



Precautions to ensure safe usage

The precautions given below are intended to ensure safe and correct use of the products.
Note that certain restrictions apply to use of these products. Failure to observe these could result in injury or property damage.

 Warning	A potentially hazardous situation which could result in death or serious injury.
 Caution	A dangerous situation which could result in minor or medium injury and/or in which only property damage is foreseen.

Note: See the terminology glosses on our website for words marked with a ※.

TOYOCONNECTOR TC3-PC Resin (TOYOX Hose Dedicated Coupling)

① Notes for installation

- Warning** Before use, make sure there are no chemicals adhering to this resin product. If harmful chemicals (solvents, surfactants, etc.) adhere, the resin will be affected and cause damage.
Pay special attention to chemicals that may be on the worker's hands and tools or chemicals that may be atomized in the air of the workspace.
- When cutting a hose, make sure that the edge face of the hose is cut perpendicularly.
- Be sure to have a sufficient hose length so as not to apply hose bending stress around a coupling.
- Warning** When inserting hoses, never apply oil, etc., to the surface of the nipples. It may cause the hose to become disconnected.
- Make sure that the hose is inserted completely into the root of the nozzle.
- Do not damage the surface of nipples with blades and other items.
- Warning** Carry out mounting at 10°C or above. Mounting below 10°C will cause the resin to harden, possibly leading to damage under large momentary loads. After mounting, use within the hose's operating temperature range should pose no problems.
- Warning** Use sealing tape for the pipe thread. Do not use thread sealants containing solvents. This may cause damage. When using non-solvent sealants, confirm the ingredients using the SDS, etc., and ensure that no harm will come to the customer. In addition, if using liquid sealant within the same piping or in other places, use the product only after the thread sealant has hardened.
- Warning** Fasten the cap nut until there are no gaps. When used in a state where there are gaps, trouble due to fluid leakage or hose disconnection will occur.
As well, be careful to avoid injury due to wrench slips when fastening nuts.
- Use a monkey wrench for tightening. Do not use a pipe wrench. It will damage the cap nut.
- Caution** Be careful not to tighten resin cap nuts and nipples more than necessary. Tighten the hexagonal part with a monkey wrench without clearance (play). Overtightening or play between the hexagonal part and wrench can lead to damage.
- Work carefully to avoid cutting yourself on the sharp edge of the coupling.
- After installation, confirm that fluids do not leak from the couplings before use. As well, do not use if damage or deformation etc. is discovered.

② Notes for safe usage

- TOYOCONNECTOR is a coupling dedicated for the TOYOX Hoses below. TOYOX is not liable for any damages caused by use with any other hose including those produced by TOYOX as well as those by other manufacturers, as full performance may not be achieved or maintained.
- Use within the operating temperature and pressure ranges of the applicable hose.
- In the case of use under negative pressure, negative-pressure usable hoses may not be applicable depending on applications or conditions (temperature, movements, etc.).
- As there is a bump in the screw portion for the tube, refrain from using this product for sanitary piping (food, etc.).
※ There is a risk of problems with food sanitation.
- Do not use a hose that is extremely bent near a coupling. The bending radius of a hose should be larger than its ※³ minimum bending radius.
- Warning** Do not attempt assembly or disassembly of couplings while fluid is running through the hose.
This may cause fluid leakage or hose disconnection.
- Perform periodic inspections during and before use to make sure that hose disconnection from the coupling and fluid leakage do not take place.
- Do not allow anything other than the inner surface of the couplings or hose to come in contact with fluids, because the fluids may permeate the hose reinforcement layer or remain inside the couplings, and bacteria may propagate (attach to the parts) or the hose may deteriorate. Also, dust, hose fragments (reinforcement material) and ink adhering to the outer surface may be mixed in.
- Warning** Do not use for piping in the applications below. This may cause coupling damage, hose rupture, or hose disconnection.
 - For piping such as solenoid valve piping, which would put impact pressure on the piping
 - Where vibration or impact will be applied to the coupling
 - Where constant tensile stress may be applied to the hoses
 - In a way that may cause static buildup (electric shock hazard)
- Do not use outdoors. Resin strength will deteriorate due to sunlight and hose working life will decrease. As well, avoid use near a heat source.
- There are some fluids for which this product is not suitable. Usable fluids may be found in the chemical resistance data for coupling fluid contact surfaces (PPSU resin) on the TOYOX website; determine fluid suitability based on the actual devices and conditions used. Be especially cautious with regards to harmful chemicals such as solvents and surfactants as they will cause considerable harm to the resin and result in damage. The product durability (lifetime) will also vary depending on conditions including usage methods, temperature, pressure, concentration and so on.
- Make sure that the chemical fluid passing through the product does not adhere anywhere but the nipple body. Only the nipple body is chemically resistant. As well, check thoroughly for fluid contact with the outer surface of the coupling.

③ Notes for the reuse of couplings and replacement of hoses

- Warning** Because the TOYOCONNECTOR TC3-PC is made of resin, it cannot be reused.
- Please make sure to use a brand-new hose.
- Before replacing a hose, always make sure to remove the fluid and dirt on the coupling surface.
This may cause fluid leakage or hose disconnection.

④ Warning

- Do not install or use twisted hoses. Twisted hoses are dangerous because they deform their interior structures and cause hose ruptures. Fix twisted hoses appropriately as shown in the following examples.

