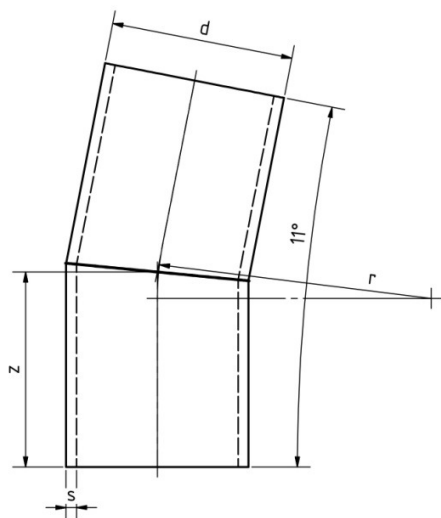


Elbows 90° & 45°'s Moulded with spigots suitable for EF Welding							
All spigots can be extended/pupped to any length							
Dia	SDR 11	Z	≥l	Dia	SDR17	Z	≥l
20	yes	70	45	20	-	-	-
25	yes	63	42	25	-	-	-
32	yes	72	47	32	-	-	-
40	yes	69	44	40	yes	51	-
50	yes	77	50	50	yes	62	-
63	yes	95	56	63	yes	95	56
75	yes	116	70	75	yes	116	72
90	yes	139	78	90	yes	139	78
110	yes	158	86	110	yes	158	80
125	yes	180	90	125	yes	180	82
140	yes	198	119	140	yes	198	119
160	yes	210	98	160	yes	210	98
180	yes	222	110	180	yes	222	116
200	yes	250	125	200	yes	250	93
225	yes	269	134	225	yes	269	117
250	yes	307	119	250	yes	307	109
280	yes	340	200	280	yes	340	200
315	yes	370	150	315	yes	370	149
355	-	-	-	355	yes	351	160
400	-	-	-	400	yes	340	100

We reserve the right to change l & Z measure at any time



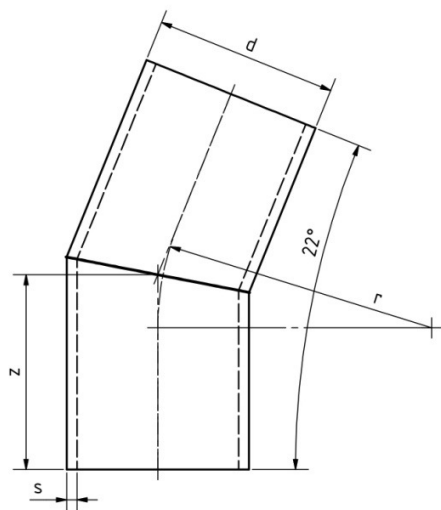
Mitered Bend 11.25° with spigots suitable for EF Coupler Welding

All Bends with standard  $r = 1.5 \times d$

All spigots can be extended/pupped to any length

Dia	SDR11	Z	≥l	Dia	SDR17	Z	≥l
110	12.8Bar	194	150	110	8Bar	194	150
125	12.8Bar	200	150	125	8Bar	200	150
140	12.8Bar	206	150	140	8Bar	206	150
160	12.8Bar	214	150	160	8Bar	214	150
180	12.8Bar	222	150	180	8Bar	222	150
200	12.8Bar	230	150	200	8Bar	230	150
225	12.8Bar	241	150	225	8Bar	241	150
250	12.8Bar	350	250	250	8Bar	350	250
280	12.8Bar	362	250	280	8Bar	362	250
315	12.8Bar	428	300	315	8Bar	428	300
355	12.8Bar	443	300	355	8Bar	443	300
400	12.8Bar	461	300	400	8Bar	461	300
450	12.8Bar	481	300	450	8Bar	481	300
500	12.8Bar	551	350	500	8Bar	551	350
560	12.8Bar	575	350	560	8Bar	575	350
630	12.8Bar	603	350	630	8Bar	603	350
710	12.8Bar	636	350	710	8Bar	636	350
800	12.8Bar	672	350	800	8Bar	672	350
900	12.8Bar	762	350	900	8Bar	762	350
1000	12.8Bar	802	400	1000	8Bar	802	400
1200	12.8Bar	882	400	1200	8Bar	882	400

We reserve the right to change l & Z measure at any time



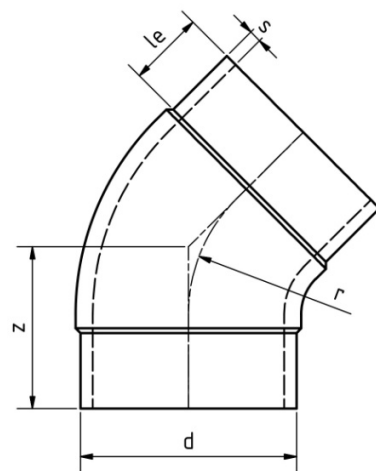
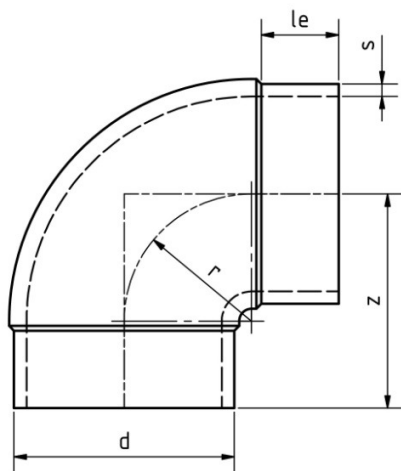
Mitered Bend 22.5° with spigots suitable for EF Coupler Welding

All Bends with standard  $r = 1.5 \times d$

All spigots can be extended/pupped to any length

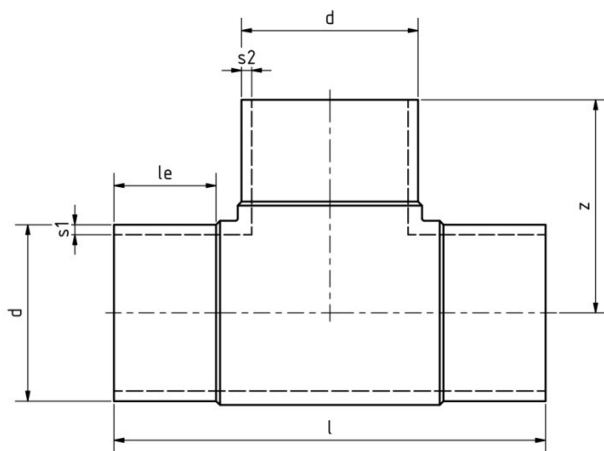
Dia	SDR11	Z	≥l	Dia	SDR17	Z	≥l
110	12.8Bar	194	150	110	8Bar	194	150
125	12.8Bar	200	150	125	8Bar	200	150
140	12.8Bar	206	150	140	8Bar	206	150
160	12.8Bar	214	150	160	8Bar	214	150
180	12.8Bar	222	150	180	8Bar	222	150
200	12.8Bar	230	150	200	8Bar	230	150
225	12.8Bar	241	150	225	8Bar	241	150
250	12.8Bar	350	250	250	8Bar	350	250
280	12.8Bar	362	250	280	8Bar	362	250
315	12.8Bar	428	300	315	8Bar	428	300
355	12.8Bar	443	300	355	8Bar	443	300
400	12.8Bar	461	300	400	8Bar	461	300
450	12.8Bar	481	300	450	8Bar	481	300
500	12.8Bar	551	350	500	8Bar	551	350
560	12.8Bar	575	350	560	8Bar	575	350
630	12.8Bar	603	350	630	8Bar	603	350
710	12.8Bar	636	350	710	8Bar	636	350
800	12.8Bar	672	350	800	8Bar	672	350
900	12.8Bar	762	350	900	8Bar	762	350
1000	12.8Bar	802	400	1000	8Bar	802	400
1200	12.8Bar	882	400	1200	8Bar	882	400

We reserve the right to change l & Z measure at any time



Elbows 90° & 45°'s Moulded with short butt fusion spigots							
All spigots can be extended/pupped to any length							
Dia	SDR 11	Z	≥l	Dia	SDR17	Z	≥l
20	yes	27	3	20	-	-	-
25	yes	32	5	25	-	-	-
32	yes	40	5	32	-	-	-
40	yes	51	7	40	yes	51	7
50	yes	62	7	50	yes	62	7
63	yes	77	8	63	yes	95	8
75	yes	85	10	75	yes	116	10
90	yes	100	10	90	yes	139	10
110	yes	120	10	110	yes	158	10
125	yes	140	15	125	yes	180	15
140	yes	155	15	140	yes	198	15
160	yes	175	15	160	yes	210	15
180	yes	195	15	180	yes	222	15
200	yes	215	15	200	yes	250	15
225	yes	245	20	225	yes	269	20
250	yes	275	25	250	yes	307	25
280	yes	310	30	280	yes	340	30
315	yes	350	35	315	yes	370	35
355	yes	340	40	355	yes	351	40
400	yes	350	50	400	yes	340	50
450	yes	450	50	450	yes	450	50
500	yes	450	50	500	yes	450	50

We reserve the right to change l & Z measure at any time



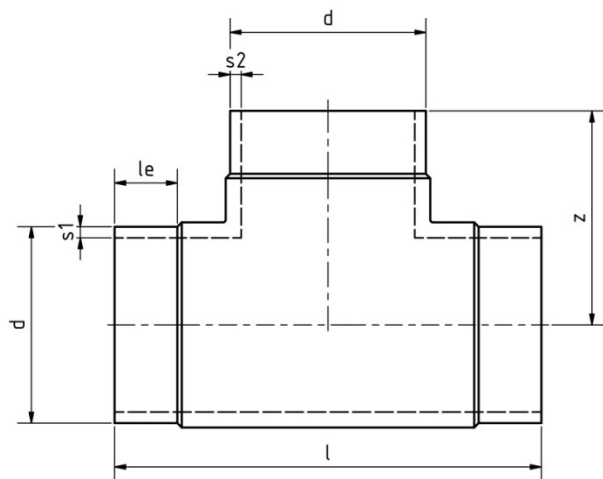
### Equal T with spigots suitable for EF Coupler Welding

We can offer all T's with any size reduced diameter branch

All spigots can be extended/pupped to any length

Dia	SDR 11	Z	≥L	≥l	Dia	SDR17	Z	≥L	≥l
20	yes	55	110	40	20	-	-	-	-
32	yes	69	142	45	32	-	-	-	-
40	yes	80	165	50	40	-	-	-	-
50	yes	87	190	60	50	-	-	-	-
63	yes	104	208	64	63	yes	114	228	70
75	yes	120	240	70	75	yes	120	240	73
90	yes	136	272	80	90	yes	153	306	86
110	yes	151	320	81	110	yes	168	336	95
125	yes	160	322	89	125	yes	177	354	100
140	yes	184	346	92	140	yes	184	346	92
160	yes	193	395	98	160	yes	193	395	98
180	yes	220	438	112	180	yes	233	466	119
200	yes	236	438	113	200	yes	251	502	127
225	yes	236	491	123	225	yes	272	554	138
250	yes	314	628	148	250	yes	314	628	148
280	yes	346	692	160	280	yes	315	607	135
315	yes	318	630	150	315	yes	380	760	170
355	yes	410	820	165	355	yes	410	820	165
400	yes	345	590	95	400	yes	460	915	195
450	yes	485	970	195	450	yes	485	970	195
500	yes	530	1060	130	500	yes	530	1060	215

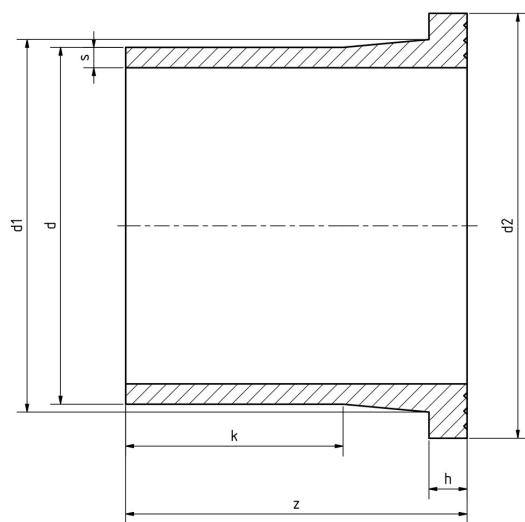
We reserve the right to change Z, L & l measures at any time



Equal T with Butt Fusion Spigots  
All spigots can be extended/pupped to any length

Dia	SDR 11	Z	≥L	≥l	Dia	SDR17	d2	≥L	≥l
20	yes	25	50	8	20	-	-	-	-
25	yes	30	60	10	25	-	-	-	-
32	yes	40	80	12	32	-	-	-	-
40	yes	44	88	16	40	yes	88	50	16
50	yes	58	116	21	50	yes	116	50	21
63	yes	73	146	24	63	yes	146	50	24
75	yes	85	170	28	75	yes	170	50	28
90	yes	100	200	23	90	yes	200	80	23
110	yes	120	240	43	110	yes	240	80	43
125	yes	125	250	26	125	yes	250	80	26
140	yes	140	280	32	140	yes	280	80	32
160	yes	160	320	40	160	yes	320	80	40
180	yes	195	390	73	180	yes	390	80	73
200	yes	215	430	64	200	yes	430	100	64
225	yes	245	490	72	225	yes	490	100	72
250	yes	275	550	86	250	yes	550	100	86
280	yes	310	620	105	280	yes	620	100	105
315	yes	350	700	111	315	yes	700	100	111
355	yes	340	680	101	355	yes	680	120	101
400	yes	338	680	95	400	yes	680	120	95
450	yes	450	900	130	450	yes	900	120	130
500	yes	450	900	130	500	yes	900	120	130
560	yes				560	yes			
630	yes				630	yes			
710	yes				710	yes			
800	yes				800	yes			
900	yes				900	yes			
1000	yes				1000	yes			

We reserve the right to change L & l measures at any time



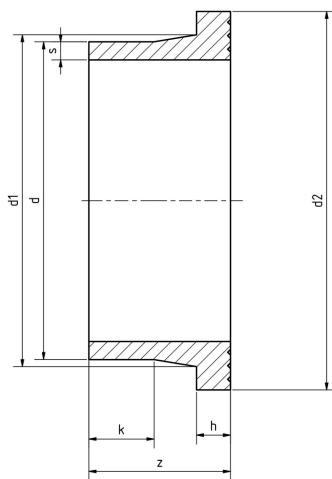
Stub flanges with spigots suitable for EF Coupler welding

All spigots can be extended/pupped to any length

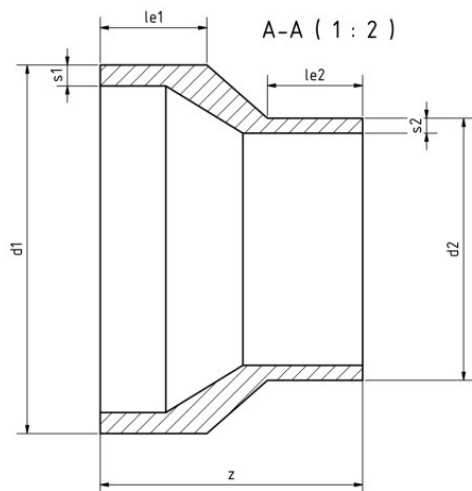
OD	SDR 11	d2	≥L	≥l	OD	SDR17	d2	≥L	≥l
20	yes	45	88	64	20	-	-	-	-
25	yes	58	90	51	25	-	-	-	-
32	yes	68	95	57	32	-	-	-	-
40	yes	78	100	55	40	-	-	-	-
50	yes	88	110	63	50	-	-	-	-
63	yes	102	120	66	63	yes	102	120	66
75	yes	122	130	78	75	yes	122	130	78
90	yes	138	145	84	90	yes	138	145	84
110	yes	158	155	88	110	yes	158	155	88
125	yes	158	170	92	125	yes	158	170	92
140	yes	188	195	102	140	yes	188	195	102
160	yes	212	195	115	160	yes	212	195	115
180	yes	212	200	120	180	yes	212	200	120
200	yes	268	205	124	200	yes	268	205	124
225	yes	268	215	137	225	yes	268	215	137
250	yes	320	205	130	250	yes	320	205	130
280	yes	320	220	140	280	yes	320	220	140
315	yes	370	225	152	315	yes	370	225	152
355	yes	430	255	165	355	yes	430	255	165
400	yes	482	*285	180	400	yes	482	*285	180
450	yes	585	*400	280	450	yes	585	*400	280
500	yes	585	*400	280	500	yes	585	*400	280
560	yes	685	*400	280	560	yes	685	*400	280
630	yes	685	*400	280	630	yes	685	*400	280
710	yes	800	*400	280	710	yes	800	*400	280
800	yes	905	*400	280	800	yes	905	*400	280
900	yes	1005	*400	280	900	yes	1005	*400	280
1000	yes	1110	*400	280	1000	yes	1110	*400	280

\* machined and extended with pipe

We reserve the right to change L & l measure at any time



Stub flanges with butt fusion spigots (short legs)									
All spigots can be extended/pupped to any length									
Dia	SDR 11	d2	≥L	≥l	Dia	SDR17	d2	≥L	≥l
20	yes	45	50	30	20	-	-	-	-
25	yes	58	50	26	25	-	-	-	-
32	yes	68	50	25	32	-	-	-	-
40	yes	78	50	24	40	yes	78	50	24
50	yes	88	50	21	50	yes	88	50	21
63	yes	102	50	16	63	yes	102	50	16
75	yes	122	50	14	75	yes	122	50	14
90	yes	138	80	33	90	yes	138	80	33
110	yes	158	80	27	110	yes	158	80	27
125	yes	158	80	25	125	yes	158	80	42
140	yes	188	80	27	140	yes	188	80	34
160	yes	212	80	34	160	yes	212	80	34
180	yes	212	80	60	180	yes	212	80	60
200	yes	268	100	36	200	yes	268	100	36
225	yes	268	100	46	225	yes	268	100	46
250	yes	320	100	35	250	yes	320	100	35
280	yes	320	100	45	280	yes	320	100	45
315	yes	370	100	35	315	yes	370	100	35
355	yes	430	120	30	355	yes	430	120	30
400	yes	482	120	42	400	yes	482	120	42
450	yes	585	120	14	450	yes	585	120	14
500	yes	585	120	24	500	yes	585	120	24
560	yes	685	120	10	560	yes	685	120	10
630	yes	685	120	30	630	yes	685	120	30
710	yes	800	120	20	710	yes	800	120	20
800	yes	905	120	18	800	yes	905	120	18
900	yes	1005	120	15	900	yes	1005	120	15
1000	yes	1110	120	10	1000	yes	1110	120	10



**Concentric reducers with spigots suitable for EF Coupler welding**

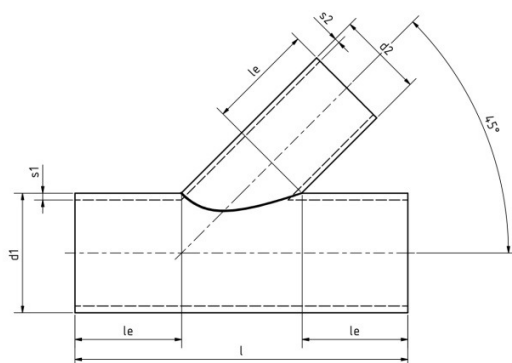
Many sizes also available as eccentric reducers, all available in SDR11, many in SDR17 (and some in SDR33)

All spigots can be extended/pupped to any length

Dia	L	≥I1	≥I2	Dia	L	≥I1	≥I2	Dia	L	≥I1	≥I2
<b>32/20</b>	92	43	39	<b>125/110</b>	200	90	82	<b>225/180</b>	310	130	111
<b>32/25</b>	89	44	37	<b>140/75</b>	230	112	70	<b>225/200</b>	272	124	115
<b>40/20</b>	94	45	36	<b>140/90</b>	230	112	79	<b>250/160</b>	339	138	111
<b>40/25</b>	96	47	35	<b>140/110</b>	230	112	82	<b>250/180</b>	338	137	123
<b>40/32</b>	93	50	39	<b>140/125</b>	211	96	90	<b>250/200</b>	337	137	127
<b>50/25</b>	136	62	48	<b>160/90</b>	217	102	74	<b>250/225</b>	337	137	137
<b>50/32</b>	134	61	50	<b>160/110</b>	223	104	84	<b>280/180</b>	350	146	119
<b>50/40</b>	134	61	56	<b>160/125</b>	231	98	92	<b>280/200</b>	350	146	124
<b>63/32</b>	150	69	50	<b>160/140</b>	217	110	95	<b>280/225</b>	350	146	129
<b>63/40</b>	152	69	55	<b>180/90</b>	237	105	79	<b>280/250</b>	350	146	134
<b>63/50</b>	151	69	60	<b>180/110</b>	270	120	92	<b>315/200</b>	380	180	134
<b>75/63</b>	149	65	59	<b>180/125</b>	278	116	103	<b>315/225</b>	380	157	133
<b>90/50</b>	142	64	49	<b>180/140</b>	270	120	110	<b>315/250</b>	380	157	138
<b>90/63</b>	144	69	55	<b>180/160</b>	277	115	114	<b>315/280</b>	380	157	148
<b>90/75</b>	163	76	61	<b>200/125</b>	283	123	103	<b>355/250</b>	415	172	143
<b>110/63</b>	174	85	63	<b>200/140</b>	275	120	110	<b>355/280</b>	415	172	148
<b>110/75</b>	180	85	57	<b>200/160</b>	252	105	100	<b>355/315</b>	415	172	158
<b>110/90</b>	179	99	93	<b>200/180</b>	272	120	115	<b>400/280</b>	450	187	153
<b>125/63</b>	187	87	61	<b>225/110</b>	312	130	94	<b>400/315</b>	450	187	158
<b>125/75</b>	205	105	76	<b>225/140</b>	295	130	110	<b>400/355</b>	450	187	168
<b>125/90</b>	216	99	86	<b>225/160</b>	312	130	109				

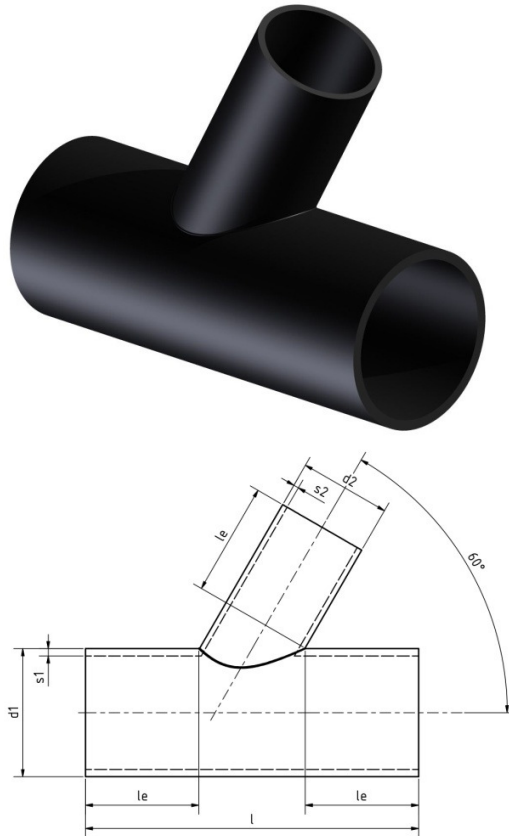
Contact us for any sizes. We do all large sizes as well that are available with short and pupped spigots

We reserve the right to change L, I 1 & I 2 measure at any time



Branch Reduced 45° Branch with spigots suitable for EF Coupler Welding									
All spigots can be extended/pupped to any length									
Dia	SDR 11	Branch	≥Z	≥L	Dia	SDR17	Branch	≥Z	≥L
125	12.8Bar	110	238	471	125	8Bar	110	238	471
140	12.8Bar	110	354	556	140	8Bar	110	354	556
160	12.8Bar	110-125	368	556	160	8Bar	110 & 125	368	556
180	12.8Bar	110-140	382	556	180	8Bar	110-140	382	556
200	12.8Bar	110-160	446	656	200	8Bar	110-160	446	656
225	12.8Bar	110-180	464	656	225	8Bar	110-180	464	656
250	12.8Bar	110-200	532	756	250	8Bar	110-200	532	756
280	12.8Bar	110-225	553	756	280	8Bar	110-225	553	756
315	12.8Bar	110-250	628	856	315	8Bar	110-250	628	856
355	12.8Bar	110-280	656	856	355	8Bar	110-280	656	856
400	12.8Bar	110-315	688	856	355	8Bar	110-315	688	856
450	12.8Bar	110-315	723	856	400	8Bar	110-315	723	856
500	12.8Bar	125-400	743	920	450	8Bar	125-400	743	920
560	12.8Bar	160-450	773	1040	500	8Bar	160-450	773	1040
630	12.8Bar	225-560	828	1000	560	8Bar	225-560	828	1000

We reserve the right to change Z, L & I measures at any time



Branch Reduced 60° Branch with spigots suitable for EF Coupler Welding									
All spigots can be extended/pupped to any length									
Dia	SDR 11	Branch	≥Z	≥L	Dia	SDR17	Branch	≥Z	≥L
125	12.8Bar	110	238	471	125	8Bar	110	238	471
140	12.8Bar	110	354	556	140	8Bar	110	354	556
160	12.8Bar	110-125	368	556	160	8Bar	110 & 125	368	556
180	12.8Bar	110-140	382	556	180	8Bar	110-140	382	556
200	12.8Bar	110-160	446	656	200	8Bar	110-160	446	656
225	12.8Bar	110-180	464	656	225	8Bar	110-180	464	656
250	12.8Bar	110-200	532	756	250	8Bar	110-200	532	756
280	12.8Bar	110-225	553	756	280	8Bar	110-225	553	756
315	12.8Bar	110-250	628	856	315	8Bar	110-250	628	856
355	12.8Bar	110-280	656	856	355	8Bar	110-280	656	856
400	12.8Bar	110-315	688	856	355	8Bar	110-315	688	856
450	12.8Bar	110-315	723	856	400	8Bar	110-315	723	856
500	12.8Bar	125-400	743	920	450	8Bar	125-400	743	920
560	12.8Bar	160-450	773	1040	500	8Bar	160-450	773	1040
630	12.8Bar	225-560	828	1000	560	8Bar	225-560	828	1000

We reserve the right to change Z, L & I measures at any time