



IRUCA
Pipelines Ltd.
Pipelines Ltd.

SPECIFICATIONS

MATERIAL:

Ductile iron grade 500-7/ 450-12 in accordance with ISO 1083.

FLANGE :

PN10, PN16 or PN25 drilling in accordance with ISO 7005-2/EN 1092-2.

FLUID TEMPERATURE:

0°C-50°C, excluding frost.

AVAILABLE COATINGS :

External coatings:

- Zinc coating & bitumen painting (standard coating)
- Liquid epoxy painting (WRAS)
- Epoxy applied by FB (WRAS)
- According to customers' requirements.

Internal coatings :

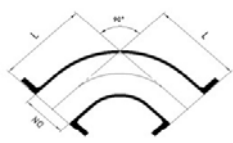
- Cement mortar lining (standard lining)
- Liquid epoxy painting (WRAS)
- Epoxy applied by FB (WRAS)
- According to customers' requirements.

REFERENCE RULES:

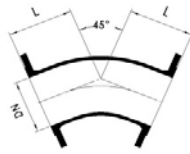
Dimensions and testing in accordance with ISO 2531/EN 545.

JOINTS:

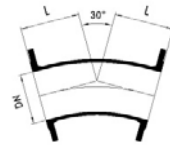
Jointed by the bolts, nuts and sealed by the gaskets.



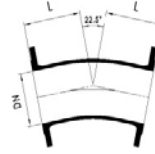
90 Deg D/F Bend



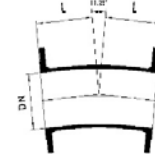
45 Deg D/F Bend



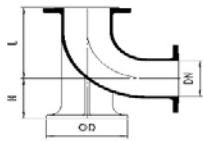
30 Deg D/F Bend



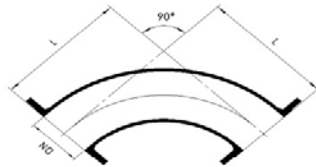
22 1/2 Deg D/F Bend



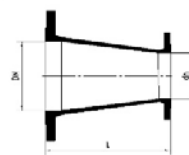
11 1/4 Deg D/F Bend



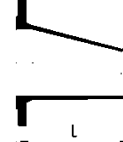
90 Deg D/F
Duckfoot Bend



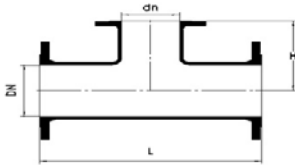
90 Deg D/F Long Bend



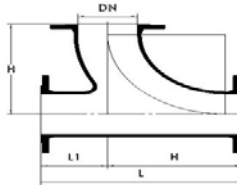
D/F Concentric
Taper



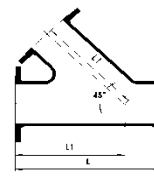
D/F Eccentric
(Flat) Taper



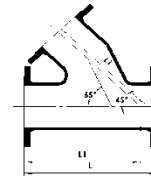
All Flange Tee



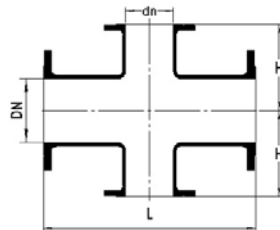
Radial Tee



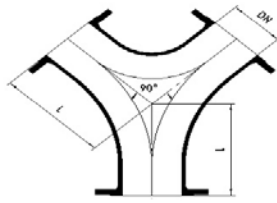
45 Deg Angle Branch
Type II



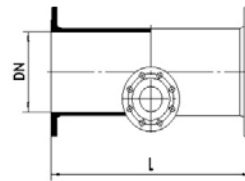
Type III



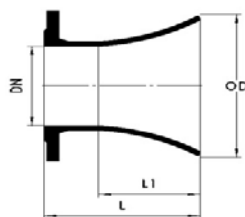
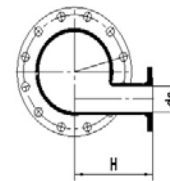
Cross



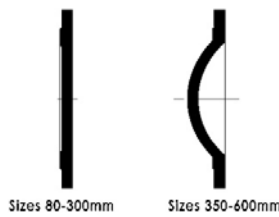
Y piece



Level Invert Tee



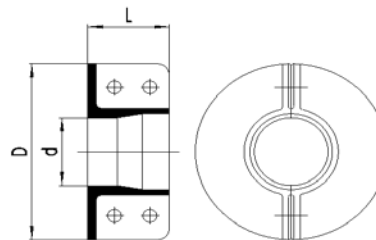
Bellmouth



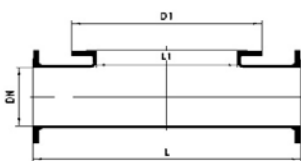
Sizes 80-300mm

Sizes 350-600mm

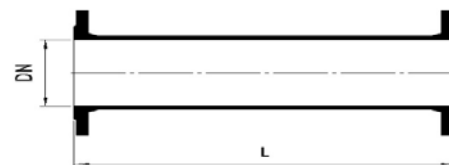
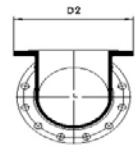
Blank Flange



Split Puddle Collar



Hatchbox



D/F Riser Pipe

80mm Flanged Fittings

Description	Series A	Series B	Dimensons		A	Weight	Pressure
			L	H			
			mm	mm	mm	kg	Bar
BENDS							
90°	X		165			9.6	16
90° Duckfoot	X		165			14.1	16
90° Long Radius	X		380			14.1	16
45°	X		130			9.3	16
30°	X		130			10.2	16
22 1/2°	X		130			9.2	16
11 1/4°	X		130			9.2	16
TEES							
dn 50mm	X		330			14.3	16
dn 80mm	X		330			15.6	16
RADIAL TEES	X		545	380		23	16
45° ANGLE BRANCH	X		500	375		21	16
CROSS	X		330	165		26.5	16
Y PIPE	X		165			15.6	16
TAPERS	X						
CONCENTRIC							
dn 50mm	X		200			7.3	16
FLAT							
dn 50mm	X		200			7.3	16
BELLMOUNTH	X		135			5.2	
HATCHBOX	X		800	520		68.3	10
BLANK FLANGE	X					3.5	16
SPLIT PUDDLE FLANGE	X		110			11.5	
FLANGE SPIGOT	X		350			7.8	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

100mm Flanged Fittings

Description	Series A	Series B	Dimensons			Weight kg	Working Pressure Bar
			L mm	H mm	A mm		
BENDS							
90°	X		180			11.8	16
90° Duckfoot	X		180			17.8	16
90° Long Radius	X		400			18	16
45°	X		140			11.3	16
30°	X		140			11.3	16
22 1/2°	X		140			11.5	16
11 1/4°	X		140			11.5	16
TEES							
dn 50mm	X		360			14.3	16
dn 80mm	X		360	175		18.4	16
		X	330	170		17.5	16
dn100mm	X		360	180			16
LEVEL INVERT TEE							
dn 80mm	X		306	195		19.5	16
RADIAL TEES	X		580	400		29.5	16
45° ANGLE BRANCH	X		540	405		27	16
CROSS	X		360	180		32.4	16
Y PIPE	X		180			19.3	16
TAPERS							
CONCENTRIC							
dn 50mm	X		200			9	16
dn 80mm	X		200			9.8	16
		X	195			9.7	16
FLAT							
dn 50mm	X		300			9.4	16
dn 80mm	x		200			9.3	16
BELLMOUNTH	X		140			6.3	
HATCHBOX	X		800	535		73.5	10
BLANK FLANGE	X					4.3	16
SPLIT PUDDLE FLANGE	X		110			14.5	
FLANGE SPIGOT	X		360			9.6	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

150mm Flanged Fittings

Description	Series A	Series B	Dimensons		A	Weight	Pressure
			L	H			
BENDS							
90°	X		220			20	16
90° Duckfoot	X		220			30	16
90° Long Radius	X		450			30.1	16
45°	X		160			18.5	16
30°	X		160			20.5	16
22 1/2°	X		160			18.6	16
11 1/4°	X		160			18.6	16
TEES							
dn 50mm	X		440	200		14.3	16
dn 80mm	X		440	205		28.5	16
		X	360	200		28	16
dn100mm	X		440	210		29.5	16
		X	380	205		27.5	16
LEVEL INVERT TEE							
dn 80mm	X		440	220		29.5	16
dn 100mm	X		440	220		30.5	16
RADIAL TEES	X		670	450		48.5	16
45° ANGLE BRANCH	X		640	480		47	16
CROSS	X		440	220		52.7	16
Y PIPE	X		220			32.5	16
TAPERS							
CONCENTRIC							
dn 80mm	X		400			16.4	16
		X	260			13.9	16
dn 100mm	X		300			15.3	16
		X	220			14.5	16
FLAT							
dn 80mm	X		400			16.1	16
dn 100mm	X		300			15	16
BELLMOUTH	X		155			10.1	
HATCHBOX	X		800	550		100	10
BLANK FLANGE	X					7.2	16
SPLIT PUDDLE FLANGE	X		130			23	
FLANGE SPIGOT	X		380			15.6	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

200mm Flanged Fittings

Description	Series A	Series B	Dimensions		A mm	Weight kg	Pressure Bar
			L mm	H mm			
BENDS							
90°	X		260			30.5	16
90° Duckfoot	X		260			30	16
90° Long Radius	X		500			45.4	16
45°	X		180			27	16
30°	X		180			28	16
22 1/2°	X		180			27	16
11 1/4°	X		180			27.5	16
TEES							
dn 80mm	X		520	235		41.5	16
		X	380	225		36	16
dn 100mm	X		520	240		50	16
		X	400	230		41	16
dn150mm	X		520	250		45.5	16
		X	460	245		43.5	16
dn 200mm	X		520	260		49	16
LEVEL INVERT TEE							
dn 80mm	X		520	250		42.5	16
dn 100mm	X		520	250		43.5	16
dn 150mm	X		520	250		48	16
RADIAL TEES	X		760	500		72.5	16
45° ANGLE BRANCH	X		735	560		71	16
CROSS	X		520	260		77.4	16
Y PIPE	X		260			49	16
TAPERS							
CONCENTRIC							
dn 80mm	X		600			26.7	16
dn 100mm	X		600			27.5	16
		X	330			20.1	16
dn 150mm	X		300			21.5	16
		X	235			20.8	16
FLAT							
dn 80mm	X		600			26.7	16
dn 100mm	X		600			27	16
dn 150mm	X		300			21.5	16
BELLMOUTH	X		170			14.8	16
HATCHBOX	X		800	560		107	10
BLANK FLANGE	X					10.8	16
SPLIT PUDDLE FLANGE	X		130			28	
FLANGE SPIGOT	X		400			22.5	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

250mm Flanged Fittings

Description	Series A	Series B	Dimensions		A	Weight	Pressure
			L	H			
BENDS							
90°	X		350			49.5	16
90° Duckfoot	X		350			75	16
90° Long Radius	X		550			65.2	16
45°	X		350			54	16
		X	245			45.8	16
30°	X		230			44	16
22 1/2°	X		350			54.5	16
		X	245			45.2	16
11 1/4°	X		350			55	16
		X	245				16
TEES							
dn 80mm	X		700	265		65	16
		X	405	265		52.1	16
dn 100mm	X		700	275		67	16
		X	425	270		55	16
dn150mm	X		700	300		71	16
		X	485	280		60.4	16
dn 200mm	X		700	260		75	16
		X	540	290		67	16
dn 250mm	X		700	350		81	16
		X	600	300		69.4	16
LEVEL INVERT TEE							
dn 80mm	X		700	275		66	16
dn 100mm	X		700	275		68.5	16
RADIAL TEES	X		900	550		72.5	16
45° ANGLE BRANCH	X		830	640		105	16
CROSS	X		700	350		125	16
Y PIPE	X		350			81	16
TAPERS							
CONCENTRIC							
dn 100mm	X		600			37.5	16
dn 150mm	X		600			38	16
		X	345			29.5	16
dn 200mm	X		300			29.5	16
		X	250			28	16
FLAT							
dn 150mm	X		600			38	16
dn 200mm	X		300			29.5	16
BELLMOUTH	X		190			21	16
HATCHBOX	X		950	675		155	10
BLANK FLANGE	X					16.6	16
SPLIT PUDDLE FLANGE	X		130			37	
FLANGE SPIGOT	X		420			31.5	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

300mm Flanged Fittings

Description	Series A	Series B	Dimensions		A	Weight	Pressure
			L	H			
BENDS							
90°	X		400			70	16
90° Duckfoot	X		400			105	16
90° Long Radius	X		600			89.5	16
45°	X		400			77	16
		X	275			63.2	16
30°	X		255			47	16
22 1/2°	X		400			77.5	16
		X	275			61.5	16
11 1/4°	X		350			78	16
		X	245			61.4	16
TEES							
dn 80mm	X		800	290		91	16
		X	425	295		69.4	16
dn 100mm	X		800	300		93	16
		X	450	300		71.4	16
dn150mm	X		800	325		97	16
		X	505	310		79.4	16
dn 200mm	X		800	350		101	16
		X	565	320		89.2	16
dn 250mm	X		800	375		108	16
		X	620	330		99.1	16
dn 300mm	X		800	400		115	16
		X	680	340		109.1	16
LEVEL INVERT TEE							
dn 80mm	X		800	305		92	16
dn 100mm	X		800	305		95.5	16
dn 150mm	X		800	305		99	16
RADIAL TEES	X		1000	600		146	16
45° ANGLE BRANCH	X		930	715		147	16
CROSS	X		800	400		176.2	16
Y PIPE	X		400			115	16
TAPERS							
CONCENTRIC							
dn 80mm	X		600			41.3	16
dn 100mm	X		600			41.5	16
dn 150mm	X		600			46	16
		X	470			42	16
dn 200mm	X		600			51	16
		X	360			41	16
dn 250mm	X		300			41.5	16
		X	265			39.8	16
FLAT							
dn 100mm	X		600			39.4	16
dn 150mm	X		600			46	16
dn 200mm	X		600			51	16
dn 250mm	X		300			39.5	16
BELLMOUTH	X		210			29	16
HATCHBOX	X		950	685		192.5	10
BLANK FLANGE	X					23.5	16
SPLIT PUDDLE FLANGE	X		130			46	
FLANGE SPIGOT	X		440			42.5	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

350mm Flanged Fittings

Description	Series A	Series B	Dimensions		A	Weight	Pressure
			L	H			
BENDS							
90°	X		450			95.2	16
90° Duckfoot	X		450			145	16
90° Long Radius	X		650			121	16
45°	X		298			83	16
		X	300			83	16
22 1/2°	X		210			68.4	16
11 1/4°	X		191			67.4	16
TEES							
dn 80mm	X		850	325		120	16
		X	445	325		81	16
dn 100mm	X		850	325		122	16
		X	470	330		84	16
dn150mm	X		850	325		126	16
		X	530	340		92	16
dn 200mm	X		850	325		128	16
		X	585	350		99.8	16
dn 250mm	X		850	325		134	16
		X	642	360		109.7	16
dn 300mm	X		850	425		145	16
		X	700	365		118.7	16
dn 350mm	X		850	425		151	16
		X	760	380		133	16
LEVEL INVERT TEE							
dn 80mm	X		850	340		121	16
dn 100mm	X		850	340		123	16
dn 150mm	X		850	340		128	16
RADIAL TEES	X		1100	650		204	16
45° ANGLE BRANCH	X		880	790		168	16
CROSS	X		850	425		231.4	16
TAPERS							
CONCENTRIC							
dn 200mm	X		600			60.9	16
dn 250mm	X		600			67	16
dn 300mm	X		300			54.8	16
		X	290			53.8	16
FLAT							
dn 200mm	X		600			60.5	16
dn 250mm	X		600			67	16
dn 300mm	X		300			52	16
BELLMOUTH	X		225			39	16
HATCHBOX	X		950	705		265	10
BLANK FLANGE	X					33.5	16
SPLIT PUDDLE FLANGE	X		130			50	
FLANGE SPIGOT	X		460			55	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

400mm Flanged Fittings

Description	Series A	Series B	Dimensions		A	Weight	Pressure
			L	H			
BENDS							
90°	X		500			127	16
90° Duckfoot	X		500			189	16
90° Long Radius	X		650			157.4	16
45°	X		324			107	16
		X	325			107	16
22 1/2°	X		324			107	16
11 1/4°	X		324			108	16
TEES							
dn 80mm	X		900	350		152	16
		X	470	355		109	16
dn 100mm	X		900	350		154	16
		X	490	360		119	16
dn150mm	X		900	350		158	16
		X	550	370		121	16
dn 200mm	X		900	350		159	16
		X	610	380		138.8	16
dn 250mm	X		900	350		148.7	16
		X	665	390		148.7	16
dn 300mm	X		900	450		177	16
		X	725	400		158.7	16
dn 350mm	X		900	450		183	16
dn 400mm	X		900	450		191	16
		X	840	420		173	16
LEVEL INVERT TEE							
dn 80mm	X		900	365		153	16
dn 100mm	X		900	365		156	16
dn 150mm	X		900	365		162	16
RADIAL TEES	X		1200	700		264	16
45° ANGLE BRANCH	X		970	870		205	16
CROSS	X		900	450		292	16
TAPERS							
CONCENTRIC							
dn 200mm	X		600			71	16
dn 250mm	X		600			77	16
dn 300mm	X		600			85	16
dn 350mm	X		300			69.9	16
		X	305			70.3	16
FLAT							
dn 300mm	X		600			84	16
dn 350mm	X		300			67	16
BELLMOUTH	X		245			51	16
HATCHBOX	X		1100	820		326	10
BLANK FLANGE	X					44.5	16
SPLIT PUDDLE FLANGE	X		150			62	
FLANGE SPIGOT	X		480			70	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

450mm Flanged Fittings

Description	Series A	Series B	Dimensions		A	Weight	Pressure
			L	H			
BENDS							
90°	X		550			163	16
90° Duckfoot	X		550			261	16
90° Long Radius	X		750			184	16
45°	X		349			132	16
		X	350			135	16
22 1/2°	X		349			135	16
11 1/4°	X		349			135	16
TEES							
dn 80mm	X		950	375		187	16
dn 100mm	X		950	375		188	16
		X	515	390		129	16
dn150mm	X		950	375		196	16
		X	570	400		138.5	16
dn 200mm	X		950	375		199	16
		X	630	410		149	16
dn 250mm	X		950	375		210	16
		X	690	420		160.5	16
dn 300mm	X		950	475		210	16
		X	745	430		173	16
dn 350mm	X		950	475		227	16
dn 400mm	X		950	475		230	16
		X	860	450		203.5	16
dn 450mm	X		950	475		240	16
		X	920	460		220.1	16
LEVEL INVERT TEE							
dn 80mm	X		950	380		188	16
dn 100mm	X		950	380		189	16
dn 150mm	X		950	380		197	16
dn 200mm	X		950	380		202	16
RADIAL TEES	X		1300	750		332	16
45° ANGLE BRANCH	X		1060	950		277	16
CROSS	X		950	475		368	16
TAPERS							
CONCENTRIC							
dn 200mm	X		600			87	16
dn 250mm	X		600			87.5	16
dn 300mm	X		600			95	16
dn 400mm	X		300			86.5	16
		X	320			88.5	16
FLAT							
dn 400mm	X		300			81	16
BELLMOUTH	X		260			63	16
BLANK FLANGE	X					63.5	16
SPLIT PUDDLE FLANGE	X		150			73	
FLANGE SPIGOT	X		500			87	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

500mm Flanged Fittings

Description	Series A	Series B	Dimensions		A	Weight	Pressure
			L	H			
BENDS							
90°	X		600			211	16
90° Duckfoot	X		600			313	16
90° Long Radius	X		800			252.6	16
45°	X		375			175	16
22 1/2°	X		375			176	16
11 1/4°	X		375			177	16
TEES							
dn 80mm	X		1000	400		237	16
dn 100mm	X		1000	400		241	16
		X	535	420		162	16
dn150mm	X		1000	400		243	16
dn 200mm	X		1000	400		245	16
		X	650	440		184	16
dn 250mm	X		1000	400		258	16
dn 300mm	X		1000	500		264	16
dn 350mm	X		1000	500		268	16
dn 400mm	X		1000	500		276	16
		X	885	480		243	16
dn 450mm	X		1000	500		298	16
dn 500mm	X		1000	500		304	16
LEVEL INVERT TEE							
dn 80mm	X		1000	400		237	16
dn 100mm	X		1000	400		241	16
dn 150mm	X		1000	400		248	16
dn 200mm	X		1000	400		255	16
RADIAL TEES	X		1400	800		422	16
45° ANGLE BRANCH	X		1140	1025		353	16
CROSS	X		1000	500		456	16
TAPERS							
CONCENTRIC							
dn 250mm	X		700			130	16
dn 300mm	X		600			134	16
dn 350mm	X		600			141	16
dn 400mm	X		600			159.2	16
dn 450mm	X		300			197.2	16
BELLMOUTH	X		280			82.5	16
BLANK FLANGE	X					79.5	16
SPLIT PUDDLE FLANGE	X		150			85	
FLANGE SPIGOT	X		520			109	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

600mm Flanged Fittings

Description	Series A	Series B	Dimensions		A	Weight	Pressure
			L	H			
BENDS							
90°	X		700			325	16
90° Duckfoot	X		700			481	16
90° Long Radius	X		900			377	16
45°	X		426			266	16
22 1/2°	X		426			269	16
11 1/4°	X		426			268	16
TEES							
dn 80mm	X		1100	450		311.6	16
dn 100mm	X		1100	450		356	16
dn 150mm	X		1100	450		356	16
dn 200mm	X		1100	450		358	16
		X	700	500		267	16
dn 250mm	X		1100	450		360	16
dn 300mm	X		1100	550		375	16
dn 350mm	X		1100	550		380	16
dn 400mm	X		1100	550		387	16
		X	930	540		335	16
dn 450mm	X		1100	550		417	16
dn 500mm	X		1100	550		420	16
dn 600mm	X		1100	550		387	16
		X	1165	580		437	16
LEVEL INVERT TEE							
dn 80mm	X		1100	435		350	16
dn 100mm	X		1100	435		351	16
dn 150mm	X		1100	450		360	16
dn 200mm	X		1100	450		370	16
RADIAL TEES	X		1600	900		730	16
45° ANGLE BRANCH	X		1310	1180		540.7	16
CROSS	X		1100	550		668	16
TAPERS							
CONCENTRIC							
dn 300mm	X		800			171	16
dn 350mm	X		750			174	16
dn 400mm	X		600			172.5	16
dn 450mm	X		600			175	16
dn 500mm	X		600			198.8	16
BELLMOUTH	X		300			122	16
BLANK FLANGE	X					125	16
SPLIT PUDDLE FLANGE	X		165			120	
FLANGE SPIGOT	X		560			159	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

700mm Flanged Fittings

Description	Series A	Series B	Dimensons		A	Weight	Pressure
			L	H			
			mm	mm	mm	kg	Bar
BENDS							
90°	X		800			416	16
90° Duckfoot	X		800			708	16
90° Long Radius	X		1000			484.2	16
45°	X		478			326	16
22 1/2°	X		478			342	16
11 1/4°	X		478			342	16
TEES							
dn 80mm	X		600	390			16
dn 100mm	X		540	510		295	16
dn150mm	X		595	115		296	16
dn 200mm	X		650	525		298	16
dn 300mm	X		780	530		402.5	16
dn 400mm	X		870	555		379	16
dn 450mm	X		920	560		471.7	16
dn 500mm	X		980	670		481	16
dn 600mm	X		1200	685		523	16
dn 700mm	X		1200	600		523	16
RADIAL TEES	X		1800	1000		TBA	16
45° ANGLE BRANCH	X		1970	1430		TBA	16
CROSS	X		1100	550		668	16
TAPERS							
CONCENTRIC							
dn 400mm	X		800			220	16
dn 450mm	X		750			217	16
dn 500mm	X		700			225	16
dn 600mm	X		600			236	16
BELLMOUTH	X		340			154	16
BLANK FLANGE	X					163	16
SPLIT PUDDLE FLANGE	X		165			144	
FLANGE SPIGOT	X		600			194	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings

800mm Flanged Fittings

Description	Series A	Series B	Dimensons		A	Weight	Pressure
			L	H			
BENDS							
90°	X		900			572	16
90° Duckfoot	X		900			974	16
90° Long Radius	X		1100			484.2	16
45°	X		529			442	16
22 1/2°	X		529			445	16
11 1/4°	X		529			445	16
TEES							
dn 100mm	X		580	570		383	16
dn150mm	X		585	575		387	16
dn 200mm	X		690	585		390	16
dn 300mm	X		800	600		443	16
dn 400mm	X		910	615		484	16
dn 450mm	X		980	615		508	16
dn 500mm	X		1020	630		599	16
dn 600mm	X		1350	645		678	16
dn 700mm	X		1350	660		711	16
dn 800mm	X		1350	675		715	16
RADIAL TEES	X		2000	1100		TBA	16
45° ANGLE BRANCH	X		2175	1570		TBA	16
TAPERS							
CONCENTRIC							
dn 450mm	X		900			286	16
dn 500mm	X		800			284	16
dn 600mm	X		700			298	16
dn 700mm	X		600			285	16
BELLMOUTH	X		380			203	16
BLANK FLANGE	X					228	16
SPLIT PUDDLE FLANGE	X		185			189	
FLANGE SPIGOT	X		600			245	16

Fittings available with bitumen, epoxy blue (WRAS) or epoxy red coatings