

## Technical data

<b>Principle</b>	Planetary gearing system with two switch positions: direct drive 1:1, overdrive 1:2.5
<b>Shifting</b>	Direct shifting via push buttons or "easy-shift" - levers on both ends of the spindle. No cables, no rods. New ergonomic design of the gear shift push buttons.
<b>Easy-shift levers</b>	As an option, there are "easy-shift" - levers available, which make shifting very simple, even with click-in pedals or small shoes.
<b>Gear housing</b>	Corrosion resistant, completely encased and protected against dust and spray water. Gear housing with integrated 27 tooth chainring and trouser guard.
<b>Axle</b>	Rides on (replaceable) cartridge bearings. You can expect a lifetime of more than 20'000 miles for the bearings and much more for the <b>high-speed-drive</b> .
<b>Axle length</b>	Rides on (replaceable) cartridge bearings. You can expect a lifetime of more than 20'000 miles for the bearings and much more for the <b>high-speed-drive</b> .
<b>Bottom brackets</b>	The <b>high-speed-drive</b> unit is designed for an inner diameter of the bottom bracket of 33.6 - 34.5mm.
<b>Chainline</b>	Distance between centerline of frame and midth of chain: 45mm.
<b>Compatibility</b>	Generally, you can combine any bicycle gearing system with <b>high-speed-drive</b> .

Please note, that **high-speed-drive** in combination with internal hubs sometimes can act like a violin body. This means, that in certain gears (often the first gear) you may feel some roughness, although **high-speed-drive** runs perfectly smooth and silent.

## Cranks

Crankarms sit conventionally on square spindle sections.

Standard length is 170mm

Standard material: aluminum

Available lengths: 155 (straight shape), 160, 165, 170, 172.5, 175mm (all offset shape). Other sizes on request.

For the standard straight 170mm crank, "easy-shift" - levers are available, which are simply clamped between pedal and crankarm and can be retrofitted to any **high-speed-driv**

## Chainrings

Material: Alu 7075

Tooth count: 27



Integrated trouser guard



Adapter for larger chainrings of 30 (=75) or even 34 (=85) teeth.



34t. chainring.

Easy to mount. It is hold by a simple circlip.



We deliver aluminum trouser guards for all chainring sizes.



Adapter for BCD130mm. The adapter is fitted to the gear housing like the chainrings above.

BCD130mm allows chainrings of 38t. or more to be mounted.

## Weight

Including axle, bearings, chainring and trouser guard, without cranks: 900g  
(crank: 220g)

**Efficiency**

High quality planetary gearing systems have efficiencies of about 95 - 97%. By using only the best technology for gears, bearings and lubrication, we try to get to the highest possible level.

All gears are precision-grinded!

The possibility to easily lubricate the **high-speed-drive** gearing system guarantees to keep this high level for lifetime.

**Load**

**high-speed-drive** can be used on tandems.

**Delivery**

The **high-speed-drive** unit comes ready for installation, with both crankarms, chainring, trouser guard and detailed installation instructions.

**Warranty**

**high-speed-drive** comes with a 5-years warranty for perfect function and a lifetime warranty against brake for clutch and gears.

Please note, that this warranty does not cover damages due to lack of lubrication.