



Shanxi Midas Industrial Co.,LTD.

**Ductile iron pipe fittings**

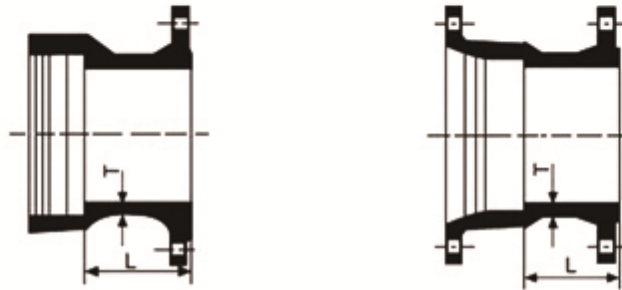
SHANXI MIDAS PIPELINE



# **ISO2531 EN545 EN598 BS4772 DUCTILE IRON PIPE FITTINGS**



ISO2531,EN545,EN598,BS4772

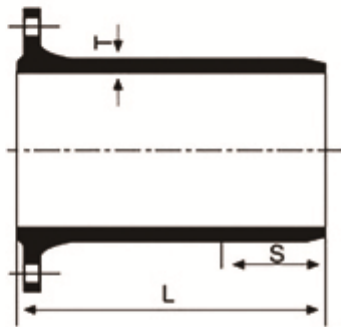


Flanged sockets

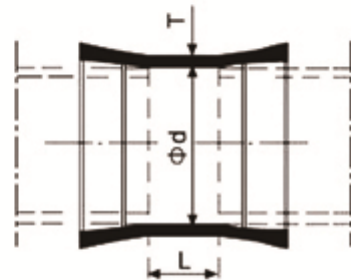
DN	T	L	Mass					
			T			K		
			PN10	PN16	PN25	PN10	PN16	PN25
80	7	130	8.1	8.1	8.1	9.3	9.3	9.3
100	7.2	130	10.0	10.0	10.3	11.3	11.3	12.5
150	7.8	135	15.8	15.8	16.8	18.0	18.0	19.0
200	8.4	140	22.0	22.0	24.0	23.0	23.0	25.0
250	9	145	31.0	31.0	34.5	31.0	31.0	34.5
300	9.6	150	39.0	39.0	44.0	45.3	45.3	50.6
350	10.2	155	47.0	50.0	58.0	53.0	55.5	63.0
400	10.8	160	57	63	74.0	64.0	70.0	81.0
450	11.4	165	71	78	88.5	74.5	82.0	92.5
500	12	170	84	99	110	87.0	100	110
600	13.2	180	112	138	152	115	140	152
700	14.4	190	161	176	210	162	174	211
800	15.6	200	215	235	283	205	220	274
900	16.8	210	263	287	345	252	271	341
1000	18	220	333	370	458	317	351	458
1100	19.2	230	410	446	527	377	412	490
1200	20.4	240	493	557	643	456	521	664
1400	22.8	310	758	825	978	654	711	882
1500	24	330	947	1035	1172	771	859	996
1600	25.2	330	1035	1137	1315	897	999	1176
1800	27.6	350	1308	1421	1638	1137	1263	1503
2000	30	370				1428	1581	1933



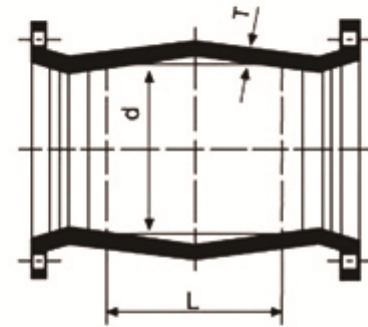
**ISO2531,EN545,EN598,BS4772**



**Flanged Spigots**



**Collars**

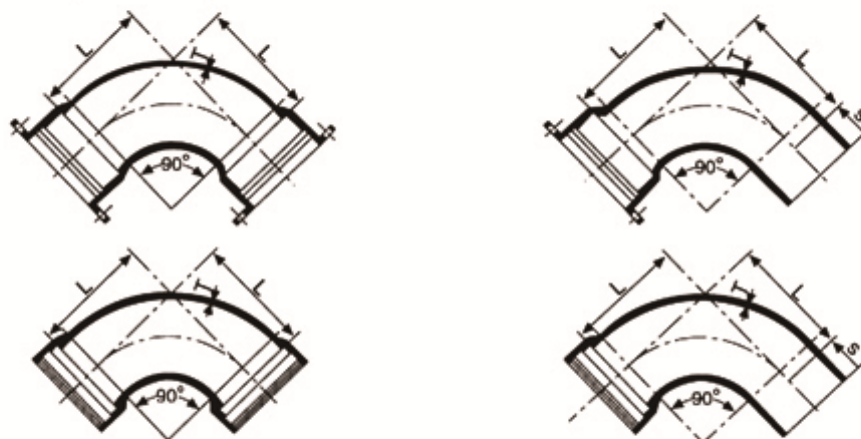


DN	T	Flanged Spigots				Collars			
		L	Mass			L	d	Mass	
			PN10	PN16	PN25			T	K
80	7	350	7.8	7.8	7.8	160	109	9.1	12.9
100	7.2	360	9.7	9.7	10.2	160	130	11.5	15.8
150	7.8	380	15.6	15.6	16.6	165	183	18.0	23.5
200	8.4	400	23	23	25	170	235	25	30.0
250	9	420	32	32	35.5	175	288	33	38.5
300	9.6	440	43	42.5	47.5	180	340	43	54.0
350	10.2	460	52	55	64	185	393	57	67.5
400	10.8	480	64	70	81	190	445	72	81.0
450	11.4	500	79	88	101	195	498	91	98.0
500	12	520	94	109	121	200	550	104	113
600	13.2	560	133	159	173	210	655	146	149
700	14.4	600	179	194	228	220	760	192	198
800	15.6	600	226	245	294	230	865	250	246
900	16.8	600	272	295	356	240	970	316	314
1000	18	600	328	369	447	250	1075	380	396
1100	19.2	600	394	430		260	1180	466	470
1200	20.4	600	456	520		270	1285	570	553
1400	22.8	710	664	732		340	1492	890	777
1500	24	750	812	913		350	1596	1113	884
1600	25.2	780	922	1024		360	1699	1382	1081
1800	27.6	850	1196	1322		380	1906	1822	1410
2000	30	920	1534	1687		400	2133		1798





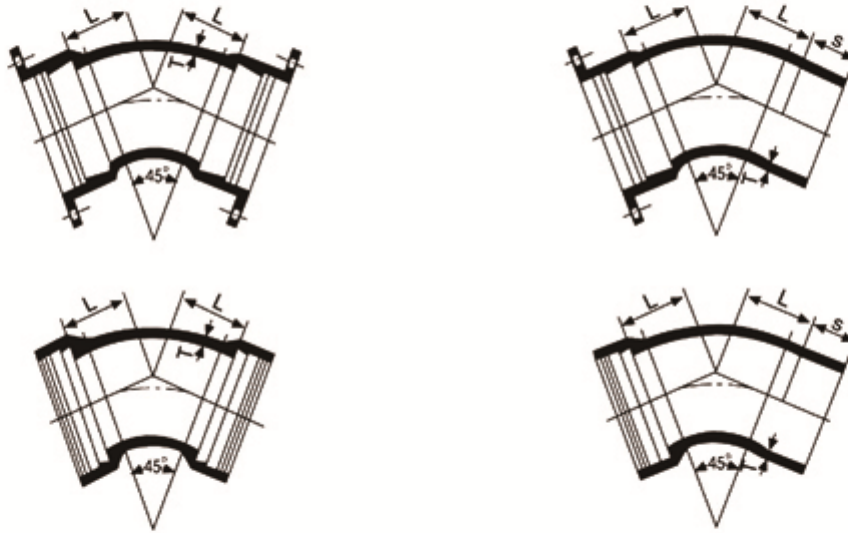
**ISO2531,EN545,EN598,BS4772**



**90° Socket bends**

DN	T	L	S	Mass			
				Double-socket		Socket-spigot	
				T	K	T	K
80	7	100	150	8.6	12.0	9	10.6
100	7.2	120	150	11.5	15.6	11.9	14.3
150	7.8	170	200	20.5	27.5	22	23.9
200	8.4	220	200	36	40.0	35.6	36.4
250	9	270	200	48.5	55.5	54.1	57.6
300	9.6	320	200	70.5	81.5	69.6	75
350	10.2	370	200	97.5	109	99.7	105
400	10.8	420	200	129	139	138	135
450	11.4	470	200	163	172	172	171
500	12	520	200	204	210	205	208
600	13.2	620	200	303	300	301	299
700	14.4	720	200	455	445	436	434
800	15.6	820	200	605	579	622	597
900	16.8	920	250	813	720	819	805
1000	18	1020	250	1045	986	1081	1066
1100	19.2	1120	250	1418	1373	1354	1331
1200	20.4	1220	250	1663	1660	1671	1634
1400	22.8	1220	300	2419	2180	2170	2419
1500	24	1270	300	2985	2636	2207	2184
1600	25.2	1290	330	3418	3116	2904	2753
1800	27.6	1320	330	4283	3861	3320	3649
2000	30	1360	400		4948	-	4867

**ISO2531,EN545,EN598,BS4772**



**45° Socket bends**

DN	T	L	S	Mass			
				Double-socket		Socket-spigot	
				T	K	T	K
80	7	55	150	7.7	11.1	8.1	8.0
100	7.2	65	150	10.1	14.3	10.6	13
150	7.8	85	200	17.4	24.0	18.2	20.7
200	8.4	110	200	29	30.4	28.2	30.4
250	9	130	200	47.5	42	40.2	41.6
300	9.6	150	200	55	66	52	56
350	10.2	175	200	76	83.5	63	70
400	10.8	195	200	89	104	89.9	95.1
450	11.4	220	200	123	132	125	129
500	12	240	200	139	150	139	142
600	13.2	285	200	202	209	200	198
700	14.4	330	200	290	289	310	302
800	15.6	370	200	382	373	418	395
900	16.8	415	250	501	488	554	539
1000	18	460	250	640	629	642	627
1100	19.2	505	250	856	836	802	782
1200	20.4	550	250	1089	943	990	953
1400	22.8	515	300	1509	1280	1352	1232
1500	24	540	300	1803	1488	1608	1433
1600	25.2	565	300	2100	1770	1849	1698
1800	27.6	610	380	2782	2300	2509	2222
2000	30	660	380		3020	—	2944



**ISO2531,EN545,EN598,BS4772**

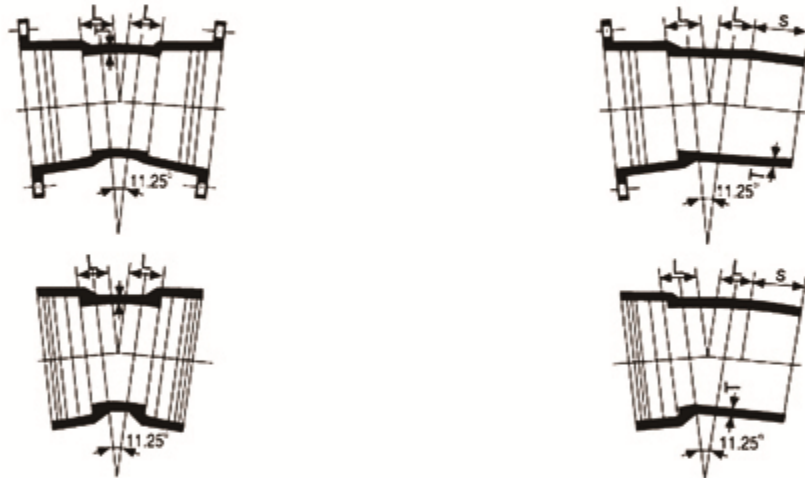


**22.5° Socket bends**

DN	T	L	S	Mass			
				Double-socket		Socket-spigot	
				T	K	T	K
80	7	40	150	7.5	10.7	7.7	7.6
100	7.2	40	150	9.5	13.5	9.8	12.2
150	7.8	55	200	15.9	22.5	16.8	19.3
200	8.4	65	200	26	30.5	25.2	27.4
250	9	75	200	36	36	35.2	36.6
300	9.6	85	200	47	56	46.2	51.6
350	10.2	95	200	63	68	59	66.2
400	10.8	110	200	79	84	79.5	84.7
450	11.4	120	200	102	110	107	111
500	12	130	200	111	123	117	119
600	13.2	150	200	157	164	161	159
700	14.4	175	200	248	240	248	240
800	15.6	195	200	331	308	331	308
900	16.8	220	250	432	417	432	390
1000	18	240	250	550	469	550	450
1100	19.2	260	250	710	595	600	552
1200	20.4	285	250	851	720	851	740
1400	22.8	260	300	1241	910	1241	965
1500	24	270	300	1410	1043	1320	1179
1600	25.2	280	300	1659	1198	1398	1377
1800	27.6	305	380	2037	1629	2245	1837
2000	30	330	380		2153		2373



**ISO2531,EN545,EN598,BS4772**

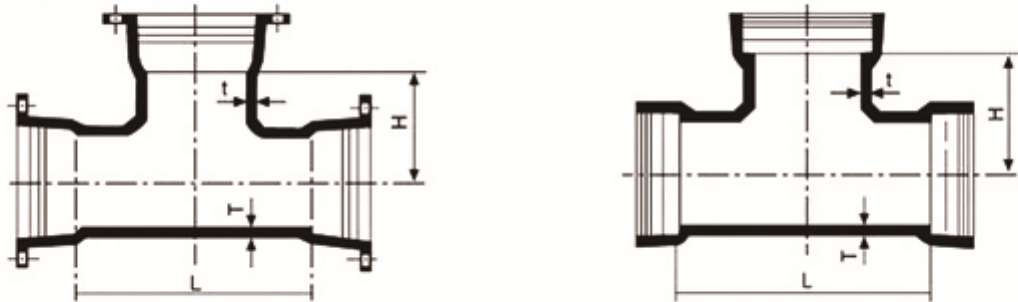


**11.25° Socket bends**

DN	T	L	S	Mass			
				Double-socket		Socket-spigot	
				T	K	T	K
80	7	30	150	7.1	10.5	7.4	7.4
100	7.2	30	150	8.9	13.1	9.4	11.7
150	7.8	35	200	16	21.5	16	17.1
200	8.4	40	200	24	25.0	23.2	25.4
250	9	50	200	34	37.5	32.2	33.6
300	9.6	55	200	43	54	42.2	47.6
350	10.2	60	200	57	65.5	53.2	58.5
400	10.8	65	200	70	74	70.5	75.7
450	11.4	70	200	91.9	93.5	97	101
500	12	75	200	96	108	102	104
600	13.2	85	200	134	141	138	136
700	14.4	95	200	216	187	216	209
800	15.6	110	200	286	234	286	263
900	16.8	120	250	374	297	374	359
1000	18	130	250	473	380.5	473	431
1100	19.2	140	250	600	455	515	475
1200	20.4	150	250	724	541	724	724
1400	22.8	130	300	1047	697	1047	1047
1500	24	140	300	1204	794	1097	1091
1600	25.2	140	300	1309	1008	1146	1134
1800	27.6	155	380	1707	1331	1458	1270
2000	30	165	380	-	1702	-	1594



**ISO2531,EN545,EN598,BS4772**



**All-socket tees**

DNx <sub>dn</sub>	T	L	t	H	Mass	
					T	K
80x80	7.0	170	7.0	85	13.5	17.7
100x80	7.2	170	7.0	95	16.3	21.5
100x100	7.2	190	7.2	95	17.5	23.5
150x80	7.8	170	7.0	120	24	29.5
150x100	7.8	195	7.2	120	26	31
150x150	7.8	255	7.8	125	31	35.6
200x80	8.4	175	7.0	145	30.0	37.9
200x100	8.4	200	7.2	145	32.0	38.8
200x150	8.4	255	7.8	150	37.0	45.0
200x200	8.4	315	8.4	155	48.0	50.5
250x80	9.0	180	7.0	170	40.0	45
250x100	9.0	200	7.2	170	43.0	48
250x150	9.0	255	7.8	175	53.0	57
250x200	9.0	315	8.4	180	60.0	61
250x250	9.0	375	9.0	190	69.0	68
300x100	9.6	205	7.2	195	54.5	68
300x150	9.6	260	7.8	200	68.0	78
300x200	9.6	320	8.4	205	76.0	84.5
300x250	9.6	375	9.0	210	84.0	92.1
300x300	9.6	435	9.6	220	98.0	106
350x100	10.2	200	7.2	220	71.0	80
350x150	10.2	265	7.8	225	87.0	95
350x200	10.2	325	8.4	230	91.0	98
350x250	10.2	360	9.0	235	97.0	109
350x300	10.2	435	9.6	240	106	122
350x350	10.2	495	10.2	250	120	131
400x100	10.8	210	7.2	245	83	95
400x150	10.8	265	7.8	250	98	111
400x200	10.8	325	8.4	255	105	114
400x250	10.8	375	9.0	260	116	128
400x300	10.8	435	9.6	270	132	142
400x350	10.8	495	10.2	270	145	152
400x400	10.8	560	10.8	280	160	167

**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	Mass	
					T	K
450x100	11.4	210	7.2	270	110	116
450x150	11.4	270	7.8	280	117	128
450x200	11.4	325	8.4	280	133	132
450x250	11.4	390	9.0	290	138	147
450x300	11.4	445	9.6	290	149	163
450x350	11.4	495	10.2	300	161	175
450x400	11.4	560	10.8	300	175	188
450x450	11.4	620	11.4	310	190	203
500x100	12.0	215	7.2	295	115	123
500x150	12.0	270	7.8	300	137	145
500x200	12.0	330	8.4	310	141	148
500x250	12.0	390	9.0	310	161	168
500x300	12.0	450	9.6	320	174	185
500x350	12.0	510	10.2	320	187	198
500x400	12.0	560	10.8	330	199	210
500x450	12.0	620	11.4	335	214	224
500x500	12.0	680	12.0	340	234	242
600x100	13.2	220	7.2	345	169	168
600x150	13.2	280	7.8	350	185	184
600x200	13.2	340	8.4	360	188	187
600x250	13.2	400	9.0	360	215	213
600x300	13.2	450	9.6	370	237	233
600x350	13.2	510	10.2	370	246	248
600x400	13.2	570	10.8	380	258	259
600x450	13.2	630	11.4	385	280	281
600x500	13.2	685	12.0	390	296	296
600x600	13.2	800	13.2	400	343	337
700x100	14.4	230	7.2	400	224	215
700x150	14.4	290	7.8	400	241	232
700x200	14.4	340	8.4	410	289	250
700x300	14.4	460	9.6	420	326	292
700x400	14.4	575	10.8	430	349	343
700x500	14.4	690	12.0	440	400	390
700x600	14.4	810	13.2	450	452	438
700x700	14.4	920	14.4	460	509	494
800x100	15.6	230	7.2	445	287	264
800x150	15.6	290	7.8	450	307	284
800x200	15.6	350	8.4	460	330	310
800x300	15.6	465	9.6	470	399	353
800x400	15.6	580	10.8	480	439	398
800x500	15.6	700	12.0	490	472	447
800x600	15.6	810	13.2	500	586	521
800x700	15.6	930	14.4	510	629	576
800x800	15.6	1045	15.6	520	701	650





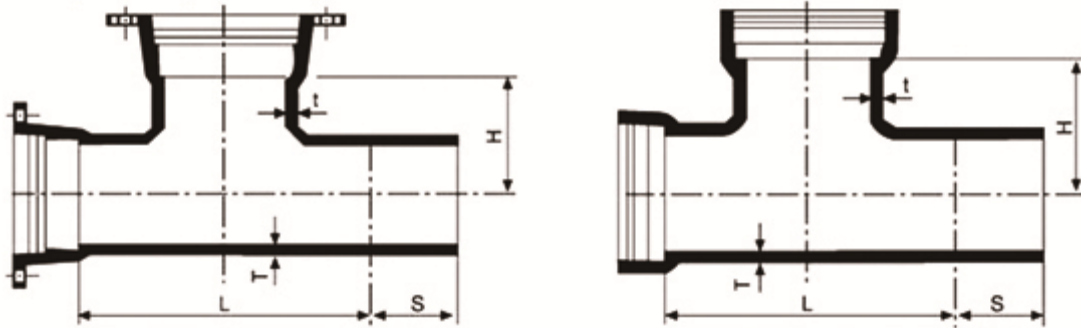
ISO2531,EN545,EN598,BS4772

DNxdn	T	L	t	H	Mass	
					T	K
900x100	16.8	240	7.2	500	360	333
900x150	16.8	300	7.8	500	386	366
900x200	16.8	360	8.4	510	436	409
900x300	16.8	470	9.6	520	462	438
900x400	16.8	590	10.8	530	543	501
900x500	16.8	700	12.0	540	594	567
900x600	16.8	820	13.2	550	670	638
900x700	16.8	940	14.4	560	720	687
900x800	16.8	1050	15.6	570	800	785
900x900	16.8	1170	16.8	580	878	835
1000x100	18.0	250	7.2	550	443	445
1000x150	18.0	300	7.8	550	474	485
1000x200	18.0	360	8.4	560	512	513
1000x300	18.0	480	9.6	570	564	568
1000x400	18.0	590	10.8	580	650	638
1000x500	18.0	710	12.0	590	690	690
1000x600	18.0	830	13.2	600	810	776
1000x700	18.0	940	14.4	610	894	860
1000x800	18.0	1055	15.6	620	963	951
1000x900	18.0	1170	16.8	630	1054	1011
1000x1000	18.0	1290	18.0	645	1158	1114
1100x200	19.2	370	8.4	610	619	575
1100x400	19.2	600	10.8	630	781	739
1100x600	19.2	830	13.2	650	929	881
1100x800	19.2	1060	15.6	670	1180	1065
1100x1000	19.2	1295	18.0	695	1333	1274
1100x1100	19.2	1410	19.2	710	1449	1382
1200x100	20.4	260	7.0	650	658	577
1200x150	20.4	320	7.8	650	691	630
1200x200	20.4	370	8.4	660	735	665
1200x300	20.4	490	9.6	670	816	746
1200x400	20.4	605	10.8	680	907	836
1200x500	20.4	720	12.0	690	1000	932
1200x600	20.4	840	13.2	700	1095	1018
1200x700	20.4	950	14.4	710	1193	1115
1200x800	20.4	1070	15.6	720	1303	1217
1200x900	20.4	1185	16.8	730	1426	1339
1200x1000	20.4	1300	18.0	745	1546	1459
1200x1200	20.4	1530	20.4	770	1800	1690

**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	Mass	
					T	K
1400x100	22.8	270	7.2	750	1006	792
1400x200	22.8	385	8.4	760	1112	891
1400x400	22.8	620	10.8	780	1330	1098
1400x600	22.8	830	13.2	800	1570	1328
1400x800	22.8	1080	15.6	820	1910	1564
1400x1000	22.8	1310	18.0	845	2004	1845
1400x1200	22.8	1550	20.4	870	2409	2133
1400x1400	22.8	1780	22.8	890	2796	2436
1600x100	25.2	280	7.2	850	1345	1067
1600x200	25.2	400	8.4	860	1551	1190
1600x400	25.2	630	10.8	880	1797	1467
1600x600	25.2	860	13.2	900	2044	1738
1600x800	25.2	1090	15.6	920	2348	2033
1600x1000	25.2	1330	18.0	945	2686	2370
1600x1200	25.2	1560	20.4	970	3042	2705
1600x1400	25.2	1790	22.8	990	3479	3058
1600x1600	25.2	2020	25.2	1010	3921	3500
1800x100	27.6	290	7.2	945	1790	1373
1800x200	27.6	410	8.4	960	1954	1532
1800x400	27.6	640	10.8	980	2280	1859
1800x600	27.6	870	13.2	1000	2620	2193
1800x800	27.6	1110	15.6	1020	2993	2558
1800x1000	27.6	1340	18.0	1045	3377	2940
1800x1200	27.6	1570	20.4	1070	3791	3332
1800x1400	27.6	1800	22.8	1090	4284	3742
1800x1600	27.6	2030	25.2	1110	4781	4209
1800x1800	27.6	2270	27.6	1130	5342	4708
2000x200	30	420	8.4	1060		1930.5
2000x400	30	650	10.8	1080		2318
2000x600	30	890	13.2	1100		2737
2000x800	30	1120	15.6	1120		3146
2000x1000	30	1350	18.0	1145		3591
2000x1200	30	1580	20.4	1170		4045
2000x1400	30	1810	22.8	1190		4517
2000x1600	30	2050	25.2	1210		5062
2000x1800	30	2280	27.6	1230		5610
2000x2000	30	2510	30	1255		6202

**ISO2531,EN545,EN598,BS4772**



**Socket-spigot tees with socket branch**

DNx <sub>dn</sub>	T	L	t	H	S	Mass	
						T	K
80x80	7.0	170	7.0	85	150	13	16.0
100x80	7.2	170	7.0	95	150	16	19.0
100x100	7.2	190	7.2	95	150	16.9	21.7
150x80	7.8	170	7.0	120	200	23	26.5
150x100	7.8	195	7.2	120	200	25	29.5
150x150	7.8	255	7.8	125	200	30	34.0
200x80	8.4	175	7.0	145	200	32	35.0
200x100	8.4	200	7.2	145	200	33	37.8
200x150	8.4	255	7.8	150	200	39	42.9
200x200	8.4	315	8.4	155	200	44	48.4
250x80	9.0	180	7.0	170	200	41.3	42.0
250x100	9.0	200	7.2	170	200	44	47.6
250x150	9.0	255	7.8	175	200	52	56.3
250x200	9.0	315	8.4	180	200	57	58.0
250x250	9.0	375	9.0	190	200	67	66.8
300x100	9.6	205	7.2	195	200	57.5	65.3
300x150	9.6	260	7.8	200	200	67.1	75.1
300x200	9.6	320	8.4	205	200	72.3	79.9
300x250	9.6	375	9.0	210	200	82.7	89.5
300x300	9.6	435	9.6	220	200	97	100
350x100	10.2	200	7.2	220	200	66.1	77.5
350x150	10.2	265	7.8	225	200	82.1	89.5
350x200	10.2	325	8.4	230	200	87.1	94.5
350x250	10.2	360	9.0	235	200	99.1	106
350x300	10.2	435	9.6	240	200	106.6	120
350x350	10.2	495	10.2	250	200	119.6	129
400x100	10.8	210	7.2	245	200	84	91.8
400x150	10.8	265	7.8	250	200	99	106
400x200	10.8	325	8.4	255	200	103	110
400x250	10.8	375	9.0	260	200	118	125
400x300	10.8	435	9.6	270	200	128	138
400x350	10.8	495	10.2	270	200	139	149
400x400	10.8	560	10.8	280	200	152	163



**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	S	Mass	
						T	K
450x100	11.4	215	7.2	270	200	107	114
450x150	11.4	270	7.8	280	200	116	123
450x200	11.4	325	8.4	280	200	127	133
450x250	11.4	390	9.0	290	200	138	144
450x300	11.4	445	9.6	290	200	150	159
450x350	11.4	495	10.2	300	200	162	171
450x400	11.4	560	10.8	300	200	172	181
450x450	11.4	620	11.4	310	200	185	193
500x100	12.0	215	7.2	295	200	115	120
500x150	12.0	270	7.8	300	200	136	141
500x200	12.0	330	8.4	310	200	140	145
500x250	12.0	390	9.0	310	200	161	165
500x300	12.0	450	9.6	320	200	174	182
500x350	12.0	510	10.2	320	200	186	194
500x400	12.0	560	10.8	330	200	199	207
500x450	12.0	620	11.4	335	200	212	228
500x500	12.0	680	12.0	340	200	231	237
600x100	13.2	220	7.2	345	200	165	169
600x150	13.2	280	7.8	350	200	180	180
600x200	13.2	340	8.4	360	200	183	183
600x250	13.2	400	9.0	360	200	210	200
600x300	13.2	450	9.6	370	200	227	234
600x350	13.2	510	10.2	370	200	241	245
600x400	13.2	570	10.8	380	200	252	256
600x450	13.2	630	11.4	385	200	274	277
600x500	13.2	685	12.0	390	200	287	289
600x600	13.2	800	13.2	400	200	334	334
700x100	14.4	230	7.2	400	200	224	215
700x150	14.4	290	7.8	400	200	241	232
700x200	14.4	340	8.4	410	200	264	250
700x300	14.4	460	9.6	420	200	301	290
700x400	14.4	575	10.8	430	200	337	329
700x500	14.4	690	12.0	440	200	380	370
700x600	14.4	810	13.2	450	200	435	418
700x700	14.4	920	14.4	460	200	511	486
800x100	15.6	230	7.2	445	200	287	264
800x150	15.6	290	7.8	450	200	307	284
800x200	15.6	350	8.4	460	200	330	305
800x300	15.6	470	9.6	470	200	374	353
800x400	15.6	580	10.8	480	200	420	420
800x500	15.6	700	12.0	490	200	472	475
800x600	15.6	810	13.2	500	200	530	500
800x700	15.6	930	14.4	510	200	640	580
800x800	15.6	1045	15.6	520	200	655	630



**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	S	Mass	
						T	K
900x100	16.8	240	7.2	500	200	360	333
900x150	16.8	300	7.8	500	200	386	359
900x200	16.8	360	8.4	510	200	415	382
900x300	16.8	470	9.6	520	200	470	468
900x400	16.8	590	10.8	530	200	520	491
900x500	16.8	700	12.0	540	200	590	565
900x600	16.8	820	13.2	550	200	650	620
900x700	16.8	940	14.4	560	200	715	690
900x800	16.8	1050	15.6	570	200	790	756
900x900	16.8	1170	16.8	580	200	860	825
1000x100	18.0	250	7.2	550	250	443	445
1000x150	18.0	300	7.8	550	250	474	475
1000x200	18.0	360	8.4	560	250	510	503
1000x300	18.0	480	9.6	570	250	564	568
1000x400	18.0	590	10.8	580	250	630	628
1000x500	18.0	710	12.0	590	250	690	690
1000x600	18.0	830	13.2	600	250	775	771
1000x700	18.0	940	14.4	610	250	850	842
1000x800	18.0	1055	15.6	620	250	942	944
1000x900	18.0	1170	16.8	630	250	1013	985
1000x1000	18.0	1290	18.0	645	250	1117	1096
1100x200	19.2	370	8.4	610	250	565	545
1100x400	19.2	600	10.8	630	250	741	706
1100x600	19.2	830	13.2	650	250	874	848
1100x800	19.2	1060	15.6	670	250	1063	1027
1100x1000	19.2	1295	18.0	695	250	1298	1261
1100x1100	19.2	1410	19.2	710	250	1414	1369
1200x100	20.4	260	7.0	650	250	648	649
1200x150	20.4	320	7.8	650	250	685	686
1200x200	20.4	370	8.4	660	250	725	726
1200x300	20.4	490	9.6	670	250	816	819
1200x400	20.4	605	10.8	680	250	884	886
1200x500	20.4	720	12.0	690	250	966	966
1200x600	20.4	840	13.2	700	250	1064	1050
1200x700	20.4	950	14.4	710	250	1163	1138
1200x800	20.4	1070	15.6	720	250	1259	1239
1200x900	20.4	1185	16.8	730	250	1361	1339
1200x1000	20.4	1300	18.0	745	250	1481	1447
1200x1200	20.4	1530	20.4	770	250	1743.5	1697

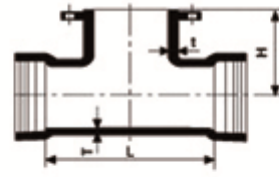
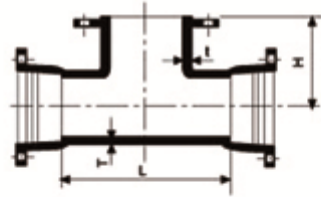
**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	S	Mass	
						T	K
1400x100	22.8	270	7.2	750	300	940	794
1400x200	22.8	385	8.4	760	300	1039	895
1400x400	22.8	620	10.8	780	300	1232	1098
1400x600	22.8	850	13.2	800	300	1432	1310
1400x800	22.8	1080	15.6	820	300	1787	1552
1400x1000	22.8	1310	18.0	845	300	1963	1830
1400x1200	22.8	1550	20.4	870	300	2278	2123
1400x1400	22.8	1780	22.8	890	300	2665	2426
1600x100	25.2	280	7.2	850	300	1180	1054
1600x200	25.2	400	8.4	860	300	1546	1332
1600x400	25.2	630	10.8	880	300	1786	1578
1600x600	25.2	860	13.2	900	300	2023	1814
1600x800	25.2	1090	15.6	920	300	2296	2064
1600x1000	25.2	1330	18.0	945	300	2591	2349
1600x1200	25.2	1560	20.4	970	300	2910	2639
1600x1400	25.2	1790	22.8	990	300	3299	3003
1600x1600	25.2	2020	25.2	1010	300	3752	3445
1800x100	27.6	290	7.2	945	380	1586.5	1377
1800x200	27.6	410	8.4	960	380	1806	1583
1800x400	27.6	640	10.8	980	380	2100	1914
1800x600	27.6	870	13.2	1000	380	2506	2288
1800x800	27.6	1110	15.6	1020	380	2808	2570
1800x1000	27.6	1340	18.0	1045	380	3175	2949
1800x1200	27.6	1570	20.4	1070	380	3588	3340
1800x1400	27.6	1800	22.8	1090	380	4081	3751
1800x1600	27.6	2030	25.2	1110	380	4578	4217
1800x1800	27.6	2270	27.6	1130	380	5139	4717
2000x200	30	420	8.4	1060	380		2020
2000x400	30	830	10.8	1080	380		2328
2000x600	30	1065	13.2	1100	380		2766
2000x800	30	1300	15.6	1120	380		3129
2000x1000	30	1530	18.0	1145	380		3568
2000x1200	30	1760	20.4	1170	380		4022
2000x1400	30	1995	22.8	1190	380		4494
2000x1600	30	2225	25.2	1210	380		5038
2000x1800	30	2460	27.6	1230	380		5587
2000x2000	30	2690	30	1255	380		6179

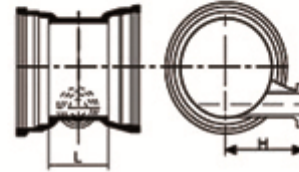




**ISO2531,EN545,EN598,BS4772**



**Double-socket tees with flanged branch**



**Double-socket level invert with flanged branch**

DNx <sub>dn</sub>	T	L	t	H	Mass					
					T			K		
					PN10	PN16	PN25	PN10	PN16	PN25
80x80	7.0	170	7.0	165	13.5	13.5	13.5	16.7	16.7	16.7
100x80	7.2	170	7.0	175	17.0	17.0	17.0	19.7	19.7	19.7
100x100	7.2	190	7.2	180	18.5	18.5	18.19	21	21	21.5
150x80	7.8	170	7.0	205	25	25	25	28.5	28.5	28.5
150x100	7.8	195	7.2	210	27	27	31.5	30.5	30.5	31
150x150	7.8	255	7.8	220	32	32	33	35.5	35.5	36.5
200x80	8.4	175	7.0	235	31.5	31.5	31.5	36.5	36.5	36.5
200x100	8.4	200	7.2	240	33.5	33.5	34	38.5	38.5	39
200x150	8.4	255	7.8	250	41	41	42	44.5	44.5	45.5
200x200	8.4	315	8.4	260	49	49	51	51.5	51.0	53.0
250x80	9.0	180	7	265	44	44	44	47.0	47.0	47.0
250x100	9.0	200	7.2	270	45	45	47	48.0	48.0	48.5
250x150	9.0	255	7.8	280	57	57	57.6	59.0	59.0	60.0
250x200	9.0	315	8.4	290	59	59	59.0	62.5	62.0	64.0
250x250	9.0	375	9.0	300	71	71	75.0	71.5	71.0	74.5
300x100	9.6	205	7.2	300	60	60	60.5	68.0	68.0	68.5
300x150	9.6	260	7.8	310	69	69	69	78.5	78.5	79.5
300x200	9.6	320	8.4	320	77	77	79	84.0	84.0	86.0
300x250	9.6	375	9.0	330	89	87.5	91	94.0	91.0	96.0
300x300	9.6	435	9.6	340	89	98.4	104	102	102	107
350x100	10.2	200	7.2	330	68.0	71	71.5	78.4	78.1	79.0
350x150	10.2	265	7.8	340	87.5	87.5	88	93.0	93.0	94.0
350x200	10.2	325	8.4	350	90.5	90.5	89.5	96.0	96.0	98.0
350x250	10.2	360	9.0	360	103	114	125	114	118	123
350x300	10.2	435	9.6	370	113	118	129	118	124	135
350x350	10.2	495	10.2	380	117	120	132	129	132	139

**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	Mass					
					T			K		
					PN10	PN16	PN25	PN10	PN16	PN25
400x100	10.8	210	7.2	360	83	83	83	93	93	93.5
400x150	10.8	265	7.8	370	102	102	103	109	109	110
400x200	10.8	325	8.4	380	112	112	114	113	112	114
400x250	10.8	375	9.0	390	119	118	122	127	128	132
400x300	10.8	435	9.6	400	131	132	137	137	140	142
400x350	10.8	495	10.2	410	143	146	153	158	156	163
400x400	10.8	560	10.8	420	160	166	177	163	168	178
450x100	11.4	210	7.2	390	99	99	99	110	110	110.5
450x150	11.4	270	7.8	400	119	119	120	127	127	128
450x200	11.4	325	8.4	410	122	122	124	130	130	132
450x250	11.4	390	9.0	420	141	141	145	149	149	153
450x300	11.4	445	9.6	430	149	149	154	157	157	162
450x350	11.4	495	10.2	440	166	169	177	174	177	186
450x400	11.4	560	10.8	450	179	185	192	185	189	200
450x450	11.4	620	11.4	460	192	200	211	200	208	219
500x100	12.0	215	7.2	420	116	116	117	124	124	125
500x150	12.0	270	7.8	430	137	137	137	143	143	144
500x200	12.0	330	8.4	440	142	142	143	149	149	151
500x250	12.0	390	9.0	450	165	171	169	172	171	177
500x300	12.0	450	9.6	460	171	179	176	177	177	182
500x350	12.0	510	10.2	470	192	195	203	198	201	210
500x400	12.0	560	10.8	480	199	205	216	207	212	223
500x450	12.0	620	11.4	490	220	228	244	226	235	250
500x500	12.0	680	12.0	500	236	249	260	242	256	266
600x100	13.2	200	7.2	480	170	170	178	152	152	153
600x150	13.2	280	7.8	490	177	177	178	183	183	184
600x200	13.2	340	8.4	500	189	189	191	187	187	188
600x250	13.2	400	9.0	510	219	218	222	215	215	218
600x300	13.2	450	9.6	520	235	235	240	222	222	227
600x350	13.2	510	10.2	530	252	255	263	247	251	260
600x400	13.2	570	10.8	540	258	263	274	258	263	274
600x450	13.2	630	11.4	550	285	293	309	281	289	305
600x500	13.2	685	12.0	560	304	309	331	301	305	327
600x600	13.2	800	13.2	580	340	366	380	345	368	380
700x100	14.4	230	7.2	510	242	242	243	243	243	244
700x150	14.4	290	7.8	520	246	246	247	246	246	247
700x200	14.4	340	8.4	525	253	252	254	250	249	251
700x300	14.4	460	9.6	540	300	300	306	301	301	307
700x400	14.4	575	10.8	555	331	337	344	329	334	345
700x500	14.4	690	12.0	570	391	406	418	392	407	409
700x600	14.4	810	13.2	585	421	445	460	422	445	457
700x700	14.4	920	14.5	600	478	492	525	476	488	521
800x100	15.6	230	7.2	570	295	295	295.5	295	295	295
800x150	15.6	290	7.8	580	308	308	309	298	298	299
800x200	15.6	350	8.4	585	321.5	321	323	302	301	303





**ISO2531,EN545,EN598,BS4772**

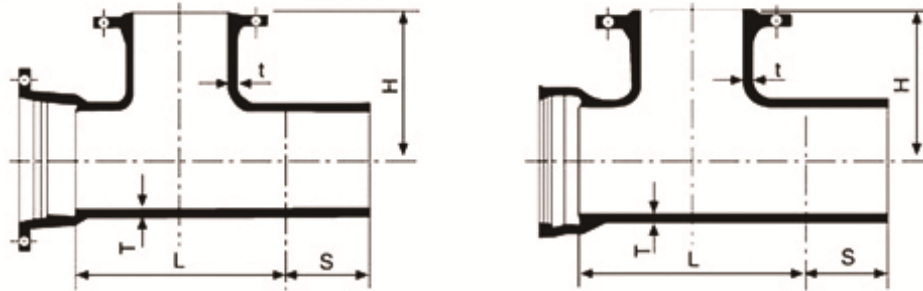
DNx dn	T	L	t	H	Mass					
					T			K		
					PN10	PN16	PN25	PN10	PN16	PN25
800x300	15.6	465	9.6	600	371	371	377	362	362	368
800x400	15.6	580	10.8	615	412	419	428	396	401	412
800x500	15.6	700	12.0	630	500	515	527	513	528	540
800x600	15.6	815	13.2	645	560	586	602	579	603	614
800x700	15.6	930	14.4	660	620	635	669	595	610	643
800x800	15.6	1045	15.6	675	646	664	710	631	646	699
900x100	16.8	240	7.2	630	363	363	364	340	340	340.5
900x150	16.8	300	7.8	640	386	386	387	368	368	369
900x200	16.8	360	8.4	645	414	414	416	371	371	373
900x300	16.8	470	9.6	660	464	464	469	442	442	448
900x400	16.8	590	10.8	675	526	530	540	484	488	499
900x500	16.8	700	12.0	690	600	620	630	572	588	600
900x600	16.8	820	13.2	705	670	700	711	669	669	683
900x700	16.8	940	14.4	720	744	759	792	716	731	764
900x800	16.8	1050	15.6	735	808	823	876	780	800	847
900x900	16.8	1170	16.8	750	852	873	929	822	841	907
1000x100	18.0	250	7.2	690	449	449	449.5	420	420	420.5
1000x150	18.0	300	7.8	700	477	477	478	447	447	448
1000x200	18.0	360	8.4	705	498	498	500	467	468	469
1000x300	18.0	480	9.6	720	569	568.5	574	540	539	545
1000x400	18.0	590	10.8	735	634	640	651	605	611	622
1000x500	18.0	710	12	750	718	733	745	689	704	716
1000x600	18.0	830	13.2	765	958	982	994	771	797	812
1000x700	18.0	940	14.4	780	985	1000	1032	861	876	909
1000x800	18.0	1055	15.6	795	980	1055	1123	951	966	1016
1000x900	18.0	1170	16.8	810	1011	1086	1093	982	1006	1064
1000x1000	18.0	1290	18.0	825	1111	1153	1224	1082	1123	1195
1100x200	19.2	370	8.4	765	623	623	625	569	569	571
1100x400	19.2	600	10.8	795	788	794	805.3	724	730	741.3
1100x600	19.2	830	13.2	825	958	984.5	1009	894	920.5	935
1100x800	19.2	1060	15.6	855	1151	1171	1209	1027	1106	1155
1100x1000	19.2	1295	16.8	885	1315	1356	1427	1251	1292	1363
1100x1100	19.2	1410	19.2	900	1414.5	1450	1526	1350.5	1386	1462
1200x100	20.4	260	7.0	810	668	668	669	573	573	574
1200x150	20.4	320	7.8	820	695	695	696	621	621	622
1200x200	20.4	370	8.4	825	732	732	733	658	658	660
1200x300	20.4	490	9.6	840	823	823	827	769	769	775
1200x400	20.4	605	10.8	855	900	906	917	827	833	844
1200x500	20.4	720	12.0	870	984	1000	1012	911	930	940
1200x600	20.4	840	13.2	885	1091	1117	1131	1018	1044	1058
1200x700	20.4	950	14.4	900	1175	1190	1223	1102	1117	1150
1200x800	20.4	1070	15.6	915	1280	1299	1347	1207	1226	1274
1200x900	20.4	1185	16.8	930	1311	1394	1452	1297	1321	1379
1200x1000	20.4	1300	18.0	945	1472	1513	1584	1399	1440	1512
1200x1200	20.4	1530	20.4	975	1715	1779	1865	1642	1706	1792



**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	Mass					
					T			K		
					PN10	PN16	PN25	PN10	PN16	PN25
1400x100	22.8	450	7.2	905	1158	1158	1159	865	865	866
1400x200	22.8	565	8.4	920	1264	1264	1266	911	911	913
1400x400	22.8	800	10.8	950	1469	1475	1486	1176	1182	1193
1400x600	22.8	1030	13.2	980	1695	1722	1737	1402	1429	1443
1400x800	22.8	1260	15.6	1010	1912	1931	1979	1619	1638	1682
1400x1000	22.8	1495	18.0	1040	2174	2216	2289	1881	1922	1994
1400x1200	22.8	1725	20.4	1070	2414	2478	2364	2127	2185	2271
1400x1400	22.8	1960	22.8	1100	2708	2715	2928	2415	2482	2635
1600x100	25.2	460	7.2	1015	1550	1550	1552	1261	1261	1263
1600x200	25.2	580	8.4	1030	1748	1748	1750	1391	1391	1393
1600x400	25.2	810	10.8	1060	2002	2008	2017	1658	1664	1765
1600x600	25.2	1040	13.2	1090	2272	2298	2312	1971	1997	2011
1600x800	25.2	1275	15.6	1120	2811	2829	2875	2381	2399	2443
1600x1000	25.2	1505	18.0	1150	2890	2931	3002	2589	2630	2701
1600x1200	25.2	1740	20.4	1180	3194	3260	3344	2893	2957	3043
1600x1400	25.2	1970	22.8	1210	3520	3587	3740	3219	3286	3459
1600x1600	25.2	2200	25.2	1240	4039	4141	4319	3738	3840	4018
1800x100	27.6	475	7.2	1125	2065	2065	2066	1622	1622	1623
1800x200	27.6	590	8.4	1140	2185	2185	2186	1742	1742	1743
1800x400	27.6	820	10.8	1170	2525	2531	2542	2082	2088	2099
1800x600	27.6	1055	13.2	1200	2876	2903	2917	2433	2460	2474
1800x800	27.6	1285	15.6	1230	3195	3215	3263	2752	2772	2820
1800x1000	27.6	1520	18.0	1260	3637	3679	3750	3194	3235	3307
1800x1200	27.6	1750	20.4	1290	3998	4062	4248	3555	3619	3805
1800x1400	27.6	1980	22.8	1320	4277	4344	4497	3834	3901	4054
1800x1600	27.6	2215	25.2	1350	4717	4817	4995	4274	4374	4552
1800x1800	27.6	2445	27.6	1380	5275	5401	5641	4838	4958	5198
2000x200	30	600	8.4	1250				2212	2212	2214
2000x400	30	830	10.8	1280				2614	2620	2631
2000x600	30	1065	13.2	1310				3030	3056	3100
2000x800	30	1300	12.6	1340				3410	3359	3407
2000x1000	30	1530	18.0	1370				3876	3918	4050
2000x1200	30	1760	20.4	1400				4198	4261	4347
2000x1400	30	1995	22.8	1430				4769	4836	4989
2000x1600	30	2225	25.2	1460				5037	5157	5335
2000x1800	30	2460	27.6	1490				5582	5709	5949
2000x2000	30	2690	30	1520				6160	6313	6666

**ISO2531,EN545,EN598,BS4772**



**Socket-spigot tees with flanged branch**

DNx dn	T	L	t	H	S	Mass					
						T			K		
						PN10	PN16	PN25	PN10	PN16	PN25
80x80	7.0	170	7.0	165	150	14	14	14	15	15	15
100x80	7.2	170	7.0	170	150	16.4	16.4	16.4	18.7	18.7	18.7
100x100	7.2	190	7.2	180	150	17.8	17.8	17.8	20.1	20.1	20.1
150x80	7.8	170	7.0	205	200	23.7	23.7	24	26.1	26.1	27.0
150x100	7.8	195	7.2	210	200	25.4	25.4	25.4	27.0	27.6	28.1
150x150	7.8	255	7.8	220	200	30.2	30.2	31.2	32.0	32	33.0
200x80	8.4	175	7.0	235	200	32.5	32.5	32.5	34.5	34.5	34.5
200x100	8.4	200	7.2	240	200	34.3	34.3	34.8	36.3	36.3	36.8
200x150	8.4	255	7.8	250	200	40.2	40.2	41.2	42.2	42.2	43.2
200x200	8.4	315	8.4	260	200	47	47	49	48.6	48.6	50.7
250x80	9.0	180	7	270	200	43.4	43.4	43.4	44.8	44.8	44.8
250x100	9.0	200	7.2	270	200	44.9	44.9	46	46.4	46.4	47
250x150	9.0	255	7.8	280	200	57.3	57.3	58.3	58.7	58.7	59
250x200	9.0	315	8.4	290	200	57.7	57.7	58.1	59.1	59.1	60
250x250	9.0	375	9.0	300	200	65.7	66.3	70.2	67.6	68.1	71.1
300x100	9.6	205	7.2	300	200	58.5	58.5	59	63.9	63.9	64.5
300x150	9.6	260	7.8	310	200	70.9	70.9	72	73.3	73.3	74.3
300x200	9.6	320	8.4	320	200	73.5	73.5	75.6	78.9	78.9	81
300x250	9.6	375	9.0	330	200	85.5	85.5	91.5	90.5	90.5	95.5
300x300	9.6	435	9.6	340	200	93	93	98	97.3	97.3	103
350x100	10.2	200	7.2	330	200	70.2	70.2	70.8	75.2	75.2	76
350x150	10.2	265	7.8	340	200	85.2	85.2	86.2	90	90	91
350x200	10.2	325	8.4	350	200	90	90	92	94	94	96
350x250	10.2	360	9.0	360	200	106	106	110	110	110	114
350x300	10.2	435	9.6	370	200	114	114	120	122	122	128
350x350	10.2	495	10.2	380	200	121	124	132	125	128	135
400x100	10.8	210	7.2	360	200	84.2	84.2	85	89.2	89.2	90
400x150	10.8	265	7.8	370	200	99.8	99.8	101	104	104	105
400x200	10.8	325	8.4	380	200	105	105	117	109	109	110
400x250	10.8	375	9.0	390	200	120	120	124	125	125	129
400x300	10.8	435	9.6	400	200	134	134	140	138	138	143
400x350	10.8	495	10.2	410	200	144	148	155	148	151	160
400x400	10.8	560	10.8	420	200	151	157	168	159	165	174



**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	S	Mass					
						T			K		
						PN10	PN16	PN25	PN10	PN16	PN25
450x100	11.4	210	7.2	390	200	106	106	107	110	110	111
450x150	11.4	270	7.8	400	200	120	120	121	123	123	124
450x200	11.4	325	8.4	410	200	130	130	132	134	134	136
450x250	11.4	390	9.0	420	200	140	140	146	145	144	150
450x300	11.4	445	9.6	430	200	156	155	161	158	158	161
450x350	11.4	495	10.2	440	200	165	168	177	169	172	181
450x400	11.4	560	10.8	450	200	180	185	191	184	189	200
450x450	11.4	620	11.4	460	200	191	199	210	199	203	219
500x100	12.0	215	7.2	420	200	116	116	117	119	119	120
500x150	12.0	270	7.8	430	200	138	138	139	140	140	141
500x200	12.0	330	8.4	440	200	142	141	143	145	144	146
500x250	12.0	390	9.0	450	200	165	164	168	168	167	171
500x300	12.0	450	9.6	460	200	178	178	183	181	181	185
500x350	12.0	510	10.2	470	200	192	195	203	184	187	196
500x400	12.0	560	10.8	480	200	198	204	215	203	210	219
500x450	12.0	620	11.4	490	200	219	227	243	222	230	245
500x500	12.0	680	12.0	500	200	231	246	258	231	252	262
600x100	13.2	200	7.2	480	200	166	166	167	164	164	165
600x150	13.2	280	7.8	490	200	183	183	184	181	181	182
600x200	13.2	340	8.4	500	200	184	184	186	188	188	190
600x250	13.2	400	9.0	510	200	215	215	218	203	203	206
600x300	13.2	450	9.6	520	200	231	230	235	228	228	233
600x350	13.2	510	10.2	530	200	247	250	258	245	248	256
600x400	13.2	570	10.8	540	200	253	258	269	256	262	272
600x450	13.2	630	11.4	550	200	279	288	303	277	286	301
600x500	13.2	685	12.0	560	200	299	303	326	297	301	324
600x600	13.2	800	13.2	580	200	333	359	373	340	365	377
700x100	14.4	230	7.2	510	200	242	242	243	243	243	245
700x150	14.4	290	7.8	520	200	246	246	246	246	246	247
700x200	14.4	340	8.4	525	200	249	249	249	249	249	251
700x300	14.4	460	9.6	540	200	300	300	306	301	301	307
700x400	14.4	575	10.8	555	200	329	333	344	329	334	325
700x500	14.4	690	12.0	570	200	391	406	418	392	407	419
700x600	14.4	810	13.2	585	200	421	445	456	422	445	460
700x700	14.4	920	14.4	600	200	476	487	523	476	488	499
800x100	15.6	230	7.2	570	200	304	304	305	295	295	296
800x150	15.6	290	7.8	580	200	308	308	308	298	298	299
800x200	15.6	350	8.4	585	200	311	311	313	302	301	303
800x300	15.6	465	9.6	600	200	371	371	377	362	362	368
800x400	15.6	580	10.8	615	200	405	410	421	396	401	415
800x500	15.6	700	12.0	630	200	522	537	549	513	528	540
800x600	15.6	810	13.2	645	200	588	612	628	579	603	615
800x700	15.6	930	14.4	660	200	620	635	669	626	641	660
800x800	15.6	1045	15.6	675	200	640	655	710	631	646	705





**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	S	Mass					
						T			K		
						PN10	PN16	PN25	PN10	PN16	PN25
900x100	16.8	240	7.2	630	250	373	373	374	355	355	356
900x150	16.8	300	7.8	640	250	385	385	386	372	372	373
900x200	16.8	360	8.4	645	250	417	417	420	398	398	400
900x300	16.8	470	9.6	660	250	467	467	482	449	449	465
900x400	16.8	590	10.8	675	250	533	539	538	504	510	519
900x500	16.8	700	12.0	690	250	650	670	682	633	648	670
900x600	16.8	820	13.2	705	250	695	721	747.5	745	769	799
900x700	16.8	940	14.4	720	250	725	740	773	760	780	827
900x800	16.8	1050	15.6	735	250	800	819	867	770	790	837
900x900	16.8	1170	16.8	750	250	853	875	930	830	856	912
1000x100	18.0	250	7.2	690	250	450	450	431	445	445	446
1000x150	18.0	300	7.8	700	250	476	476	464	426	464	465
1000x200	18.0	360	8.4	705	250	505	505	507	484	484	486
1000x300	18.0	480	9.6	720	250	564	564	579	543	543	558
1000x400	18.0	590	10.8	735	250	618	625	634	597	604	613
1000x500	18.0	710	12	750	250	684	699	709	673	688	698
1000x600	18.0	830	13.2	765	250	768	793	825	747	772	784
1000x700	18.0	940	14.4	780	250	830	844	876	809	823	855
1000x800	18.0	1055	15.6	795	250	922	997	1045	907	932	1030
1000x900	18.0	1170	16.8	810	250	981	1003	1059	980	982	1048
1000x1000	18.0	1290	18.0	825	250	1076	1113	1185	1075	1112	1166
1100x200	19.2	370	8.4	765	250	610	610	612	573	573	575
1100x400	19.2	600	10.8	795	250	755	761	770	718	725	734
1100x600	19.2	830	13.2	825	250	913	938	951	877	902	914
1100x800	19.2	1060	15.6	855	250	1082	1096	1144	1056	1074	1123
1100x1000	19.2	1295	18.0	885	250	1295	1331	1408	1251	1292	1363
1100x1100	19.2	1410	19.2	900	250	1395	1430	1506	1351	1386	1440
1200x100	20.4	260	7.2	810	250	664	664	665	608	608	609
1200x150	20.4	320	7.8	820	250	705	705	706	649	649	650
1200x200	20.4	370	8.4	825	250	739	739	741	683	683	688
1200x300	20.4	490	9.6	840	250	769	769	775	769	769	775
1200x400	20.4	605	10.8	855	250	852	856	860	787	867	878
1200x500	20.4	720	12.0	870	250	968	973	980	880	890	900
1200x600	20.4	840	13.2	885	250	1031	1055	1070	967	991	1008
1200x700	20.4	950	14.4	900	250	1169	1184	1198	1080	1095	1128
1200x800	20.4	1070	15.6	915	250	1227	1242	1258	1162	1177	1205
1200x900	20.4	1185	16.8	930	250	1367	1427	1480	1290	1314	1360
1200x1000	20.4	1300	18.0	945	250	1436	1470	1498	1372	1406	1467
1200x1200	20.4	1530	20.4	975	250	1682	1736	2053	1617	1672	1757

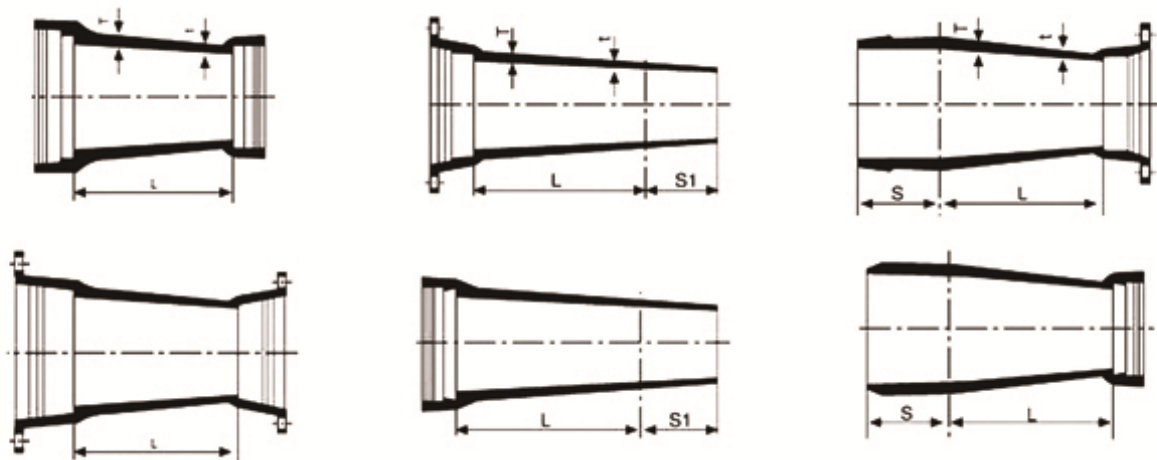
**ISO2531,EN545,EN598,BS4772**

DNx dn	T	L	t	H	S	Mass					
						T			K		
						PN10	PN16	PN25	PN10	PN16	PN25
1400x100	22.8	450	7.2	905	300	1120	1120	1120	1120	1120	1120
1400x200	22.8	565	8.4	920	300	1189	1189	1192	981	981	983
1400x400	22.8	800	10.8	950	300	1357	1368	1374	1221	1226	1239
1400x600	22.8	1030	13.2	980	300	1478	1505	1519	1441	1464	1482
1400x800	22.8	1260	15.6	1010	300	1709	1728	1777	1677	1692	1742
1400x1000	22.8	1495	18.0	1040	300	1956	1996	2075	1929	1964	2075
1400x1200	22.8	1725	20.4	1070	300	2375	2475	2569	2205	2260	2358
1400x1400	22.8	1960	22.8	1100	300	2697	2765	2917	2491	2547	2708
1600x100	25.2	460	7.2	1015	300	1300	1300	1300	1230	1230	1231
1600x200	25.2	580	8.4	1030	300	1486	1486	1488	1361	1361	1364
1600x400	25.2	810	10.8	1060	300	1753	1770	1775	1603	1609	1620
1600x600	25.2	1040	13.2	1090	300	2086	2112	2126	1906	1931	1943
1600x800	25.2	1275	15.6	1120	300	2335	2353	2399	2167	2180	2228
1600x1000	25.2	1505	18.0	1150	300	2625	2664	2736	2489	2851	2601
1600x1200	25.2	1740	20.4	1180	300	2949	3008	3094	2793	2857	2943
1600x1400	25.2	1970	22.8	1210	300	3270	3337	3418	3119	3186	3339
1600x1600	25.2	2200	25.2	1240	300	3788	3890	4008	3638	3740	3918
1800X100	27.6	410	7.2	1130	380	1865	1865	1865	1654	1654	1654
1800X200	27.6	410	8.4	1140	380	2030	2030	2032	1781	1781	1783
1800X400	27.6	820	10.8	1170	380	2367	2374	2383	2091	2098	2106
1800X600	27.6	1055	13.2	1200	380	2675	2700	2712	2442	2469	2483
1800X800	27.6	1285	15.6	1230	380	2999	3017	3063	2761	2781	2829
1800X1000	27.6	1520	18.0	1260	380	3348	3386	3459	3124	3162	3234
1800X1200	27.6	1750	20.4	1290	380	3795	3859	4045	3493	3557	3743
1800X1400	27.6	1980	22.8	1320	380	4074	4141	4294	3843	3910	4063
1800X1600	27.6	2215	25.2	1350	380	4514	4614	4792	4283	4383	4561
1800X1800	27.6	2445	27.6	1380	380	5072	5198	5438	4841	4967	5207
2000X200	30	600	8.4	1250	380				2200	2200	2201
2000X400	30	830	10.8	1280	380				2621	2628	2637
2000X600	30	1065	13.2	1310	380				3013	3039	3065
2000X800	30	1300	15.6	1340	380				3362	3380	3226
2000X1000	30	1530	18.0	1370	380				3799	3844	3913
2000X1200	30	1760	20.4	1400	380				4181	4230	4330
2000X1400	30	1995	22.8	1430	380				4661	4728	4881
2000X1600	30	2225	25.2	1460	380				5089	5774	5334
2000X1800	30	2460	27.6	1490	380				5565	5692	5932
2000X2000	30	2690	30	1520	380				6143	6296	6648





**ISO2531,EN545,EN598,BS4772**



**Socket tapers**

DNx <sub>dn</sub>	S	S <sub>1</sub>	t	Mass					
				Double-Socket		Socket-Spigot		Spigot-Socket	
				T	K	T	K	T	K
100x80	150	150	90	8.5	11.9	7.7	9.3	7.2	8.8
150x80	200	150	190	14.5	18.6	13.0	14.2	13.0	15.5
150x100	200	150	150	15	19.1	13.3	14.7	13.5	15.7
200x100	200	150	250	21.8	26.0	20.0	20.9	19.4	22.6
200x150	200	200	150	22.5	27.0	21.0	21.9	20.5	22.6
250x150	200	200	250	31	33.0	30.0	29.6	27.5	31.6
250x200	200	200	150	31.5	33.0	29.0	28.6	27.9	29.9
300x150	200	200	350	42.4	50.0	39.5	43.3	37.5	45.6
300x200	200	200	250	44.3	49.0	39.9	43.7	37.1	43.9
300x250	200	200	150	41	47.5	38.0	41.8	37.0	41.1
350x200	200	200	360	58.5	62.5	56.0	59.5	49.6	57.4
350x250	200	200	260	55.5	61.0	52.0	55.4	48.5	54.6
350x300	200	200	160	54.3	65.0	49.0	62.8	47.0	50.8
400x250	200	200	360	71	76.5	67.0	69.0	76.8	79.0
400x300	200	200	260	70	80.0	64.5	67.0	60.5	66.3
400x350	200	200	160	67	78.0	60.5	58.0	58.0	61.5

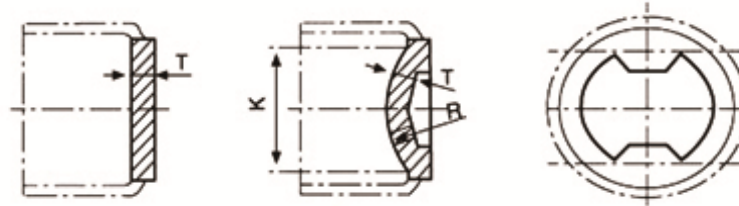


**ISO2531,EN545,EN598,BS4772**

DNxdrn	S	S <sub>1</sub>	L	M a s s					
				Double-Socket		Socket-Spigot		Spigot-Socket	
				T	K	T	K	T	K
450x350	200	200	260	86	95	81	80	88	87
450x400	200	200	160	83.1	92	75.7	74.7	70	71.6
500x350	200	200	360	98.0	115	100.8	100.8	90.9	97.8
500x400	200	200	260	94.0	111	93.7	93.7	88	92.0
500x450	200	200	160	99.5	112	87	86	86	95.5
600x400	200	200	460	142	156	144	140	133	138
600x500	200	200	260	131	145	128	124	121	119
700x500	200	200	480	194	203	195	190	179	185
700x600	200	200	280	178	187	173	168	163	164
800x600	200	200	480	252	279.3	239	229	229	260
800x700	200	200	280	229	236	209	208	209	203
900x700	250	200	480	337	227	300	329	303	278
900x800			280	313	294	263	303	260	248
1000x800	250	200	480	392	404	385	413	372	418
1000x900	250	200	280	354	368	336	379	339	392
1100x1000	250	250	280	481	444	422	449	408	457
1200x1000	250	250	480	631	580	573	589	511	560
1400x1200	300	250	360	711	663	678	617	687	650
1500x1400	300	250	260	885	742	833	696	808	696
1600x1400	300	300	360	951	936	1040	889	956	837
1800x1600	380	300	360	1235	1235	1345	1134	1323	1173
2000x1800	380	380	360		1566		1504	1669	1458

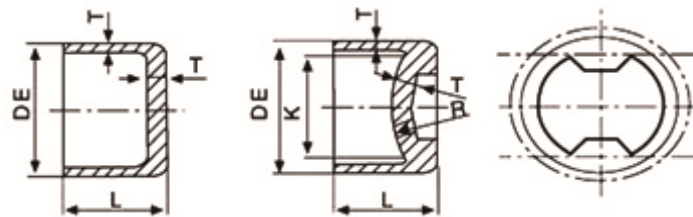


ISO2531,EN545,EN598,BS4772



Caps

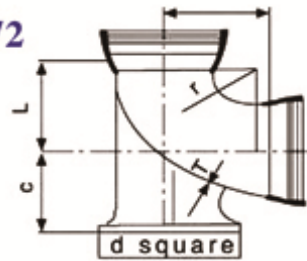
DN	T	K&R	Mass	
			T	K
80			7.3	6.5
100	18	-	8.5	8.5
150	18	-	14.1	12
200	18	-	19.8	18.4
250	19.5	-	27.4	22
300	23	-	42.8	38
350	24	315	61.7	50
400	25	370	76.3	62.5
450	26	420	93.7	76.5
500	27	460	107	91
600	29.5	565	132	128
700	31	665	202	175
800	33	760	275	228
900	35	860	353	300
1000	37	960	454	380
1100	39	1060	520	
1200	41	1160	813	580
1400	43	1260	1018	1027



Plugs

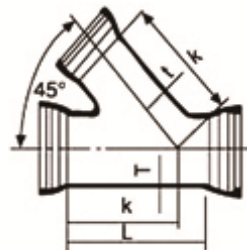
DN	DE	T	t	K&R	L		Mass	
					K	T	T	K
100	118	18	7.2	-	87	200	4.5	5.7
150	170	18	7.8	-	88	225	9.5	8.8
200	222	18	8.4	-	89	250	14.8	13
250	274	19.5	9.0	-	90	250	21.5	18
300	326	23	9.6	-	95	275	33.5	25
350	378	24	10.2	315	96	275	45.5	33
400	429	25	10.8	370	100	275	56.0	43
450	480	26	11.4	420	105	275	68.5	52.5
500	532	27	12	460	105	275	81.0	64
600	635	29.5	13.2	565	110	300	112	88
700	738	31	14.4	665	125	300	193	166
800	842	33	15.6	760	130	300	259	250
900	945	35	16.8	860	130	350	337	333
1000	1048	37	18	960	135	350	437	434
1200	1255	41	20.4	1160	137	350	783	671
1400	1462	43	22.4	1260	140	350	1078	1110

**ISO2531,EN545,EN598,BS4772**



**90° Double-socket duckfoot bends**

DN	T	L	r	c	d	Mass
80	7.0	100	80	110	180	11.3
100	7.2	120	95	125	200	14.8
150	7.8	170	145	160	250	28.5
200	8.4	220	195	190	300	44.5
250	9.0	270	245	225	350	68.5
300	9.6	320	290	225	400	100.0
350	10.2	370	340	290	450	133.0
400	10.8	420	390	320	500	180.0
450	11.4	470	435	355	550	230.0
500	12.0	520	485	385	600	294.0
600	13.2	620	580	450	700	442.0
700	14.4	720	655	515	800	618.0
800	15.6	820	745	580	900	832.0
900	16.8	920	855	645	1000	1113.0
1000	18.0	1020	945	710	1100	1435.0
1100	19.2	1120	1065	775	1200	1781.0
1200	20.4	1220	1155	840	1300	2153.0



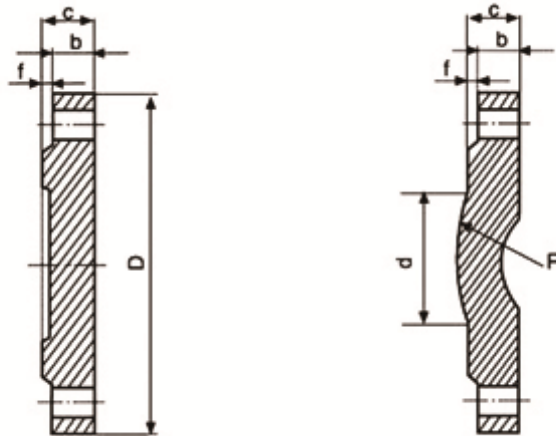
**All-socket tees with 45° angle branch**

DNx dn	T	t	L	H	Mass	
80	80	8.1	8.1	500	375	21.4
100	100	8.4	8.4	540	405	26.8
150	150	9.1	9.1	640	480	46
200	200	9.8	9.8	735	560	71.5
250	250	10.5	10.5	830	640	104
300	300	11.2	11.2	930	715	145
350	350	11.9	11.9	880	790	186
400	400	12.6	12.6	970	870	242
450	450	13.3	13.3	1060	950	307
500	500	14.0	14.0	1140	1025	383
600	600	15.4	15.4	1310	1180	567





**ISO2531,EN545,EN598,BS4772**



**DN ≤ 250 Blank flanges DN ≥ 300**

DN	Mass		
	PN10	PN16	PN25
80	3.5	3.5	3.5
100	4.3	4.3	4.8
150	7.2	7.2	8.3
200	11.0	10.8	13.3
250	16.9	16.6	21.0
300	24.0	23.5	30.0
350	31.0	35.0	45.0
400	38.0	46.0	59.0
450	46.5	63.5	79.0
500	59.0	80.0	98.0
600	89.0	126	151
700	129	164	216
800	180	229	300
900	235	301	399
1000	310	406	536
1100	405	518	615
1200	575	662	702
1400	739	994	1085
1500	990	1201	1398
1600	1239	1409	1674
1800	1717	1858	2245
2000	2272	2407	2985

**ISO2531,EN545,EN598,BS4772**



**pipes with screwd-on or weld-on flanges**

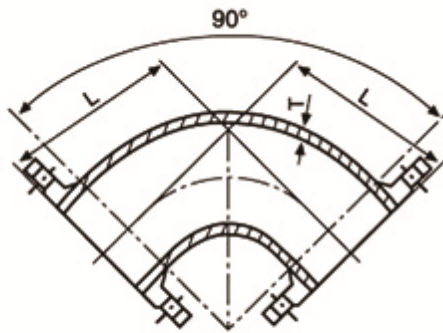


**pipes with integrally cast flanges**

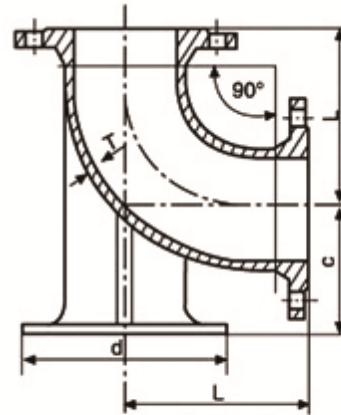
DN	Barrel				Flange mass					
	K=12		K=14		Integral flange			Screwed-on or weld on flanges		
	T	Mass/m	T	Mass/m	PN10	PN16	PN25	PN10	PN16	PN25
80	7.0	14.1	8.1	16.1	2.9	2.9	2.9	3.5	3.5	3.5
100	7.2	17.7	8.4	20.4	3.3	3.3	3.8	4.0	4.0	4.5
125	7.5	22.7	8.8	26.4	4.0	4.0	4.6	5.0	5.0	5.6
150	7.8	28.0	9.1	32.4	4.9	4.9	5.9	6.1	6.1	7.1
200	8.4	39.7	9.8	46.1	6.8	6.6	8.7	8.5	8.3	10.4
250	9.0	52.8	10.5	61.3	9.6	9.2	13.1	11.8	11.4	15.3
300	9.6	67.3	11.2	78.1	12.8	12.4	18.0	15.6	15.2	20.8
350	10.2	83.1	11.9	96.5	14.1	17.2	25.5	19	20.7	29.0
400	10.8	100.0	12.6	116.2	16.3	21.9	33.2	23	26.1	37.4
450	11.4	118.3	13.3	137.5	18.1	26.7	42.2	25	32.7	43.0
500	12.0	138.2	14.0	160.6	21.8	37.0	48.7	29	42.8	54.5
600	13.2	181.8	15.4	211.3	30.8	57.3	71.5	40	64.9	79.1
700	14.4	230.8	16.8	268.4	40.5	55.6	90.3	54	65.3	-
800	15.6	285.5	18.2	332.1	54.8	74.0	123	72	85.9	-
900	16.8	345.4	19.6	401.7	64.3	88.2	149	85	102.6	-
1000	18.0	410.6	21.0	477.7	81.4	123	201	111	145	-
1100	19.2	481.7	22.4	560.4	105	141	224	131	164	-
1200	20.4	557.7	23.8	649.0	121	185	285	160	211	-
1400	22.8	726.8	26.6	845.7	148	216	368	212	264	-
1500	24.0	819.1	28.0	953.2	201.4	289.3	-	243	326	-
1600	25.2	916.9	29.4	1067.0	206	308	486	288	369	-
1800	27.6	1129.3	32.2	1314.2	236.3	362.2	601.9	337	435	-
2000	30.0	1363.4	35.0	1586.8	279.4	432.2	784.9	390	507	-



ISO2531,EN545,EN598,BS4772



90° Double-flanged bends

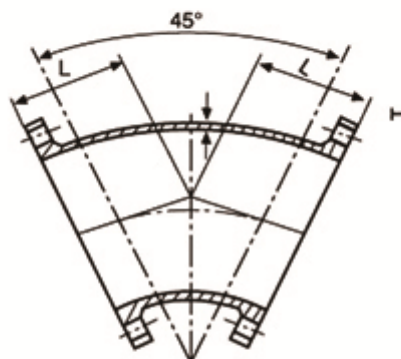


90° Double-flanged duckfoot bends

DN	T	90° Bends				90° Duckfoot bends					
		L	Mass			L	c	d	Mass		
			PN10	PN16	PN25				PN10	PN16	PN25
80	7	165	9.6	9.6	9.6	165	110	180	14.1	14.1	14.1
100	7.2	180	11.9	11.9	12.9	180	125	200	17.3	17.8	18.8
150	7.8	220	20	20	22	220	160	250	30	30	32
200	8.4	260	31	30.5	34.5	260	190	300	46.5	46	50.5
250	9	350	50	49.5	57	350	225	350	75	75	82
300	9.6	400	70	70	81	400	255	400	106	105	116
350	10.2	450	90	96	113	450	290	450	139	145	162
400	10.8	500	117	127	149	500	320	500	178	189	212
450	11.4	550	147	163	184	550	355	550	245	261	283
500	12	600	184	211	235	600	385	600	283	313	337
600	13.2	700	272	325	353	700	450	700	428	481	509
700	14.4	800	399	429	497	800	515	800	700	721	811
800	15.6	900	552	590	686	900	580	900	944	974	1070
900	16.8	1000	722	770	886	1000	645	1000	1252	1290	1406
1000	18	1100	937	1020	1162	1100	710	1100	1698	1781	1931
1100	19.2	1200	1205	1275	1427	1200	776	1200	2080	2150	2302
1200	20.4	1300	1490	1619	1791	1300	840	1300	2599	2709	2881
1400	22.8	1350	2199	2335	2641						
1500	24.0	1400	2273	2449	2843						
1600	25.2	1450	3137	3341	3697						
1800	27.6	1500	3860.5	4112.3	4592						



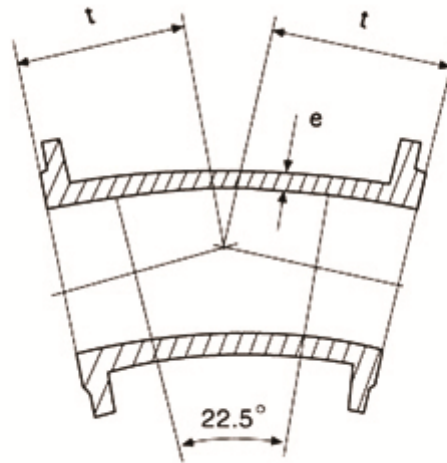
**ISO2531,EN545,EN598,BS4772**



**45° Double-flanged bends**

DN	T	L	Mass		
			PN10	PN16	PN25
80	7	130	9.3	9.3	9.3
100	7.2	140	11.3	11.3	12.4
150	7.8	160	18.5	18.5	20.5
200	8.4	180	27.5	27	31
250	9	350	55	54	62
300	9.6	400	76	77	88
350	10.2	300	78	83	71
400	10.8	325	96	107	129
450	11.4	350	120	135	157
500	12	375	147	175	198
600	13.2	425	216	266	294
700	14.4	480	302	328	395
800	15.6	530	412	442	538
900	16.8	580	529	569	685
1000	18	630	680	753	895
1100	19.2	695	857	927	1079
1200	20.4	750	1062	1178	1350
1400	22.8	775	1422	1544	1850
1500	24	810	1677	1853	2129
1600	25.2	845	1962	2151	2507
1800	27.6	910	2528	2763	3243
2000	30	980	3231	3519	4225

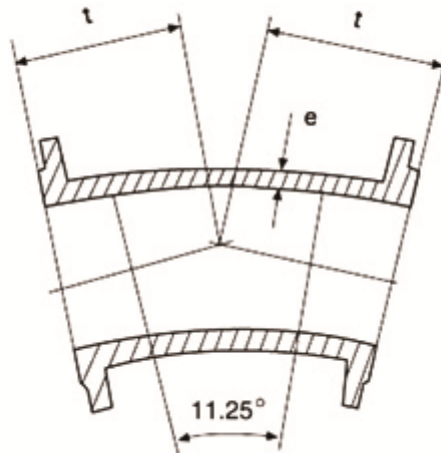
**ISO2531,EN545,EN598,BS4772**



**22.5° Double-flanged bends**

DN	Mass			e	t
	PN10	PN16	PN25		
80	9.4	9.4	9.4	7.0	105
100	11.5	11.5	12.5	7.2	110
150	18.7	18.7	21	7.8	109
200	27.9	28	32	8.4	131
250	50	50	58	9.0	190
300	70	70	78	9.6	210
350	70	76	93	10.2	210
400	96.7	109	131	10.8	239
450	122	138	166	11.4	349
500	146	178	199.8	12.0	375
600	215.2	268	296.6	13.2	426
700	311	334	400	14.4	478
800	423	453	549	15.6	529
900	543	599.2	715	16.8	581
1000	724	807	949	18.0	632
1100	877	947	1099	19.2	683
1200	1088	1198	1370	20.4	735
1400	1551	1832	2138	22.8	835
1500	1838	2014	2411	24.0	880
1600	2216	2420	2775	25.2	845
1800	1640	1864	2344	27.6	480
2000	2081	2357	3063	30.0	520

**ISO2531,EN545,EN598,BS4772**



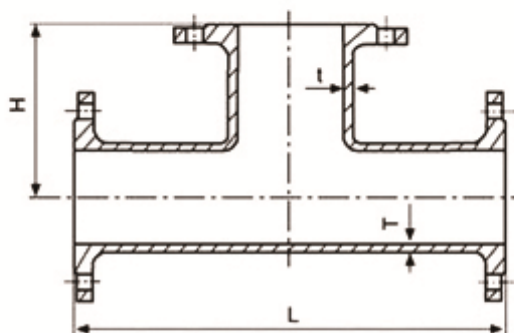
**11.25° Double-flanged bends**

DN	Mass			e	t
	PN10	PN16	PN25		
80	9.5	9.5	9.5	7.0	113
100	11.5	11.5	12.5	7.2	115
150	19.1	19.1	21	7.8	113
200	29.9	29	32	8.4	132
250	49	49	60	9.0	165
300	68	68	81	9.6	175
350	66	72	90	10.2	191
400	88	100	100	10.8	205
450	123	139	166	11.4	349
500	152	179	201	12.0	375
600	222	269	299	13.2	426
700	313	336	402	14.4	478
800	426	455	551	15.6	529
900	546	584	700	16.8	581
1000	724	807	949	18.0	632
1100	882	952	1022	19.2	683
1200	1060	1204	1332	20.4	735
1400	1507	1674	1980	22.8	835
1500	1849	2025	2419	24.0	885
1600	2203	2382	2738	25.2	940
1800	1345	1566	2046	27.6	345
2000	1694	1970	2676	30.0	375





**ISO2531,EN545,EN598,BS4772**



**All-flanged tees**

DN x dn	T	L	t	H	Mass		
					PN10	PN16	PN25
80x80	7.0	330	7.0	165	15.6	15.6	15.6
100x80	7.2	360	7.0	175	18.4	18.4	19.5
100x100	7.2	360	7.2	180	19.4	19.4	21
150x80	7.8	440	7.0	205	28.5	28.5	31
150x100	7.8	440	7.2	210	29.5	29.5	32
150x150	7.8	440	7.8	220	32.5	32.5	36
200x80	8.4	520	7.0	235	42	41.5	46
200x100	8.4	520	7.2	240	43	42	47.5
200x150	8.4	520	7.8	250	46	45.5	51
200x200	8.4	520	8.4	260	49.5	49	56
250x80	9.0	700	7	270	49.7	49.3	56.7
250x100	9.0	700	7.2	275	68	67	75
250x150	9.0	700	7.8	300	73.5	71	81
250x200	9.0	700	8.4	325	76	75	85
250x250	9.0	700	9.0	350	82	81	93
300x100	9.6	800	7.2	300	94	93	105
300x150	9.6	800	7.8	325	99	98.5	109
300x200	9.6	800	8.4	350	102	101	114
300x250	9.6	800	9.0	375	109	108	121
300x300	9.6	800	9.6	400	116	115	131
350x100	10.2	850	7.2	325	116	122	139
350x150	10.2	850	7.8	325	120	126	143
350x200	10.2	850	8.4	325	121	128	146
350x250	10.2	850	9.0	325	128	134	154
350x300	10.2	850	9.6	425	140	145	166
350x350	10.2	850	10.2	425	142	151	176
400x100	10.8	900	7.2	350	143	154	177
400x150	10.8	900	7.8	350	144	158	181
400x200	10.8	900	8.4	350	148	159	184
400x250	10.8	900	9.0	350	151	161	198
400x300	10.8	900	9.6	450	168	177	204
400x350	10.8	900	10.2	450	170	183	215
400x400	10.8	900	10.8	450	174	191	225

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DN x dn	T	L	t	H	Mass		
					PN10	PN16	PN25
450x100	11.4	950	7.2	375	177	193	215
450x150	11.4	950	7.8	375	182	197	219
450x200	11.4	950	8.4	375	185	200	224
450x250	11.4	950	9.0	375	194	210	235
450x300	11.4	950	9.6	475	203	218	245
450x350	11.4	950	10.2	475	209	228	258
450x400	11.4	950	10.8	475	215	236	270
450x450	11.4	950	11.4	475	225	251	284
500x100	12.0	1000	7.2	400	210	241	265
500x150	12.0	1000	7.8	400	214	243	269
500x200	12.0	1000	8.4	400	215	245	271
500x250	12.0	1000	9.0	400	218	258	280
500x300	12.0	1000	9.6	500	237	264	287
500x350	12.0	1000	10.2	500	239	268	298
500x400	12.0	1000	10.8	500	242	276	311
500x450	12.0	1000	11.4	500	249	298	327
500x500	12.0	1000	12.0	500	252	301	336
600x100	13.2	1100	7.2	450	297	347	372
600x150	13.2	1100	7.8	450	298	356	375
600x200	13.2	1100	8.4	450	305	358	388
600x250	13.2	1100	9.0	450	307	360	392
600x300	13.2	1100	9.6	550	312	375	404
600x350	13.2	1100	10.2	550	326	380	413
600x400	13.2	1100	10.8	550	329	387	427
600x450	13.2	1100	11.4	550	338	417	448
600x500	13.2	1100	12.0	550	349	420	464
600x600	13.2	1100	13.2	550	355	434	477
700x100	14.4	540	7.2	510	253	295	362.3
700x150	14.4	595	7.8	515	255	296	363.8
700x200	14.4	650	8.4	525	266	298	367
700x300	14.4	760	9.6	540	319	342	414
700x400	14.4	870	10.8	555	343	379	457
700x500	14.4	980	12.0	570	442	481	560
700x600	14.4	1200	13.2	585	476	523	604
700x700	14.4	1200	14.4	600	477	543	643
800x100	15.6	580	7.2	570	345	383	480
800x150	15.6	635	7.8	575	349	387	484
800x200	15.6	690	8.4	585	352	390	488
800x300	15.6	800	9.6	600	423	443	544.6
800x400	15.6	910	10.8	615	441	484	591
800x500	15.6	1020	12.0	630	561	599	706
800x600	15.6	1350	13.2	645	613	678	788
800x700	15.6	1350	14.4	660	663	711	840
800x800	15.6	1350	15.6	675	667	715	859



**ISO2531,EN545,EN598,BS4772**

DN x dn	T	L	t	H	Mass	
					PN10	PN16
900x100	16.8	620	7.2	630	428	476
900x150	16.8	675	7.8	635	432	480
900x200	16.8	730	8.4	645	436	484
900x300	16.8	840	9.6	660	523	569
900x400	16.8	950	10.8	675	541	594
900x500	16.8	1060	12.0	690	726	784
900x600	16.8	1500	13.2	705	787	860
900x700	16.8	1500	14.4	720	843	901
900x800	16.8	1500	15.6	735	853	913
900x900	16.8	1500	16.8	750	860	924
1000x100	18.0	660	7.2	690	524	572
1000x150	18.0	715	7.8	695	534	582
1000x200	18.0	770	8.4	705	546	629
1000x300	18.0	880	9.6	720	651	739
1000x400	18.0	990	10.8	735	668	755
1000x500	18.0	1100	12	750	955	1007
1000x600	18.0	1650	13.2	765	1007	1116
1000x700	18.0	1650	14.4	780	1067	1152
1000x800	18.0	1650	15.6	795	1085	1168
1000x900	18.0	1650	16.8	810	1095	1219
1000x1000	18.0	1650	18.0	825	1105	1229
1100x400	19.2	1030	10.8	795	839	913
1100x600	19.2	1800	13.2	825	1298	1391
1100x800	19.2	1800	15.6	855	1345	1430
1100x1000	19.2	1800	18.0	885	1407	1512
1100x1100	19.2	1800	19.2	900	1450	1555
1200x100	20.4	660	7.2	810	996	1082
1200x150	20.4	715	7.8	815	998	1084
1200x200	20.4	775	8.4	825	1000	1086
1200x300	20.4	890	9.6	840	1004	1122
1200x400	20.4	1010	10.8	855	1008	1160
1200x500	20.4	1125	12.0	870	1089	1255
1200x600	20.4	1240	13.2	885	1101	1256
1200x700	20.4	1355	14.4	900	1279	1432
1200x800	20.4	1470	15.6	915	1291	1439
1200x900	20.4	1585	16.8	930	1427	1662
1200x1000	20.4	1700	18.0	945	1494	1664
1200x1200	20.4	1935	20.4	975	1806	1970

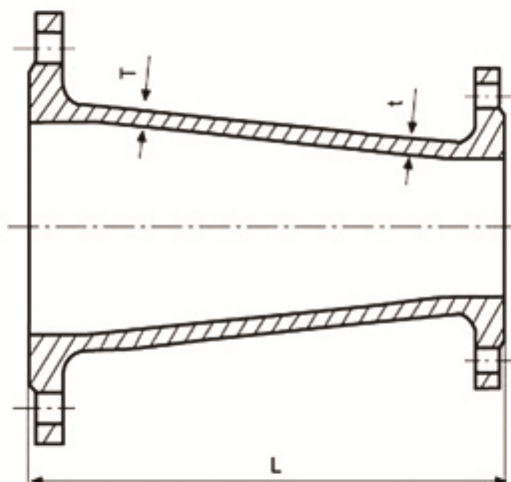


**ISO2531,EN545,EN598,BS4772**

DN x dn	T	L	t	H	Mass	
					PN10	PN16
1400x100	22.8	970	7.2	905	1227	1363
1400x200	22.8	1085	8.4	920	1231	1367
1400x400	22.8	1315	10.8	950	1514	1656
1400x600	22.8	1550	13.2	980	1655	1818
1400x800	22.8	1780	15.6	1010	1886	2041
1400x1000	22.8	2015	18.0	1040	2131	2309
1400x1200	22.8	2245	20.4	1070	2467	2667
1400x1400	22.8	2480	22.8	1100	2781	2985
1600x100	25.2	1020	7.2	1015	1874	2078
1600x200	25.2	1135	8.4	1030	1880	2084
1600x400	25.2	1370	10.8	1060	2000	2210
1600x600	25.2	1600	13.2	1090	2167	2398
1600x800	25.2	1835	15.6	1120	2452	2675
1600x1000	25.2	2063	18.0	1150	2740	2986
1600x1200	25.2	2300	20.4	1180	3058	3327
1600x1400	25.2	2535	22.8	1210	3498	3770
1600x1600	25.2	2765	25.2	1240	3886	4192
1800x100	27.6	1075	7.2	1125	2346	2598
1800x200	27.6	1190	8.4	1140	2350	2602
1800x400	27.6	1420	10.8	1170	2574	2835
1800x600	27.6	1655	13.2	1200	2694	2972
1800x800	27.6	1885	15.6	1230	3023	3299
1800x1000	27.6	2120	18.0	1260	3375	3669
1800x1200	27.6	2355	20.4	1290	3740	4056
1800x1400	27.6	2585	22.8	1320	4254	4574
1800x1600	27.6	2820	25.2	1350	4691	5147
1800x1800	27.6	3050	27.6	1380	5123	5501
2000x200	30	1235	8.4	1250	2840	3146
2000x400	30	1470	10.8	1280	3002	3314
2000x600	30	1705	13.2	1310	3309	3642
2000x800	30	1935	15.6	1340	3844	4169
2000x1000	30	2170	18.0	1370	4112	4459
2000x1200	30	2400	20.4	1400	4681	5051
2000x1400	30	2635	22.8	1430	4966	5340
2000x1600	30	2865	25.2	1460	5625	6033
2000x1800	30	3100	27.6	1490	6005	6547
2000x2000	30	3330	30	1520	6648	7107



**ISO2531,EN545,EN598,BS4772**



**Double-flanged tapers**

DN x dn	T	t	L	Mass		
				PN10	PN16	PN25
100x80	7.2	7.0	200	9.3	9.3	9.3
150x80	7.8	7.0	400	16.4	16.4	17.4
150x100	7.8	7.2	300	15.3	15.3	16.8
200x100	8.4	7.2	600	27.5	27.5	30.0
200x150	8.4	7.8	300	22	21.5	31.5
250x150	9.0	7.8	600	39	39.0	43.5
250x200	9.0	8.4	300	30	29.5	35.5
300x150	9.6	7.8	650	48.5	48.5	55
300x200	9.6	8.4	600	52.0	51.5	59
300x250	9.6	9.0	300	40.5	39.5	49
350x200	10.2	8.4	650	61.5	64.0	74.0
350x250	10.2	9.0	600	65.5	67.5	79.0
350x300	10.2	9.6	300	49.5	52.5	66
400x200	10.8	8.4	700	73.5	77.5	90.5
400x250	10.8	9.0	650	77.0	81.5	96.0
400x300	10.8	9.6	600	80.5	85.0	101
400x350	10.8	10.2	300	58	67	86
450x250	11.4	9.0	700	89.5	97	112
450x300	11.4	9.6	650	93.5	101	117
450x350	11.4	10.2	600	95.6	106	126
450x400	11.4	10.8	300	70.5	83	105
500x300	12.0	9.6	700	109	122	138
500x350	12.0	10.2	650	111	127	145
500x400	12.0	10.8	600	110	130	153
500x450	12.0	11.4	300	83	104	126
600x350	13.2	10.2	750	147	174	193
600x400	13.2	10.8	700	150	178	201

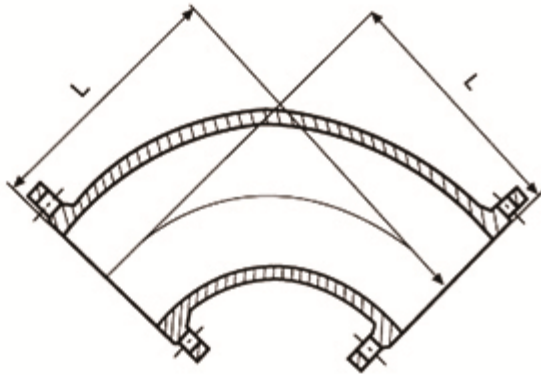
**ISO2531,EN545,EN598,BS4772**

DN x dn	T	t	L	Mass		
				PN10	PN16	PN25
600x450	13.2	11.4	650	151	183	260
600x500	13.2	12.0	600	149	190	216
700x400	14.4	10.8	800	196	212	
700x450	14.4	11.4	750	197	217	
700x500	14.4	12.0	700	200	225	
700x600	14.4	13.2	600	195	236	
800x450	15.6	11.4	900	263	286	
800x500	15.6	12.0	800	256	284	
800x600	15.6	13.2	700	260	298	
800x700	15.6	14.4	600	250	285	
900x500	16.8	12.0	1000	328	370	
900x600	16.8	13.2	800	318	360	
900x700	16.8	14.4	700	321	352	
900x800	16.8	15.6	600	308	352	
1000x600	18	13.2	1000	422	490	
1000x700	18	14.4	800	396	442	
1000x800	18	15.6	700	399	448	
1000x900	18	16.8	600	373	438	
1100x700	19.2	14.4	1000	515	562	
1100x800	19.2	15.6	800	483	532	
1100x900	19.2	16.8	700	476	530	
1100x1000	19.2	18.0	600	460	543	
1200x700	20.4	14.4	1345	711	777	
1200x800	20.4	15.6	1160	688	758	
1200x900	20.4	16.8	975	652	726	
1200x1000	20.4	18.0	790	586	692	
1200x1100	20.4	19.2	605	566	655	
1400x800	22.8	15.6	1590	1034	1105	
1400x900	22.8	16.8	1405	998	1074	
1400x1000	22.8	18.0	1220	961	1052	
1400x1100	22.8	19.2	1035	914	1005	
1400x1200	22.8	20.4	850	814	947	
1500x900	24.0	16.8	1620	1211	1317	
1500x1000	24.0	18.0	1435	1174	1297	
1500x1100	24.0	19.2	1250	1127	1250	
1500x1200	24.0	20.4	1065	1074	1216	
1500x1400	24.0	22.8	695	914	1052	
1600x1000	25.2	18.0	1650	1424	1547	
1600x1100	25.2	19.2	1465	1377	1502	
1600x1200	25.2	20.4	1280	1324	1468	
1600x1400	25.2	22.8	910	1103	1273	
1600x1500	25.2	24.0	725	1073	1250	
1800x1100	27.6	19.2	1895	1910	2057	
1800x1200	27.6	20.4	1710	1858	2024	
1800x1400	27.6	22.8	1340	1701	1870	
1800x1500	27.6	24.0	1155	1610	1810	
1800x1600	27.6	25.2	970	1436	1664	
2000x1200	30	20.4	2140	2512	2705	
2000x1400	30	22.8	1770	2358	2553	
2000x1500	30	24.0	1585	2268	2494	
2000x1600	30	25.2	1400	2176	2404	
2000x1800	30	27.6	1030	1800	2079	



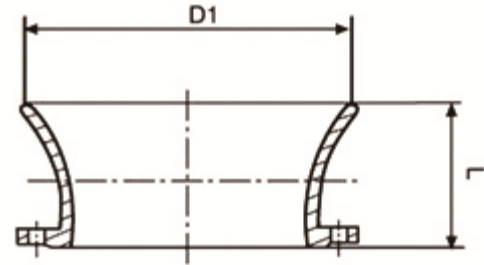


**ISO2531,EN545,EN598,BS4772**



**90° Double-flanged long radius bends**

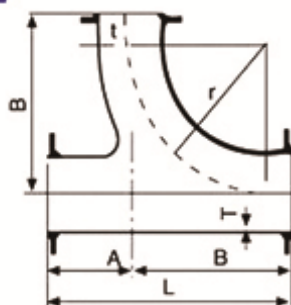
DN	L	Mass		
		PN10	PN16	PN25
80	380	14.5	14.5	14.5
100	400	18	18	19.0
125	425	23.5	23.5	24.1
150	450	30.1	30.1	32.1
200	500	45.9	45.4	49.6
250	550	66.4	65.2	73.2
300	600	89.5	90.8	101
350	660	115.8	121.6	138.4
400	700	117	129	152
450	750	184	200	221
500	800	227	252.6	275.8
600	900	326.2	377	407.6
700	1000	466	492	-
800	1100	632	666	-
900	1200	816	854	-
1000	1300	1048	1190	-
1100	1400	1315	1385	-
1200	1500	1627	1737	-



**Flanged bellmouth**

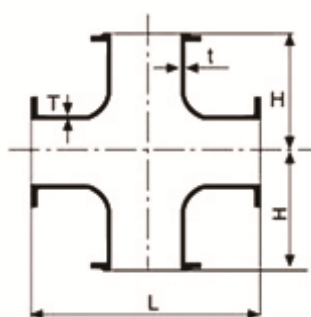
DN	D1	L	Mass		
			PN10	PN16	PN25
80	150	130	6	6	6
100	175	135	7	7	7
150	230	150	15	15	16
200	290	170	16	16	18
250	345	183	21	21	24.5
300	405	205	28.5	28.5	33.5
350	460	220	36	38	46
400	520	240	45	50	61
450	575	255	54	62	73
500	635	275	67	80	91
600	750	310	97	120	134
700	865	345	135	146	180
800	980	380	185	204	213
900	1095	415	231	250	306
1000	1210	450	297	331	406
1100	1325	485	369	405	488
1200	1440	520	447	512	603
1400	1670	590	646	702	854
1500	1785	625	772	851	999
1600	1900	660	906	995	1173
1800	2130	730	1185	1298	1538
2000	2360	800	1530	1668	2036

**ISO2531,EN545,EN598,BS4772**



**All-flanged tees with radial branch**

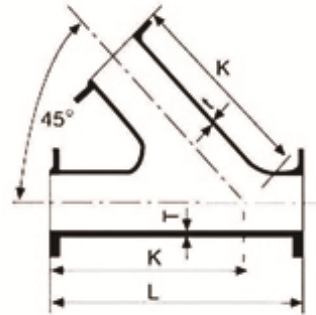
DN x dn	T	L	A	B	r	Mass PN16
80 X 80	8.1	545	165	380	330	23
100X100	8.4	580	180	400	340	29.5
150X150	9.1	670	220	450	385	47.9
200X200	9.8	760	250	500	430	71.6
250X250	10.5	900	350	550	475	104.8
300X300	11.2	1000	400	600	515	144.5
350X350	11.9	1100	450	650	560	203.4
400X400	12.6	1200	500	700	605	263.1
450X450	13.3	1300	550	750	650	332
500X500	14.0	1400	600	800	690	421.9
600X600	15.4	1600	700	900	780	623.7



**All-flanged cross**

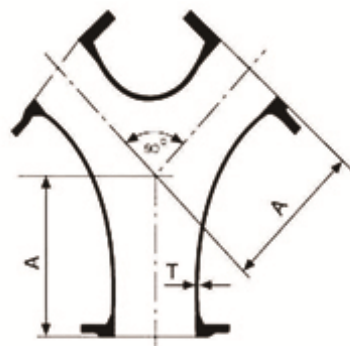
DN x dn	T	t	L	H	Mass PN16
80 X 80	8.1	8.1	330	165	20.5
100X100	8.4	8.4	360	180	25
150X150	9.1	9.1	440	220	41.1
200X200	9.8	9.8	520	260	60.9
250X250	10.5	10.5	700	350	101
300X300	11.2	11.2	800	400	143
350X350	11.9	11.9	850	425	186
400X400	12.6	12.6	900	450	237
450X450	13.3	13.3	950	475	329
500X500	14.0	14.0	1000	500	340
600X600	15.4	15.4	1100	550	527

**ISO2531,EN545,EN598,BS4772**



**All-flanged tees with 45° angle branch**

DN x dn	T	l	L	K	Mass PN16
80 X 80	8.1	8.1	500	375	21.4
100X100	8.4	8.4	540	405	27.0
150X150	9.1	9.1	640	480	46.4
200X200	9.8	9.8	735	560	70.9
250X250	10.5	10.5	830	640	103.8
300X300	11.2	11.2	930	715	145.5
350X350	11.9	11.9	880	790	195
400X400	12.6	12.6	970	870	255
450X450	13.3	13.3	1060	950	321
500X500	14.0	14.0	1140	1025	414
600X600	15.4	15.4	1310	1180	625



**All-flanged "Y" tees**

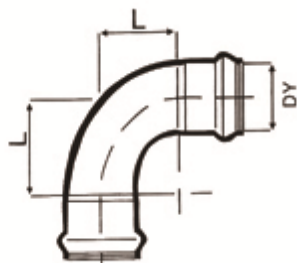
DNxDNxDN	T	A	Mass PN16
80 x 80x80	8.1	165	15.6
100x100x100	8.4	180	19.3
150x150x150	9.1	220	31.9
200x200x200	9.8	260	48.1
250x250x250	10.5	350	79.8
300x300x300	11.2	400	113.5
350x350x350	11.9	450	165.4
400x400x400	12.6	500	219.1
450x450x450	13.3	550	280.0
500x500x500	14.0	600	363.9
600x600x600	15.4	700	562.7



**ISO2531,EN12842,ISO4422**

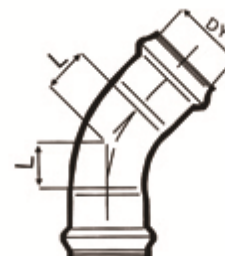
**DUCTILE IRON/PVC PIPE FITTINGS**

**球铁PVC90° 双承弯头**  
**DI/PVC Double Socket90° Bend**



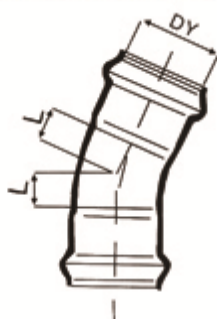
DY mm	L mm	Kg
63	85	3.5
75	95	4.2
90	100	5.4
110	130	7.5
125	125	9.2
140	130	10.3
160	180	15
200	220	24.5
225	265	30
250	285	42
315	345	66
400	365	70

**球铁PVC45° 双承弯头**  
**DI/PVC Double Socket45° Bend**



DY mm	L mm	Kg
63	50	3.3
75	55	3.6
90	60	4.5
110	70	6.2
125	125	7.5
140	130	9
160	90	11.6
200	110	18.6
225	135	24
250	135	32
315	180	58
400	200	65

**球铁PVC22.5° 双承弯头**  
**DI/PVC Double Socket22.5° Bend**



DY mm	L mm	Kg
63	35	2.9
75	35	3.3
90	40	4.1
110	45	5.5
125	125	7.6
140	130	9
160	55	10
200	65	15.5
225	85	23
250	90	28
315	105	44
400	130	55

**球铁PVC11.25° 双承弯头**  
**DI/PVC Double Socket11.25° Bend**

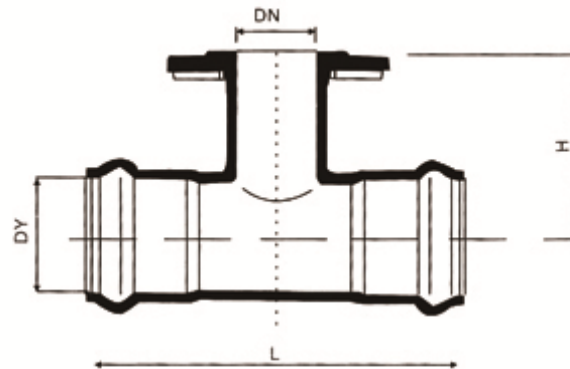


DY mm	L mm	Kg
63	25	2.5
75	25	3.8
90	25	5
110	34	6.4
125	125	7
140	130	8
160	40	6.2
200	60	13
225	70	22.6
250	70	27
315	80	36
400	100	52



**ISO2531,EN12842,ISO4422**  
**DUCTILE IRON/PVC PIPE FITTINGS**

**球铁PVC双承法兰支口三通**  
**DI/PVC Double Socket Tee Flanged Branch**

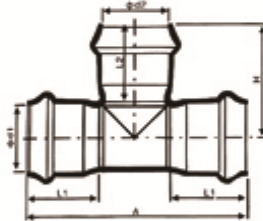


DY/DN mm	L mm	H mm	Kg
50/40	240	135	4.6
63/50	250	140	6.1
63/60	270	135	6.2
75/50	270	140	7.1
75/60	290	140	8.3
90/50	280	160	8
90/60	320	155	9.7
90/80	320	170	11
110/50	300	170	9.2
110/60	360	165	11.1
110/80	360	180	12.5
110/100	360	185	14
125/50	320	160	9.5
125/60	340	160	11.2
125/80	360	170	12.5
125/100	380	180	14
140/60	330	200	12.2
140/80	350	190	13
140/100	370	200	13.5
160/60	432	200	18
160/80	432	205	19.5
160/100	432	205	20
160/150	432	225	24
200/60	422	235	25
200/80	422	235	27
200/100	432	240	32

DY/DN mm	L mm	H mm	Kg
200/150	432	245	35
225/60	480	200	29
225/80	480	205	32
225/100	480	220	34
225/150	500	235	36
225/200	500	240	43
250/60	530	260	37
250/80	530	260	39
250/100	530	260	41
250/150	530	260	55
250/200	530	260	59
250/250	530	260	64
315/60	625	300	54
315/80	625	300	57
315/100	625	300	62
315/150	625	300	67
315/200	735	300	70
315/250	735	300	74
315/300	735	300	78
400/60	625	300	55
400/80	625	300	57
400/100	625	300	59
400/150	625	300	63
400/200	735	300	70
400/250	735	300	78
400/300	735	300	86

**ISO2531,EN12842,ISO4422**  
**DUCTILE IRON/PVC PIPE FITTINGS**

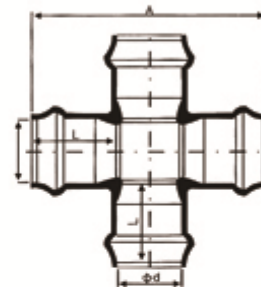
**球铁PVC全承三通**  
**DI/PVC All Socket Tee**



d1 mm	d2 mm	A mm	L1 mm	H mm	L2 mm	kg
63	50	245	95	125	90	4
63	63	255	95	125	95	4.3
75	63	275	100	135	95	5
75	75	291	100	143	100	5.6
90	63	275	105	145	95	6
90	75	290	105	150	100	6.5
90	90	308	105	155	105	7.2
110	60	300	115	155	95	7.8
110	75	315	115	165	100	8.2
100	90	328	115	165	105	8.7
110	110	345	115	175	115	9.7
125	63	340	125	155	95	9
125	75	345	125	163	100	9.5
125	90	360	125	165	105	10.2
125	110	375	125	175	115	10.8
125	125	393	125	190	125	11.8
140	63	325	130	170	95	9.7
140	75	335	130	175	100	10.4
140	90	350	130	180	105	11
140	110	370	130	180	115	11.8
140	125	370	130	205	125	12.7
140	140	390	130	200	130	13.3
160	63	350	145	180	95	11.8
160	75	365	145	190	100	12.7
160	90	380	145	190	105	13.4
160	110	400	145	200	115	14.5
160	125	415	145	210	125	15.3
160	140	425	145	215	130	16
160	160	445	145	225	145	17.6
180	110	440	155	210	115	17.2
180	140	465	166	210	130	19
180	160	480	155	230	145	20.4
180	180	500	155	250	155	21
200	75	390	155	210	100	16
200	90	410	155	210	105	17.2
200	110	430	155	220	115	18.5
200	125	440	155	230	125	19.5
200	140	455	155	230	130	20.3
200	160	480	155	245	145	22
200	180	510	155	260	155	23.5
200	200	520	155	260	155	25
225	90	410	155	215	105	19
225	110	430	155	230	115	20.5
225	125	450	155	245	145	21.5
225	140	455	155	240	130	22.3
225	160	480	155	255	145	24

d1 mm	d2 mm	A mm	L1 mm	H mm	L2 mm	kg
225	180	490	155	275	155	25.5
225	200	520	155	270	155	27.3
225	225	540	155	270	155	28
250	90	450	175	235	102	26
250	110	470	175	245	115	28.5
250	140	510	175	260	130	30.8
250	160	520	175	270	145	33
250	200	560	175	285	155	34.5
250	250	605	175	305	195	39.5
280	90	490	185	250	105	31.5
280	110	540	185	260	115	33
280	160	560	185	285	145	37
280	200	610	185	300	155	39.2
280	225	620	185	300	155	41.5
280	250	655	185	320	175	43.2
280	280	675	185	340	185	47.5
315	90	480	190	265	105	29.6
315	110	500	190	275	115	32.5
315	140	540	190	290	130	38.6
315	160	550	190	300	145	42.2
315	200	610	190	330	155	47.3
315	225	610	190	315	155	48.7
315	250	640	190	355	175	50.2
315	280	665	190	355	185	51.7
315	315	700	190	350	190	58.4
355	110	570	205	290	115	44.8
355	160	600	205	315	145	49
355	200	630	205	340	155	53.5
355	315	740	205	385	190	63.7
355	355	780	205	390	205	68.3
400	200	680	230	370	155	64.5
400	315	790	230	410	190	76
400	400	880	230	440	230	87

**球铁PVC全承十字通**  
**DI/PVC All Socket Cross**



d mm	A mm	L mm	kg
75	280	100	7
110	360	115	12
160	450	145	19.3
200	520	155	25.7



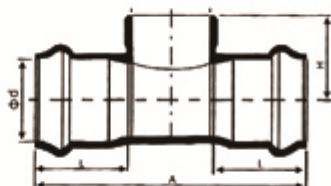


ISO2531,EN12842,ISO4422

DUCTILE IRON/PVC PIPE FITTINGS

球铁PVC双承螺纹支口三通

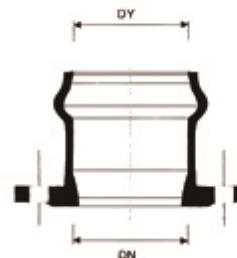
DI/PVC Double Socket Thread Branch Tee



d mm	R inch	A mm	L mm	H mm	kg
50	1	220	90	60	2.4
63	1	230	95	60	3.2
63	1 1/4	240	95	60	3.4
63	1 1/2	245	95	60	3.5
63	2	255	95	60	3.7
75	1	246	100	64	4
75	1	256	100	64	4.2
75	1 1/2	260	100	60	4.3
75	2	275	100	64	4.5
90	1	250	105	80	4.7
90	1 1/4	260	105	80	4.9
90	1 1/2	265	105	80	5
90	2	275	105	80	5.2
90	3	305	105	95	6.2
110	1	270	115	90	6
110	1 1/4	280	115	90	6.2
110	1 1/2	285	115	90	6.4
110	2	295	115	90	6.5
110	3	325	115	120	8
110	4	355	115	115	9.3
125	1	310	125	95	7.7
125	1 1/4	310	125	95	7.8
125	1 1/2	320	125	95	8
125	2	330	125	100	8.2
140	1	290	130	105	8.1
140	1 1/4	300	130	105	8.3
140	1 1/2	305	130	105	8.5
140	2	315	130	105	9
160	1	320	145	115	10
160	1 1/4	330	145	115	10.3
160	1 1/2	335	145	115	10.6
160	2	345	145	115	11
160	3	375	145	135	11.8
180	1	370	155	130	13
180	2	390	155	130	13.5
200	1	360	155	135	14
200	2	380	155	140	14.8
225	1	360	155	150	15.5
225	1 1/4	360	155	150	16
225	1 1/2	365	155	150	16.3
225	2	375	155	150	16.7
250	1	390	175	160	21.5
250	2	415	175	165	22.8
280	2	460	185	175	28
315	2	450	190	195	31.2
400	1	500	230	240	43.3
400	2	530	230	250	46

球铁PVC法兰承口

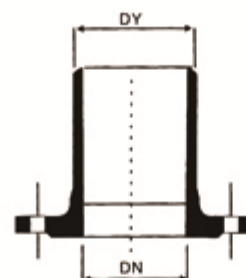
DI/PVC Flanged Socket



DY/DN mm	L mm	Kg
63/50	100	3.5
75/65	100	4.2
90/80	120	4.6
110/100	130	5.6
125/125	135	8.7
140/125	135	8.9
160/150	155	10
200/200	195	15
225/200	195	16.5
250/250	210	25.5
315/300	240	35
400/400	250	55

球铁PVC单法兰管

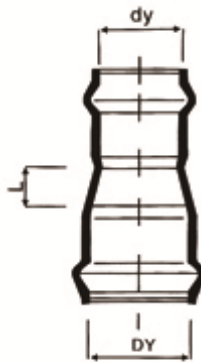
DI/PVC Flanged Spigot



DY/DN mm	L mm	Kg
63/50	150	3.4
75/65	150	4
90/80	155	5
110/100	155	6
125/125	135	8.7
140/125	135	8.9
160/150	180	10.2
200/200	195	16
225/200	195	17
250/250	205	20
315/300	275	35
400/400	250	50

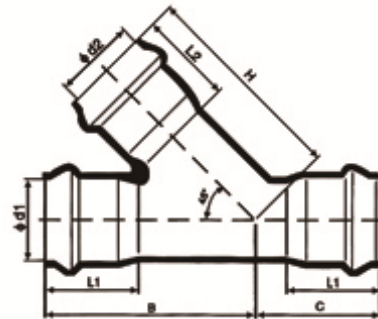
**ISO2531,EN12842,ISO4422**  
**DUCTILE IRON/PVC PIPE FITTINGS**

**球铁PVC双承渐缩**  
**DI/PVC Double Socket Reducer**



DY/dy mm	L mm	Kg
63/50	80	2.6
75/50	80	3.5
75/63	80	3.6
90/50	80	3.7
90/63	80	3.5
90/75	80	3.9
110/50	90	4.2
110/63	90	6.1
110/75	90	4.8
110/90	90	5
125/50	100	5.4
125/110	120	6.9
140/90	120	6.5
140/110	120	7
140/125	120	7.5
160/90	120	9
160/110	120	8
160/125	120	8.7
200/110	130	14
200/160	130	18
225/160	110	23
225/200	120	14.4
250/160	135	23
250/200	130	24
250/225	120	28
315/160	190	28.5
316/200	190	31
315/225	190	35
315/250	190	41
400/250	250	38
400/315	250	40

**球铁PVC全承45°三通**  
**DI/PVC All Socket 45° Tee**

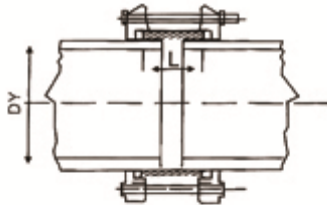


d1 mm	d2 mm	B mm	C mm	L1 mm	H mm	L2 mm	kg
90	90	235	140	105	235	105	8
110	90	250	140	115	250	105	10
110	110	270	155	115	270	115	11.5
140	90	285	145	130	265	105	13
140	110	300	160	130	280	115	14.5
140	140	315	180	130	315	130	16.7
160	90	305	145	145	280	105	15.5
160	110	320	155	145	295	115	17
160	140	355	175	145	330	130	19
160	160	345	190	145	345	145	21
225	90	365	145	155	325	105	23
225	110	380	160	155	335	115	24.5
225	140	400	180	155	375	130	27.3
225	160	415	190	155	390	145	29.5
225	225	450	230	155	450	155	35
280	110	440	170	185	375	115	38
280	160	470	200	185	430	145	44.5
280	225	315	240	185	490	155	52
280	280	550	275	185	550	185	61
315	90	430	205	190	385	105	46
315	110	460	205	190	410	115	49
315	160	510	250	190	480	145	53



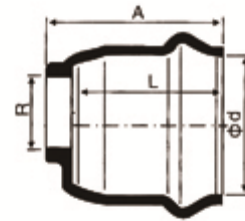
ISO2531,EN12842,ISO4422  
DUCTILE IRON/PVC PIPE FITTINGS

球铁PVC套筒  
DI/PVC Gibault Joint



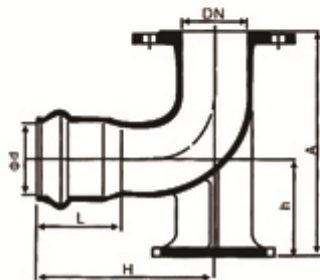
DY mm	L mm	Kg
63	100	3
75	100	3.2
90	100	3.4
110	100	4.8
125	100	5.8
140	100	7.1
160	100	8.5
200	100	9.5
225	100	12
250	100	19
315	100	15
400	120	20

球铁PVC带螺纹末端盖  
DI/PVC End Caps With Thread



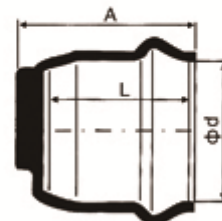
d mm	R inch	A mm	L mm	kg
50	1"	110	90	1.1
63	1"	115	95	1.5
75	1"	125	100	2
90	1"	130	105	2.7
110	2"	140	115	3.5
125	2"	165	125	4.2
140	2"	160	130	5
160	2"	175	145	6
180	2"	190	155	7.5
200	2"	190	155	8.2
225	2"	190	155	10
250	2"	205	175	13.1
280	2"	225	185	16
315	2"	225	190	18.8

球铁PVC法兰承口90° 鸭脚弯头  
DI/PVC 90° Flange socket Duckfoot Bend



DN mm	d mm	A mm	L mm	H mm	h mm	kg
80	90	280	105	220	120	12
80	110	290	115	250	120	13.5
100	110	300	115	250	120	14.8
80	160	300	145	280	120	15.5
150	160	350	145	320	120	26

球铁PVC末端盖  
DI/PVC End Caps



d mm	A mm	L mm	kg
50	110	90	1.2
63	115	95	1.7
75	125	100	2.2
90	130	105	2.9
110	140	115	3.7
125	165	125	4.8
140	160	130	5.2
160	175	145	6.3
180	190	155	7.8
200	190	155	8.5
225	190	155	10.3
250	205	175	13.4
280	225	185	17.2
315	225	190	19





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