


GB Battery Packed Compact Hydraulic Punch

Artikel Nr. / Prod.-No. / N° de produit / No. de articulo 02070



Safety instructions, Specified Conditions of Use, Performance dates, Description, Operating functions, Punching with round, square and oblong puncher, Available hydraulic screws, distance inserts and spacer sleeves, Operating time, Technical data battery and battery charger, Battery and battery charger, Punching time and punching capacity, Maintenance, Storage and transport, Disposal, CE-Declaration of Conformity.	Please read and save these instructions!		Page 11
---	--	---	----------------

Safety instructions



Wear safety goggles during drilling the guiding hole and during punching.



Keep hands out of the punching area during the punching process to avoid serious injuries.



Make sure that no other persons stay in front or close to the hydraulic punch during the punching process to avoid serious injuries caused by splinters at material failure or incorrect use of hydraulic punch.



Before changing the punching inserts it's absolutely necessary to remove the battery from the device to avoid unintended use.



While operating it can come to sparking which could set fire on flammable or explosive materials.



At intensive operating the hydraulic punch can be damaged because of overheating.



The hydraulic punch must not be operated in damp locations.



The punching process can be interrupted at any time by releasing the operating switch. Then the hydraulic punch can be vented by pressing the vent lever.

Specified conditions of use

The Battery Packed Compact Hydraulic Punch is destined to punch metal sheets.

Performance dates

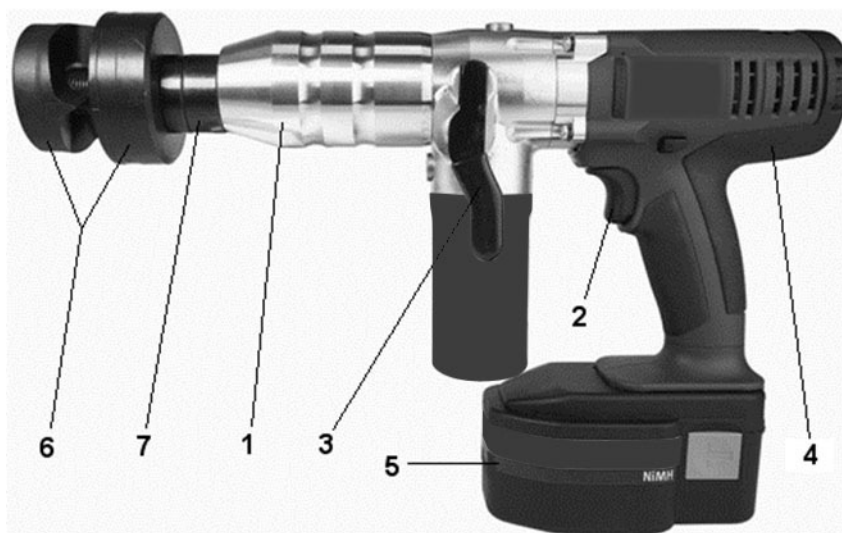
- Round punch: up to 80 mm Ø
(3,0 mm St. 37, 2,0 mm chrome nickel steel)
- Square and oblong punches: 68 x 68 mm
(3,0 mm St. 37, 2,0 mm chrome nickel steel)
- 92 x 92 mm only with special hydraulic screw and spacer sleeves
(2,0 mm St. 37, 1,5 mm chrome nickel steel)
- Punching capacity: 80 kN with pressure relief valve

The optimal working temperature for the Battery Packed Compact Hydraulic Punch is between 15° and 25°C.

Description

The ALFRA Battery Packed Compact Hydraulic Punch is a hand operated device and is made up of the following components:

1.	Punching head	head for the reception of the tension bolt including punch and die
2.	Operating switch	initiating of the punching procedure
3.	Vent lever	lever for vent of the punching head
4.	Drive	drive with operating switch
5.	Battery	rechargeable 18 V, 3,0 Ah NiMH battery
6.	Punch Insert	composed of punch and die to perforate the holes
7.	Spacer sleeves	3 spacer sleeves in different strengths



Operating functions

The punching will be initiated through the activation of the operating switch. This switch must be pressed during the whole punching process. After terminating of the punching process (if the punch has perforated completely) unblock the switch. By pressing the vent lever once the piston moves backwards to its starting position.



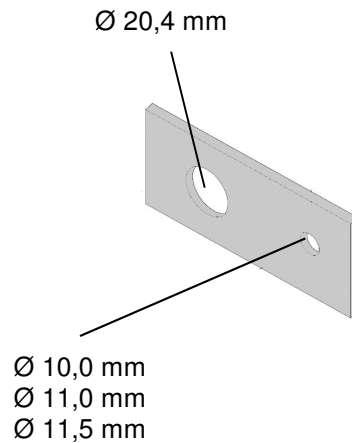
If the hydraulic punch is strained to the maximum pressure limit (due to improper tool selection, incorrect spacers or false assembly) a higher pressure to the vent lever is necessary.

Punching with round, square and oblong puncher

1. Pre-drilling with a twist drill or a multistep drill

Drilling diameter for standard punches:

- for screws with \varnothing 9,5 mm drill min. \varnothing 11,0 mm
- for TriStar split punches drill \varnothing 10,0 mm
- for screws with \varnothing 11,1 mm in stainless material drill min. \varnothing 11,5 mm
- for screws with \varnothing 19,0 mm drill min. \varnothing 20,4 mm
(pre drilling a smaller diameter und then punching is also possible).



2. Screw the hydraulic screw with the short thread side \varnothing 19,0 mm completely into the hydraulic cylinder.
3. Place the suitable spacer sleeves with the die on the hydraulic screw.



The application of a spacer sleeve is absolutely necessary.

4. Put the hydraulic screw through the pre drilled hole and screw in the round punch from the backside. For square and oblong punches plug the punch on the axis guidance of the hydraulic screw and retain with the corresponding counter nut. When mounting the hydraulic screw for square and oblong punches, screw only the long threaded side into the punching head. Align the die to the crossline mark using the line mark on the stamp.



Pay attention on the right combination of punch and die. The diameter is stamped on correspondingly.



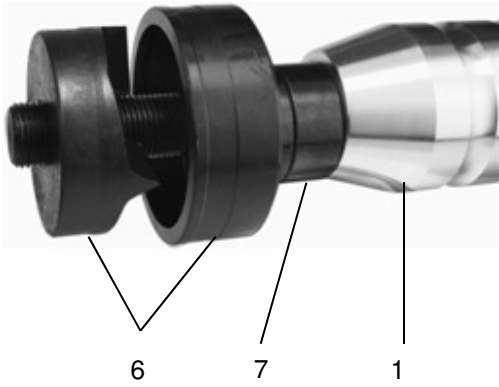
Do not punch with incomplete screwed in punches. The whole thread turns of the punch have to be screwed in on the hydraulic screw.



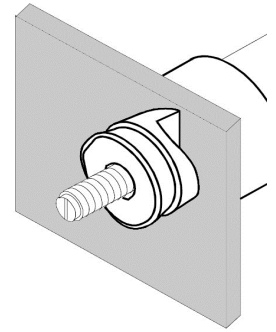
The punch should not hit the interior ground of the punch. This can cause damages to the tool and on the hydraulic punching unit.



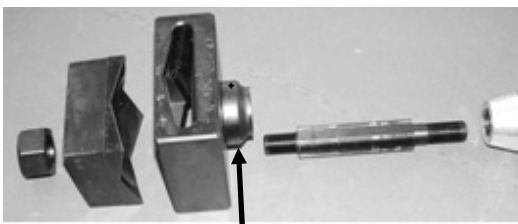
The punch must be screwed on, that a gentle contact with the sheet is given.



- 1 - Punching head
- 7 - Spacer sleeve
- 6 - Punching inserts (punch and die)



For the application of square punchers 92 x 92 mm the special hydraulic screw (Prod.-No. 01395) and the spacer sleeve (Prod.-No. 01396) is necessary. Screw the spacer sleeve tightly on the die of the square punch 92 x 92 mm.



- 1 Punching head
- 6 Punching inserts:
punch 92 x 92 mm,
die 92 x 92 mm
- 7 Spacer sleeve, Prod. No. 01396
- 8 Counter nut
- 9 Special hydraulic screw, Prod. No. 01395

- 8
- 6
- 6
- 7
- 9
- 1

5. Press the operating switch and the punching process will be initiated. The punching process is finished as soon as the punch has punched the sheet.
6. Press the vent lever located on the side so the punch will be vented and the piston moves backwards to his initial position.



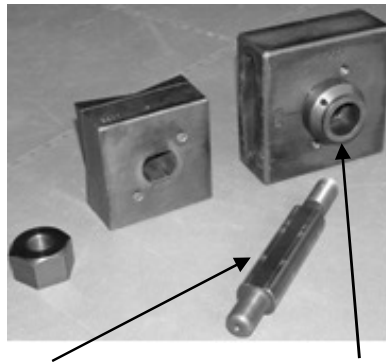
Vent lever

7. Unscrew and remove the die or correspondingly the counter nut and remove also the chad from the die.

Available hydraulic screws, distance inserts and spacer sleeves



Distance inserts
Prod. No. 02004



Special hydraulic
screw
Prod. No. 01395

Distanzbuchse
Prod. No. 01396

Operating time

The device is not suitable for permanent operation. After approx. 40 to 50 punching procedures a break should be taken of approx. 10 to 20 minutes so the hydraulic punch cools down.

Technical data battery and battery charger

- Battery: 18 V; 3,0 Ah NiMH
- Charging time: 45 min. after complete discharge
- Charging cycles: ~ 500 at normal conditions
- Use: 0° bis + 40° C, loosing capacity under 0° C

- Battery charger:
 - charges all batteries between 18 up to 28 V
 - compatible for NiCad-, NiMH- and Li-Ion-batteries
 - automatic temperature control
 - the change between quick charges to conservation charging avoids overloading of the battery cells
 - the state of charge will be indicated by LED-indication
 - the PCB is completely moulded

Battery and battery charger



The battery can be used both-sided for optimal counterweight to the punching tool.



No dissimilar batteries may be used in the charger.



The battery as well as the charger must be protected against humidity.

The charger is designed for a voltage of 230 Volt / 50 Hz.



Prod. No. 02071



Prod. No. 02072

New batteries must be fully charged before first use. For charging the battery put the plug of the charger into to the power outlet and the battery into the charger. The charging time is approx. 45 minutes.



Do not work with a feeble or partial discharged battery, especially at application with large diameter, square and oblong punches. The device could stop during the punching procedure and it could come to damages.



Charge the battery, as soon as the speed of the hydraulic punching unit slows down.

The battery charge level can be read off an LED on the charging unit.

Green: battery is completely charged

Red: battery is empty and is charging

Blinking: battery is not completely inserted or battery is too hot. An acoustic signal sounds.



Do not charge a battery which is partial unloaded.



If you want to charge 2 batteries one after another, wait approx. 15 minutes before you load the 2nd battery.

Punching time and punching capacity

22,5 mm Ø	St. 37	2 mm	5 sec.	190 Holes / Battery
63,5 mm Ø	St. 37	2 mm	7 sec.	100 Holes / Battery
68 x 68 mm	St. 37	2 mm	7 sec.	70 Holes / Battery

Maintenance

The device is designed to be maintenance free.

If the device should not build up pressure contact the distributor or the after-sales-service.

Storage and transport

After use put the punching unit back into the transport case. Store in a dry place.



Disposal

The disposal of the individual components must occur separately. The oil must be drained first and then disposed.



At disposal of all parts of the unit please respect the EC-Environmental-Norm.



Hydraulic oils pose a danger for the ground water. Uncontrolled drain or inappropriate disposals are strictly forbidden.



The Battery must be disposed under special consideration of the battery directive.



The device must not be disposed as a complete unit into the residual / non-recyclable waste because it could cause damage to the environment on the landfill.



A revocation of the used appliances through the manufacturer can be assured at a free transmittal.

CE Declaration of Conformity

We

Alfred Raith GmbH
2. Industriestraße 10
68766 Hockenheim

declare under our sole responsibility that this product:

ALFRA Battery Packed Compact Hydraulic Punch

is in conformity with the following standards or normative documents:

DIN EN 60745-1
DIN EN 292 Part 1 and 2
EN 294
EN 349
EN 60204-1
EN 28662-1
EN 50081-1
EN 50082-2
EN 60529

in accordance with the regulations of directives 98/37/EEC, 89/335/EEC.

Documentation:



Cornelia Dorn

Hockenheim, 01.09.2008



Markus A. Döring
(Geschäftsführer)



BONAB, Aröds industriväg 76, 422 43 Hisings Backa
Tel: 031-724 24 24, www.bonab.se, info@bonab.se