

For Hydraulics

700R Cupla

For hydraulic pressure up to 68.6MPa {700kgf/cm²}

Working pressure

68.6
68.6MPa
{700kgf/cm²}

Valve structure

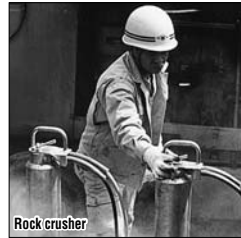


Two-way shut-off

Applicable fluids



Hydraulic oil



High pressure Cupla for working pressures up to 68.6 MPa and pressure resistance of 98 MPa! Unique sleeve ring-lock system copes with vibration and impact when connected.

- Cupla for extremely high working pressures up to 68.6MPa {700kgf/cm²} and pressure resistance of 98MPa {1,000kgf/cm²}.
- Metal-touch valves use no rubber seal, and thus ensure excellent durability.
- Special sleeve ring-lock system maintains tight connection even under vibration or impact when connected.
- Both socket and plug have metal touch automatic shut-off valves that prevent fluid spill out on disconnection.

Specifications

Body material	Special steel (Nickel-plated)			
Size	3/8" • 1/2"			
Working pressure MPa (kgf/cm ²)	68.6 {700}			
Pressure resistance MPa (kgf/cm ²)	98.0 {1000}			
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
Stand-alone leakage rate on either socket or plug	For 3/8", 0.05mℓ/min at 0.2MPa {2kgf/cm ² }			
	For 1/2", 0.05ℓ/min at 0.3MPa {3kgf/cm ² }			
	* Owing to the metal contact seal structure, there will be very minimal leakage from socket and plug respectively, when they are separated.			

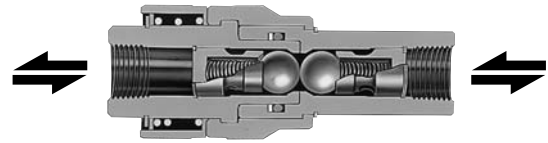
Models and Dimensions

Model	Application	Mass (g)	Dimensions (mm)					
			Lp	C	øDp	Hp(WAF)	A	T
700R-3P	R 3/8	210	54	18	39.5	Two flats 24 x ø28	13	Rc 3/8
700R-4P	R 1/2	418	70	22	50	Two flats 27 x ø35	16	Rc 1/2

Max. Tightening Torque		N·m (kgf·cm)
Size	3/8"	1/2"
Torque	40 {408}	85 {867}

Flow Direction

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



Interchangeability

Different sizes are not connectable.

Min. Cross-Sectional Area		(mm ²)
Model	700R-3SP	700R-4SP
Min. Cross-Sectional Area	34	55

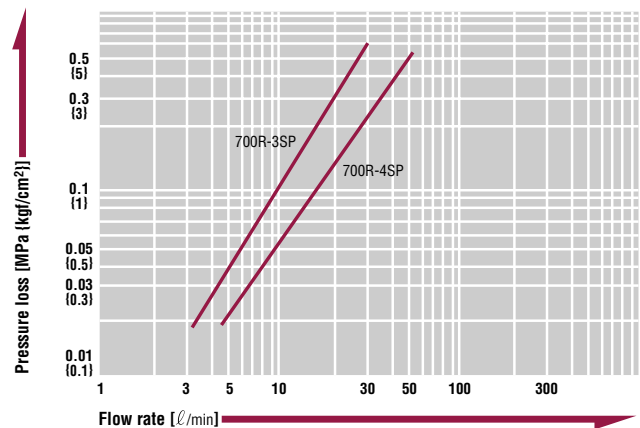
Suitability for Vacuum

Can be used to for vacuum applications up to 1.3Pa {1x10⁻²mmHg} only when socket and plug are connected.

Admixture of Air on Connection		(mℓ)
Model	700R-3SP	700R-4SP
Volume of air	1.0	2.2

Flow Rate – Pressure Loss Characteristics

[Test conditions] • Fluid : Hydraulic oil • Temperature : 30°C ± 5°C
• Fluid viscosity : 32 x 10⁻⁶m²/s • Density : 0.87 x 10³kg/m³



WAF : WAF stands for width across flats.

Model	Application	Mass (g)	Dimensions (mm)				
			Ls	øDs	Hs(WAF)	A	T
700R-3S	R 3/8	270	73	39.5	Two flats 22 x ø25	13	Rc 3/8
700R-4S	R 1/2	562	91	50	Two flats 27 x ø32	16	Rc 1/2

Before use, please be sure to read "Safety Guide" described at the end of this book and "Instruction Sheet" that comes with the products.