



PureLine[®] Products

*Product Recommendation
and Reference Guide*



Products

VALVES.....	3
Valve Product Overview	3
2-Way Manual Valve	4
2-Way Manual Valve 1½", 2"	5
2-Way Pneumatic Valve	6
2-Way Pneumatic Valve 1½", 2"	7
WS Manual Valve	8
WS Pneumatic Valve.....	9
TS Valve	10
TSV Valve	11
Lined Diaphragm Manual Valve.....	12
Lined Diaphragm Pneumatic Valve	13
FITTINGS.....	14
Fitting Product Overview	14
Flare Type Fittings	16
Weld Type Fittings.....	17
Fitting Configurations	18
Union Fittings.....	19
Pipe Fittings.....	22
Ordering Information.....	23
TUBING AND PIPE.....	30
Tubing and Pipe Product Overview.....	30
Dimensions	31
PFA Tube.....	33
PFA Tube and Pipe	34
ESD Tube	35
LPP Tube.....	36
ACCESSORIES	37
Accessory Product Overview.....	37
Nut Lock.....	38
ESD Tube Strap.....	39
DI Gun and N ₂ Gun	40
Tower Packing	41
PFA Vessel and Air Separator	42
PFA Exhaust Pot.....	43

Valves

VALVE PRODUCT OVERVIEW

- 고순도 반도체 및 LCD의 공급약품을 이송 연결시키는 라인의 제어변으로 사용됩니다.
- 접액면은 순수 PFA와 순수 PTFE로 이루어져 금속오염과 용출이온으로부터 최고의 내화학성을 갖습니다.
- PTFE Diaphragm은 최적의 설계로 제작, 가공 되었으며 얇은 막의 두께로도 높은 내압에도 이상이 없는 구조입니다.
- Union type의 Seal부분은 이중씼(Double Seal)구조의 피팅연결이 밸브의 접속부 기밀을 보증하며 눈관리의 적색 표시 체크링이 너트의 풀림을 사전에 확인할 수 있습니다.



PFA manual valve



PFA manual valve



PFA pneumatic valve



Tee-shut-off valve



Lined manual valve



Lined pneumatic valve



TSV valve



Slurry valve

2-WAY MANUAL VALVE

- PFA Manual Valve는 고순도 반도체 공정 라인을 위해 설계되었습니다.
- 용이한 눈관리(eye-checking)를 위하여 너트와 몸체에 눈표시의 체크링을 채택하였습니다.
- 고순도 및 부식성 화학 물질 및 유기/무기 화학 물질 취급에 이상적입니다.

Operating Specifications

Tube flaring type size	S: F $\frac{1}{4}$ "~F1"
Pipe welding type size	S: P15A~P25A
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²
Flow direction pressure	8 kgf/cm ²
Back direction pressure	7 kgf/cm ²

Ordering Information

PLMV-	-
	Options 2
	() = Blank
	ND = New diaphragm
	(P16 only)
	Options 1
	() = Blank
	H = 암모니아 라인에 사용
	I = Insert Type Nut를 사용하는 제품에 사용
	Size
	F04 = $\frac{1}{4}$ " (C _v =0.167~0.24)
	F06 = $\frac{3}{8}$ " (C _v =0.5~0.7)
	F08 = $\frac{1}{2}$ " (C _v =1.1~1.3)
	F12 = $\frac{3}{4}$ " (C _v =3.8~4.2)
	F16 = 1" (C _v =6~7)
	K04 = $\frac{1}{4}$ " PrimeLock® fitting (C _v =0.167~0.24)
	K06 = $\frac{3}{8}$ " PrimeLock fitting (C _v =0.5~0.7)
	K08 = $\frac{1}{2}$ " PrimeLock fitting (C _v =1.1~1.3)
	K12 = $\frac{3}{4}$ " PrimeLock fitting (C _v =3.8~4.2)
	K16 = 1" PrimeLock fitting (C _v =6~7)
	P08 = 15A (C _v =3.8~4.2)
	P12 = 20A (C _v =6~7)
	P16 = 25A (C _v =11~14.5)
	Product name
	PLMV = PureLine® manual valve



Example: PLMV-F16I

- PLMV = PureLine manual valve
- F16 = 1"
- I = Insert Type Nut 사용

2-WAY MANUAL VALVE 1½", 2"

- PFA Manual Valve는 고순도 반도체 공정 라인을 위해 설계되었습니다.
- 대구경 오리피스 밸브는 높은 유량의 화학물질 분배 어플리케이션에 이상적입니다.
- 고순도 및 부식성 화학 물질 및 유기/무기 화학 물질 취급에 이상적입니다.

Operating Specifications

Tube flaring type size	L: F1½", F2"
Pipe welding type size	L: P40A, P50A
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²
Flow direction pressure	7 kgf/cm ²
Back direction pressure	6 kgf/cm ²

Ordering Information

PLMV- -

..... **Options**
 () = Blank
 ND = New diaphragm (P24 and P32 only)

... **Size**
 F24 = 1½" (C_v=17~23)
 F32 = 2" (C_v=40~60)
 K24 = 1½" PrimeLock valve (C_v=17~23)
 KM40 = 1½" PrimeLock valve with 40 mm nut (C_v=17~23)
 P24 = 40A (C_v=30~40)
 P32 = 50A (C_v=40~60)

... **Product name**
 PLMV = PureLine manual valve



Example: PLMV-F24

- PLMV = PureLine manual valve
- F24 = 1½"

2-WAY PNEUMATIC VALVE

- 일반적으로 폐쇄 밸브 (normally closed valve)
- 100% 검사
- 고순도, 부식성 화학 물질 취급에 적합
- 청정 구역에서의 제조
- 동작압력은 6 kgf/cm² 이상을 권장하지 않음

Operating Specifications

Tube flaring type size	S: F ¹ / ₄ "~F1"
Pipe welding type size	S: P15A~P25A
Pneumatic supply pressure	6 kgf/cm ²
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²
Flow direction pressure	8 kgf/cm ²
Back direction pressure	7 kgf/cm ²

Ordering Information

PLPV-	-	
		Options 2 () = Blank ND = New diaphragm (P16 only)
		Options 1 () = Blank H = 암모니아 라인에 사용 I = Insert Type Nut를 사용하는 제품에 사용
		Size F04 = 1/4" (C _v =0.167~0.24) F06 = 3/8" (C _v =0.5~0.7) F08 = 1/2" (C _v =1.1~1.3) F12 = 3/4" (C _v =3.8~4.2) F16 = 1" (C _v =6~7) K04 = 1/4" PrimeLock fitting (C _v =0.167~0.24) K06 = 3/8" PrimeLock fitting (C _v =0.5~0.7) K08 = 1/2" PrimeLock fitting (C _v =1.1~1.3) K12 = 3/4" PrimeLock fitting (C _v =3.8~4.2) K16 = 1" PrimeLock fitting (C _v =6~7) P08 = 15A (C _v =3.8~4.2) P12 = 20A (C _v =6~7) P16 = 25A (C _v =11~14.5)
		Product name PLPV = PureLine pneumatic valve

Example: PLPV-F16I

- PLPV = PureLine pneumatic valve
- F16 = 1"
- I = Insert Type Nut 사용



PLPVO-	-	
		Options 2 () = Blank ND = New diaphragm (P16 only)
		Options 1 () = Blank H = 암모니아 라인에 사용 I = Insert Type Nut를 사용하는 제품에 사용
		Size F08 = 1/2" (C _v =1.1~1.3) F12 = 3/4" (C _v =3.8~4.2) F16 = 1" (C _v =6~7) K08 = 1/2" PrimeLock fitting (C _v =1.1~1.3) K12 = 3/4" PrimeLock fitting (C _v =3.8~4.2) K16 = 1" PrimeLock fitting (C _v =6~7) P08 = 15A (C _v =3.8~4.2) P12 = 20A (C _v =6~7) P16 = 25A (C _v =11~14.5)
		Product name PLPVO = PureLine pneumatic valve normally open type

Example: PLPVO-P16H-ND

- PLPVO = PureLine pneumatic valve
normally open type
- P16 = 25A
- H = 암모니아 라인에 사용
- ND = New diaphragm

2-WAY PNEUMATIC VALVE 1½", 2"

- 일반적으로 폐쇄 밸브(normally closed valve).
- 100% 검사.
- 고순도, 부식성 화학 물질 취급에 적합.
- 청정 구역에서의 제조.
- 동작압력은 6 kgf/cm² 이상을 권장하지 않음.

Operating Specifications

Tube flaring type size	L: F1½", F2"
Pipe welding type size	L: P40A, P50A
Pneumatic supply pressure	6 kgf/cm ²
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²
Flow direction pressure	7 kgf/cm ²
Back direction pressure	6 kgf/cm ²

Ordering Information

PLPV-	-	-	-
			Options 2
			() = Blank
			ND = New diaphragm
			(P24, P32 only)
			Options 1
			() = Blank
			45D = 45 degree (F32, P32 only)
			90D = 90 degree (P24, P32 only)
			Size
			F24 = 1½" (C _v =17~23)
			F32 = 2" (C _v =40~60)
			K24 = 1½" PrimeLock valve (C _v =17~23)
			KM40 = 1½" PrimeLock valve with 40 mm nut (C _v =17~23)
			P24 = 40A (C _v =30~40)
			P32 = 50A (C _v =40~60)
			Product name
			PLPV = PureLine pneumatic valve

Example: PLPV-P24-90D

- PLPV = PureLine pneumatic valve
- P24 = 40A
- 90D = 90 degree



PLPVO-	-
	Size
	P24 = 40A (C _v =30~40)
	P32 = 50A (C _v =40~60)
	Product name
	PLPVO = PureLine pneumatic valve
	normally open type

Example: PLPVO-P24

- PLPVO = PureLine pneumatic valve
- normally open type
- P24 = 40A

WS MANUAL VALVE

- weir-style로 유체 전단을 줄이고 슬러리 응집을 최소화하는 부드럽고 깨끗한 유로를 가능하게합니다.
- 접액면은 순수 PFA와 순수 PTFE로 구성되어 있어 금속이온과 용출이온으로부터 최상의 내화학성을 갖습니다.
- 고순도 반도체, LCD의 공급 화학 약품, CMP 슬러리 등에 이상적인 밸브입니다.

Operating Specifications

Tube flaring type size	F1/4", F3/8", F1/2", F3/4"
Maximum operating pressure	8 kgf/cm ²
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²

Ordering Information

PLWSMV-

Size

F04 = 1/4" (C_v=0.34~0.4)

F06 = 3/8" (C_v=0.66~0.68)

F08 = 1/2" (C_v=2.2~2.27)

F12 = 3/4" (C_v=3.5~5)

Product name

PLWSMV = PureLine WS manual valve



WS PNEUMATIC VALVE

- weir-style로 유체 전단을 줄이고 슬러리 응집을 최소화하는 부드럽고 깨끗한 유로를 가능하게합니다.
- 접액면은 순수 PFA와 순수 PTFE로 구성되어 있어 금속이온과 용출이온으로부터 최상의 내화학성을 갖습니다.
- 고순도 반도체, LCD의 공급 화학 약품, CMP 슬러리 등에 이상적인 밸브입니다.

Operating Specifications

Tube flaring type size	F1/4", F3/8", F1/2", F3/4"
Pneumatic supply pressure	6 kgf/cm ²
Maximum operating pressure	8 kgf/cm ²
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²

Ordering Information

PLWSPV-

...Size

F04 = 1/4" (C_v=0.34~0.4)
 F06 = 3/8" (C_v=0.66~0.68)
 F08 = 1/2" (C_v=2.2~2.27)
 F12 = 3/4" (C_v=3.5~5)

...Product name

PLWSPV = PureLine WS pneumatic valve



TS VALVE

- PFA Tee Shut-Off Valve는 일반 Manual Valve와 Union Tee Fitting의 이중적인 배관구성을 단순화 및 일체화시킨 밸브입니다.
- PFA Body 및 PTFE 다이어프램은 부식성 화학 응용 분야에서 고순도 및 내 화학성을 제공합니다.
- 유체 시스템 요구를 충족 시키기 위해 1/2"~1-1/2" 까지 다양한 연결 Size를 제공합니다.

Operating Specifications

Maximum operating pressure	8 kgf/cm ²
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²

Ordering Information

PLTSMV-

Options

() = Blank

H = 암모니아 라인에 사용

I = Insert Type Nut를 사용하는 제품에 사용

Size

F08-08-08 = 1/2" × 1/2" × 1/2" (C_v=1.1~1.3)

F12-08-12 = 3/4" × 1/2" × 3/4" (C_v=1.1~1.3)

F16-08-16 = 1" × 1/2" × 1" (C_v=1.1~1.3)

F24-08-24 = 1 1/2" × 1/2" × 1 1/2" (C_v=1.1~1.3)

F12-12-12 = 3/4" × 3/4" × 3/4" (C_v=1.1~1.3)

F16-12-16 = 1" × 3/4" × 1" (C_v=1.1~1.3)

F24-12-24 = 1 1/2" × 3/4" × 1 1/2" (C_v=1.1~1.3)

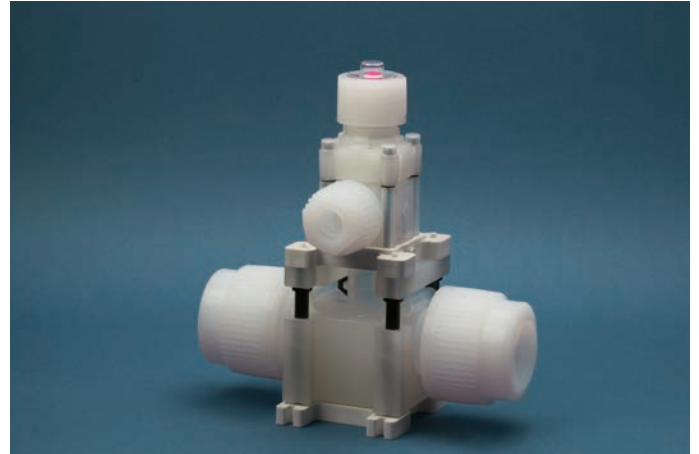
F16-16-16 = 1" × 1" × 1" (C_v=6~7)

F24-16-24 = 1 1/2" × 1" × 1 1/2" (C_v=6~7)

F24-24-24 = 1 1/2" × 1 1/2" × 1 1/2" (C_v=17~23)

Product name

PLTSMV = PureLine tee shut-off manual valve



Example: PLTSMV-F16-08-16I

- PLTSMV = PureLine tee shut-off manual valve
- F16-08-16 = 1" × 1/2" × 1"
- I = Insert Type Nut 사용

TSV VALVE

- 공간이 제한적인 VMB Box에 사용됩니다.
- 형태가 단순한 구조이며 내압성과 내부식성에 매우 강한 제품입니다.
- 4 type 형태의 밸브를 선택 배관함으로써 동일 공간상에서 최대한의 배관 밀집 효과를 얻을 수 있습니다.

Operating Specifications

Pipe welding type size	P20A
C _v value range	6~7.5
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²
Flow direction pressure	8 kgf/cm ²
Back direction pressure	7 kgf/cm ²



Ordering Information

PLTSV- 20-

Options

() = Blank

H = 암모니아 라인에 사용

Flow direction

DRAIN = Drain type

IN = In type

HOOK-UP = Hook-up type

SPARE = Spare type

Size

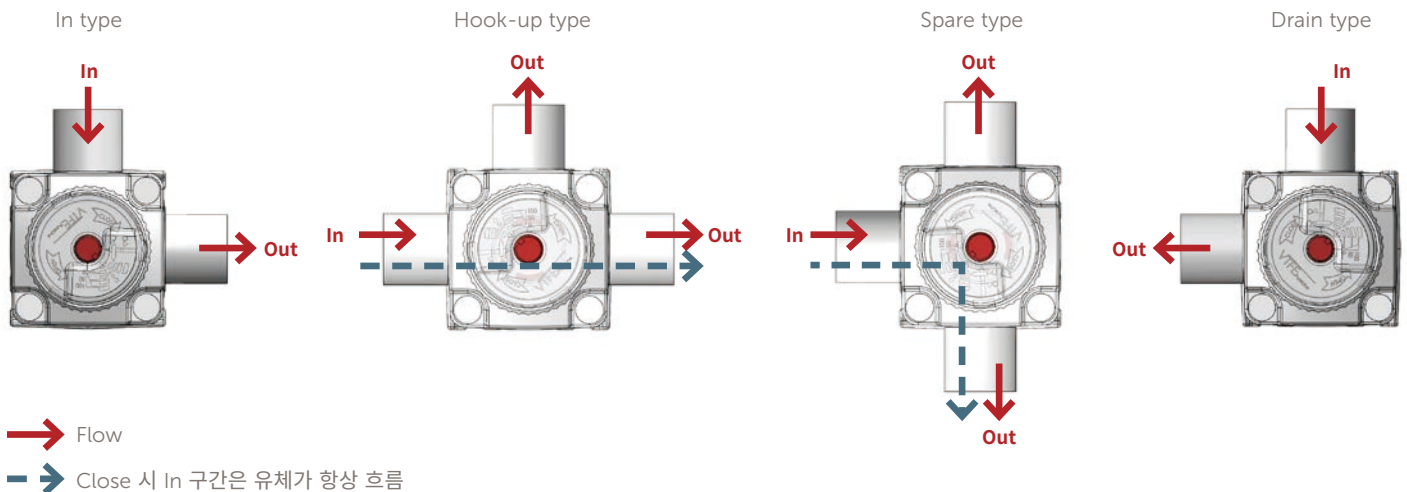
20 = 20A

Product name

PLTSV = PureLine tee shut-off 3-way valve

Example: PLTSV-20-DRAIN

- PLTSV = PureLine tee shut-off 3-way valve
- 20 = 20A
- DRAIN = Drain type



LINED DIAPHRAGM MANUAL VALVE

- 고순도 PFA 라이닝과 내구성이 뛰어난 스테인레스 스틸 하우징은 고압 어플리케이션에 견딜 수 있습니다.
- 반도체 프로세스 어플리케이션에 사용되는 고순도의 화학 물질을 대량으로 분배 할 수 있습니다.
- 슬러리 또는 연마매체의 운송에 적합한 밸브입니다.

Operating Specifications

JIS 10KG flange type	15A, 20A, 25A, 40A, 50A
ANSI 150 lb flange type	JIS 10K 와 동일
Maximum operating pressure	15A~25A : 8 kgf/cm ² 40A~50A : 7 kgf/cm ²
Maximum operating temperature	120°C (248°F)
Leakage test pressure	10 kgf/cm ²
Pinhole test	20,000 V

Ordering Information

PLLDMV-	-	-	-	-
				Bonnet bolt (optional)
				() = Blank
				C = Coating bolt
				T = Titanium bolt
				표면처리
				EP = 산세처리
				EPSH = 산세처리, Sus Handle
				BF = Buffing
				P-I = Paint, Ivory
				P-W = Paint, White
				Flange std.
				A = ANSI 150 lb
				J = JIS 10K
				Size
				08 = 15A (C _v =4.5~7)
				12 = 20A (C _v =4.5~7)
				16 = 25A (C _v =10~11)
				24 = 40A (C _v =20~26)
				32 = 50A (C _v =35~43)
				Product name
				PLLDMV = PureLine lined diaphragm manual valve



Example: PLLDMV-12-A-EPSH

- PLLDMV = PureLine lined diaphragm manual valve
- 12 = 20A
- A = ANSI 150 lb
- EPSH = 산세처리, Sus Handle

Example: PLLDMV-12-J-P-I

- PureLine lined diaphragm manual valve
- 12 = 20A
- J = JIS 10K
- P-I = Paint, Ivory

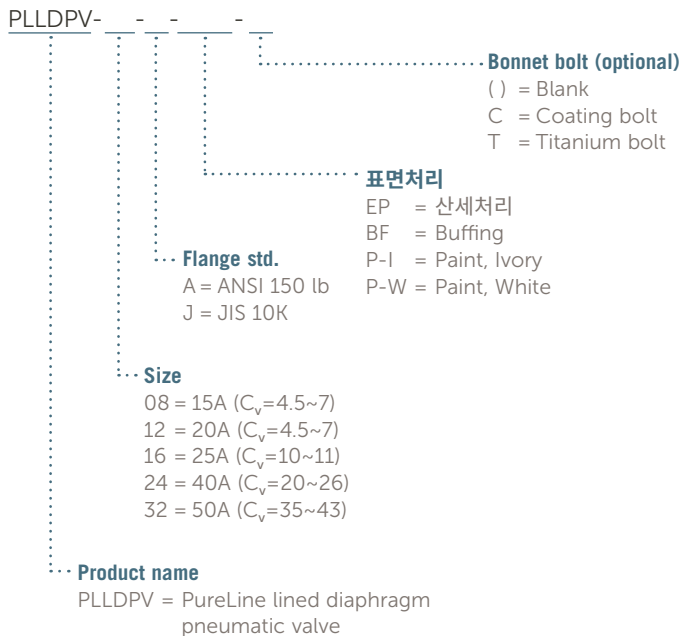
LINED DIAPHRAGM PNEUMATIC VALVE

- 고순도 PFA 라이닝과 내구성이 뛰어난 스테인레스 스틸 하우징은 고압 어플리케이션에 견딜 수 있습니다.
- 반도체 프로세스 어플리케이션에 사용되는 고순도의 화학 물질을 대량으로 분배 할 수 있습니다.
- 슬러리 또는 연마매체의 운송에 적합한 밸브입니다.

Operating Specifications

JIS 10KG flange type	15A, 20A, 25A, 40A, 50A
ANSI 150 lb flange type	JIS 10K 와 동일
Pneumatic supply pressure	6 kgf/cm ²
Maximum operating pressure	15A~25A : 8 kgf/cm ² 40A~50A : 7 kgf/cm ²
Maximum operating temperature	120°C (248°F)
Leakage test pressure	10 kgf/cm ²
Pinhole test	20,000 V

Ordering Information

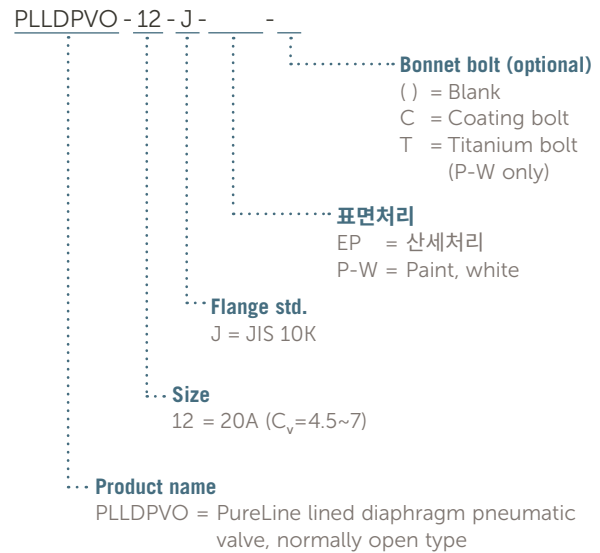


Example: PLLDPV-12-A-EP

- PLLDPV = PureLine lined diaphragm pneumatic valve
- 12 = 20A
- A = ANSI 150 lb
- EP = 산세처리

Example: PLLDPV-12-J-P-I

- PLLDPV = PureLine lined diaphragm pneumatic valve
- 12 = 20A
- J = JIS 10K
- P-I = Paint, Ivory



Example: PLLDPVO-12-J-P-W-T

- PLLDPVO = PureLine lined diaphragm pneumatic valve, normally open type
- 12 = 20A
- J = JIS 10K
- P-W = Paint, white
- T = Titanium bonnet bolt

Fittings

FITTING PRODUCT OVERVIEW

- 고순도 및 부식성 화학 물질을 공급하는 라인을 연결 하는 데 사용됩니다.
- 액체 접촉 표면은 순수 PFA재질이며, 금속 오염 및 이온 용출에 대한 내 화학성이 가장 높습니다.
- 세가지 유형의 디자인 - Straight, Elbow, Tee - 모든 유체 시스템 요구 사항을 충족합니다.
- 과체결 방지 및 이중 Seal 디자인은 신뢰성과 안전성을 제공합니다.



PFA fittings (MF type)



PFA fittings (MF type)



PFA fittings



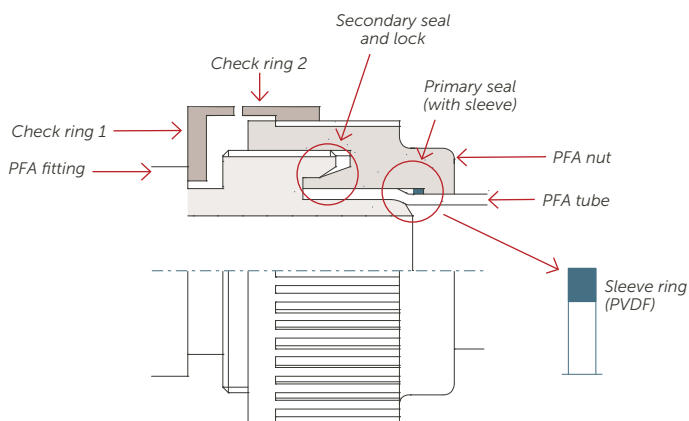
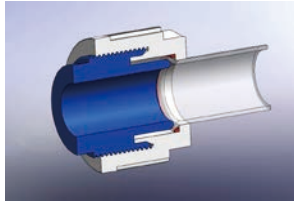
PFA fittings (MP type)



Lock
Applied product: union type fitting
Size: 2"

Double Seal 구조

- 1차 접점셀로 기밀유지.
- 2차 면 접촉셀로 기밀유지.



눈 관리

- 접속 체결관이 진동, 혹은 임의적으로 회전되는 경우 화살표가 어긋나게 배치되어 너트의 풀림 정도 여부 및 정도를 육안으로 쉽게 판단 할 수 있습니다.
- 배관 누출 감지시 전체 배관점검에 따르는 유지보수 비용절감을 위해 육안 식별만으로 큰 효과를 거둘 수 있습니다.



Eye marking

Applied products: union type fitting

Size: 1/4", 3/8", 1/2", 3/4", 1", 1 1/2"

FLARE TYPE FITTINGS

- 고순도 반도체 및 LCD의 공급약품을 이송 연결시키는 라인의 접속관으로서 사용됩니다.
- 투명한 PFA재질은 유체의 흐름을 용이하게 확인 할 수 있도록 선명도를 제공합니다.
- 이중 실패구조이며 과조립 방지기능 구조입니다.
- CCSS 공급장치 및 배관에 유효합니다.

Operating Specifications

Tube flaring type size	1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"
Maximum operating pressure	1/4"~1" : 8 kgf/cm ² 1-1/4"~2" : 7 kgf/cm ²
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²

Ordering Information

Union type (flare type)

PL = PureLine

Fitting type
 US = Union straight
 UE = Union elbow
 UT = Union tee

Size
 04 = 1/4"
 06 = 3/8"
 08 = 1/2"
 12 = 3/4"
 16 = 1"
 24 = 1 1/2"
 32 = 2"

Options
 () = Blank
 I = Insert Type Nut를 사용하는 제품에 사용 (1"이하)

Example: PLUS04I

- PL = PureLine
- US = Union Straight
- 04 = 1/4"
- I = Insert Type Nut 사용

Flange type

PL UFA -

Options
() = Blank
I = Insert Type
Nut사용

Union size
04 = 1/4"
06 = 3/8"
08 = 1/2"
12 = 3/4"
16 = 1"
24 = 1 1/2"
32 = 2"

Flange std.
A0 = ANSI 150 lb
J0 = JIS 10K

Sus flange insert size
08 = 15A
12 = 20A
16 = 25A
24 = 40A
32 = 50A

Fitting type
UFA = Union flange adapter

Product name
PL = PureLine

Example: PLUFA08A0-08I

- PL = PureLine
- UFA = Union flange adapter
- 08 = 15A sus flange insert
- AO = ANSI 150 lb
- 08 = 1/2" union
- I = Insert Type Nut사용

WELD TYPE FITTINGS

- 고순도 반도체 및 LCD의 공급약품을 이송 연결시키는 라인의 접속관으로서 사용됩니다.
- 투명한 PFA재질은 유체의 흐름을 용이하게 확인 할 수 있도록 선명도를 제공합니다.
- CCSS 공급장치 및 배관에 유효합니다.

Operating Specifications

Pipe welding type size	15A, 20A, 25A, 40A, 50A
Maximum operating pressure	15A~25A : 8 kgf/cm ² 40A~50A : 7 kgf/cm ²
Maximum operating temperature	90°C (194°F)
Leakage test pressure	9.6 kgf/cm ²

Ordering Information

Pipe type (welding type)

PL

Size	
08 = 15A	
12 = 20A	
16 = 25A	
20 = 32A	
24 = 40A	
32 = 50A	

Fitting type	
PR = Pipe reducer	
PE = Pipe elbow	
PT = Pipe tee	

Product name	
PL = PureLine	

Flange type

PL PFA

Product name		Fitting type		Size		Flange std.	
PL = PureLine		PFA = Pipe flange adapter		08 = 15A 12 = 20A 16 = 25A 20 = 32A 24 = 40A 32 = 50A		A0 = ANSI 150 lb J0 = JIS 10K	



Example: PLPR16

- PL = PureLine
- PR = Pipe reducer
- 16 = 25A

Example: PLPFA12A0

- PL = PureLine
- PFA = Pipe flange adapter
- 12 = 20A
- A0 = ANSI 150 lb

FITTING CONFIGURATIONS

Union Elbow	End Cap
Union Tee	Male Elbow Connector
Union Red Tee	Male Connector
Union Straight	Female Connector
Union Reducer	HPBOND Elbow
Panel Mounting Union	HPBOND Tee
Union Flange Adapter	HPBOND Red Tee
Tube Adapter	HPBOND Reducer
Elbow Tube Adapter	HPBOND Flange Adapter
Space Saver Adapter	HPBOND End Cap
Space Saver Union Adapter	HPBOND Female Adapter
Space Saver Union Tee	HPBOND Male Adapter
Nut	Tube End Cap

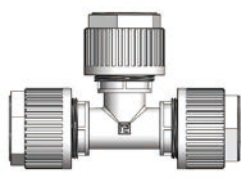


UNION FITTINGS

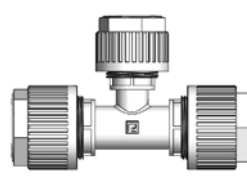
- 1/4" ~ 1 1/4" Sizes



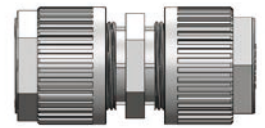
Union elbow



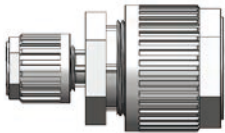
Union tee



Union red tee



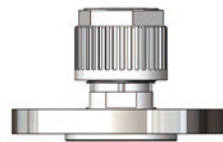
Union straight



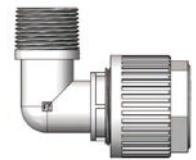
Union reducer



Panel mounting union



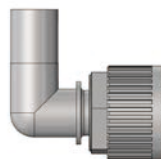
Union flange adapter



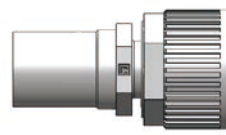
Male elbow connector



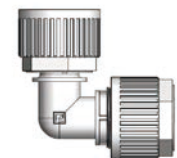
Tube adapter



Elbow tube adapter saver



Space saver adapter



Space saver union elbow



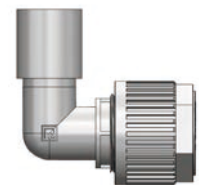
Space saver union tee



Nut



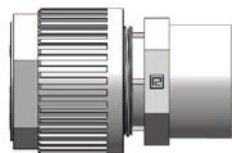
End cap



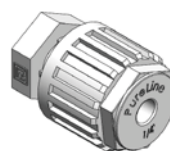
Elbow tube adapter



Male connector



Female connector

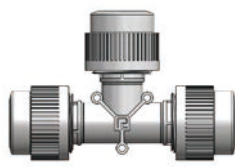


Tube end cap

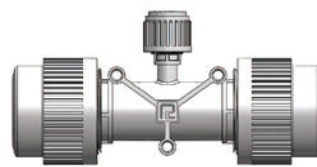
- 1½" Size



Union elbow



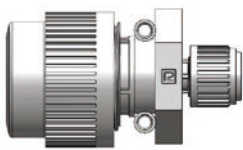
Union tee



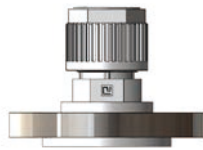
Union red tee



Union straight



Union reducer



Union flange adapter



Nut



End cap



Space saver union elbow

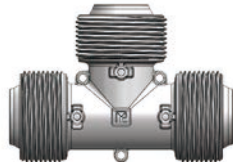


Tube adapter

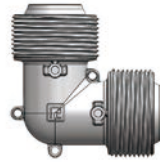
- 2" Size



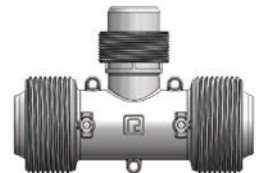
Union straight



Union equ tee



Union 90° elbow



Union red tee



Union reducer



Tube adapter 50A x 2"



Tube adapter 40A x 2"



Male connector (PT)



Male connector (NPT)



Nut



End cap



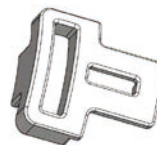
Sleeve



Special bolt

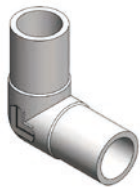


Washer

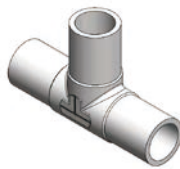


Lock

PIPE FITTINGS



HPBOND elbow



HPBOND tee



HPBOND red tee



HPBOND reducer



HPBOND flange adapter



HPBOND end cap



HPBOND female adapter



HPBOND male adapter

ORDERING INFORMATION

Union Elbow

Part number	Nominal size
PLUE04(I)	1/4"
PLUE06(I)	3/8"
PLUE08(I)	1/2"
PLUE12(I)	3/4"
PLUE16(I)	1"
PLUE24	1 1/2"
PLUE32	1 1/2"

I = Insert type nut를 사용

Union Reducer

Part number	Nominal size
PLUR04-06(I)	1/4" × 3/8"
PLUR04-08(I)	1/4" × 1/2"
PLUR04-12(I)	1/4" × 3/4"
PLUR04-16(I)	1/4" × 1"
PLUR06-08(I)	3/8" × 1/2"
PLUR06-12(I)	3/8" × 3/4"
PLUR06-16(I)	3/8" × 1"
PLUR08-12(I)	1/2" × 3/4"
PLUR08-16(I)	1/2" × 1"
PLUR12-16(I)	3/4" × 1"
PLUR24-04(I)	1 1/2" × 1/4"
PLUR24-08(I)	1 1/2" × 1/2"
PLUR24-12(I)	1 1/2" × 3/4"
PLUR24-16(I)	1 1/2" × 1"
PLUR32-24	2" × 1 1/2"

I = Insert type nut를 사용

Union Tee

Part number	Nominal size
PLUT04(I)	1/4"
PLUT06(I)	3/8"
PLUT08(I)	1/2"
PLUT12(I)	3/4"
PLUT16(I)	1"
PLUT24	1 1/2"
PLUT32	1 1/2"

I = Insert type nut를 사용

Union Red Tee

Part number	Nominal size
PLURT06-04-06(I)	3/8" × 1/4" × 3/8"
PLURT08-04-08(I)	1/2" × 1/4" × 1/2"
PLURT08-06-08(I)	1/2" × 3/8" × 1/2"
PLURT12-04-12(I)	3/4" × 1/4" × 3/4"
PLURT12-06-12(I)	3/4" × 3/8" × 3/4"
PLURT12-08-08(I)	3/4" × 1/2" × 1/2"
PLURT12-08-12(I)	3/4" × 1/2" × 3/4"
PLURT16-04-16(I)	1" × 1/4" × 1"
PLURT16-06-16(I)	1" × 3/8" × 1"
PLURT16-08-16(I)	1" × 1/2" × 1"
PLURT16-12-16(I)	1" × 3/4" × 1"
PLURT24-4-24(I)	1 1/2" × 1/4" × 1 1/2"
PLURT24-8-24(I)	1 1/2" × 1/2" × 1 1/2"
PLURT24-12-24(I)	1 1/2" × 3/4" × 1 1/2"
PLURT24-16-24(I)	1 1/2" × 1" × 1 1/2"
PLURT32-24-32	2" × 1 1/2" × 2"

I = Insert type nut를 사용

Union Flange Adapter

Part number	Nominal size
PLUFA08A0-08(I)	15A × 1/2"
PLUFA08J0-08(I)	15A × 1/2"
PLUFA12A0-04(I)	20A × 1/4"
PLUFA12J0-04(I)	20A × 1/4"
PLUFA12A0-08(I)	20A × 1/2"
PLUFA12J0-08(I)	20A × 1/2"
PLUFA12A0-12(I)	20A × 3/4"
PLUFA12J0-12(I)	20A × 3/4"
PLUFA16A0-16(I)	25A × 1"
PLUFA16J0-16(I)	25A × 1"
PLUFA24A0-04(I)	40A × 1/4"
PLUFA24J0-04(I)	40A × 1/4"
PLUFA24A0-08(I)	40A × 1/2"
PLUFA24J0-08(I)	40A × 1/2"
PLUFA24A0-12(I)	40A × 3/4"
PLUFA24J0-12(I)	40A × 3/4"
PLUFA24A0-16(I)	40A × 1"
PLUFA24J0-16(I)	40A × 1"
PLUFA24A0-24	40A × 1 1/2"
PLUFA24J0-24	40A × 1 1/2"
PLUFA32J0-24	50A × 1 1/2"
PLUFA32J0-32	50A × 2"

I = Insert type nut를 사용

Union Straight

Part number	Nominal size
PLUS04(I)	1/4"
PLUS06(I)	3/8"
PLUS08(I)	1/2"
PLUS12(I)	3/4"
PLUS16(I)	1"
PLUS24	1 1/2"
PLUS32	2"

I = Insert type nut를 사용

Tube Adapter

Part number	Nominal size
PLTA08-04(I)	15A × 1/4"
PLTA08-06(I)	15A × 3/8"
PLTA08-08(I)	15A × 1/2"
PLTA08-12(I)	15A × 3/4"
PLTA08-16(I)	15A × 1"
PLTA12-04(I)	20A × 1/4"
PLTA12-06(I)	20A × 3/8"
PLTA12-08(I)	20A × 1/2"
PLTA12-12(I)	20A × 3/4"
PLTA12-16(I)	20A × 1"
PLTA16-04(I)	25A × 1/4"
PLTA16-06(I)	25A × 3/8"
PLTA16-08(I)	25A × 1/2"
PLTA16-12(I)	25A × 3/4"
PLTA16-16(I)	25A × 1"
PLTA16-20	25A × 1 1/4"
PLTA16-24	25A × 1 1/2"

Part number	Nominal size
PLTA24-20	40A × 1¼"
PLTA24-24	40A × 1½"
PLTA32-20	50A × 1¼"
PLTA32-24	50A × 1½"
PLTA40-32	40A × 2"
PLTA50-32	50A × 2"

l = Insert type nut를 사용

Elbow Tube Adapter

Part number	Nominal size
PLETA08-08(l)	15A × ½"
PLETA08-12(l)	15A × ¾"
PLETA12-12(l)	20A × ¾"
PLETA12-16(l)	20A × 1"
PLETA16-12(l)	25A × ¾"
PLETA16-16(l)	25A × 1"

l = Insert type nut를 사용

Elbow Tube Adapter Saver

Part number	Nominal size
PLETAS12-12(l)	20A × ¾"
PLETAS12-16(l)	20A × 1"
PLETAS16-12(l)	25A × ¾"
PLETAS16-16(l)	25A × 1"

l = Insert type nut를 사용

Panel Mounting Union

Part number	Nominal size
PLPMU04-04(l)	¼" × ¼"
PLPMU04-08(l)	¼" × ½"
PLPMU06-06(l)	⅜" × ⅜"

Part number	Nominal size
PLPMU08-08(l)	½" × ½"
PLPMU08-12(l)	½" × ¾"
PLPMU12-04(l)	¾" × ¼"
PLPMU12-12(l)	¾" × ¾"
PLPMU16-12(l)	1" × ¾"
PLPMU16-16(l)	1" × 1"

l = Insert type nut를 사용

End Cap

Part number	Nominal size
PLEC04	¼"
PLEC06	⅜"
PLEC08	½"
PLEC12	¾"
PLEC16	1"
PLEC20	1¼"
PLEC24	1½"
PLEC32	2"

Nut

Part number	Nominal size
PLN04(l)	¼"
PLN06(l)	⅜"
PLN08(l)	½"
PLN12(l)	¾"
PLN16(l)	1"
PLN24	1½"
PLN32	2"

l = Insert type nut를 사용

Tube End Cap

Part number	Nominal size
PLTEC-04(I)	1/4"
PLTEC-06(I)	3/8"
PLTEC-08(I)	1/2"
PLTEC-12(I)	3/4"
PLTEC-16(I)	1"

I = Insert type nut를 사용

Space Saver Union Tee

Part number	Nominal size
PLSSUT08-08-08(I)	1/2" × 1/2"S × 1/2"
PLSSUT08S-08-08	1/2"S × 1/2" × 1/2"
PLSSUT08S-08-08S(I)	1/2"S × 1/2" × 1/2"S
PLSSUT08S-08S-08	1/2"S × 1/2"S × 1/2"
PLSSUT08S-08S-08S	1/2"S × 1/2"S × 1/2"S
PLSSUT12-12-12(I)	3/4" × 3/4"S × 3/4"
PLSSUT12S-12-12	3/4"S × 3/4" × 3/4"
PLSSUT12S-12-12S(I)	3/4"S × 3/4" × 3/4"S
PLSSUT12S-12S-12	3/4"S × 3/4"S × 3/4"
PLSSUT12S-12S-12S	3/4"S × 3/4"S × 3/4"S
PLSSUT16-16-16(I)	1" × 1"S × 1"
PLSSUT16S-16-16	1"S × 1" × 1"
PLSSUT16S-16-16S(I)	1"S × 1" × 1"S
PLSSUT16S-16S-16	1"S × 1"S × 1"
PLSSUT16S-16S-16S	1"S × 1"S × 1"S
PLSSUT24S-24-24	1 1/2"S × 1 1/2" × 1 1/2"
PLSSUT24S-24-24S	1 1/2"S × 1 1/2" × 1 1/2"S
PLSSUT24S-24S-24	1 1/2"S × 1 1/2"S × 1 1/2"
PLSSUT24S-24S-24S	1 1/2"S × 1 1/2"S × 1 1/2"S

I = Insert type nut를 사용
S = Space Saver

Space Saver Union Elbow

Part number	Nominal size
PLSSUE08(I)	1/2" × 1/2"
PLSSUE08S-08S	1/2" × 1/2"S
PLSSUE12(I)	3/4" × 3/4"
PLSSUE12S-12S	3/4" × 3/4"S
PLSSUE16(I)	1" × 1"
PLSSUE16S-16S	1" × 1"S
PLSSUE24	1 1/2" × 1 1/2"
PLSSUE24S-24S	1 1/2" × 1 1/2"S

I = Insert type nut를 사용
S = Space Saver

Space Saver Adapter

Part number	Nominal size
PLSSA8-08(I)	15A × 1/2"S
PLSSA8-12(I)	15A × 3/4"S
PLSSA8-16(I)	15A × 1"S
PLSSA12-08(I)	20A × 1/2"S
PLSSA12-12(I)	20A × 3/4"S
PLSSA12-16(I)	20A × 1"S
PLSSA16-08(I)	25A × 1/2"S
PLSSA16-12(I)	25A × 3/4"S
PLSSA16-16(I)	25A × 1"S
PLSSA16-20	25A × 1 1/4"S
PLSSA16-24	25A × 1 1/2"S
PLSSA24-24	40A × 1 1/2"S
PLSSA32-20	50A × 1 1/4"S
PLSSA32-24	50A × 1 1/2"S

I = Insert type nut를 사용
S = Space Saver

Male Connector

Part number	Nominal size
PLMC04-04N(I)	$\frac{1}{4}" \times \frac{1}{4}"N$
PLMC04-04P(I)	$\frac{1}{4}" \times \frac{1}{4}"P$
PLMC06-04N(I)	$\frac{3}{8}" \times \frac{1}{4}"N$
PLMC06-04P(I)	$\frac{3}{8}" \times \frac{1}{4}"P$
PLMC06-6N(I)	$\frac{3}{8}" \times \frac{3}{8}"N$
PLMC06-06P(I)	$\frac{3}{8}" \times \frac{3}{8}"P$
PLMC06-8N(I)	$\frac{3}{8}" \times \frac{1}{2}"N$
PLMC06-08P(I)	$\frac{3}{8}" \times \frac{1}{2}"P$
PLMC06-12N(I)	$\frac{3}{8}" \times \frac{3}{4}"N$
PLMC06-12P(I)	$\frac{3}{8}" \times \frac{3}{4}"P$
PLMC08-04N(I)	$\frac{1}{2}" \times \frac{1}{4}"N$
PLMC08-04P(I)	$\frac{1}{2}" \times \frac{1}{4}"P$
PLMC08-6N(I)	$\frac{1}{2}" \times \frac{3}{8}"N$
PLMC08-06P(I)	$\frac{1}{2}" \times \frac{3}{8}"P$
PLMC08-8N(I)	$\frac{1}{2}" \times \frac{1}{2}"N$
PLMC08-08P(I)	$\frac{1}{2}" \times \frac{1}{2}"P$
PLMC08-12N(I)	$\frac{1}{2}" \times \frac{3}{4}"N$
PLMC08-12P(I)	$\frac{1}{2}" \times \frac{3}{4}"P$
PLMC12-8N(I)	$\frac{3}{4}" \times \frac{1}{2}"N$
PLMC12-08P(I)	$\frac{3}{4}" \times \frac{1}{2}"P$
PLMC12-12N(I)	$\frac{3}{4}" \times \frac{3}{4}"N$
PLMC12-12P(I)	$\frac{3}{4}" \times \frac{3}{4}"P$
PLMC12-16N(I)	$\frac{3}{4}" \times 1"N$
PLMC12-16P(I)	$\frac{3}{4}" \times 1"P$
PLMC16-6N(I)	$1" \times \frac{3}{8}"N$
PLMC16-06P(I)	$1" \times \frac{3}{8}"P$
PLMC16-12N(I)	$1" \times \frac{3}{4}"N$

Part number	Nominal size
PLMC16-12P(I)	$1" \times \frac{3}{4}"P$
PLMC16-16N(I)	$1" \times 1"N$
PLMC16-16P(I)	$1" \times 1"P$
PLMC32-40N	$2" \times 1\frac{1}{2}"N$
PLMC32-40P	$2" \times 1\frac{1}{2}"P$

I = Insert type nut를 사용

Male Elbow Connector

Part number	Nominal size
PLMEC04-04N(I)	$\frac{1}{4}" \times \frac{1}{4}"N$
PLMEC04-04P(I)	$\frac{1}{4}" \times \frac{1}{4}"P$
PLMEC06-06N(I)	$\frac{3}{8}" \times \frac{3}{8}"N$
PLMEC06-06P(I)	$\frac{3}{8}" \times \frac{3}{8}"P$
PLMEC08-08N(I)	$\frac{1}{2}" \times \frac{1}{2}"N$
PLMEC08-08P(I)	$\frac{1}{2}" \times \frac{1}{2}"P$
PLMEC12-12N(I)	$\frac{3}{4}" \times \frac{3}{4}"N$
PLMEC12-12P(I)	$\frac{3}{4}" \times \frac{3}{4}"P$
PLMEC16-16N(I)	$1" \times 1"N$
PLMEC16-16P(I)	$1" \times 1"P$

I = Insert type nut를 사용

Female Connector

Part number	Nominal size
PLFC04-04N(I)	$\frac{1}{4}" \times \frac{1}{4}"N$
PLFC04-04P(I)	$\frac{1}{4}" \times \frac{1}{4}"P$
PLFC06-06N(I)	$\frac{3}{8}" \times \frac{3}{8}"N$
PLFC06-06P(I)	$\frac{3}{8}" \times \frac{3}{8}"P$
PLFC08-08N(I)	$\frac{1}{2}" \times \frac{1}{2}"N$
PLFC08-08P(I)	$\frac{1}{2}" \times \frac{1}{2}"P$
PLFC08-12N(I)	$\frac{1}{2}" \times \frac{3}{4}"N$

FITTINGS

Part number	Nominal size
PLFC08-12P(I)	½" × ¾"P
PLFC12-08N(I)	¾" × ½"N
PLFC12-08P(I)	¾" × ½"P
PLFC12-12N(I)	¾" × ¾"N
PLFC12-12P(I)	¾" × ¾"P
PLFC12-16N(I)	¾" × 1"N
PLFC12-16P(I)	¾" × 1"P
PLFC16-16N(I)	1" × 1"N
PLFC16-16P(I)	1" × 1"P

I = Insert type nut를 사용

HPBOND Elbow

Part number	Nominal size
PLPE8	15A
PLPE12	20A
PLPE16	25A
PLPE24	40A
PLPE32	50A

HPBOND Red Tee

Part number	Nominal size
PLPRT12-8-12	20A × 15A × 20A
PLPRT12-12-8	20A × 20A × 15A
PLPRT16-8-16	25A × 15A × 25A
PLPRT16-12-16	25A × 20A × 25A
PLPRT24-8-24	40A × 15A × 40A
PLPRT24-12-24	40A × 20A × 40A
PLPRT24-16-24	40A × 25A × 40A
PLPRT32-08-32	50A × 15A × 50A
PLPRT32-12-32	50A × 20A × 50A

Part number	Nominal size
PLPRT32-16-32	50A × 25A × 50A
PLPRT32-24-32	50A × 40A × 50A

HPBOND Tee

Part number	Nominal size
PLPT8	15A
PLPT12	20A
PLPT16	25A
PLPT24	40A
PLPT32	50A

HPBOND Reducer

Part number	Nominal size
PLPR12-8	20A × 15A
PLPR16-8	25A × 15A
PLPR16-12	25A × 20A
PLPR24-08	40A × 15A
PLPR24-12	40A × 20A
PLPR24-16	40A × 25A
PLPR32-12	50A × 20A
PLPR32-16	50A × 25A
PLPR32-24	50A × 40A

HPBOND Male Adapter

Part number	Nominal size
PLPMAN12-04N	20A × ¼"N

HPBOND Flange Adapter

Part number	Nominal size
PLPFA08A0	15A
PLPFA08J0	15A
PLPFA12A0	20A
PLPFA12J0	20A
PLPFA16A0	25A
PLPFA16J0	25A
PLPFA24A0	40A
PLPFA24J0	40A
PLPFA32A0	50A
PLPFA32J0	50A

HPBOND Female Adapter

Part number	Nominal size
PLPFAN12-08N	20A × ½"N
PLPFAN12-08P	20A × ½"P
PLPFAN16-08N	25A × ½"N
PLPFAN16-16N	25A × 1"N

HPBOND End Cap

Part number	Nominal size
PLPEC24	40A
PLPEC32	50A

Tubing and Pipe

TUBING AND PIPE PRODUCT OVERVIEW

- 퓨어라인의 PFA튜브 및 파이프는 어떠한 부식성, 고순도의 영역에도 적용되는 제품입니다.
- 이 고순도의 PFA튜브 및 파이프는 표준치수 및 고객의 요구 치수를 만족하는 여러 종류로서 제공됩니다.
- 유로의 방향을 용이하게 확인할 수 있는 투명성, 용출이온의 최저화.



PFA tube



PFA pipe



LPP tube



ESD tube

DIMENSIONS

Inch Tube and Pipe

Product		Nominal size	O.D. tolerance	Wall thickness	Wall tolerance
Tube	T-1/8"	3.18 mm	±0.102 mm	0.5 mm	±0.102 mm
	T-1/4"	6.35 mm	±0.102 mm	1.194 mm	±0.102 mm
	T-3/8"	9.53 mm	±0.102 mm	1.574 mm	±0.127 mm
	T-1/2"	12.70 mm	±0.127 mm	1.574 mm	±0.127 mm
	T-3/4"	19.05 mm	±0.127 mm	1.574 mm	±0.127 mm
	T-1"	25.40 mm	±0.127 mm	1.574 mm	±0.127 mm
	T-1 1/4"	31.80 mm	±0.127 mm	1.9 mm	±0.127 mm
	T-1 1/2" (38.1 mm)	38.10 mm	±0.250 mm	2.2 mm	±0.150 mm
	T-1 1/2" (40 mm)	40.00 mm	±0.203 mm	2.184 mm	±0.127 mm
	T-2"	50.80 mm	±0.203 mm	2.59 mm	±0.203 mm
Pipe	P-1/2" (15A)	21.34 mm	±0.127 mm	2.768 mm	±0.254 mm
	P-3/4" (20A)	26.67 mm	±0.254 mm	2.870 mm	±0.254 mm
	P-1" (25A)	33.40 mm	±0.381 mm	3.378 mm	±0.381 mm
	P-1 1/2" (40A)	48.26 mm	±0.508 mm	3.700 mm	±0.381 mm
	P-2" (50A)	60.33 mm	±0.508 mm	3.911 mm	±0.381 mm

Inch LPP Tube

Product		Nominal size	O.D. tolerance	Wall thickness	Wall tolerance
Tube	T-1/4"	6.35 mm	±0.102 mm	1.194 mm	±0.102 mm
	T-3/8"	9.53 mm	±0.102 mm	1.574 mm	±0.127 mm
	T-1/2"	12.7 mm	±0.127 mm	1.574 mm	±0.127 mm
	T-3/4"	19.05 mm	±0.127 mm	1.574 mm	±0.127 mm
	T-1"	25.4 mm	±0.127 mm	1.574 mm	±0.127 mm
	T-1 1/4"	31.80 mm	±0.127 mm	1.9 mm	±0.127 mm
	T-1 1/2"(38.1 mm)	38.1 mm	±0.250	2.2 mm	±0.150 mm
	T-1 1/2"(40 mm)	40.00 mm	±0.203 mm	2.184 mm	±0.127 mm
	T-2"	50.80 mm	±0.203 mm	2.59 mm	±0.203 mm

Inch ESD Tube

Product		Nominal size	O.D. tolerance	Wall thickness	Wall tolerance
Tube	T-1/8"	3.18 mm	+0.15/-0.10 mm	0.5 mm	±0.102 mm
	T-1/4"	6.35 mm	+0.15/-0.10 mm	1.194 mm	±0.102 mm
	T-3/8"	9.53 mm	+0.15/-0.10 mm	1.574 mm	±0.127 mm
	T-1/2"	12.7 mm	+0.25/-0.10 mm	1.574 mm	±0.127 mm
	T-3/4"	19.05 mm	+0.25/-0.10 mm	1.574 mm	±0.127 mm
	T-1"	25.4 mm	+0.25/-0.10 mm	1.574 mm	±0.127 mm
	T-1 1/4"	31.75 mm	+0.25/-0.10 mm	1.9 mm	±0.127 mm
	T-1 1/2" (38.1 mm)	38.10 mm	+0.25/-0.10 mm	2.2 mm	±0.150 mm
	T-1 1/2" (40 mm)	40.00 mm	+0.25/-0.10 mm	2.184 mm	±0.150 mm
	T-2"	50.80 mm	+0.25/-0.10 mm	2.59 mm	±0.203 mm

mm Tube

Product		Nominal size	O.D. tolerance	Wall thickness	Wall tolerance
Tube	T-Ø4xØ2	Ø4 mm	±0.102 mm	1 mm	±0.102 mm
	T-Ø4xØ3	Ø4 mm	±0.102 mm	0.5 mm	±0.102 mm
	T-Ø6xØ4	Ø6 mm	±0.102 mm	1 mm	±0.102 mm
	T-Ø8xØ4	Ø8 mm	±0.102 mm	2 mm	±0.102 mm
	T-Ø8xØ6	Ø8 mm	±0.102 mm	1 mm	±0.102 mm
	T-Ø10xØ8	Ø10 mm	±0.102 mm	1 mm	±0.102 mm
	T-Ø12xØ9	Ø12 mm	±0.127 mm	1.5 mm	±0.102 mm
	T-Ø12xØ10	Ø12 mm	±0.127 mm	1 mm	±0.102 mm
	T-Ø15xØ12.6	Ø15 mm	±0.127 mm	1.2 mm	±0.102 mm

PFA TUBE

- 유로의 흐름을 용이하게 확인할 수 있도록 투명한 소재를 선택, 압출 성형되었습니다.
- PFA tubing은 tube와 pipe의 형태로 표준치수로 공급합니다.

Specifications

Inch tube size $\frac{1}{8}$ " ~ 2"

Ordering Information

PLT-	-	-	-	-
				Length
			Type	
			RL = Roll	
			ST = Straight	
		Material		
		01 = AP231SH		
		23 = 450HP		
		25 = 451HP		
		29 = 951HP		
	Size			
	03 = $\frac{1}{8}$ "			
	04 = $\frac{1}{4}$ "			
	06 = $\frac{3}{8}$ "			
	08 = $\frac{1}{2}$ "			
	12 = $\frac{3}{4}$ "			
	16 = 1"			
	20 = $1\frac{1}{4}$ "			
	22 = $1\frac{1}{2}$ " (38.1 mm)			
	24 = $1\frac{1}{2}$ " (40 mm)			
	32 = 2"			
	Product name			
	PLT = PureLine tube			

CST = Custom
 003 = Straight 3 m
 050M = Roll 50 m
 100M = Roll 100 m
 200M = Roll 200 m*
 *Not available for $\frac{3}{8}$ ",
 $1\frac{1}{2}$ " or 2" sizes



Example: **PLT-16-01RL-100M**

- PLT = PureLine tube
- 16 = 1"
- 01 = AP231SH
- RL = Roll
- 100M = 100 m roll

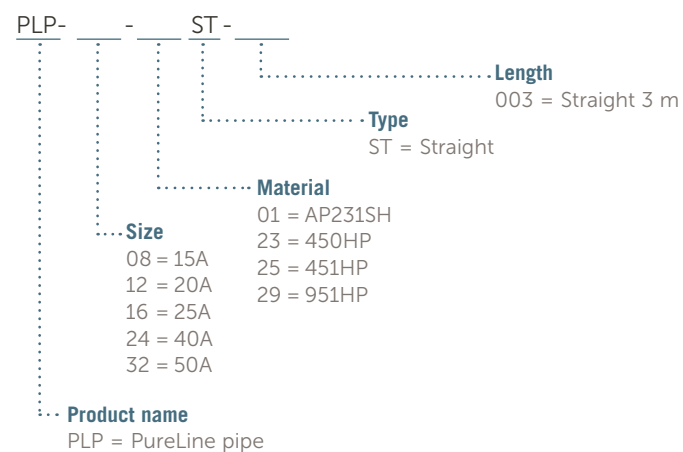
PFA PIPE

- 유로의 흐름을 용이하게 확인할 수 있도록 투명한 소재를 선택, 압출 성형되었습니다.
- PFA tubing은 tube와 pipe의 형태로 표준치수로 공급합니다.

Specifications

Inch tube size	15A, 20A, 25A, 40A, 50A
----------------	-------------------------

Ordering Information



Example: PLP-12-01ST-003

- PLP = PureLine pipe
- 12 = 20A
- 01 = AP231SH
- ST = Straight
- 003 = 3 m



ESD TUBE

- 반도체 제조 공장 내 벌크 용매 분배 작업에서 발생하는 정전기 방전 현상과 관련된 잠재적 문제를 최소화합니다.
- 전도성 스트라이프가 접지 스트랩을 통해 접지합니다.
- ESD 튜브 외부에 압출 성형된 스트립.
- 고순도 PFA와 전도성 PFA의 재질로 생산됩니다.
- 튜브에 축적된 정전하가 지나갈 수 있는 접지 경로를 제공합니다.

Specifications

Inch tube size	1/8" ~ 2"
----------------	-----------

Ordering Information

PLAT-	- 25	-		
				Length
				CST = Custom
				003 = Straight 3 m
				050M = Roll 50 m
				100M = Roll 100 m
				150M = Roll 150 m
				200M = Roll 200 m*
				*Not available for 3/8", 1 1/2" or 2" sizes.
				Type
				R = Roll
				ST = Straight
				Material
				25 = DuPont™ 451
				Size
				03 = 1/8"
				04 = 1/4"
				06 = 3/8"
				08 = 1/2"
				12 = 3/4"
				16 = 1"
				20 = 1 1/4"
				22 = 1 1/2" (38.1 mm)
				24 = 1 1/2" (40 mm)
				32 = 2"
				Product name
				PLAT = PureLine ESD tube

Example: PLAT-16-25R-100M

- PLAT = PureLine ESD tube
- 16 = 1"
- 25 = Dupont 451
- R = Roll
- 100M = 100 m roll



LPP TUBE

- 이중 튜브로써 화학 물질 투과를 감소시켜 제품 성능을 극대화합니다.
- 고순도 PFA 및 CPT 재질로 우수한 내화학성과 내부식성을 제공합니다.

Specifications

Inch tube size	1/4" ~ 2"
----------------	-----------

Ordering Information

PLLT- - 01 -

Product name
PureLine LPP tube

Size
04 = 1/4"
06 = 3/8"
08 = 1/2"
12 = 3/4"
16 = 1"
20 = 1 1/4"
22 = 1 1/2" (38.1 mm)
24 = 1 1/2" (40 mm)
32 = 2"

Material
01 = CPT/PFA

Type
RL = Roll
ST = Straight

Length
CST = Custom
003 = Straight 3 m
050M = Roll 50 m
100M = Roll 100 m
200M = Roll 200m*
*Not available for 3/8",
1 1/2" or 2" sizes



Example: PLLT-16-01RL-100M

- PLLT = PureLine LPP tube
- 16 = 1"
- 01 = CPT/PFA
- RL = Roll
- 100M = 100 m roll

Accessories

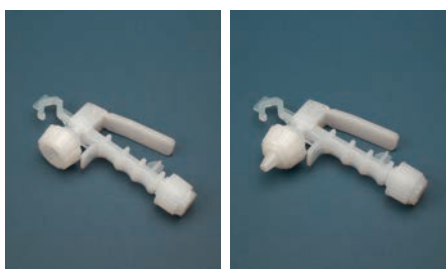
ACCESSORY PRODUCT OVERVIEW



Nut lock



ESD tube strap



DI gun



Tower packing



PFA vessel, etc.

NUT LOCK

- 진동에서 너트가 풀리는 것을 방지하며, Leak 가능성을 줄여줍니다.
- 너트의 풀림으로 인한 작업자의 재조임이 불필요합니다.
- 클립형태의 구조로 탈, 부착이 용이합니다.
- PVDF and SUS + PTFE coating.

Operating Specifications

Size	1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2"
Maximum operating pressure	Valve의 maximum operating pressure
Maximum operating temperature	90°C (194°F)



Ordering Information

Part number	Nominal size
PLNL04	1/4"
PLNL04V	1/4" valve type
PLNL06	3/8"
PLNL08	1/2"
PLNL12	3/4"
PLNL16	1"
PLNL20	1 1/4"
PLNL24	1 1/2"

ESD TUBE STRAP

- Bolt set 필요없음, 추가 band를 통한 연결/체결.
- Multi-Connection 및 긴거리 연결 가능, 최대 10개 연결 및 band 길이 만큼 체결 범위 확장.
- Strap 재질의 강도 및 전도성 강화, Bolt의 안정성 및 multi 연결에 의한 정향 증가 보상.

Specifications

Size	1/8"~1", 1 1/4"~1 1/2"
------	------------------------

Ordering Information

PLAT-STRAP -

Size

E1 = 1/8"~1"

E2 = 1 1/4"~1 1/2"

C = Connector

Product name

PLAT-STRAP = PureLine ESD tube strap



DI GUN AND N₂ GUN

- 정밀화학분야 및 반도체, LCD분야의 순수 공급약품 DI water 및 gas를 분사하는 제품입니다.
- 약액의 누유시 발생할 수 있는 위험 요소를 제거하기 위한 세척용 DI water를 이송 분사할 수 있습니다.
- 초순수 및 N₂ gas 분사용으로 유해 공급장치에 적용됩니다.

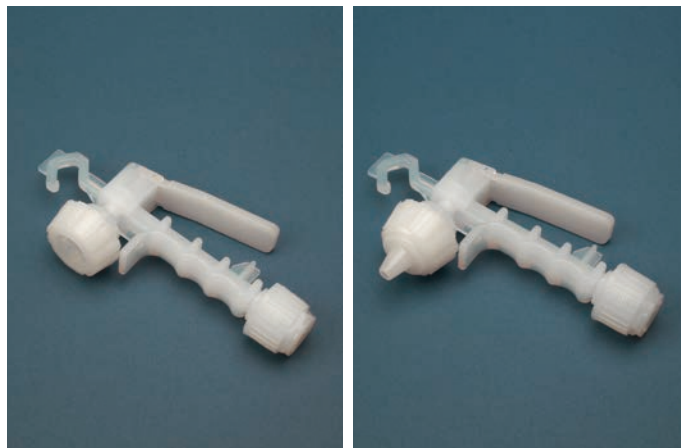
Operating Specifications

Size	3/8" tube flaring type, 1/4" NPT (gun body size) + 1/4" male connection
Operating pressure	0~5.6 kgf/cm ²
Temperature	0~90°C (32~194°F)

Ordering Information

Part number	Nominal size
PLDSG-01(I)	3/8"
PLDSG-01K	3/8" PrimeLock fitting
PLDSG-02(I)	1/4"
PLNSG-01(I)	N ₂ 3/8"
PLNSG-01K	N ₂ 3/8" PrimeLock fitting
PLNSG-02(I)	N ₂ 1/4"

I = Insert type nut를 사용



TOWER PACKING

- Tower 또는 Vessel의 유동기체 및 액체의 여과에 사용.
- 고온에서 냉각되는 과정의 액체 및 기체의 분리 여과를 위한 충전체로 사용됩니다.

Operating Specifications

Size	1", 2"
Maximum operating temperature	180°C (356°F)

Ordering Information

Part number	Nominal size
PLTP16	1"
PLTP32	2"

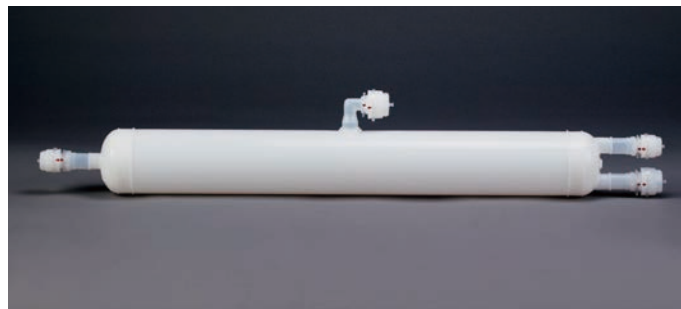


PFA VESSEL AND AIR SEPARATOR

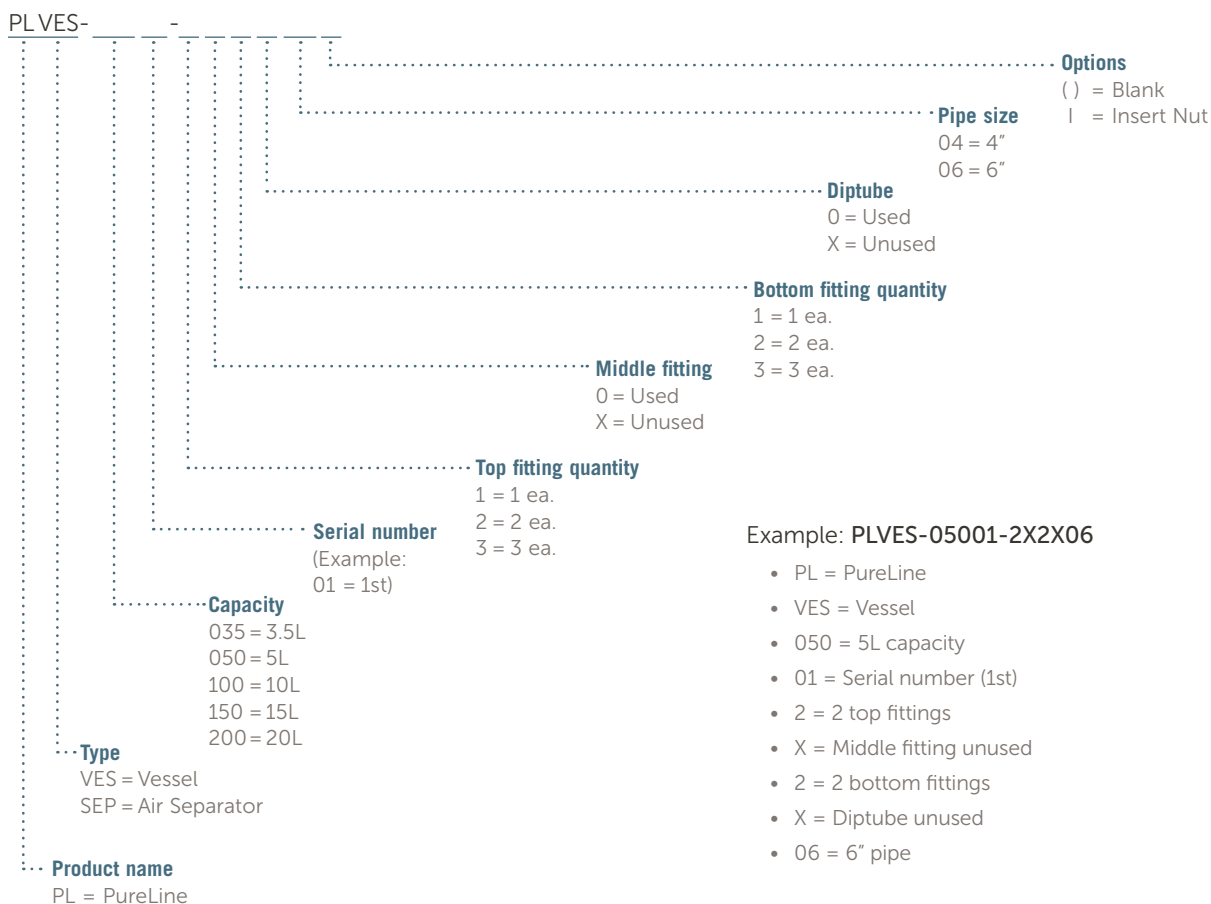
- 초순수 라인의 기액을 분리하는 공급장치에 적용합니다.
- 약액의 용량을 정량 조절하기 위한 장비입니다.
- 약액에 섞여있는 Air와 약액을 분리 시켜주는 장비입니다.

Specifications

Size	4", 6"
------	--------



Ordering Information



Notes:

**PURELINE MANUFACTURING STANDARD:
T.L.~T.L. STANDARD (CAPACITY
CALCULATION)**

- T.L.: Tangent line
- W.L.: Welding line

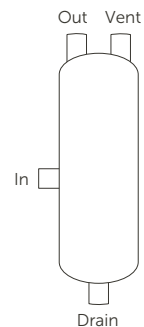
	4" STANDARD	6" STANDARD
Body length per 1L	150 mm	57 mm
Using pot	1, 2	2, 3
Outside diameter	107.2 mm	168.1 mm
Thickness	7.4 mm	9.3 mm
Inside diameter	92.4 mm	149.5 mm
Cap capacity	300 mL	1.2 L
Using condition	5 kg @ 23°C (73°F)	5 kg @ 23°C (73°F)
Water pressure test	9.75 kg	8.4 kg

FITTING FOR VESSEL

- Tube Adapter
 - 20A × 1"
 - 20A × 3/4"
 - 20A × 1/2"
- Elbow Tube Adapter
 - 20A × 1"
 - 20A × 3/4"

WELDING ROD (Φ4)

- 20A Usage: 420 mm
- 25A Usage: 440 mm



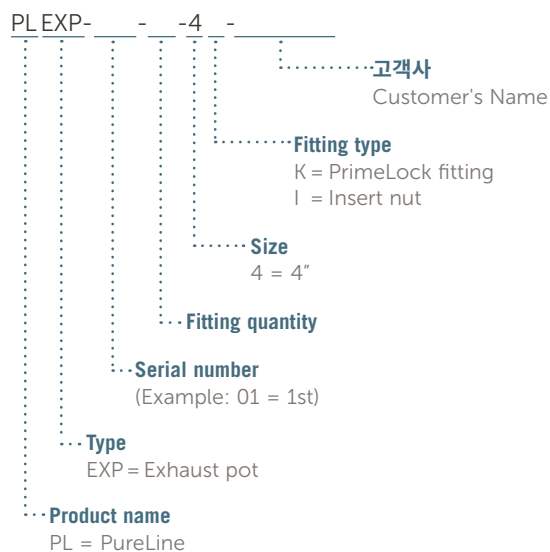
PFA EXHAUST POT

- 약액 이동간 발행하는 Air 및 Unit에 있는 불필요한 Air를 배기 시켜주는 장비입니다.

Specifications

Size	4"
------	----

Ordering Information



Example: PLEXP-026-04-4K-CUSTOMER

- PLEXP = PureLine exhaust pot
- 01 = Serial number (1st)
- 04 = 4 fittings
- 4 = 4"
- K = PrimeLock fitting
- CUSTOMER = Customer's Name

LIMITED WARRANTY

Entegris' products are subject to the Entegris, Inc. General Limited Warranty. To view and print this information, visit entegris.com and select the Legal & Trademark Notices link in the footer. Entegris does not warranty any failure in the case of customers using unapproved foreign components.

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit entegris.com and select the Contact Us link to find the customer service center nearest you.

TERMS AND CONDITIONS OF SALE

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit entegris.com and select the Terms & Conditions link in the footer.



Corporate Headquarters

129 Concord Road
Billerica, MA 01821
USA

Customer Service

Tel +1 952 556 4181
Fax +1 952 556 8022
Toll Free 800 394 4083

Entegris®, the Entegris Rings Design™, Pure Advantage™, PrimeLock® and PureLine® are trademarks of Entegris, Inc.

DuPont™ is a trademark of E.I. du Pont de Nemours and Company or its affiliates.

©2017 Entegris, Inc. | All rights reserved. | 7101-8357CRE-0617

Pureline Plant | 85-4, Donghwagongdan-ro, Munmak-eup, Wonju-Si, Gangwon-do, Korea 26365 | Tel +82 33 737 8434
Korea Sales office | KANC 13F, 109, Gwanggyo-ro, Yeongtong-gu, Suwon-Si, Gyeonggi-do, Korea 16229 | Tel +82 31 8065 8300