





## Company Introduction

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China Liansu Group Holdings Limited(Hong Kong) (stock name: China Liansu; stock code:2128) is a large leading industrial group of home building materials in China. Group's products and services cover plumbing products, sanitary ware, integral kitchen, PVC profile doors and windows, decorative plates, fire-fighting equipments and hygiene materials and etc. The sales revenue had broken through 10 billion RMB in 2011 .

At present, China Liansu has 28 subsidiaries and 25 production bases (some of them are under construction) in Mainland China, North America and Canada. Our global services and sales networks are strategically distributed throughout China, so as to provide the products and services to our customers timely and efficiently.

China Liansu established a leading international R&D center, which includes a post-doctoral workstation, and China National Accredited Laboratories authorized by CNAS. Our research team has a staff of more than one thousand. At present, China Liansu has approached 1000 patents (some of them are under processing). Our products are awarded successively of National Torch Plan Projects, National Key New Product, Scientific Achievements Promotion Projects in National Construction Industry and Government Green Procurement List; And also has been

awarded many honorary titles, such as National High-Tech Enterprise , China Construction Independent Innovation of Science Superior Enterprise, Quality Award of Guangdong Provincial Government Intellectual Property Right Preponderant Enterprise, Demonstrational Construction Base of Plastic Piping High Tech Industrialization of Ministry of Urban and Rural Development.

China Liansu offers a most comprehensive range of plastic pipes and fittings in domestic home building materials area which includes over 70 series and more than 7,000 specifications. The products are being widely used in the areas of home decoration, civil construction, municipal water supply, drainage, electric power communication, gas supply, fire-fighting and agriculture, etc. China Liansu was designated as pipe supplier for stadium and gymnasium constructions in 2008 Beijing Olympic Games, 2010 Guangzhou Asian Games and 2010 Shanghai World Expo.

Standing at a new starting point, China Liansu will keep the faith in "Create a relax life for occupants", and always adheres to the operation philosophy of "quality is the life line, technology is the driving force, and customer satisfaction is the ultimate goal". Liansu is dedicated to improving human's life quality.

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▲ Guangdong Shunde Headquarters



▲ Guangdong Heshan Production Base



▲ Guangdong Zhongshan Production Base



▲ Hubei Wuhan Production Base



▲ Guizhou Guiyang Production Base



▲ Sichuan Deyang Production Base



▲ Jiangsu Nanjing Production Base



▲ Henan Zhoukou Production Base



▲ Hebei Renqiu Production Base



▲ Heilongjiang Daqing Production Base



▲ Xinjiang Urumqi Production Base



▲ Jilin Changchun Production Base



▲ Shaanxi Xi'an Production Base

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**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:** ISO 4427-2, EN 12201-2, BS EN 13244, BS 6920, GB/T 13663.
- ◎ **Colors:**
  - Blue: all size
  - Black with blue stripes: d<sub>n</sub>110 or above
  - Other colors are also available upon request
- ◎ **Form Supplied:**
  - 5.8 meters straight length (all size)
  - 50 or 100 meters coil length (d<sub>n</sub>20~d<sub>n</sub>63)
  - Other forms are also available upon request



**Advantages**

- ◎ **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium. Sanitary. No Secondary pollution.
- ◎ **Corrosion Resistance:** unaffected by chemical matters and electron chemical matters which cause corrosion in metals.
- ◎ **High flow capacity:** smooth interior walls and low abrasion resistance result low flow resistance and high flow capacity.
- ◎ **Excellent Flexibility:** can be supplied in coil form, fewer fittings required and lower cost in installation.
- ◎ **High impact and breakage resistance.**
- ◎ **Excellent UV resistance.**
- ◎ **Differential Settlement Resistance:** low requirements for foundation treatment.
- ◎ **Easy Installation:** light weight, easy to transport and handle friendly.
- ◎ **Long Service Life:** PE water pipe can work for more than 50 years under proper use.
- ◎ **Use trenchless technology.**
- ◎ **Various Joint Availability:** socket fusion joint, butt fusion joint, electro fusion joint and transition joint.

**Applications**

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



The damage percentages in the water supply lines at Kobe/Japan earthquake in 1995.

Pipe Type	Percentage of damage Piece/km
Ductile Cast Iron Pipe	0.488
Cast Iron Pipe	1.508
PVC Pipe	1.430
Steel Pipe	0.437
Asbestos Steel Pipe	1.782
PE Pipe	0

## Physical Properties

Properties		Typical Value
Extension Rate at Break, %		≥ 350
Longitudinal Reversion, % (110°C)		≤ 3
Oxidation Induction Time, min (200°C)		≥ 20
Hydraulic Pressure Test	20°C, 100h	No Failure
	PE80 9.0MPa	
	PE100 12.4MPa	
	80°C, 165h	No Failure
	PE80 4.6MPa	
	PE100 5.5MPa	
	80°C, 1000h	No Failure
	PE80 4.0MPa	
PE100 5.0MPa		
Climate Resistance (After the pipe accumulate accept the aging energy ≥3.5GJ/m <sup>3</sup> )	80°C, 165h	No Failure
	PE80 4.6MPa	
	PE100 5.5MPa	
	Extension Rate at Break, %	≥ 350
	Oxidation Induction Time, min (200°C)	≥ 10

Technical Specifications	PE 100	Unit	Test Method
Density at 23° C	0.955	g/cm <sup>3</sup>	ISO 1183
MFR 190° /5 kg	0.23	g/10 min	ISO 1133
Mechanical Properties			
Yield Stress	23	MPa	ISO 527
Tensile Modulus	>1000	MPa	ISO 527
Oxidation-Induction Time at 210° C	≥20	min	ISO TR 10837
Carbon Black Content	≥2	%	ISO 6964
Resistance to S.C.P (slow crack propagation = 4.6 Mpa, 80° C Notched)	>1000	h	ISO 13479
Resistance to R.C.P (Rapid Crack Propagation S4-test 110/10 mm, ° C)	>10	bar	ISO DIS 13477
Elongation at break	≥500	%	ISO 6259
Linear Thermal Expansion	1.5×10 <sup>-4</sup>	°C <sup>-1</sup>	ASTM D696(20-60°C)
Electrical Properties			
Electric Strength	>20	kV/mm	ASTM D149
Volume Resistivity	>10 <sup>19</sup>	ΩM	ASTM D257



SDR 33 (PN 0.4)			SDR 21 (PN 0.6)			SDR 17 (PN 0.8)		
Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)
11113	160	4.9	11309	90	4.3	11408	75	4.5
11114	180	5.5	11310	110	5.3	11409	90	5.4
11115	200	6.2	11311	125	6.0	11410	110	6.6
11116	225	6.9	11313	160	7.7	11411	125	7.4
11117	250	7.7	11314	180	8.6	11413	160	9.5
11118	280	8.6	11315	200	9.6	11414	180	10.7
11119	315	9.7	11316	225	10.8	11415	200	11.9
11120	355	10.9	11317	250	11.9	11416	225	13.4
11121	400	12.5	11318	280	13.4	11417	250	14.8
11122	450	13.8	11319	315	15.0	11418	280	16.6
11123	500	15.3	11320	355	16.9	11419	315	18.7
11124	560	17.2	11321	400	19.1	11420	355	21.1
11125	630	19.3	11322	450	21.5	11421	400	23.7
11126	710	21.8	11323	500	23.9	11422	450	26.7
11127	800	24.5	11324	560	26.7	11423	500	29.7
			11325	630	30.0	11424	560	33.2
			11326	710	33.9	11425	630	37.4
			11327	800	38.1	11426	710	42.1
						11427	800	47.4

SDR 13.6 (PN 1.0)			SDR 11 (PN 1.25)		
Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)
11507	63	4.7	11603	25	2.3
11508	75	5.6	11604	32	3.0
11509	90	6.7	11605	40	3.7
11510	110	8.1	11606	50	4.6
11511	125	9.2	11607	63	5.8
11513	160	11.8	11608	75	6.8
11514	180	13.3	11609	90	8.2
11515	200	14.7	11610	110	10.0
11516	225	16.6	11611	125	11.4
11517	250	18.4	11612	140	12.7
11518	280	20.6	11613	160	14.6
11519	315	23.2	11614	180	16.4
11520	355	26.1	11615	200	18.2
11521	400	29.4	11616	225	20.5
11522	450	33.1	11617	250	22.7
11523	500	36.8	11618	280	25.4
11524	560	41.2	11619	315	28.6
11525	630	46.3	11620	355	32.2
11526	710	52.2	11621	400	36.3
11527	800	58.8	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 <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Length (m/roll)
12507	63	4.7	50

SDR 11 (PN 1.25)			
Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (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  
**PN:** Rate  
**d<sub>n</sub>:** Nominal Outside Diameter  
 Nominal Pressure (unit: MPa)  
**e<sub>n</sub>:** Nominal Wall Thickness



SDR 26 (PN 0.6)		
Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (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 <sub>n</sub> (mm)	e <sub>n</sub> (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 <sub>n</sub> (mm)	e <sub>n</sub> (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 <sub>n</sub> (mm)	e <sub>n</sub> (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)			SDR 11 (PN 1.6)			SDR 11 (PN 1.6)				
Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Length (m/roll)	
13602	20	2.3	13621	400	36.3	14602	20	2.3	50/100	
13603	25	2.3	13622	450	40.9	14603	25	2.3	50/100	
13604	32	3.0	13623	500	45.4	14604	32	3.0	50/100	
13605	40	3.7	13624	560	50.8	14605	40	3.7	50/100	
13606	50	4.6	13625	630	57.2	14606	50	4.6	50	
13607	63	5.8				14607	63	5.8	50	
13608	75	6.8								
13609	90	8.2	<b>Coil Pipe</b>							
13610	110	10.0	<b>SDR 13.6 (PN 1.25)</b>							
13611	125	11.4	Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Length (m/roll)				
13613	160	14.6	14507	63	4.7	50				
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								

## Product Overview

**Material:** PE, steel mesh skeleton

**Pressure Rating:** 1.0MPa, 1.6MPa, 2.0MPa, 2.5MPa

**Standard:** CJ/T189

**Size:** full 50mm through 500mm availability

**Colors:** Black (all size)

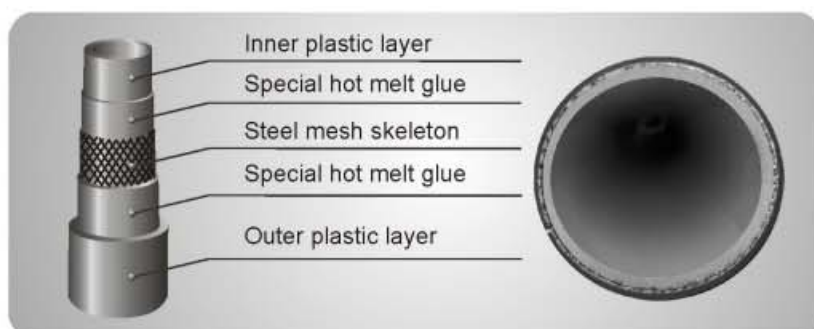
Other colors are also available upon request

**Form Supplied:** 6 meters or 8 meters straight length(all size)

Others forms are also available upon request

## Advantages

- Higher strength resistance and creep resistance.
- Excellent stiffness, impact resistance. Low linear expansion coefficient.
- Smooth inner wall, won't covered with dirt. Low flow resistance, high flow capacity.
- Both the inner and outer wall are made of plastic, lead the pipe and fittings owns good corrosion resistance.
- Light weight, easy to transport.
- Use electro-fusion joint, no leakage in the joint, fast and easy installation.
- The product is composited with steel wire and plastic, overcome the fast stress crack of plastic pipe.
- Good abrasion resistance. The product can work for more than 50 years under normal use.



## Plastic-Steel Mesh Skeleton-Plastic (PE) Composite Pipe for Water Supply

PN1.0			PN1.6			PN2.0		
Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)	Part Number	d <sub>n</sub> (mm)	e <sub>n</sub> (mm)
15206	50	4.5	15406	50	4.5	15506	50	5.0
15207	63	4.5	15407	63	4.5	15507	63	5.0
15208	75	5.0	15408	75	5.0	15508	75	5.0
15209	90	5.5	15409	90	5.5	15509	90	5.5
15211	110	5.5	15411	110	7.0			
15213	160	6.0	15413	160	9.0			
15215	200	6.0	15415	200	9.5			
15217	250	10.5	15417	250	12.0			
15219	315	11.5	15419	315	13.0	15606	50	5.5
15220	355	12.0	15420	355	14.0	15907	63	5.5
15221	400	12.5	15421	400	15.0	15608	75	5.5
15223	500	15.5	15423	500	18.0	15609	90	5.5



### [Features]

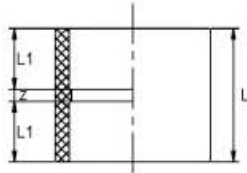
- **Material:** PE 100
- **Size:** full 20mm through 110mm availability
- **Pressure Rating:** 1.6MPa, or other nominal pressures available upon request
- **Standard:** ISO 4427-3, EN 12201-3, BS EN 12001-3 AS/NZS 4129 BS 6920
- **Color:** blue (all size)  
black (d<sub>n</sub>110)  
other colors are also available upon request
- **Joint:** joining pipe and socket fusion joint 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

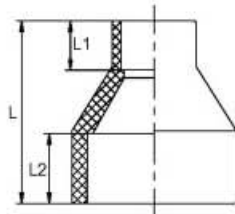
# Socket Fusion Joint Fittings

## Coupling (Soc X Soc)



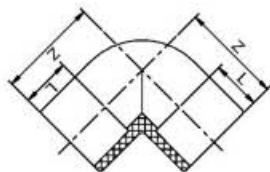
Part Number	Size (mm)	L1	L	Z	Qty/Ctn
1010002	20	16.5	37	4	810
1010003	25	18	40	4	600
1010004	32	20.5	45	4	460
1010005	40	22.5	50	5	240
1010006	50	25.5	56	5	260
1010007	63	29.5	65	6	160
1010008	75	33	72	6	100
1010009	90	36	78	6	50
1010010	110	42	90	6	36

## Reducer (Soc X Soc)



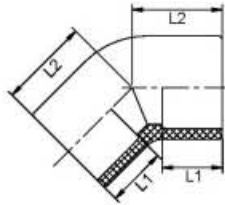
Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1010095	25x20	16.5	18	45	600
1010126	32x20	16.5	20.5	56	320
1010127	32x25	18	20.5	52	300
1010157	40x20	16.5	22.5	63	320
1010158	40x25	18	22.5	61	240
1010159	40x32	20.5	22.5	54	240
1010188	50x20	16.5	25.5	68	160
1010189	50x25	18	25.5	67	160
1010190	50x32	20.5	25.5	67	160
1010191	50x40	22.5	25.5	62	120
1010220	63x25	18	29.5	82	160
1010221	63x32	20.5	29.5	84	150
1010222	63x40	22.5	29.5	82	150
1010223	63x50	25.5	29.5	71	135
1010252	75x32	22.5	33	65	
1010253	75x40	20.5	33.5	67	
1010254	75x50	25.5	33	75	
1010255	75x63	29.5	33	80	90
1010284	90x40	22.5	37	75	
1010285	90x50	25.5	37	75	
1010286	90x63	29.5	38.5	100	72
1010287	90x75				55
1010317	110x63	29.5	41.5	112	50

## 90° Elbow (Soc X Soc)



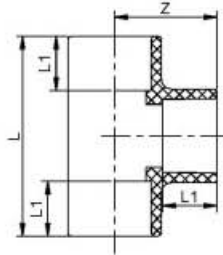
Part Number	Size (mm)	L	Z	Qty/Ctn
1020002	20	16.5	33	500
1020003	25	18	37	240
1020004	32	20.5	43	200
1020005	40	22.5	48	100
1020006	50	25.5	61	120
1020007	63	29.5	69	60
1020008	75	33	77.5	40
1020009	90	36	89	25
1020010	110	42	107	15

**45° Elbow**  
(Soc X Soc)



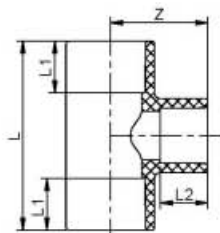
Part Number	Size (mm)	L1	L2	Qty/Ctn
1030002	20	16.5	24	500
1030003	25	18	27	360
1030004	32	20.5	32	210
1030005	40	22.5	35	140
1030006	50	25.5	41	140
1030007	63	29.5	48	80
1030008	75	31	49	50
1030009	90	37.5	59.5	30
1030010	110	41.5	67.5	20

**Tee**  
(Soc X Soc X Soc)



Part Number	Size (mm)	L1	L	Z	Qty/Ctn
1040002	20	16.5	64	32	320
1040003	25	18	72	36	260
1040004	32	20	86	43	140
1040005	40	22.5	96	48	90
1040006	50	22.5	114	57	80
1040007	63	29.5	142	71	50
1040008	75	33	155	77.5	30
1040009	90	36	178	89	20
1040010	110	42	214	107	12

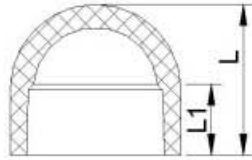
**Reducing Tee**  
(Soc X Soc X Soc)



Part Number	Size (mm)	L1	L2	L	Z	Qty/Ctn
1040095	25x20	18	16.5	66	34	280
1040126	32x20	20.5	16.5	72	38	160
1040127	32x25	20.5	18	77	40	120
1040157	40x20	22.5	16.5	78	42	116
1040158	40x25	22.5	18	83	44	96
1040159	40x32	22.5	20.5	90	46	96
1040188	50x20	25.5	16.5	86	47	160
1040189	50x25	25.5	18	91	49	150
1040190	50x32	25.5	20.5	98	51	120
1040191	50x40	25.5	22.5	104	53	100
1040220	63x25	29.5	18	101	55	80
1040221	63x32	29.5	20.5	108	57	60
1040222	63x40	29.5	22.5	112	59	60
1040223	63x50	29.5	25.5	122	62	60
1040252	75x32	33	20.5	100	64	
1040253	75x40	33	22.5	113	63.5	
1040255	75x63	33	29.5	145	75	36
1040284	90x40	37	22.5	120	72	
1040285	90x50	37	25.5	132.3	80	
1040286	90x63	37	29.5	148	84	28
1040287	90x75	36	33	164	88	25

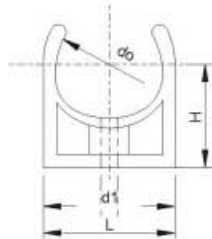
# Socket Fusion Joint Fittings

## Cap (Soc)



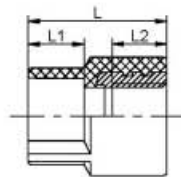
Part Number	Size (mm)	L1	L	Qty/Ctn
1050002	20	16.5	30	1500
1050003	25	18	34	900
1050004	32	20.5	44	450
1050005	40	22.5	55	240
1050006	50	25.5	59	140
1050007	63	29.5	70	150

## Pipe Clamp

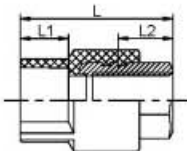


Part Number	Size (mm)	D	L	do	d1	H	Qty/Ctn
1060002	20	20	27.5	19.8	5	22	1080
1060003	25	25	32.5	24.6	5	25	1050
1060004	32	32	39	31.5	5	29	960
1060003	40	40	47.5	38.5	5	32	
1060004	50	50	57.5	48.5	5	37	

## Female Thread Adapter (Soc×Fipt with Metal Insert)



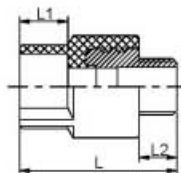
I



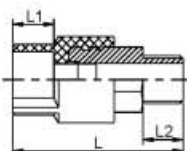
II

Part Number	Size (mm×inch)	L1	L2	L	Qty/Ctn
1070002	20x1/2"	16.5	17.5	42	360
1070065	20x3/4"	16.5	17.5	42	240
1070095	25x1/2"	18	17.5	44.5	300
1070003	25x3/4"	18	17.5	45	180
1070126	32x1/2"	20.5	17.5	47	180
1070127	32x3/4"	20.5	17.5	47	210
1070004	32x1"	20.5	23	59	128
1070159	40x1"	22.5	23	60	120
1070005	40x1 1/4"	22.5	23	64	64
1070191	50x1 1/4"	25.5	23	66	64
1070006	50x1 1/2"	25.5	23	68.5	48
1070007	63x2"	29.5	25	77	44
1070255	75x2"				

## Male Thread Adapter (Soc×Mipt with Metal Insert)



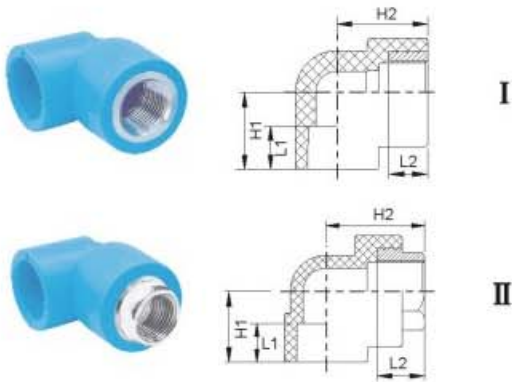
I



II

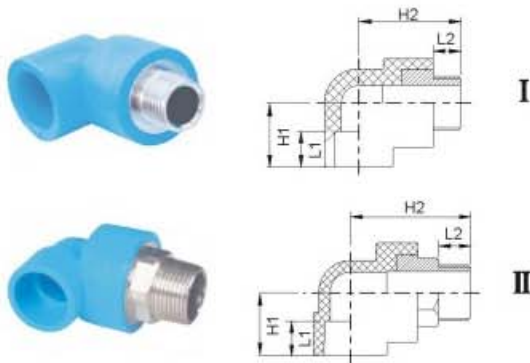
Part Number	Size (mm×inch)	L1	L2	L	Qty/Ctn
1080002	20x1/2"	16.5	14	56	240
1080065	20x3/4"	16.5	14	56	180
1080095	25x1/2"	18	14	58.5	245
1080003	25x3/4"	18	14	59	180
1080126	32x1/2"	20.5	14	61	180
1080127	32x3/4"	20.5	14	61	180
1080004	32x1"	20.5	19	78	96
1080159	40x1"	22.5	19	79	96
1080005	40x1 1/4"	22.5	21	85	64
1080191	50x1 1/4"	25.5	21	87	64
1080006	50x1 1/2"	25.5	21	89.5	64
1080007	63x2"	29.5	24	102	40
1080255	75x2"				

**Female Thread Elbow**  
(Soc×Fipt with Metal Insert)



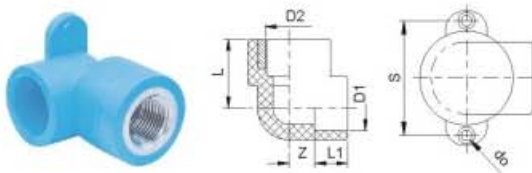
Part Number	Size (mm×inch)	L1	L2	H1	H2	Qty/Ctn
1090002	20x1/2"	16.5	17.5	30	36	240
1090065	20x3/4"	16.5	17.5	33	36	210
1090095	25x1/2"	18	17.5	33	38	210
1090003	25x3/4"	18	17.5	35	38	180
1090126	32x1/2"	20.5	17.5	35	42	180
1090127	32x3/4"	20.5	17.5	38	42	150
1090004	32x1"	20.5	23	40.5	53	96

**Male Thread Elbow**  
(Soc×Mipt with Metal Insert)



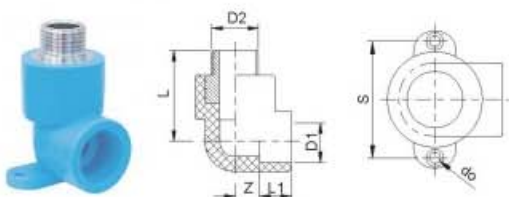
Part Number	Size (mm×inch)	L1	L2	H1	H2	Qty/Ctn
1100002	20x1/2"	16.5	14	30	50	240
1100065	20x3/4"	16.5	14	33	50	150
1100095	25x1/2"	18	14	33	52	210
1100003	25x3/4"	18	14	35	52	150
1100126	32x1/2"	20.5	14	35	56	150
1100127	32x3/4"	20.5	14	38	56	120
1100004	32x1"	20.5	19	40.5	72	80

**Female Thread Elbow with Base**  
(Soc×Fipt with Metal Insert)



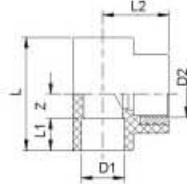
Part Number	Size (mm×inch)	D1	D2	L	S	L1	do	Qty/Ctn
1110002	20x1/2"	20	1/2"	35	50	16	5	210
1110065	20x3/4"	20	3/4"	35	55	16	5	180
1110095	25x1/2"	25	1/2"	37.5	50	18	5	180
1110003	25x3/4"	25	3/4"	37.5	55	18	5	180

**Male Thread Elbow with Base**  
(Soc×Mipt with Metal Insert)

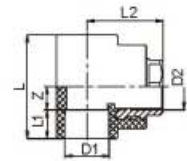


Part Number	Size (mm×inch)	D1	D2	L	S	L1	do	Qty/Ctn
1120002	20x1/2"	20	1/2"	49	50	16	5	180
1120065	20x3/4"	20	3/4"	49	55	16	5	150
1120095	25x1/2"	25	1/2"	51.5	50	18	5	180
1120003	25x3/4"	25	3/4"	51.5	55	18	5	150

**Female Thread Tee**  
(Soc×Fipt with Metal Insert)



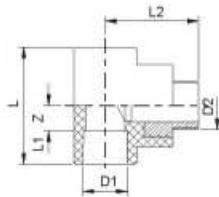
**I**



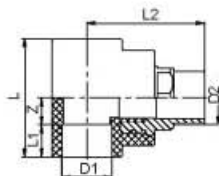
**II**

Part Number	Size (mm×inch)	D1	D2	Z	L2	L1	L	Qty/Ctn
1130002	20x1/2"	20	1/2"	13.5	36	16.5	60	240
1130065	20x3/4"	20	3/4"	16.5	36	16.5	66	210
1130095	25x1/2"	25	1/2"	15	38	18	66	180
1130003	25x3/4"	25	3/4"	17	38	18	70	150
1130126	32x1/2"	32	1/2"	14.5	42	20.5	70	160
1130127	32x3/4"	32	3/4"	17.5	42	20.5	76	144
1130004	32x1"	32	1"	20	53	20.5	81	80

**Male Thread Tee**  
(Soc×Mipt with Metal Insert)



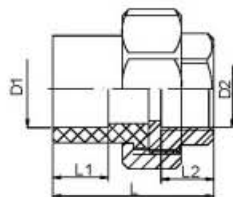
**I**



**II**

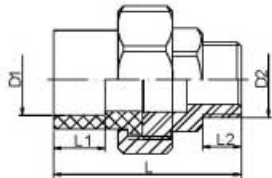
Part Number	Size (mm×inch)	D1	D2	Z	L2	L1	L	Qty/Ctn
1140002	20x1/2"	20	1/2"	13.5	50	16.5	60	180
1140065	20x3/4"	20	3/4"	16.5	50	16.5	66	150
1140095	25x1/2"	25	1/2"	15	52	18	66	150
1140003	25x3/4"	25	3/4"	17	52	18	70	120
1140126	32x1/2"	32	1/2"	14.5	56	20.5	70	120
1140127	32x3/4"	32	3/4"	17.5	56	20.5	76	100
1140004	32x1"	32	1"	20	72	20.5	81	80

**Female Thread Union**  
(Soc×Fipt with Metal)



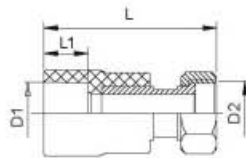
Part Number	Size (mm×inch)	D1	D2	L1	L2	L	Qty/Ctn
1150002	20x1/2"	20	1/2"	16	16	42	180
1150003	25x3/4"	25	3/4"	18	17	47	150
1150004	32x1"	32	1"	20.5	18	52	90

**Male Thread Union**  
(Soc X Mipt with Metal)



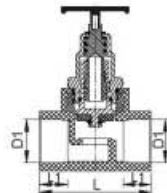
Part Number	Size (mm x inch)	D1	D2	L1	L2	L	Qty/Ctn
1160002	20x1/2"	20	1/2"	16	14	55	150
1160003	25x3/4"	25	3/4"	18	13.5	60	120
1160004	32x1"	32	1"	20.5	19	71	72

**Flexible Joint I**  
(Soc X Fipt with Metal)



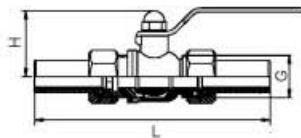
Part Number	Size (mm x inch)	D1	D2	L	L1	Qty/Ctn
1170002	20x1/2"	20	1/2"	67	16	300
1170065	20x3/4"	20	3/4"	68	16	240
1170003	25x1/2"	25	1/2"	69	18	240
1170095	25x3/4"	25	3/4"	70	18	240
1170004	32x1"	32	1"	79	20.5	150

**Stop Valve**  
(Soc X Soc)



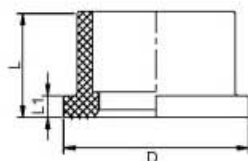
Part Number	Size (mm)	D1	L1	L	Qty/Ctn
1180002	20	20	16	64	96
1180003	25	25	18	74	72
1180004	32	32	20.5	82	48
1180005	40	40	22	85	40
1180006	50	50	25	115	30
1180007	63	63	29	121	20

**Ball Valve**  
(Spig X Spig)



Part Number	Size (mm)	L	G	H	Qty/Ctn
1190002	20	142	3/4"	35	96
1190003	25	153	1"	37	72
1190004	32	172	1-1/4"	47.5	36

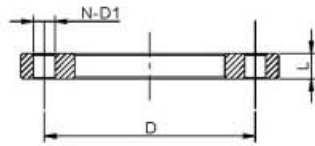
**Stub Flange**  
(Soc X Flange)



Part Number	Size (mm)	L1	L	D	Qty/Ctn
1200006	50	10	30	84	90
1200007	63	14	34	100	60
1200008	75	14	38	124	

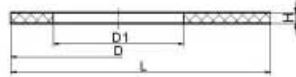
**Socket Fusion Joint Fittings**

**Flange**  
(Steel Tray)



Part Number	Size (mm)	D	D1	N	L	Qty/Ctn
1210006	50	110	18	4	10	
1210007	63	125	18	4	12	
1210008	75	145	18	4	18	

**Rubber Gasket**



Part Number	Size (mm)	D1	D	L	H	Qty/Ctn
1220006	50	45	86	113	4	
1220007	63	58	105	132.5	4	
1220008	75	68	127	153.5	4	

**Definitions of abbreviated configuration description follow**

Soc: Socket  
Spig: Spigot

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



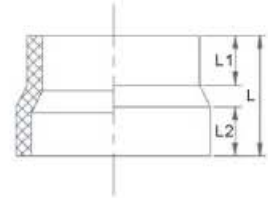
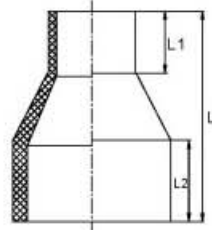
## [Features]

- **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:** ISO 4427-3, EN 12201-3, BS EN 12201-3 AS/NZS 4129 BS 6920
- **Color:** blue (all size)  
black (dn110 or above)  
other colors are also available upon request
- **Joint:** joining pipe and butt joint 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

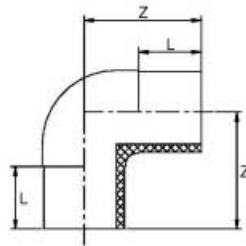
## Reducer



Part Number	SDR	Size(mm)	L1	L2	L	Qty/Ctn
1236255	11	75×63	70	75	156	60
1236286	11	90×63	65	79	172	40
1236287	11	90×75	70	80	164	40
1236316	11	110×50	70	83	196	36
1236317	11	110×63	70	80	196	36
1236318	11	110×75	70	80	184	32
1236319	11	110×90	70	80	169	30
1236348	11	125×63	70	80	200	24
1236350	11	125×90	84	98	242	24
1236351	11	125×110	80	80	178	20
1236412	11	160×90	80	90	242	12
1236413	11	160×110	80	100	228	12
1236414	11	160×125	80	80	195	12
1236441	11	180×63	78	100	266	14
1236444	11	180×110	100	100	239	12
1236447	11	180×160	90	90	230	10
1236475	11	200×110	80	100	226	6
1236478	11	200×160	100	100	239	6
1236479	11	200×180				6
1236509	11	225×160	90	90	230	6
1236511	11	225×200	90	90	206	4

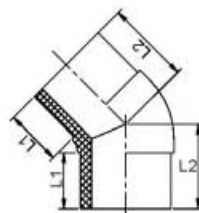
Part Number	SDR	Size(mm)	L1	L2	L	Qty/Ctn
1236537	11	250×110	80	90	210	5
1236540	11	250×160	80	90	283	3
1236542	11	250×200	90	90	246	4
1236543	11	250×225	90	90	206	3
1235568	13.6	280×110				3
1235571	13.6	280×160				4
1235573	13.6	280×200	85	85	250	4
1235599	13.6	315×110	90	85	225	2
1235602	13.6	315×160	90	90	225	2
1235604	13.6	315×200	100	100	286	2
1235605	13.6	315×225	90	90	222	2
1235606	13.6	315×250	90	90	240	
1235607	13.6	315×280	85	85	201	
1234635	17	355×200	80	80	287	
1234637	17	355×250	77	77	242	
1234639	17	355×315	90	90	220	
1234666	17	400×200	70	70	260	
1234668	17	400×250	80	80	248	
1234670	17	400×315	80	85	215	
1234697	17	450×200	70	70	254	
1234699	17	450×250	85	85	248	
1234701	17	450×315	90	100	270	
1237732	26	500×315	85	100	250	
1234732	17	500×315	85	100	250	
1237733	26	500×355	85	100	250	
1234733	17	500×355	85	100	250	
1237734	26	500×400	85	100	250	
1234734	17	500×400	85	100	250	
1234735	17	500×450	85	100	250	
1234765	17	560×400	90	95	250	
1234767	17	560×500	100	95	250	
1234794	17	630×315	100	100	290	
1234796	17	630×400	100	100	290	
1234798	17	630×500	100	100	290	

**90° Elbow**



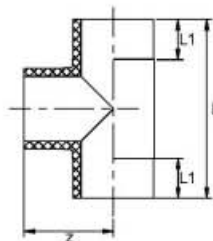
Part Number	SDR	Size (mm)	Z	L	Qty/Ctn
1246008	11	75	132	75	30
1246009	11	90	150	85	20
1246010	11	110	163	87	12
1246011	11	125	170.5	87	8
1246013	11	160	200	100	5
1246014	11	180	210	95	4
1246015	11	200	225	100	3
1244016	17	225	265	120	
1246016	11	225	265	120	
1244017	17	250	292	130	
1246017	11	250	292	130	
1244018	17	280	316	138	
1246018	11	280	316	138	

**45° Elbow**



Part Number	SDR	Size (mm)	L1	L2	Qty/Ctn
1256008	11	75	80	124	30
1256009	11	90	85	136	18
1256010	11	110	87	145	12
1256011	11	125	87	150	10
1254013	17	160	100	175	
1256013	11	160	100	175	
1254014	17	180	105	183	
1256014	11	180	105	183	
1254015	17	200	110	193	
1256015	11	200	110	193	
1254016	17	225	122	215	
1256016	11	225	122	215	
1254017	17	250	130	232	
1256017	11	250	130	232	
1254018	17	280	140	250	
1256018	11	280	140	250	

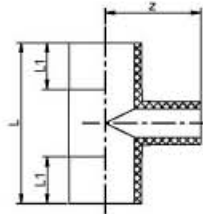
**Tee**



Part Number	SDR	Size (mm)	L1	L	Z	Qty/Ctn
1266008	11	75	75	264	132	18
1266009	11	90	85	300	150	14
1266010	11	110	87	326	163	8
1266011	11	125	87	341	170.5	6
1266013	11	160	100	400	210	3
1266014	11	180	95	420	420	3
1266015	11	200	100	450	225	2
1264016	17	225	120	530	265	
1266016	11	225	120	530	265	
1266017	11	250	130	600	300	
1264017	17	250	130	600	300	
1266018	11	280	138	632	316	
1264018	17	280	138	632	316	
1264019	17	315	150	710	355	
1266019	11	315				
1264020	17	355	110	660	330	

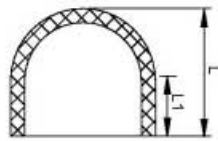
## Butt Fusion Joint Fittings

### Reducing Tee



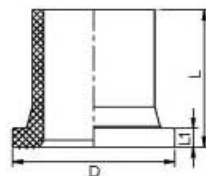
Part Number	SDR	Size(mm)	L1	L2	L	Z	Qty/Ctn
1266317	11	110×63	85	85	300	160	10
1266318	11	110×75	85	85	300	160	10
1266319	11	110×90	85	85	300	160	9
1266410	11	160×63	90	90	330	188	6
1266411	11	160×75	90	90	330	188	5
1266412	11	160×90	90	90	330	188	5
1266413	11	160×110	90	90	330	188	5
1264475	17	200×110	100	100	410	226	
1266475	11	200×110	100	100	410	226	
1264478	17	200×160	100	100	410	226	
1266478	11	200×160	100	100	410	226	
1264537	17	250×110	130	130	510	270	
1266537	11	250×110	130	130	510	270	
1264540	17	250×160	130	130	510	270	
1266540	11	250×160	130	130	510	270	

### Cap



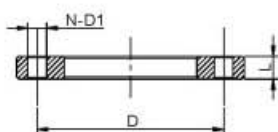
Part Number	SDR	Size(mm)	L1	L	Qty/Ctn
1276007	11	63	50.5	82	
1276008	11	75	75	113	100
1276009	11	90	75	120	60
1276010	11	110	74	130	40
1276011	11	125	80	143.5	24
1276013	11	160	98	179	15
1276014	11	180	88	180	12
1276015	11	200	98	199	8
1276016	11	225	90	204	5
1276017	11	250	97	224	4
1275018	13.6	280	78	220	4
1276019	11	315	74	140	
1274020	17	355	74	120	
1276021	11	400	74	160	

### Stub Flange



Part Number	SDR	Size(mm)	L1	L	D	Qty/Ctn
1286007	11	63	14	100	97	
1286008	11	75	16	125	122	48
1286009	11	90	17	140	138	24
1286010	11	110	18	160	158	18
1286011	11	125	18	160	163	16
1286013	11	160	28	180	212	6
1286014	11	180	30	184	212	6
1286015	11	200	32	200	268	4
1286017	11	250	35	150	320	4
1286018	11	280	38	152	324	3
1286019	11	315	35	150	370	
1285020	13.6	355	35	120	444	
1284021	17	400	33	140	482	
1283023	26	500	46	130	600	
1284023	17	500	46	130	600	
1283024	26	560	50	130	657	
1284024	17	560	50	130	657	
1283025	26	630	50	150	704	
1284025	17	630	50	150	704	

## Flange (Steel Tray)

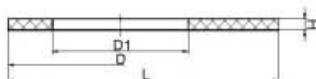


Part Number	Size(mm)	D	D1	N	L	Qty/Ctn
<b>1.6MPa</b>						
1296008	75	145	18	4	18	48
1296009	90	160	18	8	20	36
1296010	110	180	18	8	22	32
1296011	125	180	18	8	22	32
1296013	160	240	22	8	24	15
1296014	180	240	22	8	24	15
1296015	200	295	22	12	26	8
1296017	250	355	26	12	29	4
1296019	315	410	26	12	32	3

Note: Sizes of 400, 450, 500, 630 and 800 are available upon request.

<b>1.0MPa</b>						
1294015	200	295	22	8	24	
1294016	225	295	22	8	24	
1294017	250	350	22	12	26	
1294018	280	350	22	12	26	
1294019	315	400	22	12	28	
1294020	355	460	22	16	30	
1294021	400	515	26	16	32	
1294022	450	565	26	20	32	
1294023	500	620	26	20	32	
1294024	560	725	30	20	36	
1294025	630	725	30	20	36	
1294026	710	840	30	24	36	
1294027	800	950	33	24	36	

## Rubber Gasket



Part Number	Size(mm)	D1	D	L	H	Qty/Ctn
1300008	75					
1300009	90					
1300010	110					
1300011	125	102	162	188	3.5	
1300013	160					
1300014	180	148	212	238.5	3.5	
1300015	200					
1300016	225	184	273	299.5	3.5	
1300017	250					
1300018	280	229	320	348.5	3.5	
1300019	315					
1300020	355					
1300021	400					
1300022	450					
1300023	500					
1300024	560	516	690	716	5	
1300025	630					
1300026	710	630	810	837	5	
1300027	800	738	915	942.5	5	



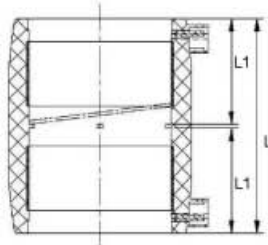
## [Features]

- **Material:** PE 100
- **Size:** full 20mm through 400mm availability
- **Pressure Rating:** 1.6MPa or other nominal pressures available upon request
- **Standard:** ISO 4427-3, EN 12201-3, BS EN 12201-3 AS/NZS 4129 BS 6920
- **Color:** blue, black or other colors available upon request
- **Joint:** joining pipe and electro fusion fittings by electro fusion joint

## [Advantages]

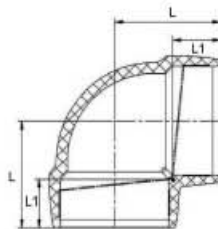
- **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium
- **Corrosion Resistance:** resist chemical matters and electron chemical corrosion
- **Low Installation Costs:** light weight and ease of installation can reduce installation costs
- **High Flow Capacity:**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

**E/F Coupling**



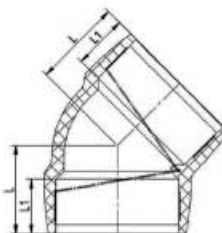
Part Number	Size(mm)	L	L1	Qty/Ctn
1310002	20			350
1310003	25			320
1310004	32	90	44	240
1310005	40	100	49	180
1310006	50	113	55	120
1310007	63	129	63	80
1310008	75	143	70	48
1310009	90	161	79	32
1310010	110	167	82	18
1310011	125	177	87	12
1310013	160	199	98	6
1310014	180	213	105	4
1310015	200	227	112	4
1310016	225	234	120	2
1310017	250	261	129	2
1310018	280	273	135	2
1310019	315	304	150	1
1310020	355	332	164	1
1310021	400	362	179	1
1310022	450	394	194.5	
1310023	500	425	210	

**E/F 90° Elbow**



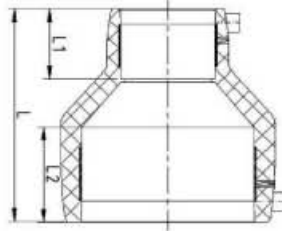
Part Number	Size(mm)	L	L1	Qty/Ctn
1320002	20			
1320003	25	65	44	240
1320004	32	74	49	160
1320005	40	86	55	100
1320006	50	100	63	60
1320007	63	114	70	40
1320008	75	131	79	24
1320009	90	145	82	16
1320010	110	159	87	9
1320011	125	190	96	6
1320013	160	206	105	4
1320014	180	225	112	2
1320015	200	265	129	2
1320017	250	320	150	1
1320019	315	395	179	
1320021	400			

**E/F 45° Elbow**



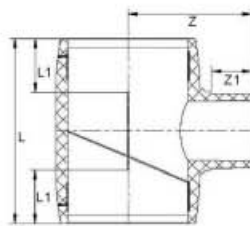
Part Number	Size(mm)	L	L1	Qty/Ctn
1330004	32	56	44	180
1330005	40	64	49	120
1330006	50	73	55	80
1330007	63	85	63	50
1330008	75	95	70	48
1330009	90	107	79	20
1330010	110	116	82	12
1330011	125	127	87	8
1330013	160	150	98	4
1330014	180	157	105	3
1330015	200	170	112	2
1330017	250	202	129	1
1330019	315	238	150	
1330021	400	280	190	

## E/F Reducer



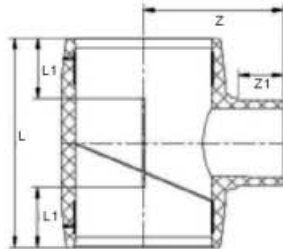
Part Number	Size(mm)	L	L1	L2	Qty/Ctn
1310127	32×25				
1310159	40×32	105	49	44	150
1310190	50×32	115	55	44	126
1310191	50×40	115	55	49	100
1310221	63×32	130	63	44	72
1310222	63×40	130	63	49	72
1310223	63×50	130	63	55	70
1310255	75×63	145	70	63	48
1310286	90×63	175	79	63	28
1310287	90×75	175	79	70	28
1310316	110×50	160	82	55	33
1310317	110×63	180	82	63	20
1310318	110×75	180	82	70	24
1310319	110×90	180	82	79	24
1310350	125×90	195	85	79	14
1310412	160×90	224	79	142	6
1310413	160×110	224	73	105	6
1310472	200×63	250	63	112	5
1310475	200×110	250	82	112	4
1310478	200×160	250	98	148	4
1310537	250×110	280	66	143	3
1310540	250×160	280	85	140	2
1310542	250×200	280	103.5	138	2
1310602	315×160	320	77	166	
1310604	315×200	320	94	165	1
1310606	315×250	320	114	163	1
1310666	400×200	370	87	200	
1310670	400×315	370	130	200	

## E/F Tee



Part Number	Size(mm)	L	L1	Z1	Z	Qty/Ctn
1340002	20					180
1340003	25					
1340004	32	118	44	46	73	120
1340005	40	136	49	40	84	70
1340006	50	157	55	57	95	48
1340007	63	190	63	65	115	30
1340008	75	215	70	72	130	20
1340009	90	242	79	81	150	12
1340010	110	266	82	84	167	7
1340011	125	290	87	89	181	5
1340013	160	338	98	105	222	3
1340014	180	368	105	107	237	2
1340015	200	398	112	115	255	2
1340017	250	472	129	135.3	301	1
1340019	315	567	150	150	360	
1340021	400	690	179	178	440	

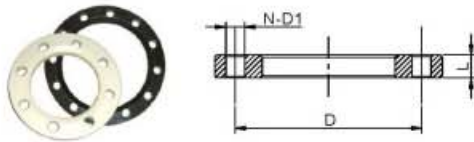
**E/ F Reducing Tee**



Part Number	Size(mm)	L	L1	Z1	Z	Qty/Ctn
1340126	32×20	107	44	43	70	130
1340127	32×25	111.5	44	43	70	130
1340157	40×20	118.5	49	43	76	90
1340158	40×25	123	49	43	76	90
1340159	40×32	129	49	46	79	90
1340188	50×20	130.5	55	42	79.5	70
1340189	50×25	135.8	55	43	81	65
1340190	50×32	142.2	55	46	84	60
1340191	50×40	149	55	51	89	60
1340219	63×20	153	63	43	90	40
1340220	63×25	158	63	43	90	40
1340221	63×32	165.5	63	46	96	40
1340222	63×40	172.5	63	51	101	40
1340223	63×50	180.5	63	57	107	36
1340253	75×40	186.3	70	51	109	
1340254	75×50	194.2	70	57	115	
1340255	75×63	204	70	65	123	
1340284	90×40	197	79	51	120	16
1340285	90×50	209.5	79	57	126	16
1340286	90×63	219	79	65	134	15
1340287	90×75	230	79	72	141	14
1340316	110×50	218	82	57	140	10
1340317	110×63	226	82	65	148	10
1340318	110×75	238	82	72	155	9
1340319	110×90	250	82	81	164	9
1340348	125×63	239	87	65	160	6
1340349	125×75	249.6	87	72	167	6
1340350	125×90	261.6	87	81	175	6
1340351	125×110	278.6	87	84	178	6
1340409	160×50	249	98	57	174	4
1340410	160×63	259	98	65	182	4
1340411	160×75	270	98	72	189	3
1340412	160×90	282	98	81	198	3
1340413	160×110	298	98	84	201	3
1340447	180×160	352	105	100	230	
1340471	200×50	308	112	70	216	2
1340472	200×63	308	112	70	216	2
1340473	200×75	308	112	81	227	
1340474	200×90	308	112	81	227	
1340475	200×110	365	112	100	245	2
1340478	200×160	365	112	100	245	2
1340533	250×50	330	129	80	252	
1340534	250×63	330	129	80	252	
1340535	250×75	330	129	80	254	
1340536	250×90	358	129	90	265	
1340537	250×110	358	129	90	265	1
1340540	250×160	430	129	110	291	1
1340542	250×200	430	129	120	291	1
1340599	315×110	440	150	100	325	
1340602	315×160	440	150	105	325	
1340604	315×200	514	150	120	346	
1340606	315×250	514	150	134	346	
1340670	400×315	619	179	163	425	

**E/F Stub Flange**


Part Number	Size(mm)	L	L1	Qty/Ctn
1350010	110	175	133	20
1350013	160	246	132	7
1350015	200	278	139	6
1350017	250	361	143	3
1350019	315	398	159	1
1350021	400	505	185	

**E/F Flange (Steel Tray)**


Part Number	Size(mm)	L	L1	Qty/Ctn
1360010	110	220	22	3
1360013	160	285	24	1
1360015	200	340	26	1
1360017	250	405	29	1
1360019	315	460	32	1
1360021	400	508	36	1

**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



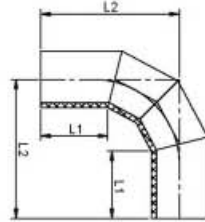
## [Features]

- **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:** ISO 4427-3 EN 12201-3 BS EN 12201-3 AS/NZS 4129 BS 6920
- **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]

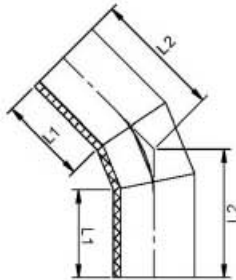
- **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium
- **Corrosion Resistance:** resist chemical matters and electron chemical corrosion
- **Low Installation Costs:** light weight and ease of installation can reduce installation costs
- **High Flow Capacity:**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

## Fabricated 90° Elbow



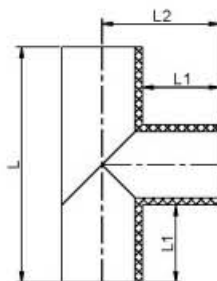
Part Number		Size (mm)	L1	L2	Qty/Ctn
0.6, 1.0 MPa	1.6MPa				
1404019	1406019	315	374	773	
1404020	1406020	355	374	833	
1404021	1406021	400	374	900	
1404022	1406022	450	410	975	
1404023	1406023	500	405	1100	
1404024	1406024	560			
1404025	1406025	630	526	1295	
1404026	1416026	710			
1404027	1416027	800			

## Fabricated 45° Elbow



Part Number		Size (mm)	L1	L2	Qty/Ctn
0.6, 1.0 MPa	1.6MPa				
1414018	1416018	280	340	498	
1414019	1416019	315	340	520	
1414020	1416020	355	363	548	
1414021	1416021	400	363	580	
1414022	1416022	450	400	950	
1414023	1416023	500			
1414024	1416024	560	500	1180	
1414025	1416025	630			
1414026	1416026	710			
1414027	1416027	800			

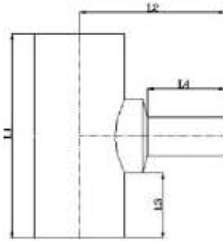
## Fabricated Tee



Part Number	Size (mm)	L1	L2	L	Qty/Ctn
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	1330	

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

**Fabricated Reducing Tee**

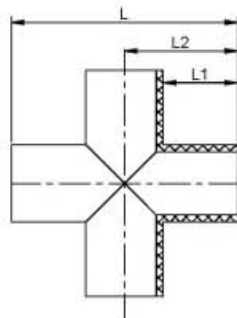


Part Number	Size (mm)	L1	L2	L3	L4	Qty/Ctn
1420472	200×63	600	275	235	145	
1420473	200×75	600	285	223	155	
1420474	200×90	600	290	213	155	
1420503	225×63	600	288	235	145	
1420504	225×75	600	298	223	155	
1420505	225×90	600	303	213	155	
1420506	225×110	600	308	203	160	
1420534	250×63	630	300	250	145	
1420535	250×75	630	310	238	155	
1420536	250×90	630	315	228	155	
1420537	250×110	630	320	218	160	
1420538	250×125	630	325	203	160	
1420565	280×63	670	315	270	145	
1420566	280×75	670	335	258	155	
1420567	280×90	670	340	248	155	
1420568	280×110	670	345	238	160	
1420569	280×125	670	335	223	160	
1420596	315×63	670	343	270	145	
1420597	315×75	670	353	258	155	
1420598	315×90	670	358	248	155	
1420599	315×110	670	363	238	160	

Part Number	Size (mm)	L1	L2	L3	L4	Qty/Ctn
1420600	315×125	670	368	223	160	
1420602	315×160	670	363	203	160	
1420627	355×63	670	358	270	145	
1420628	355×75	670	373	258	155	
1420629	355×90	670	378	248	155	
1420630	355×110	670	393	238	160	
1420631	355×125	670	393	223	160	
1420633	355×160	670	382	203	160	
1420658	400×63	720	380	295	145	
1420659	400×75	720	395	283	155	
1420660	400×90	720	400	273	155	
1420661	400×110	720	415	263	160	
1420662	400×125	720	425	248	160	
1420664	400×160	720	405	228	160	
1420689	450×63	720	400	295	145	
1420690	450×75	720	410	283	155	
1420691	450×90	720	425	273	155	
1420692	450×110	720	430	263	160	
1420693	450×125	720	440	248	160	
1420695	450×160	720	430	228	160	
1420720	500×63	760	430	315	145	
1420721	500×75	760	440	303	155	
1420722	500×90	760	455	293	155	
1420723	500×110	760	460	283	160	
1420724	500×125	760	470	268	160	
1420726	500×160	760	460	248	160	
1420754	560×110	760	485	283	160	
1420757	560×160	760	490	248	160	
1420782	630×63	760	500	315	145	
1420783	630×75	760	510	303	155	
1420784	630×90	760	530	393	155	
1420785	630×110	760	535	283	160	
1420786	630×125	760	540	268	160	
1420788	630×160	760	530	248	160	

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

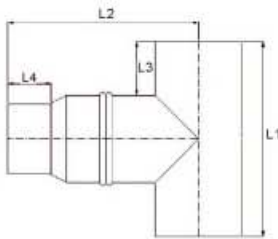
**Fabricated Cross**



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.

## Fabricated Reducing Tee Assembly



Part Number	Size (mm)	L1	L2	L3	L4	Qty/Ctn
1440471	200×50	600	315	235	30	2
1440475	200×110	440	500	120	78	2
1440476	200×125	440	650	120	70	3
1440478	200×160	440	450	120	100	2
1440507	225×125	530	705	152.5	80	3
1440509	225×160	530	485	152.5	90	2
1440511	225×200	530	400	152.5	90	2
1440533	250×50	630	340	250	30	2
1440540	250×160	600	570	165	90	2
1440542	250×200	600	500	165	100	2
1440543	250×225	600	450	165	90	2
1440571	280×160	632	588	176	100	2
1440573	280×200	632	550	176	90	2
1440595	315×50	670	383	270	30	3
1440603	315×180	920	800	302.5	80	3
1440604	315×200	920	638	302.5	100	2
1440605	315×225	920	575	302.5	90	2
1440606	315×250	920	590	302.5	88	2
1440607	315×280	920	550	302.5	85	2

Part Number	Size (mm)	L1	L2	L3	L4	Qty/Ctn
1440626	355×50	670	398	270	30	2
1440634	355×180	960	1050	302.5	80	4
1440635	355×200	960	850	302.5	100	3
1440636	355×225	960	800	302.5	90	3
1440637	355×250	960	820	302.5	88	3
1440638	355×280	960	785	302.5	85	3
1440639	355×315	960	590	302.5	90	2
1440657	400×50	720	420	295	30	3
1440666	400×200	1000	850	300	100	3
1440667	400×225	1000	820	300	90	3
1440668	400×250	1000	841	300	88	3
1440669	400×280	1000	800	300	85	3
1440670	400×315	1000	610	300	77	2
1440671	400×355	1000	600	300	30	2
1440696	450×180	1060	1300	305	80	4
1440697	450×200	1060	1173	305	100	3
1440698	450×225	1060	1100	305	90	3
1440699	450×250	1060	1126	305	88	3
1440700	450×280	1060	1085	305	77	3
1440701	450×315	1060	895	305	30	2
1440702	450×355	1060	895	305	90	2
1440703	450×400	1060	895	305	130	2
1440727	500×180	1200	1390	350	80	5
1440728	500×200	1200	1196	350	100	4
1440729	500×225	1200	1194	350	90	4
1440730	500×250	1200	1150	350	88	4
1440731	500×280	1200	1110	350	85	4
1440732	500×315	1200	920	350	85	3
1440733	500×355	1200		350		3
1440734	500×400	1200	710	350	110	2
1440735	500×450	1200		350		2
1440760	560×225	1260	1421	350	90	4
1440762	560×280	1260	1400	350	80	4
1440763	560×315	1260	1200	350	85	3
1440789	630×180	1330	1800	350	80	6
1440790	630×200	1330	1610	350	100	5
1440791	630×225	1330	1546	350	90	5
1440792	630×250	1330	1564	350	88	5
1440793	630×280	1330	1300	350	85	5
1440794	630×315	1330	1285	350	85	4
1440795	630×355	1330		350		4
1440796	630×400	1330	1080	350	120	3
1440797	630×450	1330	1335	350	80	3
1440798	630×500	1330	1055	350	60	2

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

**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

**Blade Scraper**


Part Number	Model	Application Range
1470001	Small Scraper	1.5"
1470002	Big Scraper	2.0"

**Rotation Scraper**


Part Number	Model	Application Range
1480001	RTC160	50~160
1480002	RTC315	75~315

**Socket Fusion Welding Machine**


Part Number	Model	Application Range
1490001	1000w	20~63
1490002	1600w	75~110
1490003	2500w	160

**Melting Socket**


Part Number	Model	Application Range
1500002		20
1500003		25
1500004		32
1500005		40
1500006		50
1500007		63
1500008		75
1500009		90
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
1510007	1200	900~1200

**Electro Fusion Welding Machine**


Part Number	Model	Application Range
1520001	DRJ-III	
1520002	DRJ- I	

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

## Characteristic

**3.1** Corrosion resistance.

**3.2** No leaks in the fusion weld joint. PE pipe are mainly used fusion weld joint to ensure the identity of the material, structure of the fittings and the pipe.

**3.3** The great technical and economic value of the flexibility of PE piping system. Mainly as below:

**3.3a** PE pipe can be coiled due to it's excellent flexibility, can be supplied with long length, avoiding the mass usage of joint and fittings, reducing the workload of joint. By considering the practicality, our company can supplied coiled PE pipe if the diameter not more than 63mm.



**3.3b** For reducing workload of joint, PE pipe in large diameter can be joint on the ground (outside the groove) before devoted into the groove.



**3.3c** Directional drilling technique can be used in the joint of the PE pipe in some places due to it's flexibility, lightweight and excellent scratch resistance. Suitable place includes the road, base of the railroad, river, etc.



**3.3d** Submerge the long pipe when laying the PE pipe in the river or lake. Connect the pipe on the fixed location before the pipes are submerged with heavy articles.



**3.3e** Repair the old urban water supply pipe by PE pipe as the lined pipe.



**3.4** Effective resist the underground movement and the point load. PE pipe has excellent flexibility and strong differential settlement resistance, the extension rate at break has exceeds 350%.

**3.5** Excellent resistance to fast crack propagation.

**3.6** Long service life. The PE pipe can be used for more than 50 years under proper use.

**3.7** Environment-friendly. PE pipe can be recycled. It won't produce harmful matter to the environment even burn it out.

**(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, upto 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°C ± °C)

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

**(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**

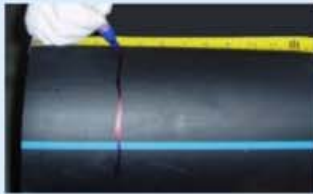
Wall Thickness (mm)	Preheating Curling Height (mm) (Preheating Temperature is 210±10℃)	Preheating Time(s) (Temperature is 210±10℃)	Allowed Maximum Transit Time(s)	Cooling Time for the Weld Seam under Pressure-reserving State (min)
2.0 - 3.9	0.5	30 - 40	4	4 - 5
4.3 - 6.9	0.5	40 - 70	5	6 - 10
7.0 - 11.4	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

**Application of Butt Fusion Joint at Sites**



**(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**



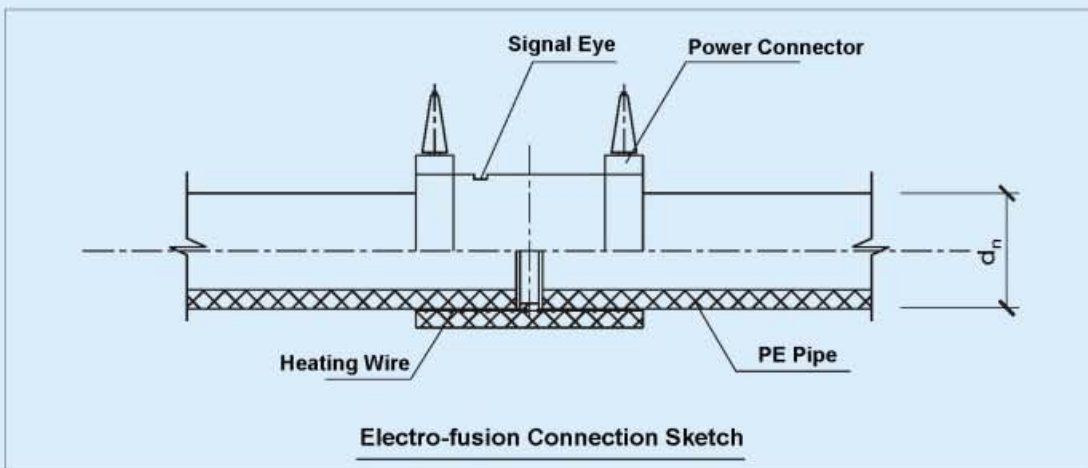
**④ Apply electric current**

- 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**

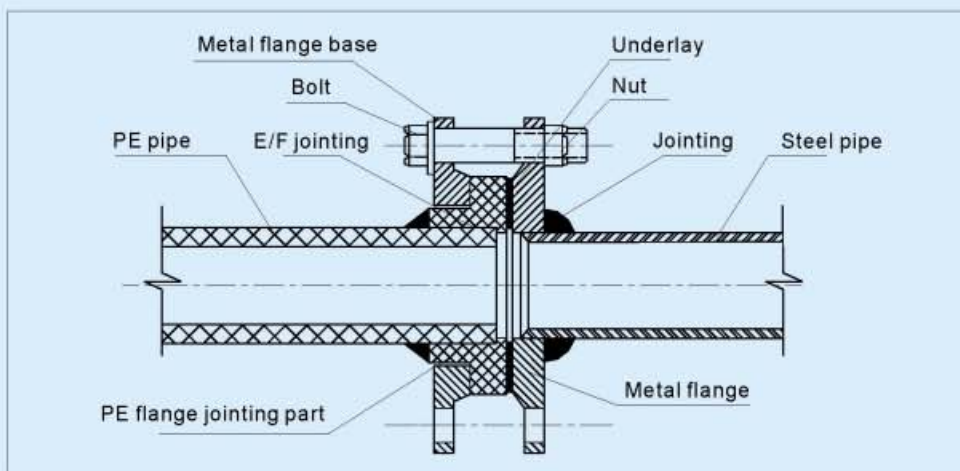
- Cool without movement or pressure.



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

**(4) Transition Joint****Join the PE pipe and the iron pipe by Flange Joint****① Preparation**

- Prepare the necessary tools and accessories.
- Check and clean the accessories.

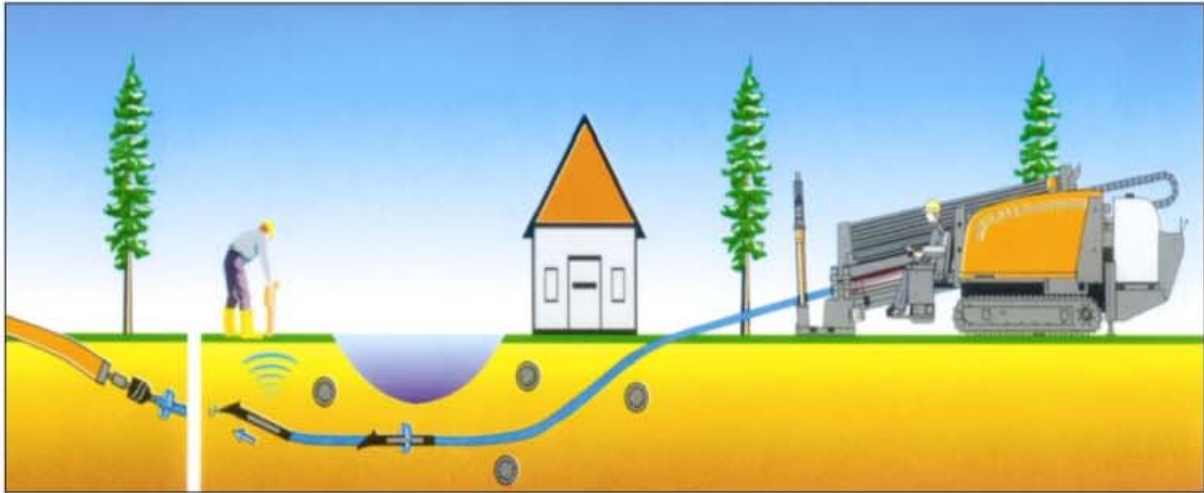
**② Put the pipe in the flange tray.****③ Use socket fusion joint or butt fusion joint on the pipe and the flange stub.****④ Put the rubber ring between the two flange stubs, and then tighten the bolts.**

## Trenchless Technology

The technology of detecting, laying, repairing and changing various kinds of pipe by no excavation or less excavation.

### Horizontal Directional Drilling Technology

The installation technology of directional drilling, chambering and pulling the pipe from different depth and different stratum by using the directional drilling equipments and location apparatus.



PE water pipe complies with ISO 4427

**NUTEK SYSTEMS, LTD.** 2012, 10/F, Lianhe Rd. 20, Zhongshan District, Shanghai, P. R. China. Tel: 86-21-5011 1111 Fax: 86-21-5011 1111

**TEST REPORT**  
OUR REFERENCE NO.: 110071-4

TITLE: Testing of Pipe  
OUR REFERENCE NO.: 110071-4  
DESCRIPTION OF SAMPLE: Polyethylene (PE) pipe of type PE100, size 110mm, 110mm, 110mm, 140mm and 200mm  
SAMPLE SUBMITTED BY: Tai Lee Pipe Limited  
10/F, 10/F, Block B, Shatin Industrial Centre, 3-7 Yuen Shan Circuit, Shatin, N.T., Hong Kong  
BRAND: L & S  
MANUFACTURER: Guangdong Liansu Technology Industrial Co., Ltd.  
BODY MARKINGS: L & S 牌 PE 100 聚乙烯管 110mm 110mm 110mm 140mm 200mm  
C 牌 PE 100 聚乙烯管 110mm 110mm 110mm 140mm 200mm  
C 牌 PE 100 聚乙烯管 110mm 110mm 110mm 140mm 200mm  
METHOD OF TEST: ISO 4427: 2004  
PERIOD OF TEST: 17<sup>th</sup> July to 4<sup>th</sup> October 2004  
RESULTS: (Apply only to the sample tested)

1. DIMENSIONAL STABILITY (ISO 4427 Clause 4.1)

Nominal size (mm)	Mean outside diameter		Minimum wall thickness (mm)	
	Sample	ISO Requirement	Sample	ISO Requirement (Type series S1, S2CR1), minimum value (S1/S2)
50	55.2	53 +0.3	5.9	5.0 +0.4
80	85.4	83 +0.3	4.82	4.5 +0.7
90	95.80	94 +0.3	4.60	4.3 +1.3
110	112.0	110 +1.0	31.7	19.9 +1.3
140	140.0	140 +1.0	15.8	14.8 +0.2
200	200.1	200 +1.0	19.9	18.2 +1.0

2. THERMAL STABILITY (ISO 4427 Clause 4.2)

Sample	Size	Deflection time at test temperature of ISO 4427 (mm)		Result
		> 50	> 10	
Sample	50mm	> 50	> 10	Pass
	80mm	> 50	> 10	Pass
	90mm	> 50	> 10	Pass
	110mm	> 50	> 10	Pass
	140mm	> 50	> 10	Pass
	200mm	> 50	> 10	Pass
ISO Requirement		> 50	> 10	

**NUTEK SYSTEMS, LTD.** 2012, 10/F, Lianhe Rd. 20, Zhongshan District, Shanghai, P. R. China. Tel: 86-21-5011 1111 Fax: 86-21-5011 1111

**TEST REPORT**  
OUR REFERENCE NO.: 110071-4 (P.2)

3. HYDROSTATIC STRENGTH (ISO 4427 Clause 5.1)

Sample	Size	Test temperature (°C)	Test stop stress (MPa)	Test pressure (Pa)	Duration (h)	Result
Sample	22mm	20	12.4	12.4	100	Pass
		80	5.5	11.5	100	Pass
		80	5.0	10.2	1000	Pass
	80mm	20	12.4	12.4	100	Pass
		80	5.5	11.2	100	Pass
		80	5.0	10.0	1000	Pass
110mm	20	12.4	12.4	100	Pass	
	80	5.5	11.2	100	Pass	
	80	5.0	10.0	1000	Pass	
	140mm	20	12.4	12.4	100	Pass
		80	5.5	11.1	100	Pass
		80	5.0	11.0	1000	Pass
200mm	20	12.4	12.4	100	Pass	
	80	5.5	11.2	100	Pass	
	80	5.0	11.1	1000	Pass	
ISO Requirement for pipe of PE100	20 <sup>st</sup> test	20	12.4	100	?	
	2 <sup>nd</sup> test	80	5.5	see type 2 below	100	?
	2 <sup>nd</sup> test	80	5.0		1000	

NOTE: 1) No leakage was detected during the above test.  
2) The test pressure P is calculated from  $P = 10 \times \frac{\sigma}{\sigma_{nom} - \sigma_{res}}$  where  $\sigma$  is the hoop stress in MPa,  $\sigma_{nom}$  is the nominal stress (mean diameter (D) in mm) of the test pipe, with the  $\sigma_{res}$  is the residual stress (wall thickness (t) in mm) of the test pipe.

4. LONGITUDINAL DEFORMATION (ISO 4427 Clause 6.2)

The test procedure was in accordance with test method A (check both methods) of ISO 4427-1.

Sample	Size	Test temperature (°C)	Duration (min)	Maximum % decrease in length	Sample	ISO Requirement	Result
Sample	22mm	110	30	1.5			Pass
		110	30	1.25			Pass
		110	30	1.8			Pass
	110mm	110	30	1.8			Pass
		110	30	1.7			Pass
		110	30	1.7			Pass
ISO Requirement	110	30	1.5				

**NUTEK SYSTEMS, LTD.** 2012, 10/F, Lianhe Rd. 20, Zhongshan District, Shanghai, P. R. China. Tel: 86-21-5011 1111 Fax: 86-21-5011 1111

**TEST REPORT**  
OUR REFERENCE NO.: 110071-4 (P.3)

5. SUMMARY OF RESULTS (Apply only to the sample tested)

Dimension	- Satisfactory
Thermal stability	- Satisfactory
Hydrostatic strength	- Satisfactory
Longitudinal extension	- Satisfactory

Date: 17<sup>th</sup> July 2004 Authorized signature: [Signature]  
Name: W.K. Yin (Director)

These reports are the results of tests approved by the Water Authority and Government Public Inspection, for using under RFRS Design.

PE water pipe and fittings' ROHS test reports issued by SGS.

**SGS**

Inspection Order No.: 84-CZ-9811-120030  
Page No.: 1 of 2  
Date of Issue: Mar 15, 2010

**INSPECTION REPORT**  
(non-regulatory)  
- Description and Quantity of Commodity as per: Water Pipes & Pipe Fittings : 15381PCS

- Name & Address of Buyer: To be advised  
- Name & Address of Seller: GUANGDONG LIANSU TECHNOLOGY INDUSTRIAL CO., LTD  
Shunde, Foshan, Guangdong, China  
- Inspection Date & Place: Mar 15, 2010 in Longshui Town, Foshan City, P.R. China  
- L/C No.: To be advised  
- PI No.: To be advised  
- Nature of Inspection: Item Result  
Witness dimension check Subject to client's evaluation  
Packing check Subject to client's evaluation  
- Inspector: Vitothai Huang

This is to report that we, SGS-CSTC Guangzhou Branch at the request of GUANGDONG LIANSU TECHNOLOGY IND. CO., LTD conducted the following inspection:  
**Inspection Finding:**  
**Inspection during Production:**

1. **Dimension Check:**  
- Reference documents:  
→ "Inspection report data" provided by LIANSU  
→ "Dimension tolerance" provided by LIANSU  
- Sample size: 20PCS for each type

**SGS**  
GUANGZHOU

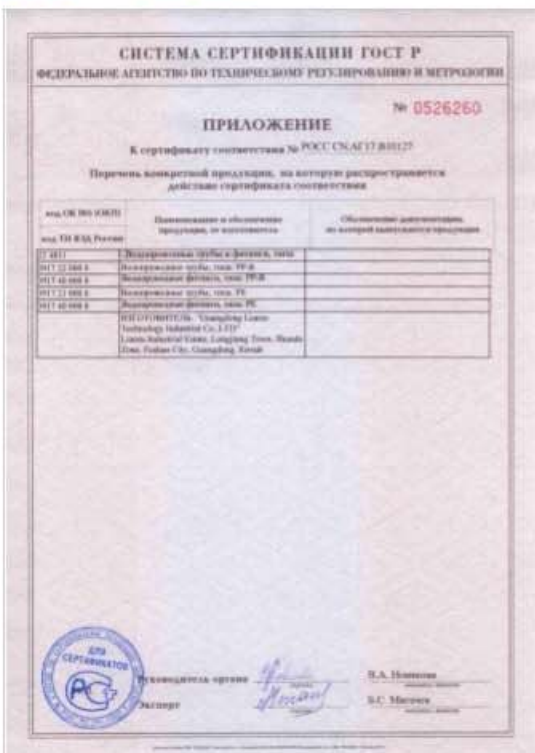
SGS-CSTC Guangzhou Technical Service Co., Ltd. No. 1088, Xinhua Road, Shunde Park, Guangzhou City 528000, P.R. China  
Tel: 86-20-8201 1881 Fax: 86-20-8201 1882  
E-mail: gsgs@sgs.com.cn  
Member of the SGS Group (Publicly traded on the stock market)



**WaterMark licence for PE water pipe fittings comply with AS/NZS 4129.**



**GOST R certification for PE pipe and fittings comply with GOST R 18599, GOST R 50838.**



**PE water pipe and fittings comply with BS 6920.**

Our Ref: QM/M110023  
Test Report: MAT/LAB 4850

11<sup>th</sup> October 2011

Guangdong Liansu Technology Industrial Co Ltd  
Liansu Industrial Estate  
Longjiang Town  
Shunde Zone  
Foshan City  
Guangdong  
China

**WRAS**  
Water Regulations Advisory Scheme

**WATER REGULATIONS ADVISORY SCHEME (WRAS)  
MATERIAL APPROVAL**

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS 6920-1:2000 "Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water".

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

**POLYETHYLENE - COMPONENTS** **3340**

Liansu PE Pipe, Black Coloured, extruded polyethylene pipe. For use with water up to 23°C.

**APPROVAL NUMBER: 110023**  
**APPROVAL HOLDER: GUANGDONG LIANSU TECHNOLOGY INDUSTRIAL CO LTD**

The Scheme reserves the right to review approval. This approval is valid between October 2011 and October 2016.

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, "Materials which have passed full tests of effect on water quality".

The Directory may be found at: [www.wras.gov.uk/directory](http://www.wras.gov.uk/directory)

Yours faithfully

*John Firthall*  
John Firthall  
Approval & Inspection Manager  
Water Regulations Advisory Scheme

Water Regulations Advisory Scheme Ltd  
20 New Road, Park Road Industrial Estate,  
Leamington Spa, CV31 3JF, UK  
Tel: 01922 444411 Fax: 01922 444411  
E-mail: [enquiries@wras.gov.uk](mailto:enquiries@wras.gov.uk)

Our Ref: QM/M110023  
Test Report: MAT/LAB 4870

11<sup>th</sup> October 2011

Guangdong Liansu Technology Industrial Co Ltd  
Liansu Industrial Estate  
Longjiang Town  
Shunde Zone  
Foshan City  
Guangdong  
China

**WRAS**  
Water Regulations Advisory Scheme

**WATER REGULATIONS ADVISORY SCHEME (WRAS)  
MATERIAL APPROVAL**

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS 6920-2:2000 "Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water".

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

**POLYETHYLENE - COMPONENTS** **3340**

Liansu PE Fittings, Black coloured, injection moulded polyethylene fittings. For use with water up to 23°C.

**APPROVAL NUMBER: 110023**  
**APPROVAL HOLDER: GUANGDONG LIANSU TECHNOLOGY INDUSTRIAL CO LTD**

The Scheme reserves the right to review approval. This approval is valid between October 2011 and October 2016.

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The Directory may be found at: [www.wras.gov.uk/directory](http://www.wras.gov.uk/directory)

Yours faithfully

*John Firthall*  
John Firthall  
Approval & Inspection Manager  
Water Regulations Advisory Scheme

Water Regulations Advisory Scheme Ltd  
20 New Road, Park Road Industrial Estate,  
Leamington Spa, CV31 3JF, UK  
Tel: 01922 444411 Fax: 01922 444411  
E-mail: [enquiries@wras.gov.uk](mailto:enquiries@wras.gov.uk)

**CE certification for PE water pipe and fittings comply with EN 12201.**



**CERTIFICATE OF COMPLIANCE**

**CERTIFICATE Nr. A120423/QLT350**

MANUFACTURER:	
NAME	GUANGDONG LIANSU TECHNOLOGY INDUSTRIAL CO. LTD.
ADDRESS	LIANSU INDUSTRIAL ESTATE, LONGJIANG TOWN, SHUNDE ZONE, FOSHAN CITY, GUANGDONG, CHINA

WE CERTIFY THE FOLLOWING PRODUCTS:

PRODUCT	PPR PIPES AND FITTINGS, PE PIPES AND FITTINGS, UPVC PIPES AND FITTINGS, CPVC PIPES AND FITTINGS
MODELS	PPR PIPES AND FITTINGS DN15-160mm PE PIPES AND FITTINGS DN15-300mm UPVC PIPES AND FITTINGS DN12-160mm CPVC PIPES AND FITTINGS DN12-160mm
YEAR	2012

REMARK: THIS DOCUMENT HAS BEEN ISSUED UPON A REVIEW OF THE DRAWINGS AND OF THE TECHNICAL CONSTRUCTION FILE. THE MANUFACTURER IS RESPONSIBLE TO MEET THE REQUIREMENTS OF THE BELOW CONSTRUCTION DIRECTIVE TO PLACE THE REQUIREMENTS OF THE ISO 9001 CERTIFICATION.

**89/106/EEC CONSTRUCTION PRODUCT DIRECTIVE**

**SAFETY STANDARDS EN NUMBERS:**  
EN ISO 15874-1:2003, EN ISO 15874-2:2003, EN ISO 15874-3:2003, EN 12201-2:2011,  
EN 12201-3:2011, EN 12201-3:2011, EN ISO 1452-1:2003, EN ISO 1452-2:2003,  
EN ISO 1452-3:2010, EN ISO 15877-1:2009+A1:2010, EN ISO 15877-2:2009+A1:2010,  
EN ISO 15877-3:2009+A1:2010

THE DIRECTORY IS YOUR ONLY REFERENCE FOR THE APPROVAL OF COMPLIANCE REQUIREMENTS AND IS CONSIDERED AS THE "LAST WORD" ON THE MATTER. THE MANUFACTURER IS RESPONSIBLE TO MEET THE REQUIREMENTS OF THE ABOVE CONSTRUCTION DIRECTIVE TO PLACE THE REQUIREMENTS OF THE ISO 9001 CERTIFICATION. TO OBTAIN THE APPROVAL OF COMPLIANCE OF THE MANUFACTURER, THE MANUFACTURER MUST OBTAIN THE APPROVAL OF COMPLIANCE OF THE MANUFACTURER.

DATE OF ISSUE: APRIL 2012  
Expiry date: 23/04/2017

*Alicia Moyca*  
*John Firthall*

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Via... 40138 Imola (BO) Italy  
Tel: +39 059 94231 - Fax: +39 059 942321 - Email: [certificazioni@entecm.it](mailto:certificazioni@entecm.it)



<http://www.liansu.com>



## **GUANGDONG LIANSU TECHNOLOGY INDUSTRIAL CO.,LTD.**

**Headquarters:** Liansu Industrial Estate, Longjiang Town, Shunde Zone, Foshan City, Guangdong (China)

Tel: +86-757-23379211      Fax: +86-757-23378980      E-mail: [oversea@liansu.com](mailto:oversea@liansu.com)

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