

For Hydraulics

# 210 Cupla

For hydraulic pressure up to 20.6MPa (210kgf/cm<sup>2</sup>)

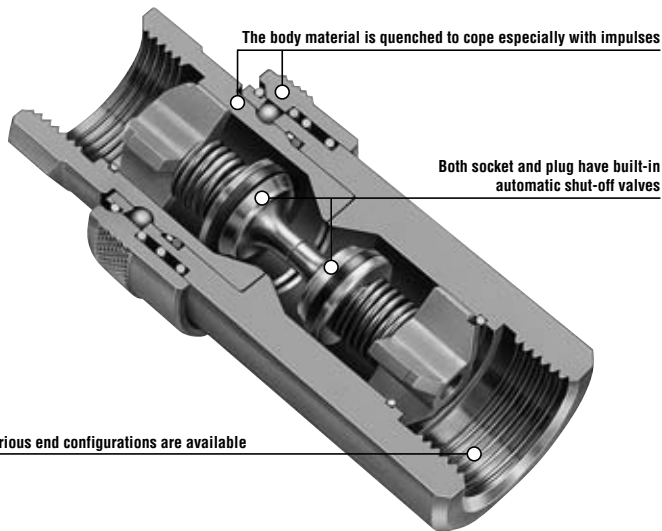
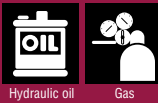
Working pressure



Valve structure



Applicable fluids



Various end configurations are available

Standard hydraulic Cuplas for general purposes with a working pressure up to 20.6MPa.

Low pressure loss, suitable for hydraulic equipment.

- General purpose hydraulic Cuplas with a working pressure of 20.6MPa(210kgf/cm<sup>2</sup>).
- Structure is designed to reduce pressure loss to the lowest, and is best for hydraulic applications that need big flow rates.
- Both socket and plug have built-in automatic shut-off valves that prevent fluid outflow when disconnected. Easy to handle.

## Specifications

Body material	Special steel (Nickel-plated)			
Size	1/4" • 3/8" • 1/2" • 3/4" • 1"			
Working pressure MPa (kgf/cm <sup>2</sup> )	20.6 (210)			
Pressure resistance MPa (kgf/cm <sup>2</sup> )	31.0 (316)			
Seal material Working temperature range	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR (SG)	-20°C~+80°C	Standard material
	Fluoro rubber	FKM (X-100)	-20°C~+180°C	Available on request

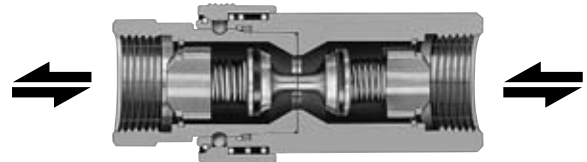
## Max. Tightening Torque

N·m (kgf·cm)

Size	1/4"	3/8"	1/2"	3/4"	1"
Torque	28 (286)	45 (459)	90 (918)	100 (1020)	180 (1836)

## Flow Direction

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



## Interchangeability

Different sizes are not interchangeable.

## Min. Cross-Sectional Area

(mm<sup>2</sup>)

Model	210-2SP	210-3SP	210-4SP	210-6SP	210-8SP
Min. Cross-Sectional Area	24.5	42.8	77.4	146.5	235.6

## Suitability for Vacuum

1.3Pa (1 × 10<sup>-2</sup>mmHg)

Socket only	Plug only	When connected
—	—	Operational

## Admixture of Air on Connection

(ml)

Model	210-2SP	210-3SP	210-4SP	210-6SP	210-8SP
Volume of air	0.85	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<sup>-6</sup>m<sup>2</sup>/s • Density : 0.87 × 10<sup>3</sup>kg/m<sup>3</sup>

