

## For Hydraulics

# 350 Cupla

For hydraulic pressures up to 34.5MPa {352kgf/cm<sup>2</sup>}

Working pressure

**34.5**

34.5MPa  
{352kgf/cm<sup>2</sup>}

Valve structure

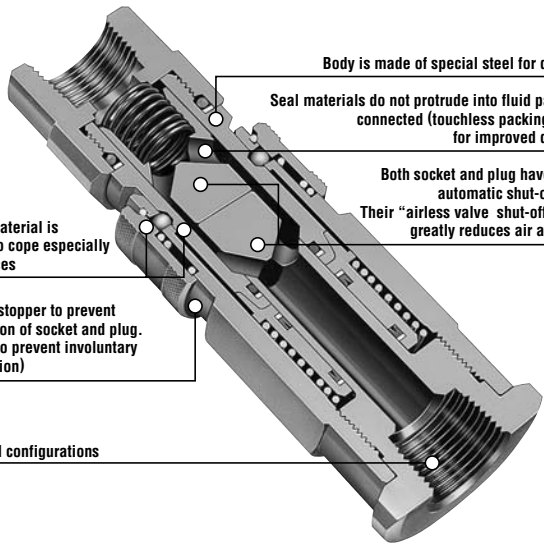


Two-way shut-off  
(Non-Spill)

Applicable fluids



Hydraulic oil



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 involuntary disconnection)

Various end configurations

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

- Locking mechanism to prevent involuntary 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. This also makes handling each independent part easier.

### 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 <sup>2</sup> )	34.5 (352)			
Pressure resistance MPa (kgf/cm <sup>2</sup> )	51.5 (525)			
Seal material Working temperature range	Seal material	Mark	Working temperature range	Remarks
	Fluoro rubber	FKM (X-100)	-20°C~+180°C	Standard material
	Nitrile rubber	NBR (SG)	-20°C~+80°C	Available on request

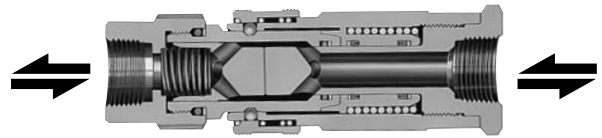
### Max. Tightening Torque

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

(mm<sup>2</sup>)

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.

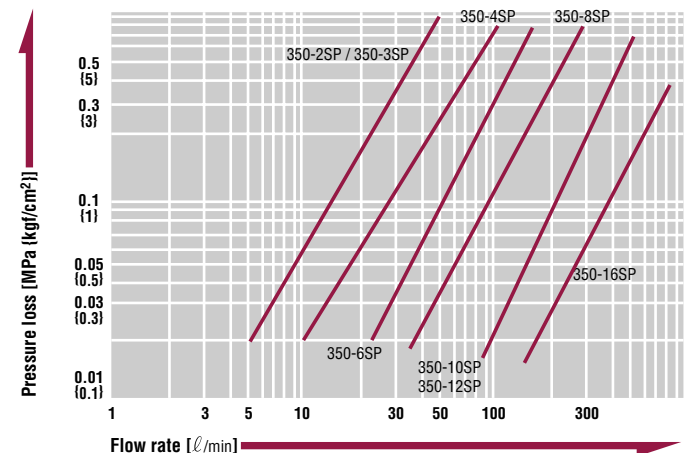
### Admixture of Air on Connection

(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

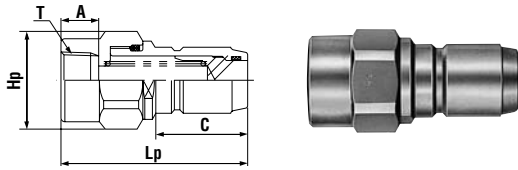
### Flow Rate – Pressure Loss Characteristics

[Test conditions] • Fluid : Hydraulic oil • Temperature : 40°C ± 5°C  
• Fluid viscosity : 32 × 10<sup>-6</sup>m<sup>2</sup>/s • Density : 0.87 × 10<sup>3</sup>kg/m<sup>3</sup>



Models and Dimensions

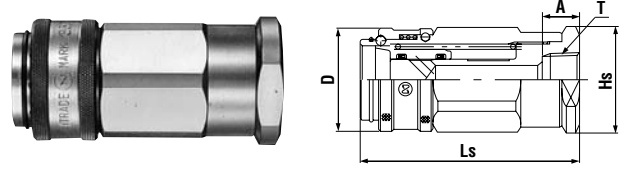
**Plug** Female thread



Model	Application	Mass (g)	Dimensions (mm)				
			Lp	C	Hp (WAF)	A	T
350-2P	R 1/4	170	72	36	Hex.27	13	Rc 1/4
350-3P	R 3/8	167	72	36	Hex.27	13	Rc 3/8
350-4P	R 1/2	245	85	40.5	Hex.27	16	Rc 1/2
350-6P	R 3/4	415	90	44.5	Hex.41	18	Rc 3/4
350-8P	R 1	1,035	119	57	Hex.50	22	Rc 1
350-10P	R1 1/4	2,700	144	75	Hex.70	25	Rc1 1/4
350-12P	R1 1/2	2,600	144	75	Hex.70	25	Rc1 1/2
350-16P*	R 2	7,500	198	88.5	Two flats 90 x ø105	29	Rc 2

\* Available on request

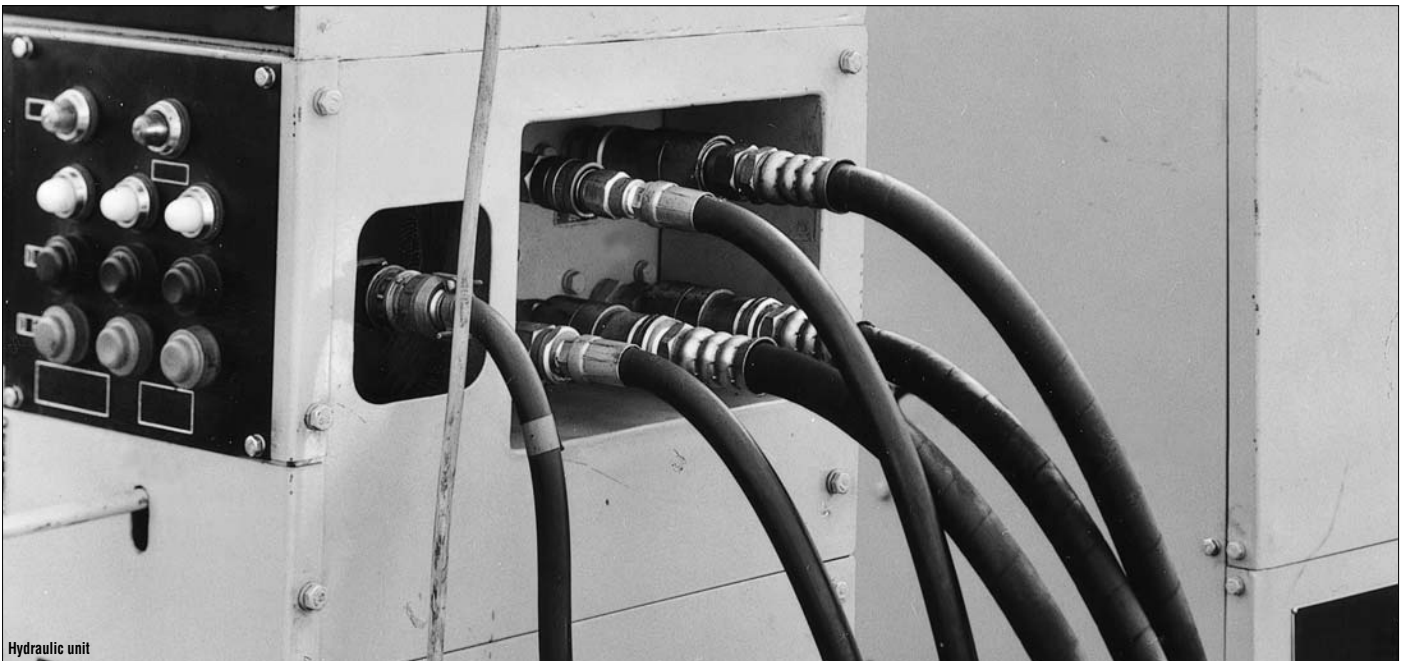
**Socket** Female thread



Model	Application	Mass (g)	Dimensions (mm)				
			Ls	øD	Hs (WAF)	A	T
350-2S	R 1/4	360	82	34	Hex.30	13	Rc 1/4
350-3S	R 3/8	353	82	34	Hex.30	13	Rc 3/8
350-4S	R 1/2	465	93.5	41	Hex.36	16	Rc 1/2
350-6S	R 3/4	660	105.5	49	Two flats 46 x ø52	18	Rc 3/4
350-8S	R 1	1,740	129	63	Two flats 55 x ø62	22	Rc 1
350-10S	R1 1/4	5,600	180	89	Hex.80	24	Rc1 1/4
350-12S	R1 1/2	5,500	180	89	Hex.80	25	Rc1 1/2
350-16S*	R 2	14,500	239	117	Two flats 105 x ø115	29	Rc 2

\* Available on request

Application example



Hydraulic unit