



## SHANDONG KANGYU PIPE INDUSTRY CO.,LTD

Add: Kangyu Industrial Park, North Section of Xizhonghuan Road,  
Wanggou Town, Lanshan District, Linyi City, Shandong Province

This book is a general information publication, and we reserve the right to change the product design and instructions at any time.

Any words or phrases in this book, regardless of their literal meaning or implication, shall not be held responsible for any product, its use and quality or any expression or modification of the terms of the purchase and sale contract.

Due to limitations in printing technology, the actual processed colors may differ slightly from those in this book, and the final shape can be determined based on the actual materials and color samples.



# Contents

kangyu Product Manual Catalog

**01-06**

Company Profile

**07-11**

HDPE Pipe

**12-15**

HDPE Gas Pipe

**16-19**

Steel Wire Mesh  
Reinforced PE  
Composite Pipe

**20-21**

HDPE Siphon Drain  
Pipe

**22-31**

HDPE Socket Fusion  
Fittings

**32-38**

HDPE Butt Fusion  
Fittings

**39-45**

HDPE Electrofusion  
Fittings

**46-48**

HDPE Double Wall  
Corrugated Pipe

**49-55**

U-PVC Pipe

**56-61**

PP-R Pipe

**62-74**

PP-R Fittings

**75-78**

PE-RT Floor Heating  
Pipe

**79-80**

Kangyu Global  
Market

**81-82**

Service

**83-88**

Certificate

# CONTENTS



Shandong Kangyu Pipe Industry Co., Ltd., located in Linyi, Shandong, China, covers an area of over 100,000 square meters and employs more than 300 people. We are a specialized integrated pipeline company engaged in the production, R&D and sales of pipes and fittings. With over 80 well-known domestic and international production lines, our annual production capacity reaches up to 150,000 tons.

At Kangyu Pipe Industry, we pride ourselves on having an efficient management and production team. Our products are manufactured using high-quality raw materials from both domestic and international sources, ensuring superior quality through a stringent quality management system and advanced production technology. We have established a high-quality, efficient, and rapid production and after-sales system, earning widespread praise and trust from our customers. Our "Kangyu" brand offers a comprehensive range of pipeline products, including HDPE pipes for water supply/ fire protection/gas/mining/oil/irrigation/ electrical and communication conduit and urban trenchless crossing pipes; PE steel mesh skeleton pipes; polyethylene double-wall corrugated pipes; hollow wall winding pipes; MPP/ABS/CPVC pipes for electrical and communication conduit; HDPE electrofusion fittings; PVC-U/PVC-M pipes for water supply/chemicals/mining/ aquaculture/ irrigation/ electrical and communication conduit; hot and cold water PP-R pipes and fittings; and PE-RT/PB heating pipes and fittings.

Our company strictly adheres to ISO9001 standards, with comprehensive testing mechanisms and high-standard laboratories. We have obtained multiple authoritative certifications, including EU CE certification, German TÜV Rheinland certification, French BV certification, Swiss SGS certification, and China's MA certification for coal mine use/non-coal mine KA certification, elevating our product quality to a new level. With strong design and development capabilities, we continually increase the development of new products and enhance product quality and technological content to meet market demands.

First-class production equipment, a highly qualified workforce, and advanced management systems are the strong foundations for our continuous growth and development. We adhere to the path of investment, innovation, and further development, evolving from a single product line to a series of diversified products. We have now become a high-tech modern enterprise integrating scientific research, development, production, marketing, trade, and services. With great enthusiasm, we uphold the principle of technology as our foundation and a market-oriented approach, striving to build a century-old enterprise and position ourselves among the leading companies in the global building materials industry.

# COMPANY PROFILE

## Pressure range

Negative pressure **0.097MPa** to ultra-high positive pressure **12.0MPa** polyolefin composite pipes

## Diameter range

**Φ12-Φ1600** large diameter **150mm** ultra-thick wall pipes.



**20<sup>+</sup>**

Years of Industry Experience

**10,0000<sup>m<sup>2</sup>+</sup>**

Total area occupied by the enterprise

**300<sup>+</sup>**

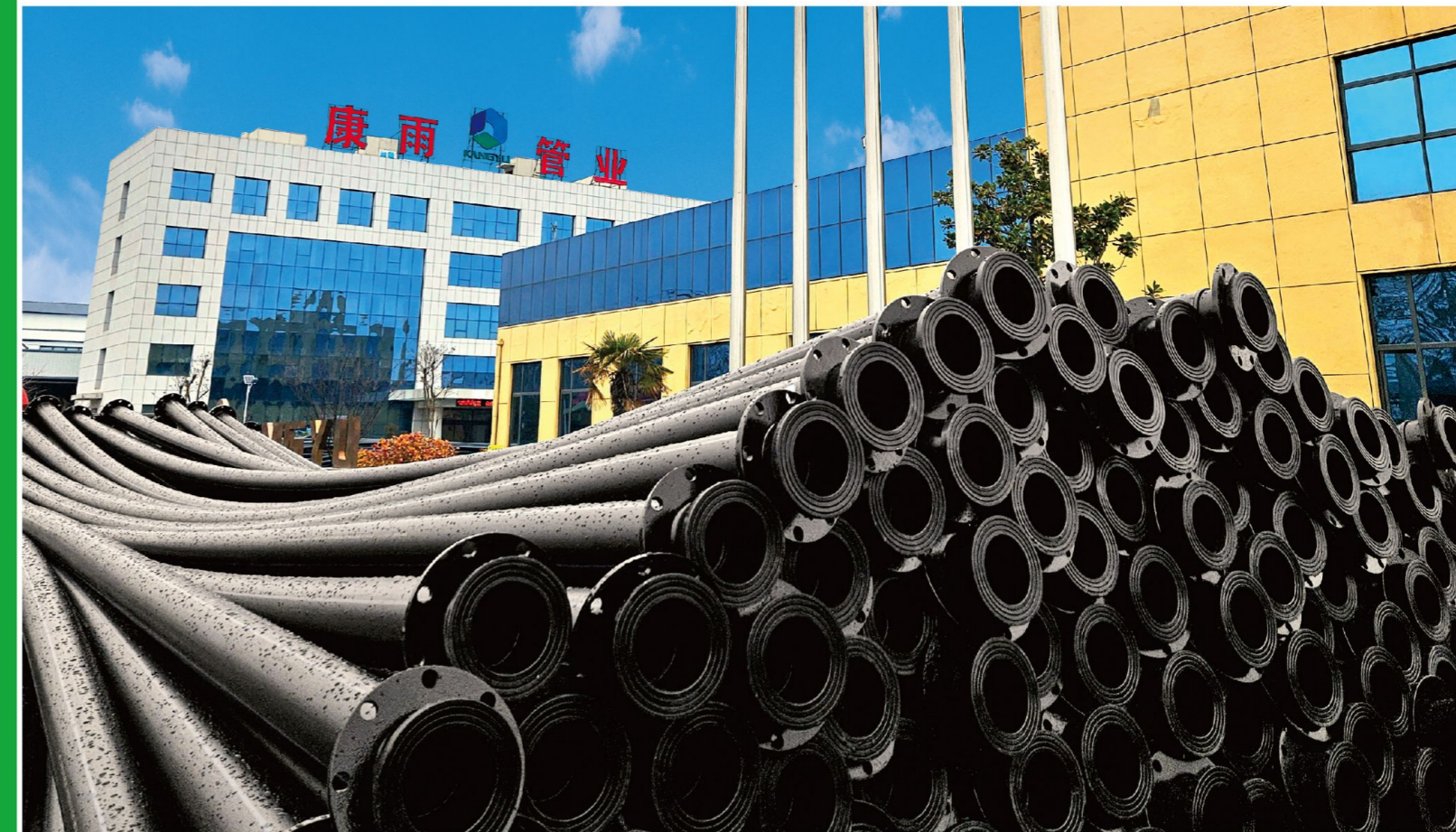
Existing employees

**80<sup>+</sup>**

Pipe and fittings production line

**15,0000t<sup>+</sup>**

Annual production capacity of pipes and fittings



# Company Exhibition Hall

Hello,welcome to kangyu!



## Company style

Kangyu Pipe Industry, as a professional new type of pipeline manufacturer, has been continuously growing and expanding over the years. With excellent quality and professional service, it has won wide recognition from the consumer public. Received high recognition from the industry and market, as well as various product awards and honors.



## Company Culture

- Open and inclusive
- Happiness and pragmatism
- Vitality development
- Win-win cooperation



### Employees think tank

Kangyu Pipe attracts the country's industry elite, respected integrity and selfless personality, advocating rigorous and pragmatic work style, pay attention to staff training initiative, leadership skills and team spirit. Employees high degree of enthusiasm and motivation for them to create a better development.



### Business objectives

In the "new pipeline professional supplier," the image of the industry is committed to the development of pipeline quality brand, through hard work and perseverance, so that we gradually grow into excellent brand-name companies.



### Talent

"Talent-level" Kang yu enterprise talent, employees are the most valuable resource of Kangyu. We always devote ourselves to creating an ideal working environment to attract, develop and retain the best talent. Our employees enjoy industry-respected position, broad space for development and challenging work, and to achieve high performance while reap rewards.



### Core Values

Coexistence and mutual benefit,people-oriented, achieving great success! Harmonious mutual benefit and coexistence with customers are the keys to victory. Kangyu must enable every partner to create value through our enterprise; we will never do a single win business.

# System solution One step approach

## Comprehensive Pipeline System Solutions

Kangyu Pipe Industry provides high-quality pipes and fittings to the market, becoming a leading product supplier. We collaborate extensively with industry manufacturers and upstream customers, possessing strong comprehensive corporate strength. Our services include complete solutions such as initial design, manufacturing, transportation, and technical guidance. With world-class production equipment, a well-established management system, and a strict quality control framework, we can tailor comprehensive pipeline system solutions to meet our customers' needs.



## Equipment partners

battenfeld-cincinnati



JWELL

FANGLI



通达机械

HAITIAN INTERNATIONAL

## Raw material partners



中国石化  
SINOPEC

بوروج  
Borouge

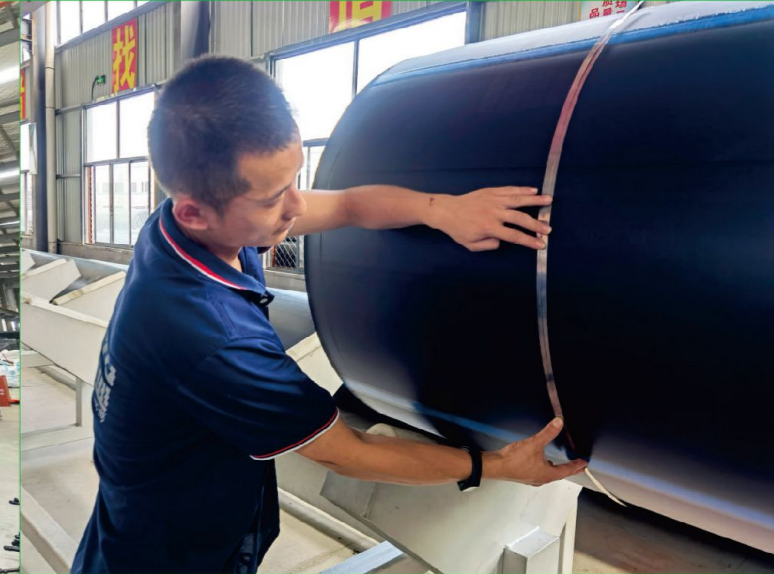


东明石化  
DONGMING PETROCHEMICAL

lyondellbasell

WANHUA 万华

# Providing You with Lifetime Worry-Free Pipeline Solutions\*\*



1. The company has invested heavily in introducing industry-leading production and testing equipment, ensuring the excellent performance of every product through strict quality management and precise production testing processes.

2. We use plastic pipe specialized materials certified by authoritative institutions to produce products, ensuring their purity, health, and environmental friendliness. We focus on quality from the source and control product performance.

3. The company has a professional mold design team that continuously improves the detailed design of products, improves and upgrades products through market feedback, and meets market demand.

4. Enterprises hire professional pipeline technology experts, purchase specialized equipment, conduct research and practice on various aspects such as pipeline performance and function, and have strong technical support.

5. Enterprises provide diversified customized services, including special models and specifications, to meet the personalized needs of different consumers.

6. We have a diverse product architecture and several series of products to meet the needs of home tooling customers. The product has unique temperature and pressure resistance characteristics, combining practicality and aesthetics, providing a new water purification experience.

7. The introduction of foreign intelligent warehouse management system, through the Internet and logistics information joint rapid warehouse distribution, reduce costs, improve work efficiency, improve logistics distribution efficiency, Meet the delivery requirements of dealers across the country.

8. The enterprise establishes a comprehensive modern management system, optimizes internal resources, cooperates reasonably, comprehensively reduces costs, and produces products that are highly cost-effective. Provide customers with a perfect comprehensive pipeline solution.

9. Relying on strong technological capabilities, enterprises continuously strengthen the research and innovation of core technologies, improve product supply chains, and achieve large-scale production.

10. Enterprises adopt various effective measures and strategies to comprehensively carry out market development and customer expansion work, and provide high-quality services and a good attitude to do a good job in customer service and customer maintenance.



# HDPE PIPE



## Caliber 12-1600mm

Polyethylene PE pipes are currently supplied to the municipal pipe market in China, while plastic pipes are steadily developing, with PE pipes, PP-R pipes, and UPVC pipes all occupying the market share

Among them, the strong development momentum of PE pipes is the most remarkable. PE pipes are widely used in various fields. Among them, water supply pipes and gas pipes are its two largest application markets.

## Hygiene and safety

The hygiene performance of polyethylene PE pipes has been tested by various national and local health inspection departments. Fully comply with the national standard GB/T 13663-2018. The material is non-toxic, does not breed bacteria, and does not scale.

## General provisions

- ① Pipes and fittings should have a product quality inspection report from the quality inspection department and a certificate of conformity from the manufacturer's factory.
- ② When storing, handling, and transporting pipes, non-metallic ropes should be used to tie them up, and the ends of the pipes should be sealed.
- ③ During the storage, handling, and transportation of pipes and fittings, they must not be thrown, dropped, or subjected to severe cracking or impact.
- ④ During the storage, handling, and transportation of pipes and fittings, they must not be exposed to direct sunlight or rain; Do not come into contact with other chemical substances such as oil, acid, salt, etc.
- ⑤ The storage period of pipes and fittings from production to use should not exceed one year.

## FEATURES

### Superior compressive strength

Polyethylene PE pipes are connected by electric fusion, hot melt butt joint, hot melt socket, welding, and mechanical fittings. The strength at the interface is higher than that of the pipe itself and will not break due to soil movement or load.

### Excellent scratch resistance

Polyethylene PE pipes have excellent scratch resistance and superior wear resistance compared to metal pipes. They also have a service life four times longer than steel pipes when transporting fluid media such as mineral sand, mud, and crude oil.

### Good environmental adaptability

Except for a few strong oxidants, it can withstand corrosion from various chemical media and does not require anti-corrosion treatment. It can be used as a transportation pipeline for various industrial fluid media.



### Seismic and impact resistance

Polyethylene PE pipes will not rupture when heavy objects are directly pressed over the pipeline. The pipeline foundation has strong adaptability during use, and is not easily damaged when uneven settlement and misalignment occur. At the same time, due to low requirements for the pipeline foundation, it can greatly save costs.

### Good flexibility

Polyethylene PE pipes have unique flexibility, with a fracture elongation of over 500% and a bending radius as small as 20-25 times that of the pipe. They are easy to move, bend, and insert during laying. At the same time, as the axial load of the fusion joint does not cause leakage or detachment, there is no need for expensive "anchoring" at the joints and bends during laying.

### Low temperature resistance and frost resistance

The low-temperature resistance of polyethylene PE pipes is far superior to other water and gas pipes such as PVC-U, and they do not undergo embrittlement or brittle fracture at very low ambient temperatures.

Nominal Outer Diameter dn	Nominal Wall Thickness en/mm							
	Standard Dimension Ratio							
	SDR9	SDR11	SDR13.6	SDR17	SDR21	SDR26	SDR33	SDR41
	Pipe Series							
	S4	S5	S6.3	S8	S10	S12.5	S16	S20
	Nominal Pressure Rating for PE80 Grade (MPa)							
	1.6	1.25	1.0	0.8	0.6	0.5	0.4	0.32
	Nominal Pressure Rating for PE100 Grade (MPa)							
2.0	1.6	1.25	1.0	0.8	0.6	0.5	0.4	
16	2.3	—	—	—	—	—	—	—
20	2.3	2.3	—	—	—	—	—	—
25	3.0	2.3	2.3	—	—	—	—	—
32	3.6	3.0	2.4	2.3	—	—	—	—
40	4.5	3.7	3.0	2.4	2.3	—	—	—
50	5.6	4.6	3.7	3.0	2.4	2.3	—	—
63	7.1	5.8	4.7	3.8	3.0	2.5	—	—
75	8.4	6.8	5.6	4.5	3.6	2.9	—	—
90	10.0	8.2	6.7	5.4	4.3	3.5	—	—
110	12.3	10.0	8.1	6.6	5.3	4.2	—	—
125	14.0	11.4	9.2	7.4	6.0	4.8	—	—
140	15.7	12.7	10.3	8.3	6.7	5.4	—	—
160	17.9	14.6	11.8	9.5	7.7	6.2	—	—
180	20.1	16.4	13.3	10.7	8.6	6.9	—	—
200	22.4	18.2	14.7	11.9	9.6	7.7	—	—
225	25.2	20.5	16.6	13.4	10.8	8.6	—	—
250	27.9	22.7	18.4	14.8	11.9	9.6	—	—
280	31.3	25.4	20.6	16.6	13.4	10.7	—	—
315	35.2	28.6	23.2	18.7	15.0	12.1	9.7	7.7
355	39.7	32.2	26.1	21.1	16.9	13.6	10.9	8.7
400	44.7	36.3	29.4	23.7	19.1	15.3	12.3	9.8
450	50.3	40.9	33.1	26.7	21.5	17.2	13.8	11.0
500	55.8	45.4	36.8	29.7	23.9	19.1	15.3	12.3
560	62.5	50.8	41.2	33.2	26.7	21.4	17.2	13.7
630	70.3	57.2	46.3	37.4	30.0	24.1	19.3	15.4
710	79.3	64.5	52.2	42.1	33.9	27.2	21.8	17.4
800	89.3	72.6	58.8	47.4	38.1	30.6	24.5	19.6
900	100.0	81.7	66.2	53.3	42.9	34.4	27.6	22.0
1000	111.1	90.2	72.5	59.3	47.7	38.2	30.6	24.5
1200	133.3	109.0	88.2	67.9	57.2	45.9	36.7	29.4
1400	—	127.3	102.9	82.4	66.7	53.5	42.9	34.3
1600	—	145.5	117.6	94.1	76.2	61.2	49.0	39.2
1800	—	—	—	105.9	85.7	69.1	54.5	43.8
2000	—	—	—	117.6	95.2	76.9	60.6	48.8
2250	—	—	—	—	107.2	86.0	70.0	55.0
2500	—	—	—	—	119.1	95.6	77.7	61.2

Physical Properties of Pipes				
No	Item	Requirement	Test parameters	
1	Hydrostatic Strength (20°C,100h)	No Failure, No Leakage	Test Temperature	20°C
			Test time	100h
			Hoop Stress:	
			PE80	10.0MPa
2	Hydrostatic Strength (80°C,165h)	No Failure, No Leakage	Test Temperature	80°C
			Test time	165h
			Hoop Stress:	
			PE80	4.5MPa
3	Hydrostatic Strength (80°C,1000h)	No Failure, No Leakage	Test Temperature	80°C
			Test time	1000h
			Hoop Stress:	
			PE80	4.0MPa
			PE100	5.0MPa

Physical Properties of Pipes				
No	Property	Requirement	Test parameters	
1	Melt Mass-Flow Rate (g/10min)	Change in MFR Before and After Processing:Not Greater Than 20%	Load Mass	5kg
2	Oxidation Induction Time	≥20min	Test Temperature	210°C
3	Longitudinal Reversion	≤3%	Test Temperature	110°C
			Specimen Length	200mm
4	Carbon Black Content <sup>b</sup>	0%~2.5%	—	—
5	Carbon Black Dispersion/Pigment Dispersion <sup>c</sup>	≤Level 3	—	—
6	Ash Content	≤0.1%	Test Temperature	(850±50)°C
			Specimen Shape	Type 2
			Test Speed	100mm/min
			Specimen Shape	Type 1 <sup>f</sup>
			Test Speed	50mm/min
			Specimen Shape	Type 1 <sup>f</sup>
7	Elongation at Break en≤5mm	≥350% <sup>d,e</sup>	Test Speed	25mm/min
			or	
			Specimen Shape	Type 3 <sup>f</sup>
			Test Speed	10mm/min
8	Resistance to Slow Crack Growth en≤5mm(Cone Test)	<10mm/24h	—	—
9	Resistance to Slow Crack Growth en>5mm(Notch Test)	No Failure, No Leakage	Test Temperature	80°C
			Internal Test Pressure:	
			PE80,SDR11	0.80MPa <sup>g</sup>
			PE100,SDR11	0.92MPa <sup>g</sup>
			Test time	500h
			Test type	Water-Water

a. The measurement values of the pipe samples are related to the measurement values of the compounds used.  
b. The carbon black content is applicable only to black pipes.  
c. The carbon black dispersion is applicable only to black pipes, and pigment dispersion is applicable only to blue pipes.  
d. If failure occurs outside the gauge length, the test is considered passed if the measured values meet the requirements.  
e. The test can be stopped once the required values are reached, and it is not necessary to continue until sample failure.  
f. If feasible, pipes with a nominal wall thickness not exceeding 25mm can also use Type 2 samples, which are formed by mechanical processing or cutting. In case of disputes, the test results of Type 1 samples shall be taken as the final basis for judgment.  
g. For pressure values corresponding to other SDR series, refer to GB/T 18476-2001.

## Sanitary requirements for immersion water of drinking water transmission and distribution pipes and fittings

Project	Standards and requirements
In the hygiene standards for drinking water	
Designated projects	
colour	Do not increase chromaticity
Turbidity	Increase amount $\leq$ 0.5 degrees
odor	No strange smell or odor is produced
Visible to the naked eye	No visible fragments or debris are generated
PH	Do not change pH
iron	$\leq$ 0.3mg/L
manganese	$\leq$ 0.01mg/L
copper	$\leq$ 0.1mg/L
zinc	$\leq$ 0.1mg/L
Volatile phenols (calculated as phenol)	$\leq$ 0.002mg/L
arsenic	$\leq$ 0.005mg/L
mercury	$\leq$ 0.001mg/L
Chromium (hexavalent)	$\leq$ 0.005mg/L
cadmium	$\leq$ 0.001mg/L
lead	$\leq$ 0.005mg/L
silver	$\leq$ 0.005mg/L
fluoride	$\leq$ 0.1mg/L
Nitrate (calculated as nitrogen)	$\leq$ 2mg/L
chloroform	$\leq$ 6 $\mu$ g/L
carbon tetrachloride	$\leq$ 0.3 $\mu$ g/L
Benzo (A) pyrene	$\leq$ 0.001 $\mu$ g/L
Other projects	Increase amount $\leq$ 10mg/L
Evaporation residue	Increase amount $\leq$ 2mg/L



## HDPE GAS PIPE



PE gas pipes are processed by blending polyethylene materials. We will thoroughly solve the corrosion and joint leakage problems of steel pipes and cast iron pipes, thereby ensuring the safe operation of the gas pipeline network system. The PE material used for PE gas pipes is an inert material that can withstand the erosion of various chemical media. The friction coefficient of the pipe wall is low, the flow resistance is small, and the conveying capacity is strong. It adopts electric heating fusion connection, and the interface strength is higher than that of the pipe body. The high toughness PE fracture elongation generally exceeds 500%. PE gas pipes have good seismic performance, resistance to slow crack growth (SCG), rapid crack propagation (RCP), flexibility, and scratch resistance.

PE gas pipes have strong adaptability to uneven settlement of pipe foundations and strong wear resistance. Multiple non excavation methods can be used, which greatly facilitates construction and installation, has low system cost, low maintenance cost, and can significantly reduce project costs.

## PRODUCT APPLICATION FIELD

The buried polyethylene (PE) pipeline for gas is suitable for underground transportation of urban gas pipeline systems with a working temperature of -20-40 °C and a maximum allowable working pressure not exceeding 0.7MPa.

Suitable types of gas for transportation:

1. Natural gas: such as pure natural gas, petroleum associated gas, mine gas, etc;
2. Artificial gas: such as coke oven gas, water gas, oil to gas, blast furnace gas, etc;
3. Liquefied petroleum gas;
4. Biogas.

# FEATURES



## Reliable connection

The polyethylene pipeline system is connected by electric melting method, and the strength of the joint is higher than that of the pipeline body.

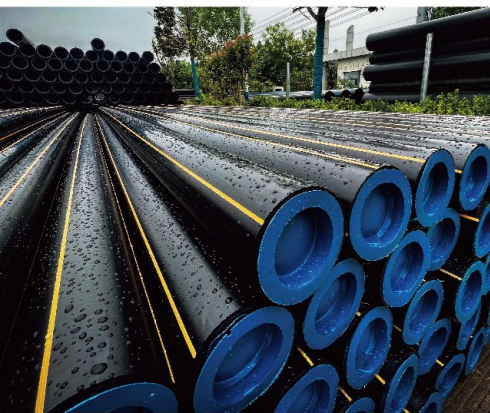
## Good resistance to stress cracking

PE gas pipes have low notch sensitivity, high shear strength, excellent scratch resistance, and outstanding resistance to environmental stress cracking.



## Resistant to aging and has a long service life

Polyethylene pipes containing 2-2.5% uniformly distributed carbon black can be stored outdoors or used for 50 years. Will not be damaged by UV radiation.



## Good wear resistance

The comparative test of wear resistance between PE gas pipes and steel pipes shows that the wear resistance of HDPE pipes is four times that of steel pipes. HDPE pipes have a longer service life and better economy.

## Good low-temperature impact resistance

Polyethylene has an extremely low low-temperature brittleness temperature and can be safely used within the temperature range of -60-60 °C. During winter construction, the material has good impact resistance and will not cause pipe brittleness.



## Convenient to transport

PE gas pipes are lighter than concrete pipes, galvanized pipes, and steel pipes. They are easy to handle and install, with lower labor and equipment requirements, which means that the installation cost of the project is greatly reduced.

**Execution standards:  
GB/T 15558-2023**

## Product specifications

Nominal outer diameter	Nominal wall thickness	
	SDR11	SDR17
16	3.0	—
20	3.0	—
25	3.0	—
32	3.0	—
40	3.7	3.0
50	4.6	3.0
63	5.8	3.8
75	6.8	4.5
90	8.2	5.4
110	10.0	6.6
125	11.4	7.4
140	12.7	8.3
160	14.6	9.5
180	16.4	10.7
200	18.2	11.9
225	20.5	13.4
250	22.7	14.8
280	25.4	16.6
315	28.6	18.7
355	32.2	21.1
400	36.4	23.7
450	40.9	26.7
500	45.5	29.7
560	50.9	33.2
630	57.3	37.4
710	64.5	42.1
800	72.6	47.4

## Physical property

Physical Properties of Pipes			
No	Property	Experimental requirement	Test parameters
1	Hydrostatic Strength (20°C,100h)	≤20%	Test temperature/load mass 190°C/5 kg
2	Time of oxidation induction	≥20 min	test temperature 210°C
3	ash content	Black pipe	≤0.10%(mass fraction)
		Orange, yellow pipes	≤0.60%(mass fraction)
4	Carbon black content <sup>a</sup>	2.0% - 2.5%(mass fraction)	
5	Carbon black dispersion / pigment dispersion <sup>b</sup>	Size grade: Grade 3	
		Apparent grade: A1, A2, A3, or B	
6	Carbon black content	Iron content was 10 mg / kg Calcium content was 250 mg / kg	

<sup>a</sup>Suitable for black pipes only.

<sup>b</sup>Carbon black dispersion is only suitable for black pipes, and pigment dispersion is only suitable for orange and yellow pipes.

## Mechanical properties of the pipes

No	Project	Experimental requirement	Test parameters
1	Hydrostatic strength (20°C, 100 h)	No Failure, No Leakage	Test temperature 20°C
			Test time ≥100 h
			Ring stress:
			PE 80 10.0 MPa PE 100 and PE 100-RC 12.0 MPa
2	Hydrostatic Strength (80°C,165h)	No Failure, No Leakage	Test temperature 80°C
			Test time ≥165 h
			Ring stress:
			PE 80 4.5 MPa PE 100 and PE 100-RC 5.4 MPa
3	Hydrostatic Strength (80°C,1000h)	No Failure, No Leakage	Test temperature 80°C
			Test time ≥1000 h
			Ring stress:
			PE 80 4.0 MPa PE 100 and PE 100-RC 5.0 MPa
4	Elongation at break ( $e_n \leq 5$ mm)	≥350% <sup>b,c</sup>	Sample type test speed Type 2 100 mm/min
	Elongation at break (5 mm< $e_n$ ≤12 mm)	≥350% <sup>b,c</sup>	Sample type test speed Type 1 <sup>d</sup> 50 mm/min
	Elongation at break ( $e_n > 12$ mm)	≥350% <sup>b,c</sup>	Sample type test speed Type 1 <sup>d</sup> 25 mm/min
			Or Sample type test speed Type 3 <sup>d</sup> 10 mm/min
5	Slow crack growth resistance (cone test) ( $e_n \leq 5$ mm)	<10(mm/24 h)	Test temperature 80°C
6	Slow crack growth resistance (incision test) <sup>a</sup> ( $e_n > 5$ mm)	No damage, No Leakage	Test temperature 80°C
			Internal test pressure:
			PE 80,SDR 11 0.80 MPa PE 100 or PE 100-RC, 0.92 MPa
			SDR 11 ≥500 h
			Test time, Water-water
7	Resistance to rapid crack expansion <sup>f</sup>	$P_{c_{95}} \geq MOP/2.4 - 0.072$ MPa	test temperature 0°C
8	Compression recovery	No damage, No Leakage	—
9	Longitudinal shrinkage rate ( $e_n \leq 16$ mm)	≤3.0%	Test temperature 110 °C
			sample length 200 mm
Additional performance requirements of PE 100-RC pipe material			
10	Strain Hardening Test (SHT)	<Gp>≥50.0-MPa	Temperature 80°C
			Sample thickness 0.3 mm
11	Slow crack growth resistance (cone test) ( $e_n \leq 5$ mm)	<1(mm/24 h)	Test temperatue 80°C



# STEEL WIRE MESH REINFORCED PE COMPOSITE PIPE

## Φ50-Φ1200mm

Steel wire mesh skeleton plastic composite pipe is an improved new type of steel skeleton plastic composite pipe. This type of pipe is also known as SRTP pipe. This new type of pipeline is made of high-strength over plastic steel wire mesh skeleton and thermoplastic polyethylene as raw materials. Steel wire winding mesh is used as the skeleton reinforcement of polyethylene plastic pipe, and high-density polyethylene (HDPE) is used as the matrix. High performance HDPE modified bonding resin is used to tightly connect the steel wire skeleton with the inner and outer high-density polyethylene layers, making it have excellent composite effect. Due to the high-strength steel wire reinforcement wrapped in continuous thermoplastic, this composite pipe overcomes the disadvantages of both steel and plastic pipes while maintaining their respective advantages.

The steel wire mesh skeleton plastic composite pipe adopts high-quality materials and advanced production technology, making it have higher pressure resistance performance. Meanwhile, the composite pipe has excellent flexibility and is suitable for long-distance buried water supply and gas pipeline systems. The fittings used for the steel wire mesh skeleton polyethylene composite pipe are polyethylene electrofusion fittings. When connecting, use the internal heating element of the pipe to melt the outer plastic layer of the pipe and the inner plastic layer of the pipe, and reliably connect the pipe and the pipe together.

### Pressure

-0.097MPa-12.0MPa

### Product execution standards

GB/T 32439-2015、CJ/T 537-2019 T/SDAS 493-2022



## Performance

1. Overcoming the rapid stress cracking phenomenon of plastic pipes, due to the composite structure of steel and plastic materials, there will be no rapid stress that plastic pipes cannot overcome.
2. It has strength, rigidity, and impact resistance that exceed ordinary pure plastic pipes, similar to the low coefficient of linear expansion and creep resistance of steel pipes;
3. Lightweight and easy to install, the pipeline connection adopts electric fusion joints, with strong axial tensile resistance and mature and reliable connection technology. The variety and specifications of pipe fittings are fully developed and can be connected with various other pipelines and valve equipment;
4. Double sided anti-corrosion, with the same anti-corrosion performance as plastic pipes, high temperature and corrosion resistance, and low thermal conductivity;
5. The structure is excellent, and the reinforced skeleton of the pipe and the inner and outer plastic layers are mutually contained into a whole, without the worry of peeling off the inner and outer plastic layers from the reinforcement body;



6. The inner wall is smooth, without scaling, and the water head loss of the pipeline is 30% lower than that of steel pipes;
7. The overall design of the pipe is based on a service life of 50 years;
8. Different pressure levels of pipes can be manufactured by adjusting the diameter of the steel wire, the thickness of the plastic layer, etc;

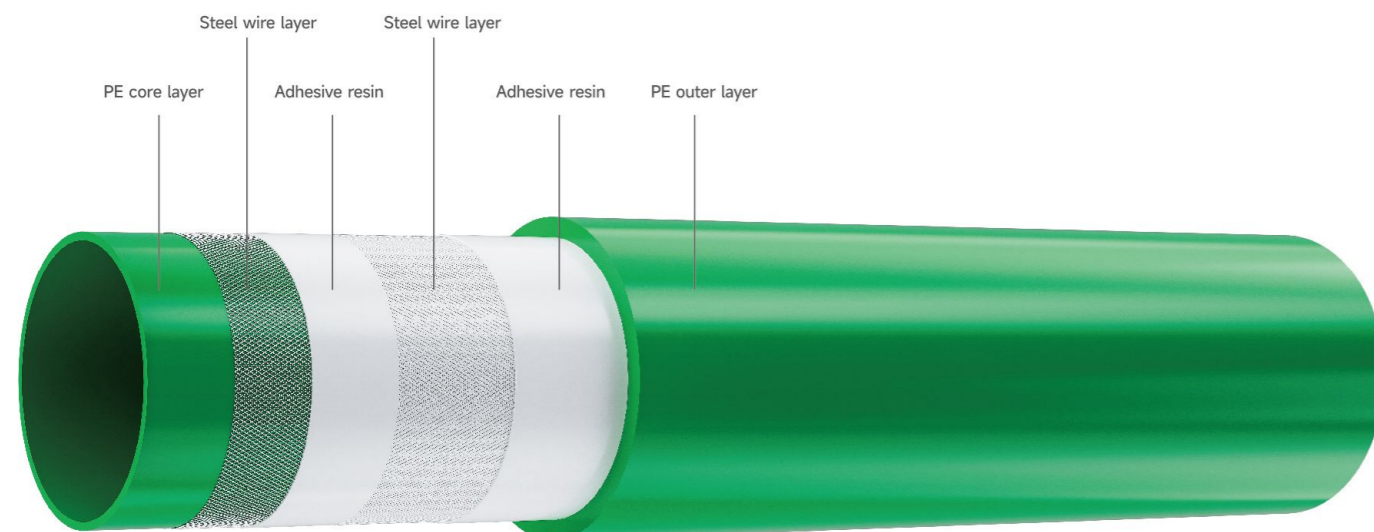
## Application area

Steel wire mesh skeleton plastic composite pipeline is a new type of pipeline with excellent performance, widely used in various fields such as oil fields, power plants, chemical and petrochemical enterprises, water companies, municipal gas, seawater utilization pipelines, etc.



## Product Structure

### SSPE (F) multi-layer steel wire mesh display



## Product specifications

		Pipe Size And Nominal Pressure														
Nominal Outside Diameter (dn) /mm		PN, MPa														
		0.8	1.0	1.25	1.6	2.0	2.5	3.0	3.5	4.0	5.0	6.3	7.0	8.0	9.0	10.0
Basic Size	Limit Deviation	Nominal wall thickness en, and limit deviation, mm														
50	+1.2 0				4.5 <sup>+1.2</sup> <sub>0</sub>	5.0 <sup>+1.2</sup> <sub>0</sub>	5.5 <sup>+1.2</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	6.0 <sup>+1.5</sup> <sub>0</sub>	8.5 <sup>+1.5</sup> <sub>0</sub>	9.0 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>
63	+1.2 0				4.5 <sup>+1.2</sup> <sub>0</sub>	5.0 <sup>+1.2</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	6.5 <sup>+1.5</sup> <sub>0</sub>	8.5 <sup>+1.5</sup> <sub>0</sub>	9.0 <sup>+1.5</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>
75	+1.2 0				5.0 <sup>+1.2</sup> <sub>0</sub>	5.0 <sup>+1.2</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	6.0 <sup>+1.5</sup> <sub>0</sub>	6.0 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	11.5 <sup>+2.0</sup> <sub>0</sub>
90	+1.4 0				5.5 <sup>+1.5</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	6.0 <sup>+1.5</sup> <sub>0</sub>	6.0 <sup>+1.5</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	11.5 <sup>+2.0</sup> <sub>0</sub>	11.5 <sup>+2.0</sup> <sub>0</sub>	11.5 <sup>+2.0</sup> <sub>0</sub>	12.0 <sup>+2.0</sup> <sub>0</sub>
110	+1.5 0		5.5 <sup>+1.5</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	7.0 <sup>+1.5</sup> <sub>0</sub>	7.0 <sup>+1.5</sup> <sub>0</sub>	7.5 <sup>+1.5</sup> <sub>0</sub>	8.5 <sup>+1.5</sup> <sub>0</sub>	8.5 <sup>+1.5</sup> <sub>0</sub>	11.0 <sup>+2.0</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>
125	+1.5 0		5.5 <sup>+1.5</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	7.5 <sup>+1.5</sup> <sub>0</sub>	8.0 <sup>+1.5</sup> <sub>0</sub>	8.5 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	11.0 <sup>+2.0</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>
140	+1.7 0		5.5 <sup>+1.5</sup> <sub>0</sub>	5.5 <sup>+1.5</sup> <sub>0</sub>	8.0 <sup>+1.5</sup> <sub>0</sub>	8.0 <sup>+1.5</sup> <sub>0</sub>	9.0 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	11.0 <sup>+2.0</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>
160	+2.0 0		6.0 <sup>+1.5</sup> <sub>0</sub>	6.0 <sup>+1.5</sup> <sub>0</sub>	9.0 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	11.0 <sup>+2.0</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	14.0 <sup>+2.5</sup> <sub>0</sub>	14.0 <sup>+2.5</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>
180	+2.2 0		6.0 <sup>+1.5</sup> <sub>0</sub>	6.0 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	11.0 <sup>+2.0</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.5 <sup>+2.2</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	14.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>
200	+2.3 0		6.0 <sup>+1.5</sup> <sub>0</sub>	6.0 <sup>+1.5</sup> <sub>0</sub>	9.5 <sup>+1.5</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	11.0 <sup>+2.0</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.5 <sup>+2.2</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	
225	+2.5 0		8.0 <sup>+1.5</sup> <sub>0</sub>	8.0 <sup>+1.5</sup> <sub>0</sub>	10.0 <sup>+2.0</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	11.0 <sup>+2.0</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>			
250	+2.5 0	8.0 <sup>+1.5</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	10.5 <sup>+2.0</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.5 <sup>+2.2</sup> <sub>0</sub>	14.0 <sup>+2.8</sup> <sub>0</sub>	14.0 <sup>+2.8</sup> <sub>0</sub>	14.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>					
280	+2.6 0	9.5 <sup>+1.5</sup> <sub>0</sub>	11.0 <sup>+2.0</sup> <sub>0</sub>	11.0 <sup>+2.0</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	17.0 <sup>+3.0</sup> <sub>0</sub>	17.0 <sup>+3.0</sup> <sub>0</sub>	18.0 <sup>+3.0</sup> <sub>0</sub>					
315	+2.7 0	9.5 <sup>+1.5</sup> <sub>0</sub>	11.5 <sup>+2.0</sup> <sub>0</sub>	11.5 <sup>+2.0</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	13.0 <sup>+2.5</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	18.0 <sup>+3.0</sup> <sub>0</sub>	18.0 <sup>+3.0</sup> <sub>0</sub>	19.0 <sup>+3.0</sup> <sub>0</sub>					
355	+2.8 0	10.0 <sup>+1.8</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	12.0 <sup>+2.2</sup> <sub>0</sub>	14.0 <sup>+2.5</sup> <sub>0</sub>	14.0 <sup>+2.5</sup> <sub>0</sub>	17.0 <sup>+3.0</sup> <sub>0</sub>	17.0 <sup>+3.0</sup> <sub>0</sub>	19.0 <sup>+3.0</sup> <sub>0</sub>	19.0 <sup>+3.0</sup> <sub>0</sub>						
400	+3.0 0	10.5 <sup>+2.0</sup> <sub>0</sub>	12.5 <sup>+2.2</sup> <sub>0</sub>	12.5 <sup>+2.2</sup> <sub>0</sub>	15.0 <sup>+2.8</sup> <sub>0</sub>	16.0 <sup>+2.8</sup> <sub>0</sub>	17.0 <sup>+3.0</sup> <sub>0</sub>	17.0 <sup>+3.0</sup> <sub>0</sub>	19.0 <sup>+3.0</sup> <sub>0</sub>							
450	+3.2 0	11.5 <sup>+2.0</sup> <sub>0</sub>	13.5 <sup>+2.5</sup> <sub>0</sub>	13.5 <sup>+2.5</sup> <sub>0</sub>	16.0 <sup>+2.8</sup> <sub>0</sub>	18.0 <sup>+3.0</sup> <sub>0</sub>	18.0 <sup>+3.0</sup> <sub>0</sub>	19.0 <sup>+3.0</sup> <sub>0</sub>								
500	+3.2 0	12.5 <sup>+2.2</sup> <sub>0</sub>	15.5 <sup>+2.8</sup> <sub>0</sub>	15.5 <sup>+2.8</sup> <sub>0</sub>	18.0 <sup>+3.0</sup> <sub>0</sub>	19.0 <sup>+3.0</sup> <sub>0</sub>	22.0 <sup>+3.0</sup> <sub>0</sub>									
560	+3.2 0	17.0 <sup>+3.0</sup> <sub>0</sub>	20.0 <sup>+3.0</sup> <sub>0</sub>	20.0 <sup>+3.0</sup> <sub>0</sub>	22.0 <sup>+3.0</sup> <sub>0</sub>	22.0 <sup>+3.0</sup> <sub>0</sub>										
630	+3.2 0	20.0 <sup>+3.0</sup> <sub>0</sub>	23.0 <sup>+3.0</sup> <sub>0</sub>	23.0 <sup>+3.0</sup> <sub>0</sub>	26.0 <sup>+3.0</sup> <sub>0</sub>	26.0 <sup>+3.0</sup> <sub>0</sub>										
710	+6.4 0	23.0 <sup>+3.0</sup> <sub>0</sub>	26.0 <sup>+3.0</sup> <sub>0</sub>	28.0 <sup>+3.0</sup> <sub>0</sub>	30.0 <sup>+3.0</sup> <sub>0</sub>											
800	+7.2 0	27.0 <sup>+3.0</sup> <sub>0</sub>	30.0 <sup>+3.0</sup> <sub>0</sub>	32.0 <sup>+3.0</sup> <sub>0</sub>	34.0 <sup>+3.0</sup> <sub>0</sub>											
900	+8.1 0	29.0 <sup>+3.0</sup> <sub>0</sub>	33.5 <sup>+3.0</sup> <sub>0</sub>	35.0 <sup>+3.0</sup> <sub>0</sub>	38.0 <sup>+3.0</sup> <sub>0</sub>											
1000	+9.0 0	34.0 <sup>+3.0</sup> <sub>0</sub>	37.0 <sup>+3.0</sup> <sub>0</sub>	40.0 <sup>+3.5</sup> <sub>0</sub>	45.0 <sup>+4.0</sup> <sub>0</sub>											
1200	+9.0 0	38.0 <sup>+3.0</sup> <sub>0</sub>	40.0 <sup>+3.5</sup> <sub>0</sub>	43.0 <sup>+4.0</sup> <sub>0</sub>												

**Note:** The above does not contain wear-resistant layer, and the thickness and deviation of wear-resistant layer are specified separately in the design of wear-resistant pipe.

## Technical index

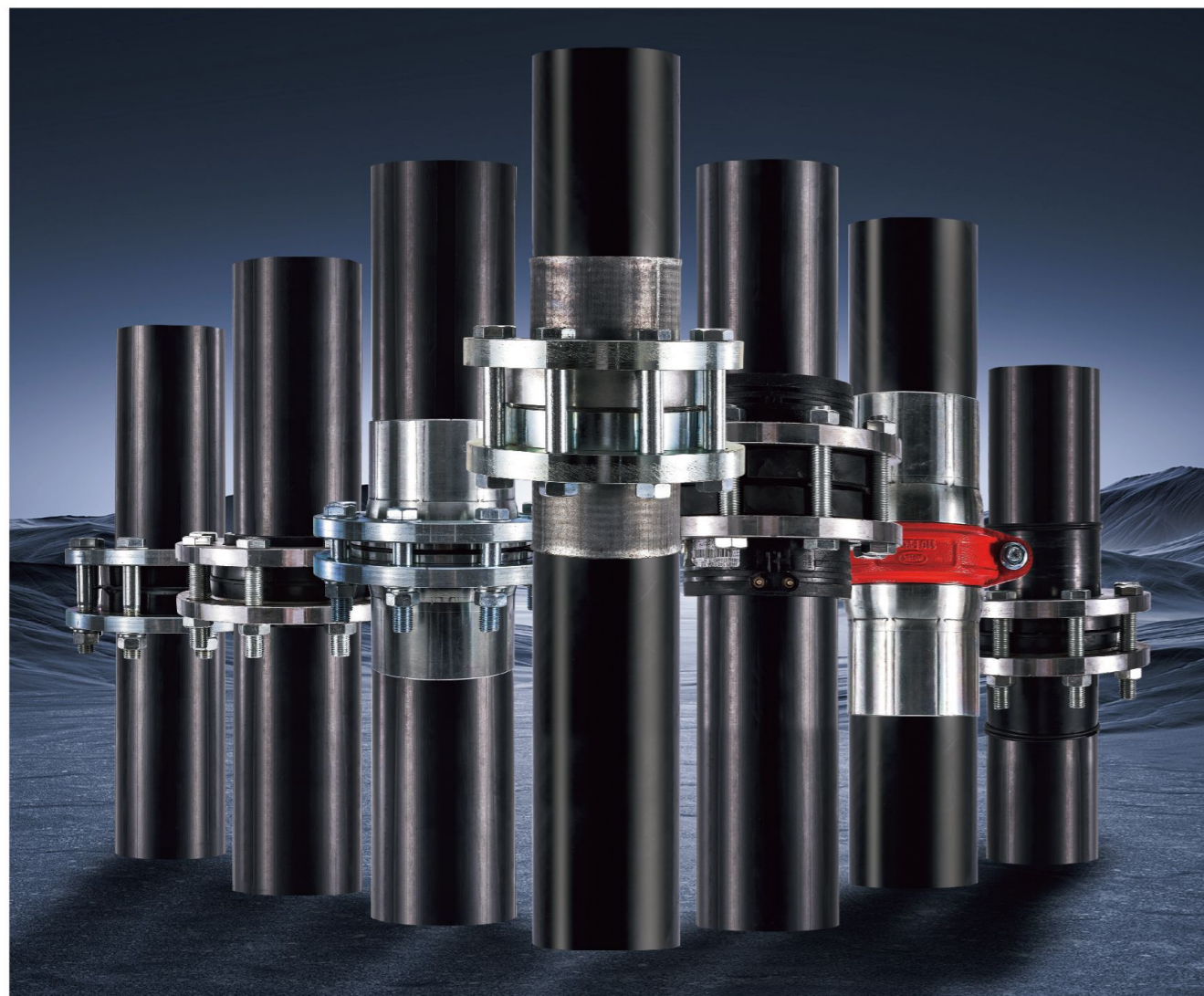
### Physical And Mechanical Properties Of Pipes

Serial Number	Item	Requirement	Test Condition
1	Melt Mass Flow Rate (MFR)	The MFR change of polyethylene before and after processing is not more than $\pm 25\%$	5kg,190°C
2	Oxidation induction time (OIT)	$\geq 20$ min	200°C
3	Cracking stability under pressure	No cracks, delamination and cracking	100mm/min
4	Peel strength	The average peel strength $\geq 15$ N/mm, and the peel strength of a single sample $\geq 12$ N/mm, and the peel interface was ductile and the surface was flocculent	100mm/min
5	Shear hydrostatic strength	Cutting annular groove does not break, no leakage	20°C,1.5PN,165h

### Hydrostatic Strength And Bursting Pressure Test Requirements

Test Type	Test Temperature/°C	Test Pressure/MPa	Test Time/H	Performance Requirement
Hydrostatic Strength	20	2PN	1	No breakage, no leakage
	60	1.2PN	165	No breakage, no leakage
	60	1.1PN	1000	No breakage, no leakage
Burst Pressure	20	Increase pressure continuously until the specimen bursts	$\geq 3$ PN	

## SSPE PIPE High pressure connection



# HDPE SIPHON DRAIN PIPE

## Φ32-Φ315mm

The siphon roof rainwater discharge system is a new type of rainwater discharge system that uses a siphon rainwater hopper that can isolate air and precise hydraulic balance calculation of pipelines. Relying on the potential energy of the building, rainwater flows through a closed pipeline system to form a full pipe flow, and falls outside the riser to produce siphon effect, quickly discharging rainwater from the roof.

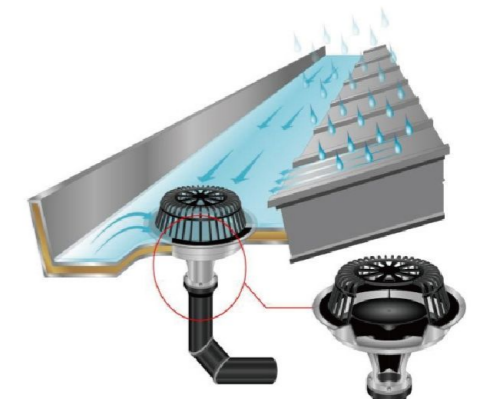
The siphon roof rainwater drainage system is one of the most advanced roof rainwater drainage systems in the world today. This system has a history of nearly 40 years and is widely used in large-span and structurally complex roofs such as large factories, exhibition halls, airports, sports fields, and high-rise buildings. Due to the current design focus on factors such as the aesthetic appearance of buildings, ease of construction, and increasing the usable area and lifespan of buildings, traditional gravity based rainwater systems are becoming increasingly inadequate and cannot meet the increasingly advanced design concepts; The replaced siphon rainwater system not only solves some design difficulties that traditional gravity rainwater systems cannot achieve, but also has advantages in saving pipes and construction volume that traditional systems cannot match.

## Application Area

Residential, hospital, office building, standardized workshop, villa, hotel, theater, exhibition center and other high-end construction projects.

## System principle

The siphon roof rainwater drainage system utilizes the Bernoulli equation. Using meticulous calculations, fully utilizing the roof and the energy generated by the height difference on the ground forms a siphon effect, and the system quickly discharges rainwater under full flow conditions.



## Specification

Unit in millimeters

### Application selection of high-density polyethylene pipes

Nominal outer diameter $d_n$	Tube series	Application area
32 ~ 315	S12.5	B,BD
200 ~ 315	16	B

Note 1: "B" is used for building sewage, wastewater, and gravity rainwater discharge; "BD" can also be used for siphon roof rainwater systems and 87 bucket rainwater systems in addition to application field "B".

Note 2: The siphonic roof rainwater system and the 87 bucket rainwater system should use pipes labeled with the "BD" in the S12.5 pipe series. "

## Specification

Unit in millimeters

### S12.5 and S16 pipe series size wall thickness

Nominal outer diameter $d_n$	S12.5 pipe series size wall thickness		S16 pipe series size wall thickness	
	e,min	e,max	e,min	e,max
32	3.0	3.3		
40	3.0	3.3		
50	3.0	3.3		
56	3.0	3.3		
63	3.0	3.3		
75	3.0	3.3		
90	3.5	3.9		
110	4.2	4.9		
125	4.8	5.5		
160	6.2	6.9		
200	7.7	8.7	6.2	6.9
250	9.6	10.8	7.8	8.6
315	12.1	13.6	9.8	10.8

## Execution standard: CJ/T 250-2018

## Technical index

Unit in millimeters

### Physical properties of pipes and fittings

Serial Number	Project	Ask
1	Longitudinal shrinkage rate of pipe (110°C)	≤ 3%, no delamination, cracking, or bubbling of the pipe material
2	Melt mass flow rate MFR (5kg, 190°C)/(g/10min)	0.2≤MFR≤1.1 MFR of pipes and fittings and MFR of raw material particles The difference value should not exceed 0.2
3	Oxidation induction time OIT (200°C)/min	OIT of pipes and fittings ≥ 20
4	Heating test of pipe fittings (110°C±2°C,1 h)	The pipe fittings are free from delamination, cracking, and bubbling
5	Impact strength test	No rupture or damage to the pipe or fittings
6	Welding strength test	The pipe or fittings have no cracks or continuous cracks
7	Static hydraulic strength test (80°C,165 h,PE 80:4.6 MPa)	The pipes and fittings shall not rupture or leak during the test period
8	Vacuum test (23°C,1 h,—0.08 MPa)	Vacuum pressure change ≤ 0.005 MPa
9	Pipe ring stiffness (Sr)/(kN/m <sup>2</sup> )	Sr≥4

Note 1: The 7th, 8th, and 9th testing items are only applicable to products with the "BD" label, that is, pipes and fittings used for building sewage, wastewater, and gravity rainwater discharge systems are not required.

# HDPE FITTINGS

## Performance

Due to the fact that the base material of the electric melting pipe fittings is PE material, the PE pipeline system composed of PE pipes together solves the two major problems of traditional pipelines: corrosion and leakage at the joints. Its advantages are mainly reflected as follows:

(1) Corrosion resistance: Long service life;

(2) No leakage at the joint: using electric fusion fittings for connection essentially ensures the consistency between the interface material, structure, and pipe body of the PE pipeline system, achieving integration between the joint and the pipe material;

(3) It can effectively resist underground movement and end loads: After the PE pipeline system is connected by fusion welding method, the joints based on this method can withstand end loads without joint leakage. Meanwhile, the stress relaxation characteristics of PE can effectively dissipate stress through deformation, so in most cases, expensive anchoring is not required at joints and bends. Based on its high toughness, the elongation at break generally exceeds 500%, and the PE pipeline system has a strong adaptability to uneven settlement of the pipe foundation.



## HDPE BUTT FUSION WELDING FITTINGS

Our hot melt butt fittings are made of PE100 grade new material, with reliable quality and complete specifications. The products include hot melt reducers, tees, reducers, pipe caps, 90 degree elbows, 45 degree elbows, 22.5 degree elbows, flange roots, and matching steel flanges.

### Connection methods: Hot melt socket connection

Hot melt butt welding is a process where the heating plate of a hot melt butt welding machine heats both ends of a PE pipe or PE fitting, and then applies a certain pressure to the melted ends to connect them together, forming an interface that is even stronger than the pipe itself. Hot melt connection is widely used for the connection of PE pipes due to its convenient operation and affordable advantages.

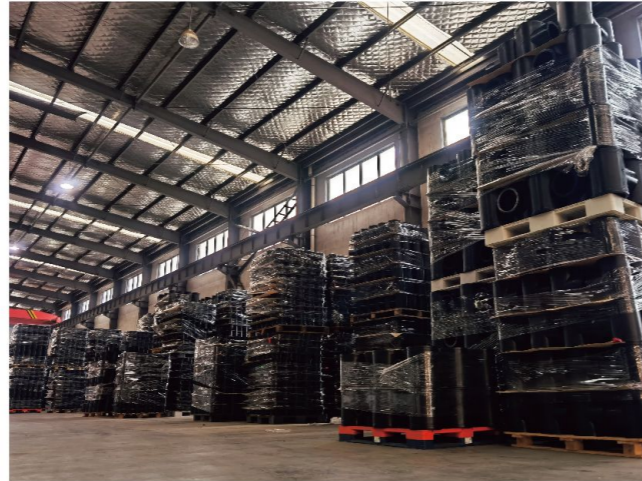
PE water supply electric fusion pipe fittings execution standard: GB/T 13663-2018

PE gas electric melting pipe fittings execution standard: GB/T 15558-2023

Hot melt pipe fittings execution standard: GB/T 13663-2018

## Advantages

Compared with the hot melt connection method, the advantages of PE electric melting pipe fittings mainly include: firstly, stable welding output heat; Secondly, the diameter of the pipeline is not affected; Thirdly, the equipment is lightweight and easy to operate; The fourth is suitable for connecting polyethylene pipes with different melt indices.



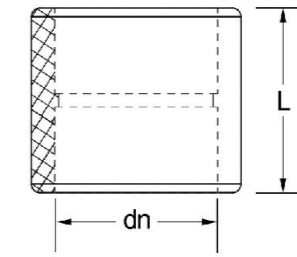
## Application area

PE electric melting fittings are widely used in the gas and municipal water supply pipeline industries due to their simple and convenient operation, stable and reliable welding.

## Φ50-Φ1000mm

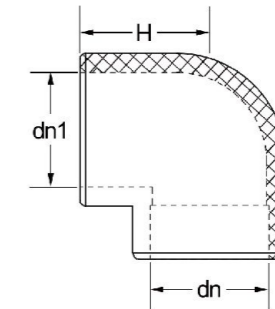
Electric melting pipe fittings refer to a type of plastic (polyethylene) pipe fittings that can be melted and connected by the temperature generated by an electric current. In the sales and application of polyethylene pipeline systems, about 15% to 20% of the sales belong to pipe fittings. The pipe fittings of polyethylene pipeline systems are mainly divided into two types: hot-melt pipe fittings and electric melt pipe fittings. Due to price reasons, the amount of hot-melt pipe fittings used in engineering applications is more than that of electric melt pipe fittings. However, electric melt pipe fittings play an important and irreplaceable role in engineering and maintenance, especially in construction. Electric melt pipe fittings are less affected by external environment and human factors, so they have better reliability and are more popular among users.

Electric fusion fittings are increasingly being used in gas pipeline engineering.



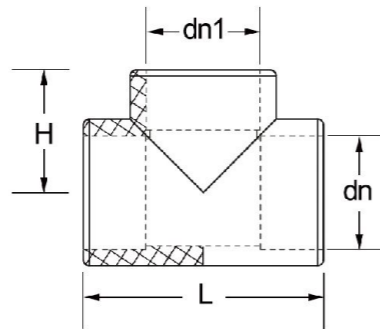
### Coupling

Specifications	DN	L	SDR11
S20	18.0	30.0	✓
S25	23.0	33.0	✓
S32	30.0	38.0	✓
S40	38.0	42.0	✓
S50	48.0	44.0	✓
S63	61.0	51.0	✓
S75	73.0	62.0	✓
S90	88.0	67.0	✓
S110	108.0	63.0	✓



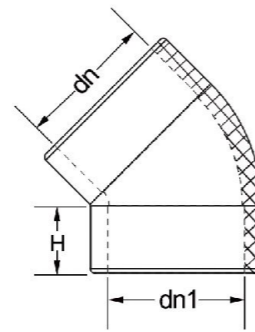
### 90°Elbow

Specifications	DN	DN1	H	SDR11
L20	18.0	18.0	15.5	○
L25	23.0	23.0	16.7	○
L32	30.0	30.0	22.6	○
L40	38.0	38.0	22.8	○
L50	48.0	48.0	73.0	○
L63	61.0	61.0	54.0	○
L75	73.0	73.0	106.0	○
L90	88.0	88.0	124.0	○
L110	108.0	108.0	150.0	○



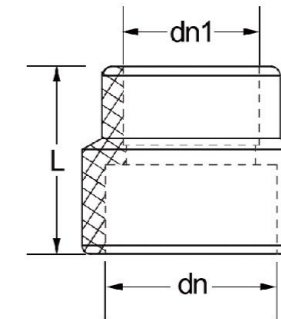
Tee

Specifications	DN	DN1	L	H	SDR11
T20	18.0	18.0	50.0	24.0	✓
T25	23.0	23.0	56.0	30.0	✓
T32	30.0	30.0	68.0	38.0	✓
T40	38.0	38.0	79.0	46.0	✓
T50	48.0	48.0	90.0	45.0	✓
T63	61.0	61.0	107.0	57.0	✓
T75	73.0	73.0	131.0	67.0	✓
T90	88.0	88.0	149.0	126.0	✓
T110	108.0	108.0	174.0	89.0	✓



45° Elbow

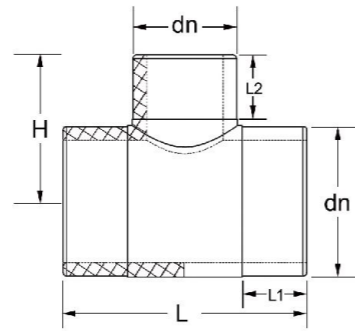
Specifications	DN	DN1	H	SDR11
L20	18.0	18.0	15.2	○
L25	23.0	23.0	24.0	○
L32	30.0	30.0	30.0	○
L40	38.0	38.0	35.0	○
L50	48.0	48.0	42.0	○
L63	61.0	61.0	50.0	○
L75	73.0	73.0	56.0	○
L90	88.0	88.0	68.0	○
L110	108.0	108.0	78.0	○



Reducer Coupling

Specifications	DN	DN1	L	SDR11
S25x20	23.0	18.0	31.0	✓
S32x20	29.0	18.0	34.0	✓
S32x25	29.0	23.0	31.0	✓
S40x20	38.0	18.0	40.0	✓
S40x25	38.0	23.0	41.0	✓
S40x32	38.0	30.0	41.0	✓
S50x20	48.0	18.0	41.0	✓
S50x25	48.0	23.0	42.0	✓
S50x32	48.0	30.0	42.0	✓
S50x40	48.0	38.0	41.0	✓
S63x20	61.0	18.0	45.0	✓
S63x25	61.0	23.0	46.0	✓
S63x32	61.0	30.0	45.0	✓
S63x40	61.0	38.0	47.0	✓
S63x50	61.0	48.0	46.0	✓
S75x20	73.0	18.0	54.0	✓
S75x25	73.0	23.0	56.0	✓
S75x32	73.0	30.0	54.0	✓
S75x40	73.0	38.0	53.0	✓
S75x50	73.0	48.0	53.0	✓
S75x63	73.0	61.0	53.0	✓
S90x25	88.0	23.0	55.0	✓
S90x32	88.0	30.0	55.0	✓
S90x40	88.0	38.0		○
S90x50	88.0	48.0	55.0	✓
S90x63	88.0	61.0	58.0	✓
S90x75	88.0	73.0	57.0	✓
S110x32	108.0	30.0	68.0	✓
S110x40	108.0	38.0	65.0	✓
S110x50	108.0	48.0	64.0	✓
S110x63	108.0	61.0	63.0	✓
S110x75	108.0	73.0	64.0	✓
S110x90	108.0	88.0	64.0	✓

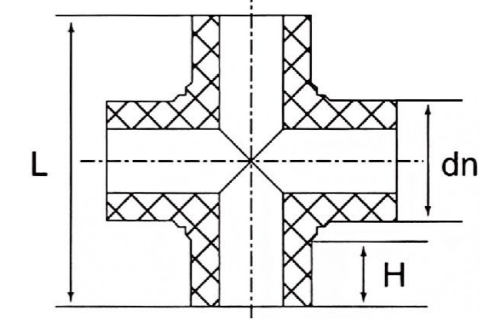
Socket Fusion PE Fittings Series



Reducer Tee

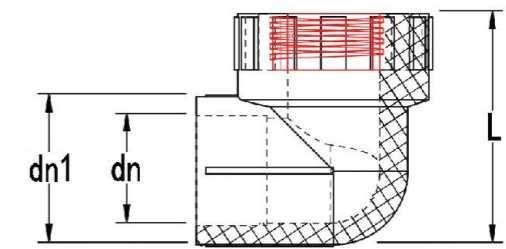
Specifications	DN	DN1	L	H	SDR11
T25x20	23.0	18.0	53.0	26.0	○
T32x20	30.0	18.0	55.3	31.0	○
T32x25	30.0	23.0	60.0	32.0	○
T40x20	38.0	18.0	58.0	34.0	○
T40x25	38.0	23.0	59.6	33.0	○
T40x32	38.0	30.0	68.0	38.0	○
T50x20	48.0	18.0	61.0	41.0	○
T50x25	48.0	23.0	66.0	41.0	○
T50x32	48.0	30.0	73.0	43.0	○
T50x40	48.0	38.0	80.0	41.0	○
T63x20	61.0	18.0	64.0	47.0	○
T63x25	61.0	23.0	69.0	47.0	○
T63x32	61.0	30.0	76.0	50.0	○
T63x40	61.0	38.0	89.0	51.0	○
T63x50	61.0	48.0	93.0	51.0	○
T75x20	73.0	18.0	75.0	56.0	○
T75x25	73.0	23.0	75.0	56.0	○
T75x32	73.0	30.0	89.0	57.0	○
T75x40	73.0	38.0	97.0	60.0	○
T75x50	73.0	48.0	107.0	37.0	○
T75x63	73.0	61.0	120.0	61.0	○
T90x25	88.0	23.0	80.0	65.0	○
T90x32	88.0	30.0	87.0	64.0	○
T90x40	88.0	38.0	96.0	65.0	○
T90x50	88.0	48.0	109.0	73.0	○
T90x63	88.0	61.0	123.0	60.0	○
T90x75	88.0	73.0	134.0	73.0	○
T110x32	108.0	30.0	90.0	74.0	○
T110x40	108.0	38.0	99.0	75.0	○
T110x50	108.0	48.0	114.0	81.0	○
T110x63	108.0	61.0	127.0	81.0	○
T110x75	108.0	73.0	152.0	84.0	○
T110x90	108.0	88.0	153.0	84.0	○

Socket Fusion PE Fittings Series



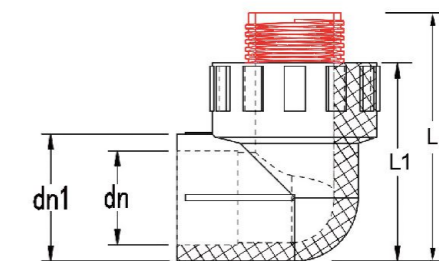
Cross

Specifications	DN	L	H	SDR11
Q20	26.8	51.5	12.0	○
Q25	31.6	52.1	9.7	○
Q32	40.9	68.7	14.1	○
Q40	50.1	80.0	14.3	○
Q50	60.7	90.6	14.6	○
Q63	74.1	105.3	15.2	○



Female Elbow

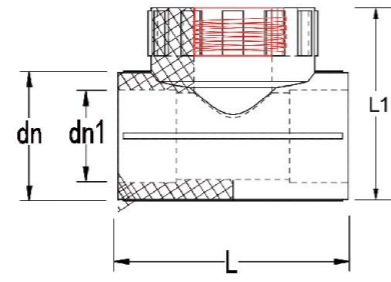
Specifications	DN	DN1	L	SDR11
20x1/2"	18.75	27.49	47.58	○
25x1/2"	23.70	33.10	52.20	○
25x3/4"	23.97	32.90	53.50	○
32x1"	30.55	41.07	61.50	○
40x1-1/4"	38.37	49.61	71.71	○
50x1-1/2"	48.09	60.28	81.32	○
63x2"	60.22	75.67	98.81	○



Male Elbow

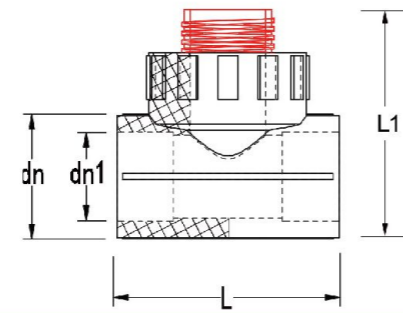
Specifications	DN	DN1	L	L1	SDR11
20x1/2"	18.75	27.49	47.58	59.64	○
25x1/2"	23.70	33.10	52.20	64.63	○
25x3/4"	23.97	32.90	53.50	66.68	○
32x1"	30.55	41.07	61.50	77.56	○
40x1-1/4"	38.37	49.61	71.71	89.75	○
50x1-1/2"	48.09	60.28	81.32	101.53	○
63x2"	60.22	75.67	98.81	118.82	○

Socket Fusion PE Fittings Series



Female Tee

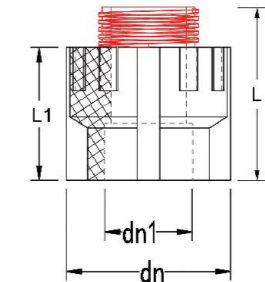
Specifications	DN	DN1	L	L1	SDR11
20x1/2"	27.82	18.88	57.10	47.92	○
25x1/2"	33.19	23.98	61.50	52.93	○
25x3/4"	33.28	23.95	66.90	53.14	○
32x1"	41.02	30.87	78.10	62.73	○
40x1-1/4"	49.80	39.01	96.70	73.36	○
50x1-1/2"	61.31	48.37	114.06	84.33	○
63x2"	75.04	60.82	114.00	99.18	○



Male Tee

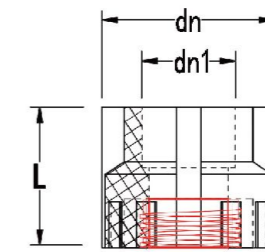
Specifications	DN	DN1	L	L1	SDR11
20x1/2"	27.82	18.88	57.10	58.80	○
25x1/2"	33.19	23.98	61.50	64.18	○
25x3/4"	33.28	23.95	66.90	67.40	○
32x1"	41.02	30.87	78.10	77.18	○
40x1-1/4"	49.80	39.01	96.70	90.13	○
50x1-1/2"	61.31	48.37	114.06	101.45	○
63x2"	75.04	60.82	114.00	117.92	○

Socket Fusion PE Fittings Series



Male Adapter

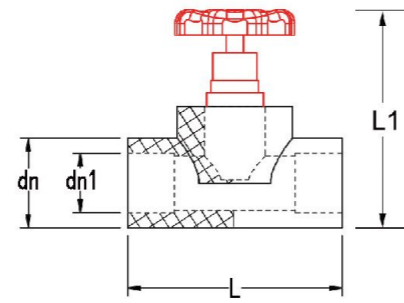
Specifications	DN	DN1	L	L1	SDR11
20x1/2"	27.87	19.08	54.65	42.79	○
25x1/2"	33.45	23.96	58.79	43.85	○
25x3/4"	33.38	23.94	58.50	44.82	○
32x1"	41.36	30.94	68.00	52.39	○
40x1-1/4"	50.70	38.69	77.22	58.51	○
50x1-1/2"	61.81	48.11	77.61	57.51	○
63x2"	76.43	61.93	87.17	65.82	○
75x2-1/2"	88.33	73.61	83.61	58.88	○
90x3"	104.70	87.79	105.12	67.45	○
110x4"	126.36	106.33	109.22	69.98	○



Female Adapter

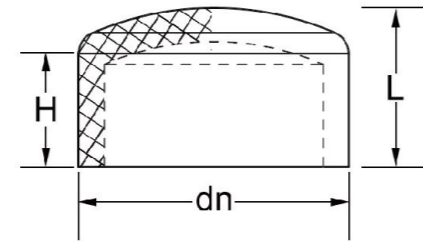
Specifications	DN	DN1	L	SDR11
20x1/2"	27.62	18.93	42.42	○
25x1/2"	33.30	24.14	43.41	○
25x3/4"	33.54	24.13	44.53	○
32x1"	41.30	30.52	52.75	○
40x1-1/4"	50.83	38.78	58.54	○
50x1-1/2"	61.61	48.03	57.84	○
63x2"	75.91	61.23	65.92	○
75x2-1/2"	87.76	73.21	63.47	○
90x3"	103.76	87.02	66.60	○
110x4"	126.66	106.27	70.36	○

## Socket Fusion PE Fittings Series



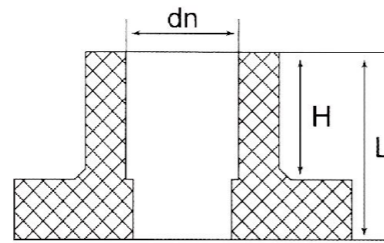
### Stop Valve

Specifications	DN	DN1	L	L1	SDR11
20	26.01	18.76	59.00	74.92	○
25	31.56	23.77	68.30	83.36	○
32	38.79	30.10	70.50	89.34	○
40	48.90	38.48	82.00	104.40	○
50	59.94	48.25	90.90	115.55	○
63	73.27	60.72	99.90	137.70	○



### End Cap

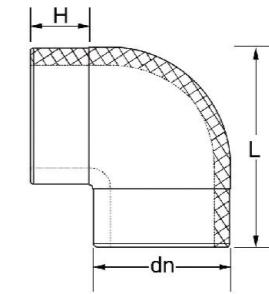
Specifications	DN	L	SDR11
D20	18.0	21.0	○
D25	23.0	22.2	○
D32	30.0	24.3	○
D40	38.0	27.5	○
D50	48.0	34.0	○
D63	61.0	40.0	○
D75	73.0	45.0	○
D90	88.0	53.0	○
D110	108.0	55.0	○



### Flange

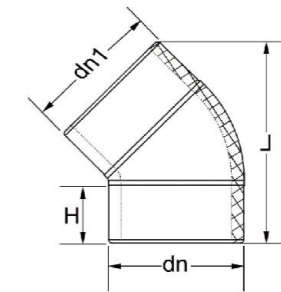
Specifications	DN	D(Q)	L	H	SDR11
FL50	48.0	72.0	25.0	15.5	○
FL63	61.0	91.0	33.0	21.0	○
FL75	73.0	108.0	34.0	20.0	○
FL90	88.0	88.0	38.0	23.0	○
FL110	108.0	108.0	43.0	25.0	○

## Butt Fusion PE Fittings Series



### 90°Elbow

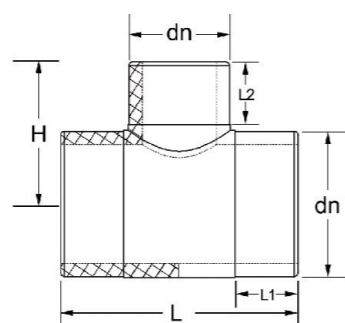
Specifications	DN	L	H	SDR11	SDR13.6	SDR17
L63	63.0	124.0	58.0	✓	○	○
L75	75.0	137.0	59.0	✓	○	○
L90	90.0	163.0	67.0	✓	○	○
L110	110.0	178.0	60.0	✓	✓	○
L125	125.0	200.0	67.0	✓	✓	○
L140	140.0	213.0	63.0	✓	✓	○
L160	160.0	237.0	69.0	✓	✓	○
L180	180.0	255.0	70.0	✓	○	○
L200	200.0	281.0	74.0	✓	✓	○
L225	225.0	310.0	74.0	✓	○	○
L250	250.0	348.0	87.0	✓	○	✓
L315	315.0	352.0	94.0	✓	○	✓
L400	400.0	510.0	103.0	✓	○	✓
L450	450.0	580.0	106.0	○	○	○
L500	500.0	613.0	111.0	○	○	✓
L630	630.0	770.0	123.0	○	○	○



### 45°Elbow

Specifications	DN	L	H	SDR11	SDR13.6	SDR17
L63	63.0	140.0	50.0	✓	○	○
L75	75.0	160.0	60.0	✓	○	○
L90	90.0	188.0	66.0	✓	○	○
L110	110.0	222.0	66.0	✓	✓	○
L125	125.0	180.0	67.0	✓	✓	○
L140	140.0	185.0	68.0	✓	✓	○
L160	160.0	245.0	71.0	✓	✓	○
L180	180.0	230.0	62.0	✓	○	○
L200	200.0	278.0	76.0	✓	✓	○
L225	225.0	260.0	72.0	✓	✓	○
L250	250.0	332.0	82.0	✓	○	○
L315	315.0	389.0	90.0	✓	○	○
L400	400.0	470.0	100.0	○	○	○
L450	450.0	450.0	95.0	○	✓	○
L500	500.0	555.0	111.0	○	○	○
L630	630.0	580.0	111.0	○	✓	○

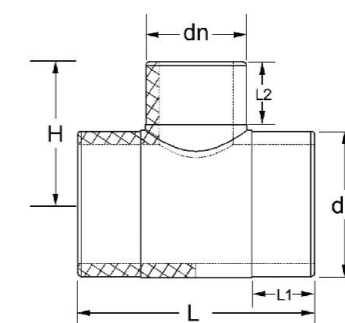
Butt Fusion PE Fittings Series



Reducer Tee

Specifications	L1	L2	L	H	SDR11	SDR13.6	SDR17
63x50	57.0	55.0	174.0	90.0	✓	○	○
75x50	57.0	55.0	191.0	96.0	✓	○	○
75x63	57.0	55.0	191.0	96.0	✓	○	○
90x50	59.0	56.0	194.0	109.0	✓	○	○
90x63	58.0	58.0	194.0	114.0	✓	○	○
90x75	63.0	60.0	239.0	80.0	✓	○	○
110x50	64.0	64.0	207.0	127.0	✓	✓	○
110x63	65.0	65.0	207.0	127.0	✓	✓	○
110x75	66.0	64.0	232.0	127.0	✓	✓	○
110x90	66.0	64.0	232.0	127.0	✓	✓	○
125x50	66.0	63.0	210.0	138.0	✓	○	○
125x63	66.0	63.0	210.0	136.0	✓	✓	○
125x75	66.0	63.0	224.0	132.0	✓	✓	○
125x90	66.0	64.0	237.0	136.0	✓	✓	○
125x110	66.0	65.0	257.0	136.0	✓	✓	○
140x50	66.0	63.0	207.0	142.0	✓	○	○
140x63	65.0	65.0	208.0	142.0	○	✓	○
140x75	65.0	65.0	237.0	147.0	✓	✓	○
140x90	65.0	65.0	237.0	140.0	○	✓	○
140x110	65.0	65.0	254.0	143.0	✓	✓	○
140x125	65.0	65.0	271.0	145.0	✓	✓	○
160x50	69.0	69.0	218.0	160.0	✓	✓	○
160x63	69.0	69.0	218.0	160.0	✓	✓	○
160x75	69.0	69.0	226.0	158.0	✓	✓	○
160x90	70.0	69.0	254.0	162.0	✓	✓	○
160x110	69.0	69.0	260.0	157.0	✓	✓	○
160x125	70.0	70.0	290.0	157.0	✓	✓	○
180x75	73.0	73.0	255.0	98.0	✓	○	○
180x90	73.0	73.0	255.0	101.0	✓	○	○
180x110	73.0	74.0	275.0	101.0	✓	○	○
180x160	74.0	73.0	436.0	100.0	✓	○	○
200x50	74.0	73.0	225.0	184.0	✓	○	○
200x63	75.0	73.0	227.0	185.0	✓	○	○
200x75	74.0	73.0	254.0	185.0	✓	✓	○
200x90	74.0	73.0	254.0	185.0	✓	✓	○
200x110	74.0	73.0	275.0	185.0	✓	✓	○
200x160	75.0	74.0	327.0	181.0	✓	✓	○
225x63	99.0	69.0	272.0	188.0	✓	✓	○
225x75	95.0	69.0	272.0	188.0	✓	✓	○
225x90	85.0	68.0	271.0	185.0	✓	✓	○
225x110	77.0	68.0	271.0	185.0	✓	✓	○
225x125	77.0	70.0	287.0	195.0	✓	✓	○
225x160	77.0	67.0	321.0	187.0	✓	✓	○

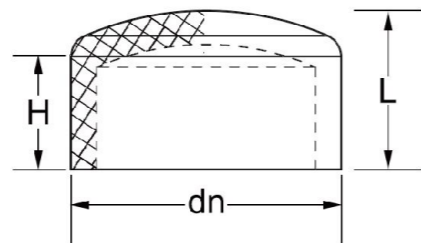
Butt Fusion PE Fittings Series



Reducer Tee

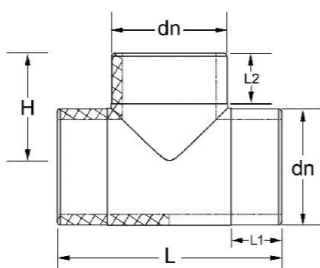
Specifications	L1	L2	L	H	SDR11	SDR13.6	SDR17
225x200	60.0	67.0	322.0	187.0	✓	✓	○
250x63	87.0	78.0	303.0	218.0	✓	○	○
250x75	87.0	81.0	303.0	218.0	✓	○	○
250x90	88.0	82.0	340.0	223.0	✓	○	○
250x110	88.0	82.0	306.0	215.0	✓	○	○
250x125	88.0	82.0	354.0	179.0	○	○	○
250x160	88.0	80.0	353.0	213.0	✓	○	○
250x200	88.0	80.0	396.0	225.0	✓	○	○
280x110	85.0	69.0	291.0	96.0	○	✓	○
280x160	87.0	69.0	340.0	95.0	○	✓	○
280x200	90.0	89.0	479.0	120.0	○	✓	○
280x250	90.0	88.0	478.0	119.0	○	✓	○
315x90	95.0	82.0	318.0	257.0	○	○	○
315x110	95.0	82.0	320.0	257.0	✓	○	○
315x125	96.0	85.0	370.0	184.0	○	○	○
315x160	95.0	85.0	366.0	248.0	✓	○	○
315x200	97.0	84.0	413.0	255.0	✓	○	○
400x110	104.0	82.0	440.0	300.0	✓	○	○
400x160	104.0	82.0	440.0	300.0	✓	○	○
400x200	104.0	82.0	440.0	300.0	✓	○	○
400x250	103.0	87.0	474.0	305.0	✓	○	○
400x315	105.0	94.0	539.0	300.0	✓	○	○
450x110	97.0	68.0	322.0	110.0	○	✓	○
450x160	96.0	70.0	374.0	110.0	○	✓	○
450x200	98.0	72.0	413.0	114.0	○	✓	○
450x250	96.0	76.0	462.0	112.0	○	✓	○
450x315	95.0	81.0	524.0	119.0	○	✓	○
450x400	95.0	95.0	609.0	131.0	○	✓	○
500x110	109.0	121.0	448.0	380.0	○	○	○
500x160	109.0	121.0	448.0	380.0	○	○	○
500x200	109.0	121.0	448.0	380.0	○	○	○
500x250	110.0	116.0	550.0	383.0	○	○	○
500x315	109.0	112.0	550.0	390.0	○	○	○
500x400	109.0	116.0	640.0	367.0	○	○	○
630x110	111.0	125.0	381.0	495.0	○	○	○
630x160	126.0	125.0	433.0	500.0	○	○	○
630x200	124.0	125.0	470.0	480.0	○	○	○
630x250	124.0	119.0	585.0	450.0	○	○	○
630x315	125.0	122.0	527.0	462.0	○	○	○
630x400	134.0	126.0	666.0	455.0	○	○	○
630x500	130.0	140.0	791.0	461.0	○	○	○

Butt Fusion PE Fittings Series



End Cap

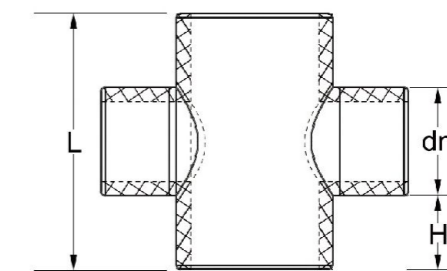
Specifications	DN	L	H	SDR11	SDR13.6	SDR17
FL75	75.0	75.0	55.0	✓	○	○
FL90	90.0	80.0	65.0	✓	○	○
FL110	110.0	86.0	67.0	✓	○	○
FL125	125.0	95.0	62.0	✓	✓	○
FL140	140.0	100.0	60.0	✓	✓	○
FL160	160.0	100.0	75.0	✓	○	○
FL180	180.0	101.0	72.3.0	○	○	○
FL200	200.0	114.0	79.0	✓	✓	○
FL225	225.0	125.0	70.0	✓	✓	○
FL250	250.0	132.0	89.0	✓	○	○
FL280	280.0	116.0	90.0	○	○	○
FL315	315.0	142.0	99.0	✓	○	○
FL355	355.0	140.0	90.0	✓	○	○
FL400	400.0	135.0	89.0	✓	✓	○
FL450	450.0	132.0	90.0	○	○	○
FL500	500.0	130.0	90.0	✓	✓	○
FL630	630.0	130.0	91.0	✓	✓	○



Tee

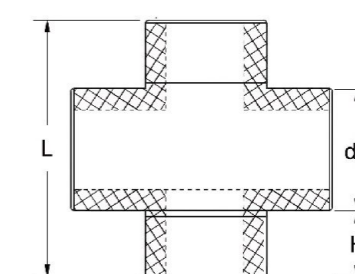
Specifications	DN	L1	L2	L	H	SDR11	SDR13.6	SDR17
T63	63.0	56.0	56.0	186.0	95.0	✓	○	○
T75	75.0	57.0	57.0	203.0	103.0	✓	○	○
T90	90.0	59.0	59.0	222.0	114.0	✓	○	○
T110	110.0	64.0	64.0	252.0	129.0	✓	✓	○
T125	125.0	65.0	65.0	273.0	137.0	✓	✓	○
T140	140.0	65.0	65.0	285.0	147.0	✓	✓	○
T160	160.0	70.0	70.0	311.0	155.0	✓	✓	○
T180	180.0	72.0	73.0	346.0	172.0	✓	○	○
T200	200.0	75.0	75.0	366.0	187.0	✓	✓	○
T225	225.0	78.0	76.0	385.0	190.0	✓	✓	○
T250	250.0	88.0	88.0	445.0	230.0	✓	○	○
T315	315.0	95.0	75.0	525.0	265.0	✓	○	○
T400	400.0	104.0	104.0	627.0	309.0	✓	○	○
T450	450.0	165.0	96.0	655.0	120.0	○	○	○
T500	500.0	110.0	110.0	740.0	145.0	○	✓	○
T630	630.0	340.0	222.0	950.0	165.0	○	✓	○

Butt Fusion PE Fittings Series



Reducer Cross

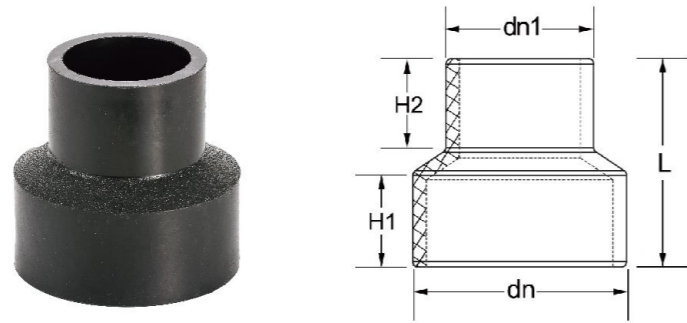
Specifications	DN	L	H	F1	W	SDR11	SDR13.6	SDR17
Q110x50	110x50	194.0	117.0	57.0	67.0	✓	✓	○
Q110x63	110x63	194.0	119.0	57.0	61.0	✓	○	○
Q110x75	110x75	239.0	124.0	57.0	76.0	○	✓	○
Q110x90	110x90	240.0	118.0	57.0	72.0	○	✓	○
Q160x63	160x63	217.0	145.0	59.0	73.0	✓	✓	○
Q160x75	160x75	215.0	145.0	58.0	66.0	○	✓	○
Q160x90	160x90	216.0	149.0	60.0	60.0	✓	✓	○
Q160x110	160x110	250.0	145.0	60.0	63.0	✓	○	○
Q200x63	200x63	236.0	166.0	61.0	80.0	✓	✓	○
Q200x75	200x75	236.0	166.0	60.0	75.0	✓	○	○
Q200x90	200x90	273.0	165.0	64.0	84.0	✓	✓	○
Q200x110	200x110	272.0	167.0	64.0	75.0	✓	✓	○
Q200x160	200x160	320.0	340.0	63.0	74.0	✓	✓	○
Q315x110	315x110	356.0	236.0	74.0	116.0	○	○	○
Q315x160	315x160	354.0	236.0	73.0	90.0	✓	○	○
Q315x200	315x200	395.0	240.0	90.0	75.0	✓	○	○
Q315x250	315x250	444.0	250.0	89.0	86.0	✓	○	○



Cross

Specifications	DN	L	L1	H	SDR11	SDR13.6	SDR17
Q63	63.0	200.0	72.0	60.0	✓	○	○
Q75	75.0	250.0	75.0	61.0	✓	○	○
Q90	90.0	215.0	65.0	61.0	✓	○	○
Q110	110.0	239.0	61.0	119.0	✓	✓	○
Q160	160.0	300.0	67.0	150.0	✓	✓	○
Q200	200.0	360.0	72.0	180.0	✓	✓	○
Q315	315.0	505.0	91.0	250.0	○	○	○

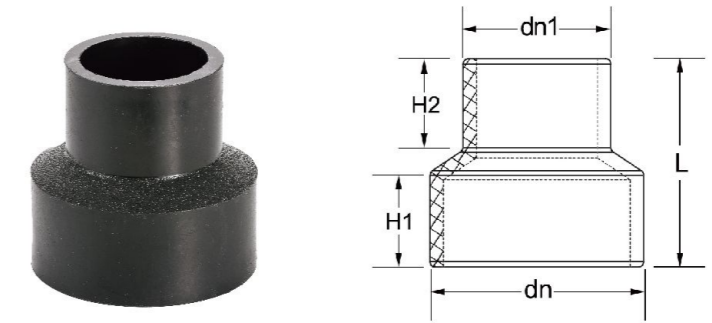
Butt Fusion PE Fittings Series



Reducer Coupling

Specifications	DN	DN1	H1	H2	L	SDR11	SDR13.6	SDR17
S75x50	75.0	50.0	64.0	54.0	122.0	✓	○	○
S75x63	75.0	63.0	64.0	55.0	123.0	✓	○	○
S90x40	90.0	40.0	61.0	55.0	135.0	✓	○	○
S90x50	90.0	50.0	61.0	55.0	132.0	✓	○	○
S90x63	90.0	63.0	60.0	59.0	130.0	✓	✓	○
S90x75	90.0	75.0	59.0	59.0	130.0	✓	○	○
S110x40	110.0	40.0	86.0	56.0	142.0	○	○	○
S110x50	110.0	50.0	62.0	61.0	141.0	✓	○	○
S110x63	110.0	63.0	62.0	61.0	141.0	✓	○	○
S110x75	110.0	75.0	63.0	63.0	139.0	✓	○	○
S110x90	110.0	90.0	63.0	63.0	135.0	✓	○	○
S125x63	125.0	63.0	65.0	62.0	140.0	✓	✓	○
S125x75	125.0	75.0	64.0	64.0	144.0	✓	✓	○
S125x90	125.0	90.0	67.0	65.0	139.0	✓	✓	○
S125x110	125.0	110.0	66.0	66.0	136.0	✓	✓	○
S140x63	140.0	63.0	65.0	57.0	157.0	✓	○	○
S140x75	140.0	75.0	65.0	62.0	154.0	✓	○	○
S140x90	140.0	90.0	65.0	64.0	152.0	✓	○	○
S140x110	140.0	110.0	65.0	65.0	147.0	✓	○	○
S140x125	140.0	125.0	68.0	66.0	141.0	✓	○	○
S160x63	160.0	63.0	69.0	60.0	163.0	✓	✓	○
S160x75	160.0	75.0	70.0	64.0	161.0	✓	✓	○
S160x90	160.0	90.0	69.0	65.0	157.0	✓	○	○
S160x110	160.0	110.0	71.0	67.0	155.0	✓	✓	○
S160x125	160.0	125.0	71.0	67.0	150.0	✓	✓	○
S160x140	160.0	140.0	70.0	67.0	149.0	✓	✓	○
S180x63	180.0	63.0	73.0	60.0	175.0	✓	○	○
S180x75	180.0	75.0	72.0	65.0	174.0	✓	○	○
S180x90	180.0	90.0	72.0	65.0	172.0	✓	○	○
S180x110	180.0	110.0	72.0	65.0	158.0	✓	○	○
S180x125	180.0	125.0	72.0	65.0	157.0	✓	○	○
S180x140	180.0	140.0	73.0	66.0	157.0	✓	○	○
S180x160	180.0	160.0	72.0	70.0	147.0	✓	○	○
S200x63	200.0	63.0	73.0	64.0	179.0	✓	○	○
S200x75	200.0	75.0	76.0	64.0	182.0	✓	✓	○
S200x90	200.0	90.0	75.0	67.0	180.0	✓	✓	○
S200x110	200.0	110.0	75.0	67.0	174.0	✓	✓	○
S200x125	200.0	125.0	76.0	68.0	167.0	✓	○	○
S200x140	200.0	140.0	75.0	68.0	160.0	✓	○	○
S200x160	200.0	160.0	76.0	68.0	159.0	✓	✓	○
S200x180	200.0	180.0	76.0	74.0	167.0	✓	✓	○
S225x63	225.0	63.0	74.0	62.0	181.0	✓	○	○
S225x75	225.0	75.0	74.0	67.0	175.0	✓	○	○

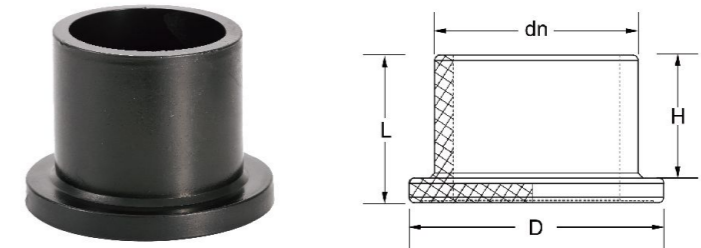
Butt Fusion PE Fittings Series



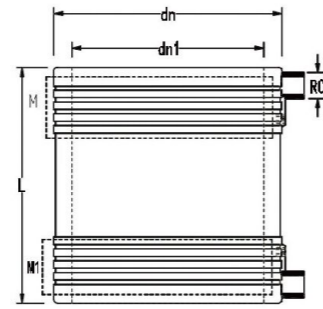
Reducer Coupling

Specifications	DN	DN1	H1	H2	L	SDR11	SDR13.6	SDR17
S225x90	225.0	90.0	76.0	67.0	175.0	✓	○	○
S225x110	225.0	110.0	74.0	67.0	175.0	✓	○	○
S225x140	225.0	140.0	75.0	68.0	165.0	✓	○	○
S225x160	225.0	160.0	74.0	70.0	165.0	✓	○	○
S225x200	225.0	200.0	75.0	75.0	159.0	✓	○	○
S250x110	250.0	110.0	94.0	70.0	194.0	○	○	✓
S250x160	250.0	160.0	82.0	76.0	184.0	✓	○	○
S250x200	250.0	200.0	85.0	84.0	186.0	✓	○	✓
S315x110	315.0	110.0	92.0	72.0	207.0	✓	○	○
S315x160	315.0	160.0	91.0	74.0	210.0	✓	○	✓
S315x200	315.0	200.0	92.0	80.0	198.0	✓	○	○
S315x250	315.0	250.0	91.0	86.0	194.0	✓	○	✓

Flange

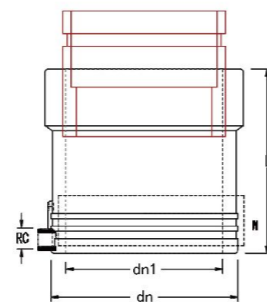


Specifications	DN	L	H	D	SDR11	SDR13.6	SDR17
FL63	63.0	87.0	72.0	87.0	✓	○	○
FL75	75.0	87.0	73.0	113.0	✓	○	○
FL90	90.0	87.0	74.0	122.0	○	✓	○
FL110	110.0	94.0	89.0	147.0	○	✓	○
FL110	110.0	104.0	87.0	145.0	✓	○	○
FL125	125.0	93.0	78.0	154.0	✓	✓	○
FL140	140.0	106.0	87.0	175.0	○	✓	○
FL160	160.0	115.0	95.0	198.0	✓	✓	○
FL180	180.0	114.0	94.0	220.0	✓	✓	○
FL200	200.0	125.0	100.0	247.0	✓	✓	○
FL225	225.0	131.0	106.0	270.0	✓	✓	○
FL250	250.0	147.0	117.0	298.0	✓	○	✓
FL315	315.0	147.0	117.0	365.0	✓	○	✓
FL355	355.0	161.0	127.0	405.0	○	○	✓
FL400	400.0	184.0	145.0	470.0	✓	○	✓
FL500	500.0	185.0	139.0	575.0	○	○	✓
FL630	630.0	195.0	148.0	680.0	○	○	✓



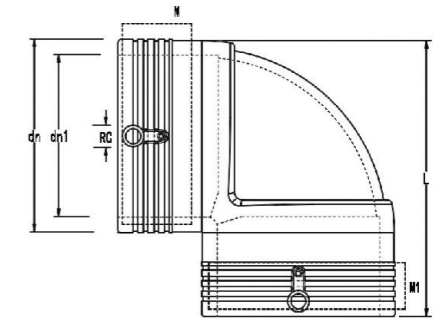
Coupling

Specifications	DN	DN1	L	M	M1	RC
S50	61.0	50.0	93.0	20.0	20.0	15.0
S63	78.0	63.0	106.0	23.0	23.0	15.0
S75	90.5	75.0	113.0	24.0	24.0	15.0
S90	109.0	90.0	123.0	29.0	29.0	15.0
S110 (small)	128.0	110.0	135.0	32.0	32.0	15.0
S110	131.0	110.0	135.0	32.0	32.0	15.0
S125	148.0	125.0	139.0	32.0	32.0	15.0
S140	164.0	140.0	157.0	45.0	45.0	15.0
S160 (small)	186.0	160.0	155.0	45.0	45.0	15.0
S160	188.0	160.0	155.0	45.0	45.0	15.0
S200 (small)	234.0	200.0	178.0	54.0	54.0	15.0
S200	236.0	200.0	180.0	54.0	54.0	15.0
S225	264.0	225.0	179.0	54.0	54.0	15.0
S250	293.0	250.0	195.0	54.0	54.0	15.0
S280	317.0	280.0	254.0	65.0	65.0	15.0
S315	370.0	315.0	230.0	65.0	65.0	15.0
S355	405.0	355.0	243.0	65.0	65.0	15.0
S400	470.0	400.0	285.0	74.0	74.0	15.0
S450	512.0	450.0	289.0	65.0	65.0	15.0
S500	588.0	500.0	310.0	80.0	80.0	15.0
S630	725.0	630.0	352.0	94.0	94.0	15.0
S400 (SDR17)	445.0	400.0	285.0	74.0	74.0	15.0
S500 (SDR17)	558.0	500.0	310.0	80.0	80.0	15.0
S630 (SDR17)	703.0	630.0	352.0	94.0	94.0	15.0
S710 (SDR17)	787.0	710.0	432.0	130.0	130.0	15.0
S800 (SDR17)	883.0	800.0	459.0	130.0	130.0	15.0
S900 (SDR17)	980.0	900.0	518.0	160.0	160.0	15.0



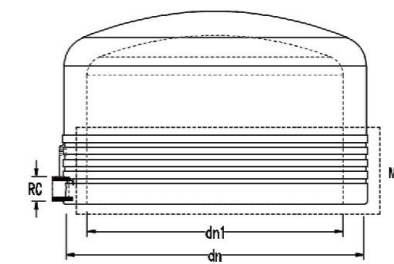
Steel-Plastic Transition Fitting

Specifications	DN	DN1	M	L	RC
75	95.0	75.0	32.0	11.5	15.0
110	139.0	110.0	45.0	12.9	15.0
160	193.0	160.0	40.0	13.6	15.0
200	246.0	200.0	58.0	14.2	15.0



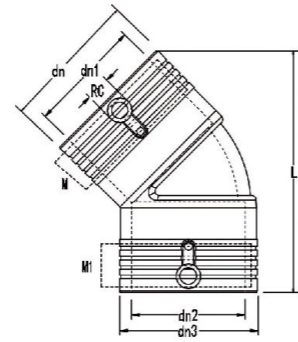
90°Elbow

Specifications	DN	DN1	M	M1	L	RC
L50	118.0	61.0	27.0	27.0	15.0	15.0
L63	123.0	75.0	30.0	30.0	15.0	15.0
L75	141.0	91.0	24.0	24.0	15.0	15.0
L90	162.0	109.0	29.0	29.0	15.0	15.0
L110	131.0	131.0	32.0	32.0	15.0	15.0
L125	207.0	148.0	32.0	32.0	15.0	15.0
L140	225.0	158.0	37.0	37.0	15.0	15.0
L160	252.0	188.0	45.0	45.0	15.0	15.0
L200	310.0	236.0	54.0	54.0	15.0	15.0
L225	330.0	260.0	54.0	54.0	15.0	15.0
L250	365.0	293.0	54.0	54.0	15.0	15.0
L315	465.0	370.0	65.0	65.0	15.0	15.0
L355	485.0	410.0	58.0	58.0	15.0	15.0
L400	595.0	470.0	69.0	69.0	15.0	15.0
L450	645.0	525.0	72.0	72.0	15.0	15.0
L500	692.0	585.0	78.0	78.0	15.0	15.0
L630	835.0	692.0	100.0	100.0	15.0	15.0
L400(SDR17)	545.0	445.0	74.0	74.0	15.0	15.0
L500(SDR17)	660.0	558.0	80.0	80.0	15.0	15.0
L630(SDR17)	835.0	725.0	94.0	94.0	15.0	15.0



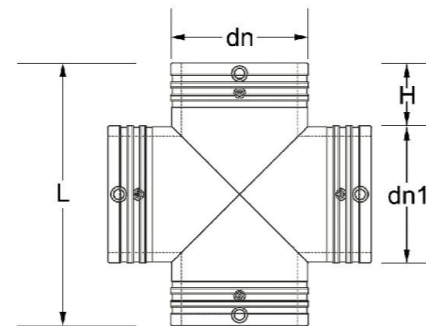
End cap

Specifications	DN	DN1	M	L	RC
D50	63.0	50.0	42.0	83.0	15.0
D63	78.0	63.0	46.0	92.0	15.0
D75	94.0	75.0	30.0	76.0	15.0
D90	111.0	90.0	31.0		15.0
D110	131.0	110.0	38.0	96.0	15.0
D160	188.0	160.0	40.0	125.0	15.0
D200	236.0	200.0	58.0	150.0	15.0
D250	296.0	250.0	54.5	160.0	15.0
D315	375.0	315.0	58.0	195.0	15.0



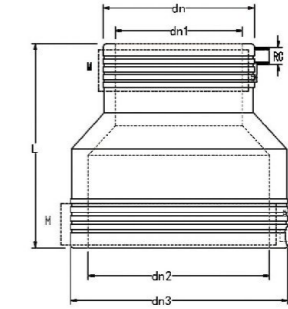
45°Elbow

Specifications	DN	DN1	DN2	DN3	M	M1	L	RC
L50	60.0	50.0	50.0	60.0	25.0	25.0	25.0	15.0
L63	75.0	63.0	63.0	75.0	30.0	30.0	30.0	15.0
L75	91.0	75.0	75.0	91.0	24.0	24.0	24.0	15.0
L90	109.0	90.0	90.0	109.0	29.0	29.0	29.0	15.0
L110	131.0	110.0	110.0	131.0	32.0	32.0	32.0	15.0
L125	152.0	125.0	125.0	152.0	32.0	32.0	32.0	15.0
L140	166.0	140.0	140.0	166.0	36.0	36.0	36.0	15.0
L160	188.0	160.0	160.0	188.0	45.0	45.0	45.0	15.0
L200	236.0	200.0	200.0	236.0	54.0	54.0	54.0	15.0
L225	260.0	225.0	225.0	260.0	54.0	54.0	54.0	15.0
L250	293.0	250.0	250.0	293.0	54.0	54.0	54.0	15.0
L315	370.0	315.0	315.0	370.0	65.0	65.0	65.0	15.0
L355	400.0	355.0	355.0	400.0	60.0	60.0	60.0	15.0
L400	470.0	400.0	400.0	470.0	69.0	69.0	69.0	15.0
L450	525.0	450.0	450.0	525.0	70.0	70.0	70.0	15.0
L500	580.0	500.0	500.0	580.0	73.0	73.0	73.0	15.0
L400(10kg)	448.0	400.0	400.0	448.0	57.0	57.0	57.0	15.0
L500(10kg)	560.0	500.0	500.0	560.0	78.0	78.0	78.0	15.0
L630(10kg)	704.0	630.0	630.0	704.0	87.0	87.0	87.0	15.0



Cross

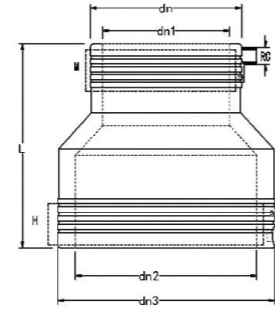
Specifications	DN	DN1	L	H	RC
110	133.0	110.0	253.0	61.0	
160	188.0	160.0	322.0	68.0	
200	236.0	200.0	385.0	78.0	



Reducer Coupling

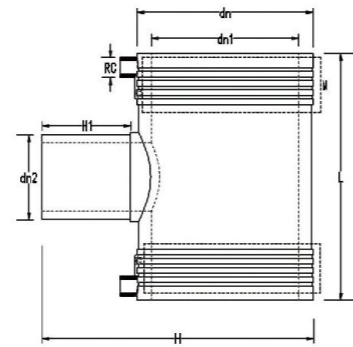
Specifications	DN	DN1	M	M1	DN2	DN3	L	RC
S40x32	42.0	32.0	14.0	14.0	40.0	49.0	85.0	15.0
S50x32	42.0	32.0	14.0	14.0	50.0	61.0	102.0	15.0
S50x40	50.0	40.0	22.0	22.0	50.0	61.0	104.0	15.0
S63x32	42.0	32.0	22.0	24.0	63.0	76.0	104.0	15.0
S63x50	61.0	50.0	30.0	28.0	63.0	76.0	106.0	15.0
S75x50	61.0	50.0	30.0	28.0	75.0	88.0	119.0	15.0
S75x63	76.0	63.0	34.0	29.0	75.0	88.0	115.0	15.0
S90x50	61.0	50.0	32.0	30.0	90.0	104.0	128.0	15.0
S90x63	76.0	63.0	35.0	35.0	90.0	104.0	128.0	15.0
S90x75	88.0	75.0	38.0	42.0	90.0	104.0	128.0	15.0
S110x50	70.0	50.0	32.0	38.0	110.0	130.0	145.0	15.0
S110x63	83.0	63.0	31.0	39.0	110.0	130.0	145.0	15.0
S110x75	94.0	75.0	32.0	31.0	110.0	130.0	145.0	15.0
S110x90	113.0	90.0	32.0	31.0	110.0	130.0	145.0	15.0
S125x110	130.0	110.0	31.0	36.0	125.0	146.0	168.0	15.0
S140x110	130.0	110.0	36.0	36.0	140.0	160.0	182.0	15.0
S160x50	70.0	50.0	45.0	32.0	160.0	190.0	186.0	15.0
S160x63	83.0	63.0	45.0	32.0	160.0	190.0	186.0	15.0
S160x75	94.0	75.0	35.0	40.0	160.0	190.0	186.0	15.0
S160x90	113.0	90.0	38.0	39.0	160.0	190.0	186.0	15.0
S160x110	134.0	110.0	38.0	41.0	160.0	190.0	177.0	15.0
S160x125	150.0	125.0	39.0	41.0	160.0	190.0	170.0	15.0
S160x140	164.0	140.0	44.0	44.0	160.0	190.0	192.0	15.0
S200x50	70.0	50.0	34.0	62.0	200.0	238.0	205.0	15.0
S200x63	82.0	63.0	30.0	63.0	200.0	238.0	232.0	15.0
S200x75	94.0	75.0	58.0	32.0	200.0	238.0	232.0	15.0
S200x90	113.0	90.0	44.0	41.0	200.0	238.0	226.0	15.0
S200x110	134.0	110.0	45.0	41.0	200.0	238.0	220.0	15.0
S200x125	145.0	125.0	45.0	49.0	200.0	238.0	211.0	15.0
S200x160	191.0	160.0	45.0	53.0	200.0	238.0	195.0	15.0
S225x160	188.0	160.0	47.0	47.0	225.0	258.0	244.0	15.0
S250x90	113.0	90.0	48.0	35.0	250.0	295.0	257.0	15.0
S250x110	134.0	110.0	46.0	41.0	250.0	295.0	257.0	15.0
S250x160	191.0	160.0	47.0	53.0	250.0	295.0	235.0	15.0
S250x200	238.0	200.0	48.0	60.0	250.0	295.0	220.0	15.0
S315x110	134.0	110.0	58.0	38.0	315.0	373.0	270.0	15.0
S315x160	191.0	160.0	75.0	46.0	315.0	373.0	290.0	15.0

Electrofusion PE Fittings Series



Reducer Coupling

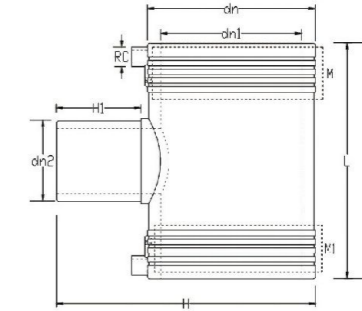
Specifications	DN	DN1	M	M1	DN2	DN3	L	RC
S315x200	238.0	200.0	65.0	59.0	315.0	373.0	275.0	15.0
S315x250	295.0	250.0	65.0	59.0	315.0	373.0	250.0	15.0
S355x200	236.0	200.0	57.0	52.0	355.0	400.0	283.0	15.0
S355x250	288.0	250.0	63.0	58.0	355.0	400.0	278.0	15.0
S355x315	359.0	315.0	64.0	68.0	355.0	400.0	278.0	15.0
S400x315	359.0	315.0	74.0	72.0	400.0	450.0	314.0	15.0
S400x355	400.0	355.0	61.0	67.0	400.0	450.0	298.0	15.0
S500x315(16kg)	359.0	315.0	70.0	70.0	500.0	562.0	326.0	15.0
S500x400(16kg)	450.0	400.0	61.0	69.0	500.0	562.0	326.0	15.0
S500x315(10kg)	365.0	315.0	76.0	76.0	500.0	562.0	326.0	15.0



Tee

Specifications	DN	DN1	M	M1	H	H1	D2	L	RC
50	61.0	50.0	28.0	28.0	117.0	59.0	50.0	148.0	15.0
63	78.0	63.0	28.0	28.0	143.0	64.0	63.0	162.0	15.0
75	91.0	75.0	24.0	24.0	160.0	69.0	75.0	175.0	15.0
90	108.0	90.0	26.0	26.0	183.0	75.0	90.0	195.0	15.0
110	131.0	110.0	32.0	32.0	211.0	80.0	110.0	211.0	15.0
125	146.0	125.0	34.0	34.0	231.0	85.0	125.0	255.0	15.0
140	164.0	140.0	35.0	35.0	287.0	112.0	140.0	281.0	15.0
160	191.0	160.0	45.0	45.0	277.0	86.0	160.0	283.0	15.0
200	237.0	200.0	54.0	54.0	332.0	95.0	200.0	343.0	15.0
225	258.0	225.0	50.0	50.0	378.0	108.0	225.0	377.0	15.0
250	295.0	250.0	54.0	54.0	412.0	117.0	250.0	397.0	15.0
315	375.0	315.0	75.0	75.0	505.0	130.0	315.0	507.0	15.0
355	400.0	355.0	63.0	63.0	540.0	137.0	355.0	565.0	15.0
400	470.0	400.0	69.0	69.0	635.0	155.0	400.0	627.0	15.0
500	557.0	500.0	88.0	88.0	700.0	148.0	500.0	725.0	15.0
630	700.0	630.0	90.0	90.0	925.0	195.0	630.0	940.0	15.0

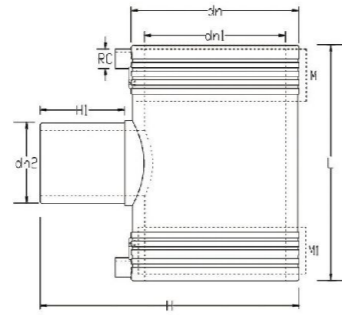
Electrofusion PE Fittings Series



Reducer Tee

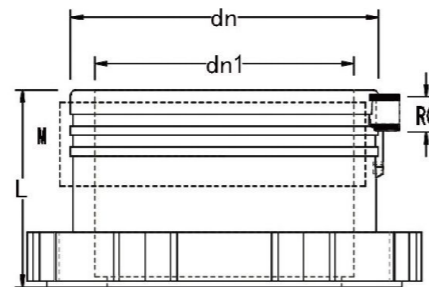
Specifications	DN	DN1	DN2	M	M1	H	H1	L	RC
50x32	62.0	50.0	32.0	24.0	24.0	125.0	57.0	134.0	15.0
50x40	62.0	50.0	40.0	24.0	24.0	122.0	58.0	145.0	15.0
63x32	78.0	63.0	32.0	24.0	24.0	143.0	58.0	160.0	15.0
63x50	78.0	63.0	50.0	24.0	24.0	140.0	58.0	155.0	15.0
75x50	91.0	75.0	50.0	24.0	24.0	161.0	70.0	175.0	15.0
75x63	91.0	75.0	63.0	24.0	24.0	161.0	70.0	175.0	15.0
90x50	109.0	90.0	50.0	26.0	26.0	176.0	67.0	174.0	15.0
90x63	109.0	90.0	63.0	26.0	26.0	178.0	69.0	174.0	15.0
90x75	109.0	90.0	75.0	26.0	26.0	178.0	69.0	174.0	15.0
110x50	132.0	110.0	50.0	32.0	32.0	202.0	70.0	185.0	15.0
110x63	132.0	110.0	63.0	32.0	32.0	202.0	70.0	185.0	15.0
110x75	132.0	110.0	75.0	32.0	32.0	203.0	71.0	195.0	15.0
110x90	132.0	110.0	90.0	32.0	32.0	207.0	75.0	222.0	15.0
125x75	149.0	125.0	75.0	36.0	36.0	222.0	68.0	255.0	15.0
125x90	148.0	125.0	90.0	36.0	36.0	230.0	77.0	254.0	15.0
125x110	142.0	125.0	110.0	36.0	36.0	232.0	81.0	255.0	15.0
140x110	165.0	140.0	110.0	36.0	36.0	268.0	85.0	281.0	15.0
160x50	191.0	160.0	50.0	45.0	45.0	262.0	71.0	205.0	15.0
160x63	191.0	160.0	63.0	45.0	45.0	262.0	71.0	205.0	15.0
160x75	191.0	160.0	75.0	45.0	45.0	265.0	74.0	214.0	15.0
160x90	191.0	160.0	90.0	45.0	45.0	265.0	74.0	241.0	15.0
160x110	191.0	160.0	110.0	45.0	45.0	271.0	80.0	241.0	15.0
160x125	191.0	160.0	125.0	45.0	45.0	271.0	80.0	281.0	15.0
160x140	185.0	160.0	140.0	45.0	45.0	288.0	110.0	303.0	15.0
200x50	237.0	200.0	50.0	54.0	54.0	309.0	72.0	232.0	15.0
200x63	237.0	200.0	63.0	54.0	54.0	309.0	72.0	232.0	15.0
200x75	237.0	200.0	75.0	54.0	54.0	313.0	76.0	242.0	15.0
200x90	237.0	200.0	90.0	54.0	54.0	313.0	76.0	270.0	15.0
200x110	237.0	200.0	110.0	54.0	54.0	320.0	83.0	270.0	15.0
200x125	235.0	200.0	125.0	54.0	54.0	355.0	85.0	355.0	15.0
200x160	237.0	200.0	160.0	54.0	54.0	327.0	92.0	344.0	15.0
225x110	257.0	225.0	110.0	54.0	54.0	370.0	91.0	318.0	15.0
225x160	257.0	225.0	160.0	48.0	48.0	370.0	100.0	322.0	15.0
225x200	254.0	225.0	200.0	48.0	48.0	365.0	105.0	378.0	15.0
250x63	297.0	250.0	63.0	54.0	54.0	377.0	80.0	281.0	15.0
250x75	297.0	250.0	75.0	54.0	54.0	377.0	80.0	281.0	15.0
250x90	297.0	250.0	90.0	54.0	54.0	377.0	80.0	281.0	15.0
250x110	297.0	250.0	110.0	54.0	54.0	377.0	80.0	283.0	15.0
250x160	297.0	250.0	160.0	54.0	54.0	387.0	90.0	357.0	15.0
250x200	297.0	250.0	200.0	54.0	54.0	400.0	103.0	357.0	15.0
315x110 (16kg)	374.0	315.0	110.0	75.0	75.0	473.0	99.0	413.0	15.0
315x160 (16kg)	374.0	315.0	160.0	75.0	75.0	473.0	99.0	413.0	15.0

## Electrofusion PE Fittings Series



### Reducer Tee

Specifications	DN	DN1	DN2	M	M1	H	H1	L	RC
315x200 (16kg)	374.0	315.0	200.0	75.0	75.0	478.0	104.0	413.0	15.0
315x250 (16kg)	374.0	315.0	250.0	75.0	75.0	490.0	116.0	453.0	15.0
355x110 (10kg)	400.0	355.0	110.0	60.0	60.0	520.0	97.0	567.0	15.0
355x160 (10kg)	398.0	355.0	160.0	64.0	64.0	535.0	113.0	565.0	15.0
355x200 (10kg)	398.0	355.0	200.0	64.0	64.0	535.0	120.0	565.0	15.0
355x315 (10kg)	405.0	355.0	315.0	60.0	60.0	535.0	145.0	560.0	15.0
400x110 (10kg)	447.0	400.0	110.0	55.0	55.0	555.0	92.0	435.0	15.0
400x160 (10kg)	450.0	400.0	160.0	70.0	70.0	575.0	97.0	425.0	15.0
400x200 (16kg)	446.0	400.0	200.0	70.0	70.0	575.0	106.0	425.0	15.0
400x250 (10kg)	445.0	400.0	250.0	60.0	60.0	570.0	115.0	546.0	15.0



### Flange Stub

Specifications	DN	DN1	M	L	RC
FL50	63.0	50.0	46.0	77.0	15.0
FL63	75.0	63.0	46.0	76.0	15.0
FL75	91.0	75.0	30.0	80.0	15.0
FL90	129.0	90.0	26.0	83.0	15.0
FL110	131.0	110.0	39.5	85.0	15.0
FL125	146.0	125.0	40.0	86.0	15.0
FL140	164.0	140.0	61.0	108.0	15.0
FL160	190.0	160.0	54.0	108.0	15.0
FL200	236.0	200.0	58.0	112.0	15.0
FL225	264.0	225.0	71.0	121.0	15.0
FL250	293.0	250.0	61.0	130.0	15.0
FL315	366.0	315.0	125.0	139.0	15.0
FL450	499.0	450.0	98.0	183.0	15.0
FL500	547.0	500.0	108.0	210.0	15.0
FL315(10kg)	353.0	315.0	138.0	145.0	15.0
FL400(10kg)	443.0	400.0	70.0	163.0	15.0
FL450(10kg)	499.0	450.0	103.0	182.0	15.0
FL500(10kg)	553.0	500.0	80.0	172.0	15.0
FL560(10kg)	612.0	560.0	92.0	206.0	15.0
FL630(10kg)	680.0	630.0	90.0	197.0	15.0
FL710 (10kg)	767.0	710.0	156.0	270.0	15.0
FL800 (10kg)	858.0	800.0	156.0	270.0	15.0

# HDPE DOUBLE WALL CORRUGATED PIPE

## Φ75-Φ1600mm

HDPE double wall corrugated pipe, abbreviated as PE corrugated pipe, was first successfully developed in Germany in the early 1980s. After more than ten years of development and improvement, it has evolved from a single variety to a complete product line. The production process and usage technology are already very mature. Due to its excellent performance and relatively economical cost, it has been greatly promoted and applied in developed countries such as Europe and America.

Double walled corrugated pipe is a new type of lightweight pipe made from high-density polyethylene. It has the characteristics of light weight, high pressure resistance, good toughness, fast construction, and long service life. Its excellent pipe wall structure design greatly reduces the cost compared to other structural pipes. And due to its convenient and reliable connection, it has been widely used both domestically and internationally. Replace a large number of concrete pipes and cast iron pipes.

### Product execution standards:

GB/T 19472-2019

### Scope of application

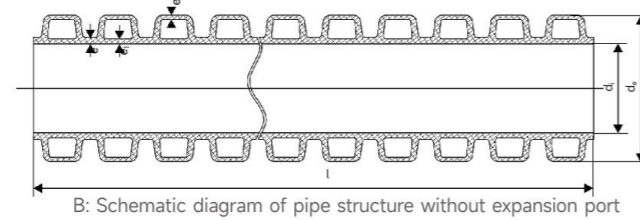
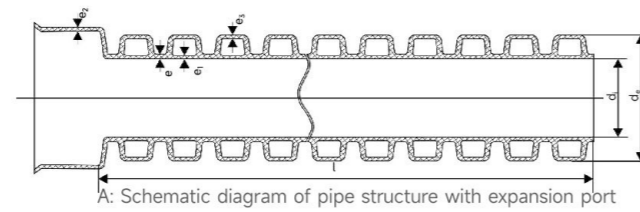
1. Municipal drainage and sewage pipeline system engineering;
2. Underground burial of drainage and sewage in apartments and residential areas;
3. Pre embedded pipelines for highways and underground seepage pipelines for golf courses;
4. Irrigation, water supply, drainage and other water conservancy projects for farmland;
5. Used for fluid transportation and ventilation in chemical and mining industries;
6. Protective sleeves for underground pipelines and communication cables.



## Performance

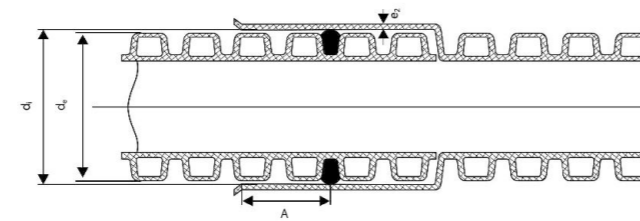
1. Unique product structure and strong pressure resistance;
2. Smooth inner wall and high flow rate;
3. The product is easy to connect, with well sealed interfaces, corrosion resistance, zero leakage, no scaling, and avoids secondary pollution.
4. The product has good flexural performance and can adapt to uneven settlement of soil;
5. Long service life, buried use can reach more than 50 years;
6. The product is lightweight, easy to construct, can reduce construction costs, and shorten the construction period;
7. At a speed of 15 feet per second, the wear resistance is 3-5 times higher than that of ordinary or fine-grained steel pipes.

## Plastic inspection well

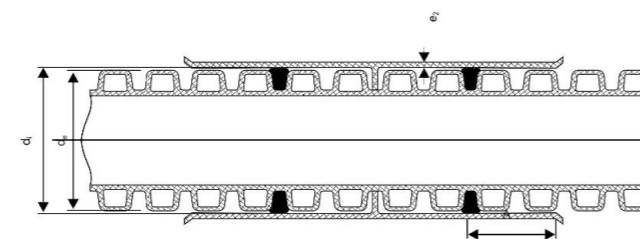


$d_o$  — The outer diameter of the pipe material;  
 $d_i$  — The inner diameter of the pipe material;  
 $e$  — Laminated wall thickness;  
 $e_1$  — Inner wall thickness  
 $e_2$  — Wall thickness of the socket;  
 $e_3$  — Outer wall thickness;  
 $l$  — Effective length of pipe material.

## Connection Display



B: Schematic diagram of plug-in connection



B: Schematic diagram of pipe fittings connection

$a$  — Interface length  
 $d_i$  — Inner diameter of socket

Plastic inspection well: The well seat is formed by one-time injection molding, using fittings such as variable diameter joints, variable angle joints, and sealing rings to achieve connections that change the diameter and angle of the pipe. The cover seat has the function of floating up and down, with a dedicated wellbore. The corresponding length is cut according to the burial depth on site. The connection between the wellbore, inlet (outlet) water pipeline and the wellbore seat is flexibly connected with rubber sealing rings, which can adapt to small range of internal angle changes. The construction is convenient and fast, with good sealing performance, effective prevention of leakage, and environmental protection and energy saving.

## Product specifications

Nominal ring stiffness class						
Class	SN4	SN6.3	SN8	SN10	SN12.5	SN16
Ring stiffness(Kn/m <sup>2</sup> )	4	6.3	8	10	12.5	16

Values in brackets are non-preferred class

DN/IN(mm)	S1		S2		S3	
	Outer Dia	Inner Dia	Outer Dia	Inner Dia	Outer Dia	Inner Dia
75						
90						
110						
160						
200	/	/	218	196	224	196
300	326	296	327	295	338	294
400	434	394	436	392	460	392
500	/	/	544	493	566	493
600	/	/	653	590	684	588
800	/	/	887	790	925	797
1000						
1200						
1600						

Physical Property		
Items		Requirement
Ring stiffness(Kn/m <sup>2</sup> )	SN4	≥4
	SN6.3*	≥6.3
	SN8	≥8
	SN10*	≥10
	SN12.5	≥12.5
	SN16	≥16
Impact property(TIR)/%		≤10
loop flexibility	The pipe is not cracked, the wall is not broken,inner wall is not reversed bending.	
oven test	No delamination ,no cracking	
density/(kg/m <sup>3</sup> )	≤1180	
oxidation induction time(200°C)/min	≥20	
creep ratio	≤4	

Experiment condition	Item	Requirement
condition B: radial deformation connection seal deformation5%,pipe deformation 10%, temperature(23 + 2)°C	inside hydrostatic pressure (15min)0.005MPa	No leak
	inside hydrostatic pressure (15min)0.05MPa	No leak
	inside negative pressure (15min) -0.03MPa	≤-0.027MPa
condition C:angular offset d≤315min:2° 315mm < d≤630mm:1.5° 630 < d:1° temperature(23 + 2)°C	inside hydrostatic pressure (15min)0.005MPa	No leak
	inside hydrostatic pressure (15min)0.05MPa	No leak
	inside negative pressure (15min) -0.03MPa	≤-0.027MPa

# PVC-M PIPE FOR WATER SUPPLY PVC-M PIPE FOR IRRIGATION

## Product Introduction

PVC-M pipe refers to a high-performance new type of pipe made of modified polyvinyl chloride, which is extruded through advanced processing technology by adding impact modifiers, and has both high strength and high toughness. The addition of impact modifiers not only maintains the high strength of PVC-U pipes but also increases the material's ductility, resulting in good toughness of the product and enhancing the safety and environmental adaptability of the pipes.

## Product execution standards:

CJ/T 272-2008

## Performance

The impact resistance performance is significantly improved, which can more effectively resist point loads and uneven settlement of the foundation;

Improved resistance to water hammer and prevention of pipeline damage during operation;

Good resistance to environmental stress cracking, effectively resisting damage to pipes during installation and transportation;

Thin and lightweight wall with low cost, the pipe wall is thinner than PVC-U under the same pressure requirements, and the cost is lower.



# PVC-U PIPE FOR WATER SUPPLY PVC PIPE FOR IRRIGATION

## Product Introduction

PVC-U water supply pipe is a type of water supply pipe mainly made of sanitary grade polyvinyl chloride resin as the main raw material, with appropriate stabilizers, lubricants, fillers, etc. added. It is extruded by a plastic extruder and injection molded by an injection molding machine, and produced through cooling, curing, shaping, inspection, packaging and other processes.

## Performance

1. Lightweight, easy to transport and unload: With low density, it is convenient for transportation, loading and unloading, and engineering construction.
2. Excellent corrosion resistance: It has excellent acid resistance, alkali resistance, and corrosion resistance, making it very suitable for use in the chemical industry.
3. Low fluid resistance: The inner wall of the pipe is smooth, with low fluid resistance, reducing costs.
4. High impact toughness: The pipe material has excellent pressure resistance, impact resistance, and tensile resistance.
5. Easy construction: Pipeline connection construction is fast and easy, and the construction cost is cheap.
6. Low engineering cost: The price is cheap, and transportation and construction are convenient, with a long service life, so the overall engineering cost is cheap.
7. Not harmful to water bodies: It has been confirmed through dissolution experiments that it does not affect water quality.



# PVC-UH PIPE WITH HIGH PERFORMANCE

## Product Introduction

High performance rigid polyvinyl chloride (PVC-UH) water supply and drainage pipes are made of polyvinyl chloride polymer materials, added with necessary additives, and extruded into shape through  $MRS \geq 25\text{Mpa}$ . As a new innovative water supply pipe, it improves the mechanical performance of the product and the connection method of the pipe on the basis of traditional PVC-U and PVC-M pipes. The product has the characteristics of light weight, low fluid resistance, low comprehensive use cost, and long service life. It can be widely used in municipal and outdoor water supply pipeline systems, building water supply pipeline systems, municipal drainage and sewage, building drainage and sewage, chemical and pharmaceutical sewage systems and other fields.



## Product specifications

Nominal DN and wall thickness (one)

DN(mm)	Nominal wall thickness(mm)						
	Series of pipe						
	S16	S12.5	S10	S8	S6.3	S5	S4
	Standard dimension ratio						
	SDR33	SDR26	SDR21	SDR17	SDR13.6	SDR11	SDR9
Nominal pressure							
0.63	0.8	1	1.25	1.6	2	2.5	
20	—	—	—	—	—	2.0	2.3
25	—	—	—	—	2.0	2.3	2.8
32	—	—	—	2.0	2.4	2.9	3.6
40	—	—	2.0	2.4	3.0	3.7	4.5
50	—	2.0	2.4	3.0	3.7	4.6	5.6
63	2.0	2.5	3.0	3.8	4.7	5.8	7.1
75	2.3	2.9	3.6	4.5	5.6	6.8	8.4
90	2.8	3.5	4.3	5.4	6.7	8.2	10.1

Nominal DN and wall thickness (two)

DN(mm)	Nominal wall thickness(mm)						
	Series of pipe						
	S20	S16	S12.5	S10	S8	S6.3	S5
	Standard dimension ratio						
	SDR41	SDR33	SDR26	SDR21	SDR17	SDR13.6	SDR11
Nominal pressure							
0.63	0.8	1	1.25	1.6	2	2.5	
110	2.7	3.4	4.2	5.3	6.6	8.1	10.0
125	3.1	3.9	4.8	6.0	7.4	9.2	11.4
140	3.5	4.3	5.4	6.7	8.3	10.3	12.7
150	4.0	4.9	6.2	7.7	9.5	11.8	14.6
160	4.4	5.5	6.9	8.6	10.7	13.3	16.4
180	4.9	6.2	7.7	9.6	11.9	14.7	18.2
200	5.5	6.9	8.6	10.8	13.4	16.6	—
225	6.2	7.7	9.6	11.9	14.8	18.4	—
250	6.9	8.6	10.7	13.4	16.6	20.6	—
280	7.7	9.7	12.1	15.0	18.7	23.2	—
315	8.7	10.9	13.6	16.9	21.1	26.1	—
355	9.8	12.3	15.3	19.1	23.7	29.4	—
400	11.0	13.8	17.2	21.5	26.7	33.1	—
450	12.3	15.3	19.1	23.9	29.7	36.8	—
500	13.7	17.2	21.4	26.7	—	—	—
630	15.4	19.3	24.1	30.0	—	—	—
710	17.4	21.8	27.2	—	—	—	—
800	19.6	24.5	30.6	—	—	—	—
900	22.0	27.6	34.4	—	—	—	—
1000	24.5	30.6	38.2	—	—	—	—
1200	29.4	36.7	45.9	—	—	—	—

## Product mix

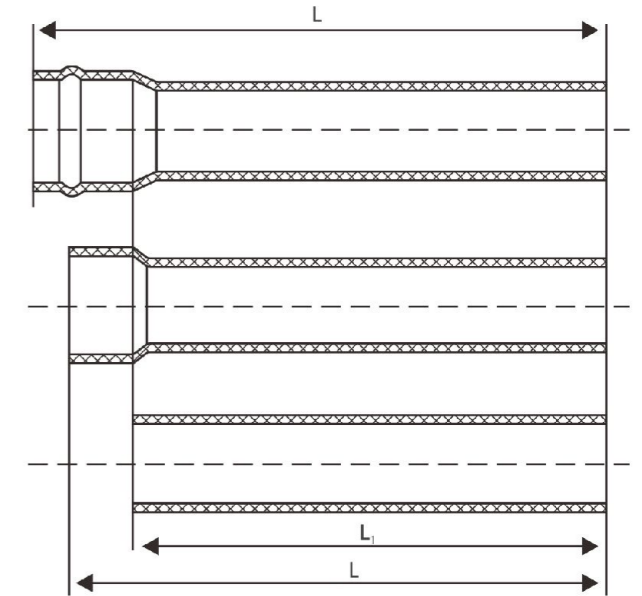
Index number description:

L - Pipe length;

L<sub>1</sub> - Effective length of pipe .

Physical properties

item	Requirement
density	1350kg/m <sup>3</sup> ~ 1460kg/m <sup>3</sup>
vicat softening temperature	≥80°C
longitudinal retraction rate	≤5%
tensile yield stress	≥45MPa
elongation at break	≥80%
luminousness	≤0.2%
drop-hammer impact	≤5%



Socket size

DN(mm)	Elastic seal ring socket		Adhesive socket		
	Joint length	Median bore diameter of socket ≥	Depth of socket ≥	Median bore diameter of socket	
				≥	≤
20	20	—	—	20.1	20.3
25	25	—	—	25.1	25.3
32	32	—	—	32.1	32.3
40	40	—	—	40.1	40.3
50	50	56	50.3	50.1	50.3
63	63	58	63.4	63.1	63.3
75	75	60	75.4	75.1	75.3
90	90	61	90.4	90.1	90.3
110	110	64	110.5	110.1	110.4
125	125	66	125.5	125.1	125.4
140	140	68	140.6	140.2	140.5
160	160	71	160.6	160.2	160.5
180	180	73	180.7	180.2	180.6
200	200	75	200.7	200.2	200.6
225	225	78	225.8	225.3	225.7
250	250	81	250.9	250.3	250.8
280	280	85	281	280.3	280.9
315	315	88	316.1	315.4	316
355	355	90	356.2	355.4	356.1
400	400	92	401.3	400.4	401.2
450	450	95	451.5	—	—
500	500	97	501.6	—	—
560	560	101	561.8	—	—
630	630	105	632	—	—
710	710	109	712.3	—	—
800	800	114	802.5	—	—
900	900	119	902.8	—	—
1000	1000	125	1003.1	—	—
1200	1200	136	1203.7	—	—

### Hydrostatic strength of pipe

DN(mm)	Test parameters			Requirement
	Temperature/°C	Time/h	Ring stress/MPa	
< 40	20	1	36	No broken ,no leak
≥40	20	1	38	
All specifications	20	100	30	
	60	1000	10	

### Hydrostatic strength of pipe socket

DN(mm)	Test parameters			Requirement
	Temperature/°C	Time/h	Pressure/MPa	
≤90	20	1	3.8xPN	No broken ,no leak
> 90			3.04xPN	

## Hygienic property

Sanitary requirements for immersion water of drinking water transmission and distribution pipes and fittings

Project	Standards and requirements
In the hygiene standards for drinking water	
Designated projects	
colour	Do not increase chromaticity
Turbidity	Increase amount ≤ 0.5 degrees
odor	No strange smell or odor is produced
Visible to the naked eye	No visible fragments or debris are generated
PH	Do not change pH
iron	≤0.03mg/L
manganese	≤0.01mg/L
copper	≤0.1mg/L
zinc	≤0.1mg/L
Volatile phenols (calculated as phenol)	≤0.02mg/L
arsenic	≤0.05mg/L
mercury	≤0.01mg/L
Chromium (hexavalent)	≤0.05mg/L
cadmium	≤0.01mg/L
lead	≤0.05mg/L
silver	≤0.05mg/L
fluoride	≤0.1mg/L
Nitrate (calculated as nitrogen)	≤2mg/L
chloroform	≤6μg/L
carbon tetrachloride	≤0.3μg/L
Benzo (A) flower	≤0.001μg/L
Other projects	Increase amount ≤ 10mg/L
Evaporation residue	Increase amount ≤ 2mg/L

## Product specifications

OD(mm)	PVC-UH Nominal pressure and size(≤90mm)						
	S16	S12.5	S10	S8	S6.3	S5	S4
	SDR33	SDR26	SDR21	SDR17	SDR13.6	SDR11	SDR9
	Nominal pressure /MPa						
	0.63	0.8	1	1.25	1.6	2	2.5
Nominal wall tickness/mm							
50	—	2	2.4	3.7	4.6	4.6	5.6
63	2	2.5	3	4.7	5.8	5.8	7.1
75	2.3	2.9	3.6	5.6	6.9	6.9	8.4
90	2.8	3.5	4.3	6.7	8.2	8.2	10.1

OD(mm)	PVC-UH Nominal pressure and size(≤90mm)							
	S25	S20	S16	S12.5	S10	S8	S6.3	S6.3
	SDR51	SDR41	SDR33	SDR26	SDR21	SDR17	SDR13.6	SDR11
	Nominal pressure /MPa							
	0.5	0.63	0.8	1	1.25	1.6	2	2.5
Nominal wall tickness/mm								
110	—	2.7	3.4	4.2	5.3	6.6	8.1	10
125	—	3.1	3.9	4.8	6	7.4	9.2	11.4
140	—	3.5	4.3	5.4	6.7	8.3	10.3	12.7
160	—	4	4.9	6.2	7.7	9.5	11.8	14.6
180	—	4.4	5.5	6.9	8.6	10.7	13.3	16.4
200	—	4.9	6.2	7.7	9.6	11.9	14.7	18.2
225	—	5.5	6.9	8.6	10.8	13.4	16.6	20.5
250	—	6.2	7.7	9.6	11.9	14.8	18.4	22.7
280	—	6.9	8.6	10.7	13.4	16.6	20.6	25.4
315	—	7.7	9.7	12.1	15	18.7	23.2	28.6
355	—	8.7	10.9	13.6	16.9	21.1	26.1	32.2
400	—	9.8	12.3	15.3	19.1	23.7	29.4	36.3
450	—	11	13.8	17.2	21.5	26.7	33.1	40.9
500	—	12.3	15.3	19.1	23.9	29.7	36.8	45.4
560	—	13.7	17.2	21.4	26.7	33.2	41.2	—
630	—	15.4	19.3	24.1	30	37.4	46.3	—
710	—	17.4	21.8	27.2	33.9	42.1	52.2	—
800	15.7	19.6	24.5	30.6	38.1	47.4	—	—
900	17.6	22	27.6	34.4	42.9	53.3	—	—
1000	19.6	24.5	30.6	38.2	47.7	—	—	—
1200	23.5	29.4	36.7	45.9	—	—	—	—
1400	27.4	34.3	42.9	53.5	—	—	—	—
1600	31.1	39.2	49	—	—	—	—	—

## Socket size (7)

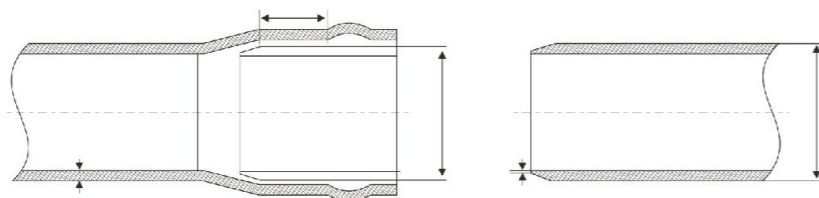
DN(mm)	PVC-UH Nominal pressure and size(≤90mm)			
	Min depth of elastic seal socket	Min depth of solvent bonding socket	Median bore diameter of solvent bonding socket	
			min	max
20		16	20.1	20.3
25		18.5	25.1	25.3
32		22	32.1	32.3
40		26	40.1	40.3
50	64	31	50.1	50.3
63	67	37.5	63.1	63.3
75	70	43.5	75.1	75.3
90	75	51	90.1	90.3
110	78	61	110.1	110.4
125	81	68.5	125.1	125.4
140	85	76	140.2	140.5
160	90	86	160.3	160.5
180	94	96	180.3	180.6
200	100	106	20.3	20.6
225	105	118.5	225.3	225.6
250	112			
280	118			
315	124			
355	130			
400	138			
450	145			
560	154			
630	165			
710	177			
800	190			



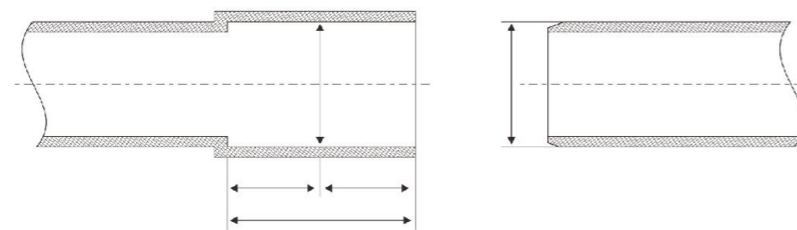
## Connection prompt

The minimum depth and inner diameter of the middle part of the solvent bonded socket meet the requirements of (7)

The wall thickness of solvent bonded socket should not be less than 0.75 times the nominal wall thickness of the connected pipe.



Elastic sealing ring type socket



Solvent bonded socket



# PP-R PIPE AND FITTINGS FOR WATER SUPPLY

## Φ16-Φ315mm



The PP-R pipeline series is in accordance with the GB/T 18742.1-2017 standard of the State Administration for Quality Supervision, Inspection and Quarantine

Released on October 14, 2017 and implemented on May 1, 2018, the relevant standards are as follows:

GB/T 18742.1-2017 Polypropylene piping systems for hot and cold water - Part 1: General principles

GB/T 18742.2-2017 Polypropylene piping systems for hot and cold water - Part 2: Pipes

GB/T 18742.3-2017 Polypropylene piping systems for hot and cold water - Part 3: Pipe fittings

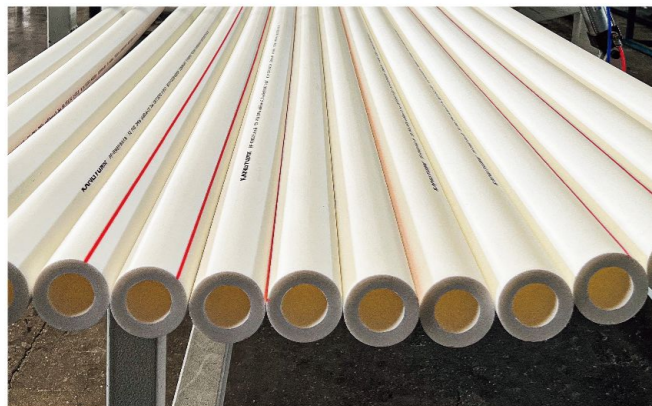


## Product characteristics

1. Sanitary and non-toxic: This product belongs to green building materials and can be used in purified water and drinking water pipeline systems;
2. High temperature and high pressure resistance: The maximum water temperature for pipeline transportation can reach 95 °C;
3. Lightweight: The specific gravity is only one-seventh of that of a metal tube;
4. Corrosion resistant and non scaling: It can avoid the worry of yellow spots on water basins and bathtubs caused by pipeline corrosion, and can eliminate blockages caused by pipeline corrosion and scaling;
5. Thermal insulation and energy saving: The thermal conductivity is only 0.5% of that of metal pipes, making it an excellent insulation and energy-saving effect for hot water pipelines;
6. Easy and reliable installation: connected by hot melt, completed in seconds, safe and reliable;
7. Beautiful appearance: The product has smooth inner and outer walls, low fluid resistance, soft color, and beautiful shape;
8. Long service life: Under the specified long-term continuous working pressure, the service life can reach more than 50 years;

## Product application

1. Residential hot and cold water pipeline system
2. Industrial water fluid transportation and discharge
3. Purified water and drinking water pipelines
4. Beverage and medicine production and delivery systems
5. Compressed air pipe
6. Basic chemical industry and agriculture pipeline



## Product specifications

### 1、 Selection of S-values for pipe series

The corresponding S value is selected according to different materials, levels of use conditions and design pressure, as shown in Table 1, Table 2, Table 3 and Table 4. Other pressure specifications, according to the supply and demand parties agreed to choose the corresponding S value, the service life design should meet the requirements of 50 years.

Table1 Selection of S-value of  $\beta$ -crystal PP-H pipe series

Design pressure MPa	Pipe series S			
	Level 1 $\sigma D=2.88\text{MPa}$	Level 2 $\sigma D=1.99\text{MPa}$	Level 4 $\sigma D=3.23\text{MPa}$	Level 5 $\sigma D=1.82\text{MPa}$
0.4	5	5	5	4
0.6	4	3.2	5	2.5
0.8	3.2	2.5	4	2
1.0	2.5	2	3.2	—

Table2 Selection of S-value of PP-B pipe series

Design pressure MPa	Pipe series S			
	Level 1 $\sigma D=1.66\text{MPa}$	Level 2 $\sigma D=1.19\text{MPa}$	Level 4 $\sigma D=1.94\text{MPa}$	Level 5 $\sigma D=1.19\text{MPa}$
0.4	4	2.5	4	2.5
0.6	2.5	2	3.2	2
0.8	2	—	2	—
1.0	—	—	2	—

Table3 Selection of S-value of PP-R pipe series

Design pressure MPa	Pipe series S			
	Level 1 $\sigma D=3.02\text{MPa}$	Level 2 $\sigma D=2.12\text{MPa}$	Level 4 $\sigma D=3.29\text{MPa}$	Level 5 $\sigma D=1.89\text{MPa}$
0.4	5	5	5	4
0.6	5	3.2	5	3.2
0.8	3.2	2.5	4	2
1.0	3.2	2	3.2	—

Table4 Selection of S-value of  $\beta$ -crystal PP-RCT pipe series

Design pressure MPa	Pipe series S			
	Level 1 $\sigma D=3.64\text{MPa}$	Level 2 $\sigma D=3.40\text{MPa}$	Level 4 $\sigma D=3.67\text{MPa}$	Level 5 $\sigma D=2.92\text{MPa}$
0.4	6.3	6.3	6.3	5
0.6	5	5	5	4
0.8	5	4	4	3.2
1.0	3.2	3.2	3.2	2.5

## 2. Specifications and dimensions

Pipe series and specifications (mm)						
Nominal outside diameter DN	Nominal wall thickness EN					
	Pipe series					
	S6.3	S5	S4	S3.2	S2.5	S2
16	—	—	2.0	2.2	2.7	3.3
20	—	2.0	2.3	2.8	3.4	4.1
25	2.0	2.3	2.8	3.5	4.2	5.1
32	2.4	2.9	3.6	4.4	5.4	6.5
40	3.0	3.7	4.5	5.5	6.7	8.1
50	3.7	4.6	5.6	6.9	8.3	10.1
63	4.7	5.8	7.1	8.6	10.5	12.7
75	5.6	6.8	8.4	10.3	12.5	15.1
90	6.7	8.2	10.1	12.3	15.0	18.1
110	8.1	10.0	12.3	15.1	18.3	22.1
125	9.2	11.4	14.0	17.1	20.8	25.1
140	10.3	12.7	15.7	19.2	23.3	28.1
160	11.8	14.6	17.9	21.9	26.6	32.1
180	13.3	16.4	20.1	24.6	29.0	36.1
200	14.7	18.2	22.4	27.4	33.2	40.1
225						
250						
280						
315						

Only applicable to β-crystal PP-RCT pipe

## 3. Hydrostatic strength

Hydrostatic strength of pipe				
Nominal outside diameter DN	Experiment parameter			
	Test temperature °C	Test duration h	Hydrostatic tension MPa	
β-crystal PP-H	20	1	21.0	No broken,no leak
		22	5.1	
	95	165	4.2	
1000		3.6		
PP-B	20	1	16.0	
		22	3.5	
	95	165	3.0	
1000		2.6		
PP-R	20	1	16.0	
		22	4.3	
	95	165	3.8	
1000		3.5		
β-crystal PP-RCT	20	1	15.0	
		22	4.2	
	95	165	4.0	
1000		3.8		

## 4. Physical and chemical properties

Physical and chemical properties of pipes			
Items	Requirements	Experiment parameter	
		Parameter	Quantitative value
Ash content			≤ 1.5%
Melting temperature $T_{pm}$		β-crystal PP-H	$T_{pm1} \geq 145^\circ\text{C}$ $T_{pm2} \geq 160^\circ\text{C}$
		PP-B	$\geq 160^\circ\text{C}$
		PP-R	$\leq 148^\circ\text{C}$
		β-crystal PP-RCT	$T_{pm1} \geq 143^\circ\text{C}$ $T_{pm2} \geq 157^\circ\text{C}$
Oxidation induction time			$\geq 20\text{min}$
95°C/100hOxidation induction time after hydrostatic test			$\geq 16\text{min}$
Pigment dispersion			≤ Level 3 Appearance level: A1, A2, A3 or B
Longitudinal retraction rate	β-crystal PP-H	≤ 2%	EN≤8mm:1h 8mm < EN≤16mm:2h EN > 16mm:4h
	PP-B		
	PP-R		
Charpy impact	β-crystal PP-RCT	The breakage rate is not more than 10% of the sample quantity	Test temperature
	β-crystal PP-H		
	PP-B		
Melt mass flow rate		≤0.5g/10min and the change rate of the mixture with the corresponding polypropylene does not exceed 20%	Test temperature Weight mass 230°C 2.16kg
Thermal stability under hydrostatic conditions		No broken,no leak	Hydrostatic tension: β-crystal PP-H PP-B PP-R β-crystal PP-RCT Test temperature Test duration 1.9MPa 1.4MPa 1.9MPa 2.6MPa 110°C 8760 h
Light transmittance		≤ 0.2%	—
Oxygen permeability		≤ 0.1g/(m <sup>3</sup> · d)	—

a Only applicable to open tube.

b Only applicable to tubes with oxygen blocking layer.

## 5. Heat cycle test

Materials	Maximum test temperature °C	Maximum test temperature °C	Test pressure MPa	Cycle index	Prestress MPa	Sample quantity	Requirements
β-crystal PP-H	95	20	1.0	5000	3.6	1	No broken,no leak
PP-B					3.0		
PP-R					2.4		
β-crystal PP-RCT					2.7		

Remark:The time of one cycle is 30<sup>±</sup>0min, including the maximum test temperature of 15<sup>±</sup>0min and the minimum test temperature of 15<sup>±</sup>0min.

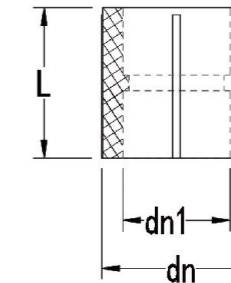
## Hygienic property

Sanitary requirement for drinking water transmission and distribution ppr pipe and fittings

Experimental Project	Standards and requirements
the hygiene standards for drinking water	
Designated projects	
colour	Do not increase chromaticity
Turbidity	Increase amount $\leq 0.5$ degrees
odor	No strange smell or odor is produced
Visible by eyes	No visible fragments or debris are generated
PH	Do not change pH
iron	$\leq 0.03\text{mg/L}$
manganese	$\leq 0.01\text{mg/L}$
copper	$\leq 0.1\text{mg/L}$
zinc	$\leq 0.1\text{mg/L}$
Volatile phenols (calculated as phenol)	$\leq 0.02\text{mg/L}$
arsenic	$\leq 0.05\text{mg/L}$
mercury	$\leq 0.01\text{mg/L}$
Chromium (hexavalent)	$\leq 0.05\text{mg/L}$
cadmium	$\leq 0.01\text{mg/L}$
lead	$\leq 0.05\text{mg/L}$
silver	$\leq 0.05\text{mg/L}$
fluoride	$\leq 0.1\text{mg/L}$
Nitrate (calculated as nitrogen)	$\leq 2\text{mg/L}$
chloroform	$\leq 6\mu\text{g/L}$
carbon tetrachloride	$\leq 0.3\mu\text{g/L}$
Benzo (A) flower	$\leq 0.001\mu\text{g/L}$
Other projects	Increase amount $\leq 10\text{mg/L}$
Evaporation residue	Increase amount $\leq 2\text{mg/L}$

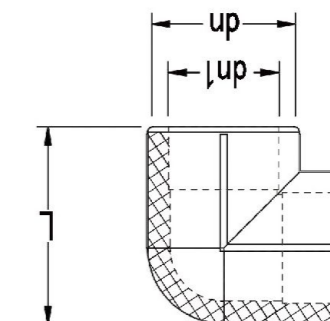
## Product customization service

If you have more product ideas, we can customize the presentation for you!



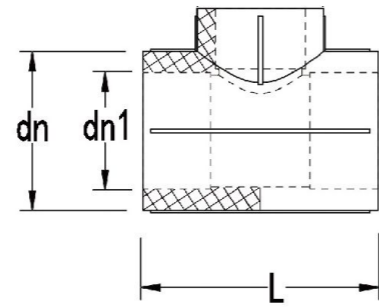
### Coupling

Specifications	DN	DN1	L
20	27.6	18.0	33.2
25	34.0	23.6	39.0
40	50.8	38.0	43.8
50	63.0	47.8	54.0
63	78.2	60.2	55.8
75	92.2	71.8	60.4
90	110.2	85.8	70.3
110	132.8	104.8	82.0
160	187.7	153.5	118.4



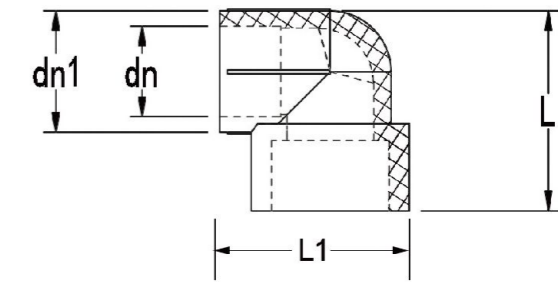
### 90°Elbow

Specifications	DN	DN1	L
20	28.5	18.9	40.0
25	34.2	23.8	46.0
40	50.0	37.4	67.0
50	62.0	47.4	81.0
63	78.5	60.5	92.0
75	92.5	72.5	109.0
90	111.6	87.6	130.0
110	134.5	105.9	157.0
160	186.0	153.0	214.0



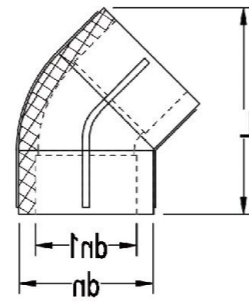
**Tee**

Specifications	DN	DN1	L
20	28.2	19.0	51.4
25	34.3	24.1	60.5
40	51.5	38.5	80.0
50	62.0	48.4	101.0
63	78.9	60.9	116.8
75	92.5	72.5	128.0
90	112.0	86.0	149.0
110	134.0	106.0	178.0
160	188.0	155.2	250.0



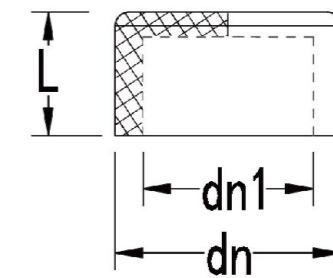
**Reducer Elbow**

Specifications	DN	DN1	L	L1
25x20	26.8	18.1	42.6	41.5
32x20	26.8	18.1	45.4	49.0
40x20	28.4	18.8	49.8	68.6
40x25	34.1	23.8	56.1	70.9
40x32	41.9	30.3	62.0	70.6
50x20	28.4	18.8	53.5	79.4
50x25	34.1	23.8	60.9	80.8
50x32	41.9	30.3	67.0	82.6
50x40	51.8	38.2	76.6	85.0
63x20	28.4	18.8	58.7	92.8
63x25	34.4	23.8	62.0	93.3
63x32	42.2	30.8	70.8	95.6
63x40	51.8	38.2	79.6	96.4
63x50	63.0	47.9	86.8	97.4



**45° Elbow**

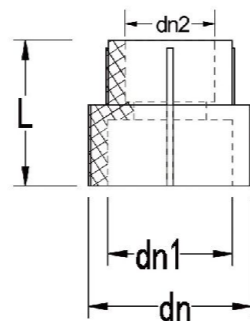
Specifications	DN	DN1	L
20	27.5	18.9	50.0
25	33.2	23.6	55.0
40	52.5	37.7	75.0
50	65.5	47.5	90.0
63	81.0	60.0	105.0
75	94.6	72.0	115.0
90	111.0	86.4	140.0
110	136.4	106.2	150.0
160	188	155.0	230.0



**End Cap**

Specifications	DN	DN1	L
20	27.3	18.7	21.6
25	33.0	23.4	22.0
40	52.3	38.1	28.4
50	65.4	47.4	42.0
63	83.0	61.4	44.0
75	95.0	73.0	38.0
90	115.0	87.8	46.0
110	131.0	101.0	55.0
160	188.0	155.0	87.0

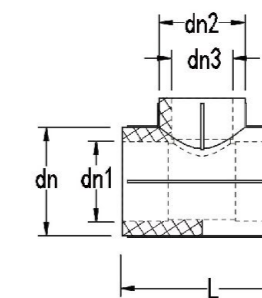
PP-R fittings for water supply



Reducer Coupling

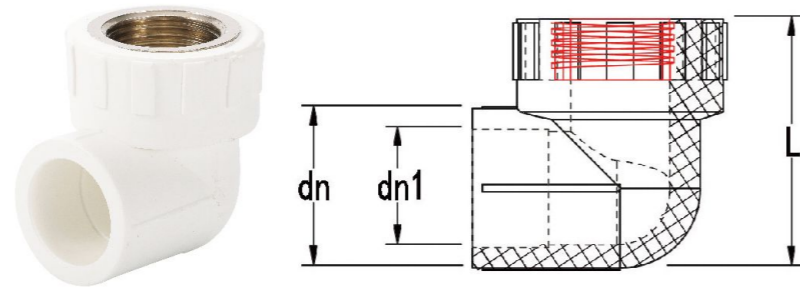
Specifications	DN	DN1	DN2	L
25x20	34.0	24.0	18.0	39.0
30x20	42.0	30.0	16.0	42.0
40x20	53.0	37.0	18.0	43.0
40x25	53.0	37.0	23.0	44.0
40x32	52.0	38.0	30.0	44.0
50x20	66.0	44.0	18.0	53.0
50x25	67.0	47.0	22.0	59.0
50x32	62.0	46.0	30.0	43.0
50x40	62.0	48.0	38.0	46.0
63x20	78.0	60.0	17.0	54.0
63x25	78.0	58.0	22.0	48.0
63x32	78.0	60.0	29.0	47.0
63x40	78.0	60.0	37.0	50.0
63x50	78.0	58.0	47.0	52.0
75x20	92.0	70.0	17.0	59.0
75x25	93.0	73.0	23.0	60.0
75x32	93.0	71.0	29.0	60.0
75x40	94.0	72.0	34.0	60.0
75x50	94.0	72.0	46.0	60.0
75x63	94.0	72.0	60.0	65.0
90x20	111.0	87.0	19.0	63.0
90x25	111.0	87.0	22.0	63.0
90x32	111.0	87.0	28.0	63.0
90x40	111.0	87.0	34.0	66.0
90x50	111.0	83.0	44.0	60.0
90x63	112.0	84.0	59.0	72.0
90x75	113.0	83.0	71.0	72.0
110x20	135.0	107.0	18.0	71.0
110x25	135.0	107.0	23.0	65.0
110x32	134.0	106.0	29.0	68.0
110x40	133.6	105.6	38.8	68.4
110x50	135.2	104.8	47.8	69.8
110x63	134.4	105.0	60.0	71.0
110x75	135.5	105.3	71.6	74.0
110x90	135.5	105.3	86.6	78.0
160x90	186.0	152.0	86.3	96.3
160x110	186.0	152.0	105.9	100.0

PP-R fittings for water supply



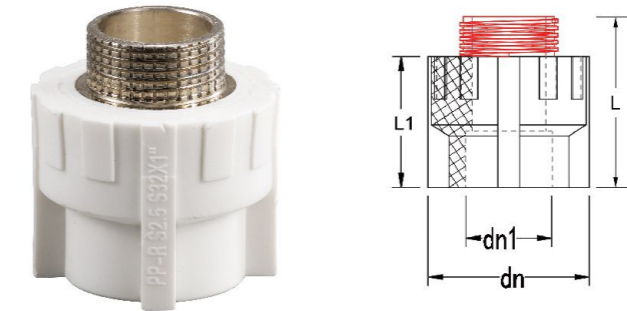
Reducer Tee

Specifications	DN	DN1	DN2	DN3	L
25x20	33.4	24.2	27.8	19.4	59.2
32x20	42.0	32.4	29.0	20.6	63.0
40x20	50.0	37.2	29.0	19.4	77.0
40x25	50.0	37.0	33.0	24.0	66.0
40x32	50.0	37.0	42.0	30.0	72.0
50x20	63.0	48.0	28.8	18.2	64.5
50x25	63.0	48.0	33.0	23.0	70.0
50x32	62.0	48.0	42.0	30.0	80.0
50x40	64.0	47.4	51.0	38.6	95.0
63x20	78.0	60.6	29.0	19.4	79.0
63x25	80.0	59.4	35.0	24.0	100.0
63x32	78.0	60.0	42.0	30.4	88.0
63x40	78.0	60.0	50.2	37.6	87.0
63x50	80.0	61.6	63.0	47.4	92.0
75x20	92.2	72.0	28.9	19.3	86.0
75x25	92.0	72.0	34.0	23.4	90.0
75x32	93.0	70.8	42.0	30.0	93.0
75x40	95.0	72.4	58.0	44.0	100.0
75x50	95.0	72.8	65.0	49.0	110.0
75x63	95.0	72.8	80.0	61.8	120.0
90x20	110.0	86.2	28.0	18.0	92.0
90x25	110.0	86.0	35.0	24.2	95.0
90x32	110.0	85.2	42.0	30.2	103.0
90x40	114.0	86.0	53.0	38.6	111.0
90x50	113.3	85.7	65.2	48.8	117.7
90x63	114.0	86.4	80.0	61.8	126.0
90x75	113.0	86.0	95.0	72.6	141.0
110x20	134.0	106.0	29.0	19.0	102.0
110x25	133.0	105.4	35.0	24.32	100.0
110x32	134.0	106.2	42.0	30.2	115.0
110x40	135.0	107.0	54.0	40.2	123.0
110x50	135.0	105.0	65.0	48.6	115.0
110x63	133.0	104.6	88.0	70.6	140.0
110x75	135.0	104.8	95.0	72.8	140.0
110x90	135.0	105.0	115.0	87.8	155.0
160x75	190.0	156.8	100.0	76.0	160.0
160x90	190.0	156.6	110.0	85.4	185.0
160x110	190.0	156.8	135.0	106.0	200.0



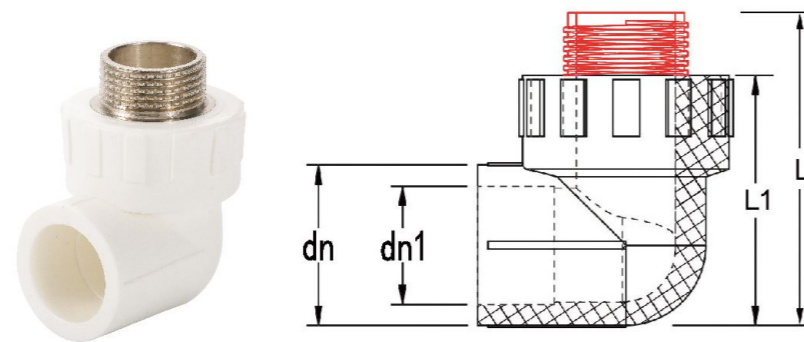
**Female Elbow**

Specifications	DN	DN1	L
20x1/2"	28.8	19.0	47.0
25x1/2"	35.0	23.5	52.2
25x3/4"	35.5	23.7	55.0
32x1/2"	42.5	30.7	62.5
32x3/4"	43.0	30.7	62.9
40x1-1/4"	51.5	38.0	72.5
50x1-1/2"	64.2	47.9	86.0
63x2"	81.1	59.9	105.1



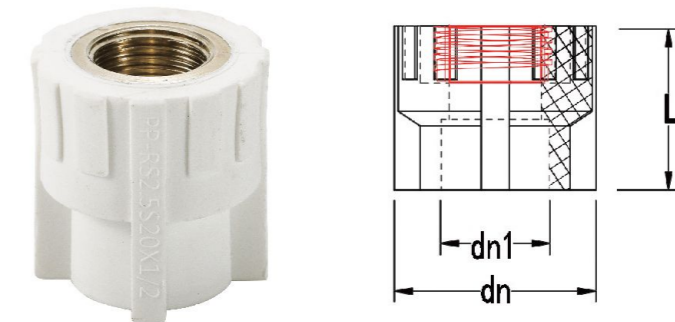
**Male Adapter**

Specifications	DN	DN1	L	L1
20x1/2"	39.7	19.0	55.4	42.0
25x1/2"	39.7	23.6	54.7	42.5
32x1/2"	41.6	30.7	56.6	44.4
25x3/4"	42.9	23.5	53.9	41.6
32x3/4"	46.7	30.7	60.0	47.5
40x1-1/4"	54.3	38.1	62.9	46.3
50x1-1/2"	67.8	48.1	70.6	54.3
63x2"	83.8	60.6	76.1	57.6
75x2-1/4"	101.6	71.8	98.2	63.9
90x3"	110.9	86.9	110.7	73.3
110x4"	131.4	106.5	118.1	80.8



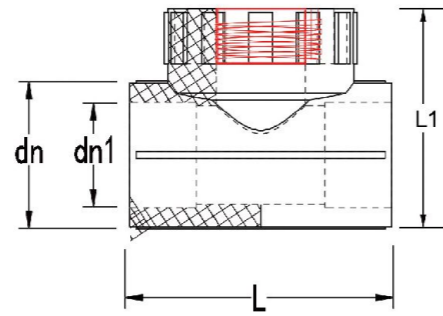
**Male Elbow**

Specifications	DN	DN1	L	L1
20x1/2"	29.2	18.6	58.9	47.0
25x1/2"	35.2	23.6	65.0	52.9
25x3/4"	35.8	23.8	66.8	54.7
32x1/2"	43.2	30.8	74.8	62.7
32x3/4"	43.2	30.8	76.4	63.4
40x1-1/4"	52.1	38.1	90.0	73.1
50x1-1/2"	64.3	48.2	103.1	85.7
63x2"	80.2	59.9	120.3	102.3



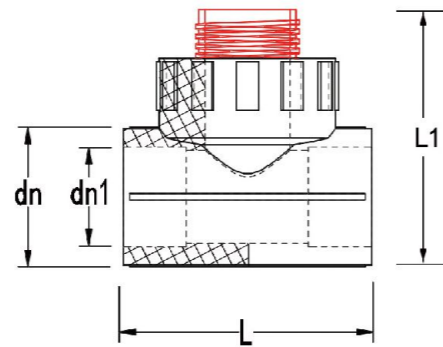
**Female Adapter**

Specifications	DN	DN1	L
20x1/2"	39.7	18.6	42.5
25x1/2"	39.7	23.7	42.5
25x3/4"	42.8	23.7	41.7
32x1/2"	41.4	30.2	44.4
32x3/4"	46.2	30.6	47.9
32x1"	56.5	30.6	46.7
40x1-1/4"	55.1	38.3	47.0
50x1-1/2"	67.9	48.0	54.7
63x2"	84.2	60.2	58.4
75x2-1/4"	101.4	71.6	79.4
90x3"	111.1	87.3	93.3
110x4"	145.0	105.2	100.5



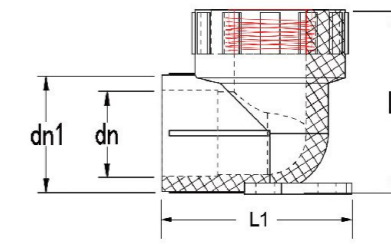
**Female Tee**

Specifications	DN	DN1	L	L1
20x1/2"	29.0	19.0	56.9	48.3
25x1/2"	34.4	24.1	56.9	52.8
25x3/4"	34.8	23.8	70.2	56.3
32x1/2"	41.8	30.1	68.2	63.2
32x3/4"	42.9	30.1	65.8	63.7
40x1 1/4"	51.8	38.1	84.0	73.9
50x1 1/2"	64.0	48.4	99.8	85.7
63x2"	80.0	60.2	112.5	102.7



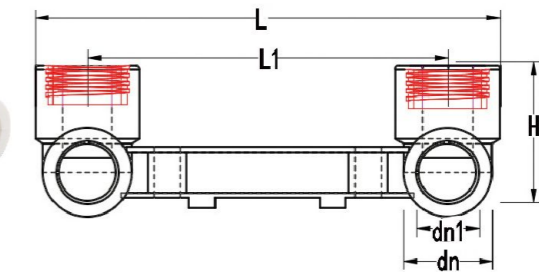
**Male Tee**

Specifications	DN	DN1	L	L1
20x1/2"	29.0	19.0	57.0	61.1
25x1/2"	34.4	24.1	61.4	66.0
25x3/4"	34.8	23.8	70.2	70.6
32x1/2"	41.8	30.1	68.2	75.6
32x3/4"	42.9	30.1	66.4	77.2
40x1 1/4"	51.8	38.1	83.6	89.8
50x1 1/2"	64.0	48.4	99.8	102.0
63x2"	80.0	60.2	113.2	121.3



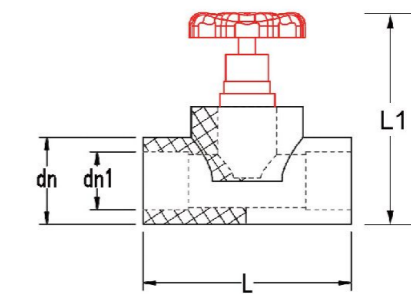
**Female Elbow with Base**

Specifications	DN	DN1	L	L1
25x1/2"	34.0	23.8	57.8	58.4
25x3/4"	32.9	23.8	54.9	61.7



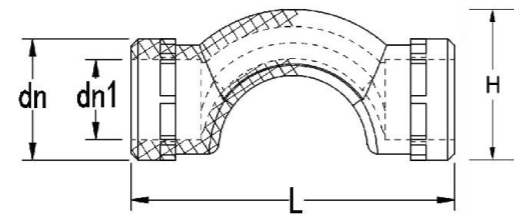
**Dual Female Elbow**

Specifications	DN	DN1	L	L1	H
20x1/2"	28.6	18.7	183.1	142.5	52.4
25x1/2"	34.7	23.8	178.9	138.9	57.5



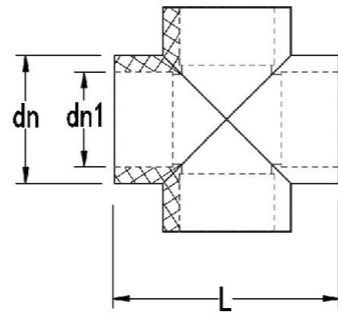
**Stop Valve**

Specifications	DN	DN1	L	L1
20	29.0	23.0	72.2	70.0
32	42.0	36.0	87.7	90.0
40	51.0	44.0	90.1	110.0
50	63.0	55.0	98.6	120.0
63	80.0	70.0	110.0	150.0
75	91.0	82.0	113.0	160.0
90	113.0	100.0	181.4	220.0
110	135.0	107.0	209.0	245.0



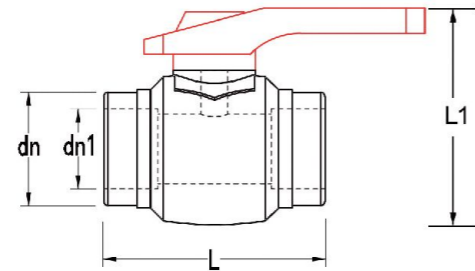
**Bridge**

Specifications	DN	DN1	L	H
20	29.5	18.7	84.6	37.9
32	43.1	30.3	136.7	62.7



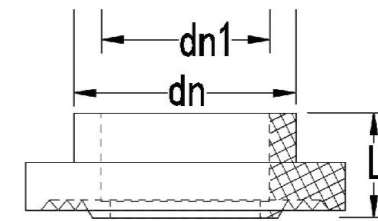
**Cross**

Specifications	DN	DN1	L
40	51.0	38.2	80.0
50	63.0	48.2	110.0
63	77.0	59.8	112.0



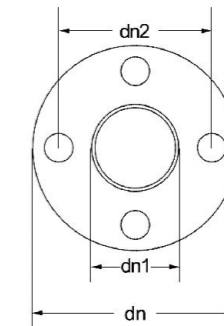
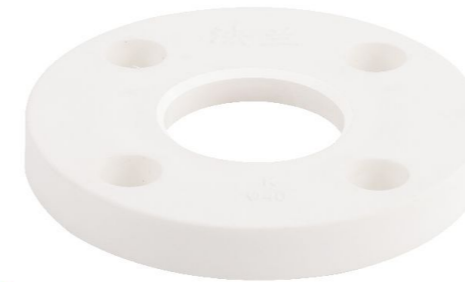
**Ball Valve**

Specifications	DN	DN1	L	L1
20	29.4	18.7	65.5	65.5
25	34.8	23.7	72.2	73.1
40	53.6	38.3	93.9	95.7
50	64.3	47.8	111.5	111.7
63	77.9	60.9	128.4	127.8
75	96.3	72.7	159.6	150.2
90	110.9	87.4	182.0	193.0
110	132.2	105.8	196.0	211.0



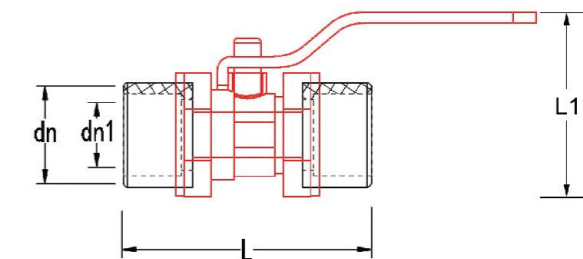
**Flange Stub**

Specifications	DN	DN1	L
50	61.2	47.6	22.6
63	74.5	60.8	25.1
75	88.1	71.1	26.6
90	105.5	85.3	27.0
110	125.6	106.6	34.4
160	187.0	156.0	56.9



**Flange Plate**

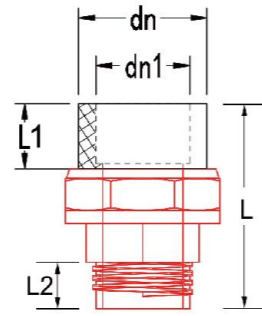
Specifications	DN	DN1	DN2
50	137.5	62.4	101.8
63	152.4	76.8	119.6
75	159.2	91.7	133.9
90	189.6	105.8	152.8
110	205.8	129.3	178.5
160	276.8	232.7	244.6



**Double Union Valve**

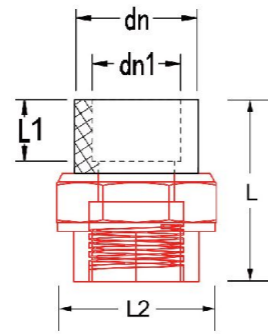
Specifications	DN	DN1	L	L1
20	26.0	18.8	75.0	50.0
25	31.0	23.8	80.0	55.0
50	60.0	48.0	115.0	95.0
63	75.0	61.0	140.0	110.0
75	89.0	73.0	165.0	120.0

PP-R fittings for water supply



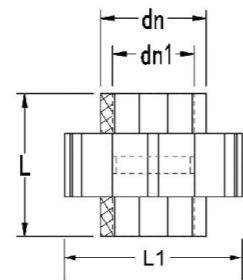
Male Union

Specifications	L	L1	L2	DN	DN1
20	50.0	17.0	13.0	28.0	19.2
25	63.0	18.0	17.0	33.0	24.0
25	70.0	22.0	17.0	35.0	24.0
32	70.0	21.0	11.0	41.0	30.6
40	75.0	25.0	18.0	50.0	38.4
50	83.0	30.0	15.0	62.0	49.0
63	90.0	35.0	20.0	76.0	60.8



Female Union

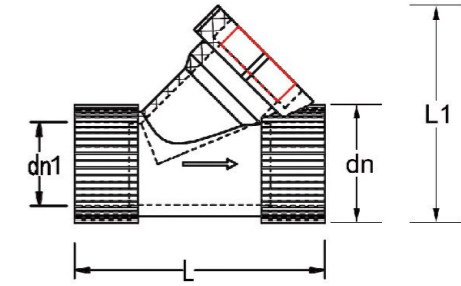
Specifications	L	L1	L2	DN	DN1
20	40.0	15.0	36.0	26.0	19.0
25	55.0	23.0	44.0	35.0	24.0
32	60.0	21.0	51.0	41.0	30.4
40	65.0	27.0	62.0	52.0	39.0
50	70.0	30.0	73.0	61.0	48.4
63	75.0	32.0	90.0	76.0	61.2



Plastic Union

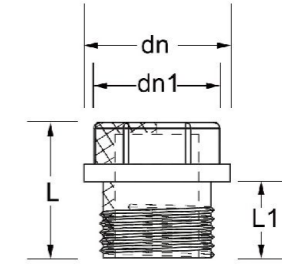
Specifications	DN	DN1	L	L1
20	27.0	18.7	42.0	43.0
25	32.5	23.5	48.2	52.3
40	49.0	38.3	56.0	72.3
50	60.0	48.0	86.0	58.0
63	74.0	61.0	64.0	124.0

PP-R fittings for water supply



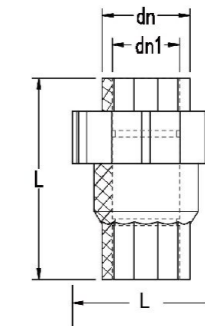
Filter

Specifications	DN	DN1	L	L1
20	28.0	19.0	68.1	56.6
25	33.5	23.5	72.2	63.6
40	52.3	38.0	99.5	91.3
50	65.0	49.0	115.0	115.0
63	80.0	61.0	139.0	132.0



Thread Plug

Specifications	DN	DN1	L	L1
1/2"	24.5	18.9	23.0	12.4
3/4"	29.9	20.3	24.7	13.4

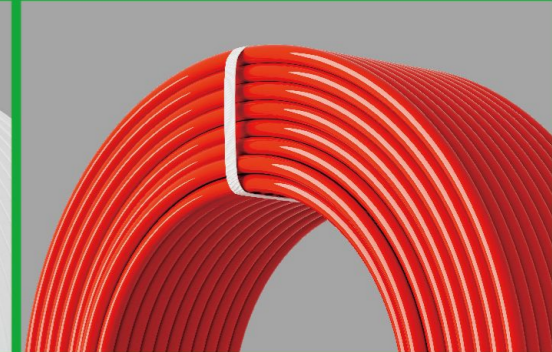
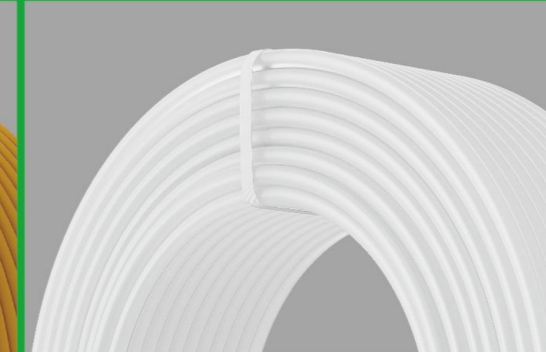


Check Valve

Specifications	DN	DN1	L	L1
20	27.0	18.9	66.8	42.9
25	31.3	23.9	73.4	52.1
40	49.5	38.4	94.4	72.3
50	59.2	48.0	106.0	84.9
63	81.0	60.2	170.0	131.0

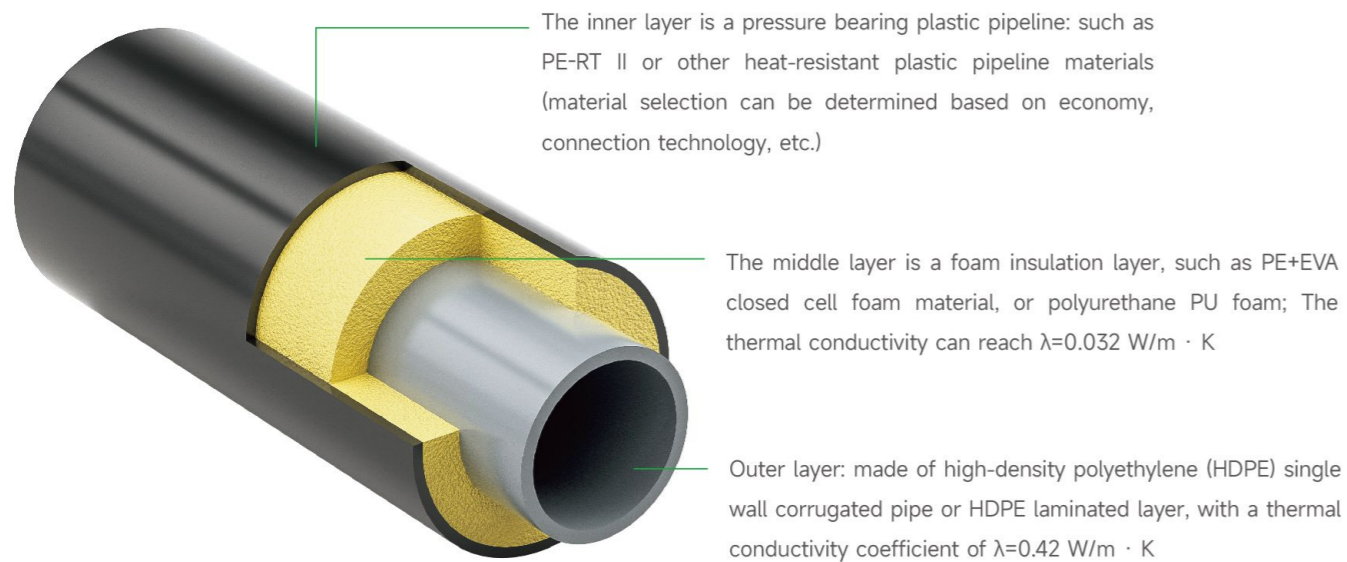


# PE-RT FLOOR HEATING PIPE



## PE-RT II HEATING PIPE

Φ20-Φ355mm



### Product execution standards:

GB/T 28799-2020

### Product application field

1. Urban heating pipeline: suitable for urban centralized heating secondary pipeline network.
2. Residential centralized heating pipelines: secondary heating pipelines for public buildings such as residential areas, hospitals, and schools, as well as heating pipelines for villa style buildings and courtyards.
3. Low temperature floor heating for indoor heating systems in residential buildings.

PE-RT (heat-resistant polyethylene) is a copolymer of ethylene and octene. During the polymerization process, the position and short branch density of the copolymer monomers on the main chain are controlled through molecular design. Its unique molecular structure gives it super heat resistance, long-lasting static pressure resistance, and excellent impact resistance.

1. Superior flexibility, more reliable use
2. Can maintain a smaller wall thickness under the same pressure
3. Low temperature impact, freeze resistant, unbreakable
4. Extremely high stress cracking resistance
5. Super strong thermal conductivity, uniform heat dissipation
6. Superior long-term high temperature resistance performance
7. Lightweight material for convenient construction
8. 50 year lifespan



## Product specifications

Nominal outside diameter $d_n$	Nominal Wall Thickness $e_n$			
	S5	S4	S3.2	S2.5
	SDR11	SDR9	SDR7.4	SDR6
8	1.0	1.0	1.1	1.4
10	1.0	1.2	1.4	1.7
12	1.3	1.4	1.7	2.0
16	1.5	1.8	2.2	2.7
20	1.9	2.3	2.8	3.4
25	2.3	2.8	3.5	4.2
32	2.9	3.6	4.4	5.4
40	3.7	4.5	5.5	6.7
50	4.6	5.6	6.9	8.3
63	5.8	7.1	8.6	10.5
75	6.8	8.4	10.3	12.5
90	8.2	10.1	12.3	15.0
110	10.0	12.3	15.1	18.3
125	11.4	14.0	17.1	20.8
140	12.7	15.7	19.2	23.3
160	14.6	17.9	21.9	26.6
180	16.4	20.1	24.6	29.9
200	18.2	22.4	27.4	33.2
225	20.5	25.2	30.8	37.4
250	22.7	27.9	34.2	41.5
280	25.4	31.3	38.3	46.5
315	28.6	35.2	43.1	52.3
355	32.2	39.7	48.5	59.0
400	36.3	44.7	—	—
450	40.9	50.3	—	—

Note: Manufacturers may also choose other specifications and sizes according to the provisions of ISO 4427, and specify them in relevant technical documents.

**If you want the product to be the color you like, we can do it!**



## Static hydraulic strength of pipes

Material	Result	Nominal Wall Thickness $e_n$			Sample quantity
		Hydrostatic pressure	Test temperature Mpa	Test time h	
PE-RT I	No rupture, no leakage	9.9	20	1	3
		3.8	95	22	
		3.6	95	165	
		3.4	95	1000	
PE-RT II	No rupture, no leakage	11.2	20	1	3
		4.1	95	22	
		4.0	95	165	
		3.8	95	1000	

## Physical and chemical properties of pipes

Project	Result	Experimental conditions		Sample quantity	
		Parameter	Numerical value		
Ash content	Original color	≤0.1%	Calcination temperature	(600±25)°C	—
	to color	≤0.8%			
Oxidation induction time	≥30 min	Test temperature	210°C	3	
Oxidation induction time after 95 °C/1000 h hydrostatic test	≥24 min	Test temperature	210°C	3	
Pigment dispersion	Size grade	≤3	—	—	
	Apparent level	A1、A2、A3 or B			
Longitudinal shrinkage rate <sup>b</sup>	≤2%	Test temperature	(110±2)°C	—	
Melt mass-flow rate	Corresponding raw material measurement values The difference should not exceed ± 0.3 g/10 min and variable Conversion rate not exceeding 20%	Weight quality	5 kg	3	
		Test temperature	190 °C		
Thermal stability under static hydraulic state	No rupture, no leakage	Test temperature	PE-RT I: 1.9 MPa PE-RT II: 2.4 MPa	1	
		Test temperature	110°C		
		Test time	8760 h		
Light transmittance	≤0.2%			—	
Oxygen permeability rate	≤0.32 mg/(m <sup>2</sup> ·d)	Test temperature	40 °C	—	
Resistant to slow crack growth Incision Test (NPT)	No rupture, no leakage	Test pressure	0.92 MPa	—	
		Test temperature	80 °C		
		Test time	500 h		

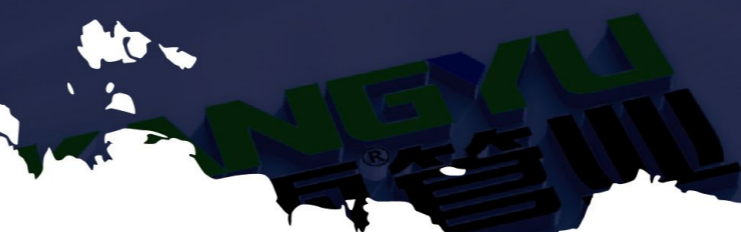
Only applicable to colored pipes.

Only applicable to pipes with  $e_n \leq 16$  mm.

Only applicable to pipes marked as 'opaque'.

D is only applicable to pipes with oxygen barrier layer.

Only applicable to PE-RT II type pipes for hot spring pipelines and central heating secondary pipelines.



- Civil
- Municipal
- Energy

**We are professional pipeline Manufacturer**

Covering a wide range of uses: drinking water, sewage treatment, rural irrigation, industrial water, fire protection facilities, oil and gas transportation, mining applications we are present in power communication and heat transfer!

**Marketing articles**

**Integrate comprehensive Marketing network, Realize Business development**

Adhering to the spirit of innovative development and pioneering spirit, Kangyu Pipe Industry is based on the domestic market distributor channel, comprehensively developing e-commerce platform channels, establishing an international trade department to carry out international business, and implementing a multi-channel business development strategy. By implementing a business process of one-on-one and one-stop service with customers, we are able to fully understand and meet their needs, and have established cooperative relationships with over 20000 customers both domestically and internationally. The product has been sold to over thirty countries and regions, and has received unanimous recognition and praise from customers.



# Technical foundation Market oriented

Kangyu Pipe Industry attaches great importance to brand promotion and has been committed to integrating itself into the pipeline industry chain. By improving modern enterprise systems and management models, it has gathered a large number of industry elites who have made outstanding achievements in production, technology research and development, enterprise management, marketing, and other fields. The comprehensive strength of the enterprise is becoming increasingly strong. The HDPE/PP/PVC composite polyolefin pipes and fittings produced have been exported to more than 30 countries and regions around the world, and have absolute dominance in the fields of civil engineering, municipal engineering, and energy engineering pipeline applications.



## SERVICE ARTICLE

### Corporate vision

Vitality, Health, Rain, Building  
Dreams for a Century

### Corporate mission

To develop into a national industry and  
add color for the benefit of society

### Application technical support

- Product technical problem answers
- Construction and installation guidance, material budget
- Design of pipeline installation drawings
- Free use of welding machines provided

### Customer Information Processing

- Customer complaint information processing
- Customer consultation information processing
- Customer satisfaction, establish customer profiles

### Improve service offerings

- A nationwide after-sales service website
- Accurate and fast transportation services
- Accident handling plan within 24 hours

### Gold service concept pursuing 100% satisfaction

Kangyu Pipe Industry is based on the market and wholeheartedly cares for consumers. After long-term market practice, we have established a comprehensive system of three major gold medal services. In order to meet the comprehensive needs of customers, the company's national service customer center is willing to provide efficient, convenient, and thoughtful services to consumers.



**上海赛威认证有限公司**  
(上海市徐汇区桂林路101号21层401室 200233)

**质量管理体系认证证书**

兹证明

**山东康雨管业有限公司**

组织机构代码/统一社会信用代码: 91371302493279707R

注册地: 山东省临沂市兰山区汪沟镇西中环北路康雨工业园  
生产/经营地: 山东省临沂市兰山区汪沟镇大柳汪村东150米

质量管理体系符合标准:  
**GB/T19001-2016/ISO9001:2015**

管理体系认证范围:  
**塑料管材的生产 (PE, PPR, PERT 管材) (涉及许可的限许可证范围内)**

证书编号: SW24020849R05

颁证日期: 2024年05月29日  
有效期至: 2027年05月28日

(签发人)

本证书三年有效期内每满12个月接受一次监督审核, 并在年度确认书一起使用方可有效。  
证书有效性可登录国家认监委官方网站 www.cnca.gov.cn 或扫描二维码查询。

**SHANGHAI SAILWAY CERTIFICATION CO.,LTD.**  
Shanghai, Building 21, No. 981, Guiliping Road, Xuhui, Shanghai 200233

**QUALITY MANAGEMENT SYSTEM CERTIFICATE**

This is to Certify that the Quality Management System of

**Shandong Kangyu Pipe Industry Co., Ltd.**

Organization Code/Unified Social Credit Code: 91371302493279707R

Registration Address:Kangyu Industrial Park, North Section of West Central Ring Road, Wanggou Town, Lanshan District, Linyi City, Shandong Prov.  
Production/Business Address:150 meters East of Daluwang Village, Wanggou Town, Lanshan District, Linyi City, Shandong Prov.

Has been Audited to Conform to the Following Quality Management System Standard:  
**GB/T19001-2016/ISO9001:2015**

for the Scope of Registration:  
**Production of Plastic Pipes (PE,PPR,PERT Pipes) (within the Scope of the License).**

证书编号: SW24020849R05

颁证日期: May 29, 2024  
Date of Expiry: May 28, 2027

(Issued By)

A surveillance audit must be carried out every 12 months within the three-year validity period,also it is only valid along with the anniversary confirmation.Effectiveness of the certificate you can search CNCA website: www.cnca.gov.cn or scanning QR code.

**上海赛威认证有限公司**  
(上海市徐汇区桂林路101号21层401室 200233)

**职业健康安全管理体系认证证书**

兹证明

**山东康雨管业有限公司**

组织机构代码/统一社会信用代码: 91371302493279707R

注册地: 山东省临沂市兰山区汪沟镇西中环北路康雨工业园  
生产/经营地: 山东省临沂市兰山区汪沟镇大柳汪村东150米

职业健康安全管理体系符合标准:  
**GB/T45001-2020/ISO45001:2018**

管理体系认证范围:  
**塑料管材的生产 (PE, PPR, PERT 管材) (涉及许可的限许可证范围内) 及相关管理活动**

证书编号: SW24S20361R05

颁证日期: 2024年05月29日  
有效期至: 2027年05月28日

(签发人)

本证书三年有效期内每满12个月接受一次监督审核, 并在年度确认书一起使用方可有效。  
证书有效性可登录国家认监委官方网站 www.cnca.gov.cn 或扫描二维码查询。

**SHANGHAI SAILWAY CERTIFICATION CO.,LTD.**  
Shanghai, Building 21, No. 981, Guiliping Road, Xuhui, Shanghai 200233

**OCCUPATIONAL HEALTH SAFETY MANAGEMENT SYSTEM CERTIFICATE**

This is to Certify that the Occupational Health & Safety Management System of

**Shandong Kangyu Pipe Industry Co., Ltd.**

Organization Code/Unified Social Credit Code: 91371302493279707R

Registration Address:Kangyu Industrial Park, North Section of West Central Ring Road, Wanggou Town, Lanshan District, Linyi City, Shandong Prov.  
Production/Business Address:150 meters East of Daluwang Village, Wanggou Town, Lanshan District, Linyi City, Shandong Prov.

Has been Audited to Conform to the Following Occupational Health & Safety Management System Standard:  
**GB/T45001-2020/ISO45001:2018**

for the Scope of Registration:  
**Production of Plastic Pipes (PE,PPR,PERT Pipes) (within the Scope of the License) and Related Management Activities.**

证书编号: SW24S20361R05

颁证日期: May 29, 2024  
Date of Expiry: May 28, 2027

(Issued By)

A surveillance audit must be carried out every 12 months within the three-year validity period,Also it is only valid along with the anniversary confirmation.Effectiveness of the certificate you can search CNCA website: www.cnca.gov.cn or scanning QR code.







A series of horizontal dotted lines for writing, spanning the width of the page.

A series of horizontal dotted lines for writing, spanning the width of the page.