一诺迪思
INNODIS

YOUR TECHNOLOGY PARTNER

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BUSINESS STRATEGY

Greeting

주식회사 이노디스는 PFD 및 반도체 장비 산업의 중심에서 특수 수지 제조 기술로 그 역할을 담당하고 있으며 이 분야에서 세계적인 가치를 창조하는 기업으로 도약할 것 입니다. 특수 수지 가공 및 제조 분야에서 기술 및 품질 경쟁력을 확보하여 세계 초 일류 부품과 서비스를 제공할 것이며 세계적 환경에 맞는 기업 및 조직문화 구축을 통해 최고의 고객 만족을 실현하는 초우량 기업이 될 것 입니다

（株）INNODIS站在半导体设备产业之中心，基于超一流合成树脂加工技术担任重要的作用，并致力发展为创造该领域世界价值的企业。敝司在特殊树脂加工领域确保技术和质量竞争力，保证提供世界超一流零部件和服务。并建设符合全球环境的企业及组织文化，发展为实现客户满足的超级优良企业。

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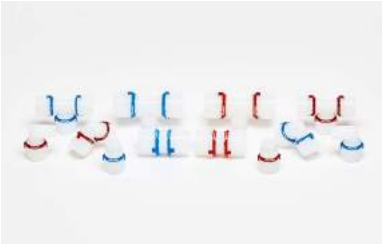
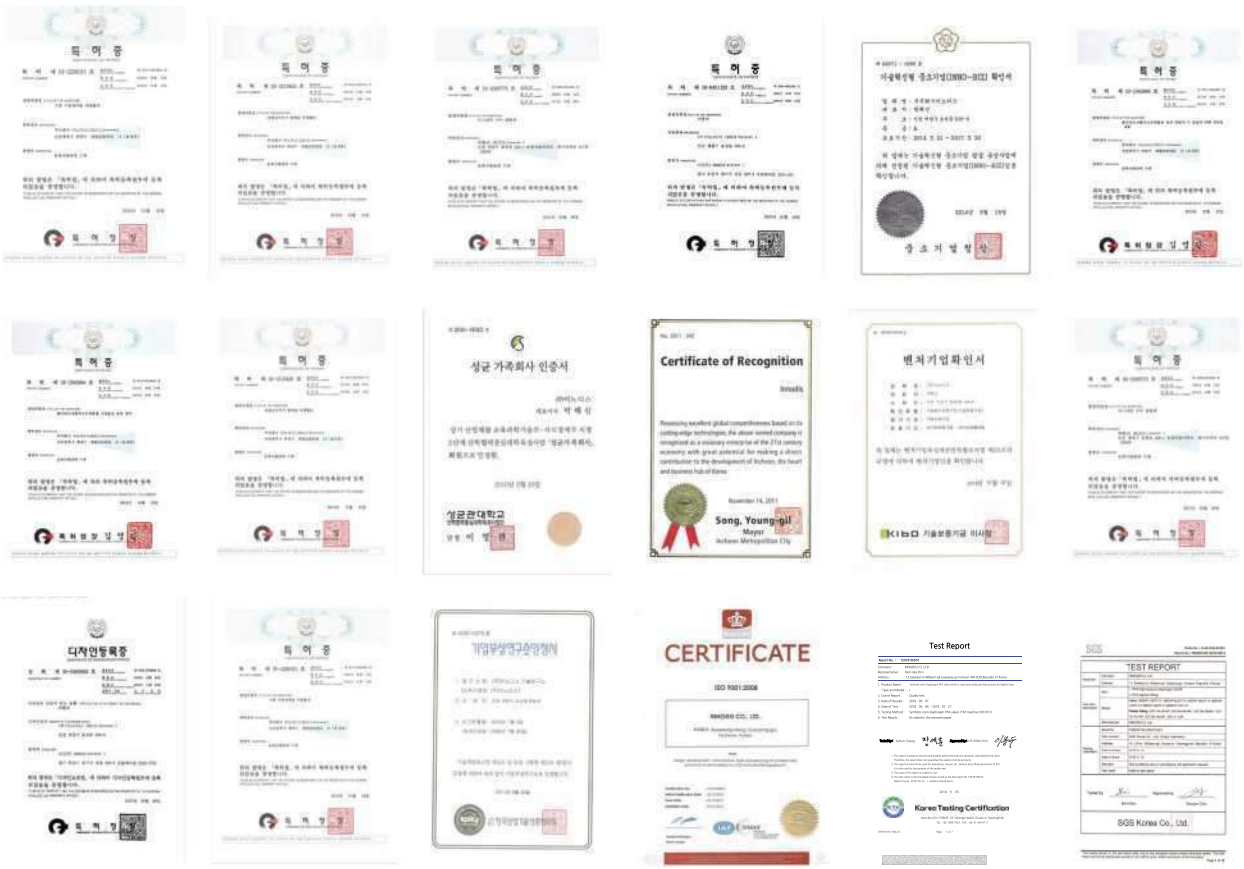
CONTENT
목차 目录



Authentication



Valve 설치 및 주의사항

다음의 원인으로 고장시 보증기간과 관계없이 유료입니다.

① 보증기간이 끝난 뒤의 고장과 파손.
② 취급 부주의로 인한 사용상의 문제점.
③ 고객의 잘못된 수리 및 개조에 인한 고장과 파손.

因以下原因发生的故障，与保修期无关都会收费维修。

① 保修期结束后的故障和损坏。
② 因操作不当而发生的使用方面的问题。
③ 因顾客进行不当的修理及改造而造成的故障和损坏。

설계 및 선정 시

① 잘못된 기기 선정은 시스템 고장의 원인이 될 수 있습니다.
② 기기 선정 및 취급은 카다로그 확인 후 사용해 주십시오.
③ 제품 구성 재료와 사용 유체 주위 분위기와 적합성은 사전에 확인, 상담해 주십시오.
④ 유체압력 및 온도는 제품 카다로그를 참고해 주시기 바랍니다.

设计及选产品时

① 机械选择不正确，会导致系统发生故障。
② 选择及操作机械时，请提前确认产品目录。
③ 产品构成材料和使用流体周围环境和适合性，请提前咨询确认。
④ 流体压力及温度请参考产品目录。

보수 공간의 확보

① 보수 점검에 필요한 공간을 확보하여 주십시오.
② 잘못된 설치 및 배관은 고객의 시스템에 심각한 문제를 발생시키는 원인이 되며 그 밖의 유체와 관련 기기와의 적합성 등은 사전에 확인, 상담해 주십시오.

维修空间的确保

① 请确保维修检查所需要的空间。
② 不正确的安装及铺设管道会导致客戶系统出现严重问题，此外请事先确认流体和相关机械的适当性等。

설치 시

설치 후 기능 및 누설 검사를 확인하고 바르게 설치 되었는지를 확인하여 주십시오.

安装时

安装后检查有无泄漏以及功能，并确认是否安装正确。

배관시

① 밸브 설치 시 반드시 배관 내부를 플러싱 해주십시오.
② 이물질의 혼입은 밸브 누수 현상의 원인이 됩니다.
③ 배관에 의한 압축, 휨 등이 밸브 몸체를 누르지 않도록 배관해 주십시오.
④ 튜브 배관 시 잡아당기면 나사산 파손 및 튜브가 빠져나와 약액이 누설될 수 있습니다.
⑤ NC, NO 형의 경우, 조작 압력을 가압하지 않는 포트는 대기 개방으로 하고 주위 분위기나 기타의 문제로 밸브에서 흡입, 배기시키고 싶지 않을 때는 고정나사를 풀어서 배관을 설치, 문제가 되지 않는 장소에서 설치를 해 주십시오.

铺设管道时

① 安装阀门时，请务必清洗配管内部。
② 异物混入会导致阀门发生漏水。
③ 铺设管道时注意不要因配管的压缩、弯曲等而向阀门施加压力。
④ 铺设管道时，如果用手拉动，就使螺纹破损及管道脱落而导致药液泄露。
⑤ 对于NC、NO型，不加以压力的接口实时开放，若不想因周围环境或其他问题造成阀门吸气或排气时，打开固定螺丝，将配管安装在不会发生问题的场所。

파일럿 포트

① 파일럿 포트 체결 토크는 밸브라벨 부착 스티커를 참조하시고 라벨에 표기가 없을 시에는 손으로 체결 후 체결 공구를 사용 1/4 바퀴를 더 조여 주십시오.
② 무리하게 조일 경우 파손의 원인이 됩니다.
③ 압축공기가 오염될 경우 작동 불량의 원인이 됩니다.

Pilot port

① Pilot port连接扭矩请参考阀门粘贴标签，如果没有标签，请用用手锁紧后，使用锁紧工具再拧四分之一圈。
② 如果用力过度，会导致损坏。
③ 压缩空气被污染，会导致运行不良。

제품보증

① 제품보증 기간은 판매일로부터 1년간 입니다.
② 보증기간에 당사의 설계 제작상의 문제로 고장과 파손이 되었을 경우 즉시 무료로 수리하거나 교체할 수 있습니다.

产品保修

① 产品保修期是销售日起一年。
② 保修期内因我公司的设计和制造问题而导致故障或损坏时，会立即免费维修或更换。

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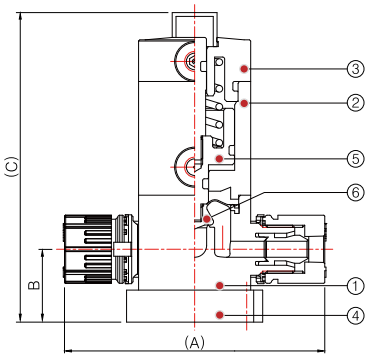
PFA
사출 射出
Valve

Air Auto Valve

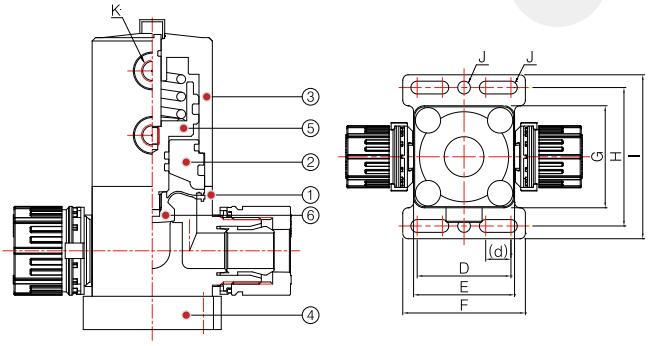
Mega Lock Type

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Air Auto Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Air Auto Valve。

PFA
사출 射出



1/4" ~ 1/2" inch



3/4" ~ 1" inch

SPECIFICATION

유체온도(流体温度)	5~120°C
반복횟수(反复次数)	10cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	1/4" (4~5kgf/cm²)
	3/8"~1" (4~6kgf/cm²)
유체압력(流体压力)	(In→Out) 0~5kgf/cm²
	(Out→In) 0~1kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	D	(d)	E	F	G	H	I	J	K
1/4"	65	18.2	77.3	26	7	28	34	28	38	45	Ø3.5	PT1/8"
3/8"	88.4	25	103	30	8	42	42	42	52	62	Ø4.5	PT1/8"
1/2"	97.6	26.4	106.4	30	8	42	42	42	52	62	Ø4.5	PT1/8"
3/4"	124.2	35.5	139.6	46	10	54	62	54	78	95	Ø9	PT1/8"
1"	143	42	159	46	10	60	66	60	78	96	Ø9	PT1/8"

CV VALUE

Valve size	Cv Value
1/4"	0.29
8mm	0.64
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

PART

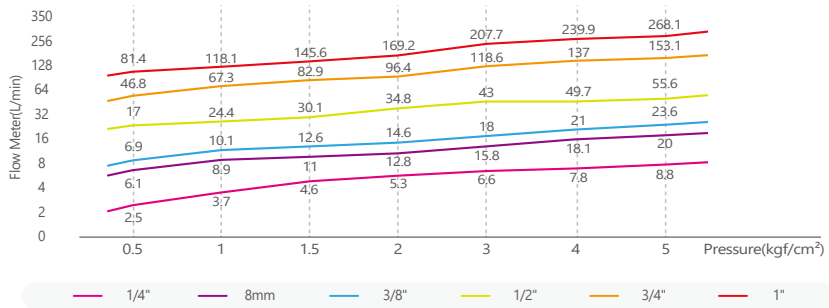
Size	① Body	② Actuator Body	③ Top Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
1/4" - 1/2"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

Size	① Body	② Housing	③ Actuator Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
3/4" - 1"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

CHARACTERISTICS

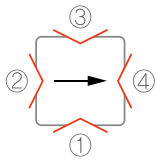
- 내화학성 우수
  (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)
- 1/4"VALVE SIZE
  NC(Normal Close) Air Port : PT1/8"
  NO(Normal Open) Air Port : M5 TAP

TECHNICAL DATA



MODEL SELECTION

IMVD - ①②③④⑤ - ⑥ - ⑦

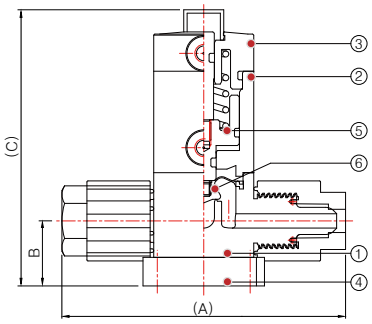
①Material	②Size	③Operation	④O-ring	⑤Option	⑥Operate Port	⑦Type
F (PFA)	14i (1/4inch) or 6m (6mm)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)		V1 (Standard Type) 유체온도(流体温度) : 5~120°C
	38i (3/8inch) or 8,10m (8,10mm)	O (Normal Open)	F (FKM)	1 (Indicator)		
	12i (1/2inch) or 12m (12mm)	D (Double Action)		2 (Flow Control)		
	34i (3/4inch) or 19m (19mm)			3 (By-Pass)		
	1i (1inch) or 25m (25mm)			4 (Flow Control + By-Pass)		

Air Auto Valve

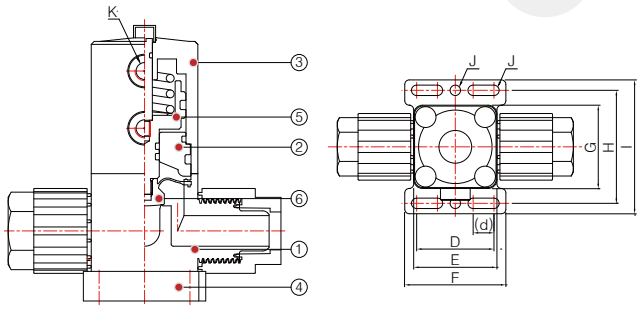
Flare Type

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Air Auto Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Air Auto Valve。

PFA
사출 射出



1/4" ~ 1/2" inch



3/4" ~ 1" inch

SPECIFICATION

유체온도(流体温度)	5~120°C
반복횟수(反复次数)	10cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	1/4" (4~5kgf/cm²)
	3/8"~1" (4~6kgf/cm²)
유체압력(流体压力)	(In→Out) 0~5kgf/cm²
	(Out→In) 0~1kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	D	(d)	E	F	G	H	I	J	K
1/4"	79.4	18.2	77.3	26	7	28	34	28	38	45	Ø3.5	PT1/8"
3/8"	104	25	103	30	8	42	42	42	52	62	Ø4.5	PT1/8"
1/2"	113.4	26.4	106.4	30	8	42	42	42	52	62	Ø4.5	PT1/8"
3/4"	138.2	35.5	139.6	46	10	54	62	54	78	95	Ø9	PT1/8"
1"	156	42	159	46	10	60	66	60	78	96	Ø9	PT1/8"

CV VALUE

Valve size	Cv Value
1/4"	0.29
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

PART

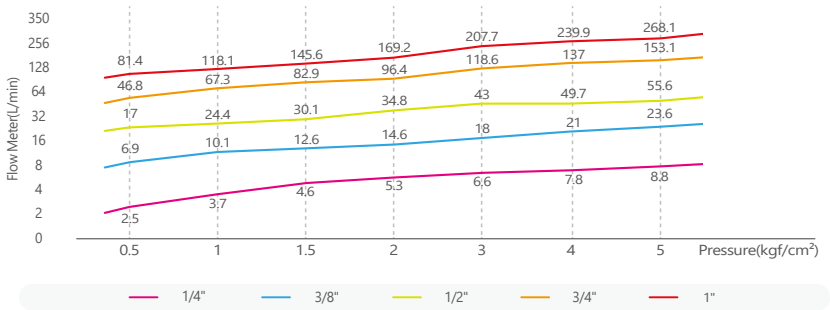
Size	① Body	② Actuator Body	③ Top Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
1/4" - 1/2"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

Size	① Body	② Housing	③ Actuator Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
3/4" - 1"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

CHARACTERISTICS

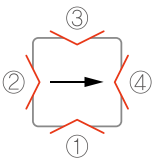
- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)
- 1/4"VALVE SIZE
  NC(Normal Close) Air Port : PT1/8"
  NO(Normal Open) Air Port : M5 TAP

TECHNICAL DATA



MODEL SELECTION

IVD - ①② FR ③④⑤ - ⑥ - ⑦

①Material	②Size	③Operation	④O-ring	⑤Option	⑥Operate Port	⑦Type
F (PFA)	14i (1/4inch) or 6m (6mm)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)		V1 (Standard Type) 유체온도(流体温度) : 5~120°C
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	34i (3/4inch) or 19m (19mm)			3 (By-Pass)		
	1i (1inch) or 25m (25mm)			4 (Flow Control + By-Pass)		

Air Auto Valve

Sensor Type

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PFA
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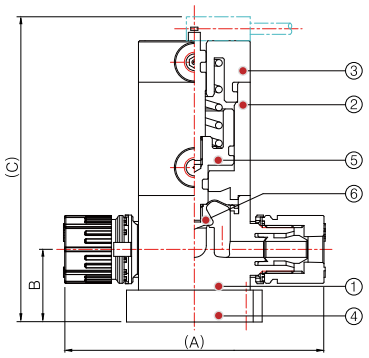
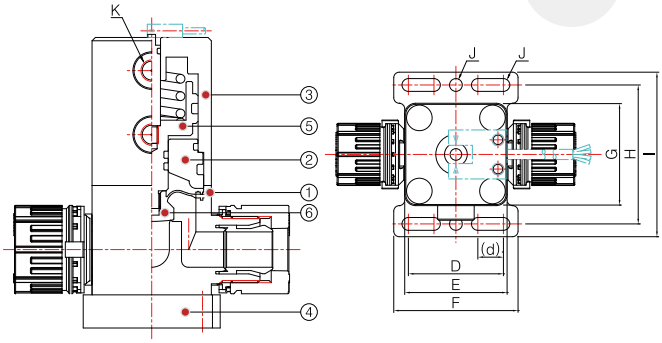


1/4" ~ 1/2" inch



3/4" ~ 1" inch

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DIMENSION

Size	(A)	B	(C)	D	(d)	E	F	G	H	I	J	K
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PART

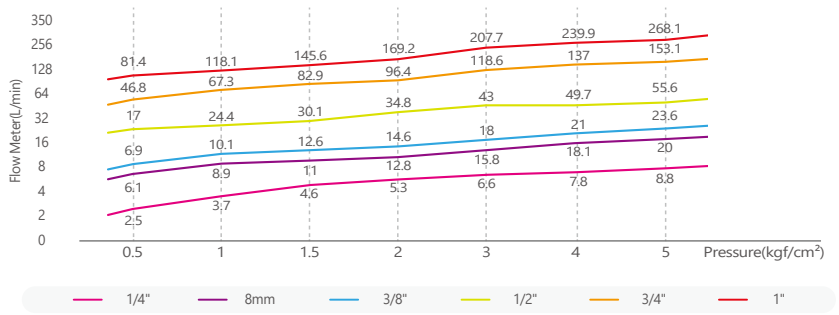
Size	① Body	② Actuator Body	③ Top Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
1/4" - 1/2"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

Size	① Body	② Housing	③ Actuator Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
3/4" - 1"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

CHARACTERISTICS

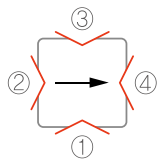
- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)
- 1/4"VALVE SIZE
  NC(Normal Close) Air Port : PT1/8"
  NO(Normal Open) Air Port : M5 TAP
- 고압 사양 사용 가능 (高压时可以使用)

TECHNICAL DATA



MODEL SELECTION

IMVD - ①②③④⑤⑥ - ⑦ - ⑧

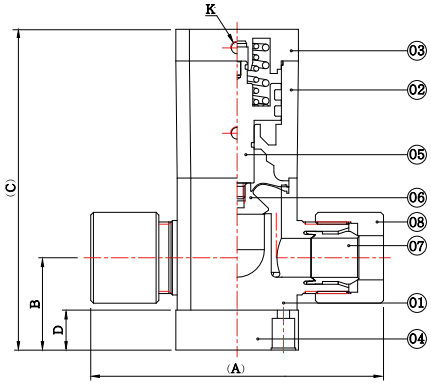
①Material	②Size	③Operation	④O-ring	⑤Option	⑥Sensor Direction ⑦Operate Port	⑧Type
F (PFA)	14i (1/4inch) or 6m (6mm)	C (Normal Close)	E (EPDM)	S (Optic Sensor)		V1 (Standard Type) 유체온도(流体温度) : 5~120°C
	38i (3/8inch) or 8,10m (8,10mm)		F (FKM)			
	12i (1/2inch) or 12m (12mm)					
	34i (3/4inch) or 19m (19mm)					
	1i (1inch) or 25m (25mm)					

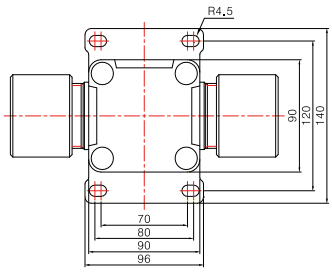
Air Auto Valve

대구경 大口径

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Air Auto Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Air Auto Valve。

PTFE
가공 加工





SPECIFICATION	
유체온도(流体温度)	5~60°C
반복횟수(反复次数)	10 cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	4~6kgf/cm^2
	PT 1/8inch
유체압력(流体压力)	(In→Out) 0~3kgf/cm^2
	(Out→In) 0~1kgf/cm^2
생산품목(生产品种)	1-1/4", 1-1/2"

DIMENSION

Size	(A)	B	(C)	D	E	F	G	H	I	J	K
1-1/4"	210	55	221	17	-	-	-	-	-	-	PT1/8"
1-1/2"	216	55	221	17	-	-	-	-	-	-	PT1/8"

CV VALUE

Valve size	Cv Value
1-1/4"	20
1-1/2"	23

CHARACTERISTICS

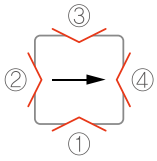
- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品（管式扩管型）

No	PART	MATERIALS
1	Body	PTFE
2	Actuator Body	PPS
3	Top Cover	PPS
4	Bottom Plate	PPS

No	PART	MATERIALS
5	Piston	PPS
6	Diaphragm	PTFE
7	Sleeve	PFA
8	Nut	PP / PVDF

*Connection은 Lock Gauge가 없는 Mega Type 입니다.
Connection是没有Lock Gauge的Mega Type。

MODEL SELECTION IVD - ①②③④⑤ - ⑥ - *M - ⑦

①Material	②Size	③Operation	④O-ring	⑤Option	⑥Operate Port	⑦Nut Material
T (PTFE)	114i (1-1/4inch)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)		V (PVDF)
	112i (1-1/2inch)	O (Normal Open)	F (FKM)	1 (Indicator)		PP (PP)
		D (Double Action)		2 (Flow Control)		

Manual Valve

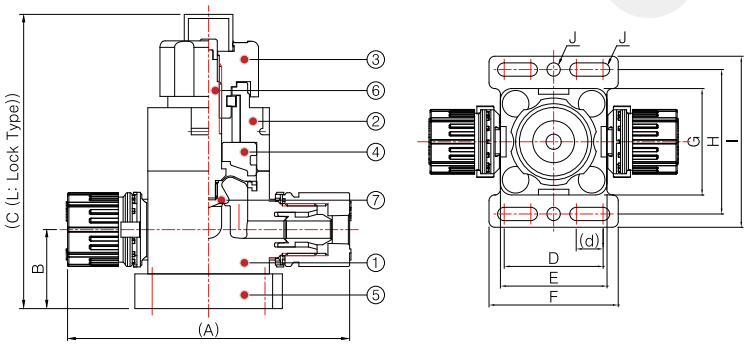
Mega Lock Type

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Manual Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Manual Valve。

[기본 基本 TYPE]

[LOCK TYPE]

PFA
사출 射出



SPECIFICATION

유체온도(流体温度)	5~120°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~5kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	(L)	D	(d)	E	F	G	H	I	J
1/4"	65	18.2	67.9	75.1	26	7	28	34	28	38	45	Ø3.5
3/8"	88.4	25	92.9	109.8	30	8	42	42	42	52	62	Ø4.5
1/2"	97.6	26.4	96.3	113.2	30	8	42	42	42	52	62	Ø4.5
3/4"	124.2	35.5	125.6	148.4	46	10	54	62	54	78	95	Ø9
1"	143	42	148.2	171.5	46	10	60	66	60	78	96	Ø9

CV VALUE

Valve size	Cv Value
1/4"	0.29
8mm	0.64
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

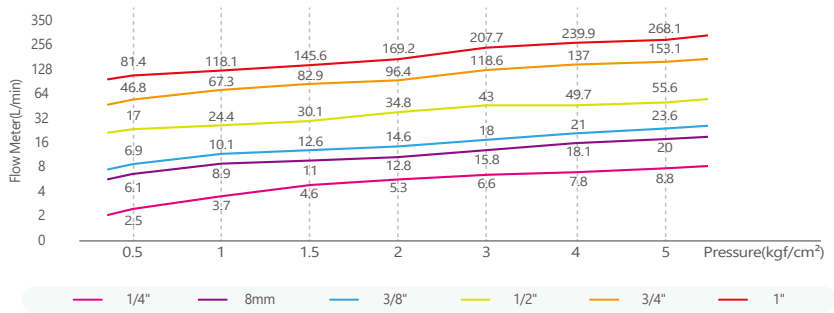
No	PART	MATERIALS
1	Body	PFA
2	Cover	PVDF
3	Handle	PVDF
4	Housing	PVDF

No	PART	MATERIALS
5	Bottom Plate	PVDF
6	Stem	PVDF
7	Diaphragm	PTFE
-	Head Stem(Lock Type)	PVDF

CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品（管式扩管型）

TECHNICAL DATA



MODEL SELECTION

IMVM - ①②③④ - ⑤

①Material	②Size	③O-ring	④Option	⑤Type
F (PFA)	14i (1/4inch) or 6m (6mm)	E (EPDM)	무기호(无记号) (일반용一般用)	V1 (Standard Type) 유체온도(流体温度) : 5~120°C
	38i (3/8inch) or 8,10m (8,10mm)	F (FKM)	L (Lock Type)	
	12i (1/2inch) or 12m (12mm)			
	34i (3/4inch) or 19m (19mm)			
	1i (1inch) or 25m (25mm)			

Manual Valve

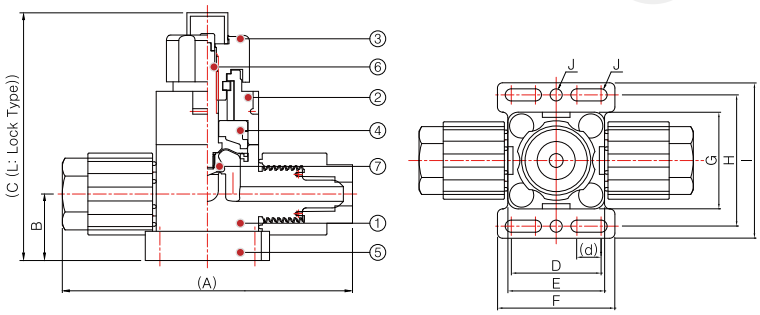
Flare Type

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Manual Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Manual Valve。

[기본 基本 TYPE]

[LOCK TYPE]

PFA
사출 射出



SPECIFICATION

유체온도(流体温度)	5~120°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~5kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	(L)	D	(d)	E	F	G	H	I	J
1/4"	79.4	18.2	67.9	75.1	26	7	28	34	28	38	45	Ø3.5
3/8"	104	25	92.9	109.8	30	8	42	42	42	52	62	Ø4.5
1/2"	113.4	26.4	96.3	113.2	30	8	42	42	42	52	62	Ø4.5
3/4"	138.2	35.5	125.6	148.4	46	10	54	62	54	78	95	Ø9
1"	156	42	148.2	171.5	46	10	60	66	60	78	96	Ø9

CV VALUE

Valve size	Cv Value
1/4"	0.29
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

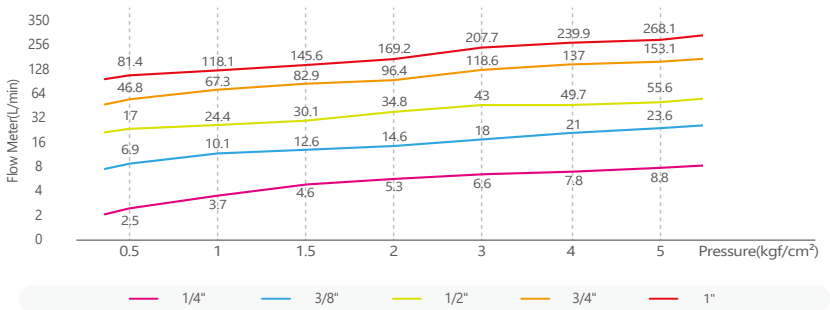
No	PART	MATERIALS
1	Body	PFA
2	Cover	PVDF
3	Handle	PVDF
4	Housing	PVDF

No	PART	MATERIALS
5	Bottom Plate	PVDF
6	Stem	PVDF
7	Diaphragm	PTFE
-	Head Stem(Lock Type)	PVDF

CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

TECHNICAL DATA



MODEL SELECTION

IVM - ①② FR ③④ - ⑤

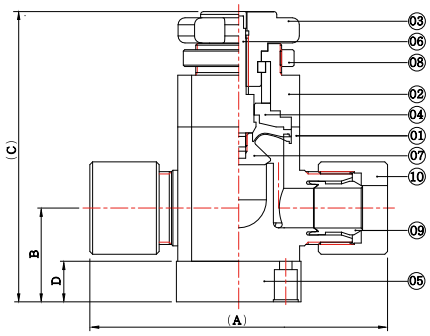
①Material	②Size	③O-ring	④Option	⑤Type
F (PFA)	14i (1/4inch) or 6m (6mm)	E (EPDM)	무기호(无记号) (일반용一般用)	V1 (Standard Type) 유체온도(流体温度) : 5~120°C
	38i (3/8inch) or 8,10m (8,10mm)	F (FKM)	L (Lock Type)	
	12i (1/2inch) or 12m (12mm)			
	34i (3/4inch) or 19m (19mm)			
	1i (1inch) or 25m (25mm)			

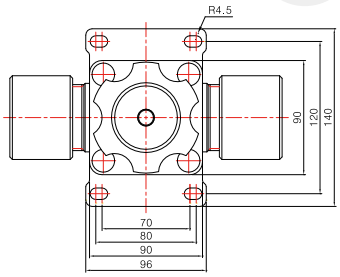
Manual Valve

대구경 大口径

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Manual Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Manual Valve。

PTFE
가공 加工





SPECIFICATION	
유체온도(流体温度)	5~60°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~3kgf/cm^2
생산품목(生产品种)	1-1/4", 1-1/2"

DIMENSION

Size	A	B	C	D	E	F	G	H	I	J	K
1-1/4"	210	58	203.4	20	-	-	-	-	-	-	PT1/8"
1-1/2"	216	58	203.4	20	-	-	-	-	-	-	PT1/8"

CV VALUE

Valve size	Cv Value
1-1/4"	20
1-1/2"	23

CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

No	PART	MATERIALS
1	Body	PTFE
2	Cover	PP
3	Handle	PP
4	Housing	PP
5	Bottom plate	PP

No	PART	MATERIALS
6	Stem	PP
7	Diaphragm	PTFE
8	Lock Nut	PP
9	Sleeve	PFA
10	Nut	PP / PVDF

*Connection은 Lock Gauge가 없는 Mega Type 입니다.
Connection是没有Lock Gauge的Mega Type。

MODEL SELECTION IVM - ①② - *M - ③

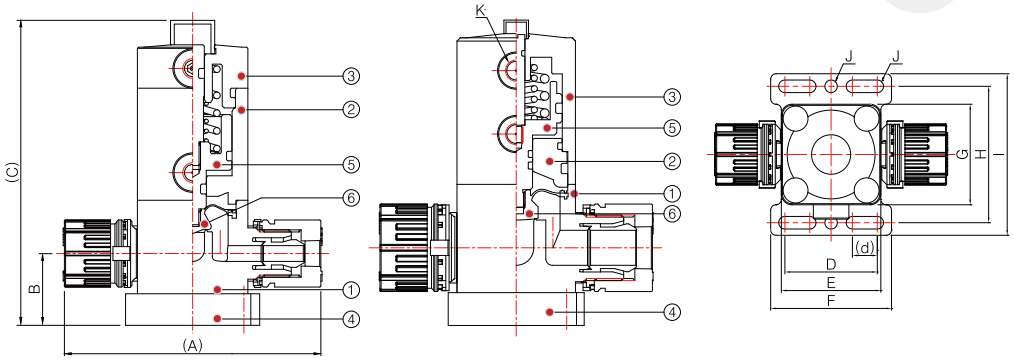
①Material	②Size	③Nut Material
T (PTFE)	114i (1-1/4inch)	V (PVDF)
	112i (1-1/2inch)	PP (PP)

High Pressure Air Auto Valve

Mega Lock Type

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) High Pressure Air Auto Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）High Pressure Air Auto Valve。

PFA
사출 射出



1/4" ~ 1/2" inch　　3/4" ~ 1" inch

SPECIFICATION

유체온도(流体温度)	5~120℃
반복횟수(反复次数)	10cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	5~7kgf/cm²
유체압력(流体压力)	(In→Out) 0~7kgf/cm²
	(Out→In) 0~5kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	D	(d)	E	F	G	H	I	J	K
1/4"	65	18.2	77.3	26	7	28	34	28	38	45	Ø3.5	PT1/8"
3/8"	88.4	25	103	30	8	42	42	42	52	62	Ø4.5	PT1/8"
1/2"	97.6	26.4	106.4	30	8	42	42	42	52	62	Ø4.5	PT1/8"
3/4"	124.2	35.5	139.6	46	10	54	62	54	78	95	Ø9	PT1/8"
1"	143	42	159	46	10	60	66	60	78	96	Ø9	PT1/8"

CV VALUE

Valve size	Cv Value
1/4"	0.29
8mm	0.64
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

PART

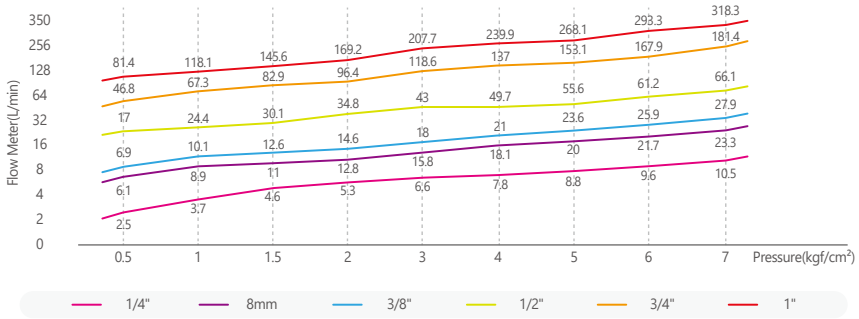
Size	① Body	② Actuator Body	③ Top Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
1/4" - 1/2"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

Size	① Body	② Housing	③ Actuator Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
3/4" - 1"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

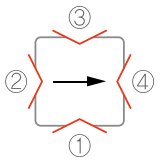
CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)
- 1/4"VALVE SIZE
  NC(Normal Close) Air Port : PT1/8"
  NO(Normal Open) Air Port : M5 TAP

TECHNICAL DATA



MODEL SELECTION　　IMDHP - ①②③④⑤ - ⑥ - ⑦

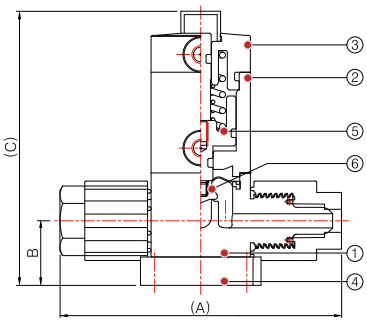
①Material	②Size	③Operation	④O-ring	⑤Option	⑥Operate Port	⑦Type
F (PFA)	14i (1/4inch) or 6m (6mm)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)		V1 (Standard Type) 유체온도(流体温度) : 5~120℃
	38i (3/8inch) or 8,10m (8,10mm)	O (Normal Open)	F (FKM)	1 (Indicator)		
	12i (1/2inch) or 12m (12mm)	D (Double Action)		2 (Flow Control)		
	34i (3/4inch) or 19m (19mm)			3 (By-Pass)		
	1i (1inch) or 25m (25mm)			4 (Flow Control + By-Pass)		

High Pressure Air Auto Valve

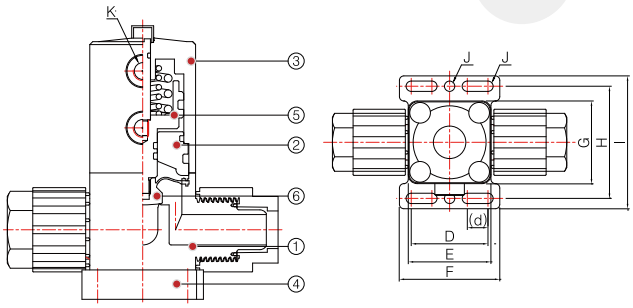
Flare Type

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) High Pressure Air Auto Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）High Pressure Air Auto Valve。

PFA
사출 射出



1/4" ~ 1/2" inch



3/4" ~ 1" inch

SPECIFICATION

유체온도(流体温度)	5~120°C
반복횟수(反复次数)	10cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	5~7kgf/cm²
유체압력(流体压力)	(In→Out) 0~7kgf/cm²
	(Out→In) 0~5kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	D	(d)	E	F	G	H	I	J	K
1/4"	79.4	18.2	77.3	26	7	28	34	28	38	45	Ø3.5	PT1/8"
3/8"	104	25	103	30	8	42	42	42	52	62	Ø4.5	PT1/8"
1/2"	113.4	26.4	106.4	30	8	42	42	42	52	62	Ø4.5	PT1/8"
3/4"	138.2	35.5	139.6	46	10	54	62	54	78	95	Ø9	PT1/8"
1"	156	42	159	46	10	60	66	60	78	96	Ø9	PT1/8"

CV VALUE

Valve size	Cv Value
1/4"	0.29
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

PART

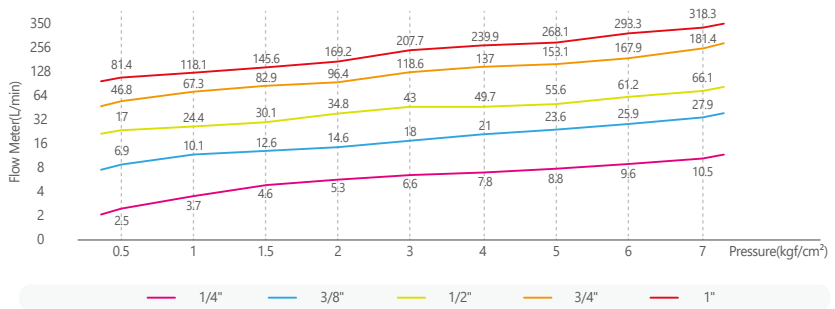
Size	① Body	② Actuator Body	③ Top Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
1/4" - 1/2"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

Size	① Body	② Housing	③ Actuator Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
3/4" - 1"	PFA	PVDF	PVDF	PVDF	PVDF	PTFE

CHARACTERISTICS

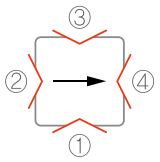
- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)
- 1/4"VALVE SIZE
  NC(Normal Close) Air Port : PT1/8"
  NO(Normal Open) Air Port : M5 TAP

TECHNICAL DATA



MODEL SELECTION

IDHP - ①②FR③④⑤ - ⑥ - ⑦

①Material	②Size	③Operation	④O-ring	⑤Option	⑥Operate Port	⑦Type
F (PFA)	14i (1/4inch) or 6m (6mm)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)		V1 (Standard Type) 유체온도(流体温度) : 5~120°C
	38i (3/8inch) or 8,10m (8,10mm)	O (Normal Open)	F (FKM)	1 (Indicator)		
	12i (1/2inch) or 12m (12mm)	D (Double Action)		2 (Flow Control)		
	34i (3/4inch) or 19m (19mm)			3 (By-Pass)		
	1i (1inch) or 25m (25mm)			4 (Flow Control + By-Pass)		

High Pressure Manual Valve

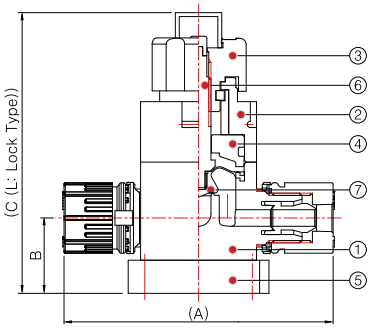
Mega Lock Type

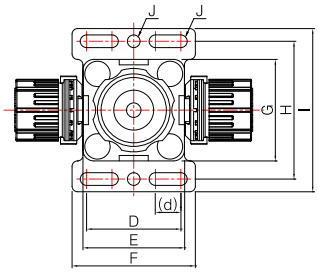
반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) High Pressure Manual Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）High Pressure Manual Valve。

PFA
사출 射出

[기본 基本 TYPE]

[LOCK TYPE]





SPECIFICATION

유체온도(流体温度)	5~120°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~7kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	(L)	D	(d)	E	F	G	H	I	J
1/4"	65	18.2	67.9	75.1	26	7	28	34	28	38	45	Ø3.5
3/8"	88.4	25	92.9	109.8	30	8	42	42	42	52	62	Ø4.5
1/2"	97.6	26.4	96.3	113.2	30	8	42	42	42	52	62	Ø4.5
3/4"	124.2	35.5	125.6	148.4	46	10	54	62	54	78	95	Ø9
1"	143	42	148.2	171.5	46	10	60	66	60	78	96	Ø9

CV VALUE

Valve size	Cv Value
1/4"	0.29
8mm	0.64
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

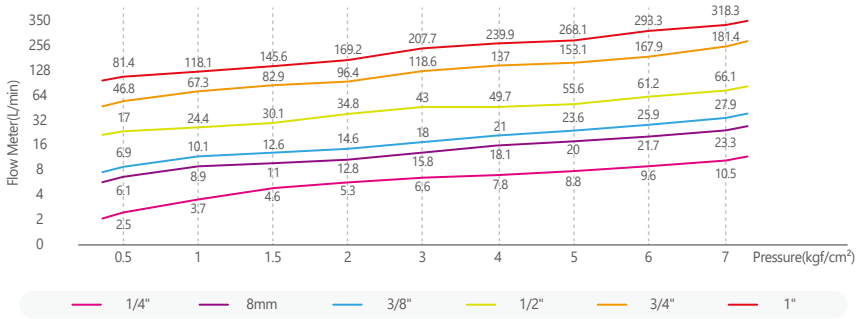
No	PART	MATERIALS
1	Body	PFA
2	Cover	PVDF
3	Handle	PVDF
4	Housing	PVDF

No	PART	MATERIALS
5	Bottom Plate	PVDF
6	Stem	PVDF
7	Diaphragm	PTFE
-	Head Stem(Lock Type)	PVDF

CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

TECHNICAL DATA



MODEL SELECTION

IMMHP - ①②③④ - ⑤

①Material	②Size	③O-ring	④Option	⑤Type
F (PFA)	14i (1/4inch) or 6m (6mm)	E (EPDM)	무기호(无记号) (일반용一般用)	V1 (Standard Type) 유체온도(流体温度) : 5~120°C
	38i (3/8inch) or 8,10m (8,10mm)	F (FKM)	L (Lock Type)	
	12i (1/2inch) or 12m (12mm)			
	34i (3/4inch) or 19m (19mm)			
	1i (1inch) or 25m (25mm)			

High Pressure Manual Valve

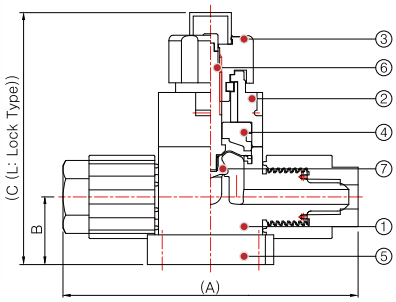
Flare Type

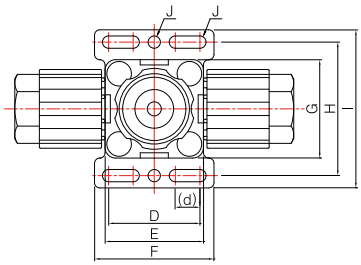
반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) High Pressure Manual Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）High Pressure Manual Valve。

PFA
사출 射出

[기본 基本 TYPE]

[LOCK TYPE]





SPECIFICATION

유체온도(流体温度)	5~120°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~7kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	(L)	D	(d)	E	F	G	H	I	J
1/4"	79.4	18.2	67.9	75.1	26	7	28	34	28	38	45	Ø3.5
3/8"	104	25	92.9	109.8	30	8	42	42	42	52	62	Ø4.5
1/2"	113.4	26.4	96.3	113.2	30	8	42	42	42	52	62	Ø4.5
3/4"	138.2	35.5	125.6	148.4	46	10	54	62	54	78	95	Ø9
1"	156	42	148.2	171.5	46	10	60	66	60	78	96	Ø9

CV VALUE

Valve size	Cv Value
1/4"	0.29
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

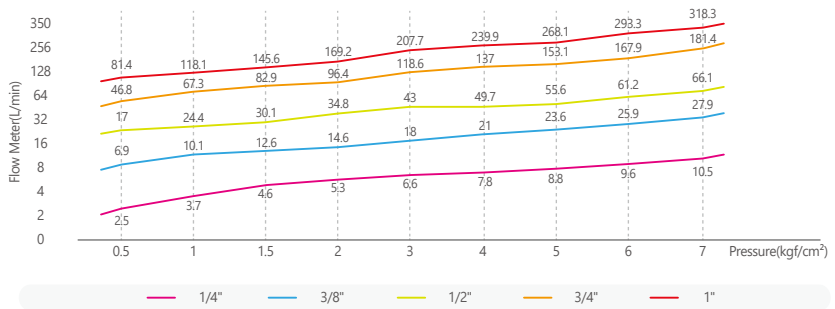
No	PART	MATERIALS
1	Body	PFA
2	Cover	PVDF
3	Handle	PVDF
4	Housing	PVDF

No	PART	MATERIALS
5	Bottom Plate	PVDF
6	Stem	PVDF
7	Diaphragm	PTFE
-	Head Stem(Lock Type)	PVDF

CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

TECHNICAL DATA



MODEL SELECTION

IMHP - ①②FR③④ - ⑤

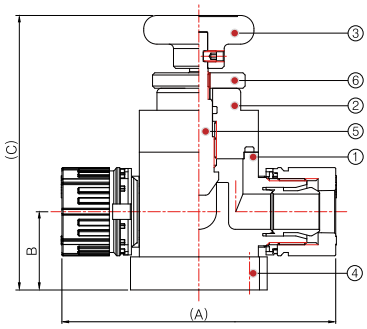
①Material	②Size	③O-ring	④Option	⑤Type
F (PFA)	14i (1/4inch) or 6m (6mm)	E (EPDM)	무기호(无记号) (일반용一般用)	V1 (Standard Type) 유체온도(流体温度) : 5~120°C
	38i (3/8inch) or 8,10m (8,10mm)	F (FKM)	L (Lock Type)	
	12i (1/2inch) or 12m (12mm)			
	34i (3/4inch) or 19m (19mm)			
	1i (1inch) or 25m (25mm)			

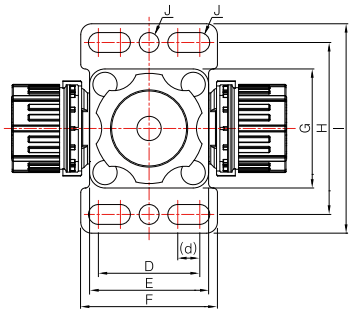
Needle Valve

Mega Lock Type

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 미세하게 조절 제어하는(ON, OFF) Needle Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Needle Valve。

PFA
사출 射出





SPECIFICATION	
유체온도(流体温度)	5~90°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~5kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	D	(d)	E	F	G	H	I	J
1/4"	65	18.2	68.6	26	7	28	34	28	38	45	Ø3.5
3/8"	88.4	25	97.8	30	8	42	42	42	52	62	Ø4.5
1/2"	97.6	26.4	101.2	30	8	42	42	42	52	62	Ø4.5
3/4"	124.2	35.5	130.5	46	10	54	62	54	78	95	Ø9
1"	143	42	153	46	10	60	66	60	78	96	Ø9

CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

No	PART	MATERIALS
1	Body	PFA
2	Cover	PTFE
3	Handle	PP

No	PART	MATERIALS
4	Bottom Plate	PVDF
5	Needle	PCTFE
6	Lock Nut	PP

MODEL SELECTION

IMVN - ①②③

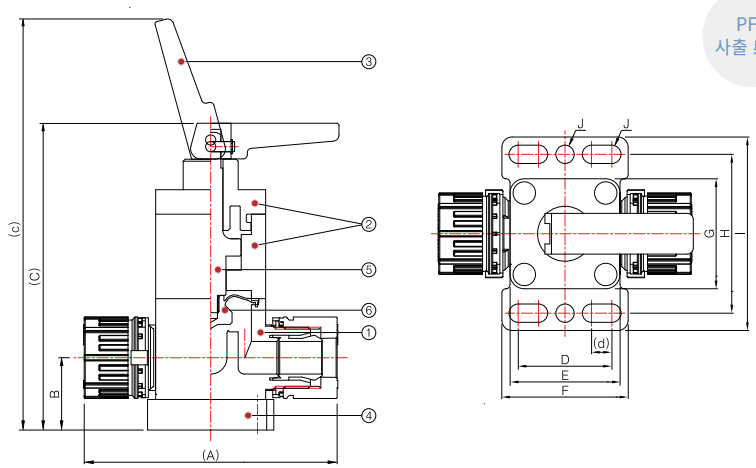
①Material	②Size	③O-ring
F (PFA)	14i (1/4inch) or 6m (6mm)	E (EPDM)
	38i (3/8inch) or 8,10m (8,10mm)	F (FKM)
	12i (1/2inch) or 12m (12mm)	
	34i (3/4inch) or 19m (19mm)	
	1i (1inch) or 25m (25mm)	

Toggle Valve

Mega Lock Type

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Toggle Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Toggle Valve。

PFA
사출 射出



SPECIFICATION

유체온도(流体温度)	5~90°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~3kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	(c)	D	(d)	E	F	G	H	I	J
1/4"	65	18.2	79.2	107.7	26	7	28	34	28	38	45	Ø3.5
3/8"	88.4	25	109.9	145.5	30	8	42	42	42	52	62	Ø4.5
1/2"	97.6	26.4	113.3	148.9	30	8	42	42	42	52	62	Ø4.5
3/4"	124.2	35.5	150.7	202	46	10	54	62	54	78	95	Ø9
1"	143	42	167.2	218.5	46	10	60	66	60	78	96	Ø9

CV VALUE

Valve size	Cv Value
1/4"	0.29
8mm	0.64
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

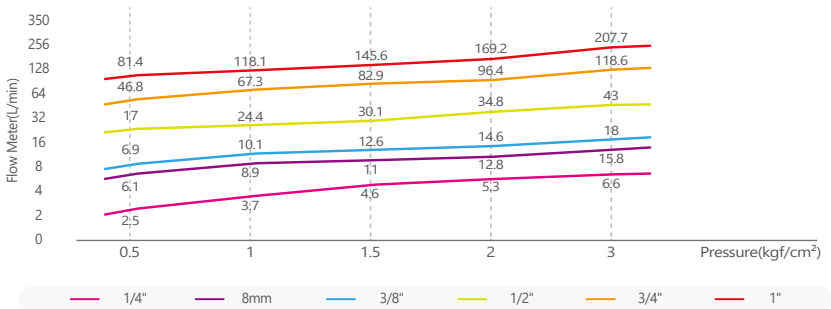
No	PART	MATERIALS
1	Body	PFA
2	Cover	PP
3	Knob	PP

No	PART	MATERIALS
4	Bottom Plate	PVDF
5	Piston	PP
6	Diaphragm	PTFE

CHARACTERISTICS

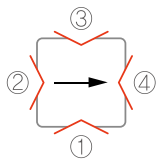
- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

TECHNICAL DATA



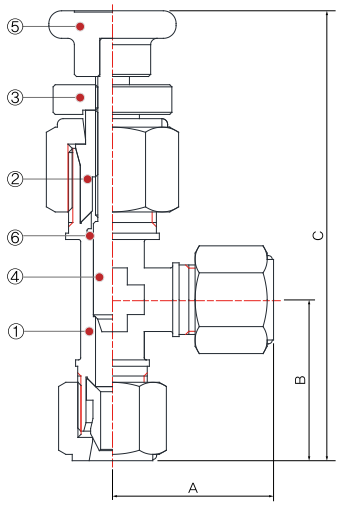
MODEL SELECTION

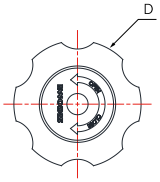
IMVT - ①②③ - ④

①Material	②Size	③O-ring	④Knob Direction
F (PFA)	14i (1/4inch) or 6m (6mm)	E (EPDM)	
	38i (3/8inch) or 8,10m (8,10mm)	F (FKM)	
	12i (1/2inch) or 12m (12mm)		
	34i (3/4inch) or 19m (19mm)		
	1i (1inch) or 25m (25mm)		

Needle Fitting Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 미세하게 조절하고 적은 공간에 적합한 Needle Fitting Valve입니다.
微细调整使用于半导体和LCD设备上的药液（包括纯水）流动，并适合狭窄空间的Needle Fitting Valve。





PFA
사출 射出

SPECIFICATION	
유체온도(流体温度)	5~90°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~3kgf/cm^2
생산품목(生产品种)	1/4inch ~ 1/2inch

DIMENSION				
Size	A	B	C	D
1/4"	33.7	33.7	92.8	Ø24
3/8"	38	42.7	113.8	Ø30
1/2"	51.2	51.2	140	Ø40

CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

No	PART	MATERIALS
1	Body	PFA
2	Sleeve Bush	PFA
3	Lock Nut	PP

No	PART	MATERIALS
4	Needle	PCTFE
5	Handle	PP
6	O-Ring	-

MODEL SELECTION

IVNF - ①②③

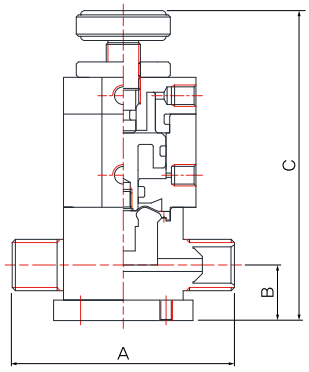
①Material	②Size	③O-ring
F (PFA)	14i (1/4inch) or 6m (6mm)	E (EPDM)
	38i (3/8inch) or 8,10m (8,10mm)	F (FKM)
	12i (1/2inch) or 12m (12mm)	

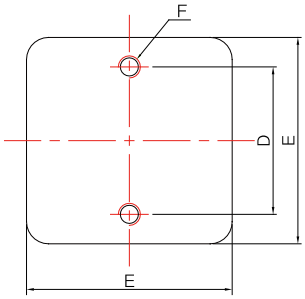
Suck Back Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 정지 시킬때 유체 방울이 떨어지는 것을 방지하는(ON, OFF) Suck Back Valve입니다.
停止使用于半导体和LCD设备的药液（包括纯水）流动时，防止流体滴下的（ON，OFF）Suck Back Vale。

PFA
가공 加工

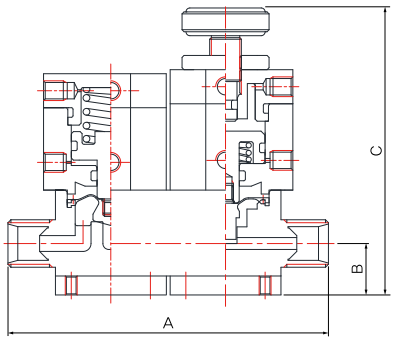
[단독형]
[单独型]

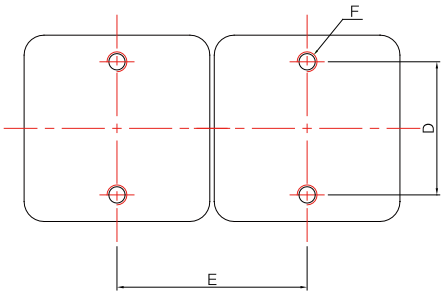




[혼합형]
[混合型]

DIMENSION (단독형, 单独型)						
Size	A	B	C	D	E	F
1/8"	42	11	59.5	10	22	M3 DP3.8
1/4"	52	12	72.9	20	28	M3 DP4.8





SPECIFICATION	
유체온도(流体温度)	5~90°C
반복횟수(反复次数)	10cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	3~5kgf/cm²
조작포트(操作 Port)	M5 TAP
유체압력(流体压力)	0~2kgf/cm²
생산품목(生产品种)	1/8inch ~ 1/4inch

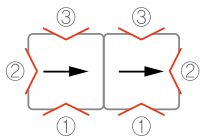
CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 주문생산제품 (可订制)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

DIMENSION (혼합형, 混合型)						
Size	A	B	C	D	E	F
1/8"	63	11	59.5	10	23	M3 DP3.8
1/4"	81	12	72.9	20	29	M3 DP4.8

MODEL SELECTION

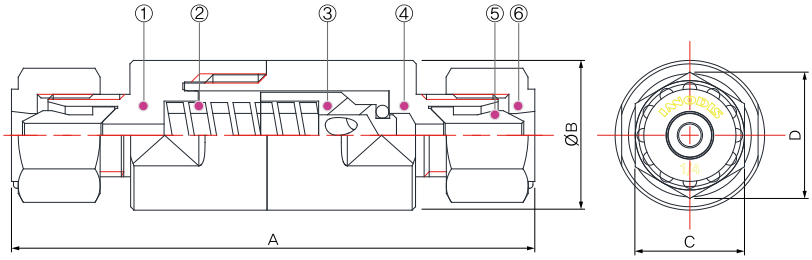
IVSU - ①②③④⑤ - ⑥

①Material	②Size	③O-ring	④Air Auto Value Option	⑤Type	⑥Operate Port
F (PFA)	18i (1/8inch) or 3,4m (3,4mm)	E (EPDM)	무기호(无记号) (No Option)	A 단독형 单独型	
	14i (1/4inch) or 6m (6mm)	F (FKM)	1 (Indicator)	B 혼합형 混合型	
			2 (Flow Control)		

Check Valve

정방향에서는 저압에 작동하고 역방향 일때는 유체의 흐름을 차단해주는 역류방지용 Check Valve입니다.
正方向时低压运作，反方向时阻断流体流动的防止逆流用Check Valve。

PFA
사출 射出



SPECIFICATION	
유체온도(流体温度)	5~60°C
사용유체(使用流体)	Chemicals, D.I-Water
생산품목(生产品种)	1/4~1/2inch (PFA)
	3/4~1inch (PTFE)
Max open pressure	7kgf/cm^2
Cracking pressure	0.02~0.1kgf/cm^2
Back Check Sealing Pressure	0.5kgf/cm^2

DIMENSION				
Size	A	B	C	D
1/4"	78.7	26	16	18.5
3/8"	83	26	22	25.4
1/2"	101.6	40	27	31.2
3/4"	132	48	38	43.9
1"	154.3	70	50	57.7

CHARACTERISTICS

- 정방향에서는 저압에 동작하는 역류 방지용 밸브
  正方向时低压运作的防止逆流用阀门
- 내화학성 우수,뛰어난 불소수지 사용
  使用耐化学性优秀的氟树脂
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

No	PART	MATERIALS
1	Out Body	PFA / PTFE
2	Spring	PFA
3	Check Piston / Pusher	PFA / PTFE

No	PART	MATERIALS
4	In Body	PFA / PTFE
5	Sleeve	PFA
6	Nut	PFA

MODEL SELECTION IVCH - ①②③ - ④

①Material	②Size	③O-ring	④Type
F (PFA)	14i (1/4inch) or 6m (6mm)	E (EPDM)	P1 (PFA 사출射出)
	38i (3/8inch) or 8,10m (8,10mm)	F (FKM)	
	12i (1/2inch) or 12m (12mm)		

MODEL SELECTION IVCH - ①②③

①Material	②Size	③O-ring
T (PTFE)	34i (3/4inch) or 19m (19mm)	E (EPDM)
	1i (1inch) or 25m (25mm)	F (FKM)

02

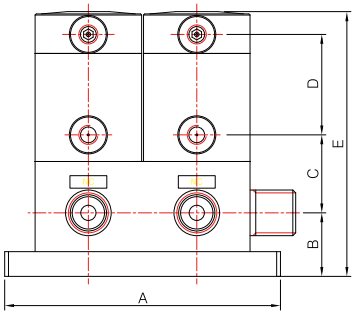
PTFE
가공 加工
Valve

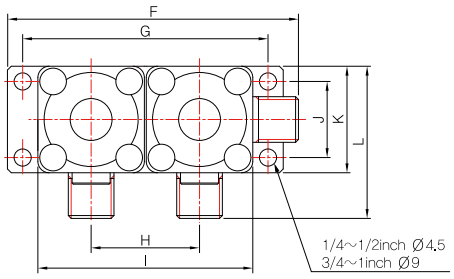
1. 3WAY VALVE
2. MANIFOLD VALVE
3. AIR AUTO VALVE (오존용臭氧用)
4. LOW-PRICED BALL VALVE
5. SLURRY VALVE
6. SPECIAL NEEDLE VALVE

3Way Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) 3Way Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）3Way Valve。

PTFE
가공 加工





SPECIFICATION

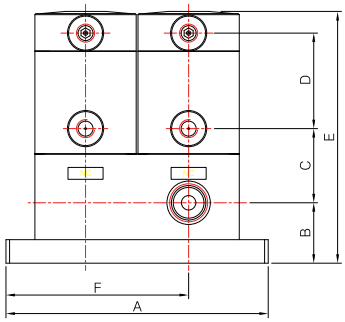
유체온도(流体温度)	5~60°C
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	1/4" (4~5kgf/cm²)
	3/8"~1" (4~6kgf/cm²)
유체압력(流体压力)	(A→B Flow)0~2kgf/cm²
	(A→C Flow)0~2kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

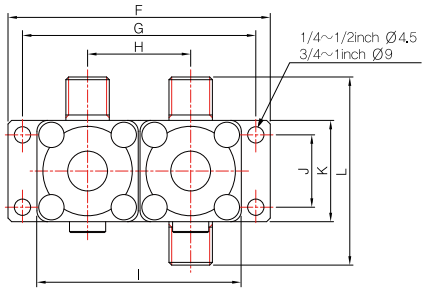
DIMENSION (S-TYPE)

Size	A	B	C	D	E	F	G	H	I	J	K	L
1/4"	72.5	18.2	20.5	26.4	71.1	76.5	64.5	28.5	56.5	20	28	40
3/8"	104.5	18.4	29.1	21	90.2	108.5	94.5	42.5	84.5	37	46	58
1/2"	104.5	20.4	31.1	21	94.2	114.5	94.5	42.5	84.5	42	51	66.5
3/4"	138.5	32.5	52	29	130.3	147.5	122.5	54.5	108.5	68	84	93
1"	158	38	62.45	30.7	148.8	167.6	139	61	121	78	98	107.1

CV VALUE

Valve size	Cv Value
1/4"	0.4
3/8"	0.7
1/2"	2
3/4"	4.8
1"	8





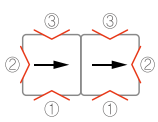
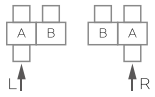
CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- 주문생산제품 (可订制)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)
- 1/4"VALVE SIZE
  NC(Normal Close) Air Port : PT1/8"
  NO(Normal Open) Air Port : M5 TAP

DIMENSION (L-TYPE)

Size	A	B	C	D	E	F	G	H	I	J	K	L
1/4"	72.5	15.7	23.5	26.4	71.6	72.5	64.5	28.5	56.5	20	28	52
3/8"	104.5	18.9	33.1	21	94.7	104.5	94.5	42.5	84.5	37	46	70
1/2"	104.5	20.9	35.1	21	98.7	104.5	94.5	42.5	84.5	42	51	82
3/4"	138.5	31	58	29	134.8	138.5	122.5	54.5	108.5	68	84	102
1"	158	38	65.45	30.7	151.8	158	139	61	121	78	98	116.2

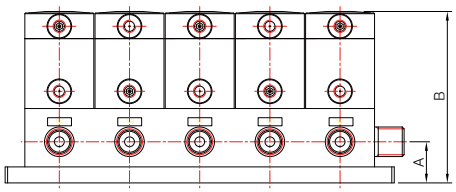
MODEL SELECTION IVD3① - ②③(In) ③(Out)④⑤ ⑥⑦(A) ⑥⑦(B) - ⑧(L/R)

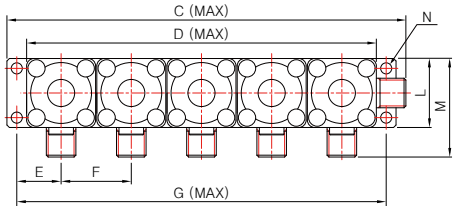
①Type	②Material	③Size	④O-ring	⑤Operate Port	⑥Operation	⑦Option	⑧In Put 위치 (位置)
 S–Type	T (PTFE)	14i (1/4inch) or 6m (6mm)	E (EPDM)		C (Normal Close)	무기호(无记号) (No Option)	
		38i (3/8inch) or 8,10m (8,10mm)	F (FKM)		O (Normal Open)	1 (Indicator)	
 L–Type		12i (1/2inch) or 12m (12mm)			D (Double Action)	2 (Flow Control)	
		34i (3/4inch) or 19m (19mm)					
		1i (1inch) or 25m (25mm)					

Manifold Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하고 적은 공간에 여러개의 Valve를 설치하기 적합한(ON, OFF) Manifold Valve입니다.
控制使用于半导体和 LCD设备上的药液（包括纯水）流动，适合在狭窄的空间安装多个阀门(ON，OFF)的Manifold Valve。

PTFE
가공 加工





SPECIFICATION

유체온도(流体温度)	5~60°C
반복횟수(反复次数)	10 cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	(In→Out)0~3kgf/cm^2
	(Out→In)0~1kgf/cm^2
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION 일체형 (一体型)

Size	A	B	C	D	E	F	G	L	M	N
1/4" (최대6열) (最多六排)	18.2	71.1	190.5	170.5	18	28.5	178.5	28	40	Ø4.5
3/8" (최대5열) (最多五排)	18.4	90.2	236	212	26	42.5	222	46	58	Ø4.5
1/2" (최대5열) (最多五排)	20.4	94.2	242	212	26	42.5	222	51	66.5	Ø4.5
3/4" (최대4열) (最多四排)	32.5	130.3	256.5	217.5	34	54.5	231.5	84	93	Ø9
1" (최대3열) (最多三排)	38	148.8	228.6	182	39	61	200	98	107.1	Ø9

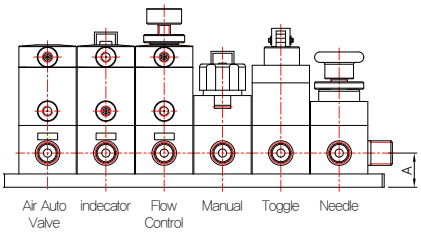
CHARACTERISTICS

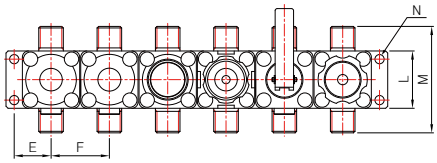
- Body 일체형 (Body 一体型)
  · 1 In에 최대 6 Out Port 까지 사용 가능(Size 참고)
  · 1 In最多可使用6 Out Port（参考尺寸）
  · Open, Close 선택하여 사용 가능
  · 可选择Open、Close使用
  · 사양에 따라 Input, Output을 선택하여 사용
  · 可按照规格选择使用Input或Output

- Body 분리형 (Body 分离型)
  · 여러개의 Valve 및 종류가 다른 Valve를 사용시 적합
  · 使用多个Valve或不同种类的Valve时适合使用
  · 수량에 관계없이 장착 가능 (특주 주문 가능)
  · 与数量无关都可安装 (可特殊订制)
  · 유지보수가 용이 (易于维修)

- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产 (管式扩管型)

- 주문생산제품 (可订制)





DIMENSION 분리형 (分离型)

Size	A	E	F	L	M	N
1/4"	18.2	18	28.5	28	52	Ø4.5
3/8"	18.4	26	42.5	46	70	Ø4.5
1/2"	20.4	26	42.5	51	82	Ø4.5
3/4"	32.5	34	54.5	84	102	Ø9
1"	38	39	61	98	116.2	Ø9

MODEL SELECTION IV①M - ②③(in)/③(Out)④⑤⑥ - ⑦

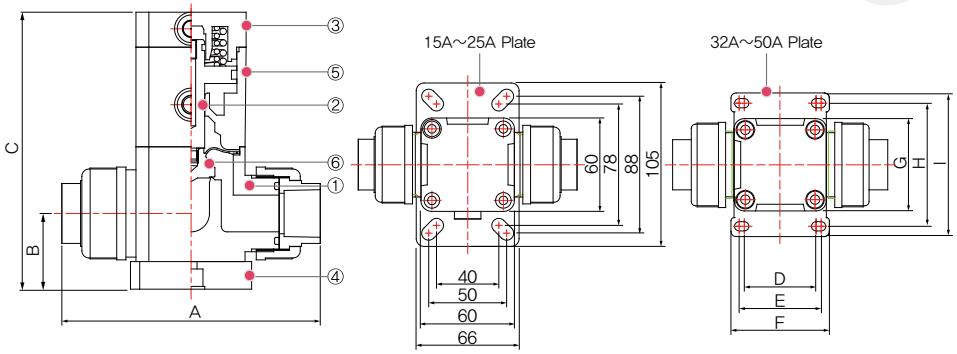
①Type	②Material	③Size	④Operation	⑤O-ring	⑥Option	⑦Connection Port
O 일체형(一体型)	T (PTFE)	14i (1/4inch) or 6m (6mm)	C (Normal Close)	E (EPDM)	무기호 (无记号) (Air Auto Valve)	4 (4 Port)
M 분리형(分离型)		38i (3/8inch) or 8,10m (8,10mm)	O (Normal Open)	F (FKM)	1 (Air Auto Valve + Indicator)	5 (5 Port)
		12i (1/2inch) or 12m (12mm)	D (Double Action)		2 (Air Auto Valve + Flow control)	6 (6 Port)
		34i (3/4inch) or 19m (19mm)			M (Manual Valve)	7 (7 Port)
		1i (1inch) or 25m (25mm)			T (Toggle Valve)	
					N (Needle Valve)	

[오존용臭氧用]

Air Auto Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Air Auto Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Air Auto Valve。

PVDF
가공 加工



SPECIFICATION

유체온도(流体温度)	5~60°C
반복횟수(反复次数)	10 cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	4~6kgf/cm²
조작포트(操作 Port)	PT 1/8inch
유체압력(流体压力)	(In→Out) 0~5kgf/cm²
	(Out→In) 0~1kgf/cm²
생산품목(生产品种)	15~50A

DIMENSION

Size	A	B	C	D	E	F	G	H	I
15A	140.8	41.2	151.7	-	-	-	-	-	-
20A	140.8	41.2	151.7	-	-	-	-	-	-
25A	154	41.2	151.7	-	-	-	-	-	-
32A	210	55	220.9	70	80	96	90	120	140
40A	210	55	220.9	70	80	96	90	120	140
50A	276	70	283.8	-	100	120	120	165	185

CV VALUE

Valve size	Cv Value
15A	7.4
20A	8.3
25A	12
32A	20
40A	23
50A	39

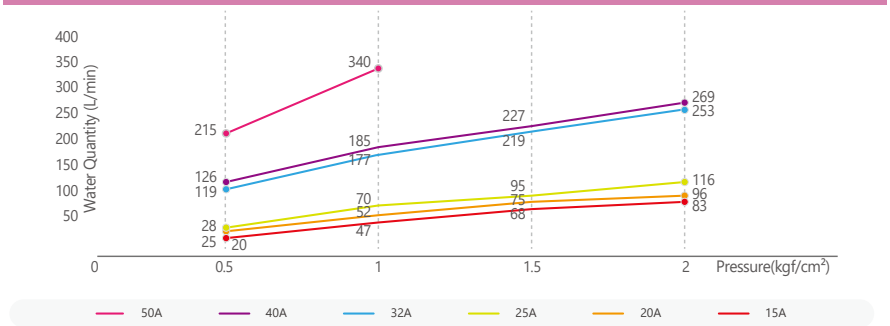
No	PART	MATERIALS
1	Body	PVDF
2	Piston	PVDF
3	Top Cover	PVDF

No	PART	MATERIALS
4	Bottom Plate	PVDF
5	Actuator Body	PVDF
6	Diaphragm	PTFE

CHARACTERISTICS

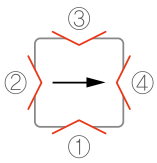
- 초순수 및 약액 사용 가능 (可使用超纯水及药液)
- 주문생산제품 (可订制)

TECHNICAL DATA



MODEL SELECTION

IVD - ①②③④⑤⑥03 - ⑦

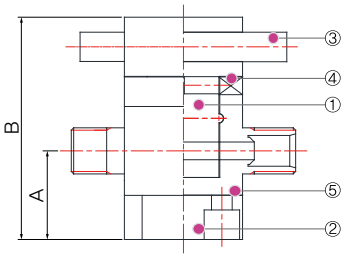
①Material	②Size	③Connection	④Operation	⑤O-ring	⑥Option	⑦Operate Port
V (PVDF)	15 (15A)	U (Union)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)	
	20 (20A)		O (Normal Open)	F (FKM)	1 (Indicator)	
	25 (25A)		D (Double Action)	K (N-217)	2 (Flow control)	
	32 (32A)			G (G902)	3 (By-pass)	
	40 (40A)				4 (Flow control +By-pass)	
	50 (50A)					

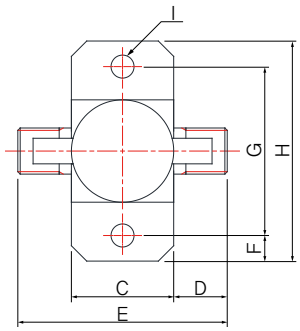
Low-Priced Ball Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는 (ON, OFF) Low-Priced Ball Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Low-Priced Ball Valve。

PTFE 가공 加工

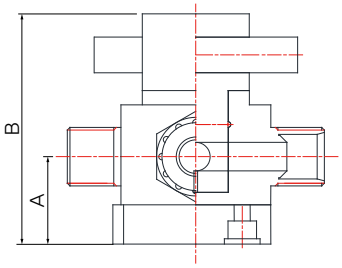
[Normal]

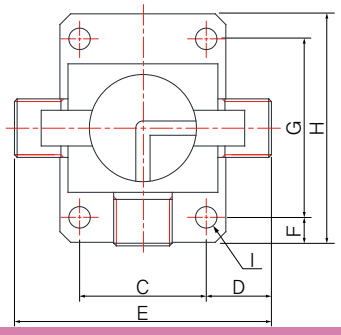




DIMENSION (기본타입 基本型)									
Size	A	B	C	D	E	F	G	H	I
1/8"	15	37.6	20	9	38	5	33	43	Ø4.5
1/4"	19.5	54.6	25	12	49	5	35	45	Ø4.5
3/8"	24.5	64.5	42	15	72	7	50	64	Ø6
1/2"	25.5	66.5	42	20	82	7	50	64	Ø6

[3Way]





SPECIFICATION	
유체온도(流体温度)	5~60°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~3kgf/cm^2
생산품목(生产品种)	1/8inch ~ 1/2inch

DIMENSION (3WAY)									
Size	A	B	C	D	E	F	G	H	I
1/8"	15	37.6	20	9	38	5	33	43	Ø4.5
1/4"	19.5	54.6	30	9.5	49	5	35	45	Ø4.5
3/8"	24.5	64.5	35.5	18.25	72	7	50	64	Ø6
1/2"	25.5	66.5	35.5	23.25	82	7	50	64	Ø6

CHARACTERISTICS

- 내화학성 우수 (耐化学性优秀)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)
- 주문생산제품 (可订制)

No	PART	MATERIALS
1	Stem	PTFE
2	Bottom Plate	PP
3	Handle	PP

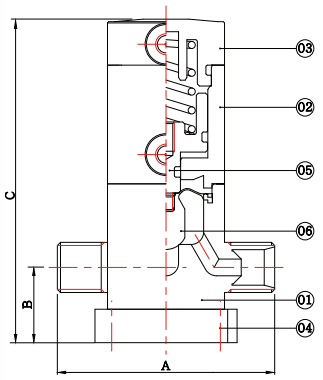
No	PART	MATERIALS
4	Pin	SUS 304
5	Body	PTFE

MODEL SELECTION IVB① - ②③

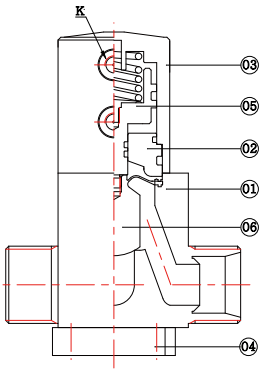
①Type	②Material	③Size
무기호(无记号) (Normal)	T (PTFE)	18i (1/8inch) or 3, 4m (3, 4mm)
3 (3Way)		14i (1/4inch) or 6m (6mm)
		38i (3/8inch) or 8,10m (8, 10mm)
		12i (1/2inch) or 12m (12mm)

Slurry Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하고 슬러리 응집을
최소화 시키는 (ON, OFF) Slurry Valve입니다.
控制使用于半导体和LCD设备上的药液（包括纯水）流动，最少化泥浆凝聚的(ON，OFF)Slurry Valve。

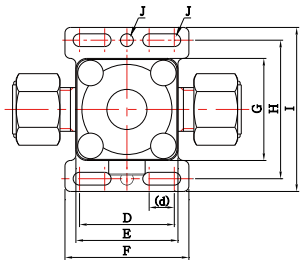


1/4" ~ 1/2" inch



3/4" ~ 1" inch

PTFE
가공 加工



SPECIFICATION

유체온도(流体温度)	5~60°C
반복횟수(反复次数)	10cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	1/4" (4~5kgf/cm²)
	3/8"~1" (4~6kgf/cm²)
유체압력(流体压力)	(In→Out) 0~3kgf/cm²
	(Out→In) 0~1kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	(A)	B	(C)	D	(d)	E	F	G	H	I	J	K
1/4"	52	18	77.4	26	7	28	34	28	38	45	Ø3.5	PT1/8"
3/8"	70	22.4	104.2	30	8	42	42	42	52	62	Ø4.5	PT1/8"
1/2"	82	20.4	104.2	30	8	42	42	42	52	62	Ø4.5	PT1/8"
3/4"	102	32.5	140.3	46	10	54	62	54	78	95	Ø9	PT1/8"
1"	126.2	38	173.8	46	10	60	66	60	78	96	Ø9	PT1/8"

CV VALUE

Valve size	Cv Value
1/4"	0.4
3/8"	0.7
1/2"	2
3/4"	4.8
1"	8

PART

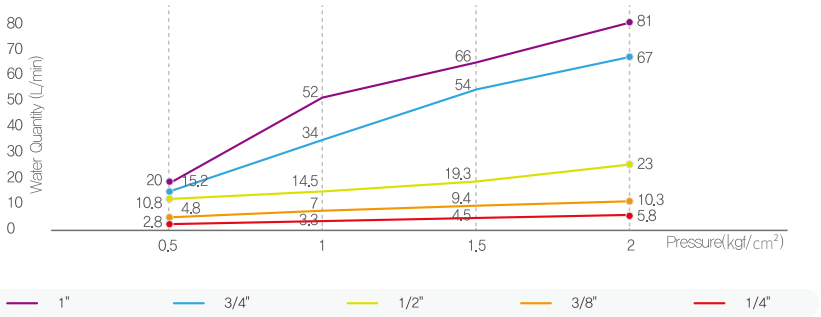
Size	① Body	② Actuator Body	③ Top Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
1/4" - 1/2"	PTFE	PVDF	PVDF	PVDF	PVDF	PTFE

Size	① Body	② Housing	③ Actuator Cover	④ Bottom Plate	⑤ Piston	⑥ Diaphragm
3/4" - 1"	PTFE	PVDF	PVDF	PVDF	PVDF	PTFE

CHARACTERISTICS

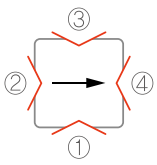
- 내화학성 우수 (耐化学性优秀)
- 주문생산제품 (可订制)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)
- 1/4"VALVE SIZE
  NC(Normal Close) Air Port : PT1/8"
  NO(Normal Open) Air Port : M5 TAP

TECHNICAL DATA



MODEL SELECTION

IDSV - ①②③④⑤ - ⑥ - ⑦

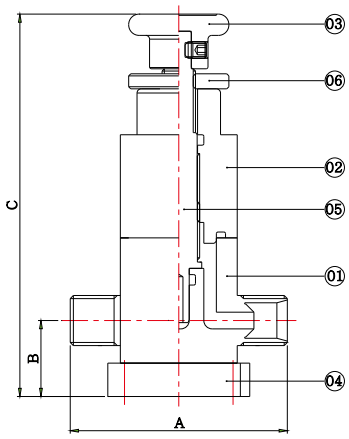
①Material	②Size	③Operation	④O-ring	⑤Option	⑥Operate Port	⑦Type
T (PTFE)	14i (1/4inch) or 6m (6mm)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)		V1 (Standard Type)
	38i (3/8inch) or 8,10m (8,10mm)	O (Normal Open)	F (FKM)	1 (Indicator)		
	12i (1/2inch) or 12m (12mm)	D (Double Action)		2 (Flow Control)		
	34i (3/4inch) or 19m (19mm)					
	1i (1inch) or 25m (25mm)					

[Special Type]

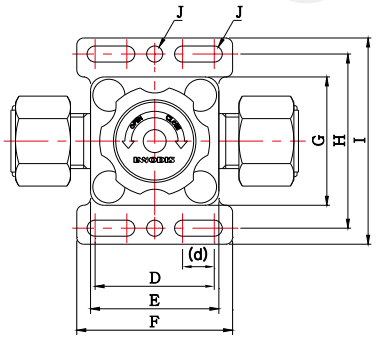
Needle Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 미세하게 조절 제어하며 온도상승에 영향이 적어 토출양을 단계별로 조절하는데 기존 Needle Valve보다 성능이 우수한 (ON, OFF) Special Needle Valve입니다.
微细调节和控制使用于半导体及LCD设备的药液（包括纯水）流动，不受温度上升影响，与原有的Needle Valve相比，按照各阶段调节排出量的性能更加优秀的（ON，OFF）Special Needle Valve。

* 온도 변화 대응용



PFA
가공 加工



PTFE 가공 加工

SPECIFICATION	
유체온도(流体温度)	5~90°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~3kgf/cm²
생산품목(生产品种)	1/4inch

DIMENSION

Size	A	B	C	D	(d)	E	F	G	H	I	J
1/4"	52	16.2	99.1	26	7	28	34	28	38	45	Ø3.5

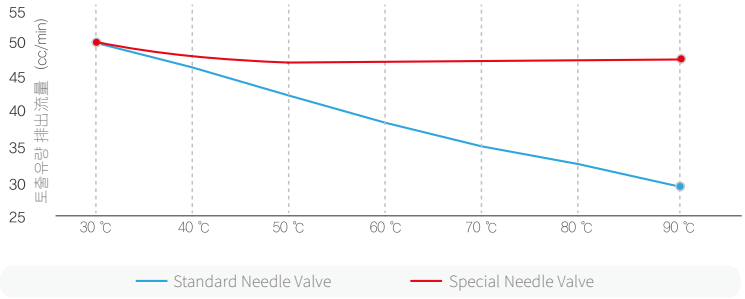
CHARACTERISTICS

- 내화학성 우수,유량 조절이 가능한 Valve
  (耐化学性优秀，可调节流量的Valve)
- 단계별로 토출양 조절 가능 (可按照各阶段调节排出量)
- 온도상승에 영향이 적음 (不受温度上升影响)
- 주문생산제품 (可订制)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

No	PART	MATERIALS
1	Body	PFA
2	Cover	PFA
3	Handle	PP

No	PART	MATERIALS
4	Bottom Plate	PVDF
5	Needle	PCTFE
6	Lock Nut	PP

온도 상승에 따른 유량 TEST 按照温度上升测试流量



온도 温度	30°C	40°C	50°C	60°C	70°C	80°C	90°C
Standard Needle Valve	50	46	43	39	35	33	30
Special Needle Valve	50	48	47	47	47	47	47

기존 Needle Valve는 50cc/min에 고정하고
온도가 (상온 ▶ 50°C▶ 90°C) 상승할수록
유량이 (50cc ▶ 43cc ▶ 30cc)로 대폭 변화한다
原有的Needle Valve固定到50cc/min，
温度越上升（常温▶ 50°C ▶ 90°C)
流量就越发生大幅变化(50cc ▶ 43cc ▶ 30cc)。

↓

자사에서 개발한 "Needle Valve는 Needle과 Body 구조를 변경하여"
온도 상승에 영향이 적으며 토출양을 단계별로 조절하여
기존 Needle Valve보다 성능이 우수하다
→ 특히 소량의 유량을 조절할 때 필요한 성능이다.
我公司开发的Needle Valve 改变了Neddle和Body结构，不受温度上升影响，
可按照各阶段调节排出量，性能比原有的Needle Valve优秀。
▶ 尤其，调节少流量时需要该性能。

MODEL SELECTION IVNHT - ①②③

①Material	②Size	③O-ring
F (PFA)	14i (1/4inch) or 6m (6mm)	E (EPDM)
		F (FKM)

03

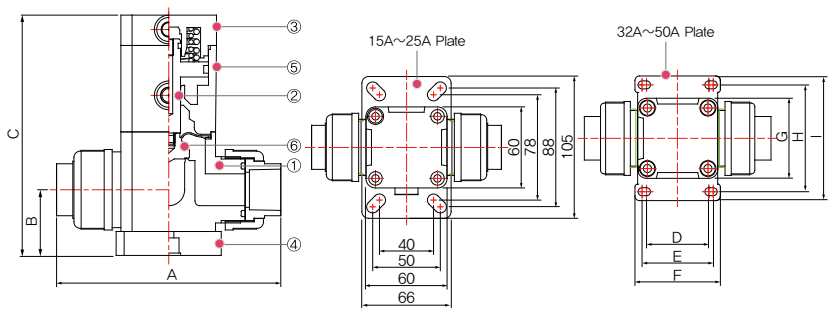
PVC
사출 射出
Valve

1. AIR AUTO VALVE
2. AIR AUTO VALVE - SENSOR TYPE
3. COCK VALVE
4. NEEDLE VALVE
5. QDR VALVE

Air Auto Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Air Auto Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Air Auto Valve。

PVC
사출 射出



SPECIFICATION

유체온도(流体温度)	5~40°C
반복횟수(反复次数)	10 cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	4~6kgf/cm^2
조작포트(操作端口)	PT 1/8inch
유체압력(流体压力)	(In→Out)0~5kgf/cm^2
	(Out→In)0~1kgf/cm^2
생산품목(生产品种)	15~50A

DIMENSION

Size	A	B	C	D	E	F	G	H	I
15A	140.8	41.2	151.7	-	-	-	-	-	-
20A	140.8	41.2	151.7	-	-	-	-	-	-
25A	154	41.2	151.7	-	-	-	-	-	-
32A	210	55	220.9	70	80	96	90	120	140
40A	210	55	220.9	70	80	96	90	120	140
50A	276	70	283.8	-	100	120	120	165	185

CV VALUE

Valve size	Cv Value
15A	7.4
20A	8.3
25A	12
32A	20
40A	23
50A	39

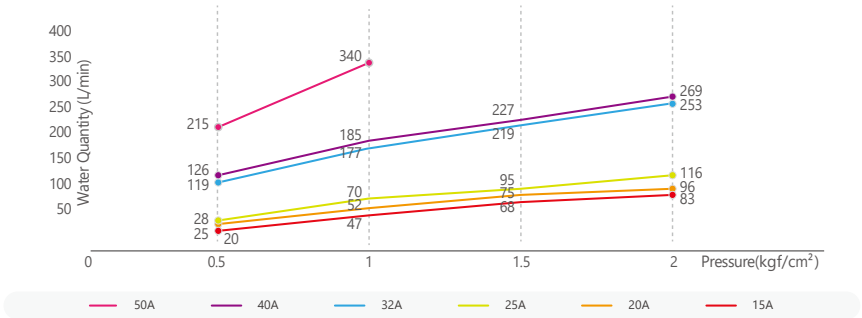
No	PART	MATERIALS
1	Body	PVC / HT-PVC
2	Piston	PPS
3	Top Cover	PPS

No	PART	MATERIALS
4	Bottom Plate	PPS
5	Actuator Body	PPS
6	Diaphragm	PTFE

CHARACTERISTICS

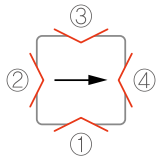
- 초순수 및 약액 사용 가능
  (可使用超纯水和药液)
- 적정재고 보유 및 특주 사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- BODY 재질 (BODY材质)
  HT-PVC : 15A ~ 25A 만 가능 (HT-PVC : 限于15A~25A)

TECHNICAL DATA



MODEL SELECTION

IVD - ①②③④⑤⑥ - ⑦

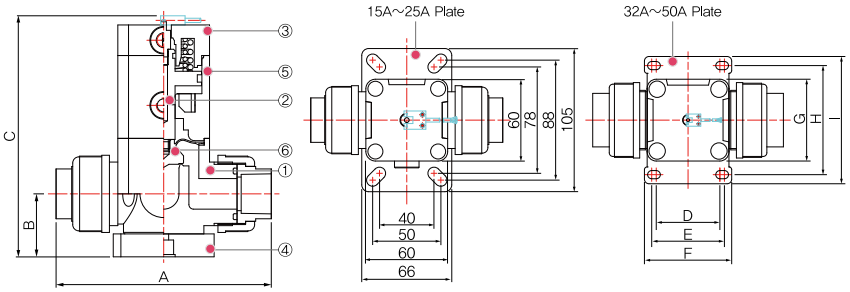
①Material	②Size	③Connection	④Operation	⑤O-ring	⑥Option	⑦Operate port
P (PVC)	15 (15A)	U (Union)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)	
C (HT-PVC)	20 (20A)		O (Normal Open)	F (FKM)	1 (Indicator)	
	25 (25A)		D (Double Action)	K (N-217)	2 (Flow Control)	
	32 (32A)			G (G902)	3 (By-Pass)	
	40 (40A)				4 (Flow Control + By-Pass)	
	50 (50A)					

Air Auto Valve

Sensor Type

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Air Auto Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Air Auto Valve。

PVC
사출 射出



SPECIFICATION

유체온도(流体温度)	5~40°C
반복횟수(反复次数)	10 cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	4~6kgf/cm²
조작포트(操作端口)	PT 1/8inch
유체압력(流体压力)	(In→Out)0~5kgf/cm²
	(Out→In)0~1kgf/cm²
생산품목(生产品种)	15~50A

DIMENSION

Size	A	B	C	D	E	F	G	H	I
15A	140.8	41.2	157.7	-	-	-	-	-	-
20A	140.8	41.2	157.7	-	-	-	-	-	-
25A	154	41.2	157.7	-	-	-	-	-	-
32A	210	55	226.9	70	80	96	90	120	140
40A	210	55	226.9	70	80	96	90	120	140
50A	276	70	289.8	-	100	120	120	165	185

CV VALUE

Valve size	Cv Value
15A	7.4
20A	8.3
25A	12
32A	20
40A	23
50A	39

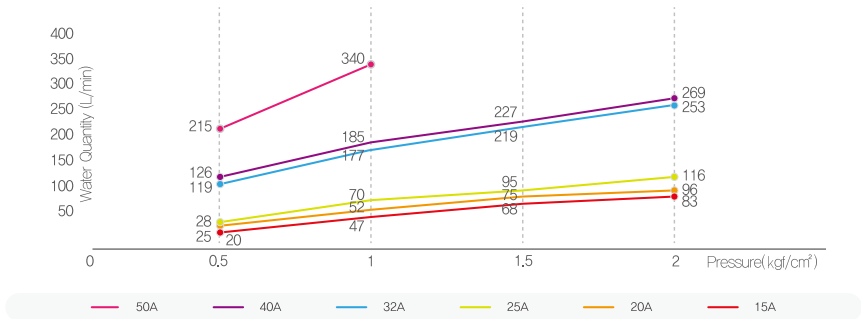
No	PART	MATERIALS
1	Body	PVC / HT-PVC
2	Piston	PPS
3	Top Cover	PPS

No	PART	MATERIALS
4	Bottom Plate	PPS
5	Actuator Body	PPS
6	Diaphragm	PTFE

CHARACTERISTICS

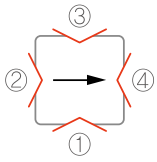
- 초순수 및 약액 사용 가능
  (可使用超纯水和药液)
- 적정재고 보유 및 특주 사양 가능
  (拥有适量库存，并可制作特殊规格产品)
- BODY 재질 (BODY材质)
  HT-PVC : 15A ~ 25A 만 가능 (HT-PVC : 限于15A~25A)

TECHNICAL DATA



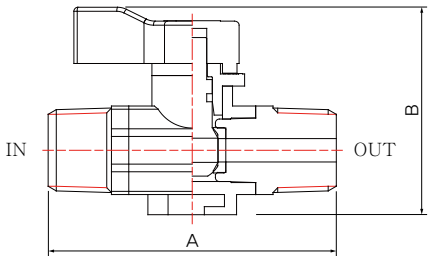
MODEL SELECTION

IVD - ①②③④⑤⑥⑦ - ⑧

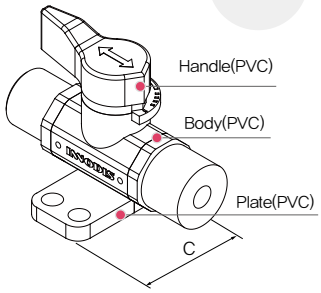
①Material	②Size	③Connection	④Operation	⑤O-ring	⑥Option	⑦Sensor Direction ⑧Operate port
P (PVC)	15 (15A)	U (Union)	C (Normal Close)	E (EPDM)	S (Optic Sensor)	
C (HT-PVC)	20 (20A)			F (FKM)		
	25 (25A)			K (N-217)		
	32 (32A)			G (G902)		
	40 (40A)					
	50 (50A)					

Cock Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는(ON, OFF) Cock Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动的（ON,OFF）Cock Valve。



* 로고를 정면으로 IN→OUT 방향 (以标志为正面 IN→OUT 方向)*



SPECIFICATION	
유체온도(流体温度)	5~40°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~3kgf/cm²
생산품목(生产品种)	1/4inch ~ 1/2inch

DIMENSION

Size	A	B	C	Orifice
1/4"	71.5	51.44	30	Ø4
3/8"				Ø6
1/2"				Ø6

유량流量 Data (L/min)

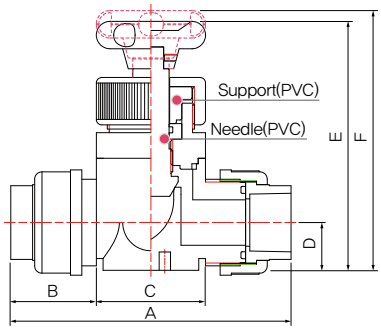
SIZE \ Pressure(kgf/cm²)	0.5	1	1.5	2	2.5	3
1/4"	1.2	1.7	2.1	2.5	2.9	3.1
3/8"	3.8	5.5	6.8	8.0	9.0	10
1/2"	8.4	13	15.1	17.5	19.6	21.5

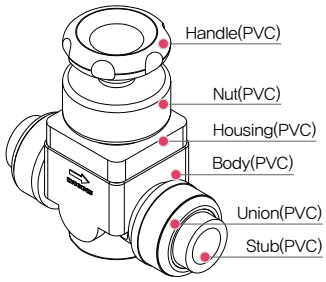
MODEL SELECTION IVC - ①②③④

①Material	②Size	③Connection	④O-ring
P (PVC)	14 (1/4inch)	MM (Male+Male)	E (EPDM)
	38 (3/8inch)	MF (Male+Female)	F (FKM)
	12 (1/2inch)	FF (Female+Female)	K (N-217)
		FM (Female+Male)	G (G902)

Needle Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 미세하게 제어하는(ON, OFF) Needle Valve입니다.
使用于半导体和LCD,化学设备上的药液（包括纯水）流动细微调整的（ON,OFF）Needle Valve。





SPECIFICATION	
유체온도(流体温度)	5~40°C
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	0~5kgf/cm²
생산품목(生产品种)	15~40A

DIMENSION

Size	A	B	C	D	E	F
15A	140.8	40.4	60	26.2	136.5	140
20A	140.8	40.4	60	26.2	136.6	140
25A	154	47	60	26.2	136.6	140
32A	210	61	90	38	222.2	230.4
40A	210	61	90	38	222.2	230.4

CHARACTERISTICS

- 유량조절이 가능한 Valve (可流量调整的阀门)
- 적정재고 보유 (拥有适量库存)
- 주문사양 가능 (可订制)

MODEL SELECTION IVN - ①②③④

①Material	②Size	③Connection	④O-ring
P (PVC)	15 (15A)	U (Union)	E (EPDM)
	20 (20A)		F (FKM)
	25 (25A)		K (N-217)
	32 (32A)		G (G902)
	40 (40A)		

QDR Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 신속히 대유량을 배출, 제어하는(ON, OFF) QDR Valve입니다.
快速大流量排出和控制使用于半导体和 LCD设备上的药液（包括纯水）流动的(ON，OFF)QDR Valve。

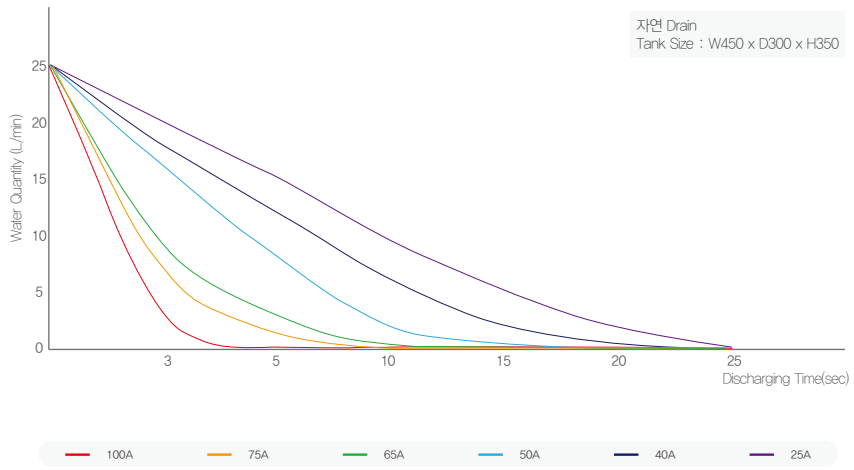
SPECIFICATION

유체온도(流体温度)	PVC, PP (5~40°C)
	C-PVC (5~60°C)
	PTFE (5~90°C)
사용유체(使用流体)	Chemicals, D.I-Water
유체압력(流体压力)	25A~65A (0~1.5kgf/cm^2)
	80A~150A (0~1kgf/cm^2)
조작압력(操作压力)	4~6kgf/cm^2
생산품목(生产品种)	20~150A
Type	Piston Type
	(초순수 超纯水, 약액용 药液用)
	Bellows Type
	(고온용 高温用, 약액용 药液用)

CHARACTERISTICS

- 적정재고 보유 및 특주사양 가능
  (拥有适量库存，并可制作特殊规格产品)

TECHNICAL DATA



* 소재별 생산 사이즈 (各材料生产尺寸)
PVC, PP: 20A~150A / HT-PVC: 20A~100A / PTFE: 20A~50A / PVDF: 20A~50A

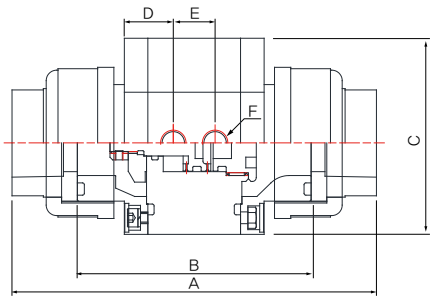
MODEL SELECTION

IVQ-①②U③④-⑤(UNION)
IVQ-①②FL③④-S(FLANGE)

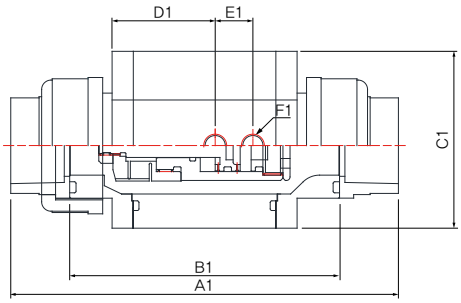
①Material		②Size		③Operation		④O-ring		⑤Type	
P	(PVC)	20	(20A)	D	(Double Action)	E	(EPDM)	무기호(无记号)	(Piston)
C	(HT-PVC)	25	(25A)			F	(FKM)	B	(Bellows)
T	(PTFE)	32	(32A)			K	(N-217)		
PP	(PP)	40	(40A)			G	(G902)		
V	(PVDF)	50	(50A)						
		65	(65A)						
		75	(75A)						
		100	(100A)						
		125	(125A)						
		150	(150A)						

＊100A FLANGE TYPE은 5K가 기본사양 입니다. (10K 주문시 영업부로 문의하여 주시기 바랍니다.)　100A FLANGE TYPE是5K的基本配置, (10K订购时请咨询营业部)

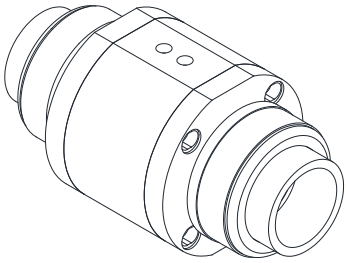
수지가공
树脂加工



[Piston Type]

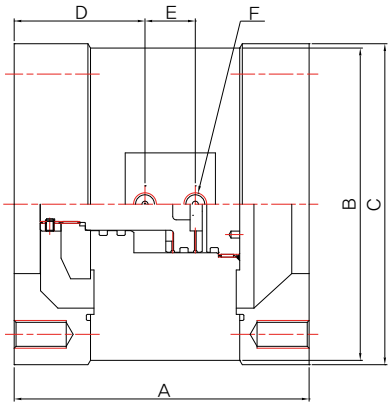


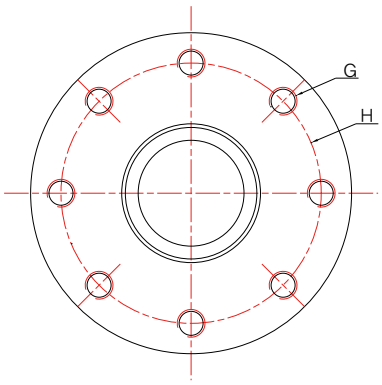
[Bellows Type]



MODEL SELECTION DIMENSION (UNION TYPE)

Piston(기본 基本Type)							Bellows Type					
Size	A	B	C	D	E	F	A1	B1	C1	D1	E1	F1
20A	139.5	89.5	80	17.75	16	PT1/8inch	164.5	112	80	40.3	16	PT1/8inch
25A	138.9	89.5	80	17.75	16	PT1/8inch	163.9	112	80	40.3	16	PT1/8inch
32A	207	139	110	38	16.5	PT1/8inch	207	139	110	38	16.5	PT1/8inch
40A	207	139	110	38	16.5	PT1/8inch	207	139	110	38	16.5	PT1/8inch
50A	271	173	130	48	20	PT1/8inch	271	173	130	48	20	PT1/8inch
65A	316.4	195	160	46.25	37.5	PT1/8inch	316.4	195	160	46.25	37.5	PT1/8inch
75A	324	211	180	61.4	27	PT1/4inch	324	211	180	61.4	27	PT1/4inch
100A	437	304	200	109.4	47	PT1/4inch	437	304	200	109.4	47	PT1/4inch





MODEL SELECTION DIMENSION (FLANGE TYPE)

Size	A	B	C	D	E	F	G	H
75A	170	Ø180	Ø190	75.4	29	PT1/4inch	8-M16 TAP DP30	PCD Ø150
100A (5K)	214	-	Ø200	93.4	36	PT1/4inch	8-M16 TAP DP30	PCD Ø165
100A (10K)	214	Ø200	Ø210	93.4	36	PT1/4inch	8-M16 TAP DP30	PCD Ø175
125A	280	-	Ø250	116.5	47.5	PT1/4inch	8-M20 TAP DP30	PCD Ø210
150A	316	-	Ø300	132.6	54.6	PT1/4inch	8-M20 TAP DP30	PCD Ø240

04

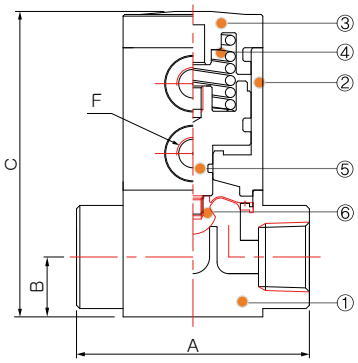
SUS Valve

1. AIR AUTO VALVE (PT Female)
2. AIR AUTO VALVE (Flange)

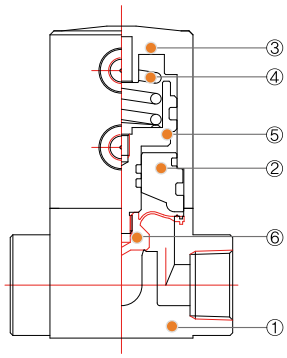
Air Auto Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는 Stainless steel body의(ON, OFF) Air Auto Valve입니다.
控制使用于半导体和 LCD设备上的药液（包括纯水）流动的Stainless steel body的(ON，OFF) Air Auto Valve。

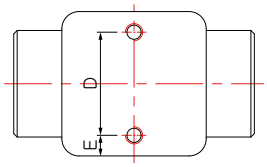
SUS



1/4" ~ 1/2" inch



3/4" ~ 1" inch



BOTTOM VIEW

SPECIFICATION

유체온도(流体温度)	5~90°C
반복횟수(反复次数)	10 cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	1/4" (4~5kgf/cm²)
	3/8"~1" (4~6kgf/cm²)
유체압력(流体压力)	(In→Out) 0~5kgf/cm²
	(Out→In) 0~1kgf/cm²
생산품목(生产品种)	1/4inch ~ 1inch

DIMENSION

Size	A	B	C	D	E	F
1/4"	42	10.2	63.1	20	4	PT1/8"
3/8"	56	12.5	86.3	30	6	PT1/8"
1/2"	70	18	91.8	30	6	PT1/8"
3/4"	84	20	117.8	38	8	PT1/8"
1"	100	26.2	137	38	11	PT1/8"

CV VALUE

Valve size	Cv Value
1/4"	0.29
3/8"	0.78
1/2"	1.94
3/4"	5.45
1"	9.55

PART

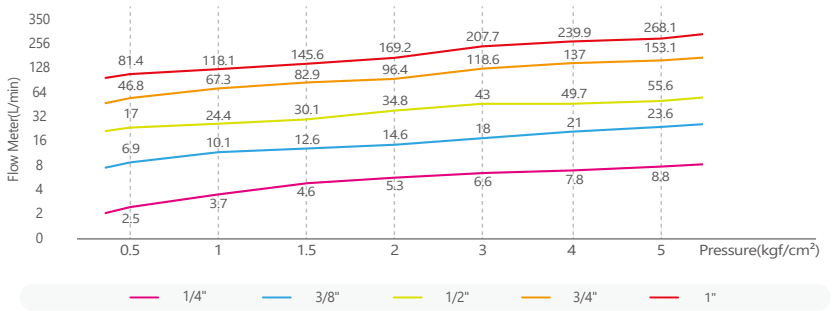
Size	① Body	② Actuator Body	③ Top Cover	④ Spring	⑤ Piston	⑥ Diaphragm
1/4" - 1/2"	SUS316L	PVDF	PVDF	SUS304	PVDF	PTFE

Size	① Body	② Housing	③ Actuator Cover	④ Spring	⑤ Piston	⑥ Diaphragm
3/4" - 1"	SUS316L	PVDF	PVDF	SUS304	PVDF	PTFE

CHARACTERISTICS

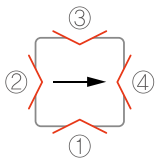
- 내화학성 우수 (耐化学性优秀)
- 주문생산제품 (可订制)
- 1/4"VALVE SIZE
  NC(Normal Close) Air Port : PT1/8"
  NO(Normal Open) Air Port : M5 TAP

TECHNICAL DATA



MODEL SELECTION

IVD - ①②③④⑤⑥ - ⑦ - ⑧

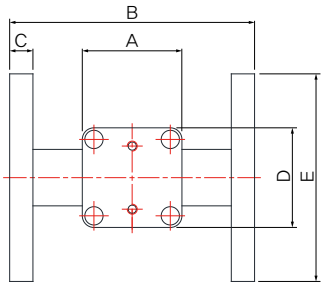
①Material	②Size	③Connection	④Operation	⑤O-ring	⑥Option	⑦Operate Port	⑧Type
S (SUS316L)	14 (1/4inch)	F (Female)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)		V1 (Standard Type)
	38 (3/8inch)		O (Normal Open)	F (FKM)	1 (Indicator)		
	12 (1/2inch)		D (Double Action)		2 (Flow Control)		
	34 (3/4inch)						
	1 (1inch)						

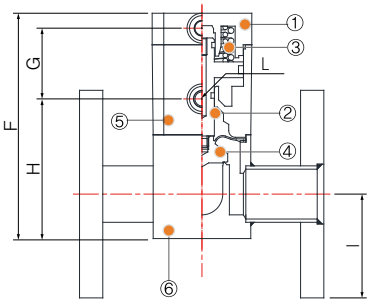
SUS VALVE

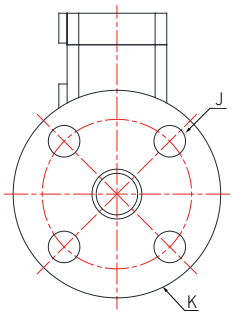
Air Auto Valve

반도체 및 LCD 장비에 사용되는 약액(순수를 포함)의 흐름을 제어하는 Stainless steel body의 (ON, OFF) Air Auto Valve입니다.
控制使用于半导体和 LCD设备上的药液（包括纯水）流动的Stainless steel body的 (ON，OFF) Air Auto Valve。

SUS







* KS 10K Flanged

SPECIFICATION

유체온도(流体温度)	5~90°C
반복횟수(反复次数)	10 cycle/min 이하 以下
사용유체(使用流体)	Chemicals, D.I-Water
조작압력(操作压力)	4~6kgf/cm²
유체압력(流体压力)	(In→Out)0~5kgf/cm²
	(Out→In)0~1kgf/cm²
생산품목(生产品种)	20~40A

DIMENSION

Size	A	B	C	D	E	F	G	H	I	J	K	L
20A	60	146.8	13.5	60	100	136.7	42.6	84.1	50	4-Ø15 THRU	10K20A	PT1/8"
25A	60	146.8	13.5	60	125	136.7	42.6	84.1	62.5	4-Ø19 THRU	10K25A	PT1/8"
32A	88	180	16	90	135	203.9	62	128.4	67.5	4-Ø19 THRU	10K32A	PT1/8"
40A	88	180	16	90	140	203.9	62	128.4	70	4-Ø19 THRU	10K40A	PT1/8"

CV VALUE

Valve size	Cv Value
20A	8.3
25A	12
32A	20
40A	23

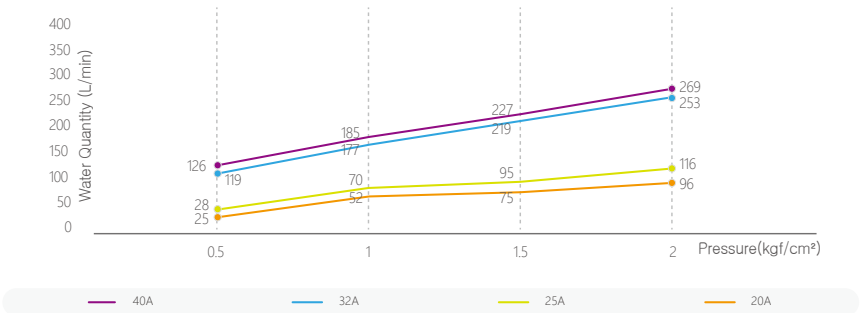
No	PART	MATERIALS
1	Top Cover	PPS / PVDF
2	Piston	PPS / PVDF
3	Spring	SUS304

No	PART	MATERIALS
4	Diaphragm	PTFE
5	Actuator Body	PPS / PVDF
6	Body	SUS316L

CHARACTERISTICS

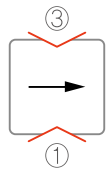
- 내화학성 우수 (耐化学性优秀)
- 적정재고 보유 및 특주사양 가능
  (拥有适量库存, 并可制作特殊规格产品)
- 주문생산제품 (可订制)
- 20 ~ 25A → 상부 PVDF 가능
  (可进行20~25A→ PVDF)

TECHNICAL DATA



MODEL SELECTION

IVD - ①②③④⑤⑥ - ⑦

①Material	②Size	③Connection	④Operation	⑤O-ring	⑥Option	⑦Operate Port
S (SUS316L)	20 (20A)	FL (Flange)	C (Normal Close)	E (EPDM)	무기호(无记号) (No Option)	
	25 (25A)		O (Normal Open)	F (FKM)	1 (Indicator)	
	32 (32A)		D (Double Action)		2 (Flow Control)	
	40 (40A)					

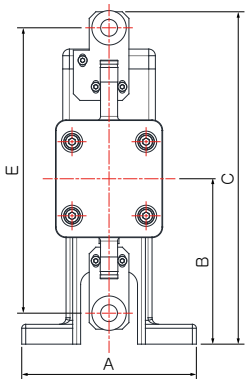
05

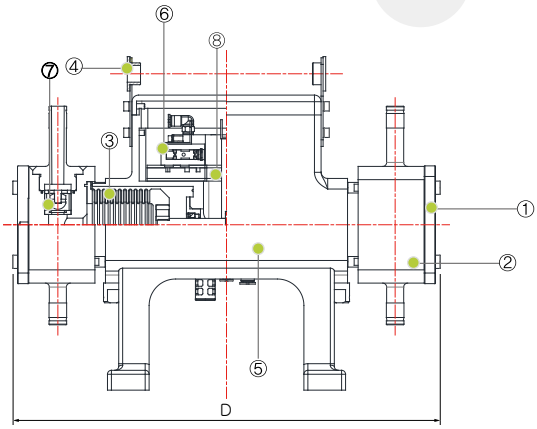
Bellows Pump

[A Type]
Bellows Pump

PTFE 소재를 적용하여 고온에서 견딜 수 있고 내부 부품 마모율을 최소화 할 수 있는 Bellows Type Pump 입니다.
使用PTFE材料，耐高温，可最小化内部零部件磨损率的Bellows Type Pump。

PUMP





CHARACTERISTICS

- 2개의 Bellows Pump로 배출되는 약액이 일정하게 배출
  两个Bellows Pump均匀排出药液
- 고압 / 고밀도의 유압작동원리에 의하여 대용량 처리 가능
  按照高压/高密度液压运行原理，可处理大流量
- 기존 Air 공급 결함 현상 및 고온의 약액으로 인한 solenoid Valve 손상 최소화 가능
  可最小化原有的Air供应缺陷现象及高温药液引起的 solenoid Valve损伤现象

DIMENSION

Size	A	B	C	D	E
10G	132	125	252.1	323.2	215.7
20G	140	150	300.5	427.9	265.25
55G	192	206	404.5	522.8	353

No	PART	MATERIALS
1	Side Cover	Al(Coating)
2	Teflon Body	PTFE
3	Bellows	PTFE
4	Tube Guide Bush	PTFE

No	PART	MATERIALS
5	Body	Al(Coating)
6	Pilot Valve	HT-PVC
7	Check Ball	PTFE
8	Vacuum Block	HT-PVC

SPECIFICATION

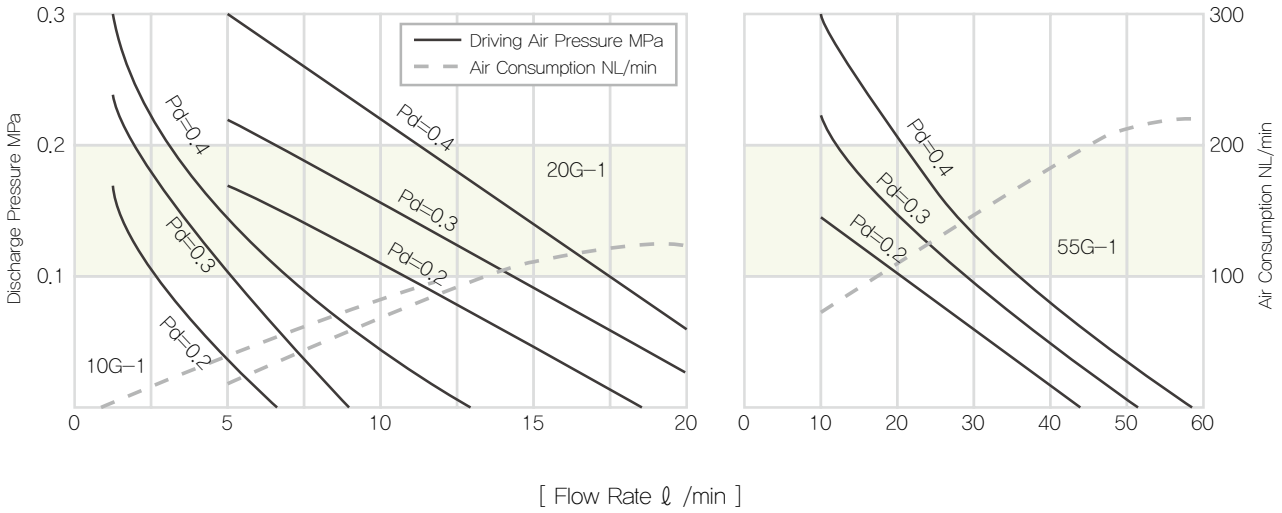
	10MP	20MP	55MP	20MPH	50MPH
Flow Rate(ℓ/min)	2~10	5~20	10~55	5~20	10~55
Pump Connection(mm/inch)	OD12.7(1/2inch)	OD19.05(3/4inch)	OD25.4(1inch)	OD19.05(3/4inch)	OD25.4(1inch)
	Flare Lock II			Flare Lock II	
Flow Amount Per One Stroke(cc)	85	200	540	200	540
Max. Driving Pressure(MPa)	0.4			0.4 0.3	0.25 0.2
Max. Liquid Temp(°C)	90			90 120	150 180
Driving Air Connection(mm/inch)	Ø6 X Ø4		OD9.53(3/8inch)	Ø6 X Ø4	OD9.53(3/8inch)
Air Consumption(Nℓ/ min)	80	110	220	110	220
Pilot Air Pressure(MPa)	0.4			0.4	
Pilot Air Connection(mm)	Ø6 X Ø4			Ø6 X Ø4	
Total Weight(kg)	5	11	21	12	22
Proximity Switch	Option			Accessory	
Leak sensor	Accessory			Accessory	
Control Valve Unit	Accessory			Accessory	
Safety Valve(0.25MPa)	Option			Accessory	

MODEL SELECTION

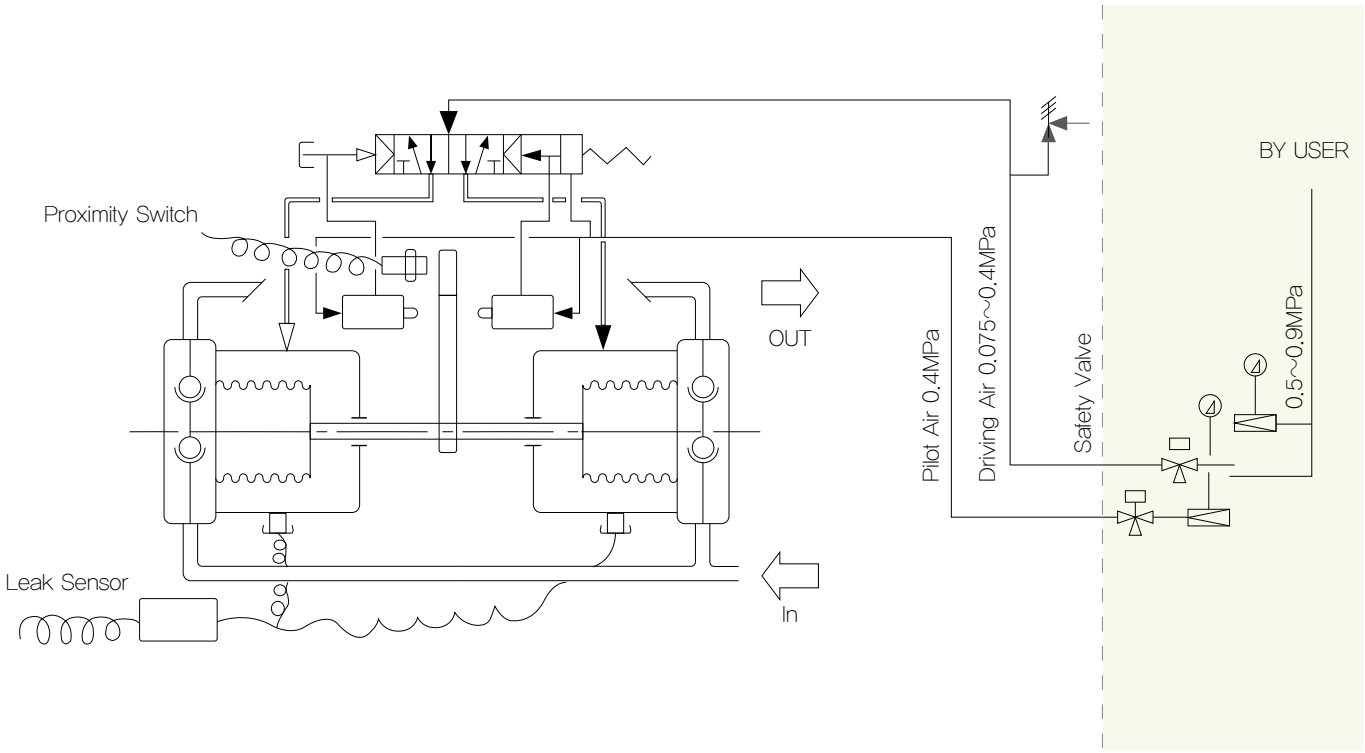
IBP - ①②③④

①Series	②Size	③Material	④Temperature(°C)
A (A Type)	10 (10G)	MP (Metal+Coating)	무기호(无记号) (10~100)
	20 (20G)		H (10~180)
	50 (55G)		

PERFORMANCE CURVE



FLOW SHEET



06

Flow Meter

Turbin Type Digital Flowmeter

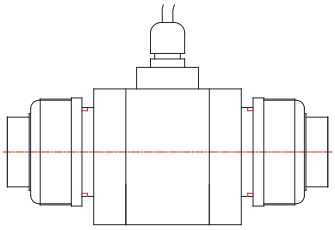
IFTB Series

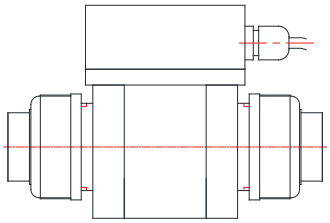
구조가 간단하여 취급 및 부수 점검이 쉬우며 순간 유량 및 적산 유량의 표시가 가능하고,
4-20mA나 접점 출력 신호를 사용할 수 있습니다.
结构简单，使用和维护方便，显示瞬间流量和累计流量，可使用4-20mA或切点输出信号。

Flowmeter

[분리형 分离型]

[일체형 一体型]





SPECIFICATION

정범위(范围)	Min. 10L/min Max. 500L/min (water 기준标准)
유량의 비율(流量比率)	10:1
정확도(准确度)	±1% Full scale
최대압력(最大压力)	5kgf/cm^2
최대온도(最高温度)	40°C (PVC) / 90°C (PTFE)
점성(黏性)	< 20cP
사용유체(使用流体)	Chemicals, D.I-Water
생산품목(生产品种)	1/4inch~1inch
	15A~75A

CHARACTERISTICS

- PVC, PTFE, SUS316 등 다양한 재질
  PVC, PTFE, SUS316 等多种材料
- 내화학성 우수 (耐化学性优秀)
- 순간유량, 적산유량 표시 (显示瞬间流量、累计流量)
- 4~20mA 접점 출력 (4~20 mA切点输出)
- 폭넓은 유량 측정 가능 (可测量广范围的流量)
- Connection은 이노디스 제품 (Tube 확관 Type)
  Connection是INNODOS产品 (管式扩管型)

MODEL SELECTION

IFTB1 (분리형 分离型) - ①②③④ - ⑤⑥⑦⑧
IFTB (일체형 一体型) - ①②③④ - ⑤⑥⑦⑧

①Material	②Size	③Connection	④O-ring	⑤Display	⑥Output	⑦Power	⑧통신 通信
T (PTFE)	14 (1/4inch) or 6 (6mm)	i (inch)	E (EPDM)	N (NONE)	1 (Ararm)	D (DC24V)	무기호(无记号) (No Option)
S (SUS316)	38 (3/8inch) or 8,10 (8,10mm)	m (mm)	F (FKM)	S (순시瞬间)	2 (4~20mA)		R (RS485)
	12 (1/2inch) or 12 (12mm)	F (Female)	K (N-217)	E (순시/적산) (瞬间/累计)	3 (1~5VDC)		
	34 (3/4inch) or 19 (19mm)		G (G902)				
	1 (1inch) or 25 (25mm)						

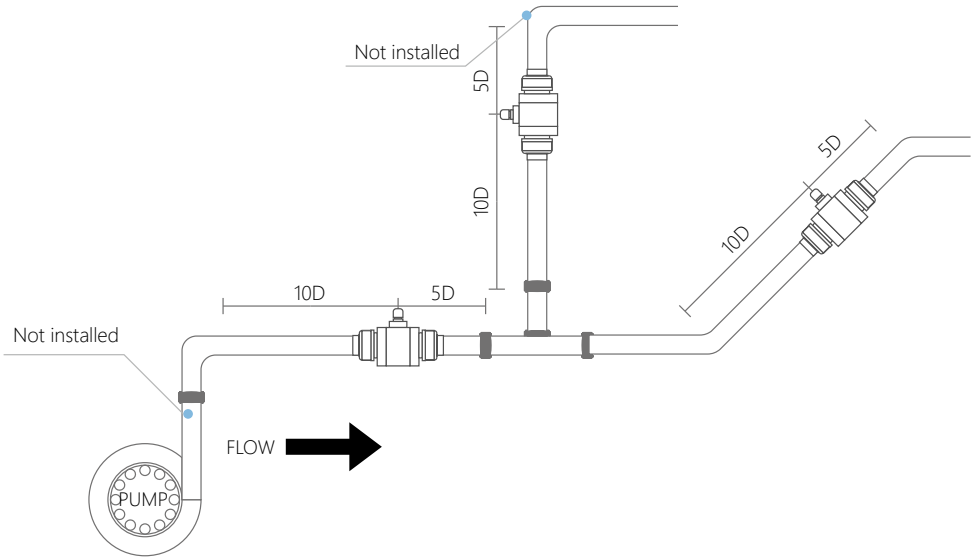
MODEL SELECTION

IFTB1 (분리형 分离型) - ①②③④ - ⑤⑥⑦⑧
IFTB (일체형 一体型) - ①②③④ - ⑤⑥⑦⑧

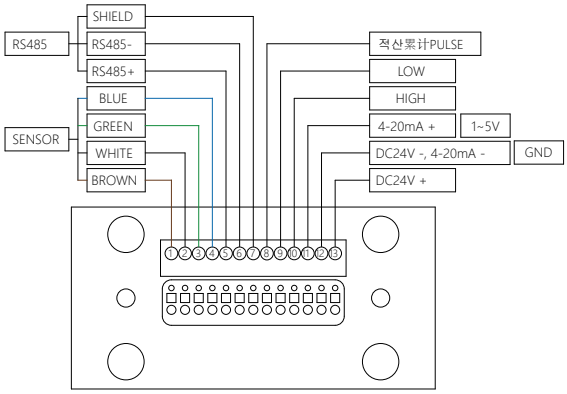
①Material	②Size	③Connection	④O-ring	⑤Display	⑥Output	⑦Power	⑧통신 通信
P (PVC)	15 (15A)	U (Union)	E (EPDM)	N (NONE)	1 (Ararm)	D (DC24V)	무기호(无记号) (No Option)
S (SUS316)	20 (20A)	FL (Flange)	F (FKM)	S (순시瞬间)	2 (4~20mA)		R (RS485)
	25 (25A)		K (N-217)	E (순시/적산) (瞬间/累计)	3 (1~5VDC)		
	32 (32A)		G (G902)				
	40 (40A)						
	50 (50A)						
	65 (65A)						
	75 (75A)						

유량 流量 Data			
Size	유량 범위 流量范围 (L/min)	Size	유량 범위 流量范围 (L/min)
1/4"	100cc~1,000cc	25A , 1"	10~100
3/8"	1~10	32A	20~200
15A , 1/2"	3~30	40A	30~300
20A , 3/4"	5~50	40A	50~500

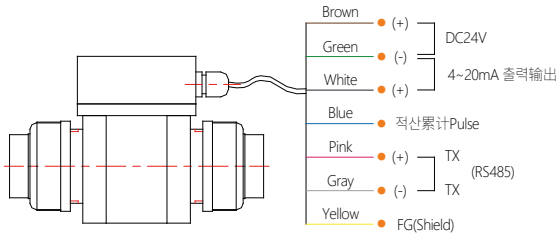
SENSOR INSTALLATION



METHOD OF WIRE CONNECTION



[분리형分离型]



[일체형一体型]

Flowmeter, Valve 일체형 (一体型) Type

IFTBV Series

일체형 Type으로 적은 공간에 적합하며 순간 유량 및 적산 유량의 표시가 가능하고, 4-20mA나 접점 출력 신호를 사용할 수 있습니다.
属于一体型Type，适合狭窄空间使用，显示瞬间流量和累计流量， 可使用4-20mA或切点输出信号。

Flowmeter

[유량계 + 밸브 일체형] - 특주 주문 사양
[流量计 + 阀门一体型] - 可制作特殊规格产品

SPECIFICATION	
정범위(范围)	Min. 10L/min Max. 500L/min (water 기준标准)
유량의 비율(流量比率)	10:1
정확도(准确度)	±3% Full scale
최대압력(最大压力)	5kgf/cm^2
최대온도(最高温度)	40°C (PVC) / 90°C (PTFE)
점성(黏性)	< 20cP
사용유체(使用流体)	Chemicals, D.I-Water

CHARACTERISTICS

- PVC, PTFE, SUS316 등 다양한 재질 (PVC, PTFE, SUS316等多种材料)
- 내화학성 우수 (耐化学性优秀)
- 순간유량, 적산유량 표시 (显示瞬间流量、累计流量)
- 4~20mA 접점 출력 (4~20 mA切点输出)
- 밸브+유량계 일체형으로 좁은 공간에 적합 (원가절감형)
  (阀门+流量计一体型，适合狭窄的空间使用 (成本节减型)

MODEL SELECTION IFTBV - ①②③ - ④⑤⑥⑦ - ⑧

①Material	②Size	③O-ring	④Display	⑤Output	⑥Power	⑦통신 通信	⑧Valve Type
T (PTFE)	38i (3/8inch) or 8,10m (8,10mm)	E (EPDM)	N (NONE)	1 (Ararm)	D (DC24V)	무기호 (无记号) (No Option)	M (Manual Valve)
	12i (1/2inch) or 12m (12mm)	F (FKM)	S (순시瞬间)	2 (4~20mA)		R (RS485)	N (Needle Valve)
	34i (3/4inch) or 19m (19mm)	K (N-217)	E (순시/적산) (瞬间/累计)	3 (1~5VDC)			
	1i (1inch) or 25m (25mm)	G (G902)					

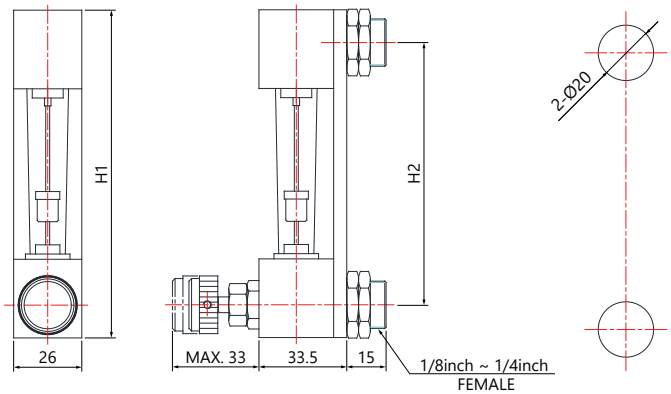
MODEL SELECTION IFTBV - ①②③④ - ⑤⑥⑦⑧ - ⑨

①Material	②Size	③Connection	④O-ring	⑤Display	⑥Output	⑦Power	⑧통신 通信	⑨Valve Type
P (PVC)	15 (15A)	U (Union)	E (EPDM)	N (NONE)	1 (Ararm)	D (DC24V)	무기호 (无记号) (No Option)	M (Manual Valve)
	20 (20A)		F (FKM)	S (순시瞬间)	2 (4~20mA)		R (RS485)	N (Needle Valve)
	25 (25A)		K (N-217)	E (순시/적산) (瞬间/累计)	3 (1~5VDC)			
			G (G902)					

IF10/20 Series

유체와 닿는 접액부는 SUS316 재질로 되어있으며 외형 몸체는 AL Anodizing 처리가 되어있는 소유량 Liquid와 GAS 측정에 적합한 표준 유량계 입니다
接触流体的部位采用SUS316材质，外壳进行AL Anodizing处理，适合测量小流量液体和气体的标准流量计。

Flowmeter



실제 치수는 영업부에 문의 또는 승인도를 요청바랍니다. 상기 치수는 변경될 수 있습니다
实际尺寸请咨询营业部或要求提供设计图。详细尺寸会有所变更。

CHARACTERISTICS

- 전장 길이에 따른 2가지 Model 按照全长尺寸有两种型号
- Flow Alarm Sensor 부착 가능 可安装Flow Alarm Sensor
- 고객 사양의 Flow Range 제작 가능
  可按照客戶要求的规格制作Flow Range
- Needle Valve로 유량 조절이 가능하며 전면 Panel 부착 가능
  可用Needle Valve调整流量，并能安装在正面Panel

DIMENSION

Model	H1	H2
IF10	125	100
IF20	160	135

STANDARD & SPECIFICATION

	Liquid and Gases		Remark
Measuring Range	Air	Min. 100ml/min	- Air at 20°C 1atm - When selecting flow range, refer to standard flow rate table.
		Max. 50L/min	
	Liquid	Min. 20ml/min	
		Max. 2L/min	
Range Ability	10:1		
Accuracy	±5% Full Scale		
Max. Op. Press	7kgf/cm² (0.7Mpa)		
Max. Op. Temp	70°C		
Material	Body	SUS316	Wetting parts
	Tapered tube	Pyrex glass	
	Packing	Viton	
	Support	Aluminum	
	Guide rod	SUS316	Cr Plating
	Cover	PC	
Connection Type	1/4inch PT Female		
Flow Direction	Bottom to Top		

MODEL SELECTION

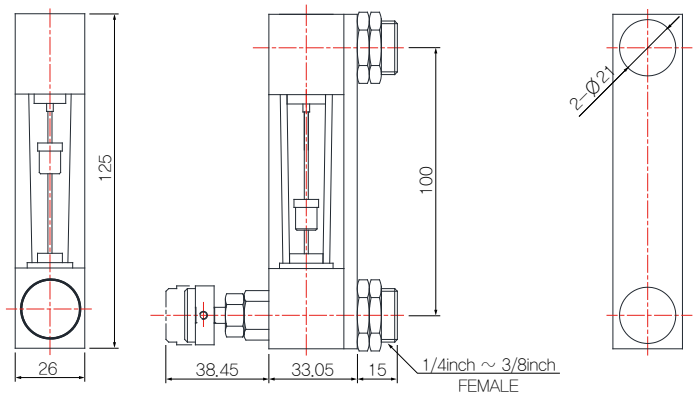
IF10/20 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
S (SUS316)	V (VITON)	F (PT(RC) Female)	1 (1/8inch)	N (NONE)	O (NONE)
	E (EPDM)	N (NPT Female)	2 (1/4inch)	B (BOTTOM)	S (Optic Sensor)
	N (NBR)	L (LOK Type)	3 (3/8inch)	T (TOP)	
	F (FKM)	V (VCR Type)			

IF35 Series

점액부를 SUS316을 사용한 Liquid용 유량 감시용 Alarm 으로 Magentic sensor, Optic Sensor 사용 가능한 소유량 유량계 입니다.
接触流体的部位使用SUS316材料，属于检测液体用流量的Alarm，可使用 Magentic sensor、Optic Sensor的小流量流量计。

Flowmeter



CHARACTERISTICS

- Water 기준으로 Max. 7L/min 까지 사용가능 以水为标准最多能使用7L/min
- Flow Alarm Sensor 부착 가능 可安装Flow Alarm Sensor
- 고객 사양의 Flow Range 제작 가능 可按照客戶的要求可制作Flow Range
- Needle Valve로 유량 조절이 가능하며 전면 Panel 부착 가능
  可用Needle Valve调整流量，并能安装在正面Panel

DIMENSION

Model	
IF35	실제 치수는 영업부에 문의 또는 승인도를 요청바랍니다. 상기 치수는 변경될 수 있습니다. 实际尺寸请咨询营业部或要求提供设计图。 详细尺寸会有所变更。

STANDARD & SPECIFICATION

	Liquid		Remark
Measuring Range	Min. 3L/min Max. 7L/min(Water 기준标准)		- Viscosity < 0.5cP - When selecting flow range, refer to standard flow rate table.
Range Ability	10:1		
Accuracy	±5% Full Scale		
Max. Op. Press	7kgf/cm² (0.7Mpa)		
Max. Op. Temp	70°C		
Material	Body	SUS316	Wetting parts
	Tapered tube	Pyrex glass	
	Packing	Viton	
	Support	Aluminum	
	Guide rod	SUS316	
	Cover	Acryl	
Connection Type	3/8inch PT Female		
Flow Direction	Bottom to Top		

MODEL SELECTION

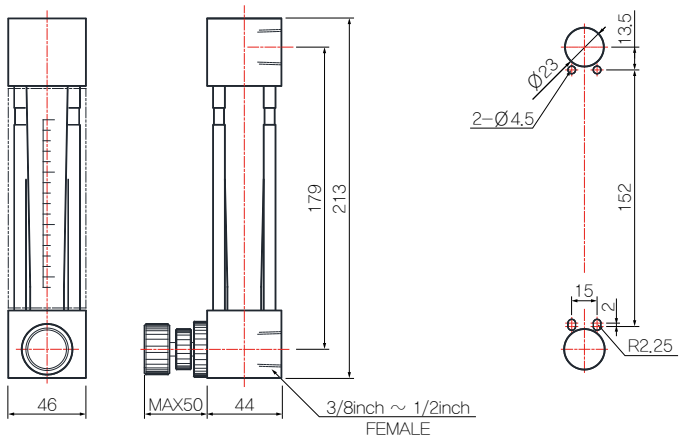
IF35 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
S (SUS316)	V (VITON)	F (PT(RC) Female)	2 (1/4inch)	N (NONE)	O (NONE)
	E (EPDM)	N (NPT Female)	3 (3/8inch)	B (BOTTOM)	S (Optic Sensor)
	N (NBR)	L (LOK Type)		T (TOP)	R (Reed Sensor)
	F (FKM)	V (VCR Type)			

IF40 Series

접액부의 재질을 유체에 따라 Teflon, PVC, SUS316, AL 모두 가능하며, 소유량의 Liquid 뿐만 아니라 각종 Chemical 및 부식성 Gas의 사용에 적합합니다.
接触流体的部位可按照流体种类选择使用Teflon、PVC、SUS316、AL材质，不仅适合测量小流量流体，还适合使用于各种Chemical及腐蚀性Gas

Flowmeter



CHARACTERISTICS

- 유체의 종류에 따른 다양한 Body 재질 按照流体种类选择多种材质
- Flow Alarm Sensor 부착 가능 可安装Flow Alarm Sensor
- 고객 사양의 Flow Range 제작 가능 戶的要求可制作Flow Range
- Needle Valve로 유량 조절이 가능하며 전후면 Panel 부착 가능
  可用Needle Valve调整流量，并能安装在正面Panel

DIMENSION

Model	
IF40	실제 치수는 영업부에 문의 또는 승인도를 요청바랍니다. 상기 치수는 변경될 수 있습니다. 实际尺寸请咨询营业部或要求提供设计图。 详细尺寸会有所变更。

STANDARD & SPECIFICATION

	Liquid and Gases			Remark
Measuring Range	Air		Min. 50L/min	- Air at 20°C 1atm - When selecting flow range, refer to standard flow rate table.
			Max. 200L/min	
	Liquid		Min. 3L/min	
			Max. 5L/min	
Range Ability	10:1			
Accuracy	±5% Full Scale			
Max. Op. Press	5kgf/cm^2 (0.5Mpa)			
Max. Op. Temp	40°C(PVC) / 70°C(PTFE)			
Material	Body		PVC	Wetting parts
	Tapered tube		Pyrex glass	
	Packing		Viton	
	Support		SUS316	
	Guide rod		SUS316	Cr Plating
	Cover		Acryl	
Connection Type	3/8inch PT Female			
Flow Direction	Bottom to Top			

MODEL SELECTION

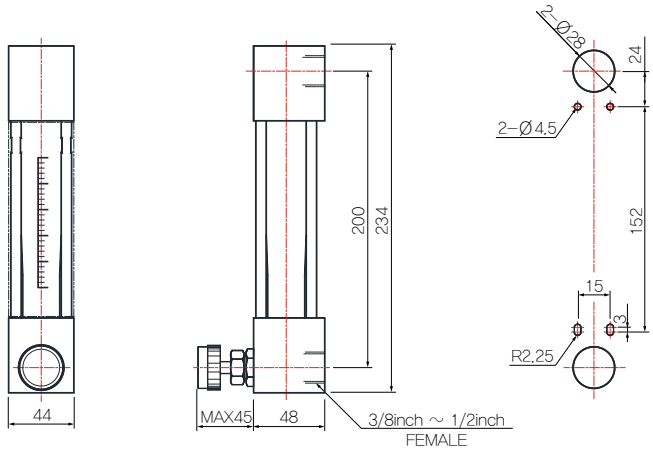
IF40 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
P (PVC)	V (VITON)	F (PT(RC) Female)	3 (3/8inch)	N (NONE)	O (NONE)
T (PTFE)	E (EPDM)	N (NPT Female)	4 (1/2inch)	B (BOTTOM)	S (Optic Sensor)
	N (NBR)	S (Special)		T (TOP)	
	F (FKM)				

IF45 Series

접액부의 재질이 SUS316과 Aluminum이 가능하면서 간단한 구조로 제작된
Liquid와 GAS사용이 가능한 중유량 유량계 입니다.
接触流体的部位可选择SUS316和铝材质，结构简单，可测试Liquid和GAS的中流量流量计。

Flowmeter



CHARACTERISTICS

- 다양한 Connection 방향과 배관 설계 용이
  可采用多种Connection方向，容易设计配管
- Needle Valve로 유량 조절이 가능 可用Needle Valve调整流量
- 고객 사양의 Flow Range 제작 가능 可按照客户的要求可制作Flow Range
- Flow Alarm Sensor 부착 가능하며 전후면 Panel 부착 가능
  可安装Flow Alarm Sensor， 并能安装在前后Panel

DIMENSION

Model	
IF45	실제 치수는 영업부에 문의 또는 승인도를 요청바랍니다. 상기 치수는 변경될 수 있습니다. 实际尺寸请咨询营业部或要求提供设计图。 详细尺寸会有所变更。

STANDARD & SPECIFICATION

	Liquid and Gases		Remark
Measuring Range	Air	Min. 50L/min	- Air at 20°C 1atm - When selecting flow range, refer to standard flow rate table.
		Max. 600L/min	
	Liquid	Min. 10L/min	
		Max. 20L/min	
Range Ability	10:1		
Accuracy	±5% Full Scale		
Max. Op. Press	7kgf/cm^2 (0.7Mpa)		
Max. Op. Temp	70°C		
Material	Body	SUS316	Wetting parts
	Tapered tube	Pyrex glass	
	Packing	Viton	
	Support	SUS316	
	Guide rod	SUS316	Cr Plating
	Cover	Acryl	
Connection Type	3/8inch PT Female		
Flow Direction	Bottom to Top		

MODEL SELECTION

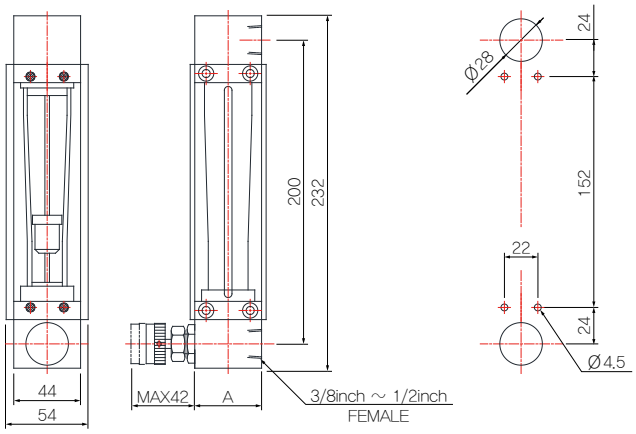
IF45 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
S (SUS316)	V (VITON)	F (PT(RC) Female)	3 (3/8inch)	N (NONE)	O (NONE)
	E (EPDM)	N (NPT Female)	4 (1/2inch)	B (BOTTOM)	S (Optic Sensor)
	N (NBR)	L (LOK Type)		T (TOP)	
	F (FKM)	V (VCR Type)			

IF50 Series

접액부의 재질이 SUS316과 Aluminum이 가능하면서 간단한 구조로 제작된 Liquid와 GAS사용이 가능한 중유량 유량계 입니다.
接触流体的部位可选择SUS316和铝材质，结构简单，可测试Liquid和GAS的中流量流量计。

Flowmeter



CHARACTERISTICS

- Aluminum Body 제작 가능 可制作Aluminum Body
- Needle Valve로 유량 조절이 가능 可用Needle Valve调整流量
- 고객 사양의 Flow Range 제작 가능 可按照客戶的要求可制作Flow Range
- Flow Alarm Sensor 부착 가능하며 전후면 Panel 부착 가능
  可安装Flow Alarm Sensor， 并能安装在前后Panel

DIMENSION

Model	A
3/8inch	44
1/2inch	48

STANDARD & SPECIFICATION

	Liquid and Gases		Remark
Measuring Range	Air	Min. 50L/min	- Air at 20°C 1atm - When selecting flow range, refer to standard flow rate table.
		Max. 600L/min	
	Liquid	Min. 5L/min	
		Max. 20L/min	
Range Ability	10:1		
Accuracy	±5% Full Scale		
Max. Op. Press	7kgf/cm² (0.7Mpa)		
Max. Op. Temp	70°C		
Material	Body	SUS316	Wetting parts
	Tapered tube	Pyrex glass	
	Packing	Viton	
	Support	Aluminum	
	Guide rod	SUS316	Cr Plating
	Cover	Acryl	
Connection Type	1/2inch PT Female		
Flow Direction	Bottom to Top		

MODEL SELECTION

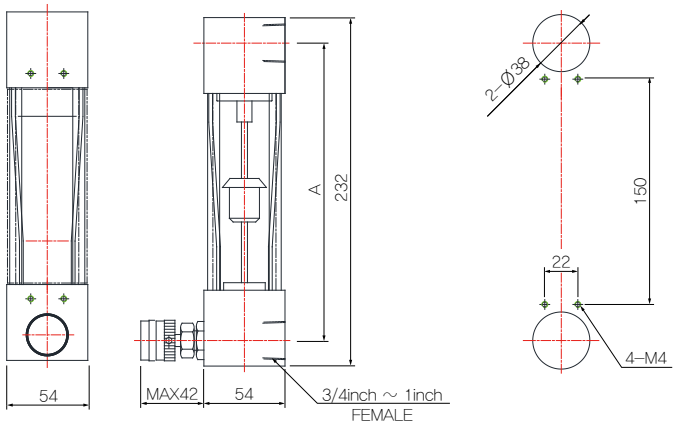
IF50 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
S (SUS316)	V (VITON)	F (PT(RC) Female)	3 (3/8inch)	N (NONE)	O (NONE)
	E (EPDM)	N (NPT Female)	4 (1/2inch)	B (BOTTOM)	S (Optic Sensor)
	N (NBR)	L (LOK Type)		T (TOP)	
	F (FKM)	V (VCR Type)			

IF60 Series

접액부의 재질이 SUS316과 Aluminum이 가능하면서 간단한 구조로 제작된 Liquid와 GAS사용이 가능한 중유량 유량계 입니다.
接触流体的部位可选择SUS316和铝材质，结构简单，可测试Liquid和GAS的中流量流量计。

Flowmeter



CHARACTERISTICS

- 다양한 Connection 방향 多样的 Connection方向
- Needle Valve로 유량 조절이 가능 多种Connection方向
- 고객 사양의 Flow Range 제작 가능 可按照客戶的要求可制作Flow Range
- Flow Alarm Sensor 부착 가능하며 전후면 Panel 부착 가능
  可安装Flow Alarm Sensor， 并能安装在前后Panel

DIMENSION

Model	A
3/4inch	198
1inch	192

STANDARD & SPECIFICATION

	Liquid and Gases		Remark
Measuring Range	Air	Min. 700L/min	- Air at 20°C 1atm - When selecting flow range, refer to standard flow rate table.
		Max. 2000L/min	
	Liquid	Min. 50L/min	
		Max. 100L/min	
Range Ability	10:1		
Accuracy	±5% Full Scale		
Max. Op. Press	7kgf/cm² (0.7Mpa)		
Max. Op. Temp	70°C		
Material	Body	SUS316	Wetting parts
	Tapered tube	Pyrex glass	
	Packing	Viton	
	Support	SUS316	
	Guide rod	SUS316	Cr Plating
	Cover	Acryl	
Connection Type	3/4inch PT Female		
Flow Direction	Bottom to Top		

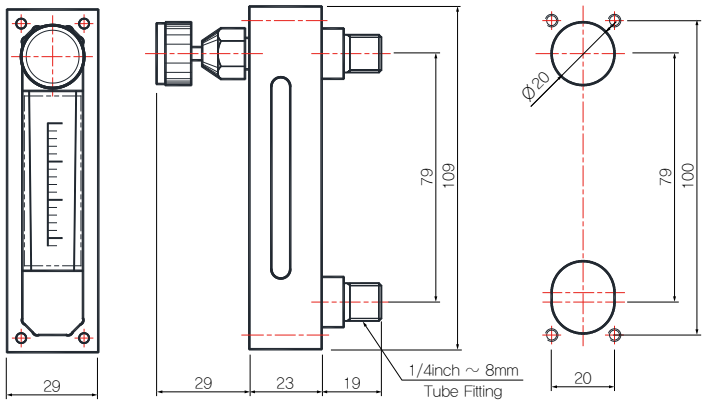
MODEL SELECTION IF60 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
S (SUS316)	V (VITON)	F (PT(RC) Female)	5 (3/4inch)	N (NONE)	O (NONE)
	E (EPDM)	N (NPT Female)	6 (1inch)	B (BOTTOM)	S (Optic Sensor)
	N (NBR)	L (LOK Type)		T (TOP)	
	F (FKM)	V (VCR Type)			

IF70 Series

접액부 및 Packing을 Teflon 소재로 사용하여 내화학성이 우수하며 정밀한 소유량 측정이 가능한 유량계 입니다.
接触流体的部位及Packing使用特氟龙材料，耐化学性优秀，可精密测量小流量的流量计。

Flowmeter



CHARACTERISTICS

- 내화학성이 우수하여 부식성 GAS 및 Chemical 사용 가능
  耐化学性优秀，可使用腐蚀性GAS和Chemical
- Needle Valve로 유량 조절이 가능 可用Needle Valve调整流量
- 고객 사양의 Flow Range 제작 가능 可按照客戶要求的规格制作Flow Range
- Flow Alarm Sensor 부착 가능 可安装Flow Alarm Sensor
- PFA Tube 연결 가능 可连接PEA Tube Connection

DIMENSION

Model	
IF70	실제 치수는 영업부에 문의 또는 승인도를 요청바랍니다. 상기 치수는 변경될 수 있습니다. 实际尺寸请咨询营业部或要求提供设计图。 详细尺寸会有所变更。

STANDARD & SPECIFICATION

	Liquid and Gases		Remark
Measuring Range	Air	Min. 100ml/min	- Air at 20°C 1atm - When selecting flow range, refer to standard flow rate table.
		Max. 50L/min	
	Liquid	Min. 20ml/min	
		Max. 2L/min	
Range Ability	10:1		
Accuracy	±5% Full Scale		
Max. Op. Press	5kgf/cm² (0.5Mpa)		
Max. Op. Temp	70°C		
Material	Body	PFA	Wetting parts
	Tapered tube	Pyrex glass	
	Packing	Teflon	
	Support	Acetal	
	Cover	Acryl	
Connection Type	1/4inch PT Female		
Flow Direction	Bottom to Top		

MODEL SELECTION

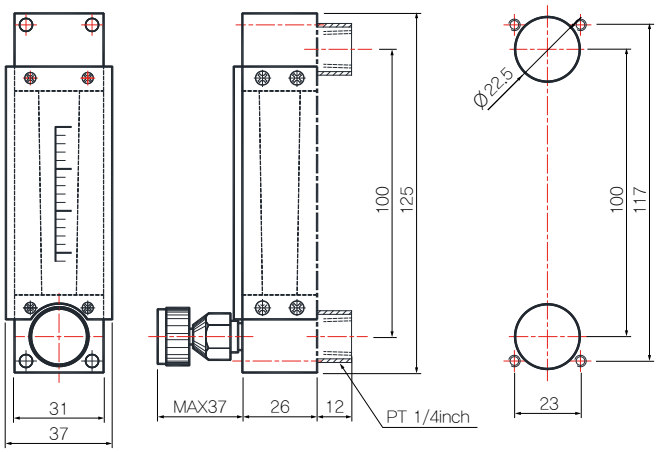
IF70 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
F (PFA)	T (PTFE)	F (PT Female)	1 (1/8inch)	N (NONE)	O (NONE)
		T (Tube Fitting)	2 (1/4inch)	B (BOTTOM)	S (Optic Sensor)
			3 (3/8inch)	T (TOP)	
			A (4mm)		
			B (6mm)		
			C (8mm)		

IF75 Series

접액부의 재질이 All PFA로 되어 있어 탁월한 내화학성과 모든 종류의 Chemical 및 내화학성이 요구되는 장치에 적합한 소유량계 입니다.
接触流体的部位采用All PEA，适合使用于多种Chemical及需要耐化学性的设备的小流量计。

Flowmeter



CHARACTERISTICS

- PFA Welding 구조로 각종 Chemical 사용 가능
  采用PFA Welding结构，可使用各种Chemical
- Needle Valve로 유량 조절이 가능 可用Needle Valve调整流量
- 고객 사양의 Flow Range 제작 가능 可按照客戶要求的规格制作Flow Range
- Flow Alarm Sensor 부착 가능 可安装Flow Alarm Sensor
- PFA Tube 연결 가능 Connection 可连接PEA Tube Connection

DIMENSION

Model	
IF75	실제 치수는 영업부에 문의 또는 승인도를 요청바랍니다. 상기 치수는 변경될 수 있습니다. 实际尺寸请咨询营业部或要求提供设计图。 详细尺寸会有所变更。

STANDARD & SPECIFICATION

	Liquid and Gases			Remark
Measuring Range	Air		Min. 500ml/min	- Air at 20°C 1atm - When selecting flow range, refer to standard flow rate table.
			Max. 50L/min	
	Liquid		Min. 20ml/min	
			Max. 2L/min	
Range Ability	10:1			
Accuracy	±5% Full Scale			
Max. Op. Press	3kgf/cm²			
Max. Op. Temp	70°C			
Material	Body		PFA	Wetting parts
	Tapered tube		PFA	
	Packing		Teflon	
	Support		Acetal	
	Cover		Acryl	
Connection Type	1/4inch PT Female			
Flow Direction	Bottom to Top			

MODEL SELECTION

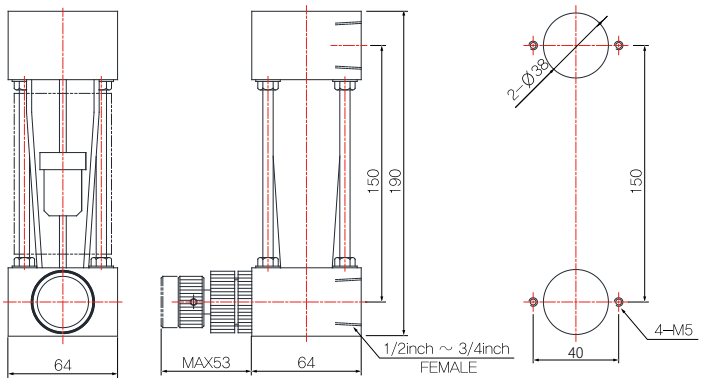
IF75 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
F (PFA)	T (PTFE)	F (PT Female)	1 (1/8inch)	N (NONE)	O (NONE)
		T (Tube Fitting)	2 (1/4inch)	B (BOTTOM)	S (Optic Sensor)
			3 (3/8inch)	T (TOP)	
			B (6mm)		
			C (8mm)		

IF80 Series

접액부의 재질이 Teflon및 PVC로 사용하며, Chemical 및 DIW에 사용하도록 제작된 중대유량 유량계 입니다.
接触流体的部位采用Teflon及PVC，适合使用于Chemical及DIW的中大流量流量计。

Flowmeter



CHARACTERISTICS

- 각종 Chemical에 적합한 내화학성 适合各种Chemical的耐化学性
- Needle Valve로 유량 조절이 가능 可用Needle Valve调整流量
- 고객 사양의 Flow Range 제작 가능 可按照客户要求的规格制作Flow Range
- Flow Alarm Sensor 부착 가능 可安装Flow Alarm Sensor
- 다양한 Connection 방향 多种Connection方向

DIMENSION

Model	
IF80	실제 치수는 영업부에 문의 또는 승인도를 요청바랍니다. 상기 치수는 변경될 수 있습니다. 实际尺寸请咨询营业部或要求提供设计图。 详细尺寸会有所变更。

STANDARD & SPECIFICATION

	Liquid and Gases		Remark
Measuring Range	Min. 10L/min Max. 50L/min(Water 기준标准)		- When selection flow range, refer to standard flow rate table - Viscosity < 0.5cP
Range Ability	10:1		
Accuracy	±5% Full Scale		
Max. Op. Press	5kgf/cm²		
Max. Op. Temp	50°C (PVC)		
Material	Body	PVC	Wetting parts
	Tapered tube	Pyrex glass	
	Packing	Viton	
	Support	SUS316	
	Guide rod	SUS316 + Teflon Cotting	Cr Plating
	Cover	Acryl	
Connection Type	1/2inch PT Female		
Flow Direction	Bottom to Top		

MODEL SELECTION

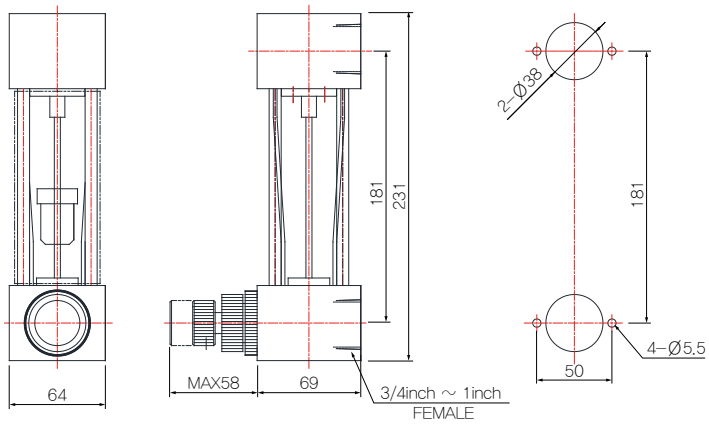
IF80 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
P (PVC)	V (VITON)	F (PT(RC) Female)	3 (3/8inch)	N (NONE)	O (NONE)
T (PTFE)	E (EPDM)	N (NPT Female)	4 (1/2inch)	B (BOTTOM)	S (Optic Sensor)
	N (NBR)		5 (3/4inch)	T (TOP)	
	F (FKM)				

IF90 Series

접액부의 재질이 Teflon으로 사용하며, Chemical에 사용하도록 제작된 대유량 유량계 입니다.
接触流体的部位采用Teflon材质，适合使用于Chemical的大流量流量计。

Flowmeter



CHARACTERISTICS

- 각종 Chemical에 적합한 내화학성 适合各种Chemical的耐化学性
- Needle Valve로 유량 조절이 가능 可用Needle Valve调整流量
- 고객 사양의 Flow Range 제작 가능 可按照客户要求的规格制作Flow Range
- Flow Alarm Sensor 부착 가능 可安装Flow Alarm Sensor
- 다양한 Connection방향 多种Connection方向

DIMENSION

Model	
IF90	실제 치수는 영업부에 문의 또는 승인도를 요청바랍니다. 상기 치수는 변경될 수 있습니다. 实际尺寸请咨询营业部或要求提供设计图。 详细尺寸会有所变更。

STANDARD & SPECIFICATION

	Liquid and Gases		Remark
Measuring Range	Min. 50L/min Max. 100L/min(Water 기준标准)		- When selection flow range, refer to standard flow rate table. - Viscosity < 0.5cP
Range Ability	10:1		
Accuracy	±5% Full Scale		
Max. Op. Press	5kgf/cm²		
Max. Op. Temp	50°C (PVC)		
Material	Body	PVC	Wetting parts
	Tapered tube	Pyrex glass	
	Packing	Viton	
	Support	SUS316	
	Guide rod	SUS316 + Teflon Cotting	Cr Plating
	Cover	Acryl	
Connection Type	1inch PT Female		
Flow Direction	Bottom to Top		

MODEL SELECTION

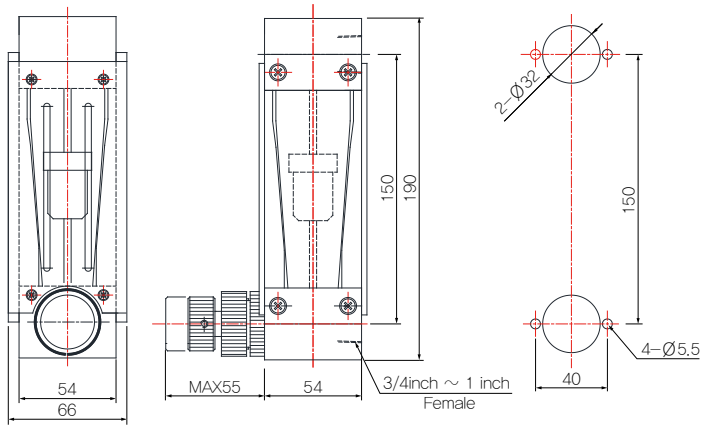
IF90 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
P (PVC)	V (VITON)	F (PT(RC) Female)	5 (3/4inch)	N (NONE)	O (NONE)
T (PTFE)	E (EPDM)	N (NPT Female)	6 (1inch)	B (BOTTOM)	S (Optic Sensor)
	N (NBR)			T (TOP)	
	F (FKM)				

IF95 Series

접액부의 재질이 All PFA로 되어 있어 탁월한 내화학성과 모든 종류의 Chemical 및 내화학성이 요구되는 장치에 적합한 대유량 유량계 입니다.
接触流体的部位采用All PEA，适合使用于多种Chemical及需要耐化学性的设备的大流量流量计。

Flowmeter



CHARACTERISTICS

- PFA Welding 구조로 각종 采用PFA Welding结构，可使用各种Chemical
- Needle Valve로 유량 조절이 가능 可用Needle Valve调整流量
- 고객 사양의 Flow Range 제작 가능 可按照客戶要求的规格制作Flow Range
- Flow Alarm Sensor 부착 가능 可安装Flow Alarm Sensor
- 다양한 Connection방향 多种Connection方向

DIMENSION

Model	
IF95	실제 치수는 영업부에 문의 또는 승인도를 요청바랍니다. 상기 치수는 변경될 수 있습니다. 实际尺寸请咨询营业部或要求提供设计图。 详细尺寸会有所变更。

STANDARD & SPECIFICATION

	Liquid and Gases		Remark
Measuring Range	Min. 50L/min Max. 100L/min(Water 기준标准)		- When selection flow range, refer to standard flow rate table - Viscosity < 0.5cP
Range Ability	10:1		
Accuracy	±5% Full Scale		
Max. Op. Press	3kgf/cm²		
Max. Op. Temp	MAX 70°C		
Material	Body	PFA	Wetting parts
	Tapered tube	PFA	
	Oring	Teflon	
	Guide rod	SUS316 + Teflon	
	Cover	Acryl	
Connection Type	1inch PT Female		
Flow Direction	Bottom to Top		

MODEL SELECTION

IF95 ①② - ③④ - ⑤⑥

①Material	②Packing	③Connection type	④Connection size	⑤Needle Valve	⑥Alarm
F (PFA)	T (PTFE)	F (PT(RC) Female)	5 (3/4inch)	N (NONE)	O (NONE)
		T (Tube Fitting)	6 (1inch)	B (BOTTOM)	S (Optic Sensor)
				T (TOP)	

07

PFA
Fitting (Mega Lock Type)

1. Tube to Male pipe thread
   - •MALE CONNECTOR
   - •MALE ELBOW
   - •MALE TEE
   - •MALE RUN TEE

2. Tube to Female pipe thread
   - •FEMALE CONNECTOR
   - •FEMALE ELBOW
   - •FEMALE TEE

3. Tube to Tube
   - •UNION CONNECTOR
   - •UNION ELBOW
   - •UNION TEE
   - •REDUCING UNION CONNECTOR
   - •REDUCING UNION ELBOW
   - •REDUCING UNION TEE
   - •PANEL MOUNT UNION CONNECTOR
   - •PANEL MOUNT NUT

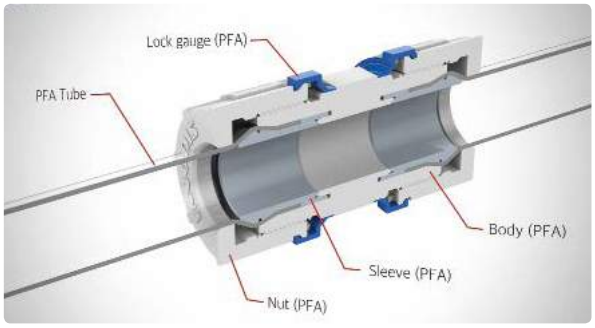
4. Space saver
   - •REDUCING UNION CONNECTOR ADAPTOR
   - •REDUCING UNION ELBOW ADAPTOR
   - •ELBOW ADAPTOR
   - •TEE ADAPTOR

5. Others
   - •TUBE CAP
   - •CAP SLEEVE / NUT / SLEEVE

6. Fitting Jig
   - •TUBE EXPANDING JIG
   - •NUT ASSEMBLY JIG

PFA Fitting

5중 실링 구조에 의한 우수한 밀폐력과 튜브보다 높은 인장강도와 최대 200°C에서도 견디는 PFA Fitting 입니다.
双重密封结构的优秀密封度、比软管更大的抗张力以及最高可 承受200°C高温的PFA Fitting。



Mega Lock Type 제품 특성

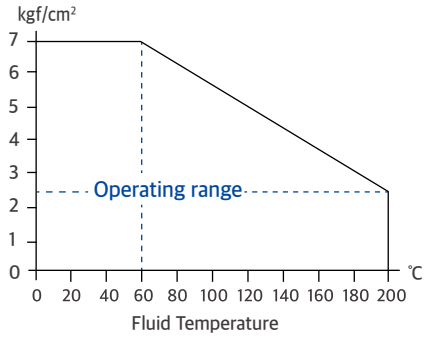
- Slide 압입 Type의 5중 Sealing 구조
- 미세 진동에 의한 너트 풀림 방지 Lock 기능
- Lock Gauge 홈 확인으로 아이 마킹 불필요
- Lock Gauge 홈 확인으로 Gauge 불필요
- PFA Tube 빠짐 현상 기능 개선
- 너트 체결 시 조임 토크 저감 설계
- Lock Gauge 소리 알림 기능으로 너트 체결 용이
- Lock Gauge 육안 확인 기능으로 너트 체결 용이
- Compact Design

Mega Lock Type产品的特性

- Slide压入式5重密封结构
- 防止微细震动导致NUT松动的Lock功能
- 透过Lock Gauge槽查看，无需眼标(Eye Marking)
- 透过Lock Gauge槽查看，无需Gauge
- 改善PFA Tube脱落现象
- 采用拧紧Nut时降低拧动转矩的设计
- 有Lock Gauge 声音提醒功能，拧紧NUT 很容易
- 有Lock Gauge 肉眼确认功能，拧紧NUT 很容易
- 设计小巧

Specification

TUBE Material	PFA, PTFE
Max pressure in operation	7kgf/cm²
Max temperature in operation	200°C
Fluid	For liquid use only
Ambient temperature range	-15°C ~ 60°C



Tube size

Metric connection — Unit : mm

Tube size O.D × I.D	Thickness	Tolerance	
		O.D	Thickness
3×2	0.5	±0.10	±0.05
4×3			
6×4	1.0		±0.06
8×6		±0.12	
10×8			
12×10			
19×15.8	1.6		±0.10
25×22	1.5	±0.20	

Inch connection — Unit : mm

Tube size O.D × I.D	Thickness	Tolerance	
		O.D	Thickness
3.18×2.18 (1/8"×0.086")	0.5	±0.10	±0.05
6.35×3.95 (1/4"×5/32")	1.2		±0.10
9.53×6.33 (3/8"×1/4")	1.6 (1/16")	±0.12	
12.7×9.5 (1/2"×3/8")			
19×15.8 (3/4"×5/8")			
25.4×22.2 (1"×7/8")		±0.20	

Mega Lock Type Sealing 구조 (Mega Lock Type Sealing结构)

Nut 체결력에 Taper 면이 눌려지는 밀폐력으로 2차 Sealing

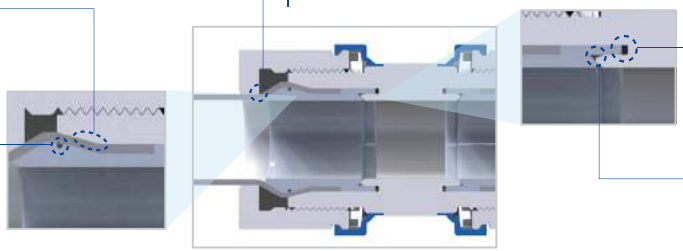
利用Nut拧紧力矩和Taper面施加的密封力完成第二次密封

Sleeve에 홈을 추가하여 홈 모서리에 의한 밀폐력으로 5차 Sealing과 동시에 튜브가 홈사이에 들어가 걸려 튜브 빠짐 현상 기능 개선

在Sleeve上制造凹槽，利用凹槽边缘的密封力完成第五次密封，同时让软管进入凹槽，改善软管脱落现象

Nut 체결력에 눌려지는 밀폐력으로 1차 Sealing

利用Nut拧紧力矩施加的密封力完成第一次密封



Nut 체결력에 Sleeve 돌출링 구간이 Body 홈링 형성구간에 Slide 압입 되어지는 밀폐력으로 3차 Sealing

利用Nut拧紧力矩和Sleeve凸环区间滑压入Body Homeling形成区间产生的密封力完成第三次密封

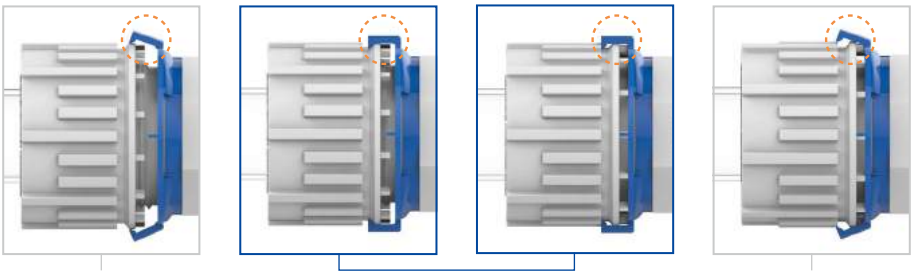
Nut 체결력에 Sleeve Taper 홈구간이 Body Taper 형성구간에 눌려지는 밀폐력으로 4차 Sealing

利用Nut拧紧力矩和Sleeve Taper凹槽区间施加在Body Taper形成区间的密封力完成第四次密封

Mega Lock Type : Slide 압입 Type의 5중 Sealing 구조

Mega Lock Type：Slide压入式五重密封结构

Mega Lock 너트 체결 확인 (检查 Mega Lock Nut的拧紧状态)



너트 체결 상태 불량
(미체결 상태)

Nut拧紧状态不良
(未连接状态)

너트 체결 상태 양호
(조립 체결)

Nut拧紧状态良好
(组装连接)

너트 체결 상태 불량
(과체결 상태)

Nut拧紧状态不良
(过紧状态)

※ 주의 注意

- 재조임을 할 경우에는 분리한 Tube와 Sleeve 및 본체의 Seal 면이 상처가 나지 않도록 주의하여 주십시오. 누설의 원인이 되는 경우도 있습니다.
  重新拧紧时，注意避免Tube、Sleeve及主体Seal面产生划痕，可能会导致泄漏。
- Nut 재조임은, 10회까지 가능합니다.
  最多可重新拧紧10次。
- 10회를 넘길 경우에는 Fitting을 교환하여 주십시오.
  超过10次时，请更换Fitting。

Mega Lock Fitting Lock Gauge Type

Sleeve 삽입 절차 (Sleeve安插步骤)

- Sleeve를 Tube에 삽입하기 전에 Nut의 방향을 확인하고 Sleeve를 Tube에 삽입해 주시기 바랍니다.
  在使用插入工具把Sleeve插入Tube之前，先确认Nut的方向，再把Nut插入Tube。
- Sleeve를 Tube에 삽입할 때 Tube와 Sleeve의 Tube 끝단 사이에 간격이 남아 있을 수 있습니다.
  이 경우 Sleeve와 Tube의 간격이 Sleeve 직선 구간의 80%이상 Tube를 삽입해 주시기 바랍니다.
  将Sleeve插入Tube时，Tube与Sleeve的Tube末端之间可能会留有间隔。
  此时，使Sleeve与Tube的间距达到Sleeve直线区间的80%以上再插入Tube。
- Sleeve가 삽입된 Tube를 Fitting & Unit에 삽입하고, Lock Gauge가 Nut 체결 홈에 들어갈 때까지 Nut를 회전 체결해주시기 바랍니다.
  소리가 들림과 동시에 Lock Gauge가 Nut 체결 홈에 들어가는 것이 보일 것입니다.
  将插好Sleeve的Tube插入Fitting & Unit，旋转拧紧Nut，直至Lock Gauge进入Nut连接槽内。
  听到声音后，将看到Lock Gauge进入Nut连接槽内。
- 너트 체결 전용 지그를 사용하면 Nut를 보다 효율적으로 조일 수 있습니다.
  使用拧紧Nut的专用夹具能更有效地拧紧Nut。

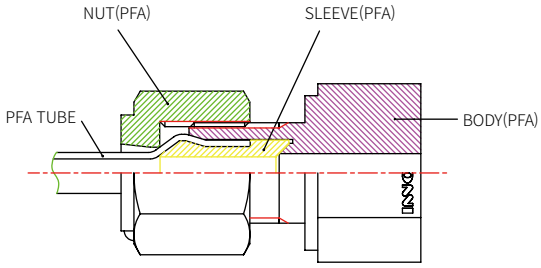
※ 주의 : Fitting 재사용의 경우 Sleeve 분해 시 Tube를 상하좌우로 흔들어서 분리하여 주시기 바랍니다.
무리하게 Sleeve 분해 시 Sleeve에서 Tube가 분리 될 우려가 있습니다.
注意 ：接头再次使用的时候，Sleeve拆卸时 请把Tube上下左右摇一摇后拆卸。
不合理的拆卸时, 会出现Sleeve和Tube分开的现象

Small Sized Models (1/8", 3mm, 4mm)

Small Sized Models(1/8", 3mm, 4mm)

소형 Fitting에는 Lock Gauge가 장착되지 않으므로
제조 업체에 문의 하시기 바랍니다.

小型Fitting上未安装Lock Gauge，请使用制造商提供的
口径规或咨询。

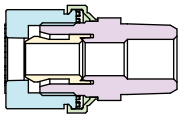


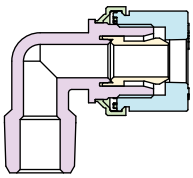
- 사양 및 치수는 변경 될 수 있습니다.
  功能以及尺寸会有变动。
- 모든 치수는 참고용입니다.
  此手册的尺寸只需要参考用。
- 이 카탈로그의 데이터는 참고용이며 보증으로 해석되어서는 안됩니다.
  此手册的数据为参考用,不可为保证。

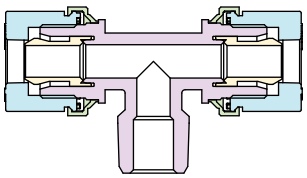
⚠ 주의 注意	• 안전을 위해 설치 및 작동 전에 지침을 따르십시오. 为了安全，安装及启动前请遵守指示。

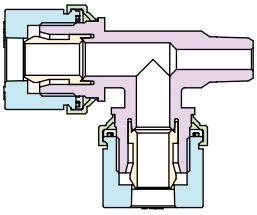
목차 目录 CONTENT

01 Tube to Male pipe thread

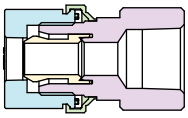


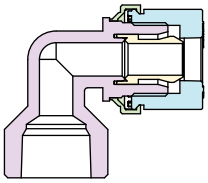


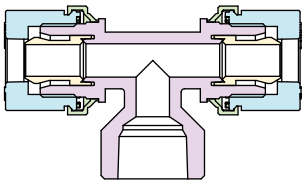




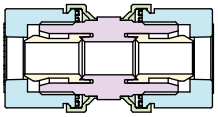
02 Tube to Female pipe thread

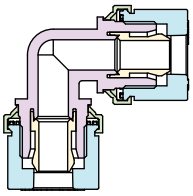


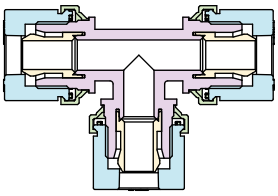


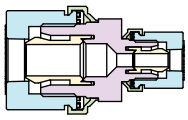


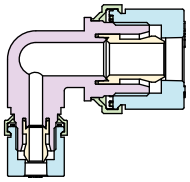
03 Tube to Tube

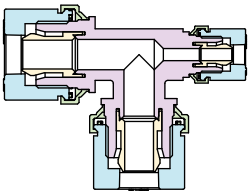




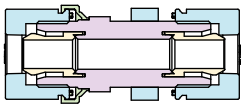




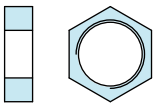




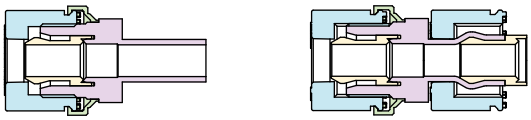
PANEL MOUNT
UNION CONNECTOR

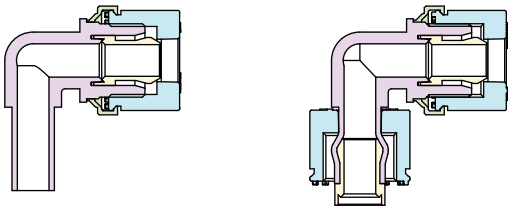


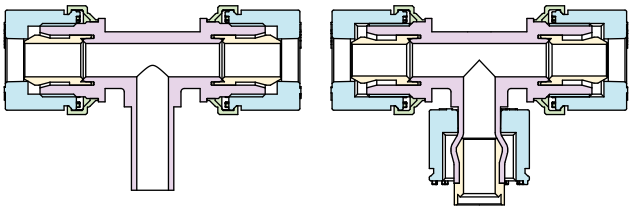
PANEL MOUNT NUT

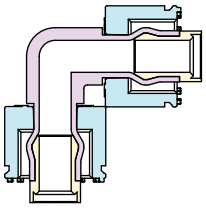


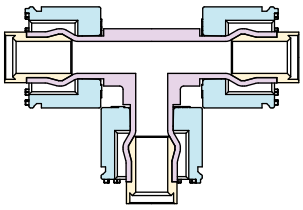
04 Space saver





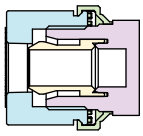




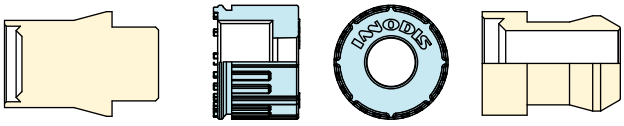


05 Others

TUBE CAP



CAP SLEEVE NUT SLEEVE



06 Fitting Jig

01

Tube to Male pipe thread

MALE CONNECTOR

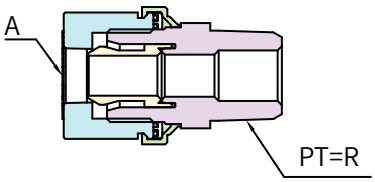
MALE ELBOW

MALE TEE

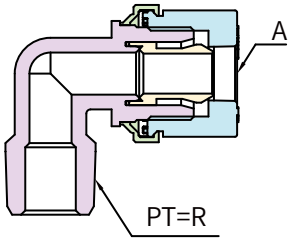
MALE RUN TEE

MALE

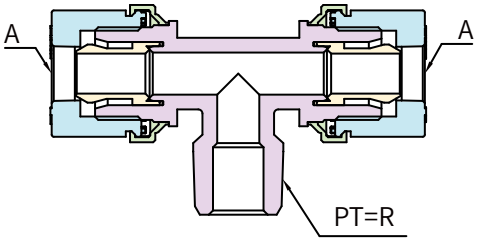
MALE CONNECTOR



MALE ELBOW



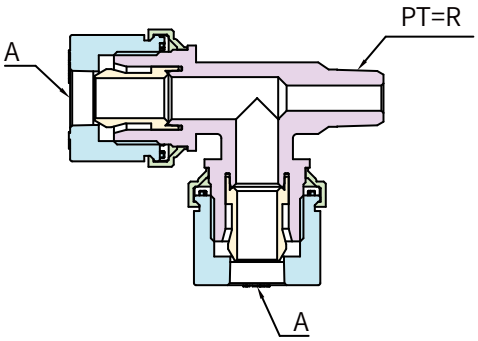
MALE TEE



IMC - 12i - R38 - M1

- M1 : Mega Lock Type (사출 射出)
  P1 : Small Size - 1/8" , 3mm , 4mm (사출 射出)
- Size : R=PT
  N=NPT
- Tube Size : A (i=inch/m=mm)
- IMC : Innodis Male Connector
  IME : Innodis Male Elbow
  IMT : Innodis Male Tee

MALE RUN TEE

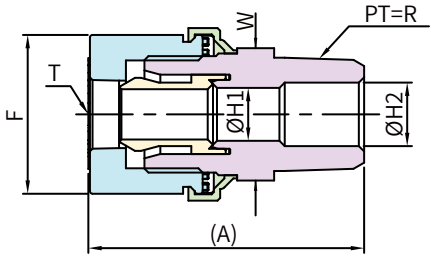


IMRT - 12i - 12i - R38 - M1

- M1 : Mega Lock Type (사출 射出)
  P1 : Small Size - 1/8" , 3mm , 4mm (사출 射出)
- Size : R=PT
  N=NPT
- Tube Size : A (i=inch/m=mm)
- IMRT : Innodis Male Run Tee

IMC

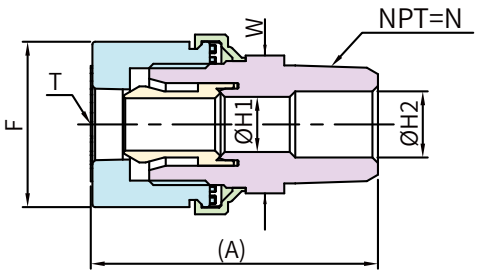
MALE CONNECTOR



PART No.	Tube Size	Thread Size	(A)	ØH1	ØH2	F	W
metric connection (R=PT)							Dimension : mm
IMC - 3m - R18 - P1	3 x 2	R 1/8	28	3	3	12.7	12
IMC - 4m - R18 - P1	4 x 3	〃	〃	〃	〃	〃	〃
IMC - 6m - R18 - M1	6 x 4	〃	34.9	4	4	17	16
IMC - 6m - R14 - M1	〃	R 1/4	38.8	〃	6	〃	〃
IMC - 6m - R38 - M1	〃	R 3/8	38.9	〃	10	〃	〃
IMC - 6m - R12 - M1	〃	R 1/2	44.9	〃	12	〃	21
IMC - 8m - R18 - M1	8 x 6	R 1/8	36.7	6	4	20	18
IMC - 8m - R14 - M1	〃	R 1/4	40.7	〃	6	〃	〃
IMC - 8m - R38 - M1	〃	R 3/8	〃	〃	10	〃	〃
IMC - 10m - R18 - M1	10 x 8	R 1/8	39.5	8	4	25	21
IMC - 10m - R14 - M1	〃	R 1/4	43.5	〃	6	〃	〃
IMC - 10m - R38 - M1	〃	R 3/8	〃	〃	10	〃	〃
IMC - 10m - R12 - M1	〃	R 1/2	47.5	〃	12	〃	〃
IMC - 10m - R34 - M1	〃	R 3/4	49.5	〃	16	〃	25
IMC - 12m - R14 - M1	12 x 10	R 1/4	48.2	10	6	30	〃
IMC - 12m - R38 - M1	〃	R 3/8	〃	〃	10	〃	〃
IMC - 12m - R12 - M1	〃	R 1/2	52.2	〃	12	〃	〃
IMC - 12m - R34 - M1	〃	R 3/4	54.2	〃	16	〃	〃
IMC - 19m - R14 - M1	19 x 15.8	R 1/4	58.4	16	6	40	34
IMC - 19m - R38 - M1	〃	R 3/8	〃	〃	10	〃	〃
IMC - 19m - R12 - M1	〃	R 1/2	62.4	〃	12	〃	〃
IMC - 19m - R34 - M1	〃	R 3/4	64.3	〃	16	〃	〃
IMC - 19m - R1 - M1	〃	R 1	67.4	〃	22	〃	〃
IMC - 25m - R12 - M1	25 x 22	R 1/2	73.1	22	12	50.5	43
IMC - 25m - R34 - M1	〃	R 3/4	75.1	〃	16	〃	〃
IMC - 25m - R1 - M1	〃	R 1	78.1	〃	22	〃	〃
Inch connection (R=PT)							Dimension : mm
IMC - 18i - R18 - P1	1/8" x 0.086"	R 1/8	28	3	3	12.7	12
IMC - 14i - R18 - M1	1/4" x 5/32"	〃	34.9	4	4	17	16
IMC - 14i - R14 - M1	〃	R 1/4	38.8	〃	6	〃	〃
IMC - 14i - R38 - M1	〃	R 3/8	38.9	〃	10	〃	〃
IMC - 14i - R12 - M1	〃	R 1/2	44.9	〃	12	〃	21
IMC - 38i - R18 - M1	3/8" x 1/4"	R 1/8	39.5	8	4	25	21
IMC - 38i - R14 - M1	〃	R 1/4	43.5	〃	6	〃	〃
IMC - 38i - R38 - M1	〃	R 3/8	〃	〃	10	〃	〃
IMC - 38i - R12 - M1	〃	R 1/2	47.5	〃	12	〃	〃
IMC - 38i - R34 - M1	〃	R 3/4	49.5	〃	16	〃	25
IMC - 12i - R14 - M1	1/2" x 3/8"	R 1/4	48.2	10	6	30	〃
IMC - 12i - R38 - M1	〃	R 3/8	〃	〃	10	〃	〃
IMC - 12i - R12 - M1	〃	R 1/2	52.2	〃	12	〃	〃
IMC - 12i - R34 - M1	〃	R 3/4	54.2	〃	16	〃	〃
IMC - 34i - R14 - M1	3/4" x 5/8"	R 1/4	58.4	16	6	40	34
IMC - 34i - R38 - M1	〃	R 3/8	〃	〃	10	〃	〃
IMC - 34i - R12 - M1	〃	R 1/2	62.4	〃	12	〃	〃
IMC - 34i - R34 - M1	〃	R 3/4	64.3	〃	16	〃	〃
IMC - 34i - R1 - M1	〃	R 1	67.4	〃	22	〃	〃
IMC - 1i - R12 - M1	1" x 7/8"	R 1/2	73.1	22	12	50.5	43
IMC - 1i - R34 - M1	〃	R 3/4	75.1	〃	16	〃	〃
IMC - 1i - R1 - M1	〃	R 1	78.1	〃	22	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다 PART NO. 以外的尺寸 请咨询营业部

IMC
MALE CONNECTOR

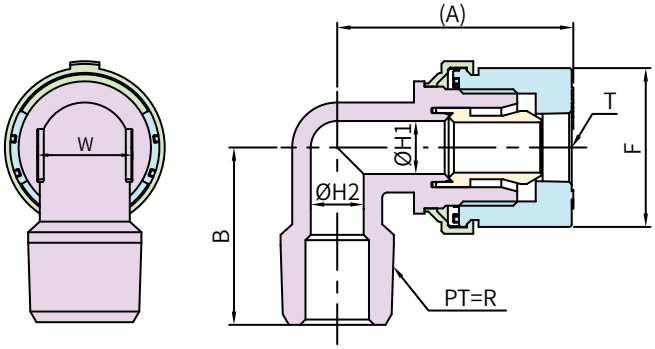


PART No.	Tube Size	Thread Size	(A)	ØH1	ØH2	F	W
metric connection (R=PT)							Dimension : mm
IMC - 3m -N18 - P1	3 x 2	NPT 1/8	28	3	3	12.7	12
IMC - 4m - N18 - P1	4 x 3	〃	〃	〃	〃	〃	〃
IMC - 6m - N14 - M1	6 x 4	NPT 1/4	38.8	4	6	17	16
IMC - 8m - N38 - M1	8 x 6	NPT 3/8	〃	〃	10	〃	〃
IMC - 10m - N14 - M1	10 x 8	NPT 1/4	43.5	8	6	25	21
IMC - 10m - N38 - M1	〃	NPT 3/8	〃	〃	10	〃	〃
IMC - 12m - N38 - M1	12 x 10	NPT 3/8	48.2	10	10	30	25
IMC - 12m - N12 - M1	〃	NPT 1/2	52.2	〃	12	〃	〃
IMC - 19m - N12 - M1	19 x 15.8	NPT 1/2	62.4	16	12	40	34
IMC - 19m - N34 - M1	〃	NPT 3/4	64.3	〃	16	〃	〃
IMC - 25m - N34 - M1	25 x 22	NPT 3/4	75.1	22	16	50.5	43
IMC - 25m - N1 - M1	〃	NPT 1	78.1	〃	22	〃	〃
metric connection (R=PT)							Dimension : mm
IMC - 18i - N18 - P1	1/8" x 0.086"	NPT 1/8	28	3	3	12.7	12
IMC - 14i - N14 - M1	1/4" x 5/32"	NPT 1/4	38.8	4	6	17	16
IMC - 38i - N14 - M1	3/8" x 1/4"	NPT 1/4	43.5	8	6	25	21
IMC - 38i - N38 - M1	〃	NPT 3/8	〃	〃	10	〃	〃
IMC - 12i - N38 - M1	1/2" x 3/8"	NPT 3/8	48.2	10	10	30	25
IMC - 12i - N12 - M1	〃	NPT 1/2	52.2	〃	12	〃	〃
IMC - 34i - N12 - M1	3/4" x 5/8"	NPT 1/2	62.4	16	12	40	34
IMC - 34i - N34 - M1	〃	NPT 3/4	64.3	〃	16	〃	〃
IMC - 1i - N34 - M1	1" x 7/8"	NPT 3/4	75.1	22	16	50.5	43
IMC - 1i - N1 - M1	〃	NPT 1	78.1	〃	22	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IME

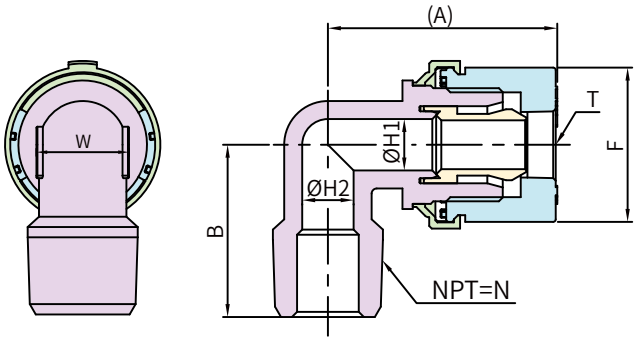
MALE ELBOW



PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (R=PT)								Dimension : mm
IME - 3m - R18 - P1	3 x 2	R 1/8	24.1	19.2	3	3	12.7	7
IME - 4m - R18 - P1	4 x 3	〃	〃	〃	〃	〃	〃	〃
IME - 6m - R18 -M1	6 x 4	〃	30.4	20.5	4	4	17	9.6
IME - 6m - R14 - M1	〃	R 1/4	30.3	25.5	〃	〃	〃	〃
IME - 6m - R38 - M1	〃	R 3/8	30.4	25	〃	〃	〃	〃
IME - 6m - R12 - M1	〃	R 1/2	33.4	31.5	〃	8	〃	14.8
IME - 8m - R14 - M1	8 x 6	R 1/4	33.7	26.5	6	6	20	13
IME - 8m - R38 - M1	〃	R 3/8	〃	〃	〃	〃	〃	〃
IME - 10m - R18 - M1	10 x 8	R 1/8	37.7	23.2	8	4	25	14.8
IME - 10m - R14 - M1	〃	R 1/4	〃	27.7	〃	6	〃	〃
IME - 10m - R38 - M1	〃	R 3/8	〃	〃	〃	8	〃	〃
IME - 10m - R12 - M1	〃	R 1/2	〃	31.2	〃	〃	〃	〃
IME - 12m - R14 - M1	12 x 10	R 1/4	44.2	29.5	10	6	30	18
IME - 12m - R38 - M1	〃	R 3/8	〃	〃	〃	10	〃	〃
IME - 12m - R12 - M1	〃	R 1/2	〃	33	〃	〃	〃	〃
IME - 12m - R34 - M1	〃	R 3/4	〃	35	〃	〃	〃	〃
IME - 19m - R38 - M1	19 x 15.8	R 3/8	56.4	34	16	10	40	27
IME - 19m - R12 - M1	〃	R 1/2	〃	37.5	〃	12	〃	〃
IME - 19m - R34 - M1	〃	R 3/4	〃	39.5	〃	16	〃	〃
IME - 19m - R1 - M1	〃	R 1	〃	〃	〃	〃	〃	〃
IME - 25m - R38 - M1	25 x 22	R 3/8	67.7	38.3	22	10	50.5	34
IME - 25m - R12 - M1	〃	R 1/2	〃	41.8	〃	12	〃	〃
IME - 25m - R34 - M1	〃	R 3/4	〃	43.8	〃	16	〃	〃
IME - 25m - R1 - M1	〃	R 1	〃	47.8	〃	22	〃	〃
Inch connection (R=PT)								Dimension : mm
IME - 18i - R18 - P1	1/8" x 0.086"	R 1/8	24.1	19.2	3	3	12.7	7
IME - 14i - R18 - M1	1/4" x 5/32"	〃	30.4	20.5	4	4	17	9.6
IME - 14i - R14 - M1	〃	R 1/4	30.3	25.5	〃	〃	〃	〃
IME - 14i - R38 - M1	〃	R 3/8	30.4	25	〃	〃	〃	〃
IME - 14i - R12 - M1	〃	R 1/2	33.4	31.5	〃	8	〃	14.8
IME - 38i - R18 - M1	3/8" x 1/4"	R 1/8	37.7	23.2	8	4	25	〃
IME - 38i - R14 - M1	〃	R 1/4	〃	27.7	〃	6	〃	〃
IME - 38i - R38 - M1	〃	R 3/8	〃	〃	〃	8	〃	〃
IME - 38i - R12 - M1	〃	R 1/2	〃	31.2	〃	〃	〃	〃
IME - 12i - R14 - M1	1/2" x 3/8"	R 1/4	44.2	29.5	10	6	30	18
IME - 12i - R38 - M1	〃	R 3/8	〃	〃	〃	10	〃	〃
IME - 12i - R12 - M1	〃	R 1/2	〃	33	〃	〃	〃	〃
IME - 12i - R34 - M1	〃	R 3/4	〃	35	〃	〃	〃	〃
IME - 34i - R38 - M1	3/4" x 5/8"	R 3/8	56.4	34	16	10	40	27
IME - 34i - R12 - M1	〃	R 1/2	〃	37.5	〃	12	〃	〃
IME - 34i - R34 - M1	〃	R 3/4	〃	39.5	〃	16	〃	〃
IME - 34i - R1 - M1	〃	R 1	〃	〃	〃	〃	〃	〃
IME - 1i - R38 - M1	1" x 7/8"	R 3/8	67.7	38.3	22	10	50.5	34
IME - 1i - R12 - M1	〃	R 1/2	〃	41.8	〃	12	〃	〃
IME - 1i - R34 - M1	〃	R 3/4	〃	43.8	〃	16	〃	〃
IME - 1i - R1 - M1	〃	R 1	〃	47.8	〃	22	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IME
MALE ELBOW



PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (N=NPT)								Dimension : mm
IME - 3m - N18 - P1	3 x 2	NPT 1/8	24.1	19.2	3	3	12.7	7
IME - 4m - N18 - P1	4 x 3	〃	〃	〃	〃	〃	〃	〃
IME - 6m - N14 - M1	6 x 4	NPT 1/4	30.3	25.5	4	4	17	9.6
IME - 8m - N38 - M1	8 x 6	NPT 3/8	33.7	26.5	6	6	20	13
IME - 10m - N14 - M1	10 x 8	NPT 1/4	37.7	27.7	8	6	25	14.8
IME - 10m - N38 - M1	〃	NPT 3/8	〃	〃	〃	8	〃	〃
IME - 12m - N38 - M1	12 x 10	NPT 3/8	44.2	29.9	10	10	30	18
IME - 12m - N12 - M1	〃	NPT 1/2	〃	33	〃	〃	〃	〃
IME - 19m - N12 - M1	19 x 15.8	NPT 1/2	56.4	37.5	16	12	40	27
IME - 19m - N34 - M1	〃	NPT 3/4	〃	39.5	〃	16	〃	〃
IME - 25m - N34 - M1	25 x 22	NPT 3/4	67.7	43.8	22	16	50.5	34
IME - 25m - N1 - M1	〃	NPT 1	〃	47.8	〃	22	〃	〃
Inch connection (N=NPT)								Dimension : mm
IME - 18i - N18 - P1	1/8" x 0.086"	NPT 1/8	24.1	19.2	3	3	12.7	7
IME - 14i - N14 - M1	1/4" x 5/32"	NPT 1/4	30.3	25.5	4	4	17	9.6
IME - 38i - N14 - M1	3/8" x 1/4"	NPT 1/4	37.7	27.7	8	6	25	14.8
IME - 38i - N38 - M1	〃	NPT 3/8	〃	〃	〃	8	〃	〃
IME - 12i - N38 - M1	1/2" x 3/8"	NPT 3/8	44.2	29.5	10	10	30	18
IME - 12i - N12 - M1	〃	NPT 1/2	〃	33	〃	〃	〃	〃
IME - 34i - N12 - M1	3/4" x 5/8"	NPT 1/2	56.4	37.5	16	12	40	27
IME - 34i - N34 - M1	〃	NPT 3/4	〃	39.5	〃	16	〃	〃
IME - 1i - N34 - M1	1" x 7/8"	NPT 3/4	67.7	43.8	22	16	50.5	34
IME - 1i - N1 - M1	〃	NPT 1	〃	47.8	〃	22	〃	〃

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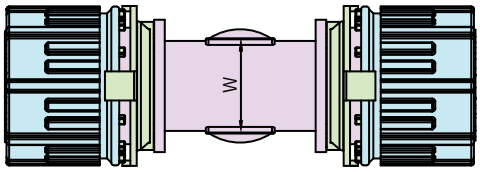
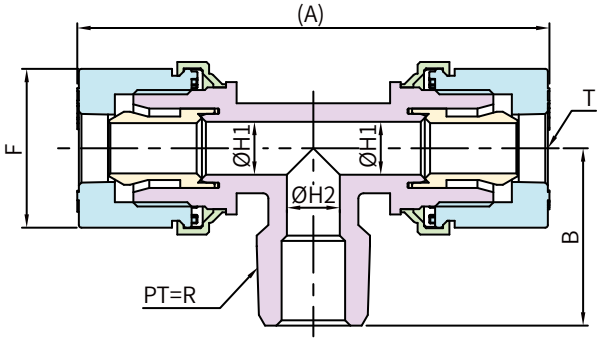
IMT

MALE TEE

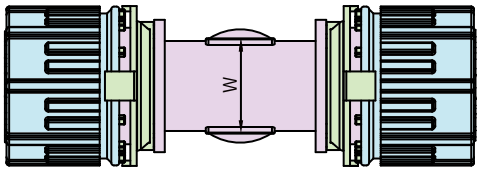


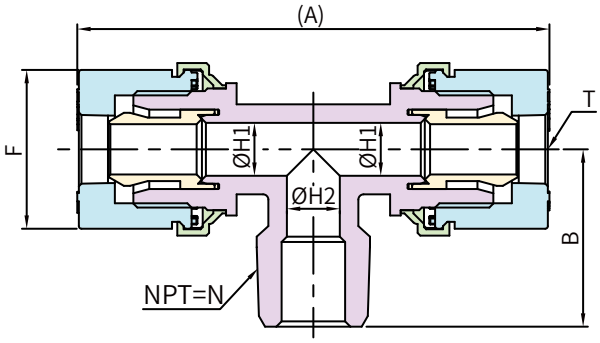


PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (R=PT)								Dimension : mm
IMT - 3m - R18 - P1	3 x 2	R 1/8	48.1	19.2	3	3	12.7	7
IMT - 4m - R18 - P1	4 x 3	〃	〃	〃	〃	〃	〃	〃
IMT - 6m - R18 - M1	6 x 4	〃	60.8	20.5	4	4	17	9.6
IMT - 6m - R14 - M1	〃	R 1/4	〃	25.5	〃	〃	〃	〃
IMT - 6m - R38 - M1	〃	R 3/8	〃	25	〃	〃	〃	〃
IMT - 8m - R14 - M1	8 x 6	R 1/4	67.4	26.5	6	6	20	13
IMT - 8m - R38 - M1	〃	R 3/8	〃	〃	〃	〃	〃	〃
IMT - 10m - R14 - M1	10 x 8	R 1/4	75.8	27.8	8	8	25	14.8
IMT - 10m - R38 - M1	〃	R 3/8	〃	〃	〃	〃	〃	〃
IMT - 10m - R12 - M1	〃	R 1/2	〃	31.3	〃	〃	〃	〃
IMT - 12m - R14 - M1	12 x 10	R 1/4	88.9	29.5	10	6	30	18
IMT - 12m - R38 - M1	〃	R 3/8	〃	〃	〃	10	〃	〃
IMT - 12m - R12 - M1	〃	R 1/2	〃	33	〃	〃	〃	〃
IMT - 12m - R34 - M1	〃	R 3/4	〃	35	〃	〃	〃	〃
IMT - 19m - R38 - M1	19 x 15.8	R 3/8	112.8	34	16	10	40	27
IMT - 19m - R12 - M1	〃	R 1/2	〃	37.5	〃	12	〃	〃
IMT - 19m - R34 - M1	〃	R 34	〃	39.5	〃	16	〃	〃
IMT - 19m - R1 - M1	〃	R 1	〃	〃	〃	〃	〃	〃
IMT - 25m - R12 - M1	25 x 22	R 1/2	135.8	42	22	12	50.5	34
IMT - 25m - R34 - M1	〃	R 3/4	〃	44	〃	16	〃	〃
IMT - 25m - R1 - M1	〃	R 1	〃	48	〃	22	〃	〃
Inch connection (R=PT)								Dimension : mm
IMT - 18i - R18 - P1	1/8" x 0.086"	R 1/8	48.1	19.2	3	3	12.7	7
IMT - 14i - R18 - M1	1/4" x 5/32"	〃	60.8	20.5	4	4	17	9.6
IMT - 14i - R14 - M1	〃	R 1/4	〃	25.5	〃	〃	〃	〃
IMT - 14i - R38 - M1	〃	R 3/8	〃	25	〃	〃	〃	〃
IMT - 38i - R14 - M1	3/8" x 1/4"	R 1/4	75.8	27.8	8	8	25	14.8
IMT - 38i - R38 - M1	〃	R 3/8	〃	〃	〃	〃	〃	〃
IMT - 38i - R12 - M1	〃	R 1/2	〃	31.3	〃	〃	〃	〃
IMT - 12i - R14 - M1	1/2" x 3/8"	R 1/4	88.9	29.5	10	6	30	18
IMT - 12i - R38 - M1	〃	R 3/8	〃	〃	〃	10	〃	〃
IMT - 12i - R12 - M1	〃	R 1/2	〃	33	〃	〃	〃	〃
IMT - 12i - R34 - M1	〃	R 3/4	〃	35	〃	〃	〃	〃
IMT - 34i - R38 - M1	3/4" x 5/8"	R 3/8	112.8	34	16	10	40	27
IMT - 34i - R12 - M1	〃	R 1/2	〃	37.5	〃	12	〃	〃
IMT - 34i - R34 - M1	〃	R 3/4	〃	39.5	〃	16	〃	〃
IMT - 34i - R1 - M1	〃	R 1	〃	〃	〃	〃	〃	〃
IMT - 1i - R12 - M1	1" x 7/8"	R 1/2	135.8	42	22	12	50.5	34
IMT - 1i - R34 - M1	〃	R 3/4	〃	44	〃	16	〃	〃
IMT - 1i - R1 - M1	〃	R 1	〃	48	〃	22	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다 PART NO. 以外的尺寸 请咨询营业部

IMT
MALE TEE



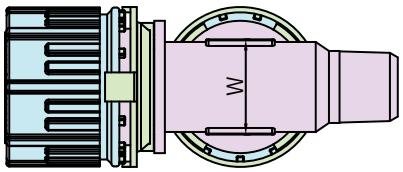


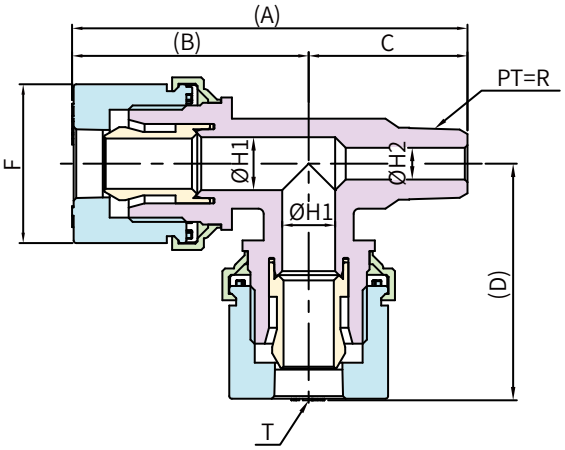
PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (N=NPT)								Dimension : mm
IMT - 3m - N18 - P1	3 x 2	NPT 1/8	48.1	19.2	3	3	12.7	7
IMT - 4m - N18 - P1	4 x 3	〃	〃	〃	〃	〃	〃	〃
IMT - 6m - N14 - M1	6 x 4	NPT 1/4	60.8	25.5	4	4	17	9.6
IMT - 8m - N38 - M1	8 x 6	NPT 3/8	67.4	26.5	6	6	20	13
IMT - 10m - N14 - M1	10 x 8	NPT 1/4	75.8	27.8	8	8	25	14.8
IMT - 10m - N38 - M1	〃	NPT 3/8	〃	〃	〃	〃	〃	〃
IMT - 12m - N38 - M1	12 x 10	NPT 3/8	88.9	29.5	10	10	30	18
IMT - 12m - N12 - M1	〃	NPT 1/2	〃	33	〃	〃	〃	〃
IMT - 19m - N12 - M1	19 x 15.8	NPT 1/2	112.8	37.5	16	12	40	27
IMT - 19m - N34 - M1	〃	NPT 34	〃	39.5	〃	16	〃	〃
IMT - 25m - N34 - M1	25 x 22	NPT 3/4	135.8	44	22	16	50.5	34
IMT - 25m - N1 - M1	〃	NPT 1	〃	48	〃	22	〃	〃
Inch connection (N=NPT)								Dimension : mm
IMT - 18i - N18 - P1	1/8" x 0.086"	NPT 1/8	48.1	19.2	3	3	12.7	7
IMT - 14i - N14 - M1	1/4" x 5/32"	NPT 1/4	60.8	25.5	4	4	17	9.6
IMT - 38i - N14 - M1	3/8" x 1/4"	NPT 1/4	75.8	27.8	8	8	25	14.8
IMT - 38i - N38 - M1	〃	NPT 3/8	〃	〃	〃	〃	〃	〃
IMT - 12i - N38 - M1	1/2" x 3/8"	NPT 3/8	88.9	29.5	10	10	30	18
IMT - 12i - N12 - M1	〃	NPT 1/2	〃	33	〃	〃	〃	〃
IMT - 34i - N12 - M1	3/4" x 5/8"	NPT 1/2	112.8	37.5	16	12	40	27
IMT - 34i - N34 - M1	〃	NPT 3/4	〃	39.5	〃	16	〃	〃
IMT - 1i - N34 - M1	1" x 7/8"	NPT 3/4	135.8	44	22	16	50.5	34
IMT - 1i - N1 - M1	〃	NPT 1	〃	48	〃	22	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IMRT

MALE RUN TEE





PART No.	Tube Size	Thread Size	(A)	(B)	C	(D)	ØH1	ØH2	F	W
metric connection (R=PT)										Dimension : mm
IMRT - 6m - 6m - R18 - M1	6 x 4	R 1/8	50.9	30.4	20.5	30.4	4	4	17	9.6
IMRT - 6m - 6m - R14 -M1	〃	R 1/4	55.9	〃	25.5	〃	〃	〃	〃	〃
IMRT - 6m - 6m - R38 - M1	〃	R 3/8	55.4	〃	25	〃	〃	〃	〃	〃
IMRT - 8m - 8m - R14 - M1	8 x 6	R 1/4	60.2	33.7	26.5	33.7	6	6	20	13
IMRT - 8m - 8m - R38 - M1	〃	R 3/8	〃	〃	〃	〃	〃	〃	〃	〃
IMRT - 10m - 10m - R14 - M1	10 x 8	R 1/4	65.8	37.9	27.9	37.8	8	6	25	14.8
IMRT - 10m - 10m - R38 - M1	〃	R 3/8	〃	〃	〃	〃	〃	8	〃	〃
IMRT - 10m - 10m - R12 - M1	〃	R 1/2	69.3	〃	31.4	〃	〃	〃	〃	〃
IMRT - 12m - 12m - R14 - M1	12 x 10	R 1/4	74.2	44.45	29.75	44.2	10	6	30	18
IMRT - 12m - 12m - R38 - M1	〃	R 3/8	〃	〃	〃	〃	〃	10	〃	〃
IMRT - 12m - 12m - R12 - M1	〃	R 1/2	77.7	〃	33.25	〃	〃	〃	〃	〃
IMRT - 12m - 12m - R34 - M1	〃	R 3/4	79.7	〃	35.25	〃	〃	〃	〃	〃
IMRT - 19m - 19m - R38 - M1	19 x 15.8	R 3/8	90.4	56.4	34	56.4	16	10	40	27
IMRT - 19m - 19m - R12 - M1	〃	R 1/2	93.9	〃	37.5	〃	〃	12	〃	〃
IMRT - 19m - 19m - R34 - M1	〃	R 3/4	95.9	〃	39.5	〃	〃	16	〃	〃
IMRT - 25m - 25m - R34 - M1	25 x 22	〃	111.9	67.9	44	67.9	22	〃	50.5	34
IMRT - 25m - 25m - R1 - M1	〃	R 1	115.9	〃	48	〃	〃	22	〃	〃
Inch connection (R=PT)										Dimension : mm
IMRT - 14i - 14i - R18 - M1	1/4" x 5/32"	R 1/8	50.9	30.4	20.5	30.4	4	4	17	9.6
IMRT - 14i - 14i - R14 - M1	〃	R 1/4	55.9	〃	25.5	〃	〃	〃	〃	〃
IMRT - 14i - 14i - R38 - M1	〃	R 3/8	55.4	〃	25	〃	〃	〃	〃	〃
IMRT - 38i - 38i - R14 - M1	3/8" x 1/4"	R 1/4	65.8	37.9	27.9	37.8	8	6	25	14.8
IMRT - 38i - 38i - R38 - M1	〃	R 3/8	〃	〃	〃	〃	〃	8	〃	〃
IMRT - 38i - 38i - R12 - M1	〃	R 1/2	69.3	〃	31.4	〃	〃	〃	〃	〃
IMRT - 12i - 12i - R14 - M1	1/2" x 3/8"	R 1/4	74.2	44.45	29.75	44.2	10	6	30	18
IMRT - 12i - 12i - R38 - M1	〃	R 3/8	〃	〃	〃	〃	〃	10	〃	〃
IMRT - 12i - 12i - R12 - M1	〃	R 1/2	77.7	〃	33.25	〃	〃	〃	〃	〃
IMRT - 12i - 12i - R34 - M1	〃	R 3/4	79.7	〃	35.25	〃	〃	〃	〃	〃
IMRT - 34i - 34i - R38 - M1	3/4" x 5/8"	R 3/8	90.4	56.4	34	56.4	16	10	40	27
IMRT - 34i - 34i - R12 - M1	〃	R 1/2	93.9	〃	37.5	〃	〃	12	〃	〃
IMRT - 34i - 34i - R34 - M1	〃	R 3/4	95.9	〃	39.5	〃	〃	16	〃	〃
IMRT - 1i - 1i - R34 - M1	1" x 7/8"	〃	111.9	67.9	44	67.9	22	〃	50.5	34
IMRT - 1i - 1i - R1 - M1	〃	R 1	115.9	〃	48	〃	〃	22	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

02

Tube to Female pipe thread

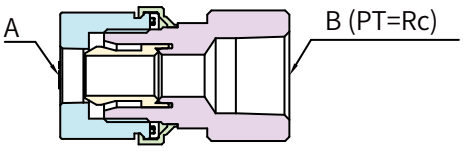
FEMALE CONNECTOR

FEMALE ELBOW

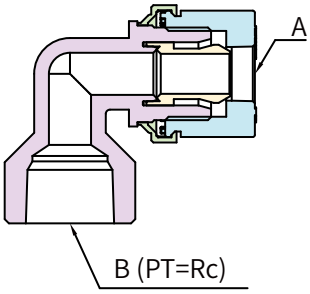
FEMALE TEE

FEMALE

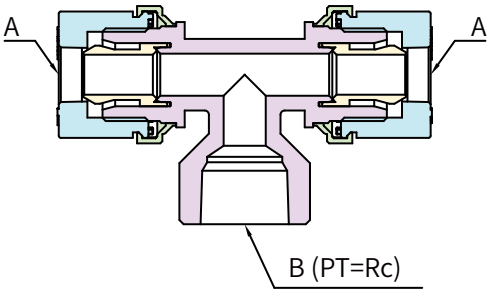
FEMALE CONNECTOR



FEMALE ELBOW



FEMALE TEE

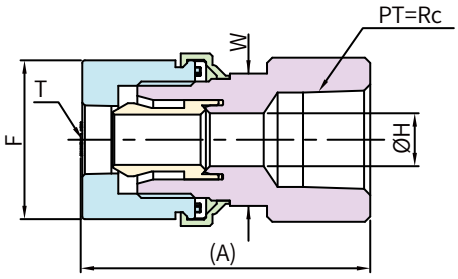


IFC - 12i - R38 - M1

- M1 : Mega Lock Type (사출 射出)
- Size : B (R=PT)
- Tube Size : A (i=inch/m=mm)
- IFC : Innodis Female Connector
  IFE : Innodis Female Elbow
  IFT : Innodis Female Tee

IFC

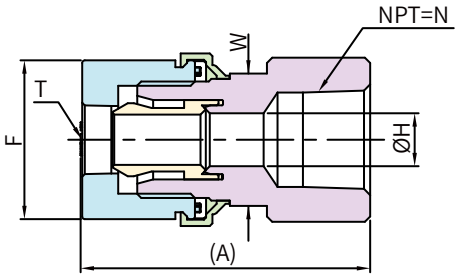
FEMALE CONNECTOR



PART No.	Tube Size	Thread Size	(A)	ØH	F	W
metric connection (Rc=PT)						Dimension : mm
IFC - 6m - R18 - M1	6 x 4	Rc 1/8	34.9	4	17	16
IFC - 6m - R14 - M1	〃	Rc 1/4	41.9	〃	〃	〃
IFC - 8m - R18 - M1	8 x 6	Rc 1/8	39.2	6	20	18
IFC - 8m - R14 - M1	〃	Rc 1/4	43.2	〃	〃	〃
IFC - 8m - R38 - M1	〃	Rc 3/8	45.2	〃	〃	〃
IFC - 10m - R18 - M1	10 x 8	Rc 1/8	42	8	25	21
IFC - 10m - R14 - M1	〃	Rc 1/4	46	〃	〃	〃
IFC - 10m - R38 - M1	〃	Rc 3/8	48	〃	〃	〃
IFC - 12m - R18 - M1	12 x 10	Rc 1/8	46.7	10	30	25
IFC - 12m - R14 - M1	〃	Rc 1/4	50.7	〃	〃	〃
IFC - 12m - R38 - M1	〃	Rc 3/8	52.7	〃	〃	〃
IFC - 12m - R12 - M1	〃	Rc 1/2	54.7	〃	〃	〃
IFC - 19m - R14 - M1	19 x 15.8	Rc 1/4	60.9	16	40	34
IFC - 19m - R38 - M1	〃	Rc 3/8	62.9	〃	〃	〃
IFC - 19m - R12 - M1	〃	Rc 1/2	64.9	〃	〃	〃
IFC - 19m - R34 - M1	〃	Rc 3/4	69.4	〃	〃	〃
IFC - 25m - R34 - M1	25 x 22	〃	80.1	22	50.5	43
IFC - 25m - R1 - M1	〃	Rc 1	84.1	〃	〃	〃
Inch connection (Rc=PT)						Dimension : mm
IFC - 14i - R18 - M1	1/4" x 5/32"	Rc 1/8	34.9	4	17	16
IFC - 14i - R14 - M1	〃	Rc 1/4	41.9	〃	〃	〃
IFC - 38i - R18 - M1	3/8" x 1/4"	Rc 1/8	42	8	25	21
IFC - 38i - R14 - M1	〃	Rc 1/4	46	〃	〃	〃
IFC - 38i - R38 - M1	〃	Rc 3/8	48	〃	〃	〃
IFC - 12i - R18 - M1	1/2" x 3/8"	Rc 1/8	46.7	10	30	25
IFC - 12i - R14 - M1	〃	Rc 1/4	50.7	〃	〃	〃
IFC - 12i - R38 - M1	〃	Rc 3/8	52.7	〃	〃	〃
IFC - 12i - R12 - M1	〃	Rc 1/2	54.7	〃	〃	〃
IFC - 34i - R14 - M1	3/4" x 5/8"	Rc 1/4	60.9	16	40	34
IFC - 34i - R38 - M1	〃	Rc 3/8	62.9	〃	〃	〃
IFC - 34i - R12 - M1	〃	Rc 1/2	64.9	〃	〃	〃
IFC - 34i - R34 - M1	〃	Rc 3/4	69.4	〃	〃	〃
IFC - 1i - R34 - M1	1" x 7/8"	〃	80.1	22	50.5	43
IFC - 1i - R1 - M1	〃	Rc 1	84.1	〃	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IFC
FEMALE CONNECTOR



PART No.	Tube Size	Thread Size	(A)	ØH	F	W
metric connection (N=NPT)						Dimension : mm
IFC - 6m - N18 - M1	6 x 4	NPT 1/8	34.9	4	17	16
IFC - 6m - N14 - M1	〃	NPT 1/4	41.9	〃	〃	〃
IFC - 8m - N18 - M1	8 x 6	NPT 1/8	39.2	6	20	18
IFC - 8m - N14 - M1	〃	NPT 1/4	43.2	〃	〃	〃
IFC - 8m - N38 - M1	〃	NPT 3/8	45.2	〃	〃	〃
IFC - 10m - N18 - M1	10 x 8	NPT 1/8	42	8	25	21
IFC - 10m - N14 - M1	〃	NPT 1/4	46	〃	〃	〃
IFC - 10m - N38 - M1	〃	NPT 3/8	48	〃	〃	〃
IFC - 12m - N18 - M1	12 x 10	NPT 1/8	46.7	10	30	25
IFC - 12m - N14 - M1	〃	NPT 1/4	50.7	〃	〃	〃
IFC - 12m - N38 - M1	〃	NPT 3/8	52.7	〃	〃	〃
IFC - 12m - N12 - M1	〃	NPT 1/2	54.7	〃	〃	〃
IFC - 19m - N14 - M1	19 x 15.8	NPT 1/4	60.9	16	40	34
IFC - 19m - N38 - M1	〃	NPT 3/8	62.9	〃	〃	〃
IFC - 19m - N12 - M1	〃	NPT 1/2	64.9	〃	〃	〃
IFC - 19m - N34 - M1	〃	NPT 3/4	69.4	〃	〃	〃
IFC - 25m - N34 - M1	25 x 22	NPT 3/4	80.1	22	50.5	43
IFC - 25m - N1 - M1	〃	NPT 1	84.1	〃	〃	〃
Inch connection (N=NPT)						Dimension : mm
IFC - 14i - N18 - M1	1/4" x 5/32"	NPT 1/8	34.9	4	17	16
IFC - 14i - N14 - M1	〃	NPT 1/4	41.9	〃	〃	〃
IFC - 38i - N18 - M1	3/8" x 1/4"	NPT 1/8	42	8	25	21
IFC - 38i - N14 - M1	〃	NPT 1/4	46	〃	〃	〃
IFC - 38i - N38 - M1	〃	NPT 3/8	48	〃	〃	〃
IFC - 12i - N18 - M1	1/2" x 3/8"	NPT 1/8	46.7	10	30	25
IFC - 12i - N14 - M1	〃	NPT 1/4	50.7	〃	〃	〃
IFC - 12i - N38 - M1	〃	NPT 3/8	52.7	〃	〃	〃
IFC - 12i - N12 - M1	〃	NPT 1/2	54.7	〃	〃	〃
IFC - 34i - N14 - M1	3/4" x 5/8"	NPT 1/4	60.9	16	40	34
IFC - 34i - N38 - M1	〃	NPT 3/8	62.9	〃	〃	〃
IFC - 34i - N12 - M1	〃	NPT 1/2	64.9	〃	〃	〃
IFC - 34i - N34 - M1	〃	NPT 3/4	69.4	〃	〃	〃
IFC - 1i - N34 - M1	1" x 7/8"	NPT 3/4	80.1	22	50.5	43
IFC - 1i - N1 - M1	〃	NPT 1	84.1	〃	〃	〃

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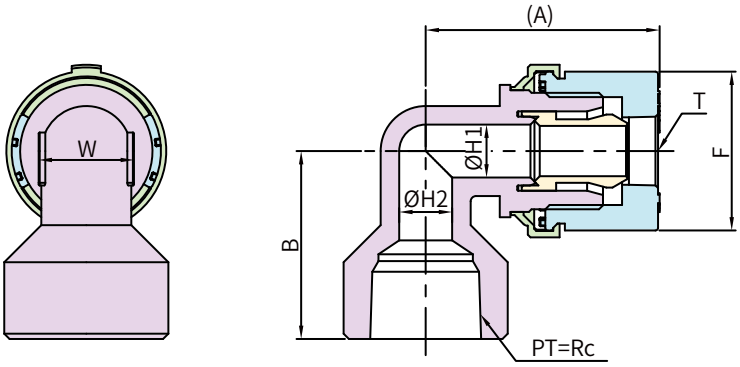
IFE

FEMALE ELBOW

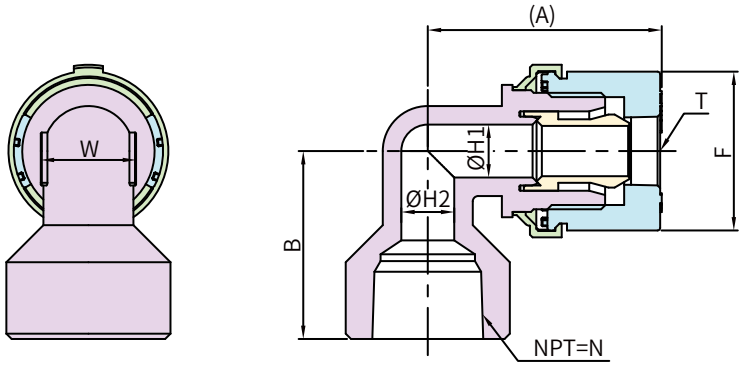


PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (Rc=PT)								Dimension : mm
IFE - 6m - R18 - M1	6 x 4	Rc 1/8	30.4	21.5	4	4	17	9.6
IFE - 6m - R14 - M1	〃	Rc 1/4	〃	25.5	〃	〃	〃	〃
IFE - 8m - R18 - M1	8 x 6	Rc 1/8	33.7	22.5	6	6	20	13
IFE - 8m - R14 - M1	〃	Rc 1/4	〃	26.5	〃	〃	〃	〃
IFE - 8m - R38 - M1	〃	Rc 3/8	〃	28.5	〃	〃	〃	〃
IFE - 10m - R18 - M1	10 x 8	Rc 1/8	37.7	23.7	8	8	25	14.8
IFE - 10m - R14 - M1	〃	Rc 1/4	〃	27.7	〃	〃	〃	〃
IFE - 10m - R38 - M1	〃	Rc 3/8	〃	29.7	〃	〃	〃	〃
IFE - 12m - R18 - M1	12 x 10	Rc 1/8	44.2	25.5	10	8.2	30	18
IFE - 12m - R14 - M1	〃	Rc 1/4	〃	29.5	〃	10	〃	〃
IFE - 12m - R38 - M1	〃	Rc 3/8	〃	31.5	〃	〃	〃	〃
IFE - 12m - R12 - M1	〃	Rc 1/2	〃	35.5	〃	〃	〃	〃
IFE - 19m - R38 - M1	19 x 15.8	Rc 3/8	56.4	36	16	14.3	40	27
IFE - 19m - R12 - M1	〃	Rc 1/2	〃	38	〃	16	〃	〃
IFE - 19m - R34 - M1	〃	Rc 3/4	〃	42.5	〃	〃	〃	〃
IFE - 25m - R12 - M1	25 x 22	Rc 1/2	67.7	42.3	22	17.9	50.5	34
IFE - 25m - R34 - M1	〃	Rc 3/4	〃	46.8	〃	22	〃	〃
IFE - 25m - R1 - M1	〃	Rc 1	〃	50.8	〃	〃	〃	〃
Inch connection (Rc=PT)								Dimension : mm
IFE - 14i - R18 - M1	1/4" x 5/32"	Rc 1/8	30.4	21.5	4	4	17	9.6
IFE - 14i - R14 - M1	〃	Rc 1/4	〃	25.5	〃	〃	〃	〃
IFE - 38i - R18 - M1	3/8" x 1/4"	Rc 1/8	37.7	23.7	8	8	25	14.8
IFE - 38i - R14 - M1	〃	Rc 1/4	〃	27.7	〃	〃	〃	〃
IFE - 38i - R38 - M1	〃	Rc 3/8	〃	29.7	〃	〃	〃	〃
IFE - 12i - R18 - M1	1/2" x 3/8"	Rc 1/8	44.2	25.5	10	8.2	30	18
IFE - 12i - R14 - M1	〃	Rc 1/4	〃	29.5	〃	10	〃	〃
IFE - 12i - R38 - M1	〃	Rc 3/8	〃	31.5	〃	〃	〃	〃
IFE - 12i - R12 - M1	〃	Rc 1/2	〃	35.5	〃	〃	〃	〃
IFE - 34i - R38 - M1	3/4" x 5/8"	Rc 3/8	56.4	36	16	14.3	40	27
IFE - 34i - R12 - M1	〃	Rc 1/2	〃	38	〃	16	〃	〃
IFE - 34i - R34 - M1	〃	Rc 3/4	〃	42.5	〃	〃	〃	〃
IFE - 1i - R12 - M1	1" x 7/8"	Rc 1/2	67.7	42.3	22	17.9	50.5	34
IFE - 1i - R34 - M1	〃	Rc 3/4	〃	46.8	〃	22	〃	〃
IFE - 1i - R1 - M1	〃	Rc 1	〃	50.8	〃	〃	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IFE

FEMALE ELBOW

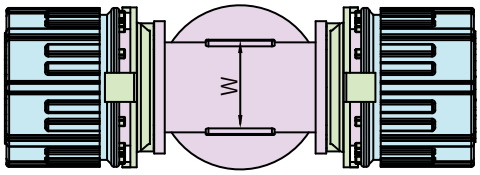


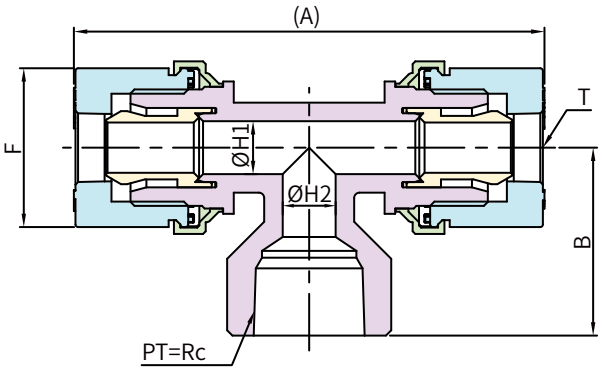
PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (N=NPT)								Dimension : mm
IFE - 6m - N18 - M1	6 x 4	NPT 1/8	30.4	21.5	4	4	17	9.6
IFE - 6m - N14 - M1	〃	NPT 1/4	〃	25.5	〃	〃	〃	〃
IFE - 8m - N18 - M1	8 x 6	NPT 1/8	33.7	22.5	6	6	20	13
IFE - 8m - N14 - M1	〃	NPT 1/4	〃	26.5	〃	〃	〃	〃
IFE - 8m - N38 - M1	〃	NPT 3/8	〃	28.5	〃	〃	〃	〃
IFE - 10m - N18 - M1	10 x 8	NPT 1/8	37.7	23.7	8	8	25	14.8
IFE - 10m - N14 - M1	〃	NPT 1/4	〃	27.7	〃	〃	〃	〃
IFE - 10m - N38 - M1	〃	NPT 3/8	〃	29.7	〃	〃	〃	〃
IFE - 12m - N18 - M1	12 x 10	NPT 1/8	44.2	25.5	10	8.2	30	18
IFE - 12m - N14 - M1	〃	NPT 1/4	〃	29.5	〃	10	〃	〃
IFE - 12m - N38 - M1	〃	NPT 3/8	〃	31.5	〃	〃	〃	〃
IFE - 12m - N12 - M1	〃	NPT 1/2	〃	35.5	〃	〃	〃	〃
IFE - 19m - N38 - M1	19 x 15.8	NPT 3/8	56.4	36	16	14.3	40	27
IFE - 19m - N12 - M1	〃	NPT 1/2	〃	38	〃	16	〃	〃
IFE - 19m - N34 - M1	〃	NPT 3/4	〃	42.5	〃	〃	〃	〃
IFE - 25m - N12 - M1	25 x 22	NPT 1/2	67.7	42.3	22	17.9	50.5	34
IFE - 25m - N34 - M1	〃	NPT 3/4	〃	46.8	〃	22	〃	〃
IFE - 25m - N1 - M1	〃	NPT 1	〃	50.8	〃	〃	〃	〃
Inch connection (N=NPT)								Dimension : mm
IFE - 14i - N18 - M1	1/4" x 5/32"	NPT 1/8	30.4	21.5	4	4	17	9.6
IFE - 14i - N14 - M1	〃	NPT 1/4	〃	25.5	〃	〃	〃	〃
IFE - 38i - N18 - M1	3/8" x 1/4"	NPT 1/8	37.7	23.7	8	8	25	14.8
IFE - 38i - N14 - M1	〃	NPT 1/4	〃	27.7	〃	〃	〃	〃
IFE - 38i - N38 - M1	〃	NPT 3/8	〃	29.7	〃	〃	〃	〃
IFE - 12i - N18 - M1	1/2" x 3/8"	NPT 1/8	44.2	25.5	10	8.2	30	18
IFE - 12i - N14 - M1	〃	NPT 1/4	〃	29.5	〃	10	〃	〃
IFE - 12i - N38 - M1	〃	NPT 3/8	〃	31.5	〃	〃	〃	〃
IFE - 12i - N12 - M1	〃	NPT 1/2	〃	35.5	〃	〃	〃	〃
IFE - 34i - N38 - M1	3/4" x 5/8"	NPT 3/8	56.4	36	16	14.3	40	27
IFE - 34i - N12 - M1	〃	NPT 1/2	〃	38	〃	16	〃	〃
IFE - 34i - N34 - M1	〃	NPT 3/4	〃	42.5	〃	〃	〃	〃
IFE - 1i - N12 - M1	1" x 7/8"	NPT 1/2	67.7	42.3	22	17.9	50.5	34
IFE - 1i - N34 - M1	〃	NPT 3/4	〃	46.8	〃	22	〃	〃
IFE - 1i - N1 - M1	〃	NPT 1	〃	50.8	〃	〃	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IFT

FEMALE TEE



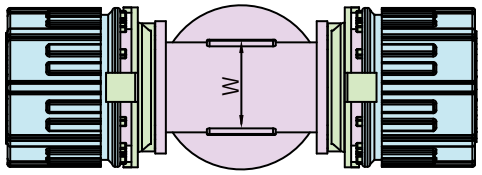


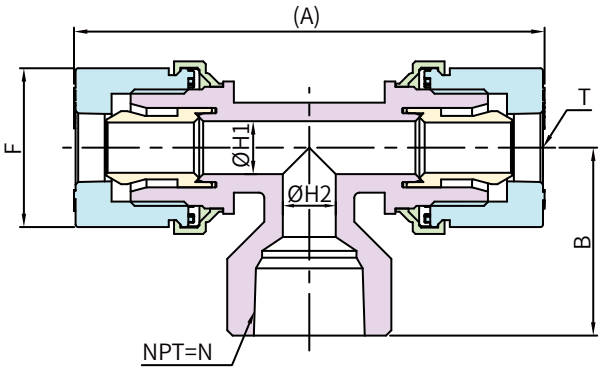
PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (Rc=PT)								Dimension : mm
IFT - 6m - R18 - M1	6 x 4	Rc 1/8	60.8	21.5	4	4	17	9.6
IFT - 6m - R14 - M1	〃	Rc 1/4	〃	25.5	〃	〃	〃	〃
IFT - 8m - R18 - M1	8 x 6	Rc 1/8	67.4	22.5	6	6	20	13
IFT - 8m - R14 - M1	〃	Rc 1/4	〃	26.5	〃	〃	〃	〃
IFT - 8m - R38 - M1	〃	Rc 3/8	〃	28.5	〃	〃	〃	〃
IFT - 10m - R18 - M1	10 x 8	Rc 1/8	75.8	23.8	8	8	25	14.8
IFT - 10m - R14 - M1	〃	Rc 1/4	〃	27.8	〃	〃	〃	〃
IFT - 10m - R38 - M1	〃	Rc 3/8	〃	29.8	〃	〃	〃	〃
IFT - 12m - R14 - M1	12 x 10	Rc 1/4	88.9	29.5	10	10	30	18
IFT - 12m - R38 - M1	〃	Rc 3/8	〃	31.5	〃	〃	〃	〃
IFT - 12m - R12 - M1	〃	Rc 1/2	〃	35.5	〃	〃	〃	〃
IFT - 19m - R38 - M1	19 x 15.8	Rc 3/8	112.8	36	16	14.3	40	27
IFT - 19m - R12 - M1	〃	Rc 1/2	〃	38	〃	16	〃	〃
IFT - 19m - R34 - M1	〃	Rc 3/4	〃	42.5	〃	〃	〃	〃
IFT - 25m - R12 - M1	25 x 22	Rc 1/2	135.8	〃	22	17.9	50.5	34
IFT - 25m - R34 - M1	〃	Rc 3/4	〃	47	〃	22	〃	〃
IFT - 25m - R1 - M1	〃	Rc 1	〃	51	〃	〃	〃	〃
Inch connection (Rc=PT)								Dimension : mm
IFT - 14i - R18 - M1	1/4" x 5/32"	Rc 1/8	60.8	21.5	4	4	17	9.6
IFT - 14i - R14 - M1	〃	Rc 1/4	〃	25.5	〃	〃	〃	〃
IFT - 38i - R18 - M1	3/8" x 1/4"	Rc 1/8	75.8	23.8	8	8	25	14.8
IFT - 38i - R14 - M1	〃	Rc 1/4	〃	27.8	〃	〃	〃	〃
IFT - 38i - R38 - M1	〃	Rc 3/8	〃	29.8	〃	〃	〃	〃
IFT - 12i - R14 - M1	1/2" x 3/8"	Rc 1/4	88.9	29.5	10	10	30	18
IFT - 12i - R38 - M1	〃	Rc 3/8	〃	31.5	〃	〃	〃	〃
IFT - 12i - R12 - M1	〃	Rc 1/2	〃	35.5	〃	〃	〃	〃
IFT - 34i - R38 - M1	3/4" x 5/8"	Rc 3/8	112.8	36	16	14.3	40	27
IFT - 34i - R12 - M1	〃	Rc 1/2	〃	38	〃	16	〃	〃
IFT - 34i - R34 - M1	〃	Rc 3/4	〃	42.5	〃	〃	〃	〃
IFT - 1i - R12 - M1	1" x 7/8"	Rc 1/2	135.8	〃	22	17.9	50.5	34
IFT - 1i - R34 - M1	〃	Rc 3/4	〃	47	〃	22	〃	〃
IFT - 1i - R1 - M1	〃	Rc 1	〃	51	〃	〃	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IFT

FEMALE TEE





PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (N=NPT)								Dimension : mm
IFT - 6m - N18 - M1	6 x 4	NPT 1/8	60.8	21.5	4	4	17	9.6
IFT - 6m - N14 - M1	〃	NPT 1/4	〃	25.5	〃	〃	〃	〃
IFT - 8m - N18 - M1	8 x 6	NPT 1/8	67.4	22.5	6	6	20	13
IFT - 8m - N14 - M1	〃	NPT 1/4	〃	26.5	〃	〃	〃	〃
IFT - 8m - N38 - M1	〃	NPT 3/8	〃	28.5	〃	〃	〃	〃
IFT - 10m - N18 - M1	10 x 8	NPT 1/8	75.8	23.8	8	8	25	14.8
IFT - 10m - N14 - M1	〃	NPT 1/4	〃	27.8	〃	〃	〃	〃
IFT - 10m - N38 - M1	〃	NPT 3/8	〃	29.8	〃	〃	〃	〃
IFT - 12m - N14 - M1	12 x 10	NPT 1/4	88.9	29.5	10	10	30	18
IFT - 12m - N38 - M1	〃	NPT 3/8	〃	31.5	〃	〃	〃	〃
IFT - 12m - N12 - M1	〃	NPT 1/2	〃	35.5	〃	〃	〃	〃
IFT - 19m - N38 - M1	19 x 15.8	NPT 3/8	112.8	36	16	14.3	40	27
IFT - 19m - N12 - M1	〃	NPT 1/2	〃	38	〃	16	〃	〃
IFT - 19m - N34 - M1	〃	NPT 3/4	〃	42.5	〃	〃	〃	〃
IFT - 25m - N12 - M1	25 x 22	NPT 1/2	135.8	〃	22	17.9	50.5	34
IFT - 25m - N34 - M1	〃	NPT 3/4	〃	47	〃	22	〃	〃
IFT - 25m - N1 - M1	〃	NPT 1	〃	51	〃	〃	〃	〃
Inch connection (N=NPT)								Dimension : mm
IFT - 14i - N18 - M1	1/4" x 5/32"	NPT 1/8	60.8	21.5	4	4	17	9.6
IFT - 14i - N14 - M1	〃	NPT 1/4	〃	25.5	〃	〃	〃	〃
IFT - 38i - N18 - M1	3/8" x 1/4"	NPT 1/8	75.8	23.8	8	8	25	14.8
IFT - 38i - N14 - M1	〃	NPT 1/4	〃	27.8	〃	〃	〃	〃
IFT - 38i - N38 - M1	〃	NPT 3/8	〃	29.8	〃	〃	〃	〃
IFT - 12i - N14 - M1	1/2" x 3/8"	NPT 1/4	88.9	29.5	10	10	30	18
IFT - 12i - N38 - M1	〃	NPT 3/8	〃	31.5	〃	〃	〃	〃
IFT - 12i - N12 - M1	〃	NPT 1/2	〃	35.5	〃	〃	〃	〃
IFT - 34i - N38 - M1	3/4" x 5/8"	NPT 3/8	112.8	36	16	14.3	40	27
IFT - 34i - N12 - M1	〃	NPT 1/2	〃	38	〃	16	〃	〃
IFT - 34i - N34 - M1	〃	NPT 3/4	〃	42.5	〃	〃	〃	〃
IFT - 1i - N12 - M1	1" x 7/8"	NPT 1/2	135.8	〃	22	17.9	50.5	34
IFT - 1i - N34 - M1	〃	NPT 3/4	〃	47	〃	22	〃	〃
IFT - 1i - N1 - M1	〃	NPT 1	〃	51	〃	〃	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

03

Tube to Tube

UNION CONNECTOR

UNION ELBOW

UNION TEE

REDUCING UNION CONNECTOR

REDUCING UNION ELBOW

REDUCING UNION TEE

PANEL MOUNT UNION CONNECTOR

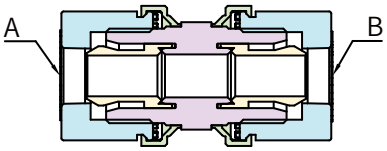
PANEL MOUNT REDUCING UNION CONNECTOR

PANEL MOUNT NUT

UNION

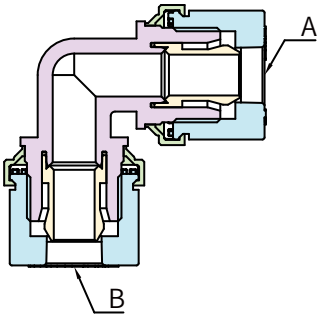
UNION CONNECTOR

REDUCING UNION CONNECTOR



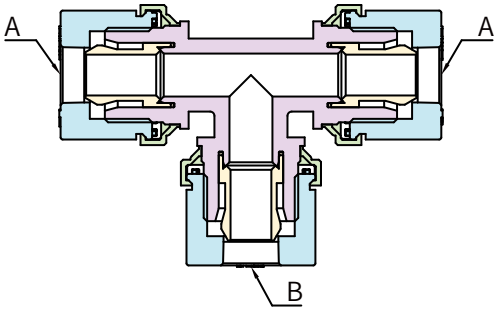
UNION ELBOW

REDUCING UNION ELBOW



UNION TEE

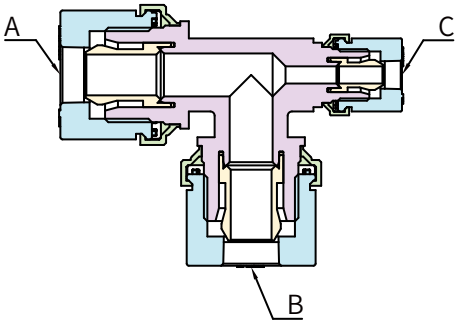
REDUCING UNION TEE



IUC - 12i - 38i - M1

- M1 : Mega Lock Type (사출 射出)
  P1 : Small Size - 1/8" , 3mm , 4mm (사출 射出)
- Tube Size : B (i=inch/m=mm)
- Tube Size : A (i=inch/m=mm)
- IUC : Innodis Union Connector
  IUE : Innodis Union Elbow
  IUT : Innodis Union Tee
  IRUC : Inodis Reducing Union Connector
  IRUE : Inodis Reducing Union Elbow
  IRUT : Inodis Reducing Union Tee

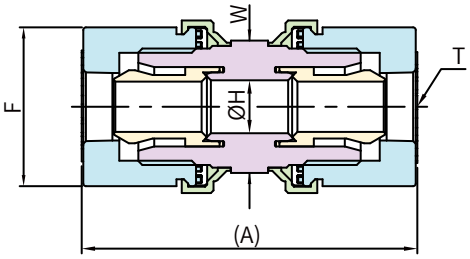
REDUCING UNION TEE



IRUT - 12i - 12i - 38i - M1

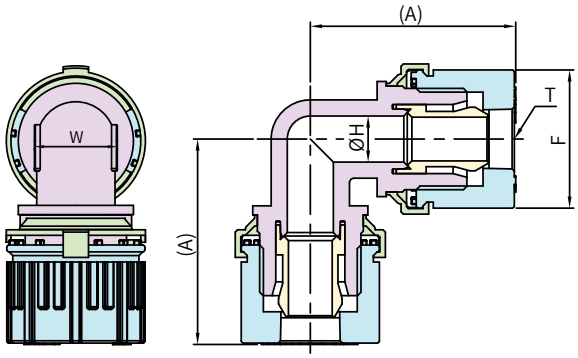
- M1 : Mega Lock Type (사출 射出)
  P1 : Small Size - 1/8" , 3mm , 4mm (사출 射出)
- Tube Size : C (i=inch/m=mm)
- Tube Size : B (i=inch/m=mm)
- Tube Size : A (i=inch/m=mm)
- IRUT : Innodis Reducing Union Tee

IUC
UNION CONNECTOR



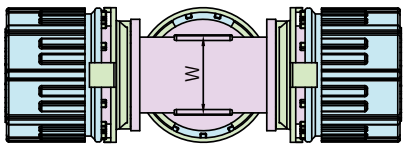
PART No.	Tube Size	(A)	ØH	F	W
metric connection					Dimension : mm
IUC - 3m - 3m - P1	3 x 2	38	3	12.7	12
IUC - 4m - 4m - P1	4 x 3	〃	〃	〃	〃
IUC - 6m - 6m - M1	6 x 4	44.6	4	17	16
IUC - 8m - 8m - M1	8 x 6	48.4	6	20	18
IUC - 10m - 10m - M1	10 x 8	54	8	25	21
IUC - 12m - 12m - M1	12 x 10	63.4	10	30	25
IUC - 19m - 19m - M1	19 x 15.8	80.8	16	40	34
IUC - 25m - 25m - M1	25 x 22	98	22	50.5	43
Inch connection					Dimension : mm
IUC - 18i - 18i - P1	1/8" x 0.086"	38	3	12.7	12
IUC - 14i - 14i - M1	1/4" x 5/32"	44.6	4	17	16
IUC - 38i - 38i - M1	3/8" x 1/4"	54	8	25	21
IUC - 12i - 12i - M1	1/2" x 3/8"	63.4	10	30	25
IUC - 34i - 34i - M1	3/4" x 5/8"	80.8	16	40	34
IUC - 1i - 1i - M1	1" x 7/8"	98	22	50.5	43

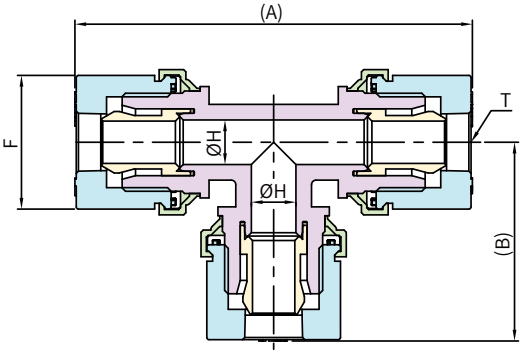
IUE
UNION ELBOW



PART No.	Tube Size	(A)	ØH	F	W
metric connection					Dimension : mm
IUE - 3m - 3m - P1	3 x 2	24.1	3	12.7	7
IUE - 4m - 4m - P1	4 x 3	〃	〃	〃	〃
IUE - 6m - 6m - M1	6 x 4	30.3	4	17	9.6
IUE - 8m - 8m - M1	8 x 6	33.7	6	20	13
IUE - 10m - 10m - M1	10 x 8	37.7	8	25	14.8
IUE - 12m - 12m - M1	12 x 10	44.2	10	30	18
IUE - 19m - 19m - M1	19 x 15.8	56.4	16	40	27
IUE - 25m - 25m - M1	25 x 22	67.7	22	50.5	34
Inch connection					Dimension : mm
IUE - 18i - 18i - P1	1/8" x 0.086"	24.1	3	12.7	7
IUE - 14i - 14i - M1	1/4" x 5/32"	30.3	4	17	9.6
IUE - 38i - 38i - M1	3/8" x 1/4"	37.7	8	25	14.8
IUE - 12i - 12i - M1	1/2" x 3/8"	44.2	10	30	18
IUE - 34i - 34i - M1	3/4" x 5/8"	56.4	16	40	27
IUE - 1i - 1i - M1	1" x 7/8"	67.7	22	50.5	34

IUT
UNION TEE

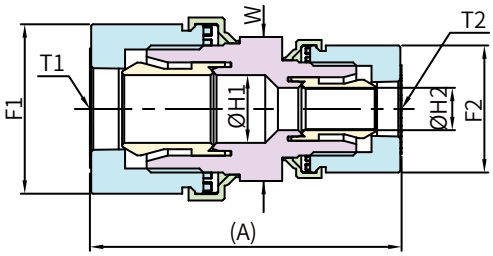




PART No.	Tube Size	(A)	(B)	ØH	F	W
metric connection						Dimension : mm
IUT - 3m - 3m - P1	3 x 2	48.1	24.1	3	12.7	7
IUT - 4m - 4m - P1	4 x 3	〃	〃	〃	〃	〃
IUT - 6m - 6m - M1	6 x 4	60.6	30.3	4	17	9.6
IUT - 8m - 8m - M1	8 x 6	67.4	33.7	6	20	13
IUT - 10m - 10m - M1	10 x 8	75.8	37.8	8	25	14.8
IUT - 12m - 12m - M1	12 x 10	88.9	44.2	10	30	18
IUT - 19m - 19m - M1	19 x 15.8	112.8	56.4	16	40	27
IUT - 25m - 25m - M1	25 x 22	135.8	67.9	22	50.5	34
Inch connection						Dimension : mm
IUT - 18i - 18i - P1	1/8" x 0.086"	48.1	24.1	3	12.7	7
IUT - 14i - 14i - M1	1/4" x 5/32"	60.6	30.3	4	17	9.6
IUT - 38i - 38i - M1	3/8" x 1/4"	75.8	37.8	8	25	14.8
IUT - 12i - 12i - M1	1/2" x 3/8"	88.9	44.2	10	30	18
IUT - 34i - 34i - M1	3/4" x 5/8"	112.8	56.4	16	40	27
IUT - 1i - 1i - M1	1" x 7/8"	135.8	67.9	22	50.5	34

IRUC

REDUCING UNION CONNECTOR

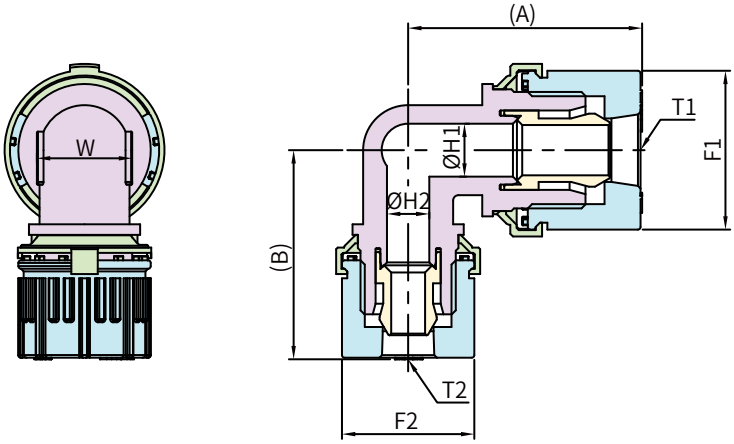


PART No.	Tube Size T1	Tube Size T2	(A)	ØH1	ØH2	F1	F2	W
metric connection								Dimension : mm
IRUC - 6m - 3m - M1	6 x 4	3 x 2	38.75	4	3	17	12.7	16
IRUC - 6m - 4m - M1	〃	4 x 3	〃	〃	〃	〃	〃	〃
IRUC - 8m - 6m - M1	8 x 6	6 x 4	46.6	6	4	20	17	18
IRUC - 10m - 6m - M1	10 x 8	〃	49.4	8	〃	25	〃	21
IRUC - 12m - 6m - M1	12 x 10	〃	54.1	10	〃	30	〃	25
IRUC - 12m - 10m - M1	〃	10 x 8	58.7	〃	8	〃	25	〃
IRUC - 19m - 10m - M1	19 x 15.8	〃	68.9	16	〃	40	〃	34
IRUC - 19m - 12m - M1	〃	12 x 10	73.6	〃	10	〃	30	〃
IRUC - 25m - 12m - M1	25 x 22	〃	84.3	22	〃	50.5	〃	43
IRUC - 25m - 19m - M1	〃	19 x 15.8	91.5	〃	16	〃	40	〃
Inch connection								Dimension : mm
IRUC - 14i - 18i - M1	1/4" x 5/32"	1/8" x 0.086"	38.75	4	3	17	12.7	16
IRUC - 8m - 14i - M1	8 x 6	1/4" x 5/32"	46.6	6	4	20	17	18
IRUC - 38i - 14i - M1	3/8" x 1/4"	〃	49.4	8	〃	25	〃	21
IRUC - 12i - 14i - M1	1/2" x 3/8"	〃	54.1	10	〃	30	〃	25
IRUC - 12i - 38i - M1	〃	3/8" x 1/4"	58.7	〃	8	〃	25	〃
IRUC - 34i - 38i - M1	3/4" x 5/8"	〃	68.9	16	〃	40	〃	34
IRUC - 34i - 12i - M1	〃	1/2" x 3/8"	73.6	〃	10	〃	30	〃
IRUC - 1i - 12i - M1	1" x 7/8"	〃	84.3	22	〃	50.5	〃	43
IRUC - 1i - 34i - M1	〃	3/4" x 5/8"	91.5	〃	16	〃	40	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다 PART NO. 以外的尺寸 请咨询营业部

IRUE

REDUCING UNION ELBOW

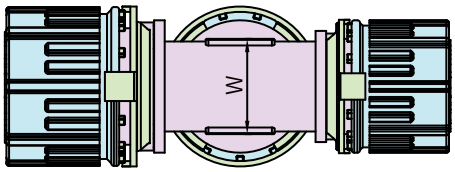


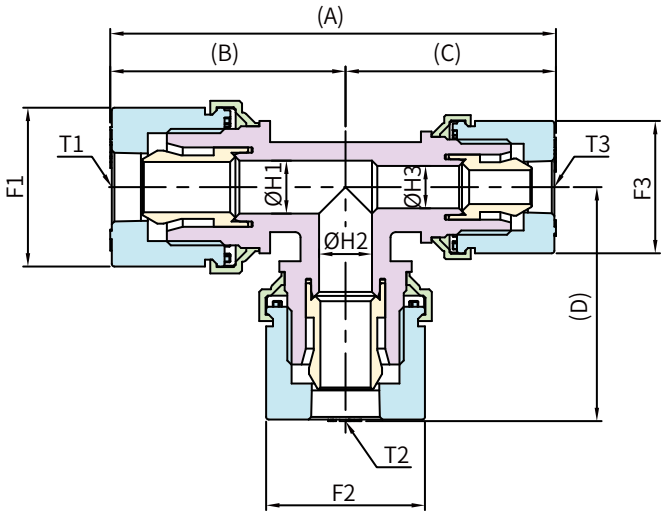
PART No.	Tube Size T1	Tube Size T2	(A)	(B)	ØH1	ØH2	F1	F2	W
metric connection									Dimension : mm
IRUE - 6m - 3m - M1	6 x 4	3 x 2	30.4	22.35	4	3	17	12.7	9.6
IRUE - 6m - 4m - M1	〃	4 x 3	〃	〃	〃	〃	〃	〃	〃
IRUE - 8m - 6m - M1	8 x 6	6 x 4	33.7	31.9	6	4	20	17	13
IRUE - 10m - 6m - M1	10 x 8	〃	37.7	33.1	8	〃	25	〃	14.8
IRUE - 12m - 6m - M1	12 x 10	〃	44.2	34.9	10	〃	30	〃	18
IRUE - 12m - 10m - M1	〃	10 x 8	〃	39.5	〃	8	〃	25	〃
IRUE - 19m - 10m - M1	19 x 15.8	〃	56.4	44	16	〃	40	〃	27
IRUE - 19m - 12m - M1	〃	12 x 10	〃	48.7	〃	10	〃	30	〃
IRUE - 25m - 12m - M1	25 x 22	〃	67.7	53	22	〃	50.5	〃	34
IRUE - 25m - 19m - M1	〃	19 x 15.8	〃	60.7	〃	16	〃	40	〃
Inch connection									Dimension : mm
IRUE - 14i - 18i - M1	1/4" x 5/32"	1/8" x 0.086"	30.4	22.35	4	3	17	12.7	9.6
IRUE - 8m - 14i - M1	8 x 6	1/4" x 5/32"	33.7	31.9	6	4	20	17	13
IRUE - 38i - 14i - M1	3/8" x 1/4"	〃	37.7	33.1	8	〃	25	〃	14.8
IRUE - 12i - 14i - M1	1/2" x 3/8"	〃	44.2	34.9	10	〃	30	〃	18
IRUE - 12i - 38i - M1	〃	3/8" x 1/4"	〃	39.5	〃	8	〃	25	〃
IRUE - 34i - 38i - M1	3/4" x 5/8"	〃	56.4	44	16	8	40	〃	27
IRUE - 34i - 12i - M1	〃	1/2" x 3/8"	〃	48.7	〃	10	〃	30	〃
IRUE - 1i - 12i - M1	1" x 7/8"	〃	67.7	53	22	〃	50.5	〃	34
IRUE - 1i - 34i - M1	〃	3/4" x 5/8"	〃	60.7	〃	16	〃	40	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다 PART NO. 以外的尺寸 请咨询营业部

IRUT

REDUCING UNION TEE





metric tube type

PART No.	Tube Size T1	Tube Size T2	Tube Size T3	(A)	(B)	(C)	(D)	ØH1	ØH2	ØH3	F1	F2	F3	W
metric connection														Dimension : mm
IRUT - 6m - 3m - M1	6 x 4	3 x 2	6 x 4	60.8	30.4	30.4	22.35	4	3	4	17	12.7	17	9.6
IRUT - 6m - 4m - M1	〃	4 x 3	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃
IRUT - 6m - 10m - M1	〃	10 x 8	〃	66.8	33.4	33.4	38	〃	8	〃	〃	25	〃	14.8
IRUT - 8m - 6m - M1	8 x 6	6 x 4	8 x 6	67.4	33.7	33.7	31.9	6	4	6	20	17	20	13
IRUT - 10m - 6m - M1	10 x 8	〃	10 x 8	75.8	37.9	37.9	33.2	8	〃	8	25	〃	25	14.8
IRUT - 12m - 6m - M1	12 x 10	6 x 4	12 x 10	88.9	44.45	44.45	34.9	10	4	10	30	17	30	18
IRUT - 12m - 10m - M1	〃	10 x 8	〃	〃	〃	〃	39.5	〃	8	〃	〃	25	〃	〃
IRUT - 19m - 6m - M1	19 x 15.8	6 x 4	19 x 15.8	112.8	56.4	56.4	39.4	16	4	16	40	17	40	27
IRUT - 19m - 10m - M1	〃	10 x 8	〃	〃	〃	〃	44	〃	8	〃	〃	25	〃	〃
IRUT - 19m - 12m - M1	〃	12 x 10	〃	〃	〃	〃	48.7	〃	10	〃	〃	30	〃	〃
IRUT - 25m - 12m - M1	25 x 22	〃	25 x 22	135.8	67.9	67.9	53.2	22	〃	22	50.5	〃	50.5	34
IRUT - 25m - 19m - M1	〃	19 x 15.8	〃	〃	〃	〃	60.9	〃	16	〃	〃	40	〃	〃
IRUT - 10m - 10m - 6m - M1	10 x 8	10 x 8	6 x 4	71.2	37.9	33.3	37.8	8	8	4	25	25	17	14.8
IRUT - 12m - 12m - 10m - M1	12 x 10	12 x 10	10 x 8	84.2	44.45	39.75	44.2	10	10	8	30	30	25	18
IRUT - 19m - 19m - 12m - M1	19 x 15.8	19 x 15.8	12 x 10	105.1	56.4	48.7	56.4	16	16	10	40	40	30	27
IRUT - 25m - 25m - 19m - M1	25 x 22	25 x 22	19 x 15.8	128.8	67.9	60.9	67.9	22	22	16	50.5	50.5	40	34

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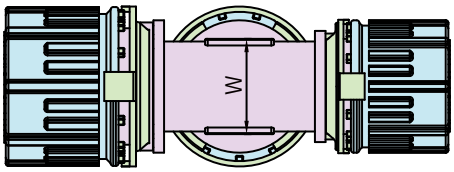
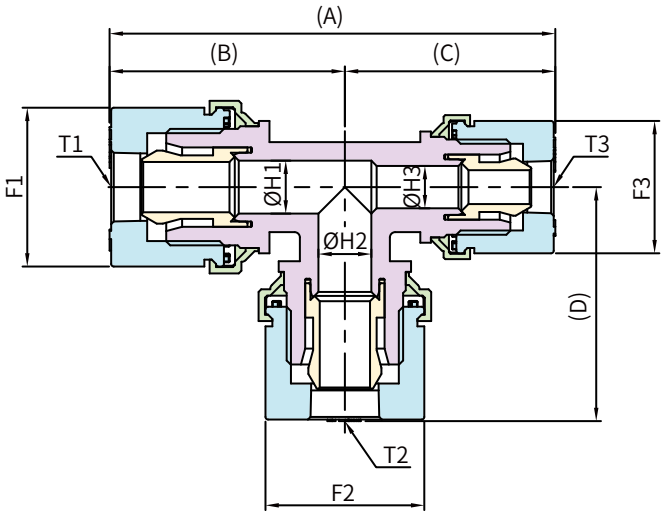
IRUT

REDUCING UNION TEE





■ inch tube type

PART No.	Tube Size T1	Tube Size T2	Tube Size T3	(A)	(B)	(C)	(D)	ØH1	ØH2	ØH3	F1	F2	F3	W
Inch connection														Dimension : mm
IRUT - 14i - 18i - M1	1/4" x 5/32"	1/8" x 0.086"	1/4" x 5/32"	60.8	30.4	30.4	22.35	4	3	4	17	12.7	17	9.6
IRUT - 14i - 38i - M1	〃	3/8" x 1/4"	〃	66.8	33.4	33.4	38	〃	8	〃	〃	25	〃	14.8
IRUT - 8m - 14i - M1	8 x 6	1/4" x 5/32"	8 x 6	67.4	33.7	33.7	31.9	6	4	6	20	17	20	13
IRUT - 38i - 14i - M1	3/8" x 1/4"	〃	3/8" x 1/4"	75.8	37.9	37.9	33.2	8	〃	8	25	〃	25	14.8
IRUT - 12i - 14i - M1	1/2" x 3/8"	〃	1/2" x 3/8"	88.9	44.45	44.45	34.9	10	〃	10	30	〃	30	18
IRUT - 12i - 38i - M1	〃	3/8" x 1/4"	〃	〃	〃	〃	39.5	〃	8	〃	〃	25	〃	〃
IRUT - 34i - 14i - M1	3/4" x 5/8"	1/4" x 5/32"	3/4" x 5/8"	112.8	56.4	56.4	39.4	16	4	16	40	17	40	27
IRUT - 34i - 38i - M1	〃	3/8" x 1/4"	〃	〃	〃	〃	44	〃	8	〃	〃	25	〃	〃
IRUT - 34i - 12i - M1	〃	1/2" x 3/8"	〃	〃	〃	〃	48.7	〃	10	〃	〃	30	〃	〃
IRUT - 1i - 12i - M1	1" x 7/8"	〃	1" x 7/8"	135.8	67.9	67.9	53.2	22	〃	22	50.5	〃	50.5	34
IRUT - 1i - 34i - M1	〃	3/4" x 5/8"	〃	〃	〃	〃	60.9	〃	16	〃	〃	40	〃	〃
IRUT - 38i - 38i - 14i - M1	3/8" x 1/4"	3/8" x 1/4"	1/4" x 5/32"	71.2	37.9	33.3	37.8	8	8	4	25	25	17	14.8
IRUT - 12i - 12i - 38i - M1	1/2" x 3/8"	1/2" x 3/8"	3/8" x 1/4"	84.2	44.45	39.75	44.2	10	10	8	30	30	25	18
IRUT - 34i - 34i - 12i - M1	3/4" x 5/8"	3/4" x 5/8"	1/2" x 3/8"	105.1	56.4	48.7	56.4	16	16	10	40	40	30	27
IRUT - 1i - 1i - 34i - M1	1" x 7/8"	1" x 7/8"	3/4" x 5/8"	128.8	67.9	60.9	67.9	22	22	16	50.5	50.5	40	34

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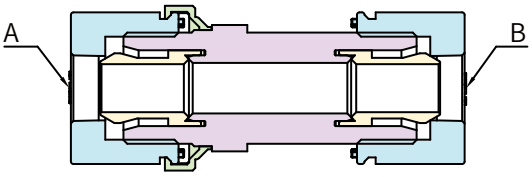
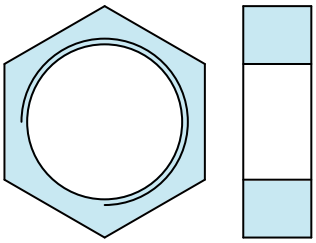
PANEL MOUNT

PANEL MOUNT UNION CONNECTOR

PANEL MOUNT REDUCING UNION CONNEC TOR



PANEL MOUNT NUT



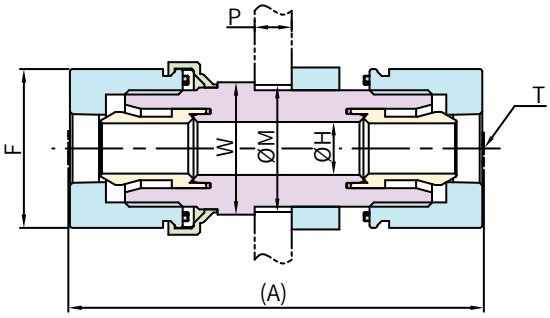
IPMUC - 12i - 12i - M1

- M1 : Mega Lock Type (사출 射出)
- Tube Size : B (i=inch/m=mm)
- Tube Size : A (i=inch/m=mm)
- IPMUC : Innodis Panel Mount Union Connector
  IPMRUC : Innodis Panel Mount Reducing Union Connector

IPM - N12i - MF

- MF : PFA (가공 加工)
- N : Nut
  Tube Size : i=inch/m=mm
- IPM : Panel Mount

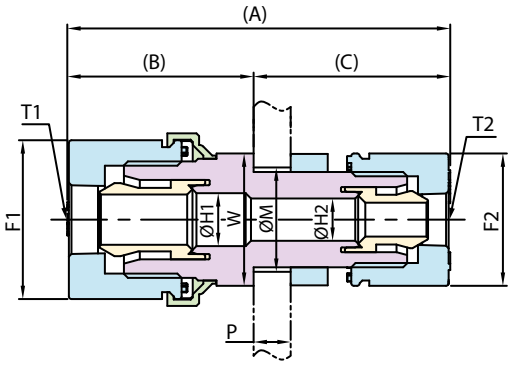
IPMUC
PANEL MOUNT UNION CONNECTOR



PART No.	Tube Size	(A)	ØH	F	MAX P	ØM	W
metric connection							Dimension : mm
IPMUC - 6m - 6m - M1	6 x 4	56	4	17	7	12.5	16
IPMUC - 8m - 8m - M1	8 x 6	62.7	6	20	〃	15.5	18
IPMUC - 10m - 10m - M1	10 x 8	67.7	8	25	〃	18.5	21
IPMUC - 12m - 12m - M1	12 x 10	78.5	10	30	〃	22.5	25
IPMUC - 19m - 19m - M1	19 x 15.8	96.5	16	40	〃	30.5	34
IPMUC - 25m - 25m - M1	25 x 22	120	22	50.5	10	40.5	43
Inch connection							Dimension : mm
IPMUC - 14i - 14i - M1	1/4" x 5/32"	56	4	17	7	12.5	16
IPMUC - 38i - 38i - M1	3/8" x 1/4"	67.7	8	25	〃	18.5	21
IPMUC - 12i - 12i - M1	1/2" x 3/8"	78.5	10	30	〃	22.5	25
IPMUC - 34i - 34i - M1	3/4" x 5/8"	96.5	16	40	〃	30.5	34
IPMUC - 1i - 1i - M1	1" x 7/8"	120	22	50.5	10	40.5	43

IPMRUC

PANEL MOUNT REDUCING UNION CONNECTOR

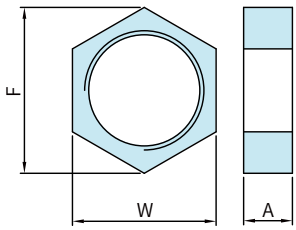


PART No.	Tube Size T1	Tube Size T2	(A)	(B)	(C)	ØH1	ØH2	F1	F2	MAX P	ØM	W
metric connection												Dimension : mm
IPMRUC - 6m - 3m - M1	6 x 4	3 x 2	51.75	25.85	31.1	4	3	17	12.7	7	10.5	16
IPMRUC - 6m - 4m - M1	〃	4 x 3	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃
IPMRUC - 8m - 6m - M1	8 x 6	6 x 4	57.8	27.7	30.1	6	4	20	17	〃	12.5	18
IPMRUC - 10m - 6m - M1	10 x 8	〃	60.6	30.5	〃	8	〃	25	〃	〃	〃	21
IPMRUC - 12m - 10m - M1	12 x 10	10 x 8	72.3	35.2	37.1	10	8	30	25	〃	18.5	25
IPMRUC - 19m - 12m - M1	19 x 15.8	12 x 10	88.7	45.4	43.3	16	10	40	30	〃	22.5	34
IPMRUC - 25m - 19m - M1	25 x 22	19 x 15.8	107.2	56.1	51.1	22	16	50.5	40	〃	30.5	43
Inch connection												Dimension : mm
IPMRUC - 14i - 18i - M1	1/4" x 5/32"	1/8" x 0.086"	51.75	25.85	31.1	4	3	17	12.7	7	10.5	16
IPMRUC - 8m - 14i - M1	8 x 6	1/4" x 5/32"	57.8	27.7	30.1	6	4	20	17	〃	12.5	18
IPMRUC - 38i - 14i - M1	3/8" x 1/4"	〃	60.6	30.5	〃	8	〃	25	〃	〃	〃	21
IPMRUC - 12i - 38i - M1	1/2" x 3/8"	3/8" x 1/4"	72.3	35.2	37.1	10	8	30	25	〃	18.5	25
IPMRUC - 34i - 12i - M1	3/4" x 5/8"	1/2" x 3/8"	88.7	45.4	43.3	16	10	40	30	〃	22.5	34
IPMRUC - 1i - 34i - M1	1" x 7/8"	3/4" x 5/8"	107.2	56.1	51.1	22	16	50.5	40	〃	30.5	43

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IPM

PANEL MOUNT NUT



PART No.	Tube Size	A	W	F
metric connection				Dimension : mm
IPM - N6m - MF	6 x 4	5	16	18.5
IPM - N8m - MF	8 x 6	7	19	22
IPM - N10m - MF	10 x 8	〃	21.5	24.8
IPM - N12m - MF	12 x 10	9	26.5	30.6
IPM - N19m - MF	19 x 15.8	〃	38	43.9
IPM - N25m - MF	25 x 22	10	45	52
Inch connection				Dimension : mm
IPM - N14i - MF	1/4" x 5/32"	5	16	18.5
IPM - N38i - MF	3/8" x 1/4"	7	21.5	24.8
IPM - N12i - MF	1/2" x 3/8"	9	26.5	30.6
IPM - N34i - MF	3/4" x 5/8"	〃	38	43.9
IPM - N1i - MF	1" x 7/8"	10	45	52

04

Space saver

UNION CONNECTOR ADAPTOR

UNION ELBOW ADAPTOR

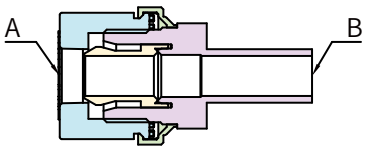
UNION TEE ADAPTOR

ELBOW ADAPTOR

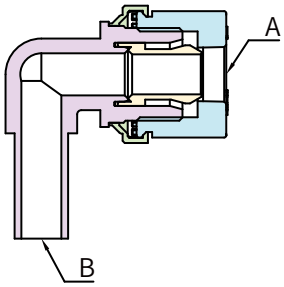
TEE ADAPTOR

UNION ADAPTOR

UNION CONNECTOR ADAPTOR
(TUBE END)



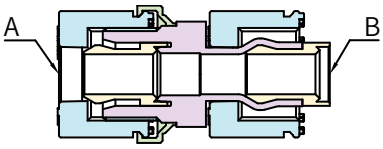
UNION ELBOW ADAPTOR
(TUBE END)



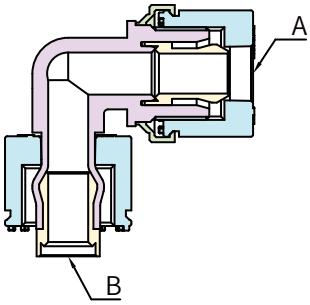
IUCA - 12i - 12T - M1

- M1 : Mega Lock Type (사출 射出)
- Size : B (T=Tube End)
- Tube Size : A (i=inch/m=mm)
- IUCA : Innodis Union Connector Adaptor
  IUEA : Innodis Union Elbow Adaptor

UNION CONNECTOR ADAPTOR
(SLEEVE & NUT SET)



UNION ELBOW ADAPTOR
(SLEEVE & NUT SET)

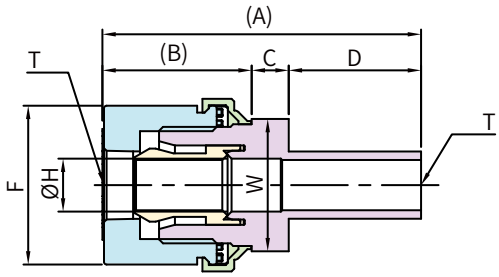


IUCA - 12i - 12A - M1

- M1 : Mega Lock Type (사출 射出)
- Size : B (A=Sleeve & Nut Set)
- Tube Size : A (i=inch/m=mm)
- IUCA : Innodis Union Connector Adaptor
  IUEA : Innodis Union Elbow Adaptor

IUCA

UNION CONNECTOR ADAPTOR



▲ Tube End Type

PART No.	Tube Size	(A)	(B)	C	D	ØH	F	W
metric connection								Dimension : mm
IUCA - 6m - 6T - M1	6 x 4	43.4	18.9	7	17.5	4	17	16
IUCA - 8m - 8T - M1	8 x 6	45.7	20.7	〃	18	6	20	18
IUCA - 10m - 10T - M1	10 x 8	51.5	23.5	〃	21	8	25	21
IUCA - 12m - 12mT - M1	12 x 10	60.2	28.2	〃	25	10	30	25
IUCA - 19m - 19T - M1	19 x 15.8	76.4	35.4	10	31	16	40	34
IUCA - 25m - 25T - M1	25 x 22	95.1	41.9	14.2	39	22	50.5	43
Inch connection								Dimension : mm
IUCA - 14i - 14T - M1	1/4" x 5/32"	43.4	18.9	7	17.5	4	17	16
IUCA - 38i - 38T - M1	3/8" x 1/4"	51.5	23.5	〃	21	8	25	21
IUCA - 12i - 12T - M1	1/2" x 3/8"	60.2	28.2	〃	25	10	30	25
IUCA - 34i - 34T - M1	3/4" x 5/8"	76.4	35.4	10	31	16	40	34
IUCA - 1i - 1T - M1	1" x 7/8"	95.1	41.9	14.2	39	22	50.5	43

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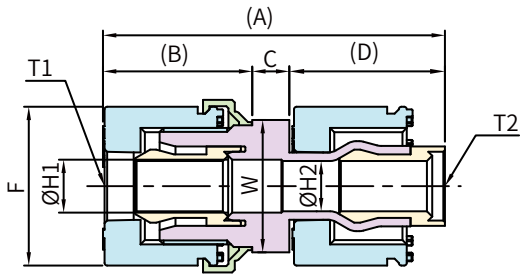


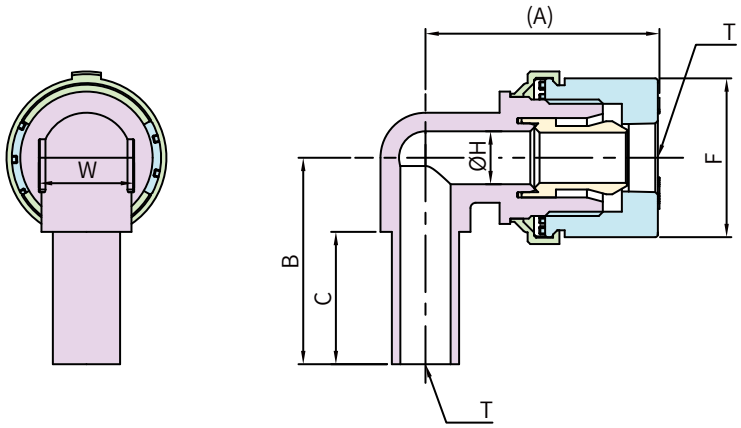
▲ Sleeve & Nut Set

PART No.	Tube Size T1	Connectable Body Size T2	(A)	(B)	C	(D)	ØH1	ØH2	F	W
metric connection										Dimension : mm
IUCA - 6m - 6A - M1	6 x 4	6	45.3	18.9	7	19.4	4	4	17	16
IUCA - 8m - 8A - M1	8 x 6	8	49.3	20.7	〃	21.6	6	6	20	18
IUCA - 10m - 10A - M1	10 x 8	10	54.9	23.5	〃	24.4	8	8	25	21
IUCA - 12m - 12mA - M1	12 x 10	12	64.6	28.2	〃	29.4	10	10	30	25
IUCA - 19m - 19A - M1	19 x 15.8	19	81.6	35.4	10	36.2	16	15.8	40	34
IUCA - 25m - 25A - M1	25 x 22	25	102.1	41.9	14.2	46	22	22	50.5	43
Inch connection										Dimension : mm
IUCA - 14i - 14A - M1	1/4" x 5/32"	1/4"	45.3	18.9	7	19.4	4	3.95	17	16
IUCA - 38i - 38A - M1	3/8" x 1/4"	3/8"	54.9	23.5	〃	24.4	8	6.33	25	21
IUCA - 12i - 12A - M1	1/2" x 3/8"	1/2"	64.6	28.2	〃	29.4	10	9.5	30	25
IUCA - 34i - 34A - M1	3/4" x 5/8"	3/4"	81.6	35.4	10	36.2	16	15.8	40	34
IUCA - 1i - 1A - M1	1" x 7/8"	1"	102.1	41.9	14.2	46	22	22.2	50.5	43

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IUEA

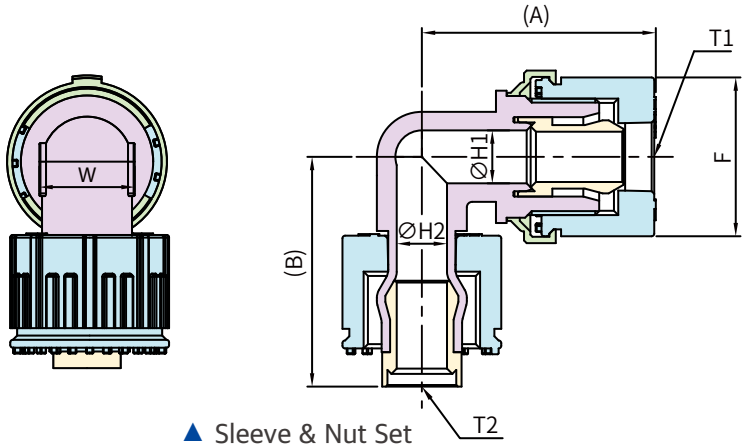
UNION ELBOW ADAPTOR



▲ Tube End Type

PART No.	Tube Size	(A)	B	C	ØH	F	W
metric connection							Dimension : mm
IUEA - 6m - 6T - M1	6 x 4	30.4	27	17.5	4	17	9.6
IUEA - 8m - 8T - M1	8 x 6	33.7	29	18	6	20	13
IUEA - 10m - 10T - M1	10 x 8	37.7	33.2	21	8	25	14.8
IUEA - 12m - 12mT - M1	12 x 10	44.2	39	25	10	30	18
IUEA - 19m - 19T - M1	19 x 15.8	56.4	49.5	31	16	40	27
IUEA - 25m - 25T - M1	25 x 22	67.7	61.8	39	22	50.5	34
Inch connection							Dimension : mm
IUEA - 14i - 14T - M1	1/4" x 5/32"	30.4	27	17.5	4	17	9.6
IUEA - 38i - 38T - M1	3/8" x 1/4"	37.7	33.2	21	8	25	14.8
IUEA - 12i - 12T - M1	1/2" x 3/8"	44.2	39	25	10	30	18
IUEA - 34i - 34T - M1	3/4" x 5/8"	56.4	49.5	31	16	40	27
IUEA - 1i - 1T - M1	1" x 7/8"	67.7	61.8	39	22	50.5	34

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部



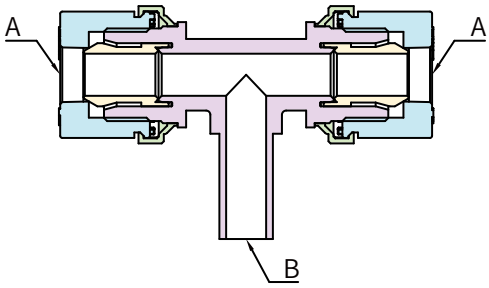
▲ Sleeve & Nut Set

PART No.	Tube Size T1	Connectable Body Size T2	(A)	(B)	ØH1	ØH2	F	W
metric connection								Dimension : mm
IUEA - 6m - 6A - M1	6 x 4	6	30.4	28.9	4	4	17	9.6
IUEA - 8m - 8A - M1	8 x 6	8	33.7	32.6	6	6	20	13
IUEA - 10m - 10A - M1	10 x 8	10	37.7	36.6	8	8	25	14.8
IUEA - 12m - 12mA - M1	12 x 10	12	44.2	43.4	10	10	30	18
IUEA - 19m - 19A - M1	19 x 15.8	19	56.4	54.7	16	15.8	40	27
IUEA - 25m - 25A - M1	25 x 22	25	67.7	68.8	22	22	50.5	34
Inch connection								Dimension : mm
IUEA - 14i - 14A - M1	1/4" x 5/32"	1/4"	30.4	28.9	4	3.95	17	9.6
IUEA - 38i - 38A - M1	3/8" x 1/4"	3/8"	37.7	36.6	8	6.33	25	14.8
IUEA - 12i - 12A - M1	1/2" x 3/8"	1/2"	44.2	43.4	10	9.5	30	18
IUEA - 34i - 34A - M1	3/4" x 5/8"	3/4"	56.4	54.7	16	15.8	40	27
IUEA - 1i - 1A - M1	1" x 7/8"	1"	67.7	68.8	22	22.2	50.5	34

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

UNION TEE ADAPTOR - Type a

UNION TEE ADAPTOR
(TUBE END)

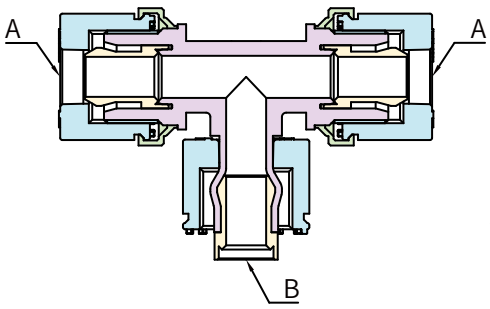


* Type : a

IUTA - 12i - 12T - M1a

- M1 : Mega Lock Type (사출 射出)
  a : Type
- Size : B (T=Tube End)
- Tube Size : A (i=inch/m=mm)
- IUTA : Innodis Union Tee Adaptor

UNION TEE ADAPTOR
(SLEEVE & NUT SET)



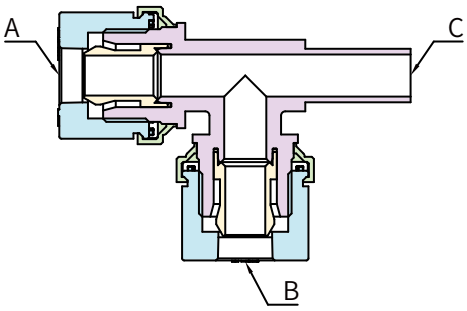
* Type : a

IUTA - 12i - 12A - M1a

- M1 : Mega Lock Type (사출 射出)
  a : Type
- Size : B (A=Sleeve & Nut Set)
- Tube Size : A (i=inch/m=mm)
- IUTA : Innodis Union Tee Adaptor

UNION TEE ADAPTOR - Type b

UNION TEE ADAPTOR
(TUBE END)

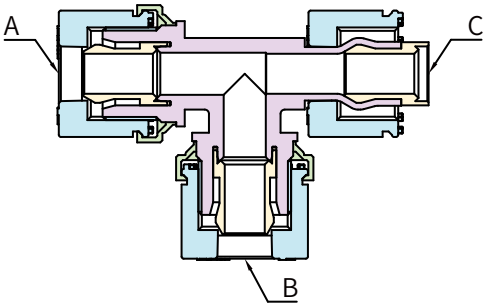


* Type : b

IUTA - 12i - 12i - 12T - M1b

- M1 : Mega Lock Type (사출 射出)
  b : Type
- Size : C (T=Tube End)
- Tube Size : B (i=inch/m=mm)
- Tube Size : A (i=inch/m=mm)
- IUTA : Innodis Union Tee Adaptor

UNION TEE ADAPTOR
(SLEEVE & NUT SET)



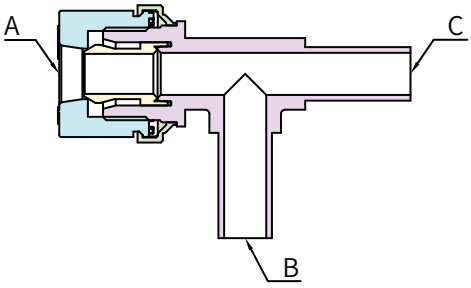
* Type : b

IUTA - 12i - 12i - 12A - M1b

- M1 : Mega Lock Type (사출 射出)
  b : Type
- Size : C (A=Sleeve & Nut Set)
- Tube Size : B (i=inch/m=mm)
- Tube Size : A (i=inch/m=mm)
- IUTA : Innodis Union Tee Adaptor

UNION TEE ADAPTOR - Type c

UNION TEE ADAPTOR
(TUBE END)

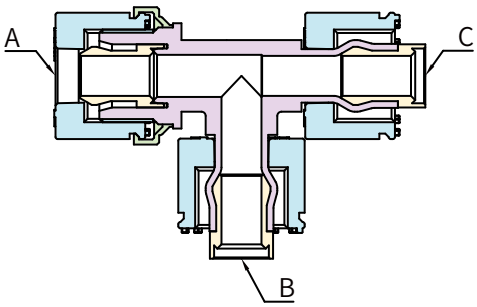


* Type : c

IUTA - 12i - 12T - 12T - M1c

- M1 : Mega Lock Type (사출 射出)
  c : Type
- Size : C (T=Tube End)
- Size : B (T=Tube End)
- Tube Size : A (i=inch/m=mm)
- IUTA : Innodis Union Tee Adaptor

UNION TEE ADAPTOR
(SLEEVE & NUT SET)



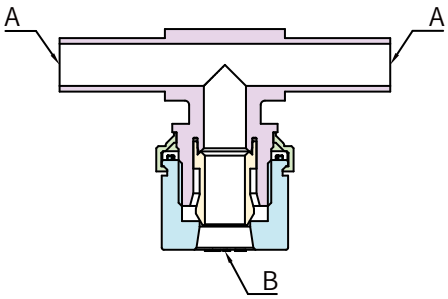
* Type : c

IUTA - 12i - 12A - 12A - M1c

- M1 : Mega Lock Type (사출 射出)
  c : Type
- Size : C (A=Sleeve & Nut Set)
- Size : B (A=Sleeve & Nut Set)
- Tube Size : A (i=inch/m=mm)
- IUTA : Innodis Union Tee Adaptor

UNION TEE ADAPTOR - Type d

UNION TEE ADAPTOR
(TUBE END)

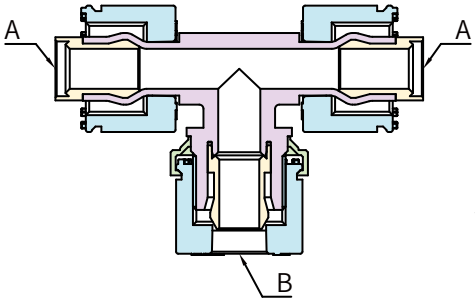


* Type : d

IUTA - 12T - 12i - M1d

- M1 : Mega Lock Type (사출 射出)
  d : Type
- Tube Size : B (i=inch/m=mm)
- Size : A (T=Tube End)
- IUTA : Innodis Union Tee Adaptor

UNION TEE ADAPTOR
(SLEEVE & NUT SET)



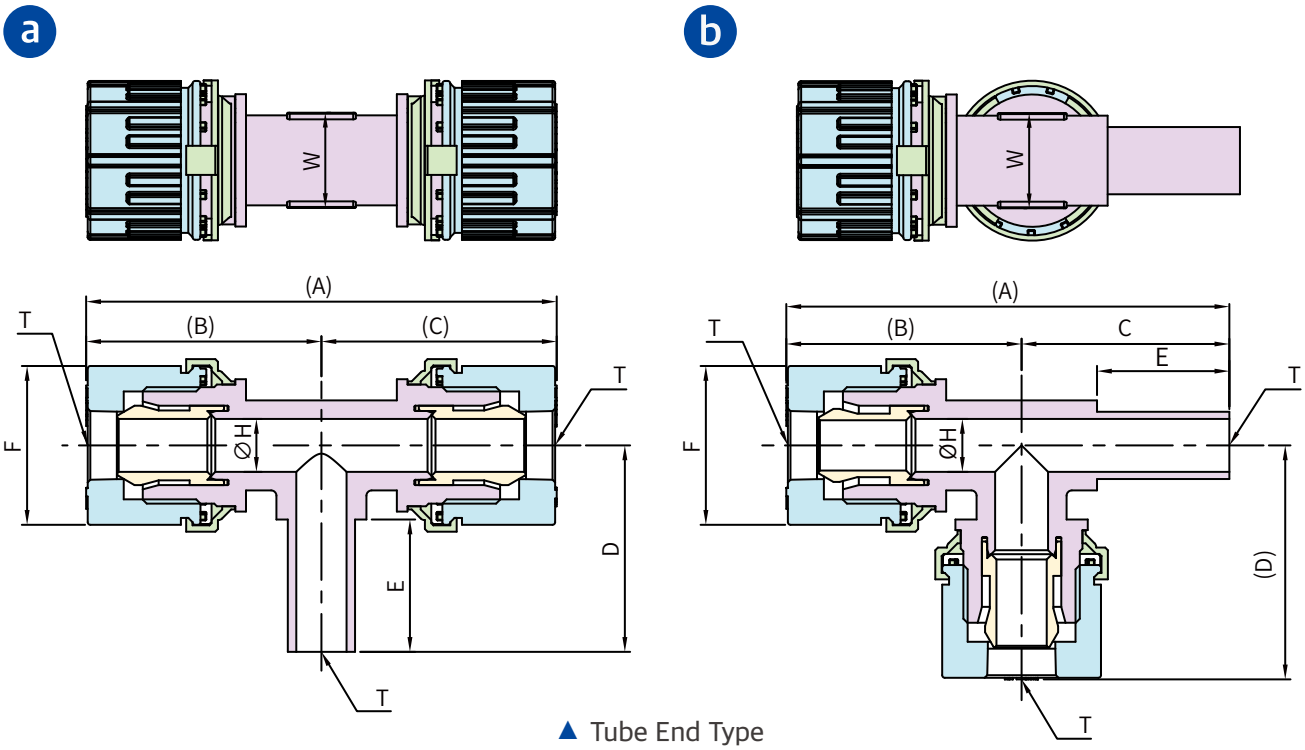
* Type : d

IUTA - 12A - 12i - M1d

- M1 : Mega Lock Type (사출 射出)
  d : Type
- Tube Size : B (i=inch/m=mm)
- Size : A (A=Sleeve & Nut Set)
- IUTA : Innodis Union Tee Adaptor

IUTA

UNION TEE ADAPTOR



▲ Tube End Type

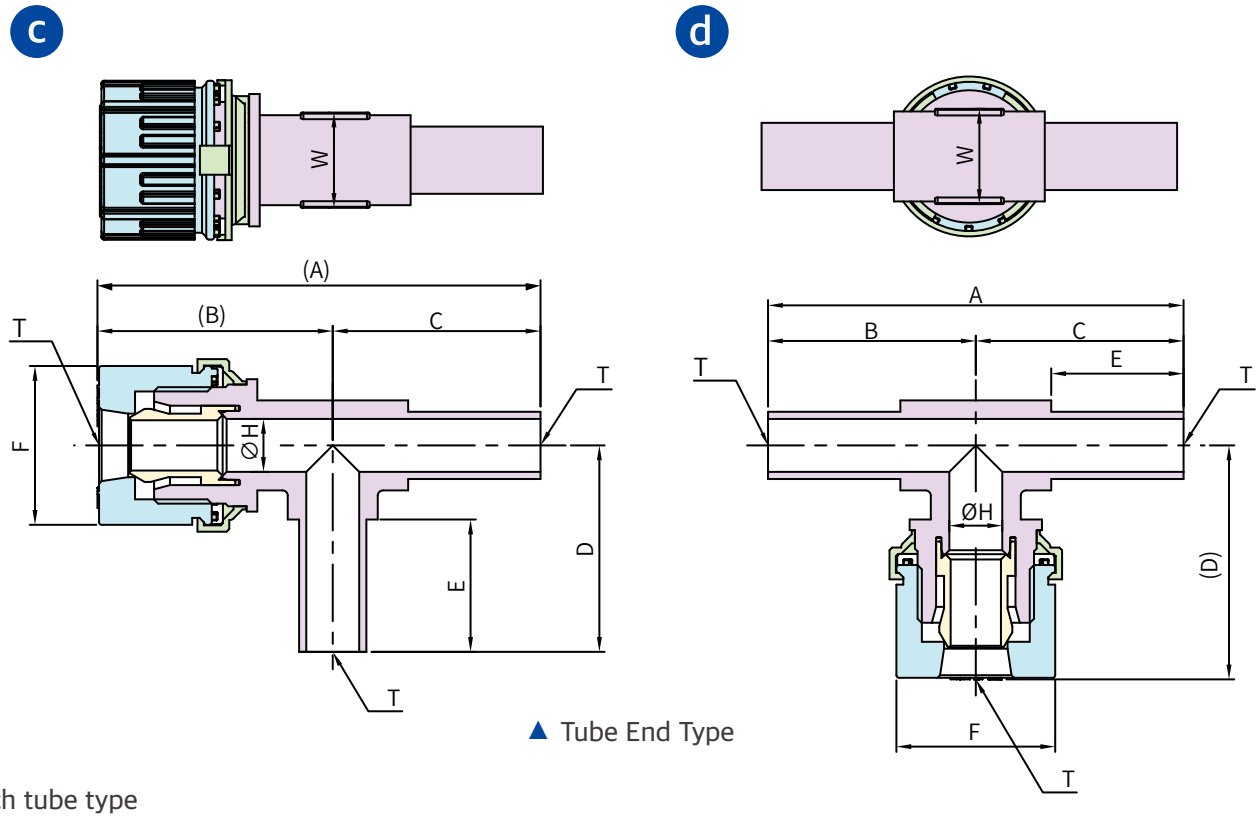
■ metric tube type

PART No.		Tube Size	A(A)	B(B)	C(C)	D(D)	E	ØH	F	W
metric connection										Dimension : mm
IUTA - 6T - 6m - M1	d	6 x 4	54	27	27	30.4	17.5	4	17	9.6
IUTA - 6m - 6T - 6T - M1	c	〃	57.4	30.4	〃	27	〃	〃	〃	〃
IUTA - 6m - 6T - M1	a	〃	60.8	〃	30.4	〃	〃	〃	〃	〃
IUTA - 6m - 6m - 6T - M1	b	〃	57.4	〃	27	30.4	〃	〃	〃	〃
IUTA - 8T - 8m - M1	d	8 x 6	58	29	29	33.7	18	6	20	13
IUTA - 8m - 8T - 8T - M1	c	〃	62.7	33.7	〃	29	〃	〃	〃	〃
IUTA - 8m - 8T - M1	a	〃	67.4	〃	33.7	〃	〃	〃	〃	〃
IUTA - 8m - 8m - 8T - M1	b	〃	62.7	〃	29	33.7	〃	〃	〃	〃
IUTA - 10T - 10m - M1	d	10 x 8	66.8	33.4	33.4	37.8	21	8	25	14.8
IUTA - 10m - 10T - 10T - M1	c	〃	71.3	37.9	〃	33.3	〃	〃	〃	〃
IUTA - 10m - 10T - M1	a	〃	75.8	〃	37.9	〃	〃	〃	〃	〃
IUTA - 10m - 10m - 10T - M1	b	〃	71.3	〃	33.4	37.8	〃	〃	〃	〃
IUTA - 12mT - 12m - M1	d	12 x 10	78.5	39.25	39.25	44.2	25	10	30	18
IUTA - 12m - 12mT - 12mT - M1	c	〃	83.7	44.45	〃	39	〃	〃	〃	〃
IUTA - 12m - 12mT - M1	a	〃	88.9	〃	44.45	〃	〃	〃	〃	〃
IUTA - 12m - 12m - 12mT - M1	b	〃	83.7	〃	39.25	44.2	〃	〃	〃	〃
IUTA - 19T - 19m - M1	d	19 x 15.8	99	49.5	49.5	56.4	31	16	40	27
IUTA - 19m - 19T - 19T - M1	c	〃	105.9	56.4	〃	49.5	〃	〃	〃	〃
IUTA - 19m - 19T - M1	a	〃	112.8	〃	56.4	〃	〃	〃	〃	〃
IUTA - 19m - 19m - 19T - M1	b	〃	105.9	〃	49.5	56.4	〃	〃	〃	〃
IUTA - 25T - 25m - M1	d	25 x 22	124	62	62	67.9	39	22	50.5	34
IUTA - 25m - 25T - 25T - M1	c	〃	129.9	67.9	〃	62	〃	〃	〃	〃
IUTA - 25m - 25T - M1	a	〃	135.8	〃	67.9	〃	〃	〃	〃	〃
IUTA - 25m - 25m - 25T - M1	b	〃	129.9	〃	62	67.9	〃	〃	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IUTA

UNION TEE ADAPTOR



▲ Tube End Type

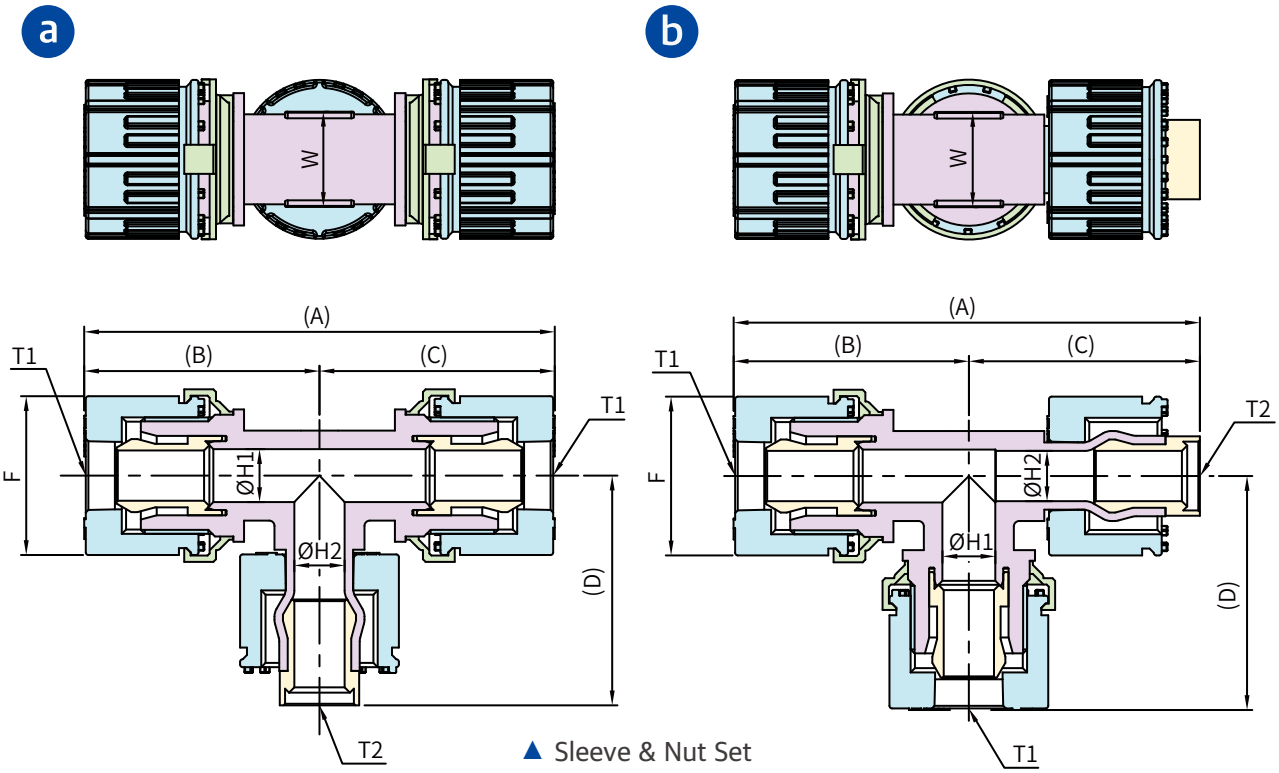
■ inch tube type

PART No.		Tube Size	A(A)	B(B)	C(C)	D(D)	E	ØH	F	W
Inch connection										Dimension : mm
IUTA - 14T - 14i - M1	d	1/4" T 5/32"	53	26.5	26.5	30.4	17.5	4	17	9.6
IUTA - 14i - 14T - 14T - M1	c	〃	56.9	30.4	〃	26.5	〃	〃	〃	〃
IUTA - 14i - 14T - M1	a	〃	60.8	〃	30.4	〃	〃	〃	〃	〃
IUTA - 14i - 14i - 14T - M1	b	〃	56.9	〃	26.5	30.4	〃	〃	〃	〃
IUTA - 38T - 38i - M1	d	3/8" x 1/4"	66.8	33.4	33.4	37.8	21	8	25	14.8
IUTA - 38i - 38T - 38T - M1	c	〃	71.3	37.9	〃	33.3	〃	〃	〃	〃
IUTA - 38i - 38T - M1	a	〃	75.8	〃	37.9	〃	〃	〃	〃	〃
IUTA - 38i - 38i - 38T - M1	b	〃	71.3	〃	33.4	37.8	〃	〃	〃	〃
IUTA - 12T - 12i - M1	d	1/2" x 3/8"	78.5	39.25	39.25	44.2	25	10	30	18
IUTA - 12i - 12T - 12T - M1	c	〃	83.7	44.45	〃	39	〃	〃	〃	〃
IUTA - 12i - 12T - M1	a	〃	88.9	〃	44.45	〃	〃	〃	〃	〃
IUTA - 12i - 12i - 12T - M1	b	〃	83.7	〃	39.25	44.2	〃	〃	〃	〃
IUTA - 34T - 34i - M1	d	3/4" x 5/8"	99	49.5	49.5	56.4	31	16	40	27
IUTA - 34i - 34T - 34T - M1	c	〃	105.9	56.4	〃	49.5	〃	〃	〃	〃
IUTA - 34i - 34T - M1	a	〃	112.8	〃	56.4	〃	〃	〃	〃	〃
IUTA - 34i - 34i - 34T - M1	b	〃	105.9	〃	49.5	56.4	〃	〃	〃	〃
IUTA - 1T - 1i - M1	d	1" x 7/8"	124	62	62	67.9	39	22	50.5	34
IUTA - 1i - 1T - 1T - M1	c	〃	129.9	67.9	〃	62	〃	〃	〃	〃
IUTA - 1i - 1T - M1	a	〃	135.8	〃	67.9	〃	〃	〃	〃	〃
IUTA - 1i - 1i - 1T - M1	b	〃	129.9	〃	62	67.9	〃	〃	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IUTA

UNION TEE ADAPTOR



▲ Sleeve & Nut Set

■ metric tube type

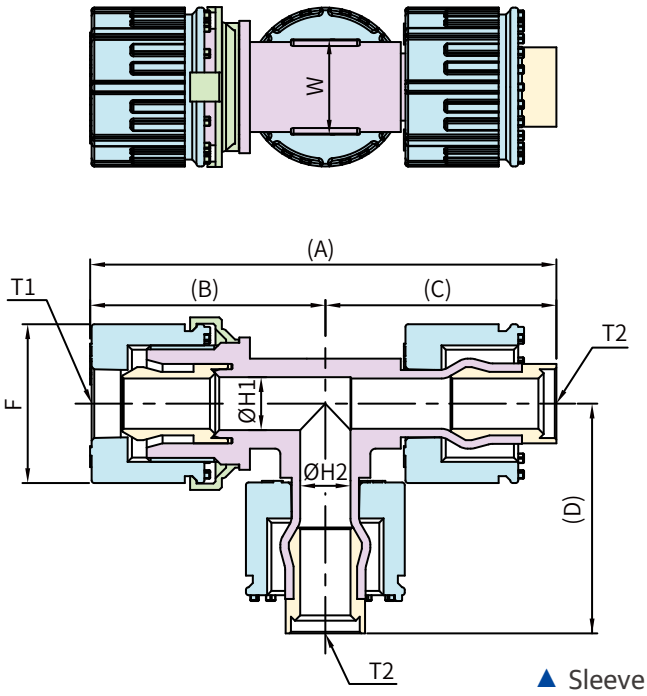
PART No.		Tube Size T1	Connectable Body Size T2	(A)	(B)	(C)	(D)	ØH1	ØH2	F	W
metric connection											Dimension : mm
IUTA - 6A - 6m - M1	d	6 x 4	6	57.8	28.9	28.9	30.4	4	4	17	9.6
IUTA - 6m - 6A - 6A - M1	c	〃	〃	59.3	30.4	〃	28.9	〃	〃	〃	〃
IUTA - 6m - 6A - M1	a	〃	〃	60.8	〃	30.4	〃	〃	〃	〃	〃
IUTA - 6m - 6m - 6A - M1	b	〃	〃	59.3	〃	28.9	30.4	〃	〃	〃	〃
IUTA - 8A - 8m - M1	d	8 x 6	8	65.2	32.6	32.6	33.7	6	6	20	13
IUTA - 8m - 8A - 8A - M1	c	〃	〃	66.3	33.7	〃	32.6	〃	〃	〃	〃
IUTA - 8m - 8A - M1	a	〃	〃	67.4	〃	33.7	〃	〃	〃	〃	〃
IUTA - 8m - 8m - 8A - M1	b	〃	〃	66.3	〃	32.6	33.7	〃	〃	〃	〃
IUTA - 10A - 10m - M1	d	10 x 8	10	73.6	36.8	36.8	37.8	8	8	25	14.8
IUTA - 10m - 10A - 10A - M1	c	〃	〃	74.7	37.9	〃	36.7	〃	〃	〃	〃
IUTA - 10m - 10A - M1	a	〃	〃	75.8	〃	37.9	〃	〃	〃	〃	〃
IUTA - 10m - 10m - 10A - M1	b	〃	〃	74.7	〃	36.8	37.8	〃	〃	〃	〃
IUTA - 12mA - 12m - M1	d	12 x 10	12	87.3	43.65	43.65	44.2	10	10	30	18
IUTA - 12m - 12mA - 12mA - M1	c	〃	〃	88.1	44.45	〃	43.4	〃	〃	〃	〃
IUTA - 12m - 12mA - M1	a	〃	〃	88.9	〃	44.45	〃	〃	〃	〃	〃
IUTA - 12m - 12m - 12mA - M1	b	〃	〃	88.1	〃	43.65	44.2	〃	〃	〃	〃
IUTA - 19A - 19m - M1	d	19 x 15.8	19	109.4	54.7	54.7	56.4	16	15.8	40	27
IUTA - 19m - 19A - 19A - M1	c	〃	〃	111.1	56.4	〃	54.7	〃	〃	〃	〃
IUTA - 19m - 19A - M1	a	〃	〃	112.8	〃	56.4	〃	〃	〃	〃	〃
IUTA - 19m - 19m - 19A - M1	b	〃	〃	111.1	〃	54.7	56.4	〃	〃	〃	〃
IUTA - 25A - 25m - M1	d	25 x 22	25	138	69	69	67.9	22	22	50.5	34
IUTA - 25m - 25A - 25A - M1	c	〃	〃	136.9	67.9	〃	69	〃	〃	〃	〃
IUTA - 25m - 25A - M1	a	〃	〃	135.8	〃	67.9	〃	〃	〃	〃	〃
IUTA - 25m - 25m - 25A - M1	b	〃	〃	136.9	〃	69	67.9	〃	〃	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

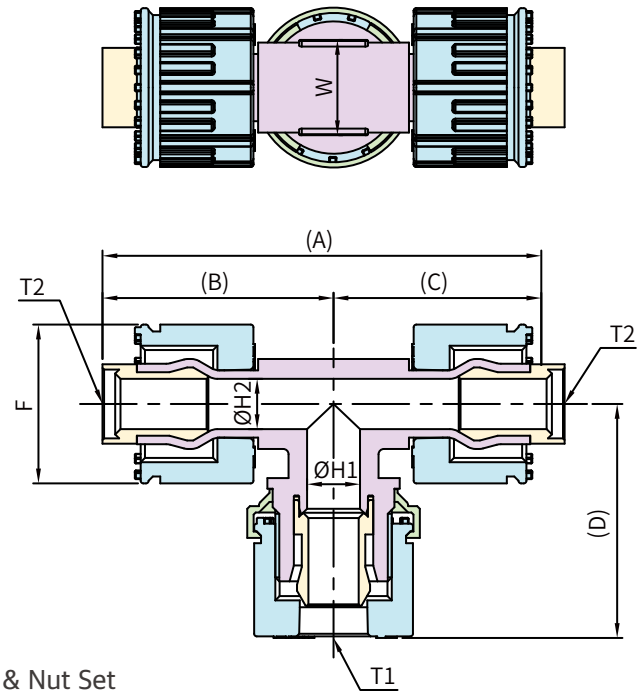
IUTA

UNION TEE ADAPTOR

c



d



▲ Sleeve & Nut Set

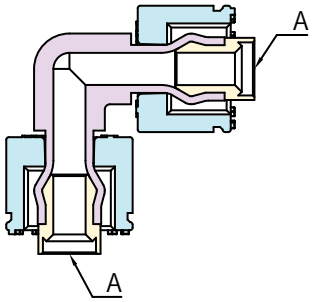
■ inch tube type

PART No.		Tube Size T1	Connectable Body Size T2	(A)	(B)	(C)	(D)	ØH1	ØH2	F	W
Inch connection											Dimension : mm
IUTA - 14A - 14i - M1	d	1/4" x 5/32"	1/4"	57.8	28.9	28.9	30.4	4	3.95	17	9.6
IUTA - 14i - 14A - 14A - M1	c	〃	〃	59.3	30.4	〃	28.9	〃	〃	〃	〃
IUTA - 14i - 14A - M1	a	〃	〃	60.8	〃	30.4	〃	〃	〃	〃	〃
IUTA - 14i - 14i - 14A - M1	b	〃	〃	59.3	〃	28.9	30.4	〃	〃	〃	〃
IUTA - 38A - 38i - M1	d	3/8" x 1/4"	3/8"	73.6	36.8	36.8	37.8	8	6.33	25	14.8
IUTA - 38i - 38A - 38A - M1	c	〃	〃	74.7	37.9	〃	36.7	〃	〃	〃	〃
IUTA - 38i - 38A - M1	a	〃	〃	75.8	〃	37.9	〃	〃	〃	〃	〃
IUTA - 38i - 38i - 38A - M1	b	〃	〃	74.7	〃	36.8	37.8	〃	〃	〃	〃
IUTA - 12A - 12i - M1	d	1/2" x 3/8"	1/2"	87.3	43.65	43.65	44.2	10	9.5	30	18
IUTA - 12i - 12A - 12A - M1	c	〃	〃	88.1	44.45	〃	43.4	〃	〃	〃	〃
IUTA - 12i - 12A - M1	a	〃	〃	88.9	〃	44.45	〃	〃	〃	〃	〃
IUTA - 12i - 12i - 12A - M1	b	〃	〃	88.1	〃	43.65	44.2	〃	〃	〃	〃
IUTA - 34A - 34i - M1	d	3/4" x 5/8"	3/4"	109.4	54.7	54.7	56.4	16	15.8	40	27
IUTA - 34i - 34A - 34A - M1	c	〃	〃	111.1	56.4	〃	54.7	〃	〃	〃	〃
IUTA - 34i - 34A - M1	a	〃	〃	112.8	〃	56.4	〃	〃	〃	〃	〃
IUTA - 34i - 34i - 34A - M1	b	〃	〃	111.1	〃	54.7	56.4	〃	〃	〃	〃
IUTA - 1A - 1i - M1	d	1" x 7/8"	1"	138	69	69	67.9	22	22.2	50.5	34
IUTA - 1i - 1A - 1A - M1	c	〃	〃	136.9	67.9	〃	69	〃	〃	〃	〃
IUTA - 1i - 1A - M1	a	〃	〃	135.8	〃	67.9	〃	〃	〃	〃	〃
IUTA - 1i - 1i - 1A - M1	b	〃	〃	136.9	〃	69	67.9	〃	〃	〃	〃

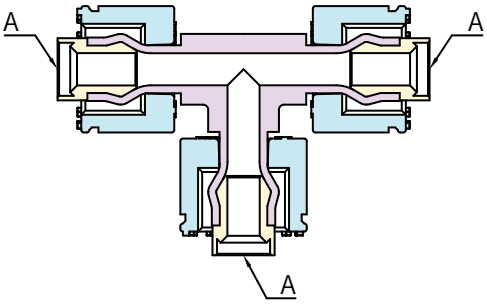
• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

ADAPTOR

ELBOW ADAPTOR
(SLEEVE & NUT SET)



TEE ADAPTOR
(SLEEVE & NUT SET)

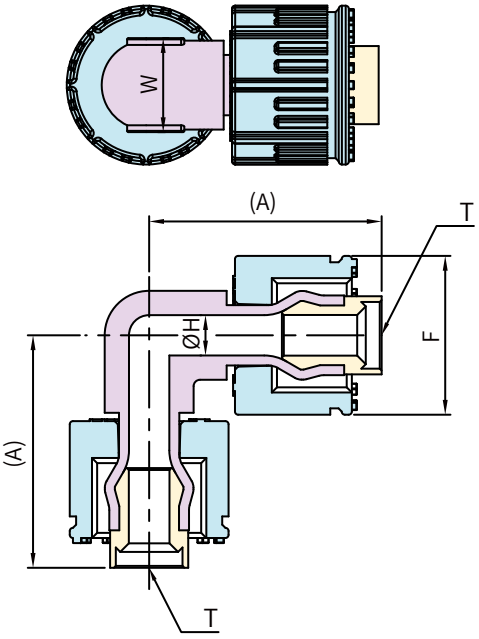


IEA - 12A - 12A - M1

- M1 : Mega Lock Type (사출 射出)
- Size : (A=Sleeve & Nut Set)
- IEA : Innodis Elbow Adaptor
  ITA : Innodis TEE Adaptor

IEA

ELBOW ADAPTOR



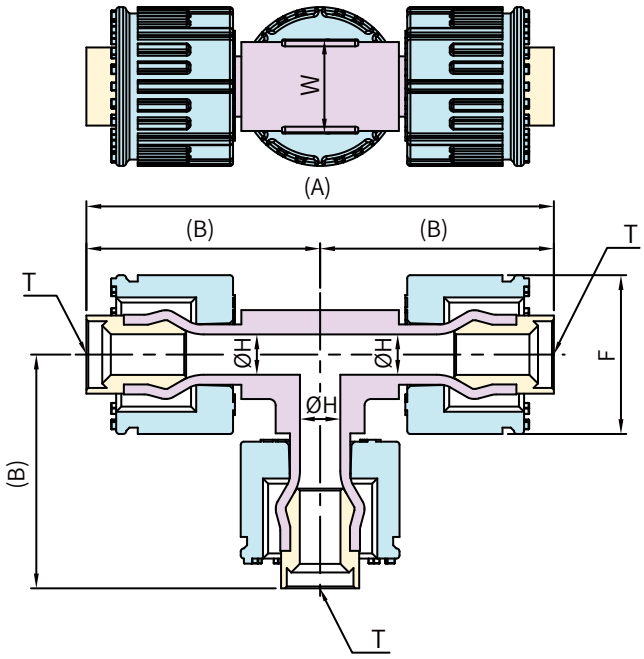
▲ Sleeve & Nut Set

PART No.	Connectable Body Size T	(A)	ØH	F	W
metric connection					Dimension : mm
IEA - 6A - 6A - M1	6	28.9	4	17	9.6
IEA - 8A - 8A - M1	8	12.5	6	20	12.5
IEA - 10A - 10A - M1	10	36.6	8	25	14.8
IEA - 12mA - 12mA - M1	12	43.4	10	30	18
IEA - 19A - 19A - M1	19	54.7	15.8	40	27
IEA - 25A - 25A - M1	25	68.8	22	50.5	34
Inch connection					Dimension : mm
IEA - 14A - 14A - M1	1/4"	28.9	3.95	17	9.6
IEA - 38A - 38A - M1	3/8"	36.6	6.33	25	14.8
IEA - 12A - 12A - M1	1/2"	43.4	9.5	30	18
IEA - 34A - 34A - M1	3/4"	54.7	15.8	40	27
IEA - 1A - 1A - M1	1"	68.8	22.2	50.5	34

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다
PART NO. 以外的尺寸 请咨询营业部

ITA

TEE ADAPTOR



▲ Sleeve & Nut Set

PART No.	Connectable Body Size T	(A)	(B)	ØH	F	W
metric connection						Dimension : mm
ITA - 6A - 6A - M1	6	57.8	28.9	4	17	9.6
ITA - 8A - 8A - M1	8	65.2	32.6	6	20	13
ITA - 10A - 10A - M1	10	73.6	36.8	8	25	14.8
ITA - 12mA - 12mA - M1	12	87.3	43.4	10	30	18
ITA - 19A - 19A - M1	19	109.4	54.7	15.8	40	27
ITA - 25A - 25A - M1	25	138	69	22	50.5	34
Inch connection						Dimension : mm
ITA - 14A - 14A - M1	1/4"	57.8	28.9	3.95	17	9.6
ITA - 38A - 38A - M1	3/8"	73.6	36.8	6.33	25	14.8
ITA - 12A - 12A - M1	1/2"	87.3	43.4	9.5	30	18
ITA - 34A - 34A - M1	3/4"	109.4	54.7	15.8	40	27
ITA - 1A - 1A - M1	1"	138	69	22.2	50.5	34

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다
PART NO. 以外的尺寸 请咨询营业部

05

Others

TUBE CAP

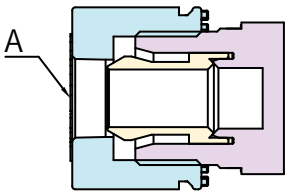
CAP SLEEVE

NUT

SLEEVE

TUBE CAP

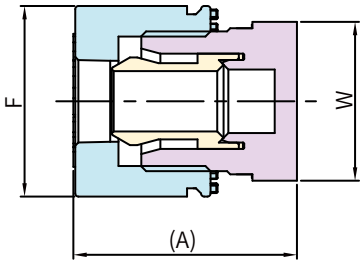
TUBE CAP



IF - TC12i - MP1

- MP1 : Mega Lock Type (PP사출 射出)
  F : PFA (가공 加工)/ T : PTFE (가공 加工)
  (Small Size - 1/8", 3m, 4m)
- TC : Tube Cap
  Tube Size : A (i=inch/m=mm)
- IF : Innodis Fitting

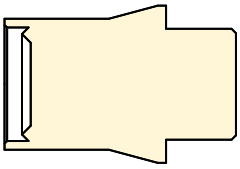
IF-TC
TUBE CAP



PART No.	Tube Size	(A)	F	W
metric connection				Dimension : mm
IF - TC3m - F	3 x 2	22	12.7	13.9
IF - TC4m - F	4 x 3	〃	〃	〃
IF - TC6m - MP1	6 x 4	25.9	17	16
IF - TC8m - MP1	8 x 6	27.7	20	18
IF - TC10m - MP1	10 x 8	30.5	25	21
IF - TC12m - MP1	12 x 10	35.2	30	25
IF - TC19m - MP1	19 x 15.8	45.4	40	34
IF - TC25m - MP1	25 x 22	56.9	50.5	43
Inch connection				Dimension : mm
IF - TC18i - F	1/8" x 0.086"	22	12.7	13.9
IF - TC14i - MP1	1/4" x 5/32"	25.9	17	16
IF - TC38i - MP1	3/8" x 1/4"	30.5	25	21
IF - TC12i - MP1	1/2" x 3/8"	35.2	30	25
IF - TC34i - MP1	3/4" x 5/8"	45.4	40	34
IF - TC1i - MP1	1" x 7/8"	56.9	50.5	43

CAP SLEEVE, UNION NUT, SLEEVE

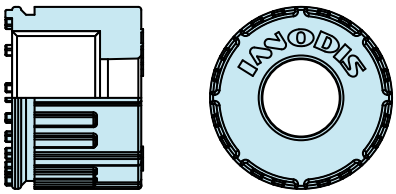
CAP SLEEVE



IF - CS12i - MT

- MT: MF : PFA (가공 加工)/ MT : PTFE (가공 加工)
  F : PFA (가공 加工)/ T : PTFE (가공 加工)
  (Small Size - 1/8”, 3m, 4m)
- CS: CS : Cap Sleeve
  Tube Size : i=inch/m=mm
- IF: IF : Innodis Fitting

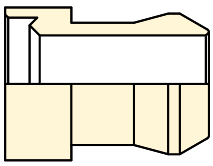
UNION NUT



IF - N12i - M1

- M1: M1 : Mega Lock Type (사출 射出)
  P1 : Small Size - 1/8”, 3m, 4m (사출 射出)
- N12i: N : Nut
  Tube Size : i=inch/m=mm
- IF: IF : Innodis Fitting

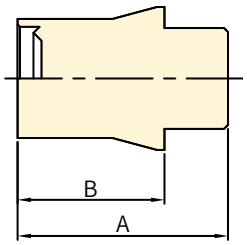
SLEEVE



IF - S12i - M1

- M1: M1 : Mega Lock Type (사출 射出)
  P1 : Small Size - 1/8”, 3m, 4m (사출 射出)
- S12i: S : Sleeve
  Tube Size : i=inch/m=mm
- IF: IF : Innodis Fitting

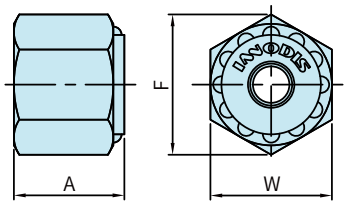
IF-CS
CAP SLEEVE



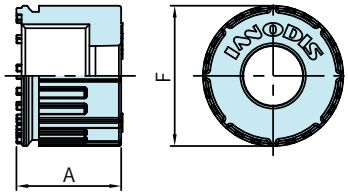
PART No.	Tube Size	A	B
metric connection			Dimension : mm
IF - CS3m - F	3 x 2	12.3	9.8
IF - CS4m - F	4 x 3	〃	〃
IF - CS6m - MF	6 x 4	17.5	11.5
IF - CS8m - MF	8 x 6	19	12.6
IF - CS10m - MF	10 x 8	21.2	14.2
IF - CS12m - MF	12 x 10	27	19
IF - CS19m - MF	19 x 15.8	32.8	23.8
IF - CS25m - MF	25 x 22	40.2	30.2
Inch connection			Dimension : mm
IF - CS18i - F	1/8" x 0.086"	12.3	9.8
IF - CS14i - MF	1/4" x 5/32"	17.5	11.5
IF - CS38i - MF	3/8" x 1/4"	21.2	14.2
IF - CS12i - MF	1/2" x 3/8"	27	19
IF - CS34i - MF	3/4" x 5/8"	32.8	23.8
IF - CS1i - MF	1" x 7/8"	40.2	30.2

IF-N
NUT

TYPE a

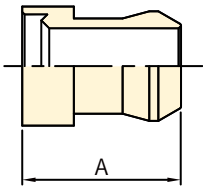


TYPE b



PART No.	Tube Size	A	F	W	TYPE
metric connection					Dimension : mm
IF - N3m - P1	3 x 2	10	12.7	11	a
IF - N4m - P1	4 x 3	〃	〃	〃	a
IF - N6m - M1	6 x 4	15.8	17	-	b
IF - N8m - M1	8 x 6	17.9	20	-	b
IF - N10m - M1	10 x 8	19.5	25	-	b
IF - N12m - M1	12 x 10	22.7	30	-	b
IF - N19m - M1	19 x 15.8	28.8	40	-	b
IF - N25m - M1	25 x 22	33.8	50.5	-	b
Inch connection					Dimension : mm
IF - N18i - P1	1/8" x 0.086"	10	12.7	11	a
IF - N14i - M1	1/4" x 5/32"	15.8	17	-	b
IF - N38i - M1	3/8" x 1/4"	19.5	25	-	b
IF - N12i - M1	1/2" x 3/8"	22.7	30	-	b
IF - N34i - M1	3/4" x 5/8"	28.8	40	-	b
IF - N1i - M1	1" x 7/8"	33.8	50.5	-	b

IF-S
SLEEVE



PART No.	Tube Size	A
metric connection		Dimension : mm
IF - S3m - P1	3 x 2	10
IF - S4m - P1	4 x 3	〃
IF - S6m - M1	6 x 4	12.5
IF - S8m - M1	8 x 6	14
IF - S10m - M1	10 x 8	15.8
IF - S12m - M1	12 x 10	20.2
IF - S19m - M1	19 x 15.8	24.3
IF - S25m - M1	25 x 22	31
Inch connection		Dimension : mm
IF - S18i - P1	1/8" x 0.086"	10
IF - S14i - M1	1/4" x 5/32"	12.4
IF - S38i - M1	3/8" x 1/4"	15.7
IF - S12i - M1	1/2" x 3/8"	20
IF - S34i - M1	3/4" x 5/8"	24.3
IF - S1i - M1	1" x 7/8"	31

06

Fitting Jig

TUBE EXPANDING JIG

NUT ASSEMBLY JIG

TUBE EXPANDING JIG (MEGA LOCK TYPE)

Tube Expanding Gun

* Body Size. 296(W)×160(L)×47(H)

Size	Code No	Weight
1/8", 1/4"	IF - TET - J1 - M1	750g
3mm ~ 8mm	IF - TET - J1M - M1	750g

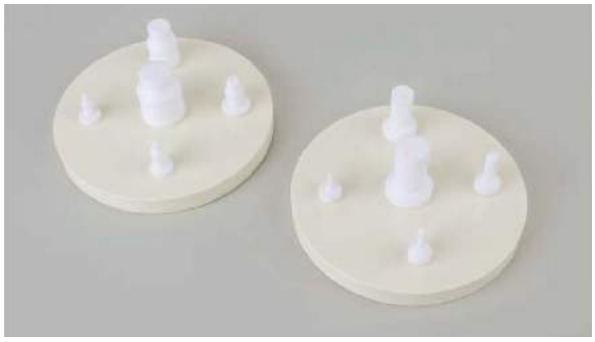
Tube Expanding Tool

* Body Size. 310(W)×105(L)×62(H)

Size	Code No	Weight
3/8" ~ 1"	IF - TET - J2 - M1	2650g
10mm ~ 25mm	IF - TET - J2M - M1	2650g

Tube Expanding Jig <Rod Type>

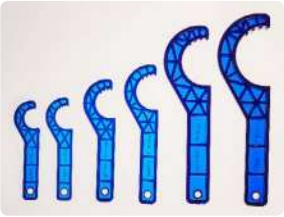
Part Name	Size	Code No	Weight
Set Code No	Inch	IFER - i - S - M1	570g
	mm	IFER - M - S - M1	630g



Tube Expanding Jig (L) / Sleeve Fix Jig (R)

Part Name	Size	Code No	Weight
Set Code No	Inch	IFEF - i - S - M1	940g
	mm	IFEF - M - S - M1	940g

NUT ASSEMBLY JIG



Part Name	Size	Code No	Weight
Nut Assembly Jig	1/4" (6mm)	IFA - 14i - M1	5g
	8mm	IFA - 8m - M1	5g
	3/8" (10mm)	IFA - 38i - M1	10g
	1/2" (12mm)	IFA - 12i - M1	15g
	3/4" (19mm)	IFA - 34i - M1	30g
	1" (25mm)	IFA - 1i - M1	40g
Set Code No	Inch / mm	IFA - SET - M1	295g

08

PFA
Fitting (Standard Type)

1. MALE CONNECTOR
2. UNION CONNECTOR
3. MALE CONNECTOR(FERRULE TYPE)
4. MALE ELBOW
5. UNION ELBOW
6. MALE TEE
7. UNION TEE
8. NUT / SLEEVE

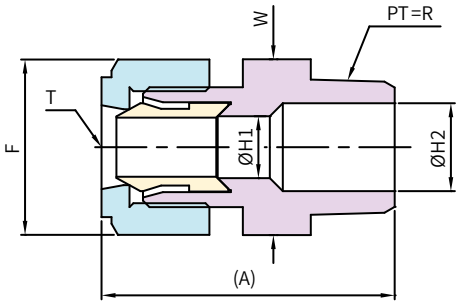
• 재조임은, 5회까지 가능합니다.
最多重新拧紧，可以到5次。

• 5회를 넘길 경우에는 FITTING을 교환하여 주십시오.
超过5次时，请更换接头（FITTING）

• 단, UNION NUT와 본체의 틈이 하한치 이하가 되면 그 시점에서 교환하여 주십시오.
但，UNION NUT和本体的空隙下限寸以下时，请换接头。

※ 주의 : 재조임을 할 경우에는 분리한 TUBE와 SLEEVE 및 본체의 SEAL 면이 상처가 나지 않도록 주의하여 주십시오.
누설의 원인이 되는 경우도 있습니다.
注意 ： 重新拧紧时，注意避免Tube和Sleeve及主体Seal面产生划痕，可能会导致泄露。

IMC
MALE CONNECTOR



PART No.	Tube Size	Thread Size	(A)	ØH1	ØH2	F	W
metric connection (R=PT)							Dimension : mm
IMC - 3m - R18 - P1	3 x 2	R 1/8	29	3	3	11	12
IMC - 4m - R18 - P1	4 x 3	〃	〃	〃	〃	〃	〃
IMC - 6m - R18 - P1	6 x 4	〃	36	4	〃	16	15
IMC - 6m - R14 - P1	〃	R 1/4	40	〃	4	〃	〃
IMC - 6m - R38 - P1	〃	R 3/8	41	〃	8	〃	〃
IMC - 6m - R12 - P1	〃	R 1/2	43	〃	10	〃	23
IMC - 8m - R18 - P1	8 x 6	R 1/8	41	8	3	22	19
IMC - 8m - R14 - P1	〃	R 1/4	44	〃	6	〃	〃
IMC - 8m - R38 - P1	〃	R 3/8	45	〃	8	〃	〃
IMC - 8m - R12 - P1	〃	R 1/2	48	〃	10	〃	〃
IMC - 8m - R34 - P1	〃	R 3/4	53	〃	15.5	〃	〃
IMC - 10m - R18 - P1	10 x 8	R 1/8	41	〃	3	〃	〃
IMC - 10m - R14 - P1	〃	R 1/4	44	〃	6	〃	〃
IMC - 10m - R38 - P1	〃	R 3/8	45	〃	8	〃	〃
IMC - 10m - R12 - P1	〃	R 1/2	48	〃	10	〃	〃
IMC - 10m - R34 - P1	〃	R 3/4	53	〃	15.5	〃	〃
IMC - 12m - R18 - P1	12 x 10	R 1/8	46	10	3	27	23
IMC - 12m - R14 - P1	〃	R 1/4	50	4	4	〃	〃
IMC - 12m - R38 - P1	〃	R 3/8	51	8	8	〃	〃
IMC - 12m - R12 - P1	〃	R 1/2	53.5	10	10	〃	〃
IMC - 12m - R34 - P1	〃	R 3/4	58	〃	15.5	〃	〃
IMC - 12m - R1 - P1	〃	R 1	63	〃	22	〃	44
IMC - 19m - R14 - P1	19 x 15.8	R 1/4	60	15.5	4	38	32
IMC - 19m - R38 - P1	〃	R 3/8	61	〃	8	〃	〃
IMC - 19m - R12 - P1	〃	R 1/2	63	〃	10	〃	〃
IMC - 19m - R34 - P1	〃	R 3/4	68	〃	15.5	〃	〃
IMC - 19m - R1 - P1	〃	R 1	72	〃	22	〃	44
IMC - 25m - R14 - P1	25 x 22	R 1/4	71.5	22	4	50	〃
IMC - 25m - R38 - P1	〃	R 3/8	72.5	〃	8	〃	〃
IMC - 25m - R12 - P1	〃	R 1/2	75.5	〃	10	〃	〃
IMC - 25m - R34 - P1	〃	R 3/4	78	〃	15.5	〃	〃
IMC - 25m - R1 - P1	〃	R 1	79	〃	22	〃	〃

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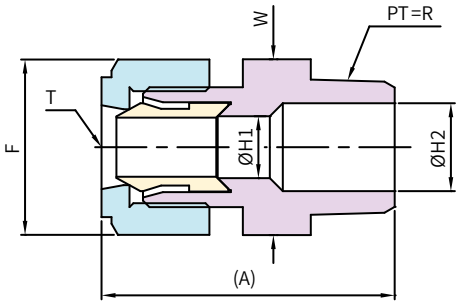
MALE CONNECTOR



PART No.	Tube Size	Thread Size	(A)	ØH1	ØH2	F	W
Inch connection (R=PT)							Dimension : mm
IMC - 18i - R18 - P1	1/8" x 0.086"	R 1/8	29	3	3	11	12
IMC - 14i - R18 - P1	1/4" x 5/32"	〃	36	4	〃	16	15
IMC - 14i - R14 - P1	〃	R 1/4	40	〃	4	〃	〃
IMC - 14i - R38 - P1	〃	R 3/8	41	〃	8	〃	〃
IMC - 14i - R12 - P1	〃	R 1/2	43	〃	10	〃	23
IMC - 38i - R18 - P1	3/8" x 1/4"	R 1/8	41	8	3	22	19
IMC - 38i - R14 - P1	〃	R 1/4	44	〃	6	〃	〃
IMC - 38i - R38 - P1	〃	R 3/8	45	〃	8	〃	〃
IMC - 38i - R12 - P1	〃	R 1/2	48	〃	10	〃	〃
IMC - 38i - R34 - P1	〃	R 3/4	53	〃	15.5	〃	〃
IMC - 12i - R18 - P1	1/2" x 3/8"	R 1/8	46	10	3	27	23
IMC - 12i - R14 - P1	〃	R 1/4	50	4	4	〃	〃
IMC - 12i - R38 - P1	〃	R 3/8	51	8	8	〃	〃
IMC - 12i - R12 - P1	〃	R 1/2	53.5	10	10	〃	〃
IMC - 12i - R34 - P1	〃	R 3/4	58	〃	15.5	〃	〃
IMC - 12i - R1 - P1	〃	R 1	63	〃	22	〃	44
IMC - 34i - R14 - P1	3/4" x 5/8"	R 1/4	60	15.5	4	38	32
IMC - 34i - R38 - P1	〃	R 3/8	61	〃	8	〃	〃
IMC - 34i - R12 - P1	〃	R 1/2	63	〃	10	〃	〃
IMC - 34i - R34 - P1	〃	R 3/4	68	〃	15.5	〃	〃
IMC - 34i - R1 - P1	〃	R 1	72	〃	22	〃	44
IMC - 1i - R14 - P1	1" x 7/8"	R 1/4	71.5	22	4	50	〃
IMC - 1i - R38 - P1	〃	R 3/8	72.5	〃	8	〃	〃
IMC - 1i - R12 - P1	〃	R 1/2	75.5	〃	10	〃	〃
IMC - 1i - R34 - P1	〃	R 3/4	78	〃	15.5	〃	〃
IMC - 1i - R1 - P1	〃	R 1	79	〃	22	〃	〃

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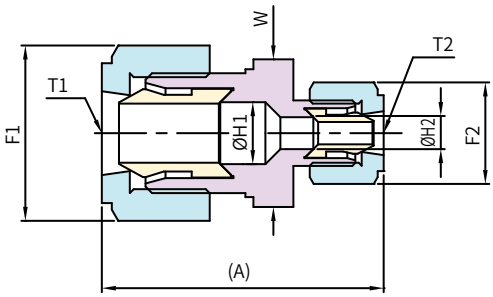
IUC

UNION CONNECTOR



PART No.	Tube Size T1	Tube Size T2	(A)	ØH1	ØH2	F1	F2	W
metric connection								Dimension : mm
IUC - 3m - 3m - P1	3 x 2	3 x 2	38	3	3	11	11	12
IUC - 4m - 3m - P1	4 x 3	〃	〃	〃	〃	〃	〃	〃
IUC - 4m - 4m - P1	〃	4 x 3	〃	〃	〃	〃	〃	〃
IUC - 6m - 3m - P1	6 x 4	3 x 2	43.5	4	〃	16	〃	15
IUC - 6m - 4m - P1	〃	4 x 3	〃	〃	〃	〃	〃	〃
IUC - 6m - 6m - P1	〃	6 x 4	47	〃	4	〃	16	〃
IUC - 8m - 6m - P1	8 x 6	〃	48	8	〃	22	〃	19
IUC - 8m - 8m - P1	〃	8 x 6	55	〃	8	〃	22	〃
IUC - 10m - 6m - P1	10 x 8	6 x 4	48	8	4	〃	16	〃
IUC - 10m - 8m - P1	〃	8 x 6	55	〃	8	〃	22	〃
IUC - 10m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃
IUC - 12m - 6m - P1	12 x 10	6 x 4	57	4	4	27	16	23
IUC - 12m - 8m - P1	〃	8 x 6	61	10	8	〃	22	〃
IUC - 12m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃
IUC - 12m - 12m - P1	〃	12 x 10	67	〃	10	〃	27	〃
IUC - 19m - 6m - P1	19 x 15.8	6 x 4	〃	15.5	4	38	16	32
IUC - 19m - 8m - P1	〃	8 x 6	71	〃	8	〃	22	〃
IUC - 19m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃
IUC - 19m - 12m - P1	〃	12 x 10	76	〃	10	〃	27	〃
IUC - 19m - 19m - P1	〃	19 x 15.8	86	〃	15.5	〃	38	〃
IUC - 25m - 6m - P1	25 x 22	6 x 4	78.5	22	4	50	16	44
IUC - 25m - 12m - P1	〃	12 x 10	86	〃	10	〃	27	〃
IUC - 25m - 19m - P1	〃	19 x 15.8	96	〃	15.5	〃	38	〃
IUC - 25m - 25m - P1	〃	25 x 22	101	〃	22	〃	50	〃
Inch connection								Dimension : mm
IUC - 18i - 18i - P1	1/8" x 0.086"	1/8" x 0.086"	38	3	3	11	11	12
IUC - 14i - 18i - P1	1/4" x 5/32"	〃	43.5	4	〃	16	〃	15
IUC - 14i - 14i - P1	〃	1/4" x 5/32"	47	〃	4	〃	16	〃
IUC - 38i - 14i - P1	3/8" x 1/4"	〃	48	8	〃	22	〃	19
IUC - 38i - 38i - P1	〃	3/8" x 1/4"	55	〃	8	〃	22	〃
IUC - 12i - 14i - P1	1/2" x 3/8"	1/4" x 5/32"	57	4	4	27	16	23
IUC - 12i - 38i - P1	〃	3/8" x 1/4"	61	10	8	〃	22	〃
IUC - 12i - 12i - P1	〃	1/2" x 3/8"	67	〃	10	〃	27	〃
IUC - 34i - 14i - P1	3/4" x 5/8"	1/4" x 5/32"	〃	15.5	4	38	16	32
IUC - 34i - 38i - P1	〃	3/8" x 1/4"	71	〃	8	〃	22	〃
IUC - 34i - 12i - P1	〃	1/2" x 3/8"	76	〃	10	〃	27	〃
IUC - 34i - 34i - P1	〃	3/4" x 5/8"	86	〃	15.5	〃	38	〃
IUC - 1i - 14i - P1	1" x 7/8"	1/4" x 5/32"	78.5	22	4	50	16	44
IUC - 1i - 12i - P1	〃	1/2" x 3/8"	86	〃	10	〃	27	〃
IUC - 1i - 34i - P1	〃	3/4" x 5/8"	96	〃	15.5	〃	38	〃
IUC - 1i - 1i - P1	〃	1" x 7/8"	101	〃	22	〃	50	〃

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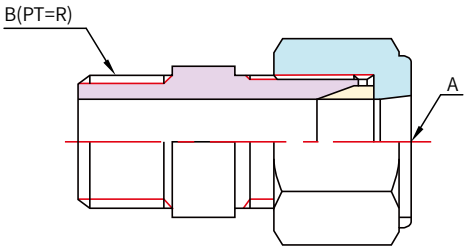
MALE CONNECTOR

FERRULE TYPE(관통형 피팅)



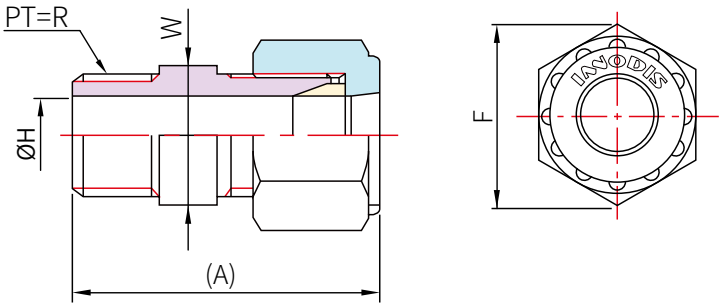
IMCF – 12i – R12 – P1

- P1 : PFA (사출)
  P2 : PFA (가공)
- Size : B (R=PT)
- Tube Size : A (i=inch/m=mm)
- IMCF : Innodis Male Connector Ferrule

IMCF

MALE CONNECTOR

FERRULE TYPE(관통형 피팅)



PART No.	Tube Size	Thread Size	(A)	ØH1	F	W
metric connection (R=PT)						Dimension : mm
IMCF - 3m - R18 - P1	3 x 2	R 1/8	31.5	3.2	12.7	12
IMCF - 4m - R18 - P1	4 x 3	R 1/8	31.5	4.2	12.7	12
IMCF - 6m - R18 - P1	6 x 4	R 1/8	33.3	6.5	18.5	15
IMCF - 6m - R14 - P1	6 x 4	R 1/4	40	6.5	18.5	15
IMCF - 8m - R14 - P1	8 x 6	R 1/4	46	8.2	25.4	19
IMCF - 8m - R38 - P1	8 x 6	R 3/8	47	8.2	25.4	19
IMCF - 8m - R12 - P1	8 x 6	R 1/2	49.7	8.2	25.4	23
IMCF - 10m - R38 - P1	10 x 8	R 3/8	46.3	10.2	25.4	19
IMCF - 10m - R12 - P1	10 x 8	R 1/2	50	10.2	25.4	23
IMCF - 12m - R38 - P1	12 x 10	R 3/8	51	12.2	31.2	23
IMCF - 12m - R12 - P1	12 x 10	R 1/2	54	12.2	31.2	23
IMCF - 19m - R34 - P1	19 x 15.8	R 3/4	67.1	19.2	43.7	32
IMCF - 25m - R1 - P1	25 x 22	R 1	78.5	25.6	57.8	44
Inch connection (R=PT)						Dimension : mm
IMCF - 18i - R18 - P1	1/8" x 0.086"	R 1/8	31.5	3.2	12.7	12
IMCF - 14i - R18 - P1	1/4" x 5/32"	R 1/8	33.3	6.5	18.5	15
IMCF - 14i - R14 - P1	1/4" x 5/32"	R 1/4	40.4	6.5	18.5	15
IMCF - 38i - R38 - P1	3/8" x 1/4"	R 3/8	46.5	9.7	25.4	19
IMCF - 38i - R12 - P1	3/8" x 1/4"	R 1/2	49.2	9.7	25.4	23
IMCF - 12i - R12 - P1	1/2" x 3/8"	R 1/2	54	13	31.2	23
IMCF - 34i - R34 - P1	3/4" x 5/8"	R 3/4	67.1	19.2	43.7	32
IMCF - 1i - R1 - P1	1" x 7/8"	R 1	78.5	25.6	57.8	44

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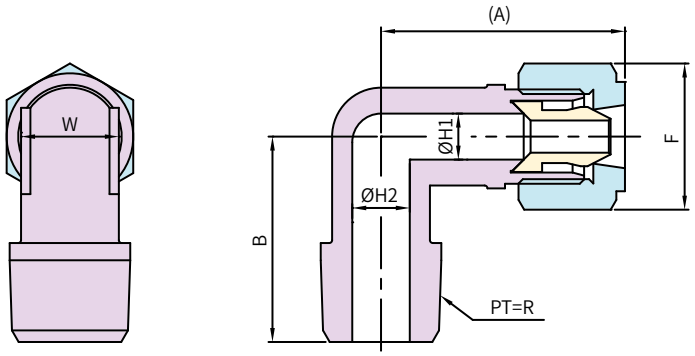
IME

MALE ELBOW



PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (R=PT)								Dimension : mm
IME - 3m - R18 - P1	3 x 2	R 1/8	24	19.2	3	3	11	7
IME - 4m - R18 - P1	4 x 3	〃	〃	〃	〃	〃	〃	〃
IME - 6m - R18 - P1	6 x 4	〃	33	23.2	4	4	16	10
IME - 6m - R14 - P1	〃	R 1/4	〃	27	〃	〃	〃	〃
IME - 6m - R38 - P1	〃	R 3/8	34	29.4	〃	4 → 8	〃	15
IME - 6m - R12 - P1	〃	R 1/2	38.5	36.7	〃	4 → 10	〃	17
IME - 8m - R18 - P1	8 x 6	R 1/8	38	25.7	8 → 6	4	22	18
IME - 8m - R14 - P1	〃	R 1/4	〃	28.3	〃	6	〃	15
IME - 8m - R38 - P1	〃	R 3/8	〃	29.5	8	8	〃	〃
IME - 8m - R12 - P1	〃	R 1/2	42.5	35.7	〃	10	〃	17
IME - 8m - R34 - P1	〃	R 3/4	47	45.9	〃	8 → 15.5	〃	22.5
IME - 10m - R18 - P1	10 x 8	R 1/8	38	25.7	8 → 6	4	〃	18
IME - 10m - R14 - P1	〃	R 1/4	〃	28.3	〃	6	〃	15
IME - 10m - R38 - P1	〃	R 3/8	〃	29.5	8	8	〃	〃
IME - 10m - R12 - P1	〃	R 1/2	42.5	35.7	〃	10	〃	17
IME - 10m - R34 - P1	〃	R 3/4	47	45.9	〃	8 → 15.5	〃	22.5
IME - 12m - R14 - P1	12 x 10	R 1/4	48	32	10 → 5	5	27	17
IME - 12m - R38 - P1	〃	R 3/8	〃	33.5	10	8	〃	〃
IME - 12m - R12 - P1	〃	R 1/2	〃	36.7	〃	10	〃	〃
IME - 12m - R34 - P1	〃	R 3/4	〃	38.3	〃	10 → 15.5	〃	〃
IME - 12m - R1 - P1	〃	R 1	56.5	55.7	〃	22	〃	32
IME - 19m - R14 - P1	19 x 15.8	R 1/4	61	37.7	15.5 → 5	5	38	22.5
IME - 19m - R38 - P1	〃	R 3/8	〃	38.4	15.5 → 8	8	〃	〃
IME - 19m - R12 - P1	〃	R 1/2	〃	41.4	15.5 → 10	10	〃	〃
IME - 19m - R34 - P1	〃	R 3/4	〃	45.9	15.5	15.5	〃	〃
IME - 19m - R1 - P1	〃	R 1	〃	55.7	〃	22	〃	32
IME - 25m - R12 - P1	25 x 22	R 1/2	72.5	47.9	22 → 10	10	50	29
IME - 25m - R34 - P1	〃	R 3/4	〃	52.4	22 → 15.5	15.5	〃	〃
IME - 25m - R1 - P1	〃	R 1	〃	55.7	22	22	〃	〃

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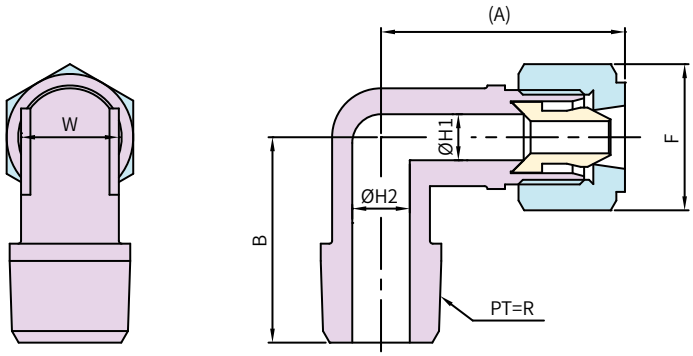
IME

MALE ELBOW



PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
Inch connection (R=PT)								Dimension : mm
IME - 18i - R18 - P1	1/8" x 0.086"	R 1/8	24	19.2	3	3	11	7
IME - 14i - R18 - P1	1/4" x 5/32"	〃	33	23.2	4	4	16	10
IME - 14i - R14 - P1	〃	R 1/4	〃	27	〃	〃	〃	〃
IME - 14i - R38 - P1	〃	R 3/8	34	29.4	〃	4 → 8	〃	15
IME - 14i - R12 - P1	〃	R 1/2	38.5	36.7	〃	4 → 10	〃	17
IME - 38i - R18 - P1	3/8" x 1/4"	R 1/8	38	25.7	8 → 6	4	22	18
IME - 38i - R14 - P1	〃	R 1/4	〃	28.3	〃	6	〃	15
IME - 38i - R38 - P1	〃	R 3/8	〃	29.5	8	8	〃	〃
IME - 38i - R12 - P1	〃	R 1/2	42.5	35.7	〃	10	〃	17
IME - 38i - R34 - P1	〃	R 3/4	47	45.9	〃	8 → 15.5	〃	22.5
IME - 12i - R14 - P1	1/2" x 3/8"	R 1/4	48	32	10 → 5	5	27	17
IME - 12i - R38 - P1	〃	R 3/8	〃	33.5	10	8	〃	〃
IME - 12i - R12 - P1	〃	R 1/2	〃	36.7	〃	10	〃	〃
IME - 12i - R34 - P1	〃	R 3/4	〃	38.3	〃	10 → 15.5	〃	〃
IME - 12i - R1 - P1	〃	R 1	56.5	55.7	〃	22	〃	32
IME - 34i - R14 - P1	3/4" x 5/8"	R 1/4	61	37.7	15.5 → 5	5	38	22.5
IME - 34i - R38 - P1	〃	R 3/8	〃	38.4	15.5 → 8	8	〃	〃
IME - 34i - R12 - P1	〃	R 1/2	〃	41.4	15.5 → 10	10	〃	〃
IME - 34i - R34 - P1	〃	R 3/4	〃	45.9	15.5	15.5	〃	〃
IME - 34i - R1 - P1	〃	R 1	〃	55.7	〃	22	〃	32
IME - 1i - R12 - P1	1" x 7/8"	R 1/2	72.5	47.9	22 → 10	10	50	29
IME - 1i - R34 - P1	〃	R 3/4	〃	52.4	22 → 15.5	15.5	〃	〃
IME - 1i - R1 - P1	〃	R 1	〃	55.7	22	22	〃	〃

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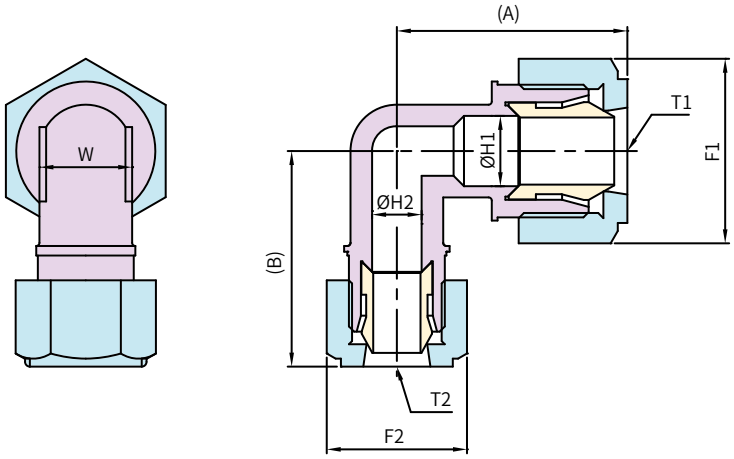
IUE
UNION ELBOW

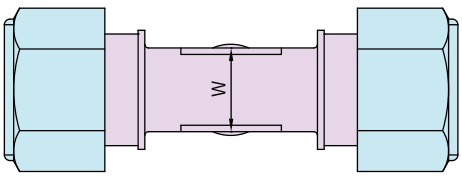


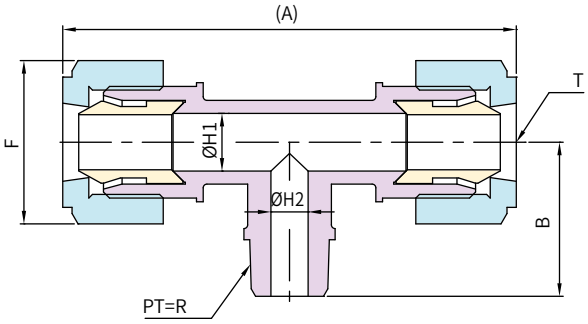
PART No.	Tube Size T1	Tube Size T2	(A)	(B)	ØH1	ØH2	F1	F2	W
metric connection									Dimension : mm
IUE - 3m - 3m - P1	3 x 2	3 x 2	24	24	3	3	11	11	7
IUE - 4m - 3m - P1	4 x 3	〃	〃	〃	〃	〃	〃	〃	〃
IUE - 4m - 4m - P1	〃	4 x 3	〃	〃	〃	〃	〃	〃	〃
IUE - 6m - 6m - P1	6 x 4	6 x 4	33	33	4	4	16	16	10
IUE - 8m - 6m - P1	8 x 6	〃	38	34	8 → 4	〃	22	〃	15
IUE - 8m - 8m - P1	〃	8 x 6	〃	38	8	8	〃	22	〃
IUE - 10m - 6m - P1	10 x 8	6 x 4	〃	34	8 → 4	4	〃	16	〃
IUE - 10m - 8m - P1	〃	8 x 6	〃	38	8	8	〃	22	〃
IUE - 10m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUE - 12m - 6m - P1	12 x 10	6 x 4	48	38.5	10 → 4	4	27	16	17
IUE - 12m - 8m - P1	〃	8 x 6	〃	42.5	10 → 8	8	〃	22	〃
IUE - 12m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUE - 12m - 12m - P1	〃	12 x 10	〃	48	10	10	〃	27	〃
IUE - 19m - 8m - P1	19 x 15.8	8 x 6	61	47	15.5 → 8	8	38	22	22.5
IUE - 19m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUE - 19m - 12m - P1	〃	12 x 10	〃	53	15.5 → 10	10	〃	27	〃
IUE - 19m - 19m - P1	〃	19 x 15.8	〃	61	15.5	15.5	〃	38	〃
IUE - 25m - 6m - P1	25 x 22	6 x 4	72.5	51	22 → 10	4	50	16	29
IUE - 25m - 8m - P1	〃	8 x 6	〃	55	〃	8	〃	22	〃
IUE - 25m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUE - 25m - 12m - P1	〃	12 x 10	〃	59.5	〃	10	〃	27	〃
IUE - 25m - 19m - P1	〃	19 x 15.8	〃	67.5	22 → 15.5	15.5	〃	38	〃
IUE - 25m - 25m - P1	〃	25 x 22	〃	72.5	22	22	〃	50	〃
Inch connection									Dimension : mm
IUE - 18i - 18i - P1	1/8" x 0.086"	1/8" x 0.086"	24	24	3	3	11	11	7
IUE - 14i - 14i - P1	1/4" x 5/32"	1/4" x 5/32"	33	33	4	4	16	16	10
IUE - 38i - 14i - P1	3/8" x 1/4"	〃	38	34	8 → 4	〃	22	〃	15
IUE - 38i - 38i - P1	〃	3/8" x 1/4"	〃	38	8	8	〃	22	〃
IUE - 12i - 14i - P1	1/2" x 3/8"	1/4" x 5/32"	48	38.5	10 → 4	4	27	16	17
IUE - 12i - 38i - P1	〃	3/8" x 1/4"	〃	42.5	10 → 8	8	〃	22	〃
IUE - 12i - 12i - P1	〃	1/2" x 3/8"	〃	48	10	10	〃	27	〃
IUE - 34i - 38i - P1	3/4" x 5/8"	3/8" x 1/4"	61	47	15.5 → 8	8	38	22	22.5
IUE - 34i - 12i - P1	〃	1/2" x 3/8"	〃	53	15.5 → 10	10	〃	27	〃
IUE - 34i - 34i - P1	〃	3/4" x 5/8"	〃	61	15.5	15.5	〃	38	〃
IUE - 1i - 14i - P1	1" x 7/8"	1/4" x 5/32"	72.5	51	22 → 10	4	50	16	29
IUE - 1i - 38i - P1	〃	3/8" x 1/4"	〃	55	〃	8	〃	22	〃
IUE - 1i - 12i - P1	〃	1/2" x 3/8"	〃	59.5	〃	10	〃	27	〃
IUE - 1i - 34i - P1	〃	3/4" x 5/8"	〃	67.5	22 → 15.5	15.5	〃	38	〃
IUE - 1i - 1i - P1	〃	1" x 7/8"	〃	72.5	22	22	〃	50	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IMT

MALE TEE

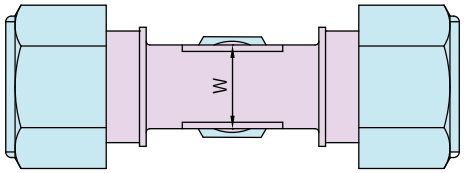


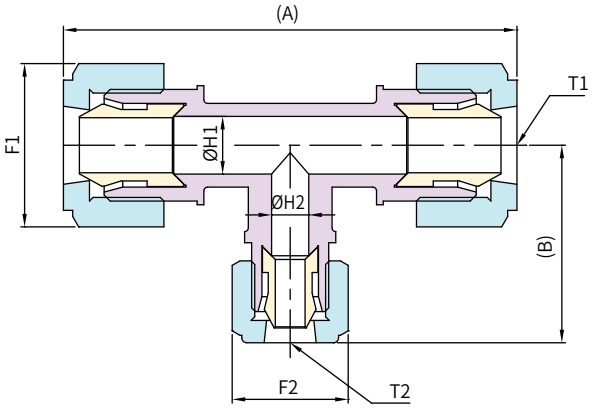


PART No.	Tube Size	Thread Size	(A)	B	ØH1	ØH2	F	W
metric connection (R=PT)								Dimension : mm
IMT - 3m - R18 - P1	3 x 2	R 1/8	48	19.2	3	3	11	7
IMT - 4m - R18 - P1	4 x 3	〃	〃	〃	〃	〃	〃	〃
IMT - 6m - R18 - P1	6 x 4	〃	66	23.2	4	4	16	10
IMT - 6m - R14 - P1	〃	R 1/4	〃	27	〃	〃	〃	〃
IMT - 6m - R38 - P1	〃	R 3/8	〃	27.4	〃	4 → 8	〃	〃
IMT - 8m - R14 - P1	8 x 6	R 1/4	76	28.25	8	6	22	15
IMT - 8m - R38 - P1	〃	R 3/8	〃	29.5	〃	8	〃	〃
IMT - 8m - R12 - P1	〃	R 1/2	85	35.7	〃	10	〃	17
IMT - 10m - R14 - P1	10 x 8	R 1/4	76	28.25	〃	6	〃	15
IMT - 10m - R38 - P1	〃	R 3/8	〃	29.5	〃	8	〃	〃
IMT - 10m - R12 - P1	〃	R 1/2	85	35.7	〃	10	〃	17
IMT - 12m - R14 - P1	12 x 10	R 1/4	97	32	10	4	27	〃
IMT - 12m - R38 - P1	〃	R 3/8	〃	33.5	〃	8	〃	〃
IMT - 12m - R12 - P1	〃	R 1/2	〃	36.7	〃	10	〃	〃
IMT - 12m - R34 - P1	〃	R 3/4	〃	38.3	〃	10 → 15.5	〃	〃
IMT - 19m - R38 - P1	19 x 15.8	R 3/8	122	38.4	15.5	8	38	22.5
IMT - 19m - R12 - P1	〃	R 1/2	〃	41.4	〃	10	〃	〃
IMT - 19m - R34 - P1	〃	R 3/4	〃	45.9	〃	15.5	〃	〃
IMT - 19m - R1 - P1	〃	R 1	〃	55.7	〃	22	〃	32
IMT - 25m - R12 - P1	25 x 22	R 1/2	144.5	47.9	22	10	50	29
IMT - 25m - R34 - P1	〃	R 3/4	〃	52.4	〃	15.5	〃	〃
IMT - 25m - R1 - P1	〃	R 1	〃	55.7	〃	22	〃	〃
Inch connection (R=PT)								Dimension : mm
IMT - 18i - R18 - P1	1/8" x 0.086"	R 1/8	48	19.2	3	3	11	7
IMT - 14i - R18 - P1	1/4" x 5/32"	〃	66	23.2	4	4	16	10
IMT - 14i - R14 - P1	〃	R 1/4	〃	27	〃	〃	〃	〃
IMT - 14i - R38 - P1	〃	R 3/8	〃	27.4	〃	4 → 8	〃	〃
IMT - 38i - R14 - P1	3/8" x 1/4"	R 1/4	76	28.25	8	6	22	15
IMT - 38i - R38 - P1	〃	R 3/8	〃	29.5	〃	8	〃	〃
IMT - 38i - R12 - P1	〃	R 1/2	85	35.7	〃	10	〃	17
IMT - 12i - R14 - P1	1/2" x 3/8"	R 1/4	97	32	10	4	27	〃
IMT - 12i - R38 - P1	〃	R 3/8	〃	33.5	〃	8	〃	〃
IMT - 12i - R12 - P1	〃	R 1/2	〃	36.7	〃	10	〃	〃
IMT - 12i - R34 - P1	〃	R 3/4	〃	38.3	〃	10 → 15.5	〃	〃
IMT - 34i - R38 - P1	3/4" x 5/8"	R 3/8	122	38.4	15.5	8	38	22.5
IMT - 34i - R12 - P1	〃	R 1/2	〃	41.4	〃	10	〃	〃
IMT - 34i - R34 - P1	〃	R 3/4	〃	45.9	〃	15.5	〃	〃
IMT - 34i - R1 - P1	〃	R 1	〃	55.7	〃	22	〃	32
IMT - 1i - R12 - P1	1" x 7/8"	R 1/2	144.5	47.9	22	10	50	29
IMT - 1i - R34 - P1	〃	R 3/4	〃	52.4	〃	15.5	〃	〃
IMT - 1i - R1 - P1	〃	R 1	〃	55.7	〃	22	〃	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IUT
UNION TEE



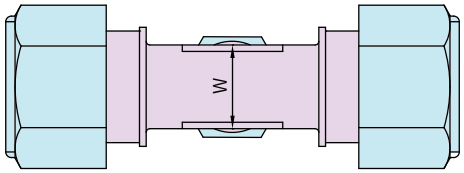


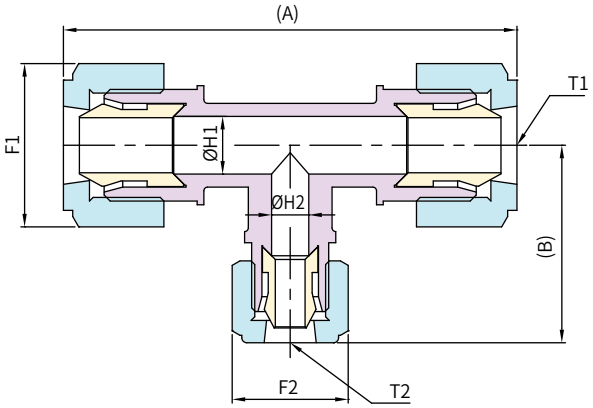
PART No.	Tube Size T1	Tube Size T2	(A)	(B)	ØH1	ØH2	F1	F2	W
metric connection									Dimension : mm
IUT - 3m - 3m - P1	3 x 2	3 x 2	48	24	3	3	11	11	7
IUT - 4m - 3m - P1	4 x 3	〃	〃	〃	〃	〃	〃	〃	〃
IUT - 4m - 4m - P1	〃	4 x 3	〃	〃	〃	〃	〃	〃	〃
IUT - 6m - 3m - P1	6 x 4	3 x 2	66	28	4	〃	16	〃	10
IUT - 6m - 4m - P1	〃	4 x 3	〃	〃	〃	〃	〃	〃	〃
IUT - 6m - 6m - P1	〃	6 x 4	〃	33	〃	4	〃	16	〃
IUT - 6m - 8m - P1	〃	8 x 6	〃	37	〃	4 → 8	〃	22	〃
IUT - 6m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUT - 8m - 6m - P1	8 x 6	6 x 4	76	34	8	4	22	16	15
IUT - 8m - 8m - P1	〃	8 x 6	〃	38	〃	8	〃	22	〃
IUT - 8m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUT - 8m - 12m - P1	〃	12 x 10	85	48	〃	10	〃	27	17
IUT - 10m - 6m - P1	10 x 8	6 x 4	76	34	〃	4	〃	16	15
IUT - 10m - 8m - P1	〃	8 x 6	〃	38	〃	8	〃	22	〃
IUT - 10m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUT - 10m - 12m - P1	〃	12 x 10	85	48	〃	10	〃	27	17
IUT - 12m - 6m - P1	12 x 10	6 x 4	96.5	38.5	10	4	27	16	〃
IUT - 12m - 8m - P1	〃	8 x 6	88	38	10 → 8	8	〃	22	15
IUT - 12m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUT - 12m - 12m - P1	〃	12 x 10	96	48	10	10	〃	27	17
IUT - 12m - 19m - P1	〃	19 x 15.8	106	61	〃	15.5	〃	38	22.5
IUT - 12m - 25m - P1	〃	25 x 22	116	72.5	〃	22	〃	50	29
IUT - 19m - 6m - P1	19 x 15.8	6 x 4	122	35	15.5	4	38	16	22.5
IUT - 19m - 8m - P1	〃	8 x 6	〃	47	〃	8	〃	22	〃
IUT - 19m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUT - 19m - 12m - P1	〃	12 x 10	〃	53	〃	10	〃	27	〃
IUT - 19m - 19m - P1	〃	19 x 15.8	〃	61	〃	15.5	〃	38	〃
IUT - 19m - 25m - P1	〃	25 x 22	133.5	72.5	〃	22	〃	50	29
IUT - 25m - 6m - P1	25 x 22	6 x 4	144.5	38.5	22	4	50	16	〃
IUT - 25m - 8m - P1	〃	8 x 6	〃	36.5	〃	8	〃	22	〃
IUT - 25m - 10m - P1	〃	10 x 8	〃	〃	〃	〃	〃	〃	〃
IUT - 25m - 12m - P1	〃	12 x 10	〃	59.5	〃	10	〃	27	〃
IUT - 25m - 19m - P1	〃	19 x 15.8	〃	67.5	〃	15.5	〃	38	〃
IUT - 25m - 25m - P1	〃	25 x 22	〃	72.5	〃	22	〃	50	〃

• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IUT

UNION TEE

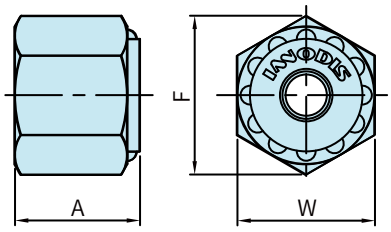




PART No.	Tube Size T1	Tube Size T2	(A)	(B)	ØH1	ØH2	F1	F2	W
Inch connection									Dimension : mm
IUT - 18i - 18i - P1	1/8" x 0.086"	1/8" x 0.086"	48	24	3	3	11	11	7
IUT - 14i - 18i - P1	1/4" x 5/32"	〃	66	28	4	〃	16	〃	10
IUT - 14i - 14i - P1	〃	1/4" x 5/32"	〃	33	〃	4	〃	16	〃
IUT - 14i - 38i - P1	〃	3/8" x 1/4"	〃	37	〃	4 → 8	〃	22	〃
IUT - 38i - 14i - P1	3/8" x 1/4"	1/4" x 5/32"	76	34	8	4	22	16	15
IUT - 38i - 38i - P1	〃	3/8" x 1/4"	〃	38	〃	8	〃	22	〃
IUT - 38i - 12i - P1	〃	1/2" x 3/8"	85	48	〃	10	〃	27	17
IUT - 12i - 14i - P1	1/2" x 3/8"	1/4" x 5/32"	96.5	38.5	10	4	27	16	〃
IUT - 12i - 38i - P1	〃	3/8" x 1/4"	88	38	10 → 8	8	〃	22	15
IUT - 12i - 12i - P1	〃	1/2" x 3/8"	96	48	10	10	〃	27	17
IUT - 12i - 34i - P1	〃	3/4" x 5/8"	106	61	〃	15.5	〃	38	22.5
IUT - 12i - 1i - P1	〃	1" x 7/8"	116	72.5	〃	22	〃	50	29
IUT - 34i - 14i - P1	3/4" x 5/8"	1/4" x 5/32"	122	35	15.5	4	38	16	22.5
IUT - 34i - 38i - P1	〃	3/8" x 1/4"	〃	47	〃	8	〃	22	〃
IUT - 34i - 12i - P1	〃	1/2" x 3/8"	〃	53	〃	10	〃	27	〃
IUT - 34i - 34i - P1	〃	3/4" x 5/8"	〃	61	〃	15.5	〃	38	〃
IUT - 34i - 1i - P1	〃	1" x 7/8"	133.5	72.5	〃	22	〃	50	29
IUT - 1i - 14i - P1	1" x 7/8"	1/4" x 5/32"	144.5	38.5	22	4	50	16	〃
IUT - 1i - 38i - P1	〃	3/8" x 1/4"	〃	36.5	〃	8	〃	22	〃
IUT - 1i - 12i - P1	〃	1/2" x 3/8"	〃	59.5	〃	10	〃	27	〃
IUT - 1i - 34i - P1	〃	3/4" x 5/8"	〃	67.5	〃	15.5	〃	38	〃
IUT - 1i - 1i - P1	〃	1" x 7/8"	〃	72.5	〃	22	〃	50	〃

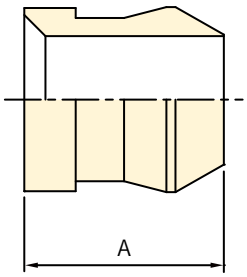
• PART NO. 외에 사이즈는 영업부에 문의하여 주시기 바랍니다　　PART NO. 以外的尺寸 请咨询营业部

IF-N NUT



PART No.	Tube Size	A	F	W
metric connection				Dimension : mm
IF-N3m	3 x 2	10	12.7	11
IF-N4m	4 x 3	〃	〃	〃
IF-N6m	6 x 4	13	18.5	16
IF-N8m	8 x 6	17.5	25.4	22
IF-N10m	10 x 8	18.5	〃	〃
IF-N12m	12 x 10	22	31.2	27
IF-N19m	19 x 15.8	27	43.9	38
IF-N25m	25 x 22	34	57.7	50
Inch connection				Dimension : mm
IF-N18i	1/8" x 0.086"	10	12.7	11
IF-N14i	1/4" x 5/32"	13	18.5	16
IF-N38i	3/8" x 1/4"	18.5	25.4	22
IF-N12i	1/2" x 3/8"	22	31.2	27
IF-N34i	3/4" x 5/8"	27	43.9	38
IF-N1i	1" x 7/8"	34	57.7	50

IF-S SLEEVE



PART No.	Tube Size	A
metric connection		Dimension : mm
IF-S3m	3 x 2	10
IF-S4m	4 x 3	〃
IF-S6m	6 x 4	13.5
IF-S8m	8 x 6	16.9
IF-S10m	10 x 8	16.7
IF-S12m	12 x 10	21
IF-S19m	19 x 15.8	28
IF-S25m	25 x 22	33
Inch connection		Dimension : mm
IF-S18i	1/8" x 0.086"	10
IF-S14i	1/4" x 5/32"	13.5
IF-S38i	3/8" x 1/4"	16.9
IF-S12i	1/2" x 3/8"	21.6
IF-S34i	3/4" x 5/8"	28
IF-S1i	1" x 7/8"	33

09

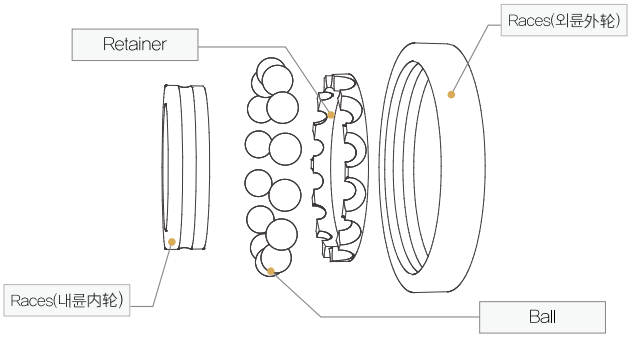
PRODUCTS

1. BEARING
2. SUS FILTER
3. CHEMICAL COUPLER
4. N2 VENT COUPLER
5. NOZZLE COUPLER
6. FLOAT LEVEL SENSOR/FLICKER SENSOR
7. PTFE INSULATOR/KNIFE
8. SHAFT(일식日式)/NOZZLE PIPE
9. BATH/WATER GUIDE
10. BOLT/NUT/WASHER/PCTFE 초저온 超低温 SEAT
11. 대전방지防止带电TEFLON
12. CNT UPE
13. PCTFE, PFA, PEEK, PEEK(C/F함유 含C/F)

Bearing

회전하고 있는 기계의 축을 일정한 위치에 고정하고 축의 자중과 축에 걸리는
하중을 지지하면서 축을 회전시키는 역할을 합니다.
旋转的机械轴固定到一定的位置，并旋转轴，同时支撑轴的自重和施加在轴上的负载。

Products



SPECIFICATION

생산품목(生产品种)	주문제작 가능 可订制

BEARING 규격표 规格表

No	내경 内径(Ø)	외경 外景(Ø)	폭 宽度	BALL 수량数量	BALL Size 尺寸 (Ø)
604	4	12	4	7	2.000
624		13	5	7	2.381
605	5	14	5	7	2.381
625		16	5	7	2.778
686	6	13	5	8	2.000
696		15	5	7	2.381
606		17	6	6	3.500
626		19	6	6	3.500
687	7	14	5	9	2.000
697		17	5	9	2.381
607		19	6	6	3.500
627		22	7	7	3.969
688	8	16	5	10	2.000
698		19	6	7	3.175
608		22	7	7	3.969
628		24	8	7	3.969
689	9	17	5	11	2.000
699		20	6	8	3.175
609		24	7	7	3.969
629		26	8	7	4.762
6800	10	19	5	10	2.381
6900		22	6	9	3.175
6000		26	8	7	4.762
6200		30	9	8	4.762
6801	12	21	5	12	2.381
6901		24	6	10	3.175

No	내경 内经(Ø)	외경 外景(Ø)	폭 宽度	BALL 수량数量	BALL Size 尺寸(Ø)
6001	12	28	8	8	4.762
6201		32	10	7	5.953
6802	15	24	5	14	2.381
6902		28	7	10	3.969
6002		32	9	9	4.762
6202		35	11	8	5.953
6803	17	26	5	16	2.381
6903		30	7	11	3.970
6003		35	10	10	4.762
6203		40	12	8	6.747
6804	20	32	7	13	3.500
6904		37	9	11	4.762
6004		42	12	9	6.350
6204		47	14	8	7.938
6805	25	37	7	15	3.500
6905		42	9	13	4.762
6005		47	12	10	6.350
6205		52	15	9	7.938
6006	30	55	13	11	7.144
6206		62	14	9	9.525
6007	35	62	14	11	7.938
6207		72	17	9	11.11
6008	40	68	15	12	11.11
6208		80	18	9	11.90
6308		90	23	8	15.08
6908		62	12	22	3.96

MODEL SELECTION IB - ① - ②/③ - ④ - ⑤

①형번 型号	②외륜 外轮 / ③내륜 内轮 Material	④Retainer Material	⑤Ball Material
규격 规格	P (PEEK)	P (PEEK)	S (SiC)
	O (POM)	V (PVDF)	Z (ZrO_2)
	U (UHMW-PE)	O (POM)	P (PEEK)
	S (SiC)	U (UHMW-PE)	S (SUS)
	Z (ZrO_2)	E (PET)	

SUS Filter

금속메쉬 소결필터 입니다.
金属网烧结过滤器。

Products

SPECIFICATION

Material	Filter Medium	Sintered SS (316L)
	End Caps	SUS316L, SUS304
	Bonding Material	Plastic Steel
	O-Rings	Welded end caps(>150°C)
		EPDM, Silicon, Viton, Teflon
Absolute retention rate	2μm, 5μm, 10μm, 20μm, 30μm, 40 to 80μm	
Filtration surface	MLS=6525 : 494cm^2	
Maximum differential pressure	Operating temp : 20°C	
	Diff. Pressure : 5 bar	
Temperature range (constant operating)	-20°C to 400°C >150°C welded endcaps	

APPLICATIONS

- 표면여과 방식의 5-Layer Mesh 소결 필터로서 단단한 구조는 높은 차압에서도 변형 없이 여과임무를 수행합니다.
  属于表面过滤方式5-Layer Mesh烧结过滤器，结构结实，即使差压高也无变形，可完善发挥过滤作用。
- 절곡필터에 비해 유량은 떨어지나, 세척재생 효율이 높아 반복 사용하여도 성능이 저하 되지 않으므로 경제성이 높은 필터입니다.
  流量低于折叠过去率，但清洗再生效率高，反复使用也不会导致性能降低，属于经济性非常优秀的过滤器。.
- 공기, 가스, 스팀, 물, 기름 등 모든 유체에 광범위하게 사용되며, 고온, 고압, 고점도, 부식성이 강한 약품 여과에 적합합니다.
  广范围使用于空气、气体、蒸汽、水、油等的所有流体，高温、高压、高粘度也能使用，腐蚀性优秀，适合过滤药品。
- 주문에 따라 다양한 형태로 제작이 가능하여 특수한 용도에도 적합합니다. 可订制成多种类型，而且适合特殊用途使用。
- 고분자용 : 고점도 폴리머, 원료제조용 필터, 모노머 필터 高分子用：高粘度聚合物，原料制造用过滤器，单体过滤器
- 화학공업용 : 화학프랜트용 프로세스 필터, 석유정제용 필터 化学工业用：化学工业用过滤器，石油精炼用过滤器
- 제약, 식품, 화장품 공업용 : 각종 약품, 음료의 합성과 정제, 회수필터, 고점도 시럽, 엑기스 필터
  制药、食品、化妆品工业用：各种药品、饮料的合成和精制、回收过滤器，高粘度糖稀、津液过滤器
- 기계공업, 선박, 항공기용 : 윤활유, 연료유, 작동유, 절삭유등 오일필터 机械工业、船舶、飞机用：润滑油、燃料油、液压油、切削油等的油过滤器
- 고온공기, 가스, 스팀, 주방후드 그리스 필터용 高温空气、气体、蒸汽、厨房排气罩润滑脂过滤用

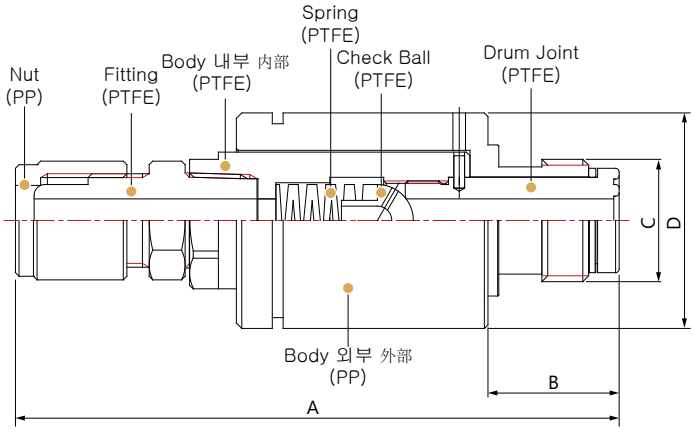
STRUCTURE

- 5-Layer의 구조로 소결 고정된 Sheet를 Tube 형태로 가공하여 End Cap과 용접 또는 접착제로 고정합니다.
  以5-Layer结构烧结固定的Sheet加工成Tube形状，与End Cap焊接或用粘剂固定。
  1st Layer : Protective Layer - 보호층 保护层
  2nd Layer : Filter Layer - 여과층 过滤层
  3rd Layer : Flow Distribution Layers - 분산층 分散层
  4, 5th Layers : Support Layers - 보강층 加固层

Chemical Coupler

Drum(Tank)에 있는 Chemical 및 약품을 장비에 공급하는 과정에서 공급 및 역류방지 역할을 하는 장치입니다.
位于Drum（Tank）的Chemical及药品供应到设备的过程中，发挥供应及防止逆流作用的装置。

Products



SPECIFICATION	
유체 접속구(流体连接口)	PTFE
외관재질(外观材质)	PP
생산품목(生产品种)	3/4inch

DIMENSION(KEY - CODE적용 适用)

	size	A	B	C	D
Standard 사양 规格	3/4"	168	36.5	Ø34	Ø60

CHARACTERISTICS

- 유체 접촉면이 Teflon으로 되어 다양한 유체에 적용 가능 (불산, 불화 암모늄, DI Water 등)
  流体接触部分采用Teflon材质，适合多种流体使用（氢氟酸、氟化氨、DI Water等）
- 모든 유형의 Drum에 장착 가능 (KODAMA, 크로바, 화진, 아이세로미림 등)
  适合安装在所有类型的Drum（KODAMA、CLOVER、HWAJIN、AICELLOMILIM等）
- 연결 부분을 다양하게 구성 가능
  连接部位采用多种结构
- 상시 재고 보유로 신속한 납기 대응과 신속한 A/S 가능
  拥有库存，货期短，快速提供维修服务

DIMENSION(KEY - CODE적용X 适用X)

	size	A	B	C	D
Standard 사양 规格	3/4"	168	36.5	Ø34	Ø60

MODEL SELECTION

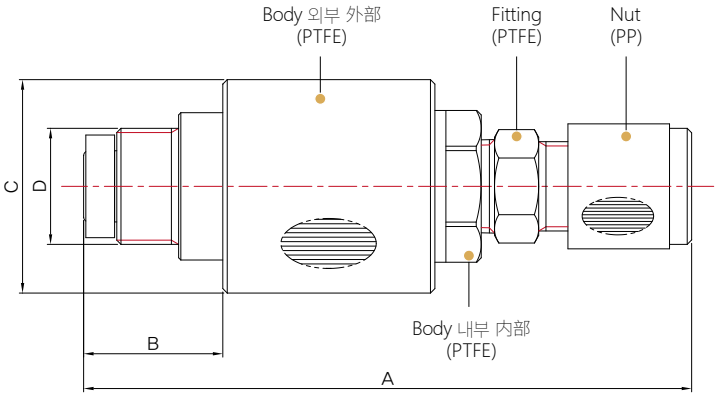
ICC - ①②③

①Size	②Color	③Producers
3 (3/4inch)	W (White)	K (KODAMA)
	R (Red)	C (CROWBAR)
		H (HWALIN)
		I (AICELLOMILIM)

N2 Vent Coupler

Coupler를 통하여 Chemical을 공급시 Drum의 부피 변화로 인한
형태 변형을 막기 위해 N2를 공급해주는 장치입니다.
通过Coupler供应Chemical时，供应N2的装置，可防止因Drum的体积变化而发生形状变形。

Products



SPECIFICATION	
유체 접속구(流体连接口)	PTFE
외관재질(外观材质l)	PTFE
생산품목(生产品种)	1/2inch

DIMENSION

	size	A	B	C	D
Standard 사양 规格	1/2"	137.6	31.5	Ø48	Ø26

CHARACTERISTICS

- 유체 접촉면이 Teflon으로 되어 다양한 유체에 적용 가능 (불산, 불화 암모늄, DI Water 등)
  流体接触部分采用Teflon材质，适合多种流体使用（氢氟酸、氟化氨、DI Water等）
- 모든 유형의 Drum에 장착 가능 (KODAMA, 크로바, 화진, 아이세로미림 등)
  适合安装在所有类型的Drum（KODAMA、CLOVER、HWAJIN、AICELLOMILIM等）
- 연결 부분을 다양하게 구성 가능　连接部位采用多种结构
- 상시 재고 보유로 신속한 납기 대응과 신속한 A/S 가능　拥有库存，货期短，快速提供维修服务

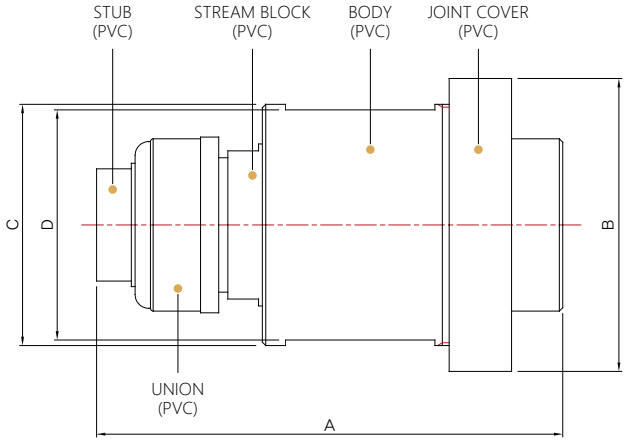
CUSTOM IC

MODEL SELECTION　ICN - ①②③

①Size	②Color	③Producers
1　(1/2inch)	W　(White)	K　(KODAMA)
		C　(CROWBAR)
		H　(HWALIN)
		I　(AICELLOMILIM)

Nozzle Coupler

FPD ETCHING 장비 공정중 요동 SPRAY PIPE의 회전을 안정적으로 하기 위한 NOZZLE COUPLER 입니다.
为确保FPD ETCHING设备工程中波动SPRAY PIPE的旋转稳定而设计的NOZZLE COUPLER。



SPECIFICATION	
유체 접속구(流体连接口)	PVC
외관재질(外观材质l)	PVC
생산품목(生产品种)	20A

DIMENSION					
	size	A	B	C	D
Standard 사양 规格	20A	136.7	Ø85	Ø70	66.8

MODEL SELECTION

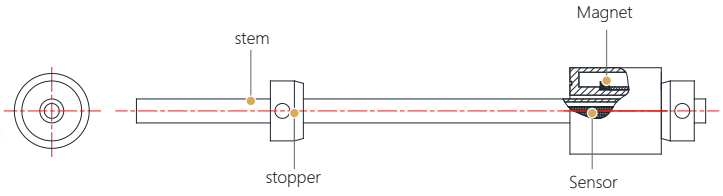
INC - ①②③ - ④

①Material	②Size	③Connection	④O-ring
P (PVC)	20 (20A)	U (Union)	E (EPDM)
			F (FKM)
			V (VITON)

Float Level Sensor

반도체및 LCD에 사용되는 Float Level Sensor 입니다.
使用于半导体及LCD的Float Level Sensor。

Products



SPECIFICATION

재질(材质)	FLOAT-PP, Stem-PVC
사용 온도(使用温度)	50~60°C
사용 유체(使用流体)	Chemicals, D.I-Water

DIMENSION

- 설계치수는 영업부에 문의 또는 승인도를 요청 바랍니다. 设计尺寸请咨询营业部或要求提供设计图。

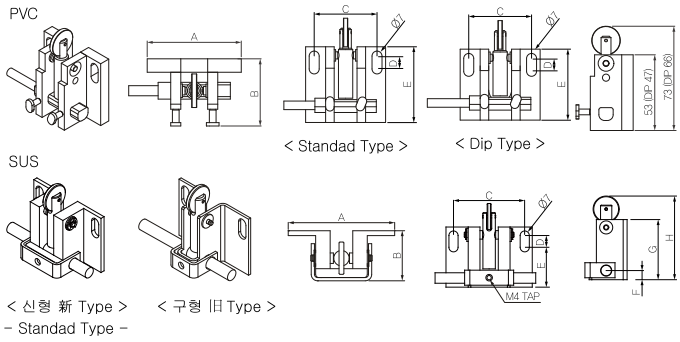
CHARACTERISTICS

- 스위치는 자기력을 감지하여 작동하며 리스트 위치는 스템 안쪽 자석과의 접촉 지점에 고정되어 있습니다.
  开关通过感应磁力来运作，并且List位置固定在与Stem内侧磁铁的接触部位。

Flicker Sensor

반도체및 LCD에 사용되는 Fllicker Sensor 입니다.
使用于半导体及LCD的Fllicker Sensor。

DIMENSION



DIMENSION

	A	B	C	D	E	F	G	H
PVC(S)	56	40	44	9	53	-	-	-
PVC(D)	56	40	44	9	47	-	-	-
SUS(신新)	66	31	54.5	9	30.5	7	46	64
SUS(구旧)	66	33	54	9	30.5	7	46	64

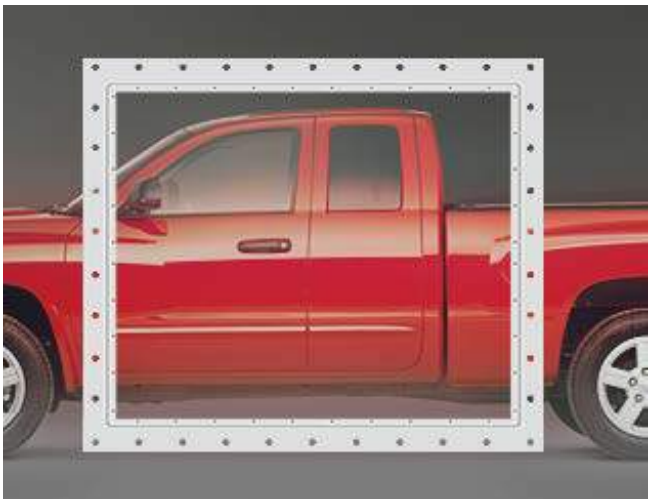
SPECIFICATION

- 주문생산제품 可订制
- 재질 및 기타문의는 영업부에 승인도를 요청 바랍니다.
  材质及其他事项请向营业部要求提供图纸。

PTFE Insulator

반도체 및 LCD 장비에 사용되는 초대형 Teflon(PTFE) Insulator 입니다.
使用于半导体及LCD设备的超大型 Teflon(PTFE) Insulator。

Products



SPECIFICATION

- 2400 x 2400 (가로x세로 横X竖) 이상 以上
- 3000 x 3000 (가로x세로 横X竖) 이상 以上
- 주문생산 可定制 (기타 其他size)

CHARACTERISTICS

- 융착 강도 우수 (인장강도 250kgf/cm^2 이상, 신율 190% 이상)
  熔接强度优秀（伸张强度250kgf/cm^2 以上，伸率190%以上）
- CVD 장비, Sputter 장비 등에 사용시 Leak 발생 없음
  使用于CVD设备、Sputter设备等时不发生Leak现象

INSULATOR	SIZE	CUSTOMER
CVD, Sputter, Dry etching 用	1930x1355x50T 2888x2588x22T 2232x1882x20T 2906x2606x20T 2610x2330x5T etc.	SAMSUNG ULVAC WONIK IPS SERVEONE etc.

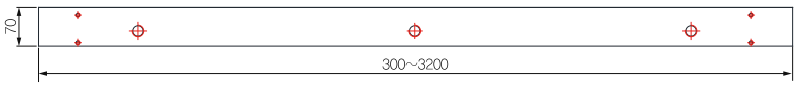
Knife

반도체및 LCD에 사용되는 Knife입니다.
使用于半导体及LCD的Knife。

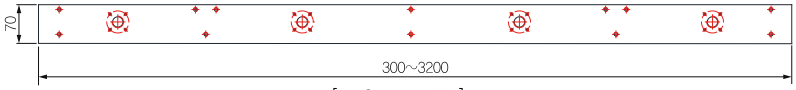
SPECIFICATION

재질(材质)	PVC, HT-PVC
생산 길이(生产长度)	3200까지 주문생산 가능 可定订制到3200 (5세대~11세대) 第五代~第十一代
사용 유체(使用流体)	Chemicals, D.I-Water, Air

DIMENSION



[액절 液晶 Knife]



[In-Shower Knife]

Shaft(일식日式)

Products

Spring
(PTFE)

SPECIFICATION	
Roller Ass'y Type	- Sleeve, Nut, O-Ring
Shaft Type	- CFRP+PVC, CFRP+SUS, PVDF, SUS (재질, 외경, 길이에 따라 주문사양 설계제작 可按照材质、外径、长度订制生产)
Magnetic Gear	- 사출Type/가공Type 射出/加工 - 나사체결 방식으로 인한 Run-Out 품질 안정 采用螺丝连接方式的run-out，质量更加优秀 - 단품 单品 MAGNETIC GEAR -0.1mm이내 以内 - Ass'y MAGNETIC GEAR -0.2mm이내 以内
Roller Materials	- UPE / PVC (가공加工) - PP / PFA / ABS (사출제품 Sleeve Type에 사용 射出产品 使用于Sleeve Type)
Concentricity	- 단품 单品 Roller -0.1mm이내以内 - Ass'y Roller -0.3mm이내以内(Ø100기준 标准) - 설비의 Shaft 지점, 전체길이(Shaft/ Roller)외경 등 주문사양 설계에 따라 Run-Out 변함 按照设备的Shaft支点、整个长度（Shaft/Roller）外径等订制设计，Run-out会有变化。
제작 制作 Shaft	- Ectcher 구간 반송/구동 Shaft Ectcher区间退回/驱动Shaft - 면취 세정구간 반송/구동 Shaft 坡口清洗区间退回/驱动Shaft

Nozzle Pipe

반도체 및 LCD 장비에 사용되는 Nozzle Pipe 입니다.
使用于半导体和LCD设备的Nozzle Pipe。

Products

Nipple 용접 焊接 Type

Tap Type

SPECIFICATION	
재질(材质)	PVC
제작방식(制作方式)	1) 용접방식 焊接方式 2) 초음파 융착방식 超声波熔接方式 3) Tap 방식 方式

DIMENSION
- 압출로 인해 형상 변경이 자유로우며 Nipple을 사용하지 않고 Nozzle 조립이 가능 采用压缩方式，形状变更容易，不使用Nipple，可直接组装Nozzle。 - Nipple 용접으로 인한 용접부가 없으므로 외관상 보기 좋음 没有Nipple焊接而产生的焊接部位，外观美观。

Bath

반도체 및 LCD 장비에 사용되는 Bath 입니다.
使用于半导体及LCD设备的Bath。

Products

Over Flow Bath

H_2SO_4, H_2O_2 Tank(PTFE)

Chcl Bath(PVDF)

Cooling Tank

HF Mixing Tank

SPECIFICATION	
재질(材质)	Teflon
생산품목(生产品种)	30, 40, 50, 60, 70ℓ

CHARACTERISTICS

- Bath는 Cleaning, Etching, Positive Resist Developing 등의 실질적인 작업이 이루어지는 공간입니다.
  Bath是进行Cleaning、Etching、Positive Resist Developing等操作的空间。
- Bath Process module은 독립적으로 구성되어 Heating, Bubble, Shower 등 Wet Process 공정을 집약시켜 놓았습니다.
  Bath Process module单独组成，并集中了Heating、Bubble、Shower等Wet Process工序。
- 이동성이 좋아 Fume Hood, Clean Bench, 실험대 등 Work table에 Bath 모듈을 올려놓으시고 작업하시면 경제성 및 효율성, 안정성을 향상할 수 있는 반도체용 Bath입니다.
  移动性优秀，在Fume Hood、Clean Bench、测试台等Work table放上Bath模块进行操作，可提高经济性、效率性和安全性的半导体用Bath。

Wafer Guide

반도체 및 LCD 장비에 사용되는 Wafer Guide 입니다.
使用于半导体及LCD设备的Wafer Guide。

Products

3점식 (PEEK)
3点式 (PEEK)

6점식 (PTFE+PEEK)
6点式 (PTFE+PEEK)

3점식 (PEEK+PVDF)
3点式 (PEEK+PVDF)

PEEK

SPECIFICATION	
재질(材质)	PEEK, PCTFE 외外

Bolt/Nut/Washer

반도체 및 LCD 장비에 사용되는 주문생산 Bolt, Nut, Washer 입니다.
使用于半导体及LCD设备的可定制Bolt、Nut、Washer。

Products

SPECIFICATION	
재질(材质)	PVC, PEEK, PVDF 사출 射出
생산품목(生产品种)	M3~M20 (상기규격 이외에도 주문생산 가능) (上述规格以外可定制生产)

MODEL SELECTION IBT - ①②③④

①Division	②Materal	③Size	④Length
H Hexagon Socket Bolt(육각 렌치볼트 内六角螺栓)	1 PVC	1 M3	주문사양 订制规格
F Flat Head Bolt (접시머리 볼트 沉头螺栓)	2 HT-PVC	2 M4	
E Hexagon Head Bolt (육각머리 볼트 六角头螺栓)	3 PEEK	3 M5	
C Cross Slotted Bolt (둥근머리볼트 圆头螺栓)	4 PVDF	4 M6	
N Hexagon Head Nut (너트 螺帽)		5 M8	
W Plain Washer (와셔 垫圈)		6 M10	
S Set Screw (무두볼트 固定螺丝)		7 M12	
		8 M16	
		9 M20	

PCTFE 초저온 超低温 Seat

PCTFE는 3불화 수지로서 다른 불소수지 들에 비해 저온 흐름 유체에 대한 높은 저항성, 치수 안정성, 높은 강도, 낮은 가스 투과성, 낮은 흡수율 등 우수한 특성이 있습니다.
PCTFE是三氟化树脂，比起其他氟树脂，具有低温流体较高的抵抗性、尺寸安全性、高强度、低气体透过性、第吸收率等优秀的特点

Products

CHARACTERISTICS

- 저온 특수 우수 低温特性优秀
· PCTFE는 저온에서 높은 기계적 강도 및 낮은 수축률을 지니고 있습니다.
이에 따라 저온에서 사용되는 기계부품 및 장비 등에 폭 넓게 사용되어 집니다.
PCTFE在低温具有高机械强度和低收缩率。
因此，广泛使用于低温下使用的机械配件及设备等。

· 최대 사용압력 最大使用压力 : 10kgf/cm²
· 적 용 适用 : 저온하 유체 및 가스(LNG, LPG 등) : 低温下流体及气体（LNG、LPG等）
· 사 용 온 도 使用温度 : -250°C~상온 常温

- 기계적 특성 우수 机械特点优秀
· 압축강도 우수 및 변형율이 적음 压缩强度优秀，变形率低

- 내화학성 우수耐化学性
· 강산, 강알칼리, 혼합산 산화제에 대한 저항성 우수 对于强酸、强碱、混合酸、氧化剂的抵抗性优秀

- 전기적 특성 우수 (낮은 유전율)
电气特性优秀（低电容率）

APPLICATIONS

- 화학 분야 化学领域
· Seals 및 Gaskets Seals 和 Gaskets
· Valve 및 Pump 부품 阀门和泵配件
· 베어링, 기어, 카메라 轴承, 齿轮，照相机
· 코팅파이프, 피팅, 열교환기, 반응용기, 드럼 등
覆膜管, , 热交换机, 反应容器, 桶 等.

- 전기분야 电气领域
· 성형부품, 터미널 보드, 인쇄 회로기판, 커넥터 커버, 튜브소켓, 전선코팅, 자켓, 전위차계 스위치 커버 등
成型配件, 电极板, 印刷电路板, 连接器套, 管插口, 电线覆膜, 套层, 电位差计, 电闸套等

소재판매销售原料(Rod)

대전방지 防止带点 Teflon

이노디스가 자체 개발한 정전기 대전방지용 Teflon 입니다.
INNODIS自行开发的防静电用Teflon。

Products

SPECIFICATION

색상(颜色)	Black(Only)																
생산품목(生产品种)	IT - 301 Rods (표준길이标准长度100mm)	지름外径 Ø(mm)	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
	Rods 최대 생산 외경Ø(500mm) Rods 最大生产外径 Ø(500mm)	지름外径 Ø(mm)	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300

TEST RESULTS

Property	Unit	Value	Test Method
표면 저항률 (表面抵抗率)	ohms/sq	10^5~10^9	IEC61340-2-3
표면 저항 (表面抵抗)	ohms	10^5~10^9	IEC61340-2-3
인장 강도 (伸展强度)	kgf/cm^2	200 이상	ASTM D638-03
연신율 (延伸率)	%	300 이상	ASTM D638-03
비중 (比重)	-	2.16	ASTM D792-00
경도 (Durometer-D)/(硬度)	-	50 - 60	ASTM D2240-04
연속 사용 온도 (连续使用温度)	°C	260	-

APPLICATIONS

- 기능성 테프론을 사용하여 정전기 대전방지를 요구하는 모든 분야에 적용 가능
  采用功能性特氟龙(TEFLON)，适用于所有需要防静电的领域
- 적용사례: EUV(자외선 조정장치) Roller에 적용
  使用事例：适用于EUV（紫外线调整装置）Roller

CHARACTERISTICS

- 소재 고유 성분 유지(변색, 탈색, 착색 없음)
  维持材料固有成分（无变色、掉色、染色）

*대전방지 테프론이란? 일반 테프론에 전도성 물질을 추가하여 정전기 방지 기능을 가진 특수 소재입니다.
什么是防止带电特氟龙？一般的特氟龙添加导电性物质，从而发挥防静电功能的特殊材料。

소재판매销售原料(Rod, Plate)

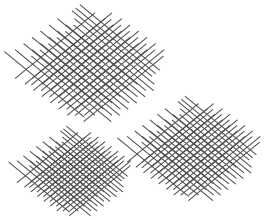
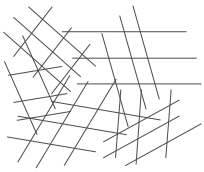
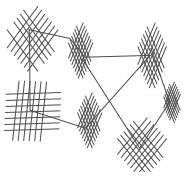
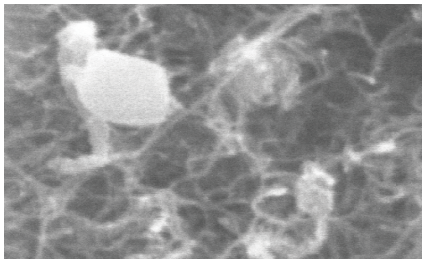
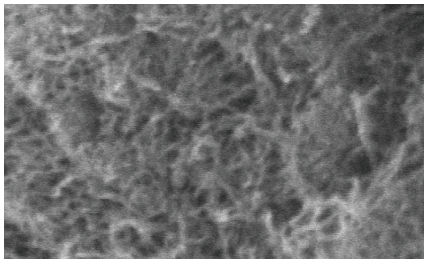
CNT UPE

나노 구조를 가진 탄소 동소체로 CNT를 분산·가공하고 분산된 CNT를 고분자와 컴파운딩하여 정전기 방지, 전자파 흡수, 차폐, 방열 등을 목적으로 하는 CNT 고분자 복합소재를 만들 수 있는 소재입니다.
具有纳米结构的碳素同素体，分散和加工CNT，分散的CNT与高分子进行化合反应，以防静电、吸收辐射、遮蔽、防热等为目的的CNT高分子复合材料。

Products

[CNT UPE 적용제품: 대전 방지 롤러]
[CNT UPE 适用产品: 防止带电辊]

CNT 분산 개념 및 분산 전후 비교 CNT分散概念及分散前后比较

개념도 概念图	 분산하지 않으면 CNT가 응집됨 如果不分散，CNT就会凝集	최적 분산된 CNT 最佳分散的CNT		- 고분자 내에서 그물망처럼 네트워크를 형성 在高分子内形成网状 - 균일하고 높은 전기 · 열전도성 가짐 带有均匀的导电和导热性
		불완전 분산된 CNT 不完全分散的CNT		- 탄소나노튜브간의 구조적 연결 단절 切断碳纳米管之间的连接结构 - 고분자내에서 탄소나노튜브의 단락 위험성 高分子内有碳纳米管断裂危险 - 불균일한 전기적 특성 (hot/cold spot 발생) 不均匀的电气特点（发生hot/cold spot）
CNT 분산 전 · 후 SEM 사진 (배율 : x 50,000) CNT分散前后 SEM照片 (倍率: x50,000)	 분산되지 않은 CNT 未分散的 CNT		 분산 후 CNT 分散后的 CNT	

CHARACTERISTICS

- 기존 대전방지 소재 원가 절감, 수명 단점 보안
  节减其他防止带电材料的成本，加长寿命
- 전자파 차폐, 방열, 정전기 방지, 난연, 강도등 소비자 요구에 맞는 고분자 복합 소재 제조
  防辐射、防热、防静电、难燃、强度等，可按照顾客的需求制造高分子复合材料
- Particle 및 슬러지 방지가 요구되는 청정 요구공정에 기존의 카본블랙 소재 대체
  需要防止Particle及淤泥的清净工序中，可替代原有的碳黑材料
- 최적화된 분산 CNT 소재 생산 가능
  可生产最佳化分散的CNT材料

소재판매 销售原料(Rod, Pipe, Plate)

PCTFE/PFA/PEEK/PEEK(C/F함유含)

Products

PCTFE, PFA, PEEK, PEEK(C/F함유 含)

- 아래 표 이외 사이즈의 경우 금형 제작후 생산 가능함
  以下表以外的尺寸可制作模具后生产。

	가로 横(mm)	세로 竖(mm)	
Plate 소재제작 制作材料	230	260	PCTFE 5~30T
	315	305	PFA 5~60T
	310	310	PEEK 5~20T
	520	520	PEEK(C/F함유 含)5~20T

PCTFE 소재 제작 制作Plate材料

R O D	외 경外径 (Ø)	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
	길 이长度 (L)	130	120	100	80	70	50	40	30	30	30	30	30	30	30	30	30	30
P I P E (외경기준 外径为准)	외 경外径 (Ø)	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
	길 이长度 (L)	150	150	150	150	150	150	150	130	120	100	100	80	80	80	80	80	80

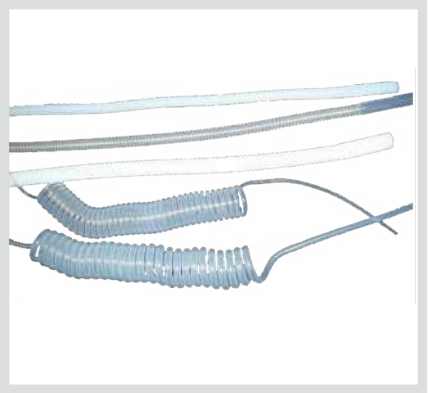
PFA 소재 제작 制作Plate材料

R O D	외 경外径 (Ø)	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
	길 이长度 (L)	130	120	100	80	70	60	60	50	50	50	40	40	40	40	40	40	40
P I P E (외경기준 外径为准)	외 경外径 (Ø)	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
	길 이长度 (L)	180	180	160	160	150	150	150	130	130	100	100	100	100	100	100	100	100








Material

PFA / PTFE / PVDF / PCTFE / PE / MC–NYLON / PEEK / Vespel / Cerazol / PVC / CPVC / POM / PET / CERAMIC / PPS / ETC(Polvimide)