**Installation & Maintenance procedure SC-HBB series quick release couplings**

Scope: SC HBB couplings are designed to perform as quick release couplings in a 50 bar pipe-system for water. One of the specifications is that connection and disconnection of mentioned quick release couplings should be possible under 50 bar. It is important for control, installation and maintenance to understand the principal way of working of this coupling. With this knowledge all people involved are able to use their common sense to prevent malfunctioning.

**Principal way of working SCHBB:**

The coupling design works similar to a ball-valve which is opened and closed by using the plug as lever. The plug can only be connected or disconnected when the coupling is in closed position. This closed position is recognised by an angle of approx.75° between the coupling and the plug. To open the coupling the plug (lever) must be moved until the plug and coupling are in 1 straight line. The plug is automatically locked by a sleeve when the coupling is in open position. To close the coupling and disconnect the plug the sleeve must be manually pushed back.

In the coupling the ball-valve is in reality a cylinder. The outside surface of this cylinder is critical for a correct sealing. It is important to keep this surface clean and scratch-free.

The sealing between the coupling-house and the cylinder is done by a form-shaped elastomer. It is normal that slip-stick causes the first movement of the cylinder to be more force-demanding than the following movements, specially when the coupling has not been used for a long time.

The cylinder is rotating in the coupling body. This body is made of nickel-plated Brass. This material is relatively soft and can be deformed when miss-used, causing the cylinder to rotate difficultly and changing the pre-load force on the sealing, possibly causing leakage. Do not use the square head of the coupling for spanners, fixation in work-benches and so on. Use the hexagon in stead.

**Check:**

Check the coupling to be clean and undamaged. Check its functioning by connecting and disconnecting the coupling a few times with a test-plug (part number 25500451). It is normal that this feels quite heavy as a result of the tension force of the sealing on the cylinder. To ease this test: Put the coupling with the hexagon in a workbench or mount the coupling on the wall bracket. And don’t forget to pull back the sleeve when you want to disconnect.

**Installation:**

Use a proper thread sealant. This sealant should combine a filling and fixating function and should be compliant with Stainless Steel and nickel plated Brass. The sealing should be free of chlorides.

Manually screw the coupling into the wall-bracket of the pipe system as far as possible. Then use a proper tool on the hexagon and continue to screw the coupling into the wall-bracket with a force of max. 65 Nm. (This value is valid for a connection-size of ¾ -ISO 228). Note that while disconnecting some water will splash out the hole on the backside of the coupling. Make sure no water sensitive parts are within the splash-area.

Make sure that when mounting the coupling the head of the coupling is NOT used as a support for tools. Always use the hexagon.

Respect the cure-time that the manufacturer of the thread sealant has provided, and take in account the minimum ambient temperature for the curing process.

Mount the coupling in a position where the crests of the locking sleeve are minimally loaded by the force caused by pulling the fire-hose. The pulling force should not force the coupling in a closed position.

**Use:**

Make sure that the moving parts of the coupling stay clean. Critical is the surface of the cylinder on the front-side of the coupling. Prevent sand, dirt, grit and dust to enter between the cylinder and the sealing. Use the dust-cap HOIB256R.

The coupling is designed to be open or closed, it will not function when the plug is permanently somewhere in between those two positions.

It is normal that, when the coupling has been in unpressurised disconnected position for a long time, it takes some time before the sealing to take its proper position. It might happen that while testing a few drops will leak between the cylinder and the sealing. This should be over after a few connections and disconnections.

**Maintenance:**

The coupling needs no specific maintenance. Keep it clean.

Connect and disconnect the coupling a few times once a year and check for leakage

Check the crests of the locking sleeve are deformed or worn out.

Check the cylinder-sealing’s hardness every 5 year and replace it if necessary.





