

Instructions for HI CUPLA

Specifications

Body material		Steel (Chrome plated)	Brass	Stainless steel (SUS304)
Size	Thread	R1/8 (10 type) R3/8, Rc3/8 (30 type) R3/4, Rc3/4 (60, 600 type)	R1/4, Rc1/4 (20 type) R1/2, Rc1/2 (40, 400 type) R1, Rc1 (800 type)	G1/4 (20PFF) G1/2 (40, 400 type)
	Hose barb	For 1/4" hose (17, 20 type) 3/8" hose (30 type) 1/2" hose (40, 400 type) 3/4" hose (600 type) 1" hose (800 type)		
	Braided hose size	For $\phi 9$ mm \times 15 mm hose		
Working pressure *1		1.5 MPa	1.0 MPa	1.5 MPa
Working temperature range *2	Seal material	Seal material	Mark	Working temperature range
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber *3	FKM	-20°C to +180°C	

*1) This shows the normal allowable fluid pressure under continuous use.

*2) The operable temperature range depends on the operating conditions.

*3) Excluding HI CUPLA for connection to braided hoses.

Maximum Tightening Torque (Taper thread) [Nm]

Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Steel	7	14	22	60	100	120
Brass	5	9	11	30	50	65
Stainless steel	—	14	22	60	100	120

Applicable Braided hose

Model	90SN-BH
	90PN-BH
Size [mm]	$\phi 9 \times 15$
Thickness and tolerance [mm]	3 ± 0.3
Material	Braided hoses should be made of soft PVC and woven by reinforcement thread

Read without fail before use

Safety precautions

- Read without fail and observe the "Safety Guide" in the general Quick Connect Couplings Catalog.
- For the cautions of the fluid to be used, please contact the manufacturer of the fluid.
- Observe the warnings and cautions below. If not observed, it could result in leakage of the fluid or damage to this product and cause burns, injury to the body by dangerous fluid such as chemical agent or high temperature fluid. It could also result in serious damage to this product or other machinery by the damage of this product. Stop using this product immediately if this happens.

- ⚠ **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.

WARNING

- Do not apply pressure to CUPLA socket while it is disconnected. (Applies to CUPLA for use with liquid)
- Do not use CUPLA continuously exceeding the working pressure. It will cause leakage or damage.
- The fluid in the piping will spill 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.
- Do not apply any artificial impact, bend or tension. 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.
- The working pressure and working temperature range for hose barb types and braided hose connection types differs depending on 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.
- Care must be taken when installing CUPLA not to overtighten or cross thread. (Applies to thread type, especially body material: stainless steel)
- Do not use anything other than the applicable hose sizes. (Applies to hose barb type and braided hose connection type)
- Insert the barb (tail) fully into a hose and secure it tightly with a hose clamp. (Applies to hose barb type) Securely tighten the nut until it is flush against the hose barb base. (Applies to braided hose connection type)
- Never strike CUPLA when inserting barb (tail) into hose. (Applies to hose barb type and braided hose connection types)
- Do not use damaged (cracked) or deteriorated hoses. (Applies to hose barb type and braided hose connection type)
- Cut off the hose at least 6 cm from the end when reusing it. (Applies to hose barb type and braided hose connection type)
- 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.
- Do not connect/disconnect with fluid still under dynamic pressure or static residual pressure. (Applies to CUPLA for use with liquid)
- Care should be taken when disconnecting CUPLA while still pressurized. To prevent injury due to the plug popping out, the socket should be held firmly in one hand and the plug in the other. If the medium is gas, an audible bang may be heard on disconnection. We recommend disconnecting CUPLA in an unpressurized state. (Applies to CUPLA for use with air)
- Do not use with any fluid or medium other than what is specified.
- Always flow the fluid from socket to plug.
- Design and keep the fluid flow speed through CUPLA below 8 m/s for liquid use.

SAFETY GUIDE

- Only use CUPLA that are within their rated temperature range.
- Apply a fluoropolymer resin sealant tape on male tapered pipe threads to ensure no leak. (Applies to thread type)
- When cleaning CUPLA, care must be taken not to use any material that will affect the seal and body materials.
- Do not exceed the recommended maximum torque when screwing in to the male or female thread of CUPLA for installation. (Applies to thread type)
- 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 shut-off valve between the pressure source and CUPLA.
- Fluid must be cleaned through filters before reaching CUPLA.
- Do not use CUPLA in areas or environment where dust such as sand or metal powder can get in to CUPLA.
- Do not let paint stick to CUPLA.
- Be careful not to put scratches or dents on CUPLA.
- Do not drop CUPLA.
- Connecting CUPLA directly to vibrating or impacting equipment will result in reduced lifetime.
- Mineral type grease is applied to the threaded part of steel nut. (Applies to braided hose connection type)
- Use only as quick connect couplings for fluid pipelines. (It cannot be used as a swivel joint)
- Do not disassemble CUPLA.
- Check CUPLA regularly. Stop using immediately if anything unusual is found on CUPLA.



◀ www.nitto-kohki.co.jp/prd/cupla/

- Be sure to read the "Safety Guide" before use.
- Asegúrese de leer la "Guía de seguridad" antes de usar el producto.
- 必ずお読みください。使用前必ず「安全ガイド」をお読みください。
- Pastikan Anda telah membaca "Panduan Keselamatan" sebelum menggunakannya.
- Hãy nhớ đọc "Hướng dẫn an toàn" trước khi dùng.
- 使用前请务必先阅读“快速接头使用的注意事项”。
- ご使用前に「[カップラ]使用上のお読み」を必ずお読みください。



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Note) Please keep this instruction sheet during use.