

For High Pressure

HSU Cupla

Stainless steel Cupla for high pressure up to 21.0 MPa (214 kgf/cm²)

Working pressure 21.0 MPa (214 kgf/cm ²)	Valve structure Two-way shut-off	Applicable fluids Water Hydraulic oil Gas
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The flow volume is increased by between 14 to 44% while at the same time the coupled length is reduced by at least 10% compared with the S210 Cupla.

- Body material is excellent corrosion resistant stainless steel (SUS304). Suitable for use in tough/harsh environments such as offshore applications.
- Sleeve stopper mechanism can be engaged by rotating sleeve after connection.
- Despite having a stainless steel body, the working pressure, 21.0 MPa, of HSU Cupla is comparable to that of special steel body Cuplas such as HSP Cupla series.
- Both socket and plug have built-in automatic shut-off valves that prevent fluid outflow on disconnection.
- Hydrogenated nitrile rubber (HNBR) is used as a seal material for wide variety of liquids.



Specifications

Body material	Stainless steel (SUS304)			
Size (Thread)	1/4", 3/8", 1/2", 3/4", 1"			
Pressure unit	MPa	kgf/cm ²	bar	PSI
Working pressure	21.0	214	210	3050
Seal material	Seal material	Mark		Working temperature range
Working temperature range	Hydrogenated nitrile rubber *	HNBR		-20°C to +120°C

* The seal materials used in HSU Cupla are not suitable for Freon gas.

Max. Tightening Torque

Size (Thread)	1/4"	3/8"	1/2"	3/4"	1"
Torque	28 {286}	35 {357}	70 {714}	100 {1020}	180 {1836}

Flow Direction

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



Interchangeability

Different size socket and plug cannot be connected to each other.

Min. Cross-Sectional Area

Model	HSU-2SP	HSU-3SP	HSU-4SP	HSU-6SP	HSU-8SP
Min. cross-sectional area	27.1	48.2	84.2	143.6	221.2

Suitability for Vacuum

1.3 × 10 ⁻¹ Pa (1 × 10 ⁻³ mmHg)		
Socket only	Plug only	When connected
—	—	Operational

Admixture of Air on Connection

May vary depending upon the usage conditions. (mL)

Model	HSU-2SP	HSU-3SP	HSU-4SP	HSU-6SP	HSU-8SP
Volume of air admixture	0.7	1.5	3.6	6.3	10.9

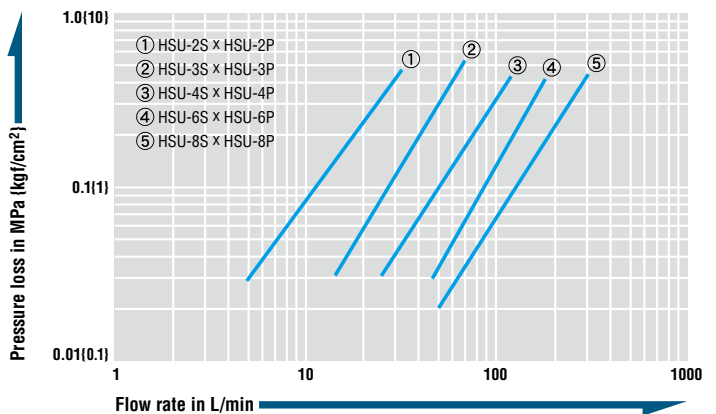
Volume of Spillage per Disconnection

May vary depending upon the usage conditions. (mL)

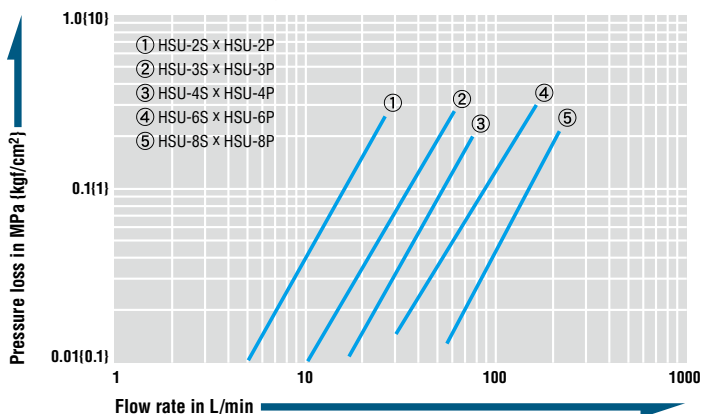
Model	HSU-2SP	HSU-3SP	HSU-4SP	HSU-6SP	HSU-8SP
Volume of spillage	0.6	1.7	3.0	6.8	11.2

Flow Rate – Pressure Loss Characteristics (Hydraulic oil / Water)

[Test conditions] • Fluid : Hydraulic oil • Temperature : 30°C to 32°C
• Fluid viscosity : 32 × 10⁻⁶ m²/s • Density : 0.87 × 10³ kg/m³

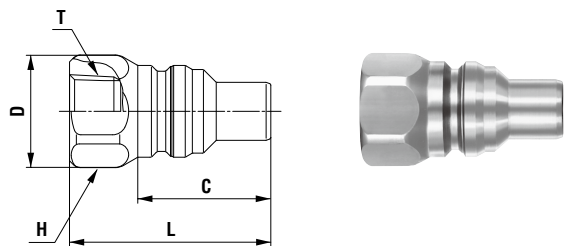


[Test conditions] • Fluid : Water • Temperature : 18°C



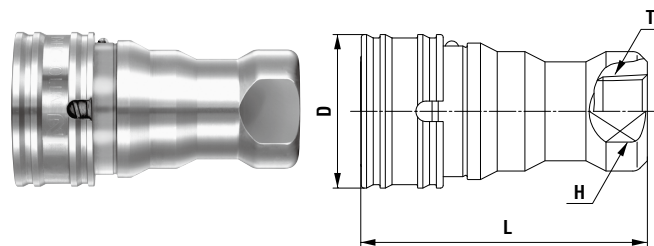
Models and Dimensions

Plug Female thread



Model	Application	Mass (g)	Dimensions (mm)				
			L	C	øD	H (WAF)	T
HSU-2P	R 1/4	49	45.5	27.5	21	Hex.19	Rc 1/4
HSU-3P	R 3/8	86	51.5	32	26.5	Hex.24	Rc 3/8
HSU-4P	R 1/2	152	59	39	33	Hex.30	Rc 1/2
HSU-6P	R 3/4	295	74	51.5	42	Hex.38	Rc 3/4
HSU-8P	R 1	481	83	58	51	Hex.46	Rc 1

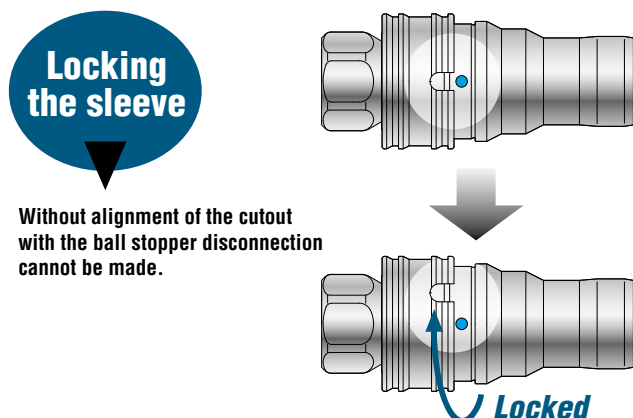
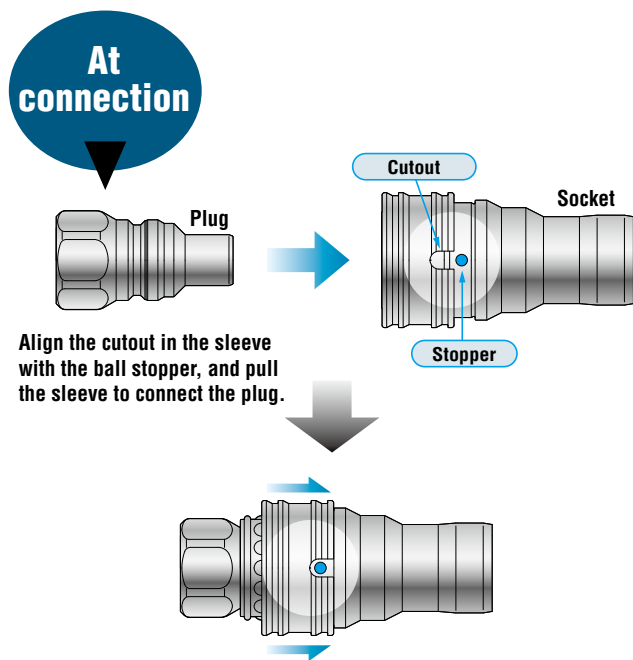
Socket Female thread



Model	Application	Mass (g)	Dimensions (mm)			
			L	øD	H (WAF)	T
HSU-2S	R 1/4	142	63	28	19	Rc 1/4
HSU-3S	R 3/8	255	71.5	35	24	Rc 3/8
HSU-4S	R 1/2	479	84	45	30	Rc 1/2
HSU-6S	R 3/4	953	106	55	38	Rc 3/4
HSU-8S	R 1	1432	118	65	46	Rc 1

Sleeve Stopper Mechanism

Easy to operate sleeve stopper mechanism enhances operator safety.



Accidental disconnection is prevented.

The stopper is marked with blue for visual understanding.