



## HDPE Fabricated Fittings

Fabricated-fittings\_v002

© Copyright Marley Pipe Systems (Pty) Ltd 2010



an *O*Aliaxis company

# Contents

<b>Dimensions</b>	<b>3</b>
<b>Segmented Bends</b>	<b>3</b>
<b>90° Bend</b>	<b>3</b>
<b>45° Bend</b>	<b>4</b>
<b>Seamless Bends - 45° and 90°</b>	<b>4</b>
<b>Tees</b>	<b>5</b>
<b>Lateral plain ended</b>	<b>5</b>
<b>Machined Reducing Bushes</b>	<b>6</b>
<b>Stub Flange Detail</b>	<b>7</b>
<b>Tak-Stub detail</b>	<b>8</b>
<b>Victualtic Stub Detail</b>	<b>8</b>
<b>Disclaimer</b>	<b>9</b>

# Dimensions

Pipe fittings can be manufactured from pipe in a wide variety of sizes and pressure classes but mostly from 75mm OD upwards and Class 6 or higher. The fittings can be plain ended (for butt welding, electrofusion fittings or compression fittings) or have stubs fitted for flanges or Tak Clamps. Permissible working pressure is 60% of class of pipe used to fabricate fitting. e.g. 10 bar pipe produces a 6 bar fabricated fitting.

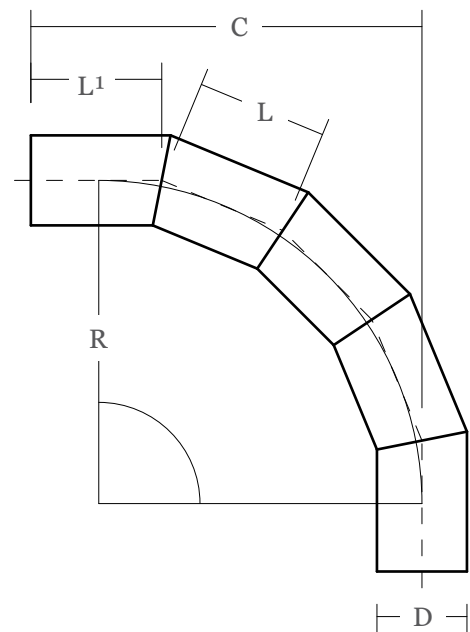


Calculated using PE 100 material.

## Segmented Bends

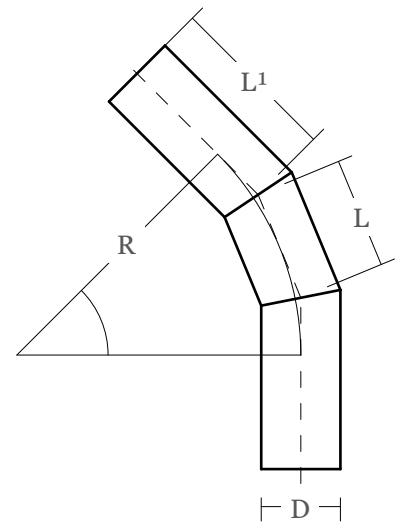
### *90° Bend*

OD mm (D)	L mm	C mm	L <sup>1</sup> mm	R mm
110	155	478	160	395
125	155	478	160	395
140	155	478	160	395
160	155	478	160	395
180	155	478	160	395
200	250	279	280	367
225	250	279	280	367
250	250	279	280	367
280	250	279	280	367
315	250	279	280	367
355	380	1178	400	968
400	380	1178	400	968
450	380	1178	400	968
500	380	1178	400	968
560	470	1450	560	1350
630	590	1800	600	1520



## 45° Bend

OD mm (D)	L mm	L <sup>1</sup> mm	R mm
75	155	238	395
90	155	238	395
110	155	238	395
125	155	238	395
140	155	238	395
160	155	238	395
180	155	238	395
200	250	405	637
225	250	405	637
250	250	405	637
280	250	405	637
315	250	405	637
355	380	590	968
400	380	590	968
450	380	590	968
500	380	590	968
560	470	900	1200
630	590	900	1500



## Seamless Bends - 45° and 90°

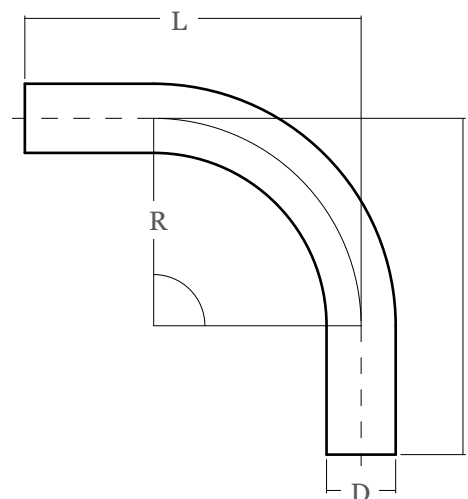
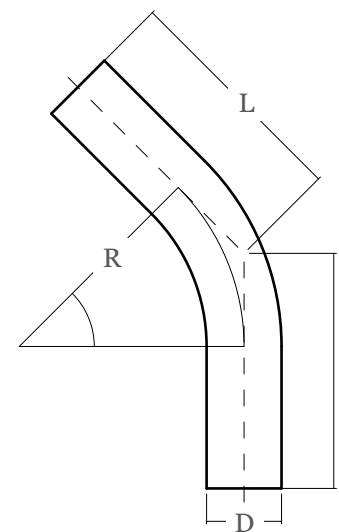
OD (mm) D	R (mm)	45° (mm) L	90° (mm) L
110	330	345	535
125	375	360	580
140	420	380	625
160	480	405	685
180	540	430	745
200	600	455	805
225	675	485	880
250	750	515	955
280	840	555	1045
315	945	585	1150
355	1065	645	1270
400	1200	705	1405
450	1350	765	1555

Sizes 110mm - 280mm: Radius = 2D

315 mm - 450mm: Radius = 3D

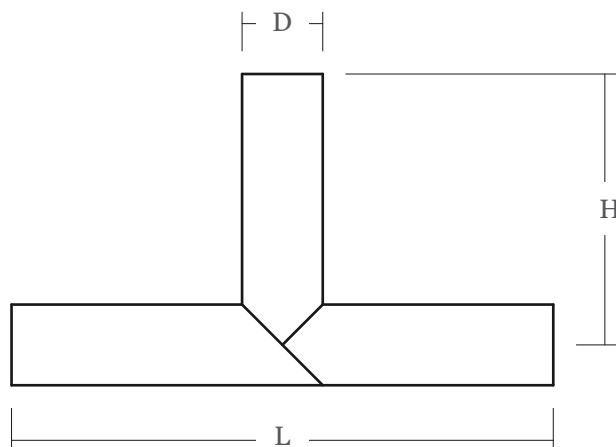
Minimum of SDR 17 for sizes 160mm and greater.

Minimum of SDR11 for smaller sizes.



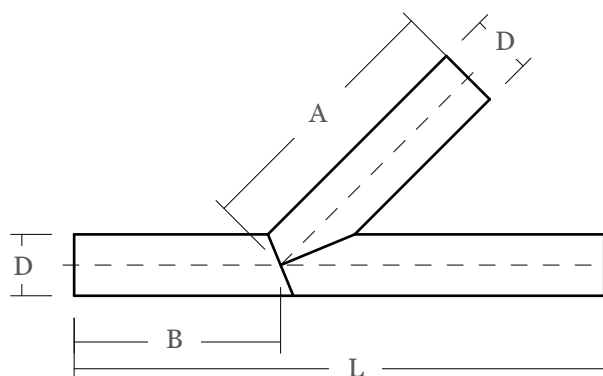
# Tees

OD (mm) D	H (mm)	L (mm)
90	200	400
110	455	910
125	465	930
140	470	940
160	480	960
180	490	980
200	500	1000
225	515	1030
250	525	1050
280	740	1480
315	760	1520
355	780	1560
400	800	1600
450	925	1850
500	950	1900
560	1180	2360
630	1215	2430



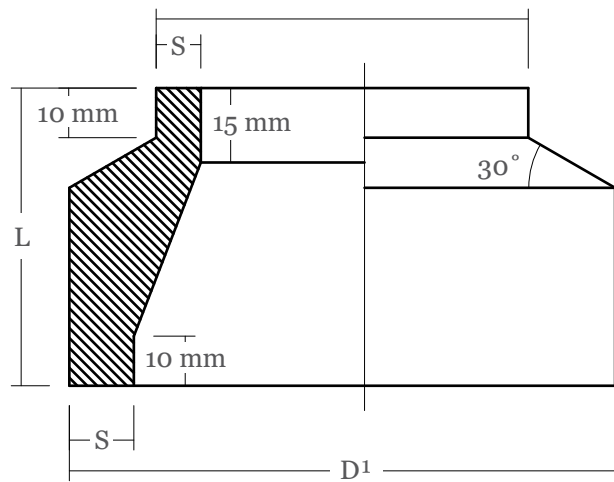
# Lateral plain ended

OD mm (D)	A (mm)	B (mm)	L (mm)
50	200	150	400
63	200	150	400
75	475	370	950 950
90	475	370	950
110	475	370	950
125	475	370	950
140	475	370	950
160	475	370	950
180	875	530	1350
200	875	530	1350
225	875	530	1350
250	875	530	1350
280	900	700	1800
315	900	700	1800
355	900	700	1800
400	900	700	1800
460	1100	870	2200



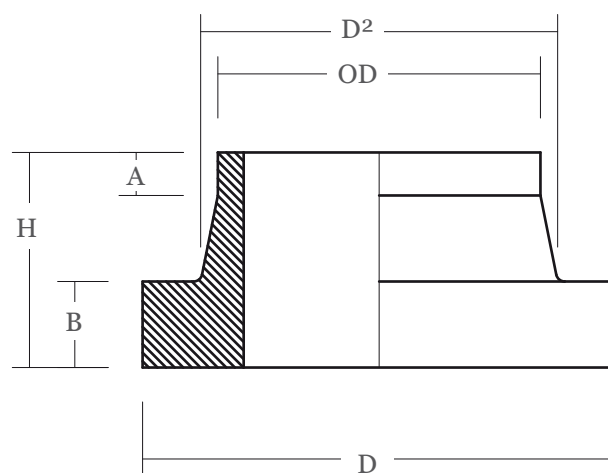
# Machined Reducing Bushes

OD (mm) D <sup>1</sup>	OD (mm) D <sup>2</sup>	L mm
25	20	60
32	20/25	60
40	20/25/32	60
50	25/32/40	60
63	25/32/40/50	60
75	32/40/50/63	60
90	40/50/63/75	60
110	63/75/90	60
125	75/90/110	60
140	90/110/125	80
160	90/110/125/140	80
180	110/125/140/160	80
200	140/160/180	80
225	160/180/200	80
250	180/200/225	80
280	200/225/280	80
315	250/280	80
355	280/315	90
400	315/355	90
450	355/400	90
500	400/450	90



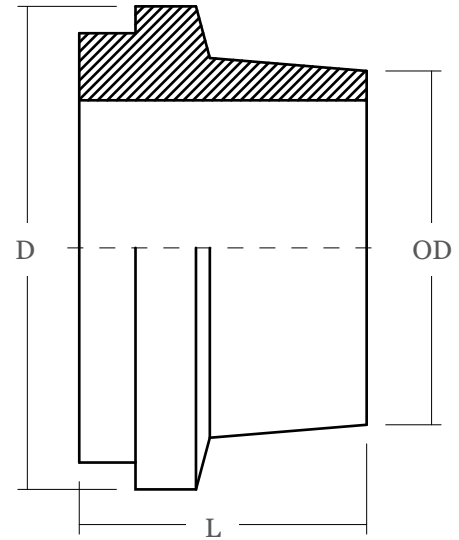
# Stub Flange Detail

Pipe OD	D	A	D <sup>2</sup>	PN 4-10		PN 12-20	
				B	H	B	H
16	46	10	28	15	40	15	40
20	46	10	28	15	40	15	40
25	56	10	36	15	40	15	40
32	65	10	43	20	40	27	60
40	73	10	50	20	50	27	60
50	83	10	60	20	50	27	60
63	98	10	71	20	50	27	60
75	110	10	83	20	50	27	60
90	129	10	100	20	50	27	60
110	158	10	125	25	55	35	75
125	160	10	133	30	60	35	75
140	188	10	155	30	60	35	75
160	217	10	187	35	70	55	100
180	217	10	187	35	70	55	100
200	270	10	234	35	70	55	100
225	270	10	234	45	80	55	100
250	310	10	275	45	80	75	120
280	325	10	289	45	80	75	120
315	375	10	327	50	90	75	120
355	430	10	373	50	90	75	120
400	486	10	426	60	100	75	120
450	540	10	472	60	100	75	120
500	585	10	526	60	100	-	-
560	645	10	588	65	105	-	-
630	725	10	658	65	105	-	-



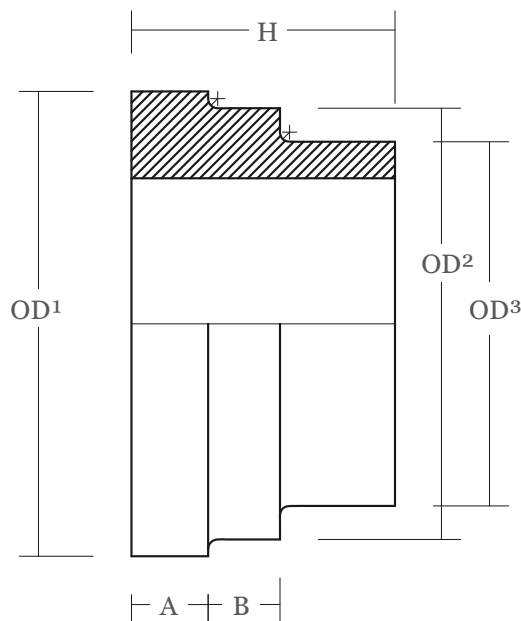
# Tak-Stub detail

Pipe OD	D	Type L <400kPa W (mm)	Type H <1600kPa W (mm)
110	142	-	53
125	167	-	55
140	175	-	60
160	196	52.5	65
180	224	65	65
200	246	-	68
225	272	-	74
250	297	78	75
280	326	-	78



# Victualtic Stub Detail

Pipe OD	Victualtic size	OD <sup>1</sup>	OD <sup>2</sup>	OD <sup>3</sup>	A	B	H	Clamp size
50	63	68.5	60	50.5	16	10	55	2"
63	90	97	90	61	16	15	55	3"
75	90	97	90	76	16	15	55	3"
90	110	124.5	115	91	16.5	15	55	4"
110	110	124.5	115	111	16.5	15	55	4"
125	160	178.5	161	126	17	15	55	6"
140	160	178.5	161	141	17	15	55	6"
160	160	178.5	161	161	17	15	55	6"
180	225	231.5	218	181	21	21	85	8"
200	225	231.5	218	201.5	21	21	85	8"
225	250	286	273	226.5	21	21	85	10"
250	250	286	273	251.5	21	21	85	10"







**Tel: 0861-MARLEY**  
**(0861-627539)**

## **Branches**

**Johannesburg | Bloemfontein | Durban | East London | George | Nelspruit  
Polokwane | Port Elizabeth | Marley Export Division  
Head Office: 1 Bickley Road, Pretoriusstad, Nigel • P.O. Box 67, Nigel, 1490**

**[www.marleypipesystems.co.za](http://www.marleypipesystems.co.za)**

## **Disclaimer**

Whilst every care has been taken in the preparation of this instruction manual, neither Marley Pipe Systems nor any of their agencies can be held liable for any errors in this publication. It should also be noted that this manual is intended for reference only. Due consultation is required when designing for particular applications, and no liability will be entertained in this regard.