



Greater Cairo Foundries

مسابك القاهرة الكبرى



DUCTILE IRON FITTINGS & ACCESSORIES







DUCTILE IRON FITTINGS

Contents	Page
Introduction	4
Manufacturing Standards	6
Manufacturing Process	7
Quality Inspection & Testing	8
Wall Thickness	10
Connection Types	11
Flanged Ends	11
Socket – Spigot (Tyton Type)	16
Socket – Spigot (Mechanical K – Type)	18
Ductile Iron Spigot End	19
Permissible deviation for the lengths of fittings	20

Flanged FITTINGS			
Product Name	Abbreviation	Symbol	Page
All Flanged Tee	T		23
All Flanged Level Invert Tee	TTO		28
All Flanged Cross	TT		29
All Flanged 45° Angle Branch Tee	FFC		30
All Flanged Radial Tee	SCH		32
Flanged Bend 90°	Q		34
Flanged Bend 45°	FFK 45		34
Flanged Bend 22½°	FFK 22		35
Flanged Bend 11¼°	FFK 11		35
LONG BEND			36
90° Flanged Duck Foot Bend	N		37
Flanged Concentric Reducer	FFR		38
Flanged Eccentric Reducer	FFRe		39
Blank Flange	X		40
Flanged Spigot	F		41

Product	Abbreviation	Symbol	Page
Flanged Bell Mouth	OMS		41
Double Flanged Pipes	FF		42
Pipe With Puddle Flanges			43
Double Flanged Pipe with Puddle	FFM		44
Flanged Spigot Pipe with Puddle			45
Double Spigot Pipe with Puddle			46
Flanged Socket Pipe with Puddle			47

SOCKET FITTINGS			
Product Name	Abbreviation	Symbol	Page
All Socket Tee	MMB		51
Double Socket Tee with Flanged Branch	MMA		54
Double Socket Level Invert Tee with Flanged Branch			58
ALL SOCKET 45° ANGLE BRACH			59
ALL SOCKET 45° RADIAL TEE			59
Flanged Socket	EU		60
Double Socket Collar	MM		60
Double Socket Bend 11¼°	MMQ11		61
Double Socket Bend 22½°	MMQ22		61
Double Socket Bend 45°	MMQ45		62
Double Socket Bend 90°	MMQ90		62
Socket Spigot Bend			62
Double Socket Reducer	MMR		63

FABRICATED PIPES	
Product Name	Page
Fabricated Pipes	67



Introduction

GCF started in 1983 with a reputable brand name in the field of Ductile Iron Pipeline Products. Based in Egypt, GCF is a prominent supplier of DI Pipes, fittings and Valves serving a broad variety of water and sewage applications. Whether it is a water pipeline, a water treatment plant, or a pumping station, GCF brand stands out as one of satisfaction over the years. Our product mix includes Pipe fittings and Mechanical Joints up to DN 2600, Butterfly Valves up to DN 2200, Gate Valves up to DN 1800, Non Return Valve up to DN 1500 and Air valves up to DN 200.

The product mix that GCF offers with a commitment to an in depth knowledge of our customers' requirements has enabled us to acquire their confidence with a continuously increased market share. GCF not only offers a range of products but offers solutions to water and sewage companies, municipalities, civil and electromechanical contractors alike.

GCF client list spreads all along the Middle East, North African and South Europe Region. From Egypt to Libya, Iraq, KSA, UAE, Oman, Algeria, Jordan, Turkey, Italy, Greece,

GCF brand stand out as brand of quality excellence. The distinctive location where GCF has its manufacturing facility makes it within few days of delivery to any market in MENA region and a free import taxation privilege.

GCF quality management system had been certified for ISO 9001 since 1997, GCF's products had been certified by different international laboratories





Manufacturing Standards

GCF produces fittings & flanged Pipes in accordance to the following standards

ISO2531:2009 (Ductile iron pipes, fittings, accessories and their joints for water applications)

EN545:2010 (Ductile iron pipes, fittings, accessories and their joints for water pipelines. Requirements and test methods)

EN598:2007 +A1:2009 (Ductile iron pipes, fittings, accessories and their joints for sewerage applications. Requirements and test methods)

ISO7005-2:1988 (Metallic flanges - Part 2: Cast iron flanges)

EN1092-2:1997 (Flanges and their joints. Circular flanges for pipes, valves, fittings and accessories, PN designated. Cast iron flanges)

ISO 4179:2005 (Ductile iron pipes and fittings for pressure and non-pressure pipelines - Cement mortar lining)

ISO 8179-2:1995 (Ductile iron pipes - External zinc coating - Part 2: Zinc rich paint with finishing layer)

EN14901:2006 (Ductile iron pipes, fittings and accessories. Epoxy coating (heavy duty) of ductile iron fittings and accessories. Requirements and test methods)

ISO4633:2002 (Rubber seals - Joint rings for water supply, drainage and sewerage pipelines - Specification for materials)



Manufacturing Process



Greater Cairo Foundries
مسابك القاهرة الكبرى



Pattern Manufacturing



Melting (Induction Furnaces)



Magnesium Treatment & Pouring



Molding



Machining



Hydrostatic Testing



Painting & Coating Applications



Surface Preparation

Molding Sand Testing



Sieve Analysis



Clay Content



Moisture Content



Permeability



Compression & Shear Strength



Tensile Strength

Material Testing



Chemical Analysis



Microstructure Analysis



Mechanical Properties



Hardness Testing

Painting & Protection Testing



Weather Conditions
Check



Surface Roughness
Measurement



Dry Film Thickness
Measurement



Holiday Test



Pull Off Test

Wall Thickness

The minimum wall thickness for fittings, e_{min} , shall be not less than 4.7 mm and shall be determined using the following equation:

$$e_{min} = (PFA \times SF \times DE) / (20 Rm + (PFA \times SF))$$

where,

e_{min} is the minimum pipe wall thickness, in millimeters;

PFA is the allowable operating pressure, in bar;

SF is the safety factor for PFA (= 3);

DE is the nominal pipe external diameter, in millimeters;

Rm is the minimum tensile strength of ductile iron, in megapascals ($Rm = 420$ MPa).

The nominal thickness e_{nom} shall be calculated using the following equation:

$$(e_{nom} = e_{min} + (2.3 + 0.001 DN))$$

The results of the nominal & minimum wall thickness were obtained in the following table:

DN	65	80	100	125	150	200	250	300	350	400	450	500	600	700
e_{nom}	7	7	7.2	7.5	7.8	8.4	9	9.6	10.2	10.8	11.4	12	13.2	14.4
e_{min}	4.7	4.7	4.8	5.1	5.4	5.9	6.5	7	7.6	8.1	8.7	9.2	10.3	11.4

DN	800	900	1000	1100	1200	1400	1500	1600	1800	2000	2200	2400	2600
e_{nom}	15.6	16.8	18	19.2	20.8	22.8	24	25.2	27.5	30	32.4	34.8	37.2
e_{min}	12.5	13.6	14.7	15.8	17.3	19.1	20.2	21.3	23.4	25.7	27.9	30.1	32.3

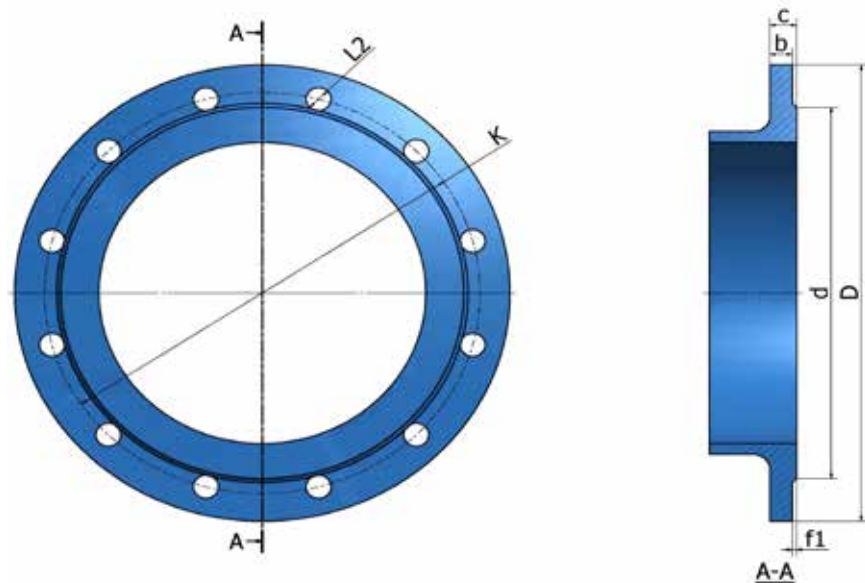
Note: The mentioned wall thicknesses are almost equivalent to K-12 Series in previous version of ISO2531



Connection Types

1- Flanged Ends

In accordance with ISO7005-2:1988 & EN1092-2:1997, GCF produces Flanged Ends Fittings & Pipes with the following dimensions.



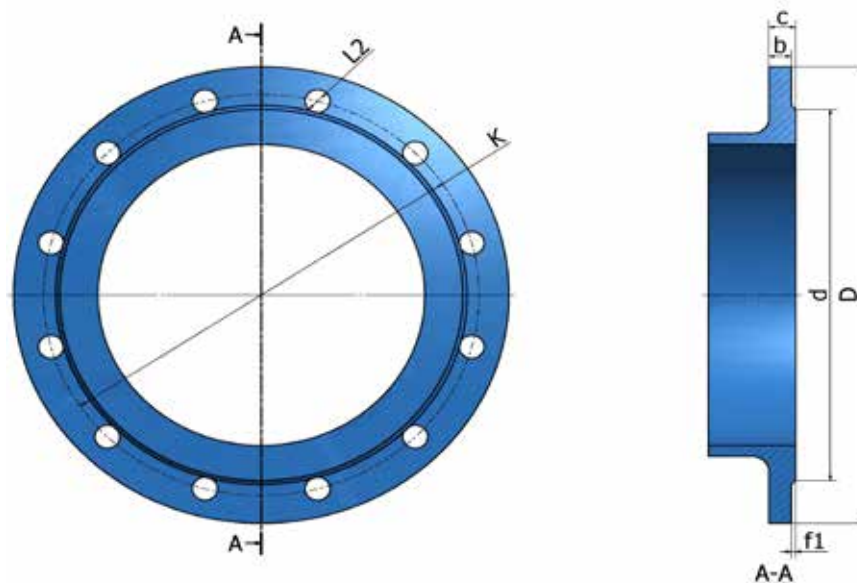
PN10

DN	D	d	C	b	f1	K	Bolt Holes		Bolt	
							NO	L2	Diameter	Length
65										
80										
100										
125										
150										
200	340	266	20	17	3	295	8	23	M20	80
250	400	319	22	19	3	350	12	23	M20	85
300	455	370	24.5	20.5	4	400	12	23	M20	85
350	505	429	24.5	20.5	4	460	16	23	M20	85
400	565	480	24.5	20.5	4	515	16	28	M24	100
450	615	527	25.5	21.5	4	565	20	28	M24	100
500	670	582	26.5	22.5	4	620	20	28	M24	110
600	780	682	30	25	5	725	20	31	M27	120
700	895	794	32.5	27.5	5	840	24	31	M27	130
800	1015	901	35	30	5	950	24	34	M30	140
900	1115	1001	37.5	32.5	5	1050	28	34	M30	140
1000	1230	1112	40	35	5	1160	28	37	M33	160
1100	1340	1215	42.5	37.5	5	1270	32	37	M33	160
1200	1455	1328	45	40	5	1380	32	40	M36	160
1400	1675	1530	46	41	5	1590	36	43	M39	180
1500	1785	1640	47.5	42.5	5	1700	36	43	M39	180
1600	1915	1750	49	44	5	1820	40	49	M45	200
1800	2115	1950	52	47	5	2020	44	49	M45	200
2000	2325	2150	56	50	5	2230	48	49	M45	280
2200	2550	2370	59	53	6	2440	52	56	M52	300
2400	2750	2570	62	56	6	2650	56	56	M52	320
2600	2960	2780	65	59	6	2850	60	56	M52	340

Use ISO PN16 Dimensions

Connection Types

1- Flanged Ends

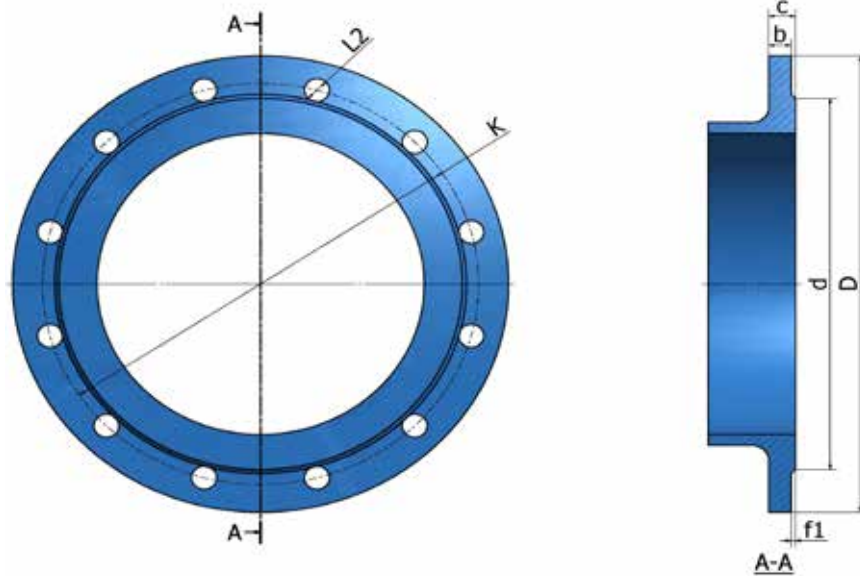


PN16

DN	D	d	C	b	f1	K	Bolt Holes		Bolt	
							N0	L2	Diameter	Length
65	185	118	19	16	3	145	4	19	M16	65
80	200	132	19	16	3	160	8	19	M16	65
100	220	156	19	16	3	180	8	19	M16	65
125	250	184	19	16	3	210	8	19	M16	70
150	285	211	19	16	3	240	8	23	M20	70
200	340	266	20	17	3	295	12	23	M20	80
250	400	319	22	19	3	355	12	28	M24	85
300	455	370	24.5	20.5	4	410	12	28	M24	85
350	520	429	26.5	22.5	4	470	16	28	M24	85
400	580	480	28	24	4	525	16	31	M27	100
450	640	544	30	26	4	585	20	31	M27	100
500	715	609	31.5	27.5	4	650	20	34	M30	110
600	840	720	36	31	5	770	20	37	M33	120
700	910	794	39.5	34.5	5	840	24	37	M33	130
800	1025	901	43	38	5	950	24	40	M36	140
900	1125	1001	46.5	41.5	5	1050	28	40	M36	140
1000	1255	1112	50	45	5	1170	28	43	M39	160
1100	1355	1215	53.5	48.5	5	1270	32	43	M39	160
1200	1485	1328	57	52	5	1390	32	49	M45	160
1400	1685	1530	60	55	5	1590	36	49	M45	180
1500	1820	1640	62.5	57.5	5	1710	36	56	M52	180
1600	1930	1750	65	60	5	1820	40	56	M52	200
1800	2130	1950	70	65	5	2020	44	56	M52	200
2000	2345	2150	75	70	5	2230	48	62	M56	280
2200	2555	2370	80	74	6	2440	52	62	M56	300
2400	2765	2570	86	80	6	2650	56	62	M56	320
2500	2870	-	86	-	-	2715	60	62	M56	320
2600	2965	2780	91	85	6	2850	60	62	M56	340

Connection Types

1- Flanged Ends



PN25

DN	D	d	C	b	f1	K	Bolt Holes		Bolt	
							N0	L2	Diameter	Length
65	185	118	19	16	3	145	8	19	M16	65
80	200	132	19	16	3	160	8	19	M16	65
100	235	156	19	16	3	190	8	23	M20	65
125	270	184	19	16	3	220	8	28	M24	65
150	300	211	20	17	3	250	8	28	M24	70
200	360	274	22	19	3	310	12	28	M24	80
250	425	330	24.5	21.5	3	370	12	31	M27	90
300	485	389	27.5	23.5	4	430	16	31	M27	
350	555	448	30	26	4	490	16	34	M30	
400	620	503	32	28	4	550	16	37	M33	
450	670	548	34.5	30.5	4	600	20	37	M33	
500	730	609	36.5	32.5	4	660	20	37	M33	
600	845	720	42	37	5	770	20	40	M36	
700	960	820	46.5	41.5	5	875	24	43	M39	
800	1085	928	51	46	5	990	24	49	M45	
900	1185	1028	55.5	50.5	5	1090	28	49	M45	
1000	1320	1140	60	55	5	1210	28	56	M52	
1100	1425	1245	64.5	59.5	5	1315	32	56	M52	
1200	1530	1350	69	64	5	1420	32	56	M52	
1400	1755	1560	74	69	5	1640	36	62	M56	
1600	1975	1780	81	76	5	1860	40	62	M56	
1800	2195	1985	88	83	5	2070	44	70	M64	
2000	2425	2210	95	90	5	2300	48	70	M64	

Connection Types

1- Flanged Ends

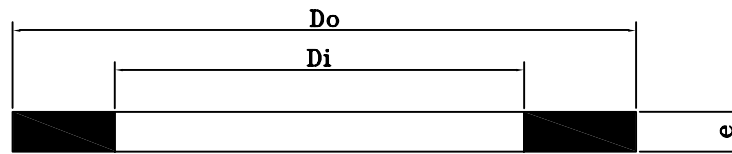
Tolerance on dimensions of flanges

DIMENSIONS & TOLERANCES IN MILLIMETER																									
Symbol	Designation	DN																							
		80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600	1800	2000	2200	2400	2600
D	Outside diameter	Minimum diameter shall provide a sufficient bearing area for the nut or bolt head																							
d	Facing diameter	+4.5	+5.5				+6.5				+8.5				+10										
		-4	-4.5				-5				-5.5				-6										
f1	Facing height	Height																							
		2				3				4				5				6							
		Tolerance																							
		+1 / -1				+1.5 / -2				+2 / -3				+2.5 / -4				+3 / -5							
b*	Flange thickness at edge	Thickness																							
		≤25				26 to 40				41 to 55				56 to 70				≥71							
		Tolerance																							
		±4				±4.5				±5				±6				±7							
L2	Diameter of bolt holes	Diameter f bolt holes																							
		≤20										≥22													
		Tolerance																							
		+0.5/0										+1/0													
K	Diameter of bolt circle	Diameter of bolt circle for bolt size																							
		M10				M12 to M24				M27 to M45				M52				≥ M56							
		Tolerance																							
		±1				±1.5				±2				±3				±3.5							
-	Center to center of adjacent bolt holes	Center to center for bolt siz																							
		M10				M12 to M24				M27 to M45				M52				≥ M56							
		Tolerance																							
		±0.5				±0.75				±1				±1.5				±1.75							
-	Parallelism of bolting surface with joint surface	2° max.																							
* b = c – f1																									

Connection Types

1- Flanged Ends

Flat Gasket Dimensions



DN	65	80	100	125	150	200	250	300	350	400	450	500	600	700
Di	70	85	105	130	155	205	255	305	355	410	460	510	610	710
Do	118	133	155	184	210	265	320	365	430	480	544	609	720	790
e	3	3	3	3	3	3	3	3	4	4	4	4	4	5

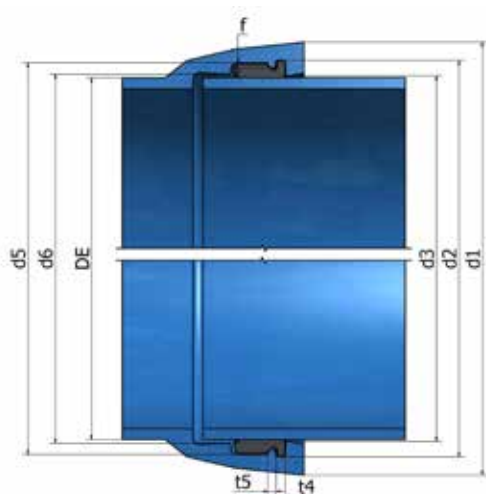
DN	800	900	1000	1100	1200	1400	1500	1600	1800	2000	2200	2400	2500	2600
Di	810	910	1010	1110	1210	1410	1510	1610	1810	2010	2210	2410	2510	2610
Do	900	1000	1110	1215	1330	1530	1640	1750	1950	2150	2370	2570		2780
e	5	5	5	5	5	5	5	5	5	5	6	6	6	6



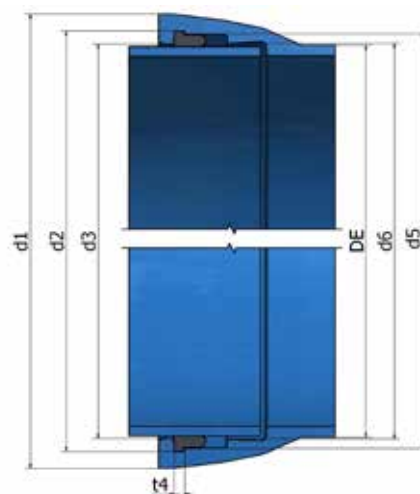
Connection Types

2-Socket - Spigot (Tyton Type)

Socket Dimensions



For DN 80 up to DN1200



For DN 1400 up to DN1600

For DN 80 up to DN1200

DN	DE		d1	d2		d3		d5		d6		f		t4		t5
80	98	+1/-2.8	140	123	±1	100.5	±1	119.1	±1	103.2	±2	3.5	+0/-0.8	6	+0/-0.5	5
100	118	+1/-2.8	163	140	±1	120.5	±1	138.9	±1	123.4	±2	3.5	+0/-0.8	6	+0/-0.5	5
150	170	+1/-2.8	217	195	±1	172.5	±1	190.6	±1	175.3	±2	3.5	+0/-0.8	6	+0/-0.5	5
200	222	+1/-3	278	250	+1.5/-1	224.5	+1.5/-1	245.2	+1.5/-1	227.8	±2	4	+0/-0.8	7	+0/-0.5	6
250	274	+1/-3	336	301.5	+1.5/-1	276.5	+1.5/-1	296.9	+1.5/-1	279.7	±2	4	+0/-0.8	7	+0/-0.5	6
300	326	+1/-3.3	393	356.5	+1.8/-1	328.5	+1.8/-1	351.7	+1.8/-1	332.1	±2	4.5	+0/-0.8	8.5	+0/-0.5	7
350	378	+1/-3.4	448	408	+1.8/-1	380.5	+1.8/-1	403.4	+1.8/-1	383.8	±2	4.5	+0/-1	8.5	+0/-0.5	7
400	429	+1/-3.5	500	462	+2.1/-1	431.5	+2.1/-1	457.2	+2.1/-1	435.8	±2.5	5	+0/-1	9.5	+0/-0.5	8
450	480	+1/-3.6	540	514	+2.2/-1	482.5	+2.2/-1	509	+2.2/-1	487	±2.5	5	+0/-1	9.5	+0/-0.5	8
500	532	+1/-3.8	604	568	+2.4/-1	534.5	+2.4/-1	562.6	+2.4/-1	539.4	±3	5.5	+0/-1	11	+0/-0.5	9
600	635	+1/-4	713	673.4	+2.7/-1	637.5	+2.7/-1	668	+2.7/-1	642.6	±3	6	+0/-1	12	+0/-0.5	10
700	738	+1/-4.2	824	788	+3.5/-1	740.5	+3.5/-1	779.3	+3.5/-1	745.8	±3.5	7	+0/-1.2	18	+0/-0.5	12
800	842	+1/-4.5	943	894	+3.8/-1	844.5	+3.8/-1	885.9	+3.8/-1	850	±3.8	8	+0/-1.2	18	+0/-0.8	14
900	945	1/-4.8	1052	1000	+4.1/-1	947.5	+4.1/-1	991.3	+4.1/-1	953.2	±4.1	9	+0/-1.2	20	+0/-0.8	16
1000	1048	+1/-5	1158	1105	+4.4/-1	1050.5	+4.4/-1	1097.1	+4.4/-1	1056.4	±4.4	9	+0/-1.2	20	+0/-0.8	16
1100	1152	+1/-5.2	1267	1211	+4.7/-1	1155	+4.7/-1	1202.5	+4.7/-1	1160.2	±4.7	10	+0/-1.2	23	+0/-0.8	18
1200	1255	+1/-5.5	1377	1317	+5/-1	1258	+5/-1	1308	+5/-1	1264	±5	10	+0/-1.2	23	+0/-0.8	18

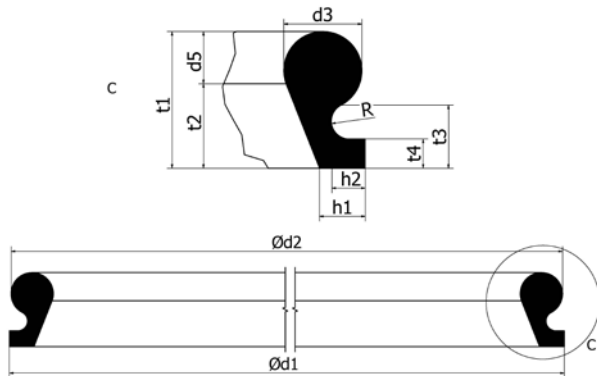
For DN 1400 up to DN1600

DN	DE		d1	d2		d3		d5		d6		t4	
1400	1462	+1/-6	1610	1529	+5.6/-1	1465	+5.6/-1	1509	+5.6/-1	1471	±5.6	25	+0/-1
1500	1565	+1/-6	1710	1635	+5.6/-1	1570	+5.6/-1	1615	+5.6/-1	1575	±5.6	26	+0/-1
1600	1668	+1/-6.5	1814	1740	+6.2/-1	1673	+6.2/-1	1717	+6.2/-1	1678	±6.2	27	+0/-1

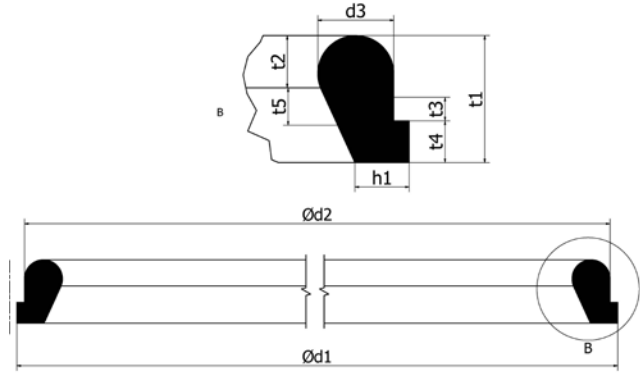
Connection Types

2-Socket - Spigot (Tyton Type)

Gasket Dimensions



For DN 80 up to DN1200



For DN 1400 up to DN1600

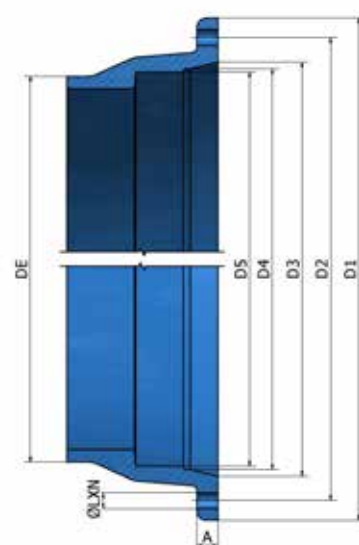
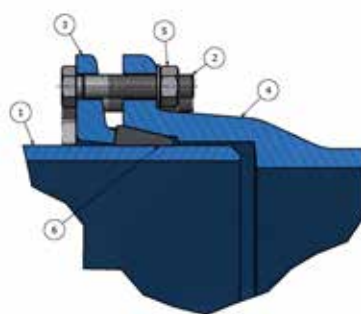
Tyton Gasket Dimensions

DN	d1	d2	d3	h1	h2	t1	t2	t3	t4	t5	R
80	126	123	16	10	4.5	26	18	10	5	3	3
100	146	144	16	10	4.5	26	18	10	5	3	3.5
125	172	170	16	10	4.5	26	18	10	5	3	3.5
150	200	198	16	10	4.5	26	18	10	5	3	3.5
200	256	254	18	11	5	30	21	12	6	4	4
250	310	308	18	11	5	32	23	12	6	4	4
300	366	364	20	12	5.5	34	24	14	7	4	4.5
350	420	418	20	12	5.5	34	24	14	7	4	4.5
400	475	473	22	13	6	38	27	16	8	5	5
450	528	526	23	13	6	38	27	16	8	5	5
500	583	581	25	14	6.5	42	30	18	9	6	5.5
600	692	690	27	15	7	46	33	20	10	7	6
700	809	803	33.5	20	10	55	39	24	16	8	7
800	919	913	35.5	21	11	60	43	26	16	9	8
900	1026	1020	37.5	22	12	65	47	28	18	10	9
1000	1133	1127	39.5	23	12	70	51	30	18	10	9
1100	1242	1235	40	25	13.5	74	54	32	19	10	10
1200	1352	1345	43.5	27	13.5	78	57	34	20	11	10
1400	1569	1549	41.5	27	-	80	58	28	23	22	-
1500	1677	1660	42	30	-	70	49	20	25	22	-
1600	1799	1779	42	32.5	-	70	49	30	23	20	-

Connection Types

3- Socket - Spigot (Mechanical K - Type)

NO	description
1	Spigot
2	Bolt
3	Gland
4	Socket
5	Nut
6	Gasket



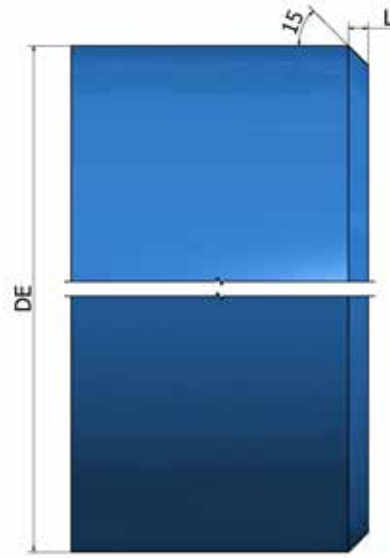
For DN 1200 up to DN2600

DN	DE		D1	D2	D3	D4		D5		A	Drilling details	
											ØL	N
1200	1255	+1 / -5.5	1444	1378	1297	1275	±2	1261	+3.5 / -3	35	33	28
1400	1462	+1 / -6	1657	1591	1504	1482	±2.5	1469	+4 / -3	38	33	28
1500	1565	+1 / -6	1766	1700	1608	1586	±2.5	1573	+4 / -3	40	33	28
1600	1668	+1 / -6.5	1874	1808	1720	1690	±2.5	1678	+4.5 / -3	41	33	30
1800	1875	+1 / -7	2089	2023	1927	1897	±2.8	1883	+5 / -4	43	33	34
2000	2082	+1 / -7.5	2305	2239	2134	2104	±2.8	2091	+5.5 / -4	46	33	36
2200	2288	+1 / -7.5	2519	2453	2340	2310	±2.8	2298	+5.5 / -4	49	33	40
2400	2495	+1 / -7.5	2734	2668	2547	2517	±2.8	2505	+5.5 / -4	52	33	44
2600	2702	+1 / -7.5	2949	2883	2754	2724	±2.8	2713	+5.5 / -4	55	33	48



Connection Types

4- Ductile Iron Spigot End



DN	External Diameter DE	Tolerance of Spigot External Diameter	Max. Permissible ovality	L	
				Min.	Max.
65	82	+1 / -2.7	0.82	10	14
80	98	+1 / -2.7	0.98	10	14
100	118	+1 / -2.8	1.18	10	14
125	144	+1 / -2.8	1.44	10	14
150	170	+1 / -2.8	1.7	10	14
200	222	+1 / -3	2.22	10	14
250	274	+1 / -3	2.74	10	14
300	326	+1 / -3.3	3.26	10	14
350	378	+1 / -3.4	3.78	10	14
400	429	+1 / -3.5	4.29	12	16
450	480	+1 / -3.6	4.8	12	16
500	532	+1 / -3.8	5.32	14	18
600	635	+1 / -4	6.35	14	18
700	738	+1 / -4.2	14.76	16	20
800	842	+1 / -4.5	16.84	16	20
900	945	+1 / -4.8	18.9	18	22
1000	1048	+1 / -5	20.96	20	24
1100	1152	+1 / -5.2	23.04	22	26
1200	1255	+1 / -5.5	25.1	24	28
1400	1462	+1 / -6	29.24	28	32
1500	1565	+1 / -6	31.3	30	34
1600	1668	+1 / -6.5	33.36	32	36
1800	1875	+1 / -7	37.5	34	38
2000	2082	+1 / -7.5	41.64	36	40
2200	2288	+1 / -7.5	45.76	38	42
2400	2495	+1 / -7.5	49.9	40	44
2600	2702	+1 / -7.5	54.04	42	46

Permissible deviation for the lengths of fittings

Permissible deviations for fittings' lengths

As given in the international standards ISO 2531:2009 & EN545:2010, the permissible deviation for the length of fittings is shown in the following table:

Permissible deviation on length of fittings		
Dimensions in millimeters		
Type of fitting	DN	Deviation
Flanged Sockets	40 to 1200	±25
	1400 to 2600	±35
Flanged Spigots	40 to 1200	±25
	1400 to 2600	±35
Collars, Reducers	40 to 1200	±25
	1400 to 2600	±35
Tees	40 to 1200	+50/-25
	1400 to 2600	+75/-35
Bends 90°	40 to 2600	±(15+0.03 X DN)
Bends 45°	40 to 2600	±(15+0.025 X DN)
Bends 11¼° and 22½°	40 to 1200	±(15+0.02 X DN)
	1400 to 2600	±(15+0.025 X DN)

Tolerances for lengths:

As per given in the international standards ISO2531:2009 & EN545:2010 the tolerances for the lengths of pipes & fittings are given in the following table

Tolerance on length	
Dimensions in millimeters	
Type of Casting	Tolerance
Socket & spigot pipes	-30 / +70
Fittings for socketed joints	±20
Pipes & fittings for flanged joints	±10*
*By agreement between manufacturer & purchaser, smaller tolerances are possible, but not less than ± 3 mm for DN ≤ 600 and ± 4 mm for DN ≥ 600 as specified in ISO 2531 & EN 545	

Flanged Fittings



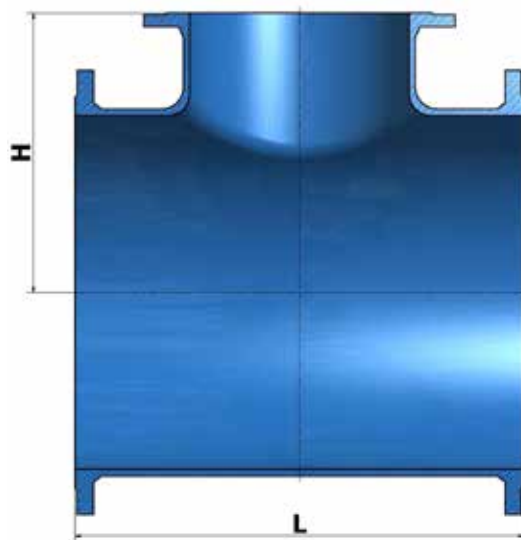
Flanged Fittings



Flanged Fittings

All Flanged Tee (T)

Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
80	80	330	165	15.6	15.6	15.6
100	80	360	175	18.4	18.4	19.5
100	100	360	180	19.4	19.4	21
125	80	400	190	23	23	24.5
125	100	400	195	24	24	26
125	125	400	200	25.5	25.5	27.5
150	80	440	205	28.5	28.5	31
150	100	440	210	29.5	29.5	32
150	150	440	220	32.5	32.5	36
200	80	520	235	42	42	46
200	100	520	240	43	43	47.5
200	150	520	250	46	46	51
200	200	520	260	49	49	56
250	80	700	270	62	66	74
250	100	700	275	63	67	75
250	150	700	325	73.5	78	81
250	200	700	325	76	80	85
250	250	700	350	82	86	93
300	80	800	300	93	97	104
300	100	800	300	94	98	105
300	150	800	320	99	104	110
300	200	800	350	102	106	114
300	250	800	375	114	120	129
300	300	800	400	116	122	131
350	80	850	325	114	120	137
350	100	850	325	116	122	139
350	150	850	325	120	126	143
350	200	850	325	121	128	146
350	250	850	325	138	143	164
350	300	850	425	140	145	166
350	350	850	425	142	151	176
400	80	900	350	141	153	175
400	100	900	350	143	154	177
400	150	900	350	149	158	181
400	200	900	350	152	161	184
400	250	900	450	166	175	202
400	300	900	450	168	177	204
400	350	900	450	172	189	223
400	400	900	450	174	191	225
450	100	950	375	177	193	215
450	150	950	375	180	196	219
450	200	950	375	183	199	222

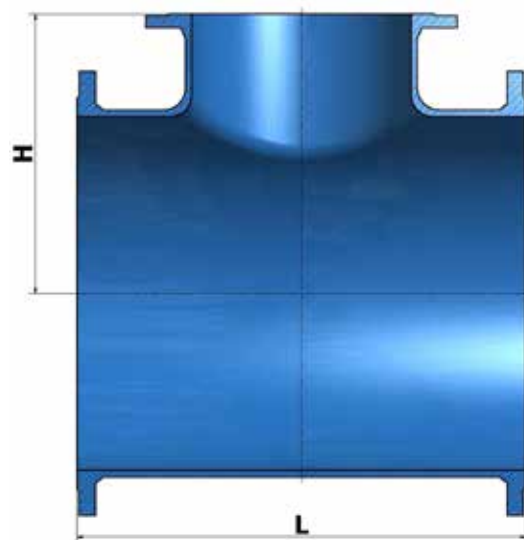


Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
450	250	950	475	197	213	240
450	300	950	475	199	215	242
450	350	950	475	207	227	260
450	400	950	475	210	230	263
450	450	950	475	216	240	272
500	100	1000	400	210	241	265
500	150	1000	400	218	245	267
500	200	1000	400	222	249	271
500	250	1000	500	234	261	288
500	300	1000	500	237	264	291
500	350	1000	500	239	273	308
500	400	1000	500	242	276	311
500	450	1000	500	249	294	329
500	500	1000	500	252	297	332
600	100	1100	450	305	358	388
600	150	1100	450	305	358	388
600	200	1100	450	305	358	388
600	250	1100	550	325	372	401
600	300	1100	550	328	375	404
600	350	1100	550	337	384	424
600	400	1100	550	340	387	427
600	450	1100	550	349	428	471
600	500	1100	550	352	431	474
600	600	1100	550	355	434	477
700	100	650	525	258	298	-
700	150	650	555	315	338	-
700	200	650	525	258	298	-
700	250	870	555	315	338	-
700	300	870	555	319	342	-

Flanged Fittings

All Flanged Tee (T)

Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
700	350	870	555	340	375	-
700	400	870	555	343	379	-
700	450	1200	600	470	517	-
700	500	1200	600	473	520	-
700	600	1200	600	476	523	-
700	700	1200	600	477	523	-
800	100	690	585	352	390	-
800	150	690	615	410	440	-
800	200	690	585	352	390	-
800	250	910	615	410	440	-
800	300	910	615	413	443	-
800	350	910	615	438	481	-
800	400	910	615	441	484	-
800	450	1350	645	607	671	-
800	500	1350	645	610	675	-
800	600	1350	645	613	678	-
800	700	1350	675	654	714	-
800	800	1350	675	657	715	-
900	100	730	645	436	484	-
900	150	730	675	514	572	-
900	200	730	645	436	484	-
900	250	950	675	514	572	-
900	300	950	675	524	580	-
900	350	950	675	535	588	-
900	400	950	675	541	594	-
900	450	1500	705	770	846	-
900	500	1500	705	780	853	-
900	600	1500	705	787	860	-
900	700	1500	750	854	910	-
900	800	1500	750	860	913	-
900	900	1500	750	873	926	-
1000	100	770	705	546	629	-
1000	150	770	705	546	629	-
1000	200	770	705	546	629	-
1000	250	990	735	640	725	-
1000	300	990	735	650	735	-
1000	350	990	735	660	745	-
1000	400	990	735	668	755	-
1000	450	1650	765	940	1021	-
1000	500	1650	765	979	1097	-
1000	600	1650	765	1007	1116	-
1000	700	1650	825	1034	1142	-
1000	800	1650	825	1085	1168	-
1000	900	1650	825	1095	1205	-
1000	1000	1650	825	1105	1229	-

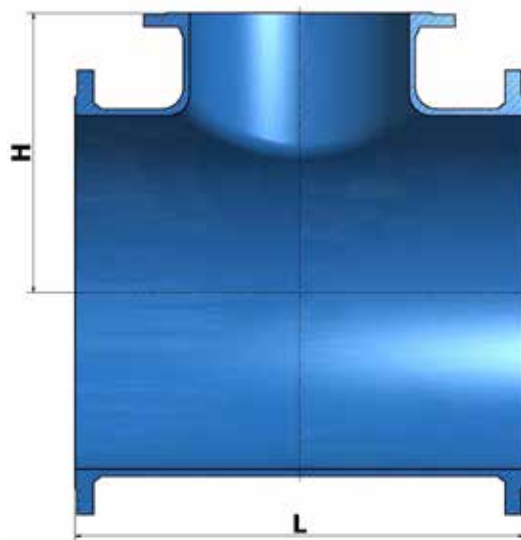


Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
1100	200	850	756	-	-	-
1100	250	865	772	-	-	-
1100	400	980	795	839	913	-
1100	600	1210	825	990	1083	-
1100	800	1470	855	1160	1245	-
1100	1000	1800	885	1345	1450	-
1100	1100	1800	900	1450	1555	-
1200	100	850	810	-	-	-
1200	150	850	810	-	-	-
1200	200	850	830	920	-	-
1200	250	850	830	-	-	-
1200	300	850	845	-	-	-
1200	350	850	845	-	-	-
1200	400	850	860	940	-	-
1200	450	850	860	-	-	-
1200	500	850	870	-	-	-
1200	600	1240	885	1101	1256	-
1200	700	1470	915	1196	1348	-
1200	800	1470	915	1291	1439	-
1200	900	1950	945	1393	1552	-
1200	1000	1950	945	1494	1664	-
1200	1200	1950	945	1806	1970	-
1400	100	950	910	-	-	-
1400	150	950	910	-	-	-
1400	200	950	925	-	-	-
1400	250	950	925	-	-	-
1400	300	950	940	-	-	-
1400	350	950	940	-	-	-
1400	400	950	955	-	-	-
1400	450	950	955	-	-	-

Flanged Fittings

All Flanged Tee (T)

Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
1400	500	950	970	-	-	-
1400	600	1550	980	1555	1818	-
1400	700	1760	1010	1721	1930	-
1400	800	1760	1010	1886	2041	-
1400	900	1760	1040	2010	2175	-
1400	1000	2015	1040	2131	2309	-
1400	1200	2015	1040	2262	2431	-
1400	1400	2015	1040	2545	2715	-
1500	100	1100	965	-	-	-
1500	150	1100	965	-	-	-
1500	200	1100	980	-	-	-
1500	250	1100	980	-	-	-
1500	300	1100	995	-	-	-
1500	350	1100	995	-	-	-
1500	400	1100	1010	-	-	-
1500	450	1100	1010	-	-	-
1500	500	1100	1020	-	-	-
1500	600	1575	1035	1762	1951	-
1500	700	2040	1095	1882	2072	-
1500	800	2040	1095	2002	2193	-
1500	900	2040	1095	2133	2335	-
1500	1000	2040	1095	2263	2474	-
1500	1200	2040	1095	2552	2782	-
1500	1400	2040	1095	2851	3084	-
1500	1500	2040	1095	3021	3284	-
1600	100	1250	1020	-	-	-
1600	150	1250	1020	-	-	-
1600	200	1250	1035	-	-	-
1600	250	1250	1035	-	-	-
1600	300	1250	1040	-	-	-
1600	350	1250	1040	-	-	-
1600	400	1250	1065	-	-	-
1600	450	1250	1065	-	-	-
1600	500	1250	1075	-	-	-
1600	600	1600	1090	2167	2398	-
1600	700	1835	1120	2355	2537	-
1600	800	1835	1120	2542	2675	-
1600	900	2065	1150	2641	2831	-
1600	1000	2065	1150	2740	2986	-
1600	1200	2300	1180	3058	3327	-
1600	1400	2300	1180	3208	3444	-
1600	1500	2300	1180	3388	3649	-
1600	1600	2300	1180	3568	3854	-
1800	100	1300	1130	-	-	-
1800	150	1300	1130	-	-	-

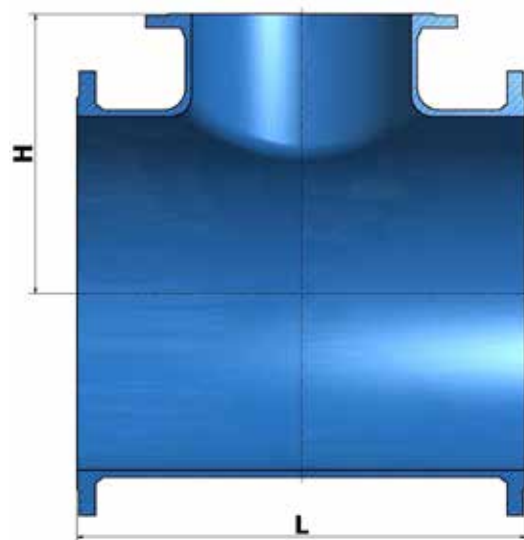


Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
1800	200	1300	1145	-	-	-
1800	250	1300	1145	-	-	-
1800	300	1300	1160	-	-	-
1800	350	1300	1160	-	-	-
1800	400	1300	1175	-	-	-
1800	450	1300	1175	-	-	-
1800	500	1300	1185	-	-	-
1800	600	1655	1200	2694	2972	-
1800	700	1885	1230	2860	3136	-
1800	800	1885	1230	3023	3299	-
1800	900	2120	1260	3200	3485	-
1800	1000	2120	1260	3375	3669	-
1800	1200	2350	1290	3740	4056	-
1800	1400	2350	1290	3910	4190	-
1800	1500	2350	1290	4120	4416	-
1800	1600	2350	1290	4328	4641	-
1800	1800	2350	1290	4750	5086	-
2000	100	1500	1240	-	-	-
2000	150	1500	1240	-	-	-
2000	200	1500	1255	-	-	-
2000	250	1500	1255	-	-	-
2000	300	1500	1270	-	-	-
2000	350	1500	1270	-	-	-
2000	400	1500	1285	-	-	-
2000	450	1500	1285	-	-	-
2000	500	1500	1295	-	-	-
2000	600	1705	1310	3309	3642	-
2000	700	2170	1370	3407	3720	-

Flanged Fittings

All Flanged Tee (T)

Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
2000	800	2170	1370	3505	3796	-
2000	900	2170	1370	3810	4128	-
2000	1000	2170	1370	4112	4459	-
2000	1200	2635	1430	4313	4644	-
2000	1400	2635	1430	4966	5340	-
2000	1500	2635	1430	5085	5455	-
2000	1600	3000	1520	5202	5567	-
2000	1800	3000	1520	5668	6055	-
2000	2000	3000	1520	6185	6599	-
2200	100	1560	1350	-	-	-
2200	150	1560	1350	-	-	-
2200	200	1560	1375	-	-	-
2200	250	1560	1375	-	-	-
2200	300	1560	1380	-	-	-
2200	350	1560	1380	-	-	-
2200	400	1560	1395	-	-	-
2200	450	1560	1395	-	-	-
2200	500	1560	1405	-	-	-
2200	600	1560	1420	3675	4034	-
2200	700	2220	1510	3988	4344	-
2200	800	2220	1510	4298	4654	-
2200	900	2220	1510	4526	4891	-
2200	1000	2220	1510	4753	5128	-
2200	1200	2220	1510	5026	5413	-
2200	1400	2880	1600	5709	6106	-
2200	1500	2880	1600	5973	6385	-
2200	1600	2880	1600	6234	6664	-
2200	1800	2880	1600	6474	6934	-
2200	2000	3020	1600	7316	7795	-
2200	2200	3020	1600	7954	8464	-
2400	100	1620	1490	-	-	-
2400	150	1620	1490	-	-	-
2400	200	1620	1500	-	-	-
2400	250	1620	1500	-	-	-
2400	300	1620	1510	-	-	-
2400	350	1620	1510	-	-	-
2400	400	1620	1520	-	-	-
2400	450	1620	1520	-	-	-
2400	500	1620	1530	-	-	-
2400	600	1620	1530	4418	4849	-
2400	700	2280	1620	4810	5260	-
2400	800	2280	1620	5200	5671	-
2400	900	2280	1620	5462	5941	-
2400	1000	2280	1620	5721	6211	-
2400	1200	2280	1620	5963	6432	-

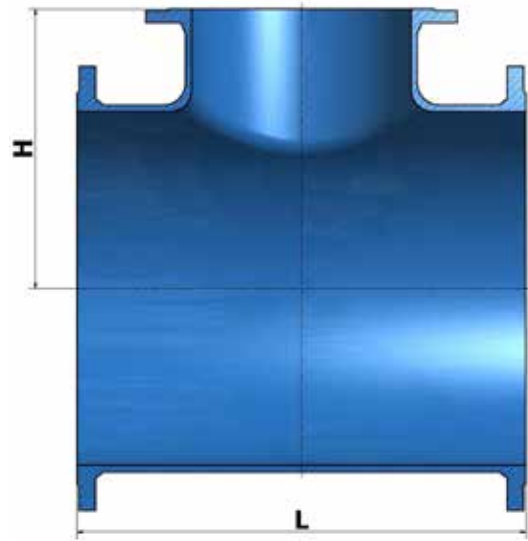


Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
2400	1400	2940	1710	6804	7317	-
2400	1600	2940	1710	7392	7937	-
2400	1800	2940	1710	7614	8145	-
2400	2000	3040	1620	8591	9185	-
2400	2200	3040	1695	9275	9901	-
2400	2400	3040	1570	10031	10715	-
2500	100	1620	1490	-	-	-
2500	150	1620	1490	-	-	-
2500	200	1620	1500	-	-	-
2500	250	1620	1500	-	-	-
2500	300	1620	1510	-	-	-
2500	350	1620	1510	-	-	-
2500	400	1620	1520	-	-	-
2500	450	1620	1520	-	-	-
2500	500	1620	1530	-	-	-
2500	600	1620	1530	-	-	-
2500	700	2280	1545	-	-	-
2500	800	2280	1560	-	-	-
2500	900	2280	1575	-	-	-
2500	1000	2280	1590	-	-	-
2500	1200	2280	1620	-	-	-
2500	1400	2940	1650	-	-	-
2500	1500	2940	1665	-	-	-
2500	1600	2940	1680	-	-	-
2500	1800	2940	1710	-	-	-
2500	2000	3060	1620	-	-	-
2500	2200	3060	1695	-	-	-
2500	2400	3060	1570	-	-	-
2600	100	1680	1685	-	-	-
2600	150	1680	1585	-	-	-
2600	200	1680	1600	-	-	-
2600	250	1680	1600	-	-	-

Flanged Fittings

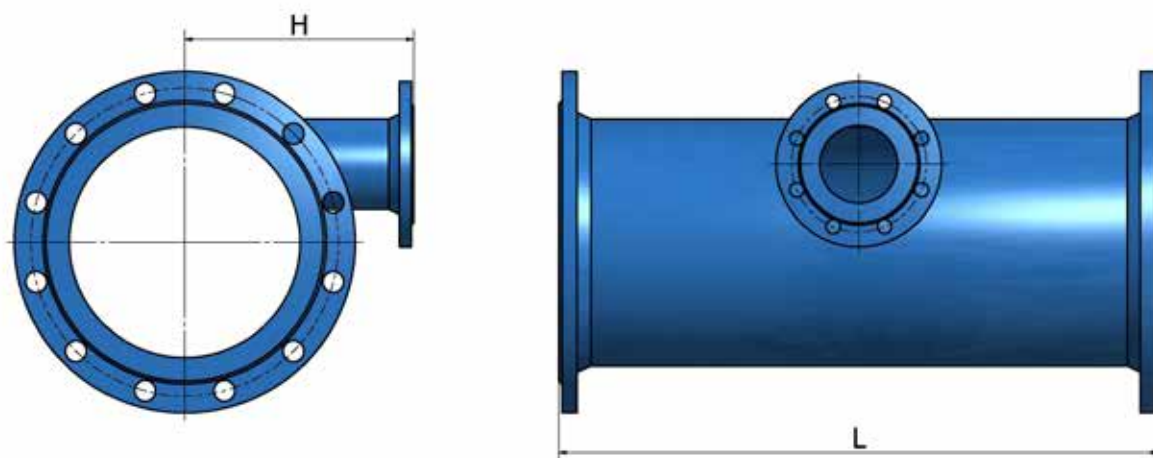
All Flanged Tee (T)

Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
2600	300	1680	1615	-	-	-
2600	350	1680	1615	-	-	-
2600	400	1680	1630	-	-	-
2600	450	1680	1630	-	-	-
2600	500	1680	1640	-	-	-
2600	600	1680	1640	5214	5711	-
2600	700	2560	1760	5645	6155	-
2600	800	2560	1760	6076	6596	-
2600	900	2560	1760	6375	6905	-
2600	1000	2560	1760	6673	7213	-
2600	1200	2560	1760	7289	7850	-
2600	1400	2560	1760	7585	8123	-
2600	1500	2560	1760	8075	8641	-
2600	1600	2560	1760	8564	9159	-
2600	1800	2560	1760	9213	9831	-



Flanged Fittings

All Flanged Level Invert Tee (TTO)

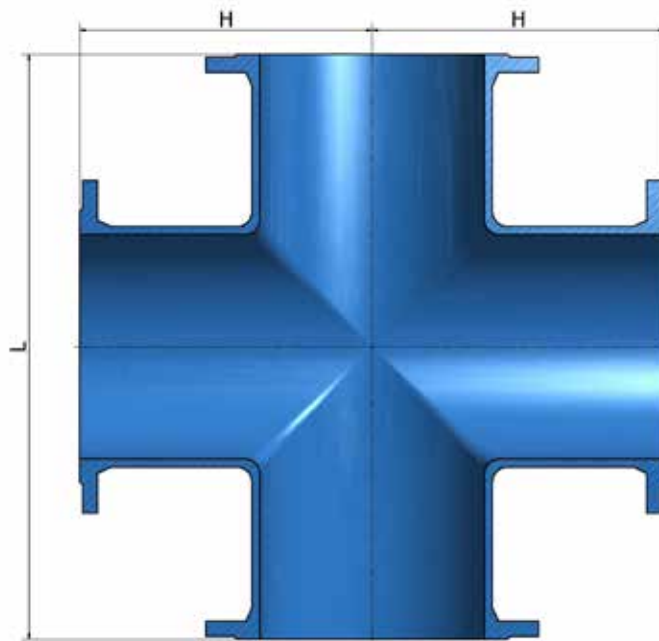


Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
100	80	360	195	19.5	19.5	21
150	80	440	220	29.5	29.5	32
200	80	520	250	42.5	42.5	47
200	100	520	250	43.5	43.5	48
250	80	700	275	66	71	76
250	100	700	275	68	73	79
250	150	700	275	-	-	-
300	80	800	305	92	97	104
300	100	800	305	95.5	99	105
300	150	800	305	99	104	110
350	80	850	340	121	127	144
350	100	850	340	123	129	146
350	150	850	340	128	134	151
350	200	950	340	-	-	-
400	80	900	365	153	165	187
400	100	900	365	156	167	190
400	150	900	365	162	171	194
400	200	900	365	167	176	199
450	80	950	380	188	204	226
450	100	950	380	189	205	227
450	150	950	380	197	213	236
450	200	950	380	202	202	241
500	80	1000	400	237	268	292
500	100	1000	400	241	272	296
500	150	1000	400	248	275	297
500	200	1000	400	255	282	304
600	80	1100	435	350	403	433
600	100	1100	435	351	404	434
600	150	1100	450	360	413	443
600	200	1100	450	370	423	453
700	100	650	500	-	-	-
700	150	650	500	262	302	-
700	200	650	500	268	308	-
800	100	690	540	-	-	-

Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
800	150	690	540	379	417	-
800	200	690	540	388	426	-
900	100	730	580	-	-	-
900	150	730	580	481	529	-
900	200	730	580	483	531	-
1000	150	770	630	625	708	-
1000	200	770	630	627	710	-
1000	250	990	735	-	-	-
1000	300	990	735	-	-	-
1000	350	990	735	-	-	-
1100	200	850	765	-	-	-
1200	100	850	700	-	-	-
1200	150	850	700	910	1039	-
1200	200	850	700	945	1074	-
1200	250	850	750	-	-	-
1200	300	850	750	-	-	-
1200	400	850	780	-	-	-
1400	150	1000	800	-	-	-
1400	200	1000	800	-	-	-
1400	250	1000	800	-	-	-
1400	300	1000	800	-	-	-
1500	150	1100	900	-	-	-
1500	200	1100	900	-	-	-
1500	250	1100	900	-	-	-
1500	300	1100	900	-	-	-
1600	200	1250	950	-	-	-
1600	250	1250	950	-	-	-
1600	300	1250	950	-	-	-
1600	350	1250	950	-	-	-
1600	400	1250	950	-	-	-
1600	500	1250	1000	-	-	-
2000	300	1500	1100	-	-	-
2200	400	1560	1395	-	3700	-

Flanged Fittings

All Flanged Cross (TT)

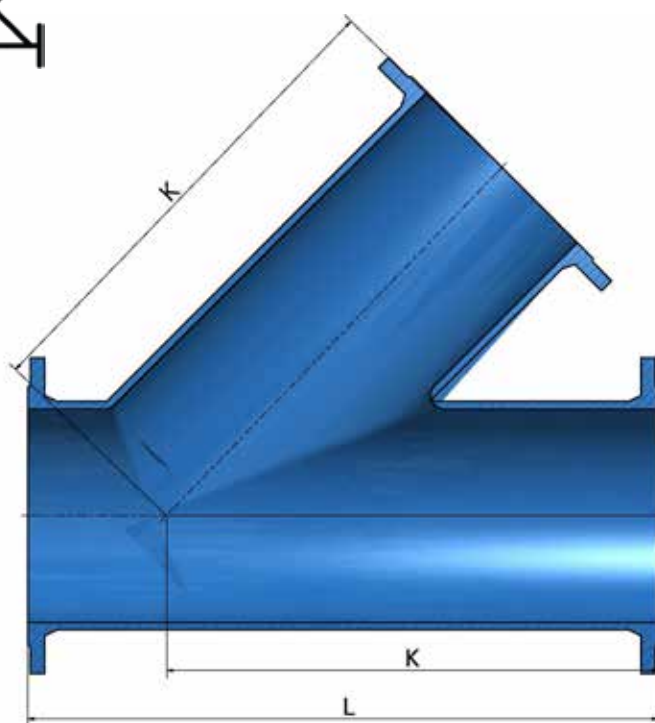


Size		Dimensions		Mass		
DN	dn	L	H	PN10	PN16	PN25
80	80	330	165	23.1	23.1	-
100	100	360	180	27.1	27.1	-
150	150	440	220	46.6	46.6	-
200	200	520	260	68.7	68.7	-
250	250	700	350	119.5	119.5	-
300	300	800	400	196	196	-
350	250	850	650	-	-	-
350	350	850	425	193	199	-
400	400	900	450	252	257	-
450	450	950	475	-	-	-
500	500	1000	500	386	431	-
600	600	1100	550	530	547	-
700	700	1200	600	658	680	-
800	800	1350	675	-	-	-
900	900	1500	750	-	-	-
1000	1000	1650	825	-	-	-
1100	1100	1780	890	-	-	-
1200	1200	1950	975	-	-	-
1400	1400	2015	1020	-	-	-
1600	1600	2300	1150	5000	-	-

Flanged Fittings

All Flanged 45° Angle Branch (FFC)

Size		Dimensions	
DN	dn	K	L
80	80	375	500
100	80	390	540
100	100	405	540
150	80	480	640
150	100	480	640
150	150	480	640
200	80	535	735
200	100	535	735
200	150	560	735
200	200	560	735
250	80	585	825
250	100	610	825
250	150	635	825
250	200	635	825
250	250	635	825
300	80	610	800
300	100	610	800
300	150	660	800
300	200	685	925
300	250	710	925
300	300	710	925
350	100	635	850
350	150	660	850
350	200	710	850
350	250	740	1000
350	300	790	1000
350	350	790	1000
400	100	710	900
400	150	740	900
400	200	760	900
400	250	820	1100
400	300	870	1100
400	350	870	1100
400	400	870	1100
450	100	710	950
450	150	760	950
450	200	790	950
450	250	820	950
450	300	900	1200
450	350	950	1200
450	400	950	1200
450	450	950	1200
500	150	765	1000
500	200	810	1000
500	250	840	1000
500	300	865	1275
500	350	950	1275
500	400	1025	1275
500	450	1025	1275
500	500	1025	1275
600	150	840	1100
600	200	890	1100
600	250	915	1100

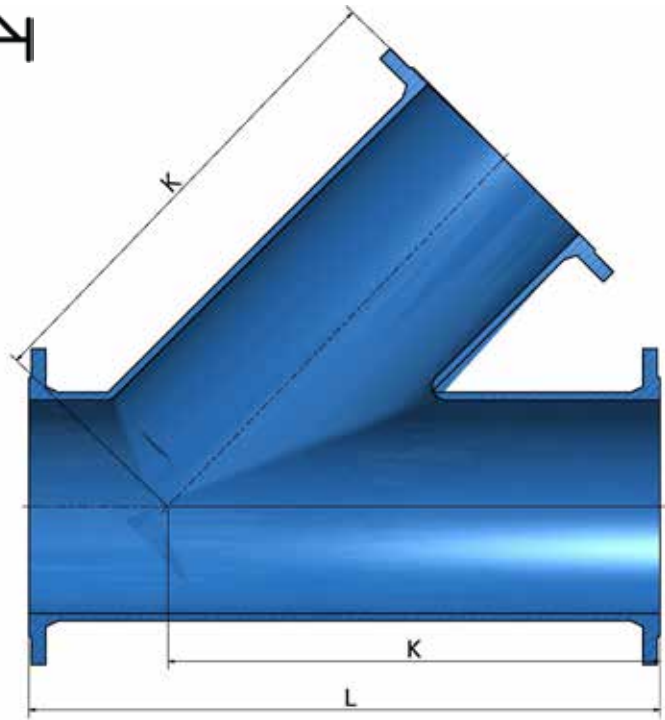


Size		Dimensions	
DN	dn	K	L
600	300	965	1250
600	350	1000	1250
600	400	1035	1250
600	450	1070	1500
600	500	1180	1500
600	600	1180	1500
700	200	1015	1200
700	250	1040	1200
700	300	1090	1400
700	350	1125	1400
700	400	1160	1400
700	450	1195	1500
700	500	1240	1500
700	600	1370	1725
700	700	1370	1725
800	250	1150	1350
800	300	1170	1350
800	350	1205	1500
800	400	1240	1500
800	450	1270	1500
800	500	1305	1700
800	600	1370	1700
800	700	1450	2000
800	800	1520	2000
900	300	1245	1500
900	350	1280	1500
900	400	1315	1500
900	450	1350	1775
900	500	1390	1775
900	600	1475	1775
900	700	1540	2000
900	800	1610	2000
900	900	1680	2130

Flanged Fittings

All Flanged 45° Angle Branch (FFC)

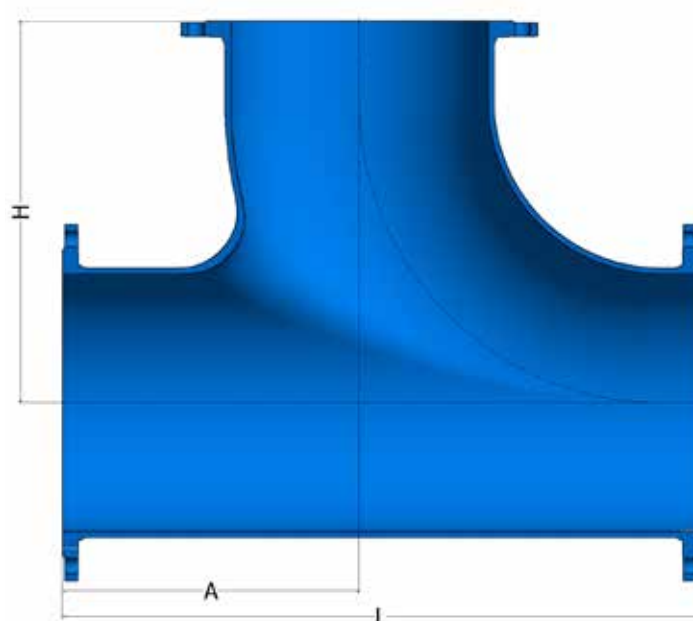
Size		Dimensions	
DN	dn	K	L
1000	350	1380	1650
1000	400	1415	1650
1000	450	1425	1650
1000	500	1510	2000
1000	600	1575	2000
1000	700	1640	2000
1000	800	1700	2500
1000	900	1975	2500
1000	1000	1980	2500
1200	450	1700	2000
1200	500	1750	2000
1200	600	1855	2300
1200	700	1920	2300
1200	800	1990	2500
1200	900	2050	2500
1200	1000	2280	3000
1200	1200	2280	3000



Flanged Fittings

All Flanged Radial Tee (SCH)

Size		Dimensions		
DN	dn	A	L	H
80	80	165	500	380
100	80	180	540	390
100	100	180	540	400
150	80	220	640	415
150	100	220	640	425
150	150	220	640	450
200	80	220	735	440
200	100	220	735	450
200	150	260	735	475
200	200	260	735	500
250	80	220	825	465
250	100	220	825	475
250	150	300	825	500
250	200	300	825	525
250	250	350	825	550
300	80	220	800	490
300	100	300	800	500
300	150	300	800	525
300	200	400	925	550
300	250	400	925	575
300	300	400	925	600
350	100	300	850	525
350	150	300	850	550
350	200	400	850	575
350	250	400	1000	600
350	300	400	1000	625
350	350	450	1000	650
400	100	300	900	550
400	150	300	900	575
400	200	400	900	600
400	250	400	1100	625
400	300	450	1100	650
400	350	450	1100	675
400	400	500	1100	700
450	100	300	950	575
450	150	300	950	600
450	200	400	950	625
450	250	450	950	650
450	300	450	1200	675
450	350	450	1200	700
450	400	550	1200	725

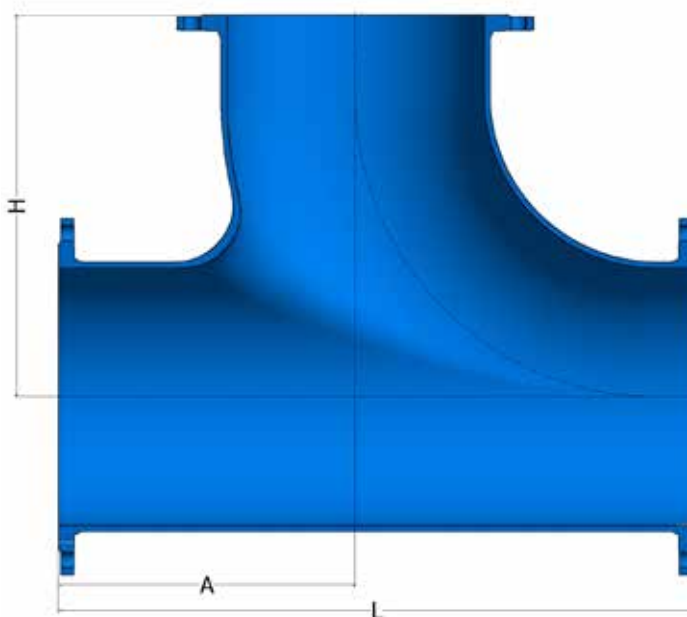


Size		Dimensions		
DN	dn	A	L	H
450	450	550	1200	750
500	150	300	1000	625
500	200	400	1000	650
500	250	450	1000	675
500	300	450	1275	700
500	350	450	1275	725
500	400	550	1275	750
500	450	550	1275	775
500	500	600	1275	800
600	150	330	1100	675
600	200	400	1100	700
600	250	450	1100	725
600	300	450	1250	750
600	350	450	1250	775
600	400	550	1250	800
600	450	600	1500	825
600	500	600	1500	850
600	600	700	1500	900
700	200	400	1200	750
700	250	450	1200	775
700	300	450	1400	800
700	350	450	1400	825
700	400	550	1400	850
700	450	600	1500	875
700	500	600	1500	900
700	600	700	1725	950

Flanged Fittings

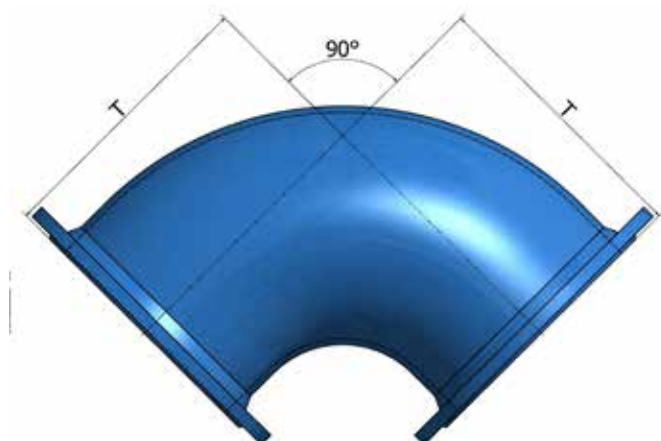
All Flanged Radial Tee (SCH)

Size		Dimensions		
DN	dn	A	L	H
700	700	800	1725	1000
800	250	450	1350	825
800	300	450	1350	850
800	350	450	1500	875
800	400	550	1500	900
800	450	600	1500	925
800	500	600	1700	950
800	600	700	1700	1000
800	700	800	2000	1050
800	800	900	2000	1100
900	300	450	1500	900
900	350	450	1500	925
900	400	500	1500	950
900	450	600	1775	975
900	500	600	1775	1000
900	600	700	1775	1050
900	700	800	2000	1100
900	800	900	2000	1150
900	900	1000	2130	1200
1000	350	450	1650	975
1000	400	550	1650	1000
1000	450	600	1650	1025
1000	500	600	2000	1050
1000	600	700	2000	1100
1000	700	800	2000	1150
1000	800	900	2500	1200
1000	900	1000	2500	1250
1000	1000	1100	2500	1300
1200	450	600	2000	1125
1200	500	600	2000	1150
1200	600	700	2300	1200
1200	700	800	2300	1250
1200	800	900	2500	1300
1200	900	1000	2500	1350
1200	1000	1100	3000	1400
1200	1200	1300	3000	1500

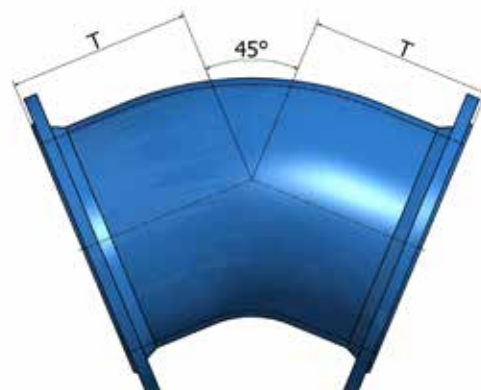


Flanged Fittings

Flanged Bend 90° (Q) 



Flanged Bend 45° (FFK45) 

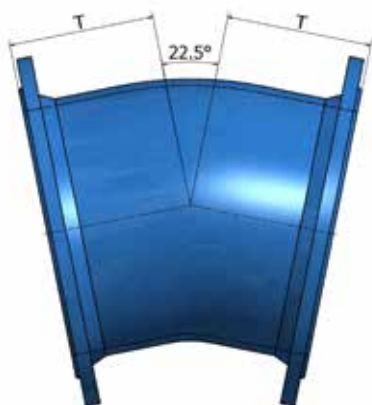


DN	T	Mass		
		PN10	PN16	PN25
80	165	9.6	9.6	9.6
100	180	11.9	11.9	12.9
150	220	20	20	22
200	260	31	31	34
250	350	50	50	57
300	400	70	70	81
350	450	90	96	113
400	500	116	127	149
450	550	147	163	184
500	600	181	211	235
600	700	272	325	353
700	800	386	416	-
800	900	533	572	-
900	1 000	698	745	-
1000	1 100	907	990	-
1100	1200	1164	1234	-
1200	1300	1452	1562	-
1400	1350	1948	2062	-
1500	1400	2273	2449	-
1600	1411	2663	2841	-
1800	1500	3348	3572	-
2000	1600	-	-	-
2200	1650	-	5310	-

DN	T	Mass		
		PN10	PN16	PN25
80	130	9.3	9.3	9.3
100	140	11.3	11.3	12.4
150	160	18.5	18.5	20.5
200	180	27.5	27.5	31
250	350	55	55	62
300	400	76	78	88
350	300	78	83	89
400	325	96	107	129
450	350	120	135	157
500	375	145	175	198
600	425	212	266	294
700	480	296	326	-
800	530	403	442	-
900	580	519	567	-
1000	630	668	751	-
1100	695	857	927	-
1200	750	1050	1178	-
1400	775	1388	1524	-
1500	810	1677	1853	-
1600	845	1915	2119	-
1800	910	2465	2717	-
2000	980	3149	3455	-
2200	880	3446	3804	-

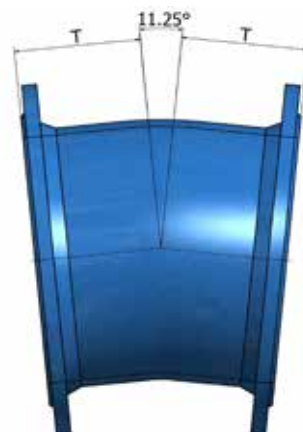
Flanged Fittings

Flanged Bend 22½° (FFK22) 



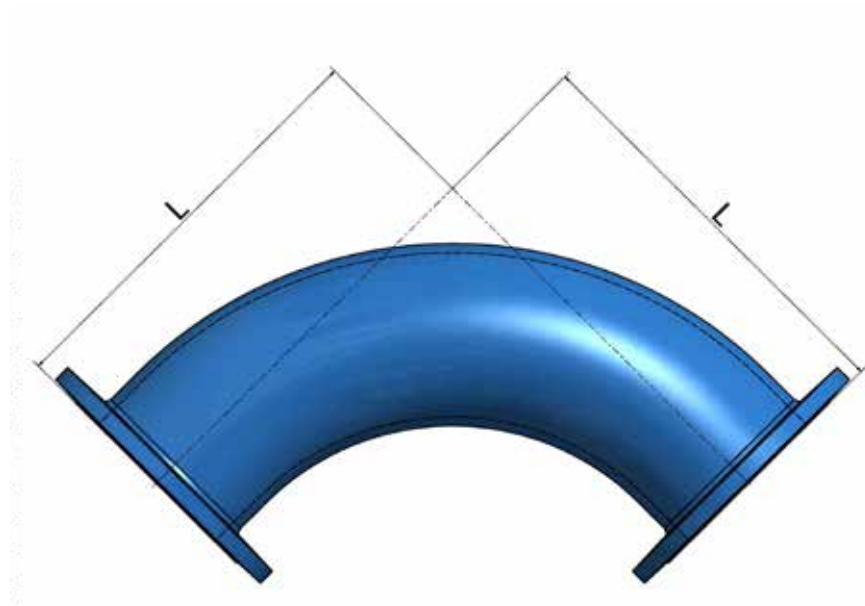
DN	T	Mass		
		PN10	PN16	PN25
80	105	9.4	9.4	9.4
100	110	11.5	11.5	12.5
150	109	18.7	18.7	19.4
200	131	27.9	27.9	31.6
250	190	56	56	62.8
300	210	76	79	89
350	210	79	84	99.9
400	239	97	109	131
450	349	122	138	160
500	375	146	177	200
600	426	216	268	297
700	478	300	330	-
800	529	409	447	-
900	581	526	577	-
1000	632	677	760	-
1100	683	877	947	-
1200	735	1054	1183	-
1400	835	1498	1632	-
1500	886	1838	2014	-
1600	940	2120	2324	-
1800	480	1549	1801	-
2000	520	1967	2273	-
2200	560	2485	2819	-

Flanged Bend 11¼° (FFK11) 



DN	T	Mass		
		PN10	PN16	PN25
80	113	9.5	9.5	9.5
100	115	11.5	11.5	12.5
150	113	18.7	18.7	20.6
200	132	27.9	27.9	31.6
250	165	55.9	55.9	63.3
300	175	77.8	78	89.5
350	191	79.3	83.6	100.4
400	205	97.2	108.4	131
450	349	123	139	160
500	375	147	177.6	200.8
600	426	216	270	299
700	478	301	332	-
800	529	412	449	-
900	581	529	577	-
1000	632	681	764	-
1100	683	882	952	-
1200	735	1060	1189	-
1400	835	1507	1612	-
1500	885	1849	2025	-
1600	940	2132	2337	-
1800	345	1251	1279	-
2000	375	1580	1886	-
2200	405	1996	2330	-

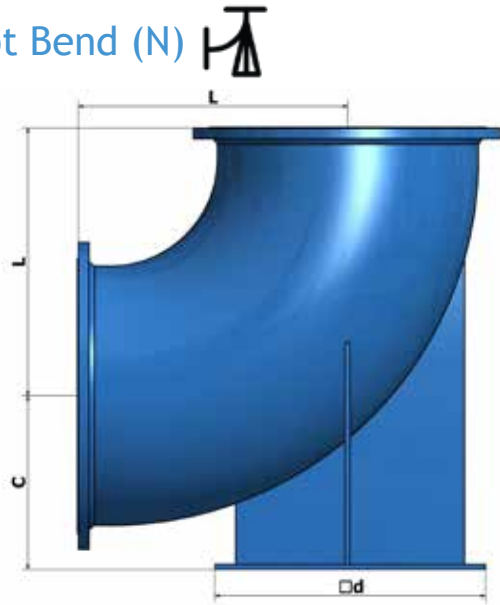
LONG BEND



DN	L	Weight (kg)		
		PN10	PN16	PN25
80	380	-	-	-
100	400	-	-	-
125	425	-	-	-
150	450	-	-	-
200	500	-	-	-
250	550	-	-	-
300	600	-	-	-
350	650	-	-	-
400	700	-	-	-
450	750	-	-	-
500	800	-	-	-
600	900	-	-	-
700	1000	-	-	-
800	1100	-	-	-
900	1200	-	-	-
1000	1300	-	-	-
1100	1400	-	-	-
1200	1500	-	-	-

Flanged Fittings

90° Flanged Duck Foot Bend (N)



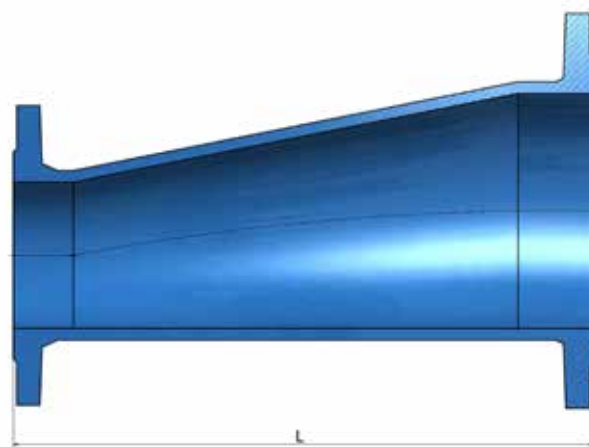
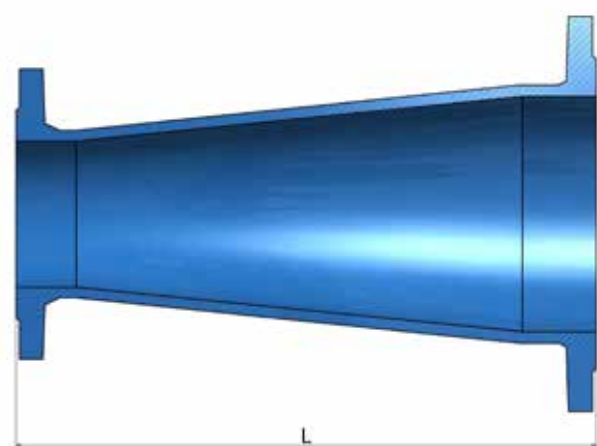
DN	Dimensions			Mass		
	L	C	□ d	PN10	PN16	PN25
80	165	110	180	14.1	14.1	14.1
100	180	125	200	17.8	17.8	18.8
150	220	160	250	30	30	32
200	260	190	300	46	46.5	50.5
250	350	225	350	75	75	82
300	400	255	400	105	106	116
350	450	290	450	139	145	162
400	500	320	500	178	189	212
450	550	355	550	245	261	283
500	600	385	600	283	313	337
600	700	450	700	428	481	509
700	800	515	800	684	708	-
800	900	580	900	944	974	-
900	1000	625	1000	1252	1290	-
1000	1100	710	1100	1629	1698	-
1100	1200	840	1300	2080	2150	-
1200	1300	950	1400	2599	2709	-
1400	1350	1045	1500	-	-	-
1500	1400	1055	1550	3100	-	-
1600	1411	-	-	-	-	-
1800	1500	-	-	-	-	-
2000	1600	-	-	-	-	-
2200	1650	1500	2200	-	8700	-

Note: For sizes up to DN700, the supporting duck foot is integrally casted, for bigger sizes the supporting duck foot is fabricated from steel and jointed by welding

Flanged Fittings

Flanged Concentric Reducer (FFR)

Flanged Eccentric Reducer (FFRe)



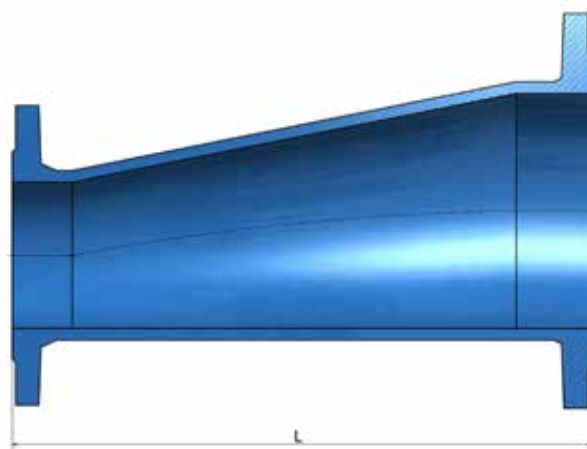
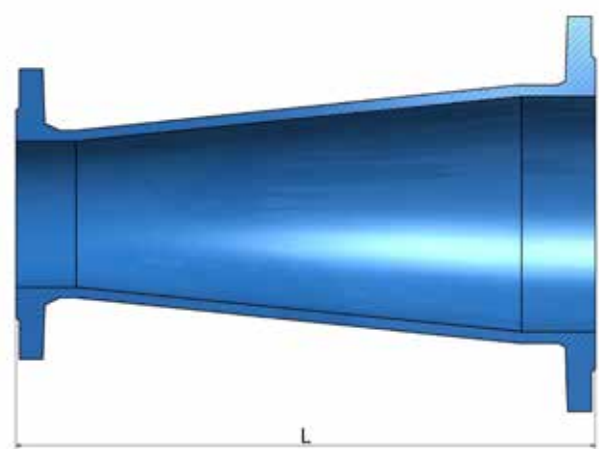
Size		L	Mass		
DN	dn		PN10	PN16	PN25
80	65	200	9	9	9.5
100	80	200	9.3	9.3	9.8
125	100	200	11.3	11.3	12.5
150	80	200	16.4	16.4	17.4
150	100	200	15.3	15.3	16.8
150	125	200	14	14	15.5
200	65	600	-	-	-
200	80	600	-	-	-
200	100	600	27.5	27.5	30
200	125	300	-	-	-
200	150	300	22	21.5	25
250	150	600	39	39	43.5
250	200	300	30	30	35.5
300	100	700	-	-	-
300	125	650	-	-	-
300	150	650	48.5	48.5	55
300	200	600	52	52	59
300	250	300	40.5	40.5	49
350	200	650	61.5	64	74
350	250	600	65.5	67.5	79
350	300	300	49.5	52.5	66
400	200	700	73.5	77.5	90.5
400	250	650	77	81.5	96
400	300	600	80.5	85	101
400	350	300	58	67	86
450	250	700	89.5	97	112
450	300	650	93.5	101	117
450	350	600	95.6	106	126
450	400	300	70.5	83	105
500	250	700	-	-	-
500	300	700	109	122	138
500	350	650	111	127	145
500	400	600	110	130	153
500	450	300	83	104	126
600	300	800	190	-	-
600	350	750	147	174	193

Size		L	Mass		
DN	dn		PN10	PN16	PN25
600	400	700	150	178	201
600	450	650	151	183	206
600	500	600	149	190	216
700	350	900	-	-	-
700	400	800	196	212	-
700	450	750	197	217	-
700	500	700	200	255	-
700	600	600	195	236	-
800	400	1000	-	-	-
800	450	900	263	286	-
800	500	800	256	284	-
800	600	700	260	298	-
800	700	600	250	285	-
900	450	1100	-	-	-
900	500	1000	338	370	-
900	600	800	318	360	-
900	700	700	321	352	-
900	800	600	308	352	-
1000	500	1200	592	735	-
1000	600	1000	422	490	-
1000	700	800	396	442	-
1000	800	700	399	448	-
1000	900	600	373	438	-
1200	600	1450	-	-	-
1200	700	1345	711	777	-
1200	800	1160	688	758	-
1200	900	975	652	726	-
1200	1000	790	586	692	-
1400	800	1590	1034	1105	-
1400	900	1405	998	1074	-
1400	1000	1220	961	1052	-
1400	1200	850	814	947	-
1500	900	1620	1211	1317	-
1500	1000	1435	1174	1297	-
1500	1200	1065	1074	1216	-
1500	1400	695	914	1058	-

Flanged Fittings

Flanged Concentric Reducer (FFR) 

Flanged Eccentric Reducer (FFRe) 



Size		L	Mass		
DN	dn		PN10	PN16	PN25
1600	1000	1650	1424	1547	-
1600	1200	1280	1324	1468	-
1600	1400	910	1103	1273	-
1600	1500	725	1073	1250	-
1800	1200	1710	1858	2024	-
1800	1400	1340	1701	1870	-
1800	1500	1155	1610	1810	-
1800	1600	970	1436	1664	-
2000	1200	2140	2512	2705	-
2000	1400	1770	2358	2553	-
2000	1500	1585	2268	2494	-
2000	1600	1400	2176	2404	-
2000	1800	1030	1800	2079	-
2200	1400	2200	3168	3385	-
2200	1500	2015	3070	3328	-
2200	1600	1830	2980	3240	-
2200	1800	1460	2712	2994	-
2200	2000	1090	2250	2570	-
2400	1500	2445	4006	4322	-
2400	1600	2260	3919	4238	-
2400	1800	1890	3557	3997	-
2400	2000	1520	3338	3704	-
2400	2200	1150	2765	3034	-
2500	1200	-	-	-	-
2500	1400	-	-	-	-
2500	1500	-	-	-	-
2500	1600	-	-	-	-
2500	1800	-	-	-	-

Size		L	Mass		
DN	dn		PN10	PN16	PN25
2500	2000	-	-	-	-
2500	2200	-	-	-	-
2600	1600	2690	4934	5286	-
2600	1800	2320	4682	5047	-
2600	2000	1950	4364	4755	-
2600	2200	1580	3996	4419	-
2600	2400	1210	3311	3748	-

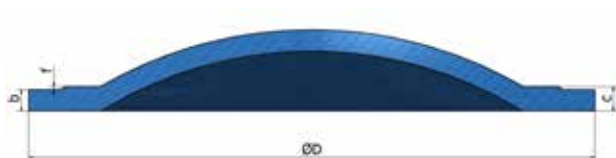


Flanged Fittings

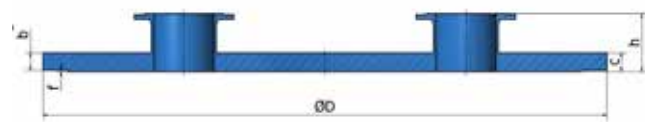
Blank Flange (X)



Blank Flange form (DN80 up to DN300)



Blank Flange form (DN350 up to DN2600)



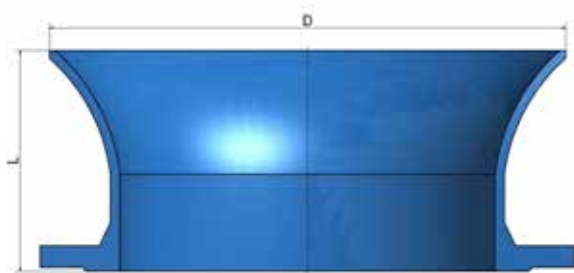
Blank Flange with one, two or three branches from (DN1400-up to DN2600)

DN	Mass		
	PN10	PN16	PN25
100	4.3	4.3	4.8
150	7.2	7.2	8.3
200	11	11	13.3
250	16.9	16.9	21
300	24	24	30
350	29.5	33.5	43.5
400	36.5	44.5	58
450	-	-	-
500	56	77	94
600	85	121	144
700	123	156	-
800	172	218	-
900	224	286	-
1000	293	387	-
1200	575	662	-
1400	739	994	-
1500	-	-	-
1600	1239	1409	-
1800	1717	1858	-
2000	-	-	-
2200	-	-	-
2400	-	-	-
2500	-	-	-
2600	-	-	-

DN	Branch	h
1000	200	200
1200	200	200
1400	80	200
1400	100	200
1400	150	200
1400	200	200
1500	80	200
1500	100	200
1500	150	200
1600	100	200
1600	150	200
1600	200	200
1800	100	200
1800	150	200
1800	200	200
2000	100	200
2000	150	200
2000	200	200
2400	100	200
2400	150	200
2400	200	200
2500	100	200
2500	150	200
2500	200	200
2600	100	200
2600	150	200
2600	200	200

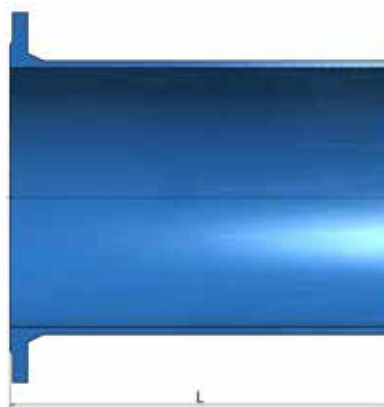
Flanged Fittings

Flanged Bell Mouth (OMS)



DN	Dimensions		Mass		
	D	L	PN10	PN16	PN25
80	150	130	5.2	5.2	5.2
100	175	135	6.2	6.2	6.7
150	230	150	10.1	10.1	11.1
200	290	170	15	15	16.8
250	345	183	21	21	24.5
300	405	205	28	28.5	33.5
350	460	220	35	38.5	46
400	520	240	45	49.5	60.5
450	575	255	54	62	73
500	635	275	67	80	91
600	750	310	96	120	132
700	865	345	135	146	-
800	980	380	182	197	-
900	1095	415	231	250	-
1000	1210	450	297	331	-
1100	1325	485	370	405	-
1200	1440	520	457	512	-
1400	1670	590	646	702	-
1500	1785	625	763	851	-
1600	1900	660	906	995	-
1800	2130	730	1185	1297	-
2000	2360	800	1530	1668	-
2200	2590	870	1964	2135	-
2400	2820	940	2485	2713	-
2600	3050	1010	2989	3242	-

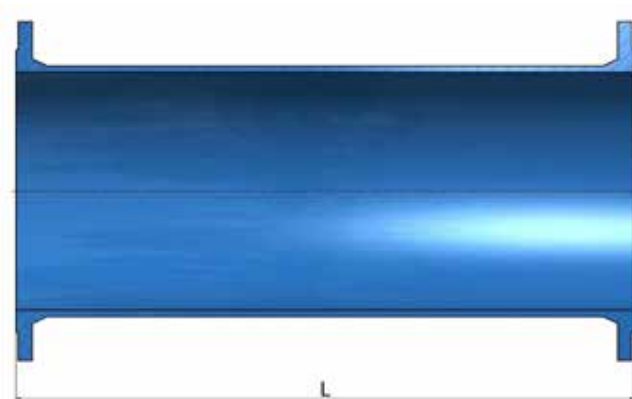
Flanged Spigot (F)



DN	L	Mass		
		PN10	PN16	PN25
80	350	7.8	7.8	
100	360	9.6	9.6	
150	380	15.6	15.6	
200	400	22.5	22.5	
250	420	32	32	
300	440	43	43	
350	460	52	55	
400	480	64	70	
450	500	77	86	
500	520	94	109	
600	560	133	159	
700	600	179	194	
800	600	226	245	
900	600	272	295	
1000	600	328	369	
1100	600	394	430	
1200	600	456	520	
1400	710	664	732	
1500	750	812	900	
1600	780	922	1024	
1800	850	1196	1322	
2000	920	1523	1687	
2200	990	1948	2115	
2400	1 060	2409	2611	
2600	1 130	2918	3153	

Flanged Fittings

Double Flanged Pipe (FF)



DN	PN10 DF Pipe Mass (Kg) for L					
	500	1000	1500	2000	2500	3000
80	14	X	X	X	X	X
100	17	27	X	X	X	X
150	26	42	X	X	X	X
200	37	60	100	X	X	X
250	50	81	113	X	X	X
300	65	104	143	182	X	X
350	77	125	174	222	X	X
400	91	149	208	266	X	X
450	110	178	247	316	X	X
500	125	204	284	364	444	524
600	168	273	379	484	590	695
700	216	349	483	616	750	883
800	276	442	608	774	940	1106
900	330	530	730	930	1130	1330
1000	402	641	881	1120	1360	1599
1100	506	786	1066	1346	1626	1906
1200	567	891	1216	1540	1865	2189
1400	719	1141	1564	1986	2409	2831
1500	881	1357	1834	2310	2787	3263
1600	946	1480	2014	2548	3082	3616
1800	1130	1787	2445	3102	3760	4417
2000	1352	2146	2940	3734	4528	5322
2200	1634	2575	3517	4458	5340	6341
2400	1901	3005	4110	5214	6319	7423
2500	2027	3217	4409	5600	6791	7981
2600	2152	3429	4707	5984	7262	8539

PN16 DF Pipe Mass (Kg) for L					
500	1000	1500	2000	2500	3000
14	X	X	X	X	X
17	27	X	X	X	X
26	42	X	X	X	X
37	60	100	X	X	X
50	81	113	X	X	X
65	104	143	182	X	X
83	131	180	228	X	X
102	160	218	276	X	X
125	194	263	332	X	X
155	235	316	396	477	557
220	326	432	538	644	750
245	380	515	650	785	920
314	480	646	812	978	1144
377	578	779	980	1181	1382
484	724	964	1204	1444	1684
576	856	1136	1416	1696	1976
696	1019	1343	1666	1990	2313
854	1278	1702	2126	2550	2974
1057	1533	2010	2486	2963	3439
1150	1684	2218	2752	3286	3820
1382	2039	2697	3354	4012	4669
1658	2451	3245	4038	4832	5625
1967	2909	3852	4794	5737	6679
2306	3409	4513	5616	6720	7823
2464	3655	4546	6036	7227	8418
2622	3900	5178	6456	7734	9012

Flanged Fittings

Pipes with Puddle Flanges:

Puddle Flange Function

Problems keep on occurring when connecting pipes during construction work. Pipes laid in the ground must be introduced into concrete walls. In many cases, the presence of groundwater must be taken into account in these procedures.

Standing water penetrates on the outer side of the pipes right into the building, requiring costly elimination of the leaks.

Usage of puddle flanges may prevent the seepage of groundwater through the concrete walls.

Puddle Flanges Dimensions

Dn	80-300	400-800	900-1600	1600
Thickness - T	10	15	20	25
External Diameter	Same as the external diameter of the main flange according of the related PN designation			

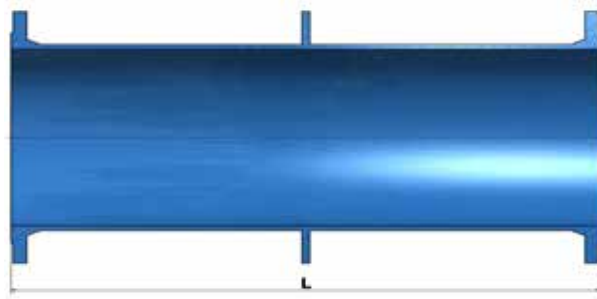
Location of the Puddle Flange:

Puddle flange is located in the middle of pipe length L unless stated in the order specifications



Flanged Fittings

Double Flanged Pipe with puddle (FFM)

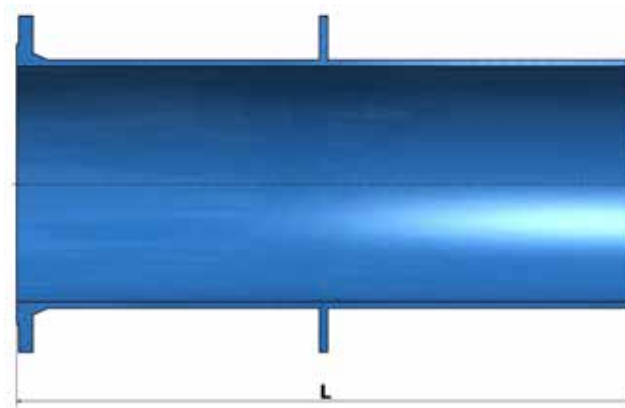


DN	PN10 Double flanged pipe with Puddle Mass (Kg) for L					
	500	1000	1500	2000	2500	3000
80	17	X	X	X	X	X
100	20	30	X	X	X	X
150	31	47	X	X	X	X
200	44	67	110	X	X	X
250	59	90	122	X	X	X
300	78	117	156	195	X	X
350	91	139	188	236	X	X
400	107	165	224	282	X	X
450	130	198	267	336	X	X
500	147	226	306	386	466	546
600	199	304	410	515	621	726
700	257	390	524	657	791	924
800	331	497	663	829	995	1161
900	395	595	795	995	1195	1395
1000	483	722	962	1201	1441	1680
1100	619	899	1179	1459	1739	2019
1200	688	1012	1337	1661	1986	2310
1400	867	1289	1712	2134	2557	2979
1500	1083	1559	2036	2512	2989	3465
1600	1152	1686	2220	2754	3288	3822
1800	1366	2023	2681	3338	3996	4653
2000	1631	2425	3219	4013	4807	5601
2200	1980	2921	3863	4804	5686	6687
2400	2299	3403	4508	5612	6717	7821
2500	2445	3635	4827	6018	7209	8399
2600	2589	3866	5144	6421	7699	8976

DN	PN16 Double flanged pipe with Puddle Mass (Kg) for L					
	500	1000	1500	2000	2500	3000
17	X	X	X	X	X	X
20	30	X	X	X	X	X
31	47	110	X	X	X	X
44	67	X	X	X	X	X
59	90	122	X	X	X	X
78	117	156	195	X	X	X
100	148	197	245	X	X	X
124	182	240	298	X	X	X
153	222	291	360	X	X	X
192	272	353	433	514	594	594
277	383	489	595	701	807	807
300	435	570	705	840	975	975
388	554	720	886	1052	1218	1218
465	666	867	1068	1269	1470	1470
606	846	1086	1326	1566	1806	1806
724	1004	1284	1564	1844	2124	2124
882	1205	1529	1852	2176	2499	2499
1069	1493	1917	2341	2765	3189	3189
1347	1823	2300	2776	3253	3729	3729
1458	1992	2526	3060	3594	4128	4128
1744	2401	3059	3716	4374	5031	5031
2090	2883	3677	4470	5264	6057	6057
2479	3421	4364	5306	6249	7191	7191
2907	4010	5114	6217	7321	8424	8424
3101	4292	5183	6673	7864	9055	9055
3294	4572	5850	7128	8406	9684	9684

Flanged Fittings

Flanged Spigot Pipe with Puddle

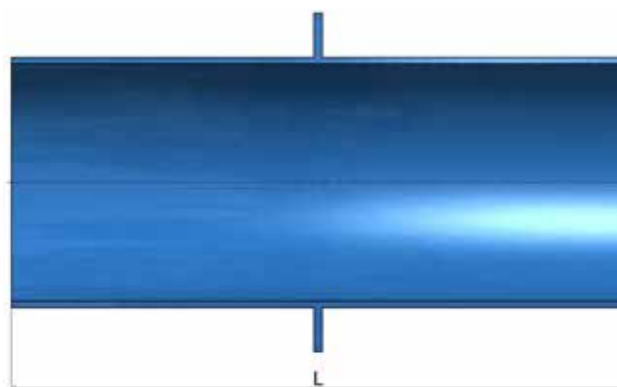


DN	PN10 Flanged Spigot Pipe with Puddle Mass (Kg) for L					
	500	1000	1500	2000	2500	3000
80	14	X	X	X	X	X
100	17	27	X	X	X	X
150	26	42	X	X	X	X
200	37	60	X	X	X	X
250	50	81	113	X	X	X
300	65	104	143	182	X	X
350	77	125	174	222	X	X
400	91	149	208	266	X	X
450	110	178	247	316	X	X
500	125	204	284	364	444	524
600	168	273	379	484	590	695
700	216	349	483	616	750	883
800	276	442	608	774	940	1106
900	330	530	730	930	1130	1330
1000	402	641	881	1120	1360	1599
1100	506	786	1066	1346	1626	1906
1200	567	891	1216	1540	1865	2189
1400	719	1141	1564	1986	2409	2831
1500	881	1357	1834	2310	2787	3263
1600	946	1480	2014	2548	3082	3616
1800	1130	1787	2445	3102	3760	4417
2000	1352	2146	2940	3734	4528	5322
2200	1634	2575	3517	4458	5340	6341
2400	1901	3005	4110	5214	6319	7423
2500	2027	3217	4409	5600	6791	7981
2600	2152	3429	4707	5984	7262	8539

DN	PN16 Flanged Spigot Pipe with Puddle Mass (Kg) for L					
	500	1000	1500	2000	2500	3000
14	X	X	X	X	X	X
17	27	X	X	X	X	X
26	42	X	X	X	X	X
37	60	X	X	X	X	X
50	81	113	X	X	X	X
65	104	143	182	X	X	X
83	131	180	228	X	X	X
102	160	218	276	X	X	X
125	194	263	332	X	X	X
155	235	316	396	477	557	
220	326	432	538	644	750	
245	380	515	650	785	920	
314	480	646	812	978	1144	
377	578	779	980	1181	1382	
484	724	964	1204	1444	1684	
576	856	1136	1416	1696	1976	
696	1019	1343	1666	1990	2313	
854	1278	1702	2126	2550	2974	
1057	1533	2010	2486	2963	3439	
1150	1684	2218	2752	3286	3820	
1382	2039	2697	3354	4012	4669	
1658	2451	3245	4038	4832	5625	
1967	2909	3852	4794	5737	6679	
2306	3409	4513	5616	6720	7823	
2464	3655	4546	6036	7227	8418	
2622	3900	5178	6456	7734	9012	

Flanged Fittings

Double Spigot Pipe with puddle +

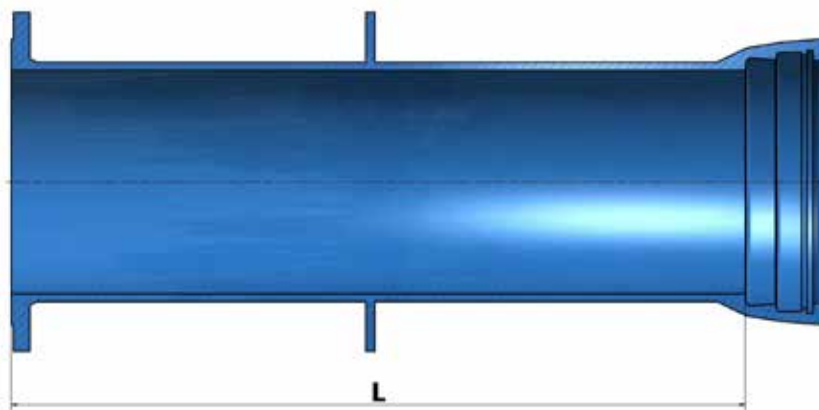


DN	PN10 Double spigot pipe with Puddle Mass (Kg) for L					
	500	1000	1500	2000	2500	3000
80	11	X	X	X	X	X
100	14	24	X	X	X	X
150	21	37	X	X	X	X
200	30	53	X	X	X	X
250	41	72	104	X	X	X
300	52	91	130	169	X	X
350	63	111	160	208	X	X
400	75	133	192	250	X	X
450	90	158	227	296	X	X
500	103	182	262	342	422	502
600	137	242	348	453	559	664
700	175	308	442	575	709	842
800	221	387	553	719	885	1051
900	265	465	665	865	1065	1265
1000	321	560	800	1039	1279	1518
1100	393	673	953	1233	1513	1793
1200	446	770	1095	1419	1744	2068
1400	571	993	1416	1838	2261	2683
1500	679	1155	1632	2108	2585	3061
1600	740	1274	1808	2342	2876	3410
1800	894	1551	2209	2866	3524	4181
2000	1073	1867	2661	3455	4249	5043
2200	1288	2229	3171	4112	4994	5995
2400	1503	2607	3712	4816	5921	7025
2500	1609	2799	3991	5182	6373	7563
2600	1715	2992	4270	5547	6825	8102

PN16 spigot flanged pipe with Puddle Mass (Kg) for L					
500	1000	1500	2000	2500	3000
11	X	X	X	X	X
14	24	X	X	X	X
21	37	X	X	X	X
30	53	X	X	X	X
41	72	104	X	X	X
52	91	131	170	X	X
66	114	163	211	X	X
80	138	196	254	X	X
97	166	235	304	X	X
118	198	279	359	440	520
163	269	375	481	587	693
190	325	460	595	730	865
240	406	572	738	904	1070
289	490	691	892	1093	1294
362	602	842	1082	1322	1562
428	708	988	1268	1548	1828
510	833	1157	1480	1804	2127
639	1063	1487	1911	2335	2759
767	1243	1720	2196	2673	3149
842	1376	1910	2444	2978	3512
1020	1677	2335	2992	3650	4307
1226	2019	2813	3606	4400	5193
1455	2397	3340	4282	5225	6167
1705	2808	3912	5015	6119	7222
1827	3018	3909	5399	6590	7781
1950	3228	4506	5784	7062	8340

Flanged Fittings

Flanged Socket Pipe with Puddle



DN	PN10 Flanged Socket Pipe with Puddle Mass (Kg) for L					
	500	1000	1500	2000	2500	3000
80	17	X	X	X	X	X
100	21	31	X	X	X	X
150	33	49	X	X	X	X
200	47	70	X	X	X	X
250	64	95	127	X	X	X
300	83	122	161	200	X	X
350	100	148	197	245	X	X
400	120	178	237	295	X	X
450	146	214	283	352	X	X
500	168	247	327	407	487	567
600	227	332	438	543	649	754
700	296	429	563	696	830	963
800	378	544	710	876	1042	1208
900	460	660	860	1060	1260	1460
1000	563	802	1042	1281	1521	1760
1100	711	991	1271	1551	1831	2111
1200	805	1129	1454	1778	2103	2427
1400	999	1421	1844	2266	2689	3111
1500	1359	1835	2312	2788	3265	3741
1600	1430	1964	2498	3032	3566	4100
1800	1620	2277	2935	3592	4250	4907
2000	1978	2772	3566	4360	5154	5948
2200	2418	3359	4301	5242	6124	7125
2400	2867	3971	5076	6180	7285	8389
2500	2027	3217	4409	5600	6791	7981
2600	3326	4603	5881	7158	8436	9713

PN16 Flanged Socket Pipe with Puddle Mass (Kg) for L					
500	1000	1500	2000	2500	3000
17	X	X	X	X	X
21	31	X	X	X	X
33	49	X	X	X	X
47	70	X	X	X	X
64	95	127	X	X	X
83	122	161	200	X	X
106	154	203	251	X	X
131	189	247	305	X	X
161	230	299	368	X	X
198	278	359	439	520	600
279	385	491	597	703	809
325	460	595	730	865	1000
416	582	748	914	1080	1246
507	708	909	1110	1311	1512
645	885	1125	1365	1605	1845
781	1061	1341	1621	1901	2181
934	1257	1581	1904	2228	2551
1134	1558	1982	2406	2830	3254
1535	2011	2488	2964	3441	3917
1634	2168	2702	3236	3770	4304
1872	2529	3187	3844	4502	5159
2284	3077	3871	4664	5458	6251
2751	3693	4636	5578	6521	7463
3272	4375	5479	6582	7686	8789
2464	3655	4546	6036	7227	8418
3796	5074	6352	7630	8908	10186



Socket Fittings



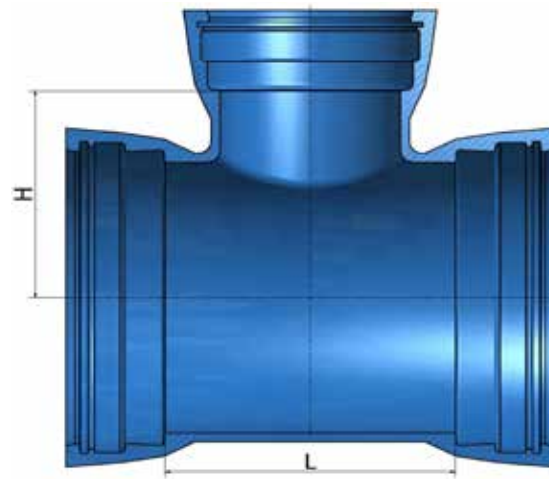
Socket Fittings



Socket Fittings

All Socket Tee (MMB)

Size		Dimensions		Mass
DN	dn	L	H	T- Type
80	80	170	85	12.8
100	80	170	95	14.8
100	100	190	95	16.1
150	80	170	120	21.5
150	100	195	120	23.5
150	150	255	125	28
200	80	175	145	30
200	100	200	145	32
200	150	255	150	37
200	200	315	155	43
250	80	180	170	-
250	100	200	170	59
250	150	260	175	-
250	200	315	180	72
250	250	375	190	81
300	100	205	195	67.5
300	150	260	200	-
300	200	320	205	79.5
300	250	375	210	-
300	300	435	220	116
350	80	325	260	-
350	100	325	260	81
350	150	325	270	98
350	200	325	270	-
350	250	495	280	-
350	300	495	285	-
350	350	495	290	142
400	80	325	280	-
400	100	325	285	131
400	150	325	295	-
400	200	325	295	145
400	250	560	300	--
400	300	560	310	-
400	350	560	315	-
400	400	560	320	165
450	80	330	310	-
450	100	330	315	-
450	150	330	320	-
450	200	330	325	-
450	250	445	330	-
450	300	445	335	-
450	350	445	340	-
450	400	620	345	-
450	450	620	350	-
500	80	330	335	-
500	100	330	340	221
500	150	330	345	-
500	200	330	345	188
500	250	450	350	-
500	300	450	360	201
500	350	680	365	-
500	400	680	370	-
500	450	680	375	-
500	500	680	380	335



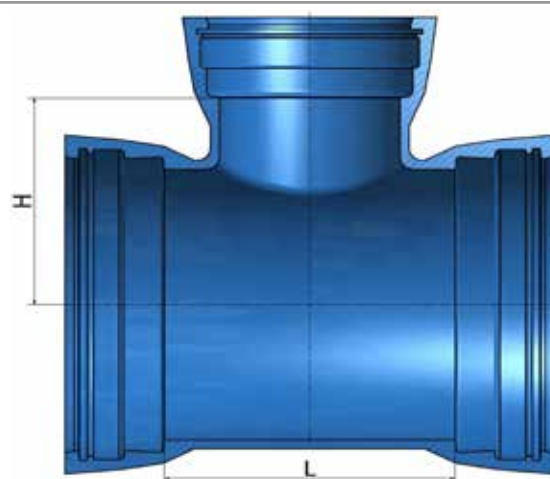
T- Type

Size		Dimensions		Mass
DN	dn	L	H	T- Type
600	80	340	385	-
600	100	340	390	-
600	150	340	395	248
600	200	340	395	328
600	250	570	400	-
600	300	570	405	-
600	350	570	410	-
600	400	570	420	-
600	450	800	425	-
600	500	800	430	-
600	600	800	440	474
700	80	345	435	-
700	100	345	440	-
700	150	345	445	-
700	200	345	450	309
700	250	575	455	-
700	300	575	460	-
700	350	575	465	-
700	400	575	470	403
700	450	810	480	-
700	500	810	485	-
700	600	810	490	-
700	700	925	500	580
800	80	350	485	-
800	100	350	485	-
800	150	350	490	-
800	200	350	495	332
800	250	500	500	-
800	300	500	510	-
800	350	500	515	-
800	400	500	520	382
800	450	815	525	-
800	500	815	530	-
800	600	815	540	493
800	700	1045	550	-
800	800	1045	565	747

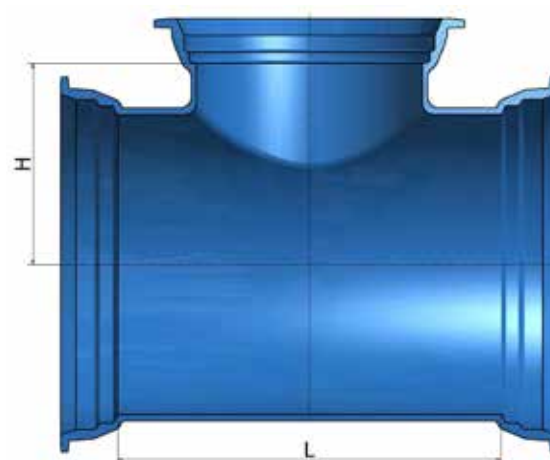
Socket Fittings

All Socket Tee (MMB)

Size		Dimensions		Mass	
DN	dn	L	H	T- Type	K- Type
900	80	355	540	-	X
900	100	355	540	-	X
900	150	355	545	-	X
900	200	355	545	826	X
900	250	590	550	-	X
900	300	590	555	-	X
900	350	590	560	-	X
900	400	590	570	464	X
900	450	820	580	-	X
900	500	820	585	-	X
900	600	820	590	592	X
900	700	1170	600	-	X
900	800	1170	615	-	X
900	900	1170	625	943	X
1000	80	360	590	-	X
1000	100	360	590	-	X
1000	150	360	595	-	X
1000	200	360	595	1051	X
1000	250	595	600	-	X
1000	300	595	610	-	X
1000	350	595	615	-	X
1000	400	595	620	940	X
1000	450	825	625	-	X
1000	500	825	630	-	X
1000	600	825	640	1009	X
1000	700	1290	650	-	X
1000	800	1290	665	-	X
1000	900	1290	675	-	X
1000	1000	1290	685	1644	X
1100	200	600	660	-	-
1200	200	605	715	-	-
1200	400	605	720	978	-
1200	500	840	730	-	-
1200	600	840	740	1139	-
1200	700	840	750	-	-
1200	800	1070	765	-	-
1200	900	1070	775	-	-
1200	1000	1500	785	-	-
1200	1200	1500	805	1900	-
1400	400	800	820	-	-
1400	500	1030	830	-	-
1400	600	1030	840	-	-
1400	700	1030	850	-	-
1400	800	1300	865	-	-
1400	900	1300	875	-	-
1400	1000	1300	885	-	-



T- Type



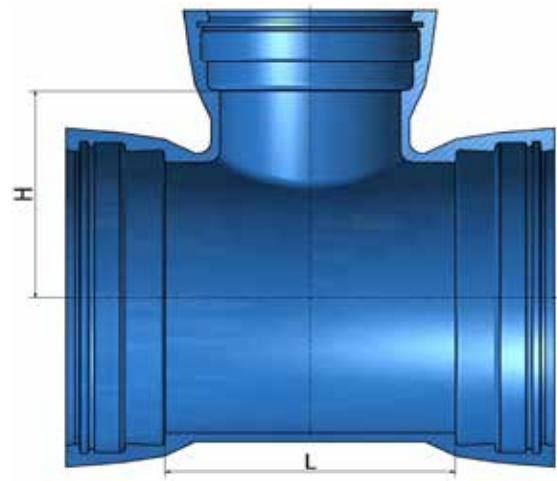
K- Type

Size		Dimensions		Mass	
DN	dn	L	H	T- Type	K- Type
1400	1200	1850	905	-	-
1400	1400	1850	930	-	-
1500	400	805	850	-	-
1500	500	1035	870	-	-
1500	600	1035	890	-	-
1500	700	1035	900	-	-
1500	800	1350	915	-	-
1500	900	1350	925	-	-
1500	1000	1350	935	-	-
1500	1200	1900	955	-	-
1500	1400	1900	980	-	-
1500	1500	1900	990	-	-
1600	400	810	910	-	-
1600	500	1040	925	-	-
1600	600	1040	940	-	-
1600	700	1040	955	-	-
1600	800	1390	965	-	-
1600	900	1390	975	-	-
1600	1000	1390	985	-	-
1600	1200	1900	1010	3352	-
1600	1400	1900	1030	-	-
1600	1500	1900	1040	-	-
1600	1600	1900	1050	-	-

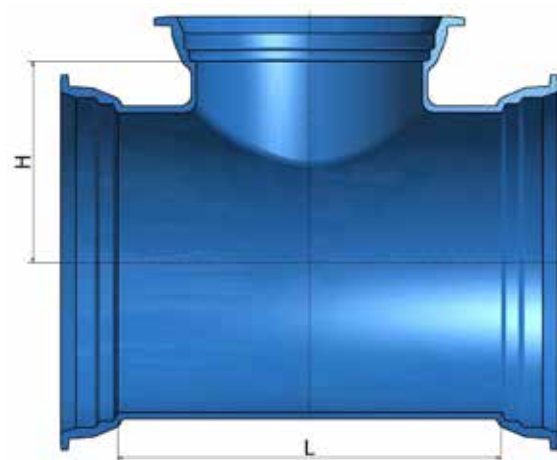
Socket Fittings

All Socket Tee (MMB)

Size		Dimensions		Mass
DN	dn	L	H	K- Type
1800	700	1055	1040	-
1800	800	1400	1065	-
1800	900	1400	1075	-
1800	1000	1400	1085	-
1800	1200	1900	1110	-
1800	1400	1900	1130	3760
1800	1500	1900	1140	-
1800	1600	2215	1150	-
1800	1800	2445	1175	4670
2000	600	1065	1140	-
2000	800	1300	1165	-
2000	1000	1530	1185	-
2000	1200	1760	1210	-
2000	1400	1995	1230	-
2000	1500	1195	1240	-
2000	1600	2225	1250	-
2000	1800	2460	1275	-
2000	2000	2690	1295	-
2200	800	1310	1265	-
2200	1000	1540	1285	-
2200	1200	1775	1310	-
2200	1400	2005	1330	-
2200	1500	2005	1340	-
2200	1600	2240	1350	-
2200	1800	2470	1375	-
2200	2000	2700	1395	-
2200	2200	2935	1415	-
2400	800	1320	1365	-
2400	1000	1555	1385	-
2400	1200	1785	1410	-
2400	1400	2020	1430	-
2400	1500	2020	1440	-
2400	1600	2250	1450	-
2400	1800	2480	1475	-
2400	2000	2715	1495	-
2400	2200	2945	1515	-
2400	2400	3180	1540	-
2600	800	1335	1465	-
2600	1000	1565	1485	-
2600	1200	1800	1510	-



T- Type



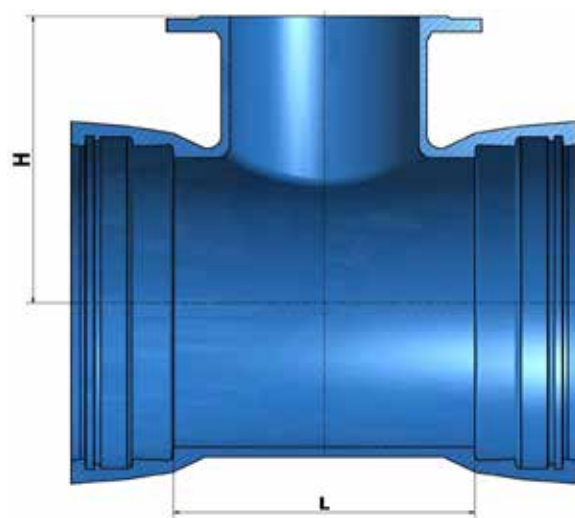
K- Type

Size		Dimensions		Mass
DN	dn	L	H	K- Type
2600	1400	2030	1530	-
2600	1500	2030	1540	-
2600	1600	2260	1550	-
2600	1800	2495	1575	-
2600	2000	2725	1595	-
2600	2200	2960	1615	-

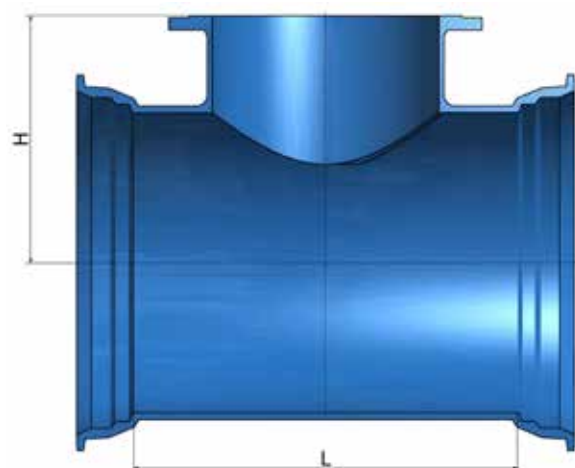
Socket Fittings

Double Socket Tee with Flanged Branch (MMA)

Size		Dimensions		Mass T- Type	
DN	dn	L	H	PN10	PN16
80	80	170	165	13.5	13.5
100	80	170	175	15.8	15.8
100	100	190	180	17.2	17.2
150	80	170	205	23	23
150	100	195	210	24.5	24.5
150	150	255	220	29.5	29.5
200	80	175	235	31.5	31.5
200	100	200	240	33.5	33.5
200	150	255	250	39	39
200	200	315	260	45.6	46
250	80	180	265	37.5	-
250	100	200	270	43.5	44
250	150	260	280	50	-
250	200	315	290	57	57
250	250	375	300	65	66
300	80	180	295	50	-
300	100	205	300	55	55
300	150	260	310	66	-
300	200	320	320	71	71
300	250	435	330	-	-
300	300	435	340	89	91
350	80	205	330	59.5	-
350	100	205	330	68	68
350	150	325	350	79	-
350	200	325	350	86	86
350	250	440	360	90	-
350	300	440	370	95	-
350	350	495	380	117	120
400	80	185	355	75	-
400	100	210	360	83	83
400	150	270	370	97.5	-
400	200	325	380	103	103
400	250	440	390	110	-
400	300	440	400	120	-
400	350	560	410	-	-
400	400	560	420	150	156
450	100	215	390	90	-
450	150	270	400	115	-
450	200	330	410	121	-
450	250	390	420	-	-
450	300	445	430	150	-
450	350	560	440	170	-
450	400	560	450	-	-
450	450	620	460	-	-
500	100	215	420	116	116
500	150	330	440	137	-



T- Type



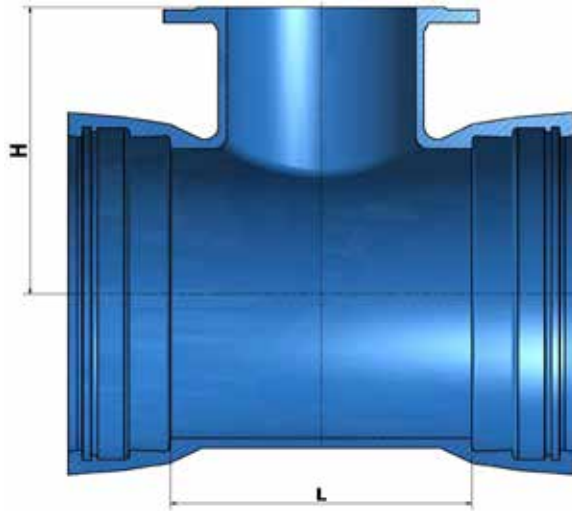
K- Type

Size		Dimensions		Mass T- Type	
DN	dn	L	H	PN10	PN16
500	200	330	440	142	142
500	250	450	450	155	-
500	300	450	450	-	-
500	350	450	460	160	-
500	400	565	480	199	205
500	450	680	490	-	-
500	500	680	500	232	247
600	100	350	500	-	-
600	150	350	500	-	-
600	200	340	500	189	189
600	250	455	510	-	-
600	300	455	520	190	200
600	350	570	530	210	220
600	400	570	540	258	263
600	450	800	560	-	-
600	500	800	570	-	-
600	600	800	580	340	366

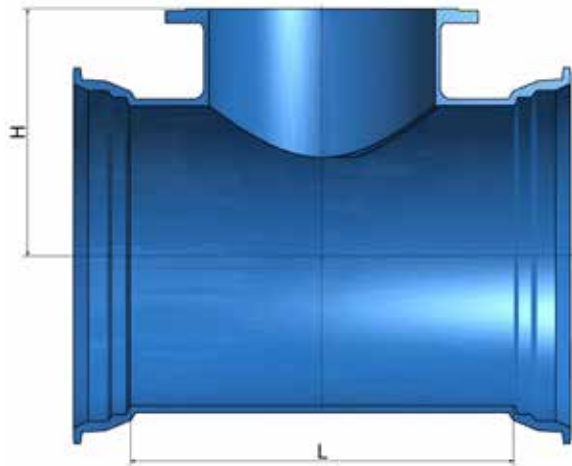
Socket Fittings

Double Socket Tee with Flanged Branch (MMA)

Size		Dimensions		Mass T- Type	
DN	dn	L	H	PN10	PN16
700	100	345	525	-	-
700	150	345	525	-	-
700	200	345	525	300	310
700	250	575	530	-	-
700	300	575	540	-	-
700	350	575	550	-	-
700	400	575	555	320	325
700	450	810	565	-	-
700	500	810	575	-	-
700	600	810	585	460	-
700	700	925	600	460	475
800	200	350	585	306	310
800	250	580	590	-	-
800	300	580	600	-	-
800	350	580	610	-	-
800	400	580	615	398	403
800	450	1045	625	-	-
800	500	1045	635	-	-
800	600	1 045	645	579	605
800	700	1045	660	-	-
800	800	1 045	675	623	642
900	200	355	645	379	379
900	250	590	650	400	420
900	300	590	660	450	470
900	350	590	670	-	-
900	400	590	675	490	495
900	450	1170	690	-	-
900	500	1170	700	-	-
900	600	1170	705	748	774
900	700	1170	720	-	-
900	800	1170	735	-	-
900	900	1170	750	814	838
1000	200	360	705	462	462
1000	250	595	720	-	-
1000	300	595	725	-	-
1000	350	595	730	-	-
1000	400	595	735	591	596
1000	450	1290	745	-	-
1000	500	1290	755	-	-
1000	600	1290	765	947	973
1000	700	1290	780	-	-
1000	800	1290	800	-	-
1000	900	1290	815	-	-
1000	1000	1290	825	1044	1086
1100	250	425	770	-	-
1200	250	605	855	-	-



T- Type



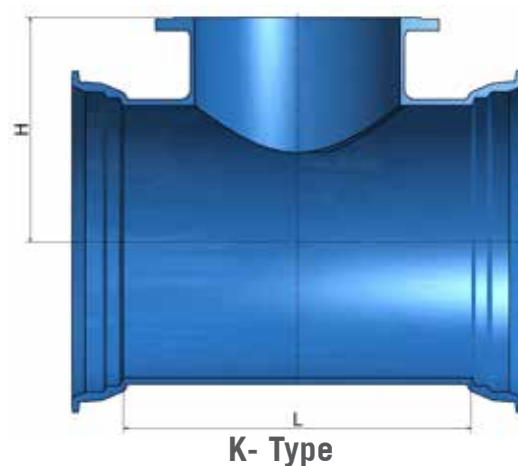
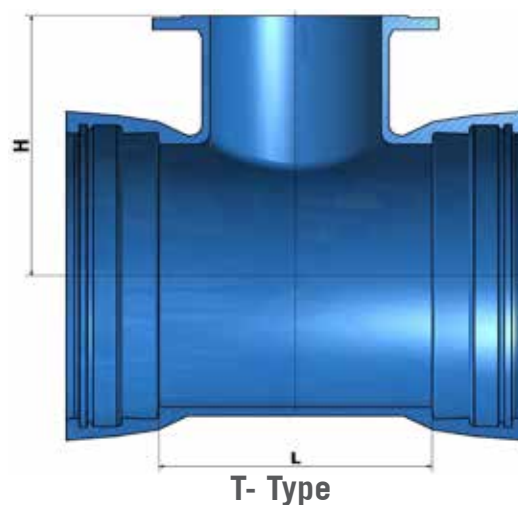
K- Type



Socket Fittings

Double Socket Tee with Flanged Branch (MMA)

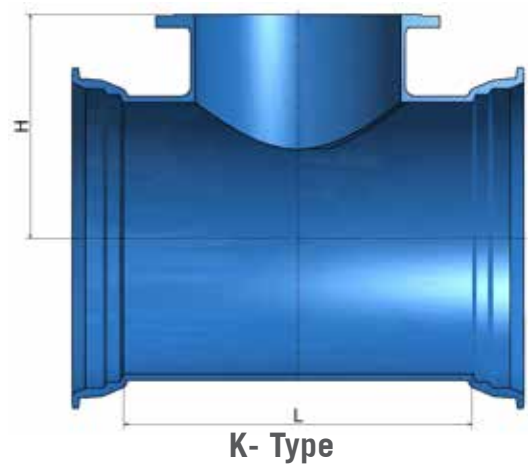
Size		Dimensions		Mass T- Type		Mass K- Type	
DN	dn	L	H	PN10	PN16	PN10	PN16
1200	600	840	885	1000	1027	-	-
1200	700	1070	910	-	-	-	-
1200	800	1070	915	1190	1210	-	-
1200	900	1300	935	-	-	-	-
1200	1000	1300	945	1406	1448	-	-
1200	1200	1535	975	-	-	-	-
1400	600	1030	980	1478	1505	-	-
1400	700	1260	1000	-	-	-	-
1400	800	1260	1010	1709	1728	-	-
1400	900	1495	1030	-	-	-	-
1400	1000	1495	1040	1955	1996	-	-
1400	1200	1850	1070	-	-	-	-
1400	1400	1850	1100	-	-	-	-
1500	600	1035	1035	1622	1645	-	-
1500	700	1270	1050	-	-	-	-
1500	800	1270	1065	1887	1901	-	-
1500	900	1270	1085	-	-	-	-
1500	1000	1 500	1095	2157	2192	-	-
1500	1200	1500	1125	-	-	-	-
1500	1400	1950	1155	-	-	-	-
1500	1500	1950	1170	-	-	-	-
1600	600	1040	1 090	1908	1934	-	-
1600	700	1275	1110	-	-	-	-
1600	800	1275	1120	2480	2522	-	-
1600	900	1275	1130	-	-	-	-
1600	1000	1505	1150	2799	2863	-	-
1600	1200	1740	1180	-	-	-	-
1600	1400	1740	1210	-	-	-	-
1600	1500	2200	1230	-	-	-	-
1600	1600	2200	1240	-	-	-	-
1800	600	1055	1200	X	X	-	-
1800	700	1285	1220	X	X	-	-
1800	800	1285	1230	X	X	-	-
1800	900	1520	1250	X	X	-	-
1800	1000	1520	1260	X	X	-	-
1800	1200	1750	1290	X	X	-	-
1800	1400	1980	1320	X	X	-	-
1800	1500	1980	1330	X	X	-	-
1800	1600	2215	1350	X	X	-	-
1800	1800	2215	1380	X	X	-	-
2000	600	1065	1310	X	X	-	-
2000	700	1300	1330	X	X	-	-
2000	800	1300	1340	X	X	-	-
2000	900	1300	1350	X	X	-	-
2000	1000	1 530	1370	X	X	-	-



Socket Fittings

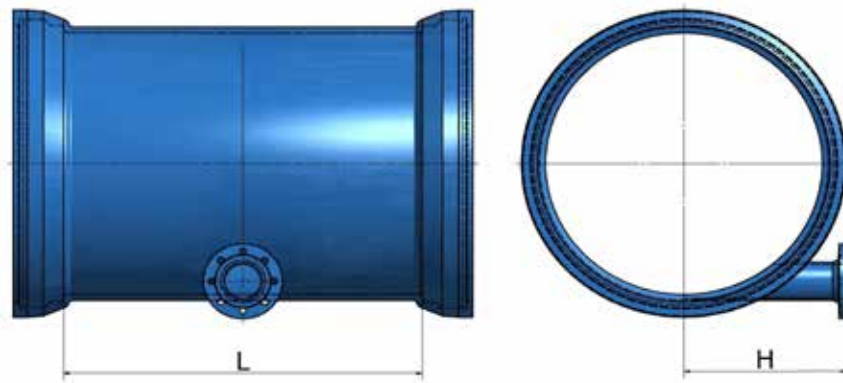
Double Socket Tee with Flanged Branch (MMA)

Size		Dimensions		Mass K- Type	
DN	dn	L	H	PN10	PN16
2000	1200	1530	1400	-	-
2000	1400	1 995	1 430	-	-
2000	1500	1995	1450	-	-
2000	1600	2500	1460	-	-
2000	1800	2500	1490	-	-
2000	2000	2500	1520	-	-
2200	600	1 080	1420	-	-
2200	700	1350	1430	-	-
2200	800	1350	1450	-	-
2200	900	1350	1460	-	-
2200	1000	1350	1480	-	-
2200	1200	1775	1510	-	-
2200	1400	1775	1540	-	-
2200	1500	1900	1560	-	-
2200	1600	1900	1570	-	-
2200	1800	2 470	1 600	-	-
2200	2000	2700	1630	-	-
2200	2200	2700	1660	-	-
2400	600	1090	1530	-	-
2400	700	1350	1545	-	-
2400	800	1350	1560	-	-
2400	900	1350	1575	-	-
2400	1000	1350	1590	-	-
2400	1200	1785	1 620	-	-
2400	1400	1900	1650	-	-
2400	1500	1900	1656	-	-
2400	1600	1900	1680	-	-
2400	1800	2480	1710	-	-
2400	2000	2480	1740	-	-
2400	2200	2800	1770	-	-
2400	2400	2800	1800	-	-
2600	600	1100	1640	-	-
2600	700	1350	1660	-	-
2600	800	1350	1670	-	-
2600	900	1350	1685	-	-
2600	1000	1500	1700	-	-
2600	1200	1500	1730	-	-
2600	1400	2 030	1750	-	-
2600	1500	2030	1770	-	-
2600	1600	2030	1790	-	-
2600	1800	2495	1820	-	-
2600	2000	2725	1850	-	-
2600	2200	3000	1880	-	-
2600	2400	3000	1910	-	-



Socket Fittings

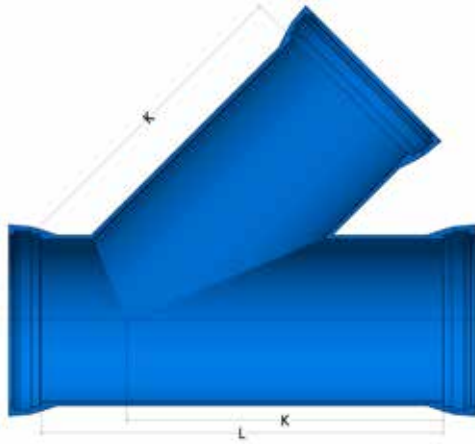
Double Socket Level Invert Tee with Flanged Branch



Size		Dimensions		Mass T- Type		Mass K- Type	
DN	dn	L	H	PN10	PN16	PN10	PN16
100	80	190	195			X	X
150	80	195	220	35	35	X	X
200	80	200	250	40	40	X	X
200	100	200	250	-	-	X	X
250	80	200	275	50	50	X	X
250	100	200	275	52	52	X	X
300	80	205	305	62	62	X	X
300	100	205	305	64	64	X	X
300	150	260	305	70	-	X	X
350	80	205	340	-	-	X	X
350	100	205	340	83	83	X	X
350	150	325	340	-	-	X	X
400	80	210	365	-	-	X	X
400	100	210	365	98	98	X	X
400	150	325	365	-	-	X	X
400	200	325	365	-	-	X	X
450	80	215	380	-	-	X	X
450	100	215	380	115	115	X	X
450	150	330	380	-	-	X	X
450	200	330	380	-	-	X	X
500	80	215	400	-	-	X	X
500	100	215	400	134	134	X	X
500	150	330	400	145	-	X	X
500	200	330	400	-	-	X	X
600	80	340	435	-	-	X	X
600	100	340	435	173	173	X	X
600	150	340	450	-	-	X	X
600	200	340	450	-	-	X	X
700	150	345	500	-	-	X	X
700	200	345	500	300	300	X	X
800	150	350	540	-	-	X	X
800	200	350	540	370	370	X	X
900	150	355	580	-	-	X	X
900	200	355	580	475	475	X	X
1000	150	360	630	-	-	X	X
1000	200	360	630	570	570	X	X
1200	200	445	750	840	840	-	-
1200	250	445	750	-	-	-	-
1400	200	460	850	-	-	-	-
1500	200	465	900	-	-	-	-
1600	400	700	950	-	-	-	-

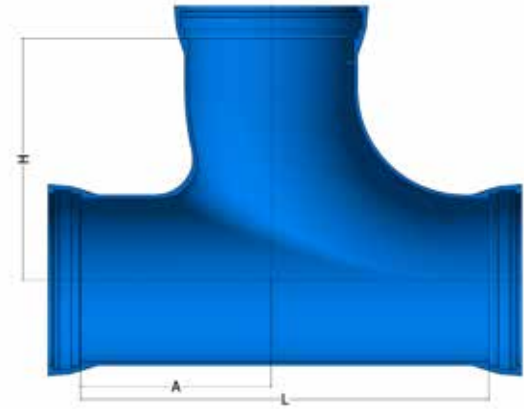
Socket Fittings

ALL SOCKET 45° ANGLE BRACH



Size		Dimensions	
DN	dn	K	L
80	80	375	500
100	100	405	540
150	150	480	640
200	200	560	735
250	250	640	830
300	300	715	930

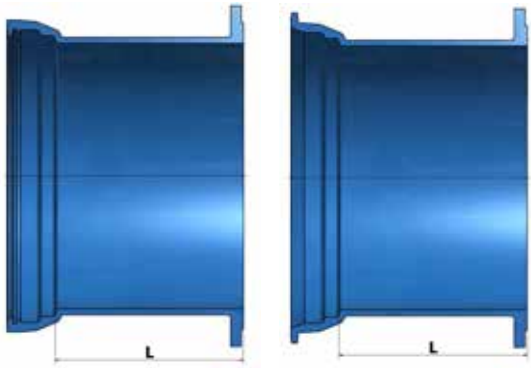
ALL SOCKET 45° RADIAL TEE



Size		Dimensions		
DN	dn	A	L	H
80	80	165	500	380
100	100	180	540	390
150	150	220	640	450
200	200	260	735	500
250	250	350	825	550
300	300	400	925	600
350	350	450	1000	650

Socket Fittings

Flanged Socket (EU)



T- Type

K- Type

DN	L	Mass T- Type		Mass K- Type	
		PN10	PN16	PN10	PN16
80	130	7.4	7.4	X	X
100	130	9	9	X	X
125	135	-	-	X	X
150	135	14.2	14.2	X	X
200	140	20.5	20.5	X	X
250	145	28	28	X	X
300	150	37	37	X	X
350	155	45	48	X	X
400	160	55	60	X	X
450	165	70.5	78	X	X
500	170	78	93	X	X
600	180	108	135	X	X
700	190	144	159	X	X
800	200	189	208	X	X
900	210	235	258	X	X
1000	220	293	324	X	X
1200	240	456	521	-	-
1400	310	654	723	-	-
1500	330	778	857	-	-
1600	330	887	989	-	-
1800	350	X	X	-	-
2000	370	X	X	-	-
2200	390	X	X	-	-
2400	410	X	X	-	-
2600	480	X	X	-	-

Double Socket Collar (MM)



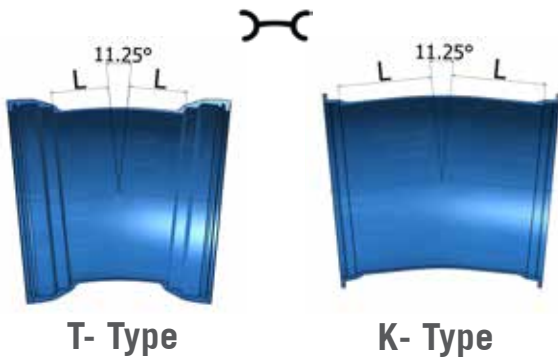
T- Type

K- Type

DN	L	Mass	
		T- Type	K- Type
80	160	7.9	X
100	160	9.9	X
125	165	-	X
150	165	15.9	X
200	170	23	X
250	175	31.5	X
300	180	41	X
350	185	52	X
400	190	64	X
450	195	88	X
500	200	93	X
600	210	129	X
700	220	172	X
800	230	223	X
900	240	282	X
1000	250	349	X
1200	270	560	-
1400	340	816	-
1500	350	974	-
1600	360	1094	-
1800	380	X	-
2000	400	X	-
2200	420	X	-
2400	440	X	-
2600	460	X	-

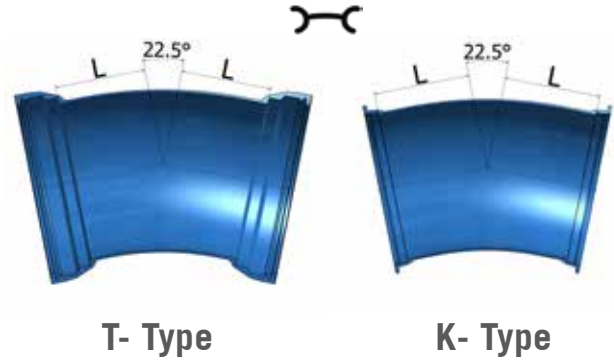
Socket Fittings

Double Socket Bend 11¼° (MMQ11)



DN	L	Mass	
		T- Type	K- Type
80	30	7.1	X
100	30	8.9	X
150	35	14.8	X
200	40	22	X
250	50	30.5	X
300	55	40.5	X
350	60	52	X
400	65	65	X
450	70	83.5	X
500	75	96	X
600	85	134	X
700	95	181	X
800	110	239	X
900	120	305	X
1000	130	381	X
1200	150	568	-
1400	130	747	-
1500	140	-	-
1600	140	1007	-
1800	155	X	-
2000	165	X	-
2200	190	X	-
2400	205	X	-
2600	215	X	-

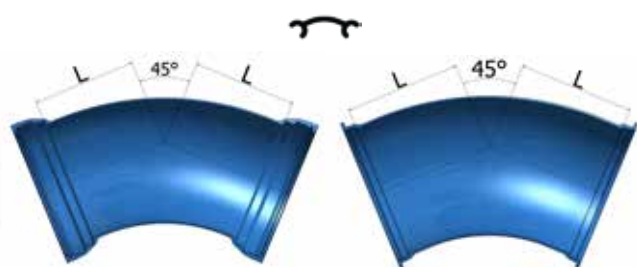
Double Socket Bend 22½° (MMQ22)



DN	L	Mass	
		T- Type	K- Type
80	40	7.3	X
100	40	9.3	X
150	55	15.9	X
200	65	24	X
250	75	33.5	X
300	85	44.5	X
350	95	58	X
400	110	74	X
450	120	95	X
500	130	111	X
600	150	157	X
700	175	217	X
800	195	287	X
900	220	373	X
1000	240	470	X
1200	285	716	-
1400	260	933	-
1500	270	-	-
1600	280	1259	-
1800	305	X	-
2000	330	X	-
2200	355	X	-
2400	380	X	-
2600	400	X	-

Socket Fittings

Double Socket Bend 45° (MMQ45)

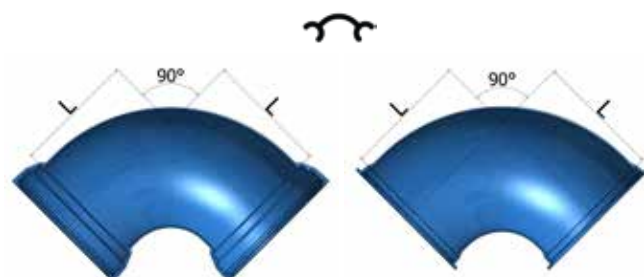


T- Type

K- Type

DN	L	Mass	
		T- Type	K- Type
80	55	7.7	X
100	65	10	X
150	85	17.4	X
200	110	27	X
250	130	38.5	X
300	150	53	X
350	175	70	X
400	195	89	X
450	220	117	X
500	240	139	X
600	285	202	X
700	330	282	X
800	370	378	X
900	415	496	X
1000	460	635	X
1100	505	-	-
1200	550	986	-
1400	515	1273	-
1500	540	-	-
1600	565	1740	-
1800	610	X	-
2000	660	X	-
2200	710	X	-
2400	755	X	-
2600	805	X	-

Double Socket Bend 90° (MMQ90)



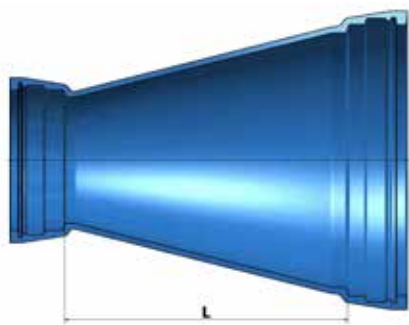
T- Type

K- Type

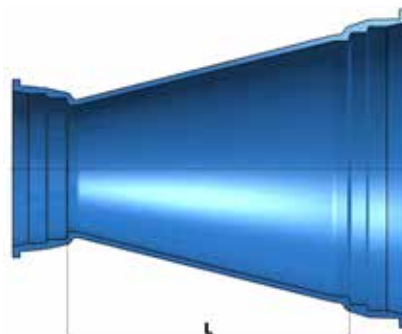
DN	L	Mass	
		T- Type	K- Type
80	100	8.6	X
100	120	11.4	X
150	170	20.5	X
200	220	33	X
250	270	48.5	X
300	320	68	X
350	370	97.5	X
400	420	124	X
450	470	156	X
500	520	193	X
600	620	280	X
700	720	455	X
800	820	605	X
900	920	813	X
1000	1020	1045	X
1200	1220	1663	-
1400	1220	2220	-
1500	1270	-	-
1600	1290	3050	-
1800	1320	X	-
2000	1360	X	-

Socket Fittings

Double Socket Reducer (MMR)



T- Type



K- Type

Size		L	Mass
DN	dn		T- Type
80	65	80	-
100	65	90	-
100	80	90	8.5
150	80	190	13.5
150	100	150	13.8
200	100	250	20.5
200	150	150	21
250	150	250	29
250	200	150	29
300	150	350	39.5
300	200	250	39.5
300	250	150	38.5
350	200	360	52
350	250	260	50
350	300	160	49.5
400	200	460	61.5
400	250	360	66
400	300	260	64
400	350	160	-
450	250	460	-
450	300	360	75
450	350	260	-
450	400	160	66
500	300	460	96.9
500	350	360	-
500	400	260	94
500	450	160	80.5
600	350	560	-
600	400	460	142
600	450	360	-
600	500	260	131
700	400	680	226
700	450	580	-
700	500	480	194
700	600	280	178
800	450	770	-
800	500	670	288
800	600	480	252
800	700	280	229
900	500	840	388
900	600	640	341
900	700	480	318
900	800	280	288

Size		L	Mass	
DN	dn		T- Type	K - Type
1000	600	840	446	X
1000	700	680	427	X
1000	800	480	392	X
1000	900	280	354	X
1200	700	1020	699	-
1200	800	870	648	-
1200	900	670	630	-
1200	1000	480	570	-
1400	800	760	877	-
1400	900	660	906	-
1400	1000	560	1015	-
1400	1200	360	711	-
1500	900	760	-	-
1500	1000	660	-	-
1500	1200	460	-	-
1500	1400	260	742	-
1600	1000	760	1427	-
1600	1200	560	1355	-
1600	1400	360	951	-
1600	1500	260	-	-
1800	1200	760	X	-
1800	1400	560	1720	-
1800	1500	460	X	-
1800	1600	360	X	-
2000	1200	960	X	-
2000	1400	760	X	-
2000	1500	660	X	-
2000	1600	560	X	-
2000	1800	360	X	-
2200	1400	960	X	-
2200	1500	860	X	-
2200	1600	760	X	-
2200	1800	560	X	-
2200	2000	360	X	-
2400	1500	1060	X	-
2400	1600	960	X	-
2400	1800	760	X	-
2400	2000	560	X	-
2400	2200	360	X	-
2600	1600	1160	X	-
2600	1800	960	X	-
2600	2000	760	X	-
2600	2200	560	X	-
2600	2400	360	X	-



Fabricated Pipes



Fabricated Pipes



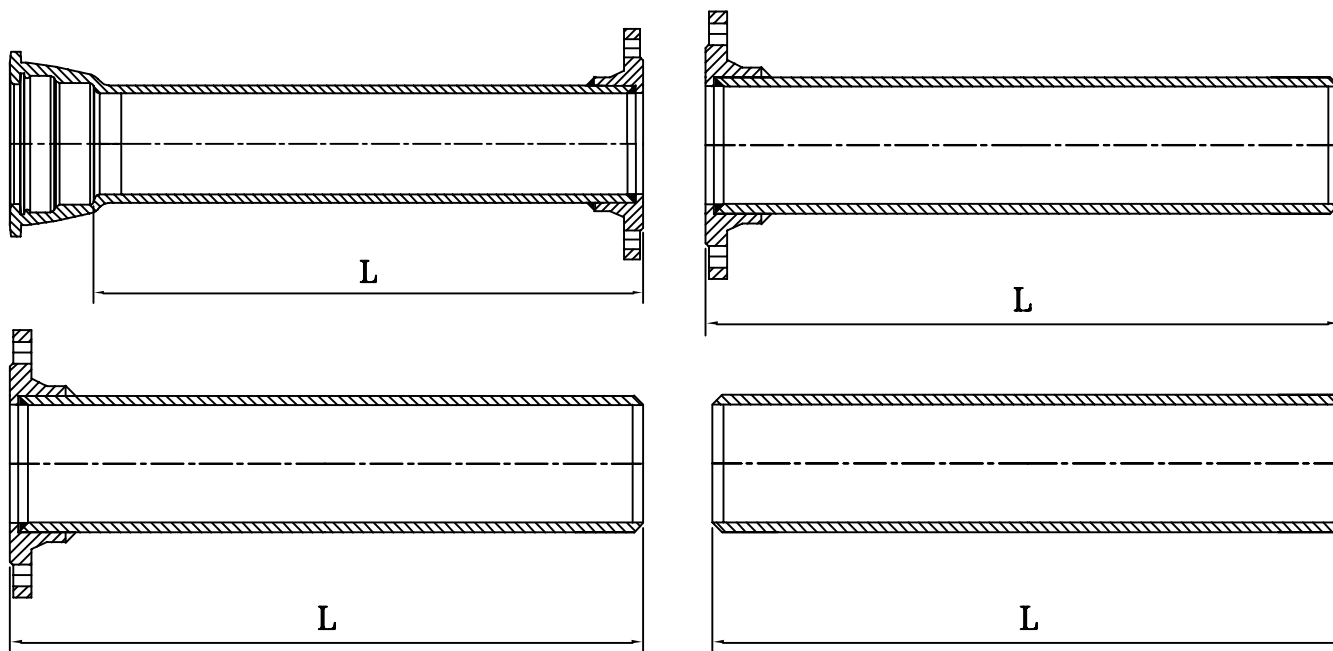
Fabricated Pipes

GCF supplies fabricated pipes with welded flanges on K9 Ductile Iron Pipes in accordance to ISO2531 & EN545.

The maximum & minimum lengths of the pipes are shown in the given table.

Diameter (DN)	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
Minimum Length L (mm)	100	100	130	150	175	200	200	200	250	250	300	300	350	400	400
Maximum Length L (mm)	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800

Dimensions of flanges are given in pages 11, 12 & 13.



Pipes with Puddle Flanges:

Puddle Flange Function

Problems keep on occurring when connecting pipes during construction work. Pipes laid in the ground must be introduced into concrete walls. In many cases, the presence of groundwater must be taken into account in these procedures.

Standing water penetrates on the outer side of the pipes right into the building, requiring costly elimination of the leaks.

Usage of puddle flanges may prevent the seepage of groundwater through the concrete walls.

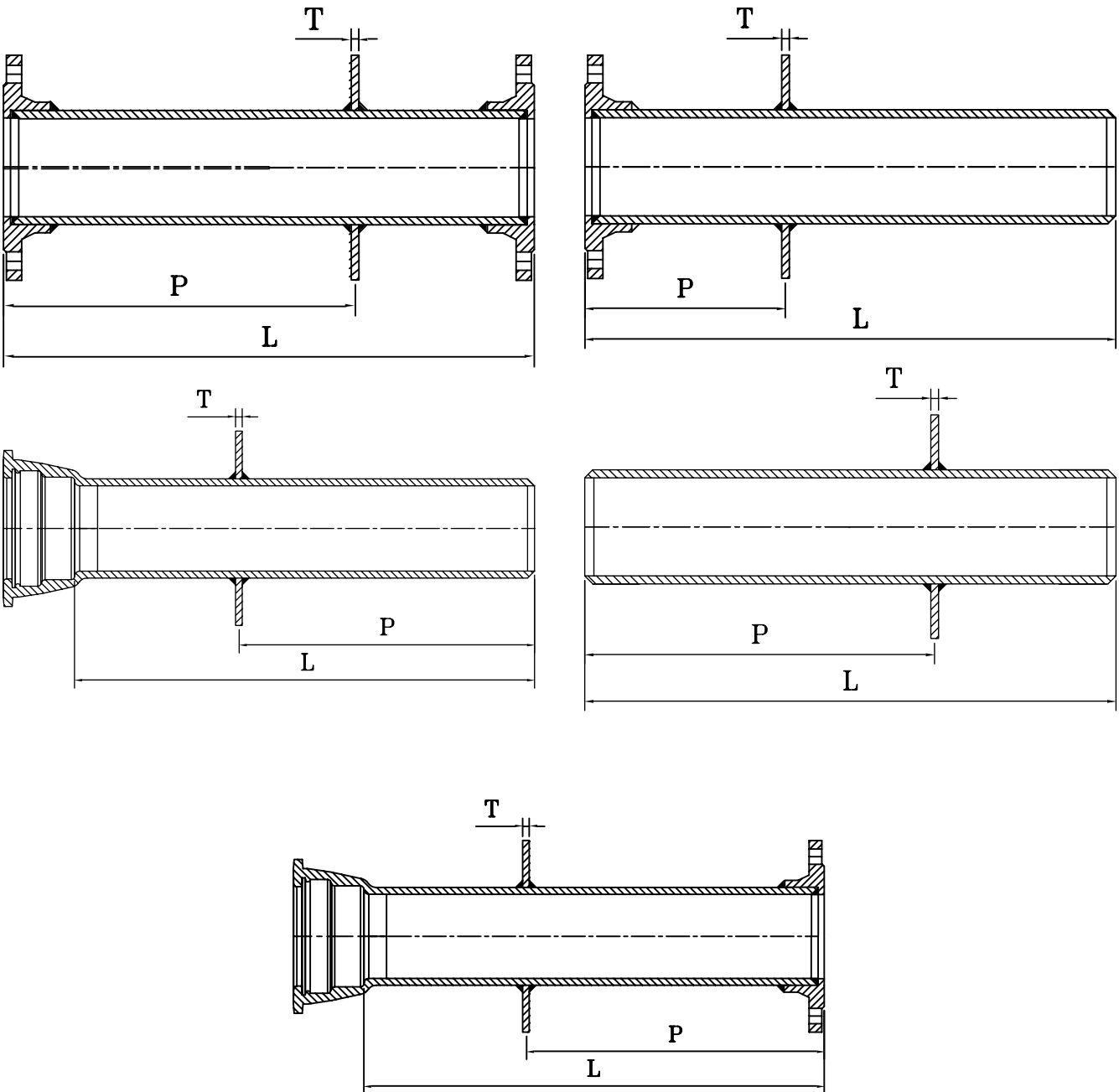
Puddle Flanges Dimensions

DN	80-300	400-800	900-1200
Thickness- T	10	15	20
External Diameter	Same as the external diameter of the main flange according to the related PN designation		

Fabricated Pipes

Location of the Puddle Flange:

Puddle flange can be located at any position as per the request of the customer, dimension "P" shall be defined in the order / specifications.







Greater Cairo Foundries
مسابك القاهرة الكبرى

www.gcf-eg.com





United
Kingdom

Greece

Turkey

Syria

Iraq

Jordan

Kuwait

Algeria

Libya

Egypt

KSA

Oman

UAE



Greater Cairo Foundries
مسابك القاهرة الكبرى

Sales Office

Unit No. 28, Industrial Zone, El-Abaseya,
behind Al-Azhar Library, Cairo, Egypt.

Tel.: +2 02 24 66 2183

Fax: +2 02 24 66 2182

e-mail: sales@gcf-eg.com - sales.a@gcf-eg.com

www.gcf-eg.com

Inshas Plant

Inshas Desert Road, Sharkia, Egypt

Tel.: +2 055-264 2030 / +2 0100 550 1550 / +2 0100 539 6591

Fax: +2 055-264 2031