

For Low Pressure (Air)

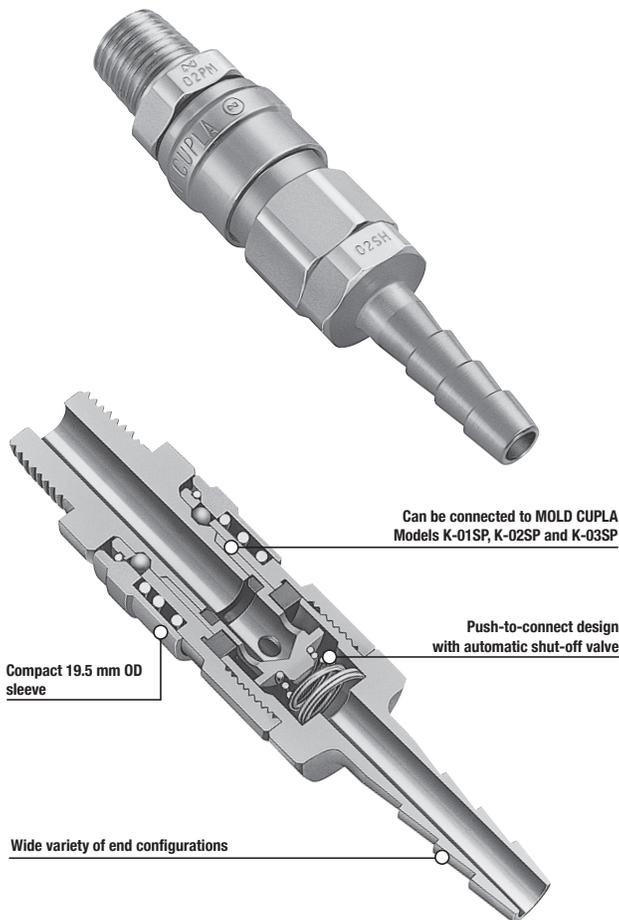
SUPER CUPLA

Light, compact for air piping connections

Working pressure  1.0 MPa (10 kgf/cm ²)	Valve structure  One-way shut-off	Applicable fluid  Air
--	---	---

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 of 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 (*1) Tube Fitter Part : Brass (Nickel plated) , Plastic			
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 CUPLA. Maximum 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.
(*1) Aluminum alloy is used for the body of 01SN, 02SN, 02SMF, 02SC-6, 02SC-8, 02SCL-6, 02SCL-8, 02SCB-6, 02SCB-8.

Maximum 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

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



Interchangeability

Sockets and plugs can be connected regardless of end configurations and sizes.
*Interchangeable with MOLD CUPLA.
*Sockets of HI CUPLA models 10, 17, 20, 30, 40 can be connected when 02S20P is used.

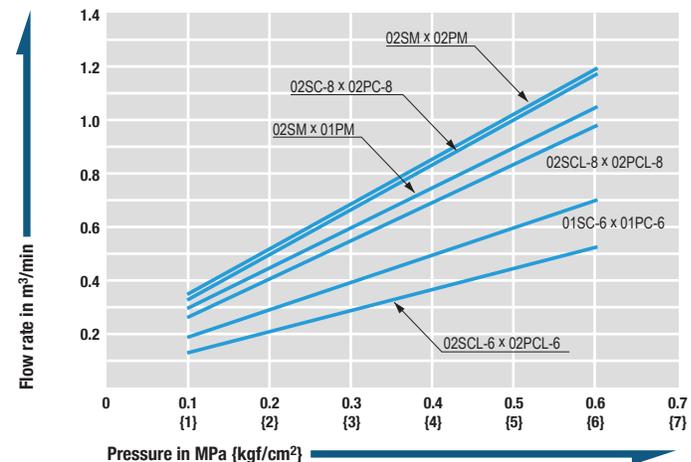
Minimum Cross-Sectional Area (mm ²)						
Plug / Socket	01PN	02PC-6 / 02PCL-6	02PC-8 / 02PCL-8	02PH / 01PM	02PN	02PM / 02PFF
01SN	11.3	11.3	11.3	11.3	11.3	11.3
02SC-6/02SCL-6/02SCB-6	11.3	12.5	12.5	12.5	12.5	12.5
02SC-8/02SCL-8/02SCB-8	11.3	12.5	19	19	19	19
02SH	11.3	12.5	19	19.6	19.6	19.6
02SN	11.3	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

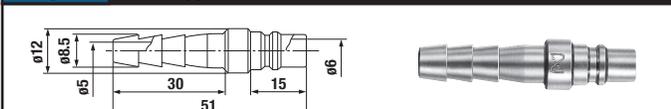
Not suitable for vacuum application in either connected or disconnected condition.

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)

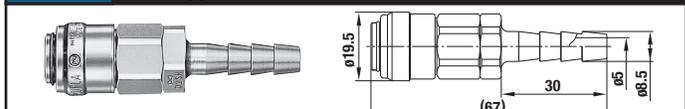


Plug O2PH type (Hose barb)



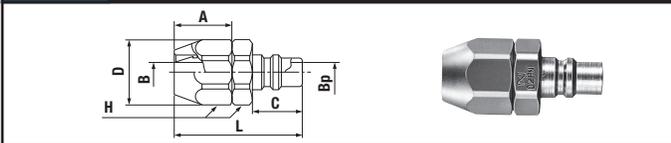
Model	Application (Hose)	Mass (g)
O2PH	1/4"	16

Socket O2SH type (Hose barb)



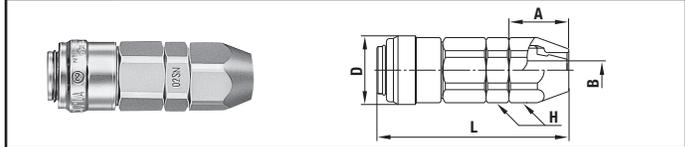
Model	Application (Hose)	Mass (g)
O2SH	1/4"	56

Plug PN type (For connection to urethane hose)



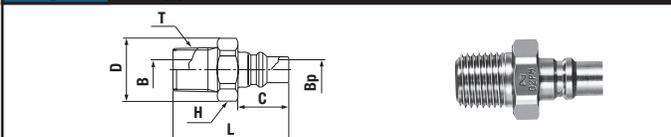
Model	Application (Hose)	Mass (g)	Dimensions (mm)						
			L	C	øD	A	H(WAF)	øBp	øB
O1PN	ø5 mm x ø8 mm	35.9	(38.5)	15	18.5	17	Hex.17	6	3.8
O2PN	ø6.5 mm x ø10 mm	35.3	(38.5)	15	18.5	17	Hex.17	6	5.3

Socket SN type (For connection to urethane hose)



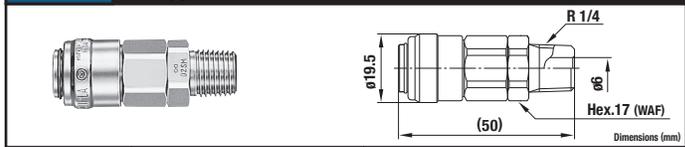
Model	Application (Hose)	Mass (g)	Dimensions (mm)					
			L	A	øD	H(WAF)	øB	
O1SN	ø5 mm x ø8 mm	45.8	(54.5)	17	19.5	Hex.17	3.8	
O2SN	ø6.5 mm x ø10 mm	44.4	(54.5)	17	19.5	Hex.17	5.3	

Plug PM type (Male thread)



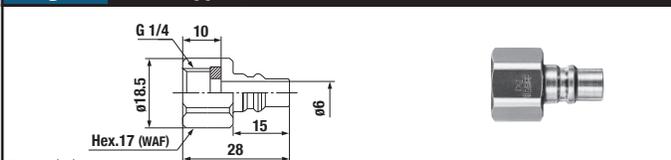
Model	Application (Thread)	Mass (g)	Dimensions (mm)						
			L	C	øD	H(WAF)	T	øBp	øB
O1PM	Rc 1/8	12	31	15	-	Hex.12	R 1/8	6	5
O2PM	Rc 1/4	22.7	34	15	18.5	Hex.17	R 1/4	6	6

Socket SM type (Male thread)



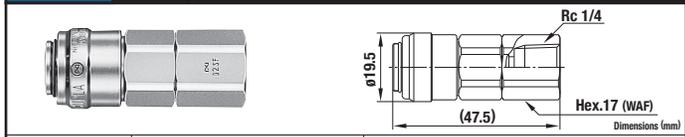
Model	Application (Thread)	Mass (g)
O2SM	Rc 1/4	57

Plug O2PFF type (Parallel female thread)



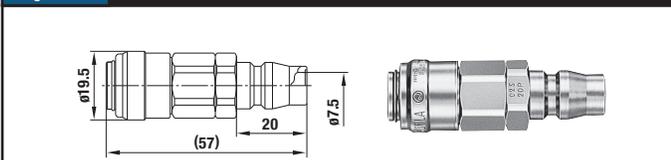
Model	Application (Thread)	Mass (g)
O2PFF	G 1/4	17.7

Socket O2SF type (Female thread)



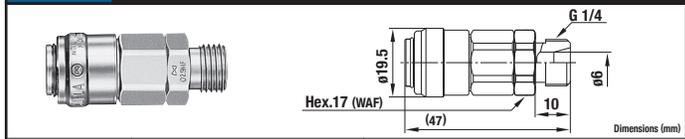
Model	Application (Thread)	Mass (g)
O2SF	R 1/4	56.4

Plug/Socket Model O2S20P (Conversion model to connect HI CUPLA socket)



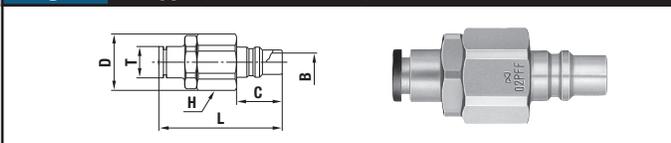
Model	Application	Mass (g)
O2S20P	HI CUPLA (Socket)	58

Socket O2SMF type (Parallel male thread)



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

Plug PC type (With Tube Fitter)



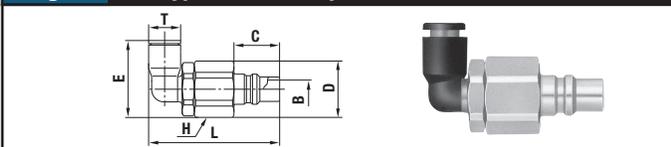
Model	Application (Tube)	Mass (g)	Dimensions (mm)						
			L	C	øD	E	H(WAF)	øT	øB
O2PC-6	6 mm OD	28.5	(40.5)	15	18.5	18.5	Hex.17	10.3	6
O2PC-8	8 mm OD	33	(47.5)	15	18.5	18.5	Hex.17	13.5	6

Socket SC type (With Tube Fitter)



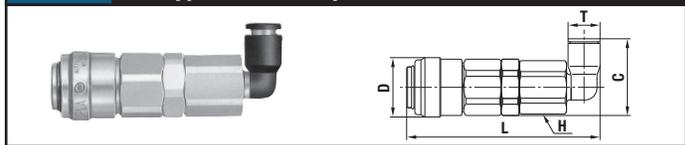
Model	Application (Tube)	Mass (g)	Dimensions (mm)		
			L	øD	øT
O2SC-6	6 mm OD	46	(65.5)	19.5	10.5
O2SC-8	8 mm OD	50.5	(70)	19.5	13.5

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 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