



deuter

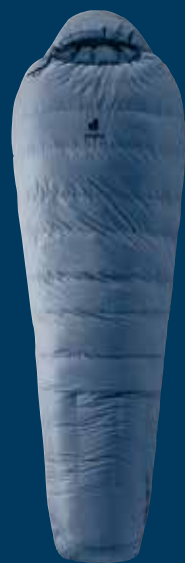


*GET THE FACTS*  
*#deuterforever*



SINCE  
1991

VINA DUKE  
EXCLUSIVELY  
MANUFACTURES ALL DEUTER  
backpacks and accessories



2003

START OF COLLABORATION  
with sleeping bag manufacturer  
B E L L M A R T

105  
ARTICLES  
bluesign®  
PRODUCT

WE CARRY PRODUCTS CERTIFIED WITH THE  
**GREEN  
BUTTON**  
GOOD FOR PEOPLE.  
GOOD FOR NATURE.

+/- 220  
PARTS  
= 1  
BACKPACK



9x **FAIR  
WEAR** LEADER

16  
PRODUCTS  
with TÜV approved safety

120 TRAILBLAZER  
for over hundred and twenty years

deuter down sleeping bags  
100 %  
RDS CERTIFIED DOWN



DEUTER  
HEADQUARTERS



# RESPONSIBILITY SINCE 1898

As mountaineering pioneers, experts in sleeping bag production and the biggest manufacturer of backpacks and accessories in Europe, deuter has shaped mountain sports worldwide for more than 120 years.

And for just as many years, we've created innovative, durable, high-quality products with the aim of ensuring they have the longest possible lifespan - for our customers, and through a sense of responsibility for people and planet. But we know we have a long way to go. There's no time for complacency. We will keep working at it, because sustainability is not a goal that can be achieved, but a process that requires constant reassessment and new approaches and measures to be adopted.

That's why we feel it's important that we don't just share product-specific knowledge, but also provide information on all aspects of our CSR activities so that retailers can give their customers wide-ranging advice.



# OUR History



**1898 THE BEGINNING**  
Hans Deuter establishes the company and becomes the sole supplier of mailbags and post sacks to the Royal Bavarian Postal service



**1919 CHANGE OF NAME**  
The company is now called "Hans Deuter" and makes luggage, backpacks, tents and freight canopies

**1930 BESTSELLER**  
The legendary Deuter Tauern backpack is launched and becomes a top-selling pack for more than 30 years

**1934 HIMALAYAS**  
The Tauern pack proves its worth on Nanga Parbat for the first time

**1939 JUST LIKE THE FIRST WORLD WAR**  
Deuter produces satchels, backpacks and tents for the military

**1953 HERMANN BUHL**  
sets off alone on July 3rd with just the bare minimum in his Deuter backpack. 17 hours later, he reaches the summit of Nanga Parbat (8,125 m) – too late in the day to make the descent – and spends the night standing on a rocky outcrop

**1957 PLC FORMED**  
The family firm becomes a public limited company and is now "Deuter Industriewerke AG-Augsburg"



**1971 PIONEERING**  
Deuter is Germany's biggest manufacturer of backpacks and luggage

**1982 EXPEDITIONS**  
A team reaches the summit of Mount Everest via the south-west face for the first time – one of numerous expeditions that Deuter has equipped with backpacks over the decades



**1984 AIRCOMFORT**  
A new carry system is launched, patented and goes on to become the most popular carry system in the world



**1989 SPLIT**  
of the company's luggage and backpack sector away from the "Deuter AG" parent company, into "Deuter Sport & Leder GmbH"

1898 1899 1905 1910 1919 1920 1930 1934 1938 1939 1953

**1905 EXPANSION**  
The "mechanised sailcloth and linen weaving, sackcloth, freight canopy, car canopy and horse rug manufacturing firm" is expanded to include tent rentals



**1920 BEER TAPPED**  
Deuter tents are used for the Munich 'Oktoberfest' for the first time

**1938 EIGER NORTH FACE**  
22-24 July – Anderl Heckmair is the first to conquer the Eiger North Face accompanied by Ludwig Vörg, Fritz Kasperek, and Heinrich Harrer. On his back he had a Deuter backpack.



1957 1965 1968 1971 1972 1982 1984 1988 1989 1991

**1965 SIERRA**  
The first alpine backpack to feature a built-in frame

**1968 WORLD FIRST**  
The first ever nylon backpack series is launched onto the market



**1972 OLYMPICS**  
Deuter supplies the German Olympic Team with travel and sports luggage



**1991 FIRST BIKE PACK EVER**  
Together with Andi Heckmair, Deuter develops the first ever backpacks designed specifically for biking



**1988 A NEW ERA**  
Alpinists, mountain guides and professional cyclists directly influence the collection: Bernd Kullmann, Pepi Stückl, Peter Vogler, Peter Habeler, and many more in the following years



# OUR History

**1996 CHILD CARRIER**  
The first ever TÜV-approved child carrier is born. Deuter is also the market leader in Germany for backpacks

**AIRCONTACT SYSTEM**  
The patented back system made from breathable hollow-chamber foam proves effective at generating ventilation on trekking backpacks



**1997 VDDBS**  
Product improvements are made with the help of the VDDBS (German Association of Mountain and Ski Guides)



**2006 WOMAN POWER**  
With the creation of SL backpacks, designed together with high-altitude mountaineer Gerlinde Kaltenbrunner to specifically suit the female anatomy

**SCHWAN STABILO**  
Deuter is bought by Schwan Stabilo and is now called "Deuter Sport GmbH & Co. KG"



**2008 BLUESIGN**  
Deuter signs up to the bluesign® standard, the world's strictest environmental standard for textiles, to help improve its manufacturing processes



**2011 FWF**  
As a member of the Fair Wear Foundation, Deuter strives to achieve good working conditions and social standards - presented with the FWF "Best Practice Award" in 2015 and 2021 for the ninth time in a row with the FWF Leader status

**FOR CHILDREN**  
Deuter develops school packs designed to suit the anatomy of children

**2013 LARGER PREMISES**  
Deuter moves into its new headquarters in Gersthofen



**2016 GRAVITY**  
The new gravity-defying climbing pack range



**2020 PFC FREE**  
Deuter keeps striving towards environmentally sound and resource efficient production throughout the supply chain

**2022 PARTNERSHIP ACKNOWLEDGED**  
Deuter wins the German Sustainability Award 'Global Corporate Partnerships 2022' with VINA DUKE

**FUTURE OF TRANSPORTATION**  
Increased popularity of bicycles as a means of transportation brings new, innovative commuter products to the fore - waterproof and suited to everyday life



1994 1995 1996 1997 1998 2001 2005 2006 2008 2009 2011 2013 2015 2016 2020 2021 2022

**1994 GROWTH**  
Production increases thanks to Deuter's new partner Duke in Vietnam



**2001 INTERNATIONAL**  
The American subsidiary Deuter USA is founded

**1998 FUTURA**  
Still hugely popular today, the Futura is launched



**1995 SLEEPING BAGS**  
Deuter introduces sleeping bags to the range and launches the **VARI QUICK** hook & loop adjustable back length



**2005 BACK PROTECTOR**  
Deuter introduces the Attack - a totally new backpack concept. The integrated TÜV approved and CE certified back protector guarantees more safety for bikers and winter sports lovers.



**2015 ANIMAL WELFARE**  
From now on Deuter only uses RDS-certified down and feathers

**2009 EXOSPHERE**  
The technology involved in making stretchy synthetic sleeping bags with our Thermo Stretch Comfort system creates a stir in the sleeping bag market



**2021 ALWAYS ON THE MOVE**  
Deuter starts the year off with a new logo and branding

**CLIMATE NEUTRAL**  
Deuter headquarters in Gersthofen are now climate neutral through the compensation of unavoidable emissions

**GREEN BUTTON**  
Deuter headquarters in Gersthofen are now climate neutral through the compensation of unavoidable emissions

**GIVING BACK TO NATURE**  
Deuter joins 1% for the Planet. This partnership assures, that our donations will have a broad regional and even global impact to preserve the magnificent world that nature provides



# BACKPACK INNOVATIONS



The list of innovations at deuter is long. Throughout the many decades of development work, we've amassed numerous patents. Some of the milestones include the Aircomfort system, the first fully-ventilated mesh carry system for a backpack; the first ever bike pack developed together with Andi Heckmair; the VariQuick system, a sturdy, simple yet effective means of adjusting back length; the first ever TÜV-certified child carrier and first ever TÜV-certified back protector built into a bike pack. All of these, world firsts.

## 2022 AIR SPACER MESH

This three-dimensional lightweight material maintains its shape under pressure and absorbs localized pressure. It gives our Aircontact and Airstripes back systems improved load distribution, cushioning and ventilation across a wider surface area.

1959



## 1959 FIRST WOMEN'S BACKPACK

Nearly thirty years on from its introduction to the deuter range, the Tauern pack is still going. But this year, a special women's version of the Tauern, with shorter shoulder straps and padded hip rests is launched.

1964

1968

## 1968 DETACHABLE BACKPACK LID

The first climbing /mountain and ski backpack with this practical feature is added to the range.



## 1964 SKI ATTACHMENTS

deuter designs application-specific backpacks with special details such as attachments for ropes, skis, ice axes and crampons

1979

1984

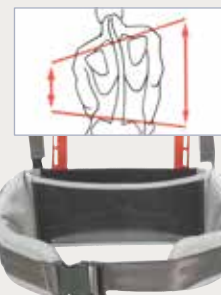
## 1984 AIRCOMFORT

The world's first mesh carry system is introduced. It revolutionises the hiking and day pack market and goes on to become the most popular carry system in the world.



## 1989 PIVOTING ERGONOMIC HIP FINS

Hips fins follow your every move while keeping the pack firmly in place and close to your centre of gravity.



## 1979 S-SHAPED SHOULDER STRAPS

Developed over many years and now perfected, the ergonomic shoulder straps follow the contours of the neck and shoulders perfectly.



1991 1992

## 1991 AIRSTripES

Together with Andi Heckmair, deuter develops the very first bike backpacks. To this day, the Airstripes system is still an established part of the collection.

## 1991 HELMET HOLDER

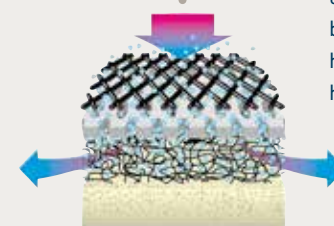
reflectors, tool compartment - with the invention of the first bike pack, deuter launches a series of new developments.

## 1992 BIKE PACK WITH INTEGRATED WINDSHIELD

This new development protects riders from undercooling on the downhills and is hi-vis for added road safety.

1995

1996



## 1996 AIRCONTACT FOAM

With its patented Aircontact System, deuter introduces ventilated backs to the trekking pack market: The pack ensures optimum load distribution yet they sweat up to 15% less.

## TÜV-APPROVED CHILD CARRIER

The Kid Comfort II was the first, and for a long time the only, TÜV/GS-approved child carrier on the market.

## 1995 REINFORCED DRAW CORD SLEEVES

High standards in quality are the norm at deuter. This includes the reinforcement of draw cord sleeves, to prevent the cord from pulling all the way through.

1999

## 1999 SOS LABEL

Over decades, our label with emergency telephone numbers and alpine signals has helped people keep a clear head in an emergency.

2005

## 2005 PROTECTOR BACKPACK

deuter introduces a new backpack design with the Shield system. An integrated, TÜV approved back protector offers bikers and winter sports fans improved safety in the event of a fall.



2010

## 2010 ERGONOMIC SCHOOL PACKS

In collaboration with paediatrician Dr. Micha Bahr, deuter develops school packs that are tailored to the anatomy of children.

2012

## 2012 PULL-FORWARD SYSTEM WITH AUTOMATIC SIDE COMPRESSION

This hip belt design with automatic side compression and Pull-Forward system creates a compact, secure fit in no time at all.

2016

## 2016 PATENTED PRECISION-ADJUSTABLE BACK LENGTH

Systems for adapting the back length on backpacks, already in use at deuter since the 1970s and perfected with the VariQuick system in 1996, take on a new dimension. The VariSlide system creates a precise, smooth adjustment to the pack's back length with just one hand.



2018

## 2018 ECL HIP FINS

Ergonomic Comfort Lock: Ergonomic padding allows the hip fins to sit snug over the crest of the hip bone and thus distribute the load evenly.

2022





# OUR PROMISE

Business must work in harmony with people and the natural world. This basic principle of sustainability underpins our corporate philosophy. Preserving natural and man-made resources is at its core, as is adopting responsible practices to make sure we tread as lightly as possible. But it takes more than a few token gestures to make it a reality. The ‘deuter promise’ goes the distance - and then some. Under the slogan ‘Together for 360° Responsibility’, it is the holistic, all-encompassing approach we take to doing business sustainably. It may not be the easiest path. And it’s certainly not the most direct one. But we’re convinced that it will reap sustainability.



Our actionable areas and sustainability goals are based on the UN's 17 Sustainable Development Goals. They are at the heart of Agenda 2030, which was adopted by United Nations member states in 2015. It is a jointly developed roadmap for sustainable economic, social and environmental development worldwide.

## ACTIONABLE AREAS AND SUSTAINABILITY ALONG THE ENTIRE SUPPLY CHAIN

We take our responsibility seriously. In everything we do. It equates to product development that looks to the future, manufacturing that uses fewer natural resources and transportation that’s less harmful to the environment. It means longer-lasting products, a responsible approach to employees and conscientious behavior in our private lives. Within the framework of our sustainability promise, we’ve developed multidisciplinary measures with quantifiable goals across six actionable areas, which we are constantly driving forward across the entire supply chain.

### ENVIRONMENTAL PROTECTION

**OUR PROMISE:** We will do our best to minimize the impact of our products on the environment.

**OUR OBJECTIVE:** To protect the environment by selecting resources carefully, reducing the amount of resources used and avoiding harmful substances. And to engage in environmental projects together with partner organizations and NGOs, and continually expand these.

### CLIMATE PROTECTION

**OUR PROMISE:** We will continue to identify and reduce our carbon footprint and offset any unavoidable CO2 emissions through climate-positive projects.

**OUR OBJECTIVE:** To achieve climate neutrality at our headquarters and for 25% of our collection by 2025. We also aim to cut the carbon footprint at all deuter sites and our production facilities across the globe. In doing so, we are contributing to the goals of the Paris Climate Agreement.

### ANIMAL WELFARE

**OUR PROMISE:** No animals will suffer or be harmed in the creation of our products.

**OUR OBJECTIVE:** To consciously avoid animal-based products where possible. We also ensure, where possible, that all components used in our production chain are vegan.

### EMPLOYEES

**OUR PROMISE:** We believe that everyone involved in the manufacturing of our products, either directly or indirectly, should have fair working conditions.

**OUR OBJECTIVE:** To ensure both our own co-workers in Germany and those of our manufacturing partners benefit from fair working conditions, fair pay, social justice, equal opportunities, and the possibility of leading a healthy, balanced lifestyle.

### CUSTOMERS

**OUR PROMISE:** We design our products with the aim of maximizing their usable lifetime and minimizing their impact on people, animals and the environment.

**OUR OBJECTIVE:** To make products safely and of high quality for specific customer requirements, that are sustainable and durable to generate better value.

### SOCIETY

**OUR PROMISE:** As an international brand we use our influence to bring about positive change in society.

**OUR OBJECTIVE:** To help people in need and organizations that fight for equality and better lives. And participate in initiatives in order to bring about social change.



Raw materials & Chemicals



Material manufacturing



Production



Management & Distribution



Product in use



Repair service / Disposal



## TOGETHER WE ARE STRONGER

We are aware that as one company on its own there are limits to how effective we can be. But many small acts can make a big difference. And that's why we work closely with our longstanding partners in manufacturing and design, recruit further partners with specialist skills and knowledge, and measure our efforts against the highest standards. Because sustainability isn't just a corporate vision, it's a philosophy that guides all our daily actions.

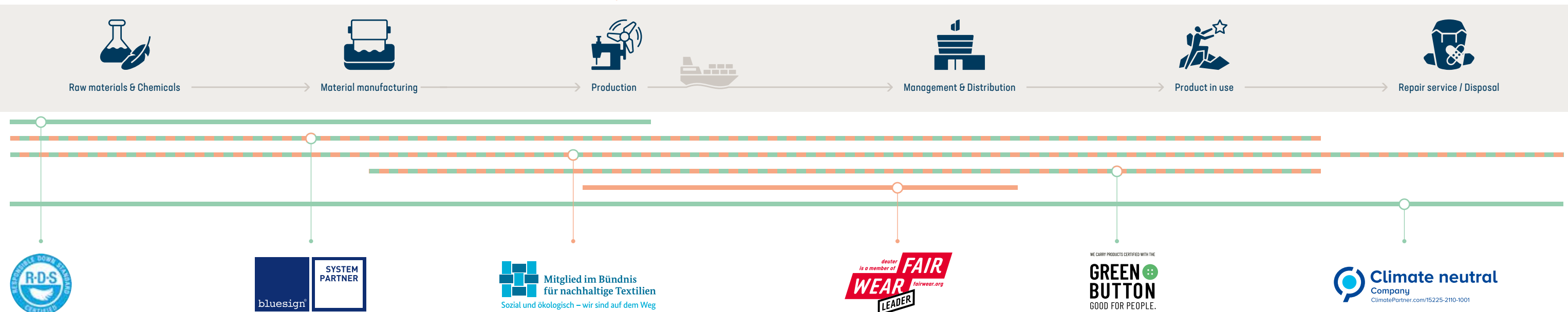


Contrary to the prevailing tendency for companies to switch suppliers frequently in order to reap economic gains, deuter has maintained its partnership with Vina Duke in Vietnam for over 30 years. This kind of exclusive partnership is pioneering and unique in the outdoor industry and has resulted in the German Sustainability Award. Find out more at: <https://www.nachhaltigkeitspreis.de/en/competitions-de/corporate-partnerships/>

### MUTUAL TRUST IS GOOD. LONG-TERM COOPERATION IS EVEN BETTER.

Fair and cooperative partnerships and an understanding of the shared responsibility of all parties involved are the foundations for stable global supply chains. By using just two long-standing, trusted manufacturing partners we are able, on the one hand, to guarantee the high quality and durability of our products. And on the other hand, we can ensure that all parties adopt fair working conditions, and that manufacturing processes are sustainable and resource efficient. Duke, Vietnam, has exclusively manufactured all of our backpacks, bags and accessories for us across its three factories since 1991, and also takes care of the majority of our international logistics.

Our partners at Bellmart in China have made our sleeping bags since 2004.



#### FOR THE LOVE OF ANIMALS

Even sustainable natural materials must be generated in an environmentally sound way. That is why, since 2015, we've exclusively used high-quality feathers that are Responsible Down Standard (RDS) certified for all of our down sleeping bags. In order to obtain RDS certification, animal welfare and farming practices have to be traceable throughout the entire production chain and meet the strictest requirements – from fledgling all the way through to finished sleeping bag.

#### MADE ACCORDING TO BLUESIGN® STANDARDS, TO PROTECT PEOPLE & PLANET

Even the most conscientiously made outdoor equipment creates an ecological footprint. At deuter, we want to keep that footprint as small and as light as possible. That's why we've adopted the bluesign® system – the world's strictest standard for environmental protection, occupational safety and consumer protection in the textile industry – to guide us in our production. By using the bluesign® system, which deuter adopted in 2008, we aim to make our products and the entire production cycle progressively more resource efficient and more environmentally friendly. And we're improving all the time. 100% of our manufacturing partners are bluesign® system partners and the number of bluesign® products in our collection is steadily rising.

#### PARTNERSHIP FOR SUSTAINABLE TEXTILES – UNITED FOR GREATER SUSTAINABILITY

We want to make outdoor equipment in an environmentally friendly, sustainable way, under fair conditions and within socially responsible manufacturing and supply chains. These chains are long and complex, and often hard for one company alone to clearly assess. That's why we have teamed up with other manufacturing partners and businesses through our membership of the Bündnis für nachhaltige Textilien. Our aim is to improve the social, environmental and economic conditions along the whole supply chain. The Partnership for Sustainable Textiles was set up in 2014 by the German government and brings together stakeholders from business, civil society, standards organizations and trade unions under one umbrella.

#### FAIRNESS FROM A TO Z WITH THE FAIR WEAR FOUNDATION

We're celebrating a small anniversary – ten years' membership of the Fair Wear Foundation (FWF). It's a milestone in our efforts to achieve fair working conditions throughout the entire production and supply chain. The FWF is a multi-stakeholder initiative that works together with brands and factories to improve working conditions in textile and garment factories, particularly on the ground in production countries. Recognition of our efforts confirms we're on the right path: Focusing on just two manufacturing partners, FWF Leader Status every year since 2013 and FWF Best Practice award in 2015.

#### GREEN BUTTON FOR GREEN PRODUCTS

Officially certified in August 2021, deuter now collaborates with the Grüner Knopf (Green Button) eco-textiles hallmark initiated by the German government. It's the world's first state-supervised certification mark for sustainably produced textiles. This global seal of approval is based on European and international systems and sets mandatory requirements to protect people and the environment. A total of 46 stringent social and environmental standards must be met, such as wastewater limits and the prohibition of forced labor. Further bolstered by our Fair Wear Leader Status, all of our bluesign® products fulfill these standards and are therefore also Green Button certified.

#### CLIMATE PROTECTION: PREVENT, REDUCE & OFFSET CO2

Climate change is one of the most urgent challenges facing our planet. Which is why we work with the international experts at ClimatePartner to prevent, reduce and offset our CO2 emissions where possible. Our objective: To achieve climate neutrality at our headquarters and for 25% of our collection by 2025. When our customers buy any products from the Pico, Kikki, Junior, Stepout, Overday and Overnite series (from fall/ winter 2022) any unavoidable emissions released during production and transportation will be offset through compensation schemes and invested in select ClimatePartner community and climate projects.

BLUESIGN® PRODUCT - WHAT THE LABEL MEANS AND WHICH DEUTER PRODUCTS IT COVERS

Manufacturing textile products involves a lot of chemicals. They're used to add color or waterproofing performance, for instance. Which is why, for this fundamental aspect of our work, we chose the bluesign® system, the most stringent set of holistic standards. Today, almost all deuter products are made with a high proportion of bluesign® certified fabrics and components. 105 items in the 2022 deuter collection are in fact certified bluesign® PRODUCTS: the Astro, Astro Pro, Heritage, UP, AViANT Duffel and AViANT Duffel Pro series, as well as the Kikki, Cotogy, Scula, all school accessories and our Urban Belts. For a product to be deemed a bluesign® PRODUCT 90% of the fabric must be 'bluesign® approved', and 30% or 20% of the components, for sleeping bags and backpacks respectively, must be 'bluesign® approved'. The entire supply chain must be certified and fully traceable. This ensures the control of emissions along the entire supply chain and guarantees the end product is not harmful to health. And all of our bluesign® products are therefore Green Button certified.

All environmental sustainability requirements fulfilled

All social sustainability requirements fulfilled

bluesign® PRODUCT

+

FAIR WEAR

=

GREEN BUTTON

GOOD FOR PEOPLE.  
GOOD FOR NATURE.



1 x ATTACK 18 SL:  
285 INDIVIDUAL PIECES AND  
AROUND 13 WORK HOURS



MADE IN ...  
WITH GOOD  
REASON

Complex, technically detailed sewn products can no longer be produced at competitive prices in Germany. It is also difficult to find sufficiently qualified people for this type of sewing work: Every backpack is made from an average of 220 pieces and sewn by hand. Today, apprenticeships in 'bag making' or 'heavy fabric tailoring' are virtually unheard of in Germany. In Vietnam, 4,000 employees manufacture our backpacks, bags and accessories to deuter's usual high standards. We nurture a trusting and long-lasting relationship with our suppliers which means we have a big influence on manufacturing and manufacturing conditions.

Today, all of the raw materials come from Asia. This means shorter and more efficient transportation routes for the textiles, buckles, zips etc. used in production. Although, Germany remains our biggest market, these days roughly 50% of our products are sold in over 60 countries throughout the world. A large proportion of our products are therefore shipped in containers directly from our suppliers to these countries. This minimizes CO2 emissions and reduces our carbon footprint.

DEUTER'S  
REPAIR SERVICE

MAKE DO & MEND -  
SAVING RESOURCES ONE STITCH AT A TIME

However well you look after a product, with so many components, there may be some wear and tear at some stage. For us, there is no doubt that mending is better than throwing away. And that's not just because we have some real miracle workers in our repairs department, but because providing a lifetime repair service also increases the lifespan of a product. This helps us all to save resources. In Germany alone, 3,500 items were repaired in just one year (2018-2019), which equates to 14 repairs each working day. And each year we distribute over 7,000 replacement parts, sometimes free of charge, for home repairs.

The following applies: Within the two-year warranty period, we will repair or replace a product free of charge if it is found to have a material or manufacturing defect. The warranty does not cover damage caused by improper use, negligence, normal wear and tear, or defects that only have a minimal effect on the value or usability of the product. The warranty will be deemed invalid if any modifications are carried out by unauthorized third parties, or if spare

parts are used that are not original deuter parts. Full details on how repairs are processed is available on our website.

KNOWLEDGE IS POWER

In addition to product features, quality and price, sustainability has now become one of the key factors in making a purchase decision. Which is why we feel it's so important for retailers to be well informed about all of our sustainability efforts and goals. And so we provide a training program for retailers in specific product areas, as well as on all relevant CSR topics, so that they are able to advise customers properly. You'll find answers to these and many more questions you might have in the deuter eLearning courses or at [deuter.com/Promise](https://www.deuter.com/Promise): How does deuter engage in environmental issues? How does deuter assess and improve working conditions in its factories? Are workers in the factories paid a living wage? Do workers in the factories have to work lots of overtime? What about fire protection and building safety? What is the Green Button?



AIRCONTACT 55+10  
Age: approx. 13 years  
Distance walked: approx. 3000 miles  
A few stitches  
A new life  
One of about 3,500 repairs per year

WATERPROOFING THAT  
DOESN'T COST THE EARTH:  
PFC FREE SINCE 2020

Because PFCs are so widely used, there are traces of them everywhere, even in the most remote parts of the world. Over time, these harmful fluorocarbons also degrade slowly, if at all. They're a ticking timebomb for humans, animals and the environment. Which is why we started to phase them out of our DWR (Durable Water Repellent) finishes from 2017, while still maintaining the highest dirt and water repellent performance in our products.



Raw materials & Chemicals



Material manufacturing



Production



Management & Distribution



Product in use



Repair service / Disposal



## THE ROOTS OF OUR QUALITY

The key to making our high-quality backpacks and sleeping bags is in using the very best materials. In contrast to cheap imports, deuter has a say in determining the quality of its raw materials. Regular laboratory testing guarantees that legal requirements for the exclusion of pollutants such as AZO dyes, heavy metals, phthalates etc. are upheld. To ensure that deuter fabrics fulfil certain requirements and can withstand the extreme demands placed on them, we use fabric quality levels that surpass any standards. We also use creative, effective ways of combining the right materials to ensure our products are suited to the applications they are designed for. The following is a brief overview of the fabrics used and their areas of application.

### THE TWO MOST IMPORTANT ONES ARE

polyamide (= nylon) and polyester. Polyamide is extremely abrasion resistant and colourfast. It is also very popular because despite its fine, lightweight fibres it is highly durable. Polyester does not absorb moisture, does not fade as fast in UV light and has a pleasant textile feel. We increasingly use recycled versions of both these fabrics in our products.

### THE CONSISTENCY OF THE FABRICS

is indicated in terms of denier (d) for thread thickness. This unit expresses the weight in grams per 9,000 m of yarn. So, for instance, a 600-denier yarn that is 9,000 metres long will weigh 600 g. The thicker the thread, the higher the denier figure for the same density of weave and therefore the more resilient the fabric. And the higher the denier figure, the greater the weight per metre square.



### FINISHES / MEMBRANES

are what gives our fabrics their water repellent or waterproof properties. Again, quality is key here. We only ever use the highest quality finishes and membranes. These are durably elastic, and resistant to cold and creases. The finishes and membranes are made from PU or TPU that is 0.03 to 0.08 mm thick and free from PFCs.

### IMPREGNATIONS

Since 2020, deuter has only used DWR (Durable Water Repellent) finishes that are PFC free and not harmful to human health or the environment.



### BUCKLES AND ZIPS

Our zips are made by YKK®, the world's leading manufacturer. Our buckles are developed in-house to make sure they are up to the job.

## WATERPROOFING

Our products can be broken down into two categories: Weatherproof & water repellent, or waterproof. In the interest of the customer (price) and the environment (finish and choice of materials), we only use waterproof materials and special production if it really makes sense to use them, where products are extremely exposed to rain or water spray. And here, too, we emphasize that our products can only be as waterproof as the materials and workmanship allow. As for how the product is used by the customer, we have no control over that.

Our waterproof products are made from hard-wearing fabrics (with 10,000 mm water column tested according to ISO 811), have taped and welded seams, and TPU-covered zippers to ensure that the contents are protected from spray and rain.

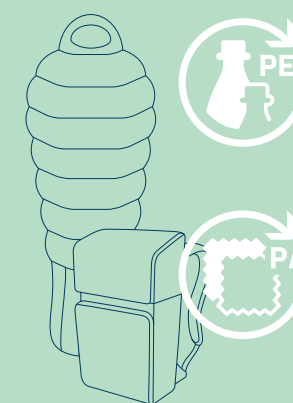
We put fabrics through tests under near-real conditions. In a ten-meter-high rain tower, we simulated the worst weather conditions and rained down the maximum amount of water onto it from above. Effectively, it was a cloud burst of 450 l / m²/h. In addition, by using different rain nozzles we were able to simulate rain coming from all sides during a bike ride. The results: Even after such a long period of intense rain, no water had penetrated inside the waterproof bags or backpacks.

## RECYCLED MATERIALS

In order to save resources and to make its products more sustainable, deuter has been using more recycled materials. Currently, we use fabrics that are made using one of two recycling processes:

Fibers and fabrics made from recycled polyester, or more precisely PET bottles. These PET bottles are post-consumer products. The advantages of using this method are the reduced use of crude oil and energy, and fewer CO2 emissions during production.

Raw materials made from recycled polyamide, or more specifically industrial waste. This kind of waste (or offcuts) is generated during the manufacture of a product and is therefore not reprocessed in the same way. This method has the advantage of using fewer natural resources and generating significantly fewer greenhouse gas emissions.



Main fabric is made from 100% recycled polyester >

**~50 %** Less crude oil and Less CO2 + energy consumption during production by recycling used PET bottles

Main fabric is made from 100% recycled polyamide >

**~27 %** Less consumption of natural resources  
**~28 %** Less greenhouse gas emissions

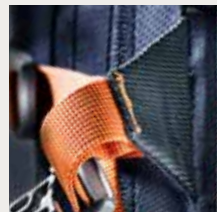


# FOR A LONGER LIFE

## BUILD



### Reinforced critical wear zones



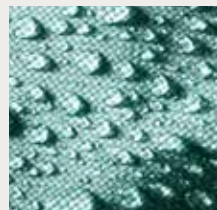
Certain areas of a backpack receive more wear than others. Binding seams, bartack seams, reinforced draw cord sleeves, etc. strengthen areas exposed to high material strain. Using a double-layer base and protecting the padding on hip fins makes deuter backpacks robust and hard wearing.

### Ergonomically shaped hip fins



The hip fins wrap comfortably around all shapes and sizes of hips because their ergonomic form is a result of skilled stitching and not moulded plastic elements. In a multi-stage process, soft, pressure-absorbing foam is sewn together with reinforced, high-density foam. This ensures superior load transfer.

### Waterproofing



Waterproof fabrics (with 10,000 mm water column), taped and welded seams, and TPU-covered zippers ensure optimum performance and, when used as intended, protect contents from spray and rain.

## MATERIALS



### Recycled materials



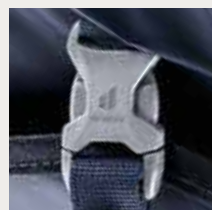
The proportion of products in the deuter collection that are recycled and bluesign® certified is rising. In 2021, 19% of the collection pieces were bluesign® and Green Button certified products. By 2025, we aim for 50% of all products to be made with recycled main fabric and for 70% of our main fabrics to be bluesign® certified.

### Robust frames structures



Frames made from permanently elastic spring steel are virtually indestructible. And when bent, the steel always returns to its original shape. Multi-chamber aluminium rods with a fortifying honeycomb-like structure inside are suited to more lightweight yet stable frames. For our lightweight backpacks we use flexible, unbreakable, U-shaped Delrin® frames for stability and load transfer.

### Brand-quality raw materials



We only use materials made by reputable manufacturers with DWR finishes that are not harmful to people or the environment. That's how we can still guarantee high levels of water and dirt repellency in our products without the use of harmful PFCs. Our zips are made by YKK®, the world's leading manufacturer. Our buckles are developed in-house to make sure they are up to the job.

## FEATURES

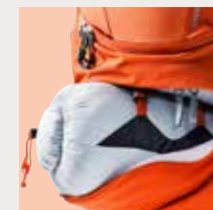


### Application-specific functionality



Every deuter pack is developed with a specific application or sport in mind. This determines the make-up of the pack, starting from the carry system, the pack shape and the compartment configuration through to the individual details like including a helmet holder, rain cover or SOS label.

### Clever load distribution



Ensuring a comfortable and secure fit requires the load to be evenly distributed. The shape and functional compartment configuration of deuter backpacks are designed to spread the load in just the right way.

## PRODUCT SAFETY



### Independent tests



Accredited, independent laboratories inspect and certify the raw materials, flawless performance and workmanship of deuter products. Critical areas and products that have to guarantee a high level of safety, such as our child carriers, are always tested and bear safety certifications such as the TÜV SÜD GS label.

### Details for added safety



Wherever possible, deuter always increases the safety aspect of its products. That's why our bike and school packs are equipped with high-quality reflectors made by 3M. Similarly, packs that will be used in the mountains are equipped with an SOS label and an signal whistle.



## EXTEND THE LIFESPAN OF YOUR BACKPACK WITH THE RIGHT CARE

### When is it time to wash your backpack?

Although backpacks are not worn against the skin like our clothes, over time and on longer hikes they will get dirty. If your pack is very dirty or sweaty, then washing it is essential. But if it's only lightly soiled, or the dirt is superficial, like specks of mud or a dusting of pollen, then you can just spot clean it using a damp cloth. Note: It's easier to remove dirt when it's still fresh, straight after your hike.

### Can I machine wash my backpack?

No. That's because the abrasion places stress on the material (and PU coating) and can damage it in the long run. Also, there is often residue left behind from detergents, which can affect people with sensitive skin, leading to skin irritation under the shoulder straps, for example. The chemical reaction that occurs be-

tween sweat, detergent residue and UV rays also speeds up the decomposition of materials.

### Correct backpack washing?

Depending on the size, submerge the pack in a bucket or bathtub of water and wash with pH-neutral soap or shower gel. Stubborn dirt can be removed with a brush. Salt deposits on the carry system can be removed by squeezing soap and lots of water through the padding by hand, over and over. Stiff zips are best treated with a little silicone spray. Always store your backpack in a dry place. In short:

- Empty your backpack completely after each use. Get rid of any dirt with a brush and soapy water.
- Never machine-wash your backpack or put it in the dryer, as this will damage the PU coating.
- Backpack materials should not be ironed.
- Always make sure any zippers are dirt free.

### Is this backpack waterproof?

Your backpack fabric should remain waterproof for the first few years. Sustained downpours will however result in some moisture seeping through the zips and seams. On alpine tours, or when climbing or ski touring, it's best to pack the contents inside waterproof bags within the pack to prevent them from getting wet. The advantage of this, as opposed to a rain cover, is that all the lashing straps e.g. for ice axe, poles or snowshoes, remain accessible. For hiking and trekking packs, we recommend using a rain cover.

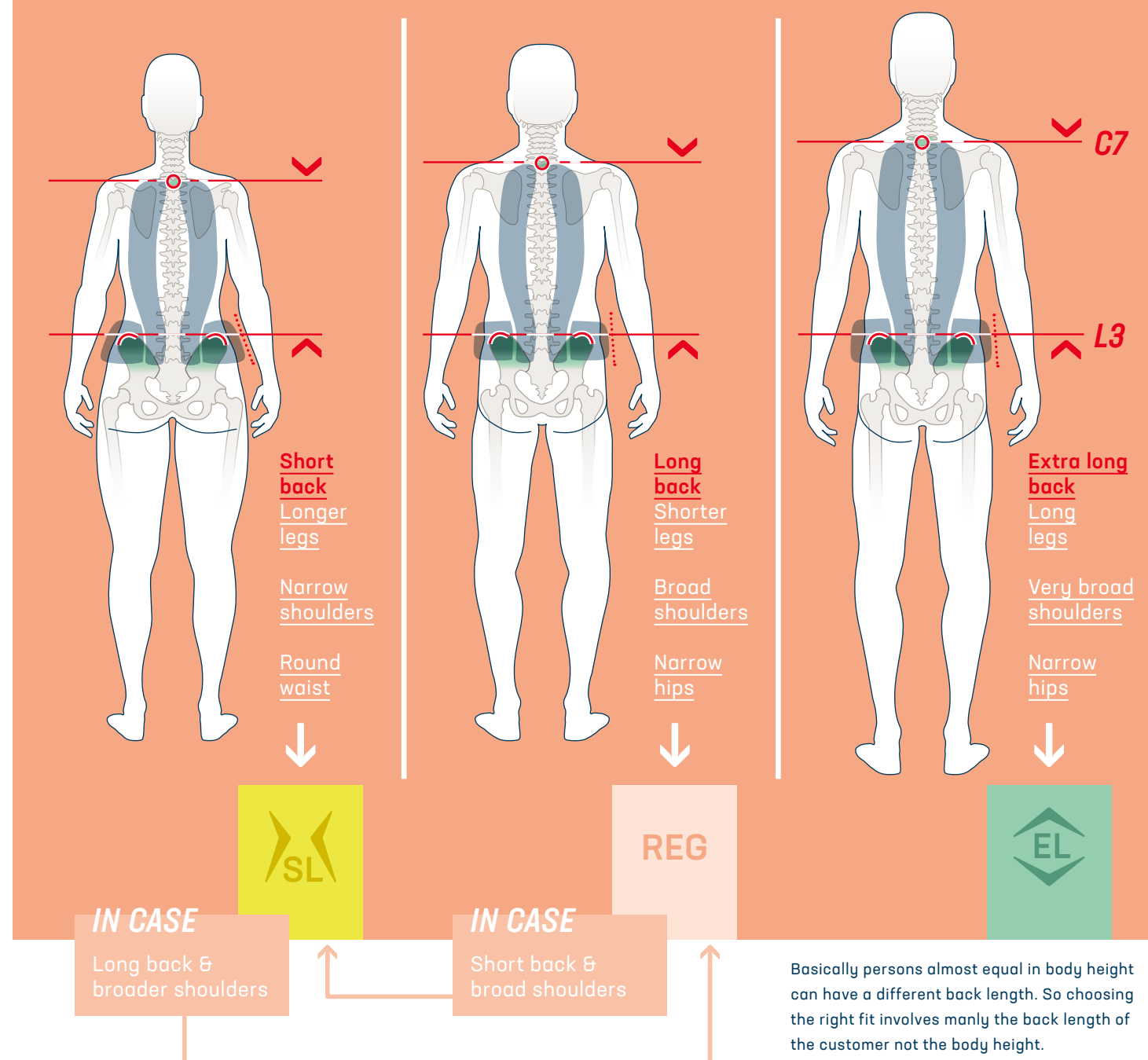
### Does backpack fabric need to be re-impregnated?

Where older models are concerned, proofing the pack can be effective, but only over shorter periods. But beware! Impregnation sprays or washes penetrate the fabric on the straps and can cause skin irritation.

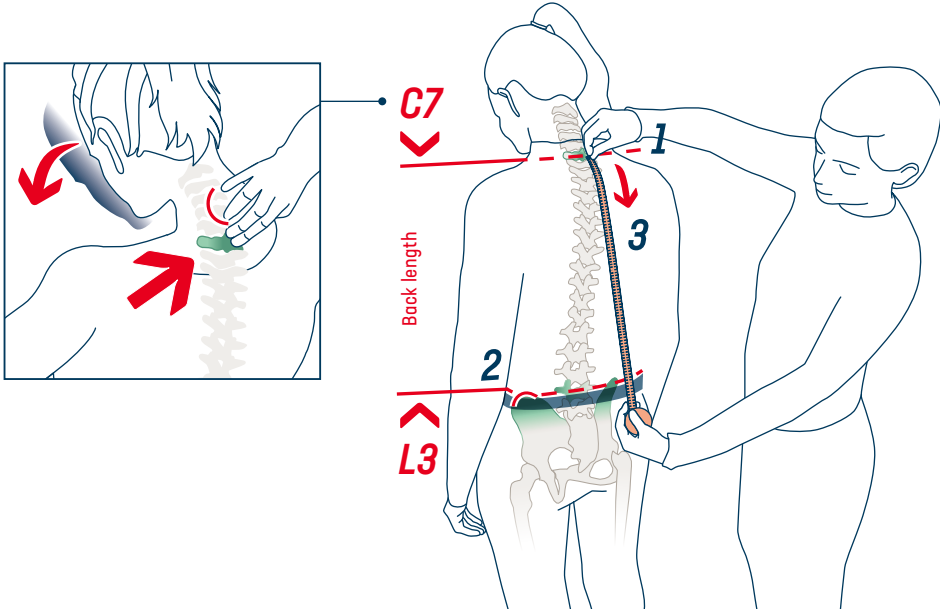


## ASSESSING A CUSTOMER'S BUILD

Choosing the right backpack isn't just about capacity. The larger the pack, the more important a well-fitting carry system is. It should have anatomically S-shaped shoulder straps that mould around the shoulder for superior carry comfort and that enable the widest possible range of movement. Assessing a customer's build will help you find them a pack with the right fit.



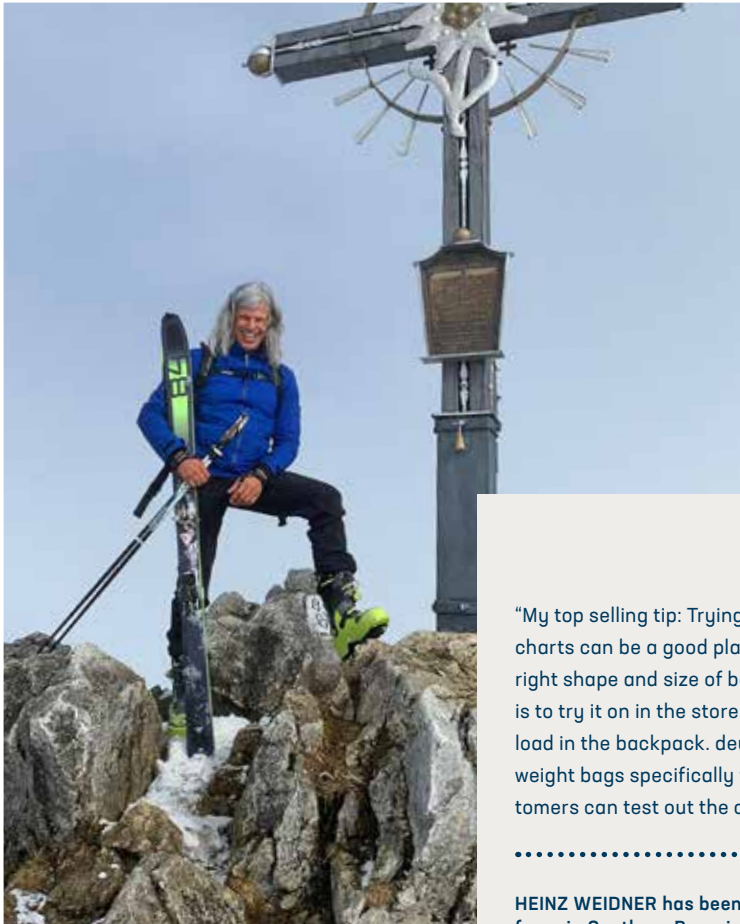
HOW TO MEASURE BACK LENGTH ?



**1 Measurement point 1 neck vertebra:** Customer bends down head. The C7 vertebra bulges below the base of the neck.

**2 Measurement point 2 lumbar region:** A belt can be a useful way of measuring here. Position the belt in line with the top of the hip bone. This is at the same height as the L3 lumbar vertebra.

**3** A measuring tape can then be positioned on the C7 vertebra, and the measurement taken between this and the top of the belt or top of the hip bone.



**MY TIP**

"My top selling tip: Trying it on! Measurements and size charts can be a good place to start when looking for the right shape and size of backpack. But the best thing to do is to try it on in the store, and even better, use a realistic load in the backpack. deuter has a packing station with weight bags specifically for this purpose. That way, customers can test out the carry comfort with a realistic load."

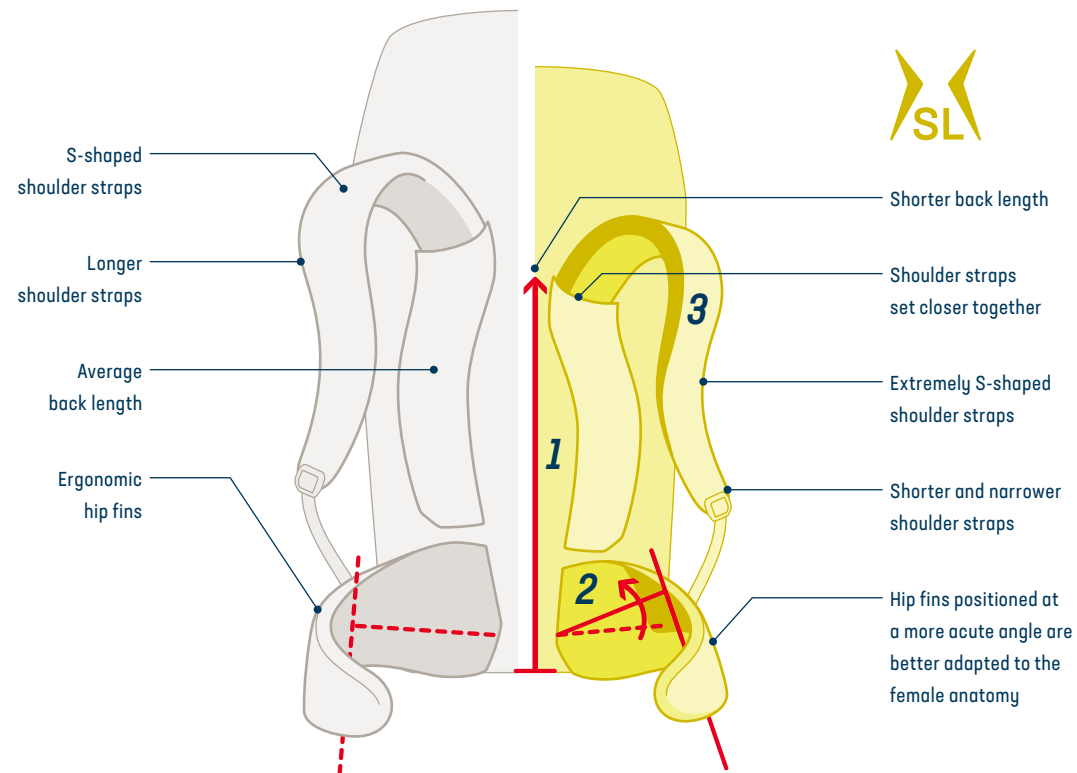
.....  
**HEINZ WEIDNER** has been responsible for the deuter sales force in Southern Bavaria and looks after more than 120 customers. He uses lots of our products himself for climbing and ski touring, and on multi-day hikes and treks.

DEUTER  
SIZE CHART

The following table should help with determining the perfect fit. Back lengths and body sizes overlap in the UNI, MEN and WOMEN fit categories. It is then down to the individual's shape such as shoulder width, or pelvis width, in determining the best model. Women should mostly opt for an SL model because of the specific fit characteristics. In the fit categories Kids, SL, UNI and REG there are some models with **adjustable back systems**. These can also be individually adjusted.

Age & Gender	Fit	Back length in cm	Back length in cm	Example & References
KIDS	KIDS	20 - 23	92 - 98	Pico, Kikki
		24 - 30	98 - 130	Waldfuchs, Schmusebär, Compact 8 JR
		28 - 42	110 - 168	Fox 30 (adjustable back system)
		32 - 44	130 - 168	Junior, Climber, Attack 8 JR
		32 - 46	130 - 172	Fox 40 (adjustable back system)
Women	SL	38 - 48	158 - 178	All SL models with fixed back length
		35 - 56	158 - 178	All SL models with adjustable back system
Unisex	UNI	38 - 54	158 - 195	All Bike and Lifestyle series without SL models
		44 - 58	158 - 195	Kid Comfort series (adjustable back system)
Men	REG	44 - 54	170 - 195	All Regular models with fixed back length
		42 - 62*	170 - 205	All Regular models with adjustable back system; *cover also EL sizes
Men	EL	48 - 58*	185 - 205	All EL models with fixed back length





## REGULAR FIT

Our Regular fit backpacks are designed for the average body shape of a man with an athletic build. These offer a very comfortable fit for many of our customers.

## SL WOMEN'S FIT

### WHAT MAKES THE FIT OF DEUTER SL PACKS SO GOOD FOR WOMEN?

The SL (Slim Line) models are developed by a specialist team of women. The carry system is designed specifically to suit the female anatomy, compared to men, women have:

**1 slightly shorter backs**, because they have longer legs and shorter overall height <sup>1)</sup>

- The SL carry systems are shorter with lower shoulder strap anchor points that guarantee the shoulder straps and hip fins create a snug fit.

**2 more conical shaped hip structure** – This characteristic is compounded by the tendency for many women to have an arched back.

- That's why SL hip fin anchor points are set closer together and at a slight upward angle. The fins themselves are crescent shaped so that, when fastened, the hip belt cre-

ates a conical shape that wraps around women's hips, without any gaps.

**3 narrower shoulders**

- Which is why SL shoulder straps are narrower and shorter, and have tapered ends and smaller buckles to prevent chafing under the armpits.
- That's why SL shoulder straps are set at a more acute angle so that they are closer together. This also keeps them in place and prevents them slipping off the shoulder.

**4 a more sensitive chest area**

- Which is why SL shoulder straps are S-shaped and feature our Soft-Edge finish down both sides. They curve around the female chest, without creating pressure points or slipping.

### MY DEUTER

"It's something that many women will have experienced – an ill-fitting pack that slips off your shoulders or creates uncomfortable pressure points. We've implemented our ideas, fine-tuned the detailing and created a women-specific fit, from the straps right through to the hip belt. I'm really pleased with the results. I always take SL models on my tours so that I can give my undivided attention to the task – and extreme conditions – at hand."

GERLINDE KALTENBRUNNER has an impressive climbing CV: She has climbed all 14 peaks over 8,000 metres, without supplemental oxygen and by fair means. Since 2005, she has enriched the Deuter women's team and used her wealth of experience to contribute to the development of the SL women's models. These women-specific backpacks are easily recognizable from their yellow SL label.



### Who else could benefit from the SL system?

The SL fit backpacks are designed for the average body shape of a woman with an athletic build. But there are some women who find that our Regular fit models are better suited to their body shape. Similarly, SL models are also ideal for some men, with a very slim build and with long legs and a short back, or men who tend to wear size S/M (44-48) clothing (exception is the Trekking backpack Air-contact X: due to their stiff reinforcement the hip fins do not adapt properly to the other hip fin shape).

<sup>1)</sup> Micro census survey results 2017, Germany



REGULAR FIT

## EL EXTRA LONG FIT

Our Extra Long (EL) models are ideal for taller people (around 185 – 200 cm), who often struggle to find a backpack that fits them. That's why we've extended the back length of our most popular models by 4 – 6 cm and increased the capacity to meet their requirements for more space. The EL models come with the same carry system and all the same features as our standard models.

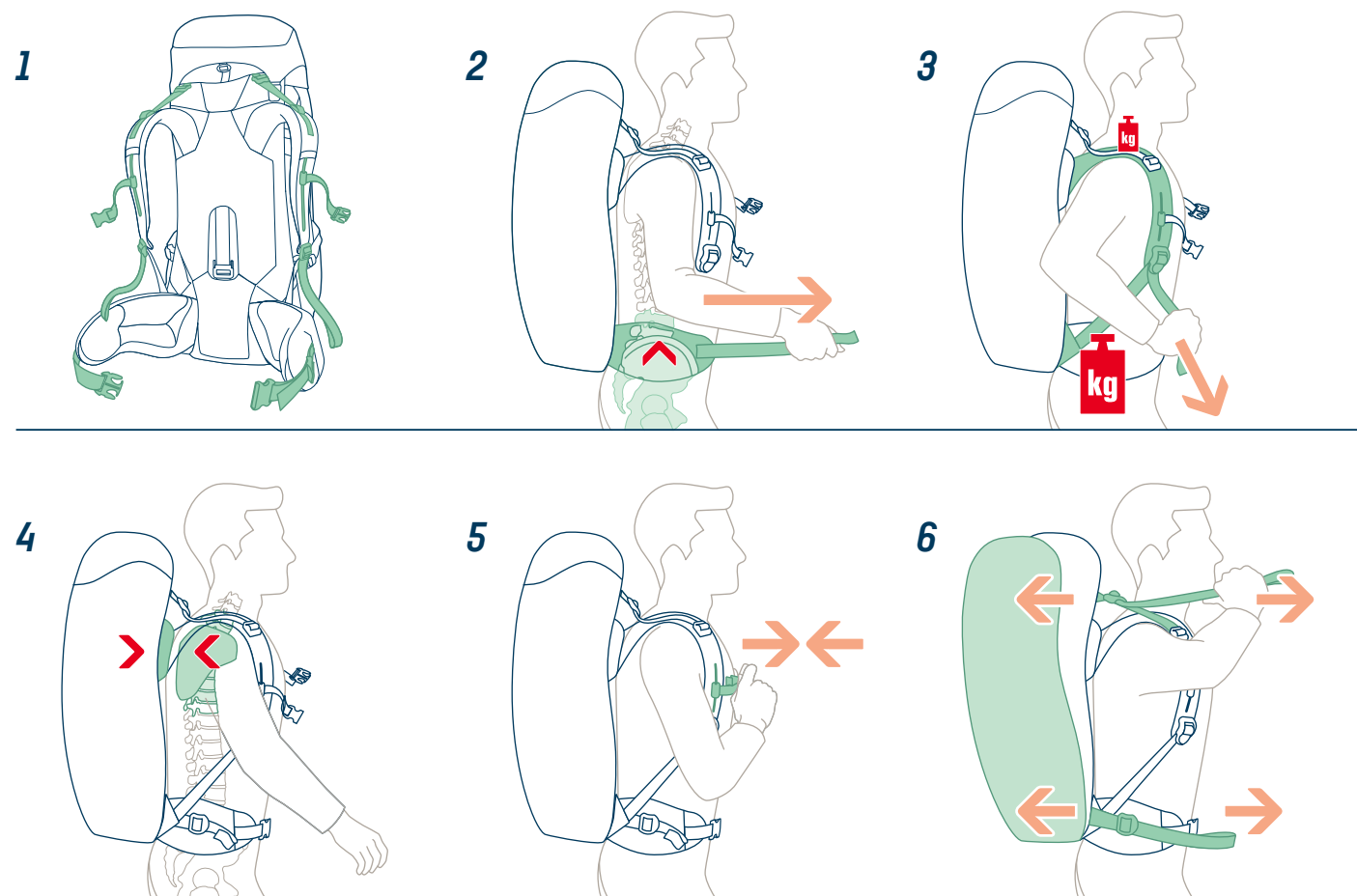
## UNISEX FIT

The perfect choice for models for minimal loads or if, like with some of our child carriers, it is going to be carried by both a man and woman. The unisex back systems come with somewhat narrower shoulder straps and hip fins than the regular models – but wider and longer than those on the SL models. Unisex fit applies to the following series in our collection: Kid Comfort, Ascender, Bike and Life-style series without a corresponding SL model.



# HOW TO ADJUST

Once you've narrowed the selection to just a few models, it's time to check the fit. Ideally, you want to load a pack – it's important to position the load correctly (see page 26) – when trying it on:



**1** Fill the pack with a realistic load when testing it for fit. Loosen all straps, then put it on.

**2** Wrap the hip fins around your hips with the centre of the hip fins covering the top of the hip bone and secure the hip belt. If the belt is too high, it will constrict your stomach. If it is too low, the fins might chafe on your leg while you walk.

**3** Finally, adjust the shoulder straps. Not too tight, because the bulk of the load should be borne by the hip belt.

**4** The anchor points for the shoulder straps should be between the shoulder blades, and the padding of the shoulder straps should wrap around the whole shoulder.

The problems illustrated in boxes **A to D** cannot be remedied by adjusting the length of the shoulder straps. Choosing the right back length is critical in ensuring maximum range of movement for the arms and making sure the anatomically S-shaped shoulder padding takes the strain off the neck muscles. Ensure you select the right back system length (Regular, SL or EL) for smaller capacity backpacks, or for larger models, an adjustable carry system (Hook & Loop, VariQuick and VariFlex > see page 28) to suit the client.

**5** Position the adjustable sternum strap at the correct height, fasten and pull tight, making sure it does not affect breathing. This stabilises the shoulder straps and comes as standard on most deuter backpacks.

**6** Pull the hip belt stabiliser straps tight for improved load control and loosen them for more mobility. With larger capacity packs, adjust the stabiliser straps on the shoulder straps. Loosened off, these allow more ventilation over easier terrain. Tightened, they create a more compact load on the back, thereby providing increased stability over more challenging terrain. On longer days, loosening or tightening the shoulder straps and stabiliser straps from time to time can shift the load between the hips and the shoulders to alleviate each in turn.

**E** The stabiliser straps are most effective when set at an angle between 30° and 45°.

**F** For smaller, lighter packs, the stabiliser straps allow for small adjustments in the length of the back. Here, the angle can be much smaller or even negative.

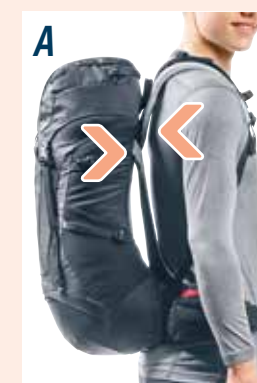


### MY TIP

“As a mountain guide, I spend a lot of time in the mountains, so I really appreciate the quality and functionality that deuter packs offer. It's especially great that the SL series means there are backpacks that actually fit me perfectly and are comfortable to carry, whatever the terrain. It's not always easy to find the right backpack straight away. Ideally, you should try to test out a pack in the shop with a realistic load. deuter provides a practical option for this: A 'Fit Centre'. This involves using ballast sacks that are quick and easy to load into a backpack. I ended up choosing my latest deuter item, the SL child carrier, without much testing however. This comfortable, functional child carrier for women helps me pass on my love for the mountains to our daughter, and it also offers me the chance to experience the outdoors from a whole new perspective.”

HEIDI HARDER is a state-certified mountain and ski guide. Winter or summer, she's happiest when she's in the mountains. Freeriding, climbing and ski touring are top of her list. She helps deuter develop women's backpacks and child carriers.

The anchor points of the shoulder straps are too low: the back length is too short



The anchor points of the shoulder straps are too high: the back length is too long



With deuter trekking packs the correct angle is achieved by threading the stabiliser straps through the higher or lower buckle on the body of the pack

**B**



This will mean the padding on the shoulder straps finishes short of where it is required, the straps cut into the shoulders and slip more easily.

**D**



The shoulder strap anchor points end up too close together at the neck and the padding on the shoulder straps runs under the armpits, which can lead to chafing on the neck and arms. This also means the load will tilt backwards.



For smaller, lighter packs, the stabiliser straps allow for small adjustments in the length of the back. Pulling the stabiliser or shoulder straps tight or loosening them adjusts the position of the pack on the back.

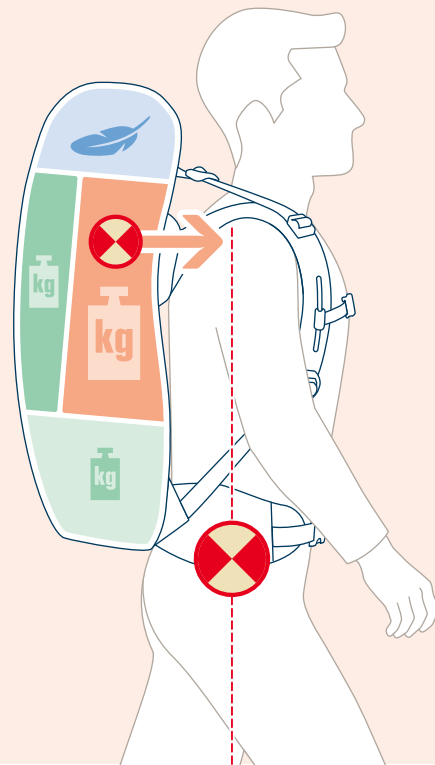


Aside from selecting the right kind of backpack, using it the right way is also important in achieving the best carry comfort. This includes packing correctly and for models with an adjustable back, precise adjustment. The most important thing when packing your backpack is not to take anything you don't need.

## HOW TO PACK

The heaviest part of the load should be close to the body and ideally at shoulder height. That way, the centre of gravity of the load and your own centre of gravity are aligned and the pack will not pull you backwards. Larger packs (above 30 litres) should therefore be packed as follows:

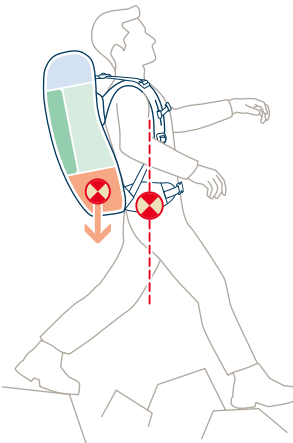
Sleeping bag, down clothing and other lighter items in the bottom compartment. Moderately heavy items such as clothing, go on top and towards the outside of the pack. Heavier equipment like tent, food, warm jackets should be stashed higher up around shoulder height and close to the back. Small items can be safely stored in the lid compartment or/and external pockets, so they are easy to access. Try to keep everything compact and have little or no equipment attached to the outside of the pack to minimise the effect of strong winds, prevent items getting wet or your pack getting snagged up. In general, try to make sure that the weight is distributed evenly on both sides of the pack, especially where side pockets are concerned. Stuff sacks help keep items neatly organised. Make sure these are not too full to prevent any dead space within the pack. Drybags are a good alternative to a rain cover.



**A** For easier terrain (hiking trails, footpaths) pack heavier items higher up.

**B** For more demanding terrain (alpine routes, climbing) pack them lower down and closer to your own centre of gravity. This will make you bend forwards somewhat when walking, to counter the weight, but it also makes it harder for you to lose your balance than it is with a higher load.

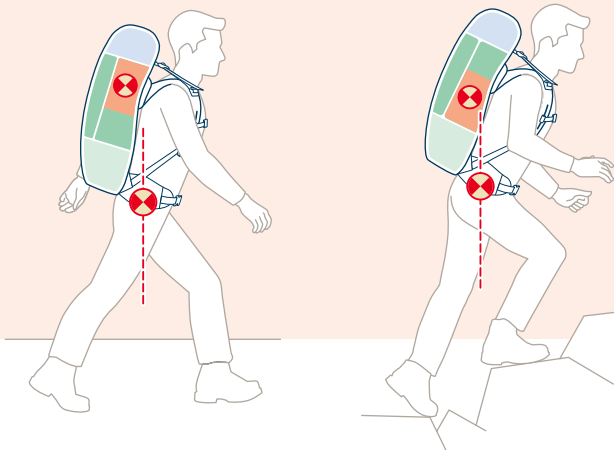
**WRONG!** The pack is pulling you backwards – the pack's centre of gravity is too far from your own. Walking with heavy loads quickly becomes too difficult because the body is constantly having to work against the weight of the pack. The shoulder straps also place more strain on the shoulders than they should. And over tricky terrain, an incorrectly packed backpack can even pose a safety risk.



### MY TIP

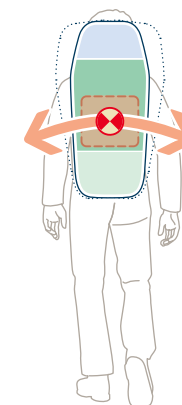
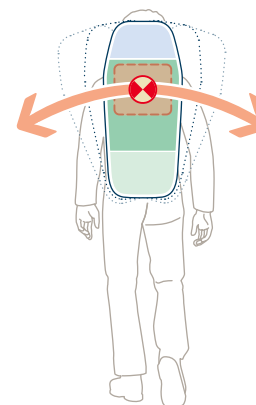
"I would say that I specialise in carry systems that can handle heavy loads in comfort. We design them so that you hardly feel you're carrying a heavy load. But there are of course limits to how much a person can carry over longer distances without any undesirable effects. Just how heavy a load should be, is also a function of an individual's level of fitness, of course. As a rule of thumb, we tend to say that a person with a good level of fitness should carry no more than 20-25% of their own weight over longer periods. People often overestimate how strong they are and end up carrying too much. It doesn't make much difference whether it's two weeks or two months – you're going to have to wash some clothes sooner or later. So, it's better to pack just three T-shirts instead of ten, and opt for a more moderate size backpack. It'll reduce the weight you carry and leave you free to focus on the trip."

STEVE BUFFINTON has been a product designer at deuter since 1996 and is the man behind several of deuter's carry systems. With his skills and talent, he is constantly raising the bar in terms of design, and in particular in creating superior carry comfort. Some of his carry systems have even been patented. When he's not busy designing, or looking after his three children, he likes to get out on his bike as much as possible.



**A** flat terrain > high center of gravity

**B** alpine terrain > low center of gravity



## CONCLUSION

Keeping the bulk of the load close to your centre of gravity makes it easier to carry. A slim shaped backpack and body-hugging carry system are what you are looking for.

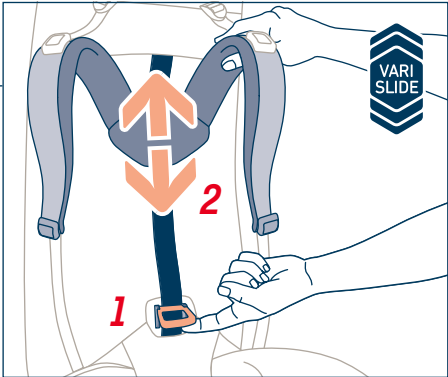


# BACK LENGTH ADJUSTMENT

For loads above 10kg or when walking longer distances in particular, having the right back length is critical to carry comfort. That's why all our backpacks with 35+ litres capacity come equipped with our Hook & Loop, VariQuick or VariSlide system. With smaller packs, doing away with a carry system keeps the overall weight down. Instead you can select the best back length by choosing between Regular, SL and EL models. Our backpacks are designed with an average sized athletic person in mind.

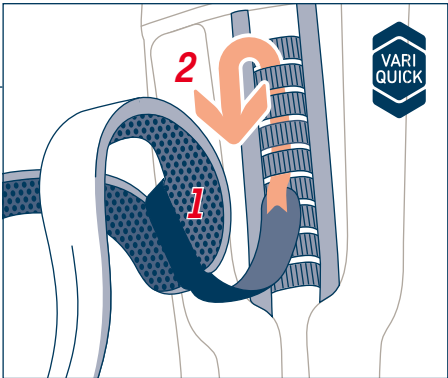
## VARI SLIDE SYSTEM

- Perfect fit for every back length in a flash:
- 1 Lift the buckle at the base of the carry system.
  - 2 While the buckle is raised, shift the shoulder harness up or down into the correct position.



## VARIQUICK SYSTEM

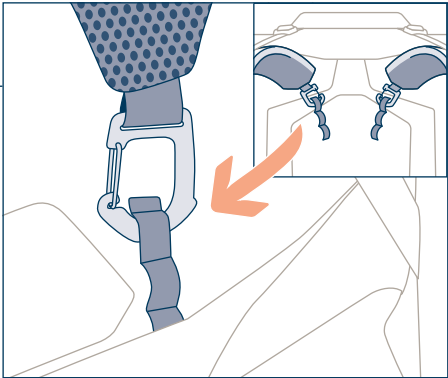
- Always follow these steps when adjusting the back length on a pack featuring the VariQuick system:
- 1 Undo the hook & loop strap at the centre of the back panel and pull it out.
  - 2 Thread it through the correct sizing loop in an upward direction, pull tight and fasten.



## HOO K & LOOP SYSTEM

By clipping a carabiner into the appropriate loop, this system allows the back length on our ultra-lightweight trekking backpacks to be adjusted to suit the individual.

Loop	1	2	3
REGULAR back length	44 cm	46 cm	48 cm
SL back length	40 cm	42 cm	44 cm



# TREKKING LOAD CATEGORIES

## WHAT DO THESE TREKKING BACKPACK CATEGORIES MEAN?

With our load categories, we don't mean the maximum load our trekking backpacks can take - they can handle way more than anyone would want to carry. They are meant as a guideline.

It's all about the comfort.

Categories are decided based on a combination of the following:

- 1. Build and stability of the back system
- 2. Expected duration of carry e.g. a trekking backpack compared to a travel backpack
- 3. A person's individual requirements e.g. thru-hikers will want a pack to be ultra-lightweight whereas classical trekkers will want more carry comfort
- 4. Individual's fitness. Expectations for an expedition participant, for example, will be higher than for a recreational hiker.
- 5. Finally, the specifications are also based on the usual or appropriate equipment that is used.

Our load categories are only intended as a guide to help find the right trekking backpack. We would however always recommend that a customer tests out carrying a backpack with an appropriate load.

### LOAD CATEGORY T1:

- Sturdy frame, combined with padded hip fins for good load transfer
- Touring backpacks, thru-hiking
  - Aircontact Ultra, Aircontact Lite
  - Up to 15 kg

### LOAD CATEGORY T2:

- Reinforced frame directly connected to sophisticated padded hip fins for greater load transfer over longer distances
- Trekking, work and travel, longer journeys
  - Aircontact Core, Futura Air Trek
  - Up to approx. 20 kg

### LOAD CATEGORY T3:

- High load-bearing frame directly connected to reinforced, sophisticated padded hip fins and wider-format shoulder straps, plus increased cushioning through special back padding, for maximum load transfer on long treks
- Trekking carrying food, long journeys
  - Aircontact X
  - Up to approx. 30 kg



# "RECOMMENDED LOAD UP TO"

## WHAT DO OUR RECOMMENDED LOAD FIGURES MEAN?

These are not the maximum weight that can be carried by a backpack, but rather the load that is most common for that particular application. It is the weight that can be carried in comfort over several hours in that particular backpack model. When selecting a backpack model, in addition to load weight, the anticipated carrying duration and target group-specific requirements for carry comfort are also taken into account.

So, the recommended load figures serve as an aid in finding the right backpack. For our child carriers we have a maximum load of 24 kg (child 22 kg + 2 kg packing items). Our child carriers are TÜV SÜD ested and approved up to this weight.

Recommended load **3 kg**

up to **10 kg**



#### **S-SHAPED SHOULDER STRAPS**

The ergonomic shape of our shoulder straps follows the contours of the shoulders and neck. The wide contact surface distributes the weight for added comfort, while tapered strap ends increase freedom of movement.

#### **ACTIVE-FIT SHOULDER STRAPS**

In our High-End series pivoting Active-Fit shoulder straps adapt to the width and slant of the shoulders.

#### **SOFT-EDGE SHOULDER STRAPS**

The seams are positioned on top of the shoulder straps for a comfortable fit and no chafing.

#### **ADJUSTABLE STERNUM STRAP**

A height-adjustable sternum strap stabilises the shoulder straps.



#### **EFFECTIVE LOAD TRANSFER**

For carry systems designed to carry heavier loads, an internal frame relieves the shoulders and back by transferring up to 70% of the weight to the hip fins.



#### **PULL-FORWARD SYSTEM**

For carry systems designed to carry heavier loads, the hip belt is easily tightened and adjusted, even with a fully-loaded pack.

#### **LUMBAL PADS**

Bearing weight incorrectly on the sacrum while carrying a pack can lead to an obstructed sacroiliac joint. Ergonomic padding used in the lumbar region of deuter carry systems transfers the weight gently onto the musculoskeletal system. This also frees up the pelvis to move naturally, which is important.



#### **ECL: ERGONOMIC COMFORT LOCK**

For carry systems designed to carry heavier loads, ergonomic padding allows the hip fins to sit snug over the crest of the hip bone and thus distribute the load evenly.

#### **3D HIP FINS**

The hip fins wrap comfortably around all shapes of hip because their ergonomic shape is a result of sophisticated, multi-layered stitching and not moulded plastic elements.

# *CARRY COMFORT WITH DEUTER*

The human anatomy is central to the carry system design of all deuter backpacks. It's an approach you can feel, because deuter backpacks are comfortable to carry and feel good. The fit, ventilation and functionality are all perfectly geared towards the application they are designed for. Some of deuter's typical carry comfort features include:


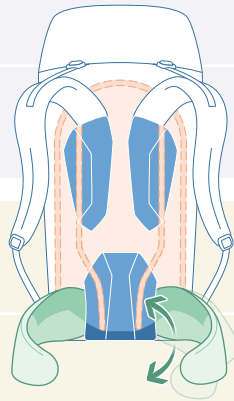

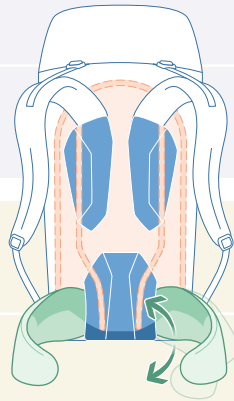

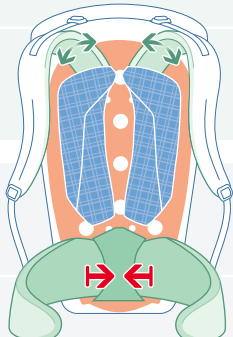
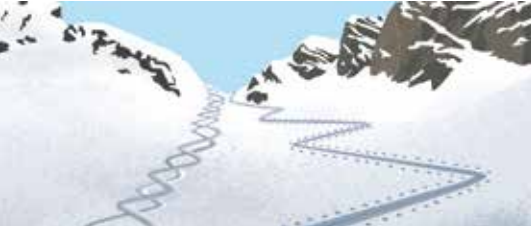
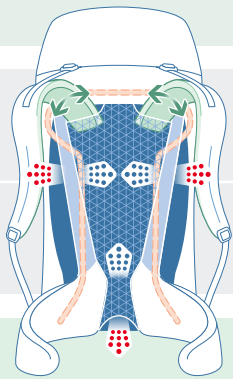
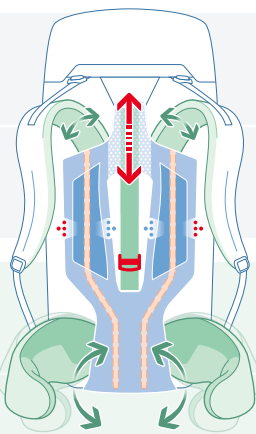
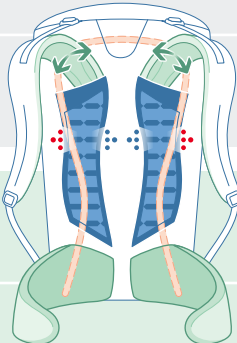
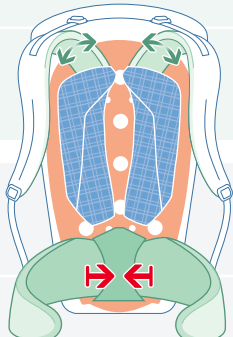

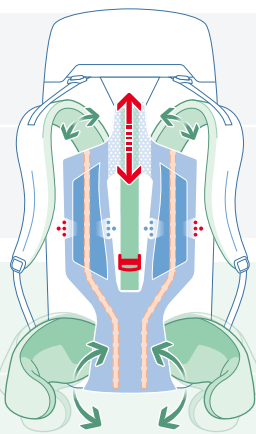
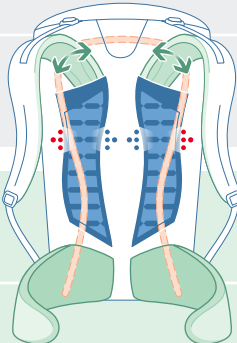


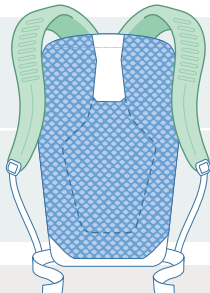

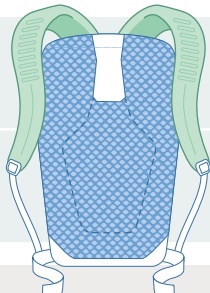
#### **DEDICATED VENTILATION**

deuter has developed different ventilation systems specifically for the requirements of different sports. But they all provide superior ventilation and a pleasant back climate. That's because sweating less is proven to increase performance.





BACKPACK Overview

	TRAIL RUNNING	0,5 day	7 litres	secure fit	lightness / fit / functionality			Ascender			
		1 day	13 litres		lightness / fit / load distribution			Ascender			
	HIKING	one day	13 - 34 litres	ventilation	ventilation / functionality / price	AC Lite   Zugspitze   Gröden   Futura	Trail	Speed Lite			
		multi days	28 - 42 litres		load transfer / functionality / lightweight	Futura   Futura Pro	Trail Pro	Speed Lite			
	TREKKING	with accom- modation	35+10 - 60+10 litres	load transfer	ventilation / lightweight	Futura Air Trek	Aircontact Lite   Aircontact Ultra		<p>The Alpine back system combines a solid, secure fit for moving over challenging terrain, with superior comfort and ventilation between the two Softstripe back pads.</p>		
		with tent	45+5 - 80+15 litres		ventilation / capacity / easy packing		Aircontact Ultra   Aircontact Core   Aircontact X				
	SNOW SPORTS	one day	18 - 32 litres	secure fit	lightweight / functionality			Freerider Lite   Freescape Lite	Freerider   Alproof Lite   Alproof   Rise		
		multi days	32+10 - 40+10 litres		functionality / load transfer / lightweight				Freerider Pro   Freescape Pro		
	MOUNTAINEERING	one day	22 - 30 litres	secure fit	lightweight / functionality	<p>The Aircomfort mesh back provides maximum all-round ventilation which results in up to 25% less perspiration. This reduces strain on the circulation and results in greater endurance – as verified by the Hohenstein Institute, Germany.</p>		Guide Lite	Guide		<p>The ergonomic carry comfort of the Contact back padding is easy on the back and keeps the load close to the body and evenly distributed.</p>
		multi days	32+8 - 45+12 litres		functionality / load transfer / lightweight			Gravity Expedition	Guide   Gravity Wall Bag		
	CLIMBING	sport	12 - 40 litres	lightweight	functionality / secure fit	<p>Up to 15% less perspiration compared to conventional full-contact back systems; proven in field tests conducted by Gabriel L.&amp;T. in cooperation with the University of Erlangen, Germany.</p>	<p>Up to 15% less perspiration compared to conventional full-contact back systems; proven in field tests conducted by Gabriel L.&amp;T. in cooperation with the University of Erlangen, Germany.</p>	Gravity Pitch		<p>A compact, secure fit in any riding situation. The Airstripes pads with minimized contact surface and ventilation channels allows air to circulate freely across 80% of the back.</p>	Gravity Motion
		alpine	22 - 50 litres		secure fit / load transfer / functionality			Guide Lite	Gravity Wall Bag		
	BIKE	one day	5 - 22 litres	secure fit	ventilation / lightweight / safety / price	Race Air				Flyt (with back protector)   Race Lite   Race   Compact	Attack (with back protector)   Road One
		multi days	14 - 32 litres		ventilation / load transfer / lightweight					Bike I   Superbike   Trans Alpine   Trans Alpine Pro	
	TRAVEL	short trips	28 - 40 litres	easy packing	functionality / hand luggage size						AViANT Carry On   Carry On Pro   Access   Duffel   Duffel Pro
		holidays	50 - 90 litres		capacity / load transfer / functionality				<p>Our lightest backpacks are conceived for people who like to keep things fast and light but refuse to compromise on carry comfort and durability.</p>		Helion   AViANT Access   Access Pro   Voyager   Duffel   Duffel Pro



# WHICH BACKPACK IS THE RIGHT ONE?

Why do we have so many different types of backpacks? Climbing, hiking, mountain biking or trekking all place different demands on our bodies and on our equipment. deuter backpacks are always designed with a specific use in mind. That's how we succeed in generating the best carry comfort, ventilation, safety and tailored features. But how do you choose the right one?



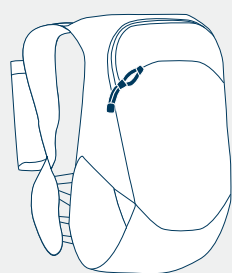
## TRAIL RUNNING Application & Carry System



**POST-WORK RUN  
EXTENDED TRAIL RUN  
FAST & LIGHT MOUNTAIN RUN**

half day - full day

7-13 liters



**ASCENDER**

**FULL-CONTACT BACK SYSTEM  
LITE**

- solid, snug fit
- lightweight & comfortable



Recommended load **1kg** up to **3kg**



### MY DEUTER

"When I'm trail running, I feel free. I'm free to choose the route I want, the direction, the duration and even how fast or slow I want to go. When I'm running, the strains and stresses of everyday life seem far away. I'm fully in the moment - in my head and in my body. And that's what I really love about it! The new Ascender has the adaptability to suit any kind of terrain. The special design means it wraps around my upper body, so it doesn't wobble while I run. And the built-in compression allows the load to be evenly condensed. There's nothing that gets in the way, and I can dedicate my full focus to the trail ahead. Lightweight, comfortable and with loads of features, the Ascender isn't just suited to longer routes but is also perfect for shorter ones too."

.....  
NATALIA SCHNEIDER, ASTA-licensed trail running guide, member of the Austrian Trail Running & Sky-running Association and member of the deuter Alpine Family, who lives in Unterwössen, in the Chiemgau region of Bavaria - and so has plenty of trails right on her doorstep.

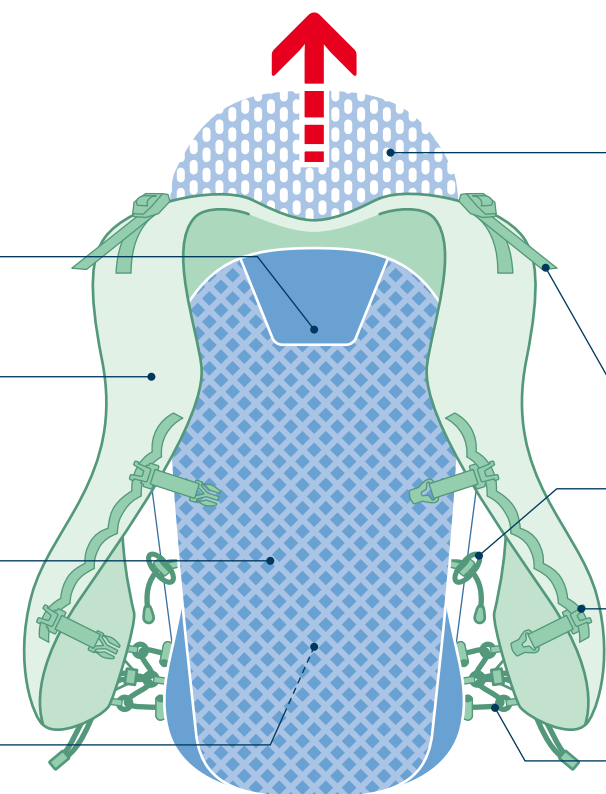


**MINIMIZED WEIGHT**  
throughout the design for greater endurance and comfort

**SOFT MATERIAL ON THE BACK AND ERGONOMIC VEST-STYLE SHOULDER STRAPS**  
wrap around the torso to create a seamless fit

**HIGHLY BREATHABLE**  
thanks to mesh on the back and shoulder straps, with lightweight fabric only used where absolutely necessary

**MOISTURE BARRIER IN MAIN COMPARTMENT**  
for reduced condensation inside the pack



**REMOVABLE FOAM BACK PAD**  
shaves off extra 15 grams if required. This lightweight foam padding increases carry comfort and creates a buffer zone that allows moisture to be dispersed

**STABILIZER STRAPS**  
for a compact, solid fit

**PACK COMPRESSION**  
via bungee cord and mesh inner pocket to anchor contents in place

**TWO ADJUSTABLE, DETACHABLE STERNUM STRAPS**  
keep the shoulder straps securely in place

**BUNGEE CORD COMPRESSION ON THE SHOULDER STRAPS**  
for precise fit adjustment on the move

### LITE SYSTEM



Lightweight

Lightweight carry comfort thanks to

- precision-adjustable fit
- removable, flexible foam back pad - aids moisture dispersal
- soft, airy mesh on back and shoulder straps

- wide, vest-style shoulder straps with bungee cord compression straps for a snug, secure fit
- shoulder strap pockets for more evenly distributed load, front and back

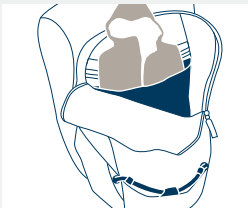
Recommended load **1kg**

up to **3kg**





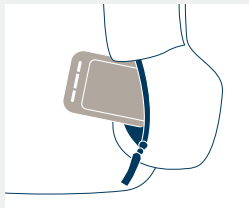
**Ultra lightweight** with innovative functionality - ideal for fast-paced endurance sports



**Zero load-wobble** thanks to stretch inner compartment and compression bungee cords



**Easy-access poles** (without having to remove pack) in holster on the shoulder straps for collapsible poles



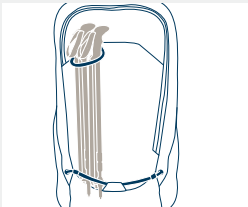
**Cell phone, GPS etc. at the ready** in large, zippered pocket on the shoulder strap



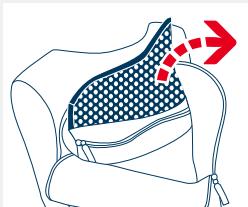
**On-the-move hydration** with pockets on the shoulder straps for two soft flasks



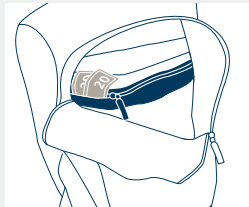
**Hydration compatible** with a 2-liter bladder (Ascender 7) or 3-liter bladder (Ascender 13)



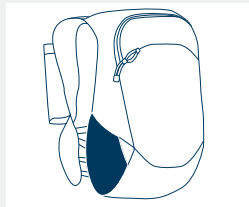
**Full range of movement** with extra pole attachment at the back



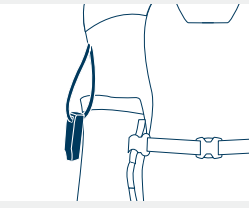
**Removable back pad** shaves off an extra 15 g from this lightweight pack



**Valuables** securely stowed in a moisture-repellent inside pocket



**Additional stow space** in the easy-access stretch side pockets



**Safety whistle** requires minimal force to generate loud and audible sound in an emergency



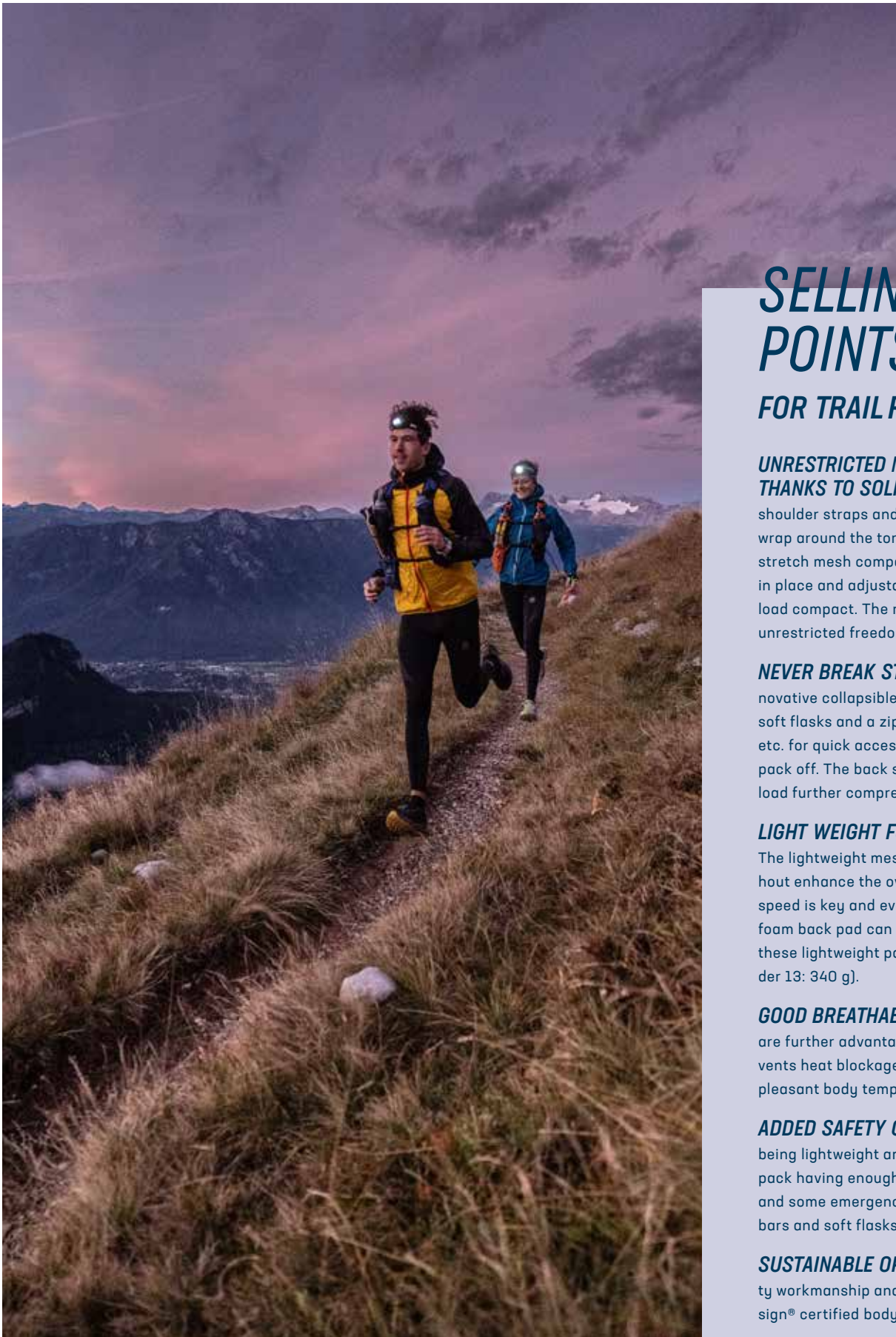
**SOS label** with emergency numbers and first aid tips



LITE SYSTEM

ASCENDER 7 | 13

Post-work run   Extended trail run   Fast & light mountain run



SELLING POINTS

FOR TRAIL RUNNING PACKS

**UNRESTRICTED MOVEMENT AT SPEED THANKS TO SOLID FIT:** The wide, vest-style shoulder straps and soft material against the back wrap around the torso to create a seamless fit. A stretch mesh compartment inside keeps contents in place and adjustable compression keeps the load compact. The result is zero load wobble and unrestricted freedom movement.

**NEVER BREAK STRIDE:** Shoulder straps with innovative collapsible pole storage, two pockets for soft flasks and a zippered pocket for a cell phone etc. for quick access without having to take the pack off. The back system can be adjusted and the load further compressed on the move too.

**LIGHT WEIGHT FOR BETTER ENDURANCE:** The lightweight mesh and minimized weight throughout enhance the overall running experience. When speed is key and every gram counts, removing the foam back pad can shave off an extra 15 g from these lightweight packs (Ascender 7: 315 g, Ascender 13: 340 g).

**GOOD BREATHABILITY** and minimized weight are further advantages of the 3D back mesh. It prevents heat blockages on the back and maintains a pleasant body temperature.

**ADDED SAFETY ON LONGER RUNS** despite being lightweight and comfortable, thanks to the pack having enough space for a jacket, headlamp and some emergency gear in addition to energy bars and soft flasks.

**SUSTAINABLE OPTION** thanks to highest-quality workmanship and durable, fully-recycled, bluesign® certified body fabric and 3D back mesh.

**IN TWO DIFFERENT SIZES** for different body shapes and sizes. The Ascender 7 for shorter or average back lengths, and the Ascender 13 for longer backs.





HIKING  
DAY TRIP  
CITY WALK

1 day



HIKING  
MOUNTAIN HIKE  
VIA FERRATA

1 day



WEEKEND HIKE  
WINTER HIKE

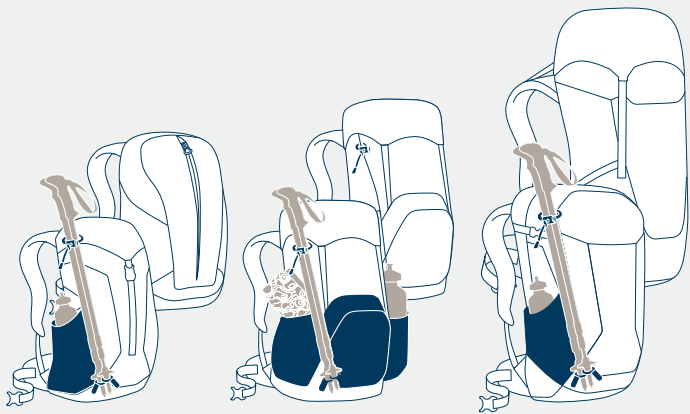
1-3 days



HUT-TO-HUT HIKE  
ALPINE TRAVERSE  
ALPINE ROUTE

2+ days

13-34 liters



AC LITE

ZUGSPITZE  
GRÖDEN

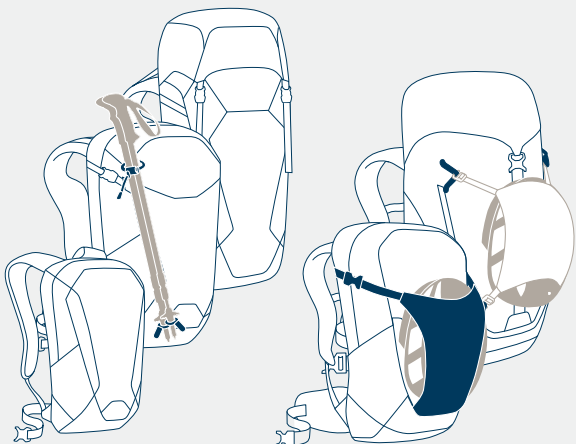
FUTURA

MESH CARRY SYSTEM  
AIRCOMFORT

MESH CARRY SYSTEM  
AIRCOMFORT SENSIC

- maximum ventilation
- compact & light
- maximum ventilation
- all-rounder
- maximum ventilation
- maximum comfort
- maximum functionality

13-30 liters



SPEED LITE

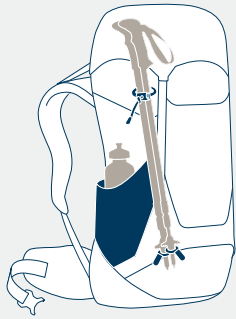
TRAIL

FULL-CONTACT  
CARRY SYSTEM  
LITE / LITE AIR

FULL-CONTACT  
CARRY SYSTEM  
AIRCONTACT TRAIL

- ultra-light
- secure fit
- ventilation
- secure fit

24-34 liters

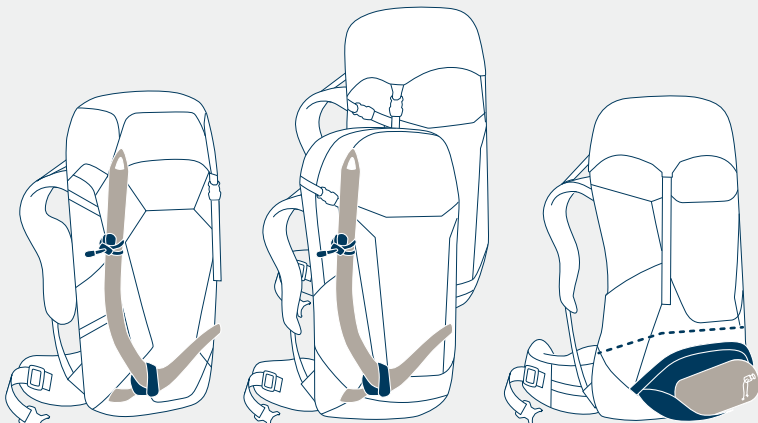


FUTURA

MESH CARRY SYSTEM  
AIRCOMFORT SENSIC

- maximum ventilation
- maximum comfort
- maximum functionality
- load transfer

28-42 liters



SPEED LITE

TRAIL PRO

FUTURA PRO

FULL-CONTACT  
CARRY SYSTEM  
LITE AIR

FULL-CONTACT  
CARRY SYSTEM  
AIRCONTACT TRAIL PRO

MESH CARRY SYSTEM  
AIRCOMFORT SENSIC PRO  
with pivoting hip fins

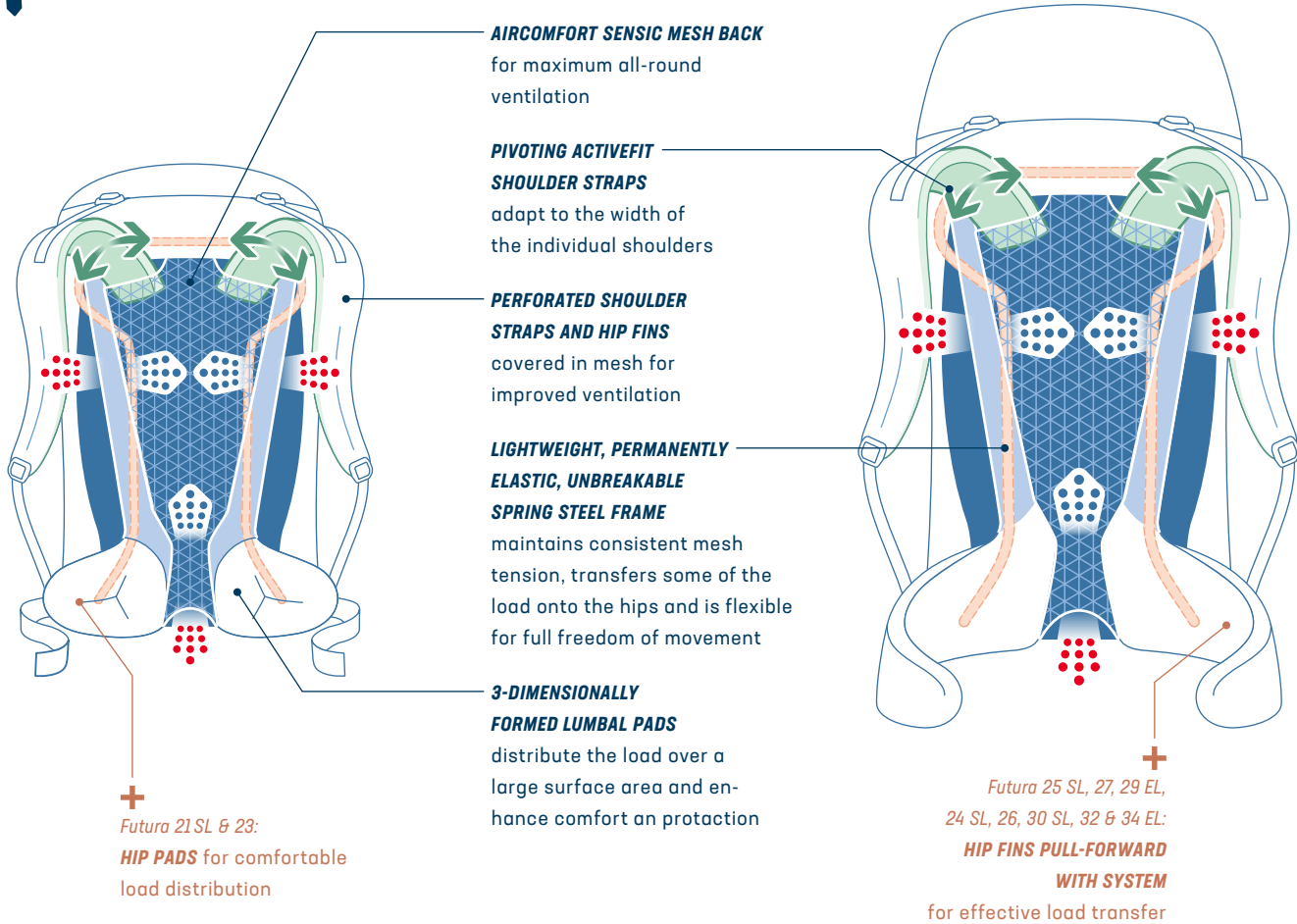
- ultra-light
- secure fit
- superior load transfer
- maximum comfort
- maximum functionality
- 2-way ventilation
- secure fit
- superior load transfer
- maximum comfort
- maximum functionality
- 2-way ventilation





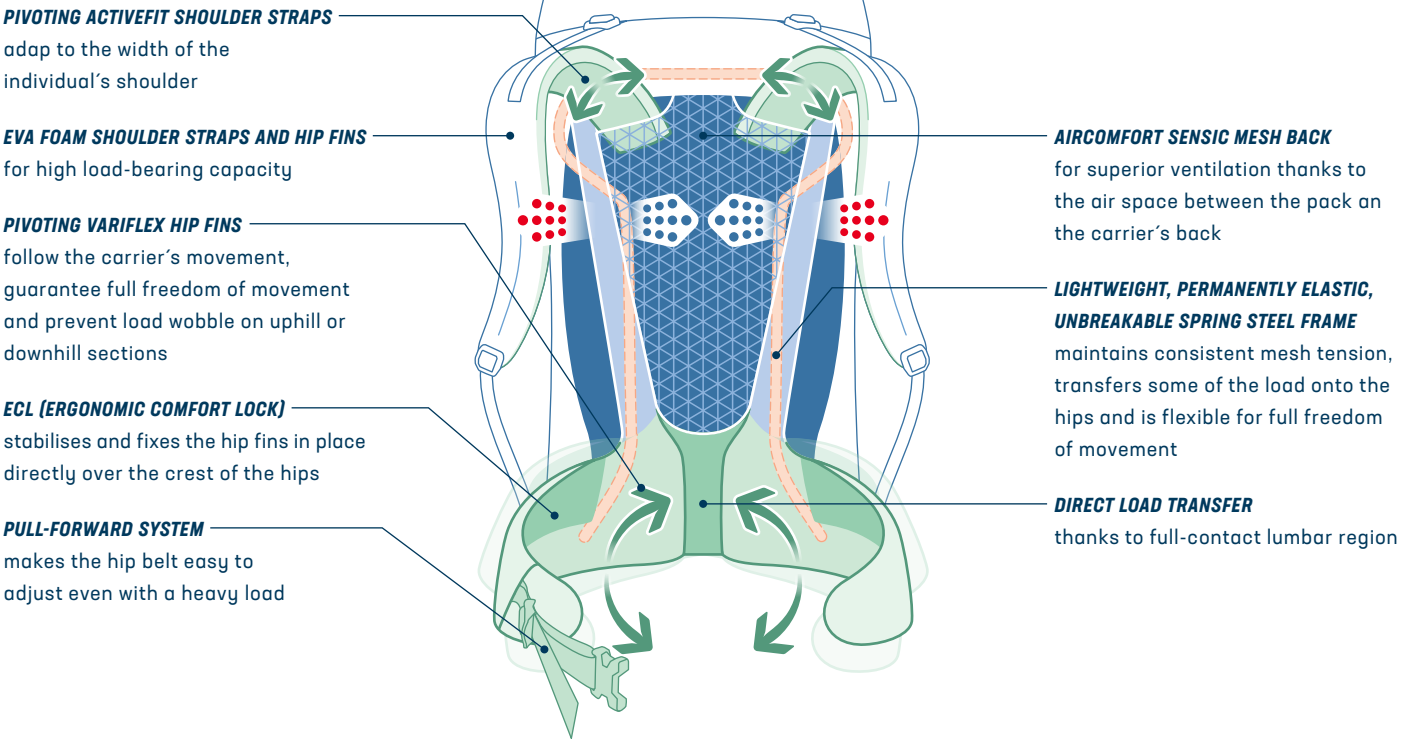
SHARED FEATURES

AIRCOMFORT SENSIC:



SHARED FEATURES

AIRCOMFORT SENSIC PRO:



AIRCOMFORT SENSIC SYSTEM

AIRCOMFORT SENSIC SYSTEM

AIRCOMFORT SENSIC PRO SYSTEM

Ventilation

Maximum all-round ventilation (up to 25% less perspiration) due to

- Aircomfort suspended mesh back
- mesh in lumbar region for ventilation on all three sides
- perforated, mesh-covered shoulder straps
- perforated hip pads

Maximum all-round ventilation results in up to 25% less perspiration due to

- Aircomfort suspended mesh back
- mesh in lumbar region for ventilation on all three sides
- perforated, mesh-covered shoulder straps
- perforated hip pads

- Aircomfort suspended mesh back
- 2-way air flow in back and shoulder region

- load distribution onto ergonomic Lumbar pads and hip pads

Load transfer thanks to

- ergonomic Lumbar pads
- padded hip fins

Superior load transfer thanks to

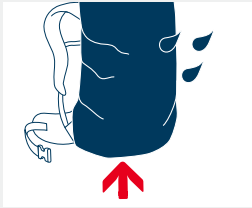
- full-contact lumbar region
- padded, firmer hip fins
- VariFlex
- ECL

Recommended load **3 kg**

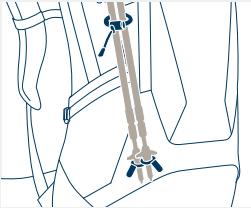
up to **10 kg**



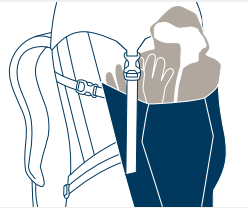
BASIC FUTURES



**Removable rain cover:** for full rain protection – easy to clean and fast drying



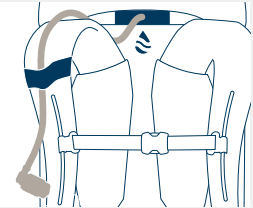
**Raised pole attachment:** pole tips do not extend past base for an upright position when placed on the ground



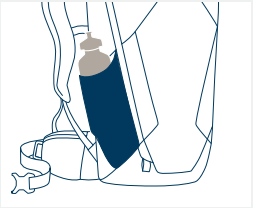
**Stretch front compartment:** keeps regularly accessed kit close at hand



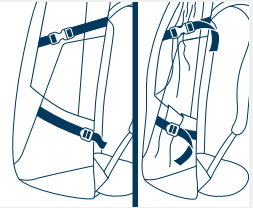
**Internal valuables pocket and key clip**



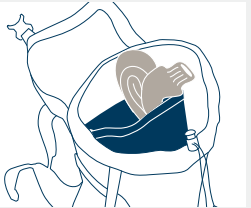
**Hydration compatible:** can be used with a hydration bladder



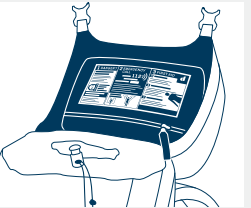
**External pockets and compartments:** for better organisation and distribution of weight



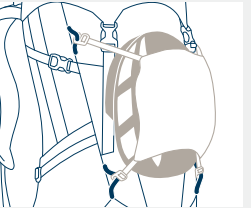
**Compression straps:** regulate the load and keep it close to the body



**Stretch inner compartment:** for wet clothing, hydration bladder etc.

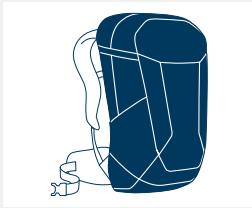


**SOS label:** international emergency phone numbers and emergency mountain signals help in a crisis

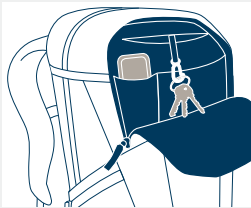


**Loops for helmet holder (accessory):** a secure place to stash your helmet

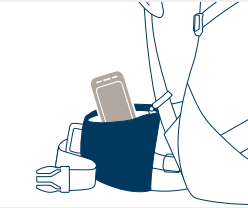
EXTRA FUTURES



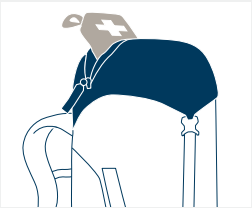
**Wide aperture zip:** main compartment opens out wide for better organisation



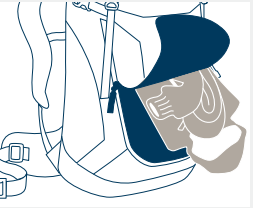
**Front compartment:** with integrated organiser



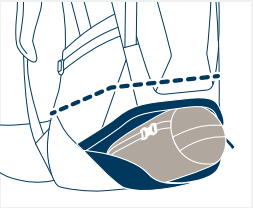
**Zippered pockets on hip fins:** keep your camera and valuables within reach



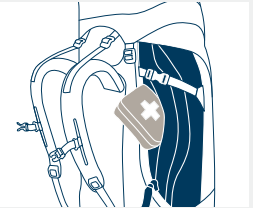
**Top loader:** great when packing more gear – with lid compartment and D-rings



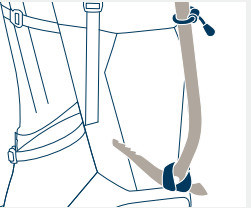
**Front zip opening:** for easy access to contents



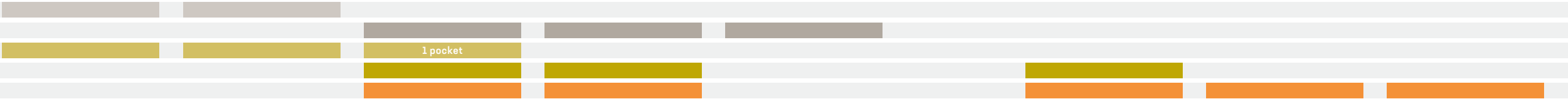
**Dedicated bottom compartment:** for pack stability and load distribution (partition opens out fully)



**Zippered side pockets:** for extra storage and organisation



**Ice axe loop:** stows ice axe safely



AIRCOMFORT SENSIC SYSTEM

FUTURA 21 SL | 23



AIRCOMFORT SENSIC SYSTEM

FUTURA 24 SL | 26



AIRCOMFORT SENSIC SYSTEM

FUTURA 25 SL | 27 | 29 EL



AIRCOMFORT SENSIC SYSTEM

FUTURA 30 SL | 32 | 34 EL

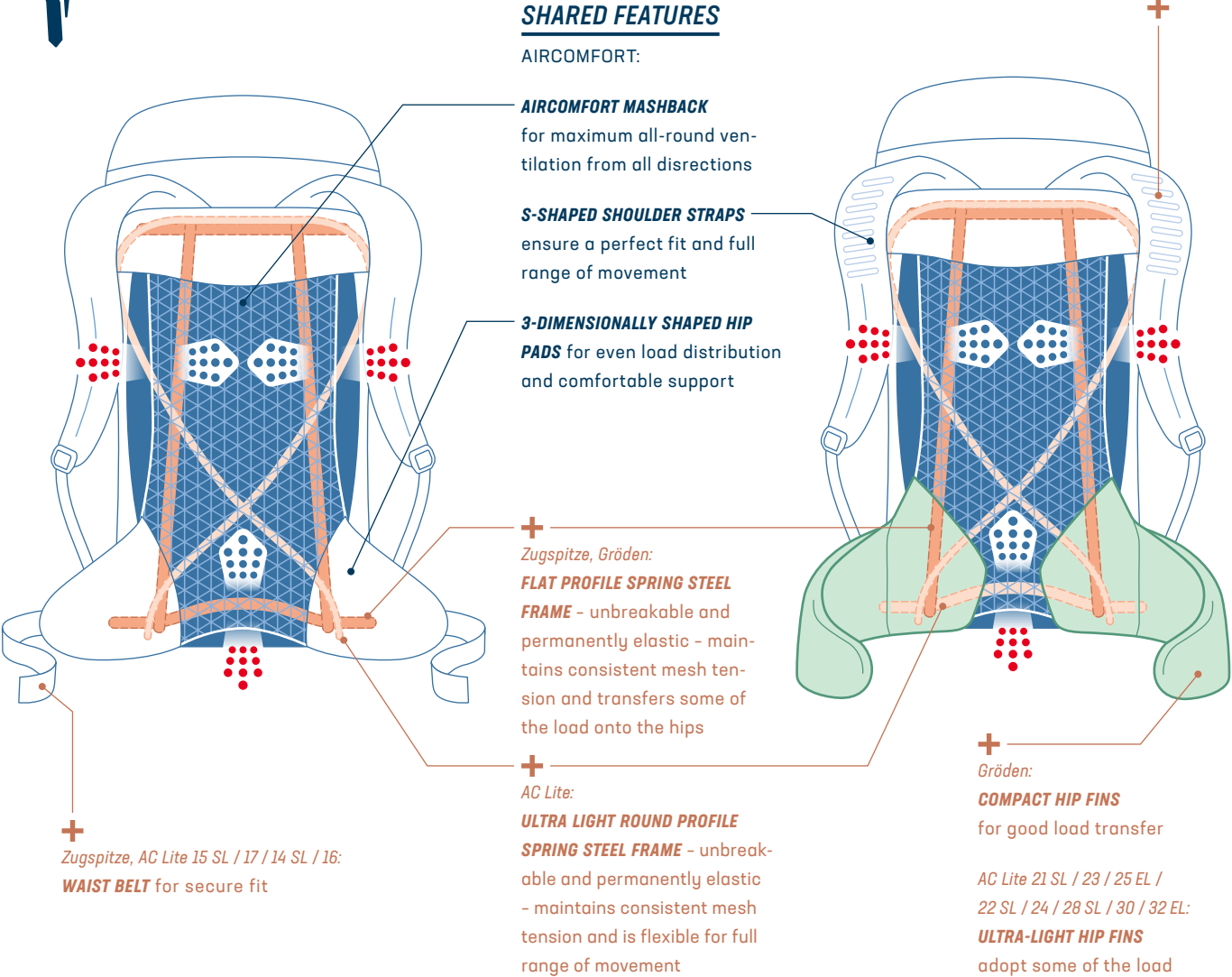


AIRCOMFORT SENSIC PRO SYSTEM

FUTURA PRO 34 SL | 36 | 38 SL | 40 | 42 EL







AIRCOMFORT SYSTEM

Ventilation

Maximum all-round ventilation results in up to 25% less perspiration due to

- robust and consistent tensioning of the Aircomfort mesh back, even with a full load
- mesh in lumbar region for ventilation on all three sides

AIRCOMFORT SYSTEM

Maximum all-round ventilation results in up to 25% less perspiration due to

- robust and consistent tensioning of the Aircomfort mesh back, even with a full load
- mesh in lumbar region for ventilation on all three sides

- Ergonomic hip pads and waist belt for load distribution

Load distribution via

- ergonomic hip pads
- padded hip fins

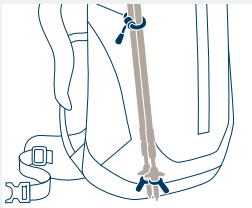
Recommended load **2 kg**

up to **6 kg**

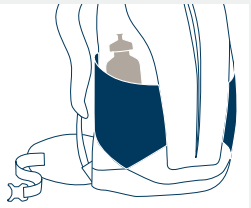
BASIC FEATURES



**Removable rain cover:** for full rain protection – easy to clean and fast drying



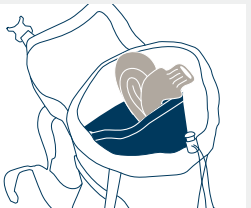
**Raised walking pole attachment:** for quick and secure stowing



**Two side pockets** keep your drinking bottle and small gear within reach (AC Lite: 1x zippered; Gröden: 2x zippered and non-stretch)



**Internal valuables pocket and key clip**



**Stretch inner compartment:** for wet clothing, hydration bladder etc.

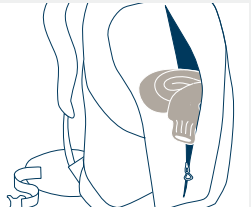
EXTRA FEATURES



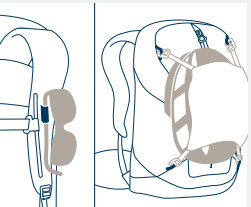
**Lightest ever deuter hiking pack series:** for fast and light hiking, taking only what you need



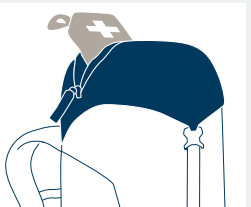
**Hydration compatible:** can be used with a drinks bladder (AC Lite 14 SL - 24: 2.0l; AC Lite 25 EL - 32 EL: 3.0l)



**Large front zipper** opening for good overview of contents and quick packing



**Fast stowing:** Glasses stow system on shoulder strap and Loops for helmet holder (accessory) on front



**Lid pocket:** keeps essentials within reach

		15 SL   17		
		21 SL   23   25 EL		



AIRCOMFORT SYSTEM

AC LITE 15 SL | 17  
| 14 SL | 16

Daytrip



AIRCOMFORT SYSTEM

AC LITE 21 SL | 23 | 25 EL  
22 SL | 24 | 28 SL | 30 | 32 EL

City walk



AIRCOMFORT SYSTEM

ZUGSPITZE 22 SL | 24

Biking

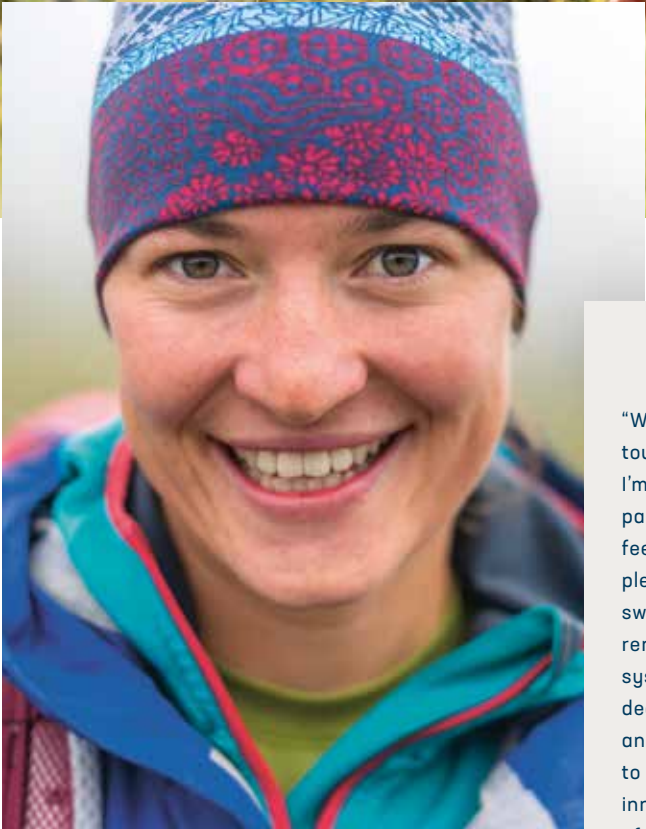


AIRCOMFORT SYSTEM

GRÖDEN 30 SL | 32

Mountainhike





MY DEUTER

“Whether it’s rock climbing, mountain biking, ski touring or hiking; I feel like I am truly myself when I’m moving through the mountains. Deuter backpacks give me a sense of security and they just feel right. The Aircomfort carry system, for example, is really effective at reducing the amount of sweat on my back. It means my performance levels remain high all day long. The Aircomfort Sensic system fits me really well. You can just feel how dedicated Deuter is in striving for wear comfort, and they’re always working together with athletes to improve it even more. For me, Deuter stands for innovation and dynamism, and it is at the forefront of technological developments.”

KATHRIN WEBER is an instructor for the JDAV (Youth section of the German Alpine Association) at both a regional and national level, and is part of the Deuter SL and Alpine family, where she contributes to the development of backpacks. It is the sense of freedom she experiences in the mountains that draws her to them throughout the year.

FACT

Aircomfort increases endurance – that’s a fact. Its effective back ventilation results in less sweat, which is proven to increase performance.

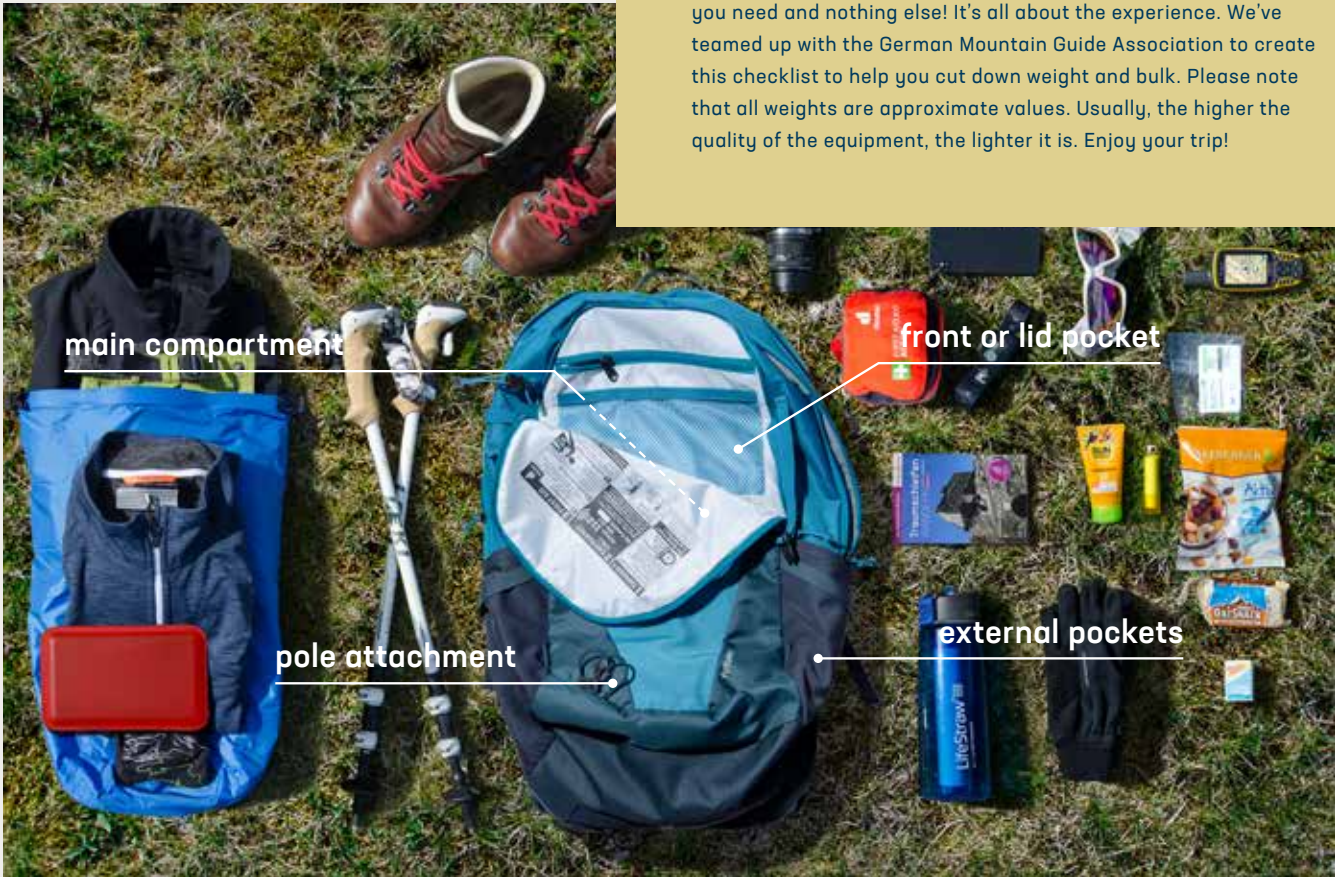


HIKING / DAY TOUR

ESSENTIAL	Weight (Average)	My pack weight	RECOMMENDED	Weight (Average)	My pack weight
● Backpack	1550 g		● Nuts, dried fruit, bars as required	200 g	
● Extra short-sleeve shirt	150 g		● Functional shorts	220 g	
● Extra short-sleeve jacket	500 g		● Swiss army knife	100 g	
● Water- and windproof pants	300 g		● Trekking poles	460 g	
● Hat or headband	60 g		APPROXIMATE WEIGHT "RECOMMENDED"	980 g	
● Cap or buff	60 g				
● Liner gloves	50 g		WITHOUT MOUNTAIN GUIDE	Weight (Average)	My pack weight
● Sunscreen, lip balm (UPF 30)	60 g		● Maps	80 g	
● Sunglasses	30 g		● Guide book	210 g	
● Drinking bottle or bladder with at least 1l capacity (depending on tour)	1190 g		● Compass	80 g	
● Electrolyte and magnesium tabs (capsules)	10 g		● OR GPS device	220 g	
● First Aid Kit S or M (incl. blister pads and personal medication)	150 g		APPROXIMATE WEIGHT "WITHOUT MOUNTAIN GUIDE"	590 g	
● ID, cash, credit card, plastic bag	40 g				
● Small torch or headlamp	80 g		APPROXIMATE (OVERALL WEIGHT)	6,52 KG	
● Mobile phone with emergency numbers	130 g				
APPROXIMATE WEIGHT "ESSENTIAL" (INCL. BACKPACK)	4,36 kg				

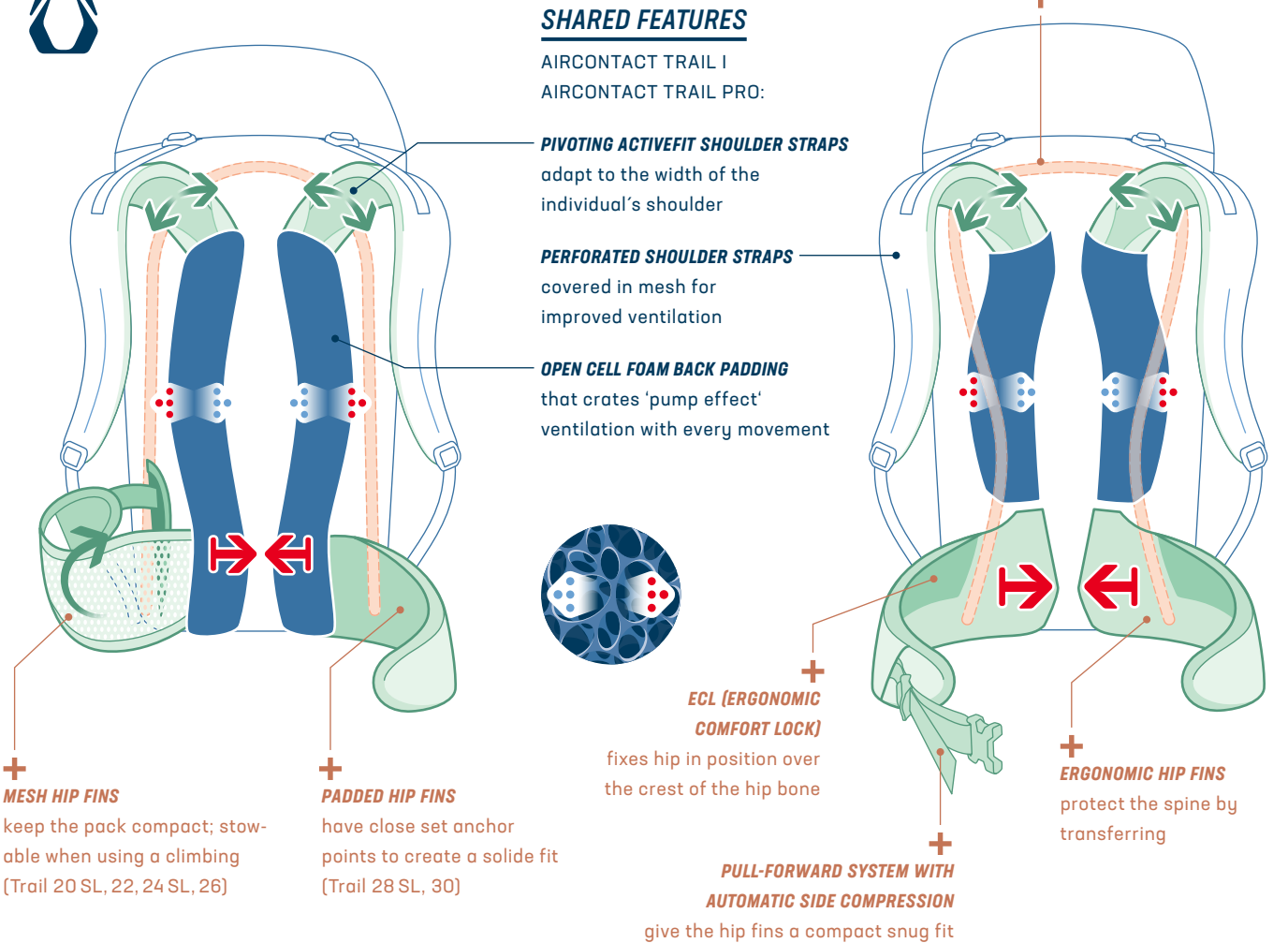
WHAT TO WEAR: Hiking boots with good grip, functional trekking trousers, functional shirt, functional jacket or gilet, backpack

AS A GENERAL RULE: Remember to pack light – take just what you need and nothing else! It’s all about the experience. We’ve teamed up with the German Mountain Guide Association to create this checklist to help you cut down weight and bulk. Please note that all weights are approximate values. Usually, the higher the quality of the equipment, the lighter it is. Enjoy your trip!





deuter  
AIRCONTACT



AIRCONTACT TRAIL SYSTEM

AIRCONTACT TRAIL PRO SYSTEM

Ventilation

Secure fit and ventilation due to

- full-contact back that keeps the load close to the centre of gravity for better load control
- breathable Aircontact padding: up to 15% less perspiration than a conventional carry system\*
- mesh/perforated hip fins

- full-contact carry system with breathable Aircontact padding for less perspiration\*
- perforated shoulder straps

- full-contact carry system
- even weight distribution thanks to flexible, lightweight Delrin® frame

\* confirmed in a field test conducted by Gabriel L. & T. in cooperation with the University of Erlangen

Superior load transfer thanks to

- full-contact carry system – weight sits close to the body for energy efficient carry
- unbreakable, permanently elastic spring steel frame

Recommended load **4 kg**

up to **10 kg**

VIA FERRATA DAY TOUR

ESSENTIAL

	Weight (Average)	My pack weight
• Backpack	1320 g	
• Climbing harness	230 g	
• Via Ferrata set	520 g	
• Via Ferrata gloves	120 g	
• Locking karabiner	95 g	
• Climbing helmet	320 g	
• Extra short-sleeve	150 g	
• Water- and windproof jacket	500 g	
• Water- and windproof pants	300 g	
• Hat and/or headband	60g	
• Sunscreen, lip balm (UPF 30)	60 g	
• First Aid Kit M	280 g	
• Blister pads	20 g	
• Headache pills	20 g	
• Drinking bottle or bladder with at least 1l capacity (depending on tour)	1190 g	
• Electrolyte and magnesium tabs	10 g	
• Muesli, dried fruit, nuts, bars as required	150 g	
• ID, cash, credit card, plastic bag	40 g	
• Headlamp	80g	
• Mobile phone with emergency numbers	130g	

APPROXIMATE WEIGHT "ESSENTIAL" (INCL. BACKPACK)

5,59 kg

RECOMMENDED

	Weight (Average)	My pack weight
• Sunglasses	30 g	
• Functional shorts	220 g	
• Runner	40 g	
• Climbing shoes (depending on route)	530 g	
• Multitool	260 g	

APPROXIMATE WEIGHT "RECOMMENDED"

1,08 kg

WITHOUT MOUNTAIN GUIDE

	Weight (Average)	My pack weight
• Route description (print-out / guide book)	80 g	
• Compass	80 g	
• GPS device	220 g	
• Short safety rope	1000 g	
• Bivouac sack	280 g	

APPROXIMATE WEIGHT "WITHOUT MOUNTAIN GUIDE"

1,66 kg

APPROXIMATE (OVERALL WEIGHT)

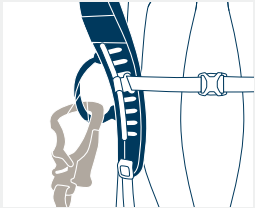
8,33 KG

**WHAT TO WEAR:** Lightweight hiking boots with good grip, functional trekking trousers, functional shirt, functional jacket or gilet, backpack

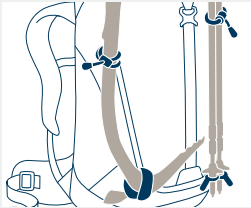




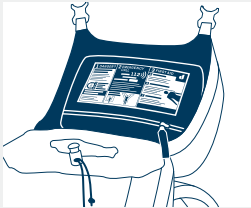
BASIC FEATURES



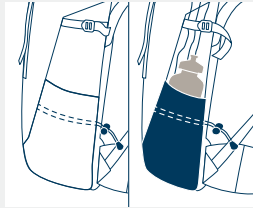
**Carabiner attachment loops on shoulder straps:** keep via ferrata sets safe and out of the way



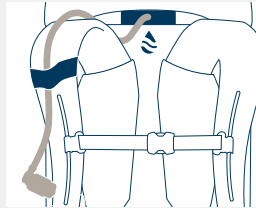
**Ice axe and hiking pole attachment:** quick and safely stowed equipment – also suitable for folding poles



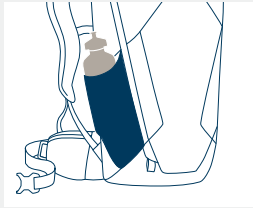
**SOS label:** international emergency phone numbers and emergency mountain signals help in a crisis



**Internal compression straps in main compartment:** for more precise load compression even with fully-loaded side pockets



**Hydration compatible:** can be used with a drinks bladder



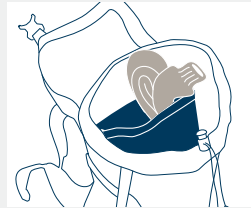
**Stretch side pockets:** keep drinks bottles or snacks handy (Trail Pro 30 SL – 36 one pocket)



**Removable rain cover:** for full rain protection – easy to clean and fast drying



**Valuables pocket and key clip**

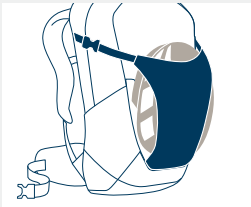


**Stretch inner compartment:** for wet clothing, hydration bladder etc.

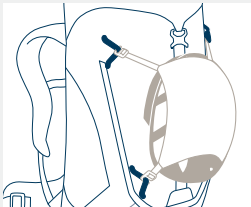
EXTRA FEATURES



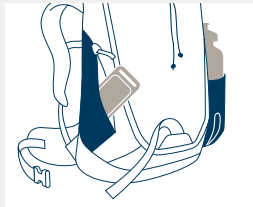
**Flat format lid/compact pack shape:** for full range of head movement, even with a helmet



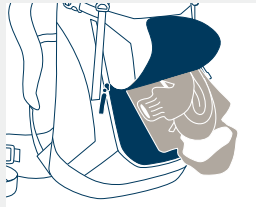
**Stretch front pocket:** versatile storage (jacket, helmet etc.)



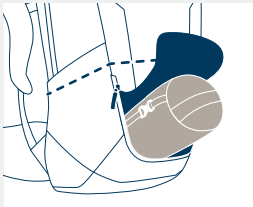
**Loops for helmet holder (accessory):** a secure place to stash your helmet



**Stretch pocket and zipped pocket on the outside:** easy access and secure



**Front zip opening:** for easy access to contents



**Dedicated bottom compartment:** for pack stability and load distribution (partition opens out fully)



**Zippered pockets on hip fins:** keep your camera and valuables within reach

						with 28 SL & 30
						2 pockets
						2 pockets



AIRCONTACT TRAIL SYSTEM

TRAIL 24 SL | 26



AIRCONTACT TRAIL SYSTEM

TRAIL 20 SL | 22 | 28 SL | 30



AIRCONTACT TRAIL PRO SYSTEM

TRAIL PRO 30 SL | 32

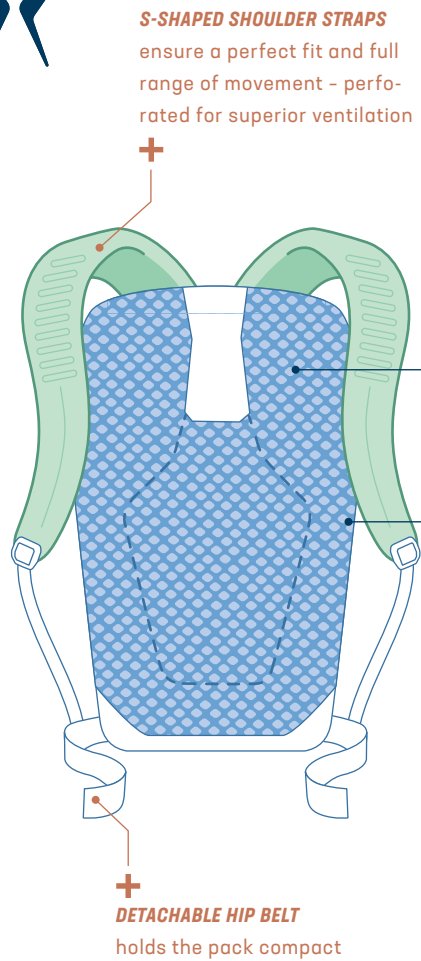


AIRCONTACT TRAIL PRO SYSTEM

TRAIL PRO 34 SL | 36







SHARED FEATURES

LITE | LITE AIR:

**MINIMALIST, ULTRA-LIGHTWEIGHT BACK SYSTEM**  
for greater endurance thanks to reduced weight – without compromising carry comfort, durability or secure fit

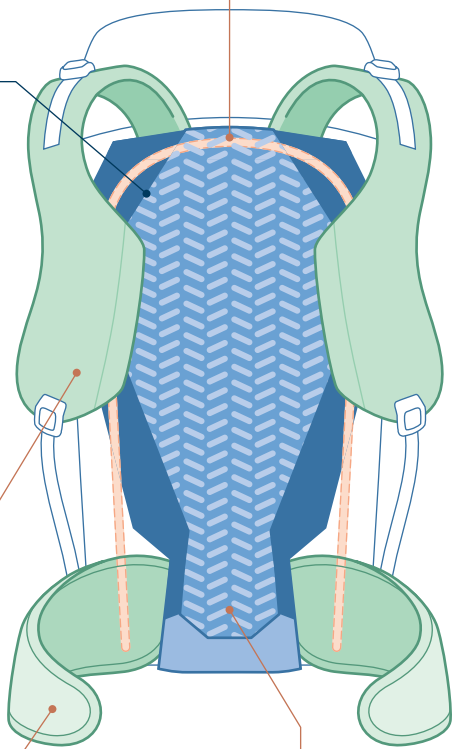
**DISTINCT V-SHAPE**  
for full range of movement and optimum load positioning

**WIDE, ERGONOMIC SHOULDER STRAPS**  
with superior ventilation help distribute the load to protect the spine

**SUPPLE HIP FINS WITH PULL-FORWARD ADJUSTMENT**  
create a solide fit and effective load transfer

**LITE AIR BACK PANEL**  
features knobbly foam padding for effective ventilation

**FLEXIBLE, LIGHTWEIGHT DELRIN® FRAME** transfers the load and adapts to your move



LITE SYSTEM

LITE AIR SYSTEM

Light construction

Lightweight with carry comfort thanks to

- compact back padding and breathable mesh
- distinct V-shape
- perforated shoulder straps

- Speed Lite 30 just 880 g – the reduced weight of the pack equates to greater endurance and higher energy levels
- profiled foam for superior ventilation
- distinct V-shape

- full-contact carry system
- detachable hip belt

Secure fit and effective load transfer thanks to

- full-contact carry system
- flexible, lightweight Delrin® frame
- wrap-around hip fins and wide shoulder straps distribute the load to protect the spine

Recommended load **2 kg**

up to **7 kg**



MY DEUTER

“For hiking, I’m a fan of the Speedlite backpack. Depending on how long I’m going for or who I’m with, I either take the Speedlite 20 or 30. It is lightweight, sits snug against the back and has space for everything I need . Since having kids, I’ve gone back to hiking more. I love the ever-changing vistas and impressions you get. It’s the oldest form of play in the mountains and lets you really get deep into the life of mountains. All it takes is time, curiosity and some good snacks along the way.”

MICHI BÜCKERS is a state-certified mountain and ski guide, mountain guide instructor and deuter brand ambassador. However, he started out his sporting career as a cycle racer. Today, the list of his favourite outdoor sports is long – and ideally, he likes combining them all.



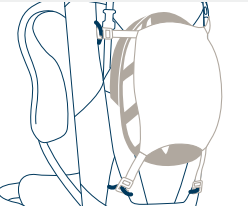
BASIC FEATURES



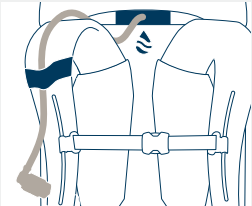
**Lightest ever deuter hiking pack series:** for fast and light hiking, taking only what you need



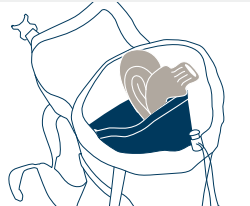
**Distinct V-shape:** for full range of movement and optimum load positioning



**Loops for helmet holder (accessory):** a secure place to stash your helmet



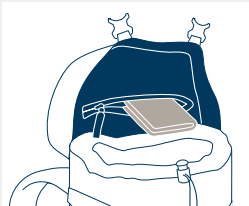
**Hydration compatible:** can be used with a drinks bladder



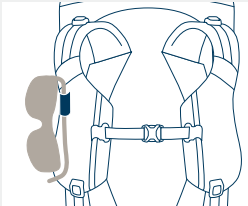
**Stretch inner compartment:** for wet clothing, hydration bladder etc.



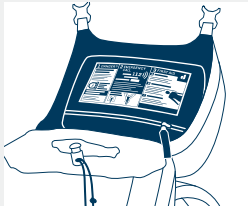
**Stretch side pockets:** keep drinks bottles or snacks handy



**Internal valuables pocket and key clip**

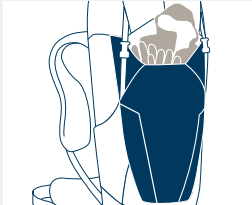


**Glasses stow system:** quickly store glasses using a dedicated loop on the shoulder straps

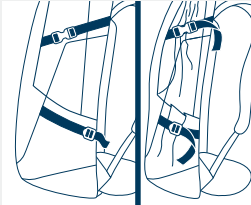


**SOS label:** international emergency phone numbers and emergency mountain signals help in a crisis

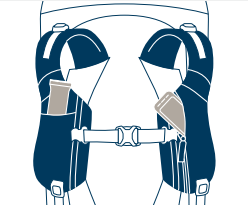
EXTRA FEATURES



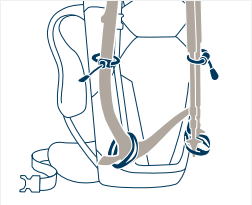
**Stretch front compartment:** keeps regularly accessed kit close at hand



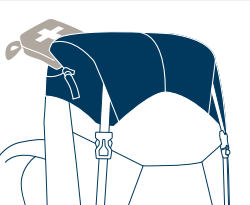
**Compression straps:** regulate the load and keep it close to the body or for attachment of kit



**Cell phone, GPS etc. at the ready** keeps the zippered pocket on the shoulder strap



**Hiking pole attachment loops:** quick and safely stowed poles



**Lid pocket:** keeps essentials within reach

	strap at top			



LITE SYSTEM

SPEED LITE 13 | 17



LITE SYSTEM

SPEED LITE 21



LITE AIR SYSTEM

SPEED LITE 23 SL | 25



LITE AIR SYSTEM

SPEED LITE 28 SL | 30

Day trip   Hiking   Via ferrata   Mountain tour   Weekend tour   Hut tour

SELLING POINTS FOR HIKING PACKS



of elastic spring steel is what keeps the Aircomfort mesh tensioned. Even when fully loaded, the space between the body of the pack and the back is maintained. And when bent, the frame always returns to its original shape.

**ERGONOMIC:** Aircomfort Sentic is the most ergonomic and consequently the most comfortable mesh carry system on the market.

**LIGHT:** Carry system and functionality pared down and weight-optimised, without any compromise on durability. Weighing just 880 grams, the Speed Lite 30 is ideal for fast and light hiking taking only what you need

**SUPERIOR VENTILATION:** Each back system offers the right level of ventilation according to the intended application. The Aircomfort mesh back, for instance, maximizes both ventilation and comfort. The Trail Aircontact back system with open cell foam padding creates 'pump effect' ventilation with every move, while offering a solid, secure fit. The Lite Air full-contact back system has a knobby foam back panel that's lightweight and allows air to circulate around it.

**CREATOR OF THE MESH BACK:** 1984 deuter patented the first mesh carry system in the world - a paradigm for future generations of back ventilation backpacks.

**IMPROVED ENDURANCE:** The superior ventilation of the Aircomfort carry system results in 25% less sweat, which is proven to increase performance. (Verified by the Hohenstein Institute)

**CONSISTENT SPAN:** Plastic can break, aluminium can bend out of shape - instead, an unbreakable frame made

**CARRY COMFORT:** S-shaped shoulder straps with Soft-Edge finish take the strain off the neck and shoulders and enhance freedom of movement.

**EASY ON THE BACK:** 3-dimensional ergonomically shaped hip pads wrap around the pelvis to transfer the load from the back onto the hips and provide carry comfort over several hours.

**TAILORED FIT:** Different sizes - Regular, SL women's fit and EL (Extra Long) - ensure the perfect fit for all: men, women, tall or short.

**BALANCED LOAD DISTRIBUTION:** Wide, ergonomic, fully ventilated shoulder straps and wrap-around hip fins create a snug body-hugging fit and distribute the load across the hips and shoulders. This alleviates pressure on the shoulders and spine. (Speed Lite 23 SL, 25, 28 SL, 30)





THRU-HIKING  
LONG-DISTANCE HIKING  
ULTRA-LIGHT TREKKING

with accommodation /  
with tarp



HUT-TO-HUT TREKKING  
ALPINE TRAVERSE  
PILGRIM ROUTE

with accommodation  
& food



LONG-DISTANCE HIKE  
PILGRIM ROUTE  
TREKKING

with accommodation  
& food



ZELT-TREKKING  
LODGE-TREKKING  
RUCKSACKREISEN

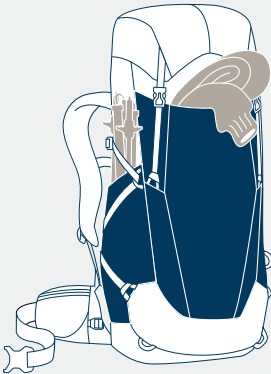
with accommodation / with tent



WILDNISTREKKING  
EXPEDITION  
WORK & TRAVEL

self-supported with tent

45+5 - 50+5 litres

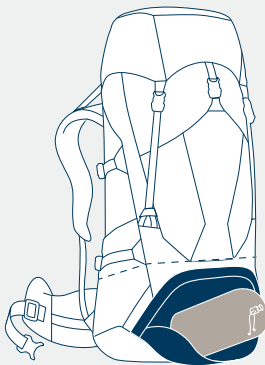


AIRCONTACT ULTRA

FULL-CONTACT CARRY SYSTEM  
AIRCONTACT ULTRA  
with Air Spacer mesh and  
mobile hip fins

- Load category T1:
- ultra lightweight
  - comfortable load distribution
  - thanks to light spring steel frame
  - Air Spacer mesh for cushioning and ventilation

35+10 - 50+10 litres

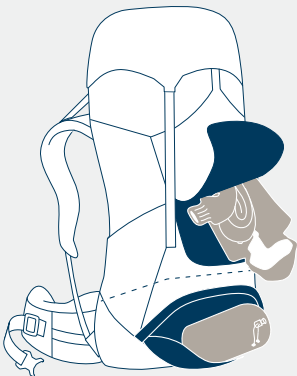


AIRCONTACT LITE

FULL-CONTACT CARRY SYSTEM  
AIRCONTACT LITE  
with Aircontact open cell foam

- Load category T1:
- lightweight
  - Aluminum X-frame for effective distribution of moderate loads
  - reduced to the essentials
  - Aircontact open cell foam for ventilation

45+10 - 60+10 litres

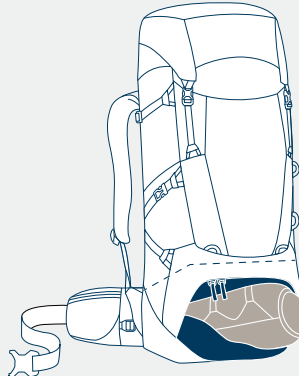


FUTURA AIR TREK

MESH CARRY SYSTEM  
AIRCOMFORT SENSIC VARIO  
with mobile hip fins

- Load category T2:
- mesh down two sides for maximum ventilation
  - reinforced spring steel frame for effective distribution of moderate loads
  - maximum comfort & features

35+10 - 70+10 litres

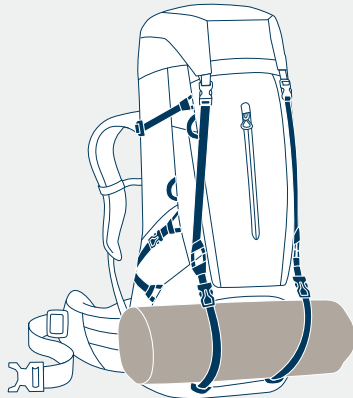


AIRCONTACT CORE

FULL-CONTACT CARRY SYSTEM  
AIRCONTACT  
with Air Spacer mesh  
and mobile hip fins

- Load category T2:
- for heavy loads
  - Y-frame for direct load transfer
  - Air Spacer mesh for cushioning and ventilation
  - additional ventilation channel
  - high comfort & versatile features

60+15 - 80+15 litres

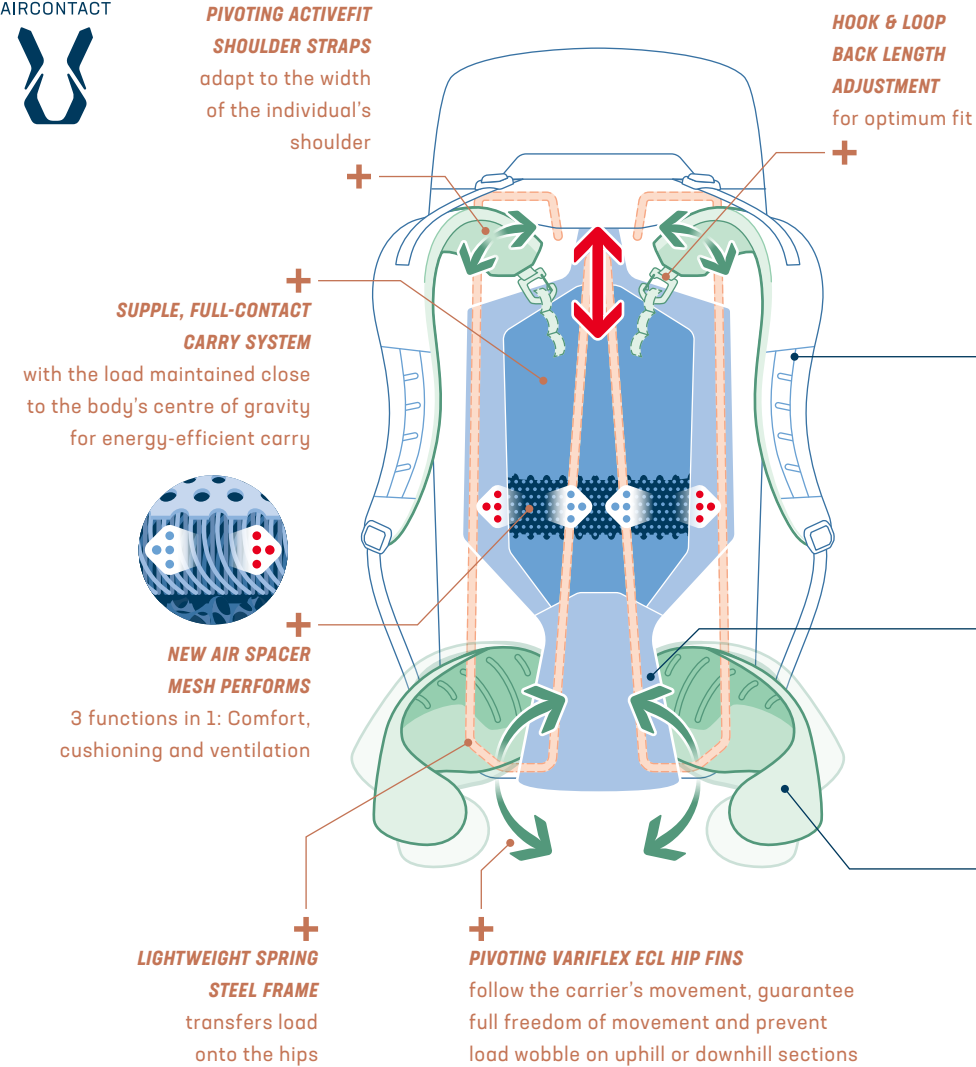


AIRCONTACT X

FULL-CONTACT CARRY SYSTEM  
AIRCONTACT X  
with Air Spacer mesh and  
mobile, double-reinforced hip fins

- Load category T3:
- for very heavy loads
  - Y-frame for direct load transfer
  - large surface area back padding for effective load distribution to protect the spine and reinforced hip fins
  - Air Spacer mesh for cushioning and ventilation
  - maximum comfort & features

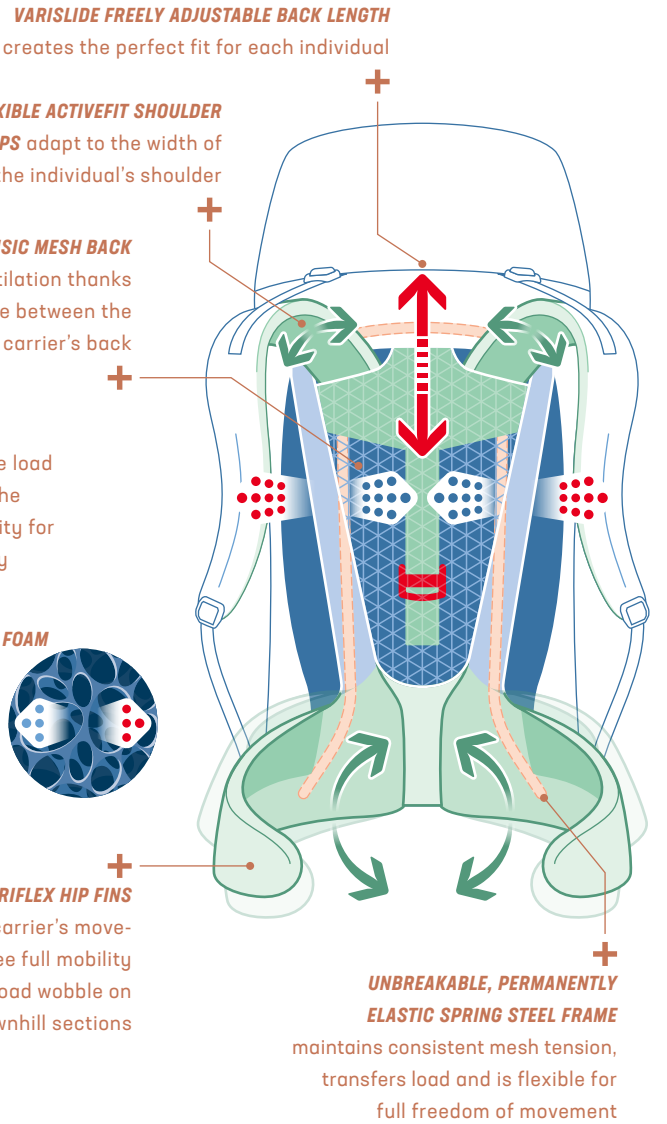
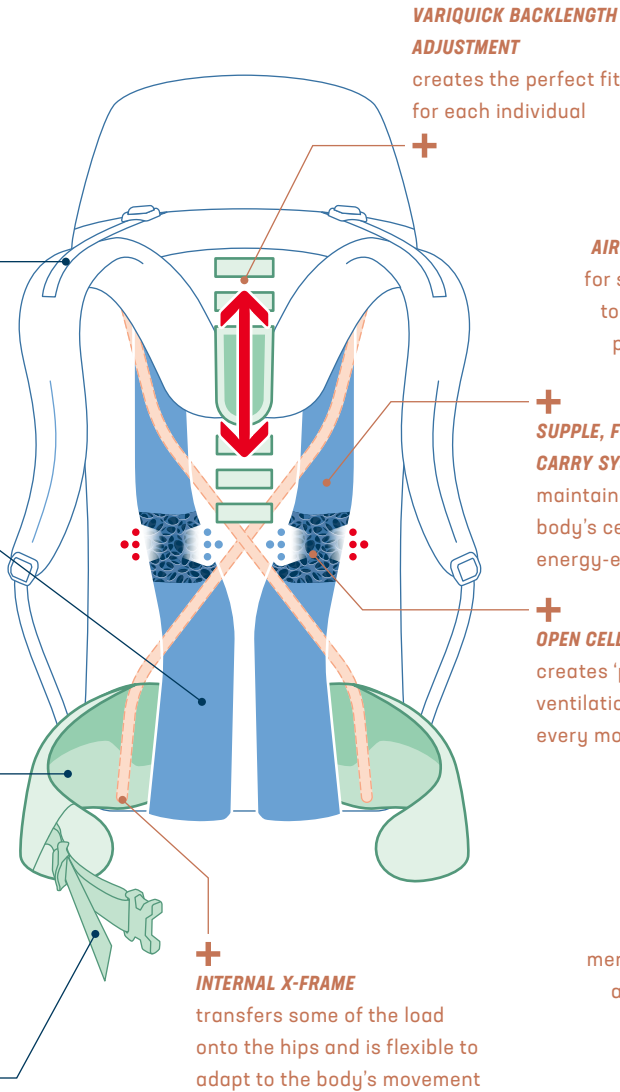




SHARED FEATURES

AIRCOMFORT SENSIC VARIO | AIRCONTACT ULTRA | AIRCONTACT LITE:

- STABILISER STRAPS** for increased ventilation (when loose) or increased load control (when tight)
- S-SHAPED SHOULDER STRAPS** for a perfect fit and full range of movement - made from foam that holds its shape for superior carry comfort
- 3-Dimensionally FORMED LUMBAL PADS** distribute the load over a large surface area and enhance comfort and protection
- CLOSE SET HIP FIN ANCHOR POINTS** for a secure, seamless fit and energy-efficient carry
- ECL (ERGONOMIC COMFORT LOCK)** stabilises and fixes the hip fins in place directly over the crest of the hips
- STABILIZING, ERGONOMIC HIP FINS** transfer the load effectively - multi-layered construction: soft, cushioning foam on the inside and load absorbent foam on the outside
- PULL-FORWARD SYSTEM** makes the hip belt easy to adjust even with a heavy load



AIRCONTACT ULTRA SYSTEM

AIRCONTACT LITE SYSTEM

AIRCOMFORT SENSIC VARIO SYSTEM

Light construction

Ultra-lightweight with high degree of comfort thanks to

- Air Spacer Mesh with 7% better ventilation than Aircontact foam
- multi-purpose features

- Lightweight spring steel frame
- Hook & Loop back length adjustment
- Ergonomic Lumbar pad
- Slender, ergonomic hip fins for moderate loads
- VariFlex hip fins & ECL
- Cushioning, load distributing Air Spacer Mesh

Lightweight with high degree of comfort thanks to

- open cell Aircontact foam that dissipates moisture and heat results in 15% less perspiration\*
- large ventilation channel between the back pads

Good load transfer due to

- lightweight, flexible internal frame
- VariQuick back length adjustment
- ergonomic Lumbar pads
- slender ergonomic hip fins for moderate loads
- ECL

\*compared to conventional full-contact carry systems; proven in a field test conducted by Gabriel L.&T. in co-operation with the University of Erlangen, Germany

- Mesh down two sides for maximum ventilation
- Reinforced spring steel frame for effective distribution of moderate loads
- Maximum comfort & features

Good load transfer due to

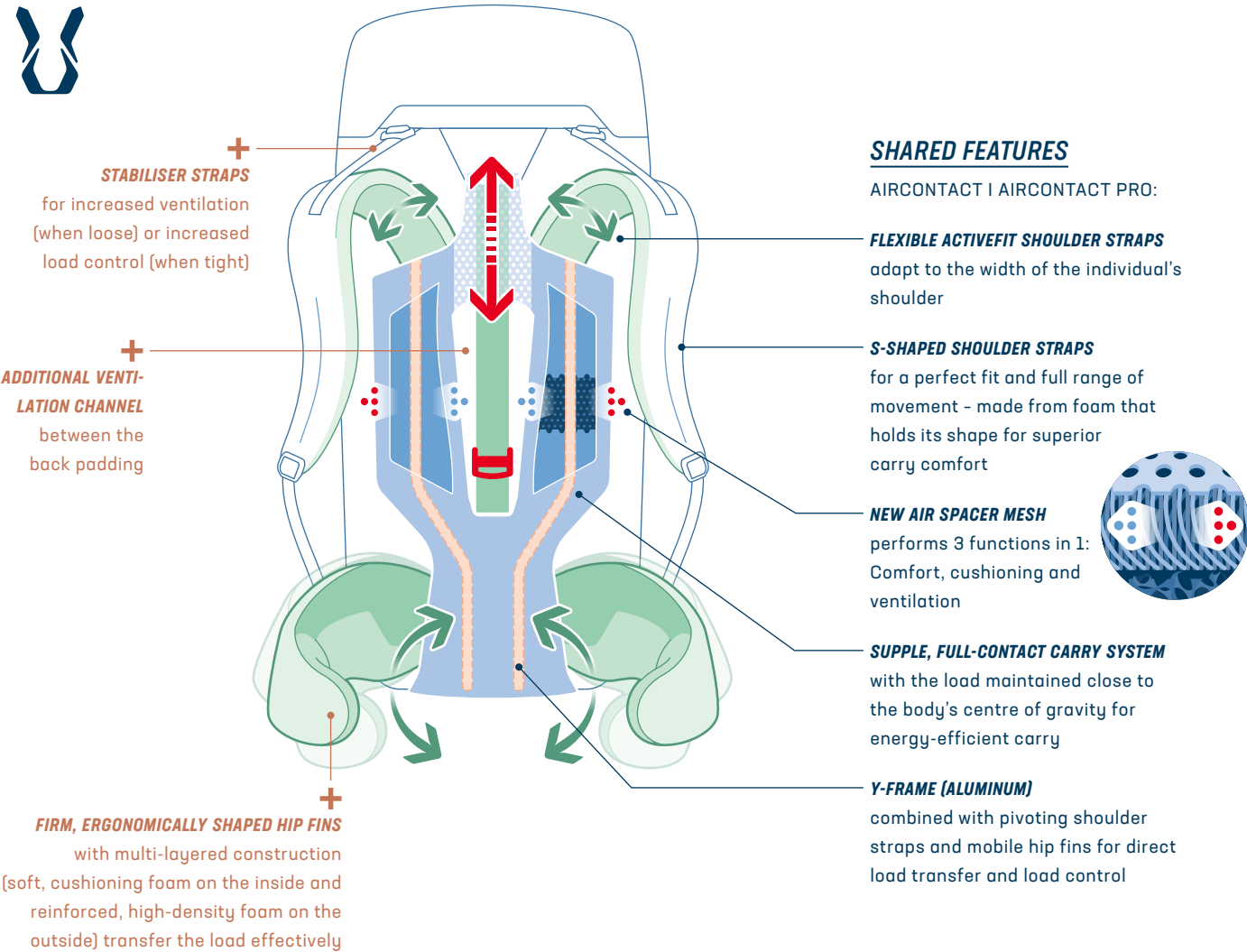
- freely VariSlide back length adjustment
- full-contact lumbar region
- padded, firmer hip fins
- VariFlex & ECL

Recommended load **8 kg**

up to **15 kg**



deuter  
AIRCONTACT



AIRCONTACT SYSTEM

Lightweight

Excellent comfort-to-weight ratio thanks to

- Air Spacer Mesh with 7% better ventilation than Aircontact foam
- large ventilation channel
- multi-purpose features

Up to 70 % load transfer due to

- Y-frame with mobile hip fins and pivoting shoulder straps
- VariSlide back length adjustment
- ergonomic Lumbar pad
- extra stabilizing, ergonomic hip fins for heavy loads
- cushioning, load distributing Air Spacer Mesh
- VariFlex hip fins & ECL

Recommended load **15 kg**

SHARED FEATURES

AIRCONTACT I AIRCONTACT PRO:

**VARISLIDE FREELY**

**ADJUSTABLE BACK LENGTH**  
creates the perfect fit for each individual

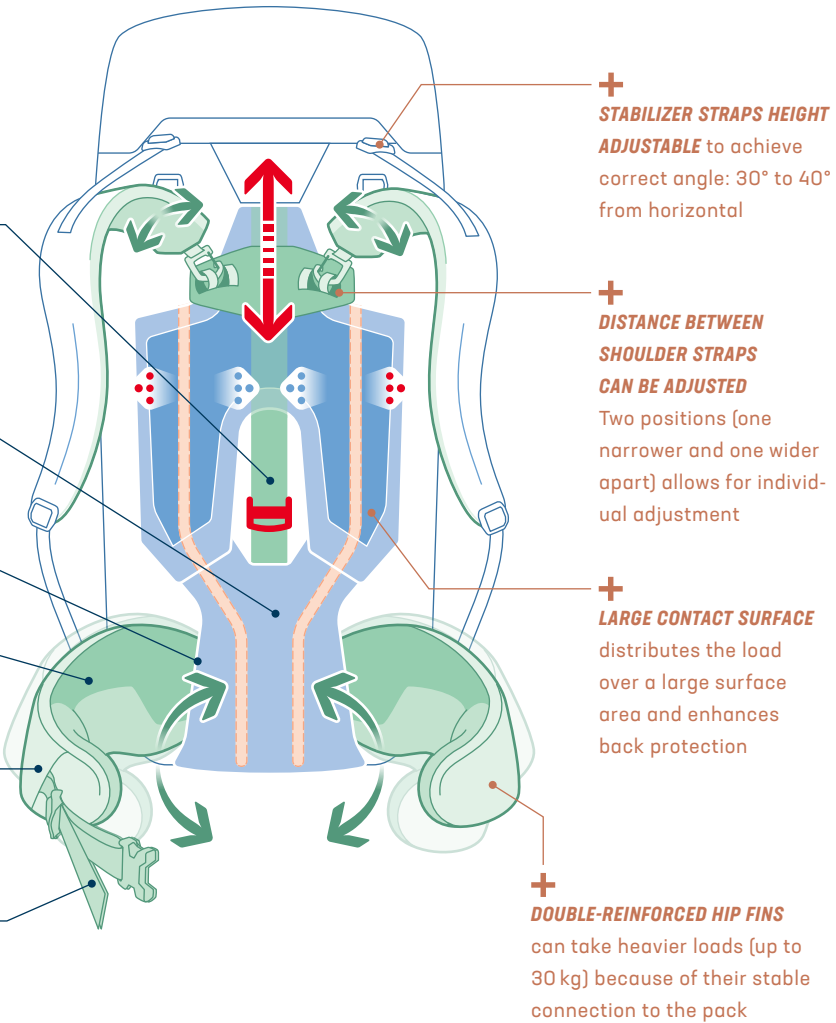
**3-Dimensionally FORMED LUMBAL PADS**  
distribute the load over a large surface area and enhance comfort and protection

**CLOSE SET HIP FIN ANCHOR POINTS**  
for a secure, seamless fit and energy-efficient carry

**ECL (ERGONOMIC COMFORT LOCK)**  
stabilises and fixes the hip fins in place over the crest of the hip bone

**PIVOTING VARIFLEX HIP FINS**  
follow the carrier's movements, guarantee full mobility and prevent load wobble on uphill or downhill sections

**PULL-FORWARD SYSTEM**  
makes the hip belt easy to adjust even with a heavy load



AIRCONTACT X SYSTEM

- Air Spacer Mesh with 7% better ventilation than Aircontact foam
- Optimized fit for each volume size
- Extremely spacious with multi-purpose features

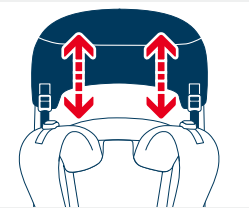
Up to 70 % load transfer due to

- Y-frame combined with mobile hip fins and pivoting shoulder straps
- VariSlide back length adjustment
- supportive ergonomic lumbar pad
- hip fins with leg recesses designed for heavy loads
- load distribution across wide surface area on the back to protect the spine
- cushioning, load distributing Air Spacer Mesh
- VariFlex hip fins & ECL

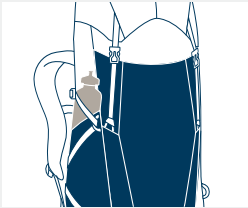
up to **30 kg**



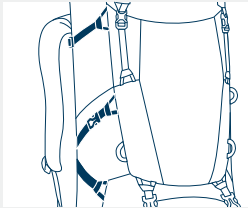
BASIC FEATURES



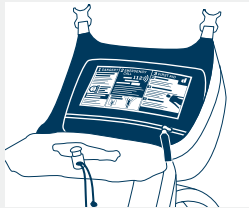
Height-adjustable lid extends capacity by 10 to 15 litres



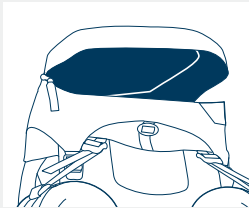
Large stretch side pockets and front pocket: for quick-access items



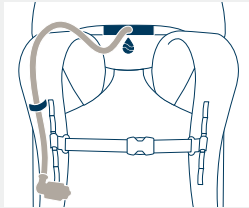
Compression straps regulate the load and keep it close to the body



SOS label with international emergency telephone numbers and emergency mountain signals



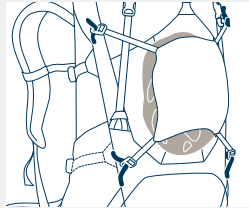
Generous lid pocket practical storage, helps with load distribution



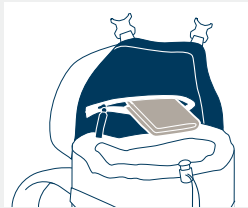
Hydration compatible can be used with a hydration bladder (3.0 L)



Zipped pocket on the hip fin: keeps camera or valuables within reach



Loops for helmet holder for a secure place to stash your helmet (helmet holder available as accessory)



Valuables pocket inside to keep items safe

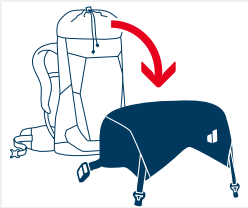


Stretch inner compartment for wet clothing, hydration bladder etc.

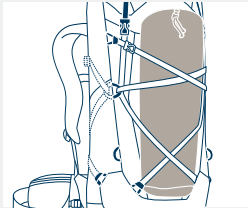
EXTRA FEATURES



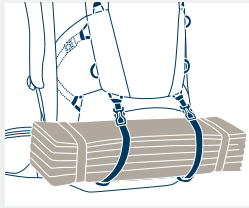
Very lightweight trekking backpack: despite its light weight offers superior carry comfort and is durable and functional



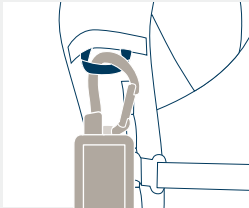
Detachable lid to save weight (converts into a day pack in the Aircontact Lite model)



Multiple gear loops to attach anything that won't fit inside



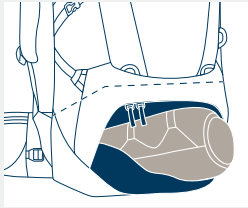
Modular gear straps are detachable and serve to attach larger equipment or to compress the load



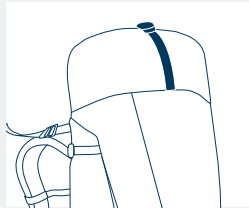
Gear loops on shoulder straps to attach GPS, map case etc.



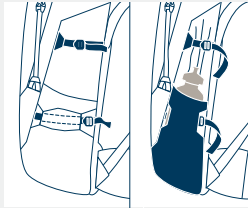
Removable rain cover for full rain protection – easy to clean and fast drying



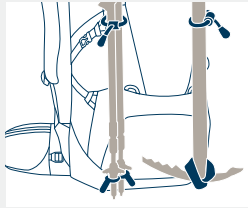
Dedicated bottom compartment for pack stability and load distribution (partition opens out fully)



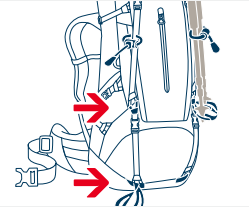
Compression straps on top secure the load and keep lid in position



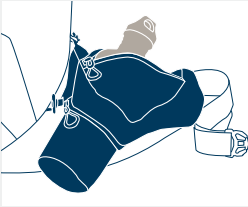
Compression straps on the bottom can be threaded through side pockets for full compression while maintaining access to pockets



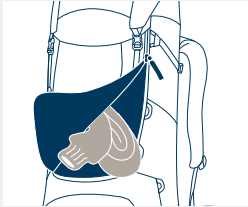
Ice axe and trekking pole attachments quick and safely stowed gear



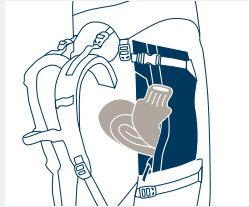
Height-adjustable ice axe and trekking pole attachments prevent poles protruding and tipping the pack when placed on the ground



Two detachable zippered hip fin pockets (3L) one of which with zip-out bottle holder (to accommodate 1.5 liter water bottle)



Front zip opening enables quick access to contents



Zipped side pockets on both sides offer around 8-10 litres extra capacity



Separate, lightweight day pack stored in the lid compartment



AIRCONTACT ULTRA SYSTEM

AIRCONTACT ULTRA  
45 SL | 50 | ALLE +5



AIRCONTACT LITE SYSTEM

AIRCONTACT LITE  
35 SL | 40 | 45 SL | 50 | ALLE +10



AIRCOMFORT SENSIC VARIO S.

FUTURA AIR TREK  
45SL | 50 | 55 SL | 60 | ALLE +10



AIRCONTACT SYSTEM

AIRCONTACT CORE  
35 SL | 40 | 45 SL | 50 | 55 SL | 60 | 65 SL | 70 | ALLE +10



AIRCONTACT X SYSTEM

AIRCONTACT X  
60 SL | 60 | 70 SL | 70 | ALLE +15

Thruhiking

Pilgrimhike

Hut-trekking

Tent-trekking

Expedition



MULTI-DAY (HUT) TREK

<i>ESSENTIAL</i>	Weight (Average)	My pack weight	<i>RECOMMENDED</i>	Weight (Average)	My pack weight
<ul style="list-style-type: none"><li>Trekking backpack 35 - 60 Litre</li></ul>	1900 g		<ul style="list-style-type: none"><li>Additional snacks</li></ul>	200 g	
<ul style="list-style-type: none"><li>Extra short &amp; long sleeve shirt</li></ul>	350 g		<ul style="list-style-type: none"><li>Pullover / Fleece</li></ul>	400 g	
<ul style="list-style-type: none"><li>Water- and windproof jacket</li></ul>	500 g		<ul style="list-style-type: none"><li>Camera and camera bag</li></ul>	310 g	
<ul style="list-style-type: none"><li>Water- and windproof trousers</li></ul>	300 g		<ul style="list-style-type: none"><li>Light trousers</li></ul>	200 g	
<ul style="list-style-type: none"><li>Functional shorts</li></ul>	200 g		<ul style="list-style-type: none"><li>Cotton t-shirt for the hut</li></ul>	170 g	
<ul style="list-style-type: none"><li>Thermal underwear</li></ul>	170 g		<ul style="list-style-type: none"><li>Hut shoes</li></ul>	180 g	
<ul style="list-style-type: none"><li>3 x Undewear, socks</li></ul>	250 g		<ul style="list-style-type: none"><li>Swiss army knife</li></ul>	100 g	
<ul style="list-style-type: none"><li>Hat or headband</li></ul>	60 g		<ul style="list-style-type: none"><li>Plastic bag (for hut shoes or laundry)</li></ul>	20 g	
<ul style="list-style-type: none"><li>Cap or Buff</li></ul>	60 g		<ul style="list-style-type: none"><li>Extra batteries (head torch, GPS etc.)</li></ul>	60 g	
<ul style="list-style-type: none"><li>Liner gloves</li></ul>	50 g		<ul style="list-style-type: none"><li>Telescopic trekking poles</li></ul>	460 g	
<ul style="list-style-type: none"><li>Sunscreen, lip balm (UPF 30)</li></ul>	60 g		<ul style="list-style-type: none"><li>Via Ferrata set or high altitudeequip- ment (depending on tour)</li></ul>	1500 g	
<ul style="list-style-type: none"><li>Sunglasses (with photochromic lenses)</li></ul>	30 g				
<ul style="list-style-type: none"><li>Drinks bottle or bladder min. 1litre capacity (depending on type of activity)</li></ul>	1190 g		<b>APPROXIMATE WEIGHT "RECOMMENDED"</b>	3,6 kg	
<ul style="list-style-type: none"><li>Granola, dried fruit, nuts, bars as required</li></ul>	200 g				
<ul style="list-style-type: none"><li>Electrolyte and magnesium tabs</li></ul>	50 g				
<ul style="list-style-type: none"><li>First Aid Kit M (incl. personal medication &amp; safety blanket)</li></ul>	310 g				
<ul style="list-style-type: none"><li>Blister pads, pain killers</li></ul>	40 g				
<ul style="list-style-type: none"><li>ID, cash, credit card, plastic bag</li></ul>	40 g				
<ul style="list-style-type: none"><li>Sleeping bag liner</li></ul>	250 g				
<ul style="list-style-type: none"><li>Washbag (shower gel etc.)</li></ul>	160 g				
<ul style="list-style-type: none"><li>Large travel towel</li></ul>	150 g				
<ul style="list-style-type: none"><li>Head torch</li></ul>	80 g				
<ul style="list-style-type: none"><li>Mobile with emergency numbers</li></ul>	130 g				
<b>APPROXIMATE WEIGHT "ESSENTIAL" (INCL. BACKPACK)</b>	6,53 kg				

<i>WITHOUT MOUNTAIN GUIDE</i>	Gewicht (Circa)	My pack weight
<ul style="list-style-type: none"><li>Topografische Karte</li></ul>	100 g	
<ul style="list-style-type: none"><li>Tourenbeschreibungen</li></ul>	100 g	
<ul style="list-style-type: none"><li>Höhenmesser / Kompass und GPS</li></ul>	300 g	
<ul style="list-style-type: none"><li>Biwaksack</li></ul>	280 g	
<b>APPROXIMATE WEIGHT "WITHOUT MOUNTAIN GUIDE"</b>	0,78 kg	
<b>APPROXIMATE (OVERALL WEIGHT)</b>	10,9 KG	



<i>ESSENTIAL</i> (EXTRA TO MULTI-DAY (HUT) TREK)	Weight (Average)	My pack weight
<ul style="list-style-type: none"><li>2-person tent with tent pegs</li></ul>	2000 g	
<ul style="list-style-type: none"><li>Sleeping bag (suitable for the expected temperatures)</li></ul>	1300 g	
<ul style="list-style-type: none"><li>Sleeping mat</li></ul>	800 g	
<ul style="list-style-type: none"><li>Stove with lid</li></ul>	700 g	
<ul style="list-style-type: none"><li>Fuel for stove</li></ul>	450 g	
<ul style="list-style-type: none"><li>Water filter</li></ul>	200 g	
<ul style="list-style-type: none"><li>1 x bag dehydrated meal / daily</li></ul>	125 g	
<ul style="list-style-type: none"><li>Muesli/porridge / daily</li></ul>	100 g	
<ul style="list-style-type: none"><li>Tea, cofffee, milk powder / daily</li></ul>	25 g	
<ul style="list-style-type: none"><li>Mug / plate / cutlery</li></ul>	250 g	
<ul style="list-style-type: none"><li>Fire lighter / tinder</li></ul>	50 g	
<ul style="list-style-type: none"><li>Folding spade</li></ul>	300 g	
<ul style="list-style-type: none"><li>Toilet paper / tissues</li></ul>	100 g	
<b>APPROXIMATE WEIGHT (INCL. BACKPACK)</b>	6,4 kg	
<b>APPROXIMATE (OVERALL WEIGHT)</b>	17,3 KG	

MULTI-DAY (TENT) TREK



**WHAT TO WEAR** Ankle high hiking boots with good grip, functional trekking trousers, functional shirt, functional jacket or gilet, trekking backpack

**AS A GENERAL RULE** Remember to pack light – take just what you need and nothing else! It's all about the experience. We've teamed up with the German Mountain Guide Association to create this checklist to help you cut down weight and bulk. Please note that all weights are approximate values. Usually, the higher the quality of the equipment, the lighter it is. Enjoy your trip!





MY DEUTER

“Being active should be fun – not painful. That’s why I think it’s fantastic that deuter was the first company to develop women-specific backpacks. The perfect fit these packs create means I can carry a heavy load on a long ascent and won’t get a headache anymore at the end of the day. And I have a general rule when I pack: If I’m going to carry it over greater distances, my backpack shouldn’t weigh more than 25 percent of my own bodyweight. When I have any suggestions for improvements after using a test model, they are implemented straight away. It’s great to see our efforts benefiting customers so quickly. It really inspires me to do more.”

.....

RAGNA KRÜCKELS is a secondary school teacher, state-certified mountain and ski guide, expedition leader and passionate climber. She loves being able to push her limits when climbing and always has fun. Ragna has been part of the deuter SL and Alpine family since 2005. She tests backpacks and ploughs all her knowledge and experience into their development.



SELLING POINTS  
TREKKING PACKS

**BEST LOAD TRANSFER AND VENTILATION:** The Aircontact back padding with special open cell foam pumps air across the back with every movement (pump effect) and also reduces perspiration by 15% compared to conventional full-contact back systems (proven in field test carried out together with Erlangen University). The mesh back system on the Futura Air Trek maximizes ventilation, reduces perspiration and therefore increases endurance. And the new Air Spacer mesh on the Aircontact Ultra, Aircontact Core and Aircontact X combines 3 functions in 1: Comfort, cushioning and ventilation. This reduces the overall weight of the pack, generates 7% better ventilation than the Aircontact Lite foam and makes the carry comfort even better.

**EASY ON THE BACK:** Ergonomic Lumbal padding transfers the load away from the lower back. This frees up the sacroiliac joint to move naturally and prevents it from becoming obstructed. It also means heavy loads can be carried with ease and in comfort.

**ERGONOMIC:** The hip fins wrap comfortably around all shapes of hip because their ergonomic form is a result of skilled stitching and not hard plastic elements.

**STABLE & COMFORTABLE:** S-shaped shoulder straps ensure a perfect fit and enhanced freedom of movement – and for superior carry comfort are made of foam that holds its shape.

**TAILORED FIT:** The larger the capacity, the more important it is that the back system should fit the anatomy of the individual. That’s why in addition to adjustable back lengths, they come in two different fit systems: Regular and women’s SL fit.

**GOOD BALANCE:** Pivoting shoulder straps and mobile hip fins (except Aircontact Lite) adapt to the individual and follow their movements – for improved balance, better energy conservation and superior freedom of movement.

**100% SOLID BUILD:** deuter backpacks are robust, durable and built to take a beating – No screws that might loosen, no plastic parts that might break.

**EASY TO USE:** The Pull-Forward system allows the hip fins to be easily tightened or adjusted, even when the pack is fully loaded.

**PATENTED ADJUSTMENT:** Adjusting the back length to the desired height is smooth, effortless and precise with the patented VariSlide system, for a fit that suits the individual’s anatomy.

**COMFORTABLE HEAVY-DUTY HAULAGE:** Loads of up to 30kg can be carried in comfort with an Aircontact Pro carry system, without any loss of mobility. That’s because the internal, ergonomic Y-shaped frame is directly connected to the shoulder straps and hip fins to effectively distribute the load.

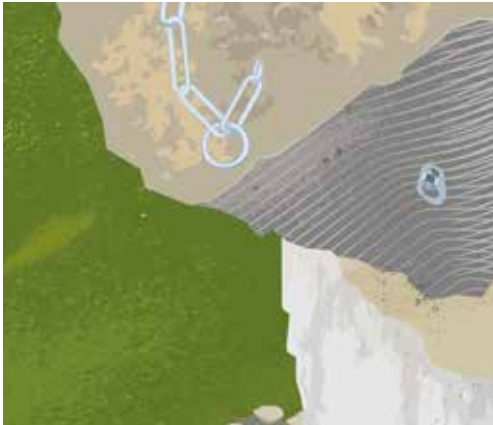
**GOOD CHOICE:** Readers of Outdoor Magazine (Germany) voted deuter number 1 in their “Gear of the Year” poll over 11 years in a row.

**MULTI-PURPOSE:** Modular gear straps that can be used for load compression or to attach gear and the height-adjustable, detachable lid offer plenty of options for attaching items to or packing them away inside the pack, depending on the undertaking (Aircontact Ultra, Aircontact Core, Aircontact X).

**INDIVIDUALIZED SOLUTIONS:** Each model of backpack is made to withstand the rigors of the specific type of hiking / trekking it is designed for – from ultra-lightweight for thru-hikers, to indestructible backpacker companions.

**DEUTER’S PACKHORSE:** The maximized load transfer and clever build of the Aircontact X means it is fully up to the task of carrying heavy amounts of gear over long distances.

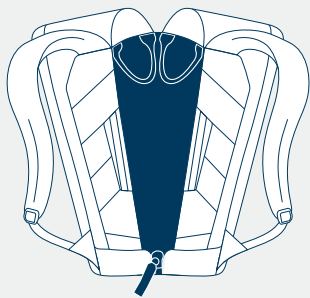




INDOOR CRAGGING  
MULTI-PITCH

1 day

40 liters



GRAVITY  
MOTION

FULL-CONTACT BACK  
CONTACT  
with opening

- light
- targeted features
- duffel/ backpack combo

6 kg 10 kg



MULTI-PITCH  
NEW ROUTE DEVELOPMENT

1+ day

12-50 liters



GRAVITY  
PITCH

FULL-CONTACT BACK  
LITE

- compact & light
- secure fit

2 kg



GRAVITY  
WALL BAG

FULL-CONTACT BACK  
ALPINE  
stowable & with elastic  
spring steel frame

- maximum  
load transfer
- secure fit
- ventilation

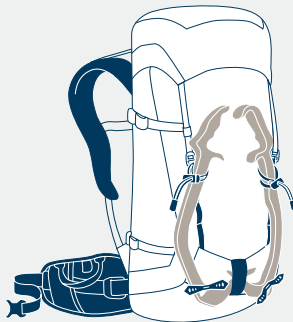
25kg



ALPINE CLIMBING  
NORTH FACE ASCENT  
ICE / MIXED CLIMBING

1 day

22-30 liters



GUIDE LITE

FULL-CONTACT BACK  
LITE  
with flexible, lightweight Delrin® frame

- compact & light
- secure fit
- good load transfer

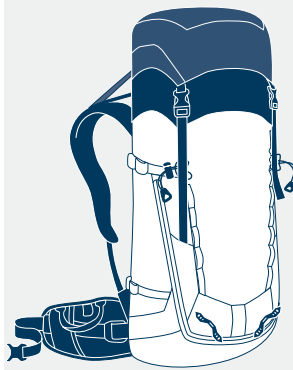
4 kg 10 kg



ALPINE ROUTE  
HIGH-ALTITUDE MOUNTAINEERING  
EXPEDITIONS

2+ days

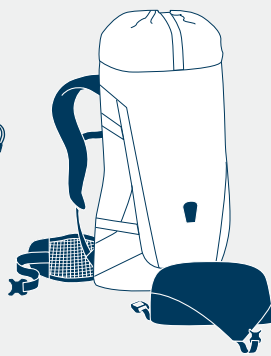
32+ - 50 liters



GUIDE

FULL-CONTACT BACK  
ALPINE  
with internal V-frame  
& pivoting hip fins

- maximum load transfer
- secure fit
- maximum functionality
- ventilation



GRAVITY  
EXPEDITION

FULL-CONTACT BACK  
LITE  
with flexible, lightweight  
Delrin® frame

- ultra-light  
& minimalist
- good load transfer
- secure fit

Recommended load 6 kg



GRAVITY  
WALL BAG

FULL-CONTACT BACK  
ALPINE  
stowable & with elastic  
spring steel frame

- maximum  
load transfer
- secure fit
- ventilation

up to 25 kg

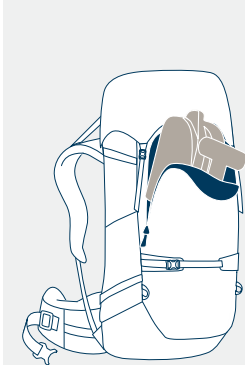




SNOW-SHOEING  
WINTER  
HIKING

1 day

32+ / 34+ liters

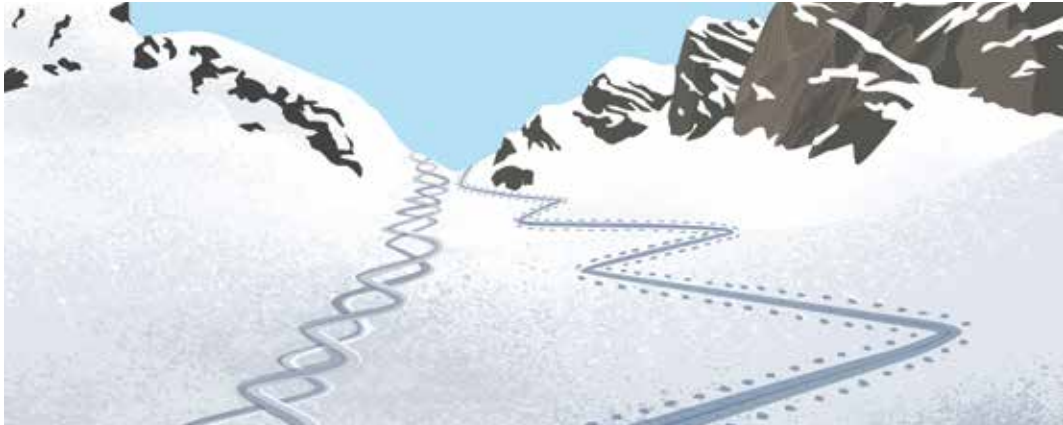


RISE

FULL-CONTACT BACK  
ALPINE  
with flexible, lightweight  
Delrin® frame

- solid fit
- effective load distribution
- winter features
- basic ventilation

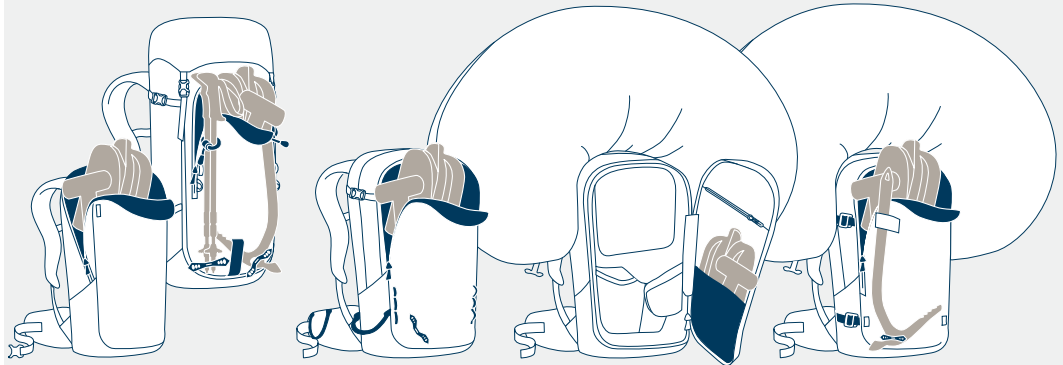
6 kg 10 kg



SKI / SNOWBOARD TOURING  
FREERIDING  
SKI MOUNTAINEERING

1 day

18 - 32 liters



FREERIDER LITE /  
FREESCAPE LITE

FULL-CONTACT BACK  
LITE

- secure fit
- compact & light
- basic ventilation

FREERIDER

FULL-CONTACT BACK  
ALPINE  
with flexible, lightweight  
Delrin® frame

- secure fit
- good load transfer
- basic ventilation

ALPROOF  
LITE

FULL-CONTACT BACK  
ALPINE  
with lightweight  
back reinforcement

- Alpride E2 electronic avalanche airbag
- lightweight
- solid fit
- basic ventilation

ALPROOF

FULL-CONTACT BACK  
ALPINE  
with lightweight  
back reinforcement

- Alpride E2 electronic avalanche airbag
- effective load distribution
- solid fit
- basic ventilation

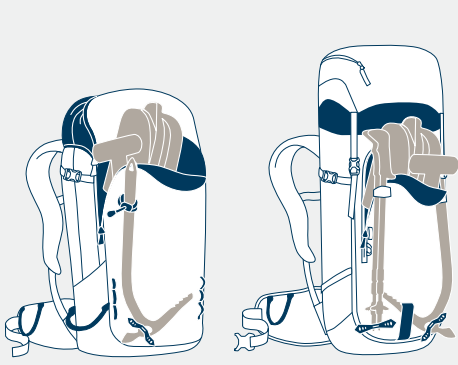
Recommended load 4 kg up to 8 kg



SKI MOUNTAINEERING  
SKI TRAVERSE

2+ days

32+ - 40+ liters



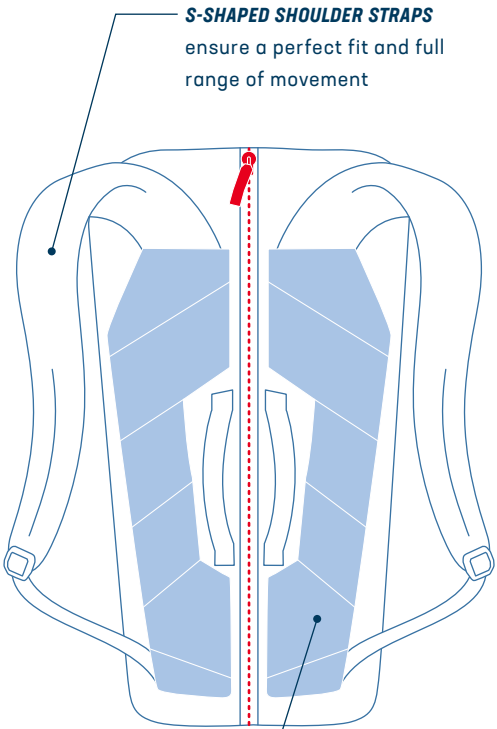
FREERIDER PRO

FULL-CONTACT BACK  
ALPINE  
with flexible, lightweight Delrin® frame

- secure fit
- good load transfer
- maximum functionality
- basic ventilation

FREESCAPE  
PRO

6 kg 10 kg



S-SHAPED SHOULDER STRAPS  
ensure a perfect fit and full  
range of movement

VERY LIGHTWEIGHT,  
SIMPLE CARRY SYSTEM  
for shorter distances with  
lightly padded back for  
carry comfort

CONTACT SYSTEM

Light construction

- lightly padded back panel

- solid, snug fit for energy  
efficient carry

Recommended load 6 kg up to 10 kg





SHARED FEATURES

LITE:

**MINIMALIST, ULTRA-LIGHT CARRY SYSTEM**  
for light to moderate loads

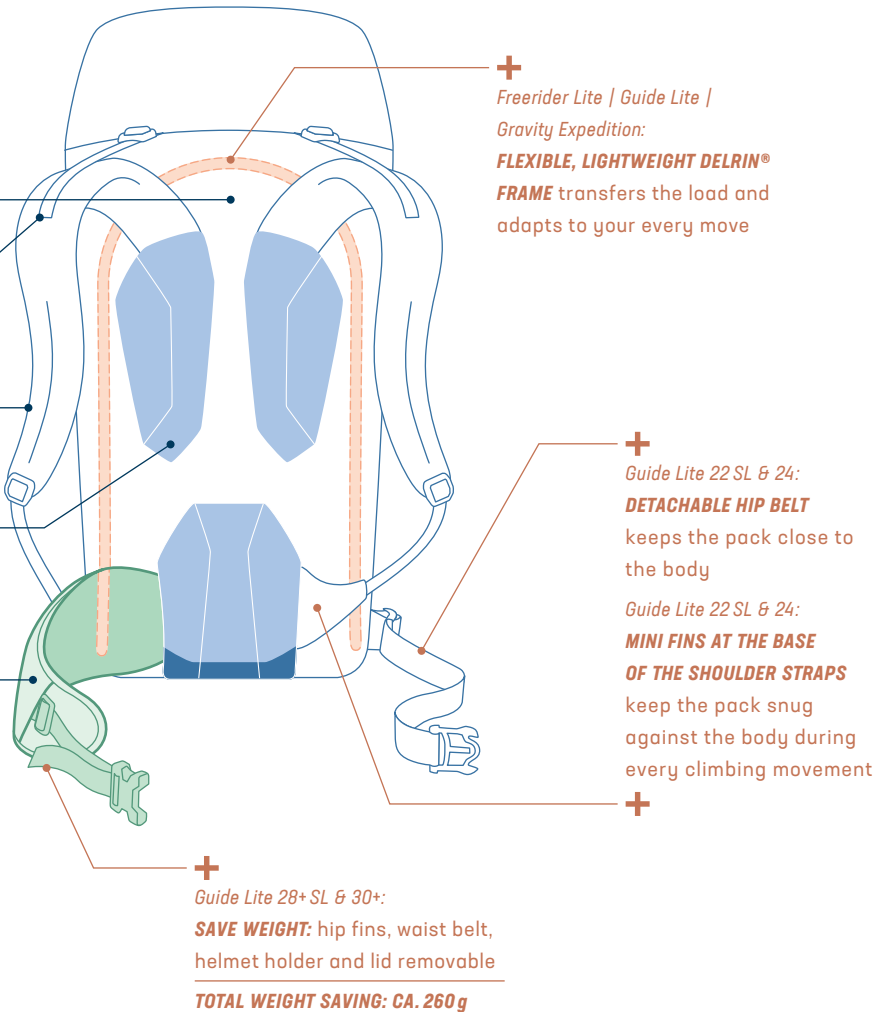
**STABILISER STRAPS**  
for increased ventilation (when loose)  
or increased load control (when tight)\*

**S-SHAPED SHOULDER STRAPS**  
ensure a perfect fit and full  
range of movement

**PADDED BACK**  
covered in breathable mesh adapts to  
the shape of the back and keeps the  
load close to the body for a secure fit

**LIGHTWEIGHT, FLEXIBLE HIP FINS**  
with close set anchor points for a solid,  
secure fit and good load transfer\*

\*excl. Gravity Pitch



LITE SYSTEM



Light construction

Lightweight with carry comfort thanks to

- compact, light back padding covered in airy 3D mesh

- solid, snug fit
- supple, light hip fins
- balanced load transfer via flexible, lightweight Delrin® frame (Freerider Lite, Guide Lite, Gravity Expedition)

Recommended load **2 kg**



SHARED FEATURES

ALPINE:

**STABILISER STRAPS**  
for increased ventilation (when loose)  
or increased load control (when tight)

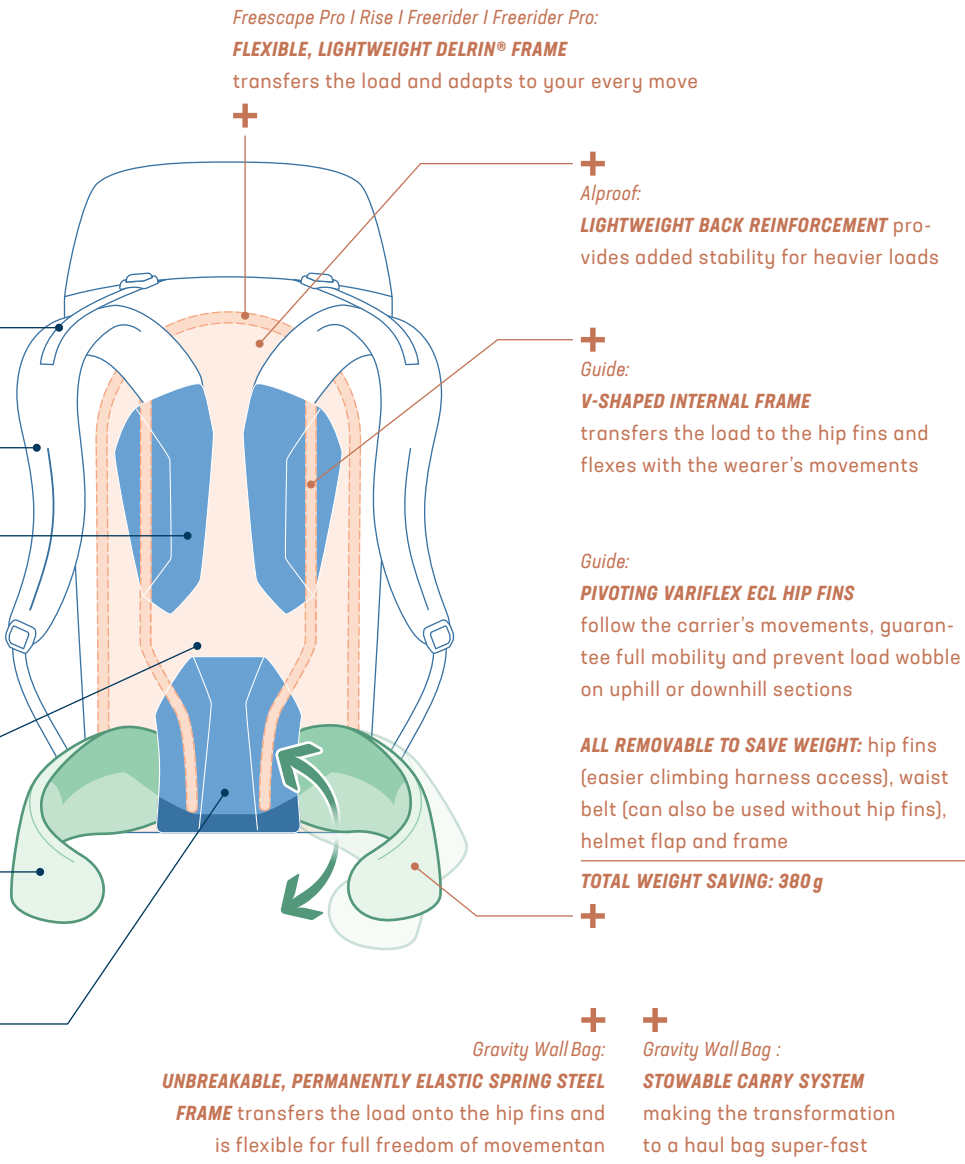
**S-SHAPED SHOULDER STRAPS**  
ensure a perfect fit and full

**3D PADDING**  
adapts to the shape of the  
back keeping the load close  
to the body for a solid fit. This  
results in improved balance  
through technical terrain.

**VENTILATION CHANNELS  
BETWEEN THE PADDING**  
generate air flow across the back

**COMPACT HIP FINS**  
with close set anchor points wrap  
around the hips for a solid, secure  
fit and effective load transfer

**ERGONOMIC LUMBAR PAD**  
distributes the load and  
protects the back



ALPINE SYSTEM

- compact, stable carry system
- Ventilation created by channels between the back padding  
– covered in airy, snow resistant 3D mesh

Secure fit with up to 70% increased load transfer thanks to

- compact, snug fit: The weight is close to the body for better load control, better balance and more energy-efficiency
- internal frame – tailored to capacity
- firm, snug-fitting hip fins
- VariFlex (Guide, Freerider Pro)

up to **25 kg**

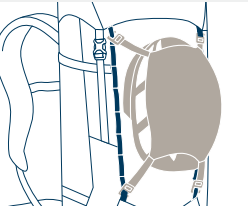




**Slender pack shape:**  
ensures good freedom of movement



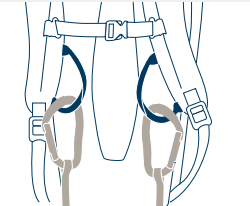
**Very light Alpine pack:**  
for fast & light projects, taking only what you need



**Helmet holder compatible:**  
helmet holder available as an accessory



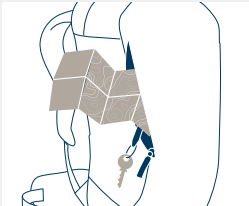
**Hydration compatible:**  
can be used with a hydration bladder (2 L)



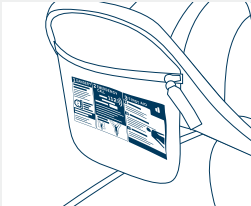
**Gear loops on shoulder straps:** to temporarily stash quickdraws etc.



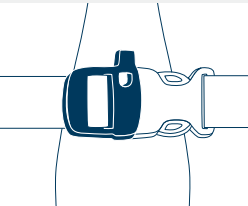
**Stretch inner compartment:** for wet clothing, hydration bladder etc. (excl. Gravity Expedition)



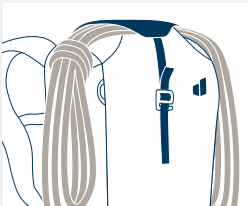
**Generous zippered front compartment:** for topo, energy bars etc.



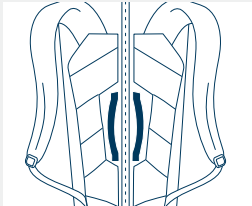
**SOS Label** with international emergency telephone numbers and emergency mountain signals



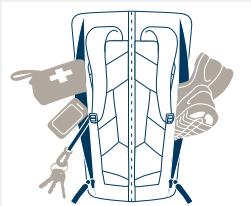
**Safety whistle:** requires minimal force to generate loud and audible sound in an emergency



**Stow option for rope on top of the pack:** with Motion under lid flap and with Pitch via gear loops on top



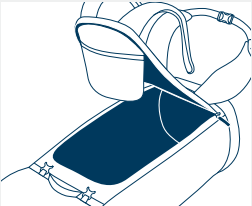
**Grab handles on the back:**  
easy to grab in between routes



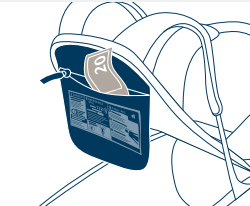
**Large zippered side pockets:**  
neatly stash rock shoes, first aid kit etc.



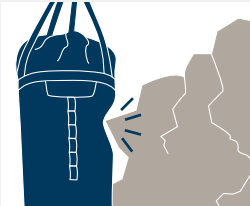
**Internal gear loops:** to sort quickdraws etc.



**Rear opening:** fast access to contents via wide-aperture zip around closure or full-length vertical zip



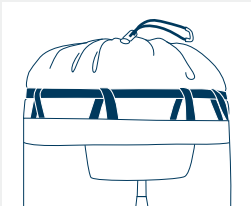
**Internal zippered valuables pocket** keeps essential small items safely stowed



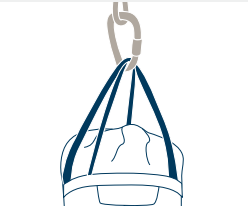
**Highly durable TPU material:** withstands contact with rock



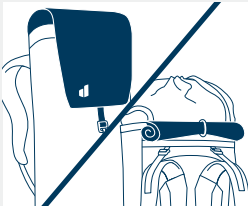
**Reinforced base with straps:** extremely stable and straps can be used to attach extra gear



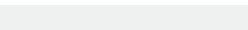
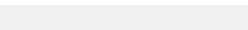
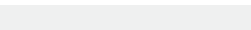
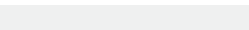
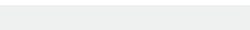
**Compression on the main opening** converts the pack quick and easy into the cylindrical shape of a classical haul bag



**Asymmetrical haul loops** make it easy to keep the load close to the wall



**Stowable back system cover:** when opened out doubles up as backpack lid



MY DEUTER

"Climbing is more than a sport for me. It's a way of life. Each new project is a new mission, a puzzle that has to be solved. That's why climbing - whether its indoors or outdoors - remains so exciting. I use the Gravity series from early morning, when I'm hauling gear to the base of the crag, to late in the day, when it's time to quickly pack up and head. I use the Wallbag to haul gear up behind me on each pitch, leaving me free to climb unrestricted. I have the Gravity Motion packed and ready to go in the cellar for heading to the gym. Comfortable bouldering shoes, a chalk bag, and leggings are all in there too, and because it's a duffel-style pack, it means I can get at them easily."

ALEX SCHWEIKHARDT, enjoyed her first mountain experiences from an early age. She was instantly attracted to the lifestyle and wonder of it all, and it sparked her passion for climbing. When thinking of where to study, the climbing options nearby were a deciding factor. She's ticked off sport climbing routes in Swiss Franconia up to 8b+, but she's most drawn to multi-pitch routes. She lives in Dornbirn, Austria, and manages to combine her passion with a career as a journalist, pro climber, state-certified sport climbing instructor and member of the deuter Alpine Family.



LITE SYSTEM

GRAVITY PITCH 12



CONTACT SYSTEM

GRAVITY MOTION



ALPINE SYSTEM

GRAVITY WALL BAG 50

Multi-pitch

Cragging

Indoor

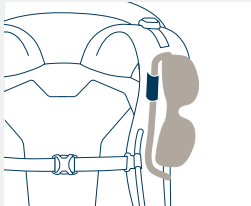
Bigwallprojects



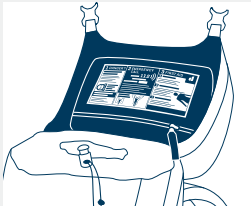
BASIC FEATURES



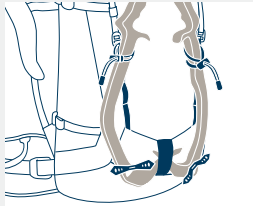
**Slender pack shape:** keeps the load close to the body and ensures good freedom of movement



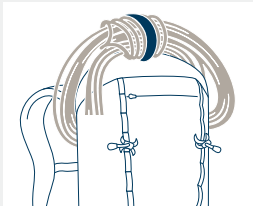
**Glasses stow system:** loop on the shoulder strap for quick and easy stowage



**SOS Label** with international emergency telephone numbers and emergency mountain signals



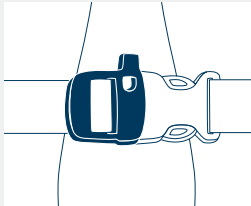
**Two ice axe attachments:** ice axes and ice tools safely stashed



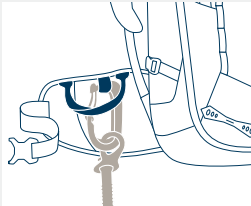
**Removeable rope strap** at the top keeps rope securely strapped to the outside of the pack, for more space inside (not Gravity Expedition)



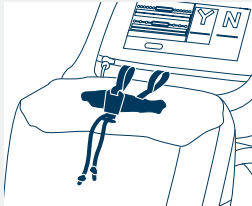
**Hydration compatible:** can be used with a hydration bladder



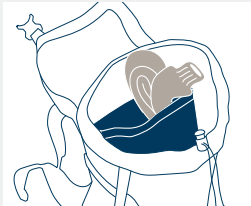
**Safety whistle:** requires minimal force to generate loud audible sound in an emergency



**Gear & Ice-Clipper loop on hip fin:** for interim gear storage (except Guide Lite 22 SL & 24)



**Fixed draw cord lock and gripper loops:** means spin-drift collar can be operated while wearing gloves

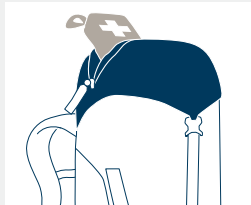


**Stretch inner compartment** for wet clothing, hydration bladder etc.

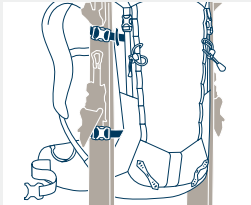
EXTRA FEATURES



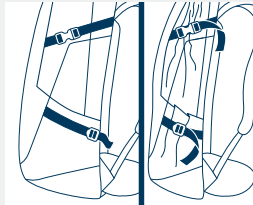
**Very light Alpine pack:** for fast & light projects, taking only what you need



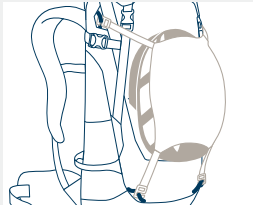
**Lid pocket** with wide zipper for quick access to essentials



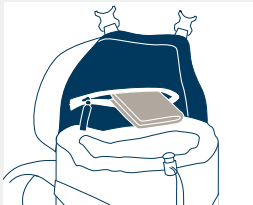
**Ski attachments at the side:** For secure transport over tricky or lengthy carry sections



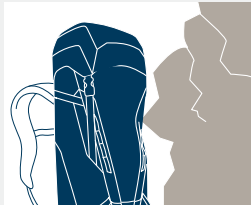
**Compression straps:** Compress the load and keep it close to the body



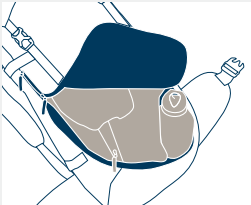
**Helmet holder compatible** (helmet holder available as accessory) – Guide Lite 22 SL & 24: Stowable cover also serves as helmet holder



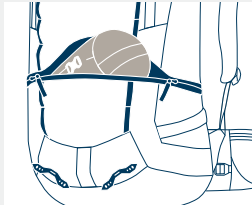
**Internal zipped pocket** for the safe storage of valuables



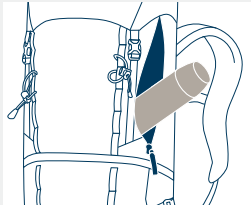
**Extremely hard wearing material** withstands frequent abrasion against rock and ice



**Front zipper:** for quick access to contents

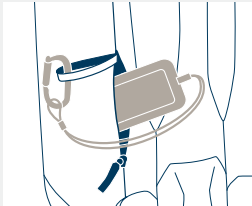


**Dedicated bottom compartment** for pack stability and load distribution (partition opens out fully)

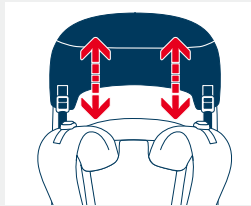


**Zip side access** for easy contents access especially lower down in the pack

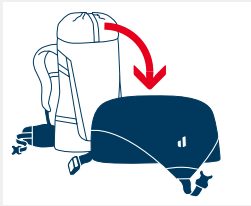
	28+ SL   30	28+ SL   30	28+ SL   30	28+ SL   30: helmet holder incl. helmet holder included			32+ SL   34+	42+ SL   44+	42+ SL   44+



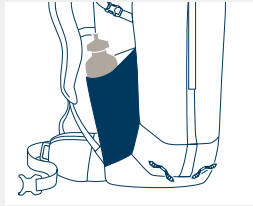
**Zipped side pocket against the back** for easy on-the-move access to maps or smartphone



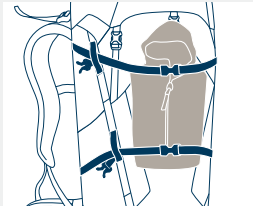
**Height-adjustable lid** extends capacity by up to 8 litres



**Detachable lid** for pared down weight



**Large stretch side pockets:** to keep drinks, bottles etc. at the ready



**Side compression straps closable at front:** for maximum compression or attachment of gear

22 SL   24	28+ SL   30	28+ SL   30		



LITE SYSTEM

ALPINE SYSTEM

LITE SYSTEM

GUIDE LITE 22 SL | 24 | 28+ SL | 30+

GUIDE 32+ SL | 34+ | 42+ SL | 44+

GRAVITY EXPEDITION 45+



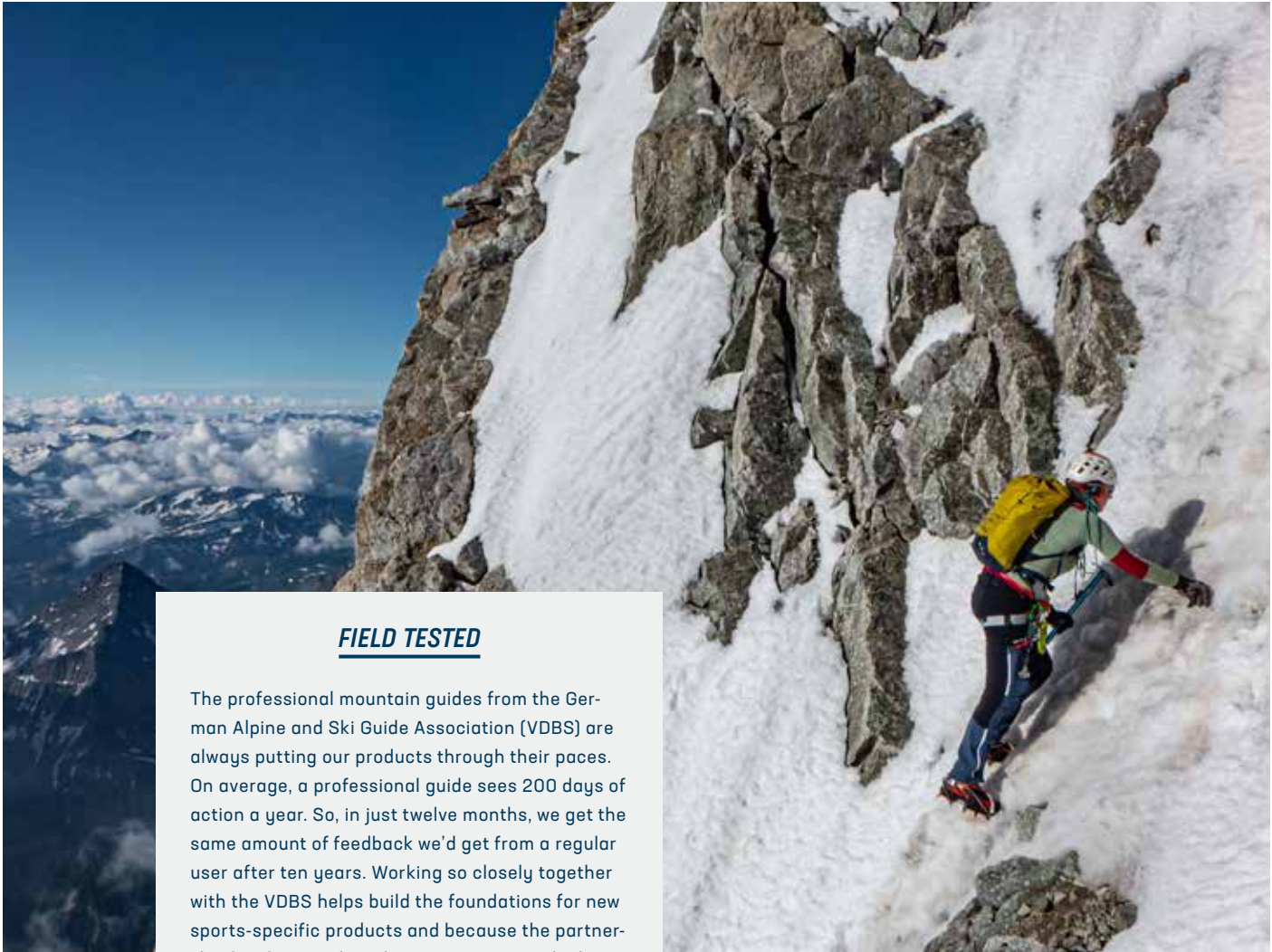
HIGH ALPINE / GLACIER MULTI-DAY TOUR

ESSENTIAL	Weight (Average)	My pack weight
● Touring backpack 30-50 Litre	1800 g	
● Extra short-sleeve shirt	150 g	
● Extra long-sleeved shirt	200 g	
● 1-2 bottoms short / long	100 g	
● Functional socks	60 g	
● Water- and windproof jacket	500 g	
● Water- and windproof pants	300 g	
● Hat and/or headband	60 g	
● Liner gloves	50 g	
● Thick gloves	280 g	
● Functional shorts	200 g	
● Cap or buff	60 g	
● Sunscreen, lip balm (UPF 50)	60 g	
● Sun-/glacier glasses	30 g	
● Drinking bottle or bladder with at least 1l capacity (de-pending on tour)	1190 g	
● Electrolyte and magnesium tabs (capsules)	50 g	
● Muesli, dried fruit, nuts, bars as required	200 g	
● First Aid Kit M (incl. rescue blanket)	310 g	
● Blister Pads	20 g	
● Headache pills	20 g	
● Telescopic poles	460 g	
● ID, cash, credit card, plastic bag	40 g	
● Sleeping bag liner	250 g	
● Washing bag (travel shower gel, tooth brush / paste, small functional towel, tissues, ear plugs)	280 g	
● Headlamp	80g	
● Mobile phone with emergency numbers	130g	
Hardware for high alpine trips:		
● • Climbing harness	230 g	
● • 2 locking karabiners	190g	
● • 2 Prusik slings, 4m x 6mm	100 g	
● • Runner	40 g	
● • Ice axe	630 g	
● • Crampon	1000 g	
● • Climbing helmet	320 g	
APPROXIMATE WEIGHT "ESSENTIAL" (INCL. BACKPACK)	9,39 kg	

RECOMMENDED	Weight (Average)	My pack weight
● Thermal flask	560 g	
● Torch	80 g	
● Multitool	150 g	
● Cotton shirt for hut	150 g	
● Light pants	200 g	
● Gaiters	120 g	
● Plastic bag (for rubbish or wet laundry)	20 g	
APPROXIMATE WEIGHT "RECOMMENDED"	1,28 kg	
WITHOUT MOUNTAIN GUIDE	Weight (Average)	My pack weight
● Maps	80 g	
● Guide book	210 g	
● Compass	80 g	
● GPS device	220 g	
● Bivouac sack	280 g	
Hardware for high alpine trips:		
● • Rope (depending on tour: 35-50 m)	2700 g	
● • 2 ice screws	340 g	
● • Depending on tour: cams + friends	700 g	
APPROXIMATE WEIGHT "WITHOUT MOUNTAIN GUIDE"	4,61 kg	
APPROXIMATE (OVERALL WEIGHT)	15,28 KG	

**WHAT TO WEAR:** Alpine boots with a very stiff sole, ideally crampon compatible, functional hiking pants, functional shirt, functional jacket or vest

**AS A GENERAL RULE:** Remember to pack light – take just what you need and nothing else! It's all about the experience. We've teamed up with the German Mountain Guide Association to create this checklist to help you cut down weight and bulk. Please note that all weights are approximate values. Usually, the higher the quality of the equipment, the lighter it is. Enjoy your trip!



Bianca Schöferle, official mountain and ski guide; Mont Blanc, Innominata Grat

FIELD TESTED

The professional mountain guides from the German Alpine and Ski Guide Association (VDBS) are always putting our products through their paces. On average, a professional guide sees 200 days of action a year. So, in just twelve months, we get the same amount of feedback we'd get from a regular user after ten years. Working so closely together with the VDBS helps build the foundations for new sports-specific products and because the partnership has been so lengthy, we can access the huge cache of experience from its members both past and present. We are very grateful to them all.

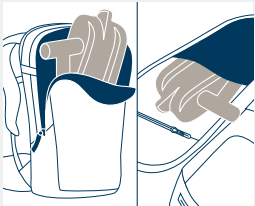




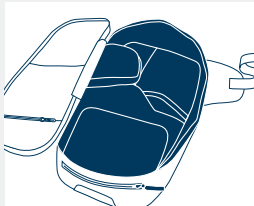




BASIC FEATURES



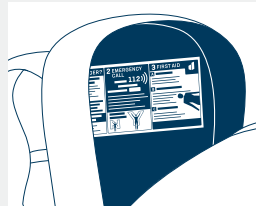
**Shovel compartment / pocket:** for speedy access to emergency avalanche equipment



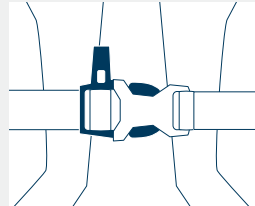
**Clamshell opening main compartment (C-Opening)** with all around 3-way zipper for quick access to contents



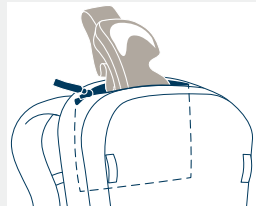
**Innovative detachable helmet bag** can also accommodate wet clothing items



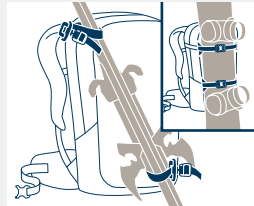
**SOS Label:** with international emergency telephone numbers and emergency mountain signals



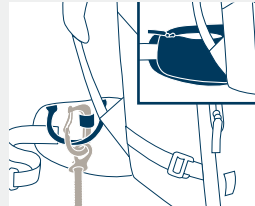
**Safety whistle:** requires minimal force to generate loud audible sound in an emergency



**Goggles safely stowed** in external-access zipper pocket with fleece lining on one side



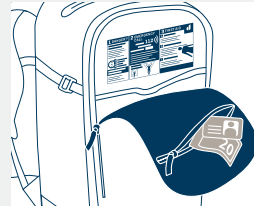
**Two stowable gear straps** to strap skis (diagonal), snowboard or snowshoes to the front



**Gear loop, ice clipper slot & zipper pocket** on the hip fins keep important items close to hand



**Ice axe / pole attachment & gear loops** safely stow equipment and additional gear

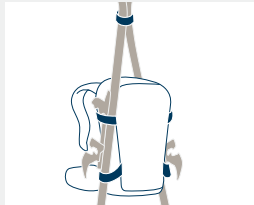


**Internal valuables pocket and key clip**

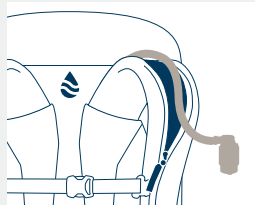
EXTRA FEATURES



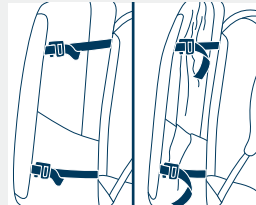
**Very light Alpine pack:** for fast & light projects, taking only what you need



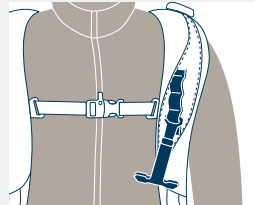
**Affix skis** with compression straps and separate, stowable gear strap (A-frame)



**Hydration compatible** with 3 L bladder and insulated hydration tube sleeves on shoulder straps



**Compression straps** regulate the load and keep it close to the body



**Height adjustable trigger handle** mountable left or right

THE SPECIFICS

*The ALPRIDE E2 electronic avalanche air bag system is the lightest of its kind.*

It's also the first avalanche airbag system to use supercapacitors to drive an electric compressor, which then inflates the 162-liter airbag in just three seconds. Supercapacitors have distinct advantages compared to batteries and rechargeable batteries: They can generate a lot of power in a short space of time, without shortening their service life. They can store electricity without the use of chemical reactions, which is why they are unaffected by the cold. Their performance is the same, from -30° C to +40° C. Whereas rechargeable batteries such as lithium-ion lose power after multiple charges, supercapacitors maintain their performance. They can be charged 500,000 times and have a virtually endless lifespan. Supercapacitors are also lighter than regular batteries.



TOP PRIORITY:  
A VALANCHE AVOIDANCE

*Why do you need an airbag?*

Avalanches always pose a big risk, no matter what safety gear you have. Even with an airbag backpack, there are still situations where chances of survival are slim. Which is why having an airbag backpack does not mean you can take greater risks. The most important thing is to minimize the risk of an avalanche. This equates to thorough avalanche training, careful route planning, regular avalanche training refreshers, the courage to express your concerns to the group you're with and being prepared to turn back. But even then, it's still risky. This is where avalanche safety equipment and an airbag backpack can help reduce the rate of fatality.



ALPINE SYSTEM

ALPROOF LITE 20 SL | 22

ALPINE SYSTEM

ALPROOF 30 SL | 32

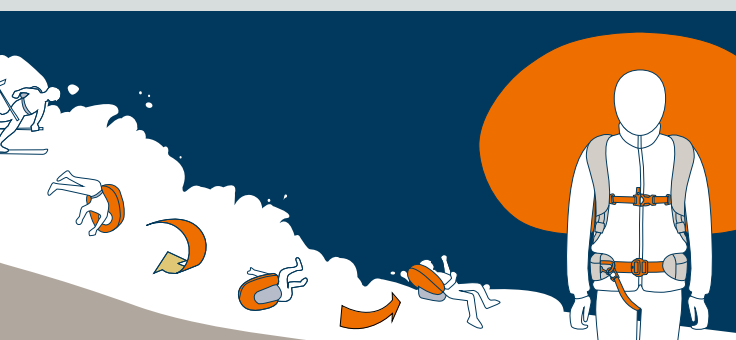




## AIR BAG EFFECT

*Remaining on the surface of an avalanche increases the chance of survival*

Full burial is when the head and upper body are covered by snow from an avalanche. Partial burial is when the head and upper body remain free. With a full burial, the chance of death is 50%, whereas with a partial burial it is 4% (Brugger et al. 2001; Statistical analysis of avalanche fatalities, Europe and North America 1981-1998). There is therefore a greater chance of survival if you can avoid full burial in an avalanche situation. The Alpride air bag makes use of granular convection (or the Brazil nut effect), whereby larger particles end up on the surface of a granular material containing a mixture of variously sized objects, while smaller particles sink. The large surface area and rounded shape of the Alpride air bag make it buoyant in an avalanche. The shape of the air bag also protects the user's back and head, and the luminous color makes it more noticeable during a search operation, where every second counts.



## RUNTIME

We recommend that during a tour, two Lithium AA batteries are used, which have not been previously used to charge the system. These will make up for the small loss in charge of the supercapacitors. By doing so, the Alpride E2 system can be used for three months in between charges. If the Alproof is not going to be used for a longer period, the batteries should be removed.

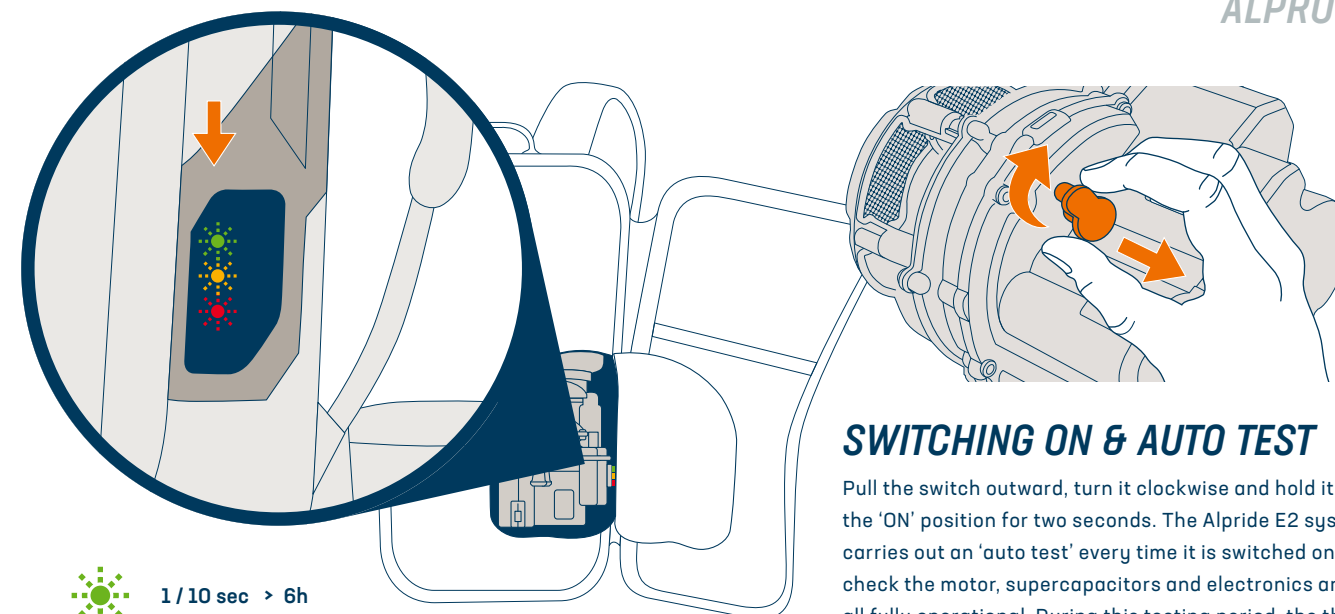
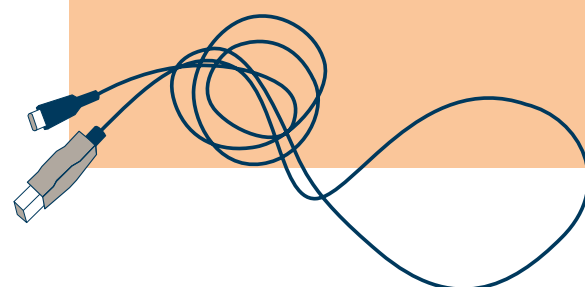
If the system is used after charging, but without batteries installed, the maximum runtime is 12 to 24 hours.



## CHARGING

The supercapacitors can be charged in two ways: via USB-C cable (5V-3A) or with two AA batteries. The system should primarily be charged via USB and only charged by batteries as a backup, e.g. when traveling. Charging can be done using the USB-C cable supplied and a regular USB charger (not supplied) or power bank, solar unit etc. Depending on the kind of charging device used, charging will take between 20 and 40 minutes. Charging via the USB cable is also possible without any batteries in place. When the batteries are inserted and the cable is connected, charging will begin without draining the batteries.

Lithium AA batteries make the Alpride E2 system ready to deploy again, after an accidental deployment. They have enough power to generate 3 full system charges. It is advisable to replace these batteries after this - and after any deployment. As soon as the air bag is filled, the two AA batteries (if installed) will immediately re-charge the supercapacitors.



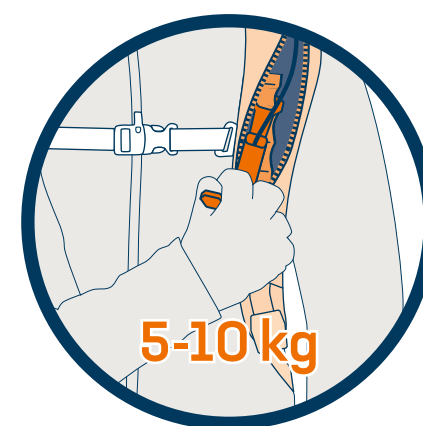
1 / 10 sec > 6h



1 / 10 sec < 6h



1 / 10 sec =

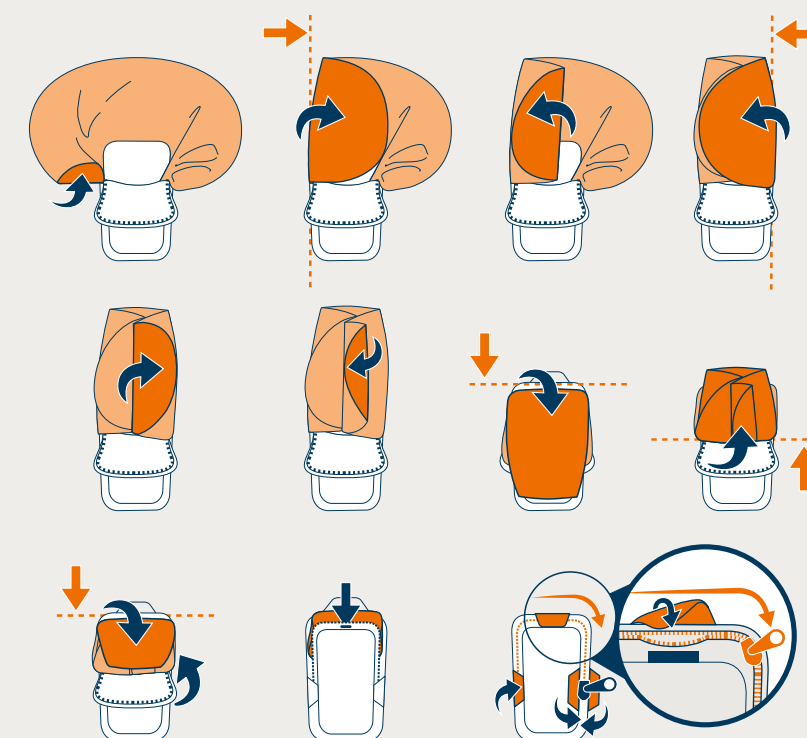


## DEPLOYMENT

To deploy the air bag, the trigger handle must be tugged (5-10 kg force). The air bag will then be inflated at high pressure by the compressor motor, within three to five seconds. Once fully inflated, the supercapacitors will automatically be re-charged by the two AA batteries (if inserted). The compressor is active for six seconds before switching itself off.

## SWITCHING ON & AUTO TEST

Pull the switch outward, turn it clockwise and hold it in the 'ON' position for two seconds. The Alpride E2 system carries out an 'auto test' every time it is switched on, to check the motor, supercapacitors and electronics are all fully operational. During this testing period, the three LED lights will light up one after the other to test they are working. Once the auto test is successfully completed, the system is ready to use. The motor will rev a second time and the green or orange LED light will flash depending on the charging status:



## PACKING AWAY

To deflate the air bag, open the safety cover on the release valve and press the orange button. Once the air bag is empty the safety cover will spring back into place automatically. When packing away the air bag it is important to follow the correct procedure. Packing it away incorrectly could prevent the air bag from deploying, might cause it to malfunction and could damage the avalanche backpack. Do not twist the airbag, do not cross over any hooks, do not roll it up and do not obstruct the airbag compartment in any way.





## FREQUENTLY ASKED QUESTIONS

### Can you switch trigger sides?

Yes, in the Alproof 30 SL and 32 models the trigger handle can easily be mounted on either side of the backpack by the client.

### What is the best height for the trigger handle?

The trigger handle should ideally be at chest height for the best accessibility. There are three heights it can be adjusted to. Simply rotate the trigger handle upwards and out of the loop on the shoulder strap, then reinsert it into the correct one.

### Is the leg loop important?

The waist belt, leg loop and sternum strap should all be tight and secure to create a snug fit. The leg loop is also there to prevent the backpack from being pulled over the skier's head in an avalanche. The leg strap is easily secured without having to undo the waist belt.

### Are people in a position to be able to deploy the airbag themselves?

Generally, yes. The most important thing is for it to be deployed immediately and decisively. Accident data analysis\* shows that as many as 12% of victims had not deployed the air bag. No correlation could be found between the size of the avalanche and the inability to deploy the air bag. But there was a significantly lower rate among professional users (mountain guides, ski patrolers) than hobby skiers (5% compared to 12%). Practice seems to be a deciding factor here. It's therefore important to regularly practice deploying an air bag to train reactions and motor skills. And if in doubt, it's better to deploy the air bag too many times, than not deploy it at all. This is easy to do with the Alpride E2 system since it can be deployed multiple times.

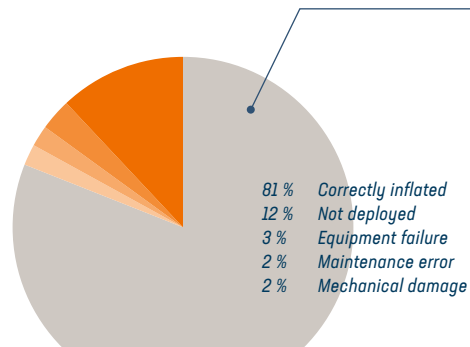
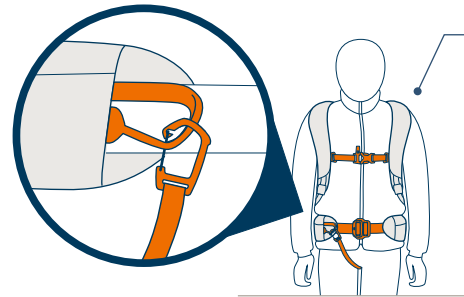
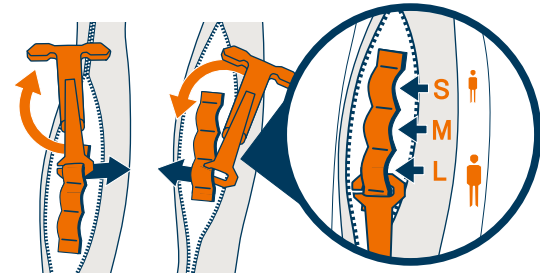
### Which is more important:

#### Avalanche air bag or avalanche beacon?

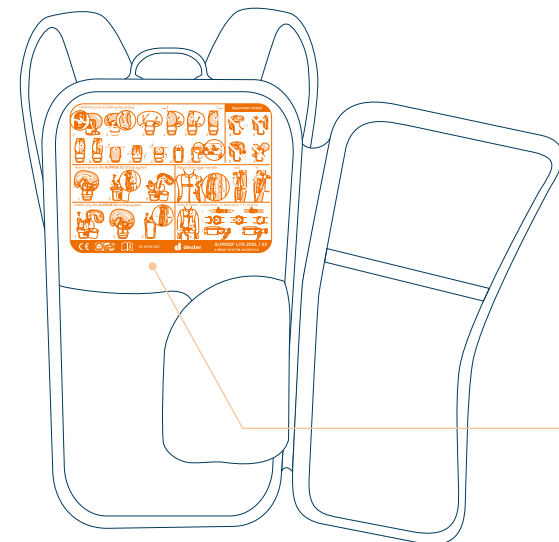
Simple: Both. Because with an avalanche air bag you can't locate victims, and with an avalanche beacon you can't prevent full burial. So the ideal avalanche safety equipment includes an avalanche air bag like the AL-PROOF, an avalanche beacon, a shovel and a probe.

### Can skis be attached at the sides?

Yes. In the Alproof 30 SL and 32 models, skis can be attached diagonally across the front of the pack and at the sides in an A-frame, using the two modular gear straps.



\*Source: Högeli, Bergundsteigen Magazine 3/14; Statistical analysis of avalanche incident reports (1994 to 2012) in North America and various European countries; only avalanches that posed serious burial potential and involved persons with and without airbag backpacks were included.



Further information: Each Alproof backpack with the ALPRIDE E2 system comes with a comprehensive user manual. Inside the pack itself there is a printed label / checklist (see image) with all the most important points to be aware of for the safe use of the system.



## SELLING POINTS FOR AVALANCHE AIRBAG PACKS

### THE LIGHTEST ELECTRONIC AIR BAG SYSTEM

currently available thanks to supercapacitor technology. Weighing just 1,140 grams (without batteries) the Alpride E2 avalanche air bag weighs only marginally more than the average cartridge system (around 1,000 g).

### REACTIVATED DURING A SKI TOUR:

No need for spare cartridges or tricky maneuvers. After a false deployment, the Alpride E2 system's supercapacitors will automatically recharge within 20-40 minutes using two AA batteries. The time this takes can be used to pack away the air bag.

### PRACTICING

deploying the air bag can be done using the USB-C charging port and cable, which means no replacement cartridge costs or shortening of battery lifespan. And it's important to practice this so that it comes automatically and without delay.

### LONG RUNTIME:

Three months runtime between charges by topping up the Alpride E2 system power with two AA batteries.

### 162 LITERS IN 3 SECONDS:

The electronic motor with latest generation turbo-loader technology generates high pressure. The 162-liter avalanche air bag will deploy within 3 seconds without failure and with absolute certainty.

### SWISS ENGINEERING

combined with deuter carry comfort: Both the Alpride E2 system and electronic controls are developed and manufactured in Switzerland - impeccable quality and superior carry comfort for a reliable product.

### RECHARGEABLE 500,000 TIMES:

Where batteries wear out after repeated charging, supercapacitors retain their performance. They can be recharged 500,000 times and have a virtually limitless service life.

### DYNAMIC FLOAT

thanks to the large, smooth surface area and rounded shape of the Alpride air bag. This increases chances of remaining on top of the avalanche and therefore chances of survival.

### UNAFFECTED BY COLD:

Supercapacitors store electricity without the use of chemical reactions. Which means they are unaffected by cold temperatures, performing the same at -30 °C as they do at +40 °C.

### TRAVEL RESTRICTIONS:

Supercapacitors are considered passive electronic elements. And so there are absolutely no restrictions for air travel or shipping and when ski touring far from civilization there are no issues with having to refill cartridges or maintaining lithium-ion batteries.

### SAFEGUARDED AIRFLOW:

In the Alproof, the air bag system is housed in a protective shell to safeguard air supply to the compressor at all times. There is no possibility for a jacket or similar to wrap itself round the intake and obstruct the air supply.

### FREEDOM OF MOVEMENT:

The Alpride E2 system can be deployed without hesitation at the first sign of an avalanche. There is nothing obstructing the wearer's vision or affecting their mobility, for improved chances of evading an avalanche.

### EASY TO CHECK:

An automatic auto test at the start and the LED lights ensure the system is always fully functional. The display is visible from the outside so that it can be checked (by the wearer or their partner) without having to remove the backpack.

SAFETY: Added to standard avalanche equipment, an avalanche backpack provides increased safety. But beware: None of these substitute meticulous planning and assessment of the terrain.





**Packing List & Selling Points**

- lid pocket
- main compartment
- safety gear compartment / pocket
- helmet holder

**SNOWSHOE / SKI**

**WHAT TO WEAR:** Ski-/ Snow shoe equipment, functional touring trousers

<b><u>ESSENTIAL</u></b>		Weight (Average)	My pack weight
<input type="checkbox"/>	Backpack	1290 g	
<input type="checkbox"/>	Probe	300 g	
<input type="checkbox"/>	Shovel	750 g	
<input type="checkbox"/>	crampons	190 g	
<input type="checkbox"/>	Extra long-sleeve shirt	200 g	
<input type="checkbox"/>	Thick gloves	280 g	
<input type="checkbox"/>	Water- and windproof jacket	500 g	
<input type="checkbox"/>	Water- and windproof pants (to pull over)	300 g	
<input type="checkbox"/>	Sunscreen, lip balm (UPF 30)	60 g	
<input type="checkbox"/>	Sun-/glacier glasses, ideally with photochromic lenses	30 g	
<input type="checkbox"/>	Drinking bottle or bladder with at least 1l capacity (depending on tour)	1190 g	
<input type="checkbox"/>	Electrolyte and magnesium tabs	10 g	
<input type="checkbox"/>	First Aid Kit S (incl. rescue blanket)	150 g	
<input type="checkbox"/>	Blister Pads	20 g	
<input type="checkbox"/>	Headache pills	20 g	
<input type="checkbox"/>	ID, cash, credit card, plastic bag	40 g	
<input type="checkbox"/>	Headlamp	80 g	
<input type="checkbox"/>	Mobile phone with emergency numbers	130 g	
<b>APPROXIMATE WEIGHT "ESSENTIAL" (INCL. BACKPACK)</b>		<b>5,54 kg</b>	

***WHAT TO WEAR:*** Ski-/ Snow shoe equipment, functional touring trousers, functional shirt, functional jacket or gilet, hat, light gloves, avalanche transceiver (test batteries before tour!), backpack

## SELLING POINTS

### FOR CLIMBING/MOUNTAINEERING/SNOW SPORTS PACKS

**100% SOLID BUILD QUALITY:** deuter backpacks are robust, uncomplicated and built to take a beating: No screws that might loosen, no plastic parts that might break.

**FUNCTIONAL:** From ice axe attachments and rear opening packs to detachable lids - everything is easy to use and tailored to the job at hand.

**INCREASED SAFETY:** All our Alpine packs come with an SOS label and a safety whistle on the sternum strap (except the Motion pack). All winter packs feature a dedicated shovel pocket for quick access to emergency avalanche equipment.

**TAILORED FIT:** The larger the capacity, the more important it is to have a back system that fits. That's why deuter offers two fit categories: Regular, and SL for women. Each one is designed to suit the specific anatomy of the person carrying it.

**FIELD TESTED:** Our products are put through their paces on average 200 days a year by mountain and ski guides. This equates to 8-10 years of regular use, in just 12 months.



"I have used deuter backpacks since my Naimona'nyi (7,694m) expedition in 2011. A pack that I use on the mountain is more than just a product, it is a tool that has been built by the creative team behind a brand. This pack reminds me of the Product Management team at deuter. And when I think of the passion with which they approach their work, I feel less alone out there, even when conditions sometimes are pretty extreme. It is as though I were climbing for them, and realising the hopes and dreams they had for the product they developed. I look forward to embarking on expeditions and climbing many more peaks with a deuter at my side."

89





ROAD/PASS  
CYCLING  
LONG-DISTANCE

1 day



RACING  
POST-WORK RIDE  
TRAINING

1 day



ENDURO  
CHALLENGING  
SINGLETRACK

1 day



MTB TOUR  
BIKE & HIKE  
WEEKEND RIDE

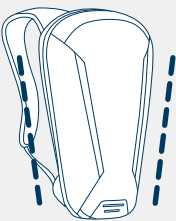
1-3 day



ALL-MOUNTAIN  
MOUNTAIN TRAVERSE  
MTB TOURING

2+ day

5 litres

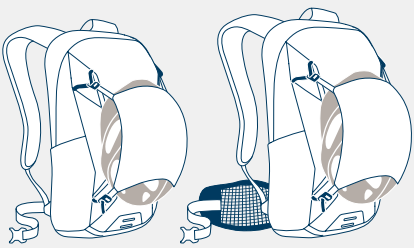


ROAD ONE

FULL-CONTACT  
CARRY SYSTEM  
CONTACT

- compact & ultra-light
- easy access to jersey pockets

8-14+3 litres



RACE LITE /  
RACE

FULL-CONTACT  
CARRY SYSTEM  
AIRSTripES

- compact & ultra-light
- secure fit
- ventilation

RACE AIR /  
RACE EXP AIR

MESH  
CARRY SYSTEM  
AIRCOMFORT

- maximum ventilation
- compact & light

8-22 litres



COMPACT

FULL-CONTACT  
AIRSTripES  
with stabilising rods

- secure fit
- maximum functionality
- ventilation

FLYT

FULL-CONTACT  
AIRSTripES  
with ultra-light protector

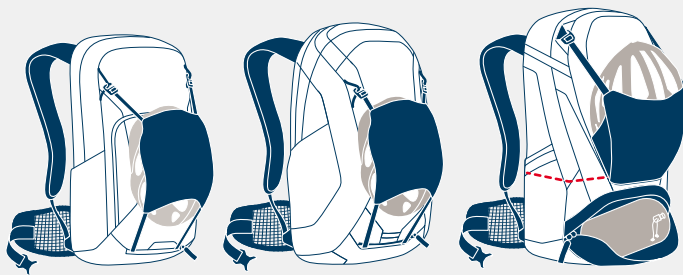
- maximum safety
- secure fit
- ventilation

ATTACK

FULL-CONTACT  
CONTACT  
with multi-impact protector

- maximum safety
- secure fit
- maximum functionality

14 - 24 litres



BIKE I

FULL-CONTACT CARRY SYSTEM  
AIRSTripES  
with stabilising rods (except Bike I 14)

- good load transfer
- maximum functionality
- secure fit
- ventilation

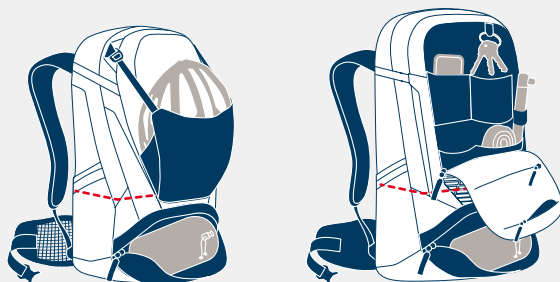
SUPERBIKE

TRANS ALPINE

FULL-CONTACT  
CARRY SYSTEM  
AIRSTripES  
with stabilising rods

- superior load transfer
- maximum functionality
- secure fit
- ventilation

26 - 32 litres



TRANS ALPINE

FULL-CONTACT  
CARRY SYSTEM  
AIRSTripES  
with stabilising Rods

- superior load transfer
- maximum functionality
- secure fit
- ventilation

TRANS ALPINE PRO

FULL-CONTACT  
CARRY SYSTEM  
AIRSTripES PRO  
with spring steel frame

- maximum load transfer
- maximum functionality
- secure fit
- ventilation

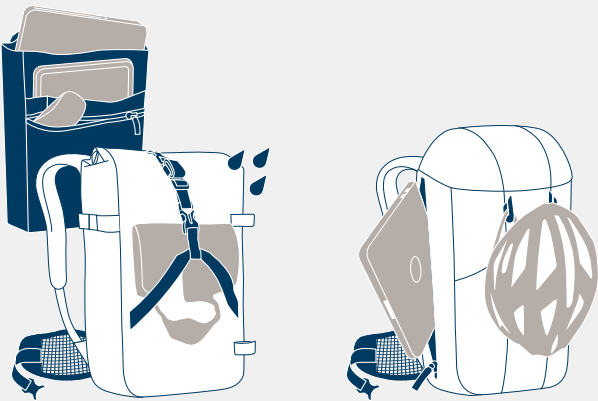




BIKE COMMUTING  
POST-WORK RIDE  
CITY

0,5 - 1 day

25+5 litres



AMAGER

ROTSOORD

FULL-CONTACT CARRY SYSTEM  
AIRSTripES  
with stowable hip fins

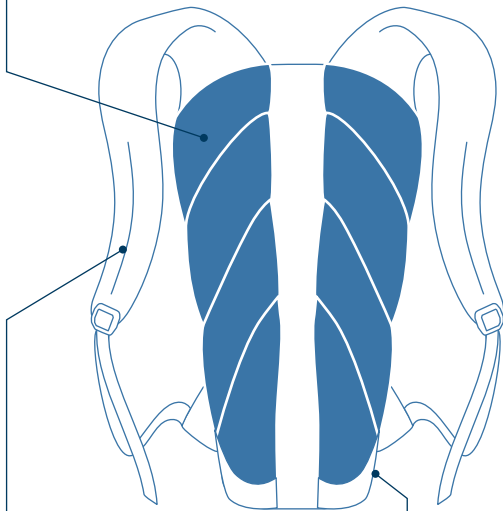
- Solid, secure fit
- Air Spacer mesh for increased ventilation
- Amager: waterproof fabric

Recommended load **4 kg** up to **7 kg**

deuter  
CONTACT



**LIGHTWEIGHT 3D-AIRMESH BACK PADDING**  
keeps the pack close & snug against  
the body



**S-SHAPED, AIRY MESH SHOULDER**  
straps ensure good ventilation  
and full range of movement

**NARROW SHAPE  
WITHOUT HIP BELT**  
for easy access  
to jersey side  
pockets

CONTACT SYSTEM

Light construction

Compact and lightweight  
thanks to

- airy, cushioning 3D mesh back
- mesh shoulder straps

- snug fit: with the load maintained close  
to the body's centre of gravity and for  
comfortable load distribution

Recommended load **1 kg**

deuter  
AIRCOMFORT

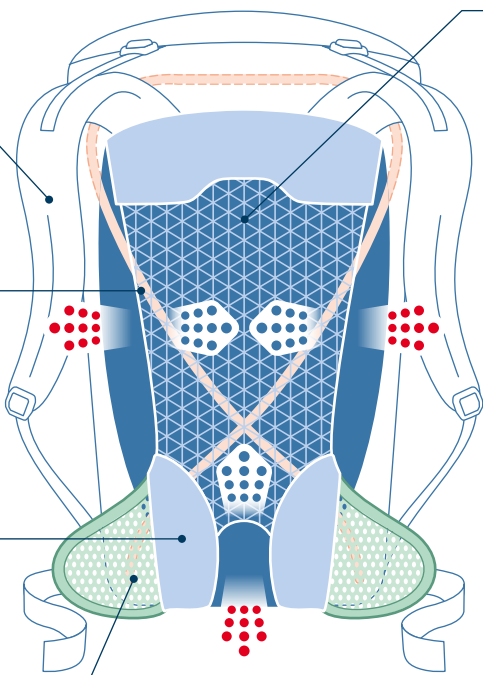


**S-SHAPED, AIRY MESH  
SHOULDER STRAPS**  
ensure good ventila-  
tion and full range of  
movement

**LIGHTWEIGHT, UNBREAKABLE,  
PERMANENTLY ELASTIC  
SPRING STEEL FRAME**  
maintains consistent  
mesh tension and is  
flexible for full freedom  
of movement

**VENTILATION PADS  
COVERED IN 3D AIRMESH**  
for soft, pleasant  
carry comfort

**MESH HIP FINES**  
create a compact fit  
in any riding situation



**AIRCOMFORT FLEXLITE MESH BACK**  
for maximum all-round  
ventilation from all directions

AIRCOMFORT SYSTEM

Up to 25% less perspiration\* due  
to maximum all-round ventilation

- Aircomfort suspended mesh back
- mesh in lumbar region for ventilation  
on all three sides
- mesh shoulder straps and hip fins

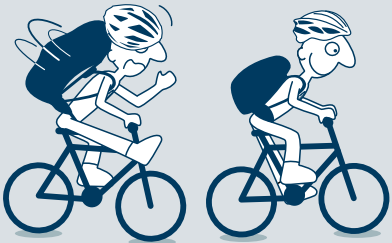
- ergonomic ventilation pads
- mesh hip fins

\* compared to a regular backpack;  
verified by the Hohenstein Institute

Recommended load **1 kg** up to **6 kg**

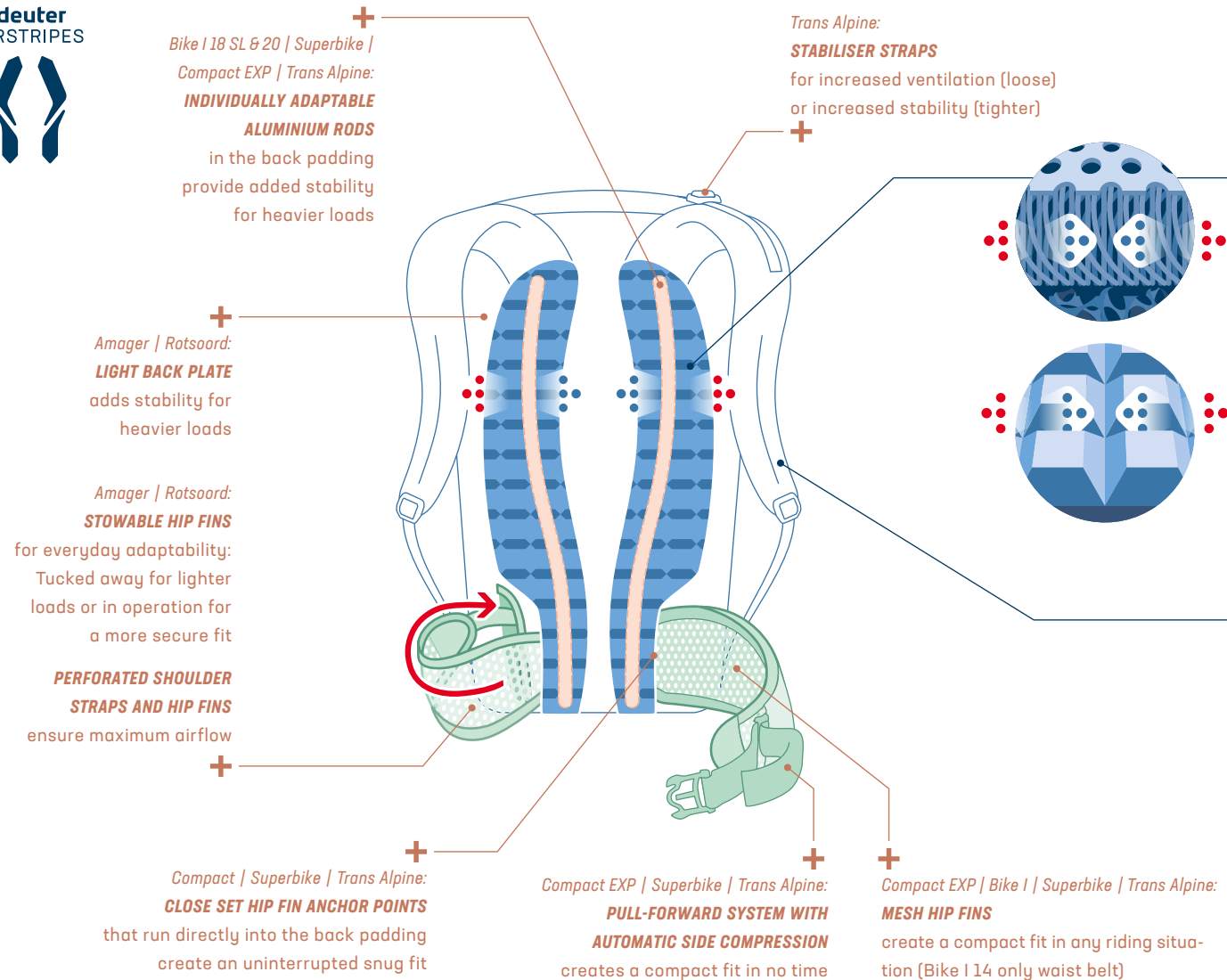
FACT

Is it better to bike with a mesh  
or full-contact carry system?  
It is important for the pack to sit  
snug and close to the body to  
minimise the effect of centrifu-  
gal forces. Tight turns, changes  
in direction at speed and steep  
downhills should not make the  
pack wobble or swerve about.  
That's why the Airstripes is the  
safest and most effective car-  
ry system for biking, especial-  
ly when it comes to heavier  
loads. The Aircomfort system  
isn't quite as close to the body  
as the Airstripes system, but  
consequently offers more ven-  
tilation across the back. This  
means the Aircomfort system is  
good for endurance riding, day  
trips with a light pack or "Bike &  
Hike" adventures.





deuter  
AIRSTripES



## AIRSTripES SYSTEM

Light construction

Compact and lightweight with good ventilation thanks to

- Air-permeable Airstripes padding with ventilation channels or Air Spacer Mesh across the whole back
- large channels between the back pads
- mesh / perforated shoulder straps and hip fins

Compact and lightweight with good ventilation thanks to

- Solid, snug fit that keeps the load close to the body's center of gravity and therefore offers full control over the pack and zero load-wobble
- flat-format Airstripes: pack does not ride up (Compact, Race, Amager, Rotsoord); thick Airstripes padding: Maximum comfort with a full load (Bike I, Superbike, Trans Alpine)
- Hip fins / waist belt

Recommended load **2 kg**

## SHARED FEATURES

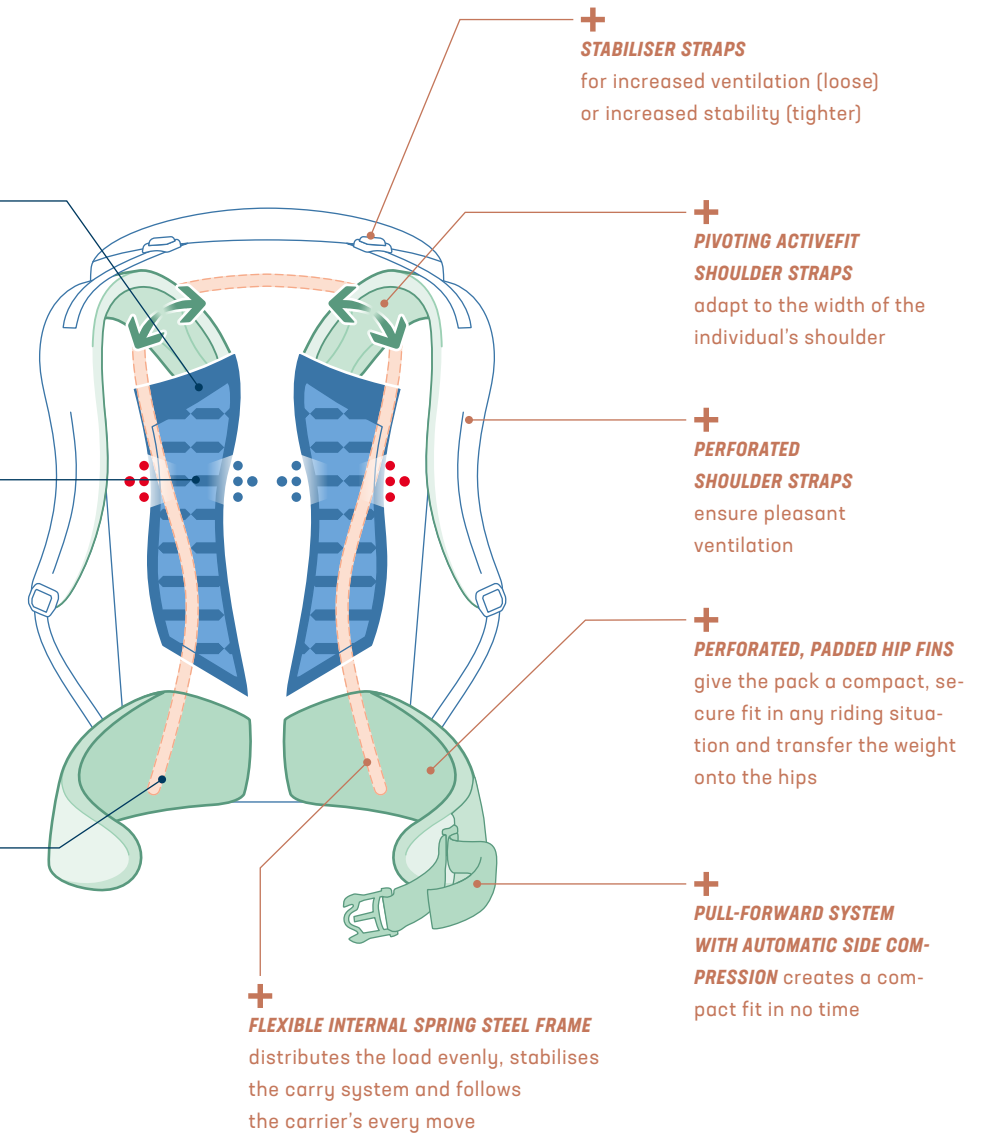
AIRSTripES | AIRSTripES PRO:

**FULL-CONTACT BACK SYSTEM WITH  
AIR-PERMEABLE AIRSTripES PADDING,**  
new Air Spacer Mesh (Amager,  
Rotsoord) or ventilation channels  
(Race, Bike I, Superbike, Trans  
Alpine) generates pleasant air  
circulation over the whole back as  
well as increased ride safety

**THICKNESS OF THE  
AIRSTripES PADDING**  
is precisely determined to  
prevent load wobble (the smaller  
the volume of the pack, the  
flatter the padding becomes)

**S-SHAPED, AIRY MESH  
SHOULDER STRAPS**  
ensure good ventilation and  
full range of movement

**SPACE BETWEEN THE  
AIRSTripES PADS**  
leaves room for the spine to  
arch in a more aggressive  
ride position



## AIRSTripES PRO SYSTEM

- air permeable Airstripes padding with ventilation channels
- large channels between the back pads
- mesh hip fins

Secure fit and load distribution thanks to

- solid, snug fit that keeps the load close to the body's center of gravity and therefore offers full control over the pack and zero load-wobble
- flexible internal spring steel frame
- thick Airstripes padding: maximum carry comfort when fully loaded
- padded, perfect fitting hip fins with automatic side compression

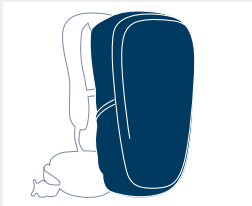
up to **5 kg**



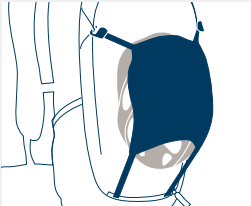




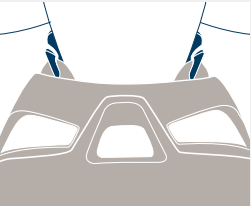
BASIC FEATURES



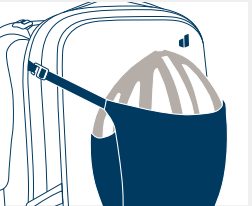
**Compact pack shape:** full range of movement for the head, even with a helmet on



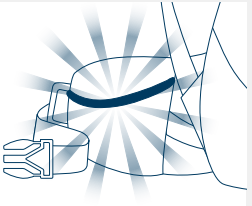
**Stowable helmet holder:** keeps your helmet safely stashed and snug against the pack (Bike I, Superbike)



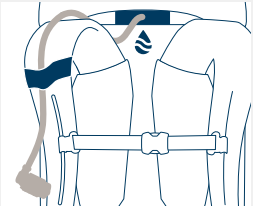
**Attachment clips for half-shell helmet** - quick and easy to stow (Trans Alpine)



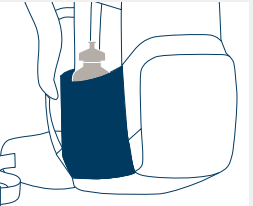
**Stretch front pocket:** keeps your helmet safely stashed and snug against the pack (Trans Alpine Pro)



**3M Reflectors:** for added safety in the rain and low light



**Hydration compatible:** can be used with a hydration bladder (3 L)



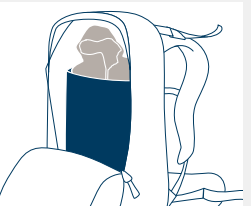
**Stretch side pockets:** keep drinks bottles or snacks handy



**Removable rain cover:** for full rain protection - easy to clean and fast drying

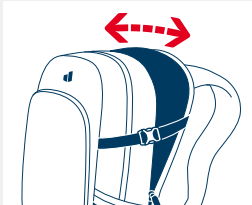


**Internal valuables pocket and key clip**

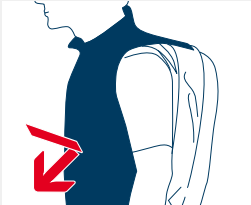


**Stretch inner compartment:** for wet clothing, hydration bladder etc.

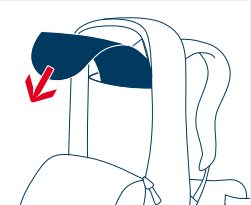
EXTRA FEATURES



**Expandable main compartment:** increases the capacity of the pack



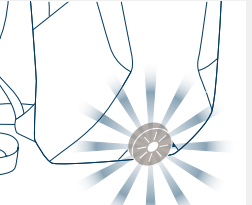
**Patented windshield:** integrated windproof gilet prevents wind chill on the descent and is hi-vis for added road safety (Superbike)



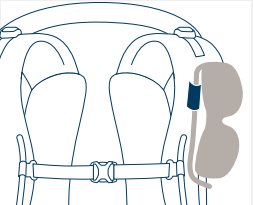
**Removable sit mat:** additional back support and a comfortable seat



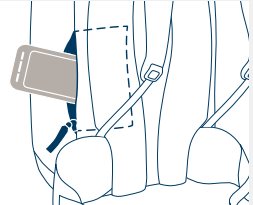
**Zipped pockets on the hip fins:** keep your camera and valuables within reach



**Loop for safety light:** for the attachment of an additional safety light



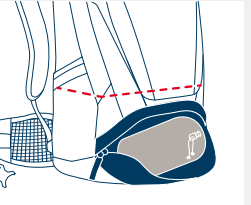
**Glasses stow system:** quickly store glasses using a dedicated loop on the shoulder straps



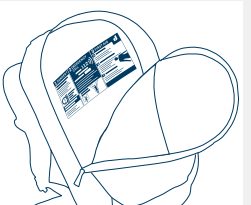
**Easy on-the-move access:** to maps or smartphone in the zipped side pocket against the back



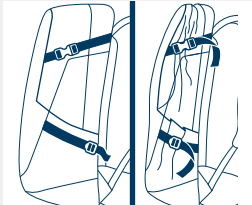
**Tool compartment on front:** fold-out format with large sub-divided section for inner tube, tools and pumps



**Dedicated bottom compartment:** for pack stability and load distribution (partition opens out fully)



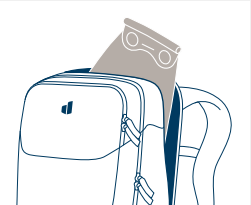
**SOS label:** with international emergency telephone numbers and emergency mountain signals



**Compression straps:** regulate the load and keep it close to the body



**Abrasion-proof and anti-slip material:** on shoulder straps and back for carrying bike (loosened stabiliser straps)



**Dedicated hydration bladder compartment:** easy to load and refill with a full pack



AIRSTripes SYSTEM

BIKE I 14 | 18 SL | 20



AIRSTripes SYSTEM

SUPERBIKE 14 EXP SL | 18 EXP



AIRSTripes SYSTEM

TRANS ALPINE 24 | 28 SL | 30 | 32 EL

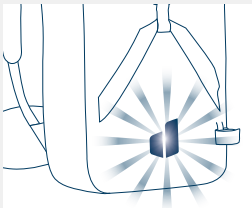


AIRSTripes PRO SYSTEM

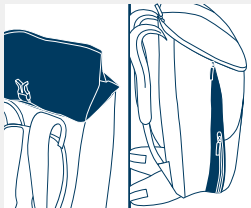
TRANS ALPINE PRO 26 SL | 28



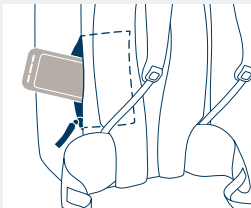
BASIC FEATURES



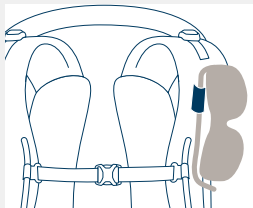
**Reflectors:** for added safety in the rain and low light



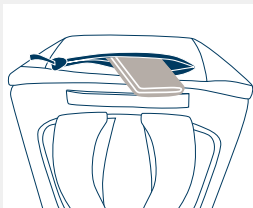
**Extendable capacity (+5 L)** for change of clothes etc. through roll-top closure (Amager) or zip-out, separate front compartment (Rotsoord)



**Zippered cell phone pocket at the side,** against the back for on-the-move access without having to take the pack off (waterproof in the Amager)



**Glasses stow system** on shoulder straps for secure stowing and easy access

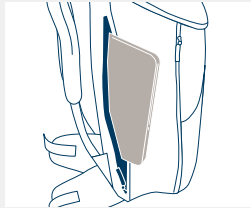


**Internal valuables pocket** (with key clip in the Rotsoord)

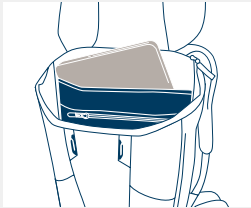
EXTRA FEATURES



**Spacious lid pocket** for secure, handy storage of important items



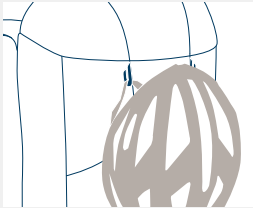
**Reinforced laptop sleeve (15")** accessed from the main compartment or directly through a side zipper



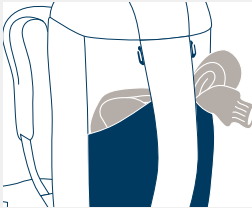
**Organizer compartment** for a tablet, files and documents



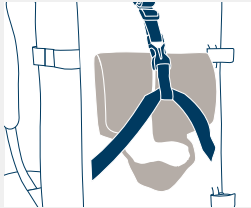
**Removable rain cover:** quick to deploy when needed



**Attachment clips for half-shell helmet** - quick and easy to stow



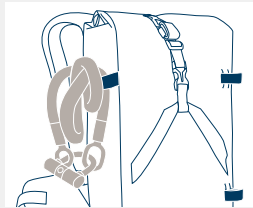
**Stretch front stash pocket** for easy access to jacket, folding umbrella etc.



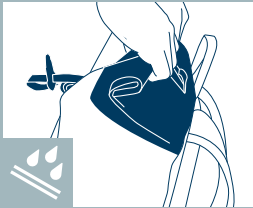
**Adjustable strap on the front** to stow a jacket, newspaper etc. and access it anytime



**Zip-in organizer unit** for documents, tablet and laptop (15", sleeve padded)



**Fast attachment of Padlock or helmet** via gear loops at the side



**Protected from rain** thanks to the waterproof performance of this backpack - full protection only with properly closed roll-top

FACT

Hard-wearing fabric with 10,000 mm water column, taped and welded waterproof seams, and TPU-covered zippers to ensure that the contents are protected from rain and road spray when used as intended - these are the distinctive features of our new waterproof bike backpack, the Amager. Find out more on page 15.



AIRSTripES SYSTEM

AMAGER 25+5



AIRSTripES SYSTEM

ROTSOORD 25+5





# MULTI-DAY BIKE TOUR

ESSENTIAL	Weight (Average)	My pack weight
● Backpack	1150 g	
● Extra long-sleeved jersey / arm warmers	70 g	
● Extra pants / knee or leg warmers	80 g	
● Windproof jacket / vest	150 g	
● Waterproof jacket	500 g	
● Waterproof pants	200 g	
● Hat / headband / buff	60 g	
● Long finger gloves	60 g	
● Sunscreen	60 g	
● Hydration bladder with at least 1l capacity (depending on tour)	1190 g	
● Electrolyte and magnesium tabs (capsules)	50 g	
● Energy gel, muesli, dried fruit, nuts, bars as required	150 g	
● First Aid Kit M (incl. rescue blanket)	310 g	
● Personal medication	100 g	
● Multi-tool	260 g	
Tools: Spare tube, Pump, Patch kit, Brake pads, Spare screws, Zip ties, Lustre terminal (provisio- nal for fixing derailleur cables)	710 g	
● ID, cash, credit card, plastic bag	40 g	
● Washing bag (travel shower gel, tooth brush / paste, small functional towel, tissues, ear plugs)	320 g	
● Sleeping bag liner, if necessary	250 g	
● Mobile phone with emergency numbers	130 g	
APPROXIMATE WEIGHT "ESSENTIAL" (INCL. BACKPACK)	5,84 kg	

RECOMMENDED	Weight (Average)	My pack weight
● Underpants & Undershirt	150 g	
● Extra socks / overshoes	100 g	
● Light pants	200 g	
● Hut shoes	180 g	
● T-Shirt	150 g	
● Detergent	70 g	
● Oil, duct tape	100 g	
● Pen	15 g	
● Bicycle lights	80 g	
APPROXIMATE WEIGHT "RECOMMENDED"	1,04 kg	
WITHOUT MOUNTAIN GUIDE	Weight (Average)	My pack weight
● Guide book, maps	150 g	
● GPS device & Compass	300 g	
● Headlamp	80 g	
● Suspension pump	400 g	
● Bivouac sack	280 g	
APPROXIMATE WEIGHT „WITHOUT BIKE GUIDE“	1,21 kg	
APPROXIMATE (OVERALL WEIGHT)	8,09 KG	

**WHAT TO WEAR:** Jersey, cycling shorts, windstopper jacket / gilet, gloves, helmet, mountain biking shoes, sunglasses (ideally with photochromic lenses), bike backpack



## MY DEUTER

"When I'm travelling and biking in various places around the world, I need to be able to rely on my equipment 100%. With deuter, I've never been disappointed. You can just feel the wealth of experience that's built into their backpack designs and their many functional details. deuter collaborates with experts to continuously improve the fit of their packs and ensure they sit snug on your back. They're incredibly comfortable to carry. It means I'll happily keep on pedalling after however many kilometres."

GERHARD CZERNER, member of the deuter Bike family. Gerhard is a biker through and through, whether it's mountain biking adventures, guiding or teaching riding technique. He loves the friendly atmosphere at deuter and the fact that athletes' ideas are fed into and acted upon in the development of their products.

## SELLING POINTS FOR BIKE PACKS

**PIONEERING:** In 1991, deuter teamed up with Transalp pioneer Andi Heckmair to develop the very first bike-specific backpack. The Bike I set new standards (that still stand to this day) with a helmet holder, reflectors, tool compartment, drinks bottle holder, rain cover and a compact pack shape. The deuter Bike I is 'the original' bike back and forefather of all bike packs.

**SUPERIOR VENTILATION:** The Air Spacer Mesh and ventilation channels of the Airstripes back system with minimized contact surface and air-permeable Airstripes padding creates noticeably superior ventilation.

**INCREASED SAFETY:** The Airstripes system creates a snug fit against the body so the rider maintains balance even through more demanding sections.

**COMFORT:** The spine has plenty of room between the two Airstripes back pads, even when in ride position.

**UNOBSTRUCTED VISION:** The compact shape of our Bike packs means you can always see over your shoulder. Even in a more extreme ride position, your helmet won't get knocked forward and obstruct your vision.

**TAILORED FIT:** Carry comfort can only truly be achieved with a backpack that fits properly. That's why deuter offers different sizes: Standard, SL women's fit and EL (Extra Long) - ensure the perfect fit for all: men, women, tall or short.

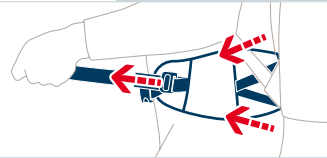
**WATERPROOFING:** The waterproof Amager protects contents by keeping out rainwater and road spray.

**PROVEN QUALITY FOR EVERYDAY USE:** Sudden changes in direction, turning left, turning right, overtaking - the city streets can require your full focus, so keeping your balance is key. For the Rotsoord and Amager we've combined practical everyday functionality with the know-how we've accumulated from our mountain bike range.

**COMPACT FIT:** Thanks to mesh hip fins with automatic side compression and close set anchor points (Compact EXP, Superbike, Trans Alpine, Trans Alpine Pro).

**STABILISED LOAD:** On larger packs, flexible parallel aluminium rods or a lightweight spring steel frame provide added stability.

**BEST BRAND:** Readers of MOUNTAINBIKE Magazine (Germany) voted deuter 'Best Brand' for 16 years in a row since 2001. Our heartfelt thanks!





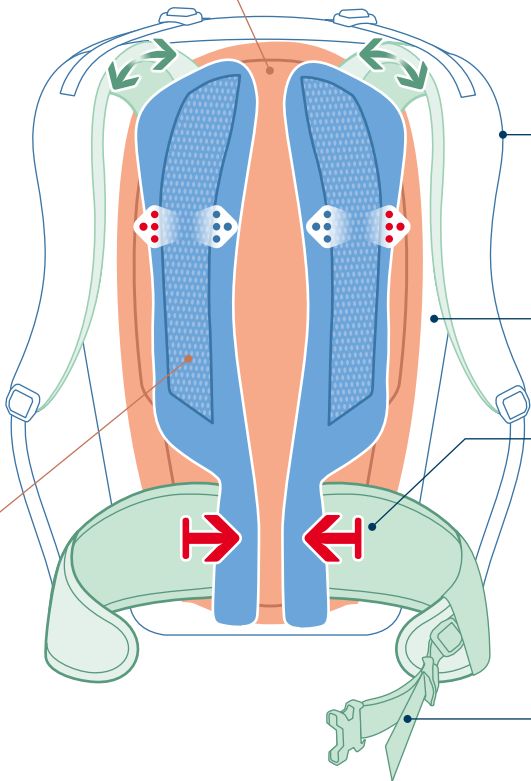
deuter  
AIRSTripES



**ULTRA-LIGHT PROTECTOR FOAM** provides the lightweight Flyt series with maximum impact protection (single use). EPP protector foam absorbs impact yet is lightweight thanks to its special cell structure, which means it is largely made up of air. The side of the protector that's against the back is made up of honeycomb-shaped elements. These are mobile, so that the protector flexes with the body and is always snug against it. On the outer surface, it benefits from a tear-resistant backing layer that provides additional stability.



**AIRSTripES PADDING** has ventilation channels that generate air flow across the entire back, and creates a secure, snug fit with zero load wobble.



SHARED FEATURES

AIRSTripES | CONTACT:

**PIVOTING S-SHAPED SHOULDER STRAPS WITH TAPERED STRAP ENDS** adapt to the shoulder width of the individual and guarantee full working radius for the arms

**COMPACT SHAPE COVERS SENSITIVE BACK AREA** and provides excellent mobility

**HIGH SET HIP FINS WITH CLOSE SET ANCHOR POINTS** fix the pack in place directly under the ribcage so that it does not ride up on the downhill. For uphill, the hip fins can be repositioned right over the crest of the hip to distribute the load effectively.

**PULL-FORWARD SYSTEM WITH AUTOMATIC SIDE COMPRESSION** quickly creates a snug, compact fit for the hip fins

AIRSTripES SYSTEM  
with integrated ultra-lightweight SHIELD back Protector

Ventilation

Lightweight yet with maximum protection thanks to

- EPP foam protector (single impact): highly effective, ultra-light and barely noticeable (removable)
- Lightweight mesh hip fins



- Airstripes back padding for air flow across the back and secure fit
- Close set, high set hip fins
- Shoulder straps with stabilizer straps
- Hip fins with automatic side compression

\*State-of-the-art protector from  
**SAS-TEC**  
body protection systems

Recommended load **2 kg**

deuter  
CONTACT

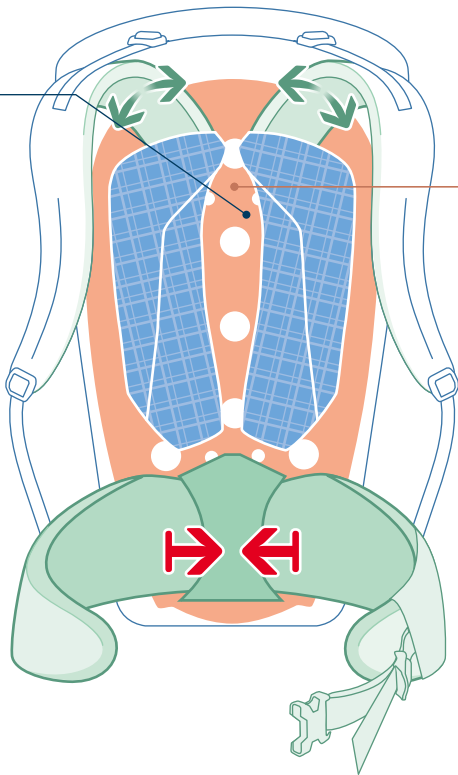
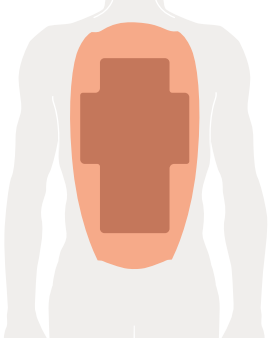


SHARED FEATURES

AIRSTripES | CONTACT:

**SAS-TEC BACK PROTECTOR HELPS PREVENT SEVERE INJURIES IN THE CASE OF A FALL**  
The back system materials are specifically designed to support the functionality of the back protector. Together, they provide the highest level of safety – in accordance with motorcycle safety standards. The impact protection is effective through a wide range of temperatures (from -20°C to +40°C / -4 to 104 Fahrenheit). The expanded protection zone further increases safety.

protection zone  
as specified by EN standards  
Protection zone SAS-TEC Protector



**VISCOELASTIC PROTECTOR FOAM** is at the heart of the Attack series. This 'memory' foam is soft and flexible during regular use but the faster it is impacted, the harder it becomes. In this way, it absorbs some of the force of the impact, similar to a shock-absorber (a hard shell protector by contrast simply distributes the force.). The foam springs back to its original shape each time it has been impacted (memory effect), so you can keep using the protector, even after a fall (multi-impact). A PE plate within the pack's carry system provides additional protection from sharp or pointy objects.

CONTACT SYSTEM  
with integrated MULTI-IMPACT back Protector

- Viscoelastic SCA\* protector foam: Highly effective, multi-impact and extremely flexible (removable)
- PE plate for additional protection
- Perforated hip fins & shoulder straps



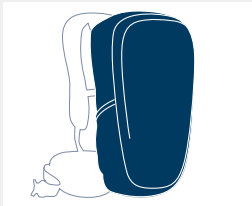
**3-IN-1 SOLUTION:** Enough stow space for extended day rides combined with safety and carry comfort

- Stabilizing full-contact back system with zero load-wobble
- very close set, high set hip fins
- More substantial hip fins with automatic side compression
- More substantial stabilizer straps with stabilizer straps

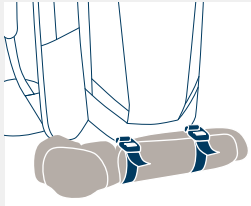
up to **6 kg**



BASIC FEATURES



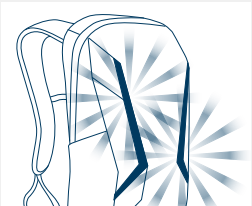
**Compact pack shape:** full range of movement for the head, even with a helmet on



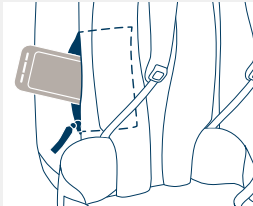
**Protection equipment can be attached:** to the bottom of the pack using two stowable straps



**Tool compartment on front:** fold-out format with large sub-divided section for inner tube, tools and pumps



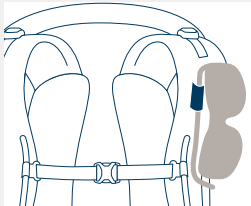
**3M Reflectors:** for added safety in the rain and low light



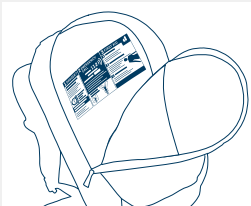
**Map compartment:** at the side and against the back so it's easy to access on the move



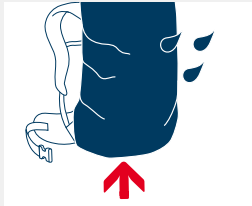
**Hydration compatible:** can be used with a hydration bladder (3 L)



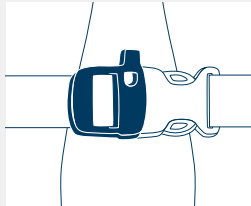
**Glasses stow system** on shoulder straps for secure stowing and easy access



**SOS label:** with international emergency telephone numbers and emergency mountain signals

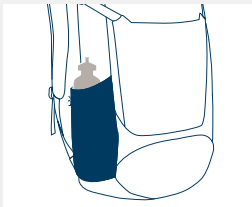


**Removable rain cover:** for full rain protection – easy to clean and fast drying

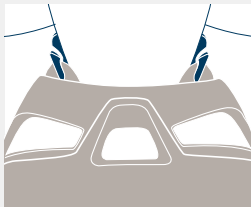


**Safety whistle:** requires minimal force to generate loud audible sound in an emergency

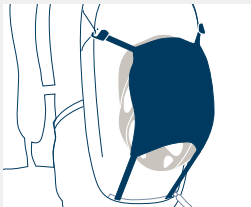
EXTRA FEATURES



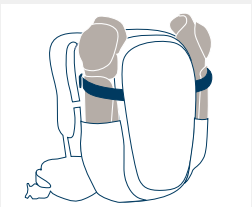
**Stretch side pockets:** keep drinks bottles or snacks handy



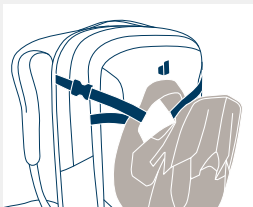
**Attachment clips for half-shell helmet** – quick and easy to stow



**Stowable helmet holder:** keeps your helmet safely stashed and snug against the pack

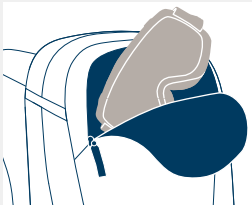


**Side compression straps:** also serve to transport protection equipment

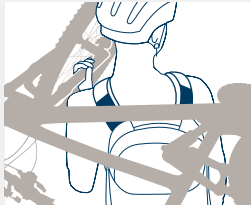


**Full-face helmet can be attached** using side compression straps

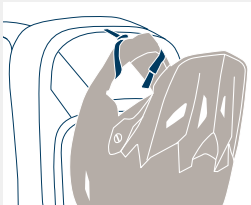
			FLYT 18 SL / 20	
Attack 14 SL / 16: 1 pocket	Attack 14 SL / 16	Attack 18 SL / 20 / 22 EL	Attack 18 SL / 20 / 22 EL	



**Soft-lined glasses pocket:** also fits goggles



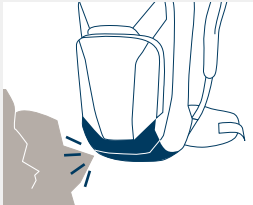
**Abrasion-proof and anti-slip material:** on shoulder straps and back for carrying bike (loosened stabiliser straps)



**Helmet strap** for convenient and secure transport of half-shell and full-face helmets



**Dedicated hydration bladder compartment:** easy to load and refill with a full pack



**Hardwearing material at the bottom of the pack** is dirt-repellent and washable

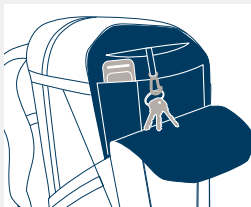
--	--	--	--	--

INTEGRATED SAS-TEC BACK PROTECTOR

The main purpose of the Deuter backpacks with built-in SAS-TEC back protectors is to minimize or even prevent injury during high-risk sports. Deuter backpacks with an integrated back protector (Deuter Shield System) are specially designed and certified for sports like mountain biking or skiing. The protector will protect the wearer from some severe injuries, such as compression fractures or hyperextension of the spine, but not all injuries. It can only protect the area of the back that is covered. *That's why Deuter has designed different sized protectors to suit different back lengths.* Further important product information can be found in the user manual that comes with the backpack or on the label inside the backpack:



**Zipped pockets on the hip fins:** keep your camera and valuables within reach



**Internal valuables pocket and key clip**

ATTACK 20

Size M-XL

44 - 54 cm

170 - 195 cm

1

2

3

BACK PROTECTOR BACKPACK

Deuter Sport GmbH  
Daimlerstraße 23  
86368 Gersthofen | Germany  
www.deuter.com

deuter

TUV

SGS

1 Backpack name 2 Areas of application 3 Size:

AIRSTripES SYSTEM

FLYT 12 SL | 14 | 18 SL | 20

CONTACT SYSTEM

ATTACK 14 SL | 16 | 18 SL | 20 | 22 EL

Size	Back lengths	Body Size	Model
XS - S	34 - 44 cm	145 - 170 cm	Attack 8 JR
S - L	38 - 48 cm	160 - 175 cm	Attack 14 SL / 18 SL Flyt 12 SL / 18 SL
M - XL	44 - 54 cm	170 - 195 cm	Attack 16 / 20 Flyt 14 / 20
L - XXL	48 - 58 cm	185 - 205 cm	Attack 22 EL

The SAS-TEC back protector is removable. A warning tag appears if the protector is removed, because its protective function only applies with the protector in place.

Enduro

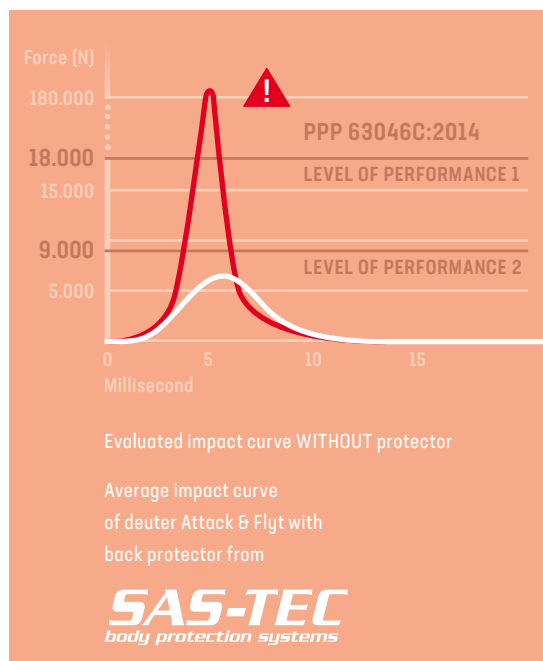
Challenging singletrack

106

107



# ATTACK UND FLYT – TESTED ACCORDING TO STANDARDS USED FOR MOTORCYCLISTS



Before a protection device can be called a PROTECTOR it must pass stringent tests. deuter back-packs with SAS-TEC back protectors are tested and certified by TÜV SÜD Product Service GmbH (0123) in accordance with VO (EU) 2016/42 standards for Personal Protective Equipment. The levels of residual force determined by its shock-absorbing performance meet the requirements of the TÜV SÜD test specification PPP 63046C:2014 for back protectors.

The capability for the protector to absorb mechanical energy is assessed by performing an impact test: A wedge-shaped weight is dropped from a height of one metre onto the protector. An anvil with a load measurement unit underneath then measures how much residual force remains under the protector. The EN standard distinguishes between two levels of protection. Level 1 for protectors that achieve an average of 18,000 N. The more stringent level 2 requires an average value below 9,000 N – with no single value higher than 12,000 N.

## OUTSTANDING SHOCK ABSORPTION: DEUTER'S BACKPACKS WITH BUILT-IN BACK PROTECTORS

The average shock absorption value for deuter protector packs (white line) is around 6,500 N and therefore falls within the Class 2 protection category – the same as motorcycle safety standards. The very flat curve shows that the force of the impact is greatly diminished and distributed - i.e. does not hit the body as sharply or in as concentrated an area. Average protectors (red curve) show almost double the transmitted force and a much steeper impact curve. Without any protection, the peak impact force would be around 108,000 N (evaluated).

## ATTACK DURABLE MULTI-IMPACT BACK PROTECTOR



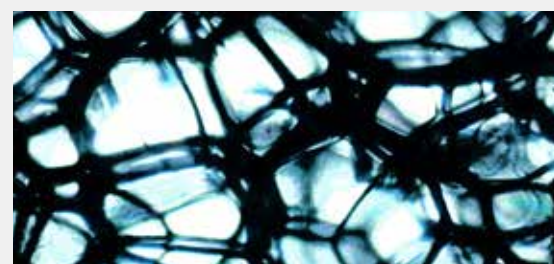
The viscoelastic protector foam is fully flexible during regular use, for superior comfort.



When gradual pressure is exerted the foam reacts gradually.

The faster the impact however, the harder the foam becomes. This is how it absorbs the force of the impact and evenly distributes any residual force. After impact, the SC-1 foam returns to its original shape.

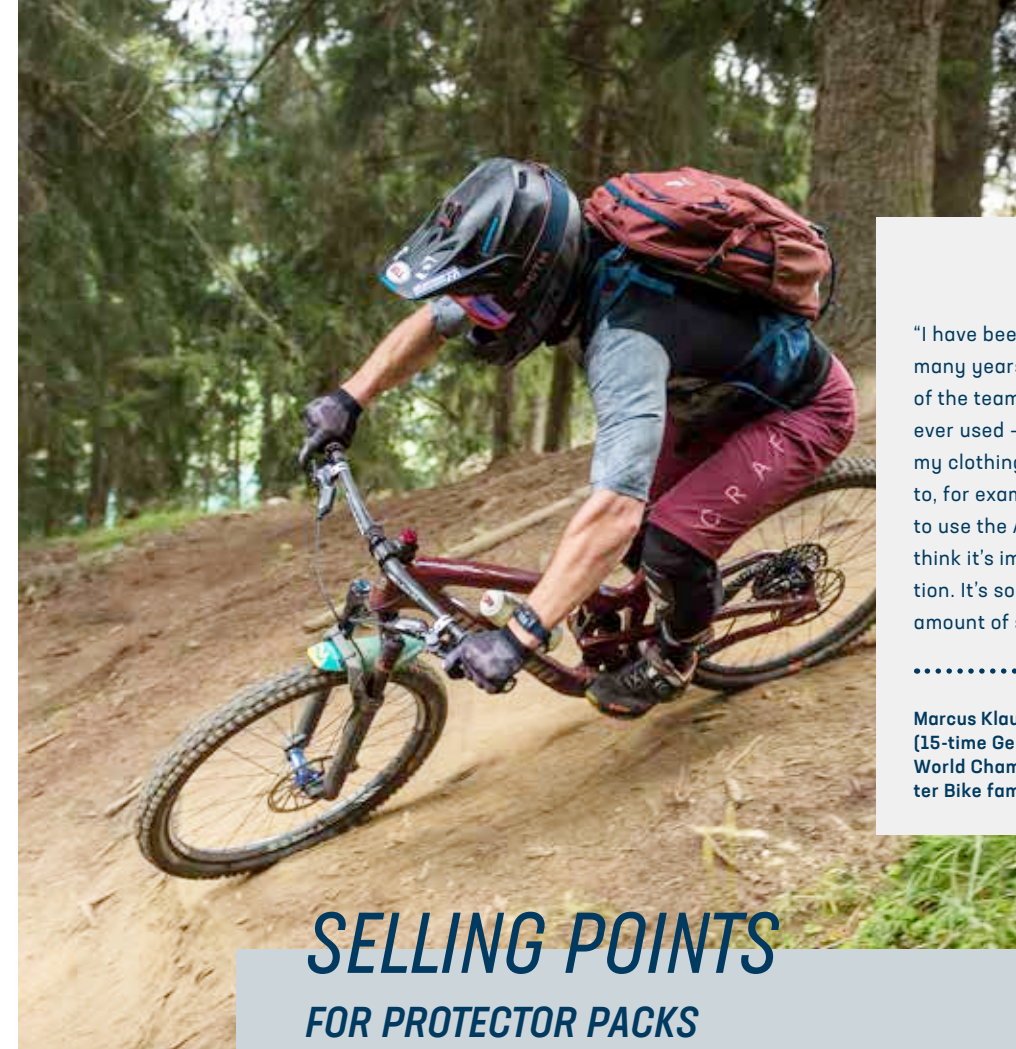
## FLYT ULTRA-LIGHT BACK PROTECTOR



Even though the EPP foam is sturdy and shock absorbing, it is also ultra light, since expanded polypropylene is large made up of air.



The side of the protector that's against the back is made up of honeycomb-shaped elements. These are mobile, so that the protector flexes with the body and is always snug against it. On the outer surface, it benefits from a tear-resistant backing layer that provides additional stability. After a crash, deuter will replace a misshapen back protector (single impact) within the two-year warranty period.



## MY DEUTER

"I have been in partnership with deuter for many years now and am very proud to be part of the team. They make the best bike pack I've ever used – the Attack 20. I use protectors in my clothing of course, but when I don't need to, for example on an enduro course, then I like to use the Attack. Even on a training ride, I think it's important to have good back protection. It's so comfortable and has just the right amount of space for all my kit."

.....

Marcus Klausmann, downhill and enduro champion (15-time German champion) and two-time Trials World Champion is a founding member of the deuter Bike family.

## SELLING POINTS FOR PROTECTOR PACKS

**HIGH SAFETY LEVEL:** The level of protection provided by our TÜV SÜD inspected SAS-TEC protectors complies with motorcycle safety standards and significantly exceeds them.

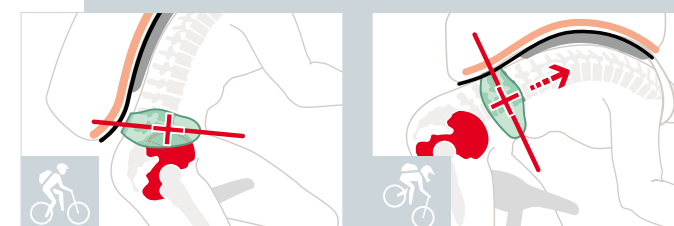
**CHOICE:** The Flyt is for ambitious mountain bikers who want low weight, the Attack is for those who want bomb-proof durability and plenty of functionality – a solution to suit the individual.

**PIONEERING:** The deuter Attack was the world's first ever backpack to feature an integrated, TÜV-certified back protector.

**VERSATILE:** The protector is removable. So that the Attack and Flyt can be used as regular bike backpacks.

**PROTECTOR AND BACKPACK IN ONE:** Not only can you don this protector in no time at all, but there's the added bonus that your safety equipment also functions as a means of carrying all your kit.

**FIRM, SOLID FIT:** Very close set, high set hip fin anchor points fix the packs in place directly below the rib cage, so there's no load wobble and the pack won't ride up on steep downhill sections or over steps. And when pedaling uphill the legs are wholly unrestricted.



## CAN BE USED AFTER MULTIPLE FALLS:

The Attack's SAS-TEC back protector is multi-impact. The viscoelastic memory foam consistently returns to its original shape. It does not break leaving sharp edges or bend irreparably out of shape. After a fall, it can be used again straight away.

## HIGHLY EFFECTIVE SHOCK ABSORPTION:

The Attack's viscoelastic memory foam absorbs the impact – similar to a shock absorber – reducing the force of the impact to a minimum. A hard shell protector by contrast simply distributes the force.

**HARDLY NOTICEABLE:** The faster the impact energy hits the Attack's viscoelastic memory foam, the harder it becomes. During regular use the SC-1 protector foam remains fully flexible and thus provides full freedom of movement.

**PUNCTURE PROTECTION:** The PE plate in the Attack's back system offers additional protection from sharp or pointy objects.

**LIGHTWEIGHT:** Superior comfort and maximum protection in a lightweight package, thanks to pared down styling and light EPP protector foam (Flyt 20 only 175 g).

**VENTILATION:** The Flyt's Airstripes back system combines ventilation across the back with maximum protection.

**SERVICE:** After a crash, deuter will replace a misshapen back protector from a Flyt backpack (single impact) within the two-year warranty period.





BIKE COMMUTING  
POST-WORK RIDE  
CITY

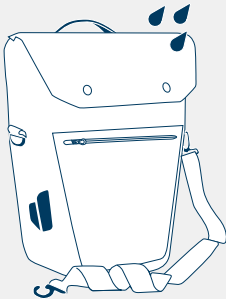
0,5 - 1 day



CYCLE TOURING  
DAY TRIP  
CITY

1+ day

17+10 litres



MAINHATTEN

BAGFIX SYSTEM

- Waterproof material
- BagFix quick-release system for secure attachment on the back

20+5 - 25+5 litres



WEYBRIDGE

BAGFIX SYSTEM

- Waterproof material
- BagFix quick-release system for secure attachment on the back



MY DEUTER

“The aim of these new products was to expand the bike product range, find customized solutions and implement them in line with the market. We’re especially proud of our in-house designed ‘BagFix’ attachment system for panniers. Not only does it look bombproof with its aluminum reinforced rails, but it can also handle heavy loads with ease.”

.....

SEBASTIAN SCHWAGER, Head of Product Management at deuter, keen cyclist from a family of keen cyclists and former ProTour road cycling professional

BAGFIX QUICK-RELEASE SYSTEM  
FOR SECURE ATTACHMENT

The newly developed, exclusive system with sturdy aluminum hooks and rails can be adjusted precisely for the secure and compact attachment of heavy loads to the bike rack

SIMPLY LIFT AND GO

to take pannier off the bike, and it’s just as easy to attach, for a secure fit with zero load-wobble

QUICK MOUNTING ON ALL  
INDUSTRY-STANDARD BIKE  
RACKS

without the use of tools thanks to spacer inserts sized between 16 and 8 millimeters, width adjustment along the mounting rail and bottom lever

VERSATILE USES

as storage on the back of a bike or a large shoulder bag

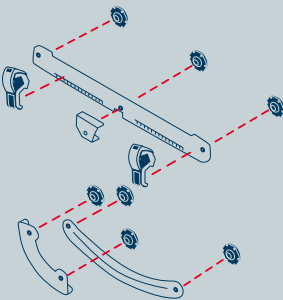
MAXIMUM FREEDOM OF MOVEMENT

for the back and feet: With a pannier, the bike bears 100% of the load - and not your back. Positioning the panniers using the precision-adjustable BagFix system ensures panniers are well out of the way of pedaling feet too

REINFORCED EDGES

make the bag more durable

BAGFIX SYSTEM



FOR A LONGER LIFE

All parts can be replaced by our repair service team. Pads (all 3 sizes) are available to buy as parts.

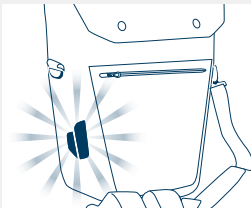
Recommended load **5 kg** up to **10 kg**



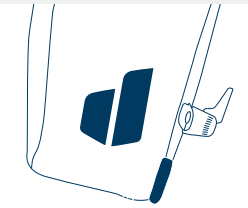
BASIC FEATURES



**Waterproof pannier** keeps contents safe from road spray and rain



**Reflective details** for added safety in the rain and low light



**Reinforced edges** on base protect contents from damage

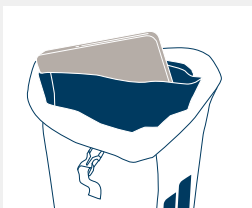


**Detachable shoulder strap** stows in front stretch mesh pocket



**Valuables pocket inside with key clip**

EXTRA FEATURES



**Zip-out organizer unit** for papers, tablet and laptop (15" reinforced sleeve) – quick and easy to grab on the way to your next meeting



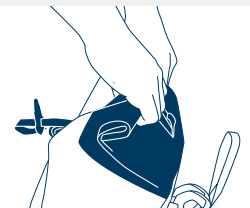
**10 L extendable capacity** through large lid flap with magnetic buckles and water-proof zipper



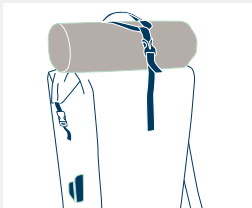
**Zippered front pocket** for quick-access items



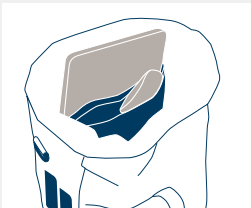
**Front stretch mesh pocket** for bike lock, lights and anything else you need close at hand



**5 L extendable capacity** through roll-top closure



**Adjustable grab handle / closure strap** functions as a gear strap for sleeping mat or jacket



**Built-in padded organizer unit** for tablet, cables, papers etc.



BAGFIX SYSTEM

MAINHATTEN 17+10



BAGFIX SYSTEM

WEYBRIDGE 20+5 | 25+5

City    Commuting    Weekend trip    Cycle touring



SELLING POINTS

PANNIERS

**WATERPROOF TO KEEP CONTENTS DRY:** The waterproof properties of this pannier keep contents safe from road spray and rain. (More on page 15)

**SECURE ATTACHMENT:** thanks to the newly developed, durable BagFix system. Even heavy loads can be mounted without tools and for a solid fit.

**EASY HANDLING:** thanks to modern fabrics with taped seams: waterproof yet supple and pleasant to the touch, it's easy to handle in whatever mode it's used (bag or pannier).

**EXTRA CAPACITY:** The Weybridge can be extended by 5 liters and the Mainhattan by 10 liters volume.

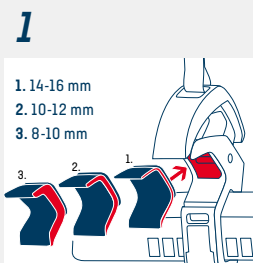
**VERSATILE USES:** As storage on the back of your bike or as a large shoulder bag.

**LIGHTWEIGHT & SPACIOUS:** the Weybridge is the perfect companion for active world travelers.

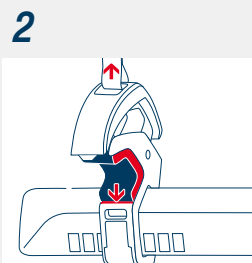
**BUSINESS FIRST:** with the Mainhattan pannier: Carried as a shoulder bag it's styled to match any business outfit. And when all you need for that meeting is your laptop and some papers, simply take the clever organizer unit with you.

**FREEDOM OF MOVEMENT:** for the back and feet: The bike bears 100 % of the load and not your back. Positioning the panniers using the precision-adjustable BagFix system ensures panniers are well out of the way of pedalling feet too.

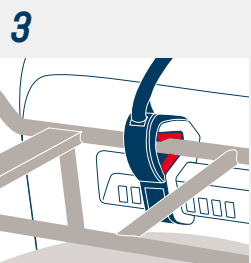
ADAPT THE BAGFIX SYSTEM



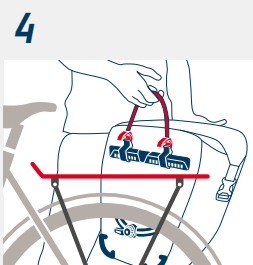
**Adapt to the diameter of the pannier rack rail** by selecting one of the rubber spacer inserts



**Place spacer insert in the BagFix hook** and press the hook firmly down



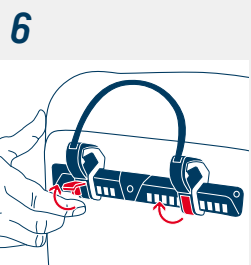
**Check spacer thickness you've selected** creates a snug fit around the rail



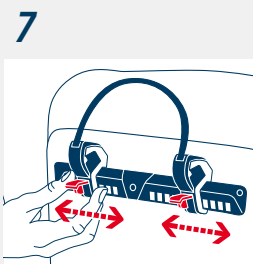
**Pulling the release handle** opens the hooks for easy mounting and removal



**Position pannier along the pannier rack** for maximum pedalling space



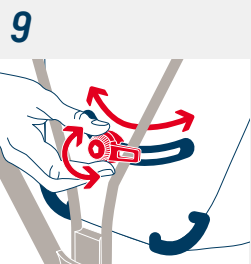
**Open the hook locking mechanism** by lifting the locking levers



**Slide the hooks along the rail** to the correct position



**Lock the clips in place again** by closing the levers until they click



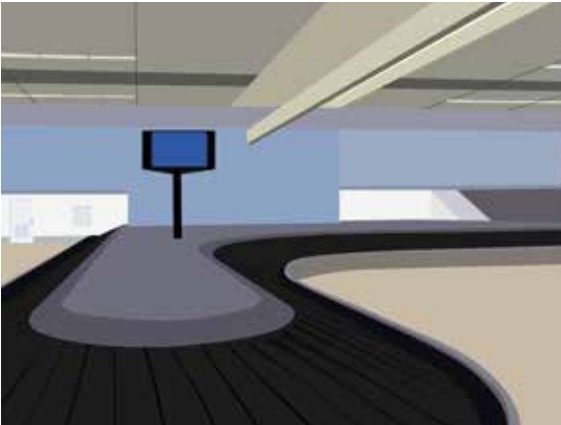
**Rotate the attachment arm** to fit the vertical spurs of your pannier rack and lock





CITY BREAKS  
SHORT BUSINESS TRIPS & COMMUTING  
WEEKEND SPORTS

1-4 days



HOLIDAYS  
FAMILY HOLIDAYS  
BUSINESS TRIPS & COMMUTING

4+ days



WORLD TRAVEL  
BACKPACKING | INTERRAILING  
WORK & TRAVEL

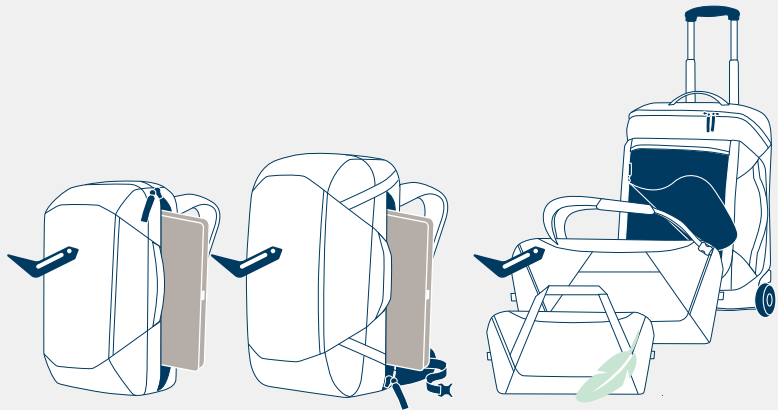
any duration



SPORT TRIPS  
CAMPING HOLIDAYS  
ROAD TRIP

4+ days

28-40 litres



AViANT CARRY ON  
I PRO      AViANT ACCESS  
38 SL & 38      AViANT DUFFEL 35 /  
PRO 40 | PRO MOVO 36

FULL-CONTACT  
with stowable shoulder straps

BACKPACK FUNCTION  
thanks to adjustable carrying  
straps (Duffel) / stowable  
straps (Pro / Pro Movo)

- hand luggage size
- easy packing and contents location
- padded laptop compartment
- hand luggage size
- comfortable carry system
- padded laptop compartment
- hand luggage size
- Duffel: lightweight
- Duffel Pro: robust & water resistant
- Duffel Pro Movo: robust & water resistant roller bag

50-80 litres



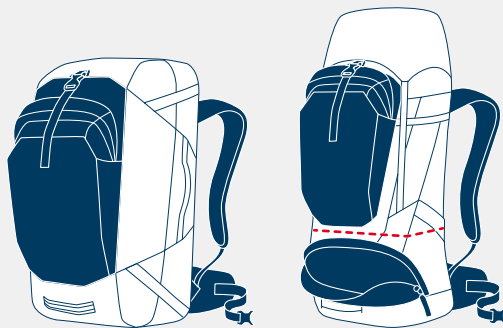
AViANT ACCESS      AViANT ACCESS  
MOVO

FULL-CONTACT BACK  
with spring steel frame

FULL-CONTACT BACK  
SYSTEM  
with wheels

- comfortable carry system
- well organised travel backpack
- trolley-suitcase & backpack in one
- contents overview with suitcase-style packing

55-65+10 litres

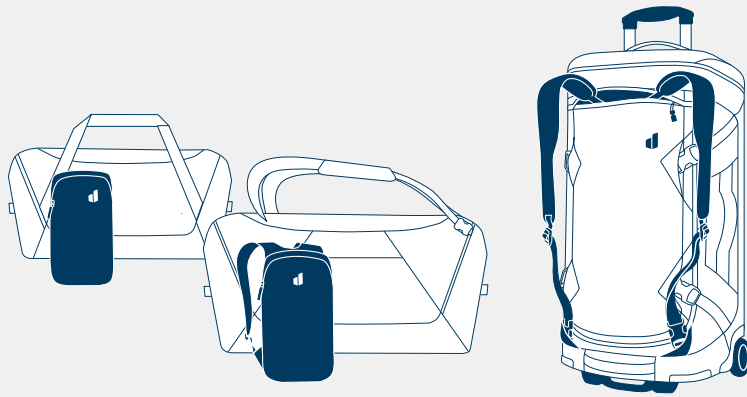


AViANT ACCESS  
PRO      AViANT  
VOYAGER

FULL-CONTACT BACK  
CARRY SYSTEM  
with flex spring steel frame

- comfortable carry system for longer carry periods
- contents overview with suitcase-style packing
- comfortable carry system for short treks
- slender pack shape

50-90 litres



AViANT DUFFEL      AViANT DUFFEL PRO      AViANT DUFFEL  
PRO MOVO

TRAVEL BAG

TRAVEL BAG  
with stowable  
shoulder straps

TROLLEY  
with stowable  
shoulder straps

- carry straps adjust to carry bag on shoulders
- compact & light
- canvas fabric is robust & water resistant
- outer casing doubles up as a small backpack
- canvas fabric is robust & water resistant
- easy packing and contents location





SHARED FEATURES

CONTACT:

S-SHAPED SHOULDER STRAPS

ensure a perfect fit and full range of movement - made from foam that holds its shape for superior carry comfort

STOWABLE BACK SYSTEM

prevents straps and buckles from snagging during transport:

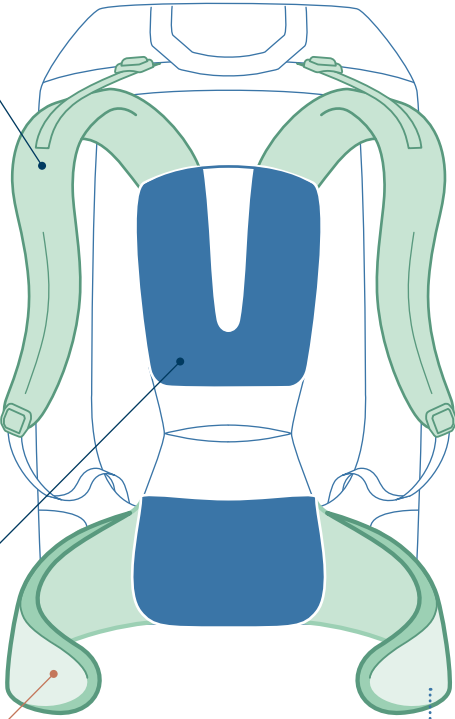
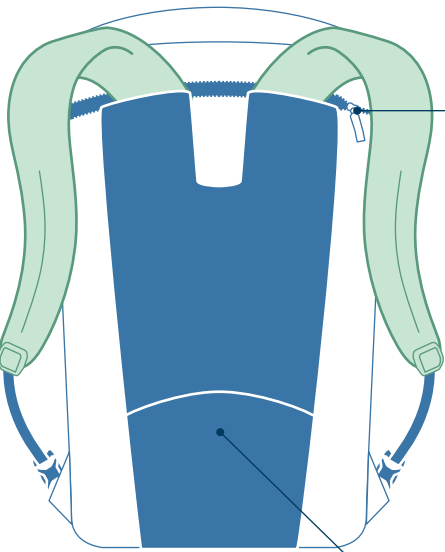
- AViANT Access 38 SL & 38: stowable shoulder straps & hip fins
- AViANT Carry On Serie: stowable shoulder straps
- AViANT Access 50 SL & 55, Access Pro Serie: Zip coverage
- AViANT Voyager: Transport cover

COVERED IN 3D AIRMESH

breathable and robust

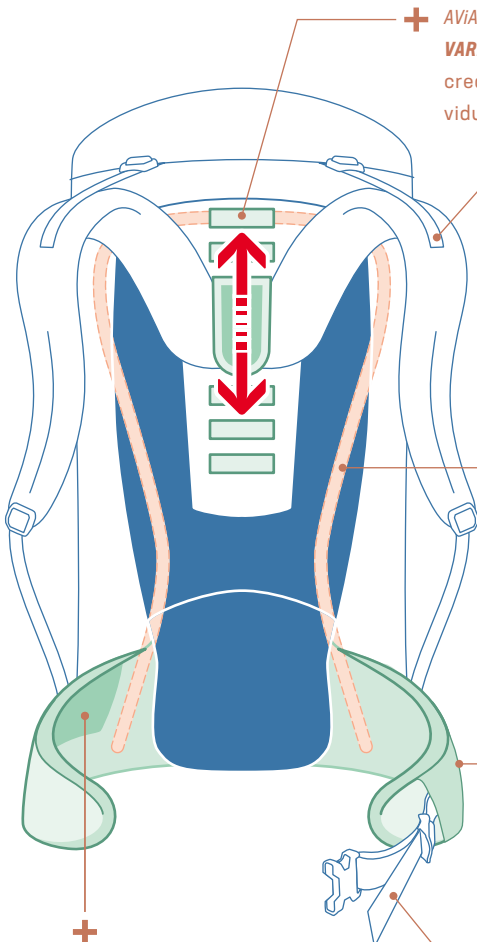
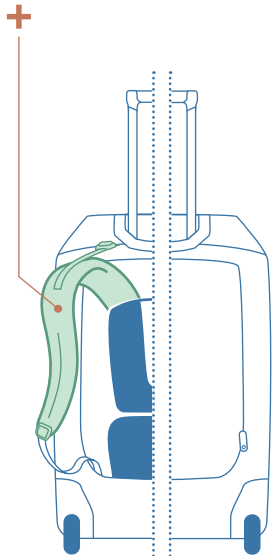
3-DIMENSIONALLY FORMED

Lumbar pads distribute the load over a large surface area and enhance comfort and protection



+ AViANT Access Movo: **INDIVIDUAL FOLD-OUT HIP FINS** for additional comfort over vlonger carry distances

AViANT Access Movo: **FOLD-OUT SHOULDER STRAPS** for speedy transition between carrying and rolling. Once released, these straps can also be used to pull the trolley.



+ AViANT Access Pro / Voyager: **VARIQUICK BACK LENGTH ADJUSTMENT** creates the perfect fit for each individual

+ AViANT Access / Access Pro / Voyager: **STABILISER STRAPS** for increased ventilation (when loose) or increased load control (when tight)

AViANT Access / Access Pro / Voyager: **INTERNAL PERMANENTLY ELASTIC SPRING** steel frame for effective load transfer

+ AViANT Access Pro / Voyager: **FIRM ERGONOMIC HIP FINS** transfer the load effectively - multi-layered construction: soft, cushioning foam on the inside and reinforced, high-density foam on the outside

+ AViANT Access / Access Pro / Voyager: **PULL-FORWARD SYSTEM** makes hip belt easy to adjust with a heavy load

+ AViANT Voyager: **ECL (ERGONOMIC COMFORT LOCK)** Stabilisationspads fixieren Hüftflossen auf Beckenkamm

CONTACT SYSTEM

CONTACT SYSTEM

CONTACT SYSTEM

Mobility

Zero-hassle travel thanks to

- stowable back system: pack turns into a sleek suitcase in no time, for practical handling on crowded trains or flights
- carry-on hand luggage dimensions

Trolley & backpack in one thanks to

- quick-access back system with individual fold-out shoulder straps and hip fins
- robust, replaceable wheels (covered when the hip fins are folded out)

- stowable back system for safe transport
- comfortable back system, designed for longer carry sections (Access Pro, Voyager)

- ergonomic padded back panel for good load distribution
- full-contact lumbar region

Good load transfer thanks to

- full-contact lumbar region
- padded, snug-fitting hip fins

Up to 70 % increased load transfer due to

- ergonomic padded back panel
- full-contact lumbar region
- padded, firm hip fins
- perfect fit thanks to back length adjustment and internal spring steel frame (Access Pro, Voyager)
- ECL (Voyager)

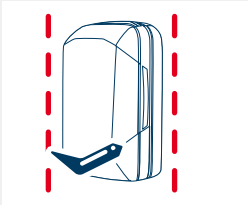
Recommended load **4 kg**

up to **20 kg**

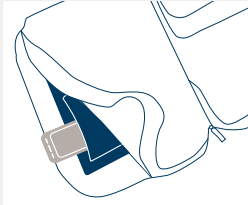




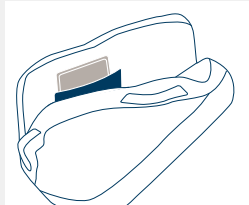
**Suitcase-style:** opens fully for easy packing and contents location



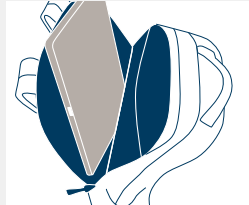
**Carry-on hand luggage size:** avoid check-in queues for zero-hassle travel



**Easy-access organiser compartment:** for clear storage of pens, mobile phone, ID etc.



**Additional tablet compartment**

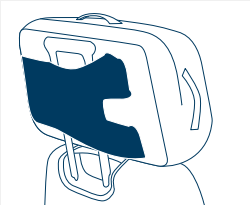


**Padded laptop compartment:** easy to access from the outside


38 SL & 38
36



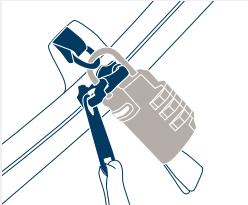
for 15" laptop
for 15" laptop
38 SL & 38: for 13" laptop
36: for 15,6" laptop
for 13" Laptop (inside daypack)
for 13" Laptop (inside daypack)



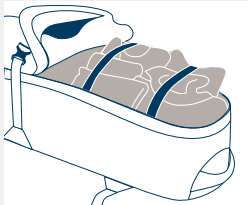
**Pass-through at back:** to go over wheeled suitcase pull-out handle



**Separate, removable bag:** keeps dirty laundry or footwear away from the rest of your luggage



**Zipped main compartment with lockable sliders:** prevents unwanted tampering



**Multiple small compartments and internal compression straps:** keep contents neat and organised



**Internal valuables pocket and key clip**



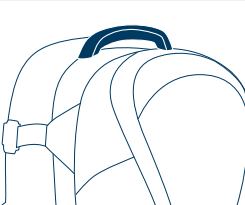




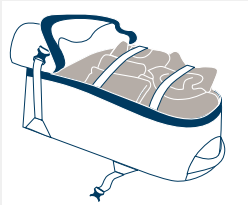
50 SL & 55

on transport cover

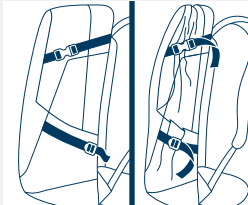

38 SL & 38



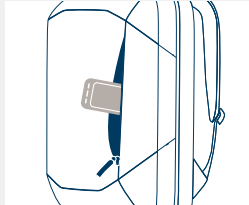
**Grab handles:** for ease when handling heavy luggage



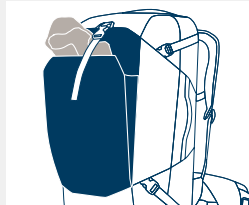
**Suitcase-style zip opening:** for quick access to contents



**Compression straps:** regulate the load and keep it close to the body



**Zipped outer pocket:** keeps small items safe and within reach



**Large stuff pocket on front:** to stash spontaneous purchases or the day pack when not in use



60 & 80

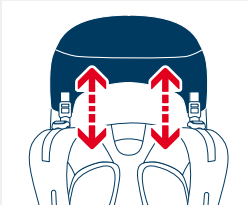
50 SL & 55



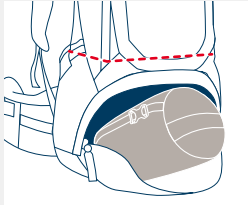

**Detachable day pack:** can be attached to the shoulder straps of the large pack for better oversight of valuables



**Transport cover:** for protection during transit (also serves as rain cover)



**Height-adjustable lid:** with large lid pocket extends capacity by up to 10 litres



**Dedicated bottom compartment:** for pack stability and load distribution (partition opens out fully)



**Zipped hip fin pocket & large stretch side pockets:** to keep mobile phone or drinks bottles at the ready




50 SL & 55









CONTACT SYSTEM

AViANT CARRY ON 28 SL | 28



CONTACT SYSTEM

AViANT CARRY ON PRO 36 SL | 36



CONTACT SYSTEM

AViANT ACCESS 38 SL | 38 | 50 SL | 55



CONTACT SYSTEM

AViANT ACCESS MOVO 36 | 60 | 80



CONTACT SYSTEM

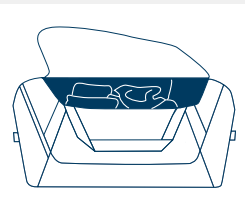
AViANT ACCESS PRO 55 SL | 60 | 65 SL | 70



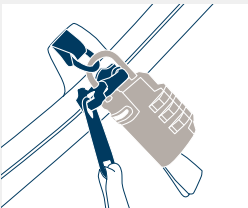
CONTACT SYSTEM

AViANT VOYAGER 60+10 SL | 65+10

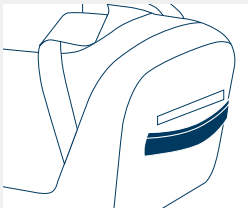




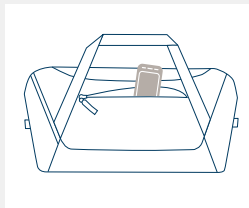
**Large opening to main compartment:** for easy access to contents



**Zipped main compartment with lockable sliders:** prevents unwanted tampering



**Grab handles:** for ease when handling heavy luggage



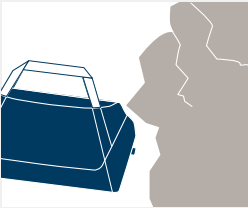
**Zipped valuables pocket:** on the outside with key clip



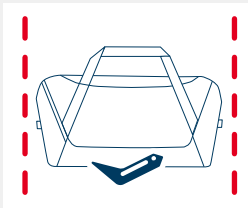
**Large zipped side pocket:** for dirty shoes / laundry etc. (two pockets in the AViANT Duffel Pro) or for a jacket, documents etc. (Duffel Pro Movo)



**Very light travel pack:** for fast & light travel, taking only what you need



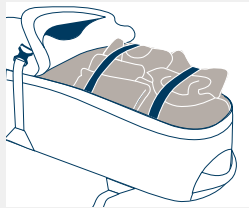
**Robust PU coated canvas:** protects contents from moisture and dirt



**Carry-on hand luggage size:** avoid check-in queues for zero-hassle travel



**Duffel outer casing:** can be used as small zipped bag for better contents organisation or as a small pack for day trips



**Multiple small compartments and internal compression straps:** keep contents neat and organised

		35	Zipped pocket	
		40	Small backpack	
		36		



AViANT DUFFEL 35 | 50 | 70



AViANT DUFFEL PRO 40 | 60 | 90



AViANT DUFFEL PRO MOVO 36 | 60 | 90

Sport weekend

Camping holiday

Road trip

Sport trip

SELLING POINTS FOR TRAVEL LUGGAGE

**TOP QUALITY:** deuter's travel luggage is robust and uncomplicated. Even in the event of damage from improper use, they can easily be repaired.

**ADDED VALUE:** The entire AViANT series comes equipped with NFC chips. These chips contain product and sustainability information, product authentication data and safety features in the event of luggage loss.

**SAFE TRAVELS:** The carry systems on deuter's travel packs can easily be stowed or covered during travel to prevent any straps or buckles snagging, for example, on the baggage carousel.

**ERGONOMIC:** The hip fins wrap comfortably around all shapes of hip because their ergonomic form is a result of skilled stitching and not hard plastic elements.

**CARRY COMFORT:** The S-shaped shoulder straps ensure full range of movement and take the strain off the neck muscles.

**WELL VENTILATED:** Breathable, 3D AirMesh covering the shoulder and back padding generates pleasant air.

**INDIVIDUAL FIT:** The larger the pack, the more important it is to have a customizable carry system. That's why the AViANT Voyager and Access Pro come with an internal frame for good load transfer and the VariQuick system for an individual fit.

**TREKKING FUNCTION:** The AViANT Voyager is not just for travel but can also be used for trekking. It's a front and top loader, has a slender body-hugging pack shape, and comes with its own day pack for little outings and a practical rain cover.

**WORK & TRAVEL:** The new deuter AViANT Access Pro series combines the versatility of a backpack with the practical functionality of a travel suitcase. Clever compartment configuration makes it quick and easy to pack. The material is also extremely hard wearing to ensure the pack has a long lifespan.

**ROBUST & SPACIOUS:** The AViANT Duffel Pro 60 & 90 and AViANT Duffel Pro Movo 60 & 90 (with 2 wheels) offer ample space for all your sports gear. The hard-wearing, water-repellent TPU material protects luggage from rain or snow on the move and is easy to clean.

**ROLLER BAG WITH BACKPACK FUNCTION:** The AViANT Access Movo models make light work of heavy loads. On four wheels, progression is effortless. And if the terrain is uneven, they convert into a backpack in no time.

**DELAY-FREE TRAVEL:** All the packs in the AViANT Carry On series and the AViANT Access 38 SL & 55 comply with carry-on luggage dimensions. Quick and easy to pack, they make heading to the airport straight from work a piece of cake - and no queuing at luggage check-in either.



INFORMATION ABOUT NFC

(NEAR FIELD COMMUNICATION)

Simply tap the seal with your NFC-enabled smartphone for the following benefits:

- SAFETY REGISTERING THIS PRODUCT** will also help you locate it if you lose it at an airport or during travel.
- PRODUCT INFORMATION** Find out everything about this product and the entire AViANT series. Read product reviews from fellow travellers and put any questions you have directly to deuter.
- SUSTAINABILITY** Read about how deuter achieves its sustainability practices. We're committed to transparent and verifiable practices.
- AUTHENTICATE** Verify if this is a genuine deuter product.

**HAND LUGGAGE SIZE**

Because airline rules regarding hand luggage sizes vary, it is important to check beforehand that the dimensions of the deuter AViANT series comply with those of your chosen airline.



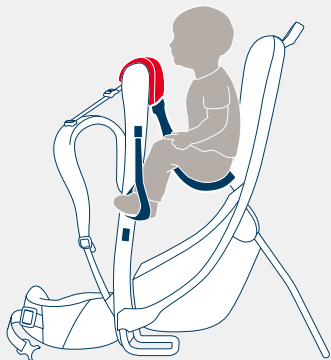


EVERYDAY  
EXPLORING NATURE  
HIKING



HIKING  
TREKKING  
OUTINGS

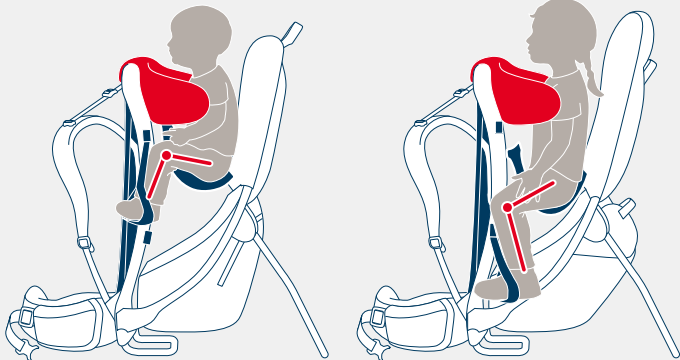
CAN BE USED FROM ABOUT 9 MONTHS OF AGE  
The child must be able to sit independently



KID COMFORT ACTIVE

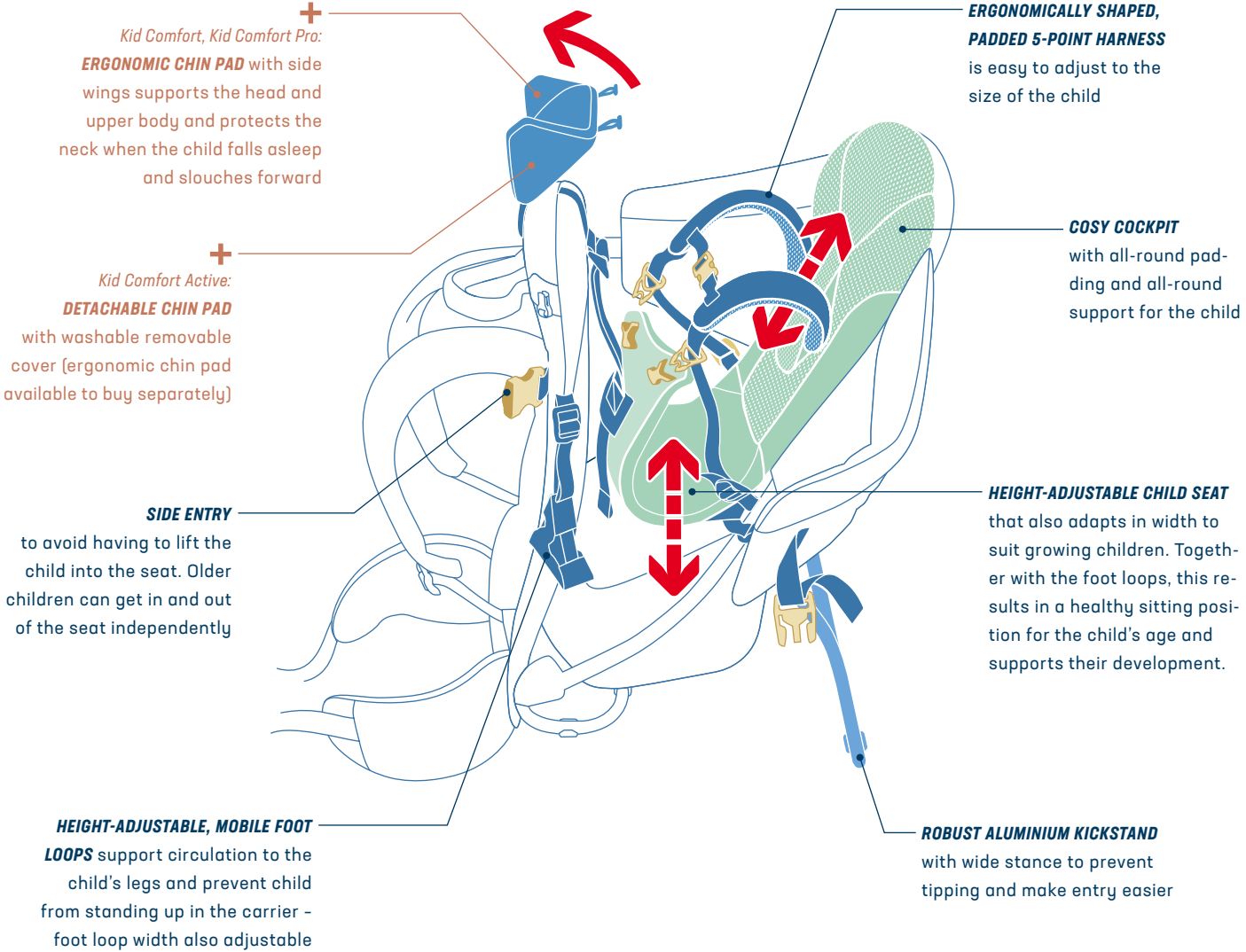
FULL-CONTACT BACK  
LITE AIR  
with adjustable back length

- compact & ultra-light
- good load transfer
- ventilating back panel
- secure fit



MESH BACK  
AIRCOMFORT SENSIC VARIO  
with adjustable back length

- maximum load transfer
- maximum comfort
- maximum functionality
- Aircomfort 2-way ventilation



# SAFETY AND COMFORT

## FOR THE CHILD

We developed the variable seat width system and adjustable foot loops together with Director of Paediatric and Adolescent Surgery at Ingolstadt Clinic, Dr. Micha Bahr:



The child's seat can be raised or lowered to suit, while the child is in the carrier.

This means the child will always be sitting in a position suited to their size to aid with their development: As the child grows, the angle of the hip joint, and thus the trajectory of blood vessels and nerves, changes. The smaller the child, the wider their legs can be spread while sitting, and the larger the child, the lower the angle. Consequently, the width increases with the height of the seat to guarantee a natural slightly splayed

'frog leg' position; the lower the seat the narrower the width for a more upright sitting position.

The ideal height of the foot loops is adjusted accordingly: during the early stages of development, the knees should be at roughly the same height as the child's navel > foot loops threaded through the highest buckle and adjusted to the right length. When the child can walk, their knees should be at an angle greater than 90° > foot loops threaded through the lower buckle and adjusted to the right length.

Maximum load **24 kg**





## SHARED FEATURES

LITE AIR | AIRCOMFORT SENSIC VARIO:

### STABILISER STRAPS

for increased stability – angle is adjustable (30° to 40°) via buckles on the shoulder straps and body of the carrier

### S-SHAPED SHOULDER STRAPS

for a perfect fit and full range of movement – made from foam that holds its shape for superior carry comfort, and perforated for ventilation

### UNISEX DESIGN

Since child carriers are often carried by either parent, the hip fins and shoulder straps are designed to be slightly narrower than those in our regular carry systems, but slightly wider and longer than those in our SL models.

### 3-Dimensionally FORMED LUMBAL PADS

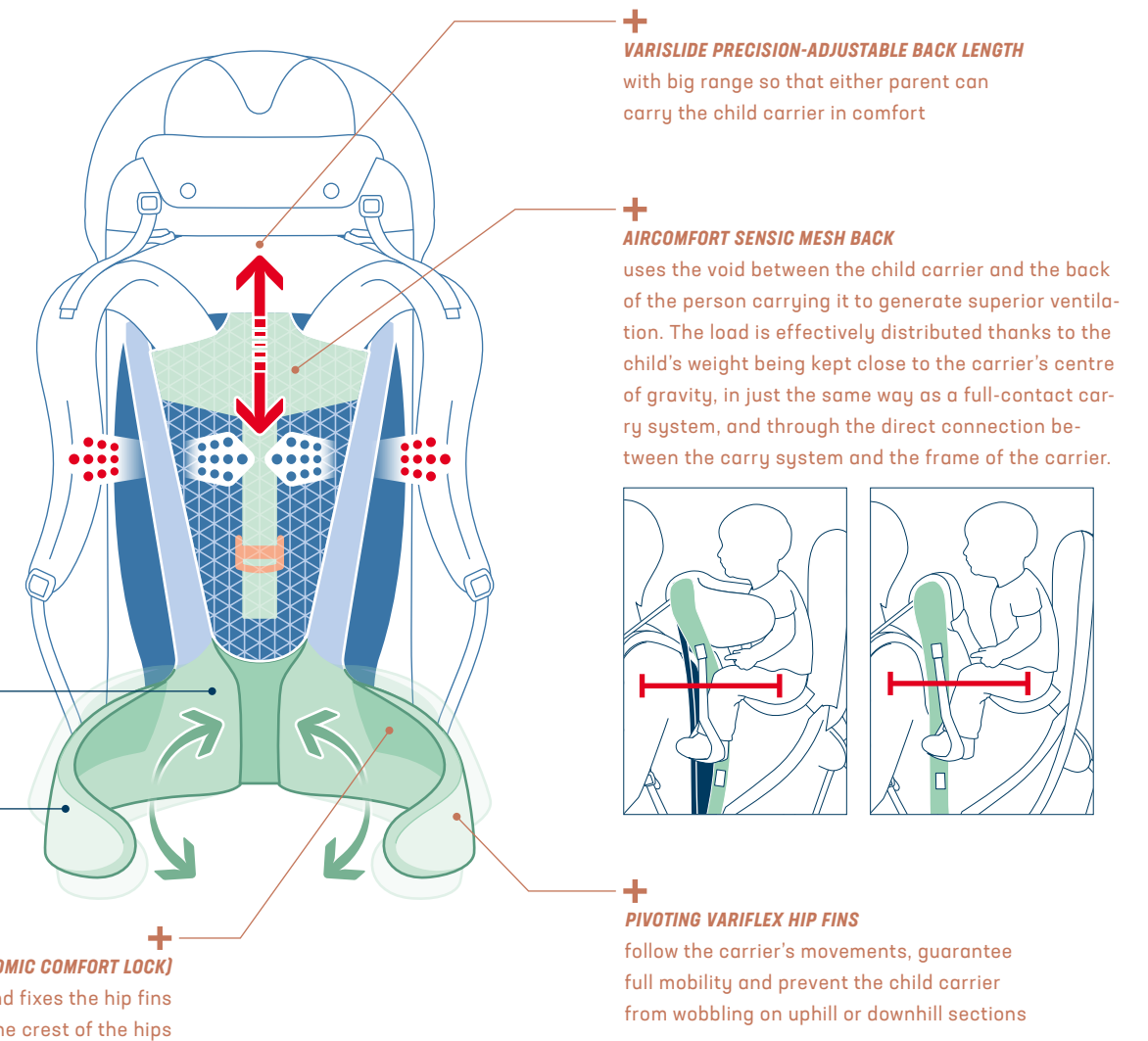
distribute the load over a large surface area and enhance comfort and protection

### FIRM, ERGONOMICALLY SHAPED HIP FINS

transfer the load effectively – with multi-layered construction (soft, cushioning foam on the inside and reinforced, high-density foam on the outside)

### PULL-FORWARD SYSTEM

easy to adjust hip belt even with a heavy load



## LITE AIR SYSTEM

## AIRCOMFORT SENSIC VARIO SYSTEM

### Lightweight

#### Comfortable yet lightweight child carrier thanks to

- lightweight full-contact carry system with knobby foam back panel for effective ventilation
- lightweight VariQuick adjustable back length
- reduced to the essentials without compromising functionality: Kid Comfort Active SL just 2.4 kg!

#### Superior carry comfort thanks to

- sophisticated ergonomic mesh back
- Aircomfort 2-way air flow in back and shoulder region

#### Up to 70% increased load transfer due to

- full-contact carry system – weight sits close to the body for energy efficient carry
- carry system is directly connected to the frame of the carrier
- full-contact lumbar region
- firm, ergonomically shaped hip fins designed for heavy loads

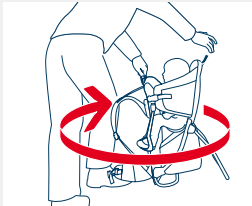
#### Up to 70% increased load transfer due to

- carry system directly connected to the frame of the carrier
- full-contact lumbar region
- VariSlide precision-adjustable back length
- firm, ergonomic hip fins designed to carry heavy loads
- VariFlex hip fins
- ECL

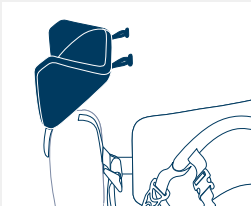
Maximum load **24 kg**



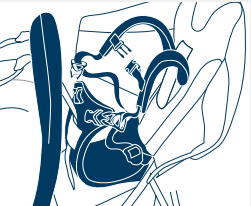
BASIC FEATURES



Two sturdy grab handles to lift the child carrier onto your back independently, with the child in it



Detachable chin pad soft and pleasant – with removable and washable cover (Kid Comfort Pro & Kid Comfort)



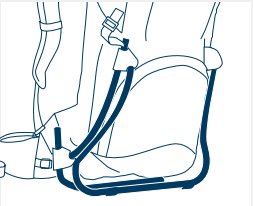
Combination of materials in the cockpit airy and soft in areas where comfort is key, robust and wipe-clean by the feet



Stretch front pocket keeps regularly accessed kit close at hand



Zipped pocket on hip fin keeps camera or valuables handy (2 at Kid Comfort & Kid Comfort Pro)

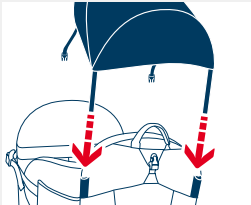


Folds down for transport to roughly half the volume

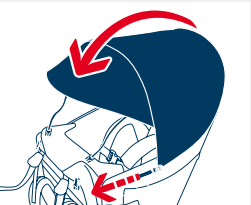
EXTRA FEATURES



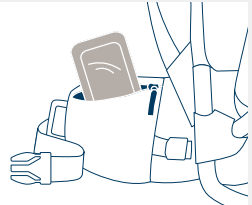
Child carrier that weighs less than 2.5 kg Lighter carry system, fewer features – zero compromise on safety and quality



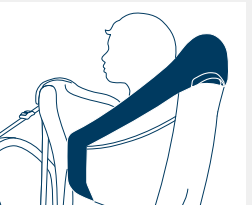
Quick-fit sun shade simply plug it in and attach with buckles



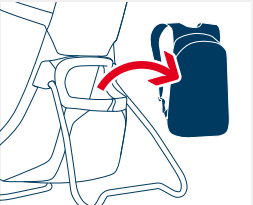
Built-in sun shade with buckle attachment for quick and easy rigging



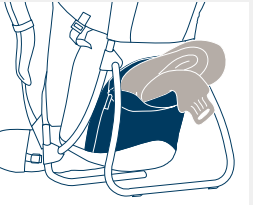
Mirror in the hip fin pocket for a quick glance at the passenger



Extra-high head support for improved protection and comfort for the child



Separate day pack for quick access to essentials – can also be attached to the sternum strap and carried on the front



Large stuff pouch under the seat with hooks for quick access – with zip closure on Kid Comfort



LITE AIR SYSTEM

KID COMFORT ACTIVE | ACTIVE SL



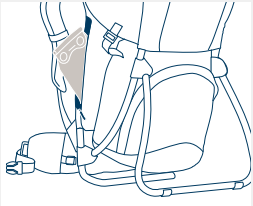
AIRCOMFORT SENSIC VARIO SYSTEM

KID COMFORT

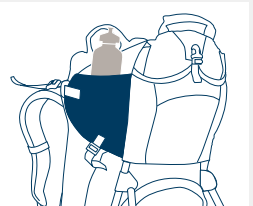


AIRCOMFORT SENSIC VARIO SYSTEM

KID COMFORT PRO



Extra space back pocket with full-length zip for hydration bladder, or in the Kid Comfort to stow sun shade / rain cover (accessory)



Two stretch side pockets can also be accessed by the child



MY DEUTER

“We’ve spent more time outdoors with the kids, exploring new places, since we’ve had a child carrier. The new Kid-Comfort carry systems have been developed together with Dr. Bahr and are designed with the physiological characteristics of children and adults in mind. Our TÜV-approved carriers are comfortable to carry thanks to ergonomic hip fins, and both comfortable and secure for little ones to sit in. That means that parents can spend more time with their children enjoying nature to the full.”

MIGUEL TIBLAS, father of two and the go-to person when it comes to deuter child carrier design. He has been a valuable contributor to the Product Development and Design Team at deuter for many years.

# HOW DID IT COME ABOUT?

## THE BEGINNING

1996 was the year the deuter child carrier first saw the light of day. By then, it had already been in development for a few years. As is often the case with our products, the deuter child carrier was developed to fulfil the requirements of our employees and was based on their own experiences. In addition to being comfortable – both for the child and the parent – the child carrier had to be as safe as possible for their little adventurers. At the time, there was ample room for improvement in both safety and comfort.

## DOWN TO WORK...

It was an opportunity that both Bernd Kullmann, the deuter Product Manager at the time, and his climbing partner and TÜV expert Volker Kron seized. Bernd recalls: "Summer 1994, late afternoon in the Austrian Alps. I was hiking down fast from a hut carrying my daughter Julia in a Kid Comfort sample. We had finished shooting the photos for the catalogue and I wanted to bring Julia down to Ingrid who was waiting in the valley. My plan was to sprint back up again so I could climb a South face route with Bill, our export manager. I had just half-jumped a steep passage when Julia screamed out. One of the seams on the prototype was torn. Luckily the seat was still intact, yet it was a shock for Julia and myself. I thought about this incident while climbing in the evening hours. When a backpack has a torn seam the consequences are not too bad, even if the contents spill. Yet, on a kid carrier the consequences can be fatal. The following Monday I called Pit Schuber, engineer and

the 'king of safety' of the German Alpine Association. I explained the story and – as usual – it didn't take Pit long to come up with some good advice: "Call Volker Kron from TÜV, the Technical Inspection Authority, in Munich." Volker is a fellow mountaineer and we got on well from the get-go." Together, the two alpinists and family men worked on some critical elements to improve the safety of child carriers. This involved them taking a look at child carriers from every angle.

## SAFETY THE PRIORITY

To protect children's little fingers, Bernd and Volker developed a plastic hinge for the kickstand, equipped with a safety spacer. The built-in safety belt was a particularly important development. It prevents children from slipping out of the cockpit. The two mountaineers then made sure that the carry system would fit both Mum and Dad by using the VariQuick adjustable system. The VariQuick system was developed a few years earlier for the deuter trekking backpacks and is still a mainstay of numerous products today.

## TÜV CERTIFIED

Bernd and Volker formulated the safety instructions for the child carrier, and carried out a harmful substances test and load capacity test. It passed with flying colours. And with that, deuter launched the world's first safety certified child carrier onto the market. The criteria developed by Bernd and Volker formed the basis of the TÜV standards still in use today.

"Together we developed criteria for improving the product safety of child carriers. Volker has five kids himself and he knew what was important."

1994 – Bernd with his daughter Jule put one of the first Kid Comfort prototypes through its paces



"Brain studies have shown that the three-dimensional weighted movement of walking stimulates equilibrium in babies and toddlers." says Dr. Bahr, Director of Paediatric and Adolescent Surgery at Ingolstadt Clinic

## NO STANDING STILL...

We work tirelessly at improving our products by harnessing the experience and knowledge of our product managers. We also rely on the input from independent experts to ensure our child carriers are tailored to the needs of parents and children alike.

## INDEPENDENT EXPERT

In 2014 we asked paediatric surgeon Dr. Micha Bahr to evaluate our child carrier. Not a hard task for Dr. Bahr, seeing as his family had been using our child carrier for several years already. "We used the carrier far more often than a pushchair", explains Micha Bahr, going on to say, "The gentle rocking movement reminds children of their time in the womb and relaxes them."

## PROMOTES THE DEVELOPMENT OF THE CHILD

Brain studies have shown that the three-dimensional weighted movement of walking stimulates equilibrium in babies and toddlers. "It is an important part of their development. Outdoors, children's interests are channelled in the right direction from an early age. Away from screens and towards nature," says Dr. Bahr.

## OUR WORK IS NEVER DONE

After many outings with the carrier, the paediatric surgeon had a solid impression of it: "The deuter carry systems are very ergonomic and therefore very comfortable for the parent. They are also sufficiently comfortable for the child to sit in and offer very good safety. The child's seat, 5-point safety harness and entry

# THE PERFORMANCE REQUIREMENTS

that the Kid Comfort has to pass for the TÜV certificate:

- chemical safety assessments in migration tests
- durability of the material in bite tests
- functionality of the kickstand locking device after 300 uses
- stability test with kid dummy on a surface with an angle of 12°
- no sign of wear and tear of the carry system after 50.000 load changes
- the adjustable safety harness must not disengage
- after six full overhead turns with a fastened kid dummy
- kickstand shows no risk of pinching
- besides the standard requirements the Kid Comfort has to pass an additional test with 150.000 walking loads with a weight of 24 kg
- general quality of the carrier: every two years a staff member of the TÜV SÜD audits the manufacturing process

and exit methods in particular are the best and safest currently available on the market." But there was still room for improvement.

## FOOT LOOPS – WHAT ARE THEY FOR?

Dr. Bahr gave us very useful advice from his own experiences with the carrier. The paediatric surgeon collaborated in the design of our height-adjustable foot loops for the child carrier, with the aim of maintaining good circulation in children's legs. It helps children's legs stay warm for longer and prevents them getting pins and needles. The mobile foot loops also encourage children to play and kick their feet about and generate more blood flow to the feet. Using this mobile design of foot loop also resolved an important safety issue: Children cannot stand up in the new foot loops or cause the carrier to tilt – with potentially dangerous consequences.

## THAT'S WHY THE SEAT IS ADJUSTABLE

Now, the seat is easily raised or lowered – and the seat itself becomes wider the higher it is raised. This ensures that it adapts to the growth of your child and creates a healthy, upright sitting position. The ergonomic chin pad, side wings that can be cinched in, and the back panel of the cockpit with head rest provide all-round support for the child.



Kid Comfort, the first model from 1996 – naturally TÜV-certified





## FREQUENTLY ASKED QUESTIONS

### From what age can I use the child carrier?

You should only use a child carrier once your child is able to sit independently. The child must be able to move into a seated position on their own and control their head well. Typically, this is from eight months of age, but can vary greatly depending on the child.

### Does it have a maximum load capacity?

The maximum load capacity for the child carrier is 24 kg (child 22 kg + gear 2 kg). The carrier has been inspected by TÜV up to this weight and conforms to EU standards.

### How long can a child be carried in the carrier?

Bear in mind that the child in the carrier may suffer from the effects of weather and temperature before you do, and with greater intensity. For a child, winter conditions are often extreme conditions. That's why it is very important to make sure the child is appropriately dressed. And regularly check the temperature of their hands and feet. It is also worth noting that remaining seated for longer

periods can reduce the circulation to your child's legs. That's why it is important to use the foot loops and take regular rest breaks, so the child can get out and move about. As a rule of thumb, take a break of 5-15 minutes every 60 minutes.

### How long should the foot loops be?

The length of the foot loops can be adjusted precisely. The correct position for the slightly splayed 'frog leg' position **A** of younger children is when the child's knees are approximately in line with its navel. As soon as the child can walk, their knees should be at an angle greater than 90° for a more upright seated position **B**.

### How do you adjust the height of the seat?

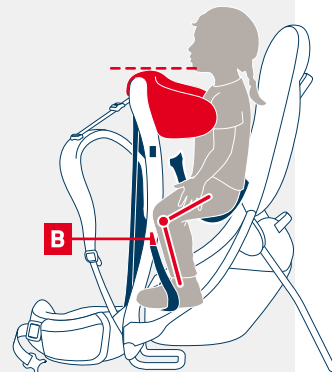
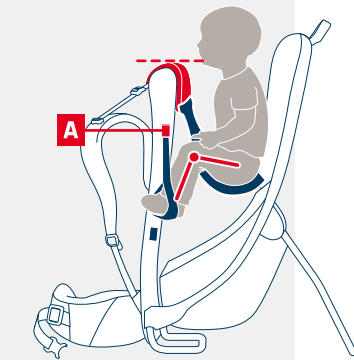
The seat height is easy to adjust, even when the child is sitting in the cockpit. To lower the seat, lift the buckle under the chin pad. To adjust the seat to the correct height, pull on the strap. Slip one hand below the seat for support during adjustment. The ideal position is when the child's chin reaches just above the seat adjustment buckle.

### What is the size limit of the child carrier?

Since children grow at different rates, there is no maximum size for the carrier. Always refer to the maximum load that should not exceed 22 kg.

### Does the child always have to be strapped in?

Sudden, unexpected movement on the part of the parent carrier or the child can result in the parent losing balance, slipping up or falling. There are also risks when putting on and taking off the child carrier or bending forward while the child is sitting in the carrier. If not strapped in, the child could also try to stand up in the seat. So, it is important that children are always strapped in. The safety belt can be adjusted to fit the child's size.



### What activities can the carrier be used for?

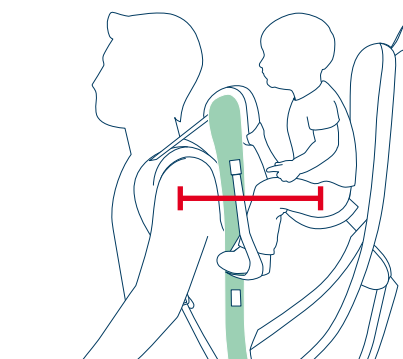
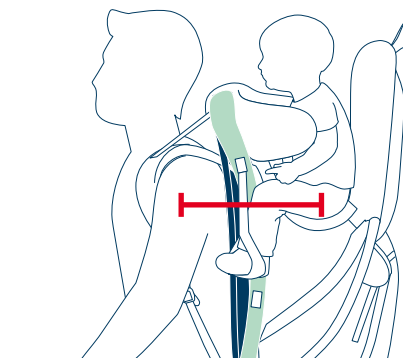
The child carrier is designed to be used for leisure activities but not for sports such as cycling, skiing or similar.

### Can the child be left unattended sitting in the carrier?

Despite the secure stance of the child carrier, one should never leave a child to sit unsupervised in the carrier - especially not on a raised surface.

### Do you really need the sun shade?

Small children have very sensitive skin. In the middle of summer or up in the mountains it is important to shield their skin from the sun's harmful radiation by using the sun shade. In addition, it is advisable to use sun cream to block out UV rays.



## SELLING POINTS CHILD CARRIERS

### FOR THE ADULT:

**CARRY COMFORT:** The carry system is designed for heavy loads and comfortable for the carrier.

**ADJUSTABLE FIT:** The back length is fully adjustable in just a few easy steps, so that either parent can carry the child carrier.

**UNISEX DESIGN:** deuter child carriers have slightly narrower shoulder straps and hip fins so that Mum and Dad can both take turns carrying.

**SL DESIGN:** For mothers looking for a child carrier with narrower shoulder straps and conical shaped hip fins for an exceptional fit.

**SUPERIOR QUALITY:** The child carrier is extremely comfortable for both the child and the adult, yet technically sophisticated, highly durable and with TÜV SÜD/GS-certified standard of quality.

**STABLE:** The kickstand is both robust and stable to prevent it from falling over.

**AIRCOMFORT SENSIC VARIO:** Combines maximum ventilation with maximum load transfer. It makes use of the void between the child carrier and the back of the person carrying it for ventilation. This maintains the child's centre of gravity as close as possible to the carrier's body, just like a full-contact carry system (Kid Comfort, Kid Comfort Pro).

**EASY CARRY:** Pivoting VariFlex hip fins promote an energy efficient carry (Kid Comfort & Kid Comfort Pro).

**AMPLE STOW SPACE:** Generous sized compartments and pockets offer ample space for longer days (Kid Comfort, Kid Comfort Pro).

### FOR THE CHILD:

**TÜV/GS CERTIFIED:** The deuter Kid Comfort was the world's first child carrier to gain TÜV/GS certification.

**ERGONOMIC DESIGN:** The sitting position in our child carriers was developed in collaboration with Paediatric Surgeon, Dr. Micha Bahr.

**PERFECT FIT:** The seat height can be adjusted to suit the child - even with the child sitting in it.

**HEALTHY SITTING POSITION:** The width of the seat alters depending on the height of the seat. Together with the foot loops this results in the correct sitting position for the child's age.

**COMFORTABLE:** Mobile foot loops aid circulation to the child's legs. Children are able to kick about and change positions but cannot stand up in the seat.

**SAFETY:** The 5-point harness with soft padding has brightly coloured buckles that are clear and intuitive to use. Adjustments are easy to make.

**PRACTICAL:** The side access to the cockpit can be used independently by older children. For smaller children it makes loading easier than lifting them into it from above.

**SECURE:** The chin pad, side wings that can be cinched in, and the back panel of the cockpit with head rest provide all-round support for the child.





FROM YEAR  
5 SECONDARY SCHOOL  
AND ABOVE

above 1.35 m height

26 Litre



COTOGY

FULL-CONTACT  
CONTACT  
with ergonomic Lumbar Pad

- suited to the shape of children and youngsters' bodies for all-round comfort
- Lumbar Pad distributes load over a large surface area and protects the back
- wraps around the shape of the shoulders
- Compartment configuration and range of storage options keep the load firmly in place while running or biking



FROM YEAR  
5 SECONDARY SCHOOL  
AND ABOVE

above 1.45 m height

30 Litre



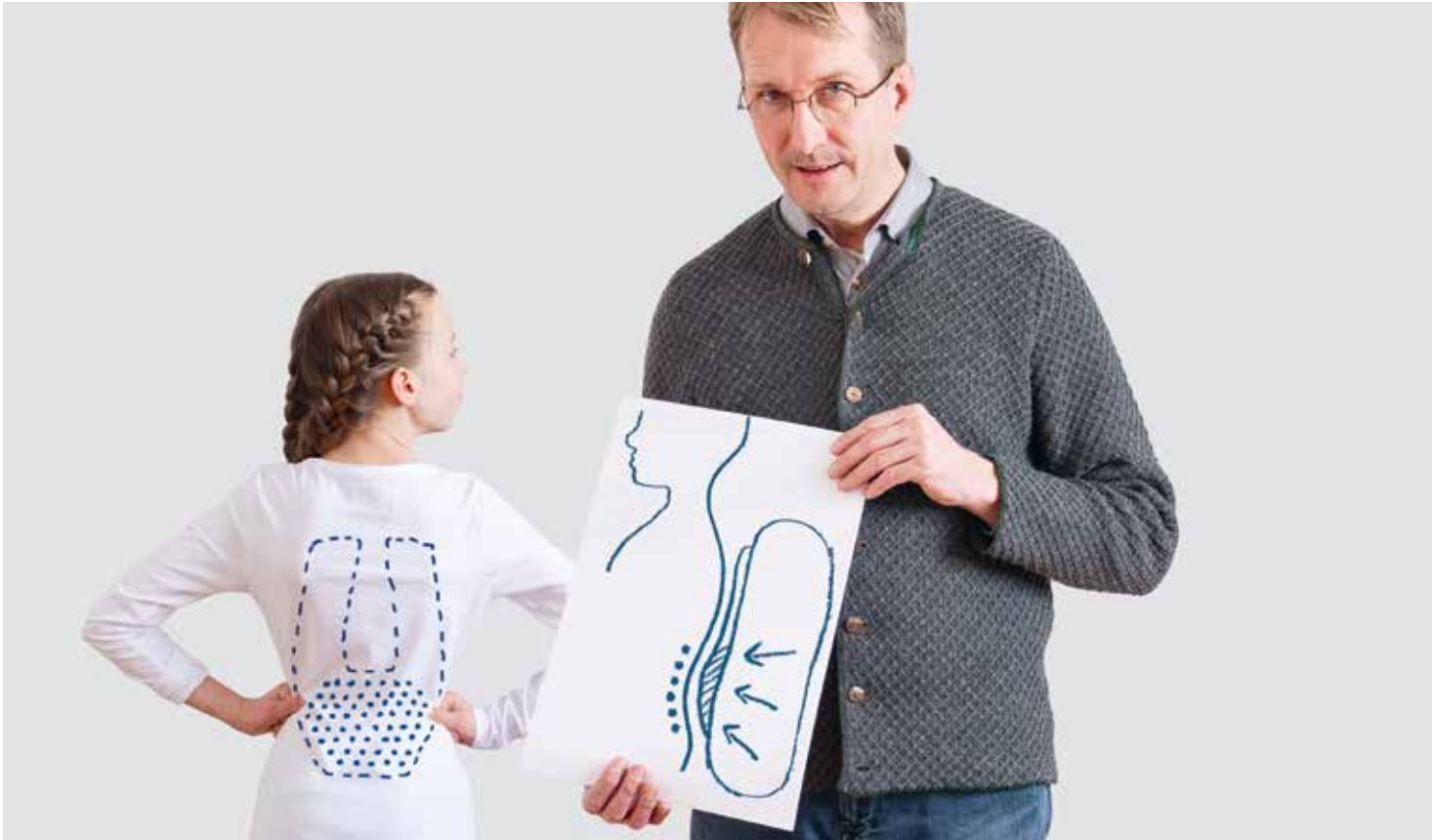
SCULA

FULL-CONTACT  
CONTACT  
with ergonomic Lumbar Pad

- suited to the shape of children and youngsters' bodies for all-round comfort
- Lumbar Pad distributes load over a large surface area and protects the back
- wraps around the shape of the shoulders
- Multi-purpose - trendy design makes it suited to life beyond school

Recommended load **6 kg**

up to **8 kg**



## QUESTIONS FOR DR. BAHR

What are the key features of a school pack?

"The carry system has to fit the body well and transfer 30% of the load onto the shoulders and 70% onto the pelvis. Deuter's LumbarPad is effective at this. It means you can do away with having a wide hip belt. The carry system should 'grow' with your child and be easily adjustable. The fit also has to be snug against the body so that the centre of gravity does not shift backwards. This supports the natural development of kids and teens and makes it feel fun and free for them to move about."

And you can achieve all of that without a hip belt?

"Yes, with the correct design, you can. Many people are under the impression that our pelvis is solidly fixed in place. It is a misconception - our pelvis (and hips) move with every step and it's important they do. By doing away with a fixed hip belt, the Deuter school pack allows for a natural range of movement. The load is evenly distributed onto the sacrum and pelvic area via the trape-

zoidal shaped LumbarPad. This transfers the load onto the musculoskeletal system as gently as possible. This is amplified by the fact that the entire carry system and shoulder straps are ergonomically shaped and fit snug against the body. Another advantage in not having a hip belt is that it cannot be incorrectly used by the child. In the worst case, an incorrectly used hip belt could even lead to obstructed joints."

So why do trekking packs have hip belts then?

"That's because they are carrying much heavier loads - up to 30 kg. Which is why much more of the load needs to be transferred away from the shoulders and onto the pelvis via special hip fins. With school packs, the LumbarPad is sufficient for transferring the load. That's because the carry system fits so snug: Deuter has the only school pack, that I know of, that doesn't slip off when a child spins round the horizontal bar. And for more extreme or pendulous activities such as riding a bike, there is a lightweight hip belt. It prevents any lateral slip. And when no longer needed, it can simply be detached."

DR. MICHA BAHR is Director of Paediatric and Adolescent Surgery at Ingolstadt Clinic. His specialist medical knowledge helps in the development of Deuter's carry systems. He knows exactly what properties a backpack must have to protect your back. Because as a doctor, he sees plenty of

back issues, posture problems and motor impairments. Children's back health is particularly important to him. That's why together with one of his daughters, Carina, he has helped so much with the development of our school packs.



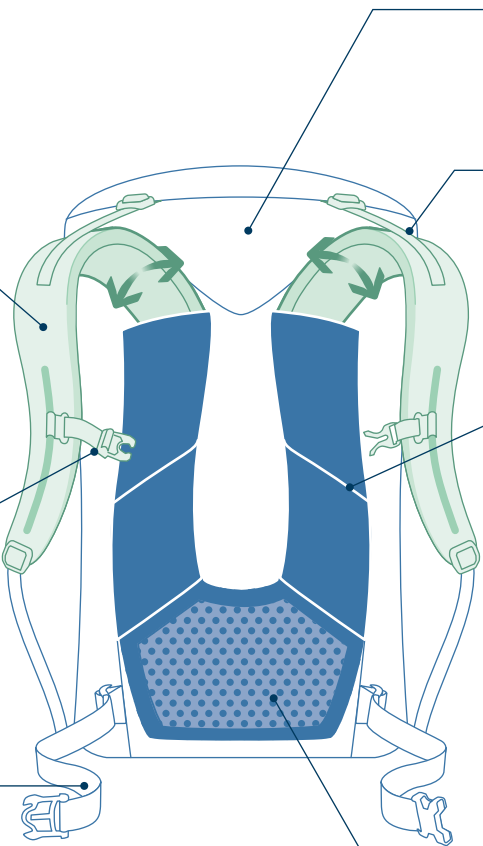
deuter  
CONTACT



**S-SHAPED, PIVOTING  
ACTIVEFIT SHOULDER STRAPS**  
adapt to the individual's  
body shape - in particular  
while they grow

**HEIGHT-ADJUSTABLE  
STERNUM STRAP**  
keeps the shoulder  
straps in place

**DETACHABLE HIP BELT**  
keeps the pack close to  
the body and prevents  
lateral slip during more  
extreme or pendulous  
activities e.g. biking



**CLEVER COMPARTMENT CONFIGURATION**  
keeps everything in place and the  
load in the right position

**STABILISER STRAPS**  
for increased ventilation (when  
loose) or increased load control  
(when tight)

**ERGONOMIC BACK PADDING**  
moulds to the shape of the  
back, distributes the load  
evenly and features air chan-  
nels for good ventilation

**ERGONOMIC LUMBALPAD**  
transfers the load evenly  
onto the musculoskeletal  
system while maintaining  
full freedom of movement  
for the pelvis and hips

CONTACT SYSTEM

Simple handling

Simply shouldered, simply comfortable, simply ergonomic thanks to

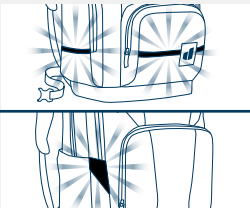
- back-friendly carry without any complicated adjustments - put it on, adjust the shoulder straps and that's it
- pivoting ActiveFit shoulder straps that automatically mould to shape
- proportions designed specifically to suit children and youngsters

Up to 70% increased load transfer due to

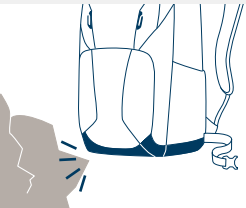
- ergonomic full-contact carry system: weight sits close to the body for energy efficient carry
- LumbalPad: distributes the load over a large area, does away with need for wide hip belt, leaves pelvis/hips free to move
- optimum compartment configuration: keeps the main load close to the back (Cotogy)

Recommended load **6 kg** up to **8 kg**

BASIC FEATURES



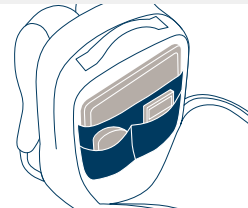
**Reflectors for good visibility**  
in low light and bad weather



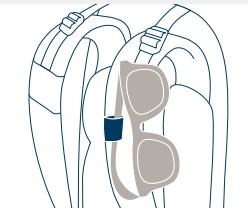
**Robust and sturdy** with rein-  
forced base - durable, water-  
proof and abrasion resistant  
canvas fabric



**Document pouch** at the back  
of the binder-compatible main  
compartment keeps heavier  
items closer to the center of  
gravity



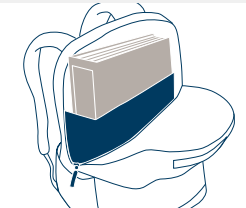
**Tablet compartment** is  
quicker to access and inclu-  
des organizer pockets for  
small items



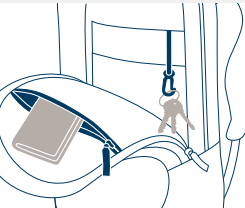
**Sunglasses stow system**  
simply hook the glasses into  
the stretchy strip on the shoul-  
der strap - stays put when  
running



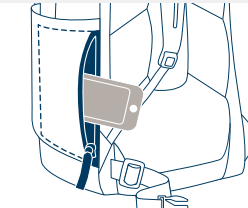
**Several external pockets**  
Snacks, umbrella etc. are ea-  
sily accessible and the load is  
evenly distributed



**Binder-compatible main  
compartment** also has space  
for other schoolwork

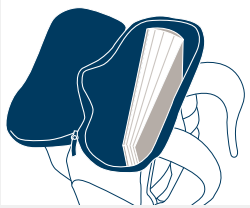


**Organizer front pocket** to  
keep pens, mobile phone, bus  
pass etc. close at hand and  
well organised



**Internal valuables pocket  
and key clip**

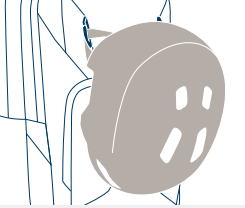
EXTRA FEATURES



**Wide top-loader access**  
Main compartment easy to  
pack with zip around closure



**Two main compartments**  
keep the load well anchored  
when moving at speed



**Attachment clips for half-  
shell helmet** - quick and easy  
to stow

GRÜNER  
KNOPF  
SOZIAL. ÖKOLOGISCH. STAATLICH.  
UNABHÄNGIG ZERTIFIZIERT.

bluesign®  
PRODUCT



CONTACT SYSTEM

COTOGY (26 L)

GRÜNER  
KNOPF  
SOZIAL. ÖKOLOGISCH. STAATLICH.  
UNABHÄNGIG ZERTIFIZIERT.

bluesign®  
PRODUCT



SCULA (30 L)

Secondary school



MY DEUTER

“When you’ve got loads to carry I think it’s important to have a backpack that sits comfortably on your hips. Deuter has some really cool packs. I like having lots of compartments, so I can stash all my school stuff and sports kit. But I don’t want my school bag to look overstuffed and the style is important too.”

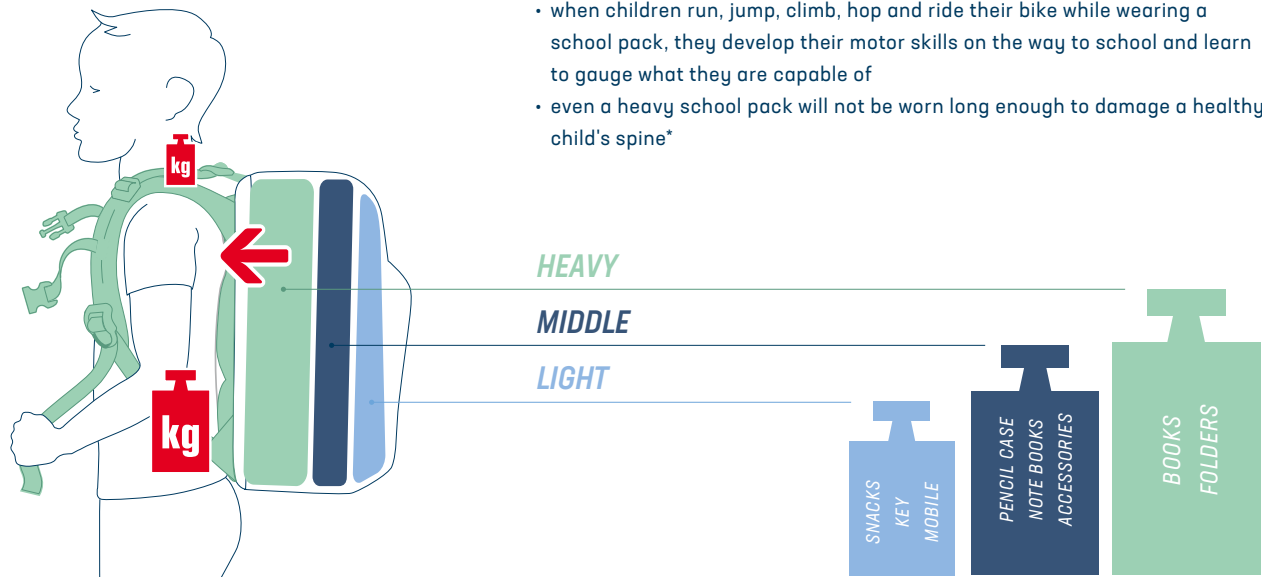
PHOENIX is still at school and a Deuter brand ambassador. When she’s not training on the trampoline, she likes to speed across the surface of water on skis.

HOW MUCH WEIGHT CAN MY CHILD CARRY?

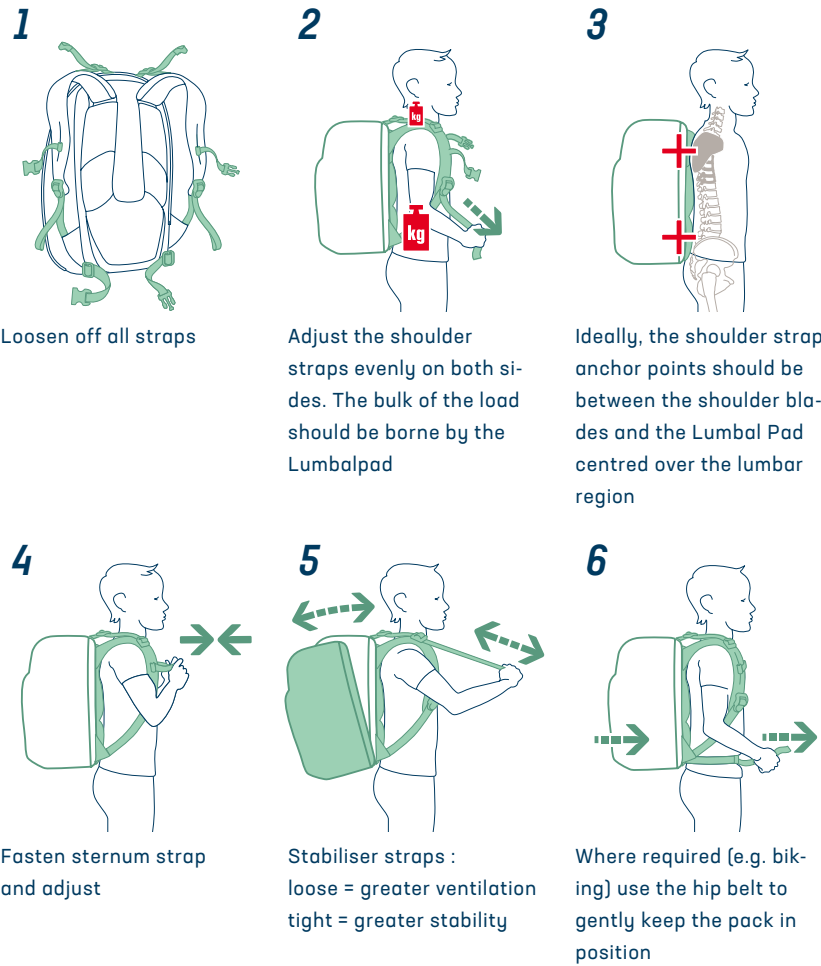
Without their school pack hurting them or their back? Parents are frequently looking for a clear answer to this question. Unfortunately, at present, there is no definitive weight limit: In 2010, the DIN 58124 standard withdrew its ruling of 10% of their bodyweight due to lack of scientific evidence. Generally, it’s of course a case of less is best (see top tips). In the end, it’s no good if the walk to school is torture for your child. But there is also no scientific evidence to support the idea that posture problems, muscle tension and back pain are solely down to the weight carried. There are often multiple reasons. Many children spend hours sitting down in the wrong position and are not active enough in their everyday lives. This means their muscles are less developed, which is why it’s important to:

CORRECTLY PACKED AND CORRECTLY CARRIED

- a school pack will strengthen a child’s core\* (stomach and back muscles)
- encourages exercise and the moderate strain of a school pack can stimulate bone growth in children
- when children run, jump, climb, hop and ride their bike while wearing a school pack, they develop their motor skills on the way to school and learn to gauge what they are capable of
- even a heavy school pack will not be worn long enough to damage a healthy child’s spine\*



THE CORRECT WAY TO SHOULDER A SCHOOL PACK



TOP TIP

Encourage school-aged children to regularly check backpack contents and consider:

- What items could remain at home or at school?
- Are there any books or folders that are not needed on that day?
- Can they share some books with the person sitting next to them?
- Are some of the contents available in digital format?

Carry the weight evenly across both shoulders. Carrying it over one shoulder causes the spine to twist and creates muscular tension in the area.

Position the heaviest part of the load close to the body and ideally at shoulder height – so the pack does not pull them backwards.

SELLING POINTS SCHOOL PACKS

**BACKPACK PIONEERS:** Deuter ploughs all its experience from alpinism into the development of their school packs.

**INNOVATION** runs in the blood. That’s why Deuter works closely together with children, youngsters, parents and doctors on the development of their school packs.

**SUPERIOR QUALITY:** The school packs are made from robust and hard wearing materials, the same ones we use for mountain sports or biking.

**NO FIDDLY ADJUSTMENTS:** Deuter school packs fit perfectly and simply: Simply shouldered, simply comfortable, simply ergonomic. They support the child’s and teens natural movements, thereby promoting healthy muscle and bone growth.

**LUMBAL PADS:** Ergonomic padding in the lumbar region distributes the load over a large surface area, and gently onto the musculoskeletal system. This frees up the pelvis to move naturally, which is important.

**EASY ON THE BACK:** Ergonomic back padding keeps the weight of the load close to the back for energy efficient carry.

**GROWS WITH THEM:** S-shaped, pivoting ActiveFit shoulder straps adapt to the growing kids and teens.

**SAFETY:** With reflectors on all sides for improved visibility on the streets.

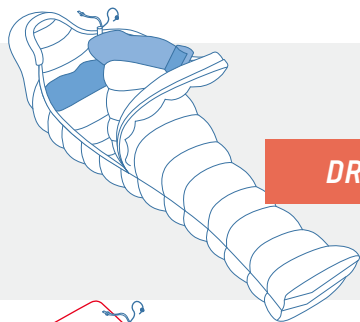
**EVERYTHING IN ITS PLACE:** Clever compartment configuration keeps everything in place and the load in the right position – heavy items further back, close to the child’s back, moderately heavy items in the middle and light items in the front pocket.





HUT STAYS  
TRAVEL  
WITH WEIGHT  
RESTRICTION

low weight  
& pack size  
temperature rating  
/ care



DREAMLITE

EXOSPHERE 0°

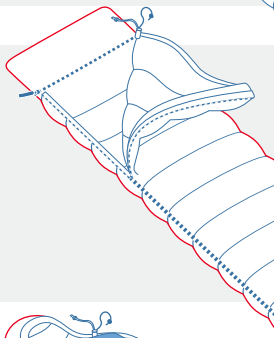
ASTRO 300

ASTRO 500



CAMPERVAN /  
MOTORHOME  
CAMPING  
FESTIVALS

spacious price  
temperature rating /  
climate



DREAMLITE

ORBIT SQ +6°

ORBIT +5°

ASTRO 300

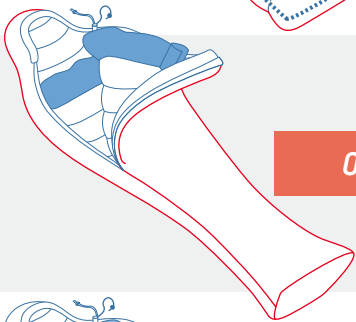
ORBIT SQ -5°

ASTRO  
500 / 500 SQ



CAR / BUS /  
TRAIN TRIP  
WITH TENT

good durability  
temperature rating /  
pack size



ORBIT +5°

EXOSPHERE 0°

ORBIT 0°

ASTRO 300

ORBIT -5°

EXOSPHERE -6°

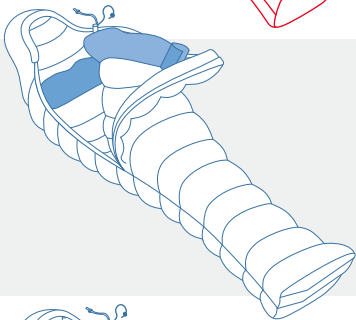
ASTRO 500

EXOSPHERE -10°



CYCLE TRIP  
WORK & TRAVEL  
MOUNTAIN SHELTER

minimal pack size &  
weight  
temperature rating /  
climate



EXOSPHERE 0°

ASTRO300

EXOSPHERE -6°

ASTRO PRO 400

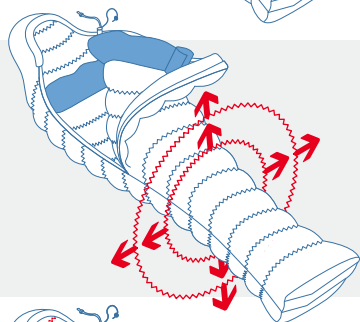
ASTRO 500

ASTRO PRO 600



TREKKING  
CANOE JOURNEY  
GENERAL USE

best warmth /  
weight ratio  
durability /  
climate



EXOSPHERE 0°

EXOSPHERE -6°

ASTRO PRO 400

ASTRO 500

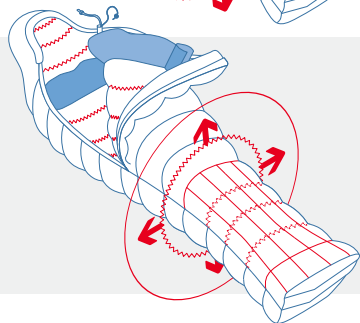
EXOSPHERE -10°

ASTRO PRO  
600 | 800 | 1000



ALPINE  
BIVOUAC  
EXPEDITION

maximum insulation  
performance  
weight / climate



■ Synthetic ■ Down \*Temperature limit

EXOSPHERE -10°

ASTRO PRO  
600 | 800 | 1000

ACTIVITY → Weight / Pack size  
CLIMATE → Fill  
FREQUENCY → Construction  
SPACE PREFERENCE → Cut

Main deciding factor  
Further factors

+13° bis +5° \*  
Equator / Summer  
Sea level

+3° bis 0° \*  
Where? When? How high?  
→ Insulation

-3° bis -6° \*

-10° bis -21° \*  
Pol / Winter  
8000 Hm

# FOR A LONGER LIFE

## BUILD

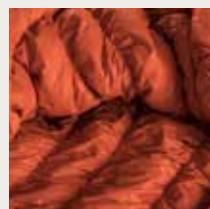


### Sophisticated designs



First-rate raw materials can only be turned into first-rate sleeping bags with the use of sophisticated design. That's why Deuter uses cleverly thought-out sleeping bag constructions, Thermo Stretch Comfort chamber seams in our Exosphere and Astro Pro series or the three-dimensionally sewn warmth collar in our sleeping bags designed to cope with lower temperatures. These all substantially increase the insulation performance and prevent cold spots.

### Robust fill chambers



Using clever, meticulous construction methods prevents cold bridges that can occur when the fill slips or is pulled apart during packing and unpacking of the sleeping bag. It not only guarantees higher performance but also better wear resistance on trips with multiple changes of location.

### Top-quality compression sack



Every Deuter sleeping bag comes with its own compression sack. They have extremely robust stitching to withstand the pressure exerted on them when stuffed, and keep the bags securely compressed.

## MATERIALS



### PFC-free sleeping bags



The entire Deuter sleeping bag collection is made without the use of any PFCs, for the protection of people and planet.

### Brand-quality raw materials

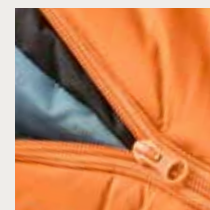


We source all the raw materials for our sleeping bags from branded manufacturers. The fill for our down sleeping bags is 100% Responsible Down Standard (RDS) certified. This ensures species-appropriate rearing and animal welfare standards are upheld. Our 2-way zips are made by the market leader in zip manufacturing, YKK®. They have a locking slider to prevent the bag opening on its own.

## FEATURES

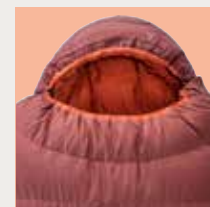


### Easy handling



Clever features make Deuter sleeping bags easy to use. Different-style draw cords make it easy to adjust the hood section at night. As it is fixed to the hood, the cord stopper can be operated with just one hand. Zips feature a wide anti-snagging band for smooth zipper operation. An inner pocket keeps small items handy.

### Perfect fit for perfect insulation



From the Mummy Comfort shape to our Stretch Mummy shape, from our contoured hood to a raised foot box, and sizes SL - L: Sophisticated, ergonomic sleeping bag shapes and a range of sizes ensure there is the right shape for everyone. So, Deuter sleeping bags always offer plenty of space to move about but are snug fitting to prevent cold spots. This also means they warm up fast and stay warm longer.

## PRODUCT SAFETY

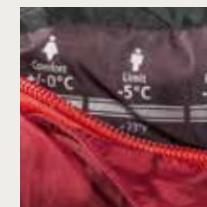


### 360-degree-warmth



The top and bottom layers of a Deuter sleeping bag are identical and contain the same amount. That's because we are aware that despite EN-norm tests assuming that a person will lie on their back, in reality, people move about in their sleep. By using our 360° fill system, we can guarantee our comfort ratings in all sleeping positions – and no more cold back!

### Realistic temperature ranges



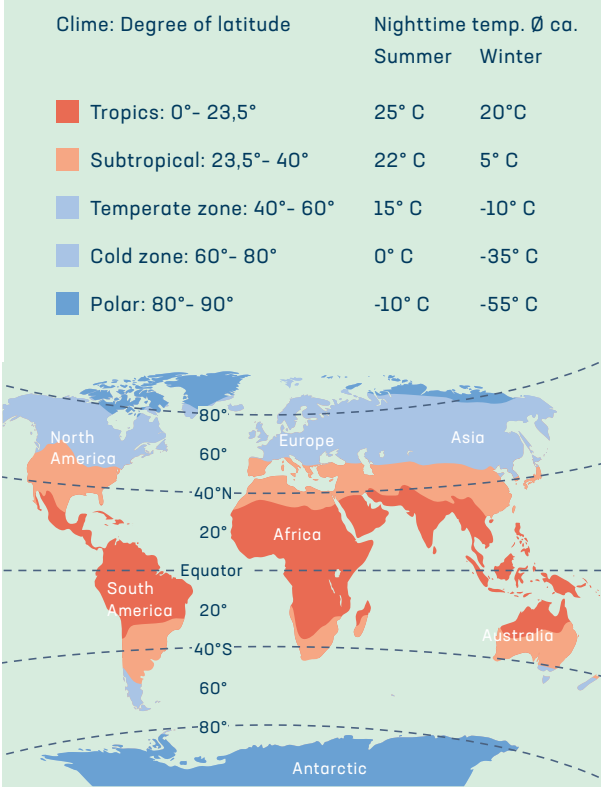
In order to guarantee that Deuter sleeping bags deliver what they promise, even in extreme conditions, we use an independent laboratory to determine their temperature range using test dummies in a cold chamber, in accordance with EN ISO 23537:2016 standards.



# WHICH SLEEPING BAG IS RIGHT FOR ME?

Destination, activity, climate, requirements and space preference – five factors that play a key role in choosing the right sleeping bag. Depending on the intended application, one or other factor tends to gain in significance. But the most important question to ask remains – *HOW COLD WILL IT BE?*

## DESTINATION → Insulation



**WHERE, WHEN AND HOW HIGH?** The destination will dictate the required level of insulation, and so it is critical in coming to a final decision about sleeping bag choice. You need to look at latitude, season and altitude. Depending on the weather, temperatures can drop by an average of 0.6°C every 100 metres of height gained.

All our sleeping bag temperature ratings are independently assessed in accordance with EN ISO 23537:2016 standards, using test dummies in a cold chamber:

**T(COM) – COMFORT RATING** Lower temperature limit for a comfortable night’s sleep for the average woman.

**T(LIM) – LIMIT RATING** Lower temperature limit for a comfortable night’s sleep for the average man.

**(EXTREME) – SURVIVAL BLANKET** Here, it’s no longer about sleep but about survival, you’re dealing with the risk of frostbite and hypothermia. The term ‘survival blanket’ can be used by sales staff to emphasise the point.

## LABORATORY VS. REALITY

### EN ISO 23537:2016 COLD CHAMBER TEST:

- test dummy is healthy and relaxed, is considered to have eaten a hot meal, and so does not get into sleeping bag in a chilly state
- zips the bag right up, is also wearing a hat
- and dry clothing
- on a well insulated base
- there is no wind in the shelter, humidity levels are normal

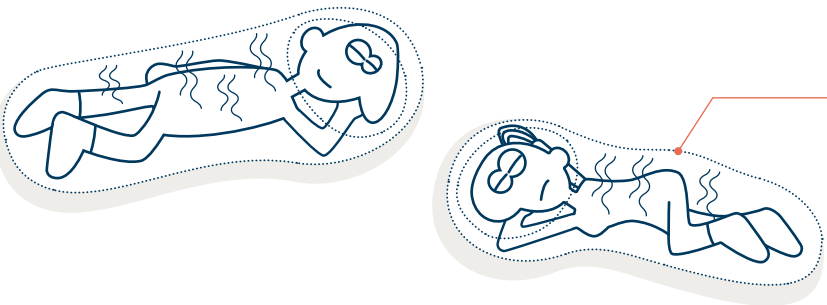
### WHAT’S WRONG? IN REALITY:

- after a long day out, the person is worn out, doesn’t want to cook, so eats a sandwich and has a sip of whisky in their sleeping bag to warm up
- has no hat and, for fear of claustrophobia, does not pull the hood tight
- has sweaty, damp clothing on from the daytime
- uses a thin sleeping mat to save weight
- the wind blows through the flysheet, it’s been raining for three days and it’s 0°C at night

## A SLEEPING BAG DOES NOT HEAT, IT INSULATES.

The fill inside a sleeping bag creates innumerable tiny air pockets that trap warm air and keep it in place. The greater the pillow of air, the better the insulation performance. Polystyrene would be the most effective material, but it cannot be compressed nor is it comfortable to sleep in. That’s why down or synthetic fibres that mimic down are used as fill materials. The fine fibres are comfortable, supple, lightweight and compressible.

**THEREFORE**, when selecting a temperature rating, it is important to consider individual physiological factors that can influence the perception of warmth.



**OBJECTIVE:** Clearly explain to the customer that if they want to sleep comfortably, they should have a decent temperature buffer.

**EXHAUSTED?** Exhaustion reduces the body’s ability to generate heat:

**EXHAUSTED?** Exhaustion reduces the body’s ability to generate heat

**INEXPERIENCED?** Correct use, appropriate clothing, sheltered sleeping spot

**CREATURE COMFORTS?** If you’re used to colder temperatures, you feel the cold less than a home-bod will

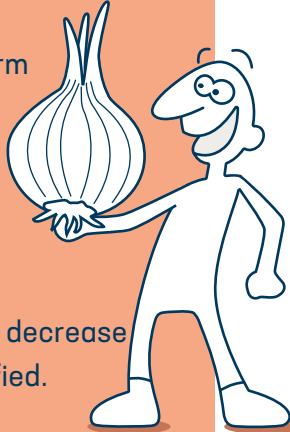
**UNDERWEIGHT?** Thin people feel the cold more, due to having less fat reserves to burn

**FEMALE?** Women feel the cold more since they generally have less muscle mass

A person weighing 50kg produces about 46W of heat; a person weighing 80kg about 74W. Yet both need to maintain a body temperature of around 37.2°C. In order to sleep comfortably, the lighter person therefore requires significantly more insulation.

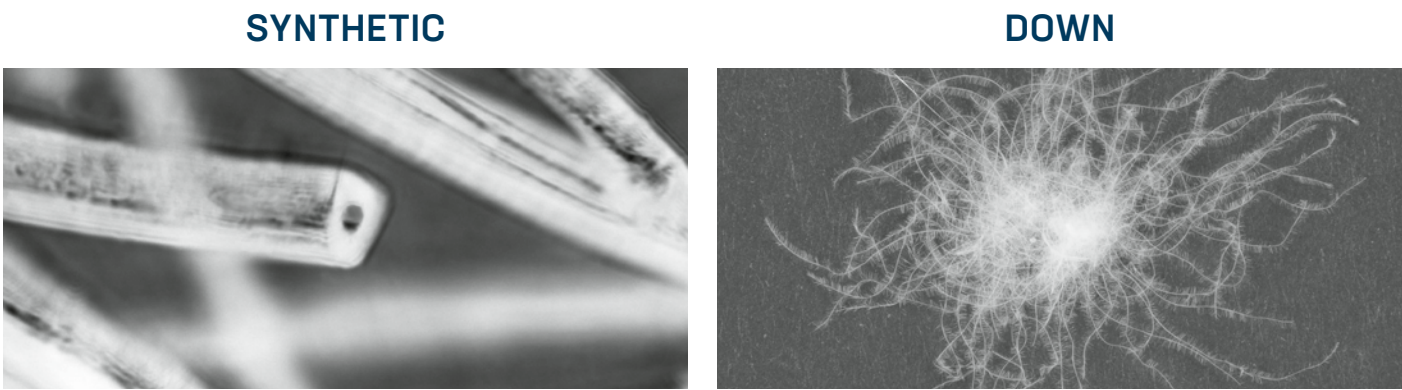
## PRACTICAL ADVICE

- Immediately unpack your sleeping bag upon arrival and fluff it up.
  - Our bodies are the heating system! Eat plenty, drink warm liquids (less alcohol) and keep moving.
  - When below +10°C a simple air mattress, camp bed, hammock, aluminium insulated or summer sleep mat is not enough. By lying in the sleeping bag, we compress the fill. This means the base has to be thermal. If necessary, bolster a thermal sleep mat with extra insulation materials.
  - Wind cools you down. At speeds of just 25km/hour, 5°C feels like 0°C. So, try to select a sheltered spot for your tent, bivvi or if necessary use a boulder for shelter.
  - Change clothing – what you wore for the day will be damp and the evaporation will cool you down.
  - A hat and scarf are mandatory sleep items for anyone not keen on pulling the hood tight.
  - Make a hot water bottle using a drinks bottle wrapped in a sock and put a fleece pull-over down inside the foot section.
  - If you feel cold, move about to warm your body through before bed.
  - Winter trips: Combine a synthetic sleeping bag (inside) with a down sleeping bag (outside).
- Incorrect use will result in up to 3°C decrease in temperature rating to that specified.



CLIMATE → Fill

DO I TEND TO TRAVEL TO RAINY AREAS? Or is it mostly hut to hut? Is my destination warm and humid or hot and dry? Do I take care of my sleeping bag? Or am I looking for something simple and easy-care? Answers to these questions will help decide whether you opt for a down or a synthetic sleeping bag. There are advantages and disadvantages to both insulation materials:



Synthetic fibres go through a thermal process to create fibrefill insulation. The fibres are smooth on the outside for maximum loft – and therefore maximum insulation. Synthetic polyester hardly absorbs any moisture. If it does get wet however, it dries extremely fast. Compared to down, it is cheaper to make and more easy-care but also less resistant to ageing.

Down feathers have a minute core from which countless fine fibres branch out. They are the underplumage of water fowl (ducks & geese). Relative to its weight (approx. 0.002 g per feather) the voluminous structure of down traps a large amount of warm, insulating air. Down is highly resilient, so it can withstand mechanical compression and packs down very small.

– heavier than down (by approx. 30%, s.p. 146)

– less compressible

– less effective moisture transport

– slightly longer to warm

+ easy-care

+ insulation performance at 70% when damp

+ dries faster

+ minimal moisture uptake

↓

car transport / instead of backpack

all-rounder / summer camping

humid climates (lengthy periods of rain, wet environments etc.)

+ best warmth-to-weight ratio

+ smaller pack size

+ superior sleep comfort

+ minimum warm-up time

+ more durable & sustainable (with proper care)

– insulation performance diminished when damp

– slower drying


– attracts moisture (clumps)


↓

where weight is an issue (international travel, backpack)

high performance / colder temperatures

dry to temperate climates





THE DEUTER ASTRO SERIES: WITH 100% RDS CERTIFIED DOWN

- No live plucking
- No forced feeding
- Traceability in the supply chain
- Certified and controlled by accredited institutes worldwide
- Animal welfare assured at all times
- [www.responsibledown.org](http://www.responsibledown.org)

THE LARGER THE DOWN FEATHERS THE BETTER THE FILL POWER OR LOFT – BEST TYPES:

- 1 goose, because a higher cuin figure can be achieved than with duck, but good quality duck down (more readily available) is better than average quality goose down
- 2 ausgewachsener Vogel, kühles Klima, Freilandhaltung, gutes Futter

Deuter only uses the highest quality down from northern China.

We only use down that is Responsible Down Standard (RDS) certified and which is a waste product from the Chinese food industry. Only dead animals, no intensive factory farm conditions, no live plucking – as is the norm in China. Deuter’s down supplier works together with the IDFL and is a bluesign® system partner.

Down fill is always a blend of insulating down and supporting feathers:

- 70/30: no warmth/weight advantage compared to good quality synthetic sleeping bag
- 80/20: good insulation performance > Astro
- 90/10 or 95/5: very good insulation performance, advisable > Astro Pro
- 100/0 is not technically feasible at an acceptable cost


Cuin fill power:

The capability for down to return to its original loft or volume (and therefore its insulation performance) following compression from shipping, use or storage. Different methods can be used to determine volume in relation to weight:

Fill power according to EN 12130 (Deuter): „Tumbe dry“:

20 g down fluffed up by warm air (during use body heat supports the restoration of loft)  
Fill power according to international IDFB: Steam: 30 g down pre-treated with steam (original fill power directly after process).

EN	IDFB	
550	620	good
650	730	very good
700	800	top quality



The different methods of measurement lead to noticeable differences between international and European values.

144

145



ACTIVITY → Weight / Pack size

COMPARISON  
PACK SIZE  
SYNTHETIC / DOWN

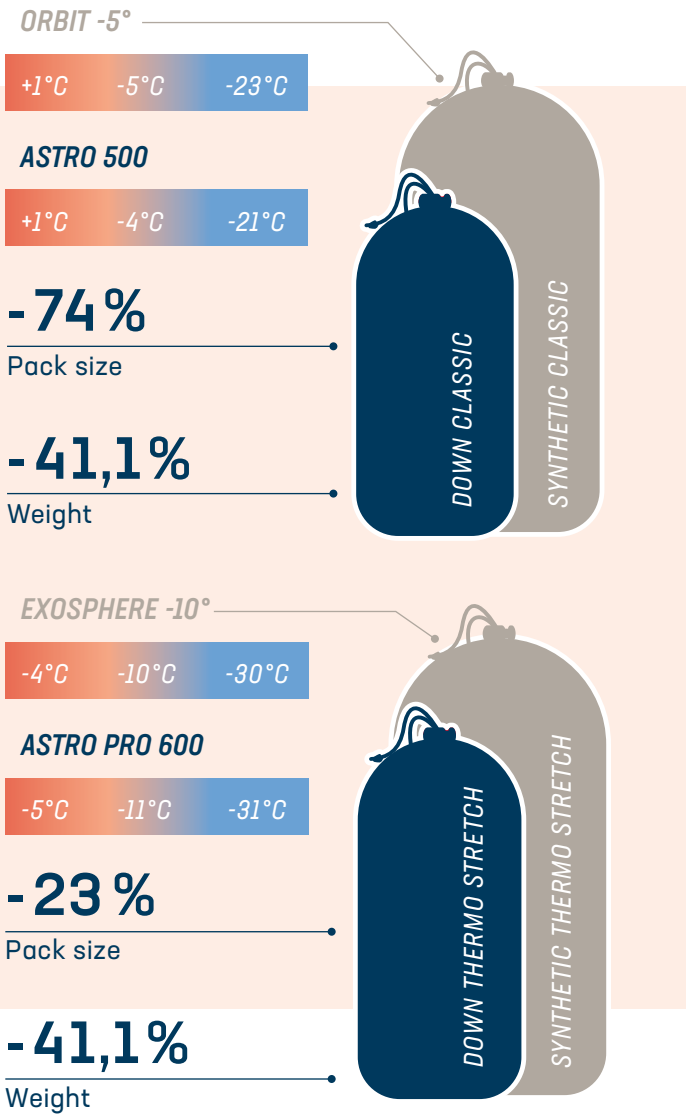
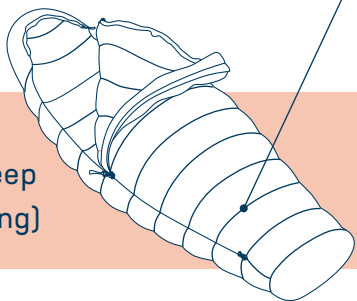
WHAT AM I GOING TO BE DOING? Am I going to have to carry my sleeping bag or am I going to stay in one place? Do I just need it in case of an emergency on an alpine traverse or does it need to be high performance for winter bivvying? Answering these questions will dictate what pack size or warmth-to-weight criteria the sleeping bag needs to fulfil. Down is unbeatable for lightweight compressibility, and high-end synthetic insulation is better than simpler synthetic fills.

SPACE PREFERENCE → Cut

THERE ARE DIFFERENT SHAPES to choose from depending on preference and activity. In general: The closer the cut the quicker the sleeping bag warms up as the sleeper has to warm up less cold air. However, the fit should also not be too tight and therefore restrict movement. It is similar to making a technical jacket where every inch counts. The competition for ever greater “warmth / weight / packability” ratios results in sleeping bags being made that are tighter and tighter - and this leads to cold bridges.

TIP

Try it out, lying down on a sleep mat, with a pillow (cross-selling)



The following shapes are used in the DEUTER SLEEPING BAG COLLECTION:

- Rectangular shape
- Deuter Mummy Comfort shape
- Thermo Stretch Mummy shape

NOT IN USE:

Ovoid: Somewhere between the shape of a rectangular and mummy design - neither offers more space nor better insulation or improved weight

THE RIGHT SIZE

avoids unnecessary empty space and reduces weight: REG for up to 185 cm, SL up to 175 cm, L up to 200 cm (for large feet, calculate an extra 5 cm)

IT IS ONLY WHEN EFFECTIVELY ENCASED THAT SLEEPING BAG FILL...

...can prevent cold bridges. Elaborate construction methods not only improve performance but also the durability and wear resistance during use and storage. The more frequent the change of location, the greater the mechanical strain (unpacking and packing) and compression strain.

- the most susceptible are single-layer designs
- shingle construction or multi-layer designs are much more stable
- down construction methods are the most wear resistant

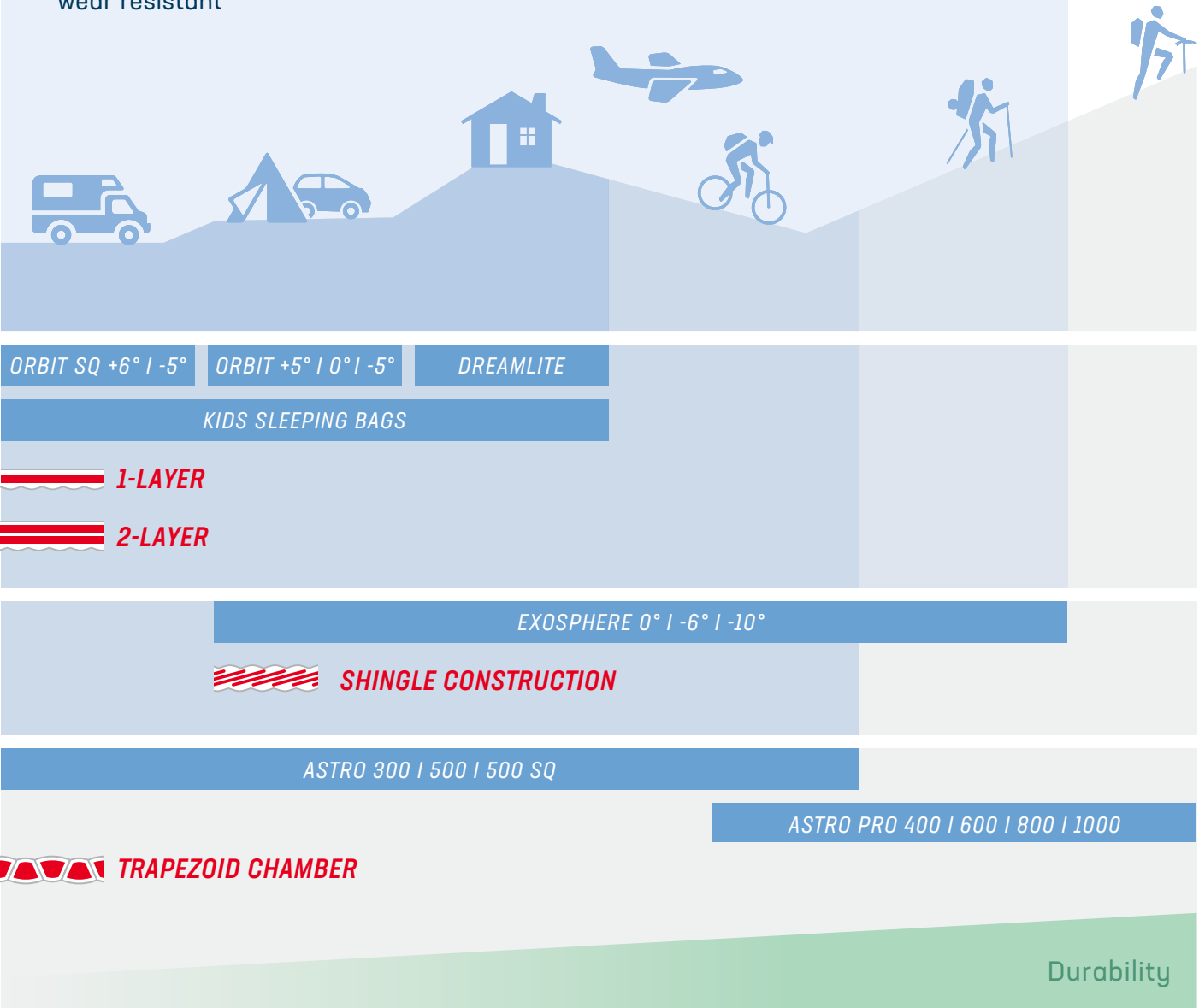
FREQUENCY → Construction

The following shapes are used in the DEUTER SLEEPING BAG COLLECTION:

- The following construction methods are used in the Deuter sleeping bag collection:
- layered construction (synthetic)
- shingle construction (synthetic)
- trapezoid chamber construction (down)

NOT USED:

- Material similar to wadding, filled in chambers - not advisable!
- cheapest construction methods (discount / hardware store sleeping bags)
- cold bridges unavoidable because fill not fixed in place and quilted all the way through



Durability





## WHAT ARE COLD BRIDGES?

You're wearing your warmest winter jacket, a woolly hat, mittens and winter boots, but you've only got a thin pair of jeans on your legs. Then, you sit down on a cold stone step. Within a very short period of time, you're freezing cold. There was little point in wearing all those other warm layers. That is what a cold bridge is.

Why is it so important to prevent cold bridges? It only takes an area the size of a postcard with little or no insulation to cool you down very quickly – and you spend several hours in your sleeping bag. So, a sleeping bag with a small cold bridge is effectively as good as having a rain jacket with a hole in it. You can forget about a good night's rest after that your hard day out.

### INCORRECT CONSTRUCTION

- Low-grade fill and not effectively fixed in place
- No zip baffle or badly designed zip baffle – must be 3D shaped
- Cold weather sleeping bag without a warmth collar
- Seam intersections in the foot section
- Chambers too large – too little fill in them
- Chambers too small – when too tightly filled the down cannot achieve its full loft
- Large lengthways chambers that allow the down to drift down the bag – smaller diagonal chambers better

### INCORRECT CARE

- Incorrect down care: Lumpy – stored damp; dirty – directly against the skin; compressed – stored in stuff sack;
- Compressed too much, the fibres kink, fill power is lost – only compress when necessary
- Long-term compression – fibres lose their elastic resilience, always store loose and dry
- Rolling it up for storage creases the fibres in the same place every time. It's better to stuff the

- sleeping bag into a bag – foot section first – in an irregular manner
- Tearing the fill by yanking the bag out of the stuff / storage sack

### AGEING FACTORS

- Deposits (body oils / salts) deteriorate the insulation performance & moisture transport effectiveness
- Flattening of the fill, the simpler the fill the faster this happens

### INCORRECT FIT

- Sleeping bag too short: Fill in the head and foot sections becomes compressed (applies to people who sleep on their tummy / with large feet)
- Sleeping bag too big: Too much air space to heat up (oval shape / children)
- Sleeping bag too narrow: Sleeping bag is stretched over the hips/ shoulders, pressed flat and does not insulate
- Incorrect use: See "practical advice"



### MY DEUTER

"The human body produces about 0.4 litres of moisture while we sleep. That's why I always make sure that I air my sleeping bag every day when I'm on expedition. However, the salts, proteins and oils contained within the sweat remain. This causes a sleeping bag to lose some of its insulation performance. To increase the lifespan and insulation performance of a sleeping bag I recommend using a liner, or sleeping in technical base layers. But on expedition that's not always possible. That's why the clever chamber design and 360° fill of Deuter sleeping bags is so important. And I've never felt cold in one, however harsh the conditions have been."

.....

FABIAN BUHL is Germany's most promising professional mountaineer and climber. High alpine projects are his speciality. When he's on expedition or carrying out an impressive first ascent, like that of Choktoi Ri (6,166 m) in the Pakistan Karakorum, he has to be able to rely on his climbing partner and his kit.



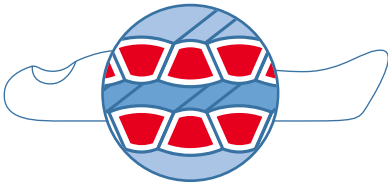


SHARED FEATURES

ASTRO | ASTRO PRO:

TRAPEZOID CHAMBER CONSTRUCTION

- Diagonal network of seams creates trapezoid-shaped chambers:
- **Down kept in position** leads to elaborate funnel shape
  - **Suited to temperatures below freezing** the best and most secure construction
  - **Compression does not result in down-free zones**
  - **360° insulation** same amount of fill in the top and bottom



- DOWN FILL 600+ CUIN 80/20 RDS DOWN**  
good insulation performance:
- **maximum sleep comfort** any sweat produced during sleep (approx. 0.5 l) is dispersed
  - **Extra fill in the foot section** in the Astro 500

ASTRO 300 & 500 & 500 SQ

- ANTI-SNAGGING BAND** on either side of the zip
- SILKY-SOFT FABRICS** highly compressible
- STORAGE SACK AND 2-STAGE STUFF SACK**
- WARMTH COLLAR: ASTRO 500**
- DEUTER MUMMY COMFORT SHAPE** very good warmth-to-weight ratio:
- CONTOURED HOOD** fits perfectly snug around the head
- FREEDOM OF MOVEMENT** in the more spacious upper section and superior insulation performance in the narrower leg section
- ERGONOMIC FOOT SECTION** corresponds to the natural position of the foot, thus avoiding fill compression - 3 chambers to keep down securely in position

- DEUTER THERMO STRETCH STRETCHY MUMMY SHAPE TOP WARMTH-TO-WEIGHT RATIO:**
- **Consistently good fit**, thanks to the stretchy seams of the liner that allow up to 25% expansion within the roomy shell
  - **No stretchy seams in the shell** because it would be detrimental to the down's loft
  - **Comfortable sleep**, turn and roll over, pull your knees up, without getting twisted up inside your sleeping bag
  - **Warms quickly and stays warm**, thanks to the stretchy liner which creates fewer surplus air pockets inside the sleeping bag that require warming
  - **Ideal for those who feel hemmed in** a regular mummy-shaped sleeping bag
  - **The lower the temperature range** the more pronounced the benefits

- EXTRA THICK FILL IN THE FOOT SECTION**
- WARMTH COLLAR**
- ANTI-SNAGGING BAND** on either side of the zip
- HIGHLY BREATHABLE FABRIC** water-repellent PU coating on head / foot section
- STORAGE SACK & COMPRESSION SACK**

ASTRO PRO 400 & 600 & 800 & 1000

- DOWN FILL 750+ CUIN 90/10 RDS DOWN (FW 22)**  
very good insulation performance, recommended!
- SAFETY RESERVES OF HEAT IN THE SL WOMEN'S MODEL THROUGH EXTRA FILL**
- DOWN REMAINS SECURELY IN POSITION:**
- THANKS TO CONTOURED HOOD** with 5 chambers (Astro Pro 400 & 600) or 7 chambers (Astro Pro 800 & 1000)
- NO MATTER HOW MUCH MOVEMENT DUE TO WAFFLE STRUCTURE:** combination of longitudinal chambers and transverse stretch seams on the top side from the knee down
- THROUGH ERGONOMIC FOOT SECTION** with 3 chambers that corresponds to the natural position of the foot, avoids pressure on the fill

Reduced weight / Pack size

Lightweight down, packs down small with superior comfort thanks to

- highly compressible RDS-certified down fill
- lightweight compressible fabrics - downproof & robust thanks to dense weave
- optimised weight vs. freedom of movement: Deuter Mummy Comfort shape



Superior warmth-to-weight ratio thanks to

- ideal 90/10 RDS down mix for maximum compressibility
- lightweight, compressible fabrics - downproof & robust thanks to dense weave
- stretchy mummy shape



Sleep comfort thanks to

- RDS-certified down fill with good loft retains heat
- Mummy Comfort shape for superior insulation
- zero cold bridges thanks to trapezoid chamber construction
- same fill in the top and bottom for 360° insulation
- improved sleep comfort thanks to optimum moisture transport

High-performance insulation and maximum sleeping comfort thanks to:

- good lofting capability of the RDS down fill: traps air that effectively stores heat
- improved performance thanks to stretchy liner with Thermo-stretch seams
- trapezoid chamber construction for zero cold bridges
- additional chambers in the leg, foot and head section: down securely fixed in position throughout
- same fill in the top and bottom for 360° insulation
- optimum moisture transport for a dry sleeping environment

Insulation performance / Temperature limit **+3°**

up to **-21°**

Hut    Touring with light baggage    Long-distance hike    Work & Travel    Cycle trip    Mountain shelter    Trekking    Alpine    Expedition

# SLEEPING BAG Synthetic

## SHARED FEATURES

CHILDREN'S SLEEPING BAGS | DREAMLITE | ORBIT SQ:

### LAYERED CONSTRUCTION

fibrefill insulation layer(s) sewn together with the liner and/ or shell:

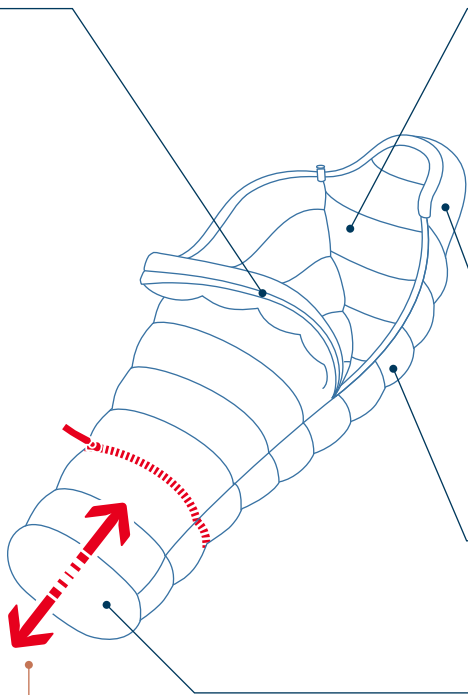
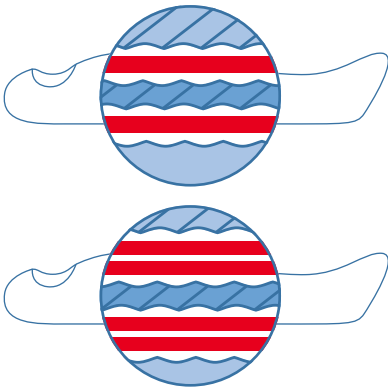
#### Single-layer construction:

Little Star, Starlight, Starlight SQ, Dreamlite, Orbit SQ +6°

#### 2-layer construction:

Starlight Pro, Orbit SQ -5°

- More layers therefore warmer
- The more sophisticated and elaborate the stitching, the more durable
- 360° insulation same amount of fill and same construction on the top and bottom



**ZIP-OUT EXTENSION IN THE FOOT**  
Sleeping bag grows with the child

## SHARED FEATURES

CHILDREN'S SLEEPING BAGS | ORBIT SQ:

### DEUTER HIGH-LOFT HOLLOWFIBRE

short-staple fibres transformed into fibrefill insulation through a thermal process: Fibres are hollow for optimum insulation performance and minimised weight

## SHARED FEATURES

STARLIGHT | STARLIGHT PRO | DREAMLITE:

### DEUTER MUMMY COMFORT SHAPE

Very good warmth-to-weight ratio:

### CONTOURED HOOD

fits perfectly snug around the head

### FREEDOM OF MOVEMENT

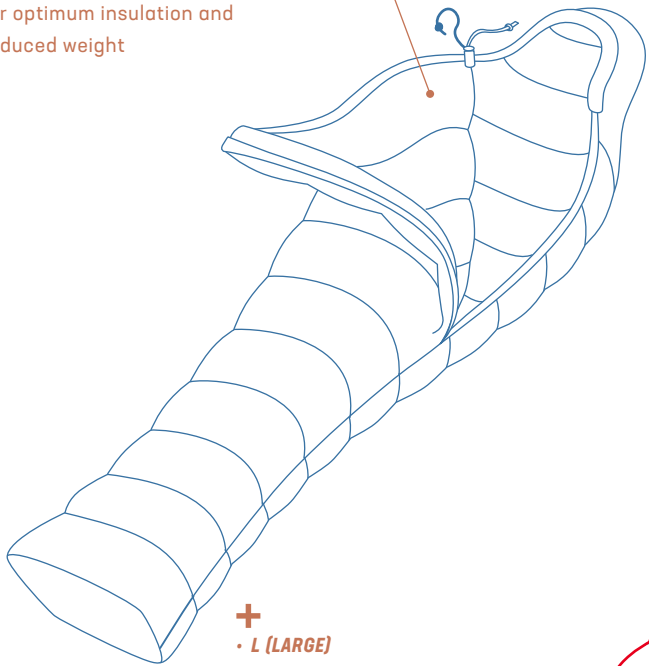
in the more spacious upper section and superior insulation performance in the narrower leg section

### ERGONOMIC FOOT SECTION

corresponds to the natural position of the foot, thus avoiding fill compression

# CHILDREN'S SLEEPING BAGS | DREAMLITE | ORBIT SQ

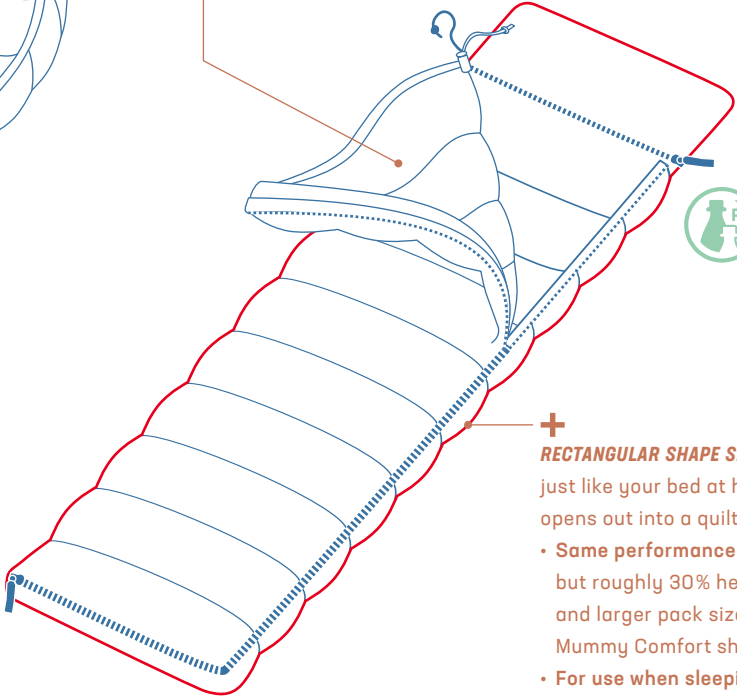
**POLYDOWN SOFT POLYESTER FIBRE**  
short-staple fibres turned into fibrefill through a thermal process: Fibres are hollow for optimum insulation and reduced weight



- **L (LARGE)** for tall people
- **FLAT-FORMAT ZIP BAFFLE**
- **CAN BE USED AS A LINER** to increase the insulation of a regular sleeping bag

**TC TECHNICAL COTTON LINING COTTON/ POLYESTER BLEND** for the comfort of cotton combined with the technical performance of polyester

**SHELL FABRIC** 100% recycled fabric with a wonderfully soft feel and touch



- **DETACHABLE HEAD SECTION** can be washed separately. Sleeping bag can be used as guest duvet.
- **ANTI-SNAGGING BAND ON EITHER SIDE OF THE ZIP**
- **ONE SIZE**

- **RECTANGULAR SHAPE SPACIOUS** just like your bed at home, opens out into a quilt:
- **Same performance** but roughly 30% heavier and larger pack size than Mummy Comfort shape
- **For use when sleeping bag does not have to be carried**

LITTLE STAR | STARLIGHT | STARLIGHT PRO | STARLIGHT SQ

# CHILDREN'S SLEEPING BAGS

Reliable companion over several years thanks to 30 cm zip-out extension in the foot section - when not in use provides doubled up insulation to cold-sensitive children's feet

## TIP

Always dress your child in clothing suited to the prevailing outdoor temperatures when sleeping in their sleeping bag, because they lose more heat than adults.

- 3D contoured hood with extra soft edging & easy-care fabrics
- without warmth collar for child safety
- Little Star two-way zip for ease of entry
- Sizes: Little Star up to 130 cm, Starlight series up to 130-170 cm
- **NO TEMPERATURE** ranges due to lack of child-sized test dummies and therefore no official testing procedures (guideline: single-layer for double-figure temperatures, 2-layer can be used in temperatures ranging down to single figures)

Campervan Fixed camp Caravaning Hut stays

DREAMLITE | ORBIT SQ +6° & -5°

Reduced weight / Pack size

Lightweight synthetic insulation with small pack size thanks to

- highly compressible fill
- Deuter Mummy Comfort shape for optimised weight vs. freedom of movement

Ample freedom of movement thanks to

- rectangular shape of the sleeping bag
- two zips convert the sleeping bag into a quilt

- Deuter Mummy Comfort shape - superior insulation through optimised shape (not too tight or too loose)
- same fill in the top and bottom for 360° insulation

- same fill in the top and bottom for 360° insulation
- Technical cotton lining for a pleasant, sleep-inducing environment inside the bag
- 2-layer construction in the Orbit SQ -5°

Insulation performance / Temperature limit **+13°**

up to **-5°**

Hut stay Work & Travel Liner bag Campervan Fixed camp

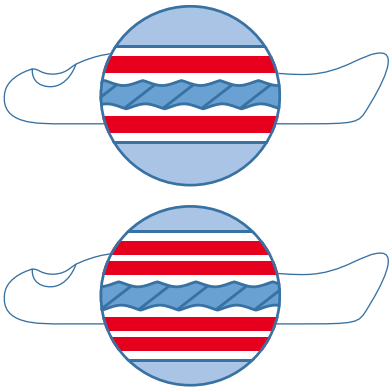


# SLEEPING BAG Synthetic

ORBIT | EXOSPHERE

**LAYERED CONSTRUCTION: FIBREFILL**  
**INSULATION LAYER(S)** sewn together with the liner and/ or shell  
2-layer construction: Orbit -5°  
1-layer construction: Orbit +5° & 0°

- **The more sophisticated and elaborate the stitching, the more durable**
- **360° insulation**  
same amount of fill and same construction on the top and bottom



**DEUTER HIGH-LOFT HOLLOWFIBER**  
**SHORT-STAPLE FIBRES TRANSFORMED INTO FIBREFILL INSULATION THROUGH A THERMAL PROCESS:** Fibres are hollow for optimum insulation and reduced weight



- **WARMTH COLLAR: ORBIT 0° & -5°**
- **ANTI-SNAGGING BAND ON EITHER SIDE OF THE ZIP**
- **UNATTACHED SHELL FOR LESS STRAIN** on the fill when packing
- **FLEECE INSERTS: SL MODELS**  
extra insulation for the kidneys and feet
- **COMPRESSION STUFF SACK**

**DEUTER MUMMY COMFORT SHAPE**  
Very good warmth-to-weight ratio:

**CONTOURED HOOD** fits perfectly snug around the head

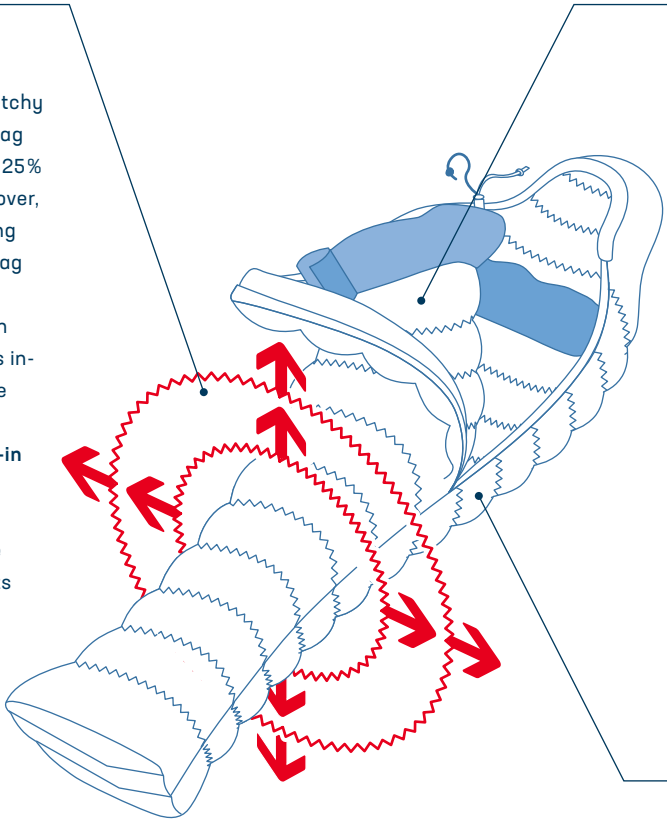
**FREEDOM OF MOVEMENT**  
in the more spacious upper section and superior insulation performance in the narrower leg section

**ERGONOMIC FOOT SECTION**  
corresponds to the natural position of the foot, thus avoiding fill compression

**THERMO STRETCH MUMMY SHAPE: CONSISTENTLY GOOD FIT**

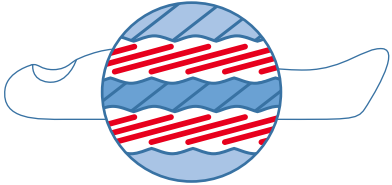
- good warmth to weight ratio:
- **Consistently good fit**, due to stretchy seams throughout the sleeping bag which allows it to stretch by up to 25%
  - **Comfortable sleep**, turn and roll over, pull your knees up, without getting twisted up inside your sleeping bag
  - **Warms quickly and stays warm**, thanks to the stretchy liner which creates fewer surplus air pockets inside the sleeping bag that require warming
  - **Ideal for those who feel hemmed-in** in a regular mummy-shaped sleeping bag
  - **The lower the temperature range** the more pronounced the benefits

- **FOOT WARMER:**  
extra layer of insulation in the foot section
- **WARMTH COLLAR:**  
Exosphere -6° und -10°
- **ANTI-SNAGGING BAND ON EITHER SIDE**
- **COMBINATION OF MATERIALS**  
Head / foot section water-repellent PU coating (tent)
- **FLEECE INSERTS: SL MODELS** for added warmth on the kidneys and feet
- **COMPRESSION SACK**



**SHINGLE CONSTRUCTION**  
fibrefill layered like roof tiles sewn together with the shell and liner

- **360° insulation**  
same amount of fill and same construction on the top and bottom
- **More fill power** (heat retention) compared to layered construction
- **The greater the overlap the better the insulation** (1.3-times: 0°, 2.5-times: -6°, 3-times: -10°)
- **Superior stability** for better resistance to mechanical compression (e.g. packing) than layered construction



**DEUTER THERMO PROLOFT®**  
mix of solid and hollow fibres high proportion of long-staple fibres, for tear resistance and durability:

- In accordance with Swiss "Öko-Tex Standard 100"
- Finer fibres than High-Loft Hollow-fibre, making them more supple and compressible

ORBIT +5° & 0° & -5°

EXOSPHERE 0° & -6° & -10°

Reduced weight / Pack size

Easy-care synthetic all-rounder

- synthetic fibrefill: does not clump together when damp and retains insulation performance, fast-drying

Superior warmth-to-weight ratio thanks to

- fine, lightweight Deuter Thermo ProLoft® fibres are highly compressible
- optimum balance of low weight & freedom of movement: stretchy mummy shape

Good insulation thanks to

- Deuter Mummy Comfort shape - not too tight for effective insulation
- same fill in the top and bottom for 360° insulation
- Seam-free shell fabric produces better thermal efficiency and also increases water resistance
- suitable sizes to avoid surplus air pockets: REG, L & SL

Hard-wearing synthetic sleeping bag with superior insulation thanks to

- fine, supple Thermo ProLoft® fibrefill that's more compressible than Orbit fill
- Thermo Stretch seams create a flexible shape that improves performance
- stable shingle design: best construction for best insulation
- ideal combination of water-repellent, breathable and lightweight fabrics
- same fill in the top and bottom for 360° insulation
- Footwarmer

Insulation performance / Temperature limit **+5°**

up to **-10°**

Campervan      Tent travels      Occasional use      Cycle trip      Work & Travel      Trekking      Canoe journey      All-round      Alpine use

SLEEPING BAG Overview

SYNTHETIC

	Exosphere 0° SL	Exosphere 0°	Exosphere 0° L	Exosphere -6° SL	Exosphere -6°	Exosphere -6° L	Exosphere -10° SL	Exosphere -10°	Exosphere -10° L	Orbit +5° SL	Orbit +5°	Orbit +5° L		Orbit +0° SL	Orbit +0°	Orbit +0° L	Orbit -5° SL	Orbit -5°	Orbit -5° L	Orbit SQ +6°	Orbit SQ -5°	Dreamlite	Dreamlite L	Little Star Kids	Starlight Kids	Starlight Pro Kids	Starlight SQ Kids
Item number	3700021	3700121	3700221	3700321	3700421	3700521	3700621	3700721	3700821	3701022	3701122	3701222		3701322	3701422	3701522	3701622	3701722	3701822	3702022	3702122	3703021	3703121	3720021	3720121	3720221	3720321
Fillweight	497 g	542 g	570 g	830 g	870 g	970 g	1180 g	1280 g	1395 g	380 g	400 g	420 g		670 g	700 g	730 g	850 g	900 g	950 g	480 g	1030 g	140 g	160 g	320 g	380 g	750 g	540 g
Total weight	1060 g	995 g	1075 g	1430 g	1370 g	1525 g	1780 g	1785 g	1955 g	1050 g	1050 g	1100 g		1400 g	1400 g	1450 g	1700 g	1700 g	1850 g	1400 g	2050 g	590 g	690 g	650 g	900 g	1330 g	1100 g
T-Comfort	+5°			+/-0°			-4°			+9°				+5°			+/-0°			+10°	+1°	+16°	-*	-*	-*	-*	
T-Limit	+/-0°			-6°			-10°			+5°				+/-0°			-5°			+6°	-5°	+13°	-*	-*	-*	-*	
T-Extreme	-15°			-23°			-30°			-9°				-15°			-23°			-7°	-22°	+3°	-*	-*	-*	-*	
Pack size [cm]	16 x 32	16 x 32	16 x 32	19 x 33	19 x 33	21 x 35	22 x 35	22 x 35	23 x 36	20 x 39	21 x 39	21 x 40		23 x 45	23 x 45	24 x 46	27 x 47	27 x 47	28 x 48	22 x 41	28 x 48	12 x 22	13 x 25	18 x 29	20 x 33	23 x 38	22 x 33
Length [cm]	197	205	220	197	205	220	197	205	220	198	208	220		198	208	220	198	208	220	195+35	195+35	205	220	115-145 +30	160-190 +30	160-190 +30	160-190 +30
Shoulder width	68-85	68-85	73-90	68-85	68-85	73-90	68-85	68-85	73-90	74	74	79		74	74	79	74	74	79	79	79	74	79	57	67	67	69
Foot width [cm]	43-54	43-54	45-56	43-54	43-54	45-56	43-54	43-54	45-56	47	47	49		47	47	49	47	47	49	79	79	47	49	41	44	44	69
Body Size [cm]	~175	~185	~200	~175	~185	~200	~175	~185	~200	~175	~185	~200		~175	~185	~200	~175	~185	~200	~200	~200	~185	~200	~95-130	~130-170	~130-170	~130-170
Construction	1.3 Shingle Layer			2.5 Shingle Layer			3.0 Shingle Layer			1-Layer				1-Layer			2-Layer			1-Layer	2-Layer	1-Layer	1-Layer	1-Layer		2-Layer	1-Layer
Insulation	deuter Thermo Pro Loft			deuter Thermo Pro Loft			Thermo Pro Loft			High Loft Hollowfibre				High Loft Hollowfibre			High Loft Hollowfibre			High Loft Hollowfibre		Polydown Soft Polyesterfibre		High Loft Hollowfibre			
Lining	30D PA			30D PA			30D PA			75D PES MICROFIBER				75D PES MICROFIBER			75D PES MICROFIBER			T/C		78D PA		75D PES			
Outer material	30D PA RIPSTOP			30D PA RIPSTOP			30D PA RIPSTOP			50D REC PES RIPSTOP				50D REC PES RIPSTOP			50D REC PES RIPSTOP			50D REC PES RIPSTOP		70D PA RIPSTOP		70D PA			
Thermo Stretch Com.	•			•			•																				
Uses	2 Season			3 Season			4 Season			Summer				2 Season			3 Season			Summer	2 Season	Summer		*Norm EN ISO 23537:2016 Temperature ranges are not available for child sizes.			

DOWN

	ASTRO PRO 400 SL	ASTRO PRO 400	ASTRO PRO 400 EL	ASTRO PRO 600 SL	ASTRO PRO 600	ASTRO PRO 600 EL	ASTRO PRO 800 SL	ASTRO PRO 800	ASTRO PRO 800 EL	ASTRO PRO 1000 SL	ASTRO PRO 1000	ASTRO PRO 1000 EL		ASTRO 300	ASTRO 300 L	ASTRO 500	ASTRO 500 L	ASTRO 500 SQ
Item number	3712223	3712023	3712123	3712523	3712323	3712423	3712823	3712623	3712723	3713123	3712923	3713023		3711021	3711121	3711221	3711321	3711421
Fillweight	400 g	400 g	450 g	600 g	600 g	650 g	800 g	800 g	850 g	1000 g	1000 g	1050 g		300 g	350 g	500 g	550 g	500 g
Total weight	800 g	850 g	950 g	1000 g	1050 g	1150 g	1250 g	1300 g	1400 g	1450 g	1500 g	1600 g		750 g	850 g	1000 g	1100 g	1300 g
T-Comfort	+ 2°			-4°			-8°			-11°				+7°		+1°		+2°
T-Limit	-4°			-10°			-15°			-18°				+3°		-4°		-3°
T-Extreme	-21°			-29°			-36°			-41°				-11°		-21°		-20°
Pack size [cm]	14 x 30	14 x 33	15 x 31	18 x 35	18 x 35	19 x 36	20 x 39	20 x 39	21 x 40	22 x 42	22 x 42	22 x 43		16 x 26	18 x 26	18 x 31	20 x 31	20 x 31
Length [cm]	194	204	219	194	204	219	194	204	219	194	204	219		205	220	205	220	195 + 35
Shoulder width	63	68	73	65	70	75	65	70	75	65	70	75		74	79	74	79	79
Foot width [cm]	43	48	52	43	48	52	43	48	52	43	48	52		47	51	47	51	79
Body Size [cm]	~175	~185	~200	~175	~185	~200	~175	~185	~200	~175	~185	~200		~185	~200	~185	~200	~200
Construction	Trapezoid Chamber			Trapezoid Chamber			Trapezoid Chamber			Trapezoid Chamber				Trapezoid Chamber		Trapezoid Chamber		H-Chamber
Fill Power	750+ cuin			750+ cuin			750+ cuin			750+ cuin				600+ cuin		600+ cuin		600+ cuin
Insulation	90/10 Down RDS / Bluesign			90/10 Down RDS / Bluesign			90/10 Down RDS / Bluesign			90/10 Down RDS / Bluesign				80/20 Down RDS / Bluesign		80/20 Down RDS / Bluesign		80/20 Down RDS / Bluesign
Lining	20D PA RIPSTOP			20D PA RIPSTOP			20D PA RIPSTOP			20D PA RIPSTOP				30D PA		30D PA		70D TASLAN
Outer material	20D PA RIPSTOP + DWR			20D PA RIPSTOP + DWR			20D PA RIPSTOP + DWR			20D PA RIPSTOP + DWR				30D PA RIPSTOP		30D PA RIPSTOP		30D PA RIPSTOP
Thermo Stretch Com.	•			•			•			•								
Uses	3 Season			4 Season			4 Season			4 Season				Summer		2 Season		3 Season

360° fill system for 360° warmth

The top and bottom layers of a deuter sleeping bag are identical and contain the same amount. That's because we are aware that despite EN-norm tests assuming that a person will lie on their back, in reality, people move about in their sleep. By using our 360° fill system, we can guarantee our comfort ratings in all sleeping positions - and no more cold back!



100% RDS certified down: the deuter Astro series

- No live plucking
- No forced feeding
- Traceability in the supply chain
- Animal welfare assured at all times
- Certified and controlled by accredited institutes worldwide





## EXTEND THE LIFESPAN OF YOUR BACKPACK WITH THE RIGHT CARE

### How do you look after your sleeping bag on the move?

It is best to air it every time you use it – for example draped over the tent. Don't wash it too often as this reduces its insulation performance. Therefore, only wash it when it's absolutely necessary. Using a sleeping bag liner or wearing technical base layers helps protect the sleeping bag. Little stains can often be removed using a sponge and warm soapy water.

### Which is better:

#### Stuffing or rolling it up?

"Stuffing – always! Rolling it creases the fibres in the same place every time. So, it's best to stuff it in an irregular manner, foot section first. Only use the stuff sack for transportation/trav-

el. Always store your sleeping bag gently folded or loosely stuffed and kept in a dry place. Ideally use a storage sack or a pillowcase, so that the fill retains its loft and can 'recover'.

### Wash your sleeping bag only once in a while with the ticking

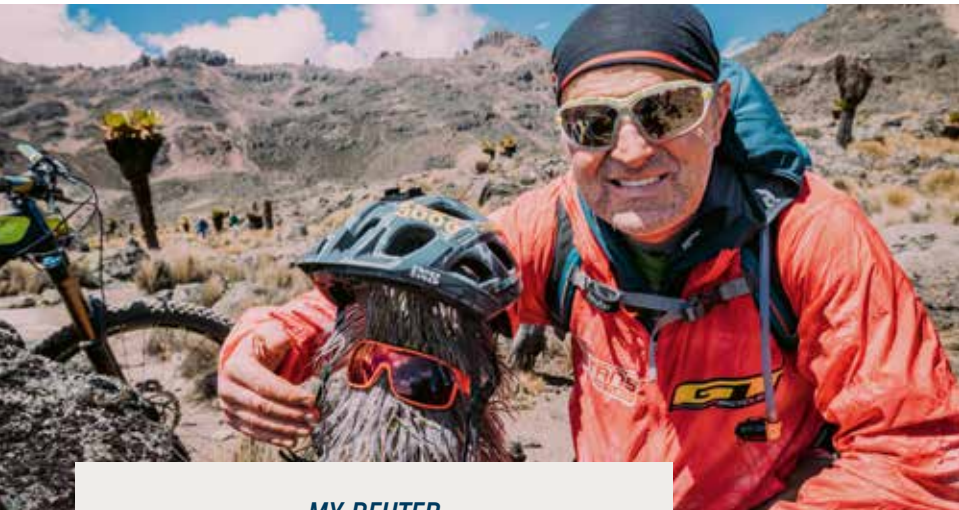
Stains, dirt and sweat cannot be avoided on and in a sleeping bag that is used regularly. However, there are ways you can protect your sleeping bag. In the best case, for example, you always snuggle in freshly showered. Since this is often not possible when camping, the use of a so-called inlet is recommended. The inner sleeping bag made of silk absorbs your sweat and can be washed easily. It also keeps you warm. Alternatively, functional underwear is also sufficient.

### How do I wash the sleeping bag correctly?

You should wash your sleeping bag as rarely as possible. While we recommend hand washing for down sleeping bags, the synthetic fiber sleeping bags can be washed gently in the washing machine – with a capacity of at least 5 kg. But down sleeping bags can also be washed in the washing machine, if necessary. No matter what your sleeping bag is made of, always follow the instructions on the sewn-in care label, which can usually be found in a pocket or on the hem.

### What happens when down feathers escape?

No worries. Your sleeping bag is not faulty. Down sleeping bags have to be air permeable for comfort. And so, the odd little down feather will always find its way through the fabric. When you notice this happening, simply pull the feather back inside the fill chamber if you can. The little gap in the fabric will seal itself back up.



### MY DEUTER

"To me, Deuter stands for quality, function and dependability. I often stay the night in a mountain hut, or sleep at altitudes between 4,600 and 5,000 metres. The Trans Alpine 30 bike pack with all its clever functions has always been totally reliable and practical. And the Exosphere-4° sleeping bag makes my nights super comfortable – despite the cold and wind."

.....  
HANS REY, mountain bike pioneer, member of the Mountain Bike Hall of Fame, trials world champion, stuntman and founder of "Wheels 4 Life" charity. Hans has been part of the Deuter Bike family since 2012.



## SELLING POINTS SLEEPING BAGS

**HIGHEST STANDARDS:** Quality, functionality and responsible manufacturing methods are our top priorities.

**PERFECT CUT:** When the fill is compressed, it loses some of its performance. That's why Deuter sleeping bags are cut to more generous proportions. The Deuter 3D mummy comfort cut offers freedom of movement in the more spacious upper section and superior insulation performance in the narrower leg section. The foot section is raised to accommodate a natural foot position.

**360° FILL:** Exactly the same amount of fill on the top and bottom side to ensure all-round warmth in all sleeping positions.

**WARM HEAD:** Ergonomically shaped Deuter functional contoured hood fits snug around the head for a warm head – and therefore a warm body.

**EASY CLOSURE:** A wide anti-snagging band on the top and bottom of the zip ensures smooth zip closure.

**DIFFERENT SIZES:** To ensure optimum insulation performance for the Orbit, Astro Pro and Exosphere series sleeping bags: REG (Regular), L (Large) and SL (women's fit)

**PFC-FREE:** The entire Deuter sleeping bag collection is free from PFCs.

**WARMTH RETENTION:** The Deuter warmth collar and zip baffle are three-dimensionally sewn and densely insulated. This prevents any cold bridges and keeps warm air inside the sleeping bag.

**SL WOMEN'S MODELS:** The SL synthetic sleeping bags are designed for women and are therefore somewhat shorter and feature fleece inserts in the kidney and foot zones for extra insulation. The SL down models are also shorter and are narrower at the shoulders and feet, while benefiting from extra down fill (relative to the size of the bag). Both are designed to suit women up to a height of 175 cm.

**EXTENDIBLE:** The children's sleeping bags Little Star, Starlight, Starlight SQ and Starlight Pro feature a 30 cm zip-out extension to the foot section. When not in use, it provides doubled up insulation for smaller children's cold-sensitive feet.

**PEACEFUL SLEEP:** Our Exosphere synthetic sleeping bags with Thermo Stretch Comfort seams stretch by up to 25% across the width – for the Astro Pro down sleeping bags the liner stretches within the spacious (non-stretch) shell. This provides ample freedom of movement and improves the warmth performance because the snug, body-hugging shape means that less air has to be warmed up.

**PRICE/PERFORMANCE VALUE:** The Deuter Thermo ProLoft synthetic fill is exceptionally soft to the touch, highly compressible and provides excellent insulation at minimal weight.

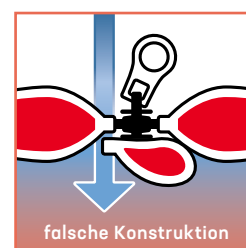
**SOFT:** Easy-care, breathable liner fabric in our synthetic sleeping bags is very soft to the touch and skin friendly.

**SUPERIOR INSULATION:** The Astro Pro differential cut supports the insulation performance. The down can achieve its full loft better between the spacious outer shell and flexible liner. In combination with the stretchy inner seams of the Thermo Stretch sleeping bags, it results in a 2°C temperature increase, on average, compared to a regular down sleeping bag.

**INGENIOUS CONSTRUCTION:** All Deuter down sleeping bags feature trapezoid-shaped chambers. Their elaborate funnel shape keeps the down perfectly in position – so that even when compressed, there are no areas without any down.

**SUPERIOR QUALITY:** The Deuter Astro Pro are extremely high quality down sleeping bags: Top quality 90/10 down with 750+ cuin fill power, extra chambers in the hood and from the knee down keep the down feathers in place, and a water-repellent coating at the head and foot protects the bag from moisture on the tent walls.

**ANIMAL WELFARE:** All our down sleeping bags are bluesign® accredited and made with top quality, Responsible Down Standard (RDS) certified down.



# DEUTER TRAINING GOES DIGITAL

## GET THE FACTS DIGITAL

deuter's retail training now includes eLearning - a smart way of increasing product knowledge for the whole team.

And it's mobile too. So you can stay up to date with everything deuter-related, or quickly bring new employees up to speed.

Because the more knowledge you have, the more we all benefit.

Scan the QR code  
or head to  
[getthefacts.deuter.com](https://getthefacts.deuter.com)



<https://getthefacts.deuter.com>

Sign up for the newsletter,  
so you'll never miss a new  
e-learning module!



**360° Corporate Responsibility**  
eLearning also provides  
details about deuter's  
sustainability initiatives

### USER-FRIENDLY

Access training any time and  
on any device, with one-time  
registration only

### BITE-SIZED LEARNING

Information about our latest  
product developments and  
topics close to our heart, like  
sustainability

### INTERACTIVE & VARIED

Each module concludes with  
a short quiz

## E-LEARNING NEWS

### OUTDOOR

Available now:  
Kid Comfort Pro, Futura &  
Futura Pro, AC Lite, Astro  
& Astro SQ, Astro Pro,  
Freescape Lite, Freescape  
Pro, Rise, Gravity Series

From March 2022:  
Ascender, Speed Lite  
Series, Aircontact Serie,  
Orbit & Orbit SQ

From August 2022:  
Alproof Lite & Alproof

### BIKE

Available now:  
Compact EXP, Attack, Flyt

From March 2022:  
Amager, Mainhattan,  
Rotsoord, Weybridge

### LIFESTYLE

Available now:  
Heritage Serie, UP Series

From March 2022:  
Cotogy & Scula

### SUSTAINABILITY

Available now:  
PFC free, FWF, RDS,  
bluesign® & deuter Promise

From August 2022:  
Recycled materials,  
Climate neutrality,  
Green button

### TECHNOLOGY

From August 2022:  
deuter carry systems



DEUTER SPORT GMBH

Daimlerstr. 23  
86368 Gersthofen  
Germany

Tel. +49 (0) 821 | 49 87 327  
Fax: +49 (0) 821 | 49 87 5339

**E-LEARNING**  
DEUTER TRAINING  
GOES DIGITAL



<https://getthefacts.deuter.com>

find out more at [deuter.com](https://deuter.com)