




For Low Pressure (Air)

# HI CUPLA 200

Push-to-connect type for air lines

Working pressure	Valve structure	Applicable fluid
 1.5 MPa {15 kgf/cm <sup>2</sup> }	 One-way shut-off	 Air

Simple and secure push-to-connect type! Big flow rate!  
End-face seal design.  
Gives excellent handling touch.

- Just push the plug into the socket for simple and secure connection. This reduces connection time and improves efficiency.
- New valve design for low pressure loss to achieve flow rate increase (15% up over the conventional model).
- End-face seal is achieved when connected.
- Enhanced operability with low connection resistance.
- End-face seal design is superior to external seal with an O-ring due to no seal damage caused by exhausted lubrication.
- Available only with steel body. Not suitable for water or oil.
- Also available with quick connect/disconnect Tube Fitter type.



▼ With Tube Fitter



## Specifications

Body material		Steel (Chrome plated)		
Size	Thread and hose barb	1/4", 3/8", 1/2"		
	Tube barb (Tube fitter)	Polyurethane tube: Outer dia. $\phi 6 \pm 0.1$ , $\phi 8 \pm 0.15$ , $\phi 10 \pm 0.15$ Polyamide tube: Outer dia. $\phi 6^{+0.05}_{-0.08}$ , $\phi 8^{+0.05}_{-0.1}$ , $\phi 10^{+0.05}_{-0.1}$ Fluorine contained resin tube: Outer dia. $\phi 6 \pm 0.07$ , $\phi 8 \pm 0.07$ , $\phi 10 \pm 0.07$		
Pressure unit	MPa	kgf/cm <sup>2</sup>	bar	PSI
Working pressure	1.5	15	15	218
Seal material	Nitrile rubber	NBR (SG)	-20°C to +60°C	Standard material
Working temperature range				

\*Above specifications apply only to CUPLA. Maximum working pressure and working temperature range may vary depending on materials of the tube and the working temperature.

## Maximum Tightening Torque

Nm { ·cm}

Size (Thread)	1/4"	3/8"	1/2"
Torque	14 {143}	22 {224}	60 {612}

## Flow Direction

Fluid must run from socket to plug.



## Interchangeability

Interchangeable with plugs of HI CUPLA models 10, 17, 20, 30 and 40.  
Interchangeable with each models of NUT CUPLA series and HI CUPLA series (except models 400, 600, and 800).  
Please see page 19 for "HI CUPLA Series Interchangeability".

## Minimum Cross-Sectional Area

(mm<sup>2</sup>)

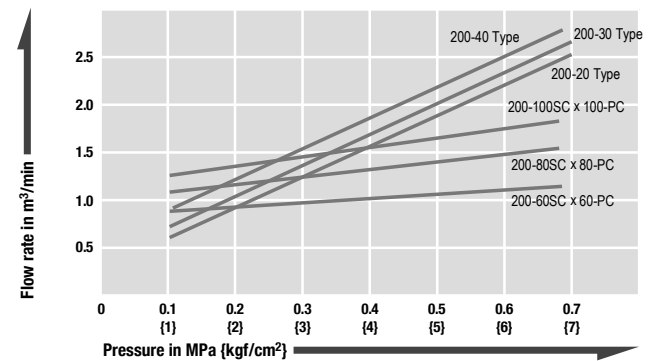
Socket	Plug	17PH	20PH	30PH	40PH	10PM	20PM	30PM	40PM	20PF	30PF	40PF
200-17SH		16	16	16	16	13	16	16	16	16	16	16
200-20SH		16	20	20	20	13	20	20	20	20	20	20
200-30SH		16	20	41	41	13	41	41	41	41	41	41
200-40SH		16	20	41	41	13	41	41	41	41	41	41
200-20SM		16	20	41	41	13	41	41	41	41	41	41
200-30SM		16	20	41	41	13	41	41	41	41	41	41
200-40SM		16	20	41	41	13	41	41	41	41	41	41
200-20SF		16	20	41	41	13	41	41	41	41	41	41
200-30SF		16	20	41	41	13	41	41	41	41	41	41
200-40SF		16	20	41	41	13	41	41	41	41	41	41

## Suitability for Vacuum

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

## Pressure - Flow Characteristics

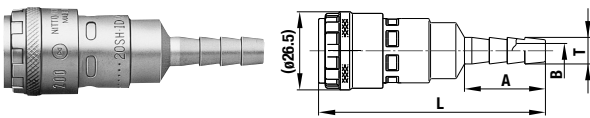
[Test conditions] • Fluid : Air • Temperature : Room temperature



Models and Dimensions

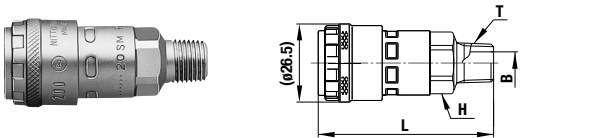
WAF: WAF stands for width across flats.

Socket SH type (Hose barb)



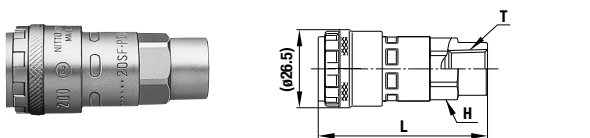
Model	Application (Hose)	Mass (g)	Dimensions (mm)			
			L	A	øT	øB
200-17SH	1/4"	86	(77)	27	7.2	4.5
200-20SH	1/4"	90	(77)	27.5	9	5
200-30SH	3/8"	92	(79)	32	11.3	7.5
200-40SH	1/2"	104	(79.5)	32	15	10

Socket SM type (Male thread)



Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	H(WAF)	T	øB
200-20SM	Rc 1/4	89	(60)	Hex.19	R 1/4	7.5
200-30SM	Rc 3/8	91	(60.5)	Hex.19	R 3/8	10
200-40SM	Rc 1/2	102	(56)	Hex.24	R 1/2	13

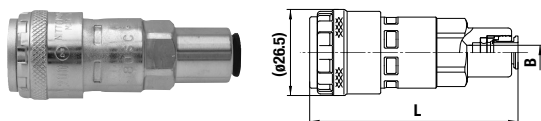
Socket SF type (Female thread)



Models	Application (Thread)	Mass (g)	Dimensions (mm)		
			L	H(WAF)	T
200-20SF	R 1/4	94	(57.5)	Hex.19	Rc 1/4
200-30SF	R 3/8	103	(55.5)	Hex.22	Rc 3/8
200-40SF	R 1/2	138	(57.5)	Hex.29	Rc 1/2

Models and Dimensions (With Tube Fitter)

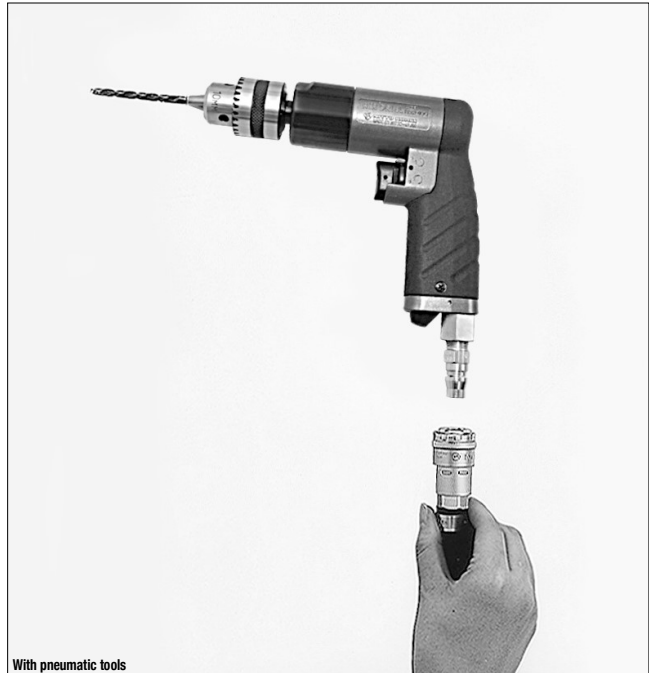
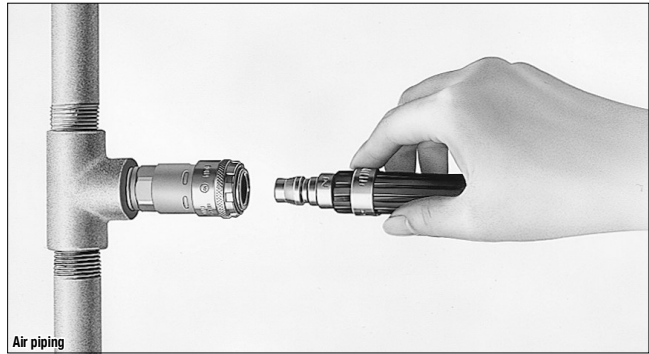
Socket SC type (Tube Fitter)



Model	Application (Tube)	Mass (g)	Dimensions (mm)	
			L	øB
200-60SC	For 6 mm OD tube	100	(64)	5
200-80SC	For 8 mm OD tube	105	(67.5)	6.5
200-100SC	For 10 mm OD tube	123	(70.5)	8.5

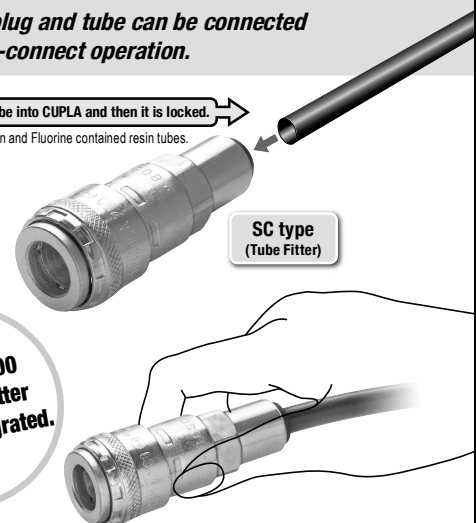
\* The outer dimensions of Model 200-100SC are a little bit different from those of other models.

Application example



All of socket, plug and tube can be connected in one push-to-connect operation.

Just push the tube into CUPLA and then it is locked.  
Polyurethane, Nylon and Fluorine contained resin tubes.



HI CUPLA 200 and Tube Fitter are now integrated.

Major applications: miniature pneumatic equipment, automatic control equipment, physicochemical equipment and medical devices.

Just push in for quick connection.