

For Low Pressure

COMPACT ZERO SPILL CUPLA

Small, high flow type for coolant piping

Working pressure



1.0 MPa
(10 kgf/cm²)

Valve structure



Two-way shut-off
(Spill Reduction)

Applicable fluids



Air

Water

For coolant piping of electronic equipment for supercomputers, data centers and other non-spill environments. Small but high flow rate for efficient cooling.

- Compact size saves space.
Outer diameters of 16 mm (CZL-1SM) and 18.5 mm (CZL-2SM)
- High flow rate for efficient cooling.
- Easy operation, push-to-connect function.
- Valve structure reduces air inclusion on connection and liquid spillage when disconnecting.



Specifications

Body material	Stainless Steel (SUS304), Nickel plated on Socket body			
Size (Thread)	1/8", 1/4"			
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 *1	Ethylene-propylene rubber	EPDM	-10°C to +100°C	Standard material

*1: The operable temperature range depends on the operating conditions.

Maximum Tightening Torque

Nm {kgf·cm}

Size (Thread)	1/8"	1/4"
Torque	9 {92}	14 {143}

Flow Direction

Fluid flow can be bi-directional when socket and plug are connected.



Interchangeability

Socket and plug of different sizes cannot be connected.

Minimum Cross-Sectional Area

(mm²)

Model	CZL-1SM×CZL-1PM	CZL-2SM×CZL-2PM
Min. cross-sectional area	14.9	30.2

Suitability for Vacuum

Please contact us if vacuum is required for your application.

Admixture of Air on Connection

May vary depending upon the usage conditions.

(mL)

Model	CZL-1SM×CZL-1PM	CZL-2SM×CZL-2PM
Volume of air inclusion	0.02	0.04

Volume of Spillage per Disconnection

May vary depending upon the usage conditions.

(mL)

Model	CZL-1SM×CZL-1PM	CZL-2SM×CZL-2PM
Volume of spillage	0.015	0.023

Flow Rate – Pressure Loss Characteristics

[Test conditions] - Fluid : Water - Temperature : 23 °C to 26 °C

