For High Pressure

Flat Face Cupla F35

For hydraulic pressures up to 35.0 MPa {35.7 kgf/cm²} with flat contact face

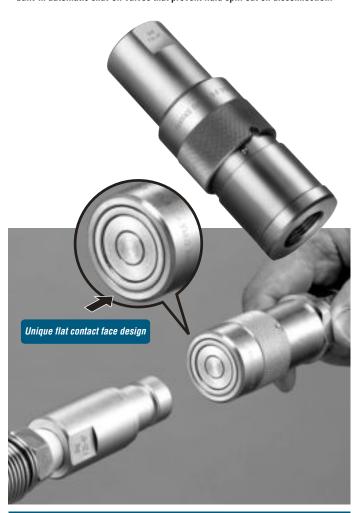






Flat contact face design reduces spill upon disconnection by less than half compared with that of conventional design.

- Flat contact face design makes it easy to clean dust and foreign matters adhered on the surface of coupling so as to prevent them from entering inside and thus causing faulty operation of connection or disconnection.
- Flat contact face design minimizes air admixture during connection to keep the possible malfunction of equipment caused by the air bubbles in the hydraulic line at minimum level.
- Push-to-connect operation.
- Sleeve stopper mechanism is engaged by rotating sleeve after connection. It prevents
 accidental disconnection even when vibration or impact is applied to the Cupla.
- The special design reduces pressure loss considerably, and especially suited to hydraulic applications in which big flow is needed. Both socket and plug have built-in automatic shut-off valves that prevent fluid spill out on disconnection.



Specifications							
Body material		Special steel (Nickel-plated)					
Size (Thread)		1/4", 3/8", 1/2", 3/4", 1"					
Working pressure	MPa	35.0					
	kgf/cm ²	357					
	bar	350					
	PSI	5080					
Seal material Working temperature range		Seal material	Mark	Working 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}						
Size (Thread)	1/4"	3/8"	1/2"	3/4"	1"	
Torque	28 {286}	40 {408}	80 {816}	150 {1530}	250 {2550}	

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

Interchangeability

Different sizes can not be connected each other.

Min. Cross-Sectional Area (mm²)						
Model	F35-2SP	F35-3SP	F35-4SP	F35-6SP	F35-8SP	
Min. cross-sectional area	34.2	34.2	73.0	149.6	227.0	

Suitability for Vacuum

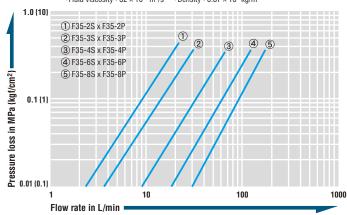
Not suitable for vacuum application in either connected or disconnected condition.

Admixture of Air on Connection (mL)						
Model	F35-2SP	F35-3SP	F35-4SP	F35-6SP	F35-8SP	
Volume of air	0.1	0.1	0.2	0.3	0.4	

^{*}Spillage volume of liquid on each disconnection depends on usage conditions

Flow Rate – Pressure Loss Characteristics

 $\begin{array}{ccc} \hbox{[Test conditions]} & \hbox{$\,\,^{+}$Fluid} : \hbox{Hydraulic oil} & \hbox{$\,\,^{+}$Temperature} : 30°C} \pm 5^{\circ}$C \\ & \hbox{$\,\,^{+}$Fluid viscosity} : $32 \times 10^{-6} \ m^{2}/s & \hbox{$\,\,^{+}$Density} : $0.87 \times 10^{3} \ kg/m^{3} \end{array}$



\triangle Precautions for use

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