

Safety Guide

<p>1</p> <ul style="list-style-type: none"> Do not connect / disconnect under dynamic pressure or static residual pressure. 	<p>2</p> <ul style="list-style-type: none"> Do not strike the tip of an automatic shut-off valve with a hammer or the like. This may cause leakage or malfunction. Consult us for alternative way of releasing the residual pressure inside. 	<p>3</p> <ul style="list-style-type: none"> The entry of foreign matters in the fluid to be used may cause a breakdown. Fluid must be cleaned through filters before reach to Cuplas.
<p>4</p> <ul style="list-style-type: none"> Selecting the wrong type of seal material may cause a leak. In making your selection, check the compatibility of the seal material with the type of fluid and temperature. 	<p>5</p> <ul style="list-style-type: none"> Remember that dirt, scratches or other damage on the sealing surface may cause a leak. If there is a risk of dirt sticking to the plug sealing while the CUPLA is disconnected, use a specified dustproof cap. 	<p>6</p> <ul style="list-style-type: none"> When installing the Coupla, do not apply an excessive tightening force. This may cause damage. Tighten it with the appropriate torque.
<p>7</p> <ul style="list-style-type: none"> Do not pressurize the socket or plug while disconnected. 	<p>8</p> <ul style="list-style-type: none"> Do not use the Coupla with a tool or machine exposed to excessive vibrations or impact. It would be dangerous. 	<p>9</p> <ul style="list-style-type: none"> Do not subject the CUPLA to excessive bending, tension or revolution. It would be dangerous.
<p>10</p> <ul style="list-style-type: none"> The CUPLA is usually greased to reduce the load imposed when the plug is inserted. But the SEMICON CUPLA is grease-free to prevent grease from entering into the fluid system. To reduce sliding resistance (insertion load) and protect an O-ring, apply the fluid to be used or pure water to the O-ring or plug (the sliding part of the O-ring) before use. 	<p>11</p> <ul style="list-style-type: none"> In cleaning the CUPLA, do so in a manner that will not affect the seal material. (Before cleaning, consult us.) 	<p>12</p> <ul style="list-style-type: none"> Do not use continuously at the lowest or highest working temperature. In this case please consult us.

Performance Standards and Contractual Control Limit

Please understand that the performance chart and outside dimensions indicated in this catalogue do not include the tolerances in mass production, and that they indicate the average as a guide for selecting models and for technical service for users.

Beware of imitations

Recently on the market, there have appeared similar products that invite misidentification or confusion with Nitto Kohki Cuplas, or such products that claim to have compatible mating parts.

Connection with a coupling of another brand that seems connectable to a Nitto Kohki Coupla may cause

1) imperfect connection or disconnection	2) reduced airtightness
3) impaired pressure resistance or durability	4) declined flow rate, and result in unexpected accidents.

Nitto Kohki cannot accept responsibility for any accident that may result by mixed use with the coupling of another brand. Nitto Kohki Couplers are produced with their own unique tolerances and precision under strict quality control, and are not interchangeable with other couplings that are not under such tolerance. Therefore, connection to other brand of coupling may end up with abrupt breakdown or personal injury. Please be sure to check for our marks below, which are always inscribed on Nitto Kohki Coupla products, when you order and purchase.



Safety Guide

The following precautions must be taken when using Cuplas. Please contact Nitto Kohki or the outlet/supplier where you purchased the product from with regard to repair procedures or clarification on the specification or applications of the products.

Precautions Relating to the Use of All Cuplas

- Be sure to read the “Instruction Sheet” that comes with the product, and “Caution” on the package before use.

Cuplas for Low Pressure (Air)

⚠ Caution

- Use Cuplas only for the purpose of quick connective couplings.
- The fluid media used must be compatible with the body and seal materials of Cupla.
- Do not connect with other brands' quick connective couplings.
- Do not use Cuplas continuously under any pressure exceeding the rated working pressure.
- Use only within the range of rated temperature. Otherwise this may damage the seal material inside and cause leakage.
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Do not use in a place where dust or metal dust may be around. This may cause malfunction or leakage.
- Careless paint on Cuplas may cause malfunction or leakage.
- Do not disassemble.
- Disconnect Cupla plug and socket while holding the plug in one hand and the socket in the other.
- After connection, try to pull plug and socket apart to check secure connection.

Cautions on Handling Hose

⚠ Caution

- Make sure there is no twisted or bent part on hoses before use.
- Do not give any scratch on hoses with stones or concrete around, or deformation for a long time. This may cause critical damage on hoses.
- Do not leave the hose with extreme kink at the connection to Cupla. This may cause leakage or damage.
- Hoses cannot be used for hoisting up and down any goods with load on Cuplas.
- Do not put hoses near fire, which may lead to softening or deformation of hoses.
- Keep hoses in the shaded, dried and well-ventilated place.
- Do not bend a urethane hose at less than the minimum-bending radius of 30mm.
- Disconnect Cupla plug and socket while holding the plug in one hand and the socket in the other.
- After connection, try to pull plug and socket apart to check secure connection.

Cupla for oxygen / Fuel gas

⚠ Warning

- Fluid must be supplied from socket to plug.
- Use a liquid or paste type thread sealant when assembling taper pipe thread joints in Cupla.
- Do not tighten up screws in excess of the rated maximum tightening torque. This may cause damage.
- The fluid media used must be compatible with the body and seal materials of Cupla.
- Do not connect with other brands' quick connective couplings.
- Do not use Cuplas continuously under any pressure exceeding the rated working pressure.
- Use only within the range of rated temperature. Otherwise this may damage the seal material inside and cause leakage.
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Do not use in a place where dust or metal dust may be around. This may cause malfunction or leakage.
- Careless paint on Cuplas may cause malfunction or leakage.
- Do not use in a place where gas is likely to remain around.
- Do not connect / disconnect Cuplas near a flame.
- Replace any Cupla with a new one after a backfire has occurred on it.
- Oil must not be present when connecting to a hose. This may cause spontaneous combustion.
- Cut off and throw away the hose at least 3cm from the end before it is reused.

⚠ Caution

- Use Cuplas only for the purpose of quick connective couplings.
- Hose barb of Cuplas must be inserted right to the root and secured tight with a hose clamp.
- Store indoors away from water or moisture.
- Do not use a hose with cracks. This may cause leakage or disconnection.
- Always check for leakage on Cuplas before use. Never use one with leaks, and replace it with a new one.
- Make sure the valve on the torch is shut before connecting a Cupla.

Mold Cupla / Flow Meter

⚠ Caution

- Use Cuplas only for the purpose of quick connective couplings.
- Do not use Cuplas continuously under any pressure exceeding the rated working pressure.
- Use only within the range of rated temperature. Otherwise this may damage the seal material inside and cause leakage.
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Do not use in a place where dust or metal dust may be around. This may cause malfunction or leakage.
- Careless paint on Cuplas may cause malfunction or leakage.
- Do not tighten up screws in excess of the rated maximum tightening torque. This may cause damage.
- Do not use a hose with cracks. This may cause leakage or disconnection.
- Direct hookup to a vibration or impact device may result in reduced lifetime.
- Fluid must be cleaned through filters before reach to Cuplas.
- Do not disassemble.
- Disconnect Cupla plug and socket while holding the plug in one hand and the socket in the other.
- After connection, try to pull plug and socket apart to check secure connection.

For Low Pressure (Water · Liquid) / For Medium Pressure

⚠ Warning

- The fluid media used must be compatible with the body and seal materials of Cupla.
- Do not use Cuplas continuously under any pressure exceeding the rated working pressure.
- Use only within the range of rated temperature. Otherwise this may damage the seal material inside and cause leakage.
- Do not pressurize the socket or plug with fluid while disconnected.
- Do not disassemble.

⚠ Caution

- Use a liquid or paste type thread sealant when assembling taper pipe thread joints in Cupla.
- Do not tighten up the screw on Cupla exceeding the rated maximum tightening torque. This may cause damage on thread.
- Use Cuplas only for the purpose of quick connective couplings.
- Do not connect with other brands' quick connective couplings. (Except Lever Lock Cupla)
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Do not use in a place where dust or metal dust may be around. This may cause malfunction or leakage.
- Careless paint on Cuplas may cause malfunction or leakage.
- A shut-off valve must be installed between pressure source and the Cupla.
- Do not use as a swivel joint.
- Direct hookup to a vibration or impact device may result in reduced lifetime.
- Fluid must be cleaned through filters before reach to Cuplas.
- O-rings in Cuplas must remain lubricated at all times.
- Do not strike the tip of an automatic shut-off valve with a hammer or the like. This may cause leakage or malfunction. Consult us for alternative way of releasing the residual pressure inside.
- Refer to the pages of Seal Material Selection Table and Body Material Selection Table at the end of this catalog to consult suitable seal and body materials for the fluid you use.

For High Pressure

⚠ Warning

- The fluid media used must be compatible with the body and seal materials of Cupla.
- Do not use Cuplas continuously under any pressure exceeding the rated working pressure.
- Use only within the range of rated temperature. Otherwise this may damage the seal material inside and cause leakage.
- Do not connect/disconnect under dynamic pressure or static residual pressure. (Excluding connection of HSP-PV type)
- Do not pressurize the socket or plug with fluid while disconnected.
- Do not disassemble.

⚠ Caution

- Use a liquid or paste type thread sealant when assembling taper pipe thread joints in Cupla.
- Do not tighten up the screw on Cupla exceeding the rated maximum tightening torque. This may cause damage on thread.
- Use Cuplas only for the purpose of quick connective couplings.
- Do not connect with other brands' quick connective couplings. (Except Lever Lock Cupla)
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Do not use in a place where dust or metal dust may be around. This may cause malfunction or leakage.
- Careless paint on Cuplas may cause malfunction or leakage.
- A shut-off valve must be installed between pressure source and the Cupla.
- Do not use as a swivel joint.
- Direct hookup to a vibration or impact device may result in reduced lifetime.
- Do not use with water-glycol type operating oil, which will dissolve zinc plating.
- Fluid must be cleaned through filters before reach to Cuplas.
- O-rings in Cuplas must remain lubricated at all times.
- Design and keep the fluid flow speed through Cuplas below 8 m/s for hydraulic use.
- Do not strike the tip of an automatic shut-off valve with a hammer or the like. This may cause leakage or malfunction. Consult us for alternative way of releasing the residual pressure inside.
- Refer to the pages of Seal Material Selection Table and Body Material Selection Table at the end of this catalog to consult suitable seal and body materials for the fluid you use.

Cupla for Inert Gas

⚠ Warning

- Do not use Cuplas continuously under any pressure exceeding the rated working pressure.
- Use only within the range of rated temperature. Otherwise this may damage the seal material inside and cause leakage.
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Do not connect/disconnect under dynamic pressure or static residual pressure.
- Do not disassemble.

⚠ Caution

- Use a liquid or paste type thread sealant when assembling taper pipe thread joints in Cupla.
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- The fluid media used must be compatible with the body and seal materials of Cupla.
- Use Cuplas only for the purpose of quick connective couplings.
- Do not connect with other brands' quick connective couplings. (Except Lever Lock Cupla)
- Do not use in a place where dust or metal dust may be around. This may cause malfunction or leakage.
- Careless paint on Cuplas may cause malfunction or leakage.
- A shut-off valve must be installed between pressure source and the Cupla.
- Do not use as a swivel joint.
- Direct hookup to a vibration or impact device may result in reduced lifetime.

Precautions Relating to the Use of All Cuplas

- Be sure to read the “Instruction Sheet” that comes with the product, and “Caution” on the package before use.

Multi Cupla Series

Overall Multi Cuplas

⚠ Warning

- Do not use couplings continuously under any pressure exceeding the rated working pressure.
- Do not use at temperatures outside the rated working temperature range. Otherwise you may damage the seal packing inside and cause leakage.
- Do not disassemble.

⚠ Caution

- Do not tighten up the screw on Cupla exceeding the rated maximum tightening torque. This may cause damage to the Cupla.
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Do not use in a place where metal debris or sands may be around. This may cause malfunction or leakage.
- Do not use for the purposes other than quick connective coupling between fluid pipelines.
- Direct hookup to a vibration or impact device may result in reduced lifetime of the Cupla.
- Fluid must be cleaned through filters before reaching the Cuplas.
- Do not strike the tip of an automatic shut-off valve with a hammer or the like. This may cause leakage or malfunction.
- Design and keep the fluid flow speed through Cuplas below 8 m/s for hydraulic use.
- A shut-off valve must be installed between pressure source and the Cupla.
- Do not connect with other brands' quick connective couplings.
- Inspect Cuplas periodically for wear. If any wear or defective area is apparent, discontinue use until repaired or replaced.

MAM Type

⚠ Warning

- Do not drop Multi Cuplas. This may cause deformation of the plate.

⚠ Caution

- Check to see that the lever is in the “open” position, and connect socket and plug securely.
- The lever should not be turned by force. This may cause lever breakage.
- The number of hoses and the positions of the hoses to be connected to the Cupla should be arranged symmetrically from the lock part so as to distribute and control the reaction evenly.
- Apply seal packing liquid/tape on male taper threads to ensure no leak.
- Packing seals in Cuplas must remain lubricated at all times.

MAM-A Type / MAM-B Type

⚠ Warning

- Do not connect or disconnect the Cuplas under a dynamic or residual pressure of 0.6MPa or more. This could lead to Cupla damage.
- Do not drop Multi Cuplas. This may cause deformation of the plate.

⚠ Caution

- Check to see that the lever is in the “connect” position, and connect socket and plug securely.
- The lever should not be turned by force. This may cause lever breakage.
- When replacing a Cupla from a plate, carefully remove the retaining ring C type by using a snap ring plier. Use caution not to over expand the retaining ring C type. It is recommended, however, that a new retaining ring C type should be used when a Cupla is replaced.
- The number of Cuplas and the positions of the Cuplas to be connected to the plate should be arranged symmetrically from the lock part so as to distribute and control the reaction evenly.
- Packing seals in Cuplas must remain lubricated at all times.

MAS Type / MAT Type

⚠ Warning

- Do not connect / disconnect under dynamic pressure.
- The lateral sides of hexagon shaped body parts on socket and plug should match each other when the connection is complete.
- Never use socket & plug set that has an axial eccentricity of more than 0.6mm diameter range. This may cause leakage or breakage.

⚠ Caution

- Connection between the same MAT types is virtually not possible because there is no allowance for eccentricity.
- O-rings in Cuplas must remain lubricated at all times.

MALC-SP Type

⚠ Danger

- Do not pressurize the socket or plug with fluid of 2MPa or more. This may cause the valve pop out.

⚠ Warning

- Never use socket & plug set that has an axial eccentricity of more than 2mm diameter range. This may cause leakage or breakage.
- Obliquity (misalignment) of socket and plug must be within 0.5 degrees during connection or disconnection; otherwise this may cause leakage or breakage.

⚠ Caution

- O-rings in Cuplas must remain lubricated at all times.

MALC-HSP Type

⚠ Danger

- Do not pressurize the socket or plug with fluid of 8MPa or more. This may cause the valve pop out.

⚠ Warning

- Never use socket & plug set that has an axial eccentricity of more than 2mm diameter range. This may cause leakage or breakage.
- Obliquity (misalignment) of socket and plug must be within 0.5 degrees during connection or disconnection; otherwise this may cause leakage or breakage.

⚠ Caution

- O-rings in Cuplas must remain lubricated at all times.

Semicon Cupla Series

⚠ Caution

- Prior to initial use, the seal material should be tested to confirm the material suitability for the fluid.
- Use a liquid or paste type thread sealant when assembling taper pipe thread joints in Cupla.
- Do not tighten up the screw on Cupla exceeding the rated maximum tightening torque. This may cause damage on thread.
- Apply the fluid used or pure water on the O-ring or plug (cylindrical part where the O-ring slides over) to reduce sliding friction (insertion load) and protect the O-ring from wear & tear.
- Small amount of fluid will spill out at disconnection. In order to avoid any foreseeable danger, purge out the fluid inside the Cupla with compressed air before disconnection.
- Do not use as a swivel joint.
- Use Cuplas only for the purpose of quick connective couplings.
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Do not pressurize the socket or plug with fluid while left disconnected. This may cause possible valve blow out.
- Be sure to mount a proper dust cap while the Cuplas are left disconnected.
- Do not disassemble.

Paint Cupla

⚠ Warning

- Do not use Cuplas continuously under any pressure exceeding the rated working pressure.
- Use only within the range of rated temperature. Otherwise this may damage the seal material inside and cause leakage.
- The fluid media used must be compatible with the body and seal materials of Cupla.
- Check carefully if your special paint or solvent is suitable for this Cupla before use.
- Make sure to ground to the earth using such a hose containing a ground wire. Insufficient grounding may lead to fire or dangerous explosion caused by possible sparks of static electricity.
- All the time during operation, wear appropriate clothes and protective equipment such as safety glasses, face guard and gloves. Otherwise it will be potentially hazardous when paint or solvent splashes on to operators.
- Do not disassemble.

⚠ Caution

- This Cupla is designed for paints diluted by solvents. Do not use this Cupla for other than this specific application.
- Do not tighten up the screw on Cupla exceeding the rated maximum tightening torque. This may cause damage on thread.
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Do not use in a place where dust or metal dust may be around. This may cause malfunction or leakage.
- Do not use as a swivel joint.
- Fluid must be cleaned through filters before reach to Cuplas.
- A shut-off valve must be installed between pressure source and the Cupla.
- Do not try to connect other makers' plug to our socket. This will cause leakage from the couplings or damage on the Cuplas.
- Do not connect with other brands' quick connective couplings.
- Be careful with the fluid that will spill out from the plug when disconnected.
- Clean up the Cuplas after every use. Otherwise paint will dry out on and inside Cuplas and may cause their malfunction, insufficient color mix, or incomplete grounding.
- Check up on Cuplas periodically. If any disorder is shown, stop using the Cuplas until properly repaired or replaced with new ones.
- Fluid must be supplied from socket to plug.

Semi-Standard Cupla Series

⚠ Caution

- Use Cuplas only for the purpose of quick connective couplings.
- The fluid media used must be compatible with the body and seal materials of Cupla.
- Do not connect with other brands' quick connective couplings.
- Do not use Cuplas continuously under any pressure exceeding the rated working pressure.
- Use only within the range of rated temperature. Otherwise this may damage the seal material inside and cause leakage.
- Do not tighten up the screw on Cupla exceeding the rated maximum tightening torque. This may cause damage on thread.
- Do not apply any artificial impact, bend, or tension other than necessary in connection and disconnection. This may cause leakage or damage.
- Direct hookup to a vibration or impact device may result in reduced lifetime.
- Do not use in a place where dust or metal dust may be around. This may cause malfunction or leakage.
- Careless paint on Cuplas may cause malfunction or leakage.
- Do not disassemble.