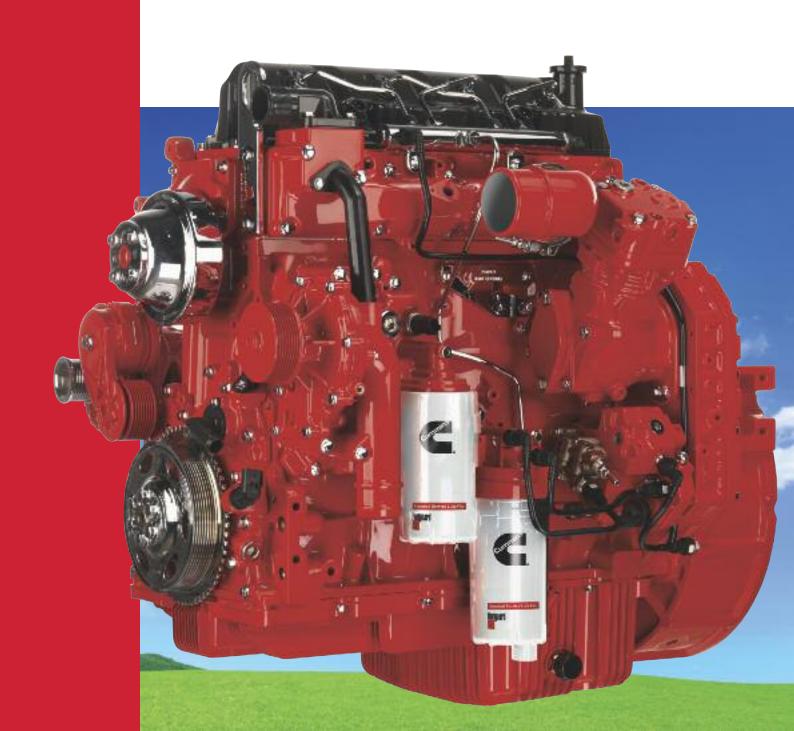


# Every<sup>™</sup> Innovation. ISF Automotive Engines 109-170PS



## **ISF**

The ISF is the latest addition to Cummins extensive range of dependable engines. Ideal for use in light commercial vehicles, customers will benefit from exceptional performance and low operating costs, with the reliability and durability expected from Cummins. Key environmental benefits include low noise and low emissions capability.

Based on Cummins experience of over 5 million engines in use in on-highway applications around the world, the ISF family has been developed with high performance and low weight, specifically for light commercial applications such as trucks, vans, pick up trucks and utility vehicles.

Torque and power are high for engines of this size and weight, making them ideal for weight sensitive and space constrained installations. Advanced thermal engineering has made the ISF capable of running at higher operating temperatures, reducing the size and cost of the vehicle cooling package. Superior Analysis Led Design makes the Cummins ISF engines the lightest and the strongest engine in their displacement class whilst the modular architecture enables easy upgrade for future emissions requirements.





These key design features form the basis of Cummins strategy to provide evolutionary products which continue to keep the company significantly ahead of the competition.

The ISF is unique to Cummins, providing equipment manufacturers with an extremely efficient and cost effective power unit, backed by the renowned dependability of Cummins engines.

#### **Ratings**

ENGINE Model	Power Range PS (kW)	PEAK TORQUE Nm (LB-FT)	Emission
ISF 2.8			
LIGHT DUTY	163 (120) @ 3600 RPM	360 (266) @ 1800 RPM	Euro 3, Euro 4
LIGHT DUTY	131 (96) @ 3600 RPM	280 (207) @ 1400 RPM	Euro 3, Euro 4
LIGHT DUTY	109 (80) @ 3600 RPM	280 (207) @ 1400 RPM	Euro 3, Euro 4
HEAVY DUTY	131 (96) @ 3200 RPM	310 (229) @ 1600 RPM	Euro 3, Euro 4
HEAVY DUTY	150 (110) @ 3200 RPM	360 (266) @ 1800 RPM	Euro 3, Euro 4
ISF 3.8	170 (125) @ 2600 RPM	600 (443) @ 1300 RPM	Euro 3, Euro 4
	156 (115) @ 2600 RPM	500 (369) @ 1200 RPM	Euro 3, Euro 4
	143 (105) @ 2600 RPM	450 (332) @ 1200 RPM	Euro 3, Euro 4

LIGHT DUTY RATINGS ARE FOR APPLICATIONS BELOW 3.5 TONNES GROSS VEHICLE WEIGHT. HEAVY DUTY RATINGS ARE FOR APPLICATIONS ABOVE 3.5 TONNES GROSS VEHICLE WEIGHT.

### **Specifications**

	ISF 2.8	ISF 3.8
ENGINE TYPE	4 CYLINDERS	4 CYLINDERS
DISPLACEMENT	2.8 LITRES	3.8 LITRES
Power	UP ТО 163 PS	UP TO 170 PS
TORQUE	UР ТО 360 <b>N</b> M	UР ТО 600 <b>N</b> M
DRY WEIGHT	214 ка	280 кд
LENGTH	632 мм	818 мм
WIDTH	659 мм	728 мм
HEIGHT	723 мм	786 мм

#### **Features and Benefits**

- Revolutionary Architecture The design of the 2.8L and 3.8L engines provides high durability with low weight, maximising vehicle payload. Key features include a stiffer block, composite oil pan and valve cover and a rear gear train which results in lower noise, with reduced harshness and vibration. The modular architecture allows for easy access and single side servicing, reducing operating costs.
- Advanced Thermal Engineering High Top Tank temperature capability facilitates higher operating temperatures thereby reducing the size and cost of the cooling package required on the vehicle.
- Electronic Integration Industry standard datalink accepts inputs from all powertrain components. Creates a seamless flow of information shared along with a high speed network.
- Electronic Control Module (ECM) Has a high processing capability maintaining an optimum balance between load demands, fuel-efficiency and emissions control.
- High Pressure Common Rail system Works at extremely high pressure and provides precise control of the combustion process. Capable of generating injection pressures that allow for refined and rapid power delivery, low noise and fuel efficient performance.
- Wastegated Turbocharger Developed by Cummins Turbo Technologies to provide excellent performance across rpm range as well as improved response through higher low-end torque.



- Latest Engine Filtration Class leading oil and fuel filtration systems developed by Cummins Filtration for exceptional engine protection.
- Emissions Technology Cummins meets global emissions by adopting the right technology for each market's emissions limits, test cycles and operational factors. No other engine company has all of the critical sub-systems in-house; electronic control, air handling, fuel systems, combustion technology, filtration and exhaust aftertreatment. The appropriate technologies are chosen for engines to be optimised to not only meet the stringent emissions levels. but also add substantial value to our customers. The ISF engines achieve Euro 4 using Selective Catalytic Reduction. Cummins integrated system provides the highest levels of performance and fuel economy with the longest service intervals and low noise. It enables the move to Euro 5 with minimal impact on the installation.
- Global Support Backed by the widest network in the industry, with over 5,500 service outlets worldwide. Contact your local customer support assistance center for technical support



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Cummins has always been a pioneer in product development. Thus specifications may change without notice. Illustrations may include optional equipment.