

For High Pressure

FLATFACE CUPLA F35

For hydraulic pressures up to 35.0 MPa {357 kgf/cm²} with flat contact face

Working pressure



Valve structure



Applicable fluid

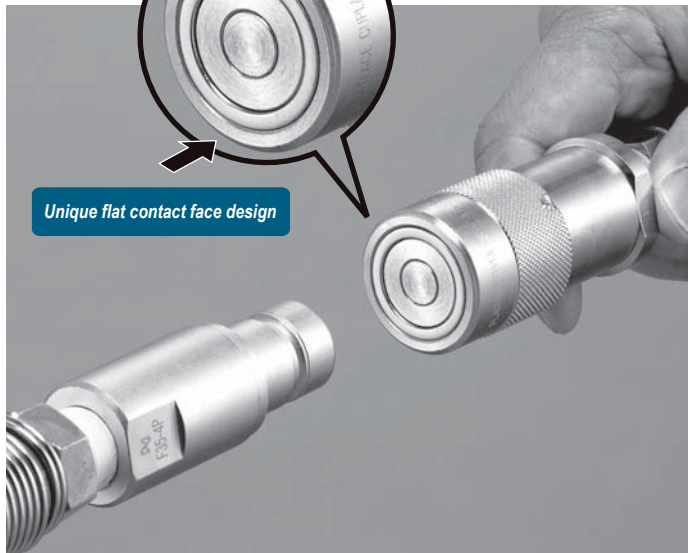


Flat contact face design reduces spill upon disconnection.

- Flat contact face design makes it easy to clean dust and foreign matter 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.
- Separation prevention mechanism is easily locked by turning the sleeve after connection. It prevents accidental disconnection even when vibration or impact is applied to 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.



Unique flat contact face design



Specifications

Body material	Special steel (Nickel plated)			
Size (Thread)	1/4", 3/8", 1/2", 3/4", 1"			
Pressure unit	MPa	kgf/cm ²	bar	PSI
Working pressure	35.0	357	350	5080
Seal material	Seal material	Mark	Working temperature range	Remarks
Working temperature range *1	Fluoro rubber	FKM	-20°C to +180°C	Standard material

*1: The operable temperature range depends on the operating conditions.

Maximum 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}

Flow Direction

Fluid flow can be bi-directional when socket and plug are connected.



Interchangeability

Socket and plug of different sizes cannot be connected.

Minimum Cross-Sectional Area

(mm²)

Model	F35-2SP	F35-3SP	F35-4SP	F35-6SP	F35-8SP
Minimum cross-sectional area	21.2	32.2	78.5	149.6	227.0

Suitability for Vacuum

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

Admixture of Air on Connection

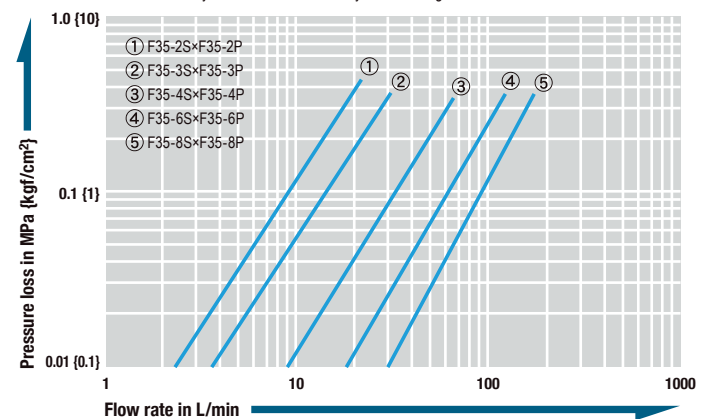
May vary depending upon the usage conditions.

(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

Flow Rate – Pressure Loss Characteristics

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

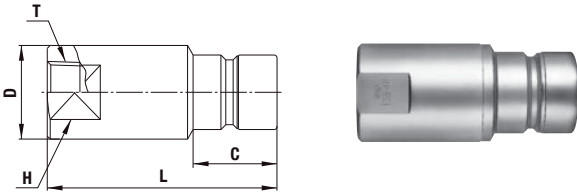


⚠ Precautions for use

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

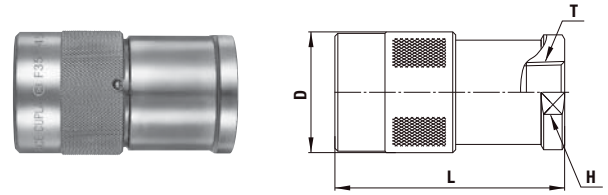
Models and Dimensions

Plug Female thread



Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	C	øD	H(WAF)	T
F35-2P	R 1/4	106	58	18.8	21.5	19	Rc 1/4
F35-3P	R 3/8	190	67.5	24	27	24	Rc 3/8
F35-4P	R 1/2	290	78	28.5	31.7	27	Rc 1/2
F35-6P	R 3/4	460	84.5	31	40	36	Rc 3/4
F35-8P	R 1	1000	108	39	50	46	Rc 1

Socket Female thread



Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	øD	H(WAF)	T
F35-2S	R 1/4	182	(57.5)	(28)	26×ø28.5	Rc 1/4
F35-3S	R 3/8	320	(70)	(34)	30	Rc 3/8
F35-4S	R 1/2	490	(78)	(41)	36	Rc 1/2
F35-6S	R 3/4	815	(85)	(49)	46×ø50	Rc 3/4
F35-8S	R 1	1520	(104)	(63)	55	Rc 1

Application Example



Snow plow