

For High Pressure

280 Cupla

For hydraulic pressure up to 27.5 to 31.5 MPa {281 to 321 kgf/cm²}

Working pressure



27.5 to 31.5 MPa
(281 to 321 kgf/cm²)

Valve structure



Two-way shut-off

Applicable fluids



Hydraulic oil

Generic Cupla copes with high pressure lines in hydraulic equipment! Low pressure loss is ideal for hydraulic equipment.

- Complies with international standard ISO 7241-1A.
- General purpose hydraulic Cuplas with the working pressure up to 27.5 to 31.5 MPa {281 to 321 kgf/cm²}.
- Structure keeps pressure loss extremely low, particularly ideal for hydraulic applications requiring high flow rates.
- Both socket and plug have built-in automatic shut-off valves to prevent fluid spill out when disconnected. Easy to handle.
- Special steel body material is adopted for its excellent strength and additional quenching treatment is done to withstand hydro pressure impacts.



Specifications

Body material	Special steel (Bright chromate conversion coating : silver)			
Size (Thread)	1/4", 3/8"		1/2", 3/4", 1"	
Working pressure	MPa	31.5	27.5	
	kgf/cm ²	321	281	
	bar	315	275	
	PSI	4570	3990	
Seal material	Nitrile rubber	Mark	NBR (SG)	Working temperature range
Working temperature range	-20°C to +80°C			
		Remarks		
		Standard material		

Max. Tightening Torque

Nm {kgf·cm}

Size (Thread)	1/4"	3/8"	1/2"	3/4"	1"
Torque	28 {286}	40 {408}	80 {816}	100 {1020}	180 {1836}

Flow Direction

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



Interchangeability

Different sizes cannot be connected.

Min. Cross-Sectional Area

(mm²)

Model	280-2SP	280-3SP	280-4SP	280-6SP	280-8SP
Min. cross-sectional area	11.4	42.8	79.1	146.5	235.6

Suitability for Vacuum

1.3 Pa {1 x 10⁻² mmHg}

Socket only	Plug only	When connected
—	—	Operational

Admixture of Air on Connection

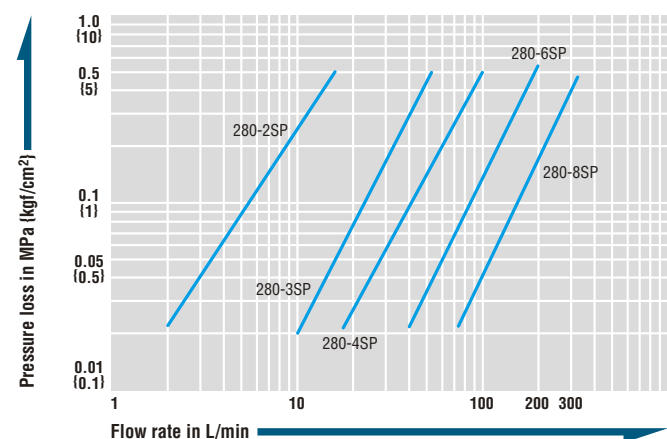
Admixture of air may vary depending upon the usage conditions.

(mL)

Model	280-2SP	280-3SP	280-4SP	280-6SP	280-8SP
Volume of air	0.37	1.02	2.63	8.83	16.04

Flow Rate – Pressure Loss Characteristics

[Test conditions] • Fluid : Hydraulic oil • Temperature : 30°C ± 5°C
• Fluid viscosity : 32 × 10⁻⁶ m²/s • Density : 0.87 × 10³ kg/m³



⚠ Precautions for use

There is no interchangeability between 280 Cupla and HSP Cupla or 210 Cupla. Do not connect each other even if some sizes are approximate.