

For Low Pressure

# Small Cupla

Lightweight and compact for use on air lines and scientific equipment

Working pressure



1.0 MPa  
(10 kgf/cm<sup>2</sup>)

Valve structure



One-way shut-off

Applicable fluids



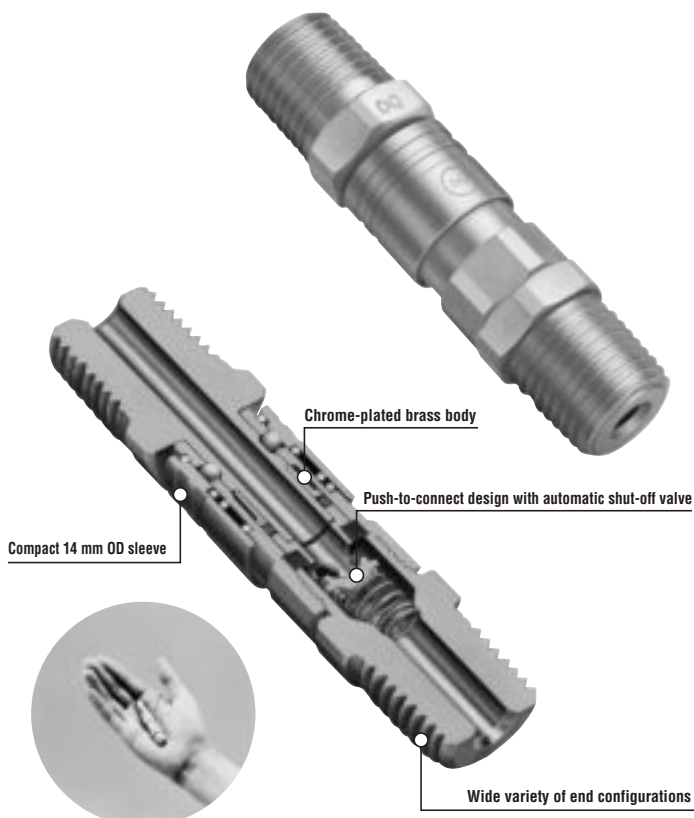
Air

Water (Tube Fitter type is unsuitable for water.)

## Lightweight and compact push-to-connect operation. Responding to requirements of modular combinations.

- Compact socket with built-in valve and 14 mm OD sleeve.  
Suits applications calling for compact and modular components.
- Just push in the plug to the socket for connection by easy one hand operation.
- Chrome-plated brass for corrosion resistance adopted for the body.  
Stable performance for long life.
- A wide line-up of end configurations (female and male threads, hose barbs, manifolds) enables suitability with a wide range of piping applications such as pneumatic, scientific and medical equipment.
- Also available with quick connect/disconnect Tube Fitter type.

Note: Fluid will flow out from the plug side when disconnected.  
Take necessary precaution if the fluid is water.



### Specifications

Body material		Cupla : Brass (Chrome-plated) Tube Fitter Type: Brass (Nickel-plated)		
Size	Thread	1/8", 1/4"		
	Hose barb	Polyamide hose: $\phi 4 \times \phi 6$ , $\phi 4.5 \times \phi 6$ Urethane hose: $\phi 4 \times \phi 6$		
	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. $\phi 6 \pm 0.07$ , $\phi 8 \pm 0.07$		
Working pressure		MPa	1.0	
		kgf/cm <sup>2</sup>	10	
		bar	10	
		PSI	145	
Seal material		Seal material	Mark	Working temperature range
Working temperature range		Nitrile rubber	NBR (SG)	-20°C to +80°C
		Standard material		

• Above specifications apply only to Cuplas. Working pressure, pressure resistance and working temperature range may vary depending on tube materials you use with and its working temperature range.

### Max. Tightening Torque

Nm (kgf·cm)

Size (Thread)	1/8"	1/4"	PN • SN Type
Torque	7 {71}	9 {92}	5 {51}

### Flow Direction

Air flows in either direction from plug or socket side when coupled.



### Interchangeability

Sockets and plugs can be connected regardless of end configurations.

### Min. Cross-Sectional Area

(mm<sup>2</sup>)

Model	MS-10SM X MS-10PM	MS-20SM X MS-20PM	MS-40SN X MS-40PN	MS-45SN X MS-45PN	Tube Fitter Type for 6 mm OD tube	Tube Fitter Type for 8 mm OD tube
Min. cross-sectional area	12.5	12.5	4.9	7	12.5	12.5

### Suitability for Vacuum

53.0 kPa {400 mmHg}

Socket only	Plug only	When connected
—	—	Operational

### Pressure - Flow Characteristics

[Test conditions] • Fluid : Air • Temperature : Room temperature  
• Tube size :  $\phi 6$  mm x  $\phi 4$  mm,  $\phi 8$  mm x  $\phi 6$  mm (Small Cupla with Tube Fitter)

