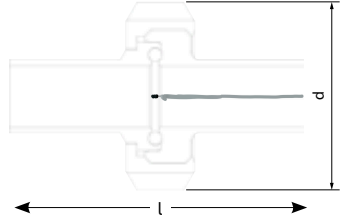
Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.
*Material is not part of the DIN 11864

BLIND WELD STUB (LINER)		safetron bf	safetron ep		
d1	h				
mm		1.4435/316L		Code	
18,00	10,00	S	SE	-	SC-BWS-08I
24,00	10,00	S	SE	-	SC-BWS-10I
30,00	10,00	S	SE	-	SC-BWS-15I
35,00	12,00	S	SE	-	SC-BWS-20I
41,00	13,00	S	SE	-	SC-BWS-25I
48,00	13,00	S	SE	-	SC-BWS-32I
61,00	14,00	S	SE	-	SC-BWS-40I
79,00	16,00	S	SE	-	SC-BWS-50I
93,00	16,00	S	SE	-	SC-BWS-65I
114,00	20,00	S	SE	-	SC-BWS-80I

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

BLIND THREADED STUB (MALE)		safetron bf	safetron ep		
SW	c				
mm		1.4435/316L		Code	
SW19	22,00	S	SE	-	SC-BTS-08I
SW24	22,00	S	SE	-	SC-BTS-10I
SW30	24,00	S	SE	-	SC-BTS-15I
SW41	24,00	S	SE	-	SC-BTS-20I
SW46	24,00	S	SE	-	SC-BTS-25I
SW50	24,00	S	SE	-	SC-BTS-32I
SW65	24,00	S	SE	-	SC-BTS-40I
SW80	28,00	S	SE	-	SC-BTS-50I
SW95	28,00	S	SE	-	SC-BTS-65I
SW115	30,00	S	SE	-	SC-BTS-80I

Screw Connection acc. to DIN 11864-1
Line C / Imperial



Imperial	TUBE DIN 11866		COMPLETE CONNECTION	
	d x s	l	d	
Inch	mm	mm		
1/2"	12,70 x 1,65	76,00	38,00	
3/4"	19,05 x 1,65	76,00	44,00	
1"	25,40 x 1,65	77,00	63,00	
1 1/2"	38,10 x 1,65	88,00	78,00	
2"	50,80 x 1,65	89,00	92,00	
2 1/2"	63,50 x 1,65	115,00	112,00	
3"	76,20 x 1,65	117,00	127,00	
4"	101,60 x 2,11	119,00	148,00	

THREADED STUB (MALE)			weldtron bf	weldtron ep	safetron bf	safetron ep		
d5	ls	c						
mm			1.4435/316L				Code	
28 x 1/8"	27,00	41,00	W	WE	S	SE	-	SC-TS-08
34 x 1/8"	27,00	41,00	W	WE	S	SE	-	SC-TS-12
52 x 1/6"	26,00	43,00	W	WE	S	SE	-	SC-TS-16
65 x 1/6"	30,00	49,00	W	WE	S	SE	-	SC-TS-24
78 x 1/6"	30,00	49,00	W	WE	S	SE	-	SC-TS-32
95 x 1/6"	40,00	60,00	W	WE	S	SE	-	SC-TS-40
110 x 1/4"	40,00	64,00	W	WE	S	SE	-	SC-TS-48
130 x 1/4"	40,00	64,00	W	WE	S	SE	-	SC-TS-64

GROOVE NUT		
d	l4	Code
mm	mm	
38	18,0	SC-GN-10
44	18,0	SC-GN-15
63	21,0	SC-GN-25
78	21,0	SC-GN-40
92	22,0	SC-GN-50
112	25,0	SC-GN-65
127	29,0	SC-GN-80
148	31,0	SC-GN-100

WELD STUB (LINER)		weldtron bf	weldtron ep	safetron bf	safetron ep		
ls	h						
mm		1.4435/316L				Code	
27,00	39,00	W	WE	S	SE	-	SC-WS-08I
27,00	39,00	W	WE	S	SE	-	SC-WS-10I
27,00	40,00	W	WE	S	SE	-	SC-WS-15I
27,00	41,00	W	WE	S	SE	-	SC-WS-20I
32,00	47,00	W	WE	S	SE	-	SC-WS-25I
32,00	47,00	W	WE	S	SE	-	SC-WS-32I
31,00	48,00	W	WE	S	SE	-	SC-WS-40I
40,00	62,00	W	WE	S	SE	-	SC-WS-50I

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.



O-RING			EPDM	FPM/FEP*
d x s		Code		
Inch	mm			
1/2"	12,00 x 3,50	SC-GK-08-1-	E	FF
3/4"	18,00 x 3,50	SC-GK-12-1-	E	FF
1"	24,00 x 3,50	SC-GK-16-2-	E	FF
1 1/2"	37,00 x 5,00	SC-GK-24-2-	E	FF
2"	50,00 x 5,00	SC-GK-32-3-	E	FF
2 1/2"	62,00 x 5,00	SC-GK-40-4-	E	FF
3"	75,00 x 5,00	SC-GK-48-5-	E	FF
4"	100,00 x 5,00	SC-GK-72-7-	E	FF

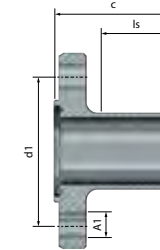
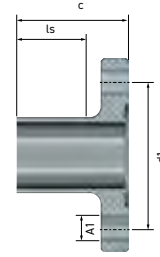
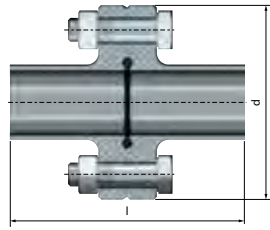
Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.
*Material is not part of the DIN 11864

BLIND WELD STUB (LINER)		safetron bf	safetron ep		
d1	h				
mm		1.4435/316L		Code	
18,00	9,00	S	SE	-	SC-BWS-08
24,00	9,00	S	SE	-	SC-BWS-12
35,00	12,00	S	SE	-	SC-BWS-16
48,00	13,00	S	SE	-	SC-BWS-24
61,00	14,00	S	SE	-	SC-BWS-32
79,00	16,00	S	SE	-	SC-BWS-40
93,00	16,00	S	SE	-	SC-BWS-48
114,00	20,00	S	SE	-	SC-BWS-64

BLIND THREADED STUB (MALE)		safetron bf	safetron ep		
SW	c				
mm		1.4435/316L		Code	
SW19	22,00	S	SE	-	SC-BTS-08
SW24	22,00	S	SE	-	SC-BTS-12
SW30	24,00	S	SE	-	SC-BTS-16
SW41	24,00	S	SE	-	SC-BTS-24
SW46	24,00	S	SE	-	SC-BTS-32
SW50	24,00	S	SE	-	SC-BTS-40
SW65	24,00	S	SE	-	SC-BTS-48
SW80	28,00	S	SE	-	SC-BTS-64

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

Flange Connection acc. to DIN 11864-2
Line A / Metric



Metric	TUBE DIN 11866	COMPLETE CONNECTION	
	d x s	l	d
DN	mm	mm	
10	13,00 x 1,50	80,00	54,00
15	19,00 x 1,50	80,00	59,00
20	23,00 x 1,50	80,00	64,00
25	29,00 x 1,50	80,00	70,00
32	35,00 x 1,50	90,00	76,00
40	41,00 x 1,50	90,00	82,00
50	53,00 x 1,50	90,00	94,00
65	70,00 x 2,00	108,00	113,00
80	85,00 x 2,00	116,00	133,00
100	104,00 x 2,00	116,00	159,00

FLANGE GROOVE (MALE)	c	ls	d1	1.4435/316L				Code
				weldtron bf	weldtron ep	safetron bf	safetron ep	
mm								
41,50	26,00	37,00	W	WE	S	SE	-	SC-FG-10M
41,50	26,00	42,00	W	WE	S	SE	-	SC-FG-15M
41,50	26,00	47,00	W	WE	S	SE	-	SC-FG-20M
41,50	26,00	53,00	W	WE	S	SE	-	SC-FG-25M
46,50	31,00	59,00	W	WE	S	SE	-	SC-FG-32M
46,50	31,00	65,00	W	WE	S	SE	-	SC-FG-40M
46,50	31,00	77,00	W	WE	S	SE	-	SC-FG-50M
55,50	42,00	95,00	W	WE	S	SE	-	SC-FG-65M
59,50	42,00	112,00	W	WE	S	SE	-	SC-FG-80M
59,50	42,00	137,00	W	WE	S	SE	-	SC-FG-100M

FLANGE COLLAR (FEMALE)	h	1.4435/316L				Code	FLANGE BORE A1	MOUNTING BOLTS G
		weldtron bf	weldtron ep	safetron bf	safetron ep			
mm								
40,00	W	WE	S	SE	-	-SC-FC-10M	4 x Ø 9,00	4/M8 x 30
40,00	W	WE	S	SE	-	-SC-FC-15M	4 x Ø 9,00	4/M8 x 30
40,00	W	WE	S	SE	-	-SC-FC-20M	4 x Ø 9,00	4/M8 x 30
40,00	W	WE	S	SE	-	-SC-FC-25M	4 x Ø 9,00	4/M8 x 30
45,00	W	WE	S	SE	-	-SC-FC-32M	4 x Ø 9,00	4/M8 x 30
45,00	W	WE	S	SE	-	-SC-FC-40M	4 x Ø 9,00	4/M8 x 30
45,00	W	WE	S	SE	-	-SC-FC-50M	4 x Ø 9,00	4/M8 x 30
54,00	W	WE	S	SE	-	-SC-FC-65M	8 x Ø 9,00	8/M8 x 30
58,00	W	WE	S	SE	-	-SC-FC-80M	8 x Ø 11,00	8/M10 x 35
58,00	W	WE	S	SE	-	-SC-FC-100M	8 x Ø 11,00	8/M10 x 40

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.



O-RING	d x s	Code	Material	
			EPDM	FPM/FEP*
DN	mm			
10	12,00 x 3,50	SC-GK-10M-0-	E	FF
15	18,00 x 3,50	SC-GK-15M-0-	E	FF
20	22,00 x 3,50	SC-GK-20M-0-	E	FF
25	28,00 x 3,50	SC-GK-25M-2-	E	FF
32	34,00 x 5,00	SC-GK-32M-2-	E	FF
40	40,00 x 5,00	SC-GK-42M-2-	E	FF
50	52,00 x 5,00	SC-GK-52M-3-	E	FF
65	68,00 x 5,00	SC-GK-65M-5-	E	FF
80	83,00 x 5,00	SC-GK-82M-6-	E	FF
100	102,00 x 5,00	SC-GK-122M-7-	E	FF

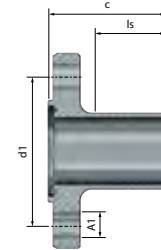
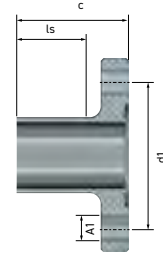
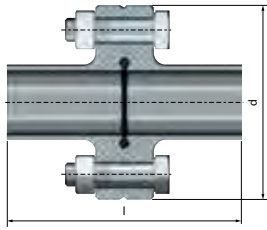
Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.
*Material is not part of the DIN 11864

BLIND FLANGE COLLAR (FEMALE)	h	1.4435/316L		Code
		safetron bf	safetron ep	
mm				
10,00	S	SE	-	SC-BFC-10M
10,00	S	SE	-	SC-BFC-15M
10,00	S	SE	-	SC-BFC-20M
10,00	S	SE	-	SC-BFC-25M
10,00	S	SE	-	SC-BFC-32M
10,00	S	SE	-	SC-BFC-40M
10,00	S	SE	-	SC-BFC-50M
10,00	S	SE	-	SC-BFC-65M
12,00	S	SE	-	SC-BFC-80M
14,00	S	SE	-	SC-BFC-100M

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

BLIND FLANGE GROOVE (MALE)	c	1.4435/316L		Code
		safetron bf	safetron ep	
mm				
11,50	S	SE	-	SC-BFG-10M
11,50	S	SE	-	SC-BFG-15M
11,50	S	SE	-	SC-BFG-20M
11,50	S	SE	-	SC-BFG-25M
11,50	S	SE	-	SC-BFG-32M
11,50	S	SE	-	SC-BFG-40M
11,50	S	SE	-	SC-BFG-50M
11,50	S	SE	-	SC-BFG-65M
13,50	S	SE	-	SC-BFG-80M
15,50	S	SE	-	SC-BFG-100M

Flange Connection acc. to DIN 11864-2
Line B / ISO



ISO	TUBE DIN 11866	COMPLETE CONNECTION	
	d x s	l	d
DN	mm	mm	
8	13,50 x 1,60	80,00	54,00
10	17,20 x 1,60	80,00	59,00
15	21,30 x 1,60	80,00	62,00
20	26,90 x 1,60	80,00	69,00
25	33,70 x 2,00	90,00	74,00
32	42,40 x 2,00	90,00	82,00
40	48,30 x 2,00	90,00	88,00
50	60,30 x 2,00	108,00	103,00
65	76,1x 2,00	112,00	125,00
80	88,90 x 2,30	116,00	137,00
100	114,30 x 2,30	116,00	168,00

FLANGE GROOVE (MALE)			weldtron bf	weldtron ep	safetron bf	safetron ep			
c	ls	d1	■	■	■	■			
mm			1.4435/316L				Code		
41,50	26,00	37,00	W	WE	S	SE	-	SC-FG-08I	
41,50	26,00	42,00	W	WE	S	SE	-	SC-FG-10I	
41,50	26,00	45,00	W	WE	S	SE	-	SC-FG-15I	
41,50	26,00	52,00	W	WE	S	SE	-	SC-FG-20I	
46,50	31,00	57,00	W	WE	S	SE	-	SC-FG-25I	
46,50	31,00	65,00	W	WE	S	SE	-	SC-FG-32I	
46,50	31,00	71,00	W	WE	S	SE	-	SC-FG-40I	
55,50	42,00	85,00	W	WE	S	SE	-	SC-FG-50I	
57,50	42,00	104,00	W	WE	S	SE	-	SC-FG-65I	
59,50	42,00	116,00	W	WE	S	SE	-	SC-FG-80I	
59,50	42,00	146,00	W	WE	S	SE	-	SC-FG-80I	

FLANGE COLLAR (FEMALE)			weldtron bf	weldtron ep	safetron bf	safetron ep			FLANGE BORE	MOUNTING BOLTS
h	■	■	■	■	■	■			A1	G
mm	1.4435/316L				Code					
40,00	W	WE	S	SE	-	SC-FC-08I			4 x Ø 9,00	4/M8 x 30
40,00	W	WE	S	SE	-	SC-FC-10I			4 x Ø 9,00	4/M8 x 30
40,00	W	WE	S	SE	-	SC-FC-15I			4 x Ø 9,00	4/M8 x 30
40,00	W	WE	S	SE	-	SC-FC-20I			4 x Ø 9,00	4/M8 x 30
45,00	W	WE	S	SE	-	SC-FC-25I			4 x Ø 9,00	4/M8 x 30
45,00	W	WE	S	SE	-	SC-FC-32I			4 x Ø 9,00	4/M8 x 30
45,00	W	WE	S	SE	-	SC-FC-40I			4 x Ø 9,00	4/M8 x 30
54,00	W	WE	S	SE	-	SC-FC-50I			4 x Ø 9,00	4/M8 x 30
56,00	W	WE	S	SE	-	SC-FC-65I			8 x Ø 11,00	8/M10 x 30
58,00	W	WE	S	SE	-	SC-FC-80I			8 x Ø 11,00	8/M10 x 35
58,00	W	WE	S	SE	-	SC-FC-100I			8 x Ø 11,00	8/M10 x 35

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.



O-RING					
d x s	EPDM	FPM/FEP*	MVQ/PFA*		
DN	mm	Code			
8	12,00 x 3,50	SC-GK-08I-1-	E	FF	MP
10	16,00 x 3,50	SC-GK-10I-1-	E	FF	MP
15	20,00 x 3,50	SC-GK-15I-2-	E	FF	MP
20	26,00 x 3,50	SC-GK-20I-2-	E	FF	MP
25	32,00 x 5,00	SC-GK-25I-2-	E	FF	MP
32	40,50 x 5,00	SC-GK-32I-3-	E	FF	MP
40	46,50 x 5,00	SC-GK-40I-3-	E	FF	MP
50	58,50 x 5,00	SC-GK-50I-4-	E	FF	MP
65	73,50 x 5,00	SC-GK-65I-5-	E	FF	MP
80	86,50 x 5,00	SC-GK-80I-6-	E	FF	MP

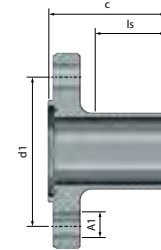
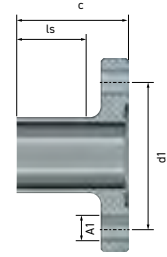
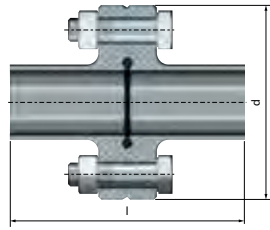
Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.
*Material is not part of the DIN 11864

BLIND FLANGE COLLAR (FEMALE)			safetron bf	safetron ep		
h	■	■	■	■		
mm	1.4435/316L				Code	
10	S	SE	-	SC-BFC-08I		
10	S	SE	-	SC-BFC-10I		
10	S	SE	-	SC-BFC-15I		
10	S	SE	-	SC-BFC-20I		
10	S	SE	-	SC-BFC-25I		
10	S	SE	-	SC-BFC-32I		
10	S	SE	-	SC-BFC-40I		
10	S	SE	-	SC-BFC-50I		
12	S	SE	-	SC-BFC-65I		
12	S	SE	-	SC-BFC-80I		
14	S	SE	-	SC-BFC-100I		

BLIND FLANGE GROOVE (MALE)			safetron bf	safetron ep		
c	■	■	■	■		
mm	1.4435/316L				Code	
11,50	S	SE	-	SC-BFG-08I		
11,50	S	SE	-	SC-BFG-10I		
11,50	S	SE	-	SC-BFG-15I		
11,50	S	SE	-	SC-BFG-20I		
11,50	S	SE	-	SC-BFG-25I		
11,50	S	SE	-	SC-BFG-32I		
11,50	S	SE	-	SC-BFG-40I		
11,50	S	SE	-	SC-BFG-50I		
13,50	S	SE	-	SC-BFG-65I		
15,50	S	SE	-	SC-BFG-80I		
15,50	S	SE	-	SC-BFG-100I		

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

Flange Connection acc. to DIN 11864-2
Line C / Imperial



Imperial	TUBE DIN 11866	COMPLETE CONNECTION	
	d x s	l	d
DN	mm	mm	
1/2"	12,70 x 1,65	80,00	54,00
3/4"	19,05 x 1,65	80,00	59,00
1"	25,40 x 1,65	80,00	66,00
1 1/2"	38,10 x 1,65	90,00	79,00
2"	50,80 x 1,65	90,00	92,00
2 1/2"	63,50 x 1,65	108,00	107,00
3"	76,20 x 1,65	112,00	125,00
4"	101,60 x 2,11	116,00	157,00

FLANGE GROOVE (MALE)			weldtron bf	weldtron ep	safetron bf	safetron ep		
c	ls	d1	■	■	■	■		
mm			1.4435/316L				Code	
41,50	26,00	37,00	W	WE	S	SE	-	SC-FG-08
41,50	26,00	42,00	W	WE	S	SE	-	SC-FG-12
41,50	26,00	49,00	W	WE	S	SE	-	SC-FG-16
46,50	31,00	62,00	W	WE	S	SE	-	SC-FG-24
46,50	31,00	75,00	W	WE	S	SE	-	SC-FG-32
55,50	42,00	89,00	W	WE	S	SE	-	SC-FG-40
57,50	42,00	104,00	W	WE	S	SE	-	SC-FG-48
59,50	42,00	135,00	W	WE	S	SE	-	SC-FG-64

FLANGE COLLAR (FEMALE)			weldtron bf	weldtron ep	safetron bf	safetron ep		
h	■	■	■	■	■	■		
mm			1.4435/316L				Code	
40,00	W	WE	S	SE	-	-	SC-FC-08	4 x Ø 9,00
40,00	W	WE	S	SE	-	-	SC-FC-12	4 x Ø 9,00
40,00	W	WE	S	SE	-	-	SC-FC-16	4 x Ø 9,00
45,00	W	WE	S	SE	-	-	SC-FC-24	4 x Ø 9,00
45,00	W	WE	S	SE	-	-	SC-FC-32	4 x Ø 9,00
54,00	W	WE	S	SE	-	-	SC-FC-40	8 x Ø 9,00
56,00	W	WE	S	SE	-	-	SC-FC-48	8 x Ø 11,00
58,00	W	WE	S	SE	-	-	SC-FC-64	8 x Ø 11,00

FLANGE BORE	MOUNTING BOLTS
A1	G
4 x Ø 9,00	4/M8 x 30
4 x Ø 9,00	4/M8 x 30
4 x Ø 9,00	4/M8 x 30
4 x Ø 9,00	4/M8 x 30
4 x Ø 9,00	4/M8 x 30
8 x Ø 9,00	8/M8 x 30
8 x Ø 11,00	8/M10 x 30
8 x Ø 11,00	8/M10 x 35

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.



O-RING					
d x s	■	EPDM	FPM/FEP*		
DN	mm	Code			
1/2"	12,00 x 3,50	SC-GK-08-1-	E	FF	
3/4"	18,00 x 3,50	SC-GK-12-1-	E	FF	
1"	24,00 x 3,50	SC-GK-16-2-	E	FF	
1 1/2"	37,00 x 5,00	SC-GK-24-2-	E	FF	
2"	50,00 x 5,00	SC-GK-32-3-	E	FF	
2 1/2"	62,00 x 5,00	SC-GK-40-4-	E	FF	
3"	75,00 x 5,00	SC-GK-48-5-	E	FF	
4"	100,00 x 5,00	SC-GK-72-7-	E	FF	

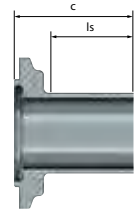
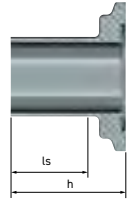
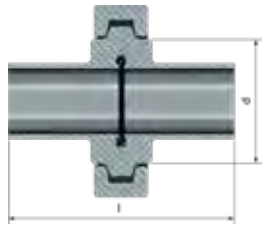
Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.
*Material is not part of the DIN 11864

BLIND FLANGE COLLAR (FEMALE)			safetron bf	safetron ep		
h	■	■	■	■		
mm			1.4435/316L		Code	
10,00	S	SE	-	-	SC-BFC-08	
10,00	S	SE	-	-	SC-BFC-12	
10,00	S	SE	-	-	SC-BFC-16	
10,00	S	SE	-	-	SC-BFC-24	
10,00	S	SE	-	-	SC-BFC-32	
10,00	S	SE	-	-	SC-BFC-40	
12,00	S	SE	-	-	SC-BFC-48	
14,00	S	SE	-	-	SC-BFC-64	

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

BLIND FLANGE GROOVE (MALE)			safetron bf	safetron ep		
c	■	■	■	■		
mm			1.4435/316L		Code	
11,50	S	SE	-	-	SC-BFG-08	
11,50	S	SE	-	-	SC-BFG-12	
11,50	S	SE	-	-	SC-BFG-16	
11,50	S	SE	-	-	SC-BFG-24	
11,50	S	SE	-	-	SC-BFG-32	
11,50	S	SE	-	-	SC-BFG-40	
13,50	S	SE	-	-	SC-BFG-48	
15,50	S	SE	-	-	SC-BFG-64	

Clamp Connection acc. to DIN 11864-3
Line A / Metric



Metric	TUBE DIN 11866		COMPLETE CONNECTION	
	d x s	l	d	
DN	mm	mm		
10	13,00 x 1,50	76,00	38,00	
15	19,00 x 1,50	76,00	44,00	
20	23,00 x 1,50	76,00	54,00	
25	29,00 x 1,50	77,00	63,00	
32	35,00 x 1,50	88,00	70,00	
40	41,00 x 1,50	88,00	78,00	
50	53,00 x 1,50	89,00	92,00	
65	70,00 x 2,00	113,00	112,00	
80	85,00 x 2,00	117,00	127,00	
100	104,00 x 2,00	120,00	148,00	

CLAMP COLLAR (FEMALE)		weldtron bf	weldtron ep	safetron bf	safetron ep	Code	
ls	h					1.4435/316L	
mm						mm	mm
26,0	38,0	W	WE	S	SE	-	SC-CC-10M
26,0	38,0	W	WE	S	SE	-	SC-CC-15M
26,0	38,0	W	WE	S	SE	-	SC-CC-20M
28,0	38,5	W	WE	S	SE	-	SC-CC-25M
30,0	44,0	W	WE	S	SE	-	SC-CC-32M
30,0	44,0	W	WE	S	SE	-	SC-CC-40M
30,0	44,5	W	WE	S	SE	-	SC-CC-50M
40,0	56,5	W	WE	S	SE	-	SC-CC-65M
40,0	58,5	W	WE	S	SE	-	SC-CC-80M
40,0	60,0	W	WE	S	SE	-	SC-CC-100M

CLAMPS		Code	
Size	Flange	CL-DP-WN	CL-DP-HN
mm	mm		
0	34,00	CL-DP-WN-1	CL-DP-HN-1
0	50,50	CL-DP-WN-0	CL-DP-HN-0
2	64,00	CL-DP-WN-2	CL-DP-HN-2
2	77,50	CL-DP-WN-3	CL-DP-HN-3
2	91,00	CL-DP-WN-4	CL-DP-HN-4
3	106,00	CL-DP-WN-5	CL-DP-HN-5
4	119,00	CL-DP-WN-6	CL-DP-HN-6
5	130,00	CL-DP-WN-7	CL-DP-HN-7
6	167,00	CL-DP-WN-8	CL-DP-HN-8
8	183,00	CL-DP-WN-9	CL-DP-HN-9

CLAMP GROOVE (MALE)		weldtron bf	weldtron ep	safetron bf	safetron ep	Code	
ls	h					1.4435/316L	Size
mm						mm	mm
27,00	39,00	W	WE	S	SE	-	SC-CG-10M
27,00	39,00	W	WE	S	SE	-	SC-CG-15M
26,00	38,00	W	WE	S	SE	-	SC-CG-20M
26,00	40,00	W	WE	S	SE	-	SC-CG-25M
32,00	47,00	W	WE	S	SE	-	SC-CG-32M
31,00	47,00	W	WE	S	SE	-	SC-CG-40M
30,00	48,00	W	WE	S	SE	-	SC-CG-50M
40,00	61,00	W	WE	S	SE	-	SC-CG-65M
40,00	61,00	W	WE	S	SE	-	SC-CG-80M
40,00	66,00	W	WE	S	SE	-	SC-CG-100M

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Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.



O-RING		Code	
d x s		EPDM	FPM/FEP*
DN	mm		
10	12,00 x 3,50	SC-GK-10M-0-	E FF
15	18,00 x 3,50	SC-GK-15M-0-	E FF
20	22,00 x 3,50	SC-GK-20M-0-	E FF
25	28,00 x 3,50	SC-GK-25M-2-	E FF
32	34,00 x 5,00	SC-GK-32M-2-	E FF
40	40,00 x 5,00	SC-GK-42M-2-	E FF
50	52,00 x 5,00	SC-GK-52M-3-	E FF
65	68,00 x 5,00	SC-GK-65M-5-	E FF
80	83,00 x 5,00	SC-GK-82M-6-	E FF
100	102,00 x 5,00	SC-GK-122M-7-	E FF

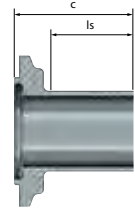
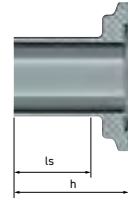
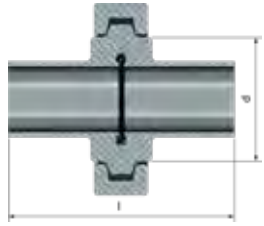
Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.
*Material is not part of the DIN 11864

BLIND CLAMP COLLAR (FEMALE)		safetron bf	safetron ep	Code	
h				1.4435/316L	
mm					
11,50	S	SE	-	SC-BCC-10M	
11,50	S	SE	-	SC-BCC-15M	
11,50	S	SE	-	SC-BCC-20M	
11,50	S	SE	-	SC-BCC-25M	
11,50	S	SE	-	SC-BCC-32M	
11,50	S	SE	-	SC-BCC-40M	
13,50	S	SE	-	SC-BCC-50M	
13,50	S	SE	-	SC-BCC-65M	
13,50	S	SE	-	SC-BCC-80M	
13,50	S	SE	-	SC-BCC-100M	

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

BLIND CLAMP GROOVE (MALE)		safetron bf	safetron ep	Code	
h				1.4435/316L	
mm					
13,00	S	SE	-	SC-BCG-10M	
13,00	S	SE	-	SC-BCG-15M	
13,00	S	SE	-	SC-BCG-20M	
13,00	S	SE	-	SC-BCG-25M	
13,00	S	SE	-	SC-BCG-32M	
13,00	S	SE	-	SC-BCG-40M	
15,00	S	SE	-	SC-BCG-50M	
15,00	S	SE	-	SC-BCG-65M	
15,00	S	SE	-	SC-BCG-80M	
15,00	S	SE	-	SC-BCG-100M	

Clamp Connection acc. to DIN 11864-3
Line B / ISO



ISO	TUBE DIN 11866			COMPLETE CONNECTION		CLAMP COLLAR (FEMALE)				CLAMPS		CLAMP GROOVE (MALE)											
	DN	mm	mm	ls	h	weldtron bf	weldtron ep	safetron bf	safetron ep	Size	Flange	ls	h										
		d x s	l	d	mm	1.4435/316L				mm	Code	mm	Code										
8	13,50 x 1,60	80,00	38,00	26,00	38,00	W	WE	S	SE	-	SC-CC-08I	0	34,00	CL-DP-WN-0	CL-DP-HN-0	27,00	39,00	W	WE	S	SE	-	SC-CG-10M
10	17,20 x 1,60	80,00	44,00	26,00	38,00	W	WE	S	SE	-	SC-CC-10I	0	50,50	CL-DP-WN-2	CL-DP-HN-2	27,00	39,00	W	WE	S	SE	-	SC-CG-15M
15	21,30 x 1,60	80,00	54,00	26,00	39,00	W	WE	S	SE	-	SC-CC-15I	0	64,00	CL-DP-WN-3	CL-DP-HN-3	26,00	38,00	W	WE	S	SE	-	SC-CG-20M
20	26,90 x 1,60	80,00	63,00	30,00	39,00	W	WE	S	SE	-	SC-CC-20I	2	77,50	CL-DP-WN-4	CL-DP-HN-4	26,00	40,00	W	WE	S	SE	-	SC-CG-25M
25	33,70 x 2,00	90,00	70,00	30,00	44,00	W	WE	S	SE	-	SC-CC-25I	2	91,00	CL-DP-WN-5	CL-DP-HN-5	32,00	47,00	W	WE	S	SE	-	SC-CG-32M
32	42,40 x 2,00	90,00	78,00	30,00	44,00	W	WE	S	SE	-	SC-CC-32I	3	106,00	CL-DP-WN-6	CL-DP-HN-6	31,00	47,00	W	WE	S	SE	-	SC-CG-40M
40	48,30 x 2,00	90,00	92,00	30,00	45,00	W	WE	S	SE	-	SC-CC-40I	3	119,00	CL-DP-WN-7	CL-DP-HN-7	30,00	48,00	W	WE	S	SE	-	SC-CG-50M
50	60,30 x 2,00	108,00	112,00	30,00	57,00	W	WE	S	SE	-	SC-CC-50I	5	130,00	CL-SP-WN-8	CL-DP-HN-8	40,00	61,00	W	WE	S	SE	-	SC-CG-65M
65	76,10 x 2,00	116,00	127,00	40,00	58,50	W	WE	S	SE	-	SC-CC-65I	6	167,00	CL-SP-WN-9	CL-DP-HN-9	40,00	61,00	W	WE	S	SE	-	SC-CG-80M
80	88,90 x 2,30	116,00	148,00	40,00	61,00	W	WE	S	SE	-	SC-CC-80I	7	183,00	CL-DP-HN-10		40,00	66,00	W	WE	S	SE	-	SC-CG-100M

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.



O-RING		EPDM		FPM/FEP*		MVQ/PFA*	
DN	mm	Code	EPDM	FPM/FEP*	MVQ/PFA*	DN	mm
8	12,00 x 3,50	SC-GK-08I-1-	E	FF	MP	8	12,00 x 3,50
10	16,00 x 3,50	SC-GK-10I-1-	E	FF	MP	10	16,00 x 3,50
15	20,00 x 3,50	SC-GK-15I-2-	E	FF	MP	15	20,00 x 3,50
20	26,00 x 3,50	SC-GK-20I-2-	E	FF	MP	20	26,00 x 3,50
25	32,00 x 5,00	SC-GK-25I-2-	E	FF	MP	25	32,00 x 5,00
32	40,50 x 5,00	SC-GK-32I-3-	E	FF	MP	32	40,50 x 5,00
40	46,50 x 5,00	SC-GK-40I-3-	E	FF	MP	40	46,50 x 5,00
50	58,50 x 5,00	SC-GK-50I-4-	E	FF	MP	50	58,50 x 5,00
65	73,50 x 5,00	SC-GK-65I-5-	E	FF	MP	65	73,50 x 5,00
80	86,50 x 5,00	SC-GK-80I-6-	E	FF	MP	80	86,50 x 5,00

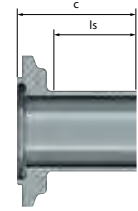
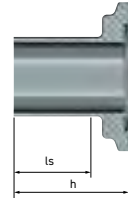
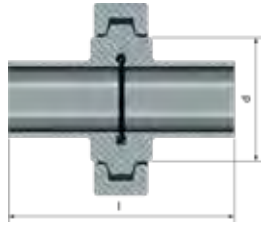
Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.
*Material is not part of the DIN 11864

BLIND CLAMP COLLAR (FEMALE)		safetron bf		safetron ep	
h	mm	1.4435/316L	Code	h	mm
11,50	11,50	S	SE - SC-BCC-08I	13,00	13,00
11,50	11,50	S	SE - SC-BCC-10I	13,00	13,00
11,50	11,50	S	SE - SC-BCC-15I	13,00	13,00
11,50	11,50	S	SE - SC-BCC-20I	13,00	13,00
11,50	11,50	S	SE - SC-BCC-25I	13,00	13,00
11,50	11,50	S	SE - SC-BCC-32I	13,00	13,00
11,50	11,50	S	SE - SC-BCC-40I	13,00	13,00
13,50	13,50	S	SE - SC-BCC-50I	15,00	15,00
13,50	13,50	S	SE - SC-BCC-65I	15,00	15,00
13,50	13,50	S	SE - SC-BCC-80I	15,00	15,00

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

BLIND CLAMP GROOVE (MALE)		safetron bf		safetron ep	
h	mm	1.4435/316L	Code	h	mm
13,00	13,00	S	SE - SC-BCG-08I	13,00	13,00
13,00	13,00	S	SE - SC-BCG-10I	13,00	13,00
13,00	13,00	S	SE - SC-BCG-15I	13,00	13,00
13,00	13,00	S	SE - SC-BCG-20I	13,00	13,00
13,00	13,00	S	SE - SC-BCG-25I	13,00	13,00
13,00	13,00	S	SE - SC-BCG-32I	13,00	13,00
13,00	13,00	S	SE - SC-BCG-40I	13,00	13,00
15,00	15,00	S	SE - SC-BCG-50I	15,00	15,00
15,00	15,00	S	SE - SC-BCG-65I	15,00	15,00
15,00	15,00	S	SE - SC-BCG-80I	15,00	15,00

Clamp Connection acc. to DIN 11864-3
Line C / Imperial



Imperial				CLAMP COLLAR (FEMALE)				CLAMPS				CLAMP GROOVE (MALE)									
TUBE DIN 11866		COMPLETE CONNECTION		ls	h	weldtron bf	weldtron ep	safetron bf	safetron ep	Size	Flange	ls	h	weldtron bf	weldtron ep	safetron bf	safetron ep				
d x s	l	d	1.4435/316L			Code	1.4435/316L	Code	1.4435/316L					Code							
Inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm				
1/2"	12,70 x 1,65	76,00	38,00	26,00	38,00	W	WE	S	SE	0	34,00	CL-DP-WN-0	CL-DP-HN-0	27,00	39,00	W	WE	S	SE	-	SC-CG-10M
3/4"	19,05 x 1,65	76,00	44,00	26,00	38,00	W	WE	S	SE	0	50,50	CL-DP-WN-2	CL-DP-HN-2	27,00	39,00	W	WE	S	SE	-	SC-CG-15M
1"	25,40 x 1,65	77,00	63,00	26,00	38,50	W	WE	S	SE	2	64,00	CL-DP-WN-3	CL-DP-HN-3	26,00	38,00	W	WE	S	SE	-	SC-CG-20M
1 1/2"	38,10 x 1,65	88,00	78,00	30,00	44,00	W	WE	S	SE	3	77,50	CL-DP-WN-4	CL-DP-HN-4	26,00	40,00	W	WE	S	SE	-	SC-CG-25M
2"	50,80 x 1,65	89,00	92,00	30,00	44,50	W	WE	S	SE	4	91,00	CL-DP-WN-5	CL-DP-HN-5	32,00	47,00	W	WE	S	SE	-	SC-CG-32M
2 1/2"	63,50 x 1,65	115,00	112,00	40,00	57,50	W	WE	S	SE	5	106,00	CL-DP-WN-6	CL-DP-HN-6	31,00	47,00	W	WE	S	SE	-	SC-CG-40M
3"	76,20 x 1,65	117,00	127,00	40,00	58,50	W	WE	S	SE	6	119,00	CL-DP-WN-7	CL-DP-HN-7	30,00	48,00	W	WE	S	SE	-	SC-CG-50M
4"	101,60 x 2,11	119,00	148,00	40,00	59,50	W	WE	S	SE	8	130,00	CL-DP-WN-8	CL-DP-HN-8	40,00	61,00	W	WE	S	SE	-	SC-CG-65M

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.



O-RING		DN	mm	Code	EPDM	FPM/FEP*
d x s						
1/2"	12,00 x 3,50			SC-GK-08-1-	E	FF
3/4"	18,00 x 3,50			SC-GK-12-1-	E	FF
1"	24,00 x 3,50			SC-GK-16-2-	E	FF
1 1/2"	37,00 x 5,00			SC-GK-24-2-	E	FF
2"	50,00 x 5,00			SC-GK-32-3-	E	FF
2 1/2"	62,00 x 5,00			SC-GK-40-4-	E	FF
3"	75,00 x 5,00			SC-GK-48-5-	E	FF
4"	100,00 x 5,00			SC-GK-64-7-	E	FF

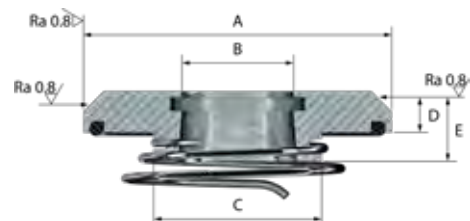
Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.
*Material is not part of the DIN 11864

BLIND CLAMP COLLAR (FEMALE)		h	safetron bf	safetron ep	Code
h					
11,50	S	SE	-	SC-BCC-08	
11,50	S	SE	-	SC-BCC-12	
11,50	S	SE	-	SC-BCC-16	
11,50	S	SE	-	SC-BCC-24	
13,50	S	SE	-	SC-BCC-32	
13,50	S	SE	-	SC-BCC-40	
13,50	S	SE	-	SC-BCC-48	
13,50	S	SE	-	SC-BCC-64	

Blue marked = Stock item Further dimensions and materials on request. Subject to alteration.

BLIND CLAMP GROOVE (MALE)		h	safetron bf	safetron ep	Code
h					
13,00	S	SE	-	SC-BCG-08	
13,00	S	SE	-	SC-BCG-12	
13,00	S	SE	-	SC-BCG-16	
13,00	S	SE	-	SC-BCG-24	
15,00	S	SE	-	SC-BCG-32	
15,00	S	SE	-	SC-BCG-40	
15,00	S	SE	-	SC-BCG-48	
15,00	S	SE	-	SC-BCG-64	

CleanShut
Wall and Ceiling Feedthroughs



METRIC

Size	OD Tube	A	B	C	D	E	Order Code				
DN	mm						Code		PVDF		
10	13,00	64,00	13,20	34,00	10,00	18,00	WFT	-	10M	-	PV
15	19,00	75,00	19,20	45,00	10,00	18,00	WFT	-	15M	-	PV
20	23,00	75,00	23,20	45,00	10,00	18,00	WFT	-	20M	-	PV
25	29,00	87,00	29,20	57,00	10,00	18,00	WFT	-	25M	-	PV
32	35,00	87,00	35,20	57,00	10,00	18,00	WFT	-	32M	-	PV
40	41,00	105,00	41,20	75,00	10,00	20,00	WFT	-	40M	-	PV
50	53,00	105,00	53,20	75,00	10,00	20,00	WFT	-	50M	-	PV
65	70,00	138,00	70,20	108,00	10,00	22,00	WFT	-	65M	-	PV
80	85,00	138,00	85,20	108,00	10,00	22,00	WFT	-	80M	-	PV
100	104,00	149,00	104,20	127,00	10,00	22,00	WFT	-	100M	-	PV

ISO

Size	OD Tube	A	B	C	D	E	Order Code				
mm	mm						Code		PVDF		
8	13,50	64,00	13,70	34,00	10,00	18,00	WFT	-	8I	-	PV
15	21,30	75,00	21,50	45,00	10,00	18,00	WFT	-	15I	-	PV
20	26,90	75,00	27,10	45,00	10,00	18,00	WFT	-	20I	-	PV
25	33,70	87,00	33,90	57,00	10,00	18,00	WFT	-	25I	-	PV
32	42,40	105,00	42,60	75,00	10,00	20,00	WFT	-	32I	-	PV
40	48,30	105,00	48,50	75,00	10,00	20,00	WFT	-	40I	-	PV
50	60,30	138,00	60,50	108,00	10,00	22,00	WFT	-	50I	-	PV
65	76,10	138,00	76,30	108,00	10,00	22,00	WFT	-	65I	-	PV
80	88,90	149,00	89,10	127,00	10,00	22,00	WFT	-	80I	-	PV

IMPERIAL

Size	OD Tube	A	B	C	D	E	Order Code				
Inch	mm							Code		PVDF	
1/2	12,70	64,00	12,90	34,00	10,00	18,00	WFT	-	08	-	PV
3/4	19,05	75,00	19,25	45,00	10,00	18,00	WFT	-	12	-	PV
1	25,40	75,00	25,60	45,00	10,00	18,00	WFT	-	16	-	PV
1 1/2	38,10	105,00	38,30	75,00	10,00	20,00	WFT	-	24	-	PV
2	50,80	105,00	51,00	75,00	10,00	20,00	WFT	-	32	-	PV
2 1/2	63,50	138,00	63,70	108,00	10,00	22,00	WFT	-	40	-	PV
3	76,20	138,00	76,40	108,00	10,00	22,00	WFT	-	48	-	PV
4	101,60	149,00	101,80	127,00	10,00	22,00	WFT	-	64	-	PV

Blue marked = Stock item
Further dimensions and materials on request. Subject to alteration.

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Eccentric T-Pieces

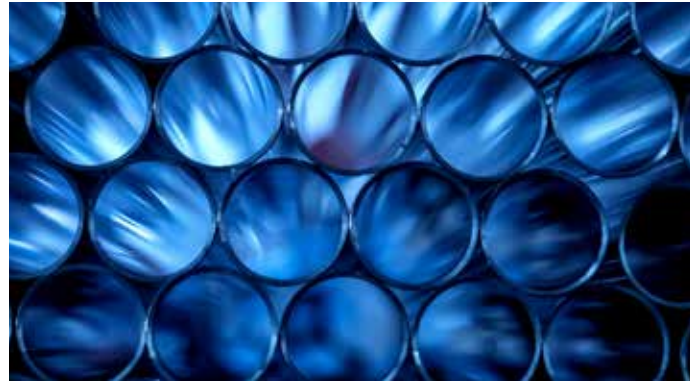


Thermowells

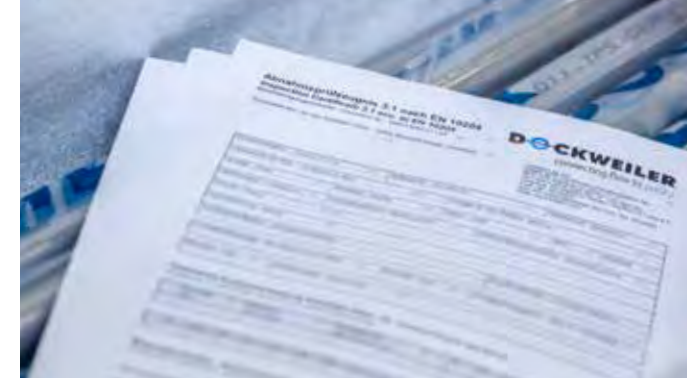


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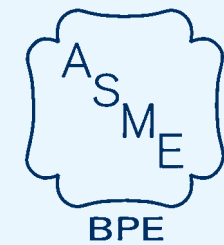
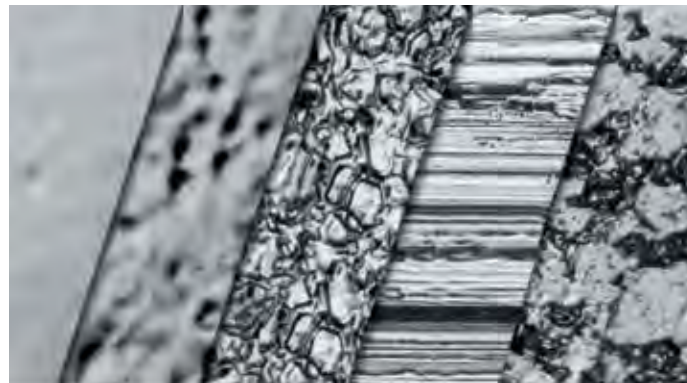


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