

Operating Instruction English

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This operating instruction is not subject to the updating

WALSPRESTA

Compresses Air Safety Coupling

1-LS-023-0-.....-..

Vor Beginn aller Arbeiten
Betriebsanleitung lesen!

*Read operating instruction
before beginning of all works!*

Betriebsanleitung immer
AUFBEWAHREN!
griffbereit am Gerät

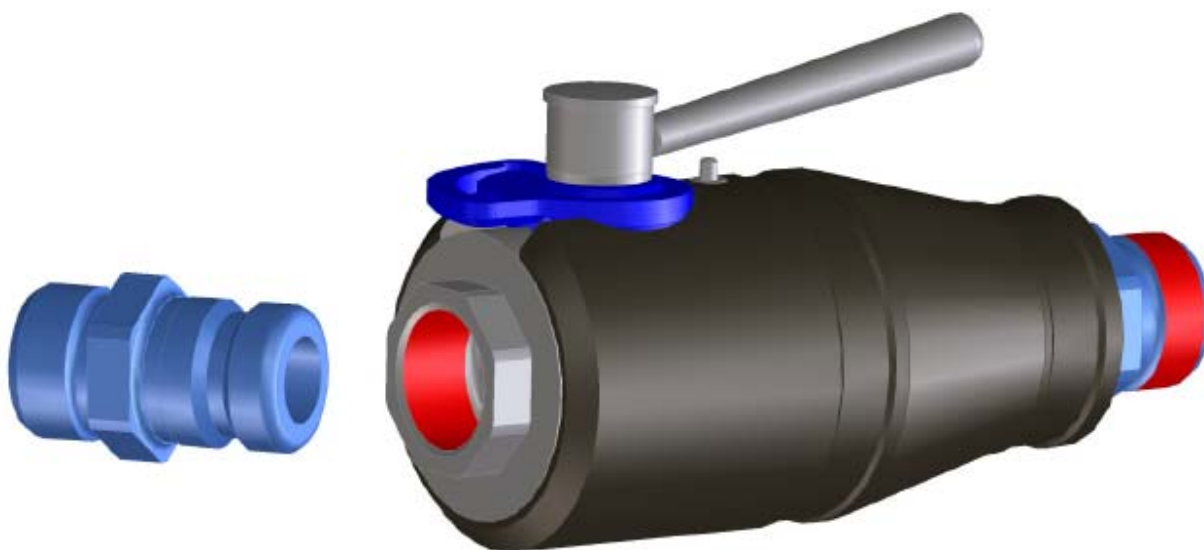
*Always KEEP operating
instruction! In a ready hand
way at the device*

Achtung: Vor Inbetriebnahme
Gerät auf mängelfreien Zustand
und technisch einwandfreie
Funktion kontrollieren.

*Caution: Before starting-up
check device on faultless
condition and technically
perfect function.*

Das Original ist die
deutsche Fassung

*The German version
is the original*



This coupling is a quality product, in which special attention has been paid to high functionality, ease of operation, safety and reliability. As an item of technical equipment this coupling is intended for use in the commercial, industrial area and for operators, who have been trained by specialists in the handling of technical systems / tools.

Customer care:

As part of our individual customer care we will be happy to assist you in questions relating to use and operation and on any problems encountered.

Service and maintenance:

In order to maintain the high technical performance capability and reliability of your coupling over many years, we recommend regular inspection and maintenance.

We can thereby offer you optimum support by our Customer Service department and the conclusion of a service and maintenance contract. Please ask for a quotation.

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List of Contents

1	<u>List of Contents</u>	
1	LIST OF CONTENTS	3
2	GENERAL.....	4
3	WARRANTY.....	5
4	SAFETY INSTRUCTION.....	6
5	PRODUCT DESCRIPTION OF THE SELF SEALING COUPLING	7
5.1	INTENDED USE.....	7
5.2	TECHNICAL DATA.....	7
6	INSTALLATION INSTRUCTION	8
7	OPERATING INSTRUCTION.....	9
7.1	CONNECTION PROCESS	9
7.2	DISCONNECTION PROCESS	9
8	MAINTENANCE INSTRUCTION	10
8.1	MAINTENANCE AND FUNCTIONAL TEST	10
8.1.1	<i>Maintenance includes following items:</i>	<i>10</i>
8.1.2	<i>Functional test includes following items:.....</i>	<i>10</i>
9	TEST	11
10	LUBRICATION !.....	12
11	STORAGE.....	13
12	SHUT-DOWN	14
13	ORDER NUMBER CODE.....	15
14	INDEX	16

2 General

This manual contains all regulations for operation, commissioning and maintenance of the coupling.


All information and notes in this operating manual were collated while taking into consideration the valid regulations, the current engineering related status of development as well as our many years of experience and acquired knowledge.

Translations of this operating manual were also produced according to the best of knowledge. However, we cannot assume liability for any translation errors.

The German version provided for this operating manual is considered the authoritative version.

The actual scope of delivery can deviate from the explanations and graphic representations described herein under certain circumstances, e.g. in the case of special designs, utilization of additional order options or because of state-of-the-art technical alterations.

If you have any questions, please contact the manufacturer.

-  This operating manual must be read carefully before starting work on or with the equipment, in particular before commissioning!
The manufacturer assumes no liability for damage or faults arising from non-compliance with the instructions in this operating manual.

The operating manual must be kept directly with the equipment and be accessible to all persons who work on or with the equipment.

It is not permitted for the operating manual to be passed to third parties and if applicable this will incur damage compensation.

All other rights reserved.

Before commissioning the device must be checked for being not defective and its technically perfect function.

The German version is the original.

We reserve the right to make technical alterations to the product within the context of improving the usage properties and further development.

The operating manual remains our property.

Any reproduction, use by or communication to third parties incurs a penalty and will be pursued by court action (copyright law against unfair competition, BGB [German Civil Code]).

All rights reserved in the case of a patent award (Paragraph 7, Section. 1 of the patent law - PG) or entry as a patented design (Paragraph 5, Section 4 of the patented design law - GMG).

3 Warranty

The warranty conforms to:

the "General Conditions for Delivery and Capacity" of C.K. Walther GmbH & Co. KG of the state which was valid at the date of the purchase contract and

the regulations agreed in the purchase contract.

Wearing parts are generally excluded from the warranty.

Typical wearing parts of products from company C.K. Walther GmbH & Co. KG are for example:

- seals
- springs

Safety Instruction

4 Safety Instruction

Using these couplings does not release the customer from his obligation to comply with the pertinent work safety regulations e.g. operational safety ordinances, etc. The duty to take due care by the operator of the couplings includes planning measures to ensure proper operation and monitoring their implementation.

Hazard notes

If the wrong product has been selected or if there is improper use or maintenance has been omitted, then hazards arise and personal injuries and material damage can occur from:

- Hazardous emission of fluid or individual particles/coupling parts
- Function impairments of connected systems or tools
- The metal parts of coupling and adaptor are not thermally protected. You can be burned if you touch these parts at high media temperatures. According to the ambient temperature valve lever and ring grip can also become unbearably hot. For that reason suitable, sufficiently long protective gloves should be worn.

The operator must in particular make sure that

- The couplings are only used according to the intended purpose.
- The couplings are only operated in a perfect, functioning condition.
- The operating manual is always in a legible condition and is available in its entirety to operating personnel.
- The operating personnel are sufficiently acquainted with the working method and the safety notes for the coupling.
- The coupling is sent to our factory for repair work.
- During operation of the coupling, no safety devices are removed and/or deactivated.
- Before installing or dismantling the coupling, you have made sure that the coupling has not been pressurized.

After completing assembly and installation work and before commissioning the coupling, observe the following points:

Check once again that all screw connections are securely fitted.

Before commissioning the coupling, a function test must be carried out (see maintenance and function test).

Product description of the coupling

5 Product description of the self sealing coupling

Coupling connection consists of:

- self sealing coupling 1-LS-023-0-.....-.-.

In case that both coupling halves are not connected they should be protected against external dirt and/or damages if required.

5.1 Intended use

- Coupling is only used as connection of two lines.
- Connection and disconnection process is carried out by hand.
- Coupling is especially suitable for the following media/applications:
 - air
- For all other possible applications, Walther-Präzision should be consulted.

5.2 Technical data

- Working pressures of coupling depend on materials of individual parts.
- When determining the working with standardized threaded connections, the highest permissible working pressure of the connection must be taken into account.
- When selecting a suitable connection the following static pressure is possible:

	max. static Working pressure (bar)
LS-023	16

- The coupling is not determined for any types of use and technical values other than those listed here.
- Safe operation is not guaranteed if the coupling is used contrary to its intended use and technical values
- The operator of the coupling is responsible for all personal injuries or material damage that occur from non-intended use and disregard of the technical values; the manufacturer assumes no responsibility in these cases.

Installation instruction

6 Installation Instruction

Subject to the general accident prevention regulations coupling is to be installed into a network in such a way that:

- a satisfactory operation is guaranteed according to the operating instruction.
- The screwing of the customer connection site must be made to relevant technical rules.
- first of all self sealing coupling is used on line side and self sealing adaptor on consumer side
- external damage of the unit as well as all moving parts are excluded.

Before installing the through type coupling and the adaptor to the piping system, make sure that the piping system has been sufficiently flushed/blown or cleaned.



After completing the installation work, perform a function test both depressurised and under working pressure, as described in the operating instructions.

Operating Instruction

7 Operating Instruction

In order to avoid critical injuries of the staff and damage at the self sealing coupling during operation, coupling may be only used for the stated applications.

7.1 Connection process

Before each coupling process a visible check of the coupling and the adaptor has to be made. Damaged parts must be changed in case of observable, visible damages or deformations.

The self-sealing coupling is equipped with an automatic lock, i. e. one-hand operation. For coupling the self-sealing coupling behind the locking sleeve or the self-sealing adaptor in the end plug area is taken up with one hand and pushed axially centred on the counter piece until the end stop.

During the coupling the locking sleeve snaps in forward without the aid of the operator.

Now the self-sealing coupling and the self-sealing adaptor are locked mechanically. Available valves are opened during the coupling process and thus the passage is released.



CAUTION

Please take care that locking sleeve is in final position, i.e. that it is flush in front with the coupling housing as otherwise no perfect lock is guaranteed.

7.2 Disconnection process

First unlocking step and venting

By moving back the locking sleeve first of all only the first unlocking step is released at pressures of $p \geq 2.5$ bar. The adaptor jumps several millimeters out of the coupling and a second locking system prevents the complete disconnection from the coupling. Now the coupling valve closes and the air escapes from the adaptor side.

Second unlocking step

Only if the pressure on the adaptor side has fallen below the switching threshold of approx. 2.5 bar the second locking system can be released, too. For that purpose the locking sleeve is to be moved back again.

Now the adaptor can be completely and safely separated from the coupling, i.e. without "back kick".

Caution!

In case of an available pressure in the line connected by the coupling system a strong separation impulse - depending on the pressure - can be effective onto the coupling system during disconnection. For that reason the movable part of the coupling (free half) is to be firmly held in the hand to avoid injuries.

Maintenance and Functional Instruction

8 Maintenance Instruction

Preventive maintenance measures

WALTHER self sealing couplings are to be operated in such a manner that external damages to elements and all moving parts are avoided.

8.1 Maintenance and functional test

In order to always guarantee function of the self sealing coupling and hence safety of operator, a maintenance and functional testing must be made in appropriate periods of time depending on operating conditions.

In order to minimize operating forces and to extend service life of the self sealing coupling we recommend to slightly grease plug surfaces (see item 10.0).

8.1.1 Maintenance includes following items:

- A visual inspection of self sealing coupling and self sealing adaptor regarding damage and contamination has to be made.
- Dirt at the functional area (sealing area, operating elements) which is easily accessible from outside should be removed by simply wiping-off.

If there are damaged, torn or corroded parts, coupling must be dismantled and returned to manufacturer for repair.

If worn or embrittled seals are found or if there is extreme dirt, the customer can decide whether he returns coupling unit to the manufacturer's factory or whether he repairs himself.

8.1.2 Functional test includes following items:

As described in the operating instruction, coupling is several times connected, pressurized and then disconnected.

In doing so, the following has to be observed:

- Connection and disconnection process must be absolutely smooth.
- Coupling must be absolutely leak-proof in connected and disconnected state.

If there are damaged, torn or corroded parts, coupling must be dismantled and returned to manufacturer for repair.

If worn or embrittled seals are found or if there is extreme dirt, the customer can decide whether he returns the coupling unit to the manufacturer's factory or whether he repairs himself.

Please note !

If the coupling is repaired by the customer themselves, a pressure and/or leak test must be performed in any case.

The sequence and extent of this test is described in section "Test".

Please note !

The manufacturer's warranty shall not apply to the end product if it is repaired by other than the manufacturer, Walther-Präzision.

9 Test

(Extract from the test instructions QM-PA 2.0 of the Walther-Präzision QM system)

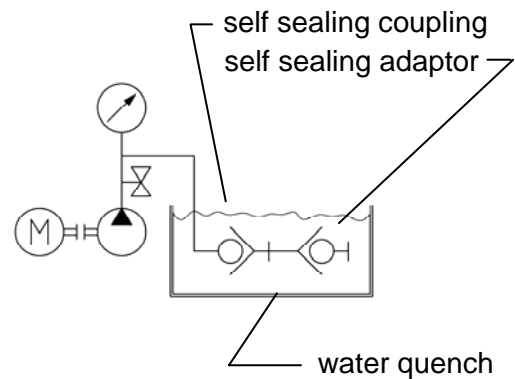
Description:

The coupling is tested by means of an immersion test according to the following values.

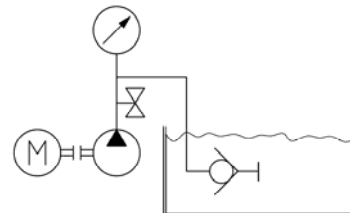
Series low pressure	
LS-023	2 bar absolut

- Test setup and test procedure

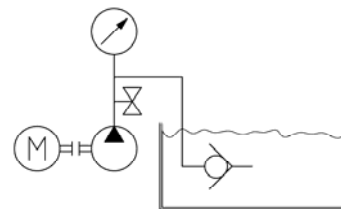
Test 1: self sealing coupling and
self sealing adaptor connected



Test 2: self sealing adaptor disconnected



Test 3: self sealing adaptor disconnected



- Notes and remarks:

The dwell time per test is 10 seconds.

There must not be any bubbles during the 10 seconds dwell time.

After testing the coupling must be dried with hot air as soon as possible

(recommended: 45 – 55 °C, approx. 30 min with air stream, up to 2 hours with stagnant air, depending on the device).

- Documentation:

Please document the test pressure, test medium and name/date of each test.

10 Lubrication !

In order to minimize operating forces and to extend service life of the coupling we recommend to slightly grease plug surfaces.

Lubrication is to be carried out with greases which **do not** tend to become resin.



Caution !

The selection of the grease is to be suited to the sealing quality and the medium (e.g.: oxygen) in view of the compatibility.

11 Storage

The couplings must be stored in such a way that no damages can occur at the couplings.

The storage conditions of the couplings must comply with the guidelines for the seals as these can change in properties due to improper storage.

The following items must be kept:

- The couplings must be stored dry.
- To safely conserve the seals and that means also the couplings they should not be stored under the effect of daylight.
- For protection against oxygen the seals and also the couplings shall be stored into the packing.

12 Shut-down

At the end of the service life the coupling or its components have to be disposed non-polluting and according to the legal regulations.

For that the local public or private disposal societies should be taken.

13 Order number code

1.	2.	3.	4.	5.	6.	7.	8.	9.
☒	☒☒	☒☒☒	☒	☒☒☒☒☒	☒☒	☒	☒☒☒	☒☒
☒	☒☒	☒☒☒	☒	☒☒☒☒☒	☒☒☒☒	☒☒☒☒	☒☒☒	☒☒

1. Subject group
2. Series
The information regarding the series comprises either two letters or two numbers.
3. Nomial size / Nominal bore
It is rounded up or down to one. The information can be numerical as well as alphanumerical.
4. Product type or design type
5. Connection design
6. Material design:
xx-x and xxxx possible
7. Material design (seal design):
xx-x and xxxx possible
8. Y or Z design
9. Additional equipment

14 Index

A		Improvement	4
According to intended purpose.....	6	Index.....	16
Acquired knowledge.....	4	Inspection.....	2
Adaptorl.....	6	Installation Instruction	8
Alterations	4	Intended use	7
Assembly	6	L	
C		Legible condition	6
Commissioning.....	4, 6	Liability.....	4
connected.....	7	List of Contents	3
connection	7	Lubrication	12
Connection process	9	M	
coupling.....	4	Maintenance	2, 4, 6
Coupling.....	6, 7, 14	Maintenance and functional test.....	10
Couplings	6	Maintenance Instruction.....	10
Customer care.....	2	Manual	4
D		Media temperatures.....	6
Damage.....	4, 6	O	
Damage compensation	4	one-hand operation.....	9
daylight.....	13	Operating Instruction	1, 9
Disconnection process	9	Operation.....	2
Disposal societies	14	Operational safety ordinances	6
Disregard	7	operator	6, 10
dry.....	13	Operators.....	2
E		Order number code.....	15
Equipment	4	Original	4
Experience.....	4	P	
external damage.....	8	packing	13
F		particular	6
Faults	4	Perfect, functioning condition.....	6
Fluid	6	Performance capability.....	2
Function.....	6	Pressurized	6
Function test	6	Product description	7
Functionality.....	2	Property.....	4
G		Protective gloves	6
General	4	Q	
guarantee	10	quality.....	12
H		R	
Hazard notes.....	6	regulations.....	8
Hazardous emission.....	6	Regulations.....	4
I		Reliability.....	2
Implementation.....	6	remarks.....	11
		Repair work.....	6
		responsible	7

<i>S</i>		Technical values.....	7
Safety.....	2	Test.....	11
Safety devices.....	6	Thermally	6
Safety Instruction	6	Tools	2, 6
Scope of delivery.....	4	Translation errors	4
Screw connections.....	6	Types of use	7
self sealing adaptor.....	8, 10	<i>U</i>	
self sealing coupling.....	7, 8, 9, 10	Use	2
service.....	10, 12	<i>V</i>	
Service.....	2	Version	4
Shut-down	14	<i>W</i>	
Special designs	4	Work safety regulations	6
Specialists.....	2	Working method	6
Status of development	4	working pressure	7
Storage.....	13	Wrong product selection	6
Systems.....	2, 6		
<i>T</i>			
Technical data	7		
Technical equipment	2		