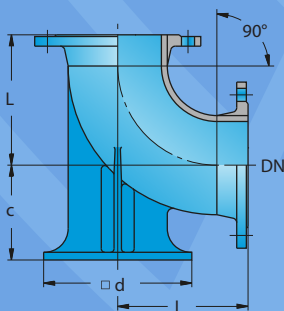
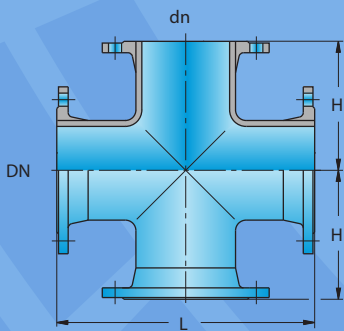
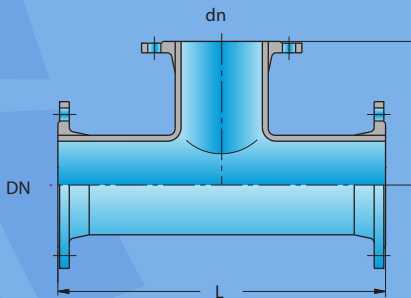
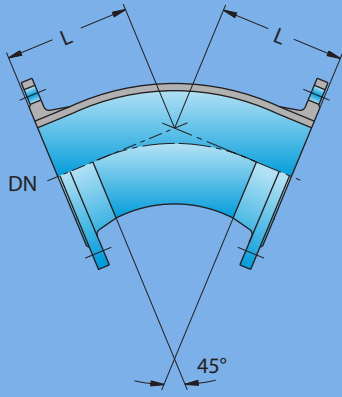




DUCTILE IRON PIPE FITTINGS to ISO / EN STANDARDS

PRODUCT CATALOG



Company Profile

For over 90 years, the men and women who make up the McWane family of companies have demonstrated pride and a commitment to excellence in the products they make. Founded in 1921, McWane, Inc. is a family owned business based in Birmingham, Alabama, with 14 iron foundries and related businesses across the United States, Canada, Australia, China, India and Abu Dhabi. McWane's divisions focus on the safe, environmentally friendly manufacturing of ductile iron pipe, soil pipe, soil fittings and utility fittings, waterworks valves and fire hydrants, propane and compressed air tanks and fire extinguishers.

[McWane International](#) was created in 1992 to accommodate the growing global demand for McWane products. This activity eventually grew into full coordination of the international sales efforts of McWane Inc.'s manufacturing across the U.S.A., Canada, Australia, China and, most recently, our new plant in Abu Dhabi, UAE.

"We recognize a significant opportunity to manufacture and supply water, sewer and plumbing products for the Middle East and North African regions," said Ruffner Page, Jr., CEO of McWane, Inc. "It's our next step towards bringing quality McWane products to even more of the world with our facility in Abu Dhabi."

The growth of the company's international sales during the last two decades required more attention be focused outside the US, and McWane International was strengthened for this purpose.

In addition to our U.S. made AWWA Standard Ductile Iron Fittings, for many years, McWane International has supplied McWane Branded Quality Certified Ductile Iron Fittings to ISO & EN Standards through OEM facilities and our Tyler Xian Xian manufacturing facility in China in sizes ranging from 80mm up to 2600mm diameters.

Today [McWane International](#) works as a team to supply waterworks, fire protection and plumbing products world wide, as well as our new ductile iron poles. The team is active in South and North America, the Caribbean, the Middle East and Asia including China and the Pacific Islands.

McWane is proud of our heritage and will continue our tradition of creating world-class quality products through our recognized family of manufacturers. McWane's global footprint has made an impact around the world. Our growing global operations are expanding this footprint to bring water to the world.



www.mcwaneinternational.com

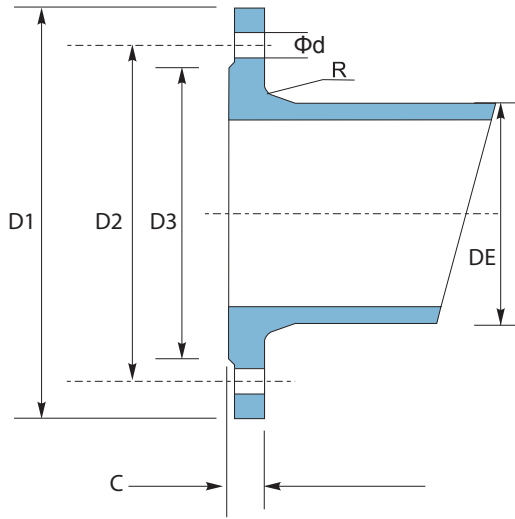
www.mcwanegulf.com

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FLANGE DIMENSIONS



FLANGE PN 10

Dimensions in mm

Nominal Dia DN	D1	D2	D3	DE	C	R	Bolts		
							Φd	Size	Nos.
80	200	160	132	98	19.0	6	19	M16	8
100	220	180	156	118	19.0	6	19	M16	8
150	285	240	211	170	19.0	8	23	M20	8
200	340	295	266	222	20.0	8	23	M20	8
250	400	350	319	274	22.0	10	23	M20	12
300	455	400	370	326	24.5	10	23	M20	12
350	505	460	429	378	24.5	10	23	M20	16
400	565	515	480	429	24.5	10	28	M24	16
450	615	565	530	480	24.5	12	28	M24	20
500	670	620	582	532	26.5	12	28	M24	20
600	780	725	682	635	30.0	12	31	M27	20
700	895	840	794	738	32.5	16	31	M27	24
800	1025	950	901	842	35.0	16	34	M30	24
900	1115	1050	1001	945	37.5	16	34	M30	28
1000	1230	1160	1112	1048	40.0	16	37	M33	28
1100	1340	1270	1218	1152	42.5	20	37	M33	32
1200	1455	1380	1328	1255	45.0	20	40	M36	32
1400	1675	1590	1530	1462	46.0	20	43	M39	36
1500	1785	1700	1640	1668	47.5	20	43	M39	36
1600	1915	1820	1750	1665	49.0	20	49	M45	40
1800	2115	2020	1950	1875	52.0	20	49	M45	44
2000	2325	2230	2150	2082	55.0	20	49	M45	48
2200	2550	2440	2370	2288	59.0	20	56	M52	52
2400	2750	2650	2570	2495	62.0	20	56	M52	56
2600	2960	2850	2780	2702	65.0	20	56	M52	60

FLANGE PN 16

Dimensions in mm

Nominal DiaDN	D1	D2	D3	DE	C	R	Bolts		
							Φd	Size	Nos.
80	200	160	132	98	19.0	6	19	M16	8
100	220	180	156	118	19.0	6	19	M16	8
150	285	240	211	170	19.0	8	23	M20	8
200	340	295	266	222	20.0	8	23	M20	12
250	400	355	319	274	22.0	10	28	M24	12
300	455	410	370	326	24.5	10	28	M24	12
350	520	470	429	378	26.5	10	28	M24	16
400	580	525	480	429	28.0	10	31	M27	16
450	640	585	548	480	30.0	12	31	M27	20
500	715	650	609	532	31.5	12	34	M30	20
600	840	770	720	635	36.0	12	37	M33	20
700	910	840	794	738	39.5	16	37	M33	24
800	1025	950	901	842	43.0	16	40	M36	24
900	1125	1050	1001	945	46.5	16	40	M36	28
1000	1255	1170	1112	1048	50.0	16	43	M39	28
1100	1355	1270	1218	1152	53.5	20	43	M39	32
1200	1485	1390	1328	1255	57.0	20	49	M45	32
1400	1685	1590	1530	1462	60.0	20	49	M45	36
1500	1820	1710	1640	1565	62.5	20	56	M52	36
1600	1930	1820	1750	1668	65.5	20	56	M52	40
1800	2130	2020	1950	1875	70.0	20	56	M52	44
2000	2345	2230	2150	2082	75.0	20	62	M56	48
2200	2555	2440	2370	2288	81.0	20	62	M56	52
2400	2765	2650	2570	2495	86.0	20	62	M56	56
2600	2965	2850	2780	2702	91.0	20	62	M56	60

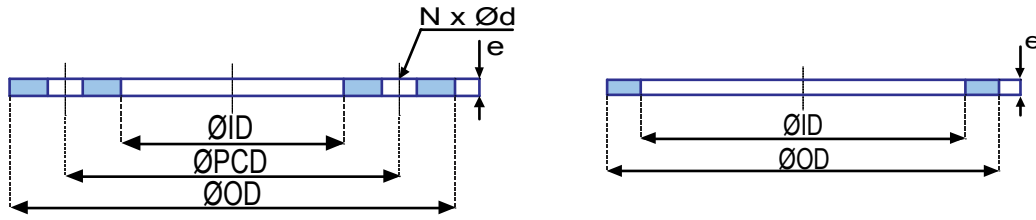
FLANGE PN 25

Dimensions in mm

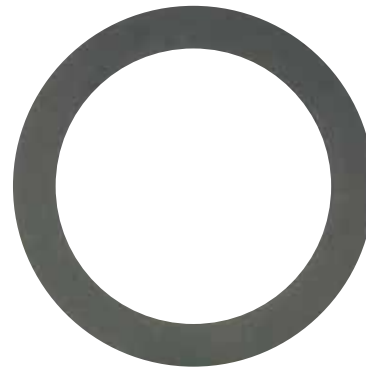
Nominal DiaDN	D1	D2	D3	DE	C	R	Bolts		
							Size	Nos.	
80	200	160	132	98	19.0	6	19	M16	8
100	235	190	156	118	19.0	6	23	M20	8
150	300	250	211	170	20.0	8	28	M24	8
200	360	310	274	222	22.0	8	28	M24	12
250	425	370	330	274	24.5	10	31	M27	12
300	485	430	389	326	27.5	10	31	M27	16
350	555	490	448	378	30.0	10	34	M30	16
400	620	550	503	429	32.0	10	37	M33	16
450	670	600	548	480	34.5	12	37	M33	20
500	730	660	609	532	36.5	12	37	M33	20
600	845	770	720	635	42.0	12	40	M36	20
700	960	875	820	738	46.5	16	43	M39	24
800	1085	990	928	842	51.0	16	49	M45	24
900	1185	1090	1028	945	55.5	16	49	M45	28
1000	1320	1210	1140	1048	60.0	16	56	M52	28
1100	1420	1310	1240	1152	64.5	20	56	M52	32
1200	1530	1420	1350	1255	69.0	20	56	M52	32
1400	1755	1640	1560	1462	74.0	20	62	M56	36
1600	1975	1860	1780	1668	81.0	20	62	M56	40
1800	2195	2070	1985	1875	88.0	20	70	M64	44
2000	2425	2300	2210	2082	95.0	20	70	M64	48

Flange dimensions to EN1092-2 / ISO 7005-2

FLANGE GASKETS



Full face Gasket



Ring Type Gasket

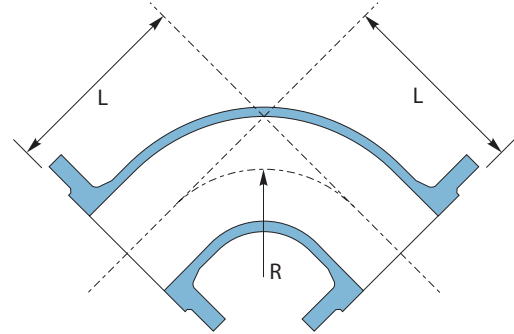
Nominal Diameter DN	Thickness mm	Ring type PN 10 & PN16		Full face PN10					Full face PN 16				
		ID mm	OD mm	ID mm	PCD mm	OD mm	N Nos	d1 mm	ID mm	PCD mm	OD mm	N Nos.	d mm
80	3.0	85.0	132.0	85.0	160.0	200.0	8	19.0	85.0	160.0	200.0	8	19.0
100	3.0	105.0	156.0	105.0	180.0	220.0	8	19.0	105.0	180.0	220.0	8	19.0
125	3.0	124.0	184.0	124.0	210.0	250.0	8	19.0	124.0	210.0	250.0	8	19.0
150	3.0	155.0	211.0	155.0	240.0	285.0	8	23.0	155.0	240.0	285.0	8	23.0
200	3.0	205.0	266.0	205.0	295.0	340.0	8	23.0	205.0	295.0	340.0	8	23.0
250	3.0	255.0	319.0	255.0	350.0	400.0	12	23.0	255.0	355.0	400.0	12	28.0
300	3.0	305.0	370.0	305.0	400.0	455.0	12	23.0	305.0	410.0	455.0	12	28.0
350	5.0	355.0	429.0	355.0	460.0	505.0	16	23.0	355.0	470.0	520.0	16	28.0
400	5.0	410.0	480.0	410.0	515.0	565.0	16	28.0	410.0	525.0	580.0	16	31.0
450	5.0	452.0	544.0	452.0	565.0	615.0	20	28.0	452.0	585.0	640.0	20	31.0
500	5.0	510.0	609.0	510.0	620.0	670.0	20	28.0	510.0	650.0	715.0	20	34.0
600	5.0	610.0	720.0	610.0	725.0	780.0	20	31.0	610.0	770.0	840.0	20	37.0
700	6.0	716.0	794.0	716.0	840.0	895.0	24	31.0	716.0	840.0	910.0	24	37.0
800	6.0	807.0	901.0	807.0	950.0	1015.0	24	34.0	807.0	950.0	1025.0	24	40.0
900	6.0	907.0	1001.0	907.0	1050.0	1115.0	28	34.0	907.0	1050.0	1125.0	28	40.0
1000	6.0	1009.0	1112.0	1009.0	1160.0	1230.0	28	37.0	1009.0	1170.0	1255.0	28	43.0
1100	6.0	1110.0	1215.0	1110.0	1270.0	1340.0	32	37.0	1110.0	1270.0	1355.0	32	43.0
1200	6.0	1212.0	1328.0	1212.0	1380.0	1455.0	32	40.0	1212.0	1390.0	1485.0	32	49.0
1400	6.0	1409.0	1530.0	1409.0	1590.0	1675.0	36	43.0	1409.0	1590.0	1685.0	36	49.0
1500	6.0	1511.0	1640.0	1511.0	1700.0	1785.0	36	43.0	1511.0	1710.0	1820.0	36	56.0
1600	6.0	1612.0	1750.0	1612.0	1820.0	1915.0	40	49.0	1612.0	1820.0	1930.0	40	56.0
1800	6.0	1815.0	1950.0	1815.0	2020.0	2115.0	44	49.0	1815.0	2020.0	2130.0	44	56.0
2000	6.0	2019.0	2150.0	2019.0	2230.0	2325.0	48	49.0	2019.0	2230.0	2345.0	48	62.0
2200	6.0	2215.0	2370.0	2215.0	2440.0	2550.0	52	56.0	2215.0	2440.0	2555.0	52	62.0
2400	6.0	2418.0	2570.0	2418.0	2650.0	2750.0	56	56.0	2418.0	2650.0	2765.0	56	62.0
2600	6.0	2622.0	2780.0	2622.0	2850.0	2960.0	60	56.0	2622.0	2850.0	2965.0	60	62.0

*All dimensions are in mm

ITEM CODE: B90

DN	L	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
50	150	6.0	6.0	6.0
65	165	7.0	7.0	7.0
80	165	9.6	9.6	9.6
100	180	15.6	15.6	15.6
150	220	20.5	20.5	20.5
200	260	31.0	31.0	35.0
250	350	49.5	49.5	56.7
300	400	69.5	69.5	80.3
350	450	90.6	96.0	111.8
400	500	117.0	126.0	148.0
450	550	147.2	163.0	184.8
500	600	184.2	211.0	232.2
600	700	276.6	324.0	347.6
700	800	394.6	418.0	
800	900	543.2	573.0	
900	1000	708.0	746.0	
1000	1100	919.0	988.0	
1200	1300	1,452.2	1,562.0	
1400	1270	2,199.0	2,335.0	
1500	1300	2,273.0	2,449.0	
1600	1270	2,663.0	2,841.0	

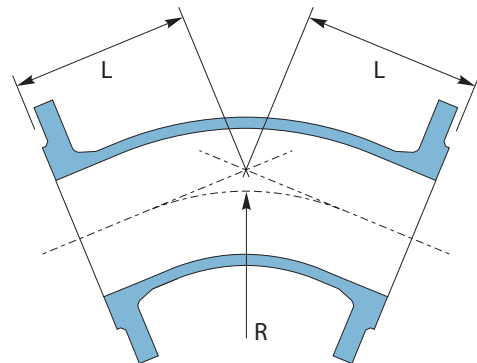
DOUBLE FLANGED 90° BEND



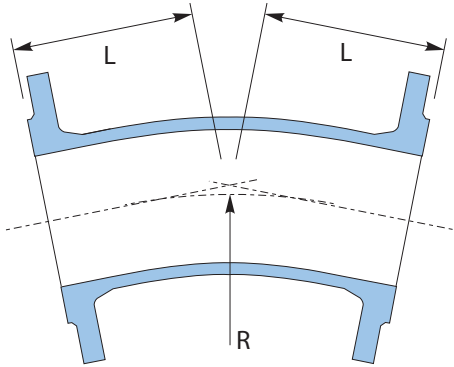
ITEM CODE: B45

DN	L	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
50	150	5.0	5.0	5.0
65	165	7.0	7.0	7.0
80	130	9.3	9.3	9.3
100	140	11.4	11.4	11.4
125	150	14.6	14.6	14.6
150	160	18.9	18.9	18.9
200	180	27.5	27.5	31.5
250	350	54.5	54.5	61.7
300	400	76.5	76.5	87.3
350	298	77.1	82.5	98.3
400	324	98.0	107.0	129.0
450	349	119.2	135.0	156.8
500	375	148.2	175.0	196.2
600	426	215.6	263.0	286.6
700	478	311.6	335.0	
800	529	414.2	444.0	
900	581	538.0	576.0	
1000	632	684.0	753.0	
1100	695	857.0	927.0	
1200	735	1,077.2	1,187.0	
1400	775	1,430.4	1,544.0	
1500	810	1,677.0	1,853.0	
1600	845	1,915.0	2,119.0	
1800	910	2,465.0	2,717.0	
2000	980	3,149.0	3,455.0	
2200		3,446.0	3,805.0	

DOUBLE FLANGED 45° BEND



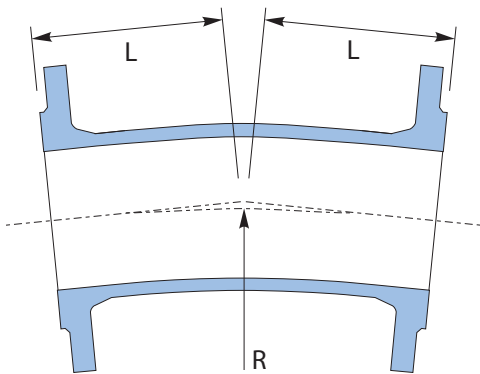
**DOUBLE FLANGED
22.5° BEND**



ITEM CODE: B22

DN	L	Unit Wt. Kgs.		
		PN10	PN16	PN25
80	130	9.2	9.2	9.2
100	140	11.5	11.5	11.5
125	150	16.0	16.0	16.0
150	160	18.6	18.6	18.6
200	180	27.0	27.0	31.0
250	350	54.5	54.5	61.7
300	400	77.5	77.5	88.3
350	298	77.6	83.0	98.8
400	324	98.0	107.0	129.0
450	349	119.2	135.0	156.8
500	375	149.2	176.0	197.2
600	426	219.6	267.0	290.6
700	478	252.0	342.0	
800	529	288.0	448.0	
900	581	361.0	588.0	
1000	632	459.0	773.0	
1100	683	600.0	947.0	
1200	735	717.0	1213.0	
1400	835	1021.0	1635.0	
1500	886	1100.0	2014.0	
1600	940	1190.0	2325.0	
1800		1640.0	1864.0	
2000		2,081.0	2357.0	
2200		2,593.0	2908.0	

**DOUBLE FLANGED
11.25° BEND**

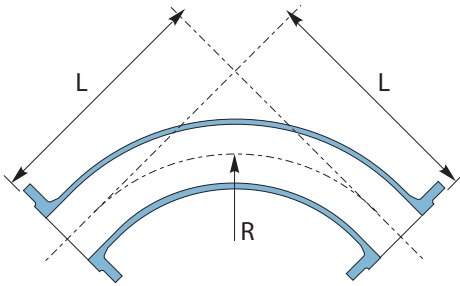


ITEM CODE: B11

DN	L	Unit Wt. Kgs.		
		PN10	PN16	PN25
80	130	9.2	9.2	9.2
100	140	11.5	11.5	11.5
125	150	16.0	16.0	16.0
150	160	18.6	18.6	18.6
200	180	27.0	27.0	31.0
250	350	55.0	55.0	62.2
300	400	78.0	78.0	88.8
350	298	78.1	83.5	99.3
400	324	99.0	108.0	130.0
450	349	119.2	135.0	156.8
500	375	148.2	175.0	196.2
600	426	220.6	268.0	291.6
700	478	240.0	343.0	
800	529	270.0	451.0	
900	581	303.0	592.0	
1000	632	382.0	778.0	
1100	683	550.0	952.0	
1200	735	590.0	1220.0	
1400	835	827.0	1643.0	
1500	885	1,100.0	2025.0	
1600	940	1,203.0	2336.6	
1800		1,342.0	1566.0	
2000		1,694.0	1970.0	
2200		2,075.0	2390.0	

*All dimensions are in mm

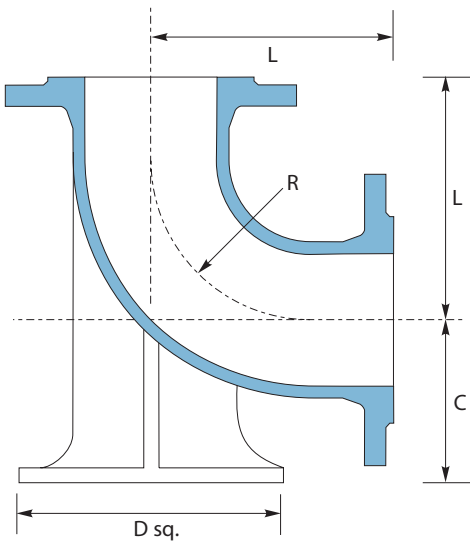
**DOUBLE
FLANGED
90° LONG
RADIUS BEND**



ITEM CODE: L90

DN	L	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
80	380	13.8	13.8	13.8
100	400	18.0	18.0	18.0
150	450	30.0	30.0	30.0
200	500	45.5	45.5	49.5
250	550	65.0	65.0	72.2
300	600	89.5	89.5	100.3
350	650	115.6	121.0	136.8
400	700	148.0	157.0	179.0
450	750	181.2	197.0	218.8
500	800	225.2	252.0	273.2
600	900	331.6	379.0	402.6
700	1000	465.6	489.0	
800	1100	631.2	661.0	
900	1200	816.0	854.0	
1000	1300	1,048.0	1,117.0	
1200	1500	1,627.2	1,737.0	

**DOUBLE
FLANGED
90° DUCKFOOT
BEND**



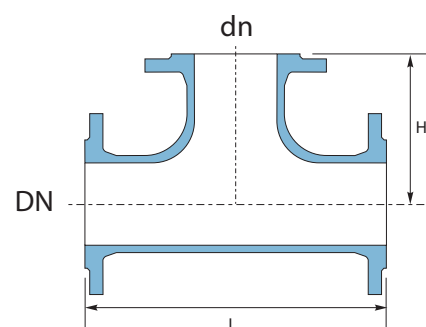
ITEM CODE: BB4

DN	L	C	D	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
50	150	95	150	8.6	8.6	8.6
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	46.5	46	50.5
250	350	225	350	75	75	82
300	400	255	400	106	105	116
350	450	290	450	139	145	162
400	500	320	500	178	189	212
450	550	355	550	229	249	275
500	600	385	600	283	313	337
600	700	450	700	428	481	509
700	800	515	800	700	741	811
800	900	580	900	846	884	982
900	1000	645	1000	1118	1165	1286
1000	1100	710	1100	1698	1781	1937
1200	1300	840	1300	2599	2709	

ITEM CODE: T90

	dn	L	H	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
80	80	330	165	15.6	15.6	15.6
100	80	360	175	18.4	18.4	18.4
	100	360	180	19.4	19.4	19.4
150	80	440	205	28.5	28.5	31
	100	440	210	29.5	29.5	32
	150	440	220	32.5	32.5	36
200	80	520	235	42	41.5	46
	100	520	240	43	42	47.5
	150	520	250	46	45	51
	200	520	260	49.5	49	56
250	80	700	265	49.7	49.3	56.7
	100	700	275	68	67	75
	150	700	300	72	71	81
	200	700	325	76	75	85
	250	700	350	82	81	93
300	100	800	300	94	93	105
	150	800	325	98	97	109
	200	800	350	102	101	114
	250	800	375	109	108	121
	300	800	400	116	115	131
350	100	850	325	116	122	139
	150	850	325	119	125	142
	200	850	325	121	128	146
	250	850	352	128	134	154
	300	850	425	132	138	160
	350	850	425	142	151	176
400	100	900	350	143	154	177
	150	900	350	144	156	181
	200	900	350	148	159	184
	250	900	350	151	161	198
	300	900	450	160	184	213
	350	900	450	170	183	215
	400	900	450	174	191	215
450	100	950	375	176	193	225
	150	950	375	182	199	231
	200	950	375	190	207	240
	250	950	375	199	216	250
	300	950	475	210	227	263
	350	950	475	219	240	279
	400	950	475	231	254	296
	450	950	475	243	269	315
500	100	1000	400	210	241	265
	150	1000	400	214	243	269
	200	1000	400	215	245	271
	250	1000	400	218	258	280
	300	1000	500	227	255	287
	350	1000	500	239	262	298
	400	1000	500	242	276	311
	450	1000	500	249	298	327
	500	1000	500	252	297	332

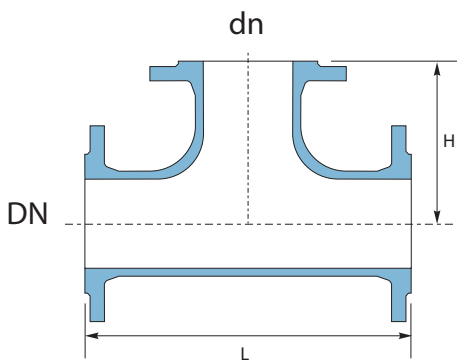
ALL FLANGED TEE



ITEM CODE: T90

DN	dn	L	H	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
600	100	1100	450	268	329	352
	150	1100	450	283	340	370
	200	1100	450	305	358	388
	250	1100	450	307	360	392
	300	1100	550	312	374	398
	350	1100	550	326	380	413
	400	1100	550	329	387	427
	450	1100	550	338	417	448
	500	1100	550	349	420	464
	600	1100	550	355	434	477
	700	80	520	505	252	294
100		540	510	253	295	
150		595	515	255	296	
200		650	525	258	298	--
250		705	530	310	335	
300		760	540	319	342	
350		815	545	340	375	
400		870	555	343	379	--
450		925	560	429	436	
500		980	570	442	481	
600		1200	585	476	523	
700	1200	600	477	523	--	
800	80	560	570	340	378	
	100	580	570	345	383	
	150	635	575	349	387	
	200	690	585	352	390	--
	250	745	590	372	410	
	300	800	600	423	427	
	350	855	605	443	471	
	400	910	615	441	484	--
	450	965	620	519	563	
	500	1020	630	561	599	
	600	1350	645	613	678	--
700	1350	660	663	711		
800	1350	675	657	715	--	
900	80	600	625	423	471	
	100	620	630	428	476	
	150	675	635	432	480	
	200	730	645	436	484	--
	250	785	650	499	533	
	300	840	660	523	569	
	350	895	665	538	588	
	400	950	675	541	594	--
	450	1005	680	673	729	
	500	1060	690	726	784	
	600	1500	705	787	860	--
700	1500	720	843	901		
800	1500	735	860	913		
900	1500	750	853	924	--	
1000	80	640	685	518	564	--
	100	660	690	524	572	
	150	715	695	534	582	
	200	770	705	546	629	--

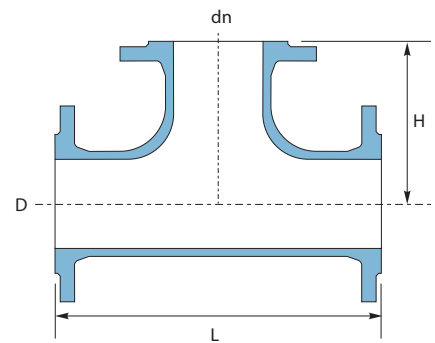
ALL FLANGED TEE (continued)



ITEM CODE: T90

DN	dn	L	H	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16
1000	250	825	710	631	703
	300	880	720	651	739
	350	935	725	660	753
	400	990	735	668	755
	450	1045	740	850	911
	500	1100	750	955	1007
	600	1650	765	1007	1116
	700	1650	780	1067	1152
	800	1650	795	1085	1168
	900	1650	810	1095	1219
	1000	1650	825	1105	1229
1200	80	635	805	995	1081
	100	660	810	996	1082
	150	715	815	998	1084
	200	775	825	1000	1086
	250	830	830	1002	1094
	300	890	840	1004	1106
	350	950	845	1006	1113
	400	1005	855	1008	1122
	450	1065	860	1078	1204
	500	1120	870	1109	1255
	600	1240	885	1101	1256
	700	1355	900	1279	1423
	800	1470	915	1291	1439
	900	1585	930	1427	1662
	1000	1700	945	1494	1664
	1200	1935	975	2321	2321
1400	100	970	905	1227	1363
	200	1085	920	1231	1367
	400	1320	950	1514	1656
	600	1550	980	1655	1818
	800	1780	1010	1886	2041
	1000	2015	1040	2131	2309
	1200	2245	1070	2567	2767
	1400	2480	1100	2781	2985
1600	600	1600	1090	2167	2398
	800	1835	1120	2452	2675
	1000	2065	1150	2740	2986
	1200	2300	1180	3058	3327
	1400	2530	1210	3498	3770
	1600	2760	1240	3886	4192
1800	600	1655	1200	2694	2972
	800	1885	1230	3023	3299
	1000	2120	1260	3375	3669
	1200	2350	1290	3740	4056
	1400	2580	1320	4254	4574
	1600	2815	1350	4691	5147
	1800	3045	1380	5123	5501
2000	600	1705	1310	3300	3642
	800	1940	1340	3844	4169
	1000	2170	1370	4112	4459
	1400	2635	1430	4966	5340
	1600	2865	1460	5625	6033
	2000	3330	1520	6648	7107

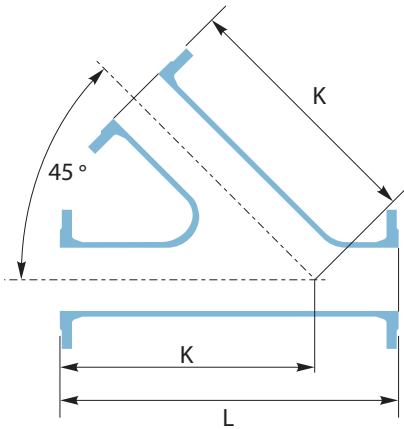
ALL FLANGED TEE
(continued)



*All dimensions are in mm

ALL FLANGED 45° ANGLE BRANCH

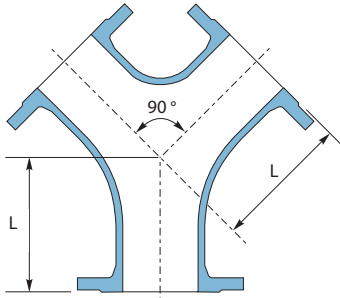
ITEM CODE: H45



DN	L	K	Unit Wt. Kgs.	Unit Wt. Kgs.	Unit Wt. Kgs.
			PN10	PN16	PN25
80	500	375	21.0	21.0	21.0
100	540	405	27.0	27.0	27.0
150	640	480	47.0	47.0	47.0
200	735	560	71.0	71.0	77.0
250	830	640	105.0	105.0	115.8
300	930	715	147.0	147.0	163.2
350	880	790	177.0	188.0	213.0
400	970	870	238.0	255.0	288.0
450	1060	950	295.0	321.0	367.0
500	1140	1025	369.0	414.0	449.0
600	1310	1180	545.0	625.0	667.0
700	1550	1430	830.0	875.0	
800	1700	1570	1570.0	1615.0	
900	1850	1700	1597.0	1669.0	
1000	2050	1900	2070.0	2196.0	
1200	2350	1950	2665.0	2857.0	

ALL FLANGED TRUE WYE

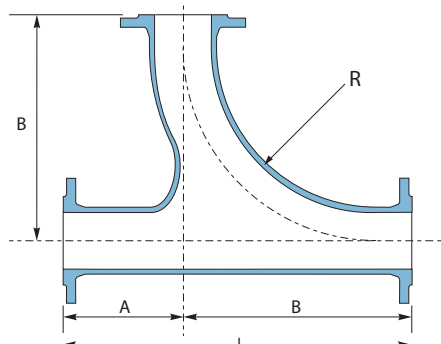
ITEM CODE: Y90



DN	L	Unit Wt. Kgs.	Unit Wt. Kgs.	Unit Wt. Kgs.
		PN10	PN16	PN25
80	165	15.6	15.6	15.6
100	180	19.3	19.3	19.3
150	220	32.5	32.5	32.5
200	260	49.0	49.0	55.0
250	350	81.0	81.0	91.8
300	400	115.0	115.0	131.2
350	450	157.9	166.0	189.7
400	500	231.0		
450	550	295.0		
500	600	385.0		
600	700	591.0		

ALL FLANGED RADIAL TEE

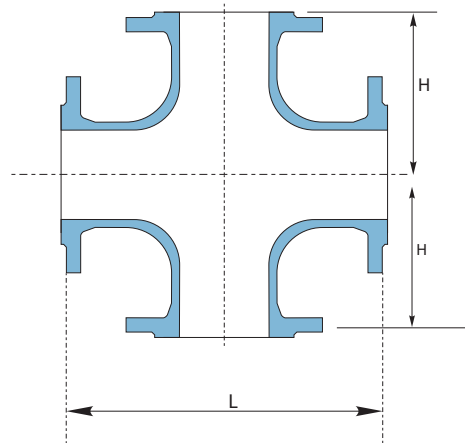
ITEM CODE: TT1



DN	L	A	B	r	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
80	545	165	380	330	23.0	23.0	23.0
100	580	180	400	340	29.5	29.5	29.5
150	670	220	450	385	48.5	48.5	48.5
200	760	260	500	430	72.5	72.5	78.5
250	900	350	550	475	106.0	106.0	116.8
300	1000	400	600	515	146.0	146.0	162.2
350	1100	450	650	560	195.9	204.0	227.7
400	1200	500	700	605	250.5	264.0	297.0
450	1300	550	750	650	308.3	332.0	364.7
500	1400	600	800	690	392.8	433.0	464.8
600	1600	700	900	780	561.9	633.0	668.4

ALL FLANGED CROSS

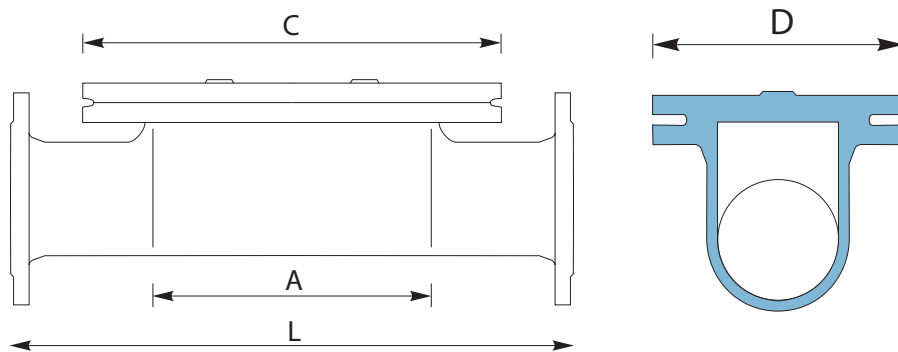
ITEM CODE: C00



DN	L	H	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
80	330	165	20.5	20.5	20.5
100	360	180	24.5	24.5	24.5
150	440	220	41.0	41.0	41.0
200	520	260	60.5	60.5	68.5
250	700	350	99.5	99.5	113.9
300	800	400	143.0	143.0	164.6
350	850	425	178.2	189.0	220.6
400	900	450	218.0	236.0	280.0
450	950	475	254.4	286.0	329.6
500	1000	500	316.4	370.0	412.4
600	1100	550	447.2	542.0	589.2
700	1200	600	633.2	680.0	
800	1350	675	903.4	963.0	
900	1500	750	1,190.0	1,266.0	
1000	1650	825	1,537.0	1,675.0	
1200	1950	975	2,452.4	2,672.0	

*All dimensions are in mm

FLANGED HATCHBOX

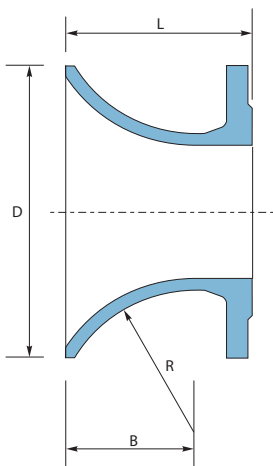


ITEM CODE: ZZ1

DN	L	A	C	D	hex bolts	stud bolts	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
					Qty / Size	Qty / Size			
80	800	400	520	200	10 x M16		68.3	68.3	68.3
100	800	400	535	235	10 x M20		73.5	73.5	73.5
150	800	400	550	300	10 x M24	4 x M24	100.0	100.0	100.0
200	800	400	560	360	12 x M24	4 x M24	107.0	107.0	111.0
250	950	500	675	425	14 x M27	4 x M27	155.0	155.0	162.2
300	950	500	685	485	18 x M27	6 x M27	193.0	193.0	203.8
350	950	500	705	555	18 x M30	6 x M30	259.6	265.0	280.8
400	1100	600	820	620	18 x M33	6 x M33	317.0	326.0	348.0
450	1100	600	820	670	18 x M33	8 x M33	369.2	385.0	406.8
500	1200	600	830	730	22 x M33	4 x M33	415.2	442.0	463.2
600	1200	600	845	845	22 x M36	4 x M36	426.6	474.0	497.6

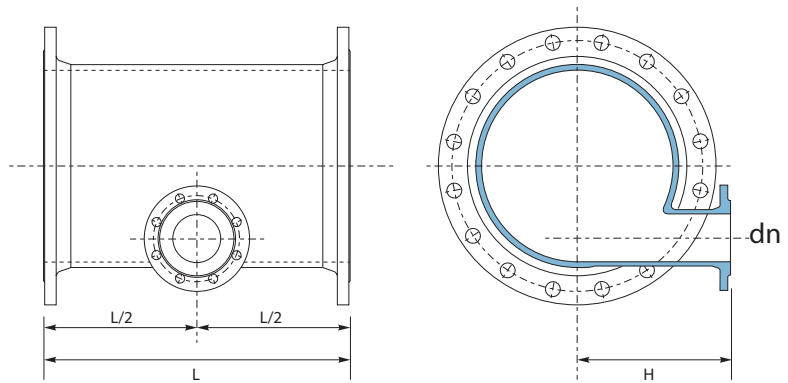
FLANGED BELLMOUTH

ITEM CODE: AA3



DN	L	D	B	R	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16
80	135	160	80	100	5.2	5.2
100	140	185	85	106	6.3	6.3
150	155	245	95	119	11.0	11.0
200	170	310	110	137	24.0	24.0
250	190	370	120	150	32.0	32.0
300	210	435	135	169	44.0	44.0
350	225	495	145	181	72.0	75.0
400	245	560	160	200	92.0	98.0
450	260	620	170	212	111.0	120.0
500	280	685	185	231	138.0	153.5
600	300	810	210	262	185.3	221.0
700	340				210.0	225.0
800	380				225.0	244.0
900	420				260.0	284.0
1000	440				327.0	369.0
1200	490				457.0	512.0
1400	515				646.0	702.0
1600	540				906.0	995.0
1800					1185.0	1297.0
2000					1530.2	1668.0

**ALL FLANGED LEVEL
INVERT TEE**



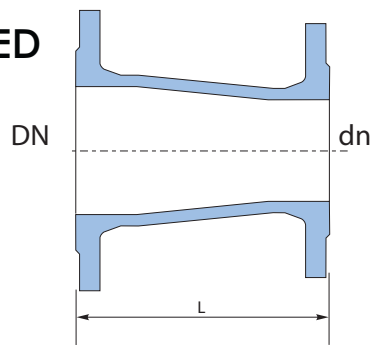
ITEM CODE: I00

DN	dn	L	H	Unit Wt. Kgs.	Unit Wt. Kgs.	Unit Wt. Kgs.
				PN10	PN16	PN25
100	80	360	195	19.5	19.5	19.5
150	80	440	220	29.5	29.5	29.5
	100	440	220	30.5	30.5	30.5
200	80	520	250	42.5	42.5	46.5
	100	520	250	43.5	43.5	47.5
250	80	700	275	66.0	66.0	73.2
	100	700	275	68.5	68.5	75.7
300	80	800	305	92.0	92.0	102.8
	100	800	305	95.5	95.5	106.3
	150	800	305	99.0	99.0	109.8
350	80	850	340	115.6	121.0	136.8
	100	850	340	117.6	123.0	138.8
	150	850	340	122.6	128.0	143.8
400	80	900	365	144.0	153.0	175.0
	100	900	365	147.0	156.0	178.0
	150	900	365	153.0	162.0	184.0
450	200	900	365	158.0	167.0	191.0
	80	950	380	172.2	188.0	209.8
	100	950	380	173.2	189.0	210.8
500	150	950	380	181.2	197.0	218.8
	200	950	380	186.2	202.0	225.8
	80	1000	400	210.2	237.0	258.2
600	100	1000	400	214.2	241.0	262.2
	150	1000	400	221.2	248.0	269.2
	200	1000	400	228.2	255.0	278.2
700	80	1100	435	302.6	350.0	373.6
	100	1100	435	303.6	351.0	374.6
	150	1100	450	312.6	360.0	383.6
800	200	1100	450	322.6	370.0	395.6
	150	600	500	238.6	262.0	
	200	650	500	244.6	268.0	
900	150	670	540	349.2	379.0	
	200	690	540	358.2	388.0	
1000	150	720	580	443.0	481.0	
	200	730	580	445.0	483.0	
1200	150	770	630	556.0	625.0	
	200	770	630	558.0	627.0	
1200	150	800	700	800.2	910.0	
	200	850	700	835.2	945.0	

*All dimensions are in mm

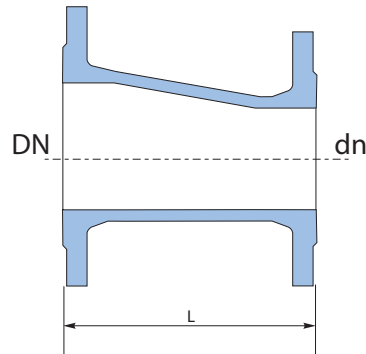
DOUBLE FLANGED CONCENTRIC TAPER

ITEM CODE: RR1



DOUBLE FLANGED FLAT TAPER

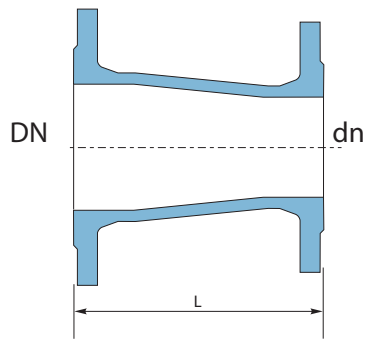
ITEM CODE: RR2



DN	dn	L	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
100	80	200	9.5	9.5	9.8
150	80	400	16	16	17
	100	300	15	15	17.5
200	100	600	27	27	29
	150	300	22	22	25
250	150	600	38	38	43
	200	300	30	29	36
300	150	600	46	46	52
	200	600	51	51	59
	250	300	40	41	49
350	200	600	58	60	71
	250	600	65	70	79
	300	300	50	52	66
400	200	600	66	71	84
	250	600	72	77	92
	300	600	79	84	101
	350	300	58	67	86
450	250	600	80	88	97
	300	600	86.8	95	107
	350	600	92.7	104	118
	400	300	72.4	81	113
500	250	700	99.4	114	130
	300	600	96.2	111	129
	400	600	110	130	153
	450	300	116	139	157
600	300	800	145	171	191
	400	600	132	164	190
	450	600	140	175	195
	500	600	149	190	216

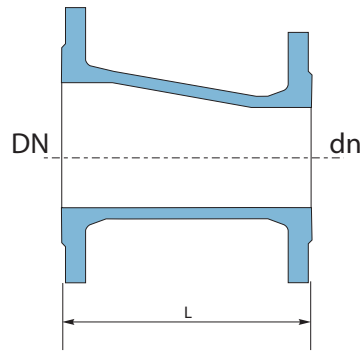
**DOUBLE FLANGED
CONCENTRIC
TAPER
(continued)**

ITEM CODE: RR1



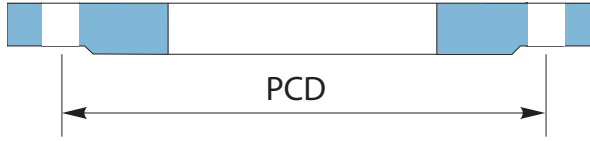
**DOUBLE
FLANGED
FLAT TAPER
(continued)**

ITEM CODE: RR2



DN	dn	L	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
700	450	700	190	213	251
	500	600	178	208	252
	600	600	195	236	288
800	500	800	255	285	347
	600	600	234	275	340
	700	600	250	285	374
900	450	1100	347	380	467
	500	1000	337	377	470
	600	800	315	366	462
	700	600	293	333	446
1000	800	600	308	352	468
	500	1200	452	501	585
	600	1000	427	487	574
	700	800	403	452	556
	800	600	369	418	540
1200	900	600	373	438	545
	700	1345	698	768	882
	800	1160	695	765	897
	900	975	628	708	871
1000	790	586	692	881	
1400	1200	850	814	947	1223
1600	1400	910	1103	1273	1641
1800	1600	970	1463	1664	2135
2000	1800	1030	1800	2079	2715
2200	2000		2250	2570	

BLANK FLANGE



ITEM CODE: K10 (PN 10)

ITEM CODE: K16 (PN 16)

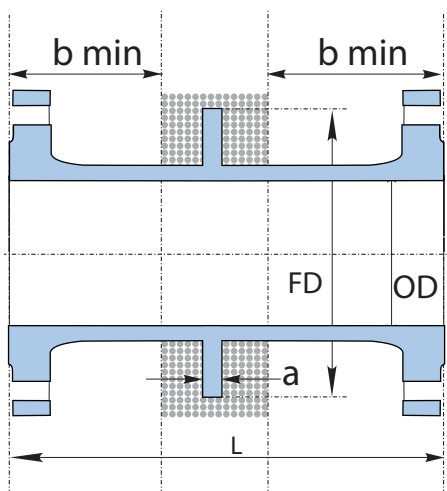
ITEM CODE: K25 (PN 25)

DN	Unit Wt. Kgs. PN10	Unit Wt. Kgs. PN16	Unit Wt. Kgs. PN25
80	3.9	3.9	3.9
100	4.8	4.8	4.8
150	8.1	8.1	8.1
200	11.4	11.4	13.4
250	16.6	16.6	20.2
300	23.0	23.0	28.4
350	34.3	37.0	44.9
400	44.0	48.5	59.5
450	55.6	63.5	74.4
500	69.6	83.0	93.6
600	106.3	130.0	141.8
700	157.3	169.0	
800	220.1	235.0	
900	288.0	307.0	
1000	378.5	413.0	
1100	501.0	536.0	
1200	604.1	659.0	
1400	847.2	904.0	
1500	978.0	1092.0	
1600	1239.0	1409.0	
1800	1717.0	1858.0	
2000	2272.0	2407.0	
2200	2372.0	3097.0	

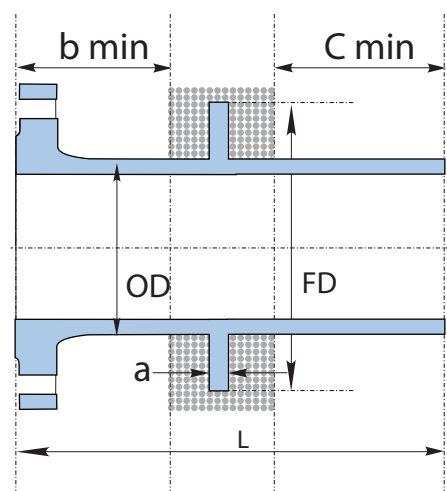
Flange dimensions to EN1092-2 / ISO 7005-2

ITEM CODE: KK2 For PN10 welded on flange without drilling for Puddle

FLANGED (FABRICATED) WALL PIECES / ANCHORING PIPES (DOUBLE FLANGE AND FLANGE X PE WITH PUDDLE FLANGE)



ITEM CODE: PP1



ITEM CODE: PP2

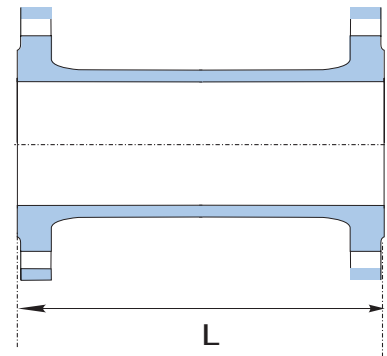
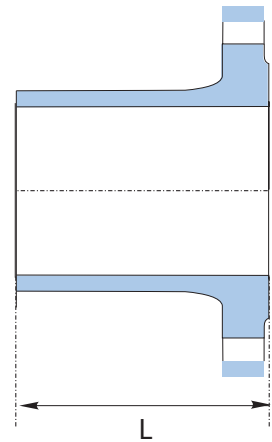
Nominal Dia DN	OD mm	L* mm	FD mm	a mm	b mm	c mm	Weight of short flange anchoring Pipes with flanges			Weight of flange spigot with flanges		
							PN 10 kg	PN 16 kg	PN 25 kg	PN 10 kg	PN 16 kg	PN 25 kg
80	98	600	200	16.0	120	200	17.5	17.5	17.5	15.7	15.7	15.7
100	118	600	220	16.0	120	200	21.0	21.0	22.0	18.9	18.9	19.4
150	170	600	285	18.0	130	200	33.0	33.0	34.5	30.0	30.0	30.5
200	222	600	340	20.0	130	200	44.5	44.6	48.0	39.5	39.5	41.5
250	274	1000	400	20.0	155	300	79.0	80.0	86.0	67.0	68.0	71.0
300	326	1000	455	20.5	155	300	104.0	107.0	118.0	86.0	88.0	94.0
350	378	1000	505	20.5	170	300	130.0	138.0	154.0	109.0	113.0	122.0
400	429	1000	565	20.5	170	300	156.0	167.0	191.0	131.0	135.0	147.0
500	532	1000	670	22.5	190	300	213.0	299.0	277.0	178.0	193.0	206.0
600	635	1000	780	25.0	200	300	286.0	339.0	354.0	237.0	263.0	271.0
700	738	1500	895	27.5	220	300	480.0	586.0		413.0	481.0	
800	842	1500	1015	30.0	240	300	610.0			519.0		
900	945	1500	1115	32.5	260	300	621.0			729.0		
1000	1048	1500	1230	35.0	300	300	745.0			880.0		

* Length and puddle flange location as per customer specification

*All dimensions are in mm

FLANGE X PLAIN END PIPE TYPE AR

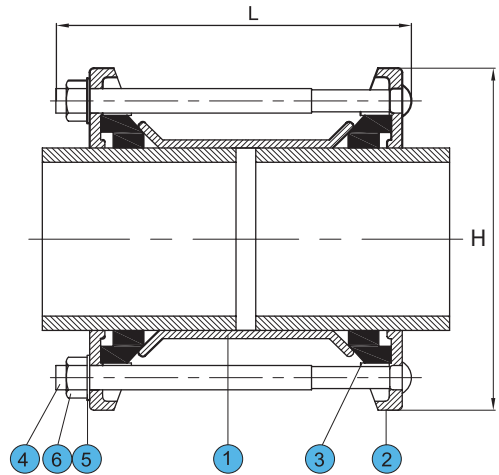
Nominal Diameter DN	L*	Weight with flange		
		PN 10 Kg	PN 16 Kg	PN 25 Kg
80	350	7.9	8.0	8.0
100	350	9.6	9.6	10.1
150	400	17.1	17.1	18.1
200	400	24.5	24.0	25.5
250	400	33.0	33.0	35.5
300	450	46.0	45.0	49.0
350	450	58.0	58.0	64.0
400	480	70.0	74.0	83.0
500	520	104.0	117.0	123.0
600	560	144.0	169.0	172.0
700	600	189.0	187.0	225.0
800	600	239.0	250.0	291.0
900	600	272.0	295.0	-
1000	600	328.0	369.0	-
1100	600	394.0	430.0	-
1200	600	456.0	520.0	-
1400	710	664.0	732.0	-
1500	745	812.0	900.0	-
1600	780	922.0	1024.0	-
1800	850	1196.0	1322.0	-
2000	920	1534.0	1687.0	-
2200	990	1948.0	2115.0	-
2400	1060	2409.0	2611.0	-
2600	1130	2918.0	3153.0	-

**FLANGE X FLANGE PIPE TYPE AF**

Nominal Diameter DN	Weight with Flange			Weight with Flange		
	Effective length = 250mm *			Effective length = 500mm *		
	PN 10 kg	PN 16 kg	PN 25 kg	PN 10 kg	PN 16 kg	PN 25 kg
80	9.6	9.6	9.8	12.9	12.9	13.3
100	11.5	11.5	12.5	13.4	13.4	16.9
150	19.0	19.0	21.0	26.0	26.0	28.0
200	26.5	26.0	29.0	36.5	36.0	39.5
250	40.5	39.5	45.5	57.0	56.0	62.0
300	53.0	52.0	59.0	75.0	73.0	80.0
350	69.0	71.0	83.0	99.0	100.0	112.0
400	80.0	88.0	106.0	113.0	123.0	141.0
500	95.0	122.0	157.0	104.0	117.0	138.0
600	129.0	178.0	201.0	139.0	166.0	215.0
700	207.0	170.0	265.0	289.0	255.0	350.0
800	267.0	223.0	352.0	373.0	329.0	458.0
900	318.0	264.0	426.0	447.0	393.0	556.0
1000	395.0	340.0	556.0	550.0	495.0	711.0
1200	-	-	-	549.0	661.0	822.0

* Length can be supplied from the range of 0.3m to 5.9m. Larger sizes are available upon customer request.

COUPLINGS



ITEM CODE:70R

SIZE CODE	COUPLING TOLERANCE MM	L MM	H MM	SETTING GAP MM	WEIGHT KG
DN 40	40 - 52	154	180	20	3.0
DN 50	59 - 78	173	180	20	3.5
DN 80	83 - 102	197	180	20	4.2
DN 100	108 - 118	207	180	20	4.5
DN 100 B	109 - 128	223	180	20	4.5
DN 125	135 - 153	257	180	20	7.2
DN 150	159 - 170	266	220	20	8.0
DN 150 B	159 - 182	286	220	20	9.0
DN 150 C	180 - 193	293	220	20	10.0
DN 175	190 - 205	304	220	20	10.5
DN 200	218 - 234	335	220	20	12.0
DN 225	235 - 250	351	220	20	12.5
DN 225 B	250 - 267	369	220	20	13.0
DN 250	272 - 286	387	220	20	13.5
DN 250 B	286 - 304	408	220	20	15.5
DN 300	315 - 328	430	220	20	16.0
DN 300 B	340 - 350	464	260	25	18.0
DN 300 C	360 - 370	484	260	25	20.0
DN 350	350 - 360	474	260	25	19.0
DN 350 B	376 - 387	500	260	25	21.0
DN 400	396 - 406	522	260	25	21.5
DN 400 B	407 - 417	531	260	25	22.0
DN 400 C	426 - 436	550	260	25	22.5
DN 400 D	436 - 446	559	260	25	23.0
DN 450	450 - 460	573	260	25	24.5
DN 450 B	464 - 474	588	260	25	26.0
DN 450 C	478 - 488	602	260	25	27.0
DN 450 D	520 - 532	644	260	25	29.0
DN 500	500 - 510	623	260	25	30.0
DN 500 B	535 - 545	659	260	25	32.0
DN 500 C	583 - 593	706	260	25	33.0
DN 550	559 - 571	685	260	25	34.0
DN 600	606 - 616	730	260	25	35.0
DN 600 B	629 - 638	752	260	25	36.0

Material Specification:

Item No.	Item Name	Material
1	Body / Center sleeve	Ductile Iron OR Carbon Steel
2	End ring	Ductile Iron / Carbon Steel
3	Gasket	Rubber EPDM
4	Stud	Galvanized Steel
5	Washer	Galvanized Steel
6	Nut	Galvanized Steel
7	Coating	Fusion Bonded Epoxy

Technical Data:

- Dimension Range: DN50 to DN1800.
- Working Pressure: PN10/ PN 16
- Max. Temperature: 80°C

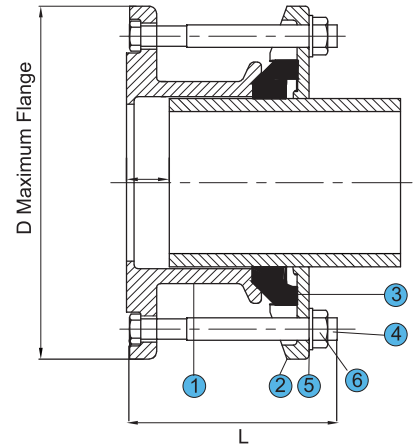
*All dimensions are in mm



FLANGE ADAPTOR

Technical Data:

- Dimension Range: DN50 to DN1800.
- Working Pressure: PN10/ PN 16
- Flange Drilling: BS EN1092
- Optional Drilling : ANSI 150
- Max. Temperature: 80°C



ITEM CODE:80R

Material Specification:

Item No.	Item Name	Material
1	Body	Ductile Iron / Carbon Steel
2	End ring	Ductile Iron / Carbon Steel
3	Gasket	Rubber EPDM
4	Stud	Galvanized Steel
5	Washer	Galvanized Steel
6	Nut	Galvanized Steel
7	Coating	Fusion Bonded Epoxy

SIZE CODE	COUPLING RANGE MM	D MM	L MM
DN 40	40 - 52	154	180
DN 50	59 - 78	173	180
DN 80	83 - 102	197	180
DN 100	108 - 118	207	180
DN 100 B	109 - 128	223	180
DN 125	135 - 153	257	180
DN 150	159 - 170	266	220
DN 150 B	159 - 182	286	220
DN 150 C	180 - 193	293	220
DN 175	190 - 205	304	220
DN 200	218 - 234	335	220
DN 225	235 - 250	351	220
DN 225 B	250 - 267	369	220
DN 250	272 - 286	387	220
DN 250 B	286 - 304	408	220
DN 300	315 - 328	430	220
DN 300 B	340 - 350	464	260
DN 300 C	360 - 370	484	260
DN 350	350 - 360	474	260
DN 350 B	376 - 387	500	260
DN 400	396 - 406	522	260
DN 400 B	407 - 417	531	260
DN 400 C	426 - 436	550	260
DN 400 D	436 - 446	559	260
DN 450	450 - 460	573	260
DN 450 B	464 - 474	588	260
DN 450 C	478 - 488	602	260
DN 450 D	520 - 532	644	260
DN 500	500 - 510	623	260
DN 500 B	535 - 545	659	260
DN 500 C	583 - 593	706	260
DN 550	559 - 571	685	260
DN 600	606 - 616	730	260
DN 600 B	629 - 638	752	260

Flanges available to PN10, PN16, and ANSI 150

* Please contact us for large dimensions

DISMANTLING JOINTS

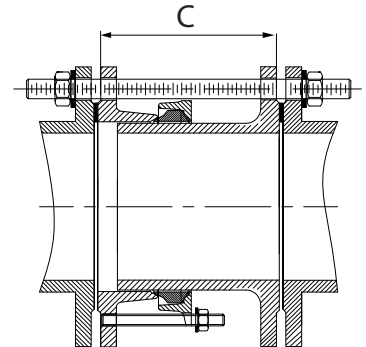
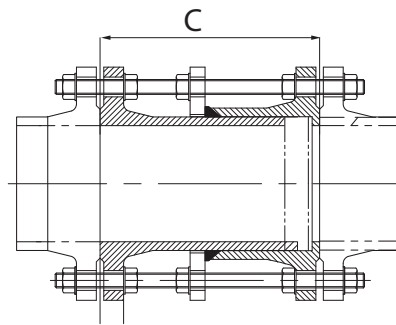
Technical Data:

- Dimension Range: DN50 to DN1800.
- Minimum Longitudinal Adjustment: +/- 20 MM
- Working Pressure: PN10 & PN 16
- Flange Drilling: BS EN1092
- Max. Temperature: 80°C



Material Specification:

Item No.	Item Name	Material
1	Body & End Ring	Ductile Iron / Rolled Steel
2	Seal Ring	Rubber EPDM
3	Stud	Galvanized Steel
4	Washer	Galvanized Steel
5	Nut	Galvanized Steel



Nominal size (mm)	Flange Type	No. Of Tie Bars based of % Restraining			Light Duty (Type 7S-R)		Heavy Duty Three Flange (Type 7D-H)	
		25%	50%	100%	Normal length C (MM)	Unit weight (25% Restrained) (KG)	Normal Length C (MM)	Unit weight (25% Restrained) (KG)
50	PN 16	4	4	8	194	8	200	8
80	PN 16	4	4	8	194	10	200	10
100	PN 16	4	4	8	194	12	200	12
150	PN 16	4	4	8	194	18	200	17
200	PN 16	4	6	12	194	24	200	25
250	PN 16	4	6	12	194	38	220	38
300	PN 16	4	6	12	194	40	230	40
350	PN 16	4	8	16	295	63	230	70
400	PN 16	5	8	16	295	75	240	80
450	PN 16	5	10	20	300	99	240	114
500	PN 16	5	10	20	300	134	260	140
600	PN 16	5	10	20	300	153	280	190
700	PN 16	6	12	24	300	162	280	230
800	PN 16	6	12	24	300	184	310	300
900	PN 16	7	14	28	307	232	315	325
1000	PN 16	7	14	28	307	282	320	450
1200	PN 16	8	16	32	320	282	350	520

Remarks

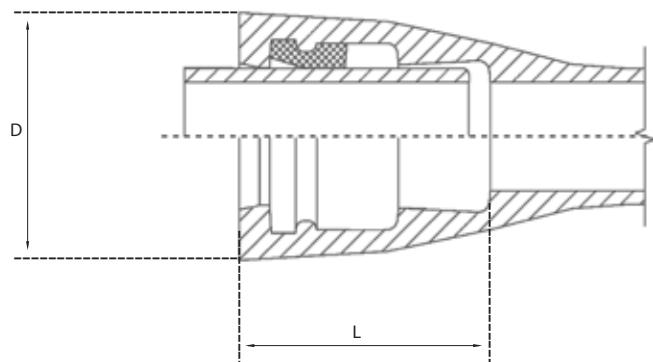
1. Standard supply is with 25% Tie Bar (25% restrained). In case of full restrained request please specify
- 2.The Tie rod and sizes may vary on both models . Please ask for the approved drawing in case of an order

*All dimensions are in mm

McWane supplies a wide range of fittings suitable for Push- on and Mechanical Joint type Ductile Iron pipes manufactured to ISO 2531 / EN 545 Standards.

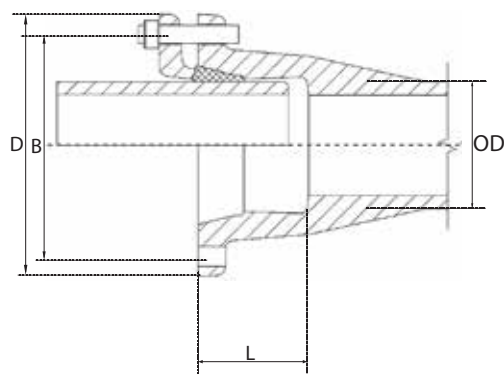
Sockets are integrally cast and generally to Class K12 .

T TYPE PUSH ON JOINT



Nominal Diameter DN	OD	D	L
80	98	140	85
100	118	163	88
150	170	217	94
200	222	278	100
250	271	336	105
300	326	393	110
350	378	448	110
400	429	500	110
450	480	552	120
500	532	604	120
600	635	713	120
700	738	824	150
800	842	943	160
900	945	1052	175
1000	1048	1158	185
1100	1152	1267	200
1200	1255	1377	215
1400	1462	1610	239
1500	1565	1695	247
1600	1668	1814	262

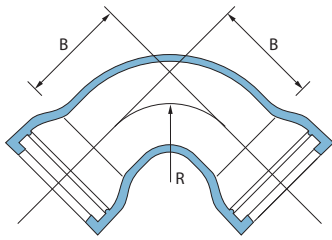
MECHANICAL JOINT (K-TYPE)



Nominal Diameter DN	OD	B	D	L	Bolt	
					size	no.
80	98	170	210.0	80	M16x85	4
100	118	186	232.0	80	M20x90	4
150	170	241	287.0	80	M20x90	6
200	222	292	338.0	80	M20x90	6
250	274	348	394.0	80	M20x90	8
300	326	399	445.0	110	M20x100	8
350	378	458	504.0	110	M20x100	10
400	429	512	558.0	110	M20x110	12
450	480	575	625.0	110	M20x110	12
500	532	618	664.0	110	M20x110	14
600	635	725	771.0	110	M20x120	14
700	738	839	893.0	120	M24x120	16
800	842	942	996.0	120	M24x120	20
900	945	1052	1,118.0	120	M30x140	20
1000	1048	1160	1,226.0	130	M30x140	20
1100	1152	1272	1,338.0	130	M30x140	20
1200	1255	1372	1,438.0	130	M30x140	28
1400	1462	1591	1,657.0	130	M30x150	28
1500	1565	1700	1,766.0	130	M30x150	28
1600	1668	1790	1,874.0	160	M30x150	30
1800	1875	2023	2089.0	170	M30x160	34
2000	2082	2239	2305.0	180	M30x160	36
2200	2288	2453	2519.0	190	M30x170	40
2400	2495	2668	2734.0	200	M30x170	44
2600	2702	2883	2949.0	210	M30x180	48

ITEM CODE: S-B90

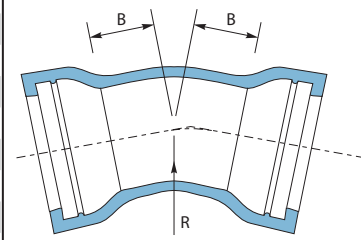
**DOUBLE
SOCKET
90° BEND**



DN	B	Unit Wt. Kgs.	
		T-Type	K-Type
80	100	8.6	
100	120	11.4	
150	170	20.5	
200	220	33	
250	270	48.5	
300	320	68	
350	370	98.4	
400	420	129	
450	470	163	
500	520	204	
600	620	303	
700	720	436	
800	820	595	
900	920	793	
1000	1020	986	
1200	1220	1624	1624
1400	1220	2419	2419
1600	1290		3014
1800			3833
2000			4783

ITEM CODE: S-B22

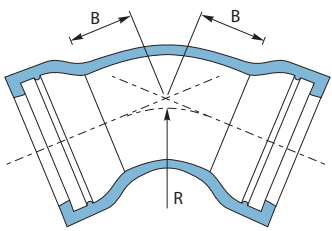
**DOUBLE
SOCKET
22.5° BEND**



DN	B	Unit Wt. Kgs.	
		T-Type	K-Type
80	40	7.5	--
100	40	9.5	
150	55	16.0	
200	65	24.0	
250	75	33.5	
300	85	44.5	
350	95	58.0	
400	110	74.0	
450	120	102.0	
500	130	111.0	
600	150	157.0	
700	175	217.0	
800	195	287.0	
900	220	373.0	
1000	240	470.0	
1200	285	716.0	851.0
1400	260	933.0	1241.0
1600	280	1259.0	1377.0
1800	305	1663.0	1837.0
2000	330	2144.0	2373.0

ITEM CODE: S-B45

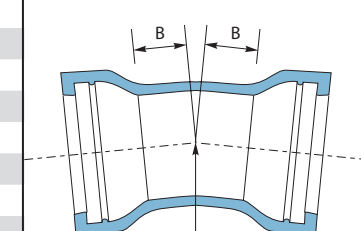
**DOUBLE
SOCKET
45° BEND**



DN	B	Unit Wt. Kgs.	
		T-Type	K-Type
80	55	8.0	
100	65	10.0	
150	85	17.5	
200	110	27.0	
250	130	38.5	
300	150	53.0	
350	175	70.0	
400	195	89.0	
450	220	123.0	
500	240	129.0	
600	285	202.0	
700	330	282.0	
800	370	378.0	
900	415	496.0	
1000	460	635.0	
1200	550	986.0	1109.0
1400	515	1273.0	1632.0
1600	565	1740.0	1893.0
1800	610	2296.0	2222.0
2000	660	2970.0	3020.0
2200	710		3762.0

ITEM CODE: S-B11

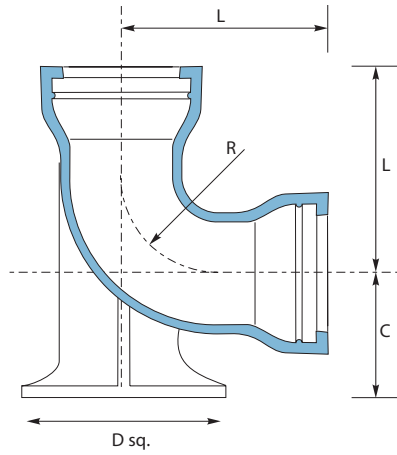
**DOUBLE
SOCKET
11.5° BEND**



DN	B	Unit Wt. Kgs.	
		T-Type	K-Type
80	30	7.0	
100	30	9.0	
150	35	15.0	
200	40	22.0	
250	50	30.5	
300	55	40.5	
350	60	52.0	
400	65	65.0	
450	70	91.9	
500	75	96.0	
600	85	134.0	
700	95	181.0	
800	110	239.0	
900	120	305.0	
1000	130	381.0	
1200	150	568.0	724.0
1400	130	747.0	1047.0
1600	140	1007.0	1134.0
1800		1331.0	1549.0
2000		1702.0	1985.0
2200		1900.0	2183.0

*All dimensions are in mm

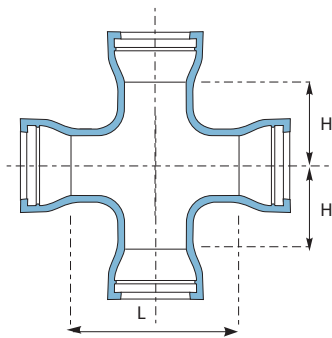
**DOUBLE SOCKET
90° DUCK-FOOT BEND**



ITEM CODE: S-BB4

DN	L	C	D	R	Unit Wt. Kgs.
					T-Type
80	100	110	180	80.0	11.3
100	120	125	200	95.0	14.8
150	170	160	250	145.0	28.5
200	220	190	300	195.0	44.5
250	270	225	350	245.0	68.5
300	320	255	400	290.0	100.0
350	370	290	450	340.0	133.0
400	420	320	500	390.0	180.0
450	470	355	550	435.0	230.0
500	520	385	600	485.0	294.0
600	620	450	700	580.0	442.0
700	720	515	800	675.0	618.0
800	820	580	900	775.0	832.0
900	920	645	1000	870.0	1,113.0
1000	1020	710	1100	970.0	1,435.0
1200	1220	840	1300	1,165.0	2,153.0

ALL SOCKET EQUAL CROSS



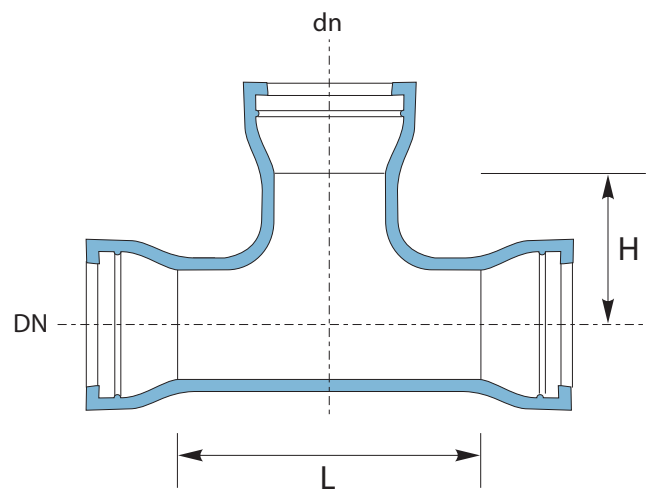
ITEM CODE: S-C00

DN	L	H	Unit Wt. Kgs.	
			T-Type	K-Type
80	165	85	15.0	
100	190	95	20.0	
150	255	125	33.5	
200	315	155	51.0	
250	375	185	75.0	
300	435	220	101.0	
350	495	250	137.0	
400	560	280	177.0	
500	680	340	272.0	
600	800	400	399.0	
700	925	460	712.0	
800	1045	525	963.0	
900	1170	585	1262.0	
1000	1290	645	1612.0	1612.0
1200	1535	765	2498.0	2498.0
1400	1780	890	3445.0	3445.0

ITEM CODE: S-T90

DN	dn	L	H	Unit Wt. Kgs. T-Type
80	80	170	85	12.5
100	80	170	95	15
	100	190	95	16
150	80	170	120	21.5
	100	195	120	23.5
	150	255	125	28
200	80	175	145	30
	100	200	145	32
	150	255	150	37
	200	315	155	43
250	80	175	165	40
	100	200	165	43
	150	260	175	51
	200	315	180	56
	250	375	185	53
300	80	180	190	51
	100	200	195	54
	150	260	200	64
	200	320	205	70
	250	375	210	80
	300	435	215	56
350	80	180	215	64
	100	205	220	67
	150	265	225	80
	200	320	230	85
	250	380	235	97
	300	435	240	106
	350	495	245	116
400	100	210	245	82
	150	265	240	97
	200	325	255	102
	250	380	260	116
	300	440	265	127
	350	500	270	137
	400	555	275	150
450	100	210	270	106
	150	270	275	116
	200	325	280	127
	250	385	285	138
	300	445	290	149
	350	500	295	161
	400	500	300	173
	450	615	305	186
500	150	270	300	137
	200	330	305	141
	250	390	315	161
	300	445	315	174
	350	505	320	187
	400	560	325	199
	450	620	330	214
	500	680	340	234
600	150	280	350	185
	200	335	355	188
	250	395	360	215
	300	450	365	231
	400	570	375	258
	450	625	380	280
	500	685	390	296
	600	800	400	343
700	200	345	405	259
	250	400	410	277
	300	460	420	297
	400	575	430	337
	450	635	435	361
	500	690	440	380
	600	810	450	430
	700	925	460	486

ALL SOCKET TEE

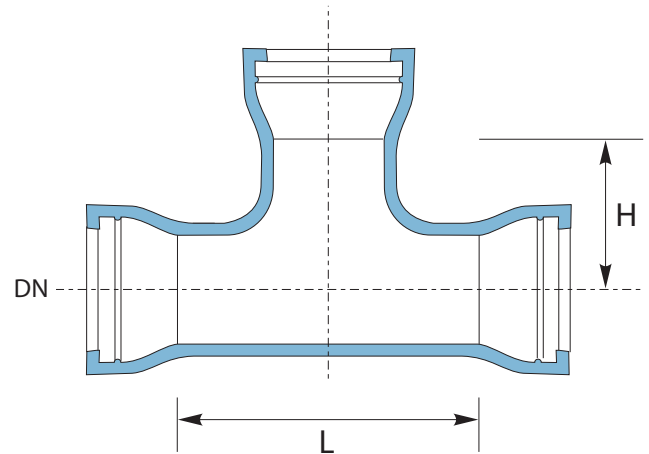


*All dimensions are in mm

ITEM CODE:S-T90

DN	dn	L	H	Unit Wt. Kgs. T-Type
800	200	350	455	330
	250	410	460	352
	300	465	470	374
	350	525	475	398
	400	580	480	420
	450	640	485	448
	500	700	490	472
	600	815	500	526
	700	930	510	586
	800	1045	525	655
900	200	355	505	410
	300	470	515	462
	400	590	530	518
	500	705	540	574
	600	820	550	635
	700	935	560	700
	800	1050	570	774
	900	1170	585	858
1000	200	360	555	502
	300	480	570	564
	400	595	580	626
	500	710	590	690
	600	825	600	758
	700	940	610	831
	800	1060	625	913
	900	1175	635	1000
	1000	1290	645	1096
1200	300	490	670	816
	400	605	680	884
	500	720	690	966
	600	840	700	1054
	700	955	710	1143
	800	1070	725	1239
	900	1185	735	1339
	1000	1300	745	1447
	1200	1535	765	1697
1400	400	620	780	1096
	500	735	790	1198
	600	850	800	1304
	700	965	810	1412
	800	1080	825	1527
	900	1200	835	1649
	1000	1315	845	1774
	1200	1545	865	2049
	1400	1780	890	2323

ALL SOCKET TEE (Continued)



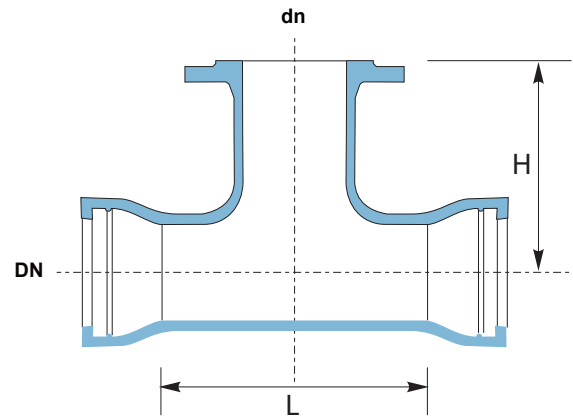
ITEM CODE:K-T90

DN	dn	L	H	Unit Wt. Kgs. K-Type
1600	1000	1325	945	2246.0
	1200	1560	965	2564.0
	1400	1790	990	2863.0
	1600	2020	1010	3246.0
1800	1000	1340	1045	2805.0
	1200	1570	1065	3162.0
	1400	1800	1090	3503.0
	1600	2035	1110	3923.0
	1800	2265	1135	4400.0
2000	1000	1350	1145	3437.0
	1200	1580	1165	3846.0
	1400	1815	1190	4244.0
	1600	2045	1210	4695.0
	1800	2280	1235	5218.0
	2000	2510	1255	5787.0
2200	1000	1360	1245	3998.0
	1200	1595	1265	4453.0
	1400	1825	1290	4916.0
	1600	2060	1310	5433.0
	1800	2290	1335	5974.0
	2000	2520	1355	6573.0
	2200	2755	1375	7230.0

ITEM CODE: V-T16

DN	dn	L	H	Unit Wt. Kgs. T-Type
80	80	170	160	13.5
100	80	170	175	16
	100	190	180	17
150	80	170	205	23
	100	195	210	24.5
	150	255	220	29.5
200	80	175	235	31.5
	100	200	240	34
	150	255	250	39
	200	315	260	46
250	80	175	265	44
	100	200	270	43.5
	150	260	280	56.5
	200	315	290	57
	250	375	300	66
300	100	200	300	55
	150	260	310	68
	200	320	320	70
	250	375	330	81
	300	435	340	91
350	100	205	330	68
	150	265	340	81.3
	200	320	350	86
	250	380	360	114
	300	435	370	118
	350	495	380	120
400	100	210	360	83
	150	265	370	98
	200	325	380	102
	250	380	390	118
	300	440	400	131
	350	500	410	146
	400	560	420	156
450	100	210	390	107
	150	270	400	119
	200	325	410	129
	250	385	420	140
	300	445	430	154
	350	500	440	169
	400	560	450	185
	450	615	460	200
500	100	215	420	116
	150	270	430	137
	200	330	440	141
	250	390	450	165
	300	445	460	179
	350	505	470	195
	400	565	480	205
	450	620	490	228
	500	680	500	247

DOUBLE SOCKET TEE WITH PN16 FLANGE BRANCH



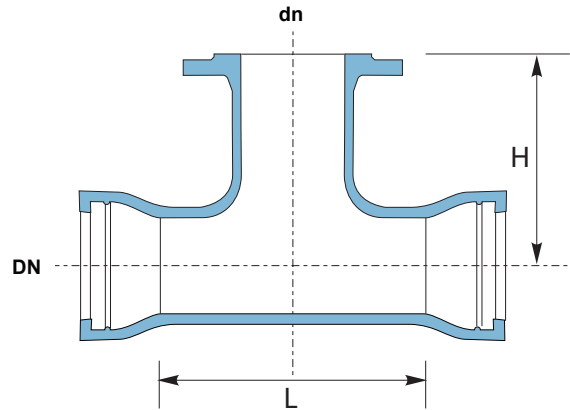
Weight with PN16 Flange indicated . PN10 & PN 25 Flanges are also available

*All dimensions are in mm

DN	dn	L	H	Unit Wt. Kgs. T-Type
600	100	220	480	171
	150	280	490	187
	200	340	500	189
	250	395	510	218
	300	450	520	235
	400	570	540	263
	450	625	550	293
	500	685	560	309
700	600	800	580	366
	200	345	525	242
	300	460	540	300
	400	575	555	325
	450	635	560	378
	500	690	570	406
800	600	810	585	445
	700	925	600	475
	200	350	585	306
	250	410	590	351
	300	465	600	371
	400	580	615	403
	500	700	630	537
	600	815	645	605
900	700	930	660	635
	800	1045	675	642
	200	355	645	379
	300	470	660	455
	400	590	675	495
	500	705	690	681
	600	820	705	774
	700	935	720	803
1000	800	1050	735	823
	900	1170	750	838
	200	360	705	462
	250	420	710	521
	300	480	720	552
	400	595	735	596
	500	710	750	867
	600	825	765	973
1200	700	940	780	1000
	800	1060	795	1021
	900	1175	810	1076
	1000	1290	825	1086
	200	375	825	682
	300	490	840	769
	400	605	855	856
	500	720	870	973
1400	600	840	885	1027
	700	955	900	1184
	800	1070	915	1210
	900	1185	930	1427
	1000	1300	945	1470
	1200	1535	975	1448
	300	680	935	1273
	400	800	950	1368
1400	500	915	965	1464
	600	1030	980	1505
	800	1260	1010	1728
	1000	1495	1040	1996
	1200	1725	1070	2439
	1400	1960	1100	2765

ITEM CODE: V-T16

**DOUBLE SOCKET TEE
WITH PN16 FLANGE BRANCH (Continued)**



ITEM CODE: V-K16

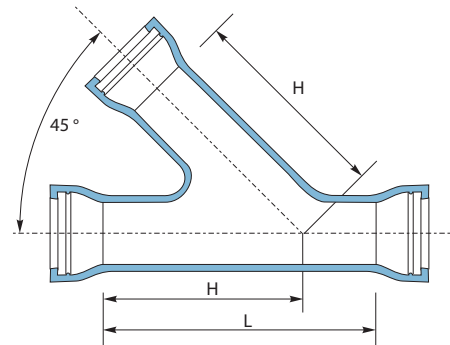
DN	dn	L	H	Unit Wt. Kgs. K-Type
1400	1000	1505	1150	2451
	1200	1740	1180	2798
	1400	1970	1210	3130
	1600	2200	1240	3551
1600	800	1275	1120	2136
	1200	1505	1150	2451
	1400	1740	1180	2798
	1600	1970	1210	3130
1800	1800	2200	1240	3551
	1000	1520	1260	3032
	1200	1750	1290	3426
	1400	1980	1320	3807
2000	1600	2215	1350	4277
	1800	2445	1380	4735
	1200	1760	1400	4134
	1400	1995	1430	4580
2000	1600	2225	1460	5097
	1800	2460	1490	5609
	2000	2690	1520	6168

Weight with PN16 Flange indicated . PN10 & PN 25 Flanges are also available

ALL SOCKET 45° ANGLE BRANCH

ITEM CODE: S-H45

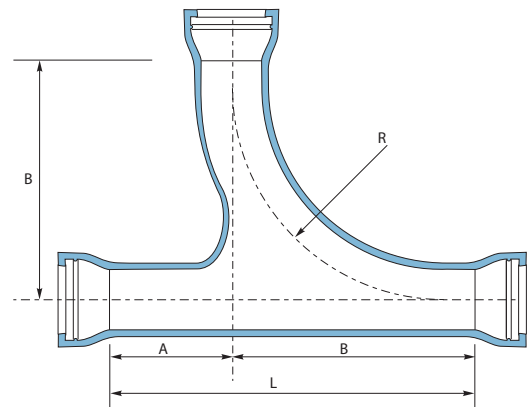
DN	L	H	Unit Wt. Kgs. T Type
80	500	375	19.0
100	540	405	26.0
150	640	480	46.0
200	735	560	72.0
250	830	640	106.0
300	930	715	151.0
350	880	790	169.0
400	970	870	209.0
450	1060	950	281.0
500	1140	1025	347.0
600	1310	1180	511.0



ALL SOCKET RADIAL TEE

ITEM CODE: S-TT1

DN	A	B	L	R	Unit Wt. Kgs. T Type
80	165	380	545	330	21.0
100	180	400	580	340	28.0
150	220	450	670	385	47.0
200	260	500	760	430	72.5
250	350	550	900	475	107.0
300	400	600	1000	515	150.0
350	450	650	1100	560	206.0

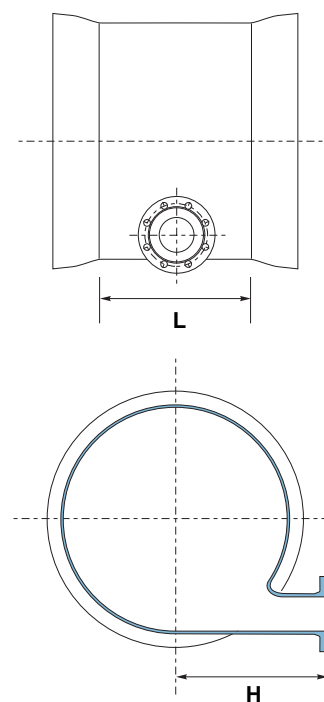


*All dimensions are in mm

ITEM CODE: V-100

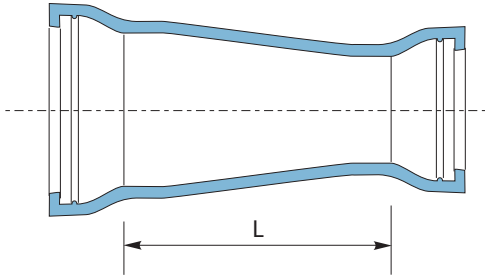
DN	Branch	L	H	Unit Wt. Kgs. T-Type
200	100	200	240	36.5
	150	250	250	44
250	100	200	270	47.5
	150	255	280	62
	200	315	290	65
300	100	205	300	59
	150	260	310	74
	200	320	320	79
350	100	205	330	73
	150	265	340	92
	200	325	350	96
400	100	210	360	89
	150	265	370	101
	200	325	380	114
	250	380	390	133
450	100	210	400	114
	150	270	400	130
	200	325	410	142
	250	385	420	154
	300	445	430	174
500	100	215	420	124
	150	274	430	150
	200	330	440	157
	250	390	450	181
	300	445	460	201
600	100	220	480	185
	150	280	490	199
	200	340	500	205
	250	395	510	238
	300	450	520	257
	350	510	530	289
	400	570	540	300
700	100	230	510	261
	150	285	515	265
	200	345	525	269
	300	460	540	324
800	100	235	570	328
	150	290	575	335
	200	350	585	336
	250	410	590	379
	300	465	630	401
900	150	300	635	409
	200	355	645	416
	300	470	660	491
	400	590	675	542
1000	150	305	695	565
	200	360	705	569
	300	480	720	
1200	200	375	825	725
	400	605	855	
1400	200	565	920	840
	400	800	950	
	600	1030	980	
1600	400	810	1060	
1800	400	820	1170	
2000	400	835	1280	
	600	1065	1310	
2200	400		1395	
	600		1420	

DOUBLE SOCKET TEE WITH FLANGED LEVEL INVERT



Weight with PN16 Flange indicated . PN10 & PN 25 Flanges are also available

DOUBLE SOCKET CONCENTRIC TAPER



ITEM CODE: S-RR1

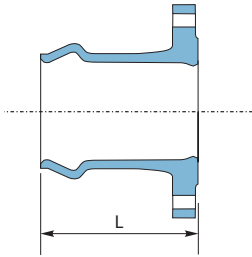
DN	dn	L	Unit Wt. Kgs. T-Type
100	80	90	8.5
150	80	190	13.5
	100	150	13.8
200	100	250	20.5
	150	150	21
250	100	300	28.5
	150	250	29
	200	150	29
300	100	450	39
	150	350	39.5
	200	250	39.5
	250	150	38.5
350	150	460	52
	200	360	51
	250	260	50
	300	160	50
400	200	460	67
	250	360	66
	300	260	64
	350	160	62
450	200	560	89
	250	460	89
	300	360	88
	350	260	86
	400	160	83
500	250	560	101
	300	460	100
	350	360	98
	400	260	94
	450	160	99
600	300	660	152
	350	560	151
	400	460	142
	450	360	149
	500	260	131
700	500	480	194
	600	280	178
800	600	480	252
	700	280	229
900	700	480	318
	800	280	288
1000	800	480	392
	900	280	354
1200	1000	480	570
1400	1200	360	711

*All dimensions are in mm

FLANGE X SOCKET PIECE FLANGE X SPIGOT PIECE

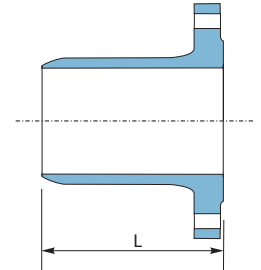
ITEM CODE: R-A16

DN	L	Unit Wt. Kgs.
80	130	7.4
100	130	9.0
150	135	14.2
200	140	20.0
250	145	27.5
300	150	36.0
350	155	48.5
400	160	60.0
450	165	78.5
500	170	93.0
600	180	135.0
700	190	159.0
800	200	208.0
900	210	258.0
1000	220	324.0
1200	240	521.0
1400	310	723.0
1600	330	999.0
1800	350	1263.0
2000	370	1581.0
2200	390	1950.0



ITEM CODE: U-A16

DN	L	Unit Wt. Kgs.
80	350	7.8
100	360	9.7
150	380	15.8
200	400	23.0
250	420	32.0
300	440	42.5
350	460	55.5
400	480	70.0
450	500	88.0
500	520	109.0
600	560	159.0
700	600	194.0
800	600	254.0
900	600	295.0
1000	600	369.0
1200	600	520.0
1400	710	734.0
1600	780	1024.0
1800	850	1322.0
2000	920	1687.0
2200	990	2115.0

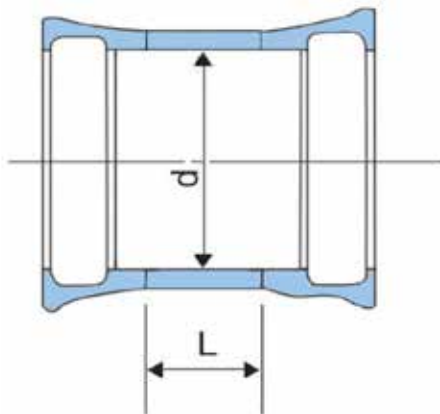


With PN 16 Flanges

COLLAR SOCKET

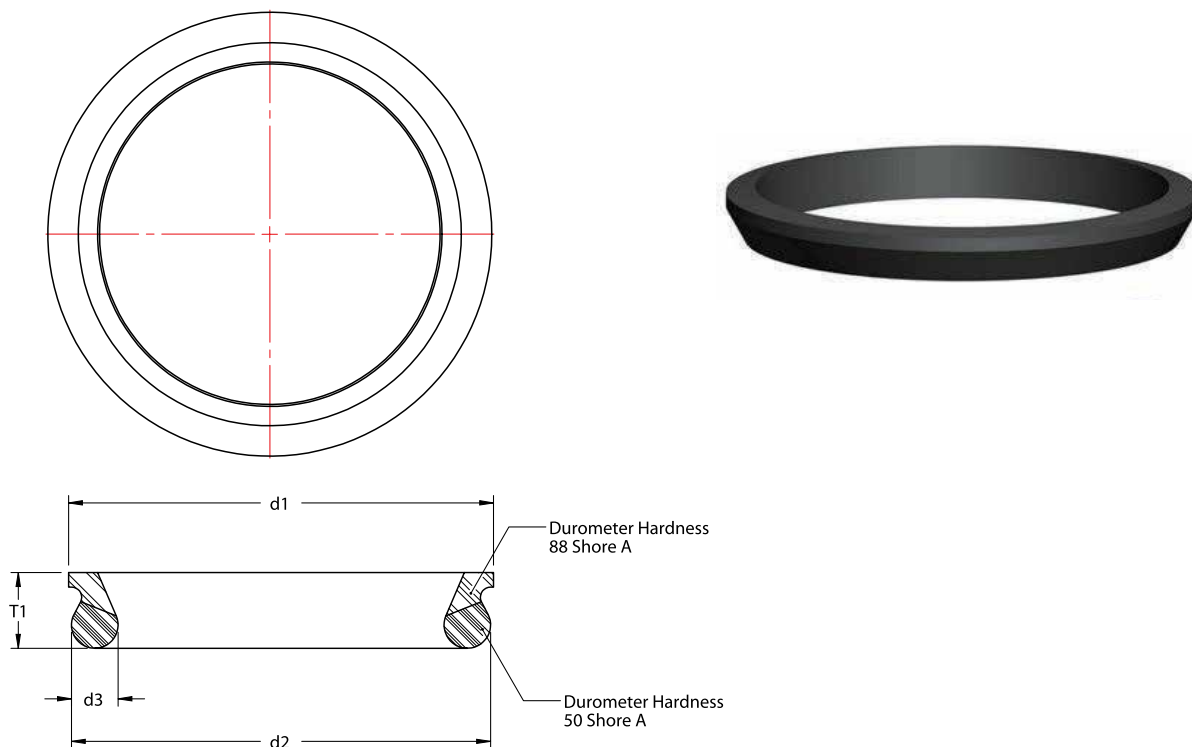
ITEM CODE: S-AA4

DN	d	L	Unit Wt. Kgs. T Type
80	109	160	7.9
100	130	160	9.9
150	183	165	15.9
200	235	170	23.0
250	288	175	31.5
300	340	180	41.0
350	393	185	52.0
400	445	190	64.0
450	498	195	91.0
500	550	200	93.0
600	655	210	129.0
700	760	220	172.0
800	865	230	223.0
900	970	240	282.0
1000	1075	250	349.0
1200	1285	270	560.0
1400	1477	340	816.0
1600	1683	360	1094.0
1800	1889	380	1427.0
2000	2095	400	1818.0
2200	2316	420	2845.0



Collar

T-TYPE PUSH ON GASKET



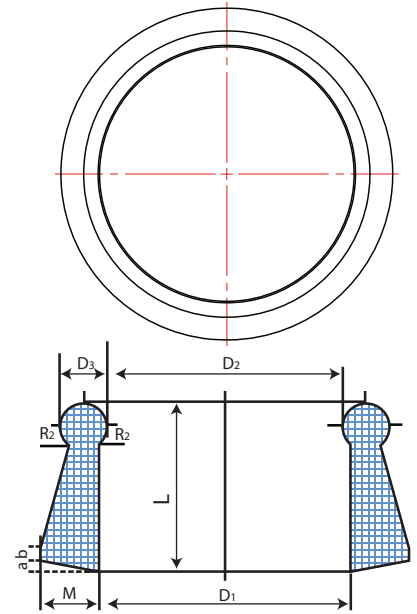
DN	d1	d2	d3	T1	Wt. Kgs.
80	126	123	16	26	0.13
100	146	144	16	26	0.22
125	172	170	16	26	0.29
150	200	198	16	26	0.36
200	256	254	18	30	0.50
250	310	308	18	32	0.72
300	366	364	20	34	0.94
350	420	418	20	34	1.25
400	475	473	22	38	1.54
450	528	526	23	38	2.00
500	583	581	24	42	2.45
600	692	690	26	46	3.34
700	809	803	33.5	55	4.55
800	919	913	35.5	60	5.51
900	1026	1020	37.5	65	6.50
1000	1133	1127	39.5	70	8.00
1100	1242	1235	41.5	74	9.00
1200	1352	1345	43.5	78	13.30
1400	1569	1549	41.5	80	17.50
1500	1677	1660	42.0	70	
1600	1799	1779	42.0	70	

ISO 4633 Standards available (EPDM/NBR)

*All dimensions are in mm

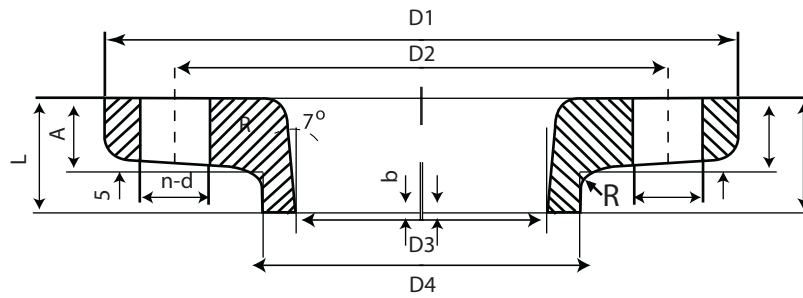
K - TYPE PUSH ON GASKET

DN	D1	D2	D3	L	M	a	b
100	116	111	11	45	15	4	4
150	167	162	11	45	15	4	4
200	218	213	11	45	15	4	4
250	269	264	11	45	15	4	4
300	319	312	15	49	18	4	4
350	370	363	15	49	18	4	4
400	420	413	15	49	18	4	4
450	471	465	15	49	18	4	4
500	521	514	15	49	18	4	4
600	622	615	15	49	18	4	4
700	723	716	18	61	21	4	4
800	825	818	18	61	21	4	4
900	926	919	18	61	21	4	4
1000	1027	1020	18	62	21	4	5
1200	1230	1223	20	62	21.5	4	5
1400	1430	1423	20	62	21.5	4	5
1500	1532	1525	20	62	21.5	4	5
1600	1635	1628	23	80	27	4	5
1800	1833	1825	23	80	27	4	5
2000	2035	2027	23	80	27	4	5
2200	2235	2227	23	80	27	4	5
2400	2440	2432	23	80	27	4	5
2600	2645	2637	23	80	27	4	5



ISO 4633 Standards available (EPDM/NBR)

DUCTILE IRON GLAND (K-TYPE)

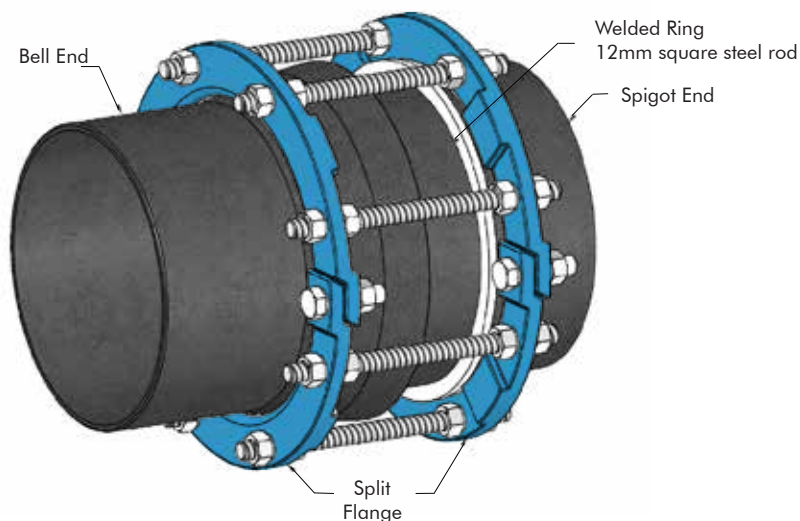


ITEM CODE: G-AA8

DN	D1	D2	D3	D4	A	L	R	b	n - d	Weight/ Kg
100	234	188	122	146	16	35	5	2	4-23	4.1
150	288	242	174	198	17	36	5	2	6-23	5.7
200	341	295	226	250	18	37	5	2	6-23	7.5
250	395	349	278	302	19	38	5	2	8-23	9.5
300	455	409	330	354	20	39	5	2	8-23	12.2
350	508	462	382	406	21	40	5	2	10-23	14.6
400	561	515	433	457	22	41	7	2	12-23	17.2
450	667	621	536	560	24	43	7	2	14-23	22.9
500	773	727	639	663	25	44	7	2	14-23	28.5
600	892	838	743	773	26	45	7	2.5	16-27	38.6
700	999	945	847	877	28	47	9	2.5	20-27	47.4
800	1123	1057	950	980	29	48	9	2.5	20-33	61.9
900	1231	1165	1054	1083	30	49	9	2.5	20-33	63.8
1000	1338	1272	1158	1187	31	50	9	2.5	24-33	68.5
1200	1444	1378	1262	1290	32	51	9	2.5	28-33	82.5
1400	1657	1591	1469	1497	34	53	9	3	28-33	104
1500	1766	1700	1573	16.5	35	54	9	3	30-33	119
1600	1874	1808	1676	1711	36	55	9	3	30-33	123
1800	2089	2023	1883	1918	38	57	11	3	34-33	162
2000	2305	2239	2090	2125	40	59	11	3	36-33	196
2200	2519	2453	2296	2331	43	62	11	3	40-33	238
2400	2734	2668	2503	2538	46	65	11	3	44-33	318
2600	2949	2883	2710	2745	49	68	11	3	48-33	378

*All dimensions are in mm

TIE BAR RESTRAINT FOR T TYPE (PUSH-ON) JOINT

**MATERIALS**

Tie Split Flange	Ductile Iron ASTM A536 Grade 65-45-12, FBE Coated
Tie Bars	Carbon Steel, BS EN ISO 898-1 Grade 8.8, Zinc Coated
Heavy Hex Nuts	Carbon Steel, BS4190 Grade 8.0, Zinc Coated
Washers	Carbon Steel, BS4320 Form E, Zinc Coated

DN	Pipe OD	Split Flange OD	Bolt Circle		Bolt Hole		Working Pressure	
			PCD	Dia.	No.	Length	Size	Bars
80	98	200	160	19	4	300	M16	40
100	118	220	180	19	4	305	M16	40
150	170	285	240	23	4	330	M20	40
200	222	340	308	23	6	345	M20	40
250	274	400	370	28	6	365	M24	30
300	326	455	427	28	6	385	M24	30
350	378	520	482	28	8	390	M24	20
400	429	580	537	31	8	415	M27	20
450	480	640	585	31	10	430	M27	20
500	532	715	650	34	10	445	M30	20
600	635	840	770	37	10	460	M33	20
700	738	910	867	37	12	515	M33	16
800	842	1025	993	40	12	555	M36	16
900	945	1125	1120	40	14	590	M36	16
1000	1048	1255	1207	43	14	625	M39	10
1100	1152	1355	1270	43	16	660	M39	10
1200	1255	1485	1432	49	16	705	M45	10
1400	1462	1685	1590	49	18	760	M45	10
1500	1565	1820	1800	56	18	830	M52	10

Appendices

FLANGE BOLT TIGHTENING

If all bolts are not tightened simultaneously in a flanged joint, the effect of tightening one bolt in the flange will have an effect on the preload in other previously tightened bolts in the flange. It is recommended to follow the procedure given below to minimize bolt preload variations due to elastic interactions.

A) Torque

Start the tightening procedure by lubricating the nuts and bolts, then hand tighten until they are snug against the flanges. If an air wrench is used make sure the pressure is set to the minimum. When tightening, always use the correct sequential bolt order for the flange.

4 and 8 Bolt Flanges

- First round - 30% of final torque (flange sequential order)
- Second round- 60% of final torque (flange sequential order)
- Third round - 100% of final torque (flange sequential order)
- One final time - clockwise or counter clockwise sequentially around the flange.

12 Bolt Flanges and More

- First round - 20% of final torque (flange sequential order)
- Second round - 40% of final torque (flange sequential order)
- Third round - 80% of final torque (flange sequential order)
- Fourth round - 100% of final torque (sequential order)
- One final time - clockwise or counter clockwise sequentially around the flange.

Required torque values are depending on the flange size and pressure rating.

B) Tightening Sequence

4 Bolt Tightening sequence

- Sequential Order: 1-2, 3-4
- Rotation Order: 1, 3, 2, 4

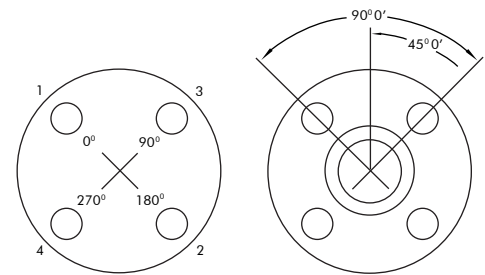
8 Bolt Tightening Sequence

- Sequential Order: 1-2, 3-4, 5-6, 7-8
- Rotation Order: 1, 5, 3, 7, 2, 6, 4, 8

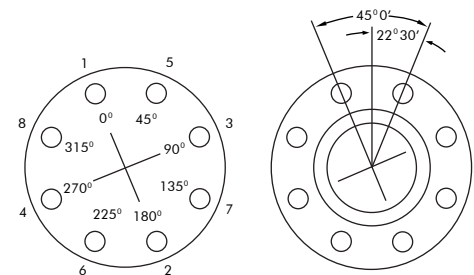
12 Bolt Tightening Sequence

- Sequential Order: 1-2, 3-4, 5-6, 7-8, 9-10, 11-12
- Rotation Order: 1, 5, 9, 3, 7, 11, 2, 6, 10, 4, 8, 12

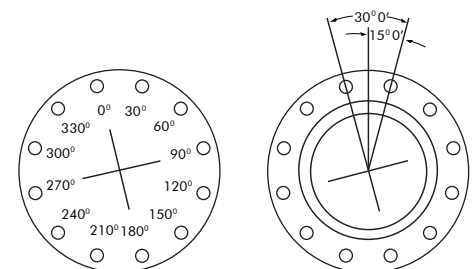
Similarly follow the same sequence for other sizes.



4 Bolt Flanges



8 Bolt Flanges



12 Bolt Flanges

LINING & COATING FOR DUCTILE IRON PIPE & FITTINGS

McWane Ductile Iron pipes are offered with various coatings and linings as detailed below:

Type	Internal (Lining)	External (Coating)
Standard	Sulphate resistant cement mortar type V (ISO 4179)	Metallic Zinc plus bituminous paint (ISO 8179-1)
Additional Protection	High alumina cement mortar	Polyethylene sleeving (installed on site)
Other Coatings	Fusion Bonded Epoxy lining (FBE) Induron Protecto 401™ ceramic epoxy Ceramapure PL90™ Seal coat	Fusion Bonded Epoxy coating Zinc / Aluminum coating up to 400mg/sqm (85% / 15%)

a) Cement lining thickness

DN	Nominal Value	Tolerance*	Maximum crack width & radial displacement
80 - 300	3.5	-1.5	0.8
350 - 600	5	-2	1.0
700 - 1200	6	-2.5	1.2
1400 - 2000	9	-3	1.5

* A negative tolerance only is required by the standards.
Note: Pipe end may have a chamfer of maximum length 50mm.

b) Bitumen coating

The mean thickness of bitumen coating shall not be less than 70 μm and local minimum thickness shall not be less than 50 μm .

c) Metallic Zinc coating

When metallic zinc spray is applied, the mean mass of the Zinc per unit area shall not be less than 130g/m², with a local minimum of 110g/m².

d) Epoxy coating

Fusion Bonded Epoxy coating available internally up to a thickness of 500 μm . Externally up to 120 μm in accordance with EN 14901.

e) Ceramic Epoxy Protecto 401™ lining

Protecto 401™ is applied to the interior of ductile pipe and fittings, utilizing specialized application equipment and stringent specifications. The lining is designed to be applied at a nominal 40-mil (1000 μm) thickness. A non-destructive pinhole detection test and a thickness test are performed to insure a sound, chemically resistant protective lining for ductile iron pipe and fittings. This lining is not suitable for potable water pipelines.

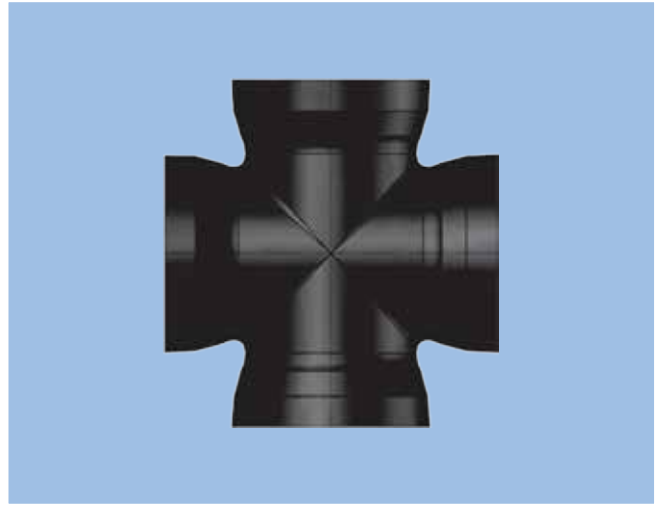
f) Ceramapure PL90™ is certified for cold end uses only to NSF/ANSI International Standard 61 for potable water immersion service. Ceramapure™ PL90 meets or exceeds AWWA C-210.

General Specifications for ISO /EN Pipes & Fittings - Ductile Iron

ISO 2531	Ductile iron pipes, fittings and accessories for pressure pipelines.
ISO 7186	Ductile iron products for sewage applications.
ISO 4179	Ductile iron pipes for pressure and non pressure pipelines - centrifugal cement mortar lining general requirements.
ISO 8179	Ductile iron pipes - external zinc coating.
ISO 4633	Rubber seals-joint rings for water supply, drainage and sewerage pipelines – Meets the specification for materials.
ISO 8180	Ductile iron pipes - Polyethylene sleeving.
ISO 7005-2	Metallic flanges - Part 2 cast iron flanges. Hexagon head bolts – produced grades A and B.
ISO 4032	Hexagon nuts, style1 - Produced grades A and B.
ISO 14901	Epoxy coating (heavy duty) of ductile iron fittings and accessories
BS EN545	Requirements and testing methods for Ductile iron pipes, fittings and accessories and their joints for water pipelines.
BS EN598	Requirements and testing methods for Ductile iron pipes, fittings and accessories and their joints for sewerage applications.
BS EN1092-2	Metallic flanges - Part 2 cast iron flanges
BS 4027	Requirements for composition, strength, physical and chemical properties of three strength classes of specification for sulfate-resisting Portland cement.
BS 3416	Specification for bitumen based coatings for cold application, suitable for use in contact with potable water.
BS 2494	Specification for elastomeric seals for joints in pipe work and pipelines.

REMARKS:

The specifications in the brochure are subject to revision without prior notice based on our product modification and sourcing programme. While we make every effort to generate the correct information in the catalog , we do not guarantee that the information is complete and accurate



Tyler Xianxian is an ISO 14001:2004 manufacturing facility and also certified to OHAS 18001:2007
 McWane Gulf is an ISO 14001:2004 manufacturing facility and also certified to OHAS 18001:2007



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