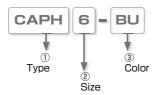




- Change Release-Ring Color by Attaching the Cap.
- Change Release-Ring Color in Concentrated Multiple Piping.
- Color cap can fit on push-in fittings with release ring placed next to next such as Union Y type (PY).
- Newly Added Color Cap with Lock Function for Tube Fitting Mini Type.
 - Lock Function Prevents Tube Escape.

■ Model Designation (Example)

Model Designation of Color cap



1) Type

Code	CAPH	CAPL
Type.	Color Cap	Color Lock Cap

² Size

			Standa	rd type			_
Code	4	6	8	10	12	16	•
Size (mm)	ø4	ø6	ø8	ø10	ø12	ø16	
Inch size	ø5/32	ø3/16, ø1/4	ø5/16	ø3/8	ø1/2	ø5/8	

Standard type: Release-ring shape

•	ľ

	Mini type				
	Ov	val	Round		
Code	4M	6M	4MQ	6MQ	
Size (mm)	ø4	ø6	ø4	ø6	
Inch size	ø1/8, ø5/32	ø1/4	ø1/8, ø5/32	_	

Mini type: Release-ring shape (Oval)

* Only CAPL (Color Lock Cap) is available for Mini type with Round release-ring

③ Color

Code	В	R	0	YB	Υ	G	BU	СВ	GR	W
Color	Black	Red	Orange	Ocher	Yellow	Green	Blue	Sky blue	Gray	White

■ Type, Ring shape, Size Chart

Тур	е			Standard						Mini			
Rin	g shape			Round						Oval Round		und	
Siz	e code		4	6	8	10	12	16	4M	6M	4MQ	6MQ	
App	olicable	mm	ø4	ø6	ø8	ø10	ø12	ø16	ø4	ø6	ø4	ø6	
Tub	oe O.D.	Inch	ø5/32	ø3/16, ø1/4	ø5/16	ø3/8	ø1/2	ø5/8	ø1/8, ø5/32	ø1/4	ø1/8, ø5/32	_	
ဂ္ဂ	CAP	H	0	0	0	0	0	0	0	0	-	_	
Code	CAF	ř	-	-	-	ı	ı	ı	0	0	0	0	

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Mini Series

PP Series

Anti-spetter & Brass Series

Before using PISCO products, be sure to read "Safety Instructions" and "Common Safety Instructions for Products Listed in This Catalog" on page 23 to 28 and "Common Safety Instructions for Fittings" on page 33 to 34.

Caution

- 1. Since Color Cap and Color Lock Cap are very small, be careful not to lose or drop it into facilities when attaching or detaching them.
- Color Lock Cap has the front and the back. Make sure that PISCO logo comes the top side. Oval shape cap is produced for the oval shape release-ring. Make sure the direction of attachment.
- 3. Minimum order quantity of Color Cap is from 1 set (10pcs/set).
- 4. CAPH cap with round shape is not available for Mini-type.
- 5. Do not press the corners on the latches (circled positions in the drawing) when disconnecting tube with a CAPH cap on.



- 6. Color cap can not be attached to Tube Fitting SUS316 Series, Tube Fitting Anti-Spatter Series, Tube Fitting Brass Series, Tube Fitting Chemical Series, Speed Controller Chemical Series, Speed Controller Anti-Spatter Series, Speed Controller Brass Series, Needle Valve SUS316 Series and Needle Valve Brass Series.
- 7. Material of color cap is POM.

■ How to attach Color Cap |

- 1. How to attach Color Cap
 - Color Cap attachment
 To attach, put it on the release-ring.



2. How to attach Color Lock Cap.

Color Lock Cap attachment
 To attach, slide it over the release-ring.



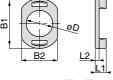
CAPH CAP Color Cap

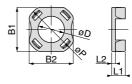












CAPH M-

CAPH .-

Unit: mm

Model code	øD	B1	B2	øΡ	L1	L2	Weight (g)	CAD file name
CAPH4M-	5	11.2	7.5	-	2.9	1	0.1	CAPH4M
CAPH6M-□	7	13.2	9.5	-	2.9	1	0.2	CAPH6M
CAPH4-□	5	9.8	9.6	11.5	3.3	1	0.1	CAPH4
CAPH6-□	7	11.7	11.7	13.4	3.6	1	0.2	CAPH6
CAPH8-□	9	13.7	13.6	15.4	3.9	1	0.2	CAPH8
CAPH10-	11	16.7	16.7	18.4	4.1	1	0.3	CAPH10
CAPH12-	13	19.7	19.7	21.4	4.3	1	0.4	CAPH12
CAPH16-□	17	23	23	24.2	3.8	0.7	0.3	CAPH16

^{※ ☐} in Model code / Replaced with Color code

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Mini Series

Anti-spatter & Brass Series

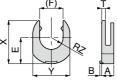
CAPL CAPL Color Cap with lock function

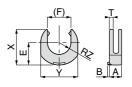




RoHS compliant







CAPL□M-□

CAPL MQ-

Unit: mm

Model code	А	В	Т	Е	Х	Y	RZ	(F)	Weight (g)	CAD ファイル名
CAPL4M-□	2.9	0.5	1	5.9	10	7.8	2.1	4.2	0.1	CAPL4M
CAPL4MQ-	2.9	0.5	1	4.9	8	7.8	2.1	4.2	0.1	CAPL4MQ
CAPL6M-□	3.2	0.5	1	6.9	11.4	9.8	3.1	6.2	0.2	CAPL6M
CAPL6MQ-□	3.2	0.5	1	5.9	9.4	9.8	3.1	6.2	0.2	CAPL6MQ

^{※ ☐} in Model code / Replaced with Color code

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···General rules and safety requirements for system and their components.

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

This Safety instructions are 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 case death or serious personal injury.

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

↑ Warning I

- 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 malfunction.
- 2. The pneumatic equipments shall be handled by a person having enough knowledge and experiences.
 - 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.

Warranty

- 1. When the product produces a trouble, which is caused by our responsibility, we will carry out either one of the following measures immediately.
 - ① Free-of-charge replacement of same product
 - 2 Free-of-charge repair of the product at our factory

Disclaimer

When a cause of the trouble/malfunction applies to any of the following items, it is excluded from the coverage of the above warranty.

- ①. A case by a natural disaster, a fire except our responsibility, the act by the third person/party, the intention or fault of the customer.
- ②. A case when a product is used out of the specific range or in a method listed in the product catalog or the instruction manual.
- ③. A case by the remodeling of the product or by a change of structure, performance, or specifications which PISCO is not involved in.
- ④. A case by the event that is unpredictable by the evaluations and the measures at the time on or before the initial delivery.
- ⑤. A case caused by the phenomenon that is able to be evaded if your machine or equipment has functions or structures that are comprised in a common sense when this product is incorporated in your machine or equipment.

Additionally, the above warranty is limited simply to the product itself. The damage induced by the trouble of the product will not be compensated.

⚠ Common Safety Instructions for Products Listed in This Catalog

PISCO products are designed and manufactured for use in general industrial machines.

- 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.

- 1. Do not use PISCO products under the following conditions.
 - ① Beyond the specifications or conditions stated in the catalog, or the instructions.
 - ② Use at outdoors.
 - ③ Excessive vibrations and impacts.
 - ④ Exposure / adhere to corrosive gas, flammable gas, chemicals, seawater, water and vapor.
 - * Some products can be used under the condition above(4). Refer to the details of specifications and conditions of each product.
- 2. Do not disassemble or modify PISCO products, which affect the performance, function, and basic structure of the product.
- Do not touch the release-ring of a 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.
- 4. Frequent switchover of compressed air may generate heat, and there is a risk of causing burn injury.
- 5. Avoid any load on PISCO products, such as, a tensile strength, twisting and bending.
- 6. 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.
- 7. 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 heat medium oil. Other PISCO products can be damaged by heat and hydrolysis under the condition above.
- 8. 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.

- 9. Use only Fittings with a characteristic of spatter-proof such as Antispatter or Brass series in a place where flame and weld spatter is produced. There is a risk of causing fire by sparks.
- 10. 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. Follow the instructions below in order to ensure the 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 the 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.
- 11. Take safety measures such as providing a protection cover if there is a risk of causing damages or fire on machine / facilities by a fluid leakage.

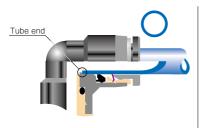
↑ Caution ■

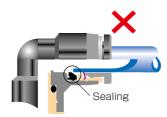
- 1. Remove dusts or drain before piping. They may get into the peripheral machine / facilities and cause malfunction
- 2. When inserting an ultra-soft tube into a push-in fitting, make sure to place an Insert Ring into the tube edge. There is a risk of causing the escape of the tube and a fluid leakage 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.
- 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 and tube hardness are within the limits of Table 1.
 - Table 1. Tube O.D. Tolerance

mm size	Nylon tube (SHORE D63)	Polyurethane tube (SHORE A98)	inch size	Nylon tube (SHORE D63)	Polyurethane tube (SHORE A98)
Ø1.8mm	_	± 0.05mm	Ø1/8	\pm 0.1mm	\pm 0.15mm
Ø2mm	_	± 0.05mm	Ø5/32	± 0.1mm	\pm 0.15mm
Ø3mm	_	± 0.15mm	Ø3/16	\pm 0.1mm	\pm 0.15mm
Ø4mm	± 0.1mm	± 0.15mm	Ø1/4	± 0.1mm	\pm 0.15mm
Ø6mm	± 0.1mm	± 0.15mm	Ø5/16	\pm 0.1mm	\pm 0.15mm
Ø8mm	± 0.1mm	± 0.15mm	Ø3/8	± 0.1mm	± 0.15mm
Ø10mm	± 0.1mm	± 0.15mm	Ø1/2	\pm 0.1mm	\pm 0.15mm
Ø12mm	± 0.1mm	± 0.15mm	Ø5/8	± 0.1mm	± 0.15mm
Ø16mm	± 0.1mm	± 0.15mm			

6. Instructions for Tube Insertion

- ① Make sure that the cut end surface of the tube is at a right angle without a scratch on the tube surface or deformations.
- When inserting a tube, the tube needs to be inserted fully into the pushin 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.





Tube is not fully inserted up to tube end.

- 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 deep enough to pull out the tube toward oneself. By insufficient pushing of the releasering, 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 tightening torque. Do not exceed these limits to tighten a thread. Excessive tightening may break the thread part or deform the gasket to 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: Tightening torque / Sealock color / Gasket materials

	0				
Thread type	Thread size	Tightening torque	Sealock color	Gasket material	
	$M3 \times 0.5$	0.7N·m		CDCC NDD	
	$M5 \times 0.8$	1 ~ 1.5N·m		SPCC+NBR SUS304+NBR	
	$M6 \times 1$	2 ~ 2.7N·m		300304+11011	
Metric thread	$M3 \times 0.5$	0.7N·m	_		
	$M5 \times 0.8$	1 ~ 1.5N·m		POM	
	$M6 \times 0.75$	0.8 ~ 1N·m		FOIVI	
	$M8 \times 0.75$	1 ~ 2N·m			
	R1/8	4.5 ~ 6.5N·m			
Tanar pina thread	R1/4	7 ~ 9N·m	\A/bita		
Taper pipe thread	R3/8	12.5 ~ 14.5N·m	White		
	R1/2	20 ~ 22N·m			
Unified thread	No.10-32UNF	1 ~ 1.5N·m		SPCC+NBR、SUS304+NBR	
	1/16-27NPT	4.5 ~ 6.5N·m			
National Pipe	1/8-27NPT	4.5 ~ 6.5N·m			
Thread Taper (American	1/4-18NPT	7 ~ 9N·m	White	_	
standard)	3/8-18NPT	12.5 ~ 14.5N·m			
2.5744.47	1/2-14NPT	20 ~ 22N·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 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 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.
- 11. Instructions for handling a fitting
 - ① Impact caused by dropping or the like may lead to damage to the product and a fluid leakage.



⚠ Common Safety Instructions for Fittings

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

1. Use PISCO products within the range of the specifications for each series. Consult with PISCO for use outside the specifications.

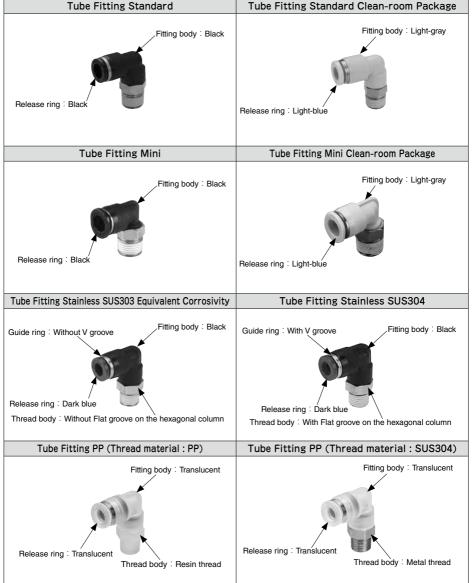
 A bulkhead nut of Bulkhead Union (PM), Bulkhead Union P (PMP), and Bulkhead Union Elbow (PML) should be tightened within the specified tightening torque range.

Bulkhead nut tightening torqui

Series	Tube size	Tightening torque			
Series	Tube Size	Bulkhead Union (PM)	Bulkhead Union P (PMP), Bulkhead Union Elbow (PML)		
	4	12.0~14.0N·m	0.4~0.6N·m		
	6	18.0 ~ 21.0N·m	0.9 ~ 1.1N·m		
Tube Fitting	8	18.0 ~ 21.0N·m	1.1 ~ 1.3N·m		
Tube Filling	10	19.0 ~ 21.0N·m	2.3 ~ 2.7N·m		
	12	19.0 ~ 21.0N·m	2.7 ~ 3.3N·m		
	16	42.0 ~ 54.0N·m	_		
	1.8	0.8~1.0N·m			
	2	0.8 ∼ 1.0N·m			
Tube Fitting Mini	3	2.5 ~ 3.5N·m] –		
	4	5.0~7.0N·m			
	6	12.0~14.0N·m			

- 2. If an object between the bulkhead nut and fitting body is deformable or has oil on its surface, the nut may loosen after tightening.
- 3. PISCO pneumatic fittings are designed for use with tube inserted. Air supply without tube insertion such as air flushing may cause an elastic sleeve to fly out of the fitting.









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

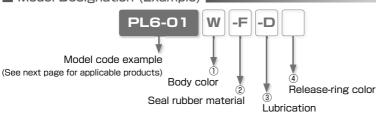
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Special Options

- 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.





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	-HN	No code
Material	FKM	EPDM (Oil-free)	HNBR	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	-P	No code
Option	Oil-free	Non-purple	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.
- 💥 3. Non-purple option is not available with FKM option. No sealock coat is provided on the thread.

4 Release-ring color

Code	-RR	No code
Color	Red	Standard color

- *. 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

Standard specification Special specification											Ivaliable		
		otaniuc I	iiu spei		ו ול ו				Specia (2)	Speci			
0	Body Color and						Dady solar	Coole					(4)
Series	Packaging /	Body	Release-			Thread	Body color		ubber m		Lubrio		Release-ring color
	Cleaning option		ring color				Light-gray	FKM	EPDM	HNBR	Oil-free	Non-Purple	Red
							W*1	-F*2	-E*3	-HN	-D*4	-P*2	-RR
Tube Fitting Standard Series	Standard	Black	Black		Turbin		×	○*5			0		0
	Light-gray	Light-gray	Light-gray		oil	With	Std. option						0
	Clean-room Pkg	0 0 7	Light-blue	NBR	Fluorochemical	sealock	×	0	O*6	0	O*6		
	Light-gray + Clean-room pkg	Light-gray	Light-gray		grease	coat	Std. option		0		0	×	×
	Clean washing + Clean-room pkg	Light-gray	Light-blue		Oil-free		×	×	○*6		Std. option		
Tube Fitting Mini Series	Standard	Black	Black		Turbin	With	×	O *5,*10	O*10		0		_
	Light-gray	Light-gray	Light-gray	NBR	oil	sealock	Std. option		"	O*10			0
	Clean-room Pkg	Light-gray	Light-blue	I I I	Fluorochemical	coat	×	○*10	<u></u> *6,*10	~	○*6	×	
	Light-gray + Clean-room pkg	Light-gray	Light-gray		grease		Std. option		○*10		0		×
Tube Fitting Stainless	_	Black	Dark-	FKM	Turbin	With sealock	×	Std.	O*7	0	O*7	\times	_
SUS304 Series		Diack	blue	1 IXIVI	oil	coat	^	option					
Tube Fitting Stainless SUS303	Standard	Black	Dark-blue	HNBR	Turbin oil	With sealock	0	0	O*7	Std.	O*7	0	0
Equiv. corrosivity	Clean washing + Clean-room pkg	Black	Dark-blue	THINDIT	Oil-free	coat	×	×		option	Std. option	×	
Tube Fitting EG Series	_	Black	Black	NBR	Turbin oil	With sealock coat	×	0	○*8	0	○*8	0	
				HNBR	Turbin	With		_		Std. option			
Tube Fitting Brass Series	_	_	-	FKM	oil	sealock	×	Std. option	×	_	0		×
				NBR	Oii	coat		_		_			
Tube Fitting	_	_	Black	NBR	Turbin	With sealock	×	O*5		0	0	0	
Long Series			Diack	NDN	oil	coat	^	0 '					
Main Block	Standard	Black	Black	NBR	Turbin	With sealock	×	○*5		0		×	0
	Light-gray	Light-gray	Light-gray	INDI	oil	coat	Std. option	0				^	0
Connector	_	Black	Black	NBR	Turbin oil	_	×	○*5	0	0	0	×	0
Speed Controller Series	Standard	Black	Black		Turbin	1450	×	O*13	O*10				
	Light-gray	Light-gray	Light-gray	NBR	oil	With	Std. option	0	0	<u>*10,*11</u>			0
	Clean-room Pkg	Light-gray	Light-blue	NDK	Fluorochemical	coat	×	*10,*11	★6,*10	JO,	_	×	
	Light-gray + Clean-room pkg	Light-gray	Light-gray		grease	coat	Std. option	*12	O*10	1		^	×
Speed Controller		Disale	Dark-	HNBR	Turbin	With sealock	0	() *11,*12	O*7	Std.		0	
SUS303 Equiv. corrosivity	_	Black	blue	HINDK	oil	coat		0,	0'	option	_		0
Needle Valve Series	Standard	Black	Black		Turbin	With	×	O*5,*12	0			0	
	Light-gray	Light-gray	Light-gray	NBR	oil	sealock	Std. option			0	_		0
	Clean-room Pkg	Light-gray	Light-blue	INDI	Fluorochemical	coat	×	O*12	O*6			×	
	Light-gray + Clean-room pkg	Light-gray	Light-gray		grease	Coal	Std. option		0			^	×
Fixed orifice joint Series	_	Black	Black	NBR	Turbin oil	With sealock coat	0	0	0	0	0	0	○*9
Regulator	_	Black	Black	NBR	Turbin oil	With sealock coat	×	×	×	×	×	0	0
Check Valve (metal body)	_	_	Black	NBR	Turbin	With sealock	×		×	×	_		0
Check Valve (resin body)		Light-gray	Light-gray	INDI	oil	coat	Std. option						
1				HNBR				0	0	Std.			
Low cracking pressure Check	_	Light-	Light-	(Elastic sleeve)	Turbin		Std.	(Elastic sleeve)	(Elastic sleeve)	option	0	×	0
Valve		gray	gray	FKM	oil		option	Std.	×	×		^	0
• a. • o				(Poppet valve packing)				option	(Poppet valve packing)	(Poppet value packing)			
*1 When light-gray (-W) is selected for hody color the release- *5 Release-ring color: Brown													

- *1. When light-gray (-W) is selected for body color, the releasering color of metric (mm) tube dia. is light-gray even for combination with any other options, except when Red color (-RR) is selected.
- *2. Non-purple (-P) option is not available with seal rubber material FKM. No Sealock coating for Non-purple option.
- *3. For EPDM (-E) specification of sealing material, the product is assembled as oil-free specification. The color of release-ring of metric (mm) tube size is yellow, except the combination with light-gray specification, which has lightgray release-ring. EPDM (-E) specification is not available for the products with M3 or M6 threads or inch tube dia.
- *4. Release-ring color: Yellow. When with light-gray specification, the release-ring color is light-gray.

- *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 color: Red is not available with body color Light-gray.
- *10. Not available for Tube dia. \varnothing 1.8mm and \varnothing 2mm.
- *11. Not available for Low cracking pressure type.
- *12. Not available for the products with M3 thread.
- *13. See *5, *10, *11 and *12.
- *14. Applicable types: JSC, JSS and JSM for Standard Series, JSC-H for High Flow Series, JSC-L and JSS-L for Low Flow Series, JKC and JKL for Constant Flow Series.

Reference chart of Appearance Color Combination with Special Options (Fitting with Metal body)

nelelelice chart o			_		er material	Lubrication	Release-ring color
Series							-RR
Selles					EPDM		
	_	(mm size)				Oil-filee	and the state of t
		(inch size)					
Tube Fitting Standard Series	Light-gray	(mm size)	-			8	
Tube Fitting Mini Series	Clean-room Pkg	(mm size)	-			•	-
		(inch size)					
	Light-gray + Clean-room pkg	(mm size)				-	
Tube Fitting	Clean washing	(mm size)	-			Std. option	
Standard Series	Clean-room pkg	(inch size)				Std. option	
Tube Fitting Stainless SUS304 series	_	(mm size)		Std. option			
	_	(mm size)					
Tube Fitting Stainless SUS303 Equiv. corrosivity	Light-gray	(mm size)				-	
•	Clean washing + Clean-room pkg	(mm size)				Std. option	

Reference chart of Appearance Color Combination with Special Options (Fitting with Resin body)

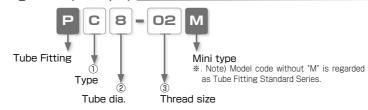
	Resin color			Seal rubbe	er material	Lubrication	Lubrication Release-ring color		
Series						-D	-RR		
				FKM	EPDM	Oil-free	Red		
	_	(mm size)					0		
		(inch size)							
Tube Fitting	Light-gray	(mm size)	OF E	OF C	OF E	OF E	0		
Standard Series Tube Fitting Mini Series	Light-gray	(inch size)	E	E	F	E			
Willin Genes	Clean reem Plus	(mm size)	OF E	OF E	IF &	OF E	0		
	Clean-room Pkg	(inch size)	E	E	B	E			
	Light-gray + Clean-room pkg	(mm size)	The second	OF G	OF CO	The state of the s			
Tube Fitting	Clean washing	(mm size)	OF E		IF &	Std. option	0		
Standard Series	Clean-room pkg	(inch size)	F		E	Std. option			
Tube Fitting Stainless SUS304 series	-	(mm size)		Std. option					
	_	(mm size)					0		
Tube Fitting Stainless SUS303 Equiv. corrosivity	Light-gray	(mm size)	OF G	OF STREET	of g	OF COMMENT	1		
	Clean washing + Clean-room pkg	(mm size)				Std. option	0)		

Reference chart of Appearance Color Combination with Special Options (Speed controller and Needle Valve)

Tioloronoo onart of Appoo						
						Release-ring color
Series						-RR
	Option			FKM	EPDM	Red
	_	(mm size)			1	•
	_	(inch size)	0	0		
	Light-gray	(mm size)	0)	0)	1	
Speed Controller Series Needle Valve Series		(inch size)			A	
	Clean-room Pkg -	(mm size)				
		(inch size)				
	Light-gray + Clean-room pkg	(mm size)	0	0	12	

Space-Saving Options

- Characteristics
 - Suitable for Installing in Limited Spaces.
- Model Designation (Example)



① Type

Code	Туре	Code	Туре	Code	Туре
L	Elbow	В	Branch Tee	D	Run Tee

² Tube dia.

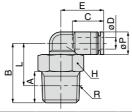
Code	8	10
Size (mm)	Ø8	Ø10

3 Thread size

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







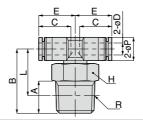
Unit: mm

Model code	Tube O.D. øD	R			Tube end C		Hex. H		øΡ	Weight (g)
PL8-01M		R1/8	8	22.5		18.5	12			11.9
PL8-02M	8	R1/4	11	25.5	18.1	19.5	14 21.9	15	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	14 17 24.4	18	20.9
PL10-03M		R3/8	12	28	20.2	21.7	17			28.8

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







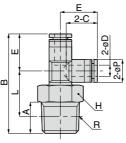
Unit: mm

Model code	Tube O.D. øD	R			Tube end C		Hex. H		øΡ	Weight (g)
PB8-01M	8	R1/8	8	22.5		18.5	12			12.8
PB8-02M		R1/4	11	25.5	18.1	19.5	14 21.9	15	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	18	22.3	
PB10-03M		R3/8	12	28	20.2	21.7	17	24.4	10	30.4

 $\ensuremath{\,\%\,}$. "L" is a reference value for height dimension after tightening thread.







Unit: mm

Model code	Tube O.D. øD	R	А	В	Tube end C	L	Hex. H	Е	øΡ	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

 $\ensuremath{\,\times\,}$.L" is a reference value for height dimension after tightening thread.