

For Low Pressure (Air)

SUPER CUPLA

Light, compact for air piping connections

Working pressure 1.0 1.0 MPa (10 kgf/cm ²)	Valve structure One-way shut-off	Applicable fluid Air
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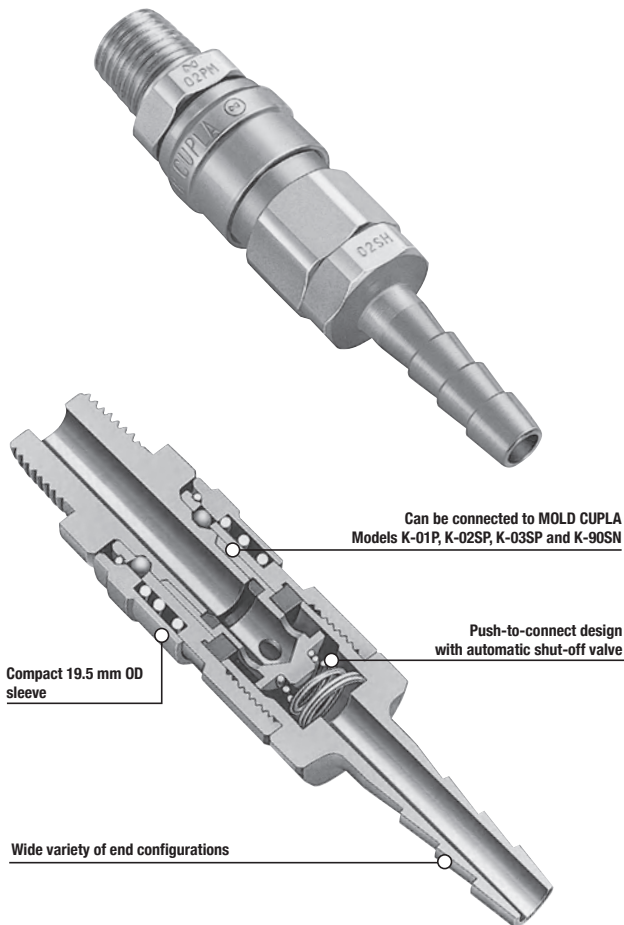
The lightweight design is suitable for power tools! Push-to-connect for easy operation.

- 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, 40 and 60.
- Also available with quick connect/disconnect Tube Fitter type.



Tài liệu được tổng hợp bởi đội ngũ kỹ thuật của **NPOWER**
Bản quyền nội dung thuộc về **Nitto Kohki**

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Specifications

Body material	CUPLA : Steel (Chrome plated), Aluminum alloy ^{*2} 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 ^{*1} (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 ^{*3}	Nitrile rubber	NBR	-20°C to +80°C	Standard material

- Above specifications apply only to CUPLA. Maximum working pressure and working temperature range may vary depending on the tube materials used with and the working temperature.
- Hose size is indicated as inner diameter x outer diameter.
*1: When connecting an extremely soft tube such as soft polyurethane or soft nylon, attach the insert ring specified by the tube manufacturer to the inner diameter of the tube to be connected.
*2: Aluminum alloy is used for the body of 01SN, 02SN, 02SMF, 02SC-6, 02SC-8, 02SCL-6, 02SCL-8, 02SCB-6, 02SCB-8.
*3: The operable temperature range depends on the operating conditions.

Maximum Tightening Torque

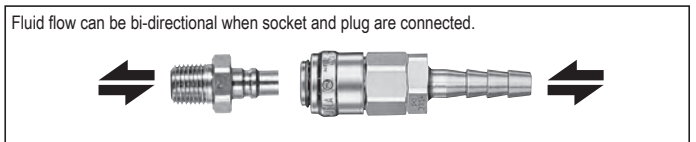
	Nm {kgf·cm}	
Size (Thread)	1/8"	1/4"
Torque	7 {71}	14 {143}

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 GRE-M1 is applied to the inside of the nut (threaded part and hose contact part) for easy tightening.

Flow Direction



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, and 60 can be connected when 02S20P is used.

Minimum Cross-Sectional Area (mm²)

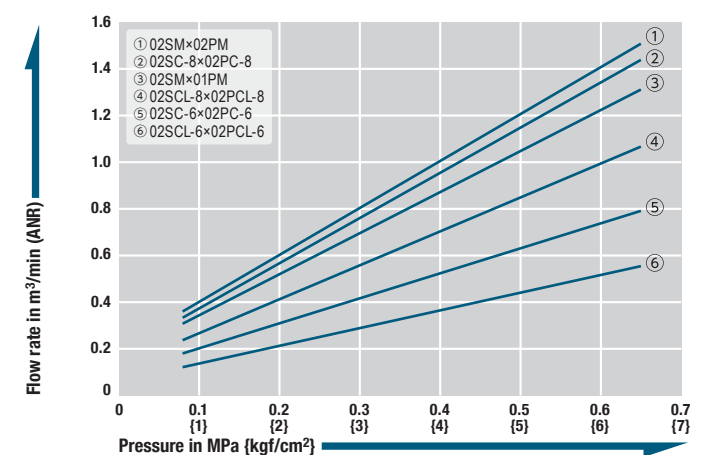
Plug / Socket	01PN	02PC-6 / 02PCL-6	02PC-8 / 02PCL-8	02PH / 02PM	02PN	02PM / 02PFF
	01SN	11.3	11.3	11.3	11.3	11.3
02SC-6/02SCL-6/02SCB-6	11.3	12.5	12.5	12.5	12.5	12.5
02SC-8/02SCL-8/02SCB-8	11.3	12.5	19	19	19	19
02SH	11.3	12.5	19	19.6	19.6	19.6
02SN	11.3	12.5	19	19.6	22	22
02SM/02SF/02SMF	11.3	12.5	19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

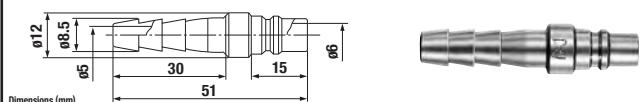
Pressure - Flow Characteristics

[Test conditions] - Fluid : Air - 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)



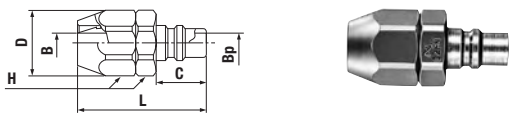
Models and Dimensions

Plug 02PH type (Hose barb)



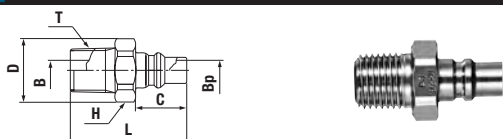
Model	Application (Hose)	Mass (g)
02PH	1/4"	16

Plug PN type (For connection to urethane hose)



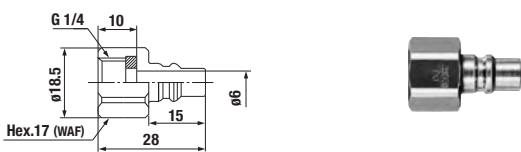
Model	Application (Hose)	Mass (g)	Dimensions (mm)					
			L	C	øD	H(WAF)	øBp	øB
01PN	ø5 mm×ø8 mm	36	(38.5)	15	18.5	Hex.17	6	3.8
02PN	ø6.5 mm×ø10 mm	36	(38.5)	15	18.5	Hex.17	6	5.3

Plug PM type (Male thread)



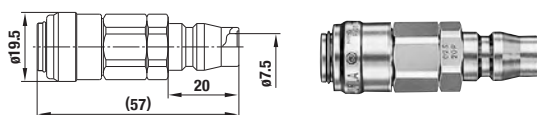
Model	Application (Thread)	Mass (g)	Dimensions (mm)						
			L	C	øD	H(WAF)	T	øBp	øB
01PM	Rc 1/8	12	31	15	-	Hex.12	R 1/8	6	5
02PM	Rc 1/4	23	34	15	18.5	Hex.17	R 1/4	6	6

Plug 02PFF type (Parallel female thread)



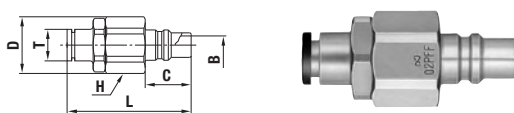
Model	Application (Thread)	Mass (g)
02PFF	G 1/4	18

Plug/Socket Model 02S20P (Conversion model to connect HI CUPLA socket)



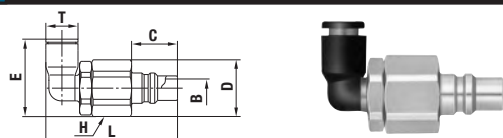
Model	Application	Mass (g)
02S20P	HI CUPLA (Socket)	58

Plug PC type (With Tube Fitter)



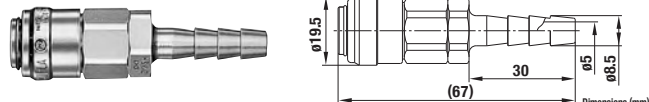
Model	Application (Tube)	Mass (g)	Dimensions (mm)						
			L	C	øD	E	H(WAF)	øT	øB
02PC-6	6 mm OD	29	(40.5)	15	18.5	18.5	Hex.17	10.3	6
02PC-8	8 mm OD	33	(47.5)	15	18.5	18.5	Hex.17	13.5	6

Plug PCL type (With L-shaped Tube Fitter)



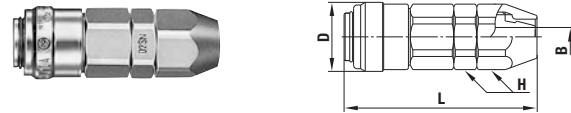
Model	Application (Tube)	Mass (g)	Dimensions (mm)						
			L	C	øD	E	H(WAF)	øT	øB
02PCL-6	6 mm OD	30	(43)	15	18.5	(25.3)	Hex.17	10.5	6
02PCL-8	8 mm OD	35	(46.5)	15	18.5	(32.3)	Hex.17	13.5	6

Socket 02SH type (Hose barb)



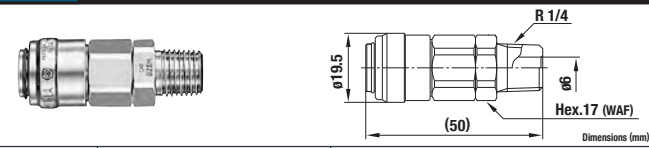
Model	Application (Hose)	Mass (g)
02SH	1/4"	56

Socket SN type (For connection to urethane hose)



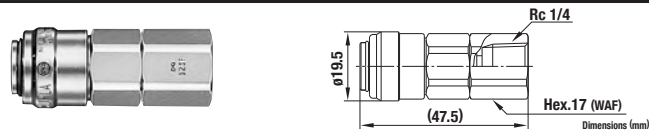
Model	Application (Hose)	Mass (g)	Dimensions (mm)			
			L	øD	H(WAF)	øB
01SN	ø5 mm×ø8 mm	46	(54.5)	19.5	Hex.17	3.8
02SN	ø6.5 mm×ø10 mm	45	(54.5)	19.5	Hex.17	5.3

Socket SM type (Male thread)



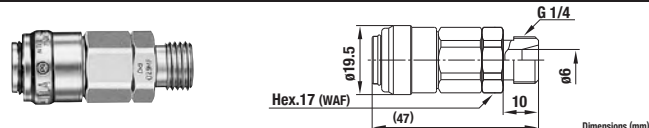
Model	Application (Thread)	Mass (g)
02SM	Rc 1/4	57

Socket 02SF type (Female thread)



Model	Application (Thread)	Mass (g)
02SF	R 1/4	57

Socket 02SMF type (Parallel male thread)



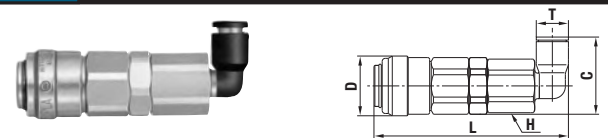
Model	Application (Thread)	Mass (g)
02SMF	G 1/4	27

Socket SC type (With Tube Fitter)



Model	Application (Tube)	Mass (g)	Dimensions (mm)		
			L	øD	øT
02SC-6	6 mm OD	46	(65.5)	19.5	10.5
02SC-8	8 mm OD	51	(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
02SCL-6	6 mm OD	48	(63.5)	19.5	Hex.16	(25.7)	10.3
02SCL-8	8 mm OD	50	(67.7)	19.5	Hex.16	(32.8)	13.5

Socket SCB type (With Tube Fitter for panel mounting)



Model	Application (Tube)	Mass (g)	Dimensions (mm)					
			L	øD	Hs(WAF)	H(WAF)	F	øJ
02SCB-6	6 mm OD	59	(71.5)	18	Hex.17	Hex.15	7 or less	12.5 ^{+0.3}
02SCB-8	8 mm OD	61	(72)	21	Hex.17	Hex.18	8 or less	15.5 ^{+0.3}