

For High Pressure

350 Cupla

For hydraulic pressures up to 34.5MPa (352kgf/cm²)

Working pressure

34.5
34.5MPa
(352kgf/cm²)

Valve structure

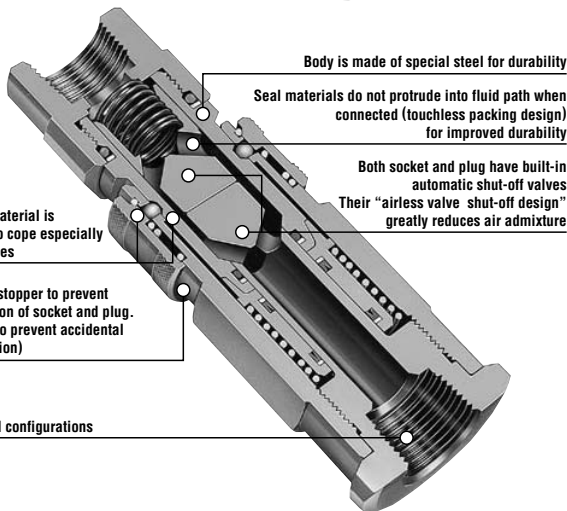
Two-way shut-off
(Non-Spill)

Applicable fluids

Hydraulic oil

Their “airless valve shut-off design” greatly reduces air admixture! Ideal for hydraulic lines with larger pressure fluctuations.

- Locking mechanism to prevent accidental disconnection maintains tight connection even under vibration or impact.
- Both socket and plug have built-in automatic shut-off valves to prevent fluid spill out when disconnected. Easy to handle.



Body is made of special steel for durability

Seal materials do not protrude into fluid path when connected (touchless packing design) for improved durability

Both socket and plug have built-in automatic shut-off valves. Their “airless valve shut-off design” greatly reduces air admixture

The body material is quenched to cope especially with impulses

Fitted with stopper to prevent disconnection of socket and plug. (Designed to prevent accidental disconnection)

Various end configurations

Specifications

| | | | | |
|--|---|-------------|---------------------------|--------------------|
| Body material | Special steel (Nickel-plated) | | | |
| Size | 1/4" • 3/8" • 1/2" • 3/4" • 1" • 1 1/4" • 1 1/2" • 2" | | | |
| Working pressure MPa (kgf/cm ²) | 34.5 (352) | | | |
| Pressure resistance MPa (kgf/cm ²) | 51.5 (525) | | | |
| Seal material | Seal material | Mark | Working temperature range | Remarks |
| | Fluoro rubber | FKM (X-100) | -20°C~+180°C | Standard material |
| Working temperature range | Nitrile rubber | NBR (SG) | -20°C~+80°C | Made-to-order item |

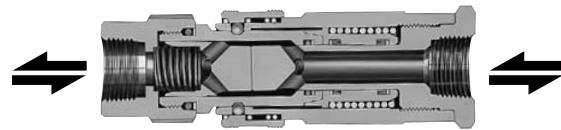
Max. Tightening Torque

N·m (kgf·cm)

| | | | | | | | | |
|--------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|
| Size | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| Torque | 28 (286) | 40 (408) | 80 (816) | 150 (1530) | 250 (2550) | 500 (5100) | 500 (5100) | 700 (7140) |

Flow Direction

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



Interchangeability

Different size socket and plug cannot be connected each other. However, 350-2SP with 350-3SP or 350-10SP with 350-12SP can be connected each other.

Min. Cross-Sectional Area

(mm²)

| | | | | | | | | |
|---------------------------|---------|---------|---------|---------|---------|----------|----------|----------|
| Model | 350-2SP | 350-3SP | 350-4SP | 350-6SP | 350-8SP | 350-10SP | 350-12SP | 350-16SP |
| Min. cross-sectional area | 32.2 | 32.2 | 78.5 | 149.6 | 227.0 | 452.4 | 452.4 | 907.9 |

Suitability for Vacuum

Not suitable for vacuum application in either connected or disconnected condition.

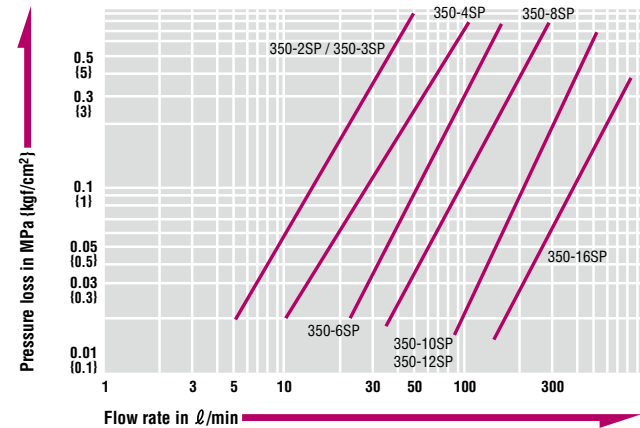
Admixture of Air on Connection

(mℓ)

| | | | | | | | | |
|---------------|---------|---------|---------|---------|---------|----------|----------|----------|
| Model | 350-2SP | 350-3SP | 350-4SP | 350-6SP | 350-8SP | 350-10SP | 350-12SP | 350-16SP |
| Volume of air | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.9 | 0.9 | 2.0 |

Flow Rate – Pressure Loss Characteristics

[Test conditions] • Fluid : Hydraulic oil • Temperature : 40°C ± 5°C
• Fluid viscosity : 32 × 10⁻⁶m²/s • Density : 0.87 × 10³kg/m³

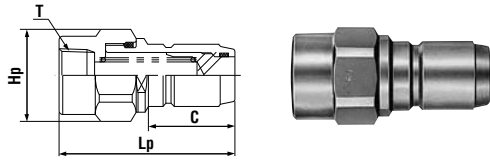


⚠ Precautions for use

Do not connect / disconnect Cuplas when pressure is applied or remaining.

Models and Dimensions

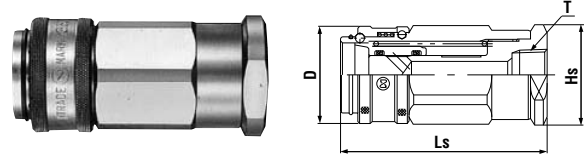
Plug Female thread



| Model | Application | Mass (g) | Dimensions (mm) | | | |
|----------|-------------|----------|-----------------|------|--------------|---------|
| | | | Lp | C | Hp (WAF) | T |
| 350-2P | R 1/4 | 170 | (72) | 36 | Hex.27 x ø29 | Rc 1/4 |
| 350-3P | R 3/8 | 167 | (72) | 36 | Hex.27 x ø29 | Rc 3/8 |
| 350-4P | R 1/2 | 245 | 85 | 40.5 | Hex.27 x ø30 | Rc 1/2 |
| 350-6P | R 3/4 | 415 | (90) | 44.5 | Hex.41 x ø45 | Rc 3/4 |
| 350-8P | R 1 | 1,035 | (119) | 57 | Hex.50 x ø55 | Rc 1 |
| 350-10P | R1 1/4 | 2,700 | (144) | 75 | Hex.70 x ø78 | Rc1 1/4 |
| 350-12P | R1 1/2 | 2,600 | (144) | 75 | Hex.70 x ø78 | Rc1 1/2 |
| 350-16P* | R 2 | 7,500 | (198) | 85.5 | 90 x ø105 | Rc 2 |

* Available on request

Socket Female thread



| Model | Application | Mass (g) | Dimensions (mm) | | | |
|----------|-------------|----------|-----------------|-----|--------------|---------|
| | | | Ls | øD | Hs (WAF) | T |
| 350-2S | R 1/4 | 360 | (82) | 34 | Hex.30 | Rc 1/4 |
| 350-3S | R 3/8 | 353 | (82) | 34 | Hex.30 | Rc 3/8 |
| 350-4S | R 1/2 | 465 | (93.5) | 41 | Hex.36 | Rc 1/2 |
| 350-6S | R 3/4 | 660 | (105.5) | 49 | 46 x ø52 | Rc 3/4 |
| 350-8S | R 1 | 1,740 | (129) | 63 | 55 x ø62 | Rc 1 |
| 350-10S | R1 1/4 | 5,600 | (180) | 89 | Hex.80 x ø90 | Rc1 1/4 |
| 350-12S | R1 1/2 | 5,500 | (180) | 89 | Hex.80 x ø90 | Rc1 1/2 |
| 350-16S* | R 2 | 14,500 | (239) | 117 | 105 | Rc 2 |

* Available on request

Application Example



Hydraulic unit