

For Hydraulics

700R Cupla

For hydraulic pressures up to 68.6 MPa (700 kgf/cm²)

- Working pressure: **68.6** MPa
- Valve structure: Two-way shut-off
- Applicable fluids: Hydraulic oil



▲ Rock crusher

High pressure Cupla for working pressures up to 68.6 MPa and pressure resistance of 98 MPa!

Unique Ring-lock system resists vibration and impact when connected.

- High pressure Cupla for working pressures up to 68.6 MPa (700 kgf/cm²) and pressure resistance of 98MPa (1000kg/cm²)
- Metal-touch valves use no rubber packing, give excellent durability.
- Special Ring-lock system maintains tight connection against vibration or impact when connected.
- Both socket and plug have metal touch automatic shut-off valves that prevent fluid outflow on disconnection. Simple to handle.

Specifications

Body material	Special steel (zinc-plated)			
Size	3/8", 1/2"			
Working pressure MPa (kgf/cm ²)	68.6 (700)			
Pressure resistance MPa (kgf/cm ²)	98.0 (1000)			
Packing material, Working temperature range	Packing material	Nitto symbol	Working temp	Remarks
	NBR	SG	-20°C ~ +80°C	Standard material
Flow loss upon disconnection	Fluoro-rubber (FKM)	X-100	-20°C ~ +180°C	Order product
	For 3/8", 0.005 Pa·m ³ /min. at 0.2 MPa (2 kgf/cm ²) For 1/2", 0.05 Pa·m ³ /min. at 0.3 MPa (3 kgf/cm ²)			

NBR : Nitrile butadiene rubber

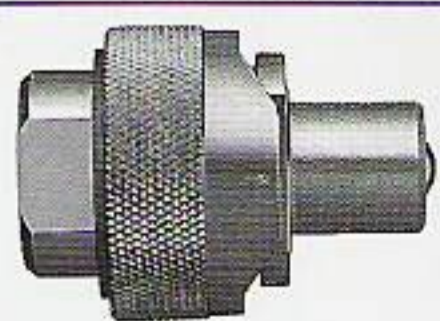
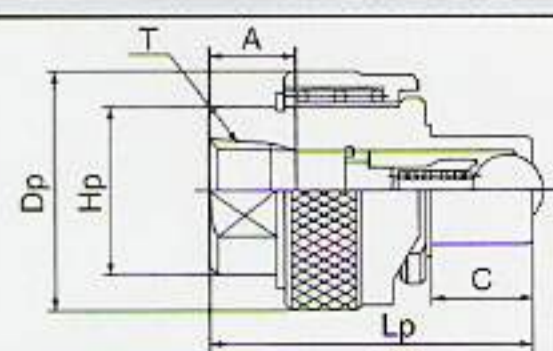
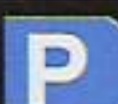
Max. Tightening Torque* N·m {kgf·cm}

Size	3/8"	1/2"
Torque	40 {408}	85 {867}

* Recommended value

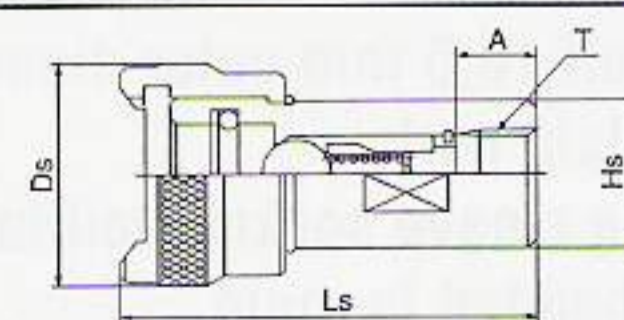
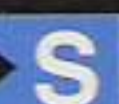
Product Codes and Dimensions Tables

Plug



Product code	Application	Mass (g)	Dimensions (mm)					
			Lp	C	øDp	Hp	A	T
700R-3P	R3/8	210	54	18	39.5	Face 24 x ø28	13	Rc3/8
700R-4P	R1/2	418	70	22	50	Face 27 x ø35	16	Rc1/2

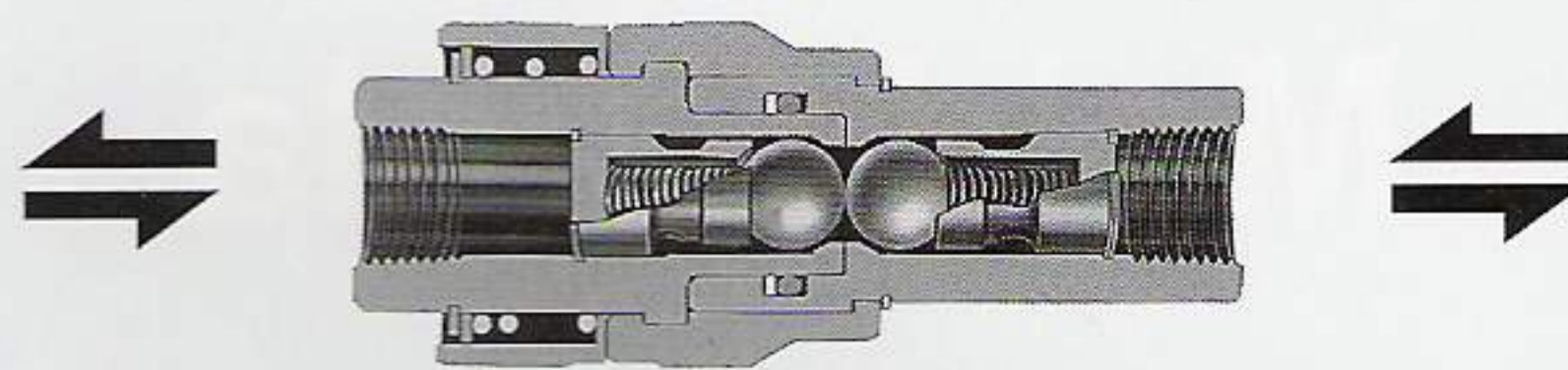
Socket



Product code	Application	Mass (g)	Dimensions (mm)				
			Ls	øDs	Hs	A	T
700R-3S	R3/8	270	73	39.5	Face 22 x ø25	13	Rc3/8
700R-4S	R1/2	562	91	50	Face 27 x ø32	16	Rc1/2

Fluid Flow Direction

Fluid flows in either direction from plug or socket.



Interchangeability

Different sizes are not interchangeable.

Min. Cross-Sectional Area (mm²)

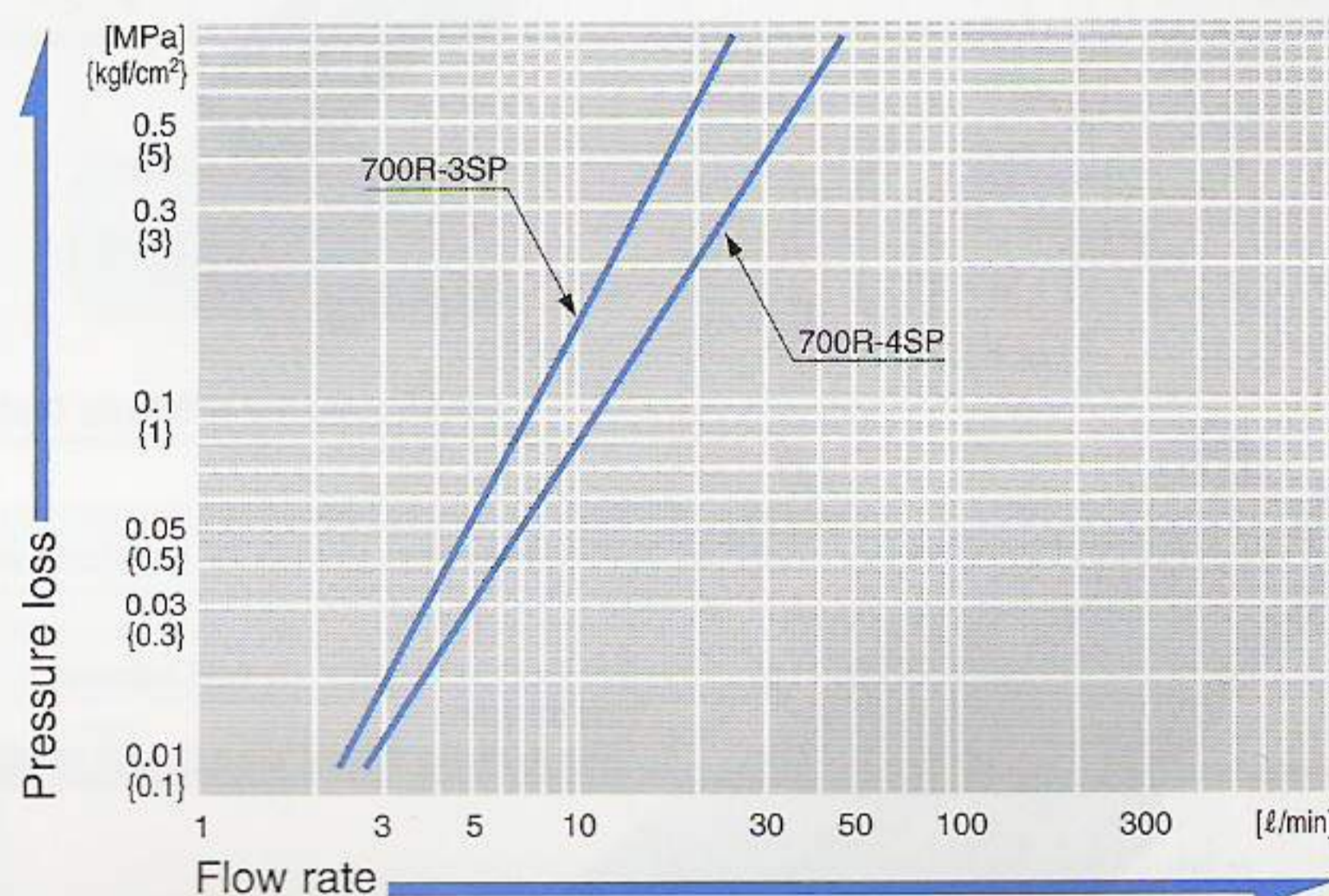
Product code	700R-3SP	700R-4SP
Min. cross-sectional area	34	55

Suitability for Vacuum Applications

Can be used to 1.3 Pa (1 x 10⁻² mmHg) only when socket and plug are connected.

Flow Rate - Pressure Loss Characteristics

[Measuring conditions] •Fluid: Hydraulic Fluid •Temperature: 30°C±5°C
•Kinematic viscosity: 46 x 10⁻⁶ m²/s •Specific gravity: 0.8661 x 10³ kg/m³



Admixture of Air on Connection (mℓ)

Product code	700R-3SP	700R-4SP
Volume of air	1.0	2.2

• Before use, please be sure to read "Requests Regarding Use" at the end of this book and "Notices and Points to be Observed" attached to the product.