







Your latest passion? Carving bends.













You're right on track here!

The Scorpion trikes from HP VELOTECHNIK offer ultimate riding fun and freedom

Whatever your pace, whatever your style: On the following pages you will find your personal favorite with ease. The team of expert engineers at HP VELOTECHNIK created eight different models to offer you the entire world of premium trikes that match virtually any activity you can even think of – epic rides, daily commuting, E-Trike rides, off road fun, special needs or sportive challenges, you name it.

Every Scorpion is hand-built to order by dedicated technicians in HP VELOTECHNIK's workshop in Kriftel near Frankfurt, Germany. Information on optional features can be found not only in this catalog but also by using the online recumbent configurator at www.hpvelotechnik.com. For competent advice and extensive test rides, your HP VELOTECHNIK dealer looks forward to your visit!

Explore what makes the Scorpion unique:

The chassis: No Squat-technology - page 26

Suspension technology in detail - page 48

The ease of riding:

Convenient facts on e-trike systems - page 50 to 55

Recumbents equal pure ergonomics — comfort made by HP VELOTECHNIK: BodyLink and ErgoMesh seats — pages 56 & 58

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Scorpion – the lightweight, sporty trekking trike

- Low, flat seat for little air resistance and outstanding braking performance
- Very high pedal position over the seat for the most efficient use of pedaling forces
- Outstanding tipping stability
- 26-inch rear wheel for an optimally smooth ride
- Luggage capacity: up to 35 kg (77 lbs) in 4 bags
- Maximum payload 150 kg (330 lbs)
- Comfortable rear suspension (elastomer-free), energy-efficient No-Squat design
- Seat and wheels quick to detach

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Scorpion fx – the medium high, foldable travel trike

- Medium high, upright seat for easy mounting and a clear view in traffic
- Medium pedal position above the seat offers good support for pedaling forces
- · Good tipping stability
- Compact 20-inch rear wheel
- Luggage capacity: up to 60 kg (132 lbs) in 6 bags
- Maximum payload 140 kg (308 lbs)
- Comfortable rear suspension (elastomer-free), energy-efficient No-Squat design
- Foldable in 60 seconds without tools

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Scorpion fs 26 Enduro – the full-suspension mountain-trike

- Medium seat height, flat seat for good ground clearance and excellent riding dynamics
- High pedal position over the seat for the efficient use of pedaling forces
- Excellent tipping stability
- MTB tyres for serious off-road use
- Luggage capacity: up to 35 kg (77 lbs) in 4 bags
- Max. payload 110 kg (243 lbs, off-road), 140 kg (310 lbs, on road)
- Comfortable, integrated all-wheel suspension
 AntiDive geometry, HP stabilizer system
- Foldable in 60 seconds without tools

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Scorpion fs 26 S-Pedelec – full-suspension e-trike for up to 45 km/h (28 mph)

- Medium seat height, flat seat for good ground clearance and excellent riding dynamics
- High pedal position over the seat for the efficient use of pedaling forces
- Excellent tipping stability
- 26-inch rear wheel for an optimally smooth ride
- Luggage capacity: up to 35 kg (77 lbs) in 4 bags
- Maximum payload 140 kg (310 lbs)
- Comfortable, integrated all-wheel suspension AntiDive geometry, HP stabilizer system
- Foldable in 60 seconds without tools

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Scorpion fs 20 - the compact, full-suspension action trike

- Medium seat height, flat seat for good ground clearance and excellent riding dynamics
- High pedal position over the seat for the efficient use of pedaling forces
- Excellent tipping stability
- Compact 20-inch rear wheel
- Luggage capacity: up to 35 kg (77 lbs) in 4 bags
- Maximum payload 130 kg (286 lbs)
- Comfortable, integrated all-wheel suspension AntiDive geometry, HP stabilizer system
- Foldable in 60 seconds without tools

Scorpion fs 26 – the dynamic, full-suspension speed trike

- Medium seat height, flat seat for good ground clearance and excellent riding dynamics
- High pedal position over the seat for the efficient use of pedaling forces
- Excellent tipping stability
- 26-inch rear wheel for an optimally smooth ride
- Luggage capacity: up to 35 kg (77 lbs) in 4 bags
- Maximum payload 140 kg (310 lbs)
- Comfortable, integrated all-wheel suspension AntiDive geometry, HP stabilizer system
- Foldable in 60 seconds without tools

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Scorpion plus 26 - full-suspension SUV-trike: higher, wider, more comfortable!

- High and an upright riding position for excellent overview and well balanced riding dynamics, low pedal position
- Wide and open frame design for easy access even for smaller riders from 1,49 m (4'10")
- Good tipping stability
- 26-inch rear wheel for an optimally smooth ride
- Luggage capacity: up to 60 kg (132 lbs) in 6 bags
- Max. payload 150 kg (330 lbs)
- Comfortable, integrated all-wheel suspension AntiDive geometry, HP stabilizer system
- Foldable in 60 seconds without tools



Scorpion plus 20 – the upright, compact full-suspension trike for daily use.

- · High and an upright riding position for excellent overview and well balanced riding dynamics, low pedal position
- Wide and open frame design for easy access even for smaller riders from 1,49 m (4'10")
- Good tipping stability
- Compact and sturdy 20-inch rear wheel
- Luggage capacity: up to 60 kg (132 lbs) in 6 bags
- Max. payload 150 kg (330 lbs)
- Comfortable, integrated all-wheel suspension AntiDive geometry, HP stabilizer system
- Foldable in 60 seconds without tools





A new era

Starting with the model year 2020, you will witness a paradigm change at HP VELO-TECHNIK. For the first time in the history of our company, our most popular models ship as completely pre-configured vehicles, called Special Edition. Amongst other things, we have loaded up on the accessories. In the truest sense of the word: Trike Packing is the keyword with which we make your bike even more flexible for holidays and everyday life.

Functionality and comfort are the guiding principles for these innovations. With the Universal Mount, our new mobile phone holder, you'll stay safely on track. The Top Load attachment adds the icing on the cake for our luggage options in the 26-inch wheels range. With the Side Bag Mount for handlebar bags next to the seat, you have all the little things and necessaires at your fingertips, just like with a luxury recliner. Even your coffee mug!

But why the Special Edition? Over many years, optimum equipment has crystallized for various uses. This is exactly how we have equipped the Special Edition models. You benefit in three ways: through the coordinated choice of components, short delivery time, and the attractive price advantage! The best thing is that you can of course continue to individually equip these trikes with accessories.

What to know more? Then arrange a test ride with your HP Velotechnik dealer and enjoy your coffee in a reclining seat.

Yours, Daniel Pulvermüller and Paul Hollants

Sporty low seat, agile chassis, powerful acceleration: Scorpion 8 1 9

Your Scorpion gives momentum to the asphalt jungle!

The best role models can be found in nature. The Scorpion sets new standards when combining stable road holding and reassuring safety with impressive maneuverability and a sporty temperament.

150% riding pleasure. More and more active people are leaning back and discovering the unique sitting comfort and energy saving aerodynamics offered by a HP VELOTECHNIK recumbent. The sporty *Scorpion* lets you experience how fun, cornering stability, and touring capability can go together in this ultimate performance trike. The *Scorpion* comes standard with an integrated design including an extra stiff Spaceframe, advanced rear triangle and an elevated pedal position. What you get? Maximum efficiency!

Just a glance at the Scorpion lets you know that the stable track and low center of gravity provide secure road-holding for optimum control at all speeds. The robust wheels are placed further forward for better braking performance. Having both front wheels in your field of view at all times lets you easily avoid road obstacles. The large 26" rear wheel with its low rolling resistance gives the rider a spirited ride in any conditions. Your Scorpion has a door-friendly track width (83cm or 33 inches) letting you roll your "new-best-friend" through most standard doors. Unless you decide to turn around for another ride, that is. After all, the highly agile speed-ster only needs a 5.4 m (17'9") turning circle.

It has never been easier for you to accept our invitation to try out the comfortable seat since the crossbar on the robust, lightweight aluminum frame sweeps elegantly backward to allow getting onto the trike easily: Simply stand in front of the seat and gently lower yourself down. While you enjoy panoramic views, the comfortable swingarm reacts to bumps on the rocky road lightning-fast. HP Velotechnik's tried-and-tested *No-Squat* technology ensures that your pedaling forces do not impair the suspension. The rear wheel transmits your pedaling force to the road as direct forward propulsion without need for complicated differential gears. Instead, your *Scorpion* can use the full range of modern bicycle drivetrain technology.

And if you want to go full speed ahead? Simply smile at any head wind. Accelerate. And look forward to carve the next corner . . .







Scorpion



Desire makes the route seem shorter. So does the right position. When riding the *Scorpion*, you offer minimum wind resistance without hunching over. This makes you quick – and your trips enjoyable. Even at a relaxed pace, you still cut a fine figure.

You're right on track. Lean back in the airy *ErgoMesh* seat or the adjustable *BodyLink* hard shell seat. They are both good for your bottom, your spinal discs, and your family planning. As flexible as life itself, they provide comfortable support for dynamic sprints.

Everyday is a thing of the past. Lean back and relax. The *Scorpion* makes your commute to work a deeply enjoyable trip. When heading off into the blue, you can finally see the sky again. And can breathe deeply. Could there be any better exercise bike?







The frame is adjusted to your leg length by shortening or extending the front boom in the main frame.



Easy to transport: HP VELOTECHNIK has developed open wheel mounts which allow the front wheels to be simply detached together with the brake disc by loosening just one bolt (HP Performance hubs standard on Scorpions).

Technical Data

BodyLink seat height ... 28 cm (11") ErgoMesh seat height ...31 / 42 cm (HS plus) (12 / 16.6")

Suspension travel 8 cm (3")

Ground clearance 10 cm (4") (statically compressed)

Wheel size (FW)20" (ISO 406) Wheel size (RW) 26" (ISO 559)

Max. tire width 5 cm (2") Wheelbase 128 cm (50")

Track width 78 cm (31")

Width 83 cm (33")

Turning circle 5.4 m (17'9") outer wheel Weight from 16.9 kg (37 lbs)

Max. payload 150 kg (330 lbs)
Frame material Aluminum 7005 T6

Swingarm bearing maintenance-free Powder coating Peeka blue

(anti-corrosion coat + Anthracite grey metallic matt

colored coat + clear coat) or custom color Rider height approx ... 1.62–2.00 m (5'4"–6'7")

Warranty on frame 10 years

Protects your clothes and the chain: The drivetrain is largely covered. The special guide tubes made from durable plastic create minimum friction for an efficient, quiet ride. The Scorpion's famed indirect steering with Advanced Steering Geometry (A.S.G.) combines smooth straight-line stability with impressive maneuverability, offering intuitive and predictable handling at all speeds. Comfortably-positioned handlebars beneath the seat, adjustable in width and angle, relieve the strain from your wrists and neck muscles. Two handlebar heights available. Maintenance-free, sealed cartridge bearings on the handlebars and self-lubricating rod end bearings on the tie rods. The wheel mounts are positioned in the frame with sturdy, adjustable A-head headsets.

HP VELOTECHNIK'S seat systems provide an exemplary ergonomic connection at the key interface between the rider and the trike. The airy, 38 cm (15") wide ErgoMesh seat has anatomically-shaped side cushioning and a practical zipper pocket in the back rest. It is also available in a 5 cm (2") wider and longer version as ErgoMesh XL seat or as ErgoMesh HS plus seat with an 11 cm (4.3") higher seat position.

Alternatively BodyLink hard shell seat.

The stable luggage rack for loads of up to 25 kg (55 lbs) has been optimized to withstand the high lateral forces to which trike riders are subjected. Riding dynamics benefit from its low pannier center of gravity. Low side bars hold your bags securely. Your luggage enjoys full suspension without the need for complicated swivel joints or even a load support on the rear wheel swingarm. This enables agile suspension and protects your equipment.

Ideal for light luggage: With the Top Load Rack, which can be attached to the luggage carrier as an option, you can significantly expand the loading capacity of your Scorpion.



The Scorpion has a very safe braking action due to the low center of gravity and the long wheelbase. The standard disc brakes ensure maximum braking power even in bad weather. The front wheels are controlled separately so that you can selectively brake the inner wheel when cornering. Due to HP VELOTECHNIK's sophisticated steering geometry, the steering is not affected by braking or sudden bumps on your trail. On request, we build your Scorpion trike with mechanically or hydraulically coupled front brakes with one-hand operation and a rear disc brake.

HP VELOTECHNIK's adjustable suspension provides superior ride comfort. You can choose either from oil dampened steel spring or leight weight air shock units. Unlike simple elastomer buffers, these durable shock absorbers work reliably unaffected by any temperature changes. The quality of a trike's suspension becomes particularly clear when carrying a great deal of luggage or riding uphill. The Scorpion's suspension utilises HP VELOTECHNIK's tried-and-tested No-Squat suspension concept: An effective combination of an exceptionally stiff rear end with the sophisticated positioning of the single swingarm pivot and the durable, large ball-bearing-mounted chain roller. It reliably prevents drive forces from affecting the suspension and unpleasant pedal kickback. Your benefit: Comfortable vibration absorption and unparalleled power transmission!

Great for transporting children or hauling heavy loads: Your Scorpion can tow a multi-track trailer weighing up to 40 kg (88 lbs).









Raised seat, easy access and plenty of space for four bags: Scorpion fx

With this comfortable touring tricycle, HP VELOTECHNIK offers a impressively stable folding trike that has been specially developed for the needs of touring cyclists. The *Scorpion fx's* seat is positioned far higher and more upright than that of its sporty contemporaries, the *Scorpion* and *Scorpion fs*. This gives easy access to the trike and offers a clear view on the road ahead and a panoramic view of the scenery around you.

The higher seat position also creates room for a lowrider rack behind the seat for a set of large panniers. Together with the robust luggage rack above the rear wheel, 50 kg (110 lbs) of luggage can be transported in four panniers close to your body and with a beneficially low center of gravity. A large variety of drivetrain options to choose from allow you to relax and enjoy the laid-back comfort of the *Scorpion fx* with such a heavy payload even on the steepest hills.



Tailwind on demand: You can upgrade your *Scorpion fx* with a powerful electrical auxiliary drive. The optional unique HP VELOTECHNIK dual battery system underneath the seat doubles the range up to 290 km (180 miles), see $p.\,50$.

With added standing-up aids the rear suspended Scorpion fx is a great match for riders with special physical abilities. If you are longing for a sitting position even higher have a look at the fully suspended Scorpion plus, p. 38.



Unfolds pure riding pleasure: Scorpion fx

Sometimes space is of the essence – as is time. This is what makes it so satisfying when highly intelligent solutions can save you both. A Swiss pocket-knife for example. Or our practical *Scorpion fx*.

Amazing space savings. Thanks to HPVELOTECHNIK's patented, self-lokking folding hinge, it is easier than ever to fold up your trike. With a few movements, this luxurious touring trike can be turned into a compact package that can be easily transported by car. In just 60 seconds, the comfortable seat can be removed without using any tools and the *Scorpion*'s rear wheel can be folded forward. A ratchet strap hidden behind the seat ties together the two halves of the frame to make the bike easy to carry when folded.

Another 90 seconds and the front wheels have been removed using one single Allen wrench. The agile speedster will now even fit in the trunk of some of the most tiny cars.

Or in your apartment: Don't let anyone ever tell you again that you don't have room for any more beautifull trikes!





Wider is better: The wider the track, the greater the tipping stability and the faster your trike can corner. A wide track also allows a big-ger steering angle for a small turning circle. So that your trike stall fits easily through doors and gates, HP VELOTICH-NIK has developed narrow hubs for a low overall width of just 83 cm (33°).

The Scorpion fix touring trike has a medium high, upright seat for a clear view in traffic combined with a medium pedal height. The seat position makes it easy to get on and off the trike and offers outstanding triking fun even for first-time users.

The Scorpion fix touring trike has a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright seat for a clear view in traffic combined with a medium high, upright





Seat removed, rear wheel folded forward (L \times W \times H): $103 \times 83 \times 69$ cm ($40 \times 33 \times 27$ ") front supported $77 \times 83 \times 97$ cm ($30 \times 33 \times 38$ ") back supported

Wheels on the side: 104 × 83 × 60 cm (41 x 33 x 24") Without wheels, fenders, rack: 75 × 74 × 60 cm (29.5 x 29 x 24")





The optional quick frame adjustment with quick release levers can be used to quickly adapt the bike to different leg lengths. By pushing in the boom tube, you can also make your *Scotpion* fx even more compact for transport.



On unfolding the trike, the robust HP VELOTECHNIK folding hinge locks into place automatically. The safety catch can be conveniently operated from above. Stainless steel axle with zero play for precise folding over and over again.

Technical Data

BodyLink seat height ... 35 cm (14") ErgoMesh seat height ... 38 cm / 49 cm (HS plus) (15" / 19.3") Bottom bracket height . 38-46 cm (15"-18") Suspension travel 8.5 cm (3.3") Ground clearance 13.5 cm (5.3") (stat. compressed) Wheel size 20" (ISO 406) Max. tire width 5 cm (2") Wheelbase 107 cm (40") Track width 78 cm (31") Width 83 cm (33") Length 165–201 cm (5'6"–6'7") Turning circle 4.50 m (14'5") outer wheel Weight from 16.5 kg (36.4 lbs) Max. payload 140 kg (308 lbs) Frame material Aluminum 7005 T6 Swingarm bearing maintenance-free Powder coating Pearl orange, (anti-corrosion coat + Cosmic grey or colored coat + clear coat) custom color Rider height approx ... 1.57 - 2.00 m (5'2'' - 6'7'')Warranty on frame 10 years



can still stay laid back and relaxed. When developing the award-winning design of the *Scorpion* fs foldable touring trike, HP VELO-TECHNIK's engineers used the latest chassis technology from the automotive sector to provide the most comfortable full suspension for yor ride. But they did not compromise by simply using retro-fit solutions on existing frames: The whole vehicle was

developed from scratch to incorporate an impressively sensitive full suspension in a sleek and lean design delivering superior performance. The wishbone axle geometry and HP VELOTECHNIK's unique Stabilizer System with its anti-roll bar integrated into the frame design allows full use of the ample suspension travel. It is finely tuned to perfectly respond to the forces of the road. The low seat and far higher pedal position of the Scorpion fs highlight the agile

trike's sporty character. The *Scorpion fs* is optionally available with a 20-inch rear wheel for compact dimensions when folded and maximum traction or a 26-inch rear wheel for a uniquely smooth ride and even easier obstacle traversing. You will experience the result of this brilliant engineering as soon as you speed up and take your first corner: The exciting synthesis of optimum road holding and maximum ride pleasure.





The Scorpion fs turns even rocky roads into rewarding destinations

Manhole covers, cobblestones, and gravel tracks: Many bike trails offer a ride on the rough side. Now you can look forward to this: When the ride conditions become more demanding and you need not only a fast-reacting suspension but also, and in particular, predictable handling, maximum steering precision, and ultimate stability at speed, your *Scorpion fs* is completely in its element.

The comfortable MacPherson struts on the front wheel suspension offer 6 cm (2.4") of suspension travel with optimised damping for vibration absortion precisely where you need it. The robust, dirt-protected MacPherson struts are held out to the sides by the solid frame cruciform and are connected via adjustable wishbones with maintenance-free bearings. With this design, our engineers were able to keep the unsprung masses extremely low. This in turn enables the sensitive responses of the *Scorpion fs's* chassis and the impressively low weight of this full-suspension trike of 17.5 kg (38 lbs). The suspension preload can be adjusted; the spring stiffness and progression can be simply adapted to your needs.

Added safety for fast cornering: The unique HPVELOTECHNIK Stabilizer System with its anti-roll bar under the frame reduces the compression of the MacPherson strut on the outside of the bend and reliably prevents the trike and rider from excessively tilting outwards due to centrifugal forces. Control in threshold areas has been noticeably improved and tipping stability vastly enhanced. The anti-dive kinematics prevent the negative dive effects on braking. The design of the camber and track geometry ensures that the steering mechanism offers straight-line stability over the entire suspension travel and remains easily accessible and free from impairment when braking (brake steer) or traversing obstacles (bump steer). The entire chassis is designed using our No-Squat suspension concept and transmits all of your drive energy to the road without any loss of power. You will feel it immediately: In the precise steering, the sporty handling, and the direct feedback from the road.

In return, you enjoy complete comfort on rough trails – so that you can lean back and relax while dynamically accelerating.







Lightweight aluminium wheel carrier with shock boot on the suspension strut. Blasted and black matte anodized finish. Housing gaskets over the tie rod's outer ball in the area of the wheels at risk from spray water.



Smooth-running hubs for quick assembly in HP VELOTECHNIK's open wheel mount system. No axle protrusion. Replaceable deep groove ball bearings.



Large, efficient chain roller. The chain lies quietly across the integrated middle bar, as on a chainwheel. Replaceable deep groove ball bearings.

Precision can be measured, passion for detail must be felt



Stable HP VELOTECHNIK folding hinge with a self-locking safety catch. Stainless steel precision axle. Two adjustable centering pins.

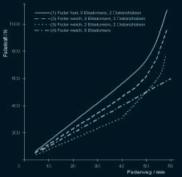


Scorpion 20





The MacPherson struts are supported in the frame by elasticated strut bearings, which continually protect them against lateral forces. The tangible benefit to you: Impressively sensitive responses and outstanding suspension comfort even at high frequencies.



By adjusting the preload, replacing the steel springs, or varying the MCU/spacer arrangement inside the spring, the suspension properties can be easily adapted to your requirements in relation to spring stiffness, damping, and progressiveness so as to provide good bottom-out prevention. Unlike simple elastomer buffers that become noticeably embrittled in the cold, this technology allows comfortable suspension even at low temperatures.

A decisive functional feature: The blue stabilizer bar under the wishbones is the core element of the unique HP Stabilizer System, which effectively reduces the trike's tilt when cornering quickly.

The Scorpion fs with a 20 inch rear wheel: A tiny package bursting with riding fun





Optimized protection with elegant contours: In designing the trike fenders, HP VELOTECHNIK has created special mudguards for use on trikes. The inner surface and bottom edge are lowered down to improve rider protection against spray, especially when cornering. The mounting elements are protectively installed on the inside of the fender. The rounded profile with a width of 60 mm (2.4") makes it possible to attach large, comfortable tires with a width of up to 50 mm (2"), such as the SCHWALBE Big Apple.

Technical Data

BodyLink seat height ... 29 cm (11") ErgoMesh seat height ... 32 / 43 cm (HS plus) (13 / 17") ErgoMesh seat width 38 / 43 cm (XL) (15 / 17") Bottom bracket height .. 40-45 cm (16-18") Suspension travel FW/RW .. 6 / 8 cm (2.4 / 3") Ground clearance 12 cm (4.7") (statically compressed) Max. tire width 5 cm (2") Wheelbase 111 cm (44") Track width 78 cm (31") Width 83 cm (33") Length 172–206 cm (5'8"–6'9") Turning circle 4.76 m (15'7") outer wheel Weight from 17.5 kg (38 lbs) Max. payload 130 kg (246 lbs) Frame material Aluminum 7005 T6 Swingarm bearing maintenance-free Powder coating Blue shade grey matt, (anti-corrosion coat + Colza yellow or colored coat + clear coat) custom color

Rider height approx ... 1.62-2.00 m (5'4"-6'7")

Warranty on frame 10 years



| Robust, full-suspension luggage rack for two large rear wheel panniers weighing up to 25 kg (55lbs). The luggage rack (including platform) is specially optimized to withstand the high lateral forces to which trikes are subjected and securely screwed to the main frame. The rack does not have to be removed



For transportation, the Scorpion fs can be easily folded up into a compact package measuring just 112x83x63 cm (44x33x25") with the luggage rack in just 60 seconds. Once the wheels have been removed, the folded dimensions are even further reduced to 112x74x46 cm (44x30x18"). Without the luggage rack, the length reduces to 90 cm (35"). The folded Scorpion fs is secured using the ratchet strap attached to the frame to make the trike easy to carry.









26 inches

Long wheelbase; clear contours; large, smoothrunning wheels; elegantly integrated independent suspension: The dynamic appearance of the Scorpion fs 26 leaves a lasting impression.

Even your first look at the *Scorpion fs 26* will get your pulse racing. The powerful 26-inch rear wheel and striking chassis suspension make it unmistakably clear: This speed trike is hungry for asphalt and adrenalin!

But the succinct design features also provide impressively stable road holding and make it extremely easy to traverse obstacles.

The best conditions for exciting trips are therefore at your fingertips. The advanced steering geometry (ASG) system enables you to control the trike smoothly and precisely and gives it a small turning circle despite the wheel size expanding the distance between the front and rear axles. The Scorpion fs 26's long wheelbase also offers a incredibly smooth ride, more safety, and greater ride pleasure – size matters!

Superior performance delivered within seconds

With the Scorpion fs 26, HP VELOTECHNIK presents its first full-suspension speed trike with a smooth-running 26-inch rear wheel, which can be folded flat for transportation without the use of tools.

In just a few simple steps, it only takes a minute for you to fold up your Scorpion fs 26 into a space-saving package with dimensions of 123x83x62 cm (48x33x24"). If you remove the wheels as well, the dimensions reduce even further to a compact 93x74x54 cm (37x29x21"). Even with the luggage rack and fenders attached, the Scorpion fs 26 can still be folded up without removing the wheels. And the chain? This rotates around its own axis and otherwise reliably remains where it should be, guided by the flexible chain guard tubes.

The best part: When you unfold the trike, HP VELOTECHNIK's unique, self-locking folding hinge enables you to quickly turn your excited anticipation into pure riding pleasure!









The HP VELOTECHNIK No-Squat technology represents optimized chassis design. The engineers designed the Scorpion fs 26's chassis to combine outstanding comfort with the efficient transmission of

pedaling forces to the road. The key to this is the agile, adjustable suspension and the avoidance of any adverse effects from the drive unit in the chassis:

Pedal kickback refers to the pedals jolting when the chain suddenly tightens or slackens when the suspension activates. HP VELOTECHNIK's chassis geometry ensures that there is no noticeable change to the chain length during compression.

Compression occurs when pedaling if dynamic forces combine to create a resultant force that causes leverage to take effect at the swingarm's pivot point. For this reason, many trike and bike designers, initially attempt to place the pivoting point within the chain's play. In practice, even such simple designs often suffer from undesired pogo-style oscillations, which have to be compensated for by high levels of damping in the shock. However, simple rubber or elastomer buffers are unable to provide such levels as they only have very low, non-adjustable damping. If the damping is too high on the other hand, the suspension responds poorly and a great deal of drive energy is lost – energy which was meant for your propulsion!

HP VELOTECHNIK's chassis design not only considers the primary chain forces but also the reaction force on the rear wheel where power is transmitted to the road – after all, your trike should dynamically accelerate when you pedal. Consideration is also given to the variable inertial forces of the masses comprised by the trike, rider, and luggage.

The HP VELOTECHNIK engineers individually determine the chassis geometry and optimum drive chain routing for each model. This means, for example, that the *Scorpion fs* 26 does not simply use the same frame as the *Scorpion fs* 20 but with an extended rear wheel swingarm. Instead, the full-suspension frame was created meticulously from scratch for the optimum implementation of the 26-inch wheel concept.

What do you feel? Impressive comfort and 100 % propulsion thanks to maximum power transmission.



The core element: On request, your trike can be equipped with a light-weight ROCK SHOX air shock for the rear suspension. This enables you to infinitely select the spring stiffness over a large range using an air pump. The hydraulic oil damping can be adjusted to the temperature and ride conditions. A blocking option is also included.

The standard shock unit is a coil over rear shock with hydraulic oil damping made by DNM. By rotating the spring, you can precisely adjust the suspension preload without the need for any tools in order to adapt the chassis to your payload and riding style. Several easily replaceable steel springs can be used to adapt the trike to the rider's weight.

The compact shock length of just 150 mm (6") enables the rear wheel to be positioned directly behind the rider. The benefit to you: Greater traction on hills and agile riding dynamics.





Video-Link: See how the Scorpion fs 26 performs at high speed in our short movie "The Dream Rider".

filmed on the world cup luge track at Oberhof, Germany. Scan the QR-Code or type: https://youtu.be/S_PoOB9RhQg



The large HP VELOTECHNIK chain roller with a weight of just 88 g (3.1 oz) maintains the chain at the distance from the swingarm pivot specified by the designer so as to avoid any troublesome suspension rocking. The chain roller is made from durable, fiber-reinforced, high-strength plastic using an injection molding procedure. It rotates with blissful ease around two sealed, individually replaceable cartridge bearings. The roller has a middle bar on which the chain lies, as on a chainwheel, and which guides the chain quietly through its movements.

Scorpion 526







Scorpion fs 26: Everyday becomes ever more extraordinary

You don't necessarily need Alpine passes, hairpin bends, or luge tracks to enjoy the Scorpion fs 26's impressive ride dynamics. HP VELOTECHNIK's agile speed trike demonstrates its strengths also on your commute to work or during spontaneous weekend tours. A glance at the performance data makes it clear: This trike represents ultimate performance — and fulfills the highest demands for exclusivity and versatility thanks to the broad range of optional features. See this for yourself by testing the ideal trike for people for whom the everyday is becoming ever more extraordinary.

Technical Data

BodyLink seat height 29 cm

ErgoMesh seat height ... 32 cm / 43 cm (HS plus) (13" / 17")

ErgoMesh seat width 38 cm / 43 cm (XL) (15" / 17")

Seat angle $41-49^{\circ} / 41-54^{\circ}$ (HS plus)

Bottom bracket height . 40-45 cm (16"-18")

Suspension travel FW/RW 6 cm / 8 cm (2.4" / 3")

Ground clearance 12 cm (4.7") (statically compressed)

Wheel size FW 20" (ISO 406)

Wheel size RW26" (ISO 559)

Max. tire width 5 cm (2")

Wheelbase 128 cm (50")

Track width 78 cm (31")

Width 83 cm (33")

Length 187–231 cm (6'2"–7'7")

Turning circle 5.51 m (18'1") outward

Weight from 18.2 kg (40 lbs)

Max. payload 140 kg (310 lbs)

Frame material Aluminum 7005 T6

Swingarm bearing maintenance-free

Powder coating Pure orange matt,

(anti-corrosion coat + Cosmic grey, or

colored coat + clear coat) custom color

Rider height approx. ... 1.62–2.00 m (5'4"–6'7")

Warranty on frame 10 years



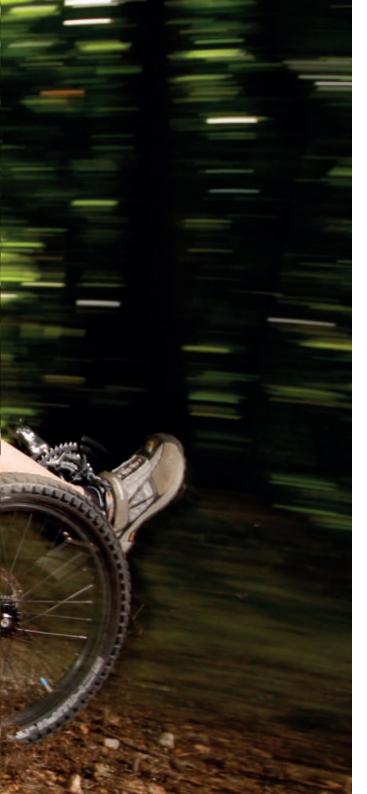
The HPVELOTECHNIK seat systems provide an exemplary ergonomic connection at the key interface between the rider and the trike. The ergonomically shaped BodyLink seat (see image) can be individually adjusted and equipped with a headrest. The Airflow seat cushion ensures optimum ventilation.

The stable rack for two panniers weighing up to 25 kg (55 lbs) has been optimized to withstand the high lateral forces to which trikes are subjected. The panniers are positioned low down with an optimum center of gravity, close to the rider to the side of the rear wheel. 14 mm (0.6") tube.

Ideally, you should complete it with the Top Load attachment, which is attached to the luggage carrier. The platform can carry up to 10 kg









Rough rider

The Scorpion fs Enduro brings trike action to the bike park

With the Scorpion fs Enduro trike HP VELOTECHNIK paves new ways, in the true sense of the word: the trike with chassis technology derived from automotive engineering, MacPherson struts and stabilizing anti-roll bar turns off-road trails into action loaded playground for the adrenaline addicted speedfan.

Based on the proven chassis of the *Scorpion fs 26* the *Enduro* trike has been configured with carefully chosen components. Tough offroad tires with especially strong snake bite protection deliver good grip. (SCHWALBE *Smart Sam:* front 20" x 2.35", rear 26" x 2,10")

With these big nobblies there is no point in adding fenders. The blue platform pedals and extra rigid *Stylo* cranks by TRUVATIV turn your leg power into direct propulsion. Off road the load capacity is at 110 kg (243 lbs), on the road the trike, weighing in from 20,5 kg (45 lbs) will take up to 140 kg (310 lbs).

Enduro goes e-trike. Like all other models in the HP VELOTECHNIK range the *Scorpion fs Enduro* can also be equipped with the powerful Pedelec-System from NEODRIVES or SHIMANO *STEPS* with *Di2*. Through the electric motor support of up to 25 km/h (16 mph) (20 mph for USA-version) it's not only that steep climbs become less daunting, but the exciting world of mountain biking becomes accessible to a wider audience. For extra long trips the double battery option from HP VELOTECHNIK instantly doubles the maximum range.

"The trip on the Scorpion is vastly different from anything I have ever experienced on a bike. I am rummaging through the foliage as during a truck-trial (....) Trike trial fascinates me more, than to blast through the terrain with an e-full susser. It is exciting, exhilarating and a refreshing new style."

Christoph Listman, head of testing, BIKE 02-14







Video-Link: Franziska Meyer, German Enduro-Champion 2015, rides the Scorpion Enduro at the Bikepark Rabenberg, Germany. Scan the QR-Code or type into your webbrowser: https://youtu.be/Zmu7g37t9xs













Officially beautiful

The Scorpion fs Enduro was awarded with the sought-after EUROBIKE Award for outstanding design and quality.

Relaxation in the cockpit

Even in the roughest of terrains you will benefit from the comfortable seating position, intuitive control and the outstanding road holding our recumbent trikes are famous for.

Array of colours

Impressing with the metallic green finish in the daytime - showing off with glimmering yellow at night.



with a versatile SCHWALBE MTB tire featuring strong side wall protection made for a powerful and reliable accelerator.

vidually suspended wheels supported by MacPherson suspension struts with anti-roll bar stabilising system result in perfectly controlled riding performance. Your advantage: Precise cornering and controlled braking.





Tail wind on request: Scorpion fs 26 S-Pedelec with an electric motor for up to 45 km/h (28 mph)

In the promising class of fast electric bikes, HP VELO-TECHNIK'S Scorpion fs 26 S-Pedelec focuses on secure road holding for a multi-track vehicle with chassis technology from the automotive engineering sector. The touring trike's low center of gravity and the good rider support in the ergonomically-designed recumbent seat enable dynamic acceleration.

While all HP VELOTECHNIK trikes can be equipped with with an electric motor to become a Pedelec with supported speeds of up to 25 km/h (15 mph) within the EU or 32 km/h (20 mph) for the US models, only the Scorpion fs 26 S-Pedelec has been specifically designed for a maximum motor supported speed of 45 km/h (28 mph).

The low air resistance thanks to the efficient recumbent position extends the rechargeable battery's range, especially at the high assisted speeds of up to 45 km/h (28 mph) reached by this speed pedelec. At such high speeds, a well-designed, full-suspension chassis is extremely important.

The Scorpion fs 26 touring trike is the perfect base vehicle for powerful motorization and high average speeds of over 25 km/h (15 mph). The speed pedelec is driven by a very silent, high-performance 370 Watt rear wheel hub motor. A 36 V Li-lon rechargeable battery with a 636 Wh capacity provides a great deal of energy. The recuperation function, which uses the motor as a generator when braking, extends the range through energy recovery. The trike comes with a start assist function as standard, which propels it to a speed of up to 20 km/h (12 mph) at the push of a button without pedaling.

More energy for up to 150 high-speed kilometers (93 mi) will be served in combination with our optional additional battery. Just like the first battery it is securely attached to the frame low beneath the seat in the middle of the vehicle, even improving the vehicle's center of gravity. The handling is as convenient as possible: The rider can switch over the power cable to the full battery within seconds. Thanks to the twin-option there is no more circuitous handling with locking keys or batterys in the bike panniers.

Features of the Scorpion fs 26 S-Pedelec base model:

GO SWISDRIVE Power electric drive • SRAM 30-42-52/I I – 36 drivetrain with bar end shifters • TEKTRO Auriga E hydraulic disc brakes, coupled at the front, individually activated at the rear • SCHWALBE Energizer Plus 47 mm tires • luggaer ack for two panniers up to 25 kg (55 lbs) • LED light system with B&M IQ-X E headlight and brake light • WingBling turn indicators • B&M E mirror • Weight from 37 kg (82 lbs) • Standard colors: cosmic grey or pure orange matt



Technical Data

System Go SwissDrive G45P

Available for Scorpion fs 26 S-Pedelec
(outside EU: All 26" trikes)

Support up to 45 km/h (28 mph)

Start assist up to 20 km/h (12 mph)

Rverese gear up to 3 km/h (1.86 mph)

Range up to 75 km (46 miles) at 60 %
(smooth, flat road, 20° C, (up to 150 km /93 miles with additional battery, rider 68 kg / 150 lbs, no wind) with additional battery limited folding function

Force amplification 5 levels (individually adjustable)



Max. torque 45 Nm (at the rear wheel)

Rated power 370 W



Rechargeable battery BMZ 36V Li-Ion

removable, with lock

Capacity 17,5 Ah Energy content 636 Wh

Battery weight 3,4 kg (7.5 lbs)

Battery life 800 - 1000 charging cycles

Charger BMZ 4,5 A Charging time 4,5 hours

no memory-effect

Charger weight 0,85 kg (1.9 lbs)

Drivetrain SRAM 30-speed

bar end shifters 52-42-30 / 11-36

52-42-30 / 11-36

Features USB, Bluetooth

Operating requirements:

In Germany the fast Scorpion fs 26 S-Pedelec is delivered with an operating license as a 'small-engine motorcycle' (L2e-P). All export-trikes will be delivered without operating licence. To learn more about the legal requirements for operating the Scorpion fs 26 S-Pedelec in your homestate, please contact your state authorities or your local HPVELOTECHNIK retailer.





A new definition of curve acceleration









The Trike with SUV-Genes: Scorpion plus

A trip into the countryside, a long distance journey or into town – no matter where you want to go: Your Scorpion plus will take you there. With this versatile SUV-trike you will attract attention everywhere. The genes of this trike combine convenience and safety with maximum riding pleasure.

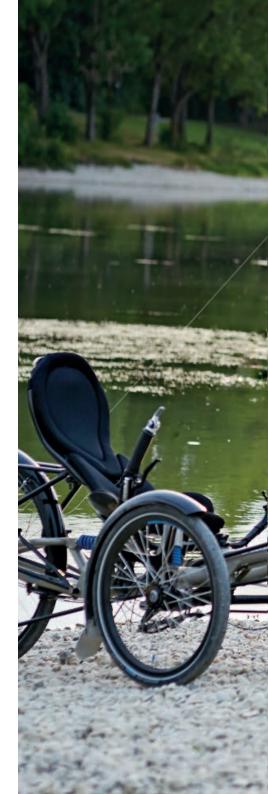
Higher, wider, more comfortable: The designers at HP VELOTECHNIK have applied what the SUV-class makes up to the construction of trikes. We want you to have an exceptional overview in almost every situation. A seat height of 57 centimetres (22.5") is a unique highlight for this type of bike.

Thanks to the wider frame, it has never been easier to enter a trike. The wide construction achieves impressive tilting stability. Experience the dynamic culture of the chassis of the Scorpion fs-class up close and in harmony with the solid performance of this SUV trike. Whether compact 20" rear wheel or the smooth running 26" wheel: The DNA of the "Generation Plus" will guarantees a highly refined riding pleasure

The Scorpion plus will desert the SUV genes just in one aspect: Despite of its wide frame it can be folded to very handy dimensions in just one minute. For this purpose, our designers have revised the patented quick-folding hinge. And on top of that, this redesign increases the maximum load to 150 kgs (330 lbs)!

















Scorpion plus 26: Let the engine run and enjoy life everyday

The backbone of the SUV-trike is the spacious frame. The geometry is based on the striking silhouette of the *Scorpion* with its large 26" rear wheel. Discover the advantages of SUV features with a wider and higher seating position and the irresistible benefits of a trike: a smoother ride, less rolling resistance and better aerodynamics.

Curious? At first glance, the *Scorpion 26 plus* is about 10 cm (4") higher and wider than its sporty cousin, the *Scorpion fs*. The frame design allows smaller riders from 1.49 cm (4'11") to easily mount the stylish full suspension trikes: Have a seat, turn the pedals, and treat yourself to luxurious comfort.

For experts, the actual design plus becomes clearer on closer inspection: the seat position appears to be moved forward to the cross frame. In fact the seat position is further back. This allows HP VELOTECHNIK engineers to optimize the centre of gravity and give the higher vehicle unprecedented stability.

Your extra bonus: The carriers can hold up to 50 kg (100 lbs.) of luggage whilst leaving enough space for an optional E-assist or water bottle cages. At the top, the optional *Top Load* platform offers space for light luggage. Thanks to the improved quick-folding hinge, the maximum load has been increased from 140 to 150 kg (309 to 330 lbs.).





Scorpion plus 20: Big times for small wheels

Small is beautiful! A smaller rear wheel is great for longer rides: you'll notice this immediately when you're on the road by train or car. When folded, the Scorpion plus 20 saves a smooth 16 centimetres (6") in length compared to the big brother. Fully folded, the pack size is only 81 x 91 x 83 centimeters (32 x 36 x 33"), so you can find a place everywhere. When riding, the trike is still very manoeuvrable: The turning radius is only 4.75 meters (15' 7"), thanks to the shorter wheelbase in comparison to the Scorpion plus 26.

A 20 inch rear wheel means more space elsewhere. With the Scorpion plus 20 you can transport your luggage comfortably. Even larger bags fit easily on the extra wide platform carrier. The carrier, specially designed for this model, does not only take the four bags of up to 50 kilograms (110 lbs). It also widens up: You can safely deposit a bigger package on the integrated platform luggage carrier. But no matter what you put on your Scorpion plus 20, the loads do not get in the way of other attachments as rechargeable battery and water bottles. This also includes the quickrelease bracket for walking aids from our "Comfort and Ability" range!

If one day you want to carry very bulky loads, you will appreciate your Scorpion plus 20 as a willing packhorse. You can safely use a wide trailer: Wherever the two front wheels pass, it follows without any pro-

By the way, the folding process for both 'generation plus' remains as simple as for the other members of the Scorpion family: You only have to open up three quick releases, take off the seat, open the safety lock on the frame - and simply fold the rear end between the front wheels.









	Scorpion plus 20	Scorpion plus 26
Seat height BodyLink		43 cm (17")
	46 cm / 57 cm (HS plus)	46 cm / 57 cm (HS plus)
0 0	(18" / 22")	(18" / 22")
Seat width ErgoMesh	38 cm / 43 cm (XL)	38 cm / 43 cm (XL)
_	(15" / 17")	(15" / 17")
Seat angle	$46 - 54^{\circ} / 46 - 59^{\circ}$ (HS plus)	$46 - 54^{\circ} / 46 - 59^{\circ}$ (HS plus)
	37-43 cm (15-17")	37-43 cm (15-17")
Suspension travel	6 / 8 cm (FW/RW) (2 / 3")	6 / 8 cm (FW/RW) (2 / 3")
Ground clearence .	15.5 cm (6", statically compressed)	15.5 cm (6", statically compressed)
Wheel size FW	20" (ISO 406)	20" (ISO 406)
Wheel size RW	20" (ISO 406)	26" (ISO 559)
Max. tire width	5 cm (2")	5 cm (2")
Wheelbase	110 cm (43")	120 cm (47")
Track width	86 cm (34")	86 cm (34")
Width	91 cm (36")	91 cm (36")
Length	168-200 cm (5'6"-6'7")	186-218 cm (6'1"-7'2")
Turning circle	4.75 m (15'7") outward	5.35 m (17'7") outward
Weight	from 18.8 kg (41 lbs)	from 19.5 kg (43 lbs)
Payload	max. I 50 kg (330 lbs)	max. 150 kg (330 lbs)
Frame material	Aluminum 7005 T6	Aluminum 7005 T6
Swingarm bearing.	maintenance-free	maintenance-free
Powder coating	Cosmic grey or	Cosmic grey or
	Magma red / black	Magma red / black
	or custom color	or custom color
Rider height	ca. 1.49 – 2.00 m (4'11"–6'7")	ca. 1.49 – 2.00 m (4'11"–6'7")
Warranty on frame	10 years	10 years





Stay mobile: Define your own way with the Scorpion plus 20

Despite often being regarded as mutually exclusive, at HP VELOTECHNIK we like to point out how ergonomics and refined design can be successfully combined. With the Scorpion plus 20, we designed a trike that provides solution for those who seek ultimate comfort as well as for people with special needs, offering a versatile and adaptable vehicle with a host of practical functions.

Many people with mobility issues never believed themselves to be able to ride a bike. But, clearly said: Does anyone has to give up riding because of getting older? Or because of compensating a handicap? Or because he has to go through a sports rehab? We give a simple answer to all these questions: Not anymore! *Scorpion plus 20* is the solution how to stay mobile and enjoy the freedom to ride!

Another feature besides having outstanding tilt stability is the ability to access the trike even more easily than the medium high *Scorpion fx* or lower, more sporty *Scorpion fs* trikes. Our developers have made major changes to the geometry to allow just that. The two crossbar elements of the main frame's cruciform now lean forward acting like open arms, inviting users to take a seat with a single movement. The wishbone and stabilizer system were also radically overhauled for this comfort model: Just like the contours of the frame crossbars, they are swept forward to create more space between the wheel and the frame.

It is now possible to easily utilize the extra space between the wheel and the frame. The rider moves right to the edge of the seat and takes place. Now he comfortably lifts a leg across the front boom and puts his feet on the pedals. Just as easy is getting off the trike: Once both feet are placed securely on one side, no-one has to balance around front boom and pedals.

With a Scorpion plus it is as easy as it gets: Take a comfy seat, pedal at your own pace, and explore new horizons!











Good technology also has to look great – clean, tidy and functional. What we proclaim for the trikes manfuctured in our German recumbent factory has also to be said on the accessories. And particularly on accessories for people with special needs. Our "Comfort and ability segment" has greatly expanded: Well known accessories just like footrest, hand rest or the quick-lock bracket for walking aids turn to be highly functionally designed artifacts.









Little helpers by HP VELOTECHNIK and you have a handle on your trike

Footrest and hand rest are equipped with a new hook and loop spring fastener featuring a functional snap mechanism. One tug on the fastening – and the hand or foot is released.

The ergo-footrest can be easily clipped into conventional clipless pedal (SHIMANO SPD). Your benefit: The adjustable trigger on the safety binding ensures that this opens reliably in the event of an accident what gives an enormous advantage to anyone doing a sports rehab after a knee surgery. The platform is anodized and width-adjustable. Available in one package with the pedals you can use the clipless pedals after your recovery to keep on riding.

The ergonomic pedal with lower leg fixation provides even more support. This new development is adjustable in many ways, however, the big difference to the Ergo-footrest is that it is firmly attached to the pedal.

The quick release bracket for walking aids provides a new particular benefit. The design is similar to that used for garden tools, however, we have decisively modified the principle for our trikes with a stainless steel safety clip: Crutches can be pushed in, securely clipped into place and pulled out again with just one hand. And if you like, you can use this accessory as a multifunctional bracket: Any parasols or fishing rods to



Chassis

The Scorpion's sting: Advanced suspension technology you can enjoy.

Let's start with the best bit: There's no need to read the small print on this page to enjoy the luxurious comfort offered by your Scorpion. All the latest vehicle technology expertise comes pre-installed into your HP VELOTECHNIK trike. Lean back, relax, and enjoy the smooth ride and the scenery around you! Now look forward to the next pothole: Your roughest trails have just become even more inviting to enjoy what German engineers call Fahrvergnuegen! Read along to find out the details:

HP VELOTECHNIK's refined suspension system treats you to relaxing comfort. It increases safety by improving control and road holding. And the best part: You save energy — an effective suspension lets you go faster! All unsprung jolts convert part of the propulsion energy into an upward or downward movement of the trike and rider, never to be recovered. On the full-suspension HP VELOTECHNIK trikes on the other hand, only the wheels follow the contours of the rocky road. Even riding along dirt tracks becomes a pleasure!

Important: The quality of a trike's suspension becomes particularly clear when carrying a great deal of luggage or riding on hills. Compare the suspension technology of the vehicles in which you are interested under different ride conditions: Paved streets, undulating roads, and dirt tracks. Load the luggage rack (and the lowrider if available) with heavy bags and check the suspension when riding on hills in low gears. It will quickly become apparent if your pedaling force is converted into undesired pogo instead of powerful propulsion.

The Scorpion trikes' rear suspension uses HP VELOTECHNIK'S *No-squat* suspension concept: The combination of an exceptionally stiff rear frame with the sophisticated positioning of the single swingarm pivot, the large, double ball-bearing-mounted chain roller effectively prevents drive forces from affecting the suspension and avoids unpleasant pedal kickback. Whereas a well-designed suspension should react sensitively to even slight bumps on the road, the frame and swingarm bearing must be built as rigidly as possible so that you can precisely control and dynamically accelerate the trike. The rear swingarm pivots with durable maintenance-free bearings on a precision-machined axle. The elegant triangular design of the rear swingarm creates a slender, robust framework to which the shock unit is connected with a harmonious flow of force. You can choose from either a steel spring or an air shock unit, both tried-and-tested in the MTB sector. Their spring stiffnes and oil damping rate have been finely tuned by our expert engineers.

A big benefit: Whereas simple elastomer buffers become noticeably embrittled at low temperatures. HP VELOTECHNIK's shocks remain reliable and comfortable!

When using the basic DNM DV-22 shock with its steel spring, the oil damping rate is permanently fixed. By adjusting the preload, you can compensate for approximately 10 kg (22 lbs) of change to the payload. In the case of larger changes, you can simply adapt the chassis to the payload by switching to a softer or harder steel spring.

The optionally available ROCK SHOX air shock has external damping adjustment, allowing you to adjust the suspension/damper settings in line with your style and road conditions. You can even block the suspension. Instead of using steel springs,

this ultra-lightweight shock uses air to set the spring rate and has a progressive characteristic curve for excellent bottom out protection. With an air shock pump, you can easily change the pressure and optimize the suspension characteristics.

HP VELOTECHNIK recommends setting the suspension so that your chassis compresses about a third of the total available suspension travel when you get on. This ensures that there is enough negative suspension travel for rapid de-compression in the event of sudden potholes and the total suspension travel is comfortably used in the event of harsh impacts without any hard jolts.

Why does a chassis with efficient suspension design need any damping at all? Mainly, to quickly stop oscillation caused by bumps on the road so that the chassis is quickly ready for the next bump.

Furthermore: The dynamic forces change depending on where the center of gravity is, which is determined by the size and weight of the rider and luggage. A further influence: If a rider works hard and moves his/her upper body unevenly, the suspension can be subjected to additional forces. As a trike rider, you benefit from a further physical advantage over the conventional upright cyclists: In the recumbent position, you pedal forward and thus place few downward forces on the suspension. On the *Scorpion* unwanted effects are suppressed during the the decompression cycle by an oil stream inside a refined hydraulic damper. If you select the lightweight air shock from ROCK SHOX, you can alter the rebound damping settings with an adjusting wheel and optimize your chassis to your specific ride situation. A good setting for maximum comfort is achieved when the rear wheel decompresses completely after a shock and then oscillates only once. Your trike will react to the slightest bumps as quickly as a *Scorpion* can sting.

Did the Scorpion hit its mark? Convince yourself by taking an extensive test ride. Your HP VELOTECHNIK dealer looks forward to your visit!















Your wish: Extra power! Turn your Scorpion into an E-Trike

No other type of bicycle fits electric motors as perfectly as recumbent trikes. Why, is obvious: The ease of pedalling and the ergonomic sitting position make the ride even more pleasant. The built-in aerodynamic advantage of your recumbent trike can also be exploited electrically: less drag means more range. Unique safety advantage: Our E-Trikes can be equipped with a turn signal!

With our electric drives you pedal, and a powerful motor supports you up to three times your pedaling power, depending on the system. With a smile on your face, you can climb the local mountain with a trailer or drive to work quickly and yet deeply relaxed.

Especially remarkable: The perfect pedalling experience with the *Scorpion* does not change with the motor. Thanks to HP VELOTECHNIK programming there is no stuttering, no noise, and no delicate throttle. The e-drive is very safe: The support only starts when you want it to.

The quiet support starts as soon as you pedal and ends subtly and electronically when the trike reaches 25 km/h (16 mph) resp. for USA 32 km/h (20 mph). Higher supported speeds can be reached with our *Scorpion fs* 26 *S-Pedelec* (see page 36).

This pre-programmed top speed allows your *E-Scorpion* to legally be a Pedelec (*Pedal Electric Cycle*) in Europe. It can be ridden in most EU countries without registration, helmet, or license plate. Once over 25 km/h (16 mph), the trike basically rides like a normal *Scorpion*.

The light weight of the trike allows a normal riding feeling, even when the battery is empty. When climbing, the trike has the advantage that it keeps its track even at slower speeds. If you stop at a traffic light, you don't need to set foot!

You have the choice, because three different drive systems provide extra power on your *Scorpion*: either the extremely quiet hub motor

from NEODRIVES in the rear wheel or one of the two bottom bracket motors from SHIMANO's STEPS series, which are moved from mid-ship upfront to pole position in your HP VELOTECHNIK recumbent trike.

Each of these three powerhouses has its own character – just like you. This enables us to offer you a solution that is exactly tailored to your needs. All systems have in common the low centre of gravity of the battery under the seat, if desired also with a second battery.

The ergonomically arranged, easy-to-read operating elements facilitate the overview. You reach your destination relaxed, no matter if you want to leave the traffic jam behind or take a big tour with heavy luggage.

E-Trikes

SHIMANO STEPS: Versatility is the key

Maximum bandwidth: With the *E5000* and *E8000* systems, HP VELOTECHNIK offers the entry-level and top model from SHIMANO'S *STEPS* engine range. Each system has it's specific advantages. The remarkably small *E5000* motor integrated in the front boom is ideal for the price-conscious. Equipped with enormous power, SHIMANO has originally created the *E8000* for mountain bikers; as it turns out it is a great system for the demanding trike rider, too.

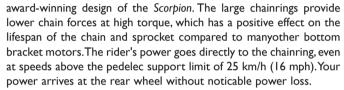
The position of the motor is unconventional for a trike. The bottom bracket is infront, which is standard by all HP Velotechnik trikes. Up until recently, there was no practical method to incorporate a heavy motor in the boom. Other e-drives systems with small chainrings would have put too much stress on the frame when in high torque mode.

This is different with the *STEPS* series: They can be equipped with large chainrings (38, 44 or 50 teeth). This makes them absolutely trike-compatible and their slim silhouette blends discreetly into the



Top: The control buttons for the electric drive and an optional electric rear derrailleur are positioned under the display at the handlebar, right at your fingertips. Center: The battery is located under the seat with a favourable low center of gravity on the right or left side, depending on the model.

Bottom: The STEPS E8000 motor unit on the beautifully shaped front boom with a forged bracket from HP VELOTECHNIK.



With a range of up to 145 km (91 miles), the STEPS System presents a powerful result of the efficient energy management of the standard 418 Wh lithium battery. The range increases by a fifth if you alternatively choose the optional battery with 504 Wh capacity, which we supply with a quick charger of a 4 A charging current. The externally identical batteries can be easily removed by unhinging them and taking them off from the side. They snap back into place just as quikkly and easily and have contact — without any plugs or seperate cables. If you have a wall outlet available once you have reached your parking spot, you can even recharge the battery without removing it from the trike.

Additionally, all those who want to be on the safe side when it comes to range can choose the optional second battery, which always comes with 504 Wh. It travels safely on the special holder under the seat on the frame. To supply the system with power, you can replace a battery with the second one by switching them from side to side during a short stop.

The clearly arranged black and white display is easy to read in many lighting conditions due to the high contrast. A light switch is ergonomically integrated into the display: If you decide for our battery lighting system, simply press a button to turn the front and rear lights on.

A variety of options awaits the trike fans with the drivetrains that HP VELOTECHNIK provides for its SHIMANO drives. This ranges from a SRAM derailleur to an electrically operated SHIMANO XT Di2 (left picture) and a fully automatic SHIMANO Nexus Di2 electric hub gear.









SHIMANO STEPS E5000

By far the most favorable electric motor in our modular system, the *E5000* will quickly make many friends: Shimano once again knows how to convince and even surprise in the technical regard. As quiet as the *E5000* provides its support, this is absolutely fantastic for a bottom bracket motor! And all this in a particularly small housing that elegantly fits into the front boom of your *Scorpion*, which has been specially forged for the *STEPS* motors.

With its harmonious characteristics and a well-proportioned torque of 40 Newton meters, the *E5000* in combination with the drivetrain options selected by us is the ideal companion for riders seeking comfort. In the basic version, with the 8-speed SRAM X4 derailleur you are ideally equipped for the little ups and downs in a cyclist's life.

If you want to enjoy the maximum lightness of triker life, choose Shimano's *Nexus Di2* 8-speed hub with fully automatic transmission. This highly integrated combination is all about simplicity. You no longer have to worry about changing gear, as the *Nexus Di2*

shifts fully automatically. Depending on your pedaling, the system automatically selects the most efficient gear and at the same time can be trained to adapt to your preferences.

Comfortable: When the traffic lights stop force you to stop, this all-round carefree package automatically shifts into a small gear. To ensure smooth and jolt-free shifting, the support provided by the engine is reduced for a short moment during gear changes.



SHIMANO STEPS E8000

The flagship of the STEPS engine range is a real powerhouse. The motor produces up to 70 Newton meters at the front of your Scorpion. Designed by SHIMANO for the MTB sector, the E8000 fits just as well into the requirement profile of a travel or trekking trike. The heart of the system is the very variable system control with the support levels "Eco", "Trail" and "Boost". By the way, these can also be individually adapted via smartphone.

Remarkable: The power engine also shows its advantages in terms of range on mountain slopes. From the standard 418 Wh battery in "Eco" mode it draws juice for around 80 kilometers and about 800 altitude meters. Packed in a beautifully shaped boom with elegant branding, specially forged for HP VELOTECHNIK to house the STEPS system, it remains pleasantly quiet.

Top engine, top gearings: With the XT Di2 electric derailleur system, the 11 gears on the rear wheel are changed with the utmost precision at the push of a button, even under load. Fans of derailleur shifting will be particularly pleased to notice that this



SHIMANO derailleur does away with the regular maintenance of the derailleur inner and outer cables! Many adventure cyclists with a lot of luggage, on the other hand, want a combination of a powerful engine and nearly indestructible internal gear hub. This makes the ROHLOFF 14-speed rear hub a faithful companion on the *Scorpion*. As the friends of the ROHLOFF most likely know, the pressure has to be taken off the pedal for a short moment to change the gears in the hub.

NEODRIVES Z20: Innovative **Swabian power for connoisseurs**

The typical features of rear wheel hub motors are that they are incredibly silent, dynamic and versatile. An outstanding choice for this drive is the NEODRIVES Z20. Optimized for dynamic riding, a futuristic design, an energy efficiency of 85% coupled with easy-use features such as a touch screen display.

The stats of the NEODRIVES Z20 speak for themselves. The maximum degree of support is 300 percent. When starting up, for example, the motor increases its maximum power output to up to 700 W. With a 612 Wh battery, you can achieve ranges of up to 145 kilometers. The whisper-quiet rear-wheel drive is a gearless motor where engine power is not lost to the chain or sprocket. This protects these drive parts, which on average will last up to four times longer than mid-engines. In order to meet the highest quality standards,

93 percent of the motor parts are manufactured in Germany.

A particular advantage of a hub motor system in contrast to bottom bracket motors is that they can recover energy when riding downhill. This technology is called recuperation. Just push a button on the control unit and the

motor operates as a generator. This charges the battery and can increase your range. The drive also protects the environment and your wallet: with modern green electricity, a full charge of riding pleasure costs you only about 30 cents.

Unique in the recumbent bike sector: the *Scorpion* with hub motor has an reverse gear. The vehicle thus plays out a further type-related advantage and rolls backwards out of the parking spot at up to 3 km/h. (1.86 mph).

Tailwind with a thumb: The remote control of the innovative system is mounted directly on the handlebar grip. The most important settings can be controlled by using your thumb. The developers have arranged the five buttons ergonomically in such a way that their size and positioning in such a way that control is intuitive right from the start — in other words, the large plus and minus buttons for switching through the support cannot be missed.

The NEODRIVES Z20 also makes it easy to take a closer look at data such as remaining range, battery charge level, current power consumption, daily distance travelled or average speed: thanks to the touchscreen, the menus on the 2-inch colour display can be scrolled quickly and easily. This even works in the rain and with most gloves.

HP VELOTECHNIK trikes give you the choice of positioning the display either next to the handlebars (picture on the left) or the "Top View" above the handlebar end for best readability.

To match the high-quality we offer you two gearing choices as an option: The SRAM 30 derailleur system with 3×10 very finely tunes gears and the robust C1.12 bottom bracket gearbox from PINION with an enormous gear ratio range of 600 percent.











Which E-Drive fits best?

Three motors, each with two drivetrain options, optimally cover your demand for additional electrical energy.

This is where the Neodrives comes in front, because the hub motor design delivers maximum power to the road right from the start, especially in

Smooth and comfortable: The STEPS E5000 has a very harmonious feel with a torque of 40 Nm. In combination with the 8-speed SRAM X4 derailleur, you have a good companion for relaxed tours in moderately demanding terrain. If you are often in town and start and stop frequently, the SHIMANO Nexus Di2 automatic transmission is the perfect choice. The rear hub shifts fully automatically and thus offers maximum comfort and safety: You can fully concentrate on the road without having to think about shifting gears.

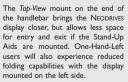
If you want endless power on the mountain or want to turn your trike into a packhorse, you will quickly become a fan of the *E8000* system with 70 Nm. Regardless of the torque specifications, which can only be compared to a limited extent, the most important factor for many people is how much thrust the engine develops at low speeds.

This is where the **NEODRIVES** comes in front, because the hub motor design delivers maximum power to the road right from the start, especially in combination with a small 20-inch rear wheel. The hub motor also scores with a very sensitively tuned driving behaviour. Nature lovers will appreciate the practically inaudible power plant in the rear wheel.

In contrast to hub motors, the bottom bracket drive is not familiar with the topic of overheating when driving slowly on a very steep mountain. There you are always well advised with SHIMANO STEPS. By the way: comfortable uphill riding is a real domain of the stable trikes from HP VELOTECHNIK.

All three systems offer impressive ranges. Invest even less thought into the location of your next power outlet with our optional extra battery. NEODRIVES wins the comfort rating in this exciting area: Instead of switching batteries, you simply switch a single cable. Moreover the Swabian have more capacity in their battery.

Standard mount for the NEODRIVES display: the display beside the handlebar. A great solution for riders who do not want the display constantly in view, and which also gives people with Comfort and Therapy accessories on their trike easier entry and exit.



The SHIMANO STEPS System requires the display to have the Top-View mount — with all the advantages of this mounting position, but without any of the drawbacks: There are no restrictions for any of the accessories!







All E-drives in comparison

E-Trikes

Technical Data

System	SHIMANO STEPS	SHIMANO STEPS	NEODRIVES	Go SwissDrive
	E5000	E8000	Z20	G45p
Available for	all Scorpion-Models	all Scorpion-Models	all Scorpion-Models	Scorpion fs 26 S-Pedelec
	excl. S-Pedelec	excl. S-Pedelec	excl. S-Pedelec	(Outside EU: all 26" rear wheel trikes)
Support	up to 25 km/h (16 mph)	up to 25 km/h (16 mph)	up to 25 km/h (16 mph)	up to 45 km/h (28 mph)
Start assist	up to 6 km/h (4 mph)	up to 6 km/h (4 mph)	up to 4 km/h (2.5 mph)	up to 20 km/h (12 mph)
Reverse gear*	-	-	up to 3 km/h (1,8 mph)	up to 3 km/h (1,8 mph)
Range**	up to 145 km (91 miles)	up to 80 km (50 miles)	up to 145 km (91 miles)	up to 75 km (46 miles)
	(up to 340 km / 211 miles with	(up to 200 km / 124 miles with	(up to 290 km / 182 miles with	(up to 150 km / 93 miles with
	additional battery, folding limited)	additional battery, folding limited)	additional battery, folding limited)	additional battery, folding limited)
Force amplification	3 levels: Eco / Normal / High	3 levels: Eco / Trail / Boost	5 levels (individually adjustable)	5 levels (individually adjustable)
Noise level	very silent	silent bottom bracket	extremely silent	extremely silent
	bottom bracket motor	motor	hub motor	hub motor
Max. torque	40 Nm (at the front motor)	70 Nm (at the front motor)	40 Nm (at the rear wheel)	45 Nm (at the rear wheel)
Rated power	250 W	250 W	250 W	370 W
Rechargeable battery	SHIMANO 36V Li-Ion	SHIMANO 36V Li-Ion	BMZ 36V Li-Ion	BMZ 36 V Li-lon
	removable, with lock	removable, with lock	removable, with lock	removable, with lock
Capacity	I4 Ah	I4 Ah	I7 Ah	17,5 Ah
Energy content	.418 Wh	418 Wh	612 Wh	636 Wh
Battery weight	2,7 kg	2,7 kg	3,5 kg (7.7 lbs)	3,4 kg
Battery life	800-1000 charging cycles	800-1000 charging cycles	800-1000 charging cycles	800-1000 charging cycles
Charger	SHIMANO ECE-60021(2 A)	SHIMANO ECE-60021(2 A)	BMZ fast charger 4A	BMZ fast charger 4,5A
Charging time	.6,5 hours (3,5 hours 80%)	6,5 hours (3,5 hours 80%)	4,5 hours	4,5 hours
	without memory effect	without memory effect	without memory effect	without memory effect
Charger weight	I kg (2.2 lbs)	I kg (2.2 lbs)	0,85 kg (1.9 lbs)	0,85 kg (1.9 lbs)
Drivetrain	SRAM X4 8 speed derailleur gearing	SHIMANO XT Di2 11 speed derailleur gearing	g Sram 30 speed derailleur gearing	SRAM 30 speed derailleur gearing
	twist shifter	with button (electric)	bar end shifters	bar end shifters
	20": 44 / I I - 34 teeth	20": 50 / I I- 46 teeth	20": 60-52-40 / II-36 teeth	52-42-30 / I I-36 teeth
	26": 38 / I I – 34 teeth	26": 44 / I I – 46 teeth	26": 52-42-30 / II-36 teeth	
Drivetrain	SHIMANO Nexus Di2 8 speed	ROHLOFF 14 speed	PINION C1.12	PINION C1.12
(alternatively)	rear wheel internal gear hub	rear wheel internal gear hub	12 speed internal gear transmission	12 speed internal gear transmission
Additional weight	ca. 8,3 kg (18.3 lbs)	ca. 8,5 kg (18.7 lbs)	ca. 8,7 kg (19.2 lbs)	-
Display	black/white display	black/white display	Colour display above	Colour display above
	above handlebar	above handlebar	handlebar (Top View)	handlebar (Top View)
	(Top View)	(Top View)	or side of handlebars	or side of handlebars
	optionally with big battery pack	optionally with big battery pack	Touchscreen	USB 5V, I A
	(504 Wh) and fast charger (4 A)	(504 Wh) and fast charger (4 A)	USB interface	Bluetooth interface
	KEC-E6000 (2,5 hours: 80%); on	KEC-E6000 (2,5 hours: 80%); on		Boost function for maximum power
	option additional battery (504 Wh)	option additional battery (504 Wh)		

^{*} Reverse gear for NEODRIVES Z20 available from Spring 2020, can be retrofitted via software update

** Range as stated by manufacturer: NEODRIVES: 100 W rider input, support level 1, flat terrain, smooth roads, 70 kg (154 lbs) payload incl.

rider; Shimano STEPS 5000: under Shimano test conditions; Shimano STEPS 8000: Support level Eco, Total weight bike, rider 100 kg (220 lbs), measured on ascent with 800 height meters (0.5 mi).



BodyLink seat



The rider is the benchmark. In the recumbent position, the pressure on the spinal discs is a third of that when bent forward. Active sitting and pedaling strengthens the back muscles. The urologist Prof. Porst advises people to use recumbents: "This means of transport offers all the benefits of a normal bike but with the added benefit that it does not restrict the blood flow around your genitals." The sports medicine specialist and urologist Prof. Frank Sommer has done the research: The recumbent seat is better than any futuristically designed bike saddle.

Do recumbent riders love for longer?

The height and tilt angle of the head rest can be adjusted. Washable cushion with reflective strips and webbing for inserting battery-powered rear lights. A great bag: The microbag has a I liter capacity for storing life's most important little items.

Detachable from the seat, it can also be used as a practical hip bag.

The blue, ripstop-nylon rain cover can be stored in the microbag behind the seat.



Optimum ventilation with the Airflow seat cover. The breathable mesh fabric is combined with a comfortable cushion.

Air flows through large openings in the spinal canal.

This seat is completely tailored to you: BodyLink – ergonomics are flexible!

Imagine getting off your bike after a long and energetic day of riding and your only ailment is the achiness in your thighs. You can relax and forget any concerns about bruises on your bottom, numb private parts, painful spinal discs, or a stiff neck.

This ergonomic seating luxury is made possible by the comfortable *BodyLink* seat from HP VELOTECHNIK. On your old bike saddle, your entire body weight rested on a very small seat pan area. Conventional recumbent seats force your back into a rigid shape or don't allow defined lumbar support specifications due to molded seat pans. *BodyLink* is tailored to the natural S-shape of the spine: The combination of a rigid, anatomically-shaped hard shell seat and a slightly curved back rest with a flexible connecting section offers you perfect support over a large area. The height of the front seat edge and the lumbar support in your lower back area can be easily and infinitely adjusted using the quick release lever. The same applies to your back rest: Sit upright in the city and recline for speedy rides in the country.

Practical: You can stipulate your seat size with millimeter-precision; the length of the *BodyLink* is infinitely adjustable. For shorter riders, an adaptor moves the seat forward by about 4 cm (1.6"). HPVELOTECHNIK manufactures the innovative recumbent seat from fiber-reinforced plastic with a lightweight foam core and a reflective side edge for improved visibility in the dark. Test it for your-self: Your HPVELOTECHNIK dealer will happily show you the great ergonomics offered by this seat!





ErgoMesh seat



Laid-back comfort: *ErgoMesh* – the breathable mesh seat in two sizes and at two heights

The relaxed feel of the comfortably reclined position is an important benefit of your HPVELOTECHNIK trike. The seat position has more of an impact on how your ride feels than any other component. In addition to your preferred seat type of either a rigid BodyLink hard shell seat or an airy ErgoMesh seat, your trike's character is predominantly determined by the seat height. As with a sports car, a low seat allows a sporty, dynamic ride with maximum tipping stability. A high seat helps you get on and off the trike easily and provides a clear view in traffic. In return, with a higher seat position, a more moderate speed must be maintained on tight bends.

The ErgoMesh HS plus seat is positioned 11 cm (4.3") higher than the ErgoMesh seat and a whole 14 cm (5.5") higher than the BodyLink hard shell seat. Both ErgoMesh seat versions incorporate a stable aluminum frame, which

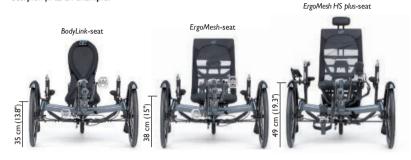
is anatomically designed for ergonomic back support. The highly breathable seat fabric can also be adjusted to your back shape using a number of wide tightening straps. It has the right level of elasticity to prevent bruising from your belt or thick clothing seams.

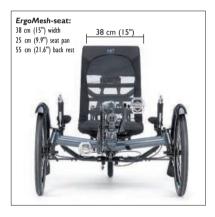
HP VELOTECHNIK has equipped the washable seat cover with breathable side padding that provides excellent side support against the

lateral forces experienced by trike riders. A removable, waterproof seat cushion increases the sitting comfort for your buttocks.

A head rest with adjustable height and angle can be attached as an accessory. The seat has a practical zipper pocket in the back rest, in which the optional rain cover can also be stored. The back rest also has a installation hole for the for a safety flag. Reflective strips on the sides make you more visible in the dark.

Various seat heights of the Scorpion fx as an example:







Change your level more often! The anatomically refined seat systems from HPVELOTECHNIK can be removed in 15 seconds using the quick release levers, making them wonderfully interchangeable.

When attached to HP VELOTECHNIK's highest trike, the foldable Scorpion plus (picture right page), the ErgoMesh HS plus seat has a seat height of 57 cm (22.5") — higher than your office chair! When traveling home in traffic with the ErgoMesh HS plus seat, you sit comfortably at eye height with car drivers. When taking your trike out for a sporty ride on the weekend, switching to a lower seat offers you less air resistance, an efficient use of pedaling force, and maximum stability when cornering quickly. The long handlebars with an 8 cm (3") higher grip position are needed for the higher ErgoMesh HS plus seat and also ideal for shorter riders using the low seats.

Big is beautiful: The 38 cm (15") wide *ErgoMesh* seat is also available as an *ErgoMesh XL* or *HS XL* seat with a width of 43 cm (17"), a 5 cm (2") longer seat pan and 4 cm (1.6") higher back rest.

ErgoMesh HS blus seat

on a Scorpion plus 26



Perfect break-time reading: The Scorpion news

"The new Scorpion fs speaks for itself. (...) When put on our cobblestone test track, it really had the wow factor: The full suspension irons out all bumps with subtle precision and eagerness." AKTIV RADFAHREN

"Thanks to the smaller wind resistance area, recumbent riders need to use less energy to travel at the same speed as an upright rider with a larger wind resistance area. To top off this blatant injustice: the recumbent rider is also seated more comfortably. Comfort that turns the Scorpion's speed into a relaxed experience. (...)

The *Scorpion* is most impressive when abruptly changing direction on a slalom course, at high cornering speeds, and when braking with the quickest possible deceleration. Simply pull on the handlebar or apply the brake on one side only; until you have learned to corner more quickly by correctly applying the brake on the inside of the bend, the award-winning chassis is extremely forgiving. After all, *Scorpion* riders want one thing above all: fun." Frankfurter Allgemeine Zeitung

"Ride to the top and the grandiose view of the Danube opens out in front of you. (...) The bottom brakket with the large 60 tooth chainring has already started to descend, the *Scorpion* picks up speed by itself.

The under seat steering lies firmly in my hands, two fingertips touch the brake levers for the two disc brakes on the front wheels.

Four pedal rotations with full pressure from my back and the Scorpion accelerates like a rocket. Click, click, move the thumb lever for the rear shifter right forward, full speed ahead!

We're taking off; my heart jumps for joy! At the bottom, I encounter a gravel parking lot – the perfect place to stop: I hit the lot at an angle, the right wheel rumbles over the ground, the rear brilliantly absorbs the grassy cross-ridge in front of me. There is no risk of skidding despite the loose ground and no sensation of tipping.

Hard on the brakes and the Scorpion stops like a Porsche, standing still in a huge cloud of dust – I thump my thighs with joy. Brilliant!" AKTIV RADFAHREN

"The Scorpion is a comfortable travel and touring trike with an aluminum frame. As it only has one rear wheel, HP VELOTECHNIK does not need a differential and can use the suspended rear wheel swingarm of two-wheeled recumbents. That offers ride comfort. The short wheelbase enables cornering maneuvers like those with a go-cart." ABFAHREN

"Don't let anyone say that trikes are for beginners or old ladies: The Scorpion trike enables riders to climb hills that defeat many mountain bikers." PM MAGAZIN

"HP VELOTECHNIK has put a great deal of expertise as a recumbent manufacturer into the *Scorpion*: With the full-suspension rear axle, special racks, and disc brakes on two front wheels, the exotic vehicle is perfect for both long trips and short everyday journeys." TREKKINGBIKE

"The HP VELOTECHNIK Scorpion is one of the finest trikes available. (...) This trike rides like a refined tadpole that has been built for years. HP VELO-

Teclinik und Moor

TECHNIK is serious about recumbent design and the Scorpion demonstrates this — and shows that they are very serious about the trike market. The Scorpion is one impressive trike." RECUMBENT CYCLIST NEWS

"I think the best way to sum up the Scorpion is that it is smooth: the transmission is quiet, the steering is light and easy-action, and the suspension does its job without drama. It rolls along willingly, and those fat frame tubes really lend it a solid feel." VELOVISION

"The Scorpion is beautiful. It's very slick and very modern with a sort of "practical performance" look. (...) In fact the word "solid" is a word that I've often used to describe HP VELOTECHNIK's bikes and it also applies to their first trike. The Scorpion has that same secure, dependable and silent personality that the Street Machine Gte, Speedmachine and Spirit all have. It's hard to describe but it's very confidence inspiring. It definitely will give you faith enough to launch out on any journey without worry of your 'bent letting you down." BENTRIDERONLINE

"The test verdict: Outstanding.



Innovative technology

meets recumbent. We were impressed with the HP VELOTECHNIK Scorpion fs right from minute one. The sporty ride properties, the excellent comfort, and the great workmanship are all-round impressive. There is a definite risk of getting addicted to this bike!"

AKTIV RADFAHREN

"With the Scorpion, HP VELOTECHNIK rings to the market a so-



phisticated, expertly-made touring trike, which impresses riders with sophisticated technology, well-selected components, a safe ride, and a whole lot of riding fun! A test ride is a must!"

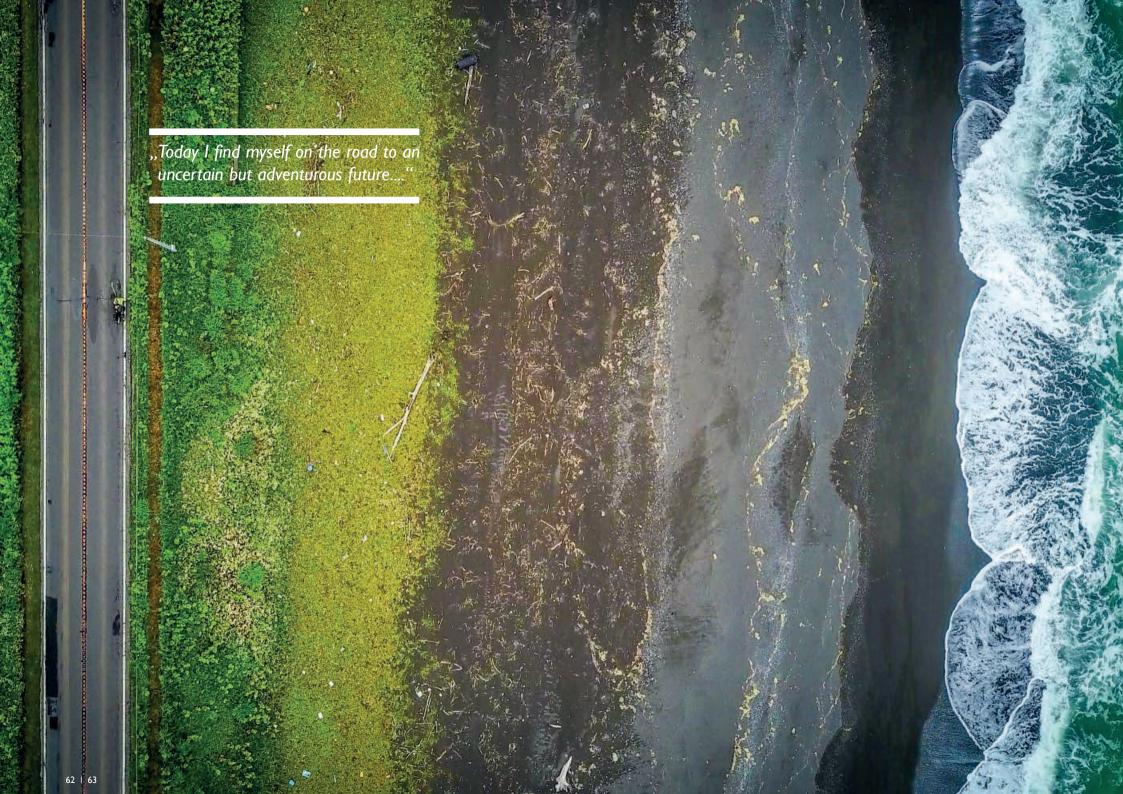
AKTIV RADFAHREN



The recumbent manufacturer HP VELOTECHNIK has been named Germany's best bike manufacturer by the sector association VSF for five

time. The bike dealers that are members of the VSF assessed their most important suppliers in categories such as product quality, delivery quality, customer service, and complaint handling. HP VELOTECHNIK received particular praise for its high quality and outstanding customer service.





Adventure



All around the World: "JaYoe!"

Matt Galat has a mission: Travelling around the world, living life to the fullest and a camera in his hand to capture moments. The ultimate vehicle for this unique trip: the Scorpion fs.

When Matt Galat first approached us at HP VELOTECHNIK to tell us about his plans to travel the world with a trike, he introduced himself full of JaYoe-Spirit: "I am from USA, live in China and I'm going to visit you in Kriftel to explain what I want to do. I am on a mission. A mission to see the world, to capture moments, to have as many amazing experiences as I possibly can and share them with the world." A little later, the professional videographer arrived in our factory with his film equipment and a detailed plan: "I'm embarking on the JaYoe World Tour, a cycle and adventure tour cutting a path around the world, from Ningbo, China to Los Angeles, California. From the seat of a specially built recumbent trike, fully loaded with photo, audio and video recording and editing components, I will produce content along the way. My hope is that others can become inspired, like I have, to explore their world in their own special way."

"This trip is not only about getting from A to B: It is about accomplishing larger than life goals, things as a kid I thought were merely fantasies. It's about living life to the fullest, adding fuel to my life in the form of travel and adventure. This is the embodiment of JaYoe!" On his bucket list were such highlights as climbing the Mount Everest or base jumping into the Swallows Caves in Mexico.

We finally had one question: What the devil does JaYoe mean? Matt's simple answer: "JaYoe is a phrase taken from the Chinese. Literally it means ,to add fuel', and is spoken as a form of encouragement to anyone trying to excel at what they are doing. All you need to do is add enough fuel, and anything is possible. It goes beyond travel and becomes a mantra for life." So we added some fuel to his plan and started the cooperation by building a unique JaYoe-Scorpion fs 20. From that point on, Matt has visited many countries, and continues touring and frequently posts vlogs on his adventures – see http://jayoe.com/



Matt Galat

Matt (Matthew) Galat was born in Detroit Michigan on June 21st, 1979. He grew up as, in his own words, an aimless dreamer, encouraged to follow his heart above all else. Driven by integrity to strive for success, he pursued a self employed life, taking him thru numerous ups and downs. From Detroit to Florida, Florida to Las Vegas, then Las Vegas to Ningbo, China. In China he found his passion for travelling, as well as his desire to explore.





Adventure



Tilmann Waldthaler on his Scorpion in Cairns



Panoramic view from the seat of the recumbent



The road to nowhere





Beastly fun in the outback



Protective shade



Idyllic campsite

"I've always wanted to try this relaxed-looking riding style. On my tour from Alaska to Patagonia, I met lots of enthusiastic recumbent fans who raved about how great, how attractive, how elegant, and above all how comfortable they are. Now I want to experience this for myself – and have been given the opportunity to do so. I'm greatly looking forward to this new experience. Sometimes even dreams of a new challenge in the middle of the desert become a reality."

On his journey from Alice Springs to Cape Leeuwin, Tilmann travels 3,600 km (2,240 mi) across the Australian continent. He is accompanied by extreme temperatures soaring to 45°C, dusty dirt tracks and strong winds, but above all by the helpfulness of the people he meets and their friendly interest in his trike. The best part for Tilmann: "Leaning back and enjoying the landscape to soak up the new ride sensation and having the opportunity to undergo these experiences. A fascinating 180° view right in front of my eyes." *Please visit www.tilmann.com*.



Fuel consumption: 7 liters of water / 100 km (12 liters per 100 mi, desert mix)





Dominik Ehrich: The fighter and the Scorpion

For the mountain rescue team at the Kitzsteinhorn, November 23rd, 2008 is a day like any other. Skier buried under an avalanche. Mission. Search. Digging through the snow. Located – rescued and flown out by helicopter.

For Dominik Ehrich it is the day that changes his life. He is lucky – in a way. Because he has been buried under the white masses just a couple of minutes too long. The experts say that after being buried for more than 15 minutes in an avalanche oxygen starvation starts to become critical. For Dominik it has been 17 minutes.

Three weeks later the doctors wake him from the artificial coma. The athlete has become a helpless, bed-ridden nursing case. Training with the ski squad? Never again. Biking up to the Kampenwand? Forget it! Dominik is suffering from ataxia, as the doctors call it. His muscles are powering with their counterparts simultaneously. But what can you expect when leg extensor and leg flexor (muscles) block each other?

"Five years after the accident I wanted to find out where I stand. Biking on Teneriffa, with mountains, muck and dirt."



His doctors oracled then: "You are lucky if you don't end up in a vegetative state!" But that is no option for Dominik. He is an athlete. For one and a half year he fights in a wheelchair. Begins to re-program his body step for step. The doctors are impressed. In their eyes a life without a wheelchair would be a huge success for Dominik. But his mind is already set on bikes again. And on the Kampenwand. But reality means the walking frame. For one and a half years again. Then he casts the frame aside and exchanges it for crutches.

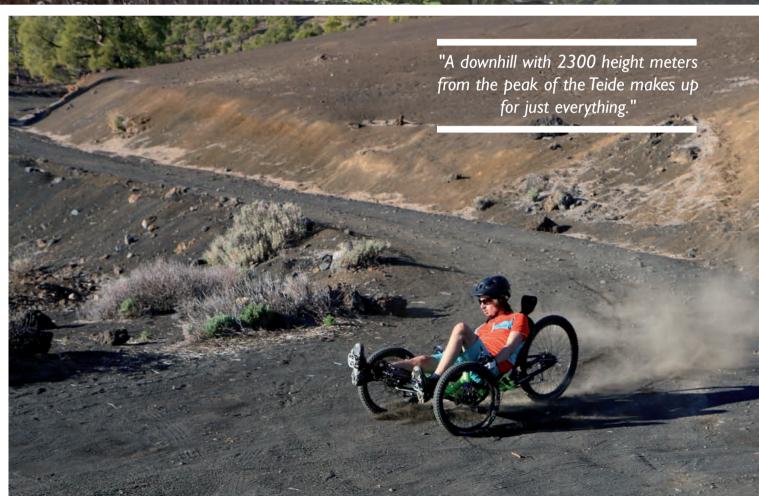
Only speaking defies him even after six years. That's why he writes. Short messages for his vis-à-vis. Articles for newspapers, bike magazines. He completes an internship at "BIKE" magazine. Then the turning point: for "FAHRRAD NEWS" he tests four trike models. On these the self confessed motion-junkie (Dominik on Dominik) can run riot. And he falls in love with the *Scorpion fs* 26 by HP VELOTECHNIK.

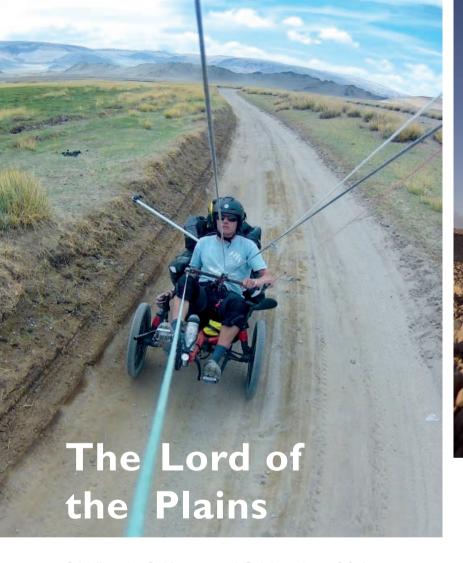


"I triked into a new life, and the Scorpion has been and still is a real emotional support"

The trike offers the perfect kick: "The cyclic pedalling motion has a harmonizing effect on both halves of the brain" he says. Nerve re-generation becomes enhanced. And his lungs, almost caved in then, work more and more powerful. But the best is: "This completely new motion- and speed feeling: to master a new piece of sports equipment perfectly in spite of all restrictions, gives an unbelievable sense of achievement."

He masters the Scorpion well enough to feel confident to fly to Teneriffa for four month. Writing coverage and scouting the island. The trike of his choice: the terrain going Scorpion fs Enduro by HP VELOTECHNIK. When he comes back in Mai 2014 he talks of "we" and "my green friend". Lets see — maybe he introduces the Kampenwand to his green friend one day ...







A company that builds exceptional bikes, always meets people with exceptional ideas. When Matthias Ramsel presented us with his wish how to use one of our *Scorpions*, we were somewhat perplex. We had to ask, "How should this work?" since it was obvious that what Matthias was planning has never been conceived from the designers of this trike and was and is far removed from it's intended use and any warranty.

Matthias ideas were challenging – not only from a technical point of view, but also on a personal level. To prove his competence, Matthias calmy showed us some photos of his last bike tour – which took him from German Hesse a few thousand miles far into the Himalaya.





Video-Link: Matthias Ramsel (Rider, Adventurer, Kite-Triker) with moving images from Mongolia https://www.youtube.com/user/springpatt



Matthias next project: A "Transmongolian-Kite-Trike-Tour". While sitting on one of our trikes he aspired to "fly", e.g. let himself be pulled by kite from Russia over the Mongolian plains right into Beijing. Mongolia had two distinctive advantages for his plans: reliable, strong western winds to carry him forward and empty, dusty high plains witout trees, telephone poles, or other obstacles.

A bike rider who has the wind as a friend ... This did sound great – but it had a hitch. As every triker knows, you have to have both your hands on the handlebars, especially at high speeds over uneven terrain. At the same time, to steer a kite you need another two hands.

The solution Matthias presented to us was not a biological sensation but a very unique and logical technical idea: The *Scorpion* would be steered with the pedals with straps running from the pedals to the handlebar allowing even the smallest movement to steer the trike. If the kite is pulling you forward, you do not need to pedal.

Nice theory, possibly disastrous. The first tests on the flat beaches in Holland proved, however, it works! Mostly! Even an experienced adventurer like Matthias will have the occasional setback. But, it does not stop him.

Finally Matthias took-off with one *Scorpion fs*, three "Flysurfer" kites, and lots of baggage to Novosibirsk, Russia.

Then ... silence. No word from Matthias. Of course: No telephone poles also means a lack of internet. What he did have makes for a great adventure: sandstorms, ice rain, temperatures from -5 to +45°C, and after a number of roll-over "events", a broken handlebar.

In the end we received a victory message: Arrival! Totals: 90 days on the trike, 5000 km (3106 mi) from which 1200 km (745 mi) were "flown" in Kite-Drive mode within 32 days, top speed with baggage 53 km/h (33 mph). And one small detour of 2000 km (1242 mi) due to a strict Chinese border officer. But isn't Lake Baikal instead of Beijing a very nice arrival point, as well?

What comes next? During wintertime, Matthias has already run tests in the snow of an deserted air field on top of the "Wasserkuppe", Hesses highest mountain. He tried out a new combination of trike, kite and a couple of old cross-country skis – yep, it also could work on snow! South Pole or bust?

Tourblog: www.kite-trike-tour.blogspot.de









Recline in style



Their shared passion for innovative bike technology brought founders of HP VELOTECHNIK, Paul Hollants and Daniel Pulvermüller, together early on. Already as students they became the winner of a national engineering competition with their fully suspended tricycle velomobile, which was the foundation stone for an impressive development from a garage lab to one of the most advanced bike and trike manufacturers in Germany. While still studying industrial engineering and mechanical engineering at the Technical University of Darmstadt, Hollants and Pulvermüller started their own business in 1993. The company name HP VELOTECHNIK is composed of the surnames of the founders and also alludes to the English name of the still exotic vehicles of that time: Human Powered Vehicles.



"HP VELOTECHNIK stands for innovative, reliable recumbent technology on two or three wheels: fast bikes and trikes on which one can enjoy the panoramic views with laid-back comfort and style. Ergonomics and refined design act at the forefront. Forget about pressure points in the nether regions, sore wrists or a stiff neck. No matter whether you are commuting or are on a grand cycle journey - on our bikes and trikes you feel good, look good and make good progress."



Paul Hollants, one of the two founders of HP VELOTECHNIK, public relations and business management director



During pre-assembly the freshly powder coated enduro frames take a round trip on the carousel. Here the folding hinges and the suspension are assembled



Outstanding design. Hollants and Pulvermüller are convinced: great technology has to look great - sleek, lean, structured and functional. That is why HP VELOTECHNIK'S products have been distinguished with multiple renowned design awards.



A front wheel finds it's place on the forged high tensile strength wheel carrier of the Scorpion fs Enduro chassis. For this model blue bellows protect the strut.

Today, the engineers at HP VELOTECHNIK have more than two decades of experience on the design and optimization of bikes, trikes and accessories for active people. With over 35 expert engineers, skilled mechanics and dedicated customer service specialists, HP VELOTECHNIK manufactures around 2000 bikes and trikes per year and is one of the leading manufacturers delivering premium recumbents to Europe and the USA. All signs point to future growth: An increasing proportion is exported to more distant regions such as Australia, Japan or South Africa.

In the spacious recumbent factory in Kriftel close to Frankfurt, Germany, each trike is built to order by hand by specialised technicians. A welding shop enables own prototyping, Computer-controlled test stands assist in the quality assurance of ach. They strictly believe in well engineered, long lasting, high qualithe bikes and trikes. The focus is on the design of innovative cycles and matching accessories and the assembly according to customer requirements using the comprehensive modular system. The basis of success of the developments are thereby the extensive riding experiences of thousands of customers all over the world.

Before an idea becomes part of reality HPVELOTECHNIK's skilled engineers perform accurate reseach and tests. They team up with cooperating universities to ensure the latest technical approty products instead of fast product cycles.

Based on the same principles, HP VELOTECHNIK exclusively distributes their premium products through a well-trained network of specialised cycling stores. These retailers ensure an excellent advice, extended test rides and a premium after-sales service.

CEO Daniel Pulvermüller gets his hands dirty during prototype production. The series frames made of highstrength aluminum alloy are welded and heat treated by dedicated frame builders in partner factorys.

About 1500 different components are awaiting their assembly in an individually configured bike in the recumbent maker's stores.

HP VELOTECHNIK: Pure recumbent passion to enjoy!

The centerpiece: The lightweight, rigid frame is made from high-strength, large diameter tubes of 7005 T6 aluminum alloy. The CNC-machined tubes, custom press forged folding hinges and laser-cut plates are linked through precise craftsmanship with impressive finely scaled, heavy-duty welding seams in the TIG process.

Tricycles are exposed to high torsional forces when cornering, accelera-

Tricycles are exposed to high torsional forces when cornering, accelerating and braking, particularly with a heavy luggage load. In order to efficiently bring your pedaling force on the road any time and to optimize driving safety in extreme conditions, the engi-



neers at HP VELOTECHNIK minimize flexing of the frame. An example: HP VELOTECHNIK's high-strength aluminum main frame tube with a solid 2 mm wall thickness provides a 34 % increase in torsional stiffness compared to a steel tube of similar weight and a wall thickness of I mm. You will feel it at once: the precision of the steering, the sporty handling and safe braking.

Each frame undergoes a heat treatment process to remove stresses from bending and welding and to achieve its maximum strength. The frame is perfectly smoothened before receiving an inside and outside anti-corrosion coating. For a uniquely brilliant finish, the frames then are painted by hand with a tough powder coating. Depending on your chosen color, it will be either a deep rich multilayer color or a combination of base color and clear coating. Besides the offered standard colors, all *Scorpion* models can be painted in your preferred custom color!



The experience of many years of precise craftsmanship confirm: attention to detail is the base for perfection.

Measuring realtime material stresses for FEM analysis in the 3D CAD model.



Inhouse testing banks for rigorous functional and fatigue strength tests of components.



Overload testing during prototype test rides on the road and in more extreme situations



Computerized pressure distribution analysed on a *BodyLink* seat for the ideal shape.



Trike development at HP VELOTECHNIK

The focus is on people. At HP VELOTECHNIK trikes are designed on the basis of your needs, modern construction methods and ergonomical sense, down to the smallest detail. Modular, orthopaedically designed seating systems such as the highly adjustable *BodyLink* seat or the well ventilated *ErgoMesh* seat in various heights, widths and lengths help creating a perfect link between you and the bike.

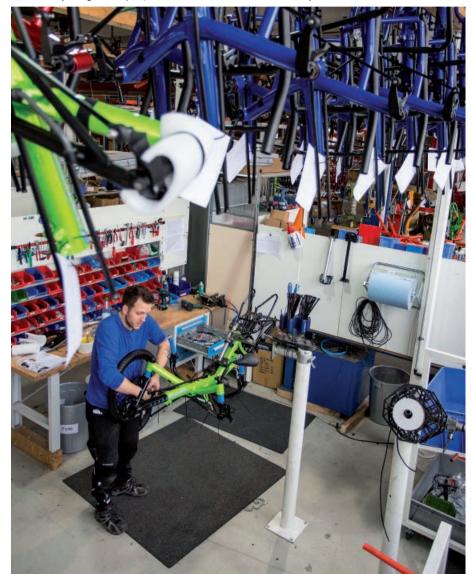


"A driving sensation like in formula 1, enormous stability on snow or gravel or with luggage facing a hill climb — who ever has tested our touring trikes has quickly been fascinated by the driving pleasure.

And you don't even have to take your feet off the pedals for your snack break!"

CEO Daniel Pulvermüller, engineering and production director

An individually configured Scorpion fs Enduro trike is assembled in the workshop.









Top: Well greased? The folding joints of a Scorpion fs are thoroughly inspected by trained Mechanics. More than 25 apprentices have learned their trade at HP VELOTECHNIK. The scope of apprenticeships covers bicyle mechatronics as well as wholesale and export merchants.

Left: Tuesday is barbecue day. Now things are inspected on the Grill which has been welded to a double-seater-sofa-tandem by the apprentices during one of their projects.

Right: Once a year it is open day at the factory. Paul Hollants explains to the public how the wheels get to roll.

HPVELOTECHNIK is committed to the advancement of cycling in the following associations:







Features

Optional features and accessories from HP VELOTECHNIK: With a Scorpion trike, you'll be ready for the challenge

Optional features for true individuals: Have you got your own notion of your ideal bike technology? Our modular system enables us to build your trike to meet your needs and desires. A whole range of reliable features and components is available for your Scorpion, all of which have been specially developed to excel in everyday use. For example, the Streamer front fairing extends the bike season to all year round. With our torsionally-rigid luggage racks, your bags are positioned securely on the frame where they enjoy full suspension instead of swinging from side to side on the fork or handlebars.

On this and the next double page, let yourself be inspired by what is classically called an accessory, but on a trike like the *Scorpion* the ride will only be a complete pleasure. Or can you imagine setting off on a tour as casually with an upright bike as with a coffee mug on the *Side Bag Mount* of a tricycle?

For the drivetrain and brakes, we use reliable, easy-tooperate components from prestigious manufacturers. We even combine these to create unconventional solutions, such as one-handed brake and shifter operation.

If you want to go beyond the optional features shown on the next pages of this brochure and equipp your Scorpion in line with your own ideas, we will gladly supply your dealer with the complete trike technology in the form of our frame kit.

Please let your dealer give you comprehensive advice. Disc brakes and hub gears can make noise; tires, shocks, and chain drives can wear out. Your dealer knows the advantages and disadvantages of the various components, can tell you the maintenance intervals, and will gladly help you tailor your Scorpion's features to its intended use, your riding style, and your needs.

Years of fascinating riding pleasure await you!

Luggage



The stable Rear rack for two panniers up to 25 kg (55 lbs) load is optimal for the high lateral forces when riding a tricycle. Your panniers ride low and close to the rider, next to the rear wheel. The advantage of the Scorpion series with the smaller 20-inch rear wheel is that the platform for larger panniers is integrated above the rear wheel. The rack is made of aluminum in 14 mm tubing with black powder coating.



Always on top: You also want to load the Scorpions with the large 26-inch rear wheel? No problem. With the Top Load attachment it's so easy. With this platform solution mounted to the basic Rear rack, you can store up to 10 kilos (22 lbs) – and your tent or a basket rides along with the best suspension.



Ideal for heavy loads: The Scorpion fx as well as the Scorpion plus 20 and 26 can have an additional Lowrider carrier for up to two additional bags (up to 25 kg / 55 lbs) which can be mounted on the carrier. This allows the center of gravity to move a little lower and improves road performance even more. Integrated in the models with 20 inch rear wheel: the carriers bulky loads.



The Trailer hitch developed for the Scorpion by WEBER and HP VELOTECHNIK has a rigid connection plate, which is used to lower the coupling point by 5 cm (2"). This enables the luggage rack to enjoy full suspension without touching the trailer tow bar.



The universal side bag holder Side Bag Mount fits small bags as well as a variety of different attachments with up to 5 kg (11 lbs) payload. This ranges from waterproof handlebar bags such as those from Ortlieb to drink holders. The black anodized aluminum tube with 22 mm diameter can be attached to the ErgoMesh seat in various positions.



For the BodyLink: the Microbag as a great bag for the little tour. It offers one liter (61 CUI) of storage space for the important little things in life. When you remove the sturdy bag made of reinforced Cordura® from the seat, it transforms into a practical hip bag thanks to the supplied elastic strap.

Weather protection gear



Optimized protection with elegant lines: HP VELOTECHNIK has developed fenders especially for tricycles with our Trikefender. The inner side and the lower edge are pulled down to improve the splash protection to the rider, especially when cornering. The mounting elements are attached to the inside of the bike and are protected. The rounded profile with a width of 60 mm (2.36") makes it possible to mount tires up to 50 mm (1.97") wide like the SCHWALBE Big Apple.



If you like off-roading, you will appreciate our practical Rear mudguard Enduro for the rear wheel of the Scorpion fs 26 Enduro. The wide and strong construction with an aluminum support protects the neck and back of the head from splashing water and flying debris.



Rain cover for the BodyLink seat is made of blue ripstop nylon – so your seat stays dry after a rain storm. You can always have the "little blue" with you, it can be rolled or folded narrowly and then easily fits into the backrest (ErgoMesh seat) or into the BodyLink Microbag.



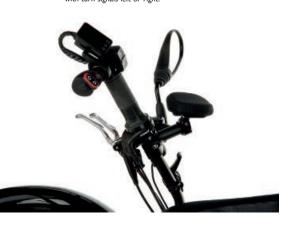


Easy insertion, safe transport and fast removal of walking aids.
The practical fastener adjusts seamlessly to diameters from 20 to
31 mm (0.78 to 1.18 inches). HPVELOTECHNIK's stainless steel clip

fixates the walking aid and releases it again with a non-fumbling

one hand operation.

Everything from a single source: People who need all the controls on their bike on one side of the handlebars choose the One-hand operation option: Thanks to custom-made manufacture, we can install engine control, gear shift, brake plus parking brake and light with turn signals left or right.



Comfort und rehab options



The standing-up support provides two grips, one positioned at each side above the left and right front wheel. They provide a firm grip and come handy to lift yourself up from the seat or to support when getting into your trikes. The standing-up support can be easily removed with one screw.



Pedal with heel strap: The alternative for those who do not want or may not be able to use SPD® system pedals. Easy entry with any kind of shoe through the automatically self-righting positioning. One hand tightening allows for safe and efficient pedalling. One grasp is enough to release the shoe again when needed.



The Ergo safety pedal allows fixation and an adjustment to the angle and the width of a foot. Practical large, one-hand operated hook-and-loop fasteners featuring an integrated steel spring. The SPD* pedal allows some lateral movement to ease the load on the joints when pedalling and offers real emergency exit options.



The Ergo pedal with lower leg support: especially for users with functional impairments of feet and lower legs. This allows simultaneous active and passive movements which can mobilise with every turn of the crank. Angle, width and height of the lower leg support are adjustable. This version does not rely on an SPD® pedal for stability reasons.



HP VELOTECHNIK has developed Support belts that are extremely easy to use for optimum fixation of the upper body and pelvis: The large range width can be adjusted by using the ratchet strap. Suitable for the ErgoMesh mesh seat.



Hand rest: a real increase in comfort for all trike drivers. The hands steer lightly without having to support the weights of the lower arm. The comfortably padded hand rests can be individually adjusted to all angles and inclinations. Also available with a possibility to fixate the lower arm — an ideal add-on for the one-hand operation of brakes and driverrain.



The Headrest for the BodyLink seat can be adjusted in height and inclination. The padding is made of mesh material with reflective stripes and a strap for inserting a battery rear lights and is also washable.



The Airflow seat cushion provides optimum ventilation for the BodyLink molded seat. The breathable spacer fabric is combined with comfortable cover. Large openings in the spinal canal allow for an air exchange.



Sporty: The SeatWings hip supports for the BodyLink seat offer optimum lateral support in fast curves. Your upper body remains freely movable so that you can dynamically lie down in curves. The flexible carbon supports are padded.



The Headrest for the ErgoMesh net seats can be adjusted in height and inclination in seconds thanks to its quick-release construction. The mesh upholstery is washable.



Very small, but a great time saver for those who frequently remove their seat:The Adjustable seat stop makes it easy to find a seat position once it has been selected. Adjustment: 0 to 4° from the middle position. Suitable for BodyLink and ErgoMesh seats.



Monarch RL air shock from ROCK SHOX. Practical: The spring stiffness can be simply adjusted to the payload using a shock pump. Equipped with adjustable hydraulic rebound damping and a blockable compression stage, it boasts the best response recorded in our tests. 262 g (9.2 oz) weight saving compared to the steel shock DNM 22.



Front Boom Quickadjust: Just open two quick releases and you can adjust your Scorpion to different lengths. Developed by HP VELOTECHNIK, the Front Boom Quickadjust gives you the advantage to easily change the length of the trike for transport or at any time a "shorter" trike is needed. Adjustment range approx. 15 cm (5.9").

Safety equipment and lights



Highlight: The Son hub dynamo lighting system for your Scorpion. Unmatched efficiency and extremely light. Always ready for use, even in rain and snow, when tire-driven dynamos slip. Ultra bright 100 lux LED headlamp B&M IQ-X bring extra safety with daytime running lights (Licht 24). B&M Toplight Flat S taillight with brake light. Parking light front & rear. Twin-wire cable in the frame.



Eyro Light Set:The 30 lux batterypowered light set from B&M has a USB charging port; a charging cable is included. The rear light Toplight Flat 5 is also from B&M and is powered from 2 AA batteries. The advanced dusk and dawn sensor turn the lights on automatically.



What the handbrake does in the car is done by the *Parking brake* on the tricycle: safe parking even on sloping ground. SHIMANO V-Brake with large thumb lock lever.



Coupled front brake: For all those who want to effectively control both front wheels at the same time with one brake pull. HP VELOTECHNIK offers this both as an option for the mechanical disc brake AVID BB7 and for the hydraulic disc brake TEKTRO Auriga.



With the extra large viewing window of the B&M E Rear mirror, you can see what's going on behind you. The field of view is easily adjustable, but remains in position even on rough surfaces. Mounted on the kingpin or with bar end bracket on the handlebar; optionally on the left, right or both sides



The classic rear mirror for cyclists: Mirrycle with slim design and round field of vision. Mounted at the end of the handlebar, when using bar-end levers with a bar-end attachment. You can also use it as a bike computer holder. Mounting on both sides possible



Safety is not a fashion statement:
Many recumbent riders enjoy using a flag to increase visibility in traffic; it belongs on their ride like a bell or horn. Our new logo and design brings a fresh level or awareness on the road to everyone.

Silver Reflective with orange Print.



The second second

Send a sign! With our turn indicator WingBling cyclists now easily can set their marks in traffic. Advantage: It is not only the communication with other road users that makes the WingBling a unique accessory to your trike. It makes your ride safer: In sharp corners you leave your hands at the handlebars.

Accessories



You will not be "unheard" of with the Airzound compressed air horn: the horn emits up to 115 dB, but you can also lower it to a tame 30 dB. The air chamber of the light plastic bottle (400 ml / 24 CUI, fits in standard bottle holders) can be filled very easily with a normal air pump.



Immobiliser: Push out the handle, pull out the key - and the powerful AXA Frame lock effectively locks the rear wheel. The AXA accessory Chain for Frame lock (I m / 39" long) is recommended as an extra to securely lock the trike



Everything in view and always within easy reach: The Universal Mount is the most practical answer to the question: Where do I put my mobile phone on the trike? Simply fasten the handlebar holder of your mobile phone, GPS device or other digital helper on the black anodized holder (approx. 7 cm / 2.75" long, 22 mm / 0.86" tube diameter) above the handlebar end.



The small version for the front:With the easy-to-fasten Speedometer mount for computers, you ensure tidy conditions on the bottom bracket. So you always have your speedometer in front at the wheel in view. Also ideal for plugin battery lights.



Everything protected: HP VELOTECHNIK offers a lightweight Chainwheel disc instead of the ram protection. This saves 150 g (0.33 lbs) of weight on the sporty SRAM 30 gears as well as rear wheel hub motor sets from NEODRIVES and GO SWISSDRIVE.



Drivetrain

Driving forward

Even with electric assist on the rise, a bicycle is defined as an apparatus which is mainly driven by human power. No other invention is able to do this as efficiently. The symbiotic combination of man and machine has inspired bicycle designers for the last 200 years. The history of the bicycle began with German engineer Drais' *Dandy Horse* and now extends to high end derailleurs with automatic shifting.

HP VELOTECHNIK's engineers have narrowed down the giant selection available today to find a selection of outstanding drive train systems, integrating them into our recumbents to perfectly satisfy your needs. This means that you always have the right option for your dream bike once we custom build your trike to your specifications.

Derailleurs or internal gears: Not only is there modern technology at work, but also two different philosophies which go beyond the ideas of 8, 14, 24, or 30 gears. Internal gear hubs allow you to shift while standing still. Derailleur shifting has its advantage with small changes between evenly spaced gears. Both internal gears and derailleur shifting can even be combined in our Tripleshift drivetrains. A further advantage for recumbents: You can use all the chain rings with all the cassette cogs since the chain is so long, that it makes every gear combination ridable.

The following pages focus on an overview of the shifting systems you desire. Your HP VELOTECHNIK dealer is ready to help to find the perfect set-up for your needs.



STURMEY ARCHER + SRAM / SHIMANO

Tripleshift 24 / 27 speed

Reliable Combo: Recumbent enthusiat's first love: The combination of a 3-speed internal gear hub plus derailleur shifting. The reliable internal gear hub from British pioneers STURMEY ARCHER allows not only changing gears when standing still, but it also expands the range of the derailleur shifting. Either 8 or 9 speed cassettes (SRAM X4, SHIMANO XT) provide a precision shifting experience, offering 24 or 27 gears.



SRAM

Sram 30 30 speed

The Elegant Racer: Are you looking for performance? Then the lightweight SRAM 30 with a triple crankset and 10 speed cassette is just right for you. The wide gear range and precision shifting ensure flexibility when you need it. The ergonomic barend shifters are a comfortable fit to your fingers and provide a reassuring "click" when operated.



XT Di2 11 speed

No more shifting cable: Changing gears at the push of a button and with extreme precision and speed through II wide-spread gears, that's what makes the Shimano XT Di2 electric derailleur outstanding. We offer this technical delicacy exclusively in combination with the STEPS E8000 e-drive.





Technical data

30 speed derailleur gearing

Gearing (20") 60-52-40 T / 11 – 36 T
Gearing (26") 52-42-30 T / 11 – 36 T
Development (20") ... 1,67 m – 8,2 m (5'8" – 26'10")
Development (26") ... 1,67 m – 9,5 m (5'8" – 31'2")
Shifter SHIMANO barend shifter
Cassette SRAM PG-1050
Rear Derailleur SRAM GX

Combination with motor .. NEODRIVES Z20 and G45p

II speed derailleur gearing

SHIMANO

Nexus 8 speed

offer for all those who prefer not to think too much about technology when cycling. We use the premium version of SHIMANO's low-maintenance 8-speed Nexus internal gear hub either as a mechanical gearbox or in the exclusive combination with the electronic Di2 gearbox, which fully automatically shifts the appropriate gear for the SHIMANO STEPS e-drive motor.



ROHLOFF

Speedhub 14 speed

The No-Worries-Package: The The World Tourer: Since 1998, the ROHLOFF Speedhub has become a mechanical legend. Uncountless world tourers have relied on the nearly indestructible internall gear hub with 14 evenly spaced gears. One of the reasons for its reliability is that the gears rest in a sealed oil bath. Your advantage: the extra-long HP VELO-TECHNIK twist shifter exclusive to HP VELOTECHNIK recumbents.



Рініон

C1.12 12 speed

The Extraordinary: The completely enclosed PINION 12-speed internally geared transmission integrated up front in the bottom bracket reliably propels you forwards with ease. HP VELOTECHNIK's extra-long twist shifter is easy to use. It is the perfect companion to the hub motors.



8 speed rear wheel internal gear hub

Gearing (20") 44 T (front) / 16 T (rear) Gearing (26") 44 T (front) / 22 T (rear) Development (20") .. 2,19 m - 6,64 m (7'3" - 21'9") Development (26") .. 2,12 m - 6,44 m (6'12" - 21'1")

Shifter Di2 with button Property When using STEPS e-drive only available with

> automatic shifter Di2. Manual switching also at the push of a button

Combination with motor .. SHIMANO STEPS E5000

14 speed rear wheel internal gear hub

Gearing (20") 52 T / 15 T Gearing (26") 46 T / 15 T Development (20") .. 1,45 m - 7,63 m (4'9" - 25')Development (26") .. I,71 m - 9,00 m (5'8" - 29'6") Shifter long ROHLOFF twist shifter by HP VELOTECHNIK

Combination with motor .. SHIMANO STEPS E8000

12 speed internal gear transmission

Gearing (20") 46 T / 28 T Gearing (26") 46 T / 36 T Development (20") .. 1,35 m - 8,21 m (4'5" - 26'11") Development (26") .. I,40 m - 8,52 m (4'7" - 27'11") Shifter long PINION twist shifter by HP VELOTECHNIK Chain tensioner by HP VELOTECHNIK with extra large pulleys

Combination with motor .. NEODRIVES Z20 and G45p



shifter for both PINION and ROHLOFF, tailored for the recumbent riders needs. Bar end shifters fit perfectly to the tip of your thumb and require less energy to precisely shift.





Open Choice: Twist or bar end shifters? This is not a philosophy decision, but an ergonomic. That is why we offer both for our discerning riders. Twist shifters are solid, reliable, and a mark on the grip indicates the current gear. HP VELOTECHNIK has developed an extra long twist

Special Edition

The Scorpion Special Edition: Ready to Ship!

Six pre-built models, available at short notice with an attractive price advantage

One visit to the dealer – and your new *Scorpion* is on its way. The *Special Edition* models from HP VELOTECHNIK are the perfect offer for those who make quick decisions: six trikes are waiting for you, covering many areas from the fast touring car to the comfortable everyday mobile for silver surfers. Your extra bonus? Compared to the same equipment from our modular system, you save money!

Good things take time: Usually the bikes are manufactured in our manufactory individually and according to your individual wishes and that takes time. Our six *Special Edition* models, on the other hand, can be delivered at short notice, and many dealers may have them in stock for you. Nevertheless, you can be certain: Each of these trikes is individually handmade by us in Kriftel!

Take a look at the six models: six trikes with different equipment for six different applications. Among the eight *Scorpion* series, we have identified your favourites. This starts with the non-motorized *Scorpion* fs 20 and the *Scorpion* fs 26. Both can also be had with a SHIMANO Steps E8000 system. In the comfort models *Scorpion plus* 20 and *Scorpion plus* 26 the SHIMANO e-drive *Steps* E5000 supports you.

The equipment selected by us for all six Special Edition models includes high-quality components for everyday use that we have carefully matched to the respective area of use. This ensures maximum driving enjoyment and maximum driving pleasure for many years.



Enjoy optimum protection that also looks elegant:

The Eyro battery light from

B&M can be recharged via a

USB charging socket. The rear

equipped with two AA batte-

ries. Of course, the Eyro also

lights up when stationary. On

the motorized models, lighting

is supplied from the e-bike bat-

light B&M Toblight Flat S senso is

HP VELOTECHNIK has developed the Trikefender mudguards especially for use on tricycles.

HP VELOTECHNIK
hand rests are a real
gain in comfort for
all trike riders. Angle,
inclination and lateral alignment can of
course be individually adjusted!



optimally adapted

using the supplied

to the payload

No compromises: The heart of the Special Edition series, the frame, is the most intricate development in the trike segment from HPVELOTECHNIK: full suspension and foldable. Chassis technology with automotive engineering ensures outstanding stability even when braking in corners.



We equip the motorized Special Edition models with the lighting system (Q-X/Akku (headlights up to 140 Lux, taillights B&M Toplight 2C DC). Switching on and off is easy thanks to an optically highlighted button on the Steps motor control display.



One thing's for sure: Turn the key once on the permanently mounted AXA Frame lock — and thieves will think twice about putting their hands on your Scorpion.



You always have an eye on what's going on behind you in the extra large field of vision of the B&M E Rear mirror.



Rain cover made of blue ripstop nylon: So that you can continue riding even after the rain has stopped.

Touring models without motor

Commuting models with SHIMANO motor STEPS E8000

Scorpion fs 26 SE frame color Pure orange matt: drivetrain SHIMANO XT Di2 II speed, 36 V Li-lon battery (504 Wh), throttle up to 6 km/h, hydraulic disc brake Tektro Auriga Twin (right hand side), lighting system IQ-X/Akku (headlight B&M IQ-XE up to 150 Lux, rear light B&M T-Toplight 2C) 8.940,00 \in

Comfort models with SHIMANO motor STEPS E5000

Six times the right one – Equipment Summary

The bikes of the Special Edition series differ strikingly. But they all rely on a high-quality aluminum frame and the McPherson front suspension. The RockShox Monarch RL shock works precisely and sensitively in the rear, and thanks to the supplied high-pressure pump, it can be adjusted individually. The well-ventilated and breathable ErgoMesh seat can be adjusted in many ways. It is available in the standard size or optionally as a wide XL version. Standard equipment includes:

- Rear rack
- Mirror B&M F
- SCHWALBE Marathon Plus tires
- Trikefender mudguards
- Frame lock
- Parking brake
- Hand rests
- Headrest
- Rain Cover
- Flag
- Water bottle set

Have you found your favourite among the Special Edition series? The best thing we are going to tell you now: Even if you buy an off-the-shelf vehicle, you won't be missing out on individuality and perhaps even a touch of extravagance! Make your trike city-ready with the Universal Mount for Smartphone or GPS device or with our new Side Bag Mount fit for the big tour! You have special needs? Do you need an Ergo safety pedal? No problem: Our extensive additional equipment, tried and tested over many years, also fits perfectly to the Special Edition models. Your dealer will be happy to explain which accessories perfectly complement your bike.

You have the full range of equipment options and special accessories with an individually built *Scorpion* trike from our modular system. You will find all the details on the next four pages.

The choice is yours! Our modular kit for your dream trike:



Basic model										
□ Scorpion (SCO) light-weight, fast Sports-Trike, 26" rear wh	neel							3.	590	.00
□ Scorpion fx (SCF) foldable, medium high-seated Travel-Tril										
,										
□ Scorpion fs 20 (SFS) foldable, full suspension Action-Trike,										
□ Scorpion fs 26 (SFL) foldable, sull suspension Action-Trike										
□ Scorpion fs 26 Enduro (SFN) foldable, full suspension Mo										
□ Scorpion fs 26 S-Pedelec (SFE) E-assist up to 45 km/h, 26	6" rear whe	el						9.4	490	,00
☐ Scorpion plus 20 (SPS) foldable, high seated, full suspension	on Comfort	-Trike, 20	" re	ar v	vhe	el		4.8	390	,00
☐ Scorpion plus 26 (SPL) foldable, high seated, full suspension										
, , , , , , , , , , , , , , , , , , , ,		-,								,
Basic configurationOption with upcharge	O Option no Not availa		SCO	片	S	교	ĸ	SFE	PS	SPL
Frame	- INOC availa	ible	S	S	S	S	S	S	တ	S
Colors										
□Front boom black anodized		0,00	•	•	•	•	•	•	•	•
□Peeka blue		0,00	O	_	_	_	_	_	_	_
□Anthracite grey metallic matt		0,00	0	_	_	_	_	_	_	_
□Pearl orange		0,00	_	0	_	_	_	_	_	_
□Cosmic grey		0,00	_	0	_	_	_	_	0	0
□Colza yellow RAL 1021		0,00	_	_	0	_	_	_	_	_
□Blue shade grey matt		0,00	_	_	0	_	_	_	_	_
☐Pure orange matt RAL 2004 / swing arm Black		0,00	_	_	_	0	_	О	_	_
□Cosmic grey / swing arm Black		0,00	_	_	_	0	_	О	_	_
□Magma red / swing arm Black		0,00	_	-	-	_	_	-	\circ	0
☐Green metallic / swing arm Black		0,00	-	-	-	-	lacktriangle	-	_	_
□Single custom color main frame and rear swing arm, powder coating,	according to .	179,00								
RAL-color chart:, front boom black anodized										
□ Double custom color main frame powder coated accordi	ing to	259,00								
RAL-color chart:, front boom / swing arm:										
Front boom										
☐ Front boom without derailleur tube (for hub gears only	y)	0,00		•	•	lacktriangle	lacktrian	-	lacktriangle	•
☐ Front boom with derailleur tube regardless of shifting of	option,	0,00	0	О	О	О	0	•	0	О
not for STEPS or PINION										
☐ Front boom carbon saves 170 g of weight, not for STEPS or PI				П				П		
☐ Front boom quickadjust compensates extra chain length	when	169,00								
front boom is adjusted, quick release levers										
Suspension										
Rear wheel suspension										
□DNM DV-22 spring / oil, spring available with various spring ra	ates	0,00	•	•	•	•	•	•	•	•
(up to 80/100/130 kg)		-,	_	_	_	-	_	_	_	-
□ROCKSHOX Monarch RL lightweight air shock, adjustable l	hydraulic	239.00								
rebound damping, lock-out, including damper pump	,	,								
Front wheel suspension										
□Front suspension standard up to 90 kg / 198 lbs, with		0,00	_	_	•	•	•	•	•	•
		.,.,				-		-		
standard stabilizer / anti-roll-bar										
standard stabilizer / anti-roll-bar Front suspension hard from 90 kg / 198 lbs, with hard		29,90	_	_						

 ◆ Basic configuration ◆ Option no upchar ◆ Not available 	ge OS	SCF	SFS	SFL	SFN	SFE	SPS	SPL
Seat								
Seats								
□BodyLink adjustable, body-contoured seat	00	О	0	0	0	0	0	0
□BodyLink seat with brackets for small riders (1.6" to the front) 0,0	00	О	0	0	0	-	0	О
□ ErgoMesh 1.2" higher position than BodyLink seat, aluminum	00 0	О	О	О	0	О	0	О
□ErgoMesh XL 2" wider and 1.2" longer than ErgoMesh seat	00	О	О	О	0	0	0	О
□ErgoMesh HS plus 4.3" higher position than ErgoMesh seat	00	О	О	0	-	-	0	О
□ErgoMesh HS XL plus 4.3" higher than ErgoMesh XL seat	00 0	0	О	0	-	-	0	0
Accessories								
☐ Headrest for BodyLink seat flexible, with cushion, adjustable in 89,5 height and angle	00	•						
□ Headrest for ErgoMesh seat adjustable in height and angle,	00	•						
□Airflow seat cushion for BodyLink seat, breathable fabric, sewn, 69,5 washable at 30°C	00 =	٠						
□SeatWings hip support for BodyLink seat, carbon fiber, flexible,	00	۰						
□ Rain cover for all HP VELOTECHNIK seats, Ripstop nylon fabric,	00 =	٠						
□ Adjustable end stops allow exact positioning of the seat	00	٠			•			
Steering			_			_	_	
□Long handlebars 3.1" higher grip position, required for high	90	ľ	•		-	•	•	-
Hand rests								
□ Handrests left and right comfortable hand support, adjustable, 129,0 mounted on handlebar, removable cushion	00	۰	-					
□Handrest one side with retaining strap adjustable in position 89,9 and angle, mounted on handlebar	00	•	-			-		
□ Handrests left and right with one retaining strap hand fixation 159,0 allows arm movement when mobility is limited, retaining strap with easy entry function on one side □ left □ right	00	•	•	•	•	-	•	
Tires								
1 44	00							
precise steering			_	_	_	_	_	_
□ SCHWALBE Marathon Plus 47 mm, very good puncture protection, 29,5 higher weight					_	•		=
□SCHWALBE KOjak 35 mm, very low rolling resistance, only for					-	-		
□SCHWALBE Smart Sam front wheel 60 mm, back wheel 57 mm, 0,0 offroad tread	00 –	-	-	-	•	-	-	-



Choose the components of your Scorpion with ease by using our comprehensive, clearly structured online configurator. Simply scan the QR-Code with your tablet-computer or type into your web browser www.hpvelotechnik.com/produkte/konfigurator

	■ Basic configuration ■ Option with upcharge	O Option no Not availab		sco	SCF	SFS	SFL	SFN	SFE	SPS
ivetrain										
Gearing										
□STURMEY ARCHER Tripleshift 24 spe	ed Sturmey Archer	3 speed	0,00				lacktriangle	-	-	•
internal gear hub with SRAM X4 8 spee	d rear derailleur, twis	t shifters								
□STURMEY ARCHER Tripleshift 27 spe	ed Sturmey Archer	3 speed	149,00						-	
internal gear hub with SHIMANO Deore	9 speed rear deraille	eur and								
SHIMANO cassette 11–36, barend shifter	'S									
□ SHIMANO Nexus Premium 8 speed : black, twist shifter	SHIMANO internal gea	r hub,	49,90					-	-	
□SRAM 30 speed SRAM GX rear deraille	eur, MICROSHIFT front	derailleur,	299,00		_	-		-	-	-
SRAM cassette PG 1050 11–36, crankser barend shifters	t 52-42-30, Sram 500	SL								
□ SRAM 30 speed SRAM GX rear deraille	eur, MICROSHIFT front	derailleur,	369,00	_			-	_	_	
SRAM cassette PG 1050 11-36, crankse	t 60-52-40, SRAM 500	SL								
barend shifters										
□ ROHLOFF Speedhub 14 speed interna	al gear hub, black, with	ROHLOFF I	.490,00					-	-	
chain tensioner and external mech box, lo	ong twist shifter									
☐ PINION C1.12 12 speed front gear box	k, black, HP chain tensi	oner, I	.590,00					-	-	
long twist shifter, 46t crankset with dou	ble sided chainwheel	disc								
☐ PINION C1.12 12 speed front gear box	k, black, HP chain tensi	oner, I	.290,00	-	_	_	-		-	-
long twist shifter, 46t crankset with dou	ble sided chainwheel	disc								
edelec / E-assist systems					_	_	_			_
SHIMANO STEPS E5000 and X4 8 s	•	•	.990,00					-	-	
25 km/h (16 mph), SRAM X4 derailleur g		attery								
418 Wh, throttle up to 6 km/h (4 mph)			200.00	_	_	_	_			_
SHIMANO STEPS E5000 and Nexus	•		.390,00					-	-	
up to 25 km/h (16 mph), SHIMANO Next	•	Ü								
hub, 36 V Li-lon battery 418 Wh, thrott			100.00	_	_	_	_			_
SHIMANO STEPS E8000 and XT Di			.170,00			-		_	-	
up to 25 km/h (16 mph), SHIMANO XT E		, 36 V								
Li-lon battery 418 Wh, throttle up to 6	\ I /	assist 2	000 00					_		
SHIMANO STEPS E8000 and XT Di	•		.870,00	_	_	_	_		-	_
up to 25 km/h (16 mph), SHIMANO XT E		, 36 V								
Li-lon battery 418 Wh, throttle up to 6	` ' '	int 1	190.00		_	-	_			_
SHIMANO STEPS E8000 and ROHLO	•		. 1 70,00			-	_	_	-	
up to 25 km/h (16 mph), ROHLOFF interr	iai gear nub, 367 LI-IC	on battery								
418 Wh, throttle up to 6 km/h (4 mph)	er 14 and all also est	a assist 3	000 00							
SHIMANO STEPS E8000 mit ROHLO	•		.070,00	_	_	_	_		-	_
up to 25 km/h (16 mph), ROHLOFF interr	•	л рашегу								
418 Wh, throttle up to 6 km/h (4 mph)		'lilan	229.00		_	_	_			_
Big battery pack SHIMANO STEPS			229,00	-		-			-	
battery 504 Wh, incl. fast charger with			000 00	_						_
2nd battery pack for STEPS E5000		,	077,00						-	
504 Wh, incl. and transport bracket mo		pperation								
battery has to be switched to main bat	lei y adapteľ									

Prices and options

● Basic co ■ Option v	onfiguration with upcharge	O Option no u Not available		SCO	SCF	SFS	SFL	SFN	SFE	SPS	SPL
Drivetrain (continued)											
Pedelec / E-assist systems (continued)											
□ NEODRIVES Z20 and SRAM 30 speed electric	assist up to 2	2. km/h	990,00					_	-		
(16 mph), SRAM 30 derailleur gearing, 36 V Li-lor	n battery 612\	₩h,									
throttle up to 4 km/h (2.5 mph), reverse gear (a	available from										
Spring 2020, can be retrofitted via software upo	date)										
□ NEODRIVES Z20 and SRAM 30 speed electric	assist up to 2	2. km/h	690,00	_	_	_	_		-	_	_
(16 mph), SRAM 30 derailleur gearing, 36 V Li-lor	n battery 612\	Wh,									
throttle up to 4 km/h (2.5 mph), reverse gear (a	available from										
Spring 2020, can be retrofitted via software upo	date)										
☐Go SwissDrive G45p and SRAM 30 speed	electric assist	up to	0,00	-	-	_	-	_	•	_	_
45 km/h (28 mph), SRAM 30 derailleur gearing, 3	6 V Li-Ion batt	ery									
636 Wh, throttle up to 20 km/h (12.5 mph), reve	erse gear up to	0									
3 km/h (2 mph)											
□ NEODRIVES Z20 and PINION I2 speed electr	ric assist up to	4.	190,00					-	-		
25 km/h (16 mph), PINION C1.12 front gear box	, 36 V Li-Ion ba	attery									
612 Wh, throttle up to 6 km/h (4 mph), reverse	gear (available	9									
from Spring 2020, can be retrofitted via softwar	re update)										
□ Neodrives Z20 and Pinion 12 speed electric assist up to3.890,00						-	-		-	-	-
25 km/h (16 mph), PINION C1.12 front gear box, 36 V Li-Ion battery											
612 Wh, throttle up to 6 km/h (4 mph), reverse gear (available											
from Spring 2020, can be retrofitted via softwar	re update)										
☐Go SwissDrive G45p and Pinion 12 speed	d electric assis	t up toI.	190,00	-	-	-	-	-		-	-
45 km/h (28 mph), PINION C1.12 front gear box	:, 36 V Li-Ion ba	attery									
636 Wh, throttle up to 20 km/h (12.5 mph), rev	erse gear up to	0									
3 km/h (2 mph)											
□ 2nd battery pack for NEODRIVES 612 Wh, inc			959,00						-		
mounting hardware, wire extension for comfor		-									
the 2nd battery (battery has not to be switched		,									
□2nd battery pack for Go SwissDRIVE 636 W			959,00	-	-	-	-	-	-	-	-
mounting hardware, wire extension for comfor		_									
the 2nd battery (battery has not to be switched		,		_	_	_	_	_	_	_	_
□ Display mount position choosable for E-assist s	systems		0,00	0	O	0	O	\circ	O	\circ	\circ
NEODRIVES and GO SWISSDRIVE											
Display position:	ebar ∟ above	handlebar									
Accessories											
□ Short cranks 155 mm, recommended for ride	er under 175	cm (5'7")	24,90						-1		
□ Chainwheel disc instead of chain guard for tr		` '	19,90	н	-	-	ы		-		=
drivetrains SRAM 30, NEODRIVES and GO SWISSDI	•		17,70	-	_		-		_		_
reduction	1.172, 130 g Weig	5110									
□ Profi Dry Lube chain lube based on PTFE, no	ahrasive effec	t for	17,90						ا		
your chain, 400 ml (EU orders only)			,		_		_		_		_
,											

Even more choice for your dream trike:



		0				_			
● Basic configuration● Option with upchargeNot avail		SC	SCF	SFS	SFL	SFN	SFE	SPS	SPL
Pedals									
☐Trekking pedals VP 199 ☐Plattform pedals blue ☐Rubber pad pedals ☐Clipless pedals SHIMANO XT PD-T8000 for normal or SPD shoes ☐Clipless pedals SHIMANO XT PD-T8000 for normal or SPD shoes	0,00 0,00 89,90	- - -	• - - -	• - - -	• - - -	- • - -	- • •	- - - -	• - - -
Special pedals (single special pedals come with one standard pedal for other side)									
□ Pedal with heelstrap and foot clamp single sided easy entry		-		•					
□ Pedals with heelstrap and foot clamp left and right easy entry and positive grip, adjustable length □ 22–28 cm (8.5"–11") □ 27–35 cm (10.5"–13.5") □ left □ right		•					•		
□ Ergonomic safety pedal single sided incl. one SPD-pedal	179,00	•		•		•	-	-	•
□ Ergonomic safety pedals left and right adjustable position,	359,00	•		•			-		
□ Ergonomic pedal with lower leg fixation single sided adjustable position, easy entry straps, leg fixation adjustable in length and position, □ 32–41 (UK 0–7½) □ 37–45 (UK 4–10½) □ left □ right		-		•		•	-	•	
□ Ergonomic pedals with lower leg fixation left and right adjustable position, easy entry straps, leg fixation adjustable in length and position, □ 32–41 (UK 0–7½) □ 37–45 (UK 4–10½)	499,00	•		•			-		
Brakes									
Mechanichal disc brakes (with HP VELOTECHNIK SnakeSeal at the brake levers) AVID BB7 separate brake per front wheel, no rear wheel brake AVID BB7 coupled front brakes with one-hand operation, rear disc brake, parking brake function	0,00	•	•	•	•	•	_	•	•
Hydraulic disc brakes (with HP VELOTECHNIK brake lever roofing)									
☐ TEKTRO Auriga separate brake per front wheel, no rear wheel brake. ☐ TEKTRO Auriga Twin coupled front brakes with one-hand operation, rear mechanical AVID BB7 disc brake, parking brake function							-		
☐ TEKTRO Auriga Twin coupled front brakes with one-hand operation, rear TEKTRO Auriga disc brake, parking brake function		-	-	-	-	-	•	-	-
SHIMANO SM-RT 26 discs, lever reach adjustable, no rear wheel brake	219,00						-		
·									
Parking brake Parking brake SHIMANO rear wheel V-Brake with thumbshifter	49,90	-	•	•		•	•	•	•

■ Basic configuration■ Option with upchargeNot available		SCO	SCF	SFS	SFL	SFN	SFE	SPS	SPL
Safety equipment									
Lights									
□ Light wire routing only twin wire routed through the frame	79,90						-		
☐ for hub dynamo ☐ for tire dynamo									
□ Lighting system rechargeable Eyro rechargeable headlight	99,90	-	-		-	-	-		-
charging via USB connector, permanent light powered by battery	100.00	_			_	_			_
□ Lighting system rechargeable Eyro rechargeable headlight	109,00		-	_	-	-	-	_	•
□ Lighting system Son xs-m disc dynohub IQ-X headlight B&M IQ-X, up to 100 Lux, rear light B&M Toplight Flat S plus with brake light, with front and rear parking lights	629,00	•	-	•		•	-	•	
□ Lighting system battery IQ Fly only with E-drive, headlight B&M IQ Fly Premium, up to 80 Lux, rear light B&M Toplight 2C DC, permanent light powered by E-bike battery	189,00	-	-	•		•	-	•	
□ Lighting system battery IQ-X only with E-drive, headlight B&M IQ-X, up to I40 Lux, rear light B&M Toplight 2C DC, permanent	269,00	•	-	•		•	-	•	
light powered by E-bike battery Indicator lights system HP VELOTECHNIK WingBling two indicator lights, both front and back, only with E-drive	569,00	•	-	•		•	•	-	
A41									
Mirrors □ Rear mirror B&M E wide view angle, easy to adjust,	59,90	•	-	-		•	•	-	-
□ Rear mirror B&M E wide view angle, easy to adjust,	59,90	-	-	-	-	-	-		
□ Rear mirror B&M E both sides knuckle mounted left and right	59,90	_	-	-	-	-	П	-	-
□ Rear mirror B&M E both sides knuckle mounted left and right	119,80						-	-	-
□ Rear mirror B&M E both sides barend mounting on handlebar	119,80	-	-	-	-	-	-		
□ Rear mirror MIRRYCLE with barend mounting, also usable as	49,90	•	-	-		-	-		
□ Rear mirror MIRRYCLE both sides barend mounting left and right	99,80						-		
Accounts									
Accessories	10.00	_	_	_	_	_	_	_	_
☐ Flag HP VELOTECHNIK double-sided print, with reflective strip ☐ Horn AIRZOUND XL adjustable 30 – 115 dB, car valve, max. 80 psi, fits to all standard handlebars diameters	19,90 34,90						-		
□ Frame lock Axa Victory with removable key, without chain, black □ Chain for frame lock Axa Victory length 100 cm	64,90 25,90						•		



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Basic configuration

O Option no upcharge ■ Option with upcharge Not available Luggage Racks lower tubes for optimized center of gravitiy for bags, black powder coating, max. load 25 kg / 55 lbs □ Rear rack 14 mm aluminum tube 6061T4, black powder coated, 139,00 flag tube, without platform, max. load 25 kg / 55 lbs □ Lowrider 10 mm tube, black powder coating, max. load 25 kg / 55 lbs . 109,00 (requires installed rear rack) maximum load 10 kg/22 lbs (requires installed rear rack), not suitable for panniers □ Side Bag Mount mounting for handlebar bags, only for ErgoMesh 119,00 seats, attached to the seat, max. load 5 kg/22 lbs per side, left and right Bags /Trailers I liter volume (not compatible with rear rack) ■ Water bottle set HP VELOTECHNIK 2 x 0,6 l clear PE-bottle with coloured HP VELOTECHNIK print, with bottle cages, mounted ☐ Trailer hitch WEBER with HP VELOTECHNIK adapter, mounted, 119,00 when rear rack or rear hub motor with dropout torque support is mounted trailers can only be attached with this adapter Gadget mounts / device mounts □ Speedometer mount for computers, battery lights etc., incl. sensor bracket for front wheel □ Universal mount for mounting on the handlebar end, Ø 22,2 mm tube holder for accessories such as mobile phone holder / GPS devices or bell, max. load 400 grams / 0.9 lbs Weather protection gear ☐ Trikefender mudguards with excellent side splash protection, 249,00 60 mm width in front, incl. 53 mm rear SKS fender ☐ Rear mudguard Enduro SKS MUD-X, mounted at seat, black □ Streamer transparent front fairing, incl. installation, not compatible 539,00 with PINION or STEPS nylon, blue Comfort and ability options One-hand operation (drivetrain & brakes) TEKTRO Auriga Twin, hydraulic, coupled, one-hand operation for both front brakes, disc brake AVID BB7 rear, parallel mounted with parking brake function, optionally right or left, not for STURMEY ARCHER Tripleshift 24 ☐ left ☐ right

Prices and options

				_							
	Basic configurationOption with upcharge	O Option no Not availal		SCO	SCF	SFS	SFL	SFN	SE	SPS	ď
Comfort and ability options (con	ntinued)										
Standing-up aid											
□ Standing-up aid for HP VELOTECH support with grip for easy entry an the knuckle, optional parking brake the standing-up aid, price per side	d exit from the trike, mo thumbshifter will be mo	unted on	74,50	•	•	-	_	-	-	-	-
□ Standing-up aid for HPVELOTECH support with grip for easy entry an the knuckle, optional parking brake the standing-up aid, price per side	d exit from the trike, mo thumbshifter will be mo	unted on	119,50	-	-	-		•	-	-	
Walking aid mounts											
■Walking aid mount single sided	d automatic attachment a	ınd	74,90								
easy to operate safety clip	🗆 left 🖵 r	ight 🛭 pair									
Support belts											
□ Pelvic support belt for optimal portion procumbent trikes with mesh seats, to belts, large range of size adjustment	easy opening due to simp		249,00	-	•				-		
□ Chest support belt for optimal u HP VELOTECHNIK recumbent trikes w due to simple ratchet belts, large ra	vith mesh seats, easy ope		249,00		•				-		





The Scorpion-family: A line-up of your favorites



















Scorpion: Light and fast sports trike with low seat and 26 inch rear wheel from € 3.590



Scorpion fs 26 Enduro: The foldable, full-suspension Mountain-Trike from € 4.790



Scorpion fx: Foldable, compact travelling trike with huge luggage capacity from ≤ 3.690

Scorpion fs 26: Foldable full-suspension action

trike with 26 inch rear wheel from € 4.490



Scorpion fs 26 S-Pedelec: Electric support up to 45 km/h (28 mph) from € 9.490



Scorpion plus 20: The foldable, high comfort trike with 20 inch rear wheel from € 4.890



Scorpion plus 26: The foldable, high comfort trike with 26 inch rear wheel from € 4.990

Choose according to your heart's delight – please find all options, accessories and prices on the previous pages.

Detailed product information can be found, in addition to this catalog, on our well-structured web pages with a variety of test reports from bike magazines, in our online recumbent configurator and in the practice-oriented operating and maintenance manual.

Personal customer service in your area can be obtained through our large network of retail partners. You will be advised on an individual basis and obtain valuable information on our sophisticated modular system of accessories and professional workshop services.

10 years warranty is offered by HPVELOTECHNIK for the frame of your new trike. We stand by our products and would like to assure you of sustainable, carefree riding pleasure. Details can be found in the service section of our website.

Excellent quality and service: HP VELOTECHNIK was awarded for five times as the best cycle manufacturer in Germany by the industry association VSF. For us, this is a source of confirmation and motivation. With our dedicated team at HPVELOTECHNIK, we are ready to create your personal dream trike!



Fast, convenient and informative: Selecting the components of your trike is easy with the online configurator at www.hpvelotechnik.com.The configurator provides detailed pictures, technical tips in english language and checks the interplay of your chosen equipment. With your personal configuration number, you can edit your saved component choice, print and call your dealer for advice.

Your custom Scorpion is individually built to order in our recumbent factory in Kriftel, Germany. You can choose the components according to your needs. By going through a personal consultation at a specialty shop in your area, extensive test rides, useful accessories and expert customer service, you will get a trike that fits you perfectly.

Your dealer is looking forward to your visit:									

Suggested retail prices in Euro based on 19 % VAT. Local prices at dealer may vary. Shipping to most EU-countries: € 159,00. Effective as of November 2019. Images with special equipment. Subject to alterations.