

Technische details Crystalyte HT en HS motoren

What is HT and HS?

HT = high torque

HS = high speed

What is the difference between HT and HS engine?

The max speed is different

Example:

With a 36V battery and 25A controller 26" rim

HT = max speed 25 km/h (comform EU)

HS = max speed 40 km/h

The HT motor has more torque at low revs and is therefore more economical at low speed.

The HS motor has more torque at high speed and is more economical at high speeds.

What is the difference between front wheel and rear wheel?

Frontwheel has a hub width of 24mm. Rearwheel has a hub width of 35mm.

The rearwheel has 20% more torque.

Features:

- Direct drive
- Brushless
- Sensorless
- Maintenance free
- Form 250Watt to 2000 Watt output power
- Voltage range 24Volt – 72Volt
- Ampere range 12Amp – 40Amp
- Front or Rearwheel
- High efficiency 86%
- Wide range of high efficiency
- Waterproof
- Offroad proofed
- Heavy duty proofed
- Disc brake for front and rear Wheel
- High torque
- 5,5 kg

Direct drive:

No mechanical parts in the engine. The stator drives the magnets of the hub immediately without mechanical transmission.

Brushless:

There are no brushes in the motor. So no wearing parts.

Sensorless:

There are no Hall sensors present in the engine which only works with sensorless motor controllers.

There are no moisture sensitive sensors in the motor, whereby the motor is resistant against humidity.

Maintenance free:

The direct drive motor, brushless and sensorless requires no maintenance and can be used more than ten thousand times.

Form 250Watt to 2000 Watt output power:

Motor can be used for 250Watt till 2000Watt.
Can be used on all applications.

Voltage range 24Volt – 72Volt:

The motor is useful on a battery voltage of 24Volt till 72 Volt.
The higher the voltage, the higher the maximum speed of the motor.
The higher the voltage, the greater the power of the motor.

Ampere range 12Amp – 40Amp:

The engine can run on controllers from 12Ampere till 40Ampere.
The amps affect the torque of the motor and not the maximum speed.
The bigger the controller, more Amp Controller, the motor torque will be delivered by the motor.

Front or Rearwheel:

The motors are available in front or rearwheel.
Frontwheel: installation width of 100mm
Rearwheel: Installation width of 135mm
The stator of a front wheel = 25mm
The stator of a rearwheel = 35mm
The stator of a rearwheel is larger and will deliver more torque by using the same battery and controller. (+25% more torque)

High efficiency 86%:

The motor drives very economic and has an efficiency of 86%. What is much more than the motors with internal transmission (75%)

Wide range of high efficiency:

The engine has a very broad range of high efficiency

Waterproof:

The motor is specially waterproofed.

Offroad proofed:

The motor is resistant against off-road use in tough conditions.

Heavy duty proofed:

By the very strong housing hub, is the motor suitable for heavy vehicles

High torque:

The motor has huge torque.
Example with a 36Volt and 25Amp controller till 60Nm koppel.
The torque is directly dependent on the controller amperes. How more amperes, how more torque the motor will give.

Disc brake for front and rear Wheel:

All motors are provided of a disc brake connection, for front and rearwheel motors.
All standard disc brakes can be installed on the motor.