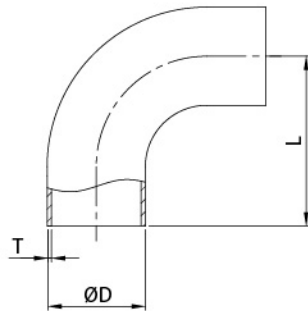
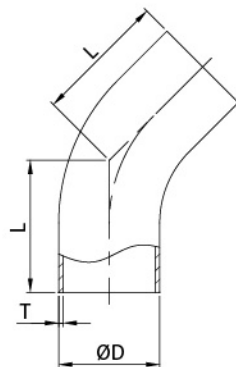


BPE Fittings



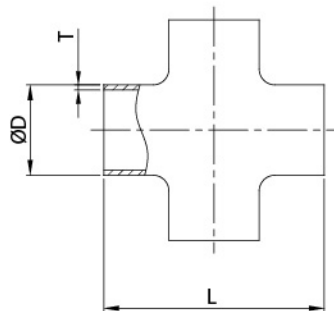
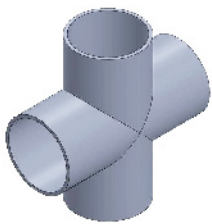
DT-4.1.1-1 LONG WELD 90° ELBOW (DT-7)

SIZE	ØD	L	T
1/2"	12.7	76.2	1.65
3/4"	19.05	76.2	1.65
1"	25.4	76.2	1.65
1.5"	38.1	95.25	1.65
2"	50.8	120.65	1.65
2.5"	63.5	139.7	1.65
3"	76.2	158.75	1.65
4"	101.6	203.2	2.11
6"	152.4	292.1	2.77



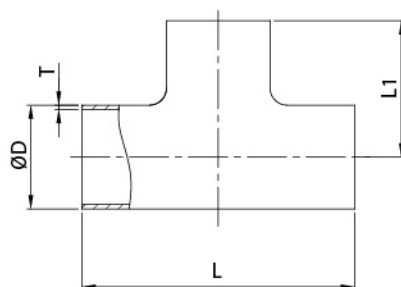
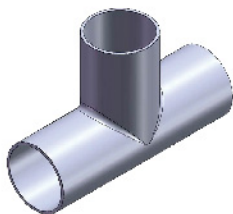
DT-4.1.1-4 LONG 45° ELBOW (DT-8)

SIZE	ØD	L	T
1/2"	12.7	57.15	1.65
3/4"	19.05	57.15	1.65
1"	25.4	57.15	1.65
1.5"	38.1	63.5	1.65
2"	50.8	76.2	1.65
2.5"	63.5	85.73	1.65
3"	76.2	92.08	1.65
4"	101.6	114.3	2.11
6"	152.4	158.75	2.77



DT-4.1.2-1C CROSS (DT-9)

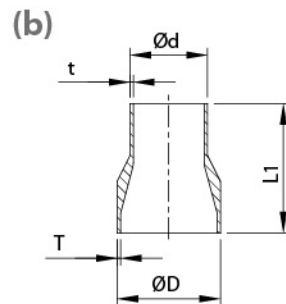
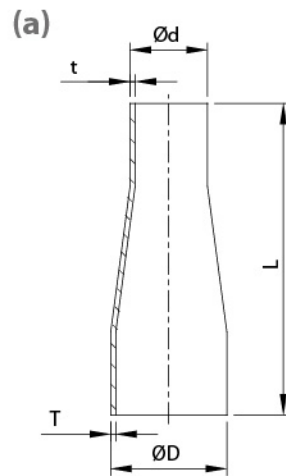
SIZE	ØD	L	T
1/2"	12.7	95.26	1.65
3/4"	19.05	101.6	1.65
1"	25.4	107.96	1.65
1.5"	38.1	120.66	1.65
2"	50.8	146.06	1.65
2.5"	63.5	158.76	1.65
3"	76.2	171.46	1.65
4"	101.6	209.56	2.11
6"	152.4	285.76	2.77



DT-4.1.2-1T TEE (DT-9)

SIZE	ØD	L	L1	T
1/2"	12.7	95.26	47.63	1.65
3/4"	19.05	101.6	50.8	1.65
1"	25.4	107.96	53.98	1.65
1.5"	38.1	120.66	60.33	1.65
2"	50.8	146.06	73.03	1.65
2.5"	63.5	158.76	79.38	1.65
3"	76.2	171.46	85.73	1.65
4"	101.6	209.56	104.78	2.11
6"	152.4	285.76	142.88	2.77

BPE Fittings



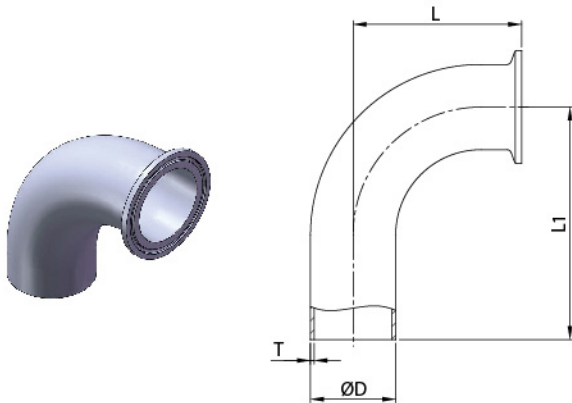
DT-4.1.3-1 CONCENTRIC REDUCER (DT11)

SIZE	ØD	Ød	L	L1	T	t
3/4"×1/2"	19.05	12.7	101.6	53.93	1.65	1.65
1.0"×1/2"	25.4	12.7	114.3	63.5	1.65	1.65
1.0"×3/4"	25.4	19.05	101.6	53.93	1.65	1.65
1.5"×1/2"	38.1	12.7	139.7	76.2	1.65	1.65
1.5"×3/4"	38.1	19.05	127	76.2	1.65	1.65
1.5"×1.0"	38.1	25.4	127	63.5	1.65	1.65
2.0"×1/2"	50.8	12.7	196.9	85.73	1.65	1.65
2.0"×3/4"	50.8	19.05	184.2	85.73	1.65	1.65
2.0"×1.0"	50.8	25.4	184.2	85.73	1.65	1.65
2.0"×1.5"	50.8	38.1	133.4	63.5	1.65	1.65
2.5"×1/2"	63.5	12.7	247.7	—	1.65	1.65
2.5"×3/4"	63.5	19.05	235	—	1.65	1.65
2.5"×1.0"	63.5	25.4	235	85.73	1.65	1.65
2.5"×1.5"	63.5	38.1	184.2	85.73	1.65	1.65
2.5"×2.0"	63.5	50.8	139.7	63.5	1.65	1.65
3.0"×1.0"	76.2	25.4	285.8	107.95	1.65	1.65
3.0"×1.5"	76.2	38.1	235	107.95	1.65	1.65
3.0"×2.0"	76.2	50.8	190.5	85.73	1.65	1.65
3.0"×2.5"	76.2	63.5	139.7	66.68	1.65	1.65
4.0"×1.0"	101.6	25.4	393.7	—	2.11	1.65
4.0"×1.5"	101.6	38.1	342.9	—	2.11	1.65
4.0"×2.0"	101.6	50.8	298.5	130.18	2.11	1.65
4.0"×2.5"	101.6	63.5	247.7	107.95	2.11	1.65
4.0"×3.0"	101.6	76.2	196.9	98.43	2.11	1.65
6.0"×3.0"	152.4	76.2	—	184.15	2.77	1.65
6.0"×4.0"	152.4	101.6	254	142.88	2.77	2.11

DT-4.1.3-1 ECCENTRIC REDUCER (DT11)

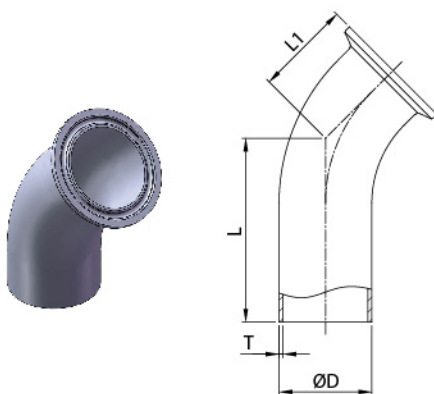
SIZE	ØD	Ød	L	L1	T	t
3/4"×1/2"	19.05	12.7	101.6	53.93	1.65	1.65
1.0"×1/2"	25.4	12.7	114.3	63.5	1.65	1.65
1.0"×3/4"	25.4	19.05	101.6	53.93	1.65	1.65
1.5"×1/2"	38.1	12.7	139.7	76.2	1.65	1.65
1.5"×3/4"	38.1	19.05	127	76.2	1.65	1.65
1.5"×1.0"	38.1	25.4	127	63.5	1.65	1.65
2.0"×1/2"	50.8	12.7	196.9	85.73	1.65	1.65
2.0"×3/4"	50.8	19.05	184.2	85.73	1.65	1.65
2.0"×1.0"	50.8	25.4	184.2	85.73	1.65	1.65
2.0"×1.5"	50.8	38.1	133.4	63.5	1.65	1.65
2.5"×1/2"	63.5	12.7	247.7	—	1.65	1.65
2.5"×3/4"	63.5	19.05	235	—	1.65	1.65
2.5"×1.0"	63.5	25.4	235	85.73	1.65	1.65
2.5"×1.5"	63.5	38.1	184.2	85.73	1.65	1.65
2.5"×2.0"	63.5	50.8	139.7	63.5	1.65	1.65
3.0"×1.0"	76.2	25.4	285.8	107.95	1.65	1.65
3.0"×1.5"	76.2	38.1	235	107.95	1.65	1.65
3.0"×2.0"	76.2	50.8	190.5	85.73	1.65	1.65
3.0"×2.5"	76.2	63.5	139.7	66.68	1.65	1.65
4.0"×1.0"	101.6	25.4	393.7	—	2.11	1.65
4.0"×1.5"	101.6	38.1	342.9	—	2.11	1.65
4.0"×2.0"	101.6	50.8	298.5	130.18	2.11	1.65
4.0"×2.5"	101.6	63.5	247.7	107.95	2.11	1.65
4.0"×3.0"	101.6	76.2	196.9	98.43	2.11	1.65
6.0"×3.0"	152.4	76.2	—	184.15	2.77	1.65
6.0"×4.0"	152.4	101.6	254	142.88	2.77	2.11

BPE Fittings



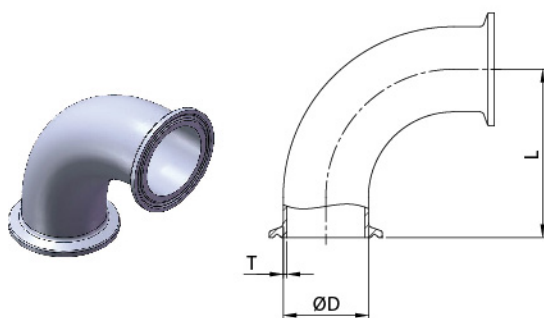
DT-4.1.1-2 90° CLAMP/WELD ELBOW (DT-12)

SIZE	ØD	L	L1	T
1/2"	12.7	41.28	76.2	1.65
3/4"	19.05	41.28	76.2	1.65
1"	25.4	50.8	76.2	1.65
1.5"	38.1	69.85	95.25	1.65
2"	50.8	88.9	120.65	1.65
2.5"	63.5	107.95	139.7	1.65
3"	76.2	127	158.75	1.65
4"	101.6	168.28	203.2	2.11
6"	152.4	266.7	292.1	2.77



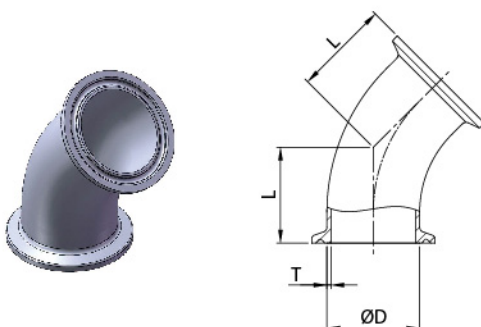
DT-4.1.1-5 45° CLAMP/WELD ELBOW (DT-13)

SIZE	ØD	L	L1	T
1/2"	12.7	57.15	25.4	1.65
3/4"	19.05	57.15	25.4	1.65
1"	25.4	57.15	28.58	1.65
1.5"	38.1	63.5	36.53	1.65
2"	50.8	76.2	44.45	1.65
2.5"	63.5	85.73	52.4	1.65
3"	76.2	92.08	60.33	1.65
4"	101.6	114.3	79.38	2.11
6"	152.4	158.75	133.35	2.77



DT-4.1.1-3 90° CLAMP ELBOW (DT-16)

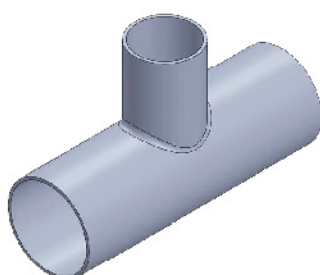
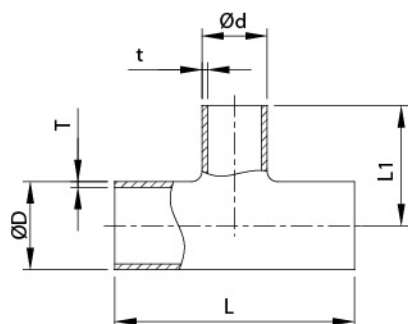
SIZE	ØD	L	T
1/2"	12.7	41.28	1.65
3/4"	19.05	41.28	1.65
1"	25.4	50.8	1.65
1.5"	38.1	69.85	1.65
2"	50.8	88.9	1.65
2.5"	63.5	107.95	1.65
3"	76.2	127	1.65
4"	101.6	168.28	2.11
6"	152.4	266.7	2.77



DT-4.1.1-6 45° CLAMP ELBOW (DT-17)

SIZE	ØD	L	T
1/2"	12.7	25.4	1.65
3/4"	19.05	25.4	1.65
1"	25.4	28.58	1.65
1.5"	38.1	36.5	1.65
2"	50.8	44.45	1.65
2.5"	63.5	52.4	1.65
3"	76.2	60.33	1.65
4"	101.6	79.38	2.11
6"	152.4	133.35	2.77

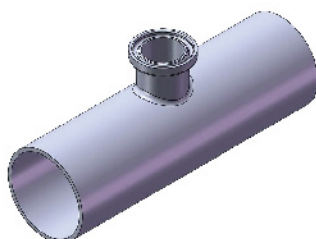
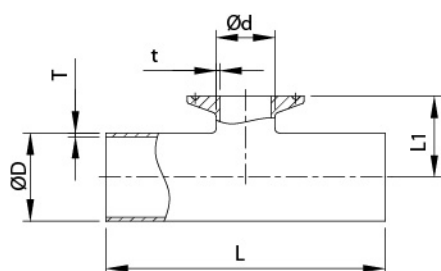
BPE Fittings



DT-4.1.2-6 REDUCING TEE (DT-10)

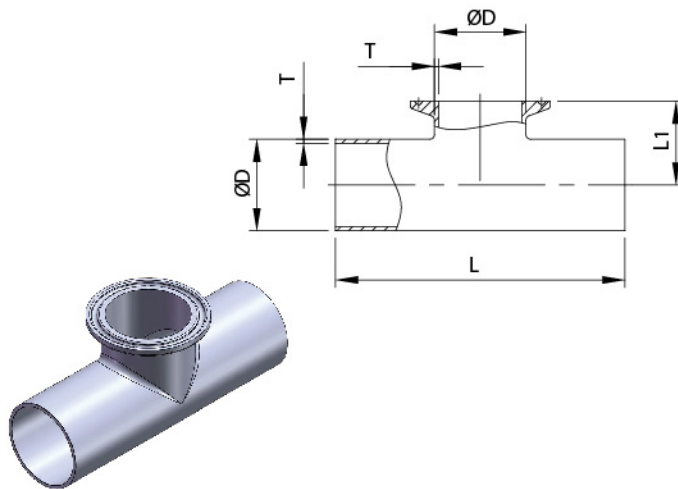
SIZE	ØD	Ød	L	L1	T	t
3/4"×1/2"	19.05	12.7	101.6	50.8	1.65	1.65
1"×1/2"	25.4	12.7	107.96	53.98	1.65	1.65
1"×3/4"	25.4	19.05	107.96	53.98	1.65	1.65
1.5"×1/2"	38.1	12.7	120.66	60.33	1.65	1.65
1.5"×3/4"	38.1	19.05	120.66	60.33	1.65	1.65
1.5"×1"	38.1	25.4	120.66	60.33	1.65	1.65
2"×1/2"	50.8	12.7	146.06	66.68	1.65	1.65
2"×3/4"	50.8	19.05	146.06	66.68	1.65	1.65
2"×1"	50.8	25.4	146.06	66.68	1.65	1.65
2"×1.5"	50.8	38.1	146.06	66.68	1.65	1.65
2.5"×1/2"	63.5	12.7	158.76	73.03	1.65	1.65
2.5"×3/4"	63.5	19.05	158.76	73.03	1.65	1.65
2.5"×1"	63.5	25.4	158.76	73.03	1.65	1.65
2.5"×1.5"	63.5	38.1	158.76	73.03	1.65	1.65
2.5"×2"	63.5	50.8	158.76	73.03	1.65	1.65
3"×1/2"	76.2	12.7	171.46	79.38	1.65	1.65
3"×3/4"	76.2	19.05	171.46	79.38	1.65	1.65
3"×1"	76.2	25.4	171.46	79.38	1.65	1.65
3"×1.5"	76.2	38.1	171.46	79.38	1.65	1.65
3"×2"	76.2	50.8	171.46	79.38	1.65	1.65
3"×2.5"	76.2	63.5	171.46	79.38	1.65	1.65
4"×1/2"	101.6	12.7	209.56	92.08	2.11	1.65
4"×3/4"	101.6	19.05	209.56	92.08	2.11	1.65
4"×1"	101.6	25.4	209.56	92.08	2.11	1.65
4"×1.5"	101.6	38.1	209.56	92.08	2.11	1.65
4"×2"	101.6	50.8	209.56	98.43	2.11	1.65
4"×2.5"	101.6	63.5	209.56	98.43	2.11	1.65
4"×3"	101.6	76.2	209.56	98.43	2.11	1.65
6"×3"	152.4	76.2	285.76	123.83	2.77	1.65
6"×4"	152.4	101.6	285.76	130.18	2.77	2.11

DT-4.1.2-7 SHORT OUTLET W/C REDUCING TEE (DT-14)



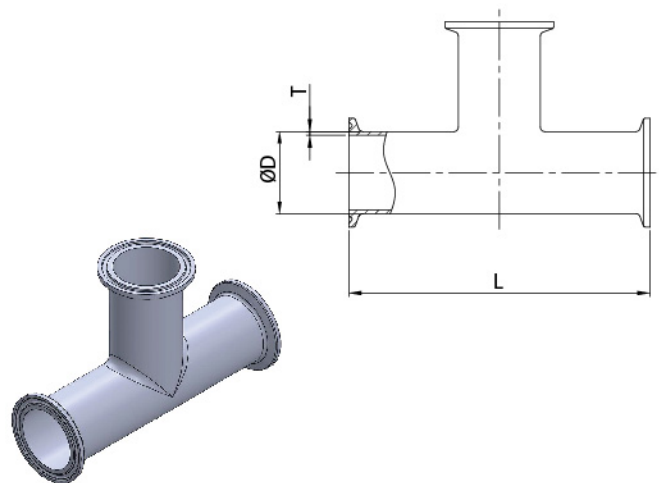
SIZE	ØD	Ød	L	L1	T	t
3/4"×1/2"	19.05	12.7	101.6	25.4	1.65	1.65
1"×1/2"	25.4	12.7	107.96	28.58	1.65	1.65
1"×3/4"	25.4	19.05	107.96	28.58	1.65	1.65
1.5"×1/2"	38.1	12.7	120.66	34.93	1.65	1.65
1.5"×3/4"	38.1	19.05	120.66	34.93	1.65	1.65
1.5"×1"	38.1	25.4	120.66	34.93	1.65	1.65
2"×1/2"	50.8	12.7	146.06	41.28	1.65	1.65
2"×3/4"	50.8	19.05	146.06	41.28	1.65	1.65
2"×1"	50.8	25.4	146.06	41.28	1.65	1.65
2"×1.5"	50.8	38.1	146.06	41.28	1.65	1.65
2.5"×1/2"	63.5	12.7	158.76	47.63	1.65	1.65
2.5"×3/4"	63.5	19.05	158.76	47.63	1.65	1.65
2.5"×1"	63.5	25.4	158.76	47.63	1.65	1.65
2.5"×1.5"	63.5	38.1	158.76	47.63	1.65	1.65
2.5"×2"	63.5	50.8	158.76	47.63	1.65	1.65
3"×1/2"	76.2	12.7	171.46	53.98	1.65	1.65
3"×3/4"	76.2	19.05	171.46	53.98	1.65	1.65
3"×1"	76.2	25.4	171.46	53.98	1.65	1.65
3"×1.5"	76.2	38.1	171.46	53.98	1.65	1.65
3"×2"	76.2	50.8	171.46	53.98	1.65	1.65
3"×2.5"	76.2	63.5	171.46	53.98	1.65	1.65
4"×1/2"	101.6	12.7	209.56	66.68	2.11	1.65
4"×3/4"	101.6	19.05	209.56	66.68	2.11	1.65
4"×1"	101.6	25.4	209.56	66.68	2.11	1.65
4"×1.5"	101.6	38.1	209.56	66.68	2.11	1.65
4"×2"	101.6	50.8	209.56	66.68	2.11	1.65
4"×2.5"	101.6	63.5	209.56	66.68	2.11	1.65
4"×3"	101.6	76.2	209.56	66.68	2.11	1.65
6"×1/2"	152.4	12.7	285.76	92.08	2.77	1.65
6"×3/4"	152.4	19.05	285.76	92.08	2.77	1.65
6"×1"	152.4	25.4	285.76	92.08	2.77	1.65
6"×1.5"	152.4	38.1	285.76	92.08	2.77	1.65
6"×2"	152.4	50.8	285.76	92.08	2.77	1.65
6"×2.5"	152.4	63.5	285.76	92.08	2.77	1.65
6"×3"	152.4	76.2	285.76	92.08	2.77	1.65
6"×4"	152.4	101.6	285.76	92.25	2.77	2.11

BPE Fittings



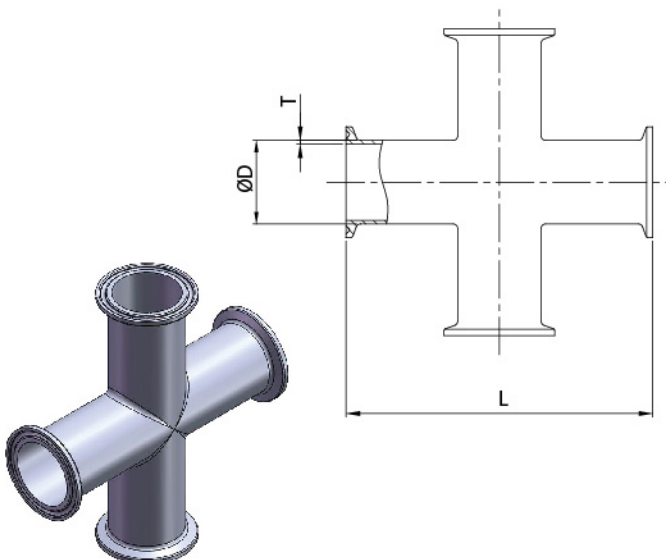
DT-4.1.2-2 EQUAL OUTLET WELD/CLAMP TEE (DT-15)

SIZE	ØD	L	L1	T
1/2"	12.7	95.26	25.4	1.65
3/4"	19.05	101.6	28.58	1.65
1"	25.4	107.96	28.59	1.65
1.5"	38.1	120.66	34.39	1.65
2"	50.8	146.06	41.28	1.65
2.5"	63.5	158.76	47.63	1.65
3"	76.2	171.46	53.98	1.65
4"	101.6	209.56	69.85	2.11
6"	152.4	285.76	117.48	2.77



DT-4.1.2-4T CLAMP TEE (DT-18)

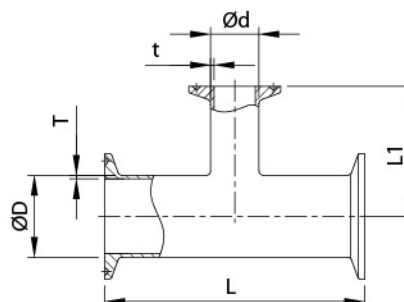
SIZE	ØD	L	T
1/2"	12.7	120.66	1.65
3/4"	19.05	127	1.65
1"	25.4	133.36	1.65
1.5"	38.1	146.06	1.65
2"	50.8	171.46	1.65
2.5"	63.5	184.16	1.65
3"	76.2	196.86	1.65
4"	101.6	241.3	2.11
6"	152.4	361.96	2.77



DT-4.1.2-4C CLAMP CROSS (DT-18)

SIZE	ØD	L	T
1/2"	12.7	120.66	1.65
3/4"	19.05	127	1.65
1"	25.4	133.36	1.65
1.5"	38.1	146.06	1.65
2"	50.8	171.46	1.65
2.5"	63.5	184.16	1.65
3"	76.2	196.86	1.65
4"	101.6	241.3	2.11
6"	152.4	361.96	2.77

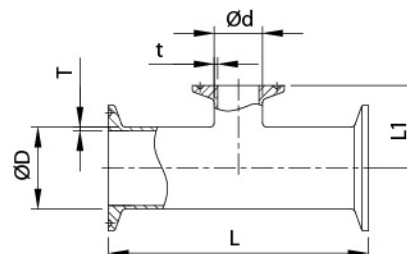
BPE Fittings



DT-4.1.2-8 REDUCING TEE CLAMP END (DT-19)

SIZE	ØD	Ød	L	L1	T	t
3/4"×1/2"	19.05	12.7	127	63.5	1.65	1.65
1.0"×1/2"	25.4	12.7	133.36	66.68	1.65	1.65
1.0"×3/4"	25.4	19.05	133.36	66.68	1.65	1.65
1.5"×1/2"	38.1	12.7	146.06	73.03	1.65	1.65
1.5"×3/4"	38.1	19.05	146.06	73.03	1.65	1.65
1.5"×1.0"	38.1	25.4	146.06	73.03	1.65	1.65
2.0"×1/2"	50.8	12.7	171.46	79.38	1.65	1.65
2.0"×3/4"	50.8	19.05	171.46	79.38	1.65	1.65
2.0"×1.0"	50.8	25.4	171.46	79.38	1.65	1.65
2.0"×1.5"	50.8	38.1	171.46	79.38	1.65	1.65
2.5"×1/2"	63.5	12.7	184.16	85.73	1.65	1.65
2.5"×3/4"	63.5	19.05	184.16	85.73	1.65	1.65
2.5"×1.0"	63.5	25.4	184.16	85.73	1.65	1.65
2.5"×1.5"	63.5	38.1	184.16	85.73	1.65	1.65
2.5"×2.0"	63.5	50.8	184.16	85.73	1.65	1.65

SIZE	ØD	Ød	L	L1	T	t
3.0"×1/2"	76.2	12.7	196.86	92.08	1.65	1.65
3.0"×3/4"	76.2	19.05	196.86	92.08	1.65	1.65
3.0"×1.0"	76.2	25.4	196.86	92.08	1.65	1.65
3.0"×1.5"	76.2	38.1	196.86	92.08	1.65	1.65
3.0"×2.0"	76.2	50.8	196.86	92.08	1.65	1.65
3.0"×2.5"	76.2	63.5	196.86	92.08	1.65	1.65
4.0"×1/2"	101.6	12.7	241.3	104.78	2.11	1.65
4.0"×3/4"	101.6	19.05	241.3	104.78	2.11	1.65
4.0"×1.0"	101.6	25.4	241.3	104.78	2.11	1.65
4.0"×1.5"	101.6	38.1	241.3	104.78	2.11	1.65
4.0"×2.0"	101.6	50.8	241.3	111.13	2.11	1.65
4.0"×2.5"	101.6	63.5	241.3	111.13	2.11	1.65
4.0"×3.0"	101.6	76.2	241.3	111.13	2.11	1.65
6.0"×3.0"	152.4	76.2	361.96	136.53	2.77	1.65
6.0"×4.0"	152.4	101.6	361.96	146.05	2.77	2.11



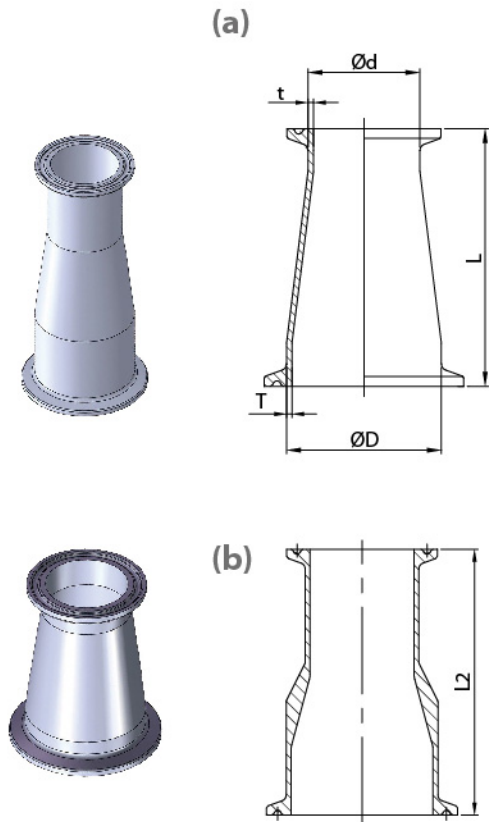
DT-4.1.2-9 REDUCING TEE CLAMP END (DT-20)

SIZE	ØD	Ød	L	L1	T	t
3/4"×1/2"	19.05	12.7	127	25.4	1.65	1.65
1.0"×1/2"	25.4	12.7	133.36	28.58	1.65	1.65
1.0"×3/4"	25.4	19.05	133.36	28.58	1.65	1.65
1.5"×1/2"	38.1	12.7	146.06	34.93	1.65	1.65
1.5"×3/4"	38.1	19.05	146.06	34.93	1.65	1.65
1.5"×1.0"	38.1	25.4	146.06	34.93	1.65	1.65
2.0"×1/2"	50.8	12.7	171.46	41.28	1.65	1.65
2.0"×3/4"	50.8	19.05	171.46	41.28	1.65	1.65
2.0"×1.0"	50.8	25.4	171.46	41.28	1.65	1.65
2.0"×1.5"	50.8	38.1	171.46	41.28	1.65	1.65
2.5"×1/2"	63.5	12.7	184.16	47.63	1.65	1.65
2.5"×3/4"	63.5	19.05	184.16	47.63	1.65	1.65
2.5"×1.0"	63.5	25.4	184.16	47.63	1.65	1.65
2.5"×1.5"	63.5	38.1	184.16	47.63	1.65	1.65
2.5"×2.0"	63.5	50.8	184.16	47.63	1.65	1.65
3.0"×1/2"	76.2	12.7	196.86	53.98	1.65	1.65
3.0"×3/4"	76.2	19.05	196.86	53.98	1.65	1.65
3.0"×1.0"	76.2	25.4	196.86	53.98	1.65	1.65

SIZE	ØD	Ød	L	L1	T	t
3.0"×1.5"	76.2	38.1	196.86	53.98	1.65	1.65
3.0"×2.0"	76.2	50.8	196.86	53.98	1.65	1.65
3.0"×2.5"	76.2	63.5	196.86	53.98	1.65	1.65
4.0"×1/2"	101.6	12.7	241.3	66.68	2.11	1.65
4.0"×3/4"	101.6	19.05	241.3	66.68	2.11	1.65
4.0"×1.0"	101.6	25.4	241.3	66.68	2.11	1.65
4.0"×1.5"	101.6	38.1	241.3	66.68	2.11	1.65
4.0"×2.0"	101.6	50.8	241.3	66.68	2.11	1.65
4.0"×2.5"	101.6	63.5	241.3	66.68	2.11	1.65
4.0"×3.0"	101.6	76.2	241.3	66.68	2.11	1.65
6.0"×1/2"	152.4	12.7	361.96	92.08	2.77	1.65
6.0"×3/4"	152.4	19.05	361.96	92.08	2.77	1.65
6.0"×1.0"	152.4	25.4	361.96	92.08	2.77	1.65
6.0"×1.5"	152.4	38.1	361.96	92.08	2.77	1.65
6.0"×2.0"	152.4	50.8	361.96	92.08	2.77	1.65
6.0"×2.5"	152.4	63.5	361.96	92.08	2.77	1.65
6.0"×3.0"	152.4	76.2	361.96	92.08	2.77	1.65
6.0"×4.0"	152.4	101.6	361.96	95.25	2.77	2.11

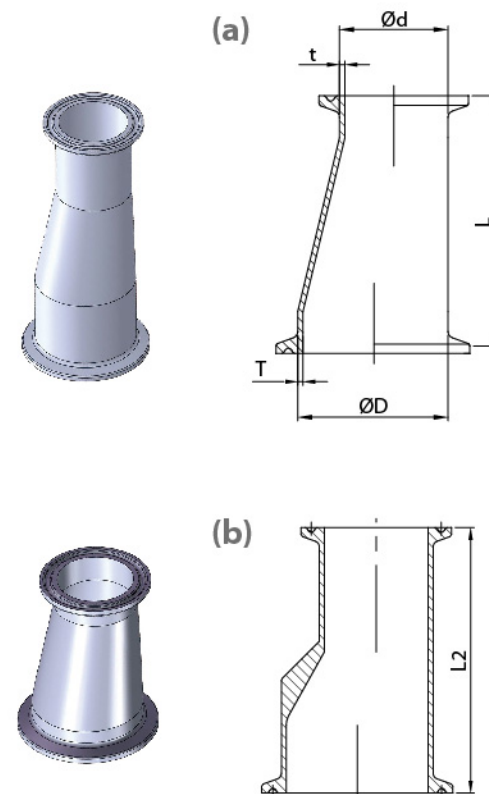
BPE Fittings

DT-4.1.3-3 CLAMP CONCENTRIC REDUCER (DT-21)



SIZE	ØD	Ød	L	T	t	L2
3/4"×1/2"	19.05	12.7	50.8	1.65	1.65	79.38
1"×1/2"	25.4	12.7	63.5	1.65	1.65	88.9
1"×3/4"	25.4	19.05	50.8	1.65	1.65	79.38
1.5"×1/2"	38.1	12.7	88.9	1.65	1.65	101.6
1.5"×3/4"	38.1	19.05	76.2	1.65	1.65	101.6
1.5"×1"	38.1	25.4	76.2	1.65	1.65	88.9
2"×1/2"	50.8	12.7	139.7	1.65	1.65	111.13
2"×3/4"	50.8	19.05	127	1.65	1.65	111.13
2"×1"	50.8	25.4	127	1.65	1.65	111.13
2"×1.5"	50.8	38.1	76.2	1.65	1.65	88.9
2.5"×1/2"	63.5	12.7	190.5	1.65	1.65	—
2.5"×3/4"	63.5	19.05	177.8	1.65	1.65	—
2.5"×1"	63.5	25.4	177.8	1.65	1.65	111.13
2.5"×1.5"	63.5	38.1	127	1.65	1.65	111.13
2.5"×2"	63.5	50.8	76.2	1.65	1.65	88.9
3"×1"	76.2	25.4	288.6	1.65	1.65	133.35
3"×1.5"	76.2	38.1	117.8	1.65	1.65	133.35
3"×2"	76.2	50.8	127	1.65	1.65	111.13
3"×2.5"	76.2	63.5	76.2	1.65	1.65	92.08
4"×1"	101.6	25.4	333.4	2.11	1.65	—
4"×1.5"	101.6	38.1	282.6	2.11	1.65	—
4"×2"	101.6	50.8	231.8	2.11	1.65	158.75
4"×2.5"	101.6	63.5	181	2.11	1.65	136.53
4"×3"	101.6	76.2	130.2	2.11	2.1	127
6"×3"	152.4	76.2	—	2.77	1.65	215.9
6"×4"	152.4	101.6	193.7	2.77	2.11	177.8

DT-4.1.3-3 CLAMP ECCENTRIC REDUCER (DT-21)

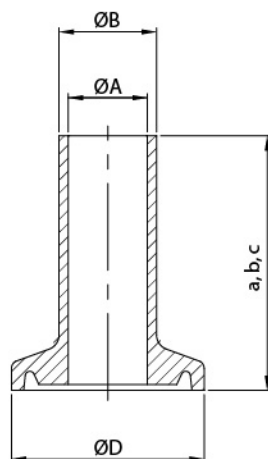
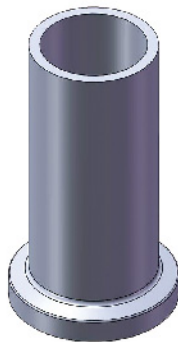


SIZE	ØD	Ød	L	T	t	L2
3/4"×1/2"	19.05	12.7	50.8	1.65	1.65	79.38
1"×1/2"	25.4	12.7	63.5	1.65	1.65	88.9
1"×3/4"	25.4	19.05	50.8	1.65	1.65	79.38
1.5"×1/2"	38.1	12.7	88.9	1.65	1.65	101.6
1.5"×3/4"	38.1	19.05	76.2	1.65	1.65	101.6
1.5"×1"	38.1	25.4	76.2	1.65	1.65	88.9
2"×1/2"	50.8	12.7	139.7	1.65	1.65	111.13
2"×3/4"	50.8	19.05	127	1.65	1.65	111.13
2"×1"	50.8	25.4	127	1.65	1.65	111.13
2"×1.5"	50.8	38.1	76.2	1.65	1.65	88.9
2.5"×1/2"	63.5	12.7	190.5	1.65	1.65	—
2.5"×3/4"	63.5	19.05	177.8	1.65	1.65	—
2.5"×1"	63.5	25.4	177.8	1.65	1.65	111.13
2.5"×1.5"	63.5	38.1	127	1.65	1.65	111.13
2.5"×2"	63.5	50.8	76.2	1.65	1.65	88.9
3"×1"	76.2	25.4	288.6	1.65	1.65	133.35
3"×1.5"	76.2	38.1	117.8	1.65	1.65	133.35
3"×2"	76.2	50.8	127	1.65	1.65	111.13
3"×2.5"	76.2	63.5	76.2	1.65	1.65	92.08
4"×1"	101.6	25.4	333.4	2.11	1.65	—
4"×1.5"	101.6	38.1	282.6	2.11	1.65	—
4"×2"	101.6	50.8	231.8	2.11	1.65	158.75
4"×2.5"	101.6	63.5	181	2.11	1.65	136.53
4"×3"	101.6	76.2	130.2	2.11	2.11	127
6"×3"	152.4	76.2	—	2.77	1.65	215.9
6"×4"	152.4	101.6	193.7	2.77	2.11	177.8

BPE Fittings

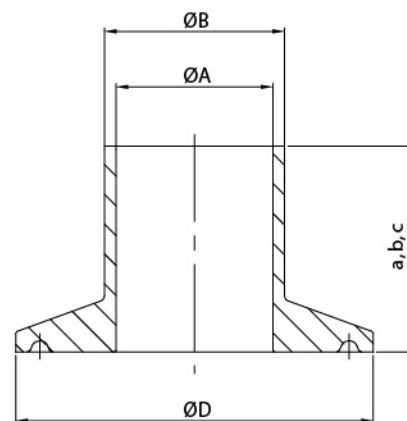
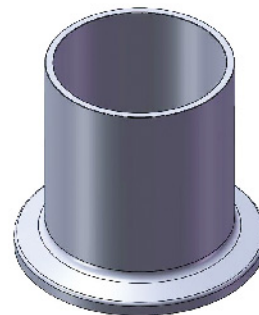
(Type A)

1/2"~1"



(Type B)

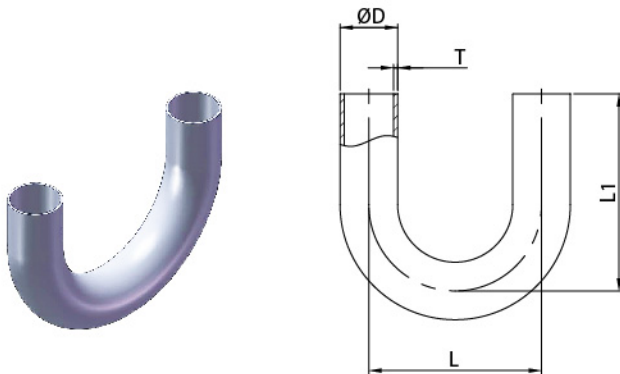
1"~6"



DT-4.1.4-1WELD FERRULE (DT-22)

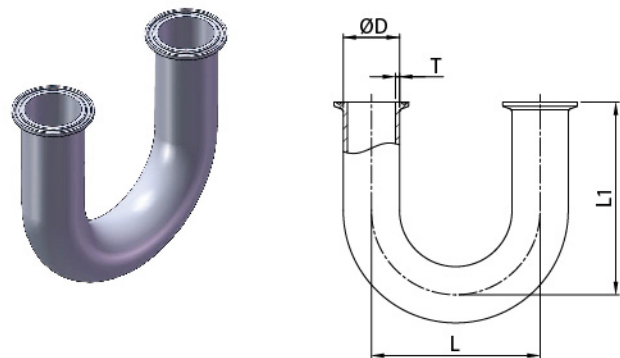
TYPE	SIZE	ØA	ØB	ØD	a	b	c
A	1/4"	4.57	6.35	25	44.45	28.58	12.7
	3/8"	7.75	9.53	25	44.45	28.58	12.7
	1/2"	9.4	12.7	25	44.45	28.58	12.7
	3/4"	15.75	19.05	25	44.45	28.58	12.7
	1.0"	22.1	25.4	34	44.45	28.58	12.7
B	1.0"	22.1	25.4	50.39	44.45	28.58	12.7
	1.5"	34.8	38.1	50.39	44.45	28.58	12.7
	2.0"	47.5	50.8	63.91	57.15	28.58	12.7
	2.5"	60.2	63.5	77.39	57.15	28.58	12.7
	3.0"	72.9	76.2	90.91	57.15	28.58	12.7
	4.0"	97.38	101.6	118.92	57.15	28.58	15.88
	6.0"	146.86	152.4	166.88	76.2	38.1	19.05

BPE Fittings



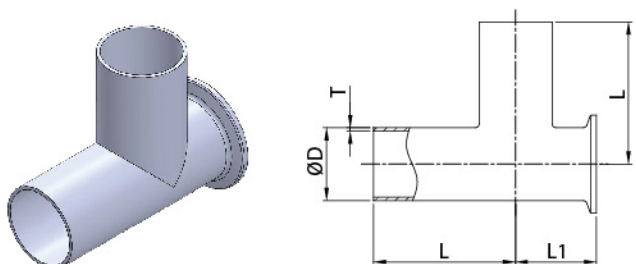
DT-4.1.1-7 180° WELD ELBOW (DT-23)

SIZE	ØD	L	L1	T
1/2"	12.7	114.3	76.2	1.65
3/4"	19.05	114.3	76.2	1.65
1"	25.4	76.2	76.2	1.65
1.5"	38.1	114.3	114.3	1.65
2"	50.8	152.4	127	1.65
2.5"	63.5	190.5	146.05	1.65
3"	76.2	228.6	165.1	1.65
4"	101.6	304.8	215.9	2.11
6"	152.4	457.2	292.1	2.77



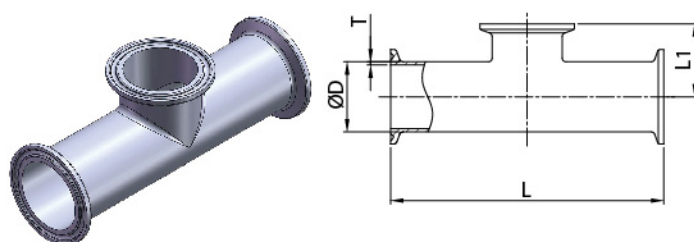
DT-4.1.1-8 180° CLAMP ELBOW (DT-24)

SIZE	ØD	L	L1	T
1/2"	12.7	114.3	88.9	1.65
3/4"	19.05	114.3	88.9	1.65
1"	25.4	76.2	88.9	1.65
1.5"	38.1	114.3	127	1.65
2"	50.8	152.4	139.7	1.65
2.5"	63.5	190.5	158.78	1.65
3"	76.2	228.6	177.8	1.65
4"	101.6	304.8	231.78	2.11
6"	152.4	457.2	330.2	2.77



DT-4.1.2-3 SHORT OUTLET RUN WELD/CLAMP TEE (DT-25)

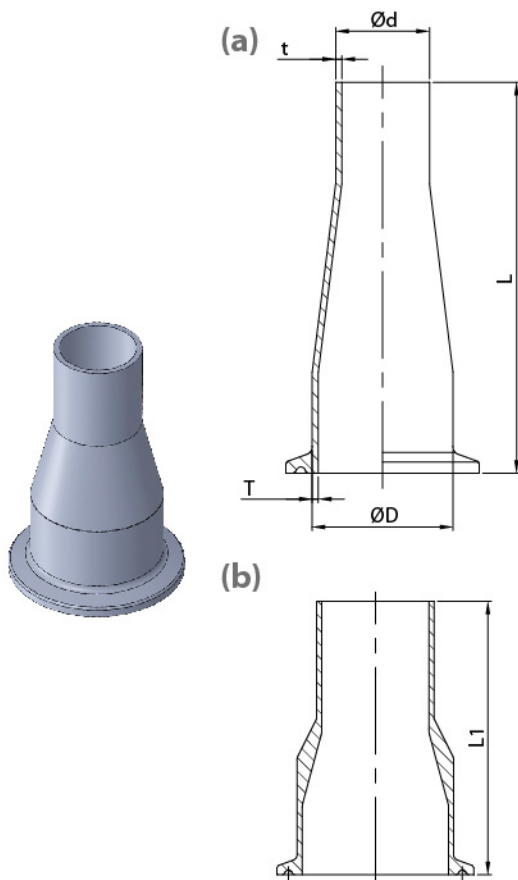
SIZE	ØD	L	L1	T
1/2"	12.7	47.63	22.23	1.65
3/4"	19.05	50.8	25.4	1.65
1"	25.4	53.98	28.58	1.65
1.5"	38.1	60.33	34.93	1.65
2"	50.8	73.03	41.28	1.65
2.5"	63.5	79.38	47.63	1.65
3"	76.2	85.73	53.98	1.65
4"	101.6	104.78	69.85	2.11
6"	152.4	142.88	117.48	2.77



DT-4.1.2-5 SHORT OUTLET TEE CLAMP END (DT-27)

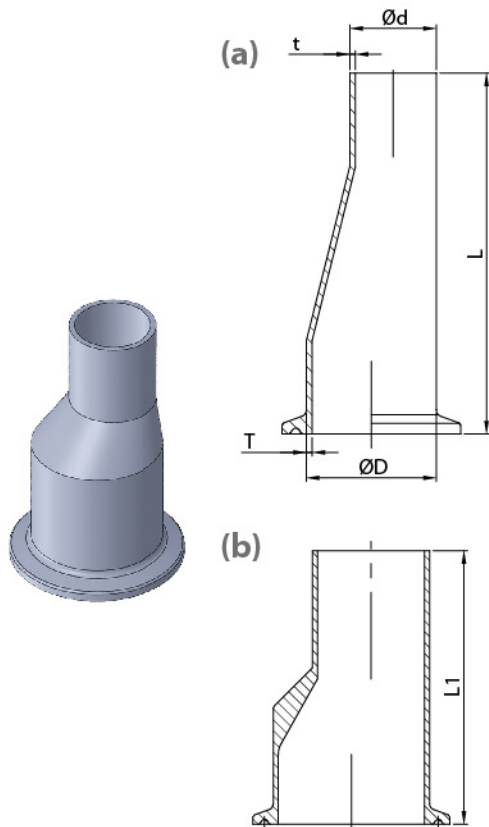
SIZE	ØD	L	L1	T
1/2"	12.7	114.3	25.4	1.65
3/4"	19.05	120.66	28.58	1.65
1"	25.4	133.36	28.58	1.65
1.5"	38.1	146.06	34.93	1.65
2"	50.8	171.46	41.28	1.65
2.5"	63.5	184.16	47.63	1.65
3"	76.2	196.86	53.98	1.65
4"	101.6	241.3	69.85	2.11
6"	152.4	361.96	117.48	2.77

BPE Fittings



DT-4.1.3-2AC CONCENTRIC REDUCER (DT-26)

SIZE	ØD	Ød	T	t	L	L1
3/4"×1/2"	19.05	12.7	1.65	1.65	76.2	66.68
1"×1/2"	25.4	12.7	1.65	1.65	88.9	76.2
1"×3/4"	25.4	19.05	1.65	1.65	76.2	66.68
1.5"×1/2"	38.1	12.7	1.65	1.65	—	88.9
1.5"×3/4"	38.1	19.05	1.65	1.65	101.6	88.9
1.5"×1"	38.1	25.4	1.65	1.65	101.6	76.2
2"×1/2"	50.8	12.7	1.65	1.65	—	98.43
2"×3/4"	50.8	19.05	1.65	1.65	—	98.43
2"×1"	50.8	25.4	1.65	1.65	152.4	98.43
2"×1.5"	50.8	38.1	1.65	1.65	101.6	76.2
2.5"×1"	63.5	25.4	1.65	1.65	—	98.43
2.5"×1.5"	63.5	38.1	1.65	1.65	152.4	98.43
2.5"×2"	63.5	50.8	1.65	1.65	107.9	76.2
3"×1"	76.2	25.4	1.65	1.65	—	120.65
3"×1.5"	76.2	38.1	1.65	1.65	203.2	120.65
3"×2"	76.2	50.8	1.65	1.65	158.8	98.43
3"×2.5"	76.2	63.5	1.65	1.65	108	79.38
4"×2"	101.6	50.8	2.11	1.65	263.5	146.05
4"×2.5"	101.6	63.5	2.11	1.65	212.7	123.83
4"×3"	101.6	76.2	2.11	1.65	161.9	114.3
6"×3"	152.4	76.2	2.77	2.77	228.6	203.2
6"×4"	152.4	101.6	2.77	2.77	228.6	161.93

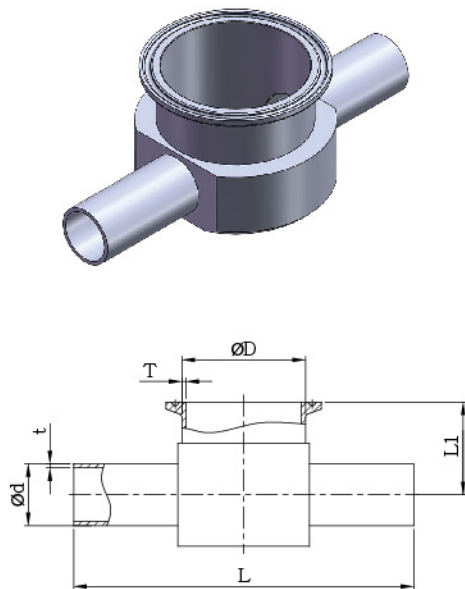


DT-4.1.3-2AE ECCENTRIC REDUCER (DT-26)

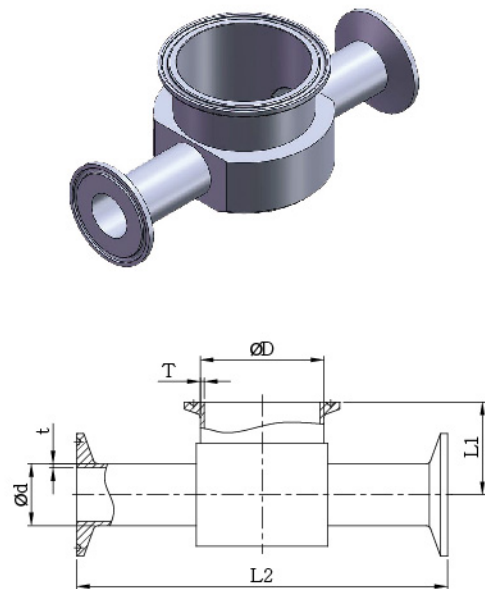
SIZE	ØD	Ød	T	t	L	L1
3/4"×1/2"	19.05	12.7	1.65	1.65	76.2	66.68
1"×1/2"	25.4	12.7	1.65	1.65	88.9	76.2
1"×3/4"	25.4	19.05	1.65	1.65	76.2	66.68
1.5"×1/2"	38.1	12.7	1.65	1.65	—	88.9
1.5"×3/4"	38.1	19.05	1.65	1.65	101.6	88.9
1.5"×1"	38.1	25.4	1.65	1.65	101.6	76.2
2"×1/2"	50.8	12.7	1.65	1.65	—	98.43
2"×3/4"	50.8	19.05	1.65	1.65	—	98.43
2"×1"	50.8	25.4	1.65	1.65	152.4	98.43
2"×1.5"	50.8	38.1	1.65	1.65	101.6	76.2
2.5"×1"	63.5	25.4	1.65	1.65	—	98.43
2.5"×1.5"	63.5	38.1	1.65	1.65	152.4	98.43
2.5"×2"	63.5	50.8	1.65	1.65	107.9	76.2
3"×1"	76.2	25.4	1.65	1.65	—	120.65
3"×1.5"	76.2	38.1	1.65	1.65	203.2	120.65
3"×2"	76.2	50.8	1.65	1.65	158.8	98.43
3"×2.5"	76.2	63.5	1.65	1.65	108	79.38
4"×2"	101.6	50.8	2.11	1.65	263.5	146.05
4"×2.5"	101.6	63.5	2.11	1.65	212.7	123.83
4"×3"	101.6	76.2	2.11	1.65	161.9	114.3
6"×3"	152.4	76.2	2.77	1.65	222.3	203.2
6"×4"	152.4	101.6	2.77	2.11	228.6	161.93

BPE Fittings

DT-4.1.2-10 (DT-28)



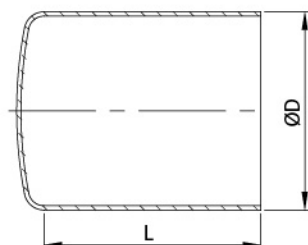
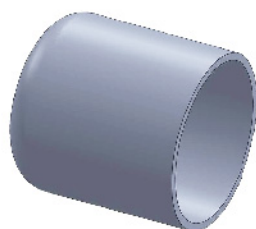
DT-4.1.2-11 (DT-29)



INSTRUMENT TEE WELD/CLAMP END

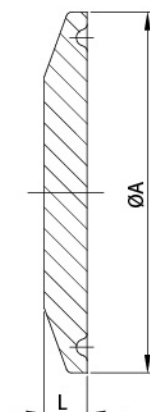
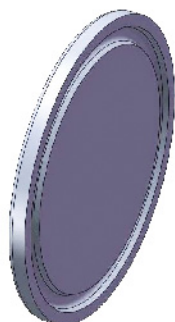
SIZE	ØD	Ød	L	L1	L2	T	t
1.5"×1/2"	38.1	12.7	127	22.23	152.4	1.65	1.65
1.5"×3/4"	38.1	19.05	127	25.4	152.4	1.65	1.65
1.5"×1"	38.1	25.4	127	28.58	152.4	1.65	1.65
2"×1/2"	50.8	12.7	139.7	25.4	165.1	1.65	1.65
2"×3/4"	50.8	19.05	139.7	28.58	165.1	1.65	1.65
2"×1"	50.8	25.4	139.7	31.75	165.1	1.65	1.65
2"×1.5"	50.8	38.1	139.7	38.1	165.1	1.65	1.65
2.5"×1/2"	63.5	12.7	170	35	195.4	1.65	1.65
2.5"×3/4"	63.5	19.05	170	38.1	195.4	1.65	1.65
2.5"×1"	63.5	25.4	170	41.3	195.4	1.65	1.65
2.5"×1.5"	63.5	38.1	170	44.5	195.4	1.65	1.65
2.5"×2"	63.5	50.8	170	48	195.4	1.65	1.65
3"×1/2"	76.2	12.7	180	38.1	205.4	1.65	1.65
3"×3/4"	76.2	19.05	180	41.3	205.4	1.65	1.65
3"×1"	76.2	25.4	180	44.5	205.4	1.65	1.65
3"×1.5"	76.2	38.1	180	48	205.4	1.65	1.65
3"×2"	76.2	50.8	180	50.8	205.4	1.65	1.65
3"×2.5"	76.2	63.5	180	54	205.4	1.65	1.65
4"×1/2"	101.6	12.7	220	79.4	245.4	1.65	1.65
4"×3/4"	101.6	19.05	220	82.6	245.4	1.65	1.65
4"×1"	101.6	25.4	220	85.7	245.4	2.11	1.65
4"×1.5"	101.6	38.1	220	88.9	245.4	2.11	1.65
4"×2"	101.6	50.8	220	95.2	245.4	2.11	1.65
4"×2.5"	101.6	63.5	220	98.4	245.4	2.11	1.65
4"×3"	101.6	76.2	220	101.6	245.4	2.11	1.65

BPE Fittings



DT-4.1.5-1 AUTOMATIC TUBE WELD CAP(DT-30)

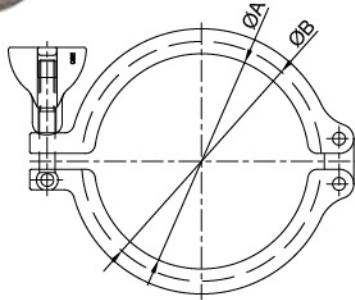
SIZE	ØD	L
1/2"	12.7	38.1
3/4"	19.05	38.1
1.0"	25.4	38.1
1.5"	38.1	38.1
2.0"	50.8	38.1
2.5"	63.5	38.1
3.0"	76.2	44.45
4.0"	101.6	50.8
6.0"	152.4	63.5



DT-4.1.5-2 SOLID END CAP HYGINIC CLAMP JOINE(DT-31)

SIZE	ØD	L
1/4"	25	4.75
3/8"	25	4.75
1/2"	25	4.75
3/4"	25	4.75
1.0"	34/50.39	6.35
1.5"	50.39	6.35
2.0"	63.91	6.35
2.5"	77.39	6.35
3.0"	90.91	6.35
4.0"	118.92	7.92
6.0"	166.88	11.1

BPE Fittings



Safety Device

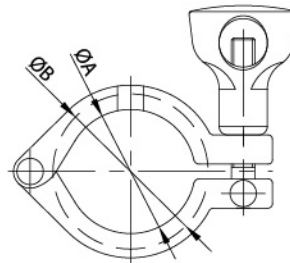
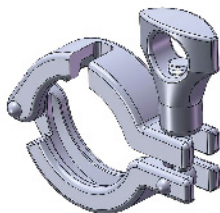
13SC SAFETY CLAMPS

Imperial	ØA	ØB
1/2"~3/4"	20.58	28.34
1.0"~1.5"	41.02	53.52
2.0"	54.54	67.04
2.5"	68.02	80.52
3.0"	81.52	94.02
4.0"	109.54	122.04
6.0"	157.6	175.1
8.0"	207.4	225.9

DN	ØA	ØB
DN10~DN20	27.2	37
DN25~DN40	44.5	54.5
DN50	57	68
DN65	84	95
DN80	99	110
DN100	112	123
DN115	123	134
DN125	144	159
DN150	172	187
DN200	222.5	237.5
DN250	257	272
DN300	308	323

Measuring temperature or bio-activity is necessary for validation processes. CSE's gap clamp with single slot or double slots has proven its value when validating sterility in a high-purity pharmaceutical system.

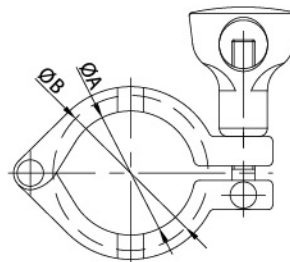
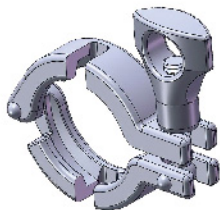
One gap



HEAVY DUTY SINGLE PIN CLAMP

SIZE	ØA	ØB
1/2"~3/4"	21.2	28.2
1.0"~1.5"	42	53.6
2.0"	55.4	67
2.5"	69	80.6
3.0"	82.6	94.2
3.5"	97.6	109.2
4.0"	110.6	122.2

Two gap



Information about Stainless steel DIN 11864/ DIN 11853

DIN 11864 Part1-3(Aseptic)

DIN11864-1	Union
DIN11864-2	Flange
DIN11864-3	Tri-Clamp

DIN 11853 Part1-3(Hygienic)

DIN11853-1	Union
DIN11853-2	Flange
DIN11853-3	Tri-Clamp