

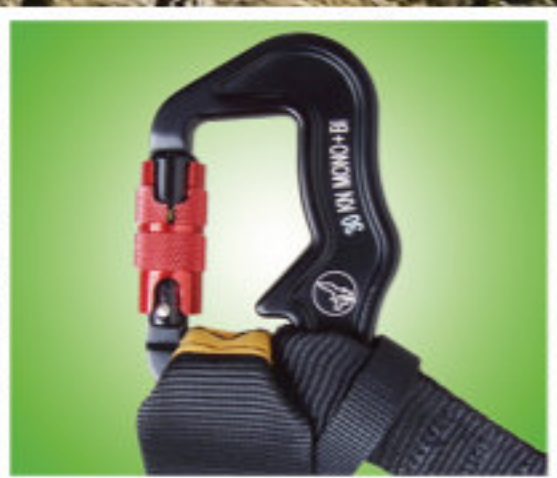
Beställ Charly-prylar ifrån
rpmSport.net

**CHARLY**
BEST OF AIR



Catalog N°28

Airsport equipment since 1974



www.finsterwalder-charly.de

OUR OFFER



Competent consulting by manufacturer

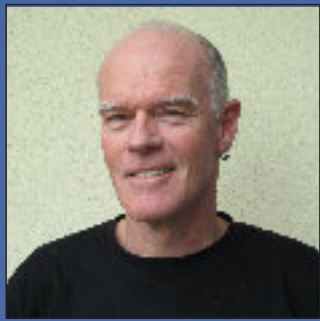
Visit our store in Munich, Pagodenburgstr.8, (daily opening hours: 8 a.m. – 4 p.m.), call us (+49 89 811 6528 or 811 8592) or send us an email to: office@finsterwalder-charly.de

Special articles from our repair shop storage have to be pre-ordered one or two days beforehand.

The rescue systems, aviation helmets, carabiners and aviation accessories developed and manufactured by us, are marketed worldwide via selected flight schools and also directly.

Kortel-Design paragliding harnesses and Skywatch anemometers we distribute as wholesalers.

Das Team of Finsterwalder & Charly:



Mike Golder
Customer service PG & HG
mike@finsterwalder-charly.de



Christian Wohlleb
Export & order acceptance
christian@finsterwalder-charly.de



Sandra Göhl
Order acceptance
sandra@finsterwalder-charly.de



Christina Finsterwalder
Purchase & Webshop
christina@finsterwalder-charly.de



Gabi Zeitler
Accountancy, order acceptance
gabi@finsterwalder-charly.de



Ing. Tom Grabner
Product development
tom@finsterwalder-charly.de



Thomas Finsterwalder
Management
thomas@finsterwalder-charly.de

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Your right to return goods

Should the delivered goods not meet your expectations, you may return them within 14 days of receipt. Please see our terms and conditions at the end of the catalog for further details.

Discount

We offer a 2% discount on cash or advance payments of orders above € 50.-. The delivery is free of shipping costs within Germany for online orders above € 50.-.



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Charly rescue systems: where you can count on!

Specialized on rescue systems since 1986

Since flying with a rescue system became obligatory in aviation sports in 1986, Charly is one of the leading supplier of rescue systems for hanggliders and paragliders due to its innovation. Center lines construction, double cap technology, rocket output, steerable rescue systems; Charly has always been belonging to the pioneers. With Tom Grabner's DIAMONDcross, the first steerable cruciform canopy, Charly presented another major milestone in the construction of rescue systems..



Engineer Tom Grabner who has been leading the developments at Charly since 2016, is an experienced acro pilot for paragliders. In this function, he constantly tests the rescue systems under real-life conditions. With the G-force trainer, developed by him, the deployment of rescue systems has been trained in case of emergency for the paraglider course for years. Tom Grabner combines theoretical and practical experiences for the development of rescue systems like nobody else.



DIAMONDcross

Tom Grabner
DESIGN

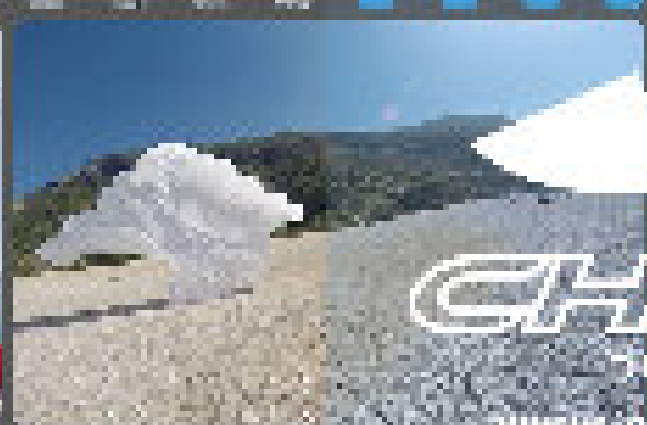
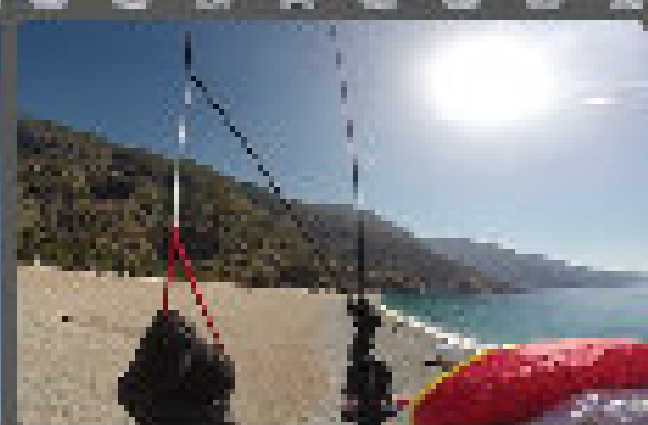
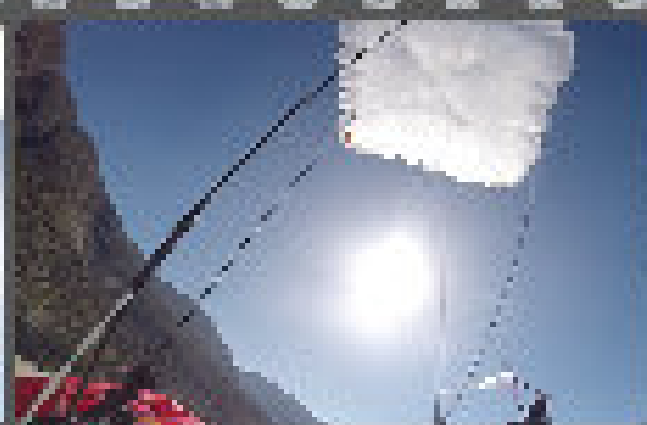
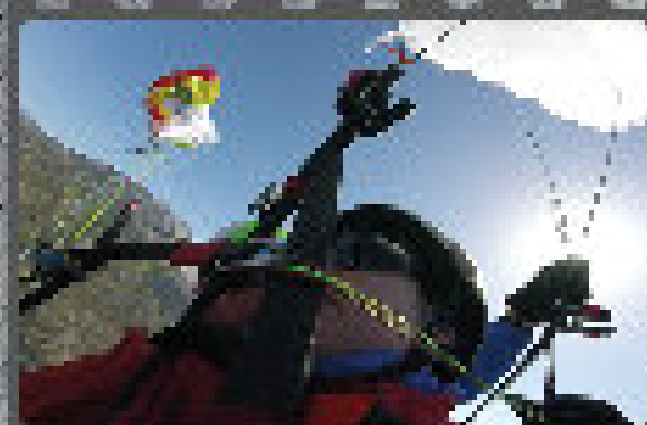
12 MODELLE FÜR GS & HG

NEU:

DIAMONDcross

150 ST Tandem

Hike & Fly



CHARLY
 BEST OF AIR

www.charly-produkte.de

ST: STEUERBAR

BASIC + HG: NICHT STEUERBAR

Superlight steerable cruciform canopy Charly DIAMONDcross ST



The new DIAMONDcross ST from Charly presents three main innovations:

1. It has a **defined forward speed in diagonal direction** with the effect of a **significantly reduced sink speed**. This results on the one hand in a higher aspect ratio compared to conventional cruciform canopies, those propulsion mainly takes place towards one side, and on the other hand in the asymmetrical air flow of the convex sides of the DIAMONDcross canopy, thereby receiving an ascending forced optimised profile.
2. The horizontal movement which is typical for every modern round canopy and cruciform canopy, can be steered for the DIAMONDcross ST **in a certain direction, if required**. Obstacles like e.g. power lines can thus be avoided and an emergency landing field can be precisely approached with a glide ratio of ca. 1:1,5. **There are no disadvantages for the DIAMONDcross ST compared with conventional cruciform canopies.**
3. The DIAMONDcross has different line lengths which has the effect that the strips of the canopy don't lie on top of each other when packing the canopy. This diversification causes an easier air inlet when opening and thus an **increased opening speed** compared to conventional cruciform canopies. The packing of the DIAMONDcross **is not more time-consuming or more complex than for a normal cruciform canopy.**

The superlight DC thus combines the low packing effort of round- and cruciform canopies with the controllability of Rogallo rescue systems. For the DIAMONDcross, there is no risk of „downplane“ directly after opening, which is the case for Rogallo rescue systems, also when flown too slow, if it opens with the top downwards.

The concept of the DIAMONDcross works without pre-brake and therefore the system remains very easy to handle and is reliable..



Riser protection for tandem and motor

€



We recommend to order the CHARLY riser protection for rescue systems for paramotor glider and tandems, as those connection straps partially run outside of the harness.

With velcro straps, the CHARLY riser protection can be led from the suspension point of the rescue system until the protected area inside of the harness. The risers are stored cleanly inside and protected against UV radiation and mechanical stress.

The tandem version is most appropriate for the DIAMONDcross 160 ST tandem as well as for light tandem-V-lines. As the CHARLY riser protection is no weight-bearing or certified component, it can individually be shortened and thus be adapted to various harnesses and spreaders. The interface as well as the zipper ends are masked with a special self-sticky repair tape or are sewed. It is only to be ensured that the zipper can be freely opened in case of rescue opening.

HFA195RST	Riser protection tandem	32,80
HFA195RSM	Riser protection motor	32,80

DIAMONDcross

Tom Grabner DESIGN

Further safety aspects:

- There are no potential hazards in consequence of the steer-ability: The twisting of the lines, which often is unavoidable when using a controllable rescue system, doesn't cause any special risks. The DIAMONDcross can also be controlled in twisted condition. The red colour marking on the front head indicates clearly visible the flight direction for the pilot.
- No risks can arise by excessive pulling or by non-use of the brake handles. There is no risk of stall. A pulling of the brakes is not required when landing, as the canopy already is trimmed at minimum sink rate. The forward speed also reduces significantly the risk of spine compression during the landing.
- The long suspension lines of the DIAMONDcross and the symmetric shape of the canopy lower the risk of causing a collapse with the rescue system and the glider.
- Forward movement and low sink rate reduce in addition the risk of a side slip between the rescue system and the glider, and therefore higher sink rates.
- A short stall phase of the DIAMONDcross after opening prevents the formation of a „downplane“-position. The DIAMONDcross merges without the help of the pilot after a short independent stall phase in an easy, very stable and swing-free forward flight.
- The special design of the inner container, optimized with the help of Tom Grabner's G-Force trainer ensures a safe deployment of the DIAMONDcross with low effort needed. Especially with regard to inconvenient pulling directions when deploying the rescue system. Therefore we absolutely recommend to use the original approved container with the rescue system and to adapt the rescue handle of the harness to the container by an authorized service company.
- The inner container has a separate space for the suspension lines.
- The canopy will only be deployed after aspect ratio of the suspension lines, which enables a fast and controlled opening. The risk of a cravat of rescue system and glider is therefore reduced.
- The superlight, optional steerable cruciform canopy from Charly's product designer Tom Grabner has been registered for patent and certified in four sizes.



i Do I have to disconnect my glider when opening the DIAMONDcross?

No

Although if the pilot reacts in a passive way, the DIAMONDcross works perfectly. The risk of a side slip is very low for a DIAMONDcross. Nevertheless, the glider should be disconnected if possible – from all rescue systems, no matter whether they are steerable or not. The disconnection can be made by separating the glider from the carabiner, as in this case, an automatic separation system for speed system is absolutely essential. Further opportunities are quick-out carabiners or cutting off the main lines by means of a jack knife. With the Finsterwalder quick-out carabiners, the disconnection is very simple.

As you can't make general statements about how the glider reacts after rescue deployment and every rescue system is always influenced by the residual resistance of the glider, a complete disconnection of the glider can only be an advantage – also if a disconnection is not absolutely necessary for the DIAMONDcross.

DIAMONDcross basic light

The non-steerable version of the DIAMONDcross ST is about 90 gram easier and cheaper than the steerable version. All other features and technical data are identical with the DIAMONDcross ST.

With a set of new risers you can subsequently modify the DIAMONDcross basic into a steerable system by the manufacturer or another authorized repair shop.

The modification costs 140,- and includes re-packing.

For more information and videos go to www.charly-produkte.de

Tom Grabner DESIGN

DIAMONDcross ST light

DIAMONDcross basic light

	DIAMONDcross ST light 100	DIAMONDcross ST light 125	DIAMONDcross ST light 160	DIAMONDcross 160 ST Tandem	DIAMONDcross ST light 220	DIAMONDcross basic light 100	DIAMONDcross basic light 125	DIAMONDcross basic light 160	DIAMONDcross basic light 220
Max. load:	100 kg	125 kg	160 kg	160 kg	220 kg	100 kg	125 kg	160 kg	220 kg
Flat surface:	25,2 m ²	30,7 m ²	41,0 m ²	41,0 m ²	59,2 m ²	25,2 m ²	30,7 m ²	41,0 m ²	59,2 m ²
Weight:	1170 g*	1390 g*	1780 g*	1850 g*	2520 g*	1140 g*	1350 g*	1750 g*	2460 g*
Sink speed:	4.7 m/s @ 100 kg 3.6 m/s @ 70 kg	4.5 m/s @ 125 kg 3.5 m/s @ 85 kg	4.5 m/s @ 160 kg 3.5 m/s @ 110 kg	4.5 m/s @ 160 kg 3.5 m/s @ 110 kg	4.5 m/s @ 220 kg 3.5 m/s @ 160 kg	4.7 m/s @ 100 kg 3.6 m/s @ 70 kg	4.5 m/s @ 125 kg 3.5 m/s @ 85 kg	4.5 m/s @ 160 kg 3.5 m/s @ 110 kg	4.5 m/s @ 220 kg 3.5 m/s @ 160 kg
Volumetric value:	3900 ccm	4700 ccm	5300 ccm	5300 ccm	7300 ccm	3900 ccm	4700 ccm	5300 ccm	7300 ccm
Certification:	EN, LTF	EN, LTF	EN, LFT	EN, LFT	EN, LTF	EN, LTF	EN, LTF	EN, LTF	EN, LTF
Article number:	HFa195/100	HFa195/125	HFa195/160	HFa195/160T	HFa195/220	HFa195/100B	HFa195/125B	HFa195/160B	HFa220B
Price:	798,00 €	848,00 €	948,00 €	973,00 € **	1.298,00 € **	778,00 €	828,00 €	923,00 €	1.273,00 € **

* the weight includes the connection to the harness, as the V-line is not necessary

**For the tandem versions, we recommend the riser protection for tandem to order at the same time!

RESCUE SYSTEMS FOR PARAGLIDERS



Second Chance

€



The worldwide top-selling PG rescue system has proven itself time and time again in emergency situations. Lightweight and with small packing dimensions at a great value for money.

Tandem rescue system Duo 200 GS

€



High-quality double canopy chute, designed for rapid deployment and minimum sink rates. One of the few rescue systems with an allowable load of 200 kg as determined by the DHV.

Charly round canopys for PG

Modell	Second Chance 86	Second Chance 94	Second Chance 118 M
Recommended Max load	86 kg	94 kg	118 kg
Flat surface:	28 m ²	32 m ²	36 m ²
Weight:	1560 g	1620 g	1920 g
Sink speed:	5.5 m/s @ 70 kg 5.9 m/s @ 80 kg	4.7 m/s @ 70 kg 5.9 m/s @ 90 kg	4.9 m/s @ 100 kg 5.4 m/s @ 110 kg
Volumetric value:	4200 ccm	5620 ccm	7280 ccm
Certification:	LTF	LTF	LFT
Article number:	HFa150/86	HFa150/94	HFa150/118
Price:	499,00 €	529,00 €	

Charly Rundkappen Rettungsgerät für Doppelsitzer GS

Modell	Duo 200 GS
Recommended Max load	200 kg
Flat surface:	55 m ²
Weight:	3810 g
Sink speed:	4.3 m/s @ 140 kg 5.9 m/s @ 200 kg
Volumetric value:	15900 ccm
Certification:	LTF
Article number:	HFa192
Price:	969,00 €



RESCUE SYSTEMS FOR PARAGLIDERS



Front containers for rescue €

Charly's rescue system containers allow for deployment in all directions and feature a window for an easy check of the fastening pin's correct position.

i The integrated **Charly loop tensioner system** provides for constant release force of the fastening pin, independent of the rescue system's packing pressure. The otherwise prescribed securing of the fastening pin by means of a predetermined breaking point becomes unnecessary. The use of a loop tensioner is recommended by the DHV to reduce the risk of unintentional deployments. Moreover, it allows for hassle-free test deployments that are strongly suggested for training purposes.

Charly Frontcontainer cockpit



HFa189



Frontcontainer for rescue system with detachable instrument compartment for flight instruments and other stuff like mobile phone, purse, adjustable fixing with line connector and snap-fits. The instruments are well protected during the flight and transportation. The instrument compartment can be brought easily in a slightly inclined position, so that an optimal perspective on the instruments is guaranteed. The upper part of the container with the valuables can be separated after the flight with a zipper and can be stowed separately while the lower part can stay with the rescue system and the harness. Fitting for all types of harnesses. Available for all sizes of rescue systems:

Size **M** suitable e.g. for DC100, SC86, SC94

Size **L** suitable e.g. for DC100, DC125, SC118

Size **XL** suitable e.g. for DC160

HFa189 Charly Frontcontainer cockpit 94,50

HFa189AG Release handle for Frontcontainer cockpit 17,80

Lightweight container „Expert“ compressible

The rescue system V-line, integrated in this 240g light Hike&Fly front container also serves to fix the containers with the carabiners.



Suitable e.g. for SC84, SC94, Rev.1, DC100, DC125

HFa1875 Charly lightweight frontcontainer „Expert“ 72,00

Service center for Charly PG & HG rescue systems

Charly recommends to consult the flight school Hochries for the checking and packing the pg and hg rescue systems.

Flugschule Hochries • Flintsbacher Str. 6 • D-83098 Brannenburg
Tel.+49(0)8034-6079618 • Mail: info@flugschule-hochries.de

BauAir Gleitschirmservice • An der Betonbrücke 8 • D-83661 Lenggries
Tel.+49(0)8042 9740301 • Mail: info@bauair-gleitschirmservice.de

Inner container for rescue systems €

i The highly recommended deployment of the rescue systems at the G-Force-Trainer show again and again that it is hard for pilots pulling the rescue system out of the harness, when being in an emergency situation. The reason is that the rescue systems are mostly available in universal inner containers which are both compatible for harnesses with built-in containers, and for front containers. However, this compromise is not ideal. Tom Grabner therefore has developed for harnesses and front containers two different inner containers, optimised on the G-Force-Trainer.

Charly inner container for harnesses



Trials have shown that this soft container with its flat, conical shape and the rounded corners can be deployed much easier and with lower effort of the rescue system compartment of the harness, compared to cubic and volume compressed inner containers. However, this inner container is less suitable for front containers.

The inner container have a separate area for the suspension lines, which is of advantage for a safe storage in the harness and a controlled deployment in emergency situations. The canopy will only be released after stretching the suspension lines, it opens fast and controlled. The risk of tangling from paraglider and rescue system is thereby minimised.

The closing rubbers consist of rubber straps with fabric coating. They are much more durable than conventional packing rubbers. The inner containers are both suitable for the Diamond Cross rescue systems and the conventional Charly rescue systems. From our perspective, it is no problem to use this inner container for other rescue systems.

The re-packing of rescue systems into our containers is possible on request and costs 25,00 €. This work can also be done by all Charly authorised dealers.

Size **S** (41,5 g) suitable for DIAMONDcross ST light 100, DIAMONDcross basic light 100, Charly Expert 100

Size **M** (43 g) suitable for DIAMONDcross ST light 125, DIAMONDcross basic light 125, DIAMONDcross delta light 160, Charly SECOND CHANCE 86, Charly SECOND CHANCE 94, Charly Expert 120, Charly Revolution GS 1

Size **L** (46,5 g) suitable for DIAMONDcross ST light 160, DIAMONDcross basic light 160, DIAMONDcross delta light 160, Charly SECOND CHANCE 118, Charly Revolution GS 2, Charly CHARLY HG, Charly Revolution II HG, Charly CLOU HG SAS

Size **XL** (50 g) suitable for DIAMONDcross ST light 220, DIAMONDcross basic light 220

HFa1950 Charly inner container for harness

29,00

Charly inner container for front container



The inner container for front containers has the conventional round shape. It also has a separate area for the suspension lines and is equipped with durable coated closing rubbers.

The inner containers are both suitable for the Diamond Cross rescue systems and the conventional Charly rescue systems. From our perspective, it is no problem to use this inner container for other rescue systems.

The re-packing of the rescue systems into our containers is possible on request and costs 25,00€. This work can also be done by all Charly authorised dealers.

Size **S** (41,5 g) suitable for DIAMONDcross ST light 100, DIAMONDcross basic light 100, Charly Expert 100

Size **M** (43 g) suitable for DIAMONDcross ST light 125 DIAMONDcross basic light 125, DIAMONDcross delta light 160, Charly SECOND CHANCE 86, Charly SECOND CHANCE 94, Charly Expert 120, Charly Revolution GS 1

Size **L** (46,5 g) suitable for DIAMONDcross ST light 160, DIAMONDcross basic light 160, DIAMONDcross delta light 160, Charly SECOND CHANCE 118, Charly Revolution GS 2, Charly CHARLY HG, Charly Revolution II HG, Charly CLOU HG SAS

Size **XL** (50 g) suitable for DIAMONDcross ST light 220, DIAMONDcross basic light 220

HFa1951 Charly inner container for front containers

29,00

i Please contact us for professional adjustment of your DIAMONDcross inner container to your harness.

Light V-Lines €

Charly Hike & Fly V-Line



If you want to reduce the weight of your paragliding equipment, you have definitely to choose Charly Hike & Fly V-Lines! They are integrated in the DIAMOND-cross paragliding rescue systems anyway and thus tested EN, LTF to 2400 DaN. They are suitable for Mono and Tandem. We recommend our softlink to be fixed on the harness.

- **Material:** High power dyneema
- **Lengths:** 140 cm, 160 cm
- **Weight:** 46g, 51g

HFa1882 Charly Hike & Fly V-Line 140 cm

39,50

HFa1884 Charly Hike & Fly V-Line 160 cm

44,50

RESCUE SYSTEMS FOR HANG GLIDERS



Tom Grabner
DESIGN

DIAMONDcross delta light

The sensationally light and small DIAMONDcross rescue systems by Tom Grabner are also available for hanggliders.

The most important features of the DIAMONDcross delta light at a glance:

- Reduction of weight and packing dimension due to high strength lighter material and dyneema lines
- Extremely low sink rates by lateral drifting of the cruciform canopy in diagonal direction and its pendulum-free condition
- Rapid deployment by fanned out canopy
- New type of inner container which makes deployment easier and minimizes the risk of tangling (cravats)

Rescue Systems for Hang Gliders

Modell	DIAMONDcross delta light 125 • new	DIAMONDcross delta light 160 • new	DIAMONDcross delta light 220 • new	Charly HG
Max. load	125 kg	160 kg	220 kg	125 kg
Flat surface:	30,7 m ²	41,0 m ²	59,2 m ²	36 m ²
Weight:	1430 g	1830 g	2540 g	2080 g
Weight incl. Rotor:	1600 g	1970 g	2710 g	2120 g
Sink speed:	4.5 m/s @ 125 kg 3.5 m/s @ 85 kg	4.5 m/s @ 160 kg 3.5 m/s @ 110 kg	4.5 m/s @ 220 kg 3.5 m/s @ 160 kg	5.4 m/s @ 110 kg 4.9 m/s @ 100 kg
Volumetric value:	4700 ccm	5300 ccm	7300 ccm	7280 ccm
Certification:	EN, LTF	EN, LTF	EN, LTF	LTF
Article number:	HFa195/125HG	HFa195/160 HG	HFa195/220 HG	HFa110
Price incl. Rotor:	957,00 €	1058,00 €	1.387,00 €	638,00 €
Price without Rotor:	868,00 €	969,00 €	1.298,00 €	549,00 €



Rescue equipment for UL

Various spare parts for UL rescue systems available on request!

Service Center for Charly UL Rescue systems



As a service company for UL rescuers we recommend Parachute-Wagner.

He also carries out the airworthiness checks for Charly.

Fallschirm-Wagner • Latscherstraße 8 • D-75365 Calw
Tel. +49(0)7051-3783 • www.fallschirm-wagner.de

Rotor

€



Rotor for HG & UL rescue systems

In emergency situations, hanggliders and microlights tend to start rotating which can cause the reserve to tangle. This is avoided by our rotor.



Rescue systems for hang gliders should be ordered together with a Rotor

We recommend the Rotor to be sewn into the main bridle at the ends of the suspension lines by the rescue system manufacturer. This can be done at the next packing inspection.

Equipped with loops, the Rotor can also be installed by the pilot himself.



Runs on 3 sets of bearings, tested breaking load of 5.000 kg at a weight of only 120 g, DHV certified for all HG and UL chutes when installed by the manufacturer.

HFa160	Rotor	72,00
HFa161	Rotor with loops/with installation	89,00



KORTEL Design is a French manufacturing company, founded by Denis Cortella in 1999. Denis was French champion in paragliding in 1998, 2004 and 2005, as well as vice-champion in 1995 and 2000. The vice-world-champion (PWCA 2005) Max Jeanpierre joint as a partner in 2006. Since 2010, CHARLY Produkte has been taken over the German and Austrian general distribution for these innovative harnesses. KORTEL design offers a perfect complement to the products of CHARLY with its portfolio.



KORTEL Kruyer III

€

The Kruyer III remains the mountain harness of the range. Completely reworked compared to the previous version, it incorporates a brand new 3D molded geometry. This technology offers unparalleled comfort for a harness of this weight.

It now also has a possible rescue connection to the shoulders. A difficult takeoff? It is now very easy to open 1 leg (or both!) to put the harness on thanks to the exclusive "Konnnect" system from the Kolibri PRO (X-Alps).

- Dynema lines structure
- Opening leg system
- Emergency connection to the shoulders
- Adjustable chest strap
- Possibility of fixing the Sak III (reversible bag-air-bag). The Sak III brings a gain in comfort and handling to the harness.
- Supplied with soft-link connectors (12g)
- Certification: EN; LTF if used with the SAK III
- Sizes: S (<168 cm), M (<180 cm), L (<192 cm), XL (<205 cm)

HG8 KORTEL Kruyer III



KORTEL Karver II

€

KARVER was the first shoulder strap-free paragliding harness worldwide. Kortel KARVER II retains the innovative concept of its predecessor yet saves another 35% of weight. In particular the improved thigh support system makes the new version even more comfortable. The ideal harness for mountaineering pilots and short XC flights.

- Special buckles for waist and leg strap adjustment
- Kortel's versatile lightweight model: buckles suitable for use in all conditions (snow, sand, etc.)
- Can be combined with Kortel SAK II (reversible backback with airbag) for improved comfort and handling
- Ready for use with a speed system
- Certification: EN; LTF with SAK II
- Weight: 775 g (S), 840 g (M), 945 g (L), 1050 g (XL)
- Sizes: S (< 1,60 m), M (< 1,80 m), L (> 1,80 m), XL (> 1,90 m)
- Colours: black/blue

HG91 KORTEL Karver II

345,00



KORTEL Sak III

€

The Kortel SaK III is Kortel Design's new reversible bag. It is compatible with the Kruyer III only.

Its volume has been increased compared to version 2, for use with standard site sails. Just like version 2, its implementation on the Kruyer III comes to provide better lumbar support with the associated setting. This support also improves the harness support when cornering. The airbag function always provides additional passive safety.

HG4250 KORTEL Sak III



KORTEL Tandemmodul for Kruyer and Karver

€

Make two out of one: The tandem module for Kruyer II and Karver II. Quickly and easily installed it allows to use the light harness as pilot harnesses for tandem flights. The features of the main straps – like the high flexibility and the easy adjustment – are also possible with the tandem module to full extent.

- The rescue reserve container is installed at the back side
- Shoulder straps provide an optimal distribution of weight
- The rescue handle can also be mounted for left-handed people
- The tandem module has a little bag for personal stuff
- Certification: EN
- Weight: 1,35 kg (incl. 10 cm foam protector), together with a Karver II size M only 2,2 kg

HG910 KORTEL Tandemmodul f. Kruyer and Karver

299,00



PG - HARNESSSES



KORTEL Karma II

€

This harness has been produced for an optimal comfort from an upright to a half-lying position. The new developed Krashbox is kept permanently in shape by a foam module, which guarantees an immediate effect of the airbag. The Karma II has been certified LTF! Much time was also invested in the choice of new materials when developing the seat, like harnesses made of dyneema, which guarantees a lower weight without influencing the resistance. All adjustments are accessible and adjustable during the flight. Roll damping adjustable during the flight and independent from the adjustment of the belly strap. In the back bag, there is an extra space for the drinking water system and/or radio. Two outside pockets on the sides. Direct access from the back-bag to the shoulder to install a beverage hose and /or microphone cable. Side air inlets are retractable to protect them during transportation.

- Certification: EN and LTF
- Weight: 2,9 kg (XS), 3,0 kg (S), 3,1 kg (M), 3,4 kg (L), 3,5 kg (XL)
- Sizes: XS (up to 1,62 m), S (as of 1,62 m), M (as of 1,70 m), L (as of 1,84 m), XL (as of 1,95 m)
- Colours: black/blue-grey/silver

HG320 KORTEL Karma II with carabiners

829,00



KORTEL Kool

€

Basic intermediate and groundhandling harness. It combines passive safety, comfort and longevity. Its with foam pre-filled airbag and the innovative storage bag in the front part of the seating surface protect the pilot already in the starting phase.

The handle of the rescue system, integrated in the airbag at the back, can be easily deployed through the variable positioning from every single position. Besides, an additional protection of the deployment handle is possible for groundhandling or the training hill.

The different-coloured leg-straps simplify the usage and the various adjustment options are also good available during the flight. A very robust truck-canvas-cover protect the harness on the bottom and can be mounted easily and fast with the help of velcro.

- Spacious, pre-filled airbag with foam
- Rescue system integrated on the backside of the airbag
- Adjustable rescue handle with safety option
- Little storage on the upper side
- Robust and replaceable coloured valance
- Radio-bag integrated in the shoulder strap
- Easy adjustment options
- Certification: EN, LTF
- Weight: 3,4 kg (XS), 3,5 kg (S), 3,7 kg (M), 4,0 kg (L)
- Sizes: XS (< 1,62 m), S (< 1,71 m), M (< 1,85 m), L (< 1,90 m)
- Colours: black/blue

HG429 KORTEL Kool

790.00



KORTEL Kuik II

€

The Kuik II is a multifunctional harness in modular design. The weight of the basis module is about 1,7 kg (M), it is a harness with single suspended leg rests without seat board. The geometry of this basis module is simply sensational. You feel comfortable right away and in the air, the Kuik II turns out to be a real miracle in handling in sitting and lying position. Thus, the Kuik II is the ideal basis for the perfect paragliding harness.

Depending on your requirements, the Kuik II can be equipped with different additional modules. The Kuik II is, depending on the module, a reversible harness with airbag and comfortable backpack, an around seat with pre-filled airbag or permanent protector, a reclined harness with best protection and aerodynamic full protection.

- Weight: basis harness: 1,85 kg (S), 2,0 kg (M), 2,1 kg (L)
- Sizes: S (1,54 - 1,68 m) M (1,67 - 1,83 m), L (1,82 - 1,95 m)
- Colors: black/yellow/white

HG93 KORTEL Kuik II basic harness incl. carabiners

539,00

HG931 Modul Crashbox

329,00

HG932 Modul reversible harness with airbag

375,00

HG933 Modul foam protector

299,00

HG934 Modul Race

675,00

HG93



HG932



HG931



HG933



HG934





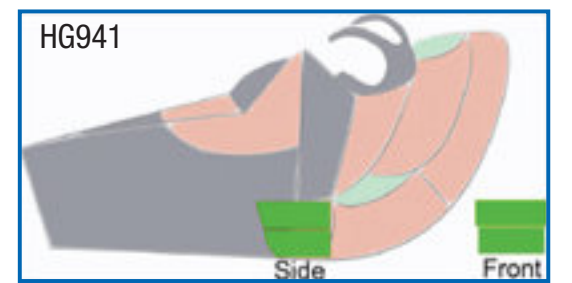
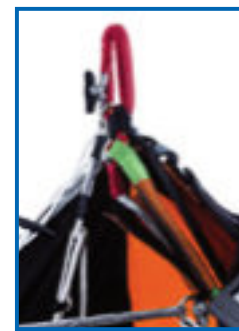
KORTEL Kolibri €

The Kolibri is a lightweight harness, developed for Hike& Fly, vol bivouac flights, competitions and is ideal for travelling. The result of a long development time and a lot of tests is a harness with:

- an innovatively adjustable dyneema- cord system
- Hybrid back protector of foam/ airbag combination

The thigh mounting which was independently of each other constructed makes the rolling softer and leads to a smoother response in difficult conditions. The comfort is unprecedented for a harness with this weight and can thus be used for flights of several hours. The frontal affixing of the rescue systems which is integrated in the leg fairing, enables an easy deployment, also for external positions. The handle is placed in such a way that it can be reached simply and intuitively. Furthermore, the Kolibri offers spacious storage by a huge bag in front of the protector, moreover, the spacious extra bag in the rear pocket also provides a stick holder. The optional protector can be easily removed and be replaced by e.g. a sleeping bag.

- Certification: EN and LTF
 - Delivery with extra light soft-link-connection (Breaking load: 2300kg)
 - Weight: 1,9 kg (M), 2,0 kg (L), 2,1 kg (XL)
 - Größen: M (bis 1,70 m), L (ab 1,70 bis 1,85 m), XL (ab 1,85 m)
 - Sizes: M (up to 1,70 m), L (as of 1,70 up to 1,85 m), XL (as of 1,85 m)
- | | | |
|------|----------------------------------|---------|
| HG94 | KORTEL Kolibri | 1299,00 |
| HG94 | KORTEL Kolibri Inside Protection | 35,70 |



KORTEL Kanibal Race II €

NEW

The famous Kanibal Race is back in a new version!

Full-race harness with unique back support and special features specially developed for demanding competition and cross country pilots.

The double reserve container fulfils the new FAI competition regulations. The new aerodynamic rear fairing has been developed for an optimized tolerance to airflow variation and better yaw stability.

- Ratchet pulleys • Three-step speed bar
- Variable seat plate angle • Attachment point height setup
- Double reserve container • Variable stabilization system
- Ballast container under the seat plate (8L max) and emptying opening in the pod
- Rigid internal structure for better back support
- Carbon tube for a better leg support
- Drag parachute (G-chute) pocket accessible from both sides with centred attachment point
- Removable cockpit with external battery storage and a size adapted to tablet
- Combi foam/airbag back protector
- Certification: EN and LTF
- Weight: 7,2 kg (S), 7,5 kg (M), 7,8 kg (L)
- Sizes: S (up to 1,67 m), M (up to 1,83 m), L (up to 1,94 m)

HG97	KORTEL Kanibal Race II	2185,00
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KORTEL Kid €



Kortel KID is the first harness for smaller passengers and children with a body measurement of 0.80 - 1.50 m.

Kortel KID is characterised by highest flexibility, like the Kortel K-FLEX. It is fully adjustable and thus fits all tandem passengers without any problems. Also for pilots who are still students or for the first flights, the KID has many advantages. The depth and width of the seat are adjustable, back length as well as back inclination. It has a foam protector. It is equipped with a big storage compartment, side handles for an easier start. and a removable, washable cover which protects the airbag.

- Weight: 1,9 kg
- Size: Uni-size, fitting for body measurements from 0,80 - 1,50 m
- Colour: blue

HG96	KORTEL Kid	435,00
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KORTEL K-Flex €



The first uni-size harness, fully adjustable for passengers and pilots with a body dimension of 1,50 – 2,00 m.

K-Flex is characterized by maximum flexibility. It is fully adjustable and thus fits easily to all tandem passengers. But also for pilots who are currently paragliding students or for the first flights, the K-Flex can convince! The seatboard depth and breadth, back length and back angle are adjustable.

K-Flex has a pre-filled airbag with lateral airinlet. It is equipped with a big storage bag, side handles for start help and a removable, washable cover, protecting the airbag.

- Weight: 3,1 kg
- Size: uni-size, fitting for body measurements 1,50 - 2,00 m
- Colour: blue

HG95	KORTEL K-Flex	592,50
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PG ACCESSORIES / COCKPITS



KORTEL Cockpit SAFE €

Developed for even more pilot safety, KorteL's Cockpit Safe is the successor of the Cockpit II. Time and again, deadly accidents happened due to untied leg straps. Investigations showed that an obstruction of the view on the plugs due to instruments mounted above was a frequent reason why pilots forgot to close the plugs. The unique attachment system of the Cockpit Safe automatically creates a connection between leg strap and main carabiner and thus prevents the pilot from falling out of the harness. For optimal instrument screen readability, the Cockpit Safe's attachment angle can be individually adjusted. The spacious upper compartment is roomy enough to store even larger flight instruments. A magnetic cover flap provides optimal protection during transport. The bottom compartment carries 3-4 liters and can be used for ballast or smaller equipment. An additional outside pocket that is easily accessible during flight is ideal for quick access to a map or a roadbook.

• Material: Cordura®, ripstop • Colour: black • Weight: 500 g

HG426 KORTEL Cockpit SAFE 135,00



KORTEL Container V3 light €

NEW

Front-outer container for Charly and KorteL emergency parachutes

- Ergonomic activation handle for left- and right handers
- Easy mounting of the rescue systems risers
- Additional strap for secure fixation
- Velcro-straps for fixing the smaller instruments
- With removable riser protection
- Incl. 1 pair of Soft Links

Size S (175 g + Riser protection 25 g) suitable for DIAMONDcross 100, Second Chance 86/95, Krisis UL80/UL95/UL115, Karre 100, Krisis Rogallo II Light 100

Size L (185 g + Riser protection 25 g) suitable for DIAMONDcross125, Second Chance 118, Krisis UL115, Karre 125, Krisis Rogallo II 130, Krisis Rogallo II Light 130

HFaV3 KORTEL Container V3 light 90,00



Produktvideo



Charly Frontcockpit-XC €

Frontcockpit with size-adjustable ballast compartment, suitable for a water ballast bag with a filling volume of up to 10l. If the ballast compartment is not needed, it can easily be removed with a zipper.

The flight instruments are well protected in the padded lid compartment during transport and can easily be attached to the Frontcockpit by means of the integrated hook-and-loop plate. Inside dimensions of instrument pocket: approx. 26 x 16 cm. Weight: 700 g.

HFa1892 Charly Frontcockpit-XC 79,00



Charly Frontcontainercockpit €

Front container for rescue system with detachable instrument compartment for flight instruments and other stuff like mobile phone, purse, adjustable fixing with line connector and snap-fits. The instruments are well protected during the flight and transportation. The instrument compartment can be brought easily in a slightly inclined position, so that an optimal perspective on the instruments is guaranteed. The upper part of the container with the valuables can be separated after the flight with a zipper and can be stowed separately while the lower part can stay with the rescue system and the harness. Fitting for all types of harnesses. Available for all sizes of rescue systems:

Size **M**, suitable, e.g., for SC84, SC94, DC100

Size **L**, suitable, e.g., for SC118, Revolution, DC100, DC125

Size **XL**, suitable, e.g., Duo160, DC160

Size **XXL**, suitable, e.g., for Duo200

HFa189 Charly Frontcontainer cockpit 94,50

HFa189AG Release handle for Frontcontainer cockpit 17,80



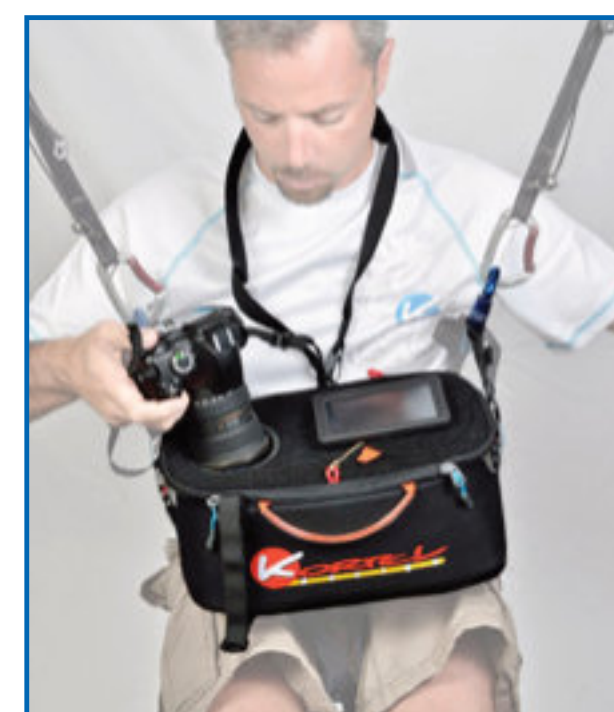
KORTEL Cockpit FOTO €

This special photo cockpit offers ideal protection for your photo equipment and can easily be turned into a practical backpack.

- Interior with adjustable Velcro dividers for flexible configuration
- Handle and shoulder strap
- Inner zipper pockets for memory cards etc.
- Reinforced fabric on the bottom
- Colour: black • Weight: 850 g

HG4260 KORTEL Cockpit FOTO

185,00





KORTEL Kolibri backpack €

The Kolibri backpack weighs a mere 800 g and - just like the Kolibri harness - has been especially developed for vol-bivouac and hike & fly pilots. A unique compression system ensures the glider's optimal positioning and weight distribution. With its premium quality and innovativeness, it ideally complements Kortel's range of lightweight flight equipment.

- Unique compression system for the optimal positioning of the glider
- Compressible inner packsack for smaller pack size
- Carrying system with frame structure for optimal weight distribution and high wear comfort
- Sweat protection
- Special zipper design for easy access to the contents
- Several easily accessible side pockets, lid compartment for valuables
- Shoulder pockets for drinking bottles

HG4251 KORTEL Packsack Kolibri

220,00

HG4253 Top pocket for Kolibri backpack

20,50



KORTEL quick pack sack Tandem €



Convenient and time-saving packing of the mushroomed glider using only one strap. This quick pack sack has a volume of 200 l and is spacious enough for your biplace wing, passenger and pilot harnesses incl. rescue chute and two helmets.

- Ergonomically shaped shoulder and hip straps for easy transport
- 2 carry straps (one on each side)
- Vertically adjustable chest strap
- 2 compression straps with light metal quick release fasteners
- Padded side pocket (for camera, telescopic stick, etc.)
- Window pocket (for pilot's license, ID cards, etc.)
- Small zipper pocket (for wallet, keys, etc.)
- Reinforced fabric on the bottom
- Colors: blue, light blue mustard, purple
- Weight: 1,47 kg

HPa120 KORTEL quick pack sack Tandem

219,00



Nova Compression Bag €

The Nova COMPRESSION BAG reduces the volume of the wing, protects it from sweat and helps to pack it flatter, which makes carrying it in your backpack more comfortable. The COMPRESSION BAG is equipped with a vent. When opened, any remaining air can be pushed out of the bag.

- Capacity: 35 l, 60 l

HPa134 NOVA Compression bag 35

32,00

HPa135 NOVA Compression bag 60

36,00



ACCESSOIRES FOR PG AND HG

Cross country ID plate

€

D-NZQR

For paragliders and hanggliders

Made from self-adhesive black ripstop nylon (other colors are not opaque enough).

HSe403	full set 30 cm high	32,50
HSe405	full set 50 cm high	49,80

Repair materials

€



HG/PG patches

Pre-packaged high adhesive ripstop nylon, 12 x 137 cm. Colors: white-transparent, black, red, dark blue, purple, pink

HSe11		8,50
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Gleitschirmpflaster für Rettungsgeräte

weiß, 50x20cm

HSe11F		12,50
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Self-adhesive sailcloth

Roll material 90 g/m² for smaller repairs on hanggliders and paragliders. Minimum order quantity 0.3 running meters. Colors: black, white, red, dark blue, purple, pink. Roll width 0,96 m.

HSe100	from 0,3 to 1 lfm, per 0,1 m	6,00
HSe10	from 1 lfm, per m	34,00

Rescue kit

€



HR	Rescue cord with lead weight	6,90
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HKa	SOS cutting knife for webbings	8,80
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Emergency knife with double blade made of carbon fiber

With an overall length of 16.2 cm very robust yet easy to handle. Extreme cutting performance thanks to two crossing blades. The knife enables easy cutting of lines and webbings.

HKa1		24,80
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Helmet pouch for radio set

€



Pouch for a radio set with hook-and-loop fastener for attachment at the chin guard of a full face helmet or at the harness shoulder strap.

HR100		14,80
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Hook-and-loop-fasteners

€



Hook-and-loop fasteners for sails and battens

HKI7	strap/buckle 18 x 5 cm	5,00
HKI800	strap/buckle 75 x 3 cm	9,50
HKI81	strap/buckle 100 x 3,8 cm	10,00
HKI82	strap/buckle 135 x 3,8 cm	11,50



Sew-on hook-and-loop-fasteners.

Can be cut to the desired length without fraying.

HKI1	Hook tape, width 25 mm	1,85
HKI2	Loop tape, width 25 mm	1,85
HKI5	Hook or loop tape, width 100 mm, orange	5,35

Webbings

€/m



Abrasion resistant, pliant, UV stabilized.

HBa1	12x1,2 mm, safety strap 700 kp	2,15
HBa2	13x2 mm white/blue	2,50
HBa3	50x2 mm	3,30
HBa5	25x2,5 mm, 1800 DaN (e.g. For pilot hang-in)	2,60
HBa4	44x2 mm, 2200 DaN	3,10
HBa40	44x1,5 mm multicolor	3,00

Windsock and accessories

€



CHARLY Windsock

Due to its size 32cm x 125cm good to see also from great distance, and due to the colours (blue in front, red at the back side), no danger of confusion of the wind direction.

Material: Robust and light Nylon Ripstop. Suitable for our rods.

Folding windsock pole and earth stake

HWi2

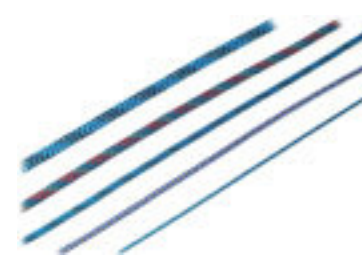


HWi20

HWi11	HARLY Windsock ø 32 cm, length 125 cm	22,80
HWi2	Folding windsock pole, length 260 cm	25,50
HWi20	Earth stake for use with windsock pole, with robust pull-out handle	19,80



Dyneema Super braid



New super fiber for smooth cords with higher tensile strength, lower weight, more abrasion resistance and almost the same non-stretching properties compared to Kevlar cords! The 3 mm Dyneema braid can be used as rescue cord for roping down in emergency situations.

Art.no.	ø	Weight g/m	Strength DaN	€/m
HSeiD2	2 mm	5	250	1,20
HSeiD4	4 mm	10	650	2,00
HSeiD5	5 mm	15	1000	2,60

High-performance Dyneema braided cord spliceable

NEW



Highest strength, minimum weight, low elongation.

Not certified for lifting loads and personal safety!

Art.no.	ø	Weight g/m	Strength DaN	€/m
HSeiD2.5	2,5 mm	3,5	590	1,70

High-quality kernmanle cords



- Fully impregnated
- Highly abrasion resistant
- Highly UV resistant
- Favorable strength-to-weight ratio

Art.no.	ø	Weight g/m	Strength DaN	€/m
HSei6	6 mm	24	730	1,00
HSei7	7 mm	30,5	1200	1,50

Sail batten cord

€/m



Polyester cord, good tensile strength and abrasion resistance, 16fold braided.

HSei2,5	2,5 mm, 110 DaN	0,35
HSei4	4,0 mm, 290 DaN	0,40

Elastic cord

€/m



Elasticated braid with nylon coating. Highly elastic yet resilient. Universally applicable.

HSeiGub	Rubber band 40x1,5 mm	2,00
HSeiGu	Rubber braid 4,0 mm, black	1,45



ACCESSORIES AND TOWING DEVICES

Instrument protective material mount €

to mount instruments either on the front cockpit pocket, on the rescue reserve front container, or by means of the flexible metal angled mount to the harness chest strap. With the Vario/GPS base board, two instruments can be mounted onto the flexible metal angled mount or to the paraglider leg mount.

Hi9640	Protective cover for Competino+, Compeo+, Flytec 6020/6030	12,50
Hi9641	Protective cover for IQ-One / IQ-One+ / IQ Basic GPS / IQ Alto Flytec 6000 / 6005 / 6015 / Element	12,50
Hi9600	Flexible metal angle mount	9,80
Hi9642	Charly Protective cover for Oudie	15,00
Hi5226J	Hyper Jacket - Silicone protective cover for Naviter Hyper	23,90

CamelBak UnBottle €

Separate insulated drinking system that turns any backpack into a hydration pack. D-rings for external attachment, fill capacity 2.0 l, empty weight 200 g.

HG1433	CamelBak UnBottle	45,00
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First Aid Kit €

The waterproof sleeve made of PU coated nylon fabric with roll closure can easily and quickly be fixed to a backpack, harness, belt, etc. Contents: 1 pair surgery gloves, 2 first aid packets, 5 m tape, 1 set plaster strips, first aid instructions. Dimensions: 12 x 11 x 8 cm, Weight: 156 g

HR11	Erste Hilfe Kit	24,90
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High-pressure water ballast bag €

HG142	High-pressure water ballast bag fill capacity 10 L Weight: 178 g	29,90
HG1434K	High-pressure water ballast bag with tube fill capacity 15 L Weight: 142 g	37,90

Towing releases and towing accessories

Mathes EASY QUICK €



Single-stage, one-piece towing release for paragliders with integrated towing assistance. The Mathes QUICK EASY TOWING RELEASE manufactured by Dietmar Mathes meets the the airworthiness requirements of the DHV for paragliders and hang gliders. Max. trailer weight: 2000 N

HS301	Mathes EASY QUICK towing release	95,00
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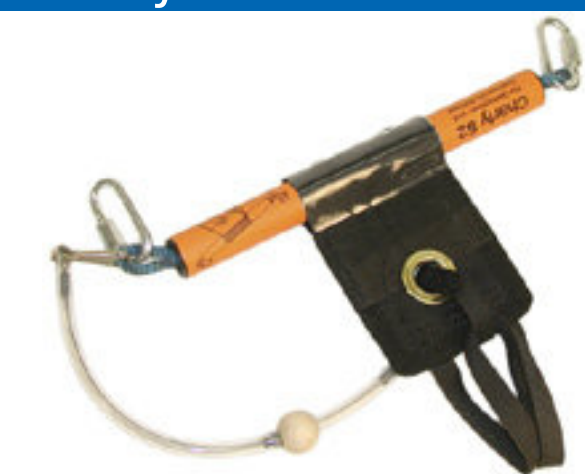
Frontcontainer towing device SK1 €



Single-stepped, split textile towing device for paragliding. Well-established on the market for many years, as its convincing attributes are simple handling, functionality and robustness. It can be attached to the harness either at the main suspension or, if applicable, at towing loops. The TOWING DEVICE SK1 may as well be attached to harnesses with integrated frontcontainer.

HS420	Frontcontainerklinke SK1	56,00
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Charly S2 €



Improved version of the super light, reliable and approved release for PG or HG-UL towing (lower risk of injury in the case of rope breakage). Tensile strength 500 kg, 150 g, DHV certified.

HS300	Charly S2 towing release	54,00
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Hi9640

Hi9641

Hi9600



Hi9642



Hi5226J



HG1433



HR11



HG142



HG1434K

Mathes EASY QUICK T €



The Easy Quick T splits into a right and a left side after you have released it. It is now also suitable for pilots with a front container or front rescue device. Weight 90 g. Released by sliding sleeve (tension sleeve), max. towing capacity 2000N.

HS301T	Mathes EASY QUICK T, separable tow release	95,00
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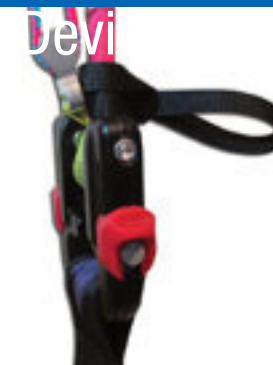
Frontcontainer towing device SK2 €



The towing device SK2 is equivalent to the well-established SK1, but additionally features an integrated towing adapter and a winch towing accelerator. The latter helps to pre-accelerate the wing during towing in order to make the towing phase safer to prevent deep stall. Moreover, a higher altitude can be obtained. The towing device splits upon release.

HS421	Frontcontainerklinke SK2	92,00
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PG Accessories and Towing €



Charly Express-Loop 12mm for fixing the PG tow release onto the risers directly over the karabiner (in order to avoid the risk of a deep stall when towing). Breakage strength 600 DaN.

HS5	Charly Express-Schlinge (Paar)	7,70
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Charly PG-Towing adapters for karabiners

When using a towing adapter, the PG will be automatically accelerated during the towing and this prevents the risk of deep stall. Thus, the start will be facilitated and more height in towing is gained. In case of rope breakage, the shooting forwards of the PG will be weaker.

HS50	Charly PG-Towing adapter (Pair)	18,50
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SPEED PEDALS AND XC BRAKE HANDLES

XC-Griff mit Wirbel €



High Adventure's new XC brake handle features an ergonomically shaped plastic bar right below the brake line knot and a large, padded brake loop. The plastic bar enables long-term energy-saving flying as the forearm does not need to be bent and thus put in a mechanically inefficient and tiring position for thermaling and good glider control. When steering using the plastic bar, the brake loop remains around the wrist. When flying accelerated, the hand slips into the loop and encourages a clean gliding position of the arm while ensuring

that immediate active flying is available if necessary. Even with thick gloves, slipping out of the loop is easily possible at any time. Moreover, the XC brake handle is designed in such a way that it cannot get caught in the lines when not in use or during ground handling. Retrofitting at any glider is easily possible.

- Available in three sizes (stretched brake loop length in cm): S (18), M (19), L (21) • Weight: 90 gr.
- With magnetic or popper attachment

Be2GM	High Adventure XC brake handle, magnetic attachment	55,00
Be2GK	High Adventure XC brake handle, popper attachment	55,00

Riser protection for tandem and motor €



i We recommend to order the CHARLY riser protection for rescue systems for paramotor glider and tandems, as those connection straps partially run outside of the harness.

With velcro straps, the CHARLY riser protection can be led from the suspension point of the rescue system until the protected area inside of the harness. The risers are stored cleanly inside and protected against UV radiation and mechanical stress.

The tandem version is most appropriate for the DIAMONDcross 160 ST tandem as well as for light tandem-V-lines. As the CHARLY riser protection is no weight-bearing or certified component, it can individually be shortened and thus be adapted to various harnesses and spreaders. The interface as well as the zipper ends are masked with a special self-sticky repair tape or are sewed. It is only to be ensured that the zipper can be freely opened in case of rescue opening.

HFA195RST	Riser protection tandem	32,80
HFA195RSM	Riser protection motor	32,80

KORTEL light speed pedal €

Light speed pedal for Krueyer II, Karver II and Kliff

HG130	KORTEL light speed pedal 2-step, Weight: 45g	33,50
HG131	KORTEL light speed pedal 3 steps, Weight: 45g	35,00

free*spee Speedbar €

free*spee allows the optimal adjustment of the speed system at any time. Letting loose of the control lines completely is not necessary thanks to one-hand operation.

HG121	free*spee 2.0 Speedbar, Weight: 80 g	54,80
HG1210	free*spee XC Speedbar 3 steps, Weight: 90 g	59,90

Charly single speed pedal €

Length adjustment directly at the foot rest by means of a three holes system. Easy to install, with sturdy rope and super light foot rest tube. Weighs a mere 109g!

HG126	Charly single speed pedal, adjustable, Weight: 109g	22,00
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Charly double speed pedal

Three-step speed system deluxe. Bent in flight direction for easy step-in. Length adjustment directly at the foot rest by means of a three holes system.

HG128	Charly double speed pedal, adjustable, Weight: 145g	32,00
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Charly soft speed pedal €

Flexible speed system for dosed acceleration across three steps.

HG123	Charly soft speed pedal, 3 steps	25,60
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Charly speed pedal return system €

HG125	Charly speed pedal return system	9,90
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Foot rest €

HG124	Charly foot rest, optimal comfort through 2-point fixing.	24,80
HG132	Kortel foot rest, Weight: 90g	32,00

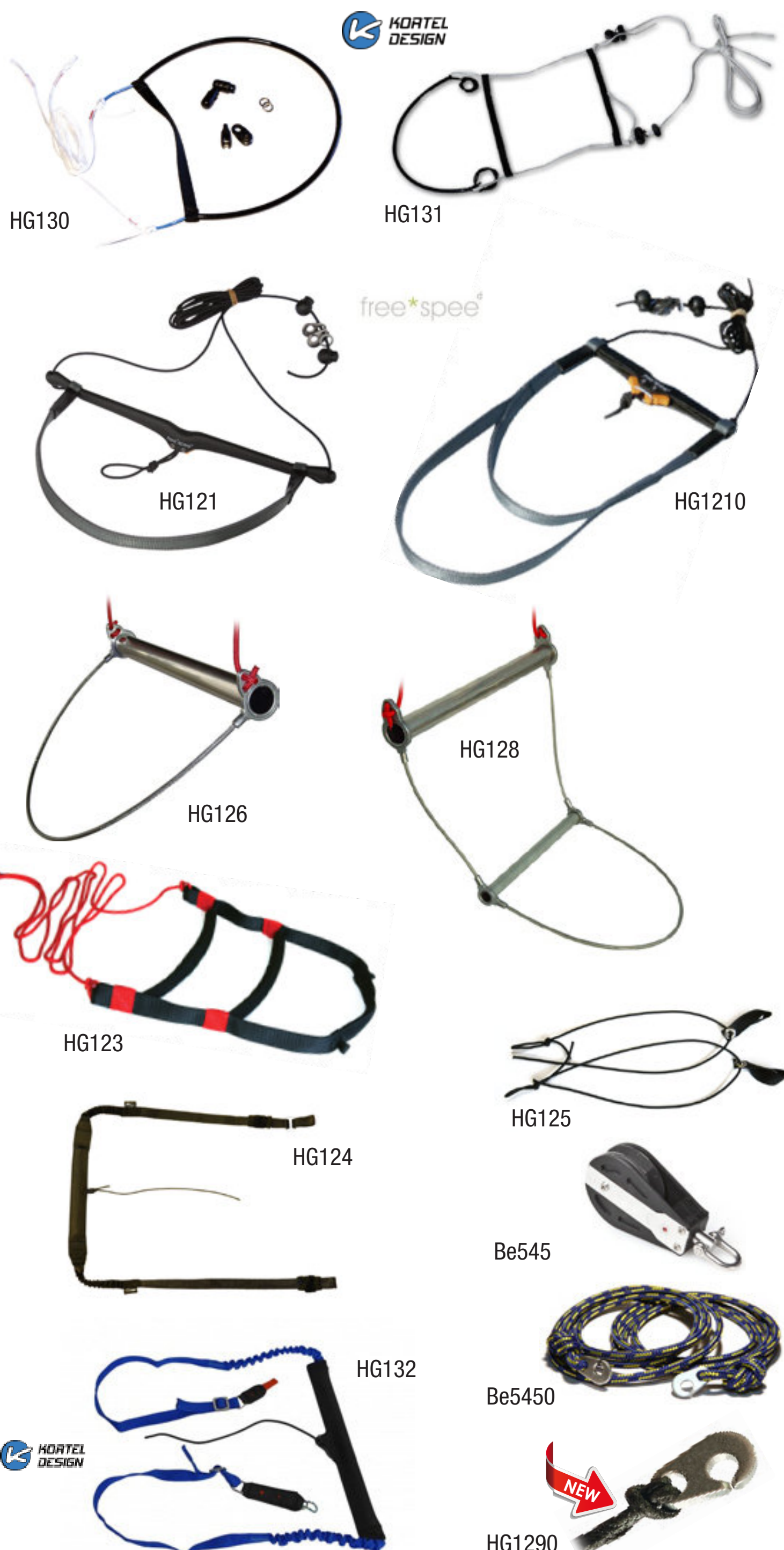
Automatic ratchet block with swivel shackle €

High-quality ratchet block made of carbon compound with stainless steel reinforcements. Large (40 mm) plate for less energy expenditure during long accelerated flights. Overall length: 75 mm. For rope diameters of 4 to 6 mm.

Be545	Automatic ratchet block with swivel shackle	49,90
Be5450	2 x 1.50 m power lock cord 5 mm incl. Brummel hooks	9,90

Dyneema rope with Brummel hook €

HG1290	Dyneema rope spliced, Brummel hook looped in, pair	8,90
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Finsterwalder PINLOCK



The Pinlock, drop-forged from Titanal (7075 T6 alloy), is compatible with conventional paraglider carabiners and is suitable for all paragliders and harnesses with webbing widths of 40 to 45 mm. Separate strap chambers avoid lateral loads.

- Very long replacement interval at a weight saving of 80 to 120g/pair compared to steel carabiners!
- Breaking load: 2,500 DaN, proven fatigue resistance!
- Replacement interval (mono): 8 years with unlimited hours of operation
- Replacement interval (tandem): 3 years with unlimited hours of operation

Weight: 80 g/pc. **Inside height:** 40 mm

HKar3	Finsterwalder Pin Lock (piece)	29,80
HKar32	Quickpin (piece)	17,80
HKar33	Adapter sleeves for narrow webbing widths (pair)	9,40

Finsterwalder SNAPLOCK



The innovative paragliding and hanggliding carabiner for harnesses with a webbing width of 25 mm; suitable also for tucked in 44 mm straps

- Breaking load: 3,000 DaN
- Breaking load (open gate): 2,000 DaN
- Load without permanent deformation (open gate): 1,600 DaN
- Replacement interval (mono): 5 years with unlimited hours of operation
- Replacement interval (tandem and hg): 2 years with unlimited hours of operation

- Drop-forged from Titanal
- **Weight:** 76 g/Stk. **Inside height:** 60 mm

HKar35	Finsterwalder Snaplock (piece)	26,00
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AustriAlpin POWERFLY

€



Steel karabiner with automatic lock for webbing widths of 44 mm.

- Breaking load: 2.600 DaN*
- Load without permanent deformation (open gate): 300 DaN*
- yearly replacement recommended
- Measures: 82 x 62 mm

- **Weight:** 140 g/Stk. **Height inside:** 60 mm

HKar410	AustriAlpin Powerfly (piece)	29,00
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Edelrid Foras

€



Edelrid FORAS is a 51 g lightweight aluminum carabiner for paragliders - ideal for modern, narrow webbings between 12 and 25 mm. The side-opening automatic twist-lock closure with an opening of 15 mm enables a connection of the risers also for thicker and stiffer webbings without any problems.

- Breaking load: 2.300 DaN*
- yearly replacement recommended
- Measures: 80 x 48 mm
- **Weight:** 51 g/pc.



HKar25	Edelrid Foras (piece)	19,50
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AustriAlpin Stratus INOX

€



Inox steel karabiner with automatic lock for webbing widths of up to 25 mm

- Breaking load: approx 2.800 DaN*
- yearly replacement recommended
- Measures: 78 x 55 mm
- **Weight:** 129 g/pc.

HKar10	AustriAlpin Stratus Inox (piece)	25,90
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AustriAlpin Stratus ALU

€



The AustriAlpin STRATUS ALU is an aluminium paragliding karabiner with automatic lock for webbing widths of up to 25 mm.

- Breaking load: approx 1.800 DaN*
- yearly replacement recommended
- Measures: 78 x 55 mm
- **Weight:** 63 g/pc.

HKar11	AustriAlpin Stratus Alu (piece)	25,90
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STUBAI 5000

€



The Stubai SUPER 5000 is a drop-forged steel karabiner with an extreme D-form for rope suspensions. Thanks to its high gate-open-load, this karabiner has no problems concerning fatigue endurance.

- Breaking load: approx. 4.500 DaN*
- Load without permanent deformation gate open: approx. 1.500 DaN*
- Replacement interval: 8 years, unlimited hours of usage
- **Weight:** 220 g/Stk. **Inner height:** 85 mm

HKar5	Stubai 5000 (piece)	24,80
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AustriAlpin TROPOS

€



The AustriAlpin TROPOS is a steel hang gliding karabiner for webbing widths of up to 30 mm and a screw-on security sleeve.

- Breaking load: approx. 3.200 DaN*
- Internal dimensions: 32 x 76 mm
- Replacement interval: yearly (recommended)
- **Weight:** 225 g/Stk. **Inner height:** 77 mm

HKar20	AustriAlpin TROPOS (piece)	24,80
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* 1 DaN (Dekaneuton) = 10 Newton ~ 1 kg, B = approx. breaking load, N = safe load (max. recommended payload)

i On the fatigue resistance of air sports Carabiners:

Paragliding carabiners are permanently subject to oscillating loads.

The DHV found them to amount to between 10 and more than 100 kg, and to occur up to 26 times per second. Given the carabiners' high breaking loads (at least 1,500 kg), such oscillating loads should be unproblematic. However, conventional carabiners have a construction-conditioned peculiarity: their play in the gate. On the one hand, this play is necessary to allow the snap hook to open and close without friction. On the other hand, it leads to the snap hook becoming weight-bearing only at loads of between 30 and 120 kg, depending on the amount of play in the gate. Accordingly, one flies as if the snap hook was open when the carabiner is under smaller loads. Practice as well as dynamic fatigue tests show that already relatively low payloads during normal flights can lead to cracks caused by material fatigue since the carabiners are not designed for such load situations.

To reliably exclude material fatigue, carabiners should be designed for fatigue resistance or should at least meet certain endurance limits. We recommend a yearly replacement of carabiners that lack a proof of fatigue resistance according to the test specifications of the DHV.

Steel is good ?

A carabiner's fatigue resistance is not a matter of material but a matter of design! In dynamic fatigue tests, some aluminum carabiners exhibited considerably higher resistance values than steel carabiners. In fact, stainless steel is usually more fatigue resistant, harder and more corrosion resistant than aluminum, but these advantages in strength can easily be outweighed by a slightly larger width of a corresponding aluminum component. Due to its better strength-to-weight ratio, high-quality aluminum alloys are the standard in aircraft construction.



The crack in the steel carabiner on the left occurred after 1,739,700 load changes between 5 and 50 kg. The steel carabiner on the right broke after 287,000 load changes between 7 and 70 kg. Not quite reassuring, particularly considering safety factors of 1.5 and 1.145 for scratches/corrosion that are required due to the statistical spread in the tests!

For comparison: Pinlock carabiners endured the required 5,000,000 load changes between 40 and 400 kg without damage. For further infos (e.g., a simple method to determine the amount of play in the carabiner gate), please visit: www.fensterwalder-charly.de

SEPERATION KARABINER



Finsterwalder QUICK-OUT Karabiners €



Our separation karabiner Finsterwalder QUICK-OUT is used whenever a reliable connection and if necessary a rapid separation also under load is important. It is suitable for the safe attachment of loads - in particular persons - and for outdoor use. It has proven itself especially during helicopter missions of the police, the military, and the mountain rescue service. In paragliding, the Finsterwalder QUICK-OUT is used for the separation of the glider when a steerable rescue system is deployed. By simultaneously pushing both release buttons, pilot and aircraft are separated effortlessly. In safety trainings, the separation of the glider after a rescue chute deployment turned out to be advantageous.

Besides the rescue options in case of emergency landings in water, trees, and high winds, the Finsterwalder QUICK-OUT also offers handling advantages compared to conventional karabiners.

- Breaking load: 4.000 DaN*, 2.000 DaN* individually tested
- No gate play, thus fatigue endurable with unlimited hours of usage for 150 DaN* hauled load!
- Double-button locking with multiple safety steps
- Replacement interval: 8 years, unlimited hours of usage

Weight: 200 g/pc.

Hkar12 Quick Out Karabiner (piece) 68,70

Quickout separation system for speed pedals & accessories



HKar14



HKar141



HKar121



HKar128

- | | |
|--|-------|
| HKar121 Extra insert for Quick Out (piece) | 22,00 |
| HKar128 Adapter sleeves for narrow webbing widths (pair) | 11,80 |
| HKar14 Patent shackle separation system (pair) | 29,80 |
| HKar141 Brummel hook separation system (pair) | 18,50 |

Separation systems for speed pedals are activated automatically by the operation of the Quickout carabiner.

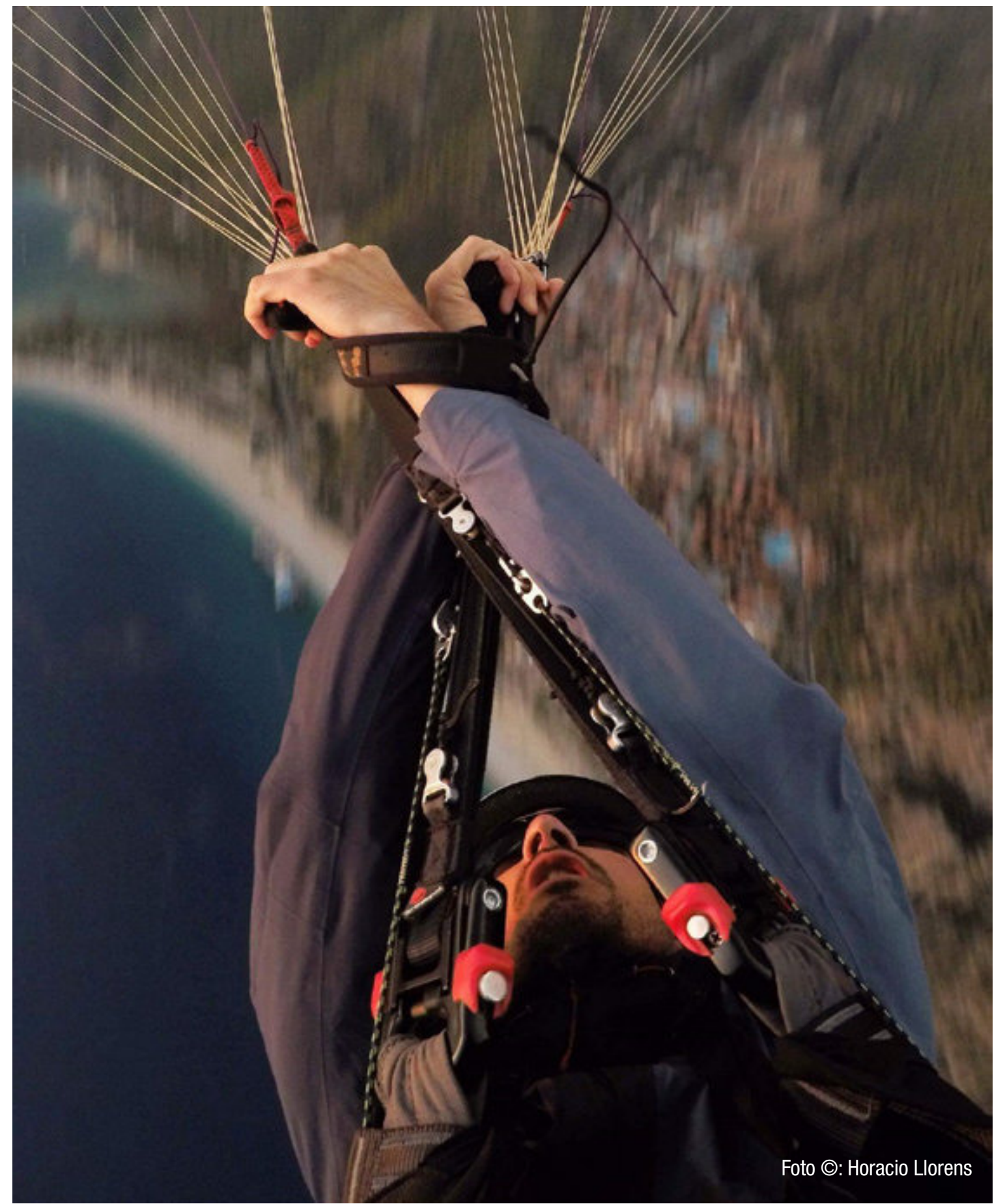


Foto ©: Horacio Llorens





SCREW LOCK LINK • SOFTLINKS

Charly stainless steel lines lock

€



- Dimensions: **20 x 30 mm**
- Stainless steel \varnothing 4 mm
- Opening: 5,5 mm
- Payload: 125 DaN*
- Breaking load: approx. 1500 DaN*
- **Weight:** 13 g

Be290 Charly stainless steel lines lock (piece) 5,50

Pequet triangular screw lock link

€



- Dimensions: **25 x 32 mm**
- Stainless steel \varnothing 4 mm
- Opening: 5,5 mm
- Payload: 125 DaN*
- Breaking load: approx. ca. 1000 DaN*
- **Weight:** 14 g

Be300 Pequet Δ -screw lock link 25x32mm 5,50

- Dimensions: **25 x 32 mm**
- Steel \varnothing 4 mm
- Opening: 6,5 mm
- Payload: 100 DaN*
- Breaking load: approx. 800 DaN*
- **Weight:** 13,5 g

Be300z Pequet Δ -screw lock link 25x32mm 3,00

- Dimensions: **32 x 42 mm**
- Stainless steel \varnothing 6 mm
- Opening: 8 mm
- Payload: 450 DaN*
- Breaking load: approx. 2250 DaN*
- **Weight:** 39,5 g

Be2900 Pequet Δ -screw lock link 32x42mm 9,00

GLIDER-HARNESS CONNECTION LINK

€



- Dimensions: **15 x 50 mm**
- Steel \varnothing 7 mm
- Opening: 9 mm
- Payload: 550 DaN*
- Breaking load: approx. 2800 DaN*
- **Weight:** 51 g

Be31 Glider-harness connection link 15x50mm 4,20



- Dimensions: **15 x 45 mm**
- Stainless steel \varnothing 6 mm
- Opening: 8 mm
- Payload: 650 DaN*
- Breaking load: approx. 3250 DaN*
- **Weight:** 35 g

Be310 Glider-harness connection link 15x45mm 8,00

SCREW CHAIN LINK

€



- Dimensions: **13 x 39 mm**
- Steel \varnothing 5 mm
- Opening: 7 mm
- Payload 280 DaN*
- Breaking load: approx. 1600 DaN*
- **Weight:** 20,5 g

Be30 Screw chain link 13x39mm 3,65



- Dimensions: **11 x 31 mm**
- Steel \varnothing 4 mm
- Opening: 5 mm
- Payload: 180 DaN*
- Breaking load: approx. 1200 DaN*
- **Weight:** 11,5 g

Be29 Screw chain link 11x31mm 3,60

Hike & Fly SCREW LOCK LINK

€



- Dimensions: **20 x 50 mm**
- Stainless steel \varnothing 5 mm
- Opening: 6,5 mm
- Payload: 325 DaN*
- Breaking load: approx. 2600 DaN*
- Suitable as an alternative to carabiners
- Fatigue endurable if screwed down
- **Weight:** 26 g

Be303 Hike & Fly screw lock link (piece) 19,95

Charly TRAPEZIUM SCREW LOCK LINK

€



- Dimensions: **42 x 45 mm**
- Stainless steel \varnothing 6 mm
- Opening: 9 mm
- Payload: 250 DaN*
- Breaking load: approx. 2100 DaN*
- Suitable as an alternative to carabiners
- Fatigue endurable if screwed down
- **Weight:** 42,5 g

Be3050 Charly trapezium screw lock link (pc.) 8,00

Pequet TRAPEZIUM SCREW LOCK LINK

€



- Dimensions: **44 x 48 mm** for webbing 28/42 mm
- Steel \varnothing 6 mm
- Opening: 9 mm
- Payload: 250 DaN*
- Breaking load: approx. 1400 DaN*
- Suitable as an alternative to carabiners
- Fatigue endurable if screwed down
- **Weight:** 46,5 g

Be305 Trapezium screw lock link 44x48mm (pc.) 8,00



- Dimensions: **30 x 47 mm** for webbing 18/30 mm
- Steel \varnothing 6 mm
- Opening: 9 mm
- Payload: 250 DaN*
- Breaking load: approx. 1400 DaN*
- Suitable as an alternative to carabiners
- Fatigue endurable if screwed down
- **Weight:** 41,6 g

Be350 Trapezium screw lock link 30x47mm (pc.) 9,90

Pequet RECTANGULAR SCREW LOCK LINK

€



- Dimensions: **30 x 52 mm**
- Stainless steel \varnothing 7 mm
- Opening: 9 mm
- Payload: 625 DaN*
- Breaking load: approx. 3125 DaN*
- Suitable as an alternative to carabiners
- Fatigue endurable if screwed down
- **Weight:** 63,5 g

Be304 Rectangular screw lock link 30x52mm (pc.) 13,80

Kortel Softlink for Paraglider

€



Glider-harness-connection for paragliders

Kortel's SOFT LINKS are ideally suited for attaching the rescue system to the harness. Moreover, they can be used as a fatigue resistant alternative to carabiners if harness and glider are only rarely disconnected from each other. The operation is simple and safe.

- Breaking load: approx. 2.300 DaN*
- **Weight:** 12 g/pair

HKar110 Kortel Softlinks (pair) 23,90

HARNESSES-HARDWARE



PATENTED SHACKLE

€



- Length: 40 mm
- Breaking load: approx. 300 kg
- **Weight:** 26 g/pcs.

Be22	Patented shackle brass	9,95
Be23	Ring for patented shackle 4 mm, ø14 mm	2,40

CHARLY SNAP-FIT STAINLESS

€



- Length: 50 mm
- Eye: 6,5 x 10,5 mm
- Breaking load: approx. ca. 200 kg
- **Weight:** 20 g/pcs.

Be20	Charly Snap-fit stainless steel	5,40
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MINI-KARABINER

€



Mini-karabiner steel ø 5 mm

- Length: 50 mm • Payload: 120 kg
- **Weight:** 16 g/Stk.

HKar91	Mini-karabiner steel ø 5 mm	2,70
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Mini-karabiner steel ø 4 mm

- Length: 40 mm • Payload: 40 kg
- **Weight:** 8 g/pcs.

HKar90	Mini-karabiner steel ø 4 mm	1,65
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DOUBLE BUTTON BUCKLE

€



Many harness manufacturers use the DOUBLE BUTTON BUCKLE to attach the front container to the harness. The stainless steel plug is corrosion-resistant and lightweight.

- Adjustable, suitable for webbings 18-20 mm
- Dimensions: 30 x 45 x 9 mm
- Breaking strength: approx 350 kg
- **Weight:** 36 g/pcs.

HSi20	Double button buckle	5,80
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JAMMING BUCKLE

€



Jamming buckle 20 mm

- Material: Zinkdruckguss
- Breaking load: approx. 290 DaN*
- **Weight:** 26 g/pcs.

HSi94	Jamming buckle for webbings 20 mm	3,20
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Jamming buckle 25 mm

- Material: Zinkdruckguss
- Breaking load: approx.. 350 DaN*
- **Weight:** 35 g/pcs.

HSi95	Jamming buckle for webbings 25 mm	3,50
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FINSTERWALDER MINI CONTROL HANDLE SWIVELS

€



Many harness manufacturers use the DOUBLE BUTTON BUCKLE to attach the front container to the harness. The stainless steel plug is corrosion-resistant and lightweight.

- ø 8/10mm • Length: 33 mm
- Breaking load 300 kg • Payload: 150 kg

Be2	Mini control handle swivels (piece)	8,00
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FINSTERWALDER SPEEDSYSTEM

€

Brummel hooks are commonly used in sailing. Finsterwalder's SPEED SYSTEM HOOKS are manufactured according to the same principle and have been developed especially for paragliding. They serve as a connection between the speed system that is attached to the harness and the glider and are hence also called speed system hooks. Nearly all paraglider manufacturers use Finsterwalder's SPEED SYSTEM HOOKS.



Finsterwalder Speedsystem hooks

- Material: Stainless steel & Titanal • Breaking str: 230 kg
- **Weight:** 5,2 g/pcs. (Stainless steel) 2,1 g/pcs. (Titanal)

Be18	Speedsystem hooks Stainless steel (piece)	2,00
Be180	Speedsystem hooks Titanal (piece)	2,00

Finsterwalder Speedsystem hooks adjustable 2mm

Ffor rope max. 3.5mm

- Titanal • Breaking strength: 190 kg
- **Weight:** 1,7 g/pcs.

Be182	Speedsyst. hooks adjustable 2mm(pcs.)	2,75
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Finsterwalder Speedsystem hooks adjustable

- Titanal • Breaking strength: 230 kg
- **Weight:** 6,9 g/pcs.

Be181	Speedsystem hooks adjustable (pcs.)	2,75
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FINSTERWALDER MINI GUIDE ROLLER FOR SPEED SYSTEM

€



For ropes of up to ø 5 mm, Avional, hardend steel axle, quiet-running

- Length: 28 mm
- ø 13 mm
- Payload ca. 100 DaN*
- **Weight:** 7 g

Be541	Finsterwalder mini guide roller	4,30
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FINSTERWALDER COMPONENTS



MANUFACTURER INQUIRIES WELCOME!

FOR MORE THAN 40 YEARS, FINSTERWALDER HAS BEEN DEVELOPING, MANUFACTURING AND SELLING COMPONENTS FOR AIRBORNE SPORTS. OUR PRODUCTS ARE USED BY MANY RENOWNED MANUFACTURERS AND HAVE AN EXCELLENT REPUTATION WORLDWIDE.

APPROVED DEVELOPMENT, MANUFACTURING AND MAINTENANCE ORGANIZATION ACCORDING TO THE CIVIL AIRCRAFT AND AVIATION APPLIANCE ORDINANCE (ZLLV) BGBL 191/1995



CHARLY AIR SPORTS HELMETS

INSIDER

Its unbeatable fit and good value for money make the Insider an all-time bestseller. Pilots appreciate that the helmet offers full protection while not restricting the field of view. Moreover, the chin guard is designed in such a way that conversation before and after flight is easily possible. The helmet edges are curved inward, thereby contributing to a larger field of view and a reduction of air drag.

Insider features

- Thanks to a vacuum high-pressure die casting process, the aramid fiber reinforced outer shell is weight-optimized and of constant quality. The choice of material and production process ensures optimum strength and durability.
- The Insider causes minimum wind noise that does not interfere with the Vox operation of radio sets. As hearing is only marginally affected by the helmet, airspeed estimation is still possible.
- The helmet shell is drawn far down at the sides, improving the fit on the head and providing for pressure-free ear padding. The wide, well cushioned internal chin strap contributes to the wearing comfort.
- Aerodynamically clean without a long tail: The Insider permits an unrestricted upward view and avoids neck injuries.
- The skin-friendly, breathable and antibacterial full textile lining (made in EU) provides for a pleasant climate inside the helmet. Comfortable fit also in special sizes like XS and XXL.
- Wear-resistant multi-layer enamel surface (paintable). 14 different colors/styles.



HHe70 bicolor dark red-metallic

Weight: 650 g

Sizes: XS=53/54, S=55/56, M=57/58, L=59/60, XL=61/62, XXL=63 cm head circumference (XS and XXL only for HHe7 und HHe70)

Art.#	Insider	€
HHe7	Insider unicolor white, red, blue	178,00 €
HHe70	Insider bicolor metallic	191,00 €
HHe72	Insider bicolor red-metallic/turquoise-metallic	196,00 €
HHe75	Insider softcolor black	185,00 €
HHe75S	Insider softcolor red and blue SALE	172,00 €
HHe77	Insider carbon-optic	200,00 €



HHe7 unicolor white



HHe7 unicolor red



HHe7 unicolor blue



HHe75 softcolor red



HHe75 softcolor blue



HHe75 softcolor black



HHe70 bicolor silver-metallic



HHe70 bicolor blue-metallic



HHe70 bicolor turquoise-metallic



HHe70 bi. Anthracite metallic



HHe70 bi. black metallic



HHe70 bicolor yellow metallic



HHe73

Art.#	Insider accessories	€
HHe702	Extra lining, check + chin pads	12,50 €
HHe703	Extra lining incl. attachment	25,00 €
HHe73	Premium fleece helmet/instrument bag	9,50 €



CHARLY AIR SPORTS HELMETS



NO LIMIT

The No Limit competition visor helmet provides maximum safety at minimum drag. Its high-quality materials and an elaborate production process guarantee for constant quality, maximum safety and durability.

No Limit features

- Im Vakuum-Pressverfahren gefertigte, mit Aramidgeweben verstärkte Außenschale, die in Bezug auf Schlagfestigkeit und Durchdringungsresistenz sogar Karbonfaserhelme übertrifft.
- The aramid fiber reinforced outer shell made by high-pressure die casting can even beat carbon fiber helmets in terms of impact strength and pierce resistance.
- Classy look: The No Limit features a scratch-proof multi-layer enamel surface. Its shell material and finish make the helmet highly resistant to aging.
- The visor fits the contour of the helmet and reduces drag considerably. Its extra wide panoramic view is important for safety. Glasses can be easily worn under the visor.
- The included clear polycarbonate visor is break-proof and anti-reflex, anti-scratch and anti-fog coated. Thanks to its 100% UV protection, it can substitute for extra sunglasses. The clear visor can easily be replaced by a toned brown one that is available as an accessory.
- The chin guard creates virtually no blind area. Conversation is easily possible with open visor.
- Aerodynamically clean without a long tail: The No Limit permits an unrestricted upward view and avoids neck injuries.
- The skin-friendly, breathable and antibacterial full textile lining (made in EU) provides for a pleasant climate inside the helmet. Pressure-free ear pads and a wide, well cushioned internal chin strap contribute to the wearing comfort.

Weight: 650 g + Visier 114 g

Sizes: S=55/56, M=57/58, L=59/60, XL=61/62, **XXL**=63 cm head circumference

NO LIMIT JET

High-class PG visor helmet with an unrestricted downward view.

No Limit Jet features

- Premium quality at a reasonable price. The aramid fiber reinforced outer shell made by high-pressure die casting can even beat carbon fiber helmets in terms of impact strength and pierce resistance.
- Classy look: The No Limit features a scratch-proof multi-layer enamel surface. Its shell material and finish make the helmet highly resistant to aging.
- Aerodynamically clean without a long tail: The No Limit permits an unrestricted upward view and avoids neck injuries.
- The included clear polycarbonate visor is break-proof and anti-reflex, anti-scratch and anti-fog coated. Thanks to its 100% UV protection, it can substitute for extra sunglasses. The clear visor can easily be replaced by a toned brown one that is available as an accessory.
- The skin-friendly, breathable and antibacterial full textile lining (made in EU) provides for a pleasant climate inside the helmet. Pressure-free ear pads and a wide, well cushioned internal chin strap contribute to the wearing comfort.

Weight: 620 g + Visier 114 g

Sizes: S=55/56, M=57/58, L=59/60, XL=61/62 cm head circumference
XXL=63 cm (only in white and carbon-optic available)



HHe30 white with toned visor (HHe350)



HHe32 carbon-optic



HHe300 white

Art.#	No Limit with clear visor	€
HHe30	No Limit white with clear visor	254,00 €
HHe31	No Limit blue, anthracite metallic with clear v.	257,00 €
HHe32	No Limit carbon look with clear visor	277,00 €

Art.#	No Limit without visor	€
HHe300	No Limit white without visor	208,00 €
HHe310	No Limit blue, anthracite metallic without v.	211,00 €
HHe320	No Limit carbon look without visor	231,00 €



HHe31J blue metallic



HHe310J anthracite metallic



HHe73

Art.#	No Limit Jet with clear visor	€
HHe30J	No Limit Jet white with clear visor	254,00 €
HHe31J	No Limit Jet blue, anthracite metallic with c.v.	257,00 €
HHe32J	No Limit Jet carbon look with clear visor	277,00 €

Art.#	No Limit Jet without visor	€
HHe300J	No Limit Jet white without visor	208,00 €
HHe310J	No Limit Jet blue, anthrac. metallic without v.	211,00 €
HHe320J	No Limit Jet carbon look without visor	231,00 €

Art.#	No Limit accessories	€
HHe35	Clear visor	46,00 €
HHe350	Toned visor	49,00 €
HHe3500	Dark toned visor	49,00 €
HHe352	Mirrored visor	59,00 €
HHe351	Visor screw kit with ratchet inserts	9,00 €
HHe73	Premium fleece helmet/instrument bag	9,50 €



* The mirrored visor is very sensitive, a careful handling is required. (e.g. Transportation in the helmet bag)



CHARLY AIR SPORTS HELMETS

LOOP

Innovative ABS helmet with optional visor, certified to CE EN 966 (airborne sports) and CE EN 1077 (skiing and snowboarding).

Loop features

- Top quality made in Europe. Charly offers a lifetime guarantee.
- The highly effective ventilation of the EPS calotte (foam-padded cushioning cap) permanently provides for a pleasant climate inside the helmet. Unlike some skiing and air sports helmets, the Loop is equipped with generous vents in the interior lining such that the air intakes on the outer shell are not covered from the inside. They are thus not just a visual gimmick but part of an effective ventilation system. The flow of fresh air is guided through the foam padding, distributed throughout the textile cap and channeled away again. The breathable interior lining thereby provides for comfortable temperatures without the need to adjust the airstream manually.
- The Loop's antibacterial textile lining envelops the whole head, is replaceable and washable. It offers considerably more comfort than adjustable headbands and is available for head circumferences of 53-55 cm (XS), 54-57 cm (S), 56-59 cm (M), 59-61 cm (XL) and 62-63 cm (XL) provides for a pleasant climate inside the helmet.
- The helmet is equipped with very comfortable, pressure-free ear pads but can also be worn without ear covers.
- A high-quality ratchet closure allows a precise adjustment of the chin strap.
- The Loop has small dimensions and weighs only 480 g.
- A helmet protection bag is included in the price.
- The optional Charly VS sun visor reduces drafts and protects from UV radiation. The visor fits over most glasses. As it is very well ventilated, glasses worn under the visor are prevented from fogging up. Tight-fitting ski goggles that are recommended during snowfall and for racing can of course also be used with the helmet.



HHe9C matt black

Weight: 480 g

Sizes: XS=53-55cm, S=54-57cm, M=56-59cm, L=59-61cm, XL=62-63cm
Kopfumfang

Art.#	Loop	€
HHe9C	Loop (matt blue, m. black, m. red, m. orange)	135,00 €
HHe9C	Loop (glossy white)	135,00 €
HHe9N	Loop with Nova design	112,50 €



HHe9C matt blue
with visor salmon (HHe950)



HHe9C matt red



HHe9C glossy white
with visor grey (HHe950)



HHe9C matt-orange
with visor yellow (HHe950)



HHe9N glossy white
with Nova Design



HHe950 Visor grey, salmon, yellow



HHe9500 Visor toned and mirrored



HHe952 Extra lining



HHe951 Visor screw kit



HHe73

Art.#	Loop accessories	€
HHe952	Extra lining for Loop	15,00 €
HHe950	Visor grey, salmon, yellow	31,00 €
HHe9500	Visor toned and mirrored	41,00 €
HHe951	Visor screw kit	7,00 €
HHe73	Premium fleece helmet/instrument bag	9,50 €



CHARLY AIR SPORTS HELMETS



ACE

Very comfortable, safe and reasonably priced paragliding and winter sports helmet with optional visor, prepared for chin guard attachment.

Ace features

- Certified to CE EN 966 (airborne sports) and CE EN 1077 (skiing and snowboarding).
- High-class quality helmet made in Europe. Charly offers a lifetime guarantee.
- The helmet shell is drawn far down at the sides, improving the fit on the head and providing for pressure-free ear padding. The wide, well cushioned internal chin strap contributes to the wearing comfort.
- The Ace's high-quality EPS cushioning foam is fully padded with skinfriendly and antibacterial textile fabric (made in EU) on the inside.
- The interior lining in sizes XS, S, M, L, XL is replaceable and washable.
- The optional Charly VS sun visor reduces drafts and protects from UV radiation. The visor fits over most glasses. As it is very well ventilated, glasses worn under the visor are prevented from fogging up. Tight-fitting ski goggles that are recommended during snowfall and for racing can of course also be used with the helmet.
- The Ace is upgradable with different chin guards: slim, e.g., for protection from slalom poles when used for winter sports; wide, e.g., for protection from rebounding towing releases when used for air sports.



HHe5v red

Weight: 530 g

Sizes: XS=53-55cm, S =55-58cm, M=57-59cm, L=58-60cm XL=61-62cm
Head circumference

Art.#	Ace	€
HHe5v	Ace (black, white, red)	94,00 €
HHe51v	Ace carbon optic	109,00 €

HHe5v black
With visor yellow (HHe950)

HHe5v white

HHe5v red
with visor gray (HHe950)HHe51v carbon loop
with visor toned and mirrored (HHe9500)

HHe952V Extra lining



HHe950 Visier gray, salmon, yellow



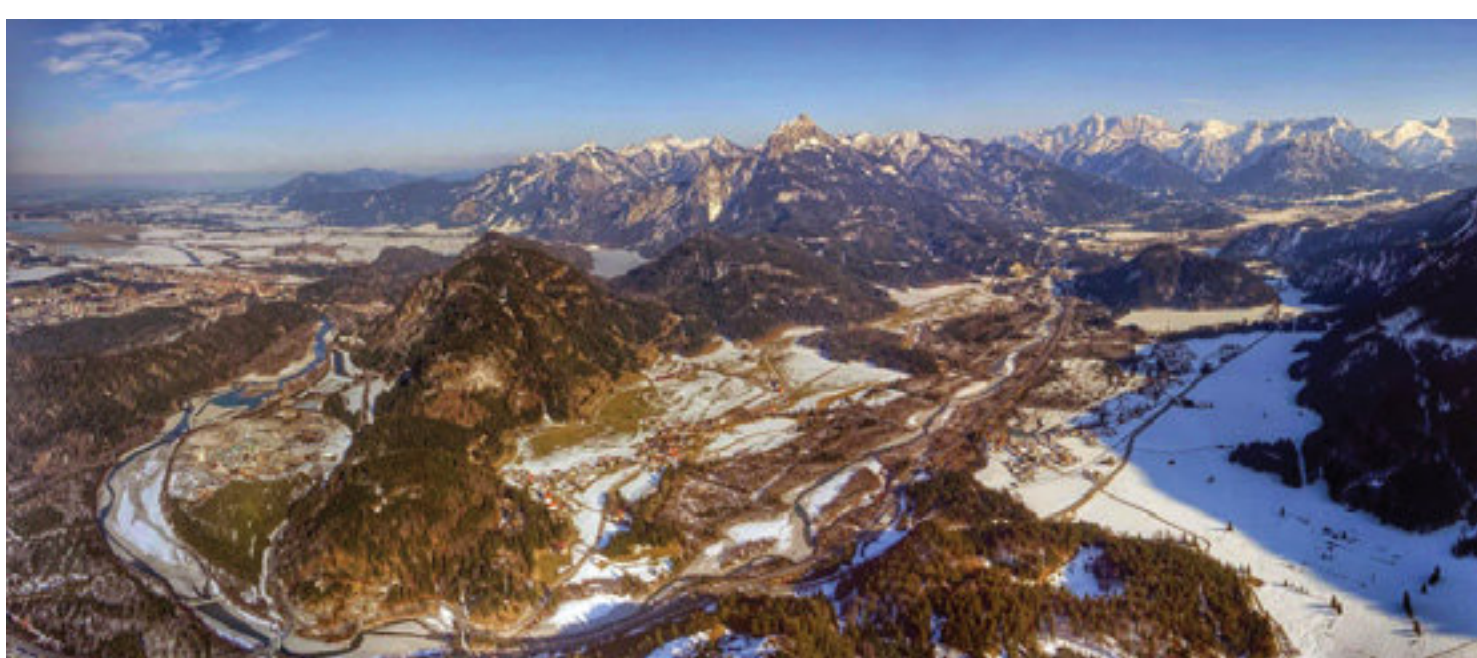
HHe9500 Visor toned and mirrored



HHe951 Visor screw kit

Art.#	Ace accessories	€
HHe252V	Extra lining for Ace	15,00 €
HHe950	Visor gray, salmon, yellow	31,00 €
HHe9500	Visor toned and mirrored	41,00 €

Art.#	Ace accessories	€
HHe951	Visor screw kit	7,00 €
HHe510s	Chin guard incl. visor screw kit ø 59 g	10,00 €
HHe73	Premium fleece helmet/instrument bag	9,50 €



HHe510s Chin guard



HHe73 Premium fleece helmet/instrument bag



CHARLY AIR SPORTS HELMETS

BREEZE VS

Very comfortable, safe and reasonably priced paragliding and winter sports freestyle helmet with optional visor.

Breeze features

- Certified to CE EN 966 (airborne sports) and CE EN 1077 (skiing and snowboarding).
- High-class quality helmet made in Europe. Charly offers a lifetime guarantee.
- The Breeze's high-quality EPS cushioning foam is fully padded with skin-friendly and antibacterial textile fabric (made in EU) on the inside.
- The interior lining in sizes XS, S, M, L, XL is replaceable and washable.
- The ear pads can be detached in warmer conditions.
- The optional Charly VS sun visor reduces drafts and protects from UV radiation. The visor fits over most glasses. As it is very well ventilated, glasses worn under the visor are prevented from fogging up. Tight-fitting ski goggles that are recommended during snowfall and for racing can of course also be used with the helmet.



HHe2v matt black

Weight: 475 g

Sizes: XS=53-55cm, S=54-57cm, M=56-59cm, L=58-61cm XL=61-62cm head circumference

Art.#	Breeze	€.
HHe2v	Breeze VS (matt black, white)	99,80 €



HHe2v white



HHe2v white with visor grey (HHe950)



HHe2v matt black with visor salmon (HHe950)



HHe2v white



HHe950 Visor grey, salmon, yellow



HHe9500 Visor toned and mirrored



HHe951 Visor screw kit



HHe73



HHe952V Extra lining

Art.#	Breeze accessories	€.
HHe252V	Extra lining for Breeze	15,00 €
HHe950	Visor gray, salmon, yellow	31,00 €
HHe9500	Visor toned and mirrored	41,00 €
HHe951	Visor screw kit	7,00 €
HHe73	Premium fleece helmet/instrument bag	9,50 €



BREEZE VS TANDEM

Size adjustable helmet for tandem passengers or use as rental helmet; certified according to CE EN 966 (airborne sports), with detachable ear pads and optional visor.

Weight: 480 g

Sizes: XS-M = 54-57cm, L-XL = 58-61cm

Art.#	Breeze VS Tandem	€.
HHe2T	Breeze VS Tandem (white)	99,80 €



GLOVES



CHARLY Windstopper Fleece

€



Windproof and breathable paragliding gloves for the summer with heatable hotliner- wristlet and touch function

- Improved follow-up model of our bestseller with fleece-lined goat nappa leather on the palm and ergonomically engineered reinforcements made of robust Supergrip at areas that are particularly exposed while paragliding
- Elastic neoprene inserts in the knuckle area and pre-shaped fingers for easier gripping
- Sensitive, slip-proof and breathable palm
- Long, wide fleece gauntlet that locks out the wind
- Hotliner pulse warmer: Pocket for activated carbon heat packs at the inside of the wrist
- Touch functionality: Conductive, robust synthetic leather at the thumb and index finger enable precise operation of touch screens

Sizes: 7 = S , 8 = M , 9 = L , 10 = XL , 10,5 = XXL

HM18 Charly WS-Fleece Handschuh

39,50

CHARLY Protect

€



Comfortable, windproof and breathable all year round fingered glove that is ideally suited for paragliding, cross-country skiing and for biking and horseback riding in the winter.

- The windproof, breathable and pliant soft shell outer layer and high-quality goat nappa leather on the palm ensure a pleasant climate and sensitive grip; comfortable neoprene gauntlets keep the cold outside and your wrists warm.
- Extra leather reinforcements on the palm, at the sides and between the little finger and the ring finger reduce abrasion at the critical wear points; elasticated inserts and preformed fingers improve the wearing comfort and provide a secure grip.
- A waterproof finger cover that is tucked away in the back of the hand offers additional protection against sudden weather changes.
- Conductive fabric at both index fingers and thumbs enables precise touchscreen operation.

Sizes: 7 = S , 8 = M , 9 = L

HM180 Charly Protect

39,90

CHARLY Touch Leder

€



Comfortably soft, breathable and pliant all year round paragliding gloves.

- Smooth, windproof, breathable and pliant soft shell outer layer; high-quality goat nappa leather on the palm for improved grip and a pleasant climate inside
- Soft PrimaLoft® insulation for warm and dry hands; equipped with a pocket for Hotliner activated carbon heat packs (HM151) on the back of the hand; activated by oxygen in the air, they provide pleasant warmth for up to six hours on very cold days
- Special leather reinforcements on the palm, at the sides and between the little finger and the ring finger reduce abrasion
- Conductive fabric at both index fingers and thumbs enables precise operation of devices with capacitive touchscreens (e.g., MP3 players, smartphones, tablet computers, etc.)
- Elasticated inserts and preformed fingers improve the wearing comfort and provide a secure grip

Sizes: 7 = S , 8 = M , 9 = L , 10 = XL , 10,5 = XXL

HM1940 Charly Touch Leder

58,80

CHARLY Touch Combi

€



Heatable paragliding fingered glove and mitten.

The Charly Touch Combi is a comfortably soft, breathable and pliant all year round paragliding fingered glove, ideally suited also for cross-country skiing and for biking and horseback riding in the winter. The mitten is invisibly tucked away in the back of the hand and can be pulled out and put over the fingers when needed. Precise flight instrument operation is still possible. Moreover, conductive fabric at both index fingers and thumbs enables easy operation of devices with capacitive touchscreens.

Two pockets inside the mitten can be equipped with Hotliner activated carbon heat packs (HM151). The heat packs are placed exactly where they are needed most and can provide warmth to the fingers from both sides in very cold weather. They are aerated very well inside the mitten and can thus emit heat for up to six hours.

- Other features similar to the Charly Touch Leder

Sizes: 7 = S , 8 = M , 9 = L , 10 = XL , 10,5 = XXL

HM1945 Charly Touch Combi

69,90

Activated Carbon heat packs

€



Extra warmth for your gloves..

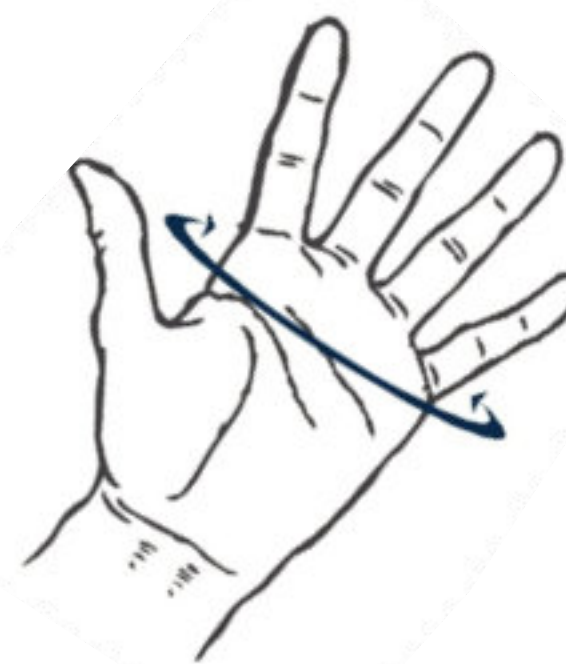
Shrink-wrapped pouches filled with activated carbon and pulp; after opening the packaging, they are activated by oxygen in the air and provide pleasant warmth for up to six hours

HM151 Activated Carbon heat packs (pair)

1,60

Size chart gloves

Hand circumference around the knuckles, without thumb:



Hand circum.	Size
18 - 21 cm	S
20,5 - 22 cm	M
21,5 - 23,5 cm	L
22,5 - 24,5 cm	XL
24 - 26 cm	XXL



ELECTRICALLY HEATED GLOVES

CHARLY'S INNOVATIVE HEATING SYSTEM

For frosty temperatures, Charly's high-tech rechargeable battery heating can be switched on. It takes the reaction of the body into account, which passes the blood away from the extremities into the body, in order to supply the vital organs. Important for warm hands is that the warmth starts in the fingers, as only then the whole hand can be warmed up. Unlike foil-based systems, which can only be affixed at the back of the hand and back of the fingers because of their low flexibility, the flexible textile wires of the Charly gloves run laterally along the fingers and finger tips. This protected position between the fingers also has the further advantage that the heat loss to the outside is reduced. Thereby, the glove perceptibly heats up better and longer.

THE RECHARGEABLE BATTERY TECHNOLOGY

The flat Charly dual batteries in the both zipper pockets can comfortably be stored either at the top side or the underside of the wrist. Without comfort losses, also two dual batteries for each glove can be inserted. The BASIC version is supplied with one pair of rechargeable battery for each glove, but you can buy separately the replacement batteries (HM1930) later at any time and insert them. The PLUS version already includes the second pair of rechargeable batteries at a discounted price. The heat output is independent of the number of batteries, but convinces in any case. The difference is only in the heating time, which is however also in the BASIC version for the daily use absolutely sufficient. At the touch of a button, the temperature is adjustable in three heating levels, which is indicated by red, blue or green lightening LEDs, integrated in the switch. The additional battery charge indicator reminds you to switch to a lower level in time, to adjust the battery power to the desired operating life.

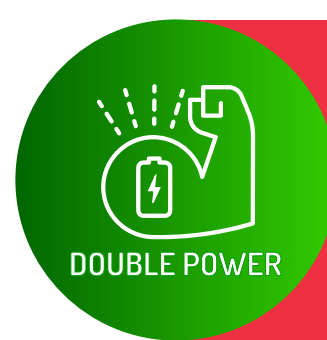
Li-ion	Heating level		
	RED	BLUE	GREEN
Powerheat / Light / Fire - BASIC	1h 45min	2h 30min	5h
Powerheat / Light / Fire - PLUS	3h 30min	5h	10h

Features of all Charly Li-ion heated gloves:

- Important for paragliding pilots: No entanglement of the lines due to the long gauntlet with internal drawcord
- Conductive leather at index and thumb for operating smart phones and other devices with touch screen
- BASIC version with a dual rechargeable battery for each glove; PLUS version with 2 dual rechargeable batteries for each glove at the discounted price
- You can buy separately the replacement batteries

Scope of delivery:

- 1 pair of Charly electrically heated gloves
- 4 (PLUS version) or rather 2 (BASIC version) Lithium Ion dual batteries 7,4 V / 2 AH / 14,8 Wh
- Battery charger for simultaneous charging of up to 4 dual batteries
- Practical fabric pocket for storage of gloves, batteries and battery charger
- Operating instruction



Charly's latest generation of battery-powered heating gloves is equipped with 2 battery pockets per glove and is therefore unique on the market today. The additional batteries make it possible to double the heating time to up to 10 hours with unrivalled heating performance!

Charly LI-ION FIRE PLUS / BASIC €



The Charly LI-ION FIRE fits like a second skin and is the ideal under glove, if the „normal“ glove is not sufficient. The cosy, highly breathable fabric, equipped with a wind blocker soft-shell at the back of the hand as an additional insulation layer delivers the extra plus of heat. In case of extreme coldness, the battery-operated heating can be patched in. During the transitional period or on less cold days, it can also be worn solo and ideally warms at a wintery walk or when you go jogging. For hang-gliding and paragliding, it is used in connection with hand fairings. Flight instruments with keys or touch screens can be operated though the glove without any problems.

- Tight and very convenient fit due to soft materials
- Wind blocker soft-shell Insulation at the back of the hand
- Neoprene gauntlet for a comfortable padding of the rechargeable batteries
- Precise operation of flight instruments with keys or touch screen through the glove
- Year-round flexibly usable as independent glove or as under glove

Unisex sizes: S, M, L, XL

HM1929P Charly LI-ION FIRE PLUS € 209,80

HM1929B Charly LI-ION FIRE BASIC € 169,80

CAUTION: The Charly LI-ION FIRE BASIC can't be retrofitted with a second set of dual batteries for extending the heating time, as it only has one battery pocket for each side!

Charly LI-ION LIGHT PLUS / BASIC €



Thin, heated leather glove with lithium-ion batteries, especially designed for the paragliding- and outdoor sport. The Charly LI-ION LIGHT has been developed particularly for paragliding pilots. Especially during the transition times, there are often summerlike temperatures at the take-off site, while in great altitudes it is freezing cold. At the touch of a button, the required warmth can be switched on easily during the flight. The goat nappa leather, laterally guided from the inner hand to the hand, protects particularly stressed areas against abrasion. The Charly LI-ION LIGHT is a true all-rounder. It has ingenious features and is thus convenient for numerous outdoor sports as cross-country skiing and horse-back riding, for which special reinforcements exist.

- Light weight, maximally breathable and sensitive
- Inner hand completely of robust goat nappa leather
- Upper hand and gauntlet windproof with 3 layers wind blocker soft-shell of very high quality
- Ideally for ski tours: Adaption of the temperature during the ascent, sufficiently sensitive for switching furs
- Usable also as under glove in down mittens

Unisex sizes: S, M, L, XL, XXL

HM1935P Charly LI-ION LIGHT PLUS € 245,50

HM1935B Charly LI-ION LIGHT BASIC € 205,50

Li - Ion Polymer battery packs and extension cables €

Extension cables and battery packs for electric heated gloves



HM1929V



HM1930

HM1929V Extension cable for connecting external batteries for Charly electric heated gloves € 5,50

HM1930 Charly double battery, Li-ion Polymer Akku 7.4 V, 2000 mAh (2 or 4 double batteries required for one pair of gloves) € 39,80

Charly LI-ION POWERHEAT PLUS / BASIC €



Pleasantly soft and comfortable heated glove of leather with lithium-ion batteries for paragliding and outdoor activities in winter. The Charly LI-ION POWERHEAT is a very good thermally insulated glove, which keeps the hand cosily warm and dry due to its waterproof and breathable Eurotex® Membrane and the moisture-wicking Primaloft® insulation. Supple and at the same time robust goat nappa leather makes the Charly LI-ION POWERHEAT extremely comfortable and sensitive. Conductive leather at index and thumb for operating smartphones and other devices with touchscreen.

- Supple but robust glove of goat nappa leather
- Permanently water proof and breathable Eurotex® Membrane and moisture-wicking Primaloft® Insulation for warm and dry hands
- Grip friendly by elastic neoprene in the ankle area and pre-formed fingers
- Extensive supergrip reinforcements at the inner hand, the thumb and at the sides prevent premature deterioration when paragliding
- Practical safety strap for mounting on the wrist.

Unisex sizes: S, M, L, XL, XXL

HM1933P Charly LI-ION POWERHEAT PLUS € 265,50

HM1933B Charly LI-ION POWERHEAT BASIC € 225,50

SUN GLASSES • BALACLAVAS • SHOES



Bertoni Anti-Fog €



Air sports sunglasses/helmet glasses that do not disturb the field of view. Distortion-free 2 mm polycarbonate lenses, 100% UV protection, anti-fog and anti-scratch coating, incl. microfiber pouch.

Color: silver mirror

HM71 Bertoni Anti Fog

45,00

Charly fleece balaclava

Our super soft balaclava leaves nothing to be desired: It features a smooth outer surface and combines highquality ClimaWarm elastic fleece, functional design and a sufficiently long neck.



HM7F Charly fleece balaclava

18,00

HM7F* dto. Logo misprint, 50% discount

SALE 9,00



La Sportiva Hyper Mid Gore-Tex €



Lightweight, supportive and waterproof Gore-Tex® paragliding shoe for all sporting activities including ambitious day hikes and easier boulder problems.

Thanks to its innovative shaft and sole/midsole construction, the Hyper Mid GTX is flexible and light like a sports shoe and surprisingly comfortable from the first step. Yet, it offers excellent stability.

An EVA midsole with Rock Guard platform in the front part prevents unnatural torsion of the ankle. The Vibram® Idrogrip sole is equipped with an Impact Brake System at the heel and inner side, suction cups at the outer side and a Climbing Zone in the front part, and thus provides for traction both on unmade terrain, e.g., launch sites and landing fields, and on trails and rocks.

At the outside, soft and sturdy suede leather is combined with robust synthetic leather. Abrasion-resistant rubber reinforcements in the area of the toes protect the upper from pebbles and sharp rocks. At the inside, a moisture-transporting GoreTex® lining with an integrated Gore-Tex® membrane ensures your feet stay dry and comfortable. Weight: 750 g

Color: black/red

Sizes UK: 8 - 11,5 (only while stocks last)

HM86 La Sportiva Hyper Mid GTX

SALE

129,50

HANWAG Sky GTX €



Extremely lightweight (600 g) thanks to a combination of Air Mesh and suede leather. Permanently waterproof, highly breathable Gore-Tex lining. Smooth-running dual-zone lacing system (special clamping eyelets enable different lacing tensions at the fore/mid foot and around the ankle). Warm insulated shaft and sole. Exceptional fit. Vibram Mars sole with extra large contact surface for safe takeoffs and landings. Rubber reinforced toes. Comfortable midsole cushioning for smooth heel-to-toe transition



Colours: marine, mango (no longer available in all sizes)

Sizes UK: 4 - 12 (only while stocks last)

HM811 Hanwag Sky GTX

239,00

HANWAG Super Fly GTX €



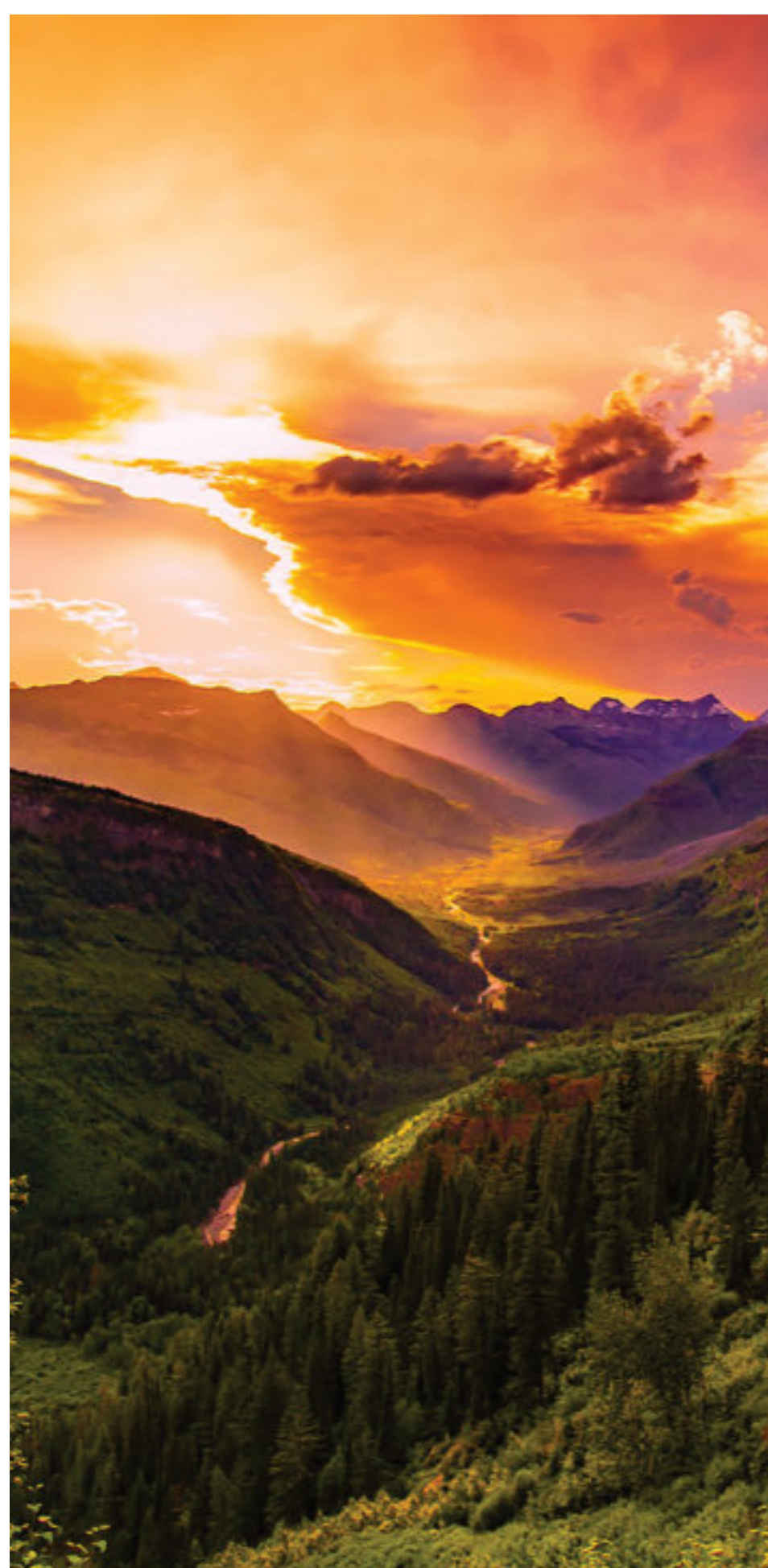
The Super Fly GTX made from cowhide leather is permanently waterproof and highly breathable thanks to its Gore-Tex Duratherm membrane. The shock absorbing dual layer cushioning wedge provides for smooth landings. All-round rubber around the lower part of the upper protects the leather from scree and rocks and significantly increases stability and durability. New eyelets for easy lacing. Weight: 990 g

Colours: alpin

Sizes UK: 4 - 12 (only while stocks last)

HM81 Hanwag Super Fly GTX

279,95





SHIRTS • FLIGHT INSTRUMENTS

CHARLY T-shirt Evolution paragliding graphic €



High-quality cotton T-shirt.

Color: gray
Sizes: M,L,XL

HM412G T-Shirt Evolution PG ~~36,50~~ **SALE 29,00**

CHARLY T-shirt Evolution hanggliding graphic €



High-quality cotton T-shirt.

Color: gray
Sizes: M,L,XL

HM412H T-Shirt Evolution HG ~~42,00~~ **SALE 34,50**

CHARLY T-shirt Evolution hanggliding €



High-quality Hanes functional shirt

Color: mid blue
Sizes: L,XL

HM410H Funktionshirt Evolution HG ~~44,00~~ **SALE 36,50**



FLYTEC ELEMENT ALTO €

NEW



The Flytec ELEMENT ALTO is a variometer which is easy to operate for beginners and leisure pilots. All essential functions are available. The ELEMENT ALTO is very robust with its solid housing in the proven Flytec-Design. Due to the simplified internal Naviter electronics it works reliably and offers the usual Flytec quality in variometer and sound.

- Robust, shockproof ABS housing
- Reliable and proven high-sensitivity vario
- Comfortable and clear vario tone • High-contrast monochrome LCD
- Keyboard with clearly detectable, glove-friendly keys
- Logbook • Customizable vario tone frequency
- Vario profiles, for different flying types
- Altimeter showing Relative / Flight level / meters or feet (ALT2)
- Graphical instant and average climb indicator
- Flight time and Local time permanently on display
- Dimensions: 138 x 74 x 23 mm, weight: 178 g with 2 Alkaline batteries, operating time: ca. 35 h, operating temperature: -10°C up to 50°C

Hi492F FLYTEC ELEMENT ALTO 199,00
Hi9641 FLYTEC protective cover 12,50

FLYTEC ELEMENT TRACK €



Despite its low dimensions, the ELEMENT TRACK has a high-sensitive 48 channel GPS-receiver and accurately indicates for paragliding pilots the important speed above ground. The ELEMENT TRACK is perfectly adapted to the requirements of paragliding- and hanglider pilots and provides an amazingly simple operation.

- Buttons also easily to operate when wearing gloves
- Black-white screen with high contrast
- Altimeter (absolute and relative height)
- All fundamental frequencies and modulations of the acoustic signals are adjustable
- GPS-receiver with 48 channels • Airspace-support
- Capacity for 200 waypoints • Routes for cross country flights and races
- Wind direction and wind speed • Speed above ground
- Current glide ratio • Target glide ratio to the next turning point
- Last thermal (Direction graphical and numerical, distancy)
- Connection with every computer via Micro-USB-interface
- Dimensions: 138 x 74 x 23 mm, Weight: 178 g with 2 Alkaline batteries, operating time: ca. 30 h, operating temperature: -10°C up to 50°C

Hi497F FLYTEC ELEMENT TRACK 415,00
Hi9641 Fabric protective cover 12,50

FLYTEC ELEMENT SPEED €



The perfect vario for beginners and occasional pilots! This compact vario in shockproof ABS housing has glove-compatible buttons as well as a black-white display with high contrast and is very easy to operate.

- Altimeter and rising/sinking in outstanding Flytec-quality
- Speed above ground and current gliding
- Wind direction and wind speed (graphical and absolute)
- Distance and direction to the take-off and to the last thermal (direction graphical and absolute, distance)
- Five pre-defined, individually adaptable vario profiles (weak / medium / strong thermal, ridge-soaring, balloon)
- GPS-receiver with 48 channels positioning with 1 Hz
- Dimensions: 138 x 74 x 23 mm, weight: 178 g with 2 Alkaline batteries, operating time: ca. 35 h, operating temperature: -10°C up to 50°C

Hi496F FLYTEC ELEMENT SPEED 349,00
Hi496F Fabric protective cover 12,50

Mobile solar charging set €

Mobile solar charging set incl. energy storage in pocket format.



Das **Goal Zero Guide 10 Plus Solar Set** consists of the Nomad 7 solar panel and the Guide 10 Plus power pack. Using solar energy, the solar panel charges smartphones, tablets, GPS or other portable devices in only few hours. Alternatively, it charges 4 AA or 4 AAA batteries and the thus stored energy is immediately available whenever you need it!

GOALZERO
Dimensions: 6,0 x 10,0 x 2,0 cm (power pack), 15 x 2,5 x 26 cm (solar panel)
Weight: 180 g (power pack), 360 g (solar panel)

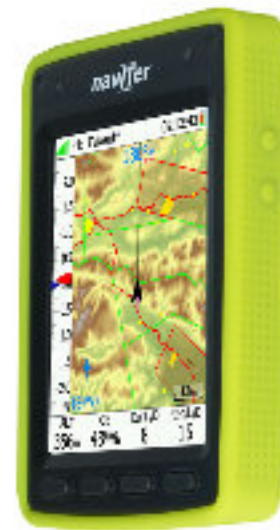
Hi75 Goal Zero Guide 10 Plus Solar Set **SALE 64,95**

FLIGHT INSTRUMENTS

NAVITER HYPER



Hi5226



Hi5226J

The Naviter HYPER is the perfect partner for your flight adventures! Both as stand-alone instrument for the daily use, for the Hike & Fly sector or as backup for your OUDIE.

The compact multitalent has high-end vario and GPS functions, callable about a very user-friendly combination of classic keys and touchscreen, as well as its clever display technology: In the transfective colour display of the Naviter HYPER, additional to the background light is a reflecting layer integrated which reflects the incident ambient light. Thus, compared to displays with a common background light, a much better readability in sunshine is reached.

Hike & Fly pilots like the compact construction form of the Naviter HYPER, the low weight of only 135 g as well as durable batteries: The integrated battery enables an independent operating time of up to 12 hours with typical usage, or even up to 36 hours when using it only as logger with switched off display.

Very practical: In the Hike & Fly mode, the running sections are also saved, flights, however, automatically are recognized and saved as own IGC files!

Also as regards interfaces, the Naviter HYPER is very flexible: As well its „big brother“ OUDIE, it is equipped with fully FLARM / FANET connectivity. USB connection, Bluetooth and WiFi simplify the conduction of software updates and transfer of the recorded flight dates to the computer.

The most important features of the Naviter HYPER at a glance

- GPS task navigation and recording of competitive IGC tracklogs
- High-end vario functions
- Thermal assistant
- Airspace structures with warning levels
- Way points & destination entry
- Outstanding touch colour display, due to transfective technology also well readable in sunshine
- 4 configurable screen views
- Simple and intuitive operation due to a combination of normal keys and touchscreen
- USB, Bluetooth and WiFi interfaces

Dimension: 107 x 70 x 18 mm, Weight 135 g

Hi5226	Naviter Hyper	689,00
Hi5226J	Hyper Jacket - Silikon Schutzhülle in gelb, blau oder rosa	23,90

NAVITER Oudie 5 XC / Oudie 5 PRO



Hi522



Hi9642



The all-in-one vario and navigation solution for paragliding and hang gliding! Easy to use and works right out of the box. With integrated Fanet+ & Flarm it allows you to share the sky with your friends and enjoy the safety of being seen by others.

Oudie 5 is delivered with the latest version of SeeYou Mobile software. Vector maps for the whole world (topo and ground elevation data, cities, rivers, lakes, roads, etc.) are preinstalled. Airspace files for much of the world are also pre-installed.

Oudie 5 works great in combination with other Naviter products such as SeeYou software, Soaring Spot website and others. It was developed with the help of top pilots to answer the question: "Why don't you build a device for paraglider and hang-glider pilots?" A bright LCD which is a significant improvement over the standard colour LCDs available in similar devices elsewhere. The screen has an anti-glare coating and is nicely sunlight readable even in direct sunlight. The touch panel can be operated with gloves, no problem.

- Gyro-assisted vario
- Sunlight readable LCD with Touch Panel optimized for gloves
- **Fanet+** to see other free-flight pilots around
- **Flarm** to be seen by glider pilots and general aviation
- Long lasting battery with Quick charger
- Lightweight and Perfect size
- Software which fully supports Competition and XC Pilots
- Flight Optimization according to Online Contest rules
- Thermal Assistant
- 12-hour autonomy (battery life)
- **Windsensor:** In the best case scenario Oudie 5 will give a useful wind estimate already after a single 180 degree turn on the ridge. It also works at wind speeds higher than your airspeed. Additional turns make the prediction better of course. There is even lots of room for improvement of this in the future.
- Full support for FAI Triangles
- Full support for Competition tasks (Race to Goal, Elapsed time)
- All maps and airspace files preinstalled
- Easy and free software updates
- Ready to fly - no setup

Dimensions: 135 x 86 x 25 mm • Weight: 135 x 86 x 25 mm

What's in the box: Oudie 5 Pro, Protective case, Getting started manual, Universal charger, Car charger, USB Cable, Velcro tape for easy installation

Hi523	Naviter Oudie 5 PRO	879,00
Hi9642	Charly protective cover for Oudie	15,00

NAVITER Oudie 5 XC

The Oudie 5 XC is a response to many pilot requests who really like the Oudie but would be happy to live without its high-end features. It was developed with the recreational pilot in mind who flies in complicated airspace, is learning to thermal or just needs a no-setup device to fly with. Absent are the competition-related navboxes, task options, Profiles and FAI Triangle features for example. That makes the software more intuitive and easy but still packs the most important features that you expect from a Vario & GPS & Colour moving map combo.


The Oudie 5 XC will grow with you. If you become the high-end competition or XC pilot later in your career a software upgrade is available which gives you all the features of an Oudie 5 PRO.

Dimensions: 135 x 86 x 25 mm • Weight: 135 x 86 x 25 mm

What's in the box: Oudie 5 XC, Protective case, Getting started manual, Universal charger, Car charger, USB Cable, Velcro tape for easy installation

Hi5233	Naviter Oudie 5 XC	729,00
Hi5234D	Upgrade Oudie 5 XC to Oudie 5 PRO	197,30

ANEMOMETERS • SPEED SENSOR



SKYWATCH[®] BL
SWISS MADE

The weather station with Bluetooth®-support!

The weather station represents the measuring and GPS coordinates graphically and digitally. The own measured values are retrievable as well as the representation on a map.

With the Skywatch App for iOS 8.4 available free of charge or newer and Android 4.4 or newer, the measured weather data can easily be shown and saved in real time on your own smartphone or tablet and can be shared via Facebook, Twitter, Instagram and www.skywatch-bl.com.

SKYWATCH BL 400

€



Similar features as Skywatch BL 300 + additionally:

- **Pressure in hPa, mbar**
 - Resolution: 0,1 units
 - Accuracy $\pm 0,2$ hPa
 - Measuring range: 300 bis 1200hPa
- Dimensions: \varnothing 26 mm, length 116 mm
- Weight: 66 g

Hi1542 SKYWATCH BL 400 195,00

SKYWATCH BL 300

€

NEW



Features BL 300:

- **Windspeed in km/h, m/s, knots, Beaufort**
 - Resolution: 0,1 units
 - Accuracy $\pm 3\%$ / $\pm 0,5$ km/h
 - Measuring range: 3 bis 150 km/h
- **Temperature in °C, °F**
 - Resolution: 0,1 units
 - Accuracy $\pm 0,3$ °C
 - Measuring range: -25 bis +60°C
- **Humidity in %**
 - Resolution: 0,1 units
 - Accuracy $\pm 3\%$ (10-90%)
 - Measuring range: 0 bis 100%
- Dimensions: \varnothing 26 mm x Länge 116 mm
- Weight: 66 g

Hi1541 SKYWATCH BL 300 175,00

SKYWATCH BL 500

€

NEW



Similar features as Skywatch BL 400 + additionally:

- **UV-Index in UV**
 - Resolution: 1 units
 - Accuracy ± 1
 - Measuring range: 0 bis 15
- Dimensions: \varnothing 26 mm, length 116 mm
- Weight: 66 g

Hi1543 SKYWATCH BL 500 225,00

Skywatch Xplorer 2 pocket anemometer

€



Pocket anemometer with replaceable lithium battery for approx. 250.000 measurements. Features: Balanced instant wind speed, maximum wind speed, calculation of the windchill factor, units: km/h, m/s, knots, mph, fps, maximum reading: 150 km/h, 42 m/s, 81 knots, 97 mph, 138 fps, backlight, stainless steel back, replaceable lithium battery, waterproof, temperature measuring range of sensor -40°C to 80°C (-40°F to 176°F), accuracy according to swiss standards.

Hi156 Skywatch Xplorer 2 49,90

Skywatch Xplorer 4 pocket anemometer

€



Pocket anemometer with replaceable lithium battery for approx. 250.000 measurements. Features: Balanced instant wind speed, maximum wind speed, calculation of the windchill factor, electronic compass in degrees, absolute pressure from 300 to 1.100 hPa, relative pressure with calibration, weather forecast with barometric pressure tendencies, altitude with calibration (definition: 1 m/ foot; maximum altitude: 8.000 m), units: km/h, m/s, knots, mph, fps, maximum reading: 150 km/h, 42 m/s, 81 knots, 97 mph, 138 fps, backlight, waterproof.

Hi157 Skywatch Xplorer 4 119,00

Skywatch Eole 1 anemometer

€



Directionally independent anemometer with aluminum bottom plate for tripod attachment (compatible with our instrument/camera mounts)

Features: Waterproof • floats • wind speed in km/h, m/s, knots, mph, fps, Beaufort (average determination: 3 s to 24 h) • detachable protective cap with openings • LCD with backlight • power supply via two standard AA Mignon batteries • operational from -20°C to 70°C • accuracy according to swiss standards • \varnothing 65 x 155 mm, 235 g.

Hi158 Skywatch Eole 1 Windmesser 69,90

Skywatch Meteos 1 anemometer

€



Directionally independent anemometer and compass with aluminum bottom plate for tripod attachment (compatible with our camera mounts).

Similar features as Eole 1 + additionally:

- Calculation of the windchill factor
- Temperature

Hi159 Skywatch Meteos 1 anemometer 89,90

Hall Speed sensor

€



Proven, astonishing accurate and robust speedometer. Hangglider edition 10-80 km/h or 10-130 km/h. Length 19 cm, weight with mount and material sleeve 170 g.

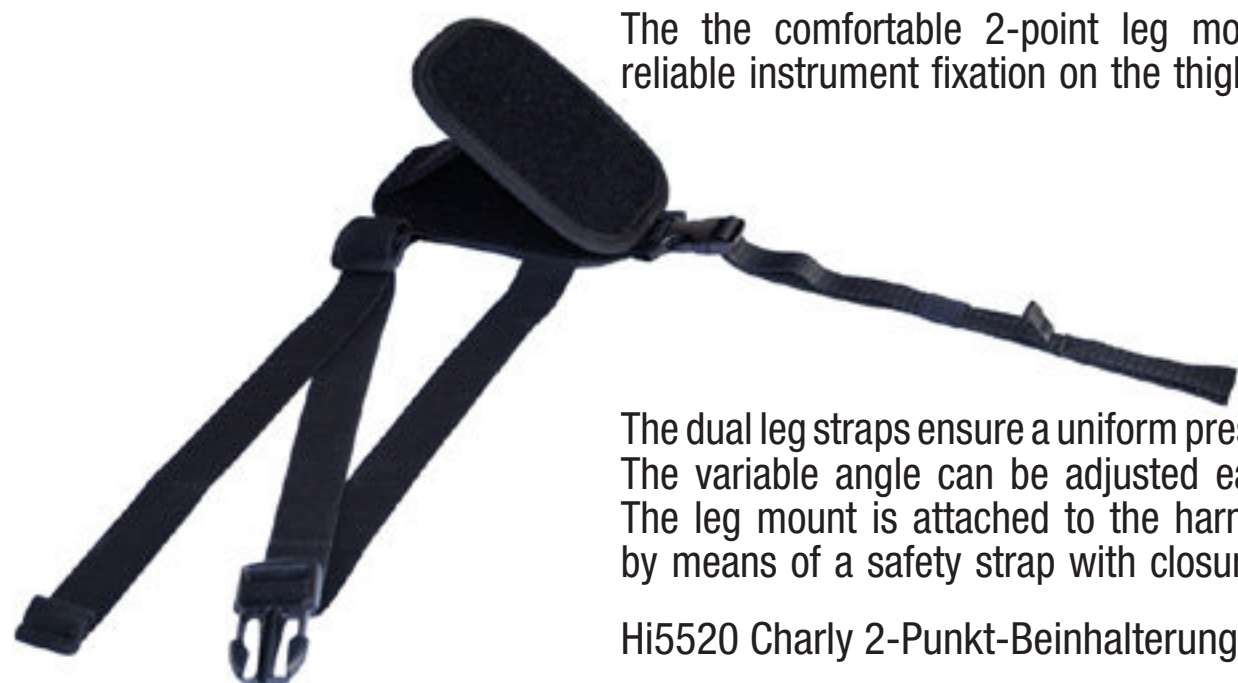
Hi141(80) HG hall speedometer 10 - 80 km/h, 19 cm, 60g 39,90
 Hi141(130) HG hall speedometer 10 - 130 km/h, 19 cm, 60g 39,90
 Hi140 Bracket short 13,50
 Hi142 Bracket long 16,00

INSTRUMENTS AND PHOTOHOLDER



Charly 2-point leg mount

€



The the comfortable 2-point leg mount provides for reliable instrument fixation on the thigh.

The dual leg straps ensure a uniform pressure distribution. The variable angle can be adjusted easily and quickly. The leg mount is attached to the harness and secured by means of a safety strap with closure. Weight: 108g

Hi5520 Charly 2-Punkt-Beinhalterung 34,00

Charly instrument cockpit mount

€



Thanks to its individually adjustable angle, the frontcockpit mount provides for good display readability in any situation. Weight: 37g

Hi5521 Charly instrument cockpit mount 16,90

Variometer mount

€



Hi550(HG)

Hi550(GS)

Hi94

Hi552

Hi550 Ball joint mount with arm for PG or HG 45,00
 Hi94 Speedbar mount for Bräuniger varios 19,00
 Hi552 Paraglider leg mount 22,50

Instrument protective material mount

€

to mount instruments either on the front cockpit pocket, on the rescue reserve front container, or by means of the flexible metal angled mount to the harness chest strap. With the Vario/GPS base board, two instruments can be mounted onto the flexible metal angled mount or to the paraglider leg mount.



Hi9640

Hi9641

Hi9642

Hi5226J

Hi9600

Hi9640 Protective cover f. Bräuniger Competino+/ Compeo+/ Flytec 6020/6030 12,50
 Hi9641 Protective cover f. IQ-One/ -One+/ -Basic GPS/ -Alto/ Flytec 6000/ 6005/ 6015/ Element 12,50
 Hi9642 Charly Protective cover f. Oudie 4 15,00
 Hi5226J Hyper Jacke - Silicone protective cover for Hyper 23,90
 Hi9600 Flexible metal angle mount 9,80

Instrument/camera mounts

€

The 3/8 inch thread of the Finsterwalder mount is suitable for all camera ball heads. These, in turn, can be screwed onto any instrument casing by means of the plate with 1/4 inch thread that is available as an accessory.



Hi81

Hi85

Hi86

Hi89

Hi80

Hi81 mount for up to 5 kg (without ball head) 17,50
 Hi80 mount for up to 1,5 kg (without ball head) 9,80
 Hi85 ball head, small (bottom 3/8 inch, top 1/4 inch thread) 13,80
 Hi86 ball head, large (bottom 3/8 Zoll-, top 1/4 inch thread) 18,50
 Hi89 plate with inch thread for camera ball heads Dimensions 13 x 50 x 3 mm 3,00



Charly premium fleece helmet & instrument bag

€



The surface of this luxurious microfibre Charly PREMIUM FLEECE HELMET BAG is smooth at the outside and soft and fleecy on the inside such that its content is optimally protected during transport. The Charly PREMIUM FLEECE HELMET BAG offers enough room for one helmet plus flight instruments, gloves, etc. and is equipped with a practical draw cord. Dimensions:: 40 x 50 cm • Weight: 67 g

HHe73 Charly Micro fleece helmet-and Instrument bag 9,50

Lightweight precision flat compass

€

Charly'sPRECISIONBASEPLATECOMPASS FOLDABLE is clearly superior to ordinary car, boat or marching compasses, because it has a much better damping and a much more reliable direction indicator, even in a 35°-inclination. The very clear display and the rotatable scale with 360° subdivision ø 60 mm of the featherlight compass provide for easy readability and operation.

Charly's PRECISION BASEPLATE COMPASS FOLDABLE is equipped with a velcro / fleece band for attachment e.g. at the front container.

Very well readable rose and rotatable 360° scale ø 60 mm. 60 x 120 x 15 mm, 80 g.



Hi168

Hi170k

Hi168 with hook-and-loop tape 27,00
 Hi170k Flat compass foldabe 27,00

Miscellaneous mounts

€



Hi94

Hi83

Hi95

Hi94 HG mount 60 x 120 mm (for use with different kinds of instruments) 19,00
 Hi83 universal ball joint mount (attachment of instruments by means of 2 screws) 12,50
 Hi95 Universal mount (for radio sets and instruments without camera thread) 21,40



SPECIAL HARNESSSES • HG ACCESSORIES



HGU110

Spreader bar

€

HGU110 Spreader bar for paraglider harnesses for use on skyfloaters 89,00

Runner sling for pilot hang-in

€



Suitable for pilot hang-ins. Breaking strength 2.500 kp, width 25 mm.

Au12/40	30, 35, 40 cm	6,00
Au12/60	45, 50, 55 cm	7,50
Au12/120	60, 65, 70 cm	8,50

Hang glider towing release

€



Charly S2:E One-stepped towing release for HG-UL towing, 150 g, DHV certified.
HS300 Charly S2 towing release 54,00



HGU101

Skyfloater Supine seat

€



Extremely comfortable skyfloating harness, does not hinder by take-off, thus ideal for the practise hill. Take-off and flight also possible with skis. The supine seat weighs only 1,2 kg and can be easily slipped into the glider cover. The rescue system can be attached on the side or (if equipped with special aid-chute container) the back.

HGU101 Skyfloater Supine seat incl. leg hang-in

250,00

Charly Knee hangers

€

Comfortably padded, certified harness, originally developed for hanggliding. This harness is also used for climbing gardens, adventure playgrounds and theatre stages. The pulley on the suspension enables continuously positions between lying, tilted forward and hanging forward.

Material: robust Cordura fabric and scrub-resistant straps. Weight 2,4 Kg. From an order of 4 harnesses, you can ask for individual modifications for an additional charge. Colours on request.

Deliverable in 3 sizes

- S (1,50-1,68 m)
- M (1,70-1,85 m)
- L (1,82-2,00 m)



HGU5 Charly Knee hangers

389,00

Charly brake chute STOP for hanggliders

€



The Charly brake chute is installed in a bag on the hangglider harness and fixed on the suspension. If you use it during the landing approach, it shortens the landing approach and considerably facilitates the landing. Attention! The brake chute has to be deployed behind the control bar, otherwise there is danger to life.

HGU32 Charly brake chute STOP 109,00

Corrosion protection oil

€



Transparent and odorless acid-free special penetrating oil for the care of high-strength hang glider tubings. Sprayed into the tubes once a year, it avoids dangerous corrosion and pitting, and provides for smooth plug-in connections. Apply only a very thin film to avoid stains on the sail!

HÖL1 WÜRTH HHS LUBE - corrosion protection oil, 500 ml 19,90

Hook-and-loop tape with buckle

€



For batten and sail fastening.

HK1800	75 x 3 cm	9,50
HK181	100 x 3,8 cm	10,00
HK182	135 x 3,8 cm	11,50
HK17	18 x 5 cm	5,00

Sail fasteners

€



Elastic multipurpose rubber rope, length 35 cm, ø 4 mm, with nylon hook. Can be used, e.g., for fastening the wire ropes and sail of long packed up gliders. Contains 4 pieces

HSe50 Liros Sail fasteners

5,50

FEX-GLIDERS



Three reasons that make Finsterwalder's gliders so popular:

While other hang glider manufacturers worry about decreasing sales figures, Finsterwalder's „Fexes“ are experiencing a revival and have almost attained cult status. More than 1.000 highly satisfied leisure pilots currently fly our gliders and gladly recommend them to others.

1. Good flight qualities

Good flight qualities are the result of a perfect interplay between several construction components: sail cut, batten and wing tube flexibility, frame ...Finsterwalder's „Fexes“ represent the perfect mix that has been found years of optimization. While competition gliders achieve their performance high aspect ratio and accept handling disadvantages, Finsterwalder's concept for all-round gliders is a relatively small, negatively V-shaped sail area. This way, performance is achieved by a low profile offset. This special concept enables the combination of **excellent flight qualities and surprisingly high performance**. Thanks to their effortless steering behavior and the advantages of the negative V-shape during thermal centering, the Fexes' performance can easily be accessed even by less experienced pilots. Finsterwalder's concept for intermediate gliders has meanwhile been copied several times, however, until now, has not yet been fully achieved. You can assure yourself of our gliders' qualities in the test reports of several air sports magazines. You can access them online via www.finsterwalder-charly.de/en/downloads.html (we will gladly send you printed copies of the test reports on request).

2. Unique 2 m short pack possibility

In addition to the conventional rigging system and packing dimensions of 5,50 respectively 3,80 m, all Finsterwalder gliders can optionally be short-packed to just 2,00 x 0,35 x 0,25 m thanks to their unique click system. Finsterwalder's sophisticated click system, where the sail is pulled off the tubing, has been brought to perfection over many years. The procedure does not stress the material and allows for the use of supported leading edges. The Snap Lock System with Finsterwalder's specially developed quick release fasteners enables the complete tool-less disassembly respectively rigging of the glider within 10-20



minutes. Moreover, the click system is advantageous for transport, storage, checks and repairs. Please find further details in the test reports of several air sports magazines. The Snap Lock System is the only super short pack system for hang gliders that is widely used today. You can visit our shop in Munich and we will gladly demonstrate or instruct you on the system free of charge.

3. Unbeatably light and robust

Thanks to their well-engineered construction and high-quality materials, the Fexes endured all trials on the DHV test vehicle even at top speed. Years of tough use at flight schools show that despite their lightweight construction and short pack possibility, the Fexes do not have to compromise in terms of robustness. All components have demonstrated their durability. Due to their high quality, used Fexes regularly achieve top prices when resold. We exclusively use specially manufactured tubes in special sizes, seamlessly drawn from 7075 T6 aluminum alloy with a strength of 650 N/mm². The tubes are eddy-current tested, mechanically polished and anodized both inside and outside. All Fexes are delivered with aerodynamically shaped fittings and ultra-light profiled AEROFOIL® and AEROSAFE® king posts and A-frame tubes forged from aircraft-grade aluminum.



Fex details from left to right: A-frame attachment with high-tech fittings, aerodynamically shaped A-frame corner and Perunal nose plate.

Lightfex Floater

The smaller version of the Perfex corresponds to its prototype in terms of flight qualities, performance and technical features. However, with respect to tube dimensions and sail cut, the construction is specially tailored to light pilots. Just like the Perfex, the Lightfex achieved top marks in the „Drachenflieger“ magazine's test reports. 14 m², optimum payload 55-80 kg! Packing dimensions 5,20/3,70/1,85 m. DHV certified! Available with speedbar for a lying down flight position or with a smaller, specially adapted supine A-frame.

L1000

€ 4270,00



Perfex Floater

2 m Kurzpack-Skyfloater mit DHV-Musterzulassung. Extrem langsam zu fliegen und dabei enorm wendig. Der Perfex hat ein wirklich traumhaftes Handling, unter 1 m/s Sinken, Maximalgeschwindigkeit supine 65 km/h, liegend 80 km/h. Für den Übungshang wegen seines geringen Gewichts und seiner Robustheit und Handlichkeit gut geeignet, für die Schulung von Anfängern jedoch fast zu leistungsstark und wendig. Mit 100%-igem Perunalgestänge, gestaffelten Rohrdurchmessern, Perunal-Segellatten mit verschiedenen Biegezonnen, Perunal-Nasenplatte, Profilturm, Finsterwalder-Turmaufhängung, AEROSAFE-Trapez, aerodynamischen Beschlügen und Schnellverschlüssen bietet der Perfex weit mehr als sein Preis vermuten lässt. Das Segel besteht aus besonders fein gewobenem, leichtem und sehr langlebigem Tuch und hat eine perfekt profilierte Anströmkannte mit Mylarverstärkung und Nasenverkleidung. 16 m², optimale Zuladung 70-105 kg. Eigengewicht ab 21 kg. Für Liegend-Flugposition oder mit kleinem, speziell angepasstem Supine-Trapez erhältlich.

P1000

€ 4270,00

*Sonderprospekt
Drachen
anfordern!*



Options

€

	Supine A-frame incl. special rigging instead of A-frame for a lying down position	no surcharge
	Round pipe or lightweight round pipe uprights instead of Aerosafe uprights for Perfex/Lightfex	no surcharge
	Speedbar with bayonet fitting and safety rope instead of straight base tube	no surcharge
A84	Wing tip protectors, pair	25,00
FHa63	Keel tube extension for Funfex (rigging aid)	63,00
Pa10	Packing bag short (2,00 m) with premium shoulder carrying straps	146,00
Pa20	Premium packing bag long	146,00

Tr22M1	AS replacement upright for Funfex/Airfex	48,00
Tr22M2	AS replacement upright for Perfex/Lightfex	51,50
Tr22M3	AS replacement upright for Speedfex	58,00

Please do not forget to order the most important replacement parts. We will gladly give you advice.

FEX-GLIDERS



More information about Finsterwalder hanggliders including assembly videos can be found on our website: www.finsterwalder-charly.de

Funfex S Intermediate

The Funfex S with double sail is the missing link between floaters and high performance gliders. Its compelling concept made the Funfex the prototype for a whole new glider category. However, its imitators never managed to surpass its flight qualities, performance, handling and lightness. Plus, it is perfectly crafted and features our unique 2 m short pack possibility.

16 m2, optimum payload 70-105 kg. Weight from 23,5 kg. Available with speedbar for a lying down flight position or with a smaller, specially adapted supine A-frame.

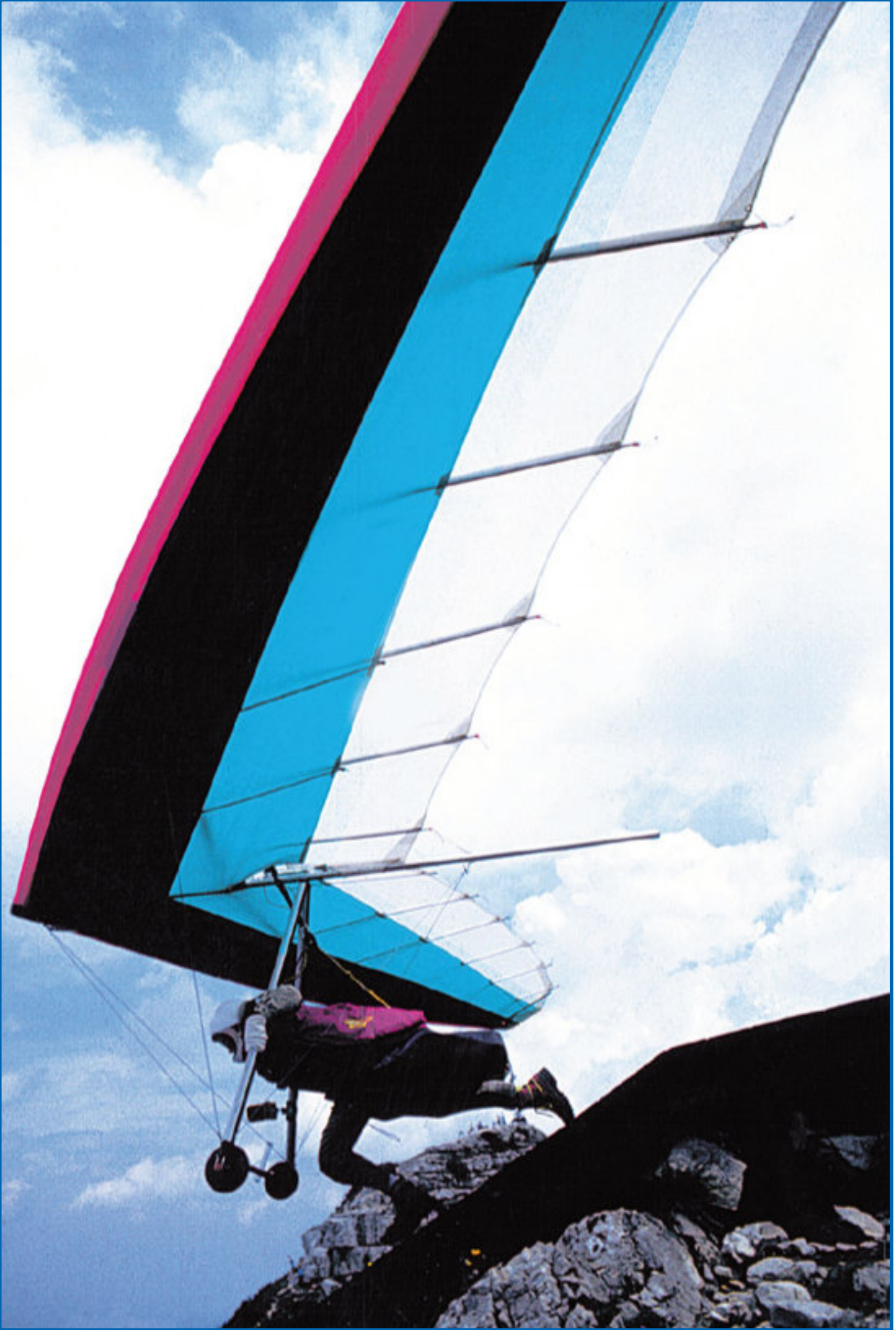
F1000 € 4690,00



Airfex Intermediate

Specially designed intermediate glider for light pilots with level 2 classification. Topclass hardware, thus unbeatably light, handy and robust. The Airfex is characterized by a particularly hassle-free landing behavior. 13,8 m2, optimum payload 55-70 kg. Weight from 22 kg.

A1000 € 4690,00



Test reports:
Read what air sports magazines write about our Fexes' as yet unsurpassed concept.
Download at www.finsterwalder-charly.de

AEROSAFE/AEROFOIL AND ROUND A-FRAME TUBES

Aerosafe/Aerofoil-UPRIGHTS

We cut uprights to the desired length and deliver them undrilled (customized tubes are nonreturnable!):

Aerosafe-Profil* (weight only 520 g/m)	Width 26 mm, length 53,5 mm (inner diameter 22 mm)	Tr22M2 matte gold up to 1,80 m	48,00 €
		Tr22M3 polished silver up to 1,65 m	66,70 €
Aerofoil-Profil* (weight only 417 g/m)	Width 26 mm, length 49,5 mm (inner diameter 22 mm)	Tr22M1 matte silver up to 1,80 m	55,20 €
		Tr22M3 polished silver up to 1,80 m	66,70 €
Round-tubes**	Tr28... (400 g/m) inner-ø 25,1 mm, outer-ø 28,5 mm	Tr28M1 up to 1,645 m	46,00 €
		Tr28M2 up to 2,18 m	61,00 €

* for improved grip and reduced risk of injury, ** drillings for round tubes on request!

Extra reinforcement tubes (installed reinforcement tubes are nonreturnable!):

The Aerosafe reinforcement tube system allows for customized upright stability. The tubes can be adapted to different pilots and upright lengths in such a way, that optimum crash safety is provided.

Reinforcement tube length 0,83 m	Tr221 without installation	7,00 €	Tr221M with installation	10,00 €
Reinforcement tube length 1,00 m	Tr22 without installation	8,00 €	Tr222M with installation	11,00 €
Reinforcement tube length 1,25 m	Tr23 without installation	10,00 €	Tr223M with installation	13,00 €

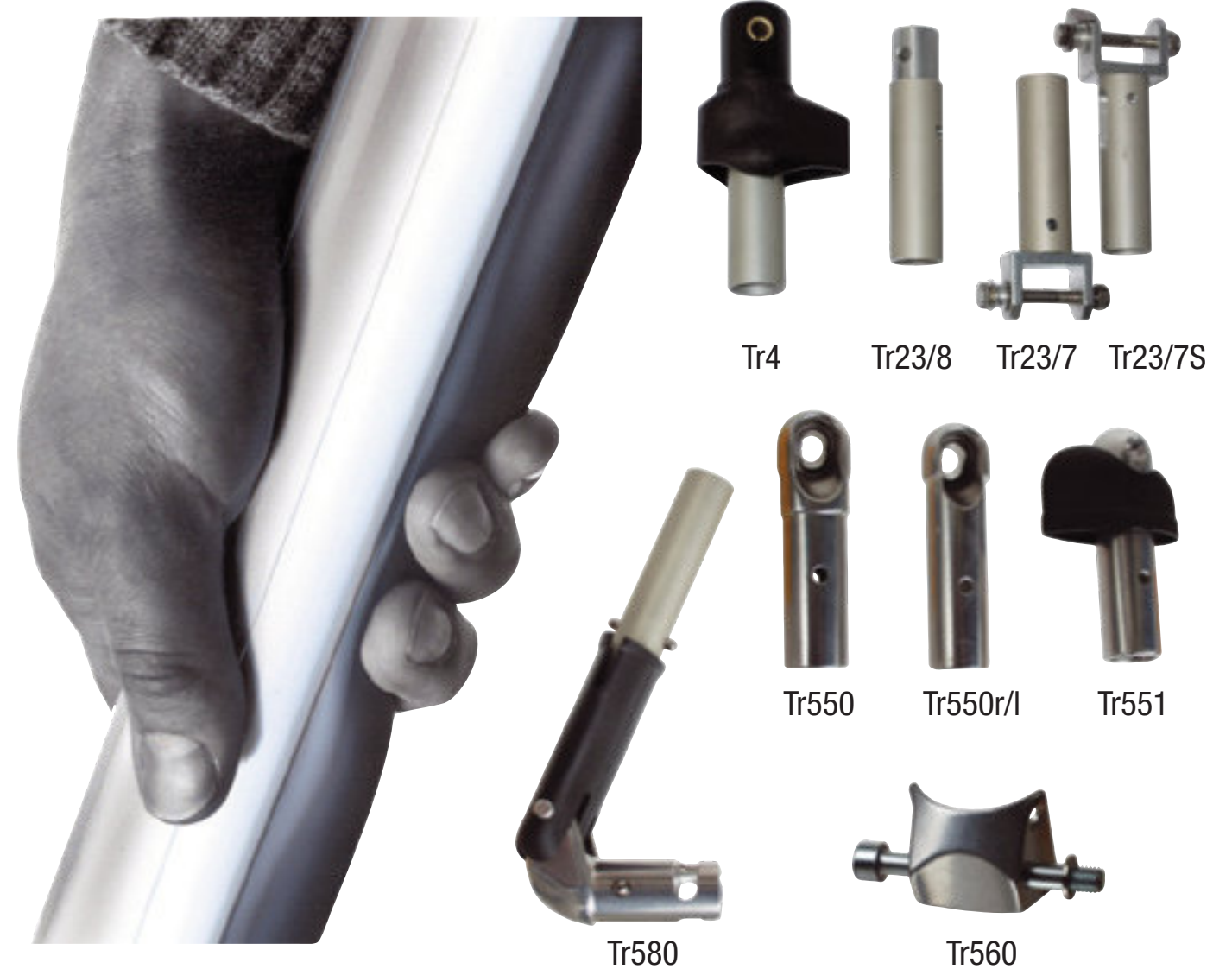
Please note: AEROSAFE (AS) are currently only available in silver polished anodised (p) !

Pre-cut Aerosafe/Aerofoil uprights (stated reinforcement tubes included), other lengths on request:

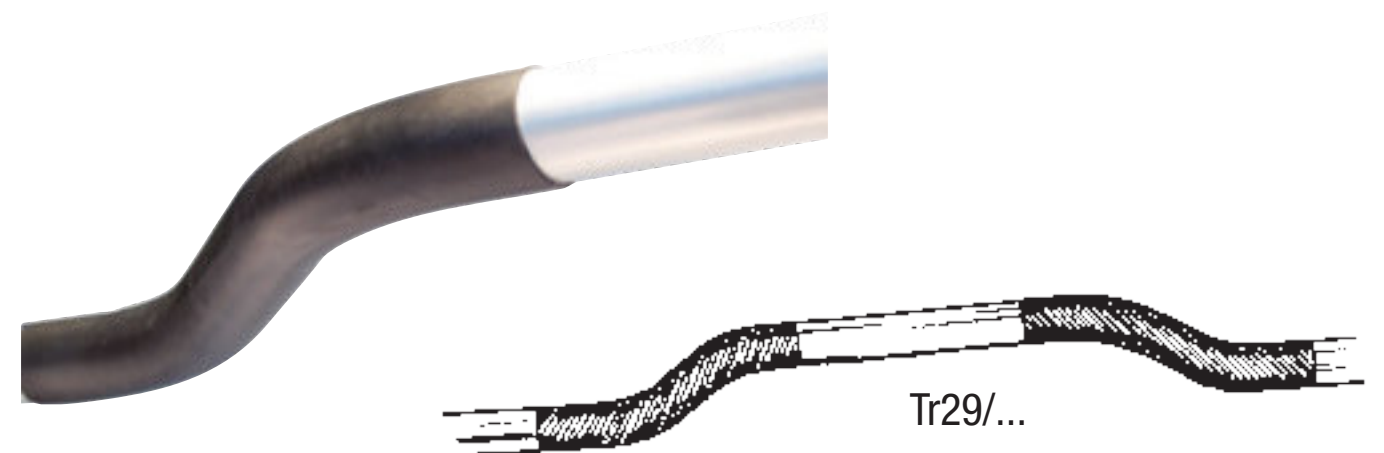
	ggf. wählen: AS = Aerosafe AF = Aerofoil	Surface	Profile length in mm	Reinforcement length in mm	Special fittings	€
Finsterwalder						
Funfex S, Airfex S, Perfex S	AS/AF	s	1470	-	-	58,00
Funfex S, Airfex S, Perfex S supine	AS/AF	s	1326	-	-	58,00
Funfex, Perfex, Lightfex	AS/AF	s	1511	-	-	62,00
Funfex, Perfex, Lightfex supine	AS/AF	s	1367	-	-	62,00
Speedfex	AS/AF	s	1570	-	-	66,70
Topfex	AS/AF	s	1645,5	-	□	66,70
Airborn						
Sting 118	AS	p	1485	0,83	-	74,80
Sting 145, 154	AS	p	1650	0,83	-	74,80
Blitz 137	AS/AF	p	1570	0,83	-	74,80
Blitz 146, Blade 141	AS	p	1700	0,83	-	76,50
Blitz 155, Blade 153	AS	p	1750	1,00	-	76,50
Aeros						
Stealth 14	AF	s	1620	0,83	-	66,20
Stealth klein	AF	s	1520	-	-	55,20
Airwave						
Calypso	AS	s	1575	0,83	□	66,20
K2, K4, K5, Kiss	AS/AF	s	1649	1,00	□	71,40
K3, Magic 185	AS/AF	s	1778	1,25	□	74,80
Apco						
Santana	AS	s	1620	-	-	55,20
Enterprise Wings						
Rage 157, Desire 141	AS/AF	p	1616	1,00	□	78,80
Desire 151, Elite 150	AS/AF	p	1670	1,00	□	78,80
Foil 139C, Aero 165	AS/AF	p	1640	1,00	□	78,80
Aero 145	AS/AF	p	1568	0,83	□	77,60
Foil 150, 160, 170, 152C	AS/AF	p	1740	1,00	□	80,30
Foil 140	AS/AF	p	1558	0,83	□	77,60
Firebird (ab Bj. 1998)						
Laser, Uno, New Wave, Classic, Quattro	AS/AF	w	1640	0,83	-	77,60
Flight Design						
Exxtacy (exkl. Umlenkrollen)	AS	p	1480	-	-	66,70
Guggenmos						
RCS	AS/AF	s	1698	-	-	55,20
Cut	AS/AF	s	1650	-	-	55,20
Icaro 2000						
GTR 148	AS	p	1595	0,83	-	74,80
GTR 162, 175, Brazil 142, 155, 169	AS	p	1650	0,83	-	74,80
Laminar, Relax	AS	p	1650	0,83	-	74,80
La Mouette						
Atlas, Azur, Profil, Probe	AS	g	1600	-	-	59,20
Topless	AS	g	1700	-	-	70,20
Moyes						
XS 142	AS	p	1567	-	-	59,20
XS 155, 169	AS/AF	p	1567	0,83	-	70,20
XT 145	AS/AF	s	1498	-	-	55,20
XT 165	AS/AF	s	1651	0,83	-	66,10
Seedwings						
Sensor 510	AF	p	1702	0,83	-	74,80
Merlin 145, 148, 158, 610	AS/AF	p	1653	0,83	-	74,80
Merlin 611	AS/AF	p	1750	1,00	-	79,90
Kestrel 133, 148, 158	AS/AF	p	1653	0,83	-	74,80
Spyder 14, 15	AS/AF	p	1653	0,83	-	74,80
Solar Wings						
Ace	AS	g	1650	0,83	-	77,60
Rumor	AS	g	1595	-	-	66,70
Thalhofer						
Reflex C, Vektor	AS/AF	s	1628	-	-	59,20
Reflex CS	AS/AF	s	1580	-	-	59,20
GT	AS	w	1600	-	-	77,60
UP						
Speed	AF	p	1630	1,00	-	79,90
Wills Wing						
Supersport 143, Spektrum 144	AS/AF	p	1575	0,83	-	70,20
Supersport 153, Spektrum 165, Sport AT167, HP AT145 links	AS/AF	p	1651	1,25	-	73,60
HP AT145 rechts	AF	p	1651	1,25	-	86,30
Supersport 163, Ram Air, Fusion, HP AT158 links	AS/AF	p	1727	1,25	-	81,70
HP AT158 rechts	AF	p	1727	1,25	-	86,30

Abbreviations: s = silver mat anodised, g = gold mat anodised, p = silver polished anodised, w = white powder coated
□ = if not existent, please order special AS/AF-adapters for top/bottom of your uprights € 11,50

Aerosafe/Aerofoil-Anschlußstücke bzw. Trapezkopfauf Anfrage:



Speedbar



Suitable for fittings ø 28,5 mm (1,125"). Inner ø 25,1 mm, suitable for wheel rods, highstrength aircraft-grade aluminum (Avional), mechanically polished, thus light and stable. Rubber coated grip area. Overhang 14 cm.

Tr29/1	Speedbar undrilled, up to 1,57 m	79,00
Tr29/2	Speedbar cut to length, drilled	95,00
Tr29/3	Speedbar with fitting for base tube locking system, custom made to the required length, suitable for our control bar corners	112,00
Tr29/S	Surcharge for safety cable installation	25,30
Tr29	Safety cable for own installation	9,50

Bolts with ring, screws, blind rivets

P5/...	Bolt 5 mm, drilled, usable length 26, 47 or 54 mm	1,25
P6/26	Bolt 6 mm, drilled, pan head, usable length 26 mm	1,35
R5	Retaining ring 1,0 x 11 mm	0,30
R6	Retaining ring 1,5 x 17 mm	0,75
DIV	Standard stainless steel screws used in glider manufacture	on request
M4-6	Stainless steel Polystop nuts M4, M5, M6	0,40
M8	Stainless steel Polystop nuts M8	0,60
N2,8-6,4	high-strength Monel metal blind rivet in different lengths	on request

Wire ropes and miscellaneous hardware

Ve40/1,5	Stainless steel wire rope 1,5 to 2,0 mm PA coated, per m	2,45
Ve40/2,5	Stainless steel wire rope 2,5 to 3,5 mm PVC coated, per m	2,30
Ve30/2	Nicopress sleeve ø 2 mm for coated wire rope 1,5 mm	0,80
Ve30/2,5	Nicopress sleeve ø 2,5 mm	0,80
Ve30	Wire clamp (screw-tightened) for wire rope ø 2-4 mm	2,50
Ve20/2	Stainless steel thimble for rope ø 2-3 mm	0,85
Ve10	High-strength light metal tang 3 mm	3,00
Ve15	Stainless steel tang 1,2 mm	3,00
Ve70	Flexible PVC tubing, transparent	2,00
Ve71	Heat shrink tubing, transparent, ø 9,5/4 mm, per m	7,80



BALL LOCK PINS • PEN SNAPPERS • PIPES



Finsterwalder is famous for a large selection of high strength super light-weight tubing from special aluminium alloys unavailable elsewhere. The tubing is also used for sport aviation purposes. We should like to draw attention to the fact, that each individual tube should be specially tested when used in safety critical situations. All tubing used in Finsterwalder gliders is from tested tubing of 7075 alloy!

Info aluminium alloys

The most commonly used alloys in HG-construction are:

AlMgSi0,5 = Extrudal = 6061 (tempered warm) Most frequently used alloy for line-pressed sections above 1 mm wall strength. Strength 25-28 kp/mm². Can be polished and anodised in all colors.

AlMgSi1 = Anticorodal 100 = 6081 (tempered warm) Alloy for inexpensive, seamless drawn tubes. Strength 3236 kp/mm². Can be polished and anodised in all colours. Is approx. 1,5 x more expensive than Extrudal.

AlCuMg1 = Avional 100 = 2017A (tempered cold) High quality alloy for seamless drawn tubing, sheet metal and forged parts. Strength 38-44 kp/mm². In spite of greater strength, it can be deformed more strongly than Anticorodal 100. Cannot be color-anodised and can only be polished mechanically. Is approx. 3 x more expensive than Extrudal.

AlZnMgCu1,5 = Perunal = 7075 (tempered warm) High quality alloy for seamless drawn tubing and sheet metal. Strength 53-64 kp/mm². By approx. double the strength, the elongation after fracture is somewhat lower than by Anticorodal. Perunal tubing is much more resistant

to damage when knocked than anticorodal tubing, in spite of the lower wall strength (minimal weight) and has more safety reserve under bending stress. Perunal tubing cannot be anodised in various colours, and can only be mechanically polished. Perunal tubes are 5 x more expensive than Extrudalrohre. Mechanical polishing is 4 x more expensive than chemical or electrical shining.

When used for the construction of hang gliders the following should always be observed: that the higher strength of the tubes should only be utilised to a maximum of 10% by normal usage.

Abbreviations:

L = length of uncut tube (minimum order)

54x0,9 means outer diameter 54 mm, wall thickness 0,9 mm

F = tensile and compression strength per mm² (is also the measurement for bending)

Moment of inertia: Information about the rigidity and compression stability of the tube. Is for all practical purposes independant of the alloy type and tensile strength.

Art.No.		Moment of inertia	€/m	Art.Nr.		Moment of inertia	€/m
A10	Saw cut, per cut		0,75	R45E	45,6x0,85, anodised, 330 g/m, Perunal F = 60, L = 6 m	29923	43,70
R06GFK	Solid fibreglass, diameter 6 mm, L = 6 m		4,00	R47	47,3x0,8, unano., 330 g/m, Perunal F = 60, L = 1,91/5,75 m	31596	41,40
R12/0,45	12x0,45, unanodised, 46 g/m, Perunal F = 60, L = 4,8 m	273	6,70	R47*	47x3x0,8, unano., 330 g/m, Perunal F = 60, L = 1,91 m	12902	28,80
R12/0,45E	12x0,45, anodised, 46 g/m, Perunal F = 60, L = 2,4 m	273	10,40	R47PE	47,3x0,8, pol.-anodised, 330 g/m, Perunal F = 60, L = 2 m	31596	52,90
R13	13,3x0,6, unanodised, 67 g/m, Perunal F = 60, L = 4,8 m	484	7,40	R47/0,65	47,3x0,65, unanodis., 265 g/m, Perunal F = 60, L = 1,91 m	25752	28,80
R13E	13,3x0,6, unanodised, 67 g/m, Perunal F = 60, L = 2,4 m	484	11,90	R52	52x0,9, unanodised 390 g/m, Perunal F = 60, L = 5,8 m	47173	45,40
R22/0,4EP	22x0,45, anodised, 85 g/m, Perunal F = 60, L = 4,75 m	1770	15,90	R52PE	52x0,9, pol.-eloxiert, 390 g/m, Perunal F = 60, L = 1,92 m	47173	59,20
R28	28,5x1,7, unanodised, 400 g/m, Avional F = 38, L = 6,58 m	12902	21,00	R54	54x0,9, unanodised, 420 g/m, Perunal F = 60, L = 5,9 m	52931	47,40
R28E	28,5x1,7, anodised, 400 g/m, Avional F = 38, L = 6,58 m	12902	24,35	R54PE	54x0,9, pol.-ano., 420 g/m, Perun. F = 60, L = 1,92/1,495 m	52931	61,20
R32/0,9	32,4x0,9, unanodised, 234 g/m, Avional F = 38, L = 6 m	11056	14,00	R54PE*	54x0,9, pol.-ano., 420 g/m, Perun. F = 60, L = 1,92	52931	34,50
R32/0,9E	32,4x0,9, anodised, 234 g/m, Avional F = 38, Restlängen	11056	17,30	R60	60x0,9, unanodised, 470 g/m, Perunal F = 60, L on request	72974	57,80
R32/0,9PE	32,4x0,9, pol.-anodised, 234 g/m, Avional F = 38, L = 2 m	11056	21,00	R60PE	60x0,9, pol.-eloxiert, 470 g/m, Perunal F = 60, L = 1,91 m	72974	71,90
R42PE	42,1.0, anticorodal pol.-anodised F = 28, L = 4,50 m		44,70	R62PE	62x0,9, pol.-eloxiert, 485 g/m, Perunal F = 60, L = 1,78/1,83 m	80634	74,80
R44E	43,8x0,9, anodised, 340 g/m, Perunal F = 60, L = 5 m	27917	44,70				
R45	45,6x0,85, unanodised, 330 g/m, Perunal F = 60, L = 6 m	29923	40,90				

* second choice

Please note that we usually stock tubes only in the stated lengths. Other lengths might be available but often have long delivery times. Tubes with a length of more than 2 m often involve high packing and shipping costs. We split the tubes at

0,75 € per cut but must, however, charge for unusable offcuts. The minimum purchase quantity is 1 tube. We do not have cutoffs from our glider production. Rebates for bulk purchasers are possible. Please ask us for a quote.

Please give us one day's notice when picking up orders so that the tubes can be collected from our stock.

Ball lock pins / Quickpins

€

Bolts with push button locking for countless uses, esp. in glider/aerospace construction and in the Reha branch. With the exception of the aluminium grips all parts are constructed from high strength stainless steel. Three ball bearings instead of the usual 2 result in twice the pull out strength. Editions with 2 ball bearings and/or special lengths on request! The security cap with inserted steel ring protects the quickpin from dirt and freezing and is available as an accessory. Breaking load in transverse direction 2,8 to.

Be64/22	Use length 22 mm	11,90
Be64/33	Use length 33 mm	11,90
Be64/38	Use length 38 mm	11,90
Be64/46	Use length 46 mm	14,80
Be64/48	Use length 48 mm, suitable for Pin Lock	14,80
Be64/...	Use length 50/70 mm	14,80
Be65	Security cap for ø 6,35 mm, with high strength nylon cord and sprung ring	2,25



Tube accessories

€

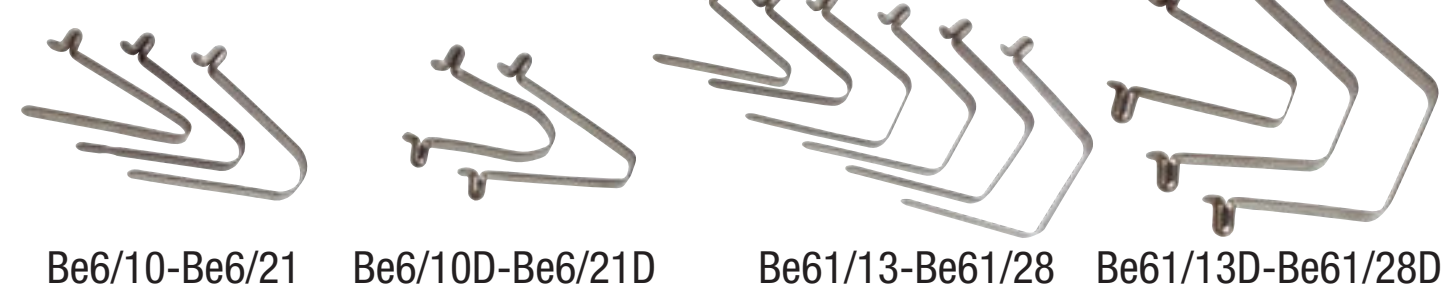
KK18-25	Tube end caps for inner diameter 18, 20, 25 mm	0,60
KK36-58	Tube end caps for inner diameter 36, 38, 44, 48, 50, 58 mm	1,50
KS52	Saddle piece 50 x 60 for tube diameter 47-54 mm	1,30
KSLS/KSLE	Tips/ends for sail battens for inner diameter 11, 12 mm	1,50
Se22	Adapter fitting, batten inner diameter 11 mm, to fibreglass 6 mm	0,80
Ha72/1	Joint plate 3 mm Avional	5,60



Be6172
€ 4,00

Be6170
€ 6,50

Be6171
€ 4,00



Detent button sprung snappers

€

Finsterwalder speciality made of chrome-nickel stainless steel.

Please state version and inner tube diameter as several sizes are grouped under the same article number!

Be6/10-Be6/21	Sprung-snapper ø 5,3 mm, single snap, size: 10-21	2,40
Be6/10D-Be6/21D	Sprung-snapper, ø 5,3 mm, double snap, size: 10-21	3,00
Be61/13-Be61/28	Sprung-snapper, ø 6,4 mm, single snap, size: 13-28	2,40
Be61/13D-Be61/28D	Sprung-snapper, ø 6,4 mm, double snap, size: 13-28	3,00
Be61/30-Be61/51	Sprung-snapper, ø 6,4 mm, single snap, size: 30-51	2,40
Be61/30D-Be61/51D	Sprung-snapper, ø 6,4 mm, double snap, size: 30-51	3,00
Be6170	Special-sprung-snapper	6,50
Be6171	Special-sprung-snapper	4,00
Be6172	Special-sprung-snapper	4,00

HANDBAIRINGS AND BAR WHEELS FOR HANGGLIDERS

Charly HG handfairings for profiled speedbars €



Specially designed neoprene gloves for profiled speedbars with Velcro strip for quick attachment and removal from the control bar.

As slipping in and out is easy, re-gripping after takeoff and instrument operation during flight is easily possible. Thanks to the neoprene fabric's excellent insulation qualities, the handfairings can be worn without glove liners in the summer. In combination with thin glove liners, they are ideal for the winter. The front part of the handfairings is equipped

with inner pockets for Chiba Hotliner activated carbon heat packs (HM151). These provide pleasant warmth for up to six hours, even in arctic conditions.



HM934	HG handfairings for profiled speedbars (pair)	69,50
HM151	Activated carbon heat packs (pair)	1,60

Charly HG handfairings for round speedbars €



The neoprene handfairings are simply pulled over the control bar. As slipping in and out is easy, re-gripping after takeoff and instrument operation during flight is easily possible.

Thanks to the neoprene fabric's excellent insulation qualities, the handfairings can be worn without glove liners in the summer. In combination with thin glove liners, they are ideal for the winter. The front part of the handfairings is equipped with inner pockets for Chiba Hotliner activated

carbon heat packs (HM151). These provide pleasant warmth for up to six hours, even in arctic conditions.

HM931	HG-Handfairings (Paar) für runde Speedbar	46,90
HM151	Activated carbon heat packs (pair)	1,60



Specially designed warming handfairings for the control bar with a practical map pocket on the back of the hand. The hands remain free for takeoff and instrument operation. The handfairings can also be worn without glove liners in the summer.

Colour: blue, orange, yellow, rose, purple

HM9N	HG handfairings with map pocket (pair)	29,50
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Finsterwalder Quick-Safe €

These unbelievable light-weight, aerodynamic, unbreakable pull apart control bar wheels have proven their worth now for years. Their smooth elliptical shape produces no airresistance worth mentioning, making them also preferred by competition pilots. It should be clear that even the best control bar wheels (especially when they are not pneumatic) will not survive every crash intact. Quick-Safe wheels help to keep the damage as small as possible. They are suitably robust for normal touch down on the wheels. In situations, where similar wheels break and the control bar is bent, the snappers on the Quick-Safe open, preserving the wheels and base tube from destruction. Quick-Safe can be attached to the rigged glider within a few seconds. Problems with putting down on steep rigging sites therefore do not exist. Quick-Safe is made of polyamid (nylon) and weighs only 270 g by measurements of 180x70 mm. Quick-Safe is available for control bar diameters of 25,5 mm, 28,5 mm, 30,5 mm and 32,5 mm; for VG-cord channel also available with diameter 35 mm.

Tip: Pay attention to the accompanied instructions for use! Choose the right hub diameter! Crash-resistance is only warranted if there is no more than 1,5 mm play between wheel-hub and control bar. Guarantee: We replace broken wheel-halves!

HRa001/25/28	Quick-Safe ø 25,5 mm, 28,5 mm, each	15,00
HRa001/35	Quick-Safe for use with VG-hub, each	17,00
HRa5/33	Hub with VG-cord channel for control bar ø 25,5 mm	18,00
Hra5/34	Hub with VG-cord channel for control bar ø 25,5 mm	18,00

Light-weight inflatable wheels €

Dimensions 200x 50mm, ø 35mm, Adapter sleeves must be ordered in addition.

HRa01	Light-weight inflatable wheels, piece	27,50
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Trainer wheels €

Dimensions 260x 50mm, ø 35mm, Adapter sleeves must be ordered in addition.

HRa1	Trainer wheels inflatable, piece	Stück	25,50
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Adapter sleeves €

Please state the required diameter! For each wheel one pair of adapter sleeves will be required!

HRa5/25/28	ø 25,5 mm or 28,5 mm, pair	3,00
	Add. price ø 35 / 30 mm and ø 35 / 32 mm	1,00

Hub with VG-cord channel for pneumatic wheels €

Hub diameter 35 mm with a cord channel for inflatable wheels on gliders with variable geometry. The VG-hub with the left wheel rim is attached to the control bar by a screw or pop rivet and the wheel runs over the hub. The right wheel rim can be removed, if the A-frame control bar and upright are separated. Suitable for inflatable tires with a hub hole diameter of 35 mm. Please state the required diameter!

HRa5/35	Hub with VG-cord channel for control bar ø 25 mm	20,00
HRa5/36	Hub with VG-cord channel for control bar ø 28 mm	20,00

HRa001/...



HRa5/33/34

HRa01



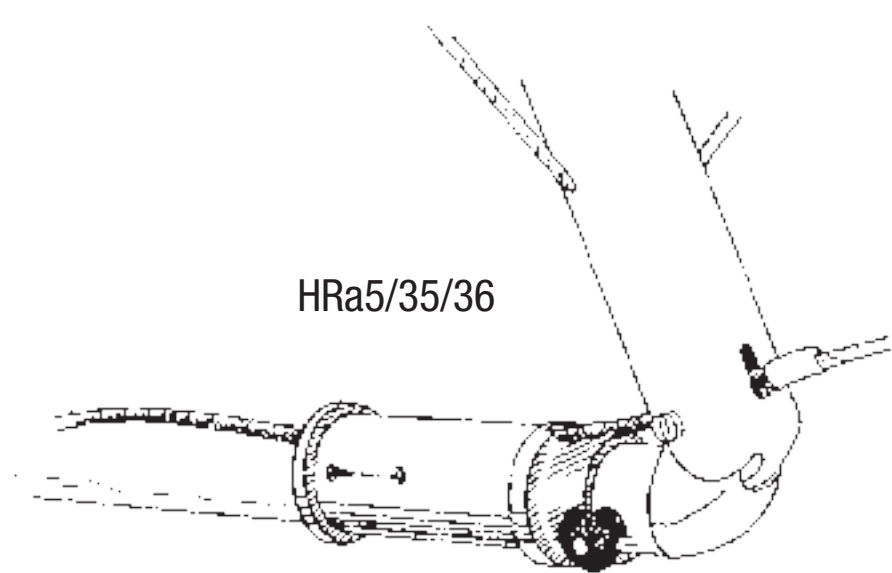
HRa1



HRa5/25/28



HRa5/35/36



HG / PG Sticker

Finsterwalder Sticker with transfer film, different colours

150x160 mm
HL81 € 4,50



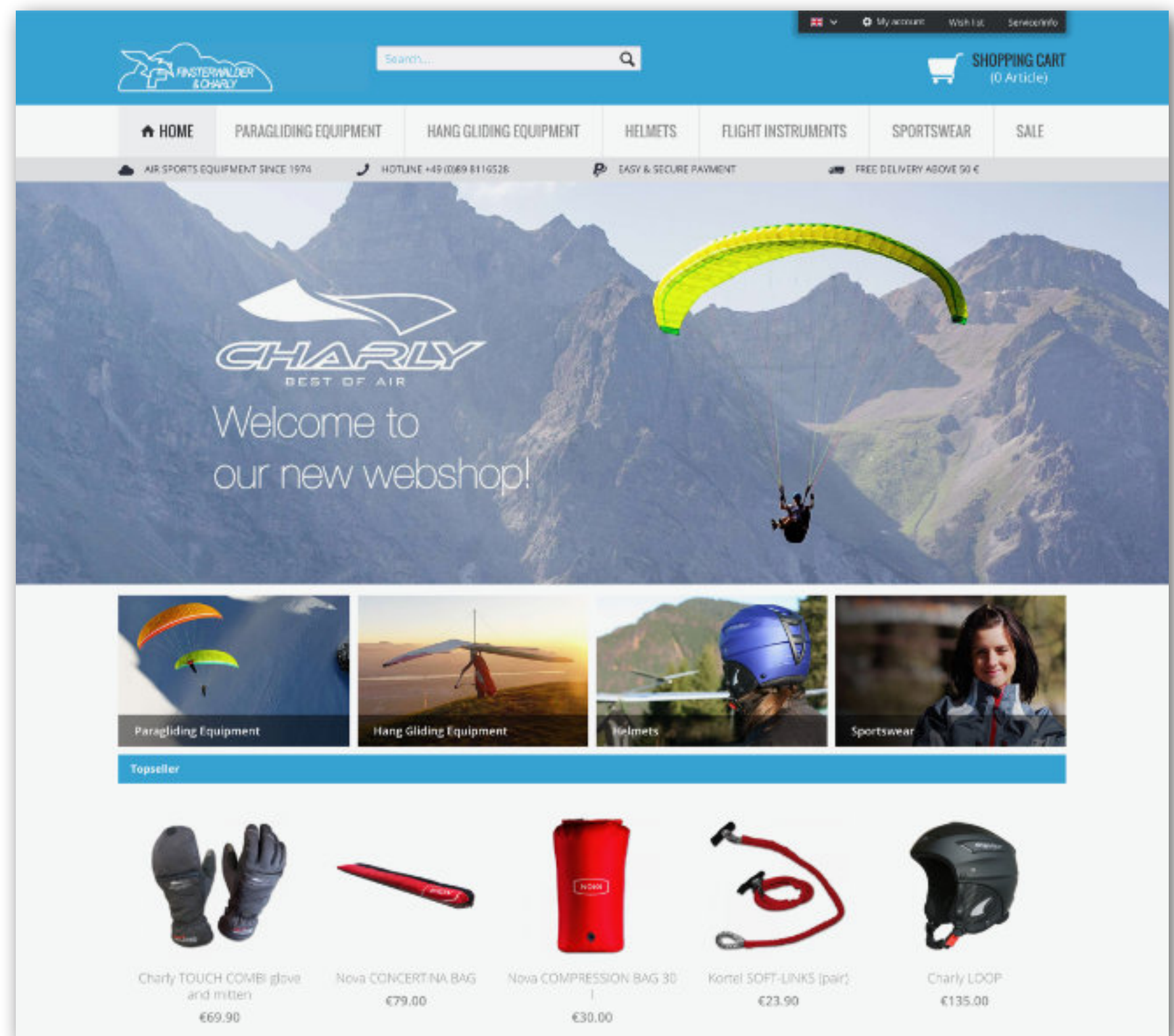
190x80 mm
HL85 € 4,50



110x140 mm
HL82 € 4,50

For further interesting offers please visit our onlineshop

www.shop.finsterwalder-charly.de



General Terms and Conditions of Business

1. Scope

These Conditions of Use shall apply to any and all contracts of the Finsterwalder GmbH, irrespective of their subject-matter, if and when the contract partner has received a copy of these Conditions of Use for reference. Furthermore, they shall apply without express reference being made to them to any future business transactions once they have become the basis of a contract.

2. Contract

Any contract shall be confirmed by us in written form to become effective. Without such confirmation, a contract shall be deemed to be accepted upon delivery of the goods or upon rendering of the agreed service.

3. Prices, payment

The specified prices shall be ex works plus shipping costs and collection fees. We offer free shipping within Germany for orders from our webshop with a minimum order value of € 50,-. If the value of goods is less than € 50,- we charge € 7,50 shipping costs within Germany. Our price lists valid at the time of concluding a contract shall exclusively apply. Information regarding our shipping costs to other countries can be found here. Unless otherwise agreed, we shall deliver the goods against cash payment or prepayment. Otherwise, the purchase price shall become due and payable three days from the date of invoice. This shall also apply to partial deliveries. If and when the period for payment has expired, we shall charge interest on arrears of 2% above the interest usually charged by the banks for overdrafts on current accounts. Unauthorized cash discounts shall be collected plus a processing fee of € 10,-.

4. Minimum order values for shipping orders

For customers in Germany respectively in the EU:	€ 15,00
For wholesalers in Germany respectively in the EU:	€ 75,00
For export in non-EU countries:	€ 130,00

We charge an extra € 5,- for requested express orders.

2. Delivery

Acceptances of delivery periods shall apply ex works. If and when agreed delivery periods cannot be maintained due to acts of God, they shall be suspended until the impediment due to a delivery is remedied. It is also an act of God if a supplier of the Finsterwalder GmbH fails to deliver or only makes partial deliveries of the goods. In case of deliveries having a fixed deadline, the customer shall at least be obliged to bear the shipping costs out and home if we dispatch the goods in time but when they are returned due to a delay in transportation.

6. Withdrawal

If and when the period for any subsequent delivery has expired, the purchaser shall be entitled to withdraw from the contract. If he has received a partial delivery before and such partial delivery is of no use for him, the purchaser shall be entitled to return the same and the purchase price claim shall cease to exist. Any withdrawal from a contract shall be made in written form.

7. Retention of ownership

The Finsterwalder GmbH shall retain ownership of all goods until any and all obligations arising from a contractual relationship are fulfilled. In case of a resale of the goods, the purchaser is obliged to inform his contractual partner about this. In case of possible enforcement measures over the retained goods, the purchaser has to inform the Finsterwalder GmbH immediately and under transmittance of the bailiff's return.

8. Passage of risk

Upon delivery of the goods to the purchaser or the forwarding agent, the risk of deterioration or loss shall pass to the purchaser, irrespective of the fact who (purchaser or seller) has borne the shipping costs. We shall take out particular transport insurances only upon request of the recipient of the goods and for his own account.

9. Return privilege

If and when a customer has received one or more of our articles for the first time and is not satisfied with their quality, he shall be entitled to return the goods within 14 days after their receipt. Provided, however, that the goods returned are practically new and that the shipping costs are borne by the purchaser. Not prepaid returns are not accepted! However, it shall be impossible to return the following: Items made to specification such as tubes cut to size, profiles, material sold by the meter, or sails made upon customer's request, as well as literature, software, and videos. When hanggliders are returned, a processing fee of € 50,- shall become due and payable. If pursuant to the above conditions the return privilege may not be granted, the purchaser shall become liable for damages if he does not accept the goods although he was requested to do so. The Finsterwalder GmbH shall then decide if it wants to withdraw from the contract or if it wants to claim damages for non-performance. In the event of damages for non-performance when an acceptance is delayed, the seller shall be entitled to claim 30% of the invoiced value without any deductions, unless the seller can satisfactorily show a higher damage.

10. Warranty

The implied warranty period of six months from delivery shall apply. The Finsterwalder GmbH hereby represents and warrants that its goods are free of any defects. If and when the goods/performance are/is defective for reasons beyond the purchaser's or customer's control, he shall be obliged to request a subsequent delivery of goods free of any defects or to request a subsequent improvement within a reasonable period of time first pursuant to the conditions mentioned under 9. above before he can assert any further warranty claims. The goods shall be returned to the Finsterwalder GmbH to examine any warranty claims. In case a warranty claim is not justified, the customer shall be liable for all cost of transport. If no substitute delivery or no subsequent improvement is possible within a reasonable period of time, the purchaser shall be entitled to withdraw from the contract. Warranty claims for non-performance shall only be admitted if and when intent or gross negligence can be imputed to the Finsterwalder GmbH. Apart from that, any and all claims for consequential damage due to defects shall be excluded. If the purchaser is a businessman, he shall be obliged to inspect the goods for any possible defects upon their receipt and to forthwith give notice of any defects. Failing this, he shall lose his right to any warranty claims. Furthermore, warranty claims shall be excluded if the defects are due to the purchaser's improper handling of the goods. When buying a hangglider or a paraglider, the customer shall be obliged to observe the operating instructions and to have a control and instruction flight made either by the manufacturer or by an instructor who is familiar with the glider.

11. Other provisions

If one or more of these provisions become ineffective, this shall not affect the validity of the remaining provisions.

12. Place of performance

For both parties, the place of performance shall be Munich, Germany, if the purchaser/customer is a businessman. sary to establish the nature, characteristics and functioning of the goods.

HOW TO FIND US

By car:

Coming from Stuttgart - The end of the Stuttgart Autobahn runs directly into the Verdi-straße towards the city centre. The Pagodenburgstraße is the first street on the right after two railway bridges (approximately 2 km from the end of the Autobahn).

Coming from Nürnberg - Take direction towards the city centre (Stadtmitte) from the end of the Autobahn. Drive onto the Mittlerer Ring (Petuelring) towards the Stuttgart Autobahn. At the end of the ring drive away from the city centre on the Menzingerstraße (running parallel to the tram). The Pagodenburgstraße is the first on the left-hand side after the tram terminus.

From the airport:

Either take the S8 subway to the main railway station or take the S1 subway to Moosach and from there with the taxi.

From the main Railway Station:

Either take tram number 17 to the terminus (Amalienburgstraße). From there it's only an 8 minute walk in the direction out of the city along the wall of the Nymphenburg park. Or take the S2 subway to Obermenzing and walk approximately 1 km along the VerdisträÙe in the direction of the city centre.



Finsterwalder GmbH • Pagodenburgstr. 8 • 81247 München
Phone +49 89 8116528 or +49 89 8118592 • Fax +49 89 8144107

E-Mail: office@finsterwalder-charly.de
Web: www.fensterwalder-charly.de

Business hours in Munich: Monday - Friday 8 a.m. - 4 p.m.
We have a telephone answering machine, if you wish to call outside of usual business hours.
Commerce register entry in Munich under the Nr. HRB 52509 since 14.3.1977
Business director: Dipl. Ing. Thomas Finsterwalder

Sales tax-ID-Nr. (E.E.C. ID. Nr.) = DE 129 346 945
Air sports articles production and distribution

Banking details:

HypoVereinsbank München 604 384 (BLZ 700 202 70),
IBAN: DE63 7002 0270 0000 6043 84 , SWIFT-BIC: HYVEDEMMXXX
Postgirokonto München 31070-807 (BLZ 700 100 80)
IBAN: DE29 7001 0080 0031 0708 07 , SWIFT-BIC: PBNKDEFF