# For High Pressure 350 Cupla For hydraulic pressures up to 34.5 MPa {352 kgf/cm²} Working pressure Valve structure Applicable Ituids 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 ensures 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.



| Specifications                             |                     |  |             |                              |                    |  |  |  |
|--|---------------------|--|-------------|------------------------------|--------------------|--|--|--|
| Body material                              |                     | Special steel (Nickel-plated)                  |             |                              |                    |  |  |  |
| Size (Thread)                              |                     | 1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" |             |                              |                    |  |  |  |
|  | MPa                 |  | 34.5        |                              |                    |  |  |  |
| Working pressure                           | kgf/cm <sup>2</sup> |  | 352         |                              |                    |  |  |  |
| working pressure                           | bar                 | 345  |             |                              |                    |  |  |  |
|  | PSI                 | 5000   |             |                              |                    |  |  |  |
| Seal material<br>Working temperature range |                     | Seal material                                  | Mark        | Working<br>temperature range | Remarks            |  |  |  |
|  |                     | Fluoro rubber                                  | FKM (X-100) | -20°C to +180°C              | Standard material  |  |  |  |
|  |                     | Nitrile rubber                                 | NBR (SG)    | -20°C to +80°C               | Made-to-order item |  |  |  |

| Max. Tightening Torque Nm {kgf•cm} |             |             |             |               |               |               | f•cm}         |               |
|------------------------------------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|
| Size (Thread)                      | 1/4"        | 3/8"        | 1/2"        | 3/4"          | 1"            | 1 1/4"        | 1 1/2"        | 2"            |
| Torque                             | 28<br>{286} | 40<br>{408} | 80<br>{816} | 150<br>{1530} | 250<br>{2550} | 500<br>{5100} | 500<br>{5100} | 700<br>{7140} |

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

### Interchangeabilit

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 (n  |         |         |         |         |         |          | (mm²)    |          |
|-------------------------------|---------|---------|---------|---------|---------|----------|----------|----------|
| Model                         | 350-2SP | 350-3SP | 350-4SP | 350-6SP | 350-8SP | 350-10SP | 350-12SP | 350-16SP |
| Min. cross-<br>sectional area | 34.2    | 34.2    | 73.0    | 149.6   | 227.0   | 452.4    | 452.4    | 907.9    |

### **Suitability for Vacuum**

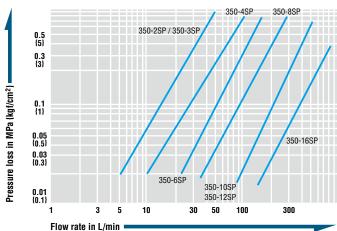
Not suitable for vacuum application in either connected or disconnected condition.

| Admixture of Air on Connection Admixture of air may vary depending upon the usage conditions. (m |         |         |         |         |         |          | (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

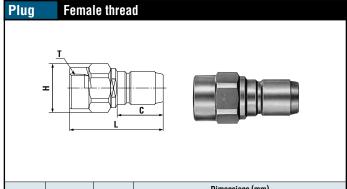
[Test conditions]  $\bullet$ Fluid : Hydraulic oil  $\bullet$ Temperature : 40°C  $\pm$  5°C

•Fluid viscosity: 32 x 10<sup>-6</sup> m<sup>2</sup>/s •Density: 0.87 x 10<sup>3</sup> kg/m<sup>3</sup>



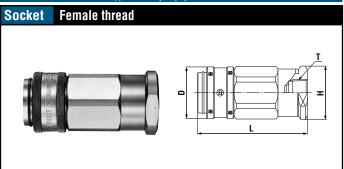
### riangle Precautions for use

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



| Model    | Application | Mass (g) | Dimensions (mm) |      |              |          |  |  |
|----------|-------------|----------|-----------------|------|--------------|----------|--|--|
| Monei    |             |          | L               | C    | H(WAF)       | T        |  |  |
| 350-2P   | R 1/4       | 170      | (72)            | 36   | Hex.27 × 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       | 473      | (90)            | 44.5 | Hex.41 × ø45 | Rc 3/4   |  |  |
| 350-8P   | R 1         | 1,035    | (119)           | 57   | Hex.50 × ø55 | Rc 1     |  |  |
| 350-10P  | R 1 1/4     | 2,700    | (144)           | 75   | Hex.70 x ø78 | Rc 1 1/4 |  |  |
| 350-12P  | R 1 1/2     | 2,600    | (144)           | 75   | Hex.70 × ø78 | Rc 1 1/2 |  |  |
| 350-16P* | R 2         | 7,500    | (198)           | 85.5 | 90 × ø105    | Rc 2     |  |  |

- Available on request
- G thread is available on request.



| Model    | Application | Mass (g) | Dimensions (mm) |      |              |          |  |  |
|----------|-------------|----------|-----------------|------|--------------|----------|--|--|
| Monei    | Application |          | L               | øD   | H(waf)       | T        |  |  |
| 350-2S   | R 1/4       | 360      | (82)            | (34) | Hex.30       | Rc 1/4   |  |  |
| 350-38   | R 3/8       | 353      | (82)            | (34) | Hex.30       | Rc 3/8   |  |  |
| 350-4S   | R 1/2       | 545      | (93.5)          | (41) | Hex.36       | Rc 1/2   |  |  |
| 350-6S   | R 3/4       | 976      | (105.5)         | (49) | 46 × ø52     | Rc 3/4   |  |  |
| 350-8\$  | R 1         | 1,740    | (129)           | (63) | 55 x ø62     | Rc 1     |  |  |
| 350-10S  | R 1 1/4     | 5,600    | (180)           | 89   | Hex.80 × ø90 | Rc 1 1/4 |  |  |
| 350-12S  | R 1 1/2     | 5,500    | (180)           | 89   | Hex.80 × ø90 | Rc 1 1/2 |  |  |
| 350-168* | R 2         | 14,500   | (239)           | 117  | 105          | Rc 2     |  |  |
|          |             |          | •               |      |              | •        |  |  |

- \* Available on request
- G thread is available on request.

### **Application Example**



### **Optional Accessory**

### **Purge Adapter**

Metal Purge Adapter for hydraulic lines (Semi-standard)

• Can be attached to hydraulic lines to purge residual pressure effectively.

| Model                     | PAD-2 (Part No.CB19855)                               |
|---------------------------|---|
| Applicable fluid          | Hydraulic oil   |
| Material                  | Steel (With autocatalytic nickel-phosphorus coating)  |
| Working pressure          | 35.0 MPa, 357 kgf/cm <sup>2</sup> , 350 bar, 5080 PSI |
| Seal material             | Nitrile rubber (NBR)                                  |
| Working temperature range | −5°C to +80   |

When ordering, please indicate Model Name or part number. Semi standard items: As these items are not always in stock, delivery time is subject to confirmation.

