



**walther  
präzision**

**Operation Instruction for  
Compressed Air Safety Coupling**

**Type LS-C..**

**Carl Kurt Walther  
GmbH & Co.KG**  
Postfach 42 04 44  
42404 Haan  
Westfalenstraße 2  
42 781 Haan  
Tel. 02129/567-0  
Fax 02129/567-450

**1-LS-C06-0-.....-...-  
1-LS-C08-0-.....-...-  
1-LS-C11-0-.....-...-**

**WALPRESTA-Serie**

**Compressed Air Safety Coupling**



**Safety instruction**

**Use according to its specification**

**Installation instruction**

**Maintenance and functional test**

**Operation instruction**

The original is the German version.



This coupling is a high-quality product designed with particular focus on high functionality, simple handling, safety and reliability. As technical appliance, the coupling is used in the industrial field as well as by operators who have been instructed by qualified personnel in the handling of compressed air technical installations/tools.

We offer an individual customer service and are ready to support you without obligation in all questions regarding the use and operation of the coupling or probably arising problems. Don't hesitate to contact our customer service, we will be pleased to assist you.

## **Safety instructions**

The use of a safety coupling does not relieve the operator from the observance of the relevant industrial safety regulations, i.e. regulation concerning reliability in operation etc.. The operator has the duty of care to plan measures which guarantee an orderly operation and to control their realization.

### **Danger references**

In case of wrong product selection, improper use and failure to carry out maintenance there is the danger that damages can be caused to persons and objects. This may result from:

- uncontrolled with high dynamic energy whipping hose ends
- dangerous spreading of compressed air or individual particles / coupling parts
- impairment of function of connected installations or tools.

### **In particular the operator must guarantee that**

- the coupling is always used according to specification.
- the coupling is always used in a perfect , functionable way.
- the operation instruction is always available to the operators in a complete and readable form.
- the operating personnel is sufficiently informed about the operation and safety instructions of the coupling.
- for repair, couplings are returned to our factory.
- during operation of coupling, no safety devices are removed and/or set out of function.
- coupling is not pressurized before mounting/dismounting of the coupling.

### **After assembly and installation as well as before the first use of the coupling the following items have to be observed:**

- check again whether all screw type connections are firmly fixed.
- before the first use of the coupling, a functional test must be carried out (see maintenance and functional test).

## **Application according to specification**

### **The appropriate application is guaranteed only if**

- the coupling connection consists of a self sealing coupling and  
**a hardened steel thru type adaptor in conformity to ISO 6150-C.**
- medium *compressed air* is used
- working pressures of *0 – 12 bar* at LS-C06  
*0 – 10 bar* at LS-C08  
*0 – 8 bar* at LS-C11  
are available
- temperature is between *0°C and smaller 60°C.*
- during selection of connections the maximum permissible working pressure of the connection is considered.



- external working loads such as tension, bending and transverse loads on the coupling connections shall be avoided, if possible, because these can reduce the permissible working pressure.

☞ The connection and disconnection process is carried out by hand.

## Installation instruction

The coupling has to be installed into a supply network under due consideration of the accident prevention rules in such a way that

- a proper operation according to the operation instruction is guaranteed.
- the coupling is mainly used on the supply side and the thru type adaptor is mainly used on the consumer side.
- external damages of the unit as well as all movable parts are excluded.

Before the coupling is installed at a pipe system it must be guaranteed that the pipe system is sufficiently rinsed/purged and/or cleaned.

All components of the coupling have to be protected against dirt and damages.

☞ After finishing of the assembly works a functional test is to be carried out according to the operation instruction for both conditions the pressurized and the depressurized.

## Maintenance and functional test

In order to always guarantee function of the coupling and protection of the operator it is necessary to carry out a maintenance and functional test at least twice a year.

The coupling is not greased or oiled by the factory. In case of a maintenance no lubricants or means of preservation are supposed to be inserted into the coupling.

☞ The maintenance includes the following items:

- external visual check for damages and dirt at the coupling and the used adaptors.
- dirt in the external accessible functional area (sealing area, operating elements) is to be removed by simple wiping.

If damaged, broken or corroded parts are available or in case of serious dirt in the functional area which is not accessible from the outside the coupling must be disassembled and sent to the manufacturer's factory for repair. This is also valid for worn out, embrittled and overaged seals.

☞ The functional test includes the following items:

As described in the operation instruction the coupling is repeatedly connected and disconnected with a pressure of at least 3 bar and a hose of at least 3 m length.

In this case attention is to be paid to the following:

- perfect, smooth function when connecting and disconnecting.
- the safety function (in this case the adaptor jumps several millimeters out of the coupling and is prevented from the complete separation of the coupling by a second locking system) must be available; thus no dangerous "back kick" must occur.
- tightness of the coupling when connected and disconnected.

In case of stated malfunctions or leakages the coupling is to be returned to the manufacturer's factory for repair.



## Operation instruction

### Connection:

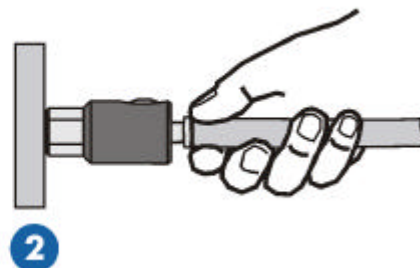
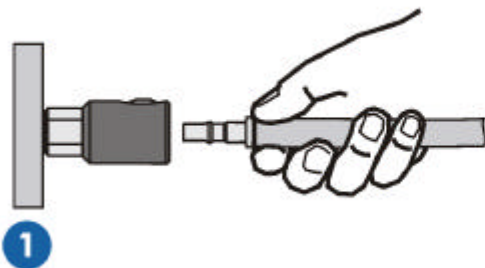
Simplest connection by plugging.

The one-hand operation is obtained by the well-proven automatic lock.

The thru type adaptor must completely be inserted into the coupling until stop (picture 2).

The locking mechanism is activated in this case und the coupling locks safely.

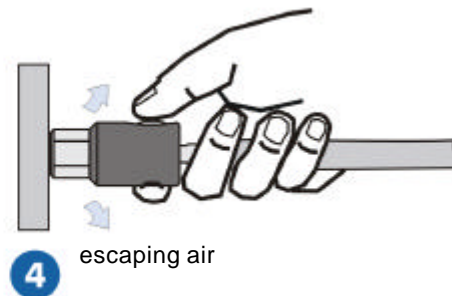
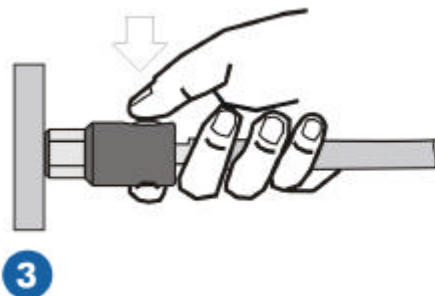
The lock can be checked by a slight pulling at the hose. If the hose part cannot be moved out of the coupling any more, it is locked safely.



### Disconnection:

First unlocking step and venting.

First of all only the first unlocking step is released (picture 3) by pressing of the unlocking button. The adaptor jumps several millimeters out of the coupling and is prevented from the complete separation of the coupling by a second locking system. In doing so the coupling valve closes and the included air in the hose of the adaptor side escapes (picture 4).



### Second unlocking step.

Only if the pressure on the adaptor side falls below the safety relevant switching threshold the second locking system may be released. For this purpose the thru type adaptor is to be pushed some few millimeters into the coupling (picture 5). Thus the safety locking is released and the adaptor can be pulled out without resistance (picture 6). This procedure prevents the dangerous "back kick" in case of a correct operation.

