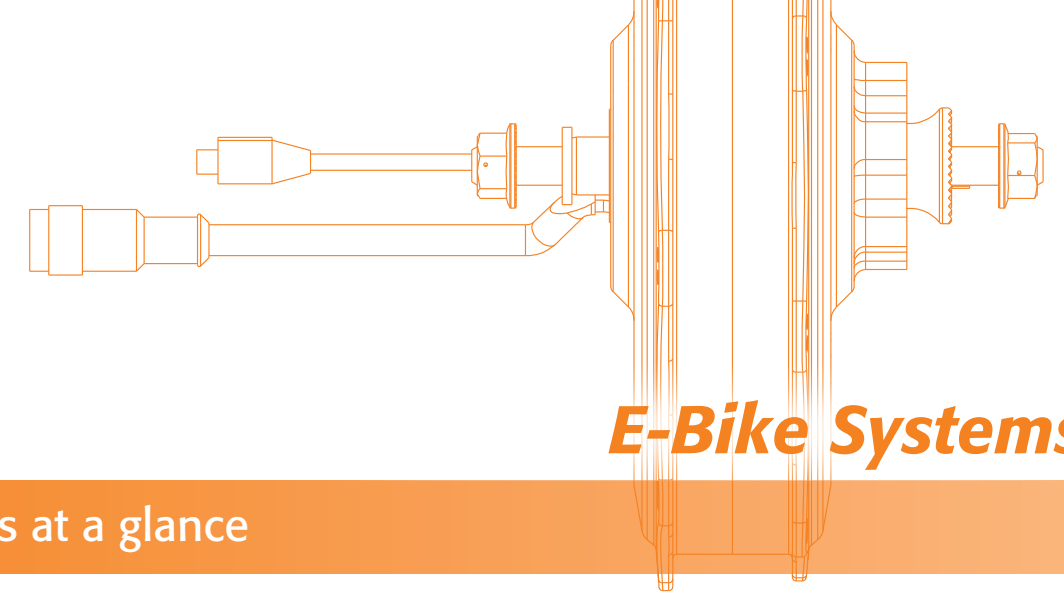


E-Bike Systems

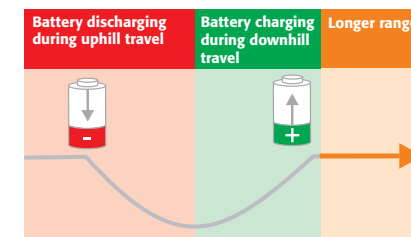
Superior technology from the e-bike pioneer





E-Bike Systems

Your benefits at a glance



Regeneration principle

Range

The regeneration-enabled system can charge the battery during downhill travel and braking. This can result in a range increase of up to 15 % .

Flexibility

Whether it's our tried-and-tested, high-performance Classic motor, the new, innovative DirectPower motor, or a model developed to meet customer-specific requirements – at HEINZMANN, we offer the tailored solution for your e-bike model. Our drive can be installed in the front or rear wheel thanks to strict compliance with the standard dimensions used in the bicycle industry. This reduces manufacturing costs and gives our customers the greatest possible flexibility in product design. After Sales Service and spare parts planning are therefore made significantly easier.

Diversity

Our modular drive systems offer the greatest possible flexibility. This enables us as a partner of bicycle manufacturers and packagers to develop the right customer-specific design for your bicycle motor or e-bike system.

Use options

The ability to turn the drives in both directions opens up a wealth of usage options, including applications outside the e-bike market. The field of rehabilitation is just one example.

Service software

The integrated service software has a clear user interface, a built-in wizard for convenient, quick configuration and can be parameterized easily by the OEM/customer. All main system parameters can be selected in the field. The software is equipped with a protection system against factory setting manipulation. The control firmware can be updated in the field. Automatic Internet updates are a matter of course.





HEINZMANN E-Bike Drives: Precision from the Black Forest

HEINZMANN DirectPower Motor – innovation and flexibility

HEINZMANN direct drives from the DirectPower series are characterized by innovative technology and flexibility. These newly developed bicycle motors can be integrated in different systems thanks to the independent control built into the battery box. As front or rear wheel drive, on request also in your choice of color or design – HEINZMANN E-Bike Motors can be adapted to your requirements.



Advantages of DirectPower

- ✓ Front/rear wheel drive
- ✓ Regeneration in the front and rear wheel
- ✓ Brake disks can be mounted in the front and rear wheel
- ✓ Gearless, brushless, wear-free, noiseless
- ✓ Customer's choice of color on request
- ✓ Cassette can be used
- ✓ Power electronics not installed in the motor, so motor power is not limited due to the electronics heating up
- ✓ Backward travel is possible for special applications



Our motors can be placed on the front or rear wheel as desired.

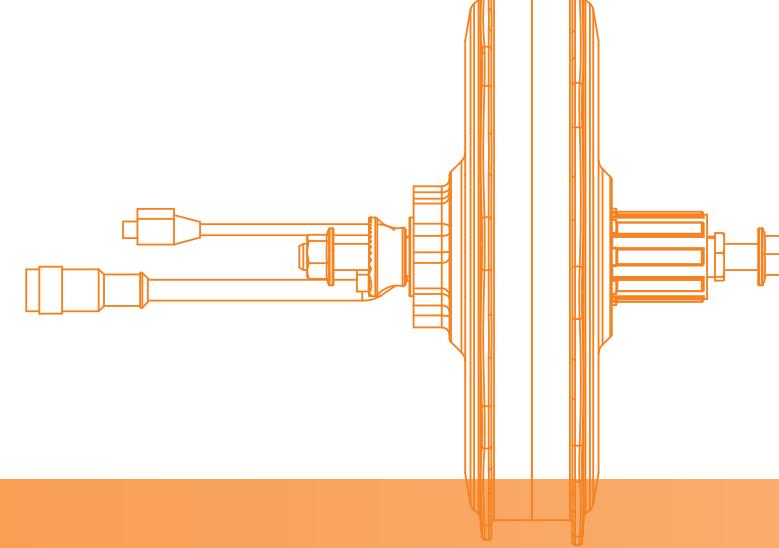
HEINZMANN Classic Motor – powerful and reliable

The HEINZMANN Classic E-bike Drive is characterized by its proven robust technology, combined with the innovative optimization of its components and properties. The powerful DC motor provides even power development with economical use of battery capacity. Powerful torque is achieved with the built-in gearing, which offers the rider maximum support, even during uphill travel or with larger loads. This makes this drive particularly suitable for use in the rehabilitation field, cargo bikes and special applications.

Advantages of Classic

- ✓ Powerful, tested and proven DC wheel hub motor
- ✓ Front/rear wheel drive
- ✓ Gearing for highest torques





HEINZMANN E-Bike Drives: Superior technology from the e-bike pioneer

PRA 180-25 DirectPower Motor

The PRA 180-25 series bicycle drives have a rated power up to 500 W and impressive flexibility. They are available in different versions and can be installed in either the front or the rear wheel. Reverse travel is also possible for special applications. It is the heart of the DirectPower system, with tailored components optimally adapted to the drive.



PRA 180-25 Basic Data

- Front/rear wheel drive
- Support 20 - 50 km/h*
- Rated power up to 250 / 500 W*
- 11 - 13.5 Nm nominal, 60 Nm impulse torque
- Weight: 4.7 kg (rear wheel), 4.5 kg (front wheel)

PRA 180-30 DirectPower Motor

The PRA 180-30 DirectPower motor combines all the advantages of the DirectPower drive series with particularly high power. The 500 W version impresses with outstanding torque performance, low power consumption and the option of installing in a standard frame. It goes without saying that this motor is also compatible with the standard components of the DirectPower system.



PRA 180-30 Basic Data

- Rear wheel drive
- Support up to 25 km/h*
- Rated power up to 500 W*
- 22.7 Nm nominal, 60 Nm impulse torque
- Weight: 5.2 kg

Versions

The DirectPower drive is available in the following versions:

PRA 180-25	Pedelec	250 W	11 Nm	max. 25 km/h with rim size 26"
	Pedelec 20	250 W	8.5 Nm	max. 25 km/h with rim size 20"
	Speed*	500 W	12.5 Nm	max. 45 km/h with rim size 26"
	High Torque	250 W	13.3 Nm	max. 21 km/h with rim size 26"
PRA 180-30	E-Bike 500*	500 W	22.7 Nm	max. 25 km/h with rim size 26"

* During the design phase, always comply with the valid legal regulations regarding operating license, insurance and authorization obligations!

RN 120 Classic Motor

HEINZMANN Classic Motors have delivered unquestioned performance for decades. The heart of the Classic Drive System is the RN 120 motor.



RN 120 Basic Data

- Support up to 25 km/h
- Rated power 250 W
- Torque up to nominal 11.5 Nm (28"), up to nominal 13.2 Nm (26")
- Weight: approx. 3.5 kg
- Max. values for torques are 35 up to 60 Nm depending on the design (see rating plate)



HEINZMANN E-Bike Systems for any requirement

DirectPower and ClassicPower System Components

HEINZMANN has adapted a selection of system components especially for the new DirectPower drive. These modular components can also be combined with the Classic motor. Depending on the configuration a selection can be made between the DirectPower and Classic systems.



Control
Drive control in the luggage carrier or on the downtube
Pre-programmed for various torque sensors currently available
Various parameters can be adapted by the customer to set an individual driving style (support levels, assisted pull-away and many more)
Bluetooth soon available
Optimal monitoring of the electrical system
Integrated safety routines
Software can be updated via an interface
Optionally prepared for regeneration and equipped with brake levers MAGURA brand type MT2/MT4 with switches
Assisted pull-away can be parameterized via a control element on the display or via handle bar



Battery pack
Optionally perfectly integrated in the luggage carrier or as downtube battery
Safe, tested and proven lithium ion technology
Carrier battery: 36 V/11 Ah
Downtube battery: 36 V/14.25 Ah
Passive cell balancing increases the service life of the battery pack
Technically, mechanically and visually sophisticated
Magnetic plug connections for quick mounting of the battery
Watertight and robust
Shock and vibration resistant



Luggage carrier
The universal e-bike carrier made from aluminum tube
Aluminum tube 10 mm, weight 1000 g
Outstanding weight/stability ratio and lateral rigidity
Corrosion-resistant
Various adaptation options through the built-in Quick Snap System
With LineTec lighting from Busch & Müller
The maximum load limit for the carrier is 30 kg!

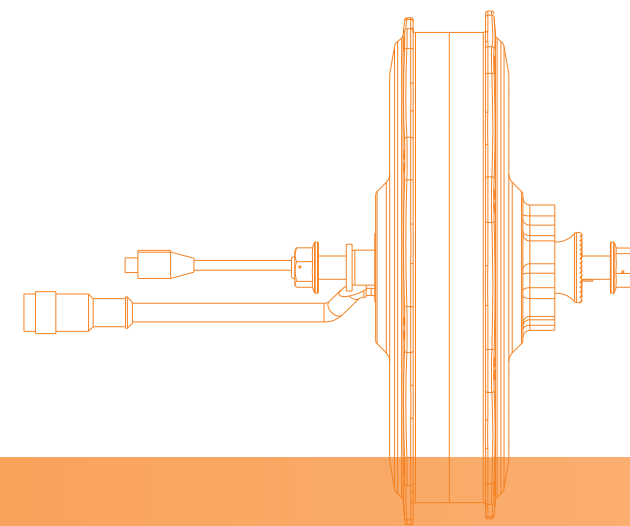


Display
Separate control unit on the handlebar for safe operation when traveling
Clear display of key operating data
Quick setting of support levels
Simple activation of assisted pull-away
Bicycle anti-theft protection through user-specific PIN
Easy to read, even in bright conditions



Torque sensor
The system is pre-programmed and tested for a range of torque sensors.
Additional adaptations can be made for the torque sensor of your choice as necessary.

Service software
Clear user interface
Quick troubleshooting in the event of faults
Built-in wizard for convenient quick configuration
Parameters can be set easily by the dealer
All major system parameters can be configured in the field
Protection system against plant data manipulation
Control firmware can be updated in the field
Automatic Internet updates for service software



HEINZMANN E-Bike Systems for any requirement

DirectPower Systems – state-of-the-art technology

The HEINZMANN DirectPower drive system consists of the DirectPower motor and tailor-made components. An external control offers maximum selection options.



Battery pack

The technically and visually sophisticated battery is mounted under the luggage carrier and is equipped with a magnetic connection system for quick, easy mounting on the e-bike.



Variant 2 can be mounted in the frame as downtube battery.



Control

The external control of HEINZMANN drives is integrated in the battery box and offers maximum selection options with regard to components and systems.



Display

Intelligent LCD display with LED backlight.



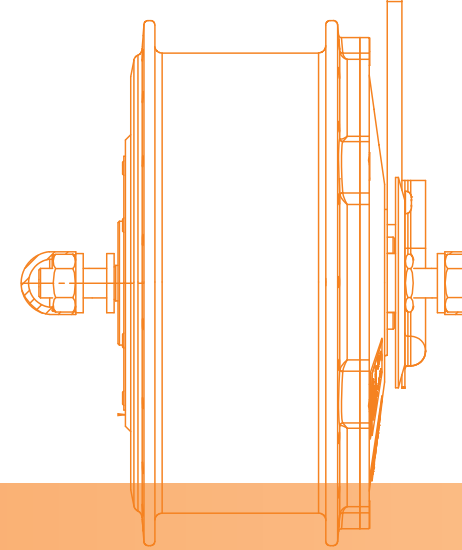
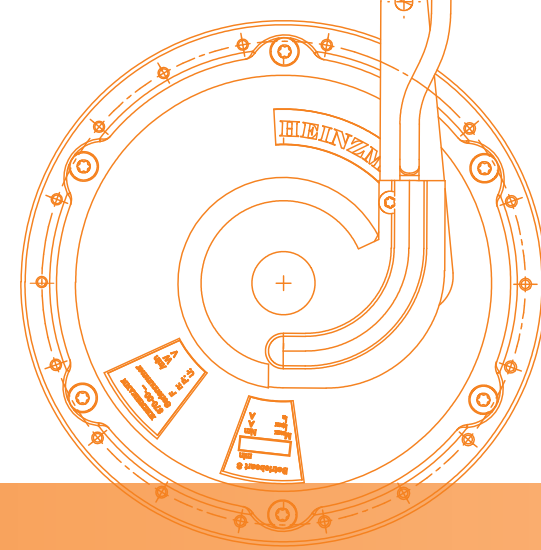
Torque sensor

The system is pre-programmed for a range of torque sensors.



Motor

Technology and design without compromise.



HEINZMANN E-Bike Systems in proven and tested technology

ClassicPower System – tested and proven meets modern technology

With the HEINZMANN ClassicPower system, the tested and proven Classic drive is combined with the modern system components that are also available with the DirectPower system (see pages 10-11). The user can choose between state-of-the-art system components or cost-efficient alternatives in combination with the Classic drive.



Classic System – tested and proven

HEINZMANN ClassicSystems combine the tested and proven Classic motor with robust and reliable system components.



Besides the Classic motor, HEINZMANN also offers the following components:



Control

The digital control unit offers two control options: customers can choose between a twist grip with pedal speed sensor or a solution with twist grip only

The control is pre-parameterized for all requirements, such as assisted pull-away up to 6 km/h or heavy load start



Sensor

The pedal speed sensor can be mounted on the right or left

Cable length on request



Battery

The lithium ion battery is in the saddle bag

Supplied with a built-in battery management system for longer battery life

Available as 36 V/9 Ah or 36 V/13 Ah



Twist grip

Digital twist grip

LED light indicator charge condition

ON/OFF switch

Eco Mode

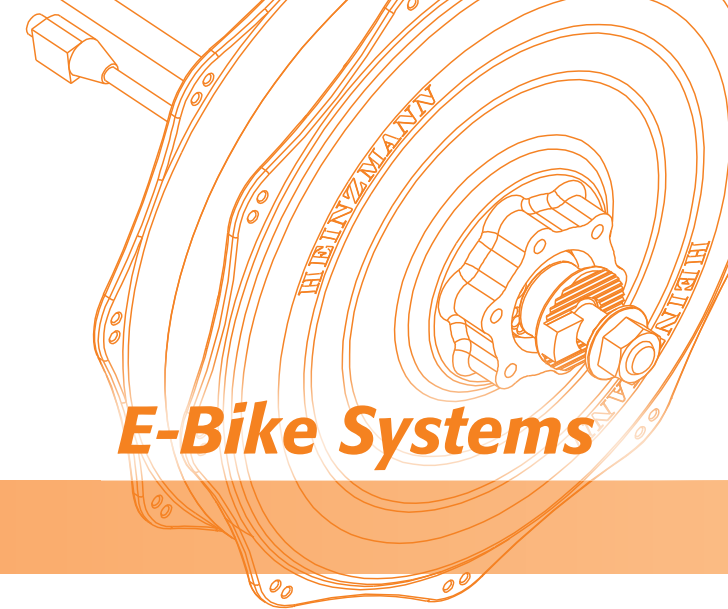
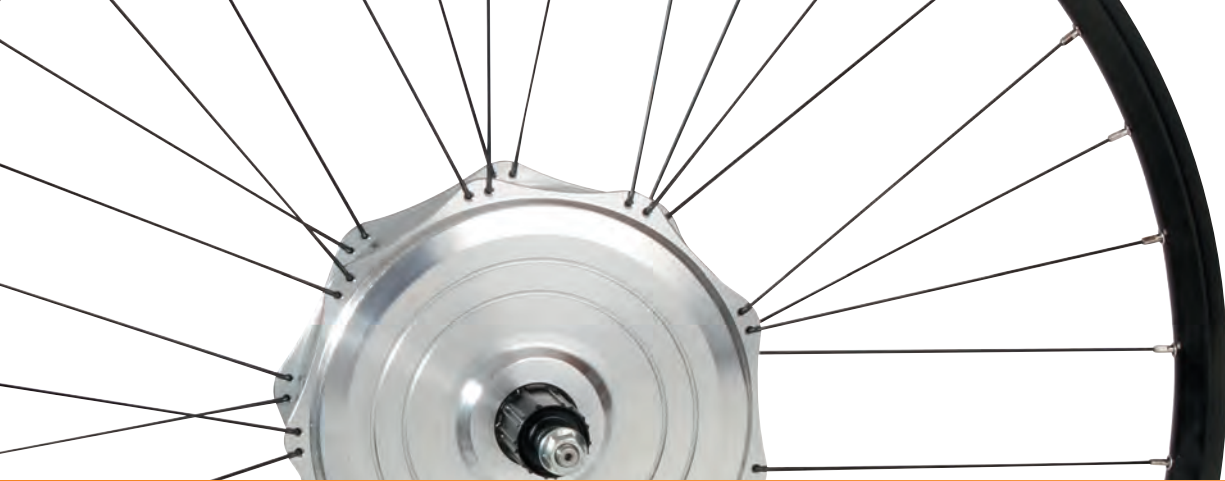
Cable length on request



Luggage carrier

The luggage carrier is designed for mounting a control unit and up to two batteries

Max. permitted total weight 30 kg



HEINZMANN: 115 years of quality made in Germany

Quality

Our electric drives are developed and produced in Schönau/Germany and are real precision products from the Black Forest. HEINZMANN products made in Germany stand for quality and German engineering skill. We would be happy to demonstrate our quality demands to you in person.

Trust

115 years of HEINZMANN and decades of experience in the field of e-bike drives make us a reliable partner. The reliability of HEINZMANN drives is also highly valued by Deutsche Post and is fitted on their electric bicycles.

Safety and experience

Back when nobody thought that e-bikes would take off, HEINZMANN had already begun developing high-quality drives for electric bicycles. During this process, the company benefited from its longstanding experience with electric drives for industrial applications in a variety of other sectors. These decades of experience make us a true specialist for e-bike drives.

Passion

We are a creative team with a passion for bicycles. Our different backgrounds complement each other perfectly. With our know-how, the dedication of our technical developers and their creative ideas for drive sets for electric bicycles, we are setting new standards in technology and design.

Diversity

We see ourselves as a partner for bicycle manufacturers and packagers and look forward to working with you to develop the right customer-specific design for your bicycle motor.



Security

Working in a company with a strong tradition provides security. Both we and our customers benefit from our company's long experience in the field of electric motors. HEINZMANN has a company history spanning over a hundred years and a worldwide service and sales organization which form the basis for innovation and quality.

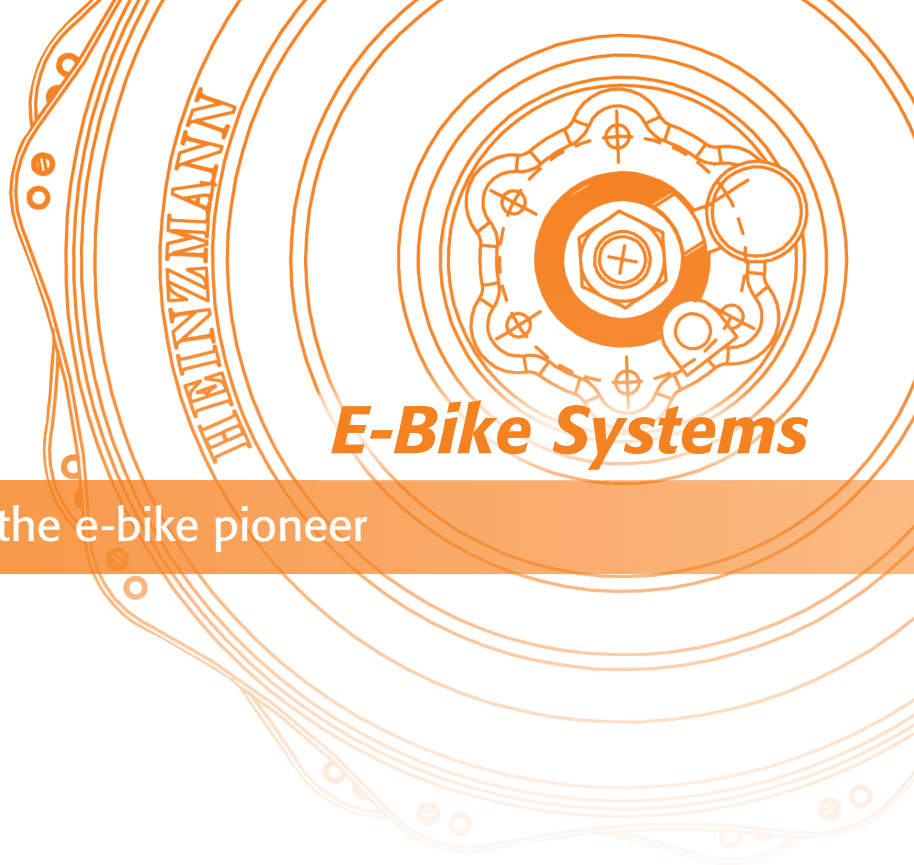
Dealer network

Our worldwide dealer network guarantees reliable service. A HEINZMANN partner is always close by.

HEINZMANN moves

Electric boats, street bikes or enduro, scooter and electric cars: electric drives from HEINZMANN have helped many products make the jump into the electric age. Innovation leaders such as Peugeot, BRAMMO and KTM value HEINZMANN as a reliable partner. HEINZMANN provides the right power from the bicycle to the roadster!





E-Bike Systems

Superior technology from the e-bike pioneer



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