## TCSB type

# **TOYOCONNECTOR®** Handling Manual

### Be sure to read this manual before using the connector.

Warning: A potentially hazardous situation which could result in death or serious injury.

This is an explaination of the "correct use" of TOYOCONNECTOR.

Similar to individually sold hoses, please be aware of the restriction on use and follow the warnings below. Failure to observe these could result in injury or property damage.

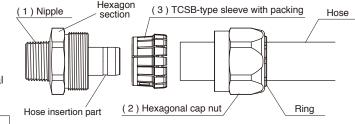
#### Names of parts (materials)

#### **Materials**

Nipple,cap nut: SCS13 (SUS304 equivalent)

Packing: NBR

Sleeve, Ring: Polyacetal





### Before fitting

- 1. When cutting a hose, please make sure that the edge face of the hose will become square-on.
- 2. Make sure that the hose is inserted completely into the root of the hose insertion part.
- 3. AWarning When inserting TOYOCONNECTOR TCSB into hoses, never put grease on the surface of the hose insertion part. It would be a cause of hose being pulled out.
- 4. After the orientation of the TCSB-type sleeve with packing is checked, tighten the hexagonal cap nut.
- 5. In the event that ring becomes dislodged from the socket nut during insertion of the hose, etc., remount the ring on the socket nut (be careful of the orientation) before use.
- 6. \(\Delta\)Warning Tighten the hexagonal cap nut completely.

If the nut becomes loose, the hose may become detached and liquid may leak.

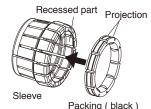
- 7. Do not cut the hose insertion part or TCSB-type sleeve with packing in place with a knife or the like.
- 8. After attaching the hose, make sure that the hose has not become detached and fluid does not leak at the connector.
- 9. Be sure to set a packing with the sleeve.
- 10. Use an " Adjustable ( Power ) Wrench " for tightening the nuts. Do not use a " Pipe Wrench ". It may damage hexagonal cap nuts.
- 11. Take care to avoid injury from the sharp edges of the connector.

### **How to fit TOYOCONNECTOR** | \* The same mounting instruction applies to all hoses.

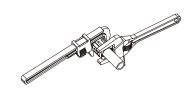
Figure 2

- 1. First, attach a nipple (1) to the equipment / machine.
- 2. Pass a hexagonal cap nut (2) through the hose and put the TCSB-type sleeve with packing (3) on the hose in such a way that there is no gap between them. (Beware of the orientation).
  - \* Fit the packing with the sleeve attached.
  - If the packing comes off the sleeve or becomes twisted, refit the packing, with the projections outside. to the recessed part of the sleeve, as shown in Fig. 1.
- 3. Insert the hose into the nipple (1) with whole TCSB-type sleeve with packing (3).
- 4. As shown in Fig. 2, secure the hexagonal part of the nipple (1) with another "monkey (motor) wrench." and tighten the hexagonal cap nut (2) completely. Tightening the nipple without securing it may cause the nipple to turn at the same time and break the thread for the piping.

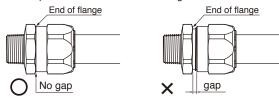
Figure 1



Sleeve Packing (black) Hose No gap Section view



Marning Tighten the hexagonal cap nut completely until it touches the flange of the nipple to prevent the hose from becoming detached and the fluid from leaking.





#### Notes for use

- 1. TOYOCONNECTOR is a hose joint used only for the following TOYOX hoses. TOYOX is not liable for any damages caused by using TOYOCONNECTOR with any other hose including those produced by TOYOX as well as those by other manufactures as full performance may not be achieved or maintained. \* Hose compatibility depends on the connector. Confirm through the catalog or the homepage.
- Use TOYOCONNECTOR within the operating temperature and pressure ranges of the applicable hose.
- 3. Do not fully bend the hose near the joint. Do not bend the hose beyond the minimum bending radius.
- 4. A Warning Do not assemble or disassemble the connector while fluid is in the hose because the hose may become loose and the liquid will leak.
- 5. Do not use the hose where there is vibration or shock. It may cause the connector to break or the hose to become detached.
- 6. Not suitable for sanitary piping, as there is a bump in the screw section.
  - \* There is a danger of food hygiene problems occurring.
- 7. Perform periodic inspections to make sure that the hose does not become detached and the fluid does not leak at the connection during use period of the hose.
- 8. 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.



## **Notes for Connector Reuse and Hose Replacement**

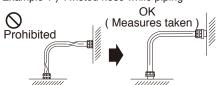
- 1. When you reuse TOYOCONNECTOR, a replacement TCSB type sleeve with packing is required.
- 2. Please make sure to use a brand-new hose.
- 3. Before replacing a hose, always make sure to remove the fluid and dirt on the connector surface. Fluid and dirt remaining on connector may possibly cause fluid leakage and hose loosening.
- 4. Products should be disposed of in accordance with the requirements of the local region.



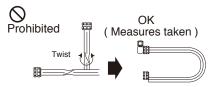
# Warning

- 1. The material used for the TOYOCONNECTOR flow pass (inner surface) is SCS13 (equivalent to SUS304). Phenomena such as corrosion or fluid leaks may occur depending on the type of fluid. Before use, be sure to check data ( refer to data on chemical resistance in the catalog or on the homepage ) or make inquiries to the toll-free number. Please also make similar checks for fluid contact with the outer surface of joints.
- 2. Do not use hoses when they are twisted. Partially twisted hoses are also a danger as they may cause internal structural damage leading to a "Burst". Follow the examples below to take preventative measures.

Example 1) Twisted hose while piping



Example 2 ) Twist when bent





TOYOX CO., LTD.