Operating manual for hydraulic cable-cutting appliance

Art. 216416



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1. Introduction

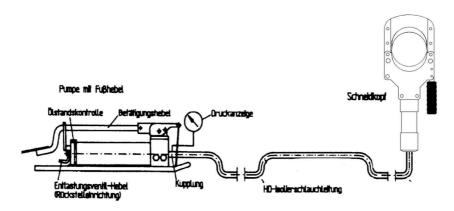
The cable-cutting appliances are used if the free-switched cable can not definite be determined, according to DIN VDE 0105 paragraph 9.6.4.

Special directions

- The cable-cutting appliance is used for cutting cables with rated voltage up to 60 kV and rated frequency up to 60 Hz.
- 2. The cable-cutting appliance is suitable for cutting cables to a total diameter of 120 mm.
- 3. Cables with special-reinforcement (for example shaft-cables, self-supporting air-cables, sea cables and so on) are not permitted to be cut with the cable-cutting appliance.
- If the minimum distance (10 m) while cutting can not be rendered other precautions like earthworks or protection-walls have to be installs to protect the operators against electric arcs.
- 5. Before the beginning of the cutting-process a security-zone in a distance of 10m has to be installed for defending the cutting place against unauthorised persons.

The cable-cutting appliance is a help to work at parts under voltage and according to the DIN VDE 0105 section I 1/07.83 paragraph. 5.2 it has to be treated in such way, this means:

- keep up a perfect condition of the appliance
- look for external damages before using the equipment
- cleaning after each use
- ¬ safety and faultless storage in the belonging transport case
- keep and restore the clean und dry condition after each use
- ¬ annual check of the cable-cutting appliance by an expert.



max. Betriebsdruck: 625 bar

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2. Behaviour at interruptions

If an interruption (for example : a short-circuit) within the cutting should be found the cable can nevertheless be cut off with the cable-cutting appliance.

- After an interruption you always have to look for a voltage-free cutting head.
- ¬ If the cutting-process can not properly be accomplished, operate the relief valve and remove the cutting head with an insulated pole from the interface of the cable.
- Afterwards a query at the agency of the system has to be made whether an interruption—notification is there.
- ¬ Check the cable-cutting appliance after the removing out of the cable-ditch.
- ¬ By influence of an electric arc an independent unlock of the blades can be preventable. If the cutting head would be damaged during a cutting-process the damaged items should be exchanged immediately.
- It is not allowed to cut with a damaged cutting head please send it back to the manufacturer for a check..
- Should an insulating liquid tread out during the cut the cutting-process has to be finished immediately
- Send the cable-cutting appliance for a check back to the manufacturer.



photo: electric arc during a short-circuit

3. Servicing of the safety cable-cutting appliance

Clean the cable-cutting appliance regularly. Especially the insulated hose and the fast-lockcoupling. Roll up the insulate red hose for the transport carefully.

DO NOT CRACK THE INSULATED HOSE

Make an oil-check at the foot operated pump pedal regularly. For an oil change it is only allowed to use the original insulating oil (Shell Naturell)

An oil change has to accomplished and to prove all 2 years. See "service instruction".

The manufacturer is only allowed to make an oil change... Check-up the oil condition

Bring the pump into a horizontal position and open the oil-lock. The oil must not flow out. It has to be very near below the edge of the oil-lock and it should only overflow after an insignificant lifting at the side of the hose. If not - the oil should be refilled. (Look for the passage for filling up with insulating fluid.).

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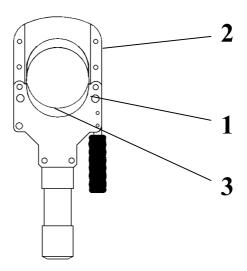
During an oil-check the cutting head, the insulating hose and the pump has to be connected on principle.

Filling with insulating fluid

If the oil condition should not be sufficient the insulating oil has to filled up to the edge of the oil-lock. Allowed is only the original insulated oil.

After the refilling close the oil-lock. During a refilling the cutting head, the insulating hose and the pump has to be connected on principle.

4. Handling of the cable-cutting appliance Art. 216416



- Hold the cutting head with one hand at the grip and with the other one at the cylinder-body. Place the cutting head with an angle of 90° towards the cable which has to be cut. Herewith the cutting head has to be based upon the wall of the cable-trench or the ground with underlay-items. Close the bolting device pin and put the latch in. The head has to be closed completely and the bolt locked!
- ¬ DO NOT CARRY THE CUTTING SYSTEM WITH THE INSULTING HOSE
- ¬ For cutting single conductor cables you have to cut all the three wires.
- ¬ Roll out the insulating hose completely (10m), but take into account that the hose will extend under pressure.
- ¬ Choose for the foot pump the maximum distanced location (10m) to the cutting place...
- The fast-lock-coupling has to be connected good and has to be locked with a secure-screw-ring. Take away the dust protecting cap of the cutting head as well as from the hydraulic hose and connect the coupling-male of the cutting head with the coupling of the hydraulic hose. After that please put the dust protecting cap from the coupling and from the male-coupling together. Herewith you can prevent that you make them dirty during the work
- Before starting the cutting –process you have to communicate with the agency of the system because of a release.
- The cutting process starts by operating the foot pump. It must be pumped until the cut is completely finished..
- Statement for the end of the cutting process:

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After the cable cut is done the demonstrated pressure on the pressure-gauge drops to the direction of "0". You have to pump more until the security valve opens itself - (max. pressure). After that you have to work with the relief valve until the blades are going to their standard positions.

- After the end of the cutting process communicate with the agency of the system and have a query about special occurrences!
- Take the cutting head away from the cutting-place. By carrying with the one hand at the grip and the other at the cylinder-body. Before opening the blades must be in their starting positions!
- After each use, the fast-lock-coupling has to be cleaned and the cable-cutting appliance has to be packed good in its transport case
- If an interruption is there please read the paragraph "behaviour at interruptions".

In case of need please call our technical service.

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5. Potential-balance

There is a fastening possibility at the foot pump for a connection-line to the potential-balance.

6. Directions of safety

- ¬ lit is only allowed that the hydraulic cable-cutting appliance is used for the aim of is definition.
- ¬ It is only allowed to install original spare parts of the manufacturer.
- ¬ It is only allowed to cut aluminium and copper cables. It is not allowed to cut a cable with steel-wires or a steel armoured cable.
- The blades have to be in a 90° position to the cable.
- ¬ Do not touch into the danger zone of the blades.
- ¬ The operating manual has to be at the appliance at every time.
- ¬ The owner has the duty that the user read and understood the operating manualthe directions of safety especially.

7. Service instructions

You take the security cable-cutting appliance to minimise the risk from power currents which are under tension.

The vocation co-operative rules for working with cable-cutting appliances say that the security cable-cutting appliances have to been checked, according to the manufacturer's statement (mostly all 2 years), from an electronic expert for the observance of the limits which are standing in the electronic rules. The insulating fluid has to be changed in the intervals which are demonstrated from the producer absolutely. In additional, this point of time has to be proved because of you can see whether the fluid was changed correctly, at the next use. (vocation co-operative rules as amended in 6/95*)

We are proposing a check within all two years to secure the insulating quality of the hydraulic oil.

- All components will be checked carefully
- The insulating oil will be changed
- All worn-out seals will be changed
- You will receive a cost-estimate for required spare parts
- Also you will receive a documentation of the check for your checking records, I with pressurecheck record according to the ISO DIN 9000.

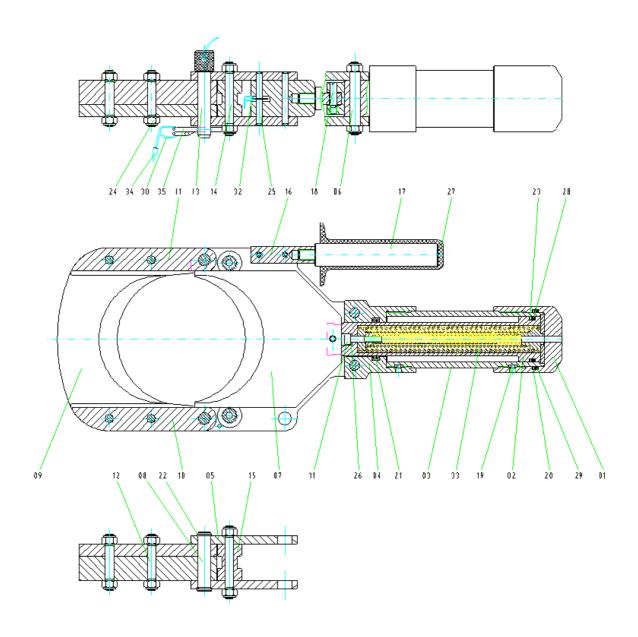
Take our offer up and let us check your equipment from our skilled experts to your security regularly.

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8. Spare Parts List



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Pos.	Description	Item
01a	Zylinderboden G¼"IG	100328-NPT
01b	Zylinderboden NPT3/8"IG	100328-G
02	Kolben	100315
03	Zylinder	
04	Zylinderkopf (Plattenhalterung)	100344
05	Seitenplatte (2x)	100345
06	Gewindebolzen M10 (2x)	100324
07	Schneidmesser	
80	Drehbolzen D12	100330
09	Gegenmesser	
10	Messerführung, links	100320
11	Messerführung, rechts	
12	Gewindebolzen M8x53 (4x)	
13	Verriegelungsbolzen	
14	Gewindebolzen M8x72 (2x)	
15	Führungsrolle (2x)	
16	Klotz für Griff	
17	Griffstange	
18	Spannhülse D6, kurz	
19	Gewindestift M6	
20	Stützring, groß	
21	Abstreifring	
22	Sicherungsring	
23	Stützring, klein	
24	Mutter M8 HF, selbstsichernd (12x)	
25	Spannhülse D6, lang (2x)	
26	Schraubendichtung M6	
27	Gummigriff	
28	O-Ring, klein	
29	O-Ring, groß	
31	Schraube M6/M5	
33	Federpaket	
30+32	+34+35 Federstecker kpl	102761

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9. Signs





for other tools.

Information for the oil



Vor Abkoppeln muss das System Druckentlastet werden!

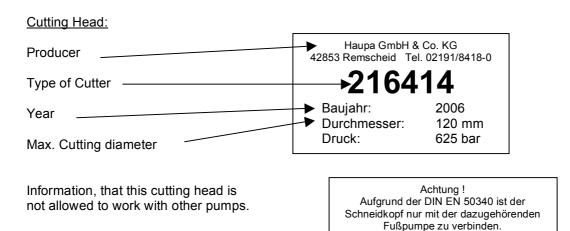
Maximum voltage



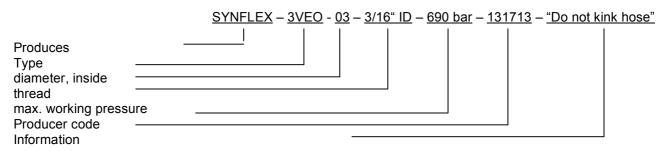
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Insulated hydraulic hose:



10. Directions for the dispatch

For the dispatch the appliance has to stand on a plate or a special case upright. And it has to be that no force, from all sides coming, can reach the appliance. You have to install followed labels for the transportation:

Not throw down
Not throw

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11. Declaration of Conformity

EG-/EU-/UE-KONFORMITÄTSERKLÄRUNG DECLARATION OF CONFORMITY DECLARATION DE CONFORMITE DICHIARATIONE DI CONFORMITÀ

Wir We Nous Nol

Haupa GmbH &Co.KG

(Name des Ausstellers / supplier's name / nom du fournisseur / nome del fornitore)

Königstr. 165-169, 42853 Remscheid, Deutschland (Anschrift / address / adresse / indirizzo)

erklären in alleiniger Verantwortung, dass das Produkt declare under our sole responsibility that the product déclarons sous notre seule responsabilité que le produit dichiariamo sotto nostra unica responsabilità che il prodotto

Hydraulische Sicherheitsschneidanlage Art. 216416

(Typ / type / type / tipo)

siehe Lieferschein

(Seriennummer / serial number / no de série / numero di serie)

auf das sich diese Erklärung bezieht mit der/den folgenden Norm(en) oder normativen Dokument(en) übereinstimmt.

to which this declaration relates is in conformity with the following standard(s) or other normative document(s).

auquel cette déclaration se réfère est conforme à la (aux) norme(s) ou autre(s) document(s) normatif(s). al quale si riferisce questa dichiarazinie è conforme alla(e) norma(e) o altro(i) documento(i) normativc(i).

EN 292-1, EN 292-2, EN 249, EN 394, pr DIN EN 982, CEE 20, CEE Amd.2, EN 60555-1/2/3, CEE (Titel und (oder) Nummer / title and (or) number / titre et (ou) numéro / titole e (o) numero)

Gemäß den Bestimmungen der Richtlinie(n). Following the provisions of Directive(s). Conformément aux dispositions de(s) Directive(s). Conformemente alle disposizioni della(e) direttiva(e).

> 98/79/EG, 91/368/CEE, 93/44/CEE, 93/68/CEE 98/37/EG, 73/23/EWG, 89/336/EWG

(Titel und (oder) Nummer / title and (or) number / titre er (ou) numéro / titolo e (o) numero)

Remscheid, den 11.11.2009 (Ort und Datum der Ausstellung) Geschäftsführers) (Place and date of issue) (Lieu et date) (Luogo e data di emissione)

(Name und Unterschrift oder gleichwertige Kennzeichnung des

(name and signature or equivalent marking of authorized person) (nom et signature du signataire autorisé) (nome e firma di persona autorizzata)

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