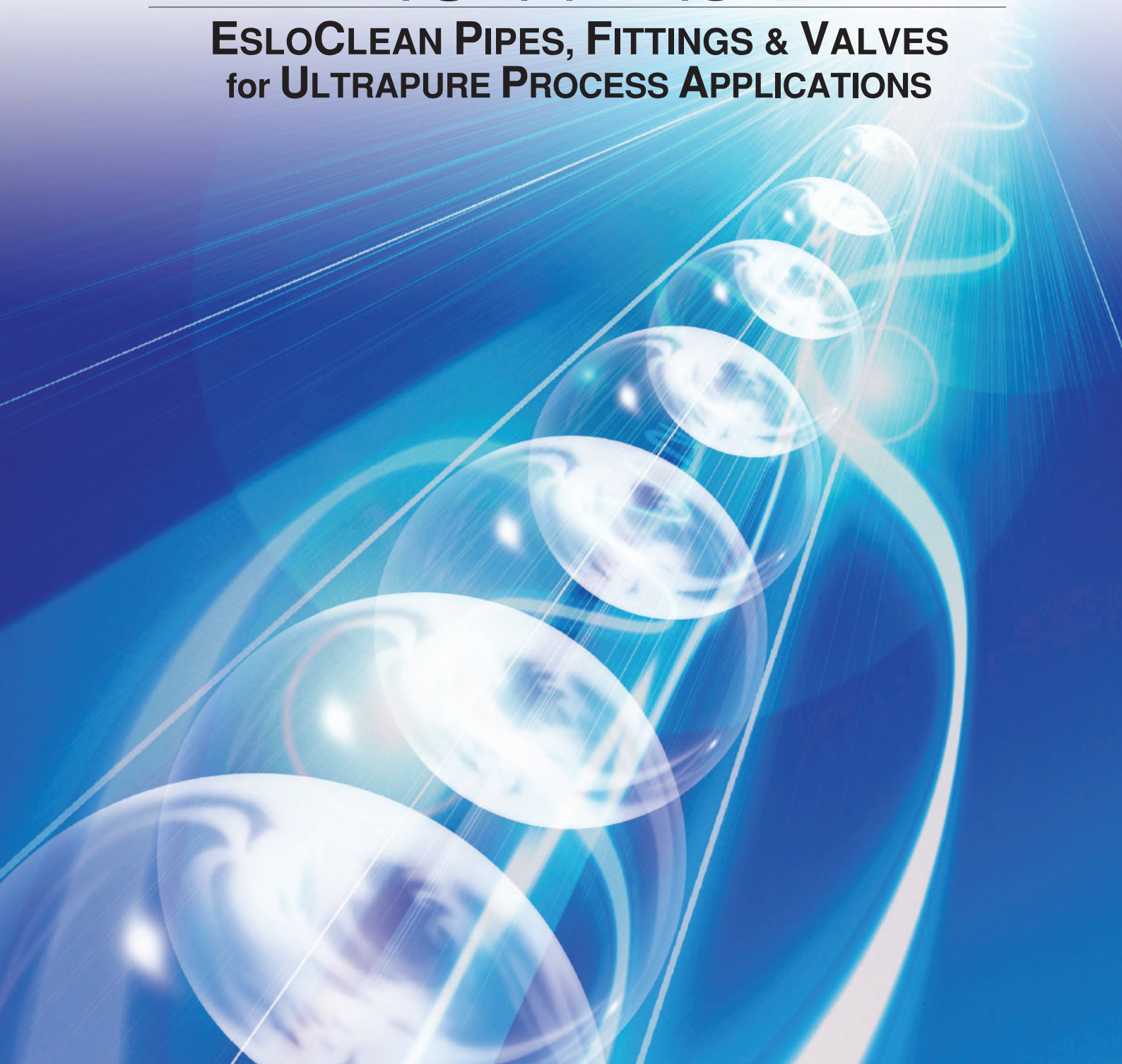


**에슬론<sup>®</sup> 크린 파이프 시스템**  
**ESLON<sup>®</sup> CLEAN PIPE SYSTEM**

**초순수용 파이프·피팅·밸브**

**ESLOCLEAN PIPES, FITTINGS & VALVES**  
**for ULTRAPURE PROCESS APPLICATIONS**





# 고도의 크린이 요구되는 흐름을 확실하게 유지시켜주는 에슬론® 크린 파이프 시스템 Absolutely suitable for a requirement of High Purity System Eslon® Clean Pipe System

일본의 반도체 산업이 대 약진을 이룬 1980년대는 VLSI의 미세화 기술이 현저하게 발전했고, 그 제조 공정의 세정용수로서 불순물이 아주 적은 초순수가 일반적으로 사용되었습니다.

그에 따라 초순수를 운송하는 배관재도 중금속이나 TOC용출이 저극히 적고, 더욱이 생균의 번식을 막기 위해 내면평활도가 높은 소재가 요구되었습니다.

이러한 고객의 요구에 부응하여 당사는 1984년 세계의 선두로 에슬론 크린 파이프를 개발했고, 그 후 열살균용으로써 내열성을 부여한 HT에슬론 크린 파이프 개발에 이어, 시스템의 신뢰를 향상시키기 위해 내충격성을 더욱 부여한 슈퍼 에슬론 크린 파이프를 개발하였습니다.

현재 세키스이 화학의 크린 배관재는 초미세화가 요구되는 반도체 산업뿐 아니라 FPD산업 등 초순수를 필요로 하는 첨단 산업에서도 많은 실적을 쌓으며 광범위하게 사용되고 있습니다. 이렇듯 초순수 분야에서 플라스틱 배관재 निर्마원 제조사인 당사는 고객의 다양한 요구에 부응하여 크린 파이프, 피팅, 밸브 등 다양한 제품을 생산하고 있습니다.

Since Japanese Semiconductor industry has made remarkable progress around 1980, the micro technology for VLSI requires ultra pure water, which has almost no contamination to rinse up the semiconductor manufacturing process, has become more in use.

In order to convey the ultra pure water, the piping and accessories are required to not cause any contamination such as heavy metal and TOC. Additionally, internal surface needs to be highly smooth to prevent any bacteria.

Sekisui Chemical is the world-wide pioneer to have developed and launched our product EsloClean Pipe to answer this requirement in 1984. Ever since then, "HT EsloClean Pipe", that has heat resistance ability for sterilization, and also "Super EsloClean Pipe", that has additional high impact resistance, have been developed.

Now, Sekisui EsloClean Pipes are widely in use for applications of not only semiconductor industry, but also other high technology industry, such as FPD industry, that requires ultra pure water.

As a market leader of plastic pipe product manufacturers, we have a great variety of pipes, fittings, and valves for all kinds of your high purity applications.

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크린 PVC 배관재  
Clean PVC & Fittings

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크린 밸브  
Clean Valves

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투명 PVC 배관재  
Clear PVC Pipe & Fittings

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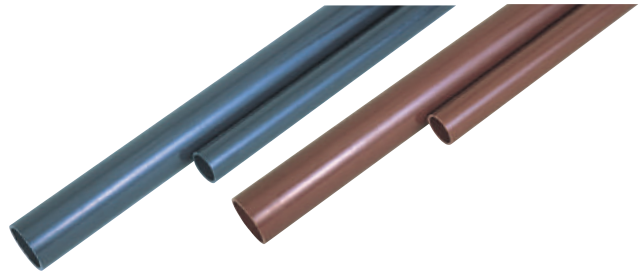
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시공  
Installation



# 에슬론 크린 파이프 시스템 **ESLON CLEAN PIPE SYSTEM**

에슬론 크린 파이프는  
용출 특성이 뛰어나고 경제적인  
초순수용 크린 배관재입니다.



**Eslon Clean Pipes & Fittings are Excellent in Super High Purity, Chemical Resistance and Lower Construction Cost.**

용도에 따라 2종류의 PVC 크린 파이프로 나누어 집니다. Two Kinds of PVC clean pipes are prepared according to the applications as follows.

명칭 Product Name	재질 Material	사이즈 Size	사용온도 Usable Temp.	최고허용압력 Max. working Pressure	접속방식 Joint	용도 Joining Method
슈퍼 에슬론 크린 파이프 Super Eslon Clean Pipe	HI-PVC 내충격성 경질염화비닐	13~300A	0~+60°C	1.0Mpa	TS접합 TS Socket	초순수 배관 Ultrapure Process
HT 에슬론 크린 파이프 HT Eslon Clean Pipe	HT(C-PVC) 내열성 경질염화비닐	13~150A	0~+90°C	1.0Mpa	소켓용착 Socket Fusion	초순수&열멸균 Ultrapure Process & Heat Sterilization

## 특징 Advantage

### ■ 독자적인 PVC 배합과 성형기술로 아주 적은 TOC와 금속 용출 달성

Extremely little elution of heavy metal or TOC, based on many proprietary technologies of PVC formulation and extrusion.

### ■ TOC와 금속 및 각종 이온 용출 성능 Elution of TOC and Heavy Metals

단위 Unit :  $\mu\text{g}/\text{m}^2 \cdot \text{day}$

명칭 Product Name	온도 Temperature	TOC	Ca	Mg	Na
슈퍼 에슬론 크린 파이프 Super Eslon Clean Pipe	상온 Room Temp	5.0	0.06	0.005	0.003
HT 에슬론 크린 파이프 HT Eslon Clean Pipe	상온 Room Temp	11.0	0.28	0.050	<0.003
	80°C	613.0	0.16	0.030	<0.003

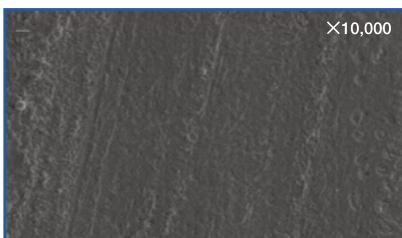
\*반도체기반기술연구회가 제정한 단관 봉수 시험법으로 8~30일간의 측정치 Data for 8~30 days by the UCT/Japan test method.

### ■ 배관 내면의 표면 조도는 평활해서 생균의 증식이나 오염을 방지합니다.

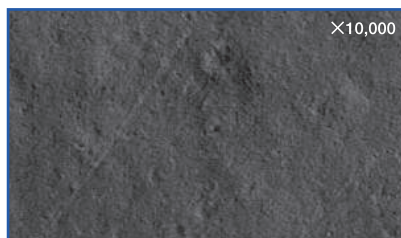
The pipe inside surface is finished very smooth like mirror, then it prevents proliferation and contamination.

파이프 사이즈 Pipe Size	13~150	200~300
표면 조도 Surface Roughness Rmax	$\leq 0.25\mu\text{m}$	$\leq 0.30\mu\text{m}$

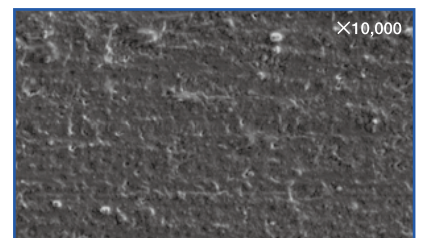
### ■ 전자현미경사진 Microscope photographs of the inside surface of EslonClean pipe



슈퍼 에슬론 크린 파이프  
Super Eslon Clean Pipe



HT 에슬론 크린 파이프  
HT Eslon Clean Pipe



일반 염화비닐관  
Ordinary U-PVC Pipe

### ■ 접착제를 사용하지 않는 열용착 접합을 할 경우 더 높은 용출 성능을 얻을 수 있습니다.

It reaches extremely less elution performance by the socket heat fusion joining, if it doesn't use the solvent cement in the jointing.

### ■ 내약품성, 내구성, 열적 성질이 뛰어납니다.

Excellent chemical resistance and mechanical properties.

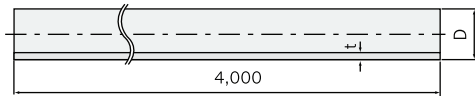
### ■ 선팽창계수가 PP나 PVDF의 1/2이므로, 열신축 처리가 용이합니다.

Since the linear expansion coefficient of EslonClean Pipe is 1/2 of PP or PVDF, counter measure for the heat expansion and contraction is easy.

# 파이프 PIPE

거린 PVC 배관재  
Clean PVC & Fittings

## 파이프 Pipe



### HI-PVC

단위 Unit : mm

호칭	Size	D	t	중량 weight (kg/m)
A	B			
13	3/8	18.0	2.5	0.170
16	1/2	22.0	3.0	0.251
20	3/4	26.0	3.0	0.303
25	1	32.0	3.5	0.439
30	1-1/4	38.0	3.5	0.531
40	1-1/2	48.0	4.0	0.774
50	2	60.0	4.5	1.098
65	2-1/2	76.0	4.5	1.415
75	3	89.0	5.9	2.156
100	4	114.0	7.1	3.338
125	5	140.0	7.5	4.370
150	6	165.0	9.6	6.561
200	8	216.0	11.0	9.918
250	10	267.0	13.6	15.157
300	12	318.0	16.2	21.504

치수는 JIS K 6741에 준함  
Dimensions are in accordance with JIS K 6741

### HT(C-PVC)

단위 Unit : mm

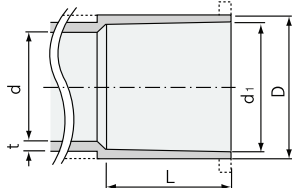
호칭	Size	D	t	중량 weight (kg/m)
A	B			
13	3/8	18.0	2.5	0.180
16	1/2	22.0	3.0	0.265
20	3/4	26.0	3.0	0.321
25	1	32.0	3.5	0.464
30	1-1/4	38.0	3.5	0.561
40	1-1/2	48.0	4.0	0.818
50	2	60.0	4.5	1.161
65	2-1/2	76.0	5.0	1.651
75	3	89.0	5.8	2.244
100	4	114.0	7.0	3.483
125	5	140.0	8.2	4.957
150	6	165.0	9.7	6.910

치수는 JIS K 6776에 준함  
Dimensions are in accordance with JIS K 6776

# 피팅 FITTINGS

거린 밸브  
Clean Valves

## 피팅 수구 공통 치수 Socket Dimension



● 65A 이상은 -의 형상입니다.  
The shape of the socket end in 65A and above is - as illustrated.

### HI-PVC

단위 Unit : mm

호칭	Size	D	t	d <sub>1</sub>	L	d
A	B					
13	3/8	24	3.0	18.40	26	13
16	1/2	29	3.5	22.40	30	16
20	3/4	33	3.5	26.45	35	20
25	1	40	4.0	32.55	40	25
30	1-1/4	46	4.0	38.60	44	31
40	1-1/2	57	4.5	48.70	55	40
50	2	70	5.0	60.80	63	51
65	2-1/2	87	6.6	76.60	61	67
75	3	102	8.0	89.60	64	77
100	4	130	10.0	114.70	84	100
125	5	157	11.0	140.85	104	125
150	6	186	13.0	166.00	132	146
※200	8	243	13.0	217.40	145	196
※250	10	300	14.5	268.60	175	242
※300	12	356	16.0	319.80	185	288

주1 : 치수는 JIS K 6743에 준함  
Note1 : Dimensions are in accordance with JIS K 6743  
※200~300A의 d<sub>1</sub>, L, D, t는 품종에 따라 다소 다르므로 승인도를 확인해 주십시오.  
Since there are some differences among types of fittings in their D, t, d<sub>1</sub> and L for 200~300A, confirm them in the approval drawing.

### HT(C-PVC)

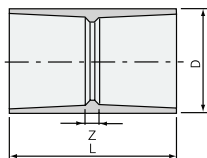
단위 Unit : mm

호칭	Size	D	t	d <sub>1</sub>	L	d
A	B					
13	3/8	26	3.5	18.30	22	14
16	1/2	29	3.5	22.35	27	17
20	3/4	34	4.0	26.35	33	21
25	1	41	4.0	32.50	38	26
30	1-1/4	46	4.5	38.50	42	34
40	1-1/2	56	4.5	48.50	47	40
50	2	69	5.0	60.50	52	50
65	2-1/2	91	6.1	76.70	70	68
75	3	106	7.0	89.70	75	78
100	4	134	9.4	114.85	94	102
125	5	166	10.4	140.80	104	125
150	6	189	12.2	166.00	132	146

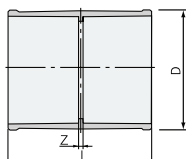
주1 : 치수는 JIS K 6777에 준함  
Note1 : Dimensions are in accordance with JIS K 6777

# 소켓 COUPLING

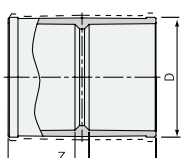
## 소켓 Coupling



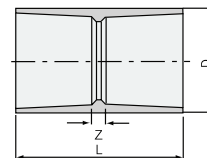
13~50



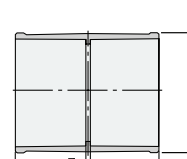
65~150



200~300



13~50



65~150

### HI-PVC

단위 Unit : mm

호칭	Size	D	L	Z	중량 weight (kg)
13	24	57	5	0.018	
16	29	67	7	0.028	
20	33	77	7	0.040	
25	40	87	7	0.061	
30	46	95	7	0.078	
40	57	117	7	0.142	
50	70	133	7	0.210	
65	87	145	23	0.366	
75	102	155	27	0.515	
100	130	200	32	1.077	
125	157	240	32	1.715	
150	186	300	36	2.846	
★ 200	243	300	10	3.450	
★ 250	300	384	34	6.660	
★ 300	356	408	38	8.860	

★200~300A 최고허용압력은 다음과 같습니다.  
Max.Working Pressure for 200~300A as below.  
사출성형품 HI-PVC only : 0.6MPa  
FRP보강품 Fiber Reinforced : 1.0MPa

### HT(C-PVC)

단위 Unit : mm

호칭	Size	D	L	Z	중량 weight (kg)
13	27.5	45.0	4.0	0.024	
16	31.0	56.0	5.0	0.033	
20	36.0	76.0	5.0	0.058	
25	42.0	86.0	5.0	0.077	
30	48.0	86.0	6.0	0.083	
40	58.0	97.0	6.0	0.142	
50	70.0	107.0	6.0	0.195	
65	87.0	145.0	6.0	0.298	
75	102.0	155.0	9.0	0.493	
100	130.0	201.0	12.0	1.102	
125	157.0	239.5	28.5	1.840	
150	186.0	295.5	28.5	3.068	

점선은 FRP보강품의 1.0MPa사양입니다.  
Dashed shape for Fiber Reinforced : 1.0MPa fitting.

투명 PVC 배관재  
Clear PVC Pipe & Fittings

기술자료  
Technical Data

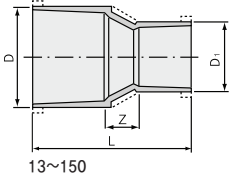
시공  
Installation

# 피팅 FITTINGS

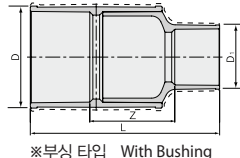
## 이경 소켓 Reducing Coupling



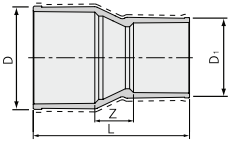
※부싱 타입



13~150



※부싱 타입 With Bushing



200~300

접선은 FRP보강품의 1.0MPa사양입니다.

Dashed shape for Fiber Reinforced : 1.0MPa fitting.

### HI-PVC

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	L	Z	중량 weight (kg)
16x13	29	24	61	5	0.024
20x13	33	24	68	7	0.031
20x16	33	29	71	6	0.036
25x13	40	24	86	20	0.046
25x16	40	29	85	15	0.048
25x20	40	33	84	9	0.053
30x13	46	24	95	25	0.058
30x20	46	33	93	14	0.060
30x25	46	40	93	9	0.071
40x20	57	33	113	23	0.095
40x25	57	40	114	19	0.110
40x30	57	46	114	15	0.118
50x25	70	40	140	37	0.180
50x30	70	46	136	29	0.167
50x40	70	57	136	18	0.185
65x50	87	70	149	25	0.336
75x50	102	70	165	38	0.450
75x65	102	87	159	38	0.487
100x75	130	102	190	42	0.890
125x100	157	130	229	41	1.531
150x100	186	130	295	79	2.348
150x125	186	157	272	36	2.369
★ 200x150	243	189	368	91	3.830
★※250x150	300	189	557	250	11.770
★ 250x200	300	243	400	80	5.900
★※300x150	356	189	605	288	13.970
★※300x200	356	243	601	271	15.920
★ 300x250	356	300	435	75	8.860

※부싱 타입 With Bushing

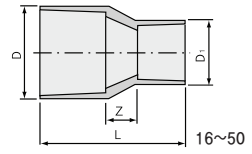
★200~300A 최고허용압력은 다음과 같습니다.

Max.Working Pressure for 200~300A as below.

사출성형품 HI-PVC only : 0.6MPa

FRP보강품 Fiber Reinforced : 1.0MPa

### A-I형 (A-I Type)



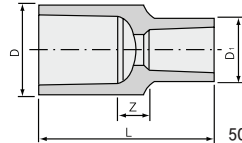
16~50

### HT(C-PVC)

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	L	Z	중량 weight (kg)
16x13	31	26	53.0	4.0	0.032
20x13	36	26	61.5	6.5	0.045
20x16	36	29	66.0	6.0	0.049
25x13	42	26	73.0	13.0	0.054
25x16	42	29	76.0	11.0	0.039
25x20	42	34	80.5	9.5	0.072
30x20	48	34	85.0	10.0	0.041
30x25	48	41	90.0	10.0	0.880
40x20	58	34	98.0	18.0	0.111
40x25	58	41	100.0	15.0	0.116
40x30	58	46	97.0	8.0	0.130
50x25	70	41	110.0	20.0	0.155
50x30	70	46	110.0	16.0	0.154
50x40	70	56	110.0	11.0	0.105

### A-II형 (A-II Type)



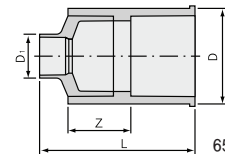
50~125

### HT(C-PVC)

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	L	Z	중량 weight (kg)
50x13	76	26	99	16	0.229
50x16	76	31	103	10	0.231
50x20	76	33	109	11	0.243
50x25	76	40	113	10	0.250
50x30	76	48	113	10	0.265
50x40	76	57	128	20	0.287
65x20	89	33	113	17	0.265
65x25	89	40	119	18	0.275
65x30	89	48	119	18	0.285
65x40	89	57	134	28	0.310
65x50	89	70	142	31	0.330
75x20	114	36	132	25	0.672
75x25	114	40	138	26	0.680
75x30	114	48	138	26	0.690
75x40	114	57	142	25	0.700
75x50	114	70	148	26	0.710
75x65	114	87	161	28	0.755
100x20	140	36	144	17	0.104
100x25	140	42	150	18	0.105
100x50	140	70	160	18	0.109
100x65	140	87	170	17	1.111
100x75	140	101	184	20	1.300
125x20	165	36	175	36	1.620
125x25	165	42	180	36	1.630
125x75	165	101	219	43	1.680
125x100	165	130	233	37	1.900

### B형 (B Type)



65~150

### HT(C-PVC)

단위 Unit : mm

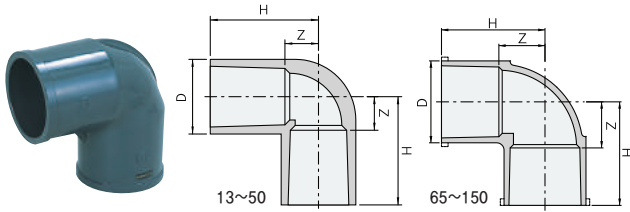
호칭 Size	D	D <sub>1</sub>	L	Z	중량 weight (kg)
65x13	87	28	144	55	0.527
65x16	87	31	154	55	0.529
100x30	130	42	246	114	1.792
100x40	130	48	251	114	1.802
125x50	157	70	288	126	2.949
125x65	157	88	293	120	2.951
150x20	186	36	338	169	4.688
150x25	186	42	343	169	4.698
150x75	186	102	381	168	4.748
150x100	186	131	396	168	4.968
150x125	186	158	407	169	5.068

# 피팅 FITTINGS

## 엘보 ELBOW

### 90° 엘보

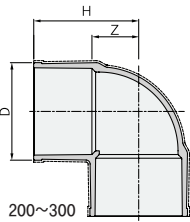
### 90° Elbow



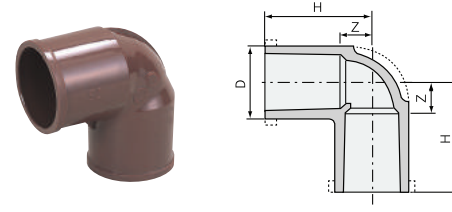
#### HI-PVC

단위 Unit : mm

호칭 Size	D	H	Z	중량 weight (kg)
13	24	36.0	10.0	0.022
16	29	43.0	13.0	0.036
20	33	52.0	15.0	0.050
25	40	60.0	18.0	0.076
30	46	67.0	21.0	0.105
40	57	82.0	27.0	0.201
50	70	99.0	33.0	0.309
65	87	110.0	49.0	0.536
75	106	125.0	56.0	0.803
100	134	155.0	71.0	1.653
125	157	187.0	83.0	2.760
150	189	229.0	98.0	4.584
★200	238	261.5	116.5	6.600
★250	289	317.8	142.8	10.800
★300	341	355.0	170.0	15.500



점선은 FRP보강품의 1.0MPa사양입니다.  
Dashed shape for Fiber Reinforced : 1.0MPa fitting.



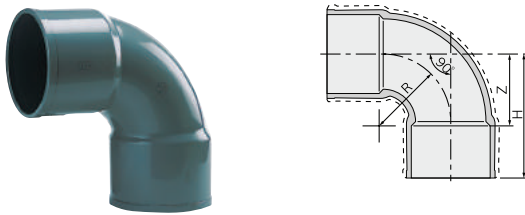
#### HT(C-PVC)

단위 Unit : mm

호칭 Size	D	H	Z	중량 weight (kg)
13	27.5	31.5	11.0	0.029
16	31.0	38.5	13.0	0.041
20	36.0	50.0	15.0	0.069
25	42.0	58.5	18.0	0.094
30	48.0	63.0	22.5	0.122
40	58.0	73.5	28.0	0.183
50	70.0	85.5	35.0	0.272
65	87.0	112.5	43.5	0.551
75	102.0	124.0	45.5	0.856
100	130.0	155.0	60.0	1.740
125	157.0	189.0	83.0	2.970
150	186.0	229.0	96.0	5.047

### 90° 밴드

### 90° Bend



#### HI-PVC

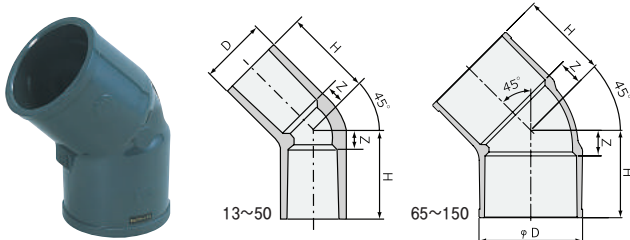
단위 Unit : mm

호칭 Size	H	Z	R	중량 weight (kg)
★200	341	196	196	7.370
★250	428	253	242	13.970
★300	441	256	242	19.690

점선은 FRP보강품의 1.0MPa사양입니다.  
Dashed shape for Fiber Reinforced : 1.0MPa fitting.

### 45° 엘보

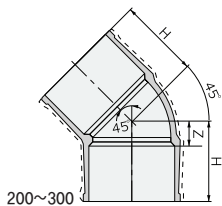
### 45° Elbow



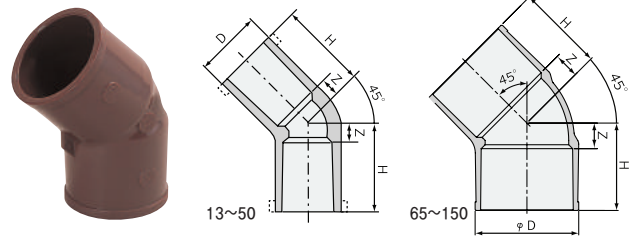
#### HI-PVC

단위 Unit : mm

호칭 Size	D	H	Z	중량 weight (kg)
13	24	36	10	0.018
20	33	44	9	0.039
25	40	51	11	0.065
30	46	56	12	0.078
40	57	69	14	0.133
50	70	81	18	0.245
65	87	94	33	0.460
75	102	98	34	0.660
100	130	123	39	1.262
125	160	149	44	1.700
150	190	184	51	3.120
★200	243	205	60	5.430
★250	300	254	79	8.760
★300	356	280	95	13.200



점선은 FRP보강품의 1.0MPa사양입니다.  
Dashed shape for Fiber Reinforced : 1.0MPa fitting.



#### HT(C-PVC)

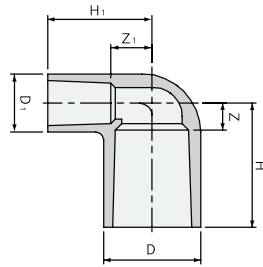
단위 Unit : mm

호칭 Size	D	H	Z	중량 weight (kg)
13	26	27	7	0.030
16	29	33	8	0.041
20	34	44	9	0.067
25	41	50	10	0.090
30	46	53	13	0.110
40	56	61	16	0.155
50	69	80	30	0.296
65	91	94	24	0.495
75	106	98	26	0.740
100	134	123	31	1.330
125	166	149	44	1.800
150	189	184	51	3.300

★200~300A 최고허용압력은 다음과 같습니다. Max.Working Pressure for 200~300A as below.  
사출성형품 HI-PVC only : 0.6MPa FRP보강품 Fiber Reinforced : 1.0MPa

# 피팅 FITTINGS

## 90° 이경 엘보 90° Reducing Elbow



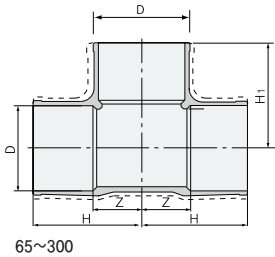
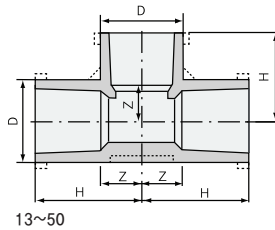
### HI-PVC

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	H	H <sub>1</sub>	Z	Z <sub>1</sub>	중량 weight (kg)
20x13	33	24	46	40	11	14	0.035
25x13	40	24	51	43	11	17	0.048
25x20	40	33	55	53	15	18	0.064

## TEE

### Equal Tee

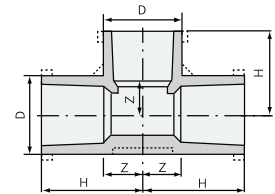


접선은 FRP보강품의 1.0MPa사양입니다.  
Dashed shape for Fiber Reinforced : 1.0MPa fitting.

### HI-PVC

단위 Unit : mm

호칭 Size	D	H	H <sub>1</sub>	Z	중량 weight (kg)
13	24	36	36	10	0.030
16	29	43	43	13	0.050
20	33	50	50	15	0.070
25	40	58	58	18	0.119
30	46	65	65	21	0.145
40	57	82	82	27	0.276
50	70	96	96	33	0.443
65	87	110	110	49	0.769
75	102	120	120	56	1.158
100	130	152	152	68	2.254
125	157	187	187	83	3.980
150	186	230	230	98	6.365
★ 200	243	267	267	122	7.940
★ 250	300	355	355	180	18.250
★ 300	356	410	375	225	29.530



### HT(C-PVC)

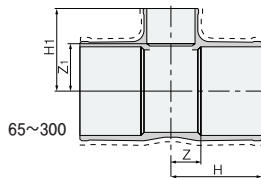
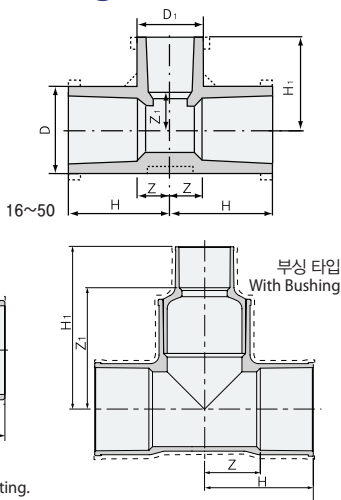
단위 Unit : mm

호칭 Size	D	H	Z	중량 weight (kg)
13	27.5	31.0	11	0.042
16	31.0	38.5	13	0.055
20	36.0	50.5	15	0.087
25	42.0	58.5	18	0.136
30	48.0	63.0	23	0.154
40	58.0	73.5	28	0.300
50	70.0	85.5	35	0.382
65	87.0	113.5	43	0.822
75	102.0	123.5	51	1.112
100	130.0	155.5	63	2.348
125	157.0	188.0	83	4.200
150	186.0	230.0	98	6.280



# 피팅 FITTINGS

## 이경 티 Reducing Tee



점선은 FRP보강품의 1.0MPa사양입니다.  
Dashed shape for Fiber Reinforced : 1.0MPa fitting.

## HI-PVC

단위 Unit : mm

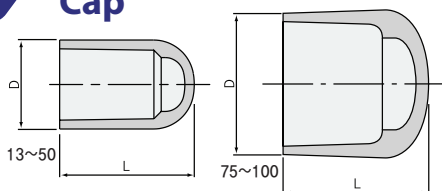
호칭 Size	D	D <sub>1</sub>	H	H <sub>1</sub>	Z	Z <sub>1</sub>	중량 weight (kg)
16x13	29	24	41	38	11	12	0.045
20x13	33	24	46	40	11	14	0.059
20x16	33	29	48	45	13	15	0.059
25x13	40	24	51	43	11	17	0.078
25x16	40	29	53	48	13	18	0.086
25x20	40	33	55	53	15	18	0.091
30x13	46	24	55	46	11	20	0.099
30x16	46	29	57	51	13	21	0.106
30x20	46	33	59	56	15	21	0.111
30x25	46	40	62	61	18	21	0.132
40x13	57	24	66	52	11	26	0.152
40x16	57	29	68	57	13	27	0.173
40x20	57	33	70	62	15	27	0.182
40x25	57	40	73	67	18	27	0.208
40x30	57	46	76	71	21	27	0.200
50x13	70	24	74	58	11	32	0.227
50x16	70	29	76	63	13	33	0.258
50x20	70	33	78	68	15	33	0.280
50x25	70	40	81	73	18	33	0.283
50x30	70	46	84	77	21	33	0.297
50x40	70	57	90	88	27	33	0.345
65x50	87	70	101	104	40	41	0.616
75x25	102	40	93	88	29	48	0.670
75x40	102	57	100	102	36	47	0.816
75x50	102	70	105	110	41	47	0.907
75x65	102	87	113	117	49	56	1.012
100x50	130	70	125	122	41	59	1.486
100x75	130	102	140	132	56	68	1.818
125x100	157	130	173	167	69	83	3.317
150x75	186	102	195	158	63	94	4.246
150x100	186	130	208	182	76	98	4.954
150x125	186	157	217	201	85	97	5.125
★ 200x100	243	134	218	200	73	116	5.920
★ 200x150	243	189	245	257	100	125	8.150
★※250x150	300	189	355	524	180	392	22.360
★ 250x200	300	243	355	335	160	190	15.620
★※300x150	356	189	375	561	190	429	29.840
★※300x200	356	243	410	599	225	454	36.590
★ 300x250	356	300	375	392	190	217	24.730

※부싱 타입 With Bushing

## 캡 CAP

### 캡

### Cap

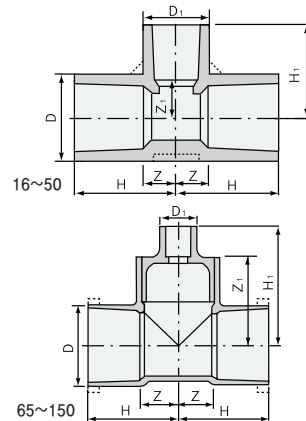


## HI-PVC

단위 Unit : mm

호칭 Size	D	L	중량 weight (kg)	호칭 Size	D	L	중량 weight (kg)
13	24	36.5	0.011	40	57	82.0	0.102
16	29	43.0	0.017	50	70	96.5	0.125
20	33	50.0	0.023	75	102	105.0	0.442
25	40	58.5	0.035	100	130	138.0	0.775
30	46	65.5	0.050				

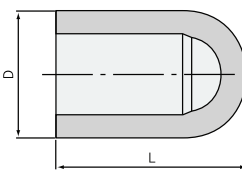
★200~300A 최고허용압력은 다음과 같습니다. Max.Working Pressure for 200~300A as below.  
사출성형품 HI-PVC only : 0.6MPa FRP보강품 Fiber Reinforced : 1.0MPa



## HT(C-PVC)

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	H	H <sub>1</sub>	Z	Z <sub>1</sub>	중량 weight (kg)
16x13	31	27.5	36.5	32.5	11.5	12.5	0.052
20x13	36	27.5	46.5	35.0	11.5	14.5	0.079
20x16	36	31.0	48.5	40.0	13.0	14.5	0.085
25x13	42	27.5	52.0	39.0	12.0	19.0	0.101
25x16	42	31.0	53.5	43.5	13.5	18.5	0.106
25x20	42	36.0	55.5	51.0	15.5	16.0	0.122
30x13	48	27.5	52.5	42.5	12.0	22.0	0.117
30x16	48	31.0	54.0	47.5	13.5	22.0	0.124
30x20	48	36.0	56.0	57.5	15.5	22.0	0.140
30x25	48	42.0	58.5	62.5	18.0	22.0	0.156
40x13	58	27.5	60.0	48.0	14.5	27.5	0.169
40x16	58	31.0	61.5	53.0	16.0	27.5	0.179
40x20	58	36.0	63.5	63.5	18.0	28.0	0.193
40x25	58	42.0	66.0	68.0	20.5	27.5	0.205
40x30	58	48.0	70.0	68.0	24.5	27.5	0.220
50x13	70	27.5	67.0	55.0	16.5	34.5	0.239
50x16	70	31.0	68.5	60.0	18.0	34.5	0.250
50x20	70	36.0	70.5	70.0	20.0	34.5	0.275
50x25	70	42.0	73.0	75.0	22.5	34.5	0.304
50x30	70	48.0	77.0	75.0	26.5	34.5	0.303
50x40	70	58.0	80.0	80.0	29.5	34.5	0.363
65x13	87	27.5	113.5	118.5	43.0	96.5	1.051
65x16	87	31.0	113.5	122.5	43.0	91.5	1.053
65x20	87	36.0	113.5	128.0	43.0	92.5	1.065
65x25	87	42.0	113.5	133.0	43.0	93.0	1.072
65x30	87	48.0	113.5	132.0	43.0	91.5	1.087
65x40	87	58.0	113.5	147.0	43.0	101.5	1.109
65x50	87	70.0	113.5	156.0	43.0	105.5	1.132
75x20	102	36.0	123.5	140.5	50.5	99.0	1.337
75x25	102	42.0	123.5	146.5	50.5	106.0	1.387
75x30	102	48.0	123.5	148.5	50.5	108.0	1.397
75x40	102	58.0	123.5	161.5	50.5	116.5	1.422
75x50	102	70.0	123.5	169.0	50.5	118.5	1.422
75x65	102	87.0	123.5	168.0	50.5	106.5	1.477
100x20	130	36.0	155.5	179.5	63.0	154.5	3.030
100x25	130	42.0	155.5	185.5	63.0	145.0	3.028
100x30	130	48.0	155.5	185.0	63.0	144.5	3.038
100x40	130	58.0	155.5	191.0	63.0	145.5	3.048
100x50	130	70.0	155.5	195.5	63.0	145.0	3.058
100x65	130	87.0	155.5	209.0	63.0	147.0	3.103
100x75	130	102.0	155.5	225.0	63.0	151.5	3.168
125x20	157	36.0	188.0	209.0	83.0	173.5	5.240
125x25	157	42.0	188.0	214.5	83.0	174.0	5.250
125x50	157	70.0	188.0	224.0	83.0	173.5	5.290
125x65	157	87.0	188.0	235.0	83.0	173.5	5.310
125x75	157	102.0	188.0	247.0	83.0	173.0	5.500
125x100	157	130.0	188.0	267.0	83.0	174.5	5.600
150x20	186	36.0	230.0	247.0	98.0	211.5	7.900
150x25	186	42.0	230.0	251.5	98.0	211.0	7.910
150x75	186	102.0	230.0	290.0	98.0	210.5	7.960
150x100	186	130.0	230.0	305.0	98.0	211.0	8.180
150x125	186	157.0	230.0	315.5	98.0	211.0	8.280



## HT(C-PVC)

단위 Unit : mm

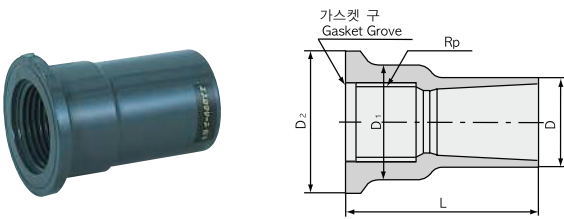
호칭 Size	D	L	중량 weight (kg)	호칭 Size	D	L	중량 weight (kg)
13	28	32.5	0.016	30	48	63.5	0.064
16	31	39.5	0.021	40	58	73.5	0.096
20	36	52.0	0.037	50	70	85.0	0.138
25	42	60.0	0.055				

# 피팅 FITTINGS

## 수전피팅 FAUCET FITTINGS

### 수전 소켓

### Faucet Socket



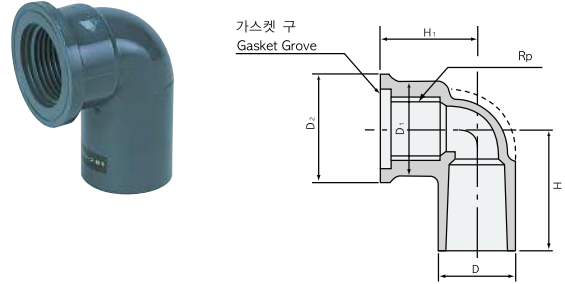
#### HI-PVC

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	D <sub>2</sub>	L	중량 weight (kg)
13xRp1/2	24	28	34	47	0.020
16xRp1/2	29	29	34	52	0.026
20xRp3/4	33	35	42	59	0.036
25xRp1	40	43	52	68	0.060

### 수전 엘보

### Faucet Elbow



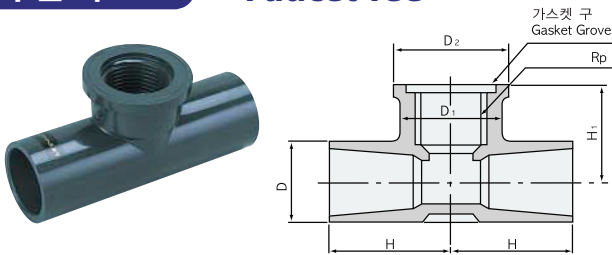
#### HI-PVC

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	D <sub>2</sub>	H	H <sub>1</sub>	중량 weight (kg)
13xRp1/2	24	28	34	38	29	0.025
16x13xRp1/2	29	29	34	43	32	0.034
20xRp3/4	33	35	42	51	36	0.050
25xRp1	40	43	52	59	40	0.082

### 수전 티

### Faucet Tee



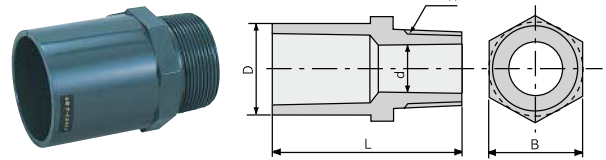
#### HI-PVC

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	D <sub>2</sub>	H	H <sub>1</sub>	중량 weight (kg)
13x13xRp1/2	24	28	34	38	29	0.036
20x13xRp1/2	33	28	34	47	34	0.070
20x20xRp3/4	33	35	42	51	36	0.115
25x25xRp1	40	43	52	59	42	0.060

### 벨브 소켓

### Male Adaptor



호칭 30이상은 8각형입니다.  
In nominal diameters 30A and above, the nut parts are shaped octagonal.

#### HI-PVC

단위 Unit : mm

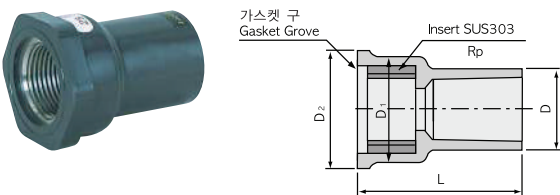
호칭 Size	D	d	L	B	중량 weight (kg)
13xR1/2	24	13	50	24	0.016
16xR1/2	29	13	54	29	0.023
20xR3/4	33	18	64	33	0.032
25xR1	40	23	71	40	0.047
30xR1 1/4	46	31	80	46	0.066
40xR1 1/2	57	37	92	57	0.100
50xR2	70	48	106	70	0.168
65xR2 1/2	87	63	119	91	0.272
75xR3	102	74	128	108	0.402
100xR4	130	96	157	135	0.765

## SUS 인서트 피팅 SUS INSERTED FAUCET FITTINGS

주 : 나사부는 JIS B 0203(배관용 테이퍼 나사)의 평행 암나사 또는 테이퍼 숫나사입니다.  
Note : The thread dimensions are in accordance with JIS B 0203.

### SUS 인서트 급수전 소켓

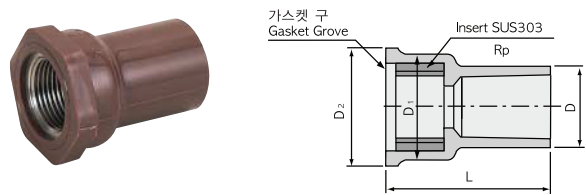
### SUS Inserted Faucet Socket



#### PVC

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	D <sub>2</sub>	L	중량 weight (kg)
13xRp3/8	27.5	34	35	46	0.030
13xRp1/2	27.5	34	35	46	0.030
16xRp3/8	31.0	34	35	52	0.033
16xRp1/2	31.0	34	35	52	0.033
20xRp1/2	36.0	42	44	63	0.061
20xRp3/4	36.0	42	44	63	0.061
25xRp1	42.0	52	54	72	0.084



#### HT(C-PVC)

단위 Unit : mm

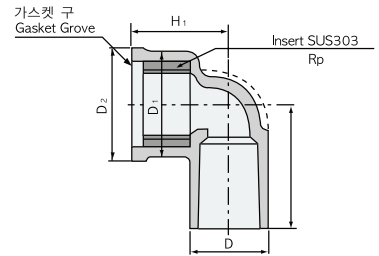
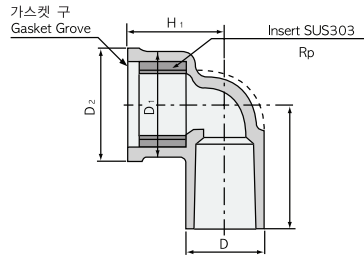
호칭 Size	D	D <sub>1</sub>	D <sub>2</sub>	L	중량 weight (kg)
13xRp3/8	27.5	34	35	46	0.031
13xRp1/2	27.5	34	35	46	0.031
16xRp3/8	31.0	34	35	52	0.034
16xRp1/2	31.0	34	35	52	0.034
20xRp1/2	36.0	42	44	63	0.062
20xRp3/4	36.0	42	44	63	0.062
25xRp1	42.0	52	54	72	0.085

# 피팅 FITTINGS

크린 PVC 배관재  
Clean PVC & Fittings

## SUS 인서트 급수전 엘보

## SUS Inserted Faucet Elbow



### PVC

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	D <sub>2</sub>	H	H <sub>1</sub>	중량 weight (kg)
13xRp3/8	27.5	34	35	33	29	0.037
13xRp1/2	27.5	34	35	33	29	0.037
16xRp3/8	31.0	34	35	38	32	0.045
16xRp1/2	31.0	34	35	38	32	0.045
20xRp1/2	36.0	42	44	51	36	0.076
25xRp1	42.0	54	54	64	40	0.105

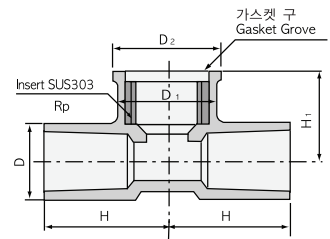
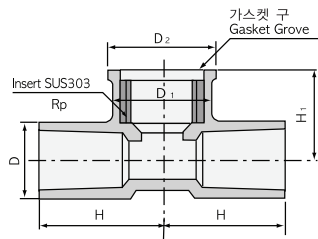
### HT(C-PVC)

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	D <sub>2</sub>	H	H <sub>1</sub>	중량 weight (kg)
13xRp3/8	27.5	34	35	33	29	0.038
13xRp1/2	27.5	34	35	33	29	0.038
16xRp3/8	31.0	34	35	38	32	0.046
16xRp1/2	31.0	34	35	38	32	0.046
20xRp1/2	36.0	42	44	51	36	0.077
25xRp1	42.0	54	54	64	40	0.106

## SUS 인서트 급수전 티

## SUS Inserted Faucet Tee



### PVC

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	D <sub>2</sub>	H	H <sub>1</sub>	중량 weight (kg)
13xRp3/8	27.5	34	35	34	29	0.048
13xRp1/2	27.5	34	35	36	32	0.048
16xRp3/8	29.0	33	34	43	32	0.049
16xRp1/2	29.0	33	34	43	32	0.049
20xRp3/8	33.0	33	34	48	34	0.066
20xRp1/2	33.0	33	34	48	34	0.066
25xRp3/8	40.0	33	34	53	38	0.085
25xRp1/2	40.0	33	34	53	38	0.085

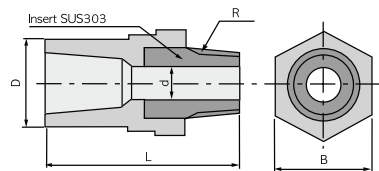
### HT(C-PVC)

단위 Unit : mm

호칭 Size	D	D <sub>1</sub>	D <sub>2</sub>	H	H <sub>1</sub>	중량 weight (kg)
13xRp3/8	27.5	34	35	34	29	0.049
13xRp1/2	27.5	34	35	36	32	0.049
16xRp3/8	29.0	33	34	43	32	0.049
16xRp1/2	29.0	33	34	43	32	0.049
20xRp3/8	33.0	33	34	48	34	0.066
20xRp1/2	33.0	33	34	48	34	0.066
25xRp3/8	40.0	33	34	53	38	0.085
25xRp1/2	40.0	33	34	53	38	0.085

## SUS 인서트 밸브 소켓

## SUS Inserted Male Adaptor



호칭 30이상은 8각형입니다.  
In nominal diameters 30A and above,  
the nut parts are shaped octagonal.

### HT(C-PVC)

단위 Unit : mm

호칭 Size	D	d	L	B	중량 weight (kg)
13xR1/2	27.5	13	64	34	0.031
16xR1/2	31.0	13	70	34	0.039
20xR3/4	36.0	18	86	40	0.061
25xR1	42.0	28	100	45	0.077
30xR1 1/4	48.0	31	109	62	0.136
40xR1 1/2	58.0	37	114	68	0.172
50xR2	70.0	48	132	84	0.300

크린 밸브  
Clean Valves

투명 PVC 배관재  
Clear PVC Pipe & Fittings

기술자료  
Technical Data

시공  
Installation



# 특수 피팅 에슬론 유니피트 ESLON "UNIFIT" COMPACT FITTINGS

## ① 풀 라인업 Easy Selection for Piping Design

에슬론 유니피트의 다양한 제품 라인업으로 에슬론 피팅이 더욱 충실해졌습니다. 이로써 지금까지 불가능했던 배관 설계가 가능하게 되어 설계의 자유도가 향상되었습니다. ESLON Compact fittings & Header offer the easy selection for designer and installer. This will enable to make a new piping design that was impossible in the past.

## ② 컴팩트한 형상 Compact Fittings & Minimized Piping Space

당사의 독자적인 부싱 용착 방식으로 뛰어난 내압성과 용출성능(TOC, 중금속 등)을 가진 컴팩트한 피팅이기 때문에 배관 공간을 줄일 수 있습니다. ESLON Compact fittings & Header are compact and piping in a narrow place can be carried out. By adopting our original fusion method with bushings, these fittings have outstanding pressure resistance and elution performances(TOC, heavy metal, etc.).

## ③ 비용 절감 Easy Installation & Low Piping Cost

피팅 개수나 접속 개소가 저감되어 시공성을 큰 폭으로 개선할 수 있습니다. 따라서 시공을 포함한 총비용이 절감됩니다. ESLON Compact fitting & Header are easy to install by reducing number of fittings and jointing. These features lead to lower piping cost.

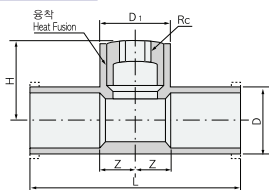
### 나사식 부싱 티

### Bushing Tee with Female Thread

#### T형 T-Type



PAT. No.1915097

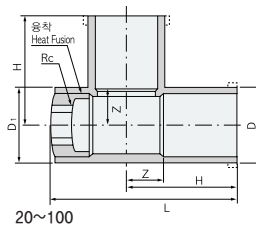


주 : 나사부는 JIS B 0203(배관용 테이퍼 나사)에 준합니다.  
Note : The thread dimensions are in accordance with JIS B 0203.

#### L형 L-Type



PAT. No.1915097



20~100

#### HI-PVC

단위 Unit : mm

호칭 Size	L	H	D	D <sub>1</sub>	Z	나사경 Thread Size
20	100	41	33	33	15	Rc 1/4 3/8
25	116	44	40	40	18	Rc 1/4 3/8 1/2
30	130	48	46	47	21	Rc 1/4 3/8 1/2 3/4
40	164	56	57	58	27	Rc 1/4 3/8 1/2 3/4 1
50	180	62	70	58	27	Rc 1/4 3/8 1/2 3/4 1
65	202	70	87	72	40	Rc 1/4 3/8 1/2 3/4 1
75	226	91	102	88	49	Rc 1/4 3/8 1/2 3/4 1
100	280	103	130	103	56	Rc 1/4 3/8 1/2 3/4 1
125	346	125	157	131	69	Rc 1/4 3/8 1/2 3/4 1
150	390	129	186	108	63	Rc 1/4 3/8 1/2 3/4 1
200	436	155	243	140	73	Rc 1/4 3/8 1/2 3/4 1

#### HI-PVC

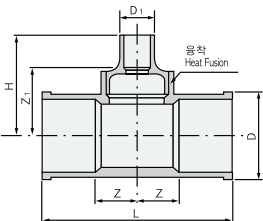
단위 Unit : mm

호칭 Size	L	H	D	D <sub>1</sub>	Z	나사경 Thread Size
20	91	50	33	33	15	Rc 1/4 3/8
25	102	58	40	40	18	Rc 1/4 3/8 1/2
30	113	65	46	47	21	Rc 1/4 3/8 1/2 3/4
40	138	82	57	58	27	Rc 1/4 3/8 1/2 3/4 1
50	158	96	70	71	33	Rc 1/4 3/8 1/2 3/4 1
65	194	110	87	88	49	Rc 1/4 3/8 1/2 3/4 1
75	211	120	102	101	56	Rc 1/4 3/8 1/2 3/4 1
100	262	152	130	131	68	Rc 1/4 3/8 1/2 3/4 1

### TS부싱 티

### Bushing Tee with TS Socket

#### T형 T-Type

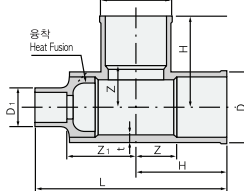


#### HI-PVC

단위 Unit : mm

호칭 Size	L	H	D	D <sub>1</sub>	Z	Z <sub>1</sub>
65x16		115		31		85
65x20		120		36		85
65x25	220.0	125	87	42	49.00	85
65x30		124		48		82
65x40		140		58		92
75x16		122		36		92
75x20	226.0	127	102	36	49.00	92
75x30		131		48		89
100x16		139		36		109
100x20		139		36		104
100x25		145		42		105
100x30	280.0	145	130	48	56.00	103
100x40		160		58		112
100x65		167		87		107
125x16		161		36		131
125x20		161		36		126
125x25		166		42		126
125x30	346.0	167	157	48	69.00	125
125x40		172		58		124
125x50		177		70		124
125x65		190		87		130
125x75		198		102		134
150x16		165		36		135
150x20		165		36		130
150x25		171		42		131
150x30	390.0	171	186	48	63.00	129
150x40		186		58		138
150x50		194		70		141
150x65		193		87		133
200x16		195		36		165
200x20		195		36		160
200x25		200		42		160
200x30	435.3	201	243	48	72.65	161
200x40		206		58		161
200x50		211		70		161
200x65		224		87		163
200x75		232		102		160

#### L형 L-Type



65x16~100x75

#### HI-PVC

단위 Unit : mm

호칭 Size	L	H	D	D <sub>1</sub>	Z	Z <sub>1</sub>
65x16	225			31		85
65x20	230			36		85
65x25	235	110	87	42	49	85
65x30	234			48		82
65x40	250			58		92
75x16	247			36		97
75x20	247			36		92
75x25	253			42		93
75x30	253	120	102	48	56	91
75x40	268			58		100
75x50	276			70		103
75x65	275			87		95
100x16	298			36		116
100x20	298			36		111
100x25	303			42		111
100x30	304			48		110
100x40	309	152	130	58	68	109
100x50	314			70		109
100x65	327			87		115
100x75	335			102		119

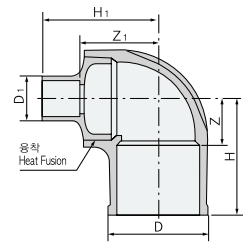
# 특수 피팅 에슬론 유니피트 ESLON "UNIFIT" COMPACT FITTINGS

## 샘플링 티 Sampling Tee



## 이경 엘보 Reducing Elbow

## 이경 엘보 Reducing Elbow



### HI-PVC

단위 Unit : mm

호칭 Size	L	H	D	Z	Rc	나사경 Thread Size
65	145	54	87	23	Rc	1/4 3/8
75	155	64	102	27	Rc	1/4 3/8
100	200	79	130	32	Rc	1/4 3/8
125	240	90	157	32	Rc	1/4 3/8 1/2
150	300	106	186	36	Rc	1/4 3/8 1/2

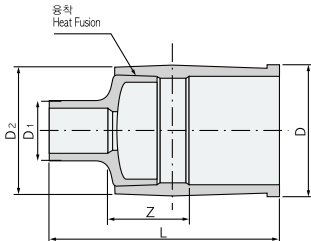
### HI-PVC

단위 Unit : mm

호칭 Size	D	D1	H	H1	Z	Z1
65x16		31		115		85
65x20		36		120		85
65x25	87	42	110	125	49	85
65x30		48		124		82
65x40		58		140		92
75x16		36		127		97
75x20		36		127		92
75x25		42		133		93
75x30	102	48	120	133	56	91
75x40		58		148		100
75x50		70		156		103
75x65		87		155		95
100x16		36		149		119
100x20		36		149		114
100x25		42		154		114
100x30	130	48	155	155	71	113
100x40		58		160		112
100x50		70		165		112
100x65		87		178		118
100x75		102		186		122

## 이경 소켓 Reducing Coupling

## 이경 소켓 Reducing Coupling



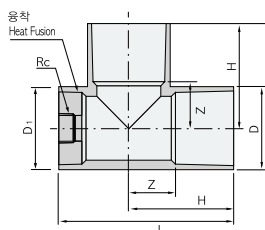
### HI-PVC

단위 Unit : mm

호칭 Size	L	D	D1	D2	Z
65x16	150		31		59
65x20	155		36		59
65x25	160	87	42	88	59
65x30	159		48		56
65x40	175		58		66
75x16	162		36		68
75x20	162		36		63
75x25	168	102	42	103	64
75x30	168		48		62
75x40	183		58		71
100x16	194		36		80
100x20	194		36		75
100x25	199		42		75
100x30	200	130	48	132	74
100x40	205		58		73
100x50	210		70		73
100x65	223		87		79

# 특수 피팅 에슬론 특수 티 ESLON "SPECIAL TEE" COMPACT FITTINGS

## L형 L-Type



### HI-PVC

단위 Unit : mm

호칭 Size	L	H	D	D1	Z	나사경 Thread Size
125	305	187	157	157	83	Rc 1/4 3/8 1/2 3/4 1
150	363	230	186	186	98	Rc 1/4 3/8 1/2 3/4 1
200	423	266	238	238	121	Rc 1/4 3/8 1/2 3/4 1

# 피팅 FITTINGS

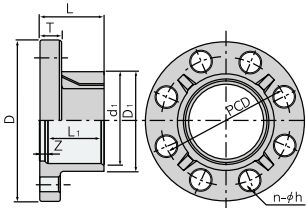
## 후랜지 FLANGE

후랜지 치수는 JIS B 2210에 준합니다.

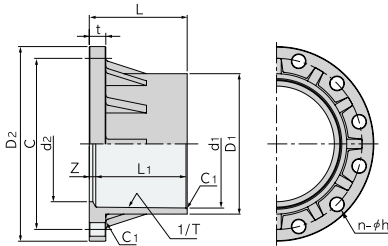
The flange dimensions are in accordance with JIS B 2210.

### TS 후랜지 JIS10K

### TS Flange JIS10K



13~150

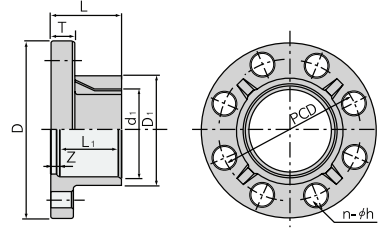


200~300

### HI-PVC

단위 Unit : mm

호칭	Size	d <sub>1</sub>	L <sub>1</sub>	D <sub>1</sub>	L	Z	PCD	D	T	n-φh	중량 weight (kg)
A	B										
13	3/8	18.4	26	26	31	5	65	90	14	4-15	0.120
15	1/2	22.4	30	31	35	5	70	95	14	4-15	0.130
20	3/4	26.5	35	35	40	5	75	100	14	4-15	0.150
25	1	32.6	40	42	45	5	90	125	14	4-19	0.235
30	1-1/4	38.6	44	48	50	6	100	135	16	4-19	0.310
40	1-1/2	48.7	55	61	61	6	105	140	16	4-19	0.360
50	2	60.5	63	73	70	7	120	155	20	4-19	0.520
65	2-1/2	76.5	61	88	70	9	140	175	22	4-19	0.710
80	3	89.6	64	102	72	8	150	185	22	8-19	0.745
100	4	114.7	84	132	90	6	175	210	22	8-19	1.140
125	5	140.9	104	158	114	10	210	250	24	8-23	1.670
150	6	166.0	132	186	142	10	240	280	26	8-23	2.530
200	8	217.5	155	238	166	11	290	330	28	12-23	3.540
250	10	269.0	185	289	198	13	355	400	30	12-25	5.470
300	12	319.0	185	344	203	18	400	445	32	16-25	8.000



13~150

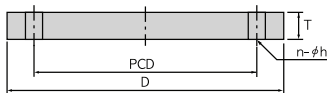
### HT(C-PVC)

단위 Unit : mm

호칭	Size	d <sub>1</sub>	L <sub>1</sub>	D <sub>1</sub>	L	Z	PCD	D	T	n-φh	중량 weight (kg)
A	B										
13	3/8	18	26	26	31	5	65	90	14	4-15	0.120
15	1/2	22	30	31	35	5	70	95	14	4-15	0.130
20	3/4	26	35	35	40	5	75	100	14	4-15	0.150
25	1	32	40	42	45	5	90	125	14	4-19	0.230
30	1-1/4	38	44	48	50	6	100	135	16	4-19	0.320
40	1-1/2	48	55	61	61	6	105	140	16	4-19	0.360
50	2	60	63	73	70	7	120	155	20	4-19	0.580
65	2-1/2	76	61	88	70	9	140	175	22	4-19	0.780
80	3	89	64	102	72	8	150	185	22	8-19	0.820
100	4	114	84	132	92	8	175	210	22	8-19	1.200
125	5	140	104	158	114	10	210	250	24	8-23	1.700
150	6	166	132	186	142	10	240	280	26	8-23	2.525

### 블라인드 후랜지

### Stop Flange JIS10K



### HI-PVC

단위 Unit : mm

호칭	Size	D	PCD	T	n-φh	중량 weight (kg)
A	B					
15	1/2	95	70	12	4-15	0.113
20	3/4	100	75	14	4-15	0.147
25	1	125	90	14	4-19	0.229
30	1-1/4	135	100	16	4-19	0.310
40	1-1/2	140	105	16	4-19	0.335
50	2	155	120	16	4-19	0.417
65	2-1/2	175	140	18	4-19	0.606
80	3	185	150	18	8-19	0.651
100	4	210	175	18	8-19	0.445
125	5	250	210	20	8-23	0.605
150	6	280	240	22	8-23	1.884
200	8	330	290	22	12-23	2.605
250	10	400	355	24	12-25	4.200
300	12	445	400	24	16-25	4.700

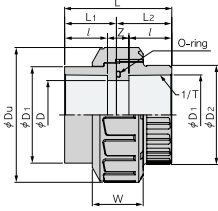


# 피팅 FITTINGS

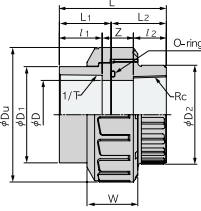
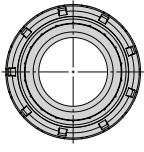
## 유니온 피팅 TRUE UNION

컴팩트 타입(TS 소켓, PVDF 변환피팅)

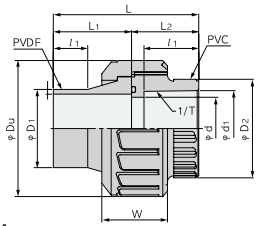
Compact Type(TS Socket, PVDF Transition Fitting)



TS 소켓  
TS Socket



나사 변환 피팅  
Thread Transition



PVDF 변환 피팅  
PVDF Transition

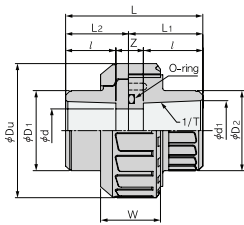
### PVC, HT(C-PVC)

단위 Unit : mm

호칭 Size		TS수구 TS Socket					나사 수구 Thread					융착 수구 Butt					L <sub>2</sub>	d	Du	D <sub>1</sub>	D <sub>2</sub>	W	오링 O-ring	
A	B	d <sub>1</sub>	I/T	Z	ℓ	L <sub>1</sub>	L	Rc	Z	ℓ <sub>2</sub>	L	D <sub>1</sub>	t	Z	ℓ <sub>1</sub>	L <sub>1</sub>								L
13	3/8	18.30	1/30	6	18	20	42±1.5	3/8	9.0	14	42±1.5	-	-	-	-	-	22	13	40	24	26	17	P-16	
16	1/2	22.30	1/37	8	22	25	52±1.5	1/2	15.0	17	52±1.5	20	1.9	8	31	50	77±1.5	27	15	46	30	32	20	P-20
20	3/4	26.30	1/42	9	25	28	59±1.5	3/4	18.0	21	59±1.5	25	1.9	9	31	50	81±1.5	31	20	54	35	37	23	P-24
25	1	32.33	1/44	9	29	32	67±1.5	1	13.0	23	67±1.5	32	2.4	9	26	50	85±1.5	35	25	67	43	45	28	P-30
30	1 1/4	38.43	1/37	12	32	36	76±1.5	1 1/4	11.0	28	76±1.5	40	2.4	12	22	50	90±1.5	40	31	78	53	55	31	P-36
40	1 1/2	48.46	1/38	12	35	39	82±1.5	1 1/2	18.5	30	82±1.5	50	3.0	12	22	50	93±1.5	43	40	87	61	63	42	P-46
50	2	60.56	1/34	16	38	43	92±1.5	2	21.0	32	92±1.5	63	3.0	16	22	50	99±1.5	49	51	107	76	78	43	P-58
65	2 1/2	76.60	1/38	18	45	52	108±1.5	2 1/2	31.0	32	108±1.5	-	-	-	-	-	56	65	128	90	93	50	P-71	
75	3	89.60	1/40	24	48	58	120±1.5	3	35.0	37	120±1.5	-	-	-	-	-	62	77	151	108	111	57	P-85	
100	4	114.70	1/42	36	58	72	152±1.5	4	49.0	45	152±1.5	-	-	-	-	-	80	100	185	132	136	72	P-112	

### 구형 볼밸브 호환 타입

### True Union Ball Valve (old type) Compatible Type



주 : 유니온 부품은 컴팩트 타입과 볼밸브 호환 타입의 규격이 다르므로 호환성이 없습니다.

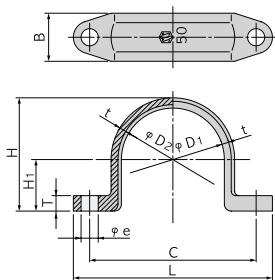
Note : Union parts are not compatible in compact type and true union ball valve compatible type.

### PVC, HT(C-PVC)

단위 Unit : mm

호칭 Size		TS수구 TS Socket			L	L <sub>1</sub>	L <sub>2</sub>	Z	d	Du	D <sub>1</sub>	D <sub>2</sub>	W	오링 O-ring
A	B	d <sub>1</sub>	I/T	ℓ										
16	1/2	22.3	1/37	22	59±1.5	29.0	30.0	13	16	49	33	31	24	P-20
20	3/4	26.3	1/42	25	68±1.5	35.0	33.0	16	20	59	35	36	26	P-24
25	1	32.3	1/43	29	78±1.5	36.0	42.0	20	25	57	44	44	31	P-30
30	1 1/4	38.4	1/37	32	90±1.5	44.5	45.5	26	30	81	54	54	31	P-36
40	1 1/2	48.5	1/38	35	94±1.5	42.0	52.0	24	40	98	65	67	40	P-48A
50	2	60.6	1/34	38	110±1.5	48.0	61.0	34	50	120	77	79	43	P-58

### 에슬론 새들 밴드 ESLON SADDLE BAND



### PVC

단위 Unit : mm

호칭 Size	∅D <sub>1</sub>	∅D <sub>2</sub>	t	C	L	∅e	T	H <sub>1</sub>	H	B	사용볼트 Bolt
16	22	24	3.0	42	53	6	5	11.0	26.0	15	M5
20	26	29	3.0	48	59	6	5	13.0	30.5	18	M5
25	32	35	3.0	54	65	6	6	16.0	36.5	18	M5
28	34	37	3.0	59	73	7	7	17.0	38.5	20	M6
30	38	41	4.0	66	80	7	7	19.0	43.5	20	M6
40	48	52	4.0	90	109	10	9	24.0	54.0	25	M8
50	60	64	4.0	97	116	10	9	30.0	66.0	28	M8
65	76	81	4.0	114	134	10	10	38.0	82.5	30	M8
75	89	94	4.0	134	158	12	11	44.5	95.5	38	M10
100	114	120	4.5	160	186	12	12	57.0	121.5	42	M10
125	140	150	5.0	192	218	12	12	70.0	150.0	46	M10
150	165	177	8.0	238	268	17	14	82.5	179.0	50	M14
200	216	236	10.0	316	356	18	20	108.0	236.0	70	M16

# 에슬론 크린 헤더 **ESLON CLEAN HEADER**

PAT.3305008

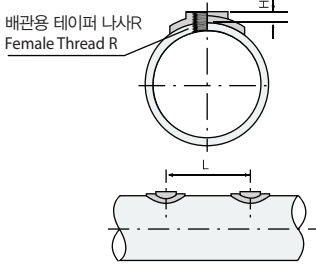
## 나사 타입

## Thread Type



### HI-PVC 단위 Unit : mm

호칭 Size	L	H
40xR1/4	40	12
40xR3/8	40	12
50xR1/4	60	9
50xR3/8	60	9
50xR1/2	60	9
50xR3/4	60	9
65xR1/4	70	11
65xR3/8	70	11
65xR1/2	70	11
65xR3/4	70	11
75xR1/4	70	11
75xR3/8	70	11
75xR1/2	70	11
75xR3/4	70	11
100xR1/4	70	11
100xR3/8	70	11
100xR1/2	70	11
100xR3/4	70	11
125xR1/4	75	12
125xR3/8	75	12
125xR1/2	75	12
125xR3/4	75	12
125xR1	75	12
150xR1/4	75	12
150xR3	75	12
150xR1/2	75	12
150xR3/4	75	12
150xR1	75	12
200xR1/4	75	14
200xR3/8	75	14
200xR1/2	75	14
200xR3/4	75	14
200xR1	75	14



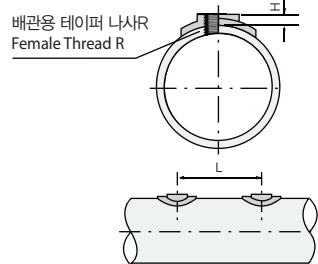
배관용 테이퍼 나사R  
Female Thread R

최대 파이프 길이 : 4,000mm  
Max.Pipe Length : 4,000mm



### HT(C-PVC) 단위 Unit : mm

호칭 Size	L	H
40xR1/4	40	12
40xR3/8	40	12
50xR1/4	60	9
50xR3/8	60	9
50xR1/2	60	9
50xR3/4	60	9
65xR1/4	70	11
65xR3/8	70	11
65xR1/2	70	11
65xR3/4	70	11
75xR1/4	70	11
75xR3/8	70	11
75xR1/2	70	11
75xR3/4	70	11
100xR1/4	70	11
100xR3/8	70	11
100xR1/2	70	11
100xR3/4	70	11
125xR1/4	75	12
125xR3/8	75	12
125xR1/2	75	12
125xR3/4	75	12
125xR1	75	12
150xR1/4	75	12
150xR3/8	75	12
150xR1/2	75	12
150xR3/4	75	12
150xR1	75	12



배관용 테이퍼 나사R  
Female Thread R

최대 파이프 길이 : 4,000mm  
Max.Pipe Length : 4,000mm

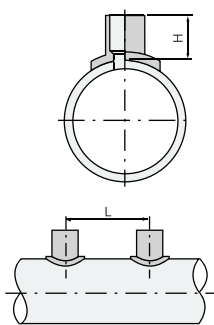
## TS 소켓 타입

## TS Socket Type



### HI-PVC 단위 Unit : mm

호칭 Size	L	H
50x13	60	40
50x16	60	40
50x20	60	45
50x25	60	50
65x13	70	40
65x16	70	40
65x20	70	45
65x25	80	50
65x30	80	54
75x13	70	40
75x16	70	40
75x20	70	45
75x25	80	50
75x30	80	54
75x40	90	65
100x13	70	40
100x16	70	40
100x20	70	45
100x25	80	50
100x30	80	54
100x40	90	65
100x50	110	73
125x13	70	40
125x16	70	40
125x20	70	45
125x25	80	50
125x30	80	54
125x40	90	65
125x50	120	73
150x13	70	40
150x16	70	40
150x20	70	45
150x25	80	50
150x30	80	54
150x40	90	65
150x50	120	73
200x13	70	40
200x16	70	40
200x20	70	45
200x25	80	50
200x30	80	54
200x40	90	65
200x50	120	73

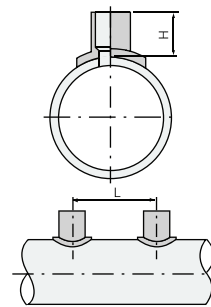


최대 파이프 길이 : 4,000mm  
Max.Pipe Length : 4,000mm



### HT(C-PVC) 단위 Unit : mm

호칭 Size	L	H
50x13	60	40
50x16	60	40
50x20	60	45
50x25	60	50
65x13	70	40
65x16	70	40
65x20	70	45
65x25	80	50
65x30	80	54
75x13	70	40
75x16	70	40
75x20	70	45
75x25	80	50
75x30	80	54
75x40	90	65
100x13	70	40
100x16	70	40
100x20	70	45
100x25	80	50
100x30	80	54
100x40	90	65
100x50	110	73
125x13	70	40
125x16	70	40
125x20	70	45
125x25	80	50
125x30	80	54
125x40	90	65
125x50	120	73
150x13	70	40
150x16	70	40
150x20	70	45
150x25	80	50
150x30	80	54
150x40	90	65
150x50	120	73



최대 파이프 길이 : 4,000mm  
Max.Pipe Length : 4,000mm

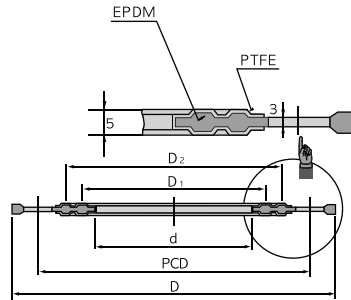
# 가스켓 GASKET

## 에슬론 PTFE 가스켓 **ESLON PTFE GASKET**

JIS10K

JIS10K

단위 Unit : mm



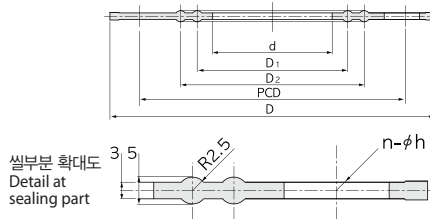
호칭 Size	d	D <sub>1</sub>	D <sub>2</sub>	PCD	D	n-øh	추천조임토크 N·m(kgf·cm) Recommend Fasten Torqu
13	14	23	37	65	88	4-15	16{160}
15	18	26	41	70	93	4-15	16{160}
20	22	36	46	75	98	4-15	16{160}
25	28	38	53	90	123	4-19	34{340}
30	37	50	65	100	133	4-19	34{340}
40	43	54	69	105	138	4-19	34{340}
50	54	68	83	120	153	4-19	34{340}
65	69	86	101	140	173	4-19	51{510}
80	80	98	113	150	183	8-19	51{510}
100	102	120	138	175	208	8-19	51{510}
125	127	145	168	210	248	8-23	62{620}
150	150	168	190	240	278	8-23	62{620}
200	198	216	248	290	328	12-23	62{620}
250	250	270	306	355	398	12-25	73{730}
300	300	324	356	400	443	16-25	73{730}

## 에슬론 EPDM 가스켓 **ESLON EPDM GASKET**

JIS10K

JIS10K

단위 Unit : mm



호칭 Size	d	D <sub>1</sub>	D <sub>2</sub>	PCD	D	n-øh	추천조임토크 N·m(kgf·cm) Recommend Fasten Torqu
13	17	25	38	65	88	4-15	15{150}
15	20	28	42	70	93	4-15	15{150}
20	25	33	47	75	98	4-15	30{300}
25	30	38	53	90	123	4-19	30{300}
30	38	48	63	100	133	4-19	30{300}
40	46	54	69	105	138	4-19	30{300}
50	58	68	83	120	153	4-19	30{300}
65	73	86	101	140	173	4-19	45{450}
80	84	98	113	150	183	8-19	45{450}
100	106	120	138	175	208	8-19	45{450}
125	131	145	168	210	248	8-23	55{550}
150	155	170	196	240	278	8-23	55{550}
200	204	218	248	290	328	12-23	55{550}
250	254	270	306	355	398	12-25	65{650}
300	304	324	356	400	443	16-25	65{650}
350	352	368	400	445	488	16-25	65{650}

## 에슬론 트라이 가드 PTFE 가스켓 **ESLON TRI-GUARD PTFE GASKET**

PTFE JIS10K

PTFE JIS10K

PTFE JPI 클래스150

PTFE JPI150

단위 Unit : mm

단위 Unit : mm

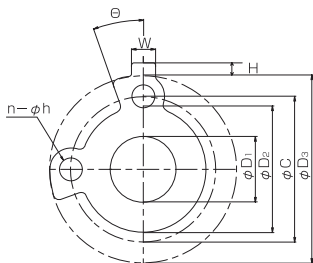
호칭 Size	D <sub>1</sub>	D <sub>2</sub>	C	D <sub>3</sub>	H	W	θ	n-øh	추천조임토크 N·m(kgf·cm) Recommend Fasten Torqu
15	18	58	70	95	10	20	25°	2-15	14{150}
20	22	63	75	100	10	20	23°	2-15	14{150}
25	28	74	90	125	10	20	27°	2-19	29{300}
30	37	84	100	135	10	20	24°	2-19	29{300}
40	43	89	105	140	10	20	23°	2-19	29{300}
*50	54	104	120	155	10	20	20°	2-19	29{300}
65	69	124	140	175	10	20	17°	2-19	44{450}
80	80	134	150	185	10	20	16°	2-19	44{450}
100	102	159	175	210	10	20	14°	2-19	44{450}
*125	127	190	210	250	10	20	13°	2-23	54{550}
150	150	220	240	280	10	20	12°	2-23	54{550}
*200	198	270	290	330	10	20	10°	2-23	54{550}

호칭 Size	D <sub>1</sub>	D <sub>2</sub>	C	D <sub>3</sub>	H	W	θ	n-øh	추천조임토크 N·m(kgf·cm) Recommend Fasten Torqu
50	61	104	120.6	152	10	20	20°	2-20	29{300}
125	143	196	215.9	254	10	20	13°	2-23	54{550}
200	220	277	298.4	343	10	20	10°	2-23	54{550}

비고 : 후랜지 치수는 JIS10K:JIS B2210, JPI 클래스150:JPI-7S-15를 참고로 합니다.  
Notes : The flange dimensions are designed referring to JIS10K(JIS B 2210), and JPI Class 150(JPI-7S-15).

PVDF 배관에서 \*표의 사이즈는 JPI 규격 가스켓을 사용해 주십시오.  
Use the gaskets of JPI specification for PVDF piping in the \*marked sizes.

두께 : 3mm  
Thickness : 3mm





# 크린 밸브 CLEAN VALVES

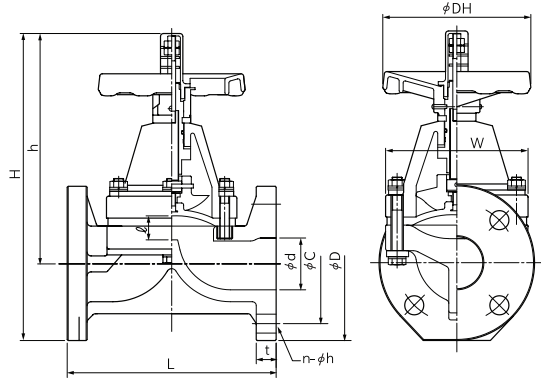
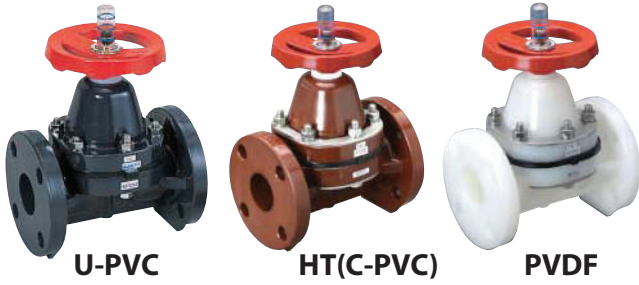
## 다이아프램밸브 DIAPHRAGM VALVE

**금유품**  
Oil-free

자동밸브도 대응 가능합니다.  
Automatic valve can be also applied.

### 후랜지식

### Flange



### 규격표 Dimension Table

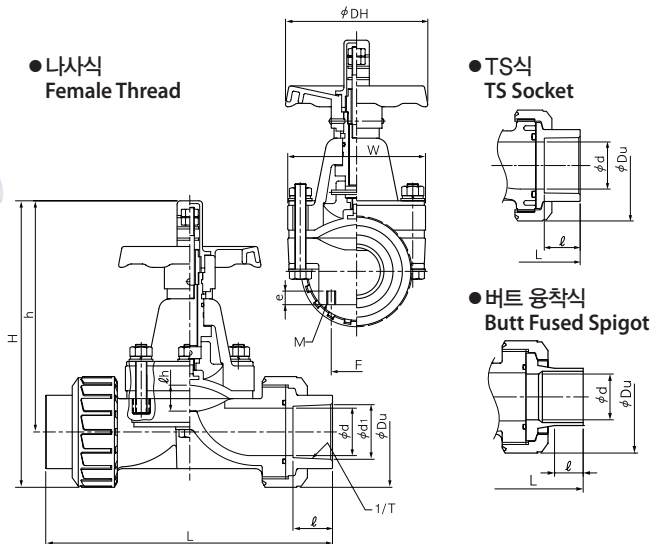
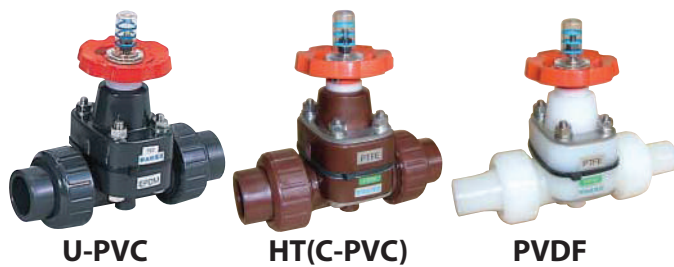
단위 Unit : mm

호칭 Size		d	L	H	h	DH	W	ℓ	후랜지부 Flange(JIS 10K)				중량 weight (kg)			포장수 Q'ty/c
A	B								φD	φC	n-φh	t	U-PVC	HT(C-PVC)	PVDF	
15	1/2	16	110	166	119	80	76	10	95	70	4-15	14	0.9	1.1	1.1	8
20	3/4	20	120	180	130	80	82	12	100	75	4-15	14	1.0	1.3	1.3	8
25	1	25	130	195	133	80	90	15	125	90	4-19	14	1.4	1.7	1.7	8
32	1 1/4	41	180	269	199	125	122	20	140	100	4-19	16	2.6	3.3	3.4	2
40	1 1/2	41	180	269	199	125	122	20	140	105	4-19	16	2.6	3.3	3.4	2
50	2	52	210	308	230	148	142	27	155	120	4-19	20	3.6	4.5	4.8	2
65	2 1/2	67	250	379	291	210	170	36	175	140	4-19	22	6.2	7.7	8.4	2
80	3	80	280	415	322	210	202	37	185	150	8-19	22	8.2	9.6	11.2	2
100	4	100	340	497	392	260	255	61	210	175	8-19	24	13.8	18.3	21.1	1
125	5	125	410	560	435	350	320	61	250	210	8-23	24	21.8	-	26.0	1
150	6	150	480	630	490	350	375	70	280	240	8-23	26	26.3	-	36.0	1
200	8	198	570	790	632	410	416	96	330	290	12-23	29	51.0	-	61.0	1
250	10	248	680	950	780	555	540	132	400	355	12-25	31	93.0	-	108.0	1

주 : 32A는 40A 밸브를 사용하고, 후랜지 볼트 구멍은 19x21입니다.  
Note : Valve 32A is same as 40A, it is fabricated to long bolt hole Ø19x21 of the flange.

### 유니온식

### True Union



### 규격표 Dimension Table

단위 Unit : mm

호칭 Size		d	L				H	h	DH	W				Du	ℓh	중량 weight (kg)				포장수 Q'ty/c					
A	B		나사 Thread	TS	용착 Butt	나사-TS Thread-TS				용착 Butt	나사-TS Thread-TS	용착 Butt	나사 Thread			TS	용착 Butt	1/T	U-PVC		HT(C-PVC)	PVDF			
15	1/2	15	133	144	176	153	145	128	120	80	76	76	49	48	10	15	22	30	1/37	0.7	0.7	0.8	0.9	0.9	12
20	3/4	20	158	172	189	170	162	141	132	80	82	82	59	58	12	20	25	24	1/42	0.8	0.8	1.0	1.0	1.0	12
25	1	25	181	187	203	185	180	152	147	80	90	90	67	66	15	25	29	24	1/43	1.1	1.1	1.2	1.4	1.4	12
32	1 1/4	31	-	262	262	257	255	208	206	125	122	122	98	96	20	-	32	25	1/37	-	1.1	-	-	-	4
40	1 1/2	40	248	262	272	257	255	208	206	125	122	122	98	96	20	31	35	24	1/38	2.7	2.7	3.4	3.7	3.7	4
50	2	50	280	298	306	299	291	239	231	148	148	142	120	117	27	32	38	28	1/34	3.6	3.6	4.3	5.0	5.0	4

주 : 32A는 40A 밸브를 사용하고, 수구를 32A로 바꾼 것입니다.  
Note : Valve 32A is same as 40A, it is changed to connection 32A.

# 크린 밸브 CLEAN VALVES

## 분기 다이아후램밸브 DEAD SPACE FREE TEE-TYPE DIAPHRAGM VALVE

금유품  
Oil-free

분기측 후랜지식

Branch Port with Flange



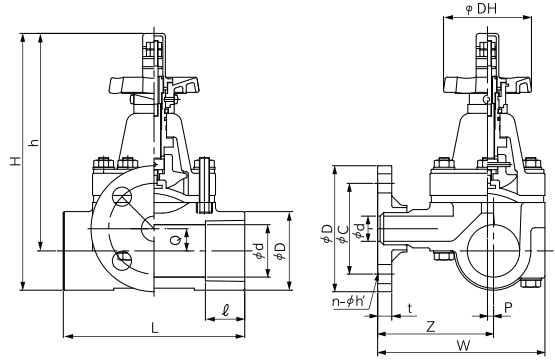
U-PVC



HT(C-PVC)



PVDF



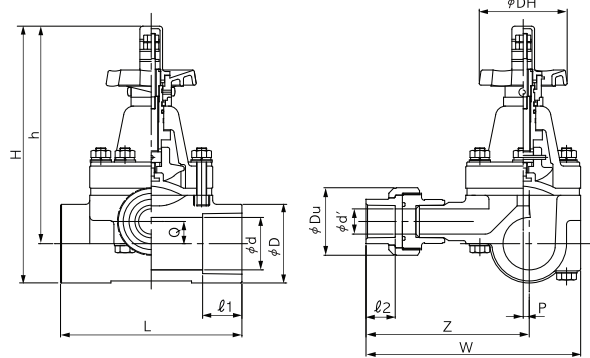
### 규격표 Dimension Table

단위 Unit : mm

호칭 Size	L	H	h	DH	P	W	Q	Z	TS				후랜지부 Flange(JIS 10K)				중량 weight (kg)			포장수 Q'ty/c
									D	l	d	phi D	phi C	n-phi H	t	U-PVC	HT(C-PVC)	PVDF		
20x16	120	148	125	80	1.5	119	8	91	35	25	21	95	70	4-15	14	0.7	0.8	-	4	
25x25	120	172	152	80	3.0	142	8	100	44	29	25	125	90	4-19	14	1.1	1.2	1.4	1	
50x25	180	261	214	90	6.0	166	22	115	77	30	52	125	90	4-19	14	2.5	2.8	3.7	1	
65x40	240	307	259	148	6.0	203	30	140	96	61	67	140	105	4-19	16	3.8	4.3	4.6	1	

분기측 유니온식

Branch Port with True Union



### 규격표 Dimension Table

단위 Unit : mm

호칭 Size	L	H	h	DH	P	W	Q	Z	TS			유니온 Union			중량 weight (kg)			포장수 Q'ty/c
									D	l1	d	d'	l2	Du	U-PVC	HT(C-PVC)	PVDF	
20x16	120	150	129	80	1.5	142	8	117	35	25	21	16	22.2	49	0.7	0.8	0.6	4
25x25	120	179	154	80	3.0	187	8	144	44	29	25	25	28.6	67	1.1	1.2	1.1	1
50x25	180	260	221	90	6.0	210	22	159	77	30	52	25	28.6	67	2.5	2.8	3.6	1
65x40	240	313	265	148	6.0	257	30	197	96	61	67	40	35.0	98	3.8	4.3	4.7	1

- 밸브 접속부의 치수는 아래의 공인 규격에 준합니다.  
Detail dimensions of valves are in accordance with the following standards;  
후랜지 Flange : JIS B 2210  
나사 Thread : JIS B 0203  
TS소켓 TS Socket : JIS K 6763

- 밸브에 대한 상세 내용은 「에슬론 밸브」 카탈로그를 참조해 주십시오.  
Please refer to brochure "ESLON VALVE" for details of valves.

크린 밸브  
Clean PVC & Fittings

크린 밸브  
Clean Valves

투명 PVC 배관재  
Clear PVC Pipe & Fittings

기술자료  
Technical Data

시공  
Installation

# 크린 밸브 CLEAN VALVES

## 볼밸브 BALL VALVE

금유품  
Oil-free

자동밸브도 대응 가능합니다.  
Automatic valve can be also applied.

### 후랜지식

### Flange



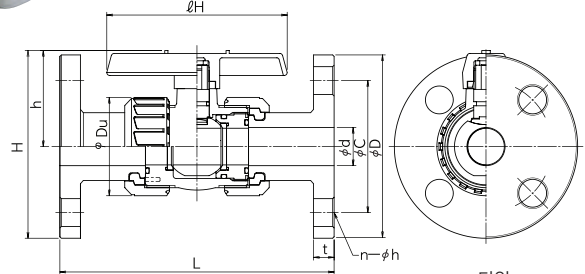
U-PVC



HT(C-PVC)



PVDF



단위 Unit : mm

### 규격표 Dimension Table

호칭 Size		d	L	H	h	lH	Du	후랜지부 Flange(JIS 10K)				중량 weight (kg)			포장수 Q'ty/c
A	B							øD	øC	n-øh	t	U-PVC	HT(C-PVC)	PVDF	
15	1/2	15	143	98	50	95	49	95	70	4-15	14	0.4	0.4	0.5	12
20	3/4	20	172	103	53	95	59	100	75	4-15	14	0.6	0.6	0.7	12
25	1	25	187	129	66	123	67	125	90	4-19	14	0.9	0.9	1.0	12
32	1 1/4	30	190	142	74	123	81	135	100	4-19	16	1.2	1.2	1.3	12
40	1 1/2	40	212	170	100	152	98	140	105	4-19	16	1.7	1.7	1.9	2
50	2	50	234	185	107	152	120	155	120	4-19	20	2.6	2.6	3.0	2
65	2 1/2	65	259	222	146	188	150	175	140	4-19	22	4.2	4.3	-	2
80	3	80	309	262	169	230	186	185	150	8-19	22	6.7	6.9	-	2
100	4	100	372	317	203	283	228	210	175	8-19	24	11.5	11.9	-	1

### 유니온식

### True Union



U-PVC

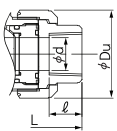


HT(C-PVC)

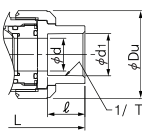


PVDF

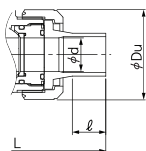
● 나사식  
Female Thread



● TS식  
TS Socket



● 버트 용착식  
Butt Fused Spigot



### 규격표 Dimension Table

단위 Unit : mm

호칭 Size		d	L				H	h	lH	Du	ø				d <sub>1</sub>	1/T	중량 weight (kg)			포장수 Q'ty/c			
A	B		나사 Thread	TS	PVDF						나사 Thread PVC	TS	용착 Butt	PVC			PVDF	TS	Butt		U-PVC	HT(C-PVC)	PVDF
					나사 Thread	용착 Butt															U-PVC	HT(C-PVC)	PVDF
15	1/2	15	97	109	99	143	75	50	95	49	18	20	22	30	22.3	1/37	0.2	0.2	0.2	24			
20	3/4	20	117	132	116	152	82	53	95	59	18	22	25	24	26.3	1/42	0.3	0.3	0.3	24			
25	1	25	128	143	136	161	100	66	123	67	23	24	29	24	32.3	1/43	0.4	0.4	0.5	24			
32	1 1/4	32	146	166	148	167	115	74	123	81	23	25	32	25	38.4	1/37	0.6	0.6	0.6	24			
40	1 1/2	40	163	175	169	190	149	100	152	98	25	28	35	24	48.5	1/38	1.1	1.1	1.2	4			
50	2	50	188	203	196	216	167	107	152	120	30	30	38	28	60.6	1/34	1.6	1.7	1.9	4			
65	2 1/2	65	227	259	227	208	221	146	188	150	32	32	61	23	76.6	1/48	3.0	-	-	2			
80	3	80	278	311	278	301	262	169	230	186	37	37	64	45	89.6	1/49	5.6	-	-	1			
100	4	100	330	390	330	340	317	203	283	228	45	45	84	43	114.7	1/56	10.5	-	-	1			

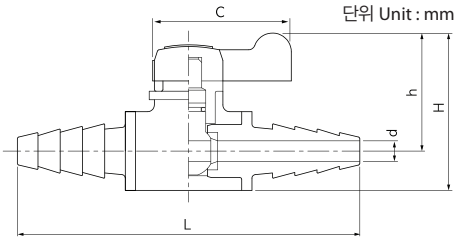
# 밸브 수동식 VALVES

## 미니 볼밸브 MINI BALL VALVE

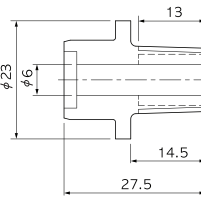
세정품  
Rinsed



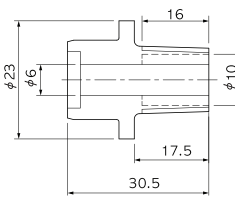
● 호스 x 호스식(6A)  
Hose x Hose(6A)



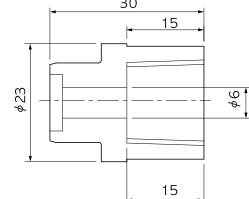
● 슛나사 수구 (R 1/4 · 3/8)  
Male Thread (R 1/4 · 3/8)



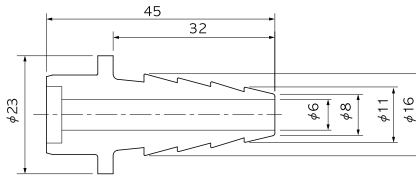
● 슛나사 수구 (R 1/2)  
Male Thread (R 1/2)



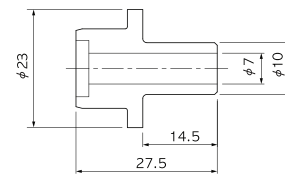
● 암나사 수구 (Rc 1/4 · 3/8)  
Female Thread (Rc 1/4 · 3/8)



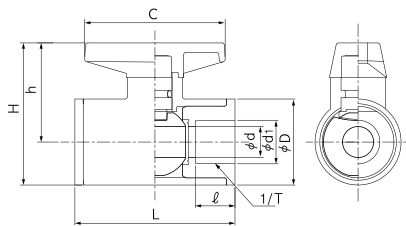
● 호스 수구  
Hose



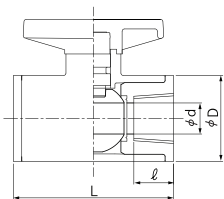
● 스트레이트 수구  
Straight



● TS식(13A · 15A)  
TS Socket (13A · 15A)



● 나사식(13A · 15A)  
Female Thread (13A · 15A)



### 규격표 Dimension Table

단위 Unit : mm

호칭 Size		d	H	h	D	c	ℓ		포장수 Q'ty/c
A	B						나사 Thread	TS	
6	1/8	6	47	35	23	40	-	-	40(20x2)
13	3/8	13	60	42	35	60	-	16.5	40
15	1/2	13	60	42	35	60	16	16.5	40

### 수구 조합과 L규격표

#### L & Weight for Each Connection Type

단위 Unit : mm

호칭 Size	접속방식 Connection Type	L	중량 weight (g)
6A	스나사 x 슛나사 Male Thread x Male Thread	66	30
	스나사 x 암나사 Male Thread x Female Thread	69	40
	스나사 x 호스 Male Thread x Hose	83	40
	스나사 x 스트레이트 Male Thread x Straight	66	30
	암나사 x 암나사 Female Thread x Female Thread	71	40
	암나사 x 호스 Female Thread x Hose	85	40
	암나사 x 스트레이트 Female Thread x Straight	69	40
	호스 x 호스 Hose x Hose	100	40
	호스 x 스트레이트 Hose x Straight	83	40
스트레이트 x 스트레이트 Straight x Straight	66	30	
13A	암나사 Rc1/2 Female Thread Rc1/2	67	90
	TS13 TS Socket 13	67	90
	TS15 TS Socket 15	67	80

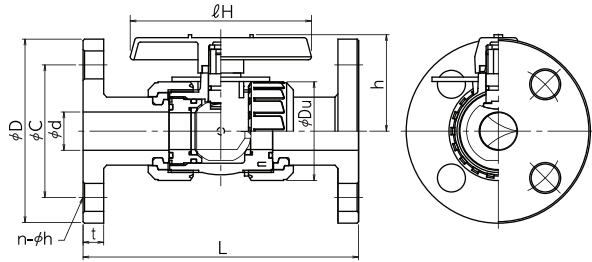


# 크린 밸브 CLEAN VALVES

## YP볼밸브 YP-BALL VALVE **금유품 Oil-free**

자동밸브도 대응 가능합니다.  
Automatic valve can be also applied.

### 후랜지식 Flange

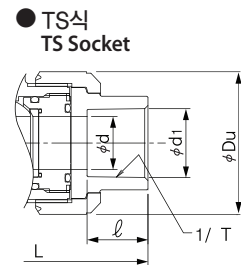
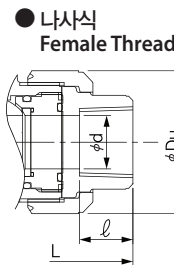


### ■ 규격표 Dimension Table

단위 Unit : mm

호칭 Size		d	L	H	h	ℓH	Du	후랜지부 Flange(JIS 10K)				중량 weight (kg)	포장수 Q'ty/c
A	B							∅D	∅C	n-∅h	t		
15	1/2	15	143	98	50	95	49	95	70	4-15	14	0.4	12
20	3/4	20	172	103	53	95	59	100	75	4-15	14	0.6	12
25	1	25	187	132	66	123	67	125	90	4-19	14	0.9	12
32	1 1/4	30	190	143	74	123	81	135	100	4-19	16	1.2	12
40	1 1/2	40	212	171	100	152	98	140	105	4-19	16	1.7	2
50	2	50	234	185	107	152	120	155	120	4-19	20	2.6	2

### 나사식 · TS식 Female Thread / TS Socket



### ■ 규격표 Dimension Table

단위 Unit : mm

호칭 Size		d	L		H	h	ℓH	Du	ℓ		중량 weight (kg)		포장수 Q'ty/c
A	B		나사 Thread	TS					나사 Thread	TS	나사 Thread	TS	
15	1/2	15	97	109	74	50	95	49	18	22	0.2	0.2	24
20	3/4	20	117	132	82	53	95	59	18	25	0.3	0.3	24
25	1	25	128	143	102	69	123	67	23	29	0.4	0.4	24
32	1 1/4	32	146	166	115	75	123	81	23	32	0.6	0.6	24
40	1 1/2	40	163	175	149	102	152	98	25	35	1.1	1.1	4
50	2	50	188	203	166	108	152	120	30	38	1.6	1.6	4

# 크린 밸브 CLEAN VALVES

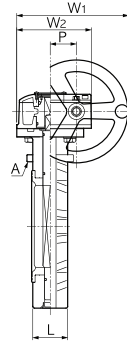
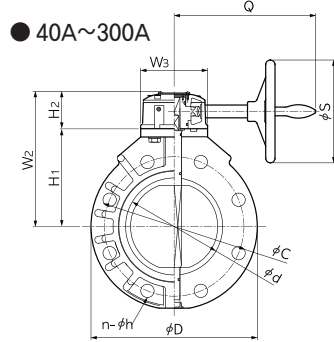
## 버터플라이밸브 BUTTERFLY VALVE

세정품 Rinsed

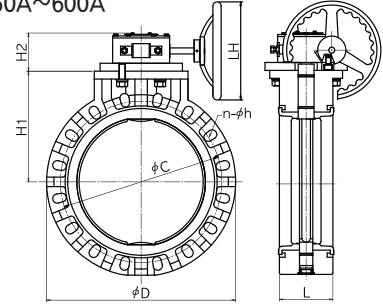
자동밸브도 대응 가능합니다.  
Automatic valve can be also applied.

### 기어식

### Gear



● 350A~600A



### ■ 규격표 40A~300A Dimension Table 40A~300A

단위 Unit : mm

호칭 Size		d	L	H <sub>1</sub>	H <sub>2</sub>	Q	W <sub>1</sub>	W <sub>2</sub>	W <sub>3</sub>	φS	D	후랜지부 Flange (JIS 10K)		중량 weight (kg)			포장수 Q'ty/c
A	B											C	n-φh	U-PVC	PP	PVDF	
40	1 1/2	45	33	60	105	125	130	105	90	100	140	105	4-19	3.6	3.5	3.7	1
50	2	57	43	60	112	125	130	105	90	100	155	120	4-19	3.8	3.6	4.0	1
65	2 1/2	71	46	60	123	125	130	105	90	100	178	140	4-19	4.2	4.0	4.4	1
80	3	80	46	60	130	125	130	105	90	100	196	150	8-19	4.5	4.3	4.8	1
100	4	100	52	60	152	125	130	105	90	100	229	175	8-19	5.3	5.1	5.7	1
125	5	125	56	64	169	242	193	128	115	180	254	210	8-23	8.2	7.7	8.9	1
150	6	150	60	64	178	242	193	128	115	180	286	240	8-23	9.8	9.1	10.8	1
200	8	198	71	64	230	242	193	128	115	180	343	290	12-23	11.6	10.7	13.2	1
250	10	246	76	96	250	297	303	215	200	250	410	355	12-25	28.1	26.6	30.7	1
300	12	299	114	96	280	297	303	215	200	250	485	400	16-25	35.2	33.3	39.6	1

주 : 핸들을 약 6회전하면 전개 → 전폐, 전폐 → 전개가 됩니다.  
Note : Open to close by six rotations of the handle.

### ■ 규격표 350A~600A Dimension Table 350A~600A

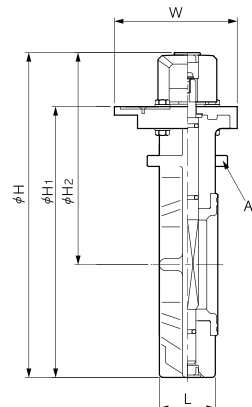
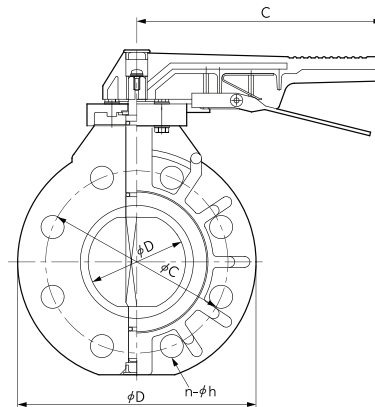
단위 Unit : mm

호칭 Size		L	φD	H <sub>1</sub>	H <sub>2</sub>	LH	후랜지부 Flange (JIS 10K)			중량 weight (kg)			포장수 Q'ty/c
A	B						C	n-φh	M	U-PVC	PP	PVDF	
350	14	129	535	325	105	310	445	16-25	-	39.0	37.0	51.3	1
400	16	169	597	350	130	310	510	16-27	-	46.4	44.5	61.0	1
450	18	179	635	370	155	310	565	20-27	M24	81.3	78.4	104.0	1
500	20	190	700	410	155	407	620	20-27	M24	98.1	95.0	125.0	1
600	24	209	815	465	155	407	730	24-33	M30	144.0	140.0	181.0	1

주 : 핸들을 약 6회전하면 전개 → 전폐, 전폐 → 전개가 됩니다.  
Note : Open to close by six rotations of the handle.

### 레버식

### Lever



### ■ 규격표 Dimension Table

단위 Unit : mm

호칭 Size		d	L	H	H <sub>1</sub>	H <sub>2</sub>	C	W	D	후랜지부 Flange (JIS 10K)		중량 weight (kg)			포장수 Q'ty/c
A	B									C	n-φh	U-PVC	PP	PVDF	
40	1/2	45	33	217	174	148	202	101	140	105	4-19	1.2	1.1	1.3	2
50	2	57	43	232	189	156	202	101	155	120	4-19	1.4	1.2	1.6	2
65	2 1/2	71	46	253	210	166	202	101	178	140	4-19	1.7	1.5	1.9	2
80	3	80	46	268	222	173	202	101	196	150	8-19	2.0	1.8	2.3	2
100	4	100	52	306	263	192	245	123	229	175	8-19	3.0	2.7	3.4	2
125	5	125	56	347	294	220	310	155	254	210	8-23	4.6	4.1	5.3	2
150	6	150	60	372	319	229	310	155	286	240	8-23	5.5	4.8	6.5	2
200	8	198	71	466	399	297	400	200	343	290	12-23	8.9	8.0	10.5	2

# 크린 밸브 CLEAN VALVES

## 스윙체크밸브 CHECK VALVE SWING TYPE

세정품  
Rinsed

후랜지식

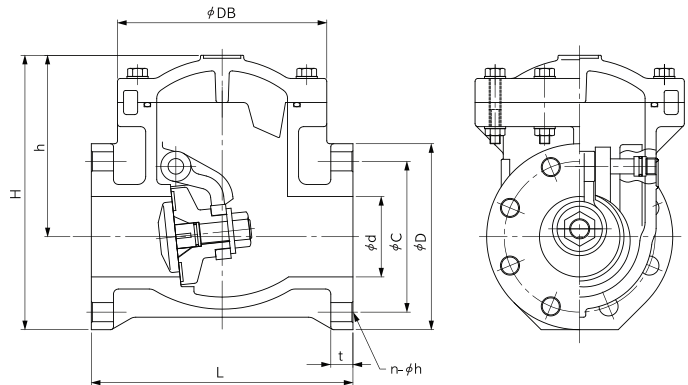
Flange



U-PVC



PVDF



### 규격표 Dimension Table

단위 Unit : mm

호칭 Size		d	L	H	h	D <sub>B</sub>	후랜지부 Flange (JIS 10K)				중량 weight (kg)		포장수 Q'ty/c
A	B						D	C	t	n- $\phi$ h	U-PVC	PVDF	
15	1/2	21	140	143	93	112	100	70	14	4-15	1.0	1.3	2
20	3/4	21	140	143	93	112	100	75	14	4-15	1.0	1.3	2
25	1	25	160	180	118	132	125	90	14	4-19	1.6	2.2	2
32	1 1/4	40	180	206	136	148	140	100	18	4-19	2.7	3.3	2
40	1 1/2	40	180	206	136	148	140	105	18	4-19	2.7	3.3	2
50	2	51	200	229	152	180	155	120	20	4-19	3.6	4.5	2
65	2 1/2	67	240	254	166	200	175	140	22	4-19	4.8	6.0	2
80	3	80	260	270	178	208	185	150	22	8-19	5.8	7.5	2
100	4	100	300	318	213	265	210	175	24	8-19	9.4	11.8	1
125	5	125	350	372	247	330	250	210	24	8-23	16.4	21.0	1
150	6	150	400	420	280	375	280	240	26	8-23	20.1	26.0	1
200	8	200	500	494	329	425	330	290	30	12-23	31.7	44.0	1

주 : 15A는 20A를, 32A는 40A 밸브를 사용하고, 후랜지 볼트 구멍은 타원형입니다.

Note : Valve 15A is same as 20A, 32A is also same as 40A, each valve is fabricated to long bolt hole of the flange.

## 볼체크밸브 CHECK VALVE BALL TYPE

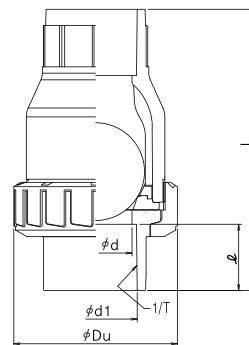
금유품  
Oil-free

나사식 · TS식

Female Thread / TS Socket



U-PVC



### 규격표 Dimension Table

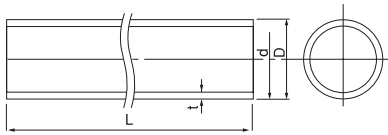
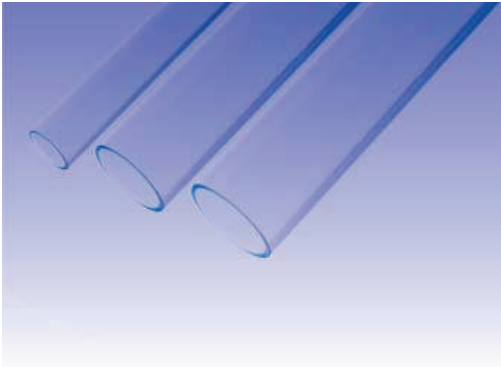
단위 Unit : mm

호칭 Size		d	L		Du	TS		Q		중량 weight (kg)		포장수 Q'ty/c
A	B		나사 Thread	TS		d <sub>1</sub>	1/T	나사 Thread	TS	U-PVC TS · 나사 Thread	HT(C-PVC) TS · 나사 Thread	
15	1/2	16	88	98	49	22.3	1/37	13	22	0.1	0.1	1
20	3/4	20	106	118	59	26.3	1/42	15	25	0.2	0.2	1
25	1	25	112	124	67	32.3	1/43	17	29	0.3	0.3	1
32	1 1/4	32	149	153	98	38.4	1/37	19	32	0.6	0.6	1
40	1 1/2	40	144	153	98	48.5	1/38	19	35	0.5	0.5	1
50	2	50	172	180	120	60.6	1/34	23	38	0.8	0.8	1
65	2 1/2	65	226	259	150	76.6	1/48	27	61	2.2	2.2	1
80	3	78	251	281	150	89.6	1/49	37	64	4.7	4.7	1
100	4	102	349	408	228	114.7	1/56	36	84	6.8	6.8	1

# 투명 PVC 배관재 CLEAR PVC PIPE & FITTINGS

## 에슬론 투명 배관재

## ESLON CLEAR PVC PIPE & FITTINGS



단위 Unit : mm

호칭 Size	D	t	d	L	중량 weight (kgf/m)
13	18±0.2	2.5±0.3	13		0.173
16	22±0.2	3.0±0.3	16		0.254
20	26±0.2	3.0±0.3	20		0.308
25	32±0.2	3.0±0.3	26		0.388
30	38±0.2	3.0±0.3	32		0.468
40	48±0.2	3.5±0.4	41		0.695
50	60±0.2	4.0±0.4	52		0.999
65	76±0.3	4.0±0.4	68		1.285
75	89±0.3	4.5±0.4	80		1.696
100	114±0.4	5.5±0.4	103		2.662
125	140±0.5	6.0±0.5	128		3.587
150	165±0.5	7.0±0.5	151		4.934
200	216±0.7	8.0±0.5	200		7.423

사이즈/품명	SOCKET	REDUCER	45° ELBOW	90° ELBOW	90° LONG ELBOW	45° Y-TEE	90° Y-TEE	90° LONG Y-TEE
30	●		●	●			●	
40	●		●	●	●	●	●	●
50	●		●	●	●	●	●	●
65	●		●	●	●	●	●	●
75	●		●	●	●	●	●	●
100	●		●	●	●	●	●	●
125								
40x30		●					●	
50x30						●	●	
50x40		●				●	●	●
65x40		●				●	●	●
65x50		●				●	●	●
65x50x50								●
75x40						●	●	●
75x50		●				●	●	●
75x65		●				●	●	●
100x40						●		●
100x50		●				●	●	●
100x65						●	●	●
100x75		●				●	●	●

- 배합제의 최적화로 투명도가 뛰어납니다.  
Excellent transparency PVC pipe and fittings
- 일반 염화비닐관과 동등한 내약품성이 있으며, 또한 내후성이 우수하여 퇴색의 성향은 저감되었습니다.  
Excellent chemical resistance and UV-rays Resistance
- 식품위생법과 수도용자재의 용출 기준에 적합합니다.  
Accordance with the standards of Food Sanitation Law



# 기술자료집 TECHNICAL DATA

## I 기본물성 BASIC PROPERTIES

항 목 Properties		단위 Unit	시험방법 Test Standard	슈퍼에슬론크린 Super EslonClean	HT에슬론크린 HT EslonClean	PVDF-UHP
물리적 Physical	비중 Specific Gravity	g/cc	ASTM D-792	1.41	1.48	1.78
	경도 Rockwell Hardness	-	ASTM D-785	110~120	140	110
	흡수율 Water Absorption	%	ASTM D-570	0.01~0.03	0.04~0.06	< 0.04
기계적 Mechanical	인장강도 Tensile Strength at Yield	MPa	ASTM D-638	49	53	50
	파단신장 Tensile Elongation at Break	%	ASTM D-638	150~250	50~100	20~50
	휨 강도 Flexural Strength	MPa	ASTM D-790	90~100	88	69
	압축강도 Compression Strength	MPa	ASTM D-695	70~80	69	60
	탄성율 Modulus of Elasticity	MPa	ASTM D-790	2700	2900	2200
	포아송비 Poisson's Ratio	-	-	0.38	0.38	0.28
	샤르피충격강도 Charpy Impact Strength	KJ/m <sup>2</sup>	ASTM D-256	21	> 7	-
열적 Thermal	선팽창계수 Linear Expansion Coefficient	1/°C	ASTM D-696	7 × 10 <sup>-5</sup>	7 × 10 <sup>-5</sup>	12~14 × 10 <sup>-5</sup>
	비열 Specific Heat	KJ/kg·K	ASTM C-177	1.2	0.84~1.2	1.2~1.6
	열전도율 Thermal Conductivity	W/m·K	ASTM C-177	0.15	0.11~0.14	0.20
	비켓연화온도 Vicat Soften Temperature	°C	JIS K 7206	81	113	170
	연소성 Flammability	-	ASTM D-635	자기소화성 Self Extinguish	자기소화성 Self Extinguish	자기소화성 Self Extinguish
전기적 Electrical	체적고유저항 Volume Resistivity	Ω·cm	ASTM D-257	> 1 × 10 <sup>15</sup>	> 1 × 10 <sup>15</sup>	> 1 × 10 <sup>14</sup>
	내전성 Dielectric Strength	KV/mm	ASTM D-149	> 40	> 40	> 40

## II 용출성능 ELUTION PERFORMANCE

### 1. 파이프 Pipe

검출항목 Detection Item	슈퍼에슬론크린 Super EslonClean		크린PVC Clean PVC		PVDF-UHP		PP-HP	
	농도 Concentration (μg/l)	용출속도 Elution Speed (μg/m <sup>2</sup> ·day)	농도 Concentration (μg/l)	용출속도 Elution Speed (μg/m <sup>2</sup> ·day)	농도 Concentration (μg/l)	용출속도 Elution Speed (μg/m <sup>2</sup> ·day)	농도 Concentration (μg/l)	용출속도 Elution Speed (μg/m <sup>2</sup> ·day)
TOC	20.0	5.0	59.0	15.9	8.0	3.0	14.0	4.0
SiO <sub>2</sub>	< 2.0	< 0.59	< 2.1	< 0.6	< 2.0	< 0.64	2.7	0.83
Na	0.01	0.003	1.5	0.4	< 0.01	< 0.003	1.2	0.37
K	0.01	0.003	0.69	0.2	< 0.01	< 0.003	0.06	0.02
Ca	0.23	0.06	32.3	8.7	1.1	0.35	0.07	0.02
Fe	0.07	0.02	< 0.2	< 0.05	0.05	0.02	0.07	0.02
Cu	< 0.01	< 0.003	< 0.3	< 2.0	< 0.005	< 0.002	< 0.005	< 0.002
Al	0.17	0.05	< 0.2	< 0.6	0.08	0.03	1.2	0.37

- 테스트 방법은 반도체기반기술연구회가 제창한 봉수 시험법에 의함.  
Test method : The elution test method proposed by the Semiconductor Basic Technology Research Association.
- 테스트 기간은 8~30일간.  
The tested period is 8 to 30 days.

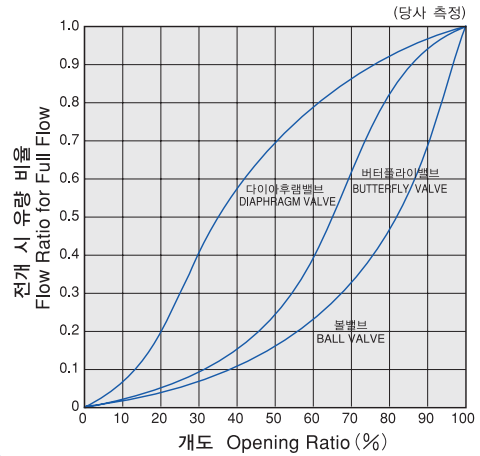
### 2. 밸브 Valves

단위 Unit : μg/l

밸브 Valves	밀봉재질 Sealing	15일간 After 15 Days						30일간 After 30 Days					
		TOC	Pb	Ca	Zn	Cd	Sn	TOC	Pb	Ca	Zn	Cd	Sn
U-PVC 볼밸브 U-PVC Ball Valve	EPDM	1.3	ND	35	25	ND	ND	2.4	ND	30	220	ND	ND
U-PVC 다이어프램밸브 U-PVC Diaphragm Valve	PTFE	0.6	ND	60	15	ND	ND	0.6	ND	70	50	ND	ND

# 기술자료집 TECHNICAL DATA

## 에슬론 밸브의 개도와 유량의 관계 FLOW CHARACTERISTICS OF ESLON VALVES



## 에슬론 밸브의 Cv치, Kv치 Cv & kv values

Cv치(Valve constant)란 미국에서 사용하고 있는 밸브 용량계수로써, 전개 상태 밸브의 전후 차압이 1PSI(0.0703kg/cm<sup>2</sup>)일 때, 60°F(15.5°C)의 맑은 물이 1분 동안 몇 갤런(미국 갤런=3.7852ℓ) 통과하는지를 나타내는 무차원 수치로써 1갤런은 Cv치 1입니다. Kv치는 국제규격(ISO)에서 사용하고 있는 용량계수로써, 전개 상태 밸브의 전후 차압이 1바(1.0197kgf/cm<sup>2</sup>)일 때, 1분 동안 몇 리터의 맑은 물이 그 밸브를 통과하는지를 나타내는 수치입니다. 액체에서의 Cv치 일반식은 다음과 같습니다.

$$Cv = Q \sqrt{\frac{\gamma}{P_1 - P_2}}$$

$$Cv = 0.0703Kv$$

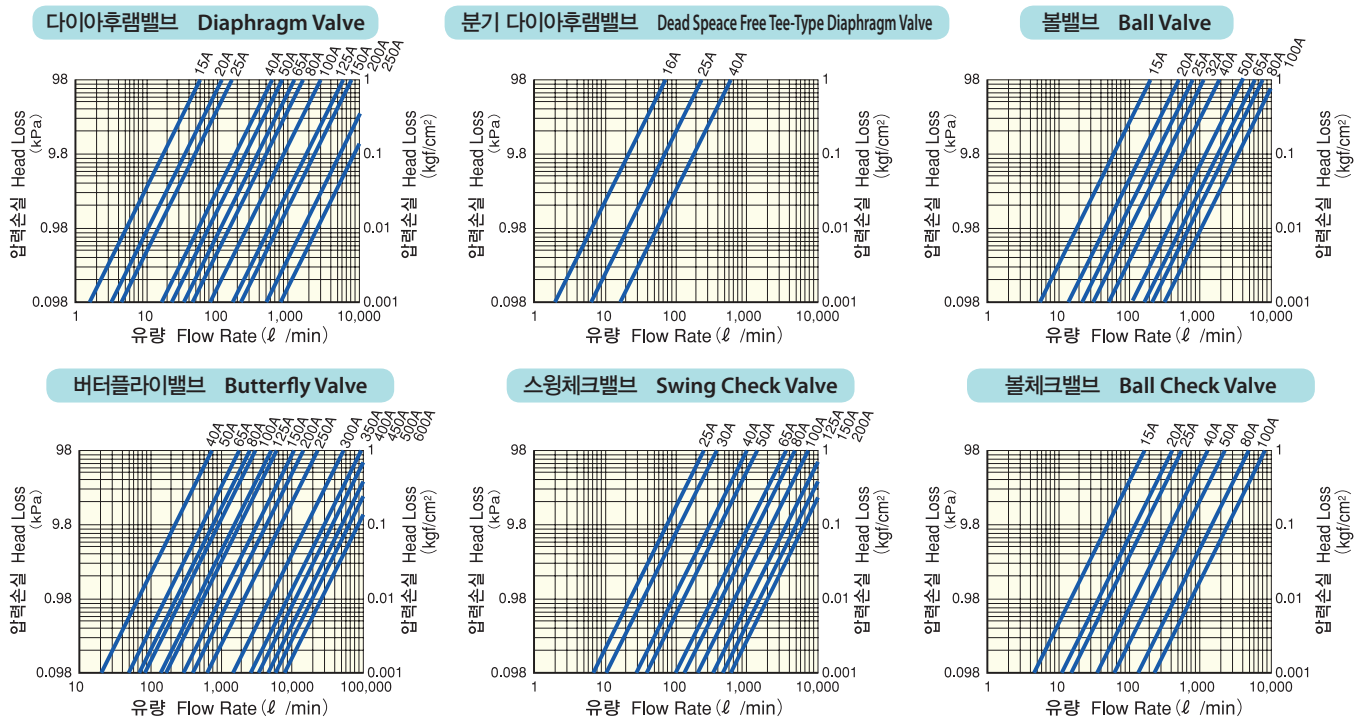
Cv value (valve constant) is the flow coefficient used in USA, and non-dimensional value representing how many gallons (1 US gallon=3.7852 litres) of water of 60°F(15.5°C) pass valve for one minute, where the pressure difference at the inlet and the outlet of the valve is 1 PSI (0.0703kgf/cm<sup>2</sup>) at its full open. 1 gallon is treated as 1Cv. Kv value is flow capacity coefficient used in the International Standards. It represents how many liters of water can pass the valve for one minute, where the pressure difference at the inlet and the outlet of the valve is 1 bar(1.0197kgf/cm<sup>2</sup>) at its full open. The Cv and Kv value for liquids is expressed by the following equation;

- Cv : 밸브의 용량계수 Valve capacity coefficient
- Q : 체적유량 Volmetric flow [GALLON]
- P<sub>1</sub> : 상류측압력 Inlet pressure [PSI]
- P<sub>2</sub> : 하류측압력 Outlet pressure [PSI]
- γ : 액체의 밀도 Liquid density [lb/gal]

## Cv치 · Kv치 Cv Value & Kv Value

품명 Valves	호칭 Size		15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
			다이아프램밸브 Diaphragm Valve	Cv	6.3	12.0	17.6	—	46.3	76.1	135	180	280	533	857	1113	1864	—	—	—	—
	Kv	89.6	171.0	250.0	—	659.0	1083.0	1920	2560	3983	7582	12191	15832	26515	—	—	—	—	—	—	—
분기 다이아프램밸브(분기축) Dead Space Free Tee-Type Diaphragm Valve	Cv	5.2	—	13.1	—	30.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Kv	74.0	—	186.0	—	428.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
볼밸브 Ball Valve	Cv	12.1	31.5	48.9	80.1	154	267	352	471	780	—	—	—	—	—	—	—	—	—	—	—
	Kv	172.0	448.0	696.0	1139.0	2191	3798	5007	6700	11095	—	—	—	—	—	—	—	—	—	—	—
버터플라이밸브 Butterfly Valve	Cv	—	—	—	—	74	172	282	309	446	755	993	2213	3440	4929	6311	8757	11107	14622	17945	—
	Kv	—	—	—	—	1053	2447	4011	4395	6344	10740	14125	31479	48993	70114	89772	124566	157994	207994	255263	—
체크밸브 Check Valve	스윙식 Swing Type	Cv	—	17.6	24.2	—	67.8	91.4	222	306	596	771	1084	1920	—	—	—	—	—	—	—
		Kv	—	250.0	344.0	—	964.0	1300.0	3158	4353	8478	10967	15420	27312	—	—	—	—	—	—	—
	볼식 Ball Type	Cv	10.5	25.7	36.9	—	84.0	146	—	322	547	—	—	—	—	—	—	—	—	—	—
		Kv	149.0	366.0	525.0	—	1195.0	2077	—	4580	7781	—	—	—	—	—	—	—	—	—	—

## 에슬론 밸브의 유량선도 FLOW DIAGRAMS FOR ESLON VALVES



크린 PVC 배관재  
Clean PVC & Fittings

크린 밸브  
Clean Valves

크린 파이프 배관재  
Clean PVC Pipe & Fittings

기술자료  
Technical Data

시공  
Installation

# 시공 INSTALLATION

## ■ 취급, 보관 Handling and Storage

### ■ 취급 Handling



파이프, 피팅, 밸브류는 떨어뜨리거나 던지거나 차공구로 두드리지 마십시오. 파손될 수 있습니다.

Pipes, Fittings and valves require more care in handling so as not to be dropped, threw or tapped to avoid damages.

### ■ 보관 Storage



배관재는 옥내에 보관해 주십시오. 어쩔 수 없이 옥외에 보관할 경우에는 차광 막 등으로 덮어서 직사광선으로부터 보호해 주십시오. 차광 막은 고반사 실버 시트를 추천합니다.

If possible, pipe should be stored inside. When this is no possible, the pipe should be protected from the sun with shading sheet. The best type of shading sheet is silver colored sheet with highly reflective performance.



파이프를 락에 보관할 경우, 평평한 판 위에 올리고, 지지대 간격을 900mm 이내로 해 주십시오.

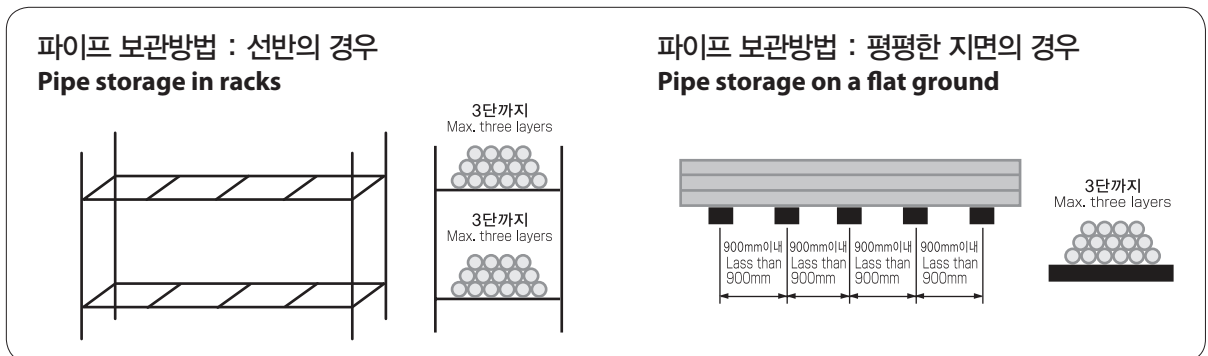
지면 위에 보관할 경우, 평평한 지면에 지지대 간격을 900mm 이내로 한 침목 위에 보관해 주십시오.

어느 경우라도 가능하면 포장 상태로 보관하고 최대적재단수는 3단까지 해 주십시오.

If the pipe is stored in racks, it should be continuously supported along its length or the spacing supports should not exceed 900 mm.

If the pipe is stored on ground, it should be stored on square lumbers where should not exceed 900 mm.

If possible, the pipe should be stored in its original packaging. It should be stacked up to maximum 3 layers.



크린 파이프, 피팅, 밸브는 먼지 등 오염방지를 위해 포장을 합니다. 시공하기 전까지 포장지를 뜯지 마십시오.

Esilon clean pipes are closed with pipe end caps and fittings & valves are packaging in polyethylene bag.

Do not take them off for before the installation to prevent dust from contamination.

## ■ 접착접합 Solvent Cement Joining

### 1. 파이프 절단 Cut Pipe Square

파이프, 피팅, 밸브류는 떨어뜨리거나 던지거나 차공구로 두드리지 마십시오. 파손될 수 있습니다.

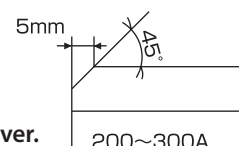
Pipes, Fittings and valves require more care in handling so as not to be dropped, threw or tapped to avoid damages.

### 2. 파이프 내외면 면취 Deburr

파이프 내면의 버를 제거하고, 200A 이상의 파이프는 그림과 같이 외면을 면취해 주십시오.

Remove all burrs inside and outside at the end of pipe.

The end of pipe must be chamfered as shown figure at right for large size pipe as 200A and over.



# 시공 INSTALLATION

### 3. 파이프, 피팅 접합면 청소 Clean Joint Components

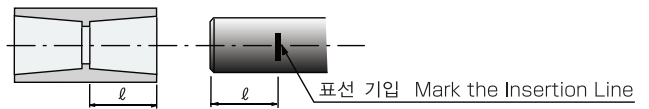
접착 접합면이 되는 파이프 외면과 피팅 내면을 마른 헝겊으로 훑, 먼지, 수분, 유분을 닦아내 주십시오.  
Wipe away all loose dirt and moisture from pipe outside and fitting inside with clean and dry rag.

### 4. 파이프, 피팅의 감합 확인 Check Joint Interference Fit

파이프를 피팅에 똑바로 가볍게 삽입해서 파이프가 수구 길이의 1/3~2/3에서 멈추는지 확인해 주십시오.  
파이프가 잘 들어가지 않거나 안에까지 들어가면 피팅을 바꿔 주십시오.  
To check, lightly insert pipe into fitting socket. For proper interference fit, fitting should go over end of pipe easily but become tight about 1/3 to 2/3 of the way on.  
If it can not become proper interference fit, change new fitting.

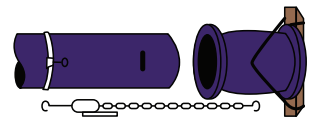
### 5. 표선 기입 Depth of Entry Mark

배관 삽입 확인을 위해 피팅 수구의 길이를 측정해서 파이프에 수구 길이의 표선을 기입합니다.  
Marking the depth of entry is a way to check if pipe has reached the bottom of fitting socket.



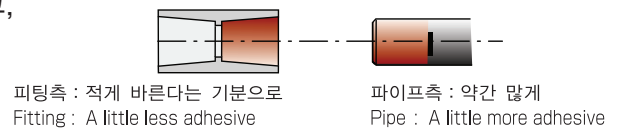
### 6. 삽입 치공구 설치 Assemble Insertion Tools for Large size pipes

대구경은 삽입력이 크기 때문에 파이프와 피팅에 삽입 치공구(레버 블럭과 와이어)를 설치합니다.  
Set insertion tools as lever-block and wires for fitting and pipe for large size pipe.



### 7. 접착제 도포 Apply Solvent Cement

붓으로 피팅 수구와 파이프 외면에 적당량의 접착제를 재빨리 도포합니다.  
피팅 수구는 약간 적게, 파이프 외면은 약간 많은 양의 접착제를 도포하고, 이때 접착제가 파이프 안으로 들어가지 않도록 주의해 주십시오.  
Using brush, solvent cement must be applied uniformly to both fitting socket and pipe outside as soon as possible.  
It must be careful not to flow out inside the pipe.  
Therefore, apply little less cement to fitting socket than pipe outside.



### 8. 파이프 삽입과 상태 유지 Joint Assembly and Hold

접착제가 건조되기 전에 파이프와 피팅을 준비해 두고, 파이프를 표선까지 똑바로 한 번에 삽입해 주십시오. 파이프가 다시 나오기 때문에 다음 표와 같이 삽입한 상태를 유지시켜 주십시오.  
Without delay, while cement is still wet, assembly the pipe and fitting. and then insert immediately the pipe into fitting socket until the mark of entry.  
To avoid pipe push out, hold the pipe and fitting together for proper time as shown right table.  
접합 후 접착제의 휘발물질이 방출되므로 배관은 환기가 되도록 개방해 주십시오.  
Piping after jointing, must be ventilated to emit solvent vapors. Do not close the ends of piping.

### 9. 양생 Initial Set Time and Cure Time

접합시킨 피팅은 접착제가 굳을 때까지 움직이지 말아 주십시오. 또한 접합 후 수압을 가할 때까지 적절한 양생 시간이 필요합니다. 각각의 시간은 아래의 표와 같습니다.  
Handle newly assembled joints carefully until initial set has taken place. The joint must adequately cure prior to use pressure application as shown below table.



# 시공 INSTALLATION


## 삽입유지시간, 이동가능시간, 양생시간 Average Insert Hold Time, Initial Set Time and Cure Time


작업온도 Temperature	5~15°C			15~35°C		
사이즈 Pipe Size	13~75(80)	100~200	250~300	13~75(80)	100~200	250~300
삽입유지시간 Insert Hold Time	2분 (min)	3분 (min)	4분 (min)	1분 (min)	1분 (min)	2분 (min)
양생시간 Cure Time	24시간 (hrs)	48시간 (hrs)	48시간 (hrs)	12시간 (hrs)	24시간 (hrs)	24시간 (hrs)


## 추천접착제 Recommended Eslon Solvent Cement


	슈퍼 에슬론 크린 Super EslonClean	HT 에슬론 크린 HT EslonClean
품명 Grade	<b>No.80C</b>  500g                      1kg	<b>No.100S</b>  500g                      250g


## ■ 사용상의 주의사항 Important Caution

- 

아세톤이나 접착제는 유기용제를 함유한 가연성 위험물입니다. 화재와 폭발사고를 방지하기 위해 보관 장소나 작업장에서는 담배, 토치, 폭죽 등 화기 엄금입니다.  
또한 충분히 환기를 시키며 작업해 주십시오. 휘발 물질은 인체에 악영향을 줄 수 있습니다.  
Acetone for cleaning and solvent cements for pipe and fitting are flammable. To avoid fire and explosion accidents, Extinguish all smoking material, flame, or other ignition sources in working or storage areas. Be sure to work only in a well ventilated space. Ingestion or intentional inhalation of solvent vapors can be harmful or fatal.
- 

접착제의 용제는 잘 휘발되지 않으므로 기온이 5°C 이하에서의 접합 작업은 피해 주십시오. 5°C 이하에서의 작업을 피할 수 없을 경우에는 당사에 문의해 주십시오.  
Because of slower evaporation of solvent, avoid jointing in as low as 5°C. If the jointing can not avoid, please contact us.
- 

배관에는 응력저감과 배관이동 방지를 위해 적절한 지지대나 고정대를 설치해 주십시오.  
Proper pipe support or thrust block must be provide to prevent movement of pipe and to reduce excessive stress.
- 

배관 테스트는 반드시 수압으로 해 주십시오. 배관 내에 에어가 남아있지 않도록 충분히 배기한 뒤 가압해 주십시오. 에어 등 가스 압력 테스트는 절대 하지 마십시오.  
The piping system must be tested with water pressure. Apply pressure after releasing air in piping. do not use air or other gases for pressure testing.
- 

접속부의 누수가 확인되어도 시중에서 판매하는 검지액을 사용하지 마십시오. 검지액은 배관재에 균열 등의 장애를 일으킬 우려가 있습니다.  
When checking leakage in the joint, do not use any of the leakage detecting agents available on market, They might cause any damage as cracks on pipes, fittings and valves.



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