



Push-In Fitting Type of Corrosion Resistant Stainless Steel Tube Fitting Stainless **SUS304** Series

Copper alloy
free material

- *Suitable for Strength Requirements /
Chemical Environment*
- *SUS304 for Metal Body*
- *FKM for Seal Rubber*

136

Stainless
Series

Chemical
Series

PP
Series

EG
Series

Anti-siphon
& Press Series

Oil Temperature
Control

Minimal
Series

Stop Fitting
Series

Rotary
Series

Twist-Proof
Fitting

Block and
Connector

Coupling

Color
Cap

FITTING

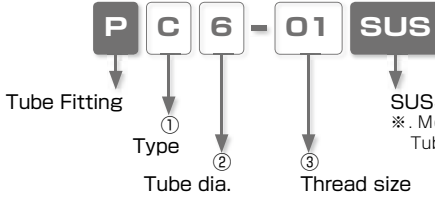
CONTROLLER

VALVE

TUBE

MADE-TO-ORDER
PRODUCTS

Model Designation (Example)



SUS304 type

※. Model code without "SUS" is regarded as Tube Fitting Standard Series.

① Type

Code	Type	Code	Type	Code	Type	Code	Type
C	Straight	L	Elbow	B	Branch Tee	D	Run Tee
X	Branch Y	VX	Tripod Elbow	AX	Branch Elbow	KD	Run Triple Tee
RX	Branch Double Y	U	Union Straight	G	Unequal Union Straight	V	Union Elbow
E	Union Tee	EG	Unequal Union Tee	Y	Union Y	W	Unequal Union Y
VU	Tripod Union	AU	Branch Union Elbow	KG	Unequal Triple Tee	RG	Unequal Double Y
PF	Cap						

② Tube dia.

Tube dia.	mm size					
Code	4	6	8	10	12	16
Size (mm)	ø4	ø6	ø8	ø10	ø12	ø16

③ Thread size (※ In case that ③ indicates tube dia., select tube dia. from table ②)

Thread size	Metric thread (mm)		Taper pipe thread			
	M5	M6	01	02	03	04
Size	M5 × 0.8	M6 × 1	R1/8	R1/4	R3/8	R1/2

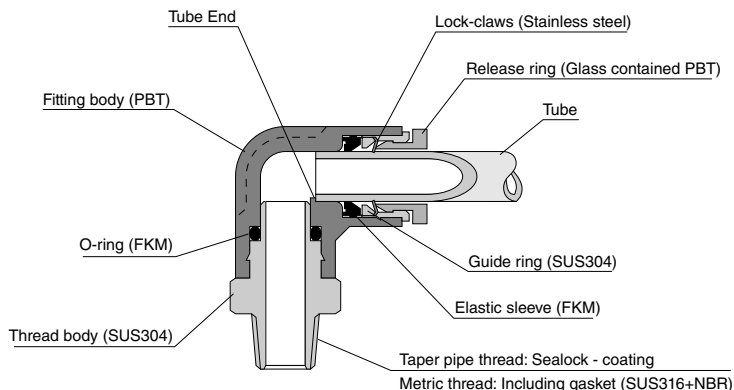
Specifications

Fluid medium	Air / Water(※) / Others (chemicals) (※)
Max. operating pressure	1.0MPa
Max. vacuum	-100kPa
Operating temp. range	0 ~ 60°C (No freezing)

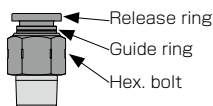
⚠ Warning

- ※ . Make sure to follow the instructions below when the fluid medium is water or liquid.
1. Surge pressure must be controlled lower than max. operating pressure when using water or liquid as a fluid medium.
 2. Be sure to place Insert Ring into the tube edge when using water or liquid as a fluid medium.
 3. The specification above may not be applied, depending on the kind of chemicals or mixed gases used as fluid medium. Make sure to use PISCO products after verifying their suitability on the user side.

Construction (Elbow: PL)



● How to identify SUS304, SUS303 Equivalent and Standard Fitting (Tube Fitting Standard Fitting).



Identification part	SUS304	SUS303 Equivalent	Standard Fitting
V groove on Guide ring	○	×	
Flat groove on hexagonal-column	○	×	×
Release-ring color	Dark blue	Dark blue	Black

⚠ Detailed Safety Instructions

Before using PISCO products, be sure to read "Safety Instructions" and "Safety Instruction Manual" on page 23 to 27 and "Common Safety Instructions for Fittings" on page 33 to 35.

Warning

1. When using chemicals as a fluid medium, be sure to contact us first. Depending on conditions, it may cause damage to the fittings, the escape of tubes and a fluid leakage.



Standard Size List

Connection: Thread ⇔ Tube

Type	Page	Thread size	Tube O.D. (mm)					
			4	6	8	10	12	16
PC Straight	P.141	M5 × 0.8	●	●				
		M6 × 1	●	●				
		R1/8	●	●		●		
		R1/4	●	●	●	●	●	
		R3/8	●	●	●	●	●	●
R1/2				●	●	●		
PL Elbow	P.142	M5 × 0.8	●	●				
		M6 × 1	●	●				
		R1/8	●	●	●	●		
		R1/4	●	●	●	●	●	
		R3/8	●	●	●	●	●	●
R1/2				●	●	●		
PB Branch Tee	P.144	M5 × 0.8	●	●				
		M6 × 1	●	●				
		R1/8	●	●	●	●		
		R1/4	●	●	●	●	●	
		R3/8	●	●	●	●	●	●
R1/2				●	●	●		
PD Run Tee	P.145	M5 × 0.8	●	●				
		M6 × 1	●	●				
		R1/8	●	●	●	●		
		R1/4	●	●	●	●	●	
		R3/8	●	●	●	●	●	●
R1/2				●	●	●		

Type	Page	Thread size	Tube O.D. (mm)					
			4	6	8	10	12	16
PX Branch Y	P.147	M5 × 0.8	●	●				
		M6 × 1	●	●				
		R1/8	●	●		●		
		R1/4	●	●	●	●	●	
		R3/8	●	●	●	●	●	●
R1/2				●	●	●		
PVX Tripod Elbow	P.148	M5 × 0.8	●	●				
		M6 × 1	●	●				
		R1/8	●	●	●	●		
		R1/4	●	●	●	●	●	
		R3/8	●	●	●	●	●	●
R1/2				●	●	●		
PAX Branch Elbow	P.149	M5 × 0.8	●	●				
		M6 × 1	●	●				
		R1/8	●	●	●	●		
		R1/4	●	●	●	●	●	
		R3/8	●	●	●	●	●	●
R1/2				●	●	●		
PRX Branch Double Y	P.150	R1/8	●	●				
		R1/4	●	●				
		Rc1/2				●		

Type	Page	Thread size	Tube O.D. 1 (mm)			Tube O.D. 2 (mm)
			4	6	8	
PKD Run Triple Tee	P.150	R1/8	●			6
		R1/4	●	●		8
		R3/8			●	10

Connection: Tube ⇔ Tube (Equal dia.)

Type	Page	Tube O.D. (mm)					
		4	6	8	10	12	16
PJ Union Straight	P.141	●	●	●	●	●	●
PV Union Elbow	P.143	●	●	●	●	●	●
PE Union Tee	P.143	●	●	●	●	●	●

Type	Page	Tube O.D. (mm)					
		4	6	8	10	12	16
PY Union Y	P.146	●	●	●	●	●	
PVU Tripod Union	P.148	●	●	●	●	●	
PAU Branch Union Elbow	P.149	●	●	●	●	●	

Connection: Tube ⇔ Tube (Unequal dia.)

Type	Page	Tube O.D. 1 (mm)	Tube O.D. 2 (mm)				
			4	6	8	10	12
PG Unequal Union Straight	P.142	6	●				
		8		●			
		10			●		
		12				●	
		16					●
PEG Unequal Union Tee	P.144	6	●				
		8		●			
		10			●		
12				●			

Type	Page	Tube O.D. 1 (mm)	Tube O.D. 2 (mm)				
			4	6	8	10	12
PW Unequal Union Y	P.146	6	●				
		8		●			
		10			●		
		12				●	
PRG Unequal Double Y	P.151	6	●				
		8		●			
PKG Unequal Triple Tee	P.150	6	●				
		8	●	●			
		10		●	●		

Plug

Type	Page	Tube O.D. (mm)				
		4	6	8	10	12
PPP Cap	P.151	●	●	●	●	●

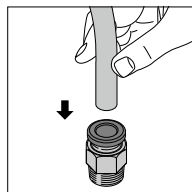
How to insert and disconnect

1. How to insert and disconnect tubes

① Tube insertion

Insert a tube into Push-In Fitting up to the tube end. Lock-claws bite the tube and fix it automatically, then the elastic sleeve seals around the tube.

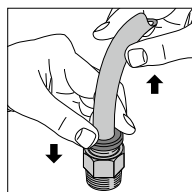
Refer to "2. Instructions for Tube Insertion" under "Common Safety Instructions for Fittings".



② Tube disconnection

The tube is disconnected by pushing release-ring to release Lock-claws.

Make sure to stop air supply before the tube disconnection.

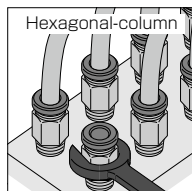


2 How to tighten thread

① . Tightening thread

Use a spanner to tighten a hexagonal-column.

Refer to "Table 2: Recommended tightening torque / Sealock color / Gasket materials" under "4. Instructions for Installing a fitting" in "Common Safety Instructions for Fittings".



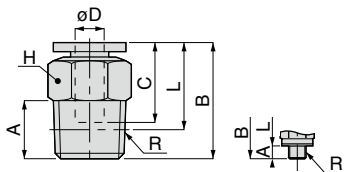
Applicable Tube and Related Products

Fluororesin (PFA) Tube.....P.628



Straight

RoHS compliant



Metric thread type

Unit : mm

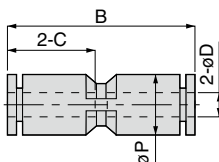
Model code	Tube O.D. ϕD	R	A	B	L	Tube end C	Hex. H	Effective area (mm ²)	Weight (g)	CAD file name		
PC4-M5SUS	4	M5×0.8	3	20.1	17.1	15	10	1.9	5.9	PC4-M5SUS		
PC4-M6SUS		M6×1	4	21.1				15.1	14	6.2	6.2	PC4-M6SUS
PC4-01SUS		R1/8	8		17.1		15.1			14	5.3	7.8
PC4-02SUS		R1/4	11	17.1				15.1	14			5.3
PC6-M5SUS	6	M5×0.8	3		22.2	19.2	17.1			12	1.9	
PC6-M6SUS		M6×1	4	23.2	18.7			12	6.2		8.8	17
PC6-01SUS		R1/8	8	22.7		18.7			14	12.5	8.7	17
PC6-02SUS		R1/4	11	24.7	17.4			17			12.5	17
PC6-03SUS		R3/8	12	23.7		17.4			17	12.5		26
PC8-01SUS		R1/8	8	27.9	23.9			18.2			14	20
PC8-02SUS	R1/4	11	26.6	20.6	17	20	22		PC8-02SUS			
PC8-03SUS	R3/8	12	23.9	17.6					17	20		
PC10-01SUS	10	R1/8	8	30.5	26.5	20.9	17	22.9			22	PC10-01SUS
PC10-02SUS		R1/4	11	30	24				17	35	20	25
PC10-03SUS		R3/8	12	29.5	23.2			21			35	25
PC10-04SUS		R1/2	15	30.5	22.3				21	35		47
PC12-02SUS	12	R1/4	11	36.1	30.1	23.5	21	59			34	PC12-02SUS
PC12-03SUS		R3/8	12	32.1	25.8				21	59	47	47
PC12-04SUS		R1/2	15	34.1	25.9			24			83.3	56
PC16-03SUS		R3/8	12	39.5	33.2				25	83.3		56
PC16-04SUS	R1/2	15	41.5	33.3	25	114	63	63			PC16-04SUS	

※. "L" is a reference value for height dimension after tightening taper thread.



Union Straight

RoHS compliant



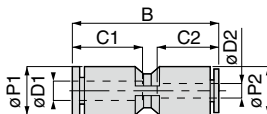
Unit : mm

Model code	Tube O.D. ϕD	B	ϕP	Tube end C	Effective area (mm ²)	Weight (g)	CAD file name
PU4SUS	4	31	10	15	5.3	4.7	PU4SUS
PU6SUS	6	35.2	12.5	17.1	12.5	6.4	PU6SUS
PU8SUS	8	37.8	14.5	18.1	20	9.1	PU8SUS
PU10SUS	10	43.8	17.5	20.4	35	15	PU10SUS
PU12SUS	12	48.2	21	23.6	59	22	PU12SUS
PU16SUS	16	49.8	25	24.3	147.6	25	PU16SUS

PG SUS Unequal Union Straight



RoHS compliant



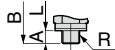
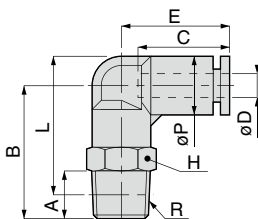
Unit : mm

Model code	Tube O.D. øD1	Tube O.D. øD2	B	øP1	øP2	Tube end C1	Tube end C2	Effective area (mm ²)	Weight (g)	CAD file name
PG6-4SUS	6	4	34.6	12.5	12.5	17.1	15	5.3	6.2	PG6-4SUS
PG8-6SUS	8	6	38	14.5	14.5	18.1	17.1	12.5	8.6	PG8-6SUS
PG10-8SUS	10	8	43.3	17.5	17.5	20.4	18.4	20	14	PG10-8SUS
PG12-10SUS	12	10	48	21	21	23.6	20.4	35	21	PG12-10SUS
PG16-12SUS	16	12	49.9	25	25	24.3	23.6	88.6	27	PG16-12SUS

PL SUS Elbow



RoHS compliant



Metric thread type

Unit : mm

Model code	Tube O.D. øD	R	A	B	L	øP	Tube end C	E	Hex. H	Effective area (mm ²)	Weight (g)	CAD file name			
PL4-M5SUS	4	M5×0.8	3	20.3	22.3	10	15	18.1	10	1.5	7.7	PL4-M5SUS			
PL4-M6SUS		M6×1	4	21.3								8	PL4-M6SUS		
PL4-01SUS		R1/8	8	23.3	24.3				4.2	11	PL4-01SUS				
PL4-02SUS		R1/4	11	26.3	25.3					19	PL4-02SUS				
PL6-M5SUS	6	M5×0.8	3	22	25.3	12.5	16.9	19.9	12	1.5	12	PL6-M5SUS			
PL6-M6SUS		M6×1	4	23								6.1	PL6-M6SUS		
PL6-01SUS		R1/8	8	25	27.3				10	14	21	PL6-01SUS			
PL6-02SUS		R1/4	11	28	28.2					17	33	PL6-02SUS			
PL6-03SUS	R3/8	12	29.8	29.7								PL6-03SUS			
PL8-01SUS	8	R1/8	8	28	31.3	14.5	18.1	22.7	14	16.5	17	17	PL8-01SUS		
PL8-02SUS		R1/4	11	31	32.2							23	PL8-02SUS		
PL8-03SUS		R3/8	12	32.8	33.7				35	22.4	30	17	30	40	PL8-03SUS
PL10-01SUS		R1/8	8	33	37.8										60
PL10-02SUS	10	R1/4	11	36	38.7	17.5	20.4	26.4	21	30	40	PL10-02SUS			
PL10-03SUS		R3/8	12	37	39.4							60	PL10-03SUS		
PL10-04SUS		R1/2	15	40	40.6										
PL12-02SUS	12	R1/4	11	38	42.5	21	23.6	29.6	21	30	48	30	PL12-02SUS		
PL12-03SUS		R3/8	12	39	43.2							47	49	PL12-03SUS	
PL12-04SUS		R1/2	15	42	44.3				63	77	81				PL12-04SUS
PL16-03SUS		R3/8	11	47	53.2										
PL16-04SUS	R1/2	15	51	55.3								PL16-04SUS			

※ . "L" is a reference value for height dimension after tightening taper thread.

FITTING, CONTROLLER, VALVE, TUBE, MADE IN JAPAN PRODUCTS

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Stainless Series, Chemical Series, PP Series, EG Series, Anti-static & Brass Series, Gel Temperature Control, Minimal Series, Stop Fitting Series, Rotary Series, Twist-Proof Fitting, Block and Connector, Coupling, Color Cap



Page for special specifications



3D CAD data is available at PISCO website.

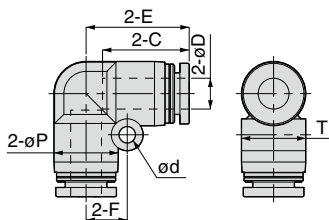


CAD data is available at PISCO website.



Union Elbow

RoHS compliant



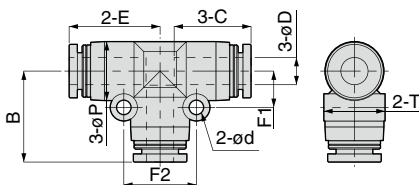
Unit : mm

Model code	Tube O.D. øD	øP	Tube end C	E	ød	F	T	Effective area (mm ²)	Weight (g)	CAD file name
PV4SUS	4	10	15	17	3.2	6.5	10	4.2	5.1	PV4SUS
PV6SUS	6	12.5	17	20.2	3.2	8	12.5	10	7.2	PV6SUS
PV8SUS	8	15	18.1	22.4	4.2	10	15.6	16.5	11	PV8SUS
PV10SUS	10	17.5	20.9	26.4	4.2	12	18.2	30	17	PV10SUS
PV12SUS	12	21	23.6	29.6	4.2	14	21.7	47	25	PV12SUS
PV16SUS	16	25	24.3	33.3	4.2	12	25.6	91.6	30	PV16SUS



Union Tee

RoHS compliant

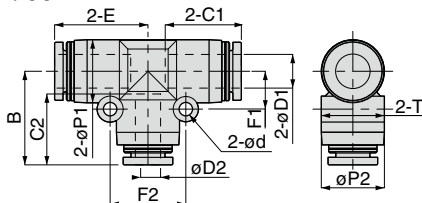


Unit : mm

Model code	Tube O.D. øD	øP	Tube end C	E	ød	T	F1	F2	B	Effective area (mm ²)	Weight (g)	CAD file name
PE4SUS	4	10	15	17	3.2	10	6.5	13	17	5.3	7.4	PE4SUS
PE6SUS	6	13	17.1	20.2	3.2	13.5	8	16	20.2	12.5	11	PE6SUS
PE8SUS	8	15	18.1	22.2	3.2	15	9	18	22.2	20	15	PE8SUS
PE10SUS	10	17.5	19.8	25.4	4.2	17.5	12	24	25.4	35	25	PE10SUS
PE12SUS	12	21	23.1	28.6	4.2	21.7	14	28	28.4	59	36	PE12SUS
PE16SUS	16	25	24.3	33.3	4.2	25.6	12	24	33.3	89.8	43	PE16SUS

PEG SUS Unequal Union Tee

RoHS compliant



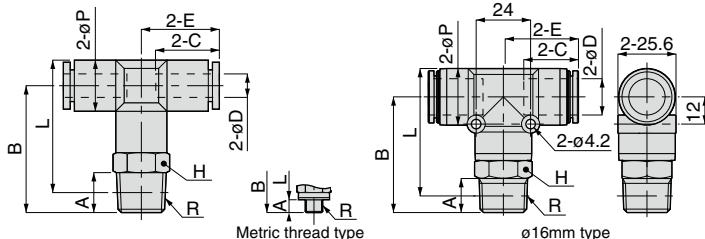
OP P.754 3D CAD CAD

Unit : mm

形式	Tube O.D. $\phi D1$	Tube O.D. $\phi D2$	$\phi P1$	$\phi P2$	Tube end C1	Tube end C2	E	ϕd	F1	F2	B	T	Effective area (mm ²)	Weight (g)	CAD file name
PEG6-4SUS	6	4	13	13	17.1	15	20.2	3.2	8	16	19.6	13.5	4.1	11	PEG6-4SUS
PEG8-6SUS	8	6	14.5	12.5	18.1	17.1	22.2	3.2	9	18	22.4	15.1	9.5	14	PEG8-6SUS
PEG10-8SUS	10	8	17.5	14.5	20.4	18.1	25.4	4.2	12	24	24.9	18.2	18.5	23	PEG10-8SUS
PEG12-10SUS	12	10	21	17.5	23.6	20.4	28.6	4.2	14	28	28.2	21.7	29.5	34	PEG12-10SUS

PB SUS Branch Tee

RoHS compliant



OP P.754 3D CAD CAD

Unit : mm

Model code	Tube O.D. ϕD	R	A	B	L	ϕP	Tube end C	E	Hex. H	Effective area (mm ²)	Weight (g)	CAD file name
PB4-M5SUS	4	M5 × 0.8	3	20.2	22.2	10	15	17	10	1.5	10	PB4-M5SUS
PB4-M6SUS		M6 × 1	4	21.2						11	PB4-M6SUS	
PB4-01SUS		R1/8	8	23.2	24.2				4.1	13	PB4-01SUS	
PB4-02SUS		R1/4	11	26.2	25.2				22	PB4-02SUS		
PB6-M5SUS	6	M5 × 0.8	3	23	26.5	13	17.1	20.3	12	1.5	16	PB6-M5SUS
PB6-M6SUS		M6 × 1	4	24						6.8		PB6-M6SUS
PB6-01SUS		R1/8	8	26	28.5				17	PB6-01SUS		
PB6-02SUS		R1/4	11	29	29.5				24	PB6-02SUS		
PB6-03SUS	R3/8	12	30.8	31	36	PB6-03SUS						
PB8-01SUS	8	R1/8	8	26.3	29.8	15	18.4	22.4	14	16.5	22	PB8-01SUS
PB8-02SUS		R1/4	11	29.3	30.8						27	PB8-02SUS
PB8-03SUS		R3/8	12	31.1	32.3				40		PB8-03SUS	
PB10-01SUS		R1/8	8	33	37.8				37		PB10-01SUS	
PB10-02SUS	R1/4	11	36	38.7	40	PB10-02SUS						
PB10-03SUS	R3/8	12	37	39.4	48	PB10-03SUS						
PB10-04SUS	R1/2	15	40	40.6	68	PB10-04SUS						
PB12-02SUS	12	R1/4	11	38	42.5	21	23.1	28.6	21	30	59	PB12-02SUS
PB12-03SUS		R3/8	12	39	43.2					60	PB12-03SUS	
PB12-04SUS		R1/2	15	42	44.3				74	PB12-04SUS		
PB16-03SUS		R3/8	11	47	53.2				90	PB16-03SUS		
PB16-04SUS	R1/2	15	51	55.3	93	PB16-04SUS						

*. "L" is a reference value for height dimension after tightening taper thread.

OP P.660

Page for special specifications

3D CAD

3D CAD data is available at PISCO website.

CAD

CAD data is available at PISCO website.

FITTING
CONTROLLER
VALVE
TUBE

MADE-TO-ORDER
PRODUCTS

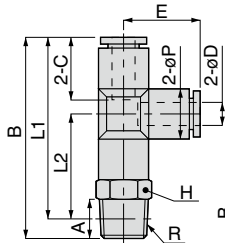
144

Stainless Series
Chemical Series
PP Series
EG Series
Anti-siphon & Back-Flow Series
Self-Compensating Control
Minimal Series
Stop Fitting Series
Rotary Series
Twist-Proof Fitting
Block and Connector
Coupling
Color Cap

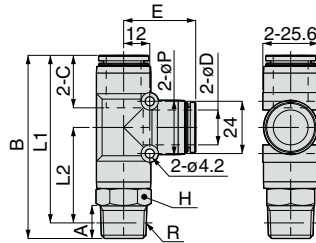


Run Tee

RoHS compliant



Metric thread type



φ16mm type

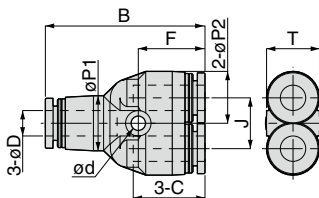
Unit : mm

Model code	Tube O.D. φD	R	A	B	L1	L2	φP	Tube end C	E	Hex. H	Effective area (mm ²)	Weight (g)	CAD file name
PD4-M5SUS	4	M5 × 0.8	3	37.2	34.2	17.2	10	15	17	10	1.9	10	PD4-M5SUS
PD4-M6SUS		M6 × 1	4	38.2									11
PD4-01SUS		R1/8	8	40.2	36.2	19.2				5.3	13	PD4-01SUS	
PD4-02SUS		R1/4	11	43.2	37.2	20.2					22	PD4-02SUS	
PD6-M5SUS	6	M5 × 0.8	3	43.3	40.3	20	13	17.1	20.2	12	1.9	15	PD6-M5SUS
PD6-M6SUS		M6 × 1	4	44.3									6.4
PD6-01SUS		R1/8	8	46.3	42.3	22				12.5	17	PD6-01SUS	
PD6-02SUS		R1/4	11	49.3	43.3	23					25	PD6-02SUS	
PD6-03SUS	R3/8	12	51.1	44.8	24.5	17	37	PD6-03SUS					
PD8-01SUS	8	R1/8	8	50.4	46.4	24.2	15	18.1	22.2	14	20	22	PD8-01SUS
PD8-02SUS		R1/4	11	53.4	47.4	25.2						28	PD8-02SUS
PD8-03SUS		R3/8	12	55.2	48.9	26.7				17	40	PD8-03SUS	
PD10-01SUS	10	R1/8	8	58.4	54.4	29	17.5	20.4	25.4	17	23.6	37	PD10-01SUS
PD10-02SUS		R1/4	11	61.4	55.4	30						40	PD10-02SUS
PD10-03SUS		R3/8	12	62.4	56.1	30.7				35	47	PD10-03SUS	
PD10-04SUS		R1/2	15	65.4	57.2	31.8					68	PD10-04SUS	
PD12-02SUS	12	R1/4	11	66.8	60.8	32.2	21	23.1	28.4	21	35	59	PD12-02SUS
PD12-03SUS		R3/8	12	67.8	61.5	32.9						59	PD12-03SUS
PD12-04SUS		R1/2	15	70.8	62.6	34				74	74	PD12-04SUS	
PD16-03SUS		R3/8	11	80.3	74	40.7					90	90	PD16-03SUS
PD16-04SUS	R1/2	15	84.3	76.1	42.8	92.8	94	PD16-04SUS					

※ 1. "L1" and "L2" are reference values for height dimensions after tightening taper thread.

PY
SUS Union Y

RoHS compliant



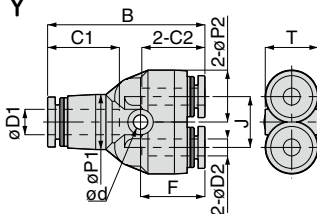
OP P.754 3D CAD CAD

Unit : mm

Model code	Tube O.D. øD	B	øP1	øP2	Tube end C	J	ød	F	T	Effective area (mm ²)	Weight (g)	CAD file name
PY4SUS	4	33	10	10	15	11	3.4	14.2	10	4.2	7.6	PY4SUS
PY6SUS	6	38	13	12.5	17.1	12	3.4	15.9	12.5	10	11	PY6SUS
PY8SUS	8	42.4	15	14.5	18.1	14	3.4	17.2	14.5	16.5	15	PY8SUS
PY10SUS	10	48.8	18	18	20.9	18	4.5	19.7	18	27	26	PY10SUS
PY12SUS	12	55.2	21.5	21	23.6	20	4.2	22.4	21	38	37	PY12SUS
PY16SUS	16	62.6	25	25	24.3	24	4.5	22.3	25	56.5	44	PY16SUS

PW
SUS Unequal Union Y

RoHS compliant



OP P.754 3D CAD CAD

Unit : mm

Model code	Tube O.D. øD1	Tube O.D. øD2	B	øP1	øP2	Tube end C1	Tube end C2	J	ød	F	T	Effective area (mm ²)	Weight (g)	CAD file name
PW6-4SUS	6	4	37.4	13	12.5	17.1	15	12	3.4	15.3	12.5	4.2	11	PW6-4SUS
PW8-6SUS	8	6	42.6	15	14.5	18.1	17.1	14	3.4	17.4	14.5	10	14	PW8-6SUS
PW10-8SUS	10	8	48.3	18	18	20.9	18.2	18	4.5	19.2	18	17	23	PW10-8SUS
PW12-10SUS	12	10	55	21.5	21	23.6	20.4	20	4.2	22.2	21	27	36	PW12-10SUS

146

Stainless
Series

Chemical
Series

PP
Series

EG
Series

Anti-sucker
& Press Series

Oil Temperature
Control

Minimal
Series

Stop Fitting
Series

Rotary
Series

Twist-Proof
Fitting

Block and
Connector

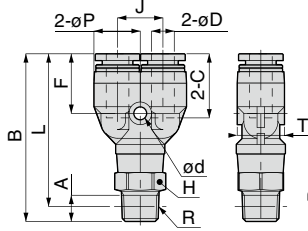
Coupling

Color
Cap



Branch Y

RoHS compliant



Metric thread type

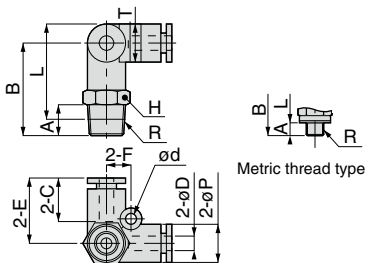
Unit : mm

Model code	Tube O.D. øD	R	A	B	L	øP	Tube end C	J	ød	F	T	Hex. H	Effective area (mm ²)	Weight (g)	CAD file name			
PX4-M5SUS	4	M5×0.8	3	37.7	34.7	10	15	11	3.4	14.2	10	10	1.5	11	PX4-M5SUS			
PX4-M6SUS		M6×1	4	38.7									3.3		PX4-M6SUS			
PX4-01SUS		R1/8	8	40.7	36.7								4.2	23	PX4-01SUS			
PX4-02SUS		R1/4	11	43.7	37.7										PX4-02SUS			
PX6-M5SUS	6	M5×0.8	3	41.5	38.5	12.5	17.1	12	3.4	15.9	12.5	12	1.5	16	PX6-M5SUS			
PX6-M6SUS		M6×1	4	42.5									6.5		PX6-M6SUS			
PX6-01SUS		R1/8	8	44.5	40.5								10	25	37	17	17	PX6-01SUS
PX6-02SUS		R1/4	11	47.5	41.5													PX6-02SUS
PX6-03SUS	R3/8	12	49.3	43	17	37	PX6-03SUS											
PX8-01SUS	8	R1/8	8	48.7	44.7	14.5	18.1	14	3.4	17.2	14.5	14	16.5	24	PX8-01SUS			
PX8-02SUS		R1/4	11	51.7	45.7									29	PX8-02SUS			
PX8-03SUS		R3/8	12	53.5	47.2									43	PX8-03SUS			
PX10-01SUS	10	R1/8	8	55.5	51.5	18	20.9	18	4.5	19.7	18	17	22.1	39	PX10-01SUS			
PX10-02SUS		R1/4	11	58.5	52.5									42	PX10-02SUS			
PX10-03SUS		R3/8	12	59.5	53.2								30	49	21	30	49	PX10-03SUS
PX10-04SUS		R1/2	15	62.5	54.3													69
PX12-02SUS	12	R1/4	11	63.7	57.7	21	23.6	20	4.2	22.4	21	21	37	61	PX12-02SUS			
PX12-03SUS		R3/8	12	64.7	58.4									62	PX12-03SUS			
PX12-04SUS		R1/2	15	67.7	59.5									77	PX12-04SUS			

※ 1. "L" is a reference value for height dimension after tightening taper thread.

PVX SUS Tripod Elbow

RoHS compliant



OP P.754 3D CAD CAD

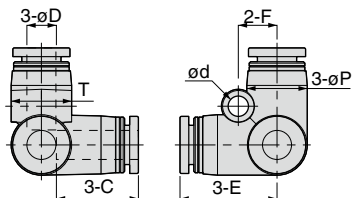
Unit : mm

Model code	Tube O.D. øD	R	A	B	L	øP	Tube end C	E	Hex. H	ød	F	T	Effective area (mm ²)	Weight (g)	CAD file name
PVX4-M5SUS	4	M5 × 0.8	3	21.7	23.7	10	15	17	10	3.2	6.5	10	2.3	11	PVX4-M5SUS
PVX4-M6SUS		M6 × 1	4	22.7									3.6		PVX4-M6SUS
PVX4-01SUS		R1/8	8	24.7	25.7				4				13	PVX4-01SUS	
PVX4-02SUS		R1/4	11	27.7	26.7				3.5				22	PVX4-02SUS	
PVX6-M5SUS	6	M5 × 0.8	3	25.3	28.6	12.5	17.1	20.2	12	4.2	8	12.5	2.3	16	PVX6-M5SUS
PVX6-M6SUS		M6 × 1	4	26.3									5.9		PVX6-M6SUS
PVX6-01SUS		R1/8	8	28.3	30.6				8.5				17	PVX6-01SUS	
PVX6-02SUS		R1/4	11	31.3	31.5				8				25	PVX6-02SUS	
PVX6-03SUS	R3/8	12	33.1	33	8.4	37	PVX6-03SUS								
PVX8-01SUS	8	R1/8	8	30.4	33.7	14.5	18.1	22.1	14	4.2	10	14.5	17.1	23	PVX8-01SUS
PVX8-02SUS		R1/4	11	33.4	34.6								17.5	29	PVX8-02SUS
PVX8-03SUS		R3/8	12	35.2	36.1				17.4				40	PVX8-03SUS	
PVX10-01SUS	10	R1/8	8	35.2	40	17.5	20.4	26.4	17	4.2	12	17.5	21.7	39	PVX10-01SUS
PVX10-02SUS		R1/4	11	38.2	40.9								31.5	41	PVX10-02SUS
PVX10-03SUS		R3/8	12	39.2	41.6				28.1				49	PVX10-03SUS	
PVX10-04SUS		R1/2	15	42.2	42.8				24.3				69	PVX10-04SUS	
PVX12-02SUS	12	R1/4	11	41.2	45.7	21	23.6	29.6	21	4.2	14	21	40.9	62	PVX12-02SUS
PVX12-03SUS		R3/8	12	42.2	46.4								45		77
PVX12-04SUS		R1/2	15	45.2	47.5								44.8	77	PVX12-04SUS

※ . "L" is a reference value for height dimension after tightening taper thread.

PVU SUS Tripod Union

RoHS compliant



OP P.754 3D CAD CAD

Unit : mm

Model code	Tube O.D. øD	øP	Tube end C	E	ød	F	T	Effective area (mm ²)	Weight (g)	CAD file name
PVU4SUS	4	10	15	17	3.2	6.5	10	3.7	7.3	PVU4SUS
PVU6SUS	6	12.5	17.1	20.2	4.2	8	12.5	8.3	11	PVU6SUS
PVU8SUS	8	14.5	18.1	22.1	4.2	10	14.5	16	15	PVU8SUS
PVU10SUS	10	17.5	20.4	26.4	4.2	12	17.5	30.2	25	PVU10SUS
PVU12SUS	12	21	23.6	29.6	4.2	14	21	40.2	36	PVU12SUS

OP P.000

Page for special specifications

3D CAD

3D CAD data is available at PISCO website.

CAD

CAD data is available at PISCO website.

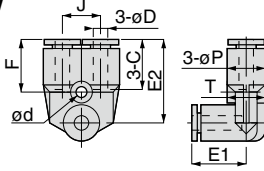
Tube Fitting Stainless SUS304 Series

FITTING



Branch Union Elbow

RoHS compliant



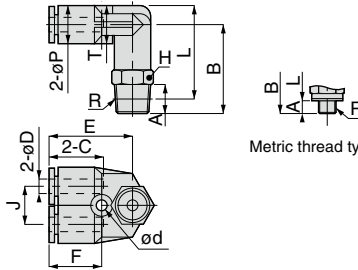
Unit : mm

Model code	Tube O.D. øD	E1	øP	Tube end C	J	E2	ød	F	T	Effective area (mm ²)	Weight (g)	CAD file name
PAU4SUS	4	17	10	15	11	22.8	3.2	14.3	10	2.5	8.1	PAU4SUS
PAU6SUS	6	19.9	12.5	17.1	12	26.3	4.2	15.6	12.5	7.2	12	PAU6SUS
PAU8SUS	8	22.7	14.5	18.1	14	29.4	4.2	16.9	14.5	16.3	17	PAU8SUS
PAU10SUS	10	25.2	17.5	20.4	18	33.7	4.2	18.7	17.5	27.9	27	PAU10SUS
PAU12SUS	12	29.6	21	23.6	20	35.4	4.2	20.6	21	40	39	PAU12SUS



Branch Elbow

RoHS compliant



Unit : mm

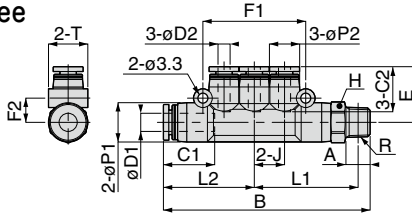
Model code	Tube O.D. øD	R	A	B	L	øP	Tube end C	J	E	Hex. H	ød	F	T	Effective area (mm ²)	Weight (g)	CAD file name
PAX4-M5SUS	4	M5 × 0.8	3	21.7	23.7	10	15	11	22.8	10	3.2	14.3	10	2.2	11	PAX4-M5SUS
PAX4-M6SUS		M6 × 1	4	22.7										2.5	12	PAX4-M6SUS
PAX4-01SUS		R1/8	8	24.7	25.7									2.7	14	PAX4-01SUS
PAX4-02SUS		R1/4	11	27.7	26.7									2.5	23	PAX4-02SUS
PAX6-M5SUS	6	M5 × 0.8	3	25	28.3	12.5	17.1	12	26.3	12	4.2	15.6	12.5	2.2	17	PAX6-M5SUS
PAX6-M6SUS		M6 × 1	4	26										6.4		12
PAX6-01SUS		R1/8	8	28	30.3									6.9	19	PAX6-01SUS
PAX6-02SUS		R1/4	11	31	31.2									6.6	26	PAX6-02SUS
PAX6-03SUS	R3/8	12	32.8	32.7	6.8	38	PAX6-03SUS									
PAX8-01SUS	8	R1/8	8	31	34.3	14.5	18.1	14	29.4	14	4.2	16.9	14.5	14.6	24	PAX8-01SUS
PAX8-02SUS		R1/4	11	34	35.2									15	29	PAX8-02SUS
PAX8-03SUS		R3/8	12	35.8	36.7									15	42	PAX8-03SUS
PAX10-01SUS		R1/8	8	34	38.8									17.5	20.4	18
PAX10-02SUS	R1/4	11	37	39.7	26.1	44	PAX10-02SUS									
PAX10-03SUS	R3/8	12	38	40.4	27.2	51	PAX10-03SUS									
PAX10-04SUS	R1/2	15	41	41.6	29.9	71	PAX10-04SUS									
PAX12-02SUS	12	R1/4	11	41.2	45.7	21	23.6	20	35.4	21	4.2	20.6	21	38.2	64	PAX12-02SUS
PAX12-03SUS		R3/8	12	42.2	46.4									43.1	65	PAX12-03SUS
PAX12-04SUS		R1/2	15	45.2	47.5									42.1	80	PAX12-04SUS

※ . "L" is a reference value for height dimension after tightening taper thread.



PKD Run Triple Tee

RoHS compliant



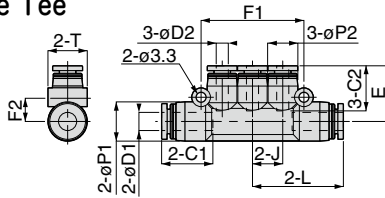
Unit : mm

形式	Tube O.D. øD1	Tube O.D. øD2	R	A	B	E	L1	L2	J	øP1	øP2	Tube end C1	Tube end C2	F1	F2	Hex. H	T	Effective area (mm ²)	Weight (g)	CAD file name
PKD6-4-01SUS	6	4	R1/8	8	68.5	18.5	34.3	30.2	10	13	10	17.1	15	34	8	12	13	5	23	PKD6-4-01SUS
PKD8-4-02SUS	8	4	R1/4	11	73.7	19.3	36.5	31.2	10	15	10	18.1	15	34	9.2	14	15	5.2	32	PKD8-4-02SUS
PKD8-6-02SUS		6			80.7	21.4	40	34.7	12		13		17.1	40.2	9			9.6	35	PKD8-6-02SUS
PKD10-8-03SUS	10	8	R3/8	12	93.2	23.7	46.7	40.2	14	17.5	15	20.9	18.1	46.2	10.5	17	17.5	19.1	57	PKD10-8-03SUS

※. "L1" is a reference value for height dimension after tightening thread.

PKG Unequal Triple Tee

RoHS compliant

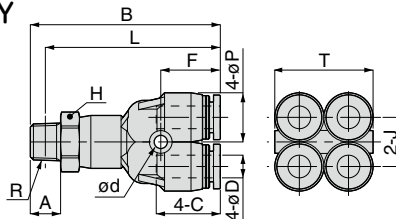


Unit : mm

Model code	Tube O.D. øD1	Tube O.D. øD2	L	E	J	øP1	øP2	Tube end C1	Tube end C2	F1	F2	T	Effective area (mm ²)	Weight (g)	CAD file name
PKG6-4SUS	6	4	30.2	18.5	10	13	10	17.1	15	34	8	13	5	16	PKG6-4SUS
PKG8-4SUS	8	4	31.2	19.3	10	10	10	18.1	15	34	9.2	15	6	19	PKG8-4SUS
PKG8-6SUS		6	34.7	21.4	12	13	13		17.1	40.2	9		10.1	23	PKG8-6SUS
PKG10-6SUS	10	6	40.2	23.9	14	17.5	15	20.9	17.1	46.2	10.5	17.5	11.2	31	PKG10-6SUS
PKG10-8SUS		8		23.7					18.1				19.1	33	PKG10-8SUS

PRX Branch Double Y

RoHS compliant



Unit : mm

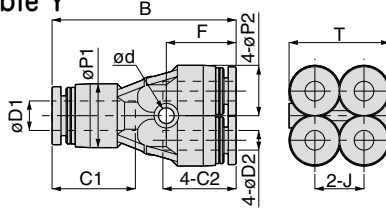
Model code	Tube O.D. øD	R	A	B	L	øP	Tube end C	J	Hex. H	ød	F	T	Effective area (mm ²)	Weight (g)	CAD file name
PRX4-01SUS	4	R1/8	8	45.8	41.8	10.5	15	10	12	3.2	14.3	20.5	1.5	21	PRX4-01SUS
PRX4-02SUS		R1/4	11	48.8	42.8				14				1.4	28	PRX4-02SUS
PRX6-01SUS	6	R1/8	8	50.4	46.4	13	17.1	13	14	3.5	15.9	26	9	28	PRX6-01SUS

※. "L" is a reference value for height dimension after tightening thread.



Unequal Double Y

RoHS compliant



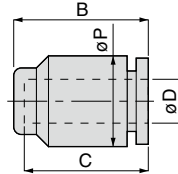
Unit : mm

Model code	Tube O.D. øD1	Tube O.D. øD2	B	øP1	øP2	Tube end C1	Tube end C2	J	ød	F	T	Effective area (mm ²)	Weight (g)	CAD file name
PRG6-4SUS	6	4	37.7	13	10.5	17.1	15	10	3.2	14.3	20.5	1.5	14	PRG6-4SUS
PRG8-6SUS	8	6	42.1	14	13	18.2	17.1	13	3.5	15.9	26	8.2	21	PRG8-6SUS



Cap

RoHS compliant



Unit : mm

Model code	Tube O.D. øD	B	øP	C	Weight (g)	CAD file name
PPF4SUS	4	16.5	10	15	2.4	PPF4SUS
PPF6SUS	6	18.6	12.5	17.1	3.2	PPF6SUS
PPF8SUS	8	19.9	14.5	18.4	4.6	PPF8SUS
PPF10SUS	10	22.5	17.5	20.9	7.6	PPF10SUS
PPF12SUS	12	25.1	21	23.1	12	PPF12SUS



SAFETY Instructions

This safety instructions aim to prevent personal injury and damage to properties by requiring proper use of PISCO products.

Be certain to follow ISO 4414 and JIS B 8370

ISO 4414 : Pneumatic fluid power...Recommendations for the application of equipment to transmission and control systems.

JIS B 8370 : General rules and safety requirements for systems and their components.

This safety instructions is classified into "Danger", "Warning" and "Caution" depending on the degree of danger or damages caused by improper use of PISCO products.



Danger

Hazardous conditions. It can cause death or serious personal injury.



Warning

Hazardous conditions depending on usages. Improper use of PISCO products can cause death or serious personal injury.



Caution

Hazardous conditions depending on usages. Improper use of PISCO products can cause personal injury or damages to properties.



Warning

1. Selection of pneumatic products

- ① A user who is a pneumatic system designer or has sufficient experience and technical expertise should select PISCO products.
- ② Due to wide variety of operating conditions and applications for PISCO products, carry out the analysis and evaluation on PISCO products. The pneumatic system designer is solely responsible for assuring that the user's requirements are met and that the application presents no health or safety hazards. All designers are required to fully understand the specifications of PISCO products and constitute all systems based on the latest catalog or information, considering any malfunctions.

2. Handle the pneumatic equipment with enough knowledge and experience

- ① Improper use of compressed air is dangerous. Assembly, operation and maintenance of machines using pneumatic equipment should be conducted by a person with enough knowledge and experience.

3. Do not operate machine / equipment or remove pneumatic equipment until safety is confirmed.

- ① Make sure that preventive measures against falling work-pieces or sudden movements of machine are completed before inspection or maintenance of these machine.
- ② Make sure the above preventive measures are completed. A compressed air supply and the power supply to the machine must be off, and also the compressed air in the systems must be exhausted.
- ③ Restart the machines with care after ensuring to take all preventive measures against sudden movements.

Disclaimer

1. PISCO does not take any responsibility for any incidental or indirect loss, such as production line stop, interruption of business, loss of benefits, personal injury, etc., caused by any failure on use or application of PISCO products.
2. PISCO does not take any responsibility for any loss caused by natural disasters, fires not related to PISCO products, acts by third parties, and intentional or accidental damages of PISCO products due to incorrect usage.
3. PISCO does not take any responsibility for any loss caused by improper usage of PISCO products such as exceeding the specification limit or not following the usage the published instructions and catalog allow.
4. PISCO does not take any responsibility for any loss caused by remodeling of PISCO products, or by combinational use with non-PISCO products and other software systems.
5. The damages caused by the defect of Pisco products shall be covered but limited to the full amount of the PISCO products paid by the customer.



SAFETY INSTRUCTION MANUAL

PISCO products are designed and manufactured for use in general industrial machines. Be sure to read and follow the instructions below.

⚠ Danger

1. Do not use PISCO products for the following applications.
 - ① Equipment used for maintaining / handling human life and body.
 - ② Equipment used for moving / transporting human.
 - ③ Equipment specifically used for safety purposes.

⚠ Warning

1. Do not use PISCO products under the following conditions.
 - ① Beyond the specifications or conditions stated in the catalog, or the instructions.
 - ② Under the direct sunlight or outdoors.
 - ③ Excessive vibrations and impacts.
 - ④ Exposure / adhere to corrosive gas, inflammable gas, chemicals, seawater, water and vapor. *
* Some products can be used under the condition above(④), refer to the details of specification and condition of each product.
2. Do not disassemble or modify PISCO products, which affect the performance, function, and basic structure of the product.
3. Turn off the power supply, stop the air supply to PISCO products, and make sure there is no residual air pressure in the pipes before maintenance and inspection.
4. Do not touch the release-ring of push-in fitting when there is a working pressure. The lock may be released by the physical contact, and tube may fly out or slip out.
5. Frequent switchover of compressed air may generate heat, and there is a risk of causing burn injury.
6. Avoid any load on PISCO products, such as a tensile strength, twisting and bending. Otherwise, there is a risk of causing damage to the products.
7. As for applications where threads or tubes swing / rotate, use Rotary Joints, High Rotary Joints or Multi-Circuit Rotary Block only. The other PISCO products can be damaged in these applications.
8. Use only Die Temperature Control Fitting Series, Tube Fitting Stainless SUS316 Series, Tube Fitting Stainless SUS316 Compression Fitting Series or Tube Fitting Brass Series under the condition of over 60°C (140° F) water or thermal oil. Other PISCO products can be damaged by heat and hydrolysis under the condition above.
9. As for the condition required to dissipate static electricity or provide an antistatic performance, use EG series fitting and antistatic products only, and do not use other PISCO products. There is a risk that static electricity can cause system defects or failures.
10. Use only Fittings with a characteristic of spatter-proof such as Anti-spatter or Brass series in a place where flame and weld spatter is produced. There is a risk of causing fire by sparks.
11. Turn off the power supply to PISCO products, and make sure there is no residual air pressure in the pipes and equipment before maintenance. Follow the instructions below in order to ensure safety.
 - ① Make sure the safety of all systems related to PISCO products before maintenance.
 - ② Restart of operation after maintenance shall be proceeded with care after ensuring safety of the system by preventive measures against unexpected movements of machines and devices where pneumatic equipment is used.
 - ③ Keep enough space for maintenance when designing a circuit.
12. Take safety measures such as providing a protection cover if there is a risk of causing damages or fires on machine / facilities by a fluid leakage.

⚠ Caution

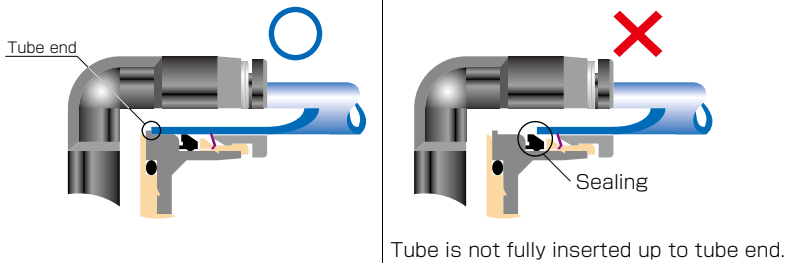
1. Remove dusts or drain before piping. They may get into the peripheral machine / facilities and cause malfunction.
2. When inserting an ultra-soft tube into push-in fitting, make sure to place an Insert Ring into the tube edge. There is a risk of causing the escape of tube and a fluid leakage without using an Insert Ring.
3. The product incorporating NBR as seal rubber material has a risk of malfunction caused by ozone crack. Ozone exists in high concentrations in static elimination air, clean-room, and near the high-voltage motors, etc. As a countermeasure, material change from NBR to HNBR or FKM is necessary. Consult with PISCO for more information.
4. Special option "Oil-free" products may cause a very small amount of a fluid leakage. When a fluid medium is liquid or the products are required to be used in harsh environments, contact us for further information.
5. In case of using non-PISCO brand tubes, make sure the tolerance of the outer tube diameter is within the limits of Table 1.

● Table 1. Tube O.D. Tolerance

mm size	Nylon tube	Polyurethane tube	inch size	Nylon tube	Polyurethane tube
ø1.8mm	—	± 0.05mm	ø1/8	± 0.1mm	± 0.15mm
ø3mm	—	± 0.15mm	ø5/32	± 0.1mm	± 0.15mm
ø4mm	± 0.1mm	± 0.15mm	ø3/16	± 0.1mm	± 0.15mm
ø6mm	± 0.1mm	± 0.15mm	ø1/4	± 0.1mm	± 0.15mm
ø8mm	± 0.1mm	± 0.15mm	ø5/16	± 0.1mm	± 0.15mm
ø10mm	± 0.1mm	± 0.15mm	ø3/8	± 0.1mm	± 0.15mm
ø12mm	± 0.1mm	± 0.15mm	ø1/2	± 0.1mm	± 0.15mm
ø16mm	± 0.1mm	± 0.15mm	ø5/8	± 0.1mm	± 0.15mm

6. Instructions for Tube Insertion

- ① Make sure that the cut end surface of the tube is at right angle without a scratch on the surface and deformations.
- ② When inserting a tube, the tube needs to be inserted fully into the push-in fitting until the tubing edge touches the tube end of the fitting as shown in the figure below. Otherwise, there is a risk of leakage.



- ③ After inserting the tube, make sure it is inserted properly and not to be disconnected by pulling it moderately.
- ※ When inserting tubes, Lock-claws may be hardly visible in the hole, observed from the front face of the release-ring. But it does not mean the tube will surely escape. Major causes of the tube escape are the followings;
- ① Shear drop of the lock-claws edge
 - ② The problem of tube diameter (usually small)
- Therefore, follow the above instructions from ① to ③, even lock-claws is hardly visible.

7. Instructions for Tube Disconnection

- ① Make sure there is no air pressure inside of the tube, before disconnecting it.
- ② Push the release-ring of the push-in fitting evenly and deeply enough to pull out the tube toward oneself. By insufficient pushing of the release-ring, the tube may not be pulled out or damaged by scratch, and tube shavings may remain inside of the fitting, which may cause the leakage later.

8. Instructions for Installing a fitting

- ① When installing a fitting, use proper tools to tighten a hexagonal-column or an inner hexagonal socket. When inserting a hex key into the inner hexagonal socket of the fitting, be careful so that the tool does not touch lock-claws. The deformation of lock-claws may result in a poor performance of systems or an escape of the tube.
- ② Refer to Table 2 which shows the recommended tightening torque. Do not exceed these limits to tighten a thread. Excessive tightening may break the thread part or deform the gasket and cause a fluid leakage. Tightening thread with tightening torque lower than these limits may cause a loosened thread or a fluid leakage.
- ③ Adjust the tube direction while tightening thread within these limits, since some PISCO products are not rotatable after the installation.

● Table 2: Recommended tightening torque / Sealock color / Gasket materials

Thread type	Thread size	Tightening torque	Sealock color	Gasket materials
Metric thread	M3 × 0.5	0.7N·m	—	SUS304 NBR
	M5 × 0.8	1.0 ~ 1.5N·m		
	M6 × 1	2 ~ 2.7N·m		
	M3 × 0.5	0.5 ~ 0.6N·m		POM
	M5 × 0.8	1 ~ 1.5N·m		
	M6 × 0.75	0.8 ~ 1N·m		
Taper pipe thread	M8 × 0.75	1 ~ 2N·m	White	—
	R1/8	7 ~ 9N·m		
	R1/4	12 ~ 14N·m		
	R3/8	22 ~ 24N·m		
Unified thread	R1/2	28 ~ 30N·m	—	SUS304, NBR
	No.10-32UNF	1.0 ~ 1.5N·m		
National pipe thread taper	1/16-27NPT	7 ~ 9N·m	White	—
	1/8-27NPT	7 ~ 9N·m		
	1/4-18NPT	12 ~ 14N·m		
	3/8-18NPT	22 ~ 24N·m		
	1/2-14NPT	28 ~ 30N·m		

※ These values may differ for some products. Refer to each specification as well.

9. Instructions for removing a fitting

- ① When removing a fitting, use proper tools to loosen a hexagonal-column or an inner hex bolt.
- ② Remove the sealant stuck on the mating equipment. The remained sealant may get into the peripheral equipment and cause malfunctions.

10. Arrange piping avoiding any load on fittings and tubes such as twist, tensile, moment load, shaking and physical impact. These may cause damages to fittings, tube deformations, bursting and the escape of tubes.

Common Safety Instructions for Fittings

Before selecting or using PISCO products, read the following instructions. Read the detailed instructions for individual series as well as the instructions below.

Warning

1. Do not use fittings with fluid medium other than air or water. (Water can be used with some series.) Contact us for using other kind of fluid medium except air and water.
2. Do not use fittings except Anti-splatter, Brass and Brass Compression Fitting series in a place where the flame and weld splatter is produced. There is a risk of causing fire by sparks.
3. As for applications where threads or tubes swing / rotate, use Rotary Joints, High Rotary Joints or Multi-Circuit Rotary Block only. The other PISCO products can be damaged in these applications.
4. Use only Die Temperature Control Fitting Series, Tube Fitting Stainless SUS316 Series, Tube Fitting Stainless SUS316 Compression Fitting Series or Tube Fitting Brass Series under the condition of over 60°C (140° F) water or thermal oil. Other PISCO products can be damaged by heat and hydrolysis under the condition above.
5. As for the condition required to dissipate static electricity or provide an antistatic performance, use EG Series fitting and antistatic products only, and do not use other PISCO products. There is a risk that static electricity can cause system defects or failures.
6. Avoid any load on PISCO products, such as a tensile strength, twisting and bending. Otherwise, there is a risk of causing damage to the products.

⚠ Caution

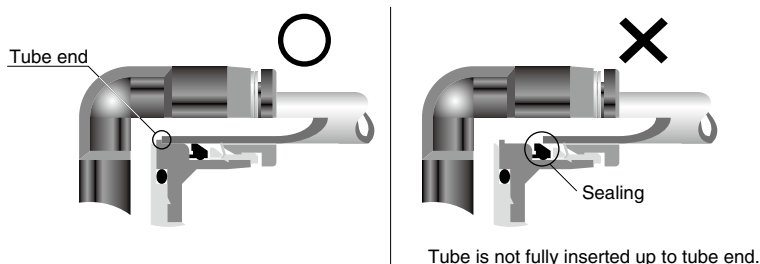
1. In case of using non-PISCO brand tubes, make sure the tolerance of the outer tube diameter is within the following limits of Table 1.

● Table 1. Tube O.D. Tolerance

mm size	Nylon tube	Urethane tube	inch size	Nylon tube	Urethane tube
ø1.8mm	—	± 0.05mm	ø1/8	± 0.1mm	± 0.15mm
ø3mm	—	± 0.15mm	ø5/32	± 0.1mm	± 0.15mm
ø4mm	± 0.1mm	± 0.15mm	ø3/16	± 0.1mm	± 0.15mm
ø6mm	± 0.1mm	± 0.15mm	ø1/4	± 0.1mm	± 0.15mm
ø8mm	± 0.1mm	± 0.15mm	ø5/16	± 0.1mm	± 0.15mm
ø10mm	± 0.1mm	± 0.15mm	ø3/8	± 0.1mm	± 0.15mm
ø12mm	± 0.1mm	± 0.15mm	ø1/2	± 0.1mm	± 0.15mm
ø16mm	± 0.1mm	± 0.15mm	ø5/8	± 0.1mm	± 0.15mm

2. Instructions for Tube Insertion

- ① Make sure that the cut end surface of the tube is at right angle without a scratch on the tube surface and deformations.
- ② When inserting a tube, the tube needs to be inserted fully into the push-in fitting until the tubing edge touches the tube end of the fitting as shown in the figure below. Otherwise, there is a risk of leakage.



- ③ After inserting the tube, make sure it is inserted properly and not to be disconnected by pulling it moderately.

3. Instructions for Tube Disconnection

- ① Make sure there is no air pressure inside of the tube, before disconnecting it.
- ② Push the release-ring of the push-in fitting evenly and deeply enough to pull out the tube toward oneself. By insufficient pushing of the release-ring, the tube may not be pulled out or damaged by scratch, and tube shavings may remain inside of the fitting, which may cause the leakage later.

4. Instructions for Installing a fitting

- ① When installing a fitting, use proper tools to tighten a hexagonal-column or an inner hexagonal socket. When inserting a hex key into the inner hexagonal socket of the fitting, be careful so that the tool does not touch lock-claws. The deformation of lock-claws may result in a poor performance of systems or an escape of the tube.
- ② Refer to Table 2 which shows the recommended tightening torque. Do not exceed these limits to tighten a thread. Excessive tightening may break the thread part or deform the gasket and cause a fluid leakage. Tightening thread with tightening torque lower than these limits may cause a loosened thread or a fluid leakage.
- ③ Adjust the tube direction while tightening thread within these limits, since some PISCO products are not rotatable the installation.

● Table 2: Recommended tightening torque / Sealock color / Gasket materials

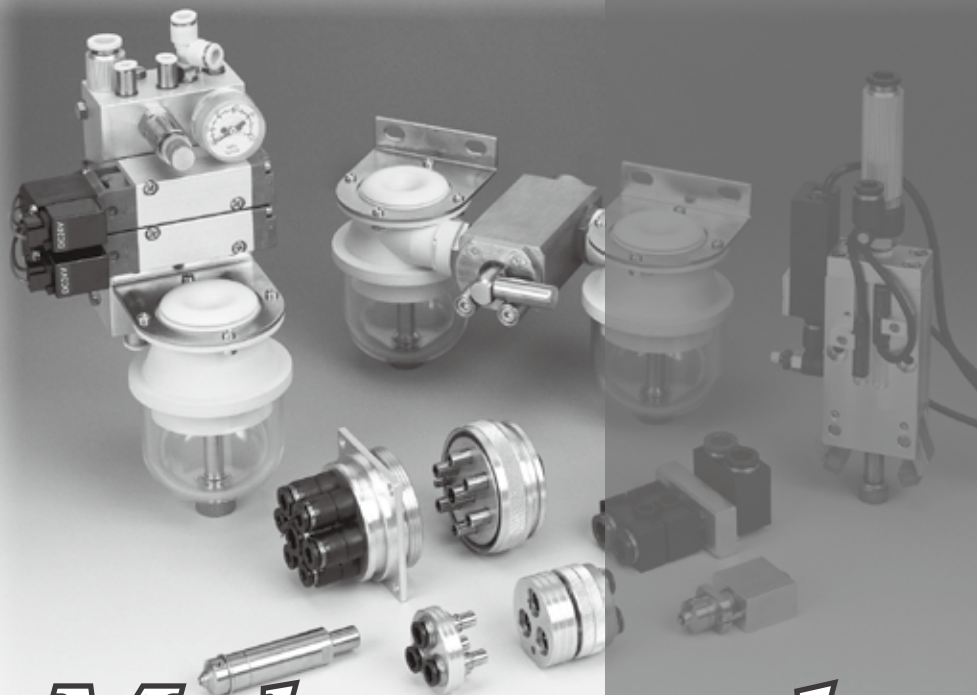
Thread type	Thread size	Tightening torque	Sealock color	Gasket materials
Metric thread	M3 × 0.5	0.7N·m	—	SUS304 NBR
	M5 × 0.8	1.0 ~ 1.5N·m		
	M6 × 1	2 ~ 2.7N·m		
	M3 × 0.5	0.5 ~ 0.6N·m		POM
	M5 × 0.8	1 ~ 1.5N·m		
	M6 × 0.75	0.8 ~ 1N·m		
	M8 × 0.75	1 ~ 2N·m		
Taper pipe thread	R1/8	7 ~ 9N·m	White	—
	R1/4	12 ~ 14N·m		
	R3/8	22 ~ 24N·m		
	R1/2	28 ~ 30N·m		
Unified thread	No.10-32UNF	1.0 ~ 1.5N·m	—	SUS304, NBR
National pipe thread taper	1/16-28NPT	7 ~ 9N·m	White	—
	1/8-27NPT	7 ~ 9N·m		
	1/4-18NPT	12 ~ 14N·m		
	3/8-18NPT	22 ~ 24N·m		
	1/2-14NPT	28 ~ 30N·m		

※. These values may differ for some products. Refer to each specification as well

5. Instructions for removing a fitting

- ① When removing a fitting, use proper tools to loosen a hexagonal-column or an inner hexagonal socket.
- ② Remove the sealant stuck on the mating equipment. The remained sealant may get into the peripheral equipment and cause malfunctions.

6. Arrange piping avoiding any load on fittings and tubes such as twist, tensile, moment load, shaking and physical impact. These may cause damages to fittings, tube deformations, bursting and the escape of tubes.



Make-to-order products

PISCO offers make-to-order products to support customer's various requirements such as special specifications, and special appearances.

Special Options

■ Characteristics

● *Color option*

Light-gray color option for resin body and release-ring.

● *Seal rubber material option*

Seal Rubber Selection: FKM or EPDM.

● *Oil-free option*

Suitable for Oil-free Environment.

● *Release-ring color option*

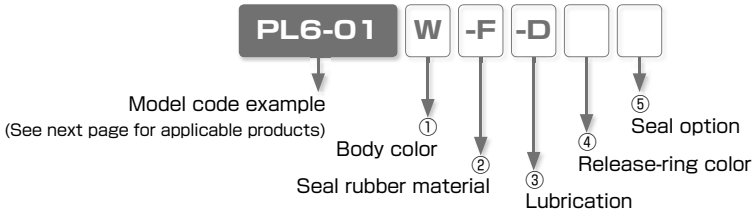
Changeable to Red Color

● *Non-purple option*

Suppress CU ion and F ion.

※ Note: With this option, Check Valve and Stop Fitting, etc. do not have marking on the brass parts. Be careful when piping.

Model Designation (Example)



① Body color

Code	W	No code
Body color	Light-gray	Standard color

※ . W: Release-ring color is light-gray

② Seal rubber material

Code	-F	-E	No code
Material	FKM	EPDM (Oil-free)	Standard seal rubber

※ 1. FKM: Release-ring color is brown. Non-purple option is not available with FKM option.

※ 2. EPDM: All oil-free. Release-ring color is yellow.

※ 3. EPDM: Not available for Thread size M3, M6 and Fittings with Inch sized Tube dia.

③ Lubrication

Code	-D	No code
Option	Oil-free	Standard lubrication

※ 1. Oil-free : Release-ring color is yellow.

※ 2. The products with oil-free option are assembled without intentional use of lubrication through its production process. It may cause problems such as degradation of airtightness and increase of friction.

④ Release-ring color

Code	-R	No code
Color	Red	Standard color

⑤ Seal option (Taper pipe thread only)

Code	-P	No code
Option	Non-purple	Standard

※ 1. Non-purple option is not available with seal rubber FKM

※ . See next page for "Reference Chart of Special Option" .

※ . Contact the nearest sales office for the price.

Reference Chart of Special Option

○ : Available, × : Not available

Series	Standard specification						Special specification					
	Body Color and Packaging Option	Body color	Release-ring color	Seal rubber material	Lubrication	Seal option	①	②	③	④	⑤	
							Body color	Seal rubber material	Lubrication	Release-ring color	Seal option	
							W* ¹	-F* ²	-E* ³	-D* ⁴	-R	-P* ²
Light-gray	FKM	EPDM	Oil-free	Red	Non-purple							
Tube Fitting Standard Series	—	Black	Black	NBR	Turbin oil	With seal coat	—	○* ⁵	○	○	○	○
	Light-gray	Light-gray	Light-gray				Std. option	○	○	○	×	○
	Clean-room pkg	Light-gray	Light-blue		Fluorochemical grease	—	○	○* ⁶	○* ⁶	×	×	
	Light-gray + Clean-room pkg	Light-gray	Light-gray		Std. option	○	○	○	×	×		
Tube Fitting Mini Series	—	Black	Black	NBR	Turbin oil	With seal coat	—	○* ⁵	○	○	○	○
	Light-gray	Light-gray	Light-gray				Std. option	○	○	○	×	○
	Clean-room pkg	Light-gray	Light-blue		Fluorochemical grease	—	○	○* ⁶	○* ⁶	×	×	
	Light-gray + Clean-room pkg	Light-gray	Light-gray		Std. option	○	○	○	×	×		
Tube Fitting Stainless SUS304 Series	—	Black	Dark-blue	FKM	Turbin oil	With seal coat	×	Std. spec.	×	○* ⁷	×	×
Tube Fitting Stainless SUS303 Equivalent Corrosivity Series	—	Black	Dark-blue	HNBR	Turbin oil	With seal coat	○	○	○* ⁷	○* ⁷	×	○
Tube Fitting EG Series	—	Black	Black	NBR	Turbin oil	With seal coat	×	○	○* ⁸	×	×	○
Tube Fitting Brass Series	—	—	—	HNBR / FM / NBR	Turbin oil	With seal coat	×	Std. option	○	○	×	○
Tube Fitting Long Type	—	—	Black	NBR	Turbin oil	With seal coat	×	○* ⁵	○	○	○	○
Speed Controller Series	—	Black	Black	NBR	Turbin oil	With seal coat	—	○* ⁵	×	×	○	○
	Light-gray	Light-gray	Light-gray				Std. option	○	×	×	×	○
	Clean-room pkg	Light-gray	Light-blue		Fluorochemical grease	—	○	×	×	×	×	
	Light-gray + Clean-room pkg	Light-gray	Light-gray		Std. option	○	×	×	×	×		
Speed Controller SUS303 Equivalent Corrosivity	—	Black	Dark-blue	HNBR	Turbin oil	With seal coat	○	○	×	×	×	○
Throttle (Needle) Valve Standard Series	—	Black	Black	NBR	Turbin oil	With seal coat	—	○* ⁵	×	×	○	○
	Light-gray	Light-gray	Light-gray				Std. option	○	×	×	×	○
	Clean-room pkg	Light-gray	Light-blue		Fluorochemical grease	—	○	×	×	×	×	
	Light-gray + Clean-room pkg	Light-gray	Light-gray		Std. option	○	×	×	×	×		
Fixed Orifice Joint Series	—	Black	Black	NBR	Turbin oil	With seal coat	○	○	○	○	○* ⁹	○
Regulator Series (RVC, RVS, RVU, RVCU, RVUM)	—	Black	Black	NBR	Turbin oil	With seal coat	○	×	×	×	○* ⁹	○
Check Valve Series	—	Black	Black	NBR	Turbin oil	With seal coat	○* ¹⁰	×	×	×	○* ⁹	○
Check Valve Series (Resin Type)	—	Light-gray	Light-gray	NBR	Turbin oil	With seal coat	Std. option	×	×	×	×	○

※ 1. W: Release-ring color is light-gray

※ 2. Seal option non-purple is not available with seal rubber material FKM

※ 3. EPDM: All oil-free. Release-ring color is yellow. Thread size M3, M6 and Fitting with inch sized Tube dia are not available.

※ 4. Release-ring color: Yellow.

※ 5. Release-ring color: Brown.

※ 6. Release-ring color: Light-blue.

※ 7. Release-ring color: Dark-blue.


※ 8. Release-ring color: Black

※ 9. Release-ring Red is not selectable with body color Light-gray.

























※ 10. Not available for CVU4-4, CVU6-6 and CVU8-8.

※ Contact the nearest sales office for other special specifications.

■ Reference chart of Appearance Color Combination (For Fitting)

Series	Resin color or Option	Tube dia.		Seal rubber material		Lubrication	Release-ring color	
				-F FKM	-E EPDM	-D Oil-free	-R Red	
Tube Fitting Standard Series Tube Fitting Mini Series	-	mm size						
		inch size						
	Light-gray	mm size						
		inch size						
	Clean-room pkg	mm size						
		inch size						
	Light-gray + Clean-room pkg	mm size						
		inch size						
	Tube Fitting Stainless SUS304 Series	-	mm size		Std. spec.			
	Tube Fitting Stainless SUS303 Equivalent Corrosivity Series	-	mm size					
		Light-gray	mm size					

Reference chart of Appearance Color Combination (For Controller)

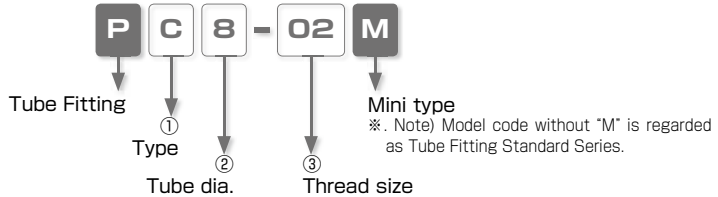
Series	Resin color or Option	Tube dia.		Seal rubber material		Release-ring color
				-F FKM	-R レッド	
Speed Controller Series Throttle (Needle) Valve Standard Series	-	mm size				
		inch size				
	Light-gray	mm size				
		inch size				
	Clean-room pkg	mm size				
		inch size				
	Light-gray + Clean-room pkg	mm size				
		inch size				

Space-Saving Options

Characteristics

- Suitable for Installing in Limited Spaces.

Model Designation (Example)



① Type

Code	Type	Code	Type	Code	Type
L	Elbow	B	Branch Tee	D	Run Tee

② Tube dia.

Code	8	10
Size (mm)	ø8	ø10

③ Thread size

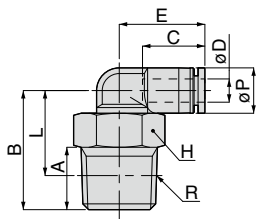
Thread size	Taper pipe thread		
Code	01	02	03
Size	R1/8	R1/4	R3/8

Make-to-order products

FITTING
CONTROLLER
VALVE
TUBE

PL
Mini

Elbow



Unit : mm

Model code	Tube O.D. ϕD	R	A	B	Tube end C	L	Hex. H	E	ϕP	Weight (g)
PL8-01M	8	R1/8	8	22.5	18.1	18.5	12	21.9	15	11.9
PL8-02M		R1/4	11	25.5		19.5	14			17.5
PL8-03M		R3/8	12	26.5		20.2	17			27.9
PL10-02M	10	R1/4	11	27	20.2	21	14	24.4	18	20.9
PL10-03M		R3/8	12	28		21.7	17			28.8

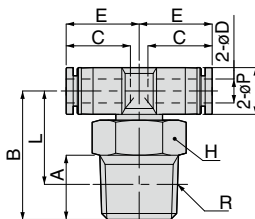
※ . "L" is a reference value for height dimension after tightening thread.

MAKE-TO-ORDER
PRODUCTS

761

PB
Mini

Branch Tee



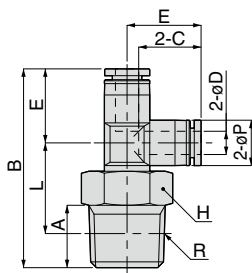
Unit : mm

Model code	Tube O.D. ϕD	R	A	B	Tube end C	L	Hex. H	E	ϕP	Weight (g)
PB8-01M	8	R1/8	8	22.5	18.1	18.5	12	21.9	15	12.8
PB8-02M		R1/4	11	25.5		19.5	14			18.2
PB8-03M		R3/8	12	26.5		20.2	17			26.1
PB10-02M	10	R1/4	11	27	20.2	21	14	24.4	18	22.3
PB10-03M		R3/8	12	28		21.7	17			30.4

※ . "L" is a reference value for height dimension after tightening thread.



Run Tee



Unit : mm

Model code	Tube O.D. øD	R	A	B	Tube end C	L	Hex. H	E	øP	Weight (g)
PD8-01M	8	R1/8	8	44.2	18.1	18.5	12	21.7	15	11.9
PD8-02M		R1/4	11	47.2		19.5	14			17.5
PD8-03M		R3/8	12	48.2		20.2	17			25.3
PD10-02M	10	R1/4	11	52.3	20.2	21	14	25.3	18	21
PD10-03M		R3/8	12	53.3		21.7	17			28.8

※ .L" is a reference value for height dimension after tightening thread.