

For Low Pressure (Air)

Super Cupla

Light, compact for air piping connections

Working pressure



Valve structure

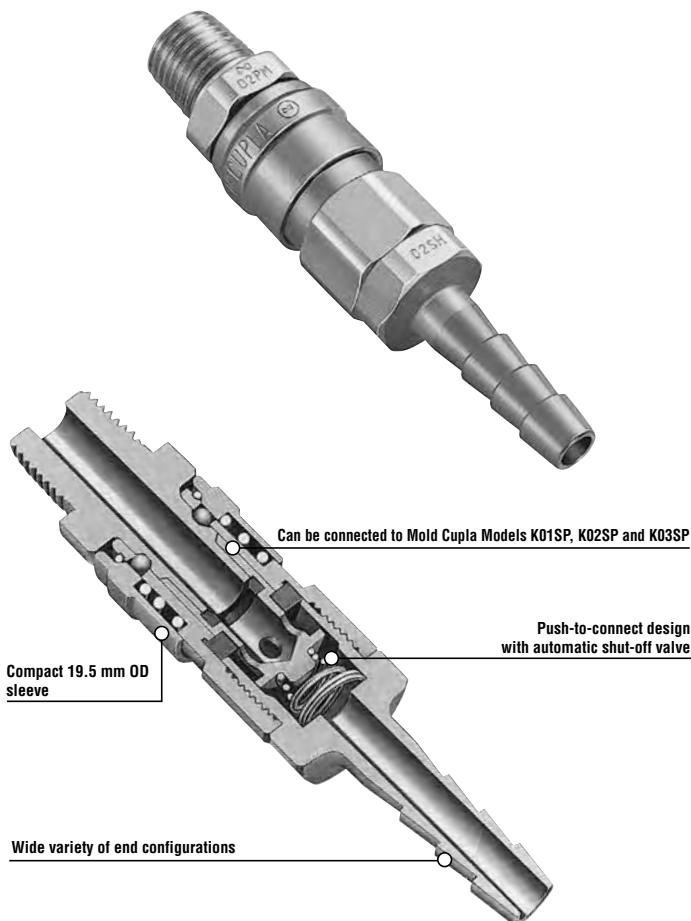


Applicable fluid



The lightweight design makes the Cupla best suited to power tools! Push-to-connect for easy operation.

- Lightweight design suits direct connection to power tools. Aluminum body is adopted for some models to reduce the weight.
- Just push the plug into socket for easy one hand connection.
- Available in various end configurations for a wide range of pneumatic applications.
- Model 02S20P can be connected with sockets for Hi Cupla Models 10, 17, 20, 30 and 40.
- Also available with quick connect / disconnect Tube Fitter type.



Specifications

Body material		Cupla : Steel (Chrome plated), Aluminum alloy Tube Fitter Part : Brass (Nickel plated)			
Size	Thread	1/8", 1/4"			
	Hose barb	1/4", Urethane hose : $\phi 5 \times \phi 8$, $\phi 6.5 \times \phi 10$			
	Tube barb (Tube fitter)	Polyurethane tube: Outside Dia. $\phi 6 \pm 0.1$, $\phi 8 \pm 0.15$ Polyamide tube: Outside Dia. $\phi 6^{+0.05}_{-0.08}$, $\phi 8^{+0.05}_{-0.1}$ Fluorine contained resin tube: Outside Dia. $\phi 6 \pm 0.07$, $\phi 8 \pm 0.07$			
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	Nitrile rubber	NBR (SG)	-20°C to +80°C	Standard material	

• Above specifications apply only to Cuplas. Max working pressure and working temperature range may vary depending on tube materials you use with and the working temperature.
Cupla with Tube Fitter has NBR packing material only.

Max. Tightening Torque Nm {kgf·cm}

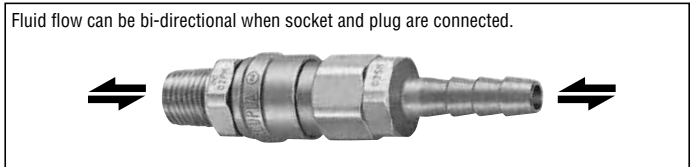
Size (Thread)	1/8"	1/4"
Torque	7 {71}	14 {143}

Tightening Torque Range Nm {kgf·cm}

PN Type, SN Type
9 to 11 {92 to 112}

To mount on urethane hose, slide it over to the hose barb and tighten the nut until it is flush against the hose barb base. It is recommended that grease is applied to the inside of the nut (threaded part and hose contact part) for easy tightening.

Flow Direction



Interchangeability

Any socket and plug can be connected regardless of their sizes and end configurations.
*Can be connected with Mold Cuplas.
*When conversion socket+plug Model 02S20P is used, Super Cupla plugs can be connected with sockets for Hi Cupla Models 20, 30 and 40.

Min. Cross-Sectional Area (mm²)

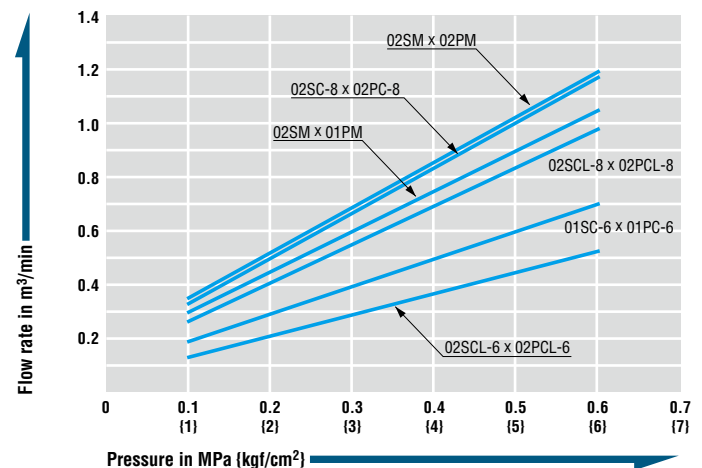
Plug / Socket	01PN	02PC-6 / 02PCL-6	02PC-8 / 02PCL-8	02PH / 02PHM	02PN	02PM / 02PFF
	01SN	11.3	11.3	11.3	11.3	11.3
02SC-6/02SCL-6/02SCB-6	11.3	12.5	12.5	12.5	12.5	12.5
02SC-8/02SCL-8/02SCB-8	11.3	12.5	19	19	19	19
02SH	11.3	12.5	19	19.6	19.6	19.6
02SN	11.3	12.5	19	19.6	22	22
02SM/02SF/02SMF	11.3	12.5	19	19.6	22	28.2
02S20P	11.3	12.5	19	19.6	22	28.2

Suitability for Vacuum

Not suitable for vacuum application in either connected or disconnected condition.

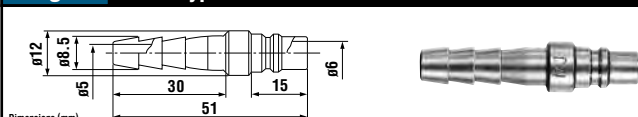
Pressure - Flow Characteristics

[Test conditions] • Fluid : Air • Temperature : Room temperature
• Tube size : $\phi 6 \text{ mm} \times \phi 4 \text{ mm}$, $\phi 8 \text{ mm} \times \phi 6 \text{ mm}$ (Super Cupla with Tube Fitter)



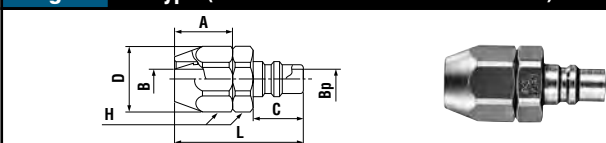
Models and Dimensions

Plug O2PH type (Hose barb)



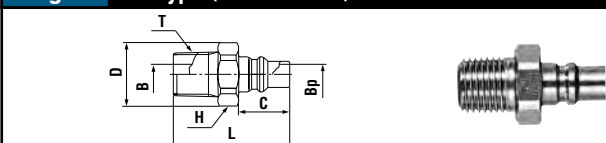
Model	Application (Hose)	Mass (g)
O2PH	1/4"	16

Plug PN type (For connection to urethane hose)



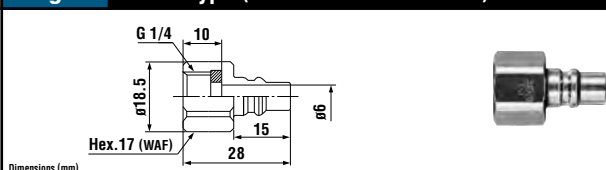
Model	Application (Hose)	Mass (g)	Dimensions (mm)						
			L	C	øD	A	H(WAF)	øBp	øB
O1PN	ø5 mm x ø8 mm	35.9	(38.5)	15	18.5	17	Hex.17	6	3.8
O2PN	ø6.5 mm x ø10 mm	35.3	(38.5)	15	18.5	17	Hex.17	6	5.3

Plug PM type (Male thread)



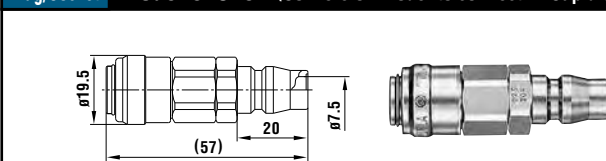
Model	Application	Mass (g)	Dimensions (mm)						
			L	C	øD	H(WAF)	T	øBp	øB
O1PM	Rc 1/8	12	31	15	-	Hex.12	R 1/8	6	5
O2PM	Rc 1/4	22.7	34	15	18.5	Hex.17	R 1/4	6	6

Plug O2PFF type (Parallel female thread)



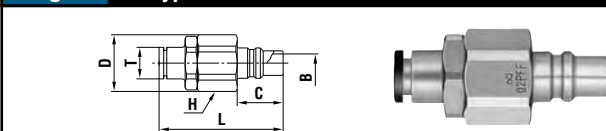
Model	Application	Mass (g)
O2PFF	G 1/4	17.7

Plug/Socket Model O2S2OP (Conversion model to connect Hi Cupla socket)



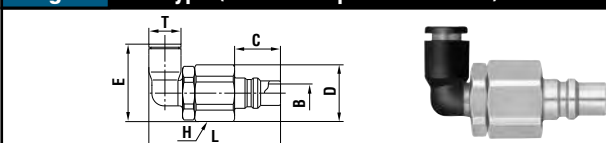
Model	Application	Mass (g)
O2S2OP	Hi Cupla (Socket)	58

Plug PC type (With Tube Fitter)



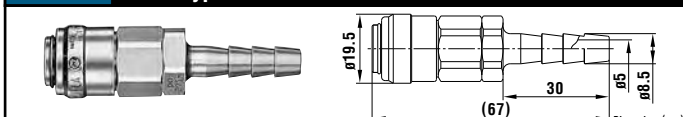
Model	Application (Tube)	Mass (g)	Dimensions (mm)						
			L	C	øD	E	H(WAF)	øT	øB
O2PC-6	6 mm OD	28.5	(40.5)	15	18.5	18.5	Hex.17	10.3	6
O2PC-8	8 mm OD	33	(47.5)	15	18.5	18.5	Hex.17	13.5	6

Plug PCL type (With L-shaped Tube Fitter)



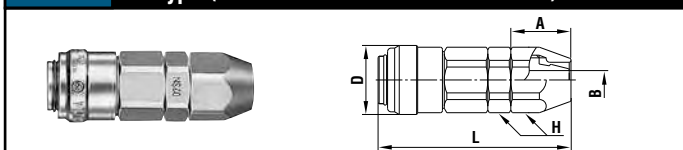
Model	Application (Tube)	Mass (g)	Dimensions (mm)						
			L	C	øD	E	H(WAF)	øT	øB
O2PCL-6	6 mm OD	29.5	(43)	15	18.5	(25.3)	Hex.17	10.5	6
O2PCL-8	8 mm OD	34.5	(46.5)	15	18.5	(32.3)	Hex.17	13.5	6

Socket O2SH type (Hose barb)



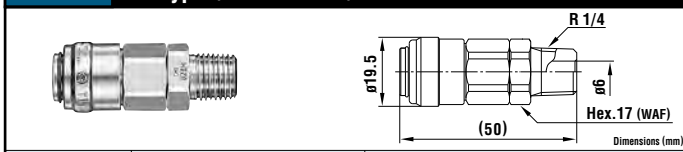
Model	Application (Hose)	Mass (g)
O2SH	1/4"	56

Socket SN type (For connection to urethane hose)



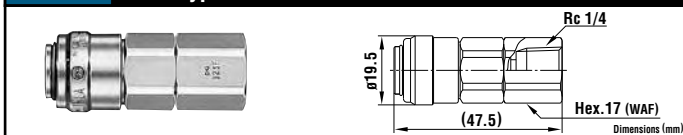
Model	Application (Hose)	Mass (g)	Dimensions (mm)				
			L	A	øD	H(WAF)	øB
O1SN	ø5 mm x ø8 mm	45.8	(54.5)	17	19.5	Hex.17	3.8
O2SN	ø6.5 mm x ø10 mm	44.4	(54.5)	17	19.5	Hex.17	5.3

Socket SM type (Male thread)



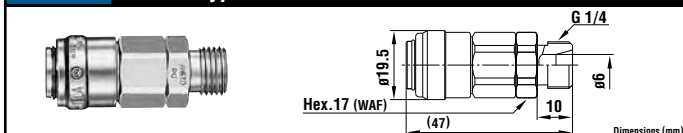
Model	Application	Mass (g)
O2SM	Rc 1/4	57

Socket O2SF type (Female thread)



Model	Application	Mass (g)
O2SF	R 1/4	56.4

Socket O2SMF type (Parallel male thread)



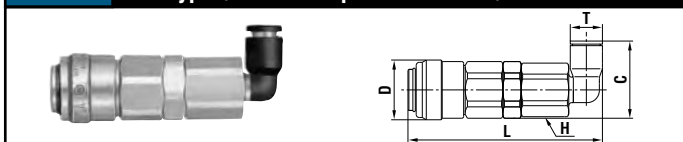
Model	Application	Mass (g)
O2SMF	G 1/4	27

Socket SC type (With Tube Fitter)



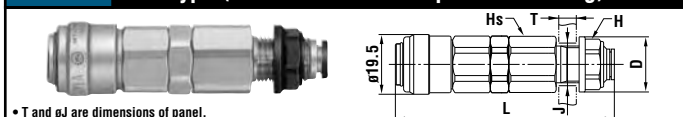
Model	Application (Tube)	Mass (g)	Dimensions (mm)		
			L	øD	øT
O2SC-6	6 mm OD	46	(65.5)	19.5	10.5
O2SC-8	8 mm OD	50.5	(70)	19.5	13.5

Socket SCL type (With L-shaped Tube Fitter)



Model	Application (Tube)	Mass (g)	Dimensions (mm)				
			L	øD	H(WAF)	C	øT
O2SCL-6	6 mm OD	47.5	(63.5)	19.5	Hex.16	(25.7)	10.3
O2SCL-8	8 mm OD	49.5	(67.7)	19.5	Hex.16	(32.8)	13.5

Socket SCB type (With Tube Fitter for panel mounting)



* T and øJ are dimensions of panel.

Model	Application (Tube)	Mass (g)	Dimensions (mm)					
			L	øD	Hs(WAF)	H(WAF)	T	øJ
O2SCB-6	6 mm OD	58.5	(71.5)	18	Hex.17	Hex.15	7 or less	12.5 ^{+0.3} ₀
O2SCB-8	8 mm OD	60.4	(72)	21	Hex.17	Hex.18	8 or less	15.5 ^{+0.3} ₀

Before use, please be sure to read "Safety Guide" described at the end of this book and "Instruction Sheet" that comes with the products.