

## Operating instruction english

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This operating instruction is not  
Subject to updating

## Clean break coupling High pressure Series HC-G06

1-HC-G06-0-S1018-AABA-Z10

1-HC-G06-2-S1018-AABB-Z10

1-HC-G06-0-S1018-AABA-Z12

1-HC-G06-2-S1018-AABB-Z12

1-HC-G06-0-S1018-AABC-Z12

1-HC-G06-2-S1018-AABD-Z12

Vor Beginn aller Arbeiten  
Betriebsanleitung lesen!

*Read operating instruction  
before beginning of all works!*

Betriebsanleitung immer  
AUFBEWAHREN!  
griffbereit am Gerät

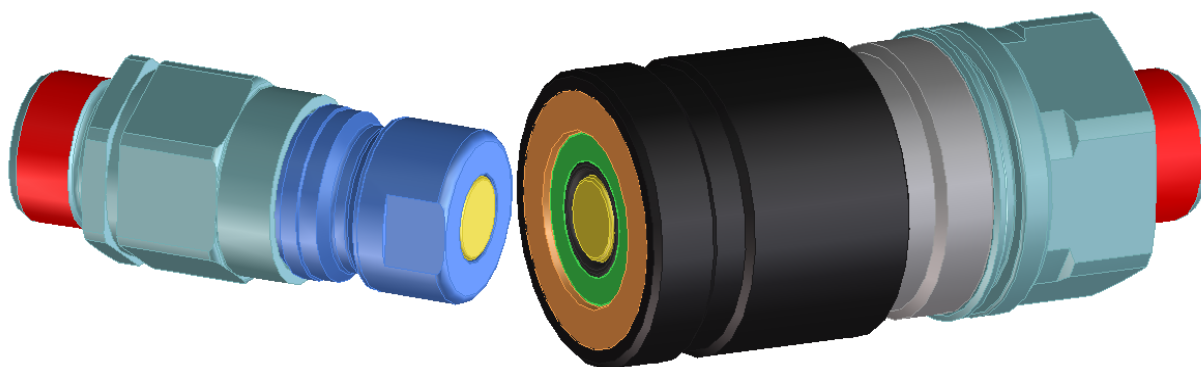
*Always KEEP operating  
instruction! In a ready hand  
way at the device*

**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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Further addresses and telephone numbers of contacts can be found on the Internet on our homepage under [www.walther-precision.de](http://www.walther-precision.de) "Service / Customer service".

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## 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 regulations agreed in the purchase contract and  
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.

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 instructions

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### 4 Safety instructions

Using these couplings does not release the customer from his obligation to comply with the pertinent work safety regulations e.g. operational safety regulations, 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. In case of high media temperatures the contact with these parts can lead to combustion. According to the ambient temperature valve handle and ring grip can also become very hot. For that reason sufficiently long protective gloves must be worn in these cases.



#### 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.
- no safety devices must be removed and/or deactivated during operation of the couplings.
- before installing or dismantling the couplings, you have made sure that the couplings have not been pressurized.



#### After completing assembly and installation work and before commissioning the coupling, the following items have to be observed:

Check once again that all screw connections are securely fitted.

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

## Product description Of the self sealing coupling

### 5 Product description of the coupling

Coupling connection consists of:

- Self sealing coupling      1-HC-G06-0-.....-.....-Z..
- Self sealing adaptor      1-HC-G06-2-.....-.....-Z..

#### 5.1 Intended use

- Coupling is only used as connection of two lines.
- Connection and disconnection process is carried out by hand.
- Additionally with automatic locking system on coupling, i.e. the locking sleeve is always in a position ready to lock after decoupling, automatically locking the coupling after sliding in the lock nipple into the coupling.  
The locking sleeve does not have to be pulled back for coupling using the second hand.
- The coupling is splash-free on coupling and decoupling.
- There is no trapped air on coupling and there are no media losses on decoupling.
  - **Hydraulic fluids based on mineral oil**
  - **HFA- und HFB-Fluids**
- 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.
- Pressure data for the connected and disconnected condition see item equipment.
  
- 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.



## Product description Of the self sealing coupling

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### 5.3 Special material and seals (WEDISO)

AABA	=	Coupling – material combination of zinc-plated, oil-burnished (partially hardened steel) and stainless steel with FKM and AU seals
AABB	=	Adaptor - material combination of zinc-plated, oil-burnished (partially hardened steel) and stainless steel with FKM and AU seals
AABC	=	Coupling - material combination of stainless steel 1.4404/1.4418 with FKM and AU seals
AABD	=	Adaptor - material combination of stainless steel 1.4404/1.4418 with FKM and AU seals

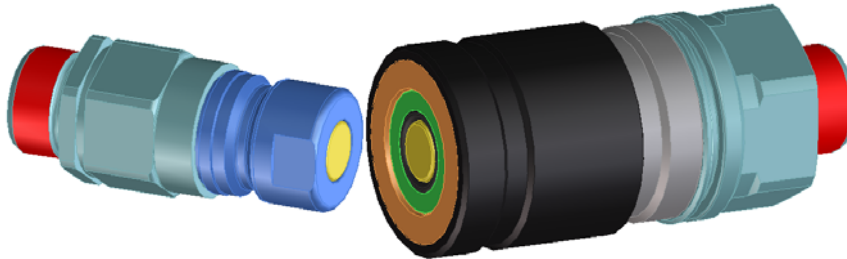
## Product description Of the self sealing coupling

### 5.4 Configuration

#### 5.4.1 Version: Z10

Description:

Clean break high-pressure coupling



The following static pressure is possible when selecting a suitable connection.

#### Working pressure (static)

**Steel:**

coupled:	650 bar	
disconnected:	adaptor	= 650 bar
	coupling	= 650 bar

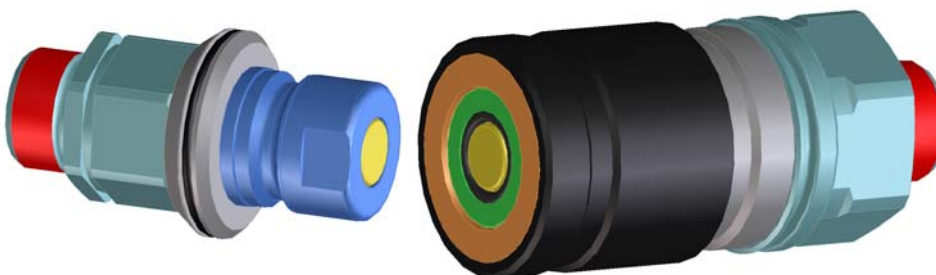
**Stainless steel:**

coupled:	360 bar	
disconnected:	adaptor	= 360 bar
	coupling	= 360 bar

#### 5.4.2 Version: Z12

Description:

Clean break high-pressure coupling, with complete dirt protection



The following static pressure is possible when selecting a suitable connection.

#### Working pressure (static)

**Steel:**

coupled:	650 bar	
disconnected:	adaptor	= 650 bar
	coupling	= 650 bar

**Stainless steel:**

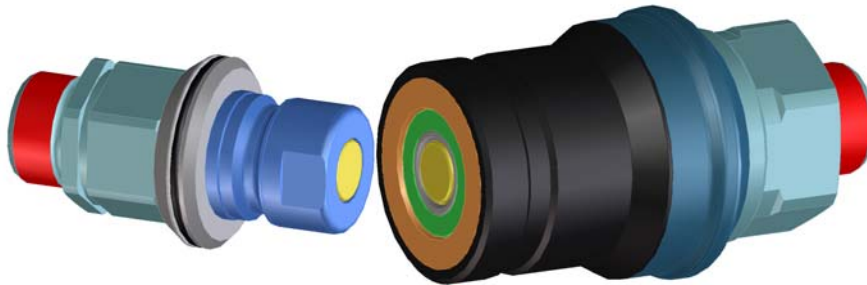
coupled:	360 bar	
disconnected:	adaptor	= 360 bar
	coupling	= 360 bar

## Product description Of the self sealing coupling

### 5.4.3 Version: Z14

Description:

Clean break high-pressure coupling, complete dirt protection with protective bellows



The following static pressure is possible when selecting a suitable connection.

**Working pressure (static)**

**Steel:**

coupled:	650 bar		
disconnected:	adaptor	=	650 bar
	coupling	=	650 bar

**Stainless steel:**

coupled:	360 bar		
disconnected:	adaptor	=	360 bar
	coupling	=	360 bar

## General arrangement drawings Parts Lists

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### **6 General Arrangement Drawings / Parts Lists**

The numbers for each position within one series cannot always be related to the same parts in consequence of the variety of components.

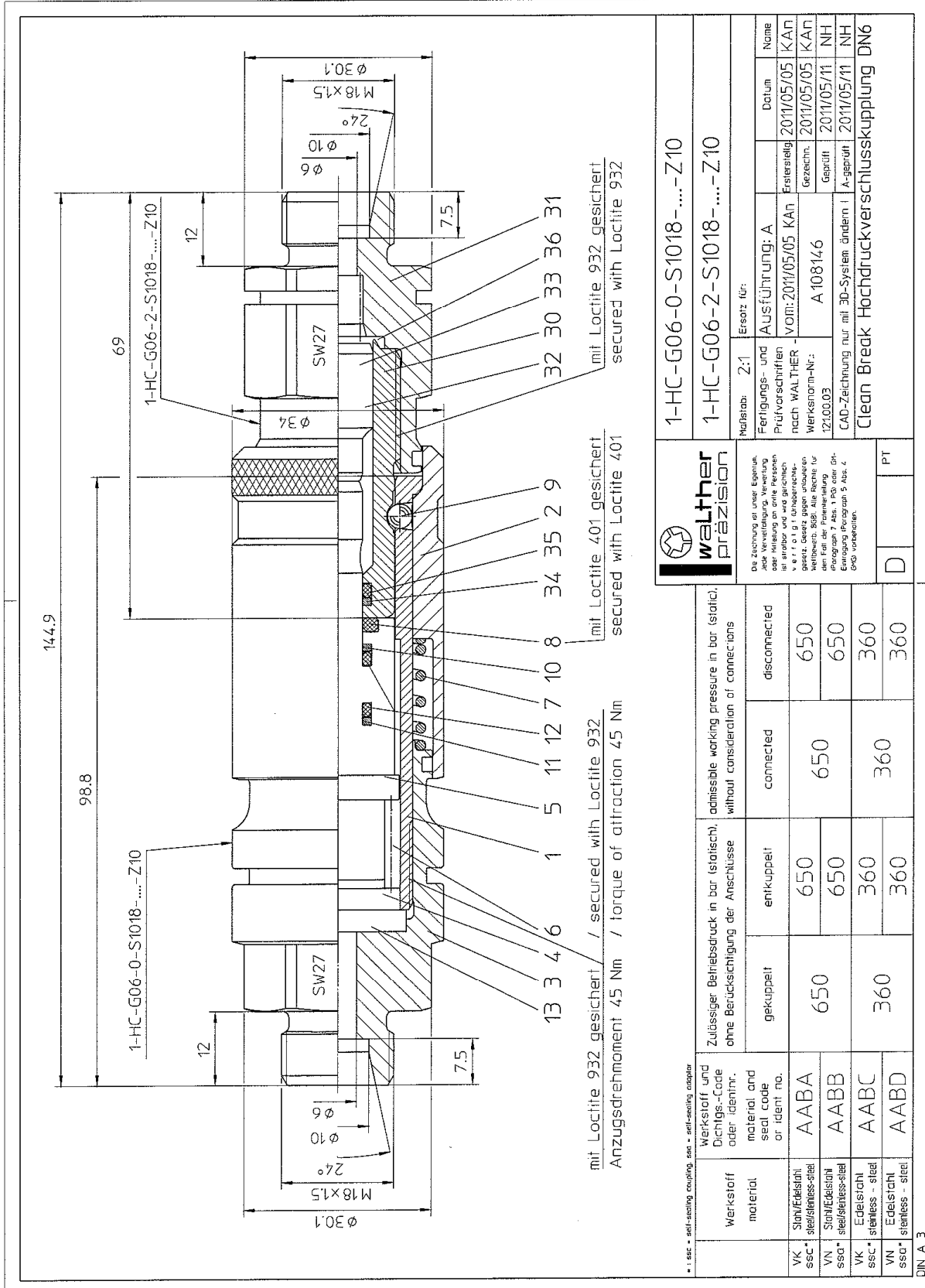
So sometimes this implicates the usage of different position numbers in the assembly and dismantling description which however should not cause any impairment while working with the documentation due to the detailed description.


## General arrangement drawings Parts Lists

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- 6.1 1-HC-G06-0-S1018-AABA-Z10
- 6.1.1 1-HC-G06-2-S1018-AABB-Z10

General arrangement drawings  
 Parts Lists




		1-HC-G06-0-S1018-...-Z10 1-HC-G06-2-S1018-...-Z10	
Maßstab: 2:1 Ersatz für: Fertigungs- und Ausfertigung: A Prüfverschriften vom: 2011/05/05 KAN nach WÄLTHNER Werkstoff-Nr.: A 108146 121.00.03 CAD-Zeichnung nur mit 3D-System ändern! Eintragung 7 Abs. 1 Pkt. oder 8 Abs. 4 GdG vorhanden.		Name Datum Erstellungsdatum Gezeichnet Geprüft A-geprüft 2011/05/05 KAN 2011/05/05 KAN 2011/05/11 NH 2011/05/11 NH Clean Break Hochdruckverschlusskupplung DN6	
Die Zeichnung ist unser Eigentum. Jede Vervielfältigung, Verbreitung oder Mitteilung an Dritte ist ohne schriftliche Genehmigung der Walther-Präzision GmbH untersagt. Im Falle der Patentverletzung durch Dritte wird die Walther-Präzision GmbH die vollen rechtlichen Ansprüche geltend machen.		D PT	
Zulässiger Betriebsdruck in bar (statisch), ohne Berücksichtigung der Anschlüsse admissible working pressure in bar (static), without consideration of connections		disconnected connected	
gekuppelt 650 360		entkuppelt 650 360	
Werkstoff und Dichtungscode oder identifizier. material and seal code or ident. no.		AABA AABB AABC AABD	
Werkstoff material VK Stahl/Edelstahl sec* steel/stainless-steel VN Stahl/Edelstahl ssa* steel/stainless-steel VK Edelstahl sec* stainless-steel VN Edelstahl ssa* stainless-steel		650 650 360 360	

DIN A 3

## General arrangement drawings Parts Lists

Pos.	Benennung	Identnr.	Zeichnungsnr.	Stck.	Werkstoff/Werkstoffnr.	Bemerkung
1	Kupplungsgehäuse	102823	4-HC-G06-001-11CB-Z10	1.000	11SMnPb30 1.0718K	Pos. 1 und Pos. 3 mit Loctite 932 gesichert
2	Verriegelungshülse	102824	4-HC-G06-002-12CG-Z10	1.000	C45 1.0503HI	
3	Verschlusstücker	102825	4-HC-G06-003-11CB-S1018-Z10	1.000	11SMnPb30 1.0718K	
4	Ventilbolzen	102826	4-HC-G06-041-0U-Z10	1.000	1.4418 QT900	
5	Ventilbuchse	102828	4-HC-G06-042-0U	1.000	1.4418 QT900	Hohlraum zwischen Pos. 4 und Pos. 5 Depofettung mit MP 1200
6	Ventilfeder	47018	4-HC-G06-005-05	1.000	X12CRNi77 1.4310	
7	Verriegelungsfeder	51807	4-HC-G06-006-05	1.000	X12CRNi77 1.4310	
8	O-Ring	8914	7-045-008914	1.000	FKM	O-Ring Pos. 8 wird in Pos. 5 mit Loctite 401 eingeklebt
9	Kugel	395	DIN 5401-395	9.000	X46Cr 13 1.4034	
10	Stützring ungeschlitzt	106148	7-047-106148	1.000	PTFE PTFE	
11	Stützring, Welle, geschlitzt	46719	7-047-046719	1.000	PTFE	

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		Ausf.: D vom 02.11.2010	
		AZ05454	
Erstest.	Datum	Name	WALTHER Clean-Break Hochdruck-Verschlußkupplung, Standardausführung, mit Anschluss M 18x1,5 AG nach DIN EN ISO 8434-1 Reihe S, Werkstoff- und Dichtungs-Sonderausführung, Stahl verzinkt/bürstet (teilweise gehärtet) und Edelstahl 1.4418 mit Dichtungen aus FKM und AU
Geschr.	23.04.2007	ABojin	
Geprüft	06.06.2007	SDressler	
		MHerold	Bestellnummer: 1-HC-G06-0-S1018-AABA-Z10
		Sachnummer: 102827	


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05.05.2011

## General arrangement drawings Parts Lists

Pos.	Benennung	Identnr.	Zeichnungsnr.	Stck.	Werkstoff/Werkstoffnr.	Bemerkung
12	O-Ring	42879	7-045-042879	2.000	AU 70	
13	O-Ring	1757	7-045-001757	1.000	FKM	
	LOCTITE 932	88519	9-920-LOCTITE 932	1.000		
	LOCTITE 401 SEKUNDENKLEBER	91710	9-920-LOCTITE 401	1.000		
	Regular Grade Never Seez	116677	9-810-REGULAR GRADE-NEVER-SEEZ	1.000		

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		Ausf.: D vom 02.11.2010	
		A205454	
Ersterrst.	Datum	Name	WALTHER Clean-Break Hochdruck-Verschlußkupplung, Standardausführung, mit Anschluss M 18x1,5 AG nach DIN EN ISO 8434-1 Reihe S, Werkstoff- und Dichtungs-Sonderausführung: Stahl verzinkt/brüniert (teilweise gehärtet) und Edelstahl 1.4418 mit Dichtungen aus FKM und AU
Geschr.	23.04.2007	ABojin	
Geprüft	06.06.2007	SDroessler	
		Bestellnummer:	Sachnummer:
		1-HC-G06-0-S1018-AABA-Z10	102827

05.05.2011


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## General arrangement drawings Parts Lists

Pos.	Benennung	Identnr.	Zeichnungsnr.	Stück.	Werkstoff/Werkstoffnr.	Bemerkung
30	Verschlußnippelmuffe	102829	4-HC-G06-010-11CG-Z10	1.000	C45 1.0503HI	Pos. 30 und Pos. 31 mit Loctite 932 gesichert
31	VN-Verschlußstück	102830	4-HC-G06-203-11CB-S1018-Z10	1.000	11SMnP630 1.0718K	
32	VN-Ventilbolzen	102831	4-HC-G06-241-0U-Z10	1.000	1.4418 QT900	
33	Ventilfeder	3743	4-EC-004-005-05	1.000	X12CRNi177 1.4310	
34	Stützring ungeschlitzt	106148	7-047-106148	1.000	PTFE PTFE	
35	O-Ring	42879	7-045-042879	1.000	AU 70	
36	O-Ring	1796	7-045-001796	1.000	FKM	
	LOCTITE 932	88519	9-920-LOCTITE 932	1.000		

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		Ausf.: C vom 05.05.2011	
		A206207	
Erstest.	Datum	Name	WALTHER Clean-Break Hochdruck-Verschlußnippel, Standardausführung, mit Anschluss M 18x1,5 AG nach DIN EN ISO 8434-1 Reihe S, Werkstoff- und Dichtungs-Sonderausführung: Stahl verzinkt (teilweise gehärtet) und Edelstahl 1.4418 mit Dichtungen aus FKM und AU
Geschr.	23.04.2007	ABojin	
Geprüft	06.06.2007	SDroessler	
		Bestellnummer: <b>1-HC-G06-2-S1018-AABB-Z10</b>	
		Sachnummer: <b>102832</b>	

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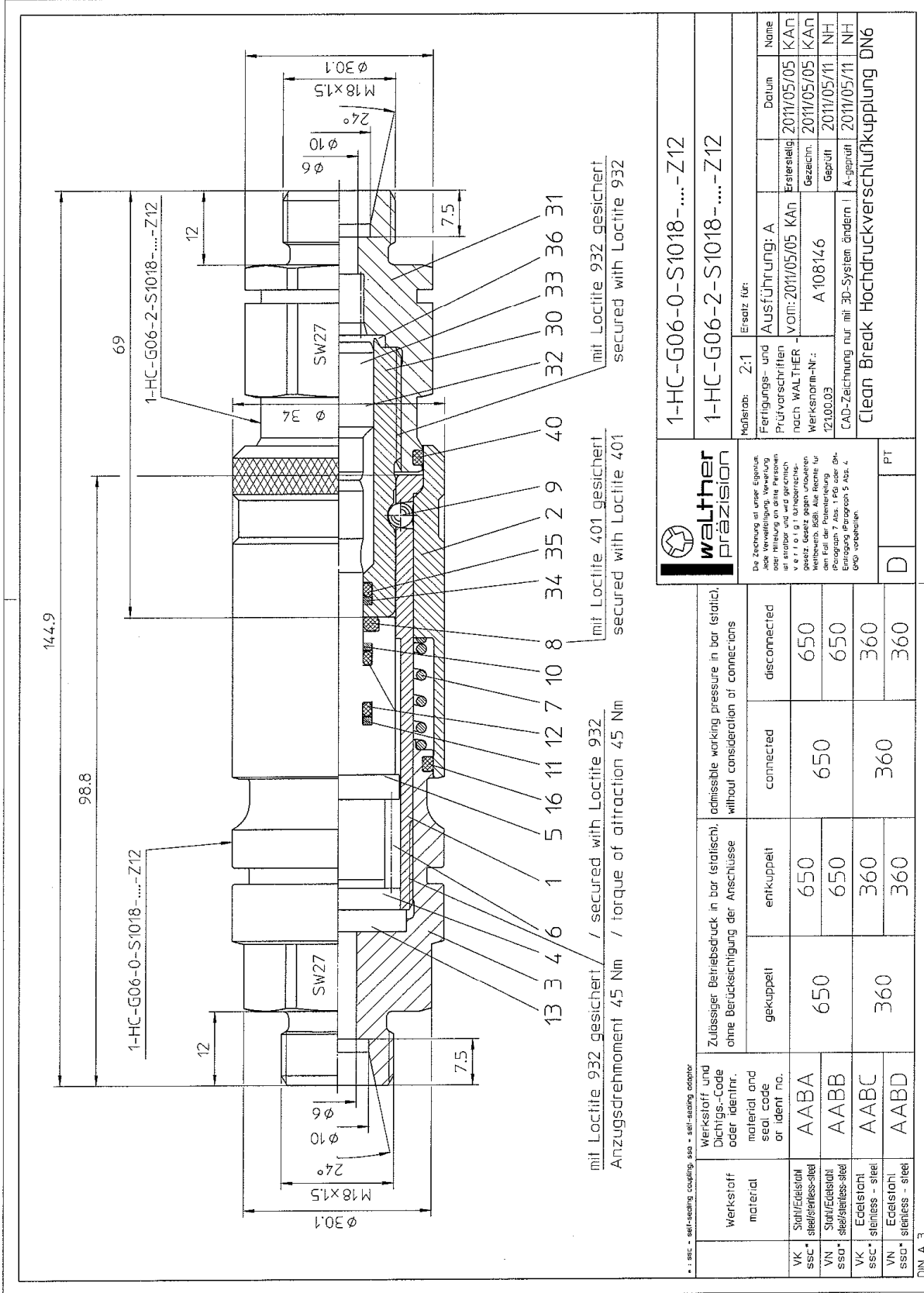
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## General arrangement drawings Parts Lists

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- 6.2 1-HC-G06-0-S1018-AABA-Z12
- 6.2.1 1-HC-G06-2-S1018-AABB-Z12
- 6.2.2 1-HC-G06-2-S1018-AABC-Z12
- 6.2.3 1-HC-G06-2-S1018-AABD-Z12


General arrangement drawings  
 Parts Lists



## General arrangement drawings Parts Lists

Pos.	Benennung	Identnr.	Zeichnungsnr.	Stck.	Werkstoff/Werkstoffnr.	Bemerkung
1	Kupplungsgehäuse	102823	4-HC-G06-001-11CB-Z10	1.000	11SMnPb30 1.0718K	Pos. 1 und Pos. 3 mit Loctite 932 gesichert
2	Verriegelungshülse	102824	4-HC-G06-002-12CG-Z10	1.000	C45 1.0503HI	
3	Verschlussstück	102825	4-HC-G06-003-11CB-S1018-Z10	1.000	11SMnPb30 1.0718K	
4	Ventilbolzen	102826	4-HC-G06-041-04J-Z10	1.000	1.4418 QT900	
5	Ventilbuchse	102828	4-HC-G06-042-0U	1.000	1.4418 QT900	Hohlraum zwischen Pos. 4 und Pos. 5 Depoifettung mit MP 1200
6	Ventilfeder	47018	4-HC-G06-005-05	1.000	X12CRNi177 1.4310	
7	Verriegelungsfeder	51807	4-HC-G06-006-05	1.000	X12CRNi177 1.4310	
8	O-Ring	8814	7-045-008814	1.000	FKM	O-Ring Pos. 8 wird in Pos. 5 mit Loctite 401 gesichert
9	Kugel	385	DIN 5401-385	9.000	X46Cr 13 1.4034	
10	Stützring ungeschlitz	106148	7-047-106148	1.000	PTFE	
11	Stützring, Welle, geschlitz	46719	7-047-046719	1.000	PTFE	


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		Ausf.: D vom 02.11.2010	
		A205454	
Erstent.	Datum	Name	WALTHER Clean-Break Hochdruck-Verschlusskupplung, mit Anschluss M 18x1,5 AG nach DIN EN ISO 8434-1 Reihe S, Werkstoff- und Dichtungs-Sonderausführung: Stahl verzinkt/brüniert (teilweise gehärtet) und Edelstahl 1.4418 mit Dichtungen aus FKM und AU
Geschr.	23.04.2007	ABojin	
Geprüft	06.06.2007	SDrossler	
		Bestellnummer:	Sachnummer: 102844
		1-HC-G06-0-S1018-AABA-Z12	

## General arrangement drawings Parts Lists

Pos.	Benennung	Identnr.	Zeichnungsnr.	Stck.	Werkstoff/Werkstoffnr.	Bemerkung
12	O-Ring	42879	7-045-042879	2.000	AU 70	
13	O-Ring	1757	7-045-001757	1.000	FKM	
16	O-Ring	1829	7-045-001829	1.000	FKM	
	LOCTITE 932	88519	9-920-LOCTITE 932	1.000		
	LOCTITE 401 SEKUNDENKLEBER	91710	9-920-LOCTITE 401	1.000		
	Regular Grade Never Seez	116677	9-810-REGULAR GRADE-NEVER-SEEZ	1.000		

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		Ausf.: D vom <b>02.11.2010</b>	
		A205454	
Ersterrl.	Datum	Name	WALTHER Clean-Break Hochdruck-Verschlusskupplung, mit Anschluss M 18x1,5 AG nach DIN EN ISO 8434-1 Reihe S, Werkstoff- und Dichtungs-Sonderausführung: Stahl verzinkt/brüniert (teilweise gehärtet) und Edelstahl 1.4418 mit Dichtungen aus FKM und AU
Geschr.	23.04.2007	ABojin	
Geprüft	06.06.2007	SDroessler	
		Bestellnummer:	
		1-HC-G06-0-S1018-AABA-Z12	
		Sachnummer:	
		102844	

05.05.2011

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## General arrangement drawings Parts Lists

Pos.	Benennung	Identnr.	Zeichnungsnr.	Stck.	Werkstoff/Werkstoffnr.	Bemerkung
30	Verschlussnippelmuffe	102829	4-HC-G06-010-11CG-Z10	1.000	C45 1.0503HI	Pos. 30 und Pos. 31 mit Loctite 932 gesichert
31	VN-Verschlussstück	102830	4-HC-G06-203-11CB-S1018-Z10	1.000	11SMnPb30 1.0718K	
32	VN-Ventilbolzen	102831	4-HC-G06-241-0U-Z10	1.000	1.4418 QT900	
33	Ventilfeder	3743	4-EC-004-005-05	1.000	X12CRNi177 1.4310	
34	Stützring ungeschlitzt	106148	7-047-106148	1.000	PTFE	
35	O-Ring	42879	7-045-042879	1.000	PTFE	
36	O-Ring	1796	7-045-001796	1.000	AU 70	
40	O-Ring	3703	7-045-003703	1.000	FKM	
	LOCTITE 932	88519	9-920-LOCTITE 932	1.000	FKM	

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Ausf.: C vom 05.05.2011		WAL THER Clean-Break Hochdruck-Verschlussnippel, mit Schmutzschutz, mit Anschluss M 18x1,5 AG nach DIN EN ISO 8434-1 Reihe S, Werkstoff- und Dichtungs-Sonderausführung: Stahl verzinkt (teilweise gehärtet) und Edelstahl 1,4418 mit Dichtungen aus FKM und AU	
A206207		Datum	23.04.2007
Ersterst.		Name	ABojin
Geschr.		SDroessler	06.06.2007
Geprüft		MHerold	06.06.2007
Bestellnummer:		1-HC-G06-2-S1018-AA8B-Z12	
Sachnummer:		102842	


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## General arrangement drawings Parts Lists

Pos.	Benennung	Identnr.	Zeichnungsnr.	Stck.	Werkstoff/Werkstoffnr.	Bemerkung
1	Kupplungsgehäuse	102833	4-HC-G06-001-0G-Z10	1.000	X2CRNiMo17 13 2 1.4404	Pos. 1 und Pos. 3 mit Loctite 932 gesichert
2	Verriegelungshülse	102835	4-HC-G06-002-0G-Z10	1.000	X2CRNiMo17 13 2 1.4404	
3	Verschlussstück	102834	4-HC-G06-003-0G-S1018-Z10	1.000	X2CRNiMo17 13 2 1.4404	
4	Ventilbolzen	102826	4-HC-G06-041-0U-Z10	1.000	1.4418 QT900	
5	Ventilbuchse	102828	4-HC-G06-042-0U	1.000	1.4418 QT900	Hohlraum zwischen Pos. 4 und Pos. 5 Depottettung mit MP 1200
6	Ventilfeder	47018	4-HC-G06-005-05	1.000	X12CRNi177 1.4310	
7	Verriegelungsfeder	51807	4-HC-G06-006-05	1.000	X12CRNi177 1.4310	
8	O-Ring	8914	7-046-008914	1.000	FKM	O-Ring Pos. 8 in Pos. 5 mit Loctite 401 gesichert
9	Kugel	395	DIN 5401-395	9.000	X46Cr 13 1.4034	
10	Stützring ungeschlitz	106148	7-047-106148	1.000	PTFE	
11	Stützring, Welle, geschlitz	46719	7-047-046719	1.000	PTFE	

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Ausf.: D vom 02.11.2010		A205454	
Ersterst.	Datum	Name	
Gesch.	23.04.2007	ABojin	
Geprüft	06.06.2007	SDrossler	
	06.06.2007	MHerold	
		WAL THER Clean-Break Hochdruck-Verschlusskupplung, mit Schmutzschutz, mit Anschluss M 18x1,5 AG nach DIN EN ISO 8434-1 Reihe S, Werkstoff- und Dichtungs-Sonderausführung: Edelstahl 1.4404/1.4571 oder gleichwertig und 1.4418 mit Dichtungen aus FKM und AU	
		Bestellnummer: 1-HC-G06-0-S1018-AA0C-Z12	
		Sachnummer: 102845	


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05.05.2011

## General arrangement drawings Parts Lists

Pos.	Benennung	Identnr.	Zeichnungsnr.	Stck.	Werkstoff/Werkstoffnr.	Bemerkung
12	O-Ring	42879	7-045-042879	2.000	AU 70	
13	O-Ring	1757	7-045-001757	1.000	FKM	
16	O-Ring	1829	7-045-001829	1.000	FKM	
	LOCTITE 932	88519	9-920-LOCTITE 932	1.000		
	LOCTITE 401 SEKUNDENKLEBER	91710	9-920-LOCTITE 401	1.000		
	Regular Grade Never Seez	116677	9-810-REGULAR GRADE-NEVER-SEEZ	1.000		

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		Ausf.: D vom 02.11.2010	
		A205454	
Ersterst.	Datum	Name	WALTHER Clean-Break Hochdruck-Verschlußkupplung, mit Anschluss M 18x1,5 AG nach DIN EN ISO 8434-1 Reihe S, Werkstoff- und Dichtungs-Sonderausführung: Edelstahl 1.4404/1.4571 oder gleichwertig und 1.4418 mit Dichtungen aus FKM und AU
Geschr.	23.04.2007	ABojin	
Geprüft	06.06.2007	SDroessler	
		Bestellnummer.	Sachnummer:
		1-HC-G06-0-S1018-AABC-Z12	102845

05.05.2011


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## General arrangement drawings Parts Lists

Pos.	Benennung	Identnr.	Zeichnungsnr.	Stck.	Werkstoff/Werkstoffnr.	Bemerkung
30	Verschlußnippelmuffe	102837	4-HC-G06-010-0U-Z10	1.000	1.4418 QT900	Pos. 30 und Pos. 31 mit Loctite 932 gesichert
31	VN-Verschlußstück	102838	4-HC-G06-203-0G-S1018-Z10	1.000	X2CrNiMo17 13 2 1.4404	
32	VN-Ventilbolzen	102831	4-HC-G06-241-0U-Z10	1.000	1.4418 QT900	
33	Ventilfeder	3743	4-EC-004-005-05	1.000	X12CRNi177 1.4310	
34	Stützring ungeschlitz	106148	7-047-106148	1.000	PTFE PTFE	
35	O-Ring	42879	7-045-042879	1.000	AU 70	
36	O-Ring	1796	7-045-001796	1.000	FKM	
40	O-Ring	3703	7-045-003703	1.000	FKM	
	LOCTITE 932	88519	9-920-LOCTITE 932	1.000		

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		Ausf.: C vom 05.05.2011	
		A206207	
Ersterst.	Datum	Name	WAL THER Clean-Break Hochdruck-Verschlußnippel, mit Schmutzschutz, mit Anschluss M 18x1,5 AG nach DIN EN ISO 8434-1 Reihe S, Werkstoff- und Dichtungs-Sonderausführung: Edelstahl 1.4404/1.4571 oder gleichwertig und 1.4418 mit Dichtungen aus FKM und AU
Geschr.	23.04.2007	ABojin	
Geprüft	06.06.2007	SDroessler	
		MHerold	Sachnummer: <b>102843</b>
		Bestellnummer: <b>1-HC-G06-2-S1018-AABD-Z12</b>	

Seite: 1 / 1

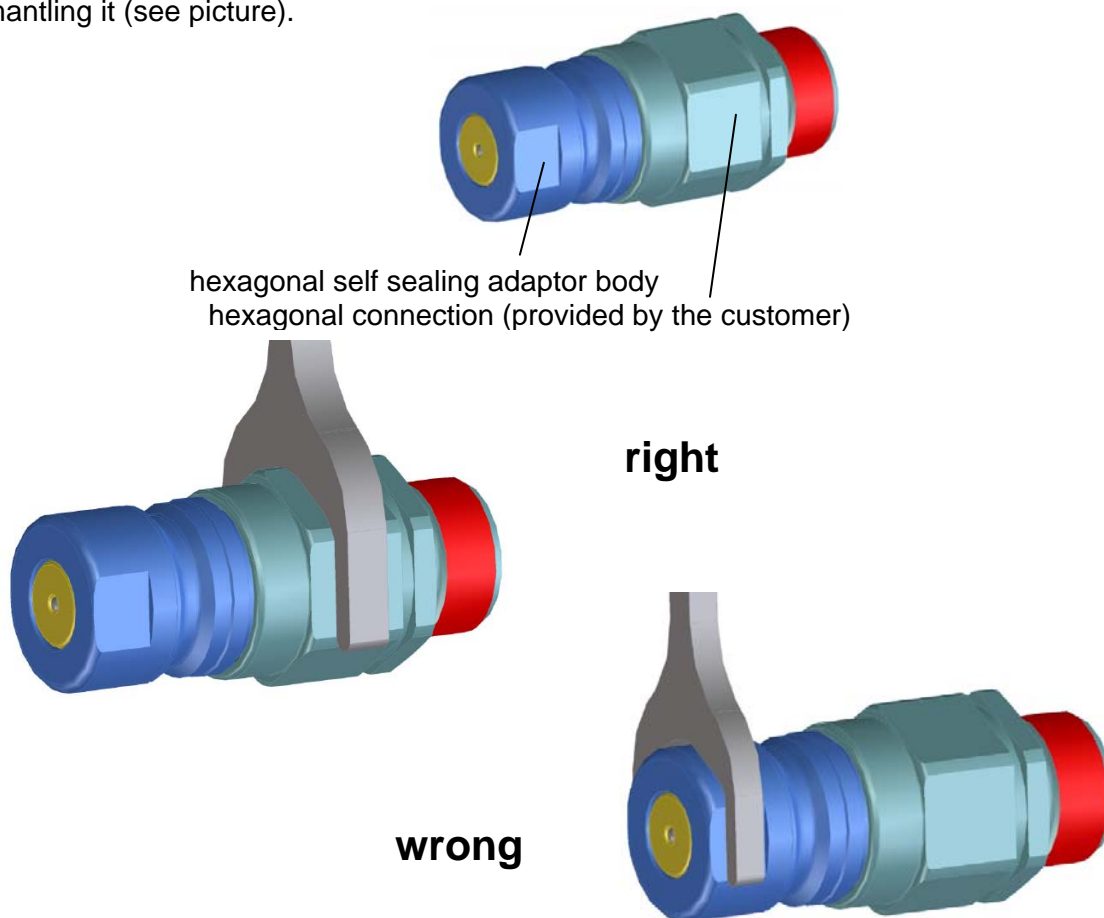
05.05.2011

## Installation instruction

### 7 Installation Instruction

Install the self sealing coupling into the network in due consideration of the general accident prevention regulations, so that:

- an error-free operation according to the operating instructions is guaranteed. Please make sure that you use only the hexagon on the connection which is provided by the customer to tighten or release the coupling / adaptor when assembling or dismantling it (see picture).



- the screw connection on the connection side (provided by the customer) is made according to the relevant technical regulations.
- the self sealing coupling is predominantly used on the network side and the self sealing coupling is mainly used on the consumer side.
- exterior damage to the unit and to all movable parts is ruled out.

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.**

## Maintenance and Functional instruction

### 8 Operating Instruction

The coupling may only be used for the specified purposes in order to avoid critical injury to personnel and damage to the locking element during use.

#### 8.1 Coupling process

Before every couple cycle a visual check of coupling and adaptor is to be carried out. In case of recognizable, visible damage or deformations damaged parts are to be exchanged.

The locking sleeve is flush with the coupling casing (see picture) when in pre-coupling position.



The coupling comes with an automatic locking system, i.e. one hand operation. For coupling, the coupling is picked up with one hand behind the locking sleeve or the lock nipple in the closure piece area and pushed axially central onto the mating piece up to the stop.

The locking sleeve locks in forward direction without operator support during coupling.

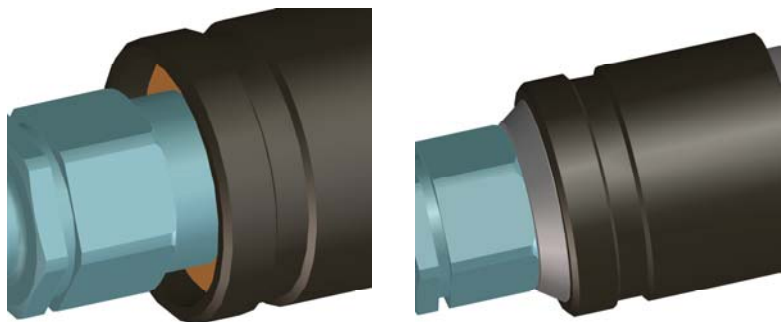
Coupling and lock nipple are both mechanically locked now.

Existing valves are opened during the coupling process thereby releasing the flow.



#### **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.



#### 8.2 Disconnection process

The coupling is picked up with one hand behind the locking sleeve for decoupling, the 2<sup>nd</sup> hand pushes back the locking sleeve and the connection is disconnected.

Existing valves will automatically shut on decoupling thus preventing any further discharge of media.

#### **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

---

### **9 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.

#### **9.1 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).

##### 9.1.1 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.

##### 9.1.2 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 !**

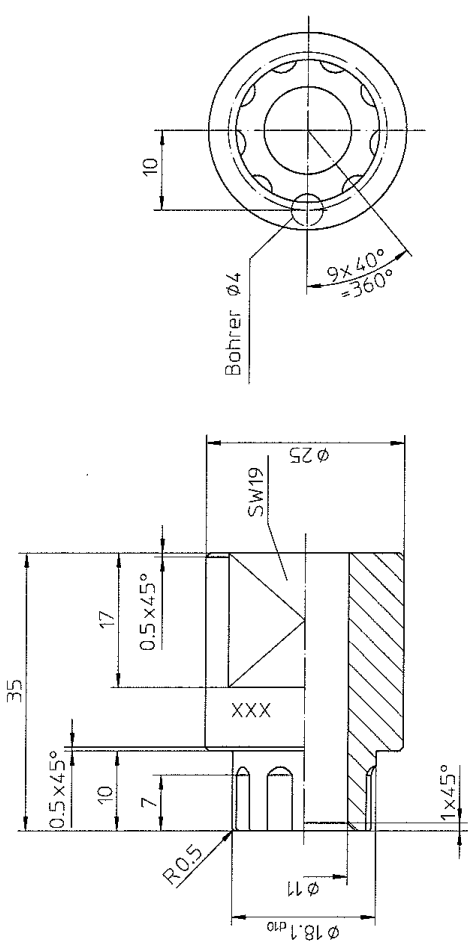
**If the coupling is repaired by the customer themselves, a pressure and/or leak test must be performed in any case.**

**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.**

# Maintenance and Functional instruction



Material: 42CrMo4V  
gehärtet und angelassen  
55 +5 HRC

$\sqrt{Rz\ 25}$

<b>walther präzision</b>		BM-01-009-034	
Maßstab:	2 : 1	Ersatz für:	
Fertigungs- und Prüfverschriften nach WALTHER - Werknorm-Nr.: 121.00.03	Ausführung: A vom: 04.08.1998	Gezeichnet: 04.08.1998	Name: AHEI
Änderungs-Auftrags-Nr.: A.....	Geprüft: 05.08.1998	Normgepr.:	HGV:
CAD-Zeichnung nicht manuell ändern !			
Montagewerkzeug für 4-HC-G06-001-...-Z02...A vom 03.06.98			

18.1	d10	18.035	17.951
Paßmaß	Abmaß	Größtmaß	Kleinmaß

DIN A 3

XXX Beschriften mit Schlagschraube der Schriftgröße 3 mm  
Text: BM-01-009-034  
HC-G06-...-Z02

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## Maintenance and Functional instruction

### **9.2 Following the instruction for disassembly and assembly**

#### **1-HC-G06-0-.....-.....-Z..**

##### 9.2.1 O-Ring (Pos.12), anti extrusion ring (Pos.11) valve bush (Pos.5)

In case of a possible disassembly of unit or seal exchange take care that unit is not pressurized and also no media is included in depressurized condition.

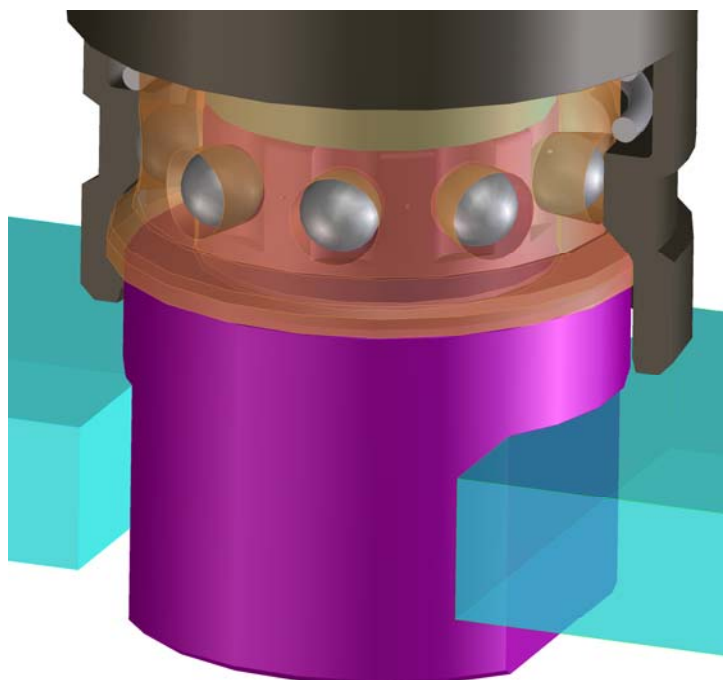
It is to be guaranteed, too, that during works at the unit it is not pressurized with medium or medium under pressure.

For dismounting the closure piece in suitable installation situation it is not mandatory to remove the hose from the closure piece as one may rotate the coupling casing.

The hose must be removed from the closure piece in unsuitable installation situation.

#### **Disassembly**

1. The threaded connection of the coupling has been tightened using a torque of 120 Nm and secured with Loctite 932.
2. For loosening this connection, it must be kept at a temperature of above 110 °C during a period of approx. 5 min. This action will destroy the adhesive.  
If this adhesive destruction should not happen, the assembly tools or/and the coupling casing will be deformed during dismounting and cannot be used any longer.
3. For dismounting, clamp the assembly tool BM-01-009-034 (ID number 69933) into a suitable clamping tool with the axial grooves upward and place the coupling onto the assembly tool (see picture).



## Maintenance and Functional instruction

4. While doing this, the coupling must be pressed against the force of the valve spring onto the assembly tool until it bottoms out in such a way that the balls thread in the axial grooves (see picture). In the process, the locking sleeve is pushed downward until it bottoms out on the coupling casing.



**When unscrewing end plug jumps forcefully from the last thread as a result of the valve spring being pre-tensioned.**

**CAUTION**

**Bruises and crushes of parts of the body are possible.**

**It must be held against the housing by hand.**

5. The closure piece is screwed off by means of an appropriate tool and the 50 mm wrench flat. The valve spring relieves in the process and the closure piece can be removed.
6. Care must be taken while removing the coupling from the assembly tool and the valve bushing (Item 5) that the locking sleeve in front remains bottomed out on the coupling casing otherwise the balls would drop from the holes in the coupling casing (see picture).



7. The O-ring (Item 12) and the anti extrusion ring (Item 11) are now exposed in the removed valve bushing (Item 5).

Remove the old O-ring (Item 12) and the anti extrusion ring (item 10) with a suitable tool. Clean seal groove and check for damages. Insert new o-ring and anti extrusion ring. Do not turn or damage the o-ring while doing this.

## Maintenance and Functional instruction

---

### Assembly

1. All old and loose Loctite particles on both threaded halves need to be removed and wetted with new Loctite 932 (see drawings under Item 6) prior to assembly.
2. Place the coupling casing with locking sleeve but without valve trims onto the clamped assembly tool (like for the assembly).
3. Then insert the valve trims acc. to drawing (see Item 6) loosely.
4. Using an appropriate tool, the closure piece is now pressed onto the coupling casing and screwed in against the valve spring as far as it will go.

#### **Important:**

The moment the closure piece is being tightened, the valve bolt (Item 4) with the O-ring threads into the valve bushing guide (Item 5). The O-ring must not be destroyed in the process.

5. The locking sleeve must be drawn back in pre-coupling position after removing the coupling from the assembly tool where the valve bushing gets forward flushing with the valve tappet.



## Maintenance and Functional instruction

### 9.2.2 O-Ring (Item 8)

In case of a possible disassembly of unit or seal exchange take care that unit is not pressurized and also no media is included in depressurized condition.

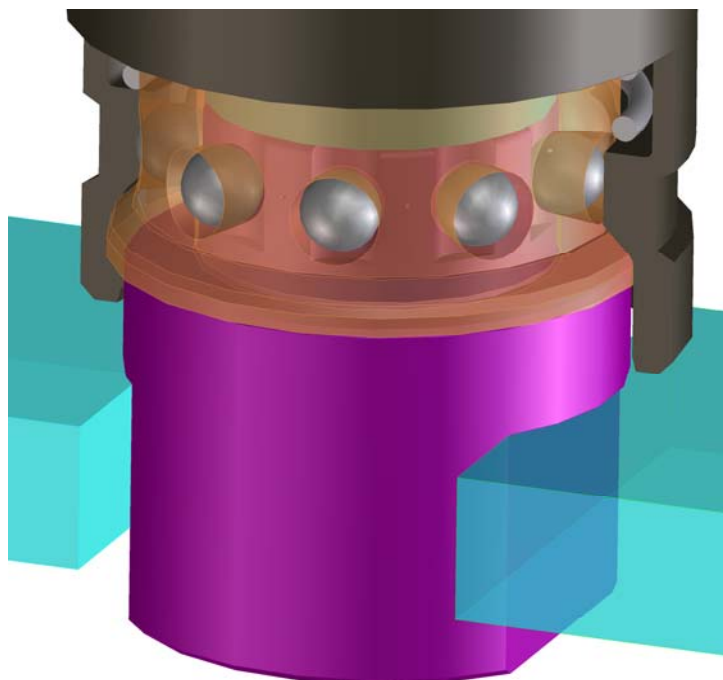
It is to be guaranteed, too, that during works at the unit it is not pressurized with medium or medium under pressure.

For dismounting the closure piece in suitable installation situation it is not mandatory to remove the hose from the closure piece as one may rotate the coupling casing.

The hose must be removed from the closure piece in unsuitable installation situation.

### Disassembly

1. The threaded connection of the coupling has been tightened using a torque of 120 Nm and secured with Loctite 932.
2. For loosening this connection, it must be kept at a temperature of above 110 °C during a period of approx. 5 min. This action will destroy the adhesive.  
If this adhesive destruction should not happen, the assembly tools or/and the coupling casing will be deformed during dismounting and cannot be used any longer.
3. For dismounting, clamp the assembly tool BM-01-009-034 (ID number 69933) into a suitable clamping tool with the axial grooves upward and place the coupling onto the assembly tool (see picture).



## Maintenance and Functional instruction

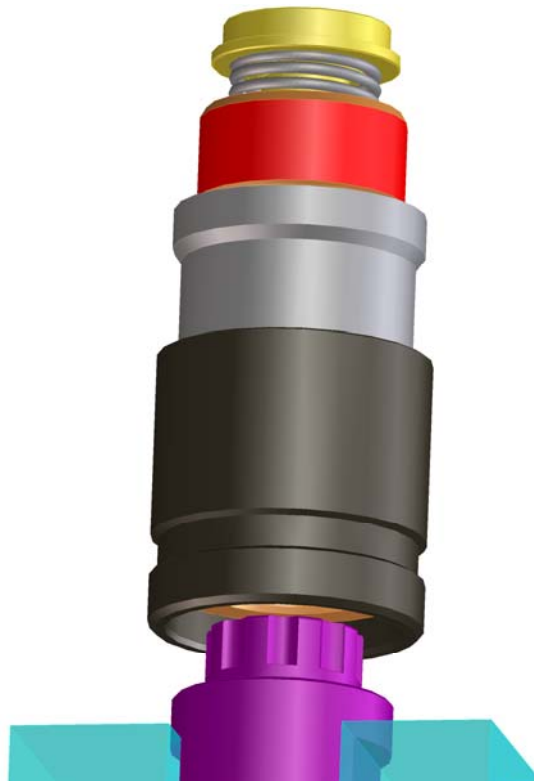
4. While doing this, the coupling must be pressed against the force of the valve spring onto the assembly tool until it bottoms out in such a way that the balls thread in the axial grooves (see picture). In the process, the locking sleeve is pushed downward until it bottoms out on the coupling casing.



**When unscrewing end plug jumps forcefully from the last thread as a result of the valve spring being pre-tensioned.**

**CAUTION Bruises and crushes of parts of the body are possible.  
It must be held against the housing by hand.**

5. The closure piece is screwed off by means of an appropriate tool and the 50 mm wrench flat. The valve spring relieves in the process and the closure piece can be removed.
6. Care must be taken while removing the coupling from the assembly tool and the valve bushing (Item 5) that the locking sleeve in front remains bottomed out on the coupling casing otherwise the balls would drop from the holes in the coupling casing (see picture).



7. The O-ring (Item 12) is now exposed in the removed valve bushing (Item 5).

Remove the old O-ring (Item 8) with a suitable tool. Clean seal groove and check for damages. Insert new o-ring and lock it with Loctite 401. Do not turn or damage the o-ring while doing this.

## Maintenance and Functional instruction

---

### Assembly

1. All old and loose Loctite particles on both threaded halves need to be removed and wetted with new Loctite 932 (see drawings under Item 6) prior to assembly.
2. Place the coupling casing with locking sleeve but without valve trims onto the clamped assembly tool (like for the assembly).
3. Then insert the valve trims acc. to drawing (see Item 6) loosely.
4. Using an appropriate tool, the closure piece is now pressed onto the coupling casing and screwed in against the valve spring as far as it will go.

#### **Important:**

The moment the closure piece is being tightened, the valve bolt (Item 4) with the O-ring threads into the valve bushing guide (Item 5). The O-ring must not be destroyed in the process.

5. The locking sleeve must be drawn back in pre-coupling position after removing the coupling from the assembly tool where the valve bushing gets forward flushing with the valve tappet.

## Maintenance and Functional instruction

### 9.2.3 O-Ring (item 12), anti extrusion ring (item11), valve bolt (item 4)

In case of a possible disassembly of unit or seal exchange take care that unit is not pressurized and also no media is included in depressurized condition.

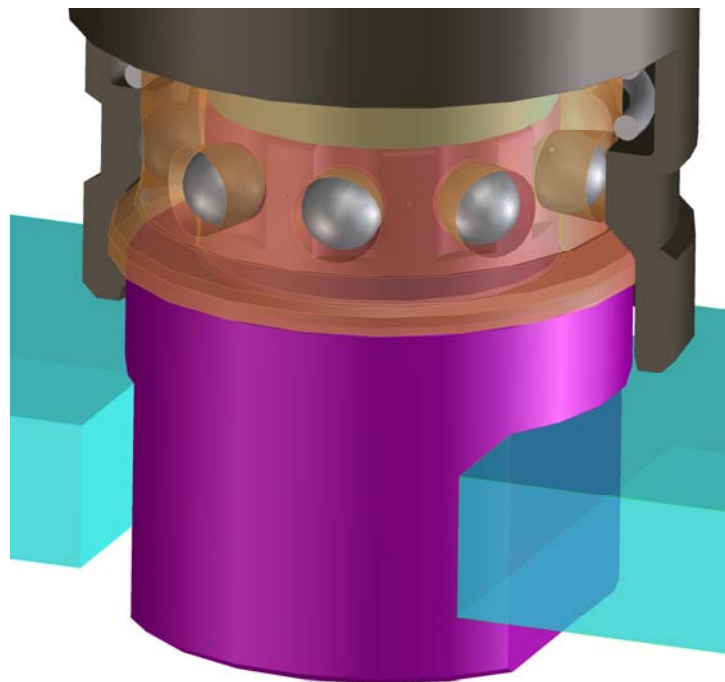
It is to be guaranteed, too, that during works at the unit it is not pressurized with medium or medium under pressure.

For dismounting the closure piece in suitable installation situation it is not mandatory to remove the hose from the closure piece as one may rotate the coupling casing.

The hose must be removed from the closure piece in unsuitable installation situation.

### Disassembly

1. The threaded connection of the coupling has been tightened using a torque of 120 Nm and secured with Loctite 932.
2. For loosening this connection, it must be kept at a temperature of above 110 °C during a period of approx. 5 min. This action will destroy the adhesive.  
If this adhesive destruction should not happen, the assembly tools or/and the coupling casing will be deformed during dismounting and cannot be used any longer.
3. For dismounting, clamp the assembly tool BM-01-009-034 (ID number 69933) into a suitable clamping tool with the axial grooves upward and place the coupling onto the assembly tool (see picture).



## Maintenance and Functional instruction

4. While doing this, the coupling must be pressed against the force of the valve spring onto the assembly tool until it bottoms out in such a way that the balls thread in the axial grooves (see picture). In the process, the locking sleeve is pushed downward until it bottoms out on the coupling casing.



**When unscrewing end plug jumps forcefully from the last thread as a result of the valve spring being pre-tensioned.**

**CAUTION Bruises and crushes of parts of the body are possible.  
It must be held against the housing by hand.**

5. The closure piece is screwed off by means of an appropriate tool and the 50 mm wrench flat. The valve spring relieves in the process and the closure piece can be removed.
6. Care must be taken while removing the coupling from the assembly tool and the valve bushing (Item 5) that the locking sleeve in front remains bottomed out on the coupling casing otherwise the balls would drop from the holes in the coupling casing (see picture).



7. The O-ring (Item 12) and the anti extrusion ring (item 11) are now exposed in the removed valve bolt (Item 4).

Remove the old O-ring (Item 12) and the anti extrusion ring (item 11) with a suitable tool. Clean seal groove and check for damages. Insert new o-ring and anti extrusion ring. Do not turn or damage the o-ring while doing this.

## Maintenance and Functional instruction

---

### Assembly

1. All old and loose Loctite particles on both threaded halves need to be removed and wetted with new Loctite 932 (see drawings under Item 6) prior to assembly.
2. Place the coupling casing with locking sleeve but without valve trims onto the clamped assembly tool (like for the assembly).
3. Then insert the valve trims acc. to drawing (see Item 6) loosely.
4. Using an appropriate tool, the closure piece is now pressed onto the coupling casing and screwed in against the valve spring as far as it will go.

#### **Important:**

The moment the closure piece is being tightened, the valve bolt (Item 4) with the O-ring threads into the valve bushing guide (Item 5). The O-ring must not be destroyed in the process.

5. The locking sleeve must be drawn back in pre-coupling position after removing the coupling from the assembly tool where the valve bushing gets forward flushing with the valve tappet.

## Maintenance and Functional instruction

### 9.2.4 O-Ring (Item13) valve bolt (Item 4)

In case of a possible disassembly of unit or seal exchange take care that unit is not pressurized and also no media is included in depressurized condition.

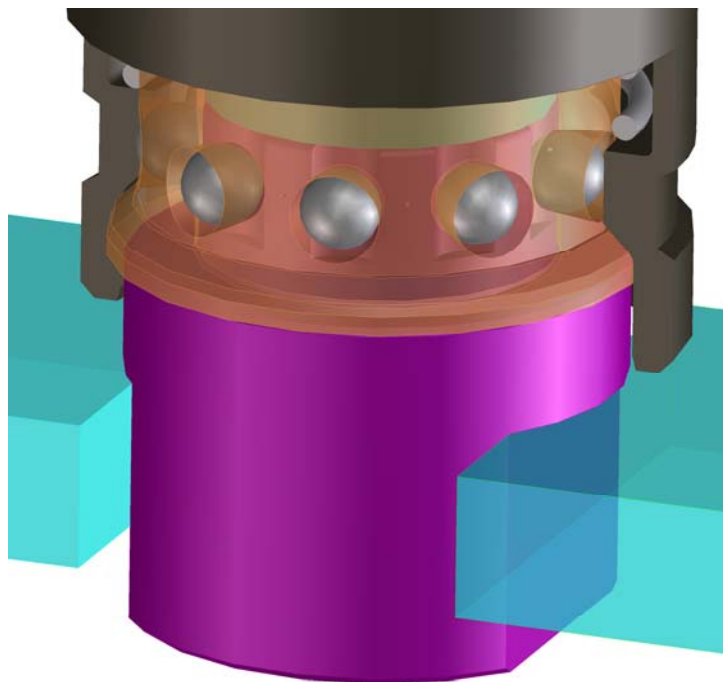
It is to be guaranteed, too, that during works at the unit it is not pressurized with medium or medium under pressure.

For dismounting the closure piece in suitable installation situation it is not mandatory to remove the hose from the closure piece as one may rotate the coupling casing.

The hose must be removed from the closure piece in unsuitable installation situation.

### Disassembly

1. The threaded connection of the coupling has been tightened using a torque of 120 Nm and secured with Loctite 932.
2. For loosening this connection, it must be kept at a temperature of above 110 °C during a period of approx. 5 min. This action will destroy the adhesive.  
If this adhesive destruction should not happen, the assembly tools or/and the coupling casing will be deformed during dismounting and cannot be used any longer.
3. For dismounting, clamp the assembly tool BM-01-009-034 (ID number 69933) into a suitable clamping tool with the axial grooves upward and place the coupling onto the assembly tool (see picture).



## Maintenance and Functional instruction

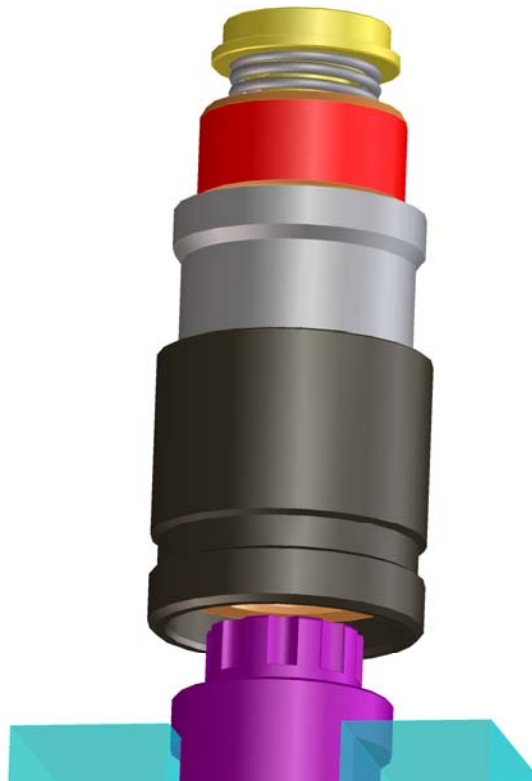
4. While doing this, the coupling must be pressed against the force of the valve spring onto the assembly tool until it bottoms out in such a way that the balls thread in the axial grooves (see picture). In the process, the locking sleeve is pushed downward until it bottoms out on the coupling casing.



**When unscrewing end plug jumps forcefully from the last thread as a result of the valve spring being pre-tensioned.**

**CAUTION Bruises and crushes of parts of the body are possible.  
It must be held against the housing by hand.**

5. The closure piece is screwed off by means of an appropriate tool and the 50 mm wrench flat. The valve spring relieves in the process and the closure piece can be removed.
6. Care must be taken while removing the coupling from the assembly tool and the valve bushing (Item 5) that the locking sleeve in front remains bottomed out on the coupling casing otherwise the balls would drop from the holes in the coupling casing (see picture).



7. The O-ring (Item 13) is now exposed in the removed valve bolt (Item 4).

Remove the old O-ring (Item 13) with a suitable tool. Clean seal groove and check for damages. Insert new o-ring. Do not turn or damage the o-ring while doing this.



## Maintenance and Functional instruction

---

### Assembly

1. All old and loose Loctite particles on both threaded halves need to be removed and wetted with new Loctite 932 (see drawings under Item 6) prior to assembly.
2. Place the coupling casing with locking sleeve but without valve trims onto the clamped assembly tool (like for the assembly).
3. Then insert the valve trims acc. to drawing (see Item 6) loosely.
4. Using an appropriate tool, the closure piece is now pressed onto the coupling casing and screwed in against the valve spring as far as it will go.

#### **Important:**

The moment the closure piece is being tightened, the valve bolt (Item 4) with the O-ring threads into the valve bushing guide (Item 5). The O-ring must not be destroyed in the process.

5. The locking sleeve must be drawn back in pre-coupling position after removing the coupling from the assembly tool where the valve bushing gets forward flushing with the valve tappet.

## Maintenance and Functional instruction

### 9.2.5 O-Ring (Item 16 and 17)

In case of a possible disassembly of unit or seal exchange take care that unit is not pressurized and also no media is included in depressurized condition.

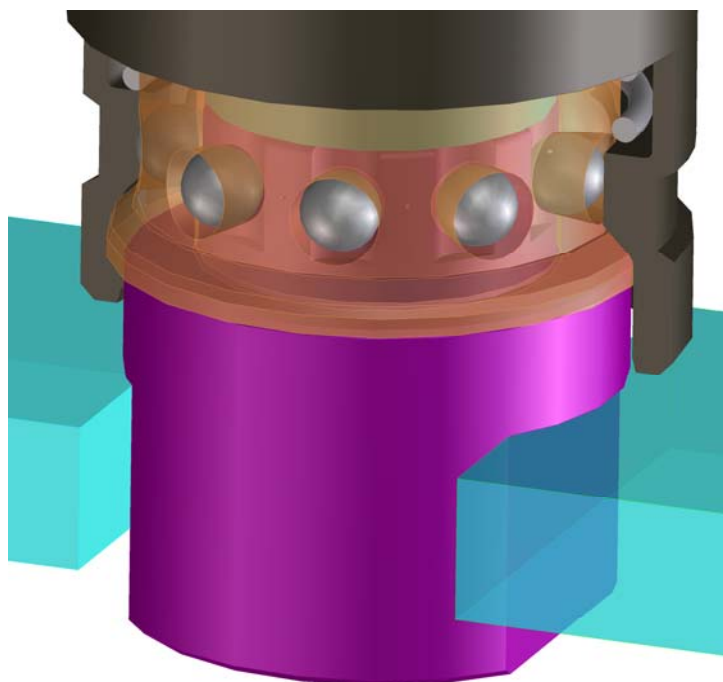
It is to be guaranteed, too, that during works at the unit it is not pressurized with medium or medium under pressure.

For dismounting the closure piece in suitable installation situation it is not mandatory to remove the hose from the closure piece as one may rotate the coupling casing.

The hose must be removed from the closure piece in unsuitable installation situation.

### Disassembly

1. The threaded connection of the coupling has been tightened using a torque of 120 Nm and secured with Loctite 932.
2. For loosening this connection, it must be kept at a temperature of above 110 °C during a period of approx. 5 min. This action will destroy the adhesive.  
If this adhesive destruction should not happen, the assembly tools or/and the coupling casing will be deformed during dismounting and cannot be used any longer.
3. For dismounting, clamp the assembly tool BM-01-009-034 (ID number 69933) into a suitable clamping tool with the axial grooves upward and place the coupling onto the assembly tool (see picture).



## Maintenance and Functional instruction

4. While doing this, the coupling must be pressed against the force of the valve spring onto the assembly tool until it bottoms out in such a way that the balls thread in the axial grooves (see picture). In the process, the locking sleeve is pushed downward until it bottoms out on the coupling casing.



**When unscrewing end plug jumps forcefully from the last thread as a result of the valve spring being pre-tensioned.**

**CAUTION Bruises and crushes of parts of the body are possible.  
It must be held against the housing by hand.**

5. The closure piece is screwed off by means of an appropriate tool and the 50 mm wrench flat. The valve spring relieves in the process and the closure piece can be removed.
6. Care must be taken while removing the coupling from the assembly tool and the valve bushing (Item 5) that the locking sleeve in front remains bottomed out on the coupling casing otherwise the balls would drop from the holes in the coupling casing (see picture).



7. The O-ring (Item 16 and 17) are now exposed in the removed butment (Item 15).

Remove the old O-ring (Item 16 and 17) with a suitable tool. Clean seal groove and check for damages. Insert new o-ring. Do not turn or damage the o-ring while doing this.

## Maintenance and Functional instruction

---

### Assembly

1. All old and loose Loctite particles on both threaded halves need to be removed and wetted with new Loctite 932 (see drawings under Item 6) prior to assembly.
2. Place the coupling casing with locking sleeve but without valve trims onto the clamped assembly tool (like for the assembly).
3. Then insert the valve trims acc. to drawing (see Item 6) loosely.
4. Using an appropriate tool, the closure piece is now pressed onto the coupling casing and screwed in against the valve spring as far as it will go.

#### **Important:**

The moment the closure piece is being tightened, the valve bolt (Item 4) with the O-ring threads into the valve bushing guide (Item 5). The O-ring must not be destroyed in the process.

5. The locking sleeve must be drawn back in pre-coupling position after removing the coupling from the assembly tool where the valve bushing gets forward flushing with the valve tappet.

## Maintenance and Functional instruction

### 1-HC-G06-2-.....-Z..

#### 9.2.6 O-ring (Item 35) and anti extrusion ring (Item 34)

In case of a possible disassembly of unit or seal exchange take care that unit is not pressurized and also no media is included in depressurized condition.

It is to be guaranteed, too, that during works at the unit it is not pressurized with medium or medium under pressure.

For dismounting the closure piece in suitable installation situation it is not mandatory to remove the hose from the closure piece as one may rotate the coupling casing.

The hose must be removed from the closure piece in unsuitable installation situation.

#### Demontage

1. The threaded connection of the lock nipple has been secured with Loctite 932.
2. For loosening this connection, it must be kept at a temperature of above 110 °C during a period of approx. 5 min. This action will destroy the adhesive.



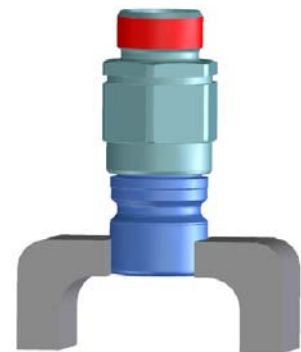
**CAUTION**

**When unscrewing end plug jumps forcefully from the last thread as a result of the valve spring being pre-tensioned.**

**Bruises and crushes of parts of the body are possible.**

**It must be held against the housing by hand.**

3. Unscrew the end plug (Item 31).
4. Remove valve parts.
5. O-Ring and anti extrusion ring are now exposed.



Remove the old O-ring (Item 35) and the anti extrusion ring (item 34) with a suitable tool. Clean seal groove and check for damages. Insert new o-ring and anti extrusion ring. Do not turn or damage the o-ring while doing this.

#### Assembly

All old and loose Loctite particles on both threaded halves need to be removed and wetted with new Loctite 932 (see drawings under Item 6) prior to assembly.

Insert valve trims acc. to drawing (see Item 6) and screw back the closure piece. In this process it is important that the valve trims are correctly positioned to each other (e.g.: valve support in the closure piece). Otherwise the closure piece could not be screwed on as far as it will go or the valve trims would jam.

## Maintenance and Functional instruction

### 9.2.7 O-Ring (Item 36)

In case of a possible disassembly of unit or seal exchange take care that unit is not pressurized and also no media is included in depressurized condition.

It is to be guaranteed, too, that during works at the unit it is not pressurized with medium or medium under pressure.

For dismounting the closure piece in suitable installation situation it is not mandatory to remove the hose from the closure piece as one may rotate the coupling casing.

The hose must be removed from the closure piece in unsuitable installation situation.

### Disassembly

1. The threaded connection of the lock nipple has been secured with Loctite 932.
2. For loosening this connection, it must be kept at a temperature of above 110 °C during a period of approx. 5 min. This action will destroy the adhesive.

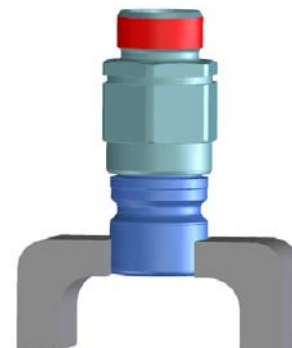


**When unscrewing end plug jumps forcefully from the last thread as a result of the valve spring being pre-tensioned.**

**CAUTION Bruises and crushes of parts of the body are possible.**

**It must be held against the housing by hand.**

3. Unscrew the end plug (Item 31).
3. Remove valve parts.
4. O-Ring is now exposed.



Remove the old O-ring (Item 36) with a suitable tool. Clean seal groove and check for damages. Insert new o-ring. Do not turn or damage the o-ring while doing this.

### Assembly

All old and loose Loctite particles on both threaded halves need to be removed and wetted with new Loctite 932 (see drawings under Item 6) prior to assembly.

Insert valve trims acc. to drawing (see Item 6) and screw back the closure piece. In this process it is important that the valve trims are correctly positioned to each other (e.g.: valve support in the closure piece). Otherwise the closure piece could not be screwed on as far as it will go or the valve trims would jam.

## Maintenance and Functional instruction

### 9.2.8 O-Ring (Item 39 and 40)

In case of a possible disassembly of unit or seal exchange take care that unit is not pressurized and also no media is included in depressurized condition.

It is to be guaranteed, too, that during works at the unit it is not pressurized with medium or medium under pressure.

For dismounting the closure piece in suitable installation situation it is not mandatory to remove the hose from the closure piece as one may rotate the coupling casing.

The hose must be removed from the closure piece in unsuitable installation situation.

### Demontage

1. The threaded connection of the lock nipple has been secured with Loctite 932.
2. For loosening this connection, it must be kept at a temperature of above 110 °C during a period of approx. 5 min. This action will destroy the adhesive.



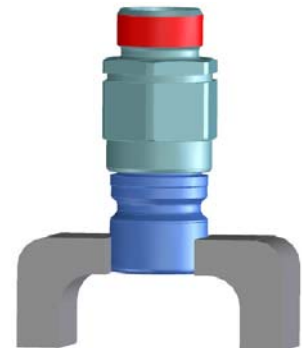
**CAUTION**

**When unscrewing end plug jumps forcefully from the last thread as a result of the valve spring being pre-tensioned.**

**Bruises and crushes of parts of the body are possible.**

**It must be held against the housing by hand.**

3. Unscrew the end plug (Item 31).
4. Remove valve parts.
5. O-Rings are now exposed.



Remove the old O-rings (Item 39 and 40) with a suitable tool. Clean seal groove and check for damages. Insert new o-rings. Do not turn or damage the o-ring while doing this.

### Assembly

All old and loose Loctite particles on both threaded halves need to be removed and wetted with new Loctite 932 (see drawings under Item 6) prior to assembly.

Insert valve trims acc. to drawing (see Item 6) and screw back the closure piece. In this process it is important that the valve trims are correctly positioned to each other (e.g.: valve support in the closure piece). Otherwise the closure piece could not be screwed on as far as it will go or the valve trims would jam.

**10 Test**

These leak tests must be performed according to the following specifications.

**(Extract from the test instructions QM-PA 3.0 of the Walther-Präzision QM system)**

- Description:

The coupling is pressure tested according to the following values.

Series	Steel	1.4404 / 1.4571 with 1.4418QT900
HC-G06	850 bar	475 bar

The pressure details charted above are only valid for the end fittings stated in the Walther Technical Catalogue.

Other end fittings (e.g. SL connections) have to be tested according to the state of the art.

If the material is steel, the test must be performed on an oil test stand.

If the material is stainless steel, the test must be performed on a water test stand.

In case of EPDM seals, please use the water test stand.

**Attention:**

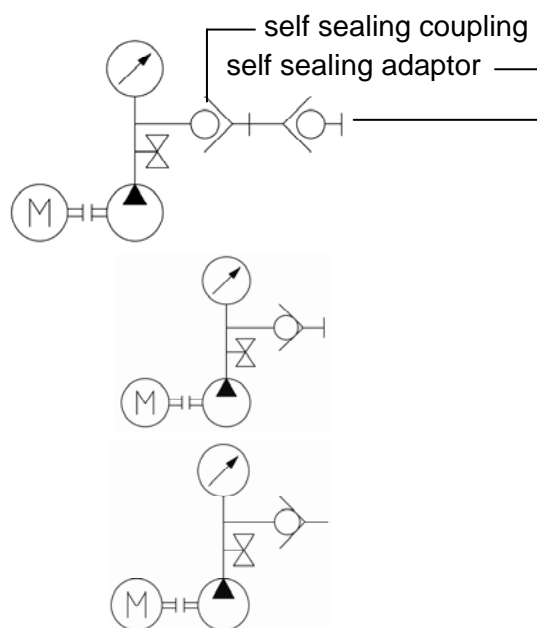
**Do not test EPDM seals with oil.**

- Test setup and test procedure

Test 1: self sealing coupling and self sealing adaptor connected

Test 2: self sealing coupling disconnected

Test 3: self sealing adaptor disconnected



- Notes and remarks:

The dwell time per test is 10 seconds.

During the 10 seconds dwell time there must not be any visible leaks.

Remove the test medium after testing, e.g. by blowing it out.

- Documentation:

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



### 11 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.

### 12 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.

### **13 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.

**14 Order number code**

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

1. Subject group
2. Series  
Series description consists of either two letters or two digits.
3. Nominal size / nominal width  
It is rounded up or rounded down to full units.  
The indication can be numerical or alphanumeric.
4. Type of product and design
5. Type of connection
6. Material:  
xx-x and xxxx possible
7. Material (seal version):  
xx-x and xxxx possible
8. Y- or Z-design
9. Optional features

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