

# Quick-fitting Type Coupling

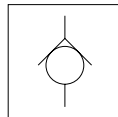
## Light Coupling Series

### Features

- The Light Coupling models are couplings incorporating the quick-fitting joint for pneumatic piping.
- This series is compatible with the couplings existing in your factory.
- The socket comes with a stop mechanism that stops air simultaneously with the removal of the plug.
- Connection and disconnection of the couplings can be done with a single hand.
- The resin couplings are lightweight and compact.(20, 15 series)
- The plug comes in not only the normal type but also the silencer type and the check valve type.  
The silencer type reduces the noise and shock at the release of the residual pressure, whereas the check valve type does not allow the flow of the residual pressure.
- Coupling module can be used not only to extend the coupling but also in combination with the Main Block. Number of blocks can be chosen for applications.

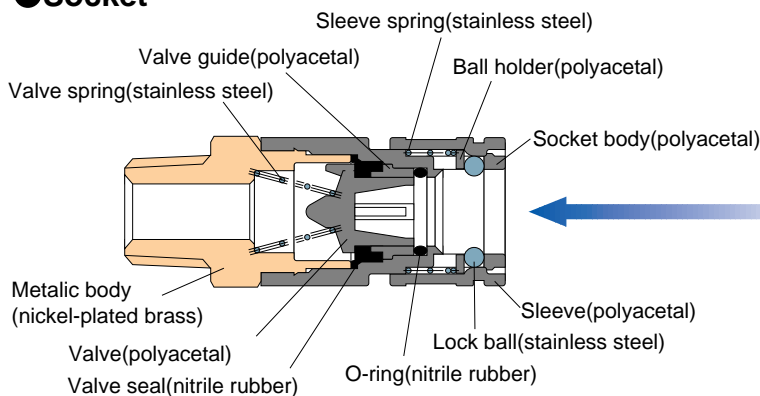
### Construction(15 series)

Graphical representation

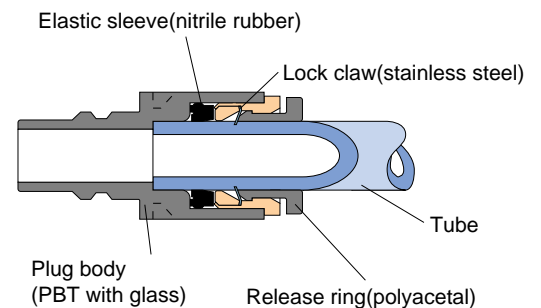


\*all sockets and plug with check valve only

#### ●Socket



#### ●Plug



\*Component materials of 20, E3, and E7 series are different from the above diagram.

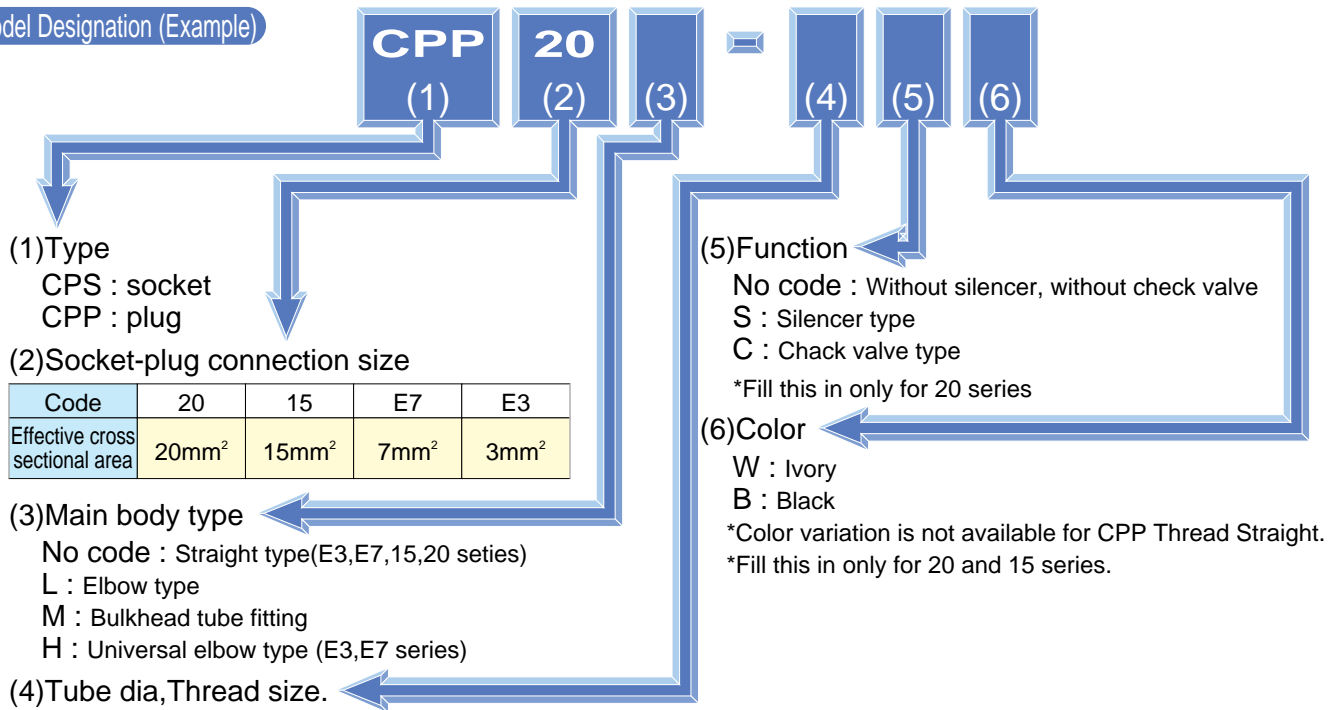
### Specification

Series	20 series	15 series	E7 series	E3 series
Fluid admitted	Air		Air , Water(conditional)	
Service pressure range	0~150 psi (0~0.9MPa)			
Service temperature range	32~140°F (0~60°C)			
Effective cross-section	20mm <sup>2</sup>	15mm <sup>2</sup>	7mm <sup>2</sup>	3mm <sup>2</sup>

#### ⚠Warning

- \*Conditions of Water (when used)
1. Operating temperature : 0 to 60°C (32 to 140°F)
  2. Operating pressure : 0 to 0.3MPa (0 to 43.5 psi)
  3. No water hammer is allowed.
  4. Be sure to install the insert ring

Model Designation (Example)



	Tube dia.											Thread size									
	mm size					in. size						mm size				in. size					
Code	4	6	8	10	12	1/8	5/32	1/4	5/16	3/8	1/2	M5	01	02	03	04	N1	N2	N3	N4	U10
Size	φ4	φ6	φ8	φ10	φ12	φ1/8	φ5/32	φ1/4	φ5/16	φ3/8	φ1/2	M5×0.8	R1/8	R1/4	R3/8	R1/2	NPT1/8	NPT1/4	NPT3/8	NPT1/2	10-32UNF

**⚠ Detailed Safety Instruction**

Before using the PISCO device, be sure to read the "Safety Instructions", "Common Safety Instructions for Products Listed in This Manual" on pages 23~24 and "Common Safety Instructions for Quick-Fitting Joint" on pages 29~31.

**⚠ Warning**

1. Before releasing the plug body other than the plug with check mechanism or silencer, make certain that the pressure inside the tube is zero and that the temperature of water has dropped below 30°C(86°F). Releasing at pressures above zero or with the water or thermal oil hotter than 30°C(86°F) may cause the plug to fly out, thus inflicting injuries or burns on you.
2. Never touch the sleeve on the socket when it is under pressure. Touching may release it.
3. When the fluid admitted with the E3 or E7 series is water, do not use the PISCO device unless the application satisfies all the conditions required in Specifications. Otherwise damage may be caused to the joint body, the tube may come off or leakage may result.
4. Provide brackets or other support means when the block is subject to bending loads or when the block consists of many joints. Use without such support means may cause deformation of the mated equipment or damage to the joint body.

**⚠ Caution**

1. When fitting the plug to the socket, make sure that it is pushed fully into the socket. Imperfect fitting may result in the falling out of the plug. After installation, pull the plug body lightly to make certain that it does not come off.
2. Be careful when you release the plug body with check mechanism or silencer with some internal pressure working. It can fly out under pressure.
3. When installing or removing the Coupling, use a supplied main block assembling wrench. Without the use of this tool, assembly may be difficult or deformation of the body may result.