

For High Pressure

210 Cupla

For hydraulic pressure up to 20.6 MPa {210 kgf/cm²}

Working pressure



Valve structure

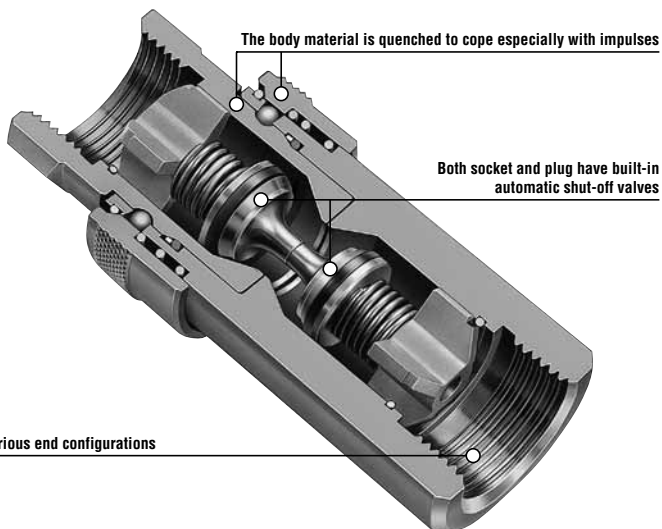


Applicable fluids



Standard hydraulic Cuplas for general purposes with a working pressure up to 20.6 MPa.
Low pressure loss, suitable for hydraulic equipment.

- General purpose hydraulic Cuplas with a working pressure of 20.6 MPa {210 kgf/cm²}.
- 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 (Thread) | 1/4", 3/8", 1/2", 3/4", 1" | | | |
| Working pressure | MPa | 20.6 | | |
| | kgf/cm ² | 210 | | |
| | bar | 206 | | |
| | PSI | 2990 | | |
| Seal material Working temperature range | Seal material | Mark | Working temperature range | Remarks |
| | Nitrile rubber | NBR (SG) | -20°C to +80°C | Standard material |
| | Fluoro rubber | FKM (X-100) | -20°C to +180°C | Available on request |

| Max. Tightening Torque | | Nm (kgf·cm) | | | | |
|------------------------|--|-------------|----------|----------|------------|------------|
| Size (Thread) | | 1/4" | 3/8" | 1/2" | 3/4" | 1" |
| Torque | | 28 (286) | 45 (459) | 90 (918) | 100 (1020) | 180 (1836) |

Flow Direction

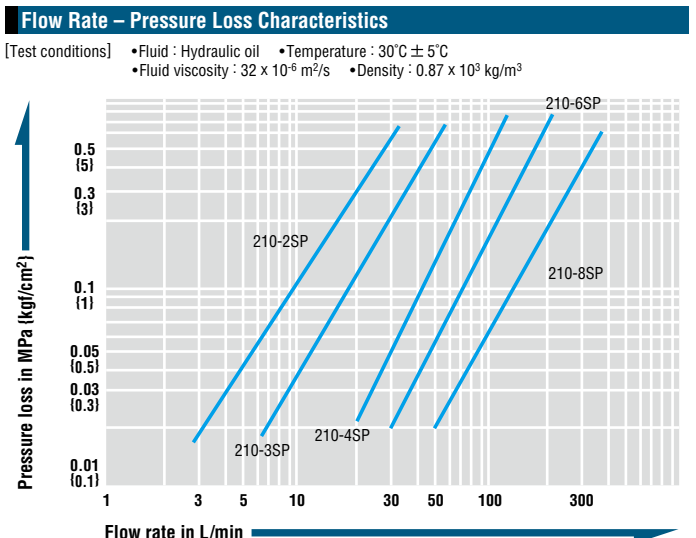
Fluid may flow in either direction from plug or from socket side when coupled.

Interchangeability
 Different sizes are not interchangeable.

| Min. Cross-Sectional Area | (mm ²) | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|
| 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 |

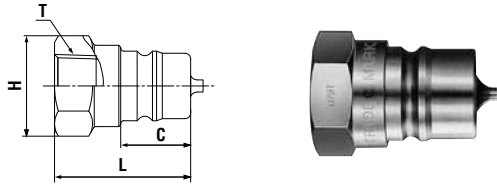
| Suitability for Vacuum | | 1.3 Pa (1 x 10 ⁻² mmHg) |
|------------------------|-----------|------------------------------------|
| Socket only | Plug only | When connected |
| — | — | Operational |

| Admixture of Air on Connection | Admixture of air may vary depending upon the usage conditions. (mL) | | | | |
|--------------------------------|---|---------|---------|---------|---------|
| Model | 210-2SP | 210-3SP | 210-4SP | 210-6SP | 210-8SP |
| Volume of air | 0.85 | 1.02 | 2.63 | 8.83 | 16.04 |



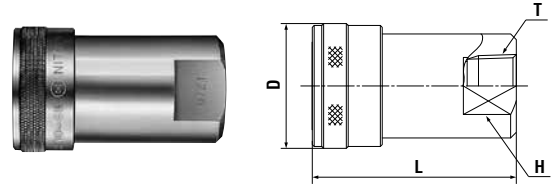
⚠ Precautions for use
 There is no interchangeability between 210 Cupla and HSP Cupla or 280 Cupla. Do not connect each other even if some sizes are approximate.

Plug Female thread



| Model | Application | Mass (g) | Dimensions (mm) | | | |
|--------|-------------|----------|-----------------|------|--------|--------|
| | | | L | C | H(WAF) | T |
| 210-2P | R 1/4 | 39 | 33 | 18 | Hex.19 | Rc 1/4 |
| 210-3P | R 3/8 | 57 | 36 | 18.5 | Hex.23 | Rc 3/8 |
| 210-4P | R 1/2 | 90 | 42.5 | 24 | Hex.27 | Rc 1/2 |
| 210-6P | R 3/4 | 195 | 51 | 28 | Hex.35 | Rc 3/4 |
| 210-8P | R 1 | 293 | 61 | 35 | Hex.41 | Rc 1 |

Socket Female thread



| Model | Application | Mass (g) | Dimensions (mm) | | | |
|--------|-------------|----------|-----------------|------|--------|--------|
| | | | L | øD | H(WAF) | T |
| 210-2S | R 1/4 | 158 | 50.5 | (30) | 22 | Rc 1/4 |
| 210-3S | R 3/8 | 193 | 54 | (33) | 23 | Rc 3/8 |
| 210-4S | R 1/2 | 330 | 65 | (39) | 29 | Rc 1/2 |
| 210-6S | R 3/4 | 566 | 78.5 | (48) | 35 | Rc 3/4 |
| 210-8S | R 1 | 861 | 95 | (55) | 41 | Rc 1 |

Application Example



Hydraulic control equipment



Construction machinery