For Low Pressure (Air)

Rotary Line Cupla

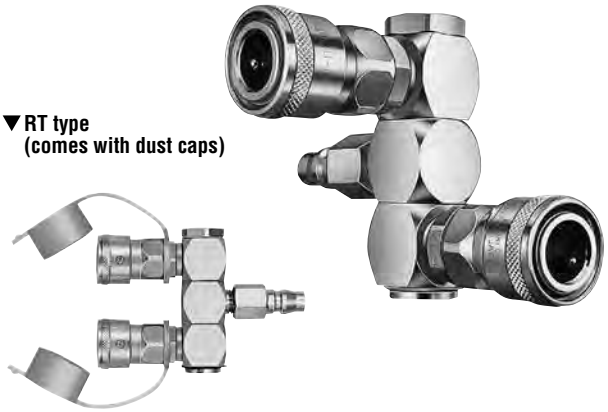
Simple design air line couplings on free turn manifold

Working pressure: 1.5 MPa {15 kgf/cm²}
Valve structure: One-way shut-off
Applicable fluid: Air

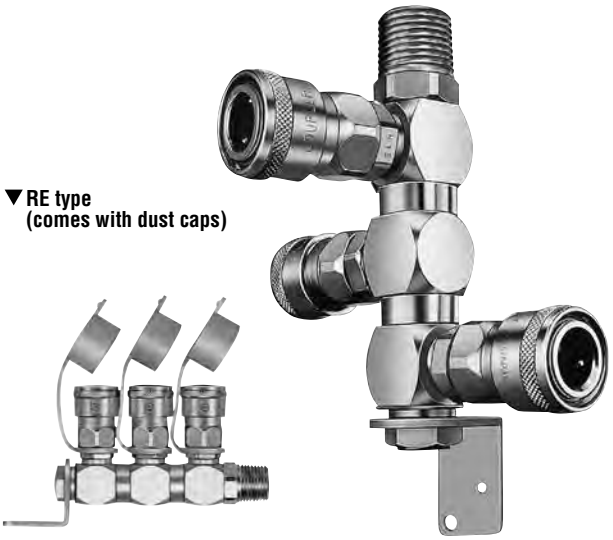
Each air outlet can be turned freely to any angle independently.

- Multiple outlets are available from single air supply source.
- Sideway air outlets are rotatable to any angle. Possible hose twists can be eliminated by the component Cuplas' swivel mechanism.
- Choose either RT type (2 outlets) or RE type (3 outlets) to suit your application.

▼RT type
(comes with dust caps)



▼RE type
(comes with dust caps)



Specifications

Body material	Body : Brass (Chrome plated), Cupla : Steel (Chrome plated)			
Model	RT Type (for two branch lines)		RE Type (for three branch lines)	
Size	Inlet	Hi Cupla Plug 20PF	Inlet	R 1/2
	Outlet	2 sockets for Hi Cupla Model 20	Outlet	3 sockets for Hi Cupla Model 20

Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	1.5	15	15	218

Seal material Working temperature range	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR (SG)	−20°C to +60°C	Standard material

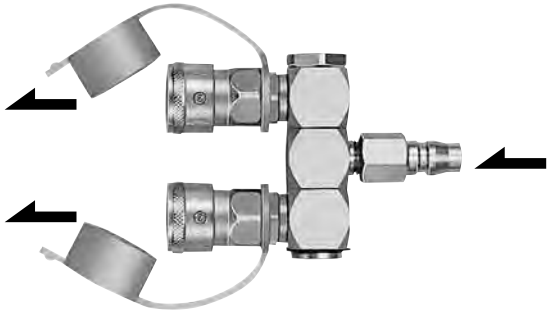
• The products come with dust caps.

Max. Tightening Torque (RE Type) Nm {kgf•cm}

Size (Thread)	1/2"
Torque	30 {306}

Fluid Flow Direction

Fluid must run from the inlet port to the outlet ports.



Interchangeability

Can be connected with plugs for Hi Cupla Models 10, 17, 20, 30 and 40.
Interchangeable with each corresponding Hi Cupla Series models.

Min. Cross-Sectional Area (mm²)

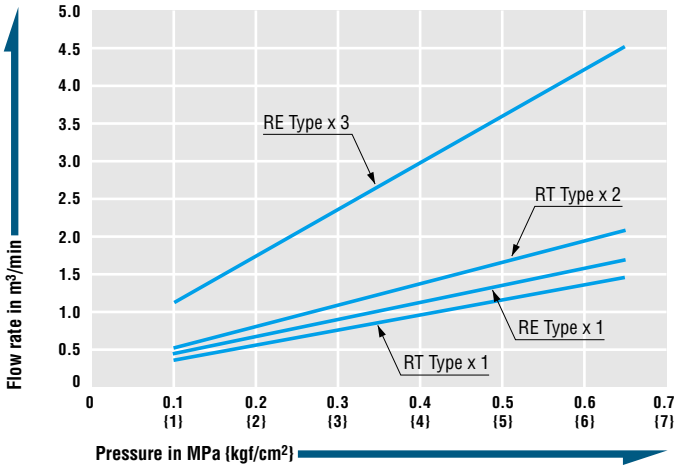
Model	RT type	RE type
Min. cross-sectional area	33	

Suitability for Vacuum

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

Pressure - Flow Characteristics

[Test conditions] •Fluid : Air •Temperature : Room temperature
•Plug : 20PM (All the Socket valves are opened with 20PM)



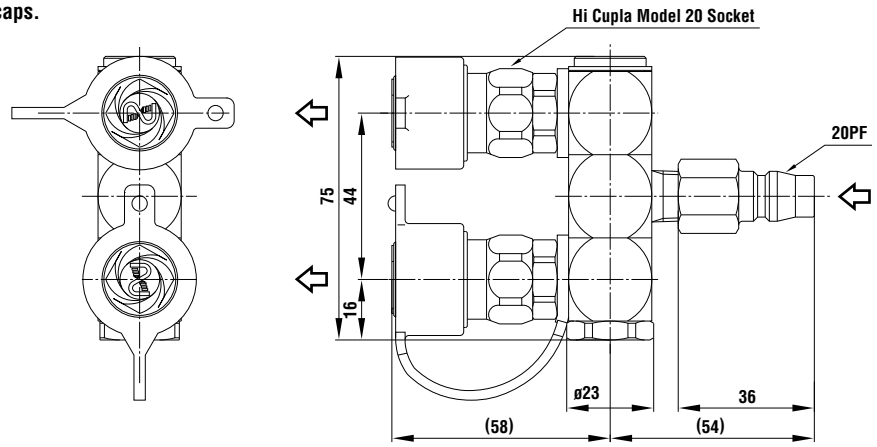
Models and Dimensions

WAF : WAF stands for width across flats.

Socket RT type (For two outlets)

Mass : 490 g

- **Fluid must run in the direction of the arrow.**
- **The product comes with dust caps.**

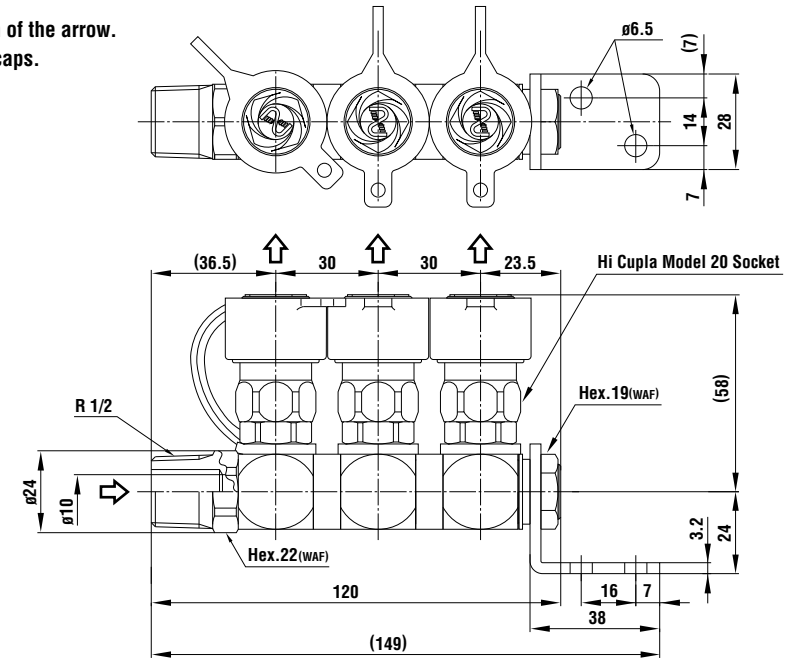


Dimensions (mm)

Socket RE type (For three outlets)

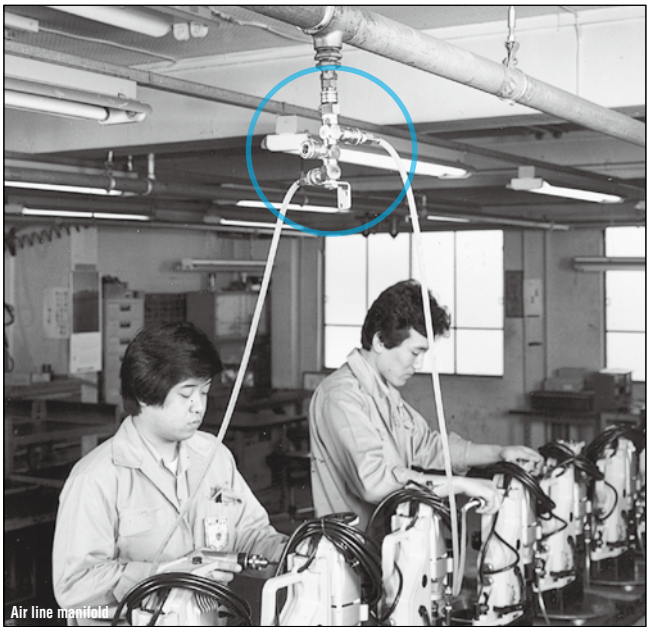
Mass : 660 g

- **Fluid must run in the direction of the arrow.**
- **The product comes with dust caps.**



Dimensions (mm)

Application Example



Air line manifold

Before use, please be sure to read "Safety Guide" described at the end of this book and "Instruction Sheet" that comes with the products.

For Low Pressure (Air)

Line Cupla

200T Type, 200L Type, 200S Type

Simple design air line coupling on manifold

Working pressure: 1.5 — 1.5 MPa {15 kgf/cm²}

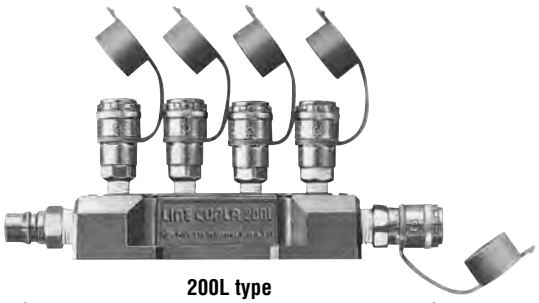
Valve structure: One-way shut-off

Applicable fluid: Air

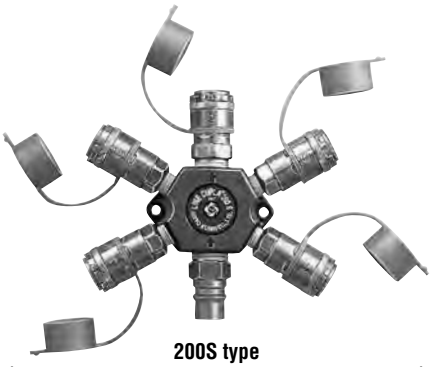
Enables several air lines to be taken simultaneously from one supply line!

- Just push in the plug into socket for simple and secure connection.
- Multiple outlets are available from single air supply source.
- Choose from the 2-outlet type (Model 200T), the 5-outlet straight type (Model 200L) and the 5-outlet star type (Model 200S) to suit your application.

200T type
(comes with dust caps)



200L type
(comes with an accessory 400SH and dust caps)



200S type
(comes with an accessory 400SH and dust caps)

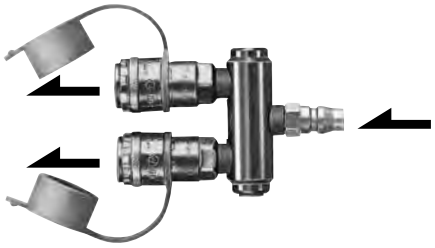
Specifications

Body material	Body : Aluminum alloy, Cupla : Steel (Chrome plated)			
Size	Inlet	200T Type : 20PM 200L Type / 200S Type : 400PM		
	Outlet	200T Type : 200-20SM 200L Type / 200S Type : 200-20SM, 40SM		
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	1.5	15	15	218
Seal material / Working temperature range	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR (SG)	−20°C to +60°C	Standard material

• The products come with dustproof caps.

Flow Direction

Fluid must run from the inlet port to the outlet ports.



Interchangeability

Can be connected with plugs for Hi Cupla Models 10, 17, 20, 30 and 40.
Interchangeable with each corresponding Hi Cupla Series models.

Min. Cross-Sectional Area (mm²)

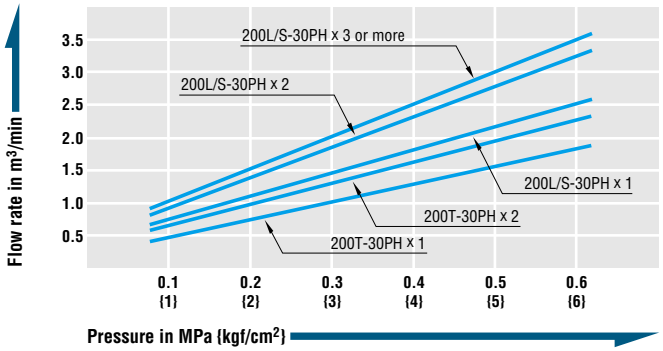
Model	200T type, 200L type, 200S type
Min. cross-sectional area	19

Suitability for Vacuum

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

Pressure - Flow Characteristics

[Test conditions] •Fluid : Air •Temperature : Room temperature



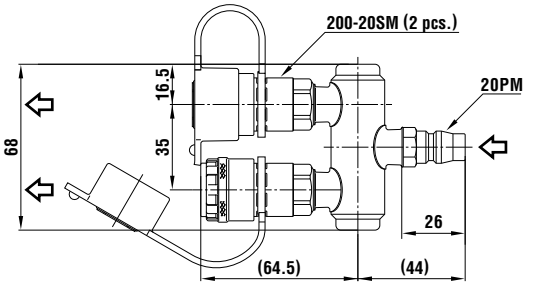
Models and Dimensions

WAF : WAF stands for width across flats.

Socket 200T type (For two outlets)

Mass : 272 g

- Fluid must run in the direction of the arrow.
- The product comes with dust caps.

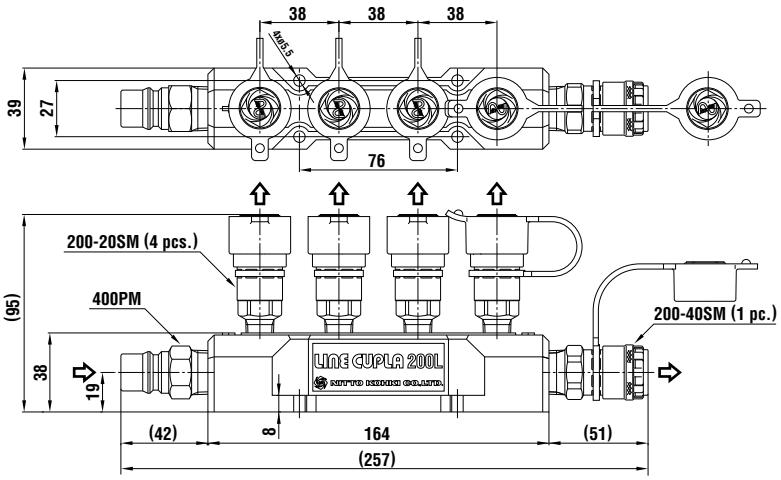


Dimensions (mm)

Socket 200L type (For five outlets, in line type)

Mass : 890 g

- Fluid must run in the direction of the arrow.
- The product comes with dust caps.
- Accessory : 400SH

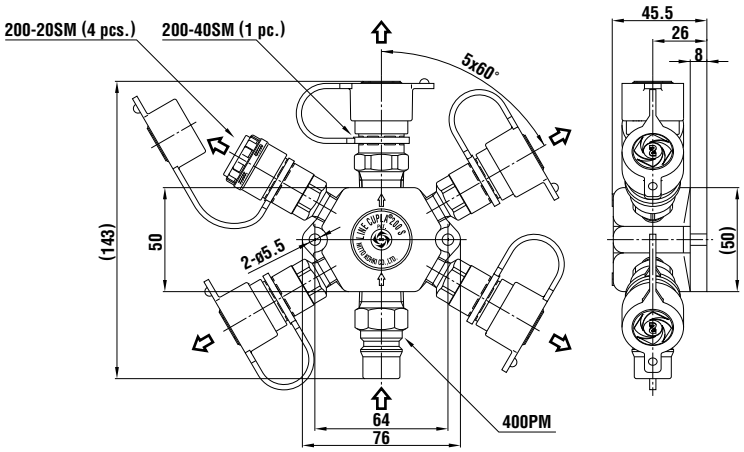


Dimensions (mm)

Socket 200S type (For five outlets, star type)

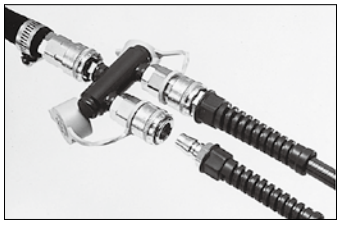
Mass : 769 g

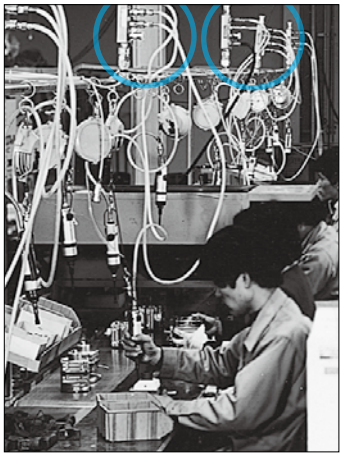
- Fluid must run in the direction of the arrow.
- The product comes with dust caps.
- Accessory : 400SH



Dimensions (mm)

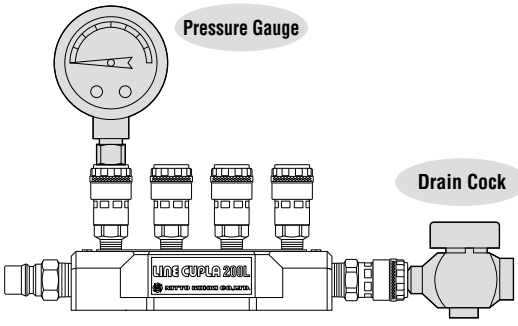
Application Example





Optional Items : Pressure Gauge and Drain Cock

"Pressure Gauge" and "Drain Cock" are available as optional items to be mounted on Line Cupla 200. (See page 144)



Appearance subject to change for improvement without notice.

For Low Pressure (Air)

Rotary Full-Blow Line Cupla

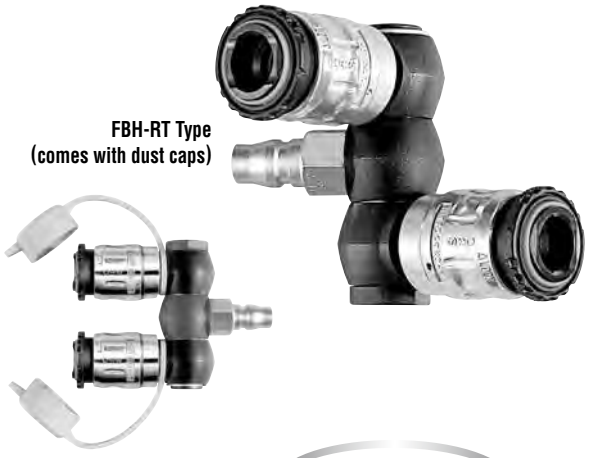
Free rotating branch air line coupling with low pressure loss & high flow rate

Working pressure	Valve structure	Applicable fluid
1.5		
1.5 MPa {15 kgf/cm²}	One-way shut-off	Air

Each air outlet can be turned freely to any angle independently.

- Multiple outlets are available from single air supply source.
- Sideway air outlets are rotatable to any angle.
- Choose either RT type (2 outlets) or RE type (3 outlets) to suit your application.
- The flow rate increases by 40% to 50% over that of conventional Cuplas.
- During connection and disconnection, the valve is closed, enabling connection/disconnection under zero line pressure.
- When the sleeve of socket is returned to its original position, the purge mechanism releases the residual air pressure in the plug, eliminating unpleasant popping noise and hose whip motion on disconnection.
- Built-in sleeve lock mechanism prevents accidental disconnection of Cuplas, ensuring safe operation.
- The valve can be opened and closed while the socket and plug is connected.

FBH-RT Type
(comes with dust caps)



FBH-RE Type
(comes with dust caps)

Specifications

Body material	Zinc alloy			
Size	RT type (For two outlets)		RE type (For three outlets)	
	Inlet	Plug (20PFF)	Inlet	R 1/2
	Outlet	Full-Blow Cupla	Outlet	Full-Blow Cupla

Pressure unit	**MPa**	**kgf/cm²**	**bar**	**PSI**
Working pressure	1.5	15	15	218

Seal material	**Mark**	**Working temperature range**	**Remarks**
Nitrile rubber	NBR (SG)	−20°C to +60°C	Standard material

Working temperature range

- The product comes with dust caps.

Max. Tightening Torque (FBH-RE Type) Nm {kgf•cm}

Size (Thread)	**1/2"**
Torque	30 {306}

Flow Direction

Fluid must run from the inlet port to the outlet ports.

Interchangeability

Can be connected with plugs for Hi Cupla Models 10, 17, 20, 30, and 40.
Interchangeable with all other Hi Cupla Series products. Please see the page for “Hi Cupla Series Interchangeability.”
Not interchangeable with some plugs of plastic Hi Cupla 250 (discontinued product).

Min. Cross-Sectional Area (mm²)

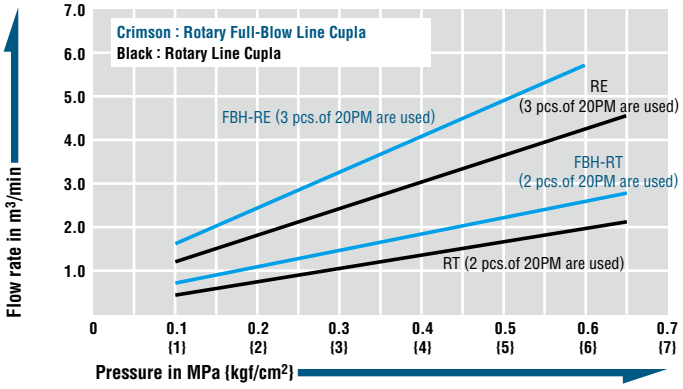
Model	**FBH-RT**	**FBH-RE**
Min. cross-sectional area	44	44

Suitability for Vacuum

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

Pressure - Flow Rated Characteristics (Comparison with Rotary Line Cupla)

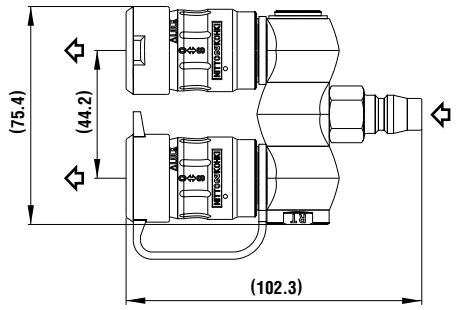
[Test conditions] •Fluid : Air •Temperature : Room temperature •Plug : 20PM



Models and Dimensions

Socket FBH-RT type (For two branch lines)

- Inlet : 1/4" Hi Cupla (20PFF)
- Outlet : Full-Blow Cupla
- Mass : 358 g
- Fluid must run in the direction of the arrow.

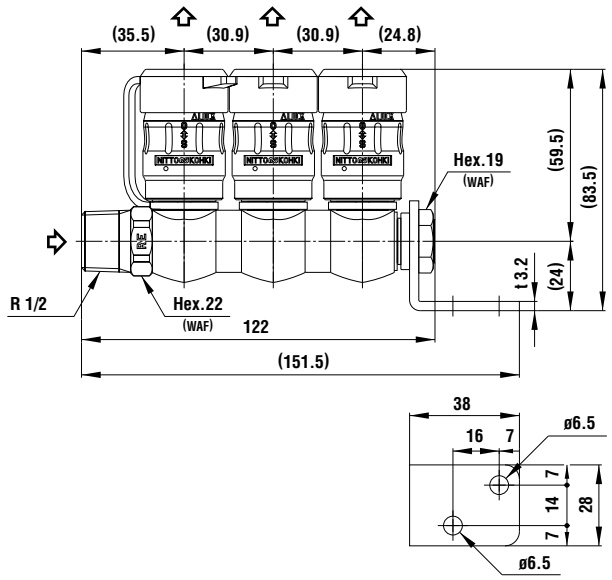


• The product comes with dust caps.

Dimensions (mm)

Socket FBH-RE type (For three branch lines)

- Inlet : R 1/2
- Outlet : Full-Blow Cupla
- Mass : 527 g
- Fluid must run in the direction of the arrow.



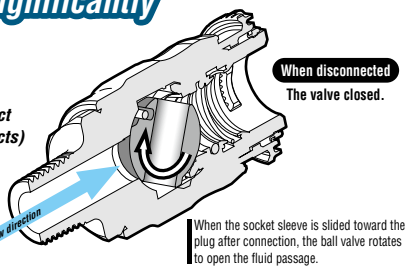
• The product comes with dust caps.

Dimensions (mm)

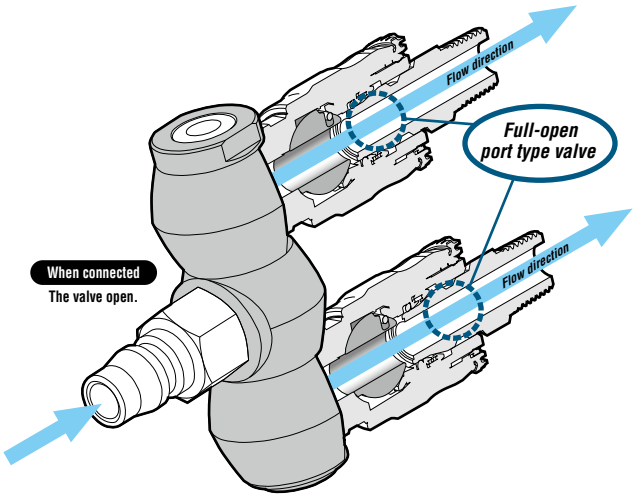
Features of Rotary Full-Blow Line Cupla

Flow rate is significantly increased.

Significant energy saving effect (Source pressure reduction effects)

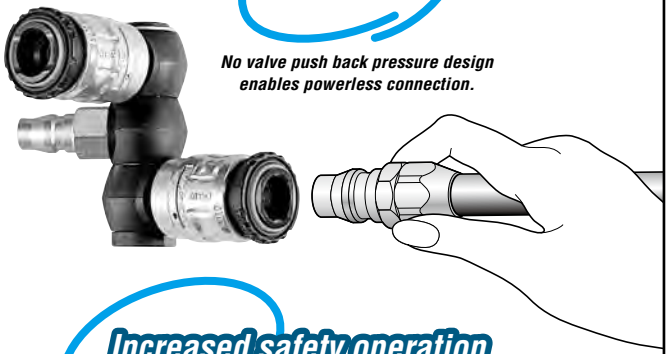


When the socket sleeve is slided toward the plug after connection, the ball valve rotates to open the fluid passage.



Far easier operation

No valve push back pressure design enables powerless connection.



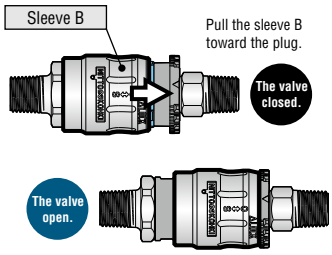
Increased safety operation

Purge function eliminates unpleasant popping noise and hose whip motion.

How It Works

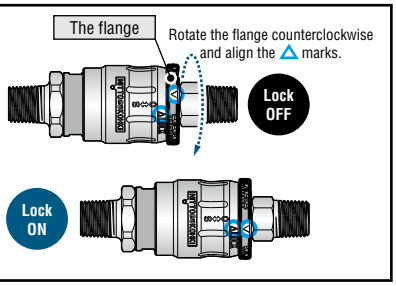
1. Open the valve

Only after connection with the plug, you can slide the socket sleeve B toward the plug in order to open the built-in valve. Full flow path is then obtained.



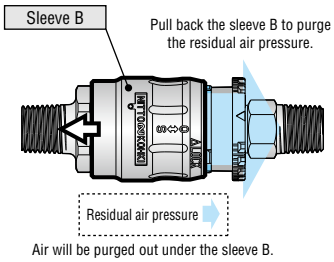
2. Lock the sleeve

Rotate the flange counterclockwise to lock the sleeve B. Without unlocking the plug you cannot disconnect.



3. Purge the residual air

To disconnect the plug, first turn the flange back to its original position for unlocking and then pull the sleeve B back to the original position. The built-in valve will be closed to purge the residual air pressure.



Air will be purged out under the sleeve B.

Before use, please be sure to read "Safety Guide" described at the end of this book and "Instruction Sheet" that comes with the products.