For Low Pressure

Compact Cupla

Small multipurpose type for low pressure lines

Working pressure: 1.0 MPa {10 kgf/cm²}
Valve structure: Two-way shut-off
Applicable fluids: Air, Water

Compact 17.5 mm outer diameter, yet socket and plug have built-in automatic shut-off valves.

- Both socket and plug have built-in automatic shut-off valves.
- Compact size with max. outer dia. 17.5 mm.
- For small bore piping from temperature control piping to scientific equipment.
- Body materials in stainless steel (SUS304) or brass, excellent in corrosion resistance.
- Four types of end configuration enable suitability with a wide range of piping applications.

Specifications

Body material		Brass, Stainless steel (SUS 304)			
Size	Thread	1/8"			
	Tube barb	Polyamide tube : ø4 x ø6, ø6 x ø8 Polyolefin tube : ø4 x ø6, ø6 x ø8 Fluorine contained resin tube : ø4 x ø6, ø6 x ø8			
Working pressure	MPa	1.0			
	kgf/cm²	10			
	bar	10			
	PSI	145			
Seal material Working temperature range		Seal material	Mark	Working temperature range	Remarks
		Fluoro rubber	FKM	−20°C to +180°C	Standard material
		Ethylene-propylene rubber	EPDM	−40°C to +150°C	Available on request

Note: Working pressure and working temperature of nut type depend on the tube material and its dimensional tolerance.

Max. Tightening Torque — N m {kgf•cm}

Size (Thread)		1/8"	Tube barb
Torque	Brass	5 {51}	5 {51}
	Stainless steel	9 {92}	7 {71}

Flow Direction

Fluid may flow in either direction from plug or from socket side when coupled.

Interchangeability

Socket and plug of Compact Cupla can be connected regardless of end configurations.

Min. Cross-Sectional Area — (mm²)

Model	CO-1SM x CO-1PM	CO-1SF x CO-1PF	CO-40SN x CO-40PN	CO-60SN x CO-60PN
Min. cross-sectional area	8.8	8.8	4.9	8.8

Suitability for Vacuum — 1.3 x 10⁻¹ Pa {1 x 10⁻³ mmHg}

Socket only	Plug only	When connected
—	—	Operational

Admixture of Air on Connection — (mL)

Admixture of air may vary depending upon the usage conditions.

Volume of air admixture	0.34

Volume of Spillage per Disconnection — (mL)

Volume of spillage may vary depending upon the usage conditions.

Volume of spillage	0.23

Flow Rate – Pressure Loss Characteristics

[Test conditions] •Fluid : Water •Temperature : 20°C ± 5°C