

# Quick-fitting Type Coupling

## Light Coupling 20 Series

### Package : 1 pc. in a bag

- The Light Coupling models are couplings incorporating the quick-fitting joint for pneumatic piping.
- The socket comes with a stop mechanism that stops air flow simultaneously with the removal of the plug.
- As the coupling is designed with a minimal fitting resistance, you can attach or detach it with only one hand.
- 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.

### Specifications

Fluid admitted	Air	
Service pressure range	0~150psi	0~0.9MPa(0~9.9kgf/cm <sup>2</sup> )
Service temperature range	32~140°F	0~60°C

### Model Designation(Example)



#### ①Type

CPS:Socket  
 CPP:Plug  
 QMC:Module parts

#### ②Socket & Plug connection size(code 20) (Effective sectional area 20mm<sup>2</sup>)

#### ③Plug type

L:Elbow  
 No code:Straight

#### ④Tube dia.

Code	mm size				in. size			
	6	8	10	12	1/4	5/16	3/8	1/2
Dia.	φ6mm	φ8mm	φ10mm	φ12mm	φ 1/4	φ 5/16	φ 3/8	φ 1/2

#### Thread size

Code	Taper pipe thread			American standard taper thread		
	02	03	04	N2	N3	N4
Dia.	R1/4	R3/8	R1/2	NPT1/4	NPT3/8	NPT1/2

#### ⑤Plug function

S:Silencer type  
 C:Check valve type  
 No code:Not silencer nor check valve type

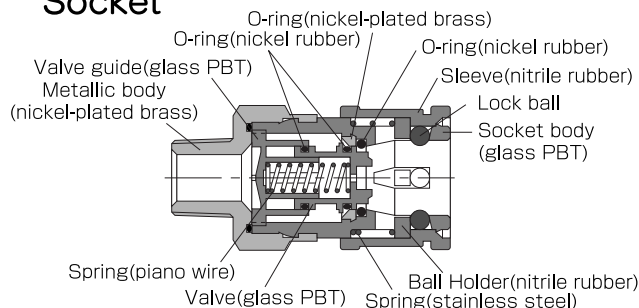
#### ⑥Color

W:Ivory  
 B:Black

※The socket and the plug are to be purchased separately.

### Construction

#### Socket



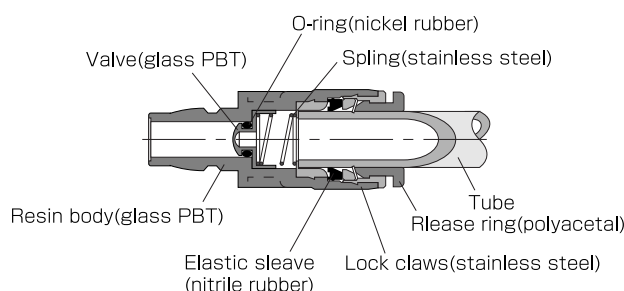
#### Code



#### Plug

Check Valve Type

※All Sockets and plug with check valve only.



### Detailed Safety Instructions

Before using the PISCO device, be sure to read the "Safety Instructions", "Common Safety Instructions for Products Listed in This Manual" on page 3 and "Common Safety Instructions for Quick-Fitting Joint" on pages 4 and 5.

#### ⚠ Warning

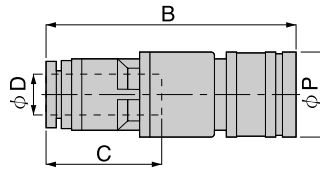
1. Before releasing the plug other than the plug with check mechanism or silencer, make certain that the pressure inside the tube is zero and that the temperature of water has dropped below 30°C. Releasing at pressures above zero or with the water or thermal oil hotter than 30°C may cause plug to fly 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 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 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.

**CPS**

Tube Fitting Built-in Socket



Unit : inch

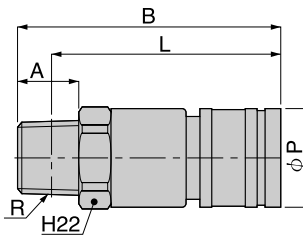
Model	Tube dia. $\phi D1$ (mm)	B	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS20-6□	6	2.16	0.98	0.67	0.81	11.50	0.62
CPS20-8□	8	2.16	0.98	0.73	0.81	19.80	1.07
CPS20-10□	10	2.36	0.98	0.81	0.99	22.60	1.22
CPS20-12□	12	2.36	0.98	0.92	1.02	23.00	1.25

Unit : inch

Model	Tube dia. $\phi D1$	B	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS20-1/4□	1/4	2.56	0.79	0.98	1.06	11.50	0.62
CPS20-5/16□	5/16	2.17	0.79	0.98	0.81	19.80	1.07
CPS20-3/8□	3/8	2.83	0.79	0.98	1.77	22.60	1.22
CPS20-1/2□	1/2	2.89	0.79	0.98	1.91	23.00	1.25

**CPS**

Taper Thread Built-in Socket



Unit : inch

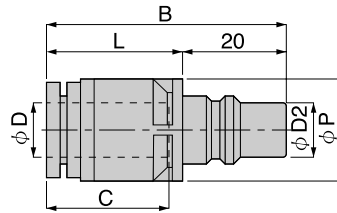
Model	R	A	B	L	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS20-02□	R1/4	0.43	1.97	1.73	0.98	0.87	1.44	22.90	1.24
CPS20-03□	R3/8	0.47	2.01	1.75	0.98	0.87	1.53	24.10	1.31
CPS20-04□	R1/2	0.59	2.13	1.81	0.98	0.87	1.88	24.20	1.31

Unit : inch

Model	NPT	A	B	L	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS20-N2U□	1/4	0.43	1.97	1.73	0.98	7/8	1.45	22.90	1.24
CPS20-N3U□	3/8	0.47	2.01	1.75	0.98	7/8	1.55	24.10	1.31
CPS20-N4U□	1/2	0.59	2.13	1.81	0.98	7/8	1.92	24.20	1.31

**CPP**

Tube Fitting Built-in Straight



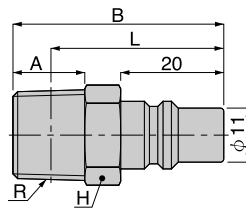
Unit : inch

Model	Tube dia. $\phi D1$	$\phi D2$	B	L	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPP20-6□	6	0.43	1.54	0.75	0.63	0.67	0.21	12.50	0.68
CPP20-8□	8	0.43	1.54	0.75	0.63	0.73	0.23	23.30	1.26
CPP20-10□	10	0.43	1.79	1.00	0.79	0.81	0.44	33.80	1.83
CPP20-12□	12	0.43	1.79	1.00	0.79	0.92	0.49	33.10	1.79
CPP20-6S□	6	0.43	1.79	1.00	0.63	0.67	0.30	10.10	0.55
CPP20-8S□	8	0.43	1.79	1.00	0.63	0.73	0.32	18.00	0.98
CPP20-10S□	10	0.43	2.18	1.40	0.83	0.81	0.62	26.00	1.41
CPP20-12S□	12	0.43	2.18	1.40	0.83	0.92	0.72	26.40	1.43
CPP20-6C□	6	0.43	1.79	1.00	0.63	0.67	0.28	10.10	0.55
CPP20-8C□	8	0.43	1.79	1.00	0.63	0.73	0.32	18.00	0.98
CPP20-10C□	10	0.43	2.18	1.40	0.83	0.81	0.62	26.00	1.41
CPP20-12C□	12	0.43	2.18	1.40	0.83	0.92	0.70	26.40	1.43

Unit : inch

Model	Tube dia. $\phi D1$	$\phi D2$	B	L	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPP20-1/4□	1/4	0.43	1.93	0.75	0.63	0.67	0.48	12.50	0.68
CPP20-5/16□	5/16	0.43	1.54	0.75	0.63	0.73	0.23	23.30	1.26
CPP20-3/8□	3/8	0.43	2.27	1.00	0.79	0.83	1.24	33.10	1.79
CPP20-1/2□	1/2	0.43	2.33	1.00	0.79	0.93	1.38	33.10	1.79
CPP20-1/4S□	1/4	0.43	2.19	1.00	0.63	0.67	0.56	10.10	0.55
CPP20-5/16S□	5/16	0.43	1.79	1.00	0.63	0.73	0.31	18.00	0.98
CPP20-3/8S□	3/8	0.43	2.66	1.40	0.83	0.83	1.42	23.60	1.28
CPP20-1/2S□	1/2	0.43	2.72	1.40	0.83	0.93	1.61	26.40	1.43
CPP20-1/4C□	1/4	0.43	2.19	1.00	0.63	0.67	0.56	10.10	0.55
CPP20-5/16C□	5/16	0.43	1.79	1.00	0.63	0.73	0.31	18.00	0.98
CPP20-3/8C□	3/8	0.43	2.66	1.40	0.83	0.83	1.42	23.70	1.28
CPP20-1/2C□	1/2	0.43	2.72	1.40	0.83	0.93	1.61	26.40	1.43

**CPP** Taper Thread Type



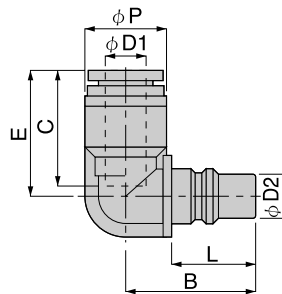
Unit : inch

Model	ΦD	R	A	B	L1	L2	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPP20-02	0.43	R1/4	0.43	1.46	1.22	0.79	0.55	0.84	39.50	2.14
CPP20-03	0.43	R3/8	0.47	1.50	1.24	0.79	0.67	1.30	39.50	2.14

Unit : inch

Model	ΦD	NPT	A	B	L1	L2	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPP20-N2U	0.43	1/4	0.43	1.46	1.02	0.79	9/16	0.89	39.50	2.14
CPP20-N3U	0.43	3/8	0.47	1.50	1.04	0.79	11/16	1.34	39.50	2.14

**CPP** Tube Fitting Built-in Elbow



Unit : inch

Model	Tube dia. φD1 (mm)	ΦD2	B	L	ΦP	C	E	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPP20L-6□	6	0.43	1.10	0.79	0.57	0.67	0.94	0.26	10.70	0.58
CPP20L-8□	8	0.43	1.10	0.79	0.57	0.73	0.94	0.26	17.50	0.95
CPP20L-10□	10	0.43	1.22	0.79	0.83	0.81	1.18	0.53	26.30	1.43
CPP20L-12□	12	0.43	1.22	0.79	0.83	0.92	1.18	0.56	29.00	1.57

Unit : inch

Model	Tube dia. φD1	ΦD2	B	L	ΦP	C	E	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPP20L-1/4□	1/4	0.43	1.10	0.79	0.57	0.67	1.34	0.52	10.70	0.58
CPP20L-5/16□	5/16	0.43	1.10	0.79	0.57	0.73	0.94	0.26	17.50	0.95
CPP20L-3/8□	3/8	0.43	1.22	0.79	0.83	0.83	1.65	1.32	28.90	1.57
CPP20L-1/2□	1/2	0.43	1.22	0.79	0.83	0.93	1.71	1.45	29.00	1.57

# Quick-fitting Type Coupling Light Coupling 15 Series

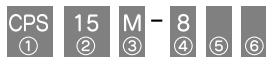
## Package : 1pc. in a bag

- The Light Coupling models are couplings incorporating the quick-fitting joint for pneumatic piping.
- The socket comes with a stop mechanism that stops air simultaneously with the removal of the plug.
- The resin couplings are lightweight and compact.

## Specifications

Fluid admitted	Air	
Service pressure range	0~150psi	0~0.9MPa(0~9.9kgf/cm <sup>2</sup> )
Service temperature range	32~140°F	0~60°C

## Model Designation(Example)



①Type  
CPS:Socket  
CCP:Plug

②Socket & Plug connection size(code 15)

③Socket type  
No code: Straight type  
M: Bulkhead type  
Plug type  
No code: Straight type  
L: Elbow type

④Tube dia.(ΦD)

	mm size			in. size		
Code	6	8	10	1/4	5/16	3/8
Dia.	φ6mm	φ8mm	φ10mm	φ1/4	φ5/16	φ3/8

Thread size(R)

	Taper pipe thread			American standard taper pipe thread		
Code	01	02	03	N1	N2	N3
Dia.	R1/8	R1/4	R3/8	NPT1/8	NPT1/4	NPT3/8

⑤U: Hexagon flat-to flat inch spec.(NPT)

No code: Model without thread and model with Taper pipe thread.

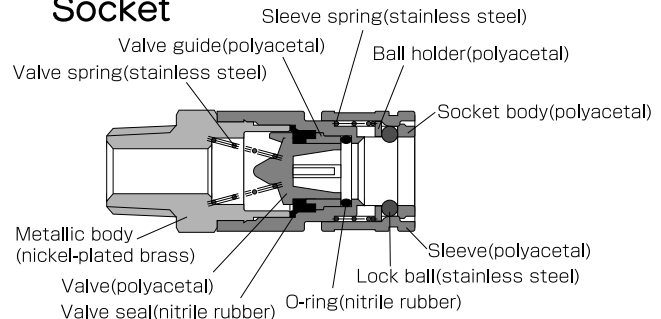
⑥Color

W: Ivory  
B: Black

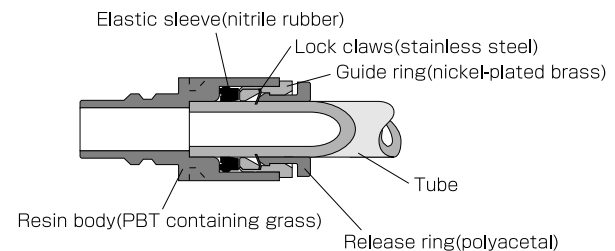
※The socket and the plug are to be purchased separately.

## Construction

### Socket



### Plug



code



※All Sockets and plug with check valve only.

## Detailed Safety Instructions

Before using the PISCO device, be sure to read the "Safety Instructions", "Common Safety Instructions for Products Listed in This Manual" on page 3 and "Common Safety Instructions for Quick-Fitting Joint" on pages 4 and 5.

### Warning

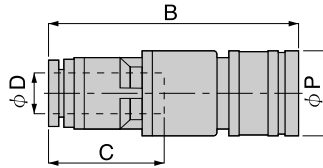
1. Before releasing the plug body other than the plug with check mechanism or silencer, make certain that the pressure inside the tube is zero and that the temperature of water has dropped below 30°C. Releasing at pressures above zero or with the water or thermal oil hotter than 30°C may cause plug to 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.

### 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.

**CPS**

Tube Fitting Built-in Socket



Unit : inch



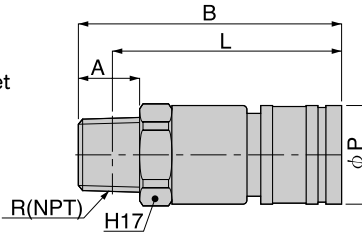
Model	Tube dia. $\phi D$ (mm)	B	L	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS 15-6	6	1.97	0.65	0.71	0.67	0.44	11.00	0.60
CPS 15-8	8	2.01	0.65	0.71	0.73	0.48	18.00	0.98
CPS 15-10	10	2.15	0.65	0.71	0.93	0.60	18.00	0.98

Unit : inch

Model	Tube dia. $\phi D$	B	L	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS 15-1/4□	1/4	2.36	0.65	0.71	0.67	0.71	11.00	0.60
CPS 15-5/16□	5/16	2.01	0.65	0.71	0.73	0.48	18.00	0.98
CPS 15-3/8□	3/8	2.62	0.65	0.71	0.83	1.40	17.60	0.95

**CPS**

Taper Thread Built-in Socket



Unit : inch



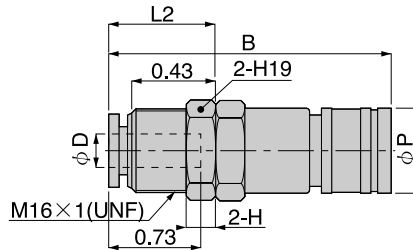
Model	R	A	B	L1	L2	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS15-01	R1/8	0.31	1.73	1.57	0.65	0.71	0.67	0.90	18.00	0.98
CPS15-02	R1/4	0.43	1.85	1.61	0.65	0.71	0.67	1.02	18.00	0.98
CPS15-03	R3/8	0.47	1.89	1.63	0.65	0.71	0.67	1.32	18.00	0.98

Unit : inch

Model	NPT	A	B	L1	L2	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS 15-N1U□	1/8	0.31	1.73	1.57	0.65	0.71	11/16	0.94	18.00	0.98
CPS 15-N2U□	1/4	0.43	1.85	1.61	0.65	0.71	11/16	1.07	18.00	0.98
CPS 15-N3U□	3/8	0.47	1.89	1.63	0.65	0.71	11/16	1.36	18.00	0.98

**CPS**

Bulkhead Type



Unit : inch



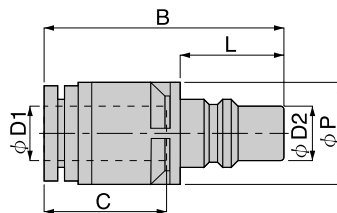
Model	Tube dia. $\phi D$ (mm)	M	B	L1	L2	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS15M-8	8	M16	2.01	2.01	0.83	0.71	0.75	1.25	18.00	0.98

Unit : inch

Model	Tube dia. $\phi D$	UNF	B	L1	L2	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPS 15M-5/16U□	5/16	5/8-18UNF	2.01	0.65	0.83	0.71	3/4	1.29	18.00	0.98

**CPP**

Tube Fitting Built-in Straight



Unit : inch



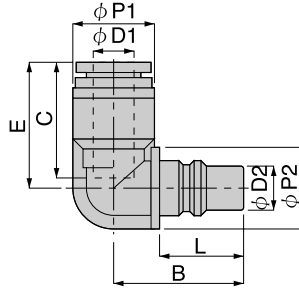
Model	Tube dia. $\phi D1$ (mm)	$\phi D2$	B	L	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CCP15-6	6	0.31	1.24	0.59	0.59	0.67	0.16	11.00	0.60
CCP15-8	8	0.31	1.38	0.59	0.59	0.73	0.21	24.00	1.30
CCP15-10	10	0.31	1.54	0.59	0.71	0.83	0.32	23.00	1.25

Unit : inch

Model	Tube dia. $\phi D1$	$\phi D2$	B	L	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CCP15-1/4□	1/4	0.31	1.57	0.59	0.59	0.67	0.43	11.00	0.60
CCP15-5/16□	5/16	0.31	1.38	0.59	0.59	0.73	0.20	23.00	1.25
CCP15-3/8□	3/8	0.31	2.01	0.59	0.71	0.83	1.12	24.30	1.32

**CPP**

Tube Fitting Bult-in Elbow



Unit : inch

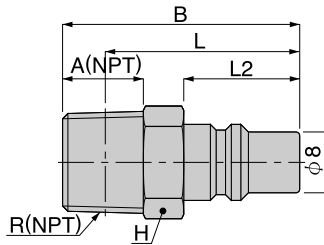
Model	Tube dia. $\phi D1$ (mm)	$\phi D2$	B	L	$\phi P1$	$\phi P2$	C	E	Weight (OZ)	Eff.a. mm2	CV
CPP15L-6	6	0.31	0.89	0.59	0.51	0.59	0.67	0.85	0.18	10.00	0.54
CPP15L-8	8	0.31	0.92	0.59	0.59	0.59	0.73	0.92	0.23	18.00	0.98
CPP15L-10	10	0.31	0.98	0.59	0.71	0.71	0.83	1.08	0.39	18.00	0.98

Unit : inch

Model	Tube dia. $\phi D1$ (mm)	$\phi D2$	B	L	$\phi P1$	$\phi P2$	C	E	Weight (OZ)	Eff.a. mm2	CV
CPP15L-1/4□	1/4	0.31	0.89	0.59	0.51	0.59	0.67	1.24	0.45	10.00	0.54
CPP15L-5/16□	5/16	0.31	0.93	0.59	0.59	0.59	0.73	0.93	0.23	18.00	0.98
CPP15L-3/8□	3/8	0.31	0.98	0.59	0.71	0.71	0.83	1.56	1.18	19.50	1.06

**CPP**

Male Straight



Unit : inch

Model	$\phi D$	R	A	B	L1	L2	H	Weight (OZ)	Eff.a. mm2	CV
CPP15-01	0.31	R1/8	0.31	1.14	0.98	0.59	0.55	0.48	23.00	1.25
CPP15-02	0.31	R1/4	0.43	1.26	1.02	0.59	0.55	0.69	25.00	1.36
CPP15-03	0.31	R3/8	0.47	1.30	1.04	0.59	0.67	1.13	23.00	1.25

Unit : inch

Model	D	NPT	A	B	L1	L2	H	Weight (OZ)	Eff.a. mm2	CV
CPP15-N1U	0.31	1/8	0.31	1.14	0.98	0.59	9/16	0.45	23.00	1.25
CPP15-N2U	0.31	1/4	0.43	1.26	1.02	0.59	9/16	0.69	25.00	1.36
CPP15-N3U	0.31	3/8	0.47	1.30	1.04	0.59	11/16	1.16	23.00	1.25

# Quick-fitting Type Miniature Coupling Light Coupling E3 & E7 Series

## Package: 1 pc. in a bag

- These are miniature coupling models incorporating the quick-fitting joint for pneumatic piping.
- The socket comes with a stop mechanism that stops air flow simultaneously with the removal of the plug.
- The compact design permits piping in a limited space.
- The coupling can be attached and detached with one hand.

## Specifications

Fluid admitted	Air	water(conditional※)
Service pressure range	0~150psi(0~0.9MPa)	0~42.7psi(0~0.3MPa)
Service temperature range	32~140°F	0~60°C

※Conditions of Water(when used)

1. Service temperature: 0 to 60°C (32 to 140°C)
2. No water hammer is allowed.
3. Be sure to install the insert ring.

## Model Designation(Example)



### ①Type

CPS:Socket  
CCP:Plug

### ②Socket & Plug connection size(code E3, E7)

Code	E3	E7
Effective sectional area	3mm <sup>2</sup>	7mm <sup>2</sup>

※E3 and E7 can not be connected.

### ③Socket and plug type

Socket  
H:Universal Elbow  
M: Bulkhead Type  
No code: Straight  
Plug  
H: Universal Elbow  
L: Elbow  
No code: Straight

### ④Tube dia.

	mm size		in. size	
Code	4	6	5/32	1/8
Dia.	φ 4mm	φ 4mm	φ 5/32	φ 1/8

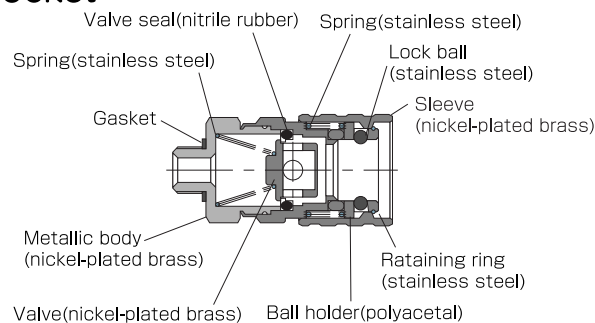
	Metric thread	Taper pipe thread	Unified fine thread	American standard taper pipe thread
Code	M5	0.1	U10	N1
Size	M5×0.8	R1/8	10-32UNF	NPT1/8

※The socket and the plug are to be purchased separately.

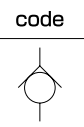
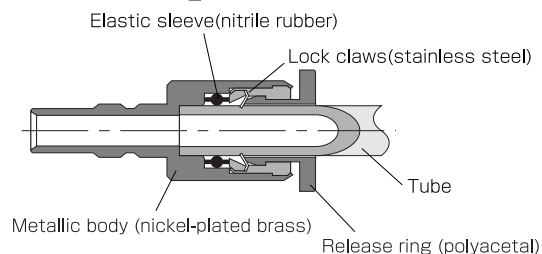
### ⑤U: Hexagon flat-to flat inch spec.(NPT)

## Construction

### Socket



### Plug

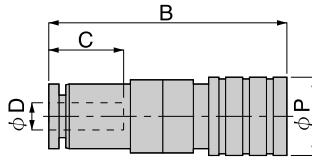


※All Sockets and plug with check valve only.

⚠ For safety, read "Detailed safety Instruction" on page 107.

**CPS**

Straight Tube Fitting



Unit : inch

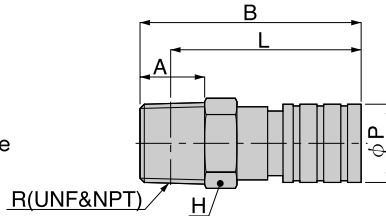
Model	Tube dia. $\phi D$ (mm)	B	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPSE 3-4	4	1.16	0.37	0.43	0.30	3.30	0.18
CPSE 7-6	6	1.26	0.45	0.47	0.44	7.70	0.42

Unit : inch

Model	Tube dia. $\phi D$	B	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPSE 3-1/8	1/8	1.16	0.37	0.43	0.30	3.30	0.18
CPSE 3-5/32	5/32	1.16	0.37	0.43	0.30	3.30	0.18

**CPS**

Straight Thread Type



Unit : inch

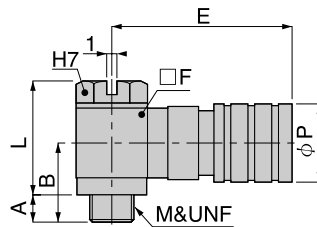
Model	R	A	B	L	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPSE 3-M5	M5	0.14	0.87	0.61	0.37	0.35	0.23	3.20	0.17
CPSE 3-01	R1/8	0.31	1.08	0.92	0.37	0.39	0.39	3.80	0.21
CPSE 7-M5	M5	0.14	0.96	0.65	0.45	0.39	0.33	4.00	0.22
CPSE 7-01	R1/8	0.31	1.16	1.00	0.45	0.39	0.44	8.30	0.45

Unit : inch

Model	UNF & NPT	A	B	L	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPSE 3-U10U	10-32UNF	0.14	0.87	0.61	0.37	7/16	0.27	3.20	0.17
CPSE 3-N1U	1/8	0.31	1.08	0.93	0.37	7/16	0.42	3.80	0.21
CPSE 7-U10U	10-32UNF	0.14	0.96	0.65	0.45	7/16	0.38	4.00	0.22
CPSE 7-N1U	1/8	0.31	1.16	1.00	0.45	7/16	0.49	8.30	0.45

**CPS**

Universal Elbow Thread Type



Unit : inch

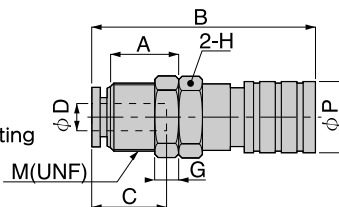
Model	M&UNF	A	B	$\phi P$	E	F	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPSE 3H-M5	M5×0.8	0.12	0.63	0.37	0.85	0.31	0.37	2.00	0.11
CPSE 7H-M5	M5×0.8	0.14	0.73	0.45	0.87	0.39	0.58	2.60	0.14

Unit : inch

Model	UNF	A	B	$\phi P$	E	F	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPSE 3H-U10U	10-32UNF	0.12	0.63	0.37	0.85	0.31	5/16	0.38	2.00	0.11
CPSE 7H-U10U	10-32UNF	0.14	0.73	0.45	0.87	0.39	5/16	0.59	2.60	0.14

**CPS**

Straight Bulkhead Tube Fitting



Unit : inch

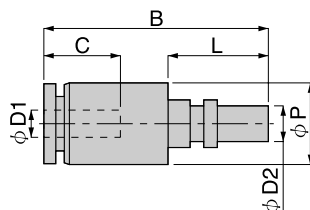
Model	Tube dia. $\phi D$ (mm)	M	A	B	$\phi P$	C	H	G	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPSE 3M-4	4	M9	0.33	1.16	0.37	0.43	0.39	0.12	0.35	3.30	0.18
CPSE 7M-6	6	M12	0.37	1.26	0.45	0.47	0.55	0.12	0.62	7.70	0.42

Unit : inch

Model	Tube dia. $\phi D$	UNF	A	B	$\phi P$	C	H	G	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPSE 3M-1/8U	5/32	7/16-20UNF	0.31	0.16	0.37	0.43	1/2	0.12	0.48	3.30	0.18
CPSE 3M-5/32U	1/8	7/16-20UNF	0.31	0.16	0.37	0.43	1/2	0.12	0.48	3.30	0.18



**CPP** Straight Tube Fitting



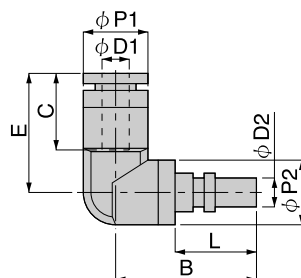
Unit : inch

Model	Tube dia. $\phi D1$ (mm)	$\phi D2$	B	L	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPPE3-4	4	0.14	0.85	0.35	0.31	0.43	0.11	4.20	0.23
CPPE7-6	6	0.22	0.91	0.39	0.39	0.47	0.16	11.40	0.62

Unit : inch

Model	Tube dia. $\phi D1$	$\phi D2$	B	L	$\phi P$	C	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPPE3-1/8	1/8	0.14	0.85	0.35	0.31	0.43	0.11	4.20	0.23
CPPE7-5/32	5/32	0.14	0.85	0.35	0.31	0.43	0.11	4.20	0.23

**CPP** Elbow Tube Fitting



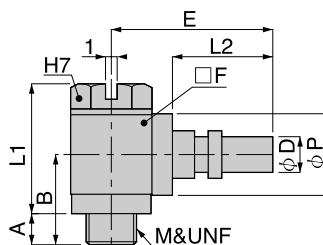
Unit : inch

Model	Tube dia. $\phi D1$ (mm)	$\phi D2$	B	L	$\phi P1$	$\phi P2$	C	E	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPPE3L-4	4	0.14	0.63	0.35	0.31	0.31	0.43	0.59	0.12	3.50	0.19
CPPE7L-6	6	0.22	0.75	0.39	0.41	0.39	0.47	0.65	0.19	8.80	0.48

Unit : inch

Model	Tube dia. $\phi D1$	$\phi D2$	B	L	$\phi P1$	$\phi P2$	C	E	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPPE3L-1/8	1/8	0.14	0.63	0.35	0.31	0.31	0.43	0.59	0.12	3.50	0.19
CPPE7L-5/32	5/32	0.14	0.63	0.35	0.31	0.31	0.43	0.59	0.12	3.50	0.19

**CPP** Universal Elbow Thread Type



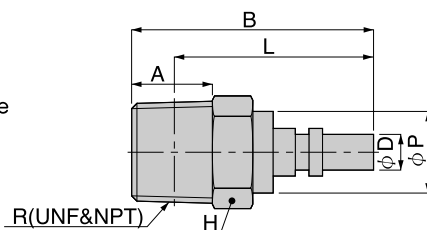
Unit : inch

Model	M&UNF	$\phi D$	A	B	L	$\phi P$	E	H	$\square F$	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPPE3H-M5	M5x0.8	0.14	0.12	0.63	0.35	0.31	0.71	0.28	0.31	0.23	1.80	0.10
CPPE7H-M5	M5x0.8	0.22	0.14	0.73	0.39	0.39	0.73	0.28	0.39	0.37	2.60	0.14

Unit : inch

Model	UNF	$\phi D$	A	B	L	$\phi P$	E	H	$\square F$	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPPE3H-U10U	10-32UNF	0.14	0.12	0.63	0.51	0.31	0.71	5/16	0.31	0.23	1.80	0.10
CPPE7H-U10U	10-32UNF	0.22	0.14	0.73	0.59	0.39	0.73	5/16	0.39	0.39	2.60	0.14

**CPP** Straight Thread Type



Unit : inch

Model	$\phi D$	R	A	B	L	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPPE3-M5	0.14	M5	0.14	0.61	0.35	0.31	0.28	0.07	4.00	0.22
CPPE3-01	0.14	R1/8	0.31	0.91	0.35	0.31	0.39	0.28	4.30	0.23
CPPE7-M5	0.22	M5	0.14	0.65	0.39	0.39	0.35	0.14	4.10	0.22
CPPE7-01	0.22	R1/8	0.31	1.02	0.39	0.39	0.39	0.28	2.10	0.11

Unit : inch

Model	$\phi D$	UNF&NPT	A	B	L	$\phi P$	H	Weight (OZ)	Eff.a. mm <sup>2</sup>	CV
CPPE3-U10U	0.14	10-32UNF	0.14	0.61	0.35	0.31	9/32	0.06	4.00	0.22
CPPE3-N1U	0.14	1/8	0.31	0.91	0.35	0.31	7/16	0.31	4.30	0.23
CPPE7-U10U	0.22	10-32UNF	0.14	0.65	0.39	0.39	5/16	0.12	4.10	0.22
CPPE7-N1U	0.22	1/8	0.31	1.02	0.39	0.39	7/16	0.32	12.10	0.66