



Application for
**Water / Sewer
Pipe & Fitting**

www.dury.com

GLOBAL LEADER COMPANY
DURY CHEMICAL



DURY CHEMICAL

NEW IND DURY CHEMICAL REVOLUT

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MESSAGE

**Dury Chemical
will open a new
horizon
for the pipe &
fitting industry
of the 21st
century.**

Dury Chemical, concerning more than anyone about a comfortable life of residents, has continued to invest and research in order to satisfy the diverse needs of customers.

As a result, has developed low-noise NC solutions that drastically reduced drainage noise in 1988, EDR solutions for underground construction that greatly improved construction process and cost by solving the problems of existing cast iron pipes in 2015, and ultra-low-noise NC2 solutions that drastically reduced noise by applying innovative low-noise technology, and achieved excellent recognition of its technology from leading customers in construction area. In addition, we have secured and been maintaining high quality level with the largest production facilities, automated manufacturing processes, and the highest quality control system in its business field.

Under the goal of providing a pleasant living environment, we will fulfill its social responsibility and develop into a company that always agonizes and researches on the 21st century of infinite competition, based on the business philosophy of customer satisfaction.

All employees of Durychemical

GLOBAL LEADER PIPES, **DURY CHEMICAL**

Durychemical's solution
becomes a global standard.



Customer Satisfaction

We are constantly investing and researching to provide a pleasant national living environment.



Production Improvement

We are expanding production facilities, automated manufacturing processes and system.



Cost reduction

We strive to satisfy both the company and customers with a cost strategy that maintains commercial performance and quality.



Quality Improvement

By expanding automated manufacturing facilities and various quality tests, we maintaining high quality levels.



Durychemical's know-how and expertise lead the future of plumbing system in the 21st century.



Company Name	DURY Chemical Co., Ltd.
CEO	Choi Baek-Kyu
Date of Establishment	1974
H.Q. / Sales Office	H.Q. & Factory: 826-90, Saengnim-daero, Saengnim-myeon, Gimhae-si, Gyeongsangnam-do, Republic of Korea Seoul-Incheon Office: 33, Yonggu-daero 2469beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea
Factory Area	Lot Area:76,529m ² / Floor Area 22,952m ²
Main Business	PVC Pipe and Fitting for Construction & Civil Engineering
Production Capacity	Pipe: 42,000t/yr, Fittings: 18,000t/yr

1974.03

Establishment of Daesungchemical Co.

1998.09

New Technology(NT) Mark
(Noise Control Pipe & Fitting)

2000.03

Obtained ISO 9002(KSA9002)

2000.12

Obtained JIS

2001.04

Selected as a venture company

2004.07

Development of NC Pipe and Fittings
(co-development with LG Chem.)

2005.06

Establishment of Research Center

2005.07

Certified specializing in components and
materials at MOTIE

2005.08

Selected as a technology-innovative
SME (INNO-BIZ)

2005.09

Opening a research division at KITECH

2006.07

Selected as a Kibo A+ Member enterprise
(Korea Technology Finance Corporation)

2012.10

Registered in SAM
(The System for Award Management - USA)

2014.06

Designation as Procurement: PVC Sewer Chamber

2015.01

Development of EDR Pipe and Fittings

2018.11

Presidential Industry Award

2019.06

Development of ultra-low-noise pipe
and fittings solution : NC2

01

Product of Dury Chemical

The best plastic pipe & fitting solution provider since its foundation in 1974.



Product



Impact-resistant sewer supply pipes & fittings

01

Features

- Eco-friendly products made from non-toxic material, causing no concern for water pollution
- Excellent abrasion resistance and corrosion resistance to chemicals
- Excellent adaptability to land deformation, such as load deformation (subsidence of ground), after construction
- High mechanical strength
- Light and strong, easy handling and installation
- Excellent weatherability, chemical resistance and oil resistance
- Easy to construct and better water tightness Better for maintenance

Applications

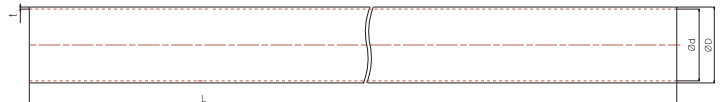
- Storm water pipeline to sewer

Precautions

- When storing outdoors, find ways to cover the tent so that it does not receive heat from direct sunlight.
- Spraying or painting chemicals or organic compounds (ex: acetone, thinner, creosote) and contacting with the fire can pose a risk the quality of the product.
- When using glue, be sure to read the precautions before using it.
- Don not screw directly into the pipe.
- It is prohibited to use it for any purpose other than those prescribed.

Impact-resistant sewer supply pipe (HIVG1, HIVG2)

Unit: mm



HIVG2

DN		Outer diameter (ØD)		Thickness (t)		Inner diameter (Ød)	Normal length (L)
Diameter	Indication	Typ.	Tolerance	Min.	Tolerance		
100	HIVG2 100	114	±0.4	3.1	+0.8	107	6,000
125	HIVG2 125	140	±0.5	4.1	+0.8	131	6,000
150	HIVG2 150	165	±0.5	5.1	+0.8	154	6,000
200	HIVG2 200	216	±0.7	6.5	+1.0	202	6,000
250	HIVG2 250	267	±0.9	7.8	+1.2	250	6,000
300	HIVG2 300	318	±1.0	9.2	+1.4	298	6,000

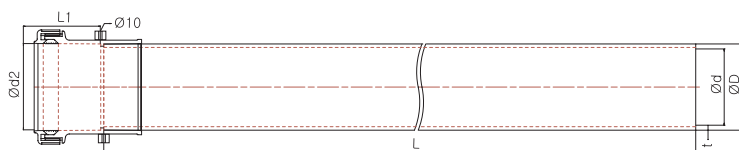
HIVG1

DN		Outer diameter (ØD)		Thickness (t)		Inner diameter (Ød)	Normal length (L)
Diameter	Indication	Typ.	Tolerance	Min.	Tolerance		
100	HIVG1 100	114	±0.4	6.6	+1.0	100	6,000
125	HIVG1 125	140	±0.5	7.0	+1.0	125	6,000
150	HIVG1 150	165	±0.5	8.9	+1.4	146	6,000
200	HIVG1 200	216	±0.7	10.3	+1.4	194	6,000
250	HIVG1 250	267	±0.9	12.7	+1.8	240	6,000
300	HIVG1 300	318	±1.0	15.1	+2.2	286	6,000

* Normal length of pipe is 6m and tolerance is +30mm, -10mm. * Custom products are possible according to the demand of consumer.

Impact-resistant sewer supply pipe

(HIVG1-R2 type, HIVG2- R2 type)



HIVG2 - R2 type

DN		Outer diameter (ØD)		Thickness (t)		Inner diameter (Ød)	Normal length (L)	Inner diameter (Ød2)	Expanded part (L1)
Diameter	Indication	Typ.	Tolerance	Min.	Tolerance				
100	HIVG2 100	114	±0.4	3.1	+0.8	107	6,000	115	88
150	HIVG2 150	165	±0.5	5.1	+0.8	154	6,000	166.5	105
200	HIVG2 200	216	±0.7	6.5	+1.0	202	6,000	218.5	119

HIVG1 - R2 type

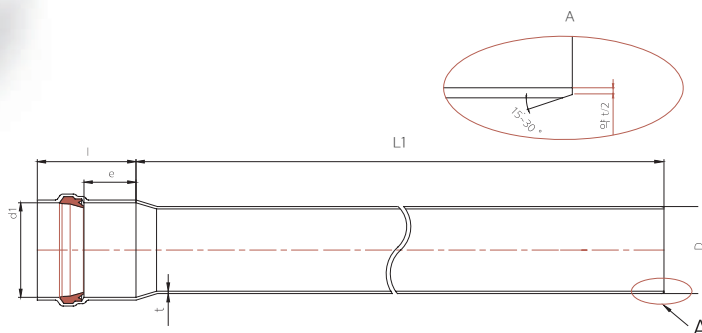
DN		Outer diameter (ØD)		Thickness (t)		Inner diameter (Ød)	Normal length (L)	Inner diameter (Ød2)	Expanded part (L1)
Diameter	Indication	Typ.	Tolerance	Min.	Tolerance				
100	HIVG1 100	114	±0.4	6.6	+1.0	100	6,000	115	88
150	HIVG1 150	165	±0.5	8.9	+1.4	146	6,000	166.5	105
200	HIVG1 200	216	±0.7	10.3	+1.4	194	6,000	218.5	119

* Normal length of pipe is 6m and tolerance is +30mm, -10mm. * Custom products are possible according to the demand of consumer.

Impact-resistant sewer supply pipe

(HIVG1-SRA type, HIVG2-SRA type)

Unit: mm



HIVG2-SRA

DN	Outer diameter (D)		Insert part Inner diameter (d1)		Thickness (t)		Expanded part (l)	Insert length (e)	Inner diameter	Normal length (L1)
	Typ.	Tolerance	Min.	Min.	Tolerance	Max	Min.			
100	114	±0.06	114.5	3.1	+0.8	145(120)	42(63.13)	107	6,000	
150	165	±1.00	165.7	5.1	+0.8	165(145)	47(72)	154	6,000	
200	216	±1.30	216.9	6.5	+1.0	185(165)	52(101)	202	6,000	
250	267	±1.60	268.1	7.8	+1.2	205(190)	57(106.5)	250	6,000	
300	318	±1.90	319.5	9.2	+1.4	225(220)	62(118)	298	6,000	

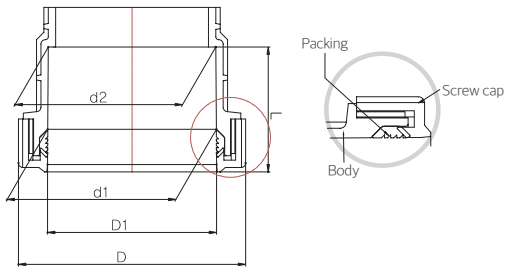
HIVG1-SRA

DN	Outer diameter (D)		Insert part Inner diameter (d1)		Thickness (t)		Expanded part (l)	Insert length (e)	Inner diameter	Normal length (L1)
	Typ.	Tolerance	Min.	Min.	Tolerance	Max	Min.			
100	114	±0.06	114.5	6.6	+1.0	145(120)	42(63.13)	100	6,000	
150	165	±1.00	165.7	8.9	+1.4	165(145)	47(72)	146	6,000	
200	216	±1.30	216.9	10.3	+1.4	185(165)	52(101)	194	6,000	
250	267	±1.60	268.1	12.7	+1.8	205(190)	57(106.5)	240	6,000	
300	318	±1.90	319.5	15.1	+2.2	225(220)	62(118)	286	6,000	

* Normal length of pipe is 6m and tolerance is +30mm, -10mm. * Custom products are possible according to the demand of consumer.

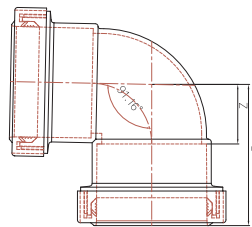
Impact-resistant sewer fitting

Insert part



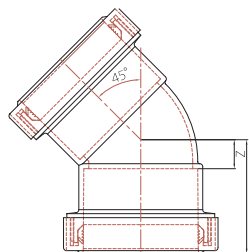
DN	d1	d2	L	D1	D (MAX)
100	115.85±1.0	114.0±1.0	85	115±1.0	155
150	167.15±1.15	165.5±1.15	120	169.9±1.15	208
200	219.10±1.50	216.5±1.50	160	219.35±1.50	272

90 Elbow (90SA)



DN	Z	L
100	62	147
150	88	208
200	115	275

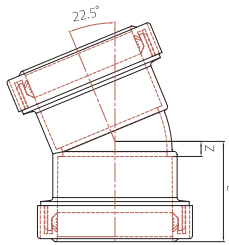
45 Elbow (45SA)



DN	Z	L
100	29	114
150	42	161
200	55	215

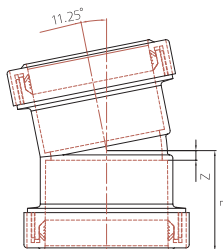
Unit: mm
* Tolerance of 'L': ± 2 mm

22 Elbow (22SA)



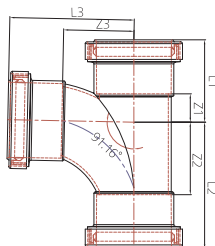
DN	Z	L
100	15	100
150	22	142
200	30	190

11 Elbow (11SA)



DN	Z	L
100	9	94
150	15.5	132
200	18	178

YT (LTA)

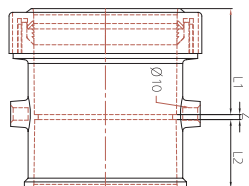


DN	Z1	Z2	Z3	L1	L2	L3
100X100	42	114	125	116	188	207
150X100	40	109	150	147	216	232
150X150	63	161	156	183	281	276
200X150	71	115	178	231	275	298

- * When tightening the cap (nut) of the rubber ring joint, use a bar (rebar and screwdriver) in the $\varnothing 10$ hole in the middle of the product.
- * During tightening, the pipe can be prevented from rotating and applied a lot of force, making it possible to construct it comfortably.

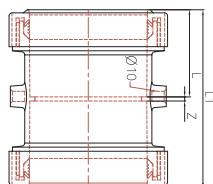
Impact-resistant sewer fitting

Single-end-nut socket



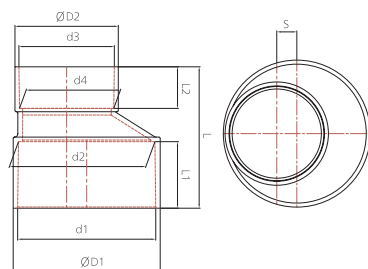
DN	L1	L2	Z(Min.)
100	85	55	4
150	120	80	5
200	160	115	5

Dual-end-nut socket



DN	L1	L2	Z(Min.)
100	85	174	4
150	120	245	5
200	160	325	5

Reducer (VG150-100)

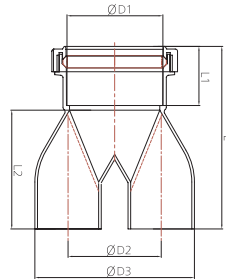


DN	L	L1	L2	$\varnothing D1$	
150X100	170	80	50	166	
$\varnothing D2$	S	d1	d2	d3	d4
115	24.1	166	164	114.7	113.3

* Tolerance of 'Z': $\pm 2\text{mm}$
 * The shape and specifications of the product can be changed without prior notice to improve the quality and performance.

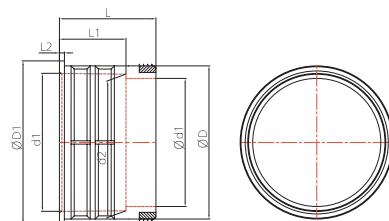
* Tolerance of 'L' : $\pm 2\text{mm}$ / Unit: mm

Split Socket



DN	L	L1	L2	ØD1	ØD2	ØD3
150	314	102	204	166	160	274

Adaptor (VG150-DC150)

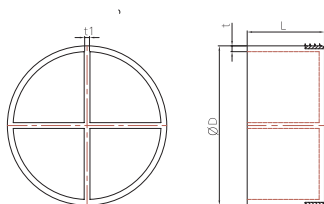


DN	L	L1	L2	ØD	ØD1	d1	d2
150	116	80	6	184.1	196.1	165.8	164.3

- * When tightening the cap (nut) of the rubber ring joint, use a bar (rebar and screwdriver) in the $\text{Ø}10$ hole in the middle of the product.
- * During tightening, the pipe can be prevented from rotating and applied a lot of force, making it possible to construct it comfortably.

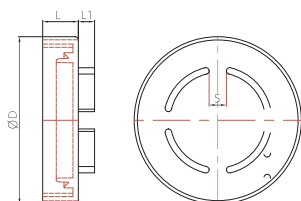
Impact-resistant sewer fitting

Cap – small manhole (HIVG150)



DN	L	ØD	t	t1
150	80	165	6.0	6.0

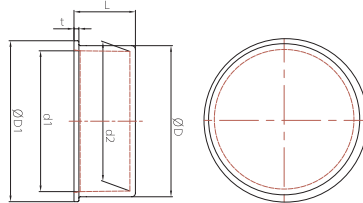
Cap – waste water receiver (HIVG 100)



DN	L	Ød	L1	S
100	33	154	15	16

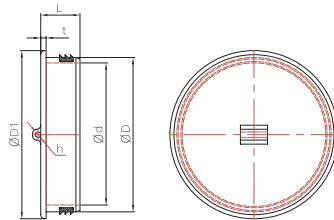
* Tolerance of 'Z': $\pm 2\text{mm}$ / Unit: mm

End cap (HIVG100, 150)



DN	L	ØD	ØD1	d1	d2	t
100	50	123	131	114.6	113.6	4
150	60	175	183	165.6	164.4	4

Maintenance hole cover (HIVG 100)



DN	L	ØD	ØD1	ØD	t	Øh
100	29	114	124.2	105	4	4

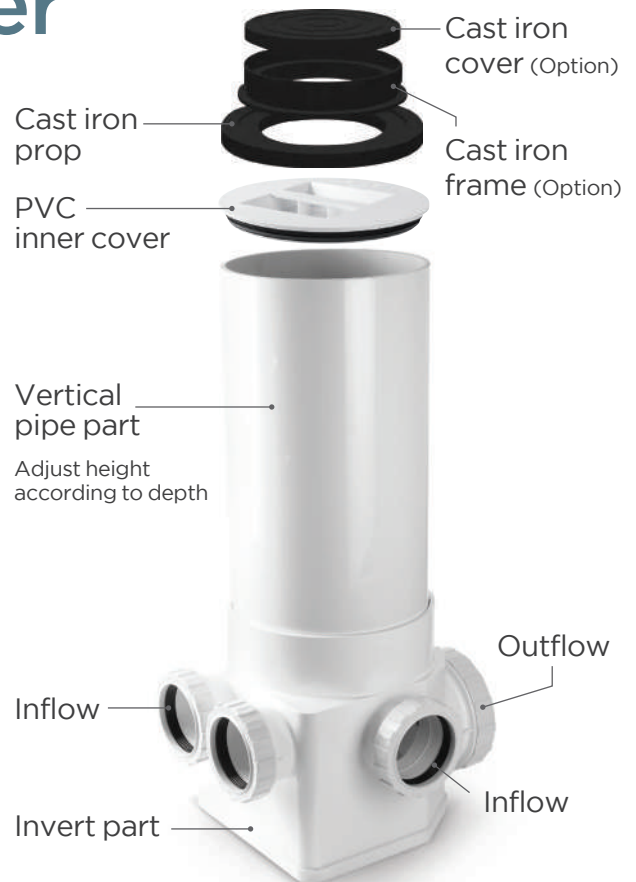
The EZ-II Polygon waste water receiver

02



Split Socket
(Option)

If 150mm pipe,
use Split Socket



Features

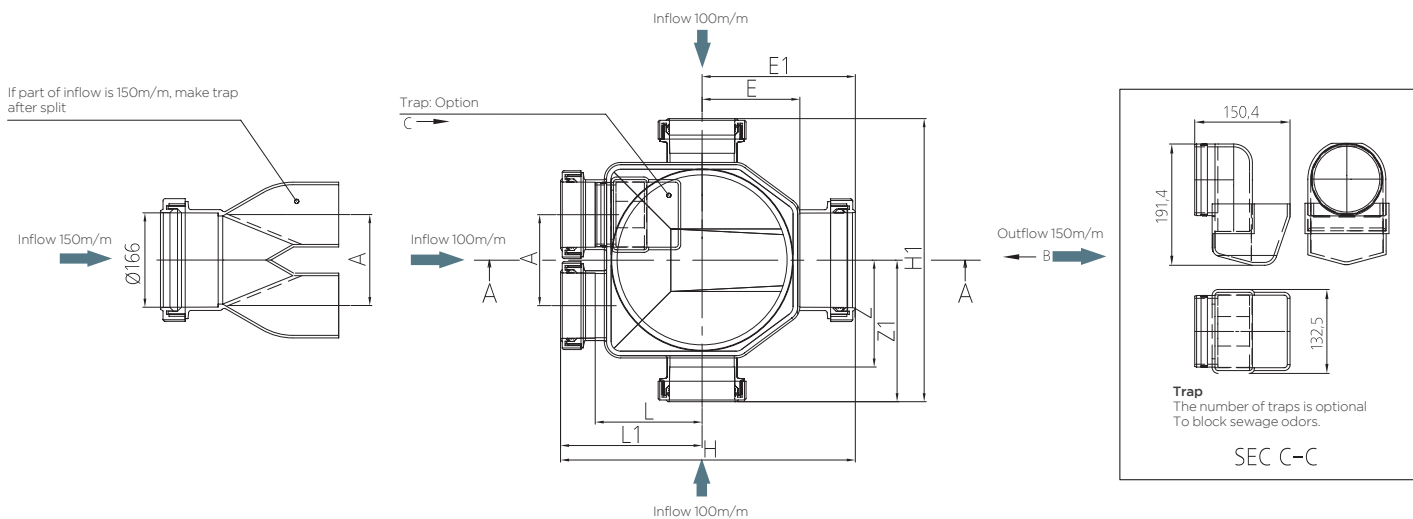
- Smooth water flow due to the design of built-in trap considering the natural flow of influent water
- Improved constructability due to the structure of the flat bottom surface
- High flexibility for piping angle due to the rubber ring method
- Excellent strength against external pressure due to the vertical-linear design considering earth pressure
- Anti-countercurrent flow of wastewater by the difference between the inlet and the outlet
- Flexible install position of trap with detachable water-sealing
- Better spatial availability compared to round-shape wastewater receiver

Precautions

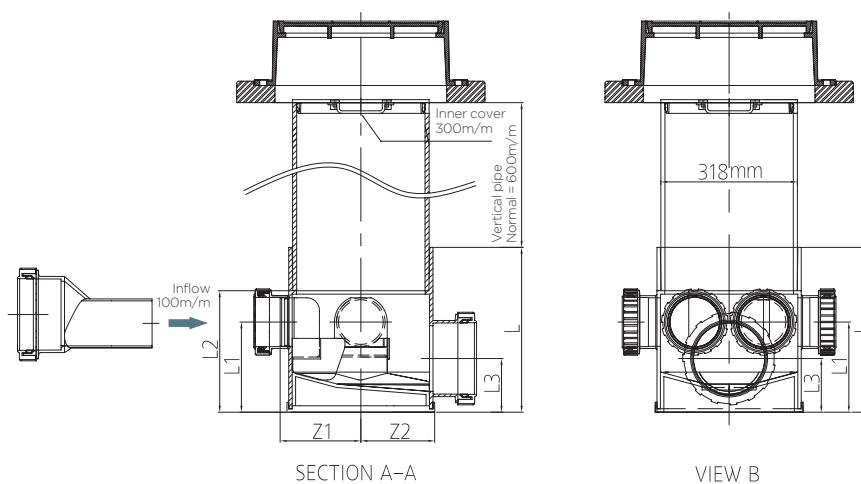
- When storing outdoors, find ways to cover the tent so that it does not receive heat from direct sunlight.
- When buried, sand shall be used and stones, logs, etc. not be directly in contact with the pipe.
- Spraying or painting chemicals or organic compounds (ex: acetone, thinner, creosote) and contacting with the fire can pose a risk the quality of the product.
- Do not drop from high places or cause undue shock.
- It is prohibited to use it for any purpose other than those prescribed.

Unit: mm

The EZ-II Polygon waste water receiver



A	L	L1	Z	Z1	E	E1	H	H1
160	188	249	187.9	248.9	172	269.5	518.5	498



DN	Inflow part	Outflow part	Z1	Z2	L	L1	L2	L3
300X150X100	100	150	188	172	384	210	283	125

The EZ PVC waste water receiver

03



Features

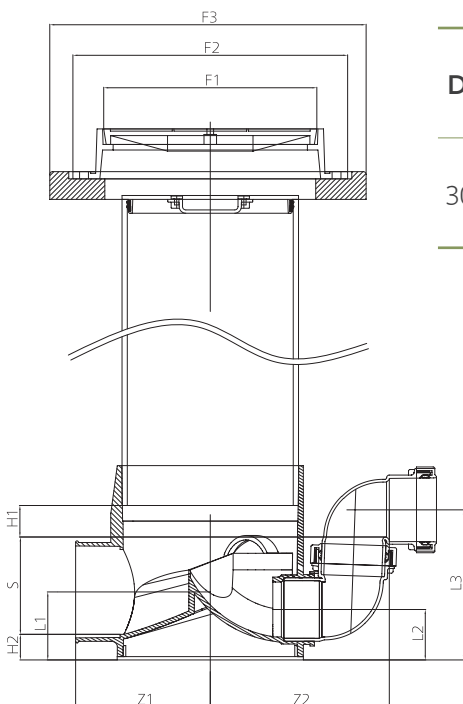
- Smooth water flow due to the design of built-in trap considering the natural flow of influent water
- Improved constructability due to the structure of the flat bottom surface
- High flexibility for piping angle due to the rubber ring method
- Excellent strength against external pressure due to the vertical-linear design considering earth pressure
- Anti-countercurrent flow of wastewater by the difference between inlet and outlet
- Flexible install position of trap with detachable water-sealing
- Better spatial availability compared to round-shape wastewater receive

Precautions

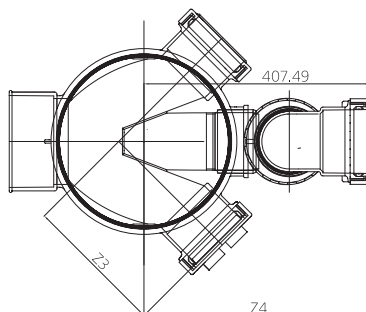
- When storing outdoors, find ways to cover the tent so that it does not receive heat from direct sunlight.
- When buried, sand shall be used and stones, logs, etc. not be directly in contact with the pipe.
- Spraying or painting chemicals or organic compounds (ex: acetone, thinner, creosote) and contacting with the fire can pose a risk the quality of the product.
- Do not drop from high places or cause undue shock.
- It is prohibited to use it for any purpose other than those prescribed.

Configuration of The EZ PVC waste water receiver

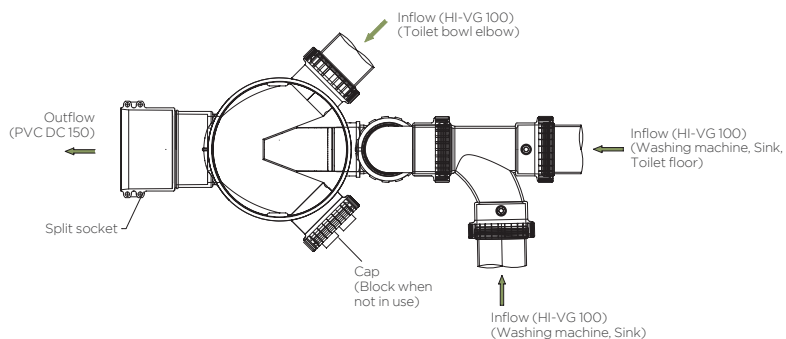
Unit: mm



DN	Inflow part	Outflow part	Z1	Z2	Z3	Z4	Z5	L	L1	L2	L3	L4	L5	L6
300	100	VG150	242.5	256.6	265	495	570	351	123	91.6	273.5	239.1	190	402

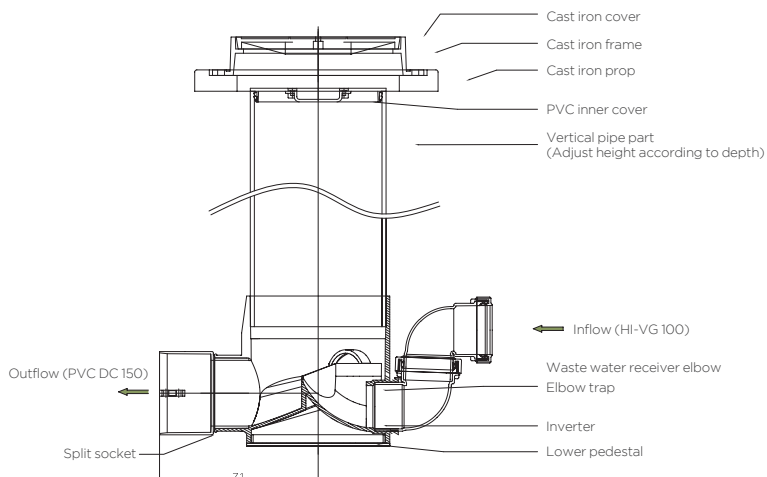


The EZ PVC waste water receiver A (Inflow HI-VG 100, Outflow PVC DC150)



DN	Inflow part	Outflow part	Z
300	100	HI-VG150	371.7

The EZ PVC waste water receiver B (Inflow HI-VG 100, Outflow PVC DC150)



DN	Inflow part	Outflow part	Z
300	100	HI-VG150	242.69

PVC Small-size manhole

04



Features

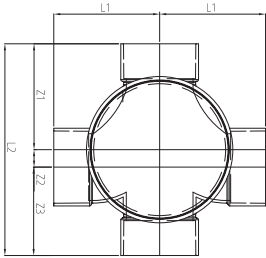
- Smooth water flow with design considering the natural flow of influent water
- Improved constructability with flat bottom surface
- Excellent strength against external pressure
- Anti-countercurrent flow design with clearance between the inlet and the outlet
- Adjustable height of vertical pipe

Precautions

- When storing outdoors, find ways to cover the tent so that it does not receive heat from direct sunlight.
- When buried, sand shall be used and stones, logs, etc. not be directly in contact with the pipe.
- Spraying or painting chemicals or organic compounds (ex: acetone, thinner, creosote) and contacting with the fire can pose a risk the quality of the product.
- Do not drop from high places or cause undue shock.
- It is prohibited to use it for any purpose other than those prescribed.

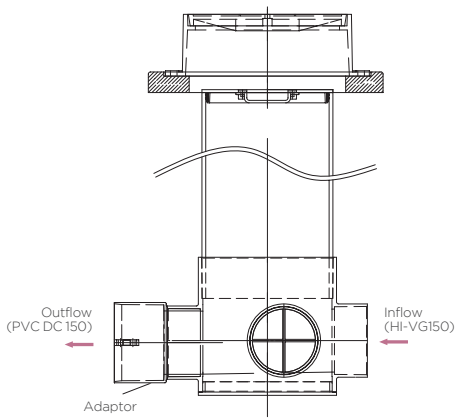
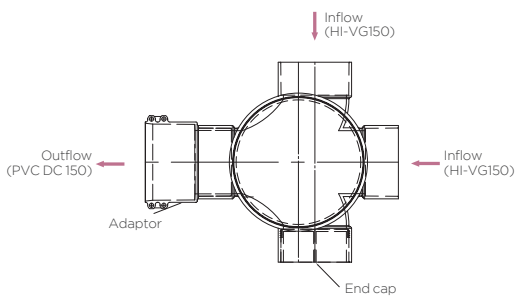
PVC Small-size manhole 90° WL300 X 150 X 150

Unit: mm

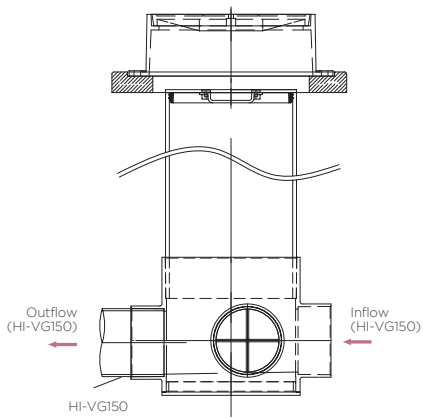
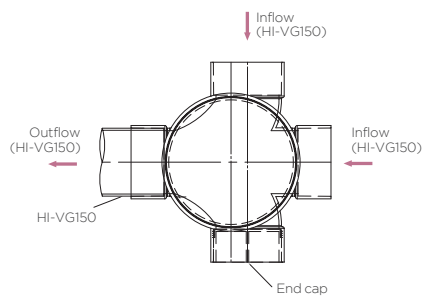


DN	Inflow part	Outflow part	Z1	Z2	Z3	L1	L2
300	VG150	VG150	243	40	203	243	485,5

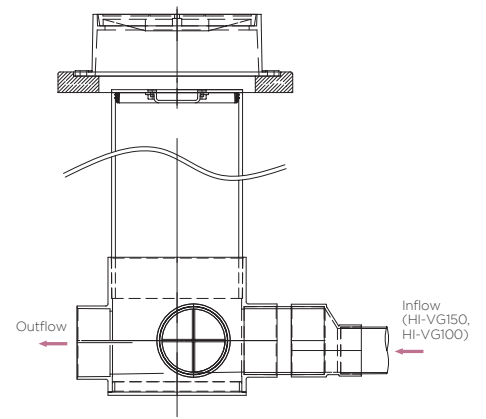
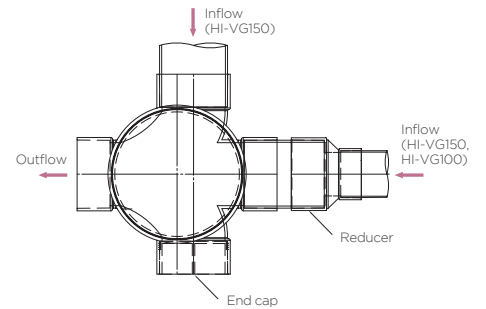
Inflow HI-VG150 Outflow - PVC DC 150



Inflow HI-VG150 Outflow HI-VG150



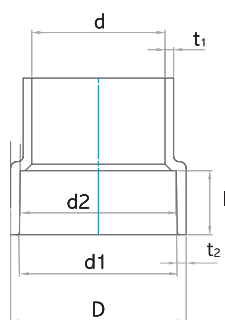
Inflow Reducer



DTS Fittings

05

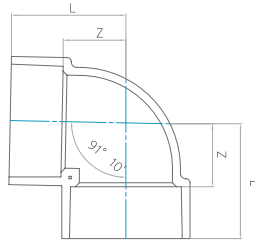
Insert part



DN	d1		d2		ℓ		t
	Typ.	tolerance	Typ.	tolerance	Typ.	tolerance	Min.
30	38.25	± 0.25	37.85	± 0.25	18	± 1	2.7
35	42.25	± 0.25	41.85	± 0.25	20	± 1	2.7
40	48.30	± 0.30	47.80	± 0.30	22	± 1	2.7
50	60.35	± 0.30	59.75	± 0.30	25	± 1	3.1
65	76.40	± 0.30	75.70	± 0.30	35	± 1	3.1
75	89.45	± 0.30	88.65	± 0.30	40	± 2	3.6
100	114.55	± 0.35	113.55	± 0.35	50	± 2	4.5
125	140.70	± 0.40	139.40	± 0.40	65	± 2	5.4
150	165.85	± 0.45	164.25	± 0.45	80	± 2	6.3
200	217.30	± 0.55	214.70	± 0.55	115	± 10	6.0
250	268.50	± 0.65	265.50	± 0.65	135	± 10	7.2
300	319.50	± 0.75	316.30	± 0.75	150	± 10	9.0
400	402.00	± 0.85	397.50	± 0.85	205	± 10	9.5

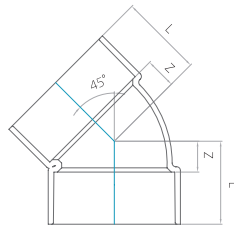
*◆ is a product other than KS. / Unit: mm

DL



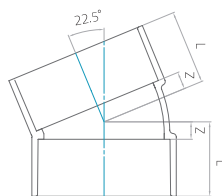
DN	Z	L
100	62	112
125	75	140
150	88	168
◆ 200	120	224
◆ 250	147	272
◆ 300	178	329

45L



DN	Z	L
100	30	80
125	38	103
150	44	124
◆ 200	56	166
◆ 250	68	198
◆ 300	77	226

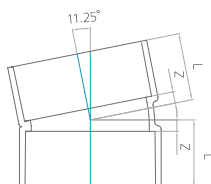
22.5L



DN	Z	L
100	15	65
150	20	100

DTS Fittings

11.25L



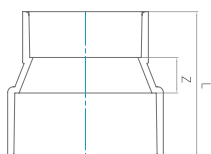
DN	Z	L
100	10	60
150	15	95

DS



DN	Z	L
100	4	104
125	4	134
150	4	164
◆ 200	4	225
◆ 250	8	280
◆ 300	8	314
◆ 400	10	420

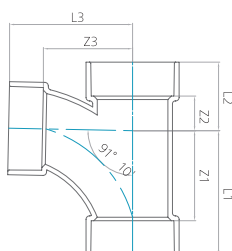
IN



DN	Z	L
100X50	30	105
100X65	30	115
100X75	30	120
125X100	35	150
150X100	40	170
150X125	40	185
◆ 200X100	45	206
◆ 200X150	49	238

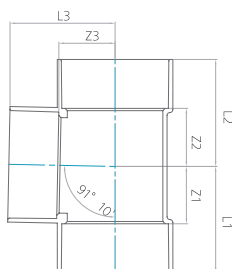
* Tolerance of 'Z': $\pm 2\text{mm}$ / Unit: mm
* ◆ is a product other than KS.

LT



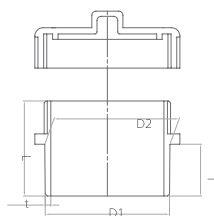
DN	Z3	L1	L2	L3
100	128	178	95	178
125	147	210	129	210
150	168	245	142	245
200	180	296	204	291
100X50	90	116	82	115
100X65	107	140	86	142
100X75	110	150	83	150
125X50	103	131	98	128
125X75	124	165	107	164
125X100	140	193	117	190
150X65	130	170	122	165
150X75	135	180	125	175
150X100	152	208	133	202
150X125	160	225	144	225
◆ 200X100	148	191	168	198
◆ 200X150	165	241	184	245

DT



DN	Z3	L1	L2	L3	t (Min.)
100	62	112	113	112	4.5
125	76	141	140	141	5.4
150	89	169	168	169	6.3
◆ 200	120	235	236	235	6.5
◆ 300	168	317	318	318	9.5
100X50	62	84	85	87	4.5
100X65	62	92	93	97	4.5
100X75	62	98	99	102	4.5
◆ 125X100	76	127	128	126	5.4
◆ 150X100	89	140	141	139	6.3

Maintenance cap



DN	D1	D2	t	L	I
◆ 50	60	62	2.5	46	26
◆ 65	76	78	2.5	59	36
◆ 75	89	92	3.0	67	42
◆ 100	114	115.5	3.5	80	52
◆ 125	140	143	4.5	98	67
◆ 150	165	168	5.5	116	82
◆ 200	216.3	220	7.5	171	105

Impact-resistant water supply pipes & fittings

06

Features

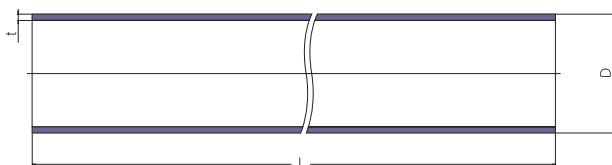
- Eco-friendly products made from non-toxic material, causing no concern for water pollution
- Excellent abrasion resistance and corrosion resistance to chemicals
- Excellent adaptability to land deformation, such as load deformation (subsidence of ground), after construction
- High mechanical strength
- Light and strong, easy handling and installation
- Excellent weatherability, chemical resistance and oil resistance

Precautions

- When storing outdoors, find ways to cover the tent so that it does not receive heat from direct sunlight.
- Spraying or painting chemicals or organic compounds (ex: acetone, thinner, creosote) and contacting with the fire can pose a risk the quality of the product.
- When using glue, be sure to read the precautions before using it.
- It is prohibited to use it for any purpose other than those prescribed.

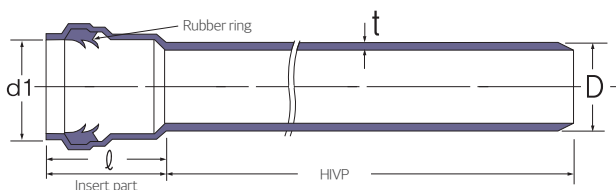
Unit: mm

Impact-resistant water supply pipe (HIVP)



DN	Outer diameter (D)			Thickness (t)	
	Typ.	Tolerance	Tolerance (Avg.)	Typ.	Tolerance
16	22	±0.20	±0.20	3.0	±0.30
20	26	±0.25	±0.20	3.0	±0.30
25	32	±0.30	±0.20	3.5	±0.30
30	38	±0.35	±0.20	3.5	±0.30
35	42	±0.35	±0.20	3.7	±0.30
40	48	±0.40	±0.20	4.0	±0.30
50	60	±0.50	±0.20	4.5	±0.40
65	76	±0.50	±0.20	5.2	±0.40
75	89	±0.50	±0.20	5.9	±0.40
100	114	±0.65	±0.20	7.1	±0.50
125	140	±0.80	±0.30	8.3	±0.60
150	165	±1.00	±0.30	9.6	±0.60
200	216	±1.30	±0.70	11.1	±0.80
250	267	±1.60	±0.90	13.4	±0.80
300	318	±1.90	±1.00	16.1	±1.10

Impact-resistant water supply pipe (HIVP- SRA type)

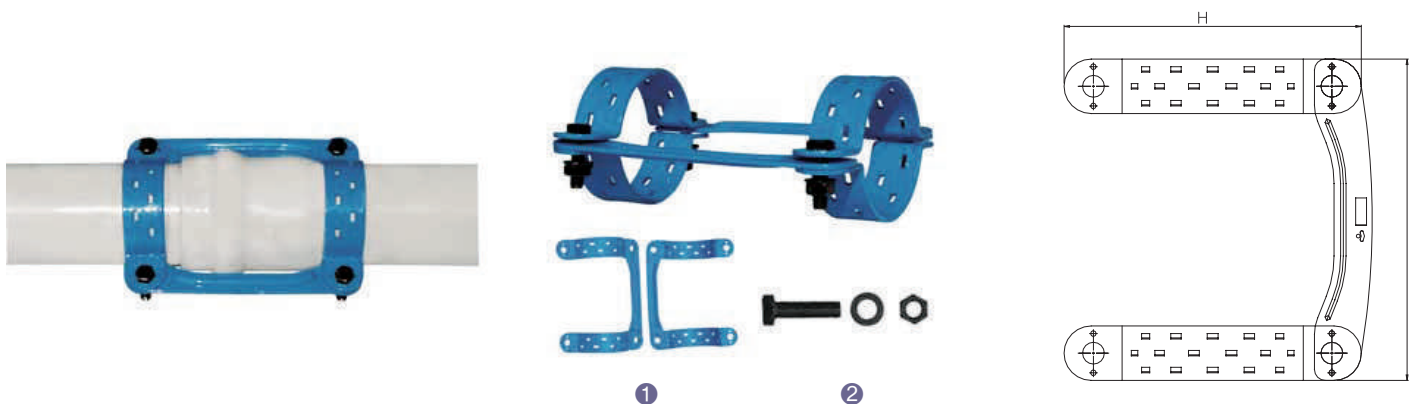


DN	Insert part Inner diameter (d)	Tolerance of (d)	(l)	Thickness (t)
50	61.3	±0.50	90	4.5
65	77.3	±0.50	95	5.2
75	90.3	±0.50	95	5.9
100	115.6	±0.65	115	7.1
125	142.0	±0.80	130	8.3
150	167.3	±1.00	135	9.6
200	219.5	±1.20	155	11.1
250	271.1	±1.40	180	13.4
300	322.7	±1.60	210	16.1

*Normal length of pipe is either 4m or 6m and tolerance is either +30mm or -10mm. *Tolerance of 'L': +30mm, -10mm.
*Tolerance of 't' follows straight pipe standard. *Material of rubber ring : type 1 unit 1 of KS M 6613.

Impact-resistant water supply fitting

Anti-separation clamp



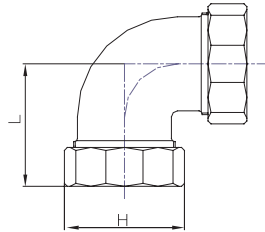
Composition

No	Part	Quantity	Material	Note
1	Body	2	88400 GCD450(350. 400A)	Epoxy powder painting
2	Bolt, Nut, Washer	4 SET	SS400	-

DN	L	H	Bolt	Quantity
50A	248	138	M12	4
65A	262	164	M12	4
75A	262	175	M12	4
100A	262	204	M12	4
125A	295	247	M18	4
150A	295	273	M18	4
200A	335	330	M12	8
250A	440	437	M18	8
300A	495	488	M18	8
350A	570	515	M18	8
400A	570	561	M18	8

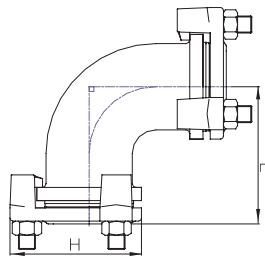
Unit: mm

90 Elbow (DL) - small



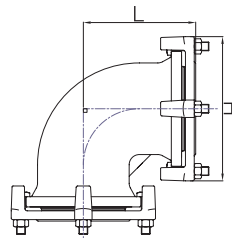
DN	L	H
16A	49	48
20A	56	55
25A	63	66
30A	72	74
35A	72	74
40A	80	81
50A	92	96

90 Elbow (DL) - medium



DN	L	H
50A	119	110
65A	143	141
75A	141	156
100A	169	190

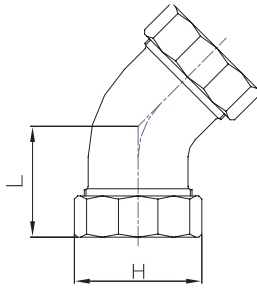
90 Elbow (DL) - large



DN	L	H
50A	119	110
65A	143	141
75A	141	156
100A	169	190

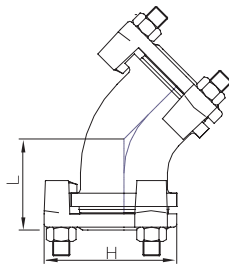
Impact-resistant water supply fitting

45 Elbow (45L) - small



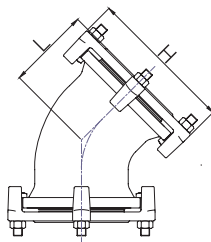
DN	L	H
16A	49	48
20A	50	55
25A	55	66
30A	62	74
35A	62	74
40A	68	81
50A	80	96

45 Elbow (45L) - medium



DN	L	H
50A	89	110
65A	93	141
75A	102	156
100A	120	190

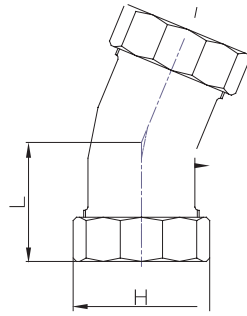
45 Elbow (45L) - large



DN	L	H
125A	167	252
150A	168	296
200A	200	351

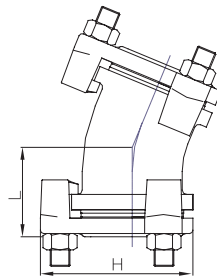
Unit: mm

22.5 Elbow (22L) - small



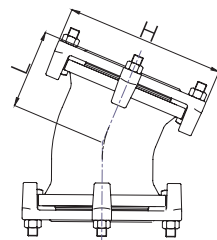
DN	L	H
25A	55	66
30A	62	74
35A	62	74
40A	68	81
50A	80	96

22.5 Elbow (22L) - medium



DN	L	H
50A	77	110
65A	79	141
75A	88	156
100A	93	190

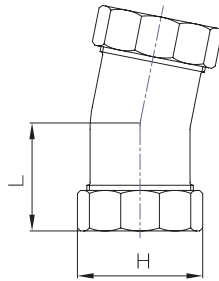
22.5 Elbow (22L) - large



DN	L	H
125A	142	252
150A	149	296
200A	171	351
250A	194	442
300A	209	496

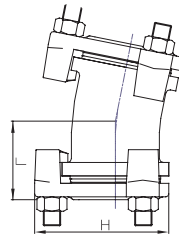
Impact-resistant water supply fitting

11.25 Elbow (11L) - small



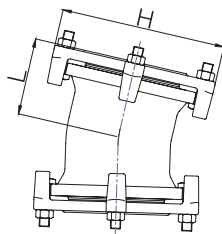
DN	L	H
50A	80	96

11.25 Elbow (11L) - medium



DN	L	H
65A	79	141
75A	88	156
100A	90	190

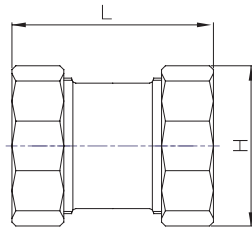
11.25 Elbow (11L) - large



DN	L	H
125A	127	252
150A	140	296
200A	160	351
250A	179	442
300A	193	496

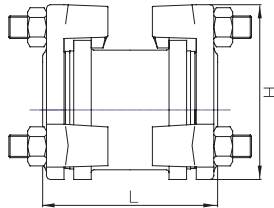
Unit: mm

Socket - small



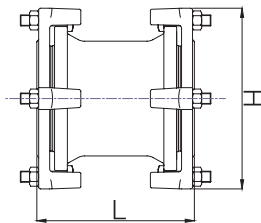
DN	L	H
16A	67	48
20A	75	55
25A	83	66
30A	90	74
35A	90	74
40A	97	81
50A	105	96

Socket - medium



DN	L	H
50A	144	110
65A	134	141
75A	156	156
100A	174	190

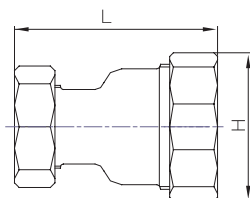
Socket - large



DN	L	H
125A	349	252
150A	262	296
200A	296	351
250A	328	442
300A	352	496

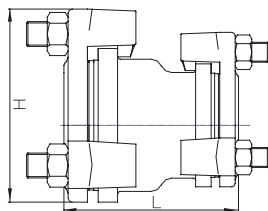
Impact-resistant water supply fitting

Reducer - small



DN	L	H
20 X 16A	75	55
25 X 16~20A	81	66
30 X 16~25A	88	74
35 X 16~25A	88	74
40 X 16~35A	95	81
50 X 16~40A	102	96

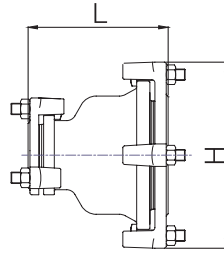
Reducer - medium



DN	L	H
75 X 50A	159	156
75 X 65A	155	156
100 X 50A	208	190
100 X 65A	192	190
100 X 75A	201	190
65 X 16~50A	144	141
75 X 16~50A	155	156
100 X 16~50A	190	156

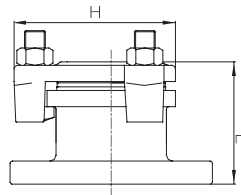
Unit: mm

Reducer - large



DN	L	H
125 X 75A	320	252
125 X 100A	285	252
150 X 75A	223	296
150 X 100A	228	296
150 X 125A	289	296
200 X 100A	266	351
200 X 125A	392	351
200 X 150A	279	351
250 X 100A	550	442
250 X 150A	454	442
250 X 200A	357	442
300 X 150A	558	496
300 X 200A	461	496
300 X 250A	368	496

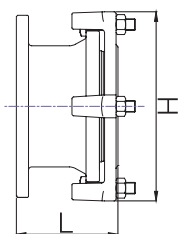
Flange Socket - medium



DN	L	H
50A	107	110
65A	103	141
75A	118	156
100A	137	190

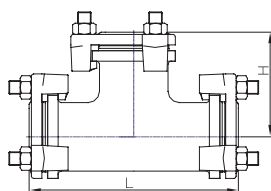
Impact-resistant water supply fitting

Flange Socket - large



DN	L	H
125A	227	252
150A	161	296
200A	173	351
250A	189	442
300A	201	496

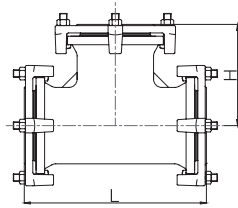
Tee - medium



DN	L	H
50A	238	119
65A	274	137
75A	282	141
100A	350	169

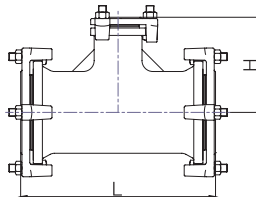
Unit: mm

Tee - large



DN	L	H
125A	409	202
150A	447	224
200A	542	271
250A	639	317
300A	708	354

Reducing Tee - large



DN	L	H
125 X 75A	399	192
125 X 100A	404	197
150 X 75A	364	199
150 X 100A	392	204
200 X 75A	396	229
200 X 100A	424	234
200 X 150A	470	261
200 X 75A	465	290
250 X 100A	470	298
250 X 150A	543	289
250 X 200A	585	310
300 X 75A	472	300
300 X 100A	477	308
300 X 150A	534	324
300 X 200A	592	332
300 X 250A	650	345

Double wall PVC pipe (DC)

07

Features

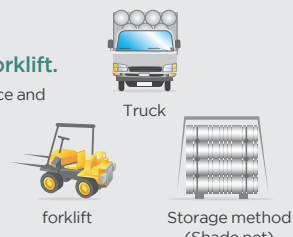
- Suitable for sewer maintenance project and enables easy maintenance.
- Excellent durability and semi-permanent useful life. • High strength against external pressure.
- Easy to carry, handle and install with light weight. • Low deformation with double wall structure.
- Excellent and semi-permanent water tightness with EPDM rubber ring.

Applications

- Storm water pipeline and waste water pipes for public sewerage.
- Storm water pipeline and waste water pipes for apartments.
- Intercepting channel for sewage treatment plant.

Construction method

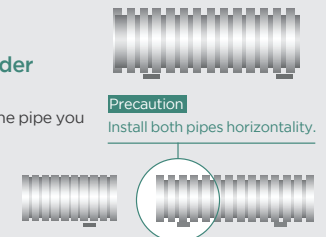
01
Lower the pipes with a forklift.
Install the pedestal on a flat surface and lower it with a forklift at once.



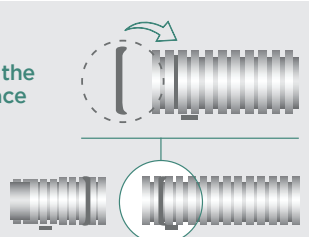
Truck
forklift
Storage method (Shade net)

02
Install a pedestal under the pipe.
Install the pedestal under the pipe you want to connect to.

Precaution
Install both pipes horizontally.




03
Put the rubber ring in the second concave surface of pipe.



04
Lubricate the inside of the socket and rubber ring.
Wipe the inside of socket and rubber ring and apply enough lubricant.

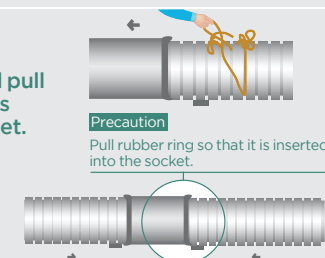
Precaution
Be careful not to get foreign substances.



05
Connect the rope and pull rubber ring so that it is inserted into the socket.

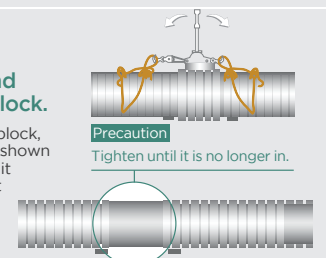
Precaution
Pull rubber ring so that it is inserted into the socket.

* If a black insertion line not marked on the cut pipe, mark it and construct it.



06
Connect the pipe and socket using lever block.
Make sure to use the lever block, connect it with the rope as shown in the picture, and connect it completely by pulling it left and right.

Precaution
Tighten until it is no longer in.

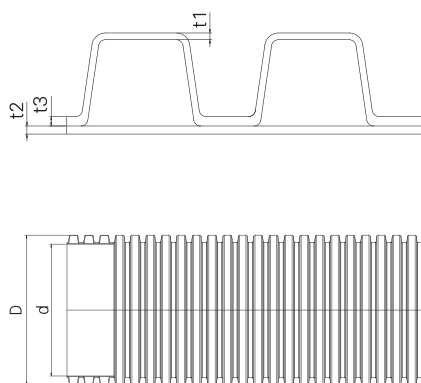


Precautions

- It is used for burying under non-pressure conditions and in principle, the pressure in use does not exceed 0.04 MPa.
- When buried, sand shall be used and stones, logs, etc. not be directly in contact with the pipe. • Don not screw directly into the pipe.
- It is prohibited to use it for any purpose other than those prescribed.

Double wall pipe (DC)

Unit: mm

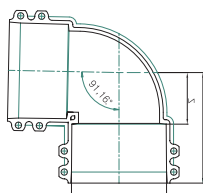


DN	Outer diameter (D)		Min. Thickness (t)			Typ. Inner diameter (d)	Normal length
	Typ.	Tolerance	Outer wall(t1)	Inner wall(t2)	(t3)		
150	181	±0.90	0.70	1.00	1.80	155	6,000
200	239	±0.90	0.90	1.10	2.20	210	6,000
250	296	±1.20	1.00	1.50	2.80	257	6,000
300	356	±1.35	1.30	1.70	3.40	305	6,000
400	460	±1.80	1.40	2.30	3.60	397	6,000

* Normal length of pipe is 6m and tolerance is ±30mm.

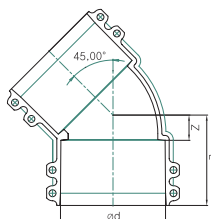
Double wall PVC DC fitting

90 Elbow (DDLA)



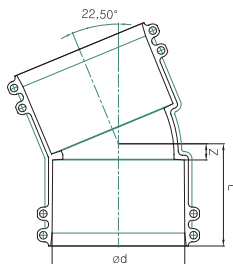
DN	Z	L	Ød
150	102	221	185

45 Elbow (D45LA)



DN	Z	L	Ød
150	47	167	185
200	59	199	243
250	71	221	300

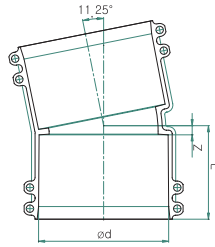
22.5 Elbow (D22LA)



DN	Z	L	Ød
150	25	146	185

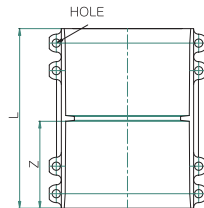
* Tolerance of 'L': $\pm 2\text{mm}$ / Unit: mm

11.25 Elbow (D11LA)



DN	Z	L	Ød
150	16	132	185

Socket (DDSA)

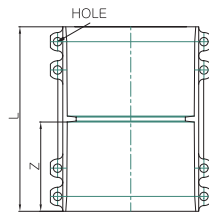


DN	Z	L	HOLE
150	120	248	10.5
200	140	288	10.5
250	150	308	12.5
300	175	360	12.5
400	210	430	12.5

* The shape and specifications of the product can be changed without prior notice to improve the quality and performance.

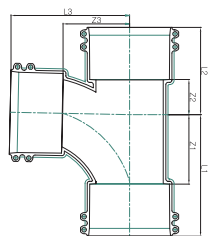
Double wall PVC DC fitting

Transparent Socket



DN	Z	L	HOLE
150	120	248	10.5
200	140	288	10.5
250	150	308	12.5
300	175	360	12.5
400	210	430	12.5

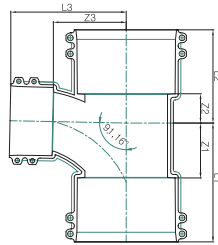
YT (DSTA)



DN	Z1	Z2	Z3	L1	L2	L3
150	160	81	155	280	201	275
200	189	101	185	329	241	325

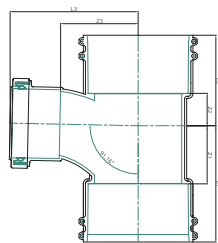
* Tolerance of 'L': $\pm 2\text{mm}$ / Unit: mm

Reducer YT (DSTA)



DN	Z1	Z2	Z3	L1	L2	L3
150X100	105	53	135	225	173	215
200X150	162	75	171	302	215	291
250X150	155	75	196	306	225	316
300X150	161	75	231	336	250	351

Reducer YT (DSTA, DC200-VG150)



DN	Z1	Z2	Z3	L1	L2	L3
200X150	140	78	189	280	217	309

* The shape and specifications of the product can be changed without prior notice to improve the quality and performance.

02

Certification of Dury Chemical



Certification





사 업 자 등록 증명서
Certificate of Business Registration
(법인사업자)

발행번호: 3997-004-2043-271
신고번호: 193-01-05343
주인명: 최백규
주소: 경상남도 김해시 장림면 장림대로 830-90
등록일자: 1984년 07월 05일 (1984년 07월 05일 27일(Day))
업종: 화학업/제조
제조업/제조
제조업/제조
제조업/제조

주인명: 최백규 (Choi Baek-gyu)
주인(사업자)등록번호: 100111-0070090

국세청 (National Tax Service)

Certificate of Business Registration

Document confirmation number : 1580-7400-0007-5071 (Person of request : Dury Chemical)

Plant Registration Certificate (Application) Form

Attachment Period of 2nd Quarter of 2020 (Application 2021.10.16)

Application Number: 100111-0070090
Registration Date: 1984-07-05
Processing Date: 2021-10-16
Invoice No:

Name of Company: Dury Chemical Co., Ltd. | Phone Number: 055-323-7333
Applicant: Name of CEO: 최백규 | Date when incorporated/registered: 1984-07-05
Address of CEO (Location of company): Gyeongnam Ginnhae city Sanglimmyeon Sanglimmyeon 826-90

Location of Plant: Gyeongnam Ginnhae city Sanglimmyeon Sanglimmyeon 826-90
Business type of Plant (classification number): Plastic, vint. lat. pipe and hose production (2271)

Area of Site: 24,244.00 m² | Manufacturing Facilities: 12,000.00 m² | Other Facilities: 463.21 m²

Registration Condition: Change of registration, and change of stated content such as extension (expired date and content) (Approval of business type change) registration date: 2013-7-05

I hereby apply for a Plant Registration Certificate in accordance with Article 22-5 of the Industrial Cluster Development and Factory Establishment Act.
Date when 11, 2021

Applicant: Dear Ginnhae mayor
Dury Chemical (signature or stamp)

Comparison of original (Red stamp)

Received document: No Required | Service Charge: 1,500 Won

I hereby certify that the above plant is registered in accordance with Article 10 of the Industrial Cluster Development and Factory Establishment Act.
Date when 11, 2021

Ginnhae mayor (Signature and stamp)

Issued on 11/16/2021

Confirmation number: 1580-7400-0007-5071

Plant Registration Certificate

Certificate No : KQS 5441

QUALITY MANAGEMENT SYSTEM CERTIFICATE

DURY CHEMICAL CO., LTD.

826-90 SANGNAM-DAERO, SANGNAM-MEON, GINHAE-SI, GYONGNAM-DO, 50600, KOREA

This is to certify that organization above has been audited and registered by KTR-CC for the SCOPE described as follows:

QUALITY MANAGEMENT SYSTEM STANDARD
ISO 9001:2015 / KS Q ISO 9001:2015

SCOPE :

DESIGN & DEVELOPMENT AND MANUFACTURE OF UNPLASTICIZED POLYVINYL CHLORIDE PIPES FOR GENERAL SERVICE UNPLASTICIZED POLYVINYL CHLORIDE PIPES FITTING FOR DRAIN UNPLASTICIZED POLYVINYL CHLORIDE PIPES FOR WATER SUPPLY RISE UNPLASTICIZED POLYVINYL CHLORIDE PIPE FITTINGS FOR WATER SUPPLY LOW NOISE CONTROL UNPLASTICIZED POLYVINYL CHLORIDE PIPE FITTINGS LOW NOISE CONTROL UNPLASTICIZED POLYVINYL CHLORIDE PIPE FITTING(S) HIGH IMPACT UNPLASTICIZED POLYVINYL CHLORIDE PIPE FOR SEWERAGE UNPLASTICIZED POLYVINYL CHLORIDE PIPE FITTING FOR SEWERAGE UNPLASTICIZED POLYVINYL CHLORIDE INSPECTION CHAMBERS FOR SEWERAGE STRUCTURED-WALL POLYVINYL CHLORIDE PIPE FOR NON-PRESSURE UNDERGROUND DRAINAGE AND SEWERAGE DOUBLE-WALL CORRUGATED PIPE ERM AND ERM HOENGAUWAN HORNIGHT BURNHAM

EXCLUDED REQUIREMENT [NONE]

Valid Until : MARCH 30, 2024
Registered Date : MARCH 11, 2000
Issued Date : MARCH 05, 2021

KTR CERTIFICATION CENTER
#501, 646-30, Hoso-ro, Iсандong-gu, Goyang-si, Gyeonggi-do, Korea
Tel : 82-2-2093-3450/82-70-4010-6981 Web : www.ktrcc.co.kr

SINCE 1995 KTR-CC KAS KAS-KC-07 IAF

This certificate remains the property of KTR-CC. This certificate is accredited by KAB which is IAF MLA joined corporation. If not received further management audit within a given period, this certificate will be canceled.

Quality Management System Certificate

Identification number R5112-0417

Confirmation certificate of technology innovation type small and medium business (INNO-BIZ)

Name of company : Dury Chemical Co. Ltd.
CEO : Choi Baek Gyu
Location : Gyeongnam Ginnhae city Sanglimmyeon Bonglimli 404
Class : A
Expiration date: 2020. 8. 16 ~ 2023. 8. 15

The company above is confirmed to be a technology innovation type small and medium business which was selected by small and medium business discovery promotion program.

① 1, 8. 5 "Retraiture of expiration date renewal"

Comparison of original (Red stamp)

August 5, 2020

Head of Small and Medium Business Administration (Signature and stamp)

INNO-BIZ



Certificate of Sanitation Safety Standard
(KCW-2011-0118)



Certificate of Sanitation Safety Standard
(KCW-2011-0119)



KS M 3401
(2019)



KS M 3402
(2019)



Certificate



Certificate of product authorization

Authorization number: 96-01-002
Company name: Dury Chemical Co. Ltd.
CEO: Choi Baek Gyu
Location of plant: 826-90, Sanglimdaero, Sanglimmyeon, Gimhae city, Gyeongnam

Product for authorization

Standard name: Rigid Polyvinyl pipe for general purpose
Standard number: KS M 3404
Type-Class or Title
 Hard polyvinyl chloride pipe(VG2 : 35-300mm),
 Shock withstand hard polyvinyl chloride pipe(VG1 : 16-300mm). End.



As a result of authorization test in accordance with clause 1 of article 17 of law for industrial standardization, because it is appropriate to Korean Standard(KS) and authorization test, this certificate authorize this product to be fit to Korean Standard(KS) in accordance with article 15 of law for industrial standardization.

January 8 2019

Chairman of Korea Standard Association



1. Initial certification date: 1996.01.15
 2. Final alteration date: 2020.01.08

KS M 3404
(2019)



Certificate



Certificate of product authorization

Authorization number: 3227
Company name: Dury Chemical Co. Ltd.
CEO: Choi Baek Gyu
Location of plant: 826-90, Sanglimdaero, Sanglimmyeon, Gimhae city, Gyeongnam

Product for authorization

Standard name: Rigid Polyvinyl chloride seamed pipe for drainage
Standard number: KS M 3410
Type-Class or Title
 90° elbow(35-150mm), 45° elbow(50-150mm), 90° heavily bent Y(50-100mm), 90° heavily bent Y with different diameters(65X50-150X100mm), 90° Y(50-100mm), socket(50-150mm), increaser(65X50-100X75mm), 45° Y(50-125mm), two 90° heavily bent Y with different diameters(100X75mm), two 90° heavily bent Y(75-100mm), 45° Y with different diameter(75X50-125X100mm), 90° Y with different diameter(65X50-100X75mm). End.



As a result of authorization test in accordance with clause 1 of article 17 of law for industrial standardization, because it is appropriate to Korean Standard(KS) and authorization test, this certificate authorize this product to be fit to Korean Standard(KS) in accordance with article 15 of law for industrial standardization.

January 8 2019


Chairman of Korea Standard Association



1. Initial certification date: 1983.10.10
 2. Final alteration date: 2020.01.08


KS M 3410
(2019)





Standard indication certificate of Korea PVC pipe association

1. Certificate number: 039
2. Company name: Dury Chemical Co, Ltd.
3. Name of CEO: Choi Baek Gyu
4. Location of plant: 826-90, Sanglimdaero, Sanglimmyeon, Gimhae city, Gyeongnam
5. Standard indication product
 - A. Standard name: Rigid Polyvinyl chloride pipe for sewer for impact resistance
 - B. Standard number: KPPS M 306
 - C. Type class: straight pipe (HVG-, HVGa) collar pipe (HVG-SRA)
 - D. Diameter of item (minimum-maximum): HVG-, HVGa - (100-300) HVG-SRA (100-300)



As a result of verification test defined by article 12 of organization standard certification business regulation, because it is appropriate to certification test standard and Korea polyvinyl chloride pipe association standard, it approves Korea polyvinyl chloride pipe association standard indication by regulation of article 9 of organization standard certification business regulation.

December 24, 2019

Chairman of Korea PVC pipe industry cooperation association



KPPS M 306





Standard indication certificate of Korea PVC pipe association

1. Certificate number: 109
2. Company name: Dury Chemical Co, Ltd.
3. Name of CEO: Choi Baek Gyu
4. Location of plant: 826-90, Sanglimdaero, Sanglimmyeon, Gimhae city, Gyeongnam
5. Standard indication product
 - A. Standard name: Rigid Polyvinyl chloride small manhole for sewer
 - B. Standard number: KPPS M 305
 - C. Type class: 45° bent elbow (left) (45L-left) - for attachment
 - D. Diameter of item (minimum-maximum): 45L-left (300)



As a result of verification test defined by article 12 of organization standard certification business regulation, because it is appropriate to certification test standard and Korea polyvinyl chloride pipe association standard, it approves Korea polyvinyl chloride pipe association standard indication by regulation of article 9 of organization standard certification business regulation.

December 24, 2019

Chairman of Korea PVC pipe industry cooperation association



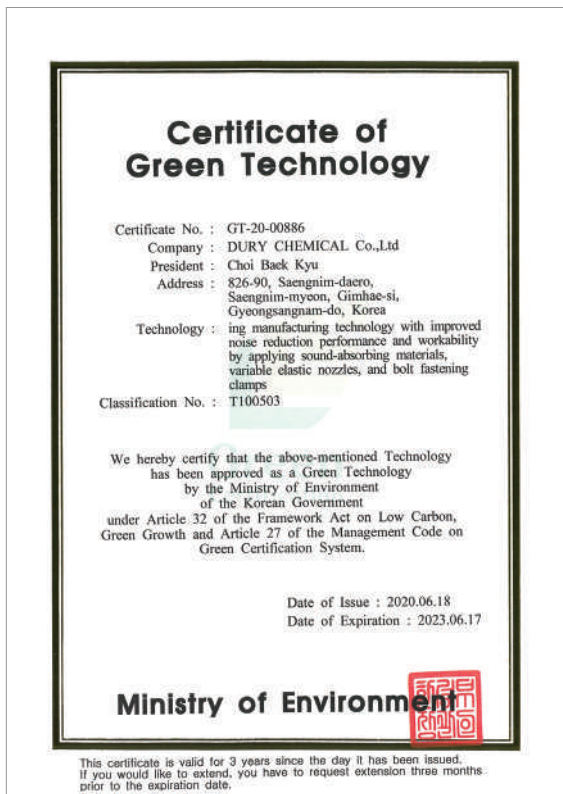
KPPS M 305



KPPS M 303



KPPS M 302



Certificate of Green Technology

DURY CHEMICAL

GLOBAL LEADER COMPANY DURY CHEMICAL



DURY CHEMICAL

H.Q. & Factory

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