













## **NEW CHALLENGE!**

# NCTECH Inc.

NCTECH Inc.

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## A company that takes on new challenges in cutting-edge technology. We are NC Tech.

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#### Company History

0	1993. 02	Established a corporation
0	1997. 03	Selected as a promising small and medium-sized business [Jeollanam-do]
0	1998. 12	Quality Management System Certificate [KSA 9001/ISO 9001 Certificate]
0	1999. 08	Acquired organization standard mark certificate [Structured PE Sewer and Drainage Pipe]
0	1999. 10	Acquired excellent organization standard product certificate [Structured PE Sewer and
0	2000. 02	Drainage Pipe] Established corporate research institute [Korea Industrial Technology Association]
0	2005. 12	Selected as a venture company [Small and Medium Business Administration]
0	2009. 11	INNO-BIZ [Technology innovative Small and Medium Business]
0	2012. 02	KS product certificate [Structured PE Double-Wall Pipe, Structured PE Multi-Wall Pipe]
0	2012. 02	Patent registration - Multi-Wall Pipe
0	2013. 01	Acquired excellent organization standard product certificate [Direct production]
		[Round Bar Support Coupling Type Connector (S/R)]
0	2013. 02	Acquired 2 K-Mark certificates [PE Double-Wall Pipe, PE Multi-Wall Pipe]
0	2017. 01	Acquired organization standard product certificate for sewage chamber [Direct production]
0	2018. 07	[Patent No. 10-1957205] Acquired high-density polyethylene tube and one other case
0	2020. 01	[Patent No. 10-2068815] Acquired 1 case of a sewage chamber
0	2020. 11	Acquired organization standard product certificate for PE connectors (elbow, tee, flange,
0	2021. 02	etc.) Acquired green technology certificate [Manufacturing technology of high-density polyeth- ylene tube with grooved structure]



# NC Tech is a company that challenges cutting-edge technology that creates value in life. We are NC Tech.



## **Certificate Status**

#### Product / ISO / Patent / Green Technology









Green Technology Certificate

Product Certificate

Product Certificate

Organization Standard Certificate

Organization Standard Certificate











Direct Production Verification Certificate

Direct Production Verification Certificate

Excellent Organization Standard Product Confirmation

Excellent Organization Standard Product Confirmation

ISO Certificate







Factory Registration Certificate



Patent No. 10-1881819



Patent No. 10-1957205



Small and Medium Business Certificate

## **PE Double-Wall Pipe**

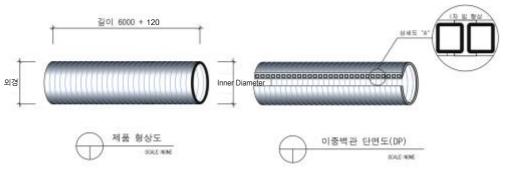
#### Structure

It is a pipe made by extruding a hollow  $\square$ -shaped square profile made of high density polyethylene material in a spiral direction around the axis of the pipe. It has smooth inner and outer surfaces, and the wall has an I-beam structure.

#### **Features**

- Delivery and construction to local governments and public companies
- Excellent chemical resistance (acid and alkali wastewater, salt)
- Excellent impact resistance, water tightness and water permeability
- · Housing site development construction, sewage pipe construction, golf course construction
- Excellent handling and constructability

PE Double-Wall
Pipe
Performance and
Drawings of PE
Multi-Wall Pipe



Item	Unit	Performance		Test Method
item	Offic	PE Double	rest Method	
		Nominal	Ring Stiffness	
Ding Ctiffness	I/N1/m²	150-200	700-1200 8 or higher	
Ring Stiffness	KN/m²	250-600	700-1200 8 or higher	
		700-1200	700-1200 8 or higher	
Ring Stiffness test	-	Impact test - No cracks, breaks, or damage		
Impact test	-	Impact test - No cracks, breaks, or damage		
Density	g/cm³	700-1200 8 or higher		KS M 3500-1
Flow index	a/40min	1.6 or less (190°C, 5.0 kg)		KS IVI 3500-1
Flow index	g/10min	1.6 of less (	190 C, 5.0 kg)	
Yield tensile strength	N/mm²	700-1200	8 or higher	
Batch test	Wt.%	0.10 or less		
Carbon black content	%	2.0~3.0		
Thermal stability	min.	20 or more		
NCLS	hr	700-1200	8 or higher	

PE Double-Wall
Pipe,
Features of PE
Multi-Wall Sewer
Pipe

Nominal	Outer Diameter (mm)	Inner Diameter (mm)	Pipe Wall Thickness(mm)	Ring Stiffness	Length
150	176	150	13	12.5	
200	228	200	14	12.5	
250	280	250	15	8	
300	338	300	19	8	
400	450	400	25	8	
450	508	450	29	8	
500	562	500	31	8	6m
600	678	600	39	8	
700	788	700	44	4	
800	900	800	50	4	
900	1012	900	56	4	
1000	1124	1000	62	4	
1200	1350	1200	75	4	

#### **※** Remarks

- 1 Tolerance of inner diameter: 150 (± 4.5mm), 200~600 (± 5.1mm), 700~1200 (± 6.4mm)
- 2 Tolerance of pipe wall thickness (total thickness): (150~250)mm pipe ±8%, 300mm or larger pipe ±5%
- Tolerance of pipe length: (0~2)%
- 1 The minimum pipe wall thickness refers to the thickness of the structured pipe wall on the fluid flow side.
- **6** The cut length of the pipe may be subject to agreement between the parties.



## **PE Multi-Wall Pipe**

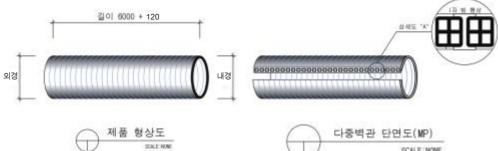
#### Structure

It is a pipe made by extruding a hollow  $\boxplus$ -shaped rectangular profile made of high density polyethylene material in a spiral direction around the axis of the pipe. It has smooth inner and outer surfaces, and the wall has an I-beam structure.

#### **Features**

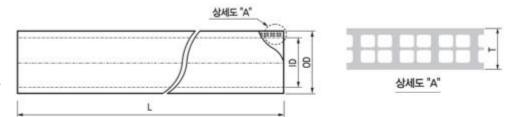
- Delivery and construction to local governments and public companies
- Excellent chemical resistance (acid and alkali wastewater, salt)
- · Excellent impact resistance, water tightness and water permeability
- · Housing site development construction, sewage pipe construction, golf course construction
- · Excellent handling and constructability

PE Multi-Wall
Pipe
Performance and
Drawings of PE
Multi-Wall Pipe



Item Unit P		Perfor	mance	Test Method
item	Offit	PE Multi-	rest Method	
		Nominal	Ring Stiffness	
Ring Stiffness	KN/m²	150-200	700-1200 8 or higher	
King Suimess	KIVIII	250-600	700-1200 8 or higher	
		700-1200	700-1200 8 or higher	
Ring Stiffness test	-	Impact test - No cracl	ks, breaks, or damage	
Impact test	-	Impact test - No cracks, breaks, or damage		
Flow index	g/10min	4.6 or loss (400°C, E.O.kg.)		KS M 3500-2
Flow index	g/ Torrilli	1.0 01 less (1	1.6 or less (190°C, 5.0 kg)	
Density	g/cm³	700-1200	700-1200 8 or higher	
Yield tensile strength	N/cm³	700-1200	8 or higher	
Batch test	Wt.%	0.10 or less		
Thermal stability	min.	20 or more		
NCLS	hr	700-1200 8 or higher		
Carbon black content	%	2.0	~3.0	

PE Multi-Wall
Pipe
Features of PE
Multi-Wall Sewer
Pipe





Nominal	Outer Diameter (mm)	Inner Diameter (mm)	Pipe Wall Thickness(mm)	Ring Stiffness	Length
150	180	150	15	16	
200	232	200	16	16	
250	284	250	17	12.5	
300	340	300	20	12.5	
400	460	400	30	12.5	
450	510	450	30	12.5	
500	570	500	35	12.5	6m
600	694	600	47	12.5	
700	800	700	50	8	
800	916	800	58	8	
900	1024	900	62	8	
1000	1150	1000	75	8	
1200	1390	1200	95	8	

#### ※ Remarks

- ① Tolerance of inner diameter: 150~600 (± 5.1mm), 700~800 (± 6.4mm)
- ② Tolerance of pipe wall thickness (total thickness): (150~250)mm pipe ±8%, 300mm or larger pipe ±5%
- ❸ Tolerance of pipe length: (0~2)%
- The minimum pipe wall thickness refers to the thickness of the structured pipe wall on the fluid
  flow side.
- 6 The cut length of the pipe may be subject to agreement between the parties.

## **Earthquake Resistance Pipe**

Structure It is a tube made of high density polyethylene material by extruding a rectangular

profile with a hollow groove shape in the spiral direction.

It has a cross-shaped structure, the inner and outer surfaces are smooth, and the

perfect joint is maintained.

It is a product with excellent corrosion resistance and durability.

It has a stable and sturdy structure to prevent leakage.

Ring Stiffness

4~12.5 kN/m2

**Features** 

- · Excellent chemical resistance (acid and alkali wastewater, salt)
- Excellent impact resistance, water tightness and water permeability



#### PE Double-Wall Pipe

ltom	Item Unit		Performance		
item	Offic	PE Double	e-Wall Pipe	Test Method	
		Nominal	Ring Stiffness		
Ding Ctiffness	KN/m²	150-200	700-1200 8 or higher		
Ring Stiffness	KIN/III	250-600	700-1200 8 or higher		
		700-1200	700-1200 8 or higher		
Ring Stiffness test	-	Impact test - No cracks, breaks, or damage			
Impact test	-	Impact test - No cracks, breaks, or damage			
Density	g/cm³	700-1200 8 or higher		KS M 3500-1	
Flow index	a/10min	1.6 or less (190°C, 5.0 kg)		K2 IVI 3200-1	
Flow index	g/10min	1.6 OF IESS ( 18	90 C, 5.0 kg)		
Yield tensile strength	N/mm²	700-1200 8	3 or higher		
Batch test	Wt.%	0.10 or less			
Carbon black content	%	2.0~3.0			
Thermal stability	min.	20 or more			
NCLS	hr	700-1200 8	3 or higher		

#### PE Multi-Wall Pipe

Item	Unit	Perfor	Test Method	
		Nominal	Ring Stiffness	
Ding Ctiffeee	KN/m²	150-200	700-1200 8 or higher	
Ring Stiffness	KIN/III	250-600	700-1200 8 or higher	
		700-1200	700-1200 8 or higher	
Ring Stiffness test	-	Impact test - No crac	ks, breaks, or damage	
Impact test	-	Impact test - No cracks, breaks, or damage		
Flow index	g/10min	1.6 or less (190°C, 5.0 kg)		KS M 3500-2
Flow index	g/Tomin	1.0 Of less (	K3 IVI 3300-2	
Density	g/cm³	700-1200	8 or higher	
Yield tensile strength	N/cm³	700-1200	8 or higher	
Batch test	Wt.%	0.10 or less		
Thermal stability	min.	20 or more		
NCLS	hr	700-1200		
Carbon black content	%	함량 2	2.0~3.0	

- ※ Remarks (The dimensions and tolerances of ER pipes follow the dimensions and tolerances of PE double-wall pipes and PE multi-wall pipes.)
  - 10 Tolerance of inner diameter: 150 (± 4.5mm), 200~600 (± 5.1mm), 700~1200 (± 6.4mm)
  - 2 Tolerance of pipe wall thickness (total thickness): (150~250)mm pipe ±8%, 300mm or larger pipe ±5%
  - 3 Tolerance of pipe length: (0~2)%
  - 1 The minimum pipe wall thickness refers to the thickness of the structured pipe wall on the fluid flow side.
  - 6 The cut length of the pipe may be subject to agreement between the parties.



## PE Double-Wall Pipe Socket Type (No Bolt)

Structure It is a pipe made by extruding a hollow \$\sigma\$-shaped square profile made of high density

polyethylene material in a spiral direction around the axis of the pipe.

It has smooth inner and outer surfaces, and the wall has an I-beam structure.

The connector socket is made of the same material as the pipe to fit the pipe to be connected.

Ring Stiffness 8~ 12.5kN/m2

Features Excellent chemical resistance (acid and alkali wastewater, salt)

· Excellent handling and constructability

· Excellent impact resistance, water tightness and water permeability



## PE Multi-Wall Pipe Socket Type (No Bolt)

Structure It is a pipe made by extruding a hollow \B-shaped rectangular profile made of high density

polyethylene material in a spiral direction around the axis of the pipe.

It has smooth inner and outer surfaces, and the wall has an I-beam structure.

The connector socket is made of the same material as the pipe to fit the pipe to be connected.

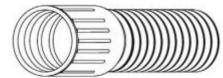
Ring Stiffness 12.5 ~ 16 kN/m2

Features Excellent chemical resistance (acid and alkali wastewater, salt)

· Excellent handling and constructability

· Excellent impact resistance, water tightness and water permeability





PE Double-Wall
Pipe,
PE Multi-Wall
Pipe
with excellent
elasticity

Item	Unit	Р	Performance	
item	Offit	PE D	Test Method	
		Nominal	Ring Stiffness	
Ring Stiffness (SN)	KN/m²	150-200	700-1200 8 or 700-1200 8 or higher higher	
(0.1)		250-600	700-1200 8 or 700-1200 8 or higher higher	
Ring Stiffness test	-	Impact test - No crac	ks, breaks, or damage	
Impact test	-	Impact test - No crac	ks, breaks, or damage	
Flow index	g/10min	1.6 or less (190°C, 5.0 kg)		KS M 3500-1
Flow index	g/Torriiri			KS M 3500-2
Density	g/cm³	700-1200 8	3 or higher	
Yield tensile strength	N/mm²	700-1200 8	3 or higher	
Batch test	Wt.%	0.10 c	or less	
Carbon black content	%	2.0~3.0		
Thermal stability	min.	20 or more		
NCLS	hr	700-1200 8	8 or higher	

PE Double-Wall
Pipe,
PE Multi-Wall
Pipe
with excellent
elasticity

PE Double-Wall Pipe, PE Multi-Wall Pipe

Item	Unit	Socket Connector Performance	Test Method	
Yield tensile strength	N/mm²	700-1200 8 or higher		
Batch test	Wt.%	0.10 이하일 것		
Carbon black content	%	2.0 ~ 3.0	KPS M 2017	
Thermal stability (OIT): over 20 minutes	min.	700-1200 8 or higher	KP3 WI 2017	
NCLS	hr	700-1200 8 or higher		
Connection water tightness test	-	No leakage		

Nominal	Oute	r Diamete	er(mr <b>hr)</b> ner Diamete	r(nRhip)e W	/all Thickr	ness(mRiir)	g Stiffnes	s Length
150	176	180	150	13	15	12.5	16	
200	228	232	200	14	16	12.5	16	
250	280	284	250	15	17	8	12.5	
300	338	340	300	19	20	8	12.5	6m
400	450	460	400	25	30	8	12.5	OIII
450	508	510	450	29	30	8	12.5	
500	562	570	500	31	35	8	12.5	
600	678	694	600	39	47	8	12.5	

#### **※** Remarks

- $\blacksquare$  Tolerance of inner diameter: 150 (  $\pm\,4.5\text{mm}$  ) , 200~600 (  $\pm\,5.1\text{mm})$
- $@ \ Tolerance \ of \ pipe \ wall \ thickness \ (total \ thickness): (150~250) mm \ pipe \ \pm 8\%, 300 mm \ or \ larger \ pipe \ \pm 5\%$
- ❸ Tolerance of pipe length: (0~2)%
- 1 The minimum pipe wall thickness refers to the thickness of the structured pipe wall on the fluid flow side.
- The cut length of the pipe may be subject to agreement between the parties.

## **Double/Multi-Wall Pipe One-Touch Socket**

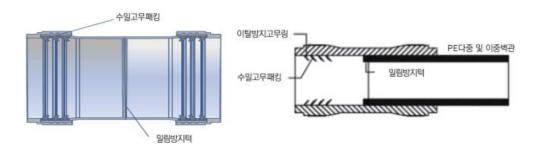
What is a one-touch socket?

- PUSH-type socket with a connector made with a separate socket
- It does not slide because there is a stumbling block in the center of the inside
- Socket-type connector for perfect watertight maintenance without leaving left or right with a rubber protrusion structure with excellent elasticity

It is a product that uses PP as the main raw material to maintain the advantages of the existing polyethylene tube one-touch socket as well as shortening the construction period by designing the one-touch push-in method







What is a one-touch socket? PE Double-Wall Pipe,

- Six rubber rings with excellent elasticity in both directions and anti-separation rings ensure stable water tightness even under subsurface sinks.
- · There is no separate bolting for PUSH type construction, so tools and electricity are unnecessary.

It is possible to construct a gentle curved section and does not require additional materials.

· The construction period is shortened and the construction cost is reduced. (minimize traffic control when working in downtown areas)

What is a one-touch socket?

Specification	Double-wall Pipe Outer Dia	amet <b>e/i(ultim)</b> all Pipe Outer Diam	eter(mm) Tolerance
ø 150	176	180	± 1
ø 200	228	232	± 1
ø 250	280	284	± 1
ø 300	338	340	± 1

#### **※** Remarks

- 1 The dimensions of the connector for double-wall and multi-wall pipes are adjusted with rubber packings.
- 2 The inner diameter of the rubber packing of the connector is smaller by 6mm than the outer diameter of

What is a one-touch socket? Structure





Inside cross-section when socket fastening Socket

Socket is fastened

What is a one-touch socket?



Digging the pipe

Compacting the bottom of the pipe

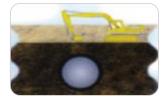
8 Aligning the pipe



4 Cleaning and lubrication



6 Pipe joint



6 Backfill

What is a one-touch socket? **Precautions for One-Touch Socket** Installation

- Do not install with gravel or other foreign substances stuck to the rubber ring inside the socket.
- The chamfered pipe in the insertion part allows for more convenient installation.
- After applying lubricant to the surface of the tube and the socket rubber ring, insert it up to the marked line of the insertion part.

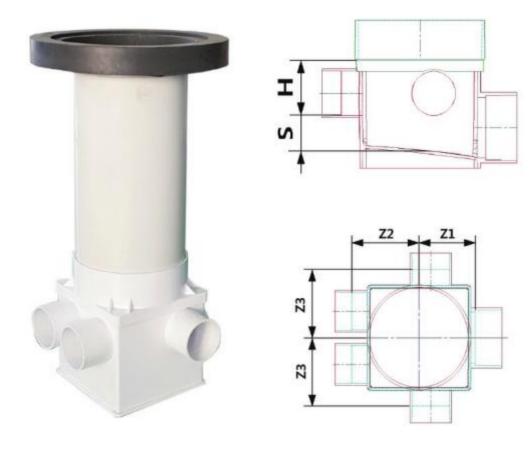
## **PVC Sewage Chamber [horizontal 90 degree 3-way gutter]**

#### Structure

It is an injection-molded product mainly made of polyvinyl chloride polymer, and the inverter part has a shape that allows sewage to flow easily.

#### **Features**

- Delivery and construction to local governments and public companies
- · Housing site development construction
- · Excellent chemical resistance (acid and alkali wastewater, salt)
- Excellent handling and constructability



#### PVC Sewage Chamber

Item	Unit	Performance	Test Method
Tensile yield strength	MPa	Tensile yield strength of 47 MPa or more at 23°C KPPS M 303	
Load	kN	No cracks, damages, or pores under a load of 12kN.	
Negative pressure Mpa		No fluctuation of 0.078 MPa	KPPS M 303
Immersion	mg/cm²	Weight change for each test solution is ±0.2mg/cm2 or less	KPP3 IVI 303
Vicat softening temperature	°C	150-200 12.5 or higher 16 or higher	
Quantitative	wt%	0.1wt% or less	

PVC Sewage Chamber Sewage Chamber Body & Trap



#### PVC Sewage Chamber

	Nominal		Z1 (minimum)	Z2	Z3	S (refernce)		Н
Gutter diameter	Inlet side	Outled side	Connection type			(minimum)	(maximum)	
300	100	150	170	160	160	20[90]	75[130]	135

#### **※** Remarks

- Remarks 1. The tolerance of Z2 and Z3 shall be ±25mm.
- 2 The shape and dimensions of the stabilizing legs indicated by dotted lines are not specified.
- The minimum and maximum values of S are the range of the difference between the bottom of the inlet joint and the outlet joint.
- 1 The shape and shape of the product are not specified.

#### PVC Sewage Chamber

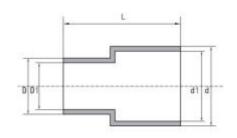




## **PVC Small Manhole for Impact Resistance**

**PVC Sewage Chamber** 

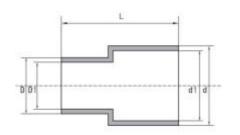




Nominal Symbol	D	D1	d	d1	L
D100 (inserted type)	114	107	138	128.5	160
D100 (socket type)	121	114.5	138	128.5	160
D150	165	156	197	184	204

Small manhole (inspection hole)

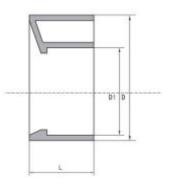




Nominal Symbo	D D	D1	d	d1	L
D200	216	204	260	243	263

Different Diameter
Tee





Nominal	D	D1	L
VG200×100	216	114.5	115
VG200×150	216	165.5	95
VG200×PE150	216	184	133
VG150×100	165	114.5	80

Small Manhole with Sewage Chamber Small manhole (inspection hole)



Small Manhole with Sewage Chamber Small manhole (inspection hole)

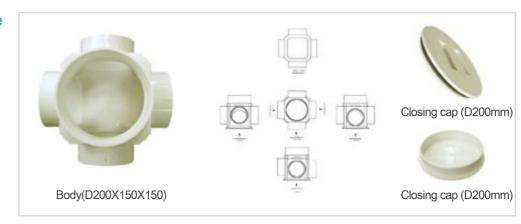




#### ※ Example of use

- Small manhole + Inner Cover + Closing Cap (150): basic use
- Small Manhole + Inner Cover + Closing Cap (150) + External Bushing (150×100): Use by changing the pipe diameter
- Small Manhole + Inner Cover + Closing Cap (150) + External Bushing (150×100) + Sealing Trap: PVC Sewage Chamber

Small manhole (inspection hole)



## **Round Bar Support Coupling Type Connector**

#### Structure

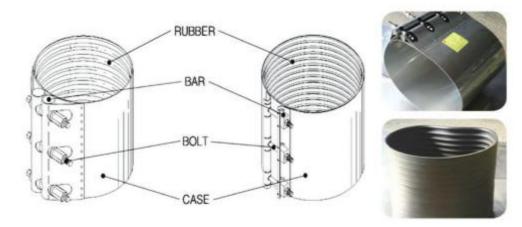
This is a round-bar-shaped angle for excellent water tightness, durability, and corrosion resistance and an integrated "I" type fastening part structure.

#### **Ring Stiffness**

Fastening part (CASE): SUS, watertight part: Cylindrical RUBBER

#### **Features**

· It is a connector with excellent workability, water tightness and durability by inserting a watertight part (cylindrical rubber) into the pipe and covering the fastening part (CASE) by bolting and nut fastening.



#### Round Bar Support Coupling Type Connector

Identification	Standard		CASE			RUBBER		
Number	Name	Thickness	Area	Length	Thickness	Area		
22468057	150	0.6±0.07	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	245-250		
22468071	200	0.6±0.07	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	245-250		
22468059	250	0.6±0.07	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	245-250		
22468060	300	0.6±0.07	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	245-250		
22468061	350	0.6±0.07	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	345-350		
22468062	400	0.6±0.07	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	345-350		
22468063	450	0.6±0.07	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	345-350		
22468064	500	0.8±0.09	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	445-450		
22468065	600	0.8±0.09	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	445-450		
22468066	700	0.8±0.09	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	445-450		
22468067	800	0.8±0.09	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	590-600		
22468068	900	0.8±0.09	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	590-600		
22468069	1000	0.8±0.09	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	590-600		
22468070	1200	0.8±0.09	700-1200 8 or higher	700-1200 8 or higher	700-1200 8 or higher	590-600		

## PE Double-Wall/Multi-Wall Perforated Pipe

#### Structure

It is an integrally molded product, and there is no separation, and it is stronger in earth pressure and lubrication pressure compared to other oil holes.

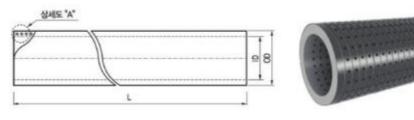
#### **Features**

Use

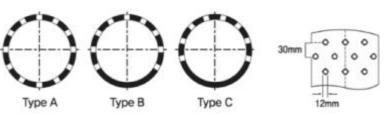
- · Excellent absorption with high pore rate
- Excellent cold resistance, heat resistance, corrosion resistance, and semi-permanent
- Drainage pipe on both sides of city road
  Drainage pipe for underground road crossing,
- bridge and tunnel

  Drainage pipes for agricultural water transmis-
- · Excellent construction and management due to light weight
- · Suitable for special terrain with production in various specifications
- Drain pipe for apartment housing complexes, drainage pipes · factories, livestock farms, etc.
- Underground drainage pipe to protect road and
- Drainage pipes for sports fields, golf courses, plazas, etc.

#### Image



#### Shape



<sup>\*</sup> Standard Diameter: 12mm · Standard spacing: 30mm \*Available to order other than the standard below

# Opening Dimensions and Spacing

Nominal	Number of Openings per Side	Opening Dimensions (mm)	Opening Space Distance (mm)	Nominal	Number of Openings per Side	Opening Dimensions (mm)	Opening Space Distance (mm)
D150	2	10	60	D500	4	12	60
D200	3	10	60	D600	4	12	60
D250	3	10	60	D700	5	12	120
D300	3	10	60	D800	5	12	120
D350	4	10	60	D900	6	12	120
D400	4	12	60	D1000	6	12	120
D450	4	12	60	D1200	7	12	120

#### Remarks

- The number of perforated pipes and perforated dimensions can be changed according to the agreement between the parties.
- 2 The length of the pipe is subject to agreement between the parties.

## **Fitting Pipe**

22.5° [Elbow 22.5°]



Nominal	L	Н	Nominal	L	Н
D150	300	610	D500	500	1071
D200	300	621	D600	500	1094
D250	300	631	D700	500	1115
D300	300	642	D800	700	1521
D350	400	845	D900	700	1542
D400	400	857	D1000	700	1564
D450	400	867	D1200	1000	2128

45° [Elbow 45°]

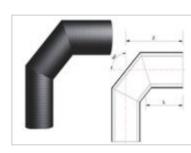


Nominal	L	Н	Nominal	L	Н
D150	300	575	D500	500	1055
D200	300	594	D600	500	1098
D250	300	612	D700	500	1136
D300	300	632	D800	700	1518
D350	400	823	D900	700	1557
D400	400	845	D1000	700	1596
D450	400	863	D1200	1000	2185

#### ※ Remarks

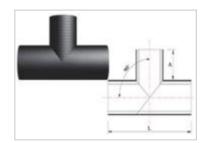
- 1 Tolerance: L: ±50mm / H: ±50mm
- ② The above specifications are subject to change to improve the quality of our products.
- Or it is possible to change the standard according to the customer's request

90° [Elbow 90°]



Nominal	L	Н	Nominal	L	Н
D150	300	480	D500	500	853
D200	300	512	D600	500	853
D250	300	512	D700	500	853
D300	300	512	D800	700	1195
D350	400	682	D900	700	1195
D400	400	682	D1000	700	1195
D450	400	682	D1200	1000	1707

[Equal Tee]

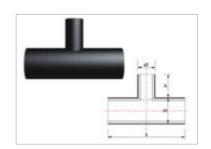


Nominal	L	Н	Nominal	L	Н
D150	970	400	D500	1450	450
D200	1150	450	D600	4500	400
D250	1150	450	D700	1800	500
D300	1500	400	D800	2000	550
D350	1150	400	D900	2200	600
D400	1150	350	D1000	2400	600
D450	1450	450	D1200	2600	600

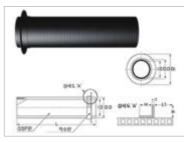
#### ※ Remarks

- 1 Tolerance: L: ±50mm / H: ±50mm
- ② The above specifications are subject to change to improve the quality of our products.

Different
Diameter Tee
[Unequal Tee]



Flange [Half Spool]



Nominal	L	Н	L
D200	D150	800	350
D250	D150~D200	800	350
D300	D150~D250	800	350
D350	D150~D250	800	350
	D300	1000	330
D400	D150~D350	1000	350
D450	D150~D400	1000	350
D500	D150~D350	1000	350
D600 —	D400~D450	1200	330
Deno	D150~D350	1000	350
D600	D400~D500	1200	350
D700	D150~D350	1000	350
D700	D400~D600	1200	350
	D150~D350	1000	350
D800	D400~D500	1200	350
	D600~D700	1400	500
	D150~D350	1200	350
D900	D400~D600	1400	350
	D700~D800	1500	500
	D150~D350	1200	350
D1000	D400~D600	1400	350
	D700~D900	1600	500
	D150~D350	1200	350
D1200	D400~D600	1400	350
	D700~D1000	1800	500

Nominal	Len	gth	Flai	nge
Nominal	L	L1	Н	Т
D150	1000	50	40	3
D200	1000	50	40	3
D250	1000	50	50	4
D300	1000	50	50	4
D350	1000	50	50	4
D400	1000	50	50	4
D450	1000	50	50	4
D500	1000	50	50	4
D600	1000	50	50	4
D700	1000	50	50	4
D800	1000	50	50	4
D900	1000	50	50	4
D1000	1000	50	50	4
D1200	1000	50	50	4

#### Remarks

- 1 Tolerance: L: ±50mm / H: ±50mm
- ${\color{red} {\it @}}$  The above specifications are subject to change to improve the quality of our products.
- Or it is possible to change the standard according to the customer's request