

For Hydraulics

Flat Face Cupla F35

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

Working pressure

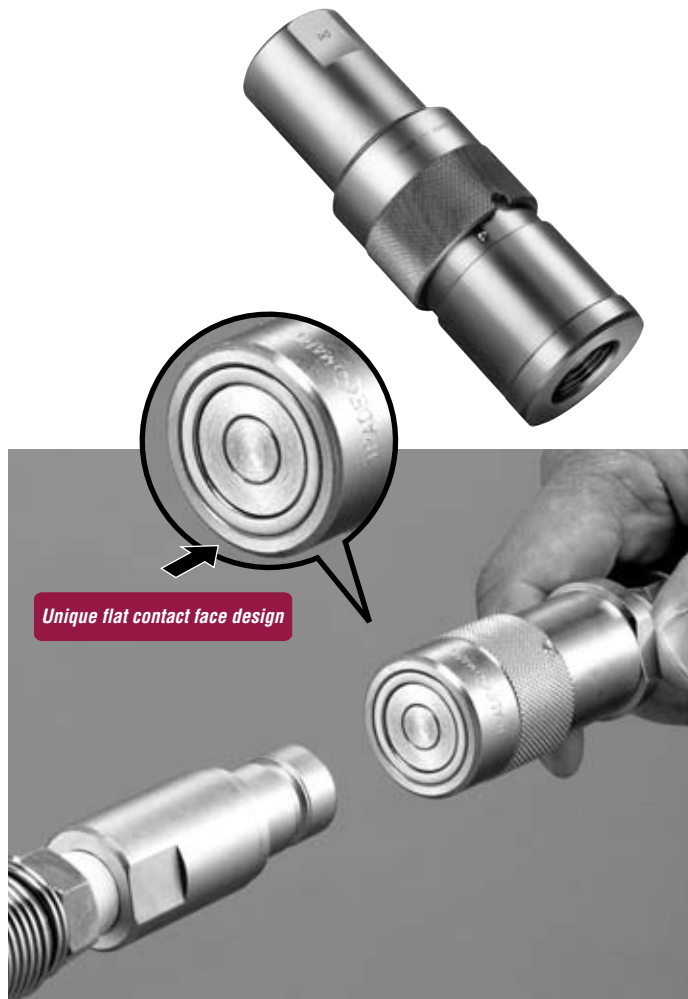
35.0
35.0MPa
{357kgf/cm²}

Valve structure

Two-way shut-off
(Non-Spill)

Applicable fluids

Hydraulic oil



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 on equipment 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	3/8" • 1/2" • 3/4" • 1"			
Working pressure MPa (kgf/cm ²)	35.0 (357)			
Pressure resistance MPa (kgf/cm ²)	52.5 (536)			
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	3/8"	1/2"	3/4"	1"
Torque	40 (408)	80 (816)	150 (1530)	250 (2550)

Flow Direction

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

	(mm ²)			
Model	F35-3	F35-4	F35-6	F35-8
Min. Cross-Sectional Area	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

	(ml)			
Model	F35-3	F35-4	F35-6	F35-8
Volume of air	0.01	0.04	0.08	0.1

Flow Rate – Pressure Loss Characteristics

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

