

Operating Instruction English

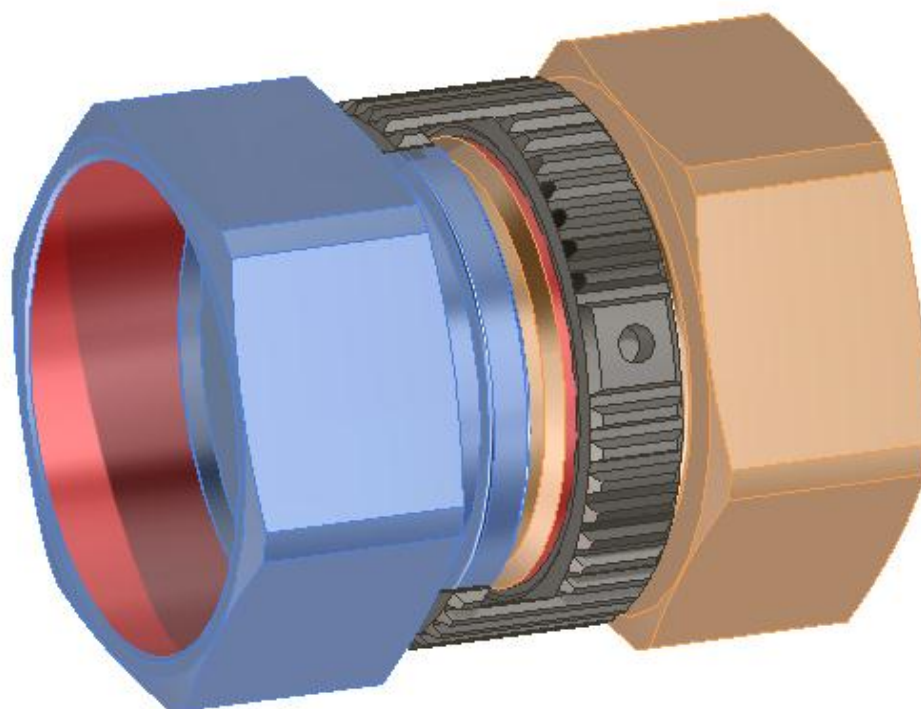
Revision	A
Datum	10.05.2013
Ersteller	NH

This operating instruction is not subject to the updating

Hook-in coupling n.b. 50

1-EH-050-1-.....-..

1-EH-050-4-.....-..



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.

Walther-Präzision
PO Box 42 04 44
42404 Haan

Westfalenstraße 2
42781 Haan

Germany

telephone: +49 (0) 2129 / 567-0
telefax: +49 (0) 2129 / 567-450

E-Mail: info@walther-praezision.de
Internet: www.walther-praezision.de

Contact:

Application technology and service

Holger R. Figge

telephone: +49 (0) 2129 / 567-591
telefax: +49 (0) 2129 / 567-590
mobile: +49 (0) 162 / 2090100
e-mail: hfigge@walther-praezision.de

Further addresses and telephone numbers of contacts can be found on the Internet on our homepage under www.walther-praezision.de "Service / Customer service".

List of Contents

1 List of Contents

1	LIST OF CONTENTS	3
2	GENERAL.....	4
3	WARRANTY.....	5
3.1	GENERAL	5
3.2	REPLACEMENT PARTS	5
4	SAFETY INSTRUCTION	6
5	PRODUCT DESCRIPTION OF THE SELF SEALING COUPLING	7
5.1	USAGE ACCORDING TO SPECIFICATION	7
5.2	TECHNICAL DATA.....	7
6	INSTALLATION INSTRUCTION	9
7	OPERATING INSTRUCTION	10
7.1	COUPLING PROCESS	10
7.2	DECOUPLING PROCESS	10
8	MAINTENANCE INSTRUCTION.....	11
8.1	MAINTENANCE:	11
8.2	FUNCTIONAL TESTING:.....	11
8.3	FOLLOWING THE INSTRUCTION FOR DISASSEMBLY AND ASSEMBLY.....	12
8.3.1	<i>Square seal</i>	12
9	LUBRICATION !.....	13
10	STORAGE	14
11	SHUT-DOWN	15
12	ORDER NUMBER CODE	16
13	INDEX.....	17

2 General

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

All information and notes in this operating instruction 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 instruction 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 instruction 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 instruction 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 instruction.

The operating instruction 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 instruction 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 instruction 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

3.1 General

The warranty is in accordance with:

The regulations agreed upon in the purchase contract and

The "General terms and conditions for delivery and service" of the company Walther-Präzision using the version valid at the time the purchase contract came into force.

Generally excluded from the warranty are consumables.

Typical consumables in products from the company Walther-Präzision are, for example:

- Seals
- Springs
- Electrical plugged contacts
- Electrical cables and hoses which are subject to regular alternating bending or torsional stresses.

Components that are not normally subject to wear under the conditions to be expected (environmental and usage) may become consumables if the described product is not operated according to the intended purpose or is operated with a disregard for the specifications in the operating instructions .

For example, electrical cables with sheathing that has been destroyed by extreme exposure to welding sparks would not fall under the warranty.

In addition, wear to other components caused by unusual environmental conditions, not expressly coordinated with the company Walther-Präzision, for example, high temperatures, dusts with an abrasive effect, high humidity or corrosive vapours and gases are not covered by the warranty.

Cycle, time or load dependant specifications for the replacement of certain components of the described product within the framework of maintenance are not warranty-relevant durability statements, they are instead recommendations designed as preventive maintenance to avoid standstill times during production.

3.2 Replacement parts

Only original parts from the company Walther-Präzision are to be used.

These are to be installed according to their intended purpose.

When using third-party items or parts that have not been approved by the company Walther-Präzision, all warranties, guarantees and service claims are voided without notification.

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.
- 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:
 - Hook-in coupling 1-EH-050-1-.....-..
 - thru type adaptor 1-EH-050-4-.....-..

5.1 Usage according to specification

- Coupling is only used as connection of two lines.
- The coupling should be connected and disconnected while depressurised.
- Connection and disconnection process is carried out by hand.
Tighten the connection with a torque of **200 Nm** after connecting the coupling to enable the full effect of the seals.
To do this, use a torque wrench with a hook wrench insert.
- Coupling is especially suitable for the following media/applications:
 - **gaseous media**
 - **fluid media**
 - **pasty media**
 - **dusty media**
- For all other possible applications, C.K. Walther should be consulted.

5.2 Technical Data

Operating pressure connected and disconnected (standard):

CAUTION

For normed threaded connections, when specifying the operating pressure, the highest permitted operating pressure of the connection must be taken into account!

Differing higher or lower operating pressures are possible according to material characteristics or the connection. This operating pressure is to be taken from the project-specific documentation.

Standard (without taking connections into account):

Stainless steel 15 bar

Temperature

In coupled and decoupled state (no relative movement)

The unit is sealed in both the coupled and decoupled state from -20°C to 130°C. This specification is, however, dependant on the sealing material and on the environmental variables, for example, humidity, installation situation etc.

Coupling and decoupling (relative movement present)

Coupling and decoupling may be carried out under certain circumstances at a temperature below 15°C.

This specification is, however, dependant on the sealing material and on the environmental variables, for example, humidity, installation situation etc.

Product description of the coupling

- The coupling is not determined for any types of use other than those listed here.
- Safe operation is not guaranteed if the coupling is used contrary to its intended use.
- 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

The coupling is to be integrated into the line network while taking into account the general accident prevention guidelines so that:

- perfect operation is guaranteed in accordance with the operating instruction.
- external damage to the unit and all mobile parts (e.g. moving around in case of pressure shocks) is excluded.

Before installing the coupling in a pipeline network, make sure that the pipeline network has been sufficiently rinsed/blown through and/or cleaned.



After completing the assembly work, a function test must be carried out according to the operating instruction, both in depressurized state and under operating pressure.

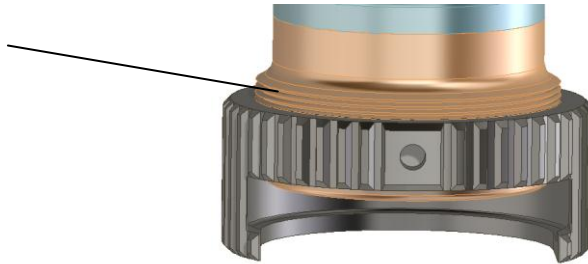
Operating Instruction

7 Operating Instruction

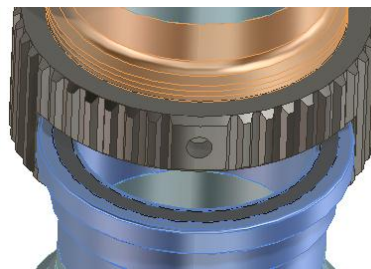
In order to avoid potentially life-threatening injuries to personnel and damages to the couplings during operation, these may only be used under the usage conditions detailed in the "Product description" section.

7.1 Coupling process

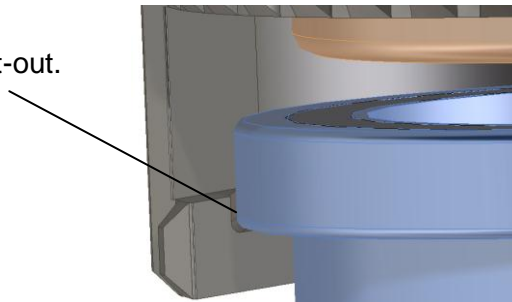
Rotate the sleeve forwards, roughly 3-4 threads should be visible.



Insert the plug nipple with the forward facing seal into the slot of the coupling nut.



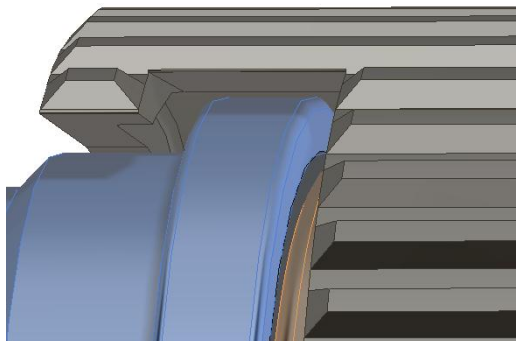
The plug nipple must be pushed as far into the slot of the coupling nut as is necessary for it to engage in the cut-out.



Tighten the coupling nut with a torque of 200 Nm. When doing this, continue to pay attention to the correct positioning of the plug nipple in the coupling nut.

7.2 Decoupling process

Rotate the sleeve forwards, so that 3-4 threads are visible and bias the plug nipple to remove it.



Maintenance and Functional Instruction

8 Maintenance Instruction

The WALTHER – coupling units are to be handled in such a way exterior damage to the elements as well as to all moving parts is prevented.

In order to minimise activation forces and to extend the lifetime of the coupling unit, we recommend lightly lubricating the connecting surfaces if this is permitted (see lubrication instructions).

In order to always ensure the functionality of the coupling unit and thus the protection of the operator, maintenance and functional testing must be carried out independantly of the operating instructions and at a suitable interval.

Note!

In the event of maintenance that is carried out by neither the company Walther-Präzision nor by personnel trained by Walther-Präzision, the warranty of the company Walther-Präzision is voided. This does not apply when maintenance is carried out by personnel trained by Walther-Präzision.

Note!

In the event of media that is hazardous to health a coupling unit returned to the company Walther-Präzision must be sent in a fully cleaned state. No media hazardous to health may be released from the coupling unit during the dismantling process. The sending party (customer) is responsible for this.

8.1 Maintenance:

- With the coupling unit in the decoupled state, carry out an external visual check for damages and contamination .
- Contamination in the functional area that can be accessed from the outside (seal region, activation elements) must be removed by wiping.

In the event of damaged, cracked or corroded parts, the coupling unit must be removed and sent to the company Walther-Präzision for repair (see Note).

In the event of worn, brittle or overaged seals as well as serious contamination, it is the decision of the customer whether they wish to send the coupling unit to the company Walther-Präzision or whether they wish to repair it themselves (see Note).

8.2 Functional testing:

As described in the operating instructions, the coupling unit is coupled, pressure is applied and it is decoupled and this process is carried out multiple times.

In doing so, the following should be taken into consideration:

- Proper, easy functionality when coupling and decoupling.
- Sealing of the coupling unit in the coupled and decoupled state.

In the event of damaged, cracked or corroded parts, the coupling unit must be removed and sent to the company Walther-Präzision for repair (see Note).

In the event of worn, brittle or overaged seals as well as serious contamination, it is the decision of the customer whether they wish to send the coupling unit to the company Walther-Präzision or whether they wish to repair it themselves (see Note).

Maintenance and Functional Instruction

8.3 Following the instruction for disassembly and assembly

8.3.1 Square seal

When dismantling the unit or when changing the seal, do not pressurise the unit and do not apply any fluid.

Make sure that the unit is not exposed to fluid or fluid under pressure while working on it.

If the installation takes place in unproblematic locations, the unit must not necessarily be removed from the pipe and hose system for dismantling, as the square seal is freely accessible after disconnection.

Dismantling

1. Remove the square seal.
2. If the groove is damaged, replace the component.
3. Also, clean the accommodation groove.
No residual particles may remain in the accommodation groove.

Assembly

Insert a new square seal. Press into place as if coupling.

9 Lubrication !

In order to minimise the activation forces and to extend the lifetime of the coupling, we recommend cleaning and lightly greasing the connecting surfaces at suitable intervals as long as there is no risk that contamination in the vicinity will cause increased wear in combination with grease.

Lubrication is not carried out if the application does not permit it (e.g. in medical technology).

The selection of the lubrication is determined by the operator of the coupling and their purchasing options.

The connecting surfaces may only be lubricated if the operating conditions permit it.

Thus:

- The lubrication must be selected in accordance with compatibility with the seal quality and material.
- Media/lubrication combinations in which the lubrication properties are changed (e.g. turns to resin) must be avoided.
- Media/lubrication combinations that prevent safe operating conditions (e.g. lubrication/oxygen) must be avoided.

The lubrication interval depends on the framework conditions and the use of the application and is determined by the operator.

10 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.

11 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.

12 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

13 Index

A	
Accident prevention guidelines.....	9
According to intended purpose.....	6
Acquired knowledge.....	4
Activation forces.....	11, 13
Adaptorl.....	6
air.....	7
Alterations.....	4
Assembly.....	6
Assembly work.....	9
B	
Brittle.....	11
C	
Cleaned.....	9, 11
Commissioning.....	4, 6
Connecting surfaces.....	11
connection.....	7
Consumables.....	5
Contact.....	2
Contamination.....	11
Corroded.....	11
coupling.....	4, 9
Coupling.....	6, 8, 15
Coupling units.....	11
Couplings.....	6
Cracked.....	11
Customer care.....	2
D	
Damage.....	4, 6, 11
Damage compensation.....	4
Damaged.....	11
Damages.....	11
daylight.....	14
Depressurized.....	9
Depressurized state.....	9
Disposal societies.....	15
Disregard for specifications.....	5
dry.....	14
E	
Easy.....	11
Environmental conditions.....	5
Equipment.....	4
Excluded from the warranty.....	5
Experience.....	4
F	
Faults.....	4
Fluid.....	6
Function.....	6
Function test.....	6, 9
functional area.....	11
Functional testing.....	11
Functionality.....	2
G	
General.....	4
General terms and conditions for delivery and service.....	5
H	
Hazard notes.....	6
Hazardous emission.....	6
I	
Implementation.....	6
Improvement.....	4
Index.....	17
Inspection.....	2
Installation Instruction.....	9
L	
Legible condition.....	6
Liability.....	4
Lifetime.....	11, 13
List of Contents.....	3
Lubrication.....	13
Lubrication in accordance with compatibility with the seal quality.....	13
M	
Maintenance.....	2, 4, 6, 11
Maintenance Instruction.....	11
Manual.....	4
Media hazardous to health.....	11
Media temperatures.....	6
Mobile parts.....	9
O	
Operating instruction.....	9

Operating Instruction	1, 10	Screw connections	6
operating instructions	5	Sealing material.....	7
Operating pressure.....	7, 9	self sealing adaptor	7
Operation	2	self sealing coupling	7
Operational safety ordinances	6	Service	2
operator.....	6	Shut-down.....	15
Operator	8	Special designs	4
Operators	2	Specialists.....	2
Order number code.....	16	specification	8
Original	4	Status of development.....	4
Original parts	5	Storage	14
Overaged	11	Systems	2, 6
<i>P</i>		<i>T</i>	
packing	14	Technical equipment.....	2
particular	6	Temperature	7
perfect operation	9	Thermally	6
Perfect, functioning condition.....	6	Third-party items.....	5
Performance capability	2	Tools.....	2, 6
Pipeline network	9	Trained	11
Pressurized	6	Translation errors.....	4
Product description	7	Types of use	8
Proper.....	11	<i>U</i>	
Property.....	4	Use	2
Protection.....	11	<i>V</i>	
Protective gloves	6	Version	4
Purchase contract.....	5	Visual check.....	11
<i>R</i>		Vorankündigung.....	5
Regulations	4	<i>W</i>	
Reliability.....	2	Warranty	5
Repairing it themselves	11	Work safety regulations	6
<i>S</i>		Working method	6
Safety.....	2	Worn	11
Safety devices.....	6	Wrong product selection	6
Safety Instruction	6		
Scope of delivery	4		