

Company Profile

HydroVAR Overview

With the increasing market presence of Thermovar due to its proven quality, it has expanded its line from only catering to PP Random Copolymer for hot and cold water application to offering new product alternatives such as large diameter chilled water Hydrovar HDPE Pipes for Industrial and Mechanical Systems.

Quality Assurance

- HydroVAR - has passed the certification of ISO9001 Quality Management System, ISO 14001 Environment Management System and OHSAS 18001 Occupational Health and Safety Management System.
- Some products have passed the certification of NSF, CSA and SAI.
- HydroVAR - plastic pipes and fittings were awarded China Top Brand.
- HydroVAR - brand was recognized as a China Famous Brand.
- HydroVAR - Inspection Center has gained the Accreditation Certificate of China National Accreditation Board for Laboratories (CNAL).

Superior Customer Service

HydroVAR attaches great importance to pre-sale service, insale service and after-sale service, providing the flexible and best solution to satisfy the various needs of our customers. We continue to value our customers with utmost priority and improving customer service with innovation.



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HDPE Chilled Water Pipe

Product Overview

- **Material:** PE 80 or PE 100
- **Pressure Rating:** 0.4MPa, 0.6MPa, 0.8MPa, 1.0MPa, 1.25MPa, 1.6MPa
- **Size:** full 20mm through 1600mm availability
- **Standard:** ISO4427-2 and BS 6920
- **Colors:** Blue: all size
Black with blue stripes: d_n110 or above
Other colors are also available upon request

Form Supplied: 5.5 meters straight length (all size)
50 or 100 meters coil length (d_n20~d_n63)
Other forms are also available upon request



Advantages

- **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium
- **Corrosion Resistant:** resist chemical matters and electron chemical corrosion
- **Low Flow Resistance:** smooth interior walls and low friction
- **Excellent Flexibility:** can be supplied in coil
- **Easy Installation:** light weight and handed friendly
- **Longevity:** more than 50 years under proper use
- **Various Joint Availability:** socket fusion joint, butt fusion joint, electro fusion joint & transition joint
- **Recycled and Environment-friendly**

Applications

- Municipal water supply
- Commercial & Residential water supply
- Industrial liquids transportation
- Sewage treatment



Properties

Properties		Typical Value
Specific Gravity, g/cm ³ (20°C)		0.941~0.965
Longitudinal Reversion, % (110°C)		≤3
Oxidation Induction Time, min (200°C)		≥20
Extension Rate at Break, %		≤350
Hydraulic Pressure Test	20°C, Hoop Stress is 12.4MPa, 100h	No Failure
	80°C, Hoop Stress is 5.5MPa, 165h	No Failure
	80°C, Hoop Stress is 5.0MPa, 1000h	No Failure

HDPE Water Pipe: HDPE 80 Pipe

SDR 33 (PN 0.4)		
Part Number	d _n (mm)	e _n (mm)
11113	160	4.9
11114	180	5.5
11115	200	6.2
11116	225	6.9
11117	250	7.7
11118	280	8.6
11119	315	9.7
11120	355	10.9
11121	400	12.5
11122	450	13.8
11123	500	15.3
11124	560	17.2
11125	630	19.3
11126	710	21.8
11127	800	24.5

SDR 21 (PN 0.6)		
Part Number	d _n (mm)	e _n (mm)
11309	90	4.3
11310	110	5.3
11311	125	6.0
11313	160	7.7
11314	180	8.6
11315	200	9.6
11316	225	10.8
11317	250	11.9
11318	280	13.4
11319	315	15.0
11320	355	16.9
11321	400	19.1
11322	450	21.5
11323	500	23.9
11324	560	26.7
11325	630	30.0
11326	710	33.9
11327	800	38.1

SDR 17 (PN 0.8)		
Part Number	d _n (mm)	e _n (mm)
11408	75	4.5
11409	90	5.4
11410	110	6.6
11411	125	7.4
11413	160	9.5
11414	180	10.7
11415	200	11.9
11416	225	13.4
11417	250	14.8
11418	280	16.6
11419	315	18.7
11420	355	21.1
11421	400	23.7
11422	450	26.7
11423	500	29.7
11424	560	33.2
11425	630	37.4
11426	710	42.1
11427	800	47.4

SDR 13.6 (PN 1.0)		
Part Number	d _n (mm)	e _n (mm)
11507	63	4.7
11508	75	5.6
11509	90	6.7
11510	110	8.1
11511	125	9.2
11513	160	11.8
11514	180	13.3
11515	200	14.7
11516	225	16.6
11517	250	18.4
11518	280	20.6
11519	315	23.2
11520	355	26.1
11521	400	29.4
11522	450	33.1
11523	500	36.8
11524	560	41.2
11525	630	46.3
11526	710	52.2
11527	800	58.8

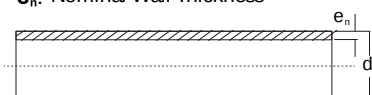
SDR 11 (PN 1.25)		
Part Number	d _n (mm)	e _n (mm)
11603	25	2.3
11604	32	3.0
11605	40	3.7
11606	50	4.6
11607	63	5.8
11608	75	6.8
11609	90	8.2
11610	110	10.0
11611	125	11.4
11613	160	14.6
11614	180	16.4
11615	200	18.2
11616	225	20.5
11617	250	22.7
11618	280	25.4
11619	315	28.6
11620	355	32.2
11621	400	36.3
11622	450	40.9
11623	500	45.4
11624	560	50.8
11625	630	57.2

Coil Pipe			
SDR 13.6 (PN 1.0)			
Part Number	d _n (mm)	e _n (mm)	Length (m/roll)
12507	63	4.7	50

SDR 11 (PN 1.25)			
Part Number	d _n (mm)	e _n (mm)	Length (m/roll)
12603	25	2.3	50/100
12604	32	3.0	50/100
12605	40	3.7	50/100
12606	50	4.6	50
12607	63	5.8	50

SDR: Standard Dimension Rate

PN: Nominal Pressure (unit: MPa)

d_n: Nominal Outside Diametere_n: Nominal Wall Thickness

HDPE Water Pipe: HDPE 100 Pipe

SDR 26 (PN 0.6)		
Part Number	d _n (mm)	e _n (mm)
13210	110	4.2
13211	125	4.8
13213	160	6.2
13214	180	6.9
13215	200	7.7
13216	225	8.6
13217	250	9.6
13218	280	10.7
13219	315	12.1
13220	355	13.6
13221	400	15.3
13222	450	17.2
13223	500	19.1
13224	560	21.4
13225	630	24.1
13226	710	27.2
13227	800	30.6
13228	900	34.4
13229	1000	38.2
13230	1200	46.3
13231	1400	53.9
13232	1600	61.6

SDR 21 (PN 0.8)		
Part Number	d _n (mm)	e _n (mm)
13309	90	4.3
13310	110	5.3
13311	125	6.0
13313	160	7.7
13314	180	8.6
13315	200	9.6
13316	225	10.8
13317	250	11.9
13318	280	13.4
13319	315	15.0
13320	355	16.9
13321	400	19.1
13322	450	21.5
13323	500	23.9
13324	560	26.7
13325	630	30.0
13326	710	33.9
13327	800	38.1
13328	900	42.9
13329	1000	47.7
13330	1200	57.2
13331	1400	66.8

SDR 17 (PN1.0)		
Part Number	d _n (mm)	e _n (mm)
13408	75	4.5
13409	90	5.4
13410	110	6.6
13411	125	7.4
13413	160	9.5
13414	180	10.7
13415	200	11.9
13416	225	13.4
13417	250	14.8
13418	280	16.6
13419	315	18.7
13420	355	21.1
13421	400	23.7
13422	450	26.7
13423	500	29.7
13424	560	33.2
13425	630	37.4
13426	710	42.1
13427	800	47.4
13428	900	53.3
13429	1000	59.3

SDR 13.6 (PN 1.25)		
Part Number	d _n (mm)	e _n (mm)
13507	63	4.7
13508	75	5.6
13509	90	6.7
13510	110	8.1
13511	125	9.2
13513	160	11.8
13514	180	13.3
13515	200	14.7
13516	225	16.6
13517	250	18.4
13518	280	20.6
13519	315	23.2
13520	355	26.1
13521	400	29.4
13522	450	33.1
13523	500	36.8
13525	630	46.3

SDR 11 (PN 1.6)		
Part Number	d _n (mm)	e _n (mm)
13602	20	2.3
13603	25	2.3
13604	32	3.0
13605	40	3.7
13606	50	4.6
13607	63	5.8
13608	75	6.8
13609	90	8.2
13610	110	10.0
13611	125	11.4
13613	160	14.6
13614	180	16.4
13615	200	18.2
13616	225	20.5
13617	250	22.7
13618	280	25.4
13619	315	28.6
13620	355	32.2
13621	400	36.3
13622	450	40.9
13623	500	45.4
13624	560	50.8
13625	630	57.2

Coil Pipe			
SDR 13.6 (PN 1.25)			
Part Number	d _n (mm)	e _n (mm)	Length (m/roll)
14507	63	4.7	50

SDR 11 (PN 1.6)			
Part Number	d _n (mm)	e _n (mm)	Length (m/roll)
14602	20	2.3	50/100
14603	25	2.3	50/100
14604	32	3.0	50/100
14605	40	3.7	50/100
14606	50	4.6	50
14607	63	5.8	50

HDPE Water Pipe Fittings: Socket Fusion Fittings



Features

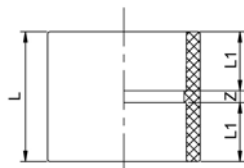
- **Material:** HDPE 100
- **Size:** full 20mm through 110mm availability
- **Pressure Rating:** 1.6MPa, or other nominal pressures available upon request
- **Standard:** prEN 12201-3, ISO4427-3 and AS/NZS 4129
- **Color:** blue (all size)
black (d110)
other colors are also available upon request
- **Joint:** joining pipe and socket fusion fittings by socket fusion joint

Advantages

- **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium
- **Corrosion Resistance:** resist chemical matters and electron chemical corrosion
- **Low Installation Costs:** light weight and ease of installation can reduce installation costs
- **High Flow Capacity:** smooth interior walls result in low pressure loss and high volume
- **Longevity:** more than 50 years under proper use

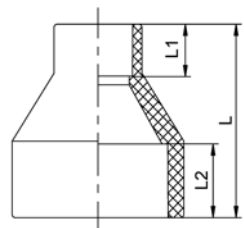
HDPE Water Pipe Fittings: Socket Fusion Fittings

Coupling
Soc X Soc



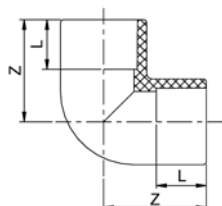
Size (mm)	L (mm)	L1 (mm)	Z (mm)
20	35	16.5	2
25	40	18.5	3
32	44	20.5	3
40	49	23	3
50	54	25.5	3
63	62	29.5	3
75	67	32	3
90	78	37	4
110	93	43.5	6

Reducer
Soc X Soc



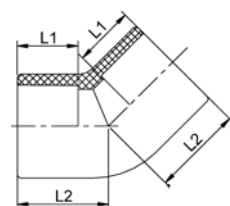
Size (mm)	L (mm)	L1 (mm)	L2 (mm)	Size (mm)	L (mm)	L1 (mm)	L2 (mm)
25x20	39.5	18.5	16.5	75x32	63	32	20.5
32x20	43.5	20.5	16.5	75x40	65	32	23
32x25	44.5	20.5	18.5	75x50	67	32	25.5
40x20	47	23	16.5	75x63	70	32	29.5
40x25	49	23	18.5	90x40	75	37	23
40x32	50.5	23	20.5	90x50	77	37	25.5
50x20	53.73	25.5	16.5	90x63	81	37	29.5
50x25	55	25.5	18.5	90x75	84	37	32
50x32	57	25.5	20.5	110x50	86	43	25.5
50x40	59	25.5	23	110x63	89	43	29.5
63x25	56.65	29	18.5	110x75	92	43	32
63x32	59	29	20.5	110x90	98	43	37
63x40	61	29	23				
63x50	63	29.5	25.5				

90 ° Elbow
Soc X Soc



Size (mm)	L (mm)	L1 (mm)	Z (mm)
20	42	16.5	11.2
25	49	18.5	13.3
32	59.3	20.5	17
40	71.62	23	21.72
50	85.9	25.5	26.72
63	105.1	29.5	33.14
75	121.2	32	38.73
90	144.7	37	47.03
110	176.5	43.5	58.84

45 ° Elbow
Soc X Soc

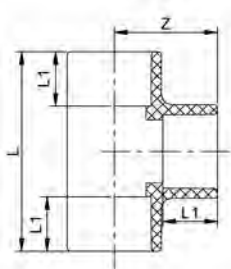


Size (mm)	L (mm)	L1 (mm)	Z (mm)
20	22	16.5	5.5
25	25	18.5	6.5
32	29	20.5	8.5
40	33	23	10
50	37.5	25.5	12
63	44.5	29.5	15
75	51.71	32	19.71
90	69.9	37	23.9
110	72.5	43	29.5

HDPE Water Pipe Fittings: Socket Fusion Fittings

Tee

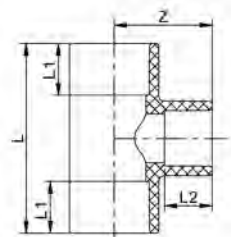
Soc X Soc X Soc



Size (mm)	L (mm)	L1 (mm)	Z (mm)
20	55.8	16.5	11.4
25	64.7	18.5	13.85
32	76.6	20.5	17.8
40	89.4	23	21.7
50	105.6	25.5	27.3
63	126.6	29.5	33.8
75	143	32	39.5
90	170	37	48
110	203	43	58.5

Reducing Tee

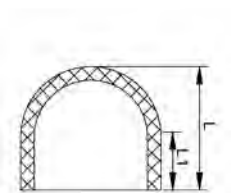
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Size (mm)	L (mm)	L1 (mm)	L2 (mm)	Z1 (mm)	Z2 (mm)	Size (mm)	L (mm)	L1 (mm)	L2 (mm)	Z1 (mm)	Z2 (mm)
25x20	59	18.5	16.5	11	13	75x50	118.6	32	25.5	27.3	39.5
32x20	64	20.5	16.5	11.5	16.5	75x63	131.6	32	29.5	33.8	39.5
32x25	68.5	20.5	18.5	13.75	17	90x40	120.4	37	23	23.2	46.5
40x20	70.8	23	16.5	12.4	21.2	90x50	130.6	37	25.5	28.3	47
40x25	75.7	23	18.5	14.85	21.2	90x63	143.6	37	29.5	34.8	47
40x32	82.6	23	20.5	18.3	21.7	90x75	155	37	32	40.5	47
50x20	75.8	25.5	16.5	12.4	26.3	110x50	142.6	42	25.5	28.3	57
50x25	80.7	25.5	18.5	14.85	26.3	110x63	155.6	42	29.5	34.8	57
50x32	87.6	25.5	20.5	18.3	26.8	110x75	167	42	32	40.5	57
50x40	95.4	25.5	23	22.2	26.8	110x90	182	42	37	48	58.5
63x25	88.7	29.5	18.5	14.85	32.8						
63x32	95.6	29.5	20.5	18.3	33.3						
63x40	103.4	29.5	23	22.2	33.3						
63x50	113.6	29.5	25.5	27.3	33.8						
75x32	100.6	32	20.5	18.3	39						
75x40	108.4	32	23	22.2	39						

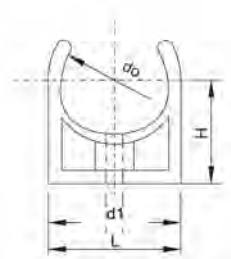
Cap

(Soc)



Size (mm)	L (mm)	L1 (mm)
20	24	16.5
25	27.5	18.5
32	31.5	20.5
40	35.5	23
50	42.5	25.5
63	51.5	29.5

Pipe Clamp



Size (mm)	L (mm)	H (mm)	D (mm)
40			8
50			8
63			8

HDPE Chilled Water Pipe Fittings: Socket Fusion Fittings

Female Thread Adapter

Soc X Fipt with Metal Insert

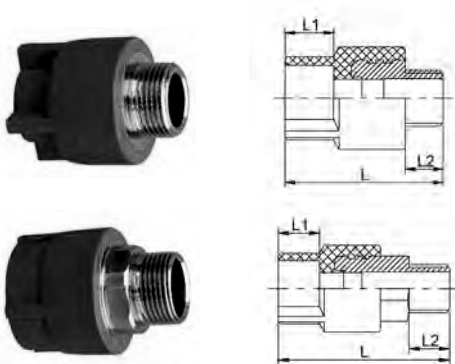


Size (mm)	L (mm)	L1 (mm)	L2 (mm)
20x1/2"	42	16.5	15
20x3/4"	44	16.5	15
25x1/2"	45	18.5	15
25x3/4"	44	18.5	15
25x1"	48	20.5	20.5
32x1/2"	47	20.5	15
32x3/4"	46	20.5	15
32x1"	49	20.5	20.5

Size (mm)	L (mm)	L1 (mm)	L2 (mm)
40x1"	61	23	20.5
40x1 1/4"	66	23	19
50x1 1/4"	68.5	25.5	19
50x1 1/2"	69.5	25.5	19
63x2"	80.5	29.5	22
75x2"	83	32	22

Male Thread Adapter

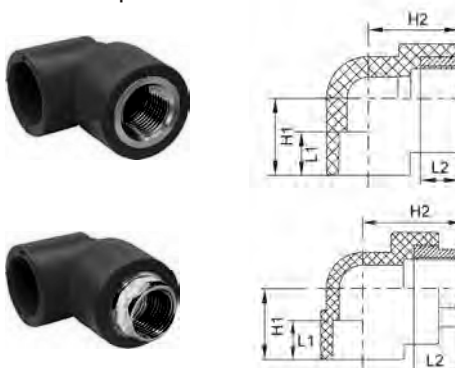
Soc X Mipt with Metal Insert



Size (mm)	L (mm)	L1 (mm)	L2 (mm)
20x1/2"	54	16.5	15
20x3/4"	57	16.5	15
25x1/2"	58	18.5	15
25x3/4"	57	18.5	15
25x1"	67.5	16.5	15
32x1/2"	62	20.5	15
32x3/4"	60	20.5	15
32x1"	78	20.5	20.5
40x1"	73	23	20.5

Female Thread Elbow

Soc X Fipt with Metal Insert



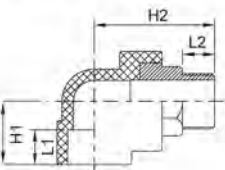
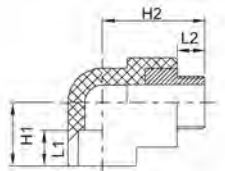
Size (mm)	L1 (mm)	Z1 (mm)	L2 (mm)	Z2 (mm)
20x1/2"	16.5	12.5	15	20
20x3/4"	16.5	13.5	15	21
25x1/2"	18.5	12.5	15	25
25x3/4"	18.5	15.5	15	25
25x1"				
32x1/2"	20.5	13	15	30
32x3/4"	20.5	15	15	30
40x3/4"	23	21.5	15	33.5
50x3/4"	25.5	26.8	15	44.5

Size (mm)	L1 (mm)	Z1 (mm)	L2 (mm)	Z2 (mm)
32x1"	20.5	19	20.5	35.5
40x1"	23	21.5	20.5	38
40x1 1/4"	23	21.5	19	46
50x1"	25.5	26.8	20.5	37.5
50x1 1/4"	25.5	26.8	19	50.5
50x1 1/2"	25.5	26.8	19	52.5
63x1"	29.5	33.1	20.5	49.5
63x1 1/4"	29.5	33.1	19	63.5
63x1 1/2"	29.5	33.1	19	63.5
63x2"	29.5	33.1	22	62.5

HDPE Water Pipe Fittings: Socket Fusion Fittings

Male Thread Elbow

Soc X Mipt with Metal Insert

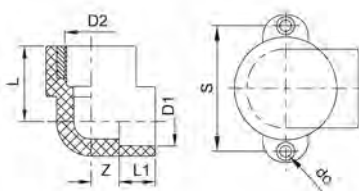


Size (mm)	L1 (mm)	Z1 (mm)	L2 (mm)	Z2 (mm)
20x1/2"	16.5	12.5	15	36
20x3/4"	16.5	13.5	15	36
25x1/2"	18.5	12.5	15	40
25x3/4"	18.5	15.5	15	40
25x1"				
32x1/2"	20.5	13	15	45
32x3/4"	20.5	15	15	45
40x3/4"	23	21.5	15	47.5
50x3/4"	24.5	26.8	15	58.5

Size (mm)	L1 (mm)	Z1 (mm)	L2 (mm)	Z2 (mm)
32x1"	20.5	18	20.5	52.7
40x1"	23	21.5	20.5	65
40x1 1/4"	23	21.5	20.5	59.3
50x1"	25.5	26.8	20.5	58
50x1 1/4"	25.5	26.8	21	69.5
50x1 1/2"	25.5	26.8	23	70.5
63x1"	29.5	33.1	20.5	70
63x1 1/4"	29.5	33.1	21	81.5
63x1 1/2"	29.5	33.1	23	81.5
63x2"	29.5	33.1	26.5	82.5

Female Thread Elbow with Base

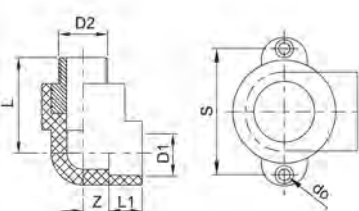
Soc X Fipt with Metal Insert



Size (mm)	L (mm)	L1 (mm)	Z1 (mm)	S (mm)	L2 (mm)	Z2 (mm)
20x1/2"	50	16.5	12.5	39	15	21
20x3/4"	50	16.5	13.5	39	15	21
25x1/2"	57.5	18.5	12.5	47	15	42.5
25x3/4"	57.5	18.5	15.5	47	15	42.5

Male Thread Elbow with Base

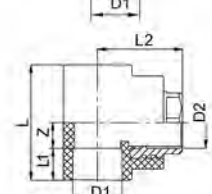
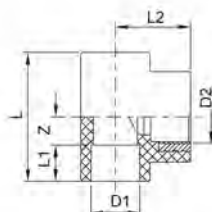
Soc X Mipt with Metal Insert



Size (mm)	L (mm)	L1 (mm)	Z1 (mm)	S (mm)	L2 (mm)	Z2 (mm)
20x1/2"	65	16.5	12.5	39	15	36
20x3/4"	65	16.5	13.5	39	15	36
25x1/2"	72.5	18.5	12.5	47	15	40
25x3/4"	72.5	18.5	15.5	47	15	40

Female Thread Tee

Soc X Fipt with Metal Insert



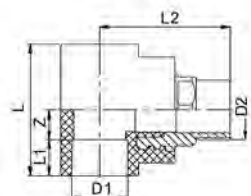
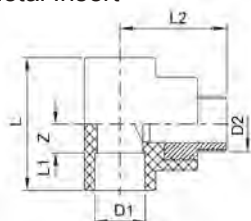
Size (mm)	L (mm)	L1 (mm)	L2 (mm)	Z1 (mm)	Z2 (mm)
20x1/2"	59	16.5	15	13	21
20x3/4"	60	16.5	15	13.5	21
25x1/2"	62	18.5	15	12.5	25
25x3/4"	67	18.5	15	15	25
25x1"					
32x1/2"	68	20.5	15	13.5	29
32x3/4"	72	20.5	15	15.5	30
40x3/4"	76	23	15	15	32

Size (mm)	L (mm)	L1 (mm)	L2 (mm)	Z1 (mm)	Z2 (mm)
32x1"	78	21	20.5	18	35.5

HDPE Water Pipe Fittings: Socket Fusion Fittings

Male Thread Tee

Soc X Mipt with Metal Insert

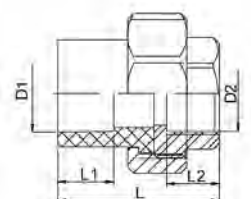


Size (mm)	L (mm)	L1 (mm)	L2 (mm)	Z1 (mm)	Z2 (mm)
20x1/2"	59	16.5	15	13	36
20x3/4"	60	16.5	15	13.5	36
25x1/2"	62	18.5	15	12.5	40
25x3/4"	67	18.5	15	15	40
25x1"					
32x1/2"	68	20.5	15	13	44
32x3/4"	72	20.5	15	15.5	45
40x3/4"	76	23		15	47.5

Size (mm)	L (mm)	L1 (mm)	L2 (mm)	Z1 (mm)	Z2 (mm)
32X1"	78	20.5	20.5	18.5	49.5

Female Thread Union

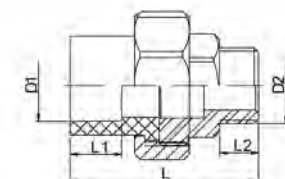
Soc X Fipt with Metal



Size (mm)	L (mm)	L1 (mm)	L2 (mm)
20x1/2"	39	26.5	15
25x3/4"	43.8	18.5	15
32x1"	48	20.5	20.5

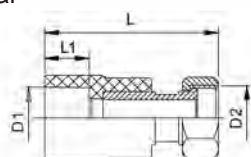
Male Thread Union

Soc X Mipt with Metal



Size (mm)	L (mm)	L1 (mm)	L2 (mm)
20x1/2"	52	16.5	15
25x3/4"	57.5	18.5	15
32x1"	65.5	20.5	20.5

Soc X Fipt with Metal

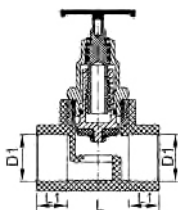


Size (mm)	L (mm)	L1 (mm)	Z (mm)
20x1/2"	68.6	16.5	43.5
20x3/4"	69.1	16.5	43.8
25x1/2"	70.6	18.5	43.5
25x3/4"	71.3	18.5	44
32x1"	79.5	20.5	48.5

HDPE Water Pipe Fittings: Socket Fusion Fittings



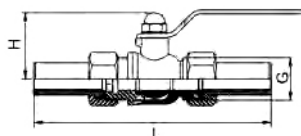
Stop Valve
Soc X Soc



Size (mm)	L (mm)	L1 (mm)
20	70	16.5
25	80	18.5
32	94	20.5
40	95	23
50	115	25.5
63	135	29.5
75	134	32x
90	188	37
110	198	43



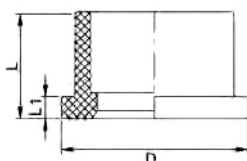
Ball Valve
Spig X Spig



Size (mm)
20
25
32



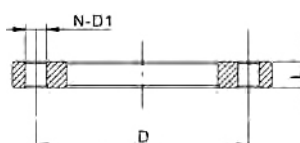
Stub Flange
Soc X Flange



Size (mm)	D1 (mm)	D2 (mm)	L (mm)	L1 (mm)	SDR
75	125	61.4	115	75x	11
90	138	80	127	80	11
110	150	90	130	85	11
125	155	102.2	140	85	11
160	212	130.8	176	100	11
180	201	147.2	156	125	11
200	226	163.6	171	100	11
225	268	184	175	117	11
225					11
250	281	204.6	189	153	11
280	325	236	155	120	13.6
315	356	268	150	104	13.6
355	420	302	200	154	13.6
400	480	348	190	144	17
450					17
500					17
560					17
630					17



Flange
Steel Tray



Size (mm)	L (mm)	L1 (mm)	D1 (mm)	D2 (mm)	D3 (mm)
40	9.6	130	98	57	18
50	10	150	110	68	18
63	11.6	160	125	86	18



Rubber Gasket

Size (mm)	Size (mm)
40	225
50	250
63	280
75	315
90	355
110	400
125	450
160	500
180	560
200	630

Definitions of abbreviated configuration description follow

Soc: Socket
Spig: Spigot

Fipt: Female Iron Pipe Thread
Mipt: Male Iron Pipe Thread

HDPE Water Pipe Fittings: Butt Fusion Fittings



Features

Material: PE 100

Size: full 75mm through 800mm availability

Pressure Rating: 1.0MPa, 1.25MPa, 1.6MPa or other nominal pressures available upon request

Standard: prEN 12201-3, ISO4427-3 and AS/NZS 4129

Color: blue (all size)

black (d_n110 or above)

other colors are also available upon request

Joint: joining pipe and butt fusion fittings by butt fusion joint

Advantages

Non-toxic: no heavy metal additives, would not be covered with dirt or contaminated by bacterium

Corrosion Resistance: resist chemical matters and electron chemical corrosion

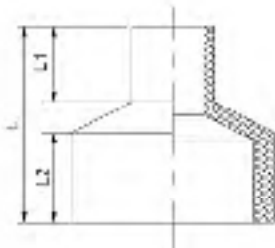
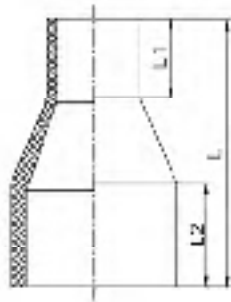
Low Installation Costs: light weight and ease of installation can reduce installation costs

High Flow Capacity: smooth interior walls result in low pressure loss and high volume

Longevity: more than 50 years under proper use

HDPE Water Pipe Fittings: Butt Fusion Fittings

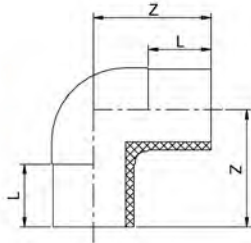
Reducer



Size (mm)	L (mm)	L1 (mm)	L2 (mm)	SDR
75x63	150	70	65	11
90x63	173	80	65	11
90x75	170	80	70	11
110x50	190		65	11
110x63	195	85	70	11
110x75	190	85	75	11
110x90	185	85	80	11
125x50	206	85	65	11
125x63	210	85	70	11
125x75	200	85	70	11
125x90	195	85	80	11
125x110	190	85	85	11
160x63	210	90	65	11
160x75	210	90	70	11
160x90	230	90	80	11
160x110	220	90	85	11
160x125	210	90	85	11
180x110	230	95	85	11
180x160	215	100	90	11
200x110	250	95	75	11
200x160	230	95	90	11
200x180				11
225x160	245	95	90	11
225x200	225	95	95	11
250x110	275	100	75	11
250x160	263	100	90	11
250x200	240	100	95	11
250x225	220	100	95	11
280x160	236	90	90	13.6
280x180	236	90	90	13.6
280x200	230	90	85	13.6
280x225	220	90	90	13.6
280x250				13.6
315x110	240	90	78	13.6
315x160	232	90	85	13.6
315x200	220	90	85	13.6
315x225	213	90	85	13.6
315x250	205	90	85	13.6
315x280	200	90	85	13.6
355x200	240	90	105	13.6
355x225	240	90	112.5	13.6
355x250	230	90	103	13.6
355x280	230	90	108.5	13.6
355x315	150	17.5	104	13.6
400x200	160	90	112	13.6
400x225	260	90	119	13.6
400x250	250	90	117	13.6
400x280	250	90	117.5	13.6
400x315				13.6
400x355				13.6
450x315				17
450x400				17
500x250				17
500x280				17
500x315				17
500x400				17
500x450				17
560x400				17
560x450				17
630x400				17
630x500				17

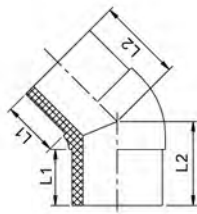
HDPE Water Pipe Fittings: Butt Fusion Fittings

90° Elbow



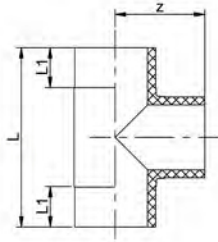
Size (mm)	L (mm)	Z1 (mm)	SDR
75	70	55	11
90	80	65	11
110	85	75	11
125	90	80	11
160	100	100	11
180	105	110	11
200	113	124	11
225	143.5	102.5	11
225	110	130	13.6
250	108	142.5	13.6

45° Elbow



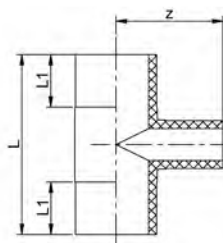
Size (mm)	L (mm)	Z (mm)	SDR
75	70	31.5	11
90	80	36.9	11
110	85	22.2	11
125	90	42	11
160	110	54	11
180	110	63.5	11
200	113	42.6	11
225	128.13	48.83	11
225	110	62.6	13.6
250	108	67.8	13.6

Tee



Size (mm)	L (mm)	L1 (mm)	Z (mm)	SDR
75	250	70	55	11
90	290	80	65	11
110	320	85	75	11
125	340	90	80	11
160	400	100	100	11
180	430	105	110	11
200	474	113	124	11
225	492	125	121	11
225	480	110	130	13.6
250	501	108	142.5	13.6

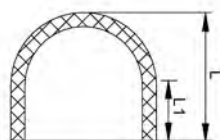
Reducing Tee



Size (mm)	L (mm)	L1 (mm)	L2 (mm)	Z1 (mm)	Z2 (mm)	Size (mm)	L (mm)	L1 (mm)	L2 (mm)	Z1 (mm)	Z2 (mm)
25x20	59	18.5	16.5	11	13	63x50	113.6	29.5	25.5	27.3	33.8
32x20	64	20.5	16.5	11.5	16.5	75x32	100.6	32	20.5	18.3	39
32x25	68.5	20.5	18.5	13.75	17	75x40	108.4	32	23	22.2	39
40x20	70.8	23	16.5	12.4	21.2	75x50	118.6	32	25.5	27.3	39.5
40x25	75.7	23	18.5	14.85	21.2	75x63	131.6	32	29.5	33.8	39.5
40x32	82.6	23	20.5	18.3	21.7	90x40	120.4	37	23	23.2	46.5
50x20	75.8	25.5	16.5	12.4	26.3	90x50	130.6	37	25.5	28.3	47
50x25	80.7	25.5	18.5	14.85	26.3	90x63	143.6	37	29.5	34.8	47
50x32	87.6	25.5	20.5	18.3	26.8	90x75	155	37	32	40.5	47
50x40	95.4	25.5	23	22.2	26.8	110x50	142.6	42	25.5	28.3	57
63x25	88.7	29.5	18.5	14.85	32.8	110x63	155.6	42	29.5	34.8	57
63x32	95.6	29.5	20.5	18.3	33.3	110x75	167	42	32	40.5	57
63x40	103.4	29.5	23	22.2	33.3	110x90	182	42	37	48	58.5
63x50	113.6	29.5	25.5	27.3	33.8						

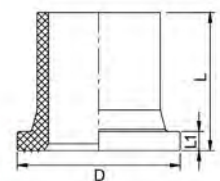
HDPE Water Pipe Fittings: Butt Fusion Fittings

Cap



Size (mm)	H (mm)	H1 (mm)	SDR
315	135	75.6	13.6
355	107	71.6	13.6
400	117	82.2	17
450			17
500			17
560			17
630			17

Stub Flange

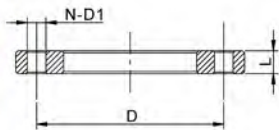


Size (mm)	D1 (mm)	D2 (mm)	L (mm)	L1 (mm)	SDR
75	125	61.4	115	75x	11
90	138	80	127	80	11
110	150	90	130	85	11
125	155	102.2	140	85	11
160	212	130.8	176	100	11
180	201	147.2	156	125	11
200	226	163.6	171	100	11
225	268	184	175	117	11
225					11
250	281	204.6	189	153	11
280	325	236	155	120	13.6
315	356	268	150	104	13.6
355	420	302	200	154	13.6
400	480	348	190	144	17
450					17
500					17
560					17
630					17

HDPE Water Pipe Fittings: Butt Fusion Fittings

Flange

Steel Tray



Size (mm)	D1 (mm)	D2 (mm)	N (mm)	L (mm)
75	145	18	4	12
90	160	18	8	13
110	180	18	8	13
125	180	18	8	13
160	240	23	8	14
180				
200	295	23	12	18
225	295	23	12	18
250	355	25	12	20
280	355	25	12	20
315	410	25	12	22
355	470	15	16	24
400	525	30	16	24
450	585	30	20	24
500	650	34	20	24

Size (mm)	D1 (mm)	D2 (mm)	N (mm)	L (mm)
200	295	23	8	16
225	295	23	8	16
250	350	23	12	18
280	350	23	12	18
315	400	23	12	20
355	460	23	16	20
400	515	25	16	21
450	565	25	20	21
500	620	25	20	22
560				
630				

Rubber Gasket



Size (mm)	Size (mm)
40	225
50	250
63	280
75	315
90	355
110	400
125	450
160	500
180	560
200	630

HDPE Water Pipe Fittings: Electro Fusion Fittings



Features

Material: PE 100

Size: full 20mm through 400mm availability

Pressure Rating: 1.6MPa or other nominal pressures available upon request

Standard: prEN 12201-3, ISO4427-3 and AS/NZS 4129

Color: blue, black or other colors available upon request

Joint: joining pipe and electro fusion fittings by electro fusion joint

Advantages

Non-toxic: no heavy metal additives, would not be covered with dirt or contaminated by bacterium

Corrosion Resistance: resist chemical matters and electron chemical corrosion

Low Installation Costs: light weight and ease of installation can reduce installation costs

High Flow Capacity: smooth interior walls result in low pressure loss and high volume

Longevity: more than 50 years under proper use

HDPE Water Pipe Fittings: Electro Fusion Fittings

E/F Coupling



Part Number	Size (mm)	Qty/Ctn
1310002	20	
1310003	25	320
1310004	32	240
1310005	40	180
1310006	50	120
1310007	63	80
1310008	75	48
1310009	90	32
1310010	110	18
1310011	125	12
1310013	160	6
1310014	180	4
1310015	200	4
1310017	250	2
1310019	315	1
1310021	400	1
1310023	500	

E/F 90° Elbow



Part Number	Size (mm)	Qty/Ctn
1320003	25	240
1320004	32	160
1320005	40	100
1320006	50	60
1320007	63	40
1320008	75	24
1320009	90	16
1320010	110	9
1320011	125	6
1320013	160	4
1320014	180	2
1320015	200	2
1320017	250	
1320019	315	
1320021	400	

E/F Reducer



Part Number	Size (mm)	Qty/Ctn
1310159	40 32	150
1310190	50 32	126
1310191	50 40	100
1310221	63 32	72
1310222	63 40	72
1310223	63 50	70
1310255	75 63	48
1310286	90 63	28
1310287	90 75	28
1310316	110 50	33
1310317	110 63	20
1310318	110 75	
1310319	110 90	24
1310350	125 90	14
1310409	160 50	
1310410	160 63	
1310411	160 75	8
1310412	160 90	6
1310413	160 110	6
1310471	200 50	5
1310472	200 63	
1310473	200 75	
1310474	200 90	4
1310475	200 110	4
1310478	200 160	4
1310534	250 63	
1310535	250 75	
1310536	250 90	
1310537	250 110	
1310540	250 160	
1310542	250 200	
1310604	315 200	1
1310606	315 250	
1310670	400 315	

E/F 45° Elbow



Part Number	Size (mm)	Qty/Ctn
1330004	32	
1330005	40	
1330006	50	80
1330007	63	50
1330008	75	48
1330009	90	20
1330010	110	12
1330011	125	8
1330013	160	4
1330014	180	3
1330015	200	2
1330017	250	1
1330019	315	
1330021	400	

E/F Tee



Part Number	Size (mm)	Qty/Ctn
1340002	20	
1340004	32	120
1340005	40	70
1340006	50	48
1340007	63	30
1340008	75	20
1340009	90	12
1340010	110	7
1340011	125	5
1340013	160	2
1340014	180	2
1340015	200	2
1340017	250	1
1340019	315	
1340021	400	

E/F: Electro Fusion

HDPE Water Pipe Fittings: Electro Fusion Fittings

**E/ F
Reducing
Tee**



Part Number	Size (mm)		Qty/Ctn
1340126	32	20	130
1340127	32	25	130
1340157	40	20	90
1340158	40	25	90
1340159	40	32	90
1340188	50	20	70
1340189	50	25	65
1340190	50	32	60
1340191	50	40	60
1340219	63	20	40
1340220	63	25	40
1340221	63	32	40
1340222	63	40	40
1340223	63	50	36
1340284	90	40	16
1340285	90	50	16
1340286	90	63	15
1340287	90	75	14
1340316	110	50	10
1340317	110	63	10
1340318	110	75	9
1340319	110	90	9
1340348	125	63	6
1340349	125	75	6
1340350	125	90	6
1340351	125	110	6
1340409	160	50	
1340410	160	63	4
1340411	160	75	3
1340412	160	90	3
1340413	160	110	3
1340471	200	50	2
1340472	200	63	2
1340473	200	75	
1340474	200	90	
1340475	200	110	2
1340478	200	160	2
1340533	250	50	
1340534	250	63	
1340535	250	75	
1340536	250	90	
1340537	250	110	1
1340540	250	160	
1340542	250	200	
1340598	315	90	
1340599	315	110	
1340602	315	160	
1340604	315	200	
1340606	315	250	
1340661	400	110	
1340664	400	160	
1340666	400	200	
1340668	400	250	
1340670	400	315	

**E/F Stub
Flange**



Part Number	Size (mm)	Qty/Ctn
1350010	110	20
1350013	160	7
1350015	200	6
1350017	250	3
1350019	315	1
1350021	400	

**E/F Flange
Steel Tray**



Part Number	Size (mm)	Qty/Ctn
1360010	110	
1360013	160	
1360015	200	
1360017	250	
1360019	315	
1360021	400	

**E/F Straight
Saddle**



Part Number	Size (mm)	Qty/Ctn
1370286	90x63	
1370317	110x63	30
1370348	125x63	
1370410	160x63	30
1370472	200x63	
1370474	200x90	12
1370536	250x90	12
1370599	315x110	4
1370602	315x160	3

**E/F Tapping
Saddle**



Part Number	Size (mm)	Qty/Ctn
1380221	63x32	
1380286	90x63	
1380315	110x40	
1380317	110x63	
1380410	160x63	
1380474	200x90	
1380536	250x90	

**E/F Stop
Saddle**



Part Number	Size (mm)	Qty/Ctn
1390009	90	
1390010	110	
1390011	125	
1390013	160	
1390015	200	
1390017	250	
1390019	315	8

HDPE Water Pipe Fitting : Fabricated Fittings



Features

Material: PE 100

Size: full 110mm through 800mm availability

Pressure Rating: 0.6MPa, 1.0MPa, 1.6MPa or other nominal pressures available upon request

Standard: prEN 12201-3 and ISO4427-3

Color: blue, black with blue stripes or other colors available upon request

Angles: various angles available upon request

Joint: joining pipe and fabricated fittings by butt fusion joint

Advantages

Non-toxic: no heavy metal additives, would not be covered with dirt or contaminated by bacterium

Corrosion Resistance: resist chemical matters and electron chemical corrosion

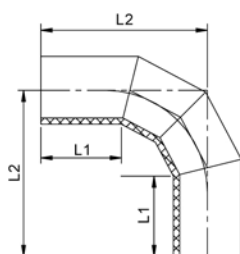
Low Installation Costs: light weight and ease of installation can reduce installation costs

High Flow Capacity: smooth interior walls result in low pressure loss and high volume

Longevity: more than 50 years under proper use

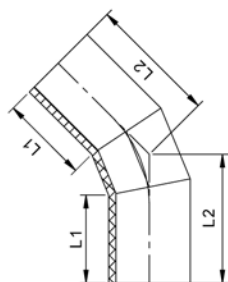
HDPE Water Pipe Fitting : Fabricated Fittings

Fabricated 90° Elbow



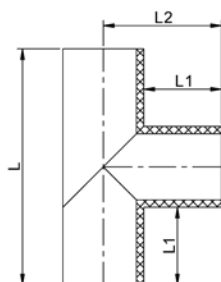
Part Number	Size (mm)	L1	L2	Qty/Ctn
0.6, 10MPa 1.6MPa				
1404014	1406014	180		
1404015	1406015	200		
1404016	1406016	225	210	488
1404017	1406017	250	265	625
1404018	1406018	280		
1404019	1406019	315	374	773
1404020	1406020	355	374	833
1404021	1406021	400	374	900
1404022	1406022	450	410	975
1404023	1406023	500	405	1100
1404024	1406024	560		
1404025	1406025	630	526	1295
1404026	710			
1404027	800			

Fabricated 45° Elbow



Part Number	Size (mm)	L1	L2	Qty/Ctn
0.6, 10MPa 1.6MPa				
1414010	1416010	110	160	218
1414011	1416011	125	160	228
1414013	1416013	160	165	249
1414014	1416014	180		
1414015	1416015	200	180	274
1414016	1416016	225	180	290
1414017	1416017	250	245	362
1414018	1416018	280		
1414019	1416019	315	340	498
1414020	1416020	355	340	520
1414021	1416021	400	363	548
1414022	1416022	450	363	580
1414023	1416023	500	400	950
1414024	1416024	560		
1414025	1416025	630	500	1180

Fabricated Tee



Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1420016	225	150	265	530	
1420017	250	250	350	750	
1420018	280				
1420019	315	300	460	920	
1420020	355	300	480	960	
1420021	400	300	500	1000	
1420022	450	305	530	1060	
1420023	500	350	600	1200	
1420024	560				
1420025	630	350	665	1300	

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

HDPE Water Pipe Fitting : Fabricated Fittings

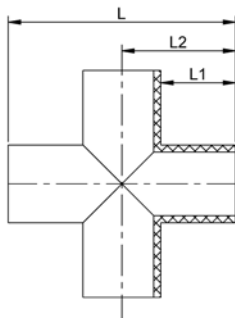
Fabricated Reducing Tee



Part Number	Size (mm)	Qty/Ctn	Part Number	Size (mm)	Qty/Ctn
1420472	200X63		1420659	400X75	
1420473	200X75		1420660	400X90	
1420474	200X90		1420661	400X110	
1420503	225X63		1420662	400X125	
1420504	225X75		1420664	400X160	
1420505	225X90		1420689	450X63	
1420506	225X110		1420690	450X75	
1420534	250X63		1420691	450X90	
1420535	250X75		1420692	450X110	
1420536	250X90		1420693	450X125	
1420537	250X110		1420695	450X160	
1420538	250X125		1420720	500X63	
1420565	280X63		1420721	500X75	
1420566	280X75		1420722	500X90	
1420567	280X90		1420723	500X110	
1420568	280X110		1420724	500X125	
1420569	280X125		1420726	500X160	
1420596	315X63		1420754	560X110	
1420597	315X75		1420757	560X160	
1420598	315X90		1420782	630X63	
1420599	315X110		1420783	630X75	
1420600	315X125		1420784	630X90	
1420602	315X160		1420785	630X110	
1420627	355X63		1420786	630X125	
1420628	355X75		1420788	630X160	
1420629	355X90				
1420630	355X110				
1420631	355X125				
1420633	355X160				
1420658	400X63				

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

Fabricated Cross



Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1430010	110	150	205	410	
1430011	125	150	215	430	
1430013	160	150	230	460	
1430015	200				
1430016	225	150	250	500	
1430017	250	150	265	530	
1430018	280	250	350	750	
1430019	315				
1430020	355	300	460	920	
1430021	400	300	480	960	
1430022	450	300	500	1000	
1430023	500				
1430024	560				
1430025	630				

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

HDPE Water Pipe Fitting : Fabricated Fittings

Fabricated Reducing Tee Assembly



Part Number	Size (mm)	Qty/Ctn	Part Number	Size (mm)	Qty/Ctn
1440471	200x50	2	1440670	400 315	2
1440475	200x110	2	1440671	400 355	2
1440476	200x125	3	1440696	450 180	4
1440478	200x160	2	1440697	450 200	3
1440502	225x50	2	1440698	450 225	3
1440507	225x125	3	1440699	450 250	3
1440509	225x160	2	1440700	450 280	3
1440511	225x200	2	1440701	450 315	2
1440533	250x50	2	1440702	450 355	2
1440540	250x160	2	1440703	450 400	2
1440542	250x200	2	1440727	500 180	5
1440543	250x225	2	1440728	500 200	4
1440571	280x160	2	1440729	500 225	4
1440573	280x200	2	1440730	500 250	4
1440595	315 50	3	1440731	500 280	4
1440603	315 180	3	1440732	500 315	3
1440604	315 200	2	1440733	500 355	3
1440605	315 225	2	1440734	500 400	2
1440606	315 250	2	1440735	500 450	2
1440607	315 280	2	1440760	560 225	4
1440626	355 50	2	1440762	560 280	4
1440634	355 180	4	1440763	560 315	3
1440635	355 200	3	1440789	630 180	6
1440636	355 225	3	1440790	630 200	5
1440637	355 250	3	1440791	630 225	5
1440638	355 280	3	1440792	630 250	5
1440639	355 315	2	1440793	630 280	5
1440657	400 50	3	1440794	630 315	4
1440666	400 200	3	1440795	630 355	4
1440667	400 225	3	1440796	630 400	3
1440668	400 250	3	1440797	630 450	3
1440669	400 280	3	1440798	630 500	2

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

Tools

Pipe Cutter



Part Number	Model	Application Range
1450001	TU 140	50~140
1450002	T3	100~160
1450003	T4	180~315

Rotation Pipe Cutter



Part Number	Model	Application Range
1460001	Pcu90~315	90~315

Tools

Blade Scraper



Part Number	Model	Application Range
1	Small Scraper	1.5"
1	Big Scraper	2.0"

Rotation Scraper



Part Number	Model	Application Range
1	RTC160	50~160
1	RTC315	75~315

Socket Fusion Welding Machine



Part Number	Model	Application Range
1	1000w	20~63
1	1600w	75~110
1	2500w	160

Melting Socket



Part Number	Model	Application Range
1500002		20
1500003		25
1500004		32
1500005		40
1500006		50
1500007		
1500008		75
1500009		
1500010		110
1500013		160

Butt Fusion Welding Machine



Part Number	Model	Application Range
1510001	160	75~160
1510002	250	110~250
1510003	315	160~315
1510004	450	280~450
1510005	630	400~630
1510006	800	630~800

Electro Fusion Welding Machine



Part Number	Model	Application Range
1520001	DRJ-	
1520002	DRJ-	

It can save the data and the data can be printed when connecting to the computer.

Installations: Socket Fusion Joint

(1) Socket Fusion Joint

STEP: Use Socket Fusion Welding Machine



1. Check and measure

- Check the pipe and fittings to see whether they are damaged, and make the incision smooth.
- Measure the depth of socket, mark on the pipe surface.



2. Chamfer

- Chamfer the nozzle, the angle should be 30, the length of surface groove should not exceed 2.0mm.



3. Clean and dry

- Clean and dry the pipe's spigot and the fittings' socket.



4. Heat

- Push the end of the pipe and fittings, without turning, up to the welding depth into the welding machine, heat up the end of the pipe and fittings.



5. Join and cool

- Pull out the pipe and fittings from the welding machine when the scheduled heating is over, insert the pipe's spigot into the fittings' socket evenly and swiftly.
- Not continue the next step until the scheduled cooling is over.

Recommended technical parameter for Socket Fusion Joint

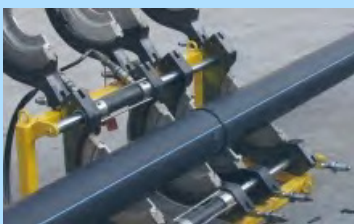
(Thermal temperature is 260)

Outer Diameter (mm)	Heating Time(s)	Maximum Transit Time (s)	Minimum Cooling Time (s)
20	5	4	2
25	7	4	2
32	8	6	4
40	12	6	4
50	18	6	4
63	24	8	6

Installations: Butt Fusion Joint

(2) Butt Fusion Joint

STEP: Use Butt Fusion Welding Machine



1. Prepare

- Prepare the necessary tools.

2. Clamp and clean

- Clamp down the pipe on the jig, clean up the joint parts, mill the joint sides, and then adjust the joint parts to make the misplacement less than 10% of the wall thickness.

3. Heat

- Put the heating panel.

4. Join

- Remove the heating panel after finishing heating, join the two heating parts swiftly, increase pressure up to the fusion-joint pressure and keep until it cools down.

5. Complete

- Butt Fusion Joint is completed.

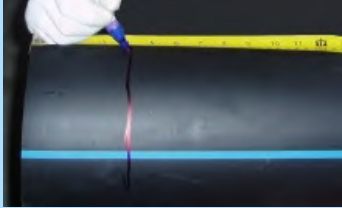
Recommended welding parameter, which should be followed by the welders

Wall Thickness (mm)	Preheating Curling Height (mm) (Preheating Temperature is 210 ± 10 °C)	Preheating Time(s) (Temperature is 210 ± 10 °C)	Allowed Maximum Transit Time(s)	Cooling Time for the Weld Seam under Pressure-reserving State (min)
2.0 - 3.9	0.5	30 - 40	4	4 - 5
4.3 - 6.9	0.5	40 - 70	5	6 - 10
7.0 - 11.4	1.0	70 - 120	6	10 - 16
12.2 - 18.2	1.0	120 - 170	8	17 - 24
20.1 - 25.5	1.5	210 - 250	10	25 - 32
28.3 - 32.2	1.5	280 - 320	12	33 - 40

Installations: Electro Fusion Joint

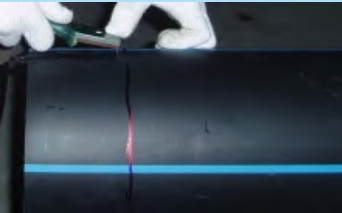
(3) Electro Fusion Joint

STEP: Use Electro Fusion Welding Machine



1. Clean and mark

- Clean up the connection part, mark the inserting depth.



2. Scrape

- Scrape and polish the joint surface.



3. Align and restrain the fittings to the pipes



4. Apply electric current

- Apply the electric current to the fittings; the joining parts will be heated and melted, turn off the current when there is melt flowing in the observation hole.



5. Cool

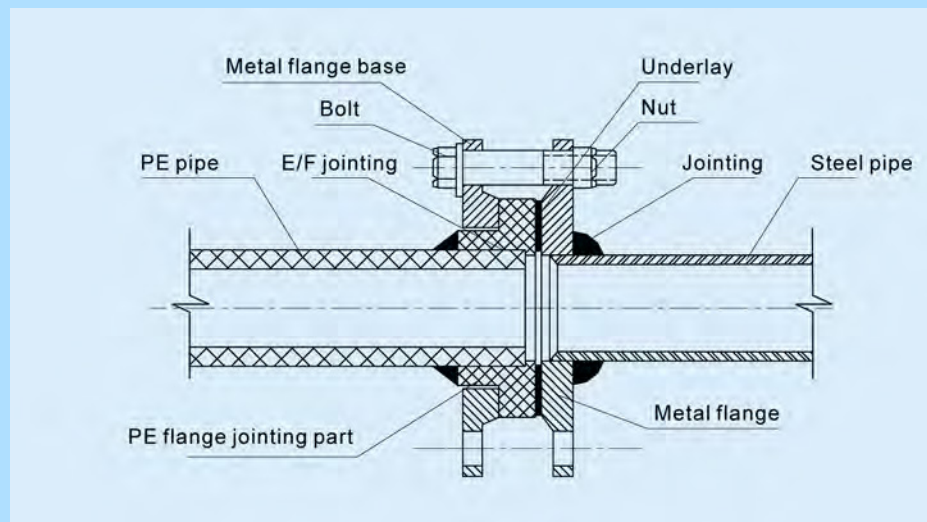
- Cool without movement or pressure.

Note: While connecting, the heating voltage and time should comply with manufacture's technical stipulations of Electro Fusion Welding Machine.

Installations: Transition Joint

(4) Transition Joint

STEP: Join the PE pipe and the iron pipe by Flange Joint





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