

## Safety Caution and Classification of Warning Indications

- ⚠ DANGER** Death or serious injury may occur.
- ⚠ WARNING** Depending on the specific situation, death or serious injury may occur.
- ⚠ CAUTION** Depending on the specific situation, serious/light injury or loss of property may occur.

## Caution for Products in this Catalogue

### DANGER

Do not use products in this catalogue in machines that have the following purposes:

- ① Maintenance of human body and life
- ② Human transportation
- ③ Instruments of critical safety

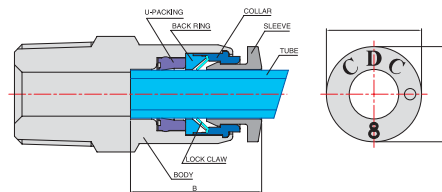
### WARNING

Do not use these products in the conditions below:

- ① Uses other than those specified and in conditions indicated for the particular product.
- ② Never touch the release sleeve of one-touch fittings when they are pressurized. (It may cause tube separation, resulting in potentially dangerous situations).
- ③ Places subject to excessive external pressure due to pulling, bending and twisting. (It may cause body breakdown, resulting in potentially dangerous situations)
- ④ Places subject to excessive vibration, impact, rotation and bending
- ⑤ Places exposed to corrosive fluid, flammable fluid, chemicals, sea water, water and vapor

### CAUTION

- ① Assemble pipes only after cleaning away impurities such as dust.
- ② The product can suffer damage or the screw may break causing quality problems when the product is assembled using excessive pressure, higher than the recommended permissible torque. If it is assembled using less pressure than the recommended torque, it may cause leakage due to the loosened screw.
- ③ Refer to the Recommended Torque Table by screw size when screwing up.
- ④ When connecting a tube to fitting products, check out the tube insertion length as indicated in Table 1 and push the tube in to the end of the fitting.



⑤ Do not use these products along with others than CDC Pneumatics. If products do not meet prescribed tolerances, tube separation and air leakage may occur.

## Common Precaution on Fitting Products

### ⚠ WARNING

- ▶ Do not use them on fluids other than air and water (partly available for some products). Contact us for use on other fluids.
- ▶ Water or other fluids at temperatures of 60°C or higher may cause hydrolysis due to the heat, and it can also deform the tube or fitting.
- ▶ Be sure to prevent pressure buildup caused by twisting, pulling, and bending of the fitting product.
- ▶ Do not use the product where weld spatters occur as fire may break out.
- ▶ Product damage or air leakage may occur at places where there is rotation and vibration. Choose the right product from our catalogue.
- ▶ Use caution in water as the product may be damaged by surge pressure.
- ▶ Do not use the product where it is directly exposed to fluids such as cutting oil, lubricating oil, and coolant oil.

### ⚠ CAUTION

- Assemble the pipes only after cleaning away impurities such as dust.
- Fitting products are used in connections to transport air smoothly. Avoid using them for other purposes.
- The tube release sleeve is circular so that it is not restricted by small places and limited spaces, otherwise, you may choose products from other series (such as compact fittings).
- Refer to Table 1 to make sure that tolerance of the OD of the tube is in the permissible range when using products other than CDC Pneumatics'.

Recommended Connection Torque (by thread)

Thread type	Thread Size	Recommended torque (kgf·cm)
Metric Thread (mm)	M3×P0.5	0.7 N.m
	M5×P0.8	1.5 N.m
	M6×P1.0	2.3 N.m
Pipe Taper Thread (PT)	R1/8	7 N.m
	R1/4	12 N.m
	R3/8	22 N.m
	R1/2	28 N.m
Unified Thread (UNF)	No. 10-32 UNF	1.5 N.m
NPT Thread	NPT1/16	7 N.m
	NPT1/8	7 N.m
	NPT1/4	12 N.m
	NPT3/8	22 N.m
	NPT1/2	28 N.m
관용평형 (PF) 나사	G 1/8	10 N.m
	G 1/4	15 N.m
	G 3/8	25 N.m
	G 1/2	40 N.m

[Table 1] Tube Insertion Length

Tube Insertion Length	Standard fittings						Standard Type			Compact Type		
	φ4	φ6	φ8	φ10	φ12	φ16	φ3	φ4	φ6	φ3	φ4	φ6
B	15.0	16.5	18.8	20.1	22.9	23.6	11.3	11.8	12.9			

Tube Insertion Length	Inch fittings						Standard Type			Compact Type		
	φ5/32	φ3/16	φ1/4	φ5/16	φ3/8	φ1/2	φ1/8	φ5/32	φ1/4	φ1/8	φ5/32	φ1/4
B	15.0	15.9	16.8	18.8	20.1	23.1	11.3	11.8	13.5			

[Table 1] Tolerance of the Outer Diameter of the Tube

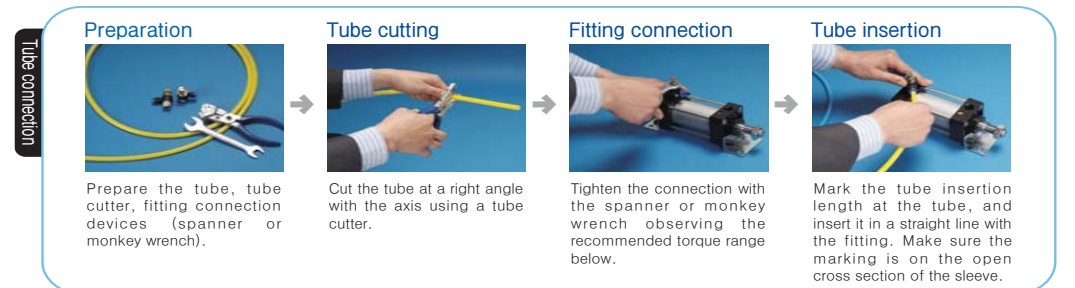
Tolerance of the OD by size (Metric) (Unit:mm)							
Tube specifications	Ø3	Ø4	Ø6	Ø8	Ø10	Ø12	Ø16
Permissible tolerance	±0.1	±0.1	±0.1	±0.1	±0.15	±0.15	±0.15

Tolerance of the OD by size (Inch) (Unit:mm)							
Tube specifications	Ø1/8	Ø5/32	Ø3/16	Ø1/4	Ø5/16	Ø3/8	Ø1/2
Permissible tolerance	±0.15	±0.15	±0.15	±0.1	+0.2	±0.15	±0.15
					-0.1		

### ▶ Insertion of tube to fitting product

- Make sure the tube is inserted fully to the end of the fitting.
- To insert the tube into the fitting, cut the tube at a right angle, insert it to the end and pull the tube gently to make sure it isn't released.
- If there are some damages or scratches on the oval shape and tube, air leakage and tube release may occur. Check it out meticulously.
- The OD of polyurethane tubes expands by pressure exerted on them. Reinsertion to the fitting may not be possible. Check the OD of the tube and change the tube if the expansion is serious.



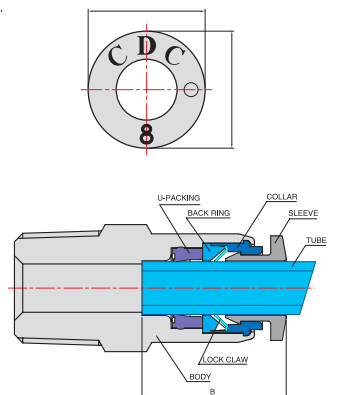
### ▶ Tube release from the fitting product

- Make sure the pressure in the tube is zero before releasing the tube from the fitting product.
- To release the tube, press the release ring regularly at the end and pull the tube with one hand.
- Cut the pressed part of the tube for reuse of the released tube.

[Table 2] Size of Sleeve for Tube Release

Sleeve specification	Standard Type						Compact Type		
	φ4	φ6	φ8	φ10	φ12	φ16	φ3	φ4	φ6
X	9.7	11.8	13.8	16.6	19	25.2	7.2	8.2	10.2
Y	-	-	-	-	-	-	9.2	10.4	12.4

Sleeve specification	Standard Type						Compact Type		
	φ5/32	φ3/16	φ1/4	φ5/16	φ3/8	φ1/2	φ1/8	φ5/32	φ1/4
X	9.7	11.1	12.6	13.8	16.8	19.9	7.2	8.2	10.8
Y	-	-	-	-	-	-	9.2	10.4	12.8



### ▶ Caution during assembly

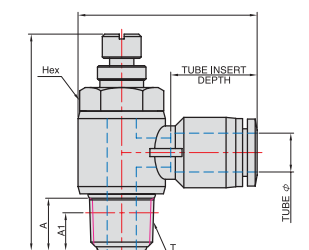
- Choose the right size devices using the hexagonal section of the fitting for assembling fitting products.
- Check out the thread type before assembly, referring to Table 3 below.

[Table 3] Fitting Screw Size (Unit:mm)

Thread type	Metric Thread		Taper Thread				
	Thread Size	M5	M6	R1/8	R1/4	R3/8	R1/2
A	4	4	8	10	11	14	
A1	4.1	4.1	4	5	5.5	7	

### Metric Thread Specifications

Thread Code	Thread Size	Applicable product
M3	M3×0.5	Apply to all products
M5	M5×0.8	
M6	M6×1.0	



- The screw thread is produced using Teflon coating treatment so that there is no need of Teflon tape or sealing treatment.
- When the product is assembled using an excessive pressure higher than the recommended permissible torque, the product can be damaged or the screw may break causing the quality problems.

## Conversion

kgf/cm <sup>2</sup>	bar	Pa(N/m <sup>2</sup> )	atm	mHg	lbf/in <sup>2</sup> (PSI)
1	0.980665	0.980665E5	0.9678	0.7356	14.22
1.0197	1	1E-5	0.9869	0.7501	14.50
1.0197E-5	1E-5	1	0.9869E-5	7.501E-6	1.450E-4
1.0332	1.0325	1.0325E5	1	0.760	14.70
1.3595	1.3332	1.3332E5	1.3158	1	19.34
0.07031	0.06895	6.895E3	0.06805	0.05171	1



**PC**



	MODEL(φD-T)									
	Tube(Metric)-Thread(R)			Tube(Inch)-Thread(R)			Tube(Inch)-Thread(NPT)			Tube(Metric)-Thread(G)
Male Straight	PC 04-M5	PC 08-01	PC 12-04	PC 1/4-01	PC 1/2-03	PC 5/32-U	PC 1/4-N3	PC 1/2-N2	PC 04-G01	PC 10-G02
	PC 04-M6	PC 08-02	PC 14-03	PC 1/4-02	PC 1/2-04	PC 5/32-N1	PC 1/4-N4	PC 1/2-N3	PC 04-G02	PC 10-G03
	PC 04-01	PC 08-03	PC 14-04	PC 1/4-03		PC 5/32-N2	PC 5/16-N1	PC 1/2-N4	PC 04-G03	PC 10-G04
	PC 04-02	PC 08-04	PC 16-03	PC 5/16-01		PC 5/32-N3	PC 5/16-N2		PC 06-G01	PC 12-G02
	PC 04-03	PC 10-01	PC 16-04	PC 5/16-02		PC 3/16-U	PC 5/16-N3		PC 06-G02	PC 12-G03
	PC 06-M5	PC 10-02		PC 5/16-03		PC 3/16-N1	PC 5/16-N4		PC 06-G03	PC 12-G04
	PC 06-M6	PC 10-03		PC 3/8-01		PC 3/16-N2	PC 3/8-N1		PC 08-G01	PC 14-G03
	PC 06-01	PC 10-04		PC 3/8-02		PC 3/16-N3	PC 3/8-N2		PC 08-G02	PC 14-G04
	PC 06-02	PC 12-01		PC 3/8-03		PC 1/4-U	PC 3/8-N3		PC 08-G03	PC 16-G03
	PC 06-03	PC 12-02		PC 3/8-04		PC 1/4-N1	PC 3/8-N4		PC 08-G04	PC 16-G04
	PC 06-04	PC 12-03		PC 1/2-02		PC 1/4-N2	PC 1/2-N1		PC 10-G01	

**PC-G**



**PCF**



	MODEL(φD-T)									
	Tube(Metric)-Thread(Rc)			Tube(Inch)-Thread(Rc)			Tube(Inch)-Thread(NPT)			Tube(Metric)-Thread(G)
Female Straight	PCF 04-M5	PCF 08-01	PCF 12-03	PCF 1/4-01	PCF 5/32-N1	PCF 5/16-N3	PCF 04-G01	PCF 08-G04		
	PCF 04-01	PCF 08-02	PCF 12-04	PCF 1/4-02	PCF 5/32-N2	PCF 5/16-N4	PCF 04-G02	PCF 10-G01		
	PCF 04-02	PCF 08-03		PCF 5/16-01	PCF 3/16-N1	PCF 3/8-N1	PCF 04-G03	PCF 10-G02		
	PCF 04-03	PCF 08-04		PCF 5/16-02	PCF 3/16-N2	PCF 3/8-N2	PCF 06-G01	PCF 10-G03		
	PCF 06-M5	PCF 10-01		PCF 3/8-02	PCF 1/4-N1	PCF 3/8-N3	PCF 06-G02	PCF 10-G04		
	PCF 06-01	PCF 10-02		PCF 3/8-03	PCF 1/4-N2	PCF 3/8-N4	PCF 06-G03	PCF 12-G02		
	PCF 06-02	PCF 10-03			PCF 1/4-N3	PCF 1/2-N2	PCF 08-G01	PCF 12-G03		
	PCF 06-03	PCF 10-04			PCF 5/16-N1	PCF 1/2-N3	PCF 08-G02	PCF 12-G04		
	PCF 06-04	PCF 12-02			PCF 5/16-N2		PCF 08-G03			

**PCF-G**



**POC**



	MODEL(φD-T)					
	Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Round Male Straight	POC 04-M5	POC 06-03	POC 12-01	POC 1/4-01	POC 5/32-U	POC 5/16-N1
	POC 04-M6	POC 08-01	POC 12-02	POC 1/4-02	POC 5/32-N1	POC 5/16-N2
	POC 04-01	POC 08-02	POC 12-03	POC 5/16-01	POC 5/32-N2	POC 5/16-N3
	POC 04-02	POC 08-03	POC 12-04	POC 5/16-02	POC 3/16-U	POC 3/8-N1
	POC 04-03	POC 08-04		POC 3/8-02	POC 3/16-N1	POC 3/8-N2
	POC 06-M5	POC 10-01		POC 3/8-03	POC 3/16-N2	POC 3/8-N3
	POC 06-M6	POC 10-02			POC 1/4-U	POC 3/8-N4
	POC 06-01	POC 10-03			POC 1/4-N1	POC 1/2-N2
	POC 06-02	POC 10-04			POC 1/4-N2	POC 1/2-N3

**PMM**



	MODEL(φD)	
	Tube(Metric)	Tube(Inch)
Bulkhead Union	PMM 04	PMM 5/32
	PMM 06	PMM 3/16
	PMM 08	PMM 1/4
	PMM 10	PMM 5/16
	PMM 12	PMM 3/8
	PMM 16	PMM 1/2

**PCP**



	MODEL(φD)	
	Tube(Metric)	Tube(Inch)
Coupler Plug	PCP 04	PCP 5/32
	PCP 06	PCP 3/16
	PCP 08	PCP 1/4
	PCP 10	PCP 5/16
	PCP 12	PCP 3/8
	PCP 16	PCP 1/2

**PMF**



	MODEL(φD-T)					
	Tube(Metric)-Thread(Rc)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
Bulkhead Female Straight	PMF 04-01	PMF 08-04	PMF 5/32-N1	PMF 3/8-N3	PMF 04-G01	PMF 10-G02
	PMF 04-02	PMF 10-01	PMF 3/16-N1	PMF 1/2-N2	PMF 04-G02	PMF 10-G03
	PMF 04-03	PMF 10-02	PMF 3/16-N2	PMF 1/2-N3	PMF 04-G03	PMF 10-G04
	PMF 06-01	PMF 10-03	PMF 1/4-N1	PMF 1/2-N4	PMF 06-G01	PMF 12-G02
	PMF 06-02	PMF 10-04	PMF 1/4-N2		PMF 06-G02	PMF 12-G03
	PMF 06-03	PMF 12-01	PMF 5/16-N1		PMF 06-G03	PMF 12-G04
	PMF 08-01	PMF 12-02	PMF 5/16-N2		PMF 08-G01	
	PMF 08-02	PMF 12-03	PMF 5/16-N3		PMF 08-G02	
	PMF 08-03	PMF 12-04	PMF 3/8-N2		PMF 08-G03	

**PMF-G**



**PL**



	MODEL(φD-T)									
	Tube(Metric)-Thread(R)			Tube(Inch)-Thread(R)			Tube(Inch)-Thread(NPT)			Tube(Metric)-Thread(G)
Male Elbow	PL 04-M5	PL 08-01	PL 12-04	PL 1/4-01	PL 1/2-03	PL-5/32-U	PL-5/16-N1	PL 04-G01	PL 10-G02	
	PL 04-M6	PL 08-02	PL 14-03	PL 1/4-02	PL 1/2-04	PL-5/32-N1	PL-5/16-N2	PL 04-G02	PL 10-G03	
	PL 04-01	PL 08-03	PL 14-04	PL 1/4-03		PL-5/32-N2	PL-5/16-N3	PL 04-G03	PL 10-G04	
	PL 04-02	PL 08-04	PL 16-03	PL 5/16-01		PL-3/16-U	PL-5/16-N4	PL 06-G01	PL 12-G02	
	PL 04-03	PL 10-01	PL 16-04	PL 5/16-02		PL-3/16-N1	PL-3/8-N1	PL 06-G02	PL 12-G03	
	PL 06-M5	PL 10-02		PL 5/16-03		PL-3/16-N2	PL-3/8-N2	PL 06-G03	PL 12-G04	
	PL 06-M6	PL 10-03		PL 3/8-01		PL-3/16-N3	PL-3/8-N3	PL 08-G01	PL 14-G03	
	PL 06-01	PL 10-04		PL 3/8-02		PL-1/4-U	PL-3/8-N4	PL 08-G02	PL 14-G04	
	PL 06-02	PL 12-01		PL 3/8-03		PL-1/4-N1	PL-1/2-N2	PL 08-G03	PL 16-G03	
	PL 06-03	PL 12-02		PL 3/8-04		PL-1/4-N2	PL-1/2-N3	PL 08-G04	PL 16-G04	
	PL 06-04	PL 12-03		PL 1/2-02		PL-1/4-N3	PL-1/2-N4	PL 10-G01		

**PL-G**



**PLF**



	MODEL(φD-T)					
	Tube(Metric)-Thread(Rc)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
Female Elbow	PLF 04-M5	PLF 08-02	PLF-5/32-U	PLF-5/16-N2	PLF 04-G01	PLF 10-G03
	PLF 04-M6	PLF 08-03	PLF-5/32-N1	PLF-5/16-N3	PLF 04-G02	PLF 10-G04
	PLF 04-01	PLF 08-04	PLF-5/32-N2	PLF-3/8-N2	PLF 06-G01	PLF 12-G02
	PLF 04-02	PLF 10-01	PLF-3/16-U	PLF-3/8-N3	PLF 06-G02	PLF 12-G03
	PLF 06-M5	PLF 10-02	PLF-3/16-N1	PLF-3/8-N4	PLF 06-G03	PLF 12-G04
	PLF 06-M6	PLF 10-03	PLF-3/16-N2	PLF-1/2-N3	PLF 08-G01	
	PLF 06-01	PLF 10-04	PLF-1/4-U	PLF-1/2-N4	PLF 08-G02	
	PLF 06-02	PLF 12-02	PLF-1/4-N1		PLF 08-G03	
	PLF 06-03	PLF 12-03	PLF-1/4-N2		PLF 08-G04	
	PLF 06-04	PLF 12-04	PLF-1/4-N3		PLF 10-G01	
	PLF 08-01		PLF-5/16-N1		PLF 10-G02	

**PLF-G**



**PLL**



	MODEL(φD-T)									
	Tube(Metric)-Thread(R)			Tube(Inch)-Thread(R)			Tube(Inch)-Thread(NPT)			Tube(Metric)-Thread(G)
Extended Male Elbow	PLL 04-M5	PLL 06-04	PLL 12-02	PLL 1/4-01	PLL-5/32-U	PLL-1/4-N3	PLL 04-G01	PLL 08-G04		
	PLL 04-M6	PLL 08-01	PLL 12-03	PLL 1/4-02	PLL-5/32-N1	PLL-5/16-N1	PLL 04-G02	PLL 10-G01		
	PLL 04-01	PLL 08-02	PLL 12-04	PLL 5/16-01	PLL-5/32-N2	PLL-5/16-N2	PLL 04-G03	PLL 10-G02		
	PLL 04-02	PLL 08-03		PLL 5/16-02	PLL-3/16-U	PLL-5/16-N3	PLL 06-G01	PLL 10-G03		
	PLL 04-03	PLL 08-04		PLL 3/8-02	PLL-3/16-N1	PLL-3/8-N2	PLL 06-G02	PLL 10-G04		
	PLL 06-M5	PLL 10-01		PLL 3/8-03	PLL-3/16-N2	PLL-3/8-N3	PLL 06-G03	PLL 12-G02		
	PLL 06-M6	PLL 10-02			PLL-3/16-N3	PLL-3/8-N4	PLL 08-G01	PLL 12-G03		
	PLL 06-01	PLL 10-03			PLL-1/4-U	PLL-1/2-N2	PLL 08-G02	PLL 12-G04		
	PLL 06-02	PLL 10-04			PLL-1/4-N1	PLL-1/2-N3	PLL 08-G03			
	PLL 06-03	PLL 12-01			PLL-1/4-N2	PLL-1/2-N4				

**PLL-G**





**PLL-P**







	MODEL(φD-T)				
	Tube(Metric)		Tube(Metric)-Thread(G)		
Extended Male Elbow	PLL-P 04-M5	PLL-P 06-04	PLL-P 12-02	PLL-P 04-G01	PLL-P 10-G01
	PLL-P 04-M6	PLL-P 08-01	PLL-P 12-03	PLL-P 04-G02	PLL-P 10-G02
	PLL-P 04-01	PLL-P 08-02	PLL-P 12-04	PLL-P 04-G03	PLL-P 10-G03
	PLL-P 04-02	PLL-P 08-03		PLL-P 06-G01	PLL-P 10-G04
	PLL-P 04-03	PLL-P 08-04		PLL-P 06-G02	PLL-P 12-G02
	PLL-P 06-M5	PLL-P 10-01		PLL-P 06-G03	PLL-P 12-G03
	PLL-P 06-M6	PLL-P 10-02		PLL-P 08-G01	PLL-P 12-G04
	PLL-P 06-01	PLL-P 10-03		PLL-P 08-G02	
	PLL-P 06-02	PLL-P 10-04		PLL-P 08-G03	
	PLL-P 06-03	PLL-P 12-01		PLL-P 08-G04	



**PLL-P-G**





PT	MODEL(φD-T)										PT-G
	Tube(Metric)-Thread(R)			Tube(Inch)-Thread(R)			Tube(Inch)-Thread(NPT)			Tube(Metric)-Thread(G)	
Male Branch Tee 	PT04-M5	PT06-04	PT12-02	PT1/4-01	PT1/2-02	PT5/32-U	PT1/4-N3	PT1/2-N3	PT04-G01	PT10-G01	Male Branch Tee 
	PT04-M6	PT08-01	PT12-03	PT1/4-02	PT1/2-03	PT5/32-N1	PT5/16-N1	PT1/2-N4	PT04-G02	PT10-G02	
	PT04-01	PT08-02	PT12-04	PT1/4-03	PT1/2-04	PT5/32-N2	PT5/16-N2		PT04-G03	PT10-G03	
	PT04-03	PT08-04	PT16-04	PT5/16-01		PT3/16-U	PT5/16-N3		PT06-G01	PT10-G04	
	PT06-M5	PT10-01		PT5/16-03		PT3/16-N2	PT3/8-N1		PT06-G03	PT12-G03	
	PT06-M6	PT10-02		PT3/8-01		PT3/16-N3	PT3/8-N2		PT08-G01	PT12-G04	
	PT06-01	PT10-03		PT3/8-02		PT1/4-U	PT3/8-N3		PT08-G02	PT16-G03	
	PT06-02	PT10-04		PT3/8-03		PT1/4-N1	PT3/8-N4		PT08-G03	PT16-G04	
	PT06-03	PT12-01		PT3/8-04		PT1/4-N2	PT1/2-N2		PT08-G04		




PTF	MODEL(φD-T)						PTF-G
	Tube(Metric)-Thread(Rc)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)		
Female Branch Tee 	PTF 04-M5	PTF 08-02	PTF5/32-U	PTF5/16-N1	PTF04-G01	PTF10-G02	Female Branch Tee 
	PTF 04-M6	PTF 08-03	PTF5/32-N1	PTF5/16-N2	PTF04-G02	PTF10-G03	
	PTF 04-01	PTF 08-04	PTF5/32-N2	PTF5/16-N3	PTF06-G01	PTF10-G04	
	PTF 04-02	PTF 10-01	PTF3/16-U	PTF3/8-N2	PTF06-G02	PTF12-G02	
	PTF 06-M5	PTF 10-02	PTF3/16-N1	PTF3/8-N3	PTF06-G03	PTF12-G03	
	PTF 06-M6	PTF 10-03	PTF3/16-N2	PTF3/8-N4	PTF08-G01	PTF12-G04	
	PTF 06-01	PTF 10-04	PTF1/4-U	PTF1/2-N3	PTF08-G02		
	PTF 06-02	PTF 12-02	PTF1/4-N1	PTF1/2-N4	PTF08-G03		
	PTF 06-03	PTF 12-03	PTF1/4-N2		PTF08-G04		
	PTF 08-01	PTF 12-04	PTF1/4-N3		PTF10-G01		



PST	MODEL(φD-T)							PST-G
	Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
Male Run Tee 	PST 04-M5	PST 08-02	PST1/4-01	PST5/32-U	PST5/16-N2	PST04-G01	PST 10-G03	Male Run Tee 
	PST 04-M6	PST 08-03	PST1/4-02	PST5/32-N1	PST5/16-N3	PST04-G02	PST 10-G04	
	PST 04-01	PST 08-04	PST1/4-03	PST5/32-N2	PST5/16-N4	PST04-G03	PST 12-G02	
	PST 04-02	PST 10-01	PST5/16-01	PST3/16-U	PST3/8-N1	PST06-G01	PST 12-G03	
	PST 04-03	PST 10-02	PST5/16-02	PST3/16-N1	PST3/8-N2	PST06-G02	PST 12-G04	
	PST 06-M5	PST 10-03	PST5/16-03	PST3/16-N2	PST3/8-N3	PST06-G03		
	PST 06-M6	PST 10-04	PST3/8-02	PST3/16-N3	PST3/8-N4	PST08-G01		
	PST 06-01	PST 12-01	PST3/8-03	PST1/4-U	PST1/2-N2	PST08-G02		
	PST 06-02	PST 12-02	PST3/8-04	PST1/4-N1	PST1/2-N3	PST08-G03		
	PST 06-03	PST 12-03	PST1/2-02	PST1/4-N2	PST1/2-N4	PST08-G04		



PWT	MODEL(φD-T)							PWT-G
	Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
Male Y 	PWT04-M5	PWT08-02	PWT1/4-01	PWT5/32-U	PWT5/16-N2	PWT04-G01	PWT10-G02	Male Y 
	PWT04-M6	PWT08-03	PWT1/4-02	PWT5/32-N1	PWT5/16-N3	PWT04-G02	PWT10-G03	
	PWT04-01	PWT08-04	PWT1/4-03	PWT5/32-N2	PWT5/16-N4	PWT04-G03	PWT10-G04	
	PWT04-02	PWT10-01	PWT5/16-01	PWT3/16-U	PWT3/8-N1	PWT06-G01	PWT12-G02	
	PWT04-03	PWT10-02	PWT5/16-02	PWT3/16-N1	PWT3/8-N2	PWT06-G02	PWT12-G03	
	PWT06-M5	PWT10-03	PWT5/16-03	PWT3/16-N2	PWT3/8-N3	PWT06-G03	PWT12-G04	
	PWT06-M6	PWT10-04	PWT3/8-02	PWT3/16-N3	PWT3/8-N4	PWT06-G04		
	PWT06-01	PWT12-01	PWT3/8-03	PWT1/4-U	PWT1/2-N2	PWT08-G01		
	PWT06-02	PWT12-02	PWT3/8-04	PWT1/4-N1	PWT1/2-N3	PWT08-G02		
	PWT06-03	PWT12-03	PWT1/2-02	PWT1/4-N2	PWT1/2-N4	PWT08-G03		



PLM	MODEL(φD)	
	Tube(Metric)	Tube(Inch)
Bulkhead Union Elbow 	PLM 04	PLM 5/32
	PLM 06	PLM 3/16
	PLM 08	PLM 1/4
	PLM 10	PLM 5/16
	PLM 12	PLM 3/8
		PLM 1/2

PXT	MODEL(φD-T)	
	Tube(Metric)-Thread(R)	Tube(Metric)-Thread(G)
Male Double Y 	PXT 04-01	PXT 04-G01
	PXT 04-02	PXT 04-G02
	PXT 06-01	PXT 06-G01
	PXT 06-02	PXT 06-G02

PKD	MODEL(φD1-φD2-T)			PKD-G	CAS	MODEL(φD)	
	Tube(Metric)	Tube(Inch)	Tube(Metric)-Thread(G)			Tube(Metric)	Tube(Inch)
Male Reducer Triple Branch 	PKD 0604-01	PKD 3/16-5/32-N1	PKD 0604-G01	Male Reducer Triple Branch 		CAS 04	CAS 5/32
	PKD 0604-02	PKD 1/4-5/32-N1	PKD 0804-G01			CAS 06	CAS 3/16
	PKD 0804-01	PKD 5/16-5/32-N2	PKD 0804-G02			CAS 08	CAS 1/4
	PKD 0804-02	PKD 5/16-3/16-N2	PKD 0806-G01			CAS 10	CAS 5/16
	PKD 0806-01	PKD 5/16-1/4-N2	PKD 0806-G02			CAS 12	CAS 3/8
	PKD 0806-02	PKD 3/8-1/4-N3	PKD 1006-G02				
	PKD 1006-02	PKD 3/8-5/16-N3	PKD 1006-G03				
	PKD 1006-03		PKD 1008-G02				
	PKD 1008-02		PKD 1008-G03				
	PKD 1008-03						

PH	MODEL(φD-T)							PH-G
	Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
Male Barjo 	PH 03-M5	PH 08-01	PH1/4-M5	PH 1/8-U	PH 1/4-N3	PH 04-G01	PH 10-G04	Male Barjo 
	PH 04-M5	PH 08-02	PH1/4-01	PH 5/32-U	PH 5/16-N1	PH 04-G02	PH 12-G03	
	PH 04-M6	PH 08-03	PH1/4-02	PH 5/32-N1	PH 5/16-N2	PH 06-G01	PH 12-G04	
	PH 04-01	PH 08-04	PH5/16-01	PH 5/32-N2	PH 5/16-N3	PH 06-G02		
	PH 04-02	PH 10-01	PH5/16-02	PH 3/16-U	PH 5/16-N4	PH 06-G03		
	PH 06-M5	PH 10-02	PH5/16-03	PH 3/16-N1	PH 3/8-N2	PH 08-G01		
	PH 06-M6	PH 10-03	PH3/8-02	PH 3/16-N2	PH 3/8-N3	PH 08-G02		
	PH 06-01	PH 10-04	PH3/8-03	PH 3/16-N3	PH 3/8-N4	PH 08-G03		
	PH 06-02	PH 12-02		PH 1/4-U	PH 1/2-N2	PH 08-G04		
	PH 06-03	PH 12-03		PH 1/4-N1	PH 1/2-N3	PH 10-G02		

PHF	MODEL(φD-T)							PHF-G
	Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
Female Barjo 	PHF 03-M5	PHF 08-01	PHF 1/4-M5	PHF 1/8-U	PHF 5/16-N1	PHF 04-G01	PHF 08-G04	Female Barjo 
	PHF 04-M5	PHF 08-02	PHF 1/4-01	PHF 5/32-U	PHF 5/16-N2	PHF 04-G02	PHF 10-G01	
	PHF 04-M6	PHF 08-03	PHF 1/4-02	PHF 5/32-N1	PHF 5/16-N3	PHF 04-G03	PHF 10-G02	
	PHF 04-01	PHF 08-04	PHF 5/16-01	PHF 3/16-U	PHF 5/16-N4	PHF 04-G04	PHF 10-G03	
	PHF 04-02	PHF 10-01	PHF 5/16-02	PHF 3/16-N1	PHF 3/8-N2	PHF 06-G01	PHF 10-G04	
	PHF 06-M5	PHF 10-02	PHF 5/16-03	PHF 3/16-N2	PHF 3/8-N3	PHF 06-G02	PHF 12-G02	
	PHF 06-M6	PHF 10-03	PHF 3/8-02	PHF 3/16-N3	PHF 3/8-N4	PHF 06-G03	PHF 12-G03	
	PHF 06-01	PHF 10-04	PHF 3/8-03	PHF 1/4-U	PHF 1/2-N2	PHF 06-G04	PHF 12-G04	
	PHF 06-02	PHF 12-02		PHF 1/4-N1	PHF 1/2-N3	PHF 08-G01		
	PHF 06-03	PHF 12-03		PHF 1/4-N2	PHF 1/2-N4	PHF 08-G02		

PHL(2)	MODEL(φD-T)				PHL-G(2)
	Tube(Metric)-Thread(R)		Tube(Metric)-Thread(G)		
Double Universal Elbow 	PHL 04-01(2)	PHL 08-03(2)	PHL 04-G01(2)	PHL 08-G03(2)	Double Universal Elbow 
	PHL 04-02(2)	PHL 08-04(2)	PHL 04-G02(2)	PHL 08-G04(2)	
	PHL 04-03(2)	PHL 10-01(2)	PHL 04-G03(2)	PHL 10-G01(2)	
	PHL 04-04(2)	PHL 10-02(2)	PHL 04-G04(2)	PHL 10-G02(2)	
	PHL 06-01(2)	PHL 10-03(2)	PHL 06-G01(2)	PHL 10-G03(2)	
	PHL 06-02(2)	PHL 10-04(2)	PHL 06-G02(2)	PHL 10-G04(2)	
	PHL 06-03(2)	PHL 12-02(2)	PHL 06-G03(2)	PHL 12-G02(2)	
	PHL 06-04(2)	PHL 12-03(2)	PHL 06-G04(2)	PHL 12-G03(2)	

**PHL(3)**



MODEL(φ D-T)			
Tube(Metric)-Thread(R)		Tube(Metric)-Thread(G)	
PHL 04-01(3)	PHL 08-03(3)	PHL 04-G01(3)	PHL 08-G03(3)
PHL 04-02(3)	PHL 08-04(3)	PHL 04-G02(3)	PHL 08-G04(3)
PHL 04-03(3)	PHL 10-01(3)	PHL 04-G03(3)	PHL 10-G01(3)
PHL 04-04(3)	PHL 10-02(3)	PHL 04-G04(3)	PHL 10-G02(3)
PHL 06-01(3)	PHL 10-03(3)	PHL 06-G01(3)	PHL 10-G03(3)
PHL 06-02(3)	PHL 10-04(3)	PHL 06-G02(3)	PHL 10-G04(3)
PHL 06-03(3)	PHL 12-02(3)	PHL 06-G03(3)	PHL 12-G02(3)
PHL 06-04(3)	PHL 12-03(3)	PHL 06-G04(3)	PHL 12-G03(3)
PHL 08-01(3)	PHL 12-04(3)	PHL 08-G01(3)	PHL 12-G04(3)
PHL 08-02(3)		PHL 08-G02(3)	

**PHL-G(3)**



**PHT(1)**



MODEL(φ D-T)			
Tube(Metric)-Thread(R)		Tube(Metric)-Thread(G)	
PHT 04-01(1)	PHT 08-03(1)	PHT 04-G01(1)	PHT 08-G03(1)
PHT 04-02(1)	PHT 08-04(1)	PHT 04-G02(1)	PHT 08-G04(1)
PHT 04-03(1)	PHT 10-01(1)	PHT 04-G03(1)	PHT 10-G01(1)
PHT 04-04(1)	PHT 10-02(1)	PHT 04-G04(1)	PHT 10-G02(1)
PHT 06-01(1)	PHT 10-03(1)	PHT 06-G01(1)	PHT 10-G03(1)
PHT 06-02(1)	PHT 10-04(1)	PHT 06-G02(1)	PHT 10-G04(1)
PHT 06-03(1)	PHT 12-02(1)	PHT 06-G03(1)	PHT 12-G02(1)
PHT 06-04(1)	PHT 12-03(1)	PHT 06-G04(1)	PHT 12-G03(1)
PHT 08-01(1)	PHT 12-04(1)	PHT 08-G01(1)	PHT 12-G04(1)
PHT 08-02(1)		PHT 08-G02(1)	

**PHT-G(1)**



**PHT(2)**



MODEL(φ D-T)			
Tube(Metric)-Thread(R)		Tube(Metric)-Thread(G)	
PHT 04-01(2)	PHT 08-03(2)	PHT 04-G01(2)	PHT 08-G03(2)
PHT 04-02(2)	PHT 08-04(2)	PHT 04-G02(2)	PHT 08-G04(2)
PHT 04-03(2)	PHT 10-01(2)	PHT 04-G03(2)	PHT 10-G01(2)
PHT 04-04(2)	PHT 10-02(2)	PHT 04-G04(2)	PHT 10-G02(2)
PHT 06-01(2)	PHT 10-03(2)	PHT 06-G01(2)	PHT 10-G03(2)
PHT 06-02(2)	PHT 10-04(2)	PHT 06-G02(2)	PHT 10-G04(2)
PHT 06-03(2)	PHT 12-02(2)	PHT 06-G03(2)	PHT 12-G02(2)
PHT 06-04(2)	PHT 12-03(2)	PHT 06-G04(2)	PHT 12-G03(2)
PHT 08-01(2)	PHT 12-04(2)	PHT 08-G01(2)	PHT 12-G04(2)
PHT 08-02(2)		PHT 08-G02(2)	

**PHT-G(2)**



**PHT(3)**



MODEL(φ D-T)			
Tube(Metric)-Thread(R)		Tube(Metric)-Thread(G)	
PHT 04-01(3)	PHT 08-03(3)	PHT 04-G01(3)	PHT 08-G03(3)
PHT 04-02(3)	PHT 08-04(3)	PHT 04-G02(3)	PHT 08-G04(3)
PHT 04-03(3)	PHT 10-01(3)	PHT 04-G03(3)	PHT 10-G01(3)
PHT 04-04(3)	PHT 10-02(3)	PHT 04-G04(3)	PHT 10-G02(3)
PHT 06-01(3)	PHT 10-03(3)	PHT 06-G01(3)	PHT 10-G03(3)
PHT 06-02(3)	PHT 10-04(3)	PHT 06-G02(3)	PHT 10-G04(3)
PHT 06-03(3)	PHT 12-02(3)	PHT 06-G03(3)	PHT 12-G02(3)
PHT 06-04(3)	PHT 12-03(3)	PHT 06-G04(3)	PHT 12-G03(3)
PHT 08-01(3)	PHT 12-04(3)	PHT 08-G01(3)	PHT 12-G04(3)
PHT 08-02(3)		PHT 08-G02(3)	

**PHT-G(3)**



**PA**



MODEL(φ D-T)	
Tube(Metric)	Tube(Metric)-Thread(G)
PA 04-M5	PA 06-G01
PA 06-01	PA 08-G02
PA 08-02	PA 10-G02
PA 10-02	PA 10-G03
PA 10-03	PA 12-G03
PA 12-03	PA 12-G04
PA 12-04	

**PA-G**



**PAF**



MODEL(φ D-T)	
Tube(Metric)	Tube(Metric)-Thread(G)
PAF 04-M5	PAF 06-G01
PAF 06-01	PAF 08-G02
PAF 08-02	PAF 10-G02
PAF 10-02	PAF 10-G03
PAF 10-03	PAF 12-G03
PAF 12-03	PAF 12-G04
PAF 12-04	

**PAF-G**



**PAT(2)**



MODEL(φ D-T)			
Tube(Metric)-Thread(R)		Tube(Metric)-Thread(G)	
PAT 04-01(2)	PAT 08-03(2)	PAT 04-G01(2)	PAT 08-G03(2)
PAT 04-02(2)	PAT 08-04(2)	PAT 04-G02(2)	PAT 08-G04(2)
PAT 04-03(2)	PAT 10-01(2)	PAT 04-G03(2)	PAT 10-G01(2)
PAT 04-04(2)	PAT 10-02(2)	PAT 04-G04(2)	PAT 10-G02(2)
PAT 06-01(2)	PAT 10-03(2)	PAT 06-G01(2)	PAT 10-G03(2)
PAT 06-02(2)	PAT 10-04(2)	PAT 06-G02(2)	PAT 10-G04(2)
PAT 06-03(2)	PAT 12-02(2)	PAT 06-G03(2)	PAT 12-G02(2)
PAT 06-04(2)	PAT 12-03(2)	PAT 06-G04(2)	PAT 12-G03(2)
PAT 08-01(2)	PAT 12-04(2)	PAT 08-G01(2)	PAT 12-G04(2)
PAT 08-02(2)		PAT 08-G02(2)	

**PAT-G(2)**



**PAT(3)**



MODEL(φ D-T)			
Tube(Metric)-Thread(R)		Tube(Metric)-Thread(G)	
PAT 04-01(3)	PAT 08-03(3)	PAT 04-G01(3)	PAT 08-G03(3)
PAT 04-02(3)	PAT 08-04(3)	PAT 04-G02(3)	PAT 08-G04(3)
PAT 04-03(3)	PAT 10-01(3)	PAT 04-G03(3)	PAT 10-G01(3)
PAT 04-04(3)	PAT 10-02(3)	PAT 04-G04(3)	PAT 10-G02(3)
PAT 06-01(3)	PAT 10-03(3)	PAT 06-G01(3)	PAT 10-G03(3)
PAT 06-02(3)	PAT 10-04(3)	PAT 06-G02(3)	PAT 10-G04(3)
PAT 06-03(3)	PAT 12-02(3)	PAT 06-G03(3)	PAT 12-G02(3)
PAT 06-04(3)	PAT 12-03(3)	PAT 06-G04(3)	PAT 12-G03(3)
PAT 08-01(3)	PAT 12-04(3)	PAT 08-G01(3)	PAT 12-G04(3)
PAT 08-02(3)		PAT 08-G02(3)	

**PAT-G(3)**



**PUC**



MODEL(φ D)	
Tube(Metric)	Tube(Inch)
PUC 04	PUC5/32
PUC 06	PUC3/16
PUC 08	PUC1/4
PUC 10	PUC5/16
PUC 12	PUC3/8
PUC 14	PUC1/2
PUC 16	

**PUL**



MODEL(φ D)	
Tube(Metric)	Tube(Inch)
PUL 04	PUL5/32
PUL 06	PUL3/16
PUL 08	PUL1/4
PUL 10	PUL5/16
PUL 12	PUL3/8
PUL 14	PUL1/2
PUL 16	

**PUT**




MODEL(φ D)	
Tube(Metric)	Tube(Inch)
PUT 04	PUT5/32
PUT 06	PUT3/16
PUT 08	PUT1/4
PUT 10	PUT5/16
PUT 12	PUT3/8
PUT 14	PUT1/2
PUT 16	

**PY**




MODEL(φ D)	
Tube(Metric)	Tube(Inch)
PY 04	PY5/32
PY 06	PY3/16
PY 08	PY1/4
PY 10	PY5/16
PY 12	PY3/8
PY 16	PY1/2

**PW**  
Reducer Y




MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PW0604	PW3/16-5/32
PW0804	PW1/4-5/32
PW0806	PW1/4-3/16
PW1006	PW5/16-5/32
PW1008	PW5/16-1/4
PW1208	PW3/8-1/4
PW1210	PW3/8-5/16
	PW1/2-5/16
	PW1/2-3/8

**PG**  
Reducer




MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PG0604	PG3/16-5/32
PG0804	PG1/4-5/32
PG0806	PG1/4-3/16
PG1006	PG5/16-5/32
PG1008	PG5/16-1/4
PG1208	PG3/8-1/4
PG1210	PG3/8-5/16
PG1412	PG1/2-3/8
PG1612	

**PGT**  
Reducer Tee




MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PGT0604	PGT1/4-5/32
PGT0804	PGT5/16-1/4
PGT0806	PGT3/8-1/4
PGT1006	PGT3/8-5/16
PGT1008	PGT1/2-3/8
PGT1208	
PGT1210	
PGT1610	
PGT1612	

**PLJ**  
Plug-in Elbow




MODEL( $\phi D$ )	
Tube(Metric)	Tube(Inch)
PLJ04	PLJ5/32
PLJ06	PLJ3/16
PLJ08	PLJ1/4
PLJ10	PLJ5/16
PLJ12	PLJ3/8
PLJ16	PLJ1/2
PLJ0604	PLJ1/4-5/32
PLJ0806	PLJ5/16-1/4
PLJ1008	PLJ3/8-1/4
PLJ1210	PLJ3/8-5/16

**PGJ**  
Plug-in Reducer




MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PGJ0604	PGJ1/8-1/4
PGJ0804	PGJ5/32-1/8
PGJ0806	PGJ5/32-1/4
PGJ1006	PGJ1/4-1/8
PGJ1008	PGJ1/4-5/32
PGJ1206	PGJ5/16-5/32
PGJ1208	PGJ5/16-1/4
PGJ1210	PGJ3/8-1/4
PGJ1612	PGJ3/8-5/16
	PGJ1/2-1/4
	PGJ1/2-5/16
	PGJ1/2-3/8

**PYJ**  
plug-in Y




MODEL( $\phi D$ )	
Tube(Metric)	Tube(Inch)
PYJ04	PYJ5/32
PYJ06	PYJ3/16
PYJ08	PYJ1/4
PYJ10	PYJ5/16
PYJ12	PYJ3/8
	PYJ1/2

**PWJ**  
Plug-in Reducer Y




MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PWJ0604	PWJ1/4-5/32
PWJ0806	PWJ5/16-1/4
PWJ1008	PWJ3/8-1/4
PWJ1210	PWJ3/8-5/16

**PIJ**  
Tube Splicer




MODEL( $\phi D$ )	
Tube(Metric)	Tube(Inch)
PIJ04	PIJ5/32
PIJ06	PIJ3/16
PIJ08	PIJ1/4
PIJ10	PIJ5/16
PIJ12	PIJ3/8
PIJ16	PIJ1/2

**PMP**




MODEL( $\phi D$ )	
Tube(Metric)	
FMP04	
FMP06	
FMP08	
FMP10	
FMP12	

**PSJ**  
Plug-in Run Tee



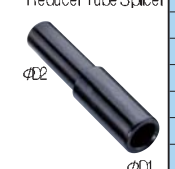
MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PSJ04	PSJ5/32
PSJ06	PSJ3/16
PSJ08	PSJ1/4
PSJ10	PSJ5/16
PSJ12	PSJ3/8
PSJ0604	PSJ1/2
PSJ0806	PSJ1/4-5/32
PSJ1008	PSJ5/16-1/4
PSJ1210	PSJ3/8-1/4
	PSJ3/8-5/16
	PSJ1/2-3/8

**PTJ**  
Plug-in Branch Tee




MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PTJ04	PTJ5/32
PTJ06	PTJ3/16
PTJ08	PTJ1/4
PTJ10	PTJ5/16
PTJ12	PTJ3/8
PTJ0604	PTJ1/2
PTJ0806	PTJ1/4-5/32
PTJ1008	PTJ5/16-1/4
PTJ1210	PTJ3/8-1/4
	PTJ3/8-5/16
	PTJ1/2-3/8

**PIG**  
Reducer Tube Splicer




MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PIG0604	PIG3/16-5/32
PIG0804	PIG1/4-5/32
PIG0806	PIG1/4-3/16
PIG1006	PIG5/16-1/4
PIG1008	PIG3/8-1/4
PIG1208	PIG3/8-5/16
PIG1210	PIG1/2-3/8
PIG1612	

**PP**  
Plug




MODEL( $\phi D$ )	
Tube(Metric)	Tube(Inch)
PP04	PP5/32
PP06	PP3/16
PP08	PP1/4
PP10	PP5/16
PP12	PP3/8
PP16	PP1/2

**PPF**  
Cap




MODEL( $\phi D$ )	
Tube(Metric)	Tube(Inch)
PPF04	PPF5/32
PPF06	PPF3/16
PPF08	PPF1/4
PPF10	PPF5/16
PPF12	PPF3/8
PPF16	PPF1/2

**PZA**  
Union Cross




MODEL( $\phi D$ )	
Tube(Metric)	Tube(Inch)
PZA04	PZA5/32
PZA06	PZA3/16
PZA08	PZA1/4
PZA10	PZA5/16
PZA12	PZA3/8
	PZA1/2

**PKG**  
Reducer Triple Branch Union




MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PKG0604	PKG3/16-5/32
PKG0804	PKG1/4-5/32
PKG0806	PKG5/16-5/32
PKG1006	PKG5/16-3/16
PKG1008	PKG5/16-1/4
	PKG3/8-1/4
	PKG3/8-5/16

**PXG**  
Reducer Double Y




MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	
PXG0604	
PXG0806	

**PXJ**  
Plug-in Reducer Double Y



MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	
PXJ0604	
PXJ0806	

**PKJ**  
Plug-in Reducer Triple Branch



MODEL( $\phi D1-\phi D2$ )	
Tube(Metric)	Tube(Inch)
PKJ0604	PKJ3/16-5/32
PKJ0804	PKJ1/4-5/32
PKJ0806	PKJ5/16-5/32
PKJ1006	PKJ5/16-3/16
PKJ1008	PKJ5/16-1/4
	PKJ3/8-1/4
	PKJ3/8-5/16

# Compact One-Touch Fittings

## Applications

- Mini one touch type pipe connection tool for air pressure piping in limited spaces.
- Various uses according to the user's environment.

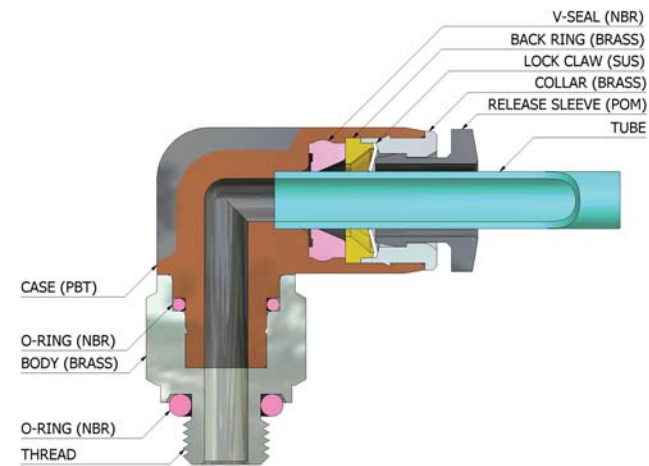
## Features

- One action can insert the tube to easy connection and release.
- Volume and OD are smaller than the regular type, but same flux is obtained.
- Treated with electroless nickel coating on the surface for excellent tolerance to corrosion.
- Oval sleeve is designed to allow easy release in the limited space.
- The screw section has O-ring, or Teflon coated.
- Miniaturized fitting for small devices and piping in limited spaces.

## Specifications

Fluid type : Air (No other gases or liquids)  
 Working pressure : 0~150PSI / 0~9.9Kg/cm<sup>2</sup> (0~990kPa)  
 Negative pressure : -29.5 in Hg / -750mmHg (-750Torr)  
 Working temperature : 32~140° F / 0~60°C  
 Applicable Tube : Polyurethane and Nylon

## Structural Diagram



## Product Code System

### METRIC - BSPT(R)

**PC 06-01-C**

Compact OneTouch Fitting	Tube Dia		Thread Size		Compact Nickel
	CODE	SIZE	METRIC THREAD		
	03	Ø3	CODE	SIZE	Sleeve Color Black
	04	Ø4	M3	M3×0.5	
	06	Ø6	M5	M5×0.8	
			M6	M6×1.0	
			R(P) THREAD		
	CODE	SIZE	CODE	SIZE	
	01	R1/8			

### METRIC - BSPP(G)

**PC 06-G01-C**

Compact OneTouch Fitting	Tube Dia		Thread Size		Sleeve Color Black
	CODE	SIZE	G(FF) THREAD		
	04	Ø4	CODE	SIZE	
	06	Ø6	G01	G1/8	

### METRIC - BSPT(R)

**PC 1/4-01-C**

Compact OneTouch Fitting	Tube Dia		Thread Size		Compact Nickel
	CODE	SIZE	METRIC THREAD		
	1/8	Ø1/8	CODE	SIZE	Sleeve Color Black
	5/32	Ø5/32	M3	M3×0.5	
	1/4	Ø1/4	M5	M5×0.8	
			M6	M6×1.0	
			R(P) THREAD		
	CODE	SIZE	CODE	SIZE	
	01	R1/8			

### INCH - NPT

**PC 1/4-N1-C**

Compact OneTouch Fitting	Tube Dia		Thread Size		Sleeve Color Black
	CODE	SIZE	UNF THREAD		
	1/8	Ø1/8	CODE	SIZE	
	5/32	Ø5/32	U	10-32UNF	
	1/4	Ø1/4	NPT THREAD		
	CODE	SIZE	CODE	SIZE	
	N0	NPT1/16			
	N1	NPT1/8			

## Applied example

- All Compact Fitting products are treated with electroless nickel coating on the brass body for excellent tolerance to corrosion.
- The sleeve is oval so that connection and release are easy.

### POC Models

- A hexagonal shape is processed at the interior for joining with a hexagonal wrench.
- The exterior of the POC is circular so that no other tools can be used for connection.

### PL, PLL Models

- The plastic main body rotates to allow efficient piping.

## CAUTION

- Be sure to refer to Caution on Safety, Classification of Warning Indications and Common Precaution of Fitting Products before use.
- Assemble the fitting according to the proper connection torque value.
- Proper torque refers to connection by hand and 2-3 rotations using a tool. Excessive pressure may damage the screw.
- To insert the tube into the fitting, cut the tube at a right angle, insert it fully to the end, and pull the tube gently to make sure it isn't released.

## WARNING

- Be sure to prevent pressure buildup due to twisting, pulling, and bending of the fitting product. This may cause product damage or air leakage.
- When the applied fluid is water, do not use the product if it does not meet all specifications. Fitting damage, tube release, and compressed air leakage may occur.



## PC-C



MODEL(φD-T)						
Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)
PC 03-M3C	PC 04-M6C	PC 1/8-M3C	PC 5/32-M6C	PC 1/8-UC	PC 5/32-N0C	PC 04-G01C
PC 03-M5C	PC 04-01C	PC 1/8-M5C	PC 5/32-01C	PC 1/8-N0C	PC 5/32-N1C	PC 06-G01C
PC 03-M6C	PC 06-M5C	PC 1/8-M6C	PC 1/4-M5C	PC 1/8-N1C	PC 1/4-UC	
PC 03-01C	PC 06-M6C	PC 1/8-01C	PC 1/4-M6C	PC 1/8-N2C	PC 1/4-N0C	
PC 04-M3C	PC 06-01C	PC 5/32-M3C	PC 1/4-01C	PC 5/32-UC	PC 1/4-N1C	
PC 04-M5C		PC 5/32-M5C				

## PC-G-C



## PCF-C



MODEL(φD-T)					
Tube(Metric)-Thread(Rc)		Tube(Inch)-Thread(Rc)		Tube(Inch)-Thread(NPT)	
PCF 03-M3C	PCF 04-M6C	PCF 1/8-M3C	PCF 5/32-M6C	PCF 1/8-UC	PCF 5/32-N0C
PCF 03-M5C	PCF 04-01C	PCF 1/8-M5C	PCF 5/32-01C	PCF 1/8-N0C	PCF 5/32-N1C
PCF 03-M6C	PCF 06-M5C	PCF 1/8-M6C	PCF 1/4-M5C	PCF 1/8-N1C	PCF 1/4-UC
PCF 04-M3C	PCF 06-M6C	PCF 1/8-01C	PCF 1/4-M6C	PCF 1/8-N2C	PCF 1/4-N0C
PCF 04-M5C	PCF 06-01C	PCF 5/32-M3C	PCF 1/4-01C	PCF 5/32-UC	PCF 1/4-N1C
		PCF 5/32-M5C			

## POC-C



MODEL(φD-T)					
Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
POC 03-M3C	POC 04-01C	POC 1/8-M3C	POC 5/32-M6C	POC 1/8-UC	POC 1/4-UC
POC 03-M5C	POC 06-M5C	POC 1/8-M5C	POC 5/32-01C	POC 1/8-N0C	POC 1/4-N0C
POC 03-M6C	POC 06-M6C	POC 1/8-M6C	POC 1/4-M5C	POC 1/8-N1C	POC 1/4-N1C
POC 04-M3C	POC 06-01C	POC 1/8-01C	POC 1/4-M6C	POC 5/32-UC	
POC 04-M5C		POC 5/32-M3C	POC 1/4-01C	POC 5/32-N0C	
POC 04-M6C		POC 5/32-M5C		POC 5/32-N1C	

## PMM-C



MODEL(φD)	
Tube(Metric)	
PMM-03C	
PMM-04C	
PMM-06C	

## PL-C

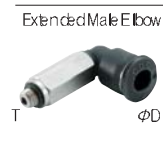


MODEL(φD-T)						
Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)
PL 03-M3C	PL 04-01C	PL 1/8-M3C	PL 5/32-M6C	PL 1/8-UC	PL 5/32-N1C	PL 04-G01C
PL 03-M5C	PL 06-M5C	PL 1/8-M5C	PL 5/32-01C	PL 1/8-N0C	PL 1/4-UC	PL 06-G01C
PL 03-M6C	PL 06-M6C	PL 1/8-M6C	PL 1/4-M5C	PL 1/8-N1C	PL 1/4-N0C	
PL 04-M3C	PL 06-01C	PL 1/8-01C	PL 1/4-M6C	PL 1/8-N2C	PL 1/4-N1C	
PL 04-M5C		PL 5/32-M3C	PL 1/4-01C	PL 5/32-UC		
PL 04-M6C		PL 5/32-M5C		PL 5/32-N0C		

## PL-G-C



## PLL-C



MODEL(φD-T)					
Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
PLL 03-M3C	PLL 04-01C	PLL 1/8-M3C	PLL 5/32-M6C	PLL 1/8-UC	PLL 1/4-UC
PLL 03-M5C	PLL 06-M5C	PLL 1/8-M5C	PLL 5/32-01C	PLL 1/8-N0C	PLL 1/4-N0C
PLL 03-M6C	PLL 06-M6C	PLL 1/8-M6C	PLL 1/4-M5C	PLL 1/8-N1C	PLL 1/4-N1C
PLL 04-M3C	PLL 06-01C	PLL 1/8-01C	PLL 1/4-M6C	PLL 5/32-UC	
PLL 04-M5C		PLL 5/32-M3C	PLL 1/4-01C	PLL 5/32-N0C	
PLL 04-M6C		PLL 5/32-M5C		PLL 5/32-N1C	

## PT-C



MODEL(φD-T)					
Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
PT 03-M3C	PT 04-01C	PT 1/8-M3C	PT 5/32-M6C	PT 1/8-UC	PT 1/4-UC
PT 03-M5C	PT 06-M5C	PT 1/8-M5C	PT 5/32-01C	PT 1/8-N0C	PT 1/4-N0C
PT 03-M6C	PT 06-M6C	PT 1/8-M6C	PT 1/4-M5C	PT 1/8-N1C	PT 1/4-N1C
PT 04-M3C	PT 06-01C	PT 1/8-01C	PT 1/4-M6C	PT 5/32-UC	
PT 04-M5C		PT 5/32-M3C	PT 1/4-01C	PT 5/32-N0C	
PT 04-M6C		PT 5/32-M5C		PT 5/32-N1C	

## PST-C



MODEL(φD-T)					
Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
PST 03-M3C	PST 04-01C	PST 1/8-M3C	PST 5/32-M6C	PST 1/8-UC	PST 1/4-UC
PST 03-M5C	PST 06-M5C	PST 1/8-M5C	PST 5/32-01C	PST 1/8-N0C	PST 1/4-N0C
PST 03-M6C	PST 06-M6C	PST 1/8-M6C	PST 1/4-M5C	PST 1/8-N1C	PST 1/4-N1C
PST 04-M3C	PST 06-01C	PST 1/8-01C	PST 1/4-M6C	PST 5/32-UC	
PST 04-M5C		PST 5/32-M3C	PST 1/4-01C	PST 5/32-N0C	
PST 04-M6C		PST 5/32-M5C		PST 5/32-N1C	

## PUC-C



MODEL(φD)	
Tube(Metric)	Tube(Inch)
PUC 03C	PUC 1/8C
PUC 04C	PUC 5/32C
PUC 06C	PUC 1/4C

## PUL-C



MODEL(φD)	
Tube(Metric)	Tube(Inch)
PUL 03C	PUL 1/8C
PUL 04C	PUL 5/32C
PUL 06C	PUL 1/4C

## PUT-C



MODEL(φD)	
Tube(Metric)	Tube(Inch)
PUT 03C	PUT 1/8C
PUT 04C	PUT 5/32C
PUT 06C	PUT 1/4C

## PG-C



MODEL(φD1-φD2)	
Tube(Metric)	Tube(Inch)
PG 04-03C	PG 5/32-1/8C
PG 06-03C	PG 1/4-1/8C
PG 06-04C	PG 1/4-5/32C

## PY-C



MODEL(φD)	
Tube(Metric)	Tube(Inch)
PY 03C	PY 1/8C
PY 04C	PY 5/32C
PY 06C	PY 1/4C

## PW-C



MODEL(φD1-φD2)	
Tube(Metric)	Tube(Inch)
PW 04-03C	PW 5/32-1/8C
PW 06-03C	PW 1/4-1/8C
PW 06-04C	PW 1/4-5/32C

## PGJ-C



MODEL(φD1-φD2)	
Tube(Metric)	Tube(Inch)
PGJ 04-03C	PGJ 5/32-1/8C
PGJ 06-03C	PGJ 1/4-1/8C
PGJ 06-04C	PGJ 1/4-5/32C

# Speed Controllers

## Applications

- A valve to control the speed of the air pressure actuator.
- Mainly installed in the air actuator.

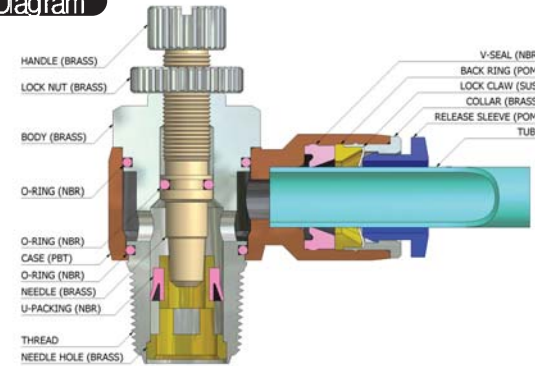
## Features

- Accurate regulation of an optimal airflow rate for precise motion control.
- Tube direction and angle are controlled according to piping as the main body can rotate up to 360 after assembly.
- Needle rotation is increased to 10-12 times for easy speed and regular speed control.
- Easy speed control with drive tools in limited and crowded spaces.
- (NSC(D) and NSC(DC) types)
- Miniaturized products occupy small space attaching to devices.

## Specifications

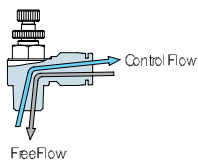
- Fluid type : Air (No other gases or liquids)
- Working pressure: 0~150PSI / 0~9.9kgf/cm<sup>2</sup> (0~990kPa)
- Negative pressure: -29.5 in Hg / -750mmHg (-750Torr)
- Working temperature : 32~140° F / 0~60° C
- Applicable Tube: Polyurethane and Nylon

## Structural Diagram



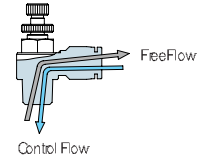
## Applied example

### Meter-Out method control



This product controls the air from the screw side, but does not control it from the tube side, thus allowing free flow.

### Meter-In method control



It controls the air flow from the tube side, but does not control it from the screw side, thus allowing free flow.



## Product Code System

### METRIC - BSPT(R)

#### NSC 06-01-MO

Speed Controllers	Tube Dia	Thread Size	Control Method
04 04	04	M5	METER-OUT
06 06	06	M5	METER-IN
08 08	08	M5	METER-IN
10 10	10	M5	METER-IN
12 12	12	M5	METER-IN

### METRIC - BSPP(G)

#### NSC 06-G01

Speed Controllers	Tube Dia	Thread Size	Sleeve Color
04 04	04	G1/8	MI BLUE
06 06	06	G1/8	MI BLUE
08 08	08	G1/4	MI RED
10 10	10	G3/8	MI RED
12 12	12	G1/2	MI RED

### INCH - BSPT(R)

#### NSC 1/4-01

Speed Controllers	Tube Dia	Thread Size	Control Method
01 01	1/4	M5	METER-OUT
02 02	1/4	M5	METER-IN
03 03	1/4	M5	METER-IN
04 04	1/4	M5	METER-IN

### INCH - NPT

#### NSC 1/4 - N1 - MO

Speed Controllers	Tube Dia	Thread Size	Control Method
01 01	1/4	NPT1/8	METER-OUT
02 02	1/4	NPT1/8	METER-IN
03 03	1/4	NPT3/8	METER-IN
04 04	1/4	NPT1/2	METER-IN

NSC	MODEL(φD-T)							NSC-G
	Tube(Metric)-Thread(R)	Tube(Inch)-Thread(R)	Tube(Inch)-Thread(NPT)	Tube(Metric)-Thread(G)				
Elbow	NSC 03-M5	NSC 08-03	NSC1/4-M5	NSC1/8-U	NSC1/4-N3	NSC04-G01	NSC10-G02	Elbow
	NSC 04-M5	NSC 08-04	NSC1/4-01	NSC5/32-U	NSC5/16-N1	NSC04-G02	NSC10-G03	
	NSC 04-01	NSC 10-01	NSC1/4-02	NSC5/32-N1	NSC5/16-N2	NSC06-G01	NSC10-G04	
	NSC 04-02	NSC 10-02	NSC5/16-01	NSC5/32-N2	NSC5/16-N3	NSC06-G02	NSC12-G02	
	NSC 06-M5	NSC 10-03	NSC5/16-02	NSC3/16-U	NSC5/16-N4	NSC06-G03	NSC12-G03	
	NSC 06-01	NSC 10-04	NSC5/16-03	NSC3/16-N1	NSC3/8-N2	NSC06-G04	NSC12-G04	
	NSC 06-02	NSC 12-02	NSC3/8-02	NSC3/16-N2	NSC3/8-N3	NSC08-G01		
	NSC 06-03	NSC 12-03	NSC3/8-03	NSC3/16-N3	NSC3/8-N4	NSC08-G02		
Swivelrotating type	NSC 06-04	NSC 12-04		NSC1/4-U	NSC1/2-N2	NSC08-G03		
	NSC 08-01			NSC1/4-N1	NSC1/2-N3	NSC08-G04		
	NSC 08-02			NSC1/4-N2	NSC1/2-N4	NSC10-G01		

NSC(D)	MODEL(φD-T)							NSC-G(D)
	Tube(Metric)-Thread(R)	Tube(Inch)-Thread(R)	Tube(Inch)-Thread(NPT)	Tube(Metric)-Thread(G)				
Elbow	NSC 03-M5(D)	NSC 08-03(D)	NSC1/4-M5(D)	NSC1/8-U(D)	NSC1/4-N3(D)	NSC04-G01(D)	NSC10-G02(D)	Elbow
	NSC 04-M5(D)	NSC 08-04(D)	NSC1/4-01(D)	NSC5/32-U(D)	NSC5/16-N1(D)	NSC04-G02(D)	NSC10-G03(D)	
	NSC 04-01(D)	NSC 10-01(D)	NSC1/4-02(D)	NSC5/32-N1(D)	NSC5/16-N2(D)	NSC06-G01(D)	NSC10-G04(D)	
	NSC 04-02(D)	NSC 10-02(D)	NSC5/16-01(D)	NSC5/32-N2(D)	NSC5/16-N3(D)	NSC06-G02(D)	NSC12-G02(D)	
	NSC 06-M5(D)	NSC 10-03(D)	NSC5/16-02(D)	NSC3/16-U(D)	NSC5/16-N4(D)	NSC06-G03(D)	NSC12-G03(D)	
	NSC 06-01(D)	NSC 10-04(D)	NSC5/16-03(D)	NSC3/16-N1(D)	NSC3/8-N2(D)	NSC06-G04(D)	NSC12-G04(D)	
	NSC 06-02(D)	NSC 12-02(D)	NSC3/8-02(D)	NSC3/16-N2(D)	NSC3/8-N3(D)	NSC08-G01(D)		
	NSC 06-03(D)	NSC 12-03(D)	NSC3/8-03(D)	NSC3/16-N3(D)	NSC3/8-N4(D)	NSC08-G02(D)		
Swivelrotating type	NSC 06-04(D)	NSC 12-04(D)		NSC1/4-U(D)	NSC1/2-N3(D)	NSC08-G03(D)		
	NSC 08-01(D)			NSC1/4-N1(D)	NSC1/2-N4(D)	NSC08-G04(D)		
	NSC 08-02(D)			NSC1/4-N2(D)		NSC10-G01(D)		

# Speed Controllers

## NSC(DC)



MODEL(φD-T)						
Tube(Metric)-Thread(R)	Tube(Inch)-Thread(R)	Tube(Inch)-Thread(NPT)	Tube(Metric)-Thread(G)			
NSC 03-M5(DC)	NSC 08-03(DC)	NSC1/4-M5(DC)	NSC1/8-U(DC)	NSC1/4-N3(DC)	NSC04-G01(DC)	NSC10-G02(DC)
NSC 04-M5(DC)	NSC 08-04(DC)	NSC1/4-01(DC)	NSC5/32-U(DC)	NSC5/16-N1(DC)	NSC04-G02(DC)	NSC10-G03(DC)
NSC 04-01(DC)	NSC 10-01(DC)	NSC1/4-02(DC)	NSC5/32-N1(DC)	NSC5/16-N2(DC)	NSC06-G01(DC)	NSC10-G04(DC)
NSC 04-02(DC)	NSC 10-02(DC)	NSC5/16-01(DC)	NSC5/32-N2(DC)	NSC5/16-N3(DC)	NSC06-G02(DC)	NSC12-G02(DC)
NSC 06-M5(DC)	NSC 10-03(DC)	NSC5/16-02(DC)	NSC3/16-U(DC)	NSC5/16-N4(DC)	NSC06-G03(DC)	NSC12-G03(DC)
NSC 06-01(DC)	NSC 10-04(DC)	NSC5/16-03(DC)	NSC3/16-N1(DC)	NSC3/8-N2(DC)	NSC06-G04(DC)	NSC12-G04(DC)
NSC 06-02(DC)	NSC 12-02(DC)	NSC3/8-02(DC)	NSC3/16-N2(DC)	NSC3/8-N3(DC)	NSC08-G01(DC)	
NSC 06-03(DC)	NSC 12-03(DC)	NSC3/8-03(DC)	NSC3/16-N3(DC)	NSC3/8-N4(DC)	NSC08-G02(DC)	
NSC 06-04(DC)	NSC 12-04(DC)		NSC1/4-U(DC)	NSC1/2-N3(DC)	NSC08-G03(DC)	
NSC 08-01(DC)			NSC1/4-N1(DC)	NSC1/2-N4(DC)	NSC08-G04(DC)	
NSC 08-02(DC)			NSC1/4-N2(DC)		NSC10-G01(DC)	

## NSC-G(DC)



## NSS



MODEL(φD-T)						
Tube(Metric)-Thread(R)	Tube(Inch)-Thread(R)	Tube(Inch)-Thread(NPT)	Tube(Metric)-Thread(G)			
NSS 04-M5	NSS 08-03	NSS 1/4-M5	NSS 5/32-U	NSS 5/16-N1	NSS 04-G01	NSS 10-G02
NSS 04-01	NSS 08-04	NSS 1/4-01	NSS 5/32-N1	NSS 5/16-N2	NSS 04-G02	NSS 10-G03
NSS 04-02	NSS 10-02	NSS 1/4-02	NSS 5/32-N2	NSS 5/16-N3	NSS 06-G01	NSS 10-G04
NSS 06-M5	NSS 10-03	NSS 5/16-01	NSS 3/16-U	NSS 5/16-N4	NSS 06-G02	NSS 12-G02
NSS 06-01	NSS 10-04	NSS 5/16-02	NSS 3/16-N1	NSS 3/8-N2	NSS 06-G03	NSS 12-G03
NSS 06-02	NSS 12-02	NSS 5/16-03	NSS 3/16-N2	NSS 3/8-N3	NSS 08-G01	NSS 12-G04
NSS 06-03	NSS 12-03	NSS 3/8-02	NSS 1/4-U	NSS 3/8-N4	NSS 08-G02	
NSS 08-01	NSS 12-04	NSS 3/8-03	NSS 1/4-N1	NSS 1/2-N2	NSS 08-G03	
NSS 08-02			NSS 1/4-N2	NSS 1/2-N3	NSS 08-G04	
			NSS 1/4-N3	NSS 1/2-N4		

## NSS-G



## NSS(D)



MODEL(φD-T)						
Tube(Metric)-Thread(R)	Tube(Inch)-Thread(R)	Tube(Inch)-Thread(NPT)	Tube(Metric)-Thread(G)			
NSS 04-M5(D)	NSS 08-03(D)	NSS 1/4-M5(D)	NSS 5/32-U(D)	NSS 5/16-N1(D)	NSS 04-G01(D)	NSS 10-G02(D)
NSS 04-01(D)	NSS 08-04(D)	NSS 1/4-01(D)	NSS 5/32-N1(D)	NSS 5/16-N2(D)	NSS 04-G02(D)	NSS 10-G03(D)
NSS 04-02(D)	NSS 10-02(D)	NSS 1/4-02(D)	NSS 5/32-N2(D)	NSS 5/16-N3(D)	NSS 06-G01(D)	NSS 10-G04(D)
NSS 06-M5(D)	NSS 10-03(D)	NSS 5/16-01(D)	NSS 3/16-U(D)	NSS 5/16-N4(D)	NSS 06-G02(D)	NSS 12-G02(D)
NSS 06-01(D)	NSS 10-04(D)	NSS 5/16-02(D)	NSS 3/16-N1(D)	NSS 3/8-N2(D)	NSS 06-G03(D)	NSS 12-G03(D)
NSS 06-02(D)	NSS 12-02(D)	NSS 5/16-03(D)	NSS 3/16-N2(D)	NSS 3/8-N3(D)	NSS 08-G01(D)	NSS 12-G04(D)
NSS 06-03(D)	NSS 12-03(D)	NSS 3/8-02(D)	NSS 1/4-U(D)	NSS 3/8-N4(D)	NSS 08-G02(D)	
NSS 08-01(D)	NSS 12-04(D)	NSS 3/8-03(D)	NSS 1/4-N1(D)	NSS 1/2-N3(D)	NSS 08-G03(D)	
NSS 08-02(D)			NSS 1/4-N2(D)	NSS 1/2-N4(D)	NSS 08-G04(D)	
			NSS 1/4-N3(D)			

## NSS-G(D)



## NSS(DC)



MODEL(φD-T)						
Tube(Metric)-Thread(R)	Tube(Inch)-Thread(R)	Tube(Inch)-Thread(NPT)	Tube(Metric)-Thread(G)			
NSS 04-M5(DC)	NSS 08-03(DC)	NSS 1/4-M5(DC)	NSS 5/32-U(DC)	NSS 5/16-N1(DC)	NSS 04-G01(DC)	NSS 10-G02(DC)
NSS 04-01(DC)	NSS 08-04(DC)	NSS 1/4-01(DC)	NSS 5/32-N1(DC)	NSS 5/16-N2(DC)	NSS 04-G02(DC)	NSS 10-G03(DC)
NSS 04-02(DC)	NSS 10-02(DC)	NSS 1/4-02(DC)	NSS 5/32-N2(DC)	NSS 5/16-N3(DC)	NSS 06-G01(DC)	NSS 10-G04(DC)
NSS 06-M5(DC)	NSS 10-03(DC)	NSS 5/16-01(DC)	NSS 3/16-U(DC)	NSS 5/16-N4(DC)	NSS 06-G02(DC)	NSS 12-G02(DC)
NSS 06-01(DC)	NSS 10-04(DC)	NSS 5/16-02(DC)	NSS 3/16-N1(DC)	NSS 3/8-N2(DC)	NSS 06-G03(DC)	NSS 12-G03(DC)
NSS 06-02(DC)	NSS 12-02(DC)	NSS 5/16-03(DC)	NSS 3/16-N2(DC)	NSS 3/8-N3(DC)	NSS 08-G01(DC)	NSS 12-G04(DC)
NSS 06-03(DC)	NSS 12-03(DC)	NSS 3/8-02(DC)	NSS 1/4-U(DC)	NSS 3/8-N4(DC)	NSS 08-G02(DC)	
NSS 08-01(DC)	NSS 12-04(DC)	NSS 3/8-03(DC)	NSS 1/4-N1(DC)	NSS 1/2-N3(DC)	NSS 08-G03(DC)	
NSS 08-02(DC)			NSS 1/4-N2(DC)	NSS 1/2-N4(DC)	NSS 08-G04(DC)	
			NSS 1/4-N3(DC)			

## NSS-G(DC)



## NSF



MODEL(φD)	
Tube(Metric)	Tube(Inch)
NSF 04	NSF 5/32
NSF 06	NSF 3/16
NSF 08	NSF 1/4
NSF 10	NSF 5/16
NSF 1.2	NSF 3/8
	NSF 1/2

### CAUTION

- Be sure to refer to Caution on Safety, Classification of Warning Indications, and Common Precaution of Fitting Products before use.
- As it allows some degree of leakage, it cannot be used for stop valves that do not permit leakage. Do not use this product when you need zero leakage.

### WARNING

- Confirm the direction of airflow before use. If the flow control direction operates backwards, the speed control needle may not operate and the actuator may spring out, causing possible bodily harm.
- The speed control must be started slowly with all the needles locked.
- Confirm the rotation of the needle valve, as too many rotations of the needle may cause damage.
- Do not force impact or rotation on the body or fitting section. It may cause product damage or air leakage.

# Hand Valves / Hand Slide Valves

# Hand Valves / Hand Slide Valves

## Applications

- Used for switching compressed air.

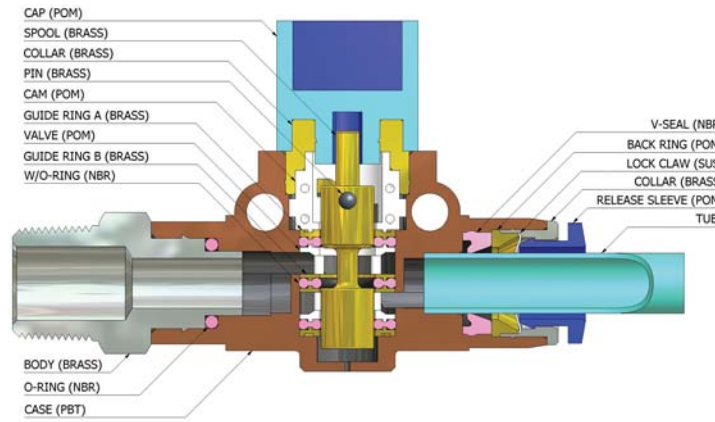
## Features

- This product switches compressed air on/off of air pressure devices by simply turning the handle.
- Maintenance or inspection is possible when the remaining pressure in the device is removed.
- A three-way valve discharges the remaining pressure out, and blocks the incoming air in the off state.
- There are 4 types available depending on the method applied to air pressure flow.

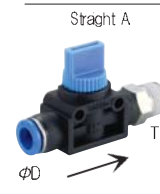
## Specifications

Fluid type : Air (No other gases or liquids)  
 Working pressure : 0~150PSI / 0~9.9Kgf/cm<sup>2</sup> (0~990kPa)  
 Negative pressure : -29.5 in Hg / -750mmHg (-750Torr)  
 Working temperature : 32~140° F / 0~60° C  
 Applicable Tube : Polyurethane and Nylon

## Structural Diagram

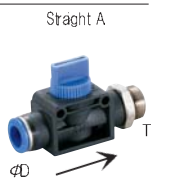


## HVC

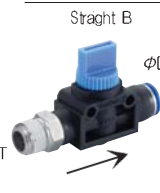


MODEL(φD-T)					
Tube(Metric)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
HVC 06-01	HVC 10-03	HVC1/4-N1	HVC3/8-N3	HVC06-G01	HVC10-G03
HVC 06-02	HVC 10-04	HVC1/4-N2	HVC3/8-N4	HVC06-G02	HVC10-G04
HVC 06-03	HVC 12-02	HVC1/4-N3	HVC1/2-N2	HVC06-G03	HVC12-G02
HVC 08-01	HVC 12-03	HVC5/16-N1	HVC1/2-N3	HVC08-G01	HVC12-G03
HVC 08-02	HVC 12-04	HVC5/16-N2	HVC1/2-N4	HVC08-G02	HVC12-G04
HVC 08-03		HVC5/16-N3		HVC08-G03	
HVC 10-02		HVC3/8-N2		HVC10-G02	

## HVC-G

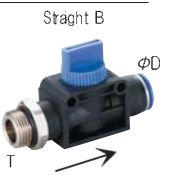


## HVF



MODEL(T-φD)					
Tube(Metric)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
HVF 01-06	HVF 02-10	HVF 1/4-N1	HVF 3/8-N2	HVF G01-06	HVF G02-10
HVF 02-06	HVF 03-10	HVF 1/4-N2	HVF 3/8-N3	HVF G02-06	HVF G03-10
HVF 03-06	HVF 04-10	HVF 1/4-N3	HVF 3/8-N4	HVF G03-06	HVF G04-10
HVF 01-08	HVF 02-12	HVF 5/16-N1	HVF 1/2-N2	HVF G01-08	HVF G02-12
HVF 02-08	HVF 03-12	HVF 5/16-N2	HVF 1/2-N3	HVF G02-08	HVF G03-12
HVF 03-08	HVF 04-12	HVF 5/16-N3	HVF 1/2-N4	HVF G03-08	HVF G04-12

## HVF-G



## HVU



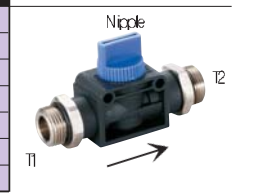
MODEL(φD1-φD2)		
Tube(Metric)	Tube(Inch)	
HVU 06-06	HVU 1/4-1/4	
HVU 08-06	HVU 5/16-1/4	
HVU 08-08	HVU 5/16-5/16	
HVU 10-08	HVU 3/8-5/16	
HVU 10-10	HVU 3/8-3/8	
HVU 12-10	HVU 1/2-3/8	
HVU 12-12	HVU 1/2-1/2	

## HVM



MODEL(T1-T2)		
Tube(Metric)	Tube(Inch)	Tube(Metric)-Thread(G)
HVM 01-01	HVM N1-N1	HVM G01-G01
HVM 02-01	HVM N2-N1	HVM G02-G01
HVM 02-02	HVM N2-N2	HVM G02-G02
HVM 03-02	HVM N3-N2	HVM G03-G02
HVM 03-03	HVM N3-N3	HVM G03-G03
HVM 04-03	HVM N4-N3	HVM G04-G03
HVM 04-04	HVM N4-N4	HVM G04-G04

## HVM-G



## HSV



MODEL(T)	
Tube(Metric)	
HSV M5	
HSV 01	
HSV 02	
HSV 03	
HSV 04	
HSV 06	

## Hand valve

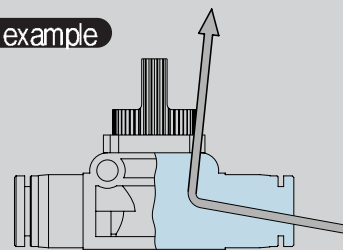
- CAUTION**
- Be sure to refer to Caution on Safety, Classification of Warning Indications, and Common Precaution of Fitting Products before use.
- WARNING**
- Do not force impact or rotation on the body or fitting section.
  - Usage in vacuum state may cause operational errors due to drawn-in dust, so a vacuum filter should be attached at the intake side.
  - Make sure that the handle lever operates at a full 90° otherwise, there may not be enough flow.

## Hand Slide valve

- CAUTION**
- Be sure to refer to Caution on Safety, Classification of Warning Indications, and Common Precaution of Fitting Products before use.
  - Make sure that the handle lever is turned properly to the desired side. If it isn't turned properly, there may not be enough flow.
- WARNING**
- Do not force impact or rotation on the body or fitting section. It may cause product damage or air leakage.
  - Confirm the air flow control direction before use.
  - Make sure that the power and air is blocked and the remaining pressure in pipes is completely removed before maintenance or inspection.



## Applied example



- To insert the tube into the fitting, insert it fully to the end, and for release, block the compressed air and push the sleeve gently to pull the tube out.
- Be sure to select the product according to your needs as hand valves discharge the remaining air using a 3-way method so that leakage may occur when fluids other than water are applied.

## Product Code System

### METRIC - BSPT(R)

**HVC 06-01**

HAND VALVE		Tube Dia		Thread Size	
CODE	φD	CODE	SIZE	CODE	SIZE
06	φ6	01	R1/8		
08	φ8	02	R1/4		
10	φ10	03	R3/8		
12	φ12	04	R1/2		

### METRIC - BSPP(G)

**HVC 06-G01**

HAND VALVE		Tube Dia		Thread Size	
CODE	φD	CODE	SIZE	CODE	SIZE
06	φ6	G01	G1/8		
08	φ8	G02	G1/4		
10	φ10	G03	G3/8		
12	φ12	G04	G1/2		

### INCH - NPT

**HVC 1/4-N1**

HAND VALVE		Tube Dia		Thread Size	
CODE	φD	CODE	SIZE	CODE	SIZE
1/4	1/4"	N1	NPT1/8		
5/16	5/16"	N2	NPT1/4		
3/8	3/8"	N3	NPT3/8		
1/2	1/2"	N4	NPT1/2		

# Stop Fittings

## Applications

- Used in the place where pneumatic piping frequently changes.

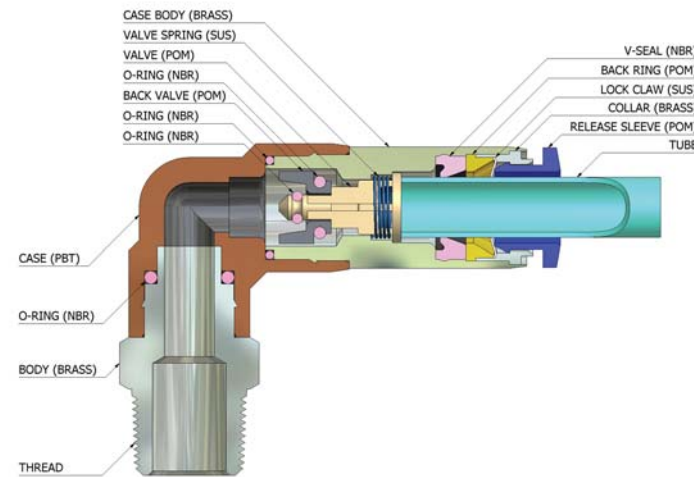
## Features

- Air is completely blocked when the tube is released, and the air flows again only after connection to ensure safety. The air flows only when the tube is connected.

## Specifications

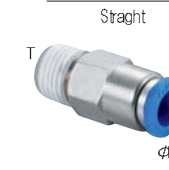
- Fluid type : Air (No other gases or liquids)
- Working pressure : 0~150PSI / 0~9.9kgf/cm<sup>2</sup> (0~990kPa)
- Negative pressure : -29.5 in Hg / -750mmHg (-750Torr)
- Working temperature : 32~140° F / 0~60° C
- Applicable Tube : Polyurethane and Nylon

## Structural Diagram



# Stop Fittings

## SPC



MODEL(φ D-T)	Tube(Metric)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
	Code	Size	Code	Size	Code	Size
Straight	SPC 04-01	SPC 10-04	SPC5/32-N1	SPC5/16-N3	SPC04-G01	SPC10-G04
	SPC 06-01	SPC 12-02	SPC3/16-N1	SPC3/8-N2	SPC06-G01	SPC12-G02
	SPC 06-02	SPC 12-03	SPC3/16-N2	SPC3/8-N3	SPC06-G02	SPC12-G03
	SPC 08-02	SPC 12-04	SPC1/4-N1	SPC3/8-N4	SPC08-G02	SPC12-G04
	SPC 08-03		SPC1/4-N2	SPC1/2-N3	SPC08-G03	
	SPC 10-02		SPC5/16-N1	SPC1/2-N4	SPC10-G02	
	SPC 10-03		SPC5/16-N2		SPC10-G03	

## SPC-G



## SPL

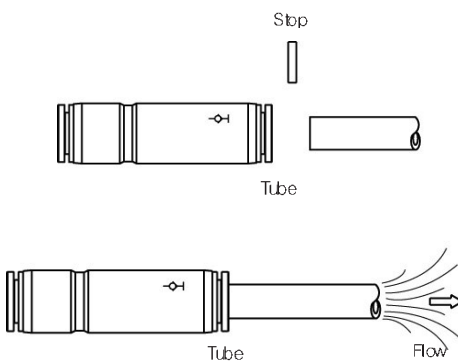


MODEL(φ D-T)	Tube(Metric)-Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
	Code	Size	Code	Size	Code	Size
Elbow	SPL 04-M5	SPL 08-02	SPL5/32-U	SPL5/16-N1	SPL04-G01	SPL10-G04
	SPL 04-M6	SPL 08-03	SPL5/32-N1	SPL5/16-N2	SPL06-G01	SPL12-G03
	SPL 04-01	SPL 10-02	SPL3/16-U	SPL5/16-N3	SPL06-G02	SPL12-G04
	SPL 06-M5	SPL 10-03	SPL3/16-N1	SPL3/8-N2	SPL08-G02	
	SPL 06-01	SPL 10-04	SPL3/16-N2	SPL3/8-N3	SPL08-G03	
	SPL 06-02	SPL 12-03	SPL1/4-U	SPL3/8-N4	SPL10-G02	
	SPL 08-01	SPL 12-04	SPL1/4-N1	SPL1/2-N3	SPL10-G03	
			SPL1/4-N2	SPL1/2-N4		

## SPL-G



## Control System



## SPU



MODEL(φ D)	Tube(Metric)	Tube(Inch)
	Union Straight	SPU 04
	SPU 06	SPU 3/16
	SPU 08	SPU 1/4
	SPU 10	SPU 5/16
	SPU 12	SPU 3/8
		SPU 1/2

## Product Code System

### METRIC - BSPT(R)

**SPC 06-01**

STOP FITTING	Tube Dia	Thread Size
04	φ4	M5 M5×0.8
06	φ6	M6 M6×1.0
08	φ8	01 R1/8
10	φ10	02 R1/4
12	φ12	03 R3/8
		04 R1/2

### METRIC - BSPP(G)

**SPC 06-G01**

STOP FITTING	Tube Dia	Thread Size
04	φ4	G01 G1/8
06	φ6	G02 G1/4
08	φ8	G03 G3/8
10	φ10	G04 G1/2
12	φ12	

### INCH - NPT

**SPC 1/4-N1**

STOP FITTING	Tube Dia	Thread Size
5/32	5/32"	U 10-32UNF
3/16	3/16"	N1 NPT1/8
1/4	1/4"	N2 NPT1/4
5/16	5/16"	N3 NPT3/8
3/8	3/8"	N4 NPT1/2
1/2	1/2"	

## CAUTION

- Be sure to refer to the Caution on Safety, Classification of Warning Indication, and Common Precaution of Fitting Products before use.
- Assemble the fitting according to the proper connection torque value.
- Proper torque refers to connection by hand and 2-3 rotations using a tool. Excessive pressure may damage the screw.
- Confirm the air flow control direction before connecting the tube. If the flow control direction operates backwards, air will not flow.

## WARNING

- Do not force impact or rotation on the body or fitting section.
- Never open the tube under pressure. The springing power of the tube may cause bodily harm.

# Check Valves

## Applications

- Used in places where air should flow in one direction only.
- Used in places where the air pressure of the ventilation section should be kept uniform.
- Good for low pressure devices.

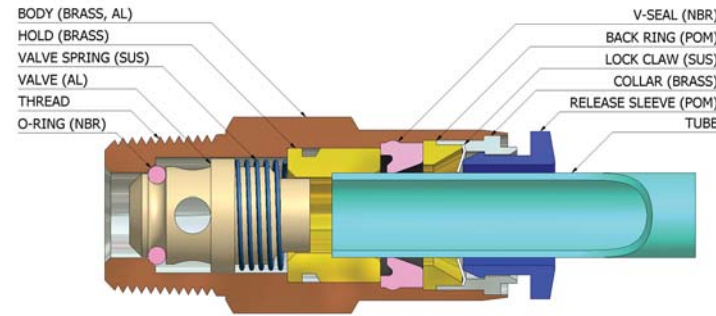
## Features

- Suitable for low pressure applications.
- This valve allows compressed air from one side flow and blocks the inverse flow to protect and maintain the vacuum line and is easily applied to low pressure piping.

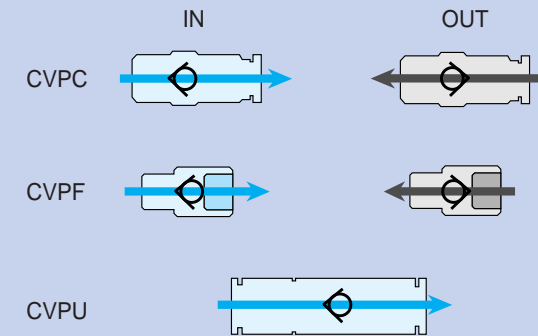
## Specifications

- Fluid type : Air (No other gases or liquids)
- Working pressure : 0~150PSI / 0~9.9Kgf/cm<sup>2</sup> (0~990kPa)
- Negative pressure : -29.5 in Hg / -750mmHg (-750Torr)
- Working temperature : 32~140° F / 0~60° C
- Applicable Tube : Polyurethane and Nylon

## Structural Diagram

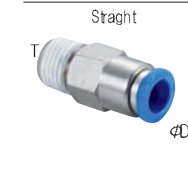


## Applied example



# Check Valves

## CVPC



MODEL(φD-T)	Tube(Metric) - Thread(R)		Tube(Inch)-Thread(NPT)		Tube(Metric)-Thread(G)	
	Tube(Metric)	Thread(R)	Tube(Inch)	Thread(NPT)	Tube(Metric)	Thread(G)
CVPC 04-M5	CVPC 10-03	CVPC5/32-U	CVPC5/16-N1	CVPC04-G01	CVPC12-G03	
CVPC 04-M6	CVPC 10-04	CVPC5/32-N1	CVPC5/16-N2	CVPC06-G01	CVPC12-G04	
CVPC 04-01	CVPC 12-03	CVPC3/16-U	CVPC3/8-N3	CVPC06-G02		
CVPC 06-01	CVPC 12-04	CVPC3/16-N1	CVPC3/8-N4	CVPC08-G01		
CVPC 06-02		CVPC3/16-N2	CVPC1/2-N3	CVPC08-G02		
CVPC 08-01		CVPC1/4-N1	CVPC1/2-N4	CVPC10-G03		
CVPC 08-02		CVPC1/4-N2		CVPC10-G04		

## CVPC-G



## CVPF



MODEL(T1-T2)	Thread(R) - Thread(Rc)		Thread(NPT)-Thread(NPT)		Thread(G) - Thread(G)	
	Thread(R)	Thread(Rc)	Thread(NPT)	Thread(NPT)	Thread(G)	Thread(G)
CVPF 01-01	CVPF 02-02	CVPF 03-03	CVPF 04-04	CVPF N1-N1	CVPF N2-N2	CVPF N3-N3
				CVPF N4-N4	CVPF G01-G01	CVPF G02-G02
					CVPF G03-G03	CVPF G04-G04

## CVPF-G



## CVPU



MODEL(φD)	Tube(Metric)		Tube(Inch)	
	Tube(Metric)	Tube(Inch)	Tube(Metric)	Tube(Inch)
CVPU 04	CVPU 06	CVPU 08	CVPU 10	CVPU 12

## Product Code System

### METRIC - BSPT(R)

#### CVPC 08-01

CHECK VALVES	Tube Dia		Thread Size		Sleeve color	
	CODE	φD	CODE	SIZE	OUT	BLUE
	04	φ4	M5	M5×0.8	IN	RED
	06	φ6	01	R1/8		
	08	φ8	02	R1/4		
	10	φ10	03	R3/8		
	12	φ12	04	R1/2		

### METRIC - BSPP(G)

#### CVPC 08-G1

CHECK VALVES	Tube Dia		Thread Size		Sleeve color	
	CODE	φD	CODE	SIZE	OUT	BLUE
	04	φ4	G01	G1/8	IN	RED
	06	φ6	G02	G1/4		
	08	φ8	G03	G3/8		
	10	φ10	G04	G1/2		
	12	φ12				

### INCH - NPT

#### CVPC 5/16-N1

CHECK VALVES	Tube Dia		Thread Size		Sleeve color	
	CODE	SIZE	CODE	SIZE	OUT	BLUE
	1/4	1/4"	N1	NPT1/8	IN	RED
	5/16	5/16"	N2	NPT1/4		
	3/8	3/8"	N3	NPT3/8		
	1/2	1/2"	N4	NPT1/2		

## CAUTION

- Be sure to refer to Caution on Safety, Classification of Warning Indications, and Common Precaution of Fitting Products before use.
- Assemble the fitting according to the proper connection torque value.
- Proper torque refers to connection by hand and 2-3 rotations using a tool. Excessive pressure may damage the screw.

## WARNING

- Do not force impact or rotation on the body or fitting section.
- The main body may heat due to too many transfer operations, and it may burn.

# Speed Controllers with Pilot Check Valves

# Two-Touch Fittings

## Applications

- Realizes momentary intermediate stoppage of a cylinder and able to adjust speed control of it.

## Features

- Combined with pilot check valve and speed controller.
- Enables 360° free direction of tubing mount.

## Specifications

- Fluid type : Air (No other gases or liquids)
- Working pressure : 14~150PSI / 1~9.9Kgf/cm<sup>2</sup> (100~990kPa)
- Negative pressure : -29.5 in Hg / -750mmHg(-750Torr)
- Working temperature : 32~140°F / 0~60°C
- Applicable Tube : Polyurethane and Nylon



## PVSC



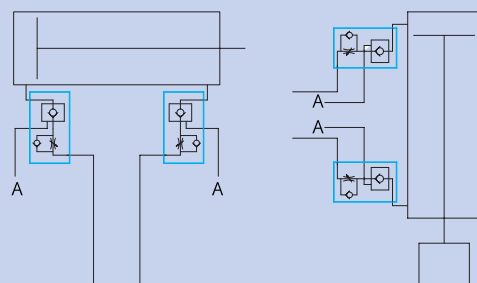
MODEL(φD-T1)				
Tube(Metric)-Thread(R)				
MODEL	ØD	T1	T2	
PVSC06-01	6	R1/8	M5	
PVSC06-02	6	R1/8	R1/8	
PVSC08-01	8	R1/8	M5	
PVSC08-02	8	R1/4	R1/8	
PVSC08-03	8	R3/8	R1/8	
PVSC10-03	10	R3/8	R1/8	
PVSC10-04	10	R1/2	R1/4	
PVSC12-03	12	R3/8	R1/8	
PVSC12-04	12	R1/2	R1/4	

## PVSC-G



MODEL(φD-T1)				
Tube(Metric)-Thread(G)				
MODEL	ØD	T1	T2	
PVSC06-G01	6	G1/8	M5	
PVSC06-G02	6	G1/8	G1/8	
PVSC08-G01	8	G1/8	M5	
PVSC08-G02	8	G1/4	G1/8	
PVSC08-G03	8	G3/8	G1/8	
PVSC10-G03	10	G3/8	G1/8	
PVSC10-G04	10	G1/2	G1/4	
PVSC12-G03	12	G3/8	G1/8	
PVSC12-G04	12	G1/2	G1/4	

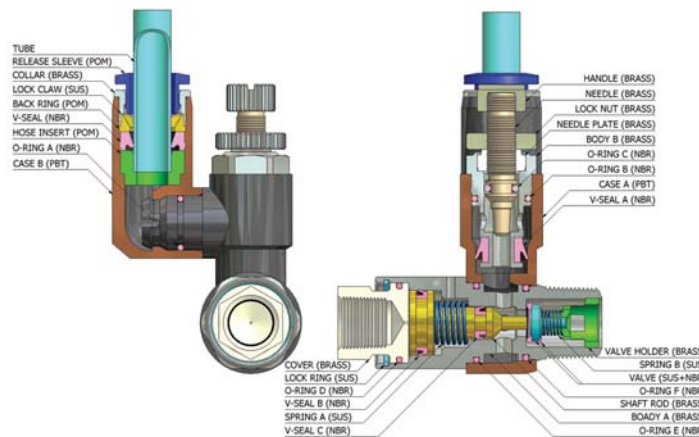
## Applied example



Allow emergent stop at optional position controlled by 'A'

Protect falling-down of the rod of cylinder in the off state

## Structural Diagram



## Product Code System

### METRIC - BSPT(R)

## PVSC 06-01

### Speed Controller with Pilot Check Valve Fitting

Tube Dia		Thread Size	
CODE	ØD	CODE	SIZE
06	Ø6	01	R1/8
08	Ø8	02	R1/4
10	Ø10	03	R3/8
12	Ø12	04	R1/2

### METRIC - BSPP(G)

## PVSC 06-G01

### Speed Controller with Pilot Check Valve Fitting

Tube Dia		Thread Size	
CODE	ØD	CODE	SIZE
06	Ø6	G01	G1/8
08	Ø8	G02	G1/4
10	Ø10	G03	G3/8
12	Ø12	G04	G1/2

## CAUTION

- Be sure to refer to Caution on Safety, Classification of Warning Indications, and Common Precaution of Fitting Products before use.
- Assemble the fitting according to the proper connection torque value.
- Proper torque refers to connection by hand and 2~3 rotations using a tool. Excessive pressure may damage the screw.

## WARNING

- Do not force impact or rotation on the body or fitting section.
- The main body may heat due to too many transfer operations, and it may burn.

## Application

- A nut tightening pipe connection tool for devices that use pneumatic piping.

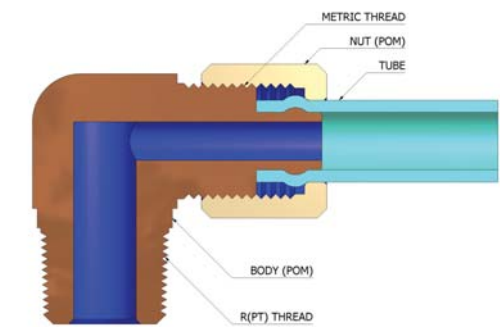
## Features

- The connection method is nut tightening and efficient in environments with vibration.
- Made from plastics to be semi-permanent, has good tolerance to corrosion and chemicals.
- Suited for low air pressure devices.

## Specifications

- Fluid type : Air (No other gases or liquids)
- Working pressure : 0~150PSI / 0~9.9Kgf/cm<sup>2</sup> (0~990kPa)
- Negative pressure : -29.5 in Hg / -750mmHg(-750Torr)
- Working temperature : 32~140°F / 0~60°C
- Applicable Tube : Polyurethane and Nylon

## Structural Diagram



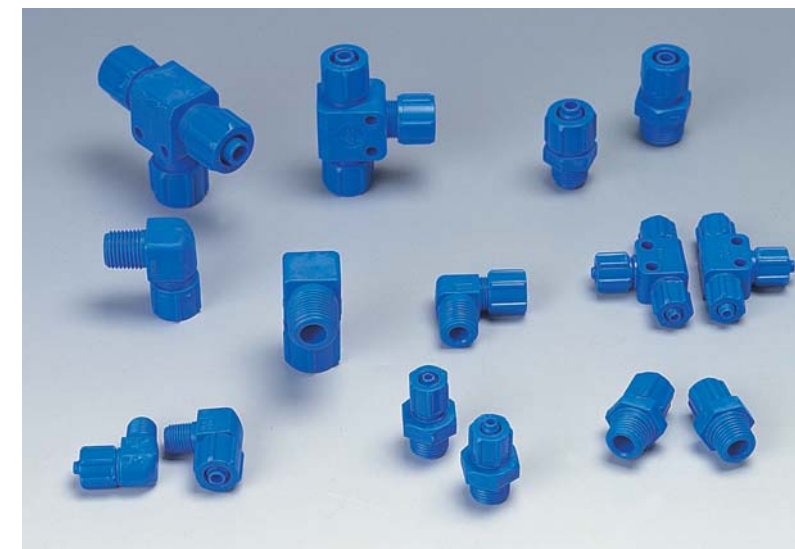
## Product Code System

### METRIC - BSPT(R)

## CK 06-01

### Two-Touch Fitting

Tube Dia		Thread Size	
CODE	OD	ID	R(PT) THREAD
04	Ø4	Ø2.5	CODE SIZE
06	Ø6	Ø4	01 R1/8
08	Ø8	Ø5.5	02 R1/4
10	Ø10	Ø6.5	03 R3/8
12	Ø12	Ø8	



## CK

Straight



MODEL(φD-T)		
Tube(Metric)		
CK 04-01		CK 10-02
CK 06-01		CK 10-03
CK 06-02		CK 12-02
CK 08-01		CK 12-03
CK 08-02		CK 12-04
CK 08-03		

## GCK

Elbow



MODEL(φD-T)		
Tube(Metric)		
GCK 04-01		GCK 10-02
GCK 06-01		GCK 10-03
GCK 06-02		GCK 12-02
GCK 08-01		GCK 12-03
GCK 08-02		GCK 12-04
GCK 08-03		

## CAUTION

- Be sure to refer to Caution Safety, Classification of Warning Indications, and Common Precaution of Fitting Products before use.
- The product is made from plastics and the screw section is not treated with Teflon coating so that a Teflon tape treatment before installation can be efficient to prevent air leakage.
- Be sure to prevent pressure buildup due to twisting, pulling, and bending of the fitting product. It may cause product damage or air leakage.
- To connect the tube, insert the tube to the end, and join the cap before use.
- Cut the pressed part of the tube before connection for reuse of the released tube.
- Be sure to prevent excessive pressure when tightening the screw because the product is made from plastics.

## FCK

Union Tee



MODEL(φD)	
Tube(Metric)	
FCK 04	
FCK 06	
FCK 08	
FCK 10	
FCK 12	

# Silencers

## Applications

- Installed at exhaust ports to diminish ventilating noise.

## Features

- Made from corrosion-resistant plastic to have long durability and be light-weight.
- Low cost and good durability
- Attached to pneumatic exhaust port to diminish noise.
- Very compact, can be easily installed in limited spaces.

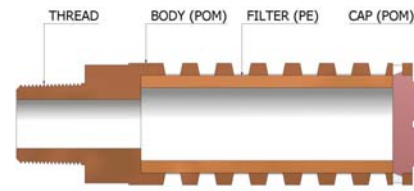
## Specifications

Code	ST01	ST02	ST03	ST04	ST06	ST08
Maximum working pressure	7kgf/cm <sup>2</sup> (700Kpa)/100PSI			9.9kgf/cm <sup>2</sup> (990Kpa)/150PSI		

## Applied example

- The exterior hexagonal part can be assembled with a spanner for screw joining.
- If the element is blocked, the increasing resistance may cause product damage and system performance may decline. When this happens, replace the product with a new one.

## Structural Diagram



ST	MODEL(T) Thread(R)
T	ST-01
	ST-02
	ST-03
	ST-04
	ST-06
	ST-08
	STM-02



## Product Code System

ST	01	STB	01
Silencer	Thread Size(T)	Metal Silencer	Thread Size(T)
	R(PT) THREAD		R(PT) THREAD
Code	Size	Code	Size
01	R1/8	M5	M5×0.8
02	R1/4	01	R1/8
03	R3/8	02	R1/4
04	R1/2	03	R3/8
06	R3/4	04	R1/2
08	R1	06	R3/4
		08	R1



## CAUTION

- Be sure to refer to Caution on Safety, Classification of Warning Indications and Common Precaution of Fitting Products before use.
- If the element is blocked by dust from long use, the increased resistance may cause system performance decline and noise increase. In that case the product should be replaced periodically to prevent product damage.
- The product is made from plastics and the screw section is not treated with Teflon coating so a Teflon tape treatment before installation can be efficient for preventing air leakage.
- Be sure to prevent excessive pressure when tightening the screw because the product is made from plastics.

# Metal Silencers

## Applications

- Metal filters are available for high temperature and pressure environments, and they are durable against impact.
- Easy to weld and used for virtually every industry.

## Features

- Excellent noise reduction and filtering effect in dry conditions.

## Specifications

	STBM5	STB01	STB02	STB03	STB04	STB06	STB08
Maximum working pressure	15kgf/cm <sup>2</sup> /220PSI						
Working temperature	0~80°C(32~176°F)						
Flow rate	250	300	320	340	370	400	420

STB	MODEL(T) Thread(R)
T	STB-M5
	STB-01
	STB-02
	STB-03
	STB-04
	STB-06
	STB-08
	STB(Φ)-M5
	STB(Φ)-01
	STB(Φ)-02
	STB(Φ)-03
	STB(Φ)-04
	STB(Φ)-06
	STB(Φ)-08



# Tubes

## Applications

- Used for piping of pneumatic devices.

## Features

- Excellent flexibility at low temperatures.
- Light-weight with good tolerance to wear and chemicals.
- Convenient for piping as it has better flexibility than nylon tubes.
- Tubes are available in diverse colors according to the working situation.

## Specifications

- Fluid type : Air(No other gases or liquids)
- Working pressure : 0~150PSI / 0~9.9Kgf/cm<sup>2</sup> (0~990KPa).
- Negative pressure : -29.5in Hg / -750mmHg (-750Torr)
- Working temperature : 32~140°F / 0~60°C

## TUBE COLOR CODE

COLOR	White	Black	Red	Blue	Yellow	Green	Clear	Silver
CODE	WT	BK	RD	BU	YL	GR	CL	SL



## Product Code System

### Polyurethane Tube

PU 08 50 BK

Polyurethane Tube	Tube Dia. (O.D & I.D)				Tube Color	
	METRIC TUBE		INCH TUBE		COLOR	CODE
	CODE	O.D	I.D	CODE	O.D	WT
	0320	Ø3	Ø2	1/8	1/8"	Black BK
	0420	Ø4	Ø2	5/32	5/32"	Red RD
	0425	Ø4	Ø2.5	3/16	3/16"	Blue BU
	0640	Ø6	Ø4	1/4	1/4"	Yellow YL
	0850	Ø8	Ø5	5/16	5/16"	Green GN
	0855	Ø8	Ø5.5	3/8	3/8"	Clear CR
	1065	Ø10	Ø6.5	1/2	1/2"	
	1280	Ø12	Ø8			
	1290	Ø12	Ø9			
	1612	Ø16	Ø12			

### Nylon Tube

NA 08 60 BK

Nylon Tube	Tube Dia. (O.D & I.D)			Tube Color	
	METRIC TUBE			COLOR	CODE
	CODE	O.D	I.D	White	WT
	0420	Ø4	Ø2		
	0425	Ø4	Ø2.5		
	0640	Ø6	Ø4		
	0860	Ø8	Ø6		
	1080	Ø10	Ø8		
	1290	Ø12	Ø9		

### Polyurethane Coil Tube

UC 08 50-5 BK

Polyurethane Coil Tube	Tube Dia. (O.D & I.D)			Length	Tube Color	
	METRIC TUBE				COLOR	CODE
	CODE	O.D	I.D	Yellow	YL	
	0640	Ø6	Ø4	Blue	BU	
	0850	Ø8	Ø5	Black	BK	
	1065	Ø10	Ø6.5			
	1280	Ø12	Ø8			

PU	MODEL(Outer · Inner)	
	Tube(Metric)	Tube(Inch)
	PU 0320	PU 1/8
	PU 0420	PU 5/32
	PU 0425	PU 3/16
	PU 0640	PU 1/4
	PU 0850	PU 5/16
	PU 0855	PU 3/8
	PU 1065	PU 1/2
	PU 1280	
	PU 1290	
	PU 1612	

UC	MODEL(Outer · Inner · Length)	
	Tube(Metric)-Meters	
	UC 0640-3	UC 0850-5
	UC 0640-5	UC 0850-7.5
	UC 0850-5	UC 0850-10
	UC 0850-7.5	UC 1065-5
	UC 0850-10	UC 1065-7.5
	UC 1065-5	UC 1065-10
	UC 1065-7.5	UC 1280-5
	UC 1065-10	UC 1280-7.5
	UC 1280-5	UC 1280-10
	UC 1280-7.5	
	UC 1280-10	

\*w/o coupler \*with coupler

NA	MODEL(Outer · Inner)	
	Tube(Metric)	
	NA 0420	
	NA 0425	
	NA 0640	
	NA 0860	
	NA 1080	
	NA 1290	

# Tube Cutter

ETC	MODEL
	ETC-20



## CAUTION

- Make sure the tube is fully inserted to the end of the fitting. Air leakage and tube release may occur.
- To insert the tube into the fitting, cut the tube at a right angle, insert it fully to the end, and pull the tube gently to make sure it isn't released.
- Secure the excess tube for future length changes in piping the tube.
- Be sure to fix the tube if the tube release may cause harm to human or property.

## WARNING

- Do not use on fluids other than air and water (partly available for some products). Contact us for use on other fluids.
- If there is some damage or scratches on the oval shape and tube, air leakage and tube release may occur. Check it out meticulously.
- Water or other fluids at temperatures of 60° or higher may cause hydrolysis due to heat and it can also deform the tube or fitting.
- Do not use the product where weld splatters occur as fire may break out.
- Use caution in water as the product may be damaged by surge pressure.
- Do not use the product where it is directly exposed to fluids such as cutting oil, lubricating oil, and coolant oil.
- Avoid places where electrostatic induction and electrification occur.
- Avoid flammable gases such as oxygen, hydrogen, and LPG.

# Air Guns

## Applications

- Used for washing machinery, or cleaning places where out of reach.

## Features

- Simple design.
- Easy to control air injection amount for user's convenience.
- Universally used due to the various length nozzles.
- Made from engineering plastic to be light and impact-resistant.

## Specifications

- Fluid type : Air (No other gases or liquids)
- Working pressure: 0~150PSI / 0~9.9Kg/cm<sup>2</sup> (0~990KPa).
- Negative pressure: -29.5in Hg / -750mmHg (-750Torr)
- Working temperature: 32~140°F / 0~60°C

## Product Code System

<b>CA</b>	<b>01</b>	<b>F</b>	
Air Gun	Nozzle Size(L)	Coupling Form	
	METRIC TYPE	CODE TYPE	
Code	Length	Blank	FLUG
00	0mm	F	Rc 1/4
01	100mm	G	G 1/4
02	200mm		
03	300mm		

## CAUTION

- Be sure to refer to the Caution Safety, Classification of Warning Indication and Common Precaution of Fitting Products (P8) before use.
- Be sure to prevent excessive impact, rotation, and bending because the main body is made from plastics.
- Make sure that the machine is at a stop before washing the product and removing the dust.

<b>CA</b>	MODEL(L-T)	<b>CAF</b>
	CA-0050 CA-0050F CA-0100 CA-0100F CA-0200 CA-0200F CA-0300 CA-0300F	
<b>CB01</b>	MODEL(L-T)	<b>CB01F</b>
	CB01-100 CB01-100F CB01-200 CB01-200F CB01-300 CB01-300F	

# Oil Ejector Lines

## Applications

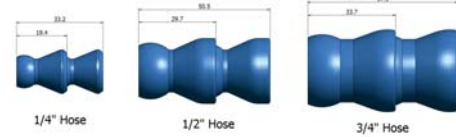
- Attached to machine tools to control the flow of cutting oil.

## Features

- Good tolerance to corrosion, chemicals, and good anti-conductivity.
- Flow direction can be changed in various directions.
- Made from plastics to be semi-permanent and light-weight.
- Various products can be selected according to operating purposes.

## Product Code System

<b>OEL</b>	<b>01</b>	<b>R</b>	
Oil Ejector line	Thread Size(T)	Nozzle Type(L)	
	R(P/T) THREAD	CODE TYPE	
Code	size	R	Round
01	R1/8	F	Flare
02	R1/4		
03	R3/8		
04	R1/2		
06	R3/4		



<b>OEL</b>	MODEL(T-L)
	OEL 01 OEL 02 OEL 03 OEL 04 OEL 06

1/4" SYSTEM		1/2" SYSTEM		3/4" SYSTEM	
	1/4" Hose		1/2" Hose		3/4" Hose
	1/4" Y Fitting		R1/2 Thread		5/8" Round Nozzle
	1/8" Round Nozzle		1/2" Y-Fitting		3/8" Round Nozzle
	1/4" Double Socket		1/2"-1/4" Y-Reducer		3" Flare Nozzle
	1/4" Round Nozzle		1/2" Double Socket		R 3/4 Thread
	1" Flare Nozzle		1/2" Double Socket		
	1.5 Nozzle(16Hole)		1-1/4" Flare Nozzle		
	1/4" Valve		2-1/2" Flare Nozzle		
	R 1/8 Thread		1/2" Valve		
	R 1/4 Thread		1/2" Thread Valve		
			2.0 Nozzle(20Hole)		

# Couplers

## Applications

- Used for compressed air piping.
- Widely applicable for hose connection of pneumatic devices, and air piping at plants, etc.

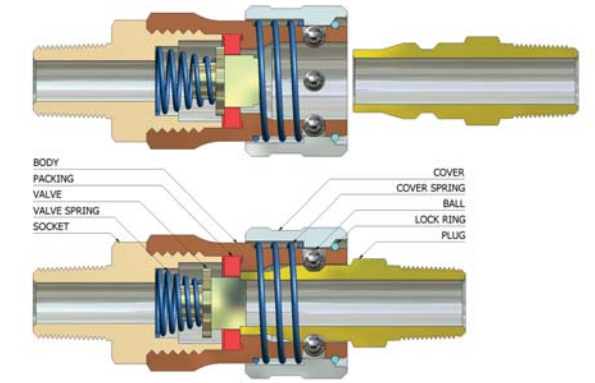
## Features

- One-way valve with a built-in automatic switching valve in the hole.
- Various materials and shapes can be selected according to operating needs.
- Smooth connection and release of plug and socket allows convenient use.

## Specifications

- Fluid type : Air (No other gases or liquids)
- Material: Steel, Brass
- Working pressure: 0~150PSI / 0~9.9Kg/cm<sup>2</sup> (0~990KPa)
- Working temperature: 32~140°F / 0~60°C

## Structural Diagram



## Product Code System

**OSH 20**


①	② 연결형태	③ 나사의 형태	④ 나사의 크기
O : One Touch Coupler B : Brass Coupler	CODE TYPE S Socket P Plug	CODE TYPE H Hose Stem M Male Thread F Female Thread N Nut	SIZE H M F N 20 9 R 1/4 Rc 1/4 - 30 11 R 3/8 Rc 3/8 - 40 15 R 1/2 Rc 1/2 - 400 15 R 1/2 Rc 1/2 - 600 21 R 3/4 Rc 3/4 - 800 27 R 1 Rc 1 - 08 - - - 8x5 10 - - - 10x65 12 - - - 12x8


## Coupler


<b>SH</b>	MODEL(T)	<b>SM</b>	MODEL(T)	<b>SF</b>	MODEL(T)
	Hose Stem		Thread(R)		Thread(Rc)
	SH 20 SH 30 SH 40 SH 400 SH 600 SH 800		SM 20 SM 30 SM 40 SM 400 SM 600 SM 800		SF 20 SF 30 SF 40 SF 400 SF 600 SF 800
<b>SN</b>	MODEL(T)	<b>PH</b>	MODEL(T)	<b>PM</b>	MODEL(T)
	Hose Nut(φT)		Hose Stem		Thread(R)
	SN 08 SN 10 SN 12		PH 20 PH 30 PH 40 PH 400 PH 600 PH 800		PM 20 PM 30 PM 40 PM 400 PM 600 PM 800
<b>PF</b>	MODEL(T)	<b>PN</b>	MODEL(T)		
	Thread(Rc)		Hose Nut(φT)		
	PF 20 PF 30 PF 40 PF 400 PF 600 PF 800		PN 08 PN 10 PN 12		




One - Touch Coupler


	MODEL(T)
	Hose Stem
	OSH 20
	OSH 30
	OSH 40


	MODEL(T)
	Thread(R)
	OSM 20
	OSM 30
	OSM 40


	MODEL(T)
	Thread(Rc)
	OSF 20
	OSF 30
	OSF 40


	MODEL(T)
	Hose Nut(φT)
	OSN 08
	OSN 10
	OSN 12


Coupler (BSBM)


	MODEL(T)
	Hose Stem
	BSH 20
	BSH 30
	BSH 40

	MODEL(T)
	Thread(R)
	BSM 20
	BSM 30
	BSM 40


	MODEL(T)
	Thread(Rc)
	BSF 20
	BSF 30
	BSF 40


	MODEL(T)
	Hose Stem
	BPH 20
	BPH 30
	BPH 40


	MODEL(T)
	Thread(R)
	BPM 20
	BPM 30
	BPM 40


	MODEL(T)
	Thread(Rc)
	BPF 20
	BPF 30
	BPF 40


Mold Coupler (BSBM)


	MODEL(T)
	Hose Stem
	KSH 20
	KSH 30A
	KSH 30

	MODEL(T)
	Thread(R)
	KSM 10
	KSM 20
	KSM 30


	MODEL(T)
	Thread(Rc)
	KSF 20
	KSF 30


	MODEL(T)
	Hose Stem
	KPH 20
	KPH 30A
	KPH 30


	MODEL(T)
	Thread(R)
	KPM 10
	KPM 20
	KPM 30

	MODEL(T)
	Thread(Rc)
	KPF 10
	KPF 20
	KPF 30

Line Coupler

	MODEL(T)
	Thread(Rc 1/4)
	LC 2A

	MODEL(T)
	Thread(Rc 1/4)
	LC 3A

	MODEL(T)
	Thread(Rc 1/4)
	LC 03

# SP Couplers

Applications

- Coupler used for piping and steam, oil, medical and air devices.

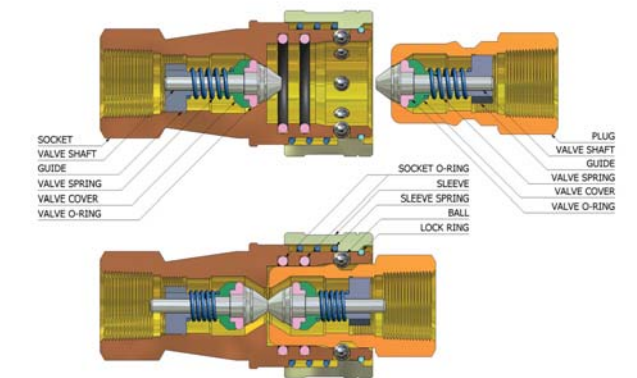
Features

- Easy to handle fluids and widely used for vacuum states with 10 mmHg of vacuum at release.
- The product has a built-in switching valve at the socket and plug, and is highly airtight and durable in comparison with existing couplers for regular and high pressure.
- Very safe due to a two-way switching type coupler.

Specifications

- Fluid type: Air, Water, Gasoline, Oil, Steam
- Material: Brass
- Working pressure: 0-70kgf/cm<sup>2</sup> (7000Kpa)
- Working temperature: -20 ~ 80°C

Structural Diagram



Compatibility

Connection is impossible if the sizes are different.

Installation Direction

Air can flow either to the plug or to socket according to the coupler installation direction

Minimum cross section (mm<sup>2</sup>)

Name	01 SP	02 SP	03 SP	04 SP	06 SP	08 SP	Note
Minimum cross section	10	25	43	90	180	305	HNBR

Product Code System

## SP 01 S

① SI Coupler	② Thread Size	③ Coupling Form																											
	<table border="1"> <tr> <th>SIZE</th> <th>S</th> <th>P</th> </tr> <tr> <td>01</td> <td>Rc 1/8</td> <td>Rc 1/8</td> </tr> <tr> <td>02</td> <td>Rc 1/4</td> <td>Rc 1/4</td> </tr> <tr> <td>03</td> <td>Rc 3/8</td> <td>Rc 3/8</td> </tr> <tr> <td>04</td> <td>Rc 1/2</td> <td>Rc 1/2</td> </tr> <tr> <td>06</td> <td>Rc 3/4</td> <td>Rc 3/4</td> </tr> <tr> <td>08</td> <td>Rc 1</td> <td>Rc 1</td> </tr> </table>	SIZE	S	P	01	Rc 1/8	Rc 1/8	02	Rc 1/4	Rc 1/4	03	Rc 3/8	Rc 3/8	04	Rc 1/2	Rc 1/2	06	Rc 3/4	Rc 3/4	08	Rc 1	Rc 1	<table border="1"> <tr> <th>CODE</th> <th>TYPE</th> </tr> <tr> <td>S</td> <td>Socket</td> </tr> <tr> <td>P</td> <td>Plug</td> </tr> </table>	CODE	TYPE	S	Socket	P	Plug
SIZE	S	P																											
01	Rc 1/8	Rc 1/8																											
02	Rc 1/4	Rc 1/4																											
03	Rc 3/8	Rc 3/8																											
04	Rc 1/2	Rc 1/2																											
06	Rc 3/4	Rc 3/4																											
08	Rc 1	Rc 1																											
CODE	TYPE																												
S	Socket																												
P	Plug																												



MODEL(T)
Thread(Rc)
SP 01S
SP 02S
SP 03S
SP 04S
SP 06S
SP 08S



MODEL(T)
Thread(Rc)
SP 01P
SP 02P
SP 03P
SP 04P
SP 06P
SP 08P

# Two-Touch Fittings BSBM



## Applications

- Screw joining fitting with large maintenance power and easy release and connection in limited piping spaces.
- Convenient to use in place with a lot of impact and vibration.

## Features

- Attached insert allows tolerance to pressure and vibration.
- Two-touch type fitting fixes the tube more firmly.
- Efficient for piping due to coating at the screw section.

## Specifications

- Fluid type : Air, Oil, Water
- Working pressure : 0~150PSI / 0~9.9Kgf/cm<sup>2</sup> (0~990KPa).
- Negative pressure : -750mmHg(-750 Torr)
- Working temperature
  - Air: -40°C ~ +80°C
  - Water : 0°C ~ +70°C
  - Oil: -40°C ~ +80°C

## Product Code System

### METRIC - BSPT(R)

**CC 6×4-01**

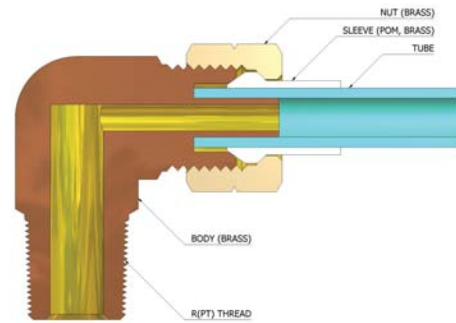
Two Touch Fitting BSBM		Tube Dia		Thread Size	
CODE	Q.D	LD	R(P)T	THREAD	SIZE
4×2	φ4	φ2	01	R1/8	
4×2.5	φ4	φ2.5	02	R1/4	
6×4	φ6	φ4	03	R3/8	
8×5	φ8	φ5	04	R1/2	
8×6	φ8	φ6			
10×6.5	φ10	φ6.5			
10×8	φ10	φ8			
12×8	φ12	φ8			
12×9	φ12	φ9			
16×12	φ16	φ12			
16×13	φ16	φ13			

### INCH - BSPT(R)

**CC 1/4-01**

Two Touch Fitting BSBM		Tube Dia (Nylon Tube)		Thread Size	
CODE	Q.D	LD	R(P)T	THREAD	SIZE
1/8	φ3.18	φ2.0	01	R1/8	
3/16	φ4.76	φ3.0	02	R1/4	
1/4	φ6.35	φ4.57	03	R3/8	
5/16	φ8.0	φ5.0	04	R1/2	
3/8	φ9.53	φ6.99			
1/2	φ12.7	φ9.56			

## Structural Diagram



# Two-Touch Fittings BSBM

## CL



MODEL(φD-T)				
Tube(Metric)-Thread(R)			Tube(Inch)-Thread(R)	
CL 4×2-01	CL 8×6-02	CL 12×8-04	CL 3/16 - 01	CL 3/8 - 01
CL 4×2-02	CL 8×6-03	CL 12×9-02	CL 3/16 - 02	CL 3/8 - 02
CL 4×2.5-01	CL 10×6.5-02	CL 12×9-03	CL 1/4 - 01	CL 3/8 - 03
CL 6×4-01	CL 10×6.5-03	CL 12×9-04	CL 1/4 - 02	CL 3/8 - 04
CL 6×4-02	CL 10×6.5-04	CL 16×12-03	CL 1/4 - 03	CL 1/2 - 02
CL 6×4-03	CL 10×8-02	CL 16×12-04	CL 5/16 - 01	CL 1/2 - 03
CL 8×5-01	CL 10×8-03	CL 16×13-03	CL 5/16 - 02	CL 1/2 - 04
CL 8×5-02	CL 10×8-04	CL 16×13-04	CL 5/16 - 03	
CL 8×5-03	CL 12×8-02			
CL 8×6-01	CL 12×8-03			

## CL



## CT



MODEL(φD-T)	
Tube(Metric)-Thread(R)	
CT 4×2-01	CT 10×6.5-03
CT 6×4-01	CT 10×8-02
CT 6×4-02	CT 10×8-03
CT 6×4-03	CT 10×8-04
CT 8×5-01	CT 12×8-02
CT 8×5-02	CT 12×8-03
CT 8×5-03	CT 12×8-04
CT 8×6-01	CT 12×9-02
CT 8×6-02	CT 12×9-03
CT 8×6-03	CT 12×9-04
CT 10×6.5-02	

## CUC



MODEL(φD)	
Tube(Metric)	Tube(Inch)
CUC 4×2	CUC 1/8
CUC 6×4	CUC 3/16
CUC 8×5	CUC 1/4
CUC 8×6	CUC 5/16
CUC 10×6.5	CUC 3/8
CUC 10×8	CUC 1/2
CUC 12×8	
CUC 12×9	

## CUC



## CUL



MODEL(φD)	
Tube(Metric)	
CUL 4×2	
CUL 6×4	
CUL 8×5	
CUL 8×6	
CUL 10×6.5	
CUL 10×8	
CUL 12×8	
CUL 12×9	

## CUT



MODEL(φD)	
Tube(Metric)	Tube(Inch)
CUT 4×2	CUT 1/8
CUT 6×4	CUT 3/16
CUT 8×5	CUT 1/4
CUT 8×6	CUT 5/16
CUT 10×6.5	CUT 3/8
CUT 10×8	CUT 1/2
CUT 12×8	
CUT 12×9	

## CUT



## CSM



MODEL(φD)	
Tube(Metric)	
CSM 04	
CSM 06	
CSM 08	
CSM 10	
CSM 12	
CSM 16	

## CSN



MODEL(φD)	
Tube(Metric)	Tube(Inch)
CSN 04	CSN 3/16
CSN 06	CSN 1/4
CSN 08	CSN 5/16
CSN 10	CSN 3/8
CSN 12	CSN 1/2

## CSN



## CC



MODEL(φD-T)				
Tube(Metric)-Thread(R)			Tube(Inch)-Thread(R)	
CC 4×2-01	CC 8×6-01	CC 10×8-04	CC 3/16 - 01	CC 3/8 - 01
CC 4×2-02	CC 8×6-02	CC 12×8-02	CC 3/16 - 02	CC 3/8 - 02
CC 6×4-01	CC 8×6-03	CC 12×8-03	CC 1/4 - 01	CC 3/8 - 03
CC 6×4-02	CC 10×6.5-02	CC 12×8-04	CC 1/4 - 02	CC 3/8 - 04
CC 6×4-03	CC 10×6.5-03	CC 12×9-02	CC 1/4 - 03	CC 1/2 - 02
CC 8×5-01	CC 10×6.5-04	CC 12×9-03	CC 5/16 - 01	CC 1/2 - 03
CC 8×5-02	CC 10×8-02	CC 12×9-04	CC 5/16 - 02	CC 1/2 - 04
CC 8×5-03	CC 10×8-03		CC 5/16 - 03	

## CC



## NUT



MODEL(φD)	
Tube(Metric)	Tube(Inch)
NUT 04	NUT 3/16
NUT 06	NUT 1/4
NUT 08	NUT 5/16
NUT 10	NUT 3/8
NUT 12	NUT 1/2

## NUT

