

For Air

# Hi Cupla 200

Push-to-connect type for air lines

Working pressure



1.5 MPa  
(15 kgf/cm<sup>2</sup>)

Valve structure



One-way shut-off

Applicable fluid



Air



▼ with Tube Fitter

**Simple and secure push-to-connect type! Big flow rate! Tube edge 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 previous model).
- Tube edge seal is achieved when connected.
- Low connection resistance allows easier connection/disconnection.
- No seal damage caused by exhausted lubricant is observed and the handling is superior to external O-ring design.
- Available only with steel body. Not suitable for water or oil.
- Tube Fitter type is available for push-to-connect operation.

## Specifications

Body material	Steel (Chrome-plated)			
Size	1/4" (20 type) • 3/8" (30 type) • 1/2" (40 type)			
Tube size (for Tube Fitter end configurations)	Polyurethane : $\phi 6 \pm 0.1$ • $\phi 8 \pm 0.15$ • $\phi 10 \pm 0.15$ Nylon : $\phi 6^{+0.05}_{-0.08}$ • $\phi 8^{+0.05}_{-0.1}$ • $\phi 10^{+0.05}_{-0.1}$ Teflon : $\phi 6 \pm 0.07$ • $\phi 8 \pm 0.07$ • $\phi 10 \pm 0.07$			
Working pressure MPa (kgf/cm <sup>2</sup> )	1.5 (15)			
Pressure resistance MPa (kgf/cm <sup>2</sup> )	2.0 (20)			
Seal material	Seal material	Mark	Working temperature range	Remarks
Working temperature range	Nitrile rubber	NBR (SG)	-5°C~+60°C	Standard material

• Above are specifications only for Cuplas. Working pressures, maximum pressures and working temperature ranges may vary depending on materials of the tube and temperature conditions in use. The seal material of Micro Cupla with Tube Fitter is NBR only.

## Max. Tightening Torque

N·m (kgf·cm)

Size	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 Hi Cupla Models 20, 30 and 40.  
Interchangeable with each corresponding Hi Cupla Series models.

## Min. Cross-Sectional Area

(mm<sup>2</sup>)

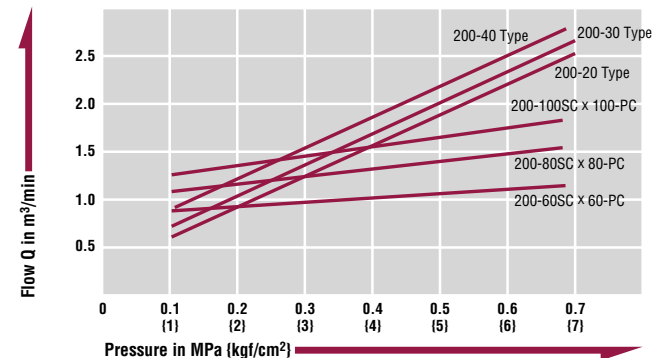
Socket	Plug	17PH	20PH	30PH	40PH	20PM	30PM	40PM	20PF	30PF	40PF
200-17SH		16	16	16	16	16	16	16	16	16	16
200-20SH		16	20	20	20	20	20	20	20	20	20
200-30SH		16	20	41	41	41	41	41	41	41	41
200-40SH		16	20	41	41	41	41	41	41	41	41
200-20SM		16	20	41	41	41	41	41	41	41	41
200-30SM		16	20	41	41	41	41	41	41	41	41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

## Suitability for Vacuum

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

## Pressure - Flow Characteristics

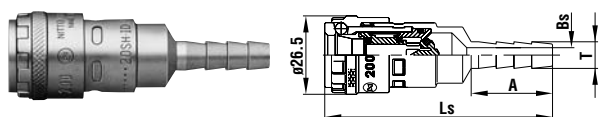
[Test conditions] • Fluid : Air • Temperature : Room temperature



Models and Dimensions

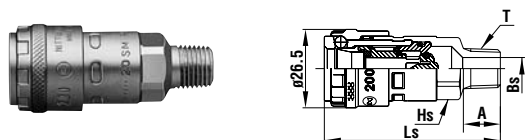
WAF : WAF stands for width across flats.

**Socket SH type (Hose barb)**



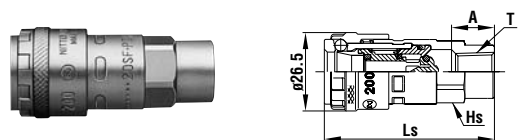
Model	Application (Hose)	Mass (g)	Dimensions (mm)			
			Ls	A	øT	øBs
200-17SH	1/4"	86	77	27	7.2	4.5
200-20SH	1/4"	90	77	27.5	9	5
200-30SH	3/8"	92	79	32	11.3	7.5
200-40SH	1/2"	104	79.5	32	15	10

**Socket SM type (Male thread)**



Model	Application	Mass (g)	Dimensions (mm)				
			Ls	Hs(WAF)	A	T	øBs
200-20SM	Rc 1/4	89	60	Hex.19	13	R 1/4	7.5
200-30SM	Rc 3/8	91	60.5	Hex.19	13.5	R 3/8	10
200-40SM	Rc 1/2	102	56	Hex.24	16	R 1/2	13

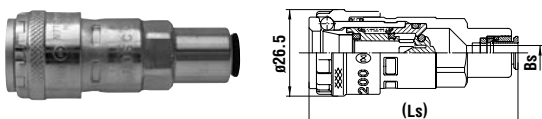
**Socket SF type (Female thread)**



Models	Application	Mass (g)	Dimensions (mm)			
			Ls	Hs(WAF)	A	T
200-20SF	R 1/4	94	57.5	Hex.19	14.5	Rc 1/4
200-30SF	R 3/8	103	55.5	Hex.22	13	Rc 3/8
200-40SF	R 1/2	138	57.5	Hex.29	16	Rc 1/2

Models and Dimensions (with Tube Fitter)

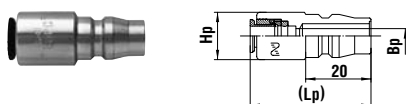
**Socket SC type (with Tube Fitter)**



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

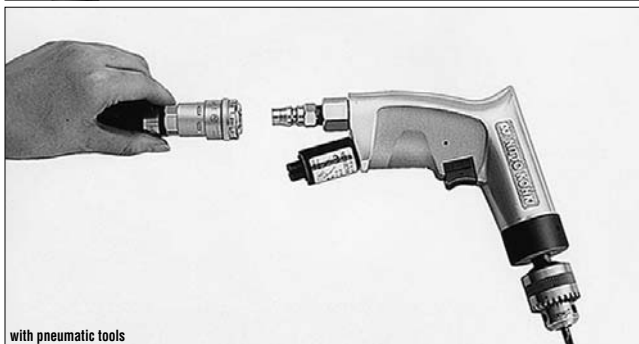
\* The outer dimensions of Model 200-100SC are a little bit different from those of other models.

**Plug PC type (with Tube Fitter)**

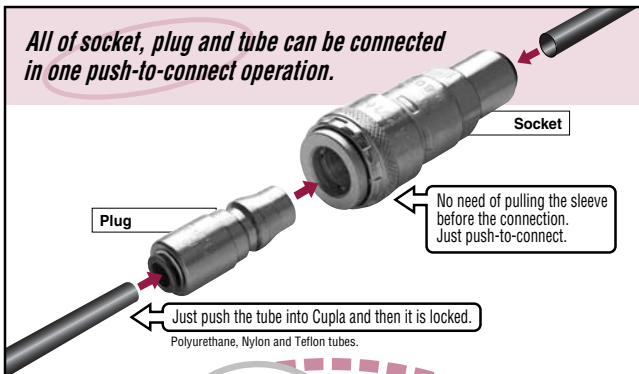


Model	Application	Mass (g)	Dimensions (mm)		
			Lp	øHp	øBp
60PC	For 6mm OD tube	25	37	14.5	4.5
80PC	For 8mm OD tube	30	41	16.5	6.5
100PC	For 10mm OD tube	43	45	19.5	7.5

Application example



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



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.