Safety Precautions

The safety precautions provide instructions for the safe use of NITTO KOHKI coupling "CUPLA" to avoid the potential danger of bodily harm or damage to surrounding property. The safety precautions are categorized under the headings Danger, Warning and Caution, in accordance with the degree of potential hazard to the body or surrounding property, if CUPLA is used incorrectly. They are all important notes for safety and must be followed as well as in accordance with International standards #1 and other local safety regulations #2.

#1: ISO 4413, Hydraulic Fluid Power – General rules relating to systems
ISO 4414, Pneumatic Fluid Power – General rules relating to systems
#2: Industrial Health & Safety law (for example)

DANGER
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION
Indicates a potentially hazardous situation which, if not avoided, may result in personal injury or property damage.

Caution When Selecting CUPLA

DANGER
- Connection to a coupling of another brand may cause imperfect connection or disconnection, reduced air tightness, impaired pressure resistance or durability, reduced flow rate and potentially result in an unexpected accident and therefore must be avoided. Nitto Kohki cannot accept liability for any accident that may result by mixed use with the coupling of another brand. Please be sure to check for our marks on the right hand side of this page, which are always inscribed on NITTO KOHKI coupling "CUPLA" when you order and purchase.
- Do not use CUPLA under conditions and environments other than specified in the catalog.

WARNING
- Please consult us prior to selection or use of CUPLA when they are intended for use with corrosive or flammable gases/liquids and/or in atmospheres of these types of gases and liquids.
- Selecting the wrong type of seal material may cause a leak. In making your selection, please check the compatibility of the seal material with the type of fluid and temperature used in the application.

CAUTION
- If CUPLA is to be used for the following applications, please consult us:
  - Equipment that directly comes into contact with and runs food, drugs or medicines, drinking water, atomic energy equipment or equipment that ensures safety.
  - Medical facilities or suction equipment that directly affects human body
  - Vehicles, aircraft and associated equipment systems that accommodate people
  - The compatibility of the product with specific equipment, systems, etc. must be determined by the person designing the equipment, systems, etc. or the person who decides its specifications based on necessary analysis and test result. The expected performance and safety assurance of the equipment, systems, etc. will be the responsibility of the person who has determined its compatibility with the product.
- Please consult us prior to use if CUPLA is required for use on machines, equipment or systems (hereafter referred to as “equipment, systems, etc.”) for sustaining or controlling goods or death or personal injury.
- When CUPLA is used for the purpose of ensuring safety, please consult us beforehand.
- The compatibility of the product with specific equipment, systems, etc. must be determined by the person designing the equipment, systems, etc. or the person who decides its specifications based on necessary analysis and test result. The expected performance and safety assurance of the equipment, systems, etc. will be the responsibility of the person who has determined its compatibility with the product.
- Connection with such a similar product to NITTO KOHKI coupling "CUPLA" may cause:
  - Vehicles, aircraft and associated equipment systems that accommodate people
  - Equipment that directly comes into contact with and runs food, drugs or medicines, drinking water, atomic energy equipment or equipment that ensures safety.
  - Selecting the wrong type of seal material may cause a leak. In making your selection, please check the compatibility of the seal material with the type of fluid and temperature used in the application.
- Please consult us prior to selection or use of CUPLA when they are intended for use with corrosive or flammable gases/liquids and/or in atmospheres of these types of gases and liquids.

Warranty and Disclaimer

Our responsibilities for the defects in our products shall be as follows:
- We shall be responsible for any defects in design, material or workmanship of our products, if it is apparent that such defects are due to reasons solely attributable to us.
- Our responsibilities shall be limited to one of the following, as determined by us:
  (a) repair of any defective products or parts thereof,
  (b) replacement of any defective products or parts thereof; or
  (c) compensation for loss and damages incurred by you, which shall in no case exceed the amount of your purchase price for the defective products.
- We shall in no case be liable for any special, indirect or consequential loss or damages, whether such loss or damages are those arising from work stoppage, impairment of other goods or death or personal injury.

Performance, Dimensions and Its Limitation

Please note the performance charts and outside dimensions in this catalog do not take into account any tolerances found in mass production. The information is an average or standard value to be a guide for selecting models and to enable technical appraisal by users.

Beware of Imitations

Recently, similar products which invite misidentification or confusion with NITTO KOHKI coupling "CUPLA" have appeared on the market. Connection with such a similar product to NITTO KOHKI coupling "CUPLA" may cause:
- Imperfect connection or disconnection
- Reduced air tightness
- Impaired pressure resistance or durability
- Reduced flow rate
and could result in unexpected accidents. Therefore, connection other than with NITTO KOHKI coupling "CUPLA" must be avoided.

Note:
Nitto Kohki cannot accept any liability for any accident that may occur as a result of using couplings of another brand in conjunction with our own.
The following precautions must be taken when using CUPLA. Please contact Nitto Kohki or the outlet / supplier where you purchased the product with regard to repair procedures, certification on the specification or applications of the products.

Safety Guide

Prepare Precautions Related to the Use of All CUPLA products

CUPLA for Low Pressure (Air)

Caution

• Prior to use, check the compatibility of the seal material and body material against the temperature and the fluid to be used. Selecting the wrong seal material will lead to leakage.

• Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.

• Only use CUPLA that are within their rated temperature range. Otherwise this can lead to leakage through seal deterioration or damage. It cannot be used continuously at its lowest or highest rated working temperature. The operability of CUPLA differs depending on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation test under your actual operating environment and conditions.

• Do not exceed the recommended maximum torque when screwing in the male or female thread of CUPLA for installation. It will cause damage. (Applies to thread type. Nut type)

• Check to make sure when installing CUPLA that the seal can be siphoned or cross-thread, this can cause damage and lead to leakage. (Applies to thread type. Nut type, especially body material: stainless steel)

• Do not use any other than the applicable hose or tube axles. It will cause leakage. (Applies to hose or tube filter connection type)

• Insert the barb (tail) fully into a hose or a tube and secure it tightly with a hose clamp or a nut. Incomplete insertion or insufficient clamping will lead to leakage or sliding off of a hose or a tube from the barb (tail). (Applies to hose or tube filter connection type)

• Never strike CUPLA when inserting barb (tail) into hose or tube. This could cause poor connection. (Applies to hose or tube filter connection type)

• Do not use cracked (deteriorated) or deteriorated hoses or tubes. It will lead to leakage or bursting of hoses or tubes. (Applies to hose or tube filter connection type)

• Cut off the hose or tube at a designated length from the end when using it. Failure to do so will lead to leakage or bursting of the hose or tube. See the “Instruction manual” enclosed with the product for the normal length. (Applies to hose or tube filter connection type)

• Prior to use, always perform a leak test after installing CUPLA.

• After installation, try to pull the socket and plug apart to confirm secure connection. If the connection is incomplete, the socket and plug may disassemble or leak. (Except for CUPLA with purge function)

• Do not use damaged (cracked) or deteriorated hoses or tubes. It will lead to leakage or bursting of hoses or tubes. (Applies to hose or tube filter connection type)

• Do not use any artificial impact, bend or tension. It will cause leakage or damage.

• Always install a shut-off valve between the pressure source and the socket.

• After connection, try to pull the socket and plug apart to confirm secure connection. If the connection is incomplete, the socket and plug may disassemble or leak. (Except for CUPLA with purge function)

• Do not apply any artificial impact, bend or tension. It will cause leakage or damage.

• Do not apply CUPLA in areas or environment where dust such as sand or metal powder can get in to CUPLA. It will lead to malfunction or leakage.

• Do not let paint stick to CUPLA. It will cause malfunction or leakage.

• Be careful not to put scratches or dents on CUPLA. Especially, scratches or dents in the mating parts will cause leakage.

• Do not apply any artificial impact, bend or tension. It will cause leakage or damage.

• Do not drop CUPLA. It will cause leakage or malfunction.

• Connecting CUPLA directly to vibrating or impacting equipment will result in reduced lifetime.

• Do not use with any fluid or medium other than what is specified. To do so could cause leakage or damage. (Applies to thread type. Nut type)

• The durability of the hose depends on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation test under your actual operating environment and conditions.

• Make sure that there is no twist or bend on the hose before use. (Except for CUPLA with purge function)

• Do not exceed the maximum extendable length, to do so will damage the hose. See catalogue page for full specification details. (Applies to NK CUPLA COIL HOSE)

• Do not use in areas or environment where dust such as sand or metal powder can get in to CUPLA. This may cause damage to the hose.

• Do not use CUPLA near fire or places where gas accumulates. It will cause fire or explosion.

• The use of inline filters is strongly advised and recommended. To prevent damage, the fluid should be clean before reaching CUPLA. The inclusion of foreign matter in the fluid could damage the hose.

• Do not use in environments where dust such as sand or metal powder can get in to CUPLA. This may cause damage to the hose.

• Do not use CUPLA in areas or environment where dust such as sand or metal powder can get in to CUPLA. This may cause damage to the hose.

• Do not use in areas or environment where dust such as sand or metal powder can get in to CUPLA. This may cause damage to the hose.

Cautions on Handling CUPLA HOSE

Warning

• Do not use with any fluid or medium other than what is specified. To do so could cause leakage or damage. (Applies to thread type. Nut type)

• Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.

• Replace CUPLA with a new one if any barb (tail) or branch becomes loose. It will lead to leakage or sliding off of a hose or a tube from the barb (tail).

• Never let it adhere to CUPLA when installing a hose. It will cause spontaneous fire.

• Insert the barb (tail) fully into a hose and secure it tightly with a hose clamp or a nut. Incomplete insertion or insufficient clamping will lead to leakage or sliding off of a hose or a tube from the barb (tail). (Applies to hose type)

• Prior to use, always perform a leak test after installing CUPLA. Always check for leakage on CUPLA before use. If any leakage is found, stop using immediately.

• Follow the hose at least 3 cm from the end when using it. Failure to do so will lead to leakage or bursting of the hose. (Applies to hose type)

• Do not use CUPLA near fire or places where gas accumulates. It will cause fire or explosion.

• Make sure that the valve on the hose is closed before connecting to CUPLA. If connected with vacuum open, the gas will flow out and could cause a fire or explosion.

• Do not disassemble CUPLA. It will cause leakage or damage.

• Do not store in a dry environment. Moisture will cause corrosion and may also freeze in low temperatures, which may cause malfunction of CUPLA or other equipment.

CUPLA for Oxygen / Fuel Gas

Caution

• Only use CUPLA that are within their rated temperature range. Otherwise the hose will get damaged or deteriorate and cause leakage. It cannot be used continuously at its lowest or highest rated working temperature.

• Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.

• Replace CUPLA with a new one if any barb (tail) or branch becomes loose. It will lead to leakage or sliding off of a hose or a tube from the barb (tail).

• Never let it adhere to CUPLA when installing a hose. It will cause spontaneous fire.

• Insert the barb (tail) fully into a hose and secure it tightly with a hose clamp or a nut. Incomplete insertion or insufficient clamping will lead to leakage or sliding off of a hose from the barb (tail). (Applies to hose type)

• Prior to use, always perform a leak test after installing CUPLA. Always check for leakage on CUPLA before use. If any leakage is found, stop using immediately.

• Follow the hose at least 3 cm from the end when using it. Failure to do so will lead to leakage or bursting of the hose. (Applies to hose type)

• Do not use CUPLA near fire or places where gas accumulates. It will lead to fire or explosion.

• Make sure that the valve on the hose is closed before connecting to CUPLA. If connected with vacuum open, the gas will flow out and could cause a fire or explosion.

• Do not disassemble CUPLA. It will cause leakage or damage.

• The working pressure and working temperature range for hose connection types depends upon the hose to be used. Prior to use, confirm that the temperature and the type of fluid to be used is suitable for the hose.

• Connect the hose or tube to the CUPLA with a hose clamp or a nut. Incomplete insertion or insufficient clamping will lead to leakage or sliding off of a hose or a tube from the barb (tail). (Applies to hose or tube fitter connection type)

• Refer to the operation manual enclosed with the product for full specification details. (Applies to hose or tube fitter connection type)

• The working pressure and working temperature range for hose connection types depends upon the hose to be used. Prior to use, confirm that the temperature and the type of fluid to be used is suitable for the hose.

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• The working pressure and working temperature range for hose connection types depends upon the hose to be used. Prior to use, confirm that the temperature and the type of fluid to be used is suitable for the hose.
As to the use of any special paint or solvent, make thoroughly sure of the material compatibility.

When installing TSP CUPLA Socket with Ball Valve, in order to protect the spherical surface of the ball valve, install it with the valve in the fully opened state as a rule. (Applies to thread type, Nut type)

Also, stress corrosion cracking may occur if used under corrosive environment. Take note of usage conditions. (Applies to hose or tube fitter connection type)

• When storing TSP CUPLA Sockets with Ball valve, ensure that the valve is fully open. If stored with the valve partially open, the packing will deform and cause leakage.

• Only use CUPLA in a combination with NITTO KOHKI coupling “CUPLA”. (Except LEVER LOCK CUPLA)

• Do not apply any artificial impact, bend or tension. It will cause leakage or damage.

• Do not let paint stick to CUPLA. It will cause malfunction or leakage.

• The use of inline filters is strongly advised and recommended. To prevent damage, the fluid should be clean before reaching CUPLA.

• After connection, try to pull the socket and plug apart to confirm secure connection. If the connection is incomplete, the socket and plug may disconnect when pressurized. (Applies to MOLD CUPLA or HOT WATER CUPLA)

• In case of a shut-off valve between the pressure source and CUPLA, do not use with fluid or medium other than what is specified, to do so could cause leakage or damage.

• Do not use damaged (cracked) or deteriorated hoses or tubes. It will lead to leakage or bursting of hoses or tubes. (Applies to hose or tube fitter connection type)

• Insert the barb (tail) fully into a hose or a tube and secure it tightly with a hose clamp or a nut. Incomplete insertion or insufficient clamping will lead to leakage or sliding off of a hose or a tube from the barb (tail).

• When the valve is fully open or closed, there will be a void between valve body and the ball valve which can trap a small amount of fluid under pressure.

• Prior to use, always perform a leak test after installing CUPLA.

• Prior to use, thoroughly be aware of the socket and plug part for certain secure connection. If the connection is incomplete, the socket and plug may disconnect when pressurized. (Applies to MOLD CUPLA or HOT WATER CUPLA)

• When using TSP CUPLA Socket with Ball Valve, make thoroughly sure of the material compatibility.

• When the fluid in the piping will flow out upon disconnection. When using for hazardous fluids (such as hot fluid), discharge all the fluid inside CUPLA before disconnecting, in order to prevent burns, etc. (Applies to MOLD CUPLA)

• When storing FLOW METER, ensure that the valve is fully open. If stored with the valve partially open, the packing will deform and cause leakage.

CUPLA for Low Pressure (Water, Liquid) and for Medium Pressure

MOLD CUPLA / FLOW METER / HOT WATER CUPLA

Caution

Prior to use, check the compatibility of the seal material and body material against the temperature and the fluid to be used. Selecting the wrong seal material will lead to leakage.

• Only use CUPLA that are within their rated temperature range. Otherwise this can lead to leakage through seal deterioration or damage. It cannot be used continuously at its lowest or highest rated working temperature.

• If used within the rated operating temperature range, prolong the use of FLOW METER under pressure and with the temperature in the upper regions will cause leakage. (Especially when the valve is fully open)

• The durability of CUPLA or FLOW METER differs depending on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation test under your actual operating environment and conditions.

• The durability of CUPLA differs depending on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation test under your actual operating environment and conditions.

• The working pressure and working temperature range for hose connection types depends upon the hose to be used. Prior to use, confirm that the temperature and the type of fluid to be used is suitable for the hose or tube.

• Before taking the body off from the piping, partially open the valve to allow the pressure to discharge. (Applies to FLOW METER)

• Use it in the state that the fluid does not freeze in the case of water. If it freezes, it will cause damage to the valve. (Applies to Valve Structures: Two-way shut-off type and One-way shut-off type)

• Always install a shut-off valve between the pressure source and CUPLA. Prior to use, always perform a leak test after installing CUPLA.

• Do not exceed the recommended maximum torque when screwing in to the male or female thread of CUPLA for installation. It will cause damage.

• Do not exceed the maximum allowable pressure when using the product. (Applies to pipe and tube connection type)

• The fluid in the piping will flow out upon disconnection. When using for hazardous fluids (such as hot fluid), discharge all the fluid inside CUPLA before disconnecting, in order to prevent burns, etc. (Applies to MOLD CUPLA)

• Do not exceed the maximum allowable pressure when using the product. (Applies to pipe and tube connection type)

• Use the fluid in the piping will flow out upon disconnection. When using for hazardous fluids (such as hot fluid), discharge all the fluid inside CUPLA before disconnecting, in order to prevent burns, etc. (Applies to MOLD CUPLA)

• Prior to use, always perform a leak test after installing CUPLA.

• Prior to use, thoroughly be aware of the socket and plug part for certain secure connection. If the connection is incomplete, the socket and plug may disconnect when pressurized. (Applies to MOLD CUPLA or HOT WATER CUPLA)

• When cleaning CUPLA, care must be taken not to use any material that will affect the seal and body materials.

• Do not use CUPLA in areas or environment where dust such as sand or metal powder can get in to CUPLA. It will lead to malfunction or leakage.

• Do not apply any artificial impact, bend or tension. It will cause leakage or damage.

• Care must be taken when installing CUPLA not to over tighten or cross thread, this can cause damage and lead to leakage. (Applies to thread type, Nut type, especially body material: stainless steel)

• Do not apply a fluoropolymer resin sealant tape on male tapered pipe threads to ensure no leak. (Applies to thread type)

• Use it in the state that the fluid does not freeze in the case of water. If it freezes, it will cause damage to the valve. (Applies to Valve Structures: Two-way shut-off type and One-way shut-off type)

• Prior to storage, make sure that the valve is fully open. If stored with the valve partially open, the packing will deform and cause leakage.

• Connecting CUPLA directly to vibrating or impacting equipment will result in reduced lifetime.

• Use only on quick connect coupling for fluid piping. (I cannot be used as a sensor axial)

• Do not disassemble CUPLA. It will cause leakage or damage.

• Before taking the body off from the piping, partially open the valve to allow the pressure to discharge. (Applies to TSP CUPLA Socket with Ball Valve)

• Prior to use, thoroughly be aware of the socket and plug part for certain secure connection. If the connection is incomplete, the socket and plug may disconnect when pressurized. (Applies to TSP CUPLA Socket with Ball Valve)

• Use it in the state that the fluid does not freeze in the case of water. If it freezes, it will cause damage to the valve. (Applies to Valve Structures: Two-way shut-off type and One-way shut-off type)

• Do not exceed the maximum allowable pressure when using the product. (Applies to pipe and tube connection type)

• The fluid in the piping will flow out upon disconnection. When using for hazardous fluids (such as hot fluid), discharge all the fluid inside CUPLA before disconnecting, in order to prevent burns, etc. (Applies to MOLD CUPLA)

• The durability of CUPLA differs depending on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation test under your actual operating environment and conditions.

• The fluid in the piping will flow out upon disconnection. When using for hazardous fluids (such as hot fluid), discharge all the fluid inside CUPLA before disconnecting, in order to prevent burns, etc. (Applies to MOLD CUPLA)

• The durability of CUPLA differs depending on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation test under your actual operating environment and conditions.

• Care must be taken when installing CUPLA not to over tighten or cross thread, this can cause damage and lead to leakage. (Applies to thread type, Nut type, especially body material: stainless steel)

• Do not apply any artificial impact, bend or tension. It will cause leakage or damage.

• Use it in the state that the fluid does not freeze in the case of water. If it freezes, it will cause damage to the valve. (Applies to Valve Structures: Two-way shut-off type and One-way shut-off type)

• Always install a shut-off valve between the pressure source and CUPLA. Prior to use, always perform a leak test after installing CUPLA.

• Do not exceed the maximum allowable pressure when using the product. (Applies to pipe and tube connection type)

• The fluid in the piping will flow out upon disconnection. When using for hazardous fluids (such as hot fluid), discharge all the fluid inside CUPLA before disconnecting, in order to prevent burns, etc. (Applies to MOLD CUPLA)

• Do not exceed the maximum allowable pressure when using the product. (Applies to pipe and tube connection type)

• Prior to use, thoroughly be aware of the socket and plug part for certain secure connection. If the connection is incomplete, the socket and plug may disconnect when pressurized. (Applies to MOLD CUPLA or HOT WATER CUPLA)

• When cleaning CUPLA, care must be taken not to use any material that will affect the seal and body materials.

• Do not use CUPLA in areas or environment where dust such as sand or metal powder can get in to CUPLA. It will lead to malfunction or leakage.

• Do not apply any artificial impact, bend or tension. It will cause leakage or damage.

• Care must be taken when installing CUPLA not to over tighten or cross thread, this can cause damage and lead to leakage. (Applies to thread type, Nut type, especially body material: stainless steel)

• Do not apply a fluoropolymer resin sealant tape on male tapered pipe threads to ensure no leak. (Applies to thread type)

• Use it in the state that the fluid does not freeze in the case of water. If it freezes, it will cause damage to the valve. (Applies to Valve Structures: Two-way shut-off type and One-way shut-off type)

• Prior to storage, make sure that the valve is fully open. If stored with the valve partially open, the packing will deform and cause leakage.

• Connecting CUPLA directly to vibrating or impacting equipment will result in reduced lifetime.

• Use only on quick connect coupling for fluid piping. (I cannot be used as a sensor axial)

• Do not disassemble CUPLA. It will cause leakage or damage.

• Before taking the body off from the piping, partially open the valve to allow the pressure to discharge. (Applies to TSP CUPLA Socket with Ball Valve)
**Precautions Relating to the use of ALL CUPLA Products**

**CUPLA for High Pressure**

**Danger**
- Do not apply continuous pressure to CUPLA socket or plug while they are disconnected. It will cause leakage or damage.
- **Warning**
- Do not use CUPLA continuously exceeding the rated working pressure. Also, do not use 700R CUPLA in an environment where there is impure pressure. It will cause leakage or damage.
- Do not connect/disconnect with fluid still under dynamic pressure or static residual pressure. It will cause damage to the valve. However, the HSP-PV type can be connected under static residual pressure.
- After connection, try to pull the socket and plug apart to confirm secure connection. If the connection is incomplete, the socket and plug may disconnect when pressurized.
- Only use CUPLA in a combination with NITO KOHKI couplings “CUPLA”. However, 280 CUPLA is interchangeable with couplers complying with ISO7241-1A.
- When using by connecting 280 CUPLA with other brands, compare the pressure specifications and use under the lower pressure.
- Do not disassemble CUPLA. It will cause leakage or damage.

**Caution**
- Prior to use, check the compatibility of the seal material and body material against the temperature and the fluid to be used. Selecting the wrong seal material will lead to leakage.
- As to the use of any special paint or solvent, make thoroughly sure of the material compatibility.
- Only use CUPLA that are within their rated temperature range. Otherwise this can lead to leakage through seal deterioration or damage. It cannot be used continuously at its lowest or highest rated working temperature.
- The durability of CUPLA differs depending on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation test under your actual operating environment and conditions. Also, stress corrosion cracking may occur if used under corrosive environment. Take note of usage conditions.
- When selecting CUPLA, care must be taken not to use any material that will affect the seal and body materials.
- Make sure that O-rings and Packing seals are lubricated with grease or oil at all times. If not, the O-rings will get damaged and cause leakage.
- Apply a flucytoprene resin sealant tape on male tapered pipe threads to ensure no leak.
- Do not exceed the recommended maximum torque when screwing in the male or female thread of CUPLA for installation. It will cause damage.
- CUPLA becomes soft when installing CUPLA not to overtighten or cross thread, this can cause damage and lead to leakage. (Applies to HSU CUPLA, S210 CUPLA)
- Prior to use, always perform a leak test after installing CUPLA.
- Put a designated dust cap on CUPLA after disconnection when there is a possibility of foreign matter such as dirt sticking to the seal surface.
- Always install a dust-off valve between the pressure source and CUPLA.
- Do not strike the tip of an automatic shut-off valve with a hammer or a similar tool. It will cause leakage or maloperation. However, if you need to relieve residual pressure, please consult us.
- Do not use with any fluid or medium other than what is specified, to do so could cause leakage or damage. Do not use 280 CUPLA with water-glycerol operating oil. The plating will dissolve.
- Use only the prescribed fluid that does not freeze in the case of water. If it freezes, it will cause damage to CUPLA.
- The use of inline filters is strongly advised and recommended. To prevent damage, the fluid should be clean before reaching CUPLA.
- Design and keep the fluid flow speed through CUPLA below 8 m/s. It will cause damage to the valve if used at 8 m/s or over.
- Do not use CUPLA in areas or environments where dust or metal powder can get in to CUPLA. It will lead to malfunction or leakage.
- Do not let paint stick to CUPLA. It will cause malfunction or leakage.
- Be careful not to put scratches or dents on CUPLA. Scratches on the sealing parts will cause leakage. Especially, be careful about the seating surface of HSP CUPLA with male parallel thread with 30° flare.
- Do not apply any artificial impact, bend or tension. It will cause leakage or damage.
- Do not drop CUPLA, it will cause leakage or malfunction. If a FLAT FACE CUPLA plug is dropped, it is possible that the valve may open, to re-seat, connect the Socket to the Plug and disconnect, the valve will return to its original position.
- Connecting CUPLA directly to vibrating or impacting equipment will result in reduced lifetime.
- When using O-Ring seals for GP Type or GS Type of HSP CUPLA, use the O-Ring size described on the “Instruction manual” enclosed with the product.
- Due to the metal-touch valve structure, 450B and 700R CUPLA will slightly leak when not coupled.
- Connect after making sure that the lever is in the “connect” position. It will not connect if it is not in the “connect” position.
- Use only as quick connect couplings for fluid pipes.
- Only use CUPLA in a combination with NITO KOHKI coupling “CUPLA”.

**MULTI CUPLA Series**

**Overall MULTI CUPLA**

**Caution**
- Prior to use, check the compatibility of the seal material and body material against the temperature and the fluid to be used. Selecting the wrong seal material will lead to leakage.
- As to the use of any special paint or solvent, make thoroughly sure of the material compatibility.
- Only use CUPLA that are within their rated temperature range. Otherwise this can lead to leakage through seal deterioration or damage. It cannot be used continuously at its lowest or highest rated working temperature.
- The durability of CUPLA differs depending on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation test under your actual operating environment and conditions. Also, stress corrosion cracking may occur if used under corrosive environment. Take note of usage conditions.
- When selecting CUPLA, care must be taken not to use any material that will affect the seal and body materials.
- Apply a flucytoprene resin sealant tape on male tapered pipe threads to ensure no leak. (Applies to Snap ring mount Type, MAM Type, MAM-A Type, MAM-B Type)
- Do not exceed the recommended maximum torque when screwing in the male or female thread of CUPLA for installation. It will cause damage.
- Prior to use, always perform a leak test after installing CUPLA.
- Always install a dust-off valve between the pressure source and CUPLA.
- Do not use with any fluid or medium other than what is specified, to do so could cause leakage or damage. Do not use 280 CUPLA with water-glycerol operating oil. The plating will dissolve.
- Connect after making sure that the lever is in the “connect” position. It will not connect if it is not in the “connect” position.
- Do not force turning the lever. It will cause damage.
- After connection, try to pull the socket and plug apart to confirm secure connection. If the connection is incomplete, the socket and plug may disconnect when pressurized.
- Design and keep the fluid flow speed through CUPLA below 8 m/s. It will cause damage to the valve if used at 8 m/s or over.
- Do not disassemble CUPLA. It will cause leakage or damage.
- **MAM Type**
- Do not connect/disconnect with fluid still under dynamic pressure or static residual pressure exceeding the maximum working pressure. It will cause damage to CUPLA.
- Do not drop MULTI CUPLA. It will cause deformation of the plate.
- **Warning**
- Do not connect/disconnect with fluid still under dynamic pressure or static residual pressure exceeding the maximum working pressure. It will cause damage to CUPLA.
- Only use CUPLA in a combination with NITO KOHKI coupling “CUPLA”.
- **Caution**
- Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
- Make sure that O-rings and Packing seals are lubricated with grease or oil at all times. If not, the O-rings will get damaged and cause leakage.
- Do not deform the stop ring when installing CUPLA. If the stop ring is widened, it may come off from its groove and lead to poor connection or damage of CUPLA. Also change the stop ring with a new one when replacing CUPLA.
- Install hose symmetrically from the locking unit when they are connected to CUPLA in order to distribute the reaction force evenly. Failure to do so will lead to breakage.
- Connect after making sure that the lever is in the “connect” position. It will not connect if it is not in the “connect” position.
- Do not force turning the lever. It will cause damage.
- After connection, try to pull the socket and plug apart to confirm secure connection. If the connection is incomplete, the socket and plug may disconnect when pressurized.
- Design and keep the fluid flow speed through CUPLA below 6 m/s. It will cause damage to the valve if used at 6 m/s or over.
- Do not disassemble CUPLA. It will cause leakage or damage.

**MAM-A Type / MAM-B Type**

**Warning**
- Do not connect/disconnect CUPLA while they are pressurized or residual pressure of more than 0.6 MPa remains. It will cause damage to CUPLA.
- **Caution**
- Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
- Do not drop MULTI CUPLA. It will cause deformation of the plate.
- Make sure that O-rings and Packing seals are lubricated with grease or oil at all times. If not, the O-rings will get damaged and cause leakage.
- Install the M type retaining ring by using a pair of snap ring pliers. If the C type retaining rings are expanded too much, it will come off from its groove and lead to poor connection or breakage. Also change the retaining ring with a new one when replacing CUPLA.
- Install hoses symmetrically from the locking unit when they are connected to CUPLA in order to distribute the reaction force evenly. Failure to do so will lead to breakage.
- Connect after making sure that the lever is in the “connect” position. It will not connect if it is not in the “connect” position.
- Do not force turning the lever. It will cause damage.
- Do not strike the tip of an automatic shut-off valve with a hammer or a similar tool. It will cause leakage or maloperation.
- Use only as quick connect couplings for fluid pipes.
- Only use CUPLA in a combination with NITO KOHKI coupling “CUPLA”.
**Precautions Relating to the Use of All CUPLA products**

**MULTI CUPLA Series**

**MAS Type / MAT Type**

- **Warning**
  - Do not apply pressure to CUPLA socket or plug while they are disconnected. It will cause leakage or damage.
  - Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.

- **Caution**
  - Make sure that O-rings and packing seals are lubricated with grease or oil at all times. If not, the O-rings will get damaged and cause leakage.
  - Keep the center axis eccentricity of the Socket and Plug within 0.05 mm diameter. Failure to do so will lead to leakage or breakage.
  - Install the C-type retaining ring by using a pair of snap ring pliers. If the C-type retaining rings are expanded too much, it will come off from its groove and lead to poor connection or breakage.
  - Care must be taken when installing CUPLA not to over tighten or cross thread. This can cause damage and lead to leakage.
  - When connecting, connect socket and plug together tightly without a gap. If the gap exceeds 0.5 mm the flow will be reduced.
  - For the load required to maintain connection when CUPLA is connected, see the page in this catalog where MAS Type / MAT Type is described. Connection exceeding the maximum acceptable load will cause breakage. Connecting below the minimum load required to maintain connection will result in reduced flow.
  - Do not connect/disconnect with fluid still under dynamic pressure or static residual pressure. It will cause damage to the valve.
  - When connecting, connect socket and plug tightly with a gap of 0.5 mm if the flow is for reference only.
  - Use it in the state that the fluid does not freeze in the case of water. If it freezes, it will cause damage to CUPLA.
  - Do not drop CUPLA. It will cause leakage or malfunction.
  - Do not disassemble CUPLA. It will cause leakage or damage.

**MALC-01 Type**

- **Caution**
  - Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
  - Keep the center axis eccentricity of the Socket and Plug within 2 mm diameter. Failure to do so will lead to leakage or breakage.
  - Obliquity of socket and plug must be within 0.5 degrees during connection or disconnection. If installed exceeding 0.5 degrees, it will cause leakage or damage.
  - When connecting, connect socket and plug tightly without a gap. If the gap exceeds 0.5 mm the flow will be reduced.
  - For the load required to maintain connection when CUPLA is connected, see the page in this catalog where MALC-01 Type is described. Connection exceeding the maximum acceptable load will cause breakage.
  - Connecting below the minimum load required to maintain connection will result in reduced flow.
  - Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
  - Do not disassemble CUPLA. It will cause leakage or damage.

**MALC-SP Type / MALC-HSP Type**

- **Danger**
  - Do not use uncoupled socket or plug continuously exceeding its rated working pressure. It will cause leakage or damage. (Applies to MALC Type CUPLA)

- **Warning**
  - Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
  - Do not disassemble CUPLA. It will cause leakage or damage.

- **Caution**
  - Keep the center axis eccentricity of the Socket and Plug within 2 mm diameter. Failure to do so will lead to leakage or breakage.
  - Obliquity of socket and plug must be within 0.5 degrees during connection or disconnection. If installed exceeding 0.5 degrees, it will cause leakage or damage.
  - When connecting, connect socket and plug tightly without a gap. If the gap exceeds 0.5 mm the flow will be reduced.
  - For the load required to maintain connection when CUPLA is connected, see the page in this catalog where MALC-SP Type / MALC-HSP Type is described. Connection exceeding the maximum acceptable load will cause breakage.
  - Connecting below the minimum load required to maintain connection will result in reduced flow.
  - Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
  - Do not disassemble CUPLA. It will cause leakage or damage.

**SEIMCON CUPLA Series**

- **Warning**
  - Do not apply pressure to CUPLA socket or plug while they are disconnected. It will cause leakage or damage.
  - Prior to use, check the compatibility of the seal material and body material against the temperature and the fluid to be used. Selecting the wrong seal material will lead to leakage.

- **Caution**
  - Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
  - Do not disassemble CUPLA. It will cause leakage or damage.

- **Precautions Relating to the Use of All CUPLA products**
  - Be sure to read the “Instruction Sheet” that comes with the product or “Caution” on the package before use.
**Safety Guide**

**Precautions Relating to the Use of All CUPLA products**

**SEMICON CUPLA Series**

- **Caution**
  - Do not apply pressure to CUPLA socket or plug while they are disconnected. It will cause leakage or damage. (Applies to SP-V CUPLA)
  - Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
  - The fluid in the piping will spill out upon disconnection. Take extra care when using at places where it is liable to cause anoxia. (Applies to PCV PIPE CUPLA)

**PAINT CUPLA**

- **Warning**
  - Do not apply paint to CUPLA socket or plug while they are disconnected. It will cause leakage or damage. (Applies to SP-V CUPLA)
  - Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
  - The fluid in the piping will spill out upon disconnection. Take extra care when using at places where it is liable to cause anoxia. (Applies to PCV PIPE CUPLA)

- **Caution**
  - Do not apply any artificial impact, bend or tension. It will cause leakage or damage.
  - Do not drop CUPLA. It will cause leakage or malfunction.
  - Connecting CUPLA directly to vibrating or impacting equipment will result in reduced lifetime.
  - Use only as quick connect couplings for fluid pipelines. (It cannot be used as a swivel joint)
  - Do not disassemble CUPLA. It will cause leakage or damage.
  - Check CUPLA regularly. Stop using immediately if anything unusual is found on CUPLA.

**CUPA for Inert Gas**

- **Warning**
  - Do not apply any artificial impact, bend or tension. It will cause leakage or damage.
  - Do not drop CUPLA. It will cause leakage or malfunction.
  - Connecting CUPLA directly to vibrating or impacting equipment will result in reduced lifetime.

- **Caution**
  - Prior to use, check the compatibility of the seal material and body material against the temperature and the fluid to be used. Selecting the wrong seal material will lead to leakage.
  - Only use CUPLA that are within their rated temperature range. Otherwise this can lead to leakage through seal deterioration or damage. It cannot be used continuously at its lowest or highest rated working temperature.
  - The durability of CUPLA differs depending on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation tests under your actual operating environment and conditions.
  - Always stress corrosion cracking may occur if used under corrosive environment. Take note of usage conditions. (For PCV PIPE CUPLA, replace it with a new one after connection/disconnection of 5000 times as an approximate guide.)
  - When cleaning CUPLA, care must be taken not to use any material that will affect the seal and body materials.
  - Apply thread sealants on male tapered pipe threads to ensure a tight seal.
  - Do not exceed the recommended maximum torque when screwing in or out of CUPLA, this can cause damage and lead to leakage. (Applies to SP-V CUPLA,Body material: Stainless steel)
  - Prior to use, always perform a leak test after installing CUPLA.
  - Make sure that O-rings are lubricated with grease at all times. If not, the O-rings will get damaged and cause leakage. (Applies to SP-V CUPLA sealing materials.)
  - For the purpose of reducing the insertion load on connection and to prevent O-ring from damage, apply a lubricant that is suitable for the operational environment to the Plug tip and sealing surface. (Applies to SP-V CUPLA Seal material: BHBR)
  - Do not use pipe sizes other than the suitable sizes. It will cause leakage. Contact us if required to use Aluminum alloy pipes. (Applies to PCV PIPE CUPLA)
  - Chamfer the edge of the copper pipe to be used. If not chamfered, it will damage the packing and cause leakage. Do not use pipes with deformation or burns. It will lead to leakage or poor connection. (Applies to PCV PIPE CUPLA)
  - When connecting copper pipes, push down the lever only after confirming that the end of the copper pipe is pressed against the packing inside CUPLA. At this time, be careful not to get fingers caught. (Applies to PCV PIPE CUPLA)
  - After connection, try to pull the socket and plug apart and CUPLA and pipe apart to confirm secure connection. If the connection is incomplete, the socket and plug may disconnection when pressurized.
  - Do not disconnect with fluid still under dynamic pressure or static residual pressure. (Applies to SP-V PIPE CUPLA)
  - Contact us if it is required to connect/disconnect SP-V CUPLA under dynamic pressure or static residual pressure.
  - When connected with the copper pipe, do not rotate the pipe. It will damage the packing and cause leakage. (Applies to PCV PIPE CUPLA)
  - Put a designated dust cap on CUPLA after disconnection. When there is a possibility of foreign matter such as dirt sticking to the seal surface. (Applies to SP-V CUPLA)
  - When disconnected, store CUPLA with the lever in the ‘Open’ position. (Applies to PCV PIPE CUPLA)
  - Keep the O-ring free from contamination between the pressure source and CUPLA.
  - Do not strike the tip of an automatic shut-off valve with a hammer or a similar tool. It will cause leakage or malfunction. (Applies to SP-V CUPLA) However, if you need to relieve residual pressure, please consult us.
  - Do not store with any liquids other than what is specified. If so, it could cause leakage or damage.
  - The use of fine filters is strongly advised and recommended. ‘To prevent damage, the fluid should be clean before reaching CUPLA.’
  - Do not use CUPLA in areas where dust such as sand or metal powder can get in to CUPLA. It will lead to malfunction or leakage.
  - Do not let paint stick to CUPLA, It will cause malfunction or leakage.
  - Be careful not to put scratches or dents on CUPLA. Especially, scratches on the sealing parts will cause leakage.
  - Do not drop CUPLA. It will cause leakage or malfunction.
  - Do not apply any artificial impact, bend or tension. It will cause leakage or damage.
  - Do not drop CUPLA. It will cause leakage or malfunction.
  - Connecting CUPLA continuously exceeding the rated working pressure will result in reduced lifetime.
  - Stop using CUPLA if the lever is deformed. (Applies to PCV PIPE CUPLA)
  - Ensure that any copper residue or swirl that has adhered to the inside of the CUPLA is removed after use. (Applies to PCV PIPE CUPLA)
  - Use only as quick connect couplings for fluid pipelines. (It cannot be used as a swivel joint) (Applies to SP-V CUPLA)
  - Only use CUPLA in a combination with NITTO KOKI coupling ‘CUPLA’. (Applies to SP-V CUPLA)
  - Do not disassemble CUPLA. It will cause leakage or damage.

**PAINT CUPLA**

- **Warning**
  - Make sure that a hose containing a ground wire is connected to a ground. Insufficient grounding will lead to fire or dangerous explosion caused by possible sparks of static electricity.
  - Wear appropriate clothes and protective equipment such as safety glasses, face guard and gloves at all times. Otherwise it could be potentially hazardous when paint or solvent splashes on to operators.

- **Caution**
  - The CUPLA is designed for paints diluted by solvents. Do not use this CUPLA for any other applications such as Powder coating, Electrostatic coating or Electrodeposition coating. The seal material will deteriorate and cause leakage.
  - As to the use of any special paint or solvent, make thorough sure of the material compatibility.
  - Do not use CUPLA continuously exceeding the rated working pressure. It will cause leakage or damage.
  - Only use CUPLA that are within their rated temperature range. Otherwise this can lead to leakage through seal deterioration or damage. It cannot be used continuously at its lowest or highest rated working temperature.
  - The durability of CUPLA differs depending on the operating environment and conditions (pressure and temperature etc.). If necessary, conduct performance evaluation tests under your actual operating environment and conditions.
  - Also, stress corrosion cracking may occur if used under corrosive environment. Take note of usage conditions.
  - The fluid in the piping will spill out upon disconnection. Be careful so that it will not contact the human body.
  - Clean CUPLA each time after use. Otherwise paint will dry out and will cause malfunction, insufficient color mix or poor grounding. When cleaning CUPLA, care must be taken not to use any material that will affect the seal and body materials.
  - If cleaning, do not try to open the valve by inserting something except the plug into the socket. It will cause leakage.
  - Always install a shut-off valve between the pressure source and CUPLA.
  - The use of fine filters is strongly advised and recommended. ‘To prevent damage, the fluid should be clean before reaching CUPLA.’
  - Always use thread sealants on male tapered pipe threads to ensure a tight seal.
  - Do not use CUPLA in areas where dust such as sand or metal powder can get in to CUPLA. It will lead to malfunction or leakage.
  - Be careful not to put scratches or dents on CUPLA. Especially, scratches on the sealing parts will cause leakage.
  - Do not drop CUPLA. It will cause leakage or damage.
  - Do not drop CUPLA. It will cause leakage or malfunction.
  - Connecting CUPLA directly to vibrating or impacting equipment will result in reduced lifetime.
  - Use only as quick connect couplings for fluid pipelines. (It cannot be used as a swivel joint) (Applies to SP-V CUPLA)
  - Only use CUPLA in a combination with NITTO KOKI coupling ‘CUPLA’. (Applies to SP-V CUPLA)
  - Do not disassemble CUPLA. It will cause leakage or damage.

Be sure to read the "Instruction Sheet" that comes with the product or "Caution" on the package before use.