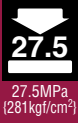


For Hydraulics

280 Cupla

For hydraulic pressure up to 27.5~31.5MPa (281~321kgf/cm²)

Working pressure



Valve structure



Applicable fluids



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

- In accordance with international standard ISO 7241-1A.
- General purpose hydraulic Cuplas with the working pressure up to 27.5~31.5MPa (281~321kgf/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. This also makes handling each independent part easier.
- Special steel body material is adopted for its excellent strength and additional quenching treatment is done to withstand hydro pressure impacts.
- Various end configurations.

Specifications

Body material	Special steel (Zinc plating, clear passivate finish: silver)			
Size	1/4" • 3/8"	1/2" • 3/4" • 1"		
Working pressure MPa (kgf/cm ²)	31.5 (321)	27.5 (281)		
Pressure resistance MPa (kgf/cm ²)	47.3 (482)	41.3 (421)		
Seal material	Seal material	Mark	Working temperature range	Remarks
Working temperature range	Nitrile rubber	NBR (SG)	-20°C~+80°C	Standard material

Max. Tightening Torque

N·m (kgf·cm)

Size	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

1.3Pa (1 x 10⁻²mmHg)

Socket only	Plug only	When connected
—	—	Operational

Admixture of Air on Connection

(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 x 10⁻⁶m²/s •Density : 0.87 x 10³kg/m³

