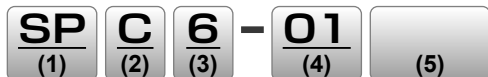


⚠ Safety instructions for this product

Safety instructions, Common safety instructions for each product category and Detailed safety instructions for each product are in the end of this catalog and our website.

Model Designation (Example)



(1) Tube Fitting Stainless SUS303 Equivalent Corrosivity

(2) Type

(3) Tube dia. (øD)

Code	4	6	8	10	12	16
Tube O.D. (mm)	ø4	ø6	ø8	ø10	ø12	ø16

(4) Thread size(R)

Code	Metric thread		Taper pipe male thread			
	M5	M6	01	02	03	04
Male thread size	M5×0.8	M6×1	R1/8	R1/4	R3/8	R1/2

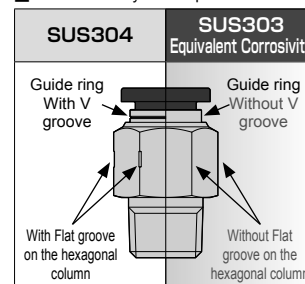
* In case that (4) indicates tube dia., select tube dia. from table (3).

(5) Wash & Packaging spec. (Optional)

Code	No code	-UC
Specifications	No clean wash, Standard pkg.	Clean-wash & Clean-room pkg.

* SPHW, SPHT, SPAW, SPAT is not compatible with clean washing and clean room pkg. spec.

How to identify similar products



Characteristics

Special stainless steel, which corrosive resistance is equivalent to SUS303 stainless steel is used.

This tube fitting serves best where strength is required or in a corrosive atmosphere.

Copper Alloy free.

Seal rubber material is suitable for low level ozone resistance.

HNBR is used for seal rubber material.

● Clean-wash spec. (Optional)

For manufacturing process where particles and oil should be avoided.

The products goes through vacuum ultrasonic cleaning by HFE (hydro fluoro ether) in a clean-room and is packed with deaeration packaging.



Specifications

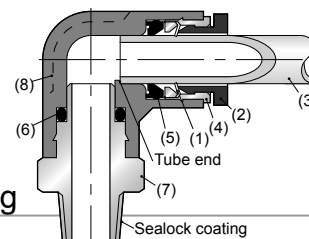
Fluid medium	Air, Water (Conditional*)
Max. operating pressure	1.0 MPa
Max. vacuum	-100 kPa
Operating temp. range	0 to 60°C (no freezing)

⚠ Warning

- * Make sure to follow the instructions below when the fluid medium is water.
- 1. Surge pressure must be controlled lower than max. operating pressure when using water as a fluid medium.
- 2. General tap water in Japan, free from foreign substances or contamination, can be used. Carry out the evaluation under an actual operating condition for using other kind of water.
- 3. Be sure to use Insert Ring (WR) when using water or liquid as a fluid medium.

Sectional drawing

Elbow type: SPL



No.	Parts	Material
(1)	Lock-claws	Stainless steel
(2)	Release-ring	POM
(3)	Tube	Fluororesin (PFA), (FEP) or Polyamide, etc.
(4)	Guide ring	Special stainless steel (Austenite or ferritic)*2
(5)	Elastic sleeve	HNBR
(6)	O-ring	HNBR
(7)	Metallic body	Special stainless steel (Austenite or ferritic) or SUS303.*1,2
(8)	Resin body	PBT

*1. The gasket of Metric thread is PPS.












*2. The corrosive resistance is equivalent to SUS303.


*3. SPHW, SPHT, SPAW, and SPAT use FKM and POM as part of the seal material in contact with the fluid.


*4. SPML uses NBR for nut stops.

Tube Fitting Stainless SUS303 Equivalent Corrosivity

RoHS2 (2011/65/EU+EU2015/863) compliant

Type	Model code SPC ϕ D-R[5]	Type	Model code SPL ϕ D-R[5]	Type	Model code SPB ϕ D-R[5]
Straight SPC 	SPC4-M5[5]	Elbow SPL 	SPL4-M5[5]	Branch Tee SPB 	SPB4-M5[5]
	SPC4-M50[5]*		SPL4-M6[5]		SPB4-M6[5]
	SPC4-M6[5]		SPL4-01[5]		SPB4-01[5]
	SPC4-01[5]		SPL4-02[5]		SPB4-02[5]
	SPC4-02[5]		SPL6-M5[5]		SPB6-M5[5]
	SPC6-M5[5]		SPL6-M6[5]		SPB6-M6[5]
	SPC6-M6[5]		SPL6-01[5]		SPB6-01[5]
	SPC6-01[5]		SPL6-02[5]		SPB6-02[5]
	SPC6-02[5]		SPL6-03[5]		SPB6-03[5]
	SPC6-03[5]		SPL8-01[5]		SPB8-01[5]
	SPC8-01[5]		SPL8-02[5]		SPB8-02[5]
	SPC8-02[5]		SPL8-03[5]		SPB8-03[5]
	SPC8-03[5]		SPL10-01[5]		SPB10-01[5]
	SPC10-01[5]		SPL10-02[5]		SPB10-02[5]
	SPC10-02[5]		SPL10-03[5]		SPB10-03[5]
	SPC10-03[5]		SPL10-04[5]		SPB10-04[5]
	SPC10-04[5]		SPL12-02[5]		SPB12-02[5]
SPC12-02[5]	SPL12-03[5]	SPB12-03[5]			
SPC12-03[5]	SPL12-04[5]	SPB12-04[5]			
SPC12-04[5]	SPL16-03[5]	SPB16-03[5]			
SPC16-03[5]	SPL16-04[5]	SPB16-04[5]			
SPC16-04[5]					
		Type	Model code SPH ϕ D-R[5]	Type	Model code SPD ϕ D-R[5]
Inner Hex. Straight SPOC 	SPOC4-M5[5]	Banjo type SPH 	SPH4-M5[5]	Run Tee SPD 	SPD4-M5[5]
	SPOC4-01[5]		SPH4-01[5]		SPD4-M6[5]
	SPOC6-M5[5]		SPH6-M5[5]		SPD4-01[5]
	SPOC6-01[5]		SPH6-01[5]		SPD4-02[5]
	SPOC6-02[5]		SPH6-02[5]		SPD6-M5[5]
	SPOC8-01[5]		SPH8-01[5]		SPD6-M6[5]
	SPOC8-02[5]		SPH8-02[5]		SPD6-01[5]
	SPOC8-03[5]		SPH8-03[5]		SPD6-02[5]
	SPOC10-01[5]		SPH10-02[5]		SPD6-03[5]
	SPOC10-02[5]		SPH10-03[5]		SPD8-01[5]
	SPOC10-03[5]		SPH12-03[5]		SPD8-02[5]
	SPOC10-04[5]		SPH12-04[5]		SPD8-03[5]
	SPOC12-02[5]				SPD10-01[5]
SPOC12-03[5]	Type	Model code SPV ϕ D[5]	SPD10-02[5]		
SPOC12-04[5]	Union Elbow SPV 	SPV4[5]	SPD10-03[5]		
		SPV6[5]	SPD10-04[5]		
		SPV8[5]	SPD12-02[5]		
		SPV10[5]	SPD12-03[5]		
		SPV12[5]	SPD12-04[5]		
Union Straight SPU 	SPU4[5]	Union Tee SPE 	SPV16[5]	SPD16-03[5]	
	SPU6[5]		Type	Model code SPE ϕ D[5]	SPD16-04[5]
	SPU8[5]		Unequal Union Tee SPEG 	SPE4[5]	SPEG ϕ D ₁ - ϕ D ₂ [5]
	SPU10[5]			SPE6[5]	SPEG6-4[5]
	SPU12[5]			SPE8[5]	SPEG8-6[5]
SPU16[5]	SPE10[5]	SPEG10-8[5]			
	SPE12[5]	SPE16[5]	SPEG12-10[5]		
	SPE16[5]				
Unequal Union Straight SPG 	SPG6-4[5]				
	SPG8-6[5]				
	SPG10-8[5]				
	SPG12-10[5]				
	SPG16-12[5]				

 CAD data is available at PISCO website.

 Packaging specifications
1 pc. /bag



Options

Code	[5] : -UC
Specifications	Clean-wash and Clean-room pkg. (*) (Fill in [5] with "-UC".)

* Rubber material: FKM is not available for Clean-wash spec.



Non-standard options (details ▶ P. 893)

- Body color Optional (Light gray)
- Seal rubber material optional (FKM or EPDM)
- Oil-free
- Copper free spec.
- Release-ring color change (Red)
- ▶ Contact us for the price.



Make to Order Production

Order Production Index

Based on the standard products, "Special specification option" on parts for matching operating environment or "Special appearance option" for matching a color for operating environment can be selected and ordered by just adding prearranged extension code of options.

*PISCO welcomes an inquiry of custom-made product, which is not listed in this catalog.
Please feel free to contact nearest PISCO office.

PISCO flexibly corresponds to non standard products that meet the needs of our customers.



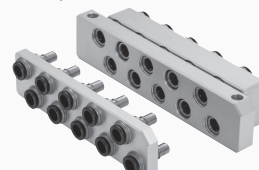
Visit PISCO web site for video about Non-standard products.
<https://www.pisco.co.jp/en/product/special/>



Tube penetration type
Tube Fitting



Tube Fitting unequal
port combinations



Multiple Coupling



Bulk Packaging (Tube Fitting,
Control, Vacuum Pad)

Make to Order Production

G thread spec.



Fittings with mm size tube diameter and parallel pipe thread are available. Contact us for inquiry.



● Applicable model

Fitting Tube Fitting, Tube Fitting Mini

Inch NPT spec.

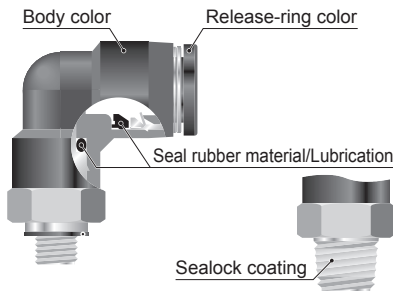


● Applicable model

Fitting	Tube Fitting, Tube Fitting Mini, Die Temperature Control Fitting, Rotary Joint, High Rotary Joint, Connector, Light Coupling
Control	Speed Controller, Speed Controller Large-flow type, Orifice Flow Speed Controller, Throttle (Needle) Valve, Quick Exhaust Valve, Orifice Fitting, Pressure Regulator Push-lock type, Pressure Controller, Check Valve, Pressure Gauge
Valve	Change Valve, Hand Valve, Ball Valve, Mechanical Valve



Special options



- ▶ Color option
Light-gray color option for resin body and release-ring.
- ▶ Seal rubber material option
Seal Rubber Selection: FKM, EPDM or HNBR.
- ▶ Oil-free option
Assembled without intentional use of oil, oil contamination into fluid medium can be prevented.
- ▶ ~~Non-purple option~~
~~Restraining generation of Cu ion or Fe ion from the product.~~
~~With this option, Check Valve and Stop Fitting, etc. do not have marking on the lower parts. Please refer to the piping.~~
- ▶ Release-ring color option
Changeable to Red Color

Non-purple spec. option will no longer be available after March 31, 2025. Please see "Discontinuation notice of Non-purple spec. option" on the last page.

Model Designation (Example)

PL6-01	W	-F	-D	
(1)	(2)	(3)	(4)	(5)

(1) Model code (See the next page for available products.)

(2) Body color (Resin body color)

Code	W	No code
Color	Light gray	Standard

*When light-gray (W) is selected for body color, the metric (mm) size release-ring color is light-gray even for combination with any other options (except when red release-ring is specified). The color of release-ring of inch tube dia. is always white.

(3) Seal rubber material

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

*1. For FKM (-F) specification, the color of metric (mm) size release-ring is brown, while inch tube dia. is white. FKM (-F) specification is not available with non-purple (-P) specification.
*2. For EPDM (-E) specification, the product is assembled as oil-free specification. The color of metric (mm) release-ring is yellow.
*3. EPDM (-E) specification can not be selected for the products with M3 or M6 threads or with inch tube dia.

(4) Lubrication

Code	-D	-P	No code
Option	Oil-free	Non-purple	Standard

*1. The metric (mm) size release-ring color of oil-free (-D) specification is yellow, while inch tube dia. is white.
*2. The product with oil-free (-D) specification is assembled without intentional use of lubrication in standard process. Therefore the problem of reducing airtightness or increasing frictions of rubber parts may be resulted.
*3. ~~Non-purple (-P) specification is available with seal rubber material FKM. The Seal selecting for Non-purple option.~~

Non-purple spec. option will no longer be available after March 31, 2025. Please see "Discontinuation notice of Non-purple spec. option" on the last page.

(5) Release-ring color

Code	-RR	No code
Color	Red	Standard

Reference Chart of Special Options

○: Available, ×: Not available

Product series	Standard specification						Special specification							
	Body color and Packaging/ Cleaning option	Resin body color	Release-ring color	Seal rubber material	Lubrication	Thread sealing	(1)	(2)			(3)		(4)	
							Light gray	FKM	EPDM	HNBR	Oil-free option	Non-purple	Red	
							-W ^{*1}	-F ^{*2}	-E ^{*3}	-HN	-D ^{*4}	-P ^{*2}	-RR	
Tube fitting	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5}	○	○	○	○	○	
	Light gray	Light gray	Light gray				Standard spec.	○	○ ^{*6}	○	○	○		
	Clean-room pkg.	Light gray	Light blue				Fluorine-based grease	×	○	○ ^{*6}	○	○	×	×
	Light gray + Clean-room pkg.	Light gray	Light gray				Oil-free option	Standard spec.	○	○	○	○	×	×
	Clean wash + Clean-room pkg.	Light gray	Light blue					×	×	○ ^{*6}	Standard spec.	○	○	
Tube fitting Mini	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5,*10}	○ ^{*10}	○ ^{*10}	○	○	○	
	Light gray	Light gray	Light gray				Standard spec.	○ ^{*10}	○ ^{*6,*10}	○ ^{*10}	○	○	○	
	Clean-room pkg.	Light gray	Light blue				Fluorine-based grease	×	○ ^{*10}	○ ^{*6,*10}	○ ^{*10}	○	○	×
	Light gray + Clean-room pkg.	Light gray	Light gray				Standard spec.	○	○ ^{*10}	○	○	○	×	
	Standard	Black	Dark blue				FKM	Turbin oil	Sealock coating	×	Standard spec.	○ ^{*7}	○	○ ^{*7}
Tube Fitting Stainless SUS303 equivalent corrosivity	Standard	Black	Dark blue	HNBR	Turbin oil	Sealock coating	○	○	○ ^{*7,*15}	Standard spec.	○ ^{*7}	○	○	
	Clean wash + Clean-room pkg.	Black	Dark blue		Oil-free option	×	×	○	○	Standard spec.	Standard spec.	×	○	
Tube Fitting Anti-static	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○	○ ^{*8}	○	○ ^{*8}	○	△ ^{*17}	
Tube fitting Brass	Standard	—	—	HNBR	Turbin oil	Sealock coating	×	—	×	Standard spec.	○	○	×	
				FKM			Standard spec.	—	○	○	○	○		
Tube fitting Long	Standard	—	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5}	○	○	○	○	○	
Main block	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5}	○	○	△ ^{*17}	×	○	
	Light gray	Light gray	Light gray				Standard spec.	○	○	○	○	○		
Connector	Standard	Black	Black	NBR	Turbin oil	—	×	○ ^{*5}	○	○	○	×	○	
Speed controller ^{*14}	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*13}	○ ^{*10}	○	△ ^{*17}	○	○	
	Light gray	Light gray	Light gray				Standard spec.	○	○ ^{*6,*10}	○ ^{*10,*11}	○	○	○	
	Clean-room pkg.	Light gray	Light blue				Fluorine-based grease	×	○ ^{*10,*11,*12}	○ ^{*10}	○	○	○	×
	Light gray + Clean-room pkg.	Light gray	Light gray				Standard spec.	○	○ ^{*10}	○	○	○	○	
	Standard	Black	Dark blue				HNBR	Turbin oil	Sealock coating	○	○ ^{*11,*12}	○ ^{*7}	Standard spec.	△ ^{*17}
Needle valve	Standard	Black	Black	NBR	Turbin oil	Sealock coating	×	○ ^{*5,*12}	○	○	△ ^{*17}	○	○	
	Light gray	Light gray	Light gray				Standard spec.	○	○ ^{*6}	○	○	○	○	
	Clean-room pkg.	Light gray	Light blue				Fluorine-based grease	×	○ ^{*12}	○	○	○	○	×
	Light gray + Clean-room pkg.	Light gray	Light gray				Standard spec.	○	○	○	○	○	○	
	Standard	Black	Black				NBR	Turbin oil	Sealock coating	○	○	○	○	○
Check valve (Metal type)	Standard	—	Black	NBR	Turbin oil	Sealock coating	×	○	×	×	△ ^{*17}	○	○	
Check valve (Resin type)		Light gray	Light gray				Standard spec.	○	○	○	○	○		
Check Valve for Low Operating Pressure	Standard	Light gray	Light gray	HNBR (Elastic sleeve)	Turbin oil	—	Standard spec.	○ (Elastic sleeve)	○ (Elastic sleeve)	Standard spec.	○	×	○	
				FKM (Valve packing)			Standard spec.	×	×	○	○			

*1. When light-gray (-W) is selected for body color, the release-ring color of metric (mm) tube dia. is light-gray even for combination with any other options, except when Red color (-RR) is selected. The color of release-ring of inch tube dia. is always white.

*2. Non-purple spec. option is not available with seal rubber material FKM.

*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 light-gray 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. ø1.8 mm and ø2 mm.

*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.

*15. Gasket material for Metric thread : PPS

*16. Orifice bore 0.1 mm and 0.2 mm is not available.







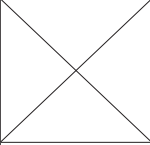
*17. Contact us for inquiry.

Non-purple spec. option will no longer be available after March 31, 2025. Please see "Discontinuation notice of Non-purple spec. option" on the last page.

*Consult PISCO for any inquiry of special-made product, which is not listed in this catalog.

Make to Order Production

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








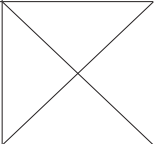







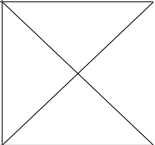







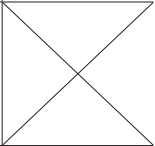



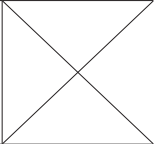



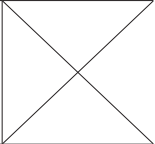
Product series	Resin color or Option	Tube dia. size		Seal rubber material		Lubrication	Release-ring color
				-F	-E	-D	-RR
				FKM	EPDM	Oil-free option	Red
Tube fitting Tube fitting Mini	-	mm size					
		inch size					
	Light gray	mm size					
		inch size					
	Clean-room pkg.	mm size					
		inch size					
	Light gray + Clean-room pkg.	mm size					
Tube fitting	Clean wash + Clean-room pkg.	mm size				Standard specification	
		inch size				Standard specification	
Tube Fitting SUS304	-	mm size		Standard specification			
Tube Fitting Stainless SUS303 equivalent corrosivity	-	mm size					
	Light gray	mm size					
	Clean wash + Clean-room pkg.	mm size				Standard specification	

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

Product series	Resin color or Option	Tube dia. size	Seal rubber material		Lubrication	Release-ring color		
			-F	-E	-D	-RR		
			FKM	EPDM	Oil-free option	Red		
Tube fitting Tube fitting Mini	-	mm size						
		inch size						
	Light gray	mm size						
		inch size						
	Clean-room pkg.	mm size						
		inch size						
	Light gray + Clean-room pkg.	mm size						
	Tube fitting	Clean wash + Clean-room pkg.	mm size				Standard specification	
			inch size				Standard specification	
	Tube Fitting SUS304	-	mm size		Standard specification			
	Tube Fitting Stainless SUS303 equivalent corrosivity	-	mm size					
		Light gray	mm size					
Clean wash + Clean-room pkg.		mm size				Standard specification		

Make to Order Production

Reference Chart of Appearance Color Combination with Special Options (Controllers)

Product series	Resin color or Option	Tube dia. size		Seal rubber material		Release-ring color
				-F	-E	-RR
				FKM	EPDM	Red
Speed controller Throttle (needle) valve	-	mm size				
		inch size				
	Light gray	mm size				
		inch size				
	Clean-room pkg.	mm size				
		inch size				
	Light gray + Clean-room pkg.	mm size				
						

To: PISCO Distributers
 Attn: To Whom It May Concern
 Date: September 2024

Discontinuation notice of Non-purple spec. option

We would like to express our sincere gratitude for your continued patronage. We would like to inform you that the Non-purple spec., which was available as Special specification option, is discontinued, and its manufacturing and sales will be terminated as of the end of March, 2025. Thank you for your understanding.

Details

1. Discontinued option Make-to-order option, Special specification: Non-purple spec.
 Model code (Ex.): PL6-01-**P**
 *-P" at the end of the model code

 Non-purple spec: For the Non-purple spec., fluorine ions and copper ions, which were undesirable in the manufacturing line of cathode ray tube televisions, are suppressed by not applying Sealock (fluorine-based thread sealant) to the products. Thus, Non-purple spec. is equivalent to No-Sealock spec.
2. Reason To update and expand applicable products by reviewing specifications to match the current situation.
3. Discontinuation Date **March 31, 2025**
4. Replacement Make-to-order option, Special specification: No-Sealock spec.
 Model code (Ex.): PL6-01-**NS**
 *-NS" at the end of the model code
 *The list price remains the same.

		Thread sealant (Sealock)	Rubber material (Std. NBR)	Gasket material (Std. NBR)	Lubrication (Std. Turbine oil)	Marking	Applicable products
Discontinued	-P: Non-purple	Not applied	Fluorine materials are not selectable.			Not available	Some models of Tube Fitting
Replacement	-NS: No-Sealock	Not applied	Fluorine materials are selectable			Available	Tube Fitting, Speed Controller, Needle Valve, Check Valve, etc.

Please make inquiries to the following sales office.

Overseas Sales Department
 TEL: +81-265-76-7751 FAX: +81-265-76-3305
 E-mail: intl@pisco.co.jp URL: <https://pisco.co.jp/en/>