

VIP container hooks >VCH-K 16< >VCH-SL 22<

Assembly instructions

These assembly instructions/manufacturer's declaration must be kept for the time during which the unit is used.

TRANSLATION OF THE ORIGINAL INSTRUCTIONS

These assembly instructions apply in addition to the operating instructions for RUD sling chains
(ICE-no. 7995555 or VIP-no. 7101649).



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RUD item no.: 7906680-EN / 02.019



VIP container hooks
VCH-K 16



VIP container hooks
VCH-SL 22



Simple testing, administration and documentation of work equipment and components subject to testing.



EG-Einbauerklärung

entsprechend der EG-Maschinenrichtlinie 2006/42/EG, Anhang II B und ihren Änderungen

Hersteller: **RUD Ketten**
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Hiermit erklären wir, dass die nachfolgend bezeichnete unvollständige Maschine den grundlegenden Anforderungen der Maschinenrichtlinie 2006/42/EG (Anhang 1) entspricht. Die nachfolgend bezeichnete unvollständige Maschine darf, in der gelieferten Ausführung erst dann in Betrieb genommen werden, wenn festgestellt wurde, dass die Maschine, in die diese unvollständige Maschine eingebaut werden soll, den Anforderungen der EG-Maschinenrichtlinie 2006/42/EG entspricht.

Produktbezeichnung: Containerhaken
VCH / CH

Folgende harmonisierten Normen wurden angewandt:

DIN EN 1677-1 : 2009-03 DIN EN ISO 12100 : 2011-03

Folgende nationalen Normen und technische Spezifikationen wurden außerdem angewandt:

BGR 500, KAP2.8 : 2008-04

Die speziellen Unterlagen zur unvollständigen Maschine nach Anhang VII Teil B wurden erstellt und werden auf begründetes Verlangen in geeigneter Form übermittelt.

Für die Zusammenstellung der Konformitätsdokumentation bevollmächtigte Person:
Michael Betzler, RUD Ketten, 73432 Aalen

Aalen, den 26.09.2016

Dr.-Ing. Arne Kriegsmann (Prokurist/QMB)
Name, Funktion und Unterschrift Verantwortlicher *Arne Kriegsmann*



EC-Mounting declaration

According to the EC-Machinery Directive 2006/42/EC, annex II B and amendments

Manufacturer: **RUD Ketten**
Rieger & Dietz GmbH u. Co. KG
Friedensinsel
73432 Aalen

We hereby declare that the following incomplete machines correspond to the basic requirements of the Machinery Directive 2006/42/EC (annex 1). The following incomplete machine, in the delivered machine, may only be put into operation when the machine in which the incomplete machine shall be assembled, has been tested according to the requirements of the EC-Machinery Directive 2006/42/EC.

Product name: Container hook
VCH / CH

The following harmonized norms were applied:

DIN EN 1677-1 : 2009-03 DIN EN ISO 12100 : 2011-03

The following national norms and technical specifications were applied:

BGR 500, KAP2.8 : 2008-04

The special documents about the incomplete machine according to annex VII part B have been created and can be handed over in a suitable form on request.

Authorized person for the configuration of the declaration documents:
Michael Betzler, RUD Ketten, 73432 Aalen

Aalen, den 26.09.2016

Dr.-Ing. Arne Kriegsmann (Prokurist/QMB)
Name, function and signature of the responsible person *Arne Kriegsmann*

These instructions apply to the following variant of the VIP container hook:

- **VCH-K 16**-VIP container hooks in VIP pink/magenta (grade 100, H1 stamp)
- **VCH-SL 22**-VIP container hook in VIP pink/magenta (grade 100, H1 stamp)



Carefully read the assembly instructions before using the VIP container hooks. Ensure that you have understood all the contents.

Non-observation of the instructions can lead to injuries or damage and will invalidate the guarantee.

1 Safety information



WARNING

Incorrectly mounted or damaged lifting and lashing means and improper use can lead to injuries and damage to objects after a fall.

Check the attachment equipment carefully every time before use.

- Remove all body parts (fingers, hands, arms etc.) from the danger zone during the lifting process (risk of crushing).
- The VIP container hooks may only be used by authorised and instructed persons in compliance with the DGUV Regulations 100-500 chapter 2.8 (BGR 500) and in compliance with any valid national regulations if used outside Germany.
- The VIP container hook may only be loaded up to the permissible load capacity WLL (see table 1, page 5).
- No technical modifications must be made to the VIP container hook.
- No persons are allowed in the danger zone.
- Take extreme circumstances or impact loads into consideration when choosing the used VIP container hook and the components.
- Staying under suspended loads is prohibited.
- Ensure a stable position of the load during lifting. Swinging must be avoided.
- Damaged or worn VIP container hooks must not be used.
- The lifting of persons is not allowed.

2 Intended use

The described VIP container hooks must only be used in locked state for lifting, lashing or transporting loads.

Please note that the VIP container hook must align itself in the direction of tension. It must not be subject to bending loads.

The VIP container hooks VCH-K 16 and VCH-SL 22 are designed for lifting and transporting ISO containers.

Use the VIP container hooks only with RUD chains.

The described VIP container hooks must only be used for the purposes described here for lifting or transporting loads.

3 Instructions for assembly and use

3.1 General information

- Temperature suitability:
When used at temperatures exceeding 200°C, the load bearing capacities of the VIP container hooks must be reduced as follows:

- | | | |
|---|---|--------------|
| - | -40°C bis 200°C | no reduction |
| - | 200°C bis 300°C | minus 10 % |
| - | 300°C bis 380°C | minus 40 % |
| - | temperatures above 380°C are not allowed! | |

- VIP container hooks may not be allowed to come into contact with aggressive chemicals, acids and their vapours.

- The load bearing capacities of the components depend on the following variables:

- Grade of the component (fig. 1)
- Nominal size of the component
- Existing load case

The permissible load bearing capacities can be found in table 1, page 5 (or alternatively www.rud.com).

3.2 Information about assembly

When assembling the VIP container hooks pay attention to the correct assignment of chain to component. The grades/nominal sizes of the components can be identified by the labelling/stamping on the component/bolt/chain or by the colour:



NOTE

It is important to pay attention to the grade assignment of the components.

- For VIP components (VCH-K 16 and VCH-SL 22) mount only connecting bolts with H1-10 stamping.

Mixing of system parts of different grades/nominal sizes is not permitted.

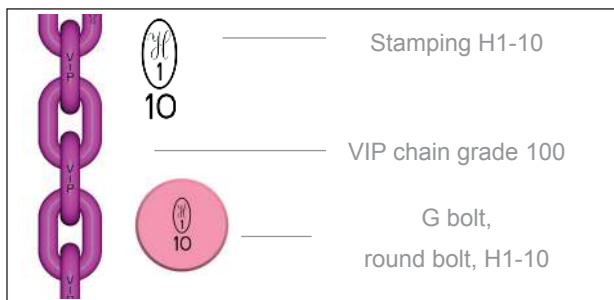


Fig. 1: VIP chain with bolt and stamping

The following always applies:

- Mount the clamping sleeve to secure the connecting bolt in such a way in the clevis that the slot of the clamping sleeve shows clearly to the front.
- RUD G-bolts are unmistakable:
Use only the round VIP-G bolt (fig. 1) for VIP components
- The G bolt must be mounted in the component by means of the clamping pin and the stepped hole in such a way that it cannot get undone (fig. 2).
- Use the clamping sleeve only once.
- Use only original RUD replacement parts.
- Subsequently check the proper mounting (see section 4 testing/repair).

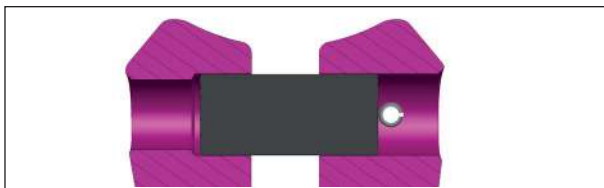


Fig. 2: G bolt assembly by means of clamping pin and stepped hole (left). A G bolt of the next smaller size falls out.

Instructions for handling VIP container hooks

The VIP container hooks VCH-K 16 and VCH-SL 22 are designed for lifting and transporting ISO containers.

Instructions on handling VIP container hooks VCH-K 16

1. Insert the container hook VCH-K 16 as shown in fig. 3 into the ISO corner. The latch (1) opens and closes automatically during insertion.

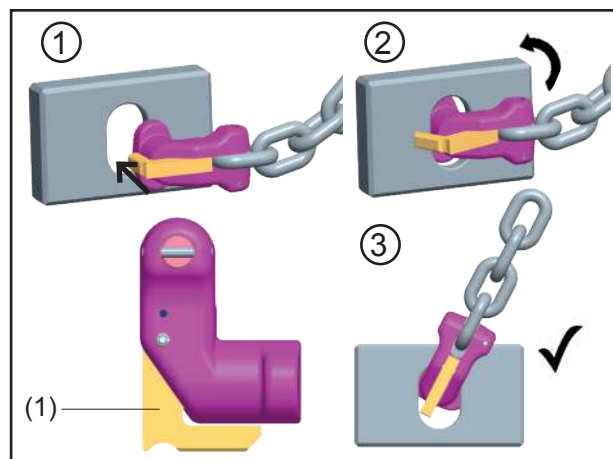


Fig. 3: Insertion of the VIP container hook VCH-K 16

2. Ensure that when lifting the ISO container the container hook VCH-K 16 is locked in the ISO container corner and is within the permissible angle range.
3. The VCH-K 16 may only be used in the angle range 0°-40° (see fig. 4, green range).
4. The VCH-K 16 must not be used in the angle range greater than 40° (see fig. 4, red range).

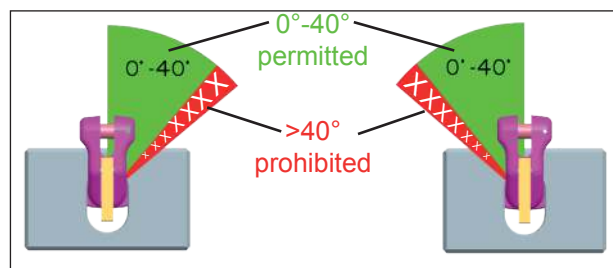


Fig. 4: Range of use VIP container hook VCH-K 16

5. Pull the latch to remove the container hook (fig. 3 (1)).

Instructions on handling VIP container hooks VCH-SL 22

1. Insert the container hook VCH-SL 22 as shown in fig. 5 into the ISO corner. The securing bolt (2) opens and closes automatically during insertion.

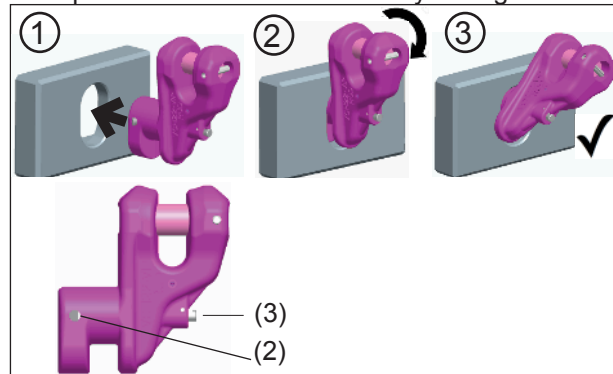


Fig. 5: Insertion of the VIP container hook VCH-SL 22

2. After inserting the container hook in the ISO container corner check if the locking mechanism is effective.

3. Ensure that when lifting the ISO container the container hook VCH-SL 22 is locked in the ISO container corner and is within the permissible angle range.
4. The VCH-SL 22 may only be used in the angle range 30°-60° (see fig. 6, **green range**).
5. The VCH-SL 22 may only be used for vertical lifting of ISO containers (see fig. 6, **red range**).

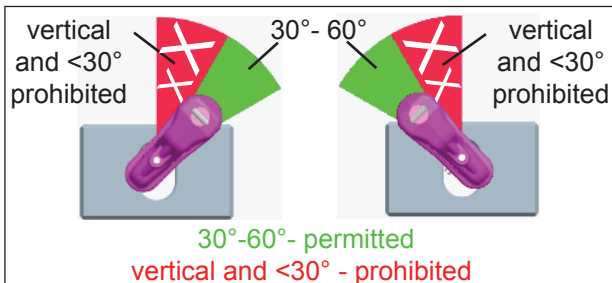


Fig. 6: Range of use VIP container hook VCH-SL 22



NOTE

By installing a VIP ring fork VRG 16 into the clevis of the VCH-SL 22 you can reduce to a VIP chain 16. The load capacity of the VCH-SL 22 is then reduced from 20 t to 10 t.

6. Press the release bolt to remove the container hook (fig. 5 (3)).

3.3 General information on use

- At regular intervals and every time before commissioning, check the entire attachment/lashing equipment to ensure that it is still suitable for its purpose, for heavy corrosion, wear, deformations etc. (see section 4 testing/repairs).



WARNING

Incorrectly mounted or damaged lifting and lashing means and improper use can lead to injuries and damage to objects after a fall.

Check the attachment equipment carefully every time before use.

- In accordance with DIN EN 818 and DIN EN 1677, RUD components are designed for a dynamic load of 20,000 stress cycles.
 - Please note that during one lifting process there might be several stress cycles.
 - Please note that due to the high dynamic load with high numbers of stress cycles there is the risk of damage to the product.
 - The BG/DGUV recommends: At high dynamic load with high stress cycles (permanent operation), the working load must be reduced according to the engine group 1Bm (M3 according to DIN EN 818-7).

- Each time before applying load to the VIP container hook check that the G bolt safety catch is engaged.
- Makes sure that the flow of forces happens in the straight strand without twisting, buckling or kinking.
- If possible leave the immediate danger zone.
- Always supervise your suspended loads.
- For all lifting means/lashing equipment, pay attention to the operating instructions for RUD sling chains or the equivalent load bearing capacity (VIP grade 100).

4 Inspection / repair

4.1 Information about regular checks

The operator must determine and specify the nature and scope of the required inspections as well as the terms of periodic inspections by means of a risk assessment (see sections 4.2 and 4.3).

The continuous suitability of the lifting equipment must be checked at least 1x year by an expert.

Depending on the application conditions, e.g. when used frequently or if there is a higher level of wear or corrosion, it may be necessary to carry out inspections at intervals of less than a year. This inspection is also absolutely necessary after damage and special incidents.

The inspection cycles must be specified by the operator.

4.2 Test criteria for the regular visual inspection by the user

- VIP container hook is complete
- readable size and manufacturer symbols
- Mechanical damage such as large notches, in particular in areas subject to tensile loads
- deformation of the component
- Functional check VCH-K 16
 - The reset function of the latch (1) must be ensured.
 - If the latch (1) is difficult to move it must be oiled at the bolt and spring. Press the latch several times after oiling to distribute the grease on the inside.

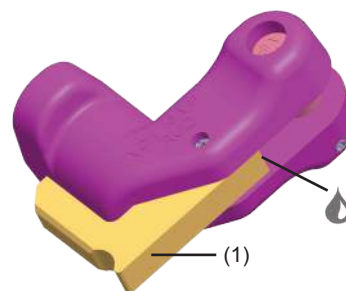


Fig. 7: Oiling the VCH-K 16

- Functional check VCH-SL 22

- Press the securing bolt (2) and release. The securing bolt must return to the end position independently. The securing bolt must be easily operable.
- Press the release bolt (3). The securing bolt (2) must no longer protrude. When releasing the securing bolt (2), both bolts must return to the end position independently.
- If the security mechanism is difficult to operate, oil the release and securing bolt with penetrating oil. Press the release bolt several times after oiling to distribute the grease on the inside.

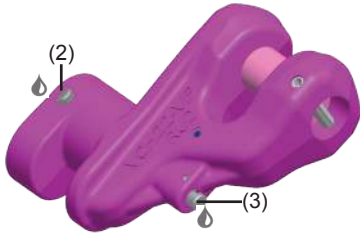


Fig. 8: Oiling the VCH-SL 22

4.3 Additional test criteria for the expert / repairer

- Cracks or other damage
- If the spring of the latch is broken, the VCH-K 16 must no longer be used. Repairs must be carried out by an expert. (RUD item no. replacement set: 7910095)
- Additional inspections may be necessary, depending on the result of the risk assessment (e.g. check for cracks in load-bearing parts).

5 Information on repairs

- Repairs may only be carried out by experts who have the required skills and expertise.
- Use only original RUB replacement parts and enter the repairs carried out in the chain index card (of the complete lifting means) and use the AYE-D. NET system.

Designation	chain	WLL [t]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	T [mm]	Weight [kg./pc]	Art. no.
VCH-K 16	VIP 16	10	18	70	23	50	46	76	48	40	2.35	8505210
VCH-SL 22	VIP 22	20	25	62	48	50	100	50	53	45	4.2	8502313

Table 1: Dimensions table

Subject to technical modifications

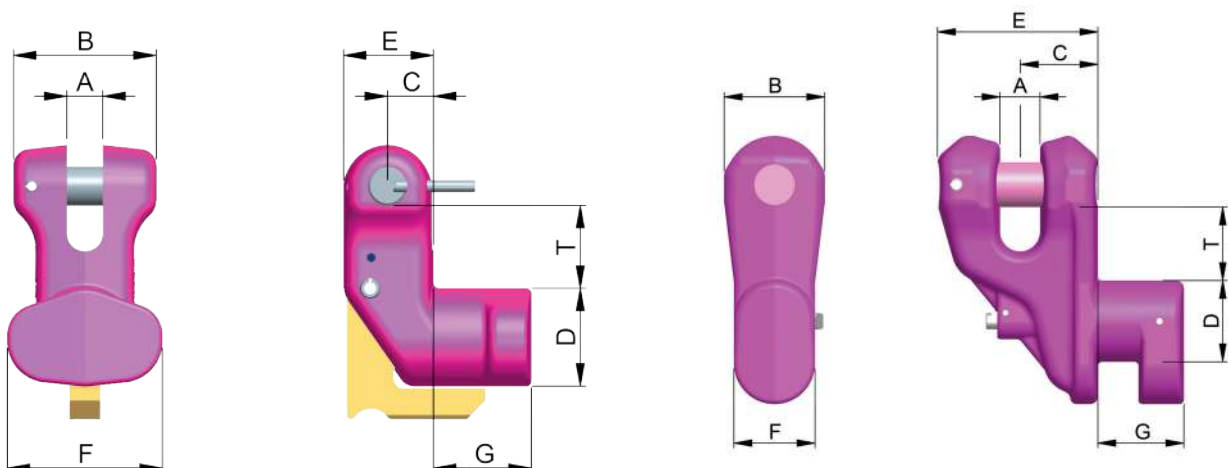


Fig. 9: VCH-K 16 and VCH-SL 22