2027

Recumbent technology

HP VELOTECHNIK

Cycling Fun on Three Wheels

Scorpion

Scorpion Trikes – Comfortably Suspended Recumbent Trikes from HP VELOTECHNIK. The Perfect Blend of Comfort and Riding Dynamics!

Dream colors on dream trails: *Scorpion fs 26* with special color Turquoise blue RAL 5018 in Sedona, Arizona, USA

Ready for your next adventure? Your *Scorpion* will take you there!

SCHWALBE
MARATHON PLUS
HPVELOTECHNIK

Your latest passion?
Carving bends.

You're right on track: Take a seat on the *Scorpion*. Sit back and relax. Put your feet up. Enjoy the spectacular views. Then push the pedals and accelerate dynamically. Ahead lies total riding pleasure!

The daily grind is yesterday news. Time for more pleasure in life!

The next adventure is closer than you think. Your *Scorpion* trike will take you there!

Its easy-to-access, back-friendly seat and clear view of both front wheels inspire confidence from the moment you set off. Add impressively stable handling — even when carrying plenty of luggage — and you'll find yourself tempted to take the long way home. Combining innovative trike technology, premium materials, and decades of trike-building expertise, the agile *Scorpion* reflects the craftsmanship and true engineering excellence that define HP VELOTECHNIK.

The *Scorpion* with powerful electric assist: Hit the road in style!

There's nothing quite like having extra power available whenever you need it. If you're looking for electric assist, the *Scorpion* E-Trike is an outstanding choice.

Whether you need automatic gear shifting, dual batteries, an electric reverse gear, or features that support rehabilitation and adaptive mobility needs, every model can be equipped with an electric drive system capable of speeds up to 25 km/h (16 mph). For US customers, all models can be configured to reach speeds of up up to 20 mph. With the high-performance *Scorpion fs 26 S-Pedelec* you can even reach speeds of up to 45 km/h (28 mph, US Class 3 electric bicycle).

Depending on your needs, you can choose between four bottom bracket motors from SHIMANO and BAFANG or the whisper-quiet rear hub motor from NEODRIVES.

You'll enjoy all the benefits of the *Scorpion* trike platform, including exceptional handling, outstanding stability, and complete balance at a standstill. These premium trikes feature optimized weight distribution and large batteries positioned beneath the seat for a low center of gravity. Generous cargo capacity is combined with extended range, thanks to the streamlined and energy-efficient riding position.

Combining powerful electric assist, sophisticated suspension, and remarkably stable handling, the *Scorpion* delivers an exceptional riding experience on every road, through every curve, and around every turn!

304
JXI

You're right on track here!

The Scorpion class from HP Velotechnik offers plenty of riding fun for traveling, touring, city and off-road use

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 nine 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!

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

P. 8

Scorpion fx *– the medium high, foldable travel trike with rear suspension*

- Medium seat height, 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 63 kg (139 lbs) in 8 bags
- Maximum payload 140 kg (308 lbs)
- Comfortable rear suspension (elastomer-free), energy-efficient *No-Squat* design
- Foldable in 60 seconds without tools

P. 12

Scorpion fx 26 *– the medium high, foldable travel trike with rear suspension for globetrotters*

- Medium seat height, upright seat for easy mounting and a clear view in traffic, very good ground clearance
- Medium pedal position above the seat offers good support for pedaling forces
- Good tipping stability
- 26-inch rear wheel for a smooth ride
- Luggage capacity: up to 63 kg (139 lbs) in 8 bags
- Max. payload 150 kg (330 lbs)
- Comfortable rear suspension (elastomer-free), energy-efficient *No-Squat* design
- Foldable in 60 seconds without tools

S. 18

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

P. 36

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 a smooth ride
- Luggage capacity: up to 35 kg (77 lbs) in 4 bags
- Maximum payload 130 kg (287 lbs)
- Comfortable, integrated all-wheel suspension *AntiDive geometry*, *HP stabilizer system*
- Foldable in 60 seconds without tools

P. 40

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 a smooth ride
- Luggage capacity: up to 63 kg (139 lbs) in 8 bags
- Max. payload 150 kg (330 lbs)
- Comfortable, integrated all-wheel suspension *AntiDive geometry*, *HP stabilizer system*
- Foldable in 60 seconds without tools

P. 46

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

P. 22

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 a 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

P. 30

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 63 kg (139 lbs) in 8 bags
- Max. payload 150 kg (330 lbs)
- Comfortable, integrated all-wheel suspension *AntiDive geometry, HP stabilizer system*
- Foldable in 60 seconds without tools

P. 48

Contents

Explore what makes the Scorpion unique:

The chassis: *No Squat*-technology – p. 32

Scorpion as a handbike: *Hands-On-Cycle* – p. 54 to 57

Suspension technology in detail – p. 58

The ease of riding:
Convenient facts on e-trike systems – pp. 60 to 65

Comfort made by HP VELOTECHNIK: *ErgoMesh, ErgoMesh Premium* and *BodyLink* seats – pp 66 to 71

The *Scorpion* family in the media – p. 72

Trike adventure: people on bikes – pp. 74 to 79

HP VELOTECHNIK: Behind the scenes – pp. 80 to 83

Selected options and accessories – pp. 84 to 89

Pick your gear: Details on our drivetrains – p. 90

Special Edition models – pp. 92 to 93

Overview of models, options and prices – pp. 94 to 97

Recline in style …

… and imagine yourself in one of our Scorpion trikes. What you'll experience is a glimpse of the future of mobility! Many experts consider the bicycle one of the true game changers of the mobility transition, and modern e-bikes show why. Our new BAFANG motor system delivers powerful electric assist at the touch of a thumb, up to the 25 km/h assistance limit (20 mph for US customers). For riders with limited leg strength, this can be a true game changer. For everyone else, it paires perfectly with the ROHLOFF E-14 electronic shifting system for an exceptionally smooth ride.

Discover sophisticated engineering, outstanding ergonomics, and countless details that transform your recumbent seat into your favorite place to be.

One example is the completely redesigned Streamer 2.0 fairing. It folds forward for convenient entry and exit. Once seated, simply close it and enjoy a relaxed riding position with an uninterrupted panoramic view — the unique experience that makes recumbent cycling so special.

Curious? Then experience it for yourself. Contact your dealer today to schedule a test ride. Your specialist dealer will also be happy to help you choose the right components and determine the equipment configuration that best suits your needs. Can you already feel the breeze?

Yours, Daniel Pulvermüller and Paul Hollants

Sporty low seat, agile chassis, powerful acceleration: *Scorpion*

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 speedster 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 carving 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?

Opens up
new horizons: *Scorpion*

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

Seat	Height	Angle
- *BodyLink*	28 cm (11")	41–49°
- *ErgoMesh*	31cm/12" (*HS* 42cm/16.6")	41-49°(*HS*: 41–54°)
- *ErgoMesh Premium*	31cm/12" (*HS* 42cm/16.6")	36–50°
Bottom bracket height	41–52 cm (16.1–20.5")	
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")	
Length	194– 227 cm (6'4"–7'6")	
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	
Powder coating	Peeka blue	
(anti-corrosion coat + colored coat + clear coat)	Anthracite grey metallic matt 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 breathable *ErgoMesh* seat (photo) offers outstanding adjustment possibilities thanks to the integrated *OrthoFlex®* technology. In the high-end range, the flexible *ErgoMesh Premium* seat comes up with a variety of unique features (see page 59). Both seats are also available as *XL*-version with 5 cm (2") more width and 3 to 4 cm (1.2" to (1.6")) more backrest height or as *HS*-seat with 11 cm (4.3") higher seat position. As a sporty version we offer the *BodyLink* hard shell seat.

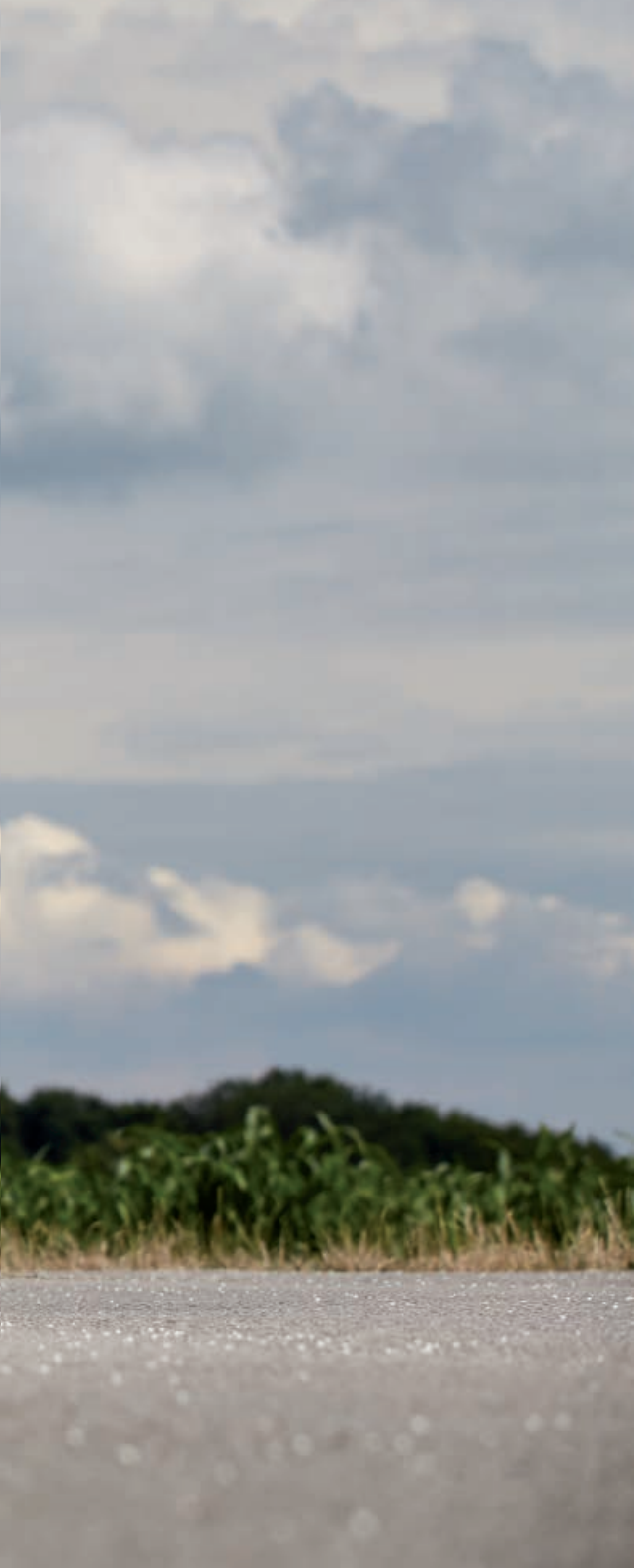
The stable luggage rack for loads of up to 25 kg (55 lbs) has been optimized to withstand the high lateral forces to which trike riders are subjected. Riding dynamics benefit from its low pannier center of gravity. Low side bars hold your bags securely. Your luggage enjoys full suspension without the 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 many bags: *Scorpion fx*



Globetrotter with a panoramic view

A travel partner for heavy tasks: *Scorpion fx*

HP Velotechnik's *Scorpion fx 20* and *Scorpion fx 26* touring tricycles offer remarkable stability with folding capability, specifically designed to meet touring cyclists' requirements. Unlike their sportier relatives, the *Scorpion* and *Scorpion fs*, these models feature a significantly higher and more upright seat position. This design choice facilitates easy entry and exit while providing excellent visibility of both the road ahead and the surrounding landscape.

The elevated seating creates space for a Lowrider rack behind the seat, accommodating large panniers. This feature, combined with the sturdy luggage rack, allows for carrying up to 50 kg (110 lbs) of gear with an advantageously low center of gravity. The following six pages will demonstrate how accessories like the *Side Bag Mount* and *Add-on Bags* can expand your faithful travel companion's carrying capacity even further.

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 570 km (354 miles), see *p. 60.*

Unfolds pure riding pleasure: *Scorpion fx 20*

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 20*.

Amazing space savings. Thanks to HP VELOTECHNIK'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 in your car. In just 60 seconds, the comfortable seat can be removed without using any tools and the *Scorpion fx 20*'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!

Scorpion fx 20

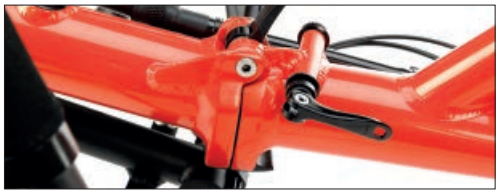
Wider is better: The wider the track, the greater the tipping stability and the faster your trike can corner. A wide track also allows a bigger steering angle for a small turning circle. So that your trike still fits easily through doors and gates, HP VELOTECHNIK has developed narrow hubs for a low overall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

The *Scorpion fx* touring trike series 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.

Ideal for heavy loads: A lowrider rack for two front or rear wheel bags weighing up to 25 kg (55 lbs) can be additionally attached to the *Scorpion fx*'s luggage rack. Good road holding thanks to the low center of gravity close to the body.

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

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



On unfolding the *Scorpion fx 20*, the robust 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.

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 *Scorpion fx* even more compact for transport.

Technical Data

Seat	Height	Angle
- *BodyLink*	35 cm (14")	46–54°
- *ErgoMesh*	38cm/15"(HS: 49/19.3")	46–54°(HS: 46-59°)
- *ErgoMesh Premium*	38cm/15"(HS: 49/19.3")	41–55°
Bottom bracket height	38–46 cm (15"–18")	
Suspension travel	8.5 cm (3.3")	
Ground clearance	13.5cm (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	
Powder coating (anti-corrosion coat + colored coat+clear coat)	Pearl orange, Cool grey metallic or custom color	
Rider height approx	1.57–2.00 m (5'2"–6'7")	
Warranty on frame	10 years	

More suspension travel, more ground clearance, more freedom on the roads: *Scorpion fx 26*

The luggage champion for your grand tour!

No mountain too high, no desert too hot, and no long-distance cycling route too challenging? Then unleash the extraordinary *Scorpion fx 26* and discover your ultimate three-wheeled adventure companion!

The impressive *Scorpion fx 26* delivers performance that speaks volumes. With a remarkable 150 kg (331 lbs) payload capacity – 10 kg (22 lbs) more than the *Scorpion fx 20* – you'll have the freedom to pack everything your adventure demands.

Experience grand comfort with a total of 10 cm (4") of super plush suspension at the rear wheel – our engineers have added an extra 15 mm (0.6") of suspension travel compared to the *Scorpion fx 20*. And with 25 mm (1") additional ground clearance, rough trails become just another reason to smile.

Add to this the large 26-inch rear wheel as your flywheel. Feel firsthand what cycling enthusiasts mean by "length runs": superior smoothness while the large rear wheel effortlessly conquers roots and potholes. Simply ride relaxed!

Great performance – small pack size. As assertive as your *Scorpion fx 26* is on your tours, it remains just as manageable before and after your ride. It gladly fits in the trunk of most cars thanks to HP VELOTECHNIK's ingenious flat fold with self locking hinge. The design allows the rear frame and wheel to rotate almost 90 degrees when folded. For long-distance transport, you can make it even more compact with just a few simple steps.

Call your local dealer today to arrange a personal demonstration and test ride to experience these benefits and more!

+60s

Unfolding full pleasure

Experience the sophisticated folding technology of the *Scorpion fx 26*! Thanks to HP VELOTECHNIK's ingenious flat fold with self locking hinge, this premium trike with its impressive large rear wheel transforms into a travel-ready companion in just seconds. The design allows the rear frame and wheel to rotate almost 90 degrees when folded.

In just a few simple steps, your *Scorpion fx 26* compacts into an incredibly space-efficient package measuring just 111 x 83 x 66 cm. Want even more portability? Remove the frontwheels and the trike-fenders and watch it shrink to an astonishing 93 x 74 x 54 cm! Even with all your accessories – luggage rack and fenders included – the folding magic happens without removing a single wheel. And forget chain worries! Our sophisticated chain management system with flexible guard tubes ensures perfect positioning every time.

Here's the game-changer: HP VELOTECHNIK'S innovative self-locking folding hinge means you'll easily go from compact transport mode to exhilarating ride set-up. As the frame stays in position after unfolding, you can conveniently close the safety latch with one hand. Turn your trike riding dreams into reality with the ultimate blend of comfort, style and performance!

The *ErgoMesh Premium* mesh seat gives you the most flexible seat comfort you can imagine. The seat bottom part and backrest can be adjusted independently of each other, the seat cover can be adjusted using the eight tensioning straps. There are also four additional *Othoflex* support cushions inside the seat cover that you can cut to size and position to suit your individual shape.

The *Scorpion fx 26* 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. You can also choose the option with a coupled brake, which decelerates both front wheels simultaneously, including a parking brake function on the rear wheel.

For additional luggage space, supplement the luggage rack with our *Lowrider* option. Additionally you can use the *Top Load* platform, which bolts onto the luggage rack. This allows you to carry bulky or voluminous items such as a sleeping mat or tent on your trike while using your rack and *Lowrider* for your heavier panniers.

Complete charge: 9 x panniers = 63 kg payload

Technical Data

Seat	Height	Angle
- *BodyLink*	35 cm (14")	46–54°
- *ErgoMesh*	38cm/15"(HS: 49/19.3")	46-54°(HS:46-59°)
- *ErgoMesh Premium*	38cm/15"(HS: 49/19.3")	41–55°
Bottom bracket height	38–46 cm (15"–18")	
Suspension travel	10 cm (4")	
Ground clearance	16 cm (6.3") (stat. compressed)	
Wheel size	20" (ISO 406) / 26" (ISO 559)	
Max. tire width	5 cm (2")	
Wheelbase	120 cm (47")	
Track width	78 cm (31")	
Width	83 cm (33")	
Length	190–221 cm (6'2"–7'3")	
Turning circle	5.20 m (17') outer wheel	
Weight	from 17.2 kg (37.9 lbs)	
Max. payload	150 kg (331 lbs)	
Frame material	Aluminum 7005 T6	
Powder coating (anti-corrosion coat + colored coat + clear coat)	Pearl orange, Cool grey metallic or custom color	
Rider height approx	1.57– 2.00 m (5'2"–6'7")	
Warranty on frame	10 years	

The perfect blend of great riding dynamics and comfort: *Scorpion fs*

It's good to know, that even if things get rough ahead of you, you can still stay laid back and relaxed. When developing the award-winning design of the *Scorpion fs* foldable touring trike, HP VELOTECHNIK'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.

Scorpion fs 20
The *Scorpion fs* with a 20-inch rear wheel:
Best perspectives for your adventures!

The *Scorpion fs* with a 20-inch rear wheel: Compact design, powerful traction, and a smile on your face uphill

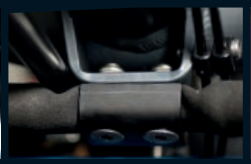
The *Scorpion fs* turns even rocky roads into rewarding destinations

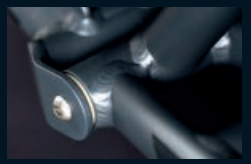
Manhole covers, cobblestones, and gravel tracks: Many bike trails offer a ride on the rough side. Now you can look forward to this: When the ride conditions become more demanding and you need not only a fast-reacting suspension but also, and in particular, predictable handling, maximum steering precision, 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 absorption 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 *HP Velotechnik 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.





Scorpion fs 20

Precision can be measured, passion for detail must be felt

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.

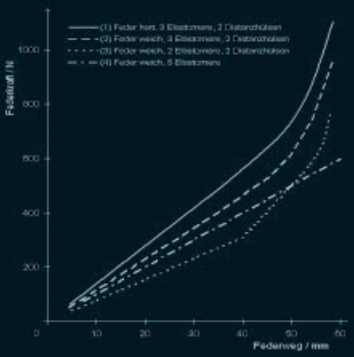
Smooth-running hubs for quick assembly in HP VELOTECHNIK's open wheel mount system. No axle protrusion. Replaceable deep groove ball bearings.

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

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

Scorpion fs 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.

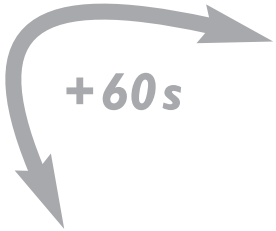


By adjusting the preload, replacing the steel springs, or varying the MCU/spacer arrangement inside the spring, the suspension properties can be easily adapted to your requirements in relation to spring stiffness, damping, and progressiveness so as to provide good bottom-out prevention. Unlike simple 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 *Marathon Plus*.



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 to fold the trike.

For transportation, the *Scorpion fs* can be easily folded up into a compact package measuring just 112 x 83 x 63 cm (44 x 33 x 25", L x W x H) with the luggage rack in just 60 seconds. Once the wheels have been removed, the folded dimensions are even further reduced to 112 x 74 x 46 cm (44 x 30 x 18"). 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.

Technical Data

Seat	Height	Angle
- *BodyLink*	29 cm (11")	41–49°
- *ErgoMesh*	32cm/13"(HS: 43/17") 41–49°(41–54°)	
- *ErgoMesh Premium*	32cm/13"(HS: 43/17")	36–50°
Bottom bracket height	40–45 cm (16–18")	
Suspension travel FW/RW	6 / 8 cm (2.4 / 3")	
Ground clearance	12cm (4.7") (statically compressed)	
Wheel size	20" (ISO 406)	
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	
Powder coating	Blue shade grey matt,	
(anti-corrosion coat +	Colza yellow or	

The *Scorpion fs* won the *Eurobike Award* for its particularly innovative design and above-average product quality. The judging panel of specialist journalists, design experts, and sports scientists at the IF – International Design Forum based their decision on criteria such as efficiency, ergonomics, utility, weight, safety, environmental friendliness, and workmanship.

The position of the bottom bracket above the seat enables efficient power transmission and, together with the low seat, highlights the *Scorpion fs*'s sporty character.

Size matters: *Scorpion fs* with a 26-inch rear wheel

Looking for the speed king? *Scorpion fs 26*

Long wheelbase; clear contours; large, smooth-running 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!

The bestseller from HP VELOTECHNIK

The *Scorpion fs 26* is always the right choice! The striking, full-suspension speed trike is for good reasons the best-selling model in HP VELOTECHNIK's trike line-up.

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 123 x 83 x 62 cm (L x W x H, 48 x 33 x 24"). If you remove the wheels as well, the dimensions reduce even further to a compact 93 x 74 x 54 cm (37 x 29 x 21").

The responsive full-suspension chassis combined with dynamic handling characteristics and smooth 26" rear wheel technology create the foundation for two unparalleled trike variants: the trail-conquering *Scorpion fs 26 Enduro* off-road model and the high-performance *Scorpion fs 26 S-Pedelec* featuring electric assistance of up to 45 km/h (28 mph). Feeling intrigued by these velocity machines? Call your HP VELOTECHNIK dealer today to experience these speed champions during an exhilarating test ride!

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.

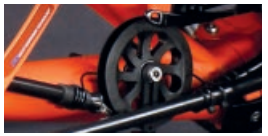
What do you feel? Impressive comfort and 100 % propulsion thanks to maximum power transmission.

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 core element: On request, your trike can be equipped with a lightweight *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.



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 fs 26
HP VELOTECHNIK
Scorpion
HPVELOTECHNIK
SCHWALBE TAYKER
SCHWALBE RACER
Gets your pulse racing
even just to look at

Your endorphin level highlights the pure riding pleasure

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 whether 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 product exclusivity and versatility thanks to the broad range of optional features. See this for yourself by testing the ideal trike for people who aspire to have the everyday become ever more extraordinary.

The HP VELOTECHNIK seat systems provide an exemplary ergonomic connection as 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 down low with an optimum center of gravity, and close to the rider to the side of the rear wheel. 14 mm (0.6") tube.
Ideally, you should accessorize it with the Top Load attachment, which is attached to the luggage carrier. This platform can carry up to a 10 kg (22 lbs) payload, particularly suitable for more substantial loads.

Technical Data

Seat	Height	Angle
- *BodyLink*	29 cm (11")	41–49°
- *ErgoMesh*	32cm/13" (HS: 43cm/17")	41–49° (HS: 41–54°)
- *ErgoMesh Premium*	32cm/13" (HS: 43cm/17")	36–50°
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 RW	26" (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	5.5 m (18'1") outer wheel	
Weight from	18.2 kg (40 lbs)	
Max. payload	140 kg (310 lbs)	
Frame material	Aluminum 7005 T6	
Powder coating	Pure orange matt,	
(anti-corrosion coat + colored coat + clear coat)	Cool grey metallic, or custom color	
Rider height approx.	1.62–2.00 m (5'4"–6'7")	
Warranty on frame	10 years	

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 off-road tires with especially strong snake bite protection deliver good grip. (SCHWALBE *Smart Sam:* front 20" x 2.35", rear 26" x 2,1"). With these big knobby tires there is no point in adding fenders. The blue platform pedals turn your leg power into direct propulsion. For even more power, you can optionally mount the extra rigid *GX* cranks by SRAM. 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 is more fascinating, than to blast through the terrain with an electric full suspension bike. 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/2mu7g37t9xs

hpvelotechnik.com

Scorpion fs ENDURO

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.

Striking arguments

The grippy 26" rear wheel paired with a versatile SCHWALBE MTB tire featuring strong side wall protection made for a powerful and reliable accelerator.

Sophisticated chassis technology

Perfect on rooty and stony tracks: HP VELOTCHNIK's individually 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.

The *Scorpion fs 26 S-Pedelec* up to 45 km/h (28 mph): *Good night, resting time!*

Leave later, arrive faster: With powerful electric assist you are always on the move with ease.

US Class 3 electric bicycle 500W 28mph

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

In the groundbreaking class of fast electric bikes, HP VELOTECHNIK's *Scorpion fs 26 S-Pedelec* focuses on secure and stable road handling for a multi-track vehicle with innovative chassis technology from the automotive engineering sector. The touring trike's low center of gravity and the solid rider support in the ergonomically-designed recumbent seat enables dynamic acceleration. While all our trikes can be equipped with an electric motor to become a Pedelec with supported speeds of up to 25 km/h (16 mph) within the EU or 32 km/h (20 mph, US Class 1), only the *Scorpion fs 26 S-Pedelec* has been engineered for a maximum motor supported speed of 45 km/h (28 mph). In the USA this trike meets all requirements for a Class 3 electric bicycle.

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

The *Scorpion fs 26* is the perfect base vehicle for powerful motorization and high speeds of over 25 km/h (16 mph). The *S-Pedelec* is driven by a powerful and almost noiseless rear wheel hub motor with a rated peak power of 1000 watts. The German manufacturer NEODRIVES claims an efficiency of more than 85 %. The standard equipment of the *Scorpion fs 26 S-Pedelec* includes a push assist with up to 6 km/h (4 mph), even without pedalling. It has to be started with an initial movement by the rider.

Plenty of energy is supplied by a Li-Ion battery with a capacity of 627 Wh. A range-extending energy recovery system enables the recuperation function, which uses the motor as a generator when driving downhill. Even more energy for up to 120 high-speed kilometres (75 miles) is provided by the optional supplemental battery. Like the first battery, it is located deep under the seat to ensure a balanced center of gravity. Once one "tank" is empty, you can exchange the two batteries in two easy steps.

Practicality: The trike, which can carry a load of up to 140 kg (309 lbs), can also be folded compactly for transport in an average automobile in just a few steps. HP VELOTECHNIK's self-locking folding hinge makes the process child's play.

Features of the *Scorpion fs 26 S-Pedelec* base model:
NEODRIVES *Z20 RS* Power electric drive • SRAM 30-42-52/11–36 drivetrain with bar end shifters • hydraulic disc brakes, coupled at the front, individually activated at the rear • SCHWALBE Marathon Plus 47 mm tires • luggage rack 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 (extra option for US) • B&M E mirror • Weight from 37 kg (82 lbs) • Standard colors: Cool grey metallic or pure orange matt

Additional battery on the left side for doubling the range as an option.

Display: The control unit and the remote control are easy to read.

Award-winning design: The *Scorpion fs 26 S-Pedelec* has already been awarded twice with the prestigious *Eurobike Award* for particularly innovative design and above-average functionality.

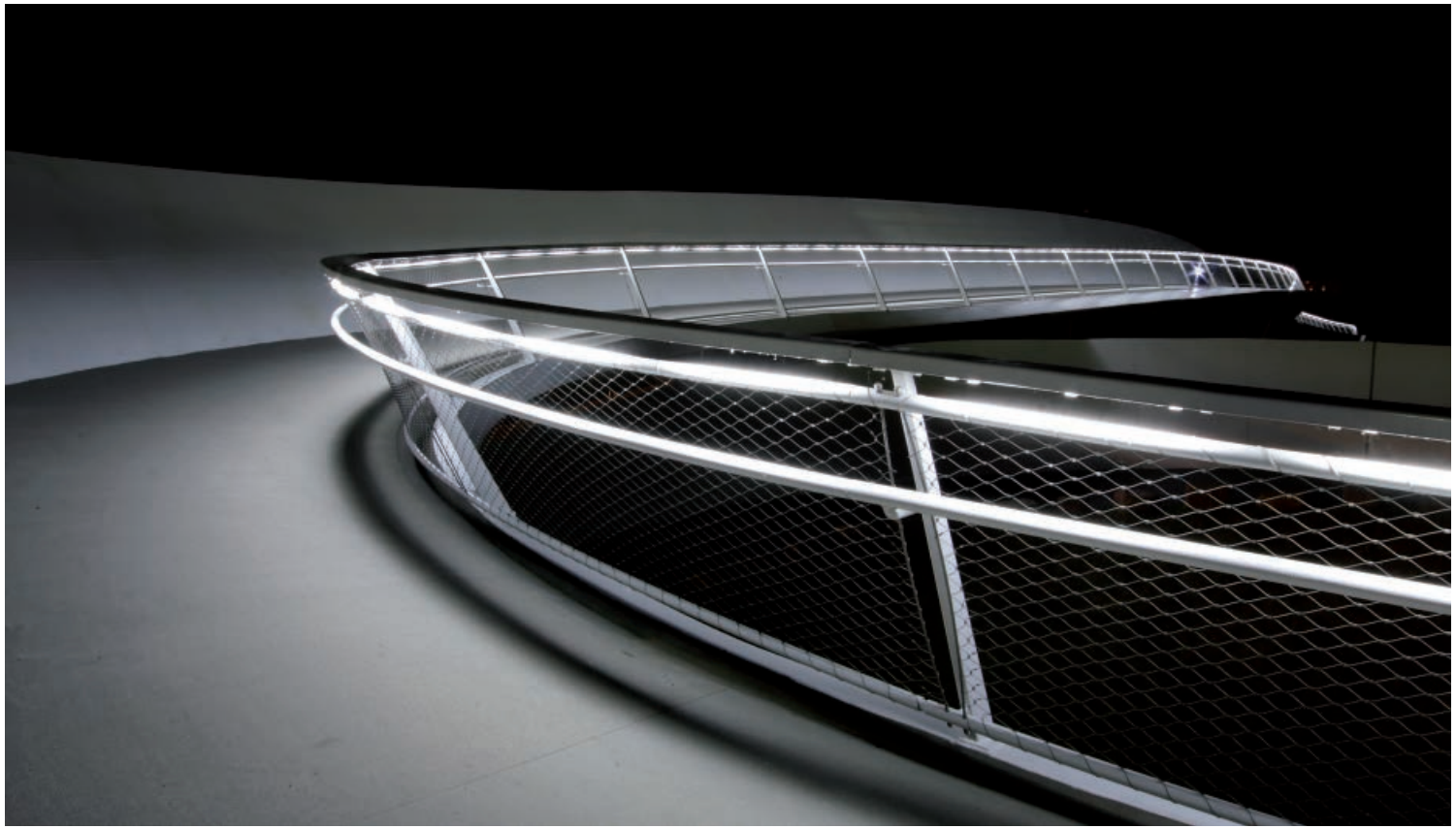
Technical Data

System	**NEODRIVES *Z20 RS***
Available for	*Scorpion fs 26 S-Pedelec* (outside EU: All 26" trikes)
Support up to	45 km/h (28 mph)
Push assist up to ...	6 km/h (4 mph)
Range ..... (flat road, 20° C, smooth ride at 39 km/h / 24 mph)	up to 60 km (37 miles) at level 3 (up to 120 km / 75 miles with additional battery, with additional battery limited folding function)
Force amplification (individually adjustable)	5 levels: 0/80/160/240/320/400 %

Max. torque	40 Nm (at the rear wheel)
Nominal peak power	1000 W

Rechargeable battery	BMZ 48 V Li-Ion removable, with lock
Energy content	627 Wh
Battery weight	4,2 kg (9.3 lbs)
Battery life	800 – 1000 charging cycles
Charger	BMZ 4 A (quick charger)
Charging time	4,5 hours no memory-effect
Charger weight	1,08 kg (2.4 lbs)
Drivetrain	SRAM 30-speed bar end shifters 52-42-30 / 11–36
Features	USB, Bluetooth

Operating requirements:
The fast *Scorpion fs 26 S-pedelec* has an EU type approval as a moped (L2e-P), which is valid for EU countries and Switzerland. The EU driving permit for it is included in the car driving license. 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 HP VELOTECHNIK retailer.



A new definition of curve acceleration

S.U.V.

The Trike with SUV-Genes: *Scorpion plus*

A trip into the countryside, a long distance journey or just a ride 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 demands in the construction of trikes. We want you to have an exceptional view in almost every situation. A seat height of 57 centimeters (22.5") is a unique highlight for this type of bike.
Thanks to the wider frame, it has never been easier to position yourself in a trike. The wide construction achieves impressive tilting stability. Experience the dynamic culture of the chassis of the *Scorpion fs*-class up close to sense the 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 guarantee a highly refined riding pleasure

The *Scorpion plus* SUV genes will mutate in just one aspect: Despite its wide frame it can be folded to very manageable dimensions in just one minute. For this purpose, our designers have reinforced the patented quick-folding hinge. And as such, this redesign now increases the maximum load to 150 kgs (330 lbs)!

Scorpion+

The first ever SUV that makes any sense in the city

Scorpion+26

4 panniers on the carrier plus basket on top, plus 2 handlebar panniers next to the seat – more SUV features on a trike is hard to find.

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 plus 26* is about 10 centimeter (4") higher and wider than its sporty cousin, the *Scorpion fs*. The frame design allows smaller riders from 1.49 centimeter (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 of the *Scorpion plus* becomes clearer on closer inspection. For example at first glance the seat position appears to be moved forward to the cross frame. In fact the seat position is further back. This allowed HP VELOTECHNIK engineers to optimize the center of gravity and give the higher vehicle unprecedented stability.

Your extra bonus: The carriers can hold up to 50 kg (100 lbs.) of luggage while leaving enough space for an optional E-assist or two 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 payload has been increased from 140 to 150 kg (309 to 330 lbs.).

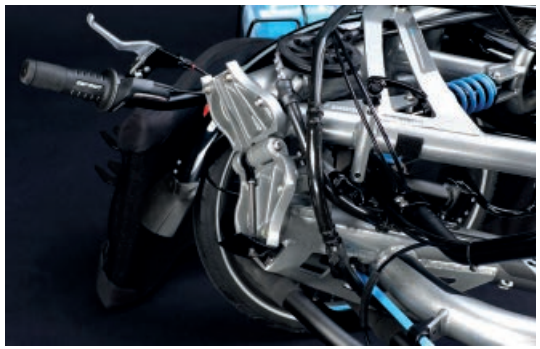
Scorpion plus 20: Big times for small wheels

Small is beautiful! A smaller rear wheel is great for longer rides and you'll notice this immediately when you're on the road with your trike by train or car. When folded, the *Scorpion plus 20* saves a smooth 16 centimeters (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", L x W x H), so you can find a transport place virtually everywhere. When riding, the trike is still very maneuverable: 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. You can safely rest 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 such as a rechargeable battery and water bottles. This also applies to the quick-release 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 or wherever the two front wheels lead, it follows without any problems.

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.



Technical Data Scorpion plus

	Scorpion plus 20		Scorpion plus 26	
Seat	Height	Angle	Height	Angle
- *BodyLink*	43 cm / 17"	46–54°	43 cm (17")	46 – 54°
- *ErgoMesh*	46cm/18.1"(HS 57/22.4")	46-54°(HS 46-59°)	46cm/18.1"(HS 57/22.4")	46-54 (HS 46-59°)
- *ErgoMesh Premium*	46cm/18.1"(HS 57/22.4")	41–55°	46cm/18.1"(HS 57/22.4")	41–55°
Bottom bracket height	37–43 cm		37–43 cm	
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") outer wheel		5.35 m (17'7") outer wheel	
Weight	from 18.8 kg (41 lbs)		from 19.5 kg (43 lbs)	
Payload	max. 150 kg (330 lbs)		max. 150 kg (330 lbs)	
Frame material	Aluminum 7005 T6		Aluminum 7005 T6	
Powder coating (anti-corrosion coat colored coat + clear coat)	Cool grey metallic or Magma red / black or custom color		Cool grey metallic or Magma red / black 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	

Scorpion

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

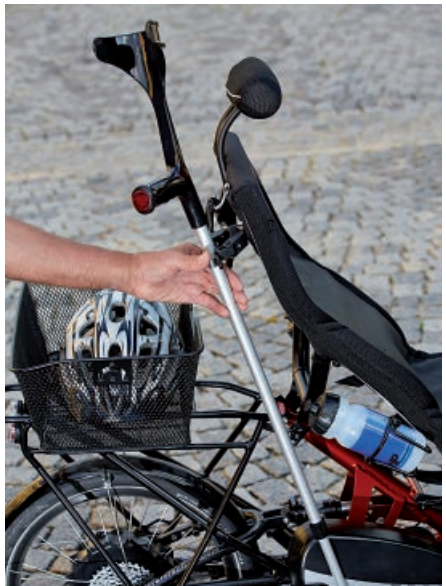
Despite often being regarded as mutually exclusive, at HP VELOTECHNIK we like to point out how ergonomics and refined design can be elegantly combined. With the *Scorpion plus 20,* we designed a trike that provides a solution for those who seek ultimate comfort as well as for people with special needs,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

Many people with mobility issues never believed they would be able to ride a bike. But, clearly said: Does anyone have to give up riding because of getting older? Or because of needing accommodation for 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 for 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 his 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!



Great technology should also look great – clean, tidy and functional. What we firmly believe is that the quality and innovation of the trikes manufactured in our German recumbent factory should also carry over to the accessories. This is especially applicable to 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 recumbent artifacts.

Scorpion+

Little helpers by HP VELOTECHNIK to steer you on your way

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

The *ErgoPedal with safety release* can be easily clipped into conventional clipless pedal (SHIMANO *SPD*). Your benefit is that the adjustable trigger on the safety binding ensures that it opens reliably in the event of an accident. It also gives an enormous advantage to anyone doing a sports rehab after a knee surgery. The platform is anodized and width-adjustable.

The *ErgoPedal with calf brace* provides even more support. This new enhancement is adjustable in many ways, however, the big difference to the *ErgoPedal with safety release* is that it is firmly attached to the pedal. With both *ErgoPedals*, two *Adapters to extend the pedal axle* are included. These provide even more flexibility to align the foot platform in cases of an angled or misaligned foot position.

The quick release bracket for walking aids provides a new and especially important 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. The bracket is suitable for tube diameters from 20 to 30 mm (0,8" to 1,2"). 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 umbrellas or fishing rods to carry along?

Olympic honors

***Hands-On-Cycle* is a revolutionary concept in which just one special unit turns a pedal bike into a hand operated trike from HP VELOTECHNIK: fully encapsulated, with full suspension, optionally equipped with an electric motor and many functional and elegant extras, this was all it took to convince the most successful female cyclist of all time.**

It caused quite a stir in the media: Kristina Vogel wants to cycle again! The double Olympic champion and 17-time world champion in track cycling, paraplegic since her serious training accident in 2018, felt ready again after five years without a bike so now she was able to expe-

Hands-On-Cycle

rience the wind in her hair, the clicking of the chain when changing gear and the centrifugal forces when cornering again**.**

There is no question that she was in need of a handbike to achieve this. But not just any bike. For Kristina, style, maximum functionality and – of course – speed is key to great design. An intensive exchange of ideas began between her and the HP VELOTECHNIK team. The *Scorpion fs 20* with the *Hands-On-Cycle* makes quite an impression. The combination of a sporty tricycle and HP VELOTECHNIK's elegant, fully encapsulated handbike unit is unique in the field of hand-propelled vehicles.

We arranged an appointment at the HP VELOTECHNIK development workshop to test whether the bike fits her or not. This was not easy, because Kristina has a more than a full schedule. In addition to her job as a cycling trainer at the School of the Federal Police, she participates on talk shows, flies around the world to comment on the World Cycling Championships on TV, beams into the camera at advertising shoots for cosmetics or glamorously opens the Sports Press Ball as a dance partner on her wheelchair.

She makes the transition from wheelchair to the net seat of the *Scorpion* with energy and power which left us impressed. Now it's a matter of millimetrical fine tuning. Kristina is small, she is close to the 162 cm which is the minimum height spec for *Hands-On-Cycle*. Her legs lie flat on the frame tubes. "Can you do something about this?", she asks.

We did. This is one of the perks of a specialist bike manufacturer. And so the pro's feedback turned into a win-win situation for everyone. We did the second fitting at the eve of *Eurobike* 2023, now with *Foot plates* and *Calf braces*. It fits! The next day, our booth at the world's leading trade fair for the cycling world was packed like never before. TV, radio, newspapers – everyone wanted Kristina with the *Hands-On-Cycle*.

At the photo shoot a few weeks later at Kristina's home, she really gets her *Scorpion fs 20* going. She steers it swiftly along the forest paths in the Berlin countryside. Standard handbikes with their powered front wheel don't have that much grip on soft ground. She rolls even greater on asphalt and comes back with the experience of many pedelec riders: "It's a pity that the motor cuts out at 25 km/h." There is a flash of the former "speed queen" of track cycling: Kristina wants more!

Hands-On-Cycle – fully enclosed and fully integrated

In the *Hands-On-Cycle*, 20 years of experience in tricycle construction merge with technical sophistication and convincing design to create a uniquely elegant, compact and comfortable composition. In practice, this means that handcycling has never been so safe and inclusive for people with disabilities.

Thanks to *Hands-On-Cycle*, you can (once again) take off on bike tours and excursions with family and friends. And in the utmost comfort: The *Scorpion plus* models and the *Scorpion fs 20* (photo), which also has full suspension, roll casually over bad roads thanks to the rear-wheel drive with plenty of grip. Our trikes also have an amazingly small turning circle and plenty of space for loading luggage.

Unique safety advantage: HP VELOTECHNIK packs the hand drive, including gears and chain into a closed housing. This prevents rotating and oily drive parts from coming into contact with your upper body and arms.

Built-in convenience: The unit can be easily raised and lowered thanks to the quick-release fastening. When fully upright, it locks into place and you can easily hold on to it to get on and off.

Powerful plus: As an option, we can also equip your hand bike with an electric motor. The rear wheel hub motor *Z20* from NEODRIVES supports you with up to 25 km/h (16 mph).

Casual comfort: The ergonomically positioned handles close with a flat rest, which prevents your hands from slipping. You thus avoid having to grip the handles tightly without interruption. This noticeably relieves the strain on your arms.

The cockpit: The *Hands-On-Cycle* provides a clear view of the trike's most important operating and control units. It offers space for additional devices, for example, you can mount your smartphone holder there.

The mast of the *Hands-On-Cycle* is made of aluminum and has a resistant powder coating in Blue shade grey matt. At the heart of the complex design is a cardan joint. Thanks to its sophisticated mechanics, *Hands-On-Cycle* manages to combine steering and drive in one element in an extremely efficient space-saving design.

Bright-eyed: The headlight of the optional lighting system can be elegantly integrated into the mast of the *Hands-On-Cycle*.

Wishful thinking: *Hands-On-Cycle* is fully integrated into HP VELOTECHNIK's modular system. Just as with the trikes with pedals, you can choose from various gears (chain or hub) as well as braking systems (hydraulic, optionally coupled).

The hand drive, with integrated footrest is installed in the main frame instead of the usual recumbent front boom. The additional weight is only 7.5 kg (16,5 lbs). Like all outriggers in HP Velotechnik bikes, *Hands-On-Cycle* is length-adjustable. In addition, the footrest is adjustable for length.

Four-way adjustable

Hands-On-Cycle can be continuously adjusted for people with a height of 1.62 to 2.00 m* (5'3" to 6'6") and arm lengths of 70 to 94 cm* (27" to 37"). Optimization is possible in all three dimensions. The length adjustment range of the hands-on-cycle unit in the main frame is 6 cm (2.3"); the footrest can be extended by up to 14 cm (5.5"). The mast has an adjustment angle of 22°. The grip width can be varied between 52 and 62 cm (20.4" and (24.4"). Another possibility for adjustments is offered by the flexible seat systems from HP VELOTECHNIK. We recommend the *ErgoMesh Premium*.

* Approximate value; consult with a specialist dealer as to whether and how *Hands-On-Cycle* can be used for your personal indications and a test ride are necessary in any case.

Compact for transport

The basic models for *Hands-On-Cycle, Scorpion fs 20* and *Scorpion plus 20* and *26*, are foldable. And remain so even with the hand drive mounted. The difference: The folding size becomes larger, and an additional handle is required: Before you can fold the main frame, the hand drive mast must first be folded to the side.

All data from your engine, always perfectly in view.

What is already difficult for many cyclists is often even more complex for hand bikers: giving hand signals when turning. Our optional *WingBling* turn indicators make it easy.

Hands-On-Cycle is prepared for options such as the foot plates. Another option is the *Lower leg fixation*. Both have Velcro straps to fix the feet and legs.

Technical Data

Length ..... 190–210 cm (6'2"–6'9")
Width ..... 83 cm (2'7")
Height ..... 85 – 100 cm (2'8"–3'3")
Folded dim (LxBxH) .... 105 x 83 x 98 cm (3'4"x 2'7" x 3'2")*
Turning circle ..... 4,76 m (15'6") outside
Weight ..... from 25 kg (55 lbs)
Riders size ..... approx. 1.62 – 2.00 m (5'3" – 6'6")

* Folded dim. may increase depending on accessories

Hands-On-Cycle

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

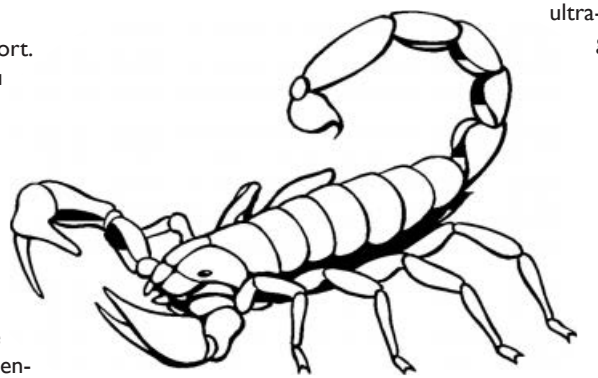
Let's start with the best bit: There's no need to read the small print on this page to enjoy the luxurious comfort offered by your Scorpion. All the latest vehicle technology expertise comes pre-installed into your HP VELOTECHNIK trike. Lean back, relax, and enjoy the smooth ride and the scenery around 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 *Air shock* system 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*, 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!

STREAMER
HPVELOTECHNIK

Stay cool: The e-drive not only saves time for moments of enjoyment. It also enables an electric automatic from SHIMANO for precise gear changes.

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

No other type of bicycle is as perfectly compatible with electric motors as recumbent trikes. Why, is obvious: The ease of pedaling in the ergonomic sitting position makes the ride even more pleasant. The built-in aerodynamic advantage of your recumbent trike can also be leveraged electrically. Less drag means more range.

Depending on which electric drive system on the trike you pedal, 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 effortlessly.

Especially remarkable is that the perfect pedaling experience does not change with the motor. Thanks to HP VELOTECHNIK programming and impeccable engineering, there is no stuttering and no noise. The electric drive system is very safe: the motor only operates when you activate the push assist function or start pedaling. The motor then engages quietly with the first rotation of the crank and is smoothly reduced as the speed reaches 25 km/h (16 mph) or for *Scorpions* in the USA 20 mph (32 km/h).

This pre-programmed top speed allows your *E-Scorpion* to legally conform to e-bike regulations in many countries and US-States. It can usually be ridden without registration, helmet, or license plate. As a unique safety advantage our E-Trikes can be equipped with a turn signal!

The light weight of the trike allows a normal riding feeling, even when the battery is drained. 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 on the ground!

You have the choice, because five 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 three bottom bracket motors from SHIMANO's *STEPS* series or the bottom bracket motor from BAFANG. They all reinforce how HP VELOTECHNIK's unique power forward design enhances your riding experience.

Each of these five 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. The *Scorpion* can also accommodate a second battery.

Just like a mini-dashboard the ergonomically arranged, easy-to-read operating elements facilitate the rider's technical monitoring. You reach your destination relaxed, no matter if you want to leave the traffic jam behind or take a big tour with heavy luggage.

US Class 1 electric bicycle 250W 20mph

NEODRIVES *Z20*: Full power directly at your rear wheel

The outstanding advantages of rear wheel hub motors are that they are incredibly quiet, dynamic and versatile.

An excellent choice is the NEODRIVES *Z20*: Optimized for dynamic riding, it features a modern design, a high energy efficiency of 85 percent and user-friendly features such as a functional display. The direct rear-wheel drive delivers a particularly natural riding feel, providing smooth and responsive assistance exactly when you need it.

The NEODRIVES Z20's specifications speak for themselves. The maximum level of assistance is 300 percent. During acceleration, the motor boosts its maximum power output to as much as 450 W. With a 576 Wh battery, you can achieve ranges of up to 136 kilometers (84 miles).

The whisper-quiet rear-wheel drive is a gearless motor, so power is not lost through the sprocket or chain. This reduces wear on drivetrain components, allowing them to last up to four times longer than with a mid-drive motor.

A particular advantage of this hub motor system in contrast to bottom bracket motors is that it can recover energy when riding downhill, helping to extend your range.

This energy recovery technology is called recuperation. Simply press a button on the control unit and the motor operates as a generator. This recharges the battery and also helps extend the lifespan of your disc brake pads The drive system benefits both the environment and your wallet. With modern green electricity, a full charge of riding enjoyment costs you only a few cents.

Perfect for your trike: The *Scorpion* with NEODRIVES hub motor includes a reverse gear for maneuvring. Reverse travel at speeds of up to 3 km/h (1.86 mph) is activated through a submenu in the control unit and initiated by a slight reverse movement by the rider.

Tailwind at your thumb: The remote control for this innovative system is mounted directly on the handlebar grip. The most important settings can be adjusted with your thumb. The developers have arranged five buttons ergonomically in such a way that their size and placement feels intuitive from the very first ride. In other words, the large plus and minus buttons for changing assistance levels are absolutely easy to find.

The NEODRIVES *Z20* also makes it easy to view information such as remaining range, battery charge level, motor support, daily distance travelled, and average speed. Thanks to the convenient user interface, the menus on the 2.4-inch display can be scrolled quickly and easily.

HP VELOTECHNIK trikes allow you to position the NEODRIVES display either beside the handlebars (pictured left) or in the "Top View" position above the handlebar end for optimum readability.

To further emphasize quality, we offer two gearing options: the SRAM 30 derailleur system with 3x10 finely tuned gears, and the robust PINION C1.12 gearbox with an impressive gear range of 600 percent.

SHIMANO *STEPS E5000*

By far the most affordable electric motor in our modular system comes in a particularly small housing. This fits elegantly on the bottom bracket boom of your *Scorpion*, which is specially forged for the *STEPS* motors.

With its harmonious characteristics and a well-dosed torque of 40 Newton meters, the *E5000*, in combination with the shifting options we have selected, is the ideal companion for comfort-oriented riders.

Comfort meets versatility: The large surface of the black-and-white display (6,9 cm / 2.7") ensures good readability with its high-contrast display. The system impresses with its very easy handling, including the practically integrated light button. Wireless connectivity to smartphone apps and a variety of bike computer functions underline the versatility of the *STEPS E5000* build by SHIMANO.

SHIMANO *STEPS EP5*

Surprising: The system is located in the mid-price segment, but is very powerful. A torque of 60 newton meters means an increase of 50 percent compared to the *E5000* motor.

This expands the range of use of your trike immensely and ensures a wide range of applications in everyday life. The *EP5* delivers plenty of power both on hills and as a towing machine in front of a children's trailer or cargo trailer.

Comfort fans choose the *Nexus Di2* hub, with either 5 or 8 gears. You will already appreciate the advantages of the fully automatic gearing, which can be activated at the push of a button, after the first lap. When stopping at traffic lights, for e xample, the no-worry package automatically engages a low gear. Otherwise, too, the *Nexus Di2* always shifts into the most efficient gear. To ensure that the shifting process is smooth and without jolts, the system automatically reduces the assistance for a moment.

SHIMANO *STEPS EP801 Cargo*

The flagship: The SHIMANO *EP801* catapults the topic of e-mobility into a new dimension. All modules have been revised and equipped with new software. The top system impresses with a torque of 85 newton meters. It goes without saying that HP VELOTECHNIK includes a large color display (7.1 cm / 2.8") with numerous bike computer functions.

SHIMANO's new technologies enable fully automatic gear changes for the first time on a derailleur. The system always selects the most efficient gear when riding thanks to the *Autoshift technology*. But it can do even more. *Freeshift technology* detects braking: parallel to deceleration, thus the chain is shifted to a lower gear.

Ingenious additional feature: Via our app, you can program the motor with two completely individually tunable profiles. This is perfect if you want to get the bike ready for different areas of use or riders in seconds at the touch of a button on the display..

We chose the *Cargo* version of the *EP801* with care. It allows you to get full power from the motor practically with the first pedal stroke. The maximum assistance ratio is a whopping 400 percent.

US Class 1 electric bicycle 250W 20mph

SHIMANO *STEPS*: Versatility is the key

Maximum bandwidth: With the *EP801 Cargo, EP5* and *E5000* systems, we use the most advanced motors from the SHIMANO *STEPS* motor range to fit to our trikes. Each system has it's specific advantages. The very compact *E5000* integrated into the front boom is ideal for the price-conscious. The *EP5* already offers 50 percent more power. The *EP801* high-end system impresses with a maximum power of 600 W and a torque of 85 Nm. We install the *EP801* in the *Cargo* version. It provides full power practically after the first pedal stroke.

Automatic comfort: You can combine all engines with fully automatic gearing. The *EP801 Cargo* comes with two highlights: the continuously variable *Trekking Automatiq* from ENVIOLO and the 10-speed *Cues Di2* derailleur from SHIMANO, which always engages the most efficient gear when riding thanks to *Autoshift Technology*. As with the *EP5*, the proven *Nexus Di2* 8-speed hub gear system is also available for the *E5000*. The *EP5* can also be optionally equipped with the 5-speed automatic hub *Nexus Di2*. The Result: You let the machine work and dedicate yourself to relax to enjoy the surroundings!

You prefer to have it in your own hands? Then choose from our manual gearing systems. If you mostly ride on flat terrain, go for the 8-speed derailleur, which also comes with an attractive price. Fans of high-end technology, on the other hand, will enjoy the legendary 14-speed hub gear from ROHLOFF, the *Speedhub*.

The slim silhouettes of the motors blend discreetly into the multi-award-winning design of the *Scorpions*. The large chainrings provide lower chain forces at high torque, which has a positive effect on the lifespan of the chain and sprocket compared to many other bottom bracket motors. The forces of rider and motor go directly to the chainring, even at speeds above the pedelec support limit of 25 km/h (16 mph) or, for US Class 1 electric bikes, 32 km/h (20 mph). Your power arrives at the rear wheel without noticeable power loss.

With a range of up to 191 km (118 miles), the *STEPS* system delivers a powerful result from the efficient energy management of the standard 418 Wh lithium battery.

The range increases by almost a third if you alternatively choose the optional battery with 630 Wh capacity, which we supply with 4 A quick charger. The externally identical batteries can be easily removed by unhinging them and removing them off from the side. They snap back into place just as quickly and easily. 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 630 Wh capacity. This backup power source travels safely on the special mount under the seat. 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.

Top: The displays are always located at the end of the handlebar. On the large, high-contrast black-and-white-display, the control button for the light is positioned directly below it.
Center: The battery is located under the seat with a favorable low center of gravity on the right or left side, depending on the model.
Bottom: The *STEPS* motors are positioned right at the front in the beautifully shaped front boom with a forged bracket from HP VELOTECHNIK.

BAFANG *M410 HD: Smart Pedaling* for riders with reduced leg strength

Specifically for HP VELOTECHNIK, the powerful BAFANG *M410 HD* motor is equipped with software that combines two worlds. Our engineers have named this technology *Smart Pedaling*.

"Smart" describes the way the system responds to pedaling, since e-bike motors usually rely on either torque sensing or cadence sensing. Our BAFANG system can do both! In normal torque sensing mode, the system works as you would expect from most e-bikes. You pedal, and the motor adds power accordingly – the more force you apply, the more assistance you receive. This creates a very natural riding experience.

Originally, this high-performance drive system, with its maximum torque of 90 Nm and torque-based control, was developed for mountain biking and heavily loaded trekking bikes. However, with this performance profile it is also ideally suited for tricycles. In a sense, extra enjoyment is built in – whether you are cruising comfortably through the city or tackling alpine passes with heavy loads.

For riders with very limited leg strength or physical impairments, however, the pure torque sensing is less suitable. This is where – as the name suggests – *Smart Pedaling* comes into play. It allows you to switch to cadence control while riding. All you need to do is operate the thumb throttle. Even if you are only pedaling lightly, the system will provide the constant extra power that you chose as assistance level.

In this mode, it is inherent that significantly more battery energy is consumed with minimal pedaling than in torque-sensing mode. Thanks to the large 720 Wh battery, however, you can still ride in complete comfort. Its generous capacity provides ample reserves for long day rides, hilly terrain, and frequent use of higher assistance levels. Depending on riding style, route profile, weather conditions, and load, the battery can support impressive touring distances, giving you the confidence to explore beyond your usual routes and enjoy every journey on your *Scorpion* with less concern about range.

The throttle has a second function. It allows the motor to push your *Scorpion* forward from a standstill without any pedaling. This boost automatically stops once 6 km/h (4 mph) is reached. The thumb throttle is positioned optimally within easy reach of your thumb, close to the handlebar grip.

Below the display on the left are the touch buttons for switching the assistance level. Below the display on the right is the thumb throttle for extra power.

The BAFANG motor also enables an additional gearing option. The *M410 HD* is the only one of our motors that can be combined with the electrically shifted version of the ROHLOFF 14-speed hub gear. For even greater comfort, the ENVIOLO *Trekking Automatiq* offers a fully automatic hub gear system.

Both solutions complement the character of the drive perfectly, allowing you to focus entirely on the ride while the technology works seamlessly in the background. Whether you prefer maximum control or effortless convenience, the drivetrain can be tailored to suit your individual riding style.

Technical Data

System	Bafang *M410 HD*	Shimano *STEPS E5000*	Shimano *STEPS EP5*	Shimano *STEPS EP801 Cargo*	Neodrives *Z20*	Neodrives *Z20 RS*
Available for	all *Scorpion*-Models excl. *S-Pedelec*	all *Scorpion*-Models excl. *S-Pedelec*	all *Scorpion*-Models excl. *S-Pedelec*	all *Scorpion*-Models excl. *S-Pedelec*	all *Scorpion*-Models excl. *S-Pedelec*	*Scorpion fs 26 S-Pedelec*
Support up to	25 km/h (16 mph)	25 km/h (16 mph)	25 km/h (16 mph)	25 km/h (16 mph)	25 km/h (16 mph)	45 km/h (28 mph)
Push assist up to	6 km/h (4 mph)	6 km/h (4 mph)	6 km/h (4 mph)	6 km/h (4 mph)	6 km/h (4 mph)	6 km/h (4 mph)
Reverse gear	-	-	-	-	up to 3 km/h (1.8 mph)	
Range*	up to 128 km (80 miles)** (up to 256 km / 160 miles with additional battery, folding limited)	up to 285 km (177 miles) (up to 570 km / 354 miles with additional battery, folding limited)	up to 184 km (114 miles) (up to 460 km / 286 miles with additional battery, folding limited)	up to 191 km (118 miles) (up to 480 km with additional battery, folding limited)	up to 136 km (84 miles) (up to 290 km / 180 miles with additional battery, folding limited)	up to 60 km (37 miles) (up to 75 km with additional battery, folding limited)
Force amplification	5 levels	3 levels: Eco / Normal / High	3 levels: Eco / Trail / Boost	3 levels: Eco / Trail / Boost	5 levels	5 levels
Noise level	very silent bottom bracket motor	silent bottom bracket motor	silent bottom bracket motor	very silent bottom bracket motor	extremely silent hub motor	extremely silent hub motor
Max. torque	90 Nm	40 Nm (at the front motor)	60 Nm (at the front motor)	85 Nm (at the front motor)	40 Nm (at the rear wheel)	40 Nm (at the rear wheel)
Rated power	250 W	250 W	250 W	250 W	250 W	400 W
Maximum power	750 W	420 W	500 W	600 W	450 W	1000 W
Rechargeable battery	Bafang 36 V Li-Ion removable	Shimano 36 V Li-Ion (Generation 1), removable	Shimano 36 V Li-Ion (Generation 2), removable	Shimano 36 V Li-Ion (Generation 2), removable	Bmz 36 V Li-Ion removable	Bmz 48 V Li-Ion removable
Support	up to 340 %	up to 200 %	up to 300 %	up to 400 %	up to 300 %	up to 400 %
Energy content	720 Wh	630 Wh	418 Wh	418 Wh	576 Wh	627 Wh
Battery weight	3.5kg (7.7 lbs)	3,4 kg (7.5 lbs)	2,6 kg (5.6 lbs)	2,6 kg (5.6 lbs)	3,5 kg (7.7 lbs)	4,2 kg kg (9.2 lbs)
Battery life	800 – 1000 charging cycles	800 – 1000 charging cycles	800 – 1000 charging cycles	800 – 1000 charging cycles	800 – 1000 charging cycles	800 – 1000 charging cycles
Charger	Bafang (2 A)	Shimano (4 A)	Shimano (2 A)	Shimano (2 A)	Bmz fast charger 4 A	Bmz fast charger 4 A
Charging time	10 hours (8 hours 80%)	5 hours (3,6 hours 80%)	6,5 hours (3,5 hours 80%)	6,5 hours (3,5 hours 80%)	4 hours	4,5 hours
Charger weight	0,5 kg (1.1 lbs)	0,5 kg (1.1 lbs)	0,5 kg (1.1 lbs)	0,5 kg (1.1 lbs)	0,85 kg (1.9 lbs)	1,08 kg (2.4 lbs)
Additional weight	ca. 8,4 kg (18.5 lbs)	ca. 8,9 kg (19.6 lbs)	ca. 8,4 kg (18.5 lbs)	ca. 8,1 kg (17.9 lbs)	ca. 8,7 kg (19.2 lbs)	-
Display	Black/white display above handlebar (Top View)	Black/white display above handlebar (Top View)	Color display above handlebar (Top View)	Color display above handlebar (Top View)	Black/white display above handlebar (Top View) or side of handlebars	Color display above handlebar (Top View) or side of handlebars
Drivetrain	Sram *X4* 8 speed derailleur gearing, twist shifter 20": 44 / 11– 34 teeth 26": 38 / 11– 34 teeth	Sram *X4* 8 speed derailleur gearing, twist shifter 20": 44 / 11– 34 teeth 26": 38 / 11– 34 teeth	Sram *X4* 8 speed derailleur gearing, twist shifter 20": 44 / 11– 34 teeth 26": 38 / 11– 34 teeth	Shimano *Cues Di2* 10 speed derailleur gearing (electric) with button 20": 50 / 11– 43 teeth 26": 44 (SFN: 38) / 11– 43 teeth	Sram *30* speed derailleur gearing bar end shifters 20": 60-52-40 / 11–36 teeth 26": 52-42-30 / 11–36 teeth	Sram *30* speed derailleur gearing bar end shifters 52-42-30 / 11–36 teeth
Drivetrain (alternatively)	Rohloff *Speedhub* 14 speed (rear wheel internal gear hub) or Rohloff E14 (electric gearing) or Enviolo Trekking Automatiq	Shimano *Nexus Di2* 8 speed, automatic rear wheel internal gear hub	Shimano *Nexus Di2*, automatic rear wheel internal gear hub (5 or 8 speed)	Rohloff *Speedhub* 14 speed (rear wheel internal gear hub) or Enviolo Trekking Automatiq (stepless planetary gearbox)	Pinion C1.12 12 speed internal gear transmission	Pinion C1.12 12 speed internal gear transmission
Extras	Bluetooth interface additional battery (720 Wh) switchable from torque control to cadence control via a thumb lever	Bluetooth interface additional battery (630 Wh)	Bluetooth interface optionally with big battery pack (630 Wh) and fast charger (4 A; 2,5 hours: 50%); optionally with additional battery (630 Wh)	Bluetooth interface optionally with big battery pack (630 Wh) and fast charger (4 A; 2,5 hours: 50%); optionally with additional battery (630 Wh)	Bluetooth interface USB interface optionally with additional battery (576 Wh)	Bluetooth interface USB interface Touchscreen on option: additional battery (651 Wh)

* Range as stated by manufacturer: Shimano *STEPS E5000, EP5* and *EP801 Cargo*: support mode Eco, flat terrain, 23 km/h (14.3 mph), system weight 105 kg (231 lbs), outside temperature 23°, without electric gearing and light (standard battery with 418 Wh); *EP801 Cargo* with Eco mode on Level 3 (27 Nm) and start of support with Level 5.
Neodrives *Z20*: 100 W rider input, support level 1, flat terrain, smooth roads, 70 kg (154 lbs) payload incl. rider; Neodrives *Z20 RS*: support level 3 in optimal conditions (flat terrain, temperature 20°, even ride, pedalling power driver 80 W, speed 39 km/h (24,2 mph); with support level 5 up to about 40 km (24.9 miles).
** Range recorded by HP Velotechnik: support mode 1, flat terrain, 18 km/h (11.2 mph), temperature 20°, system weight 115 kg (254 lbs), drivetrain Enviolo *Trekking Automatiq*

Take a seat and enjoy: Seating systems from HP VELOTECHNIK offer pure ergonomics

The comfortable seat is a major advantage of a recumbent. Recumbent riders who rave about their *Scorpion* will tell upright bicycle riders who suffer from permanent pressure points when sitting, about two unbeatable benefits. The first is comfortable seating and the second back-friendly ergonomics.

The relaxed feel of the comfortably reclined position is an important benefit of your HP VELOTECHNIK trike. The seat position has more of an impact on how your ride feels than any other component. For exactly these reasons, HP VELOTECHNIK gives top priority to the design of the seat as the central contact point between rider and bike.

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. The secret lies in the perfect fit. The premise for powerful pedaling without pressure points is an ergonomically optimized recumbent seat in which the entire upper body can be supported over a large area.

Since everyone is built differently, we have developed three seat systems: the sporty hard shell seat *BodyLink*, the breathable mesh seat *ErgoMesh* and the flexible mesh seat *ErgoMesh Premium*. The mesh seats are also available in a range of widths and heights. This allows you to optimize your bike for a wide range of uses.

Sit back and experience how all three seat systems can flexibly adapt to your body shape. On the following pages we will show you what modern recumbent seating systems are capable of and what accessories you can use to equip your individual oasis of well-being.

Test it for yourself: Your HP VELOTECHNIK dealer will happily show you the great ergonomics offered by these seats!

NET SEAT

ErgoMesh

Cool comfort that breathes: Mesh seats ensure the best possible air circulation on the contact surfaces. When you lean back, you can feel how pleasantly the *ErgoMesh* seat surface adapts to your back and buttocks. The ergonomically optimized support with a maximum of individual adaptability succeeds thanks to up to eight tension straps as well as four *OrthoFlex*® cushions.

NET SEAT

ErgoMesh Premium

Comfort with maximum flexibility: The *ErgoMesh Premium* is just as airy and adaptable as the *ErgoMesh* seat – but in terms of flexibility and adjustment options it even surpasses it. With the *Seat-O-Flex* hinge developed by HP VELOTECHNIK, you can adjust the angles of the backrest and seat surface independently of each other on this premium seat.

SHELL SEAT

BodyLink

Hard shell, efficient power development: The advantage of a shell seat is its ultra-precisely defined shape. Our sophisticated technology nevertheless offers highly flexible adjustments. This makes the anatomically shaped *BodyLink* the perfect abutment for the best possible power transmission when pedaling. Sporty riders on the hunt for new speed records appreciate this.

OrthoFlex® – perfectly tailored ergonomics for the mesh seat

The basic elements of the *OrthoFlex*® technology are four highly breathable cushion blocks made of open-pored polyurethane material. They can be individually cut to size. You simply insert these 3D cushions into the side pockets of the seat, align them according to the shape of your back and close the pockets with velcro. This fixes the four elements in a non-slip position. If the alignment is not yet as desired, one is easily able to readjust the cushions while sitting: Simply take a seat in *ErgoMesh* or *ErgoMesh Premium*, open the velcro fastener and optimize the cushion position.

***OrthoFlex*® was originally developed** with orthopaedic specialists for use in our *Gekko fxs* children's trike that grows with the child. But why should only the youngest benefit from such smart technology? Combine the advantages of the simplest handling and maximum flexibility to get the greatest possible adaptability.

Enjoyment depends on
the right position

ErgoMesh – the breathable mesh seat

The *ErgoMesh* seat incorporates a high-strength aluminum frame, which is anatomically designed for ergonomic back support. Seven tension straps and four *OrthoFlex*® pads are used for individual adjustment.

The washable seat cover has a two-layer construction. Our engineers have chosen a very air-permeable mesh fabric as the base material. In combination with the broad tension straps, it has the right level of elasticity to prevent bruising from your belt or thick clothing seams. On top of this is a 3D knitted fabric with a cut to fit the body. The abrasion-resistant material wicks away sweat and is therefore used on the main contact areas. Its contours define the areas where you insert the four *OrthoFlex*® elements from the side. And finally, the cut shape of the 3D knitted fabric in combination with the discreet blue contrasting topstitching gives the *ErgoMesh* seat its sporty, dynamic look.

The *ErgoMesh* even has one advantage over the *ErgoMesh Premium*: an integrated zip pocket. Placed on the upper edge of the backrest, keys and the (very) small belongings fit in to that pocket – or the optional rain cover. If you need more storage space, simply equip the *ErgoMesh* with the optional *Add-on bags*.

ErgoMesh seat
on the *Scorpion fx*

This is what *ErgoMesh* and *ErgoMesh Premium* have in common

Even though the frame shape of *ErgoMesh* and *ErgoMesh Premium* is fundamentally different, they are like twins in many ways. Find out which comfort options and accessories you can use to upgrade both seats to a unique oasis of well-being; here shown on the *ErgoMesh Premium*.

The bag to pin on

A well designed seat back may seem to be a basic feature. But at HP Velotechnik it can do much more! We have equipped the mesh seats with two removable, functional luggage pockets, the *Add-on bags*. Separated neatly, they accommodate the optional seat rain cover as well as the small everyday items. Both bags are made of water-repellent Cordura® and have a protected zipper. They each offer a pack content of 1.4 litres. The left pocket made for stashing the protective cover has an airy mesh fabric on the side, so that the contents can start to dry while you continue your journey.

Optional headrest

A comfortable headrest can be mounted on the upper cross brace if desired. The height and inclination of the headrest can be adjusted in a few moments thanks to quick-release levers.

Show your colors

The seat is designed for the inclusion of a flag pole. With an optional flag as passive safety equipment, you set a clearly visible exclamation mark in traffic.

Reflective Elements

For extra safety there are reflective strips on the side of the seat and on the back of the bags, which provide better visibility when in the headlights.

Under tension

To individually adjust the fit of the seat to your body, you can adjust the tension straps on the *ErgoMesh Premium* in addition to positioning the *OrthoFlex*® pads. The back section is equipped with five, at the *ErgoMesh Premium* with six tension straps, which can be adjusted to be firmer or more flexible in seconds using a ladder buckle. Two more straps are located under the seat. In order to create the optimal power transmission in the transition from belt system to seat, the extremely resistant material Hypalon® was used, which is most notably used in boat building.

Nice and clean

The seat cover of your mesh seat is washable and can be replaced even after many active years in the recumbent.

Easy Seat-mounting

The mounting on the trike is done with the proven 3-point mounting system from HP Velotechnik. The ingenious design allows the seat angle to be adjusted with infinite settings in seconds. All you have to do to set the desired position is to close three quick releases. If you remove the seat frequently, the optional *Adjustable end stops* lets you retain your preferred position. An additional advantage of the 3-point mounting is that you can interchange *ErgoMesh Premium*, *ErgoMesh* and *BodyLink* as you wish.

ErgoMesh Premium seat

ErgoMesh Premium – the best of two worlds

The premium version: For the first time in recumbent mesh seat design, the *ErgoMesh Premium* allows the angle of inclination of the seat and backrest to be adjusted independently. By that it combines the best of two worlds: the ergonomically adjustable fit of a partially flexible hard shell seat with the airy comfort of a mesh seat.

The frame is made of high-strength aluminum tubes and gives the premium seat its unmistakably defined contour. For outstanding comfort the *ErgoMesh Premium* combines a unique material mix of six different woven and knitted fabrics. This makes the seat both highly breathable and comfortable. In addition the seat is highly adjustable.

Unique: *Seat-O-Flex*

The *Seat-O-Flex* joint is the linchpin for your best possible comfort. Before all other innovations in this superlative seat, the developers at HP Velotechnik were convinced that for maximum flexibility, the seat and backrest should be freely adjustable and independent of each other. Adjusting the angle of the seat as a whole, you can already do this with the *ErgoMesh*. With it the rider can choose either the aerodynamic reclining position or the upright position for a wider field of vision. But the rigid overall construction also means that in a very upright position it offers less support to the front. Also at a very flat angle some people feel pressure from the front edge of the seat. You will enjoy the new freedom with the *Seat-O-Flex* technology in the *ErgoMesh Premium* seat by your ability to adjust the backrest and seat completely independently from each other. Experience this unbelievable comfort and find out how much difference 14 degree backrest angles can make.

Multi section design

In order to provide optimum support for the back and buttocks, the *ErgoMesh Premium* seat is divided into eight large cushion zones. The individual sections are separated by ventilation channels. The structure combines aesthetics and functionality by providing the greatest possible air supply precisely in those areas where the body sweats most.

Seat with contour

The aluminum frame (6061 T6) with its elaborately shaped 3D outline defines a new standard for recumbent seats. The design challenges that the engineers overcame were outstanding. The front edge of a recumbent seat has to fulfil two seemingly contradictory tasks: it must provide firm support to the front, but at the same time offer comfortable freedom of movement for the thighs when pedaling. The *ErgoMesh Premium* delivers on that perfect shape for maximum support.
Details make the difference: A glance at the upper seat mount on the *ErgoMesh Premium* shows that in contrast to the *ErgoMesh* seat and *BodyLink*, the mount with its characteristic long slits can be folded away flat. This makes transport easier and saves space.

Premium upholstery

The construction of the *ErgoMesh Premium* seat is characterized by a complex material mix. The seats made of simple foam used on some recumbents can sometimes offer a pleasantly cushiony feeling during the first seat test – but they usually prove to be too soft on long rides, and leave the pedalist in his own sweat. The *ErgoMesh Premium*, on the other hand, has a multi-layer structure tailored to the frame: Between the wide-meshed nylon base mesh and the abrasion-resistant surface knitted fabric, a second, 12 mm thick spacer knitted fabric ensures a very high level of breathability combined with a very good cushioning effect and firm support for your back.

Package measure: 68 x 41 x 24 cm (26.8" x 16.1" x 9.4")

Small is beautiful

You have two options for transporting the bike in the car. You can leave the seat on the trike and, after releasing a quick release, simply fold it forward. This will make your *Scorpion* nice and flat. If you want to transport the trike folded, remove the seat. You'll then also have two choices. With the seat folded, the *ErgoMesh Premium* becomes short and compact. Or it can also be fully opened. With a height of 16 cm (6.3"), the flat stretched seat leaves plenty of room in your car for your trike and your luggage.

Package measure (L x W x H): 89 x 41 x 16 cm (35" x 16.1" x 6.3")

BodyLink seat

The anatomically-shaped hard shell seat and back rest can be separately adjusted using quick release levers. After loosening the four screws in the center, the seat can be infinitely adjusted to your back length. It can also be completely removed in 15 seconds – a practical feature when it is raining or you want to put it in your car.

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 1 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!

The *BodyLink* seat by HP Velotechnik 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 two-part design allows the upper and lower parts to be aligned steplessly and independently of each other within a defined angular range.

With two quick-release levers you can fix the position of the lumbar support in your lower back area and at the same time the height of the front edge of the seat. With the third quick release, you can set the angle of the backrest in seconds: upright in the city, flat and fast in the country. The appeal is in the variety. At the same time, the *BodyLink*'s narrow backrest, compared to mesh seats, gives you plenty of freedom to move your upper arms, even in the upright position. An excellent basis for dynamic driving maneuvers and lots of driving fun.

On the practicality side, 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"). HP Velotechnik 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. The standard version is padded with EVA foam, while the optional *Airflow seat cushion* provides immediate and pleasant ventilation.

The *SeatWings* hip supports offer optimum side protection when cornering quickly. Your upper body can still move freely so that you can lean sportily into the bend.

High or wide – the main thing is to sit casually!

Change your level more often: The orthopedically convincing seat systems from HP VELOTECHNIK are available in several different heights. Thanks to the quick-release fastening, they can be removed in just 15 seconds and thus interchanged in no time at all.

Alongside the design of the *Scorpion*, it is above all the seat height that determines the character of your vehicle. A low seating position enables sporty, dynamic riding with maximum rollover stability. The *BodyLink* reduces air resistance, improves pedaling efficiency, and ensures maximum stability in fast corners. A higher seating position makes mounting and dismounting easier and offers excellent visibility, but requires adjusted cornering speeds.

The suffix *HS* in the name stands for high seat. Mounted on HP VELOTECHNIK's tallest trike, the foldable *Scorpion plus*, the airy *ErgoMesh HS* and the flexible *ErgoMesh Premium HS* offer a seat height of 57 cm (22.4"). This is higher than your office chair! With the high seat, you ride comfortably at eye level with car drivers in everyday traffic. Suitable for the high seats, the optional long handlebar offers an 8 cm (3.1") higher grip position – also ideal for smaller riders on lower seating positions. *HS* seats are available for all *Scorpion* models except the *Scorpion fs 26 S-pedelec*.

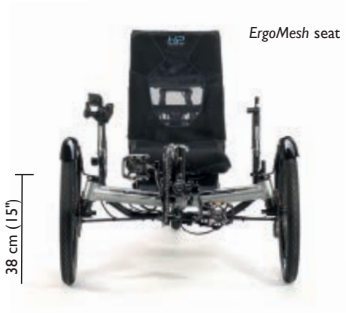
Big is beautiful: Both mesh seats are also available in an extra-large *XL* version. The 38 cm (15") wide *ErgoMesh* grows into the *ErgoMesh XL* or *HS XL* with a width of 43 cm (17"). The seat surface is extended by 5 cm (2") and the backrest is 4 cm (1.6") higher. On the *ErgoMesh Premium* (41 cm / 16.1" wide), the seat width increases to 46 cm (18.1"), while both seat length and backrest height are increased by 3 cm (1.2").

For riders who prefer a generous seat with proportions better suited to a shorter back or narrower upper body, the *ErgoMesh Premium XL Short* is available. Compared to the standard *XL*, the seat surface is 5 cm (2") wider and 3 cm (1.2") longer, while the backrest is 2 cm (0.8") narrower and 4 cm (1.6") shorter.

Seat heights

Seat height measured from the ground; shown using the example of the mid-height *Scorpion fx*. Seat heights for the *ErgoMesh Premium* correspond to those of the *ErgoMesh*.

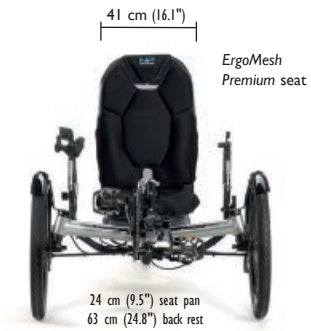
BodyLink shell seat



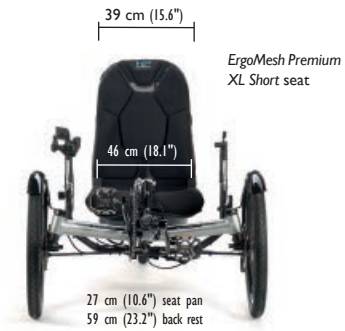
ErgoMesh seat

ErgoMesh HS seat

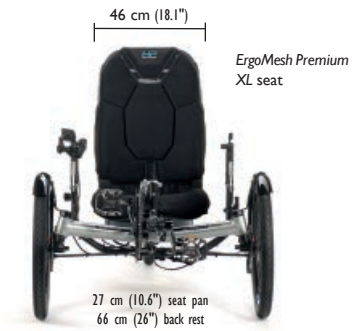
Seat width



ErgoMesh Premium seat



ErgoMesh Premium XL Short seat



ErgoMesh Premium XL seat

***ErgoMesh* seat:**
38 cm (15") width
25 cm (9.9") seat pan
55 cm (21.6") back rest

***ErgoMesh XL* seat:**
43 cm (17") width
30 cm (11.8") seat pan
59 cm (23.2") back rest

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 braket 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 VELOTECHNIK 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." RECUMBENTCYCLISTNEWS

"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 sophisticated, 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.

23

Sylvia, Myrtle the turtle and the big freedom

Sylvia Halpern can easily be called an icon in the US recumbent scene. She has been on tour with a *Scorpion fs 20* for more than ten years now – and has been completely thrilled for just as many years.

She is just as much at home at major events like the Tater Tot Recumbent Rally as she is in demand as a guide for budding globetrotters. In 2007, she set out on the journey for the first time – and lost 45 kilos over the course of the next five years. So in 2012, the then 51-year-old switched to the streamlined and sporty *Scorpion fs 20*. Of course, it was not yet clear where "Myrtle the Turtle" would take her – as she lovingly calls her vehicle. In

Adventure

"Just stay in a hotel on the route? Impossible!"

the meantime, the inseparable couple has visited countries on every continent. Whether Mexico, Colombia or Morocco, Thailand, New Zealand or Italy: In countless videos and blog entries she has recorded her impressions and unique pictures tell of the encounters.

The trike travel expert from Portland, Oregon is especially appreciated for her precise advice. For those who are going on a big trike trip for the first time, her tour diaries are a real treasure trove. Maybe it's because, in addition to technical tips, she has countless personal pieces of advice at her fingertips and loves to share her experiences. In this way, she conveys exactly what you won't find anywhere else. Details on organization, for example, or tips for accessories, where she shares all her experience.

With her travels, Sylvia has become increasingly independent and practically lives completely her project, which she now calls "Truck, Trike an Trailer". Because for her and Myrtle, their new home is now an American truck with a large camping trailer. Two impactful events kindled the decision of moving to widest mobility. One was the Corona pandemic: "I couldn't travel like I used to. Just stay in a hotel on the route? Impossible!"

The other has to do with her *Scorpion*: in 2019, the little turtle got a motor from the SHIMANO *STEPS* series. This opened up a whole new world for Sylvia. Planning routes and taking the topography into account, for example? Was yesterday! Whether mountains or wild terrain – now the whole world is at the feet of the electrified turtle and its pilot.

Triking into a new life

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.

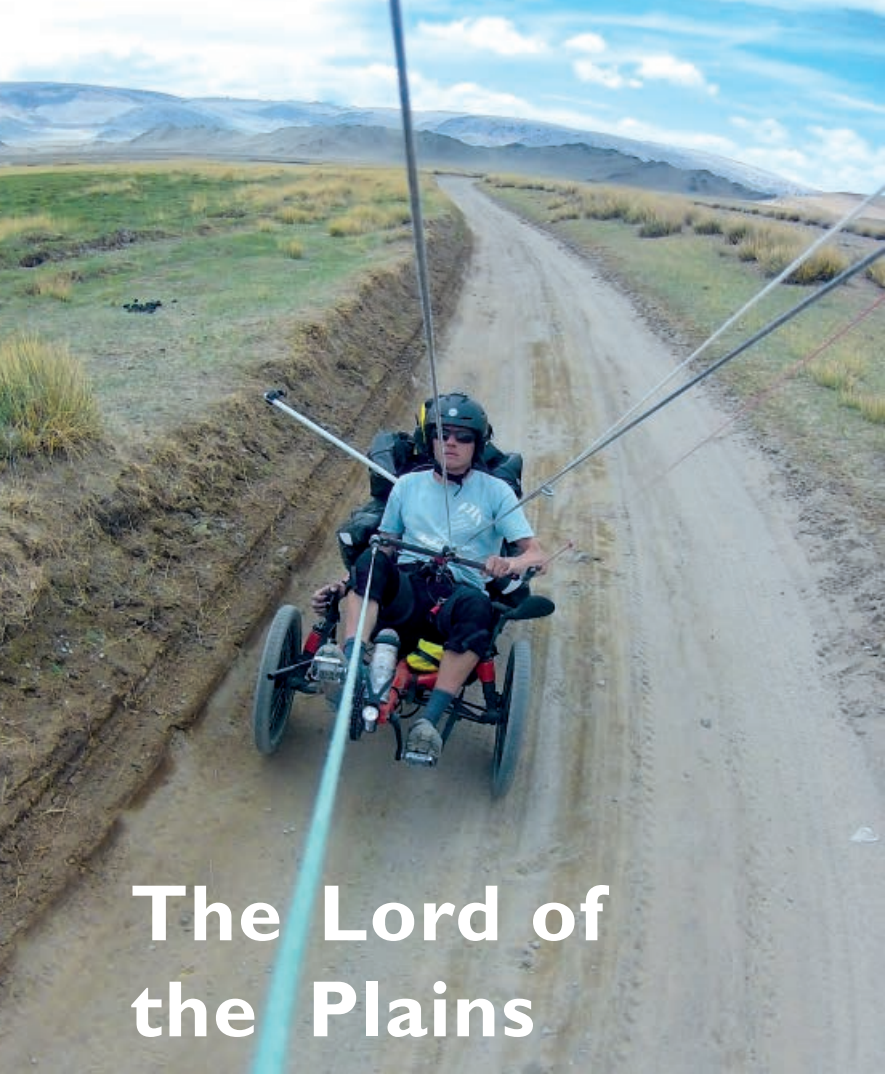
Only speaking defies him even after six years. That's why he writes. Short messages for his vis-à-vis. Articles for newspapers, bike magazines. He completes an internship at "BIKE" magazine. Then the turning point: for "FAHRRAD NEWS" he tests four trike models. On these the self confessed motion-junkie (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 downhill with 2300 height meters from the peak of the Teide makes up for just everything."



The Lord of the Plains

3 Wheels, 3 Kites, and 3 Months of Adventure

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.

„Sometimes I wish I could beam myself back into this open, wild world …“

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

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

„For most people, this could have been a nightmare, but for me, my dream became reality.“

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: *H*uman *P*owered *V*ehicles.

"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, the trikes are elaborately hand built by specialised technicians. A welding shop enables own prototyping, Computer-controlled test stands assist in the quality assurance of the 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 HP VELOTECHNIK's skilled engineers perform accurate reseach and tests. They team up with cooperating universities to ensure the latest technical approach. They strictly believe in well engineered, long lasting, high quality 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.

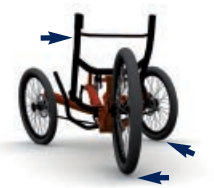
CEO Daniel Pulvermüller gets his hands dirty during prototype production. The series frames made of high-strength aluminum alloy are welded and heat treated by dedicated frame builders in partner factorys.

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

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

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, 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 engineers 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 1 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!

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

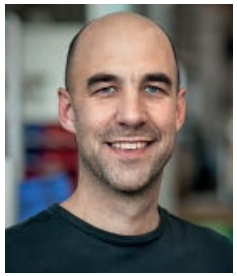
Inhouse testing banks for rigorous functional and fatigue strength tests of components.

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

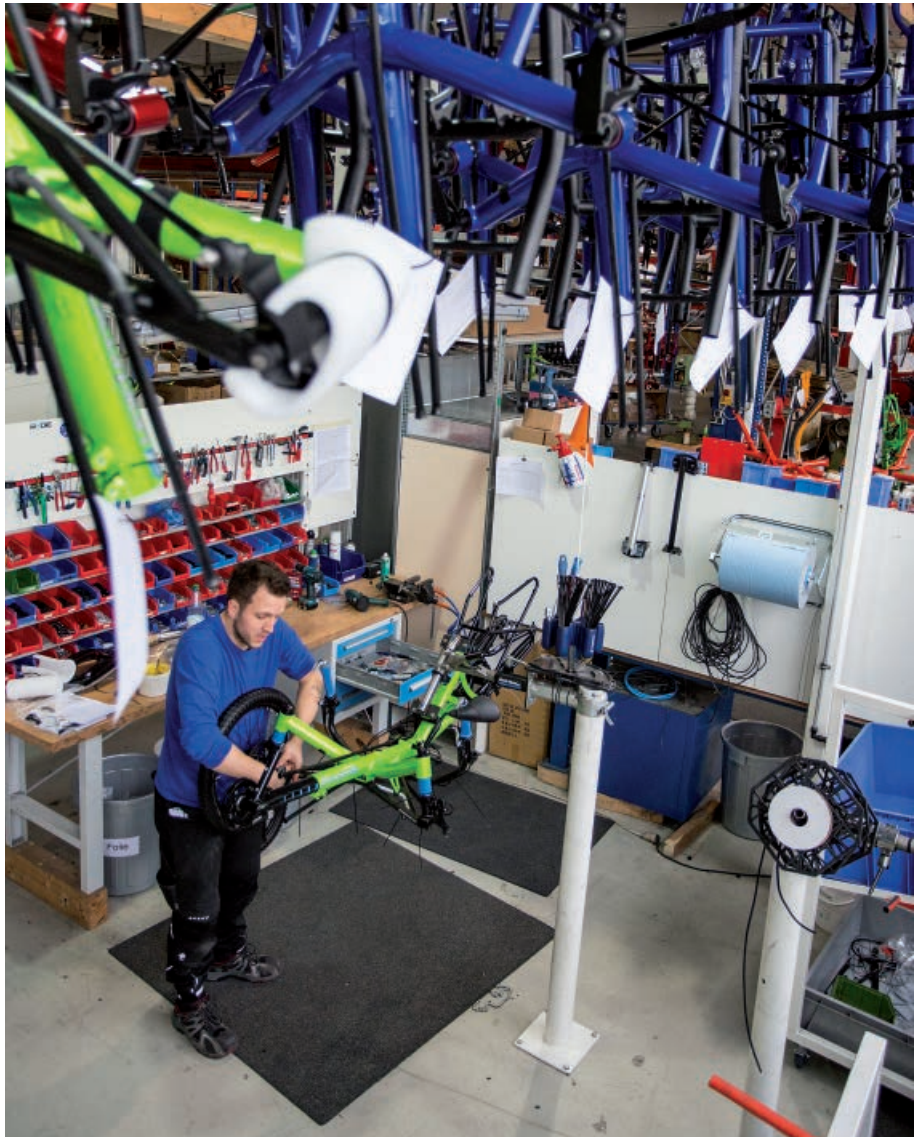
The focus is on people. At HP VELOTECHNIK trikes are designed on the basis of your needs, modern construction methods and ergonomical sense, down to the smallest detail.
Modular, orthopaedically designed seating systems such as the highly adjustable *BodyLink* seat or the well ventilated *ErgoMesh* seat 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.

HP VELOTECHNIK is committed to the advancement of cycling in the following associations:

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

Optional features for true individuals: Do you have 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 by protecting you from the elements. 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 traditionally called an accessory. However, on a trike like the *Scorpion* these amenities will truly add to your complete riding pleasure. Or can you imagine setting off on a tour as casually with a traditional upright bike as with a coffee mug on the *Side Bag Mount* of a tricycle?

For the drivetrain and brakes, we use reliable, easy-to-operate components from the cycling world's most prestigious manufacturers. We even combine these to create unconventional solutions, such as a one-handed brake and shifter operation.

If you want to go beyond the optional features shown on the next pages of this brochure and equip 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.

Our highly competent dealers are there to 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 match its intended use, your riding style, and your needs. With the extensive HP VELOTECHNIK worldwide dealer network, you can rely on perfect service in your vicinity. Check our dealer database at www.hpvelotechnik.com for details.

Years of fascinating riding pleasure await you!

Luggage

The stable *Rear rack* for two panniers up to a 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 t ubes (12 mm and 10 mm / 0.47" and 0.39") with black powder coating.

Always on top: Might 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* (tubing in 14 mm / 0.55"), you can store up to 10 kilos (22 lbs) – and your tent or a basket rides along with the best suspension in the industry.

Ideal for heavy loads: On the four models *Scorpion fx 20* and *26* as well as *Scorpion plus 20* and *26*, an additional lowrider carrier for up to two additional bags (up to 25 kg / 55 lbs) can be mounted on the luggage rack. This allows the center of gravity to move a little lower and improves road performance even more. The models with a 20-inch rear wheel already have an integrated platform for placing bulky loads over the rear wheel.

The universal side bag holder *Side Bag Mount* fits small bags as well as a variety of different attachments with up to a 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 and the *ErgoMesh Premium* seat in various positions.

ErgoMesh and *ErgoMesh Premium* can be equipped with two removable, functional luggage pockets, the *Add-on bags*. Separated neatly, they accommodate the optional seat rain cover as well as the small everyday items. Both bags are made of water-repellent Cordura® and have a protected zipper. They each offer a pack content of 1.4 litres. The left pocket made for stashing the protective cover has an airy mesh fabric on the side, so that the contents can start to dry while you continue your journey.

For the *BodyLink*, the *Microbag* is 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 well 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*.

Cycling can be such a pleasure. Enjoy your ride with the *Streamer* and outsmart wind and weather while experiencing the thrill of added speed on your recumbent trike!

The *Streamer* is a front fairing for recumbent bicycles designed by HP VELOTECHNIK. The new *Streamer 2.0* version impresses with its unique mounting system, featuring just a single attachment point at the very front of the boom. The resulting gain in comfort becomes apparent the moment you get on the bike. Simply tilt the windscreen forward, and after taking your seat, casually pull it back down until it locks into place. It's as easy as opening and closing a car door.

Your recumbent trike already offers a significant aerodynamic advantage. With our streamlined front fairing, you can benefit from aerodynamics even more. The *Streamer* extends your cycling season to the entire year. When riding in the rain, the *Streamer* keeps your legs dry. It is also ideal for touring in fall and winter, making riding in cold winds far more comfortable and enjoyable.

The universally adjustable mounting system is especially practical: By opening the quick-release clamp at the front attachment point, you can adjust both the angle and height to suit your body size. And when the sun is shining, you can simply remove the *Streamer*; for transport, the windshield can even be rolled up.

Light and safety

Highlight (picture left): The SON hub dynamo lighting system for your *Scorpion* has unmatched efficiency and is extremely light. Always ready for use, even in rain and snow. The ultra bright 100 lux LED headlamp B&M *IQ-X* brings extra safety with daytime running lights (*Licht 24*). B&M *Toplight 2C plus* taillight. Parking lights in front & rear. Twin-wire cable in the frame.

Eyro Light Set (picture right): The 30 lux battery-powered light set from B&M has a USB charging port with a charging cable is included. The rear light *Toplight 2C permanent* is also from B&M and is powered by 2 AA batteries.

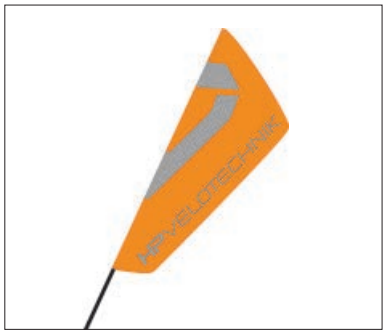
Send a signal! With our *WingBling* turn indicator, cyclists now can easily show their intentions in traffic. Advantage: It is not only the communication with other road users that makes the *WingBling* a unique accessory to your trike. It also makes your ride safer: In sharp corners you leave your hands at the handlebars instead of using hand signals.

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

Coupled front brake (picture right): Designed 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 *Cargo Duo* by RIDEREVER.

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 available 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 is possible.

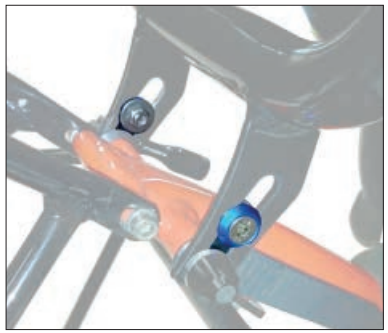


Safety is not a fashion statement: Many recumbent riders enjoy using a flag to increase visibility in traffic; it belongs on their ride like a bell or horn. With our logo and eye-catching design, you'll bring a new level of attention to the road for everyone.
Silver Reflective with orange Print.

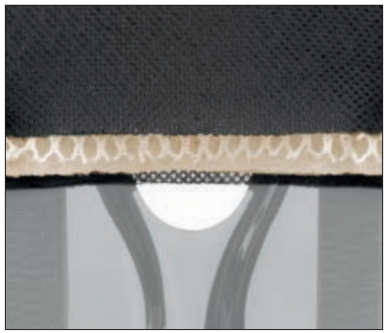
Comfort options

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 the possibility to fixate the lower arm – an ideal add-on for the one-hand operation of brakes and drivetrain.

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 lean into the curves. The flexible carbon supports are padded with breathably materials.



Very small, but a great time saver for those who frequently remove their seat: Although the *Adjustable seat stop* reduces the adjustment angle by 4°, it makes it easy to find a seat position once it has been selected. Suitable for *ErgoMesh Premium*, *ErgoMesh* and *BodyLink* seats.



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.

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").

Headrests

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.

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.

Walking aid mount: 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). HP VELOTECHNIK's stainless steel clip fixates the walking aid and releases it again with a non-fumbling one hand operation.

Rehab options

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

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 in 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.

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

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 pedaling. One grasp is enough to release the shoe again when needed.

The *ErgoPedal with safety release* allows fixation and an adjustment to the angle and the width of a foot. For even greater flexibility in adjusting the angle for an outward or inward foot position, use the included *Adapter to extend the pedal axle*. 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 pedaling and offers real emergency exit options.

The *ErgoPedal with calf brace* is 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. For even greater flexibility in adjusting the angle for an outward or inward foot position, use the included *Adapter to extend the pedal axle*. This version does not rely on an *SPD*® pedal for stability reasons.

Additional accessories

You will not be anonymous 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.

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.

Air shock instead of steel shock. Practical: The spring stiffness can be easily 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 and saves weight compared to the steel shock DNM *DV-22*.

With 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. This is also ideal for plug-in battery lights.

Immobiliser: Push out the handle, pull out the key - and the powerful ABUS *Frame lock Granit 6950 X-Plus* effectively locks the rear wheel. The ABUS accessory *Chain for Frame lock ACH2.0* (1 m / 39" long) is recommended as an extra to securely lock the trike.

Complete protection: 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.

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. As 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 / 30 speed

Reliable Combo: Recumbent enthusiast'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. The 24-speed gearing is equipped with twist shifters, the 30-speed (Microshift *XLE*) is operated with bar end shifters.

Sturmey Archer + Sram / Shimano *Tripleshift*
24 or 30 sp. internal plus derailleur gearing

24 speed: gearing	20": 46 / 11 – 34 / 26": 39 / 11 – 34
24 speed: development	20": 1,49 – 8,53 m / 26": 1,69 – 9,64 m
30 speed: gearing	20": 46 / 11 – 36 / 26": 39 / 11 – 36
30 speed: development	20": 1,50 – 8,68 m / 26": 1,67 – 9,67 m
Shifter	24 speed: Sram long twist shifter 30 speed: bar end shifter
Cassette	Shimano *CS-HG50* (24) / *CS-M77* (30)
Rear Derailleur	Sram *X4* (24) / Microshift *XLE* (30)
Combination with motor	No

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.

Sram *30*
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 (5'6" – 26'11")
Development (26")	1,67 m – 9,5 m (5'6" – 31'2")
Shifter	Shimano bar end shifter
Cassette	Sram PG-1050
Rear Derailleur	Sram GX
Combination with motor	Neodrives *Z20* and *Z20 RS*

Shimano

Cues Di2 10 speed

No more shifting cable: The gearing *Cues Di2* we offer exclusively in combination with the bottom bracket motor *STEPS EP801 Cargo*. This electric derailleur automatically shifts to the appropriate gear when riding and shifts back when braking. Of course, you can still shift through 10 gears at the touch of a button and with extreme precision and speed.

Shimano *Cues Di2*
10 speed derailleur gearing

Gearing (20")	50 T / 11 – 43 T
Gearing (26")	44 T (SFN: 38 T) / 11 – 36 T
Development (20")	1,81 m – 7,09 m (5'9" – 23'3")
Development (26")	2,10 m – 8,20 m (6'9" – 26'9") SFN: 1,88 m – 7,36 m (6'2" – 24'1")
Shifter	Shimano *Di2* with button
Cassette	Shimano *CS-LG400*
Rear Derailleur	Shimano *Cues Di2* (electric)
Combination with motor	Shimano *STEPS EP801 Cargo*

Shimano

Nexus 5 / 8 speed

The No-Worries-Package: The perfect selection for all those who prefer not to think too much about technology when cycling. We offer the 8-speed *Nexus Premium* hub as a mechanical gear system. In combination with the Shimano *STEPS* motors, the *Nexus* hubs even become fully automatic gear systems: you can have the *Nexus Di2* with 5 or 8 gears, both of which automatically select the right gear ratio!

Shimano *Nexus*
5 or 8 speed rear wheel internal gear hub

Gearing (20") ..... 38 Z / 24 Z (5 speed) / 44 Z / 16 Z (8)
Gearing (26") ..... 38 Z / 30 Z (5 speed) / 44 Z / 22 Z (8)
Development (20") .. 2,36 m – 6,20 m (5 sp.) / 2,19 m – 6,64 m (8 sp.)
Development (26") .. 2,53 m – 6,66 m (5 sp.) / 2,12 m – 6,44 m (8 sp.)
Shifter ..... *Di2* with button
Property ..... When using *STEPS* e-drive available with automatic shifter *Nexus Di2*. Manual switching also at the push of a button
Combination with motor .. Shimano *E5000, EP5 (8 speed),* Shimano *EP5, EP801 Cargo (5 speed)*

Rohloff

Speedhub 14 speed

The World Tourer: Since 1998, the Rohloff *Speedhub* has become a mechanical legend. Countless world tourers have relied on the nearly indestructible internal 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 Velotechnik twist shifter exclusive to HP Velotechnik recumbents.

Rohloff *Speedhub*
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") .. 1,71 m – 9,00 m (5'8" – 29'6")
Shifter ..... long Rohloff twist shifter by HP Velotechnik

Combination with motor .. Shimano *EP801 Cargo* + Bafang
Combination with *E14* ... Bafang *M410 HD*

Enviolo

Trekking Automatiq

Infinitely happy: With this technology, you never have to think about shifting gears again. Once set to your desired cadence via app, the planetary gearbox does everything else by itself. We offer the powerful *Trekking Automatiq* together with the Shimano *STEPS* motor *EP801 Cargo*. The stepless transmission with 380% spread lets you pedal on evenly relaxed on the mountain.

Enviolo *Trekking Automatiq*
Stepless gear changing

Gearing (20") ..... 44 T / 18 T
Gearing (26") ..... 44 T / 22 T
Development (20") .. 1,89 m – 7,20 m (5'9" – 23'3")
Development (26") .. 2,05 m – 7,79 m (6'9" – 26'9")
Shifter ..... —
Property ..... fully automatic, stepless gear changing

Combination with motor .. Shimano *STEPS EP801 Cargo* Bafang *M410 HD*

Pinion

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.

Pinion *C1.12*
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") .. 1,40 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 *Z20 RS*

Twist or bar end shifters? This is not a philosophy decision, but an ergonomic decision. 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 shifter for both Rohloff and Pinion, tailored for the riders needs. Bar end shifters fit perfectly to the tip of your thumb and require less energy for a precision shift.

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 trike 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 factory individually and according to your individual wishes and that takes time. Our six *Special Edition* models, on the other hand, can be delivered on short notice. Nevertheless, you can be certain: Each of these trikes has been elaborately handmade by us in Kriftel!

Take a look at the six models: six trikes with different equipment for six different applications. Among our overall eight *Scorpion* series, we have identified your favorites. This starts with the non-motorized *Scorpion fs 20* and the *Scorpion fs 26*. Both can also be had with a SHIMANO *STEPS EP801 Cargo* system. In the comfort models *Scorpion plus 20* and *Scorpion plus 26,* you are supported by the new SHIMANO *STEPS EP5* motor including an automatic transmission.

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.

We are equipping four of the *Special Edition* models with *STEPS* motors from SHIMANO. The two *Scorpion Plus* models are fitted with the *EP5* (pictured left), while the *Scorpion fs 20* and *Scorpion fs 26* are powered by the *EP801* (main picture). All of them have automatic gearing. In combination with the *EP5* we use a 5-speed hub, with the *EP801* the *Cues Di2* derailleur selects the appropriate gear from the 10 gears.

That airy ride feeling: The breathable fabric of the *ErgoMesh* seat can be adjusted to your back shape with multiple wide tension straps. You can stow all your most needed things in the practical zipper pocket in the backrest. The seats are also available in the wider *XL* version. The *Scorpion plus*-comfort models are equipped with *ErgoMesh HS* seat which is 11 cm (4.33") higher.

Not without our pennant: With the clearly visible HP VELOTECHNIK flag you show your colors in traffic.

Turn your *Scorpion* into a carry-all: We deliver all trikes of the *Special Edition* with a robust *Rear rack* for two large rear panniers up to 25 kg (55 lbs).

Enjoy optimum protection that also looks elegant: HP VELOTECHNIK has developed the *Trikefender* mudguards especially for use on tricycles.

The *Eyro* battery light from B&M can be recharged via a USB charging socket. The rear light B&M *Toplight Flat S senso* is equipped with two AA batteries. Of course, the *Eyro* also lights up when stationary. On the motorized models, lighting is supplied from the e-bike battery.

With the *Marathon Plus* from tire specialist SCHWALBE, you benefit from built-in puncture protection.

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

It's up to you: The ROCKSHOX *Monarch RL* shock can be optimized for maximum comfort regardless of the payload using the supplied pump.

We equip the motorized *Special Edition* models with the lighting system *IQ-X/Akku* from German specialists Busch&Müller (headlights up to 150 Lux, taillights B&M *Toplight 2C*). Switching on and off is easy thanks to an optically highlighted button.

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

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*.

This much freedom of choice is a must: Our most variable seat, the *ErgoMesh Premium*, is available as an optional extra.

Touring models without motor

Scorpion fs 20 SE color Blue shade grey matt: drivetrain *Tripleshift 30* (STURMEY ARCHER 3 speed internal gear hub with MICROSHIFT *XLE* 10- speed rear derailleur, bar end shifters, hydraulic disc brake SHIMANO *BR-MT200* (separate brake per front wheel), headlight B&M *Eyro/Batterie* (up to 30 Lux), rear light B&M *Toplight 2C permanent,* low mesh seat ..... **6.950,00 €**

Scorpion fs 26 SE color Pure orange matt: drivetrain SRAM 30 with bar end shifters, hydraulic disc brake SHIMANO *BR-MT200* (separate brake per front wheel), headlight B&M *Eyro/Batterie* (up to 30 Lux), rear light B&M *Toplight 2C permanent,* low mesh seat ..... **6.990,00 €**

Commuting models with SHIMANO motor *STEPS EP801*

Scorpion fs 20 SE color Colza yellow: drivetrain SHIMANO *Cues Di2* 10 speed, 36 V Li-Ion battery (630 Wh), push assist up up to 6 km/h, hydraulic disc brake SHIMANO *Deore XT* (separate brake per front wheel), lighting system *IQ-X* (headlight B&M *IQ-XE* up to 150 Lux, rear light B&M *Toplight 2C)* ... **10.790,00 €**

Scorpion fs 26 SE color Pure orange matt: drivetrain SHIMANO *Cues Di2* 10 speed, 36 V Li-Ion battery (630 Wh), push assist up to 6 km/h, hydraulic disc brake SHIMANO *Deore XT* (separate brake per front wheel), lighting system *IQ-X* (headlight B&M *IQ-XE* up to 150 Lux, rear light B&M *Toplight 2C)* ..... **10.830,00 €**

Comfort models with SHIMANO motor *STEPS EP5*

Scorpion plus 20 SE color Magma red, swing arm Black: drivetrain SHIMANO *Nexus Di2* (5 speed automatic gear hub), 36 V Li-Ion battery (630 Wh), push assist up to 6 km/h, hydraulic disc brake SHIMANO *Deore XT* (separate brake per front wheel), lighting system *IQ-X* (headlight B&M *IQ-XE* up to 150 Lux, rear light B&M *Toplight 2C*), high net seat *ErgoMesh HS* with long handle bar, optional with wide *ErgoMesh HS XL* ..... **10.550,00 €**

Scorpion plus 26 SE color Magma red, swing arm Black: drivetrain SHIMANO *Nexus Di2* (5 speed automatic gear hub), 36 V Li-Ion battery (630 Wh), push assist up to 6 km/h, hydraulic disc brake SHIMANO *Deore XT* (separate brake per front wheel), lighting system *IQ-X* (headlight B&M *IQ-XE* up to 150 Lux, rear light B&M *Toplight 2C*), high net seat *ErgoMesh HS* with long handle bar, optional with wide *ErgoMesh HS XL* ..... **10.590,00 €**

Six times the right one – Equipment Summary

The six 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. Standard equipment includes:

- Rear rack
- Mirror B&M *E*
- SCHWALBE *Marathon Plus* tires
- *Trikefender* mudguards
- Parking brake
- Flag

For the seat, choose between the breathable *ErgoMesh* and the flexible *ErgoMesh Premium* (€ 329 surcharge). Both are individually adjustable: Eight tension straps (respectively seven with the *ErgoMesh*) and four *OrthoFlex®* pads are used for individual adjustment. Both seats available in standard or wide *XL* versions.

Have you found your favorite among the *Special Edition* series? We have saved the best for last: 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 comfort accessories as headrest and handrests 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:

HP VELOTECHNIK

Basic models

- ❑ ***Scorpion* (SCO)** light-weight, fast Sports-Trike, 26" rear wheel 3.990,00
- ❑ ***Scorpion fx* 20 (SCF)** foldable, medium high-seated Travel-Trike, 20" rear wheel 4.690,00
- ❑ ***Scorpion fx* 26 (SCL)** foldable, medium high-seated Travel-Trike, 26" rear wheel 4.790,00
- ❑ ***Scorpion fs* 20 (SFS)** foldable, full suspension Touring-Trike, 20" rear wheel 5.890,00
- ❑ ***Scorpion fs* 26 (SFL)** foldable, sull suspension Action-Trike, 26" rear wheel 5.990,00
- ❑ ***Scorpion fs* 26 *Enduro* (SFN)** foldable, full suspension Mountain-Trike, 26" rear wheel 6.190,00
- ❑ ***Scorpion fs* 26 *S-Pedelec* (SFE)** E-assist up to 45 km/h, 26" rear wheel 12.390,00
- ❑ ***Scorpion plus* 20 (SPS)** foldable, high seated, full suspension Comfort-Trike, 20" rear wheel 6.390,00
- ❑ ***Scorpion plus* 26 (SPL)** foldable, high seated, full suspension Comfort-Trike, 26" rear wheel 6.490,00

● Basic configuration ❍ Option no upcharge
■ Option with upcharge – Not available

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
Frame										
Colors										
❑**Front boom black anodized**	0,00	●	●	●	●	●	●	●	●	●
❑**Peeka blue**	0,00	❍	–	–	–	–	–	–	–	–
❑**Anthracite grey metallic matt**	0,00	❍	–	–	–	–	–	–	–	–
❑**Pearl orange**	0,00	–	❍	❍	–	–	–	–	–	–
❑**Cool grey metallic**	0,00	–	❍	–	–	–	–	–	❍	❍
❑**Colza yellow RAL 1021**	0,00	–	–	–	❍	–	–	–	–	–
❑**Blue shade grey matt**	0,00	–	–	–	❍	–	–	–	–	–
❑**Pure orange matt RAL 2004 / swing arm Black**	0,00	–	–	–	–	❍	–	❍	–	–
❑**Cool grey metallic / swing arm Black**	0,00	–	–	❍	–	❍	–	❍	–	–
❑**Magma red / swing arm Black**	0,00	–	–	–	–	–	–	–	❍	❍
❑**Green metallic / swing arm Black**	0,00	–	–	–	–	–	●	–	–	–
❑**Single custom color** main frame and rear swing arm powder coating RAL-color ca.: _____, front boom: black anodized	199,00	■	■	■	■	■	■	■	■	■
❑**Double custom color** main frame powder coated according to RAL-color ca.: _____, front boom / swing arm: _____	289,00	■	■	■	■	■	■	■	■	■
Front boom										
❑**Front boom without derailleur tube** (for hub gears only)	0,00	●	●	●	●	●	●	–	●	●
❑**Front boom with derailleur tube** regardless of shifting option, not for STEPS, PINION or BAFANG	0,00	❍	❍	❍	❍❍		❍	●	❍	❍
❑**Front boom carbon** saves 170 g of weight, not for STEPS, PINION or BAFANG	199,00	■	■	■	■	■	■	■	■	■
❑**Front boom quickadjust** compensates extra chain length when front boom is adjusted, quick release levers	229,00	■	■	■	■	■	■	■	■	■
❑**Front boom quickadjust without chain compensation** QR-levers	49,90	■	■	■	■	■	■	■	■	■
Suspension										
Rear wheel suspension										
❑**DNM DV-22** spring/oil, spring available with various spring rates (soft / standard / hard)	0,00	●	●	●	●	●	●	●	●	●
❑**Air shock** air/oil, lightweight, adjustable, hydraulic rebound damping, lock-out, incl. damper pump	199,00	■	■	■	■	■	■	■	■	■
Front wheel suspension										
❑**Front suspension & stabilizer standard** payload up to 90 kg / 198 lbs	0,00	–	–	–	●	●	●	●	●	●
❑**Front suspension & stabilizer hard** payload from 90 kg / 198 lbs	34,90	–	–	–	■	■	■	■	■	■

● Basic configuration ❍ Option no upcharge
■ Option with upcharge – Not available

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
Seat										
Seats										
❑**ErgoMesh** mesh seat with *OrthoFlex* technology, prepared for optional *Add-on bags*, 3 cm / 1.2" higher position than *BodyLink* seat	0,00	❍	❍	❍	❍	❍	❍	❍	❍	❍
❑**ErgoMesh XL** 5 cm / 2" wider and 3 cm / 1.2" longer than *ErgoMesh* seat	0,00	❍	❍	❍	❍	❍	❍	❍	❍	❍
❑**ErgoMesh HS** 11 cm / 4.3" higher position than *ErgoMesh* seat	0,00	❍	❍	❍	❍	❍	–	–	❍	❍
❑**ErgoMesh HS XL** 11 cm / 4.3" higher than *ErgoMesh XL* seat	0,00	❍	❍	❍	❍	❍	–	–	❍	❍
❑**ErgoMesh Premium** with *OrthoFlex* technology, seat and back surface independently adjustable	329,00	■	■	■	■	■	■	■	■	■
❑**ErgoMesh Premium XL** 5 cm / 2" wider and 3 cm / 1.2" longer than *ErgoMesh Premium* seat	329,00	■	■	■	■	■	■	■	■	■
❑**ErgoMesh Premium XL Short** backrest 7 cm (2.8") less wide and 7 cm (2.8") shorter than *ErgoMesh Premium XL* seat	329,00	■	■	■	■	■	■	■	■	■
❑**ErgoMesh Premium HS** 11 cm / 4.3" higher than *ErgoMesh Premium* seat	329,00	■	■	■	■	■	–	–	■	■
❑**ErgoMesh Premium HS XL** 11 cm / 4.3" higher than *ErgoMesh Premium XL*	329,00	■	■	■	■	■	–	–	■	■
❑**ErgoMesh Premium HS XL Short** backrest 7 cm (2.8") less wide and 7 cm (2.8") shorter than *ErgoMesh Premium HS XL* seat	329,00	■	■	■	■	■	–	–	■	■
❑**BodyLink** adjustable, body-contoured seat	179,00	■	■	■	■	■	■	■	■	■
❑**BodyLink** seat with brackets for small riders (4 cm / 1.6" to the front)	179,00	■	■	■	■	■	■	–	■	■
Accessories										
❑**Headrest for *BodyLink* seat** flexible, with cushion, adjustable in height and angle	139,00	■	■	■	■	■	■	■	■	■
❑**Headrest for *ErgoMesh* seat** adjustable in height and angle, with quick release lever	179,00	■	■	■	■	■	■	■	■	■
❑**Airflow seat cushion** for *BodyLink* seat, breathable fabric, sewn	69,90	■	■	■	■	■	■	■	■	■
❑**SeatWings** hip support for *BodyLink* seat, carbon fiber, flexible, padded	289,00	■	■	■	■	■	■	■	■	■
❑**Seat angle adapter** to adjust the backrest in a more upright position, with quick release, for *ErgoMesh Premium* seats only	99,90	■	■	■	■	■	■	–	■	■
❑**Adjustable end stops** allow exact positioning of the seat	19,90	■	■	■	■	■	■	■	■	■
❑**Two adjustable end stops** for *ErgoMesh Premium* seats only	39,80	■	■	■	■	■	■	■	■	■
Steering										
❑**Long handlebars** 6 cm / 2.4" higher grip position, required for high *ErgoMesh* seats (*ErgoMesh HS, HS XL*)	19,90	■	■	■	■	■	–	■	■	■
Handrests										
❑**Handrests left and right** comfortable hand support, adjustable, mounted on handlebar, removable cushion	159,00	■	■	■	■	■	■	■	■	■
❑**Handrest one side with retaining strap** adjustable in position and angle, mounted on handlebar ❑ left ❑ right	119,00	■	■	■	■	■	■	–	■	■
❑**Handrests left and right with one retaining strap** hand fixation allows arm movement when mobility is limited, retaining strap with easy entry function on one side ❑ left ❑ right	209,00	■	■	■	■	■	■	–	■	■
Tires										
❑**SCHWALBE Tryker** 40 mm, high wear-resistance, low rolling resistance, precise steering	0,00	●	●	●	●	●	–	–	●	●
❑**SCHWALBE Marathon Plus** 47 mm, very good puncture protection higher weight	49,90	■	■	■	■	■	–	●	■	■
❑**SCHWALBE Kojak** 35 mm, very low rolling resistance, only for drivetrain SRAM 30 speed and PINION	49,90	■	■	■	■	■	–	–	■	■
❑**SCHWALBE Smart Sam** front 60 mm, back 54 mm, offroad tread	0,00	–	–	–	–	–	●	–	–	–

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

Prices and options

● Basic configuration ❍ Option no upcharge
■ Option with upcharge – Not available

Drivetrain

Gearing

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
❑ **Sturmey Archer Tripleshift 24 speed** Sturmey Archer 3 speed internal gear hub with Sram X4 8 speed rear derailleur, twist shifters 1 speed chainring set	0,00	●	●	●	●	●	●	–	●	●
❑ **Sturmey Archer Tripleshift 30 speed** Sturmey Archer 3 speed internal gear hub with Microshift XLE 10 speed rear derailleur and Shimano XT cassette 11–36, barend shifters, 1 speed chainring set	189,00	■	■	■	■	■	■	–	■	■
❑ **Sturmey Archer Tripleshift 30 speed 32 teeth** Sturmey Archer 3 speed internal gear hub with Microshift XLE 10 speed rear derailleur and Shimano XT cassette 11–36, barend shifters, lightweight SRAM GX chainring set 32 teeth	399,00	■	–	■	–	■	■	–	–	■
❑ **Shimano Nexus Premium 8 speed** Shimano internal gear hub, black, twist shifter	39,90	■	■	■	■	■	–	–	■	■
❑ **Sram 30 speed** Sram GX rear derailleur, Microshift front derailleur, Sram cassette PG 1050 11–36, crankset 52-42-30, Sram SL 500barend shifters	279,00	■	–	■	–	■	–	–	–	■
❑ **Sram 30 speed** Sram GX rear derailleur, Microshift front derailleur, Sram cassette PG 1050 11–36, crankset 60-52-40, Sram SL 500 barend shifters	369,00	–	■	–	■	–	–	–	■	–
❑ **Rohloff Speedhub 14 speed** internal gear hub, black, with Rohloff chain tensioner and external mech box, long twist shifter	1.950,00	■	■	■	■	■	–	–	■	■
❑ **Pinion C1.12 12 speed** front gear box, black, HP chain tensioner, long twist shifter, 46t crankset with double sided chainwheel disc	1.990,00	■	■	■	■	■	–	–	■	■

Accessories

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
❑ **Chainwheel disc** instead of chain guard, 150 g / 0.3 lbs lighter, only with 30 gear options	39,90	■	–	■	–	■	■	–	–	■

Pedelec / E-assist systems Neodrives

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
❑ **Neodrives Z20 and Sram 30 speed** electric assist up to 25 km/h (16 mph), Sram 30 derailleur gearing, 36 V Li-Ion battery 576 Wh, push assist forward and backwards	3.590,00	■	■	■	■	■	■	–	■	■
❑ **Neodrives Z20 RS and Sram 30 speed** electric assist up to 45 km/h (28 mph), Sram 30 derailleur gearing, 48 V Li-Ion battery 627 Wh, push assist	0,00	–	–	–	–	–	–	●	–	–
❑ **Neodrives Z20 and Pinion 12 speed** electric assist up to 25 km/h (16 mph), Pinion C1.12 front gear box, 36 V Li-Ion battery 576 Wh, push assist forward and backwards	5.290,00	■	■	■	■	■	■	–	■	■
❑ **Neodrives Z20 RS and Pinion 12 speed** electric assist up to 45 km/h (28 mph), Pinion C1.12 front gear box, 48 V Li-Ion battery 627 Wh, push assist	1.790,00	–	–	–	–	–	–	■	–	–
❑ **2nd battery pack for Neodrives** 36 V Li-Ion battery 576 Wh, incl. adapter, mounting hardware and wire extension for comfortably charging and switching the batteries, restricts folding function	990,00	■	■	■	■	■	■	–	■	■
❑ **2nd battery pack for Neodrives** 48 V Li-Ion battery 627 Wh, incl. mounting hardware (for operation battery has to be switched to main battery adapter), restricts folding function	1.520,00	–	–	–	–	–	–	■	–	–
❑ **Display mount** position choosable for Neodrives Display position: ❑ side of handlebar ❑ above handlebar	0,00	❍	❍	❍	❍	❍	❍	❍	❍	❍

Drivetrain (continued)

Pedelec / E-assist systems Shimano STEPS

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
❑ **Shimano STEPS E5000 and Sram X4 8 speed** electric assist up to 25 km/h (16 mph), Sram X4 derailleur gearing, Li-Ion battery 630 Wh, push assist	1.690,00	■	■	■	■	■	–	–	■	■
❑ **Shimano STEPS E5000 and Nexus Di2 8 speed** electric assist up to 25 km/h (16 mph), Shimano Nexus 8 speed Di2 automatic gear hub, Li-Ion battery 630 Wh, push assist	1.990,00	■	■	■	■	■	–	–	■	■
❑ **Shimano STEPS EP5 and Sram X4 8 speed** electric assist up to 25 km/h (16 mph), Sram X4 derailleur gearing, Li-Ion battery 418 Wh, push assist	2.390,00	■	■	■	■	■	■	–	■	■
❑ **Shimano STEPS EP5 and Nexus Di2 8 speed** electric assist up to 25 km/h (16 mph), Shimano Nexus 8 speed Di2 automatic gear hub, Li-Ion battery 418 Wh, push assist	2.690,00	■	■	■	■	■	■	–	■	■
❑ **Shimano STEPS EP5 and Nexus Di2 5 speed** electric assist up to 25 km/h (16 mph), Shimano Nexus 5 speed Di2 automatic gear hub, Li-Ion battery 418 Wh, push assist	2.750,00	■	■	■	■	■	■	–	■	■
❑ **Shimano STEPS EP801 Cargo and Nexus Di2 5 speed** electric assist up to 25 km/h (16 mph), Shimano Nexus 5 speed Di2 automatic gear hub, Li-Ion battery 418 Wh, push assist	3.290,00	■	■	■	■	■	■	–	■	■
❑ **Shimano STEPS EP801 Cargo and Cues Di2 10 speed** electric assist up to 25 km/h (16 mph), Shimano Cues Di2 derailleur gearing, Li-Ion battery 418 Wh, push assist	3.390,00	■	■	■	■	■	■	–	■	■
❑ **Shimano STEPS EP801 Cargo and Enviolo Automatiq** electric assist up to 25 km/h (16 mph), Enviolo hub with automatic internal stepless shifting, color display, Li-Ion battery 418 Wh, push assist	4.290,00	■	■	■	■	■	■	–	■	■
❑ **Shimano STEPS EP801 Cargo and Rohloff 14 speed** electric assist up to 25 km/h (16 mph), Rohloff internal gear hub, Li-Ion battery 418 Wh, push assist	4.890,00	■	■	■	■	■	■	–	■	■
❑ **Big battery pack Shimano STEPS** Li-Ion battery 630 Wh, incl. fast charger with 4 A, upcharge on small battery 418 Wh	299,00	■	■	■	■	■	■	–	■	■
❑ **2nd battery pack for STEPS** Li-Ion battery 630 Wh, incl. transport bracket mounted on frame (for operation, battery has to be switched to main battery adapter, may restrict folding function)	990,00	■	■	■	■	■	■	–	■	■

Pedelec / E-assist systems Bafang

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
❑ **Bafang M410 HD and X4 8 speed** electric assist up to 25 km/h (16 mph), Sram X4 8 speed derailleur gearing, Li-Ion battery 720 Wh, throttle for push assist and Smart Pedaling	2.290,00	■	■	■	■	■	■	–	■	■
❑ **Bafang M410 HD and Enviolo Automatiq** electric assist up to 25 km/h (16 mph), Enviolo hub with automatic internal stepless shifting, Li-Ion battery 720 Wh, throttle for push assist and Smart Pedaling	3.290,00	■	■	■	■	■	■	–	■	■
❑ **Bafang M410 HD and Rohloff 14 speed** electric assist up to 25 km/h (16 mph), Rohloff internal gear hub, Li-Ion battery 720 Wh, throttle for push assist and Smart Pedaling	3.890,00	■	■	■	■	■	■	–	■	■
❑ **Bafang M410 HD and Rohloff E14 14 speed** electric assist up to 25 km/h (16 mph), Rohloff E14 internal gear hub with electronic shifting, Li-Ion battery 720 Wh, throttle for push assist and Smart Pedaling	4.390,00	■	■	■	■	■	■	–	■	■

Even more choice for your dream trike:

● Basic configuration ❍ Option no upcharge
■ Option with upcharge – Not available

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
Brakes										
Hydraulic disc brakes *(with HP Velotechnik brake lever roofing)*										
❑ **Shimano BR-MT200** separate brake per front wheel, no rear wheel brake	0,00	●	●	●	●	●	●	–	●	●
❑ **Shimano XT** hydraulic, separate brake per front wheel, Shimano SM-RT 26 discs, lever reach adjustable, no rear wheel brake	219,00	■	■	■	■	■	■	–	■	■
❑ **Riderever coupled** coupled front brakes, rear mechanical disc brake Avid BB7 with parking brake function	299,00	■	■	■	■	■	■	–	■	■
❑ **Tektro Auriga Twin** coupled front brakes with one-hand operation, rear Tektro Auriga disc brake, parking brake function	0,00	–	–	–	–	–	–	●	–	–
Mechanical disc brakes *(with HP Velotechnik SnakeSeal at the brake levers not with Hands-On-Cycle)*										
❑ **Avid BB7** separate brake per front wheel, no rear wheel brake	79,90	■	■	■	■	■	■	–	■	■
❑ **Avid BB7 coupled** front brakes with one-hand operation, rear disc brake, parking brake function	199,00	■	■	■	■	■	■	–	■	■
Parking brake										
❑ **Parking brake Shimano** rear wheel V-Brake with thumbshifter	54,90	■	■	■	■	■	■	●	■	■
Luggage										
Racks										
❑ **Rear rack** 12 mm / 10 mm (0.47" / 0.39") aluminium tube 6061T4, additional lower tubes for optimized center of gravitiy for bags, black powder coating, max. load 55 lbs / 25 kg	289,00	–	■	–	■	–	–	–	■	–
❑ **Rear rack** 14 mm (0.55") aluminium tube 6061T4, black powder coated, flag tube, without platform, max. load 55 lbs / 25 kg	229,00	■	–	■	–	■	■	●	–	■
❑ **Lowrider** 10 mm (0.39") tube, black powder coating, max. load 55 lbs / 25 kg (requires installed rear rack)	139,00	–	■	■	–	–	–	–	■	■
❑ **Top Load rack** additional luggage rack above the rear wheel, maximum load 10 kg / 22 lbs (requires installed rear rack), not suitable for panniers	189,00	■	–	■	–	■	■	■	–	■
❑ **Side Bag Mount** mounting for handlebar bags, only for *ErgoMesh* seats, attached to the seat, max. load 5 kg / 11 lbs per side, left and right	159,00	■	■	■	■	■	■	■	■	■
Bags / Trailers										
❑ **Microbag** topbag for *BodyLink* seat, detachable, also as hip bag, 1 liter volume (not compatible with rear rack)	39,90	–	■	■	■	–	■	–	■	■
❑ **Add-on bags for mesh seat** 1 pair of bags, attached to backrest, 1 bag water repellent, 1 bag ventilated, capacity approx. 1,4 l per bag	67,90	■	■	■	■	■	■	■	■	■
❑ **Water bottle set HP Velotechnik** 2 x 0,6 l clear PE-bottle with coloured HP Velotechnik print, with bottle cages, mounted	79,90	■	■	■	■	■	■	■	■	■
❑ **Trailer hitch Weber** with HP Velotechnik adapter, mounted	179,00	–	–	–	■	–	–	–	–	–
Gadget mounts / device mounts										
❑ **Speedometer mount** for computers, battery lights etc., incl. sensor bracket for front wheel	29,90	■	■	■	■	■	■	■	■	■
❑ **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 / 0.88 lbs	49,90	■	■	■	■	■	■	■	■	■

● Basic configuration ❍ Option no upcharge
■ Option with upcharge – Not available

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
Safety equipment										
Lights										
❑ **Light wire routing only** twin wire routed through the frame ❑ for hub dynamo ❑ for tire dynamo	109,00	■	■	■	■	■	■	–	■	■
❑ **Lighting system rechargeable Eyro** rechargeable headlight B&M Eyro, up to 30 Lux, rear light B&M Toplight 2C permanent, charging via USB connector, permanent light powered by battery	119,00	–	■	–	■	–	–	–	■	–
❑ **Lighting system rechargeable Eyro** rechargeable headlight B&M Eyro, up to 30 Lux, rear light B&M Toplight 2C permanent, charging via USB connector, permanent light powered by battery	139,00	■	–	■	–	■	■	–	–	■
❑ **Lighting system Son xs-m disc dynohub IQ-X** headlight B&M IQ-X, up to 100 Lux, rear light B&M Toplight 2C plus with front and rear parking lights	759,00	■	■	■	■	■	■	–	■	■
❑ **Lighting system IQ XS friendly for E-drive** headlight B&M IQ XS friendly, up to 80 Lux, rear light B&M Toplight 2C DC, permanent light powered by E-bike battery	219,00	■	■	■	■	■	■	–	■	■
❑ **Lighting system IQ-X for E-drive** headlight B&M IQ-X, up to 150 Lux, rear light B&M Toplight 2C DC, permanent light powered by E-bike battery	299,00	■	■	■	■	■	■	–	■	■
❑ **Lighting system IQ-XE with horn** headlight B&M IQ-XE, up to 150 Lux, rear light B&M Toplight Line, permanent light powered by E-bike battery	0,00	–	–	–	–	–	–	●	–	–
❑ **Indicator lights system HP Velotechnik WingBling** two indicator lights, both front and back, only with E-drive	689,00	■	■	■	■	■	■	●	■	■
Mirrors										
❑ **Rear mirror B&M E** wide view angle, easy to adjust, knuckle mounting (SFE always left): ❑ left ❑ right	84,90	■	■	■	■	■	■	●	–	–
❑ **Rear mirror B&M E** wide view angle, easy to adjust, barend mounting on handlebar: ❑ left ❑ right	84,90	–	–	–	–	–	–	–	■	■
❑ **Rear mirror B&M E both sides** knuckle mounted left and right	84,90	–	–	–	–	–	–	■	–	–
❑ **Rear mirror B&M E both sides** knuckle mounted left and right	169,80	■	■	■	■	■	■	–	–	–
❑ **Rear mirror B&M E both sides** barend mounting on handlebar	169,80	–	–	–	–	–	–	–	■	■
❑ **Rear mirror Mirrycle** with barend mounting, also usable as computer mount: ❑ left ❑ right	69,90	■	■	■	■	■	■	–	■	■
❑ **Rear mirror Mirrycle both sides** barend mounting left and right	139,80	■	■	■	■	■	■	–	■	■
Accessories										
❑ **Flag HP Velotechnik** double-sided print, with reflective strip	26,90	■	■	■	■	■	■	–	■	■
❑ **Horn AirZound XL** adjustable 30 – 115 dB, car valve, max. 80 psi, fits to all standard handlebars diameters	39,90	■	■	■	■	■	■	–	■	■
❑ **Frame lock Abus Granit XPlus 6950** with removable key	99,90	■	■	■	■	■	■	–	■	■
❑ **Chain for frame lock Abus** length 100 cm / 39.4"	39,90	■	■	■	■	■	■	–	■	■
❑ **Frame lock Axa Victory** with removable key	0,00	–	–	–	–	–	–	●	–	–
❑ **Chain for frame lock Axa** length 100 cm / 39.4"	29,90	–	–	–	–	–	–	■	–	–

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

Prices and options

● Basic configuration ❍ Option no upcharge
■ Option with upcharge – Not available

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
Pedals and cranks										
❑ **Trekking pedals VP 199**	0,00	●	●	●	●	●	–	–	–	●
❑ **Plattform pedals blue**	0,00	–	–	–	–	–	●	–	–	–
❑ **Rubber pad pedals**	0,00	–	–	–	–	–	–	●	–	–
❑ **Clipless pedals Shimano XT PD-T8000** for normal or SPD shoes	89,90	■	■	■	■	■	–	■	■	■
❑ **Clipless pedals Shimano XT PD-T8000** for normal or SPD shoes	59,90	–	–	–	–	–	■	–	–	–
Special pedals *(single special pedals come with one standard pedal for other side)*										
❑ **Pedal with heelstrap and foot clamp single sided** easy entry and positive grip, adjustable length, shoe size: ❑ 22–28 cm (8.7"–11") ❑ 27–34 cm (10.6"–13.4") ❑ left ❑ right	99,90	■	■	■	■	■	■	■	■	■
❑ **Pedals with heelstrap and foot clamp left and right** easy entry and positive grip, adjustable length, shoe size: ❑ 22–28 cm (8.7"–11") ❑ 27–34 cm (10.6"–13.4")	199,00	■	■	■	■	■	■	■	■	■
❑ **ErgoPedal single sided** adjustable position, easy entry straps, shoe size: ❑ 20–28 cm (7.9"–11") ❑ 27–34 cm (10.6"–13.4") ❑ left ❑ right	179,00	■	■	■	■	■	■	–	■	■
❑ **ErgoPedal left and right** adjustable position, easy entry straps, shoe size: ❑ 20–28 cm (7.9"–11") ❑ 27–34 cm (10.6"–13.4")	359,00	■	■	■	■	■	■	–	■	■
❑ **ErgoPedal with safety release single sided** incl. one SPD-pedal Shimano PD-A530, adjustable position and release force, joint-friendly freedom of movement +/-3 degrees, easy entry straps, shoe size: ❑ 20–28 cm (7.9"–11") ❑ 27–34 cm (10.6"–13.4") ❑ left ❑ right	229,00	■	■	■	■	■	■	–	■	■
❑ **ErgoPedal with safety release left and right** adjustable position, joint-friendly freedom of movement +/-3 degrees, easy entry straps, higher safety due to adjustable release force, shoe size: ❑ 20–28 cm (7.9"–11") ❑ 27–34 cm (10.6"–13.4")	459,00	■	■	■	■	■	■	–	■	■
❑ **ErgoPedal with calf brace single sided** adjustable position, easy entry straps, leg fixation adjustable in length and position, shoe size: ❑ 20–28 cm (7.9"–11") ❑ 27–34 cm (10.6"–13.4") ❑ left ❑ right	369,00	■	■	■	■	■	■	–	■	■
❑ **ErgoPedal with calf brace left and right** adjustable position, easy entry straps, leg fixation adjustable in length and position, shoe size: ❑ 20–28 cm (7.9"–11") ❑ 27–34 cm (10.6"–13.4")	739,00	■	■	■	■	■	■	–	■	■
Cranks										
❑ **Short cranks** 155 mm (6.1"), recommended for riders under 175 cm (5'7")	24,90	■	■	■	■	■	■	■	■	■
❑ **Crank shortener** Terracycle crank shortener, price per side ❑ left ❑ right ❑ pair	139,00	■	■	■	■	■	■	–	■	■
❑ **Pedal swing** Terracycle pedal swing (max. – 85mm), requires crank shortener, price per side ❑ left ❑ right ❑ pair	79,00	■	■	■	■	■	■	–	■	■

● Basic configuration ❍ Option no upcharge
■ Option with upcharge – Not available

		SCO	SCF	SCL	SFS	SFL	SFN	SFE	SPS	SPL
Comfort and ability options										
One-hand operation for brakes and drivetrain										
❑ **One-hand operation with hydraulic brake** includes hydraulic coupled disc brake Riderever front, mechanical disc brake Avid BB7 with parking brake function rear, surcharge for all drivetrain options, not for Sturmey Archer Tripleshift 24 Mounting the controls: ❑ left ❑ right	519,00	■	■	■	■	■	■	–	■	■
Standing-up aid										
❑ **Standing-up aid** for HP Velotechnik trikes without front suspension, support with grip for easy entry and exit from the trike, mounted on the knuckle, price per side ❑ left ❑ right ❑ pair	94,50	■	■	■	–	–	–	–	–	–
❑ **Standing-up aid** for HP Velotechnik trikes with front suspension, support with grip for easy entry and exit from the trike, mounted on the knuckle, price per side ❑ left ❑ right ❑ pair	149,50	–	–	–	■	■	■	■	■	■
Walking aid mounts										
❑ **Walking aid mount single sided** automatic attachment and easy to operate safety clip, price per side ❑ left ❑ right ❑ pair	99,90	■	■	■	■	■	■	■	■	■
Support belts										
❑ **Pelvic support belt** for optimal pelvis support on HP Velotechnik mesh seats, also available as *XL* version	269,00	■	■	■	■	■	■	–	■	■
❑ **Chest support belt** for optimal upper body support on HP Velotechnik mesh seats, also available as *XL* version	269,00	■	■	■	■	■	■	–	■	■
Hand drive *Color: Blue shade grey matt, enclosed drive, height adjustable, length adjustable, adjustable leg rest, parking brake, width adjustable hand crank, restricts folding function and choice of options*										
❑ **Hands-On-Cycle with Tripleshift 24** Sturmey Archer 3 speed internal gear hub with Sram X4 8 speed rear derailleur, twist shifters	3.190,00	–	–	–	■	–	–	–	■	■
❑ **Hands-On-Cycle with Rohloff** 14 speed internal gear hub, black, twist shifter	5.390,00	–	–	–	■	–	–	–	■	■
❑ **Hands-On-Cycle w/ Neodrives Z20 & Shimano/Microshift 10** E-drive up to 25 km/h (16 mph), hub motor, 10 gear rear derailleur Microshift XLE, triggershifter and cassette Shimano XT, Li-Ion battery 576 Wh, push assist	6.490,00	–	–	–	■	–	–	–	■	■
❑ **Footplate** for placing the feet, 1 pair mounted on the leg rest	329,00	–	–	–	■	–	–	–	■	■
❑ **Calf brace** legs can be fixed, 1 pair mounted on the leg rest	159,00	–	–	–	■	–	–	–	■	■
❑ **Indicator lights system WingBling HOC** only in combination with electric drive, operable from the handlebar	829,00	–	–	–	■	–	–	–	■	■
Protection gear										
❑ **Trikefender** mudguards with excellent side splash protection, 60 mm width in front, incl. 53 mm rear Sks fender	339,00	■	■	■	■	■	–	■	■	■
❑ **Rear mudguard Enduro** Sks MUD-X, mounted at seat, black	54,90	–	–	–	–	–	■	–	–	–
❑ **Streamer 2.0** transparent front fairing, incl. installation, not compatible with Pinion	799,00	■	■	■	■	■	–	■	■	■
❑ **Transport cover** for folded HP Velotechnik trikes, ripstop nylon, blue	99,90	–	■	■	■	■	■	■	■	■
❑ **Rain cover** for all HP Velotechnik seats, Ripstop nylon, blue	29,90	■	■	■	■	■	■	■	■	■

2027
Recumbent technology

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

Scorpion

Scorpion: Light and fast sports trike with low seat and 26" rear wheel ..... from € 3.990

Scorpion fx 20: Foldable, medium high-seated travelling trike with 20" rear wheel .... from € 4.690

Scorpion fx 26: Foldable, medium high-seated travelling trike with 26" rear wheel .... from € 4.790

Scorpion fs 20: Foldable, full-suspension touring trike with 20" rear wheel ..... from € 5.890

Scorpion fs 26: the foldable, full-suspension action trike with 26" rear wheel ..... from € 5.990

Scorpion fs 26 Enduro: Foldable, full-suspension Mountain-Trike ..... from € 6.190

Scorpion fs 26 S-Pedelec: Electric support up to 45 km/h (28 mph) ..... from € 12.390

Scorpion plus 20: Foldable, high comfort trike with 20" rear wheel ..... from € 6.390

Scorpion plus 26: Foldable, high comfort trike with 26" rear wheel ..... from € 6.490

Online configurator: Our digital modular system at www.hpvelotechnik.com is fast, convenient and informative. This makes choosing your trike fun. 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:

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

10 years warranty is offered by HP VELOTECHNIK for the frame of your new trike. We are proud of our products and strive to deliver the best sustainable, carefree riding pleasure. For details, check out the service section on our website www.hpvelotechnik.com, there you can also configure your dream bike in the online recumbent bike configurator!

Get expert advice and customer service in your area from 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. In the mood for a quick test ride? Don't hesitate, simply contact your retailer!

Suggested retail prices in Euro based on 19 % VAT. Local prices at dealer may vary. Shipping to most EU-countries: € 140,00. Effective as of August 2026. Images with special equipment. Subject to alterations.

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HP VELOTECHNIK