



Volvo Trucks. Driving Progress

# VOLVO FE

PRODUCT GUIDE



# Your flexible working partner.

Ideal for delivering refrigerated food, yet adaptable as a concrete mixer. The Volvo FE more than lives up to its reputation as a multi-purpose, versatile vehicle which delivers excellent driveability combined with first-class productivity. Designed with urban and regional distribution in mind, it is easy to load and unload and offers the driver a comfortable, spacious environment in which to work. Focusing on simple manoeuvrability, increased safety and generous visibility, the Volvo FE does not sacrifice any of Volvo Trucks' legendary power and performance. Plus, with Volvo as your working partner, you can take advantage of a wide range of flexible services, safe in the knowledge that you have chosen a transport solution of the highest class.

## This is why:

### **1** Easy to own, easy to drive.

A truck that offers you maximum flexibility when and where you need it. With unrivalled all-round capabilities and ease of driving, you are free to concentrate on your business, letting us take the strain.

### **2** Comfort.

Designed for long days in the driver's seat. Whatever your professional commitments, the Volvo FE delivers optimum comfort and ergonomics.

### **3** Safety.

At Volvo we pride ourselves in focusing on your safety. Our trucks are fitted with the latest, most developed systems to ensure not only your health and well-being, but also to prevent accidents and to mitigate the resulting consequences should an accident occur.

### **4** Power & Engineering.

With a variety of models available, the Volvo FE is whatever you need it to be. Power and performance comes from our attention to detail in technology, transmission and electrical systems.

### **5** Peace of mind.

We ensure that our Volvo services keep you on the road, offering the potential to maximise your productivity without taking any unnecessary risks.



# First-class distribution. At any temperature.

In a competitive business like distribution, it is comforting to have a reliable vehicle behind you. Particularly when you are transporting and delivering sensitive products, such as frozen goods. With its powerful D8K, 6 cylinder engine with power options of 250, 280 and 320 hp, the Volvo FE delivers top performance and is perfect for distribution work.



### Headlights.

When you are out on the road making deliveries, the Volvo FE's powerful, adjustable headlights, which now feature the Volvo "V" shape day time running light and fog lamps ensure good visibility, even in poor conditions. Their distinctive design ensures that everyone knows there is a Volvo approaching.



### Power take-off.

The Volvo FE features a variety of engine or gearbox mounted power take-offs. Learn more on **page 32**.



### Part of the Volvo family.

The distinctive new design, featuring the Volvo iron mark, is a sign of quality on the road. We believe that your business can benefit via a positive partnership with Volvo. Our heritage of designing trucks of the highest calibre is respected worldwide. Welcome to the family.



### I-Shift - take the weight off your left foot.

Driving with I-Shift means you can forget the clutch pedal. Volvo's advanced automated gearshifting uses its built-in intelligence to select the right gear for you at all times. Even the greatest drivers find it difficult to match its automatic precision. Learn more about I-Shift on **page 31**.





**EASY TO OWN, EASY TO DRIVE**

# Don't fret, don't worry.

At Volvo Trucks we believe that you should be free to focus on what is important to you in your business. You need valuable uptime from your truck – we deliver. You can increase the productivity of your business by employing our flexible range of services. We also work towards lowering the total cost of ownership of your vehicle. All things considered, the Volvo FE represents an extremely profitable solution for you and your business.



## **Flexible contracts tailored to your needs.**

With a selection of Volvo Service Contracts, you can take advantage of the ideal transport solution. Our contracts offer you the freedom to decide on the maintenance and repair of your vehicle's operation, when required. This flexibility helps keep your productivity at a maximum. The contract can be tailored to your specific requirement and include body, taillift, couplings and even tyres.



## **With superior all-round vision.**

The Volvo FE allows you to appreciate the world around your cab. The size and strategic placement of the mirrors deliver the finest possible all-round visibility, while auxiliary windows provide you with a perfect view of the area close to your vehicle.



## **Your truck – the way you want it.**

At Volvo we tailor our trucks to your requirements. We can then prepare your truck directly from the factory, with the necessary body attachments and electrical connections for the bodybuilder. This process significantly shortens lead-times, which means that you receive exactly the truck you want for your business – fast.



### Your vehicle is secure.

The option of an advanced remote-controlled alarm system makes the Volvo FE an enemy of the thief. Easily activated in the event of unwelcome guests trying to open the doors or disturb the vehicle.



### Simple manoeuvring – wherever you are.

The Volvo FE is easy to manoeuvre even in the most congested of spaces. It is a vehicle that allows for easy steering and smooth acceleration, as well as providing an array of instruments to help you navigate every situation.



### Because driving should be a pleasure.

When constructing the instrument cluster and dashboard of the Volvo FE, we felt it was important to focus on common-sense simplicity. The placing of the dashboard's gauges and instruments is designed to be operated with a single glance, offering the best possible ergonomics and allowing you to enjoy a smooth, intuitive drive, however busy the roads are.



### The complex system that makes it easier.

Every function on the truck can be simply activated from the driver's seat. A modern, comprehensive electrical system permits easy control and regulation, while applications can be introduced on specification.



### Volvo Premium Lease.

If it suits you to lease your distribution vehicle or vehicle fleet, a Volvo Premium Lease is available for a monthly fee. A comprehensive package is available, including everything except fuel and driver costs. Let your business run smoothly. Read more about Volvo services on **page 25**.

# Power and performance on demand.

Subtlety, power, quick response – and kinder to the environment. Volvo FE engines ensure a flexibility which makes the vehicle an essential professional tool for urban and regional distribution. Incorporating the very latest in engine technology, the Volvo FE represents the perfect long-term investment when you need to ensure maximum uptime and productivity for your business.

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### STARTING HELP

This helps you to maintain constant revs in your selected gear. This option is particularly effective when starting on slippery road surfaces.

### ENGINE REGENERATION

When the engine and exhaust after-treatment system (EATS) are operating, soot and sulphur accumulate in the EATS. This is controlled by natural chemical reactions when using the truck. In extreme conditions driver intervention is required to control regeneration by using the dash mounted switch when the vehicle is stationary. A gauge in the dash gives a warning if static regeneration is required.

### COMPRESSION BRAKE AND EXHAUST BRAKE

The Volvo FE offers a choice of an exhaust brake, or an compression & exhaust brake, both providing powerful braking on demand.

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### EURO-6

The strict European exhaust standards for diesel engines are set to control the amount of pollutants that have a serious effect on air quality. The Euro-6 standard, applicable from the start of 2014, demands a severe reduction compared to Euro-5, including a NOx reduction of 77 %. Volvo Trucks' solution to the challenge is to refine the selective catalyst reduction (SCR) technology by adding a water-cooled EGR (Exhaust Gas Recirculation) system to the engine. The engines available for the Volvo FE range have been meticulously constructed and engineered to comply with Euro-6 without losing power or torque, or increasing fuel consumption. A win-win situation. For drivers as well as for the environment.

### SERVICE INTERVALS AND MAINTENANCE REQUIREMENTS STAY THE SAME

Volvo FE owners do not have to worry about service intervals on their vehicles, despite the increased demands on engines and service personnel as a result of Euro-6. There are no changes to these requirements.

### VARIABLE GEOMETRY TURBOCHARGER

Improved truck performance at low speed is achieved through the use of a variable geometry turbocharger. This allows the effective aspect ratio of the engine's turbo to be altered and contributes to the flat torque output and super-fast response.



#### POWER

The rapid response of the D8K engine's power output makes the Volvo FE the perfect utility vehicle. For more information, please see **page 29**.

#### ADBLUE

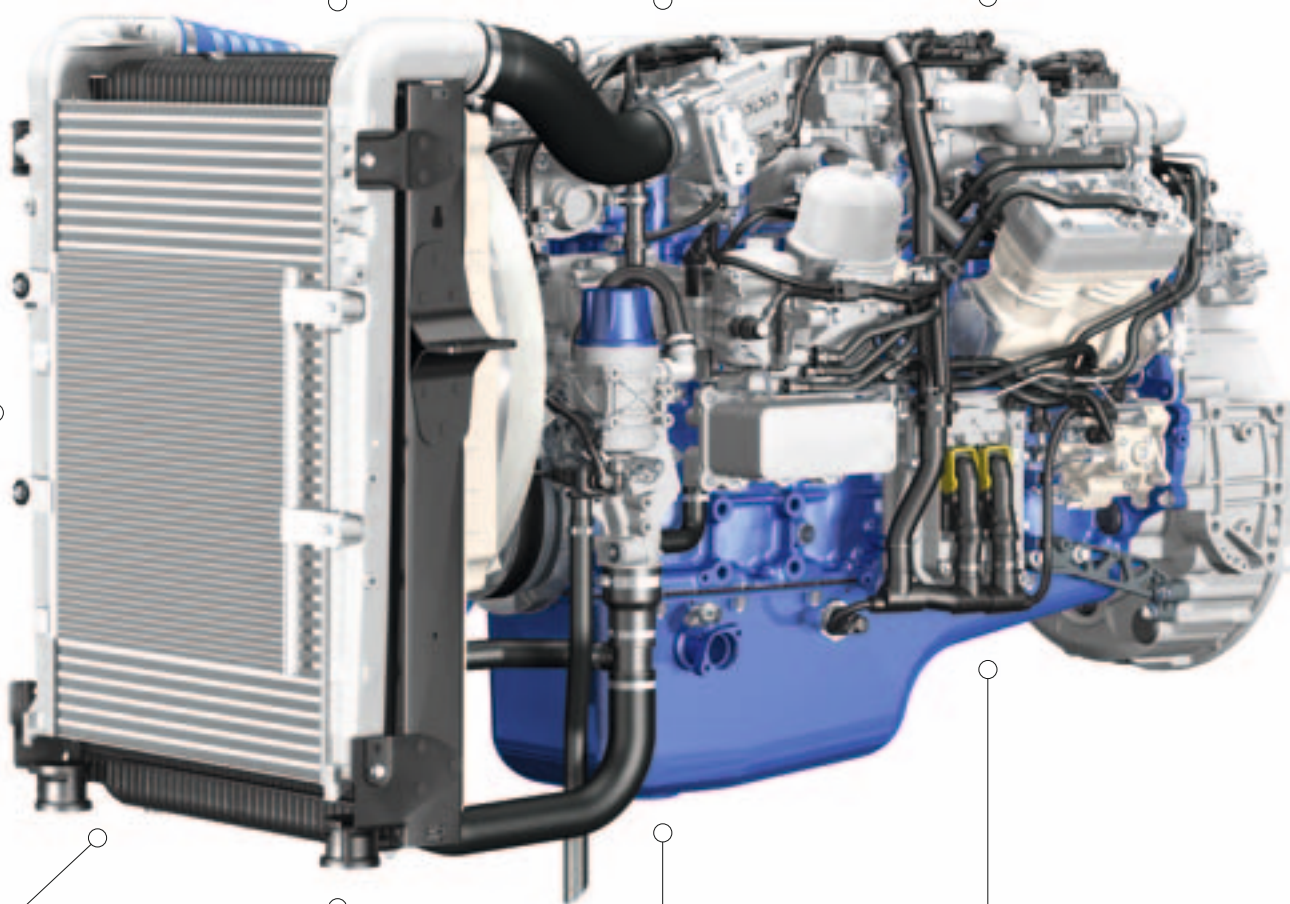
AdBlue is injected into the exhaust from a separate tank, lowering exhaust emissions. AdBlue accounts for 5–6% in relationship to the engine's diesel consumption.

#### QUICK RESPONSE

The D8K engine is a top performer in any situation. Where tight manoeuvring is required – in heavy urban traffic for example – a lightning-fast response can be relied upon everytime.

#### COMMON RAIL INJECTION SYSTEM

The high pressure electronic injection is provided by common rail, with a maximum pressure of 2,000 bar.



#### EXHAUST AFTER-TREATMENT

The D8K engine's emissions are filtered using a combination of SCR (Selective Catalytic Reduction) and EGR (Exhaust Gas Recirculation) systems. An extra injector is fitted on the exhaust in order to regulate the correct temperature of the exhaust gas for further exhaust treatment.

#### POWER TAKE-OFF

The power take-off options on the Volvo FE provide power for running an auxiliary application or the vehicle's own load-handling equipment. Learn more on **page 32**.

#### THE D8K - POWER PERFECTLY MATCHED

The Volvo D8K engine is an all-new 6 cylinder, 8 litre engine with power outputs 250, 280 and 320 hp. It is the perfect match with Volvo FE, with optimal adaptability and top performance.

#### TORQUE

The D8K engine produces a wider, flatter torque and a better response at low rpm. Maximum torque is now 1,200 Nm, which lessens the need for changing gears.

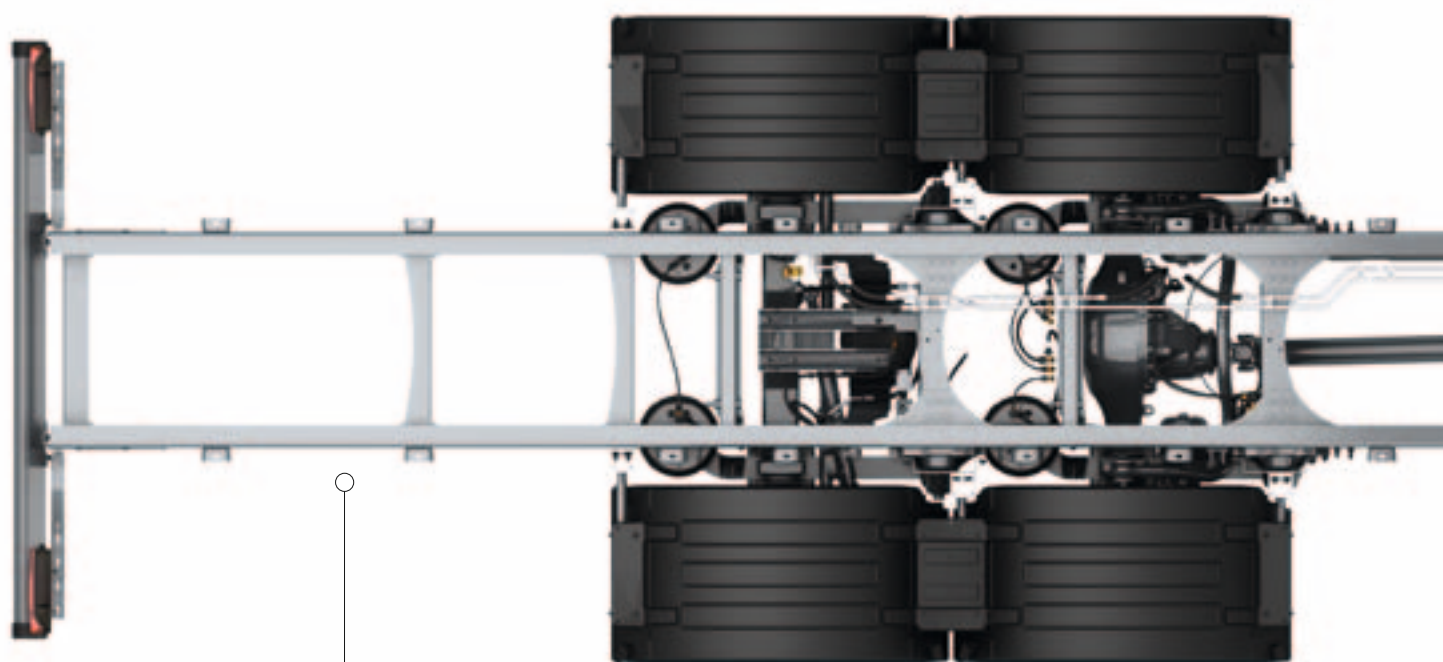
#### OIL DRAIN

The average oil drain for the D8K engine in the Volvo FE is now up to 75,000 km depending on driving conditions, using the VDS4 (Volvo Drain Specification) quality standards.

## THE FLEXIBLE CHASSIS

# A framework for success.

When adapting the chassis of the Volvo FE, our engineers set their imaginations to work. A flexible model was the collective vision, one that could be fitted to almost any task a truck could undertake. They then developed a sturdy, durable chassis which, although light, could bear heavy loads and furthermore was easily customised. Now you can put the results of their endeavour to the test.



### **VOLVO BODYBUILDER INSTRUCTIONS**

Volvo Bodybuilder Instructions serves the needs of professional bodybuilders all over the world. Access to drawings, vehicle specifications and fact sheets make it a prime resource when customising the Volvo FE chassis to your business requirements.

### **FRAME HEIGHT**

There are two variants of frame height (FRAME266 & FRAME300) with a frame thickness of 7 mm and 8 mm respectively.

### **TRAILING AXLES**

There are two types of trailing axles on the FE chassis. The TA-FIXED axle is a fixed tag axle with either single or double wheels. The TA-HYDRS is a hydraulically-steered tag axle with single wheels.

### **REAR AXLES**

Four different rear axles are available in various combinations. Load capacity varies from 13 to 23 tonnes.

#### **SUSPENSION**

There is a choice of suspension on the Volvo FE on both front and rear axles. These are dependent on the axle load. Air and leaf suspension are available in a variety of combinations.

#### **SPECIAL APPLICATIONS**

For specific applications like refuse, tankers and cranes, the chassis can be specially adapted. Fuel tanks and/or AdBlue tanks are repositioned in order to accommodate the application in question.

#### **ALL-NEW CHASSIS PACKAGING**

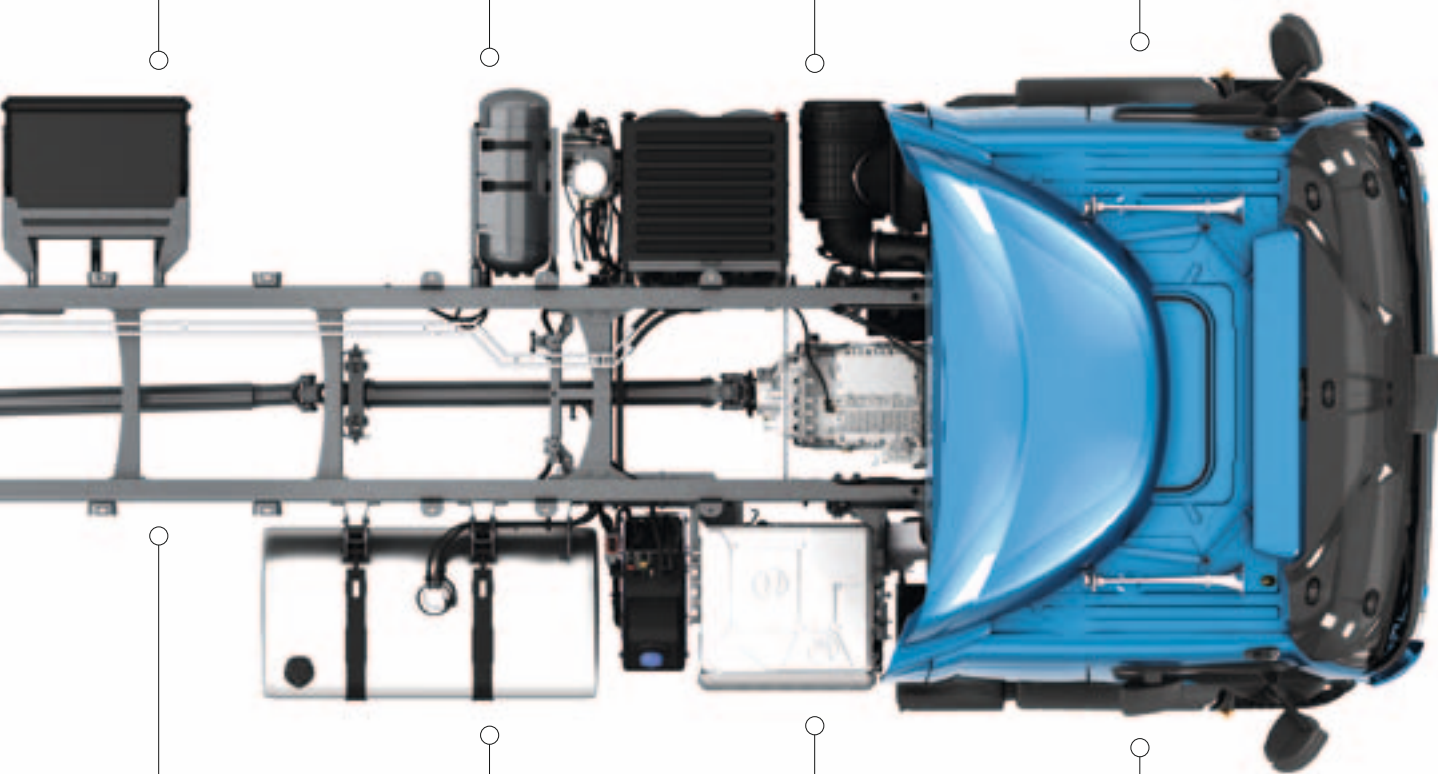
The improved chassis packaging for Euro-6 means that the Volvo FE remains as flexible as before, unaffected by the stricter emission requirements.

#### **AIR SUSPENSION**

The Electronic Control System (ECS) can be used to control the air suspension levelling, via switches on the dashboard or a control box. This results in easy, fast loading, regardless of the height of the loading bay.

#### **WHEELBASE**

There is a choice of wheelbases on the Volvo FE range, between 3,200 and 6,800 mm depending on the vehicle model and axle configuration.



#### **FRAME INNER LINER**

On three-axle vehicles there is, as standard, an inner liner to reinforce the area around the rear axles' installation.

#### **FUEL TANKS**

Plastic, steel or aluminium fuel tanks with varying capacities of between 160 and 630 litres can be stipulated, according to truck specifications and special requirements.

#### **TOOLBOXES**

The Volvo FE comes equipped with two separate toolboxes – a smaller version with 55 litres in volume and a larger 125 litre model. These are perfect for keeping load security straps or other equipment.

#### **FRONT AXLES**

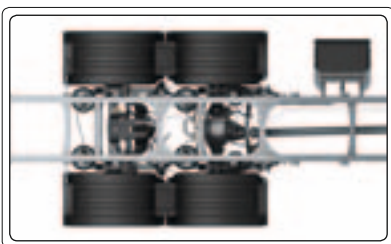
Maintenance-free front axles are available on the chassis of the Volvo FE, with maximum load capacity of 7.1 to 8 tonnes.



# The truck that delivers a clean sweep.

When choosing the right truck for your business demands, there is always the temptation to prioritise or compromise on certain details. With the Volvo FE you don't need to.

We fit the superstructure that suits your exact requirements. The FE 6x2 rigid with its low noise level, impressively low emissions, unrivalled all-round visibility and easy manoeuvring make it the perfect choice for refuse operations. Frequent stops and starts are aided by a generous D8K, 6 cylinder, 8-litre engine combined with automatic transmission or I-Shift, while the low cab has a convenient entry with anti-slip steps. However, with an interior this comfortable, you might not want to get out too often.



### Rear axle/bogie

Carrying a heavy rear load means trusting the suspension on your truck. The light-weight drive axle of the Volvo FE supports a design weight of 13-tonnes and the air suspension ensures the smoothest possible journey. Learn more about axle/bogie options on **page 32**.



### Automatic transmission and I-Shift.

Stopping and starting your vehicle as frequently as you do when collecting refuse, it's reassuring to know that you have the assistance of an automatic gearchanging system. Using these types of transmission means that you can simply concentrate on driving your vehicle from one stopping point to the next.



### Instep.

Ideal for frequent stops, when entering and leaving your vehicle. Anti-slip steps and accessible handholds make your task easier, even in adverse weather conditions. Optional lighting on the lower doors is ideal when working on dark mornings or at dusk.





## CAB INTERIOR

# Step into a more comfortable working day.

When your daily routine requires entering and exiting your vehicle frequently, a convenient, ergonomically-designed instep is a must. Once inside, a spacious interior with well-appointed features makes your truck a relaxed space that is a real pleasure to work in. Take a look around the Volvo FE interior – adapted with your comfort in mind.



### Spacious cab sizes.

There are three different spacious cab options with the Volvo FE. The day cab is the most compact of the three while the comfort cab can be equipped with or without bed. The larger sleeper cab always comes with a bed, offering ample space for rest and relaxation. Learn more on **page 33**.



### Cab suspension.

A smooth drive is guaranteed by the Volvo FE's state-of-the-art cab suspension. There is a mechanical cab suspension, with coiled springs and shock absorbers front and rear and the option of four point air suspension.



### Even more generous storage space.

Look around the cab and you will find an abundance of space to store your items. Storage compartments in the dashboard. In the doors. Above your head. Between the seats. Plus, you have the option of adding yet more storage units if you so wish.



### Instep.

Optional step lighting is available in the form of a lamp in the door's lower frame. Accessible handholds and two anti-slip steps make regular entry and exit of your vehicle easy.



### Audio options.

A journey goes quicker when you have a soundtrack. There is a range of audio options available – from USB connections, CD and mp3 players to radio variations – with integrated bluetooth and remote controls for your convenience. Learn more on **page 34**.



### Steering wheel.

The steering wheel can be adjusted to your favoured position and has a diameter of either 460 or 500 mm.



#### **All-new seats.**

New ergonomic seats are a key feature of the latest Volvo FE interior, with improved anchoring, integrated head-restraint and seat belt. New upholstery material is easier to keep clean. Both the driver and the passenger seats can be specified and adjusted to suit your needs.



#### **Low interior noise.**

Maximum sound isolation means that the Volvo FE can be driven in a relaxed environment with engine and tyre noise minimised.



#### **Ergonomic thinking.**

When planning a cab's layout, we consider what is most important to you the driver. It's called ergonomic thinking. Placing the instruments and gearshift strategically, so that you can reach and control everything without straining. The controls you use most often are placed close to the steering wheel, making your job just a little easier.



#### **DIN compartments.**

Above the windscreen there are two storage units, as well as four DIN compartments. The DIN compartments are intended for items such as a communication radio, extra storage or tachograph.



#### **Climate control options.**

A climate unit keeps the cab temperature at the right level – with or without the use of optional air conditioning.



#### **Dashboard and centre console layout.**

The dashboard and cluster layout makes it easy to access the vital information you will need. Speed, rpm, fuel and oil levels are all instantly visible, helping you plan your journey with ease.

## CAB EXTERIOR

# We took something good and made it better.



When designing and building our range of trucks, we believe in each member of the Volvo family having its own distinct personality. The Volvo FE stands out from the crowd in this respect. It is a vehicle that radiates a particular confidence and a balanced, sleek exterior marks out its territory as the highest quality vehicle in its specific field. A recent new design builds on this unique personality, achieving a thoroughly modern look. Trademark V-shaped LED lamps are one of its most recognisable characteristics on approach. The Volvo FE – all things considered, a mark of distinction.



### Air Deflectors.

Roof mounted air deflectors assist in decreasing resistance thus improving fuel economy when correctly matched to the vehicle's body.



### Air-intake grille.

The front grille features a beehive pattern that allows for more efficient air-flow, facilitating improved cooling of the engine and the after-treatment process.



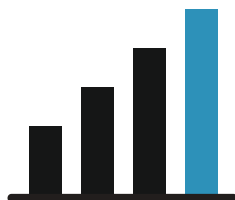
### Optional roof hatch.

A roof hatch is available – either in glass or metal – which is controlled either manually or electrically.



### Feel proud to drive a Volvo.

The prestigious iron mark on the Volvo FE is now placed high on the front of the vehicle, closer to you, the driver.



### A comprehensive solution.

With maximum adaptability and excellent driveability, the Volvo FE represents a perfect choice when looking to optimise productivity in your business. We make sure you receive the exact vehicle you need. Whether your business is construction, distribution or refuse handling, the Volvo FE is here to do the job.



### Part of our premium range.

The Volvo FE is part of Volvo's premium truck range – from the mighty Volvo FH16 to the Volvo FMX, a rugged beast of a construction vehicle. No matter what your business is, we have the truck to match.

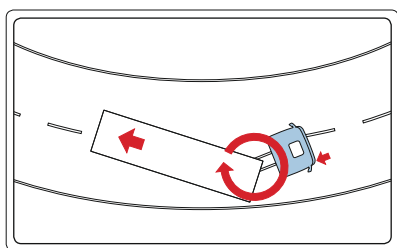




## SAFETY

# Developed with your safety in mind.

At Volvo we pride ourselves in taking your safety seriously. This is part of our heritage and is built into our core values. It is naturally a key reason behind the constant technological improvements we are making to our vehicles. The Volvo FE features excellent visibility and improved in-cab safety, as well as an innovative protection system. This not only increases your own safety, but also the safety of those around you on the road.



### **Electronic Stability Programme (ESP).**

ESP is provided as standard on the Volvo FE. This feature increases vehicle safety and direction stability when driving conditions are difficult. It also helps to avoid rollover situations.



### **Reinforced seats and seat anchoring.**

The seats are of course safely anchored to the floor, and the anchoring has been specially reinforced in order to provide maximum safety. In fact the entire FE cab has been reinforced to protect you in the event of an accident. It goes without saying that the cab has passed all Volvo's collision, barrier and crash tests.



### **Integrated seatbelts with increased impact resistance.**

The seatbelts are integrated into the seats and provide first-class impact resistance. They are available in either black or red, the latter option making it easy for those outside the cab to see that they are being used.



### **Front under-run protection (FUP) system.**

Volvo have developed the FUP system with other road users in mind. Front and rear under-run protection prevents smaller vehicles from becoming wedged under the truck if there is a collision.



#### **ENHANCED ALL-ROUND VISIBILITY**

When driving in an urban environment it is vital that you are able to get the total picture of your surroundings at all times. With the optional electrically-controlled, heated exterior mirrors, you will be in complete control of what you see. Tinted, solar managed glass is available as option. This reduces the heating up of the cab due to sun.

#### **EXTRA WINDOWS**

Extra windows in the passenger doors and side panels are also available. These are particularly useful when driving in confined spaces.

#### **THREE-PIECE BUMPER CONCEPT**

The Volvo FE's innovative bumper concept incorporates steel corners that provide excellent impact resistance. It is also easy to change a single part if it becomes damaged, leading to lower repair costs.

# Building a brighter future.

When your business is construction, you need to maintain a flexible vehicle fleet. The Volvo FE serves this purpose perfectly. It serves equally well as a tipper as it does as a concrete mixer. Robust yet agile, the Volvo FE is the perfect all-rounder, highly suited to removing obstacles, transporting materials or helping to construct new urban developments. With excellent manoeuvrability, it's at home in any situation.



### Volvo Bodybuilder Instructions.

When you order your Volvo FE, the bodybuilder logs into Volvo Bodybuilder Instructions and can see the exact specifications of your truck. Work commences on building your truck, using drawings created on the system. This intuitive technology has the positive effect of hugely reducing lead-times and improving quality.



### New seats.

The Volvo FE is fitted with all-new ergonomic seats which provide maximum comfort when spending a long day behind the wheel. The seats can be tilted and adjusted to suit your needs and the woven textile upholstery is easy to keep clean – ideal when driving in a dusty environment.



### I-Shift.

Volvo's automated gearchanging is equipped with software technology which ensures that the Volvo FE maintains the optimum gear regardless of driving conditions. The systems' base software can be easily adapted for specific requirements through two additional packages – Distribution & Construction or Fuel Economy.



### Ergonomics.

The instrument cluster and dashboard of the Volvo FE has been intuitively planned to offer the driver the best possible ergonomics. The dashboard's gauges are placed to give a perfect overview of operations with a single glance. The controls you need most are close to hand – simple.



### Sleeper cab.

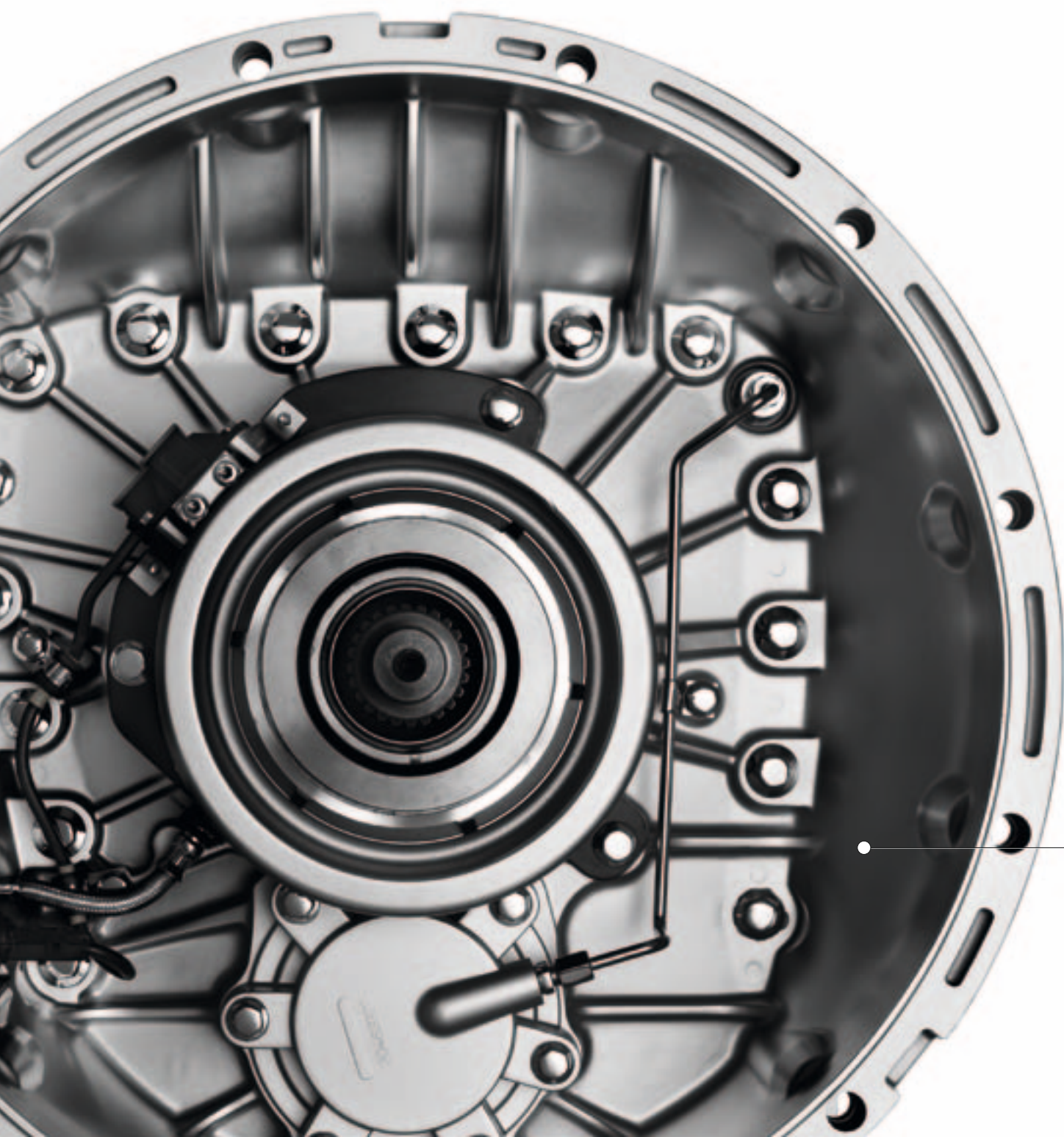
The Volvo FE has three separate cab options – the day cab, the comfort cab, and the sleeper cab. The sleeper is the most spacious model, perfect for longer assignments when you want maximum space to work and optimal home comforts around you. Read more about the roomy cab interiors on **pages 14-15**.

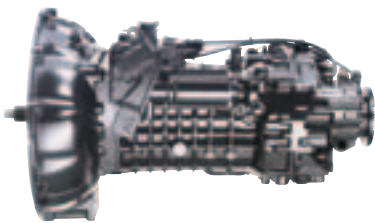




TRANSMISSION & BRAKES

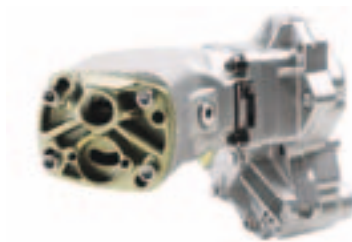
**Choose the best gear  
for your surroundings.**





#### **Automatic or Manual.**

Offering both manual and automatic transmission allows you to choose a gearbox that best suits your needs. The manual gearbox range is available with either a standard 6 or 9 speed option, suited respectively to city driving and tougher terrain at higher GVW. An automatic transmission is more practical when assignments involve frequent starts and stops and is a particularly good match for the Volvo FE with its D8K engine.



#### **Power take-offs.**

The Volvo FE features a variety of power take-offs with flange or pump drives. Learn more on **page 32**.



#### **Disc Brakes.**

The Volvo FE features pneumatic brakes with ventilated discs front and rear in order to aid smooth braking.



#### **Clutches.**

The functional push-type single plate clutches on the Volvo FE vary from size 395 mm to 430 mm depending on gearbox choice.



#### **EBS.**

The Electronically-controlled Brake System incorporates an anti-locking system and delivers fast braking response and reduced brake wear.

#### **Let I-Shift take the strain.**

Forget the clutch pedal and let I-Shift choose the correct gear, allowing you to sit back and focus on the traffic. I-Shift is Volvo's automated gear change which features an electronic control unit. This receives information about vehicle speed, acceleration, weight, road gradient and torque demand and, using precise technology, carries out accurate gear changes accordingly. The I-Shift system communicates with the engine, which adjusts revs and engine brake effect for fast, comfortable automated shifts. For a complete overview, see **page 31**.



# The complete transport solution.

Buying a truck is an important long-term investment. It should be a careful, considered choice, based on many different factors. Once you have made this decision, you should be free to concentrate on your business. When you purchase a Volvo FE, we let you do precisely that.

Being part of the Volvo family means being able to take advantage of our comprehensive range of solutions. Whatever your requirements, you can be sure that there is a package that suits you perfectly.



### **Volvo insurance.**

Volvo insurance offers a thoroughly flexible and comprehensive solutions. The solutions can, of course, be tailored to suit your individual business needs. The three basic types of insurance are:

**Third part liability:** covers you against damages to third parties caused by yourself.

**Comprehensive insurance:** covers damages on your own equipment non-related to third party, like fire, theft, vandalism.

**Gap insurance:** covering the gap between outstanding finance amounts and vehicle value in case of total loss. Gap is available for finance contracts with Volvo Financial Services.

The insurance is provided by your Volvo dealer, making your truck even easier to own, saving time, effort – and money.



### **Driver Development.**

Volvo Trucks' Driver Development Programme offers drivers the opportunity to refine their skills and competence, leading to improved safety and reduced fuel consumption. This service, presented in conjunction with our dealers, can help operators increase fleet productivity, while reducing the risks and enhancing the personal safety of every Volvo driver. All courses are accredited to meet Driver CPC demands.





#### **Volvo Premium Lease.**

If you wish to lease your vehicle, a comprehensive solution is part of Volvo's total offer. This can include everything minus fuel and driver costs – all for a fixed monthly fee. This service can assist you in planning an accurate budget for your business.



#### **Gold Service Contract.**

The Gold Service Contract goes a long way towards securing the necessary uptime for a profitable enterprise. Maintenance and repairs, pro-active planning, monitoring of critical parts and service of your vehicle only when absolutely required – all work together to safeguard your business productivity and offer you peace of mind.



#### **Strong dealer network.**

Volvo services focus on keeping your business on the road – whatever your location.

Our network is constantly expanding and our strategically located service points worldwide ensure that, as part of the family, you are never far from first-class customer service.



#### **Fuel Advice.**

Fuel Advice provides you with access to our fuel management coaches – true experts in reducing fuel consumption. Each month you receive enhanced fuel reports with personalised advice on how to improve. You can get more advice via the dedicated help desk or log on to the toolbox to find hands-on tips and inspiration.



#### **Dynafleet/Dynafleet App.**

Dynafleet is Volvo Trucks' user-friendly fleet management system. It allows you to monitor fuel consumption, driver times, emissions and service intervals in real-time from any location, through an intuitive web interface. Traffic planning maximises resources by utilising your entire vehicle fleet while helping to reduce fuel consumption. Administration is simplified through integration with existing office systems. All to make your business run more efficiently. Dynafleet for the driver is also available as a highly practical app.



#### **Every drop counts.**

At Volvo Trucks we pride ourselves in taking our environmental responsibilities seriously. It is therefore our philosophy that every drop of fuel that our vehicles use makes a difference. By incorporating such services as driver training, vehicle maintenance, traffic planning systems and analysis, our aim is to show that, by taking relatively small steps, your fuel consumption can be markedly reduced. The overall result is as kind to the environment as it is to your pocket.

Read more about every drop counts at [www.volvotrucks.com/everydropcounts](http://www.volvotrucks.com/everydropcounts)

# Tailoring your Volvo FE.

Welcome to the Volvo FE. The flexible chassis layout and VBI (Volvo Bodybuilder Instructions) make it easy to prepare your vehicle for a superstructure. With driveline, cabs and equipment packages that provide you with a wealth of options, the Volvo FE is the perfect truck for your specific business needs.

# 1

## CHASSIS

Wheelbases, chassis heights, tanks, axles, rear suspensions and brakes.

**PAGES 27-28**

# 2

## DRIVELINE

Engines, gearboxes, rear axles and power take-offs.

**PAGES 29-32**

# 3

## CAB

Specifications, measurements and features for the day cab, comfort cab and sleeper cab.

**PAGE 33**

# 4

## EQUIPMENT PACKAGES

Complete equipment packages for improved driver comfort, storage and operating economy.

**PAGE 34**

# 5

## ACCESSORIES

There are plenty of ways you can accessorise your Volvo FE. View some of the highlights.

**PAGE 35**

<b>WHEELBASES</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wheelbase (mm)	4x2 rigid	6x2 rigid	6x4 rigid
<input type="checkbox"/> 3200			•
<input type="checkbox"/> 3500	•	•	•
<input type="checkbox"/> 3700	•	•	
<input type="checkbox"/> 3850			•
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<input type="checkbox"/> 6800	•		

<b>CHASSIS HEIGHT</b>	<b>Tyre</b>	<b>Height (mm)</b>
<input type="checkbox"/> Low	315/60R22.5"	880
<input type="checkbox"/> Medium	315/70R22.5"	950
<input type="checkbox"/> High	315/80R22.5"	1050

## FUEL TANKS

The fuel tanks are available in plastic, steel or aluminium. Fuel volume varies from 160 to 630 litres. There are two heights of D-shaped tanks – 560 mm and 710 mm.

## ADBLUE TANK

The AdBlue tank is made of plastic and the volume is 32 litres. The AdBlue pump is integrated in the tank module.

## REAR AXLES

There are four different rear axles available. Maximum axle load varies from 13 up to 23 tonnes. All axles have differential lock as standard.

## FRONT AXLES

Front axle loads vary from 7.1 up to 8 tonnes.

## TAG AXLES

These are available in several configurations – fixed with single or dual wheels, or with fixed or steered tag axle. Axle load 6.7, 7.1, 7.5, 9.5 or 10.5 tonnes.

<b>REAR SUSPENSION</b>					
Type	Axle combination	Suspension type	Axle/bogie load (tonnes)	Axle type	Tag axle
<b>Solo axle</b>					
<input type="checkbox"/> RAD-L90	4x2	Parabolic/S-spring	13	Single/hub	
<input type="checkbox"/> RAD-KR	4x2	Air	13	Single/hub	
<b>Bogie</b>					
<input type="checkbox"/> RADT-KR	6x2	Air	19/21	Single/hub	Fixed/steered
<input type="checkbox"/> RADD-BR	6x4	Parabolic	21	Single/hub	

# 1 CHASSIS

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## CHASSIS FEATURES

The chassis is developed to give optimum space for superstructure and equipment. Here are some of the key features, which may vary depending on the truck's specification.

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### FRAME BODY BUILDER HOLE ROW

The upper hole row is reserved for the body builder. All brackets in the upper hole row have an offset and an 8 mm spacer. No rivets are used in the upper hole row.

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### CRANE PREPARATION

Crane plates on the chassis can be factory-mounted.

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## BRAKES

The Volvo FE has pneumatic brakes with ventilated discs front and rear. The EBS (Electronically controlled Brake System) anti-locking disc-brake system provides both faster and safer braking response and promotes less brake wear. The system includes features such as ABS and Brake Blending. With Brake Blending, the system utilises the vehicle's various brakes for more uniform brake application and less wear on both the wheel brakes and tyres. The extended EBS medium package includes "Hill Hold".

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### ESP (ELECTRONIC STABILITY PROGRAM)

Standard ESP helps maintain directional stability in difficult conditions, and also helps in preventing rollover.

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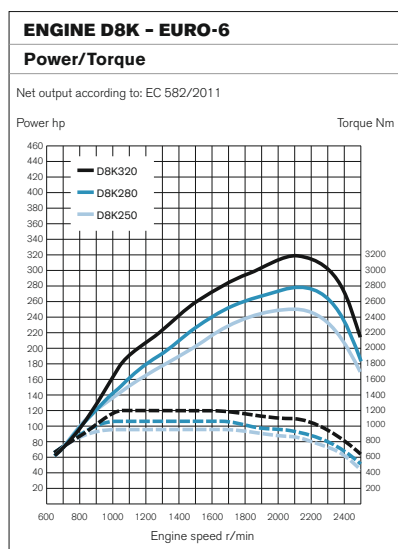
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### ☐ HYDRAULIC RETARDER FOR AL306 AUTOMATIC GEARBOXES

The compact, integrated hydraulic retarder (RET-HYDR and RET-TPT variants) is mounted on the gearbox. The max effect is 400 kW. Maximum ratio in the torque converter (TC418) is 1.98:1.

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## ☐ **D8K250** (184 kW)

Max power at 2,100 r/min 250 hp

Max torque at 900–1,700 r/min 950 Nm

## ☐ **D8K280** (206 kW)

Max power at 2,100 r/min 280 hp

Max torque at 950–1,700 r/min 1,050 Nm

## ☐ **D8K320** (235 kW)

Max power at 2,100 r/min 320 hp

Max torque at 1,050–1,600 r/min 1,200 Nm

## **D8K**

No. of cylinders 6

Displacement 7.7 dm<sup>3</sup>

Stroke 135 mm

Bore 110 mm

Compression ratio 17.5:1

Economy revs 1,000–1,700 r/min

Exhaust braking effect (2,800 r/min) 120 kW

Compression brake effect (2,800 r/min)

170 kW

Oil filters 1

Oil change volume, incl. filter 25.5 l

Cooling system, total volume 17 l

Oil change interval: Up to 100,000 km,  
or once a year (Long haul)/75,000  
or once a year (Distribution): using VDS4.

## **FUEL**

EN 590 (EU norm) max 10 ppm sulphur.

## **ENGINE-MOUNTED POWER TAKE-OFF**

Ratio 1:1 600 Nm\*

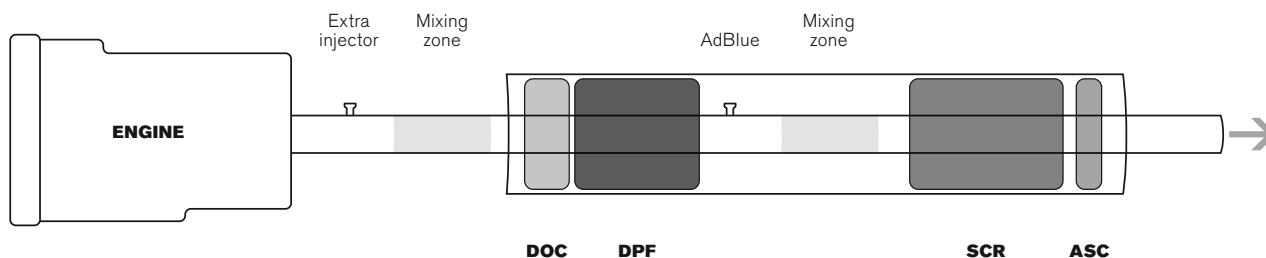
\* Torque output both when driving and standing still.

## 2 DRIVELINE

### EURO-6

We've come a long way in reducing environmental impact. Now it's time for Euro-6, the toughest step so far, putting extremely strict limits on emissions of particulate matter PM (0.01 g/kWh) and oxides of nitrogen NO<sub>x</sub> (0.40 g/kWh for steady-state cycle and 0.46 g/kWh for transient cycle).

### OUR SOLUTION FOR EURO-6



#### ENGINE

A closed loop butterfly exhaust brake, a turbo, a cooled EGR and more. The new engine components serve two main purposes: to improve gas-flow and make sure the exhausts reach the after-treatment system at optimum temperature.

#### EXTRA INJECTOR

A special diesel injector is used for heat management of the Diesel Particulate Filter DOC and ensures the efficiency of the Diesel Particulate Filter DPF and good Selective Catalytic Reduction SCR functionality.

#### DIESEL OXIDATION CATALYST (DOC)

The DOC produces the NO<sub>2</sub> necessary for the DPF to efficiently combust the particulates. In cold conditions, it also provides the heat needed for regeneration.

#### DIESEL PARTICULATE FILTER (DPF)

The filter collects particulate matter (PM) and stores it until it's burned off during auto-regeneration. If the temperature is not achieved during the duty cycle there is a switch in the cab to regenerate the DPF when stationary. There is also a regeneration gauge in the dash.

#### SELECTIVE CATALYTIC REDUCTION (SCR)

In the mixing zone, the exhaust gas is sprayed with AdBlue – which is an ammonia NH<sub>3</sub> solution. When they reach the catalysts, the oxides of nitrogen (NO<sub>x</sub>) are efficiently transformed into harmless nitrogen gas and water.

#### AMMONIA SLIP CATALYST (ASC)

The last step before the tailpipe where the remaining ammonia (NH<sub>3</sub>), if any, is removed.

### EUROPEAN EMISSION STANDARDS 1993-2013

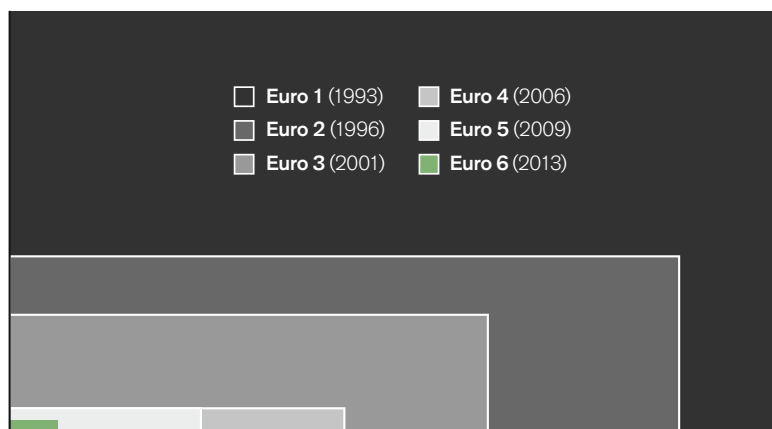
PM (g/kWh)

0.36

0.30

0.20

0.10



PM = Particulate Matter

NO<sub>x</sub> = Oxides of Nitrogen

## GEARBOXES

The manual gearboxes are operated with servo assistance. The short gear lever, on the engine tunnel, and offers short, vibration free lever movements. The automatic transmission is operated via push-buttons. And the new I-Shift two pedal transmission control is mounted on the steering column. All gearboxes can be specified with a power take-off.

## GEARBOXES

Type		Number of gears	Max torque (Nm)	GCW approval (tonnes)	D8K250	D8K280	D8K320
<input type="checkbox"/> ZTO1006	Manual	6	1050	32	•	•	
<input type="checkbox"/> ZTO1109	Manual	9	1200	44	•	•	•
<input type="checkbox"/> AT2412E	I-Shift	12	2400	44	•	•	•
<input type="checkbox"/> AL306	Automatic	6	1300	32	•	•	•

## I-SHIFT

I-Shift is Volvo's gearbox with automated gearchanging for all applications. Well known for fast gear shifting, it both increases driver comfort and reduces fuel consumption. Can be fitted with a power take-off. For certain applications, an extra transmission oil cooler is available.

## I-SHIFT SOFTWARE PACKAGES

### BASIC

The basic software designed to suit most transport demands.

## DISTRIBUTION & CONSTRUCTION

Improving performance in more challenging conditions, for example tight manoeuvring.

## FUEL ECONOMY

Designed to optimise the driving for best fuel economy.

## I-SHIFT SOFTWARE PACKAGES

		<input type="checkbox"/>	<input type="checkbox"/>
Functions	Basic	Distribution & Construction	Fuel Economy
Basic Shift Strategy	•	•	•
Performance Shift	•	•	•
Basic Gear Selection Adjustment	•	•	•
Gearbox Oil Temperature Monitor	•	•	•
Enhanced Shift Strategy		•	•
Launch Control		•	•
I-Roll			•
Kick-down inhibition/activation			•
<b>Additional options</b>			
Enhanced PTO Functions	•	•	•
Enhanced Gear Selection Adjustment, including kick-down	•	•	•

## 2 DRIVELINE

### POWER TAKE-OFFS

Name/Variant	Gearbox	Type	Speed ratio	Max torque (Nm)	Rotation
<input type="checkbox"/> PR-HP4T	AL306	Pump con.	1:1.401	400	Same
<input type="checkbox"/> PR-HF4TL	AL306	Flange	1:1.139	400	Same
<input type="checkbox"/> PR-HF6TH	AL306	Flange	1:1.401	600	Same
<input type="checkbox"/> PR-HP6TL	AL306	Pump con.	1:1.139	600	Same
<input type="checkbox"/> PTRD-D1D	AT2412E	Flange	1:1.300–1.650	550	Inverse
		Pump con.	1:0.600–0.770	1000	Same
<input type="checkbox"/> PTR-FH1	AT2412E/ZTO1109	Flange	1:0.970	800	Inverse
<input type="checkbox"/> PTR-PH1	AT2412E/ZTO1109	Pump con.	1:0.970	800	Inverse
<input type="checkbox"/> PTR-FH2	AT2412E/ZTO1109	Flange	1:1.253	430	Same
<input type="checkbox"/> PTR-PH2	AT2412E/ZTO1109	Pump con.	1:1.253	430	Same
<input type="checkbox"/> PTR-FH5	AT2412E/ZTO1109	Flange	1:1.778	450	Same
<input type="checkbox"/> PTR-PH4	AT2412E/ZTO1109	Pump con.	1:1.778	450	Inverse
<input type="checkbox"/> PTR-ZF4	ZTO1006/ATO1056	Flange	1:1.700	320	Same
<input type="checkbox"/> PTR-ZF5	ZTO1006/ATO1056	Pump con.	1:1.700	320	Same
<input type="checkbox"/> PTR-FH5	ZTO1006/ATO1056	Flange	1:0.962	450	Same
<input type="checkbox"/> PTR-PH4	ZTO1006/ATO1056	Pump con.	1:0.962	450	Same
<input type="checkbox"/> PTR-ZF2	ZTO1109	Flange	1:1.900	410	Same
<input type="checkbox"/> PTR-ZF3	ZTO1109	Pump con.	1:1.900	410	Same
<input type="checkbox"/> PTR-A-PH1	ZTO1109	Pump con.	1:0.970	600	Inverse
<input type="checkbox"/> PTR-A-PH2	ZTO1109	Pump con.	1:1.253	430	Same

### REAR AXLES

Type	Axle	Gear	Max torque (Nm)	Max axle load (tonnes)	GCW approval (tonnes)
<b>Single reduction</b>					
<input type="checkbox"/> RSS1344C	Solo	Hypoid	2600	13	44
<input type="checkbox"/> RTS2370A	Tandem	Hypoid	3550	23	70
<b>Hub reduction</b>					
<input type="checkbox"/> RSH1370F	Solo	Spiral bevel	3550	13	70
<input type="checkbox"/> RTH2180C	Tandem	Hypoid	2100	13	65

### REAR AXLE RATIOS

RSS1344C	RTS2370A	RSH1370F	RTH2180C
2.64:1	3.09:1	3.76:1	2.96:1
2.85:1	3.40:1	4.12:1	3.08:1
3.08:1	3.78:1	4.55:1	3.22:1
3.36:1	4.13:1	4.67:1	3.36:1
3.70:1	4.50:1	5.41:1	3.52:1
4.11:1	5.14:1	6.18:1	3.70:1
4.63:1	5.67:1	7.21:1	3.89:1
5.29:1	6.17:1		4.12:1
6.17:1			4.35:1
			4.62:1
			4.82:1
			5.12:1
			5.43:1
			5.86:1
			6.31:1

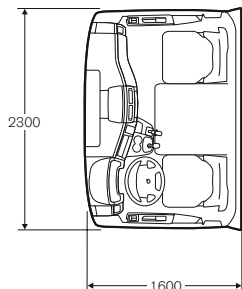
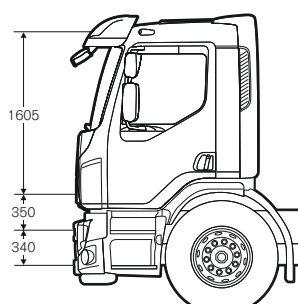


## CABS

All Volvo FE cabs are aerodynamically designed to reduce air resistance and the interiors are equipped with a variety of storage facilities. Additional storage units are available as options. All seats are ergonomic and feature integrated seatbelts and head-restraints.

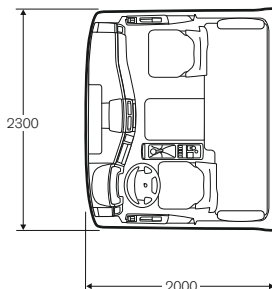
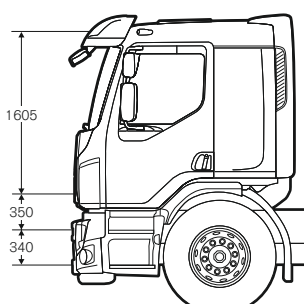
### DAY CAB

Day cab with comfortable and ergonomic driver area. Interior height 1,605 mm, length 1,600 mm, width 2,300 mm.



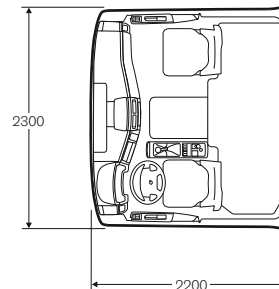
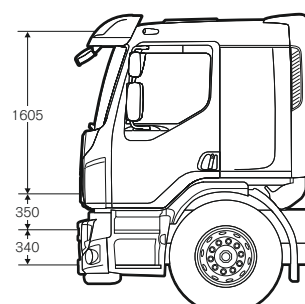
### COMFORT CAB

Comfort cab offers extra space that can be equipped with an occasional fold up single bunk or be used as office space with extra storage compartments. Interior height 1,605 mm, length 2,000 mm, width 2,300 mm.



### SLEEPER CAB

Sleeper cab with a single bunk. Interior height 1,605 mm, length 2,200 mm, width 2,300 mm.



### CAB SUSPENSION

Mechanical suspension front and rear: coil spring and shock absorber. Option of four point air suspension

### DRIVER'S SEAT

Three different levels of comfort: Comfort, Standard and Economy. All three feature backrest, length, height and front tilt adjustment and integrated headrests.

### PASSENGER SEAT

Three different levels of comfort are available: Standard, Economy or Basic.

### COLOURS

Available in 232 fixed variants. On top of that additional colours can be ordered on Customer Adaptation.

### STEERING WHEEL

The steering wheel has a diameter of 460 mm or 500 mm depending on truck configuration and can be pneumatically adjusted to the desired position.

### ROOF HATCH

The cab can be equipped with either a manual or electrically operated roof hatch that can be opened 50 mm. It is available in either glass or steel.

### CAB HEATING

The cab heating system is available in two variants: manually controlled, heater only, or manually controlled heater and air conditioning. A 2 kW parking heater system is available as an option.

### INTERIOR STORAGE

The cab interior has many practical, easily accessible compartments for storage of documents and personal belongings. There are two storage units above the window, as well as four DIN compartments. A number of different storage and tunnel boxes, writing pad and clothes hooks can be specified as options.

### AIR HORNS

Option of two roof-mounted air horns.

### BED (COMFORT CAB)

The bed is offered as either a narrow 580 mm of fold up 780 mm fold up design.

## 4 EQUIPMENT PACKAGES

AUDIO PACKAGES			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Basic	Medium	High
<b>Radio/CD unit</b>			
Audio CD	•	•	•
CD-R/CD-RW		•	•
wav/wma/mp3		•	•
Speed-dependant volume control		•	•
Extended mute functions	•	•	•
<b>Radio</b>			
FM/AM antenna	•	•	•
FM stations	12	18	18
AM stations	6	6	6
RDS	•	•	•
<b>Connections and interfaces</b>			
Low-level input, 4 channels	•	•	•
3.5 mm stereo line input			•
USB connection			•
iPod interface			•
Bluetooth		•	•
Wireless remote control			•
<b>Speakers</b>			
Number of speakers	2	2	2
Output	2×20 W	2×20 W	2×20 W

Some of the equipment shown or mentioned may only be available as options or accessories and may vary from one country to another in accordance with local legislation. Your Volvo dealer will be happy to provide you with more detailed information. Colours may vary somewhat owing to the limitations of the printing process. We reserve the right to alter product specifications without prior notification.

### VOLVO TRUCK ACCESSORIES

There is a wide range of accessories available to further optimise your truck for your operation and for your personal needs. Developed and tested by Volvo Trucks for Volvo trucks. Here's a small selection. Ask your Volvo dealer or visit [www.volvotrucks.com](http://www.volvotrucks.com) to learn more.



Warning beacon light



I-Shift software



Seat covers



Mud flaps



Electrical cab heater



Engine Idle Shutdown software

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