

**tyco**

*Flow Control*

**Tyco Water**

**TYTON JOINT pipeline fittings are manufactured to AS/NZS 2280.**

### Features

- Ductile Iron fittings for high strength and impact resistance
- Extremely strong and efficient flexible joint
- Suitable for 'in ground' or 'above ground' applications
- All fittings up to and including DN300 are supplied with a thermally bonded polymeric coating for long life corrosion protection.
- Fittings DN375 and above are cement lined/bitumen coated or can be polymeric coated to suit local utility specifications.
- The TYTON® socket profile provides the flexibility of using TYTON gaskets for ductile iron OD compatible pipes, PLASTYT® gaskets for series 1 PVC pipes or TYTON-LOK® gaskets for restrained joints
- Joints can be deflected and permits axial movement to compensate for thermal expansion and contraction



### General Application

TYTON JOINT® pipeline fittings are used in the construction of new pipelines.

Note - Some fittings have been superseded by the AUSLITE range. Please refer to the AUSLITE fittings datasheet for information.

### Technical Data

**Size Range:** DN100 - DN750

**Allowable Operating Pressure:** 1600kpa and 3500 kPa

**Standards:**

AS/NZS 2280 - Ductile iron pressure pipes and fittings

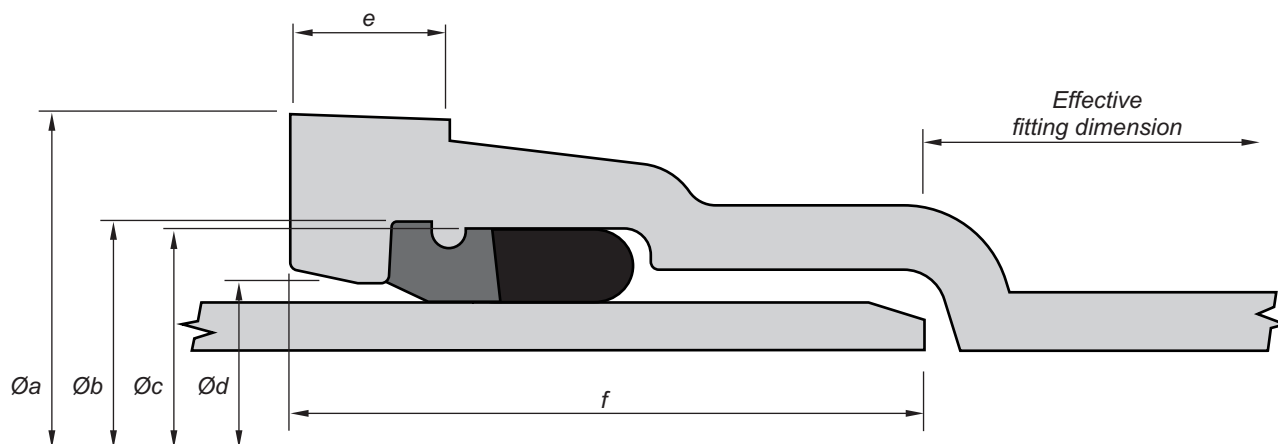
**Certification:**

ProductMark Licence  
PRD/R61/0412/1

Certified to AS 4020 - Suitable for contact with drinking water.

# TYTON JOINT® Pipeline Fittings

DN100 - DN750



## Socket Dimensions

Nominal Size DN	Øa	Øb	Øc	Ød	e	f
*100	180	145.8	143.2	124.7	20	89
*150	235	201.2	198.6	180.1	25	89
200	297	258.4	255.8	235.2	30	113
225	326	285.3	282.7	262.1	30	117
250	353	312.2	309.6	289.0	30	123
300	412	371.6	369.0	348.4	30	123
375	507	463.2	460.6	430.2	35	170
450	589	544.0	541.4	511.0	35	127
500	644	597.3	594.7	564.3	35	127
600	755	704.0	701.4	671.0	35	127
750	925	873.0	866.4	830.0	40	157

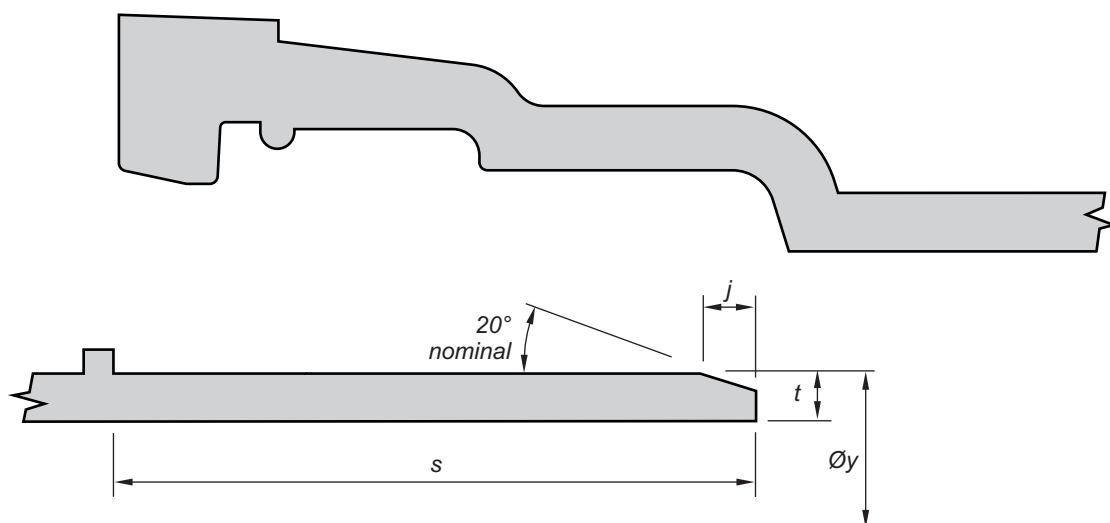
\*Note - please refer to AUSLITE data sheets for AUSLITE socket dimensions.

## Cement Mortar Lining

Nominal Size DN	Thickness Nominal	Thickness Minimum
100 - 300	6mm	4mm
375 - 750	9mm	7mm

# TYTON JOINT® Pipeline Fittings

DN100 - DN750



## Spigot Dimensions

Nominal Size DN	t (min)	j	s	Øy
100	8	10 ±2	102	122 +1/-2
150	9	10 ±2	102	177 +1/-2
200	10	10 ±2	115	232 +1/-2
225	10	10 ±2	115	259 +1/-2
250	10	10 ±2	115	286 +1/-2
300	11	10 ±2	115	345 +1/-2
375	12	16 ±2	140	426 ±2
450	13	16 ±2	140	507 ±2
500	14	16 ±2	140	560 ±2
600	15	16 ±2	140	667 ±2
750	18	20 ±2	170	826 ±2

## TYTON JOINT allowable deflections

Nominal Size DN	Allowable joint deflection
80 - 300	5°
375	4°
450 - 750	3°

# TYTON JOINT® Pipeline Fittings

DN100 - DN750

## Typical Specifying Sequence

Specifying a fusion coated, socketed, DN250 tee with a DN150 branch.

<b>Example</b>	250x250-150	-	SC-SCxSC	TEE	FC
<b>Nominal Size</b>					
<b>Angle (if applicable)</b>					
<b>End Type(s)</b>					
FL - Flange SC - Socket SP - Spigot					
<b>Type of Fitting</b>					
TEE BEND TAPER CONN					
<b>Extra Information</b>					
TC - Figure B5 Flange HP - Figure B6 Flange CL - Cement Lined FC - Fusion Coated					

Specifying a cement lined, bitumen coated, socketed, DN500 x 22.5° bend

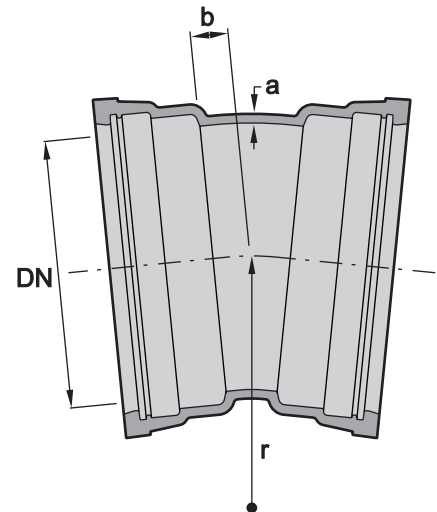
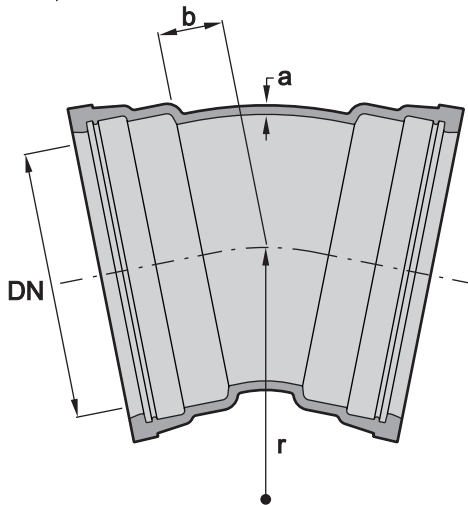
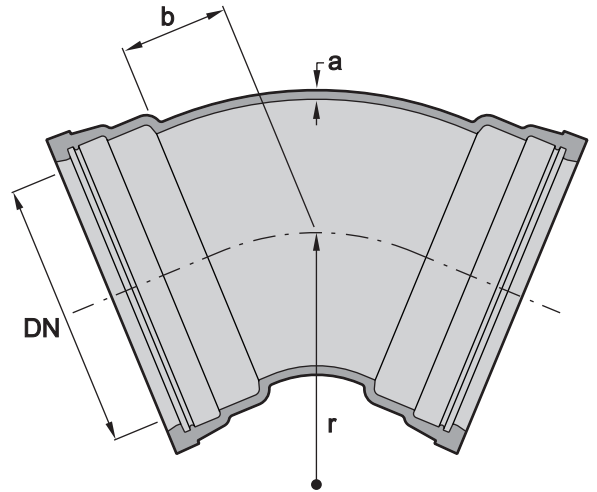
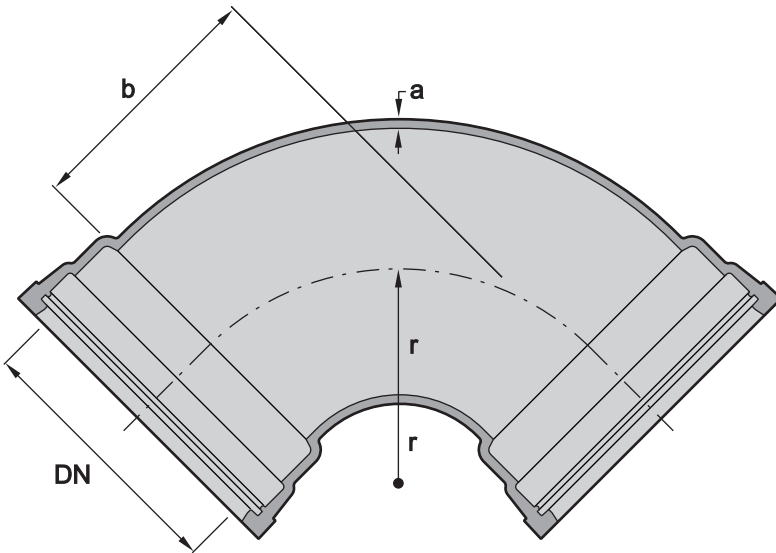
<b>Example</b>	500	22½	SC-SC	BEND	CL
<b>Nominal Size</b>					
<b>Angle (if applicable)</b>					
<b>End Type(s)</b>					
FL - Flange SC - Socket SP - Spigot					
<b>Type of Fitting</b>					
TEE BEND TAPER CONN					
<b>Extra Information</b>					
TC - Figure B5 Flange HP - Figure B6 Flange CL - Cement Lined FC - Fusion Coated					



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TYTON JOINT bends are manufactured to AS/NZS 2280.



Dimensions - Bends (SC-SC)

Nominal Size DN	a	r	Dimension b			
			90°	45°	22½°	11¼°
*100	8	152	165	80	45	30
*150	9	190	205	95	55	35
200	10	203	220	100	55	35
225	10	229	250	115	65	45
250	10	254	275	125	70	45
300	11	305	325	145	80	50
375	12	381	405	185	100	65
450	13	457	480	215	115	70
500	14	508	535	235	125	75
600	15	610	635	280	145	85
750	18	765	795	345	180	105

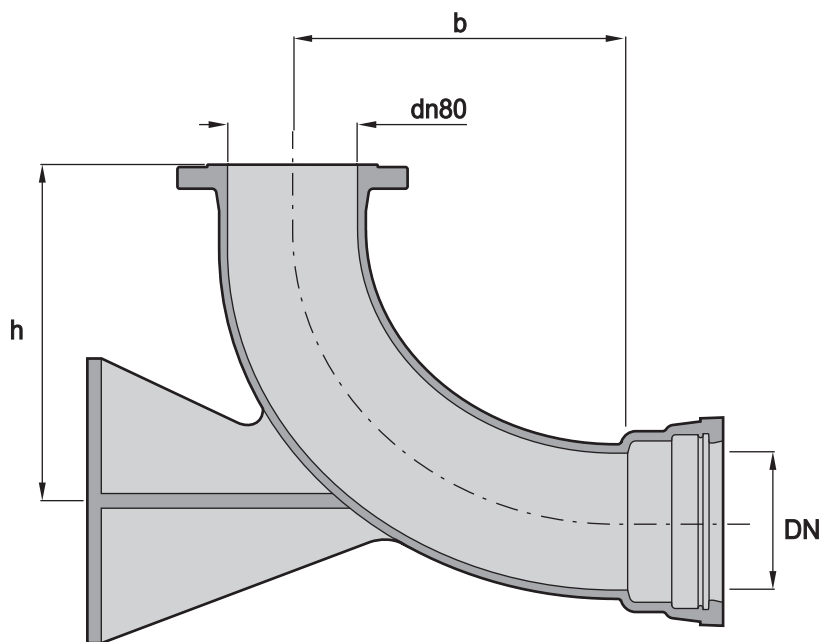
\*Note - Superseded by AUSLITE range for PN16.



Flow Control

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TYTON JOINT hydrant and washout bends are manufactured to AS/NZS 2280 requirements.



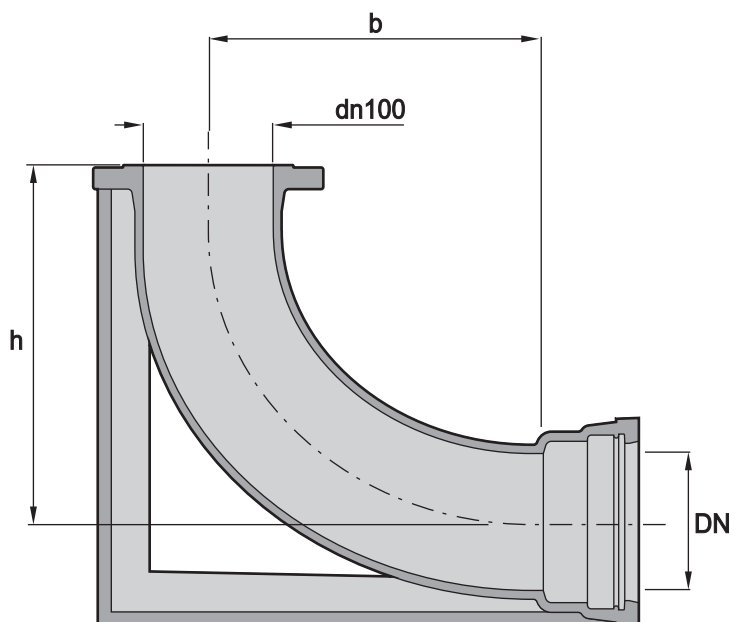
Dimensions - Hydrant bends

Nominal Size DN	Dimensions	
	b	h
100	205	215
150	280	245

Dimensions - Washout bends

Nominal Size DN	Dimensions	
	b	h
*100	195	200
150	160	200

\*Note - Superseded by AUSLITE range for PN16.

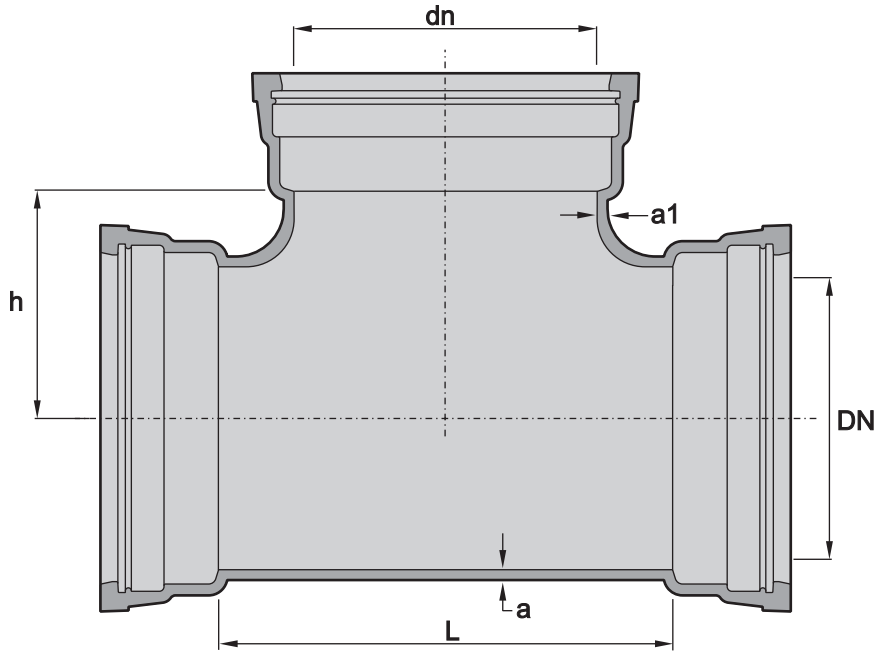




Flow Control

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TYTON JOINT tees are manufactured to AS/NZS 2280.



Dimensions - Tee (SC-SCxSC)

Nominal Size		Dimensions				Nominal Size		Dimensions			
Body DN	Branch dn	a	a1	h	L	Body DN	Branch dn	a	a1	h	L
*100	100	8	8	115	230	375	250	12	10	275	420
*150	100	9	8	145	230	375	300	12	11	285	500
*150	150	9	9	145	290	375	375	12	12	305	610
200	100	10	8	170	230	450	250	13	10	315	420
200	150	10	9	170	290	450	300	13	11	325	500
200	200	10	10	170	340	450	375	13	12	345	610
225	100	10	8	185	240	450	450	13	13	345	690
225	150	10	9	185	300	500	250	14	10	340	420
225	200	10	10	185	350	500	300	14	11	355	500
225	225	10	10	190	380	500	375	14	12	370	610
250	100	10	8	200	240	500	450	14	13	370	690
250	150	10	9	200	300	500	500	14	14	385	770
250	200	10	10	200	350	600	300	15	11	405	500
250	225	10	10	205	380	600	375	15	12	425	610
250	250	10	10	205	410	600	450	15	13	425	690
300	100	11	8	230	240	600	500	15	14	435	770
300	150	11	9	230	300	600	600	15	15	435	870
300	200	11	10	230	350	750	300	18	11	485	510
300	225	11	10	235	380	750	375	18	12	505	620
300	250	11	10	235	410	750	450	18	13	505	700
300	300	11	11	245	490	750	500	18	14	515	780
375	200	12	10	270	360	750	600	18	15	515	880
375	225	12	10	275	390	750	750	18	18	535	1070

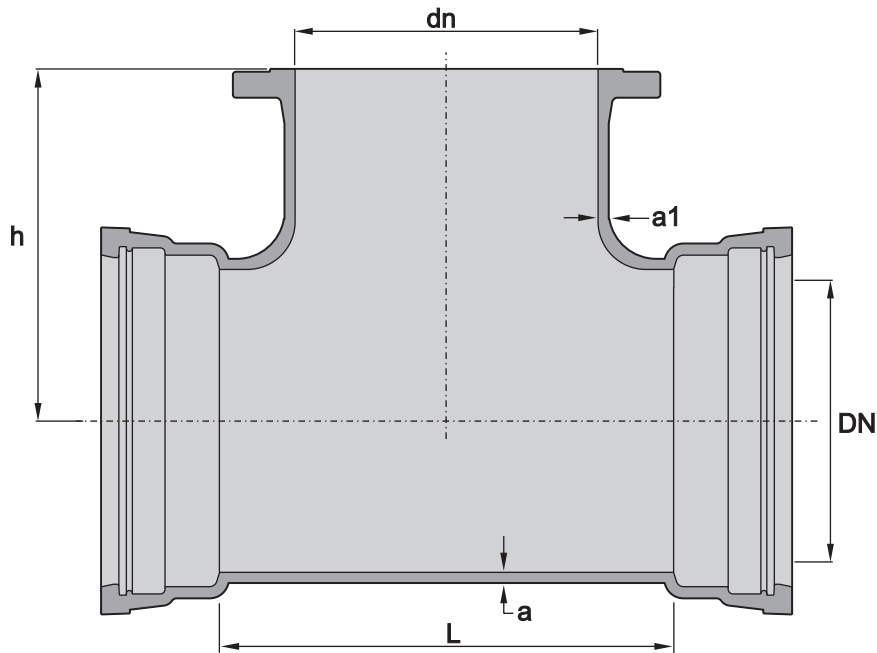
\*Note - Superseded by AUSLITE range for PN16.



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TYTON JOINT tees are manufactured to AS/NZS 2280.



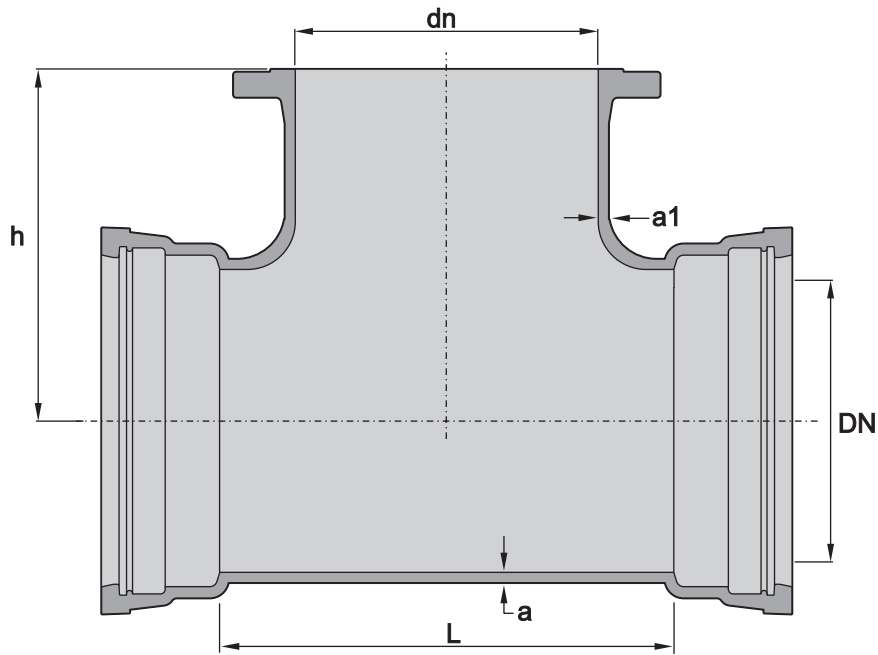
Dimensions - Tee (SC-SCxFL)

Nominal Size		Dimensions				Nominal Size		Dimensions			
Body DN	Branch dn	a	a1	h	L	Body DN	Branch dn	a	a1	h	L
*100	80	8	8	195	210	300	80	11	8	310	220
*100	100	8	8	195	230	300	100	11	8	310	240
*150	80	9	8	225	210	300	150	11	9	335	300
*150	100	9	8	225	230	300	200	11	10	335	350
*150	150	9	9	250	290	300	225	11	10	350	380
200	80	10	8	250	210	300	250	11	10	350	410
200	100	10	8	250	230	300	300	11	11	375	490
200	150	10	9	275	290	375	80	12	8	350	230
200	200	10	10	275	340	375	100	12	8	350	250
225	80	10	8	265	220	375	200	12	10	375	360
225	100	10	8	265	240	375	225	12	10	390	390
225	150	10	9	290	300	375	250	12	10	390	420
225	200	10	10	290	350	375	300	12	11	415	500
225	225	10	10	305	380	375	375	12	12	445	610
250	80	10	8	280	220						
250	100	10	8	280	240						
250	150	10	9	305	300						
250	200	10	10	305	350						
250	225	10	10	320	380						
250	250	10	10	320	410						

\*Note - Superseded by AUSLITE range for PN16.

# TYTON JOINT® Tees (SC-SCxFL)

DN450 - DN750



## Dimensions - Tee (SC-SCxFL)

Nominal Size		Dimensions			
Body DN	Branch dn	a	a1	h	L
450	80	13	8	390	230
450	100	13	8	390	250
450	250	13	10	430	420
450	300	13	11	455	500
450	375	13	12	485	610
450	450	13	13	495	690
500	80	14	8	415	230
500	100	14	8	415	250
500	250	14	10	455	420
500	300	14	11	485	500
500	375	14	12	510	610
500	450	14	13	520	690
500	500	14	14	550	770

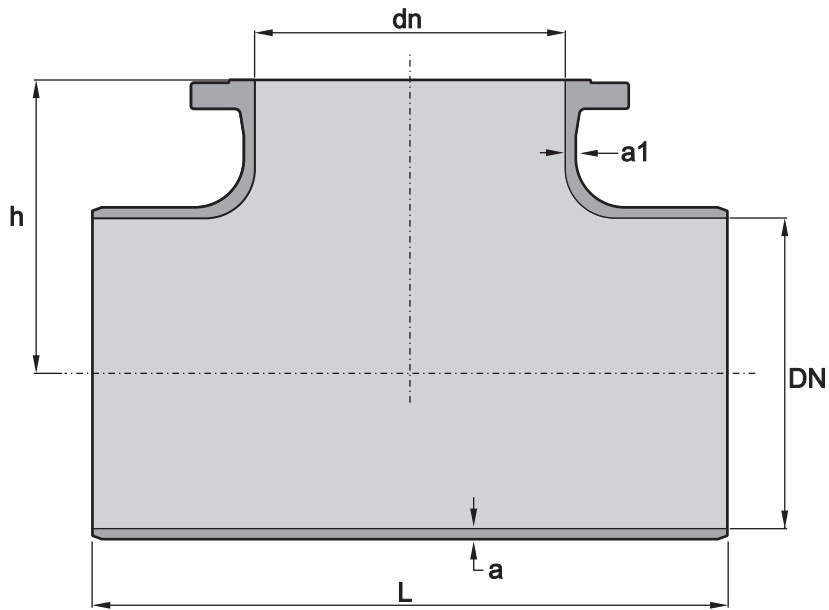
Nominal Size		Dimensions			
Body DN	Branch dn	a	a1	h	L
600	80	15	8	470	230
600	100	15	8	470	250
600	300	15	11	535	500
600	375	15	12	565	610
600	450	15	13	575	690
600	500	15	14	600	770
600	600	15	15	615	870
750	100	18	8	550	260
750	300	18	11	615	510
750	375	18	12	645	620
750	450	18	13	655	700
750	500	18	14	680	780
750	600	18	15	695	880
750	750	18	18	725	1070



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TYTON JOINT tees are manufactured to AS/NZS 2280.



Dimensions - Tee (SP-SPxFL)

Nominal Size		Dimensions			
Body DN	Branch dn	a	a1	h	L
100	80	8	8	178	432
100	100	8	8	178	432
150	80	9	8	203	432
150	100	9	8	203	432
150	150	9	9	203	432
200	80	10	8	241	457
200	100	10	8	241	457
200	150	10	9	241	482
200	200	10	10	241	534
225	80	10	8	254	457
225	100	10	8	254	457
225	150	10	9	254	508
225	200	10	10	254	534
225	225	10	10	254	558
250	80	10	8	267	457
250	100	10	8	267	457
250	150	10	9	267	534
250	200	10	10	267	558
250	225	10	10	267	558
250	250	10	10	267	610
300	80	11	8	305	457
300	100	11	8	305	457
300	150	11	9	305	610

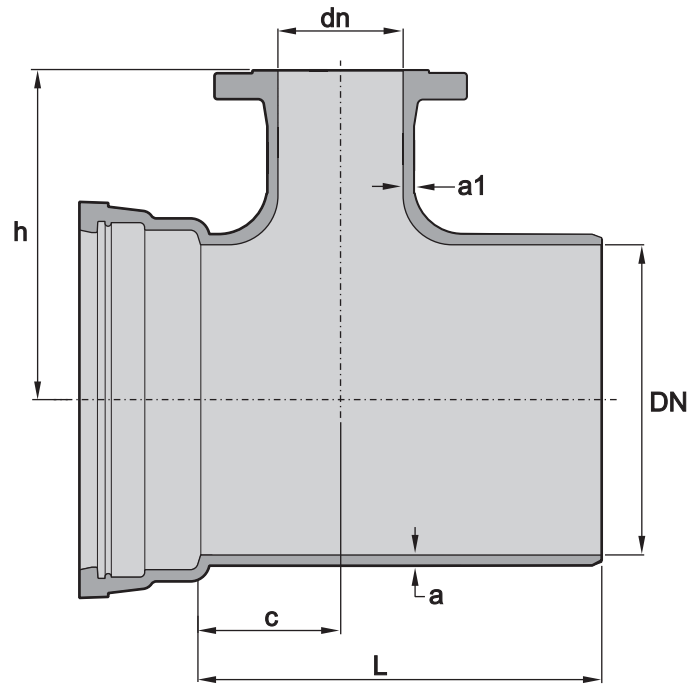
Nominal Size		Dimensions			
Body DN	Branch dn	a	a1	h	L
300	200	11	10	305	636
300	225	11	10	305	636
300	250	11	10	305	636
300	300	11	11	305	660
375	80	12	8	305	559
375	100	12	8	305	559
375	200	12	10	356	736
375	225	12	10	356	736
375	250	12	10	356	736
375	300	12	11	356	736
375	375	12	12	368	812
450	80	13	8	343	559
450	100	13	8	343	559
450	450	13	13	406	888
500	80	14	8	381	584
500	100	14	8	381	584
500	500	14	14	444	940
600	80	15	8	432	584
600	100	15	8	432	584
600	600	15	15	508	1066
750	750	18	18	725	1355



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TYTON JOINT tees are manufactured to AS/NZS 2280.



Dimensions - Tee (SC-SPxFL)

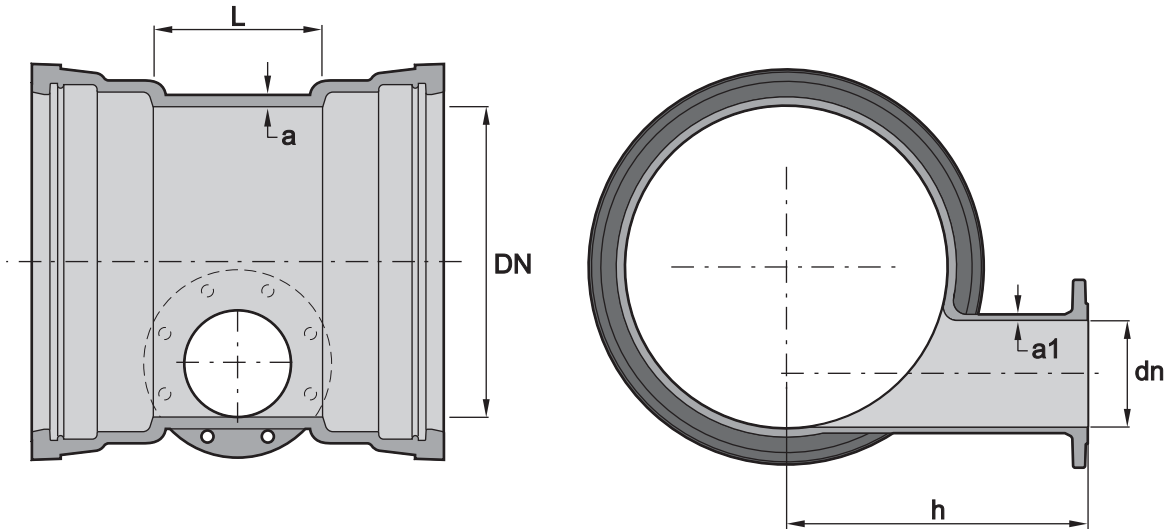
Nominal Size		Dimensions				
Body DN	Branch dn	a	a1	c	h	L
100	80	8	8	105	195	310
100	100	8	8	115	195	335
150	80	9	8	105	225	310
150	100	9	8	115	225	335
200	80	10	8	105	250	325
200	100	10	8	115	250	345
225	80	10	8	110	265	330
225	100	10	8	120	265	350
250	80	10	8	110	280	330
250	100	10	8	120	280	350
300	80	11	8	110	310	330
300	100	11	8	120	310	350
375	80	12	8	115	350	360
375	100	12	8	125	350	380
450	80	13	8	115	390	360
450	100	13	8	125	390	380
500	80	14	8	115	415	360
500	100	14	8	125	415	380
600	80	15	8	115	470	360
600	100	15	8	125	470	380
750	100	18	8	130	550	415



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TYTON JOINT scour tees are manufactured to AS/NZS 2280.



Dimensions - Scour Tee

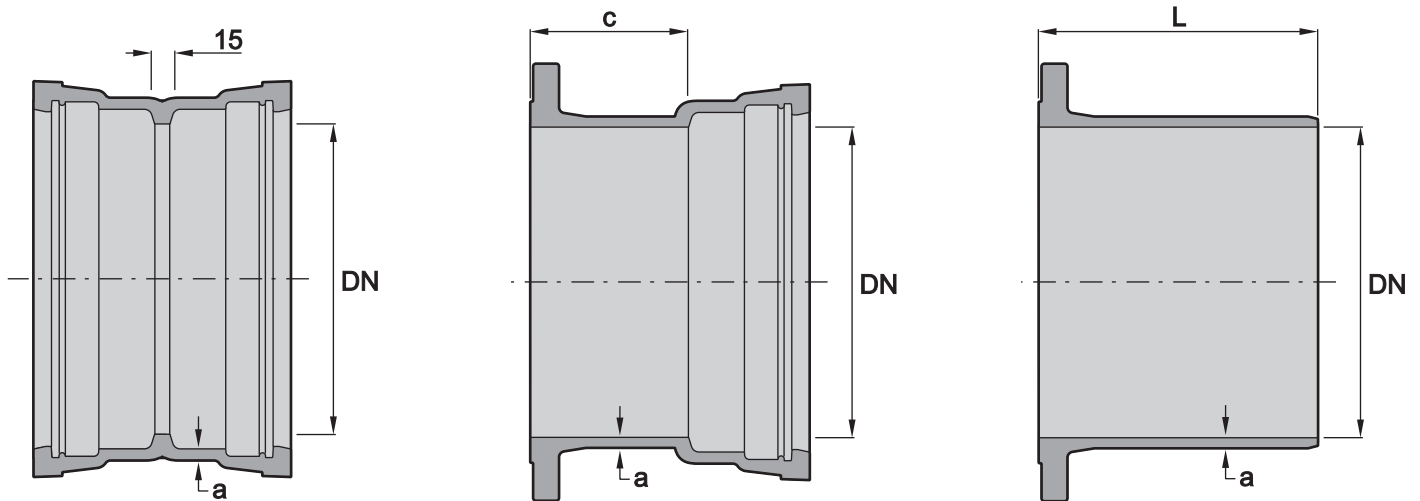
Nominal Size		Dimensions			
Body DN	Branch dn	a	a1	h	L
100	80	8	8	200	200
150	80	9	8	225	210
200	80	10	8	250	210
225	100	10	8	265	240
250	100	10	8	280	240
300	100	11	8	310	240
375	150	12	9	375	310
450	150	13	9	415	310
500	150	14	9	440	310
600	150	15	9	495	310
750	200	18	10	575	370



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**Tyco Water**

TYTON JOINT connectors are manufactured to AS/NZS 2280.



Dimensions - Connectors

Nominal Size DN	Dimensions		
	a	c	L
*100	8	110	205
150	9	135	205
200	10	135	230
225	10	155	230
250	10	155	230
300	11	170	255
375	12	190	280
450	13	200	280
500	14	215	305
600	15	230	330
750	18	250	370

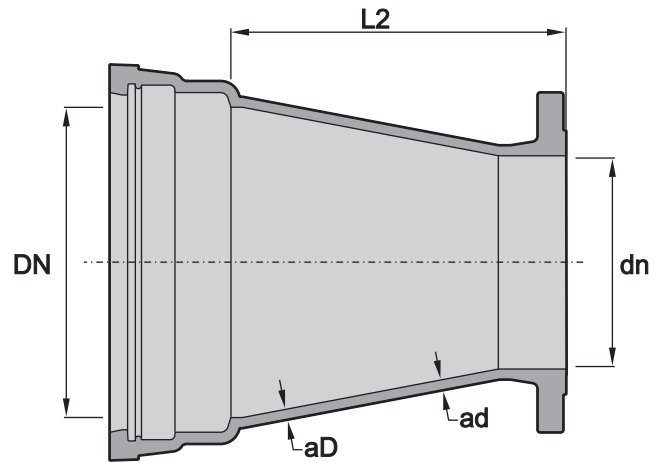
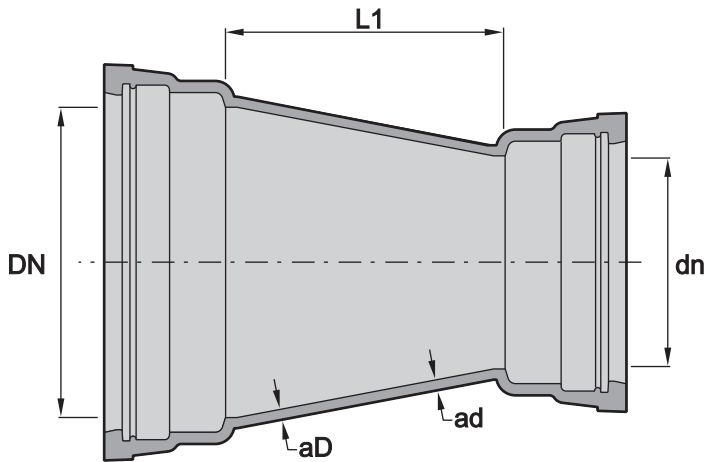
\*Note - Superseded by AUSLITE range for PN16.



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TYTON JOINT tapers are manufactured to AS/NZS 2280.



Dimensions - Tapers

Nominal Size		Dimensions			
Large	Small	aD	ad	L1	L2
DN	dn				
150	100	9	8	170	190
200	100	10	8	295	315
200	150	10	9	170	200
225	100	10	8	365	-
225	150	10	9	235	270
225	200	10	10	110	155
250	100	10	8	425	445
250	150	10	9	300	330
250	200	10	10	175	215
250	225	10	10	115	160
300	100	11	8	555	575
300	150	11	9	425	460
300	200	11	10	300	345
300	225	11	10	240	290
300	250	11	10	180	225
375	200	12	10	495	-

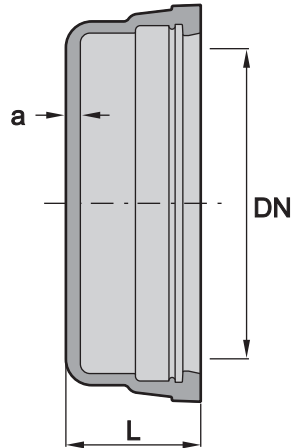
Nominal Size		Dimensions			
Body	Branch	aD	ad	L1	L2
DN	dn				
375	225	12	10	435	485
375	250	12	10	375	420
375	300	12	11	245	305
450	250	13	10	565	610
450	300	13	11	435	495
450	375	13	12	250	310
500	250	14	10	690	740
500	300	14	11	565	-
500	375	14	12	380	440
500	450	14	13	190	255
600	300	15	11	820	875
600	375	15	12	635	-
600	450	15	13	440	510
600	500	15	14	315	400
750	375	18	12	1020	-
750	450	18	13	830	-
750	500	18	14	700	-
750	600	18	15	445	540



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TYTON JOINT caps are manufactured to AS/NZS 2280.



**Dimensions - Caps**

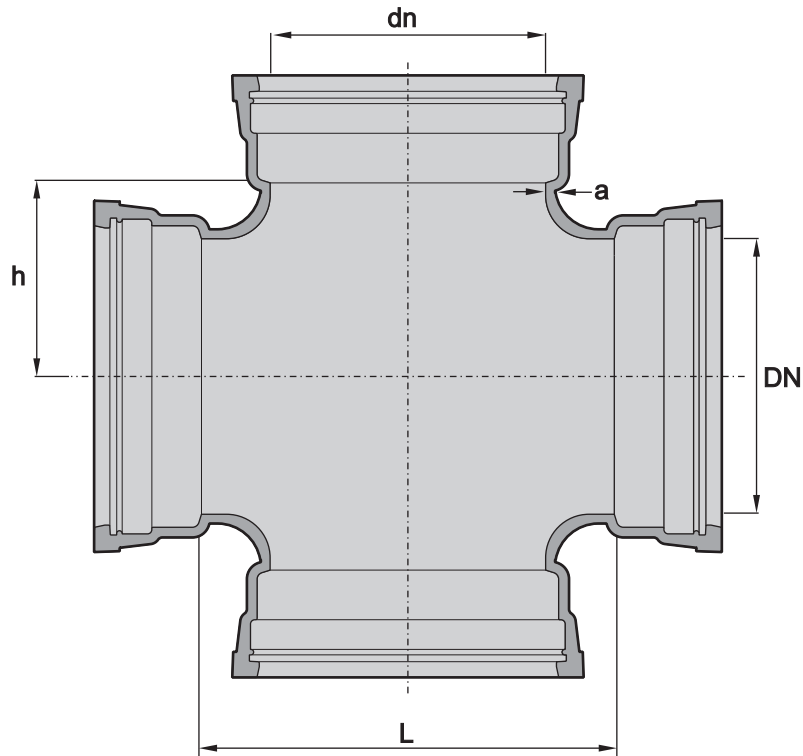
Nominal Size DN	Dimensions	
	a	L
100	18	89
150	18	89
200	18	102
225	19	102
250	20	102
300	23	102
375	25	127
450	26	127
500	27	127
600	30	127
750	33	157



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TYTON JOINT crosses are manufactured in accordance with AS/NZS 2280.



Dimensions - Crosses

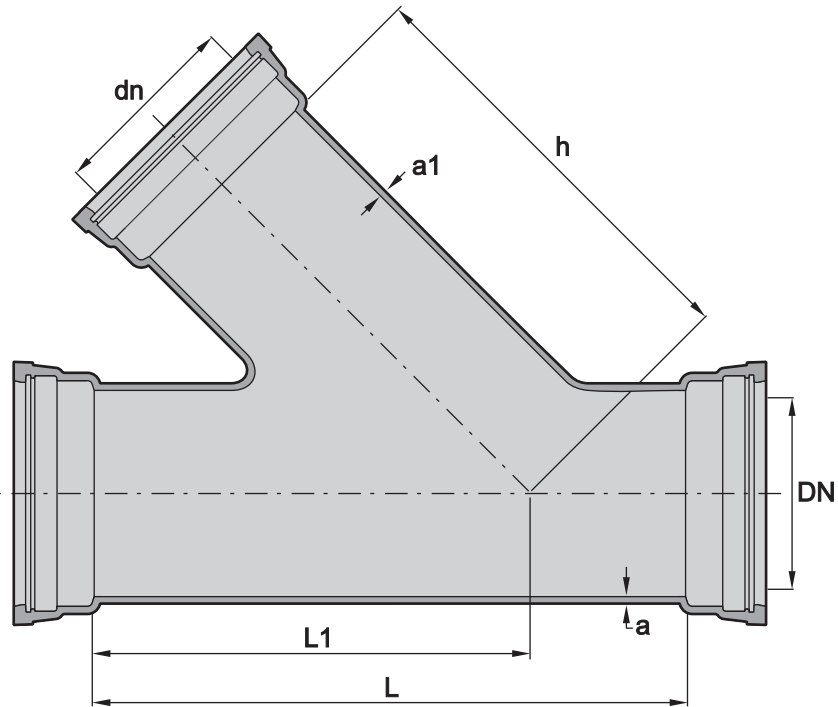
Nominal Size		Dimensions		
Body DN	Branch dn	a	h	L
100	100	8	115	230
150	150	9	145	290
200	200	10	170	340
225	225	10	190	380
250	250	10	205	410
300	300	11	245	490
375	375	12	305	610
450	450	13	345	690
500	500	14	385	770
600	600	15	435	870
750	750	18	535	1070



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TYTON JOINT angle branches are manufactured in accordance with AS/NZS 2280.



Dimensions - Angle Branches

Nominal Size		Dimensions				
Body DN	Branch dn	a	a1	h	L1	L
100	100	8	8	330	330	508
150	100	9	8	330	330	483
150	150	9	9	381	381	559
200	100	10	8	356	356	508
200	150	10	9	406	406	584
200	200	10	10	483	483	686
225	100	10	8	406	406	508
225	150	10	9	457	457	584
225	225	10	10	533	533	737
250	100	10	8	406	406	508
250	150	10	9	432	432	584
250	200	10	10	483	483	686
250	250	10	10	559	559	787
300	100	11	8	432	432	508
300	150	11	9	457	457	584
300	225	11	10	533	533	711
300	250	11	10	584	584	787
300	300	11	11	635	635	864

Nominal Size		Dimensions				
Body DN	Branch dn	a	a1	h	L1	L
375	100			560	734	928
375	150			630	734	928
375	300			760	760	1040
375	375			787	787	1017
450	100			617	660	822
450	150			645	660	822
450	300			775	800	1025
450	375			914	914	1234
450	450			914	914	1184
500	500			1000	1000	1320
600	450			1025	1025	1301
600	600			1165	1165	1465