

## Husqvarna Motorcycles 2022 FE 350 Rockstar Edition

The FE 350 is known for its versatility in all types of terrain. With a lightweight chassis and enhanced all-round performance, it possesses a 450-rivalling power-to-weight ratio, while keeping the light and agile feel of a 250. Already a preferred choice for those wanting a perfect balance of weight and power, the motorcycle combines premium WP suspension, innovative electronics, and comfortable ergonomics. Along with a host of other innovative refinements, the FE 350 Rockstar Edition features the same advanced technology with added colour, graphics, and part updates to replicate the Rockstar Energy Husqvarna Factory Racing machines.

### Engine

The DOHC 350 cc engine is second to none in terms of versatility. Sharing much of its architecture with the FE 250 engine, the FE 350 Rockstar Edition delivers a significant increase in power and torque giving its lightweight character 450-rivalling power.

- Performance, weight, mass centralisation → rideability
- Lightweight and compact → 450 rivalling power-to-weight ratio

### Cylinder head

The FE 350 Rockstar Edition features an advanced DOHC cylinder head layout, which is meticulously engineered to deliver performance and reliability. Internally, the DOHC layout features polished camshafts and low-friction DLC coated finger followers. Together with the lightweight titanium valves - 36.3 mm intake and 29.1 mm exhaust - they help deliver optimal performance.

- Lightweight titanium valves → 36.3 mm intake and 29.1 mm exhaust
- Polished camshafts, finger followers with DLC coating → minimal friction

### Cylinder and piston

The 88 mm bore and 57.5 mm stroke cylinder features a compression ratio of 13.5:1 and a large diameter yet lightweight forged bridged-box-type piston. As a result, the low oscillating mass delivers exceptional power, high revs, and broad spread of usable power.

- Lightweight 88 mm diameter piston → reduces oscillating masses
- Forged bridged-box-type piston → optimised fit in combustion chamber
- 13.5:1 compression ratio → high performance and reduced danger of engine knocking

### Crankshaft

The crankshaft is optimised for overall reliability to guarantee long service intervals of 135 hours. This has been made possible by a bushing-type bearing at the connecting rod and two force-fitted bearing shells at the big-end bearing. Additionally, an oil supply to the main bearing is integrated within the engine casing.

- Bushing-type bearing on connecting rod → maximum reliability and long service intervals

- Plain big end bearing with force-fitted bearing shells → 135-hour service interval

### Counter balancer shaft

In order to counteract the rotational force of the crankshaft and reduce vibration, the FE 350 Rockstar Edition engine uses a multifunctional counter balancer shaft, which also drives the water pump and timing chain.

- Multifunctional counter balancer shaft → reduced vibrations, compact design

### Crankcases

The engine cases are engineered to house the shaft arrangements at the ideal centre of gravity. The casings are manufactured using a high-pressure die-cast production process, resulting in thin wall thickness while retaining exceptional strength. The iconic Husqvarna Motorcycles logo adorns the bronze finished crankcase covers.

- Crankcases → light and compact, mass-centralisation
- High-pressure die-cast production process → thin walls for reduced weight, while maintaining strength

### Gearbox

The 6-speed gearbox from Pankl Racing Systems uses specific wide-range enduro gearing. Additionally, a gear sensor allows the EMS to tailor a specific engine character for each gear.

- Pankl 6-speed gearbox → enduro specific ratios
- No-dirt gear lever → prevents dirt build up for perfect control

### DDS clutch

The FE 350 Rockstar Edition features a Dampened Diaphragm Steel (DDS) clutch. The exclusive characteristics of this system include a single diaphragm steel pressure plate instead of traditional coil springs, which makes the clutch pull very light while the integrated damping system improves traction and durability. The clutch basket is a single-piece CNC machined steel component that allows the use of thin steel liners and contributes to the compact design of the engine. The Brembo hydraulic system ensures perfect action in all conditions.

- DDS clutch → compact with better action and improved durability
- Brembo hydraulic system → perfect clutch action

### Benefits

- 450-rivalling power-to-weight ratio
- Manoeuvrable and agile feel of a 250
- Map switch and traction control as standard
- Brembo hydraulic clutch for consistent, maintenance-free operation