

# BUILD YOUR OWN E-BIKE

#### The desire to have your own e-bike:

no other trend has dominated the bicycle industry more intensively in recent years than the e-bike!. In 2020, sales records were set across Europe, making the e-bike segment the strongest bicycle segment in the individual countries. Almost 2 million e-bikes were sold in Germany alone. Quantitative market shares of + 40% are no longer uncommon and a further increase is seen as very realistic.

The e-bike is both a problem solver and an expression of a new sense of mobility that is simply fun, environmentally friendly and healthy.

With our almost 100 years of expertise in the development, procurement and marketing of bicycle components, we have developed a holistic concept that combines the latest state of the art in a wide range of possible variations and a high degree of customization.

The Messingschlager E-Mobility Solutions address the specific consumer and market needs of a wide variety of target groups in the international markets and offer the bicycle manufacturer maximum flexibility in terms of design, procurement and production.

Our e-mobility solutions are based on the legal EU directives and regulations for pedelecs and guarantee our customers legal security.

This enables our customers to enter the number 1 growth market in the bicycle industry in an uncomplicated, cost-efficient and faster than average manner! Another important component of this concept was the introduction of the Messingschlager PartFinder in 2020. The range of parts, which will be significantly expanded for 2022, makes it easier for OEMs, dealers and end users alike to find the right load-appropriate bicycle part for the required application. Our recommended bicycle parts are tested and categorized according to the valid ISO 4210 / EN 15194 standards up to 120 kg and sometimes even up to 160 kg.

The long-standing experience of the company Messingschlager gives you assistance, market-driven answers and important reliability in a time when the international supply chains are heavily



stressed and product availability is characterized by great uncertainties and long lead times.

The e-bike has arrived in the middle of society. Don't let the dynamics of this product segment and its opportunities slip by!

We are happy to support you!

#### Your Team Messingschlager

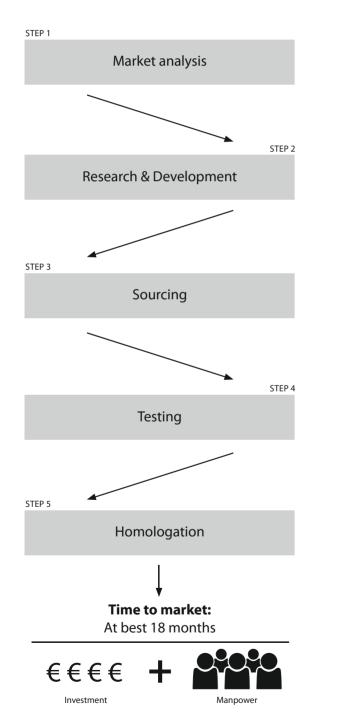
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# YOUR BENEFIT

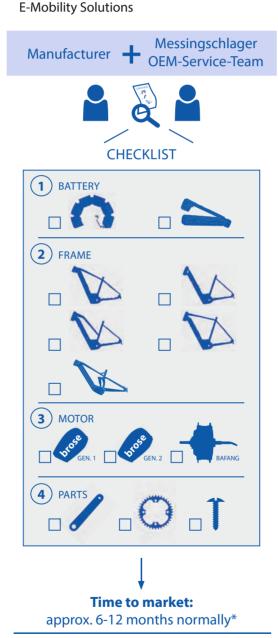
### **Product Range Expansion or** How to Enter the Booming E-Bike Market

Two possible ways

#### **IN-HOUSE DEVELOPMENT**



messingschlager





\*As of Sep. 2021: Exact promises of delivery dates are only possible in individual cases



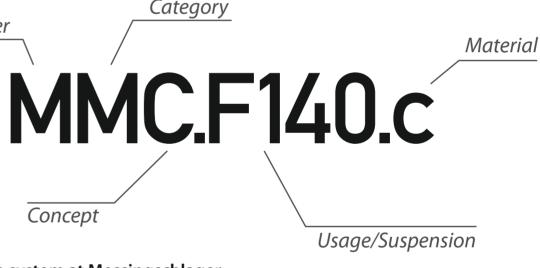
Category Messingschlager Concept

#### New classification system at Messingschlager

With the emergence of further, new frame platforms, the need for a new designation formula arose to develop and re-categorise our product range accordingly. From this season on we will name our e-bike kits as follows:

- MMC.F140.c / SUV Messingschlager Mountain Concept Fullsuspension (140 mm) Carbon frame
- MMC.HT.al / Messingschlager Mountain Concept Hardtail Aluminium frame
- **MUC.T.al** / Messingschlager Urban Concept Trekking-E-Bike Aluminium frame
- MUC.C.al / SUV Messingschlager Urban Concept City and SUV-E-Bike Aluminium frame
- **MUC.C.al** / Messingschlager Urban Concept City-E-Bike Aluminium frame
- MUC.L.al / Messingschlager Urban Concept Light-E-Bike Aluminium frame
- MRC.G.al / Messingschlager Road Concept Gravel-E-Bike Aluminium frame







#### Brose

Messingschlager and Brose have a longstanding partnership. The variability of the two motor platforms, aluminum or magnesium housing, enables a wide range of applications.

Messingschlager is one of the first manufacturers to install the complete Brose motor system - consisting of a motor, newly developed 630 Wh battery and smart display. Maximum flexibility is the key to success, which is reflected in the new E-MTB Fully and Gen2 (City, Trekking, Hardtail MTB) concepts.

For the high-performance E-MTB MMC.F140.c we rely on the 90 Nm strong Drive S Mag from Brose with a magnesium housing. With our city platform Gen2, a Brose Drive C, T or S is optional. The different performance features ensure the best possible adaptation to the respective market.

We also install Brose displays to match the engine. Depending on the model, the compact remote or the smart Brose Allround display is used here.

For long ranges, we mount the newly developed Brose battery with 630 Wh in our E-MTB. State of the art cell technology and a high level of power density are used. In our new city concept Gen2, we offer either a 522 or 630 Wh battery.

It goes without saying that the battery is fully integrated in the down tube of each of our e-bikes, giving a streamline and slick appearance!

### Bafang

Bafang is a well-known manufacturer of motor systems for e-bikes of all types. The company occupies a leading position worldwide in hub motors, has an extensive range of products and, with its open system architecture, enables the greatest possible freedom of design for OE customers. Regardless of whether it is a rear, mid,

front or cargo engine, Bafang has products to fit all markets. There are also displays of all quality levels and suitable batteries. The entire Bafang range is available from Messingschlager.

This is reason enough to equip the product range of our light e-bikes with selected new hub motors of Bafang.













These compact motors fit in with the 360 Wh battery - which, are equipped with the latest 21700 cell technology and fit seamlessly with the clean design of our light e-bikes. Depending on the application, we install the sporty, compact DP C11 or the clear DP C240 displays.



MMC.F140.c / Messingschlager Mountain Concept Fully Carbon

## **99** Generous full suspension on travel & an impressive performance! 56

For sporty use on the trail: high-end all-mountain with carbon frame, 140 mm suspension travel and a complete Brose drive system.

## MMC.F140.c



# MMC.F140.c





#### MMC.F140.c - developed for high-end-E-MTBs

When developing this new platform, Messingschlager was concerned with designing a carbon frame based on the most modern geometric approaches for all-mountain/trail applications. We followed a clear goal: to develop a modern carbon design at an attractive price. What is interesting about our MMC. F140.c: as well as the main frame, the rear end and shock absorber rocker also made of carbon ensuring a low overall weight.

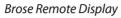
With this frame as a basis, complete bicycles weighing less than 22 kg can be built. In addition to its low weight, the use of mixed wheel sizes with 29", 27.5" or Mullet system are possible. For the motor, we opted for the high performance and power of the Brose Drive S Mag with a maximum torque of up to 90 Nm. The new Brose battery with 630 Wh is fully integrated in the down tube. For the display we recommend minimalist solutions with the Brose Display Remote or Allround.

Categorization:



# **MMC.F140.c**









Brose Drive S Mag



The frame, shock absorber and rear end are made of high-quality carbon fibers. This guarantees a low weight with optimal rigidity.



When it comes to the built-in components of the motor system, we rely on the entire Brose product range.

Nm

Wh



Design and formal language are modern and independent, but do not have a polarizing effect on the viewer. In our newly developed e-all-mountain with a carbon frame, we are one of the first providers to install the complete system from Brose. This complete package includes the Brose Drive S Mag motor, the newly developed Brose battery with 630 Wh and the extremely compact Remote Display, also from Brose.

## <u>Key Facts</u>



To ensure the greatest variability our E-All Mountain was designed so that both 27.5" and 29" wheels can be mounted.



When coordinating the suspension travel of up to 140 mm, our developers paid attention to a progressive characteristic curve for perfect performance. The heart of our full suspension is formed by the Brose Drive S Mag, which has achieved a maximum torque of 90 Nm with a weight of only 2.9 kg.

This powerful unit is supplied with electricity by a fully integrated battery, which has a capacity of 630 Wh and guarantees the best range.



This system underlines the sporty approach of our frame platform and enables the construction of strong and smooth performance E-MTBs.

## **Geometry**

FULLY	S/M	M/L	L/XL
Seat tube length	400 mm	420 mm	480 mm
Top tube length horizontal	600	632	664
Steerer tube	118	140	162
Chain stay	465 mm	465 mm	465 mm
Steerer tube angle	66°	66°	66°
Seat tube angle	74.9°	74.7°	74.6°
Wheelbase	1219 mm	1252 mm	1286 mm
Reach	434 mm	460 mm	485 mm
Stack	610 mm	630 mm	650 mm
Head set (S.H.I.S.)	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40
Fork installation height	551 mm	551 mm	551 mm
Seat post Ø	31.6 mm	31.6 mm	31.6 mm

MMC.HT.al / Messingschlager Mountain Concept Hardtail Aluminium

## **Powerful e-hardtail** with a wide range of uses 66

At home on all trails with Brose Generation 2, whether after work or for the weekend ride.

## MMC.HT.al



# MMC.HT.al





E-Mobility Solutions

#### MMC.HT.al – Powerful e-hardtail with a wide range of uses

An E-MTB for all situations - our MMC. HT.al comes pretty close to this ideal. Whether on the narrow single trails of German low mountain ranges or on alpine gravel roads, the MTB hardtail meets all requirements perfectly.

Driven by proven Brose Mag generation 2 drives, the MMC.HT.al is designed for a wide range of uses in the touring sector and is recommended for suspension forks with 100–120 mm travel on 29" wheels or 120–140 mm travel on 27, 5" wheels.

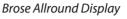
The advantage of the concept lies in its great variability with useful details: Boost thru-axle standard, the option of mounting a dropper post with internal cable routing, flexible battery capacity from 522 Wh or 630 Wh for maximum range. The lightweight battery is elegantly integrated into the frame and ensures a clean, harmonious look. For the display, we recommend the universal and informative allround display from Brose for all relevant information during an E-MTB tour.

Categorization:



# MMC.HT.a









Brose Drive S Mag



Optimal full integration into the frame: lightweight batteries with 522 Wh for attractive price points or 630 Wh for maximum range.



Elegantly integrated and still informative with all important tour data: the Brose LCD color display "Allround".



Highflexibility:rearendwith12x148mm Boost thru axles and for tire widths up to 29" x 2.4" or 27.5" x 2.8".

Our MTB hardtail frame is designed for the best possible all-round properties. It can optionally be equipped with Brose Drive C, S or T drives, depending on the desired driving dynamics and also with the Mag version.

The Brose Allround Display keeps the driver up to date with all important tour data at all times. Depending on the desired range and pricing, the hardtail platform can be specified with a 522 or 630 Wh battery.

## Key Facts



In order to guarantee the greatest possible variability, our E-MTB hardtail was designed in such a way that both 27.5" and 29" wheels can be mounted.



Flexible suitability for suspension forks up to 120 mm (29,,) or 140 mm (27.5") for a wide range of applications.





Powerful Brose Drive S Mag drive with a maximum torque of 90 Nm and a weight of only 2.9 kg.

Optionally with 522 Wh or 630 Wh for maximum range or attractive price points.











Both the drive and the batteries are always optimally integrated into the frame. Perfect for a quick evening round or a long weekend tour.

## **Geometry**

HARDTAIL	S/M	M/L	L/XL
Seat tube length	420 mm	460 mm	500 mm
Top tube length horizontal	606	637	659
Steerer tube	160	160	170
Chain stay	480 mm	480 mm	480 mm
Steerer tube angle	68°	68°	68°
Seat tube angle	73°	73°	73°
Wheelbase	1178 mm	1198 mm	1218 mm
Reach	405 mm	435 mm	455 mm
Stack	658 mm	663 mm	668 mm
Head set (S.H.I.S.)	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40
F ork installation height	503 mm	503 mm	503 mm
Seat post Ø	31.6 mm	31.6 mm	31.6 mm

## MUC.T.al / Messingschlager Urban Concept Trekking Aluminium

## Go for the next discovery tour with powerful 90 Nm.

Contemporary design and the whisperquiet Brose drive for high-quality travel and trekking fun.

## MUC.T.al









#### MUC.T.al – the perfect basis for an attractive trekking e-bike

"The journey is the goal" - hardly any other model in our e-mobility program applies this motto as much as it does with MUC.T.al. It is quite possible that the rider would like to cover the route again when he or she has arrived. Uphill? None noticed. Headwind? Can't be at all. Heavy baggage? Could have been more. Arrive relaxed! At any time. Our recipe for success: an aluminum frame suitable for touring, which impresses with its geometry suitable for long journeys and is compatible with all Brose Mag generation 2 drives. Its quiet and high-torque characteristics - whether Drive T with 70 Nm or Drive S with 90 Nm of torque - make the Brose drive the perfect, unobtrusive but powerful partner for long trekking tours.

We also offer batteries with a capacity of up to 630 Wh. Maximum variability is the motto for the drive. Due to the open construction of the frame triangle, both belt and chains drives can be installed. The modern Brose all-round display in smartwatch design offers the discerning rider good readability and a large number of useful functionalities and rounds off the overall drive concept.

#### **Categorization:**



upper picture: women's version left picture: men's version

# 





The geometry, construction and details of the new trekking frame provide the best prerequisites for touring specifications.



The new Allround display from Brose impresses with its functionality and the clean look of a smart watch.

Flexibility with the motor: this model can optionally be equipped with Brose Drive C, T or S - with a belt or chain drive.

Brose Allround Display





Brose Drive C/T or S

Cover long distances with the best possible comfort and reliable, quiet pedal assistance - this is ensured by our new frame concept and the powerful Brose Drive C, T or S drives with 50, 70 or

Men

Trapez

90 Nm maximum torque. This makes riding uphill an easy task.

For the cockpit, we opted for the Brose all-round display with the look of a

#### TREKKING

Seat tube le Top tube le Steerer tube Chain stay Steerer tube Seat tube a Wheelbase Reach Stack Head set (S.

Fork installa Seat post Ø

TREKKING TRAPEZ	S	М	L
Seat tube length	450 mm	500 mm	550 mm
Top tube length horizontal	599	609	620
Steerer tube	170	180	190
Chain stay	475 mm	475 mm	475 mm
Steerer tube angle	71°	71°	71°
Seat tube angle	73°	73°	73°
Wheelbase	1104 mm	1124 mm	1136 mm
Reach	400 mm	407 mm	415 mm
Stack	653 mm	661 mm	671 mm
Head set (S.H.I.S.)	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40
Fork installation height	460 mm	460 mm	460 mm
Seat post Ø	31.6 mm	31.6 mm	31.6 mm

Key Facts



Wh

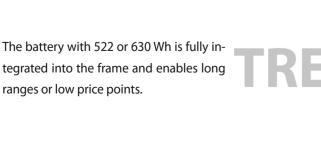
Driven by Brose Drive C, T or S motors, the customer has the option of 50, 70 or 90 Nm max. torque.

ranges or low price points.



Maximum variability: thanks to the frame lock and construction, chain, hub and belt drives can be installed.

Men's or trapeze frames with trekking-specific details and geometry for long-distance comfort.











Battery with 522 or 630 Wh



smartwatch and elegant integration. For trekking applications, we recommend the 630 Wh battery, ideally suited for a long weekend tour or the stages of bike travelling.

## **Geometry**

5 MEN	S	м	L	XL
ength	450 mm	500 mm	550 mm	600 mm
ength horizontal	608	615	623	628
be	170	180	190	190
	475 mm	475 mm	475 mm	475 mm
oe angle	71°	71°	71°	71°
angle	73°	73°	73°	73°
2	1122 mm	1130 mm	1139 mm	1144 mm
	408 mm	413 mm	418 mm	423 mm
	653 mm	662 mm	671 mm	671 mm
5.H.I.S.)	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40
lation height	460 mm	460 mm	460 mm	460 mm
ð	31.6 mm	31.6 mm	31.6 mm	31.6 mm

MUC.C.al SUV / Messingschlager Urban Concept City Aluminium SUV

## **Our interpretation** of a real SUV! Perfect for on- and offroad

A city e-bike can be hardly score when used aside from on the road? That's wrong! With our SUV concept we have made an on-road bike absolutely suitable for off-road use.

ISABEA

Totally versatile, totally sexy, totally SUV

## MUC.C.al SUV



messingschieder

# MUC.C.a







#### MUC.C.al<sup>SUV</sup> – this is how we imagine a real SUV

City e-bikes have many advantages, but are in terms of off-road suitability inferior to the normal eMTB. Messingschlager has taken on this subject and presents an interpretation of an all-road e-bike, ideal for on- and off-road use. It unites the advantages of a low-entry bike with more off-road mobility.

The geometry and seating position promises in urban areas, as well as on gravel or forest paths a high degree of comfort and suitability for touring.

Our SUV is equipped and well prepared for all eventualities that may come up on an e-bike on a weekend tour or a shopping trip to the weekly market. This is thanks to a powerful lighting system, elegant integration of mudguards and luggage racks as well as thick knobby tires.

The aluminum frame with comfortable geometry and low step trough entry is compatible with all Brose motors - Drive C, T or S - compatible.

To increase flexibility to a maximum, we also offer here the option of a 522 Wh battery - for implementation of particularly cheaper price points - or a range extending 630 Wh battery.

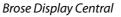
Open frame triangle for maximum flexibility (chain drive as well as belt drives possible without any problems).

#### **Categorization:**



# MUC.C.a SUV









Brose Drive C/T oder S



Our variable city platform makes a wide range of applications possible. With a bright lighting system and chunky, bulky tires this e-bike turns into a real SUV.

## <u>Key Facts</u>



Always everything in view! The Brose display central sits in the middle above the handlebars, impresses with its functionality and good readability, whether on- or offroad.

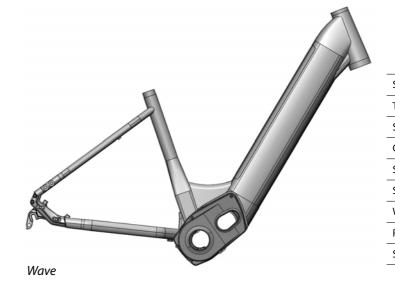
Vario



Flexibility with the engine: this model can optionally be equipped with a Brose Drive C, Drive T or Drive S.

With this frame platform, we offer greatest possible variability the and flexibility. Equipped with either Brose Drive C, T or S, the driving dynamics can be adapted to different purposes. With a maximum torque of 90 Nm, this e-bike feels at home in any area.

As an information center, we decided on the Brose Central Display, which thanks to its 3.5-inch color display offers a great overview and is linked to the Brose Display Remote and functions as



Nm

Wh

Driven by Brose Drive C, T or S motors, the customer has the option of 50, 70 or 90 Nm max. torque.

The battery, optionally in 522 or 630 Wh, is fully integrated in the frame and enables large ranges in an urban environment.

Maximum variability: thanks to the frame lock and construction, chain, hub and belt drives can be installed.

Coarse, voluminous tires up to 2.35", elegantly integrated mudguard / luggage rack unit, 80-100 mm suspension travel, high-quality lighting system our interpretation of an SUV!

a practical control unit.







Battery mit 522 oder 630 Wh



For good ranges in urban areas, we offer two diff erent batteries with 522 or 630 Wh for this platform. This means that nothing stands in the way of a long tour at the weekend or the daily commute to the office.

	S	м	L
Seat tube length	440 mm	490	540
Top tube length horizontal	612	629	645
Steerer tube	170	185	200
Chain Stay	475 mm	475 mm	475 mm
Steerer tube angle	67°	67°	67°
Seat tube angle	70°	70°	70°
Wheelbase	1124 mm	1141 mm	1159 mm
Reach	390 mm	402 mm	414 mm
Stack	644 mm	658 mm	671 mm

## **Geometry**

MUC.C.al / Messingschlager Urban Concept City Aluminium Modern e-bikes belong in the city like gondolas on the

Grand Canal 66

Contemporary design and high variability, consistently and smart appearance.

## MUC.C.al



HE-SHIPPING

# 







#### MUC.C.al - the perfect basis for an attractive city e-bike

E-bikes have become indispensable in urban areas. It is time for Messingschlager to use the experience gained and to further develop our well-known city and trekking line of the first generation. The aluminium frame with comfortable geometry and low entry is compatible with all Brose motors - Drive C, T or S. This also applies to the trekking concept. In order to increase the range, we also off er the option of using a 522 Wh battery - for particularly low-cost price points - or a long-range 630 Wh battery.

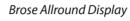
The battery removal was designed so that the cover and battery can be removed upwards without tools and that important ergonomic aspects are taken into account. We also have the greatest possible variety of power transmissions and, like the first generation, we use an open frame triangle so that both chain and belt drives can be installed without any problems.

#### **Categorization:**



# MUC.C.a









Brose Drive C/T or S



The construction and design of our new city platform is modern, variable and ergonomic.

large ranges.



The new Allround display from Brose: high functionality with the clean look of a smart watch.



Flexibility in the drive: chain, hub and belt drives are possible thanks to a frame lock construction.

With this frame platform, we offer the greatest possible variability and flexibility. Equipped with either Brose Drive C, T or S, the driving dynamics can be adjusted for different purposes.

With a maximum torque of 50, 70 or 90 Nm, this e-bike feels at home anywhere. As an information center, we decided on the Brose Allround Display, which impresses with its smart watchlike design and high functionality.

## <u>Key Facts</u>



Wh

Driven by Brose Drive C, T or S motors, the customer has the option of 50, 70 or 90 Nm max. torque.

The battery, optionally in 522 or 630 Wh, is

fully integrated in the frame and enables



Maximum variability: thanks to the frame lock and construction, chain, hub and belt drives can be installed.

Practical and elegant wave frame shape with deep entry and geometry for the challenges of the city.









Battery with 522 or 630 Wh



For high ranges in urban areas, we offer two diff erent batteries with 522 or 630 Wh for this platform. This means that nothing stands in the way of a long weekend tour or the daily commute to the office.

## **Geometry**

WAVE	S	м	L
Seat tube length	440 mm	490 mm	540 mm
Top tube length horizontal	612	629	645
Steerer tube	170	185	200
Chain stay	475 mm	475 mm	475 mm
Steerer tube angle	69°	69°	69°
Seat tube angle	71°	71°	71°
Wheelbase	1124 mm	1141 mm	1159 mm
Reach	390 mm	402 mm	414 mm
Stack	644 mm	658 mm	671 mm
Head set (S.H.I.S.)	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/40
Fork installation height	460 mm	460 mm	460 mm
Seat post Ø	31.6 mm	31.6 mm	31.6 mm

## MUC.L.al / Messingschlager Urban Concept Light Aluminium *Stylish & slim, nobody spots an e-bike here!* 66

The e-bikes in our Light series combine timeless bicycle design with the latest e-technology and light weight.

## MUC.L.al



# MUC.L.al







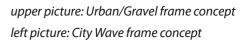
## MUC.L.al – light and stylish through the city

Equipped with a stylish design and variability, this concept speaks for itself. Messingschlager offers two frame platforms: urban/gravel and wave. Our light e-bike can be equipped with various Bafang motors and thus has a maximum of 30, 42 or 45 Nm. Torque. The fully integrated 360 Wh battery with 21700 cell technology is installed seamlessly in the slim down tube.

Thanks to this integration and the successful design, it is almost impossible to tell from our light model that it is a real e-bike with a possible weight of less than 15 kg. For more fl exibility, we have equipped this frame with an open dropout to keep all options in terms of chain or belt drive open.

#### Categorization:





# MUC.L.a





Our light e-bike is driven by a compact and powerful Bafang hub motor, which blends inconspicuously into the slim appearance.



The DP C240 Remote display is also from Bafang and is easy to use.



The on / off button has been integrated inconspicuously in the bottom bracket area, creating a clean design.



The urban version of our light e-bike can be equipped with three different rear engines, which have a maximum torque of 45 Nm.

The internally installed, almost invisible, slim battery supplies the system with sufficient energy the battery is equipped with the latest 21700 cell technology.

#### URBAN / GF

Seat tube le Top tube ler Steerer tube Chain stay Steerer tube Seat tube ar Wheelbase Reach Stack Head set (S.

Fork installa Seat post-Ø

S	м	L
460 mm	520 mm	580 mm
565	596	627
165	185	205
445 mm	445 mm	445 mm
69°	69°	69°
73°	73°	73°
1071 mm	1103 mm	1135 mm
380 mm	405 mm	430 mm
606 mm	625 mm	644 mm
ZS44/28.6 ZS44/30	ZS44/28.6 ZS44/30	ZS44/28.6 ZS44/30
430 mm	430 mm	430 mm
31.6 mm	31.6 mm	31.6 mm
	460 mm 565 165 445 mm 69° 73° 1071 mm 380 mm 606 mm ZS44/28.6 ZS44/30 430 mm	460 mm         520 mm           565         596           165         185           445 mm         445 mm           69°         69°           73°         73°           1071 mm         1103 mm           380 mm         405 mm           606 mm         625 mm           2S44/28.6         ZS44/28.6           ZS44/30         430 mm

## Key Facts



Driven by compact Bafang hub motors, 304245 our light e-bike has torques of 30, 42 or 45 Nm.



The battery with the latest 21700 cell technology, which has a capacity of 360 Wh, is fully integrated in the slim down tube.



kg

Maximum variability: thanks to the frame lock and construction, chain and belt drives can be installed.

Stylish and smart, that's exactly how we design our light e-bike. In addition, the name suggests that low weights of less than 15 kg are possible.



Urban/Gravel











As for display, we rely on the easyto-use and clearly designed DP C240 from Bafang, which is operated with a remote unit.

RAVEL	S	м	L	XL
ength	460 mm	500 mm	540 mm	580 mm
ength horizontal	560	570	580	590
e	150	160	170	180
	445 mm	445 mm	445 mm	445 mm
e angle	69°	69°	69°	69°
ingle	73°	73°	73°	73°
1 -	1065 mm	1075 mm	1086 mm	1097 mm
	379 mm	386 mm	393 mm	402 mm
	592 mm	601 mm	611 mm	620 mm
5.H.I.S.)	ZS44/28.6 ZS44/30	ZS44/28.6 ZS44/30	ZS44/28.6 ZS44/30	ZS44/28.6 ZS44/30
ation height	430 mm	430 mm	430 mm	430 mm
ð	31.6 mm	31.6 mm	31.6 mm	31.6 mm

### Geometry

MRC.G.al / Messingschlager Road Concept Gravel Aluminium

## Riding a gravel bike is even more fun with an engine! 66

We have consistently expanded our innovative Light series to include the Road style: An e-gravel bike with an almost invisible 360 Wh battery and a powerful motor at the rear.

## MRC.G.al



# MRC.G.a







#### MRC.G.al - Gravel fans will be thrilled

Light e-bikes not only work in urban areas, they also work very well off the beaten track. With our MRC.G.al, we have designed a light e-bike that shouldn't be missing on extended bike tours, is perfect for commuters or fitness session in your free time. We recommend two models from Bafang for the motors:

- H400 for longer, powerful climbs
- H600 for optimal lightweight construction (2 kg!)

Both motors are compactly integrated in the rear wheel hub and, with the optional torque sensors, off er similar support characteristics. The internally built-in battery has a compact design, is equipped with the latest cell technology and has a capacity of 360 Wh and is integrated seamlessly into the down tube. In conjunction with the low-profile tires, impressive ranges are possible.

#### Categorization:



# MRC.G.al





The light e-gravel bike is powered by a compact Bafang hub motor, which is inconspicuously integrated into the slim appearance.



The control unit DP C11 also comes from Bafang and ensures a harmonious, sporty operating concept.

In order to maximize the intended use, the rear end and fork were designed so that tires up to max. 29x2.1 can easily fit into it.



Sporty e-bikes need the right motor! Bafang supplies us with the right motors which, depending on the model, have a maximum torque of up to 45 Nm. For improved performance and an even more sensitive sensor system, we use a special bottom bracket that makes the modulation of the engine characteristics very sensitive through the torque.

## <u>Key Facts</u>



Driven by compact Bafang hub motors, our light e-bike has torques of 30, 42 or 45 Newton meters.



The battery with the latest 21700 cell technology and a capacity of 360 Wh, sits

in the slim down tube.



tiple options with this light e-bike. Light or powerful - the choice is up to you.

Thanks to different motors, there are mul-



Stylish and smart, that's exactly how we call our light e-bikes. In addition, the name suggests the sensationally low weight of approx. 15kg.



#### URBAN / GR

Seat tube len Top tube len Steerer tube Chain stay Steerer tube Seat tube an Wheelbase Reach Stack Head set (S.F

Fork installa Seat post Ø





The inconspicuous Bafang DP C11 is used as a display, which blends harmoniously into the overall picture and clearly displays all the important data.

### **Geometry**

RAVEL	S	М	L	XL
ength	460 mm	500 mm	540 mm	580 mm
ngth horizontal	560	570	580	590
e	150	160	170	180
	445 mm	445 mm	445 mm	445 mm
e angle	69°	69°	69°	69°
ngle	73°	73°	73°	73°
	1065 mm	1075 mm	1086 mm	1097 mm
	379 mm	386 mm	393 mm	402 mm
	592 mm	601 mm	611 mm	620 mm
.H.I.S.)	ZS44/28.6 ZS44/30	ZS44/28.6 ZS44/30	ZS44/28.6 ZS44/30	ZS44/28.6 ZS44/30
ation height	430 mm	430 mm	430 mm	430 mm
	31.6 mm	31.6 mm	31.6 mm	31.6 mm

## E-BIKE KIT PARTS GEN2 MMC.HT.al / MUC.T.al / MUC.C.al / MUC.C.al SUV

#### ART.-NO. DESCRIPTION

	E-BIKE FRAMES	BROSE G7	321195	THRU AXI
	<ul> <li>raw finish</li> <li>external charging connection</li> </ul>	BROSE G2	200	<ul> <li>SCRAX B</li> <li>hidden Q</li> </ul>
	<ul> <li>external charging connection</li> <li>for semi-integrated head set,</li> </ul>		412	• nidden Q     • OLD 148
	<ul> <li>1½" → 1.5", tapered</li> <li>for seat stays with Ø 31.6 mm</li> </ul>		55 g	<ul> <li>aluminiu</li> <li>only 55 g</li> </ul>
	City, 28"			<ul> <li>M12 x len</li> </ul>
	size S, 44 cm			<ul> <li>thread pit</li> <li>thread len</li> </ul>
	size M, 49 cm			• e.g. for MT
	size L, 54 cm			• OEM
			393250	E-BIKE FO
	Trekking W		10	
	size S, 45 cm			<ul> <li>Ahead ste</li> <li>for disc brack</li> </ul>
	size M, 50 cm			with eyele
13715	size L, 55 cm			<ul> <li>with two c</li> <li>head set re</li> </ul>
	Trekking M			<ul> <li>OLD 100 n</li> <li>for max 2.3</li> </ul>
	size S, 45 cm			<ul> <li>mounting approx. 65</li> </ul>
13717	size M, 50 cm			<ul> <li>compatible</li> </ul>
13718	size L, 55 cm			
13719	size XL, 60 cm			
	MTB Hardtail, 29"			
	size S, 42 cm			
13721	size M, 46 cm			
13722	size L, 50 cm			BATTERY
2			613206	Battery BN2
60326	DERAILLEUR HANGER	BROSE G7		
	fits Brose G2 city / trekking frames	BROSE G2	613201	Battery BN2
	<ul> <li>for Postmount 160 mm</li> <li>left</li> </ul>	0011		
			613236	Top Side Do
	DERAILLEUR HANGER	BROSE G2		
	<ul> <li>fits Brose G2 city / trekking frames</li> <li>slider right side / drive side</li> </ul>	00111		
13623	for internal gear hub	BROSE G2		
60327	for derailleur		613237	Down Side [
13625	DERAILLEUR HANGER SET			
	fits Brose G2 city / trekking frames	BROSE G 2	613227	
	<ul> <li>set for 12x142 mm thru axle</li> <li>for derailleur</li> </ul>	BROSE G2	613224	charger, 4 A
	DERAILLEUR HANGER	RPDSE C 2		
	<ul> <li>fits Brose G2 MTB frames (art. 613720-2)</li> </ul>	BROSE G2	613228	charger, 2 A,
	right side		613225	charger, 2 A

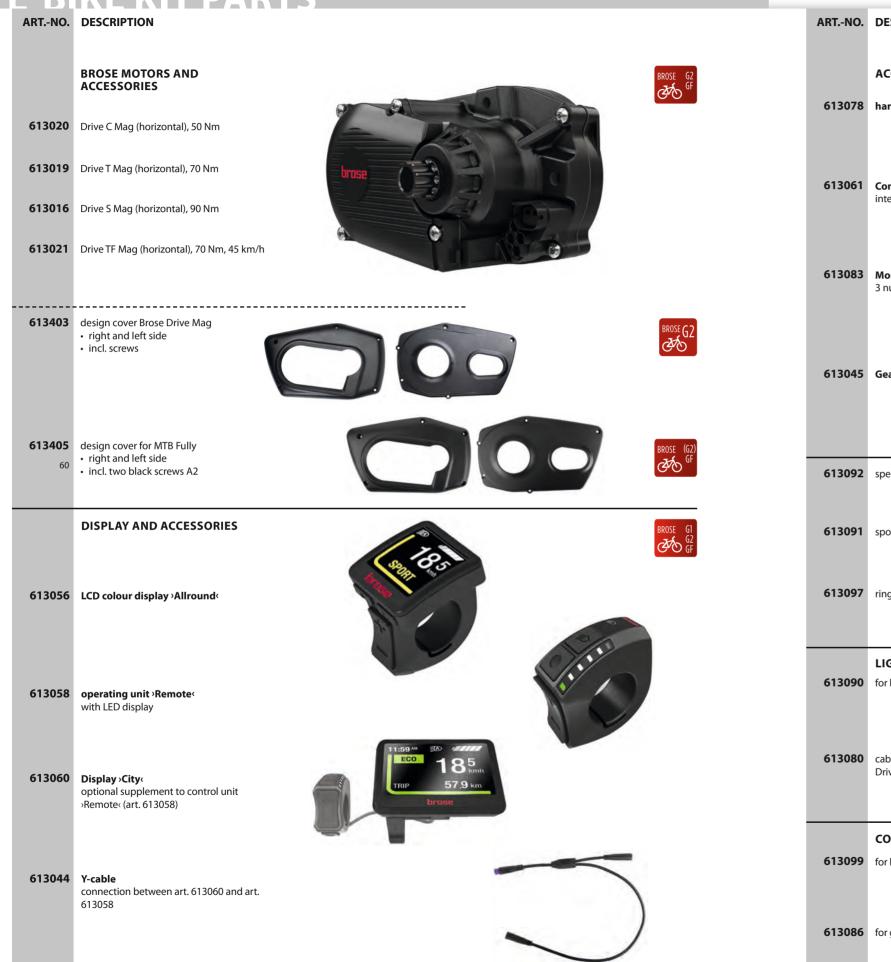
ARTNO.	DESCRIPTION	
<b>321195</b> 200	<ul> <li>THRU AXLE WITH LEVER</li> <li>SCRAX B-12 148 QR</li> <li>hidden QR lever</li> <li>OLD 148 mm</li> <li>aluminium</li> <li>only 55 g</li> <li>M12 x length 178 mm</li> <li>thread pitch: 1.5 mm</li> <li>thread length: 18 mm</li> <li>e.g. for MTB or e-bike frames art. 613620 et seq.</li> <li>OEM</li> </ul>	
<b>393250</b> 10	<ul> <li>E-BIKE FORK 28"/29"</li> <li>aluminum 7005</li> <li>Ahead steerer 285 mm, tapered, 1%" - 1,5"</li> <li>for disc brake mount (PM)</li> <li>with eyelets for carrier</li> <li>with two cable guide bosses</li> <li>head set rest 62 mm</li> <li>OLD 100 mm</li> <li>for max 2.35" tire width</li> <li>mounting height 460 mm (instead of suspension fork wit approx. 65 mm travel)</li> <li>compatible to all Brose Gen1- and Gen2 (city) models</li> </ul>	h
	BATTERY AND ACCESSORIES	
613206	Battery BN21L integrated, 36 V, 630 Wh	
613201	Battery BN21L integrated, 36 V, 522 Wh	
613236	Top Side Docking Station für Akku BN21 Kit 1	0
613237	Down Side Docking Station für Akku BN21 Kit 2	
613227 613224	charger, 4 A, <b>EU</b> type charger, 4 A, <b>UK</b> type	
613228 613225	charger, 2 A, <b>EU</b> type charger, 2 A <b>UK</b> type, for art. 613201, 613206	



E-Mobility Solutions



## **E-BIKE KIT PARTS**



ARTNO.	DESCRIPTION	
	ACCESSORIES AND MOUNTING PARTS	
613078	harness BN21L	-
613061	<b>Connector</b> between motor and display, internal wake up, 1,300 mm	
613083	<b>Montage Kit Brose Mag horizontal</b> 3 nuts, 1 washer, 1 screw	
613045	Gear Sensor, Mag-series	
613092	speed senor	
613091	spoke magnet	I
613097	ring nut for spider	
613090	LIGHT CABLES for head light, 1,226 mm	
613080	cable for rear light and brake light Brose Drive Mag, 1,400 mm	C
	COVERPLUGS FOR MOTOR	
613099	for lighting connector	
613086	for gear sensor	













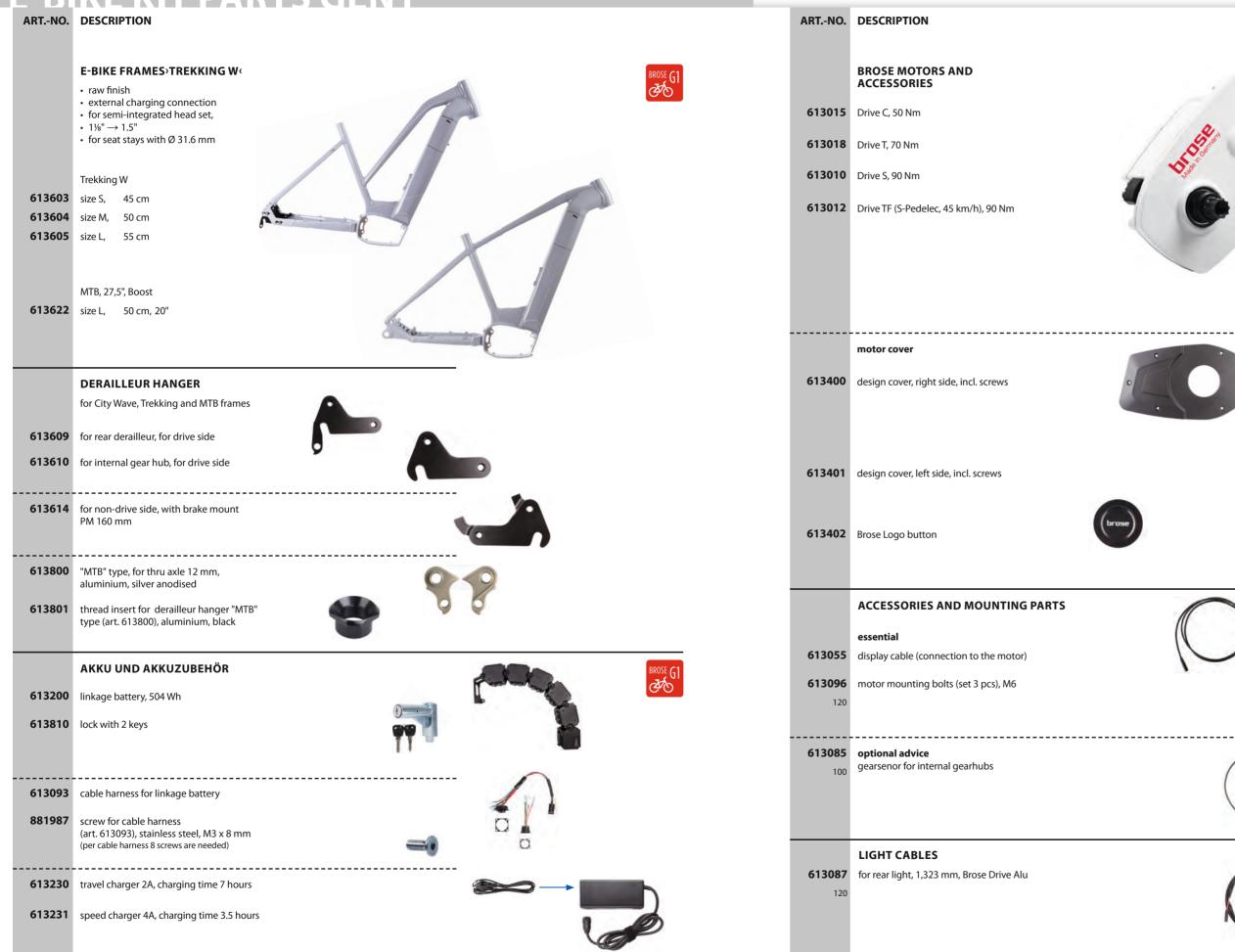








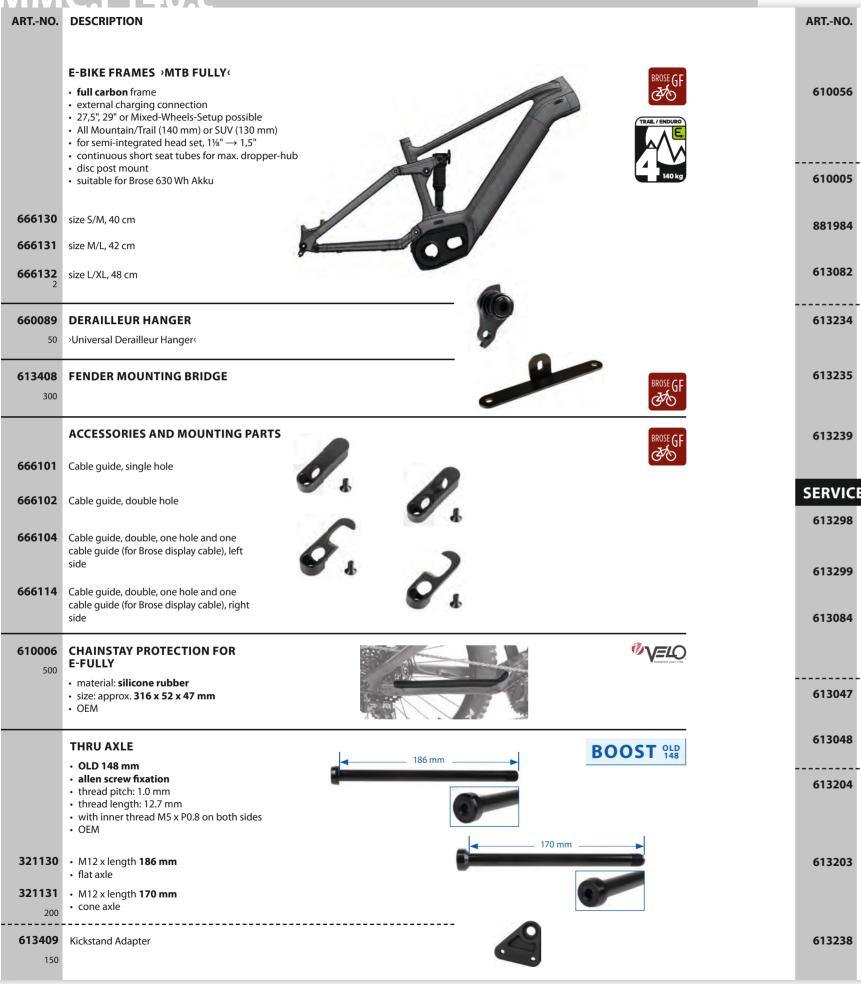
## **E-BIKE KIT PARTS GEN1**







## E-BIKE KIT PARTS FULLY MMC.F140.c

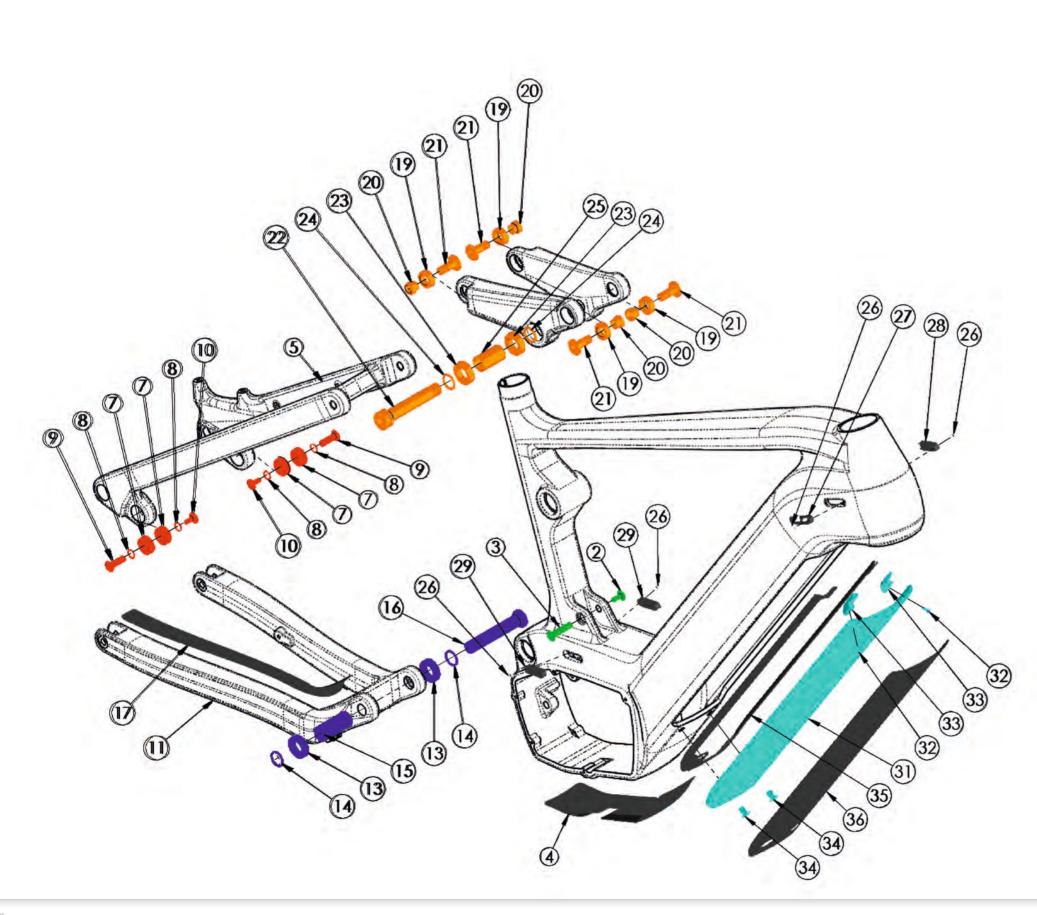


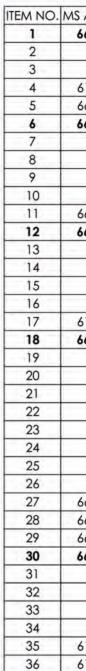
ARTNO.	DESCRIPTION
610056	BATTERY AND ACCESSORIES e-bike battery, 630 Wh
610005	subframe incl. lock and wiring harness for battery art. 610056
881984	fixing screw M6x1.0x10 mm for Brose sub- frame art. 610005
613082	charging socket, external port in frame
613234	quick charger, 4A
613235	power cable for quick charger art. 613234, <b>EU</b> plug
613239	power cable for quick charger art. 613234, <b>UK</b> plug
SERVIC	E PARTS BROSE
613298	diagnostic tool for linkage battery (art. 613200)
613299	connecting cable from diagnostic tool (art. 613298) to the battery
613084	e-Bike service adapter for connection of the Brose e-bike system with the PC (between motor and display)
	belt service kit for Drive Alu
613048	belt service kit for Drive Mag
613204	Li-lon battery • DT external bottle type • universally suitable for Brose • identical to BMZ • 36 Volt, 11 Ah, 396 Wh
613203	Li-lon battery • DT external bottle type • universally suitable for Brose • identical to BMZ • 36 Volt, 17.5 Ah, 630 Wh
613238	docking station, accessorry kit for Li-Ion battery art. 613203/4





# E-BIKE KIT PARTS FULLY MMC.F140.c

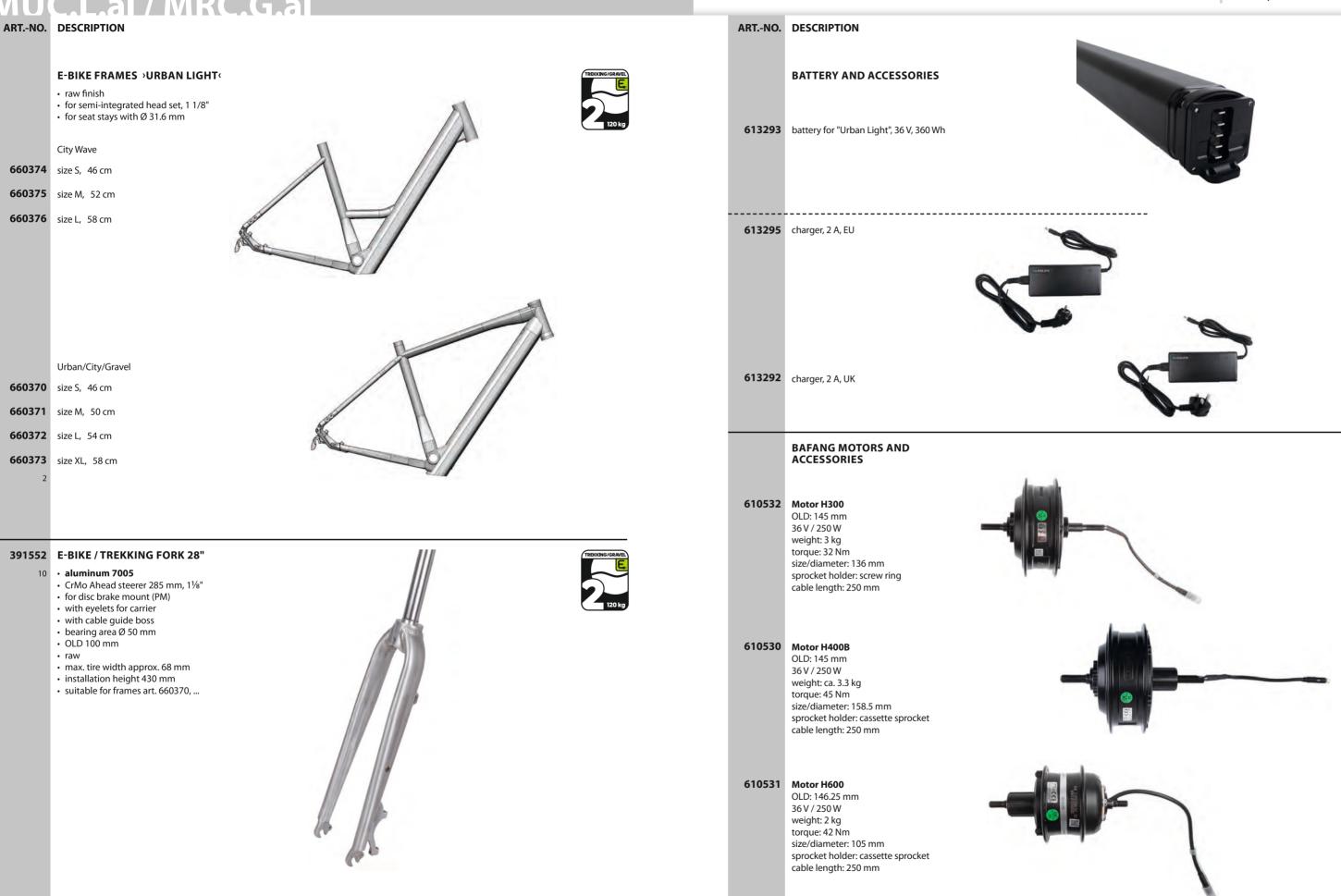




E-Mobility Solutions

666106 SHOCK MOUNT KIT SHOCK-MOUNT-SCREW SHOCK-MOUNT-AXLE 610009 MOTOR BRACKET PROTECTION STIC	1 1 1
SHOCK-MOUNT-AXLE	
	1
610009 MOTOR BRACKET PROTECTION STIC	
	CKER 1
666112 SEAT STAYS	1
666109 HORST LINK KIT	2
BALL-BEARING_22x8x7	2
WASHER_8.2x12x1.5	2
HORST-LINK-AXLE	1
SHOCK-MOUNT-SCREW	1
666113 CHAIN STAYS	1
666107 MAIN PIVOT KIT	1
BALL-BEARING_28x15x7	2
WASHER_15x20x2	2
BEARING-BUSHING_15x45	1
AXLE_M15x78_HEX8	1
610006 CHAIN STAY PROTECTION STICKER	1
666108 ROCKER LINKAGE KIT	1
BALL-BEARING_21x12x7	1
BEARING-BUSHING_15x10	1
BEARING-SCREW_M10x1x23	1
AXLE-ROCKER_M15X78_HEX8	1
BALL-BEARING_28x15x7	2
WASHER_15x20x2	2
BEARING-BUSHING_15x35	1
SCREW CABLE GUIDE M3 X 6	4
666104 CABLE GUIDE FOR 2 CABLES, SLOTT	ED 1
666102 CABLE GUIDE FOR 2 CABLES	1
666101 CABLE GUIDE FOR 1 CABLE	2
666111 BATTERY COVER KIT	1
BAT-COVER_MS-BROSE-AM-CF	1
screw_M3x8	2
BATTERY-COVER-HOOK	2
screw_M8x1.25x10	2
610007 BATTERY-COVER-STICKER_INSIDE	1
610008 BATTERY-COVER-STICKER_OUTSIDE	1

## E-BIKE KIT PARTS LIGHT MUC.L.al / MRC.G.al









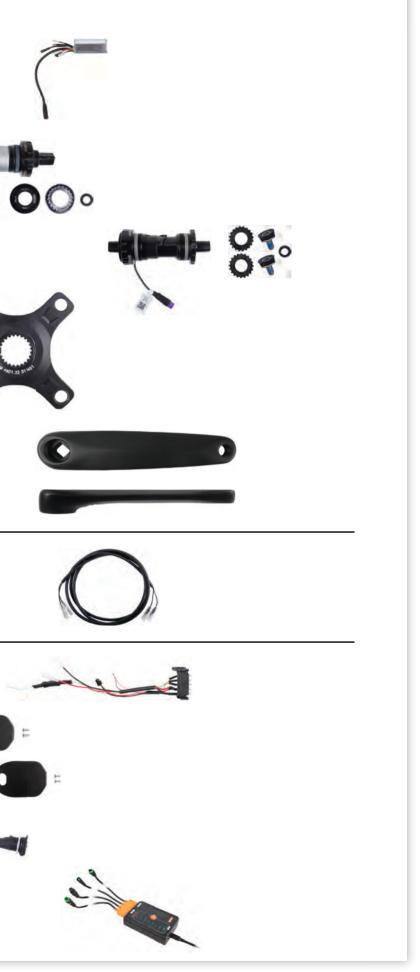


## E-BIKE KIT PARTS LIGHT MUC.L.al / MRC.G.al

	DESCRIPTION	ARTNO.	DESCRIPTION
610513	DISPLAY AND ACCESSORIES LCD Display C11	610515	ACCESSORIES AND MOUNTING PARTS Controller
		610502	bottom bracket with torque sensor
610514	LCD Display C240		bottom bracket with Speedsensor, 126 mm axle
		610533	spider (for bottom bracket with torque sensor art. 610502), BCD: 104 mm
		353603	
610522	LCD Display C260		crank left, aluminium, 170 mm (for bottom bracket art. 610502) crank left, aluminium, 170 mm (for bottom bracket art. 610502)
		610517	LIGHT CABLES for head light, 1,200 mm
			for rear light, 1,200 mm
610523	LED Display E161	613294	SERVICE PARTS battery connector
		613627	downtube cover suitable for frames art. 660374/5/6
		660321	downtube cover suitable for frames art. 660370/1/2/3
610516	connecting cable display controller, 1,200 mm	613296	charger socket
		613297	on/off button
		610521	service adapter







# SERVICE

#### Service is our top priority

A product is only as good as its service. We are fully committed to sustainable customer satisfaction. Our E-Mobility Service Center is characterized by a guick response and competent specialists.

Messingschlager offers comprehensive services for OEM customers as well as dealers. We maintain a service and test center, which can be reached via

a free hotline. We kepp all important spare parts in stock, which can be with you within a few working days. In many countries we are continuously building so-called service satellites in order to be able to respond even faster on site with shipping spare parts and batteries. In this way we also guarantee the training of international dealers.

In addition, we offer regular training courses for both manufacturers and specialist dealers in order to pass on system knowledge. This opens up the possibility of quickly identifying and eliminating sources of error. In order to be able to react promptly in service cases, we also carry all tools necessary for the service.



#### Service achievements

- · Documentation of the work steps for effective and time-saving assembly
- · Training for assembly regarding cable laying and connection of the system
- · Training in assembly for EOL test (End of Line) and installation of the appropriate, customer-specific firmware
- · OEM hotline in the E-Mobility Service Center
- Stocking of all crucial original spare parts and delivery within 48 hours
- · General training on the system and all necessary diagnostic solutions for all components (motor, display, battery)
- · Fast response to questions within 24 hours
- · Supply of all tools necessary for the OEM
- · Web-based OEM & specialist dealer service tool





**ALL FRAME CATEGORIES** 

#### CONTACT

In order to be able to make the process of a complaint more efficcient, please note the following points:

For questions or complaints about our E-Bike Solutions, please contact our E-Mobility Service Center by email or phone. E-Mail: e-mobility@messingschlager.com Hotline: +49 9544 / 9444 - 45

Our E-Mobility team can be reached free of charge form Monday to Friday from 8:00 a.m. to 4:00 p.m.

You can find more information about our range and service on our website: www.messingschlager.com/de/ebike



**MULTIPLE BATTERY OPTIONS** 



**DRIVE TRAIN BRANDS** 



**DISPLAY SOLUTIONS** 

## PartFinder

Load-oriented and harmonious products for e-bikes & bikes!66

M-UN

## e-bike add-on parts

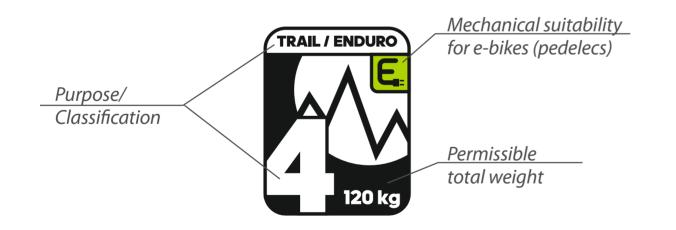


# PartFinder



### Load-oriented products - every e-bike needs suitable parts

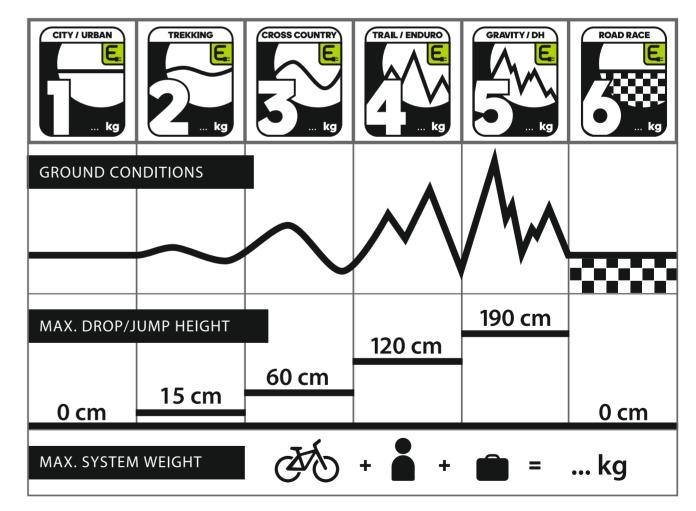
The Messingschlager PartFinder is a classification matrix for bicycles / e-bikes and their accessories. It classifies bicycles according to the respective areas of use based on ASTM F2043-13 or DIN EN 17406 (still in the drafting stage). In addition, it provides quality standards and test reports for increased loads or areas of application that go beyond the current ISO4210 / EN15194 standards. These were developed in cooperation with independent, accredited testing institutes.



The Messingschlager PartFinder is intended to help dealers and end consumers to find their way around the extensive range of accessories and to select the right, tested component for their respective needs.

Bicycles and thus the built-in components are developed and constructed for a specific area of application and the loads to be expected here. The forces that act here vary depending on the area of application and system weight (bike + rider + luggage). The right component can be found quickly and easily with the help of the pictograms.

### **PartFinder overview**







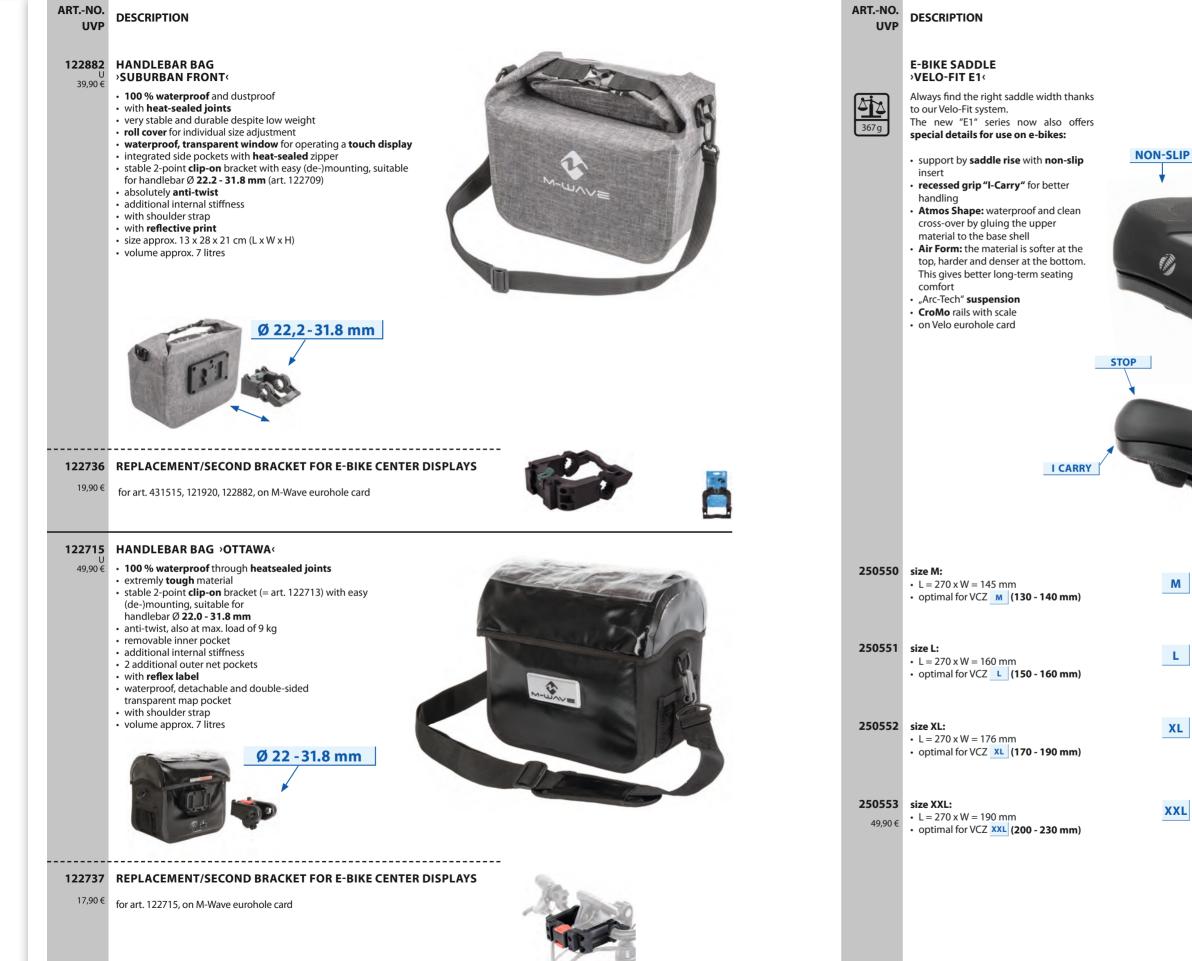
Μ

L

XL

XXL

## HANDLEBAR BAG / BRACKET / SADDLE



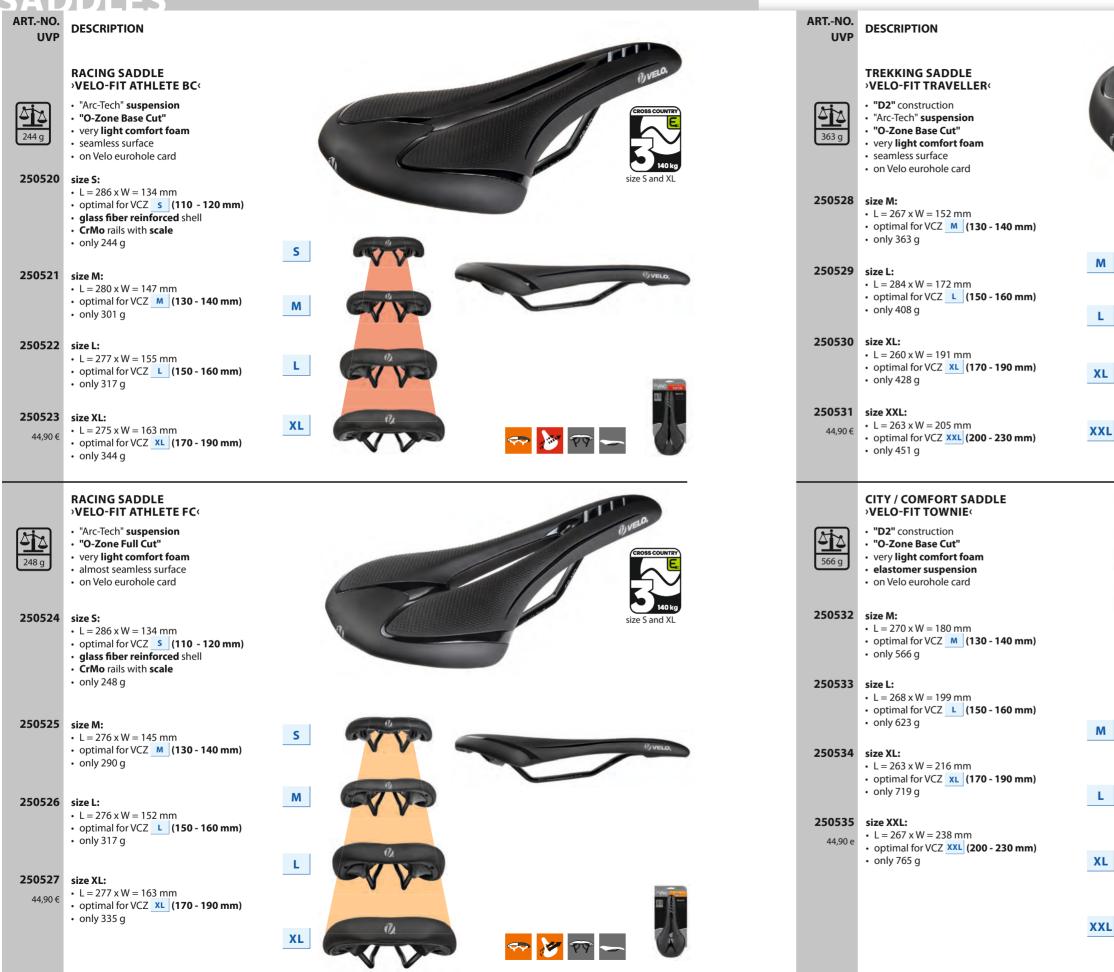






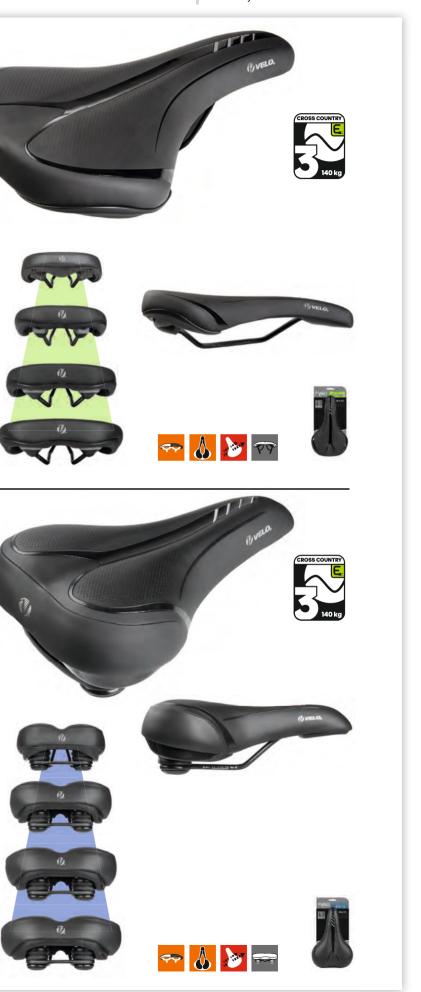


## SADDLES

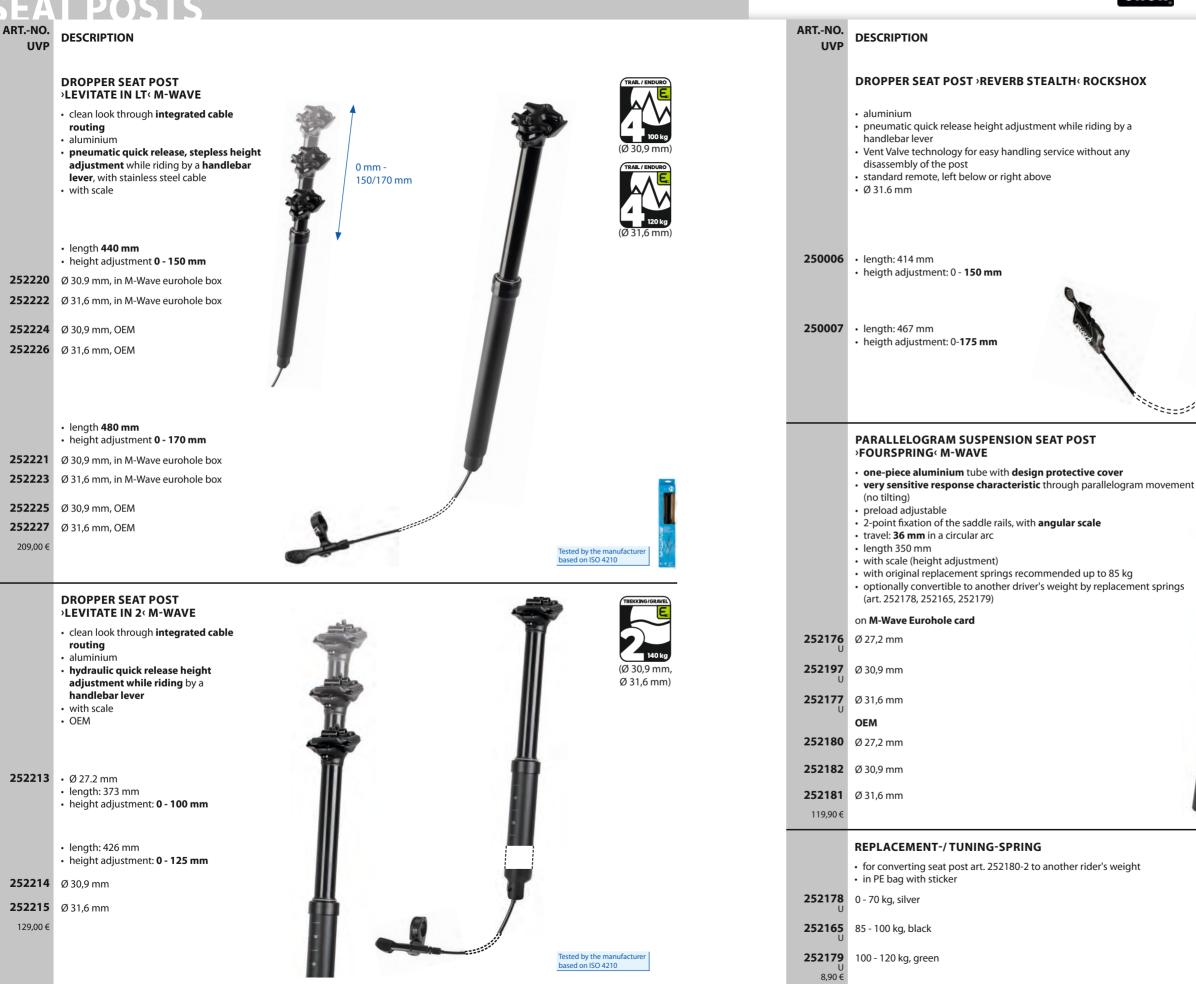








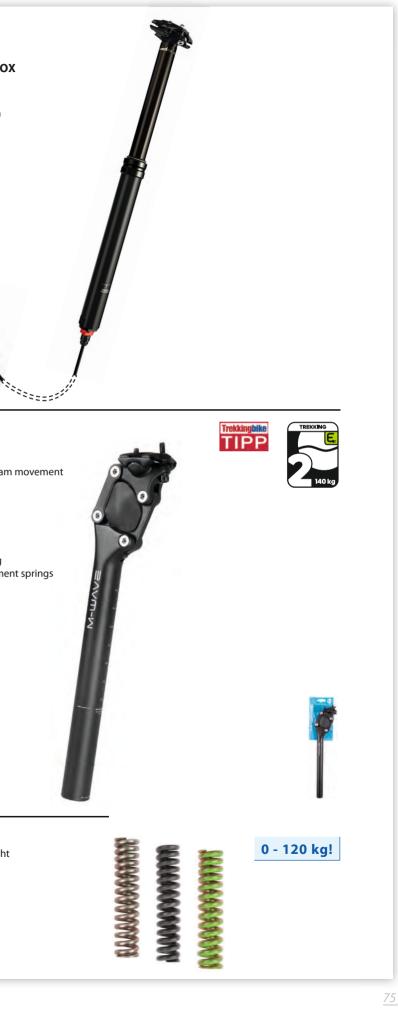
## SEA<u>T POSTS</u>











## <u>SEAT POSTS</u>













Tested by the manufactur based on ISO 4210







Tested by the manufactur based on ISO 4210

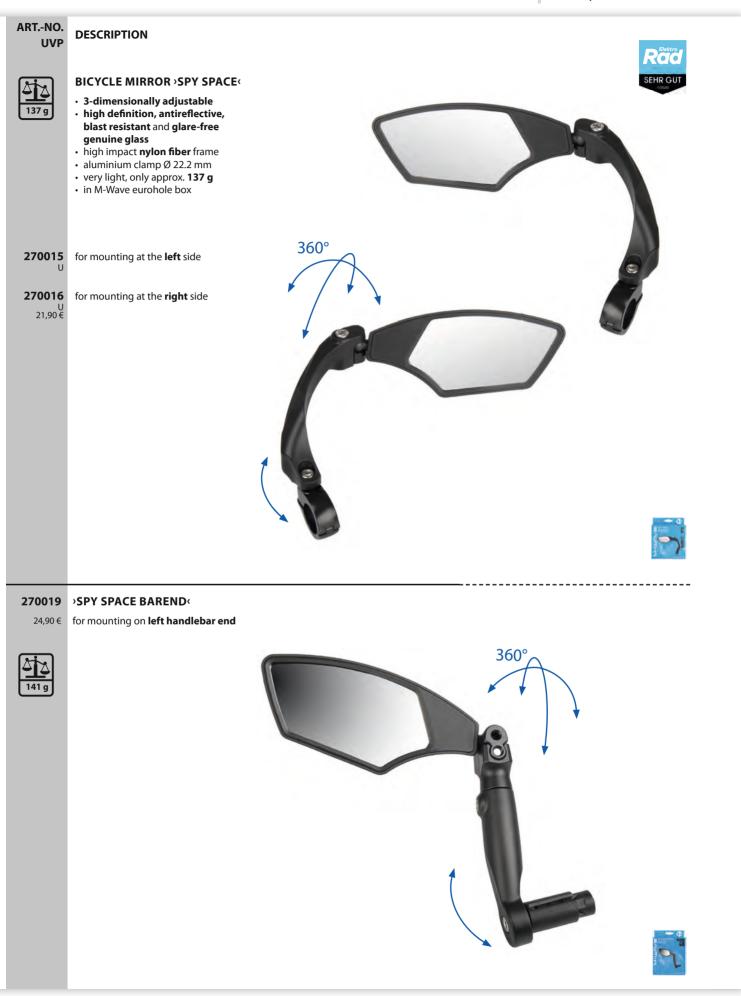
## SEAT POSTS / BICYCLE MIRRORS

ARTNO. UVP	DESCRIPTION		
254 g	<ul> <li>single piece seat post with aluminium head</li> <li>with scale (height adjustment)</li> <li>easy saddle angle adjustable with 2 bolts</li> <li>only 254 g (Ø 27.2 mm)</li> <li>length 350 mm</li> <li>on Zoom eurohole card</li> </ul>	R R R R R R R R R R R R R R R R R R R	TREKKING Lido kg
<b>252740</b> U	Ø 27,2 mm	Ŕ	
<b>252741</b> U 24,90€	Ø 31,6 mm		
			Tested by the manufacturer based on ISO 4210
	SEAT POST >A 350 STRONG (M-WAVE • with aluminium head • easy saddle angle adjustable with 2 bolts • offset: 15 mm • length 350 mm		(Ø 31,6 mm)
252831 252833 252835			
252830 252832 252834 14,90 €	Ø 30,9 mm		ſ
14,90€			









## **BICYCLE MIRRORS**



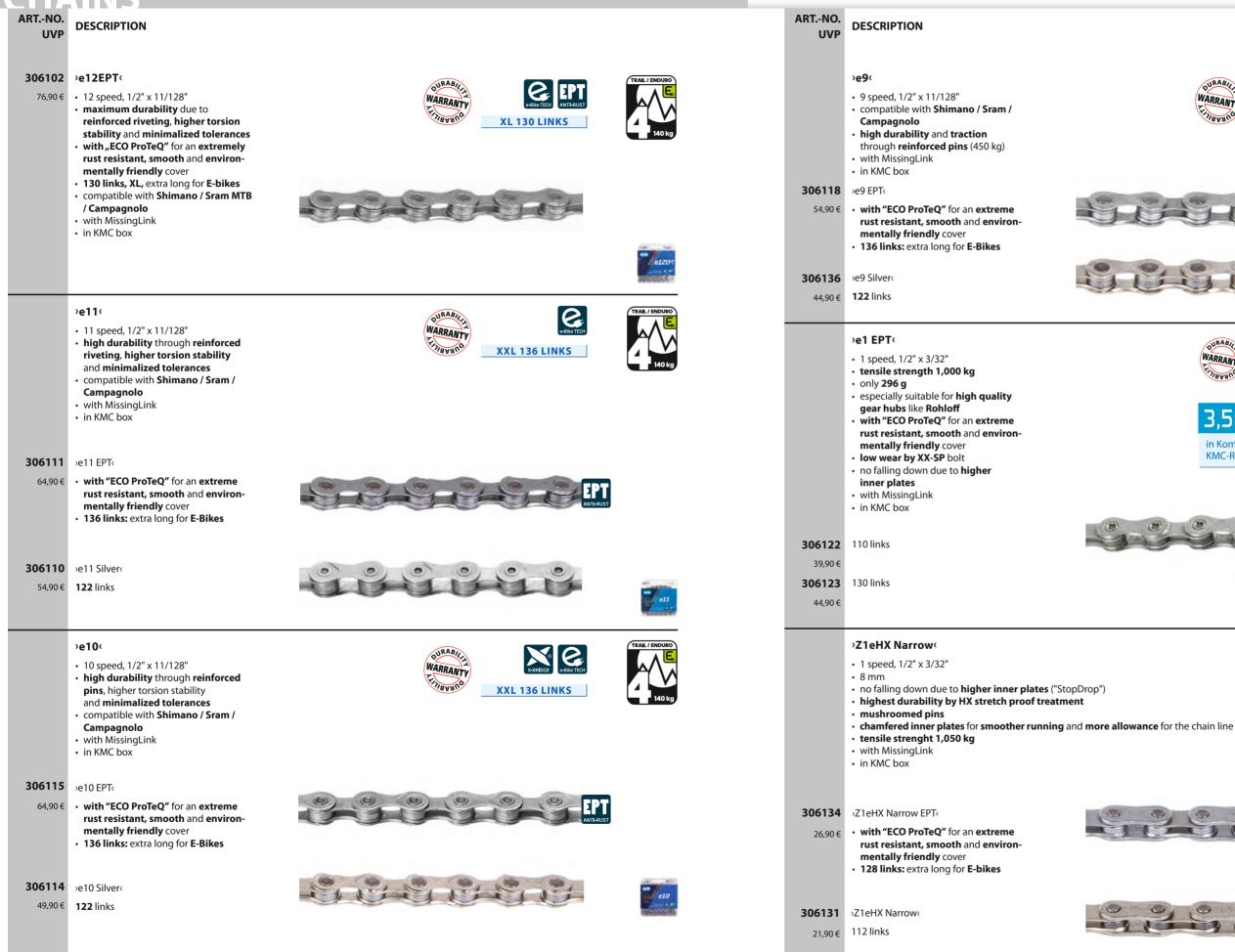








#### HAIN

















DURABILIA

WARRANTY

FILIBARUQ



























## **CHAINS**

	Drive durability of e-bikes with mid-mounted engine	
	e101 EPT / KMC Ritzel wide 10.000 km +	
	e1 EPT / KMC Ritzel narrow 3.500 km +	
	standard powered by	
ARTNO. UVP	DESCRIPTION	
<b>306125</b> 69,90€	<ul> <li>&gt;E101 EPT</li> <li>1 speed, 1/2" x 1/8"</li> <li>112 links</li> <li>with "ECO ProTeQ" for an extreme rust resistant, smooth and environmentally friendly cover</li> <li>when using with KMC 1/8" chainring and KMC sprocket (art. 350075-8, 350081) enormously longlasting running performance significantly over 10,000 km</li> <li>chainring and chain easily retrofitted at lots of bicycles</li> <li>with MissingLink</li> <li>in KMC box</li> </ul>	ARTNO. UVP
<b>306127</b> 21,90 €	<ul> <li>1 speed, 1/2" x 1/8"</li> <li>112 links</li> <li>9.2 mm</li> <li>high durability through reinforced pins and chain links</li> <li>no falling down due to higher inner plates ("StopDrop")</li> <li>hardened bolts</li> <li>chamfered inner plates for smoother running and more</li> </ul>	
	<ul> <li>allowance for the chain line</li> <li>with MissingLink</li> <li>in KMC box</li> </ul>	
<b>303731</b> 21,90€		<b>309900</b> 399,00 €
	<ul> <li>no falling down due to higher inner plates ("StopDrop")</li> <li>hardened bolts</li> <li>chamfered inner plates for smoother running and more allowance for the chain line</li> <li>with MissingLink</li> <li>in KMC box</li> </ul>	<b>309901</b> 59,90 €
		<b>309902</b> 44,90 €

NO. UVP	DESCRIPTION
	FOR WORKSHOPS AND FACTORIES
	50 METER REEL AND DISPLAY
	For professional dealers with workshop, KMC now offers some chain models on workshop reels. The key models, from single speed up to 12 speed chains, are available packed on 50 meter reels. Due to the large variety of chain lengths, especially for e-bikes, ready cut to length chains will produce a lot of rejects: The 50 me- ter reel offers the advantage of <b>flexibility</b> , you can shorten to the <b>desired length</b> with <b>less waste and lower cost</b> . Of course, KMC will include the right <b>connecting links</b> for secure and easy assembly.
	CHAIN REEL HOLDER
	<ul> <li>stable steel rack</li> <li>magnetic bracket for the end of chains</li> <li>with holder for box with 40 connecting links</li> </ul>
<b>9900</b> 99,00€	<ul> <li>for 3 x 50 meter chain reels</li> <li>mobile and height adjustable</li> </ul>
9901	<ul> <li>for 1 x 50 meter chain reel</li> <li>for mounting on wall or with</li> </ul>

for mounting on wall or with (table) foot art. 309902

(table) foot for art. 309901

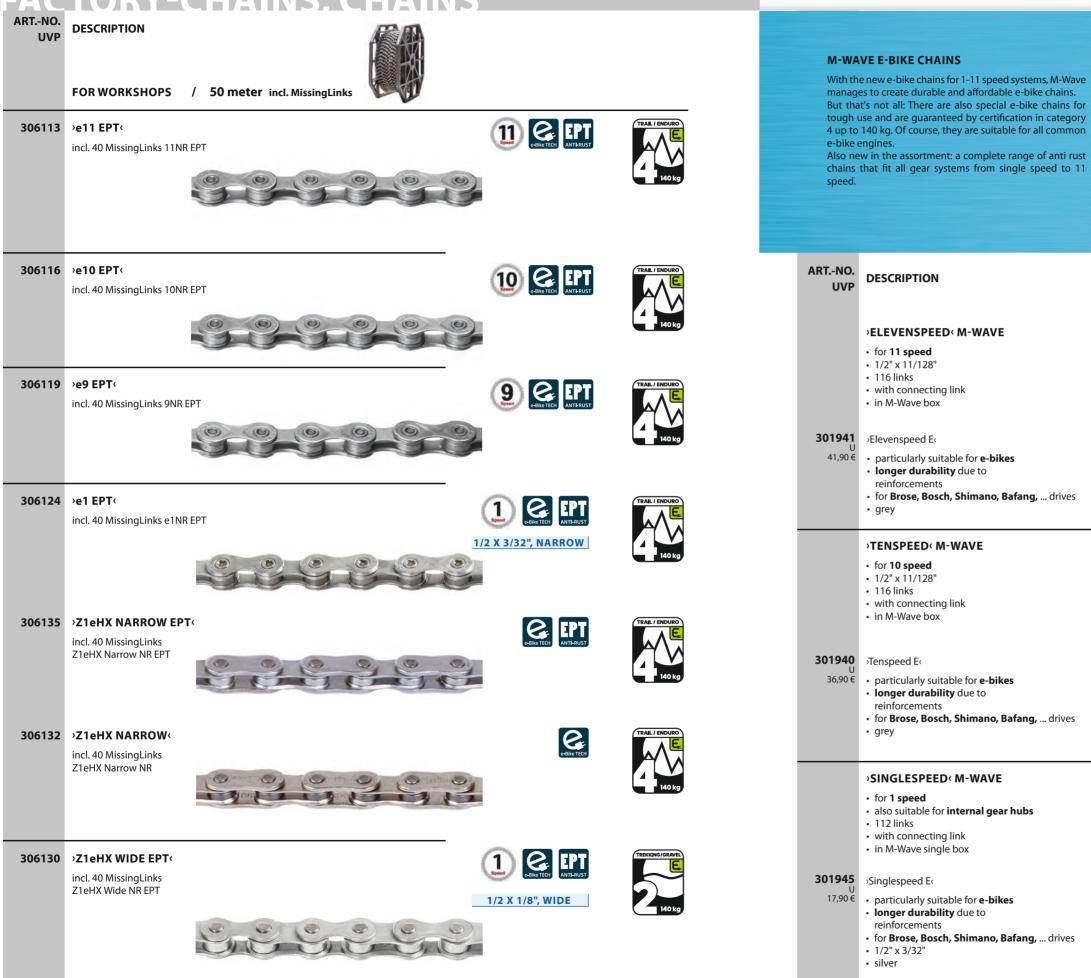








## FACTORY-CHAINS, CHAINS





(11)

10

1



















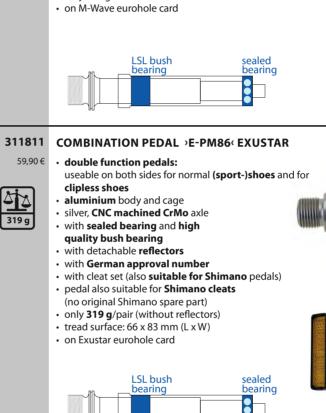






## **CLIPLESS PEDALS / COMBINATION PEDALS**

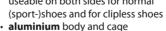






### 311099 COMBINATION PEDAL > PEASY <

double function pedals: useable on both sides for normal



- silver CNC machined CrMo axle
  - only 319 g/pair (without reflectors)
  - with detachable **reflectors**
  - with German approval number
  - with cleat set (also suitable for
  - Shimano pedals)
  - pedal also suitable for Shimano cleats (no original Shimano spare part)
- tread surface: 63 x 80 mm (L x W)
- on M-Wave eurohole card





## **NON-SLIP PEDALS / PEDALS**

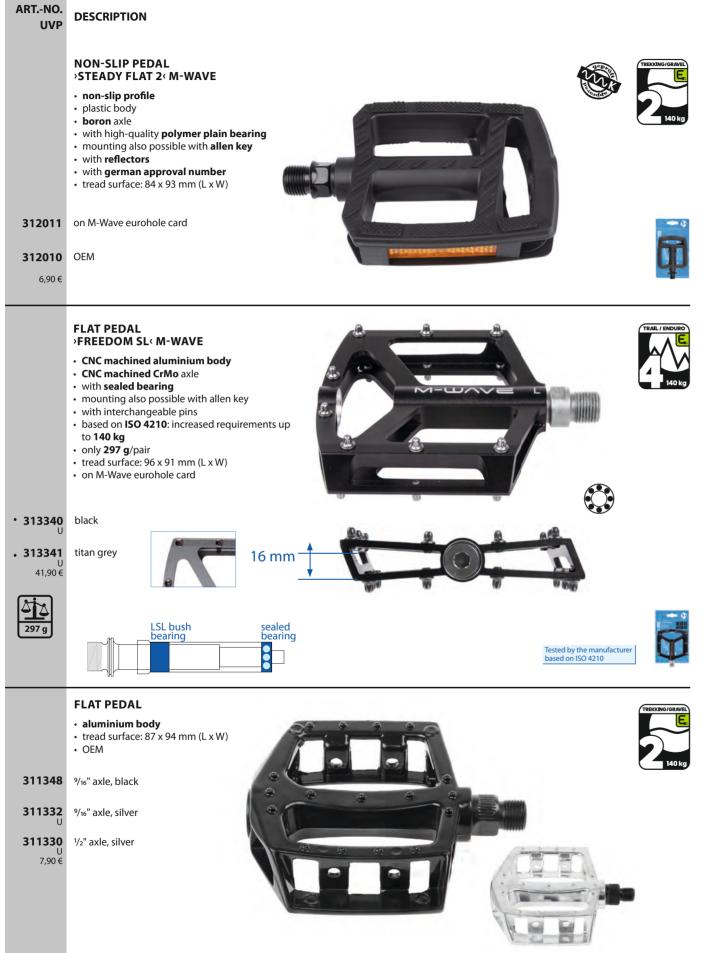


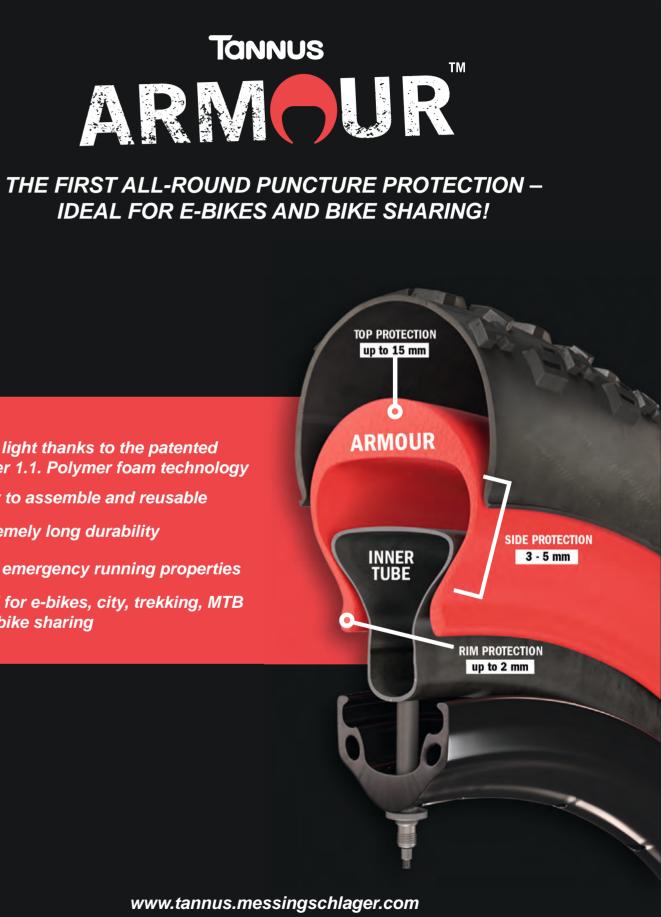






## **ION-SLIP PEDALS / PEDALS**





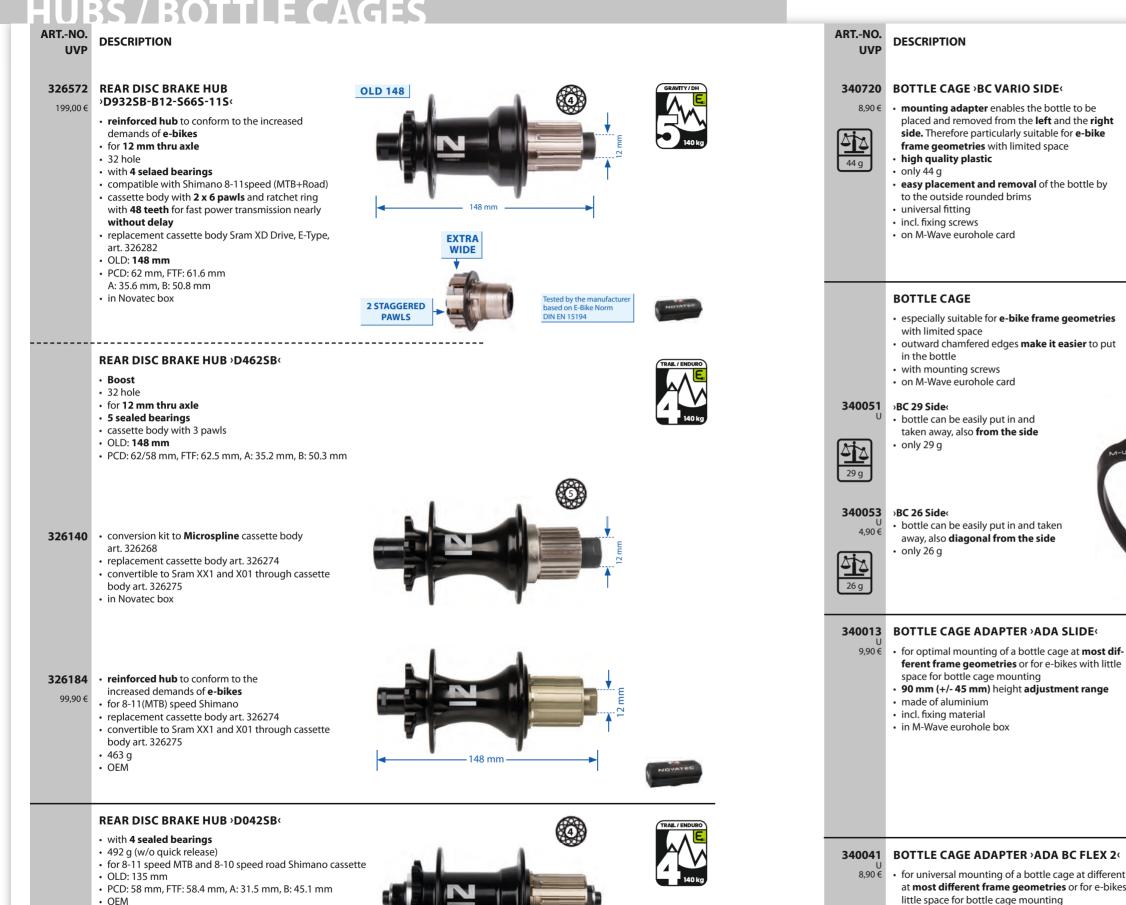
- + Very light thanks to the patented Aither 1.1. Polymer foam technology
- + Easy to assemble and reusable
- **+** Extremely long durability
- **With emergency running properties**
- + Ideal for e-bikes, city, trekking, MTB and bike sharing





## HUBS / BOTTLE CAGES





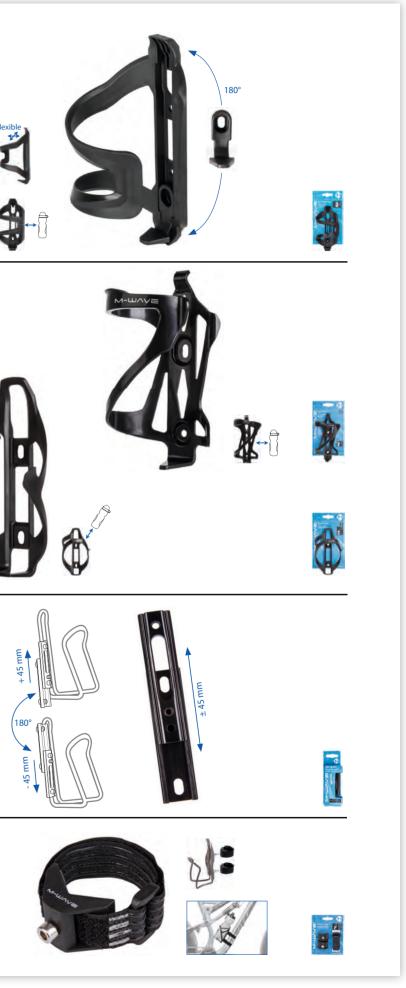
#### 340041 BOTTLE CAGE ADAPTER > ADA BC FLEX 24

- for universal mounting of a bottle cage at different places, at most different frame geometries or for e-bikes with little space for bottle cage mounting
- fast and flexible mounting possibilities by non-slip hook and loop fasteners (art. 340042)
- 1 set = 1 pair of adapters, 1 pair of Velcro straps
- on M-Wave eurohole card

326221 36 hole

326223 32 hole 64.90€







## CHAINRINGS / DIRECT MOUNTS

Drive durability of e-bikes with mid-mounted engine



- + significant increase of lifetime of the drive unit through the matched combination of chain and chainring
- + guaranteed durability of more than 10,000 km

		<b>bike engines</b> eneration 2	Shim	ano circuit	no circuit hubs Enviolo circuit hu		
teeth	1/2 x 1/8"	1/2 x 11/128"	1/2 x 1/8"	1/2 x	3/32"	1/2 x 3/32"	
	AM	AM	AM	AM	OEM	OEM	
15		350079					
17				350087	350090		
18	350075	350083	350094	350088	350091		
19	350076	350084	350095	350089	350092		
20	350077	350085	350096	350097	350093	350080	
21	350078	350086					
UVP	13,90€	12,90€	12,90€	12,90€	12,90 €	12,90 €	



#### KETTENBLÄTTER

#### black

#### • BCD 104 mm

- for Brose, Bosch, Shimano, ...
- for 1/2 x 3/32" & 11/128" chains
- 0 offset

	ste	el	steel / narrow wide		
teeth	AM	OEM	AM	OEM	
32			356213	356202	
34			356214	356230	
36	356204 U	356201	356215	356203	
UVP	9,90€	9,90€	19,90€	19,90€	
38	<b>352682</b>	352685	356216	356232	
40	356205 U	356220	356217	356235	
42	352683 U	352686	356218	356236	
44	352684 U	352687	356219	356226	
46	356206 U	356228	356242	356237	
UVP	9,90€	9,90€	24,90€	24,90€	

#### DIRECT MOUNTS

#### black • for 1/2 x 3/32" & 11/128" chains steel

	• steel				
teeth	Bosch <sup>*</sup>	GEN 2	Bosch* chainline	chain	
	AM	OEM	AM	OEM	A
15	356264	356263			
16	356283	356281			
17	356284	356282			
34					356
36					356
38			356249	356207	356
40			356250	356208	
42			356251	356209	
UVP	4,90€	4,90 €	9,90 €	9,90€	24,

Other sizes and designs available on request \*no original Bosch spare part





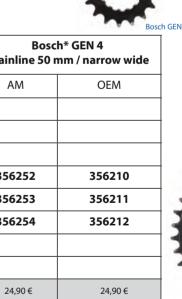


aluminium / narrow wide			
AM	OEM		
356243	356238		
356244	356229		
356245	356239		
29,90€	29,90 €		
356246	356231		
356247	356240		
356248	356241		
36,90€	36,90€		

















## CHAIN GUARD / ACCESSORIES / SPIDER

	<ul> <li>cHAIN GU</li> <li>aluminium</li> <li>black anod</li> <li>bolt circle</li> </ul>	lized				Chain Guard 1	104
teeth	CHAING	JARD 104	CHAINGU	ARD 104SL	CHAINGUA	RD 104CN	
teeth	AM	OEM	AM	OEM	AM	OEM	
36					356256	356278	
38					356257	356279	
40	356255	356273			356258	356280	
42			356261	356272			-
44			356259	356275			2
46			356260	356276			
48				356274			
UVP	12,90 €	12,90€	13,90€	13,90€	20,90 €	20,90€	X
HAINRI	NG BOLTS			<b>AM</b> (4	pieces on M-Wav	e tag)	OEM
	<b>x L8,5 mm</b> ut chainguard)				356304		356300
	<b>x L9,5 mm</b> ut chainguard)				356305		356301
	x L10,5 mm nd without chain	guard)			356306		356302
<b>VI8 x 0,75</b> usage with c	<b>x L12,5 mm</b> hainguard)				356307		356303
	U	IVP			2,99 € / set		0,69€/pc
						I	
CHAINRI	NG NUTS			<b>AM</b> (4	pieces on M-Wav	e tag)	ОЕМ
	x L5,5 mm				356310		356308
5	ut chainguard) <b>x L8,5 mm</b> hainguard)				356311		356309
		IVP			2,99 € / set		0,69 € / pc
ARTNO. UVP		ON					
	SET OF CH	IAINRING B	OLTS AND C	HAINRING			
356291	<b>set</b> of 4x scre 4x nut M8 x	t of 4x screw M8 x 8.5 mm and nut M8 x 5.5 mm, for chainwheel sets without chain lard, in PE bag			4x		+
<b>356293</b> 4,99€	4x nut M8 x 8		im and ainwheel sets w	ith chain			

Other sizes and	d designs available on request.
Other sizes and	a designs available on request.

	<ul> <li>aluminium</li> <li>with chaing</li> <li>black anod</li> <li>BCD 104 m</li> </ul>
613511	for Shimano
613510	for Shimano
19,90€	

	<ul> <li>with chainguard mounting</li> <li>black anodized</li> <li>BCD 104 mm</li> </ul>
613511	for Shimano E6000, chainline <b>47 mm</b>
613510	for Shimano E5000, chainline <b>47 mm</b>
19,90€	
613512	for Shimano E6100, chainline 47 mm

613509 for Shimano E7000/8000, 24,90 € chainline **53 mm** 

\*no original Shimano / Bosch / Brose spare part

ARTNO. UVP	DESCRIPTION
	SPIDER FOR E-BIKE ENGINES OF BROSE*
	<ul><li> aluminium</li><li> black anodized</li><li> BCD 104 mm</li></ul>
	for chainline <b>45 mm</b>
613524	with chainguard mounting
613502	without chainguard mounting
	for chainline <b>47 mm</b>
613522	with chainguard mounting
613523	
010020	
	for chainline <b>49 mm</b>
	with chainguard mounting
613521	without chainguard mounting
19,90€	
613501	for chainline <b>52 mm</b>
19,90€	<ul> <li>e. g. for MTB Linkage battery frames with boost standard (art. 61362</li> <li>without chainguard mounting</li> </ul>
	SPIDER FOR E-BIKE ENGINES OF BOSCH*
	• aluminium
	<ul><li>without chainguard mounting</li><li>black anodized</li></ul>
	• BCD 104 mm
613513	for BOSCH GEN3 system, chainline <b>47 mm</b>
14,90€	
613514	for BOSCH GEN4 system, chainline <b>50 mm</b>
24,90€	
	SPIDER FOR E-BIKE ENGINES OF SHIMANO*
	<ul><li> aluminium</li><li> with chainguard mounting</li></ul>
	<ul><li>black anodized</li><li>BCD 104 mm</li></ul>
613511	for Shimano E6000, chainline <b>47 mm</b>
613510	for Shimano E5000, chainline <b>47 mm</b>
19,90€	
613512	for Shimano E6100, chainline <b>47 mm</b>
613508	for Shimano E7000/8000,
	chainline <b>50 mm</b>
613509	for Shimano E7000/8000,







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620-2)



## CRANKS ACCESSORIES FOR CHAINWHEEL SETS

C

ARTNO. UVP	DESCRIPTION	
	CRANK	
	• aluminium	
	• 170 mm • OEM	
	offset: 0 mm	
352602	left, black	
352603	right, black	
9,90€		
	KURBELARM	
	• aluminium • 170 mm • OEM	)
	offset: 20 mm	
352661	left, silver polished	
352662	left, black	_
<b>352667</b>	right, black	
8,90€	e e e e e e e e e e e e e e e e e e e	
• 352639	BOLTS	
U 1,90€	• suitable for <b>Bosch</b> and <b>Brose E-bike</b> cranks	
	<ul> <li>(no original Bosch/Brose spare part)</li> <li>also suitable for ISIS bottom bracket with M15 thread</li> <li>10 pieces in PE bag</li> </ul>	
<b>356290</b> U 2,49 €	<ul> <li>suitable for Brose E-bike cranks (no original Brose spare part)</li> <li>also suitable for ISIS bottom bracket with M15 thread</li> <li>20 pieces in PE bag</li> </ul>	
	CHAIN GUARD	
	<ul> <li>for Brose Motor Drive S + C + T + TF</li> <li>made of aluminium</li> <li>black</li> <li>OEM</li> </ul>	
• 356285	42 - 44 teeth	
• 356286	46 - 48 teeth	
11,90€		
	BRACKET FOR CHAIN GUARD	
	<ul> <li>for Brose Motor Drive S + C + T + TF</li> <li>with 2 angle brackets</li> <li>black</li> </ul>	V
	incl. mounting screws     OEM	-
• 356287	suitable for art. 356285 (42 - 44 teeth)	
• 356297	suitable for art. 356286 (46 - 48 teeth)	1
5,90€		/
• 356298	ANGLE BRACKET	
0,99€	<ul> <li>for fixing the chain guard at the seat stay or at the drop out</li> <li>made of aluminium</li> <li>suitable for art. 356285/6</li> <li>black</li> <li>incl. mounting material</li> <li>OEM</li> </ul>	

CRANK, ISIS TYPE FOR BOSCH GEN1+2+4, BROSE*,				
• aluminium	, black			
le	rig	gł		

	GEN1+2+4	4, BROSE*,	•				
	aluminium, black					1	
length		eft		ght	offset		
	AM	OEM	AM	OEM			
	SHAPE 1					I	ISUKG
170	356108	356127	356109	356126	0 mm		
175	356110	356125	356111	356124			SHAPE 1
170	356112	356123	356113	356122	5 mm		0
175	356114	356121	356115	356120			
UVP	12,90€	11,90€	12,90€	11,90€			
170				356167	13 mm		
UVP				14,90€			
Länge	le	eft	ri	ght	offset		]
	AM	OEM	AM	OEM	1		
		1	SHAP	E 2	1	1	CHART 2
170		356191		356192	5 mm	-	SHAPE 2
160	356116	356135	356117	356133	13 mm		
170	356118	356134	356119	356132	15 11111		32
UVP	12,90€	11,90€	12,90€	11,90€			At. 083295
	aluminium					1	]
	le	eft	ri	ght	offset		
length	AM	OEM	AM	OEM			-
160	356140	356131	356141	356129			
170	356142	356130	356143	356128	5 mm		SHAPE 1
UVP	12,90€	11,90€	12,90€	11,90€		A	
			•		-		
	CRANK, F( AXLES (SF 7000/610	OR SHIMANO IIMANO E80 0)*	O 24 MM 00 /				
	<ul><li> aluminium</li><li> also suitab</li></ul>	, black le for Hollowte	ch II cranks				
	le	eft	ri	ght	offset		
length	AM	OEM	AM	OEM			
165	356144	356139	356145	356138			
175	356146	356137	356147	356136	13 mm		SHAPE 3
	+					1	SHAPE 3 Senex

E SAMOX

UVP

100

14,90€

14,90€

\*no original Shimano / Bosch / Brose spare part

14,90€

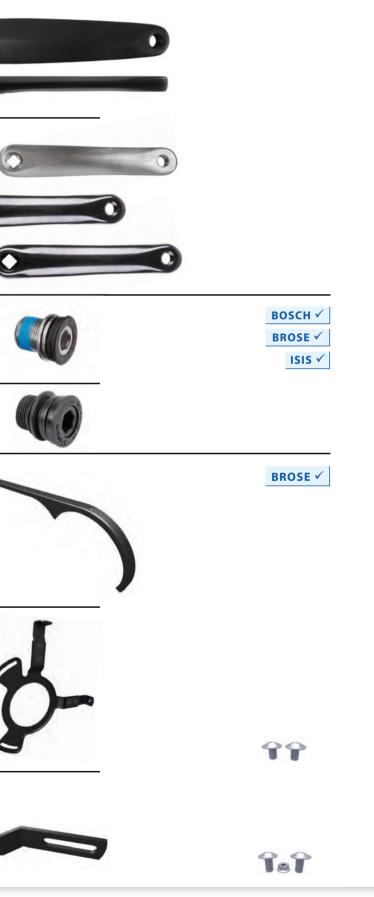
The cranks are also available on request in other lengths, offsets and designs.

14,90€

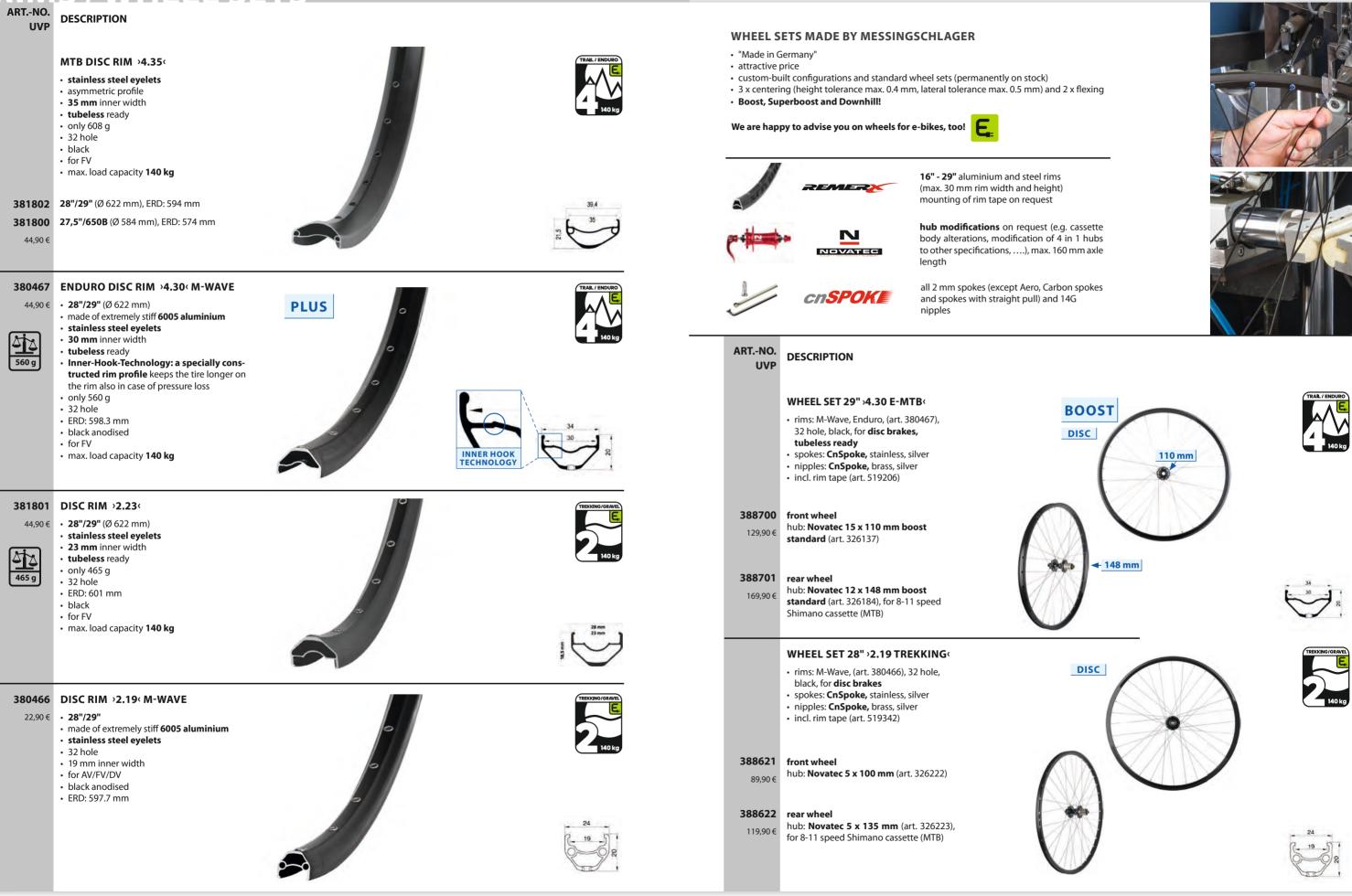






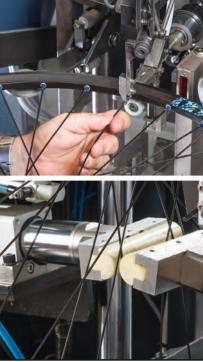


## RIMS / WHEEL SETS



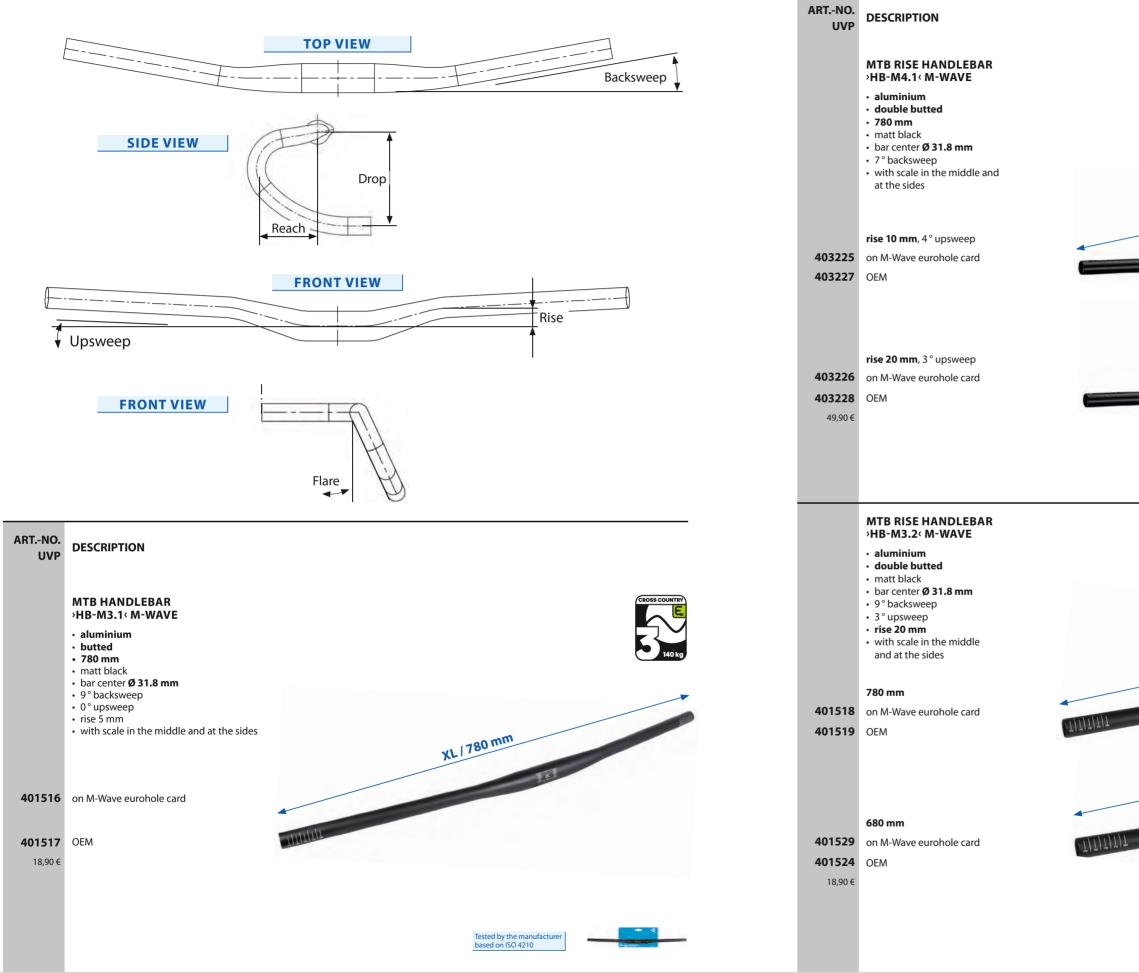








## HANDLEBARS

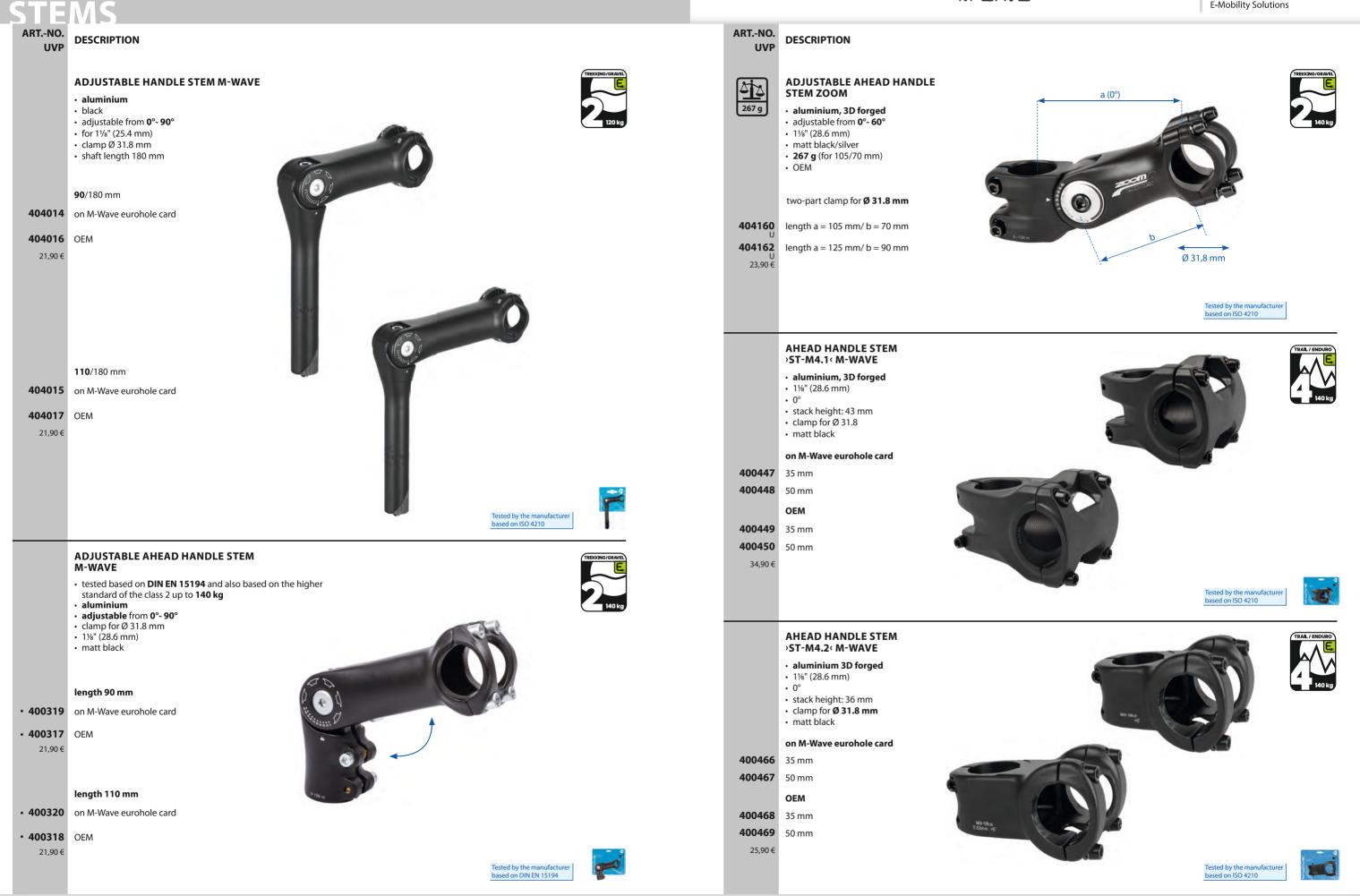
















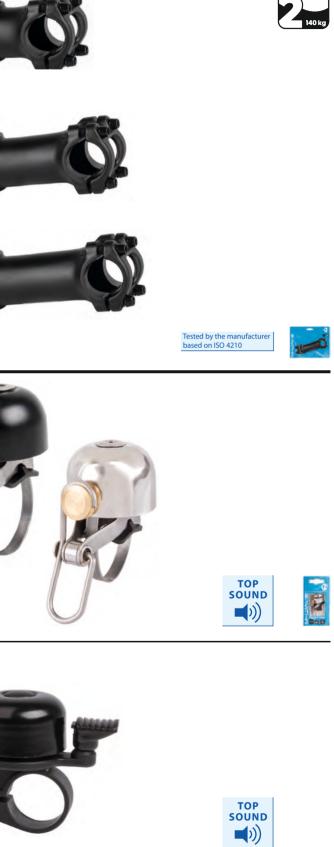
## STEMS / BELLS

	MS/BELLS					
ARTNO. UVP	DESCRIPTION			ARTNO. UVP	DESCRIPTION	
	AHEAD HANDLE STEM >ST-M3.1 ( M-WAVE • aluminium 3D forged • 11/6" (28.6 mm) • clamp for Ø 31.8 mm • from 113 g • matt black		THO KS		AHEAD HANDLE STEM >ST-M3.3 (M-WAVE • aluminium, 3D forged • 11%" (28.6 mm) • 7° • clamp for Ø 25.4 mm • matt black	No.
	7°			404400	on M-Wave eurohole card	
	on M-Wave eurohole card	- Tent				
404520	60 mm			404401	90 mm	4
404522	90 mm			404402	105 mm	
404524	100 mm					
404526	110 mm				OEM	
				404403	60 mm	
				404404	90 mm	
	OEM			404405	105 mm	Up-tile Litters +T
404521		Normal Control of Cont		18,90€		
404523 404525						
404525						
19,90 €	›ST-M3.2‹M-WAVE		Tested by the manufacturer based on ISO 4210	420451	COPPER BELL >BELLA C-YELL (M-WAVE • very loud and long lasting sound (100 dB) • Ø 30 mm • incl. 3M rubber inlay • in M-Wave eurohole box • black • black • approved for e-bikes according to DIN 33946	E
	35°					U
	on M-Wave eurohole card			<b>420450</b> U 11,90€	silver	
404351				11,50 €		
404353		interest of the second se				
404355					MINI BELL	
404357	120 mm OEM	TOP:		2,90€	<ul> <li>aluminium</li> <li>Ø 35 mm</li> <li>tested according to DIN 33946 and therefore approved for e-bikes</li> <li>up to 92 db</li> </ul>	1
404350					<ul> <li>lever 360° turnable, with click function</li> <li>OEM</li> </ul>	
404352						
404354		and the second s				
404356	120 mm		÷ 4			
19,90 €		State of the state	Tested by the manufacturer based on ISO 4210			









## SIDE STANDS









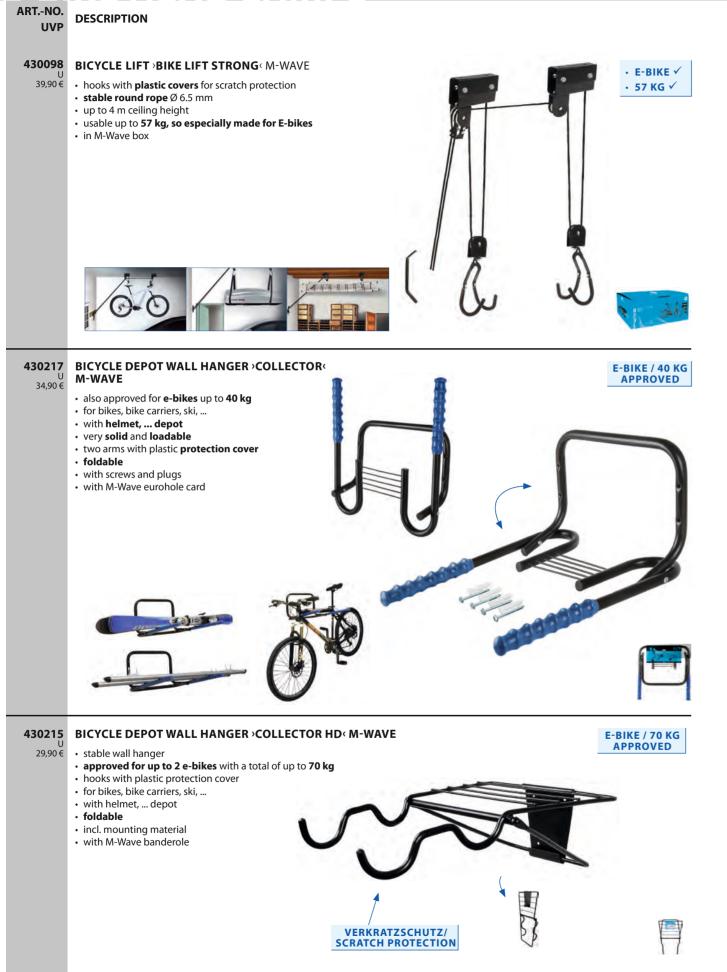








## BICYCLE LIFT -/ HANGER E-BIKE HEAD LAMPS



	LITEM	
Y	Litemove, the manufacturer of LED lights fou ance with highest quality. The young compa- fields of optics, electronics and mechanical e therefore able to offer top quality products at	ny has nginee
ARTNO. UVP	DESCRIPTION	
461623	E-BIKE HEAD LAMP >AE-130 < LITEMOVE • High and Low Beam • 130 / 90 Lux • 4 high intensity LEDs • 6 - 16 V DC / 6 W (low beam) – 13 W (high beam) • with handlebar remote control • aluminium housing • version for fork mounting (other versions available on request) • incl. 140 cm double cable • with German approval number • 120 g • OEM	
	<ul> <li>E-BIKE HEAD LAMP &gt;SE-150 ( LITEMOVE</li> <li>150 Lux</li> <li>Cones of light 7 m width and 70 m wide</li> <li>4,5-16V DC/7.2W</li> <li>2 high intensity LEDs</li> <li>6061 aluminium housing</li> <li>version for fork mounting (other versions available on request)</li> <li>fork assembly</li> <li>with German approval number</li> <li>83 g</li> <li>OEM</li> </ul>	
<b>461611</b> 59,90 €	E-BIKE HEAD LAMP >SE-110 < LITEMOVE   10 Lux  550 lumen  4.5-16 V DC / 5.6 W  2 high intensity LEDs  aluminium / plastic housing  incl. 140 cm double cable  with German approval number  83 g  OEM	







d in 2019, combines stylish & modern appearas decades of international experience in the neering from the automotive industry and is interesting price.













## HEAD LAMPS / ACCESSORIES / CARRIER REAR LIGHTS









## E-BIKE HEAD LAMPS CARRIER REAR LIGHT





SUPERNOVA ()

**E-Mobility Solutions** 













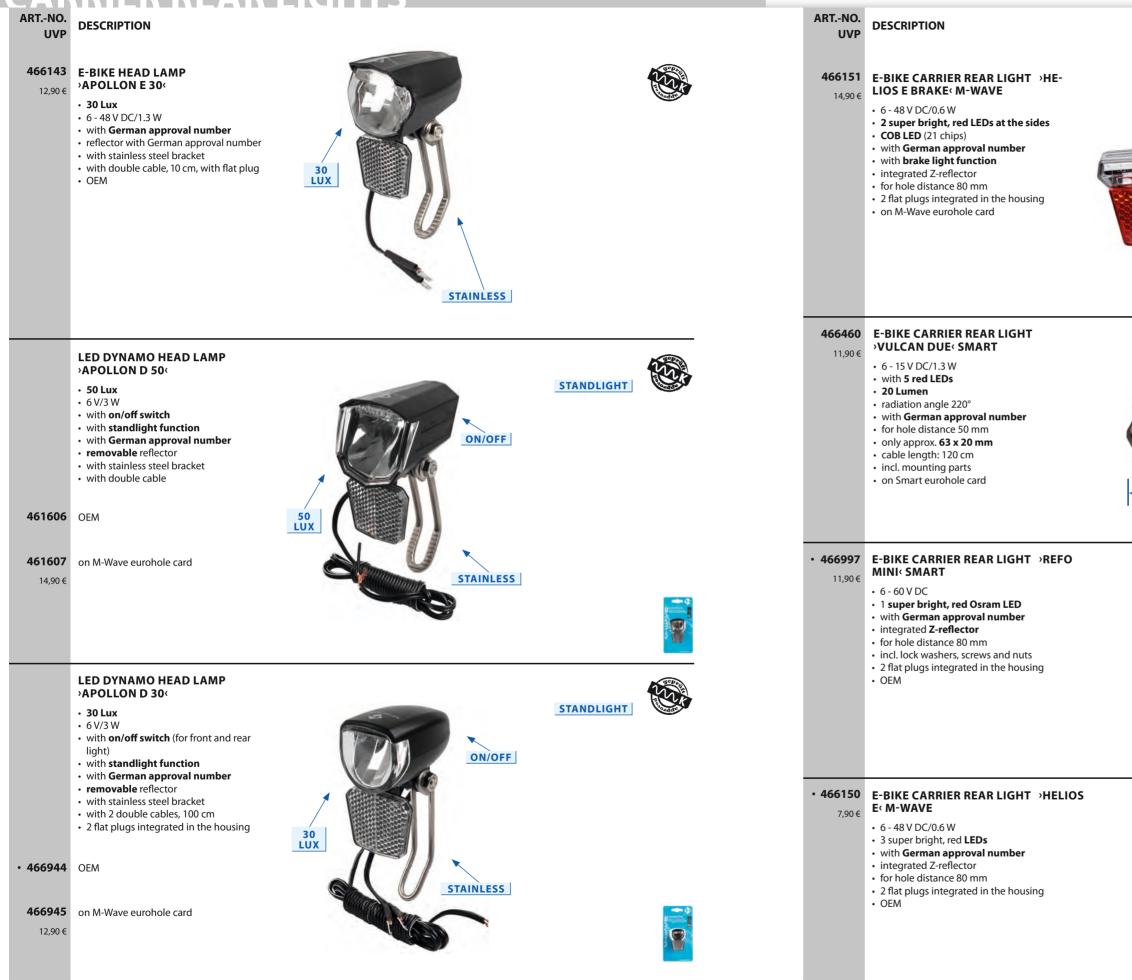






80 LUX

## **E-BIKE / DYNAMO HEAD LAMPS** CARRIER REAR LIGHTS





## **PUNCTURE PROTECTION**

		RE PROTECTION ALL-ROUND	т	annus
	EASY MO		AKA	<b>NOUR</b>
	REUSABL			
	SEHR LEI		NEVEK	STOP RIDING
	JETIK LEI			
		rotection against punctures, cuts and our is significantly more effective tha	pinching. n other puncture protection systems!	
	<ul> <li>up to 15 mm at</li> <li>free tire and tree</li> </ul>	t the tread, 3-5 mm at the sides and 2 mi	n in the rim area	
	<ul> <li>very light and r</li> </ul>	eusable		
	greater grip an	d better traction	e Armour works against deformation by la	ateral forces, allowing
		k of snake bites (e.g. by a strong impact) r 1.1 technology: very lightweight high-	tech polymer foam with millions of bubble	es provides shock and
	vibration damp			
	<ul> <li>easy mounting</li> </ul>		inde haing at reduced speed	
		ection for tube mounting for several widths		
	<ul><li>recyclable</li><li>ideal also for bi</li></ul>	ke sharing fleets		
		ТОР		AL
		PROTECTION		
		up to 15 mm		
1	ARMOUR			
	•			
6				
			20064	+ the integ
	INNER	SIDE PROTECTION	ARMOUR	
	TUBE	3-5 mm		
		RIM		
		PROTECTION		Set
		<sup>1.</sup> 2 mm	Also available	e in a set with matching tube
	- subject to the	Art. 084163		
		ARMEUR		
				6
	and the second se	RUREINA ANNINISCHATT THE RUST ALLIPOUR PERCENCE ANTONIO PERSONAL		
	1	AND DE	Alexan	T AND A
			ALL STAT	1 martin
			CC NIII	
			and man / 1	
		1.40		
		and the second		

ARTNO. UVP	ARMOUR SIZE	MATCHING TIRE	MATCHING TUBE	RIMM INNER WIDTH	WEIGHT	FEATURES (Banderole)			
	<b>29 x 1.95 - 2.50</b> 50/63 - 622	~ <b>29 x 1.95 - 2.50</b> ~ 50/63 - 622	<b>~ 700 x 44 - 54 C</b> ~44/54 - 622	~ 19 - 33 mm	320 g				
<b>519155</b> 44,90 €	set of art. 519185 and fitting tube, FV 48 mm (Art. 559125)								
	<b>29 x 2.60 - 3.00</b> 65/75 - 622	~ <b>29 x 2.60 - 3.00</b> ~ 65/75 - 622	~ <b>29 x 2.00 - 2.40</b> ~ 50/63 - 622	~ 23 - 36 mm	350 g				
<b>519163</b> 49,90 €	<b>set</b> of art. 519193 a	and fitting tube, FV 48 i	mm (Art. 559133)						
	<b>700 x 28 - 34 C</b> 28/34 - 622	~ <b>700 x 28 - 34 C</b> ~ 28/34 - 622	~ <b>700 x 20 - 25 C</b> ~ 20/25 - 622	~ 16 - 25 mm	200 g				
<b>519158</b> 34,90 €	set of art. 519188 a	and fitting tube, FV 48 i	mm (Art. 559128)						
	<b>700 x 35 - 40 C</b> 35/40 - 622	~ <b>700 x 35 - 40 C</b> ~ 35/40 - 622	<b>~ 700 x 20 - 28 C</b> ~ 20/28 - 622	~ 19 - 25 mm	230 g				
		and fitting tube, FV 48 i							
	<b>700 x 42 - 47 C</b> 42/47 - 622	<b>~ 700 x 42 - 47 C</b> ~ 42/47 - 622	~ <b>700 x 28 - 40 C</b> ~ 28/40 - 622	~ 19 - 25 mm	290 g				
<b>519154</b> 39,90 €	<b>set</b> of art. 519184 a	and fitting tube, FV 48 i	mm (Art. 559123)						
<b>519182</b> 39,90 €	<b>27.5 x 1.95 - 2.50</b> 50/63 - 584	~ <b>27.5 x 1.95 - 2.50</b> ~ 50/63 - 584	~ <b>27.5 x 1.65 - 2.125</b> ~ 44/54 - 584	~ 19 - 33 mm	310 g				
<b>519152</b> 44,90 €	<b>set</b> of art. 519182 a	and fitting tube, FV 48 i	mm (Art. 559122)						
	<b>27.5 x 2.60 - 3.00</b> 65/75 - 584	<b>~ 27.5 x 2.60 - 3.00</b> ~ 65/75 - 584	<b>~ 27.5 x 2.00 - 2.40</b> ~ 50/63 - 584	~ 23 - 36 mm	330 g				
<b>519162</b> 49,90 €	set of art. 519192 a	and fitting tube, FV 48 i	mm (Art. 559132)						
	<b>26 x 1.60 - 1.90</b> 42/47 - 559	<b>~ 26 x 1.60 - 1.90</b> ~ 42/47 - 559	~ <b>26 x 1.10 - 1.50</b> ~ 28/40 - 559	~ 19 - 25 mm	260 g	(art. 519120)			
<b>519150</b> 39,90 €	set of art. 519180 a	and fitting tube, FV 48 i	mm (Art. 559120)						
	<b>26 x 1.95 - 2.10</b> 50/54 - 559	<b>~ 26 x 1.95 - 2.10</b> ~ 50/54 - 559	~ <b>26 x 1.65 - 1.90</b> ~ 44/50 - 559	~ 19 - 33 mm	250 g				
<b>519159</b> 44,90 €	set of art. 519189 a	and fitting tube, FV 48 i	mm (Art. 559129)						
<b>519181</b> 39,90 €	<b>26 x 1.95 - 2.50</b> 50/63 - 559	~ <b>26 x 1.95 - 2.50</b> ~ 50/63 - 559	~ <b>26 x 1.65 - 1.90</b> ~ 44/54 - 559	~ 19 - 33 mm	300 g	(art. 519121)			
<b>519151</b> 44,90 €	<b>set</b> of art. 519181 a	and fitting tube, FV 48 i	mm (Art. 559129)						
	<b>26 x 4.00 - 4.80</b> 100/120 - 559	~ <b>26 x 4.00 - 4.80</b> ~ 100/120 - 559	<b>~ 26 x 3.8 - 4.8</b> ~ 90/120 - 559	~ 65 - 100 mm	480 g	for Fat tires, with banderole			
	<b>24 x 1.95 - 2.50</b> 50/63 - 507	~ <b>24 x 1.95 - 2.50</b> ~ 50/63 - 507	~ <b>24 x 1.65 - 2.125</b> ~ 44/54 - 507	~ 19 - 33 mm	270 g				
<b>519157</b> 44,90 €	<b>set</b> of art. 519187 a	and fitting tube, FV 48 i	mm (Art. 559126)						
	<b>24 x 1 3/8</b> 35/40 - 540	~ <b>24 x 1 3/8</b> ~ 35/40 - 540	<b>~ 24 x 1</b> ~ 20/28 - 540	~ 18 - 25 mm	170 g	also for wheelchairs 逘 (art. 519131)			
		and fitting tube, FV 48 i							
519186	<b>20 x 1.95 - 2.50</b> 50/63 - 406	~ <b>20 x 1.95 - 2.50</b> ~ 50/63 - 406	~ <b>20 x 1.65 - 2.125</b> ~ 44/54 - 406	~ 19 - 33 mm	220 g				
		and fitting tube, FV 48 i							
519190	<b>20 x 1.75 - 1.95</b> 47/50 - 406	~ <b>20 x 1.75 - 1.95</b> ~ 47/50 - 406	~ <b>20 x 1.5 - 1.95</b> ~ 40/50 - 406	~ 20 - 36 mm	190 g				
519160		and fitting tube, AV 35							
34,90€									





## PUNCTURE PROTECTION



150 g

#### **PUNCTURE PROTECTION**

ARMOUR TUBELESS The Tannus Armour tubeless tire insert is comprised of the high-tech polymer foam. This puncture protection for tubeless tires is very easy and without tools to install, even on the trails. Also test results are showing, that this Armour tubeless puncture protection is the best compromise out of lightest weight, low rolling resistance and high stability even in corners.

- 20 mm allround rim protection
- ride-flat technology, thick enough to "ride-out" in case of a flat
- very high damping property
- wing technology keeps your ride comfortable and safe, even in curves
- does not absorb sealant, keeps sealant where it belongs
- easy on-the-go-installation
- reusable
- free tire and tread selection
- fits for 2.10-2.60" tire width,
- ideal for rim width 23-35 mm
- in Tannus eurohole box

**519103** • fits for 1.3-1.75" tire width, ideal for rim width 19-27 mm

• 700 x 33-47 C (33/47 - 622), 70 g

fits for 2.10-2.60" tire width, ideal for rim width 23-35 mm

- **519100 27,5 x 2.10-2.60** (53/65 584), **150 g**
- 519101 29 x 2.10-2.60 (53/65 622), 160 g
- 49,90€

#### SOLID MATERIAL TIRES >AIRLESS

Tannus airless tires offer 100% puncture protection by very low weight, thanks to the used high-tech polymer nano foam. The airless tires have a very low rolling resistance and are available in different densities. The airless road tire has 100% puncture protection and weighs 160 g less than normal puncture protection tires.

- made of hightech polymer foam
- ultra light
- super durable, manufacturer warranty for at least 7,000 km
- lightfast
- low rolling resistance
- available in three different degrees of hardness (soft, medium and hard) on request
- Green Certification:
- environmentally friendly production
- and recycling
- 100% recyclable
- reduces waste
- approved according to EN 14781: 2005
- incl. mounting tool and pins

Other sizes, colors, hardness are available on request. Please contact your seller.



Tannus 

#### TWOI-END TUBE

- · fast and easy mounting possible without detaching the wheel
- excellently suitable for e-bikes and
- bikes with coaster and gear hub
- especially durable and breakdown resistant through 1.10 mm wall thickness
- in box
- unit: 100/20



ARTNO. UVP	SIZE	ETRTO NO.	VA
518200	20 x 1.90 - 2.10	50/54-406	A
518240	24 x 1.60 - 1.75	40/47-507	A
518243	24 x 1.90 - 2.10	50/54-507	A
518260	26 x 1.60 - 1.75	40/47-559	A
518263	26 x 1.90 - 2.10	50/54-559	A
518277	27.5/650 B x 1.90 - 2.10	50/54-584	F
518280	700 x 32/35 C	32/37-622/635	A
518281			F
518283	700 x 38/45 C	40/47-622/635	A
518284			F
<b>518291</b> 11,95€	28/29 x 1.90 - 2.10	50/54-622	F



Tannus **Airless Tire** 











#### ALVE

40 mm
40 mm
40 mm
40 mm
40 mm
47 mm
40 mm
47 mm
40 mm
47 mm
47 mm

TIRES



# DESIGNED FOR YOUR JOURNEY





528234	650 B x 2.60
64,90€	27.5 x 2.60
☆ ☆ ☆	

• 60 TPI Kevlar folded • EMC

66-584

- Tubeless Ready
- only 1.053 g TCC: 2.271 mm

124





# eurohole card

 Dual Tread rubber compound (for speed (center) and grip (shoulder)) • E-Bike certified up to 50 km/h (ECE-R75)

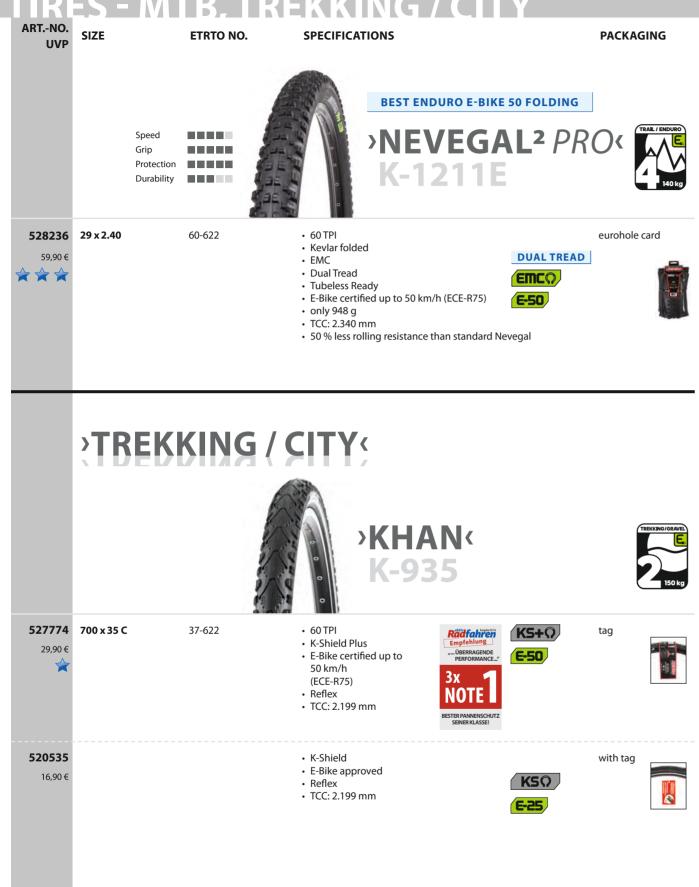




eurohole card

**E-50** 

#### ES - MTB. TREKKING / CITY ΓIR



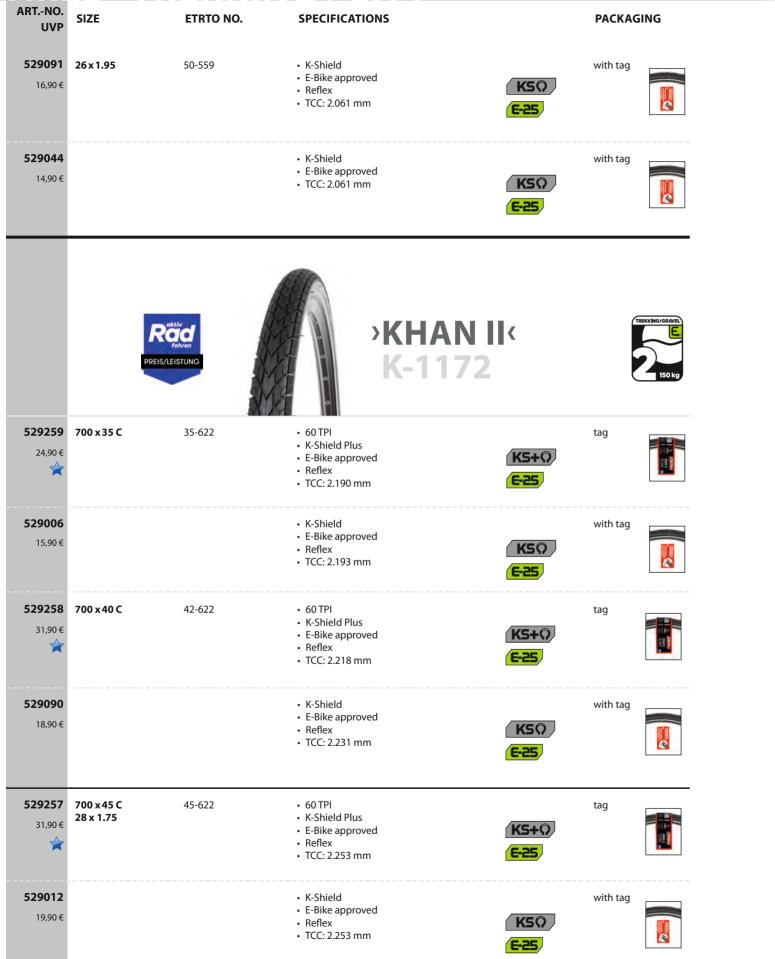
				E-MODIII	ty solutions
ARTNO. UVP	SIZE	ETRTO NO.	SPECIFICATIONS		PACKAGING
<b>529389</b> 31,90€	700 x 38 C	40-622	<ul> <li>60 TPI</li> <li>K-Shield Plus</li> <li>E-Bike approved</li> <li>Reflex</li> <li>TCC: 2.199 mm</li> </ul>	Empfehlurg         meuerragende         Dereragende         Sx         BESTER PANNENSCHUTZ         Seiner klasse!	tag
<b>527754</b> 34,90 €	700 x 40 C	42-622	<ul> <li>60 TPI</li> <li>K-Shield Plus</li> <li>E-Bike approved</li> <li>Reflex</li> <li>TCC: 2.209 mm</li> </ul>	<b>(K5+Ω</b> ) <b>(E-25</b> )	tag
<b>529087</b> 19,90€			<ul> <li>K-Shield</li> <li>E-Bike approved</li> <li>Reflex</li> <li>TCC: 2.209 mm</li> </ul>	<b>KS</b> Q <b>E-25</b>	with tag
<b>529654</b> 31,90 €	700 x 45 C 28 x 1.75	47-622	<ul> <li>60 TPI</li> <li>K-Shield Plus</li> <li>E-Bike approved</li> <li>Reflex</li> <li>TCC: 2.249 mm</li> </ul>	(KS+Q) (E-25)	tag
<b>529015</b> 19,90 €			<ul> <li>K-Shield</li> <li>E-Bike approved</li> <li>Reflex</li> <li>TCC: 2.249 mm</li> </ul>	<b>KS</b> Ω <b>E-25</b>	with tag
522673 35,90 € ⋧	26x1.75	47-559	<ul> <li>60 TPI</li> <li>K-Shield Plus</li> <li>E-Bike approved</li> <li>Reflex</li> <li>TCC: 2.023 mm</li> </ul>	(KS+Q) (E-25)	tag
<b>529093</b> 18,90 €			<ul> <li>K-Shield</li> <li>E-Bike approved</li> <li>Reflex</li> <li>TCC: 2.023 mm</li> </ul>	<b>KS</b> Ω <b>E-25</b>	with tag
<b>529095</b> 14,90€			<ul> <li>K-Shield</li> <li>E-Bike approved</li> <li>TCC: 2.023 mm</li> </ul>	(KSQ) (E-25)	with tag





E-Mobility Solutions

#### ES - TREKKING / CITY FIR



				E-Mobility Solutions
ARTNO. UVP	SIZE	ETRTO NO.	SPECIFICATIONS	PACKAGING
<b>529011</b> 26,90 €	700 x 50 C	50-622	<ul> <li>30 TPI</li> <li>K-Shield</li> <li>E-Bike approved</li> <li>Reflex</li> <li>nur 1.092 g</li> <li>TCC: 2.297 mm</li> </ul>	with tag          FAT KHAN         KSO         E-25
<b>520903</b> 22,90€	650 B x 2.10 27.5 x 2.10	53-584	<ul> <li>30 TPI</li> <li>K-Shield</li> <li>E-Bike approved</li> <li>Reflex</li> <li>nur 1.038 g</li> <li>TCC: 2.177 mm</li> </ul>	with tag          FAT KHAN         KSQ         E-25
<b>529007</b> 13,90 €	26 x 1.95	50-559	<ul> <li>K-Shield</li> <li>E-Bike approved</li> <li>TCC: 2.095 mm</li> </ul>	with tag <b>KSO</b> <b>E-25</b>
			EUROT K-197	REK<
<b>529018</b> 15,90€	700 x 38 C	40-622	<ul> <li>30 TPI</li> <li>K-Shield</li> <li>E-Bike approved</li> <li>TCC: 2.202 mm</li> </ul>	with tag
			>KWIC K-112	K JOURNEY< 9
527988 35,90€ ⋧	700 x 40 C	40-622	<ul> <li>60 TPI</li> <li>K-Shield</li> <li>E-Bike certified up to 50 km/h (ECE-R7</li> <li>Reflex</li> <li>TCC: 2.227 mm</li> </ul>	tag (5) <b>KSQ</b> (E-50)





## TIRES

			KD7C		<b>SSINGSCHADE</b>
ARTNO. UVP	SIZE	ETRTO NO.	SPECIFICATIONS		PACKAGING
<b>558145</b> U 16,90€	700 x 40 C	42-622	with reflective stripes and puncture protection	PROTECT	OEM
<b>558140</b> 17,90 €	700 x 45 C	47-622	with reflective stripes and puncture protection	PROTECT	OEM
<b>558138</b> 16,90€	26 x 1.75	47-559	with reflective stripes and puncture protection	PROTECT	OEM
<b>558141</b> 17,90€	26 x 1.95	50-559	<ul> <li>with reflective stripes and puncture protection</li> </ul>	PROTECT	OEM
		Present and	ONE 0 CKU-200		
<b>558044</b> U 15,90 €	700 x 35 C	37-622	<ul> <li>with reflective stripes and puncture protection</li> </ul>	PROTECT	OEM
<b>558046</b> U 16,90 €	700 x 38 C	40-622	<ul> <li>with reflective stripes and puncture protection</li> </ul>	PROTECT	OEM
<b>558048</b> U 16,90€	700 x 40 C	42-622	<ul> <li>with reflective stripes and puncture protection</li> </ul>	PROTECT	OEM
<b>558042</b> U 16,90€	26 x 1.75	47-559	with reflective stripes and puncture protection	PROTECT	OEM



TIRES								
			A		ARTNO. UVP	SIZE	ETRTO NO.	SPECIFICA
	HC I	<b>RUD</b>			<b>558145</b> U 16,90 €	700 x 40 C	42-622	• with reflec puncture p
	Tires - tubes - no chichi. T unbeatable price.	That's what KUJO is all about. KUJO gives y	or it righ		<b>558140</b> 17,90 €	700 x 45 C	47-622	• with reflec puncture p
	No matter if MTB, trekking, r experience in R&D and distr	oad racing or BMX - we have always the right ti ribution of bicycle tires, all products are adjust ir performance, quality and great reliability, at a	ted to the needs of the ma		<b>558138</b> 16,90 €	26 x 1.75	47-559	• with reflec puncture p
ARTNO. UVP	ETRTO NO.	SPECIFICATIONS		PACKAGING	<b>558141</b> 17,90 €	26 x 1.95	50-559	• with reflec puncture p
<b>558052</b> 700 x 45 C U 16,90 €	47-622	• with reflective stripes and puncture protection		OEM				Preferinterint
					<b>558044</b> U 15,90 €	700 x 35 C	37-622	<ul> <li>with reflect puncture p</li> </ul>
		ONE 0 KU-20			<b>558046</b> U 16,90€	700 x 38 C	40-622	with reflect     puncture
<b>558143</b> U 15,90 € <b>700 x 35 C</b>	37-622	with reflective stripes and puncture protection	PROTECT	OEM	<b>558048</b> U 16,90 €	700 x 40 C	42-622	• with reflec puncture p
558139 U 16,90 € 700 x 38 C	40-622	<ul> <li>with reflective stripes and puncture protection</li> </ul>	PROTECT	OEM	<b>558042</b> U 16,90 €	26 x 1.75	47-559	• with reflec puncture p





## E-BIKE COMPONENTS / ACCESSORIES

#### ART.-NO.

#### DESCRIPTION UVP

#### 610010 E-BIKE UNIVERSAL MID-MOUNTED MOTOR 699.00€

- turns (almost) every bike into a mid-
- mounted E-Bike up to 25 km/h • universally useable in (almost) every frame with 68 - 73 mm BSA bot-
- tom bracket
- 36 V, 250 W
- with torque sensor
- torque 50 Nm
- integrated controller
- incl. illuminated display
- remote control at the handlebar end
- USB connection possibility for smartphones, ... • connection possibility for head lamp and rear light
- with **pushing aid** (6 km/h)
- suitable for derailleur and internal gear box
- with integrated freewheel (not suitable for coaster brake hubs)
- with cable set (waterproof IP67) and speed sensor
- for bikes from 20" 29"
- with 42 teeth chainring and chainguard
- with EMV and EMC verification

#### 610053 E-BIKE BATTERY

- 549,00 € with accumulator management system
  - 375 Wh / 36 Volt
  - lockable
  - with charger
  - rechargeable mounted on bike and separately
  - with charge control indicator
  - for mounting at eyelets for bottle cages
  - dangerous goods class UN 38.3

#### **E-BIKE BATTERIES**

Ask us for your individually tuned E-Bike batteries, for mounting at the down tube, eyelets for bottle cage, carrier, ... or integrated into the frame.



REMOTE CONTROL



#### 612030 E-BIKE MOTOR PROTECTION COVER >E-PROTECT CENTER M-WAVE 24,90€

- universal size, ideally suitable for **e-bike** motors of Shimano, Bosch, Brose, ...
- size flexibly adaptable
- made of neoprene
- protects the motor through isolation • protects from coldness, weather condition
- and dirt
- **prevents** scratches, stone chipping and shock damages
- in M-Wave eurohole box



ARTNO. UVP	DESCRIPTION	
612010 U 14,90€	<ul> <li>E-BIKE BATTERY PROTECTION</li> <li>E-PROTECT (M-WAVE</li> <li>universal suitable for Bosch and Shimano down tu batteries (no original Bosch or Shimano spare part)</li> <li>isolation provides extended battery capacity</li> <li>made of neoprene</li> <li>protection from coldness and weather condition</li> <li>protection from scratches, stone chipping and shock damages</li> <li>in M-Wave eurohole box</li> </ul>	lbe
<b>612021</b> U 14,90€	<ul> <li>E-BIKE BATTERY PROTECTION COVER &gt;E-PROTECT WRAP&lt; M-WAVE</li> <li>universal size for in the frame integrated e-bike batteries</li> <li>isolation provides extended battery capacity</li> <li>protection from coldness and weather con- dition, scratches, stone chipping and shock damages</li> <li>made of neoprene</li> <li>in M-Wave eurohole box</li> </ul>	
<b>612020</b> U 17,90€	E-BIKE BATTERY PROTECTION COVER >E-PROTECT CARRIER (M-WAVE • universal size, ideally suitable for carrier batteries	9

- from Bosch (and Shimano) isolation provides extended battery capacity
- protection from coldness and
- weather condition protection from scratches, stone chipping and
- shock damages
- made of neoprene

- with opening to charge the battery inside the
- carrier (Bosch battery)
- in M-Wave eurohole box

#### 122538 E-BIKE BATTERY BAG **ROUGH RIDE BCM-WAVE** U 34,90€

- universal, padded transport protection for down tube and carrier batteries
- 100% waterproof
- expandable via roll cover
- high tear resistance through reinforced ripstop textile • universal and secure mounting to the frame tube,
- carrier, ... with wide hook and loop fasteners
- with non-slip inlays and reflex logo
- size: approx. 55 x 8.5 x 13 cm
- $(L \times W \times H)$ volume approx. 7 litres

#### 612022 E-BIKE BATTERY CONNECTOR COVER >E-PROTECT CONNECT (M-WAVE U 9,90€

- universal size to cover the connection contacts of the frame with removed e-bike
- batteries protection from dirt, water and damages
- made of neoprene
- on M-Wave eurohole card



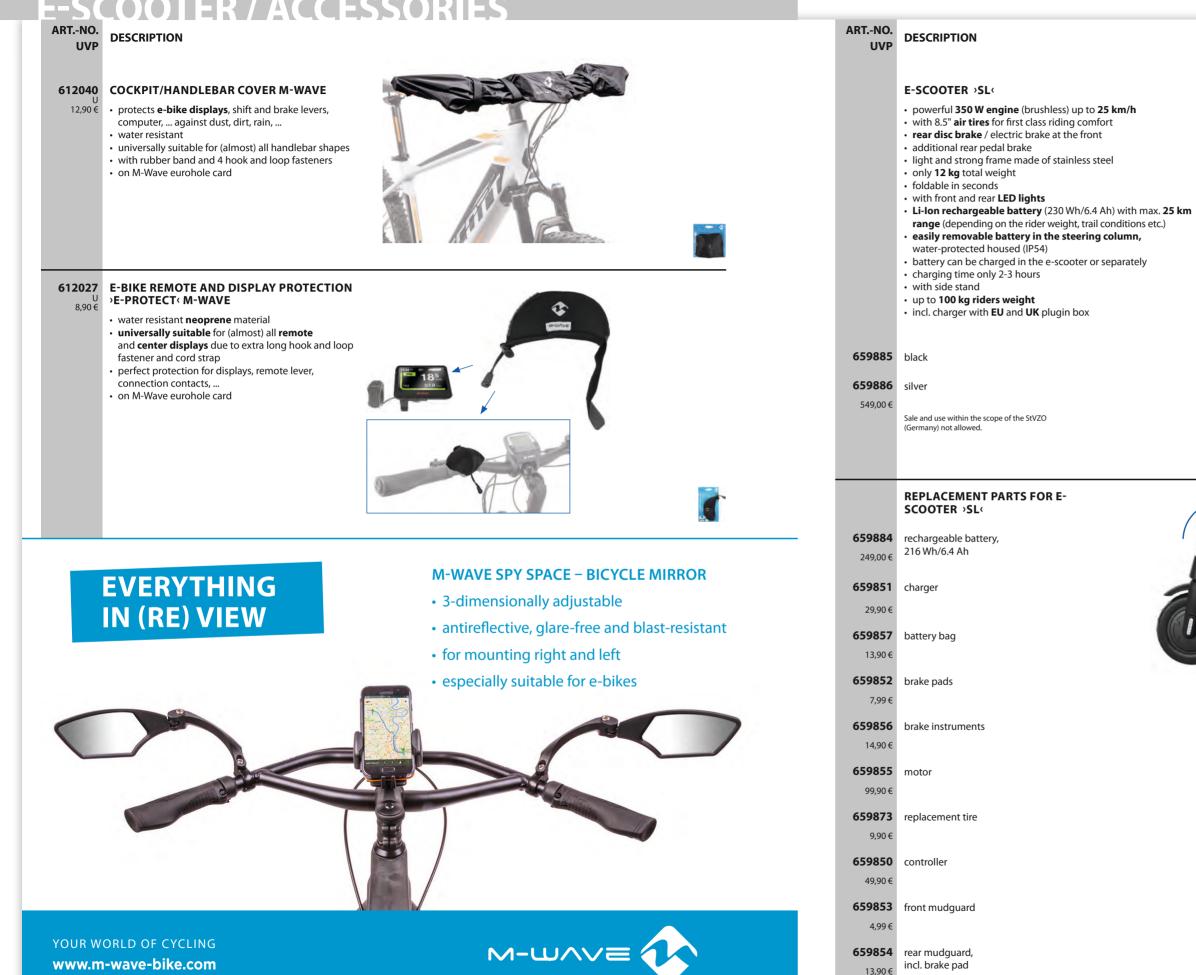






## E-BIKE COMPONENTS / ACCESSORIES E-SCOOTER / ACCESSORIES













## E-SCOOTER / ACCESSORIES

#### UVP

#### 659905 E-SCOOTER > E9X (

- 399,00 € powerful 250 W engine (brushless) up to 20 km/h with 8.5" air tires for first class riding comfort
  - rear disc brake / electric brake at the front
  - light, strong aluminium frame
  - only 12.5 kg total weight
  - foldable in seconds
  - with front and rear LED lights
  - Li-lon rechargeable battery
  - (216 Wh/6 Ah) with max. 18 km range
  - with side stand
  - incl. bell
  - with number plate bracket
  - up to 100 kg riders weight
  - incl. charger with **EU** and **UK** plugin box

Sale and use within the scope of the StVZO (Germany) not allowed.

#### **REPLACEMENT PARTS FOR** E-SCOOTER >E9X(

659860	rechargeable battery,
159,90€	216 Wh/6 Ah

659861	rechargeable battery,
179,90€	270 Wh/7.5 Ah



9.90€

7,90€

659863 brake disc

- 659865 brake instruments (brake lever, bell)
- 14,90€
- 659864 tube
- 5,90€
- 659873 replacement tire
- frontwheel with motor
- 659869 99,90€

9,90€

- 659866 throttle
- 12,90€
- 659872 grips

9,90€

659868 display platine 29,90€







ARTNO. UVP	DESCRIPTION
	ERSATZTEILE FÜR E-SCOOTER >E9X<
659871	scooter board
7,90€	
659867	front light
6,90€	
659870	rear light glass
0,99€	
659874	reflector sticker
1,49€	

#### ACCESSORIES FOR E-SCOOTER

122888 scooter/handlebar bag >Suburban messenger compact< 21,90€

11,90€

7,90€

#### 122580 bracket for mobile devices Bike Mount Flex

• in PE bag with sheet

## M 122739 shoulder strap for e-scooter • e.g. for art. 659905/659985/6, ...

TUBE FOR E-SCOOTER >K	ENDA	
SIZE	VALVE	FEATUR
8" 8 1/2 x 2.0 (E-Scooter ✓)	AV 45° 70°	AV 45°/70
	SIZE	









RE 70° bent





### SETUP MMC.F140.c

**SRAM** and **RockShox** - these are the leading international brands for drives, derailleurs, suspension forks and suspensions in the MTB, road and gravel sector. Versatile solutions meet the requirements of the respective bicycle concept at the highest technical level. As an OEM, you can now obtain **the entire range of parts from the brands Sram and RockShox** via Messingschlager.

During the development of our brand new allmountain E-MTB fully made of carbon, the chassis tuning was already carried out in close cooperation with the engineers from Schweinfurt. These parts can be found as examples on the following two pages. Feel free to contact us regarding other desired parts - we will gladly help you choose!

#### **ART.-NO. DESCRIPTION**

#### 391502 SUSPENSION FORK >Pike Select Charger RC

- travel: 140 mm
- suspension system: DebonAir air suspension with adjustable low speed compression
- steerer Ø (stem): 28.6 mm / 11/8"
- steerer Ø (crown race): 40 mm
- steerer: 1<sup>1</sup>/<sub>8</sub>" 1.5" tapered
- fork offset: 51 mm
- stanchion Ø: 35 mm
- OLD: boost standard, 110 mm
- axle type: thru axle maxle
- brake mount: disc post mount
- min/max. rotor size: 180/220 mm
- max. tire width: 29 x 3.2"
- installation height: 551 mm
- model: FS-PIKE-SEL-B4

#### 390020 SUSPENSION FORK>35 SILVER TK 27.5"

- travel: 140 mm
- suspension system: Solo Air air suspension with turnkey lockout
- steerer Ø (stem):
- 28.6 mm / 11/8" • steerer: 1<sup>1</sup>/<sub>8</sub>" - 1.5" tapered
- fork offset: 44 mm
- stanchion Ø: 35 mm
- OLD: boost standard, 110 mm
- axle type: thru axle maxle
- break mount: disc post mount
- min/max. rotor size: 180/220 mm
- max. tire width: 27.5 x 3.2"
- installation height: 552 mm
- model: FS-35S-TK-A1





BROSE GF

#### ART.-NO. DESCRIPTION

#### 390031 SUSPENSION FORK>REBA RL-A9

- travel: 100 mm
- suspension system: solo air suspension
- steerer Ø (stem): 28.6 mm / 11/8"
- steerer: 1<sup>1</sup>/<sub>8</sub>" 1.5" tapered
- fork offset: 51 mm
- stanchion Ø: 32 mm
- OLD: boost standard, 110 mm
- axle type: thru axle maxle
- brake mount: disc post mount
- min./max. rotor size: 160 / 220 mm • max. tire width: 29 x 3.2"
- installation height: 506 mm • model: FS-REBA-RL-A9

#### 390022 SUSPENSION FORK >PARAGON GOLD RL-A1(

#### travel: 65 mm

- suspension system: solo air suspension
- steerer Ø (stem): 28.6 mm / 11/8"
- steerer: 1<sup>1</sup>/<sub>8</sub>" 1.5" tapered
- fork offset: 46 mm
- stanchion Ø: 30 mm
- OLD: 100 mm
- axle type: 9 mm quick release
- brake mount: disc post mount
- min./max. rotor size: 160 / 180 mm
- max. tire width: 28 x 2.8"
- installation height: 477 mm
- model: FS-Paragon Gold-RL-A1

#### REAR SUSPENSION >DELUXE SELECT +<

- suspension system: DebonAir air sus-
- pension, RT Rebound Threshold
- OLD: 185 mm
- shaft hardware: trunnion
- model: RS-DLX-SELP-B2

666740 hub: 55 mm

666741 hub: 47,5 mm

















## SHIFTING COMPONENTS

#### ART.-NO. DESCRIPTION

#### SHIFTING COMPONENTS

#### 681038 Rear derailleur GX Eagle

- 12 speed
- long cage
- capacity: 52 teeth • aluminium cage
- x-actuation
- 299 g

#### 681016 Rear derailleur NX Eagle

- 12 speed
- long cage
- capacity: 50 teeth
- steel cage x-actuation
- 339 g

#### 681020 Shift lever GX Eagle

- 12 speed
- X-actuation
- matchmaker compatible
- 122 g

#### 681017 Shift lever NX Eagle

- 12 speed
- X-actuation
- matchmaker compatible
- 112 g

#### Lever clamp >Matchmaker X<

360140 left

360141 right

#### BRAKES AND ACCESSORIES

#### 360496 Disc brake >Guide RE

- for front
- adjustable reach
- for DOT 5.1
- with 950 mm tube
- for postmount system incl. 20 mm spacer
- 415 g

#### 360497 Disc brake >Guide REG

- for rear
- adjustable reach
- für DOT 5.1
- with 1,650 mm tube
- for postmount system
- 415 g

#### 360490 disc brake >Level T

- front
- for DOT 4
- with 950 mm tube
- for postmount system

#### 360491 disc brake >Level To

- rear
- for DOT 4
- with 1,650 mm tube
- for postmount system



ARTNO.		ß
360498	BRAKES AND ACCESSORIES Brake disc • 200 mm • center lock • inkl. fixing screws	Cr
360499	Brake disc • 203 mm • center lock • inkl. fixing screws	
	CASSETTE SPROCKETS	
700202	<ul><li>cassette sprocket GX Eagle</li><li>12 speed</li><li>10-52 teeth</li></ul>	
700214	<ul><li>cassette sprocket NX Eagle</li><li>12 speed</li><li>11-50 teeth</li></ul>	
300207		
	<ul> <li>GX Eagle</li> <li>12 speed</li> <li>126 links</li> <li>silver/black</li> <li>PowerLock</li> </ul>	
356299	CHAINRING	June
	<ul> <li>X-Sync 2</li> <li>steel</li> <li>34 teeth</li> <li>bolt circle: 104 mm</li> </ul>	6
	DROPPER SEAT POST >REVERB STEALTH<	
	<ul> <li>aluminium</li> <li>pneumatic quick release height adjustment while riding by a handlebar lever</li> <li>Vent Valve technology for easy handling service without any disassembly of the post</li> <li>standard remote, left below or right above</li> <li>Ø 31.6 mm</li> </ul>	
250006	<ul> <li>length: 414 mm</li> <li>heigth adjustment: 0-150 mm</li> </ul>	
250007	<ul> <li>length: 467 mm</li> <li>heigth adjustment: 0-175 mm</li> </ul>	
660089	<b>DERAILLEUR HANGER</b> OUniversal Derailleur Hanger	,











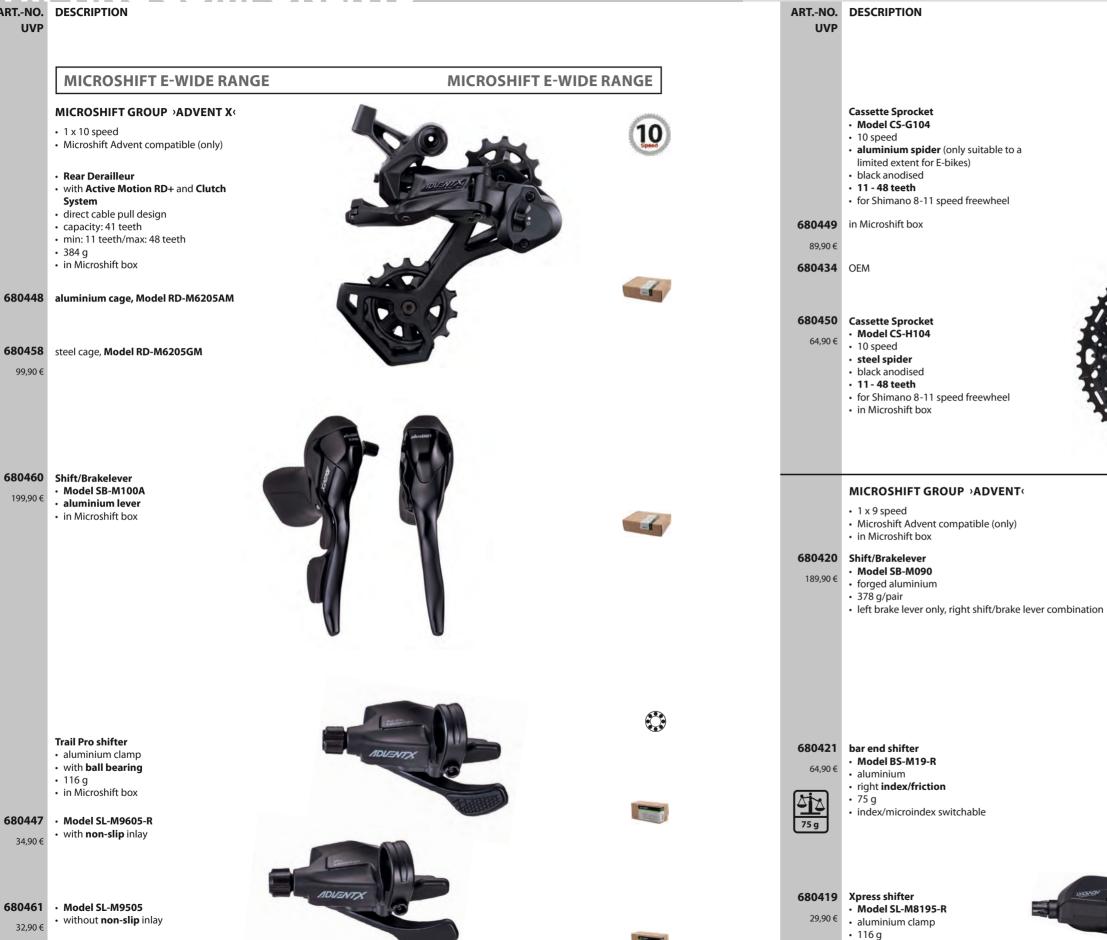






## SHIFTING COMPONENTS











#### SHIFTING COMPONENTS ART.-NO. DESCRIPTION

#### UVP

#### MICROSHIFT GROUP > ADVENT(

- 1 x 9 speed
- Microshift Advent compatible (only)
- in Microshift box

#### 680422 Rear Derailleur

- Model RD-M6195M 79,90€
  - 1x 9 speed
  - medium cage
  - with Active Motion RD+ and Clutch system
  - · direct cable pull design
  - capacity: 41 teeth
  - min: 11 teeth/max: 46 teeth
  - 384 g

#### 680423 Rear Derailleur

- Model RD-M6195L 79.90€
  - 2 x 9 speed
  - long cage
  - with Active Motion RD+ and Clutch system
  - direct cable pull design
  - · capacity: 47 teeth

#### 680452 Rear Derailleur

- Model RD-M619M 59,90€
  - 1 x 9/8 speed
  - medium cage
  - with Active Motion RD+ • direct cable pull design
  - capacity: 41 teeth

#### **Cassette Sprocket**

- 9 speed
- black anodised
- in Microshift box

#### 680424 · Model CS-H093A

- aluminium (only suitable to a limited extent for E-bikes)
- 11 42 teeth

#### 680451 • Model CS-H093

- steel
- 59,90 € 11 46 teeth





#### ART.-NO. DESCRIPTION UVP

#### MICROSHIFT GROUP >ACOLYTE

- 1 x 8 speed
- Microshift Acolyte compatible (only)
- in Microshift box

#### 680454 Rear Derailleur

- Model RD-M5185M 47,90€
  - medium cage
  - capacity: 41 teeth
  - Spring Lock Clutch Design
  - direct cable pull design • min: 11 teeth/max: 46 teeth
  - 384 g

#### 680453 X-Press shifter

- Model SL-M7180R 21,90€ aluminium clamp • 134 g

#### Cassette Sprocket Model CS-H083

- 8 speed
- black anodised
- 680455 12 42 teeth

#### 44,90€

680456 12 - 46 teeth

#### 49,90€

#### E-MOTOR

- LOCKRING TOOL
- to mount and demount the lockring of the spider/chainring
- CNC machined
- on Super B eurohole card

#### 880428 >TB-1069

- for Bosch Active Line Plus, Bosch Active Line 22,90€ 3. Generation and Brose
  - for ½" drive or 24 mm wrench

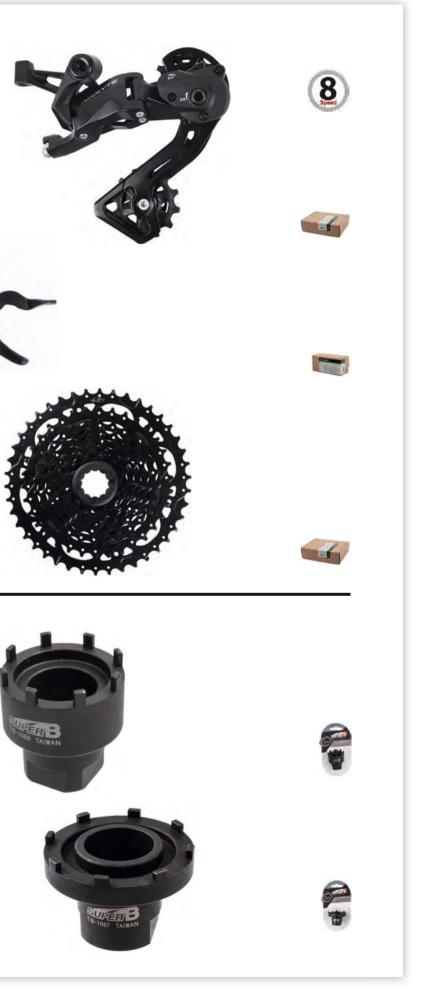
#### 880429 >TB-1067

• for Bosch Active Line 2. Generation, Perfor-24,90€ mance Line and Performance Line CX for 1/2" drive

## microSHIFT







# BUILD YOUR OWN E-BIKE

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Messingschlager GmbH & Co. KG Haßbergstr. 45 D-96148 Baunach Tel.: +49 (0) 95 44 94 44 - 0 e-mobility@messingschlager.com www.messingschlager.com Distribution: