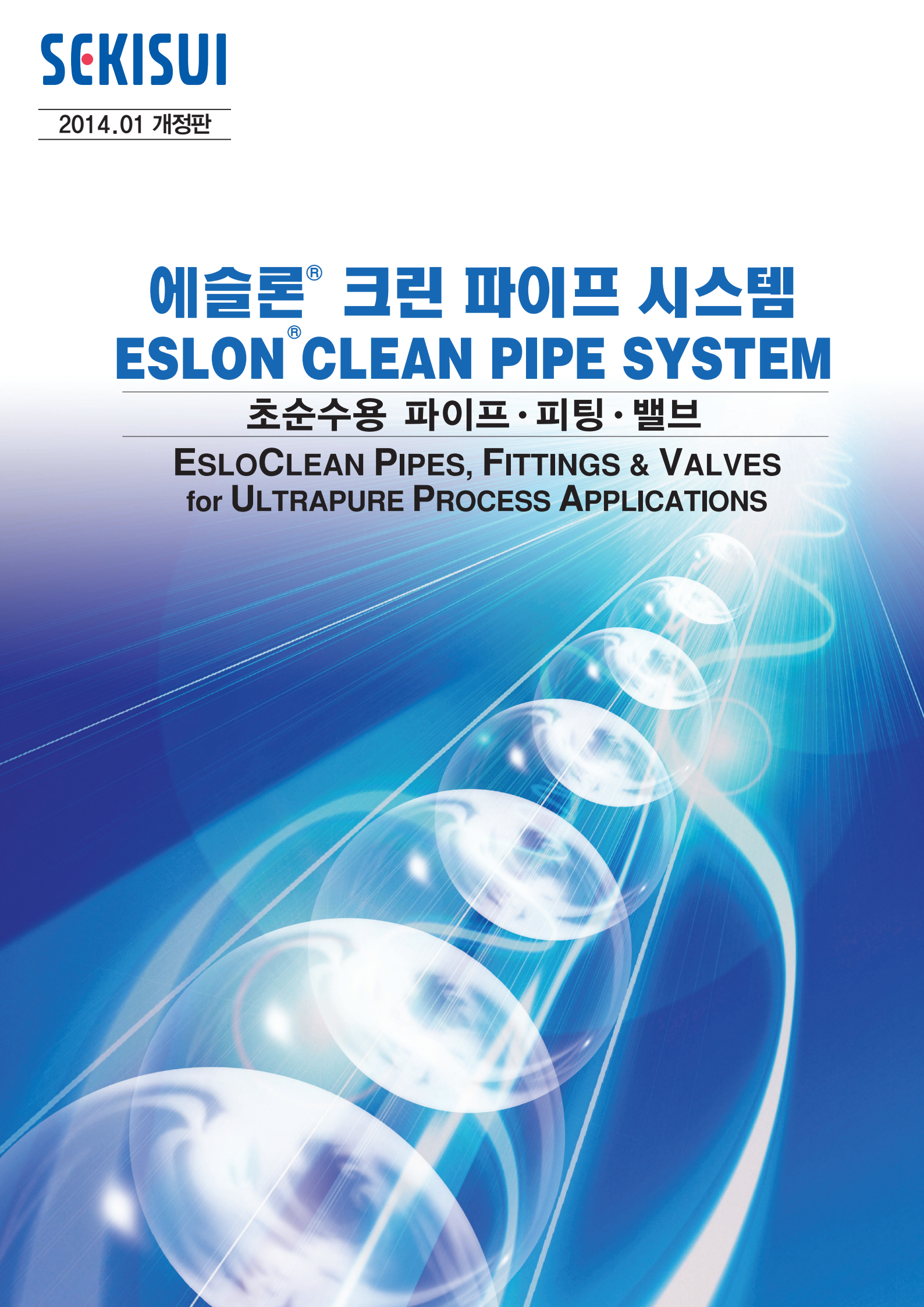
SEKISUI

2014.01 개정판

# 에슬론® 크린 파이프 시스템
# ESLON® 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 세정용수로써 불순물이 아주 적은 초순수가 일반적으로 사용되었습니다.
그에 따라 초순수를 운송하는 배관재도 중금속이나 TOC용출이 지극히 적고, 더욱이 생균의 번식을 막기 위해 내면평활도가 높은 소재가 요구되었습니다.
이러한 고객의 요구에 부응하여 당사는 1984년 세계의 선두로 에슬로 크린 파이프를 개발했고, 그 후 열살균용으로써 내열성을 부여한 HT에슬로 크린 파이프 개발에 이어, 시스템의 신뢰를 향상시키기 위해 내충격성을 더욱 부여한 슈퍼 에슬로 크린 파이프를 개발하였습니다.
현재 세키스이 화학의 크린 배관재는 초미세화가 요구되는 반도체 산업뿐 만 아니라 FPD산업 등 초순수를 필요로 하는 첨단 산업에서도 많은 실적을 쌓으며 광범위하게 사용되고 있습니다. 이렇듯 초순수 분야에서 플라스틱 배관재 넘버원 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 EsoClean 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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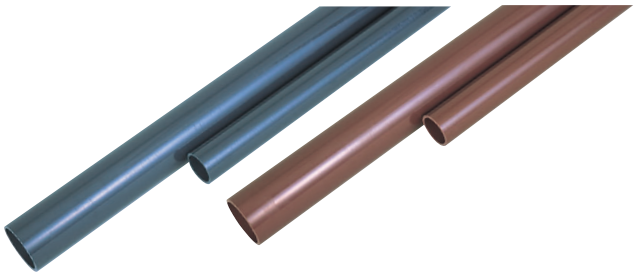

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# 에슬론 크린 파이프 시스템 ESLON CLEAN PIPE SYSTEM

## 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 나뉘어 집니다. Two Kinds of PVC clean pipes are prepared according to the applications as follows.

| 명 칭 Product Name | 재 질 Material | 사이즈 Size | 사용온도 Usable Temp. | 최고허용압력 Max. working Pressure | 접속방식 Joint | 용 도 Jointing 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 | 소켓융착 Socket Fusion | 초순수&열멸균 Ultrapure Process & Heat Sterilization |

## 특 징 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 각 종 이온 용출 성능 Elution of TOC and Heavy Metals

단위 Unit : ㎍/㎡ · 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 |

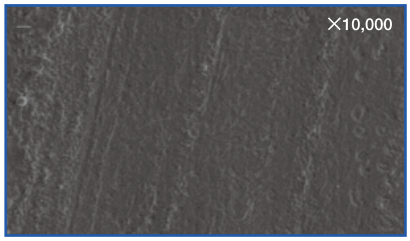
※반도체기반기술연구회가 제창한 단관 봉수 시험법으로 8~30일간의 측정치 Data for 8~30 days by the UCT/Japan test method.

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

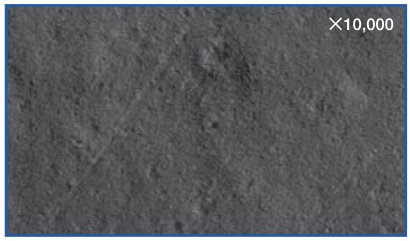
**The pipe inside surface is finished very smooth like mirror, then it prevents proliferation and contamination.**

| 파이프 사이즈 Pipe Size | | 13~150 | 200~300 |
|---|---|---|---|
| 표면 조도 Surface Roughness | Rmax | ≦0.25㎛ | ≦0.30㎛ |

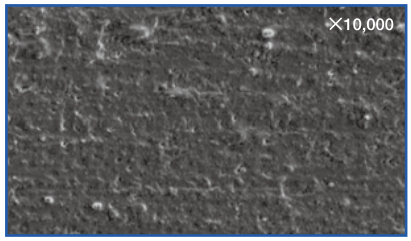
### ■ 전자현미경사진 Microscope photographs of the inside surface of EslonClean pipe




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.

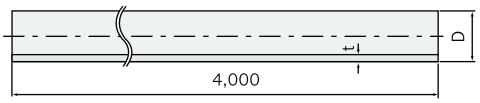
**Excellent chemical resistance and mechanical properties.**

### ■ 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

## 파이프 Pipe




### HI-PVC

단위 Unit : mm

| 호칭 Size A | 호칭 Size B | D | t | 중량 weight (kg/m) |
|---|---|---|---|---|
| 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)

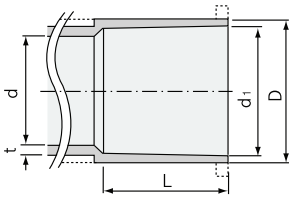
단위 Unit : mm

| 호칭 Size A | 호칭 Size B | D | t | 중량 weight (kg/m) |
|---|---|---|---|---|
| 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

## 피팅 수구 공통 치수 Socket Dimension




●65A이상은 ㄱ의 형상입니다.
The shape of the socket end in 65A and above is ㄱ as illustrated.

### HI-PVC

단위 Unit : mm

| 호칭 Size A | 호칭 Size B | D | t | $d_1$ | L | d |
|---|---|---|---|---|---|---|
| 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 $d_1$, L, D, t는 품종에 따라 다소 다르므로 승인도를 확인해 주십시오.
Since there are some differences among types of fittings in their D, t, $d_1$ and L for 200~300A, confirm them in the approval drawing.

### HT(C-PVC)

단위 Unit : mm

| 호칭 Size A | 호칭 Size B | D | t | $d_1$ | L | d |
|---|---|---|---|---|---|---|
| 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

## 소 켓 Coupling

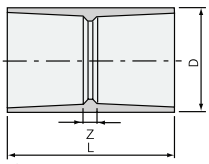


### HI-PVC

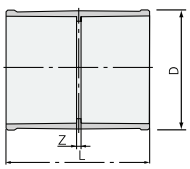
단위 Unit : mm

| 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 |

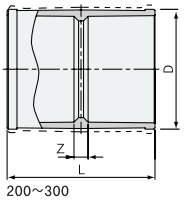
★200~300A 최고허용압력은 다음과 같습니다.
Max.Working Pressure for 200~300A as below.
사출성형품 HI-PVC only : 0.6MPa
FRP보강품 Fiber Reinforced : 1.0MPa



13~50



65~150



200~300

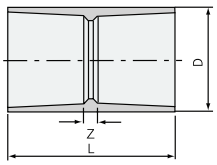
점선은 FRP보강품의 1.0MPa사양입니다.
Dashed shape for Fiber Reinforced : 1.0MPa fitting.



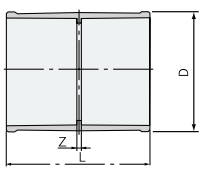
### HT(C-PVC)

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 |



13~50



65~150

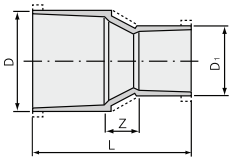
# 피팅 FITTINGS

## 이경 소켓 Reducing Coupling

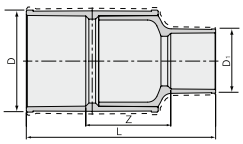




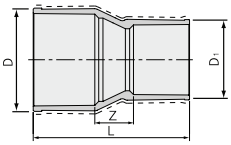
※부싱 타입




13~150




※부싱 타입 With Bushing




200~300

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

### HI-PVC

단위 Unit : mm

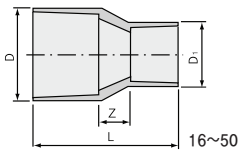
| 호칭 Size | D | D1 | L | Z | 중량 weight (kg) |
|---|---|---|---|---|---|
| 16x13 | 29 | 24 | 61 | 5 | 0.024 |
| 20x13 | 33 | 24 | 68 | 7 | 0.031 |
| 20x16 | 33 | 29 | 71 | 6 | 0.036 |
| 25x13 | 40 | 24 | 86 | 20 | 0.046 |
| 25x16 | 40 | 29 | 85 | 15 | 0.048 |
| 25x20 | 40 | 33 | 84 | 9 | 0.053 |
| 30x13 | 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)





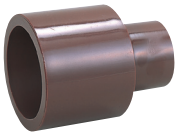

16~50

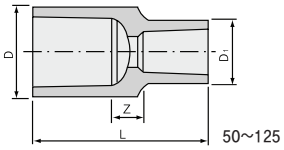
### HT(C-PVC)

단위 Unit : mm

| 호칭 Size | D | D1 | 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

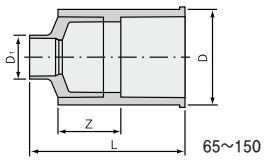
### HT(C-PVC)

단위 Unit : mm

| 호칭 Size | D | D1 | 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

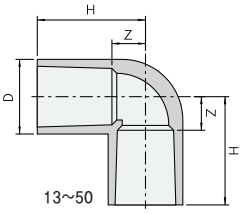
| 호칭 Size | D | D1 | L | Z | 중량 weight (kg) |
|---|---|---|---|---|---|
| 65x13 | 87 | 28 | 144 | 55 | 0.527 |
| 65x16 | 87 | 31 | 154 | 55 | 0.529 |
| 100x30 | 130 | 42 | 246 | 114 | 1.792 |
| 100x40 | 130 | 48 | 251 | 114 | 1.802 |
| 125x50 | 157 | 70 | 288 | 126 | 2.949 |
| 125x65 | 157 | 88 | 293 | 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 |

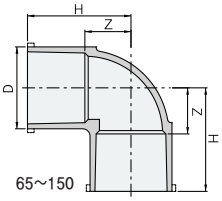
# 피팅 FITTINGS

## 엘보 ELBOW

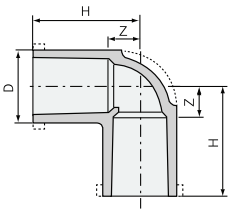
### 90° 엘보 90° Elbow





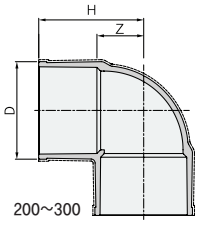






**HI-PVC** 단위 Unit : mm

| 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 |



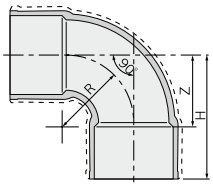

점선은 FRP보강품의 1.0MPa사양입니다.
Dashed shape for Fiber Reinforced : 1.0MPa fitting.

**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





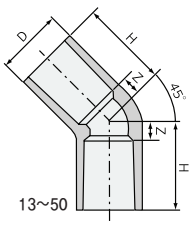

**HI-PVC** 단위 Unit : mm

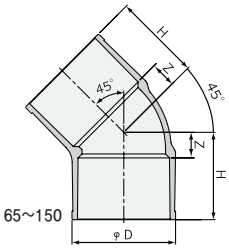
| 호칭 Size | H | Z | R | 중량 weight (kg) |
|---|---|---|---|---|
| ★200 | 341 | 196 | 196 | 7.370 |
| ★250 | 428 | 253 | 242 | 13.970 |
| ★300 | 441 | 256 | 242 | 19.690 |

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

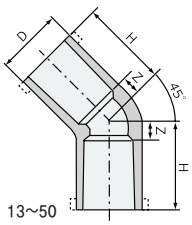
### 45° 엘보 45° Elbow

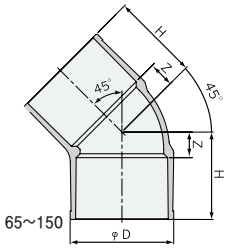




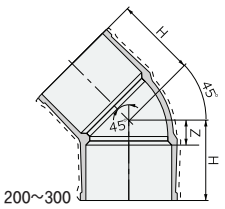



**HI-PVC** 단위 Unit : mm

| 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

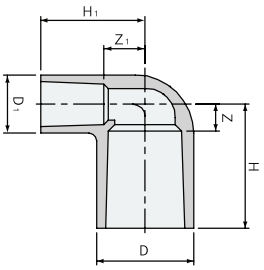
| 호칭 Size | D | H | Z | 중량 weight (kg) |
|---|---|---|---|---|
| 13 | 26 | 27 | 7 | 0.030 |
| 16 | 29 | 33 | 8 | 0.041 |
| 20 | 34 | 44 | 9 | 0.067 |
| 25 | 41 | 50 | 10 | 0.090 |
| 30 | 46 | 53 | 13 | 0.110 |
| 40 | 56 | 61 | 16 | 0.155 |
| 50 | 69 | 80 | 30 | 0.296 |
| 65 | 91 | 94 | 24 | 0.495 |
| 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

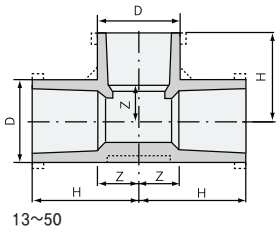
단위 Unit : mm

| 호칭 Size | D | D1 | H | H1 | Z | Z1 | 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 |

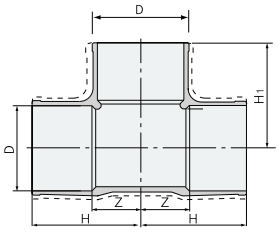
# 티 TEE

## 티 Equal Tee






13~50




65~300

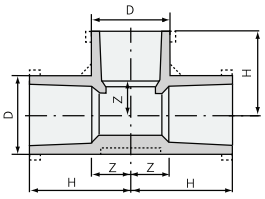
점선은 FRP보강품의 1.0MPa사양입니다.
Dashed shape for Fiber Reinforced : 1.0MPa fitting.

### HI-PVC

단위 Unit : mm

| 호칭 Size | D | H | H1 | 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

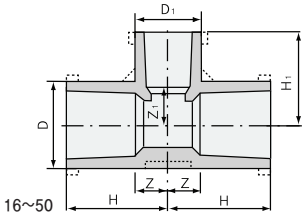
| 호칭 Size | D | H | Z | 중량 weight (kg) |
|---|---|---|---|---|
| 13 | 27.5 | 31.0 | 11 | 0.042 |
| 16 | 31.0 | 38.5 | 13 | 0.055 |
| 20 | 36.0 | 50.5 | 15 | 0.087 |
| 25 | 42.0 | 58.5 | 18 | 0.136 |
| 30 | 48.0 | 63.0 | 23 | 0.154 |
| 40 | 58.0 | 73.5 | 28 | 0.300 |
| 50 | 70.0 | 85.5 | 35 | 0.382 |
| 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 |

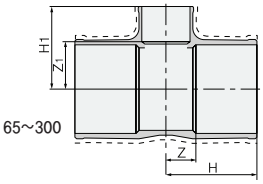
★200~300A 최고허용압력은 다음과 같습니다. Max.Working Pressure for 200~300A as below.
사출성형품 HI-PVC only : 0.6MPa FRP보강품 Fiber Reinforced : 1.0MPa

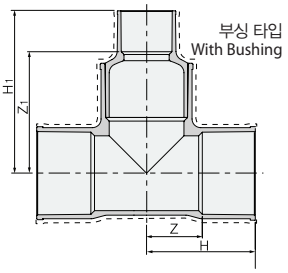
# 피팅 FITTINGS

## 이경 티 Reducing Tee






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

### HI-PVC

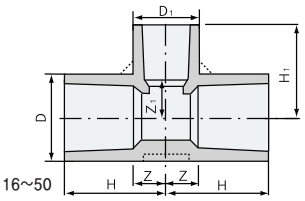
단위 Unit : mm

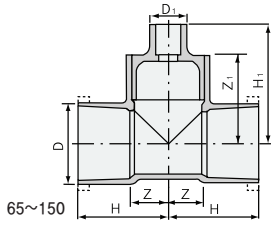
| 호칭 Size | D | D1 | H | H1 | Z | Z1 | 중량 weight (kg) |
|---|---|---|---|---|---|---|---|
| 16x13 | 29 | 24 | 41 | 38 | 11 | 12 | 0.045 |
| 20x13 | 33 | 24 | 46 | 40 | 11 | 14 | 0.059 |
| 20x16 | 33 | 29 | 48 | 45 | 13 | 15 | 0.059 |
| 25x13 | 40 | 24 | 51 | 43 | 11 | 17 | 0.078 |
| 25x16 | 40 | 29 | 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








### HT(C-PVC)

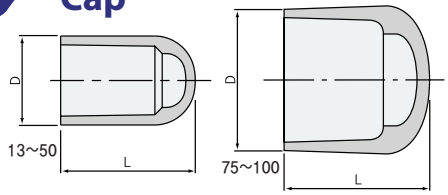
단위 Unit : mm

| 호칭 Size | D | D1 | H | H1 | Z | Z1 | 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 |

# 캡 CAP

## 캡 Cap



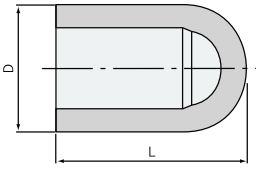



### HI-PVC

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 | | | | |






### 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 | | | | |

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

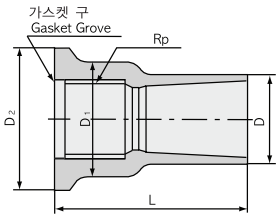
# 피팅 FITTINGS

## 수전피팅 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.

### 수전 소켓 Faucet Socket



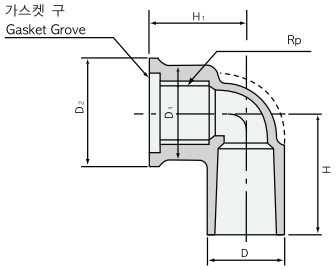



HI-PVC 단위 Unit : mm

| 호칭 Size | D | D1 | D2 | 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



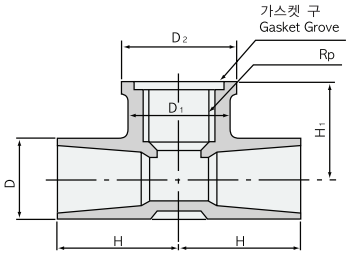



HI-PVC 단위 Unit : mm

| 호칭 Size | D | D1 | D2 | H | H1 | 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



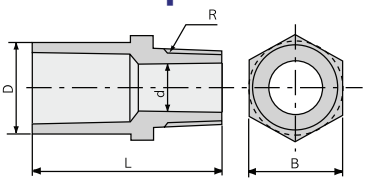



HI-PVC 단위 Unit : mm

| 호칭 Size | D | D1 | D2 | H | H1 | 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

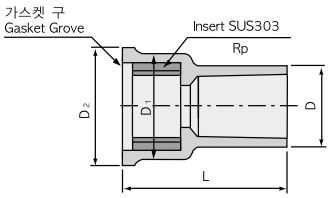
| 호칭 Size | D | d | L | B | 중량 weight (kg) |
|---|---|---|---|---|---|
| 13xR1/2 | 24 | 13 | 50 | 24 | 0.016 |
| 16xR1/2 | 29 | 13 | 54 | 29 | 0.023 |
| 20xR3/4 | 33 | 18 | 64 | 33 | 0.032 |
| 25xR1 | 40 | 23 | 71 | 40 | 0.047 |
| 30xR1 1/4 | 46 | 31 | 80 | 46 | 0.066 |
| 40xR1 1/2 | 57 | 37 | 92 | 57 | 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

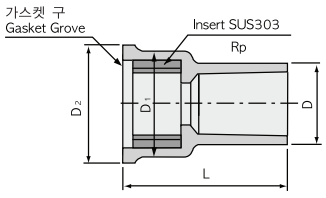





PVC 단위 Unit : mm

| 호칭 Size | D | D1 | D2 | 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

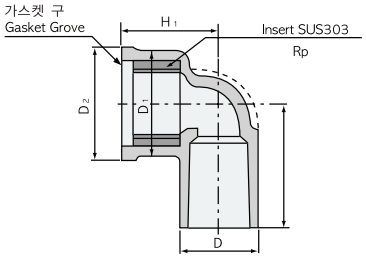
| 호칭 Size | D | D1 | D2 | L | 중량 weight (kg) |
|---|---|---|---|---|---|
| 13xRp3/8 | 27.5 | 34 | 35 | 46 | 0.031 |
| 13xRp1/2 | 27.5 | 34 | 35 | 46 | 0.031 |
| 16xRp3/8 | 31.0 | 34 | 35 | 52 | 0.034 |
| 16xRp1/2 | 31.0 | 34 | 35 | 52 | 0.034 |
| 20xRp1/2 | 36.0 | 42 | 44 | 63 | 0.062 |
| 20xRp3/4 | 36.0 | 42 | 44 | 63 | 0.062 |
| 25xRp1 | 42.0 | 52 | 54 | 72 | 0.085 |

# 피팅 FITTINGS



## SUS 인서트 급수전 엘보 SUS Inserted Faucet Elbow



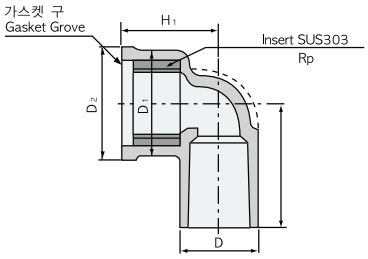



### PVC

단위 Unit : mm

| 호칭 Size | D | D1 | D2 | H | H1 | 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 |





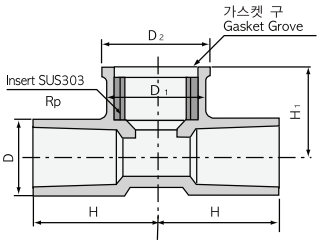

### HT(C-PVC)

단위 Unit : mm

| 호칭 Size | D | D1 | D2 | H | H1 | 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



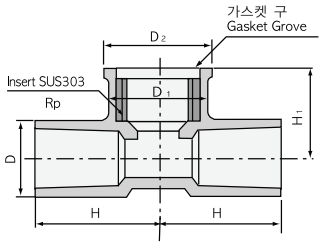



### PVC

단위 Unit : mm

| 호칭 Size | D | D1 | D2 | H | H1 | 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 |





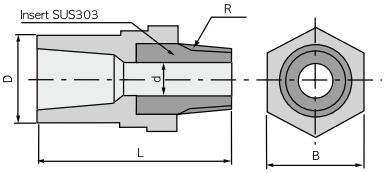

### HT(C-PVC)

단위 Unit : mm

| 호칭 Size | D | D1 | D2 | H | H1 | 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 300이상은 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 |

# 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 융착 방식으로 뛰어난 내압성능과 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.

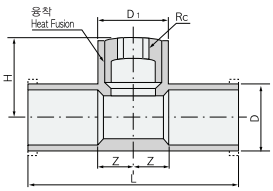
**ESLON Compact fitting & Header are easy to install by reducing number of fittings and jointing. These features lead to lower piping cost.**

## 나사식 부싱 티 Bushing Tee with Female Thread

### T형 T-Type



PAT. No.1915097

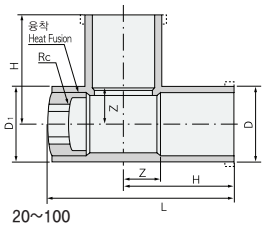



주 : 나사부는 **JIS B 0203**(배관용 테이퍼 나사)에 준합니다.
Note : The thread dimensions are in accordance with **JIS B 0203**.

### L형 L-Type



PAT. No.1915097




20~100

### HI-PVC

단위 Unit : mm

| 호칭 Size | L | H | D | $D_1$ | 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

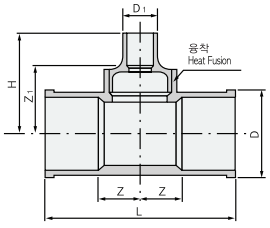
단위 Unit : mm

| 호칭 Size | L | H | D | $D_1$ | 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





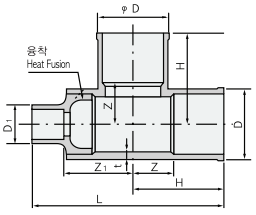

### HI-PVC

단위 Unit : mm

| 호칭 Size | L | H | D | $D_1$ | Z | $Z_1$ |
|---|---|---|---|---|---|---|
| 65x16 | 220.0 | 115 | 87 | 31 | 49.00 | 85 |
| 65x20 | | 120 | | 36 | | 85 |
| 65x25 | | 125 | | 42 | | 85 |
| 65x30 | | 124 | | 48 | | 82 |
| 65x40 | | 140 | | 58 | | 92 |
| 75x16 | 226.0 | 122 | 102 | 36 | 49.00 | 92 |
| 75x20 | | 127 | | 36 | | 92 |
| 75x30 | | 131 | | 48 | | 89 |
| 100x16 | 280.0 | 139 | 130 | 36 | 56.00 | 109 |
| 100x20 | | 139 | | 36 | | 104 |
| 100x25 | | 145 | | 42 | | 105 |
| 100x30 | | 145 | | 48 | | 103 |
| 100x40 | | 160 | | 58 | | 112 |
| 100x65 | | 167 | | 87 | | 107 |
| 125x16 | 346.0 | 161 | 157 | 36 | 69.00 | 131 |
| 125x20 | | 161 | | 36 | | 126 |
| 125x25 | | 166 | | 42 | | 126 |
| 125x30 | | 167 | | 48 | | 125 |
| 125x40 | | 172 | | 58 | | 124 |
| 125x50 | | 177 | | 70 | | 124 |
| 125x65 | | 190 | | 87 | | 130 |
| 125x75 | | 198 | | 102 | | 134 |
| 150x16 | 390.0 | 165 | 186 | 36 | 63.00 | 135 |
| 150x20 | | 165 | | 36 | | 130 |
| 150x25 | | 171 | | 42 | | 131 |
| 150x30 | | 171 | | 48 | | 129 |
| 150x40 | | 186 | | 58 | | 138 |
| 150x50 | | 194 | | 70 | | 141 |
| 150x65 | | 193 | | 87 | | 133 |
| 200x16 | 435.3 | 195 | 243 | 36 | 72.65 | 165 |
| 200x20 | | 195 | | 36 | | 160 |
| 200x25 | | 200 | | 42 | | 160 |
| 200x30 | | 201 | | 48 | | 161 |
| 200x40 | | 206 | | 58 | | 161 |
| 200x50 | | 211 | | 70 | | 161 |
| 200x65 | | 224 | | 87 | | 163 |
| 200x75 | | 232 | | 102 | | 160 |

### L형 L-Type






65x16~100x75

### HI-PVC

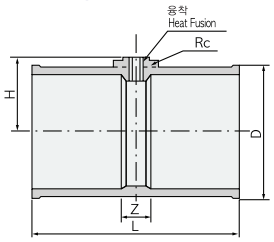
단위 Unit : mm

| 호칭 Size | L | H | D | $D_1$ | Z | $Z_1$ |
|---|---|---|---|---|---|---|
| 65x16 | 225 | 110 | 87 | 31 | 49 | 85 |
| 65x20 | 230 | | | 36 | | 85 |
| 65x25 | 235 | | | 42 | | 85 |
| 65x30 | 234 | | | 48 | | 82 |
| 65x40 | 250 | | | 58 | | 92 |
| 75x16 | 247 | 120 | 102 | 36 | 56 | 97 |
| 75x20 | 247 | | | 36 | | 92 |
| 75x25 | 253 | | | 42 | | 93 |
| 75x30 | 253 | | | 48 | | 91 |
| 75x40 | 268 | | | 58 | | 100 |
| 75x50 | 276 | | | 70 | | 103 |
| 75x65 | 275 | | | 87 | | 95 |
| 100x16 | 298 | 152 | 130 | 36 | 68 | 116 |
| 100x20 | 298 | | | 36 | | 111 |
| 100x25 | 303 | | | 42 | | 111 |
| 100x30 | 304 | | | 48 | | 110 |
| 100x40 | 309 | | | 58 | | 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





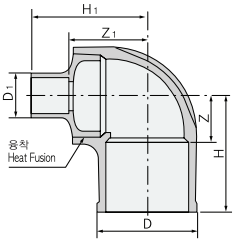

### HI-PVC

단위 Unit : mm

| 호칭 Size | L | H | D | Z | 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 |

## 이경 엘보 Reducing Elbow





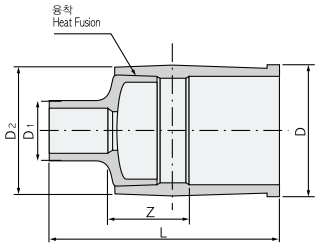

### HI-PVC

단위 Unit : mm

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

## 이경 소켓 Reducing Coupling






### HI-PVC

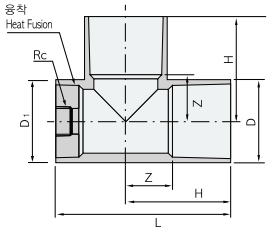
단위 Unit : mm

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

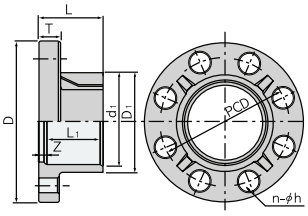
# 피팅 FITTINGS

## 후랜지 FLANGE

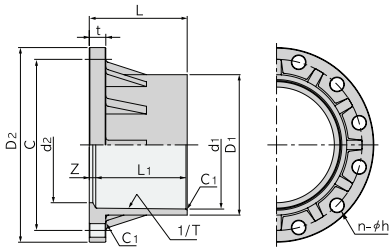
후랜지 치수는 JIS B 2210에 준합니다.
The flange dimensions are in accordance with JIS B 2210.

### TS 후랜지 JIS10K — TS Flange JIS10K



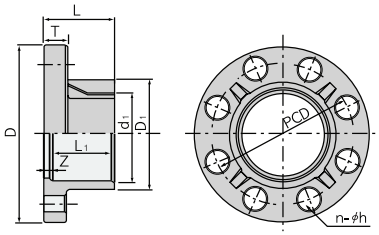



13~150




200~300






13~150

#### HI-PVC

단위 Unit : mm

| 호칭 Size A | 호칭 Size B | $d_1$ | $L_1$ | $D_1$ | L | Z | PCD | D | T | n-øh | 중량 weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

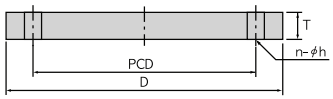
#### HT(C-PVC)

단위 Unit : mm

| 호칭 Size A | 호칭 Size B | $d_1$ | $L_1$ | $D_1$ | L | Z | PCD | D | T | n-øh | 중량 weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 A | 호칭 Size B | D | PCD | T | n-øh | 중량 weight (kg) |
|---|---|---|---|---|---|---|
| 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 |

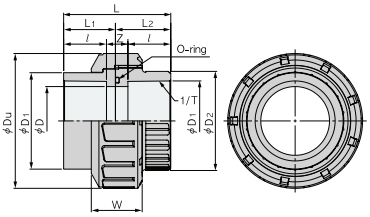
# 피팅 FITTINGS

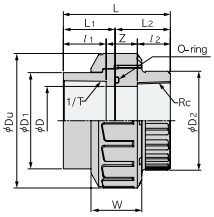
## 유니온 피팅 TRUE UNION

### 컴팩트 타입(TS 소켓, PVDF변환피팅) Compact Type(TS Socket, PVDF Transition Fitting)



TS 소켓
**TS Socket**

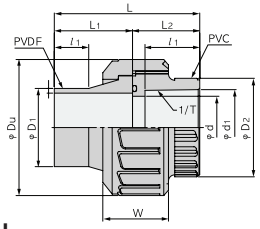



나사 변환 피팅
**Thread Transition**



PVDF 변환 피팅
**PVDF Transition**



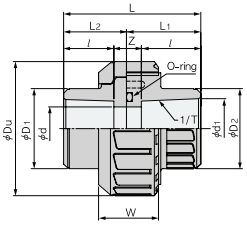

### PVC, HT(C-PVC)

단위 Unit : mm

| 호칭 Size | | TS수구 TS Socket | | | | | | 나사 수구 Thread | | | | 융착 수구 Butt | | | | | | L2 | d | Du | D1 | D2 | W | 오링 O-ring |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | d1 | I/T | Z | ℓ | L1 | L | Rc | Z | ℓ2 | L | D1 | t | Z | ℓ1 | L1 | 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.**

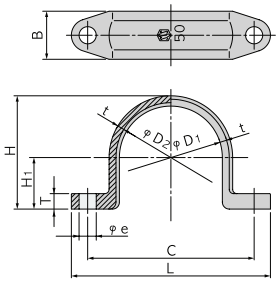
### PVC, HT(C-PVC)

단위 Unit : mm

| 호칭 Size | | TS수구 TS Socket | | | L | L1 | L2 | Z | d | Du | D1 | D2 | W | 오링 O-ring |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | d1 | 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

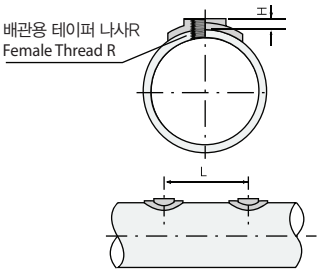
| 호칭 Size | ØD1 | ØD2 | t | C | L | Øe | T | H1 | H | B | 사용볼트 Bolt |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 22 | 24 | 3.0 | 42 | 53 | 6 | 5 | 11.0 | 26.0 | 15 | M5 |
| 20 | 26 | 29 | 3.0 | 48 | 59 | 6 | 5 | 13.0 | 30.5 | 18 | M5 |
| 25 | 32 | 35 | 3.0 | 54 | 65 | 6 | 6 | 16.0 | 36.5 | 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



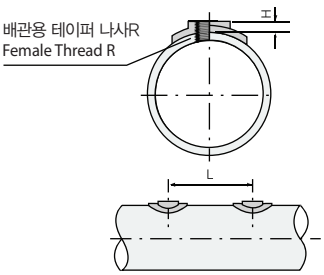



최대 파이프 길이 : 4,000mm
Max.Pipe Length : 4,000mm

### 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 |





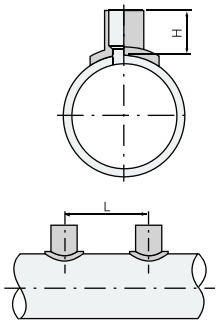

최대 파이프 길이 : 4,000mm
Max.Pipe Length : 4,000mm

### 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 |

## TS 소켓 타입 TS Socket Type



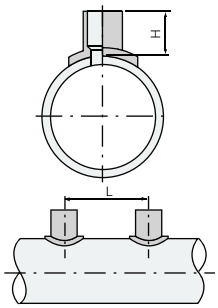



최대 파이프 길이 : 4,000mm
Max.Pipe Length : 4,000mm

### 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 | 70 |
| 125x16 | 70 | 70 |
| 125x20 | 70 | 70 |
| 125x25 | 80 | 80 |
| 125x30 | 80 | 80 |
| 125x40 | 90 | 90 |
| 125x50 | 120 | 120 |
| 150x13 | 70 | 70 |
| 150x16 | 70 | 70 |
| 150x20 | 70 | 70 |
| 150x25 | 80 | 80 |
| 150x30 | 80 | 80 |
| 150x40 | 90 | 90 |
| 150x50 | 120 | 120 |

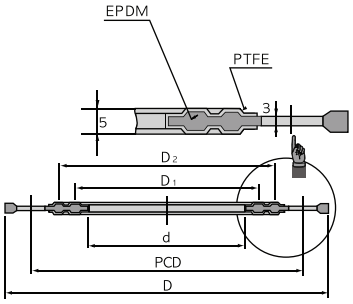
※ L : 주배관 사이즈의 분기 최소 간격

# 가스켓 GASKET

## 에슬론 PTFE 가스켓 ESLON PTFE GASKET

### JIS10K JIS10K





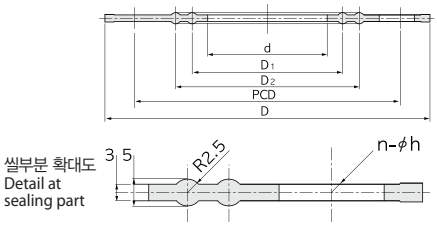

단위 Unit : mm

| 호칭 Size | d | D1 | D2 | PCD | D | n-øh | 추천조임토르크 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

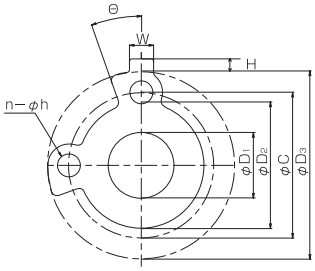
| 호칭 Size | d | D1 | D2 | PCD | D | n-øh | 추천조임토르크 N-m{kgf-cm} Recommend Fasten Torqu |
|---|---|---|---|---|---|---|---|
| 13 | 17 | 25 | 38 | 65 | 88 | 4-15 | 15{150} |
| 15 | 20 | 28 | 42 | 70 | 93 | 4-15 | 15{150} |
| 20 | 25 | 33 | 47 | 75 | 98 | 4-15 | 30{300} |
| 25 | 30 | 38 | 53 | 90 | 123 | 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

단위 Unit : mm

| 호칭 Size | D1 | D2 | C | D3 | H | W | Θ | n-øh | 추천조임토르크 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} |




### PTFE JPI 클래스150 PTFE JPI150

단위 Unit : mm

| 호칭 Size | D1 | D2 | C | D3 | H | W | Θ | n-øh | 추천조임토르크 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

## 다이아후램밸브 DIAPHRAGM VALVE 금유품 Oil-free

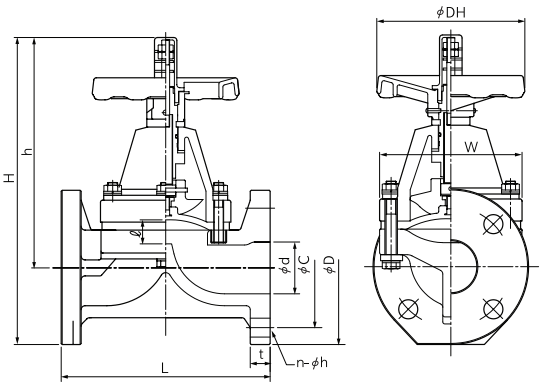
자동밸브도 대응 가능합니다.
Automatic valve can be also applied.

### 후랜지식 Flange


U-PVC


HT(C-PVC)


PVDF




### 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 | | | | | | | | øD | øC | n-øh | 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.

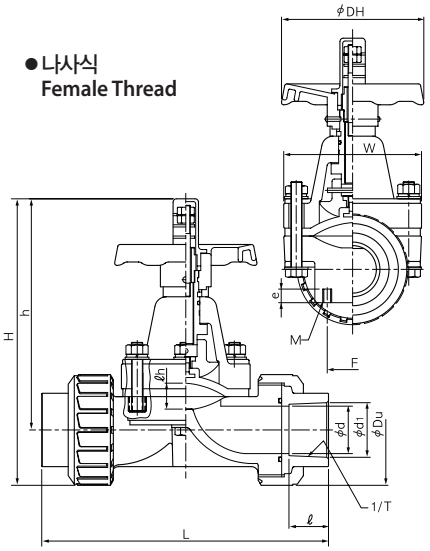
### 유니온식 True Union


U-PVC

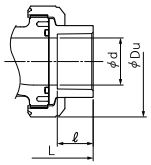

HT(C-PVC)


PVDF

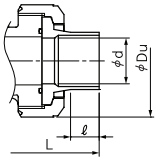
● 나사식
Female Thread




● TS식
TS Socket




● 버트 융착식
Butt Fused Spigot




### 규격표 Dimension Table

단위 Unit : mm

| 호칭 Size | | d | L | | | H | | h | | DH | W | | Du | | ℓh | ℓ | | | 1/T | 중량 weight (kg) | | | | | 포장수 Q'ty/c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | | 나사 Thread | TS | 융착 Butt | 나사·TS Thread·TS | 융착 Butt | 나사·TS Thread·TS | 융착 Butt | | 나사·TS Thread·TS | 융착 Butt | 나사·TS Thread·TS | 융착 Butt | | 나사 Thread | TS | 융착 Butt | | U-PVC | | HT(C-PVC) | PVDF | | |
| | | | | | | | | | | | | | | | | | | | | 나사 Thread | TS | TS | 나사 Thread | 융착 Butt | |
| 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



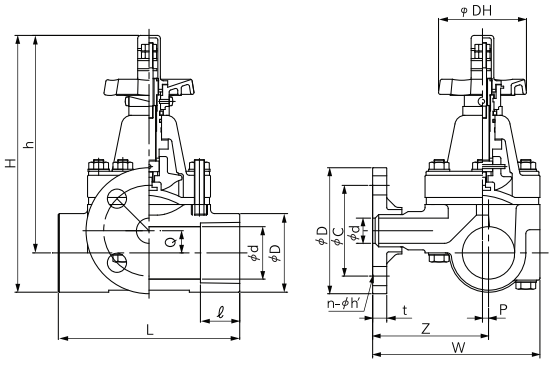
U-PVC



HT(C-PVC)



PVDF




■ 규격표 Dimension Table

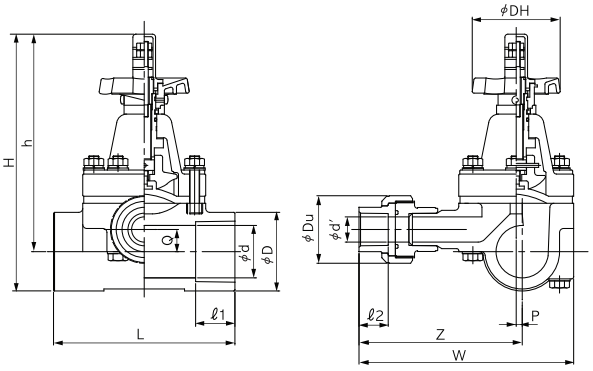
단위 Unit : mm

| 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 | øD | øC | n-øh | 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」 카타로그를 참조해 주십시오.
Please refer to brochure "ESLON VALVE" for details of valves.

# 크린 밸브 CLEAN VALVES

## 볼밸브 BALL VALVE 금유품 Oil-free

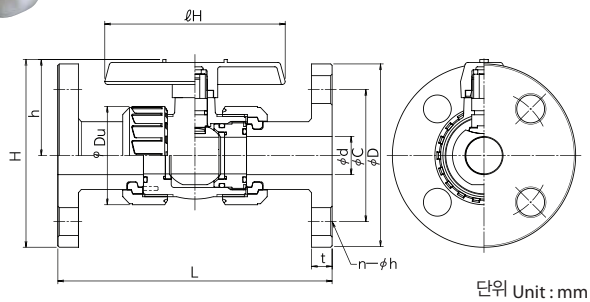
자동밸브도 대응 가능합니다.
Automatic valve can be also applied.

### 후랜지식 Flange


U-PVC


HT(C-PVC)


PVDF




■ 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 | | | | | | | 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 |

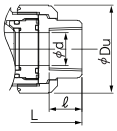
### 유니온식 True Union


U-PVC

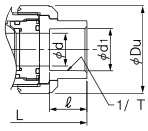

HT(C-PVC)


PVDF

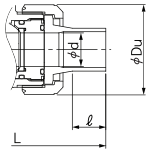
● 나사식
Female Thread




● TS식
TS Socket




● 버트 융착식
Butt Fused Spigot




■ 규격표 Dimension Table

단위 Unit : mm

| 호칭 Size | | d | L | | | | H | h | ℓH | Du | ℓ | | | | $d_1$ | 1/T | 중량 weight (kg) | | | 포장수 Q'ty/c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | | 나사 Thread | TS | PVDF | | | | | | 나사 Thread | | TS | 융착 Butt | | | U-PVC | HT(C-PVC) | PVDF | |
| | | | | | 나사 Thread | 융착 Butt | | | | | 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 |

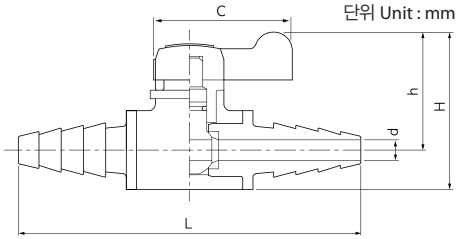
# 밸브 수동식 VALVES

## 미니 볼밸브 MINI BALL VALVE 세정품 Rinsed

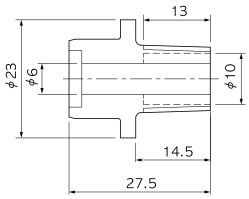


● 호스×호스식(6A)
Hose×Hose(6A)

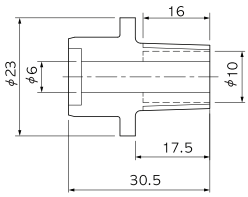
단위 Unit : mm



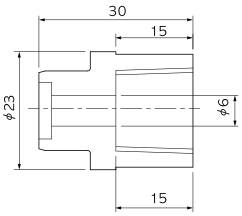

●숫나사 수구 (R 1/4 · 3/8)
Male Thread (R 1/4 · 3/8)



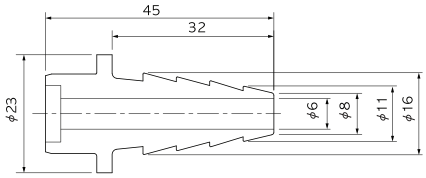

●숫나사 수구 (R 1/2)
Male Thread (R 1/2)



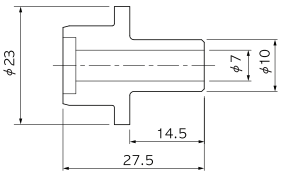

●암나사 수구 (Rc 1/4 · 3/8)
Female Thread (Rc 1/4 · 3/8)



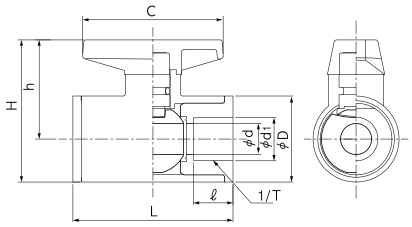

●호스 수구
Hose




●스트레이트 수구
Straight




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

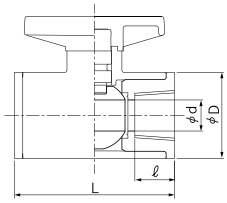



## 규격표 Dimension Table

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 |

● 나사식(13A · 15A)
FemaleThread (13A · 15A)




## 수구 조합과 L규격표
## L & Weight for Each Connection Type

단위 Unit : mm

| 호칭 Size | 접속방식 Connection Type | | L | 중량 weight (g) |
|---|---|---|---|---|
| 6A | 숫나사 x 숫나사 | MaleThread x MaleThread | 66 | 30 |
| | 숫나사 x 암나사 | MaleThread x FemaleThread | 69 | 40 |
| | 숫나사 x 호스 | MaleThread x Hose | 83 | 40 |
| | 숫나사 x 스트레이트 | MaleThread x Straight | 66 | 30 |
| | 암나사 x 암나사 | FemaleThread x FemaleThread | 71 | 40 |
| | 암나사 x 호스 | FemaleThread x Hose | 85 | 40 |
| | 암나사 x 스트레이트 | FemaleThread 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 | FemaleThread Rc1/2 | 67 | 90 |
| | TS13 | TS Socket 13 | 67 | 90 |
| | TS15 | TS Socket 15 | 67 | 80 |

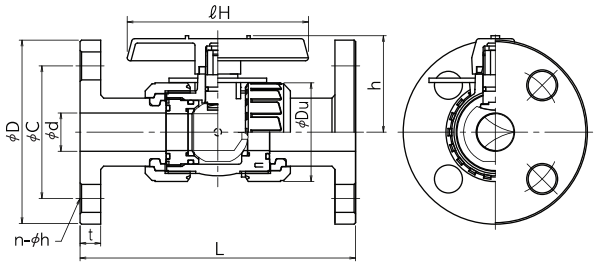
# 크린 밸브 CLEAN VALVES

## YP볼밸브 YP-BALL VALVE 금유품 Oil-free

자동밸브도 대응 가능합니다.
Automatic valve can be also applied.

### 후랜지식 Flange






### 규격표 Dimension Table

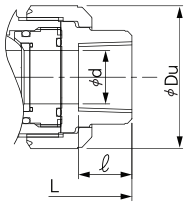
단위 Unit : mm

| 호칭 Size | | d | L | H | h | ℓH | Du | 후랜지부 Flange(JIS 10K) | | | | 중량 weight (kg) | 포장수 Q'ty/c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | | | | | | | ØD | ØC | n-Øh | 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 |

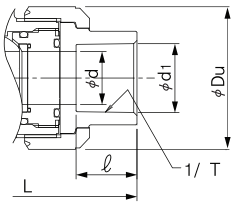
### 나사식 · TS식 Female Thread / TS Socket



● 나사식
Female Thread




● TS식
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

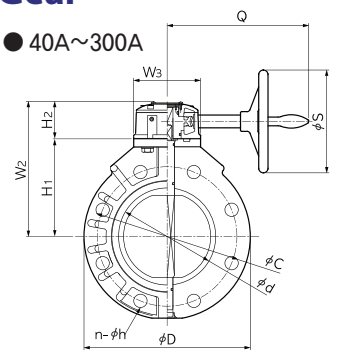
## 버터플라이밸브 BUTTERFLY VALVE 세정품 Rinsed

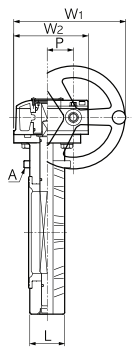
자동밸브도 대응 가능합니다.
Automatic valve can be also applied.

### 기어식 Gear

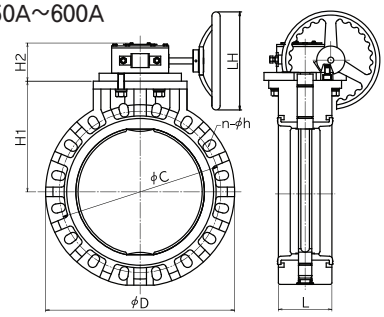


● 40A~300A




● 350A~600A




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

단위 Unit : mm

| 호칭 Size | | d | L | $H_1$ | $H_2$ | Q | $W_1$ | $W_2$ | $W_3$ | øS | D | 후랜지부 Flange (JIS 10K) | | 중량 weight (kg) | | | 포장수 Q'ty/c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | | | | | | | | | | | C | n-øh | 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

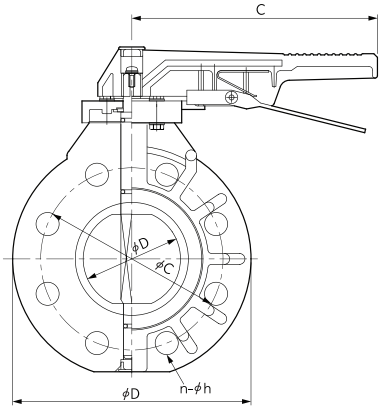
단위 Unit : mm

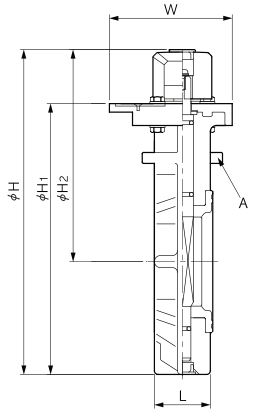
| 호칭 Size | | L | øD | $H_1$ | $H_2$ | LH | 후랜지부 Flange (JIS 10K) | | | 중량 weight (kg) | | | 포장수 Q'ty/c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | | | | | | C | n-øh | M | U-PVC | PP | PVDF | |
| 350 | 14 | 129 | 535 | 325 | 105 | 310 | 445 | 16-25 | - | 39.0 | 37.0 | 51.3 | 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 | $H_1$ | $H_2$ | C | W | D | 후랜지부 Flange (JIS 10K) | | 중량 weight (kg) | | | 포장수 Q'ty/c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | | | | | | | | | C | n-øh | 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 |

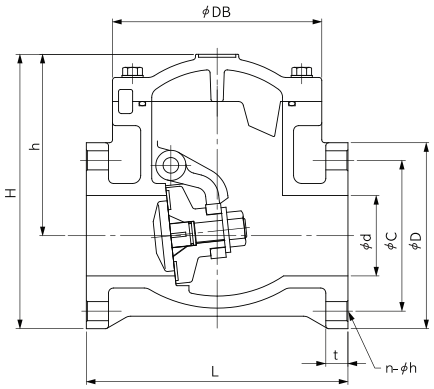
# 크린 밸브 CLEAN VALVES

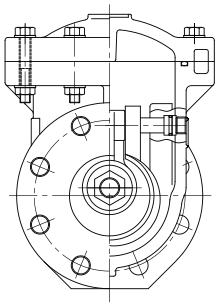
## 스윙체크밸브 CHECK VALVE SWING TYPE 세정품 Rinsed

### 후랜지식 Flange


U-PVC


PVDF



### 규격표 Dimension Table

단위 Unit : mm

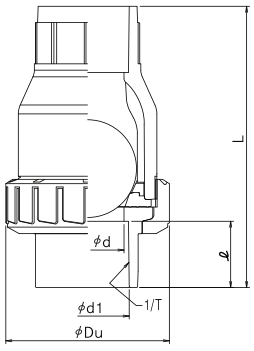
| 호칭 Size | | d | L | H | h | $D_B$ | 후랜지부 Flange (JIS 10K) | | | | 중량 weight (kg) | | 포장수 Q'ty/c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | | | | | | D | C | t | n-øh | U-PVC | PVDF | |
| 15 | 1/2 | 21 | 140 | 143 | 93 | 112 | 100 | 70 | 14 | 4-15 | 1.0 | 1.3 | 2 |
| 20 | 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



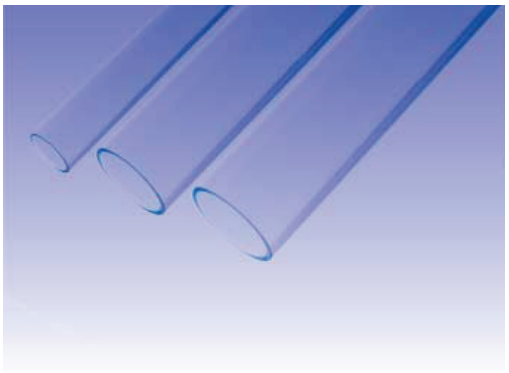

### 규격표 Dimension Table

단위 Unit : mm

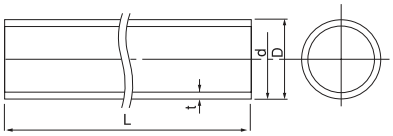
| 호칭 Size | | d | L | | Du | TS | | ℓ | | 중량 weight (kg) | | 포장수 Q'ty/c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | | 나사 Thread | TS | | $d_1$ | 1/T | 나사 Thread | TS | U-PVC TS·나사 Thread | HT(C-PVC) TS·나사 Thread | |
| 15 | 1/2 | 16 | 88 | 98 | 49 | 22.3 | 1/37 | 13 | 22 | 0.1 | 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

## 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 Sharpy Impact Strength | $KJ/m^2$ | ASTM D-256 | 21 | > 7 | - |
| 열적 Thermal | 선팽창계수 Linear Expansion Coefficient | 1/°C | ASTM D-696 | $7\times10^{-5}$ | $7\times10^{-5}$ | $12\sim14\times10^{-5}$ |
| | 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 |
| | 비캣연화온도 Vicat Soften Temperature | °C | JIS K 7206 | 81 | 113 | 170 |
| | 연소성 Flammability | - | ASTM D-635 | 자기소화성 Self Extinct | 자기소화성 Self Extinct | 자기소화성 Self Extinct |
| 전기적 Electrical | 체적고유저항 Volume Resistivity | Ω·cm | ASTM D-257 | $>1\times10^{15}$ | $>1\times10^{15}$ | $>1\times10^{14}$ |
| | 내전성 Dielectric Strength | KV/mm | ASTM D-149 | > 40 | > 40 | > 40 |

## 용출성능 ELUTION PERFORMANCE

### 1. 파이프 Pipe

| 검출항목 Detection Item | 슈퍼에슬론크린 Super EslonClean | | 크린PVC Clean PVC | | PVDF-UHP | | PP-HP | |
|---|---|---|---|---|---|---|---|---|
| | 봉입수농도 Concentration (μg/l) | 용출속도 Elution Speed ($\mu g/m^2 \cdot day$) | 봉입수농도 Concentration (μg/l) | 용출속도 Elution Speed ($\mu g/m^2 \cdot day$) | 봉입수농도 Concentration (μg/l) | 용출속도 Elution Speed ($\mu g/m^2 \cdot day$) | 봉입수농도 Concentration (μg/l) | 용출속도 Elution Speed ($\mu g/m^2 \cdot day$) |
| TOC | 20.0 | 5.0 | 59.0 | 15.9 | 8.0 | 3.0 | 14.0 | 4.0 |
| $SiO_2$ | < 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.

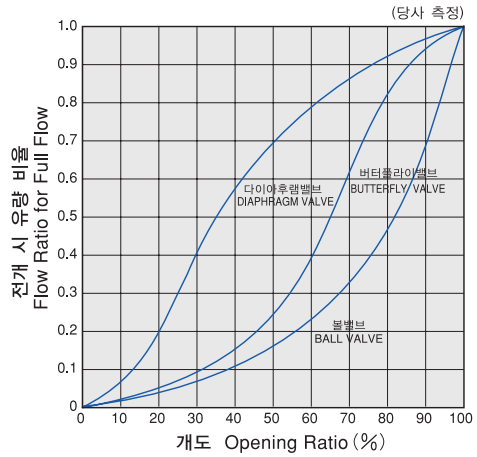
### 2. 밸브 Valves

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 다이아후램밸브 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/cm²)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/cm²)일 때, 1분 동안 몇 리터의 맑은 물이 그 밸브를 통과하는지를 나타내는 수치입니다. 액체에서의 Cv치 일반식은 다음과 같습니다.

**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/cm²) 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/cm²)at its full open. The Cv and Kv value for liquids is expressed by the following equation;**

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

$$Cv = 0.0703Kv$$

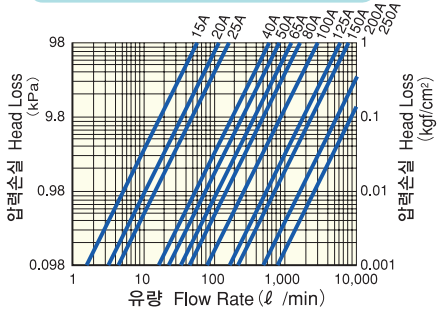
| | | |
|---|---|---|
| Cv : | 밸브의 용량계수 | Valve capacity coefficient |
| Q : | 체적유량 | Volmetric flow [GALLON] |
| $P_1$ : | 상류측압력 | Inlet pressure [PSI] |
| $P_2$ : | 하류측압력 | Outlet pressure [PSI] |
| $\gamma$ : | 액체의 밀도 | Liquid density [b/gal] |

### Cv치 · Kv치 Cv Value & Kv Value

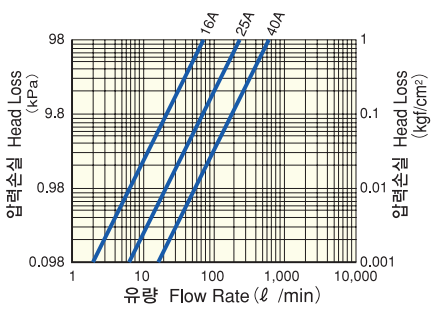
| 품명 Valves / 호칭 Size | | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 다이아후램밸브 Diaphragm Valve | | Cv | 6.3 | 12.0 | 17.6 | — | 46.3 | 76.1 | 135 | 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 다이아후램밸브(분기측) Dead Speace 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

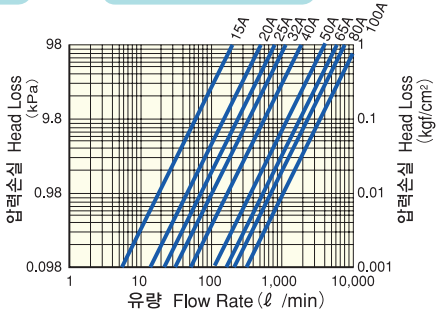
### 다이아후램밸브 Diaphragm Valve



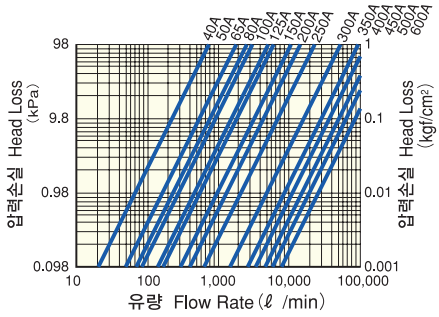

### 분기 다이아후램밸브 Dead Speace Free Tee-Type Diaphragm Valve



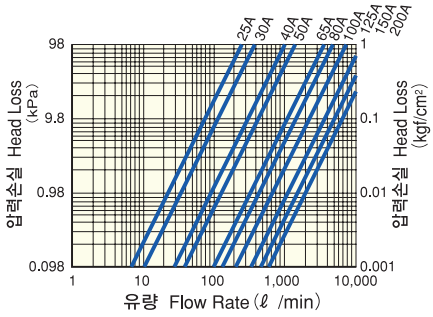

### 볼밸브 Ball Valve



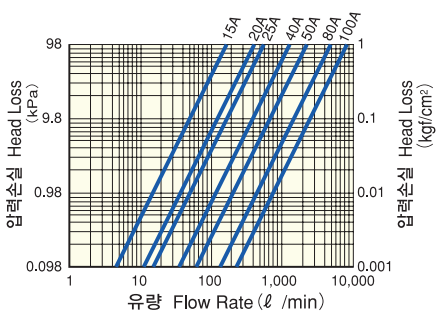

### 버터플라이밸브 Butterfly Valve




### 스윙체크밸브 Swing Check Valve




### 볼체크밸브 Ball Check Valve



# 시공 INSTALLATION

## ■ 취급, 보관 Handling and Storage

### ■ 취급 Handling

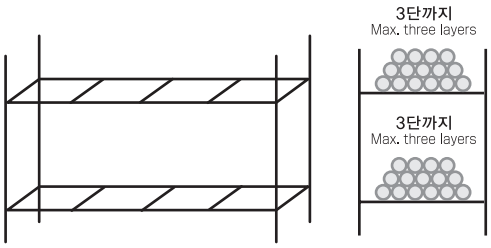
파이프, 피팅, 밸브류는 떨어뜨리거나 던지거나 치공구로 두드리지 마십시오. 파손될 수 있습니다.
Pipes, Fittings and valves require more care in handling so as not to be dropped, threw or tapped to avoid damages.

### ■ 보관 Storage

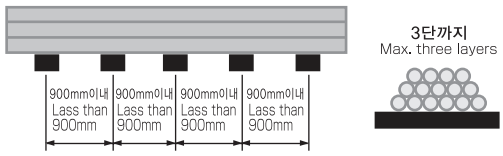
배관재는 옥내에 보관해 주십시오. 어쩔 수 없이 옥외에 보관할 경우에는 차광 막 등으로 덮어서 직사광선으로부터 보호해 주십시오. 차광 막은 고반사 실버 시트를 추천합니다.
If possible, pipe should be stored inside. When this is no possible, the pipe should be protected from the sun with shading sheet. The best type of shading sheet is silver colored sheet with highly reflective 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.

파이프 보관방법 : 선반의 경우
**Pipe storage in racks**




파이프 보관방법 : 평평한 지면의 경우
**Pipe storage on a flat ground**




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

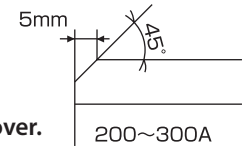
## ■ 접착접합 Solvent Cement Joining

### 1. 파이프 절단 Cut Pipe Square

파이프, 피팅, 밸브류는 떨어뜨리거나 던지거나 치공구로 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 흙, 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

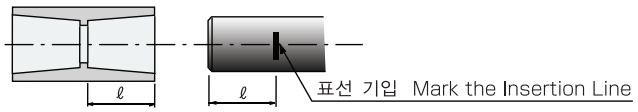
파이프를 피팅에 똑바로 가볍게 삽입해서 파이프가 수구 길이의 1/3~2/3에서 멈추는지 확인해 주십시오.
파이프가 잘 들어가지 않거나 안에까지 들어가면 피팅을 바꿔 주십시오.

**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.

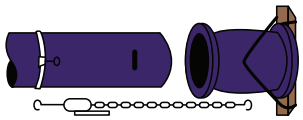
**Marking the depth of entry is a way to check if pipe has reached the bottom of fitting socket.**




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

대구경은 삽입력이 크기 때문에 파이프와 피팅에 삽입 치공구(레버 블럭과 와이어) 를 설치합니다.

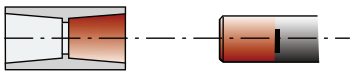
**Set insertion tools as lever-block and wires for fitting and pipe for large size pipe.**



### 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.**



피팅측 : 적게 바른다는 기분으로
Fitting : A little less adhesive

파이프측 : 약간 많게
Pipe : A little more adhesive

### 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
## Rocommended Eslon Solvent Cement

| | 슈퍼 에슬론 크린 Super EslonClean | HT 에슬론 크린 HT EslonClean |
|---|---|---|
| 품명 Grade | No.80C  500g 1kg | No.100S  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 장해를 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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*기재사항은 예고 없이 변경될 수 있습니다.

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