For Gases and Liquids

Lever Lock Cupla

Metal body / Plastic body

For bulk flow, low pressure applications

Working pressure 1.8 — 1.8 MPa {18 kgf/cm²}

Working pressure 0.5 — 0.5 MPa {5 kgf/cm²}

Valve structure — Straight through

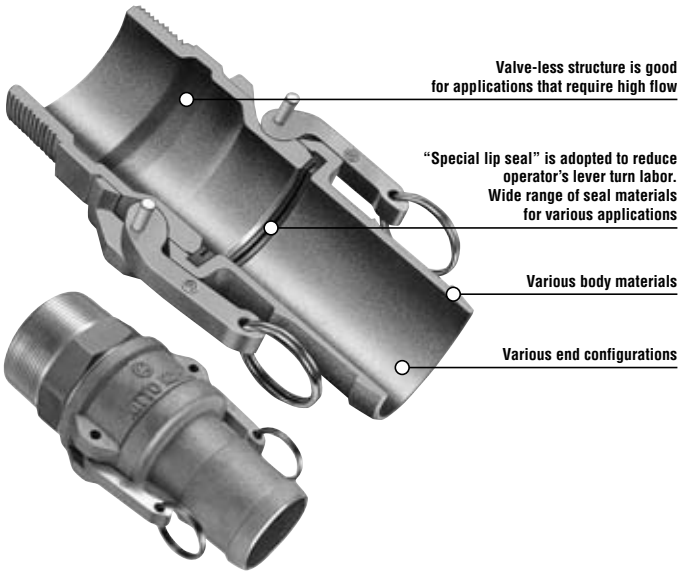
Designs and specifications are subject to change for improvement without notice

Applicable fluids (plastic body Cuplas are for water or air only)

Water | Hydraulic oil | Steam | Air

Metal body *Plastic body*

(Aluminum alloy, Copper alloy, and Stainless)



Light lever pull-down will connect the plug and socket without fail ready to flow liquid, or gases.

- This Cupla complies with diversified applications in liquid or gas transportation.
- End seal structure enables no bumps or hollows on the internal fluid passage, and ensures smooth fluid transportation.
- "Special lip seal" adopted (except 3/4", 1" sizes and silicon rubber seal) for light lever action and tight and sure sealing when connected.
- Connection part dimensions comply with US military specifications MIL-A-A-59326.
- The variety of body materials, sizes and end configurations has been standardized to comply with wide range of applications.
- Additional stopper function design will enhance safety (made-to-order product).

Specifications (Metal body)

Body material (Material symbol)	Aluminum alloy (AL), Copper alloy (BR)				Stainless Steel (SUS)		
Size	3/4"~2"	2 1/2"	3"	4"	3/4"~2"	2 1/2"~3"	4"
Working pressure MPa {kgf/cm²}	1.8 {18}	1.1 {11}	0.9 {9}	0.7 {7}	1.8 {18}	1.6 {16}	1.1 {11}
Pressure resistance MPa {kgf/cm²}	2.7 {27}	1.7 {17}	1.4 {14}	1.1 {11}	2.7 {27}	2.4 {24}	1.7 {17}
Seal material/Working temperature range	Seal material : Nitrile rubber / Mark:NBR (SG) / Working temperature range : -20°C~+80°C						

Optional seal material Working temperature range	Seal material	Mark	Working temperature range
	Silicone rubber	SI	−40°C~+150°C
	Fluoro rubber	FKM (X-100)	−20°C~+180°C
	Ethylene-propylene rubber	EPDM (EPT)	−40°C~+150°C
	FEP-covered silicon rubber*	—	+5°C~+50°C

*Made-to-order (itemWorking pressure : 0.2MPa {2kgf/cm²} / Pressure resistance : 0.3MPa {3kgf/cm²})

Specifications (Plastic body)

Body material (Material symbol)	Polypropylene (PP)	
Size	3/4" • 1" • 1 1/2"	2" • 3"
Working pressure* MPa {kgf/cm²}	0.5 {5}	0.2 {2}
Pressure resistance* MPa {kgf/cm²}	0.7 {7}	0.35 {3.5}
Seal material/Working temperature range	Seal material : Nitrile rubber / Mark:NBR (SG) / Working temperature range : +5°C~+50°C	

Optional seal material Working temperature range	Seal material	Mark	Working temperature range
	Silicone rubber	SI	+5°C~+50°C
	Fluoro rubber	FKM (X-100)	+5°C~+50°C
	Ethylene-propylene rubber	EPDM (EPT)	+5°C~+50°C

*Made-to-order (itemWorking pressure : 0.2MPa {2kgf/cm²} / Pressure resistance : 0.3MPa {3kgf/cm²})

Max. Tightening Torque N•m {kgf•cm}

Size		3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Torque	Aluminum alloy Copper alloy	50 {510}	70 {714}	120 {1224}	140 {1428}	260 {2652}	350 {3570}	410 {4182}	470 {4794}
	Stainless alloy	90 {918}	120 {1224}	220 {2244}	260 {2652}	350 {3570}	480 {4896}	520 {5304}	590 {6018}

Flow Direction

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

Interchangeability

Same size sockets and plugs are interchangeable regardless of their end configurations. Connection part dimensions are in compliance with MIL-A-A-59326.

Suitability for Vacuum (Metal body) 53.0kPa {400mmHg}

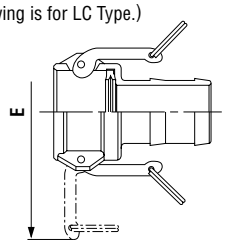
Socket only	Plug only	When connected
—	—	Operational

Suitability for Vacuum (Plastic body)

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

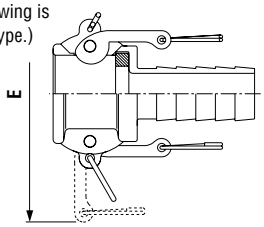
Dimensions with lever fully opened

Metal (This drawing is for LC Type.)



Size	Dimensions E (mm)
3/4"	122
1"	132
1 1/4"	183
1 1/2"	191
2"	201
2 1/2"	213
3"	250
4"	278

Plastic (This drawing is for LC Type.)



Size	Dimensions E (mm)
3/4"	111
1"	126
1 1/2"	185
2"	195
3"	249