



Bottle and valve assembly manual

DESCRIPTION

The assemblies consisting of cylinder/bottles and valves, as well as cylinder packages of a (shut-off) bridge, are pressure equipment for use in diving. For details on the printing devices used, please refer to the declaration of conformity.

LEGAL SITUATION

Notice to Pressure Equipment Directive (PED)

Anyone who completes the cylinder body with the cylinder valve to form a usable cylinder (assembly according to the Pressure Equipment Directive) for the purpose of placing it on the market becomes the manufacturer of this assembly and must therefore meet the requirements of the Pressure Equipment Directive (reassessment of conformity, CE marking, etc.).

A certificate of conformity must be drawn up for the assembly and given to the user/operator.

According to the "Recitals for the Pressure Equipment Directive" paragraph 5 sentence 4, this does not apply to the users (users/operators) of diving cylinders who carry out the assembly of the cylinder body and cylinder valve on their premises under their responsibility or have them carried out, since this assembly is not falls under the Pressure Equipment Directive.

It should be noted that whoever changes the assembly of any kind becomes the manufacturer of this modified assembly. For this purpose, the requirements of the Pressure Equipment Directive must be met again (reassessment of conformity, CE marking, etc.).

The originally issued certificate of conformity expires as a result of this change and has no meaning for the changed assembly group.

Reference to national regulations

National regulations regulate, among other things, the time frame and the type of tests before commissioning and periodic tests.

Under certain circumstances, national regulations may require further tests or approvals for all users or a limited group of users before using an assembly.

In any case, the respective national regulations must be observed by the user.

MONTAGE

You will receive the assembly fully assembled. Reassembly after maintenance or testing according to BetrSichV may only be carried out by authorized and competent persons. Any change to the assembly makes you the new manufacturer.

INSTALLATION

Every first filling of a non-pressurized assembly with a pressurized gas represents a start-up. In Germany, the BetrSichV stipulates that the respective first start-up of a new or significantly modified assembly must be carried out by an authorized body (e.g. TÜV). If your assembly is completely empty, we recommend having it checked for corrosion/damage by a specialist retailer before refilling.

Contact data can be found at any time on our homepage.

USAGE INSTRUCTIONS

Do not use any tools when screwing on the pressure reducer.

The connection thread of the valve and the thread of the

DIN handwheel on the pressure reducer must be free of foreign objects.

1. Screw the pressure reducer(s) into the valve hand-tight.
2. Carefully open the valve by turning the handwheel to the left.
3. Continue turning the handwheel until it stops.
4. Turn back 1/4 turn.
5. Check for leaks (blowing noises).

6. Repeat the process for the second outlet.
7. The valve is now ready for operation.

If the "1st regulator" freezes up during the dive, it can be locked with the hand wheel. You can continue to breathe from the "2nd regulator" without the gas being lost via the outflowing 1st regulator.

After the frozen controller has thawed, the outlet can be opened again with the hand wheel.

After each use, the valve should be closed with little effort.

Over time, excessive tightening can damage the lower spindle.

The pipe and shut-off bridges permanently connect two pressure vessels and cannot be shut off at the valves. The shut-off bridge makes it possible to ensure the gas supply if gas escapes from a cylinder and this gas escape cannot be stopped by shutting it off using the handwheel. When filling a device with a shut-off bridge using a valve, make sure that the shut-off bridge is open, otherwise a cylinder would not be filled with gas.

MAINTENANCE AND CARE

After the dive, the tank with valve should be rinsed in clean fresh water and kept in the shade.

Due to the selection of high-quality materials and excellent lubricants, the valves are maintenance-free over a longer period of time.

Only original spare parts may be used for repairs or revisions. Repairs or revisions may only be carried out by authorized and competent persons.

When using the valves in diving schools/diving bases, we recommend applying new lubricant to the spindle mechanism once a year.

The user is responsible for compliance with regular maintenance and repeat tests. If the respective deadlines are exceeded, the operating permit expires and the assembly must be completely depressurized. Both statutory deadlines and deadlines chosen by you (e.g. by means of a safety assessment) are latest deadlines. In the event of special incidents (e.g. acts of violence, moist or oily breathing gas, visible corrosion, ...), the user should (or have) carry out maintenance/repeat testing earlier.

HAZARDS AND PREVENTION

Use:

1. Assemblies supplied for self-contained underwater breathing apparatus are specially designed for this purpose and must under no circumstances be used for any other purpose. They are to be used only by properly trained divers and by properly trained others.

Print:

2. An assembly containing gas under pressure may present a hazard if used for a purpose other than that for which it was intended. All self-contained breathing apparatus assemblies must be used with a regulator appropriately qualified for the service to protect the diver from full gas pressure within the cylinder. Under no circumstances should any attempt be made to unscrew a valve on a pressurized apparatus .
- 3.
4. The assemblies may be filled up to the filling pressure stamped on the pressure vessel. 5th 6th 7th
Under no circumstances should an attempt be made to unscrew a valve on a pressurized device.
Under no circumstances should an attempt be made to unscrew the second outlet from a pressurized device.
Under no circumstances should the clamps or double feet be removed from a pressurized device.
8. If a self-contained breathing apparatus assembly should leak after filling, as indicated by air bubbles escaping from the assembly after immersion in water, the gas cylinder should under no circumstances be used, even if the bubbles are small and slow to escape . In such a case, the gas cylinder must be depressurized in a controlled manner and taken to an authorized dealer / center for inspection by a competent person.
9. It must be ensured that a pressure vessel is not emptied in an uncontrolled manner, since the pressure surge can lead to a could result in injury to the user.

Corrosion:

10. Do not place assemblies on concrete floors, wet wood floors, or wet wood racks for long periods of time, or store. Assemblies must be stored on dry surfaces.
11. Do not completely drain a self contained scuba assembly and then leave the valve open as this will allow moisture into the gas cylinder which could cause corrosion.

Damage:

12. The assembly must not be altered or modified such as re-marking/engraving/assembly of other parts/etc. as this may pose a hazard to the user or other persons. Original design and regulatory approvals are voided by changes or modifications.
13. Do not throw or drop the assembly as this may damage the assembly and/or the valve. Impacts can cause dents or other damage, which in turn can compromise the integrity of the assembly.

14. Assemblies may not be used as targets. Do not aim darts or fire arrows, airguns or heavier weapons at assemblies. This would be irresponsible and could cause a serious accident.
15. Do not attempt to crush an assembly or drive a vehicle over it. It must not be used as a ramming tool, hammer, doorstop, load pad, stop to prevent the closing of scissor-type mechanisms, lifting device or otherwise, or for any purpose other than that originally intended.
16. Inspection by an authorized re-inspection center is required whenever other damage is found such as dents etc. can be found.
17. Do not attempt to saw or drill holes in the gas cylinder or weld anything to it.

Temperature:

18. The smallest common temperature range of cylinder body(s) and valve(s) and must not fall below or be crossed, be exceeded, be passed.
19. Do not place the assembly in hot or boiling water or near any heat source such as Store heaters, storage heaters, radiators, open fires or appliances that produce heat, etc.
20. When (re)painting the bottle body, make sure that the specified maximum temperatures are not exceeded. Baked paint is not permitted under any circumstances.
21. Do not throw the assembly into a fire as it may explode.

Gases with a different O2 content than air:

22. As soon as the O2 content of a gas deviates above or below the usual approx. 21% in the ambient air, the gas poses additional dangers for people and material. Before handling such gases, the user is obliged to obtain comprehensive information about the dangers and handling regulations and to comply with these regulations.
23. The valves/fittings/shut-off devices and all connecting parts must always be kept free of grease.
Filling should only be performed by qualified personnel at approved facilities 24. Only fill this assembly with oxygen enriched air (nitrox) when it has been verified that the cylinder and valve have been verified as oxygen clean and compatible and the assembly has been inspected since such verification by a competent person, have not been used for any other purpose.
25. Assemblies that have been certified as oxygen clean for the purpose of nitrox inflation must be certified as such clearly marked and identified.
26. If the assemblies are to be filled with Nitrox, they must be clearly marked to indicate that they contain nitrox.

Transport:

We would like to point out that there is no sample acceptance for our assemblies according to EN13769 because assemblies for diving according to ADR, subsection 1.1.3.1.a) are exempt from all ADR regulations as long as measures are taken that are subject to normal transport Conditions prevent content from being released. The user is responsible for securing the transport.

In addition, we recommend every user to always pay attention to the current color scheme and UN number so that rescue workers are able to handle the diving devices correctly after a traffic accident.

BtS Europa AG

BTS EUROPA AG
Klosterhofweg 96
Moenchengladbach 41199 Germany
+49 2166 67541 10
Info@BtS-eu.com
WWW.BTS-EU.COM