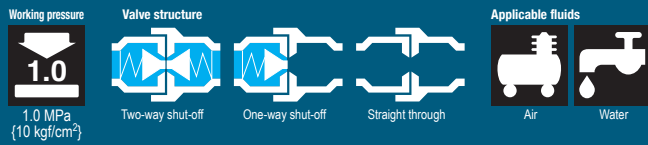


For Low Pressure

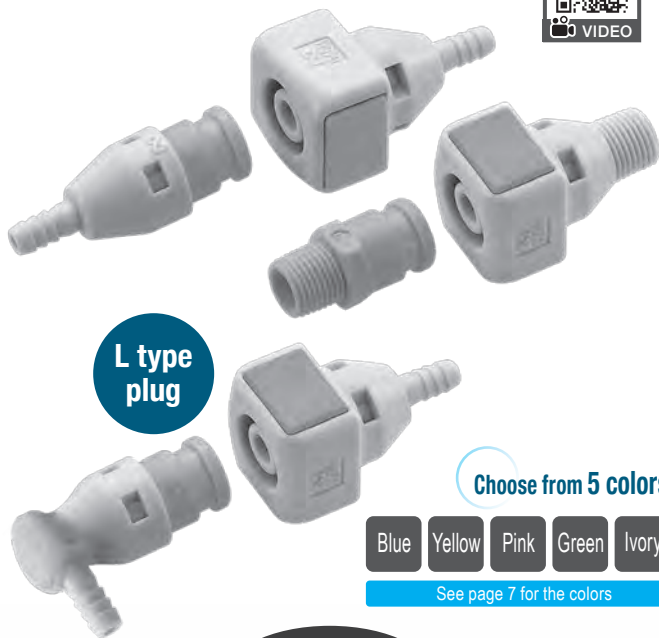
CUBE CUPLA

Small and lightweight coupling for air supply lines.



Both socket and plug have built-in valve types and valveless types. Simple one action for connection or disconnection. Lightweight plastic coupling.

- In all five color variations to prevent piping mistakes.
- Ultra-lightweight, made of polyacetal resin. Compact design for space saving.
- Just push plug into socket for connection. Simply press the button on the socket for disconnection.
- Two-way shut-off type with valve on both sides and straight through type with low pressure loss are available.
- L type plug is suitable for piping in narrow spaces are available.
- Socket and plug cannot be disconnected unless two buttons on the socket are pressed simultaneously.



Push the buttons for quick disconnection

Push button for disconnection

Simple operation to push the buttons on the socket.

Specifications

Body material	Polyacetal resin (POM)			
Size	4 mm and 6 mm ID tube, 1/8"			
Pressure unit	MPa	kgf/cm ²	bar	PSI
Working pressure	1.0	10	10	145
Seal material	Seal material	Mark	Working temperature range	Remarks
Working temperature range *1	Nitrile rubber	NBR	-20°C to +60°C	Standard material

*1: The operable temperature range depends on the operating conditions.

Tightening Torque Range

Nm {kgf·cm}

Size (Thread)	R 1/8
Torque	0.9 to 1.1 {9.2 to 11}

Flow Direction

Fluid flow can be bi-directional when socket and plug are connected.



Interchangeability

Sockets and plugs can be connected regardless of end configurations.

*Do not use in the combination of valved sockets and valveless plugs.

The valve in the socket will not open and the fluid will not flow.

Connection capability

Select the combination of models suitable to your applications

Connection capability		Plug	
Socket	Valve	With	Without
	With	 Two-way shut-off	Not connectable
	Without	 One-way shut-off	 Straight through

Note: When disconnected, the fluid from the valveless side will flow out. Take care if the fluid is water.

Minimum Cross-Sectional Area (-VL means Valve less type) (mm²)

Socket Plug	SPC-04SH	SPC-06SH	SPC-10SM	SPC-04SH -VL	SPC-06SH -VL	SPC-10SM -VL
SPC-04PH/PHB/PHL	5	5	5	5	5	5
SPC-06PH/PHB/PHL	5	8.6	8.6	5	8.6	8.6
SPC-10PM	5	8.6	8.6	5	8.6	8.6
SPC-04PH-VL/PHB-VL/PHL-VL	-	-	-	5	5	5
SPC-06PH-VL/PHB-VL	-	-	-	5	10.2	10.2
SPC-06PHL-VL	-	-	-	5	10.2	12.6
SPC-10PM-VL	-	-	-	5	10.2	16.6

Suitability for Vacuum

53.0 kPa {400 mmHg}

Socket only	Plug only	When connected
-	-	Operational

Admixture of Air on Connection

May vary depending upon the usage conditions.

(mL)

Volume of air admixture	0.60 (Built-in valve type only)
-------------------------	---------------------------------

Volume of Spillage per Disconnection

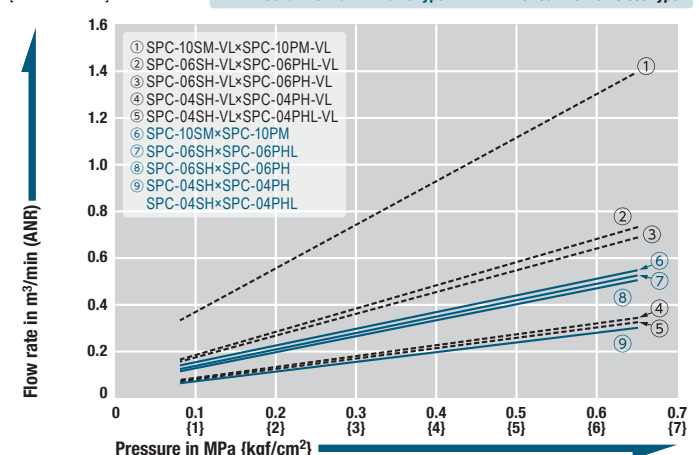
May vary depending upon the usage conditions.

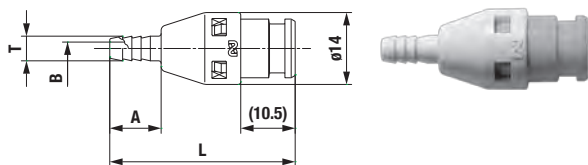
(mL)

Volume of spillage	0.51 (Built-in valve type only)
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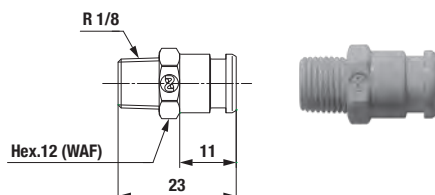
Pressure - Flow Characteristics (The fluid flow will not differ by body color)

[Test conditions] - Fluid : Air — Solid line: Built-in valve type Dotted line: Valveless type



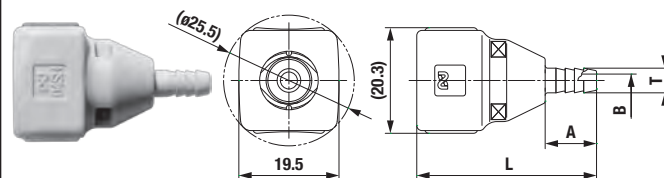
Plug PH type (Hose barb)

Color	Model	Application (Tube)	Built-in valve	Mass (g)	Dimensions (mm)			
					L	A	øT	øB
Ivory	SPC-04PH-IVR	4 mm ID	With	3.1	(36)	10	4.8	2.5
	SPC-04PH-VL-IVR	4 mm ID	Without	2.6	(36)	10	4.8	2.5
	SPC-06PH-IVR	6 mm ID	With	3.4	(40)	15	7	3.6
	SPC-06PH-VL-IVR	6 mm ID	Without	2.9	(40)	15	7	3.6
Blue	SPC-04PH-BLU	4 mm ID	With	3.1	(36)	10	4.8	2.5
	SPC-04PH-VL-BLU	4 mm ID	Without	2.6	(36)	10	4.8	2.5
	SPC-06PH-BLU	6 mm ID	With	3.4	(40)	15	7	3.6
	SPC-06PH-VL-BLU	6 mm ID	Without	2.9	(40)	15	7	3.6
Yellow	SPC-04PH-YEL	4 mm ID	With	3.1	(36)	10	4.8	2.5
	SPC-04PH-VL-YEL	4 mm ID	Without	2.6	(36)	10	4.8	2.5
	SPC-06PH-YEL	6 mm ID	With	3.4	(40)	15	7	3.6
	SPC-06PH-VL-YEL	6 mm ID	Without	2.9	(40)	15	7	3.6
Pink	SPC-04PH-PNK	4 mm ID	With	3.1	(36)	10	4.8	2.5
	SPC-04PH-VL-PNK	4 mm ID	Without	2.6	(36)	10	4.8	2.5
	SPC-06PH-PNK	6 mm ID	With	3.4	(40)	15	7	3.6
	SPC-06PH-VL-PNK	6 mm ID	Without	2.9	(40)	15	7	3.6
Green	SPC-04PH-GRN	4 mm ID	With	3.1	(36)	10	4.8	2.5
	SPC-04PH-VL-GRN	4 mm ID	Without	2.6	(36)	10	4.8	2.5
	SPC-06PH-GRN	6 mm ID	With	3.4	(40)	15	7	3.6
	SPC-06PH-VL-GRN	6 mm ID	Without	2.9	(40)	15	7	3.6

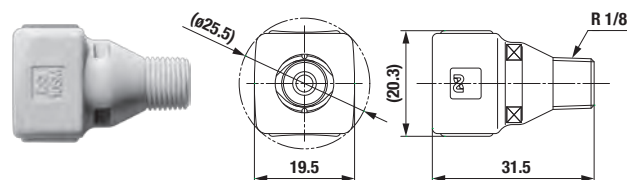
Plug PM type (Male thread)

Dimensions (mm)

Color	Model	Application (Thread)	Built-in valve	Mass (g)
Ivory	SPC-10PM-IVR	Rc 1/8	With	2.0
	SPC-10PM-VL-IVR	Rc 1/8	Without	1.5
Blue	SPC-10PM-BLU	Rc 1/8	With	2.0
	SPC-10PM-VL-BLU	Rc 1/8	Without	1.5
Yellow	SPC-10PM-YEL	Rc 1/8	With	2.0
	SPC-10PM-VL-YEL	Rc 1/8	Without	1.5
Pink	SPC-10PM-PNK	Rc 1/8	With	2.0
	SPC-10PM-VL-PNK	Rc 1/8	Without	1.5
Green	SPC-10PM-GRN	Rc 1/8	With	2.0
	SPC-10PM-VL-GRN	Rc 1/8	Without	1.5

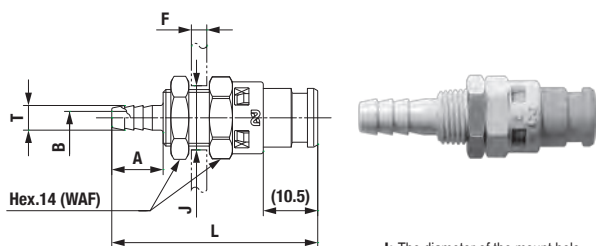
Socket SH type (Hose barb)

Color	Model	Application (Tube)	Built-in valve	Mass (g)	Dimensions (mm)			
					L	A	øT	øB
Ivory	SPC-04SH-IVR	4 mm ID	With	6.5	35	10	4.8	2.5
	SPC-04SH-VL-IVR	4 mm ID	Without	6.1	35	10	4.8	2.5
	SPC-06SH-IVR	6 mm ID	With	7.0	40	15	7	3.6
	SPC-06SH-VL-IVR	6 mm ID	Without	6.6	40	15	7	3.6
Blue	SPC-04SH-BLU	4 mm ID	With	6.5	35	10	4.8	2.5
	SPC-04SH-VL-BLU	4 mm ID	Without	6.1	35	10	4.8	2.5
	SPC-06SH-BLU	6 mm ID	With	7.0	40	15	7	3.6
	SPC-06SH-VL-BLU	6 mm ID	Without	6.6	40	15	7	3.6
Yellow	SPC-04SH-YEL	4 mm ID	With	6.5	35	10	4.8	2.5
	SPC-04SH-VL-YEL	4 mm ID	Without	6.1	35	10	4.8	2.5
	SPC-06SH-YEL	6 mm ID	With	7.0	40	15	7	3.6
	SPC-06SH-VL-YEL	6 mm ID	Without	6.6	40	15	7	3.6
Pink	SPC-04SH-PNK	4 mm ID	With	6.5	35	10	4.8	2.5
	SPC-04SH-VL-PNK	4 mm ID	Without	6.1	35	10	4.8	2.5
	SPC-06SH-PNK	6 mm ID	With	7.0	40	15	7	3.6
	SPC-06SH-VL-PNK	6 mm ID	Without	6.6	40	15	7	3.6
Green	SPC-04SH-GRN	4 mm ID	With	6.5	35	10	4.8	2.5
	SPC-04SH-VL-GRN	4 mm ID	Without	6.1	35	10	4.8	2.5
	SPC-06SH-GRN	6 mm ID	With	7.0	40	15	7	3.6
	SPC-06SH-VL-GRN	6 mm ID	Without	6.6	40	15	7	3.6

Socket SM type (Male thread)

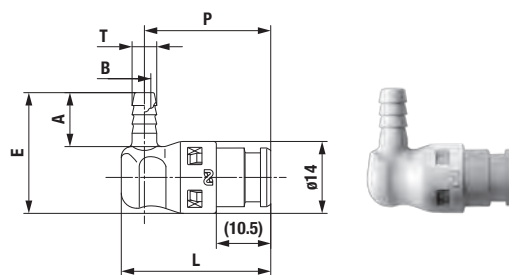
Dimensions (mm)

Color	Model	Application (Thread)	Built-in valve	Mass (g)
Ivory	SPC-10SM-IVR	Rc 1/8	With	6.8
	SPC-10SM-VL-IVR	Rc 1/8	Without	6.4
Blue	SPC-10SM-BLU	Rc 1/8	With	6.8
	SPC-10SM-VL-BLU	Rc 1/8	Without	6.4
Yellow	SPC-10SM-YEL	Rc 1/8	With	6.8
	SPC-10SM-VL-YEL	Rc 1/8	Without	6.4
Pink	SPC-10SM-PNK	Rc 1/8	With	6.8
	SPC-10SM-VL-PNK	Rc 1/8	Without	6.4
Green	SPC-10SM-GRN	Rc 1/8	With	6.8
	SPC-10SM-VL-GRN	Rc 1/8	Without	6.4

Plug PHB Type (For panel mount)

J: The diameter of the mount hole.
F: Thickness of panel must be 5 mm or less.

Color	Model	Application (Tube)	Built-in valve	Mass (g)	Dimensions (mm)					
					L	A	øT	øB	F	øJ
Ivory	SPC-04PHB-IVR	4 mm ID	With	5.9	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-04PHB-VL-IVR	4 mm ID	Without	5.4	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-IVR	6 mm ID	With	6.2	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-VL-IVR	6 mm ID	Without	5.7	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀
Blue	SPC-04PHB-BLU	4 mm ID	With	5.9	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-04PHB-VL-BLU	4 mm ID	Without	5.4	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-BLU	6 mm ID	With	6.2	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-VL-BLU	6 mm ID	Without	5.7	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀
Yellow	SPC-04PHB-YEL	4 mm ID	With	5.9	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-04PHB-VL-YEL	4 mm ID	Without	5.4	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-YEL	6 mm ID	With	6.2	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-VL-YEL	6 mm ID	Without	5.7	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀
Pink	SPC-04PHB-PNK	4 mm ID	With	5.9	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-04PHB-VL-PNK	4 mm ID	Without	5.4	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-PNK	6 mm ID	With	6.2	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-VL-PNK	6 mm ID	Without	5.7	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀
Green	SPC-04PHB-GRN	4 mm ID	With	5.9	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-04PHB-VL-GRN	4 mm ID	Without	5.4	(40)	10	4.8	2.5	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-GRN	6 mm ID	With	6.2	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀
	SPC-06PHB-VL-GRN	6 mm ID	Without	5.7	(45)	15	7	3.6	5 mm or less	11.1 ^{+0.3} ₀

Plug PHL Type (Hose barb)

Color	Model	Application (Tube)	Built-in valve	Mass (g)	Dimensions (mm)					
					L	P	A	E	øT	øB
Ivory	SPC-04PHL-IVR	4 mm ID	With	3.5	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-04PHL-VL-IVR	4 mm ID	Without	3	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-06PHL-IVR	6 mm ID	With	3.9	(30.5)	(25.5)	15.5	28.5	7	4
	SPC-06PHL-VL-IVR	6 mm ID	Without	3.4	(30.5)	(25.5)	15.5	28.5	7	4
Blue	SPC-04PHL-BLU	4 mm ID	With	3.5	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-04PHL-VL-BLU	4 mm ID	Without	3	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-06PHL-BLU	6 mm ID	With	3.9	(30.5)	(25.5)	15.5	28.5	7	4
	SPC-06PHL-VL-BLU	6 mm ID	Without	3.4	(30.5)	(25.5)	15.5	28.5	7	4
Yellow	SPC-04PHL-YEL	4 mm ID	With	3.5	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-04PHL-VL-YEL	4 mm ID	Without	3	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-06PHL-YEL	6 mm ID	With	3.9	(30.5)	(25.5)	15.5	28.5	7	4
	SPC-06PHL-VL-YEL	6 mm ID	Without	3.4	(30.5)	(25.5)	15.5	28.5	7	4
Pink	SPC-04PHL-PNK	4 mm ID	With	3.5	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-04PHL-VL-PNK	4 mm ID	Without	3	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-06PHL-PNK	6 mm ID	With	3.9	(30.5)	(25.5)	15.5	28.5	7	4
	SPC-06PHL-VL-PNK	6 mm ID	Without	3.4	(30.5)	(25.5)	15.5	28.5	7	4
Green	SPC-04PHL-GRN	4 mm ID	With	3.5	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-04PHL-VL-GRN	4 mm ID	Without	3	(29)	(24.5)	10.5	23.5	4.8	2.5
	SPC-06PHL-GRN	6 mm ID	With	3.9	(30.5)	(25.5)	15.5	28.5	7	4
	SPC-06PHL-VL-GRN	6 mm ID	Without	3.4	(30.5)	(25.5)	15.5	28.5	7	4

Choose from
5 colors

Blue

Yellow

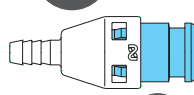
Pink

Green

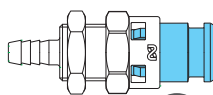
Ivory

The following  part shown below are colored. The other plastic parts are ivory.[See page 7 for the colors](#)

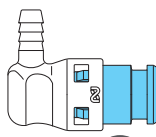
Plug



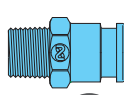
PH Type



PHB Type

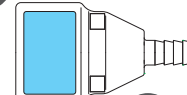


PHL Type

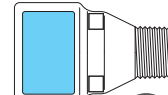


PM Type

Socket



SH Type



SM Type

- Resin (POM) such as the main body ... Conforms to article No.3-D-2-(2)-2 and has passed both material and elution tests specified in the Food sanitation Act and the standards For Food and Food additives (Notice No. 370 of 1959 issued by the Ministry of Health and Welfare of Japan).
- O-ring (NBR) ... Conforms to article No.3-D-3-(1) and has passed both material and elution tests specified in the Food sanitation Act and the standards For Food and Food additives (Notice No. 370 of 1959 issued by the Ministry of Health and Welfare of Japan).
- Silicone type grease (NSF H1, NSF 61 registered product) is applied to the sealing material.
- Evaluation shall be made by the customer before use to determine the suitability with applications that require sanitation control.

Small size

Lightweight
made of resin

Compared with products of the same specification

(Our products with similar working pressure / flow rate)



COMPACT CUPLA

CUBE CUPLA

The weight is about ...

$\frac{1}{5}$

Push-to-connect
operation

Push in

A clicking
sound

Push button
easy
disconnection

Just push
the buttons

Push button
for disconnection
2 places on the
socket side

Push button
easy
disconnection