



**ON-ROAD**

**ENGINES &  
DRIVELINES**

**Power you trust**



**ON-ROAD**

**ENGINES &  
DRIVELINES**

**Power you trust**

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# **ABOUT FPT**

FPT is a brand of Iveco Group, dedicated to the design, production, and sale of powertrains and solutions for on- and off-road vehicles, as well as marine and power generation applications.

At FPT, sustainability is a common underlying commitment, through the entire product development and as a corporate approach.

The extensive product offering includes six engine ranges with power outputs from 30 hp to over 1,000 hp, transmissions with torque up to 500 Nm and front and rear axles from 2.45 to 32 tonnes GAW (Gross Axle Weight).

FPT offers the most complete range of natural gas engines for on- and off-road applications on the market, with power outputs ranging from 50 to 520 hp.

A dedicated ePowertrain division is accelerating the path towards net zero mobility with electric drivelines, battery packs, and battery management systems.

This extensive offering and its strong focus on R&D makes FPT a world leader in industrial powertrain solutions.

We are proud to be a Company driven by sustainability and innovation, one which builds Customer advantage through continuous research and improvement and creates value by leveraging this advantage.

# ***THE ROAD TO INNOVATION***

## FPT at a glance for On-Road powertrain solutions

Technological excellence and product innovation are at the core of FPT mission. We design and develop state-of-the-art powertrain solutions for a wide range of on-road applications, from Light, Medium and Heavy commercial vehicles to buses.

Our engines, ranging from 2.3 to 12.9 litres, are engineered to deliver exceptional performance, fuel efficiency and reliability, meeting the most stringent emissions legislations.

Our extensive product offering also includes high-performance front and rear axles from 2.45 to 32 tonnes GAW (Gross Axle Weight) for all commercial categories and manual transmissions with torque up to 500 Nm for light commercial vehicles and minibuses.

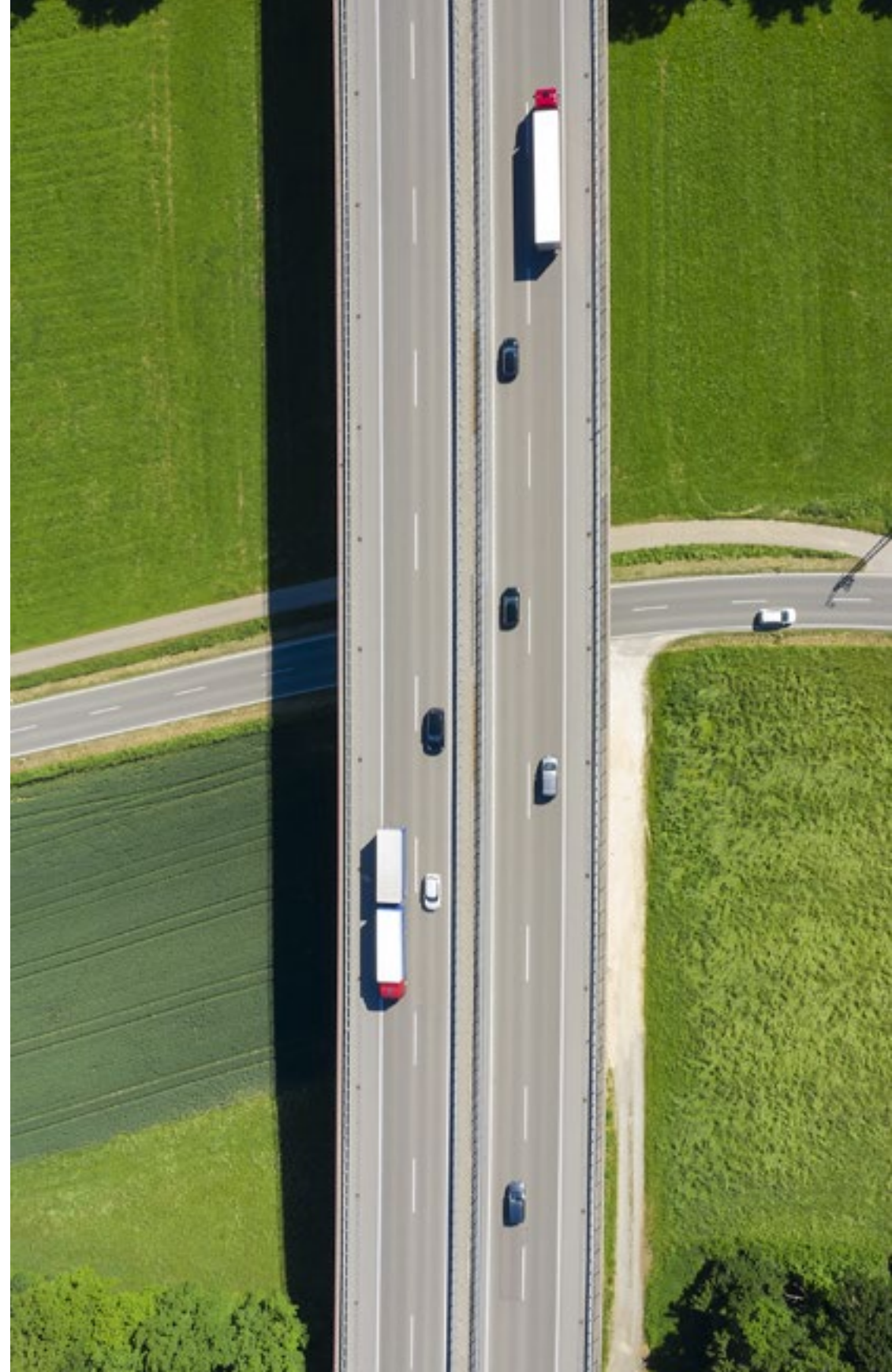
We are proud to serve the industry's leading Customers, providing them with the power and reliability they need to succeed. We power the vehicles of many leading industry players and we are committed to building strong partnerships that contribute to mutual growth.

Our F1, NEF and CURSOR engine families excel in performance, durability and efficiency. They provide power, reliability and cutting-edge innovation, needed to thrive in today's competitive landscape.

Committed to environmental responsibility, all our engine families meet the most stringent emission regulations and are available in Natural Gas configurations, offering a cleaner and more eco-friendly alternative for a sustainable future.

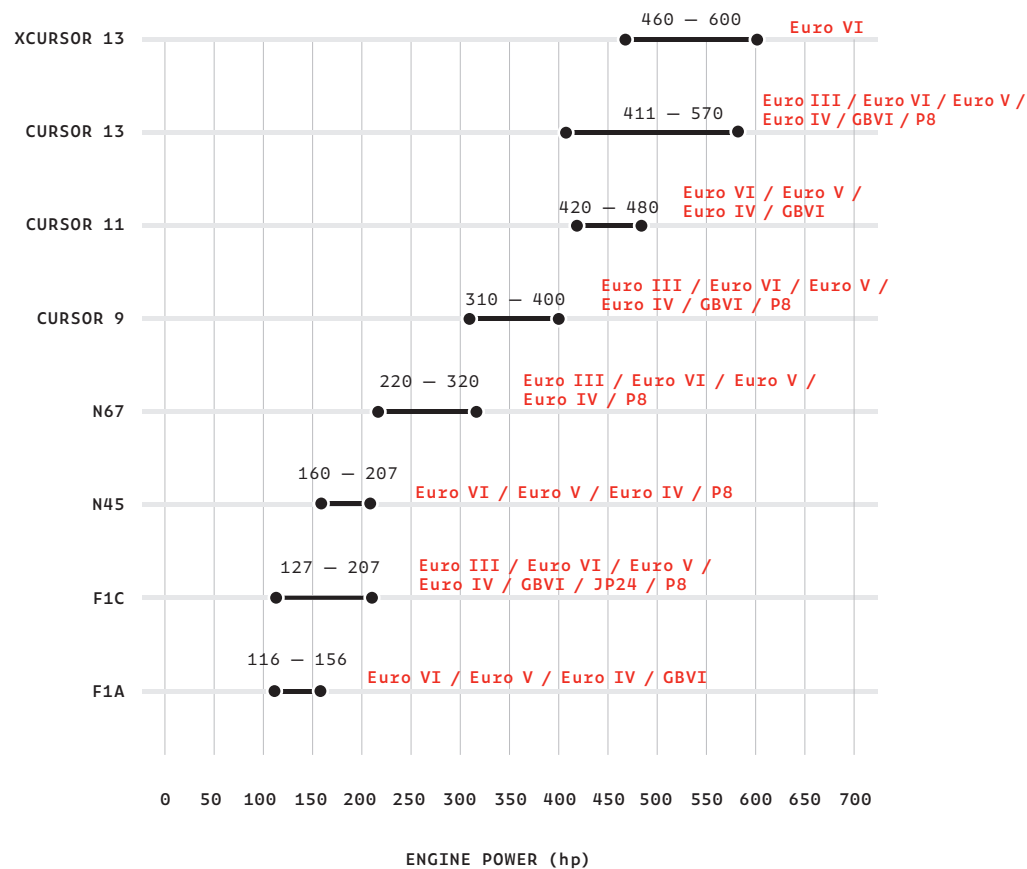
FPT prioritizes meeting new emission limits while minimizing vehicle design changes and cost increases, leveraging our patented HI-eSCR technology. It delivers substantial improvements in both performance and efficiency, built upon 25 years of experience and over three millions SCR produced.

By choosing FPT, Customers gain access to advanced technology, reducing cost of ownership and acquiring ideal solutions for their most demanding needs. This allows them to focus on their core business growth while leaving the powertrain innovation to us.



## On-Road Diesel Engines Portfolio Overview

116 – 600 hp



## Diesel Engine Technology

Commercial transport relies on high performance, durability and efficiency. **FPT certified engines**, known for their power, reliability, robustness and innovation, are designed to meet these needs. Our range of engines for on-road applications, which includes three engine families, the **F1**, **NEF**, and **CURSOR**, offers displacements from **2.3 to 12.9 litres**, with rated power outputs from **116 to 600 hp**, and maximum torque values from **340 to 2,850 Nm**. These engines provide cost-effective solutions to tackle daily challenges.

### Performance

- Class leading in performance, specifically in the Light and Heavy range.

### Reliability and Durability

- High reliability and low fuel consumption thanks to EGR-free architecture (for NEF and CURSOR series) and proven and break-through After-Treatment technologies.
- Long service life, durability and class leading in maintenance intervals.

### Fuel Consumption

- High fuel efficiency achieved through the latest high-pressure Common Rail and Turbocharging and, for NEF and CURSOR, EGR-free architecture.

### Easy installation

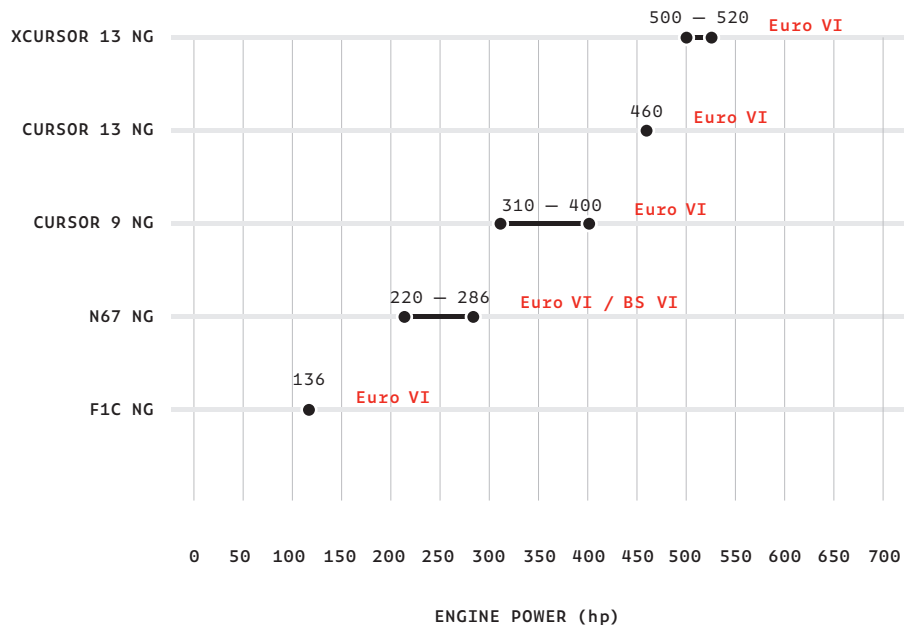
- Availability of extensive options for tailor-made products.
- Compact engine layout for truck & bus applications.

### Environmental responsibility

- Worldwide compliance with the most stringent emissions legislations.

## On-Road Natural Gas Engines Portfolio Overview

136 - 520 hp



## Pioneering yesterday, to lead today

At FPT, we have been exploring alternative fuel solutions for over **25 years**, establishing ourselves as pioneers in the development of Natural Gas applications. Today, we are leaders in this field, with over **100,000 Natural Gas engines** installed successfully to test the reliability of this technology.

Building on these results, today we are able to offer the **largest Natural Gas engine line-up on the market**.

All FPT engine families are **compatible with CNG, LNG and Bio-Methane**, offering clean and innovative engines with reduced CO<sub>2</sub> emissions. These engines are designed to ensure low noise, long service life and daily savings thanks to reduced cost per kilometer, all while being environmentally friendly and complying with current emission standards. Our range of Natural Gas engines, which includes three engine families, the **F1, NEF, and CURSOR**, offers displacements from **3 to 12.9 litres**, with rated power outputs from **136 to 520 hp** and maximum torque values from **350 to 2,500 Nm**.

### Performance

- **Best-in-class in performance.**

### Reliability and Durability

- **Best-in-class in oil change interval and durability.**
- **High reliability** achieved through cutting-edge engine design and high-performance materials.
- **Simple After-Treatment System** for emission compliance.

### Fuel Consumption

- **Low fuel consumption** and reduced engine noise vs Diesel thanks to FPT multipoint stoichiometric combustion.

### Versatility

- **The largest Natural Gas line up** on the market.
- **Compatible with CNG, LNG and Bio-Methane**, up to around 100% lower CO<sub>2</sub> emissions than Diesel with Bio-Methane.

# ***ENGINES FOR LCVs***

# THE F1 SERIES



## Engine Models

F1A (4 cyl., 2.3 L)

F1C (4 cyl., 3 L)

F1C NG (4 cyl., 3L)

## Power range

From 116 to 207 hp

## Key Advantages

### Performance

- Best-in-class in power and torque (up to 207 hp and 470 Nm).
- Best-in-class in transient response thanks to Electronic Variable Geometry Turbo (eVGT).

### Worldwide presence

- Worldwide footprint (Europe, China, Latin America).
- Worldwide Emission Certification availability.
- ATS system with double SCR, optimized for urban missions with reduced load and low exhaust temperatures, as well as for suburban use.

### Fuel Efficiency

- Exceptional efficiency achieved through a combination of multiple elements: electronically controlled variable-geometry turbocharger, reduced engine friction, variable displacement oil pump, cooling system optimization, maximum torque value reached at low rpm (downspeeding), and cutting-edge high-pressure (up to 2,000 bar) Common Rail technology.

### Natural Gas

- The only LCV engine also available in a Natural Gas configuration.
- Low fuel consumption and reduced engine noise vs Diesel thanks to multipoint stoichiometric combustion.
- Diesel industrial engines derived for high reliability, featuring simple WG turbochargers.
- Emissions compliance with a simple After-Treatment System (3-Way Catalyst with CPF and without EGR).

### Reliability & Durability

- Class leading in reliability thanks to double chain timing.
- Long service life and durability (400,000 km Be10 on GVW up to 7.2 t).
- Class leading in maintenance (up to 50,000 km for oil change interval).

### Versatility

- The only player to offer two engine models (2.3 L and 3 L) for Light Commercial Vehicle applications.
- Optimized packaging available for both transverse and longitudinal installation.
- Available in off-the-shelf configuration for a wide range of applications (municipality vehicles, sweepers, etc).

## Engine Specifications

Fuel	Engine name	Displacement Litres	Cylinder Arrangement	Power			Torque		
				kW	Hp	rpm	Nm	rpm	
DIESEL	F1A	2.3	4L	115	156	3,500	400	1,600	
DIESEL	F1A	2.3	4L	100	136	3,500	370	1,400	
DIESEL	F1A	2.3	4L	85	116	3,500	340	1,500	
DIESEL	F1C	3	4L	152	207	3,500	470	1,400	
DIESEL	F1C	3	4L	129	175	3,500	430	1,600	
DIESEL	F1C	3	4L	129	175	2,865	430	1,600	
DIESEL	F1C	3	4L	118	160	3,500	400	1,500	
DIESEL	F1C	3	4L	110	150	2,620	400	1,600	
DIESEL	F1C	3	4L	96	130	2,620	350	1,400	
DIESEL	F1C	3	4L	95	127	3,400	430	1,500	
NATURAL GAS	F1C NG	3	4L	100	136	3,500	350	1,500	

Turbocharging	Injection System	Dimensions <sup>1</sup> (LxWxH) mm	Dry Weight <sup>1</sup> kg	Emission Standards	Exhaust System	Off-the-shelf configuration availability
eVGT	ECR 2,000 bar	707 x 662 x 826	202	Euro 6d final/ Euro VI E	EGR + DOC + SCRoF + SCR + CUC	
eVGT	ECR 2,000 bar	707 x 662 x 826	202	Euro 6d final/ Euro VI E	EGR + DOC + SCRoF + SCR + CUC	
eVGT	ECR 2,000 bar	707 x 662 x 826	202	Euro 6d final	EGR + DOC + SCRoF + SCR + CUC	
eVGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	•
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	•
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	•
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	•
WG	MPI	745 x 695 x 750	245	Euro VI E2	3WAY CA-TALYST + CPF	

### Legend

<sup>1</sup> Dimensions and weight can be changed according to engine options.

### Arrangement

L In line vertical

### Injection System

ECR Electronic Common Rail  
MPI Multi-point Injection

### Turbocharging

VGT Variable Geometry Turbo  
eVGT Electronic Variable Geometry Turbo  
WG Fixed geometry turbocharger with wastegate valve

### Exhaust System

EGR External Exhaust Gas Recirculation  
DOC Diesel Oxidation Catalyst  
SCRoF Selective Catalytic Reduction on Filter  
SCR Selective Catalytic Reduction  
CUC Clean Up Catalyst  
CPF CNG Particulate Filter

# ***ENGINES FOR TRUCKS***

# THE NEF SERIES



## Engine Models

N45 (4 cyl., 4.5 L)  
N67 (6 cyl., 6.7 L)  
N67 NG (6 cyl., 6.7 L)

## Power range

From 160 to 320 hp

## Key Advantages

### Performance

- Power Density aligned with best Competitors.

### Fuel efficiency

- Low Total Cost of Ownership thanks to EGR-free architecture and DPF with passive regeneration
- FPT exclusive HI-eSCR ATS technology.

### Reliability & Durability

- High reliability and cost-effective technology thanks to EGR-free architecture, simple turbocharger and cast-iron head / block.
- Up to 300,000 km DPF service intervals thanks to passive regeneration.

### Versatility

- One engine displacement from Euro III to Euro VI.
- Optimized packaging and installation.
- Scale effect leveraging on other segments.
- Available in off-the-shelf configuration for a wide range of applications (municipality vehicles, sweepers, etc).

### Natural Gas

- The only Natural Gas medium-duty truck engine in Europe.
- Best-in-class in performance, durability (up to 450,000 km) and maintenance (spark plugs up to 900 hours, oil change intervals up to 750 hours and maintenance-free CPF).
- Low fuel consumption and reduced engine noise vs Diesel thanks to multipoint stoichiometric combustion.
- High reliability thanks to Ni-Resist cast-iron exhaust manifold and water cooled wastegate turbocharger.
- Emissions compliance with a simple After-Treatment System (3-Way Catalyst with CPF and without EGR).

## Engine Specifications

Fuel	Engine name	Displacement Litres	Cylinder Arrangement	Power			Torque		
				kW	Hp	rpm	Nm	rpm	
DIESEL	N45	4.5	4L	152	207	2,500	750	1,400	
DIESEL	N45	4.5	4L	137	186	2,200	700	1,100	
DIESEL	N45	4.5	4L	137	186	2,500	680	1,250	
DIESEL	N45	4.5	4L	118	160	2,200	680	1,100	
DIESEL	N45	4.5	4L	118	160	2,500	580	1,250	
DIESEL	N67	6.7	6L	235	320	2,500	1,100	1,250	
DIESEL	N67	6.7	6L	207	280	2,500	1,000	1,250	
DIESEL	N67	6.7	6L	185	252	2,500	850	1,250	
DIESEL	N67	6.7	6L	162	220	2,500	800	1,250	
NATURAL GAS	N67 NG	6.7	6L	210*	286	2,200	1,250	1,100	
NATURAL GAS	N67 NG	6.7	6L	206	280	2,200	1,000	1,250	
NATURAL GAS	N67 NG	6.7	6L	185	252	2,300	850	1,250	
NATURAL GAS	N67 NG	6.7	6L	162	220	2,200	800	1,250	

Turbocharging	Injection System	Dimensions <sup>1</sup> (LxWxH) mm	Dry Weight <sup>1</sup> kg	Emission Standards	Exhaust System	Off-the-shelf configuration availability
WG	ECR 1,600 bar	854 x 782 x 910	400	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	854 x 782 x 910	400	Euro VI E	DOC + DPF + SCR + CUC	
WG	ECR 1,600 bar	854 x 782 x 910	400	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	854 x 782 x 910	400	Euro VI E	DOC + DPF + SCR + CUC	
WG	ECR 1,600 bar	854 x 782 x 910	400	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	1,100 x 782 x 924	530	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	1,100 x 782 x 924	530	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	1,100 x 782 x 924	530	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	1,100 x 782 x 924	530	Euro VI E	DOC + DPF + SCR + CUC	●
WG	MPI	1,060 x 704 x 868	548	Euro VI E2	3 WAY CATALYST + CPF	
WG	MPI	1,060 x 704 x 868	548	Euro VI E2	3 WAY CATALYST + CPF	
WG	MPI	1,060 x 704 x 868	548	Euro VI E2	3 WAY CATALYST + CPF	
WG	MPI	1,060 x 704 x 868	548	Euro VI E2	3 WAY CATALYST + CPF	

### Legend

<sup>1</sup> Dimensions and weight can be changed according to engine options.  
\*Max capability.

#### Arrangement

L In line vertical

#### Injection System

ECR Electronic Common Rail  
MPI Multi-point injection

#### Turbocharging

WG Fixed geometry turbocharger with wastegate valve

#### Exhaust System

DOC Diesel Oxidation Catalyst  
DPF Diesel Particulate Filter w/ passive regeneration  
SCR Selective Catalytic Reduction  
CUC Clean Up Catalyst  
CPF CNG Particulate Filter

# THE CURSOR SERIES



## Engine Models

CURSOR 9 (6 cyl., 8.7 L)  
 CURSOR 9 NG (6 cyl., 8.7 L)  
 CURSOR 11 (6 cyl., 11.1 L)  
 CURSOR 13 (6 cyl., 12.9 L)  
 CURSOR 13 NG (6 cyl., 12.9 L)  
 XCURSOR 13 (6 cyl., 12.9 L)  
 XCURSOR 13 NG (6 cyl., 12.9 L)

## Power range

From 341 to 600 hp

## Key Advantages

### Performance

- Best-in-class in performance and transient response with low fuel consumption.
- Best-in-class in braking power thanks to a new valve train system.
- 11 L performance in a 9 L package.
- High maximum torque delivered at low rpm thanks to new eVGT.

### Fuel efficiency & CO<sub>2</sub>

- Low Total Cost of Ownership thanks to EGR-free architecture and DPF with passive regeneration.
- XCURSOR 13 key contributor to achieving the 2025 target for reducing CO<sub>2</sub> emissions in the vehicle fleet.
- FPT exclusive HI-eSCR ATS technology.

### Natural Gas

- Best-in-class in performance, oil change interval and durability.
- Best-in-class in braking power thanks to a new valve train system.
- Low fuel consumption and reduced engine noise vs Diesel thanks to multipoint stoichiometric combustion.
- High reliability thanks to Ni-Resist cast-iron exhaust manifold, water cooled wastegate turbocharger and Compacted Graphite Iron (CGI) cylinder head (XCURSOR 13 only).
- Emissions compliance with a simple After-Treatment System.

### Reliability & Durability

- High reliability thanks to EGR-free architecture and class leading in durability.
- Extended oil and DPF service intervals.

### Versatility

- XCURSOR 13 the first multi-fuel core base engine for Diesel, Natural Gas and future Hydrogen applications.
- Easily adaptable for different vehicle installations and for a wide market coverage.
- Common engine architecture from Euro III to Euro VI.

### Worldwide presence

- Worldwide footprint (Europe, China, Latin America).

# Engine Specifications

Fuel	Engine name	Displacement Litres	Cylinder Arrangement	Power			Torque	
				kW	Hp	rpm	Nm	rpm
DIESEL	CURSOR 9	8.7	6L	294	400	2,200	1,700	1,200
DIESEL	CURSOR 9	8.7	6L	265	360	2,200	1,650	1,200
DIESEL	CURSOR 9	8.7	6L	251	341	2,200	1,400	1,100
DIESEL	CURSOR 11	11.1	6L	353	480	1,900	2,300	970
DIESEL	CURSOR 11	11.1	6L	338	460	1,900	2,150	925
DIESEL	CURSOR 11	11.1	6L	309	420	1,900	2,000	870
DIESEL	CURSOR 13	12.9	6L	419	570	1,900	2,500	1,000
DIESEL	CURSOR 13	12.9	6L	387	530	1,900	2,400	950
DIESEL	CURSOR 13	12.9	6L	375	510	1,900	2,300	900
DIESEL	CURSOR 13	12.9	6L	357	490	1,900	2,400	950
DIESEL	CURSOR 13	12.9	6L	332	452	1,900	2,200	870
DIESEL	CURSOR 13	12.9	6L	302	411	1,900	2,120	1,200
DIESEL	XCURSOR 13	12.9	6L	442*	600	1,900	2,850	980
DIESEL	XCURSOR 13	12.9	6L	426	580	1,650	2,800	978
DIESEL	XCURSOR 13	12.9	6L	426	580	1,650	2,600	940
DIESEL	XCURSOR 13	12.9	6L	397	540	1,650	2,700	956
DIESEL	XCURSOR 13	12.9	6L	397	540	1,650	2,500	910
DIESEL	XCURSOR 13	12.9	6L	368	500	1,650	2,600	843
DIESEL	XCURSOR 13	12.9	6L	368	500	1,650	2,400	795
DIESEL	XCURSOR 13	12.9	6L	338	460	1,650	2,500	820
DIESEL	XCURSOR 13	12.9	6L	338	460	1,650	2,300	770
NATURAL GAS	CURSOR 9 NG	8.7	6L	294	400	2,000	1,700	1,200
NATURAL GAS	CURSOR 9 NG	8.7	6L	280	381	2,000	1,700	1,200
NATURAL GAS	CURSOR 9 NG	8.7	6L	251	340	2,000	1,500	1,100
NATURAL GAS	CURSOR 13 NG	12.9	6L	338	460	1,900	2,000	1,100
NATURAL GAS	XCURSOR 13 NG	12.9	6L	382*	520	1,900	2,500	1,100
NATURAL GAS	XCURSOR 13 NG	12.9	6L	368	500	1,700	2,200	1,000

## Legend

1 Dimensions and weight can be changed according to engine options.  
\*Max capability.

## Arrangement

L In line vertical

## Injection System

ECR Electronic Common Rail  
MPI Multi-point Injection

Turbocharging	Injection System	Dimensions <sup>1</sup> (LxWxH) mm	Dry Weight <sup>1</sup> kg	Emission Standards	Exhaust System
eVGT	ECR 1,800 bar	1,181 x 1,001 x 1,079	860	Euro VI E	DOC + DPF + SCR + CUC
WG	ECR 1,800 bar	1,181 x 1,001 x 1,079	860	Euro VI E	DOC + DPF + SCR + CUC
WG	ECR 1,800 bar	1,181 x 1,001 x 1,079	860	Euro VI E	DOC + DPF + SCR + CUC
eVGT	ECR 2,200 bar	1,286 x 1,035 x 1,149	1,080	Euro VI E	DOC + DPF + SCR + CUC
eVGT	ECR 2,200 bar	1,286 x 1,035 x 1,149	1,080	Euro VI E	DOC + DPF + SCR + CUC
eVGT	ECR 2,200 bar	1,286 x 1,035 x 1,149	1,080	Euro VI E	DOC + DPF + SCR + CUC
eVGT	ECR 2,200 bar	1,360 x 1,008 x 1,171	1,132	Euro VI E	DOC + DPF + SCR + CUC
eVGT	ECR 2,200 bar	1,360 x 1,008 x 1,171	1,132	Euro VI E	DOC + DPF + SCR + CUC
eVGT	ECR 2,200 bar	1,360 x 1,008 x 1,171	1,132	Euro VI E	DOC + DPF + SCR + CUC
eVGT	ECR 2,200 bar	1,360 x 1,008 x 1,171	1,132	Euro VI E	DOC + DPF + SCR + CUC
WG	ECR 2,200 bar	1,360 x 1,008 x 1,171	1,132	Euro VI E	DOC + DPF + SCR + CUC
WG	ECR 2,200 bar	1,360 x 1,008 x 1,171	1,132	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
WG	MPI	1,433 x 1,014 x 1,100	870	Euro VI E2	3 WAY CATALYST + CPF
WG	MPI	1,433 x 1,014 x 1,100	870	Euro VI E2	3 WAY CATALYST + CPF
WG	MPI	1,433 x 1,014 x 1,100	870	Euro VI E2	3 WAY CATALYST + CPF
WG	MPI	1,610 x 1,027 x 1,178	1,150	Euro VI E2	3 WAY CATALYST + CPF
eWG	MPI	1,365 x 1,067 x 1,167	1,050	Euro VI E2	EGR + 3 WAY CATALYST + CPF
eWG	MPI	1,365 x 1,067 x 1,167	1,050	Euro VI E2	EGR + 3 WAY CATALYST + CPF

## Turbocharging

eVGT Electronic Variable Geometry Turbo  
eVGT BB Electronic Variable Geometry Turbo Ball Bearing  
WG Fixed geometry turbocharger with wastegate valve  
eWG Electronic fixed geometry turbocharger with wastegate valve

## Exhaust System

EGR External Exhaust Gas Recirculation  
DOC Diesel Oxidation Catalyst  
SCRoF Selective Catalytic Reduction on Filter  
SCR Selective Catalytic Reduction  
CUC Clean Up Catalyst  
CPF CNG Particulate Filter

# ***ENGINES FOR BUSES***

# THE F1 SERIES



## Engine Models

F1C (4 cyl., 3 L)

F1C NG (4 cyl., 3L)

## Power range

From 127 to 207 hp

## Key Advantages

### Performance

- Best-in-class in power and torque (up to 207 hp and 470 Nm).
- Best-in-class in transient response thanks to Electronic Variable Geometry Turbo (eVGT).

### Worldwide presence

- Worldwide footprint (Europe, China, Latin America).
- Worldwide Emission Certifications availability.
- ATS system with double SCR, optimized for urban missions with reduced load and low exhaust temperatures, as well as for suburban use.

### Fuel Efficiency

- Exceptional efficiency achieved through a combination of multiple elements: electronically controlled variable-geometry turbocharger, reduced engine friction, variable-displacement oil pump, cooling system optimization, maximum torque value reached at low rpm (downspeeding), and cutting-edge high-pressure (up to 2,000 bar) Common Rail technology.

### Natural Gas

- The only light engine also available in a Natural Gas configuration.
- Low fuel consumption and reduced engine noise vs Diesel thanks to multipoint stoichiometric combustion.
- Diesel industrial derived engines ensuring high reliability with simple WG turbocharger.
- Emissions compliance with a simple After-Treatment System (3-Way Catalyst with CPF and without EGR).

### Reliability & Durability

- Class leading in reliability thanks to double chain timing.
- Long service life and durability (400,000 km Be10 on GVW up to 7.2 t).
- Class leading in maintenance (up to 50,000 km for oil change interval).

### Versatility

- Optimized packaging available for both transverse and longitudinal installation.
- Available in off-the-shelf configuration for a wide range of applications.

## Engine Specifications

Fuel	Engine name	Displacement Litres	Cylinder Arrangement	Power			Torque	
				kW	Hp	rpm	Nm	rpm
DIESEL	F1C	3	4L	152	207	3,500	470	1,600
DIESEL	F1C	3	4L	129	175	3,500	430	1,600
DIESEL	F1C	3	4L	129	175	2,865	430	1,600
DIESEL	F1C	3	4L	110	150	2,620	400	1,600
DIESEL	F1C	3	4L	96	130	2,620	350	1,400
DIESEL	F1C	3	4L	95	127	3,400	430	1,500
NATURAL GAS	F1C NG	3	4L	100	136	3,500	350	1,500

Turbocharging	Injection System	Dimensions <sup>1</sup> (LxWxH) mm	Dry Weight <sup>1</sup> kg	Emission Standards	Exhaust System	Off-the-shelf configuration availability
eVGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	●
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	●
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	●
VGT	ECR 2,000 bar	858 x 704 x 739	257	Euro VI E	EGR + DOC + SCRoF + SCR + CUC	●
WG	MPI	745 x 695 x 750	245	Euro VI E2	3 WAY CATALYST + CPF	

### Legend

<sup>1</sup> Dimensions and weight can be changed according to engine options.

### Arrangement

L In line vertical

### Injection System

ECR Electronic Common Rail  
MPI Multi-point Injection

### Turbocharging

VGT Variable Geometry Turbo  
eVGT Electronic Variable Geometry Turbo  
WG Fixed geometry turbocharger with wastegate valve

### Exhaust System

EGR External Exhaust Gas Recirculation  
DOC Diesel Oxidation Catalyst  
SCRoF Selective Catalytic Reduction on Filter  
SCR Selective Catalytic Reduction  
CUC Clean Up Catalyst  
CPF CNG Particulate Filter

# THE NEF SERIES



## Engine Models

N45 (4 cyl., 4.5 L)  
N67 (6 cyl., 6.7 L)  
N67 NG (6 cyl., 6.7 L)

## Power range

From 160 to 320 hp

## Key Advantages

### Performance

- Power density aligned with best Competitors.
- Ideal for applications where fuel economy, weight and space are paramount.

### Fuel Consumption

- Low Total Cost of Ownership and DPF with passive regeneration.
- FPT exclusive HI-eSCR ATS technology.

### Natural Gas

- The only Natural Gas medium-duty engine in Europe.
- Best-in-class in performance, durability (up to 450,000 km) and maintenance (spark plugs up to 900 hours, oil change intervals up to 750 hours and maintenance-free CPF).
- Low fuel consumption and reduced engine noise vs Diesel thanks to multipoint stoichiometric combustion.
- High reliability thanks to Ni-Resist cast-iron exhaust manifold and water cooled wastegate turbocharger.
- Emissions compliance with a simple After-Treatment System (3-Way Catalyst with CPF and without EGR).

### Reliability & Durability

- High reliability simple turbocharger and cast-iron head / block.
- Up to 300,000 km DPF service intervals thanks to passive regeneration.

### Versatility

- One engine displacement from Euro III to Euro VI.
- Optimized packaging and installation.
- Scale effect leveraging on other segments.
- Available in off-the-shelf configuration for wide range of applications.

## Engine Specifications

Fuel	Engine name	Displacement Litres	Cylinder Arrangement	Power			Torque		
				kW	hp	rpm	Nm	rpm	
DIESEL	N45	4.5	4L	137	186	2,500	750	1,400	
DIESEL	N45	4.5	4L	118	160	2,500	580	1,250	
DIESEL	N67	6.7	6L	235	320	2,500	1,100	1,250	
DIESEL	N67	6.7	6L	210	286	2,500	1,000	1,250	
DIESEL	N67	6.7	6L	184	250	2,500	950	1,400	
NATURAL GAS	N67 NG	6.7	6L	206	280	2,000	980	1,200	

Turbocharging	Injection System	Dimensions <sup>1</sup> (LxWxH) mm	Dry Weight <sup>1</sup> kg	Emission Standards	Exhaust System	Off-the-shelf configuration availability
WG	ECR 1,600 bar	854 x 782 x 910	400	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	854 x 782 x 910	400	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	1,100 x 782 x 924	530	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	1,100 x 782 x 924	530	Euro VI E	DOC + DPF + SCR + CUC	●
WG	ECR 1,600 bar	1,100 x 782 x 924	530	Euro VI E	DOC + DPF + SCR + CUC	●
WG	MPI	1,060 x 704 x 868	548	Euro VI E2	3 WAY CATALYST + CPF	

### Legend

<sup>1</sup> Dimensions and weight can be changed according to engine options.  
\*Max capability.

#### Arrangement

L In line vertical

#### Injection System

ECR Electronic Common Rail  
MPI Multi-point Injection

#### Turbocharging

WG Fixed geometry turbocharger with wastegate valve

#### Exhaust System

DOC Diesel Oxidation Catalyst  
DPF Diesel Particulate Filter w/ passive regeneration  
SCR Selective Catalytic Reduction  
CUC Clean Up Catalyst  
CPF CNG Particulate Filter

# THE CURSOR SERIES



## Engine Models

CURSOR 9 (6 cyl., 8.7 L)  
 CURSOR 9 NG (6 cyl., 8.7 L)  
 XCURSOR 13 (6 cyl., 12.9 L)  
 XCURSOR 13 NG (6 cyl., 12.9 L)

## Power range

From 310 to 600 hp

## Key Advantages

### Performance

- Best-in-class in performance and transient response with low fuel consumption.
- Best-in-class in braking power thanks to a new valve train system.
- 11 L performance in a 9 L package.
- High maximum torque delivered at low rpm thanks to new eVGT.

### Fuel efficiency & CO<sub>2</sub>

- Low Total Cost of Ownership and DPF with passive regeneration.
- XCURSOR 13 developed to achieve CO<sub>2</sub> emissions target in the vehicle fleet.
- FPT exclusive HI-eSCR ATS technology.

### Natural Gas

- Best-in-class in performance, oil change interval and durability.
- Best-in-class in braking power thanks to a new valve train system.
- Low fuel consumption and reduced engine noise vs Diesel thanks to multipoint stoichiometric combustion.
- High reliability thanks to Ni-Resist cast-iron exhaust manifold, water cooled wastegate turbocharger and Compacted Graphite Iron (CGI) cylinder head (XCURSOR 13 only).
- Emissions compliance with a simple After-Treatment System.

### Reliability & Durability

- High reliability and class leading in durability.
- Extended oil and DPF service intervals.

### Worldwide presence

- Worldwide footprint (Europe, China, Latin America).

### Versatility

- XCURSOR 13 the first multi-fuel core base engine for Diesel, Natural Gas and future Hydrogen applications.
- Easily adaptable for different vehicle installations and for a wide market coverage.
- Common engine architecture from Euro III to Euro VI.

## Engine Specifications

Fuel	Engine name	Displacement Litres	Cylinder Arrangement	Power			Torque	
				kW	Hp	rpm	Nm	rpm
DIESEL	CURSOR 9	8.7	6L	294	400	2,200	1,700	1,200
DIESEL	CURSOR 9	8.7	6L	265	360	2,200	1,650	1,200
DIESEL	CURSOR 9	8.7	6L	251	341	2,200	1,400	1,100
DIESEL	CURSOR 9	8.7	6L	228	310	2,200	1,300	1,100
DIESEL	XCURSOR 13 <sup>2</sup>	12.9	6L	442*	600	1,900	2,850	980
*NATURAL GAS	CURSOR 9 NG	8.7	6L	294	400	2,000	1,700	1,200
NATURAL GAS	CURSOR 9 NG	8.7	6L	264	359	2,000	1,640	1,100
NATURAL GAS	CURSOR 9 NG	8.7	6L	251	340	2,000	1,500	1,100
NATURAL GAS	CURSOR 9 NG	8.7	6L	228	310	1,800	1,300	1,100
NATURAL GAS	XCURSOR 13 NG <sup>2</sup>	12.9	6L	382*	520	1,900	2,500	1,100

Turbocharging	Injection System	Dimensions <sup>1</sup> (LxWxH) mm	Dry Weight <sup>1</sup> kg	Emission Standards	Exhaust System
eVGT	ECR 1,800 bar	1,181 x 1,001 x 1,079	860	Euro VI E	DOC + DPF + SCR + CUC
WG	ECR 1,800 bar	1,181 x 1,001 x 1,079	860	Euro VI E	DOC + DPF + SCR + CUC
WG	ECR 1,800 bar	1,181 x 1,001 x 1,079	860	Euro VI E	DOC + DPF + SCR + CUC
WG	ECR 1,800 bar	1,181 x 1,001 x 1,079	860	Euro VI E	DOC + DPF + SCR + CUC
eVGT BB	ECR 2,500 bar	1,365 x 1,079 x 1,185	1,018	Euro VI E	DOC + DPF + SCR + CUC
WG	MPI	1,433 x 1,014 x 1,100	870	Euro VI E2	3 WAY CATALYST + CPF
WG	MPI	1,433 x 1,014 x 1,100	870	Euro VI E2	3 WAY CATALYST + CPF
WG	MPI	1,433 x 1,014 x 1,100	870	Euro VI E2	3 WAY CATALYST + CPF
WG	MPI	1,433 x 1,014 x 1,100	870	Euro VI E2	3 WAY CATALYST + CPF
eWG	MPI	1,365 x 1,067 x 1,167	1,050	Euro VI E2	EGR + 3 WAY CATALYST + CPF

### Legend

<sup>1</sup> Dimensions and weight can be changed according to engine options.

<sup>2</sup> Derivation from the truck version may be required subject to Customer request.

\*Max capability.

**Arrangement**  
L In line vertical

**Injection System**  
ECR Electronic Common Rail  
MPI Multi-point Injection

**Turbocharging**  
eVGT Electronic Variable Geometry Turbo  
eVGT BB Electronic Variable Geometry Turbo Ball Bearing  
WG Fixed geometry turbocharger with wastegate valve  
eWG Electronic fixed geometry turbocharger with wastegate valve

**Exhaust System**  
DOC Diesel Oxidation Catalyst  
DPF Diesel Particulate Filter w/passive regeneration  
SCR Selective Catalytic Reduction  
CUC Clean Up Catalyst  
CPF CNG Particulate Filter

**We innovate constantly.  
We increase the benefits for  
end users and create value  
for the businesses we serve.**



# ***DRIVELINES***

# FRONT & REAR AXLES



## Axle model

Front axles:  
from 3.6 to 18 t GAW and up to 40 t GVW  
capability.

Rear axles:  
from 2.45 to 32 t GAW and up to 60 t GCVW  
capability.

## Performance

- High performance axles for all commercial vehicles.
- On-demand all-wheel drive with improved traction. Hydrostatic Drive on the front axle engaged when needed, supplementing rear-axle power or preventing slip.

## Efficiency

- Designed for high efficiency and optimized power-weight ratio.

## Reliability

- Best-in-class in efficiency for all LCV applications.
- Easy maintenance and long oil change interval.

## Versatility

- Products for every kind of application from On to Off-highway.
- Rear axle available with disc or drum brakes, single and twin wheel with differential lock for the best end user flexibility in different applications.
- Heavy-duty applications available in Solo and Tandem rear axle configurations to optimize vehicle payload capacity.

## Front Axles Specifications

	Application	Model	Type
NOT DRIVING AXLES	HEAVY TRUCK	5890	S
	HEAVY TRUCK	5871	S
	MEDIUM TRUCK	5860	S
	MEDIUM TRUCK	5845	S
	MEDIUM TRUCK	5833	S
DRIVING HUB REDUCTION AXLES	HEAVY TRUCK	5986 HD	T
	HEAVY TRUCK*	5985	S/T
	MEDIUM TRUCK*	5956	S

GAW t	Brake System	Weight kg
9	DISC	427
7.1	DISC	423
6.1	DISC	316
4.6	DISC	246
3.6	DISC	175
9 + 8,5	DRUM	654 + 763
9 / 15	DRUM	650 / 1410
5.6	DRUM	650

### Legend

- \* OFF Highway
- S Solo
- T Tandem

## Rear Axles Specifications

	Application	Model	Type
SINGLE REDUCTION AXLES	HEAVY TRUCK	MT23	T
	HEAVY TRUCK	MS13-18X	S
	HEAVY TRUCK	MS13 - 17X HE	S
	HEAVY TRUCK	MS13 - 17X	S
	MEDIUM TRUCK	MS11	S
	MEDIUM TRUCK	MS10	S
	MEDIUM TRUCK	MS08	S
	MEDIUM TRUCK	4521	S
	MEDIUM TRUCK	4517	S
	LIGHT TRUCK	4517/2	S
	LIGHT TRUCK	4517/3	S
	LIGHT TRUCK	4511	S
	LIGHT TRUCK	NDA SW / TW	S
	LIGHT TRUCK	NDA HD	S
HUB REDUCTION AXLES	HEAVY TRUCK*	453291	T
	HEAVY TRUCK*	452191	T
	HEAVY TRUCK*	452146	T
	HEAVY TRUCK*	451846	T
	HEAVY TRUCK*	451391	S
	MEDIUM TRUCK*	451146	S
TAG AXLES	HEAVY TRUCK	5890 Pusher	Steering
	HEAVY TRUCK	56082	No-Steering
	HEAVY TRUCK	57080	Steering
	HEAVY TRUCK	55080	No-Steering

GAW t	Brake System	Weight kg
23	DISC/DRUM	1331
13	DISC	726
13	DISC	630
13	DISC	600
11	DISC	517
10.7	DISC	460
8.5	DISC	350
6.8	DISC	280
5.7	DISC	230
5.4	DISC	200
5	DISC	250
3.7	DISC	157
2.4 / 2.6	DISC	130 / 140
2.7	DISC	152
16 + 16	DISC/DRUM/S-CAM	1610
11.5 + 11.5	DISC/DRUM	1560
11 + 11	DISC/DRUM	1360
18	DISC	1100
13	DISC/DRUM	700
11.5	DRUM	528
9	DISC	427
10	DISC	420
8 / 9	DISC	470 / 490
8 / 9	DISC	400 / 425

### Legend

- \* OFF Highway
- S Solo
- T Tandem

# FT50.6 MANUAL TRANSMISSION



**Application**  
LCVs and Minibuses  
up to 8 t GVW

**Weight**  
57 kg

**Speeds**  
6-speed  
**PTO**  
Available

**Max input Torque**  
500 Nm

## Performance

- State-of-the-art art shifting comfort and best-in-class for precision thanks to a robust new pre-synchronizer system, low-friction bearings and an optimized internal shifter grid.
- Excellent torque-weight ratio.

## Efficiency

- Best-in-class efficiency, fuel saving thanks to low friction bearings and gaskets and new synthetic oil (extended oil change intervals).

## State of the art shifting comfort

- New Transmission shifter system based on passenger car shift feeling and optimized synchronization system.

## Flexibility

- PTO always available for end user flexibility for different applications.





# ***YOU ASK FOR THE BEST. WE MAKE IT HAPPEN.***

When the market becomes increasingly challenging, it is essential to have reliable partners.

We work closely with our Customers to provide tailor-made solutions, maximizing engine performance and durability. We are committed to doing everything possible to support you and your business.


## Extended Warranty. Everyday closer to your needs.

On top of the Base Warranty, it is possible to register for our Extended Warranty program, which covers all required FPT Industrial Genuine Parts along with any repairs carried out by highly qualified technicians.

The FPT Industrial Extended Warranty guarantees:

- Customizable offer according to your needs.
- Warranty costs of your FPT Industrial Product are known in advance.
- Assistance performed by FPT Industrial qualified technicians.
- Optimal Product performance thanks to FPT Industrial Genuine Parts.

Our FPT Industrial Extended Warranty has been developed with the aim of being closer to you in your everyday activities. You can customize it according to your needs and extend it for up to four years. To request a quotation please contact your reference FPT Industrial Dealer.

	OPERATING KMS	COVERAGE	DURATION
	Up to 500,000 km	<input type="checkbox"/> BRONZE Engine Major components only* <input type="checkbox"/> SILVER Complete Engine <input type="checkbox"/> GOLD Complete Engine + ATS	Engine Base Warranty + <input type="checkbox"/> 1 Year EW <input type="checkbox"/> 2 Years EW <input type="checkbox"/> 3 Years EW <input type="checkbox"/> 4 Years EW <u>Up to 4 years of total coverage</u>

(\*) Main engine components list: Cylinder head; cylinder block; crankshaft; camshaft; connecting rod; pistons; timing gears; flywheel; flywheel housing; oil pump; exhaust manifold; engine control unit.

## Proactive Assistance. Your direct connection to the Control Room.

Ensuring optimal engine performance and smooth operations has never been easier, thanks to our advanced connected services, our Control Room and Telematic Kit. The telematics (MyFPT Portal and the Telematic Kit), directly connected to your engine, allow the Control Room to analyse your engine in real-time. Through this advanced system, we can promptly detect any anomalies and identify areas for optimization.

Our dedicated team is always ready to provide prompt assistance and support. With this proactive approach, we can address any potential issues, ensuring that your engine performs at its best.

Experience the convenience of enhanced engine performance and the peace of mind that comes with our close monitoring and support.

- Health status monitoring.
- Maximize uptime thanks to the prompt activation of the FPT Industrial local Service Point, which is informed about the issue in advance, before even leaving the workshop.
- Engine diagnostics and repair based on FPT Industrial technical know-how and field experience.
- Total Cost of Ownership (TCO) reduced by minimizing downtime.



## **RAS - Remote Assistance Support. Ready to provide digital assistance.**

Remote Assistance, the latest assistance tool introduced by FPT, is designed to lead users into a new digital and innovative experience.

This user-friendly solution is remarkably easy to install and use. All it takes is for a technician to plug the Dongle into the vehicle's OBD (On-Board Diagnostics) port and configure it through the FPT RAS Workshop APP.

Remote Assistance allows for the efficient diagnostics and troubleshooting of specific errors or fault codes, enabling the quick restoration of the engine to its normal operating conditions.

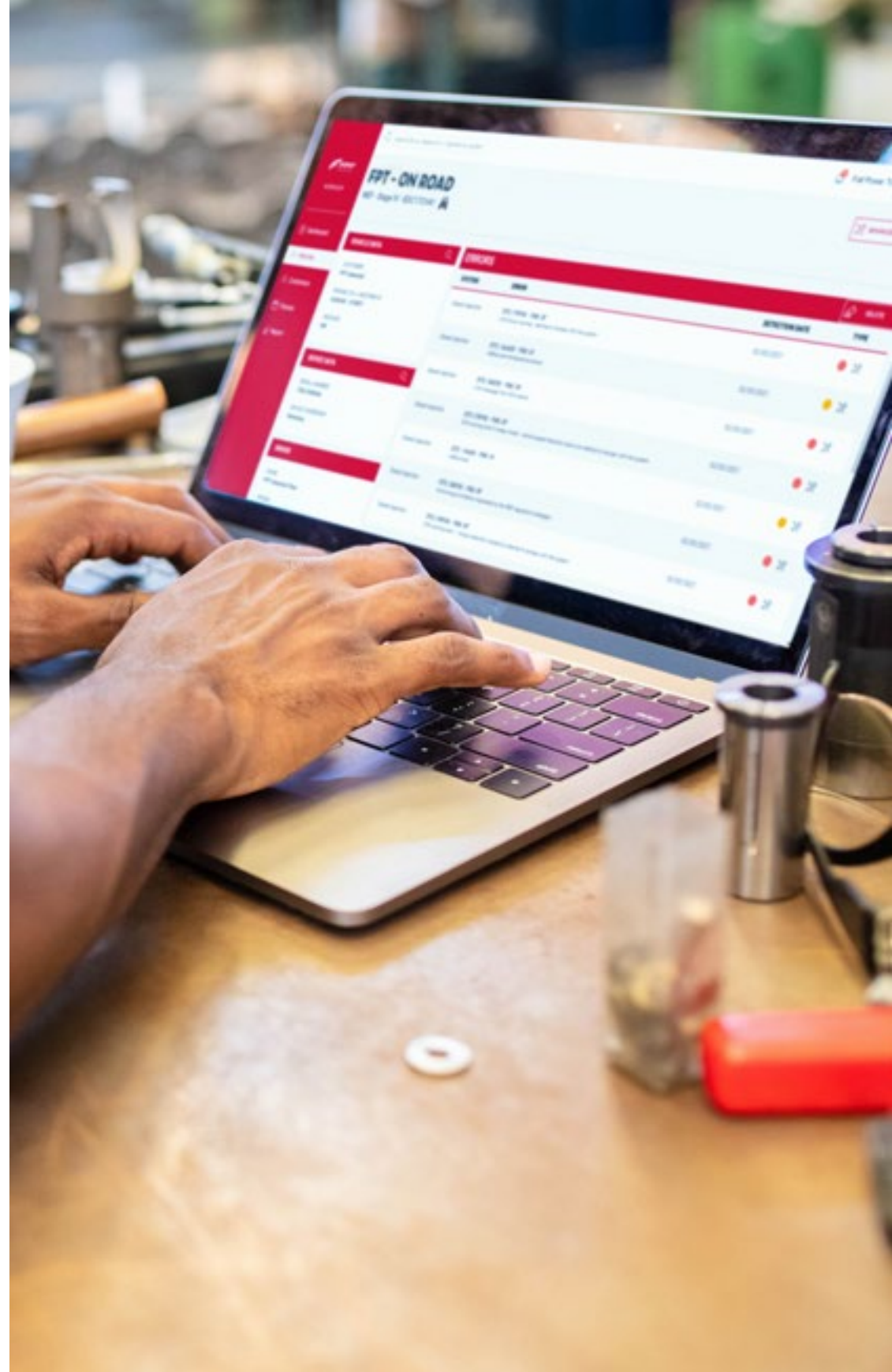
FPT has developed this product specifically for their engines, drawing upon their expertise and engineering knowledge.

It is meticulously designed to meet Customers' needs, offering maximum reliability and comprehensive coverage across their range of engines.

As an official diagnostic tool, it remains in perfect alignment with the latest engine updates, including the incorporation of specific error codes.

### **Main features:**

- Maximizes uptime by immediate remote assistance.
- Complies with ECU regulations: over-the-air DPF service regeneration and error reset.
- Enables remote real-time pre-diagnosis through the Workshop portal.



## Genuine Parts. Original is better.

Our Genuine Parts are manufactured with the same rigorous procedures and premium materials as your FPT Industrial engine. They ensure:

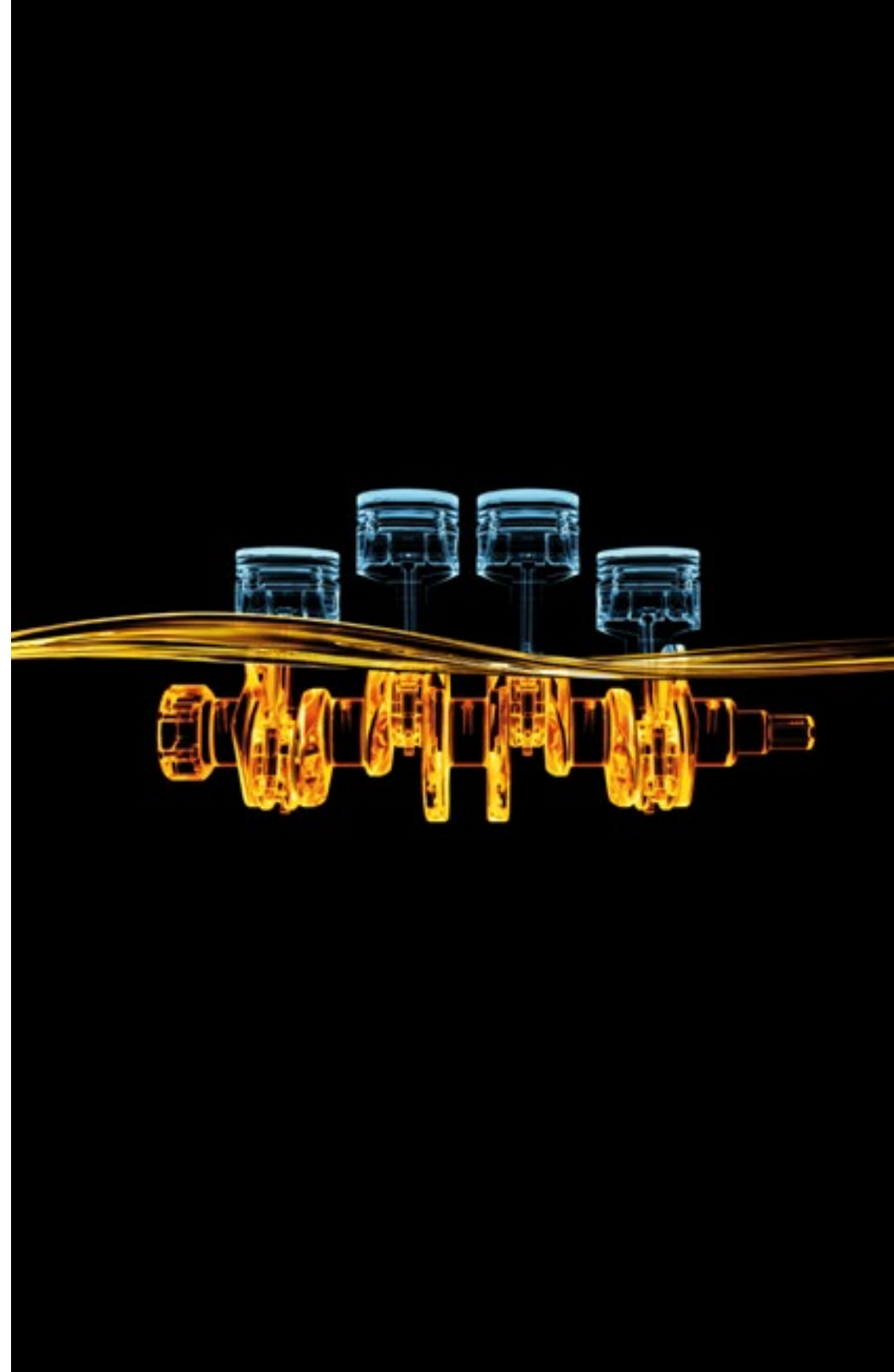
- **Total Compatibility:** guaranteed to perfectly fit with your engine.
- **Optimized Service Life:** exceptional durability without compromising engine performance.
- **Guaranteed Operation:** assured to achieve optimal engine output.

By choosing FPT Industrial Genuine Parts, you maintain the best conditions just like from the manufacturing plant, maximizing engine output and uptime. Our network of Authorized Workshops features highly qualified technicians ready to expertly assist you in achieving peak engine efficiency.

## The perfect combination.

FPT Industrial Genuine Engine Oils are designed with Customer's missions in mind. Developed for exceptional performance under any condition, our lubricants deliver:

- **Enhanced Protection & Durability:** extended engine life and minimized downtime with superior wear and tear resistance.
- **Maximized Uptime & Fuel Efficiency:** our core focus is keeping your equipment running strong. FPT Industrial Fluids has been developed to guarantee the highest level of cleanliness, protection and efficiency, resulting in:
  - +87% cleaner pistons and +68% better top ring protection.
  - +41% Cylinder Wear protection.
  - +20% improved Soot Handling and Sludge Control.
  - -20% in Total Cost of Ownership (TCO).
  - Reduced fuel and oil consumption for a greener future.



## **You need help? We are here for you.**

Because you never stop, and neither do we. Our Customer Contact Centre is active 24/7, to assist you and to activate our local support network.

For any issue or need, our technical and expert support service is ready to help you any time, anywhere.

If you need technical support or assistance on-site, you can always rely on a global network of 70 dealers and over 900 service points.

Discover our global dealers' network:





All the pictures, drawings illustrations and descriptions contained in this brochure are based on product information available to FPT at the time of printing (31/05/2026). Some of the engine line-ups may refer to a specific market configuration which may not be present or offered for sale available in all other markets. The colours featured in this brochure may differ from the originals. FPT reserves the right to introduce any modifications, at any time and without any prior advance notice, to design, material, components equipment and/or technical specifications.





Contact us

